

COMMITTENTE:



DIREZIONE LAVORI:



APPALTATORE:

CONSORZIO:

HIRPINIA - ORSARA AV

SOCI:



PROGETTAZIONE:

MANDATARIA:



MANDANTI:



PROGETTO ESECUTIVO

ITINERARIO NAPOLI - BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA

PIAZZALI

RI11 PIAZZALE FINESTRA DI EMERGENZA

Opere di sostegno su pali – Relazione di calcolo

APPALTATORE	DIRETTORE DELLA PROGETTAZIONE	PROGETTISTA
Consorzio HIRPINIA - ORSARA AV Il Direttore Tecnico Ing. P. M. Gianvecchio 16/01/2023	Il Responsabile integrazione fra le varie prestazioni specialistiche Ing. G. Cassani	 Ing. R.Zanon

COMMESSA	LOTTO	FASE	ENTE	TIPO DOC.	OPERA/DISCIPLINA	PROGR.	REV.	SCALA:
IF3A	02	E	ZZ	CL	RI1105	002	D	-

Rev.	Descrizione	Redatto	Data	Verificato	Data	Approvato	Data	Autorizzato Data
A	Emissione	G. Pepe	08/02/2022	L.Ongaro	08/02/2022	T.Finocchietti	08/02/2022	Ing. R.Zanon 16/01/2023
B	C.08.01 A valle del contraddittorio	G. Pepe	08/06/2022	L.Ongaro	08/06/2022	A.Callerio	08/06/2022	
C	C.08.03 A valle del contraddittorio	G. Pepe	30/09/2022	L.Ongaro	30/09/2022	A.Callerio	30/09/2022	
D	C.08.04 A valle del contraddittorio	G. Pepe	16/01/2023	L.Ongaro	16/01/2023	A.Callerio	16/01/2023	

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n. Elab.: -

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PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 2 di 95

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1 INTRODUZIONE

Il presente documento inquadra e descrive le analisi di dimensionamento e verifica del muro di sottoscarpa su pali presente del piazzale Finestra di Emergenza - RI11. Il piazzale è realizzato su due livelli. Al limite est della parte di piazzale a maggiore quota è presente un muro di sottoscarpa fondato su pali D = 800 mm, lunghi 15 m, posti su due file. L'interasse longitudinale tra i pali è pari a 2.4 m. Il paramento è spesso 70 cm ed è alto 5.5 m e sostiene un terrapieno che ha la stessa pendenza della strada che vi corre accanto, ovvero circa 10°. La ciabatta di fondazione è spessa 100 cm ed è lunga 4.75 m.

Nel seguito:

- verrà richiamata la documentazione di riferimento;
- si descriverà il modello geotecnico di progetto;
- si indicheranno le procedure e i metodi di calcolo anche con riferimento alla normativa vigente;
- si presenteranno i risultati di calcolo;
- si espliciteranno le verifiche di normativa.

2 DOCUMENTAZIONE DI RIFERIMENTO

2.1 NORMATIVA

La progettazione è conforme alle normative vigenti nonché alle istruzioni dell'Ente FF.SS.

La normativa cui viene fatto riferimento nelle fasi di calcolo e progettazione è la seguente:

- Nuove norme tecniche per le costruzioni - D.M. 17-01-18 (NTC-2018);
- Circolare del 21 gennaio 2019 - Istruzioni per l'applicazione dell'«Aggiornamento delle «Norme tecniche per le costruzioni»» di cui al decreto ministeriale 17 gennaio 2018.;
- Eurocodice 2: Progettazione delle strutture in calcestruzzo – Parte 1.1: Regole generali e regole per gli edifici.
- UNI ENV 1992-1-1 Parte 1-1: Regole generali e regole per gli edifici;
- UNI EN 206-1/2001 - Calcestruzzo. Specificazioni, prestazioni, produzione e conformità;
- UNI EN 1998-5 – Fondazioni ed opere di sostegno.

REGOLAMENTO (UE) N. 1299/2014 DELLA COMMISSIONE del 18 novembre 2014 relativo alle specifiche tecniche di interoperabilità per il sottosistema «infrastruttura» del sistema ferroviario dell'Unione europea

RFI DTC SI CS MA IFS 001 B del 22.12.2017 – Manuale di progettazione delle opere civili-Parte II – Sez- 3 – Corpo stradale ;

UNI EN 1997-1: Eurocodice 7 – Progettazione geotecnica parte 1: regole generali;

UNI EN 1997-1: Eurocodice 8 – Progettazione delle strutture per la resistenza sismica –Parte 5; Fondazioni, strutture di contenimento ed aspetti geotecnici;

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2.2 DOCUMENTAZIONE DI PROGETTO

IF3A.0.2.E.ZZ.P9.RI.11.0.0.001.B Planimetria di progetto e tracciamento

IF3A.0.2.E.ZZ.RI.RI.11.0.3.001.B Relazione idraulica

IF3A.0.2.E.ZZ.W9.RI.11.0.0.001.B Planimetria e sezioni e profili opere di sostegno

IF3A.0.2.E.ZZ.WZ.RI.11.0.0.001.B Sezioni trasversali

IF3A.0.2.E.ZZ.PA.RI.11.0.5.001.B Opere di sostegno - Carpenteria - Pianta e tracciamento

IF3A.0.2.E.ZZ.WB.RI.11.0.5.001.B Opere di sostegno - Carpenteria - Sezioni tipologiche

3 CARATTERISTICHE DEI MATERIALI

3.1 CALCESTRUZZO PER MAGRONE

Per il magrone di sottofondazione si prevede l'utilizzo di calcestruzzo di classe R_{ck} 15.

3.2 CALCESTRUZZO

Per la realizzazione **della fondazione e del paramento** si prevede l'utilizzo di calcestruzzo avente classe di resistenza C30/37 ($R_{ck} \geq 37$ N/mm²) che presenta le seguenti caratteristiche:

- Resistenza caratteristica a compressione (cilindrica) $\rightarrow f_{ck} = 0.83 \times R_{ck} = 30.0$ N/mm²
- Resistenza media a compressione $\rightarrow f_{cm} = f_{ck} + 8 = 38.0$ N/mm²
- Modulo elastico $\rightarrow E_{cm} = 22000 \times (f_{cm}/10)^{0.3} = 32836$ N/mm²
- Resistenza di calcolo a compressione $\rightarrow f_{cd} = \alpha_{cc} \times f_{ck} / \gamma_c = 0.85 \times f_{ck} / 1.5 = 17.0$ N/mm²
- Resistenza a trazione media $\rightarrow f_{ctm} = 0.30 \times f_{ck}^{2/3} = 2.89$ N/mm²
- Resistenza a trazione $\rightarrow f_{ctk} = 0.7 \times f_{ctm} = 2.03$ N/mm²
- Resistenza a trazione di calcolo $\rightarrow f_{ctd} = f_{ctk} / \gamma_c = 1.35$ N/mm²

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PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER							<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">COMMESSA</th> <th style="text-align: left;">LOTTO</th> <th style="text-align: left;">CODIFICA</th> <th style="text-align: left;">DOCUMENTO</th> <th style="text-align: left;">REV.</th> <th style="text-align: left;">FOGLIO</th> </tr> </thead> <tbody> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>6 di 95</td> </tr> </tbody> </table>						COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
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Per la realizzazione **dei pali** si prevede l'utilizzo di calcestruzzo avente classe di resistenza C25/30 ($R_{ck} \geq 30$ N/mm²) che presenta le seguenti caratteristiche:

- Resistenza caratteristica a compressione (cilindrica) $\rightarrow f_{ck} = 0.83 \times R_{ck} = 25.0$ N/mm²
- Resistenza media a compressione $\rightarrow f_{cm} = f_{ck} + 8 = 33.0$ N/mm²
- Modulo elastico $\rightarrow E_{cm} = 22000 \times (f_{cm}/10)^{0.3} = 31476$ N/mm²
- Resistenza di calcolo a compressione $\rightarrow f_{cd} = \alpha_{cc} \times f_{ck} / \gamma_c = 0.85 \times f_{ck} / 1.5 = 14.17$ N/mm²
- Resistenza a trazione media $\rightarrow f_{ctm} = 0.30 \times f_{ck}^{2/3} = 2.56$ N/mm²
- Resistenza a trazione $\rightarrow f_{ctk} = 0.7 \times f_{ctm} = 1.79$ N/mm²

Resistenza a

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PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>7 di 95</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A	02	E ZZ CL	RI1105 002	D	7 di 95
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3.3 ACCIAIO PER CALCESTRUZZO ARMATO

Per le armature metalliche si adottano tondini in acciaio del tipo B450C saldabile, controllato in stabilimento e che presentano le seguenti caratteristiche:

Proprietà	Requisito
Limite di snervamento f_y	≥ 450 MPa
Limite di rottura f_t	≥ 540 MPa
Allungamento totale al carico massimo A_{gt}	$\geq 7.5\%$
Rapporto f_t/f_y	$1,15 \leq R_m/R_e \leq 1,35$
Rapporto $f_{y \text{ misurato}} / f_{y \text{ nom}}$	$\leq 1,25$

- Tensione di snervamento caratteristica $\rightarrow f_{yk} \geq 450$ N/mm²
- Tensione caratteristica a rottura $\rightarrow f_{tk} \geq 540$ N/mm²
- Tensione in condizione di esercizio (comb. Rara) $\rightarrow \sigma_s = 0.75 * f_{yk} = 337.50$ N/mm²
- Fattore di sicurezza acciaio $\rightarrow \gamma_s = 1.15$
- Resistenza a trazione di calcolo $\rightarrow f_{yd} = f_{yk} / \gamma_s = 391.30$ N/mm²

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4 DESCRIZIONE DELLE OPERE

Il piazzale è realizzato su due livelli a diversa quota. Il piazzale è realizzato su due livelli. Al limite Est del piazzale a quota maggiore è presente un muro di sottoscarpa fondato su pali D = 800 mm, lunghi 15 m, posti su due file. L'interasse longitudinale tra i pali è pari a 2.4 m. Il paramento è spesso 70 cm ed è alto 5.5 m e sostiene un terrapieno che ha la stessa pendenza della strada che vi corre accanto, ovvero circa 10°. La ciabatta di fondazione è spessa 100 cm ed è lunga 4.75 m.

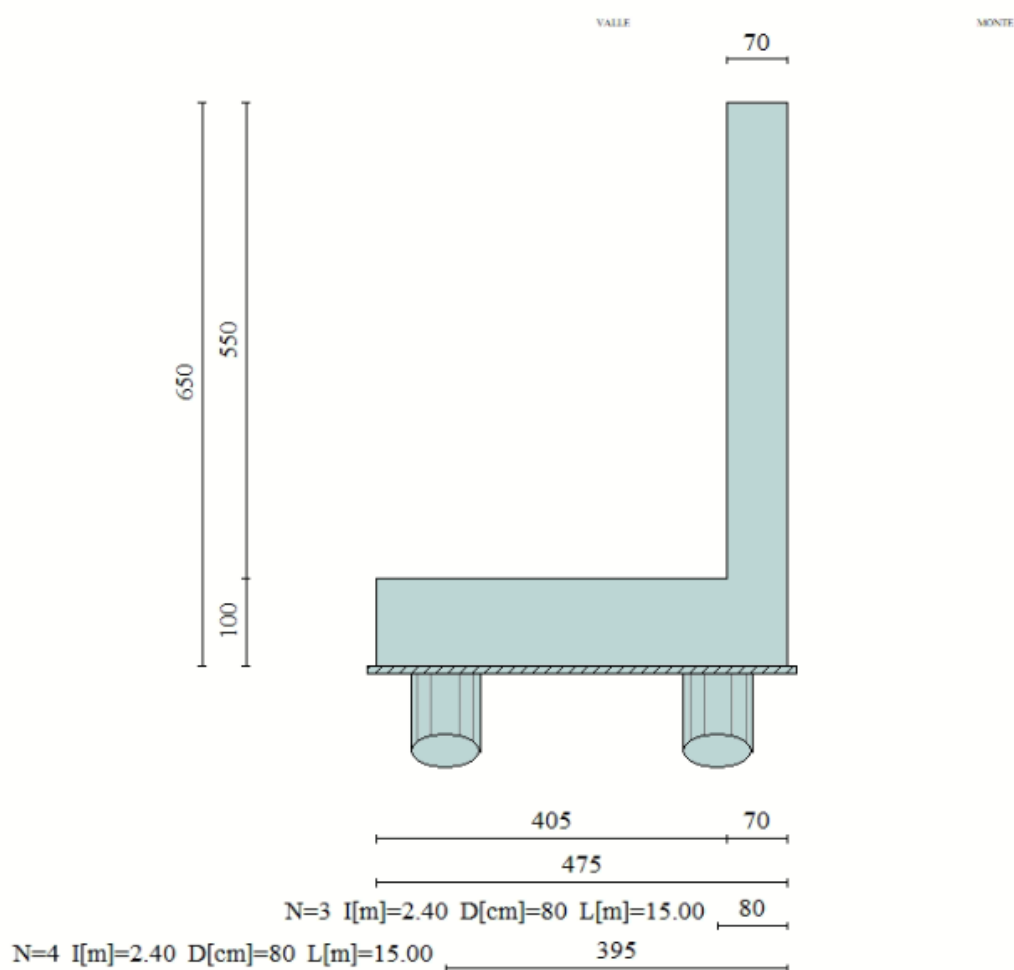


Figura 4-1. Geometria schematica dell'opera

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5 MODELLO GEOTECNICO DI RIFERIMENTO

Il modello geotecnico di riferimento viene derivato da tutte le informazioni disponibili.

In particolare, sono state individuate le seguenti unità litostratigrafiche:

- Coltre eluvio colluviale;
- SFT_2: argilla limosa e argille marnose con intercalazioni di sabbia;

La falda di progetto è stata considerata cautelativamente a 5.0 m dal p.c. originario

Si riportano nel seguito le planimetrie di ubicazione delle indagini disponibili e le stratigrafie di riferimento, che è in particolare quella del sondaggio **IF16F19 bis**

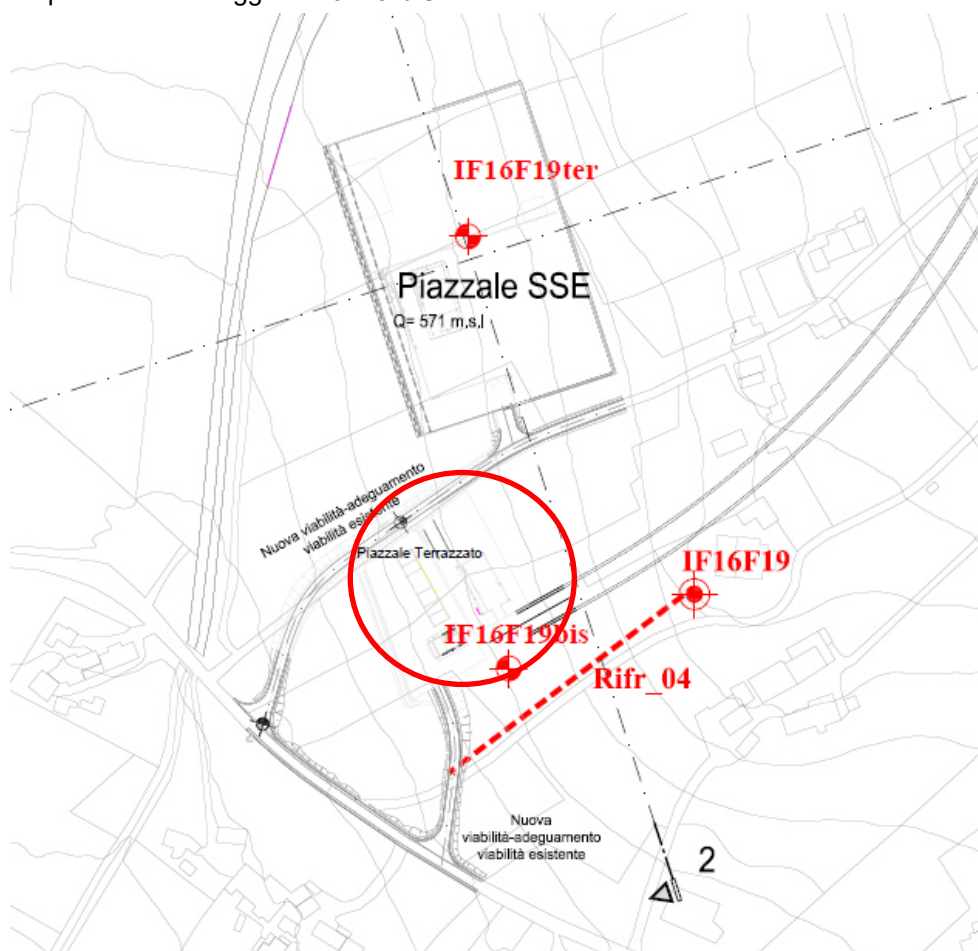


Figura 5-1. Planimetria di ubicazione dei sondaggi e posizione del piazzale

Il modello geotecnico di riferimento viene derivato da tutte le informazioni disponibili.

La viabilità è a servizio e prossima ai piazzali RI11 ed RI12.

La stratigrafia del terreno è riportata di seguito prendendo come riferimento il log stratigrafico del sondaggio IF16F19 TER, eseguito in corrispondenza del piazzale RI 12.

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IF3A	02	E ZZ CL	RI1105 002	D	11 di 95													

Il sondaggio mostra la presenza, come indicato anche nella relazione geotecnica generale, di due strati

- **Unità C** (coltre superficiale)
- **Unità SFT2** (argille limose con intercalazioni sabbiose)

Sulla base del profilo presentato è possibile definire la seguente stratigrafia di progetto

Da quota 0.0 da p.c. a -5.4 m da p.c.

Unità C

Da quota -5.4 m da p.c. a alla massima profondità di interesse. **Unità SFT2**

La quota di falda di progetto è posta a -5.0 m dal p.c.

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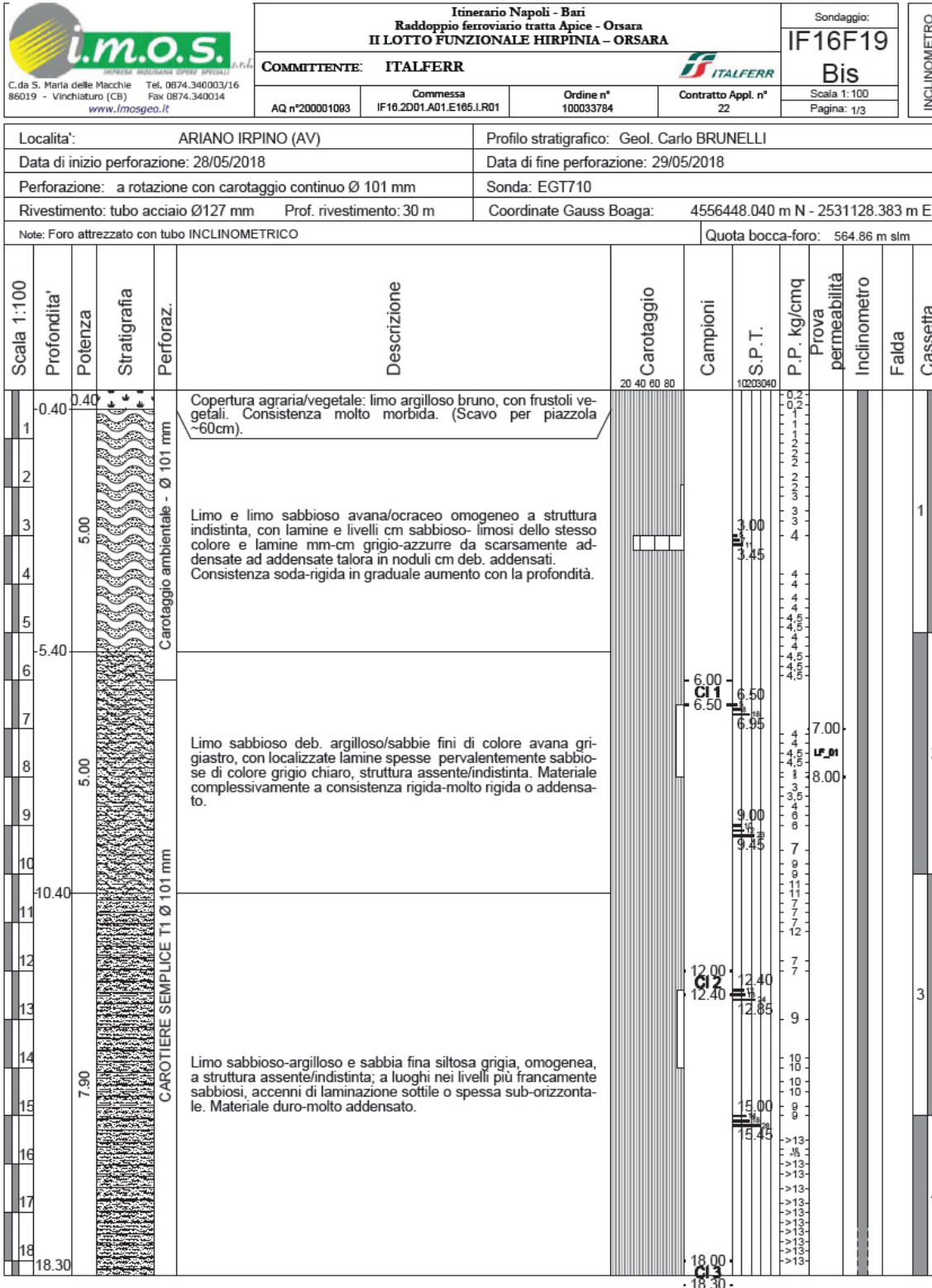


Figura 5-2. schema sintetico della stratigrafia dell'area

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COMMITTENTE: ITALFERR S.P.A.				TABELLA RIASSUNTIVA										SGAILAB – Laboratori e Ricerche S.r.l.																					
LAVORO: P.D. Hirpinia - Orsara				PROVE DI LABORATORIO SU:										Via Marconi, 18/a - 47833 - Merciano di Romagna (RN) - ITALY																					
LOCALITA': FLUMERI (AV)				TERRE										Tel./Fax. +39 0541988972 - e mail: info@sgailab.net																					
DATA ARRIVO: Giugno 2018				ROCCHE										REA. RN-304214 – C.F. e P.IVA 03686910401																					
N° COMMESSA: 18.007.01				MATER. STRADALI										www.sgailab.net																					
SONDAGGIO n.	CAMP. n.	prof. mt.	STATO DEL CAMP.	POCKET PENET. PP KPa	VANE TEST VT KPa	CONTEN. D'ACQUA W %	PESO UNITA' Mgr/m³	SECCO UNITA' Mgr/m³	GRANULOMETRIA					LIMITI DI ATTERBERG		CLASSIFICAZIONE		COMPRESSIONE SEMPLICE			TAGLIO DIRETTO AL CASAGRANDE		COMPRESSIONE TRIASSIALE			PROVA EDOMETRICA		VELOC. SONICHE V _s m/s	PESO SPECIF. DEL TERRENO γ _s Mg/m³						
									G %	S %	L %	L+A %	A %	W _L %	I _p %	AASHTO	USCS	σ _c KPa	ε _v %	C _u Kpa	c' KPa	φ°	c' KPa	φ°	Eed KPa	C _v cm²/s	K cm/s			Press KPa					
IF16F19Bis	C11	6.00 6.50	I	430 >600	75 225	15.83	1.99	1.72	0.00	14.48	63.06	85.53	22.48	30	10	A - 6	CL					10.3	27.2												2.66
IF16F19Bis	C12	12.00 12.40	I	200 570	125	17.41	1.97	1.67	0.05	13.65	60.80	86.30	25.50	22	2	A - 4	ML	47.02	2.54	23.51														2.60	
IF16F19Bis	C13	18.00 18.30	I	480 >600	>250	12.98	1.98	1.76	0.06	23.01	56.03	76.93	20.90	31	11	A - 6	CL									18.2	33.2							2.59	
IF16F19Bis	C14	24.00 24.30	I	>600	>250	15.78	2.14	1.85	0.02	12.55	63.22	87.43	24.21	40	18	A - 6	CL	1818.69	3.98	909.35														2.61	
IF16F19Bis	C15	30.00 30.20	I	>600	>250	9.95	2.08	1.89	0.01	16.49	58.59	83.50	24.91	31	12	A - 6	CL									50.4	28.1							2.66	
IF16F19Bis	C16	30.20 30.40	I	>600	>250	12.44	2.18	1.94	0.19	10.39	65.86	89.42	23.56	40	21	A - 6	CL									40.2	35.0							2.65	

Figura 5-3. Risultati delle prove di laboratorio per i campioni estratti dal sondaggio di riferimento

I valori di resistenza espressi dalle prove pocket penetrometer sulle carote estratte dal sondaggio evidenziano valori di resistenza non drenata linearmente crescenti da 100 a 230 kPa nello strato di coltre e crescenti da 200 kPa a 450 kPa nei primi 5.0 m dello strato SFT2, per poi attestarsi, più in profondità, su valori sempre superiori a 500 kPa.

Confrontando questi valori con quelli desunti dalle prove del medesimo tipo, effettuate in laboratorio, che hanno comunque minore numerosità è possibile affermare che il valore minimo assoluto di resistenza non drenata dello strato di coltre è pari a 75 kPa, e che una buona stima del valore caratteristico della resistenza non drenata è pari a 100 kPa.

Per quanto concerne i primi 5 metri dello strato SFT2 (si intenda da -5.4 m da boccaforo sondaggio a -10.4 m da boccaforo sondaggio) si evidenzia una resistenza non drenata minima pari ad almeno 110 kPa, rapidamente crescenti con la profondità fino a 450 kPa. Negli strati più profondi la resistenza non drenata appare sicuramente non minore di 300 kPa, come dimostrato anche dai valori di pocket penetrometer effettuati sui campioni indisturbati, in laboratorio.

Concordemente a quanto riportato nella relazione geotecnica generale e sulla base delle indagini in sito e di laboratorio (VEDI **Figura 5-3**) si individuano le seguenti caratteristiche meccaniche dei terreni interagenti con le opere

COLTRE

Peso Volume: $\gamma = 20.5 \text{ kN/m}^3$

Angolo di attrito $\theta = 27^\circ$

Coesione efficace $c' = 8 \text{ kPa}$

Coesione non drenata $c_u = 75\div 100 \text{ kPa}$

Indice di compressione $C_c = 0.064$

Indice di ricomprensione $C_r = 0.012$

Indice dei vuoti $e_0 = 0.5$

OCR = 3

$K = 4 \times 10^{-7} \text{ m/s}$

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SFT2:

Peso Volume: $\gamma = 20 \text{ kN/m}^3$

Angolo di attrito $\phi = 27^\circ$

Coesione efficace $c' = 2 \text{ kPa}$

Coesione non drenata $c_u = 110 \div 250 \text{ kPa}$

Indice di compressione $C_c = 0.066$

Indice di ricomprensione $C_r = 0.010$

Indice dei vuoti $e_0 = 0.45$

OCR = 4

$K = 1 \times 10^{-7} \text{ m/s}$

Il terreno utilizzato per la realizzazione dei rilevati e dei rinterri, in accordo con il capitolato tecnico, ha le seguenti proprietà:

Peso Volume: $\gamma = 19 \text{ kN/m}^3$

Angolo di attrito $\phi = 35^\circ$

Coesione efficace $c' = 0 \text{ kPa}$

Concordemente a quanto esplicitato sopra, le verifiche di stabilità globale dei muri in condizione sismica sono state condotte considerando la resistenza al taglio in condizioni non drenate del terreno naturale. La resistenza non drenata lungo i piani di scorrimento considerati è stata valutata come minimo pari a

$c_{u,} = 90 \text{ kPa}$

per i terreni della coltre,

pari a

$c_{u,} = 100 \text{ kPa}$

per i primi 5.0 m di terreno SFT2

$c_{u,} = 250 \text{ kPa}$

Per i terreni SFT2 Più profondi di 5.0m

La quota di testa della falda è posta a 5.0 m dal piano campagna naturale.

Nella definizione del modello geotecnico per i pali si sottolinea che la rigidità delle molle “alla Winkler” trasversali è stata valutata cautelativamente secondo le indicazioni di Broms

$kh = 400 \text{ cu/d} = 3 \text{ kg/cmq/cm}$

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6 NORMATIVA

In linea con quanto riportato nel quadro normativo vigente, le azioni descritte nei paragrafi precedenti, sono combinate nel modo seguente:

combinazione fondamentale (SLU):

$$\gamma_{G1} \cdot G_1 + \gamma_{G2} \cdot G_2 + \gamma_p \cdot P + \gamma_{Q1} \cdot Q_{k1} + \gamma_{Q2} \cdot \psi_{02} \cdot Q_{k2} + \gamma_{Q3} \cdot \psi_{03} \cdot Q_{k3} + \dots$$

combinazione sismica:

$$E + G_1 + G_2 + P + \psi_{21} \cdot Q_{k1} + \psi_{22} \cdot Q_{k2} + \dots$$

combinazione eccezionale:

$$G_1 + G_2 + P + A_d + \psi_{21} \cdot Q_{k1} + \psi_{22} \cdot Q_{k2} + \dots$$

combinazione Rara (SLE irreversibile):

$$G_1 + G_2 + P + Q_{k1} + \psi_{02} \cdot Q_{k2} + \psi_{03} \cdot Q_{k3} + \dots$$

combinazione Frequente (SLE reversibile):

$$G_1 + G_2 + P + \psi_{11} \cdot Q_{k1} + \psi_{22} \cdot Q_{k2} + \psi_{23} \cdot Q_{k3} + \dots$$

combinazione Quasi Permanente (SLE per gli effetti a lungo termine):

$$G_1 + G_2 + P + \psi_{21} \cdot Q_{k1} + \psi_{22} \cdot Q_{k2} + \psi_{23} \cdot Q_{k3} + \dots$$

Sono prese in considerazione le seguenti verifiche agli stati limite ultimi:

Le verifiche di capacità portante dei pali sono svolte secondo la metodologia degli stati limite ultimi, in accordo alla normativa vigente (DM 2008). La verifica della capacità portante dei pali è soddisfatta se:

$$F_{cd} < R_{cd}$$

essendo:

$$R_{cd} = R_k / \gamma_R$$

dove:

F_{cd} carico assiale di compressione di progetto;

R_{cd} capacità portante di progetto nei confronti dei carichi assiali;

R_k valore caratteristico della capacità portante limite del palo;

γ_R coefficiente di sicurezza sulle resistenze

In particolare, le verifiche di capacità portante dei pali agli stati limite ultimi (SLU) sono condotte con riferimento al seguente approccio

$$\text{Combinazione 1: } A1 + M1 + R3,$$

tenendo conto dei coefficienti parziali riportati nelle seguenti Tabella 6-1 e Tabella 6-2.

Il peso del palo, in accordo con quanto riportato al paragrafo 6.4.3 delle NTC2018, deve essere incluso tra le

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azioni permanenti di cui alla Tabella 6-1.

La resistenza di progetto a compressione $R_{c,d}$ è calcolata applicando al valore caratteristico della resistenza $R_{c,k}$ i coefficienti parziali γ_R riportati in tabella seguente, relativi alla condizione di pali trivellati.

Il valore caratteristico della resistenza $R_{c,k}$ a compressione ed a trazione $R_{t,k}$ è ottenuto applicando i fattori di correlazione ξ_3 e ξ_4 (Tabella 6-3) alle resistenze di calcolo $R_{c,cal}$; tali fattori sono funzione del numero di verticali d'indagine rappresentative:

$$R_{c,k} = \min \left\{ \frac{(R_{c,cal})_{media}}{\xi_3}; \frac{(R_{c,cal})_{min}}{\xi_4} \right\}$$

$$R_{t,k} = \min \left\{ \frac{(R_{t,cal})_{media}}{\xi_3}; \frac{(R_{t,cal})_{min}}{\xi_4} \right\}$$

I valori di ξ_3 e ξ_4 da utilizzare nelle analisi sono funzione dal numero di sondaggi che sono stati considerati per valutare la resistenza del palo per ogni area omogenea o struttura/opera.

Tabella 6-1 – Tab. 6.2.I, NTC 2018

	Effetto	Coefficiente Parziale γ_F (o γ_E)	EQU	(A1)	(A2)
Carichi permanenti G_1	Favorevole	γ_{G1}	0,9	1,0	1,0
	Sfavorevole		1,1	1,3	1,0
Carichi permanenti $G_2^{(1)}$	Favorevole	γ_{G2}	0,8	0,8	0,8
	Sfavorevole		1,5	1,5	1,3
Azioni variabili Q	Favorevole	γ_Q	0,0	0,0	0,0
	Sfavorevole		1,5	1,5	1,3

Tabella 6-2 – Tab. 6.4.II, NTC 2018

Tabella 6.4.II – Coefficienti parziali γ_R da applicare alle resistenze caratteristiche.

Resistenza	Simbolo	Pali infissi			Pali trivellati			Pali ad elica continua		
		(R1)	(R2)	(R3)	(R1)	(R2)	(R3)	(R1)	(R2)	(R3)
Base	γ_b	1,0	1,45	1,15	1,0	1,7	1,35	1,0	1,6	1,3
Laterale in compressione	γ_s	1,0	1,45	1,15	1,0	1,45	1,15	1,0	1,45	1,15
Totale ^(*)	γ_t	1,0	1,45	1,15	1,0	1,6	1,30	1,0	1,55	1,25
Laterale in trazione	γ_{st}	1,0	1,6	1,25	1,0	1,6	1,25	1,0	1,6	1,25

^(*) da applicare alle resistenze caratteristiche dedotte dai risultati di prove di carico di progetto.

Tabella 6-3 – Tab. 6.4.IV NTC 2018 - Fattori di correlazione ξ per la determinazione della resistenza caratteristica in funzione del numero di verticali d'indagine

Numero di verticali indagate	1	2	3	4	5	7	≥ 10
ξ_3	1,70	1,65	1,60	1,55	1,50	1,45	1,40
ξ_4	1,70	1,55	1,48	1,42	1,34	1,28	1,21

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In conclusione, nel caso in esame la stima delle capacità portanti dei pali è eseguita assumendo la combinazione A1+M1+R3 sia per le combinazioni statiche che per quelle sismiche. Per le verifiche in condizioni sismiche i coefficienti delle azioni A1 sono assunti unitari, come da §7.11.5.3-NTC2018.

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6.1 CRITERI DI VERIFICA

6.1.1 VERIFICA AL CARICO LIMITE ASSIALE DELL'INSIEME PALO-TERRENO

La portata di progetto di un palo trivellato (eseguito con completa asportazione del terreno) “ $Q_{tot_c,d}$ ” in compressione è espressa dalla seguente relazione:

$$Q_{tot_c,d} = Q_{II} / F_{SL,C} + Q_{bl} / F_{SB} - W'_{p-s} = Q_{I_c,d} + Q_{b,d} - W_{p-s,d}$$

dove:

Q_{II} valore di calcolo della portata laterale,

Q_{bl} valore di calcolo della portata di base,

$Q_{I_c,d}$ valore di progetto della portata laterale,

$F_{SL,C}$ fattore di sicurezza per la portata laterale in compressione ($= \xi \cdot \gamma_s$),

F_{SB} fattore di sicurezza per la portata di base ($= \xi \cdot \gamma_b$),

$Q_{b,d}$ valore di progetto della portata di base,

W_{p-s} valore di progetto del peso del palo, al netto del peso del terreno asportato.

Diversamente, la portata di progetto a trazione “ $Q_{tot_tr,d}$ ” è espressa dalla seguente relazione:

$$Q_{tot_tr,d} = Q_{LL,Tr} / F_{SL} + W'_P = Q_{I_tr,d} + W'_p$$

dove:

Q_{LL} valore di calcolo della portata laterale,

W'_P peso efficace del palo, alleggerito se sotto falda,

$F_{SL,Tr}$ fattore di sicurezza per la portata laterale in trazione ($= \gamma_{st} \cdot \xi$).

La portata laterale limite è valutata con la seguente relazione:

$$Q_{II} = \pi \cdot D \cdot \sum_i (\tau_i \cdot h_i)$$

dove:

D diametro palo,

τ_i tensione di adesione laterale limite nello strato i-esimo,

h_i altezza dello strato i-esimo.

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Per i terreni coesivi la tensione di adesione laterale limite è valutata con la seguente espressione:

$$\tau_{lim} \text{ (kPa)} = \alpha \cdot c_u \leq \tau_{us,max}$$

dove:

c_u resistenza al taglio non drenata.

α coefficiente empirico, determinato in accordo a quanto indicato nel manuale FHWA 2010:

$$\alpha = 0.55 \quad \text{per } (c_u/p_a) \leq 1.5;$$

$$\alpha = 0.55 - 0.1 \cdot (c_u/p_a - 1.5) \quad \text{per } 1.5 \leq (c_u/p_a) \leq 2.5$$

Inoltre, per la resistenza laterale si impongono anche le seguenti condizioni:

$$\tau_{lim} \text{ (kPa)} \geq 0.23 \cdot \sigma'_{v0}$$

$$\tau_{us,max} = 100 \text{ kPa (resistenza laterale massima in terreno coesivo),}$$

dove:

σ'_{v0} tensione verticale efficace alla quota di riferimento.

Per i terreni incoerenti la tensione di aderenza laterale limite è valutata mediante metodo β con la seguente espressione (Reese & O'Neill, 1999, recepito nel manuale FHWA del 2010):

$$\tau_{lim} \text{ (kPa)} = \beta \cdot \sigma'_{v0} \leq \tau_{us,max}$$

dove:

$$\beta = 1.5 - 0.245 \cdot z^{0.50} \quad (0.25 \leq \beta \leq 1.20) \text{ per sabbie;}$$

$$\beta = 2.0 - 0.147 \cdot z^{0.75} \quad (0.25 \leq \beta \leq 1.80) \text{ per sabbie ghiaiose;}$$

σ'_{v0} tensione verticale efficace alla quota di riferimento.

$$\tau_{us,max} = 150 \text{ kPa (resistenza laterale massima in terreno incoerente)}$$

Per la valutazione della portata di base limite si utilizzano le seguenti relazioni:

$$Q_{bl} = A_p \cdot q_{bl}$$

dove:

A_p area della base del palo,

q_{bl} portata limite specifica di base.

La portata di base limite nei terreni coesivi è valutata con la seguente relazione:

$$q_{b,ult} \text{ (kPa)} = 9 \cdot c_{u,k}$$

dove:

$c_{u,k}$ valore caratteristico della resistenza a taglio non drenata.

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Il valore della portata di base in terreni incoerenti critico è stato invece valutato secondo il metodo di Berezantzev (1961) ovvero come

$$q_b = \sigma'_{vL} N_q,$$

in cui

σ'_{vL} è la tensione litostatica alla base del palo

N_q è un coefficiente desumibile dall'abaco riportato di seguito

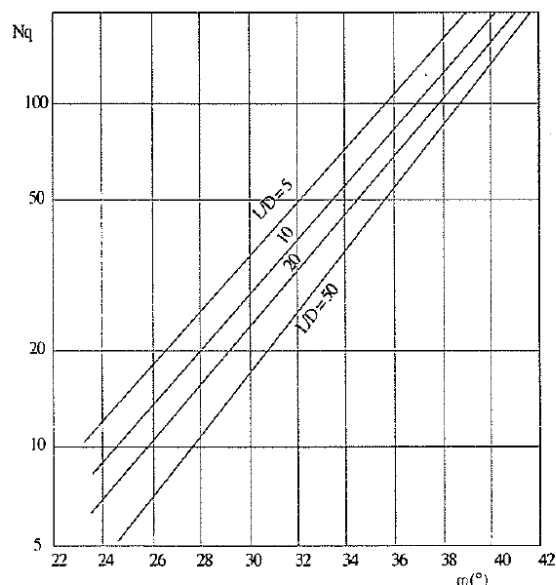


Figura 6-1. coefficiente N_q secondo Berezantzev et al (1961)

Nel caso di terreni stratificati, costituiti da alternanze di strati di limi e argille e di sabbie e ghiaie, i criteri di valutazione delle portate laterali limite sono analoghi a quelli descritti precedentemente. Tuttavia, in accordo a quanto discusso in Meyerhof (1976), la portata di base negli strati sabbioso-ghiaiosi si riduce rispetto a quella caratteristica dello strato supposto omogeneo (v. figura seguente). Pertanto, nel caso di terreno stratificato, la mobilitazione dell'intera resistenza di base disponibile è subordinata alla condizione che il palo penetri nello strato portante per almeno 3 diametri. Viceversa, con l'avvicinarsi della base del palo ad uno strato inferiore di minore resistenza, la portata si riduce linearmente fino all'interfaccia tra gli strati, laddove eguaglia il valore di rottura dell'unità più debole .

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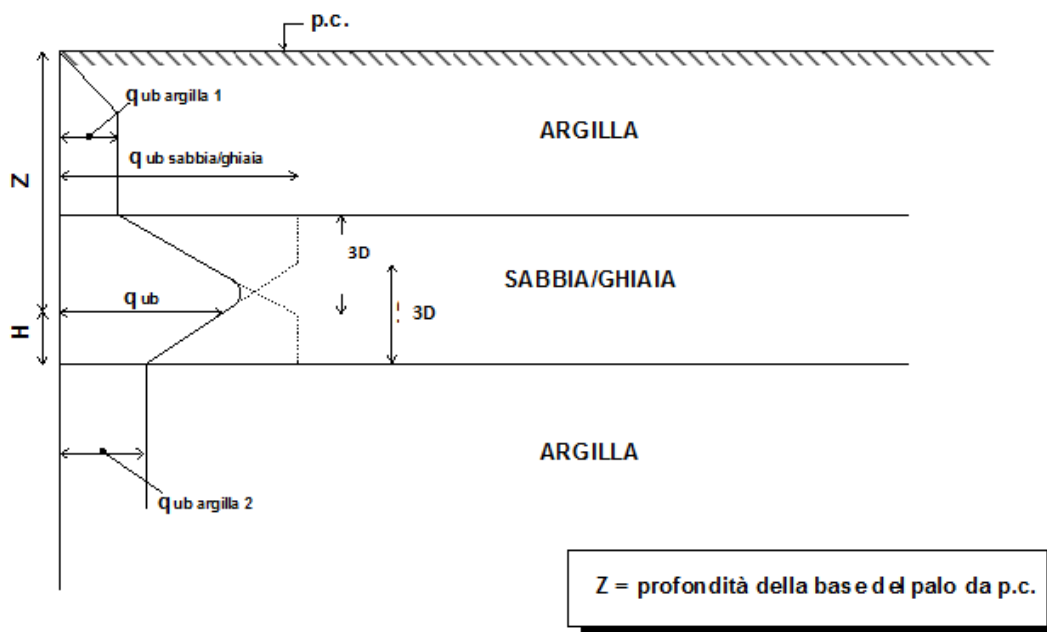


Figura 6-2 - Criterio di valutazione della pressione ultima di base (q_{ub}) in terreni stratificati

Si riportano nel seguito le curve di carico limite dei pali sia non fattorizzate, sia calcolate secondo le direttive della normativa vigente utilizzando un coefficiente

$$\xi_3 = \xi_4 = 1.7$$

6.1.2 VERIFICA AL CARICO LIMITE TRASVERSALE DEL PALO

Per la determinazione del valore di progetto della resistenza dei pali soggetti a carichi trasversali valgono le indicazioni di cui al paragrafo precedente riguardanti le combinazioni di coefficienti parziali di sicurezza, l'amplificazione delle azioni e l'abbattimento delle proprietà meccaniche dei terreni. I coefficienti di sicurezza parziali sulla resistenza da applicarsi sono quelli contenuti nella seguente tabella

COEFFICIENTE PARZIALE (R1)	COEFFICIENTE PARZIALE (R2)	COEFFICIENTE PARZIALE (R3)
$\gamma_T = 1,0$	$\gamma_T = 1,6$	$\gamma_T = 1,3$

Il carico limite trasversale è calcolabile mediante la teoria di Broms (1964).

Per pali in terreni granulari impediti di ruotare in testa si possono presentare i seguenti casi:

- Palo corto (nessuna formazione di cerniere plastiche)
- palo intermedio (formazione di cerniera plastiche alla connessione fondazione palo)

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- palo lungo (formazione di due cerniere plastiche, una alla connessione fondazione palo, l'altra lungo il fusto del palo).

Nel presente caso di palo lungo operando in tensioni totali il carico limite trasversale caratteristico si calcola come:

in cui

- “d” il diametro del palo
- M_y il momento di plasticizzazione del palo
- c_u la resistenza in condizioni non drenate del terreno

$$\frac{H_k}{c_u d^2} = 13.5 + \left(\sqrt{182.25 + 36 \frac{M_y}{c_u d^3}} \right)$$

in cui

- “d” il diametro del palo
- M_y il momento di plasticizzazione del palo
- c_u la resistenza in condizioni non drenate del terreno

In tensioni efficaci invece detti

- “d” il diametro del palo
- M_y il momento di plasticizzazione del palo
- γ il peso per unità di volume del terreno
- k_p il coefficiente di spinta passiva del terreno

$$H_k = k_p \gamma d^4 \left(\sqrt[3]{3.676 \frac{M_y}{k_p \gamma d^4}} \right)$$

6.2 VERIFICHE STRUTTURALI SLU/SLV E SLE

Le verifiche allo Stato Limite Ultimo sono condotte secondo i paragrafi 4.1.2.3.4 (per la resistenza flessionale) e 4.1.2.3.5 (per la resistenza nei confronti di sollecitazioni taglianti) delle NTC2018.

L'obiettivo in termini di resistenza a taglio è dimostrare che la sezione sostiene il valore dello sforzo di taglio agente (V_{Ed}) senza armature trasversali.

Per ottenere i valori di progetto si è utilizzato il software Max.

Le verifiche agli Stati Limite di Esercizio SLE (tensioni e fessurazione) sono state condotte secondo quanto riportato nel manuale RFI Parte II Sezione 2 – Ponti e strutture con particolare riferimento al paragrafo 2.5.8.3.2.1 e 2.5.1.8.3.2.4.

Le fessure limite sono: - $w_k=0,20$ mm per la combinazione rara;

La massima tensione di compressione del calcestruzzo deve rispettare la limitazione seguente:

$$\sigma_{c,max} \leq 0,55 f_{ck} \text{ per combinazione caratteristica (rara)}$$

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PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER						<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">COMMESSA</th> <th style="text-align: left;">LOTTO</th> <th style="text-align: left;">CODIFICA</th> <th style="text-align: left;">DOCUMENTO</th> <th style="text-align: left;">REV.</th> <th style="text-align: left;">FOGLIO</th> </tr> </thead> <tbody> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>23 di 95</td> </tr> </tbody> </table>					COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A
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$\sigma_{c,max} \leq 0,40 f_{ck}$ per combinazione quasi permanente.

La tensione massima dell'acciaio per effetto delle azioni dovute alla combinazione caratteristica deve rispettare la limitazione seguente:

$\sigma_{s,max} \leq 0,75 f_{yk}$ per combinazione caratteristica (rara)

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7 AZIONI SULLA STRUTTURA

7.1 COMBINAZIONI DI CARICO

Per il dettaglio delle combinazioni di carico si rimanda agli allegati di calcolo.

7.2 CARICHI PERMANENTI

Il peso proprio della struttura è calcolato ipotizzando un peso per unità di volume del calcestruzzo pari a

- Peso Volume: $\gamma = 24.5 \text{ kN/m}^3$

Il peso per unità di volume del terrapieno viene valutato a partire da un peso per unità di volume del terreno di riempimento pari a

- Peso Volume: $\gamma = 19.0 \text{ kN/m}^3$

Le spinte in condizioni statiche vengono valutate con il metodo di Culmann (vedasi allegato) in ipotesi di spinta attiva, sicuramente accettabile per un muro su fondazione diretta.

L'incremento di spinta in condizioni sismiche viene valutato con il metodo di Monobe-Okabe, ipotizzando la risultante delle spinte sia posta a metà dell'altezza del paramento.

7.3 CARICHI SISMICI

Per la definizione dell'azione sismica sono necessarie delle valutazioni preliminari relative alle seguenti caratteristiche proprie della costruzione (2.4 – NTC2018):

- Vita Nominale (V_N);
- Classe d'uso (C_u);
- Periodo di Riferimento (V_R).

Si attribuisce una vita nominale $V_N = 75$ anni e la classe d'uso III con coefficiente d'uso $C_u=1,5$, in conformità ai seguenti riferimenti normativi:

- DM 17/01/2018 par. 2.4;
- - Circolare del 21 gennaio 2019 -;
- Decreto 21/10/2003 P.C.M. Dipartimento della Prot. Civile (all.1);
- "Istruzione per la progettazione e l'esecuzione dei ponti ferroviari" (rif. RFI-DTC-ICI-PO-SP-INF-001-A) par. 1.1.

Il periodo di riferimento da considerare per il calcolo dell'azione sismica sarà quindi $V_R = C_u \times V_N = 112,5$ anni.

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Le azioni sismiche di progetto, in base alle quali valutare il rispetto dei diversi stati limite considerati, si definiscono a partire dalla “pericolosità sismica di base” del sito di costruzione, ai sensi dell’Ordinanza del Presidente del Consiglio dei Ministri n. 3274 del 20 marzo 2003. La pericolosità sismica è definita in termini di accelerazione orizzontale massima attesa a_g , nonché di ordinate dello spettro di risposta elastico in accelerazione ad essa corrispondente, con riferimento a prefissata probabilità di eccedenza P_{VR} nel periodo di riferimento V_R (3.2 – NTC2018).

La normativa NTC2018 definisce le forme spettrali, per ciascuna delle probabilità di superamento nel periodo di riferimento P_{VR} , a partire dai valori dei seguenti parametri su sito di riferimento rigido orizzontale:

- a_g – Accelerazione orizzontale massima al sito;
- F_0 – Valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale;
- T_C^* - Periodo d’inizio del tratto a velocità costante dello spettro in accelerazione orizzontale.

Nei confronti delle azioni sismiche si definiscono due stati limite di esercizio e due ultimi, che sono individuati riferendosi alle prestazioni della costruzione nel suo complesso (3.2.1 – NTC2018), ai quali corrispondono i seguenti valori dei parametri precedentemente definiti:

Ai fini della definizione dell’azione sismica di progetto, si rende necessario valutare l’effetto della risposta sismica locale mediante specifiche analisi. In assenza di tali analisi, per la definizione dell’azione sismica si può far riferimento a un approccio semplificato, che si basa sull’individuazione di categorie di sottosuolo di riferimento (Tab. 3.2.II e 3.2.III – NTC2018).

Il terreno su cui insiste la costruzione è stato assimilato ad un sottosuolo di *categoria C*.

Nel caso in esame si può assumere una categoria topografica T_1 (Superficie pianeggiante, pendii e rilievi isolati con inclinazione media $i \leq 15^\circ$).

Gli spettri di progetto agli stati limite SLV sono stati determinati facendo riferimento alle coordinate del piazzale:

- Longitudine: 15.1325° ,
- Latitudine: 41.1595° ,

Risulta per lo stato limite di salvaguardia della vita (SLV) quanto segue.

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Parametri e punti dello spettro di ris

Parametri indipendenti

STATO LIMITE	SLV
a_g	0.347 g
F_o	2.352
T_c	0.425 s
S_S	1.210
C_C	1.392
S_T	1.000
q	1.000

Parametri dipendenti

S	1.210
η	1.000
T_B	0.197 s
T_C	0.592 s
T_D	2.987 s

7.3.1 Coefficienti di spinta in condizioni sismiche

La spinta delle terre in condizioni sismiche verrà valutata tramite il metodo di Mononobe Okabe. Esso è basato sullo studio dell'equilibrio limite globale del sistema formato dal muro e dal prisma di terreno omogeneo retrostante l'opera e coinvolto nella rottura in una configurazione fittizia di calcolo nella quale l'angolo ε (inclinazione del piano campagna rispetto al piano orizzontale) e l'angolo β (inclinazione della parete interna rispetto al piano orizzontale passante per il piede), vengono aumentati di una quantità θ tale che:

$$\operatorname{tg} \theta = k_h / (1 \pm k_v)$$

con k_h coefficiente sismico orizzontale e k_v verticale.

In assenza di studi specifici, i coefficienti k_h e k_v devono essere calcolati come:

$$k_h = \beta_m a_{max} / g \quad k_v = 0,5 \cdot k_h$$

in cui a_{max} rappresenta il valore dell'accelerazione sismica massima del terreno per la categoria stratigrafica:

$$a_{max} = S \cdot a_g = S_S \cdot S_T \cdot a_g$$

Nella precedente espressione, il coefficiente β_m assume i valori riportati al paragrafo 7.11.6.2.1 delle NTC2018 ($\beta_m = 0,38$ per gli SLV e $\beta_m = 0,47$).

Per le verifiche è stato quindi utilizzato concordemente alle prescrizioni del Mdp

$$\beta_m = 0,76.$$

Si trova pertanto

$$k_h = 0.318$$

$$k_v = \pm 0.159$$

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8 MODELLO DI CALCOLO

8.1 IPOTESI DI CALCOLO

La scelta del valore dell'attrito terra muro (d) è stata operata in ottemperanza a quanto prescritto dal Manuale di Progettazione Italferr RFI DTC SI CS MA IFS 001 E, sez III, par 3.10.3.3.

Citando dal manuale nel caso di muri a mensola con suola sufficientemente lunga di cui al caso (a) della figura sotto riportata la spinta sull'opera di sostegno dovrà essere applicata sul piano verticale cd, assunto come il paramento virtuale del muro. Su tale paramento l'angolo di inclinazione δ della risultante della spinta (applicata ad $1/3$ dell'altezza del paramento virtuale) si potrà assumere uguale all'angolo di inclinazione β del terrapieno, a meno che β non sia superiore all'angolo di resistenza al taglio del terreno φ' , nel qual caso si potrà assumere $\delta = \varphi'$.

Per muri con suola relativamente corta di cui al caso (b) della figura sotto riportata, quando cioè l'angolo che la retta passante per i punti a e c, rappresentanti lo spigolo lato terreno della testa del muro e lo spigolo lato terreno della fondazione, forma con la verticale è inferiore a $45^\circ - \varphi'/2$, si potrà assumere $\delta = \varphi'/2$ e la superficie virtuale su cui applicare la spinta diventa il piano ac della figura.

Nel primo caso tutto il peso del terreno al di sopra della suola (abcd) dovrà essere considerato stabilizzante nelle verifiche, e ad esso sono da applicarsi le forze d'inerzia in fase sismica. Nel secondo caso il terreno da prendere in considerazione sarà quello contenuto nel triangolo (abc).

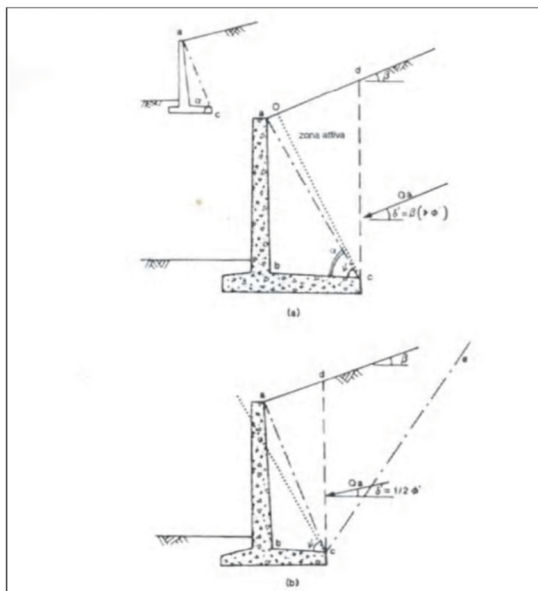


Figura 8-1. Spinta sui muri di sostegno a mensola con suola lunga (caso a) e con suola corta (caso b)

Si segnala inoltre che per i materiali a grana fina in condizioni sismiche si adottano le caratteristiche di resistenza non drenata.

Nelle verifiche di stabilità del complesso opera terreno si considererà una stratigrafia del terreno parallela al piano campagna, sicuramente più aderente alla realtà.

Nell'analisi del muro, tale schematizzazione risulterebbe sovrabbondantemente complicata, dal momento che i cunei di spinta sono tutti interni al riempimento e che il terreno di fondazione viene schematizzato nel codice

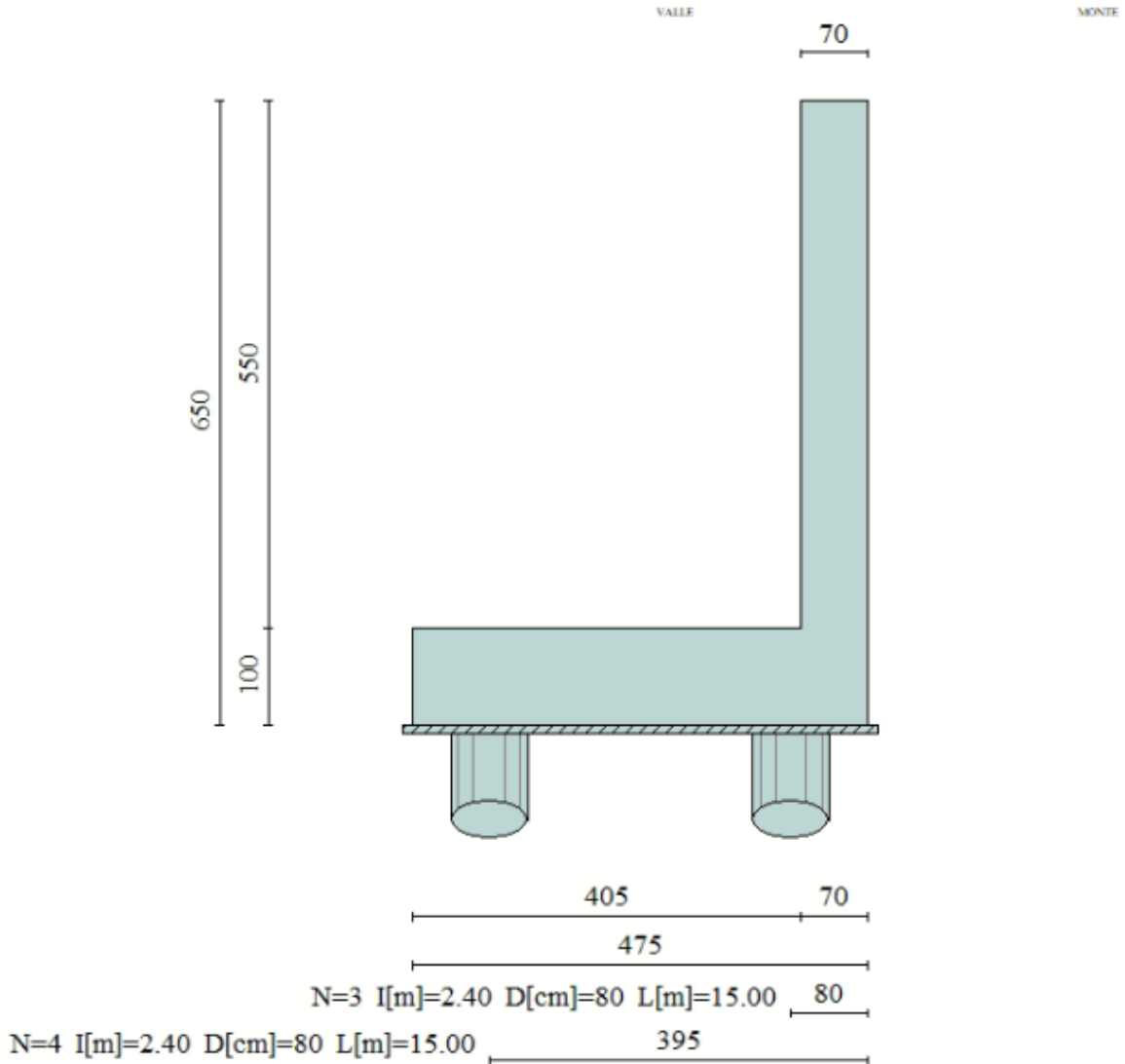
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di calcolo come una serie di molle interagenti coi pali. Pertanto, in questo caso, è stata adottata una geometria a livelli orizzontali.

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8.2 SEZIONI DI CALCOLO

La seguente figura presenta la sezione di calcolo considerata.



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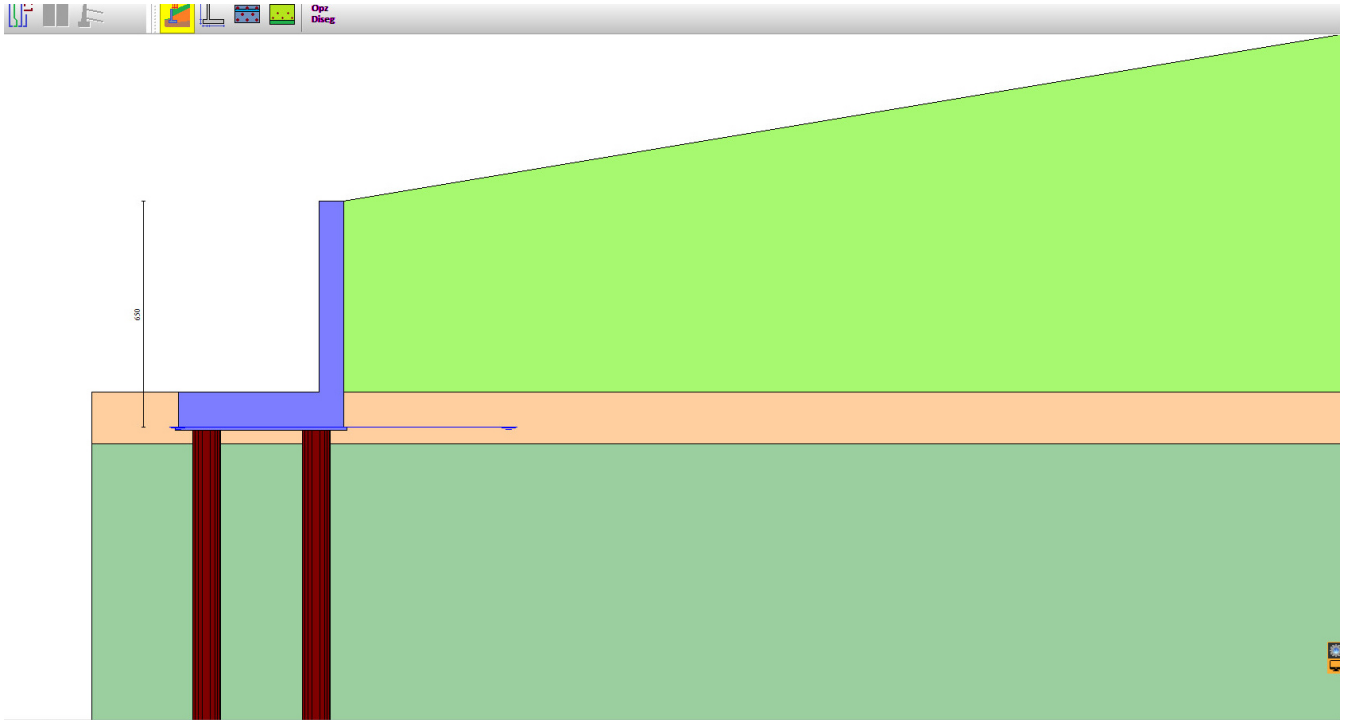


Figura 8-2. Sezione di calcolo 1 – geometria di calcolo

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9 RISULTATI DELL'ANALISI

9.1 SOLLECITAZIONI SLU-SLV SUL PARAMENTO

Si riportano nel seguito gli involuipi delle sollecitazioni in condizioni SLU sul paramento

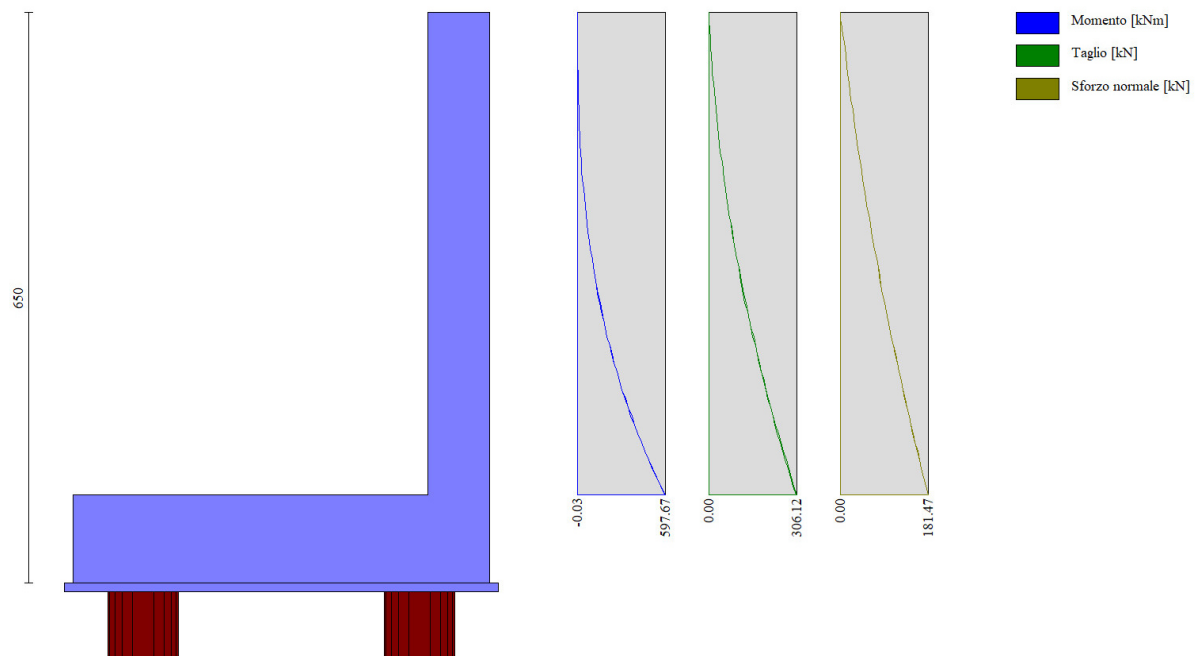


Figura 9-1. Involuppo delle sollecitazioni SLU e SLV sul paramento

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9.2 SOLLECITAZIONI SLE SUL PARAMENTO

Si riportano nel seguito gli involuپی delle sollecitazioni in condizioni SLE RARE, SLE FREQUENTI e SLE QUASI PERMANENTI sul paramento

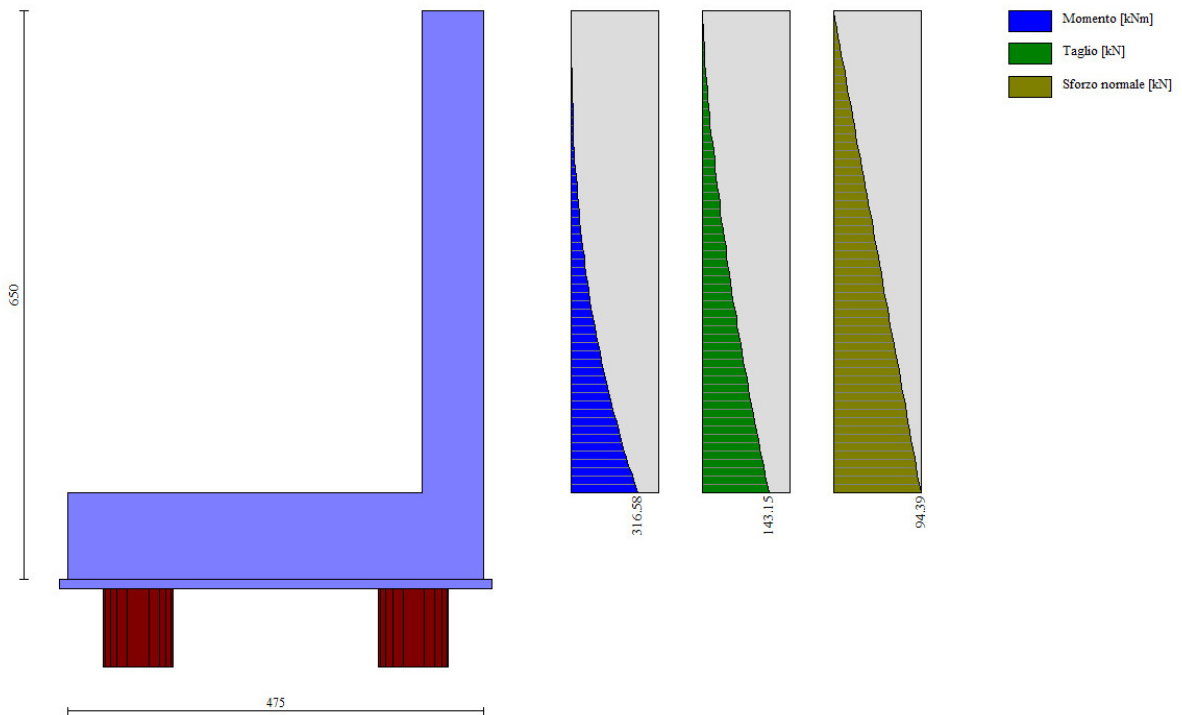


Figura 9-2. Sollecitazioni SLE RARA-FR-QP sul paramento

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9.3 SOLLECITAZIONI SLU-SLV SULLA CIABATTA DI FONDAZIONE

Si riportano nel seguito gli involuipi delle sollecitazioni in condizioni SLU-SLV sulla ciabatta di fondazione. E' necessario segnalare che le sollecitazioni di progetto verranno identificate sugli allineamenti che lambiscono i pali per evitare di individuare i valori irrealistici dati dalla concentrazione di sforzi presente in prossimità del nodo di attacco palo-piastra.

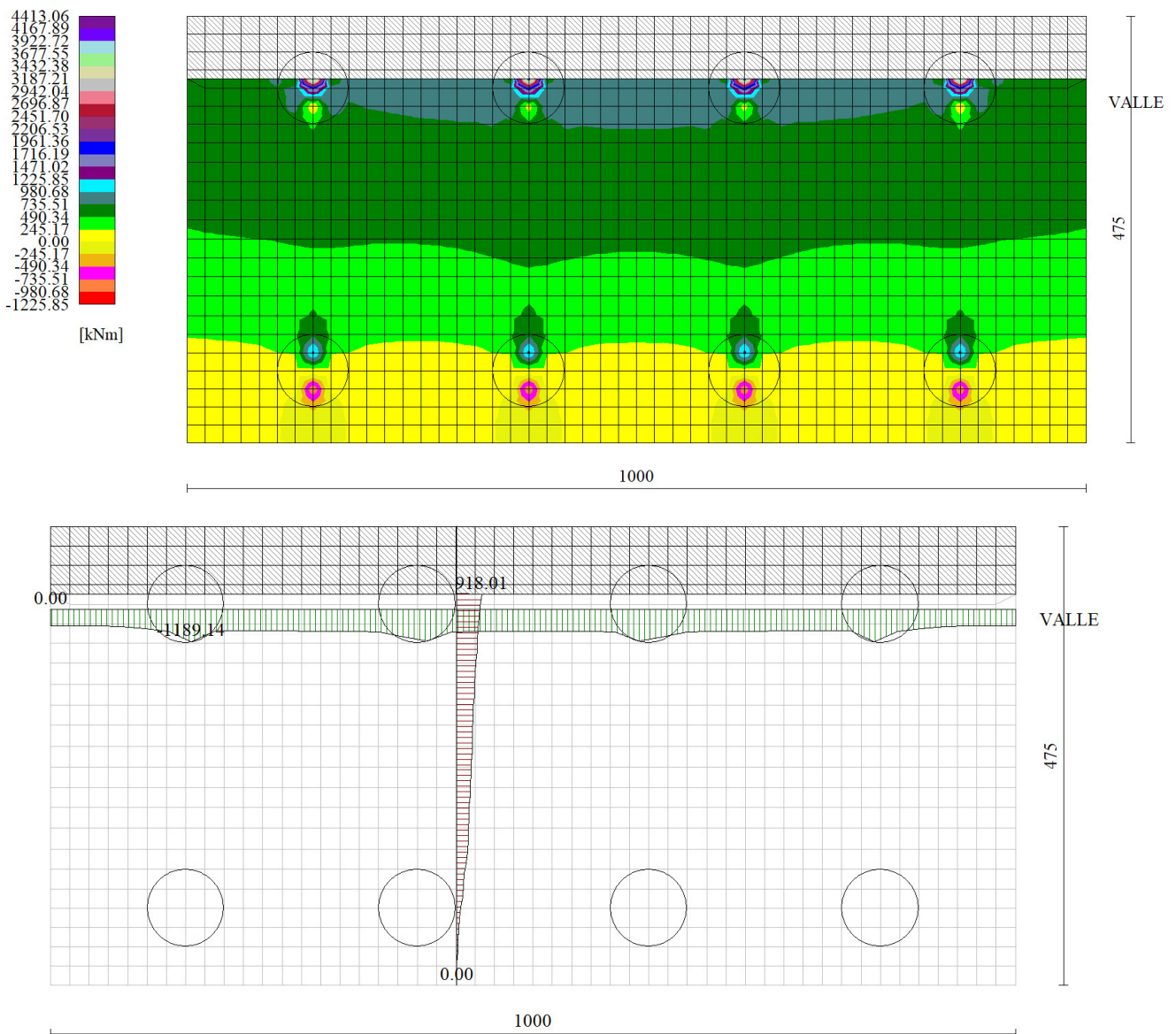


Figura 9-3. Mom flettenti M_y (SLU SLV). $M_{d,y} = 1190$ kNm/m

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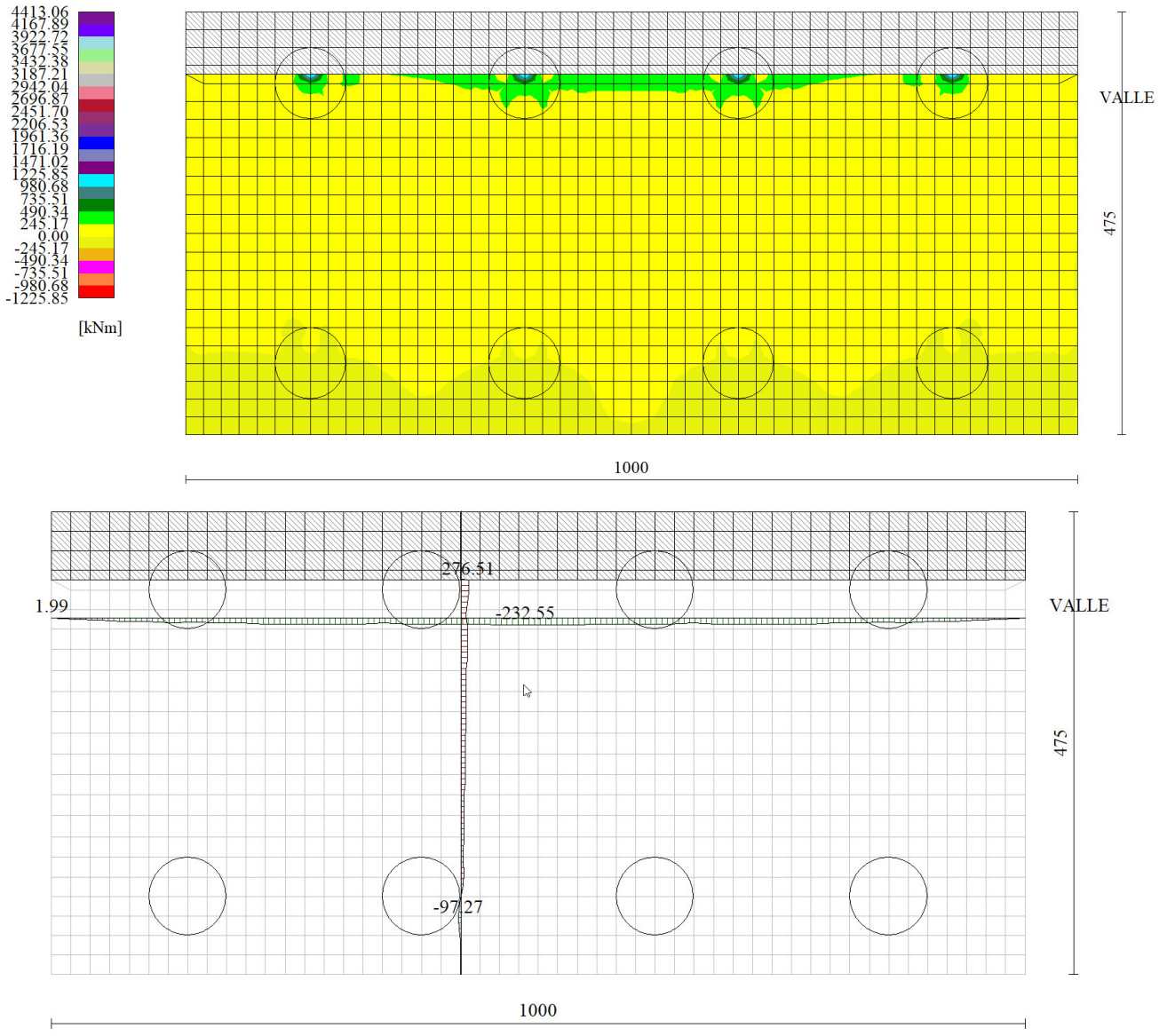


Figura 9-4. Mom flettenti M_x (SLU SLV) $M_{d,x} = 280 \text{ kNm/m}$

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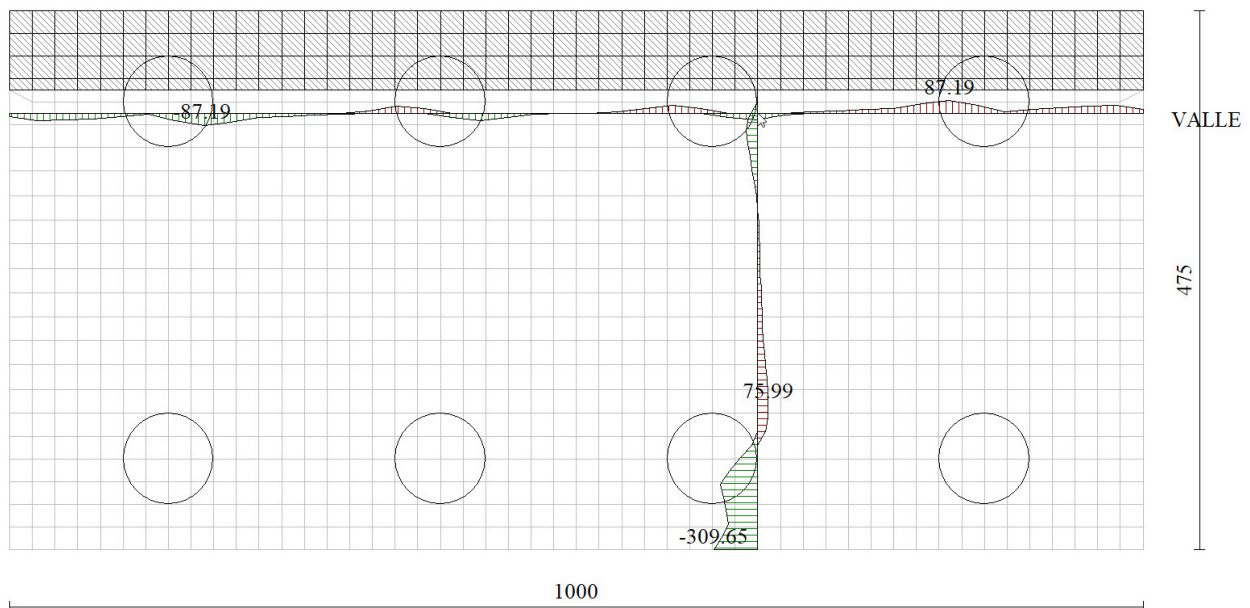
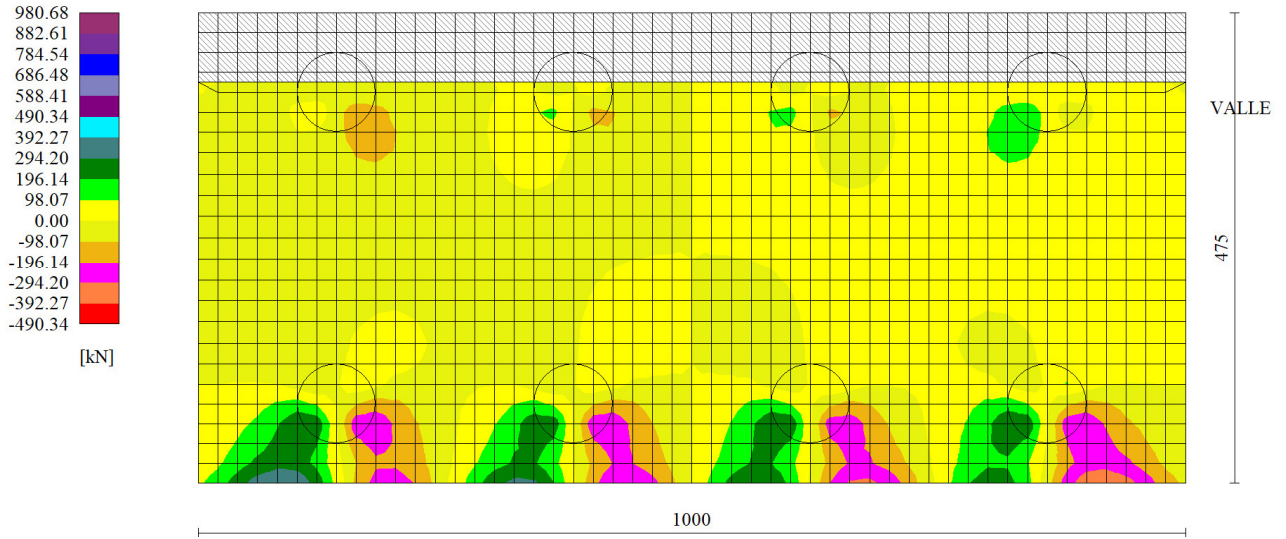


Figura 9-5. tagli Tx (SLU SLV) Td,x = 310 kN/m

APPALTATORE: Consorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI					
PROGETTAZIONE: Mandataria: ROCKSOIL S.P.A Mandanti: NET ENGINEERING GCF PINI ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA					
M-INGEGNERIA PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 36 di 95

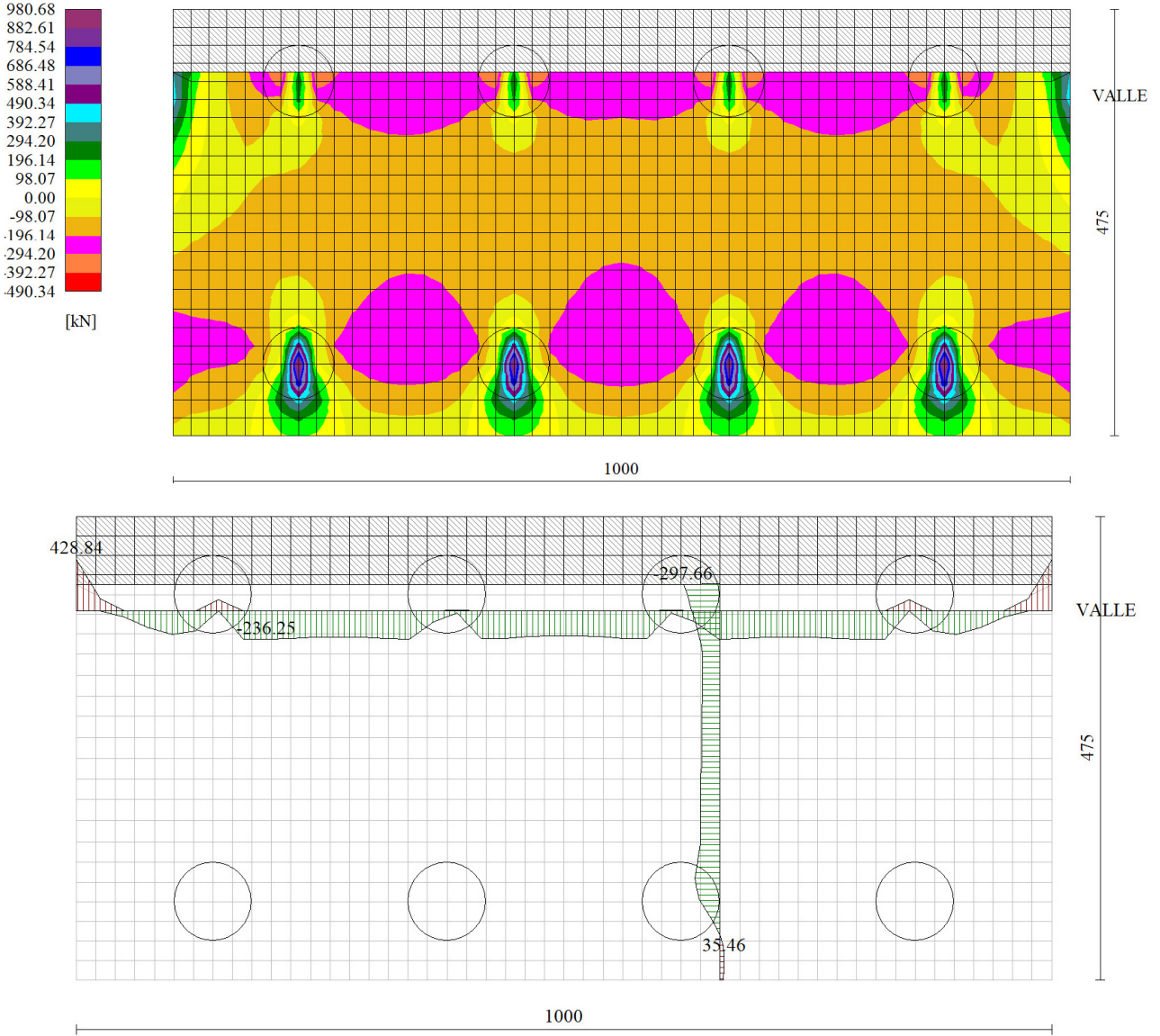


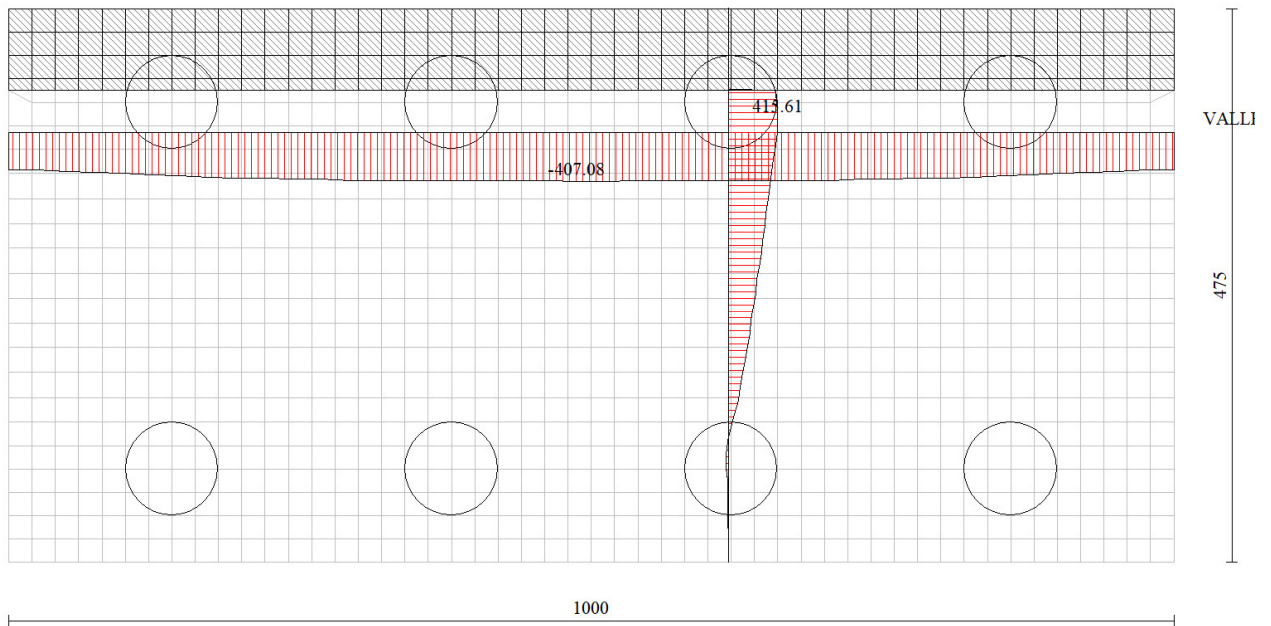
Figura 9-6. tagli Ty (SLU SLV) Td,y = 430 kNm/m

APPALTATORE: Consorzio <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI					
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 37 di 95

9.4 SOLLECITAZIONI SLE SULLA CIABATTA DI FONDAZIONE

Si riportano nel seguito le sollecitazioni in condizioni SLE per la ciabatta di fondazione.

Figura 9-7. sollecitazioni M_y in condizioni SLE per la ciabatta di fondazione



APPALTATORE: Consorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER													
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	<table border="1"> <thead> <tr> <th>COMMESSA</th> <th>LOTTO</th> <th>CODIFICA</th> <th>DOCUMENTO</th> <th>REV.</th> <th>FOGLIO</th> </tr> </thead> <tbody> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>38 di 95</td> </tr> </tbody> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A	02	E ZZ CL	RI1105 002	D	38 di 95
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	38 di 95								

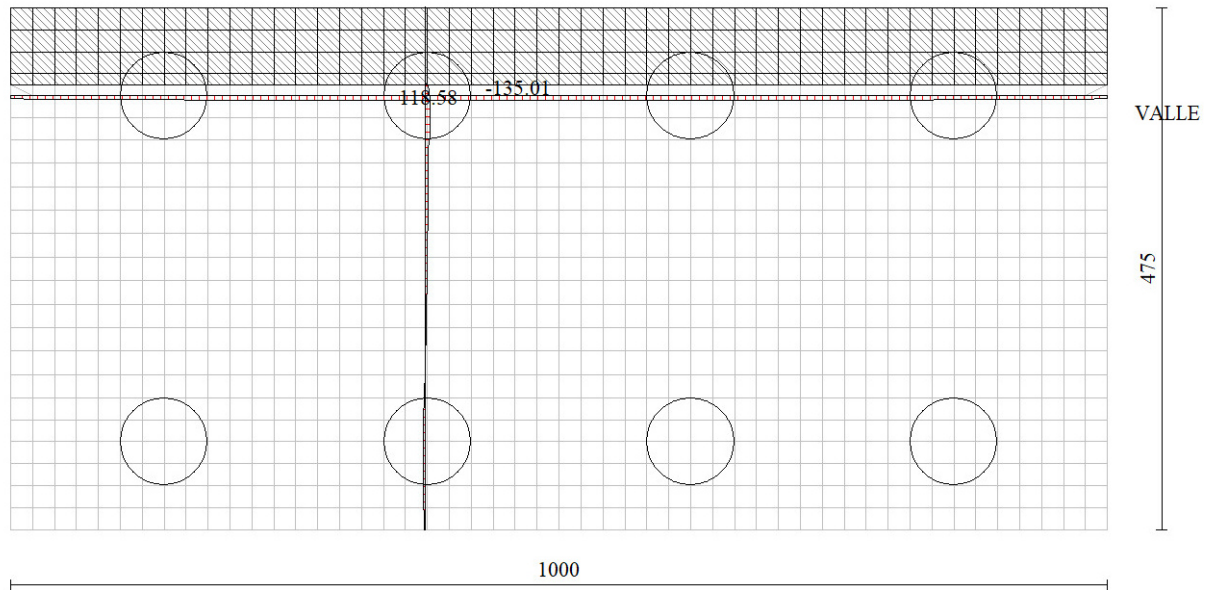


Figura 9-8. sollecitazioni M_x in condizioni SLE per la ciabatta di fondazione

APPALTATORE: Consorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI		ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER						
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo						
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	
IF3A	02	E ZZ CL	RI1105 002	D	39 di 95	

9.5 SOLLECITAZIONI SUI PALI DI FONDAZIONE

Si riportano nel seguito le sollecitazioni sui pali in condizioni SLU statiche, SLV (sismiche) e SLE rara

I momenti flettenti sono riportati in kNm

I Tagli sono riportati in kN

Gli sforzi normali sono riportati in kN

Gli spostamenti sono riportati in cm

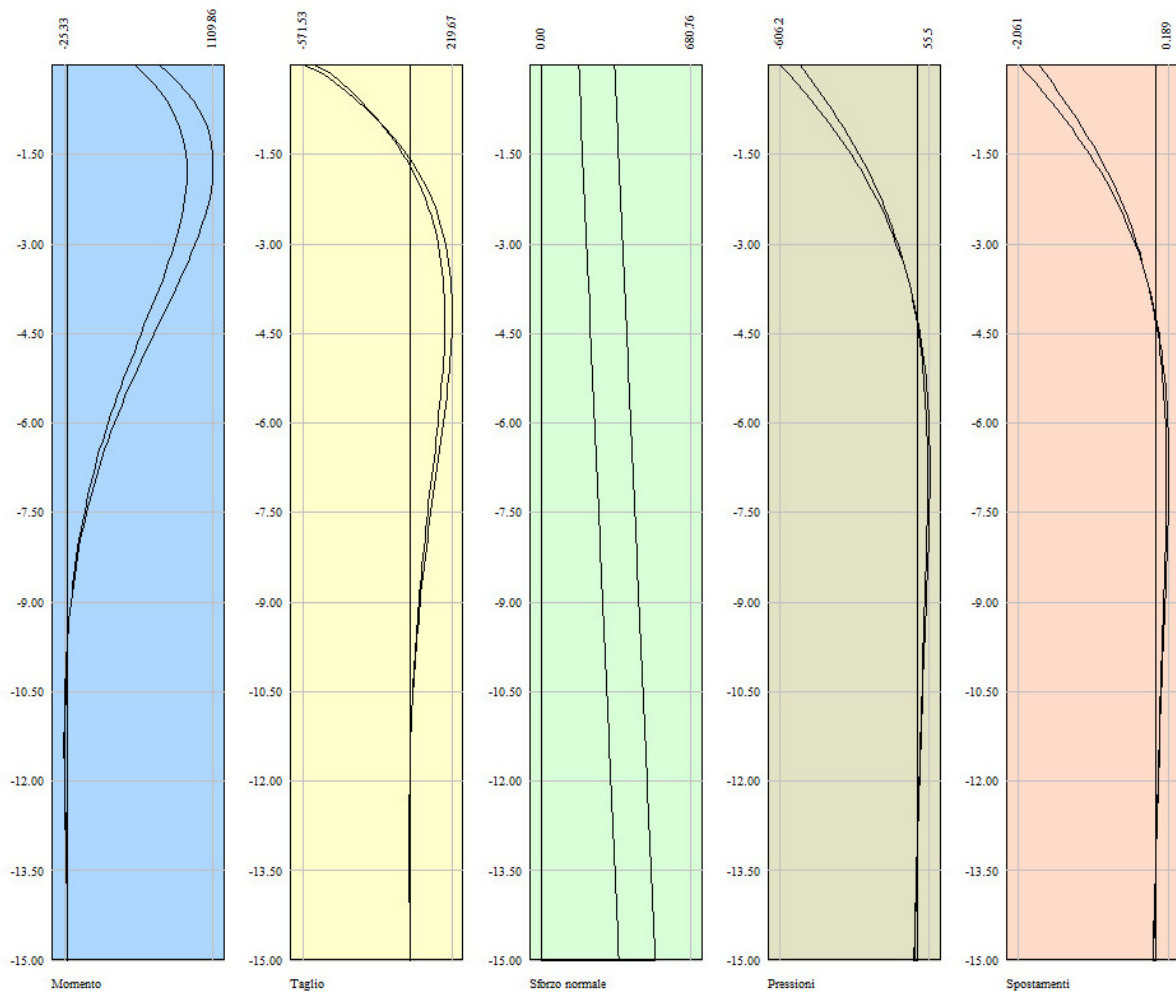


Figura 9-9. Sollecitazioni di progetto sui pali di fondazione e spost massimi (cond SLV)

APPALTATORE: Consorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI					
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 40 di 95

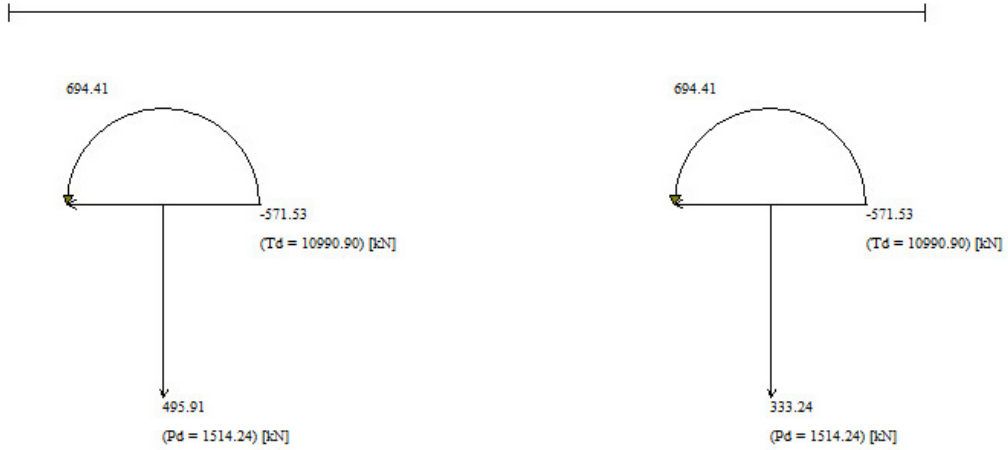


Figura 9-10. Sollecitazioni in testa ai pali (cond SLV)

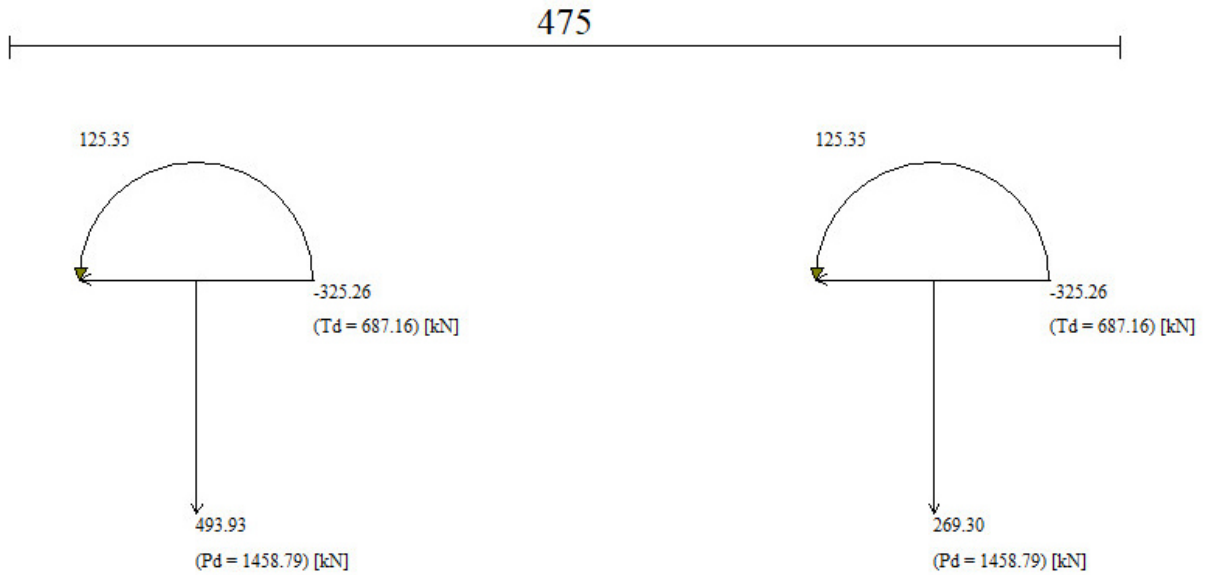


Figura 9-11. Sollecitazioni in testa ai pali (cond SLU)

APPALTATORE: Consorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI		ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA					
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER							
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo		COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO
		IF3A	02	E ZZ CL	RI1105 002	D	41 di 95

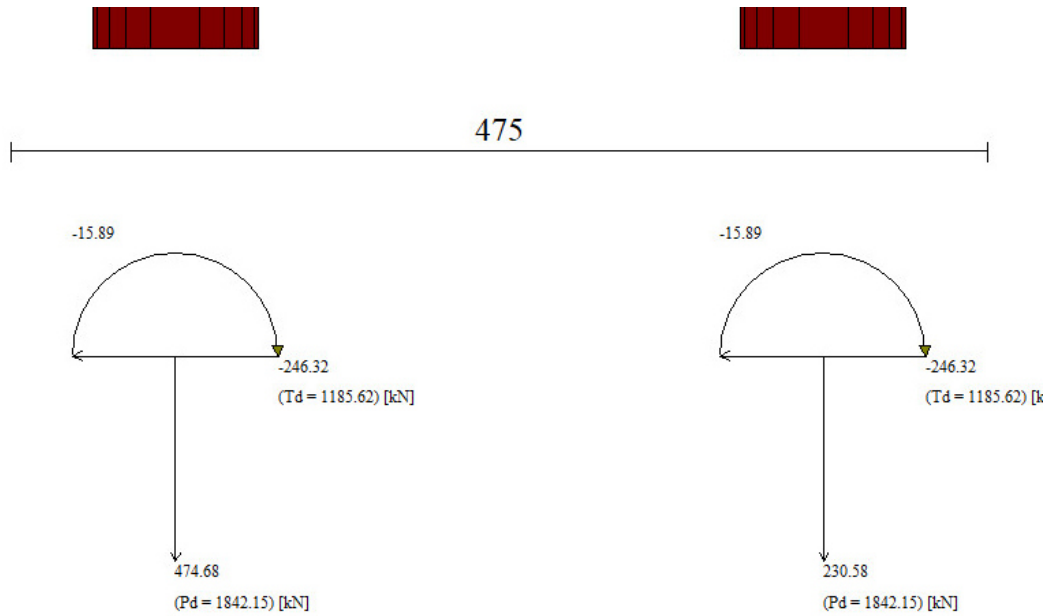


Figura 9-12. Sollecitazioni in testa ai pali (cond SLE)

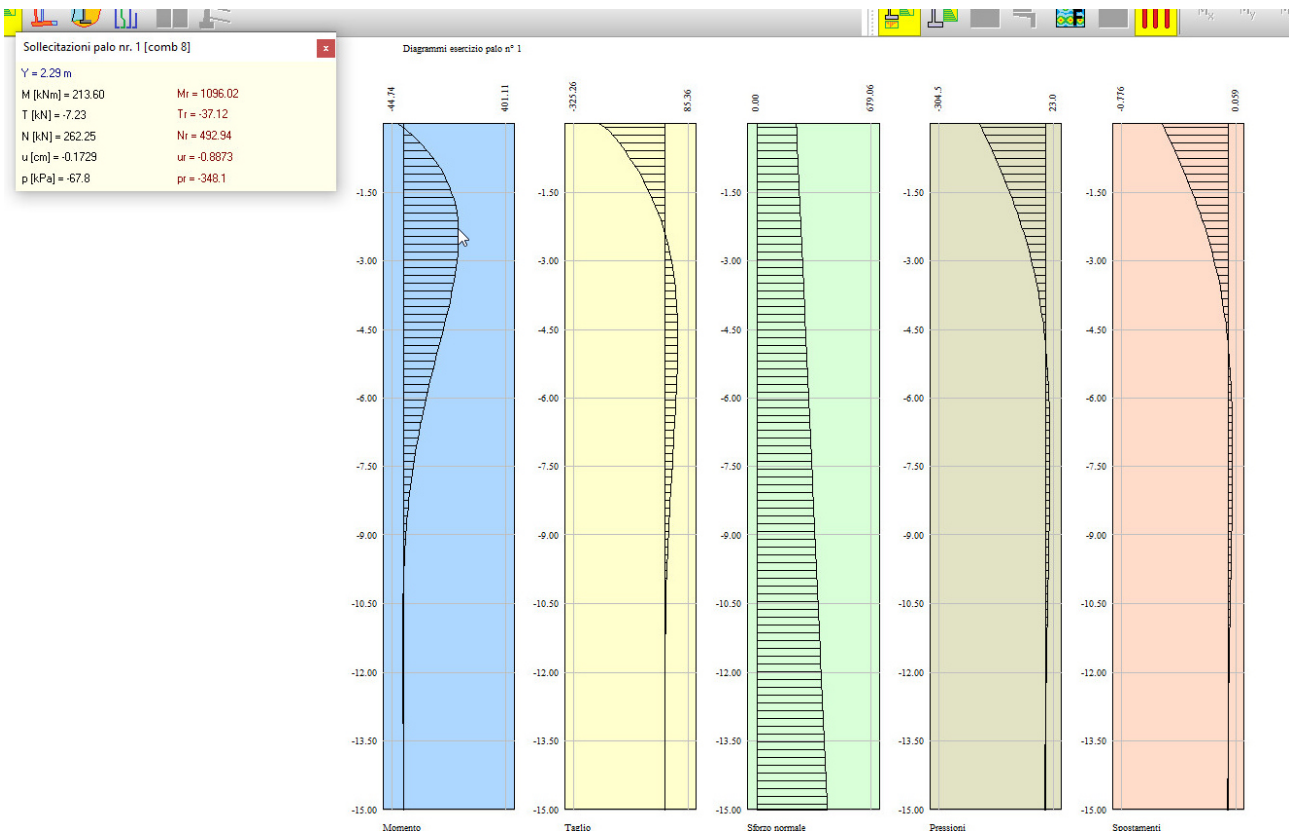


Figura 9-13. Sollecitazioni e spostamenti lungo il fusto dei pali (cond SLE). M SLE = 213 kN m

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA																
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER						<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">COMMESSA</th> <th style="text-align: left;">LOTTO</th> <th style="text-align: left;">CODIFICA</th> <th style="text-align: left;">DOCUMENTO</th> <th style="text-align: left;">REV.</th> <th style="text-align: left;">FOGLIO</th> </tr> </thead> <tbody> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>42 di 95</td> </tr> </tbody> </table>					COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO												
IF3A	02	E ZZ CL	RI1105 002	D	42 di 95												

Si noti che gli spostamenti calcolati in condizioni SLV sono tali da consentire l'adozione del metodo di Monobe Okabe per il calcolo delle spinte sismiche sul muro, dal momento che anche il solo spostamento orizzontale della fondazione risulta superiore al minimo spostamento indicato nell' EC7 - Parte 1 - Annesso C (C.3 "Movements to mobilise limit earth pressures).

$$v_{a, \min} = 0.1\% H = 0.1 \cdot 0.01 \cdot 650 = 0.65 \text{ cm}$$

$$U = 2.5 \text{ cm} > v_{a, \min}$$

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI GCF ELETTRI-FER M-INGEGNERIA													
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>43 di 95</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A	02	E ZZ CL	RI1105 002	D	43 di 95
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	43 di 95								

9.6 CARICO LIMITE ASSIALE DEL PALO DI FONDAZIONE

Si riportano nel seguito le curve di carico limite del palo D= 800 mm, sia in formato tabulare sia in formato grafico.

Le curve di carico limite di progetto sono ricavate per un fattore di correlazione stratigrafico

$$\xi_3 = \xi_4 = 1.7$$

E' evidenziato il carico limite per

$$L = 15.0 \text{ m}$$

Le curve di portanza sono calcolate nelle seguenti ipotesi

$$\text{Quota testa palo da p.c.} = .00 \text{ m}$$

$$\text{Quota falda da p.c.} = .00 \text{ m}$$

$$\text{Peso di volume del palo} = 6.00 \text{ kN/m}^3$$

$$\text{Fattore di sicurezza portata laterale} = 1.00 \text{ (FS,l)}$$

$$\text{Fattore di sicurezza portata di base} = 1.00 \text{ (FS,b)}$$

$$\text{Strato 1 "COLTRE " (Coesivo) da .00 a .50 m}$$

$$G_n = 20.0 \text{ kN/m}^3 \quad G_e = 10.0 \text{ kN/m}^3$$

$$\text{Tau} = \alpha * C_u < 100.0 \text{ kPa}$$

Criterio $\alpha(C_u)$ nel seguito

$$\text{Tau} > .23 * S'v$$

$$Q_b = 9.0 * C_u$$

$$C_u \text{ variabile lin. da } 90.0 \text{ a } 90.0 \text{ kPa}$$

$$\text{Strato 2 "STF2 " (Coesivo) da .50 a 5.00 m}$$

$$G_n = 20.0 \text{ kN/m}^3 \quad G_e = 10.0 \text{ kN/m}^3$$

$$\text{Tau} = \alpha * C_u < 100.0 \text{ kPa}$$

Criterio $\alpha(C_u)$ nel seguito

$$\text{Tau} > .23 * S'v$$

$$Q_b = 9.0 * C_u$$

$$C_u \text{ variabile lin. da } 110.0 \text{ a } 110.0 \text{ kPa}$$

$$\text{Strato 3 "STF2 " (Coesivo) da 5.00 a 30.00 m}$$

$$G_n = 20.0 \text{ kN/m}^3 \quad G_e = 10.0 \text{ kN/m}^3$$

$$\text{Tau} = \alpha * C_u < 100.0 \text{ kPa}$$

Criterio $\alpha(C_u)$ nel seguito

$$\text{Tau} > .23 * S'v$$

$$Q_b = 9.0 * C_u$$

$$C_u \text{ variabile lin. da } 250.0 \text{ a } 250.0 \text{ kPa}$$

APPALTATORE: <u>Consorzio Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI				
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
M-INGEGNERIA PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. FOGLIO D 44 di 95

Tabella 9-1. carico limite e carico di progetto dei pali

RI11 - Curve di capacità portante								
Pali trivellati Φ		800						
Numero verticali indagate		1						
ξ_s		1,7						
lpalo m	CARICO LIMITE ULTIMO			CURVE SLU				
	$Q_{b,lim}$ kN	$Q_{b,cr}$ kN	$Q_{TOT,lim}$ kN	$Q_{l,c,d}$ kN	$Q_{l,tr,d}$ kN	$Q_{b,d}$ kN	$Q_{tot,c,d}$ kN	$Q_{tot,tr,d}$ kN
0,00	0	407	407	0	0	177	177	0
0,50	66	407	471	34	31	177	209	33
1,00	138	425	560	71	65	185	252	68
1,50	214	443	653	109	101	193	296	106
2,00	290	461	746	148	136	201	341	142
2,50	366	480	838	187	172	209	386	180
3,00	442	498	931	226	208	217	431	217
3,50	518	498	1005	265	244	217	468	255
4,00	594	498	1080	304	280	217	505	292
4,50	670	498	1154	343	315	217	542	329
5,00	759	498	1241	388	357	217	586	372
5,50	872	624	1480	446	410	272	696	427
6,00	998	751	1731	510	470	327	814	488
6,50	1123	878	1981	574	528	383	931	548
7,00	1249	1004	2232	639	588	437	1049	609
7,50	1375	1131	2483	703	647	493	1166	670
8,00	1500	1131	2607	767	706	493	1229	730
8,50	1626	1131	2731	832	765	493	1291	791
9,00	1752	1131	2856	896	824	493	1354	851
9,50	1877	1131	2980	960	883	493	1415	912
10,00	2003	1131	3104	1025	943	493	1478	973
10,50	2129	1131	3228	1089	1002	493	1540	1034
11,00	2254	1131	3352	1153	1061	493	1603	1094
11,50	2380	1131	3476	1217	1120	493	1665	1155
12,00	2506	1131	3601	1282	1179	493	1728	1215
12,50	2631	1131	3725	1346	1238	493	1789	1276
13,00	2757	1131	3849	1410	1297	493	1852	1336
13,50	2883	1131	3973	1475	1357	493	1914	1398
14,00	3008	1131	4097	1539	1416	493	1977	1458
14,50	3134	1131	4221	1603	1475	493	2039	1519
15,00	3260	1131	4345	1668	1534	493	2102	1579
15,50	3385	1131	4470	1731	1593	493	2163	1640
16,00	3511	1131	4594	1796	1652	493	2226	1700
16,50	3637	1131	4718	1860	1712	493	2288	1762
17,00	3762	1131	4842	1924	1770	493	2351	1821
17,50	3888	1131	4966	1989	1830	493	2413	1883
18,00	4014	1131	5090	2053	1889	493	2476	1943
18,50	4139	1131	5215	2117	1948	493	2537	2004
19,00	4265	1131	5339	2182	2007	493	2600	2064
19,50	4391	1131	5463	2246	2066	493	2662	2125
20,00	4516	1131	5587	2310	2125	493	2725	2185

APPALTATORE: Consorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER													
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>45 di 95</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A	02	E ZZ CL	RI1105 002	D	45 di 95
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	45 di 95								

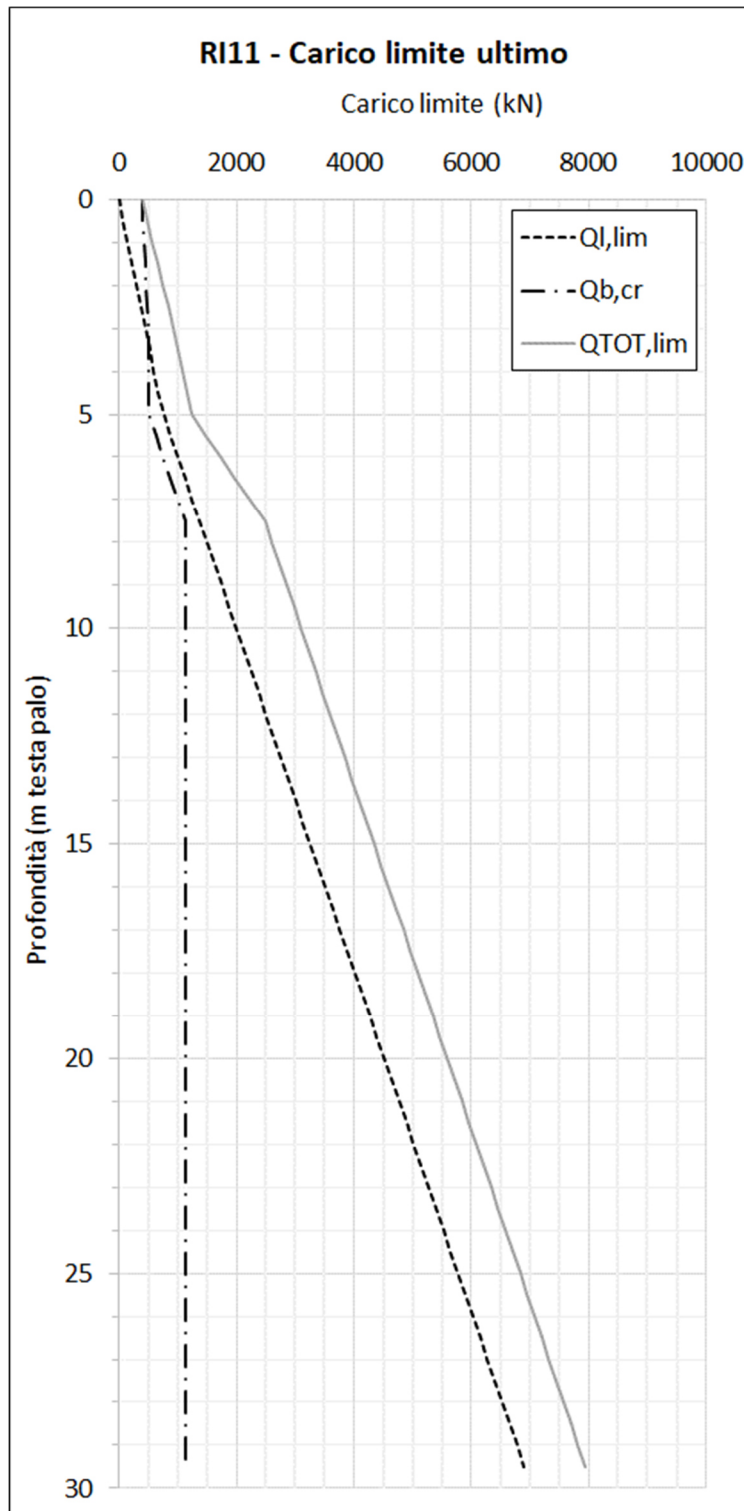


Figura 9-14. Carico limite ultimo dei pali di fondazione

APPALTATORE: Consorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER													
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>46 di 95</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A	02	E ZZ CL	RI1105 002	D	46 di 95
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	46 di 95								

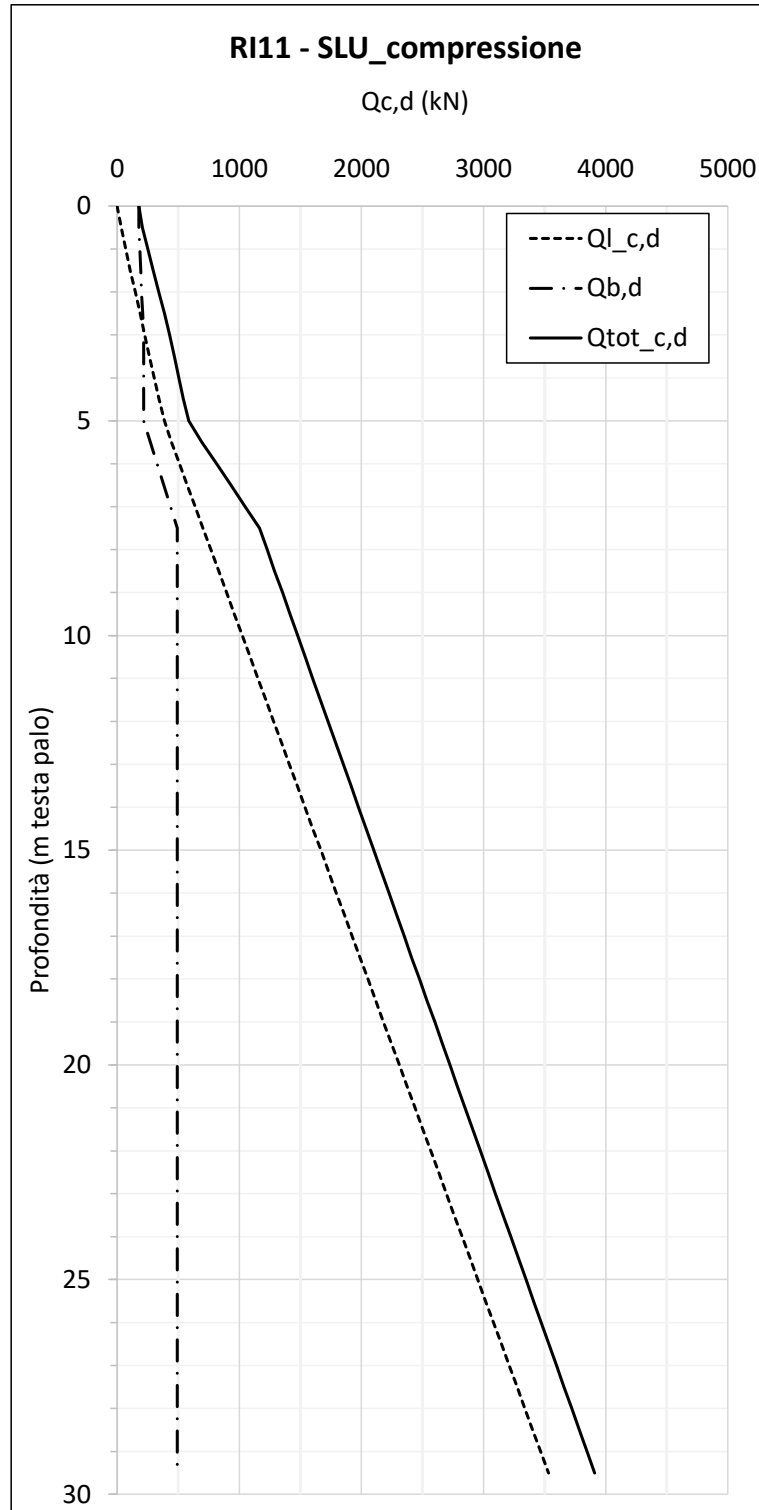


Figura 9-15. Carico limite di progetto dei pali di fondazione in compressione

APPALTATORE: Consorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER													
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>47 di 95</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A	02	E ZZ CL	RI1105 002	D	47 di 95
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	47 di 95								

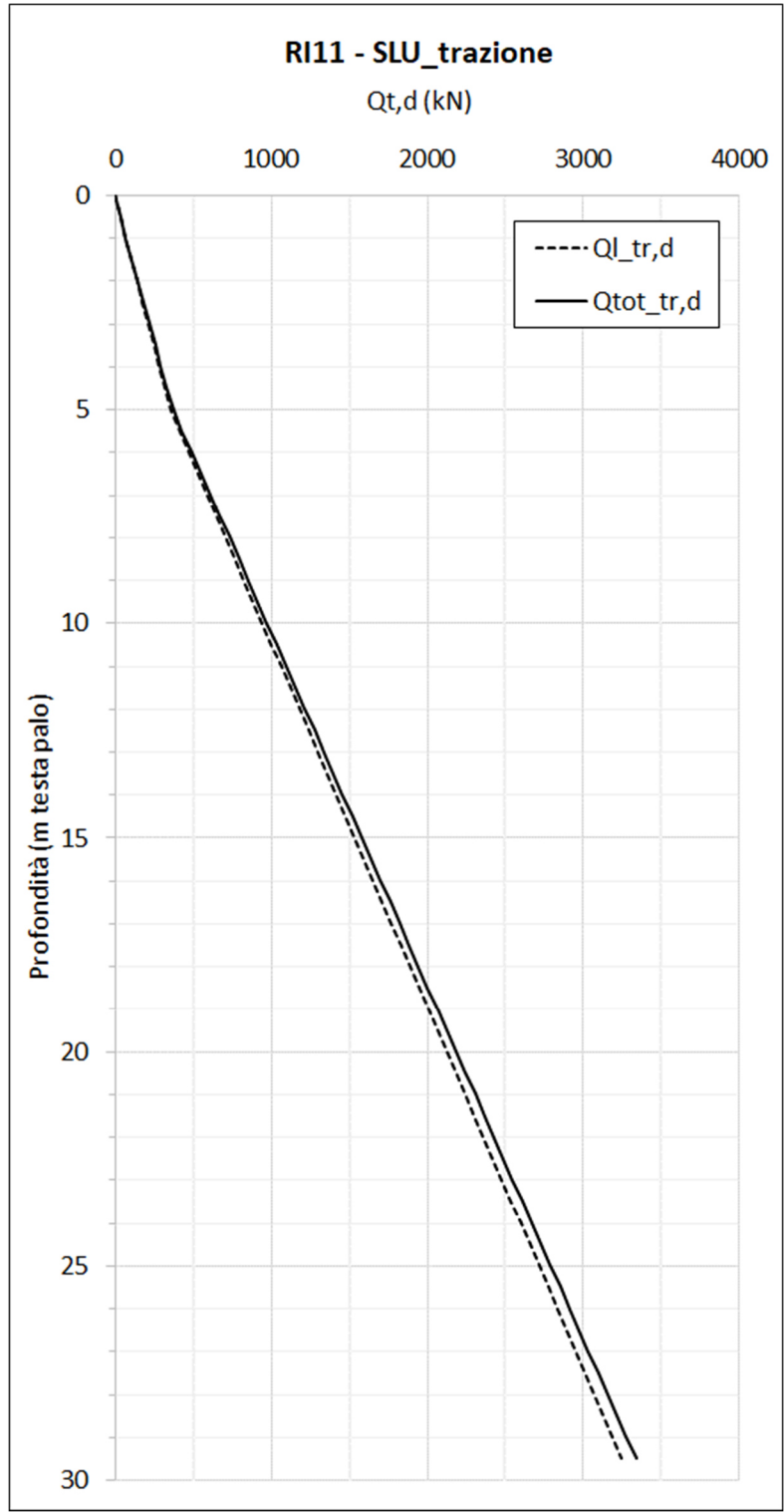


Figura 9-16. Carico limite di progetto dei pali di fondazione in trazione

APPALTATORE: <u>Conorzio Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI					
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 48 di 95

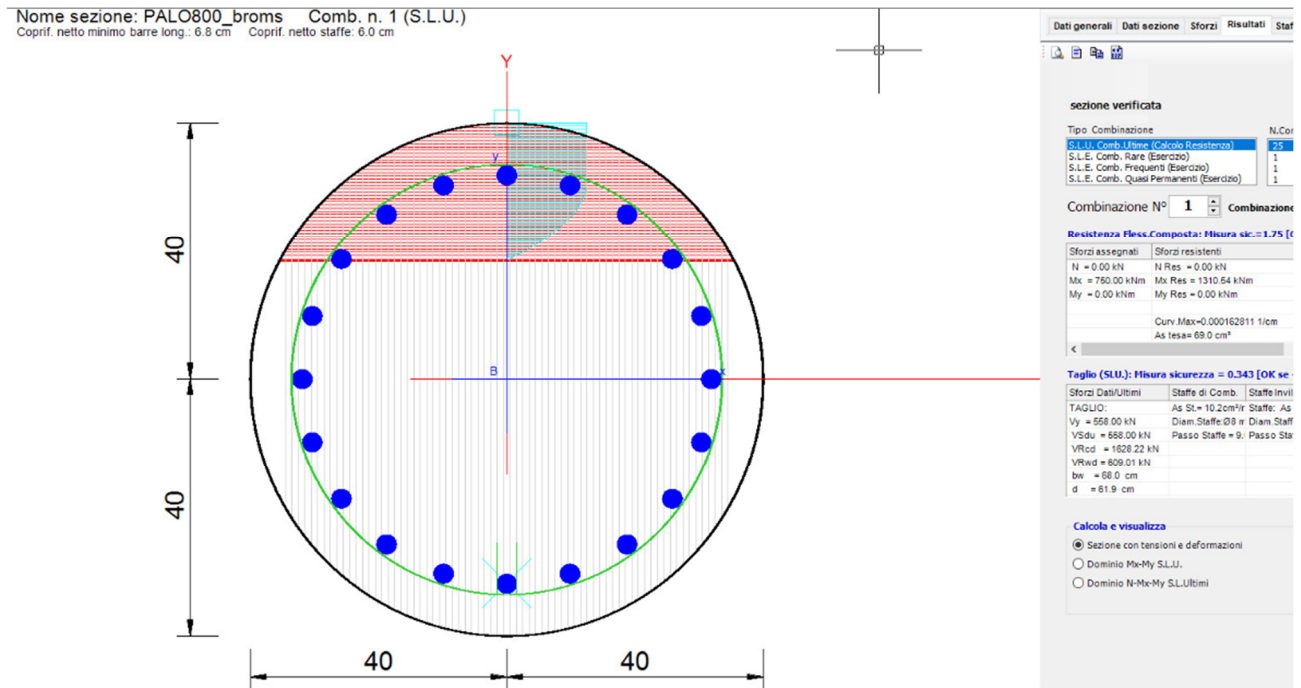
9.7 CARICO LIMITE TRASVERSALE DEL PALO DI FONDAZIONE

Si riporta nel seguito il calcolo del carico limite trasversale del palo di fondazione, sia in tensioni totali (per le verifiche in condizioni non drenate, caso sismico), sia in tensioni efficaci (per le verifiche in condizioni drenate, caso non sismico).

Concordemente alla interpretazione più corretta del metodo, il momento di plasticizzazione del palo è calcolato senza tener conto dei coefficienti di riduzione delle caratteristiche dei materiali strutturali.

Il momento di plasticizzazione vale in questa condizione:

$$M_y = 1300 \text{ kN m}$$



CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	<u>25/30</u>
	Resis. compr. di progetto fcd:	24.9 MPa
	Resis. compr. ridotta fcd':	12.5 MPa
	Def.unit. max resistenza ec2:	0.0020
	Def.unit. ultima ecu:	0.0035
	Diagramma tensione-deformaz.:	Parabola-Rettangolo
	Modulo Elastico Normale Ec:	31447.2 MPa
Resis. media a trazione fctm:	2.60 MPa	
ACCIAIO LONG. -	Tipo:	B450C"
	Resist. caratt. snervam. fyk:	450.0 MPa
	Resist. caratt. rottura ftk:	450.0 MPa
	Resist. snerv. di progetto fyd:	450.0 MPa
	Resist. ultima di progetto ftd:	450.0 MPa
	Deform. ultima di progetto Epu:	0.068

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo					
COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 49 di 95

	Modulo Elastico Ef	2000000	daN/cm ²
	Diagramma tensione-deformaz.:	Bilineare finito	
ACCIAIO STAFFE -	Tipo:	B450C	
	Resist. caratt. snervam. fyk:	450.0	MPa
	Resist. caratt. rottura ftk:	450.0	MPa
	Resist. snerv. di progetto fyd:	391.3	MPa
	Resist. ultima di progetto ftd:	391.3	MPa
	Deform. ultima di progetto Epu:	0.068	
	Modulo Elastico Ef	2000000	daN/cm ²
	Diagramma tensione-deformaz.:	Bilineare finito	

CARATTERISTICHE DOMINIO CALCESTRUZZO

Forma del Dominio: Circolare
Classe Calcestruzzo: 25/30

Raggio circ.: 40.0 cm
X centro circ.: 0.0 cm
Y centro circ.: 0.0 cm

DATI GENERAZIONI CIRCOLARI DI BARRE

N°Gen. Numero assegnato alla singola generazione circolare di barre
Xcentro Ascissa [cm] del centro della circonfer. lungo cui sono disposte le barre generate
Ycentro Ordinata [cm] del centro della circonfer. lungo cui sono disposte le barre generate
Raggio Raggio [cm] della circonferenza lungo cui sono disposte le barre generate
N°Barre Numero di barre generate equidist. disposte lungo la circonferenza
Ø Diametro [mm] della singola barra generata

N°Gen.	Xcentro	Ycentro	Raggio	N°Barre	Ø
1	0.0	0.0	31.9	20	26

ARMATURE A TAGLIO

Diametro staffe: 8 mm
Passo staffe: 9.0 cm
Staffe: Una sola staffa chiusa perimetrale

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale [kN] applicato nel Baric. (+ se di compressione)
Mx Momento flettente [kNm] intorno all'asse x princ. d'inerzia con verso positivo se tale da comprimere il lembo sup. della sez.
My Momento flettente [kNm] intorno all'asse y princ. d'inerzia con verso positivo se tale da comprimere il lembo destro della sez.
Vy Componente del Taglio [kN] parallela all'asse princ.d'inerzia y
Vx Componente del Taglio [kN] parallela all'asse princ.d'inerzia x

N°Comb.	N	Mx	My	Vy	Vx
1	0.00	750.00	0.00	558.00	0.00

RISULTATI DEL CALCOLO

Sezione verificata per tutte le combinazioni assegnate

Copriferro netto minimo barre longitudinali: 6.8 cm

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER													
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>50 di 95</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A	02	E ZZ CL	RI1105 002	D	50 di 95
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	50 di 95								

Interferro netto minimo barre longitudinali: 7.4 cm
 Copriferro netto minimo staffe: 6.0 cm

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

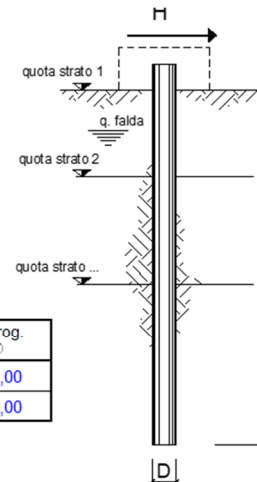
Ver S = combinazione verificata / N = combin. non verificata
 N Sforzo normale assegnato [kN] nel baricentro B sezione cls.(positivo se di compressione)
 Mx Componente del momento assegnato [kNm] riferito all'asse x princ. d'inerzia
 My Componente del momento assegnato [kNm] riferito all'asse y princ. d'inerzia
 N Res Sforzo normale resistente [kN] nel baricentro B sezione cls.(positivo se di compress.)
 Mx Res Momento flettente resistente [kNm] riferito all'asse x princ. d'inerzia
 My Res Momento flettente resistente [kNm] riferito all'asse y princ. d'inerzia
 Mis.Sic. Misura sicurezza = rapporto vettoriale tra (N r,Mx Res,My Res) e (N,Mx,My)
 Verifica positiva se tale rapporto risulta >=1.000
 As Tesa Area armature trave [cm²] in zona tesa. [Tra parentesi l'area minima ex § 7.2.6 NTC

N°Comb	Ver	N	Mx	My	N Res	Mx Res	My Res	Mis.Sic.	As Tesa
1	S	0.00	750.00	0.00	0.00	1310.54	0.00	1.75	69.0(10.1)

In condizioni drenate, ovvero in tensioni efficaci, il carico trasversale di progetto vale
 Hd = 447.8

APPALTATORE: Consorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI		ITINERARIO NAPOLI – BARI					
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER		RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo		COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 51 di 95

coefficienti parziali			A		M		R
Metodo di calcolo			permanenti	variabili	γ_{φ}	γ_{cu}	γ_T
			γ_G	γ_Q			
SLU	A1+M1+R1	<input type="radio"/>	1,30	1,50	1,00	1,00	1,00
	A2+M1+R2	<input type="radio"/>	1,00	1,30	1,00	1,00	1,60
	A1+M1+R3	<input checked="" type="radio"/>	1,30	1,50	1,00	1,00	1,30
	SISMA	<input type="radio"/>	1,00	1,00	1,00	1,00	1,30
DM88		<input type="radio"/>	1,00	1,00	1,00	1,00	1,00
definiti dal progettista			1,30	1,50	1,25	1,40	1,00



n	1	2	3	4	5	7	≥10	T.A.	prog.
ξ_3	1,70	1,65	1,60	1,55	1,50	1,45	1,40	1,00	1,00
ξ_4	1,70	1,55	1,48	1,42	1,34	1,28	1,21	1,00	1,00

strati terreno	descrizione	quote (m)	γ (kN/m ³)	γ' (kN/m ³)	φ (°)	Parametri medi		Parametri minimi		
						k_p	c_u (kPa)	φ (°)	k_p	c_u (kPa)
p.c.=strato 1		100,00	20	10	27	2,66		27	2,66	
<input checked="" type="checkbox"/> strato 2		98,00	20	10	27	2,66		27	2,66	
<input type="checkbox"/> strato 3						1,00			1,00	
<input type="checkbox"/> strato 4						1,00			1,00	
<input type="checkbox"/> strato 5						1,00			1,00	
<input type="checkbox"/> strato 6						1,00			1,00	

Quota falda **0** (m)
 Diametro del palo D **0,80** (m)
 Lunghezza del palo L **15,00** (m)
 Momento di plasticizzazione palo My **1300,33** (kNm)
 Step di calcolo **0,01** (m)

palo impedito di ruotare
 palo libero

Calcolo
 (ctrl+r)

	H medio		H minimo	
Palo lungo	989,6 (kN)		989,6 (kN)	
Palo intermedio	3858,0 (kN)		3858,0 (kN)	
Palo corto	14379,9 (kN)		14379,9 (kN)	
H_{med}	989,6 (kN)	Palo lungo	H_{min}	989,6 (kN)
H_k = Min(H_{med}/ξ₃ ; R_{min}/ξ₄)				582,12 (kN)
H_d = H_k/γ_T				447,79 (kN)

APPALTATORE: Consorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI		ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER						
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo						
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	
IF3A	02	E ZZ CL	RI1105 002	D	52 di 95	

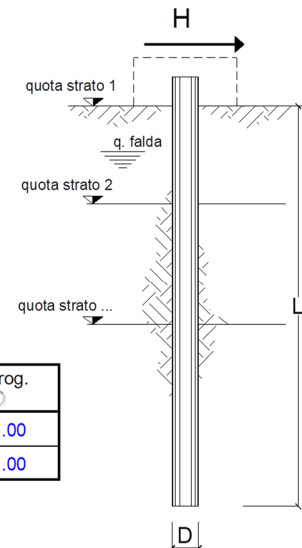
In condizioni non drenate, ovvero in tensioni totali, il carico trasversale di progetto vale

$H_d = 584 \text{ kN}$

opera **Ri11**

coefficienti parziali			A		M		R	
			permanenti	variabili	γ_ϕ	γ_{cu}	γ_T	
Metodo di calcolo			γ_G	γ_Q				
S.U.	A1+M1+R1	<input type="radio"/>	1.30	1.50	1.00	1.00	1.00	
	A2+M1+R2	<input type="radio"/>	1.00	1.30	1.00	1.00	1.60	
	A1+M1+R3	<input checked="" type="radio"/>	1.30	1.50	1.00	1.00	1.30	
	SISMA	<input type="radio"/>	1.00	1.00	1.00	1.00	1.30	
DM88			<input type="radio"/>	1.00	1.00	1.00	1.00	
definiti dal progettista			<input type="radio"/>	1.30	1.50	1.25	1.40	1.00

n	1	2	3	4	5	7	≥ 10	T.A.	prog.
ξ_3	1.70	1.65	1.60	1.55	1.50	1.45	1.40	1.00	1.00
ξ_4	1.70	1.55	1.48	1.42	1.34	1.28	1.21	1.00	1.00



strati terreno	descrizione	quote (m)	γ (kN/m ³)	γ' (kN/m ³)	ϕ (°)	Parametri medi		Parametri minimi		
						k_p	c_u (kPa)	ϕ (°)	k_p	c_u (kPa)
p.c.=strato 1		100.00	19	9		1.00	90		1.00	90
<input checked="" type="checkbox"/> strato 2		99.50	20	10		1.00	100		1.00	100
<input checked="" type="checkbox"/> strato 3		94.50	20	10		1.00	250		1.00	250
<input type="checkbox"/> strato 4						1.00			1.00	
<input type="checkbox"/> strato 5						1.00			1.00	
<input type="checkbox"/> strato 6						1.00			1.00	

Quota falda 0 (m)

Diametro del palo D 0.80 (m)

Lunghezza del palo L 15.00 (m)

Momento di plasticizzazione palo M_y 1300.33 (kNm)

Step di calcolo 0.01 (m)

- palo impedito di ruotare
 palo libero

Calcolo
(ctrl+r)

	<u>H medio</u>		<u>H minimo</u>	
Palo lungo	1292.4 (kN)		1292.4 (kN)	
Palo intermedio	6073.2 (kN)		6073.2 (kN)	
Palo corto	20203.2 (kN)		20203.2 (kN)	
H_{med}	1292.4 (kN)	Palo lungo	H_{min}	1292.4 (kN)
H_k = Min(H_{med}/ξ₃ ; R_{min}/ξ₄)			760.24 (kN)	
H_d = H_k/γ_T			584.80 (kN)	

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI				
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
M-INGEGNERIA PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. FOGLIO D 53 di 95

10 VERIFICHE GEOTENICHE DEL PALO DI FONDAZIONE

10.1 VERIFICA A CARICO LIMITE ASSIALE A COMPRESSIONE

La verifica è soddisfatta essendo

$E_d < R_d$

500 kN < 2102 kN

10.2 VERIFICA A CARICO LIMITE ASSIALE A TRAZIONE

Non ci sono pali sottoposti a trazione

10.3 VERIFICA A CARICO LIMITE ASSIALE GLOBALE

Ai fini di una verifica globale della palificata a carico limite assiale si confrontano nel seguito il massimo carico verticale agente sulla fondazione e la somma del carico limite dei pali afferenti al concio medesimo, moltiplicata per il coefficiente di interazione tra i pali così come definito dall'espressione di Converse Labarre, al fine di tenere conto dell'effetto gruppo tra i pali.

Si trova, per quel che riguarda l'efficienza del numero dei pali:

$$E = 1 - \frac{\arctg(i/d) (m-1)n + (n-1)m}{\pi/2 \quad mn}$$

dove m ed n sono rispettivamente il numero di pali lungo un allineamento orizzontale e lungo un allineamento verticale, i l'interasse tra i pali e d il diametro dei pali medesimi

Nel caso presente si trova

m=4

n= 2

i= 2.4 m

d = 0.8

Si trova

E = 0.74

Il carico limite di progetto della palificata vale perciò

$Q_{d,tot} = 0.74 * 8 * 2102 = 21444 \text{ kN}$

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA										
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER						<table border="1"> <tr> <td data-bbox="730 358 858 409">COMMESSA IF3A</td> <td data-bbox="858 358 959 409">LOTTO 02</td> <td data-bbox="959 358 1086 409">CODIFICA E ZZ CL</td> <td data-bbox="1086 358 1262 409">DOCUMENTO RI1105 002</td> <td data-bbox="1262 358 1342 409">REV. D</td> <td data-bbox="1342 358 1436 409">FOGLIO 54 di 95</td> </tr> </table>					COMMESSA IF3A
COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 54 di 95						

Il carico verticale massimo agente sulla palificata vale invece, come si evince dagli allegati

Ed,tot = 8000 (circa, calcolato cautelativamente moltiplicando il carico massimo sul singolo palo per il numero dei pali)

La verifica è pertanto soddisfatta.

10.4 VERIFICA A CARICO LIMITE TRASVERSALE

La verifica è soddisfatta essendo, in condizioni statiche (tensioni efficaci)

$Ed < Rd$

$325 \text{ kN} < 447.8 \text{ kN}$

La verifica è soddisfatta anche in condizioni simiche (tensioni totali)

$Ed < Rd$

$571 \text{ kN} < 584 \text{ kN}$

Il dettaglio tabulare dei risultati delle azioni sui pali è riportato in allegato.

APPALTATORE: Consorzio <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI					
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 55 di 95

11 VERIFICHE DI STABILITA' GLOBALE

Si riportano nel seguito le verifiche di stabilità del muro di sostegno.

In condizioni statiche esse sono svolte in tensioni efficaci ed in tensioni totali in condizioni statiche e solo in tensioni totali in condizioni sismiche.

I pali sono stati schematizzati come elementi resistenti a taglio, con resistenza pari a quella definita nelle verifiche strutturali

$T_d = 900 \text{ kN}$

Si riportano nel seguito gli esiti delle verifiche effettuate.

Come si nota

In condizioni statiche risulta sempre

$FS > 1.1$

In condizioni sismiche

$FS > 1.2$

Le verifiche sono perciò soddisfatte

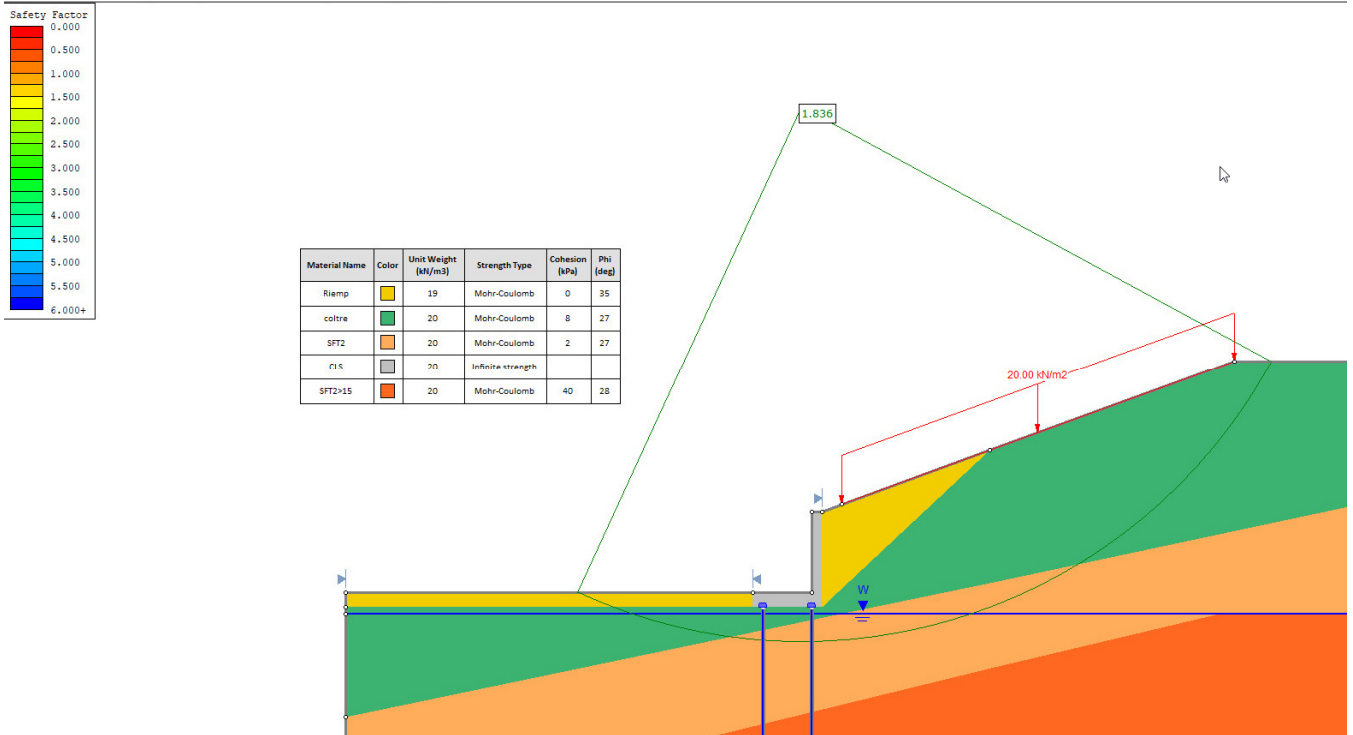


Figura 11-1. Verifiche di stabilità, condizioni statiche, tensioni efficaci

APPALTATORE: Consorzio <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI		ITINERARIO NAPOLI – BARI					
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER		RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo		COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 56 di 95

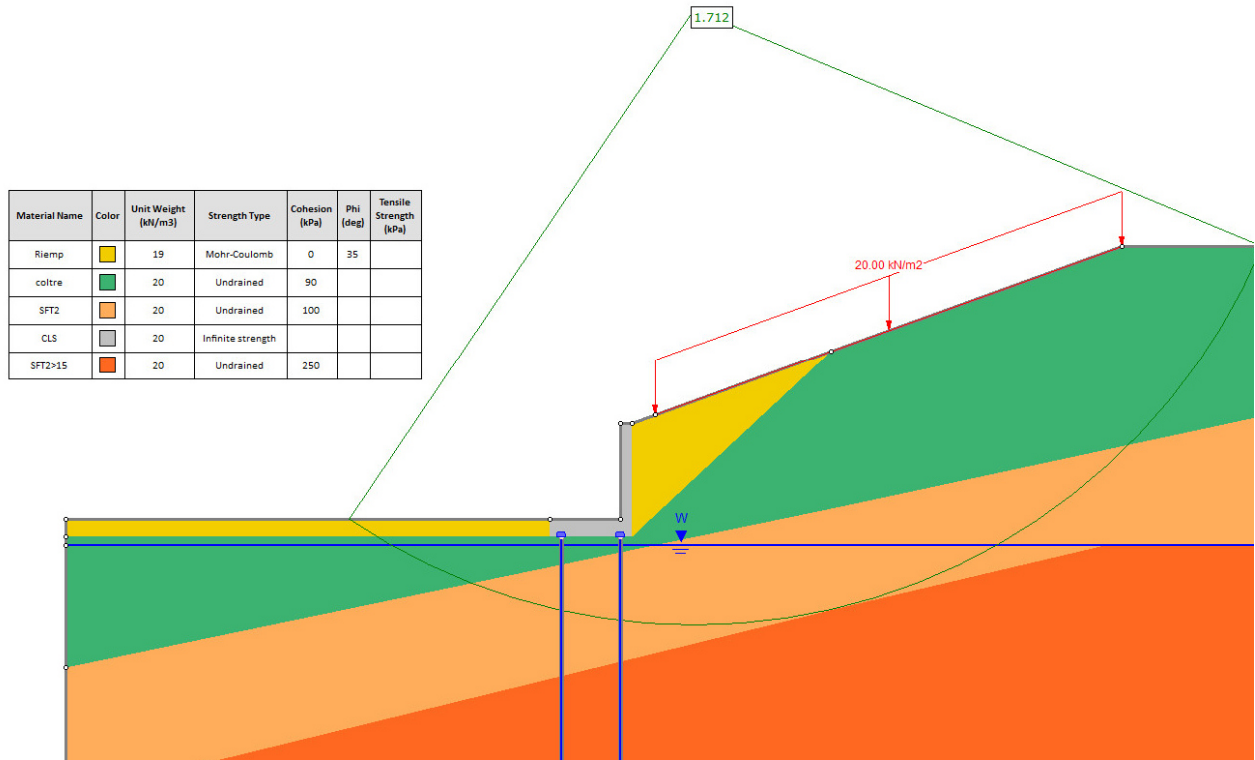


Figura 11-2. Verifiche di stabilità, condizioni statiche, tensioni totali

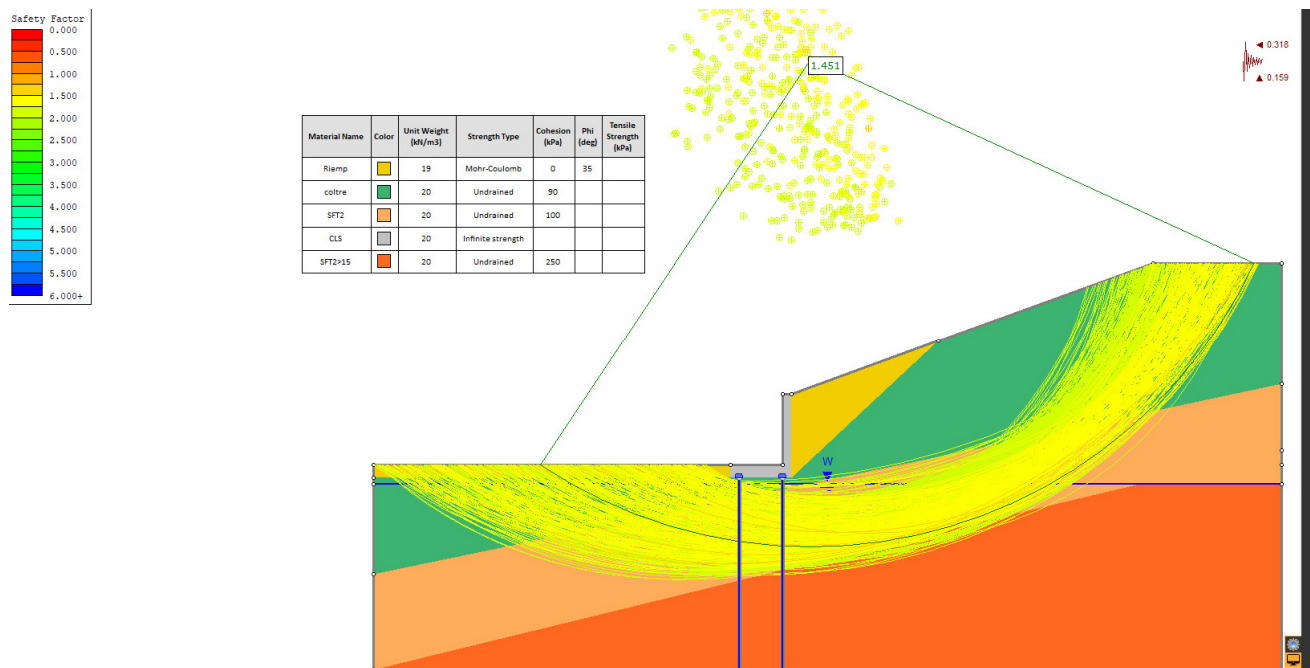


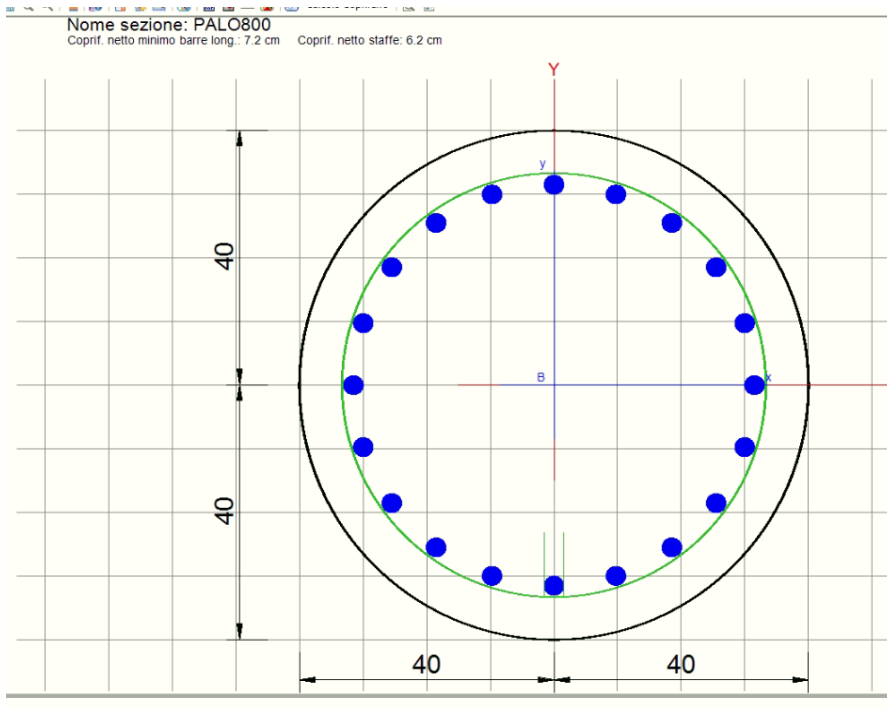
Figura 11-3. Verifiche di stabilità, condizioni sismiche

APPALTATORE: Conorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI				
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. FOGLIO D 57 di 95

12 VERIFICHE STRUTTURALI DEL PALO DI FONDAZIONE

Si riepilogano nel seguito le verifiche strutturali del palo di fondazione

I pali sono armati con 20 Φ 26 e con staffe Φ 10/10



Descrizione Sezione:

Metodo di calcolo resistenza:	Resistenze agli Stati Limite Ultimi
Tipologia sezione:	Sezione generica di Trave
Normativa di riferimento:	N.T.C.
Percorso sollecitazione:	A Sforzo Norm. costante
Condizioni Ambientali:	Molto aggressive
Riferimento Sforzi assegnati:	Assi x,y principali d'inerzia
Riferimento alla sismicit�:	Comb. non sismiche

CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C28/35
	Resis. compr. di progetto fcd:	15.9 MPa
	Resis. compr. ridotta fcd':	7.9 MPa
	Def.unit. max resistenza ec2:	0.0020
	Def.unit. ultima ecu:	0.0035

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI				
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
M-INGEGNERIA PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D FOGLIO 58 di 95

Diagramma tensione-deformaz.:	Parabola-Rettangolo
Modulo Elastico Normale Ec:	32308.0 MPa
Resis. media a trazione fctm:	2.76 MPa
Coeff. Omogen. S.L.E.:	15.00
Sc limite S.L.E. comb. Rare:	16.8 MPa
Sc limite S.L.E. comb. Frequenti:	16.8 MPa
Ap.Fessure limite S.L.E. comb. Frequenti:	0.200 mm
Sc limite S.L.E. comb. Q.Permanenti:	12.6 MPa
Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.200 mm

ACCIAIO -	Tipo:	B450C
	Resist. caratt. snervam. fyk:	450.0 MPa
	Resist. caratt. rottura ftk:	450.0 MPa
	Resist. snerv. di progetto fyd:	391.3 MPa
	Resist. ultima di progetto ftd:	391.3 MPa
	Deform. ultima di progetto Epu:	0.068
	Modulo Elastico Ef	2000000 daN/cm ²
	Diagramma tensione-deformaz.:	Bilineare finito
	Coeff. Aderenza istantaneo $\beta_1 \cdot \beta_2$:	1.00
	Coeff. Aderenza differito $\beta_1 \cdot \beta_2$:	0.50
	Sf limite S.L.E. Comb. Rare:	360.00 MPa

CARATTERISTICHE DOMINIO CALCESTRUZZO

Forma del Dominio:	Circolare
Classe Calcestruzzo:	C28/35

Raggio circ.:	40.0 cm
X centro circ.:	0.0 cm
Y centro circ.:	0.0 cm

DATI GENERAZIONI CIRCOLARI DI BARRE

N°Gen.	Numero assegnato alla singola generazione circolare di barre
Xcentro	Ascissa [cm] del centro della circonf. lungo cui sono disposte le barre generate
Ycentro	Ordinata [cm] del centro della circonf. lungo cui sono disposte le barre generate
Raggio	Raggio [cm] della circonferenza lungo cui sono disposte le barre generate
N°Barre	Numero di barre generate equidist. disposte lungo la circonferenza
Ø	Diametro [mm] della singola barra generata

APPALTATORE: <u>Conorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI GCF ELETTRI-FER													
M-INGEGNERIA													
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>59 di 95</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A	02	E ZZ CL	RI1105 002	D	59 di 95
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	59 di 95								

N°Gen.	Xcentro	Ycentro	Raggio	N°Barre	Ø
1	0.0	0.0	31.5	20	26

ARMATURE A TAGLIO

Diametro staffe:	10 mm
Passo staffe:	10.0 cm
Staffe:	Una sola staffa chiusa perimetrale

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baric. (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia con verso positivo se tale da comprimere il lembo sup. della sez.
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia con verso positivo se tale da comprimere il lembo destro della sez.
Vy	Componente del Taglio [kN] parallela all'asse princ.d'inerzia y
Vx	Componente del Taglio [kN] parallela all'asse princ.d'inerzia x

N°Comb.	N	Mx	My	Vy	Vx
1	250.00	1109.00	0.00	571.00	0.00

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	0.00	213.00	0.00

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo					
COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 60 di 95

N Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)

Mx Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo superiore della sezione

My Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	0.00	213.00 (193.26)	0.00 (0.00)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)

Mx Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo superiore della sezione

My Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	0.00	213.00 (193.26)	0.00 (0.00)

RISULTATI DEL CALCOLO

Sezione verificata per tutte le combinazioni assegnate

Copriferro netto minimo barre longitudinali: 7.2 cm

Interferro netto minimo barre longitudinali: 7.3 cm

Copriferro netto minimo staffe: 6.2 cm

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver S = combinazione verificata / N = combin. non verificata

N Sforzo normale assegnato [kN] nel baricentro B sezione cls.(positivo se di compressione)

Mx Componente del momento assegnato [kNm] riferito all'asse x princ. d'inerzia

My Componente del momento assegnato [kNm] riferito all'asse y princ. d'inerzia

N Res Sforzo normale resistente [kN] nel baricentro B sezione cls.(positivo se di compress.)

Mx Res Momento flettente resistente [kNm] riferito all'asse x princ. d'inerzia

My Res Momento flettente resistente [kNm] riferito all'asse y princ. d'inerzia

APPALTATORE: Conorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo					
COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 61 di 95

Mis.Sic. Misura sicurezza = rapporto vettoriale tra (N r, Mx Res, My Res) e (N, Mx, My)
Verifica positiva se tale rapporto risulta ≥ 1.000

As Tesa Area armature trave [cm²] in zona tesa. [Tra parentesi l'area minima ex (4.1.15)NTC]

N°Comb	Ver	N	Mx	My	N Res	Mx Res	My Res	Mis.Sic.	As Tesa
1	S	250.00	1109.00	0.00	249.94	1137.55	0.00	1.03	69.0(8.0)

METODO AGLI STATI LIMITE ULTIMI - DEFORMAZIONI UNITARIE ALLO STATO ULTIMO

ec max Deform. unit. massima del calcestruzzo a compressione

x/d Rapporto di duttilità [§ 4.1.2.1.2.1 NTC] deve essere < 0.45

Xc max Ascissa in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)

Yc max Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)

es min Deform. unit. minima nell'acciaio (negativa se di trazione)

Xs min Ascissa in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)

Ys min Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)

es max Deform. unit. massima nell'acciaio (positiva se di compress.)

Xs max Ascissa in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

Ys max Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	x/d	Xc max	Yc max	es min	Xs min	Ys min	es max	Xs max	Ys max
1	0.00350	0.354	0.0	40.0	0.00233	0.0	31.5	-0.00638	0.0	-31.5

POSIZIONE ASSE NEUTRO PER OGNI COMB. DI RESISTENZA

a, b, c Coeff. a, b, c nell'eq. dell'asse neutro $aX+bY+c=0$ nel rif. X,Y,O gen.

x/d Rapp. di duttilità (travi e solette)[§ 4.1.2.1.2.1 NTC]: deve essere < 0.45

C.Rid. Coeff. di riduz. momenti per sola flessione in travi continue

N°Comb	a	b	c	x/d	C.Rid.
1	0.000000000	0.000138146	-0.002025823	0.354	0.883

VERIFICHE A TAGLIO

Diam. Staffe: 10 mm

Passo staffe: 10.0 cm [Passo massimo di normativa = 33.0 cm]

APPALTATORE: Consorzio <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER	
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	

Ver	S = comb. verificata a taglio / N = comb. non verificata
Ved	Taglio di progetto [kN] = proiezione di Vx e Vy sulla normale all'asse neutro
Vcd	Taglio compressione resistente [kN] lato calcestruzzo [formula (4.1.28)NTC]
Vwd	Taglio resistente [kN] assorbito dalle staffe [(4.1.18) NTC]
Dmed	Altezza utile media pesata [cm] valutata lungo strisce ortog. all'asse neutro. La resistenza delle travi è calcolata assumendo il valore di 0.9 Dmed come coppia interna. I pesi della media sono le lunghezze delle strisce.(Sono escluse le strisce totalmente non compresse).
bw	Larghezza media resistente a taglio [cm] misurate parallel. all'asse neutro E' data dal rapporto tra l'area delle sopradette strisce resistenti e Dmed.
Ctg	Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo
Acw	Coefficiente maggiorativo della resistenza a taglio per compressione
Ast	Area staffe+legature strettam. necessarie a taglio per metro di pil.[cm ² /m]
A.Eff	Area staffe+legature efficaci nella direzione del taglio di combinaz.[cm ² /m] Tra parentesi è indicata la quota dell'area relativa alle sole legature. L'area della legatura è ridotta col fattore L/d_max con L=lungh.legat.proietta- ta sulla direz. del taglio e d_max= massima altezza utile nella direz.del taglio.

N°Comb	Ver	Ved	Vcd	Vwd	Dmed	bw	Ctg	Acw	Ast	A.Eff
1	S	571.00	1091.56	837.10	60.5	71.0	2.500	1.031	10.7	15.7(0.0)

COMBINAZIONI RARE IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

Ver	S = comb. verificata/ N = comb. non verificata
Sc max	Massima tensione (positiva se di compressione) nel calcestruzzo [MPa]
Xc max, Yc max	Ascissa, Ordinata [cm] del punto corrisp. a Sc max (sistema rif. X,Y,O)
Ss min	Minima tensione (negativa se di trazione) nell'acciaio [MPa]
Xs min, Ys min	Ascissa, Ordinata [cm] della barra corrisp. a Ss min (sistema rif. X,Y,O)
Ac eff.	Area di calcestruzzo [cm ²] in zona tesa considerata aderente alle barre
As eff.	Area barre [cm ²] in zona tesa considerate efficaci per l'apertura delle fessure

N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	4.57	0.0	0.0	-104.9	0.0	-31.5	781	26.5

COMBINAZIONI RARE IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

	La sezione viene assunta sempre fessurata anche nel caso in cui la trazione minima del calcestruzzo sia inferiore a fctm
Ver.	Esito della verifica
e1	Massima deformazione unitaria di trazione nel calcestruzzo (trazione -) valutata in sezione fessurata
e2	Minima deformazione unitaria di trazione nel calcestruzzo (trazione -) valutata in sezione fessurata

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo					
COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 63 di 95

k1	= 0.8 per barre ad aderenza migliorata [eq.(7.11)EC2]
kt	= 0.4 per comb. quasi permanenti / = 0.6 per comb.frequenti [cfr. eq.(7.9)EC2]
k2	= 0.5 per flessione; $= (e1 + e2) / (2 * e1)$ per trazione eccentrica [eq.(7.13)EC2]
k3	= 3.400 Coeff. in eq.(7.11) come da annessi nazionali
k4	= 0.425 Coeff. in eq.(7.11) come da annessi nazionali
Ø	Diametro [mm] equivalente delle barre tese comprese nell'area efficace Ac eff [eq.(7.11)EC2]
Cf	Copriferro [mm] netto calcolato con riferimento alla barra più tesa
e sm - e cm	Differenza tra le deformazioni medie di acciaio e calcestruzzo [(7.8)EC2 e (C4.1.7)NTC] Tra parentesi: valore minimo = $0.6 S_{max} / E_s$ [(7.9)EC2 e (C4.1.8)NTC]
sr max	Massima distanza tra le fessure [mm]
wk	Apertura fessure in mm calcolata = $sr_{max} * (e_{sm} - e_{cm})$ [(7.8)EC2 e (C4.1.7)NTC]. Valore limite tra parentesi
Mx fess.	Componente momento di prima fessurazione intorno all'asse X [kNm]
My fess.	Componente momento di prima fessurazione intorno all'asse Y [kNm]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00063	0.00000	0.500	26.0	72	0.00031 (0.00031)	375	0.118 (990.00)	193.26	0.00

COMBINAZIONI FREQUENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	4.57	0.0	0.0	-104.9	0.0	-31.5	781	26.5

COMBINAZIONI FREQUENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00063	0.00000	0.500	26.0	72	0.00031 (0.00031)	375	0.118 (0.20)	193.26	0.00

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	4.57	0.0	0.0	-104.9	0.0	-31.5	781	26.5

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00063	0.00000	0.500	26.0	72	0.00033 (0.00031)	375	0.123 (0.20)	193.26	0.00

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI					
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 64 di 95

13 VERIFICHE STRUTTURALI PARAMENTO E FONDAZIONE

Si riepilogano nel seguito i coefficienti di sicurezza nei confronti degli stati limite ultimi per scorrimento,

13.1 PARAMENTO

Si riportano le verifiche del paramento nella sezione maggiormente sollecitata (zona incastro) e a due metri dell'estradosso della fondazione. Le verifiche sono state svolte mediante il software di calcolo RC-Sec.

Armatura scelta:

Armatura verticale

$\varnothing 28/200 + \varnothing 24/400$ lato terreno per i primi 2m a partire dall'estradosso della fondazione;

$\varnothing 22/200$ lato terreno per il resto dell'altezza del paramento;

$\varnothing 16/100$ lato esterno.

Armatura Longitudinale per $1/3 H$ del paramento a partire dall'estradosso della fondazione

$\varnothing 14/100$ lato terreno;

$\varnothing 14/100$ lato esterno .

Armatura Longitudinale per il resto dell'altezza del paramento

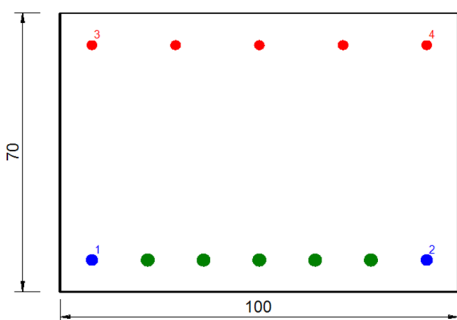
$\varnothing 14/200$ lato terreno;

$\varnothing 14/200$ lato esterno.

Copriferro 40mm

Armatura a taglio $\varnothing 10/600 \times 600$ quinconce.

- 1) Verifica del paramento nella sezione maggiormente sollecitata (zona incastro)



CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -

Classe:

C30/37

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI GCF ELETTRI-FER M-INGEGNERIA													
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COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	65 di 95								

Resis. compr. di progetto fcd:	17.0	MPa
Def.unit. max resistenza ec2:	0.0020	
Def.unit. ultima ecu:	0.0035	
Diagramma tensione-deformaz.:	Parabola-Rettangolo	
Modulo Elastico Normale Ec:	32836.0	MPa
Resis. media a trazione fctm:	2.90	MPa
Coeff. Omogen. S.L.E.:	15.00	
Sc limite S.L.E. comb. Rare:	18.0	MPa
Sc limite S.L.E. comb. Frequenti:	18.0	MPa
Ap.Fessure limite S.L.E. comb. Frequenti:	0.200	mm
Sc limite S.L.E. comb. Q.Permanenti:	13.5	MPa
Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.200	mm

ACCIAIO -	Tipo:	B450C
	Resist. caratt. snervam. fyk:	450.0 MPa
	Resist. caratt. rottura ftk:	450.0 MPa
	Resist. snerv. di progetto fyd:	391.3 MPa
	Resist. ultima di progetto ftd:	391.3 MPa
	Deform. ultima di progetto Epu:	0.068
	Modulo Elastico Ef	2000000 daN/cm ²
	Diagramma tensione-deformaz.:	Bilineare finito
	Coeff. Aderenza istantaneo $\beta_1 \cdot \beta_2$:	1.00
	Coeff. Aderenza differito $\beta_1 \cdot \beta_2$:	0.50
	Sf limite S.L.E. Comb. Rare:	360.00 MPa

CARATTERISTICHE DOMINIO CALCESTRUZZO

Forma del Dominio:	Poligonale
Classe Calcestruzzo:	C30/37

N°vertice:	X [cm]	Y [cm]
1	0.0	0.0
2	0.0	70.0
3	100.0	70.0
4	100.0	0.0

DATI BARRE ISOLATE

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER													
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COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	66 di 95								

N°Barra	X [cm]	Y [cm]	DiamØ[mm]
1	8.0	8.0	24
2	92.0	8.0	24
3	8.0	62.0	20
4	92.0	62.0	20

DATI GENERAZIONI LINEARI DI BARRE

N°Gen.	Numero assegnato alla singola generazione lineare di barre
N°Barra Ini.	Numero della barra iniziale cui si riferisce la generazione
N°Barra Fin.	Numero della barra finale cui si riferisce la generazione
N°Barre	Numero di barre generate equidistanti cui si riferisce la generazione
Ø	Diametro in mm delle barre della generazione

N°Gen.	N°Barra Ini.	N°Barra Fin.	N°Barre	Ø
1	1	2	5	28
2	3	4	3	20

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baric. (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia con verso positivo se tale da comprimere il lembo sup. della sez.
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia con verso positivo se tale da comprimere il lembo destro della sez.
Vy	Componente del Taglio [kN] parallela all'asse princ.d'inerzia y
Vx	Componente del Taglio [kN] parallela all'asse princ.d'inerzia x

N°Comb.	N	Mx	My	Vy	Vx
1	90.00	600.00	0.00	0.00	0.00

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
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APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER													
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>67 di 95</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A	02	E ZZ CL	RI1105 002	D	67 di 95
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	67 di 95								

Mx Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo superiore della sezione

My Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	90.00	320.00	0.00

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)

Mx Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo superiore della sezione

My Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	90.00	320.00 (306.92)	0.00 (0.00)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)

Mx Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo superiore della sezione

My Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	90.00	320.00 (306.92)	0.00 (0.00)

RISULTATI DEL CALCOLO

Sezione verificata per tutte le combinazioni assegnate

Copriferro netto minimo barre longitudinali: 6.6 cm

Interferro netto minimo barre longitudinali: 11.2 cm

APPALTATORE: Conorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo					
COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 68 di 95

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver	S = combinazione verificata / N = combin. non verificata
N	Sforzo normale assegnato [kN] nel baricentro B sezione cls.(positivo se di compressione)
Mx	Componente del momento assegnato [kNm] riferito all'asse x princ. d'inerzia
My	Componente del momento assegnato [kNm] riferito all'asse y princ. d'inerzia
N Res	Sforzo normale resistente [kN] nel baricentro B sezione cls.(positivo se di compress.)
Mx Res	Momento flettente resistente [kNm] riferito all'asse x princ. d'inerzia
My Res	Momento flettente resistente [kNm] riferito all'asse y princ. d'inerzia
Mis.Sic.	Misura sicurezza = rapporto vettoriale tra (N r,Mx Res,My Res) e (N,Mx,My) Verifica positiva se tale rapporto risulta >=1.000
As Totale	Area totale barre longitudinali [cm ²]. [Tra parentesi il valore minimo di normativa]

N°Comb	Ver	N	Mx	My	N Res	Mx Res	My Res	Mis.Sic.	As Totale
1	S	90.00	600.00	0.00	90.07	918.77	0.00	1.53	55.5(21.0)

METODO AGLI STATI LIMITE ULTIMI - DEFORMAZIONI UNITARIE ALLO STATO ULTIMO

ec max	Deform. unit. massima del calcestruzzo a compressione
Xc max	Ascissa in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
Yc max	Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
es min	Deform. unit. minima nell'acciaio (negativa se di trazione)
Xs min	Ascissa in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
Ys min	Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
es max	Deform. unit. massima nell'acciaio (positiva se di compress.)
Xs max	Ascissa in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)
Ys max	Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	Xc max	Yc max	es min	Xs min	Ys min	es max	Xs max	Ys max
1	0.00350	100.0	70.0	0.00077	92.0	62.0	-0.01769	8.0	8.0

POSIZIONE ASSE NEUTRO PER OGNI COMB. DI RESISTENZA

a, b, c	Coeff. a, b, c nell'eq. dell'asse neutro $aX+bY+c=0$ nel rif. X,Y,O gen.
x/d	Rapp. di duttilità (travi e solette)[§ 4.1.2.1.2.1 NTC]: deve essere < 0.45
C.Rid.	Coeff. di riduz. momenti per sola flessione in travi continue

APPALTATORE: Consorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI		ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA					
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER							
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo							COMMESSA IF3A

N°Comb	a	b	c	x/d	C.Rid.
1	0.000000000	0.000341771	-0.020423983	---	---

COMBINAZIONI RARE IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

Ver	S = comb. verificata/ N = comb. non verificata
Sc max	Massima tensione (positiva se di compressione) nel calcestruzzo [MPa]
Xc max, Yc max	Ascissa, Ordinata [cm] del punto corrisp. a Sc max (sistema rif. X,Y,O)
Ss min	Minima tensione (negativa se di trazione) nell'acciaio [MPa]
Xs min, Ys min	Ascissa, Ordinata [cm] della barra corrisp. a Ss min (sistema rif. X,Y,O)
Ac eff.	Area di calcestruzzo [cm ²] in zona tesa considerata aderente alle barre
As eff.	Area barre [cm ²] in zona tesa considerate efficaci per l'apertura delle fessure

N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	5.02	100.0	70.0	-135.8	36.0	8.0	1600	39.8

COMBINAZIONI RARE IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

	La sezione viene assunta sempre fessurata anche nel caso in cui la trazione minima del calcestruzzo sia inferiore a f_{ctm}
Ver.	Esito della verifica
e1	Massima deformazione unitaria di trazione nel calcestruzzo (trazione -) valutata in sezione fessurata
e2	Minima deformazione unitaria di trazione nel calcestruzzo (trazione -) valutata in sezione fessurata
k1	= 0.8 per barre ad aderenza migliorata [eq.(7.11)EC2]
kt	= 0.4 per comb. quasi permanenti / = 0.6 per comb.frequenti [cfr. eq.(7.9)EC2]
k2	= 0.5 per flessione; $= (e1 + e2)/(2 * e1)$ per trazione eccentrica [eq.(7.13)EC2]
k3	= 3.400 Coeff. in eq.(7.11) come da annessi nazionali
k4	= 0.425 Coeff. in eq.(7.11) come da annessi nazionali
Ø	Diametro [mm] equivalente delle barre tese comprese nell'area efficace Ac eff [eq.(7.11)EC2]
Cf	Copriferro [mm] netto calcolato con riferimento alla barra più tesa
e sm - e cm	Differenza tra le deformazioni medie di acciaio e calcestruzzo [(7.8)EC2 e (C4.1.7)NTC] Tra parentesi: valore minimo = $0.6 S_{max} / E_s$ [(7.9)EC2 e (C4.1.8)NTC]
sr max	Massima distanza tra le fessure [mm]
wk	Apertura fessure in mm calcolata = $sr_{max} * (e_{sm} - e_{cm})$ [(7.8)EC2 e (C4.1.7)NTC]. Valore limite tra parentesi
Mx fess.	Componente momento di prima fessurazione intorno all'asse X [kNm]
My fess.	Componente momento di prima fessurazione intorno all'asse Y [kNm]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00082	0.00000	0.500	27.0	66	0.00041 (0.00041)	409	0.167 (990.00)	306.92	0.00

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER													
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COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	70 di 95								

COMBINAZIONI FREQUENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	5.02	100.0	70.0	-135.8	36.0	8.0	1600	39.8

COMBINAZIONI FREQUENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm sr max	wk	Mx fess	My fess	
1	S	-0.00082	0.00000	0.500	27.0	66	0.00041 (0.00041)	409	0.167 (0.20)	306.92	0.00

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

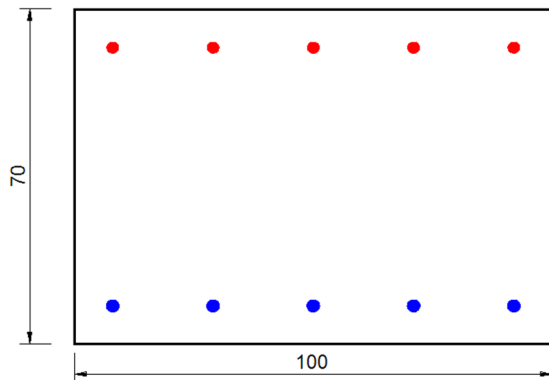
N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	5.02	100.0	70.0	-135.8	36.0	8.0	1600	39.8

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm sr max	wk	Mx fess	My fess	
1	S	-0.00082	0.00000	0.500	27.0	66	0.00041 (0.00041)	409	0.168 (0.20)	306.92	0.00

APPALTATORE: <u>Consorzio Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI					
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 71 di 95

2) Verifica del paramento a 2m dall'estradosso della fondazione



CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C30/37
	Resis. compr. di progetto fcd:	17.0 MPa
	Def.unit. max resistenza ec2:	0.0020
	Def.unit. ultima ecu:	0.0035
	Diagramma tensione-deformaz.:	Parabola-Rettangolo
	Modulo Elastico Normale Ec:	32836.0 MPa
	Resis. media a trazione fctm:	2.90 MPa
	Coeff. Omogen. S.L.E.:	15.00
	Sc limite S.L.E. comb. Rare:	18.0 MPa
	Sc limite S.L.E. comb. Frequenti:	18.0 MPa
	Ap.Fessure limite S.L.E. comb. Frequenti:	0.200 mm
	Sc limite S.L.E. comb. Q.Permanenti:	13.5 MPa
	Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.200 mm
ACCIAIO -	Tipo:	B450C
	Resist. caratt. snervam. fyk:	450.0 MPa
	Resist. caratt. rottura ftk:	450.0 MPa
	Resist. snerv. di progetto fyd:	391.3 MPa
	Resist. ultima di progetto ftd:	391.3 MPa
	Deform. ultima di progetto Epu:	0.068
	Modulo Elastico Ef	2000000 daN/cm ²
Diagramma tensione-deformaz.:	Bilineare finito	

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI GCF ELETTRI-FER													
M-INGEGNERIA													
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COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	72 di 95								

Coeff. Aderenza istantaneo $\beta_1 \cdot \beta_2$:	1.00
Coeff. Aderenza differito $\beta_1 \cdot \beta_2$:	0.50
Sf limite S.L.E. Comb. Rare:	360.00 MPa

CARATTERISTICHE DOMINIO CALCESTRUZZO

Forma del Dominio: Poligonale
Classe Calcestruzzo: C30/37

N°vertice:	X [cm]	Y [cm]
1	0.0	0.0
2	0.0	70.0
3	100.0	70.0
4	100.0	0.0

DATI BARRE ISOLATE

N°Barra	X [cm]	Y [cm]	DiamØ[mm]
1	8.0	8.0	22
2	92.0	8.0	22
3	8.0	62.0	20
4	92.0	62.0	20

DATI GENERAZIONI LINEARI DI BARRE

N°Gen. Numero assegnato alla singola generazione lineare di barre
N°Barra Ini. Numero della barra iniziale cui si riferisce la generazione
N°Barra Fin. Numero della barra finale cui si riferisce la generazione
N°Barre Numero di barre generate equidistanti cui si riferisce la generazione
Ø Diametro in mm delle barre della generazione

N°Gen.	N°Barra Ini.	N°Barra Fin.	N°Barre	Ø
1	1	2	3	22
2	3	4	3	20

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI GCF ELETTRI-FER													
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COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	73 di 95								

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baric. (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia con verso positivo se tale da comprimere il lembo sup. della sez.
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia con verso positivo se tale da comprimere il lembo destro della sez.
Vy	Componente del Taglio [kN] parallela all'asse princ.d'inerzia y
Vx	Componente del Taglio [kN] parallela all'asse princ.d'inerzia x

N°Comb.	N	Mx	My	Vy	Vx
1	60.00	270.00	0.00	0.00	0.00

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	50.00	90.00	0.00
2	40.00	0.00	0.00

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	50.00	90.00 (289.21)	0.00 (0.00)

APPALTATORE: <u>Consorzio Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER													
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COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	74 di 95								

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	50.00	90.00 (289.21)	0.00 (0.00)

RISULTATI DEL CALCOLO

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver	S = combinazione verificata / N = combin. non verificata
N	Sforzo normale assegnato [kN] nel baricentro B sezione cls.(positivo se di compressione)
Mx	Componente del momento assegnato [kNm] riferito all'asse x princ. d'inerzia
My	Componente del momento assegnato [kNm] riferito all'asse y princ. d'inerzia
N Res	Sforzo normale resistente [kN] nel baricentro B sezione cls.(positivo se di compress.)
Mx Res	Momento flettente resistente [kNm] riferito all'asse x princ. d'inerzia
My Res	Momento flettente resistente [kNm] riferito all'asse y princ. d'inerzia
Mis.Sic.	Misura sicurezza = rapporto vettoriale tra (N r,Mx Res,My Res) e (N,Mx,My) Verifica positiva se tale rapporto risulta >=1.000
As Tesa	Area armature trave [cm ²] in zona tesa. [Tra parentesi l'area minima ex (4.1.15)NTC]

N°Comb	Ver	N	Mx	My	N Res	Mx Res	My Res	Mis.Sic.	As Tesa
1	S	60.00	270.00	0.00	59.90	466.76	0.00	1.73	34.7(11.7)

METODO AGLI STATI LIMITE ULTIMI - DEFORMAZIONI UNITARIE ALLO STATO ULTIMO

ec max	Deform. unit. massima del calcestruzzo a compressione
x/d	Rapporto di duttilità [§ 4.1.2.1.2.1 NTC] deve essere < 0.45
Xc max	Ascissa in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
Yc max	Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
es min	Deform. unit. minima nell'acciaio (negativa se di trazione)
Xs min	Ascissa in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
Ys min	Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo					
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es max Deform. unit. massima nell'acciaio (positiva se di compress.)
Xs max Ascissa in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)
Ys max Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	x/d	Xc max	Yc max	es min	Xs min	Ys min	es max	Xs max	Ys max
1	0.00350	0.113	100.0	70.0	-0.00051	92.0	62.0	-0.02755	8.0	8.0

POSIZIONE ASSE NEUTRO PER OGNI COMB. DI RESISTENZA

a, b, c Coeff. a, b, c nell'eq. dell'asse neutro $aX+bY+c=0$ nel rif. X,Y,O gen.
x/d Rapp. di duttilità (travi e solette)[§ 4.1.2.1.2.1 NTC]: deve essere < 0.45
C.Rid. Coeff. di riduz. momenti per sola flessione in travi continue

N°Comb	a	b	c	x/d	C.Rid.
1	0.000000000	0.000500791	-0.031555404	0.113	0.700

COMBINAZIONI RARE IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

Ver S = comb. verificata/ N = comb. non verificata
Sc max Massima tensione (positiva se di compressione) nel calcestruzzo [MPa]
Xc max, Yc max Ascissa, Ordinata [cm] del punto corrisp. a Sc max (sistema rif. X,Y,O)
Ss min Minima tensione (negativa se di trazione) nell'acciaio [MPa]
Xs min, Ys min Ascissa, Ordinata [cm] della barra corrisp. a Ss min (sistema rif. X,Y,O)
Ac eff. Area di calcestruzzo [cm²] in zona tesa considerata aderente alle barre
As eff. Area barre [cm²] in zona tesa considerate efficaci per l'apertura delle fessure

N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	1.85	100.0	70.0	-71.1	8.0	8.0	1750	19.0

COMBINAZIONI RARE IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

La sezione viene assunta sempre fessurata anche nel caso in cui la trazione minima del calcestruzzo sia inferiore a f_{ctm}

Ver. Esito della verifica
e1 Massima deformazione unitaria di trazione nel calcestruzzo (trazione -) valutata in sezione fessurata
e2 Minima deformazione unitaria di trazione nel calcestruzzo (trazione -) valutata in sezione fessurata
k1 = 0.8 per barre ad aderenza migliorata [eq.(7.11)EC2]
kt = 0.4 per comb. quasi permanenti / = 0.6 per comb.frequenti [cfr. eq.(7.9)EC2]

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PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER					
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k2	= 0.5 per flessione; $= (e1 + e2) / (2 * e1)$ per trazione eccentrica [eq.(7.13)EC2]
k3	= 3.400 Coeff. in eq.(7.11) come da annessi nazionali
k4	= 0.425 Coeff. in eq.(7.11) come da annessi nazionali
Ø	Diametro [mm] equivalente delle barre tese comprese nell'area efficace Ac eff [eq.(7.11)EC2]
Cf	Copriferro [mm] netto calcolato con riferimento alla barra più tesa
e sm - e cm	Differenza tra le deformazioni medie di acciaio e calcestruzzo [(7.8)EC2 e (C4.1.7)NTC] Tra parentesi: valore minimo = $0.6 S_{max} / E_s$ [(7.9)EC2 e (C4.1.8)NTC]
sr max	Massima distanza tra le fessure [mm]
wk	Apertura fessure in mm calcolata = $sr_{max} * (e_{sm} - e_{cm})$ [(7.8)EC2 e (C4.1.7)NTC]. Valore limite tra parentesi
Mx fess.	Componente momento di prima fessurazione intorno all'asse X [kNm]
My fess.	Componente momento di prima fessurazione intorno all'asse Y [kNm]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00042	0.00000	0.500	22.0	69	0.00021 (0.00021)	579	0.123 (990.00)	289.21	0.00

COMBINAZIONI FREQUENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	1.85	100.0	70.0	-71.1	8.0	8.0	1750	19.0

COMBINAZIONI FREQUENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00042	0.00000	0.500	22.0	69	0.00021 (0.00021)	579	0.123 (0.20)	289.21	0.00

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	1.85	100.0	70.0	-71.1	8.0	8.0	1750	19.0

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00042	0.00000	0.500	22.0	69	0.00021 (0.00021)	579	0.123 (0.20)	289.21	0.00

VERIFICA A TAGLIO

La verifica a taglio è stata eseguita attraverso un foglio excel.

La verifica è soddisfatta in assenza di armatura a taglio, tuttavia si prevede la seguente armatura a taglio :

APPALTATORE: Conorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI				
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
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spilli Ø10/600x600 quinconce

VERIFICA A TAGLIO DELLA SEZIONE IN C.A. SECONDO T.U. 14/01/2008 § 4.1.2.1.3

• Caratteristiche della sezione

$b_w = 1000$ mm larghezza	$f_{yk} = 450$ MPa	resist. caratteristica
$h = 1000$ mm altezza	$\gamma_s = 1.15$	coeff. sicurezza
$c = 71$ mm copriferro	$f_{yd} = 391.3$ MPa	resist. di calcolo
$f_{ck} = 30$ MPa resist. caratteristica	Armatura longitudinale tesa:	
$\gamma_c = 1.50$ coeff. sicurezza	$A_{sl,1} = 10 \text{ } \emptyset 22$	$= 38.01 \text{ cm}^2$
$\alpha_{cc} = 0.85$ coeff. riduttivo	$A_{sl,2} = 0 \text{ } \emptyset 0$	$= 0.00 \text{ cm}^2$
$d = 929$ mm altezza utile	$A_{sl,3} = 0 \text{ } \emptyset 0$	$= 0.00 \text{ cm}^2$
$f_{cd} = 17.00$ MPa resist. di calcolo		38.01 cm^2

• Sollecitazioni (compressione<0, trazione>0, taglio in valore assoluto)

$$N_{ed} = 0.0 \text{ kN} \quad V_{ed} = 370.0 \text{ kN}$$

• Elementi senza armature trasversali resistenti a taglio

$$k = 1 + (200/d)^{1/2} < 2 \quad k = 1.464 < 2$$

$$v_{min} = 0,035 k^{3/2} f_{ck}^{1/2} \quad v_{min} = 0.340$$

$$\rho_1 = A_{sl}/(b_w \times d) < 0.02 \quad \rho_1 = 0.004 < 0.02$$

$$\sigma_{cp} = N_{Ed}/A_c < 0.2 f_{cd} \quad \sigma_{cp} = 0.00 \text{ MPa} < 0.2 f_{cd}$$

$$V_{Rd} = (0,18 \times k \times (100 \times \rho_1 \times f_{ck})^{1/3} / \gamma_c + 0,15 \times \sigma_{cp}) \times b_w \times d > (v_{min} + 0,15 \times \sigma_{cp}) \times b_w \times d$$

$$V_{Rd} = 376.5 \text{ kN}; \quad (\text{con } (v_{min} + 0,15 \times \sigma_{cp}) \times b_w \times d = 315.5 \text{ kN})$$

$$V_{Rd} = 376.5 \text{ kN} \quad \text{valore di calcolo}$$

la sezione è verificata in assenza di armature per il taglio

APPALTATORE: <u>Consorzio Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI					
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA					
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13.2 FONDAZIONE

riportano le verifica della fondazione eseguite nella sezione maggiormente sollecitata (zona incastro con paramento), e a 1,5 m dalla sezione di incastro con il paramento. Le verifiche sono state svolte mediante il software di calcolo RC-Sec.

Per le verifiche si dispongono i seguenti ferri:

Armatura trasversale

Ø28/200 disposti in due strati lato terreno fino a 1,5 m dalla sezione di incastro con il paramento

Ø28/200 per il resto della fondazione

Ø20/200 lato esterno.

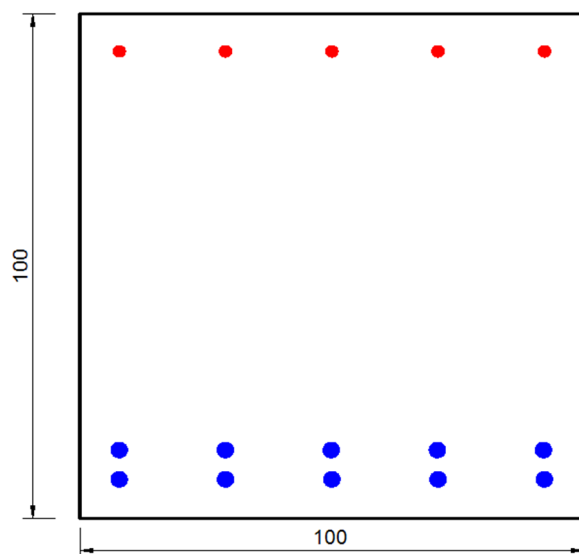
Armatura Longitudinale

Ø14/200 lato esterno

Ø18/200 lato terreno

Copriferro 40mm

- 1) Verifica della fondazione nella sezione maggiormente sollecitata (zona incastro con paramento)



CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C30/37
	Resis. compr. di progetto fcd:	17.0 MPa
	Def.unit. max resistenza ec2:	0.0020
	Def.unit. ultima ecu:	0.0035
	Diagramma tensione-deformaz.:	Parabola-Rettangolo
	Modulo Elastico Normale Ec:	32836.0 MPa

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PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI GCF ELETTRI-FER													
M-INGEGNERIA													
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>79 di 95</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A	02	E ZZ CL	RI1105 002	D	79 di 95
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Resis. media a trazione fctm:	2.90	MPa
Coeff. Omogen. S.L.E.:	15.00	
Sc limite S.L.E. comb. Rare:	18.0	MPa
Sc limite S.L.E. comb. Frequenti:	18.0	MPa
Ap.Fessure limite S.L.E. comb. Frequenti:	0.200	mm
Sc limite S.L.E. comb. Q.Permanenti:	13.5	MPa
Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.200	mm

ACCIAIO -	Tipo:	B450C
	Resist. caratt. snervam. fyk:	450.0 MPa
	Resist. caratt. rottura ftk:	450.0 MPa
	Resist. snerv. di progetto fyd:	391.3 MPa
	Resist. ultima di progetto ftd:	391.3 MPa
	Deform. ultima di progetto Epu:	0.068
	Modulo Elastico Ef	2000000 daN/cm ²
	Diagramma tensione-deformaz.:	Bilineare finito
	Coeff. Aderenza istantaneo $\beta_1 \cdot \beta_2$:	1.00
	Coeff. Aderenza differito $\beta_1 \cdot \beta_2$:	0.50
	Sf limite S.L.E. Comb. Rare:	360.00 MPa

CARATTERISTICHE DOMINIO CALCESTRUZZO

Forma del Dominio:	Poligonale
Classe Calcestruzzo:	C30/37

N°vertice:	X [cm]	Y [cm]
1	0.0	0.0
2	0.0	100.0
3	100.0	100.0
4	100.0	0.0

DATI BARRE ISOLATE

N°Barra	X [cm]	Y [cm]	DiamØ[mm]
1	8.2	8.2	28
2	8.2	91.8	20
3	91.8	91.8	20

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER					
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4	91.8	8.2	28
5	8.2	14.0	28
6	91.8	14.0	28

DATI GENERAZIONI LINEARI DI BARRE

N°Gen.	Numero assegnato alla singola generazione lineare di barre
N°Barra Ini.	Numero della barra iniziale cui si riferisce la generazione
N°Barra Fin.	Numero della barra finale cui si riferisce la generazione
N°Barre	Numero di barre generate equidistanti cui si riferisce la generazione
Ø	Diametro in mm delle barre della generazione

N°Gen.	N°Barra Ini.	N°Barra Fin.	N°Barre	Ø
1	1	4	3	28
2	5	6	3	28
3	2	3	3	20

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baric. (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia con verso positivo se tale da comprimere il lembo sup. della sez.
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia con verso positivo se tale da comprimere il lembo destro della sez.
Vy	Componente del Taglio [kN] parallela all'asse princ.d'inerzia y
Vx	Componente del Taglio [kN] parallela all'asse princ.d'inerzia x

N°Comb.	N	Mx	My	Vy	Vx
1	0.00	1200.00	0.00	0.00	0.00

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER													
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COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
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My Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	0.00	450.00	0.00

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo superiore della sezione
My Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	0.00	450.00 (613.88)	0.00 (0.00)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo superiore della sezione
My Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	0.00	450.00 (613.88)	0.00 (0.00)

RISULTATI DEL CALCOLO

Sezione verificata per tutte le combinazioni assegnate

Copriferro netto minimo barre longitudinali: 6.8 cm
Interferro netto minimo barre longitudinali: 3.0 cm

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

APPALTATORE: Conorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo					
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Ver	S = combinazione verificata / N = combin. non verificata
N	Sforzo normale assegnato [kN] nel baricentro B sezione cls.(positivo se di compressione)
Mx	Componente del momento assegnato [kNm] riferito all'asse x princ. d'inerzia
My	Componente del momento assegnato [kNm] riferito all'asse y princ. d'inerzia
N Res	Sforzo normale resistente [kN] nel baricentro B sezione cls.(positivo se di compress.)
Mx Res	Momento flettente resistente [kNm] riferito all'asse x princ. d'inerzia
My Res	Momento flettente resistente [kNm] riferito all'asse y princ. d'inerzia
Mis.Sic.	Misura sicurezza = rapporto vettoriale tra (N r,Mx Res,My Res) e (N,Mx,My) Verifica positiva se tale rapporto risulta >=1.000
As Tesa	Area armature trave [cm ²] in zona tesa. [Tra parentesi l'area minima ex § 7.2.6 NTC]

N°Comb	Ver	N	Mx	My	N Res	Mx Res	My Res	Mis.Sic.	As Tesa
1	S	0.00	1200.00	0.00	0.00	1989.47	0.00	1.66	61.6(20.0)

METODO AGLI STATI LIMITE ULTIMI - DEFORMAZIONI UNITARIE ALLO STATO ULTIMO

ec max	Deform. unit. massima del calcestruzzo a compressione
x/d	Rapporto di duttilità [§ 4.1.2.1.2.1 NTC] deve essere < 0.45
Xc max	Ascissa in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
Yc max	Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
es min	Deform. unit. minima nell'acciaio (negativa se di trazione)
Xs min	Ascissa in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
Ys min	Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
es max	Deform. unit. massima nell'acciaio (positiva se di compress.)
Xs max	Ascissa in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)
Ys max	Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	x/d	Xc max	Yc max	es min	Xs min	Ys min	es max	Xs max	Ys max
1	0.00350	0.154	0.0	100.0	0.00147	8.2	91.8	-0.01921	8.2	8.2

POSIZIONE ASSE NEUTRO PER OGNI COMB. DI RESISTENZA

a, b, c	Coeff. a, b, c nell'eq. dell'asse neutro aX+bY+c=0 nel rif. X,Y,O gen.
x/d	Rapp. di duttilità (travi e solette)[§ 4.1.2.1.2.1 NTC]: deve essere < 0.45
C.Rid.	Coeff. di riduz. momenti per sola flessione in travi continue

N°Comb	a	b	c	x/d	C.Rid.
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APPALTATORE: <u>Conorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo					
COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 83 di 95

1 0.000000000 0.000247368 -0.021236800 0.154 0.700

COMBINAZIONI RARE IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

Ver S = comb. verificata/ N = comb. non verificata
Sc max Massima tensione (positiva se di compressione) nel calcestruzzo [MPa]
Xc max, Yc max Ascissa, Ordinata [cm] del punto corrisp. a Sc max (sistema rif. X,Y,O)
Ss min Minima tensione (negativa se di trazione) nell'acciaio [MPa]
Xs min, Ys min Ascissa, Ordinata [cm] della barra corrisp. a Ss min (sistema rif. X,Y,O)
Ac eff. Area di calcestruzzo [cm²] in zona tesa considerata aderente alle barre
As eff. Area barre [cm²] in zona tesa considerate efficaci per l'apertura delle fessure

N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	3.31	0.0	100.0	-97.2	70.9	8.2	2300	61.6

COMBINAZIONI RARE IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

La sezione viene assunta sempre fessurata anche nel caso in cui la trazione minima del calcestruzzo sia inferiore a f_{ctm}

Ver. Esito della verifica
e1 Massima deformazione unitaria di trazione nel calcestruzzo (trazione -) valutata in sezione fessurata
e2 Minima deformazione unitaria di trazione nel calcestruzzo (trazione -) valutata in sezione fessurata
k1 = 0.8 per barre ad aderenza migliorata [eq.(7.11)EC2]
kt = 0.4 per comb. quasi permanenti / = 0.6 per comb.frequenti [cfr. eq.(7.9)EC2]
k2 = 0.5 per flessione; $= (e1 + e2) / (2 * e1)$ per trazione eccentrica [eq.(7.13)EC2]
k3 = 3.400 Coeff. in eq.(7.11) come da annessi nazionali
k4 = 0.425 Coeff. in eq.(7.11) come da annessi nazionali
Ø Diametro [mm] equivalente delle barre tese comprese nell'area efficace Ac eff [eq.(7.11)EC2]
Cf Copriferro [mm] netto calcolato con riferimento alla barra più tesa
e sm - e cm Differenza tra le deformazioni medie di acciaio e calcestruzzo [(7.8)EC2 e (C4.1.7)NTC]
Tra parentesi: valore minimo = $0.6 S_{max} / E_s$ [(7.9)EC2 e (C4.1.8)NTC]
sr max Massima distanza tra le fessure [mm]
wk Apertura fessure in mm calcolata = $sr_{max} * (e_{sm} - e_{cm})$ [(7.8)EC2 e (C4.1.7)NTC]. Valore limite tra parentesi
Mx fess. Componente momento di prima fessurazione intorno all'asse X [kNm]
My fess. Componente momento di prima fessurazione intorno all'asse Y [kNm]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00055	0.00000	0.500	28.0	68	0.00029 (0.00029)	409	0.119 (990.00)	613.88	0.00

COMBINAZIONI FREQUENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo					
COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 84 di 95

N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	3.31	0.0	100.0	-97.2	70.9	8.2	2300	61.6

COMBINAZIONI FREQUENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm sr max	wk	Mx fess	My fess	
1	S	-0.00055	0.00000	0.500	28.0	68	0.00029 (0.00029)	409	0.119 (0.20)	613.88	0.00

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

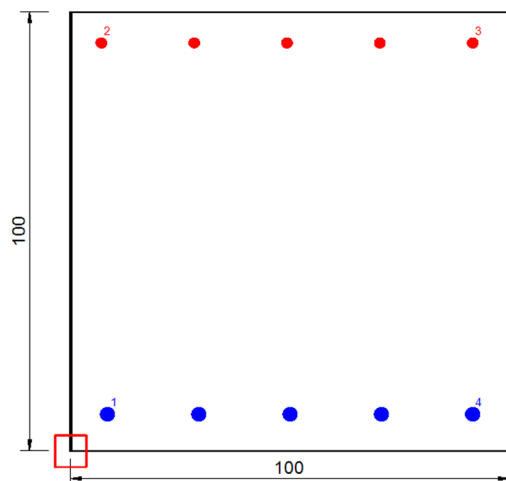
N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	3.31	0.0	100.0	-97.2	70.9	8.2	2300	61.6

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm sr max	wk	Mx fess	My fess	
1	S	-0.00055	0.00000	0.500	28.0	68	0.00029 (0.00029)	409	0.119 (0.20)	613.88	0.00

2) Verifica della fondazione a 1,5 m dalla sezione di incastro con il paramento

APPALTATORE: <u>Consorzio Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI				
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
M-INGEGNERIA PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. FOGLIO D 85 di 95



CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C30/37
	Resis. compr. di progetto fcd:	17.0 MPa
	Def.unit. max resistenza ec2:	0.0020
	Def.unit. ultima ecu:	0.0035
	Diagramma tensione-deformaz.:	Parabola-Rettangolo
	Modulo Elastico Normale Ec:	32836.0 MPa
	Resis. media a trazione fctm:	2.90 MPa
	Coeff. Omogen. S.L.E.:	15.00
	Sc limite S.L.E. comb. Rare:	18.0 MPa
	Sc limite S.L.E. comb. Frequenti:	18.0 MPa
	Ap.Fessure limite S.L.E. comb. Frequenti:	0.200 mm
	Sc limite S.L.E. comb. Q.Permanenti:	13.5 MPa
	Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.200 mm
	ACCIAIO -	Tipo:
Resist. caratt. snervam. fyk:		450.0 MPa
Resist. caratt. rottura ftk:		450.0 MPa
Resist. snerv. di progetto fyd:		391.3 MPa
Resist. ultima di progetto ftd:		391.3 MPa
Deform. ultima di progetto Epu:		0.068
Modulo Elastico Ef		2000000 daN/cm ²
Diagramma tensione-deformaz.:		Bilineare finito
Coeff. Aderenza istantaneo $\beta_1 \cdot \beta_2$:		1.00
Coeff. Aderenza differito $\beta_1 \cdot \beta_2$:		0.50

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER													
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>86 di 95</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A	02	E ZZ CL	RI1105 002	D	86 di 95
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	86 di 95								

Sf limite S.L.E. Comb. Rare:

360.00 MPa

CARATTERISTICHE DOMINIO CALCESTRUZZO

Forma del Dominio: Poligonale
 Classe Calcestruzzo: C30/37

N°vertice:	X [cm]	Y [cm]
1	0.0	0.0
2	0.0	100.0
3	100.0	100.0
4	100.0	0.0

DATI BARRE ISOLATE

N°Barra	X [cm]	Y [cm]	DiamØ[mm]
1	8.2	8.2	28
2	8.2	91.8	20
3	91.8	91.8	20
4	91.8	8.2	28

DATI GENERAZIONI LINEARI DI BARRE

N°Gen. Numero assegnato alla singola generazione lineare di barre
 N°Barra Ini. Numero della barra iniziale cui si riferisce la generazione
 N°Barra Fin. Numero della barra finale cui si riferisce la generazione
 N°Barre Numero di barre generate equidistanti cui si riferisce la generazione
 Ø Diametro in mm delle barre della generazione

N°Gen.	N°Barra Ini.	N°Barra Fin.	N°Barre	Ø
1	1	4	3	28
2	2	3	3	20

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTAZIONE: <u>Mandatario</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo					
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N Sforzo normale [kN] applicato nel Baric. (+ se di compressione)
Mx Momento flettente [kNm] intorno all'asse x princ. d'inerzia
con verso positivo se tale da comprimere il lembo sup. della sez.
My Momento flettente [kNm] intorno all'asse y princ. d'inerzia
con verso positivo se tale da comprimere il lembo destro della sez.
Vy Componente del Taglio [kN] parallela all'asse princ.d'inerzia y
Vx Componente del Taglio [kN] parallela all'asse princ.d'inerzia x

N°Comb.	N	Mx	My	Vy	Vx
1	0.00	970.00	0.00	0.00	0.00

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo superiore della sezione
My Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	0.00	280.00	0.00

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo superiore della sezione
My Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	0.00	280.00 (563.49)	0.00 (0.00)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA												
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER													
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	<table border="1"> <tr> <td>COMMESSA</td> <td>LOTTO</td> <td>CODIFICA</td> <td>DOCUMENTO</td> <td>REV.</td> <td>FOGLIO</td> </tr> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>88 di 95</td> </tr> </table>	COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A	02	E ZZ CL	RI1105 002	D	88 di 95
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO								
IF3A	02	E ZZ CL	RI1105 002	D	88 di 95								

N Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)

Mx Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo superiore della sezione

My Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione)
con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	0.00	280.00 (563.49)	0.00 (0.00)

RISULTATI DEL CALCOLO

Sezione verificata per tutte le combinazioni assegnate

Copriferro netto minimo barre longitudinali: 6.8 cm

Interferro netto minimo barre longitudinali: 18.1 cm

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver S = combinazione verificata / N = combin. non verificata

N Sforzo normale assegnato [kN] nel baricentro B sezione cls.(positivo se di compressione)

Mx Componente del momento assegnato [kNm] riferito all'asse x princ. d'inerzia

My Componente del momento assegnato [kNm] riferito all'asse y princ. d'inerzia

N Res Sforzo normale resistente [kN] nel baricentro B sezione cls.(positivo se di compress.)

Mx Res Momento flettente resistente [kNm] riferito all'asse x princ. d'inerzia

My Res Momento flettente resistente [kNm] riferito all'asse y princ. d'inerzia

Mis.Sic. Misura sicurezza = rapporto vettoriale tra (N r,Mx Res,My Res) e (N,Mx,My)
Verifica positiva se tale rapporto risulta ≥ 1.000

As Tesa Area armature trave [cm²] in zona tesa. [Tra parentesi l'area minima ex (4.1.15)NTC]

N°Comb	Ver	N	Mx	My	N Res	Mx Res	My Res	Mis.Sic.	As Tesa
1	S	0.00	970.00	0.00	0.00	1061.70	0.00	1.09	30.8(15.9)

METODO AGLI STATI LIMITE ULTIMI - DEFORMAZIONI UNITARIE ALLO STATO ULTIMO

ec max Deform. unit. massima del calcestruzzo a compressione

x/d Rapporto di duttilità [§ 4.1.2.1.2.1 NTC] deve essere < 0.45

Xc max Ascissa in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)

Yc max Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)

es min Deform. unit. minima nell'acciaio (negativa se di trazione)

Xs min Ascissa in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)

APPALTATORE: Consorzio <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER	
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Ys min Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
 es max Deform. unit. massima nell'acciaio (positiva se di compress.)
 Xs max Ascissa in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)
 Ys max Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	x/d	Xc max	Yc max	es min	Xs min	Ys min	es max	Xs max	Ys max
1	0.00350	0.092	0.0	100.0	0.00012	8.2	91.8	-0.03438	8.2	8.2

POSIZIONE ASSE NEUTRO PER OGNI COMB. DI RESISTENZA

a, b, c Coeff. a, b, c nell'eq. dell'asse neutro $aX+bY+c=0$ nel rif. X,Y,O gen.
 x/d Rapp. di duttilità (travi e solette)[§ 4.1.2.1.2.1 NTC]: deve essere < 0.45
 C.Rid. Coeff. di riduz. momenti per sola flessione in travi continue

N°Comb	a	b	c	x/d	C.Rid.
1	0.000000000	0.000412593	-0.037759319	0.092	0.700

COMBINAZIONI RARE IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

Ver S = comb. verificata/ N = comb. non verificata
 Sc max Massima tensione (positiva se di compressione) nel calcestruzzo [MPa]
 Xc max, Yc max Ascissa, Ordinata [cm] del punto corrisp. a Sc max (sistema rif. X,Y,O)
 Ss min Minima tensione (negativa se di trazione) nell'acciaio [MPa]
 Xs min, Ys min Ascissa, Ordinata [cm] della barra corrisp. a Ss min (sistema rif. X,Y,O)
 Ac eff. Area di calcestruzzo [cm²] in zona tesa considerata aderente alle barre
 As eff. Area barre [cm²] in zona tesa considerate efficaci per l'apertura delle fessure

N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	2.50	0.0	100.0	-108.4	70.9	8.2	2050	30.8

COMBINAZIONI RARE IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

La sezione viene assunta sempre fessurata anche nel caso in cui la trazione minima del calcestruzzo sia inferiore a f_{ctm}
 Ver. Esito della verifica
 e1 Massima deformazione unitaria di trazione nel calcestruzzo (trazione -) valutata in sezione fessurata
 e2 Minima deformazione unitaria di trazione nel calcestruzzo (trazione -) valutata in sezione fessurata
 k1 = 0.8 per barre ad aderenza migliorata [eq.(7.11)EC2]

APPALTATORE: <u>Consorzio Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER					
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo					
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kt	= 0.4 per comb. quasi permanenti / = 0.6 per comb.frequenti [cfr. eq.(7.9)EC2]
k2	= 0.5 per flessione; $= (e1 + e2) / (2 * e1)$ per trazione eccentrica [eq.(7.13)EC2]
k3	= 3.400 Coeff. in eq.(7.11) come da annessi nazionali
k4	= 0.425 Coeff. in eq.(7.11) come da annessi nazionali
Ø	Diametro [mm] equivalente delle barre tese comprese nell'area efficace Ac eff [eq.(7.11)EC2]
Cf	Copriferro [mm] netto calcolato con riferimento alla barra più tesa
e sm - e cm	Differenza tra le deformazioni medie di acciaio e calcestruzzo [(7.8)EC2 e (C4.1.7)NTC] Tra parentesi: valore minimo = 0.6 Smax / Es [(7.9)EC2 e (C4.1.8)NTC]
sr max	Massima distanza tra le fessure [mm]
wk	Apertura fessure in mm calcolata = sr max * (e_sm - e_cm) [(7.8)EC2 e (C4.1.7)NTC]. Valore limite tra parentesi
Mx fess.	Componente momento di prima fessurazione intorno all'asse X [kNm]
My fess.	Componente momento di prima fessurazione intorno all'asse Y [kNm]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00061	0.00000	0.500	28.0	68	0.00033 (0.00033)	548	0.178 (990.00)	563.49	0.00

COMBINAZIONI FREQUENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	2.50	0.0	100.0	-108.4	70.9	8.2	2050	30.8

COMBINAZIONI FREQUENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00061	0.00000	0.500	28.0	68	0.00033 (0.00033)	548	0.178 (0.20)	563.49	0.00

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Ss min	Xs min	Ys min	Ac eff.	As eff.
1	S	2.50	0.0	100.0	-108.4	70.9	8.2	2050	30.8

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00061	0.00000	0.500	28.0	68	0.00033 (0.00033)	548	0.178 (0.20)	563.49	0.00

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA																
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER						<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">COMMESSA</th> <th style="text-align: left;">LOTTO</th> <th style="text-align: left;">CODIFICA</th> <th style="text-align: left;">DOCUMENTO</th> <th style="text-align: left;">REV.</th> <th style="text-align: left;">FOGLIO</th> </tr> </thead> <tbody> <tr> <td>IF3A</td> <td>02</td> <td>E ZZ CL</td> <td>RI1105 002</td> <td>D</td> <td>91 di 95</td> </tr> </tbody> </table>					COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO	IF3A
COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO												
IF3A	02	E ZZ CL	RI1105 002	D	91 di 95												
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo																	

VERIFICA A TAGLIO

Le verifiche a taglio sono state eseguite tramite un foglio excel.

È necessaria la seguente armatura a taglio:

- 1) spilli Ø10/200x200 quinconce per una lunghezza di 1 m a partire da 1.85m dalla sezione di incastro con il paramento (in corrispondenza della zona dove si verifica il taglio massimo).

- 2) spilli Ø10/400x200 quinconce per il resto della fondazione;

APPALTATORE: Conorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI				
PROGETTAZIONE: Mandataria Mandanti ROCKSOIL S.P.A NET ENGINEERING PINI M-INGEGNERIA GCF ELETTRI-FER	RADDOPPIO TRATTA APICE - ORSARA II LOTTO FUNZIONALE HIRPINIA - ORSARA				
PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D FOGLIO 92 di 95

VERIFICA A TAGLIO DELLA SEZIONE IN C.A. SECONDO T.U. 14/01/2008 § 4.1.2.1.3

• Caratteristiche della sezione

$b_w = 1000$ mm larghezza	$f_{yk} = 450$ MPa resist. caratteristica
$h = 1000$ mm altezza	$\gamma_s = 1.15$ coeff. sicurezza
$c = 82$ mm copriferro	$f_{yd} = 391.3$ MPa resist. di calcolo
$f_{ck} = 30$ MPa resist. caratteristica	Armatura longitudinale tesa:
$\gamma_c = 1.50$ coeff. sicurezza	$A_{sl,1} = 5 \text{ } \emptyset 28 = 30.79 \text{ cm}^2$
$\alpha_{cc} = 0.85$ coeff. riduttivo	$A_{sl,2} = 0 \text{ } \emptyset 0 = 0.00 \text{ cm}^2$
$d = 918$ mm altezza utile	$A_{sl,3} = 0 \text{ } \emptyset 0 = 0.00 \text{ cm}^2$
$f_{cd} = 17.00$ MPa resist. di calcolo	30.79 cm^2

• Sollecitazioni (compressione<0, trazione>0, taglio in valore assoluto)

$$N_{ed} = 0.0 \text{ kN} \quad V_{ed} = 400.0 \text{ kN}$$

• Elementi senza armature trasversali resistenti a taglio

$$k = 1 + (200/d)^{1/2} < 2 \quad k = 1.467 < 2$$

$$v_{min} = 0,035 k^{3/2} f_{ck}^{1/2} \quad v_{min} = 0.341$$

$$\rho_1 = A_{sl}/(b_w \times d) < 0.02 \quad \rho_1 = 0.003 < 0.02$$

$$\sigma_{cp} = N_{Ed}/A_c < 0.2 f_{cd} \quad \sigma_{cp} = 0.00 \text{ MPa} < 0.2 f_{cd}$$

$$V_{Rd} = (0,18 \times k \times (100 \times \rho_1 \times f_{ck})^{1/3} / \gamma_c + 0,15 \times \sigma_{cp}) \times b_w \times d > (v_{min} + 0,15 \times \sigma_{cp}) \times b_w \times d$$

$$V_{Rd} = 348.8 \text{ kN}; \quad (\text{con } (v_{min} + 0,15 \times \sigma_{cp}) \times b_w \times d = 312.6 \text{ kN})$$

$$V_{Rd} = 348.8 \text{ kN} \quad \text{valore di calcolo}$$

la sezione NON è verificata in assenza di armature per il taglio

• Elementi con armature trasversali resistenti a taglio

$$\theta = 25.0 \text{ }^\circ \quad \text{inclinaz. bielle cls} \quad \text{angolo ammissibile}$$

$$\alpha = 90.0 \text{ }^\circ \quad \text{inclinaz. staffe}$$

Armatura a taglio (staffatura):

$$A_{sw}/s = \text{staffe } \emptyset 10 \text{ mm con n}^\circ \text{ bracci (trasv)} \quad 2.5 \quad \text{passo } 20 \text{ cm} = 0.098 \text{ cm}^2/\text{cm}$$

$$V_{Rsd} = 0.90 \times d \times (A_{sw}/s) \times f_{yd} \times (\cotg \alpha + \cotg \theta) \times \text{sen} \alpha \quad V_{Rsd} = 680.7 \text{ kN}$$

$$f_{cd} = 8.50 \text{ MPa resist. di calcolo ridotta}$$

$$\alpha_c = 1.000 \quad \text{coeff. maggiorativo}$$

$$V_{Rcd} = 0.90 \times d \times b_w \times \alpha_c \times f_{cd} \times (\cotg \alpha + \cotg \theta) / (1 + \cotg^2 \alpha) \quad V_{Rcd} = 2689.9 \text{ kN}$$

$$V_{Rd} = \min(V_{Rcd}, V_{Rsd}) \quad V_{Rd} = 680.7 > 400.0 \text{ kN} \quad \text{c.s.} = 1.7$$

la sezione armata a taglio risulta verificata.

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PROGETTO ESECUTIVO Opere di sostegno su pali – Relazione di calcolo	COMMESSA IF3A	LOTTO 02	CODIFICA E ZZ CL	DOCUMENTO RI1105 002	REV. D	FOGLIO 93 di 95

14 CEDIMENTI DEL MURO

Come evidenziato nel paragrafo 9.5 il carico massimo in condizioni SLE vale

$$N = 475 \text{ kN}$$

Largamente inferiore alla resistenza laterale del palo.

Ciò implica che il cedimento previsto per il palo singolo sia largamente inferiore a quello per il quale si mobilita la resistenza laterale del palo, compresa tra 0.5 e 1.5 cm.

Il cedimento atteso per il gruppo di pali può essere calcolato con il metodo di Mandolini e Viggiani (1899), partendo proprio dall'assunzione che il cedimento del palo singolo sia pari a

$$W_s = 0.5 \text{ cm}$$

Per un gruppo di 8 pali si trova

$$W_{\text{gruppo}} = 2.5 \text{ cm}$$

Coefficiente di forma

$$\beta = 0.5 + \text{Log}(L_{\text{utile}} / D) = 1.84 \quad (-)$$

Cedimento del palo

$$\delta = \beta * P / E * L_{\text{utile}} = 4.99 \text{ (mm)}$$

CEDIMENTO DELLA PALIFICATA:

$$\delta_p = R_s * \delta = n * R_g * \delta$$

Coefficiente di Gruppo

$$R_g = 0.5 / R + 0.13 / R^2 \quad (\text{Viggiani, 1999})$$

$$R = (n * s / L)^{0.5} \quad R = 1.131$$

Cedimento della palificata

$$\delta_p = n * R_g * \delta = 8 * 0.54 * 4.99 = 21.71 \text{ (mm)}$$

Sicuramente compatibile con le necessità funzionali del muro.

APPALTATORE: Consorzio Soci HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	ITINERARIO NAPOLI – BARI				
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15 INCIDENZA

L'incidenza degli elementi del muro vale:

Pali: 190 kg/m³

Paramento: 90 kg/m³

Fondazione: 150 kg/m³

Incidenza media: 120 kg/m³

Paramento										
Caratteristiche geometriche			Armatura		diametro	peso	lunghezza	numero	peso totale	
Spessore	L1	L2	V	Pos.	lato terreno	mm	kg/m	m	-	kg
m	m	m	m ³	Pos. 1	lato terreno verticali	22	2,98	1,1	5	16,39
0,7	1	1	0,7	Pos. 1	lato esterno verticali	20	2,47	1,1	5	13,59
				Pos. 2	lato terreno orizzontali	14	1,21	1,1	7,5	9,98
				Pos. 2	lato esterno orizzontali	14	1,21	1,1	7,5	9,98
				Pos. 3	chiusure di testa spalmate su 5,5m di altezza del paramento*	14	1,21	0,53	5	3,19
				Pos. 4	spilli	10	0,62	0,9	2,7778	1,55
										54,68
					coefficiente per sfido		1,1	incidenza	kg/m ³	85,93
								incidenza computata	kg/m³	90,00

Fondazione										
Caratteristiche geometriche			Armatura		diametro	peso	lunghezza	numero	peso totale	
Spessore	L1	L2	V	Pos.	lato terreno	mm	kg/m	m	-	kg
m	m	m	m ³	Pos. 5	lato terreno trasversali	28	4,83	1,1	7,5	39,8475
1	1	1	1	Pos. 5	lato esterno trasversali	20	2,47	1,1	5	13,59
				Pos. 6	lato terreno longitudinali	18	2	1,1	5	11,00
				Pos. 6	lato esterno longitudinali	14	1,21	1,1	5	6,66
				Pos. 7	chiusure laterali spalmate su 4,75m**	28	4,83	0,36	7,5	12,96
				Pos. 8	spilli	10	0,62	1,2	16,667	12,40
				Pos. 9	riprese spalmate su 4,75m di fondazione	22	2,98	0,47	0	0,00
				Pos. 10	riprese spalmate su 4,75m di fondazione	20	2,47	0,45	5	5,59
				Pos. 11	riprese+lunghezza di sovrapposizione	28	4,83	0,94	5	22,68
										totale 124,72
					coefficiente per sfido		1,2	incidenza	kg/m ³	149,66
								incidenza computata	kg/m³	150,00
								INCIDENZA MEDIA	kg/m³	120,00

* poichè il calcolo dell'incidenza è stato eseguito al m³, le chiusure sono state spalmate per tutta l'altezza del paramento

** poichè il calcolo dell'incidenza è stato eseguito al m³, le riprese sono state spalmate per tutta la lunghezza della fondazione

PALI

PESO GABBIA

W = 1428.34 kg

VOLUME PALO

V = $\pi R^2 L = 3.14 * 0.42^2 * 15 = 7.536 \text{ m}^3$

INCIDENZA

inc = $1428.34 / 7.536 = 189.5 \text{ kg/m}^3$

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA - ORSARA av WEBUILD italia PIZZAROTTI	<p style="text-align: center;">ITINERARIO NAPOLI – BARI</p> <p style="text-align: center;">RADDOPPIO TRATTA APICE - ORSARA</p> <p style="text-align: center;">II LOTTO FUNZIONALE HIRPINIA - ORSARA</p>																
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COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO												
IF3A	02	E ZZ CL	RI1105 002	D	95 di 95												

ALLEGATI

Progetto:
 Ditta:
 Comune:
 Progettista:
 Direttore dei Lavori:
 Impresa:

Dati

Materiali

Simbologia adottata

n° Indice materiale
 Descr Descrizione del materiale
Calcestruzzo armato
 C Classe di resistenza del cls
 A Classe di resistenza dell'acciaio
 γ Peso specifico, espresso in [kN/mc]
 R_{ck} Resistenza caratteristica a compressione, espressa in [kPa]
 E Modulo elastico, espresso in [kPa]
 ν Coeff. di Poisson
 n Coeff. di omogenizzazione acciaio/cls
 ntc Coeff. di omogenizzazione cls teso/compresso

Calcestruzzo armato

n°	Descr	C	A	γ	R_{ck}	E	ν	n	ntc
				[kN/mc]	[kPa]	[kPa]			
1	C30/37	C30/37	B450C	24.5170	35000	32587986	0.30	15.00	0.50

Acciai

Descr	f_{yk}	f_{uk}
	[kPa]	[kPa]
B450C	449936	539963

Tipologie pali

Simbologia adottata

n° Indice tipologia palo
 Descr Descrizione tipologia palo
 P Contributo portanza palo (laterale e/o punta)
 T Tecnologia costruttiva (trivellato, infisso o elica continua)
 V Vincolo palo-fondazione: Cerniera o Incastro (libero o impedito di ruotare in testa)
 Imat Indice materiale che lo costituisce
 BD usa metodo di Bustamante-Doix
 PN Portanza nota
 Pp, Pl Portanza di punta e laterale caratteristica, espressa in [kN]

n°	Descr	P	T	V	Imat	BD	PN	Pp	Pl
1	Tipologia 1	Laterale + Punta	Trivellato	Incastro	1	NO	SI	493.00	1534.00

Geometria profilo terreno a monte del muro

Simbologia adottata

(Sistema di riferimento con origine in testa al muro, ascissa X positiva verso monte, ordinata Y positiva verso l'alto)

n° numero ordine del punto
 X ascissa del punto espressa in [m]
 Y ordinata del punto espressa in [m]
 A inclinazione del tratto espressa in [°]

n°	X	Y	A
	[m]	[m]	[°]
1	0.00	0.00	0.000
2	30.00	5.00	9.462
3	31.00	5.00	0.000

Inclinazione terreno a valle del muro rispetto all'orizzontale 0.000 [°]

Falda

Simbologia adottata

(Sistema di riferimento con origine in testa al muro, ascissa X positiva verso monte, ordinata Y positiva verso l'alto)

n°	numero ordine del punto
X	ascissa del punto espressa in [m]
Y	ordinata del punto espressa in [m]
A	inclinazione del tratto espressa in [°]

n°	X [m]	Y [m]	A [°]
1	-5.00	-6.50	0.000
2	0.00	-6.50	0.000
3	5.00	-6.50	0.000

Geometria muro

Geometria paramento e fondazione

Lunghezza muro	10.00	[m]
<u>Paramento</u>		
Materiale	C30/37	
Altezza paramento	5.50	[m]
Altezza paramento libero	5.50	[m]
Spessore in sommità	0.70	[m]
Spessore all'attacco con la fondazione	0.70	[m]
Inclinazione paramento esterno	0.00	[°]
Inclinazione paramento interno	0.00	[°]
<u>Fondazione</u>		
Materiale	C30/37	
Lunghezza mensola di valle	4.05	[m]
Lunghezza mensola di monte	0.00	[m]
Lunghezza totale	4.75	[m]
Inclinazione piano di posa	0.00	[°]
Spessore	1.00	[m]
Spessore magrone	0.10	[m]

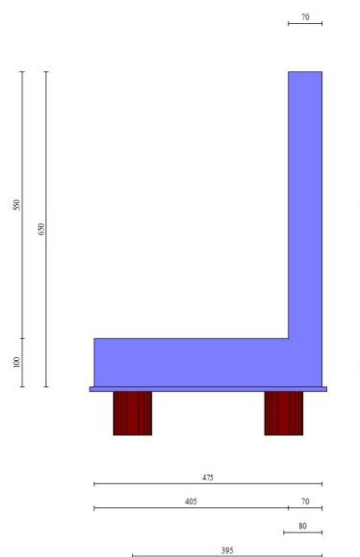


Fig. 1 - Sezione quotata del muro

Descrizione pali di fondazione

Simbologia adottata

n°	numero d'ordine della fila
X	ascissa della fila misurata dallo spigolo di monte della fondazione espressa in [m]
I	interasse tra i pali, espressa in [m]
f	franco laterale (distanza minima dal bordo laterale), espressa in [m]
Np	Numero di pali della fila
D	diametro dei pali della fila espresso in [cm]
L	lunghezza dei pali della fila espressa in [m]
α	inclinazione dei pali della fila rispetto alla verticale espressa in [°]
ALL	allineamento dei pali della fila rispetto al baricentro della fondazione (CENTRATI o SFALSATI)

n°	Tipologia	X [m]	I [m]	f [m]	Np	D [cm]	L [m]	α [°]	ALL
1	Tipologia 1	0.80	2.40	1.00	4	80.00	15.00	0.00	Sfalsati
2	Tipologia 1	3.95	2.40	1.00	4	80.00	15.00	0.00	Sfalsati

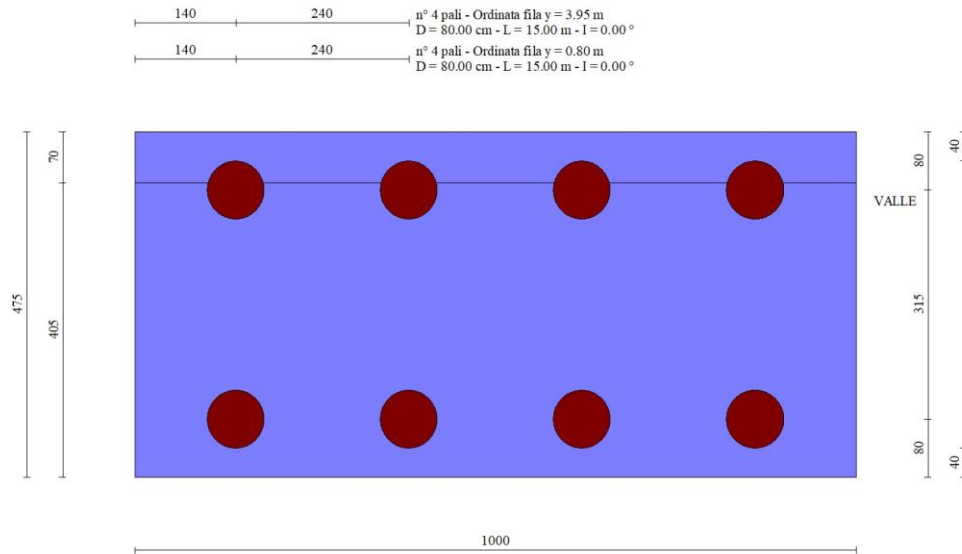


Fig. 2 - Pianta pali

Descrizione terreni**Parametri di resistenza****Simbologia adottata**

n°	Indice del terreno
Descr	Descrizione terreno
γ	Peso di volume del terreno espresso in [kN/mc]
γ_{sat}	Peso di volume saturo del terreno espresso in [kN/mc]
ϕ	Angolo d'attrito interno espresso in [°]
δ	Angolo d'attrito terra-muro espresso in [°]
c	Coesione espressa in [kPa]
c_a	Adesione terra-muro espressa in [kPa]
Per calcolo portanza con il metodo di Bustamante-Doix	
Cesp	Coeff. di espansione laterale (solo per il metodo di Bustamante-Doix)
τ_l	Tensione tangenziale limite, espressa in [kPa]

n°	Descr	γ [kN/mc]	γ_{sat} [kN/mc]	ϕ [°]	δ [°]	c [kPa]	c_a [kPa]	Cesp	τ_l [kPa]	
1	Rilevato	19.0000	19.0000	35.000	17.500	0	0	1.000		0 (CAR)
				35.000	35.000	0	0			0 (MIN)
				38.000	35.000	0	0			0 (MED)
2	coltre	20.5000	20.5000	27.000	18.000	8	0	1.000		0 (CAR)
				27.000	18.000	8	0			0 (MIN)
				27.000	18.000	8	0			0 (MED)
3	SFT2	20.0000	20.0000	27.000	18.000	2	0	1.000		0 (CAR)
				27.000	18.000	2	0			0 (MIN)
				27.000	18.000	2	0			0 (MED)

Stratigrafia**Simbologia adottata**

n°	Indice dello strato
H	Spessore dello strato espresso in [m]
α	Inclinazione espressa in [°]
Terreno	Terreno dello strato

Kwn, Kwt Costante di Winkler normale e tangenziale alla superficie espressa in Kg/cm²/cm

Per calcolo pali (solo se presenti)

Kw Costante di Winkler orizzontale espressa in Kg/cm²/cm

Ks Coefficiente di spinta

Cesp Coefficiente di espansione laterale (per tutti i metodi tranne il metodo di Bustamante-Doix)

Per calcolo della spinta con coeff. di spinta definiti (usati solo se attiva l'opzione 'Usa coeff. di spinta da strato')

Kststa, Kstsis Coeff. di spinta statico e sismico

n°	H	α	Terreno	Kwn	Kwt	Kw	Ks	Cesp	Kststa	Kstsis
	[m]	[°]		[Kg/cm ²]	[Kg/cm ²]	[Kg/cm ²]				
1	5.50	0.000	Rilevato	0.000	0.000	0.000	0.500	1.000	---	---
2	1.50	0.000	coltre	0.000	0.000	20.068	0.500	1.000	---	---
3	30.00	0.000	SFT2	0.000	0.000	0.000	0.000	1.000	---	---

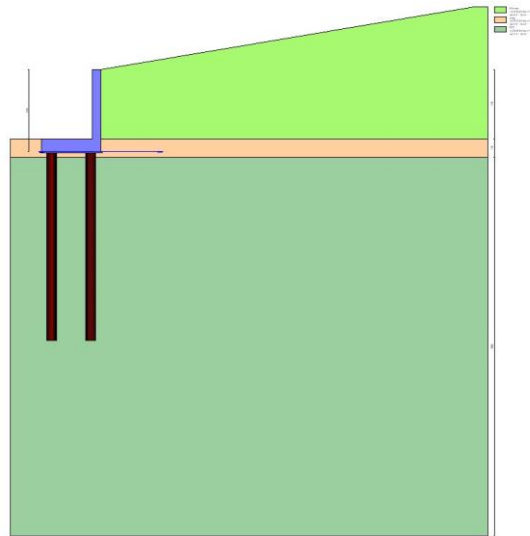


Fig. 3 - Stratigrafia

Condizioni di carico

Simbologia adottata

Carichi verticali positivi verso il basso.

Carichi orizzontali positivi verso sinistra.

Momento positivo senso antiorario.

X Ascissa del punto di applicazione del carico concentrato espressa in [m]

F_x Componente orizzontale del carico concentrato espressa in [kN]

F_y Componente verticale del carico concentrato espressa in [kN]

M Momento espresso in [kNm]

X_i Ascissa del punto iniziale del carico ripartito espressa in [m]

X_r Ascissa del punto finale del carico ripartito espressa in [m]

Q_i Intensità del carico per x=X_i espressa in [kN]

Q_r Intensità del carico per x=X_r espressa in [kN]

Condizione n° 1 (Condizione 1) - VARIABILE TF

Coeff. di combinazione $\Psi_0=0.75 - \Psi_1=0.75 - \Psi_2=0.00$

Carichi sul terreno

n°	Tipo	X	Fx	Fy	M	Xi	Xf	Qi	Qf
		[m]	[kN]	[kN]	[kNm]	[m]	[m]	[kN]	[kN]
1	Distribuito					0.50	20.00	20.0000	20.0000

Normativa

Normativa usata: **Norme Tecniche sulle Costruzioni 2018 (D.M. 17.01.2018) + Circolare C.S.LL.PP. 21/01/2019 n.7**

Coeff. parziali per le azioni o per l'effetto delle azioni

Carichi	Effetto		Combinazioni statiche					Combinazioni sismiche		
			HYD	UPL	EQU	A1	A2	EQU	A1	A2
Permanenti strutturali	Favorevoli	$\gamma_{G1, fav}$	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Permanenti strutturali	Sfavorevoli	$\gamma_{G1, sfav}$	1.10	1.10	1.30	1.30	1.00	1.00	1.00	1.00

Carichi	Effetto		Combinazioni statiche					Combinazioni sismiche			
			HYD	UPL	EQU	A1	A2	EQU	A1	A2	
Permanenti non strutturali	Favorevoli	$\gamma_{G2,fav}$	0.00	0.80	0.80	0.80	0.80	0.80	0.00	0.00	0.00
Permanenti non strutturali	Sfavorevoli	$\gamma_{G2,sfav}$	1.00	1.50	1.50	1.50	1.30	1.00	1.00	1.00	1.00
Variabili	Favorevoli	$\gamma_{Q,fav}$	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Variabili	Sfavorevoli	$\gamma_{Q,sfav}$	1.50	1.50	1.50	1.50	1.30	1.00	1.00	1.00	1.00
Variabili da traffico	Favorevoli	$\gamma_{QT,fav}$	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Variabili da traffico	Sfavorevoli	$\gamma_{QT,sfav}$	1.00	1.50	1.35	1.35	1.15	1.00	1.00	1.00	1.00

Coeff. parziali per i parametri geotecnici del terreno

Parametro		Combinazioni statiche		Combinazioni sismiche	
		M1	M2	M1	M2
Tangente dell'angolo di attrito	$\gamma_{\tan(\phi)}$	1.00	1.25	1.00	1.00
Coesione efficace	γ_c	1.00	1.25	1.00	1.00
Resistenza non drenata	γ_{cu}	1.00	1.40	1.00	1.00
Peso nell'unità di volume	γ_r	1.00	1.00	1.00	1.00

Coeff. parziali γ_R per le verifiche agli stati limite ultimi STR e GEO

Verifica	Combinazioni statiche			Combinazioni sismiche		
	R1	R2	R3	R1	R2	R3
Capacità portante	--	--	1.40	--	--	1.20
Scorrimento	--	--	1.10	--	--	1.00
Resistenza terreno a valle	--	--	1.40	--	--	1.20
Ribaltamento	--	--	1.15	--	--	1.00
Stabilità fronte di scavo	--	1.10	--	--	1.20	--

Carichi verticali. Coeff. parziali γ_R da applicare alle resistenze caratteristiche

Resistenza		Pali fissi			Pali trivellati			Pali ad elica continua		
		R1	R2	R3	R1	R2	R3	R1	R2	R3
Punta	γ_b	--	--	1.15	--	--	1.35	--	--	1.30
Laterale compressione	γ_s	--	--	1.15	--	--	1.15	--	--	1.15
Totale compressione	γ_t	--	--	1.15	--	--	1.30	--	--	1.25
Laterale trazione	γ_{st}	--	--	1.25	--	--	1.25	--	--	1.25

Carichi trasversali. Coeff. parziali γ_R da applicare alle resistenze caratteristiche

		R1	R2	R3
Trasversale	γ_t	--	--	1.30

Coefficienti di riduzione ζ per la determinazione della resistenza caratteristica dei pali

Numero di verticali indagate 1

$\zeta_3=1.70$ $\zeta_4=1.70$

Descrizione combinazioni di carico

Con riferimento alle azioni elementari prima determinate, si sono considerate le seguenti combinazioni di carico:

- Combinazione fondamentale, impiegata per gli stati limite ultimi (SLU):

$$\gamma_{G1} G_1 + \gamma_{G2} G_2 + \gamma_{Q1} Q_{k1} + \gamma_{Q2} Q_{k2} + \gamma_{Q3} Q_{k3} + \dots$$

- Combinazione caratteristica, cosiddetta rara, impiegata per gli stati limite di esercizio (SLE) irreversibili:

$$G_1 + G_2 + Q_{k1} + \Psi_{0,2} Q_{k2} + \Psi_{0,3} Q_{k3} + \dots$$

- Combinazione frequente, impiegata per gli stati limite di esercizio (SLE) reversibili:

$$G_1 + G_2 + \Psi_{1,1} Q_{k1} + \Psi_{2,2} Q_{k2} + \Psi_{2,3} Q_{k3} + \dots$$

- Combinazione quasi permanente, impiegata per gli effetti di lungo periodo:

$$G_1 + G_2 + \Psi_{2,1} Q_{k1} + \Psi_{2,2} Q_{k2} + \Psi_{2,3} Q_{k3} + \dots$$

I valori dei coeff. $\Psi_{0,j}$, $\Psi_{1,j}$, $\Psi_{2,j}$ sono definiti nelle singole condizioni variabili. per I valori dei coeff. γ_G e γ_Q , sono definiti nella tabella normativa.

In particolare si sono considerate le seguenti combinazioni:

Simbologia adottata

γ Coefficiente di partecipazione della condizione

Ψ Coefficiente di combinazione della condizione

Combinazione n° 1 - STR (A1-M1-R3)

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Favorevole
Peso terrapieno	1.00	--	Favorevole
Spinta terreno	1.30	--	Sfavorevole
Condizione 1	1.35	1.00	Sfavorevole

Combinazione n° 2 - GEO (A2-M2-R2)

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole
Condizione 1	1.15	1.00	Sfavorevole

Combinazione n° 3 - EQU (A1-M1-R3)

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Favorevole
Peso terrapieno	1.00	--	Favorevole
Spinta terreno	1.30	--	Sfavorevole
Condizione 1	1.35	1.00	Sfavorevole

Combinazione n° 4 - SLER

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole
Condizione 1	1.00	1.00	Sfavorevole

Combinazione n° 5 - SLEF

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole
Condizione 1	1.00	0.75	Sfavorevole

Combinazione n° 6 - SLEQ

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole

Dati sismici

	Simbolo	U.M.	SLU	SLE
Accelerazione al suolo	a_g	[m/s ²]	3.385	0.000
Accelerazione al suolo	a_g/g	[%]	0.345	0.000
Massimo fattore amplificazione spettro orizzontale	F0		2.354	2.430
Periodo inizio tratto spettro a velocità costante	Tc*		0.425	0.370
Tipo di sottosuolo - Coefficiente stratigrafico	Ss		C	1.213
Categoria topografica - Coefficiente amplificazione topografica	St		T1	1.000

Stato limite ...	Coeff. di riduzione β_m	kh	kv
Ultimo	0.760	31.801	15.900
Ultimo - Ribaltamento	1.000	41.843	20.921
Esercizio	0.200	0.000	0.000

Nel calcolo non è stato portato in conto il sisma verticale
 Forma diagramma incremento sismico **Stessa forma del diagramma statico**

Opzioni di calcolo

Spinta

Metodo di calcolo della spinta
 Tipo di spinta
 Terreno a bassa permeabilità

Culmann
 Spinta a riposo
 NO

Superficie di spinta limitata	NO
<u>Stabilità globale</u>	
Metodo di calcolo della stabilità globale	Bishop
<u>Altro</u>	
Partecipazione spinta passiva terreno antistante	0.00
Partecipazione resistenza passiva dente di fondazione	50.00
Componente verticale della spinta nel calcolo delle sollecitazioni	NO
Considera terreno sulla fondazione di valle	NO
Considera spinta e peso acqua fondazione di valle	NO
<u>Spostamenti</u>	
Modello a blocchi	
Non è stato richiesto il calcolo degli spostamenti	
Spostamento limite	5.00 [cm]
<u>Opzioni calcolo pali</u>	
<u>Portanza verticale</u>	
Metodo di calcolo della portanza alla punta	Berezantzev
Metodo di calcolo della portanza alla laterale	Integrazione delle tensioni tangenziali ($k_s \sigma_v \tan(\delta) + c_a$)
Correzione angolo di attrito in funzione del tipo di palo (infisso/trivellato)	Attiva
Andamento pressione verticale nel calcolo della portanza alla punta σ_v con la profondità	Pressione geostatica
Andamento pressione verticale nel calcolo della portanza laterale	Pressione geostatica
Applica coeff. parziale azione peso proprio palo e attrito negativo	
<u>Portanza trasversale</u>	
Costante di Winkler: costante pari a 4.00 [Kg/cm ² /cm] Criterio rottura palo-terreno	
- Spostamento limite	Non attivo
- Pressione limite	Pressione limite costante $p_l = 6.63$ [kPa]
- Palo infinitamente elastico	Non attivo
<u>Cedimenti</u>	
Metodo di calcolo	Metodo agli elementi finiti
Spostamento limite alla punta	1.00 [cm]
Spostamento limite laterale	0.50 [cm]

Risultati per combinazione

Spinta e forze

Simbologia adottata

Ic	Indice della combinazione
A	Tipo azione
I	Inclinazione della spinta, espressa in [°]
V	Valore dell'azione, espressa in [kN]
Cx, Cy	Componente in direzione X ed Y dell'azione, espressa in [kN]
Px, Py	Coordinata X ed Y del punto di applicazione dell'azione, espressa in [m]

Ic	A	V [kN]	I [°]	Cx [kN]	Cy [kN]	Px [m]	Py [m]
1	Spinta statica	277.67	17.63	264.63	84.09	0.00	-3.98
	Peso/inerzia muro			0.00	210.85/0.00	-1.47	-4.55
	Peso dell'acqua sulla fondazione di valle				0.00	0.00	0.00
	Resistenza pali			-528.54			
4	Spinta statica	210.23	17.63	200.36	63.66	0.00	-3.96
	Peso/inerzia muro			0.00	210.85/0.00	-1.47	-4.55
	Peso dell'acqua sulla fondazione di valle				0.00	0.00	0.00 </td
	Resistenza pali			-900.76			
5	Spinta statica	201.92	17.63	192.44	61.14	0.00	-3.97
	Peso/inerzia muro			0.00	210.85/0.00	-1.47	-4.55
	Peso dell'acqua sulla fondazione di valle				0.00	0.00	0.00
	Resistenza pali			-920.48			
6	Spinta statica	177.02	17.63	168.71	53.61	0.00	-4.01
	Peso/inerzia muro			0.00	210.85/0.00	-1.47	-4.55
	Peso dell'acqua sulla fondazione di valle				0.00	0.00	0.00
	Resistenza pali			-995.97			

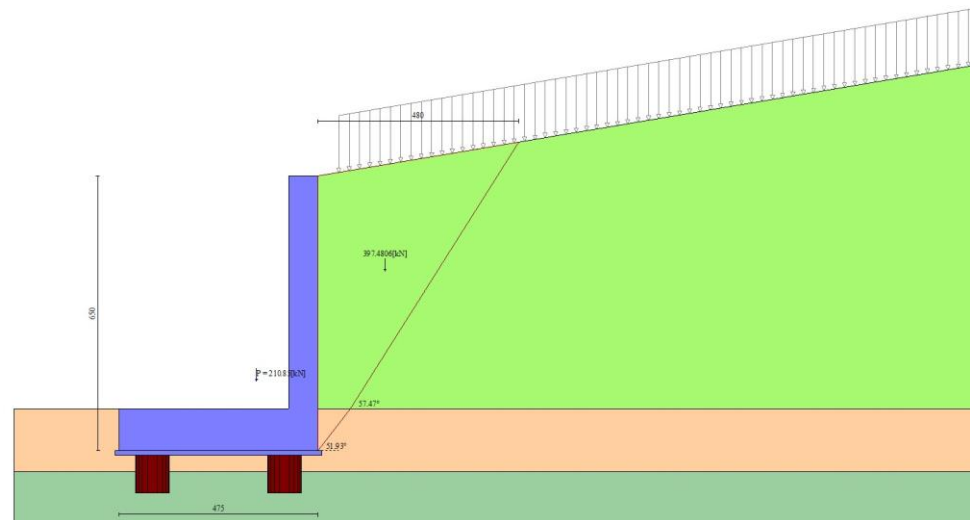


Fig. 4 - Cuneo di spinta (combinazione statica) (Combinazione n° 1)

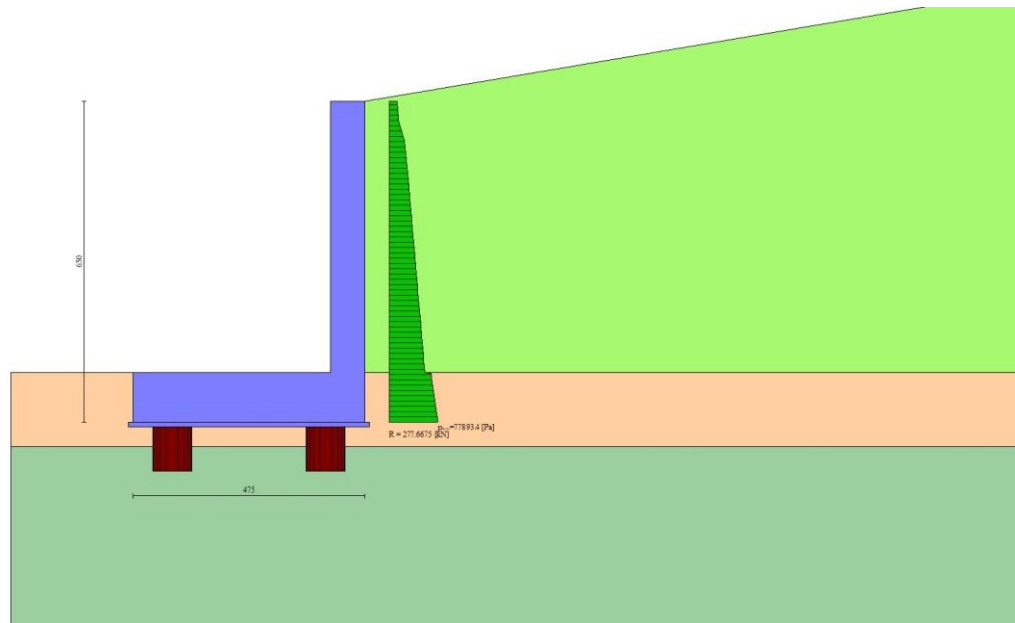


Fig. 5 - Diagramma delle pressioni (combinazione statica) (Combinazione n° 1)

Scarichi in testa ai pali

Simbologia adottata

Cmb	Indice/Tipo combinazione
Ip	Indice palo
N	Sforzo normale, espresso in [kN]
M	Momento, espresso in [kNm]
T	Taglio, espresso in [kN]

Cmb	Ip	N [kN]	M [kNm]	T [kN]
1 - STR (A1-M1-R3)	1	243.72	149.83	-330.78
	2	493.59	149.83	-330.78
4 - SLER	1	212.36	3.12	-250.45
	2	473.86	3.12	-250.45
5 - SLEF	1	217.11	-4.87	-240.55
	2	462.84	-4.87	-240.55
6 - SLEQ	1	231.23	-28.58	-210.89
	2	429.89	-28.58	-210.89

Verifiche geotecniche

Quadro riassuntivo coeff. di sicurezza calcolati

Simbologia adottata

Cmb	Indice/Tipo combinazione
S	Sisma (H: componente orizzontale, V: componente verticale)
FS _{SCO}	Coeff. di sicurezza allo scorrimento
FS _{RIB}	Coeff. di sicurezza al ribaltamento
FS _{QLIM}	Coeff. di sicurezza a carico limite
FS _{STAB}	Coeff. di sicurezza a stabilità globale
FS _{HYD}	Coeff. di sicurezza a sifonamento
FS _{UPL}	Coeff. di sicurezza a sollevamento

Cmb	Sismica	FS _{SCO}	FS _{RIB}	FS _{QLIM}	FS _{STAB}	FS _{HYD}	FS _{UPL}
1 - STR (A1-M1-R3)		1.997					
2 - GEO (A2-M2-R2)					2.284		
3 - EQU (A1-M1-R3)			6.872				

Verifica stabilità globale muro + terreno

Simbologia adottata

Ic	Indice/Tipo combinazione
C	Centro superficie di scorrimento, espresso in [m]

R Raggio, espresso in [m]
FS Fattore di sicurezza

Ic	C	R	FS
	[m]	[m]	
2 - GEO (A2-M2-R2)	-2.40; 11.40	25.45	2.284

Cedimenti pali

Simbologia adottata

Ic Indice combinazione
Ip Indice palo
w Cedimento, espresso in [cm]

Ic	Ip	w
		[cm]
4	1	0.4491
	2	1.0033
5	1	0.4591
	2	0.9800
6	1	0.4890
	2	0.9101

Sollecitazioni

Elementi calcolati a trave

Simbologia adottata

N Sforzo normale, espresso in [kN]. Positivo se di compressione.
T Taglio, espresso in [kN]. Positivo se diretto da monte verso valle
M Momento, espresso in [kNm]. Positivo se tende le fibre contro terra (a monte)

Elementi calcolati a piastra

Simbologia adottata

Mx, My Momenti flettenti, espresso in [kNm]
Mxy Momento torcente, espresso in [kNm]. Positivo se diretto da monte verso valle
Tx, Ty Tagli, espresso in [kN]. Positivo se tende le fibre contro terra (a monte)
I momenti flettenti sono positivi se tendono le fibre inferiori (intradosso fondazione, paramento esterno)

Paramento

Combinazione n° 1 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	1.72	1.05	0.05
3	-0.20	3.43	2.17	0.21
4	-0.30	5.15	3.35	0.49
5	-0.40	6.86	4.59	0.88
6	-0.50	8.58	5.98	1.41
7	-0.60	10.30	7.59	2.09
8	-0.70	12.01	9.41	2.93
9	-0.80	13.73	11.47	3.98
10	-0.90	15.45	13.66	5.23
11	-1.00	17.16	15.93	6.71
12	-1.10	18.88	18.28	8.42
13	-1.20	20.59	20.71	10.37
14	-1.30	22.31	23.20	12.57
15	-1.40	24.03	25.77	15.01
16	-1.50	25.74	28.40	17.72
17	-1.60	27.46	31.10	20.70
18	-1.70	29.18	33.87	23.94
19	-1.80	30.89	36.70	27.47
20	-1.90	32.61	39.60	31.29
21	-2.00	34.32	42.57	35.39
22	-2.10	36.04	45.60	39.80
23	-2.20	37.76	48.70	44.52
24	-2.30	39.47	51.86	49.54
25	-2.40	41.19	55.09	54.89
26	-2.50	42.90	58.38	60.56
27	-2.60	44.62	61.74	66.57
28	-2.70	46.34	65.17	72.91
29	-2.80	48.05	68.66	79.60

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
30	-2.90	49.77	72.21	86.65
31	-3.00	51.49	75.83	94.05
32	-3.10	53.20	79.52	101.81
33	-3.20	54.92	83.26	109.95
34	-3.30	56.63	87.08	118.47
35	-3.40	58.35	90.96	127.37
36	-3.50	60.07	94.90	136.66
37	-3.60	61.78	98.91	146.35
38	-3.70	63.50	102.98	156.45
39	-3.80	65.22	107.12	166.95
40	-3.90	66.93	111.32	177.87
41	-4.00	68.65	115.59	189.22
42	-4.10	70.36	119.92	200.99
43	-4.20	72.08	124.32	213.21
44	-4.30	73.80	128.78	225.86
45	-4.40	75.51	133.31	238.96
46	-4.50	77.23	137.90	252.52
47	-4.60	78.94	142.55	266.55
48	-4.70	80.66	147.27	281.04
49	-4.80	82.38	152.06	296.00
50	-4.90	84.09	156.91	311.45
51	-5.00	85.81	161.82	327.39
52	-5.10	87.53	166.80	343.82
53	-5.20	89.24	171.84	360.75
54	-5.30	90.96	176.95	378.19
55	-5.40	92.67	182.12	396.14
56	-5.50	94.39	187.36	414.61

Combinazione n° 4 - SLER

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	1.72	0.81	0.04
3	-0.20	3.43	1.67	0.16
4	-0.30	5.15	2.57	0.37
5	-0.40	6.86	3.53	0.68
6	-0.50	8.58	4.60	1.08
7	-0.60	10.30	5.82	1.60
8	-0.70	12.01	7.22	2.26
9	-0.80	13.73	8.78	3.05
10	-0.90	15.45	10.44	4.01
11	-1.00	17.16	12.18	5.14
12	-1.10	18.88	13.97	6.45
13	-1.20	20.59	15.81	7.94
14	-1.30	22.31	17.71	9.62
15	-1.40	24.03	19.67	11.48
16	-1.50	25.74	21.67	13.55
17	-1.60	27.46	23.73	15.82
18	-1.70	29.18	25.84	18.30
19	-1.80	30.89	28.00	20.99
20	-1.90	32.61	30.21	23.90
21	-2.00	34.32	32.47	27.03
22	-2.10	36.04	34.79	30.40
23	-2.20	37.76	37.15	33.99
24	-2.30	39.47	39.56	37.83
25	-2.40	41.19	42.03	41.91
26	-2.50	42.90	44.54	46.24
27	-2.60	44.62	47.11	50.82
28	-2.70	46.34	49.72	55.66
29	-2.80	48.05	52.39	60.76
30	-2.90	49.77	55.10	66.14
31	-3.00	51.49	57.87	71.79
32	-3.10	53.20	60.68	77.71
33	-3.20	54.92	63.54	83.92
34	-3.30	56.63	66.46	90.42
35	-3.40	58.35	69.42	97.22
36	-3.50	60.07	72.44	104.31
37	-3.60	61.78	75.50	111.70
38	-3.70	63.50	78.61	119.41
39	-3.80	65.22	81.78	127.43
40	-3.90	66.93	84.99	135.77
41	-4.00	68.65	88.25	144.43
42	-4.10	70.36	91.56	153.42
43	-4.20	72.08	94.93	162.74

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
44	-4.30	73.80	98.34	172.41
45	-4.40	75.51	101.80	182.41
46	-4.50	77.23	105.31	192.77
47	-4.60	78.94	108.87	203.48
48	-4.70	80.66	112.48	214.54
49	-4.80	82.38	116.14	225.97
50	-4.90	84.09	119.85	237.77
51	-5.00	85.81	123.61	249.94
52	-5.10	87.53	127.42	262.50
53	-5.20	89.24	131.28	275.43
54	-5.30	90.96	135.19	288.75
55	-5.40	92.67	139.15	302.47
56	-5.50	94.39	143.15	316.58

Combinazione n° 5 - SLEF

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	1.72	0.81	0.04
3	-0.20	3.43	1.67	0.16
4	-0.30	5.15	2.57	0.37
5	-0.40	6.86	3.53	0.68
6	-0.50	8.58	4.58	1.08
7	-0.60	10.30	5.75	1.60
8	-0.70	12.01	7.06	2.24
9	-0.80	13.73	8.51	3.02
10	-0.90	15.45	10.05	3.94
11	-1.00	17.16	11.66	5.03
12	-1.10	18.88	13.34	6.28
13	-1.20	20.59	15.06	7.70
14	-1.30	22.31	16.84	9.29
15	-1.40	24.03	18.67	11.07
16	-1.50	25.74	20.56	13.03
17	-1.60	27.46	22.49	15.18
18	-1.70	29.18	24.47	17.53
19	-1.80	30.89	26.51	20.08
20	-1.90	32.61	28.59	22.83
21	-2.00	34.32	30.73	25.80
22	-2.10	36.04	32.91	28.98
23	-2.20	37.76	35.15	32.38
24	-2.30	39.47	37.44	36.01
25	-2.40	41.19	39.77	39.87
26	-2.50	42.90	42.16	43.97
27	-2.60	44.62	44.59	48.30
28	-2.70	46.34	47.08	52.89
29	-2.80	48.05	49.62	57.72
30	-2.90	49.77	52.20	62.81
31	-3.00	51.49	54.84	68.16
32	-3.10	53.20	57.52	73.78
33	-3.20	54.92	60.26	79.67
34	-3.30	56.63	63.04	85.84
35	-3.40	58.35	65.88	92.28
36	-3.50	60.07	68.76	99.01
37	-3.60	61.78	71.70	106.04
38	-3.70	63.50	74.68	113.35
39	-3.80	65.22	77.71	120.97
40	-3.90	66.93	80.80	128.90
41	-4.00	68.65	83.93	137.13
42	-4.10	70.36	87.11	145.69
43	-4.20	72.08	90.34	154.56
44	-4.30	73.80	93.63	163.76
45	-4.40	75.51	96.96	173.28
46	-4.50	77.23	100.34	183.15
47	-4.60	78.94	103.77	193.35
48	-4.70	80.66	107.25	203.90
49	-4.80	82.38	110.78	214.81
50	-4.90	84.09	114.36	226.06
51	-5.00	85.81	117.99	237.68
52	-5.10	87.53	121.67	249.66
53	-5.20	89.24	125.40	262.02
54	-5.30	90.96	129.18	274.74
55	-5.40	92.67	133.01	287.85
56	-5.50	94.39	136.88	301.35

Combinazione n° 6 - SLEQ

n°	X [m]	N [kN]	T [kN]	M [kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	1.72	0.81	0.04
3	-0.20	3.43	1.67	0.16
4	-0.30	5.15	2.57	0.37
5	-0.40	6.86	3.53	0.68
6	-0.50	8.58	4.54	1.08
7	-0.60	10.30	5.59	1.59
8	-0.70	12.01	6.70	2.20
9	-0.80	13.73	7.85	2.93
10	-0.90	15.45	9.06	3.77
11	-1.00	17.16	10.31	4.74
12	-1.10	18.88	11.61	5.84
13	-1.20	20.59	12.97	7.07
14	-1.30	22.31	14.37	8.43
15	-1.40	24.03	15.82	9.94
16	-1.50	25.74	17.32	11.60
17	-1.60	27.46	18.88	13.41
18	-1.70	29.18	20.48	15.38
19	-1.80	30.89	22.13	17.51
20	-1.90	32.61	23.83	19.80
21	-2.00	34.32	25.58	22.27
22	-2.10	36.04	27.38	24.92
23	-2.20	37.76	29.23	27.75
24	-2.30	39.47	31.13	30.77
25	-2.40	41.19	33.08	33.98
26	-2.50	42.90	35.07	37.38
27	-2.60	44.62	37.12	40.99
28	-2.70	46.34	39.22	44.81
29	-2.80	48.05	41.37	48.84
30	-2.90	49.77	43.56	53.09
31	-3.00	51.49	45.81	57.55
32	-3.10	53.20	48.11	62.25
33	-3.20	54.92	50.45	67.18
34	-3.30	56.63	52.85	72.34
35	-3.40	58.35	55.29	77.75
36	-3.50	60.07	57.79	83.40
37	-3.60	61.78	60.33	89.31
38	-3.70	63.50	62.92	95.47
39	-3.80	65.22	65.57	101.89
40	-3.90	66.93	68.26	108.58
41	-4.00	68.65	71.00	115.55
42	-4.10	70.36	73.79	122.79
43	-4.20	72.08	76.64	130.31
44	-4.30	73.80	79.53	138.11
45	-4.40	75.51	82.47	146.21
46	-4.50	77.23	85.46	154.61
47	-4.60	78.94	88.50	163.31
48	-4.70	80.66	91.59	172.31
49	-4.80	82.38	94.73	181.63
50	-4.90	84.09	97.92	191.26
51	-5.00	85.81	101.16	201.21
52	-5.10	87.53	104.44	211.49
53	-5.20	89.24	107.78	222.10
54	-5.30	90.96	111.17	233.05
55	-5.40	92.67	114.61	244.34
56	-5.50	94.39	118.09	255.97

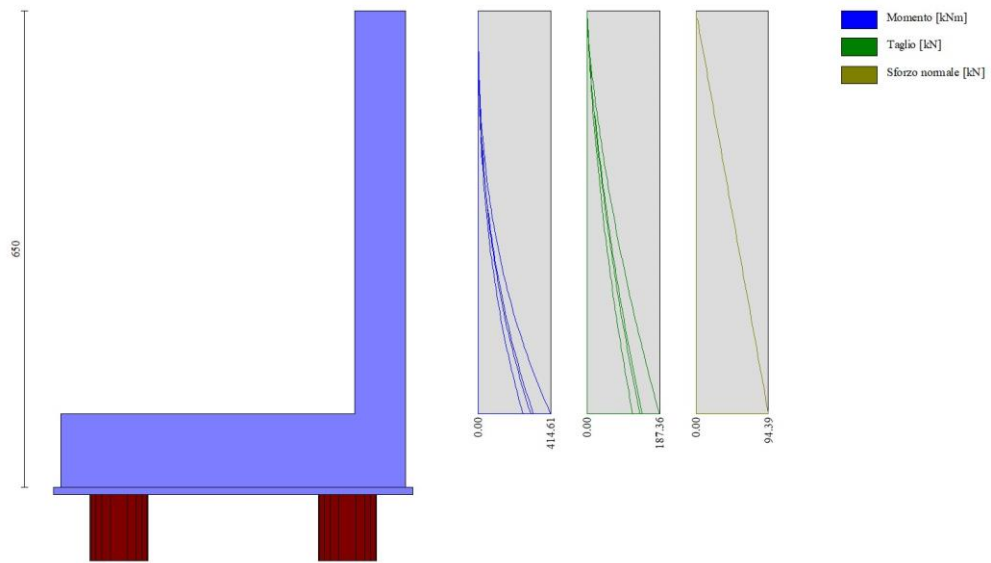


Fig. 6 - Paramento (Inviluppo)

Piastra fondazione

Combinazione n° 1 - STR (A1-M1-R3)

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1	-0.38	-0.05	0.32	29.55	-25.96
2	-5.02	0.86	1.35	52.39	-17.71
3	-2.66	5.99	1.48	35.45	-33.23
4	0.12	5.16	0.03	17.94	-43.47
5	-16.07	0.63	3.08	94.09	-15.60
6	-11.48	5.99	3.73	68.15	-29.06
7	-2.34	18.20	2.40	28.23	-60.93
8	0.00	17.71	0.06	13.97	-72.63
9	-10.20	17.33	5.67	56.97	-54.57
10	-29.54	0.95	5.04	127.20	-11.97
11	-25.21	5.60	6.59	95.13	-22.86
12	-23.76	15.34	9.43	86.02	-46.02
13	-1.84	36.20	3.08	24.07	-83.01
14	0.03	35.98	0.15	11.67	-93.27
15	-8.33	34.50	6.82	50.57	-77.85
16	-20.23	30.70	10.89	82.42	-72.27
17	-43.00	1.41	7.11	145.70	-3.65
18	-41.18	5.06	9.97	112.01	-8.68
19	-43.49	11.40	14.66	112.80	-25.59
20	-39.56	23.66	15.28	124.57	-57.73
21	-1.06	58.86	3.89	19.82	-100.66
22	0.18	58.71	0.34	9.48	-108.89
23	-5.63	56.80	8.42	42.56	-98.57
24	-13.92	52.36	13.09	71.63	-99.15
25	-27.30	44.48	18.93	118.24	-98.68
26	-53.79	1.05	8.13	138.35	12.28
27	-57.01	0.14	13.33	108.75	19.21
28	-59.57	6.06	22.14	129.51	22.44
29	-73.92	8.52	28.79	163.33	-10.75
30	-52.30	29.92	25.52	142.67	-89.51
31	-0.35	85.44	4.91	14.62	-113.70
32	0.25	85.05	0.67	6.92	-119.67
33	-3.11	83.69	10.47	31.44	-114.61
34	-7.99	80.13	16.67	51.88	-120.65
35	-15.46	74.69	23.44	77.92	-131.88
36	-22.26	71.09	37.71	84.89	-156.99
37	-60.15	-0.75	6.94	98.72	31.39
38	-69.61	-11.00	12.33	75.30	62.12
39	-75.06	-29.97	27.74	102.10	102.30
40	-72.07	-4.40	43.48	133.80	58.61
41	-75.84	17.95	97.95	89.44	-54.61
42	-68.15	62.67	50.09	48.32	-140.41
43	0.05	115.10	5.90	9.01	-121.59

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
44	0.18	114.32	1.08	4.19	-125.28
45	-1.49	114.21	12.40	19.22	-124.43
46	-4.67	112.43	19.44	29.86	-132.72
47	-9.76	111.28	27.88	36.63	-146.91
48	-23.52	112.08	36.68	41.38	-167.95
49	-40.44	139.54	39.78	33.41	-172.86
50	-61.79	-2.24	3.24	35.58	40.33
51	-74.26	-18.39	5.63	17.34	87.24
52	-89.55	-77.06	9.30	7.46	154.08
53	-114.86	-232.76	11.52	1.64	182.67
54	-81.71	15.30	13.07	-2.32	143.43
55	-42.78	280.28	14.36	-5.50	-15.45
56	-41.12	179.44	15.57	-8.44	-161.04
57	0.16	148.28	6.61	3.59	-124.07
58	0.01	147.14	1.44	1.54	-125.53
59	-0.62	148.42	13.50	7.85	-127.78
60	-2.63	148.64	20.54	11.40	-135.62
61	-7.28	150.21	27.20	12.99	-146.55
62	-14.42	157.48	31.77	10.74	-156.89
63	-20.29	172.49	28.68	1.97	-170.44
64	-20.28	182.09	16.82	-11.65	-180.78
65	-58.55	-0.84	-0.53	-27.45	31.22
66	-68.16	-11.28	-1.23	-40.24	61.62
67	-73.20	-30.48	-9.41	-86.72	101.04
68	-69.49	-5.15	-20.78	-130.07	56.47
69	-72.34	17.04	-72.17	-93.64	-57.65
70	-63.61	61.70	-21.76	-58.89	-144.30
71	-34.78	138.60	-9.05	-49.89	-177.58
72	-13.33	171.76	4.53	-24.87	-176.00
73	0.32	181.95	6.95	-0.80	-121.41
74	-0.14	180.45	1.70	-0.68	-120.60
75	0.38	182.87	13.76	-0.72	-125.69
76	-0.30	184.20	19.98	-0.58	-132.42
77	-2.04	187.18	24.84	-1.50	-140.24
78	-4.25	192.74	26.78	-4.29	-148.34
79	-5.13	199.48	24.39	-9.06	-155.33
80	-2.81	202.69	18.09	-15.07	-159.79
81	3.22	199.06	11.33	-20.65	-161.76
82	-51.07	0.85	-1.95	-66.69	11.90
83	-54.51	-0.42	-2.72	-72.56	18.17
84	-56.18	5.04	-4.61	-112.78	19.89
85	-69.02	7.02	-7.08	-158.24	-15.03
86	-45.53	28.09	-0.85	-145.56	-95.55
87	-13.39	69.14	-10.55	-94.21	-164.72
88	-12.40	110.22	-7.20	-56.64	-177.34
89	-0.71	156.04	0.11	-32.43	-167.96
90	12.22	191.92	7.53	-24.17	-161.16
91	0.70	214.72	7.13	-4.30	-114.60
92	-0.18	212.81	1.94	-2.54	-111.08
93	1.82	216.05	13.70	-7.09	-119.90
94	3.00	217.69	19.16	-8.97	-126.31
95	4.00	220.23	22.87	-10.82	-133.11
96	5.20	223.66	24.19	-13.09	-139.58
97	7.38	226.95	22.80	-15.87	-145.14
98	11.30	228.34	19.36	-18.79	-149.48
99	17.21	226.97	15.42	-21.26	-152.48
100	24.62	223.74	12.52	-22.68	-154.26
101	-40.16	1.06	-1.33	-73.28	-4.28
102	-38.44	4.21	-0.17	-73.97	-10.28
103	-39.21	9.85	1.53	-93.91	-29.39
104	-32.87	21.40	4.79	-117.27	-64.04
105	-17.71	41.71	3.94	-118.95	-107.57
106	-2.67	71.77	1.80	-85.14	-143.30
107	6.41	108.52	-0.42	-49.86	-160.81
108	12.74	148.12	2.52	-32.65	-162.99
109	22.07	186.05	7.14	-24.83	-159.33
110	32.50	220.42	11.33	-22.62	-155.06
111	1.30	245.77	7.42	-7.36	-104.51
112	-0.16	243.31	2.29	-4.24	-97.37
113	3.67	247.27	13.90	-12.40	-111.74
114	6.74	248.75	18.90	-15.60	-118.90
115	10.12	250.57	22.10	-17.87	-125.75
116	13.84	252.67	23.31	-19.75	-131.99
117	18.16	254.53	22.64	-21.43	-137.44
118	23.38	255.46	20.61	-22.85	-142.03
119	29.55	255.16	18.05	-23.79	-145.76

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
120	36.39	253.93	15.80	-23.98	-148.68
121	43.32	252.50	14.33	-23.23	-150.87
122	-28.16	0.38	0.17	-53.53	-12.83
123	-23.40	4.48	2.08	-54.72	-24.91
124	-19.49	13.27	4.92	-64.37	-50.75
125	-12.48	27.64	6.97	-72.12	-80.14
126	-2.14	48.64	7.36	-69.25	-110.39
127	8.12	76.25	6.02	-56.07	-135.32
128	15.94	108.83	5.33	-40.19	-150.79
129	23.02	146.03	6.30	-28.19	-157.14
130	30.69	182.94	8.82	-22.71	-157.54
131	39.74	218.21	11.54	-21.03	-155.39
132	49.70	251.52	13.70	-21.53	-152.55
133	2.04	274.62	8.04	-10.41	-91.62
134	-0.12	271.38	2.84	-6.00	-79.46
135	5.75	276.28	14.67	-17.45	-101.89
136	10.68	277.55	19.47	-21.64	-110.77
137	16.16	278.86	22.40	-24.14	-118.49
138	21.91	280.28	23.56	-25.70	-125.16
139	27.92	281.62	23.20	-26.70	-130.93
140	34.27	282.59	21.78	-27.27	-135.94
141	40.92	283.07	19.84	-27.31	-140.30
142	47.70	283.13	17.89	-26.70	-144.05
143	54.27	283.08	16.27	-25.34	-147.20
144	60.24	283.24	15.09	-23.23	-149.76
145	-18.33	-0.25	1.45	-18.93	-16.41
146	-11.98	4.66	3.60	-25.64	-30.93
147	-6.99	14.76	6.53	-32.31	-59.00
148	-0.47	30.63	8.47	-36.38	-85.83
149	7.47	52.09	9.23	-35.93	-110.90
150	15.51	78.87	9.27	-31.49	-131.56
151	22.72	109.93	9.27	-25.68	-145.92
152	29.70	145.56	9.93	-20.86	-153.76
153	37.12	181.87	11.17	-18.51	-156.36
154	45.54	217.32	12.56	-18.19	-155.83
155	55.00	251.31	13.66	-19.04	-153.95
156	65.25	283.82	14.30	-20.55	-151.79
157	2.86	300.97	9.07	-13.75	-76.01
158	-0.11	296.62	3.65	-7.97	-56.88
159	8.01	302.99	16.14	-22.78	-90.70
160	14.80	304.22	20.89	-27.73	-102.28
161	22.22	305.29	23.58	-30.25	-111.49
162	29.75	306.46	24.52	-31.44	-118.90
163	37.20	307.75	24.13	-31.94	-125.09
164	44.56	309.06	22.81	-31.99	-130.54
165	51.79	310.30	21.02	-31.51	-135.54
166	58.79	311.44	19.10	-30.34	-140.13
167	65.34	312.56	17.31	-28.38	-144.16
168	71.18	313.74	15.75	-25.67	-147.47
169	76.08	315.12	14.43	-22.43	-149.98
170	-13.17	-0.34	2.61	21.56	-17.36
171	-6.60	4.71	4.73	7.26	-32.54
172	-1.37	15.22	7.88	-0.34	-61.27
173	4.90	31.49	9.79	-4.55	-87.49
174	12.22	53.15	11.05	-7.09	-111.28
175	19.71	79.78	11.96	-8.86	-130.91
176	26.72	110.47	12.67	-10.30	-145.03
177	33.78	145.75	13.23	-11.73	-153.36
178	41.20	181.94	13.65	-13.16	-156.72
179	49.55	217.58	13.89	-14.62	-156.81
180	58.91	251.95	13.94	-16.11	-155.32
181	69.10	284.94	13.75	-17.58	-153.37
182	79.89	316.74	13.29	-18.95	-151.68
183	3.80	324.60	10.56	-17.66	-57.48
184	-0.17	318.62	4.76	-10.35	-28.70
185	10.54	327.30	18.35	-28.75	-78.46
186	19.29	328.74	23.12	-34.16	-93.87
187	28.61	329.84	25.47	-36.30	-105.04
188	37.75	331.04	25.98	-36.92	-113.19
189	46.43	332.55	25.20	-37.01	-119.58
190	54.67	334.41	23.60	-36.86	-125.33
191	62.48	336.58	21.62	-36.23	-131.07
192	69.82	338.89	19.55	-34.73	-136.75
193	76.54	341.19	17.56	-32.16	-141.90
194	82.44	343.41	15.74	-28.63	-146.04
195	87.32	345.57	14.07	-24.48	-148.97

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
196	91.10	347.72	12.55	-20.12	-150.71
197	-13.89	-0.26	3.76	62.10	-16.49
198	-7.60	4.61	5.82	40.30	-31.14
199	-2.54	14.70	9.18	31.81	-59.50
200	4.13	30.57	11.04	27.48	-86.69
201	12.28	52.10	12.80	21.94	-112.13
202	20.56	79.01	14.58	13.95	-133.17
203	28.04	110.27	15.99	5.25	-147.87
204	35.32	146.21	16.47	-2.46	-156.03
205	43.02	182.92	16.08	-7.69	-158.89
206	51.69	218.86	15.20	-10.99	-158.55
207	61.36	253.43	14.21	-13.16	-156.77
208	71.74	286.60	13.23	-14.63	-154.59
209	82.60	318.63	12.24	-15.57	-152.64
210	93.77	349.85	11.16	-15.93	-151.34
211	4.96	345.30	12.60	-22.49	-35.66
212	-0.37	336.74	6.25	-13.40	6.72
213	13.61	349.19	21.41	-35.66	-65.66
214	24.55	351.11	26.21	-40.86	-86.34
215	35.80	352.44	28.04	-41.85	-99.81
216	46.37	353.82	27.83	-41.47	-108.17
217	56.02	355.61	26.31	-41.30	-113.91
218	64.91	358.17	24.03	-41.57	-119.51
219	73.21	361.62	21.53	-41.45	-126.31
220	80.94	365.53	19.17	-39.97	-133.85
221	87.93	369.28	17.04	-36.71	-140.73
222	93.97	372.63	15.08	-32.00	-145.91
223	98.90	375.60	13.24	-26.54	-149.19
224	102.60	378.27	11.52	-20.93	-150.84
225	105.13	380.67	9.98	-15.57	-151.09
226	-19.39	0.35	4.99	96.88	-12.99
227	-14.75	4.38	7.24	69.80	-25.33
228	-10.70	13.14	10.60	64.41	-51.77
229	-3.38	27.51	12.32	63.80	-81.88
230	7.38	48.63	14.42	55.84	-112.89
231	18.15	76.50	17.58	39.09	-138.57
232	26.52	109.47	19.68	20.26	-154.74
233	34.22	147.28	19.89	5.29	-161.72
234	42.48	184.99	18.27	-3.17	-162.67
235	52.07	221.23	16.14	-7.93	-160.90
236	62.47	255.69	14.18	-10.60	-158.28
237	73.30	288.73	12.56	-12.05	-155.49
238	84.35	320.70	11.16	-12.62	-152.95
239	95.48	351.92	9.87	-12.30	-150.96
240	106.62	382.73	8.64	-10.89	-149.92
241	6.67	363.04	15.51	-28.57	-10.36
242	-0.60	350.16	8.19	-17.42	51.94
243	17.76	368.63	25.67	-43.57	-53.23
244	31.34	371.30	30.38	-47.27	-81.02
245	44.53	373.12	31.34	-45.65	-97.08
246	56.25	374.76	30.13	-43.41	-104.33
247	66.38	376.36	27.53	-43.37	-107.01
248	75.48	379.34	23.96	-45.51	-111.11
249	84.15	384.99	20.43	-47.42	-120.07
250	92.25	391.61	17.74	-46.51	-131.70
251	99.55	397.38	15.68	-42.13	-141.55
252	105.79	401.96	13.87	-35.50	-147.70
253	110.74	405.66	12.01	-28.22	-150.88
254	114.36	408.84	10.24	-21.15	-152.22
255	116.62	411.47	8.69	-14.42	-152.15
256	117.75	413.58	7.44	-8.18	-150.45
257	-27.28	1.02	6.41	116.92	-4.52
258	-25.75	4.05	9.30	89.75	-10.92
259	-26.30	9.62	13.70	94.87	-30.94
260	-19.47	21.17	14.11	109.93	-66.70
261	-3.64	41.65	17.41	106.52	-111.39
262	12.20	72.07	21.35	69.08	-148.26
263	22.15	109.40	25.00	30.76	-166.84
264	29.46	149.89	23.29	10.47	-170.00
265	39.74	188.99	19.65	-0.49	-167.18
266	51.05	224.81	16.16	-5.97	-163.53
267	62.60	258.60	13.51	-8.74	-159.72
268	74.09	291.16	11.53	-10.07	-156.11
269	85.40	322.83	9.96	-10.36	-152.75
270	96.50	353.83	8.63	-9.60	-149.72
271	107.36	384.36	7.50	-7.44	-147.28

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
272	118.00	414.84	6.65	-3.23	-146.28
273	9.63	378.47	19.92	-35.90	17.79
274	-1.74	357.40	11.50	-22.82	110.77
275	24.38	385.67	32.36	-51.82	-42.98
276	40.80	388.28	35.91	-52.11	-79.06
277	56.15	392.46	35.11	-45.41	-99.03
278	68.31	394.99	33.30	-39.22	-104.72
279	77.80	393.79	29.55	-39.82	-96.98
280	86.29	394.85	23.33	-47.57	-93.03
281	95.30	405.75	17.48	-55.29	-110.34
282	104.02	418.51	14.66	-55.61	-133.12
283	111.50	426.65	13.76	-48.20	-146.21
284	117.80	431.73	12.24	-38.02	-151.86
285	122.94	436.27	10.49	-28.64	-153.96
286	126.33	439.89	8.81	-20.43	-154.58
287	128.32	442.71	7.35	-12.64	-154.42
288	128.77	444.70	6.30	-4.50	-153.02
289	128.47	446.27	5.95	3.62	-148.61
290	-34.43	0.78	6.90	110.73	11.57
291	-38.15	-0.66	11.59	89.36	17.30
292	-39.49	4.69	19.37	115.04	17.77
293	-51.63	6.65	25.40	152.32	-18.67
294	-27.19	27.91	21.55	134.53	-100.77
295	6.09	69.42	33.03	79.47	-171.50
296	8.32	111.22	31.13	38.74	-185.59
297	21.41	158.21	25.10	11.28	-177.56
298	35.73	195.61	18.77	-0.32	-171.92
299	49.43	229.31	14.62	-5.33	-165.92
300	62.33	261.76	11.90	-7.71	-160.92
301	74.51	293.57	10.02	-8.78	-156.49
302	86.10	324.82	8.58	-8.92	-152.28
303	97.15	355.47	7.40	-8.09	-148.03
304	107.72	385.47	6.47	-5.82	-143.59
305	117.82	414.91	6.01	-1.11	-139.16
306	127.65	444.96	6.73	8.21	-137.60
307	17.02	396.26	30.11	-42.81	42.71
308	0.70	359.42	14.75	-28.56	187.45
309	34.79	395.62	42.74	-56.95	-35.33
310	57.69	402.18	42.69	-52.58	-80.07
311	71.23	409.23	38.57	-40.15	-106.88
312	83.76	420.10	36.00	-22.83	-115.10
313	92.59	411.91	36.53	-19.61	-96.61
314	93.45	387.46	22.28	-45.77	-77.55
315	108.70	427.83	8.73	-72.12	-109.83
316	116.75	451.76	11.30	-69.21	-143.74
317	122.85	456.09	11.74	-51.51	-155.77
318	131.00	462.87	10.56	-36.79	-157.91
319	135.44	467.85	8.79	-26.31	-157.48
320	138.38	471.81	7.40	-18.19	-157.01
321	140.16	474.78	6.26	-10.53	-157.06
322	140.63	476.88	5.23	-1.39	-157.31
323	137.79	477.45	5.33	11.11	-155.55
324	137.62	480.87	7.61	25.72	-144.80
325	-38.66	-0.93	5.31	72.02	30.79
326	-48.62	-11.61	9.73	58.40	60.50
327	-53.21	-30.99	23.53	90.72	98.30
328	-48.55	-5.72	38.29	126.02	51.77
329	-50.10	16.66	91.97	84.47	-64.40
330	-39.83	61.85	43.30	45.90	-153.05
331	-9.32	139.61	32.05	33.58	-188.20
332	14.04	174.17	19.82	5.10	-188.37
333	32.50	203.31	14.21	-2.70	-175.67
334	48.32	233.51	11.14	-5.89	-167.63
335	62.30	264.46	9.31	-7.41	-161.79
336	75.02	295.59	8.04	-8.11	-156.75
337	86.80	326.49	7.03	-8.24	-151.86
338	97.80	356.84	6.14	-7.73	-146.57
339	108.10	386.24	5.40	-6.24	-140.16
340	117.70	414.10	5.08	-2.93	-131.35
341	126.49	439.23	6.09	4.43	-118.14
342	136.38	465.22	12.66	24.74	-113.54
343	21.55	390.04	45.91	-42.45	58.81
344	-3.84	402.57	35.00	-36.29	254.37
345	61.77	398.77	57.30	-48.66	-26.63
346	82.16	411.48	49.56	-45.16	-81.56
347	95.84	426.07	40.80	-30.87	-119.22

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
348	92.02	434.29	39.03	-4.29	-139.99
349	118.13	474.69	43.54	3.50	-150.82
350	93.70	307.83	21.59	-37.43	-71.93
351	131.91	494.87	0.60	-78.71	-163.52
352	120.17	474.92	8.01	-71.71	-168.13
353	139.64	487.43	11.09	-45.43	-168.82
354	144.09	493.34	8.64	-28.90	-163.41
355	147.14	498.39	7.39	-19.90	-159.77
356	149.34	502.40	6.42	-13.87	-158.13
357	151.07	505.65	5.70	-8.23	-158.53
358	152.13	508.08	5.23	-0.41	-161.18
359	152.13	510.08	4.11	14.13	-166.15
360	137.67	506.14	9.17	37.63	-165.94
361	155.17	535.55	19.29	41.05	-163.25
362	-39.32	-2.37	1.29	9.65	39.80
363	-52.22	-18.84	2.37	2.55	85.84
364	-66.89	-77.76	3.96	-1.24	150.63
365	-90.92	-233.60	4.92	-3.33	176.78
366	-56.06	14.63	5.51	-4.54	135.02
367	-15.11	280.18	5.90	-5.31	-26.31
368	-11.24	180.31	6.16	-5.87	-174.23
369	12.09	184.57	6.30	-6.36	-196.15
370	32.10	207.28	6.34	-6.79	-177.11
371	48.69	235.59	6.27	-7.18	-168.46
372	63.08	265.93	6.09	-7.54	-162.28
373	75.98	296.85	5.80	-7.84	-156.99
374	87.78	327.69	5.39	-8.05	-151.80
375	98.71	357.97	4.87	-8.15	-146.04
376	108.85	387.16	4.27	-8.09	-138.72
377	118.13	414.11	3.60	-7.81	-127.72
378	126.26	435.53	2.92	-7.21	-105.94
379	129.11	433.73	2.30	-6.15	-85.90
380	123.75	359.10	1.87	-4.52	-75.73
381	113.49	391.20	78.79	-30.06	85.22
382	97.21	398.28	85.63	23.53	230.90
383	101.52	397.21	64.72	-17.95	-19.16
384	112.54	421.28	53.88	-23.79	-81.65
385	124.05	445.04	45.34	-13.73	-128.38
386	135.60	468.59	30.91	-7.40	-176.65
387	133.93	485.33	87.82	-14.44	-231.03
388	196.91	724.27	21.36	-17.17	-106.02
389	144.11	509.48	-44.00	-20.19	-243.11
390	156.35	517.77	16.29	-27.95	-203.91
391	156.10	520.84	7.61	-22.22	-177.68
392	156.76	525.42	7.52	-11.55	-165.60
393	158.27	529.65	6.47	-8.22	-159.69
394	159.71	533.48	5.94	-5.97	-157.26
395	161.14	536.98	5.67	-3.90	-157.91
396	162.63	540.36	5.41	-1.14	-162.27
397	165.22	543.98	6.71	8.56	-173.36
398	169.14	550.02	0.08	12.92	-199.49
399	161.13	552.11	63.22	3.35	-240.05
400	218.93	778.97	1.66	-1.88	-106.56
401	-35.99	-0.93	-2.71	-52.64	30.72
402	-45.94	-11.59	-4.98	-53.23	60.38
403	-50.52	-30.92	-15.60	-93.15	98.06
404	-45.85	-5.59	-28.45	-132.63	51.42
405	-47.39	16.89	-80.93	-93.50	-64.84
406	-37.11	62.19	-31.48	-56.48	-153.58
407	-6.59	140.11	-19.72	-45.29	-188.81
408	16.76	174.85	-7.18	-17.79	-189.03
409	35.19	204.20	-1.49	-10.87	-176.36
410	50.97	234.64	1.46	-8.49	-168.31
411	64.89	265.83	2.94	-7.70	-162.41
412	77.51	297.22	3.62	-7.62	-157.28
413	89.16	328.36	3.83	-7.94	-152.24
414	100.01	358.93	3.69	-8.68	-146.75
415	110.13	388.52	3.22	-10.08	-140.09
416	119.54	416.50	2.19	-12.84	-130.99
417	128.11	441.69	-0.18	-19.02	-117.46
418	137.76	467.64	-7.99	-37.20	-112.53
419	156.29	537.88	-15.48	-50.21	-161.97
420	161.93	554.26	-59.84	-7.17	-238.61
421	113.49	378.32	80.40	0.00	105.81
422	118.15	393.82	66.31	0.00	-17.01
423	128.18	427.27	54.25	0.00	-81.33

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
424	136.06	453.55	44.84	0.00	-130.58
425	148.63	495.43	38.46	0.00	-196.90
426	132.48	441.61	37.51	0.00	-262.75
427	370.84	1236.15	21.15	0.00	-143.14
428	140.22	467.41	5.91	0.00	-274.55
429	164.47	548.25	8.39	0.00	-223.67
430	160.75	535.85	7.88	0.00	-179.47
431	162.55	541.84	6.95	0.00	-165.63
432	163.57	545.22	6.26	0.00	-159.01
433	164.69	548.95	5.80	0.00	-156.34
434	165.74	552.47	5.60	0.00	-157.05
435	167.00	556.65	5.71	0.00	-161.95
436	167.66	558.87	6.16	0.00	-174.60
437	174.15	580.50	7.71	0.00	-218.50
438	153.10	510.35	13.03	0.00	-270.53
439	387.51	1291.71	1.61	0.00	-142.53
440	153.71	512.38	-9.76	0.00	-269.04
441	153.71	512.38	-9.76	0.00	-269.04
442	153.71	512.38	-9.76	0.00	-269.04
443	153.71	512.38	-9.76	0.00	-269.04
444	153.71	512.38	-9.76	0.00	-269.04
445	153.71	512.38	-9.76	0.00	-269.04
446	153.71	512.38	-9.76	0.00	-269.04
447	153.71	512.38	-9.76	0.00	-269.04
448	153.71	512.38	-9.76	0.00	-269.04
449	153.71	512.38	-9.76	0.00	-269.04
450	153.71	512.38	-9.76	0.00	-269.04
451	153.71	512.38	-9.76	0.00	-269.04
452	153.71	512.38	-9.76	0.00	-269.04
453	153.71	512.38	-9.76	0.00	-269.04
454	153.71	512.38	-9.76	0.00	-269.04
455	153.71	512.38	-9.76	0.00	-269.04
456	153.71	512.38	-9.76	0.00	-269.04
457	153.71	512.38	-9.76	0.00	-269.04
458	153.71	512.38	-9.76	0.00	-269.04
459	153.71	512.38	-9.76	0.00	-269.04
460	153.71	512.38	-9.76	0.00	-269.04
461	153.71	512.38	-9.76	0.00	-269.04
462	-29.13	0.78	-4.30	-91.15	11.44
463	-32.81	-0.62	-6.84	-84.02	17.05
464	-34.13	4.81	-11.43	-117.31	17.29
465	-46.25	6.91	-15.55	-158.77	-19.36
466	-21.78	28.35	-10.49	-143.42	-101.67
467	11.53	70.09	-21.18	-89.93	-172.58
468	13.78	112.19	-18.75	-50.36	-186.82
469	26.86	159.55	-12.39	-23.91	-178.90
470	41.14	197.38	-5.94	-13.24	-173.33
471	54.76	231.54	-1.89	-9.09	-167.31
472	67.53	264.50	0.51	-7.50	-162.22
473	79.53	296.82	1.84	-7.12	-157.59
474	90.88	328.57	2.49	-7.51	-153.09
475	101.64	359.67	2.66	-8.65	-148.44
476	111.85	390.04	2.39	-10.89	-143.50
477	121.55	419.75	1.52	-15.10	-138.48
478	130.93	449.92	-0.58	-23.27	-136.27
479	140.42	485.78	-2.73	-38.63	-142.82
480	139.94	510.87	-5.16	-47.17	-163.42
481	170.78	554.40	3.49	-16.90	-196.63
482	175.39	584.64	-4.24	0.00	-215.53
483	175.39	584.64	-4.24	0.00	-215.53
484	175.39	584.64	-4.24	0.00	-215.53
485	175.39	584.64	-4.24	0.00	-215.53
486	175.39	584.64	-4.24	0.00	-215.53
487	175.39	584.64	-4.24	0.00	-215.53
488	175.39	584.64	-4.24	0.00	-215.53
489	175.39	584.64	-4.24	0.00	-215.53
490	175.39	584.64	-4.24	0.00	-215.53
491	175.39	584.64	-4.24	0.00	-215.53
492	175.39	584.64	-4.24	0.00	-215.53
493	175.39	584.64	-4.24	0.00	-215.53
494	175.39	584.64	-4.24	0.00	-215.53
495	175.39	584.64	-4.24	0.00	-215.53
496	175.39	584.64	-4.24	0.00	-215.53
497	175.39	584.64	-4.24	0.00	-215.53
498	175.39	584.64	-4.24	0.00	-215.53
499	175.39	584.64	-4.24	0.00	-215.53

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
500	175.39	584.64	-4.24	0.00	-215.53
501	175.39	584.64	-4.24	0.00	-215.53
502	175.39	584.64	-4.24	0.00	-215.53
503	175.39	584.64	-4.24	0.00	-215.53
504	175.39	584.64	-4.24	0.00	-215.53
505	175.39	584.64	-4.24	0.00	-215.53
506	-19.37	1.02	-3.80	-97.00	-4.71
507	-17.81	4.10	-4.54	-84.11	-11.29
508	-18.32	9.79	-5.74	-96.85	-31.66
509	-11.44	21.53	-4.24	-116.11	-67.75
510	4.45	42.28	-6.32	-115.16	-112.76
511	20.33	73.05	-9.44	-79.32	-149.91
512	30.33	110.81	-12.54	-42.20	-168.74
513	37.65	151.85	-10.46	-22.99	-172.09
514	47.90	191.59	-6.66	-13.04	-169.37
515	59.11	228.11	-3.21	-8.51	-165.71
516	70.49	262.67	-0.83	-6.64	-161.76
517	81.72	296.00	0.65	-6.12	-157.88
518	92.69	328.44	1.47	-6.48	-154.09
519	103.35	360.14	1.82	-7.66	-150.46
520	113.69	391.27	1.77	-9.92	-147.27
521	123.73	422.17	1.29	-13.73	-145.38
522	133.53	453.81	0.58	-19.48	-146.72
523	142.10	484.95	-0.08	-24.80	-152.67
524	155.65	517.33	0.24	-24.30	-162.43
525	167.76	550.74	-2.81	-12.83	-169.11
526	169.58	565.28	-2.37	0.00	-170.19
527	169.58	565.28	-2.37	0.00	-170.19
528	169.58	565.28	-2.37	0.00	-170.19
529	169.58	565.28	-2.37	0.00	-170.19
530	169.58	565.28	-2.37	0.00	-170.19
531	169.58	565.28	-2.37	0.00	-170.19
532	169.58	565.28	-2.37	0.00	-170.19
533	169.58	565.28	-2.37	0.00	-170.19
534	169.58	565.28	-2.37	0.00	-170.19
535	169.58	565.28	-2.37	0.00	-170.19
536	169.58	565.28	-2.37	0.00	-170.19
537	169.58	565.28	-2.37	0.00	-170.19
538	169.58	565.28	-2.37	0.00	-170.19
539	169.58	565.28	-2.37	0.00	-170.19
540	169.58	565.28	-2.37	0.00	-170.19
541	169.58	565.28	-2.37	0.00	-170.19
542	169.58	565.28	-2.37	0.00	-170.19
543	169.58	565.28	-2.37	0.00	-170.19
544	169.58	565.28	-2.37	0.00	-170.19
545	169.58	565.28	-2.37	0.00	-170.19
546	169.58	565.28	-2.37	0.00	-170.19
547	169.58	565.28	-2.37	0.00	-170.19
548	169.58	565.28	-2.37	0.00	-170.19
549	169.58	565.28	-2.37	0.00	-170.19
550	169.58	565.28	-2.37	0.00	-170.19
551	169.58	565.28	-2.37	0.00	-170.19
552	-8.94	0.35	-2.37	-76.51	-13.24
553	-4.27	4.43	-2.47	-63.74	-25.82
554	-0.16	13.33	-2.65	-65.99	-52.73
555	7.23	27.95	-2.44	-69.58	-83.30
556	18.09	49.42	-3.31	-64.11	-114.76
557	28.96	77.73	-5.62	-49.00	-140.84
558	37.42	111.27	-7.13	-31.43	-157.36
559	45.18	149.81	-6.92	-17.64	-164.63
560	53.43	188.36	-5.07	-10.29	-165.73
561	62.93	225.55	-2.91	-6.61	-163.98
562	73.14	261.04	-1.15	-5.00	-161.20
563	83.67	295.15	0.05	-4.52	-158.07
564	94.29	328.17	0.77	-4.78	-154.96
565	104.87	360.37	1.14	-5.71	-152.19
566	115.32	392.02	1.21	-7.39	-150.15
567	125.66	423.49	1.07	-9.85	-149.47
568	135.77	454.95	0.80	-12.51	-150.70
569	146.61	487.13	0.54	-13.43	-153.63
570	157.02	518.07	-0.38	-10.67	-156.35
571	166.15	549.73	-1.02	-3.54	-156.71
572	169.67	565.57	-1.44	0.00	-156.16
573	169.67	565.57	-1.44	0.00	-156.16
574	169.67	565.57	-1.44	0.00	-156.16
575	169.67	565.57	-1.44	0.00	-156.16

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
576	169.67	565.57	-1.44	0.00	-156.16
577	169.67	565.57	-1.44	0.00	-156.16
578	169.67	565.57	-1.44	0.00	-156.16
579	169.67	565.57	-1.44	0.00	-156.16
580	169.67	565.57	-1.44	0.00	-156.16
581	169.67	565.57	-1.44	0.00	-156.16
582	169.67	565.57	-1.44	0.00	-156.16
583	169.67	565.57	-1.44	0.00	-156.16
584	169.67	565.57	-1.44	0.00	-156.16
585	169.67	565.57	-1.44	0.00	-156.16
586	169.67	565.57	-1.44	0.00	-156.16
587	169.67	565.57	-1.44	0.00	-156.16
588	169.67	565.57	-1.44	0.00	-156.16
589	169.67	565.57	-1.44	0.00	-156.16
590	169.67	565.57	-1.44	0.00	-156.16
591	169.67	565.57	-1.44	0.00	-156.16
592	169.67	565.57	-1.44	0.00	-156.16
593	169.67	565.57	-1.44	0.00	-156.16
594	169.67	565.57	-1.44	0.00	-156.16
595	169.67	565.57	-1.44	0.00	-156.16
596	169.67	565.57	-1.44	0.00	-156.16
597	169.67	565.57	-1.44	0.00	-156.16
598	169.67	565.57	-1.44	0.00	-156.16
599	169.67	565.57	-1.44	0.00	-156.16
600	-1.00	-0.27	-1.14	-41.18	-16.79
601	5.32	4.66	-1.06	-33.71	-31.74
602	10.45	14.91	-1.24	-32.85	-60.71
603	17.24	31.05	-1.19	-32.73	-88.50
604	25.55	52.98	-1.69	-29.71	-114.54
605	34.01	80.43	-2.59	-23.42	-136.12
606	41.65	112.39	-3.36	-16.05	-151.30
607	49.06	149.22	-3.35	-9.63	-159.85
608	56.82	186.99	-2.65	-5.65	-162.96
609	65.45	224.12	-1.65	-3.61	-162.68
610	74.95	259.99	-0.75	-2.69	-160.75
611	85.02	294.53	-0.09	-2.41	-158.17
612	95.40	327.93	0.32	-2.54	-155.54
613	105.90	360.45	0.55	-3.04	-153.28
614	116.44	392.40	0.63	-3.89	-151.77
615	126.94	424.07	0.60	-5.00	-151.30
616	137.50	455.85	0.50	-5.89	-151.86
617	148.02	488.03	0.22	-5.77	-152.75
618	157.52	518.67	-0.17	-4.07	-152.72
619	165.79	549.29	-0.61	-1.34	-151.14
620	169.27	564.25	-0.67	0.00	-149.98
621	169.27	564.25	-0.67	0.00	-149.98
622	169.27	564.25	-0.67	0.00	-149.98
623	169.27	564.25	-0.67	0.00	-149.98
624	169.27	564.25	-0.67	0.00	-149.98
625	2.03	-0.35	0.00	0.00	-17.71
626	8.61	4.74	0.00	0.00	-33.25
627	13.94	15.41	0.00	0.00	-62.72
628	20.39	31.97	0.00	0.00	-89.71
629	27.97	54.08	0.00	0.00	-114.27
630	35.73	81.32	0.00	0.00	-134.62
631	43.01	112.81	0.00	0.00	-149.38
632	50.32	149.15	0.00	0.00	-158.24
633	57.92	186.60	0.00	0.00	-161.96
634	66.32	223.68	0.00	0.00	-162.19
635	75.59	259.64	0.00	0.00	-160.57
636	85.49	294.31	0.00	0.00	-158.20
637	95.79	327.83	0.00	0.00	-155.74
638	106.27	360.46	0.00	0.00	-153.65
639	116.83	392.50	0.00	0.00	-152.27
640	127.42	424.28	0.00	0.00	-151.81
641	138.00	456.13	0.00	0.00	-152.06
642	148.41	488.33	0.00	0.00	-152.31
643	157.59	518.81	0.00	0.00	-151.54
644	165.68	549.17	0.00	0.00	-149.46
645	169.22	564.05	0.00	0.00	-148.16
646	169.22	564.05	0.00	0.00	-148.16
647	169.22	564.05	0.00	0.00	-148.16
648	169.22	564.05	0.00	0.00	-148.16
649	169.22	564.05	0.00	0.00	-148.16
650	-1.00	-0.27	1.14	41.18	-16.79
651	5.32	4.66	1.06	33.71	-31.74

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
652	10.45	14.91	1.24	32.85	-60.71
653	17.24	31.05	1.19	32.73	-88.50
654	25.55	52.98	1.69	29.71	-114.54
655	34.01	80.43	2.59	23.42	-136.12
656	41.65	112.39	3.36	16.05	-151.30
657	49.06	149.22	3.35	9.63	-159.85
658	56.82	186.99	2.65	5.65	-162.96
659	65.45	224.12	1.65	3.61	-162.68
660	74.95	259.99	0.75	2.69	-160.75
661	85.02	294.53	0.09	2.41	-158.17
662	95.40	327.93	-0.32	2.54	-155.54
663	105.90	360.45	-0.55	3.04	-153.28
664	116.44	392.40	-0.63	3.89	-151.77
665	126.94	424.07	-0.60	5.00	-151.30
666	137.50	455.85	-0.50	5.89	-151.86
667	148.02	488.03	-0.22	5.77	-152.75
668	157.52	518.67	0.17	4.07	-152.72
669	165.79	549.29	0.61	1.34	-151.14
670	169.27	564.25	0.67	0.00	-149.98
671	169.27	564.25	0.67	0.00	-149.98
672	169.27	564.25	0.67	0.00	-149.98
673	169.27	564.25	0.67	0.00	-149.98
674	169.27	564.25	0.67	0.00	-149.98
675	-8.94	0.35	2.37	76.51	-13.24
676	-4.27	4.43	2.47	63.74	-25.82
677	-0.16	13.33	2.65	65.99	-52.73
678	7.23	27.95	2.44	69.58	-83.30
679	18.09	49.42	3.31	64.11	-114.76
680	28.96	77.73	5.62	49.00	-140.84
681	37.42	111.27	7.13	31.43	-157.36
682	45.18	149.81	6.92	17.64	-164.63
683	53.43	188.36	5.07	10.29	-165.73
684	62.93	225.55	2.91	6.61	-163.98
685	73.14	261.04	1.15	5.00	-161.20
686	83.67	295.15	-0.05	4.52	-158.07
687	94.29	328.17	-0.77	4.78	-154.96
688	104.87	360.37	-1.14	5.71	-152.19
689	115.32	392.02	-1.21	7.39	-150.15
690	125.66	423.49	-1.07	9.85	-149.47
691	135.77	454.95	-0.80	12.51	-150.70
692	146.61	487.13	-0.54	13.43	-153.63
693	157.02	518.07	0.38	10.67	-156.35
694	166.15	549.73	1.02	3.54	-156.71
695	169.67	565.57	1.44	0.00	-156.16
696	169.67	565.57	1.44	0.00	-156.16
697	169.67	565.57	1.44	0.00	-156.16
698	169.67	565.57	1.44	0.00	-156.16
699	169.67	565.57	1.44	0.00	-156.16
700	-19.37	1.02	3.80	97.00	-4.71
701	-17.81	4.10	4.54	84.11	-11.29
702	-18.32	9.79	5.74	96.85	-31.66
703	-11.44	21.53	4.24	116.11	-67.75
704	4.45	42.28	6.32	115.16	-112.76
705	20.33	73.05	9.44	79.32	-149.91
706	30.33	110.81	12.54	42.20	-168.74
707	37.65	151.85	10.46	22.99	-172.09
708	47.90	191.59	6.66	13.04	-169.37
709	59.11	228.11	3.21	8.51	-165.71
710	70.49	262.67	0.83	6.64	-161.76
711	81.72	296.00	-0.65	6.12	-157.88
712	92.69	328.44	-1.47	6.48	-154.09
713	103.35	360.14	-1.82	7.66	-150.46
714	113.69	391.27	-1.77	9.92	-147.27
715	123.73	422.17	-1.29	13.73	-145.38
716	133.53	453.81	-0.58	19.48	-146.72
717	142.10	484.95	0.08	24.80	-152.67
718	155.65	517.33	-0.24	24.30	-162.43
719	167.76	550.74	2.81	12.83	-169.11
720	169.58	565.28	2.37	0.00	-170.19
721	169.58	565.28	2.37	0.00	-170.19
722	169.58	565.28	2.37	0.00	-170.19
723	169.58	565.28	2.37	0.00	-170.19
724	169.58	565.28	2.37	0.00	-170.19
725	-29.13	0.78	4.30	91.15	11.44
726	-32.81	-0.62	6.84	84.02	17.05
727	-34.13	4.81	11.43	117.31	17.29

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
728	-46.25	6.91	15.55	158.77	-19.36
729	-21.78	28.35	10.49	143.42	-101.67
730	11.53	70.09	21.18	89.93	-172.58
731	13.78	112.19	18.75	50.36	-186.82
732	26.86	159.55	12.39	23.91	-178.90
733	41.14	197.38	5.94	13.24	-173.33
734	54.76	231.54	1.89	9.09	-167.31
735	67.53	264.50	-0.51	7.50	-162.22
736	79.53	296.82	-1.84	7.12	-157.59
737	90.88	328.57	-2.49	7.51	-153.09
738	101.64	359.67	-2.66	8.65	-148.44
739	111.85	390.04	-2.39	10.89	-143.50
740	121.55	419.75	-1.52	15.10	-138.48
741	130.93	449.92	0.58	23.27	-136.27
742	140.42	485.78	2.73	38.63	-142.82
743	139.94	510.87	5.16	47.17	-163.42
744	170.78	554.40	-3.49	16.90	-196.63
745	175.39	584.64	4.24	0.00	-215.53
746	175.39	584.64	4.24	0.00	-215.53
747	175.39	584.64	4.24	0.00	-215.53
748	175.39	584.64	4.24	0.00	-215.53
749	175.39	584.64	4.24	0.00	-215.53
750	-35.99	-0.93	2.71	52.64	30.72
751	-45.94	-11.59	4.98	53.23	60.38
752	-50.52	-30.92	15.60	93.15	98.06
753	-45.85	-5.59	28.45	132.63	51.42
754	-47.39	16.89	80.93	93.50	-64.84
755	-37.11	62.19	31.48	56.48	-153.58
756	-6.59	140.11	19.72	45.29	-188.81
757	16.76	174.85	7.18	17.79	-189.03
758	35.19	204.20	1.49	10.87	-176.36
759	50.97	234.64	-1.46	8.49	-168.31
760	64.89	265.83	-2.94	7.70	-162.41
761	77.51	297.22	-3.62	7.62	-157.28
762	89.16	328.36	-3.83	7.94	-152.24
763	100.01	358.93	-3.69	8.68	-146.75
764	110.13	388.52	-3.22	10.08	-140.09
765	119.54	416.50	-2.19	12.84	-130.99
766	128.11	441.69	0.18	19.02	-117.46
767	137.76	467.64	7.99	37.20	-112.53
768	156.29	537.88	15.48	50.21	-161.97
769	161.93	554.26	59.84	7.17	-238.61
770	153.71	512.38	9.76	0.00	-269.04
771	153.71	512.38	9.76	0.00	-269.04
772	153.71	512.38	9.76	0.00	-269.04
773	153.71	512.38	9.76	0.00	-269.04
774	153.71	512.38	9.76	0.00	-269.04
775	-39.32	-2.37	-1.29	-9.65	39.80
776	-52.22	-18.84	-2.37	-2.55	85.84
777	-66.89	-77.76	-3.96	1.24	150.63
778	-90.92	-233.60	-4.92	3.33	176.78
779	-56.06	14.63	-5.51	4.54	135.02
780	-15.11	280.18	-5.90	5.31	-26.31
781	-11.24	180.31	-6.16	5.87	-174.23
782	12.09	184.57	-6.30	6.36	-196.15
783	32.10	207.28	-6.34	6.79	-177.11
784	48.69	235.59	-6.27	7.18	-168.46
785	63.08	265.93	-6.09	7.54	-162.28
786	75.98	296.85	-5.80	7.84	-156.99
787	87.78	327.69	-5.39	8.05	-151.80
788	98.71	357.97	-4.87	8.15	-146.04
789	108.85	387.16	-4.27	8.09	-138.72
790	118.13	414.11	-3.60	7.81	-127.72
791	126.26	435.53	-2.92	7.21	-105.94
792	129.11	433.73	-2.30	6.15	-85.90
793	123.75	359.10	-1.87	4.52	-75.73
794	218.93	778.97	-1.66	1.88	-106.56
795	387.51	1291.71	-1.61	0.00	-142.53
796	387.51	1291.71	-1.61	0.00	-142.53
797	387.51	1291.71	-1.61	0.00	-142.53
798	387.51	1291.71	-1.61	0.00	-142.53
799	387.51	1291.71	-1.61	0.00	-142.53
800	-38.66	-0.93	-5.31	-72.02	30.79
801	-48.62	-11.61	-9.73	-58.40	60.50
802	-53.21	-30.99	-23.53	-90.72	98.30
803	-48.55	-5.72	-38.29	-126.02	51.77

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
804	-50.10	16.66	-91.97	-84.47	-64.40
805	-39.83	61.85	-43.30	-45.90	-153.05
806	-9.32	139.61	-32.05	-33.58	-188.20
807	14.04	174.17	-19.82	-5.10	-188.37
808	32.50	203.31	-14.21	2.70	-175.67
809	48.32	233.51	-11.14	5.89	-167.63
810	62.30	264.46	-9.31	7.41	-161.79
811	75.02	295.59	-8.04	8.11	-156.75
812	86.80	326.49	-7.03	8.24	-151.86
813	97.80	356.84	-6.14	7.73	-146.57
814	108.10	386.24	-5.40	6.24	-140.16
815	117.70	414.10	-5.08	2.93	-131.35
816	126.49	439.23	-6.09	-4.43	-118.14
817	136.38	465.22	-12.66	-24.74	-113.54
818	155.17	535.55	-19.29	-41.05	-163.25
819	161.13	552.11	-63.22	-3.35	-240.05
820	153.10	510.35	-13.03	0.00	-270.53
821	153.10	510.35	-13.03	0.00	-270.53
822	153.10	510.35	-13.03	0.00	-270.53
823	153.10	510.35	-13.03	0.00	-270.53
824	153.10	510.35	-13.03	0.00	-270.53
825	-34.43	0.78	-6.90	-110.73	11.57
826	-38.15	-0.66	-11.59	-89.36	17.30
827	-39.49	4.69	-19.37	-115.04	17.77
828	-51.63	6.65	-25.40	-152.32	-18.67
829	-27.19	27.91	-21.55	-134.53	-100.77
830	6.09	69.42	-33.03	-79.47	-171.50
831	8.32	111.22	-31.13	-38.74	-185.59
832	21.41	158.21	-25.10	-11.28	-177.56
833	35.73	195.61	-18.77	0.32	-171.92
834	49.43	229.31	-14.62	5.33	-165.92
835	62.33	261.76	-11.90	7.71	-160.92
836	74.51	293.57	-10.02	8.78	-156.49
837	86.10	324.82	-8.58	8.92	-152.28
838	97.15	355.47	-7.40	8.09	-148.03
839	107.72	385.47	-6.47	5.82	-143.59
840	117.82	414.91	-6.01	1.11	-139.16
841	127.65	444.96	-6.73	-8.21	-137.60
842	137.62	480.87	-7.61	-25.72	-144.80
843	137.67	506.14	-9.17	-37.63	-165.94
844	169.14	550.02	-0.08	-12.92	-199.49
845	174.15	580.50	-7.71	0.00	-218.50
846	174.15	580.50	-7.71	0.00	-218.50
847	174.15	580.50	-7.71	0.00	-218.50
848	174.15	580.50	-7.71	0.00	-218.50
849	174.15	580.50	-7.71	0.00	-218.50
850	-27.28	1.02	-6.41	-116.92	-4.52
851	-25.75	4.05	-9.30	-89.75	-10.92
852	-26.30	9.62	-13.70	-94.87	-30.94
853	-19.47	21.17	-14.11	-109.93	-66.70
854	-3.64	41.65	-17.41	-106.52	-111.39
855	12.20	72.07	-21.35	-69.08	-148.26
856	22.15	109.40	-25.00	-30.76	-166.84
857	29.46	149.89	-23.29	-10.47	-170.00
858	39.74	188.99	-19.65	0.49	-167.18
859	51.05	224.81	-16.16	5.97	-163.53
860	62.60	258.60	-13.51	8.74	-159.72
861	74.09	291.16	-11.53	10.07	-156.11
862	85.40	322.83	-9.96	10.36	-152.75
863	96.50	353.83	-8.63	9.60	-149.72
864	107.36	384.36	-7.50	7.44	-147.28
865	118.00	414.84	-6.65	3.23	-146.28
866	128.47	446.27	-5.95	-3.62	-148.61
867	137.79	477.45	-5.33	-11.11	-155.55
868	152.13	510.08	-4.11	-14.13	-166.15
869	165.22	543.98	-6.71	-8.56	-173.36
870	167.66	558.87	-6.16	0.00	-174.60
871	167.66	558.87	-6.16	0.00	-174.60
872	167.66	558.87	-6.16	0.00	-174.60
873	167.66	558.87	-6.16	0.00	-174.60
874	167.66	558.87	-6.16	0.00	-174.60
875	-19.39	0.35	-4.99	-96.88	-12.99
876	-14.75	4.38	-7.24	-69.80	-25.33
877	-10.70	13.14	-10.60	-64.41	-51.77
878	-3.38	27.51	-12.32	-63.80	-81.88
879	7.38	48.63	-14.42	-55.84	-112.89

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
880	18.15	76.50	-17.58	-39.09	-138.57
881	26.52	109.47	-19.68	-20.26	-154.74
882	34.22	147.28	-19.89	-5.29	-161.72
883	42.48	184.99	-18.27	3.17	-162.67
884	52.07	221.23	-16.14	7.93	-160.90
885	62.47	255.69	-14.18	10.60	-158.28
886	73.30	288.73	-12.56	12.05	-155.49
887	84.35	320.70	-11.16	12.62	-152.95
888	95.48	351.92	-9.87	12.30	-150.96
889	106.62	382.73	-8.64	10.89	-149.92
890	117.75	413.58	-7.44	8.18	-150.45
891	128.77	444.70	-6.30	4.50	-153.02
892	140.63	476.88	-5.23	1.39	-157.31
893	152.13	508.08	-5.23	0.41	-161.18
894	162.63	540.36	-5.41	1.14	-162.27
895	167.00	556.65	-5.71	0.00	-161.95
896	167.00	556.65	-5.71	0.00	-161.95
897	167.00	556.65	-5.71	0.00	-161.95
898	167.00	556.65	-5.71	0.00	-161.95
899	167.00	556.65	-5.71	0.00	-161.95
900	-13.89	-0.26	-3.76	-62.10	-16.49
901	-7.60	4.61	-5.82	-40.30	-31.14
902	-2.54	14.70	-9.18	-31.81	-59.50
903	4.13	30.57	-11.04	-27.48	-86.69
904	12.28	52.10	-12.80	-21.94	-112.13
905	20.56	79.01	-14.58	-13.95	-133.17
906	28.04	110.27	-15.99	-5.25	-147.87
907	35.32	146.21	-16.47	2.46	-156.03
908	43.02	182.92	-16.08	7.69	-158.89
909	51.69	218.86	-15.20	10.99	-158.55
910	61.36	253.43	-14.21	13.16	-156.77
911	71.74	286.60	-13.23	14.63	-154.59
912	82.60	318.63	-12.24	15.57	-152.64
913	93.77	349.85	-11.16	15.93	-151.34
914	105.13	380.67	-9.98	15.57	-151.09
915	116.62	411.47	-8.69	14.42	-152.15
916	128.32	442.71	-7.35	12.64	-154.42
917	140.16	474.78	-6.26	10.53	-157.06
918	151.07	505.65	-5.70	8.23	-158.53
919	161.14	536.98	-5.67	3.90	-157.91
920	165.74	552.47	-5.60	0.00	-157.05
921	165.74	552.47	-5.60	0.00	-157.05
922	165.74	552.47	-5.60	0.00	-157.05
923	165.74	552.47	-5.60	0.00	-157.05
924	165.74	552.47	-5.60	0.00	-157.05
925	-13.17	-0.34	-2.61	-21.56	-17.36
926	-6.60	4.71	-4.73	-7.26	-32.54
927	-1.37	15.22	-7.88	0.34	-61.27
928	4.90	31.49	-9.79	4.55	-87.49
929	12.22	53.15	-11.05	7.09	-111.28
930	19.71	79.78	-11.96	8.86	-130.91
931	26.72	110.47	-12.67	10.30	-145.03
932	33.78	145.75	-13.23	11.73	-153.36
933	41.20	181.94	-13.65	13.16	-156.72
934	49.55	217.58	-13.89	14.62	-156.81
935	58.91	251.95	-13.94	16.11	-155.32
936	69.10	284.94	-13.75	17.58	-153.37
937	79.89	316.74	-13.29	18.95	-151.68
938	91.10	347.72	-12.55	20.12	-150.71
939	102.60	378.27	-11.52	20.93	-150.84
940	114.36	408.84	-10.24	21.15	-152.22
941	126.33	439.89	-8.81	20.43	-154.58
942	138.38	471.81	-7.40	18.19	-157.01
943	149.34	502.40	-6.42	13.87	-158.13
944	159.71	533.48	-5.94	5.97	-157.26
945	164.69	548.95	-5.80	0.00	-156.34
946	164.69	548.95	-5.80	0.00	-156.34
947	164.69	548.95	-5.80	0.00	-156.34
948	164.69	548.95	-5.80	0.00	-156.34
949	164.69	548.95	-5.80	0.00	-156.34
950	-18.33	-0.25	-1.45	18.93	-16.41
951	-11.98	4.66	-3.60	25.64	-30.93
952	-6.99	14.76	-6.53	32.31	-59.00
953	-0.47	30.63	-8.47	36.38	-85.83
954	7.47	52.09	-9.23	35.93	-110.90
955	15.51	78.87	-9.27	31.49	-131.56

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
956	22.72	109.93	-9.27	25.68	-145.92
957	29.70	145.56	-9.93	20.86	-153.76
958	37.12	181.87	-11.17	18.51	-156.36
959	45.54	217.32	-12.56	18.19	-155.83
960	55.00	251.31	-13.66	19.04	-153.95
961	65.25	283.82	-14.30	20.55	-151.79
962	76.08	315.12	-14.43	22.43	-149.98
963	87.32	345.57	-14.07	24.48	-148.97
964	98.90	375.60	-13.24	26.54	-149.19
965	110.74	405.66	-12.01	28.22	-150.88
966	122.94	436.27	-10.49	28.64	-153.96
967	135.44	467.85	-8.79	26.31	-157.48
968	147.14	498.39	-7.39	19.90	-159.77
969	158.27	529.65	-6.47	8.22	-159.69
970	163.57	545.22	-6.26	0.00	-159.01
971	163.57	545.22	-6.26	0.00	-159.01
972	163.57	545.22	-6.26	0.00	-159.01
973	163.57	545.22	-6.26	0.00	-159.01
974	163.57	545.22	-6.26	0.00	-159.01
975	-28.16	0.38	-0.17	53.53	-12.83
976	-23.40	4.48	-2.08	54.72	-24.91
977	-19.49	13.27	-4.92	64.37	-50.75
978	-12.48	27.64	-6.97	72.12	-80.14
979	-2.14	48.64	-7.36	69.25	-110.39
980	8.12	76.25	-6.02	56.07	-135.32
981	15.94	108.83	-5.33	40.19	-150.79
982	23.02	146.03	-6.30	28.19	-157.14
983	30.69	182.94	-8.82	22.71	-157.54
984	39.74	218.21	-11.54	21.03	-155.39
985	49.70	251.52	-13.70	21.53	-152.55
986	60.24	283.24	-15.09	23.23	-149.76
987	71.18	313.74	-15.75	25.67	-147.47
988	82.44	343.41	-15.74	28.63	-146.04
989	93.97	372.63	-15.08	32.00	-145.91
990	105.79	401.96	-13.87	35.50	-147.70
991	117.80	431.73	-12.24	38.02	-151.86
992	131.00	462.87	-10.56	36.79	-157.91
993	144.09	493.34	-8.64	28.90	-163.41
994	156.76	525.42	-7.52	11.55	-165.60
995	162.55	541.84	-6.95	0.00	-165.63
996	162.55	541.84	-6.95	0.00	-165.63
997	162.55	541.84	-6.95	0.00	-165.63
998	162.55	541.84	-6.95	0.00	-165.63
999	162.55	541.84	-6.95	0.00	-165.63
1000	-40.16	1.06	1.33	73.28	-4.28
1001	-38.44	4.21	0.17	73.97	-10.28
1002	-39.21	9.85	-1.53	93.91	-29.39
1003	-32.87	21.40	-4.79	117.27	-64.04
1004	-17.71	41.71	-3.94	118.95	-107.57
1005	-2.67	71.77	-1.80	85.14	-143.30
1006	6.41	108.52	0.42	49.86	-160.81
1007	12.74	148.12	-2.52	32.65	-162.99
1008	22.07	186.05	-7.14	24.83	-159.33
1009	32.50	220.42	-11.33	22.62	-155.06
1010	43.32	252.50	-14.33	23.23	-150.87
1011	54.27	283.08	-16.27	25.34	-147.20
1012	65.34	312.56	-17.31	28.38	-144.16
1013	76.54	341.19	-17.56	32.16	-141.90
1014	87.93	369.28	-17.04	36.71	-140.73
1015	99.55	397.38	-15.68	42.13	-141.55
1016	111.50	426.65	-13.76	48.20	-146.21
1017	122.85	456.09	-11.74	51.51	-155.77
1018	139.64	487.43	-11.09	45.43	-168.82
1019	156.10	520.84	-7.61	22.22	-177.68
1020	160.75	535.85	-7.88	0.00	-179.47
1021	160.75	535.85	-7.88	0.00	-179.47
1022	160.75	535.85	-7.88	0.00	-179.47
1023	160.75	535.85	-7.88	0.00	-179.47
1024	160.75	535.85	-7.88	0.00	-179.47
1025	-51.07	0.85	1.95	66.69	11.90
1026	-54.51	-0.42	2.72	72.56	18.17
1027	-56.18	5.04	4.61	112.78	19.89
1028	-69.02	7.02	7.08	158.24	-15.03
1029	-45.53	28.09	0.85	145.56	-95.55
1030	-13.39	69.14	10.55	94.21	-164.72
1031	-12.40	110.22	7.20	56.64	-177.34

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1032	-0.71	156.04	-0.11	32.43	-167.96
1033	12.22	191.92	-7.53	24.17	-161.16
1034	24.62	223.74	-12.52	22.68	-154.26
1035	36.39	253.93	-15.80	23.98	-148.68
1036	47.70	283.13	-17.89	26.70	-144.05
1037	58.79	311.44	-19.10	30.34	-140.13
1038	69.82	338.89	-19.55	34.73	-136.75
1039	80.94	365.53	-19.17	39.97	-133.85
1040	92.25	391.61	-17.74	46.51	-131.70
1041	104.02	418.51	-14.66	55.61	-133.12
1042	116.75	451.76	-11.30	69.21	-143.74
1043	120.17	474.92	-8.01	71.71	-168.13
1044	156.35	517.77	-16.29	27.95	-203.91
1045	164.47	548.25	-8.39	0.00	-223.67
1046	164.47	548.25	-8.39	0.00	-223.67
1047	164.47	548.25	-8.39	0.00	-223.67
1048	164.47	548.25	-8.39	0.00	-223.67
1049	164.47	548.25	-8.39	0.00	-223.67
1050	-58.55	-0.84	0.53	27.45	31.22
1051	-68.16	-11.28	1.23	40.24	61.62
1052	-73.20	-30.48	9.41	86.72	101.04
1053	-69.49	-5.15	20.78	130.07	56.47
1054	-72.34	17.04	72.17	93.64	-57.65
1055	-63.61	61.70	21.76	58.89	-144.30
1056	-34.78	138.60	9.05	49.89	-177.58
1057	-13.33	171.76	-4.53	24.87	-176.00
1058	3.22	199.06	-11.33	20.65	-161.76
1059	17.21	226.97	-15.42	21.26	-152.48
1060	29.55	255.16	-18.05	23.79	-145.76
1061	40.92	283.07	-19.84	27.31	-140.30
1062	51.79	310.30	-21.02	31.51	-135.54
1063	62.48	336.58	-21.62	36.23	-131.07
1064	73.21	361.62	-21.53	41.45	-126.31
1065	84.15	384.99	-20.43	47.42	-120.07
1066	95.30	405.75	-17.48	55.29	-110.34
1067	108.70	427.83	-8.73	72.12	-109.83
1068	131.91	494.87	-0.60	78.71	-163.52
1069	144.11	509.48	44.00	20.19	-243.11
1070	140.22	467.41	-5.91	0.00	-274.55
1071	140.22	467.41	-5.91	0.00	-274.55
1072	140.22	467.41	-5.91	0.00	-274.55
1073	140.22	467.41	-5.91	0.00	-274.55
1074	140.22	467.41	-5.91	0.00	-274.55
1075	-61.79	-2.24	-3.24	-35.58	40.33
1076	-74.26	-18.39	-5.63	-17.34	87.24
1077	-89.55	-77.06	-9.30	-7.46	154.08
1078	-114.86	-232.76	-11.52	-1.64	182.67
1079	-81.71	15.30	-13.07	2.32	143.43
1080	-42.78	280.28	-14.36	5.50	-15.45
1081	-41.12	179.44	-15.57	8.44	-161.04
1082	-20.28	182.09	-16.82	11.65	-180.78
1083	-2.81	202.69	-18.09	15.07	-159.79
1084	11.30	228.34	-19.36	18.79	-149.48
1085	23.38	255.46	-20.61	22.85	-142.03
1086	34.27	282.59	-21.78	27.27	-135.94
1087	44.56	309.06	-22.81	31.99	-130.54
1088	54.67	334.41	-23.60	36.86	-125.33
1089	64.91	358.17	-24.03	41.57	-119.51
1090	75.48	379.34	-23.96	45.51	-111.11
1091	86.29	394.85	-23.33	47.57	-93.03
1092	93.45	387.46	-22.28	45.77	-77.55
1093	93.70	307.83	-21.59	37.43	-71.93
1094	196.91	724.27	-21.36	17.17	-106.02
1095	370.84	1236.15	-21.15	0.00	-143.14
1096	370.84	1236.15	-21.15	0.00	-143.14
1097	370.84	1236.15	-21.15	0.00	-143.14
1098	370.84	1236.15	-21.15	0.00	-143.14
1099	370.84	1236.15	-21.15	0.00	-143.14
1100	-60.15	-0.75	-6.94	-98.72	31.39
1101	-69.61	-11.00	-12.33	-75.30	62.12
1102	-75.06	-29.97	-27.74	-102.10	102.30
1103	-72.07	-4.40	-43.48	-133.80	58.61
1104	-75.84	17.95	-97.95	-89.44	-54.61
1105	-68.15	62.67	-50.09	-48.32	-140.41
1106	-40.44	139.54	-39.78	-33.41	-172.86
1107	-20.29	172.49	-28.68	-1.97	-170.44

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1108	-5.13	199.48	-24.39	9.06	-155.33
1109	7.38	226.95	-22.80	15.87	-145.14
1110	18.16	254.53	-22.64	21.43	-137.44
1111	27.92	281.62	-23.20	26.70	-130.93
1112	37.20	307.75	-24.13	31.94	-125.09
1113	46.43	332.55	-25.20	37.01	-119.58
1114	56.02	355.61	-26.31	41.30	-113.91
1115	66.38	376.36	-27.53	43.37	-107.01
1116	77.80	393.79	-29.55	39.82	-96.98
1117	92.59	411.91	-36.53	19.61	-96.61
1118	118.13	474.69	-43.54	-3.50	-150.82
1119	133.93	485.33	-87.82	14.44	-231.03
1120	132.48	441.61	-37.51	0.00	-262.75
1121	132.48	441.61	-37.51	0.00	-262.75
1122	132.48	441.61	-37.51	0.00	-262.75
1123	132.48	441.61	-37.51	0.00	-262.75
1124	132.48	441.61	-37.51	0.00	-262.75
1125	-53.79	1.05	-8.13	-138.35	12.28
1126	-57.01	0.14	-13.33	-108.75	19.21
1127	-59.57	6.06	-22.14	-129.51	22.44
1128	-73.92	8.52	-28.79	-163.33	-10.75
1129	-52.30	29.92	-25.52	-142.67	-89.51
1130	-22.26	71.09	-37.71	-84.89	-156.99
1131	-23.52	112.08	-36.68	-41.38	-167.95
1132	-14.42	157.48	-31.77	-10.74	-156.89
1133	-4.25	192.74	-26.78	4.29	-148.34
1134	5.20	223.66	-24.19	13.09	-139.58
1135	13.84	252.67	-23.31	19.75	-131.99
1136	21.91	280.28	-23.56	25.70	-125.16
1137	29.75	306.46	-24.52	31.44	-118.90
1138	37.75	331.04	-25.98	36.92	-113.19
1139	46.37	353.82	-27.83	41.47	-108.17
1140	56.25	374.76	-30.13	43.41	-104.33
1141	68.31	394.99	-33.30	39.22	-104.72
1142	83.76	420.10	-36.00	22.83	-115.10
1143	92.02	434.29	-39.03	4.29	-139.99
1144	135.60	468.59	-30.91	7.40	-176.65
1145	148.63	495.43	-38.46	0.00	-196.90
1146	148.63	495.43	-38.46	0.00	-196.90
1147	148.63	495.43	-38.46	0.00	-196.90
1148	148.63	495.43	-38.46	0.00	-196.90
1149	148.63	495.43	-38.46	0.00	-196.90
1150	-43.00	1.41	-7.11	-145.70	-3.65
1151	-41.18	5.06	-9.97	-112.01	-8.68
1152	-43.49	11.40	-14.66	-112.80	-25.59
1153	-39.56	23.66	-15.28	-124.57	-57.73
1154	-27.30	44.48	-18.93	-118.24	-98.68
1155	-15.46	74.69	-23.44	-77.92	-131.88
1156	-9.76	111.28	-27.88	-36.63	-146.91
1157	-7.28	150.21	-27.20	-12.99	-146.55
1158	-2.04	187.18	-24.84	1.50	-140.24
1159	4.00	220.23	-22.87	10.82	-133.11
1160	10.12	250.57	-22.10	17.87	-125.75
1161	16.16	278.86	-22.40	24.14	-118.49
1162	22.22	305.29	-23.58	30.25	-111.49
1163	28.61	329.84	-25.47	36.30	-105.04
1164	35.80	352.44	-28.04	41.85	-99.81
1165	44.53	373.12	-31.34	45.65	-97.08
1166	56.15	392.46	-35.11	45.41	-99.03
1167	71.23	409.23	-38.57	40.15	-106.88
1168	95.84	426.07	-40.80	30.87	-119.22
1169	124.05	445.04	-45.34	13.73	-128.38
1170	136.06	453.55	-44.84	0.00	-130.58
1171	136.06	453.55	-44.84	0.00	-130.58
1172	136.06	453.55	-44.84	0.00	-130.58
1173	136.06	453.55	-44.84	0.00	-130.58
1174	136.06	453.55	-44.84	0.00	-130.58
1175	-29.54	0.95	-5.04	-127.20	-11.97
1176	-25.21	5.60	-6.59	-95.13	-22.86
1177	-23.76	15.34	-9.43	-86.02	-46.02
1178	-20.23	30.70	-10.89	-82.42	-72.27
1179	-13.92	52.36	-13.09	-71.63	-99.15
1180	-7.99	80.13	-16.67	-51.88	-120.65
1181	-4.67	112.43	-19.44	-29.86	-132.72
1182	-2.63	148.64	-20.54	-11.40	-135.62
1183	-0.30	184.20	-19.98	0.58	-132.42

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1184	3.00	217.69	-19.16	8.97	-126.31
1185	6.74	248.75	-18.90	15.60	-118.90
1186	10.68	277.55	-19.47	21.64	-110.77
1187	14.80	304.22	-20.89	27.73	-102.28
1188	19.29	328.74	-23.12	34.16	-93.87
1189	24.55	351.11	-26.21	40.86	-86.34
1190	31.34	371.30	-30.38	47.27	-81.02
1191	40.80	388.28	-35.91	52.11	-79.06
1192	57.69	402.18	-42.69	52.58	-80.07
1193	82.16	411.48	-49.56	45.16	-81.56
1194	112.54	421.28	-53.88	23.79	-81.65
1195	128.18	427.27	-54.25	0.00	-81.33
1196	128.18	427.27	-54.25	0.00	-81.33
1197	128.18	427.27	-54.25	0.00	-81.33
1198	128.18	427.27	-54.25	0.00	-81.33
1199	128.18	427.27	-54.25	0.00	-81.33
1200	-16.07	0.63	-3.08	-94.09	-15.60
1201	-11.48	5.99	-3.73	-68.15	-29.06
1202	-10.20	17.33	-5.67	-56.97	-54.57
1203	-8.33	34.50	-6.82	-50.57	-77.85
1204	-5.63	56.80	-8.42	-42.56	-98.57
1205	-3.11	83.69	-10.47	-31.44	-114.61
1206	-1.49	114.21	-12.40	-19.22	-124.43
1207	-0.62	148.42	-13.50	-7.85	-127.78
1208	0.38	182.87	-13.76	0.72	-125.69
1209	1.82	216.05	-13.70	7.09	-119.90
1210	3.67	247.27	-13.90	12.40	-111.74
1211	5.75	276.28	-14.67	17.45	-101.89
1212	8.01	302.99	-16.14	22.78	-90.70
1213	10.54	327.30	-18.35	28.75	-78.46
1214	13.61	349.19	-21.41	35.66	-65.66
1215	17.76	368.63	-25.67	43.57	-53.23
1216	24.38	385.67	-32.36	51.82	-42.98
1217	34.79	395.62	-42.74	56.95	-35.33
1218	61.77	398.77	-57.30	48.66	-26.63
1219	101.52	397.21	-64.72	17.95	-19.16
1220	118.15	393.82	-66.31	0.00	-17.01
1221	118.15	393.82	-66.31	0.00	-17.01
1222	118.15	393.82	-66.31	0.00	-17.01
1223	118.15	393.82	-66.31	0.00	-17.01
1224	118.15	393.82	-66.31	0.00	-17.01
1225	-5.02	0.86	-1.35	-52.39	-17.71
1226	-2.66	5.99	-1.48	-35.45	-33.23
1227	-2.34	18.20	-2.40	-28.23	-60.93
1228	-1.84	36.20	-3.08	-24.07	-83.01
1229	-1.06	58.86	-3.89	-19.82	-100.66
1230	-0.35	85.44	-4.91	-14.62	-113.70
1231	0.05	115.10	-5.90	-9.01	-121.59
1232	0.16	148.28	-6.61	-3.59	-124.07
1233	0.32	181.95	-6.95	0.80	-121.41
1234	0.70	214.72	-7.13	4.30	-114.60
1235	1.30	245.77	-7.42	7.36	-104.51
1236	2.04	274.62	-8.04	10.41	-91.62
1237	2.86	300.97	-9.07	13.75	-76.01
1238	3.80	324.60	-10.56	17.66	-57.48
1239	4.96	345.30	-12.60	22.49	-35.66
1240	6.67	363.04	-15.51	28.57	-10.36
1241	9.63	378.47	-19.92	35.90	17.79
1242	17.02	396.26	-30.11	42.81	42.71
1243	21.55	390.04	-45.91	42.45	58.81
1244	113.49	391.20	-78.79	30.06	85.22
1245	113.49	378.32	-80.40	0.00	105.81
1246	113.49	378.32	-80.40	0.00	105.81
1247	113.49	378.32	-80.40	0.00	105.81
1248	113.49	378.32	-80.40	0.00	105.81
1249	113.49	378.32	-80.40	0.00	105.81
1250	-0.38	-0.05	-0.32	-29.55	-25.96
1251	0.12	5.16	-0.03	-17.94	-43.47
1252	0.00	17.71	-0.06	-13.97	-72.63
1253	0.03	35.98	-0.15	-11.67	-93.27
1254	0.18	58.71	-0.34	-9.48	-108.89
1255	0.25	85.05	-0.67	-6.92	-119.67
1256	0.18	114.32	-1.08	-4.19	-125.28
1257	0.01	147.14	-1.44	-1.54	-125.53
1258	-0.14	180.45	-1.70	0.68	-120.60
1259	-0.18	212.81	-1.94	2.54	-111.08

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1260	-0.16	243.31	-2.29	4.24	-97.37
1261	-0.12	271.38	-2.84	6.00	-79.46
1262	-0.11	296.62	-3.65	7.97	-56.88
1263	-0.17	318.62	-4.76	10.35	-28.70
1264	-0.37	336.74	-6.25	13.40	6.72
1265	-0.60	350.16	-8.19	17.42	51.94
1266	-1.74	357.40	-11.50	22.82	110.77
1267	0.70	359.42	-14.75	28.56	187.45
1268	-3.84	402.57	-35.00	36.29	254.37
1269	97.21	398.28	-85.63	-23.53	230.90
1270	97.21	398.28	-85.63	-23.53	230.90
1271	97.21	398.28	-85.63	-23.53	230.90
1272	97.21	398.28	-85.63	-23.53	230.90
1273	97.21	398.28	-85.63	-23.53	230.90

Combinazione n° 4 - SLER

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1	-0.14	0.06	0.32	29.55	-12.84
2	-2.79	0.86	1.35	52.39	-9.20
3	-2.13	5.99	1.48	35.45	-17.96
4	0.12	5.16	0.03	17.94	-22.62
5	-9.70	0.63	3.08	94.09	-7.60
6	-8.49	5.99	3.73	68.15	-15.13
7	-1.80	18.20	2.40	28.23	-34.99
8	0.06	17.71	0.06	13.97	-40.55
9	-7.54	17.33	5.67	56.97	-30.91
10	-19.80	0.95	5.04	127.20	-5.00
11	-18.66	5.60	6.59	95.13	-10.73
12	-17.23	15.34	9.43	86.02	-24.72
13	-1.34	36.20	3.08	24.07	-51.41
14	0.24	35.98	0.15	11.67	-56.38
15	-6.38	34.50	6.82	50.57	-48.32
16	-15.19	30.70	10.89	82.42	-44.27
17	-32.45	1.41	7.11	145.70	-0.51
18	-31.75	5.06	9.97	112.01	-2.16
19	-30.97	11.40	14.66	112.80	-11.17
20	-28.88	23.66	15.28	124.57	-34.45
21	-0.95	58.86	3.89	20.16	-67.30
22	0.36	58.71	0.34	9.77	-71.12
23	-5.30	56.80	8.42	42.71	-66.72
24	-13.13	52.36	13.09	71.63	-68.01
25	-25.75	44.48	18.93	118.24	-70.22
26	-45.80	1.05	8.13	138.35	12.28
27	-46.13	0.14	13.33	108.75	19.21
28	-46.94	6.06	22.14	129.51	22.44
29	-49.62	8.52	28.79	163.33	-2.64
30	-49.54	29.92	25.52	142.67	-72.50
31	-0.35	85.44	4.91	17.88	-81.69
32	0.36	85.05	0.67	8.65	-84.12
33	-3.11	83.69	10.47	37.86	-83.93
34	-7.99	80.13	16.67	62.32	-90.97
35	-15.46	74.69	23.44	94.73	-105.66
36	-22.26	71.09	37.71	116.53	-142.48
37	-56.20	0.75	6.94	98.72	31.39
38	-58.02	-1.75	12.33	75.30	62.12
39	-63.99	-10.51	27.74	102.10	102.30
40	-70.97	-4.40	43.48	133.80	58.61
41	-72.11	17.95	97.95	89.44	-54.61
42	-62.17	62.67	50.09	85.11	-140.41
43	0.05	115.10	5.90	14.25	-93.33
44	0.25	114.32	1.08	6.92	-94.46
45	-1.49	114.21	12.40	29.67	-97.68
46	-4.67	112.43	19.44	46.49	-108.18
47	-9.76	111.28	27.88	61.73	-128.07
48	-23.52	112.08	36.68	72.56	-164.17
49	-40.44	139.54	39.78	57.52	-172.86
50	-59.75	1.16	3.24	35.58	40.33
51	-62.33	-1.57	5.63	17.34	87.24
52	-72.67	-15.49	9.30	7.46	154.08
53	-80.80	-29.30	11.52	1.92	182.67
54	-78.03	15.30	13.07	-0.72	143.43
55	-42.78	280.28	14.36	-2.87	-15.45
56	-41.12	179.44	15.57	-4.97	-161.04

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
57	0.16	148.28	6.61	9.64	-101.05
58	0.09	147.14	1.44	4.72	-101.14
59	-0.62	148.42	13.50	19.59	-106.41
60	-2.63	148.64	20.54	28.87	-117.44
61	-7.28	150.21	27.20	35.30	-135.19
62	-14.42	157.48	31.77	33.83	-156.89
63	-20.29	172.49	28.68	18.74	-170.44
64	-20.28	182.09	16.82	-7.40	-180.78
65	-54.82	0.69	3.15	-1.96	31.22
66	-56.87	-2.00	6.28	-22.49	61.62
67	-62.62	-11.03	9.63	-61.33	101.04
68	-69.15	-5.15	9.89	-89.03	56.47
69	-69.67	17.04	7.83	-88.98	-57.65
70	-58.99	61.70	7.58	-58.89	-144.30
71	-34.78	138.60	7.29	-49.89	-177.58
72	-13.33	171.76	8.74	-24.87	-176.00
73	0.32	181.95	6.95	5.04	-104.10
74	-0.03	180.45	1.70	2.42	-103.26
75	0.38	182.87	13.76	10.19	-109.71
76	-0.30	184.20	19.98	14.45	-119.57
77	-2.04	187.18	24.84	15.95	-133.23
78	-4.25	192.74	26.78	12.52	-148.34
79	-5.13	199.48	24.39	3.21	-155.33
80	-2.81	202.69	18.09	-10.15	-159.79
81	3.22	199.06	11.33	-20.65	-161.76
82	-43.31	0.85	3.25	-20.35	11.90
83	-44.09	-0.42	6.93	-42.36	18.17
84	-44.44	5.04	10.88	-78.31	19.89
85	-46.18	7.02	11.08	-120.31	-4.80
86	-44.85	28.09	8.79	-139.20	-76.19
87	-13.39	69.14	5.77	-94.21	-147.82
88	-12.40	110.22	4.74	-56.64	-171.23
89	-0.71	156.04	6.09	-32.43	-167.96
90	12.22	191.92	8.60	-24.17	-160.31
91	0.70	214.72	7.13	0.84	-102.60
92	-0.09	212.81	1.94	0.24	-100.48
93	1.82	216.05	13.70	2.19	-108.41
94	3.00	217.69	19.16	3.23	-117.04
95	4.00	220.23	22.87	2.70	-127.64
96	5.20	223.66	24.19	-0.33	-138.75
97	7.38	226.95	22.80	-6.01	-145.14
98	11.30	228.34	19.36	-13.26	-149.48
99	17.21	226.97	15.42	-20.09	-152.48
100	24.62	223.74	12.52	-22.68	-151.21
101	-29.42	1.06	2.92	-24.48	-0.32
102	-29.32	4.21	6.40	-43.19	-2.27
103	-27.79	9.85	10.21	-66.16	-12.39
104	-24.24	21.40	10.74	-96.21	-37.56
105	-17.71	41.71	8.52	-113.71	-75.63
106	-2.67	71.77	5.82	-85.14	-113.59
107	6.41	108.52	4.76	-49.86	-138.61
108	12.74	148.12	5.72	-32.65	-148.43
109	22.07	186.05	7.75	-24.83	-149.19
110	32.50	220.42	11.33	-22.62	-146.36
111	1.30	245.77	7.42	-2.94	-97.13
112	-0.09	243.31	2.29	-1.81	-92.87
113	3.67	247.27	13.90	-4.59	-103.75
114	6.74	248.75	18.90	-5.63	-111.91
115	10.12	250.57	22.10	-7.02	-120.81
116	13.84	252.67	23.31	-9.39	-129.47
117	18.16	254.53	22.64	-12.81	-136.74
118	23.38	255.46	20.61	-16.74	-141.66
119	29.55	255.16	18.05	-20.25	-143.86
120	36.39	253.93	15.80	-22.35	-143.77
121	43.32	252.50	14.33	-22.44	-142.39
122	-17.12	0.38	2.52	-16.56	-4.67
123	-16.61	4.48	5.42	-31.67	-10.71
124	-14.04	13.27	8.72	-46.82	-26.02
125	-9.94	27.64	9.50	-60.10	-48.00
126	-2.14	48.64	8.44	-65.77	-74.86
127	8.12	76.25	6.92	-56.07	-101.27
128	15.94	108.83	6.24	-40.19	-122.08
129	23.02	146.03	6.79	-28.19	-135.00
130	30.69	182.94	8.82	-22.71	-140.81
131	39.74	218.21	11.54	-21.03	-142.02
132	49.70	251.52	13.70	-20.46	-140.87

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
133	2.04	274.62	8.04	-6.49	-88.19
134	-0.08	271.38	2.84	-3.81	-79.46
135	5.75	276.28	14.67	-10.68	-96.63
136	10.68	277.55	19.47	-13.15	-105.34
137	16.16	278.86	22.40	-14.94	-113.84
138	21.91	280.28	23.56	-16.69	-121.61
139	27.92	281.62	23.20	-18.63	-128.12
140	34.27	282.59	21.78	-20.57	-133.00
141	40.92	283.07	19.84	-22.08	-136.14
142	47.70	283.13	17.89	-22.66	-137.79
143	54.27	283.08	16.27	-22.01	-138.44
144	60.24	283.24	15.09	-20.08	-138.69
145	-8.55	-0.25	2.24	-1.28	-6.93
146	-7.75	4.66	4.50	-14.11	-14.58
147	-5.12	14.76	7.35	-23.61	-31.58
148	-0.47	30.63	8.49	-30.33	-51.92
149	7.47	52.09	9.23	-33.37	-74.39
150	15.51	78.87	9.27	-31.49	-96.21
151	22.72	109.93	9.27	-25.68	-114.69
152	29.70	145.56	9.93	-20.86	-128.13
153	37.12	181.87	11.17	-18.51	-136.06
154	45.54	217.32	12.56	-17.59	-139.51
155	55.00	251.31	13.66	-16.87	-140.08
156	65.25	283.82	14.30	-17.14	-139.07
157	2.86	300.97	9.07	-10.07	-76.01
158	-0.10	296.62	3.65	-5.88	-56.88
159	8.01	302.99	16.14	-16.58	-87.63
160	14.80	304.22	20.89	-20.11	-97.99
161	22.22	305.29	23.58	-22.02	-107.08
162	29.75	306.46	24.52	-23.18	-114.85
163	37.20	307.75	24.13	-24.04	-121.27
164	44.56	309.06	22.81	-24.66	-126.34
165	51.79	310.30	21.02	-24.87	-130.17
166	58.79	311.44	19.10	-24.40	-132.94
167	65.34	312.56	17.31	-23.07	-134.87
168	71.18	313.74	15.75	-20.88	-136.26
169	76.08	315.12	14.43	-18.01	-137.40
170	-4.48	-0.27	2.61	21.56	-7.59
171	-3.61	4.71	4.73	7.26	-15.70
172	-1.03	15.22	7.88	0.05	-33.19
173	4.90	31.49	9.79	-3.22	-53.12
174	12.22	53.15	11.05	-5.18	-74.51
175	19.71	79.78	11.96	-6.54	-95.17
176	26.72	110.47	12.67	-7.66	-113.03
177	33.78	145.75	13.23	-8.78	-126.60
178	41.20	181.94	13.65	-9.94	-135.17
179	49.55	217.58	13.89	-11.14	-139.37
180	58.91	251.95	13.94	-12.39	-140.55
181	69.10	284.94	13.75	-13.63	-139.95
182	79.89	316.74	13.29	-14.82	-138.51
183	3.80	324.60	10.56	-13.98	-57.48
184	-0.16	318.62	4.76	-8.20	-28.70
185	10.54	327.30	18.35	-22.72	-77.18
186	19.29	328.74	23.12	-26.99	-90.35
187	28.61	329.84	25.47	-28.69	-100.81
188	37.75	331.04	25.98	-29.17	-109.05
189	46.43	332.55	25.20	-29.15	-115.58
190	54.67	334.41	23.60	-28.88	-120.90
191	62.48	336.58	21.62	-28.25	-125.31
192	69.82	338.89	19.55	-27.02	-128.95
193	76.54	341.19	17.56	-25.04	-131.86
194	82.44	343.41	15.74	-22.37	-134.06
195	87.32	345.57	14.07	-19.21	-135.69
196	91.10	347.72	12.55	-15.86	-136.90
197	-5.15	-0.26	3.76	62.10	-6.96
198	-4.41	4.61	5.82	40.30	-14.69
199	-1.73	14.70	9.18	31.81	-31.90
200	4.13	30.57	11.04	27.48	-52.51
201	12.28	52.10	12.80	23.16	-75.29
202	20.56	79.01	14.58	19.40	-97.43
203	28.04	110.27	15.99	13.28	-116.21
204	35.32	146.21	16.47	6.11	-129.94
205	43.02	182.92	16.08	-0.03	-138.12
206	51.69	218.86	15.20	-4.61	-141.77
207	61.36	253.43	14.21	-7.87	-142.46
208	71.74	286.60	13.23	-10.15	-141.47

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
209	82.60	318.63	12.24	-11.70	-139.71
210	93.77	349.85	11.16	-12.64	-137.79
211	4.96	345.30	12.60	-18.49	-35.66
212	-0.32	336.74	6.25	-11.00	6.72
213	13.61	349.19	21.41	-29.42	-65.66
214	24.55	351.11	26.21	-33.90	-83.07
215	35.80	352.44	28.04	-34.87	-95.44
216	46.37	353.82	27.83	-34.40	-104.17
217	56.02	355.61	26.31	-33.66	-110.62
218	64.91	358.17	24.03	-32.95	-116.00
219	73.21	361.62	21.53	-31.96	-121.02
220	80.94	365.53	19.17	-30.26	-125.67
221	87.93	369.28	17.04	-27.65	-129.58
222	93.97	372.63	15.08	-24.28	-132.47
223	98.90	375.60	13.24	-20.48	-134.39
224	102.60	378.27	11.52	-16.61	-135.57
225	105.13	380.67	9.98	-12.94	-136.13
226	-10.40	0.35	4.99	96.88	-4.73
227	-10.03	4.38	7.24	69.80	-10.93
228	-7.35	13.14	10.60	64.41	-26.65
229	-3.00	27.51	12.32	63.80	-49.19
230	7.38	48.63	14.42	56.05	-76.67
231	18.15	76.50	17.58	48.60	-103.72
232	26.52	109.47	19.68	34.69	-125.15
233	34.22	147.28	19.89	19.73	-138.67
234	42.48	184.99	18.27	8.44	-145.00
235	52.07	221.23	16.14	0.75	-146.61
236	62.47	255.69	14.18	-4.17	-145.71
237	73.30	288.73	12.56	-7.23	-143.60
238	84.35	320.70	11.16	-9.04	-141.01
239	95.48	351.92	9.87	-9.87	-138.40
240	106.62	382.73	8.64	-9.76	-136.11
241	6.67	363.04	15.51	-23.85	-10.36
242	-0.50	350.16	8.19	-14.49	51.94
243	17.76	368.63	25.67	-36.68	-53.23
244	31.34	371.30	30.38	-40.41	-77.09
245	44.53	373.12	31.34	-39.69	-91.71
246	56.25	374.76	30.13	-37.83	-100.38
247	66.38	376.36	27.53	-36.64	-105.65
248	75.48	379.34	23.96	-36.35	-110.51
249	84.15	384.99	20.43	-35.92	-116.50
250	92.25	391.61	17.74	-34.17	-123.08
251	99.55	397.38	15.68	-30.78	-128.46
252	105.79	401.96	13.87	-26.31	-131.88
253	110.74	405.66	12.01	-21.54	-133.84
254	114.36	408.84	10.24	-16.89	-134.82
255	116.62	411.47	8.69	-12.52	-135.07
256	117.75	413.58	7.44	-8.18	-134.53
257	-19.56	1.02	6.41	116.92	-0.41
258	-19.66	4.05	9.30	89.75	-2.60
259	-17.98	9.62	13.70	94.87	-13.34
260	-14.04	21.17	14.11	109.93	-39.35
261	-3.64	41.65	17.41	106.52	-78.37
262	12.20	72.07	21.35	84.96	-117.31
263	22.15	109.40	25.00	53.82	-143.30
264	29.46	149.89	23.29	29.89	-154.03
265	39.74	188.99	19.65	13.53	-155.61
266	51.05	224.81	16.16	3.76	-153.41
267	62.60	258.60	13.51	-1.98	-149.86
268	74.09	291.16	11.53	-5.33	-146.06
269	85.40	322.83	9.96	-7.16	-142.31
270	96.50	353.83	8.63	-7.83	-138.74
271	107.36	384.36	7.50	-7.37	-135.47
272	118.00	414.84	6.65	-3.23	-132.91
273	9.63	378.47	19.92	-30.00	17.79
274	-1.43	357.40	11.50	-18.99	110.77
275	24.38	385.67	32.36	-43.76	-42.98
276	40.80	388.28	35.91	-45.19	-73.39
277	56.15	392.46	35.11	-41.22	-90.66
278	68.31	394.99	33.30	-36.81	-99.29
279	77.80	393.79	29.55	-35.72	-96.98
280	86.29	394.85	23.33	-38.19	-93.03
281	95.30	405.75	17.48	-40.68	-110.34
282	104.02	418.51	14.83	-39.48	-122.64
283	111.50	426.65	13.76	-34.33	-129.33
284	117.80	431.73	12.24	-27.87	-132.76

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
285	122.94	436.27	10.49	-21.84	-134.15
286	126.33	439.89	8.81	-16.41	-134.66
287	128.32	442.71	7.35	-11.31	-134.74
288	128.77	444.70	6.30	-4.50	-134.14
289	128.47	446.27	5.95	3.62	-131.92
290	-30.56	0.78	6.90	110.73	11.57
291	-31.63	-0.66	11.59	89.36	17.30
292	-31.76	4.69	19.37	115.04	17.77
293	-32.95	6.65	25.40	152.32	-7.22
294	-27.19	27.91	21.55	134.53	-79.92
295	6.09	69.42	33.03	110.10	-152.89
296	8.32	111.22	31.13	67.93	-177.62
297	21.41	158.21	25.10	31.56	-175.76
298	35.73	195.61	18.77	13.07	-169.10
299	49.43	229.31	14.62	3.53	-160.92
300	62.33	261.76	11.90	-1.71	-154.12
301	74.51	293.57	10.02	-4.64	-148.43
302	86.10	324.82	8.58	-6.18	-143.45
303	97.15	355.47	7.40	-6.66	-138.84
304	107.72	385.47	6.47	-5.82	-134.35
305	117.82	414.91	6.01	-1.11	-129.94
306	127.65	444.96	6.73	8.21	-127.11
307	17.02	396.26	30.11	-35.54	42.71
308	0.70	359.42	14.75	-23.64	187.45
309	34.79	395.62	42.74	-47.70	-35.33
310	57.69	402.18	42.69	-45.05	-72.10
311	71.23	409.23	38.57	-37.47	-93.99
312	83.76	420.10	36.00	-22.83	-102.52
313	92.59	411.91	36.53	-19.61	-96.61
314	93.45	387.46	22.28	-36.85	-77.55
315	108.70	427.83	15.34	-51.63	-109.83
316	116.75	451.76	13.11	-47.86	-125.88
317	122.85	456.09	11.74	-36.70	-133.76
318	131.00	462.87	10.56	-27.57	-135.19
319	135.44	467.85	8.79	-20.32	-134.94
320	138.38	471.81	7.40	-14.69	-134.69
321	140.16	474.78	6.26	-9.41	-134.83
322	140.63	476.88	5.23	-1.39	-135.17
323	137.79	477.45	5.33	11.11	-134.26
324	137.62	480.87	7.61	25.72	-127.61
325	-38.66	0.62	5.31	72.02	30.79
326	-41.99	-2.34	9.73	58.40	60.50
327	-47.44	-11.65	23.53	90.72	98.30
328	-48.55	-5.72	38.29	126.02	51.77
329	-50.10	16.66	91.97	84.47	-64.40
330	-39.83	61.85	43.30	81.53	-153.05
331	-9.32	139.61	32.05	55.67	-188.20
332	14.04	174.17	19.82	19.09	-188.37
333	32.50	203.31	14.21	6.18	-175.67
334	48.32	233.51	11.14	0.03	-167.05
335	62.30	264.46	9.31	-3.24	-157.42
336	75.02	295.59	8.04	-5.06	-150.22
337	86.80	326.49	7.03	-6.01	-144.27
338	97.80	356.84	6.14	-6.31	-138.82
339	108.10	386.24	5.40	-5.88	-133.24
340	117.70	414.10	5.08	-2.93	-126.66
341	126.49	439.23	6.09	4.43	-117.88
342	136.38	465.22	12.66	24.74	-113.54
343	21.55	390.04	45.91	-35.02	58.81
344	-3.33	402.57	35.00	-29.82	254.37
345	61.77	398.77	57.30	-40.32	-26.63
346	82.16	411.48	49.56	-37.66	-71.77
347	95.84	426.07	40.80	-26.09	-101.84
348	92.02	434.29	39.03	-4.29	-118.87
349	118.13	474.69	43.54	3.50	-133.30
350	93.70	365.40	21.59	-30.17	-71.93
351	131.91	494.87	13.38	-50.44	-143.63
352	120.17	474.92	10.83	-50.80	-141.69
353	139.64	487.43	11.09	-35.71	-141.96
354	144.09	493.34	8.64	-22.55	-137.81
355	147.14	498.39	7.39	-15.73	-135.16
356	149.34	502.40	6.42	-11.25	-134.03
357	151.07	505.65	5.70	-7.08	-134.40
358	152.13	508.08	5.23	-0.41	-136.48
359	152.13	510.08	4.11	14.13	-140.50
360	137.67	506.14	9.17	37.63	-140.82

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
361	155.17	535.55	19.29	41.05	-144.47
362	-39.32	1.07	1.29	9.65	39.80
363	-45.53	-2.02	2.37	2.55	85.84
364	-55.47	-16.33	3.96	-0.81	150.63
365	-62.66	-30.48	4.92	-2.48	176.78
366	-56.06	14.63	5.51	-3.44	135.02
367	-15.11	280.18	5.90	-4.06	-26.31
368	-11.24	180.31	6.16	-4.50	-174.23
369	12.09	184.57	6.30	-4.90	-196.15
370	32.10	207.28	6.34	-5.25	-177.11
371	48.69	235.59	6.27	-5.58	-168.46
372	63.08	265.93	6.09	-5.89	-158.82
373	75.98	296.85	5.80	-6.15	-151.03
374	87.78	327.69	5.39	-6.36	-144.68
375	98.71	357.97	4.87	-6.48	-138.86
376	108.85	387.16	4.27	-6.47	-132.77
377	118.13	414.11	3.60	-6.29	-125.18
378	126.26	435.53	2.92	-5.85	-105.94
379	129.11	433.73	2.30	-5.02	-85.90
380	123.75	407.28	1.87	-3.72	-75.73
381	113.49	391.20	78.79	-24.61	85.22
382	97.21	398.28	85.63	23.53	230.90
383	101.52	397.21	64.72	-14.78	-19.16
384	112.54	421.28	53.88	-19.28	-70.98
385	124.05	445.04	45.34	-10.16	-108.24
386	135.60	468.59	30.91	-0.76	-149.89
387	133.93	485.33	87.82	-5.48	-189.36
388	196.91	724.27	21.36	-13.85	-106.02
389	144.11	509.48	11.08	-20.19	-199.15
390	156.35	517.77	16.29	-27.81	-171.92
391	156.10	520.84	7.61	-18.95	-148.00
392	156.76	525.42	7.52	-9.44	-138.54
393	158.27	529.65	6.47	-6.64	-134.01
394	159.71	533.48	5.94	-4.86	-132.24
395	161.14	536.98	5.67	-3.23	-132.81
396	162.63	540.36	5.41	-0.89	-136.34
397	165.22	543.98	6.71	8.56	-145.22
398	169.14	550.02	4.32	15.61	-169.26
399	161.13	552.11	63.22	8.84	-197.76
400	218.93	778.97	1.66	-1.56	-106.56
401	-35.99	0.62	1.52	-20.65	30.72
402	-39.92	-2.33	3.48	-32.24	60.38
403	-45.36	-11.62	5.00	-66.45	98.06
404	-45.85	-5.59	4.11	-91.51	51.42
405	-47.39	16.89	1.17	-89.67	-64.84
406	-37.11	62.19	0.11	-56.48	-153.58
407	-6.59	140.11	-1.01	-45.29	-188.81
408	16.76	174.85	-0.47	-17.79	-189.03
409	35.19	204.20	0.83	-10.87	-176.36
410	50.97	234.64	1.90	-8.49	-167.63
411	64.89	265.83	2.94	-7.70	-157.97
412	77.51	297.22	3.62	-7.29	-150.71
413	89.16	328.36	3.83	-6.77	-144.65
414	100.01	358.93	3.69	-6.73	-139.05
415	110.13	388.52	3.22	-7.16	-133.27
416	119.54	416.50	2.93	-8.39	-126.47
417	128.11	441.69	2.70	-11.65	-117.43
418	137.76	467.64	1.88	-23.60	-112.53
419	156.29	537.88	0.44	-27.54	-143.56
420	161.93	554.26	-1.67	-7.17	-196.72
421	113.49	378.32	80.40	0.00	105.81
422	118.15	393.82	66.31	0.00	-17.01
423	128.18	427.27	54.25	0.00	-70.42
424	136.06	453.55	44.84	0.00	-109.82
425	148.63	495.43	38.46	0.00	-167.29
426	132.48	441.61	37.51	0.00	-219.07
427	370.84	1236.15	21.15	0.00	-143.14
428	140.22	467.41	11.72	0.00	-228.62
429	164.47	548.25	8.39	0.00	-188.91
430	160.75	535.85	7.88	0.00	-149.22
431	162.55	541.84	6.95	0.00	-138.21
432	163.57	545.22	6.26	0.00	-133.05
433	164.69	548.95	5.80	0.00	-131.10
434	165.74	552.47	5.60	0.00	-131.72
435	167.00	556.65	5.71	0.00	-135.73
436	167.66	558.87	6.16	0.00	-146.00

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
437	174.15	580.50	7.71	0.00	-185.66
438	153.10	510.35	13.03	0.00	-226.46
439	387.51	1291.71	1.61	0.00	-142.53
440	153.71	512.38	-0.90	0.00	-225.38
441	153.71	512.38	-0.90	0.00	-225.38
442	153.71	512.38	-0.90	0.00	-225.38
443	153.71	512.38	-0.90	0.00	-225.38
444	153.71	512.38	-0.90	0.00	-225.38
445	153.71	512.38	-0.90	0.00	-225.38
446	153.71	512.38	-0.90	0.00	-225.38
447	153.71	512.38	-0.90	0.00	-225.38
448	153.71	512.38	-0.90	0.00	-225.38
449	153.71	512.38	-0.90	0.00	-225.38
450	153.71	512.38	-0.90	0.00	-225.38
451	153.71	512.38	-0.90	0.00	-225.38
452	153.71	512.38	-0.90	0.00	-225.38
453	153.71	512.38	-0.90	0.00	-225.38
454	153.71	512.38	-0.90	0.00	-225.38
455	153.71	512.38	-0.90	0.00	-225.38
456	153.71	512.38	-0.90	0.00	-225.38
457	153.71	512.38	-0.90	0.00	-225.38
458	153.71	512.38	-0.90	0.00	-225.38
459	153.71	512.38	-0.90	0.00	-225.38
460	153.71	512.38	-0.90	0.00	-225.38
461	153.71	512.38	-0.90	0.00	-225.38
462	-26.45	0.78	1.47	-38.93	11.44
463	-27.51	-0.62	3.80	-51.17	17.05
464	-27.62	4.81	5.69	-82.03	17.29
465	-28.79	6.91	4.61	-121.18	-7.74
466	-21.78	28.35	1.38	-138.20	-80.60
467	11.53	70.09	-2.47	-89.93	-153.73
468	13.78	112.19	-4.29	-50.36	-178.61
469	26.86	159.55	-3.78	-23.91	-176.86
470	41.14	197.38	-2.12	-13.24	-170.27
471	54.76	231.54	-0.51	-9.09	-162.11
472	67.53	264.50	0.70	-7.50	-155.25
473	79.53	296.82	1.84	-7.12	-149.43
474	90.88	328.57	2.49	-6.79	-144.24
475	101.64	359.67	2.66	-6.62	-139.32
476	111.85	390.04	2.54	-7.28	-134.45
477	121.55	419.75	2.62	-9.17	-129.59
478	130.93	449.92	2.50	-13.63	-126.25
479	140.42	485.78	1.77	-23.33	-126.24
480	139.94	510.87	0.18	-31.06	-139.02
481	170.78	554.40	3.49	-16.90	-167.20
482	175.39	584.64	-1.87	0.00	-183.51
483	175.39	584.64	-1.87	0.00	-183.51
484	175.39	584.64	-1.87	0.00	-183.51
485	175.39	584.64	-1.87	0.00	-183.51
486	175.39	584.64	-1.87	0.00	-183.51
487	175.39	584.64	-1.87	0.00	-183.51
488	175.39	584.64	-1.87	0.00	-183.51
489	175.39	584.64	-1.87	0.00	-183.51
490	175.39	584.64	-1.87	0.00	-183.51
491	175.39	584.64	-1.87	0.00	-183.51
492	175.39	584.64	-1.87	0.00	-183.51
493	175.39	584.64	-1.87	0.00	-183.51
494	175.39	584.64	-1.87	0.00	-183.51
495	175.39	584.64	-1.87	0.00	-183.51
496	175.39	584.64	-1.87	0.00	-183.51
497	175.39	584.64	-1.87	0.00	-183.51
498	175.39	584.64	-1.87	0.00	-183.51
499	175.39	584.64	-1.87	0.00	-183.51
500	175.39	584.64	-1.87	0.00	-183.51
501	175.39	584.64	-1.87	0.00	-183.51
502	175.39	584.64	-1.87	0.00	-183.51
503	175.39	584.64	-1.87	0.00	-183.51
504	175.39	584.64	-1.87	0.00	-183.51
505	175.39	584.64	-1.87	0.00	-183.51
506	-13.43	1.02	1.02	-42.82	-0.54
507	-13.53	4.10	3.03	-51.16	-2.86
508	-11.81	9.79	4.61	-68.70	-13.86
509	-7.83	21.53	3.76	-95.73	-40.13
510	4.45	42.28	0.55	-111.32	-79.42
511	20.33	73.05	-2.97	-79.32	-118.61
512	30.33	110.81	-4.78	-42.20	-144.82

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
513	37.65	151.85	-4.57	-22.99	-155.73
514	47.90	191.59	-3.27	-13.04	-157.43
515	59.11	228.11	-1.74	-8.51	-155.26
516	70.49	262.67	-0.44	-6.64	-151.64
517	81.72	296.00	0.65	-6.12	-147.65
518	92.69	328.44	1.47	-6.11	-143.59
519	103.35	360.14	1.82	-5.86	-139.57
520	113.69	391.27	1.92	-6.48	-135.72
521	123.73	422.17	2.05	-8.18	-132.47
522	133.53	453.81	1.90	-11.36	-130.71
523	142.10	484.95	1.23	-15.26	-132.27
524	155.65	517.33	0.24	-18.70	-137.85
525	167.76	550.74	-1.38	-11.38	-142.16
526	169.58	565.28	-1.70	0.00	-142.81
527	169.58	565.28	-1.70	0.00	-142.81
528	169.58	565.28	-1.70	0.00	-142.81
529	169.58	565.28	-1.70	0.00	-142.81
530	169.58	565.28	-1.70	0.00	-142.81
531	169.58	565.28	-1.70	0.00	-142.81
532	169.58	565.28	-1.70	0.00	-142.81
533	169.58	565.28	-1.70	0.00	-142.81
534	169.58	565.28	-1.70	0.00	-142.81
535	169.58	565.28	-1.70	0.00	-142.81
536	169.58	565.28	-1.70	0.00	-142.81
537	169.58	565.28	-1.70	0.00	-142.81
538	169.58	565.28	-1.70	0.00	-142.81
539	169.58	565.28	-1.70	0.00	-142.81
540	169.58	565.28	-1.70	0.00	-142.81
541	169.58	565.28	-1.70	0.00	-142.81
542	169.58	565.28	-1.70	0.00	-142.81
543	169.58	565.28	-1.70	0.00	-142.81
544	169.58	565.28	-1.70	0.00	-142.81
545	169.58	565.28	-1.70	0.00	-142.81
546	169.58	565.28	-1.70	0.00	-142.81
547	169.58	565.28	-1.70	0.00	-142.81
548	169.58	565.28	-1.70	0.00	-142.81
549	169.58	565.28	-1.70	0.00	-142.81
550	169.58	565.28	-1.70	0.00	-142.81
551	169.58	565.28	-1.70	0.00	-142.81
552	-2.32	0.35	0.54	-34.59	-4.90
553	-1.94	4.43	1.89	-38.89	-11.26
554	0.78	13.33	2.82	-48.36	-27.33
555	7.23	27.95	2.16	-58.51	-50.24
556	18.09	49.42	0.09	-62.23	-78.09
557	28.96	77.73	-2.23	-49.00	-105.50
558	37.42	111.27	-3.61	-31.43	-127.25
559	45.18	149.81	-3.72	-17.64	-141.03
560	53.43	188.36	-2.93	-10.29	-147.54
561	62.93	225.55	-1.83	-6.61	-149.22
562	73.14	261.04	-0.81	-5.00	-148.24
563	83.67	295.15	0.05	-4.52	-145.90
564	94.29	328.17	0.77	-4.64	-142.92
565	104.87	360.37	1.14	-4.38	-139.71
566	115.32	392.02	1.26	-4.80	-136.65
567	125.66	423.49	1.35	-5.88	-134.13
568	135.77	454.95	1.19	-7.44	-132.70
569	146.61	487.13	0.65	-8.79	-132.66
570	157.02	518.07	-0.19	-7.84	-133.06
571	166.15	549.73	-0.91	-2.96	-132.34
572	169.67	565.57	-1.08	0.00	-131.55
573	169.67	565.57	-1.08	0.00	-131.55
574	169.67	565.57	-1.08	0.00	-131.55
575	169.67	565.57	-1.08	0.00	-131.55
576	169.67	565.57	-1.08	0.00	-131.55
577	169.67	565.57	-1.08	0.00	-131.55
578	169.67	565.57	-1.08	0.00	-131.55
579	169.67	565.57	-1.08	0.00	-131.55
580	169.67	565.57	-1.08	0.00	-131.55
581	169.67	565.57	-1.08	0.00	-131.55
582	169.67	565.57	-1.08	0.00	-131.55
583	169.67	565.57	-1.08	0.00	-131.55
584	169.67	565.57	-1.08	0.00	-131.55
585	169.67	565.57	-1.08	0.00	-131.55
586	169.67	565.57	-1.08	0.00	-131.55
587	169.67	565.57	-1.08	0.00	-131.55
588	169.67	565.57	-1.08	0.00	-131.55

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
589	169.67	565.57	-1.08	0.00	-131.55
590	169.67	565.57	-1.08	0.00	-131.55
591	169.67	565.57	-1.08	0.00	-131.55
592	169.67	565.57	-1.08	0.00	-131.55
593	169.67	565.57	-1.08	0.00	-131.55
594	169.67	565.57	-1.08	0.00	-131.55
595	169.67	565.57	-1.08	0.00	-131.55
596	169.67	565.57	-1.08	0.00	-131.55
597	169.67	565.57	-1.08	0.00	-131.55
598	169.67	565.57	-1.08	0.00	-131.55
599	169.67	565.57	-1.08	0.00	-131.55
600	4.81	-0.27	0.20	-18.94	-7.15
601	5.54	4.66	0.85	-20.68	-15.09
602	10.45	14.91	1.26	-24.33	-32.75
603	17.24	31.05	0.91	-27.83	-53.84
604	25.55	52.98	-0.05	-28.91	-77.11
605	34.01	80.43	-1.15	-23.42	-99.72
606	41.65	112.39	-1.88	-16.05	-118.95
607	49.06	149.22	-2.02	-9.63	-133.05
608	56.82	186.99	-1.68	-5.65	-141.49
609	65.45	224.12	-1.12	-3.61	-145.25
610	74.95	259.99	-0.56	-2.69	-145.89
611	85.02	294.53	-0.09	-2.41	-144.65
612	95.40	327.93	0.32	-2.51	-142.40
613	105.90	360.45	0.55	-2.34	-139.75
614	116.44	392.40	0.63	-2.54	-137.13
615	126.94	424.07	0.66	-3.02	-134.88
616	137.50	455.85	0.55	-3.60	-133.21
617	148.02	488.03	0.26	-3.78	-131.92
618	157.52	518.67	-0.14	-2.93	-130.30
619	165.79	549.29	-0.46	-1.06	-127.96
620	169.27	564.25	-0.52	0.00	-126.63
621	169.27	564.25	-0.52	0.00	-126.63
622	169.27	564.25	-0.52	0.00	-126.63
623	169.27	564.25	-0.52	0.00	-126.63
624	169.27	564.25	-0.52	0.00	-126.63
625	7.25	-0.28	0.00	0.00	-7.80
626	8.61	4.74	0.00	0.00	-16.16
627	13.94	15.41	0.00	0.00	-34.20
628	20.39	31.97	0.00	0.00	-54.74
629	27.97	54.08	0.00	0.00	-76.76
630	35.73	81.32	0.00	0.00	-98.04
631	43.01	112.81	0.00	0.00	-116.48
632	50.32	149.15	0.00	0.00	-130.55
633	57.92	186.60	0.00	0.00	-139.49
634	66.32	223.68	0.00	0.00	-143.89
635	75.59	259.64	0.00	0.00	-145.05
636	85.49	294.31	0.00	0.00	-144.20
637	95.79	327.83	0.00	0.00	-142.22
638	106.27	360.46	0.00	0.00	-139.76
639	116.83	392.50	0.00	0.00	-137.27
640	127.42	424.28	0.00	0.00	-135.08
641	138.00	456.13	0.00	0.00	-133.27
642	148.41	488.33	0.00	0.00	-131.59
643	157.59	518.81	0.00	0.00	-129.43
644	165.68	549.17	0.00	0.00	-126.69
645	169.22	564.05	0.00	0.00	-125.24
646	169.22	564.05	0.00	0.00	-125.24
647	169.22	564.05	0.00	0.00	-125.24
648	169.22	564.05	0.00	0.00	-125.24
649	169.22	564.05	0.00	0.00	-125.24
650	4.81	-0.27	1.14	41.18	-7.15
651	5.54	4.66	1.06	33.71	-15.09
652	10.45	14.91	1.24	32.85	-32.75
653	17.24	31.05	1.19	32.73	-53.84
654	25.55	52.98	1.69	29.71	-77.11
655	34.01	80.43	2.59	26.48	-99.72
656	41.65	112.39	3.36	21.40	-118.95
657	49.06	149.22	3.35	15.25	-133.05
658	56.82	186.99	2.65	10.13	-141.49
659	65.45	224.12	1.65	6.58	-145.25
660	74.95	259.99	0.75	4.37	-145.89
661	85.02	294.53	0.11	3.12	-144.65
662	95.40	327.93	-0.23	2.54	-142.40
663	105.90	360.45	-0.47	3.04	-139.75
664	116.44	392.40	-0.61	3.89	-137.13

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
665	126.94	424.07	-0.60	5.00	-134.88
666	137.50	455.85	-0.50	5.89	-133.21
667	148.02	488.03	-0.22	5.77	-131.92
668	157.52	518.67	0.17	4.07	-130.30
669	165.79	549.29	0.61	1.34	-127.96
670	169.27	564.25	0.67	0.00	-126.63
671	169.27	564.25	0.67	0.00	-126.63
672	169.27	564.25	0.67	0.00	-126.63
673	169.27	564.25	0.67	0.00	-126.63
674	169.27	564.25	0.67	0.00	-126.63
675	-2.32	0.35	2.37	76.51	-4.90
676	-1.94	4.43	2.47	63.74	-11.26
677	0.78	13.33	2.65	65.99	-27.33
678	7.23	27.95	2.44	69.58	-50.24
679	18.09	49.42	3.31	64.11	-78.09
680	28.96	77.73	5.62	56.08	-105.50
681	37.42	111.27	7.13	43.16	-127.25
682	45.18	149.81	6.92	29.14	-141.03
683	53.43	188.36	5.07	18.75	-147.54
684	62.93	225.55	2.91	11.96	-149.22
685	73.14	261.04	1.15	7.93	-148.24
686	83.67	295.15	0.00	5.71	-145.90
687	94.29	328.17	-0.59	4.78	-142.92
688	104.87	360.37	-1.00	5.71	-139.71
689	115.32	392.02	-1.21	7.39	-136.65
690	125.66	423.49	-1.07	9.85	-134.13
691	135.77	454.95	-0.80	12.51	-132.70
692	146.61	487.13	-0.54	13.43	-132.66
693	157.02	518.07	0.38	10.67	-133.06
694	166.15	549.73	1.02	3.54	-132.34
695	169.67	565.57	1.44	0.00	-131.55
696	169.67	565.57	1.44	0.00	-131.55
697	169.67	565.57	1.44	0.00	-131.55
698	169.67	565.57	1.44	0.00	-131.55
699	169.67	565.57	1.44	0.00	-131.55
700	-13.43	1.02	3.80	97.00	-0.54
701	-13.53	4.10	4.54	84.11	-2.86
702	-11.81	9.79	5.74	96.85	-13.86
703	-7.83	21.53	4.24	116.11	-40.13
704	4.45	42.28	6.32	115.16	-79.42
705	20.33	73.05	9.44	92.73	-118.61
706	30.33	110.81	12.54	62.53	-144.82
707	37.65	151.85	10.46	39.47	-155.73
708	47.90	191.59	6.66	23.93	-157.43
709	59.11	228.11	3.21	14.96	-155.26
710	70.49	262.67	0.83	9.98	-151.64
711	81.72	296.00	-0.52	7.34	-147.65
712	92.69	328.44	-1.18	6.48	-143.59
713	103.35	360.14	-1.63	7.66	-139.57
714	113.69	391.27	-1.77	9.92	-135.72
715	123.73	422.17	-1.29	13.73	-132.47
716	133.53	453.81	-0.58	19.48	-130.71
717	142.10	484.95	0.08	24.80	-132.27
718	155.65	517.33	0.02	24.30	-137.85
719	167.76	550.74	2.81	12.83	-142.16
720	169.58	565.28	2.37	0.00	-142.81
721	169.58	565.28	2.37	0.00	-142.81
722	169.58	565.28	2.37	0.00	-142.81
723	169.58	565.28	2.37	0.00	-142.81
724	169.58	565.28	2.37	0.00	-142.81
725	-26.45	0.78	4.30	91.15	11.44
726	-27.51	-0.62	6.84	84.02	17.05
727	-27.62	4.81	11.43	117.31	17.29
728	-28.79	6.91	15.55	158.77	-7.74
729	-21.78	28.35	10.49	143.42	-80.60
730	11.53	70.09	21.18	118.07	-153.73
731	13.78	112.19	18.75	76.82	-178.61
732	26.86	159.55	12.39	41.26	-176.86
733	41.14	197.38	5.94	23.53	-170.27
734	54.76	231.54	1.89	14.71	-162.11
735	67.53	264.50	-0.51	10.15	-155.25
736	79.53	296.82	-1.52	7.83	-149.43
737	90.88	328.57	-2.04	7.51	-144.24
738	101.64	359.67	-2.35	8.65	-139.32
739	111.85	390.04	-2.39	10.89	-134.45
740	121.55	419.75	-1.52	15.10	-129.59

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
741	130.93	449.92	0.58	23.27	-126.25
742	140.42	485.78	2.73	38.63	-126.24
743	139.94	510.87	5.16	47.17	-139.02
744	170.78	554.40	1.29	18.91	-167.20
745	175.39	584.64	4.24	0.00	-183.51
746	175.39	584.64	4.24	0.00	-183.51
747	175.39	584.64	4.24	0.00	-183.51
748	175.39	584.64	4.24	0.00	-183.51
749	175.39	584.64	4.24	0.00	-183.51
750	-35.99	0.62	2.71	52.64	30.72
751	-39.92	-2.33	4.98	53.23	60.38
752	-45.36	-11.62	15.60	93.15	98.06
753	-45.85	-5.59	28.45	132.63	51.42
754	-47.39	16.89	80.93	93.50	-64.84
755	-37.11	62.19	31.48	89.60	-153.58
756	-6.59	140.11	19.72	64.64	-188.81
757	16.76	174.85	7.18	28.86	-189.03
758	35.19	204.20	1.49	16.67	-176.36
759	50.97	234.64	-1.46	11.19	-167.63
760	64.89	265.83	-2.59	8.55	-157.97
761	77.51	297.22	-2.99	7.62	-150.71
762	89.16	328.36	-3.15	7.94	-144.65
763	100.01	358.93	-3.16	8.68	-139.05
764	110.13	388.52	-3.06	10.08	-133.27
765	119.54	416.50	-2.19	12.84	-126.47
766	128.11	441.69	0.18	19.02	-117.43
767	137.76	467.64	7.99	37.20	-112.53
768	156.29	537.88	15.48	50.21	-143.56
769	161.93	554.26	59.84	12.00	-196.72
770	153.71	512.38	9.76	0.00	-225.38
771	153.71	512.38	9.76	0.00	-225.38
772	153.71	512.38	9.76	0.00	-225.38
773	153.71	512.38	9.76	0.00	-225.38
774	153.71	512.38	9.76	0.00	-225.38
775	-39.32	1.07	-1.04	-7.94	39.80
776	-45.53	-2.02	-1.90	-2.23	85.84
777	-55.47	-16.33	-3.18	1.24	150.63
778	-62.66	-30.48	-3.94	3.33	176.78
779	-56.06	14.63	-4.42	4.54	135.02
780	-15.11	280.18	-4.74	5.31	-26.31
781	-11.24	180.31	-4.96	5.87	-174.23
782	12.09	184.57	-5.09	6.36	-196.15
783	32.10	207.28	-5.14	6.79	-177.11
784	48.69	235.59	-5.10	7.18	-168.46
785	63.08	265.93	-4.97	7.54	-158.82
786	75.98	296.85	-4.75	7.84	-151.03
787	87.78	327.69	-4.43	8.05	-144.68
788	98.71	357.97	-4.02	8.15	-138.86
789	108.85	387.16	-3.54	8.09	-132.77
790	118.13	414.11	-3.00	7.81	-125.18
791	126.26	435.53	-2.45	7.21	-105.94
792	129.11	433.73	-1.94	6.15	-85.90
793	123.75	407.28	-1.59	4.52	-75.73
794	218.93	778.97	-1.42	1.88	-106.56
795	387.51	1291.71	-1.37	0.00	-142.53
796	387.51	1291.71	-1.37	0.00	-142.53
797	387.51	1291.71	-1.37	0.00	-142.53
798	387.51	1291.71	-1.37	0.00	-142.53
799	387.51	1291.71	-1.37	0.00	-142.53
800	-38.66	0.62	-0.56	-36.58	30.79
801	-41.99	-2.34	-0.33	-36.75	60.50
802	-47.44	-11.65	-1.36	-64.87	98.30
803	-48.55	-5.72	-3.77	-86.60	51.77
804	-50.10	16.66	-7.69	-82.83	-64.40
805	-39.83	61.85	-9.39	-45.90	-153.05
806	-9.32	139.61	-10.94	-33.58	-188.20
807	14.04	174.17	-10.67	-5.10	-188.37
808	32.50	203.31	-9.47	2.70	-175.67
809	48.32	233.51	-8.33	5.89	-167.05
810	62.30	264.46	-7.39	7.41	-157.42
811	75.02	295.59	-6.56	8.11	-150.22
812	86.80	326.49	-5.77	8.24	-144.27
813	97.80	356.84	-4.95	7.73	-138.82
814	108.10	386.24	-4.08	6.24	-133.24
815	117.70	414.10	-3.14	4.30	-126.66
816	126.49	439.23	-2.26	0.16	-117.88

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
817	136.38	465.22	-2.06	-13.43	-113.54
818	155.17	535.55	-2.80	-20.01	-144.47
819	161.13	552.11	-4.55	-3.35	-197.76
820	153.10	510.35	-3.69	0.00	-226.46
821	153.10	510.35	-3.69	0.00	-226.46
822	153.10	510.35	-3.69	0.00	-226.46
823	153.10	510.35	-3.69	0.00	-226.46
824	153.10	510.35	-3.69	0.00	-226.46
825	-30.56	0.78	-0.62	-54.99	11.57
826	-31.63	-0.66	0.00	-55.81	17.30
827	-31.76	4.69	-0.66	-80.58	17.77
828	-32.95	6.65	-3.27	-116.39	-7.22
829	-27.19	27.91	-7.48	-131.48	-79.92
830	6.09	69.42	-11.98	-79.47	-152.89
831	8.32	111.22	-14.25	-38.74	-177.62
832	21.41	158.21	-14.03	-11.28	-175.76
833	35.73	195.61	-12.50	0.32	-169.10
834	49.43	229.31	-10.85	5.33	-160.92
835	62.33	261.76	-9.41	7.71	-154.12
836	74.51	293.57	-8.18	8.78	-148.43
837	86.10	324.82	-7.05	8.92	-143.45
838	97.15	355.47	-5.94	8.09	-138.84
839	107.72	385.47	-4.80	6.06	-134.35
840	117.82	414.91	-3.64	3.86	-129.94
841	127.65	444.96	-2.65	-1.44	-127.11
842	137.62	480.87	-2.34	-12.80	-127.61
843	137.67	506.14	-3.21	-23.23	-140.82
844	169.14	550.02	-0.08	-12.92	-169.26
845	174.15	580.50	-4.82	0.00	-185.66
846	174.15	580.50	-4.82	0.00	-185.66
847	174.15	580.50	-4.82	0.00	-185.66
848	174.15	580.50	-4.82	0.00	-185.66
849	174.15	580.50	-4.82	0.00	-185.66
850	-19.56	1.02	-1.07	-59.10	-0.41
851	-19.66	4.05	-0.78	-56.00	-2.60
852	-17.98	9.62	-1.74	-67.47	-13.34
853	-14.04	21.17	-4.12	-91.16	-39.35
854	-3.64	41.65	-8.32	-104.82	-78.37
855	12.20	72.07	-12.51	-69.08	-117.31
856	22.15	109.40	-14.78	-30.76	-143.30
857	29.46	149.89	-14.90	-10.47	-154.03
858	39.74	188.99	-13.76	0.49	-155.61
859	51.05	224.81	-12.24	5.97	-153.41
860	62.60	258.60	-10.76	8.74	-149.86
861	74.09	291.16	-9.43	10.07	-146.06
862	85.40	322.83	-8.20	10.36	-142.31
863	96.50	353.83	-6.98	9.60	-138.74
864	107.36	384.36	-5.75	7.44	-135.47
865	118.00	414.84	-4.54	5.44	-132.91
866	128.47	446.27	-3.55	1.46	-131.92
867	137.79	477.45	-3.16	-4.12	-134.26
868	152.13	510.08	-3.68	-10.38	-140.50
869	165.22	543.98	-4.68	-7.85	-145.22
870	167.66	558.87	-4.90	0.00	-146.00
871	167.66	558.87	-4.90	0.00	-146.00
872	167.66	558.87	-4.90	0.00	-146.00
873	167.66	558.87	-4.90	0.00	-146.00
874	167.66	558.87	-4.90	0.00	-146.00
875	-10.40	0.35	-1.54	-51.15	-4.73
876	-10.03	4.38	-1.91	-44.03	-10.93
877	-7.35	13.14	-3.51	-47.45	-26.65
878	-3.00	27.51	-5.71	-54.27	-49.19
879	7.38	48.63	-8.77	-55.84	-76.67
880	18.15	76.50	-11.78	-39.09	-103.72
881	26.52	109.47	-13.67	-20.26	-125.15
882	34.22	147.28	-14.15	-5.29	-138.67
883	42.48	184.99	-13.58	3.17	-145.00
884	52.07	221.23	-12.54	7.93	-146.61
885	62.47	255.69	-11.40	10.60	-145.71
886	73.30	288.73	-10.28	12.05	-143.60
887	84.35	320.70	-9.18	12.62	-141.01
888	95.48	351.92	-8.05	12.30	-138.40
889	106.62	382.73	-6.87	10.89	-136.11
890	117.75	413.58	-5.70	8.56	-134.53
891	128.77	444.70	-4.71	6.28	-134.14
892	140.63	476.88	-4.16	3.23	-135.17

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
893	152.13	508.08	-4.25	1.20	-136.48
894	162.63	540.36	-4.60	1.14	-136.34
895	167.00	556.65	-4.66	0.00	-135.73
896	167.00	556.65	-4.66	0.00	-135.73
897	167.00	556.65	-4.66	0.00	-135.73
898	167.00	556.65	-4.66	0.00	-135.73
899	167.00	556.65	-4.66	0.00	-135.73
900	-5.15	-0.26	-1.87	-35.84	-6.96
901	-4.41	4.61	-2.92	-26.21	-14.69
902	-1.73	14.70	-5.04	-23.84	-31.90
903	4.13	30.57	-6.91	-24.03	-52.51
904	12.28	52.10	-8.88	-21.94	-75.29
905	20.56	79.01	-10.70	-13.95	-97.43
906	28.04	110.27	-11.98	-5.25	-116.21
907	35.32	146.21	-12.55	2.46	-129.94
908	43.02	182.92	-12.49	7.69	-138.12
909	51.69	218.86	-12.08	10.99	-141.77
910	61.36	253.43	-11.49	13.16	-142.46
911	71.74	286.60	-10.81	14.63	-141.47
912	82.60	318.63	-10.04	15.57	-139.71
913	93.77	349.85	-9.13	15.93	-137.79
914	105.13	380.67	-8.10	15.57	-136.13
915	116.62	411.47	-7.00	14.42	-135.07
916	128.32	442.71	-5.94	12.64	-134.74
917	140.16	474.78	-5.12	10.53	-134.83
918	151.07	505.65	-4.74	8.23	-134.40
919	161.14	536.98	-4.67	3.90	-132.81
920	165.74	552.47	-4.63	0.00	-131.72
921	165.74	552.47	-4.63	0.00	-131.72
922	165.74	552.47	-4.63	0.00	-131.72
923	165.74	552.47	-4.63	0.00	-131.72
924	165.74	552.47	-4.63	0.00	-131.72
925	-4.48	-0.27	-2.06	-17.28	-7.59
926	-3.61	4.71	-3.73	-6.00	-15.70
927	-1.03	15.22	-6.22	0.34	-33.19
928	4.90	31.49	-7.73	4.55	-53.12
929	12.22	53.15	-8.75	7.09	-74.51
930	19.71	79.78	-9.50	8.86	-95.17
931	26.72	110.47	-10.09	10.30	-113.03
932	33.78	145.75	-10.59	11.73	-126.60
933	41.20	181.94	-10.97	13.16	-135.17
934	49.55	217.58	-11.21	14.62	-139.37
935	58.91	251.95	-11.29	16.11	-140.55
936	69.10	284.94	-11.18	17.58	-139.95
937	79.89	316.74	-10.84	18.95	-138.51
938	91.10	347.72	-10.27	20.12	-136.90
939	102.60	378.27	-9.45	20.93	-135.57
940	114.36	408.84	-8.42	21.15	-134.82
941	126.33	439.89	-7.25	20.43	-134.66
942	138.38	471.81	-6.11	18.19	-134.69
943	149.34	502.40	-5.30	13.87	-134.03
944	159.71	533.48	-4.91	5.97	-132.24
945	164.69	548.95	-4.80	0.00	-131.10
946	164.69	548.95	-4.80	0.00	-131.10
947	164.69	548.95	-4.80	0.00	-131.10
948	164.69	548.95	-4.80	0.00	-131.10
949	164.69	548.95	-4.80	0.00	-131.10
950	-8.55	-0.25	-1.45	18.93	-6.93
951	-7.75	4.66	-3.60	25.64	-14.58
952	-5.12	14.76	-6.53	32.31	-31.58
953	-0.47	30.63	-8.47	36.38	-51.92
954	7.47	52.09	-8.54	35.93	-74.39
955	15.51	78.87	-8.22	32.33	-96.21
956	22.72	109.93	-8.14	28.45	-114.69
957	29.70	145.56	-8.58	23.54	-128.13
958	37.12	181.87	-9.41	19.73	-136.06
959	45.54	217.32	-10.33	18.19	-139.51
960	55.00	251.31	-11.10	19.04	-140.08
961	65.25	283.82	-11.58	20.55	-139.07
962	76.08	315.12	-11.71	22.43	-137.40
963	87.32	345.57	-11.50	24.48	-135.69
964	98.90	375.60	-10.93	26.54	-134.39
965	110.74	405.66	-10.00	28.22	-133.84
966	122.94	436.27	-8.74	28.64	-134.15
967	135.44	467.85	-7.29	26.31	-134.94
968	147.14	498.39	-6.07	19.90	-135.16

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
969	158.27	529.65	-5.36	8.22	-134.01
970	163.57	545.22	-5.18	0.00	-133.05
971	163.57	545.22	-5.18	0.00	-133.05
972	163.57	545.22	-5.18	0.00	-133.05
973	163.57	545.22	-5.18	0.00	-133.05
974	163.57	545.22	-5.18	0.00	-133.05
975	-17.12	0.38	-0.17	53.53	-4.67
976	-16.61	4.48	-2.08	54.72	-10.71
977	-14.04	13.27	-4.92	64.37	-26.02
978	-9.94	27.64	-6.97	72.12	-48.00
979	-2.14	48.64	-7.36	69.25	-74.86
980	8.12	76.25	-6.02	61.05	-101.27
981	15.94	108.83	-5.33	49.41	-122.08
982	23.02	146.03	-6.30	36.77	-135.00
983	30.69	182.94	-8.18	27.88	-140.81
984	39.74	218.21	-9.78	22.73	-142.02
985	49.70	251.52	-11.18	21.53	-140.87
986	60.24	283.24	-12.19	23.23	-138.69
987	71.18	313.74	-12.75	25.67	-136.26
988	82.44	343.41	-12.88	28.63	-134.06
989	93.97	372.63	-12.56	32.00	-132.47
990	105.79	401.96	-11.78	35.50	-131.88
991	117.80	431.73	-10.52	38.02	-132.76
992	131.00	462.87	-8.83	36.79	-135.19
993	144.09	493.34	-7.17	28.90	-137.81
994	156.76	525.42	-6.07	11.55	-138.54
995	162.55	541.84	-5.77	0.00	-138.21
996	162.55	541.84	-5.77	0.00	-138.21
997	162.55	541.84	-5.77	0.00	-138.21
998	162.55	541.84	-5.77	0.00	-138.21
999	162.55	541.84	-5.77	0.00	-138.21
1000	-29.42	1.06	1.33	73.28	-0.32
1001	-29.32	4.21	0.17	73.97	-2.27
1002	-27.79	9.85	-1.53	93.91	-12.39
1003	-24.24	21.40	-4.79	117.27	-37.56
1004	-17.71	41.71	-3.94	118.95	-75.63
1005	-2.67	71.77	-1.80	96.59	-113.59
1006	6.41	108.52	0.42	67.77	-138.61
1007	12.74	148.12	-2.52	46.25	-148.43
1008	22.07	186.05	-7.14	32.41	-149.19
1009	32.50	220.42	-9.93	25.33	-146.36
1010	43.32	252.50	-11.78	23.23	-142.39
1011	54.27	283.08	-13.15	25.34	-138.44
1012	65.34	312.56	-14.01	28.38	-134.87
1013	76.54	341.19	-14.40	32.16	-131.86
1014	87.93	369.28	-14.32	36.71	-129.58
1015	99.55	397.38	-13.75	42.13	-128.46
1016	111.50	426.65	-12.60	48.20	-129.33
1017	122.85	456.09	-10.83	51.51	-133.76
1018	139.64	487.43	-8.80	45.43	-141.96
1019	156.10	520.84	-7.08	22.22	-148.00
1020	160.75	535.85	-6.63	0.00	-149.22
1021	160.75	535.85	-6.63	0.00	-149.22
1022	160.75	535.85	-6.63	0.00	-149.22
1023	160.75	535.85	-6.63	0.00	-149.22
1024	160.75	535.85	-6.63	0.00	-149.22
1025	-43.31	0.85	1.95	66.69	11.90
1026	-44.09	-0.42	2.72	72.56	18.17
1027	-44.44	5.04	4.61	112.78	19.89
1028	-46.18	7.02	7.08	158.24	-4.80
1029	-44.85	28.09	0.85	145.56	-76.19
1030	-13.39	69.14	10.55	120.56	-147.82
1031	-12.40	110.22	7.20	80.78	-171.23
1032	-0.71	156.04	-0.11	46.93	-167.96
1033	12.22	191.92	-7.53	31.13	-160.31
1034	24.62	223.74	-11.03	24.48	-151.21
1035	36.39	253.93	-13.00	23.98	-143.77
1036	47.70	283.13	-14.47	26.70	-137.79
1037	58.79	311.44	-15.47	30.34	-132.94
1038	69.82	338.89	-16.01	34.73	-128.95
1039	80.94	365.53	-16.11	39.97	-125.67
1040	92.25	391.61	-15.75	46.51	-123.08
1041	104.02	418.51	-14.66	55.61	-122.64
1042	116.75	451.76	-11.30	69.21	-125.88
1043	120.17	474.92	-8.01	71.71	-141.69
1044	156.35	517.77	-9.06	27.95	-171.92

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1045	164.47	548.25	-8.34	0.00	-188.91
1046	164.47	548.25	-8.34	0.00	-188.91
1047	164.47	548.25	-8.34	0.00	-188.91
1048	164.47	548.25	-8.34	0.00	-188.91
1049	164.47	548.25	-8.34	0.00	-188.91
1050	-54.82	0.69	0.53	27.45	31.22
1051	-56.87	-2.00	1.23	40.24	61.62
1052	-62.62	-11.03	9.41	86.72	101.04
1053	-69.15	-5.15	20.78	130.07	56.47
1054	-69.67	17.04	72.17	93.64	-57.65
1055	-58.99	61.70	21.76	90.43	-144.30
1056	-34.78	138.60	9.05	67.03	-177.58
1057	-13.33	171.76	-4.53	33.12	-176.00
1058	3.22	199.06	-11.00	23.09	-161.76
1059	17.21	226.97	-13.06	21.26	-152.48
1060	29.55	255.16	-14.73	23.79	-143.86
1061	40.92	283.07	-16.04	27.31	-136.14
1062	51.79	310.30	-17.01	31.51	-130.17
1063	62.48	336.58	-17.61	36.23	-125.31
1064	73.21	361.62	-17.83	41.45	-121.02
1065	84.15	384.99	-17.62	47.42	-116.50
1066	95.30	405.75	-16.92	55.29	-110.34
1067	108.70	427.83	-8.73	72.12	-109.83
1068	131.91	494.87	-0.60	78.71	-143.63
1069	144.11	509.48	44.00	22.47	-199.15
1070	140.22	467.41	-5.91	0.00	-228.62
1071	140.22	467.41	-5.91	0.00	-228.62
1072	140.22	467.41	-5.91	0.00	-228.62
1073	140.22	467.41	-5.91	0.00	-228.62
1074	140.22	467.41	-5.91	0.00	-228.62
1075	-59.75	1.16	-2.46	-26.59	40.33
1076	-62.33	-1.57	-4.28	-13.04	87.24
1077	-72.67	-15.49	-7.08	-5.94	154.08
1078	-80.80	-29.30	-8.82	-1.64	182.67
1079	-78.03	15.30	-10.08	2.32	143.43
1080	-42.78	280.28	-11.18	5.50	-15.45
1081	-41.12	179.44	-12.23	8.44	-161.04
1082	-20.28	182.09	-13.33	11.65	-180.78
1083	-2.81	202.69	-14.44	15.07	-159.79
1084	11.30	228.34	-15.53	18.79	-149.48
1085	23.38	255.46	-16.59	22.85	-141.66
1086	34.27	282.59	-17.57	27.27	-133.00
1087	44.56	309.06	-18.42	31.99	-126.34
1088	54.67	334.41	-19.06	36.86	-120.90
1089	64.91	358.17	-19.41	41.57	-116.00
1090	75.48	379.34	-19.34	45.51	-110.51
1091	86.29	394.85	-18.83	47.57	-93.03
1092	93.45	387.46	-17.98	45.77	-77.55
1093	93.70	365.40	-17.42	37.43	-71.93
1094	196.91	724.27	-17.24	17.17	-106.02
1095	370.84	1236.15	-17.07	0.00	-143.14
1096	370.84	1236.15	-17.07	0.00	-143.14
1097	370.84	1236.15	-17.07	0.00	-143.14
1098	370.84	1236.15	-17.07	0.00	-143.14
1099	370.84	1236.15	-17.07	0.00	-143.14
1100	-56.20	0.75	-1.70	-55.01	31.39
1101	-58.02	-1.75	-2.15	-48.73	62.12
1102	-63.99	-10.51	-4.33	-73.51	102.30
1103	-70.97	-4.40	-7.48	-93.25	58.61
1104	-72.11	17.95	-12.05	-87.94	-54.61
1105	-62.17	62.67	-14.47	-48.32	-140.41
1106	-40.44	139.54	-16.85	-33.41	-172.86
1107	-20.29	172.49	-17.57	-1.97	-170.44
1108	-5.13	199.48	-17.50	9.06	-155.33
1109	7.38	226.95	-17.60	15.87	-145.14
1110	18.16	254.53	-18.02	21.43	-136.74
1111	27.92	281.62	-18.67	26.70	-128.12
1112	37.20	307.75	-19.42	31.94	-121.27
1113	46.43	332.55	-20.17	37.01	-115.58
1114	56.02	355.61	-20.78	41.30	-110.62
1115	66.38	376.36	-21.07	43.37	-105.65
1116	77.80	393.79	-21.02	39.82	-96.98
1117	92.59	411.91	-21.18	22.27	-96.61
1118	118.13	474.69	-22.24	10.22	-133.30
1119	133.93	485.33	-24.29	14.44	-189.36
1120	132.48	441.61	-23.33	0.00	-219.07

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1121	132.48	441.61	-23.33	0.00	-219.07
1122	132.48	441.61	-23.33	0.00	-219.07
1123	132.48	441.61	-23.33	0.00	-219.07
1124	132.48	441.61	-23.33	0.00	-219.07
1125	-45.80	1.05	-1.41	-72.98	12.28
1126	-46.13	0.14	-1.12	-69.06	19.21
1127	-46.94	6.06	-2.45	-91.38	22.44
1128	-49.62	8.52	-5.53	-125.65	-2.64
1129	-49.54	29.92	-10.24	-139.40	-72.50
1130	-22.26	71.09	-15.38	-84.89	-142.48
1131	-23.52	112.08	-18.44	-41.38	-164.17
1132	-14.42	157.48	-19.19	-10.74	-156.89
1133	-4.25	192.74	-18.78	4.29	-148.34
1134	5.20	223.66	-18.41	13.09	-138.75
1135	13.84	252.67	-18.45	19.75	-129.47
1136	21.91	280.28	-18.90	25.70	-121.61
1137	29.75	306.46	-19.68	31.44	-114.85
1138	37.75	331.04	-20.67	36.92	-109.05
1139	46.37	353.82	-21.75	41.47	-104.17
1140	56.25	374.76	-22.81	43.41	-100.38
1141	68.31	394.99	-23.82	39.22	-99.29
1142	83.76	420.10	-25.02	26.41	-102.52
1143	92.02	434.29	-27.12	10.60	-118.87
1144	135.60	468.59	-29.03	7.40	-149.89
1145	148.63	495.43	-29.48	0.00	-167.29
1146	148.63	495.43	-29.48	0.00	-167.29
1147	148.63	495.43	-29.48	0.00	-167.29
1148	148.63	495.43	-29.48	0.00	-167.29
1149	148.63	495.43	-29.48	0.00	-167.29
1150	-32.45	1.41	-1.42	-76.38	-0.51
1151	-31.75	5.06	-1.03	-70.60	-2.16
1152	-30.97	11.40	-2.08	-80.68	-11.17
1153	-28.88	23.66	-4.60	-103.41	-34.45
1154	-25.75	44.48	-9.13	-116.00	-70.22
1155	-15.46	74.69	-13.87	-77.92	-105.66
1156	-9.76	111.28	-16.86	-36.63	-128.07
1157	-7.28	150.21	-17.87	-12.99	-135.19
1158	-2.04	187.18	-17.77	1.50	-133.23
1159	4.00	220.23	-17.47	10.82	-127.64
1160	10.12	250.57	-17.46	17.87	-120.81
1161	16.16	278.86	-17.91	24.14	-113.84
1162	22.22	305.29	-18.83	30.25	-107.08
1163	28.61	329.84	-20.17	36.30	-100.81
1164	35.80	352.44	-21.90	41.85	-95.44
1165	44.53	373.12	-24.05	45.65	-91.71
1166	56.15	392.46	-26.71	45.41	-90.66
1167	71.23	409.23	-29.69	40.15	-93.99
1168	95.84	426.07	-33.06	30.87	-101.84
1169	124.05	445.04	-35.66	13.73	-108.24
1170	136.06	453.55	-35.94	0.00	-109.82
1171	136.06	453.55	-35.94	0.00	-109.82
1172	136.06	453.55	-35.94	0.00	-109.82
1173	136.06	453.55	-35.94	0.00	-109.82
1174	136.06	453.55	-35.94	0.00	-109.82
1175	-19.80	0.95	-1.35	-67.36	-5.00
1176	-18.66	5.60	-1.11	-59.91	-10.73
1177	-17.23	15.34	-2.12	-63.26	-24.72
1178	-15.19	30.70	-4.10	-69.90	-44.27
1179	-13.13	52.36	-7.33	-71.03	-68.01
1180	-7.99	80.13	-10.80	-51.88	-90.97
1181	-4.67	112.43	-13.31	-29.86	-108.18
1182	-2.63	148.64	-14.53	-11.40	-117.44
1183	-0.30	184.20	-14.79	0.58	-119.57
1184	3.00	217.69	-14.75	8.97	-117.04
1185	6.74	248.75	-14.90	15.60	-111.91
1186	10.68	277.55	-15.47	21.64	-105.34
1187	14.80	304.22	-16.56	27.73	-97.99
1188	19.29	328.74	-18.20	34.16	-90.35
1189	24.55	351.11	-20.48	40.86	-83.07
1190	31.34	371.30	-23.65	47.27	-77.09
1191	40.80	388.28	-28.12	52.11	-73.39
1192	57.69	402.18	-34.03	52.58	-72.10
1193	82.16	411.48	-39.78	45.16	-71.77
1194	112.54	421.28	-43.55	23.79	-70.98
1195	128.18	427.27	-43.68	0.00	-70.42
1196	128.18	427.27	-43.68	0.00	-70.42

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1197	128.18	427.27	-43.68	0.00	-70.42
1198	128.18	427.27	-43.68	0.00	-70.42
1199	128.18	427.27	-43.68	0.00	-70.42
1200	-9.70	0.63	-1.04	-50.32	-7.60
1201	-8.49	5.99	-0.89	-42.91	-15.13
1202	-7.54	17.33	-1.67	-42.28	-30.91
1203	-6.38	34.50	-2.98	-43.54	-48.32
1204	-5.30	56.80	-4.98	-42.56	-66.72
1205	-3.11	83.69	-7.17	-31.44	-83.93
1206	-1.49	114.21	-8.95	-19.22	-97.68
1207	-0.62	148.42	-10.01	-7.85	-106.41
1208	0.38	182.87	-10.43	0.72	-109.71
1209	1.82	216.05	-10.59	7.09	-108.41
1210	3.67	247.27	-10.87	12.40	-103.75
1211	5.75	276.28	-11.51	17.45	-96.63
1212	8.01	302.99	-12.63	22.78	-87.63
1213	10.54	327.30	-14.30	28.75	-77.18
1214	13.61	349.19	-16.67	35.66	-65.66
1215	17.76	368.63	-20.06	43.57	-53.23
1216	24.38	385.67	-25.56	51.82	-42.98
1217	34.79	395.62	-34.15	56.95	-35.33
1218	61.77	398.77	-46.19	48.66	-26.63
1219	101.52	397.21	-52.25	17.95	-19.16
1220	118.15	393.82	-53.59	0.00	-17.01
1221	118.15	393.82	-53.59	0.00	-17.01
1222	118.15	393.82	-53.59	0.00	-17.01
1223	118.15	393.82	-53.59	0.00	-17.01
1224	118.15	393.82	-53.59	0.00	-17.01
1225	-2.79	0.86	-0.53	-27.90	-9.20
1226	-2.13	5.99	-0.42	-22.30	-17.96
1227	-1.80	18.20	-0.80	-21.09	-34.99
1228	-1.34	36.20	-1.44	-20.96	-51.41
1229	-0.95	58.86	-2.40	-19.82	-67.30
1230	-0.35	85.44	-3.48	-14.62	-81.69
1231	0.05	115.10	-4.41	-9.01	-93.33
1232	0.16	148.28	-5.02	-3.59	-101.05
1233	0.32	181.95	-5.32	0.80	-104.10
1234	0.70	214.72	-5.49	4.30	-102.60
1235	1.30	245.77	-5.73	7.36	-97.13
1236	2.04	274.62	-6.20	10.41	-88.19
1237	2.86	300.97	-6.98	13.75	-76.01
1238	3.80	324.60	-8.13	17.66	-57.48
1239	4.96	345.30	-9.73	22.49	-35.66
1240	6.67	363.04	-12.09	28.57	-10.36
1241	9.63	378.47	-15.70	35.90	17.79
1242	17.02	396.26	-24.07	42.81	42.71
1243	21.55	390.04	-37.02	42.45	58.81
1244	113.49	391.20	-63.79	30.06	85.22
1245	113.49	378.32	-65.15	0.00	105.81
1246	113.49	378.32	-65.15	0.00	105.81
1247	113.49	378.32	-65.15	0.00	105.81
1248	113.49	378.32	-65.15	0.00	105.81
1249	113.49	378.32	-65.15	0.00	105.81
1250	-0.14	0.06	-0.11	-15.45	-12.84
1251	0.12	5.16	0.10	-11.32	-22.62
1252	0.06	17.71	0.16	-10.51	-40.55
1253	0.24	35.98	0.06	-10.27	-56.38
1254	0.36	58.71	-0.19	-9.48	-71.12
1255	0.36	85.05	-0.52	-6.92	-84.12
1256	0.25	114.32	-0.83	-4.19	-94.46
1257	0.09	147.14	-1.05	-1.54	-101.14
1258	-0.03	180.45	-1.18	0.68	-103.26
1259	-0.09	212.81	-1.30	2.54	-100.48
1260	-0.09	243.31	-1.53	4.24	-92.87
1261	-0.08	271.38	-1.93	6.00	-79.46
1262	-0.10	296.62	-2.55	7.97	-56.88
1263	-0.16	318.62	-3.42	10.35	-28.70
1264	-0.32	336.74	-4.61	13.40	6.72
1265	-0.50	350.16	-6.21	17.42	51.94
1266	-1.43	357.40	-8.94	22.82	110.77
1267	0.70	359.42	-11.62	28.56	187.45
1268	-3.33	402.57	-28.22	36.29	254.37
1269	97.21	398.28	-69.55	-18.87	230.90
1270	97.21	398.28	-69.55	-18.87	230.90
1271	97.21	398.28	-69.55	-18.87	230.90
1272	97.21	398.28	-69.55	-18.87	230.90

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1273	97.21	398.28	-69.55	-18.87	230.90

Combinazione n° 5 - SLEF

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1	-0.12	0.07	0.32	29.55	-11.77
2	-2.60	0.86	1.35	52.39	-8.49
3	-2.05	5.99	1.48	35.45	-16.64
4	0.12	5.16	0.03	17.94	-20.86
5	-9.13	0.63	3.08	94.09	-6.96
6	-8.12	5.99	3.73	68.15	-13.96
7	-1.72	18.20	2.40	28.23	-32.62
8	0.06	17.71	0.06	13.97	-37.65
9	-7.22	17.33	5.67	56.97	-28.77
10	-18.82	0.95	5.04	127.20	-4.47
11	-17.88	5.60	6.59	95.13	-9.75
12	-16.48	15.34	9.43	86.02	-22.86
13	-1.28	36.20	3.08	24.07	-48.26
14	0.24	35.98	0.15	11.67	-52.74
15	-6.12	34.50	6.82	50.57	-45.40
16	-14.57	30.70	10.89	82.42	-41.54
17	-31.14	1.41	7.11	145.70	-0.29
18	-30.52	5.06	9.97	112.01	-1.67
19	-29.59	11.40	14.66	112.80	-9.98
20	-27.66	23.66	15.28	124.57	-32.19
21	-0.91	58.86	3.89	20.16	-63.61
22	0.37	58.71	0.34	9.77	-66.98
23	-5.16	56.80	8.42	42.71	-63.19
24	-12.78	52.36	13.09	71.63	-64.51
25	-25.09	44.48	18.93	118.24	-66.83
26	-44.34	1.05	8.13	138.35	12.28
27	-44.51	0.14	13.33	108.75	19.21
28	-45.21	6.06	22.14	129.51	22.44
29	-47.21	8.52	28.79	163.33	-1.87
30	-48.31	29.92	25.52	142.67	-69.69
31	-0.35	85.44	4.91	17.88	-77.66
32	0.36	85.05	0.67	8.65	-79.69
33	-3.11	83.69	10.47	37.86	-80.00
34	-7.99	80.13	16.67	62.32	-86.98
35	-15.46	74.69	23.44	94.73	-101.56
36	-22.26	71.09	37.71	116.53	-138.23
37	-54.73	0.81	6.94	98.72	31.39
38	-56.10	-1.22	12.33	75.30	62.12
39	-61.98	-9.28	27.74	102.10	102.30
40	-69.36	-4.40	43.48	133.80	58.61
41	-70.35	17.95	97.95	89.44	-54.61
42	-60.51	62.67	50.09	85.32	-140.41
43	0.05	115.10	5.90	14.25	-89.14
44	0.25	114.32	1.08	6.92	-89.93
45	-1.49	114.21	12.40	29.67	-93.57
46	-4.67	112.43	19.44	46.49	-104.01
47	-9.76	111.28	27.88	61.80	-123.80
48	-23.52	112.08	36.68	72.74	-159.95
49	-40.44	139.54	39.78	57.64	-172.86
50	-58.31	1.32	3.24	35.58	40.33
51	-60.30	-0.64	5.63	17.34	87.24
52	-70.16	-11.88	9.30	7.46	154.08
53	-77.20	-17.79	11.52	1.92	182.67
54	-76.15	15.30	13.07	-0.61	143.43
55	-42.78	280.28	14.36	-2.65	-15.45
56	-41.12	179.44	15.57	-4.65	-161.04
57	0.16	148.28	6.61	9.77	-96.88
58	0.09	147.14	1.44	4.79	-96.70
59	-0.62	148.42	13.50	19.82	-102.31
60	-2.63	148.64	20.54	29.22	-113.32
61	-7.28	150.21	27.20	35.79	-131.07
62	-14.42	157.48	31.77	34.40	-155.38
63	-20.29	172.49	28.68	19.29	-170.44
64	-20.28	182.09	16.82	-6.98	-180.78
65	-53.38	0.76	3.28	-0.54	31.22
66	-54.99	-1.47	6.55	-21.05	61.62
67	-60.66	-9.79	10.46	-58.67	101.04
68	-67.62	-5.15	11.34	-84.93	56.47
69	-68.02	17.04	11.98	-86.84	-57.65

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
70	-57.48	61.70	9.00	-58.89	-144.30
71	-34.78	138.60	8.01	-49.89	-177.58
72	-13.33	171.76	8.77	-24.87	-176.00
73	0.32	181.95	6.95	5.26	-100.07
74	-0.03	180.45	1.70	2.54	-99.03
75	0.38	182.87	13.76	10.58	-105.73
76	-0.30	184.20	19.98	14.99	-115.60
77	-2.04	187.18	24.84	16.60	-129.29
78	-4.25	192.74	26.78	13.22	-145.82
79	-5.13	199.48	24.39	3.86	-155.33
80	-2.81	202.69	18.09	-9.62	-159.79
81	3.22	199.06	11.33	-20.65	-161.76
82	-41.90	0.85	3.46	-17.42	11.90
83	-42.52	-0.42	7.30	-39.84	18.17
84	-42.81	5.04	11.49	-74.79	19.89
85	-43.92	7.02	11.83	-115.72	-3.85
86	-43.83	28.09	9.12	-135.91	-73.15
87	-13.39	69.14	6.52	-94.21	-143.31
88	-12.40	110.22	5.28	-56.64	-166.71
89	-0.71	156.04	6.28	-32.43	-163.87
90	12.22	191.92	8.60	-24.17	-156.08
91	0.70	214.72	7.13	1.13	-98.80
92	-0.08	212.81	1.94	0.40	-96.58
93	1.82	216.05	13.70	2.70	-104.62
94	3.00	217.69	19.16	3.88	-113.22
95	4.00	220.23	22.87	3.45	-123.80
96	5.20	223.66	24.19	0.45	-134.92
97	7.38	226.95	22.80	-5.27	-144.36
98	11.30	228.34	19.36	-12.61	-149.48
99	17.21	226.97	15.42	-19.54	-150.36
100	24.62	223.74	12.52	-22.68	-146.94
101	-28.15	1.06	3.09	-21.33	-0.05
102	-28.14	4.21	6.61	-40.61	-1.69
103	-26.53	9.85	10.46	-63.26	-11.02
104	-23.22	21.40	10.83	-93.03	-35.04
105	-17.71	41.71	8.58	-111.02	-71.91
106	-2.67	71.77	5.90	-85.14	-109.10
107	6.41	108.52	4.93	-49.86	-133.90
108	12.74	148.12	5.76	-32.65	-143.81
109	22.07	186.05	7.75	-24.83	-144.69
110	32.50	220.42	11.33	-22.62	-141.88
111	1.30	245.77	7.42	-2.59	-93.62
112	-0.09	243.31	2.29	-1.62	-89.39
113	3.67	247.27	13.90	-4.00	-100.16
114	6.74	248.75	18.90	-4.87	-108.23
115	10.12	250.57	22.10	-6.18	-117.04
116	13.84	252.67	23.31	-8.52	-125.63
117	18.16	254.53	22.64	-11.96	-132.82
118	23.38	255.46	20.61	-15.97	-137.63
119	29.55	255.16	18.05	-19.55	-139.69
120	36.39	253.93	15.80	-21.72	-139.43
121	43.32	252.50	14.33	-21.86	-137.89
122	-16.09	0.38	2.60	-14.21	-4.08
123	-15.83	4.48	5.49	-29.74	-9.62
124	-13.39	13.27	8.73	-44.87	-23.93
125	-9.55	27.64	9.50	-58.17	-44.96
126	-2.14	48.64	8.44	-64.17	-70.96
127	8.12	76.25	6.92	-56.07	-96.80
128	15.94	108.83	6.24	-40.19	-117.35
129	23.02	146.03	6.79	-28.19	-130.25
130	30.69	182.94	8.82	-22.71	-136.12
131	39.74	218.21	11.54	-21.03	-137.37
132	49.70	251.52	13.70	-19.92	-136.22
133	2.04	274.62	8.04	-6.08	-85.02
134	-0.08	271.38	2.84	-3.57	-77.51
135	5.75	276.28	14.67	-9.98	-93.26
136	10.68	277.55	19.47	-12.27	-101.79
137	16.16	278.86	22.40	-13.97	-110.13
138	21.91	280.28	23.56	-15.70	-117.76
139	27.92	281.62	23.20	-17.66	-124.14
140	34.27	282.59	21.78	-19.65	-128.89
141	40.92	283.07	19.84	-21.23	-131.89
142	47.70	283.13	17.89	-21.89	-133.38
143	54.27	283.08	16.27	-21.31	-133.88
144	60.24	283.24	15.09	-19.43	-134.01
145	-7.78	-0.25	2.24	-0.29	-6.22

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
146	-7.30	4.66	4.50	-13.18	-13.29
147	-4.86	14.76	7.35	-22.62	-29.23
148	-0.47	30.63	8.49	-29.34	-48.70
149	7.47	52.09	9.23	-32.50	-70.45
150	15.51	78.87	9.27	-31.49	-91.77
151	22.72	109.93	9.27	-25.68	-109.98
152	29.70	145.56	9.93	-20.86	-123.33
153	37.12	181.87	11.17	-18.51	-131.27
154	45.54	217.32	12.56	-17.14	-134.75
155	55.00	251.31	13.66	-16.34	-135.33
156	65.25	283.82	14.30	-16.53	-134.30
157	2.86	300.97	9.07	-9.57	-73.29
158	-0.10	296.62	3.65	-5.59	-56.88
159	8.01	302.99	16.14	-15.73	-84.51
160	14.80	304.22	20.89	-19.08	-94.57
161	22.22	305.29	23.58	-20.90	-103.42
162	29.75	306.46	24.52	-22.04	-111.00
163	37.20	307.75	24.13	-22.93	-117.24
164	44.56	309.06	22.81	-23.61	-122.16
165	51.79	310.30	21.02	-23.89	-125.84
166	58.79	311.44	19.10	-23.49	-128.45
167	65.34	312.56	17.31	-22.24	-130.24
168	71.18	313.74	15.75	-20.13	-131.52
169	76.08	315.12	14.43	-17.34	-132.57
170	-3.86	-0.26	2.61	21.56	-6.85
171	-3.32	4.71	4.73	7.26	-14.36
172	-0.94	15.22	7.88	0.09	-30.77
173	4.90	31.49	9.79	-3.06	-49.84
174	12.22	53.15	11.05	-4.95	-70.55
175	19.71	79.78	11.96	-6.25	-90.73
176	26.72	110.47	12.67	-7.32	-108.31
177	33.78	145.75	13.23	-8.40	-121.76
178	41.20	181.94	13.65	-9.51	-130.32
179	49.55	217.58	13.89	-10.67	-134.54
180	58.91	251.95	13.94	-11.87	-135.73
181	69.10	284.94	13.75	-13.07	-135.12
182	79.89	316.74	13.29	-14.22	-133.62
183	3.80	324.60	10.56	-13.35	-57.48
184	-0.16	318.62	4.76	-7.84	-28.70
185	10.54	327.30	18.35	-21.69	-74.32
186	19.29	328.74	23.12	-25.76	-87.06
187	28.61	329.84	25.47	-27.39	-97.18
188	37.75	331.04	25.98	-27.86	-105.17
189	46.43	332.55	25.20	-27.89	-111.51
190	54.67	334.41	23.60	-27.68	-116.65
191	62.48	336.58	21.62	-27.12	-120.89
192	69.82	338.89	19.55	-25.98	-124.37
193	76.54	341.19	17.56	-24.10	-127.13
194	82.44	343.41	15.74	-21.54	-129.22
195	87.32	345.57	14.07	-18.48	-130.76
196	91.10	347.72	12.55	-15.23	-131.92
197	-4.52	-0.26	3.76	62.10	-6.25
198	-4.10	4.61	5.82	40.30	-13.39
199	-1.62	14.70	9.18	31.81	-29.53
200	4.13	30.57	11.04	27.48	-49.26
201	12.28	52.10	12.80	23.16	-71.31
202	20.56	79.01	14.58	19.40	-92.93
203	28.04	110.27	15.99	13.47	-111.44
204	35.32	146.21	16.47	6.48	-125.07
205	43.02	182.92	16.08	0.43	-133.26
206	51.69	218.86	15.20	-4.12	-136.92
207	61.36	253.43	14.21	-7.37	-137.62
208	71.74	286.60	13.23	-9.63	-136.62
209	82.60	318.63	12.24	-11.17	-134.81
210	93.77	349.85	11.16	-12.10	-132.80
211	4.96	345.30	12.60	-17.70	-35.66
212	-0.31	336.74	6.25	-10.53	6.72
213	13.61	349.19	21.41	-28.15	-63.19
214	24.55	351.11	26.21	-32.43	-79.87
215	35.80	352.44	28.04	-33.36	-91.80
216	46.37	353.82	27.83	-32.93	-100.24
217	56.02	355.61	26.31	-32.25	-106.48
218	64.91	358.17	24.03	-31.60	-111.68
219	73.21	361.62	21.53	-30.69	-116.51
220	80.94	365.53	19.17	-29.09	-120.97
221	87.93	369.28	17.04	-26.60	-124.71

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
222	93.97	372.63	15.08	-23.37	-127.49
223	98.90	375.60	13.24	-19.71	-129.34
224	102.60	378.27	11.52	-15.96	-130.47
225	105.13	380.67	9.98	-12.41	-131.03
226	-9.65	0.35	4.99	96.88	-4.14
227	-9.52	4.38	7.24	69.80	-9.82
228	-6.98	13.14	10.60	64.41	-24.53
229	-2.90	27.51	12.32	63.80	-46.08
230	7.38	48.63	14.42	56.05	-72.69
231	18.15	76.50	17.58	48.60	-99.14
232	26.52	109.47	19.68	34.78	-120.30
233	34.22	147.28	19.89	20.13	-133.77
234	42.48	184.99	18.27	8.93	-140.15
235	52.07	221.23	16.14	1.25	-141.79
236	62.47	255.69	14.18	-3.68	-140.89
237	73.30	288.73	12.56	-6.76	-138.75
238	84.35	320.70	11.16	-8.58	-136.11
239	95.48	351.92	9.87	-9.43	-133.43
240	106.62	382.73	8.64	-9.33	-131.03
241	6.67	363.04	15.51	-22.85	-10.36
242	-0.48	350.16	8.19	-13.89	51.94
243	17.76	368.63	25.67	-35.13	-51.92
244	31.34	371.30	30.38	-38.68	-73.94
245	44.53	373.12	31.34	-37.98	-88.00
246	56.25	374.76	30.13	-36.21	-96.36
247	66.38	376.36	27.53	-35.11	-101.45
248	75.48	379.34	23.96	-34.89	-106.15
249	84.15	384.99	20.43	-34.53	-111.92
250	92.25	391.61	17.74	-32.89	-118.24
251	99.55	397.38	15.68	-29.65	-123.43
252	105.79	401.96	13.87	-25.35	-126.73
253	110.74	405.66	12.01	-20.74	-128.63
254	114.36	408.84	10.24	-16.24	-129.58
255	116.62	411.47	8.69	-12.01	-129.84
256	117.75	413.58	7.44	-8.18	-129.32
257	-18.69	1.02	6.41	116.92	-0.13
258	-18.88	4.05	9.30	89.75	-1.99
259	-17.12	9.62	13.70	94.87	-11.90
260	-13.44	21.17	14.11	109.93	-36.74
261	-3.64	41.65	17.41	106.52	-74.53
262	12.20	72.07	21.35	84.96	-112.65
263	22.15	109.40	25.00	53.96	-138.39
264	29.46	149.89	23.29	30.34	-149.19
265	39.74	188.99	19.65	14.04	-150.86
266	51.05	224.81	16.16	4.25	-148.67
267	62.60	258.60	13.51	-1.52	-145.10
268	74.09	291.16	11.53	-4.90	-141.25
269	85.40	322.83	9.96	-6.75	-137.44
270	96.50	353.83	8.63	-7.46	-133.80
271	107.36	384.36	7.50	-7.04	-130.45
272	118.00	414.84	6.65	-3.23	-127.78
273	9.63	378.47	19.92	-28.74	17.79
274	-1.36	357.40	11.50	-18.20	110.77
275	24.38	385.67	32.36	-41.88	-42.12
276	40.80	388.28	35.91	-43.21	-70.22
277	56.15	392.46	35.11	-39.36	-86.79
278	68.31	394.99	33.30	-35.12	-95.10
279	77.80	393.79	29.55	-34.15	-95.26
280	86.29	394.85	23.33	-36.67	-93.03
281	95.30	405.75	17.48	-39.21	-105.88
282	104.02	418.51	14.83	-38.14	-117.62
283	111.50	426.65	13.76	-33.18	-124.06
284	117.80	431.73	12.24	-26.92	-127.42
285	122.94	436.27	10.49	-21.08	-128.78
286	126.33	439.89	8.81	-15.79	-129.29
287	128.32	442.71	7.35	-10.82	-129.38
288	128.77	444.70	6.30	-4.50	-128.81
289	128.47	446.27	5.95	3.62	-126.64
290	-29.67	0.78	6.90	110.73	11.57
291	-30.58	-0.66	11.59	89.36	17.30
292	-30.66	4.69	19.37	115.04	17.77
293	-31.25	6.65	25.40	152.32	-6.14
294	-27.19	27.91	21.55	134.53	-76.69
295	6.09	69.42	33.03	110.10	-148.15
296	8.32	111.22	31.13	68.11	-172.83
297	21.41	158.21	25.10	32.02	-171.23

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
298	35.73	195.61	18.77	13.55	-164.54
299	49.43	229.31	14.62	3.97	-156.30
300	62.33	261.76	11.90	-1.31	-149.42
301	74.51	293.57	10.02	-4.27	-143.66
302	86.10	324.82	8.58	-5.83	-138.62
303	97.15	355.47	7.40	-6.34	-133.95
304	107.72	385.47	6.47	-5.79	-129.41
305	117.82	414.91	6.01	-1.11	-124.95
306	127.65	444.96	6.73	8.21	-122.04
307	17.02	396.26	30.11	-34.03	42.71
308	0.70	359.42	14.75	-22.65	187.45
309	34.79	395.62	42.74	-45.61	-34.45
310	57.69	402.18	42.69	-42.93	-68.90
311	71.23	409.23	38.57	-35.55	-89.94
312	83.76	420.10	36.00	-22.83	-97.92
313	92.59	411.91	36.53	-19.61	-96.61
314	93.45	387.46	22.28	-35.41	-77.55
315	108.70	427.83	15.37	-50.28	-107.70
316	116.75	451.76	13.11	-46.60	-120.47
317	122.85	456.09	11.74	-35.69	-128.29
318	131.00	462.87	10.56	-26.78	-129.69
319	135.44	467.85	8.79	-19.66	-129.43
320	138.38	471.81	7.40	-14.14	-129.20
321	140.16	474.78	6.26	-8.97	-129.36
322	140.63	476.88	5.23	-1.39	-129.73
323	137.79	477.45	5.33	11.11	-128.86
324	137.62	480.87	7.61	25.72	-122.26
325	-38.66	0.69	5.31	72.02	30.79
326	-40.73	-1.80	9.73	58.40	60.50
327	-46.12	-10.41	23.53	90.72	98.30
328	-48.55	-5.72	38.29	126.02	51.77
329	-50.10	16.66	91.97	84.47	-64.40
330	-39.83	61.85	43.30	81.76	-153.05
331	-9.32	139.61	32.05	55.71	-188.20
332	14.04	174.17	19.82	19.47	-188.37
333	32.50	203.31	14.21	6.56	-175.67
334	48.32	233.51	11.14	0.37	-162.53
335	62.30	264.46	9.31	-2.92	-152.77
336	75.02	295.59	8.04	-4.75	-145.49
337	86.80	326.49	7.03	-5.72	-139.47
338	97.80	356.84	6.14	-6.03	-133.98
339	108.10	386.24	5.40	-5.63	-128.38
340	117.70	414.10	5.08	-2.93	-121.82
341	126.49	439.23	6.09	4.43	-113.09
342	136.38	465.22	12.66	24.74	-111.75
343	21.55	390.04	45.91	-33.51	58.81
344	-3.14	402.57	35.00	-28.53	254.37
345	61.77	398.77	57.30	-38.54	-26.33
346	82.16	411.48	49.56	-35.80	-68.57
347	95.84	426.07	40.80	-24.13	-97.73
348	92.02	434.29	39.03	-4.29	-114.18
349	118.13	474.69	43.54	3.50	-128.70
350	93.70	365.40	21.59	-29.00	-71.93
351	131.91	494.87	13.73	-48.98	-138.68
352	120.17	474.92	10.83	-49.97	-136.22
353	139.64	487.43	11.09	-35.23	-136.43
354	144.09	493.34	8.64	-22.03	-132.21
355	147.14	498.39	7.39	-15.26	-129.56
356	149.34	502.40	6.42	-10.84	-128.44
357	151.07	505.65	5.70	-6.73	-128.86
358	152.13	508.08	5.23	-0.41	-131.01
359	152.13	510.08	4.11	14.13	-135.13
360	137.67	506.14	9.17	37.63	-135.52
361	155.17	535.55	19.29	41.05	-139.66
362	-39.32	1.23	1.29	9.65	39.80
363	-44.19	-1.07	2.37	2.55	85.84
364	-53.67	-12.71	3.96	-0.76	150.63
365	-59.82	-18.96	4.92	-2.36	176.78
366	-56.06	14.63	5.51	-3.29	135.02
367	-15.11	280.18	5.90	-3.89	-26.31
368	-11.24	180.31	6.16	-4.32	-174.23
369	12.09	184.57	6.30	-4.69	-196.15
370	32.10	207.28	6.34	-5.03	-177.11
371	48.69	235.59	6.27	-5.35	-165.13
372	63.08	265.93	6.09	-5.65	-154.20
373	75.98	296.85	5.80	-5.91	-146.31

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
374	87.78	327.69	5.39	-6.11	-139.89
375	98.71	357.97	4.87	-6.23	-134.04
376	108.85	387.16	4.27	-6.23	-127.94
377	118.13	414.11	3.60	-6.06	-120.41
378	126.26	435.53	2.92	-5.64	-105.94
379	129.11	433.73	2.30	-4.85	-85.90
380	123.75	407.28	1.87	-3.59	-75.73
381	113.49	391.20	78.79	-23.61	85.22
382	97.21	398.28	85.63	23.53	230.90
383	101.52	397.21	64.72	-14.13	-19.16
384	112.54	421.28	53.88	-18.35	-67.79
385	124.05	445.04	45.34	-9.08	-104.13
386	135.60	468.59	30.91	0.65	-145.76
387	133.93	485.33	87.82	-4.24	-185.07
388	196.91	724.27	21.36	-13.32	-106.02
389	144.11	509.48	13.70	-20.19	-194.54
390	156.35	517.77	16.29	-27.81	-167.05
391	156.10	520.84	7.61	-18.90	-142.51
392	156.76	525.42	7.52	-9.23	-132.91
393	158.27	529.65	6.47	-6.44	-128.35
394	159.71	533.48	5.94	-4.69	-126.61
395	161.14	536.98	5.67	-3.08	-127.24
396	162.63	540.36	5.41	-0.72	-130.87
397	165.22	543.98	6.71	8.56	-139.94
398	169.14	550.02	4.57	16.36	-164.64
399	161.13	552.11	63.22	9.51	-193.37
400	218.93	778.97	1.66	-1.51	-106.56
401	-35.99	0.69	1.72	-18.48	30.72
402	-38.74	-1.79	3.86	-30.42	60.38
403	-44.12	-10.37	6.00	-63.60	98.06
404	-45.85	-5.59	5.78	-87.36	51.42
405	-47.39	16.89	5.57	-87.57	-64.84
406	-37.11	62.19	1.81	-56.48	-153.58
407	-6.59	140.11	0.02	-45.29	-188.81
408	16.76	174.85	-0.11	-17.79	-189.03
409	35.19	204.20	0.93	-10.87	-176.36
410	50.97	234.64	1.90	-8.49	-163.09
411	64.89	265.83	2.94	-7.70	-153.31
412	77.51	297.22	3.62	-7.11	-145.96
413	89.16	328.36	3.83	-6.57	-139.84
414	100.01	358.93	3.69	-6.51	-134.20
415	110.13	388.52	3.22	-6.92	-128.42
416	119.54	416.50	2.94	-8.12	-121.64
417	128.11	441.69	2.84	-11.34	-112.68
418	137.76	467.64	2.40	-23.35	-111.09
419	156.29	537.88	1.27	-26.97	-138.80
420	161.93	554.26	1.43	-7.17	-192.39
421	113.49	378.32	80.40	0.00	105.81
422	118.15	393.82	66.31	0.00	-17.01
423	128.18	427.27	54.25	0.00	-67.23
424	136.06	453.55	44.84	0.00	-105.72
425	148.63	495.43	38.46	0.00	-163.52
426	132.48	441.61	37.51	0.00	-215.56
427	370.84	1236.15	21.15	0.00	-143.14
428	140.22	467.41	11.72	0.00	-224.79
429	164.47	548.25	8.39	0.00	-184.42
430	160.75	535.85	7.88	0.00	-143.75
431	162.55	541.84	6.95	0.00	-132.58
432	163.57	545.22	6.26	0.00	-127.38
433	164.69	548.95	5.80	0.00	-125.45
434	165.74	552.47	5.60	0.00	-126.14
435	167.00	556.65	5.71	0.00	-130.27
436	167.66	558.87	6.16	0.00	-140.76
437	174.15	580.50	7.71	0.00	-181.44
438	153.10	510.35	13.03	0.00	-222.90
439	387.51	1291.71	1.61	0.00	-142.53
440	153.71	512.38	-0.49	0.00	-221.87
441	153.71	512.38	-0.49	0.00	-221.87
442	153.71	512.38	-0.49	0.00	-221.87
443	153.71	512.38	-0.49	0.00	-221.87
444	153.71	512.38	-0.49	0.00	-221.87
445	153.71	512.38	-0.49	0.00	-221.87
446	153.71	512.38	-0.49	0.00	-221.87
447	153.71	512.38	-0.49	0.00	-221.87
448	153.71	512.38	-0.49	0.00	-221.87
449	153.71	512.38	-0.49	0.00	-221.87

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
450	153.71	512.38	-0.49	0.00	-221.87
451	153.71	512.38	-0.49	0.00	-221.87
452	153.71	512.38	-0.49	0.00	-221.87
453	153.71	512.38	-0.49	0.00	-221.87
454	153.71	512.38	-0.49	0.00	-221.87
455	153.71	512.38	-0.49	0.00	-221.87
456	153.71	512.38	-0.49	0.00	-221.87
457	153.71	512.38	-0.49	0.00	-221.87
458	153.71	512.38	-0.49	0.00	-221.87
459	153.71	512.38	-0.49	0.00	-221.87
460	153.71	512.38	-0.49	0.00	-221.87
461	153.71	512.38	-0.49	0.00	-221.87
462	-25.73	0.78	1.75	-35.28	11.44
463	-26.63	-0.62	4.30	-48.32	17.05
464	-26.69	4.81	6.50	-78.39	17.29
465	-27.25	6.91	5.60	-116.59	-6.63
466	-21.78	28.35	1.99	-135.01	-77.35
467	11.53	70.09	-1.41	-89.93	-148.96
468	13.78	112.19	-3.43	-50.36	-173.78
469	26.86	159.55	-3.24	-23.91	-172.29
470	41.14	197.38	-1.87	-13.24	-165.67
471	54.76	231.54	-0.43	-9.09	-157.44
472	67.53	264.50	0.70	-7.50	-150.52
473	79.53	296.82	1.84	-7.12	-144.64
474	90.88	328.57	2.49	-6.63	-139.39
475	101.64	359.67	2.66	-6.43	-134.43
476	111.85	390.04	2.54	-7.05	-129.53
477	121.55	419.75	2.68	-8.89	-124.63
478	130.93	449.92	2.67	-13.31	-121.23
479	140.42	485.78	2.01	-23.02	-120.97
480	139.94	510.87	0.44	-31.00	-133.82
481	170.78	554.40	3.49	-16.90	-162.68
482	175.39	584.64	-1.84	0.00	-179.40
483	175.39	584.64	-1.84	0.00	-179.40
484	175.39	584.64	-1.84	0.00	-179.40
485	175.39	584.64	-1.84	0.00	-179.40
486	175.39	584.64	-1.84	0.00	-179.40
487	175.39	584.64	-1.84	0.00	-179.40
488	175.39	584.64	-1.84	0.00	-179.40
489	175.39	584.64	-1.84	0.00	-179.40
490	175.39	584.64	-1.84	0.00	-179.40
491	175.39	584.64	-1.84	0.00	-179.40
492	175.39	584.64	-1.84	0.00	-179.40
493	175.39	584.64	-1.84	0.00	-179.40
494	175.39	584.64	-1.84	0.00	-179.40
495	175.39	584.64	-1.84	0.00	-179.40
496	175.39	584.64	-1.84	0.00	-179.40
497	175.39	584.64	-1.84	0.00	-179.40
498	175.39	584.64	-1.84	0.00	-179.40
499	175.39	584.64	-1.84	0.00	-179.40
500	175.39	584.64	-1.84	0.00	-179.40
501	175.39	584.64	-1.84	0.00	-179.40
502	175.39	584.64	-1.84	0.00	-179.40
503	175.39	584.64	-1.84	0.00	-179.40
504	175.39	584.64	-1.84	0.00	-179.40
505	175.39	584.64	-1.84	0.00	-179.40
506	-12.82	1.02	1.26	-38.99	-0.25
507	-13.00	4.10	3.37	-48.30	-2.24
508	-11.21	9.79	5.08	-65.73	-12.39
509	-7.48	21.53	4.11	-92.61	-37.48
510	4.45	42.28	0.91	-108.77	-75.53
511	20.33	73.05	-2.56	-79.32	-113.90
512	30.33	110.81	-4.26	-42.20	-139.85
513	37.65	151.85	-4.16	-22.99	-150.83
514	47.90	191.59	-3.01	-13.04	-152.61
515	59.11	228.11	-1.62	-8.51	-150.46
516	70.49	262.67	-0.41	-6.64	-146.82
517	81.72	296.00	0.65	-6.12	-142.80
518	92.69	328.44	1.47	-6.00	-138.70
519	103.35	360.14	1.82	-5.70	-134.63
520	113.69	391.27	1.93	-6.29	-130.72
521	123.73	422.17	2.10	-7.94	-127.40
522	133.53	453.81	1.98	-11.10	-125.51
523	142.10	484.95	1.31	-15.07	-126.99
524	155.65	517.33	0.24	-18.70	-132.63
525	167.76	550.74	-1.37	-11.38	-137.04

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
526	169.58	565.28	-1.70	0.00	-137.73
527	169.58	565.28	-1.70	0.00	-137.73
528	169.58	565.28	-1.70	0.00	-137.73
529	169.58	565.28	-1.70	0.00	-137.73
530	169.58	565.28	-1.70	0.00	-137.73
531	169.58	565.28	-1.70	0.00	-137.73
532	169.58	565.28	-1.70	0.00	-137.73
533	169.58	565.28	-1.70	0.00	-137.73
534	169.58	565.28	-1.70	0.00	-137.73
535	169.58	565.28	-1.70	0.00	-137.73
536	169.58	565.28	-1.70	0.00	-137.73
537	169.58	565.28	-1.70	0.00	-137.73
538	169.58	565.28	-1.70	0.00	-137.73
539	169.58	565.28	-1.70	0.00	-137.73
540	169.58	565.28	-1.70	0.00	-137.73
541	169.58	565.28	-1.70	0.00	-137.73
542	169.58	565.28	-1.70	0.00	-137.73
543	169.58	565.28	-1.70	0.00	-137.73
544	169.58	565.28	-1.70	0.00	-137.73
545	169.58	565.28	-1.70	0.00	-137.73
546	169.58	565.28	-1.70	0.00	-137.73
547	169.58	565.28	-1.70	0.00	-137.73
548	169.58	565.28	-1.70	0.00	-137.73
549	169.58	565.28	-1.70	0.00	-137.73
550	169.58	565.28	-1.70	0.00	-137.73
551	169.58	565.28	-1.70	0.00	-137.73
552	-1.90	0.35	0.69	-31.59	-4.29
553	-1.77	4.43	2.08	-36.72	-10.14
554	0.81	13.33	3.06	-46.39	-25.18
555	7.23	27.95	2.36	-56.68	-47.09
556	18.09	49.42	0.27	-60.82	-74.05
557	28.96	77.73	-2.00	-49.00	-100.85
558	37.42	111.27	-3.35	-31.43	-122.31
559	45.18	149.81	-3.47	-17.64	-136.05
560	53.43	188.36	-2.75	-10.29	-142.60
561	62.93	225.55	-1.73	-6.61	-144.31
562	73.14	261.04	-0.76	-5.00	-143.35
563	83.67	295.15	0.05	-4.52	-140.99
564	94.29	328.17	0.77	-4.57	-137.97
565	104.87	360.37	1.14	-4.28	-134.72
566	115.32	392.02	1.27	-4.67	-131.59
567	125.66	423.49	1.38	-5.72	-128.99
568	135.77	454.95	1.22	-7.29	-127.46
569	146.61	487.13	0.66	-8.72	-127.37
570	157.02	518.07	-0.19	-7.84	-127.77
571	166.15	549.73	-0.91	-2.96	-127.08
572	169.67	565.57	-1.08	0.00	-126.30
573	169.67	565.57	-1.08	0.00	-126.30
574	169.67	565.57	-1.08	0.00	-126.30
575	169.67	565.57	-1.08	0.00	-126.30
576	169.67	565.57	-1.08	0.00	-126.30
577	169.67	565.57	-1.08	0.00	-126.30
578	169.67	565.57	-1.08	0.00	-126.30
579	169.67	565.57	-1.08	0.00	-126.30
580	169.67	565.57	-1.08	0.00	-126.30
581	169.67	565.57	-1.08	0.00	-126.30
582	169.67	565.57	-1.08	0.00	-126.30
583	169.67	565.57	-1.08	0.00	-126.30
584	169.67	565.57	-1.08	0.00	-126.30
585	169.67	565.57	-1.08	0.00	-126.30
586	169.67	565.57	-1.08	0.00	-126.30
587	169.67	565.57	-1.08	0.00	-126.30
588	169.67	565.57	-1.08	0.00	-126.30
589	169.67	565.57	-1.08	0.00	-126.30
590	169.67	565.57	-1.08	0.00	-126.30
591	169.67	565.57	-1.08	0.00	-126.30
592	169.67	565.57	-1.08	0.00	-126.30
593	169.67	565.57	-1.08	0.00	-126.30
594	169.67	565.57	-1.08	0.00	-126.30
595	169.67	565.57	-1.08	0.00	-126.30
596	169.67	565.57	-1.08	0.00	-126.30
597	169.67	565.57	-1.08	0.00	-126.30
598	169.67	565.57	-1.08	0.00	-126.30
599	169.67	565.57	-1.08	0.00	-126.30
600	5.04	-0.27	0.27	-17.34	-6.43
601	5.54	4.66	0.94	-19.54	-13.77

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
602	10.45	14.91	1.36	-23.36	-30.34
603	17.24	31.05	1.01	-26.98	-50.52
604	25.55	52.98	0.04	-28.26	-73.05
605	34.01	80.43	-1.05	-23.42	-95.14
606	41.65	112.39	-1.76	-16.05	-114.07
607	49.06	149.22	-1.91	-9.63	-128.06
608	56.82	186.99	-1.59	-5.65	-136.51
609	65.45	224.12	-1.06	-3.61	-140.30
610	74.95	259.99	-0.54	-2.69	-140.95
611	85.02	294.53	-0.09	-2.41	-139.70
612	95.40	327.93	0.32	-2.47	-137.43
613	105.90	360.45	0.55	-2.29	-134.73
614	116.44	392.40	0.63	-2.47	-132.04
615	126.94	424.07	0.67	-2.94	-129.72
616	137.50	455.85	0.56	-3.53	-127.97
617	148.02	488.03	0.26	-3.74	-126.63
618	157.52	518.67	-0.14	-2.92	-124.99
619	165.79	549.29	-0.46	-1.06	-122.65
620	169.27	564.25	-0.52	0.00	-121.32
621	169.27	564.25	-0.52	0.00	-121.32
622	169.27	564.25	-0.52	0.00	-121.32
623	169.27	564.25	-0.52	0.00	-121.32
624	169.27	564.25	-0.52	0.00	-121.32
625	7.39	-0.27	0.00	0.00	-7.05
626	8.61	4.74	0.00	0.00	-14.79
627	13.94	15.41	0.00	0.00	-31.73
628	20.39	31.97	0.00	0.00	-51.39
629	27.97	54.08	0.00	0.00	-72.70
630	35.73	81.32	0.00	0.00	-93.48
631	43.01	112.81	0.00	0.00	-111.62
632	50.32	149.15	0.00	0.00	-125.56
633	57.92	186.60	0.00	0.00	-134.49
634	66.32	223.68	0.00	0.00	-138.91
635	75.59	259.64	0.00	0.00	-140.10
636	85.49	294.31	0.00	0.00	-139.24
637	95.79	327.83	0.00	0.00	-137.23
638	106.27	360.46	0.00	0.00	-134.72
639	116.83	392.50	0.00	0.00	-132.18
640	127.42	424.28	0.00	0.00	-129.91
641	138.00	456.13	0.00	0.00	-128.03
642	148.41	488.33	0.00	0.00	-126.29
643	157.59	518.81	0.00	0.00	-124.11
644	165.68	549.17	0.00	0.00	-121.36
645	169.22	564.05	0.00	0.00	-119.91
646	169.22	564.05	0.00	0.00	-119.91
647	169.22	564.05	0.00	0.00	-119.91
648	169.22	564.05	0.00	0.00	-119.91
649	169.22	564.05	0.00	0.00	-119.91
650	5.04	-0.27	1.14	41.18	-6.43
651	5.54	4.66	1.06	33.71	-13.77
652	10.45	14.91	1.24	32.85	-30.34
653	17.24	31.05	1.19	32.73	-50.52
654	25.55	52.98	1.69	29.71	-73.05
655	34.01	80.43	2.59	26.48	-95.14
656	41.65	112.39	3.36	21.40	-114.07
657	49.06	149.22	3.35	15.25	-128.06
658	56.82	186.99	2.65	10.16	-136.51
659	65.45	224.12	1.65	6.61	-140.30
660	74.95	259.99	0.75	4.38	-140.95
661	85.02	294.53	0.11	3.12	-139.70
662	95.40	327.93	-0.23	2.54	-137.43
663	105.90	360.45	-0.47	3.04	-134.73
664	116.44	392.40	-0.61	3.89	-132.04
665	126.94	424.07	-0.60	5.00	-129.72
666	137.50	455.85	-0.50	5.89	-127.97
667	148.02	488.03	-0.22	5.77	-126.63
668	157.52	518.67	0.17	4.07	-124.99
669	165.79	549.29	0.61	1.34	-122.65
670	169.27	564.25	0.67	0.00	-121.32
671	169.27	564.25	0.67	0.00	-121.32
672	169.27	564.25	0.67	0.00	-121.32
673	169.27	564.25	0.67	0.00	-121.32
674	169.27	564.25	0.67	0.00	-121.32
675	-1.90	0.35	2.37	76.51	-4.29
676	-1.77	4.43	2.47	63.74	-10.14
677	0.81	13.33	2.65	65.99	-25.18

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
678	7.23	27.95	2.44	69.58	-47.09
679	18.09	49.42	3.31	64.11	-74.05
680	28.96	77.73	5.62	56.08	-100.85
681	37.42	111.27	7.13	43.16	-122.31
682	45.18	149.81	6.92	29.14	-136.05
683	53.43	188.36	5.07	18.81	-142.60
684	62.93	225.55	2.91	12.00	-144.31
685	73.14	261.04	1.15	7.93	-143.35
686	83.67	295.15	0.00	5.71	-140.99
687	94.29	328.17	-0.58	4.78	-137.97
688	104.87	360.37	-0.99	5.71	-134.72
689	115.32	392.02	-1.21	7.39	-131.59
690	125.66	423.49	-1.07	9.85	-128.99
691	135.77	454.95	-0.80	12.51	-127.46
692	146.61	487.13	-0.54	13.43	-127.37
693	157.02	518.07	0.38	10.67	-127.77
694	166.15	549.73	1.02	3.54	-127.08
695	169.67	565.57	1.44	0.00	-126.30
696	169.67	565.57	1.44	0.00	-126.30
697	169.67	565.57	1.44	0.00	-126.30
698	169.67	565.57	1.44	0.00	-126.30
699	169.67	565.57	1.44	0.00	-126.30
700	-12.82	1.02	3.80	97.00	-0.25
701	-13.00	4.10	4.54	84.11	-2.24
702	-11.21	9.79	5.74	96.85	-12.39
703	-7.48	21.53	4.24	116.11	-37.48
704	4.45	42.28	6.32	115.16	-75.53
705	20.33	73.05	9.44	92.73	-113.90
706	30.33	110.81	12.54	62.53	-139.85
707	37.65	151.85	10.46	39.53	-150.83
708	47.90	191.59	6.66	24.01	-152.61
709	59.11	228.11	3.21	14.99	-150.46
710	70.49	262.67	0.83	9.98	-146.82
711	81.72	296.00	-0.51	7.34	-142.80
712	92.69	328.44	-1.16	6.48	-138.70
713	103.35	360.14	-1.61	7.66	-134.63
714	113.69	391.27	-1.77	9.92	-130.72
715	123.73	422.17	-1.29	13.73	-127.40
716	133.53	453.81	-0.58	19.48	-125.51
717	142.10	484.95	0.08	24.80	-126.99
718	155.65	517.33	0.06	24.30	-132.63
719	167.76	550.74	2.81	12.83	-137.04
720	169.58	565.28	2.37	0.00	-137.73
721	169.58	565.28	2.37	0.00	-137.73
722	169.58	565.28	2.37	0.00	-137.73
723	169.58	565.28	2.37	0.00	-137.73
724	169.58	565.28	2.37	0.00	-137.73
725	-25.73	0.78	4.30	91.15	11.44
726	-26.63	-0.62	6.84	84.02	17.05
727	-26.69	4.81	11.43	117.31	17.29
728	-27.25	6.91	15.55	158.77	-6.63
729	-21.78	28.35	10.49	143.42	-77.35
730	11.53	70.09	21.18	118.07	-148.96
731	13.78	112.19	18.75	76.82	-173.78
732	26.86	159.55	12.39	41.32	-172.29
733	41.14	197.38	5.94	23.59	-165.67
734	54.76	231.54	1.89	14.71	-157.44
735	67.53	264.50	-0.51	10.15	-150.52
736	79.53	296.82	-1.48	7.83	-144.64
737	90.88	328.57	-1.99	7.51	-139.39
738	101.64	359.67	-2.31	8.65	-134.43
739	111.85	390.04	-2.39	10.89	-129.53
740	121.55	419.75	-1.52	15.10	-124.63
741	130.93	449.92	0.58	23.27	-121.23
742	140.42	485.78	2.73	38.63	-120.97
743	139.94	510.87	5.16	47.17	-133.82
744	170.78	554.40	1.63	19.55	-162.68
745	175.39	584.64	4.24	0.00	-179.40
746	175.39	584.64	4.24	0.00	-179.40
747	175.39	584.64	4.24	0.00	-179.40
748	175.39	584.64	4.24	0.00	-179.40
749	175.39	584.64	4.24	0.00	-179.40
750	-35.99	0.69	2.71	52.64	30.72
751	-38.74	-1.79	4.98	53.23	60.38
752	-44.12	-10.37	15.60	93.15	98.06
753	-45.85	-5.59	28.45	132.63	51.42

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
754	-47.39	16.89	80.93	93.50	-64.84
755	-37.11	62.19	31.48	89.60	-153.58
756	-6.59	140.11	19.72	64.64	-188.81
757	16.76	174.85	7.18	28.86	-189.03
758	35.19	204.20	1.49	16.67	-176.36
759	50.97	234.64	-1.46	11.19	-163.09
760	64.89	265.83	-2.52	8.55	-153.31
761	77.51	297.22	-2.89	7.62	-145.96
762	89.16	328.36	-3.06	7.94	-139.84
763	100.01	358.93	-3.08	8.68	-134.20
764	110.13	388.52	-3.02	10.08	-128.42
765	119.54	416.50	-2.19	12.84	-121.64
766	128.11	441.69	0.18	19.02	-112.68
767	137.76	467.64	7.99	37.20	-111.09
768	156.29	537.88	15.48	50.21	-138.80
769	161.93	554.26	59.84	12.57	-192.39
770	153.71	512.38	9.76	0.00	-221.87
771	153.71	512.38	9.76	0.00	-221.87
772	153.71	512.38	9.76	0.00	-221.87
773	153.71	512.38	9.76	0.00	-221.87
774	153.71	512.38	9.76	0.00	-221.87
775	-39.32	1.23	-1.00	-7.69	39.80
776	-44.19	-1.07	-1.84	-2.18	85.84
777	-53.67	-12.71	-3.06	1.24	150.63
778	-59.82	-18.96	-3.80	3.33	176.78
779	-56.06	14.63	-4.27	4.54	135.02
780	-15.11	280.18	-4.58	5.31	-26.31
781	-11.24	180.31	-4.78	5.87	-174.23
782	12.09	184.57	-4.91	6.36	-196.15
783	32.10	207.28	-4.96	6.79	-177.11
784	48.69	235.59	-4.92	7.18	-165.13
785	63.08	265.93	-4.80	7.54	-154.20
786	75.98	296.85	-4.58	7.84	-146.31
787	87.78	327.69	-4.28	8.05	-139.89
788	98.71	357.97	-3.89	8.15	-134.04
789	108.85	387.16	-3.42	8.09	-127.94
790	118.13	414.11	-2.90	7.81	-120.41
791	126.26	435.53	-2.37	7.21	-105.94
792	129.11	433.73	-1.88	6.15	-85.90
793	123.75	407.28	-1.54	4.52	-75.73
794	218.93	778.97	-1.37	1.88	-106.56
795	387.51	1291.71	-1.33	0.00	-142.53
796	387.51	1291.71	-1.33	0.00	-142.53
797	387.51	1291.71	-1.33	0.00	-142.53
798	387.51	1291.71	-1.33	0.00	-142.53
799	387.51	1291.71	-1.33	0.00	-142.53
800	-38.66	0.69	-0.29	-33.90	30.79
801	-40.73	-1.80	0.19	-34.82	60.50
802	-46.12	-10.41	-0.13	-62.12	98.30
803	-48.55	-5.72	-1.82	-82.67	51.77
804	-50.10	16.66	-2.97	-81.02	-64.40
805	-39.83	61.85	-7.35	-45.90	-153.05
806	-9.32	139.61	-9.56	-33.58	-188.20
807	14.04	174.17	-9.94	-5.10	-188.37
808	32.50	203.31	-9.01	2.70	-175.67
809	48.32	233.51	-8.00	5.89	-162.53
810	62.30	264.46	-7.12	7.41	-152.77
811	75.02	295.59	-6.33	8.11	-145.49
812	86.80	326.49	-5.56	8.24	-139.47
813	97.80	356.84	-4.76	7.73	-133.98
814	108.10	386.24	-3.89	6.24	-128.38
815	117.70	414.10	-2.93	4.30	-121.82
816	126.49	439.23	-1.96	0.16	-113.09
817	136.38	465.22	-1.42	-13.43	-111.75
818	155.17	535.55	-1.87	-19.70	-139.66
819	161.13	552.11	-1.37	-3.35	-193.37
820	153.10	510.35	-3.20	0.00	-222.90
821	153.10	510.35	-3.20	0.00	-222.90
822	153.10	510.35	-3.20	0.00	-222.90
823	153.10	510.35	-3.20	0.00	-222.90
824	153.10	510.35	-3.20	0.00	-222.90
825	-29.67	0.78	-0.27	-50.83	11.57
826	-30.58	-0.66	0.63	-52.84	17.30
827	-30.66	4.69	0.37	-77.04	17.77
828	-31.25	6.65	-2.00	-112.03	-6.14
829	-27.19	27.91	-6.56	-128.58	-76.69

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
830	6.09	69.42	-10.59	-79.47	-148.15
831	8.32	111.22	-13.03	-38.74	-172.83
832	21.41	158.21	-13.13	-11.28	-171.23
833	35.73	195.61	-11.88	0.32	-164.54
834	49.43	229.31	-10.40	5.33	-156.30
835	62.33	261.76	-9.06	7.71	-149.42
836	74.51	293.57	-7.89	8.78	-143.66
837	86.10	324.82	-6.79	8.92	-138.62
838	97.15	355.47	-5.70	8.09	-133.95
839	107.72	385.47	-4.56	6.06	-129.41
840	117.82	414.91	-3.37	3.86	-124.95
841	127.65	444.96	-2.30	-1.44	-122.04
842	137.62	480.87	-1.97	-12.80	-122.26
843	137.67	506.14	-2.85	-23.23	-135.52
844	169.14	550.02	-0.08	-12.92	-164.64
845	174.15	580.50	-4.70	0.00	-181.44
846	174.15	580.50	-4.70	0.00	-181.44
847	174.15	580.50	-4.70	0.00	-181.44
848	174.15	580.50	-4.70	0.00	-181.44
849	174.15	580.50	-4.70	0.00	-181.44
850	-18.69	1.02	-0.75	-54.75	-0.13
851	-18.88	4.05	-0.30	-53.02	-1.99
852	-17.12	9.62	-1.05	-64.59	-11.90
853	-13.44	21.17	-3.49	-88.26	-36.74
854	-3.64	41.65	-7.64	-102.55	-74.53
855	12.20	72.07	-11.75	-69.08	-112.65
856	22.15	109.40	-13.91	-30.76	-138.39
857	29.46	149.89	-14.12	-10.47	-149.19
858	39.74	188.99	-13.14	0.49	-150.86
859	51.05	224.81	-11.75	5.97	-148.67
860	62.60	258.60	-10.37	8.74	-145.10
861	74.09	291.16	-9.10	10.07	-141.25
862	85.40	322.83	-7.90	10.36	-137.44
863	96.50	353.83	-6.71	9.60	-133.80
864	107.36	384.36	-5.48	7.44	-130.45
865	118.00	414.84	-4.27	5.44	-127.78
866	128.47	446.27	-3.29	1.46	-126.64
867	137.79	477.45	-2.95	-4.12	-128.86
868	152.13	510.08	-3.61	-10.38	-135.13
869	165.22	543.98	-4.57	-7.85	-139.94
870	167.66	558.87	-4.84	0.00	-140.76
871	167.66	558.87	-4.84	0.00	-140.76
872	167.66	558.87	-4.84	0.00	-140.76
873	167.66	558.87	-4.84	0.00	-140.76
874	167.66	558.87	-4.84	0.00	-140.76
875	-9.65	0.35	-1.32	-47.62	-4.14
876	-9.52	4.38	-1.58	-41.73	-9.82
877	-6.98	13.14	-3.05	-45.55	-24.53
878	-2.90	27.51	-5.22	-52.64	-46.08
879	7.38	48.63	-8.27	-54.91	-72.69
880	18.15	76.50	-11.21	-39.09	-99.14
881	26.52	109.47	-13.04	-20.26	-120.30
882	34.22	147.28	-13.53	-5.29	-133.77
883	42.48	184.99	-13.03	3.17	-140.15
884	52.07	221.23	-12.07	7.93	-141.79
885	62.47	255.69	-10.99	10.60	-140.89
886	73.30	288.73	-9.92	12.05	-138.75
887	84.35	320.70	-8.85	12.62	-136.11
888	95.48	351.92	-7.74	12.30	-133.43
889	106.62	382.73	-6.58	10.89	-131.03
890	117.75	413.58	-5.44	8.56	-129.32
891	128.77	444.70	-4.49	6.28	-128.81
892	140.63	476.88	-4.00	3.23	-129.73
893	152.13	508.08	-4.14	1.20	-131.01
894	162.63	540.36	-4.52	1.14	-130.87
895	167.00	556.65	-4.58	0.00	-130.27
896	167.00	556.65	-4.58	0.00	-130.27
897	167.00	556.65	-4.58	0.00	-130.27
898	167.00	556.65	-4.58	0.00	-130.27
899	167.00	556.65	-4.58	0.00	-130.27
900	-4.52	-0.26	-1.73	-33.68	-6.25
901	-4.10	4.61	-2.70	-24.91	-13.39
902	-1.62	14.70	-4.70	-22.93	-29.53
903	4.13	30.57	-6.53	-23.37	-49.26
904	12.28	52.10	-8.47	-21.94	-71.31
905	20.56	79.01	-10.25	-13.95	-92.93

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
906	28.04	110.27	-11.49	-5.25	-111.44
907	35.32	146.21	-12.05	2.46	-125.07
908	43.02	182.92	-12.02	7.69	-133.26
909	51.69	218.86	-11.63	10.99	-136.92
910	61.36	253.43	-11.08	13.16	-137.62
911	71.74	286.60	-10.43	14.63	-136.62
912	82.60	318.63	-9.68	15.57	-134.81
913	93.77	349.85	-8.80	15.93	-132.80
914	105.13	380.67	-7.80	15.57	-131.03
915	116.62	411.47	-6.73	14.42	-129.84
916	128.32	442.71	-5.72	12.64	-129.38
917	140.16	474.78	-4.95	10.53	-129.36
918	151.07	505.65	-4.60	8.23	-128.86
919	161.14	536.98	-4.55	3.90	-127.24
920	165.74	552.47	-4.51	0.00	-126.14
921	165.74	552.47	-4.51	0.00	-126.14
922	165.74	552.47	-4.51	0.00	-126.14
923	165.74	552.47	-4.51	0.00	-126.14
924	165.74	552.47	-4.51	0.00	-126.14
925	-3.86	-0.26	-1.99	-16.69	-6.85
926	-3.32	4.71	-3.59	-5.83	-14.36
927	-0.94	15.22	-5.99	0.34	-30.77
928	4.90	31.49	-7.45	4.55	-49.84
929	12.22	53.15	-8.43	7.09	-70.55
930	19.71	79.78	-9.15	8.86	-90.73
931	26.72	110.47	-9.73	10.30	-108.31
932	33.78	145.75	-10.21	11.73	-121.76
933	41.20	181.94	-10.58	13.16	-130.32
934	49.55	217.58	-10.82	14.62	-134.54
935	58.91	251.95	-10.89	16.11	-135.73
936	69.10	284.94	-10.79	17.58	-135.12
937	79.89	316.74	-10.46	18.95	-133.62
938	91.10	347.72	-9.91	20.12	-131.92
939	102.60	378.27	-9.12	20.93	-130.47
940	114.36	408.84	-8.13	21.15	-129.58
941	126.33	439.89	-7.01	20.43	-129.29
942	138.38	471.81	-5.90	18.19	-129.20
943	149.34	502.40	-5.13	13.87	-128.44
944	159.71	533.48	-4.75	5.97	-126.61
945	164.69	548.95	-4.64	0.00	-125.45
946	164.69	548.95	-4.64	0.00	-125.45
947	164.69	548.95	-4.64	0.00	-125.45
948	164.69	548.95	-4.64	0.00	-125.45
949	164.69	548.95	-4.64	0.00	-125.45
950	-7.78	-0.25	-1.45	18.93	-6.22
951	-7.30	4.66	-3.60	25.64	-13.29
952	-4.86	14.76	-6.53	32.31	-29.23
953	-0.47	30.63	-8.31	36.38	-48.70
954	7.47	52.09	-8.32	35.93	-70.45
955	15.51	78.87	-7.98	32.33	-91.77
956	22.72	109.93	-7.89	28.45	-109.98
957	29.70	145.56	-8.31	23.54	-123.33
958	37.12	181.87	-9.10	19.73	-131.27
959	45.54	217.32	-9.97	18.19	-134.75
960	55.00	251.31	-10.71	19.04	-135.33
961	65.25	283.82	-11.17	20.55	-134.30
962	76.08	315.12	-11.31	22.43	-132.57
963	87.32	345.57	-11.11	24.48	-130.76
964	98.90	375.60	-10.57	26.54	-129.34
965	110.74	405.66	-9.68	28.22	-128.63
966	122.94	436.27	-8.47	28.64	-128.78
967	135.44	467.85	-7.04	26.31	-129.43
968	147.14	498.39	-5.84	19.90	-129.56
969	158.27	529.65	-5.15	8.22	-128.35
970	163.57	545.22	-4.96	0.00	-127.38
971	163.57	545.22	-4.96	0.00	-127.38
972	163.57	545.22	-4.96	0.00	-127.38
973	163.57	545.22	-4.96	0.00	-127.38
974	163.57	545.22	-4.96	0.00	-127.38
975	-16.09	0.38	-0.17	53.53	-4.08
976	-15.83	4.48	-2.08	54.72	-9.62
977	-13.39	13.27	-4.92	64.37	-23.93
978	-9.55	27.64	-6.97	72.12	-44.96
979	-2.14	48.64	-7.36	69.25	-70.96
980	8.12	76.25	-6.02	61.05	-96.80
981	15.94	108.83	-5.33	49.41	-117.35

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
982	23.02	146.03	-6.30	36.77	-130.25
983	30.69	182.94	-7.96	27.88	-136.12
984	39.74	218.21	-9.47	22.73	-137.37
985	49.70	251.52	-10.80	21.53	-136.22
986	60.24	283.24	-11.76	23.23	-134.01
987	71.18	313.74	-12.32	25.67	-131.52
988	82.44	343.41	-12.45	28.63	-129.22
989	93.97	372.63	-12.17	32.00	-127.49
990	105.79	401.96	-11.44	35.50	-126.73
991	117.80	431.73	-10.22	38.02	-127.42
992	131.00	462.87	-8.55	36.79	-129.69
993	144.09	493.34	-6.90	28.90	-132.21
994	156.76	525.42	-5.78	11.55	-132.91
995	162.55	541.84	-5.50	0.00	-132.58
996	162.55	541.84	-5.50	0.00	-132.58
997	162.55	541.84	-5.50	0.00	-132.58
998	162.55	541.84	-5.50	0.00	-132.58
999	162.55	541.84	-5.50	0.00	-132.58
1000	-28.15	1.06	1.33	73.28	-0.05
1001	-28.14	4.21	0.17	73.97	-1.69
1002	-26.53	9.85	-1.53	93.91	-11.02
1003	-23.22	21.40	-4.79	117.27	-35.04
1004	-17.71	41.71	-3.94	118.95	-71.91
1005	-2.67	71.77	-1.80	96.59	-109.10
1006	6.41	108.52	0.42	67.77	-133.90
1007	12.74	148.12	-2.52	46.25	-143.81
1008	22.07	186.05	-7.14	32.41	-144.69
1009	32.50	220.42	-9.63	25.33	-141.88
1010	43.32	252.50	-11.38	23.23	-137.89
1011	54.27	283.08	-12.69	25.34	-133.88
1012	65.34	312.56	-13.53	28.38	-130.24
1013	76.54	341.19	-13.93	32.16	-127.13
1014	87.93	369.28	-13.88	36.71	-124.71
1015	99.55	397.38	-13.38	42.13	-123.43
1016	111.50	426.65	-12.30	48.20	-124.06
1017	122.85	456.09	-10.56	51.51	-128.29
1018	139.64	487.43	-8.44	45.43	-136.43
1019	156.10	520.84	-6.78	22.22	-142.51
1020	160.75	535.85	-6.29	0.00	-143.75
1021	160.75	535.85	-6.29	0.00	-143.75
1022	160.75	535.85	-6.29	0.00	-143.75
1023	160.75	535.85	-6.29	0.00	-143.75
1024	160.75	535.85	-6.29	0.00	-143.75
1025	-41.90	0.85	1.95	66.69	11.90
1026	-42.52	-0.42	2.72	72.56	18.17
1027	-42.81	5.04	4.61	112.78	19.89
1028	-43.92	7.02	7.08	158.24	-3.85
1029	-43.83	28.09	0.85	145.56	-73.15
1030	-13.39	69.14	10.55	120.56	-143.31
1031	-12.40	110.22	7.20	80.78	-166.71
1032	-0.71	156.04	-0.11	46.93	-163.87
1033	12.22	191.92	-7.53	31.13	-156.08
1034	24.62	223.74	-10.70	24.48	-146.94
1035	36.39	253.93	-12.56	23.98	-139.43
1036	47.70	283.13	-13.97	26.70	-133.38
1037	58.79	311.44	-14.93	30.34	-128.45
1038	69.82	338.89	-15.48	34.73	-124.37
1039	80.94	365.53	-15.61	39.97	-120.97
1040	92.25	391.61	-15.33	46.51	-118.24
1041	104.02	418.51	-14.55	55.61	-117.62
1042	116.75	451.76	-11.30	69.21	-120.47
1043	120.17	474.92	-8.01	71.71	-136.22
1044	156.35	517.77	-8.34	28.10	-167.05
1045	164.47	548.25	-7.99	0.00	-184.42
1046	164.47	548.25	-7.99	0.00	-184.42
1047	164.47	548.25	-7.99	0.00	-184.42
1048	164.47	548.25	-7.99	0.00	-184.42
1049	164.47	548.25	-7.99	0.00	-184.42
1050	-53.38	0.76	0.53	27.45	31.22
1051	-54.99	-1.47	1.23	40.24	61.62
1052	-60.66	-9.79	9.41	86.72	101.04
1053	-67.62	-5.15	20.78	130.07	56.47
1054	-68.02	17.04	72.17	93.64	-57.65
1055	-57.48	61.70	21.76	90.43	-144.30
1056	-34.78	138.60	9.05	67.03	-177.58
1057	-13.33	171.76	-4.53	33.12	-176.00

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1058	3.22	199.06	-10.74	23.09	-161.76
1059	17.21	226.97	-12.64	21.26	-150.36
1060	29.55	255.16	-14.22	23.79	-139.69
1061	40.92	283.07	-15.48	27.31	-131.89
1062	51.79	310.30	-16.41	31.51	-125.84
1063	62.48	336.58	-17.01	36.23	-120.89
1064	73.21	361.62	-17.24	41.45	-116.51
1065	84.15	384.99	-17.10	47.42	-111.92
1066	95.30	405.75	-16.54	55.29	-105.88
1067	108.70	427.83	-8.73	72.12	-107.70
1068	131.91	494.87	-0.60	78.71	-138.68
1069	144.11	509.48	44.00	22.63	-194.54
1070	140.22	467.41	-5.91	0.00	-224.79
1071	140.22	467.41	-5.91	0.00	-224.79
1072	140.22	467.41	-5.91	0.00	-224.79
1073	140.22	467.41	-5.91	0.00	-224.79
1074	140.22	467.41	-5.91	0.00	-224.79
1075	-58.31	1.32	-2.36	-25.54	40.33
1076	-60.30	-0.64	-4.11	-12.53	87.24
1077	-70.16	-11.88	-6.82	-5.73	154.08
1078	-77.20	-17.79	-8.49	-1.64	182.67
1079	-76.15	15.30	-9.71	2.32	143.43
1080	-42.78	280.28	-10.77	5.50	-15.45
1081	-41.12	179.44	-11.79	8.44	-161.04
1082	-20.28	182.09	-12.86	11.65	-180.78
1083	-2.81	202.69	-13.93	15.07	-159.79
1084	11.30	228.34	-14.99	18.79	-149.48
1085	23.38	255.46	-16.01	22.85	-137.63
1086	34.27	282.59	-16.95	27.27	-128.89
1087	44.56	309.06	-17.76	31.99	-122.16
1088	54.67	334.41	-18.38	36.86	-116.65
1089	64.91	358.17	-18.70	41.57	-111.68
1090	75.48	379.34	-18.64	45.51	-106.15
1091	86.29	394.85	-18.14	47.57	-93.03
1092	93.45	387.46	-17.32	45.77	-77.55
1093	93.70	365.40	-16.77	37.43	-71.93
1094	196.91	724.27	-16.59	17.17	-106.02
1095	370.84	1236.15	-16.43	0.00	-143.14
1096	370.84	1236.15	-16.43	0.00	-143.14
1097	370.84	1236.15	-16.43	0.00	-143.14
1098	370.84	1236.15	-16.43	0.00	-143.14
1099	370.84	1236.15	-16.43	0.00	-143.14
1100	-54.73	0.81	-1.38	-51.47	31.39
1101	-56.10	-1.22	-1.56	-46.26	62.12
1102	-61.98	-9.28	-2.98	-70.41	102.30
1103	-69.36	-4.40	-5.38	-89.10	58.61
1104	-70.35	17.95	-7.17	-86.02	-54.61
1105	-60.51	62.67	-12.25	-48.32	-140.41
1106	-40.44	139.54	-15.26	-33.41	-172.86
1107	-20.29	172.49	-16.61	-1.97	-170.44
1108	-5.13	199.48	-16.76	9.06	-155.33
1109	7.38	226.95	-16.94	15.87	-144.36
1110	18.16	254.53	-17.38	21.43	-132.82
1111	27.92	281.62	-18.00	26.70	-124.14
1112	37.20	307.75	-18.72	31.94	-117.24
1113	46.43	332.55	-19.42	37.01	-111.51
1114	56.02	355.61	-19.97	41.30	-106.48
1115	66.38	376.36	-20.18	43.37	-101.45
1116	77.80	393.79	-20.01	39.82	-95.26
1117	92.59	411.91	-19.79	22.27	-96.61
1118	118.13	474.69	-20.56	10.22	-128.70
1119	133.93	485.33	-20.33	14.44	-185.07
1120	132.48	441.61	-22.08	0.00	-215.56
1121	132.48	441.61	-22.08	0.00	-215.56
1122	132.48	441.61	-22.08	0.00	-215.56
1123	132.48	441.61	-22.08	0.00	-215.56
1124	132.48	441.61	-22.08	0.00	-215.56
1125	-44.34	1.05	-1.02	-67.89	12.28
1126	-44.51	0.14	-0.44	-65.44	19.21
1127	-45.21	6.06	-1.35	-87.38	22.44
1128	-47.21	8.52	-4.17	-120.96	-1.87
1129	-48.31	29.92	-9.22	-136.29	-69.69
1130	-22.26	71.09	-13.87	-84.89	-138.23
1131	-23.52	112.08	-17.08	-41.38	-159.95
1132	-14.42	157.48	-18.12	-10.74	-155.38
1133	-4.25	192.74	-17.96	4.29	-145.82

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1134	5.20	223.66	-17.71	13.09	-134.92
1135	13.84	252.67	-17.79	19.75	-125.63
1136	21.91	280.28	-18.23	25.70	-117.76
1137	29.75	306.46	-18.96	31.44	-111.00
1138	37.75	331.04	-19.89	36.92	-105.17
1139	46.37	353.82	-20.88	41.47	-100.24
1140	56.25	374.76	-21.82	43.41	-96.36
1141	68.31	394.99	-22.66	39.22	-95.10
1142	83.76	420.10	-23.77	26.41	-97.92
1143	92.02	434.29	-25.83	10.60	-114.18
1144	135.60	468.59	-28.31	7.40	-145.76
1145	148.63	495.43	-28.38	0.00	-163.52
1146	148.63	495.43	-28.38	0.00	-163.52
1147	148.63	495.43	-28.38	0.00	-163.52
1148	148.63	495.43	-28.38	0.00	-163.52
1149	148.63	495.43	-28.38	0.00	-163.52
1150	-31.14	1.41	-1.08	-71.00	-0.29
1151	-30.52	5.06	-0.53	-66.85	-1.67
1152	-29.59	11.40	-1.37	-77.23	-9.98
1153	-27.66	23.66	-3.94	-100.07	-32.19
1154	-25.09	44.48	-8.43	-113.42	-66.83
1155	-15.46	74.69	-13.08	-77.92	-101.56
1156	-9.76	111.28	-15.94	-36.63	-123.80
1157	-7.28	150.21	-17.02	-12.99	-131.07
1158	-2.04	187.18	-17.04	1.50	-129.29
1159	4.00	220.23	-16.82	10.82	-123.80
1160	10.12	250.57	-16.84	17.87	-117.04
1161	16.16	278.86	-17.28	24.14	-110.13
1162	22.22	305.29	-18.15	30.25	-103.42
1163	28.61	329.84	-19.40	36.30	-97.18
1164	35.80	352.44	-21.02	41.85	-91.80
1165	44.53	373.12	-23.03	45.65	-88.00
1166	56.15	392.46	-25.54	45.41	-86.79
1167	71.23	409.23	-28.43	40.15	-89.94
1168	95.84	426.07	-31.83	30.87	-97.73
1169	124.05	445.04	-34.32	13.73	-104.13
1170	136.06	453.55	-34.65	0.00	-105.72
1171	136.06	453.55	-34.65	0.00	-105.72
1172	136.06	453.55	-34.65	0.00	-105.72
1173	136.06	453.55	-34.65	0.00	-105.72
1174	136.06	453.55	-34.65	0.00	-105.72
1175	-18.82	0.95	-1.13	-62.67	-4.47
1176	-17.88	5.60	-0.79	-56.70	-9.75
1177	-16.48	15.34	-1.69	-60.66	-22.86
1178	-14.57	30.70	-3.67	-67.72	-41.54
1179	-12.78	52.36	-6.89	-69.49	-64.51
1180	-7.99	80.13	-10.29	-51.88	-86.98
1181	-4.67	112.43	-12.73	-29.86	-104.01
1182	-2.63	148.64	-13.93	-11.40	-113.32
1183	-0.30	184.20	-14.23	0.58	-115.60
1184	3.00	217.69	-14.23	8.97	-113.22
1185	6.74	248.75	-14.39	15.60	-108.23
1186	10.68	277.55	-14.93	21.64	-101.79
1187	14.80	304.22	-15.96	27.73	-94.57
1188	19.29	328.74	-17.51	34.16	-87.06
1189	24.55	351.11	-19.66	40.86	-79.87
1190	31.34	371.30	-22.69	47.27	-73.94
1191	40.80	388.28	-26.98	52.11	-70.22
1192	57.69	402.18	-32.68	52.58	-68.90
1193	82.16	411.48	-38.25	45.16	-68.57
1194	112.54	421.28	-41.91	23.79	-67.79
1195	128.18	427.27	-42.03	0.00	-67.23
1196	128.18	427.27	-42.03	0.00	-67.23
1197	128.18	427.27	-42.03	0.00	-67.23
1198	128.18	427.27	-42.03	0.00	-67.23
1199	128.18	427.27	-42.03	0.00	-67.23
1200	-9.13	0.63	-0.91	-46.85	-6.96
1201	-8.12	5.99	-0.72	-40.60	-13.96
1202	-7.22	17.33	-1.43	-40.56	-28.77
1203	-6.12	34.50	-2.73	-42.21	-45.40
1204	-5.16	56.80	-4.72	-41.79	-63.19
1205	-3.11	83.69	-6.88	-31.44	-80.00
1206	-1.49	114.21	-8.62	-19.22	-93.57
1207	-0.62	148.42	-9.66	-7.85	-102.31
1208	0.38	182.87	-10.07	0.72	-105.73
1209	1.82	216.05	-10.24	7.09	-104.62

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1210	3.67	247.27	-10.51	12.40	-100.16
1211	5.75	276.28	-11.12	17.45	-93.26
1212	8.01	302.99	-12.17	22.78	-84.51
1213	10.54	327.30	-13.76	28.75	-74.32
1214	13.61	349.19	-16.02	35.66	-63.19
1215	17.76	368.63	-19.27	43.57	-51.92
1216	24.38	385.67	-24.56	51.82	-42.12
1217	34.79	395.62	-32.82	56.95	-34.45
1218	61.77	398.77	-44.38	48.66	-26.33
1219	101.52	397.21	-50.20	17.95	-19.16
1220	118.15	393.82	-51.48	0.00	-17.01
1221	118.15	393.82	-51.48	0.00	-17.01
1222	118.15	393.82	-51.48	0.00	-17.01
1223	118.15	393.82	-51.48	0.00	-17.01
1224	118.15	393.82	-51.48	0.00	-17.01
1225	-2.60	0.86	-0.47	-25.94	-8.49
1226	-2.05	5.99	-0.35	-21.09	-16.64
1227	-1.72	18.20	-0.71	-20.23	-32.62
1228	-1.28	36.20	-1.34	-20.33	-48.26
1229	-0.91	58.86	-2.29	-19.73	-63.61
1230	-0.35	85.44	-3.36	-14.62	-77.66
1231	0.05	115.10	-4.27	-9.01	-89.14
1232	0.16	148.28	-4.86	-3.59	-96.88
1233	0.32	181.95	-5.15	0.80	-100.07
1234	0.70	214.72	-5.31	4.30	-98.80
1235	1.30	245.77	-5.54	7.36	-93.62
1236	2.04	274.62	-5.99	10.41	-85.02
1237	2.86	300.97	-6.73	13.75	-73.29
1238	3.80	324.60	-7.82	17.66	-57.48
1239	4.96	345.30	-9.36	22.49	-35.66
1240	6.67	363.04	-11.62	28.57	-10.36
1241	9.63	378.47	-15.10	35.90	17.79
1242	17.02	396.26	-23.14	42.81	42.71
1243	21.55	390.04	-35.55	42.45	58.81
1244	113.49	391.20	-61.22	30.06	85.22
1245	113.49	378.32	-62.51	0.00	105.81
1246	113.49	378.32	-62.51	0.00	105.81
1247	113.49	378.32	-62.51	0.00	105.81
1248	113.49	378.32	-62.51	0.00	105.81
1249	113.49	378.32	-62.51	0.00	105.81
1250	-0.12	0.07	-0.10	-14.34	-11.77
1251	0.12	5.16	0.10	-10.71	-20.86
1252	0.06	17.71	0.16	-10.09	-37.65
1253	0.24	35.98	0.06	-9.96	-52.74
1254	0.37	58.71	-0.19	-9.48	-66.98
1255	0.36	85.05	-0.52	-6.92	-79.69
1256	0.25	114.32	-0.83	-4.19	-89.93
1257	0.09	147.14	-1.04	-1.54	-96.70
1258	-0.03	180.45	-1.15	0.68	-99.03
1259	-0.08	212.81	-1.27	2.54	-96.58
1260	-0.09	243.31	-1.49	4.24	-89.39
1261	-0.08	271.38	-1.87	6.00	-77.51
1262	-0.10	296.62	-2.46	7.97	-56.88
1263	-0.16	318.62	-3.29	10.35	-28.70
1264	-0.31	336.74	-4.44	13.40	6.72
1265	-0.48	350.16	-5.97	17.42	51.94
1266	-1.36	357.40	-8.60	22.82	110.77
1267	0.70	359.42	-11.18	28.56	187.45
1268	-3.14	402.57	-27.09	36.29	254.37
1269	97.21	398.28	-66.70	-18.08	230.90
1270	97.21	398.28	-66.70	-18.08	230.90
1271	97.21	398.28	-66.70	-18.08	230.90
1272	97.21	398.28	-66.70	-18.08	230.90
1273	97.21	398.28	-66.70	-18.08	230.90

Combinazione n° 6 - SLEQ

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1	-0.08	0.08	0.32	29.55	-8.59
2	-2.05	0.86	1.35	52.39	-6.36
3	-1.80	5.99	1.48	35.45	-12.70
4	0.12	5.16	0.03	17.94	-15.60
5	-7.44	0.63	3.08	94.09	-5.05
6	-7.04	5.99	3.73	68.15	-10.47

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
7	-1.49	18.20	2.40	28.23	-25.53
8	0.07	17.71	0.06	13.97	-29.01
9	-6.24	17.33	5.67	56.97	-22.42
10	-15.90	0.95	5.04	127.20	-2.90
11	-15.53	5.60	6.59	95.13	-6.85
12	-14.23	15.34	9.43	86.02	-17.32
13	-1.08	36.20	3.08	24.07	-38.88
14	0.26	35.98	0.15	11.67	-41.89
15	-5.34	34.50	6.82	50.57	-36.70
16	-12.70	30.70	10.89	82.42	-33.40
17	-27.25	1.41	7.11	145.70	0.39
18	-26.84	5.06	9.97	112.01	-0.22
19	-25.48	11.40	14.66	112.80	-6.41
20	-23.99	23.66	15.28	124.57	-25.46
21	-0.81	58.86	3.89	20.16	-52.61
22	0.37	58.71	0.34	9.77	-54.64
23	-4.71	56.80	8.42	42.71	-52.66
24	-11.74	52.36	13.09	71.63	-54.10
25	-23.11	44.48	18.93	118.24	-56.74
26	-39.98	1.05	8.13	138.35	12.28
27	-39.67	0.14	13.33	108.75	19.21
28	-40.05	6.06	22.14	129.51	22.44
29	-40.04	8.52	28.79	163.33	0.43
30	-44.62	29.92	25.52	142.67	-61.29
31	-0.35	85.44	4.91	17.88	-65.64
32	0.36	85.05	0.67	8.65	-66.47
33	-3.11	83.69	10.47	37.86	-68.28
34	-7.99	80.13	16.67	62.32	-75.07
35	-15.46	74.69	23.44	94.73	-89.32
36	-22.26	71.09	37.71	116.53	-125.55
37	-50.35	1.00	6.94	98.72	31.39
38	-50.38	0.34	12.33	75.30	62.12
39	-55.98	-5.62	27.74	102.10	102.30
40	-64.55	-4.40	43.48	133.80	58.61
41	-65.09	17.95	97.95	89.44	-54.61
42	-55.56	62.67	50.09	85.91	-140.41
43	0.05	115.10	5.90	14.25	-76.66
44	0.25	114.32	1.08	6.92	-76.42
45	-1.49	114.21	12.40	29.67	-81.32
46	-4.67	112.43	19.44	46.49	-91.56
47	-9.76	111.28	27.88	61.96	-111.05
48	-23.52	112.08	36.68	73.22	-147.34
49	-40.44	139.54	39.78	57.96	-172.86
50	-53.99	1.79	3.24	35.58	40.33
51	-54.24	2.13	5.63	17.34	87.24
52	-62.68	-1.17	9.30	7.46	154.08
53	-66.49	16.39	11.52	1.92	182.67
54	-70.52	15.30	13.07	-0.28	143.43
55	-42.78	280.28	14.36	-1.99	-15.45
56	-41.12	179.44	15.57	-3.69	-161.04
57	0.16	148.28	6.61	10.13	-84.44
58	0.10	147.14	1.44	4.99	-83.42
59	-0.62	148.42	13.50	20.48	-90.08
60	-2.63	148.64	20.54	30.25	-101.02
61	-7.28	150.21	27.20	37.22	-118.78
62	-14.42	157.48	31.77	36.08	-143.76
63	-20.29	172.49	28.68	20.92	-170.44
64	-20.28	182.09	16.82	-5.70	-180.78
65	-49.10	0.96	3.67	3.65	31.22
66	-49.37	0.11	7.36	-16.79	61.62
67	-54.83	-6.11	12.90	-50.73	101.04
68	-63.05	-5.15	15.63	-72.73	56.47
69	-63.09	17.04	24.30	-80.45	-57.65
70	-52.98	61.70	13.21	-58.89	-144.30
71	-34.78	138.60	10.16	-49.89	-177.58
72	-13.33	171.76	8.87	-24.87	-176.00
73	0.32	181.95	6.95	5.90	-88.05
74	-0.01	180.45	1.70	2.90	-86.41
75	0.38	182.87	13.76	11.76	-93.87
76	-0.30	184.20	19.98	16.60	-103.72
77	-2.04	187.18	24.84	18.54	-117.51
78	-4.25	192.74	26.78	15.29	-134.32
79	-5.13	199.48	24.39	5.80	-149.86
80	-2.81	202.69	18.09	-8.01	-157.56
81	3.22	199.06	11.33	-20.65	-154.40
82	-37.70	0.85	4.09	-8.72	11.90

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
83	-37.86	-0.42	8.41	-32.31	18.17
84	-37.94	5.04	13.28	-64.31	19.89
85	-37.20	7.02	14.03	-102.03	-1.03
86	-40.80	28.09	10.10	-126.08	-64.08
87	-13.39	69.14	8.75	-94.21	-129.83
88	-12.40	110.22	6.87	-56.64	-153.18
89	-0.71	156.04	6.82	-32.43	-151.22
90	12.22	191.92	8.60	-24.17	-143.42
91	0.70	214.72	7.13	1.97	-87.46
92	-0.06	212.81	1.94	0.86	-84.93
93	1.82	216.05	13.70	4.18	-93.28
94	3.00	217.69	19.16	5.82	-101.79
95	4.00	220.23	22.87	5.67	-112.32
96	5.20	223.66	24.19	2.75	-123.44
97	7.38	226.95	22.80	-3.07	-132.87
98	11.30	228.34	19.36	-10.66	-138.15
99	17.21	226.97	15.42	-17.87	-138.20
100	24.62	223.74	12.52	-22.56	-134.16
101	-24.35	1.06	3.58	-11.96	0.76
102	-24.62	4.21	7.25	-32.94	0.03
103	-22.77	9.85	11.20	-54.61	-6.91
104	-20.17	21.40	11.09	-83.55	-27.54
105	-17.71	41.71	8.75	-102.96	-60.84
106	-2.67	71.77	6.15	-85.14	-95.70
107	6.41	108.52	5.43	-49.86	-119.82
108	12.74	148.12	5.87	-32.65	-130.01
109	22.07	186.05	7.75	-24.83	-131.22
110	32.50	220.42	11.33	-22.62	-128.48
111	1.30	245.77	7.42	-1.58	-83.13
112	-0.07	243.31	2.29	-1.05	-78.98
113	3.67	247.27	13.90	-2.24	-89.43
114	6.74	248.75	18.90	-2.63	-97.21
115	10.12	250.57	22.10	-3.67	-105.77
116	13.84	252.67	23.31	-5.93	-114.14
117	18.16	254.53	22.64	-9.46	-121.09
118	23.38	255.46	20.61	-13.64	-125.59
119	29.55	255.16	18.05	-17.45	-127.22
120	36.39	253.93	15.80	-19.83	-126.46
121	43.32	252.50	14.33	-20.13	-124.42
122	-13.04	0.38	2.81	-7.23	-2.33
123	-13.50	4.48	5.67	-24.02	-6.37
124	-11.46	13.27	8.77	-39.06	-17.73
125	-8.39	27.64	9.50	-52.40	-35.88
126	-2.14	48.64	8.44	-59.40	-59.36
127	8.12	76.25	6.92	-56.07	-83.47
128	15.94	108.83	6.24	-40.19	-103.25
129	23.02	146.03	6.79	-28.19	-116.07
130	30.69	182.94	8.82	-22.71	-122.10
131	39.74	218.21	11.54	-20.97	-123.48
132	49.70	251.52	13.70	-18.28	-122.33
133	2.04	274.62	8.04	-4.85	-75.55
134	-0.08	271.38	2.84	-2.88	-68.63
135	5.75	276.28	14.67	-7.89	-83.19
136	10.68	277.55	19.47	-9.66	-91.17
137	16.16	278.86	22.40	-11.10	-99.03
138	21.91	280.28	23.56	-12.75	-106.25
139	27.92	281.62	23.20	-14.78	-112.25
140	34.27	282.59	21.78	-16.93	-116.59
141	40.92	283.07	19.84	-18.71	-119.16
142	47.70	283.13	17.89	-19.59	-120.20
143	54.27	283.08	16.27	-19.20	-120.26
144	60.24	283.24	15.09	-17.49	-120.02
145	-5.48	-0.25	2.24	2.64	-4.11
146	-5.95	4.66	4.50	-10.40	-9.45
147	-4.08	14.76	7.35	-19.69	-22.25
148	-0.47	30.63	8.49	-26.40	-39.08
149	7.47	52.09	9.23	-29.91	-58.71
150	15.51	78.87	9.27	-29.67	-78.54
151	22.72	109.93	9.27	-25.68	-95.93
152	29.70	145.56	9.93	-20.86	-109.00
153	37.12	181.87	11.17	-18.16	-116.96
154	45.54	217.32	12.56	-15.78	-120.53
155	55.00	251.31	13.66	-14.76	-121.13
156	65.25	283.82	14.30	-14.74	-120.03
157	2.86	300.97	9.07	-8.07	-65.03
158	-0.09	296.62	3.65	-4.73	-53.79

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
159	8.01	302.99	16.14	-13.22	-75.17
160	14.80	304.22	20.89	-15.99	-84.33
161	22.22	305.29	23.58	-17.56	-92.47
162	29.75	306.46	24.52	-18.65	-99.46
163	37.20	307.75	24.13	-19.61	-105.20
164	44.56	309.06	22.81	-20.45	-109.65
165	51.79	310.30	21.02	-20.94	-112.86
166	58.79	311.44	19.10	-20.78	-115.02
167	65.34	312.56	17.31	-19.77	-116.39
168	71.18	313.74	15.75	-17.90	-117.32
169	76.08	315.12	14.43	-15.34	-118.11
170	-2.01	-0.24	2.61	21.56	-4.65
171	-2.45	4.71	4.73	7.26	-10.36
172	-0.69	15.22	7.88	0.21	-23.57
173	4.90	31.49	9.79	-2.58	-40.08
174	12.22	53.15	11.05	-4.23	-58.74
175	19.71	79.78	11.96	-5.37	-77.48
176	26.72	110.47	12.67	-6.31	-94.22
177	33.78	145.75	13.23	-7.26	-107.34
178	41.20	181.94	13.65	-8.23	-115.86
179	49.55	217.58	13.89	-9.26	-120.14
180	58.91	251.95	13.94	-10.33	-121.35
181	69.10	284.94	13.75	-11.41	-120.67
182	79.89	316.74	13.29	-12.44	-119.01
183	3.80	324.60	10.56	-11.49	-51.68
184	-0.15	318.62	4.76	-6.76	-28.70
185	10.54	327.30	18.35	-18.63	-65.80
186	19.29	328.74	23.12	-22.08	-77.20
187	28.61	329.84	25.47	-23.49	-86.32
188	37.75	331.04	25.98	-23.97	-93.56
189	46.43	332.55	25.20	-24.11	-99.31
190	54.67	334.41	23.60	-24.09	-103.93
191	62.48	336.58	21.62	-23.75	-107.67
192	69.82	338.89	19.55	-22.87	-110.66
193	76.54	341.19	17.56	-21.30	-112.98
194	82.44	343.41	15.74	-19.04	-114.72
195	87.32	345.57	14.07	-16.30	-116.02
196	91.10	347.72	12.55	-13.35	-117.04
197	-2.64	-0.26	3.76	62.10	-4.13
198	-3.17	4.61	5.82	40.30	-9.53
199	-1.26	14.70	9.18	31.81	-22.49
200	4.13	30.57	11.04	27.48	-39.55
201	12.28	52.10	12.80	23.16	-59.44
202	20.56	79.01	14.58	19.40	-79.54
203	28.04	110.27	15.99	14.02	-97.20
204	35.32	146.21	16.47	7.58	-110.53
205	43.02	182.92	16.08	1.79	-118.72
206	51.69	218.86	15.20	-2.67	-122.46
207	61.36	253.43	14.21	-5.86	-123.18
208	71.74	286.60	13.23	-8.08	-122.11
209	82.60	318.63	12.24	-9.59	-120.13
210	93.77	349.85	11.16	-10.51	-117.88
211	4.96	345.30	12.60	-15.36	-35.45
212	-0.28	336.74	6.25	-9.15	6.72
213	13.61	349.19	21.41	-24.38	-55.53
214	24.55	351.11	26.21	-28.05	-70.31
215	35.80	352.44	28.04	-28.85	-80.93
216	46.37	353.82	27.83	-28.52	-88.49
217	56.02	355.61	26.31	-28.03	-94.11
218	64.91	358.17	24.03	-27.59	-98.77
219	73.21	361.62	21.53	-26.92	-103.04
220	80.94	365.53	19.17	-25.61	-106.94
221	87.93	369.28	17.04	-23.48	-110.18
222	93.97	372.63	15.08	-20.65	-112.60
223	98.90	375.60	13.24	-17.39	-114.22
224	102.60	378.27	11.52	-14.03	-115.24
225	105.13	380.67	9.98	-10.83	-115.78
226	-7.43	0.35	4.99	96.88	-2.36
227	-8.01	4.38	7.24	69.80	-6.52
228	-5.89	13.14	10.60	64.41	-18.21
229	-2.60	27.51	12.32	63.80	-36.82
230	7.38	48.63	14.42	56.05	-60.82
231	18.15	76.50	17.58	48.60	-85.48
232	26.52	109.47	19.68	35.00	-105.81
233	34.22	147.28	19.89	21.31	-119.16
234	42.48	184.99	18.27	10.39	-125.66

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
235	52.07	221.23	16.14	2.74	-127.40
236	62.47	255.69	14.18	-2.22	-126.50
237	73.30	288.73	12.56	-5.33	-124.27
238	84.35	320.70	11.16	-7.19	-121.47
239	95.48	351.92	9.87	-8.08	-118.55
240	106.62	382.73	8.64	-8.08	-115.86
241	6.67	363.04	15.51	-19.87	-10.36
242	-0.42	350.16	8.19	-12.10	51.94
243	17.76	368.63	25.67	-30.49	-45.15
244	31.34	371.30	30.38	-33.51	-64.51
245	44.53	373.12	31.34	-32.88	-76.92
246	56.25	374.76	30.13	-31.38	-84.33
247	66.38	376.36	27.53	-30.55	-88.89
248	75.48	379.34	23.96	-30.53	-93.12
249	84.15	384.99	20.43	-30.40	-98.21
250	92.25	391.61	17.74	-29.08	-103.80
251	99.55	397.38	15.68	-26.28	-108.39
252	105.79	401.96	13.87	-22.49	-111.33
253	110.74	405.66	12.01	-18.36	-113.06
254	114.36	408.84	10.24	-14.31	-113.95
255	116.62	411.47	8.69	-10.48	-114.21
256	117.75	413.58	7.44	-7.03	-113.78
257	-16.11	1.02	6.41	116.92	0.71
258	-16.56	4.05	9.30	89.75	-0.19
259	-14.58	9.62	13.70	94.87	-7.62
260	-11.65	21.17	14.11	109.93	-28.95
261	-3.64	41.65	17.41	106.52	-63.06
262	12.20	72.07	21.35	84.96	-98.76
263	22.15	109.40	25.00	54.36	-123.72
264	29.46	149.89	23.29	31.67	-134.73
265	39.74	188.99	19.65	15.54	-136.66
266	51.05	224.81	16.16	5.70	-134.50
267	62.60	258.60	13.51	-0.16	-130.85
268	74.09	291.16	11.53	-3.62	-126.86
269	85.40	322.83	9.96	-5.54	-122.88
270	96.50	353.83	8.63	-6.33	-119.04
271	107.36	384.36	7.50	-6.04	-115.44
272	118.00	414.84	6.65	-3.23	-112.46
273	9.63	378.47	19.92	-24.97	17.79
274	-1.17	357.40	11.50	-15.84	110.77
275	24.38	385.67	32.36	-36.28	-36.09
276	40.80	388.28	35.91	-37.28	-60.75
277	56.15	392.46	35.11	-33.80	-75.21
278	68.31	394.99	33.30	-30.07	-82.56
279	77.80	393.79	29.55	-29.48	-82.52
280	86.29	394.85	23.33	-32.16	-82.61
281	95.30	405.75	17.48	-34.84	-91.99
282	104.02	418.51	14.83	-34.15	-102.61
283	111.50	426.65	13.76	-29.74	-108.32
284	117.80	431.73	12.24	-24.11	-111.46
285	122.94	436.27	10.49	-18.80	-112.74
286	126.33	439.89	8.81	-13.94	-113.23
287	128.32	442.71	7.35	-9.36	-113.35
288	128.77	444.70	6.30	-4.50	-112.86
289	128.47	446.27	5.95	3.62	-110.86
290	-27.03	0.78	6.90	110.73	11.57
291	-27.46	-0.66	11.59	89.36	17.30
292	-27.36	4.69	19.37	115.04	17.77
293	-26.17	6.65	25.40	152.32	-2.91
294	-27.19	27.91	21.55	134.53	-67.08
295	6.09	69.42	33.03	110.10	-133.99
296	8.32	111.22	31.13	68.60	-158.50
297	21.41	158.21	25.10	33.38	-157.67
298	35.73	195.61	18.77	14.98	-150.88
299	49.43	229.31	14.62	5.28	-142.46
300	62.33	261.76	11.90	-0.11	-135.37
301	74.51	293.57	10.02	-3.15	-129.41
302	86.10	324.82	8.58	-4.79	-124.17
303	97.15	355.47	7.40	-5.39	-119.33
304	107.72	385.47	6.47	-4.97	-114.64
305	117.82	414.91	6.01	-1.11	-110.02
306	127.65	444.96	6.73	8.21	-106.86
307	17.02	396.26	30.11	-29.52	42.71
308	0.70	359.42	14.75	-19.68	187.45
309	34.79	395.62	42.74	-39.38	-28.97
310	57.69	402.18	42.69	-36.63	-59.33

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
311	71.23	409.23	38.57	-29.80	-77.82
312	83.76	420.10	36.00	-19.76	-84.19
313	92.59	411.91	36.53	-16.09	-84.69
314	93.45	387.46	22.28	-31.10	-77.55
315	108.70	427.83	15.43	-46.25	-94.01
316	116.75	451.76	13.11	-42.85	-104.29
317	122.85	456.09	11.74	-32.67	-111.93
318	131.00	462.87	10.56	-24.45	-113.25
319	135.44	467.85	8.79	-17.70	-112.98
320	138.38	471.81	7.40	-12.52	-112.78
321	140.16	474.78	6.26	-7.64	-113.01
322	140.63	476.88	5.23	-1.39	-113.49
323	137.79	477.45	5.33	11.11	-112.73
324	137.62	480.87	7.61	25.72	-106.26
325	-36.32	0.90	5.31	72.02	30.79
326	-36.95	-0.20	9.73	58.40	60.50
327	-42.16	-6.70	23.53	90.72	98.30
328	-48.55	-5.72	38.29	126.02	51.77
329	-48.98	16.66	91.97	84.47	-64.40
330	-37.86	61.85	43.30	82.41	-153.05
331	-9.32	139.61	32.05	55.82	-188.20
332	14.04	174.17	19.82	20.59	-188.00
333	32.50	203.31	14.21	7.67	-164.05
334	48.32	233.51	11.14	1.41	-149.00
335	62.30	264.46	9.31	-1.95	-138.89
336	75.02	295.59	8.04	-3.83	-131.33
337	86.80	326.49	7.03	-4.83	-125.12
338	97.80	356.84	6.14	-5.20	-119.49
339	108.10	386.24	5.40	-4.90	-113.84
340	117.70	414.10	5.08	-2.93	-107.32
341	126.49	439.23	6.09	4.43	-98.78
342	136.38	465.22	12.66	24.74	-98.06
343	21.55	390.04	45.91	-29.00	58.81
344	-2.59	402.57	35.00	-24.70	254.37
345	61.77	398.77	57.30	-33.21	-21.48
346	82.16	411.48	49.56	-30.24	-59.00
347	95.84	426.07	40.80	-18.30	-85.43
348	92.02	434.29	39.03	-4.29	-100.18
349	118.13	474.69	43.54	3.50	-114.95
350	93.70	365.40	21.59	-25.51	-71.93
351	131.91	494.87	14.74	-44.64	-123.89
352	120.17	474.92	10.83	-47.53	-119.88
353	139.64	487.43	11.09	-33.82	-119.91
354	144.09	493.34	8.64	-20.46	-115.50
355	147.14	498.39	7.39	-13.84	-112.82
356	149.34	502.40	6.42	-9.62	-111.76
357	151.07	505.65	5.70	-5.66	-112.31
358	152.13	508.08	5.23	0.17	-114.66
359	152.13	510.08	4.11	14.13	-119.09
360	137.67	506.14	9.17	37.63	-119.69
361	155.17	535.55	19.29	41.05	-125.29
362	-39.32	1.71	1.29	9.65	39.80
363	-40.19	1.72	2.37	2.55	85.84
364	-48.32	-1.96	3.96	-0.60	150.63
365	-51.36	15.24	4.92	-2.03	176.78
366	-54.32	14.63	5.51	-2.85	135.02
367	-15.11	280.18	5.90	-3.38	-26.31
368	-11.24	180.31	6.16	-3.76	-174.23
369	12.09	184.57	6.30	-4.09	-196.15
370	32.10	207.28	6.34	-4.40	-169.61
371	48.69	235.59	6.27	-4.68	-151.72
372	63.08	265.93	6.09	-4.95	-140.36
373	75.98	296.85	5.80	-5.19	-132.18
374	87.78	327.69	5.39	-5.38	-125.57
375	98.71	357.97	4.87	-5.49	-119.60
376	108.85	387.16	4.27	-5.51	-113.50
377	118.13	414.11	3.60	-5.37	-106.14
378	126.26	435.53	2.92	-5.01	-93.14
379	129.11	433.73	2.30	-4.32	-85.90
380	123.75	407.28	1.87	-3.21	-75.73
381	113.49	391.20	78.79	-20.62	85.22
382	97.21	398.28	85.63	23.53	230.90
383	101.52	397.21	64.72	-12.17	-15.16
384	112.54	421.28	53.88	-15.58	-58.25
385	124.05	445.04	45.34	-5.85	-91.87
386	135.60	468.59	30.91	4.83	-133.44

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
387	133.93	485.33	87.82	-0.55	-172.24
388	196.91	724.27	21.36	-11.73	-106.02
389	144.11	509.48	21.47	-20.19	-180.74
390	156.35	517.77	16.29	-27.81	-152.50
391	156.10	520.84	7.61	-18.74	-126.10
392	156.76	525.42	7.52	-8.62	-116.11
393	158.27	529.65	6.47	-5.85	-111.46
394	159.71	533.48	5.94	-4.17	-109.79
395	161.14	536.98	5.67	-2.61	-110.59
396	162.63	540.36	5.41	-0.22	-114.54
397	165.22	543.98	6.71	9.25	-124.17
398	169.14	550.02	5.32	18.59	-150.83
399	161.13	552.11	63.22	11.51	-180.28
400	218.93	778.97	1.66	-1.35	-106.56
401	-34.59	0.90	2.30	-12.03	30.72
402	-35.21	-0.19	4.99	-25.00	60.38
403	-40.42	-6.67	8.98	-55.11	98.06
404	-45.85	-5.59	10.73	-74.98	51.42
405	-47.21	16.89	18.64	-81.28	-64.84
406	-36.08	62.19	6.85	-56.48	-153.58
407	-6.59	140.11	3.06	-45.29	-188.81
408	16.76	174.85	0.98	-17.79	-188.46
409	35.19	204.20	1.24	-10.87	-164.55
410	50.97	234.64	1.90	-8.49	-149.51
411	64.89	265.83	2.94	-7.70	-139.37
412	77.51	297.22	3.62	-6.58	-131.77
413	89.16	328.36	3.83	-5.97	-125.47
414	100.01	358.93	3.69	-5.85	-119.72
415	110.13	388.52	3.22	-6.19	-113.90
416	119.54	416.50	2.98	-7.31	-107.20
417	128.11	441.69	3.27	-10.43	-98.45
418	137.76	467.64	3.96	-22.63	-97.52
419	156.29	537.88	3.73	-25.30	-124.57
420	161.93	554.26	10.63	-7.17	-179.45
421	113.49	378.32	80.40	0.00	105.81
422	118.15	393.82	66.31	0.00	-13.16
423	128.18	427.27	54.25	0.00	-57.68
424	136.06	453.55	44.84	0.00	-93.46
425	148.63	495.43	38.46	0.00	-152.26
426	132.48	441.61	37.51	0.00	-205.05
427	370.84	1236.15	21.15	0.00	-143.14
428	140.22	467.41	11.72	0.00	-213.35
429	164.47	548.25	8.39	0.00	-170.99
430	160.75	535.85	7.88	0.00	-127.41
431	162.55	541.84	6.95	0.00	-115.76
432	163.57	545.22	6.26	0.00	-110.45
433	164.69	548.95	5.80	0.00	-108.59
434	165.74	552.47	5.60	0.00	-109.46
435	167.00	556.65	5.71	0.00	-113.95
436	167.66	558.87	6.16	0.00	-125.12
437	174.15	580.50	7.71	0.00	-168.82
438	153.10	510.35	13.03	0.00	-212.25
439	387.51	1291.71	1.61	0.00	-142.53
440	153.71	512.38	0.72	0.00	-211.39
441	153.71	512.38	0.72	0.00	-211.39
442	153.71	512.38	0.72	0.00	-211.39
443	153.71	512.38	0.72	0.00	-211.39
444	153.71	512.38	0.72	0.00	-211.39
445	153.71	512.38	0.72	0.00	-211.39
446	153.71	512.38	0.72	0.00	-211.39
447	153.71	512.38	0.72	0.00	-211.39
448	153.71	512.38	0.72	0.00	-211.39
449	153.71	512.38	0.72	0.00	-211.39
450	153.71	512.38	0.72	0.00	-211.39
451	153.71	512.38	0.72	0.00	-211.39
452	153.71	512.38	0.72	0.00	-211.39
453	153.71	512.38	0.72	0.00	-211.39
454	153.71	512.38	0.72	0.00	-211.39
455	153.71	512.38	0.72	0.00	-211.39
456	153.71	512.38	0.72	0.00	-211.39
457	153.71	512.38	0.72	0.00	-211.39
458	153.71	512.38	0.72	0.00	-211.39
459	153.71	512.38	0.72	0.00	-211.39
460	153.71	512.38	0.72	0.00	-211.39
461	153.71	512.38	0.72	0.00	-211.39
462	-23.59	0.78	2.58	-24.45	11.44

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
463	-24.01	-0.62	5.76	-39.81	17.05
464	-23.89	4.81	8.88	-67.55	17.29
465	-22.68	6.91	8.53	-102.92	-3.34
466	-21.78	28.35	3.79	-125.45	-67.65
467	11.53	70.09	1.73	-89.93	-134.70
468	13.78	112.19	-0.85	-50.36	-159.33
469	26.86	159.55	-1.63	-23.91	-158.61
470	41.14	197.38	-1.13	-13.24	-151.89
471	54.76	231.54	-0.17	-9.09	-143.49
472	67.53	264.50	0.70	-7.50	-136.36
473	79.53	296.82	1.84	-7.12	-130.30
474	90.88	328.57	2.49	-6.17	-124.90
475	101.64	359.67	2.66	-5.86	-119.82
476	111.85	390.04	2.54	-6.37	-114.81
477	121.55	419.75	2.86	-8.07	-109.81
478	130.93	449.92	3.20	-12.36	-106.23
479	140.42	485.78	2.75	-22.13	-105.21
480	139.94	510.87	1.19	-30.82	-118.27
481	170.78	554.40	3.49	-16.90	-149.18
482	175.39	584.64	-1.74	0.00	-167.10
483	175.39	584.64	-1.74	0.00	-167.10
484	175.39	584.64	-1.74	0.00	-167.10
485	175.39	584.64	-1.74	0.00	-167.10
486	175.39	584.64	-1.74	0.00	-167.10
487	175.39	584.64	-1.74	0.00	-167.10
488	175.39	584.64	-1.74	0.00	-167.10
489	175.39	584.64	-1.74	0.00	-167.10
490	175.39	584.64	-1.74	0.00	-167.10
491	175.39	584.64	-1.74	0.00	-167.10
492	175.39	584.64	-1.74	0.00	-167.10
493	175.39	584.64	-1.74	0.00	-167.10
494	175.39	584.64	-1.74	0.00	-167.10
495	175.39	584.64	-1.74	0.00	-167.10
496	175.39	584.64	-1.74	0.00	-167.10
497	175.39	584.64	-1.74	0.00	-167.10
498	175.39	584.64	-1.74	0.00	-167.10
499	175.39	584.64	-1.74	0.00	-167.10
500	175.39	584.64	-1.74	0.00	-167.10
501	175.39	584.64	-1.74	0.00	-167.10
502	175.39	584.64	-1.74	0.00	-167.10
503	175.39	584.64	-1.74	0.00	-167.10
504	175.39	584.64	-1.74	0.00	-167.10
505	175.39	584.64	-1.74	0.00	-167.10
506	-10.98	1.02	1.97	-27.60	0.61
507	-11.43	4.10	4.39	-39.78	-0.39
508	-9.42	9.79	6.44	-56.87	-8.04
509	-6.45	21.53	5.15	-83.30	-29.59
510	4.45	42.28	1.97	-101.13	-63.93
511	20.33	73.05	-1.34	-79.32	-99.85
512	30.33	110.81	-2.72	-42.20	-125.01
513	37.65	151.85	-2.93	-22.99	-136.19
514	47.90	191.59	-2.26	-13.04	-138.23
515	59.11	228.11	-1.27	-8.51	-136.11
516	70.49	262.67	-0.30	-6.64	-132.42
517	81.72	296.00	0.65	-6.12	-128.28
518	92.69	328.44	1.47	-5.65	-124.06
519	103.35	360.14	1.82	-5.25	-119.85
520	113.69	391.27	1.96	-5.71	-115.78
521	123.73	422.17	2.25	-7.25	-112.23
522	133.53	453.81	2.23	-10.35	-109.99
523	142.10	484.95	1.52	-14.52	-111.21
524	155.65	517.33	0.24	-18.70	-117.01
525	167.76	550.74	-1.34	-11.38	-121.75
526	169.58	565.28	-1.70	0.00	-122.58
527	169.58	565.28	-1.70	0.00	-122.58
528	169.58	565.28	-1.70	0.00	-122.58
529	169.58	565.28	-1.70	0.00	-122.58
530	169.58	565.28	-1.70	0.00	-122.58
531	169.58	565.28	-1.70	0.00	-122.58
532	169.58	565.28	-1.70	0.00	-122.58
533	169.58	565.28	-1.70	0.00	-122.58
534	169.58	565.28	-1.70	0.00	-122.58
535	169.58	565.28	-1.70	0.00	-122.58
536	169.58	565.28	-1.70	0.00	-122.58
537	169.58	565.28	-1.70	0.00	-122.58
538	169.58	565.28	-1.70	0.00	-122.58

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
539	169.58	565.28	-1.70	0.00	-122.58
540	169.58	565.28	-1.70	0.00	-122.58
541	169.58	565.28	-1.70	0.00	-122.58
542	169.58	565.28	-1.70	0.00	-122.58
543	169.58	565.28	-1.70	0.00	-122.58
544	169.58	565.28	-1.70	0.00	-122.58
545	169.58	565.28	-1.70	0.00	-122.58
546	169.58	565.28	-1.70	0.00	-122.58
547	169.58	565.28	-1.70	0.00	-122.58
548	169.58	565.28	-1.70	0.00	-122.58
549	169.58	565.28	-1.70	0.00	-122.58
550	169.58	565.28	-1.70	0.00	-122.58
551	169.58	565.28	-1.70	0.00	-122.58
552	-0.66	0.35	1.12	-22.69	-2.49
553	-1.24	4.43	2.66	-30.28	-6.78
554	0.92	13.33	3.76	-40.51	-18.76
555	7.23	27.95	2.96	-51.21	-37.69
556	18.09	49.42	0.81	-56.59	-62.00
557	28.96	77.73	-1.32	-49.00	-86.97
558	37.42	111.27	-2.56	-31.43	-107.59
559	45.18	149.81	-2.73	-17.64	-121.17
560	53.43	188.36	-2.23	-10.29	-127.84
561	62.93	225.55	-1.44	-6.61	-129.66
562	73.14	261.04	-0.64	-5.00	-128.72
563	83.67	295.15	0.05	-4.52	-126.32
564	94.29	328.17	0.77	-4.34	-123.20
565	104.87	360.37	1.14	-3.96	-119.80
566	115.32	392.02	1.30	-4.26	-116.48
567	125.66	423.49	1.45	-5.25	-113.62
568	135.77	454.95	1.31	-6.83	-111.84
569	146.61	487.13	0.67	-8.51	-111.57
570	157.02	518.07	-0.19	-7.84	-111.98
571	166.15	549.73	-0.91	-2.96	-111.37
572	169.67	565.57	-1.08	0.00	-110.63
573	169.67	565.57	-1.08	0.00	-110.63
574	169.67	565.57	-1.08	0.00	-110.63
575	169.67	565.57	-1.08	0.00	-110.63
576	169.67	565.57	-1.08	0.00	-110.63
577	169.67	565.57	-1.08	0.00	-110.63
578	169.67	565.57	-1.08	0.00	-110.63
579	169.67	565.57	-1.08	0.00	-110.63
580	169.67	565.57	-1.08	0.00	-110.63
581	169.67	565.57	-1.08	0.00	-110.63
582	169.67	565.57	-1.08	0.00	-110.63
583	169.67	565.57	-1.08	0.00	-110.63
584	169.67	565.57	-1.08	0.00	-110.63
585	169.67	565.57	-1.08	0.00	-110.63
586	169.67	565.57	-1.08	0.00	-110.63
587	169.67	565.57	-1.08	0.00	-110.63
588	169.67	565.57	-1.08	0.00	-110.63
589	169.67	565.57	-1.08	0.00	-110.63
590	169.67	565.57	-1.08	0.00	-110.63
591	169.67	565.57	-1.08	0.00	-110.63
592	169.67	565.57	-1.08	0.00	-110.63
593	169.67	565.57	-1.08	0.00	-110.63
594	169.67	565.57	-1.08	0.00	-110.63
595	169.67	565.57	-1.08	0.00	-110.63
596	169.67	565.57	-1.08	0.00	-110.63
597	169.67	565.57	-1.08	0.00	-110.63
598	169.67	565.57	-1.08	0.00	-110.63
599	169.67	565.57	-1.08	0.00	-110.63
600	5.70	-0.27	0.48	-12.58	-4.28
601	5.54	4.66	1.19	-16.14	-9.84
602	10.45	14.91	1.68	-20.45	-23.17
603	17.24	31.05	1.28	-24.44	-40.64
604	25.55	52.98	0.30	-26.31	-60.95
605	34.01	80.43	-0.75	-23.42	-81.46
606	41.65	112.39	-1.41	-16.05	-99.51
607	49.06	149.22	-1.57	-9.63	-113.17
608	56.82	186.99	-1.32	-5.65	-121.61
609	65.45	224.12	-0.90	-3.61	-125.48
610	74.95	259.99	-0.46	-2.69	-126.18
611	85.02	294.53	-0.08	-2.41	-124.92
612	95.40	327.93	0.32	-2.36	-122.56
613	105.90	360.45	0.55	-2.13	-119.72
614	116.44	392.40	0.63	-2.26	-116.83

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
615	126.94	424.07	0.69	-2.71	-114.28
616	137.50	455.85	0.58	-3.33	-112.31
617	148.02	488.03	0.26	-3.64	-110.82
618	157.52	518.67	-0.14	-2.92	-109.13
619	165.79	549.29	-0.46	-1.06	-106.77
620	169.27	564.25	-0.52	0.00	-105.44
621	169.27	564.25	-0.52	0.00	-105.44
622	169.27	564.25	-0.52	0.00	-105.44
623	169.27	564.25	-0.52	0.00	-105.44
624	169.27	564.25	-0.52	0.00	-105.44
625	7.81	-0.25	0.00	0.00	-4.81
626	8.61	4.74	0.00	0.00	-10.73
627	13.94	15.41	0.00	0.00	-24.38
628	20.39	31.97	0.00	0.00	-41.40
629	27.97	54.08	0.00	0.00	-60.60
630	35.73	81.32	0.00	0.00	-79.88
631	43.01	112.81	0.00	0.00	-97.13
632	50.32	149.15	0.00	0.00	-110.69
633	57.92	186.60	0.00	0.00	-119.56
634	66.32	223.68	0.00	0.00	-124.05
635	75.59	259.64	0.00	0.00	-125.28
636	85.49	294.31	0.00	0.00	-124.41
637	95.79	327.83	0.00	0.00	-122.33
638	106.27	360.46	0.00	0.00	-119.68
639	116.83	392.50	0.00	0.00	-116.94
640	127.42	424.28	0.00	0.00	-114.45
641	138.00	456.13	0.00	0.00	-112.37
642	148.41	488.33	0.00	0.00	-110.48
643	157.59	518.81	0.00	0.00	-108.22
644	165.68	549.17	0.00	0.00	-105.45
645	169.22	564.05	0.00	0.00	-103.99
646	169.22	564.05	0.00	0.00	-103.99
647	169.22	564.05	0.00	0.00	-103.99
648	169.22	564.05	0.00	0.00	-103.99
649	169.22	564.05	0.00	0.00	-103.99
650	5.70	-0.27	1.14	41.18	-4.28
651	5.54	4.66	1.06	33.71	-9.84
652	10.45	14.91	1.24	32.85	-23.17
653	17.24	31.05	1.19	32.73	-40.64
654	25.55	52.98	1.69	29.71	-60.95
655	34.01	80.43	2.59	26.48	-81.46
656	41.65	112.39	3.36	21.40	-99.51
657	49.06	149.22	3.35	15.25	-113.17
658	56.82	186.99	2.65	10.24	-121.61
659	65.45	224.12	1.65	6.67	-125.48
660	74.95	259.99	0.75	4.38	-126.18
661	85.02	294.53	0.11	3.12	-124.92
662	95.40	327.93	-0.23	2.54	-122.56
663	105.90	360.45	-0.47	3.04	-119.72
664	116.44	392.40	-0.61	3.89	-116.83
665	126.94	424.07	-0.60	5.00	-114.28
666	137.50	455.85	-0.50	5.89	-112.31
667	148.02	488.03	-0.22	5.77	-110.82
668	157.52	518.67	0.19	4.07	-109.13
669	165.79	549.29	0.61	1.34	-106.77
670	169.27	564.25	0.67	0.00	-105.44
671	169.27	564.25	0.67	0.00	-105.44
672	169.27	564.25	0.67	0.00	-105.44
673	169.27	564.25	0.67	0.00	-105.44
674	169.27	564.25	0.67	0.00	-105.44
675	-0.66	0.35	2.37	76.51	-2.49
676	-1.24	4.43	2.47	63.74	-6.78
677	0.92	13.33	2.65	65.99	-18.76
678	7.23	27.95	2.44	69.58	-37.69
679	18.09	49.42	3.31	64.11	-62.00
680	28.96	77.73	5.62	56.08	-86.97
681	37.42	111.27	7.13	43.16	-107.59
682	45.18	149.81	6.92	29.14	-121.17
683	53.43	188.36	5.07	18.98	-127.84
684	62.93	225.55	2.91	12.11	-129.66
685	73.14	261.04	1.15	7.93	-128.72
686	83.67	295.15	0.00	5.71	-126.32
687	94.29	328.17	-0.57	4.78	-123.20
688	104.87	360.37	-0.98	5.71	-119.80
689	115.32	392.02	-1.21	7.39	-116.48
690	125.66	423.49	-1.07	9.85	-113.62

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
691	135.77	454.95	-0.80	12.51	-111.84
692	146.61	487.13	-0.54	13.43	-111.57
693	157.02	518.07	0.38	10.67	-111.98
694	166.15	549.73	1.06	3.54	-111.37
695	169.67	565.57	1.44	0.00	-110.63
696	169.67	565.57	1.44	0.00	-110.63
697	169.67	565.57	1.44	0.00	-110.63
698	169.67	565.57	1.44	0.00	-110.63
699	169.67	565.57	1.44	0.00	-110.63
700	-10.98	1.02	3.80	97.00	0.61
701	-11.43	4.10	4.54	84.11	-0.39
702	-9.42	9.79	5.74	96.85	-8.04
703	-6.45	21.53	4.24	116.11	-29.59
704	4.45	42.28	6.32	115.16	-63.93
705	20.33	73.05	9.44	92.73	-99.85
706	30.33	110.81	12.54	62.53	-125.01
707	37.65	151.85	10.46	39.67	-136.19
708	47.90	191.59	6.66	24.24	-138.23
709	59.11	228.11	3.21	15.08	-136.11
710	70.49	262.67	0.83	9.98	-132.42
711	81.72	296.00	-0.49	7.34	-128.28
712	92.69	328.44	-1.09	6.48	-124.06
713	103.35	360.14	-1.57	7.66	-119.85
714	113.69	391.27	-1.77	9.92	-115.78
715	123.73	422.17	-1.29	13.73	-112.23
716	133.53	453.81	-0.58	19.48	-109.99
717	142.10	484.95	0.08	24.80	-111.21
718	155.65	517.33	0.20	24.30	-117.01
719	167.76	550.74	2.81	12.83	-121.75
720	169.58	565.28	2.37	0.00	-122.58
721	169.58	565.28	2.37	0.00	-122.58
722	169.58	565.28	2.37	0.00	-122.58
723	169.58	565.28	2.37	0.00	-122.58
724	169.58	565.28	2.37	0.00	-122.58
725	-23.59	0.78	4.30	91.15	11.44
726	-24.01	-0.62	6.84	84.02	17.05
727	-23.89	4.81	11.43	117.31	17.29
728	-22.68	6.91	15.55	158.77	-3.34
729	-21.78	28.35	10.49	143.42	-67.65
730	11.53	70.09	21.18	118.07	-134.70
731	13.78	112.19	18.75	76.82	-159.33
732	26.86	159.55	12.39	41.48	-158.61
733	41.14	197.38	5.94	23.73	-151.89
734	54.76	231.54	1.89	14.71	-143.49
735	67.53	264.50	-0.51	10.15	-136.36
736	79.53	296.82	-1.36	7.83	-130.30
737	90.88	328.57	-1.84	7.51	-124.90
738	101.64	359.67	-2.19	8.65	-119.82
739	111.85	390.04	-2.39	10.89	-114.81
740	121.55	419.75	-1.52	15.10	-109.81
741	130.93	449.92	0.58	23.27	-106.23
742	140.42	485.78	2.73	38.63	-105.21
743	139.94	510.87	5.16	47.17	-118.27
744	170.78	554.40	2.64	21.44	-149.18
745	175.39	584.64	4.24	0.00	-167.10
746	175.39	584.64	4.24	0.00	-167.10
747	175.39	584.64	4.24	0.00	-167.10
748	175.39	584.64	4.24	0.00	-167.10
749	175.39	584.64	4.24	0.00	-167.10
750	-34.59	0.90	2.71	52.64	30.72
751	-35.21	-0.19	4.98	53.23	60.38
752	-40.42	-6.67	15.60	93.15	98.06
753	-45.85	-5.59	28.45	132.63	51.42
754	-47.21	16.89	80.93	93.50	-64.84
755	-36.08	62.19	31.48	89.60	-153.58
756	-6.59	140.11	19.72	64.64	-188.81
757	16.76	174.85	7.18	28.86	-188.46
758	35.19	204.20	1.49	16.67	-164.55
759	50.97	234.64	-1.46	11.19	-149.51
760	64.89	265.83	-2.30	8.55	-139.37
761	77.51	297.22	-2.61	7.62	-131.77
762	89.16	328.36	-2.77	7.94	-125.47
763	100.01	358.93	-2.83	8.68	-119.72
764	110.13	388.52	-2.87	10.08	-113.90
765	119.54	416.50	-2.19	12.84	-107.20
766	128.11	441.69	0.18	19.02	-98.45

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
767	137.76	467.64	7.99	37.20	-97.52
768	156.29	537.88	15.48	50.21	-124.57
769	161.93	554.26	59.84	14.26	-179.45
770	153.71	512.38	9.76	0.00	-211.39
771	153.71	512.38	9.76	0.00	-211.39
772	153.71	512.38	9.76	0.00	-211.39
773	153.71	512.38	9.76	0.00	-211.39
774	153.71	512.38	9.76	0.00	-211.39
775	-39.32	1.71	-0.90	-6.94	39.80
776	-40.19	1.72	-1.64	-2.02	85.84
777	-48.32	-1.96	-2.73	1.24	150.63
778	-51.36	15.24	-3.38	3.33	176.78
779	-54.32	14.63	-3.80	4.54	135.02
780	-15.11	280.18	-4.07	5.31	-26.31
781	-11.24	180.31	-4.26	5.87	-174.23
782	12.09	184.57	-4.37	6.36	-196.15
783	32.10	207.28	-4.42	6.79	-169.61
784	48.69	235.59	-4.39	7.18	-151.72
785	63.08	265.93	-4.29	7.54	-140.36
786	75.98	296.85	-4.10	7.84	-132.18
787	87.78	327.69	-3.83	8.05	-125.57
788	98.71	357.97	-3.49	8.15	-119.60
789	108.85	387.16	-3.08	8.09	-113.50
790	118.13	414.11	-2.62	7.81	-106.14
791	126.26	435.53	-2.14	7.21	-93.14
792	129.11	433.73	-1.70	6.15	-85.90
793	123.75	407.28	-1.40	4.52	-75.73
794	218.93	778.97	-1.25	1.88	-106.56
795	387.51	1291.71	-1.21	0.00	-142.53
796	387.51	1291.71	-1.21	0.00	-142.53
797	387.51	1291.71	-1.21	0.00	-142.53
798	387.51	1291.71	-1.21	0.00	-142.53
799	387.51	1291.71	-1.21	0.00	-142.53
800	-36.32	0.90	0.51	-25.95	30.79
801	-36.95	-0.20	1.72	-29.08	60.50
802	-42.16	-6.70	3.52	-53.95	98.30
803	-48.55	-5.72	3.96	-70.96	51.77
804	-48.98	16.66	11.05	-75.61	-64.40
805	-37.86	61.85	-1.30	-45.90	-153.05
806	-9.32	139.61	-5.46	-33.58	-188.20
807	14.04	174.17	-7.78	-5.10	-188.00
808	32.50	203.31	-7.62	2.70	-164.05
809	48.32	233.51	-6.99	5.89	-149.00
810	62.30	264.46	-6.31	7.41	-138.89
811	75.02	295.59	-5.63	8.11	-131.33
812	86.80	326.49	-4.94	8.24	-125.12
813	97.80	356.84	-4.19	7.73	-119.49
814	108.10	386.24	-3.34	6.24	-113.84
815	117.70	414.10	-2.30	4.30	-107.32
816	126.49	439.23	-1.06	0.16	-98.78
817	136.38	465.22	0.51	-13.43	-98.06
818	155.17	535.55	0.88	-18.79	-125.29
819	161.13	552.11	8.09	-3.35	-180.28
820	153.10	510.35	-1.75	0.00	-212.25
821	153.10	510.35	-1.75	0.00	-212.25
822	153.10	510.35	-1.75	0.00	-212.25
823	153.10	510.35	-1.75	0.00	-212.25
824	153.10	510.35	-1.75	0.00	-212.25
825	-27.03	0.78	0.78	-38.47	11.57
826	-27.46	-0.66	2.49	-43.99	17.30
827	-27.36	4.69	3.42	-66.50	17.77
828	-26.17	6.65	1.77	-99.01	-2.91
829	-27.19	27.91	-3.81	-119.89	-67.08
830	6.09	69.42	-6.43	-79.47	-133.99
831	8.32	111.22	-9.40	-38.74	-158.50
832	21.41	158.21	-10.43	-11.28	-157.67
833	35.73	195.61	-10.05	0.32	-150.88
834	49.43	229.31	-9.07	5.33	-142.46
835	62.33	261.76	-8.02	7.71	-135.37
836	74.51	293.57	-7.01	8.78	-129.41
837	86.10	324.82	-6.02	8.92	-124.17
838	97.15	355.47	-4.99	8.09	-119.33
839	107.72	385.47	-3.86	6.06	-114.64
840	117.82	414.91	-2.59	3.86	-110.02
841	127.65	444.96	-1.29	-1.44	-106.86
842	137.62	480.87	-0.85	-12.80	-106.26

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
843	137.67	506.14	-1.79	-23.23	-119.69
844	169.14	550.02	-0.08	-12.92	-150.83
845	174.15	580.50	-4.33	0.00	-168.82
846	174.15	580.50	-4.33	0.00	-168.82
847	174.15	580.50	-4.33	0.00	-168.82
848	174.15	580.50	-4.33	0.00	-168.82
849	174.15	580.50	-4.33	0.00	-168.82
850	-16.11	1.02	0.17	-41.79	0.71
851	-16.56	4.05	1.13	-44.14	-0.19
852	-14.58	9.62	1.00	-56.01	-7.62
853	-11.65	21.17	-1.60	-79.58	-28.95
854	-3.64	41.65	-5.63	-95.76	-63.06
855	12.20	72.07	-9.52	-69.08	-98.76
856	22.15	109.40	-11.31	-30.76	-123.72
857	29.46	149.89	-11.80	-10.47	-134.73
858	39.74	188.99	-11.28	0.49	-136.66
859	51.05	224.81	-10.30	5.97	-134.50
860	62.60	258.60	-9.19	8.74	-130.85
861	74.09	291.16	-8.09	10.07	-126.86
862	85.40	322.83	-7.01	10.36	-122.88
863	96.50	353.83	-5.89	9.60	-119.04
864	107.36	384.36	-4.69	7.44	-115.44
865	118.00	414.84	-3.47	5.44	-112.46
866	128.47	446.27	-2.52	1.46	-110.86
867	137.79	477.45	-2.32	-4.12	-112.73
868	152.13	510.08	-3.41	-10.38	-119.09
869	165.22	543.98	-4.24	-7.85	-124.17
870	167.66	558.87	-4.67	0.00	-125.12
871	167.66	558.87	-4.67	0.00	-125.12
872	167.66	558.87	-4.67	0.00	-125.12
873	167.66	558.87	-4.67	0.00	-125.12
874	167.66	558.87	-4.67	0.00	-125.12
875	-7.43	0.35	-0.67	-37.10	-2.36
876	-8.01	4.38	-0.59	-34.88	-6.52
877	-5.89	13.14	-1.67	-39.91	-18.21
878	-2.60	27.51	-3.78	-47.77	-36.82
879	7.38	48.63	-6.78	-51.49	-60.82
880	18.15	76.50	-9.51	-39.09	-85.48
881	26.52	109.47	-11.18	-20.26	-105.81
882	34.22	147.28	-11.67	-5.29	-119.16
883	42.48	184.99	-11.37	3.17	-125.66
884	52.07	221.23	-10.64	7.93	-127.40
885	62.47	255.69	-9.76	10.60	-126.50
886	73.30	288.73	-8.83	12.05	-124.27
887	84.35	320.70	-7.87	12.62	-121.47
888	95.48	351.92	-6.84	12.30	-118.55
889	106.62	382.73	-5.74	10.89	-115.86
890	117.75	413.58	-4.66	8.56	-113.78
891	128.77	444.70	-3.82	6.28	-112.86
892	140.63	476.88	-3.53	3.23	-113.49
893	152.13	508.08	-3.79	1.20	-114.66
894	162.63	540.36	-4.29	1.14	-114.54
895	167.00	556.65	-4.33	0.00	-113.95
896	167.00	556.65	-4.33	0.00	-113.95
897	167.00	556.65	-4.33	0.00	-113.95
898	167.00	556.65	-4.33	0.00	-113.95
899	167.00	556.65	-4.33	0.00	-113.95
900	-2.64	-0.26	-1.31	-27.25	-4.13
901	-3.17	4.61	-2.04	-21.06	-9.53
902	-1.26	14.70	-3.70	-20.21	-22.49
903	4.13	30.57	-5.41	-21.38	-39.55
904	12.28	52.10	-7.25	-21.59	-59.44
905	20.56	79.01	-8.92	-13.95	-79.54
906	28.04	110.27	-10.05	-5.25	-97.20
907	35.32	146.21	-10.59	2.46	-110.53
908	43.02	182.92	-10.60	7.69	-118.72
909	51.69	218.86	-10.32	10.99	-122.46
910	61.36	253.43	-9.86	13.16	-123.18
911	71.74	286.60	-9.30	14.63	-122.11
912	82.60	318.63	-8.62	15.57	-120.13
913	93.77	349.85	-7.82	15.93	-117.88
914	105.13	380.67	-6.90	15.57	-115.78
915	116.62	411.47	-5.93	14.42	-114.21
916	128.32	442.71	-5.05	12.64	-113.35
917	140.16	474.78	-4.42	10.53	-113.01
918	151.07	505.65	-4.19	8.23	-112.31

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
919	161.14	536.98	-4.18	3.90	-110.59
920	165.74	552.47	-4.16	0.00	-109.46
921	165.74	552.47	-4.16	0.00	-109.46
922	165.74	552.47	-4.16	0.00	-109.46
923	165.74	552.47	-4.16	0.00	-109.46
924	165.74	552.47	-4.16	0.00	-109.46
925	-2.01	-0.24	-1.77	-14.94	-4.65
926	-2.45	4.71	-3.19	-5.30	-10.36
927	-0.69	15.22	-5.31	0.34	-23.57
928	4.90	31.49	-6.61	4.55	-40.08
929	12.22	53.15	-7.48	7.09	-58.74
930	19.71	79.78	-8.12	8.86	-77.48
931	26.72	110.47	-8.64	10.30	-94.22
932	33.78	145.75	-9.07	11.73	-107.34
933	41.20	181.94	-9.41	13.16	-115.86
934	49.55	217.58	-9.63	14.62	-120.14
935	58.91	251.95	-9.70	16.11	-121.35
936	69.10	284.94	-9.62	17.58	-120.67
937	79.89	316.74	-9.34	18.95	-119.01
938	91.10	347.72	-8.85	20.12	-117.04
939	102.60	378.27	-8.15	20.93	-115.24
940	114.36	408.84	-7.27	21.15	-113.95
941	126.33	439.89	-6.27	20.43	-113.23
942	138.38	471.81	-5.29	18.19	-112.78
943	149.34	502.40	-4.60	13.87	-111.76
944	159.71	533.48	-4.26	5.97	-109.79
945	164.69	548.95	-4.16	0.00	-108.59
946	164.69	548.95	-4.16	0.00	-108.59
947	164.69	548.95	-4.16	0.00	-108.59
948	164.69	548.95	-4.16	0.00	-108.59
949	164.69	548.95	-4.16	0.00	-108.59
950	-5.48	-0.25	-1.45	18.93	-4.11
951	-5.95	4.66	-3.60	25.64	-9.45
952	-4.08	14.76	-6.53	32.31	-22.25
953	-0.47	30.63	-7.75	36.38	-39.08
954	7.47	52.09	-7.64	35.93	-58.71
955	15.51	78.87	-7.26	32.33	-78.54
956	22.72	109.93	-7.16	28.45	-95.93
957	29.70	145.56	-7.50	23.54	-109.00
958	37.12	181.87	-8.17	19.73	-116.96
959	45.54	217.32	-8.92	18.19	-120.53
960	55.00	251.31	-9.55	19.04	-121.13
961	65.25	283.82	-9.96	20.55	-120.03
962	76.08	315.12	-10.11	22.43	-118.11
963	87.32	345.57	-9.96	24.48	-116.02
964	98.90	375.60	-9.51	26.54	-114.22
965	110.74	405.66	-8.74	28.22	-113.06
966	122.94	436.27	-7.64	28.64	-112.74
967	135.44	467.85	-6.32	26.31	-112.98
968	147.14	498.39	-5.17	19.90	-112.82
969	158.27	529.65	-4.51	8.22	-111.46
970	163.57	545.22	-4.33	0.00	-110.45
971	163.57	545.22	-4.33	0.00	-110.45
972	163.57	545.22	-4.33	0.00	-110.45
973	163.57	545.22	-4.33	0.00	-110.45
974	163.57	545.22	-4.33	0.00	-110.45
975	-13.04	0.38	-0.17	53.53	-2.33
976	-13.50	4.48	-2.08	54.72	-6.37
977	-11.46	13.27	-4.92	64.37	-17.73
978	-8.39	27.64	-6.97	72.12	-35.88
979	-2.14	48.64	-7.36	69.25	-59.36
980	8.12	76.25	-6.02	61.05	-83.47
981	15.94	108.83	-5.33	49.41	-103.25
982	23.02	146.03	-6.27	36.77	-116.07
983	30.69	182.94	-7.29	27.88	-122.10
984	39.74	218.21	-8.52	22.73	-123.48
985	49.70	251.52	-9.65	21.53	-122.33
986	60.24	283.24	-10.50	23.23	-120.02
987	71.18	313.74	-11.01	25.67	-117.32
988	82.44	343.41	-11.19	28.63	-114.72
989	93.97	372.63	-11.01	32.00	-112.60
990	105.79	401.96	-10.42	35.50	-111.33
991	117.80	431.73	-9.33	38.02	-111.46
992	131.00	462.87	-7.70	36.79	-113.25
993	144.09	493.34	-6.08	28.90	-115.50
994	156.76	525.42	-4.93	11.55	-116.11

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
995	162.55	541.84	-4.69	0.00	-115.76
996	162.55	541.84	-4.69	0.00	-115.76
997	162.55	541.84	-4.69	0.00	-115.76
998	162.55	541.84	-4.69	0.00	-115.76
999	162.55	541.84	-4.69	0.00	-115.76
1000	-24.35	1.06	1.33	73.28	0.76
1001	-24.62	4.21	0.17	73.97	0.03
1002	-22.77	9.85	-1.53	93.91	-6.91
1003	-20.17	21.40	-4.79	117.27	-27.54
1004	-17.71	41.71	-3.94	118.95	-60.84
1005	-2.67	71.77	-1.80	96.59	-95.70
1006	6.41	108.52	0.42	67.77	-119.82
1007	12.74	148.12	-2.52	46.25	-130.01
1008	22.07	186.05	-7.14	32.41	-131.22
1009	32.50	220.42	-8.74	25.33	-128.48
1010	43.32	252.50	-10.19	23.23	-124.42
1011	54.27	283.08	-11.33	25.34	-120.26
1012	65.34	312.56	-12.10	28.38	-116.39
1013	76.54	341.19	-12.52	32.16	-112.98
1014	87.93	369.28	-12.59	36.71	-110.18
1015	99.55	397.38	-12.28	42.13	-108.39
1016	111.50	426.65	-11.41	48.20	-108.32
1017	122.85	456.09	-9.75	51.51	-111.93
1018	139.64	487.43	-7.35	45.43	-119.91
1019	156.10	520.84	-5.90	22.22	-126.10
1020	160.75	535.85	-5.27	0.00	-127.41
1021	160.75	535.85	-5.27	0.00	-127.41
1022	160.75	535.85	-5.27	0.00	-127.41
1023	160.75	535.85	-5.27	0.00	-127.41
1024	160.75	535.85	-5.27	0.00	-127.41
1025	-37.70	0.85	1.95	66.69	11.90
1026	-37.86	-0.42	2.72	72.56	18.17
1027	-37.94	5.04	4.61	112.78	19.89
1028	-37.20	7.02	7.08	158.24	-1.03
1029	-40.80	28.09	0.85	145.56	-64.08
1030	-13.39	69.14	10.55	120.56	-129.83
1031	-12.40	110.22	7.20	80.78	-153.18
1032	-0.71	156.04	-0.11	46.93	-151.22
1033	12.22	191.92	-7.53	31.13	-143.42
1034	24.62	223.74	-9.72	24.48	-134.16
1035	36.39	253.93	-11.25	23.98	-126.46
1036	47.70	283.13	-12.47	26.70	-120.20
1037	58.79	311.44	-13.35	30.34	-115.02
1038	69.82	338.89	-13.89	34.73	-110.66
1039	80.94	365.53	-14.13	39.97	-106.94
1040	92.25	391.61	-14.09	46.51	-103.80
1041	104.02	418.51	-13.74	55.61	-102.61
1042	116.75	451.76	-11.30	69.21	-104.29
1043	120.17	474.92	-8.01	71.71	-119.88
1044	156.35	517.77	-6.18	28.99	-152.50
1045	164.47	548.25	-6.97	0.00	-170.99
1046	164.47	548.25	-6.97	0.00	-170.99
1047	164.47	548.25	-6.97	0.00	-170.99
1048	164.47	548.25	-6.97	0.00	-170.99
1049	164.47	548.25	-6.97	0.00	-170.99
1050	-49.10	0.96	0.53	27.45	31.22
1051	-49.37	0.11	1.23	40.24	61.62
1052	-54.83	-6.11	9.41	86.72	101.04
1053	-63.05	-5.15	20.78	130.07	56.47
1054	-63.09	17.04	72.17	93.64	-57.65
1055	-52.98	61.70	21.76	90.43	-144.30
1056	-34.78	138.60	9.05	67.03	-177.58
1057	-13.33	171.76	-4.53	33.12	-176.00
1058	3.22	199.06	-9.97	23.09	-154.40
1059	17.21	226.97	-11.40	21.26	-138.20
1060	29.55	255.16	-12.71	23.79	-127.22
1061	40.92	283.07	-13.80	27.31	-119.16
1062	51.79	310.30	-14.64	31.51	-112.86
1063	62.48	336.58	-15.20	36.23	-107.67
1064	73.21	361.62	-15.48	41.45	-103.04
1065	84.15	384.99	-15.52	47.42	-98.21
1066	95.30	405.75	-15.40	55.29	-91.99
1067	108.70	427.83	-8.73	72.12	-94.01
1068	131.91	494.87	-0.60	78.71	-123.89
1069	144.11	509.48	44.00	23.11	-180.74
1070	140.22	467.41	-5.91	0.00	-213.35

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1071	140.22	467.41	-5.91	0.00	-213.35
1072	140.22	467.41	-5.91	0.00	-213.35
1073	140.22	467.41	-5.91	0.00	-213.35
1074	140.22	467.41	-5.91	0.00	-213.35
1075	-53.99	1.79	-2.08	-22.40	40.33
1076	-54.24	2.13	-3.63	-11.00	87.24
1077	-62.68	-1.17	-6.02	-5.10	154.08
1078	-66.49	16.39	-7.50	-1.64	182.67
1079	-70.52	15.30	-8.60	2.32	143.43
1080	-42.78	280.28	-9.56	5.50	-15.45
1081	-41.12	179.44	-10.48	8.44	-161.04
1082	-20.28	182.09	-11.45	11.65	-180.78
1083	-2.81	202.69	-12.42	15.07	-157.56
1084	11.30	228.34	-13.36	18.79	-138.15
1085	23.38	255.46	-14.27	22.85	-125.59
1086	34.27	282.59	-15.10	27.27	-116.59
1087	44.56	309.06	-15.81	31.99	-109.65
1088	54.67	334.41	-16.34	36.86	-103.93
1089	64.91	358.17	-16.61	41.57	-98.77
1090	75.48	379.34	-16.53	45.51	-93.12
1091	86.29	394.85	-16.07	47.57	-82.61
1092	93.45	387.46	-15.32	45.77	-77.55
1093	93.70	365.40	-14.83	37.43	-71.93
1094	196.91	724.27	-14.66	17.17	-106.02
1095	370.84	1236.15	-14.52	0.00	-143.14
1096	370.84	1236.15	-14.52	0.00	-143.14
1097	370.84	1236.15	-14.52	0.00	-143.14
1098	370.84	1236.15	-14.52	0.00	-143.14
1099	370.84	1236.15	-14.52	0.00	-143.14
1100	-50.35	1.00	-0.44	-40.96	31.39
1101	-50.38	0.34	0.20	-38.89	62.12
1102	-55.98	-5.62	1.03	-61.18	102.30
1103	-64.55	-4.40	0.84	-76.72	58.61
1104	-65.09	17.95	7.34	-80.26	-54.61
1105	-55.56	62.67	-5.65	-48.32	-140.41
1106	-40.44	139.54	-10.54	-33.41	-172.86
1107	-20.29	172.49	-13.73	-1.97	-170.44
1108	-5.13	199.48	-14.55	9.06	-149.86
1109	7.38	226.95	-14.98	15.87	-132.87
1110	18.16	254.53	-15.46	21.43	-121.09
1111	27.92	281.62	-16.02	26.70	-112.25
1112	37.20	307.75	-16.63	31.94	-105.20
1113	46.43	332.55	-17.18	37.01	-99.31
1114	56.02	355.61	-17.55	41.30	-94.11
1115	66.38	376.36	-17.54	43.37	-88.89
1116	77.80	393.79	-16.97	39.82	-82.52
1117	92.59	411.91	-15.68	22.27	-84.69
1118	118.13	474.69	-15.57	10.22	-114.95
1119	133.93	485.33	-8.60	14.44	-172.24
1120	132.48	441.61	-18.35	0.00	-205.05
1121	132.48	441.61	-18.35	0.00	-205.05
1122	132.48	441.61	-18.35	0.00	-205.05
1123	132.48	441.61	-18.35	0.00	-205.05
1124	132.48	441.61	-18.35	0.00	-205.05
1125	-39.98	1.05	0.14	-52.75	12.28
1126	-39.67	0.14	1.57	-54.66	19.21
1127	-40.05	6.06	1.94	-75.46	22.44
1128	-40.04	8.52	-0.12	-106.98	0.43
1129	-44.62	29.92	-6.16	-126.98	-61.29
1130	-22.26	71.09	-9.36	-84.89	-125.55
1131	-23.52	112.08	-13.04	-41.38	-147.34
1132	-14.42	157.48	-14.93	-10.74	-143.76
1133	-4.25	192.74	-15.52	4.29	-134.32
1134	5.20	223.66	-15.63	13.09	-123.44
1135	13.84	252.67	-15.82	19.75	-114.14
1136	21.91	280.28	-16.23	25.70	-106.25
1137	29.75	306.46	-16.83	31.44	-99.46
1138	37.75	331.04	-17.55	36.92	-93.56
1139	46.37	353.82	-18.27	41.47	-88.49
1140	56.25	374.76	-18.85	43.41	-84.33
1141	68.31	394.99	-19.21	39.22	-82.56
1142	83.76	420.10	-20.02	26.41	-84.19
1143	92.02	434.29	-21.97	10.60	-100.18
1144	135.60	468.59	-26.16	7.40	-133.44
1145	148.63	495.43	-25.13	0.00	-152.26
1146	148.63	495.43	-25.13	0.00	-152.26

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1147	148.63	495.43	-25.13	0.00	-152.26
1148	148.63	495.43	-25.13	0.00	-152.26
1149	148.63	495.43	-25.13	0.00	-152.26
1150	-27.25	1.41	-0.09	-54.97	0.39
1151	-26.84	5.06	0.95	-55.66	-0.22
1152	-25.48	11.40	0.75	-66.92	-6.41
1153	-23.99	23.66	-1.99	-90.11	-25.46
1154	-23.11	44.48	-6.35	-105.72	-56.74
1155	-15.46	74.69	-10.74	-77.92	-89.32
1156	-9.76	111.28	-13.18	-36.63	-111.05
1157	-7.28	150.21	-14.47	-12.99	-118.78
1158	-2.04	187.18	-14.85	1.50	-117.51
1159	4.00	220.23	-14.89	10.82	-112.32
1160	10.12	250.57	-15.01	17.87	-105.77
1161	16.16	278.86	-15.39	24.14	-99.03
1162	22.22	305.29	-16.10	30.25	-92.47
1163	28.61	329.84	-17.11	36.30	-86.32
1164	35.80	352.44	-18.39	41.85	-80.93
1165	44.53	373.12	-19.98	45.65	-76.92
1166	56.15	392.46	-22.07	45.41	-75.21
1167	71.23	409.23	-24.69	40.15	-77.82
1168	95.84	426.07	-28.15	30.87	-85.43
1169	124.05	445.04	-30.32	13.73	-91.87
1170	136.06	453.55	-30.80	0.00	-93.46
1171	136.06	453.55	-30.80	0.00	-93.46
1172	136.06	453.55	-30.80	0.00	-93.46
1173	136.06	453.55	-30.80	0.00	-93.46
1174	136.06	453.55	-30.80	0.00	-93.46
1175	-15.90	0.95	-0.46	-48.69	-2.90
1176	-15.53	5.60	0.13	-47.16	-6.85
1177	-14.23	15.34	-0.43	-52.93	-17.32
1178	-12.70	30.70	-2.39	-61.23	-33.40
1179	-11.74	52.36	-5.59	-64.85	-54.10
1180	-7.99	80.13	-8.76	-51.88	-75.07
1181	-4.67	112.43	-11.01	-29.86	-91.56
1182	-2.63	148.64	-12.16	-11.40	-101.02
1183	-0.30	184.20	-12.57	0.58	-103.72
1184	3.00	217.69	-12.68	8.97	-101.79
1185	6.74	248.75	-12.86	15.60	-97.21
1186	10.68	277.55	-13.32	21.64	-91.17
1187	14.80	304.22	-14.17	27.73	-84.33
1188	19.29	328.74	-15.45	34.16	-77.20
1189	24.55	351.11	-17.24	40.86	-70.31
1190	31.34	371.30	-19.81	47.27	-64.51
1191	40.80	388.28	-23.56	52.11	-60.75
1192	57.69	402.18	-28.68	52.58	-59.33
1193	82.16	411.48	-33.67	45.16	-59.00
1194	112.54	421.28	-37.01	23.79	-58.25
1195	128.18	427.27	-37.11	0.00	-57.68
1196	128.18	427.27	-37.11	0.00	-57.68
1197	128.18	427.27	-37.11	0.00	-57.68
1198	128.18	427.27	-37.11	0.00	-57.68
1199	128.18	427.27	-37.11	0.00	-57.68
1200	-7.44	0.63	-0.52	-36.50	-5.05
1201	-7.04	5.99	-0.23	-33.73	-10.47
1202	-6.24	17.33	-0.73	-35.43	-22.42
1203	-5.34	34.50	-1.99	-38.25	-36.70
1204	-4.71	56.80	-3.94	-39.04	-52.66
1205	-3.11	83.69	-6.00	-31.44	-68.28
1206	-1.49	114.21	-7.61	-19.22	-81.32
1207	-0.62	148.42	-8.59	-7.85	-90.08
1208	0.38	182.87	-9.00	0.72	-93.87
1209	1.82	216.05	-9.18	7.09	-93.28
1210	3.67	247.27	-9.43	12.40	-89.43
1211	5.75	276.28	-9.94	17.45	-83.19
1212	8.01	302.99	-10.82	22.78	-75.17
1213	10.54	327.30	-12.15	28.75	-65.80
1214	13.61	349.19	-14.08	35.66	-55.53
1215	17.76	368.63	-16.90	43.57	-45.15
1216	24.38	385.67	-21.55	51.82	-36.09
1217	34.79	395.62	-28.83	56.95	-28.97
1218	61.77	398.77	-38.98	48.66	-21.48
1219	101.52	397.21	-44.07	17.95	-15.16
1220	118.15	393.82	-45.19	0.00	-13.16
1221	118.15	393.82	-45.19	0.00	-13.16
1222	118.15	393.82	-45.19	0.00	-13.16

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1223	118.15	393.82	-45.19	0.00	-13.16
1224	118.15	393.82	-45.19	0.00	-13.16
1225	-2.05	0.86	-0.31	-20.13	-6.36
1226	-1.80	5.99	-0.17	-17.49	-12.70
1227	-1.49	18.20	-0.43	-17.68	-25.53
1228	-1.08	36.20	-1.03	-18.44	-38.88
1229	-0.81	58.86	-1.97	-18.45	-52.61
1230	-0.35	85.44	-2.99	-14.62	-65.64
1231	0.05	115.10	-3.84	-9.01	-76.66
1232	0.16	148.28	-4.39	-3.59	-84.44
1233	0.32	181.95	-4.65	0.80	-88.05
1234	0.70	214.72	-4.79	4.30	-87.46
1235	1.30	245.77	-4.99	7.36	-83.13
1236	2.04	274.62	-5.36	10.41	-75.55
1237	2.86	300.97	-5.98	13.75	-65.03
1238	3.80	324.60	-6.92	17.66	-51.68
1239	4.96	345.30	-8.24	22.49	-35.45
1240	6.67	363.04	-10.21	28.57	-10.36
1241	9.63	378.47	-13.28	35.90	17.79
1242	17.02	396.26	-20.34	42.81	42.71
1243	21.55	390.04	-31.18	42.45	58.81
1244	113.49	391.20	-53.55	30.06	85.22
1245	113.49	378.32	-54.64	0.00	105.81
1246	113.49	378.32	-54.64	0.00	105.81
1247	113.49	378.32	-54.64	0.00	105.81
1248	113.49	378.32	-54.64	0.00	105.81
1249	113.49	378.32	-54.64	0.00	105.81
1250	-0.08	0.08	-0.07	-11.01	-8.59
1251	0.12	5.16	0.11	-8.88	-15.60
1252	0.07	17.71	0.16	-8.82	-29.01
1253	0.26	35.98	0.06	-9.04	-41.89
1254	0.37	58.71	-0.19	-8.95	-54.64
1255	0.36	85.05	-0.52	-6.92	-66.47
1256	0.25	114.32	-0.82	-4.19	-76.42
1257	0.10	147.14	-1.00	-1.54	-83.42
1258	-0.01	180.45	-1.09	0.68	-86.41
1259	-0.06	212.81	-1.18	2.54	-84.93
1260	-0.07	243.31	-1.36	4.24	-78.98
1261	-0.08	271.38	-1.68	6.00	-68.63
1262	-0.09	296.62	-2.19	7.97	-53.79
1263	-0.15	318.62	-2.91	10.35	-28.70
1264	-0.28	336.74	-3.91	13.40	6.72
1265	-0.42	350.16	-5.27	17.42	51.94
1266	-1.17	357.40	-7.59	22.82	110.77
1267	0.70	359.42	-9.89	28.56	187.45
1268	-2.59	402.57	-23.71	36.29	254.37
1269	97.21	398.28	-58.18	-15.74	230.90
1270	97.21	398.28	-58.18	-15.74	230.90
1271	97.21	398.28	-58.18	-15.74	230.90
1272	97.21	398.28	-58.18	-15.74	230.90
1273	97.21	398.28	-58.18	-15.74	230.90

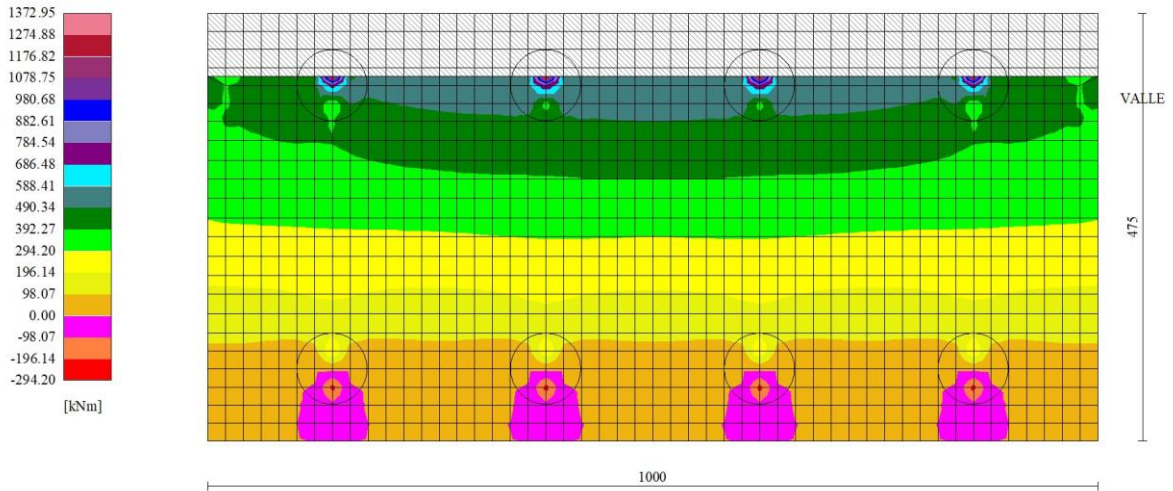


Fig. 7 - Piastra fondazione - Momenti My (Combinazione n° 1)

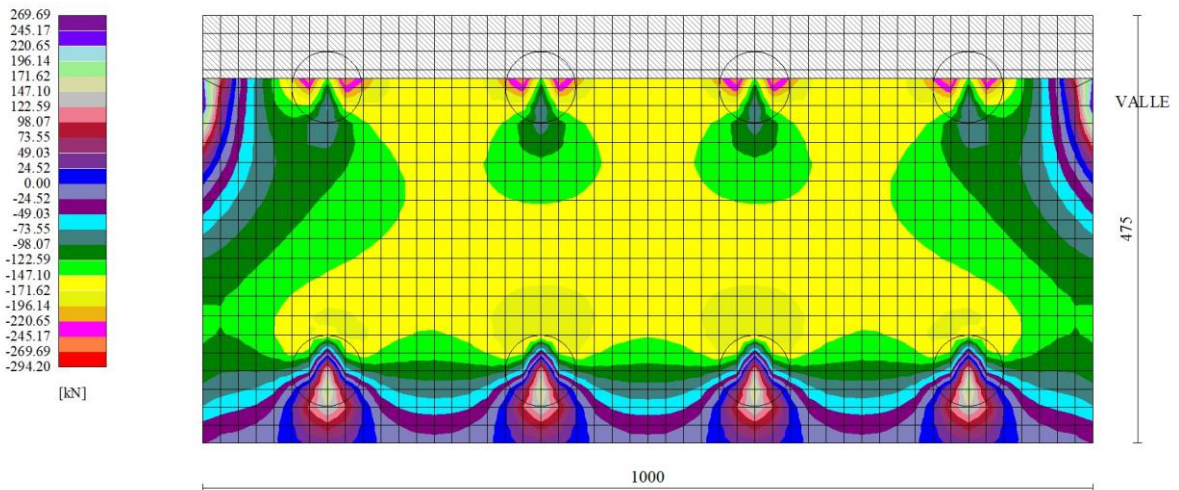


Fig. 8 - Piastra fondazione - Taglio Ty (Combinazione n° 1)

Sollecitazioni pali

Simbologia adottata

- N Sforzo normale, espresso in [kN]. Positivo se di compressione.
- T Taglio, espresso in [kN]. Positivo se diretto da monte verso valle
- M Momento, espresso in [kNm]. Positivo se tende le fibre contro terra (a monte)

Combinazione n° 1 - STR (A1-M1-R3)

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	243.72	493.52	-330.78	-858.87	149.83	389.04
14	1.95	267.63	492.93	4.25	11.03	424.28	1101.65
29	4.20	295.36	492.93	90.21	234.24	287.50	746.49
75	11.10	380.39	492.93	-0.41	-1.06	-12.12	-31.46
101	15.00	428.45	492.93	-0.34	-0.88	0.00	0.00

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	493.59	493.59	-330.78	-858.87	149.83	389.04
14	1.95	517.44	493.00	4.25	11.03	424.28	1101.65
29	4.20	545.17	493.00	90.21	234.24	287.50	746.49
75	11.10	630.20	493.00	-0.41	-1.06	-12.12	-31.46
101	15.00	678.27	493.00	-0.34	-0.88	0.00	0.00

Combinazione n° 4 - SLER

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	212.36	493.58	-250.45	-1125.95	3.12	14.03
17	2.40	241.83	492.99	6.05	27.20	245.03	1101.58
32	4.65	269.56	492.99	52.12	234.33	162.37	729.97
77	11.40	352.75	492.99	-0.18	-0.82	-6.16	-27.70
101	15.00	397.11	492.99	-0.21	-0.93	0.00	0.00

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	473.86	493.49	-250.45	-1125.95	3.12	14.03
17	2.40	503.26	492.89	6.05	27.20	245.03	1101.58
32	4.65	530.99	492.89	52.12	234.33	162.37	729.97
77	11.40	614.18	492.89	-0.18	-0.82	-6.16	-27.70
101	15.00	658.54	492.89	-0.21	-0.93	0.00	0.00

Combinazione n° 5 - SLEF

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	217.11	493.58	-240.55	-1150.60	-4.87	-23.28
17	2.40	246.57	492.99	4.14	19.80	230.32	1101.65
32	4.65	274.30	492.99	48.98	234.27	154.20	737.56
77	11.40	357.49	492.99	-0.09	-0.45	-5.71	-27.33
101	15.00	401.85	492.99	-0.20	-0.93	0.00	0.00

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	462.84	493.58	-240.55	-1150.60	-4.87	-23.28
17	2.40	492.25	492.99	4.14	19.80	230.32	1101.65
32	4.65	519.97	492.99	48.98	234.27	154.20	737.56
77	11.40	603.16	492.99	-0.09	-0.45	-5.71	-27.33
101	15.00	647.52	492.99	-0.20	-0.93	0.00	0.00

Combinazione n° 6 - SLEQ

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	231.23	493.54	-210.89	-1244.97	-28.58	-168.72
18	2.55	262.55	492.95	4.44	26.24	186.60	1101.59
33	4.80	290.27	492.95	39.69	234.29	123.82	730.97
101	15.00	415.98	492.95	-0.16	-0.95	0.00	0.00

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	429.89	493.54	-210.89	-1244.97	-28.58	-168.72
18	2.55	461.15	492.95	4.44	26.24	186.60	1101.59
33	4.80	488.88	492.95	39.69	234.29	123.82	730.97
101	15.00	614.58	492.95	-0.16	-0.95	0.00	0.00

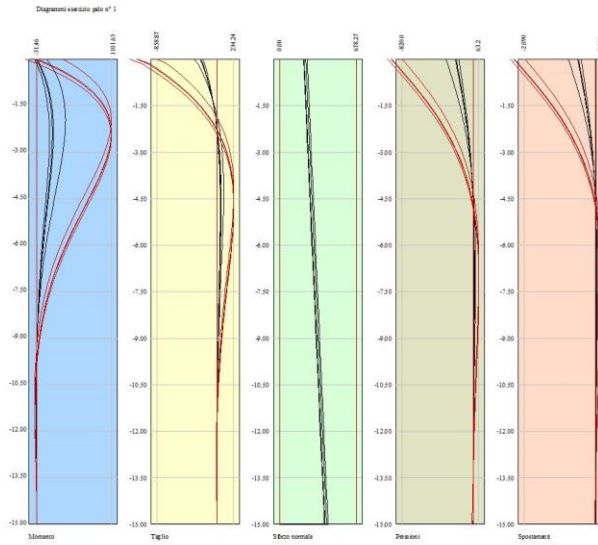


Fig. 9 - Sollecitazioni palo (Palo n° 1) (Involuppo)

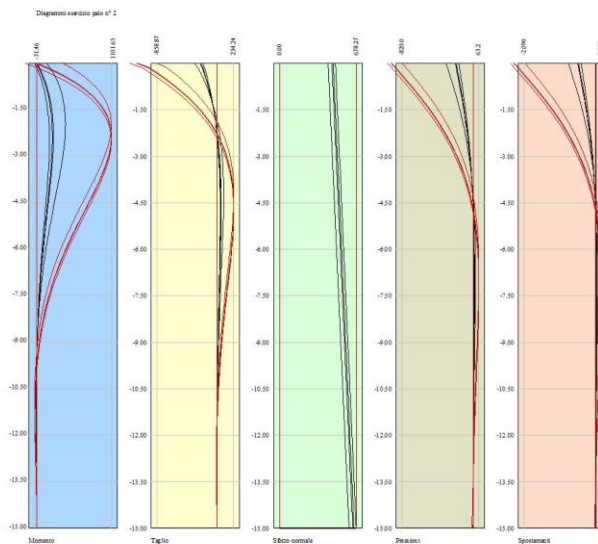


Fig. 10 - Sollecitazioni palo (Palo n° 2) (Involuppo)

Risultati per inviluppo

Spinta e forze

Simbologia adottata

Ic	Indice della combinazione
A	Tipo azione
I	Inclinazione della spinta, espressa in [°]
V	Valore dell'azione, espressa in [kN]
Cx, Cy	Componente in direzione X ed Y dell'azione, espressa in [kN]
Px, Py	Coordinata X ed Y del punto di applicazione dell'azione, espressa in [m]

Ic	A	V [kN]	I [°]	Cx [kN]	Cy [kN]	Px [m]	Py [m]
1	Spinta statica	277.67	17.63	264.63	84.09	0.00	-3.98
	Peso/Inerzia muro			0.00	210.85/0.00	-1.47	-4.55
	Peso dell'acqua sulla fondazione di valle				0.00	0.00	0.00
	Resistenza pali			-528.54			

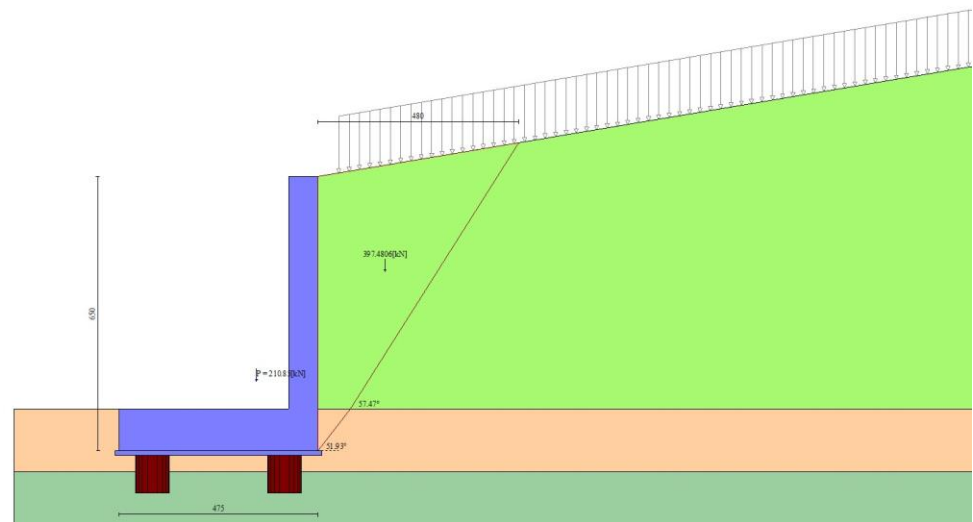


Fig. 11 - Cuneo di spinta (combinazione statica) (Combinazione n° 1)

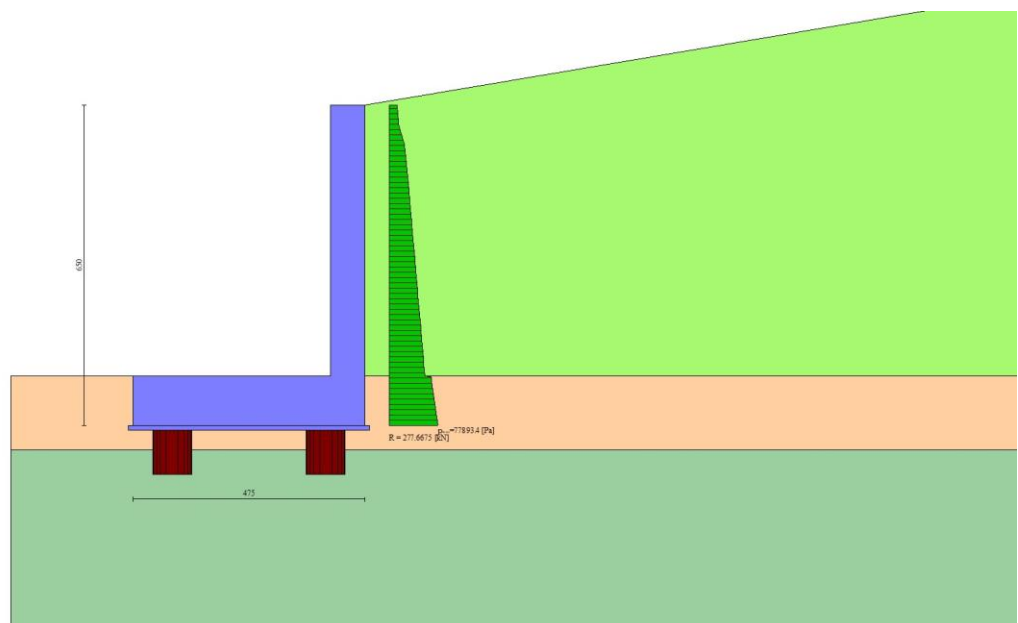


Fig. 12 - Diagramma delle pressioni (combinazione statica) (Combinazione n° 1)

Scarichi in testa ai pali

Simbologia adottata

Cmb	Indice/Tipo combinazione
Ip	Indice palo
N	Sforzo normale, espresso in [kN]
M	Momento, espresso in [kNm]
T	Taglio, espresso in [kN]

Cmb	Ip	N [kN]	M [kNm]	T [kN]
1 - STR (A1-M1-R3)	1	243.72	149.83	-330.78
	2	493.59	149.83	-330.78

Verifiche geotecniche

Quadro riassuntivo coeff. di sicurezza calcolati

Simbologia adottata

Cmb	Indice/Tipo combinazione
S	Sisma (H: componente orizzontale, V: componente verticale)
FS _{SCO}	Coeff. di sicurezza allo scorrimento
FS _{RIB}	Coeff. di sicurezza al ribaltamento
FS _{QLIM}	Coeff. di sicurezza a carico limite
FS _{STAB}	Coeff. di sicurezza a stabilità globale
FS _{HYD}	Coeff. di sicurezza a sifonamento
FS _{SUPL}	Coeff. di sicurezza a sollevamento

Cmb	Sismica	FS _{SCO}	FS _{RIB}	FS _{QLIM}	FS _{STAB}	FS _{HYD}	FS _{SUPL}
1 - STR (A1-M1-R3)		1.997					
2 - GEO (A2-M2-R2)					2.284		
3 - EQU (A1-M1-R3)			6.872				

Verifica stabilità globale muro + terreno

Simbologia adottata

Ic	Indice/Tipo combinazione
C	Centro superficie di scorrimento, espresso in [m]
R	Raggio, espresso in [m]
FS	Fattore di sicurezza

Ic	C [m]	R [m]	FS
2 - GEO (A2-M2-R2)	-2.40; 11.40	25.45	2.284

Sollecitazioni

Elementi calcolati a trave

Simbologia adottata

N	Sforzo normale, espresso in [kN]. Positivo se di compressione.
T	Taglio, espresso in [kN]. Positivo se diretto da monte verso valle
M	Momento, espresso in [kNm]. Positivo se tende le fibre contro terra (a monte)

Elementi calcolati a piastra

Simbologia adottata

M _x , M _y	Momenti flettenti, espresso in [kNm]
M _{xy}	Momento torcente, espresso in [kNm]. Positivo se diretto da monte verso valle
T _x , T _y	Tagli, espresso in [kN]. Positivo se tende le fibre contro terra (a monte)

I momenti flettenti sono positivi se tendono le fibre inferiori (intradosso fondazione, paramento esterno)

Paramento

n°	X [m]	N _{min} [kN]	N _{max} [kN]	T _{min} [kN]	T _{max} [kN]	M _{min} [kNm]	M _{max} [kNm]
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	-0.10	1.72	1.72	0.81	1.05	0.04	0.05
3	-0.20	3.43	3.43	1.67	2.17	0.16	0.21
4	-0.30	5.15	5.15	2.57	3.35	0.37	0.49
5	-0.40	6.86	6.86	3.53	4.59	0.68	0.88
6	-0.50	8.58	8.58	4.54	5.98	1.08	1.41
7	-0.60	10.30	10.30	5.59	7.59	1.59	2.09
8	-0.70	12.01	12.01	6.70	9.41	2.20	2.93
9	-0.80	13.73	13.73	7.85	11.47	2.93	3.98
10	-0.90	15.45	15.45	9.06	13.66	3.77	5.23

n°	X	Nmin	Nmax	Tmin	Tmax	Mmin	Mmax
	[m]	[kN]	[kN]	[kN]	[kN]	[kNm]	[kNm]
11	-1.00	17.16	17.16	10.31	15.93	4.74	6.71
12	-1.10	18.88	18.88	11.61	18.28	5.84	8.42
13	-1.20	20.59	20.59	12.97	20.71	7.07	10.37
14	-1.30	22.31	22.31	14.37	23.20	8.43	12.57
15	-1.40	24.03	24.03	15.82	25.77	9.94	15.01
16	-1.50	25.74	25.74	17.32	28.40	11.60	17.72
17	-1.60	27.46	27.46	18.88	31.10	13.41	20.70
18	-1.70	29.18	29.18	20.48	33.87	15.38	23.94
19	-1.80	30.89	30.89	22.13	36.70	17.51	27.47
20	-1.90	32.61	32.61	23.83	39.60	19.80	31.29
21	-2.00	34.32	34.32	25.58	42.57	22.27	35.39
22	-2.10	36.04	36.04	27.38	45.60	24.92	39.80
23	-2.20	37.76	37.76	29.23	48.70	27.75	44.52
24	-2.30	39.47	39.47	31.13	51.86	30.77	49.54
25	-2.40	41.19	41.19	33.08	55.09	33.98	54.89
26	-2.50	42.90	42.90	35.07	58.38	37.38	60.56
27	-2.60	44.62	44.62	37.12	61.74	40.99	66.57
28	-2.70	46.34	46.34	39.22	65.17	44.81	72.91
29	-2.80	48.05	48.05	41.37	68.66	48.84	79.60
30	-2.90	49.77	49.77	43.56	72.21	53.09	86.65
31	-3.00	51.49	51.49	45.81	75.83	57.55	94.05
32	-3.10	53.20	53.20	48.11	79.52	62.25	101.81
33	-3.20	54.92	54.92	50.45	83.26	67.18	109.95
34	-3.30	56.63	56.63	52.85	87.08	72.34	118.47
35	-3.40	58.35	58.35	55.29	90.96	77.75	127.37
36	-3.50	60.07	60.07	57.79	94.90	83.40	136.66
37	-3.60	61.78	61.78	60.33	98.91	89.31	146.35
38	-3.70	63.50	63.50	62.92	102.98	95.47	156.45
39	-3.80	65.22	65.22	65.57	107.12	101.89	166.95
40	-3.90	66.93	66.93	68.26	111.32	108.58	177.87
41	-4.00	68.65	68.65	71.00	115.59	115.55	189.22
42	-4.10	70.36	70.36	73.79	119.92	122.79	200.99
43	-4.20	72.08	72.08	76.64	124.32	130.31	213.21
44	-4.30	73.80	73.80	79.53	128.78	138.11	225.86
45	-4.40	75.51	75.51	82.47	133.31	146.21	238.96
46	-4.50	77.23	77.23	85.46	137.90	154.61	252.52
47	-4.60	78.94	78.94	88.50	142.55	163.31	266.55
48	-4.70	80.66	80.66	91.59	147.27	172.31	281.04
49	-4.80	82.38	82.38	94.73	152.06	181.63	296.00
50	-4.90	84.09	84.09	97.92	156.91	191.26	311.45
51	-5.00	85.81	85.81	101.16	161.82	201.21	327.39
52	-5.10	87.53	87.53	104.44	166.80	211.49	343.82
53	-5.20	89.24	89.24	107.78	171.84	222.10	360.75
54	-5.30	90.96	90.96	111.17	176.95	233.05	378.19
55	-5.40	92.67	92.67	114.61	182.12	244.34	396.14
56	-5.50	94.39	94.39	118.09	187.36	255.97	414.61

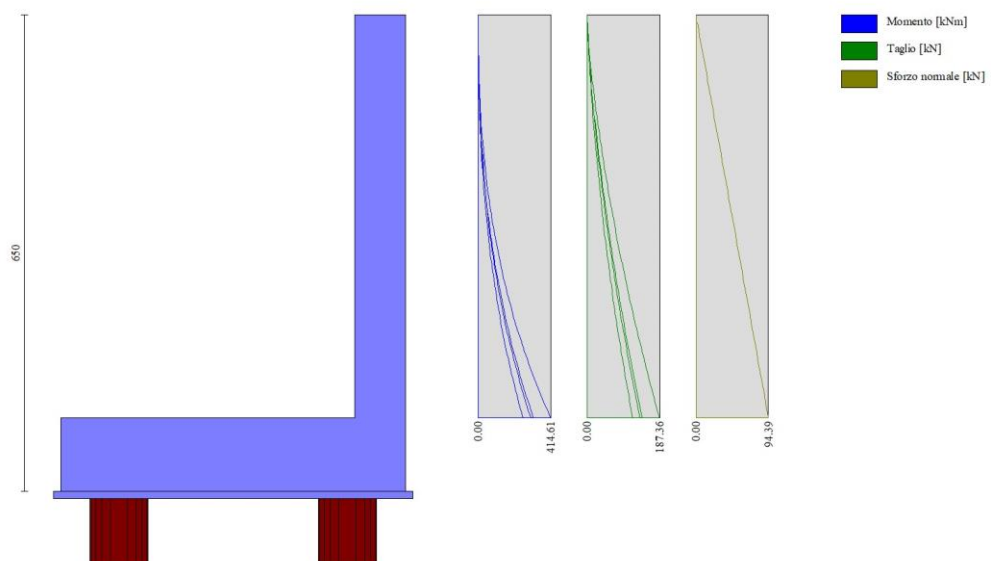


Fig. 13 - Paramento

Piastra fondazione

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
1	-0.08 -0.38	0.08 -0.05	0.32 0.07	29.55 11.01	-8.59 -25.96	MAX MIN
2	-2.05 -5.02	0.86 0.19	1.35 0.31	52.39 20.13	-6.36 -17.71	MAX MIN
3	-1.80 -2.66	5.99 1.67	1.48 0.17	35.45 17.49	-12.70 -33.23	MAX MIN
4	0.12 -0.06	5.16 1.77	0.03 -0.11	17.94 8.88	-15.60 -43.47	MAX MIN
5	-7.44 -16.07	0.63 0.00	3.08 0.52	94.09 36.50	-5.05 -15.60	MAX MIN
6	-7.04 -11.48	5.99 1.05	3.73 0.23	68.15 33.73	-10.47 -29.06	MAX MIN
7	-1.49 -2.34	18.20 5.98	2.40 0.43	28.23 17.68	-25.53 -60.93	MAX MIN
8	0.07 0.00	17.71 6.39	0.06 -0.16	13.97 8.82	-29.01 -72.63	MAX MIN
9	-6.24 -10.20	17.33 4.40	5.67 0.73	56.97 35.43	-22.42 -54.57	MAX MIN
10	-15.90 -29.54	0.95 -0.31	5.04 0.46	127.20 48.69	-2.90 -11.97	MAX MIN
11	-15.53 -25.21	5.60 -0.04	6.59 -0.13	95.13 47.16	-6.85 -22.86	MAX MIN
12	-14.23 -23.76	15.34 1.56	9.43 0.43	86.02 52.93	-17.32 -46.02	MAX MIN
13	-1.08 -1.84	36.20 13.36	3.08 1.03	24.07 18.44	-38.88 -83.01	MAX MIN
14	0.26 0.03	35.98 13.99	0.15 -0.06	11.67 9.04	-41.89 -93.27	MAX MIN
15	-5.34 -8.33	34.50 10.83	6.82 1.99	50.57 38.25	-36.70 -77.85	MAX MIN
16	-12.70 -20.23	30.70 6.18	10.89 2.39	82.42 61.23	-33.40 -72.27	MAX MIN
17	-27.25 -43.00	1.41 -0.55	7.11 0.09	145.70 54.97	0.39 -3.65	MAX MIN
18	-26.84 -41.18	5.06 -1.25	9.97 -0.95	112.01 55.66	-0.22 -8.68	MAX MIN
19	-25.48 -43.49	11.40 -2.26	14.66 -0.75	112.80 66.92	-6.41 -25.59	MAX MIN
20	-23.99 -39.56	23.66 -1.03	15.28 1.99	124.57 90.11	-25.46 -57.73	MAX MIN
21	-0.81 -1.06	58.86 24.19	3.89 1.97	20.16 18.45	-52.61 -100.66	MAX MIN
22	0.37 0.18	58.71 24.90	0.34 0.19	9.77 8.95	-54.64 -108.89	MAX MIN
23	-4.71 -5.63	56.80 21.16	8.42 3.94	42.71 39.04	-52.66 -98.57	MAX MIN
24	-11.74 -13.92	52.36 15.56	13.09 5.59	71.63 64.85	-54.10 -99.15	MAX MIN
25	-23.11 -27.30	44.48 6.55	18.93 6.35	118.24 105.72	-56.74 -98.68	MAX MIN
26	-39.98 -53.79	1.05 -0.19	8.13 -0.14	138.35 52.75	12.28 5.92	MAX MIN
27	-39.67 -57.01	0.14 -1.59	13.33 -1.57	108.75 54.66	19.21 9.87	MAX MIN
28	-40.05 -59.57	6.06 -5.96	22.14 -1.94	129.51 75.46	22.44 16.72	MAX MIN
29	-40.04 -73.92	8.52 -10.21	28.79 0.12	163.33 106.98	0.43 -10.75	MAX MIN
30	-44.62 -52.30	29.92 -8.34	25.52 6.16	142.67 126.98	-61.29 -89.51	MAX MIN
31	-0.35 -0.74	85.44 38.64	4.91 2.99	17.88 14.62	-65.64 -113.70	MAX MIN
32	0.36 0.25	85.05 39.30	0.67 0.52	8.65 6.92	-66.47 -119.67	MAX MIN
33	-3.11 -4.55	83.69 35.75	10.47 6.00	37.86 31.44	-68.28 -114.61	MAX MIN
34	-7.99 -11.54	80.13 30.49	16.67 8.76	62.32 51.88	-75.07 -120.65	MAX MIN
35	-15.46 -23.07	74.69 22.33	23.44 10.74	94.73 77.92	-89.32 -131.88	MAX MIN
36	-22.26 -41.86	71.09 10.36	37.71 9.36	116.53 84.89	-125.55 -156.99	MAX MIN
37	-50.35 -60.15	1.00 -0.75	6.94 0.44	98.72 40.96	31.39 12.35	MAX MIN
38	-50.38 -69.61	0.34 -11.00	12.33 -0.20	75.30 38.89	62.12 27.31	MAX MIN
39	-55.98 -75.06	-5.62 -29.97	27.74 -1.03	102.10 61.18	102.30 42.61	MAX MIN
40	-64.55 -72.07	-4.40 -20.79	43.48 -0.84	133.80 76.72	58.61 12.15	MAX MIN
41	-65.09	17.95	97.95	89.44	-54.61	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-75.84	-20.52	-7.34	80.26	-73.93	MIN
42	-55.56	62.67	50.09	85.91	-140.41	MAX
	-68.15	-1.53	5.65	48.32	-168.96	MIN
43	0.05	115.10	5.90	14.25	-76.66	MAX
	-0.74	56.49	3.84	9.01	-121.59	MIN
44	0.25	114.32	1.08	6.92	-76.42	MAX
	0.18	56.98	0.82	4.19	-125.28	MIN
45	-1.49	114.21	12.40	29.67	-81.32	MAX
	-4.08	54.24	7.61	19.22	-124.43	MIN
46	-4.67	112.43	19.44	46.49	-91.56	MAX
	-10.22	50.30	11.01	29.86	-132.72	MIN
47	-9.76	111.28	27.88	61.96	-111.05	MAX
	-19.83	44.74	13.18	36.63	-146.91	MIN
48	-23.52	112.08	36.68	73.22	-147.34	MAX
	-31.50	38.74	13.04	41.38	-167.95	MIN
49	-40.44	139.54	39.78	57.96	-172.86	MAX
	-45.40	26.11	10.54	33.41	-206.34	MIN
50	-53.99	1.79	3.24	35.58	40.33	MAX
	-61.79	-2.24	2.08	22.40	15.18	MIN
51	-54.24	2.13	5.63	17.34	87.24	MAX
	-74.26	-18.39	3.63	11.00	38.91	MIN
52	-62.68	-1.17	9.30	7.46	154.08	MAX
	-89.55	-77.06	6.02	5.10	51.78	MIN
53	-66.49	16.39	11.52	1.92	182.67	MAX
	-114.86	-232.76	7.50	1.64	-13.87	MIN
54	-70.52	15.30	13.07	-0.28	143.43	MAX
	-81.71	-23.55	8.60	-2.32	-109.67	MIN
55	-42.78	280.28	14.36	-1.99	-15.45	MAX
	-69.60	-49.70	9.56	-5.50	-183.84	MIN
56	-41.12	179.44	15.57	-3.69	-161.04	MAX
	-51.80	13.45	10.48	-8.44	-226.10	MIN
57	0.16	148.28	6.61	10.13	-84.44	MAX
	-0.70	78.14	4.39	3.59	-124.07	MIN
58	0.10	147.14	1.44	4.99	-83.42	MAX
	0.01	78.35	1.00	1.54	-125.53	MIN
59	-0.62	148.42	13.50	20.48	-90.08	MAX
	-3.36	76.79	8.59	7.85	-127.78	MIN
60	-2.63	148.64	20.54	30.25	-101.02	MAX
	-8.02	74.52	12.16	11.40	-135.62	MIN
61	-7.28	150.21	27.20	37.22	-118.78	MAX
	-14.30	71.74	14.47	12.99	-146.55	MIN
62	-14.42	157.48	31.77	36.08	-143.76	MAX
	-21.73	68.08	14.93	10.74	-159.26	MIN
63	-20.29	172.49	28.68	20.92	-170.44	MAX
	-28.00	64.34	13.73	1.97	-190.36	MIN
64	-20.28	182.09	16.82	-5.70	-180.78	MAX
	-28.95	62.42	11.45	-11.65	-209.22	MIN
65	-49.10	0.96	3.67	3.65	31.22	MAX
	-58.55	-0.84	-0.53	-27.45	12.45	MIN
66	-49.37	0.11	7.36	-16.79	61.62	MAX
	-68.16	-11.28	-1.23	-40.24	27.36	MIN
67	-54.83	-6.11	12.90	-50.73	101.04	MAX
	-73.20	-30.48	-9.41	-86.72	42.39	MIN
68	-63.05	-5.15	15.63	-72.73	56.47	MAX
	-69.49	-21.56	-20.78	-130.07	11.41	MIN
69	-63.09	17.04	24.30	-80.45	-57.65	MAX
	-72.34	-21.52	-72.17	-93.64	-75.79	MIN
70	-52.98	61.70	13.21	-58.89	-144.30	MAX
	-63.61	-2.65	-21.76	-90.43	-171.64	MIN
71	-34.78	138.60	10.16	-49.89	-177.58	MAX
	-41.40	24.97	-9.05	-67.03	-209.88	MIN
72	-13.33	171.76	8.87	-24.87	-176.00	MAX
	-23.34	63.33	4.53	-33.12	-194.79	MIN
73	0.32	181.95	6.95	5.90	-88.05	MAX
	-0.46	101.54	4.65	-0.80	-121.41	MIN
74	-0.01	180.45	1.70	2.90	-86.41	MAX
	-0.14	101.38	1.09	-0.68	-120.60	MIN
75	0.38	182.87	13.76	11.76	-93.87	MAX
	-2.14	101.01	9.00	-0.72	-125.69	MIN
76	-0.30	184.20	19.98	16.60	-103.72	MAX
	-4.95	100.04	12.57	-0.58	-132.42	MIN
77	-2.04	187.18	24.84	18.54	-117.51	MAX
	-8.62	98.81	14.85	-1.50	-140.24	MIN
78	-4.25	192.74	26.78	15.29	-134.32	MAX
	-12.26	97.59	15.52	-4.29	-149.66	MIN
79	-5.13	199.48	24.39	5.80	-149.86	MAX
	-14.42	96.59	14.55	-9.06	-164.77	MIN
80	-2.81	202.69	18.09	-8.01	-157.56	MAX
	-13.68	95.96	12.42	-15.07	-172.48	MIN
81	3.22	199.06	11.33	-20.65	-154.40	MAX
	-9.47	95.83	9.97	-23.09	-170.10	MIN
82	-37.70	0.85	4.09	-8.72	11.90	MAX
	-51.07	-0.28	-1.95	-66.69	6.14	MIN
83	-37.86	-0.42	8.41	-32.31	18.17	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-54.51	-2.05	-2.72	-72.56	9.99	MIN
84	-37.94	5.04	13.28	-64.31	19.89	MAX
	-56.18	-6.95	-4.61	-112.78	16.32	MIN
85	-37.20	7.02	14.03	-102.03	-1.03	MAX
	-69.02	-11.77	-7.08	-158.24	-15.03	MIN
86	-40.80	28.09	10.10	-126.08	-64.08	MAX
	-45.53	-10.37	-0.85	-145.56	-95.55	MIN
87	-13.39	69.14	8.75	-94.21	-129.83	MAX
	-36.87	8.09	-10.55	-120.56	-164.72	MIN
88	-12.40	110.22	6.87	-56.64	-153.18	MAX
	-24.21	36.43	-7.20	-80.78	-177.34	MIN
89	-0.71	156.04	6.82	-32.43	-151.22	MAX
	-13.62	66.05	0.11	-46.93	-168.10	MIN
90	12.22	191.92	8.60	-24.17	-143.42	MAX
	-2.56	96.07	7.53	-31.13	-161.16	MIN
91	0.70	214.72	7.13	1.97	-87.46	MAX
	-0.05	125.47	4.79	-4.30	-114.60	MIN
92	-0.06	212.81	1.94	0.86	-84.93	MAX
	-0.18	124.84	1.18	-2.54	-111.08	MIN
93	1.82	216.05	13.70	4.18	-93.28	MAX
	-0.59	125.54	9.18	-7.09	-119.90	MIN
94	3.00	217.69	19.16	5.82	-101.79	MAX
	-1.60	125.34	12.68	-8.97	-126.31	MIN
95	4.00	220.23	22.87	5.67	-112.32	MAX
	-2.85	125.10	14.89	-10.82	-133.11	MIN
96	5.20	223.66	24.19	2.75	-123.44	MAX
	-3.79	124.91	15.63	-13.09	-139.58	MIN
97	7.38	226.95	22.80	-3.07	-132.87	MAX
	-3.63	124.75	14.98	-15.87	-148.20	MIN
98	11.30	228.34	19.36	-10.66	-138.15	MAX
	-1.66	124.58	13.36	-18.79	-153.76	MIN
99	17.21	226.97	15.42	-17.87	-138.20	MAX
	2.34	124.36	11.40	-21.26	-154.42	MIN
100	24.62	223.74	12.52	-22.56	-134.16	MAX
	7.93	124.13	9.72	-24.48	-154.26	MIN
101	-24.35	1.06	3.58	-11.96	0.76	MAX
	-40.16	-0.69	-1.33	-73.28	-4.28	MIN
102	-24.62	4.21	7.25	-32.94	0.03	MAX
	-38.44	-1.96	-0.17	-73.97	-10.28	MIN
103	-22.77	9.85	11.20	-54.61	-6.91	MAX
	-39.21	-3.79	1.53	-93.91	-29.39	MIN
104	-20.17	21.40	11.09	-83.55	-27.54	MAX
	-32.87	-3.45	4.79	-117.27	-64.04	MIN
105	-17.71	41.71	8.75	-102.96	-60.84	MAX
	-19.21	3.43	3.94	-118.95	-107.57	MIN
106	-2.67	71.77	6.15	-85.14	-95.70	MAX
	-15.61	18.85	1.80	-96.59	-143.30	MIN
107	6.41	108.52	5.43	-49.86	-119.82	MAX
	-10.85	41.24	-0.42	-67.77	-160.81	MIN
108	12.74	148.12	5.87	-32.65	-130.01	MAX
	-2.96	68.71	2.52	-46.25	-162.99	MIN
109	22.07	186.05	7.75	-24.83	-131.22	MAX
	5.40	96.57	7.14	-32.41	-159.33	MIN
110	32.50	220.42	11.33	-22.62	-128.48	MAX
	14.19	123.98	8.74	-25.33	-155.06	MIN
111	1.30	245.77	7.42	-1.58	-83.13	MAX
	0.48	149.00	4.99	-7.36	-104.51	MIN
112	-0.07	243.31	2.29	-1.05	-78.98	MAX
	-0.16	147.79	1.36	-4.24	-97.37	MIN
113	3.67	247.27	13.90	-2.24	-89.43	MAX
	1.12	149.50	9.43	-12.40	-111.74	MIN
114	6.74	248.75	18.90	-2.63	-97.21	MAX
	1.84	149.76	12.86	-15.60	-118.90	MIN
115	10.12	250.57	22.10	-3.67	-105.77	MAX
	2.65	149.97	15.01	-17.87	-125.75	MIN
116	13.84	252.67	23.31	-5.93	-114.14	MAX
	3.81	150.22	15.82	-19.75	-131.99	MIN
117	18.16	254.53	22.64	-9.46	-121.09	MAX
	5.69	150.45	15.46	-21.43	-137.44	MIN
118	23.38	255.46	20.61	-13.64	-125.59	MAX
	8.65	150.57	14.27	-22.85	-142.03	MIN
119	29.55	255.16	18.05	-17.45	-127.22	MAX
	12.76	150.55	12.71	-23.79	-145.76	MIN
120	36.39	253.93	15.80	-19.83	-126.46	MAX
	17.74	150.42	11.25	-23.98	-148.68	MIN
121	43.32	252.50	14.33	-20.13	-124.42	MAX
	23.06	150.30	10.19	-23.23	-150.87	MIN
122	-13.04	0.38	2.81	-7.23	-2.33	MAX
	-28.16	-0.52	0.17	-53.53	-12.83	MIN
123	-13.50	4.48	5.67	-24.02	-6.37	MAX
	-23.40	-1.03	2.08	-54.72	-24.91	MIN
124	-11.46	13.27	8.77	-39.06	-17.73	MAX
	-19.49	-0.58	4.92	-64.37	-50.75	MIN
125	-8.39	27.64	9.50	-52.40	-35.88	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-12.48	2.79	6.97	-72.12	-80.14	MIN
126	-2.14	48.64	8.44	-59.40	-59.36	MAX
	-5.44	11.22	7.36	-69.25	-110.39	MIN
127	8.12	76.25	6.92	-56.07	-83.47	MAX
	-2.68	25.69	6.02	-61.05	-135.32	MIN
128	15.94	108.83	6.24	-40.19	-103.25	MAX
	0.85	45.57	5.33	-49.41	-150.79	MIN
129	23.02	146.03	6.79	-28.19	-116.07	MAX
	6.12	70.51	6.27	-36.77	-157.14	MIN
130	30.69	182.94	8.82	-22.71	-122.10	MAX
	12.71	97.17	7.29	-27.88	-157.54	MIN
131	39.74	218.21	11.54	-20.97	-123.48	MAX
	20.09	124.01	8.52	-22.73	-155.39	MIN
132	49.70	251.52	13.70	-18.28	-122.33	MAX
	28.04	150.33	9.65	-21.53	-152.55	MIN
133	2.04	274.62	8.04	-4.85	-75.55	MAX
	1.08	171.43	5.36	-10.41	-91.62	MIN
134	-0.08	271.38	2.84	-2.88	-68.63	MAX
	-0.12	169.50	1.68	-6.00	-80.47	MIN
135	5.75	276.28	14.67	-7.89	-83.19	MAX
	2.90	172.31	9.94	-17.45	-101.89	MIN
136	10.68	277.55	19.47	-9.66	-91.17	MAX
	5.25	172.85	13.32	-21.64	-110.77	MIN
137	16.16	278.86	22.40	-11.10	-99.03	MAX
	7.87	173.33	15.39	-24.14	-118.49	MIN
138	21.91	280.28	23.56	-12.75	-106.25	MAX
	10.75	173.85	16.23	-25.70	-125.16	MIN
139	27.92	281.62	23.20	-14.78	-112.25	MAX
	14.03	174.36	16.02	-26.70	-130.93	MIN
140	34.27	282.59	21.78	-16.93	-116.59	MAX
	17.85	174.80	15.10	-27.27	-135.94	MIN
141	40.92	283.07	19.84	-18.71	-119.16	MAX
	22.25	175.10	13.80	-27.31	-140.30	MIN
142	47.70	283.13	17.89	-19.59	-120.20	MAX
	27.04	175.30	12.47	-26.70	-144.05	MIN
143	54.27	283.08	16.27	-19.20	-120.26	MAX
	31.88	175.49	11.33	-25.34	-147.20	MIN
144	60.24	283.24	15.09	-17.49	-120.02	MAX
	36.34	175.78	10.50	-23.23	-149.76	MIN
145	-5.48	-0.25	2.24	2.64	-4.11	MAX
	-18.33	-0.32	1.45	-18.93	-16.41	MIN
146	-5.95	4.66	4.50	-10.40	-9.45	MAX
	-11.98	-0.26	3.60	-25.64	-30.93	MIN
147	-4.08	14.76	7.35	-19.69	-22.25	MAX
	-6.99	1.54	6.53	-32.31	-59.00	MIN
148	-0.47	30.63	8.49	-26.40	-39.08	MAX
	-1.26	6.28	7.75	-36.38	-85.83	MIN
149	7.47	52.09	9.23	-29.91	-58.71	MAX
	1.92	15.39	7.64	-35.93	-110.90	MIN
150	15.51	78.87	9.27	-29.67	-78.54	MAX
	4.95	29.49	7.26	-32.33	-131.56	MIN
151	22.72	109.93	9.27	-25.68	-95.93	MAX
	8.29	48.22	7.16	-28.45	-145.92	MIN
152	29.70	145.56	9.93	-20.86	-109.00	MAX
	12.69	71.86	7.50	-23.54	-153.76	MIN
153	37.12	181.87	11.17	-18.16	-116.96	MAX
	18.22	97.68	8.17	-19.73	-156.36	MIN
154	45.54	217.32	12.56	-15.78	-120.53	MAX
	24.77	124.22	8.92	-18.19	-155.83	MIN
155	55.00	251.31	13.66	-14.76	-121.13	MAX
	32.12	150.58	9.55	-19.04	-153.95	MIN
156	65.25	283.82	14.30	-14.74	-120.03	MAX
	40.04	176.28	9.96	-20.55	-151.79	MIN
157	2.86	300.97	9.07	-8.07	-65.03	MAX
	1.73	192.26	5.98	-13.75	-76.05	MIN
158	-0.09	296.62	3.65	-4.73	-53.79	MAX
	-0.11	189.42	2.19	-7.97	-63.09	MIN
159	8.01	302.99	16.14	-13.22	-75.17	MAX
	4.75	193.58	10.82	-22.78	-90.70	MIN
160	14.80	304.22	20.89	-15.99	-84.33	MAX
	8.67	194.39	14.17	-27.73	-102.28	MIN
161	22.22	305.29	23.58	-17.56	-92.47	MAX
	12.93	195.12	16.10	-30.25	-111.49	MIN
162	29.75	306.46	24.52	-18.65	-99.46	MAX
	17.29	195.92	16.83	-31.44	-118.90	MIN
163	37.20	307.75	24.13	-19.61	-105.20	MAX
	21.74	196.79	16.63	-31.94	-125.09	MIN
164	44.56	309.06	22.81	-20.45	-109.65	MAX
	26.36	197.63	15.81	-31.99	-130.54	MIN
165	51.79	310.30	21.02	-20.94	-112.86	MAX
	31.14	198.36	14.64	-31.51	-135.54	MIN
166	58.79	311.44	19.10	-20.78	-115.02	MAX
	35.98	198.99	13.35	-30.34	-140.13	MIN
167	65.34	312.56	17.31	-19.77	-116.39	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	40.66	199.60	12.10	-28.38	-144.16	MIN
168	71.18	313.74	15.75	-17.90	-117.32	MAX
	44.87	200.28	11.01	-25.67	-147.47	MIN
169	76.08	315.12	14.43	-15.34	-118.11	MAX
	48.37	201.13	10.11	-22.43	-149.98	MIN
170	-2.01	-0.24	2.61	21.56	-4.65	MAX
	-13.17	-0.34	1.77	14.94	-17.36	MIN
171	-2.45	4.71	4.73	7.26	-10.36	MAX
	-6.60	0.01	3.19	5.30	-32.54	MIN
172	-0.69	15.22	7.88	0.21	-23.57	MAX
	-1.37	2.21	5.31	-0.34	-61.27	MIN
173	4.90	31.49	9.79	-2.58	-40.08	MAX
	2.18	7.37	6.61	-4.55	-87.49	MIN
174	12.22	53.15	11.05	-4.23	-58.74	MAX
	5.33	16.68	7.48	-7.09	-111.28	MIN
175	19.71	79.78	11.96	-5.37	-77.48	MAX
	8.48	30.70	8.12	-8.86	-130.91	MIN
176	26.72	110.47	12.67	-6.31	-94.22	MAX
	11.85	49.13	8.64	-10.30	-145.03	MIN
177	33.78	145.75	13.23	-7.26	-107.34	MAX
	16.11	72.43	9.07	-11.73	-153.36	MIN
178	41.20	181.94	13.65	-8.23	-115.86	MAX
	21.40	98.05	9.41	-13.16	-156.72	MIN
179	49.55	217.58	13.89	-9.26	-120.14	MAX
	27.72	124.59	9.63	-14.62	-156.81	MIN
180	58.91	251.95	13.94	-10.33	-121.35	MAX
	34.90	151.09	9.70	-16.11	-155.32	MIN
181	69.10	284.94	13.75	-11.41	-120.67	MAX
	42.72	177.03	9.62	-17.58	-153.37	MIN
182	79.89	316.74	13.29	-12.44	-119.01	MAX
	50.99	202.17	9.34	-18.95	-151.68	MIN
183	3.80	324.60	10.56	-11.49	-51.68	MAX
	2.45	211.09	6.92	-17.66	-60.75	MIN
184	-0.15	318.62	4.76	-6.76	-28.70	MAX
	-0.17	207.00	2.91	-10.35	-40.16	MIN
185	10.54	327.30	18.35	-18.63	-65.80	MAX
	6.75	213.01	12.15	-28.75	-78.46	MIN
186	19.29	328.74	23.12	-22.08	-77.20	MAX
	12.27	214.18	15.45	-34.16	-93.87	MIN
187	28.61	329.84	25.47	-23.49	-86.32	MAX
	18.07	215.24	17.11	-36.30	-105.04	MIN
188	37.75	331.04	25.98	-23.97	-93.56	MAX
	23.73	216.47	17.55	-36.92	-113.19	MIN
189	46.43	332.55	25.20	-24.11	-99.31	MAX
	29.16	217.86	17.18	-37.01	-119.58	MIN
190	54.67	334.41	23.60	-24.09	-103.93	MAX
	34.45	219.26	16.34	-36.86	-125.33	MIN
191	62.48	336.58	21.62	-23.75	-107.67	MAX
	39.65	220.51	15.20	-36.23	-131.07	MIN
192	69.82	338.89	19.55	-22.87	-110.66	MAX
	44.70	221.64	13.89	-34.73	-136.75	MIN
193	76.54	341.19	17.56	-21.30	-112.98	MAX
	49.41	222.72	12.52	-32.16	-141.90	MIN
194	82.44	343.41	15.74	-19.04	-114.72	MAX
	53.58	223.86	11.19	-28.63	-146.04	MIN
195	87.32	345.57	14.07	-16.30	-116.02	MAX
	56.99	225.11	9.96	-24.48	-148.97	MIN
196	91.10	347.72	12.55	-13.35	-117.04	MAX
	59.55	226.49	8.85	-20.12	-150.71	MIN
197	-2.64	-0.26	3.76	62.10	-4.13	MAX
	-13.89	-0.33	1.31	27.25	-16.49	MIN
198	-3.17	4.61	5.82	40.30	-9.53	MAX
	-7.60	-0.31	2.04	21.06	-31.14	MIN
199	-1.26	14.70	9.18	31.81	-22.49	MAX
	-2.54	1.45	3.70	20.21	-59.50	MIN
200	4.13	30.57	11.04	27.48	-39.55	MAX
	1.75	6.17	5.41	21.38	-86.69	MIN
201	12.28	52.10	12.80	23.16	-59.44	MAX
	4.99	15.28	7.25	21.59	-112.13	MIN
202	20.56	79.01	14.58	19.40	-79.54	MAX
	8.19	29.44	8.92	13.95	-133.17	MIN
203	28.04	110.27	15.99	14.02	-97.20	MAX
	11.71	48.28	10.05	5.25	-147.87	MIN
204	35.32	146.21	16.47	7.58	-110.53	MAX
	16.32	72.12	10.59	-2.46	-156.03	MIN
205	43.02	182.92	16.08	1.79	-118.72	MAX
	22.05	98.20	10.60	-7.69	-158.89	MIN
206	51.69	218.86	15.20	-2.67	-122.46	MAX
	28.78	125.09	10.32	-10.99	-158.55	MIN
207	61.36	253.43	14.21	-5.86	-123.18	MAX
	36.27	151.86	9.86	-13.16	-156.77	MIN
208	71.74	286.60	13.23	-8.08	-122.11	MAX
	44.30	178.04	9.30	-14.63	-154.59	MIN
209	82.60	318.63	12.24	-9.59	-120.13	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	52.67	203.42	8.62	-15.57	-152.64	MIN
210	93.77	349.85	11.16	-10.51	-117.88	MAX
	61.26	227.97	7.82	-15.93	-151.34	MIN
211	4.96	345.30	12.60	-15.36	-35.45	MAX
	3.35	227.61	8.24	-22.49	-42.14	MIN
212	-0.28	336.74	6.25	-9.15	6.72	MAX
	-0.37	221.65	3.91	-13.40	-10.54	MIN
213	13.61	349.19	21.41	-24.38	-55.53	MAX
	9.14	230.41	14.08	-35.66	-65.75	MIN
214	24.55	351.11	26.21	-28.05	-70.31	MAX
	16.37	232.02	17.24	-40.86	-86.34	MIN
215	35.80	352.44	28.04	-28.85	-80.93	MAX
	23.66	233.53	18.39	-41.85	-99.81	MIN
216	46.37	353.82	27.83	-28.52	-88.49	MAX
	30.41	235.42	18.27	-41.47	-108.17	MIN
217	56.02	355.61	26.31	-28.03	-94.11	MAX
	36.56	237.64	17.55	-41.30	-113.91	MIN
218	64.91	358.17	24.03	-27.59	-98.77	MAX
	42.34	239.82	16.61	-41.57	-119.51	MIN
219	73.21	361.62	21.53	-26.92	-103.04	MAX
	47.93	241.71	15.48	-41.45	-126.31	MIN
220	80.94	365.53	19.17	-25.61	-106.94	MAX
	53.29	243.33	14.13	-39.97	-133.85	MIN
221	87.93	369.28	17.04	-23.48	-110.18	MAX
	58.21	244.92	12.59	-36.71	-140.73	MIN
222	93.97	372.63	15.08	-20.65	-112.60	MAX
	62.44	246.60	11.01	-32.00	-145.91	MIN
223	98.90	375.60	13.24	-17.39	-114.22	MAX
	65.82	248.34	9.51	-26.54	-149.19	MIN
224	102.60	378.27	11.52	-14.03	-115.24	MAX
	68.32	250.07	8.15	-20.93	-150.84	MIN
225	105.13	380.67	9.98	-10.83	-115.78	MAX
	69.97	251.77	6.90	-15.57	-151.09	MIN
226	-7.43	0.35	4.99	96.88	-2.36	MAX
	-19.39	-0.54	0.67	37.10	-12.99	MIN
227	-8.01	4.38	7.24	69.80	-6.52	MAX
	-14.75	-1.13	0.59	34.88	-25.33	MIN
228	-5.89	13.14	10.60	64.41	-18.21	MAX
	-10.70	-0.76	1.67	39.91	-51.77	MIN
229	-2.60	27.51	12.32	63.80	-36.82	MAX
	-3.38	2.55	3.78	47.77	-81.88	MIN
230	7.38	48.63	14.42	56.05	-60.82	MAX
	0.64	10.98	6.78	51.49	-112.89	MIN
231	18.15	76.50	17.58	48.60	-85.48	MAX
	3.75	25.56	9.51	39.09	-138.57	MIN
232	26.52	109.47	19.68	35.00	-105.81	MAX
	7.66	45.65	11.18	20.26	-154.74	MIN
233	34.22	147.28	19.89	21.31	-119.16	MAX
	13.35	70.98	11.67	5.29	-161.72	MIN
234	42.48	184.99	18.27	10.39	-125.66	MAX
	20.35	98.17	11.37	-3.17	-162.67	MIN
235	52.07	221.23	16.14	2.74	-127.40	MAX
	28.12	125.70	10.64	-7.93	-160.90	MIN
236	62.47	255.69	14.18	-2.22	-126.50	MAX
	36.38	152.84	9.76	-10.60	-158.28	MIN
237	73.30	288.73	12.56	-5.33	-124.27	MAX
	44.91	179.25	8.83	-12.05	-155.49	MIN
238	84.35	320.70	11.16	-7.19	-121.47	MAX
	53.55	204.82	7.87	-12.62	-152.95	MIN
239	95.48	351.92	9.87	-8.08	-118.55	MAX
	62.21	229.54	6.84	-12.30	-150.96	MIN
240	106.62	382.73	8.64	-8.08	-115.86	MAX
	70.85	253.45	5.74	-10.89	-149.92	MIN
241	6.67	363.04	15.51	-19.87	-10.36	MAX
	4.63	241.73	10.21	-28.57	-20.24	MIN
242	-0.42	350.16	8.19	-12.10	51.94	MAX
	-0.60	232.74	5.27	-17.42	24.20	MIN
243	17.76	368.63	25.67	-30.49	-45.15	MAX
	12.30	245.68	16.90	-43.57	-54.18	MIN
244	31.34	371.30	30.38	-33.51	-64.51	MAX
	21.56	247.72	19.81	-47.27	-81.02	MIN
245	44.53	373.12	31.34	-32.88	-76.92	MAX
	30.32	249.70	19.98	-45.65	-97.08	MIN
246	56.25	374.76	30.13	-31.38	-84.33	MAX
	37.80	252.56	18.85	-43.41	-104.33	MIN
247	66.38	376.36	27.53	-30.55	-88.89	MAX
	44.17	256.12	17.54	-43.37	-107.01	MIN
248	75.48	379.34	23.96	-30.53	-93.12	MAX
	50.12	259.50	16.53	-45.51	-111.11	MIN
249	84.15	384.99	20.43	-30.40	-98.21	MAX
	56.03	262.02	15.52	-47.42	-120.07	MIN
250	92.25	391.61	17.74	-29.08	-103.80	MAX
	61.85	264.08	14.09	-46.51	-131.70	MIN
251	99.55	397.38	15.68	-26.28	-108.39	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	67.14	266.29	12.28	-42.13	-141.55	MIN
252	105.79	401.96	13.87	-22.49	-111.33	MAX
	71.49	268.70	10.42	-35.50	-147.70	MIN
253	110.74	405.66	12.01	-18.36	-113.06	MAX
	74.81	271.04	8.74	-28.22	-150.88	MIN
254	114.36	408.84	10.24	-14.31	-113.95	MAX
	77.19	273.17	7.27	-21.15	-152.22	MIN
255	116.62	411.47	8.69	-10.48	-114.21	MAX
	78.74	275.03	5.93	-14.42	-152.15	MIN
256	117.75	413.58	7.44	-7.03	-113.78	MAX
	79.50	276.68	4.66	-8.56	-150.45	MIN
257	-16.11	1.02	6.41	116.92	0.71	MAX
	-27.28	-0.72	-0.17	41.79	-4.52	MIN
258	-16.56	4.05	9.30	89.75	-0.19	MAX
	-25.75	-2.12	-1.13	44.14	-10.92	MIN
259	-14.58	9.62	13.70	94.87	-7.62	MAX
	-26.30	-4.08	-1.00	56.01	-30.94	MIN
260	-11.65	21.17	14.11	109.93	-28.95	MAX
	-19.47	-3.85	1.60	79.58	-66.70	MIN
261	-3.64	41.65	17.41	106.52	-63.06	MAX
	-8.83	3.03	5.63	95.76	-111.39	MIN
262	12.20	72.07	21.35	84.96	-98.76	MAX
	-6.10	18.59	9.52	69.08	-148.26	MIN
263	22.15	109.40	25.00	54.36	-123.72	MAX
	-0.74	41.30	11.31	30.76	-166.84	MIN
264	29.46	149.89	23.29	31.67	-134.73	MAX
	7.81	69.33	11.80	10.47	-170.00	MIN
265	39.74	188.99	19.65	15.54	-136.66	MAX
	16.83	97.98	11.28	-0.49	-167.18	MIN
266	51.05	224.81	16.16	5.70	-134.50	MAX
	26.24	126.40	10.30	-5.97	-163.53	MIN
267	62.60	258.60	13.51	-0.16	-130.85	MAX
	35.64	153.96	9.19	-8.74	-159.72	MIN
268	74.09	291.16	11.53	-3.62	-126.86	MAX
	44.86	180.58	8.09	-10.07	-156.11	MIN
269	85.40	322.83	9.96	-5.54	-122.88	MAX
	53.86	206.29	7.01	-10.36	-152.75	MIN
270	96.50	353.83	8.63	-6.33	-119.04	MAX
	62.61	231.15	5.89	-9.60	-149.72	MIN
271	107.36	384.36	7.50	-6.04	-115.44	MAX
	71.13	255.15	4.69	-7.44	-147.28	MIN
272	118.00	414.84	6.65	-3.23	-112.46	MAX
	79.49	278.29	3.47	-5.44	-146.28	MIN
273	9.63	378.47	19.92	-24.97	17.79	MAX
	6.74	253.84	13.28	-35.90	4.24	MIN
274	-1.17	357.40	11.50	-15.84	110.77	MAX
	-1.74	239.26	7.59	-22.82	66.55	MIN
275	24.38	385.67	32.36	-36.28	-36.09	MAX
	17.07	258.82	21.55	-51.82	-44.13	MIN
276	40.80	388.28	35.91	-37.28	-60.75	MAX
	28.76	260.71	23.56	-52.11	-79.06	MIN
277	56.15	392.46	35.11	-33.80	-75.21	MAX
	39.16	263.56	22.07	-45.41	-99.03	MIN
278	68.31	394.99	33.30	-30.07	-82.56	MAX
	46.59	267.49	19.21	-39.22	-104.72	MIN
279	77.80	393.79	29.55	-29.48	-82.52	MAX
	52.17	273.07	16.97	-39.82	-99.52	MIN
280	86.29	394.85	23.33	-32.16	-82.61	MAX
	57.69	278.52	16.07	-47.57	-99.99	MIN
281	95.30	405.75	17.48	-34.84	-91.99	MAX
	63.93	281.28	15.40	-55.29	-110.52	MIN
282	104.02	418.51	14.83	-34.15	-102.61	MAX
	70.62	283.63	13.74	-55.61	-133.12	MIN
283	111.50	426.65	13.76	-29.74	-108.32	MAX
	76.48	287.02	11.41	-48.20	-146.21	MIN
284	117.80	431.73	12.24	-24.11	-111.46	MAX
	80.79	290.53	9.33	-38.02	-151.86	MIN
285	122.94	436.27	10.49	-18.80	-112.74	MAX
	83.83	293.58	7.64	-28.64	-153.96	MIN
286	126.33	439.89	8.81	-13.94	-113.23	MAX
	86.01	296.09	6.27	-20.43	-154.58	MIN
287	128.32	442.71	7.35	-9.36	-113.35	MAX
	87.46	298.06	5.05	-12.64	-154.42	MIN
288	128.77	444.70	6.30	-4.50	-112.86	MAX
	88.18	299.54	3.82	-6.28	-153.02	MIN
289	128.47	446.27	5.95	3.62	-110.86	MAX
	87.91	300.65	2.52	-1.46	-148.61	MIN
290	-27.03	0.78	6.90	110.73	11.57	MAX
	-34.43	-0.32	-0.78	38.47	6.10	MIN
291	-27.46	-0.66	11.59	89.36	17.30	MAX
	-38.15	-2.27	-2.49	43.99	9.72	MIN
292	-27.36	4.69	19.37	115.04	17.77	MAX
	-39.49	-7.38	-3.42	66.50	15.39	MIN
293	-26.17	6.65	25.40	152.32	-2.91	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-51.63	-12.37	-1.77	99.01	-18.67	MIN
294	-27.19	27.91	21.55	134.53	-67.08	MAX
	-30.86	-10.99	3.81	119.89	-100.77	MIN
295	6.09	69.42	33.03	110.10	-133.99	MAX
	-24.44	7.64	6.43	79.47	-171.50	MIN
296	8.32	111.22	31.13	68.60	-158.50	MAX
	-10.94	36.37	9.40	38.74	-185.59	MIN
297	21.41	158.21	25.10	33.38	-157.67	MAX
	0.60	66.73	10.43	11.28	-177.56	MIN
298	35.73	195.61	18.77	14.98	-150.88	MAX
	12.61	97.77	10.05	-0.32	-171.92	MIN
299	49.43	229.31	14.62	5.28	-142.46	MAX
	24.00	127.16	9.07	-5.33	-165.92	MIN
300	62.33	261.76	11.90	-0.11	-135.37	MAX
	34.62	155.08	8.02	-7.71	-160.92	MIN
301	74.51	293.57	10.02	-3.15	-129.41	MAX
	44.57	181.86	7.01	-8.78	-156.49	MIN
302	86.10	324.82	8.58	-4.79	-124.17	MAX
	53.93	207.70	6.02	-8.92	-152.28	MIN
303	97.15	355.47	7.40	-5.39	-119.33	MAX
	62.76	232.70	4.99	-8.09	-148.03	MIN
304	107.72	385.47	6.47	-4.97	-114.64	MAX
	71.09	256.87	3.86	-6.06	-143.59	MIN
305	117.82	414.91	6.01	-1.11	-110.02	MAX
	78.95	280.09	2.59	-3.86	-139.16	MIN
306	127.65	444.96	6.73	8.21	-106.86	MAX
	86.52	301.99	1.29	1.44	-137.60	MIN
307	17.02	396.26	30.11	-29.52	42.71	MAX
	11.77	267.18	20.34	-42.81	23.64	MIN
308	0.70	359.42	14.75	-19.68	187.45	MAX
	0.50	241.90	9.89	-28.56	121.01	MIN
309	34.79	395.62	42.74	-39.38	-28.97	MAX
	24.20	266.76	28.83	-56.95	-36.29	MIN
310	57.69	402.18	42.69	-36.63	-59.33	MAX
	40.37	271.04	28.68	-52.58	-80.07	MIN
311	71.23	409.23	38.57	-29.80	-77.82	MAX
	51.59	275.95	24.69	-40.15	-106.88	MIN
312	83.76	420.10	36.00	-19.76	-84.19	MAX
	58.13	280.42	20.02	-26.41	-115.10	MIN
313	92.59	411.91	36.53	-16.09	-84.69	MAX
	60.61	287.04	15.68	-22.27	-101.47	MIN
314	93.45	387.46	22.28	-31.10	-77.55	MAX
	64.62	296.96	15.32	-45.77	-102.38	MIN
315	108.70	427.83	15.43	-46.25	-94.01	MAX
	71.50	297.98	8.73	-72.12	-112.28	MIN
316	116.75	451.76	13.11	-42.85	-104.29	MAX
	80.45	302.17	11.30	-69.21	-143.74	MIN
317	122.85	456.09	11.74	-32.67	-111.93	MAX
	86.56	308.14	9.75	-51.51	-155.77	MIN
318	131.00	462.87	10.56	-24.45	-113.25	MAX
	90.14	312.72	7.70	-36.79	-157.91	MIN
319	135.44	467.85	8.79	-17.70	-112.98	MAX
	92.68	316.39	6.32	-26.31	-157.48	MIN
320	138.38	471.81	7.40	-12.52	-112.78	MAX
	94.51	319.19	5.29	-18.19	-157.01	MIN
321	140.16	474.78	6.26	-7.64	-113.01	MAX
	95.88	321.26	4.42	-10.53	-157.06	MIN
322	140.63	476.88	5.23	-1.39	-113.49	MAX
	96.68	322.55	3.53	-3.23	-157.31	MIN
323	137.79	477.45	5.33	11.11	-112.73	MAX
	96.71	323.12	2.32	4.12	-155.55	MIN
324	137.62	480.87	7.61	25.72	-106.26	MAX
	94.63	322.56	0.85	12.80	-144.80	MIN
325	-36.32	0.90	5.31	72.02	30.79	MAX
	-39.55	-0.93	-0.51	25.95	12.42	MIN
326	-36.95	-0.20	9.73	58.40	60.50	MAX
	-48.62	-11.61	-1.72	29.08	27.05	MIN
327	-42.16	-6.70	23.53	90.72	98.30	MAX
	-53.21	-30.99	-3.52	53.95	41.25	MIN
328	-48.55	-5.72	38.29	126.02	51.77	MAX
	-53.24	-22.40	-3.96	70.96	9.04	MIN
329	-48.98	16.66	91.97	84.47	-64.40	MAX
	-52.74	-22.43	-11.05	75.61	-80.54	MIN
330	-37.86	61.85	43.30	82.41	-153.05	MAX
	-40.85	-3.39	1.30	45.90	-178.13	MIN
331	-9.32	139.61	32.05	55.82	-188.20	MAX
	-23.15	24.68	5.46	33.58	-218.08	MIN
332	14.04	174.17	19.82	20.59	-188.00	MAX
	-5.83	63.93	7.78	5.10	-204.65	MIN
333	32.50	203.31	14.21	7.67	-164.05	MAX
	9.34	97.68	7.62	-2.70	-181.47	MIN
334	48.32	233.51	11.14	1.41	-149.00	MAX
	22.41	127.83	6.99	-5.89	-167.63	MIN
335	62.30	264.46	9.31	-1.95	-138.89	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	34.00	156.02	6.31	-7.41	-161.79	MIN
336	75.02	295.59	8.04	-3.83	-131.33	MAX
	44.50	182.94	5.63	-8.11	-156.75	MIN
337	86.80	326.49	7.03	-4.83	-125.12	MAX
	54.11	208.89	4.94	-8.24	-151.86	MIN
338	97.80	356.84	6.14	-5.20	-119.49	MAX
	62.97	234.02	4.19	-7.73	-146.57	MIN
339	108.10	386.24	5.40	-4.90	-113.84	MAX
	71.10	258.41	3.34	-6.24	-140.16	MIN
340	117.70	414.10	5.08	-2.93	-107.32	MAX
	78.46	282.01	2.30	-4.30	-131.35	MIN
341	126.49	439.23	6.09	4.43	-98.78	MAX
	84.93	304.50	1.06	-0.16	-118.14	MIN
342	136.38	465.22	12.66	24.74	-98.06	MAX
	90.29	324.12	-0.51	13.43	-116.32	MIN
343	21.55	390.04	45.91	-29.00	58.81	MAX
	14.76	263.82	31.18	-42.45	36.38	MIN
344	-2.59	402.57	35.00	-24.70	254.37	MAX
	-3.84	272.17	23.71	-36.29	168.88	MIN
345	61.77	398.77	57.30	-33.21	-21.48	MAX
	42.25	269.71	38.98	-48.66	-27.95	MIN
346	82.16	411.48	49.56	-30.24	-59.00	MAX
	56.47	278.15	33.67	-45.16	-81.56	MIN
347	95.84	426.07	40.80	-18.30	-85.43	MAX
	65.96	286.89	28.15	-30.87	-119.22	MIN
348	92.02	434.29	39.03	-4.29	-100.18	MAX
	72.67	294.11	21.97	-10.60	-139.99	MIN
349	118.13	474.69	43.54	3.50	-114.95	MAX
	69.29	292.61	15.57	-10.22	-150.82	MIN
350	93.70	365.40	21.59	-25.51	-71.93	MAX
	77.33	307.83	14.83	-37.43	-145.19	MIN
351	131.91	494.87	14.74	-44.64	-123.89	MAX
	78.65	306.48	0.60	-78.71	-163.52	MIN
352	120.17	474.92	10.83	-47.53	-119.88	MAX
	91.80	322.03	8.01	-71.71	-168.13	MIN
353	139.64	487.43	11.09	-33.82	-119.91	MAX
	95.75	329.03	7.35	-45.43	-168.82	MIN
354	144.09	493.34	8.64	-20.46	-115.50	MAX
	98.65	334.34	6.08	-28.90	-163.41	MIN
355	147.14	498.39	7.39	-13.84	-112.82	MAX
	100.47	338.10	5.17	-19.90	-159.77	MIN
356	149.34	502.40	6.42	-9.62	-111.76	MAX
	101.94	341.02	4.60	-13.87	-158.13	MIN
357	151.07	505.65	5.70	-5.66	-112.31	MAX
	103.18	343.25	4.19	-8.23	-158.53	MIN
358	152.13	508.08	5.23	0.17	-114.66	MAX
	104.18	344.79	3.79	-1.20	-161.18	MIN
359	152.13	510.08	4.11	14.13	-119.09	MAX
	104.34	345.05	3.41	10.38	-166.15	MIN
360	137.67	506.14	9.17	37.63	-119.69	MAX
	103.81	344.06	1.79	23.23	-165.94	MIN
361	155.17	535.55	19.29	41.05	-125.29	MAX
	94.60	335.12	-0.88	18.79	-163.25	MIN
362	-39.32	1.71	1.29	9.65	39.80	MAX
	-42.46	-2.37	0.90	6.94	15.18	MIN
363	-40.19	1.72	2.37	2.55	85.84	MAX
	-52.22	-18.84	1.64	2.02	38.57	MIN
364	-48.32	-1.96	3.96	-0.60	150.63	MAX
	-66.89	-77.76	2.73	-1.24	50.45	MIN
365	-51.36	15.24	4.92	-2.03	176.78	MAX
	-90.92	-233.60	3.38	-3.33	-16.72	MIN
366	-54.32	14.63	5.51	-2.85	135.02	MAX
	-58.58	-24.86	3.80	-4.54	-114.30	MIN
367	-15.11	280.18	5.90	-3.38	-26.31	MAX
	-51.91	-50.84	4.07	-5.31	-190.35	MIN
368	-11.24	180.31	6.16	-3.76	-174.23	MAX
	-30.82	12.81	4.26	-5.87	-236.24	MIN
369	12.09	184.57	6.30	-4.09	-196.15	MAX
	-7.93	62.79	4.37	-6.36	-221.47	MIN
370	32.10	207.28	6.34	-4.40	-169.61	MAX
	8.61	97.78	4.42	-6.79	-186.67	MIN
371	48.69	235.59	6.27	-4.68	-151.72	MAX
	22.35	128.31	4.39	-7.18	-169.61	MIN
372	63.08	265.93	6.09	-4.95	-140.36	MAX
	34.30	156.66	4.29	-7.54	-162.28	MIN
373	75.98	296.85	5.80	-5.19	-132.18	MAX
	44.98	183.67	4.10	-7.84	-156.99	MIN
374	87.78	327.69	5.39	-5.38	-125.57	MAX
	54.66	209.71	3.83	-8.05	-151.80	MIN
375	98.71	357.97	4.87	-5.49	-119.60	MAX
	63.50	234.96	3.49	-8.15	-146.04	MIN
376	108.85	387.16	4.27	-5.51	-113.50	MAX
	71.52	259.49	3.08	-8.09	-138.72	MIN
377	118.13	414.11	3.60	-5.37	-106.14	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	78.64	283.38	2.62	-7.81	-127.72	MIN
378	126.26	435.53	2.92	-5.01	-93.14	MAX
	84.59	306.70	2.14	-7.21	-111.63	MIN
379	129.11	433.73	2.30	-4.32	-85.90	MAX
	88.81	329.24	1.70	-6.15	-110.33	MIN
380	123.75	407.28	1.87	-3.21	-75.73	MAX
	97.91	359.10	1.40	-4.52	-149.61	MIN
381	113.49	391.20	78.79	-20.62	85.22	MAX
	76.96	265.12	53.55	-30.06	55.68	MIN
382	97.21	398.28	85.63	23.53	230.90	MAX
	66.01	270.08	58.18	15.74	154.72	MIN
383	101.52	397.21	64.72	-12.17	-15.16	MAX
	68.95	269.26	44.07	-17.95	-21.02	MIN
384	112.54	421.28	53.88	-15.58	-58.25	MAX
	76.38	285.40	37.01	-23.79	-81.65	MIN
385	124.05	445.04	45.34	-5.85	-91.87	MAX
	83.23	300.82	30.32	-13.73	-128.38	MIN
386	135.60	468.59	30.91	4.83	-133.44	MAX
	85.68	311.91	26.16	-7.40	-176.65	MIN
387	133.93	485.33	87.82	-0.55	-172.24	MAX
	88.99	321.92	8.60	-14.44	-231.03	MIN
388	196.91	724.27	21.36	-11.73	-106.02	MAX
	81.78	288.64	14.66	-17.17	-216.99	MIN
389	144.11	509.48	21.47	-20.19	-180.74	MAX
	95.94	338.53	-44.00	-23.11	-243.11	MIN
390	156.35	517.77	16.29	-27.81	-152.50	MAX
	99.87	345.71	6.18	-28.99	-203.91	MIN
391	156.10	520.84	7.61	-18.74	-126.10	MAX
	105.14	352.89	5.90	-22.22	-177.68	MIN
392	156.76	525.42	7.52	-8.62	-116.11	MAX
	106.62	356.87	4.93	-11.55	-165.60	MIN
393	158.27	529.65	6.47	-5.85	-111.46	MAX
	107.77	360.11	4.51	-8.22	-159.69	MIN
394	159.71	533.48	5.94	-4.17	-109.79	MAX
	108.82	362.89	4.26	-5.97	-157.26	MIN
395	161.14	536.98	5.67	-2.61	-110.59	MAX
	109.80	365.37	4.18	-3.90	-157.91	MIN
396	162.63	540.36	5.41	-0.22	-114.54	MAX
	110.75	367.57	4.29	-1.14	-162.27	MIN
397	165.22	543.98	6.71	9.25	-124.17	MAX
	111.55	369.42	4.24	7.85	-173.36	MIN
398	169.14	550.02	5.32	18.59	-150.83	MAX
	108.83	368.67	0.08	12.92	-199.49	MIN
399	161.13	552.11	63.22	11.51	-180.28	MAX
	107.83	368.77	-8.09	3.35	-240.05	MIN
400	218.93	778.97	1.66	-1.35	-106.56	MAX
	97.12	327.28	1.25	-1.88	-219.22	MIN
401	-34.59	0.90	2.30	-12.03	30.72	MAX
	-37.49	-0.93	-2.71	-52.64	12.39	MIN
402	-35.21	-0.19	4.99	-25.00	60.38	MAX
	-45.94	-11.59	-4.98	-53.23	26.97	MIN
403	-40.42	-6.67	8.98	-55.11	98.06	MAX
	-50.52	-30.92	-15.60	-93.15	41.11	MIN
404	-45.85	-5.59	10.73	-74.98	51.42	MAX
	-51.15	-22.33	-28.45	-132.63	8.83	MIN
405	-47.21	16.89	18.64	-81.28	-64.84	MAX
	-50.64	-22.32	-80.93	-93.50	-80.88	MIN
406	-36.08	62.19	6.85	-56.48	-153.58	MAX
	-38.73	-3.20	-31.48	-89.60	-178.54	MIN
407	-6.59	140.11	3.06	-45.29	-188.81	MAX
	-21.36	24.97	-19.72	-64.64	-218.57	MIN
408	16.76	174.85	0.98	-17.79	-188.46	MAX
	-4.04	64.33	-7.18	-28.86	-205.20	MIN
409	35.19	204.20	1.24	-10.87	-164.55	MAX
	11.12	98.22	-1.49	-16.67	-182.05	MIN
410	50.97	234.64	1.90	-8.49	-149.51	MAX
	24.17	128.54	1.46	-11.19	-168.31	MIN
411	64.89	265.83	2.94	-7.70	-139.37	MAX
	35.73	156.91	2.30	-8.55	-162.41	MIN
412	77.51	297.22	3.62	-6.58	-131.77	MAX
	46.16	184.00	2.61	-7.62	-157.28	MIN
413	89.16	328.36	3.83	-5.97	-125.47	MAX
	55.70	210.13	2.77	-7.94	-152.24	MIN
414	100.01	358.93	3.69	-5.85	-119.72	MAX
	64.46	235.44	2.83	-8.68	-146.75	MIN
415	110.13	388.52	3.22	-6.19	-113.90	MAX
	72.48	259.97	2.87	-10.08	-140.09	MIN
416	119.54	416.50	2.98	-7.31	-107.20	MAX
	79.72	283.68	2.19	-12.84	-130.99	MIN
417	128.11	441.69	3.27	-10.43	-98.45	MAX
	86.04	306.23	-0.18	-19.02	-117.46	MIN
418	137.76	467.64	3.96	-22.63	-97.52	MAX
	91.24	325.86	-7.99	-37.20	-115.63	MIN
419	156.29	537.88	3.73	-25.30	-124.57	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	95.39	336.82	-15.48	-50.21	-161.97	MIN
420	161.93 108.48	554.26 370.38	10.63 -59.84	-7.17 -14.26	-179.45 -238.61	MAX MIN
421	113.49 76.97	378.32 256.57	80.40 54.64	0.00 0.00	105.81 70.19	MAX MIN
422	118.15 80.16	393.82 267.21	66.31 45.19	0.00 0.00	-13.16 -18.95	MAX MIN
423	128.18 86.86	427.27 289.52	54.25 37.11	0.00 0.00	-57.68 -81.33	MAX MIN
424	136.06 92.71	453.55 309.04	44.84 30.80	0.00 0.00	-93.46 -130.58	MAX MIN
425	148.63 97.34	495.43 324.45	38.46 25.13	0.00 0.00	-152.26 -196.90	MAX MIN
426	132.48 106.41	441.61 354.70	37.51 18.35	0.00 0.00	-205.05 -262.75	MAX MIN
427	370.84 65.11	1236.15 217.04	21.15 14.52	0.00 0.00	-143.14 -245.73	MAX MIN
428	140.22 111.74	467.41 372.46	11.72 5.91	0.00 0.00	-213.35 -274.55	MAX MIN
429	164.47 108.23	548.25 360.78	8.39 6.97	0.00 0.00	-170.99 -223.67	MAX MIN
430	160.75 109.68	535.85 365.58	7.88 5.27	0.00 0.00	-127.41 -179.47	MAX MIN
431	162.55 110.45	541.84 368.15	6.95 4.69	0.00 0.00	-115.76 -165.63	MAX MIN
432	163.57 111.31	545.22 371.03	6.26 4.33	0.00 0.00	-110.45 -159.01	MAX MIN
433	164.69 112.10	548.95 373.66	5.80 4.16	0.00 0.00	-108.59 -156.34	MAX MIN
434	165.74 112.88	552.47 376.26	5.60 4.16	0.00 0.00	-109.46 -157.05	MAX MIN
435	167.00 113.65	556.65 378.83	5.71 4.33	0.00 0.00	-113.95 -161.95	MAX MIN
436	167.66 114.64	558.87 382.13	6.16 4.67	0.00 0.00	-125.12 -174.60	MAX MIN
437	174.15 115.16	580.50 383.87	7.71 4.33	0.00 0.00	-168.82 -218.50	MAX MIN
438	153.10 120.92	510.35 403.06	13.03 1.75	0.00 0.00	-212.25 -270.53	MAX MIN
439	387.51 76.93	1291.71 256.44	1.61 1.21	0.00 0.00	-142.53 -247.19	MAX MIN
440	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
441	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
442	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
443	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
444	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
445	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
446	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
447	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
448	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
449	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
450	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
451	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
452	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
453	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
454	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
455	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
456	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
457	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
458	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
459	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
460	153.71 121.38	512.38 404.61	0.72 -9.76	0.00 0.00	-211.39 -269.04	MAX MIN
461	153.71	512.38	0.72	0.00	-211.39	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	121.38	404.61	-9.76	0.00	-269.04	MIN
462	-23.59 -29.13	0.78 -0.32	2.58 -4.30	-24.45 -91.15	11.44 6.03	MAX MIN
463	-24.01 -32.81	-0.62 -2.26	5.76 -6.84	-39.81 -84.02	17.05 9.58	MAX MIN
464	-23.89 -34.13	4.81 -7.32	8.88 -11.43	-67.55 -117.31	17.29 15.10	MAX MIN
465	-22.68 -46.25	6.91 -12.24	8.53 -15.55	-102.92 -158.77	-3.34 -19.36	MAX MIN
466	-21.78 -26.66	28.35 -10.77	3.79 -10.49	-125.45 -143.42	-67.65 -101.67	MAX MIN
467	11.53 -20.89	70.09 8.00	1.73 -21.18	-89.93 -118.07	-134.70 -172.58	MAX MIN
468	13.78 -7.37	112.19 36.92	-0.85 -18.75	-50.36 -76.82	-159.33 -186.82	MAX MIN
469	26.86 4.19	159.55 67.51	-1.63 -12.39	-23.91 -41.48	-158.61 -178.90	MAX MIN
470	41.14 16.18	197.38 98.85	-1.13 -5.94	-13.24 -23.73	-151.89 -173.33	MAX MIN
471	54.76 27.53	231.54 128.56	-0.17 -1.89	-9.09 -14.71	-143.49 -167.31	MAX MIN
472	67.53 38.08	264.50 156.83	0.70 0.51	-7.50 -10.15	-136.36 -162.22	MAX MIN
473	79.53 47.92	296.82 183.98	1.84 1.36	-7.12 -7.83	-130.30 -157.59	MAX MIN
474	90.88 57.13	328.57 210.19	2.49 1.84	-6.17 -7.51	-124.90 -153.09	MAX MIN
475	101.64 65.78	359.67 235.53	2.66 2.19	-5.86 -8.65	-119.82 -148.44	MAX MIN
476	111.85 73.88	390.04 260.00	2.54 2.39	-6.37 -10.89	-114.81 -143.50	MAX MIN
477	121.55 81.49	419.75 283.45	2.86 1.52	-8.07 -15.10	-109.81 -138.48	MAX MIN
478	130.93 88.78	449.92 305.48	3.20 -0.58	-12.36 -23.27	-106.23 -136.27	MAX MIN
479	140.42 96.57	485.78 326.07	2.75 -2.73	-22.13 -38.63	-105.21 -142.82	MAX MIN
480	139.94 105.42	510.87 347.52	1.19 -5.16	-30.82 -47.17	-118.27 -163.42	MAX MIN
481	170.78 110.03	554.40 371.95	3.49 -2.64	-16.90 -21.44	-149.18 -196.63	MAX MIN
482	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
483	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
484	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
485	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
486	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
487	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
488	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
489	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
490	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
491	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
492	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
493	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
494	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
495	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
496	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
497	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
498	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
499	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
500	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
501	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
502	175.39 116.11	584.64 387.02	-1.74 -4.24	0.00 0.00	-167.10 -215.53	MAX MIN
503	175.39	584.64	-1.74	0.00	-167.10	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	116.11	387.02	-4.24	0.00	-215.53	MIN
504	175.39	584.64	-1.74	0.00	-167.10	MAX
	116.11	387.02	-4.24	0.00	-215.53	MIN
505	175.39	584.64	-1.74	0.00	-167.10	MAX
	116.11	387.02	-4.24	0.00	-215.53	MIN
506	-10.98	1.02	1.97	-27.60	0.61	MAX
	-19.37	-0.72	-3.80	-97.00	-4.71	MIN
507	-11.43	4.10	4.39	-39.78	-0.39	MAX
	-17.81	-2.11	-4.54	-84.11	-11.29	MIN
508	-9.42	9.79	6.44	-56.87	-8.04	MAX
	-18.32	-4.01	-5.74	-96.85	-31.66	MIN
509	-6.45	21.53	5.15	-83.30	-29.59	MAX
	-11.44	-3.68	-4.24	-116.11	-67.75	MIN
510	4.45	42.28	1.97	-101.13	-63.93	MAX
	-3.57	3.34	-6.32	-115.16	-112.76	MIN
511	20.33	73.05	-1.34	-79.32	-99.85	MAX
	-0.79	19.11	-9.44	-92.73	-149.91	MIN
512	30.33	110.81	-2.72	-42.20	-125.01	MAX
	4.62	42.09	-12.54	-62.53	-168.74	MIN
513	37.65	151.85	-2.93	-22.99	-136.19	MAX
	13.20	70.48	-10.46	-39.67	-172.09	MIN
514	47.90	191.59	-2.26	-13.04	-138.23	MAX
	22.22	99.56	-6.66	-24.24	-169.37	MIN
515	59.11	228.11	-1.27	-8.51	-136.11	MAX
	31.58	128.47	-3.21	-15.08	-165.71	MIN
516	70.49	262.67	-0.30	-6.64	-132.42	MAX
	40.88	156.56	-0.83	-9.98	-161.76	MIN
517	81.72	296.00	0.65	-6.12	-128.28	MAX
	49.95	183.74	0.49	-7.34	-157.88	MIN
518	92.69	328.44	1.47	-5.65	-124.06	MAX
	58.74	210.02	1.09	-6.48	-154.09	MIN
519	103.35	360.14	1.82	-5.25	-119.85	MAX
	67.22	235.41	1.57	-7.66	-150.46	MIN
520	113.69	391.27	1.96	-5.71	-115.78	MAX
	75.41	259.88	1.77	-9.92	-147.27	MIN
521	123.73	422.17	2.25	-7.25	-112.23	MAX
	83.39	283.38	1.29	-13.73	-145.38	MIN
522	133.53	453.81	2.23	-10.35	-109.99	MAX
	91.38	305.96	0.58	-19.48	-146.72	MIN
523	142.10	484.95	1.52	-14.52	-111.21	MAX
	99.71	328.48	-0.08	-24.80	-152.67	MIN
524	155.65	517.33	0.24	-18.70	-117.01	MAX
	106.83	350.34	-0.20	-24.30	-162.43	MIN
525	167.76	550.74	-1.34	-11.38	-121.75	MAX
	113.40	374.47	-2.81	-12.83	-169.11	MIN
526	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
527	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
528	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
529	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
530	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
531	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
532	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
533	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
534	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
535	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
536	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
537	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
538	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
539	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
540	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
541	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
542	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
543	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
544	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
545	169.58	565.28	-1.70	0.00	-122.58	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	116.10	386.98	-2.37	0.00	-170.19	MIN
546	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
547	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
548	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
549	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
550	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
551	169.58	565.28	-1.70	0.00	-122.58	MAX
	116.10	386.98	-2.37	0.00	-170.19	MIN
552	-0.66	0.35	1.12	-22.69	-2.49	MAX
	-8.94	-0.54	-2.37	-76.51	-13.24	MIN
553	-1.24	4.43	2.66	-30.28	-6.78	MAX
	-4.27	-1.12	-2.47	-63.74	-25.82	MIN
554	0.92	13.33	3.76	-40.51	-18.76	MAX
	-0.16	-0.69	-2.65	-65.99	-52.73	MIN
555	7.23	27.95	2.96	-51.21	-37.69	MAX
	4.27	2.74	-2.44	-69.58	-83.30	MIN
556	18.09	49.42	0.81	-56.59	-62.00	MAX
	7.59	11.36	-3.31	-64.11	-114.76	MIN
557	28.96	77.73	-1.32	-49.00	-86.97	MAX
	10.79	26.20	-5.62	-56.08	-140.84	MIN
558	37.42	111.27	-2.56	-31.43	-107.59	MAX
	14.79	46.64	-7.13	-43.16	-157.36	MIN
559	45.18	149.81	-2.73	-17.64	-121.17	MAX
	20.55	72.44	-6.92	-29.14	-164.63	MIN
560	53.43	188.36	-2.23	-10.29	-127.84	MAX
	27.57	100.20	-5.07	-18.98	-165.73	MIN
561	62.93	225.55	-1.44	-6.61	-129.66	MAX
	35.30	128.38	-2.91	-12.11	-163.98	MIN
562	73.14	261.04	-0.64	-5.00	-128.72	MAX
	43.47	156.25	-1.15	-7.93	-161.20	MIN
563	83.67	295.15	0.05	-4.52	-126.32	MAX
	51.82	183.43	0.00	-5.71	-158.07	MIN
564	94.29	328.17	0.77	-4.34	-123.20	MAX
	60.20	209.78	0.57	-4.78	-154.96	MIN
565	104.87	360.37	1.14	-3.96	-119.80	MAX
	68.51	235.24	0.98	-5.71	-152.19	MIN
566	115.32	392.02	1.30	-4.26	-116.48	MAX
	76.73	259.81	1.21	-7.39	-150.15	MIN
567	125.66	423.49	1.45	-5.25	-113.62	MAX
	84.87	283.56	1.07	-9.85	-149.47	MIN
568	135.77	454.95	1.31	-6.83	-111.84	MAX
	92.98	306.76	0.80	-12.51	-150.70	MIN
569	146.61	487.13	0.67	-8.51	-111.57	MAX
	100.83	329.88	0.54	-13.43	-153.63	MIN
570	157.02	518.07	-0.19	-7.84	-111.98	MAX
	107.63	352.06	-0.38	-10.67	-156.35	MIN
571	166.15	549.73	-0.91	-2.96	-111.37	MAX
	113.32	374.54	-1.06	-3.54	-156.71	MIN
572	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
573	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
574	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
575	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
576	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
577	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
578	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
579	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
580	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
581	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
582	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
583	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
584	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
585	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
586	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
587	169.67	565.57	-1.08	0.00	-110.63	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	115.67	385.55	-1.44	0.00	-156.16	MIN
588	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
589	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
590	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
591	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
592	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
593	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
594	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
595	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
596	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
597	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
598	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
599	169.67	565.57	-1.08	0.00	-110.63	MAX
	115.67	385.55	-1.44	0.00	-156.16	MIN
600	5.70	-0.27	0.48	-12.58	-4.28	MAX
	-1.00	-0.34	-1.14	-41.18	-16.79	MIN
601	5.54	4.66	1.19	-16.14	-9.84	MAX
	5.16	-0.30	-1.06	-33.71	-31.74	MIN
602	10.45	14.91	1.68	-20.45	-23.17	MAX
	7.12	1.51	-1.24	-32.85	-60.71	MIN
603	17.24	31.05	1.28	-24.44	-40.64	MAX
	10.23	6.35	-1.19	-32.73	-88.50	MIN
604	25.55	52.98	0.30	-26.31	-60.95	MAX
	13.60	15.68	-1.69	-29.71	-114.54	MIN
605	34.01	80.43	-0.75	-23.42	-81.46	MAX
	16.95	30.15	-2.59	-26.48	-136.12	MIN
606	41.65	112.39	-1.41	-16.05	-99.51	MAX
	20.60	49.41	-3.36	-21.40	-151.30	MIN
607	49.06	149.22	-1.57	-9.63	-113.17	MAX
	25.33	73.83	-3.35	-15.25	-159.85	MIN
608	56.82	186.99	-1.32	-5.65	-121.61	MAX
	31.13	100.62	-2.65	-10.24	-162.96	MIN
609	65.45	224.12	-0.90	-3.61	-125.48	MAX
	37.87	128.34	-1.65	-6.67	-162.68	MIN
610	74.95	259.99	-0.46	-2.69	-126.18	MAX
	45.28	156.03	-0.75	-4.38	-160.75	MIN
611	85.02	294.53	-0.08	-2.41	-124.92	MAX
	53.13	183.19	-0.11	-3.12	-158.17	MIN
612	95.40	327.93	0.32	-2.36	-122.56	MAX
	61.21	209.58	0.23	-2.54	-155.54	MIN
613	105.90	360.45	0.55	-2.13	-119.72	MAX
	69.39	235.11	0.47	-3.04	-153.28	MIN
614	116.44	392.40	0.63	-2.26	-116.83	MAX
	77.59	259.79	0.61	-3.89	-151.77	MIN
615	126.94	424.07	0.69	-2.71	-114.28	MAX
	85.74	283.77	0.60	-5.00	-151.30	MIN
616	137.50	455.85	0.58	-3.33	-112.31	MAX
	93.73	307.29	0.50	-5.89	-151.86	MIN
617	148.02	488.03	0.26	-3.64	-110.82	MAX
	101.32	330.71	0.22	-5.77	-152.75	MIN
618	157.52	518.67	-0.14	-2.92	-109.13	MAX
	107.71	352.69	-0.19	-4.07	-152.72	MIN
619	165.79	549.29	-0.46	-1.06	-106.77	MAX
	113.18	374.48	-0.61	-1.34	-151.14	MIN
620	169.27	564.25	-0.52	0.00	-105.44	MAX
	115.53	385.09	-0.67	0.00	-149.98	MIN
621	169.27	564.25	-0.52	0.00	-105.44	MAX
	115.53	385.09	-0.67	0.00	-149.98	MIN
622	169.27	564.25	-0.52	0.00	-105.44	MAX
	115.53	385.09	-0.67	0.00	-149.98	MIN
623	169.27	564.25	-0.52	0.00	-105.44	MAX
	115.53	385.09	-0.67	0.00	-149.98	MIN
624	169.27	564.25	-0.52	0.00	-105.44	MAX
	115.53	385.09	-0.67	0.00	-149.98	MIN
625	7.81	-0.25	0.00	0.00	-4.81	MAX
	2.03	-0.35	0.00	0.00	-17.71	MIN
626	8.61	4.74	0.00	0.00	-10.73	MAX
	7.33	0.00	0.00	0.00	-33.25	MIN
627	13.94	15.41	0.00	0.00	-24.38	MAX
	9.16	2.24	0.00	0.00	-62.72	MIN
628	20.39	31.97	0.00	0.00	-41.40	MAX
	12.17	7.52	0.00	0.00	-89.71	MIN
629	27.97	54.08	0.00	0.00	-60.60	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	15.52	17.05	0.00	0.00	-114.27	MIN
630	35.73	81.32	0.00	0.00	-79.88	MAX
	18.89	31.41	0.00	0.00	-134.62	MIN
631	43.01	112.81	0.00	0.00	-97.13	MAX
	22.48	50.34	0.00	0.00	-149.38	MIN
632	50.32	149.15	0.00	0.00	-110.69	MAX
	26.94	74.32	0.00	0.00	-158.24	MIN
633	57.92	186.60	0.00	0.00	-119.56	MAX
	32.38	100.78	0.00	0.00	-161.96	MIN
634	66.32	223.68	0.00	0.00	-124.05	MAX
	38.77	128.32	0.00	0.00	-162.19	MIN
635	75.59	259.64	0.00	0.00	-125.28	MAX
	45.93	155.95	0.00	0.00	-160.57	MIN
636	85.49	294.31	0.00	0.00	-124.41	MAX
	53.60	183.10	0.00	0.00	-158.20	MIN
637	95.79	327.83	0.00	0.00	-122.33	MAX
	61.58	209.51	0.00	0.00	-155.74	MIN
638	106.27	360.46	0.00	0.00	-119.68	MAX
	69.71	235.06	0.00	0.00	-153.65	MIN
639	116.83	392.50	0.00	0.00	-116.94	MAX
	77.89	259.79	0.00	0.00	-152.27	MIN
640	127.42	424.28	0.00	0.00	-114.45	MAX
	86.02	283.85	0.00	0.00	-151.81	MIN
641	138.00	456.13	0.00	0.00	-112.37	MAX
	93.96	307.48	0.00	0.00	-152.06	MIN
642	148.41	488.33	0.00	0.00	-110.48	MAX
	101.43	330.95	0.00	0.00	-152.31	MIN
643	157.59	518.81	0.00	0.00	-108.22	MAX
	107.72	352.87	0.00	0.00	-151.54	MIN
644	165.68	549.17	0.00	0.00	-105.45	MAX
	113.13	374.44	0.00	0.00	-149.46	MIN
645	169.22	564.05	0.00	0.00	-103.99	MAX
	115.47	384.90	0.00	0.00	-148.16	MIN
646	169.22	564.05	0.00	0.00	-103.99	MAX
	115.47	384.90	0.00	0.00	-148.16	MIN
647	169.22	564.05	0.00	0.00	-103.99	MAX
	115.47	384.90	0.00	0.00	-148.16	MIN
648	169.22	564.05	0.00	0.00	-103.99	MAX
	115.47	384.90	0.00	0.00	-148.16	MIN
649	169.22	564.05	0.00	0.00	-103.99	MAX
	115.47	384.90	0.00	0.00	-148.16	MIN
650	5.70	-0.27	1.14	41.18	-4.28	MAX
	-1.00	-0.34	-0.48	12.58	-16.79	MIN
651	5.54	4.66	1.06	33.71	-9.84	MAX
	5.16	-0.30	-1.19	16.14	-31.74	MIN
652	10.45	14.91	1.24	32.85	-23.17	MAX
	7.12	1.51	-1.68	20.45	-60.71	MIN
653	17.24	31.05	1.19	32.73	-40.64	MAX
	10.23	6.35	-1.28	24.44	-88.50	MIN
654	25.55	52.98	1.69	29.71	-60.95	MAX
	13.60	15.68	-0.30	26.31	-114.54	MIN
655	34.01	80.43	2.59	26.48	-81.46	MAX
	16.95	30.15	0.75	23.42	-136.12	MIN
656	41.65	112.39	3.36	21.40	-99.51	MAX
	20.60	49.41	1.41	16.05	-151.30	MIN
657	49.06	149.22	3.35	15.25	-113.17	MAX
	25.33	73.83	1.57	9.63	-159.85	MIN
658	56.82	186.99	2.65	10.24	-121.61	MAX
	31.13	100.62	1.32	5.65	-162.96	MIN
659	65.45	224.12	1.65	6.67	-125.48	MAX
	37.87	128.34	0.90	3.61	-162.68	MIN
660	74.95	259.99	0.75	4.38	-126.18	MAX
	45.28	156.03	0.46	2.69	-160.75	MIN
661	85.02	294.53	0.11	3.12	-124.92	MAX
	53.13	183.19	0.08	2.41	-158.17	MIN
662	95.40	327.93	-0.23	2.54	-122.56	MAX
	61.21	209.58	-0.32	2.36	-155.54	MIN
663	105.90	360.45	-0.47	3.04	-119.72	MAX
	69.39	235.11	-0.55	2.13	-153.28	MIN
664	116.44	392.40	-0.61	3.89	-116.83	MAX
	77.59	259.79	-0.63	2.26	-151.77	MIN
665	126.94	424.07	-0.60	5.00	-114.28	MAX
	85.74	283.77	-0.69	2.71	-151.30	MIN
666	137.50	455.85	-0.50	5.89	-112.31	MAX
	93.73	307.29	-0.58	3.33	-151.86	MIN
667	148.02	488.03	-0.22	5.77	-110.82	MAX
	101.32	330.71	-0.26	3.64	-152.75	MIN
668	157.52	518.67	0.19	4.07	-109.13	MAX
	107.71	352.69	0.14	2.92	-152.72	MIN
669	165.79	549.29	0.61	1.34	-106.77	MAX
	113.18	374.48	0.46	1.06	-151.14	MIN
670	169.27	564.25	0.67	0.00	-105.44	MAX
	115.53	385.09	0.52	0.00	-149.98	MIN
671	169.27	564.25	0.67	0.00	-105.44	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	115.53	385.09	0.52	0.00	-149.98	MIN
672	169.27	564.25	0.67	0.00	-105.44	MAX
	115.53	385.09	0.52	0.00	-149.98	MIN
673	169.27	564.25	0.67	0.00	-105.44	MAX
	115.53	385.09	0.52	0.00	-149.98	MIN
674	169.27	564.25	0.67	0.00	-105.44	MAX
	115.53	385.09	0.52	0.00	-149.98	MIN
675	-0.66	0.35	2.37	76.51	-2.49	MAX
	-8.94	-0.54	-1.12	22.69	-13.24	MIN
676	-1.24	4.43	2.47	63.74	-6.78	MAX
	-4.27	-1.12	-2.66	30.28	-25.82	MIN
677	0.92	13.33	2.65	65.99	-18.76	MAX
	-0.16	-0.69	-3.76	40.51	-52.73	MIN
678	7.23	27.95	2.44	69.58	-37.69	MAX
	4.27	2.74	-2.96	51.21	-83.30	MIN
679	18.09	49.42	3.31	64.11	-62.00	MAX
	7.59	11.36	-0.81	56.59	-114.76	MIN
680	28.96	77.73	5.62	56.08	-86.97	MAX
	10.79	26.20	1.32	49.00	-140.84	MIN
681	37.42	111.27	7.13	43.16	-107.59	MAX
	14.79	46.64	2.56	31.43	-157.36	MIN
682	45.18	149.81	6.92	29.14	-121.17	MAX
	20.55	72.44	2.73	17.64	-164.63	MIN
683	53.43	188.36	5.07	18.98	-127.84	MAX
	27.57	100.20	2.23	10.29	-165.73	MIN
684	62.93	225.55	2.91	12.11	-129.66	MAX
	35.30	128.38	1.44	6.61	-163.98	MIN
685	73.14	261.04	1.15	7.93	-128.72	MAX
	43.47	156.25	0.64	5.00	-161.20	MIN
686	83.67	295.15	0.00	5.71	-126.32	MAX
	51.82	183.43	-0.05	4.52	-158.07	MIN
687	94.29	328.17	-0.57	4.78	-123.20	MAX
	60.20	209.78	-0.77	4.34	-154.96	MIN
688	104.87	360.37	-0.98	5.71	-119.80	MAX
	68.51	235.24	-1.14	3.96	-152.19	MIN
689	115.32	392.02	-1.21	7.39	-116.48	MAX
	76.73	259.81	-1.30	4.26	-150.15	MIN
690	125.66	423.49	-1.07	9.85	-113.62	MAX
	84.87	283.56	-1.45	5.25	-149.47	MIN
691	135.77	454.95	-0.80	12.51	-111.84	MAX
	92.98	306.76	-1.31	6.83	-150.70	MIN
692	146.61	487.13	-0.54	13.43	-111.57	MAX
	100.83	329.88	-0.67	8.51	-153.63	MIN
693	157.02	518.07	0.38	10.67	-111.98	MAX
	107.63	352.06	0.19	7.84	-156.35	MIN
694	166.15	549.73	1.06	3.54	-111.37	MAX
	113.32	374.54	0.91	2.96	-156.71	MIN
695	169.67	565.57	1.44	0.00	-110.63	MAX
	115.67	385.55	1.08	0.00	-156.16	MIN
696	169.67	565.57	1.44	0.00	-110.63	MAX
	115.67	385.55	1.08	0.00	-156.16	MIN
697	169.67	565.57	1.44	0.00	-110.63	MAX
	115.67	385.55	1.08	0.00	-156.16	MIN
698	169.67	565.57	1.44	0.00	-110.63	MAX
	115.67	385.55	1.08	0.00	-156.16	MIN
699	169.67	565.57	1.44	0.00	-110.63	MAX
	115.67	385.55	1.08	0.00	-156.16	MIN
700	-10.98	1.02	3.80	97.00	0.61	MAX
	-19.37	-0.72	-1.97	27.60	-4.71	MIN
701	-11.43	4.10	4.54	84.11	-0.39	MAX
	-17.81	-2.11	-4.39	39.78	-11.29	MIN
702	-9.42	9.79	5.74	96.85	-8.04	MAX
	-18.32	-4.01	-6.44	56.87	-31.66	MIN
703	-6.45	21.53	4.24	116.11	-29.59	MAX
	-11.44	-3.68	-5.15	83.30	-67.75	MIN
704	4.45	42.28	6.32	115.16	-63.93	MAX
	-3.57	3.34	-1.97	101.13	-112.76	MIN
705	20.33	73.05	9.44	92.73	-99.85	MAX
	-0.79	19.11	1.34	79.32	-149.91	MIN
706	30.33	110.81	12.54	62.53	-125.01	MAX
	4.62	42.09	2.72	42.20	-168.74	MIN
707	37.65	151.85	10.46	39.67	-136.19	MAX
	13.20	70.48	2.93	22.99	-172.09	MIN
708	47.90	191.59	6.66	24.24	-138.23	MAX
	22.22	99.56	2.26	13.04	-169.37	MIN
709	59.11	228.11	3.21	15.08	-136.11	MAX
	31.58	128.47	1.27	8.51	-165.71	MIN
710	70.49	262.67	0.83	9.98	-132.42	MAX
	40.88	156.56	0.30	6.64	-161.76	MIN
711	81.72	296.00	-0.49	7.34	-128.28	MAX
	49.95	183.74	-0.65	6.12	-157.88	MIN
712	92.69	328.44	-1.09	6.48	-124.06	MAX
	58.74	210.02	-1.47	5.65	-154.09	MIN
713	103.35	360.14	-1.57	7.66	-119.85	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	67.22	235.41	-1.82	5.25	-150.46	MIN
714	113.69 75.41	391.27 259.88	-1.77 -1.96	9.92 5.71	-115.78 -147.27	MAX MIN
715	123.73 83.39	422.17 283.38	-1.29 -2.25	13.73 7.25	-112.23 -145.38	MAX MIN
716	133.53 91.38	453.81 305.96	-0.58 -2.23	19.48 10.35	-109.99 -146.72	MAX MIN
717	142.10 99.71	484.95 328.48	0.08 -1.52	24.80 14.52	-111.21 -152.67	MAX MIN
718	155.65 106.83	517.33 350.34	0.20 -0.24	24.30 18.70	-117.01 -162.43	MAX MIN
719	167.76 113.40	550.74 374.47	2.81 1.34	12.83 11.38	-121.75 -169.11	MAX MIN
720	169.58 116.10	565.28 386.98	2.37 1.70	0.00 0.00	-122.58 -170.19	MAX MIN
721	169.58 116.10	565.28 386.98	2.37 1.70	0.00 0.00	-122.58 -170.19	MAX MIN
722	169.58 116.10	565.28 386.98	2.37 1.70	0.00 0.00	-122.58 -170.19	MAX MIN
723	169.58 116.10	565.28 386.98	2.37 1.70	0.00 0.00	-122.58 -170.19	MAX MIN
724	169.58 116.10	565.28 386.98	2.37 1.70	0.00 0.00	-122.58 -170.19	MAX MIN
725	-23.59 -29.13	0.78 -0.32	4.30 -2.58	91.15 24.45	11.44 6.03	MAX MIN
726	-24.01 -32.81	-0.62 -2.26	6.84 -5.76	84.02 39.81	17.05 9.58	MAX MIN
727	-23.89 -34.13	4.81 -7.32	11.43 -8.88	117.31 67.55	17.29 15.10	MAX MIN
728	-22.68 -46.25	6.91 -12.24	15.55 -8.53	158.77 102.92	-3.34 -19.36	MAX MIN
729	-21.78 -26.66	28.35 -10.77	10.49 -3.79	143.42 125.45	-67.65 -101.67	MAX MIN
730	11.53 -20.89	70.09 8.00	21.18 -1.73	118.07 89.93	-134.70 -172.58	MAX MIN
731	13.78 -7.37	112.19 36.92	18.75 0.85	76.82 50.36	-159.33 -186.82	MAX MIN
732	26.86 4.19	159.55 67.51	12.39 1.63	41.48 23.91	-158.61 -178.90	MAX MIN
733	41.14 16.18	197.38 98.85	5.94 1.13	23.73 13.24	-151.89 -173.33	MAX MIN
734	54.76 27.53	231.54 128.56	1.89 0.17	14.71 9.09	-143.49 -167.31	MAX MIN
735	67.53 38.08	264.50 156.83	-0.51 -0.70	10.15 7.50	-136.36 -162.22	MAX MIN
736	79.53 47.92	296.82 183.98	-1.36 -1.84	7.83 7.12	-130.30 -157.59	MAX MIN
737	90.88 57.13	328.57 210.19	-1.84 -2.49	7.51 6.17	-124.90 -153.09	MAX MIN
738	101.64 65.78	359.67 235.53	-2.19 -2.66	8.65 5.86	-119.82 -148.44	MAX MIN
739	111.85 73.88	390.04 260.00	-2.39 -2.54	10.89 6.37	-114.81 -143.50	MAX MIN
740	121.55 81.49	419.75 283.45	-1.52 -2.86	15.10 8.07	-109.81 -138.48	MAX MIN
741	130.93 88.78	449.92 305.48	0.58 -3.20	23.27 12.36	-106.23 -136.27	MAX MIN
742	140.42 96.57	485.78 326.07	2.73 -2.75	38.63 22.13	-105.21 -142.82	MAX MIN
743	139.94 105.42	510.87 347.52	5.16 -1.19	47.17 30.82	-118.27 -163.42	MAX MIN
744	170.78 110.03	554.40 371.95	2.64 -3.49	21.44 16.90	-149.18 -196.63	MAX MIN
745	175.39 116.11	584.64 387.02	4.24 1.74	0.00 0.00	-167.10 -215.53	MAX MIN
746	175.39 116.11	584.64 387.02	4.24 1.74	0.00 0.00	-167.10 -215.53	MAX MIN
747	175.39 116.11	584.64 387.02	4.24 1.74	0.00 0.00	-167.10 -215.53	MAX MIN
748	175.39 116.11	584.64 387.02	4.24 1.74	0.00 0.00	-167.10 -215.53	MAX MIN
749	175.39 116.11	584.64 387.02	4.24 1.74	0.00 0.00	-167.10 -215.53	MAX MIN
750	-34.59 -37.49	0.90 -0.93	2.71 -2.30	52.64 12.03	30.72 12.39	MAX MIN
751	-35.21 -45.94	-0.19 -11.59	4.98 -4.99	53.23 25.00	60.38 26.97	MAX MIN
752	-40.42 -50.52	-6.67 -30.92	15.60 -8.98	93.15 55.11	98.06 41.11	MAX MIN
753	-45.85 -51.15	-5.59 -22.33	28.45 -10.73	132.63 74.98	51.42 8.83	MAX MIN
754	-47.21 -50.64	16.89 -22.32	80.93 -18.64	93.50 81.28	-64.84 -80.88	MAX MIN
755	-36.08	62.19	31.48	89.60	-153.58	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-38.73	-3.20	-6.85	56.48	-178.54	MIN
756	-6.59 -21.36	140.11 24.97	19.72 -3.06	64.64 45.29	-188.81 -218.57	MAX MIN
757	16.76 -4.04	174.85 64.33	7.18 -0.98	28.86 17.79	-188.46 -205.20	MAX MIN
758	35.19 11.12	204.20 98.22	1.49 -1.24	16.67 10.87	-164.55 -182.05	MAX MIN
759	50.97 24.17	234.64 128.54	-1.46 -1.90	11.19 8.49	-149.51 -168.31	MAX MIN
760	64.89 35.73	265.83 156.91	-2.30 -2.94	8.55 7.70	-139.37 -162.41	MAX MIN
761	77.51 46.16	297.22 184.00	-2.61 -3.62	7.62 6.58	-131.77 -157.28	MAX MIN
762	89.16 55.70	328.36 210.13	-2.77 -3.83	7.94 5.97	-125.47 -152.24	MAX MIN
763	100.01 64.46	358.93 235.44	-2.83 -3.69	8.68 5.85	-119.72 -146.75	MAX MIN
764	110.13 72.48	388.52 259.97	-2.87 -3.22	10.08 6.19	-113.90 -140.09	MAX MIN
765	119.54 79.72	416.50 283.68	-2.19 -2.98	12.84 7.31	-107.20 -130.99	MAX MIN
766	128.11 86.04	441.69 306.23	0.18 -3.27	19.02 10.43	-98.45 -117.46	MAX MIN
767	137.76 91.24	467.64 325.86	7.99 -3.96	37.20 22.63	-97.52 -115.63	MAX MIN
768	156.29 95.39	537.88 336.82	15.48 -3.73	50.21 25.30	-124.57 -161.97	MAX MIN
769	161.93 108.42	554.26 370.38	59.84 -10.63	14.26 7.17	-179.45 -238.61	MAX MIN
770	153.71 121.38	512.38 404.61	9.76 -0.72	0.00 0.00	-211.39 -269.04	MAX MIN
771	153.71 121.38	512.38 404.61	9.76 -0.72	0.00 0.00	-211.39 -269.04	MAX MIN
772	153.71 121.38	512.38 404.61	9.76 -0.72	0.00 0.00	-211.39 -269.04	MAX MIN
773	153.71 121.38	512.38 404.61	9.76 -0.72	0.00 0.00	-211.39 -269.04	MAX MIN
774	153.71 121.38	512.38 404.61	9.76 -0.72	0.00 0.00	-211.39 -269.04	MAX MIN
775	-39.32 -42.46	1.71 -2.37	-0.90 -1.29	-6.94 -9.65	39.80 15.18	MAX MIN
776	-40.19 -52.22	1.72 -18.84	-1.64 -2.37	-2.02 -2.55	85.84 38.57	MAX MIN
777	-48.32 -66.89	-1.96 -77.76	-2.73 -3.96	1.24 0.60	150.63 50.45	MAX MIN
778	-51.36 -90.92	15.24 -233.60	-3.38 -4.92	3.33 2.03	176.78 -16.72	MAX MIN
779	-54.32 -58.58	14.63 -24.86	-3.80 -5.51	4.54 2.85	135.02 -114.30	MAX MIN
780	-15.11 -51.91	280.18 -50.84	-4.07 -5.90	5.31 3.38	-26.31 -190.35	MAX MIN
781	-11.24 -30.82	180.31 12.81	-4.26 -6.16	5.87 3.76	-174.23 -236.24	MAX MIN
782	12.09 -7.93	184.57 62.79	-4.37 -6.30	6.36 4.09	-196.15 -221.47	MAX MIN
783	32.10 8.61	207.28 97.78	-4.42 -6.34	6.79 4.40	-169.61 -186.67	MAX MIN
784	48.69 22.35	235.59 128.31	-4.39 -6.27	7.18 4.68	-151.72 -169.61	MAX MIN
785	63.08 34.30	265.93 156.66	-4.29 -6.09	7.54 4.95	-140.36 -162.28	MAX MIN
786	75.98 44.98	296.85 183.67	-4.10 -5.80	7.84 5.19	-132.18 -156.99	MAX MIN
787	87.78 54.66	327.69 209.71	-3.83 -5.39	8.05 5.38	-125.57 -151.80	MAX MIN
788	98.71 63.50	357.97 234.96	-3.49 -4.87	8.15 5.49	-119.60 -146.04	MAX MIN
789	108.85 71.52	387.16 259.49	-3.08 -4.27	8.09 5.51	-113.50 -138.72	MAX MIN
790	118.13 78.64	414.11 283.38	-2.62 -3.60	7.81 5.37	-106.14 -127.72	MAX MIN
791	126.26 84.59	435.53 306.70	-2.14 -2.92	7.21 5.01	-93.14 -111.63	MAX MIN
792	129.11 88.81	433.73 329.24	-1.70 -2.30	6.15 4.32	-85.90 -110.33	MAX MIN
793	123.75 97.91	407.28 359.10	-1.40 -1.87	4.52 3.21	-75.73 -149.61	MAX MIN
794	218.93 97.12	778.97 327.28	-1.25 -1.66	1.88 1.35	-106.56 -219.22	MAX MIN
795	387.51 76.93	1291.71 256.44	-1.21 -1.61	0.00 0.00	-142.53 -247.19	MAX MIN
796	387.51 76.93	1291.71 256.44	-1.21 -1.61	0.00 0.00	-142.53 -247.19	MAX MIN
797	387.51	1291.71	-1.21	0.00	-142.53	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	76.93	256.44	-1.61	0.00	-247.19	MIN
798	387.51	1291.71	-1.21	0.00	-142.53	MAX
	76.93	256.44	-1.61	0.00	-247.19	MIN
799	387.51	1291.71	-1.21	0.00	-142.53	MAX
	76.93	256.44	-1.61	0.00	-247.19	MIN
800	-36.32	0.90	0.51	-25.95	30.79	MAX
	-39.55	-0.93	-5.31	-72.02	12.42	MIN
801	-36.95	-0.20	1.72	-29.08	60.50	MAX
	-48.62	-11.61	-9.73	-58.40	27.05	MIN
802	-42.16	-6.70	3.52	-53.95	98.30	MAX
	-53.21	-30.99	-23.53	-90.72	41.25	MIN
803	-48.55	-5.72	3.96	-70.96	51.77	MAX
	-53.24	-22.40	-38.29	-126.02	9.04	MIN
804	-48.98	16.66	11.05	-75.61	-64.40	MAX
	-52.74	-22.43	-91.97	-84.47	-80.54	MIN
805	-37.86	61.85	-1.30	-45.90	-153.05	MAX
	-40.85	-3.39	-43.30	-82.41	-178.13	MIN
806	-9.32	139.61	-5.46	-33.58	-188.20	MAX
	-23.15	24.68	-32.05	-55.82	-218.08	MIN
807	14.04	174.17	-7.78	-5.10	-188.00	MAX
	-5.83	63.93	-19.82	-20.59	-204.65	MIN
808	32.50	203.31	-7.62	2.70	-164.05	MAX
	9.34	97.68	-14.21	-7.67	-181.47	MIN
809	48.32	233.51	-6.99	5.89	-149.00	MAX
	22.41	127.83	-11.14	-1.41	-167.63	MIN
810	62.30	264.46	-6.31	7.41	-138.89	MAX
	34.00	156.02	-9.31	1.95	-161.79	MIN
811	75.02	295.59	-5.63	8.11	-131.33	MAX
	44.50	182.94	-8.04	3.83	-156.75	MIN
812	86.80	326.49	-4.94	8.24	-125.12	MAX
	54.11	208.89	-7.03	4.83	-151.86	MIN
813	97.80	356.84	-4.19	7.73	-119.49	MAX
	62.97	234.02	-6.14	5.20	-146.57	MIN
814	108.10	386.24	-3.34	6.24	-113.84	MAX
	71.10	258.41	-5.40	4.90	-140.16	MIN
815	117.70	414.10	-2.30	4.30	-107.32	MAX
	78.46	282.01	-5.08	2.93	-131.35	MIN
816	126.49	439.23	-1.06	0.16	-98.78	MAX
	84.93	304.50	-6.09	-4.43	-118.14	MIN
817	136.38	465.22	0.51	-13.43	-98.06	MAX
	90.29	324.12	-12.66	-24.74	-116.32	MIN
818	155.17	535.55	0.88	-18.79	-125.29	MAX
	94.60	335.12	-19.29	-41.05	-163.25	MIN
819	161.13	552.11	8.09	-3.35	-180.28	MAX
	107.83	368.77	-63.22	-11.51	-240.05	MIN
820	153.10	510.35	-1.75	0.00	-212.25	MAX
	120.92	403.06	-13.03	0.00	-270.53	MIN
821	153.10	510.35	-1.75	0.00	-212.25	MAX
	120.92	403.06	-13.03	0.00	-270.53	MIN
822	153.10	510.35	-1.75	0.00	-212.25	MAX
	120.92	403.06	-13.03	0.00	-270.53	MIN
823	153.10	510.35	-1.75	0.00	-212.25	MAX
	120.92	403.06	-13.03	0.00	-270.53	MIN
824	153.10	510.35	-1.75	0.00	-212.25	MAX
	120.92	403.06	-13.03	0.00	-270.53	MIN
825	-27.03	0.78	0.78	-38.47	11.57	MAX
	-34.43	-0.32	-6.90	-110.73	6.10	MIN
826	-27.46	-0.66	2.49	-43.99	17.30	MAX
	-38.15	-2.27	-11.59	-89.36	9.72	MIN
827	-27.36	4.69	3.42	-66.50	17.77	MAX
	-39.49	-7.38	-19.37	-115.04	15.39	MIN
828	-26.17	6.65	1.77	-99.01	-2.91	MAX
	-51.63	-12.37	-25.40	-152.32	-18.67	MIN
829	-27.19	27.91	-3.81	-119.89	-67.08	MAX
	-30.86	-10.99	-21.55	-134.53	-100.77	MIN
830	6.09	69.42	-6.43	-79.47	-133.99	MAX
	-24.44	7.64	-33.03	-110.10	-171.50	MIN
831	8.32	111.22	-9.40	-38.74	-158.50	MAX
	-10.94	36.37	-31.13	-68.60	-185.59	MIN
832	21.41	158.21	-10.43	-11.28	-157.67	MAX
	0.60	66.73	-25.10	-33.38	-177.56	MIN
833	35.73	195.61	-10.05	0.32	-150.88	MAX
	12.61	97.77	-18.77	-14.98	-171.92	MIN
834	49.43	229.31	-9.07	5.33	-142.46	MAX
	24.00	127.16	-14.62	-5.28	-165.92	MIN
835	62.33	261.76	-8.02	7.71	-135.37	MAX
	34.62	155.08	-11.90	0.11	-160.92	MIN
836	74.51	293.57	-7.01	8.78	-129.41	MAX
	44.57	181.86	-10.02	3.15	-156.49	MIN
837	86.10	324.82	-6.02	8.92	-124.17	MAX
	53.93	207.70	-8.58	4.79	-152.28	MIN
838	97.15	355.47	-4.99	8.09	-119.33	MAX
	62.76	232.70	-7.40	5.39	-148.03	MIN
839	107.72	385.47	-3.86	6.06	-114.64	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	71.09	256.87	-6.47	4.97	-143.59	MIN
840	117.82	414.91	-2.59	3.86	-110.02	MAX
	78.95	280.09	-6.01	1.11	-139.16	MIN
841	127.65	444.96	-1.29	-1.44	-106.86	MAX
	86.52	301.99	-6.73	-8.21	-137.60	MIN
842	137.62	480.87	-0.85	-12.80	-106.26	MAX
	94.63	322.56	-7.61	-25.72	-144.80	MIN
843	137.67	506.14	-1.79	-23.23	-119.69	MAX
	103.81	344.06	-9.17	-37.63	-165.94	MIN
844	169.14	550.02	-0.08	-12.92	-150.83	MAX
	108.83	368.67	-5.32	-18.59	-199.49	MIN
845	174.15	580.50	-4.33	0.00	-168.82	MAX
	115.16	383.87	-7.71	0.00	-218.50	MIN
846	174.15	580.50	-4.33	0.00	-168.82	MAX
	115.16	383.87	-7.71	0.00	-218.50	MIN
847	174.15	580.50	-4.33	0.00	-168.82	MAX
	115.16	383.87	-7.71	0.00	-218.50	MIN
848	174.15	580.50	-4.33	0.00	-168.82	MAX
	115.16	383.87	-7.71	0.00	-218.50	MIN
849	174.15	580.50	-4.33	0.00	-168.82	MAX
	115.16	383.87	-7.71	0.00	-218.50	MIN
850	-16.11	1.02	0.17	-41.79	0.71	MAX
	-27.28	-0.72	-6.41	-116.92	-4.52	MIN
851	-16.56	4.05	1.13	-44.14	-0.19	MAX
	-25.75	-2.12	-9.30	-89.75	-10.92	MIN
852	-14.58	9.62	1.00	-56.01	-7.62	MAX
	-26.30	-4.08	-13.70	-94.87	-30.94	MIN
853	-11.65	21.17	-1.60	-79.58	-28.95	MAX
	-19.47	-3.85	-14.11	-109.93	-66.70	MIN
854	-3.64	41.65	-5.63	-95.76	-63.06	MAX
	-8.83	3.03	-17.41	-106.52	-111.39	MIN
855	12.20	72.07	-9.52	-69.08	-98.76	MAX
	-6.10	18.59	-21.35	-84.96	-148.26	MIN
856	22.15	109.40	-11.31	-30.76	-123.72	MAX
	-0.74	41.30	-25.00	-54.36	-166.84	MIN
857	29.46	149.89	-11.80	-10.47	-134.73	MAX
	7.81	69.33	-23.29	-31.67	-170.00	MIN
858	39.74	188.99	-11.28	0.49	-136.66	MAX
	16.83	97.98	-19.65	-15.54	-167.18	MIN
859	51.05	224.81	-10.30	5.97	-134.50	MAX
	26.24	126.40	-16.16	-5.70	-163.53	MIN
860	62.60	258.60	-9.19	8.74	-130.85	MAX
	35.64	153.96	-13.51	0.16	-159.72	MIN
861	74.09	291.16	-8.09	10.07	-126.86	MAX
	44.86	180.58	-11.53	3.62	-156.11	MIN
862	85.40	322.83	-7.01	10.36	-122.88	MAX
	53.86	206.29	-9.96	5.54	-152.75	MIN
863	96.50	353.83	-5.89	9.60	-119.04	MAX
	62.61	231.15	-8.63	6.33	-149.72	MIN
864	107.36	384.36	-4.69	7.44	-115.44	MAX
	71.13	255.15	-7.50	6.04	-147.28	MIN
865	118.00	414.84	-3.47	5.44	-112.46	MAX
	79.49	278.29	-6.65	3.23	-146.28	MIN
866	128.47	446.27	-2.52	1.46	-110.86	MAX
	87.91	300.65	-5.95	-3.62	-148.61	MIN
867	137.79	477.45	-2.32	-4.12	-112.73	MAX
	96.71	323.12	-5.33	-11.11	-155.55	MIN
868	152.13	510.08	-3.41	-10.38	-119.09	MAX
	104.34	345.05	-4.11	-14.13	-166.15	MIN
869	165.22	543.98	-4.24	-7.85	-124.17	MAX
	111.55	369.42	-6.71	-9.25	-173.36	MIN
870	167.66	558.87	-4.67	0.00	-125.12	MAX
	114.64	382.13	-6.16	0.00	-174.60	MIN
871	167.66	558.87	-4.67	0.00	-125.12	MAX
	114.64	382.13	-6.16	0.00	-174.60	MIN
872	167.66	558.87	-4.67	0.00	-125.12	MAX
	114.64	382.13	-6.16	0.00	-174.60	MIN
873	167.66	558.87	-4.67	0.00	-125.12	MAX
	114.64	382.13	-6.16	0.00	-174.60	MIN
874	167.66	558.87	-4.67	0.00	-125.12	MAX
	114.64	382.13	-6.16	0.00	-174.60	MIN
875	-7.43	0.35	-0.67	-37.10	-2.36	MAX
	-19.39	-0.54	-4.99	-96.88	-12.99	MIN
876	-8.01	4.38	-0.59	-34.88	-6.52	MAX
	-14.75	-1.13	-7.24	-69.80	-25.33	MIN
877	-5.89	13.14	-1.67	-39.91	-18.21	MAX
	-10.70	-0.76	-10.60	-64.41	-51.77	MIN
878	-2.60	27.51	-3.78	-47.77	-36.82	MAX
	-3.38	2.55	-12.32	-63.80	-81.88	MIN
879	7.38	48.63	-6.78	-51.49	-60.82	MAX
	0.64	10.98	-14.42	-56.05	-112.89	MIN
880	18.15	76.50	-9.51	-39.09	-85.48	MAX
	3.75	25.56	-17.58	-48.60	-138.57	MIN
881	26.52	109.47	-11.18	-20.26	-105.81	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	7.66	45.65	-19.68	-35.00	-154.74	MIN
882	34.22	147.28	-11.67	-5.29	-119.16	MAX
	13.35	70.98	-19.89	-21.31	-161.72	MIN
883	42.48	184.99	-11.37	3.17	-125.66	MAX
	20.35	98.17	-18.27	-10.39	-162.67	MIN
884	52.07	221.23	-10.64	7.93	-127.40	MAX
	28.12	125.70	-16.14	-2.74	-160.90	MIN
885	62.47	255.69	-9.76	10.60	-126.50	MAX
	36.38	152.84	-14.18	2.22	-158.28	MIN
886	73.30	288.73	-8.83	12.05	-124.27	MAX
	44.91	179.25	-12.56	5.33	-155.49	MIN
887	84.35	320.70	-7.87	12.62	-121.47	MAX
	53.55	204.82	-11.16	7.19	-152.95	MIN
888	95.48	351.92	-6.84	12.30	-118.55	MAX
	62.21	229.54	-9.87	8.08	-150.96	MIN
889	106.62	382.73	-5.74	10.89	-115.86	MAX
	70.85	253.45	-8.64	8.08	-149.92	MIN
890	117.75	413.58	-4.66	8.56	-113.78	MAX
	79.50	276.68	-7.44	7.03	-150.45	MIN
891	128.77	444.70	-3.82	6.28	-112.86	MAX
	88.18	299.54	-6.30	4.50	-153.02	MIN
892	140.63	476.88	-3.53	3.23	-113.49	MAX
	96.68	322.55	-5.23	1.39	-157.31	MIN
893	152.13	508.08	-3.79	1.20	-114.66	MAX
	104.18	344.79	-5.23	-0.17	-161.18	MIN
894	162.63	540.36	-4.29	1.14	-114.54	MAX
	110.75	367.57	-5.41	0.22	-162.27	MIN
895	167.00	556.65	-4.33	0.00	-113.95	MAX
	113.65	378.83	-5.71	0.00	-161.95	MIN
896	167.00	556.65	-4.33	0.00	-113.95	MAX
	113.65	378.83	-5.71	0.00	-161.95	MIN
897	167.00	556.65	-4.33	0.00	-113.95	MAX
	113.65	378.83	-5.71	0.00	-161.95	MIN
898	167.00	556.65	-4.33	0.00	-113.95	MAX
	113.65	378.83	-5.71	0.00	-161.95	MIN
899	167.00	556.65	-4.33	0.00	-113.95	MAX
	113.65	378.83	-5.71	0.00	-161.95	MIN
900	-2.64	-0.26	-1.31	-27.25	-4.13	MAX
	-13.89	-0.33	-3.76	-62.10	-16.49	MIN
901	-3.17	4.61	-2.04	-21.06	-9.53	MAX
	-7.60	-0.31	-5.82	-40.30	-31.14	MIN
902	-1.26	14.70	-3.70	-20.21	-22.49	MAX
	-2.54	1.45	-9.18	-31.81	-59.50	MIN
903	4.13	30.57	-5.41	-21.38	-39.55	MAX
	1.75	6.17	-11.04	-27.48	-86.69	MIN
904	12.28	52.10	-7.25	-21.59	-59.44	MAX
	4.99	15.28	-12.80	-23.16	-112.13	MIN
905	20.56	79.01	-8.92	-13.95	-79.54	MAX
	8.19	29.44	-14.58	-19.40	-133.17	MIN
906	28.04	110.27	-10.05	-5.25	-97.20	MAX
	11.71	48.28	-15.99	-14.02	-147.87	MIN
907	35.32	146.21	-10.59	2.46	-110.53	MAX
	16.32	72.12	-16.47	-7.58	-156.03	MIN
908	43.02	182.92	-10.60	7.69	-118.72	MAX
	22.05	98.20	-16.08	-1.79	-158.89	MIN
909	51.69	218.86	-10.32	10.99	-122.46	MAX
	28.78	125.09	-15.20	2.67	-158.55	MIN
910	61.36	253.43	-9.86	13.16	-123.18	MAX
	36.27	151.86	-14.21	5.86	-156.77	MIN
911	71.74	286.60	-9.30	14.63	-122.11	MAX
	44.30	178.04	-13.23	8.08	-154.59	MIN
912	82.60	318.63	-8.62	15.57	-120.13	MAX
	52.67	203.42	-12.24	9.59	-152.64	MIN
913	93.77	349.85	-7.82	15.93	-117.88	MAX
	61.26	227.97	-11.16	10.51	-151.34	MIN
914	105.13	380.67	-6.90	15.57	-115.78	MAX
	69.97	251.77	-9.98	10.83	-151.09	MIN
915	116.62	411.47	-5.93	14.42	-114.21	MAX
	78.74	275.03	-8.69	10.48	-152.15	MIN
916	128.32	442.71	-5.05	12.64	-113.35	MAX
	87.46	298.06	-7.35	9.36	-154.42	MIN
917	140.16	474.78	-4.42	10.53	-113.01	MAX
	95.88	321.26	-6.26	7.64	-157.06	MIN
918	151.07	505.65	-4.19	8.23	-112.31	MAX
	103.18	343.25	-5.70	5.66	-158.53	MIN
919	161.14	536.98	-4.18	3.90	-110.59	MAX
	109.80	365.37	-5.67	2.61	-157.91	MIN
920	165.74	552.47	-4.16	0.00	-109.46	MAX
	112.88	376.26	-5.60	0.00	-157.05	MIN
921	165.74	552.47	-4.16	0.00	-109.46	MAX
	112.88	376.26	-5.60	0.00	-157.05	MIN
922	165.74	552.47	-4.16	0.00	-109.46	MAX
	112.88	376.26	-5.60	0.00	-157.05	MIN
923	165.74	552.47	-4.16	0.00	-109.46	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	112.88	376.26	-5.60	0.00	-157.05	MIN
924	165.74	552.47	-4.16	0.00	-109.46	MAX
	112.88	376.26	-5.60	0.00	-157.05	MIN
925	-2.01	-0.24	-1.77	-14.94	-4.65	MAX
	-13.17	-0.34	-2.61	-21.56	-17.36	MIN
926	-2.45	4.71	-3.19	-5.30	-10.36	MAX
	-6.60	0.01	-4.73	-7.26	-32.54	MIN
927	-0.69	15.22	-5.31	0.34	-23.57	MAX
	-1.37	2.21	-7.88	-0.21	-61.27	MIN
928	4.90	31.49	-6.61	4.55	-40.08	MAX
	2.18	7.37	-9.79	2.58	-87.49	MIN
929	12.22	53.15	-7.48	7.09	-58.74	MAX
	5.33	16.68	-11.05	4.23	-111.28	MIN
930	19.71	79.78	-8.12	8.86	-77.48	MAX
	8.48	30.70	-11.96	5.37	-130.91	MIN
931	26.72	110.47	-8.64	10.30	-94.22	MAX
	11.85	49.13	-12.67	6.31	-145.03	MIN
932	33.78	145.75	-9.07	11.73	-107.34	MAX
	16.11	72.43	-13.23	7.26	-153.36	MIN
933	41.20	181.94	-9.41	13.16	-115.86	MAX
	21.40	98.05	-13.65	8.23	-156.72	MIN
934	49.55	217.58	-9.63	14.62	-120.14	MAX
	27.72	124.59	-13.89	9.26	-156.81	MIN
935	58.91	251.95	-9.70	16.11	-121.35	MAX
	34.90	151.09	-13.94	10.33	-155.32	MIN
936	69.10	284.94	-9.62	17.58	-120.67	MAX
	42.72	177.03	-13.75	11.41	-153.37	MIN
937	79.89	316.74	-9.34	18.95	-119.01	MAX
	50.99	202.17	-13.29	12.44	-151.68	MIN
938	91.10	347.72	-8.85	20.12	-117.04	MAX
	59.55	226.49	-12.55	13.35	-150.71	MIN
939	102.60	378.27	-8.15	20.93	-115.24	MAX
	68.32	250.07	-11.52	14.03	-150.84	MIN
940	114.36	408.84	-7.27	21.15	-113.95	MAX
	77.19	273.17	-10.24	14.31	-152.22	MIN
941	126.33	439.89	-6.27	20.43	-113.23	MAX
	86.01	296.09	-8.81	13.94	-154.58	MIN
942	138.38	471.81	-5.29	18.19	-112.78	MAX
	94.51	319.19	-7.40	12.52	-157.01	MIN
943	149.34	502.40	-4.60	13.87	-111.76	MAX
	101.94	341.02	-6.42	9.62	-158.13	MIN
944	159.71	533.48	-4.26	5.97	-109.79	MAX
	108.82	362.89	-5.94	4.17	-157.26	MIN
945	164.69	548.95	-4.16	0.00	-108.59	MAX
	112.10	373.66	-5.80	0.00	-156.34	MIN
946	164.69	548.95	-4.16	0.00	-108.59	MAX
	112.10	373.66	-5.80	0.00	-156.34	MIN
947	164.69	548.95	-4.16	0.00	-108.59	MAX
	112.10	373.66	-5.80	0.00	-156.34	MIN
948	164.69	548.95	-4.16	0.00	-108.59	MAX
	112.10	373.66	-5.80	0.00	-156.34	MIN
949	164.69	548.95	-4.16	0.00	-108.59	MAX
	112.10	373.66	-5.80	0.00	-156.34	MIN
950	-5.48	-0.25	-1.45	18.93	-4.11	MAX
	-18.33	-0.32	-2.24	-2.64	-16.41	MIN
951	-5.95	4.66	-3.60	25.64	-9.45	MAX
	-11.98	-0.26	-4.50	10.40	-30.93	MIN
952	-4.08	14.76	-6.53	32.31	-22.25	MAX
	-6.99	1.54	-7.35	19.69	-59.00	MIN
953	-0.47	30.63	-7.75	36.38	-39.08	MAX
	-1.26	6.28	-8.49	26.40	-85.83	MIN
954	7.47	52.09	-7.64	35.93	-58.71	MAX
	1.92	15.39	-9.23	29.91	-110.90	MIN
955	15.51	78.87	-7.26	32.33	-78.54	MAX
	4.95	29.49	-9.27	29.67	-131.56	MIN
956	22.72	109.93	-7.16	28.45	-95.93	MAX
	8.29	48.22	-9.27	25.68	-145.92	MIN
957	29.70	145.56	-7.50	23.54	-109.00	MAX
	12.69	71.86	-9.93	20.86	-153.76	MIN
958	37.12	181.87	-8.17	19.73	-116.96	MAX
	18.22	97.68	-11.17	18.16	-156.36	MIN
959	45.54	217.32	-8.92	18.19	-120.53	MAX
	24.77	124.22	-12.56	15.78	-155.83	MIN
960	55.00	251.31	-9.55	19.04	-121.13	MAX
	32.12	150.58	-13.66	14.76	-153.95	MIN
961	65.25	283.82	-9.96	20.55	-120.03	MAX
	40.04	176.28	-14.30	14.74	-151.79	MIN
962	76.08	315.12	-10.11	22.43	-118.11	MAX
	48.37	201.13	-14.43	15.34	-149.98	MIN
963	87.32	345.57	-9.96	24.48	-116.02	MAX
	56.99	225.11	-14.07	16.30	-148.97	MIN
964	98.90	375.60	-9.51	26.54	-114.22	MAX
	65.82	248.34	-13.24	17.39	-149.19	MIN
965	110.74	405.66	-8.74	28.22	-113.06	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	74.81	271.04	-12.01	18.36	-150.88	MIN
966	122.94	436.27	-7.64	28.64	-112.74	MAX
	83.83	293.58	-10.49	18.80	-153.96	MIN
967	135.44	467.85	-6.32	26.31	-112.98	MAX
	92.68	316.39	-8.79	17.70	-157.48	MIN
968	147.14	498.39	-5.17	19.90	-112.82	MAX
	100.47	338.10	-7.39	13.84	-159.77	MIN
969	158.27	529.65	-4.51	8.22	-111.46	MAX
	107.77	360.11	-6.47	5.85	-159.69	MIN
970	163.57	545.22	-4.33	0.00	-110.45	MAX
	111.31	371.03	-6.26	0.00	-159.01	MIN
971	163.57	545.22	-4.33	0.00	-110.45	MAX
	111.31	371.03	-6.26	0.00	-159.01	MIN
972	163.57	545.22	-4.33	0.00	-110.45	MAX
	111.31	371.03	-6.26	0.00	-159.01	MIN
973	163.57	545.22	-4.33	0.00	-110.45	MAX
	111.31	371.03	-6.26	0.00	-159.01	MIN
974	163.57	545.22	-4.33	0.00	-110.45	MAX
	111.31	371.03	-6.26	0.00	-159.01	MIN
975	-13.04	0.38	-0.17	53.53	-2.33	MAX
	-28.16	-0.52	-2.81	7.23	-12.83	MIN
976	-13.50	4.48	-2.08	54.72	-6.37	MAX
	-23.40	-1.03	-5.67	24.02	-24.91	MIN
977	-11.46	13.27	-4.92	64.37	-17.73	MAX
	-19.49	-0.58	-8.77	39.06	-50.75	MIN
978	-8.39	27.64	-6.97	72.12	-35.88	MAX
	-12.48	2.79	-9.50	52.40	-80.14	MIN
979	-2.14	48.64	-7.36	69.25	-59.36	MAX
	-5.44	11.22	-8.44	59.40	-110.39	MIN
980	8.12	76.25	-6.02	61.05	-83.47	MAX
	-2.68	25.69	-6.92	56.07	-135.32	MIN
981	15.94	108.83	-5.33	49.41	-103.25	MAX
	0.85	45.57	-6.24	40.19	-150.79	MIN
982	23.02	146.03	-6.27	36.77	-116.07	MAX
	6.12	70.51	-6.79	28.19	-157.14	MIN
983	30.69	182.94	-7.29	27.88	-122.10	MAX
	12.71	97.17	-8.82	22.71	-157.54	MIN
984	39.74	218.21	-8.52	22.73	-123.48	MAX
	20.09	124.01	-11.54	20.97	-155.39	MIN
985	49.70	251.52	-9.65	21.53	-122.33	MAX
	28.04	150.33	-13.70	18.28	-152.55	MIN
986	60.24	283.24	-10.50	23.23	-120.02	MAX
	36.34	175.78	-15.09	17.49	-149.76	MIN
987	71.18	313.74	-11.01	25.67	-117.32	MAX
	44.87	200.28	-15.75	17.90	-147.47	MIN
988	82.44	343.41	-11.19	28.63	-114.72	MAX
	53.58	223.86	-15.74	19.04	-146.04	MIN
989	93.97	372.63	-11.01	32.00	-112.60	MAX
	62.44	246.60	-15.08	20.65	-145.91	MIN
990	105.79	401.96	-10.42	35.50	-111.33	MAX
	71.49	268.70	-13.87	22.49	-147.70	MIN
991	117.80	431.73	-9.33	38.02	-111.46	MAX
	80.79	290.53	-12.24	24.11	-151.86	MIN
992	131.00	462.87	-7.70	36.79	-113.25	MAX
	90.14	312.72	-10.56	24.45	-157.91	MIN
993	144.09	493.34	-6.08	28.90	-115.50	MAX
	98.65	334.34	-8.64	20.46	-163.41	MIN
994	156.76	525.42	-4.93	11.55	-116.11	MAX
	106.62	356.87	-7.52	8.62	-165.60	MIN
995	162.55	541.84	-4.69	0.00	-115.76	MAX
	110.45	368.15	-6.95	0.00	-165.63	MIN
996	162.55	541.84	-4.69	0.00	-115.76	MAX
	110.45	368.15	-6.95	0.00	-165.63	MIN
997	162.55	541.84	-4.69	0.00	-115.76	MAX
	110.45	368.15	-6.95	0.00	-165.63	MIN
998	162.55	541.84	-4.69	0.00	-115.76	MAX
	110.45	368.15	-6.95	0.00	-165.63	MIN
999	162.55	541.84	-4.69	0.00	-115.76	MAX
	110.45	368.15	-6.95	0.00	-165.63	MIN
1000	-24.35	1.06	1.33	73.28	0.76	MAX
	-40.16	-0.69	-3.58	11.96	-4.28	MIN
1001	-24.62	4.21	0.17	73.97	0.03	MAX
	-38.44	-1.96	-7.25	32.94	-10.28	MIN
1002	-22.77	9.85	-1.53	93.91	-6.91	MAX
	-39.21	-3.79	-11.20	54.61	-29.39	MIN
1003	-20.17	21.40	-4.79	117.27	-27.54	MAX
	-32.87	-3.45	-11.09	83.55	-64.04	MIN
1004	-17.71	41.71	-3.94	118.95	-60.84	MAX
	-19.21	3.43	-8.75	102.96	-107.57	MIN
1005	-2.67	71.77	-1.80	96.59	-95.70	MAX
	-15.61	18.85	-6.15	85.14	-143.30	MIN
1006	6.41	108.52	0.42	67.77	-119.82	MAX
	-10.85	41.24	-5.43	49.86	-160.81	MIN
1007	12.74	148.12	-2.52	46.25	-130.01	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-2.96	68.71	-5.87	32.65	-162.99	MIN
1008	22.07	186.05	-7.14	32.41	-131.22	MAX
	5.40	96.57	-7.75	24.83	-159.33	MIN
1009	32.50	220.42	-8.74	25.33	-128.48	MAX
	14.19	123.98	-11.33	22.62	-155.06	MIN
1010	43.32	252.50	-10.19	23.23	-124.42	MAX
	23.06	150.30	-14.33	20.13	-150.87	MIN
1011	54.27	283.08	-11.33	25.34	-120.26	MAX
	31.88	175.49	-16.27	19.20	-147.20	MIN
1012	65.34	312.56	-12.10	28.38	-116.39	MAX
	40.66	199.60	-17.31	19.77	-144.16	MIN
1013	76.54	341.19	-12.52	32.16	-112.98	MAX
	49.41	222.72	-17.56	21.30	-141.90	MIN
1014	87.93	369.28	-12.59	36.71	-110.18	MAX
	58.21	244.92	-17.04	23.48	-140.73	MIN
1015	99.55	397.38	-12.28	42.13	-108.39	MAX
	67.14	266.29	-15.68	26.28	-141.55	MIN
1016	111.50	426.65	-11.41	48.20	-108.32	MAX
	76.48	287.02	-13.76	29.74	-146.21	MIN
1017	122.85	456.09	-9.75	51.51	-111.93	MAX
	86.56	308.14	-11.74	32.67	-155.77	MIN
1018	139.64	487.43	-7.35	45.43	-119.91	MAX
	95.75	329.03	-11.09	33.82	-168.82	MIN
1019	156.10	520.84	-5.90	22.22	-126.10	MAX
	105.14	352.89	-7.61	18.74	-177.68	MIN
1020	160.75	535.85	-5.27	0.00	-127.41	MAX
	109.68	365.58	-7.88	0.00	-179.47	MIN
1021	160.75	535.85	-5.27	0.00	-127.41	MAX
	109.68	365.58	-7.88	0.00	-179.47	MIN
1022	160.75	535.85	-5.27	0.00	-127.41	MAX
	109.68	365.58	-7.88	0.00	-179.47	MIN
1023	160.75	535.85	-5.27	0.00	-127.41	MAX
	109.68	365.58	-7.88	0.00	-179.47	MIN
1024	160.75	535.85	-5.27	0.00	-127.41	MAX
	109.68	365.58	-7.88	0.00	-179.47	MIN
1025	-37.70	0.85	1.95	66.69	11.90	MAX
	-51.07	-0.28	-4.09	8.72	6.14	MIN
1026	-37.86	-0.42	2.72	72.56	18.17	MAX
	-54.51	-2.05	-8.41	32.31	9.99	MIN
1027	-37.94	5.04	4.61	112.78	19.89	MAX
	-56.18	-6.95	-13.28	64.31	16.32	MIN
1028	-37.20	7.02	7.08	158.24	-1.03	MAX
	-69.02	-11.77	-14.03	102.03	-15.03	MIN
1029	-40.80	28.09	0.85	145.56	-64.08	MAX
	-45.53	-10.37	-10.10	126.08	-95.55	MIN
1030	-13.39	69.14	10.55	120.56	-129.83	MAX
	-36.87	8.09	-8.75	94.21	-164.72	MIN
1031	-12.40	110.22	7.20	80.78	-153.18	MAX
	-24.21	36.43	-6.87	56.64	-177.34	MIN
1032	-0.71	156.04	-0.11	46.93	-151.22	MAX
	-13.62	66.05	-6.82	32.43	-168.10	MIN
1033	12.22	191.92	-7.53	31.13	-143.42	MAX
	-2.56	96.07	-8.60	24.17	-161.16	MIN
1034	24.62	223.74	-9.72	24.48	-134.16	MAX
	7.93	124.13	-12.52	22.56	-154.26	MIN
1035	36.39	253.93	-11.25	23.98	-126.46	MAX
	17.74	150.42	-15.80	19.83	-148.68	MIN
1036	47.70	283.13	-12.47	26.70	-120.20	MAX
	27.04	175.30	-17.89	19.59	-144.05	MIN
1037	58.79	311.44	-13.35	30.34	-115.02	MAX
	35.98	198.99	-19.10	20.78	-140.13	MIN
1038	69.82	338.89	-13.89	34.73	-110.66	MAX
	44.70	221.64	-19.55	22.87	-136.75	MIN
1039	80.94	365.53	-14.13	39.97	-106.94	MAX
	53.29	243.33	-19.17	25.61	-133.85	MIN
1040	92.25	391.61	-14.09	46.51	-103.80	MAX
	61.85	264.08	-17.74	29.08	-131.70	MIN
1041	104.02	418.51	-13.74	55.61	-102.61	MAX
	70.62	283.63	-14.83	34.15	-133.12	MIN
1042	116.75	451.76	-11.30	69.21	-104.29	MAX
	80.45	302.17	-13.11	42.85	-143.74	MIN
1043	120.17	474.92	-8.01	71.71	-119.88	MAX
	91.80	322.03	-10.83	47.53	-168.13	MIN
1044	156.35	517.77	-6.18	28.99	-152.50	MAX
	99.87	345.71	-16.29	27.81	-203.91	MIN
1045	164.47	548.25	-6.97	0.00	-170.99	MAX
	108.23	360.78	-8.39	0.00	-223.67	MIN
1046	164.47	548.25	-6.97	0.00	-170.99	MAX
	108.23	360.78	-8.39	0.00	-223.67	MIN
1047	164.47	548.25	-6.97	0.00	-170.99	MAX
	108.23	360.78	-8.39	0.00	-223.67	MIN
1048	164.47	548.25	-6.97	0.00	-170.99	MAX
	108.23	360.78	-8.39	0.00	-223.67	MIN
1049	164.47	548.25	-6.97	0.00	-170.99	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	108.23	360.78	-8.39	0.00	-223.67	MIN
1050	-49.10	0.96	0.53	27.45	31.22	MAX
	-58.55	-0.84	-3.67	-3.65	12.45	MIN
1051	-49.37	0.11	1.23	40.24	61.62	MAX
	-68.16	-11.28	-7.36	16.79	27.36	MIN
1052	-54.83	-6.11	9.41	86.72	101.04	MAX
	-73.20	-30.48	-12.90	50.73	42.39	MIN
1053	-63.05	-5.15	20.78	130.07	56.47	MAX
	-69.49	-21.56	-15.63	72.73	11.41	MIN
1054	-63.09	17.04	72.17	93.64	-57.65	MAX
	-72.34	-21.52	-24.30	80.45	-75.79	MIN
1055	-52.98	61.70	21.76	90.43	-144.30	MAX
	-63.61	-2.65	-13.21	58.89	-171.64	MIN
1056	-34.78	138.60	9.05	67.03	-177.58	MAX
	-41.40	24.97	-10.16	49.89	-209.88	MIN
1057	-13.33	171.76	-4.53	33.12	-176.00	MAX
	-23.34	63.33	-8.87	24.87	-194.79	MIN
1058	3.22	199.06	-9.97	23.09	-154.40	MAX
	-9.47	95.83	-11.33	20.65	-170.10	MIN
1059	17.21	226.97	-11.40	21.26	-138.20	MAX
	2.34	124.36	-15.42	17.87	-154.42	MIN
1060	29.55	255.16	-12.71	23.79	-127.22	MAX
	12.76	150.55	-18.05	17.45	-145.76	MIN
1061	40.92	283.07	-13.80	27.31	-119.16	MAX
	22.25	175.10	-19.84	18.71	-140.30	MIN
1062	51.79	310.30	-14.64	31.51	-112.86	MAX
	31.14	198.36	-21.02	20.94	-135.54	MIN
1063	62.48	336.58	-15.20	36.23	-107.67	MAX
	39.65	220.51	-21.62	23.75	-131.07	MIN
1064	73.21	361.62	-15.48	41.45	-103.04	MAX
	47.93	241.71	-21.53	26.92	-126.31	MIN
1065	84.15	384.99	-15.52	47.42	-98.21	MAX
	56.03	262.02	-20.43	30.40	-120.07	MIN
1066	95.30	405.75	-15.40	55.29	-91.99	MAX
	63.93	281.28	-17.48	34.84	-110.52	MIN
1067	108.70	427.83	-8.73	72.12	-94.01	MAX
	71.50	297.98	-15.43	46.25	-112.28	MIN
1068	131.91	494.87	-0.60	78.71	-123.89	MAX
	78.65	306.48	-14.74	44.64	-163.52	MIN
1069	144.11	509.48	44.00	23.11	-180.74	MAX
	95.94	338.53	-21.47	20.19	-243.11	MIN
1070	140.22	467.41	-5.91	0.00	-213.35	MAX
	111.74	372.46	-11.72	0.00	-274.55	MIN
1071	140.22	467.41	-5.91	0.00	-213.35	MAX
	111.74	372.46	-11.72	0.00	-274.55	MIN
1072	140.22	467.41	-5.91	0.00	-213.35	MAX
	111.74	372.46	-11.72	0.00	-274.55	MIN
1073	140.22	467.41	-5.91	0.00	-213.35	MAX
	111.74	372.46	-11.72	0.00	-274.55	MIN
1074	140.22	467.41	-5.91	0.00	-213.35	MAX
	111.74	372.46	-11.72	0.00	-274.55	MIN
1075	-53.99	1.79	-2.08	-22.40	40.33	MAX
	-61.79	-2.24	-3.24	-35.58	15.18	MIN
1076	-54.24	2.13	-3.63	-11.00	87.24	MAX
	-74.26	-18.39	-5.63	-17.34	38.91	MIN
1077	-62.68	-1.17	-6.02	-5.10	154.08	MAX
	-89.55	-77.06	-9.30	-7.46	51.78	MIN
1078	-66.49	16.39	-7.50	-1.64	182.67	MAX
	-114.86	-232.76	-11.52	-1.92	-13.87	MIN
1079	-70.52	15.30	-8.60	2.32	143.43	MAX
	-81.71	-23.55	-13.07	0.28	-109.67	MIN
1080	-42.78	280.28	-9.56	5.50	-15.45	MAX
	-69.60	-49.70	-14.36	1.99	-183.84	MIN
1081	-41.12	179.44	-10.48	8.44	-161.04	MAX
	-51.80	13.45	-15.57	3.69	-226.10	MIN
1082	-20.28	182.09	-11.45	11.65	-180.78	MAX
	-28.95	62.42	-16.82	5.70	-209.22	MIN
1083	-2.81	202.69	-12.42	15.07	-157.56	MAX
	-13.68	95.96	-18.09	8.01	-172.48	MIN
1084	11.30	228.34	-13.36	18.79	-138.15	MAX
	-1.66	124.58	-19.36	10.66	-153.76	MIN
1085	23.38	255.46	-14.27	22.85	-125.59	MAX
	8.65	150.57	-20.61	13.64	-142.03	MIN
1086	34.27	282.59	-15.10	27.27	-116.59	MAX
	17.85	174.80	-21.78	16.93	-135.94	MIN
1087	44.56	309.06	-15.81	31.99	-109.65	MAX
	26.36	197.63	-22.81	20.45	-130.54	MIN
1088	54.67	334.41	-16.34	36.86	-103.93	MAX
	34.45	219.26	-23.60	24.09	-125.33	MIN
1089	64.91	358.17	-16.61	41.57	-98.77	MAX
	42.34	239.82	-24.03	27.59	-119.51	MIN
1090	75.48	379.34	-16.53	45.51	-93.12	MAX
	50.12	259.50	-23.96	30.53	-111.11	MIN
1091	86.29	394.85	-16.07	47.57	-82.61	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	57.69	278.52	-23.33	32.16	-99.99	MIN
1092	93.45	387.46	-15.32	45.77	-77.55	MAX
	64.62	296.96	-22.28	31.10	-102.38	MIN
1093	93.70	365.40	-14.83	37.43	-71.93	MAX
	77.33	307.83	-21.59	25.51	-145.19	MIN
1094	196.91	724.27	-14.66	17.17	-106.02	MAX
	81.78	288.64	-21.36	11.73	-216.99	MIN
1095	370.84	1236.15	-14.52	0.00	-143.14	MAX
	65.11	217.04	-21.15	0.00	-245.73	MIN
1096	370.84	1236.15	-14.52	0.00	-143.14	MAX
	65.11	217.04	-21.15	0.00	-245.73	MIN
1097	370.84	1236.15	-14.52	0.00	-143.14	MAX
	65.11	217.04	-21.15	0.00	-245.73	MIN
1098	370.84	1236.15	-14.52	0.00	-143.14	MAX
	65.11	217.04	-21.15	0.00	-245.73	MIN
1099	370.84	1236.15	-14.52	0.00	-143.14	MAX
	65.11	217.04	-21.15	0.00	-245.73	MIN
1100	-50.35	1.00	-0.44	-40.96	31.39	MAX
	-60.15	-0.75	-6.94	-98.72	12.35	MIN
1101	-50.38	0.34	0.20	-38.89	62.12	MAX
	-69.61	-11.00	-12.33	-75.30	27.31	MIN
1102	-55.98	-5.62	1.03	-61.18	102.30	MAX
	-75.06	-29.97	-27.74	-102.10	42.61	MIN
1103	-64.55	-4.40	0.84	-76.72	58.61	MAX
	-72.07	-20.79	-43.48	-133.80	12.15	MIN
1104	-65.09	17.95	7.34	-80.26	-54.61	MAX
	-75.84	-20.52	-97.95	-89.44	-73.93	MIN
1105	-55.56	62.67	-5.65	-48.32	-140.41	MAX
	-68.15	-1.53	-50.09	-85.91	-168.96	MIN
1106	-40.44	139.54	-10.54	-33.41	-172.86	MAX
	-45.40	26.11	-39.78	-57.96	-206.34	MIN
1107	-20.29	172.49	-13.73	-1.97	-170.44	MAX
	-28.00	64.34	-28.68	-20.92	-190.36	MIN
1108	-5.13	199.48	-14.55	9.06	-149.86	MAX
	-14.42	96.59	-24.39	-5.80	-164.77	MIN
1109	7.38	226.95	-14.98	15.87	-132.87	MAX
	-3.63	124.75	-22.80	3.07	-148.20	MIN
1110	18.16	254.53	-15.46	21.43	-121.09	MAX
	5.69	150.45	-22.64	9.46	-137.44	MIN
1111	27.92	281.62	-16.02	26.70	-112.25	MAX
	14.03	174.36	-23.20	14.78	-130.93	MIN
1112	37.20	307.75	-16.63	31.94	-105.20	MAX
	21.74	196.79	-24.13	19.61	-125.09	MIN
1113	46.43	332.55	-17.18	37.01	-99.31	MAX
	29.16	217.86	-25.20	24.11	-119.58	MIN
1114	56.02	355.61	-17.55	41.30	-94.11	MAX
	36.56	237.64	-26.31	28.03	-113.91	MIN
1115	66.38	376.36	-17.54	43.37	-88.89	MAX
	44.17	256.12	-27.53	30.55	-107.01	MIN
1116	77.80	393.79	-16.97	39.82	-82.52	MAX
	52.17	273.07	-29.55	29.48	-99.52	MIN
1117	92.59	411.91	-15.68	22.27	-84.69	MAX
	60.61	287.04	-36.53	16.09	-101.47	MIN
1118	118.13	474.69	-15.57	10.22	-114.95	MAX
	69.29	292.61	-43.54	-3.50	-150.82	MIN
1119	133.93	485.33	-8.60	14.44	-172.24	MAX
	88.99	321.92	-87.82	0.55	-231.03	MIN
1120	132.48	441.61	-18.35	0.00	-205.05	MAX
	106.41	354.70	-37.51	0.00	-262.75	MIN
1121	132.48	441.61	-18.35	0.00	-205.05	MAX
	106.41	354.70	-37.51	0.00	-262.75	MIN
1122	132.48	441.61	-18.35	0.00	-205.05	MAX
	106.41	354.70	-37.51	0.00	-262.75	MIN
1123	132.48	441.61	-18.35	0.00	-205.05	MAX
	106.41	354.70	-37.51	0.00	-262.75	MIN
1124	132.48	441.61	-18.35	0.00	-205.05	MAX
	106.41	354.70	-37.51	0.00	-262.75	MIN
1125	-39.98	1.05	0.14	-52.75	12.28	MAX
	-53.79	-0.19	-8.13	-138.35	5.92	MIN
1126	-39.67	0.14	1.57	-54.66	19.21	MAX
	-57.01	-1.59	-13.33	-108.75	9.87	MIN
1127	-40.05	6.06	1.94	-75.46	22.44	MAX
	-59.57	-5.96	-22.14	-129.51	16.72	MIN
1128	-40.04	8.52	-0.12	-106.98	0.43	MAX
	-73.92	-10.21	-28.79	-163.33	-10.75	MIN
1129	-44.62	29.92	-6.16	-126.98	-61.29	MAX
	-52.30	-8.34	-25.52	-142.67	-89.51	MIN
1130	-22.26	71.09	-9.36	-84.89	-125.55	MAX
	-41.86	10.36	-37.71	-116.53	-156.99	MIN
1131	-23.52	112.08	-13.04	-41.38	-147.34	MAX
	-31.50	38.74	-36.68	-73.22	-167.95	MIN
1132	-14.42	157.48	-14.93	-10.74	-143.76	MAX
	-21.73	68.08	-31.77	-36.08	-159.26	MIN
1133	-4.25	192.74	-15.52	4.29	-134.32	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-12.26	97.59	-26.78	-15.29	-149.66	MIN
1134	5.20	223.66	-15.63	13.09	-123.44	MAX
	-3.79	124.91	-24.19	-2.75	-139.58	MIN
1135	13.84	252.67	-15.82	19.75	-114.14	MAX
	3.81	150.22	-23.31	5.93	-131.99	MIN
1136	21.91	280.28	-16.23	25.70	-106.25	MAX
	10.75	173.85	-23.56	12.75	-125.16	MIN
1137	29.75	306.46	-16.83	31.44	-99.46	MAX
	17.29	195.92	-24.52	18.65	-118.90	MIN
1138	37.75	331.04	-17.55	36.92	-93.56	MAX
	23.73	216.47	-25.98	23.97	-113.19	MIN
1139	46.37	353.82	-18.27	41.47	-88.49	MAX
	30.41	235.42	-27.83	28.52	-108.17	MIN
1140	56.25	374.76	-18.85	43.41	-84.33	MAX
	37.80	252.56	-30.13	31.38	-104.33	MIN
1141	68.31	394.99	-19.21	39.22	-82.56	MAX
	46.59	267.49	-33.30	30.07	-104.72	MIN
1142	83.76	420.10	-20.02	26.41	-84.19	MAX
	58.13	280.42	-36.00	19.76	-115.10	MIN
1143	92.02	434.29	-21.97	10.60	-100.18	MAX
	72.67	294.11	-39.03	4.29	-139.99	MIN
1144	135.60	468.59	-26.16	7.40	-133.44	MAX
	85.68	311.91	-30.91	-4.83	-176.65	MIN
1145	148.63	495.43	-25.13	0.00	-152.26	MAX
	97.34	324.45	-38.46	0.00	-196.90	MIN
1146	148.63	495.43	-25.13	0.00	-152.26	MAX
	97.34	324.45	-38.46	0.00	-196.90	MIN
1147	148.63	495.43	-25.13	0.00	-152.26	MAX
	97.34	324.45	-38.46	0.00	-196.90	MIN
1148	148.63	495.43	-25.13	0.00	-152.26	MAX
	97.34	324.45	-38.46	0.00	-196.90	MIN
1149	148.63	495.43	-25.13	0.00	-152.26	MAX
	97.34	324.45	-38.46	0.00	-196.90	MIN
1150	-27.25	1.41	-0.09	-54.97	0.39	MAX
	-43.00	-0.55	-7.11	-145.70	-3.65	MIN
1151	-26.84	5.06	0.95	-55.66	-0.22	MAX
	-41.18	-1.25	-9.97	-112.01	-8.68	MIN
1152	-25.48	11.40	0.75	-66.92	-6.41	MAX
	-43.49	-2.26	-14.66	-112.80	-25.59	MIN
1153	-23.99	23.66	-1.99	-90.11	-25.46	MAX
	-39.56	-1.03	-15.28	-124.57	-57.73	MIN
1154	-23.11	44.48	-6.35	-105.72	-56.74	MAX
	-27.30	6.55	-18.93	-118.24	-98.68	MIN
1155	-15.46	74.69	-10.74	-77.92	-89.32	MAX
	-23.07	22.33	-23.44	-94.73	-131.88	MIN
1156	-9.76	111.28	-13.18	-36.63	-111.05	MAX
	-19.83	44.74	-27.88	-61.96	-146.91	MIN
1157	-7.28	150.21	-14.47	-12.99	-118.78	MAX
	-14.30	71.74	-27.20	-37.22	-146.55	MIN
1158	-2.04	187.18	-14.85	1.50	-117.51	MAX
	-8.62	98.81	-24.84	-18.54	-140.24	MIN
1159	4.00	220.23	-14.89	10.82	-112.32	MAX
	-2.85	125.10	-22.87	-5.67	-133.11	MIN
1160	10.12	250.57	-15.01	17.87	-105.77	MAX
	2.65	149.97	-22.10	3.67	-125.75	MIN
1161	16.16	278.86	-15.39	24.14	-99.03	MAX
	7.87	173.33	-22.40	11.10	-118.49	MIN
1162	22.22	305.29	-16.10	30.25	-92.47	MAX
	12.93	195.12	-23.58	17.56	-111.49	MIN
1163	28.61	329.84	-17.11	36.30	-86.32	MAX
	18.07	215.24	-25.47	23.49	-105.04	MIN
1164	35.80	352.44	-18.39	41.85	-80.93	MAX
	23.66	233.53	-28.04	28.85	-99.81	MIN
1165	44.53	373.12	-19.98	45.65	-76.92	MAX
	30.32	249.70	-31.34	32.88	-97.08	MIN
1166	56.15	392.46	-22.07	45.41	-75.21	MAX
	39.16	263.56	-35.11	33.80	-99.03	MIN
1167	71.23	409.23	-24.69	40.15	-77.82	MAX
	51.59	275.95	-38.57	29.80	-106.88	MIN
1168	95.84	426.07	-28.15	30.87	-85.43	MAX
	65.96	286.89	-40.80	18.30	-119.22	MIN
1169	124.05	445.04	-30.32	13.73	-91.87	MAX
	83.23	300.82	-45.34	5.85	-128.38	MIN
1170	136.06	453.55	-30.80	0.00	-93.46	MAX
	92.71	309.04	-44.84	0.00	-130.58	MIN
1171	136.06	453.55	-30.80	0.00	-93.46	MAX
	92.71	309.04	-44.84	0.00	-130.58	MIN
1172	136.06	453.55	-30.80	0.00	-93.46	MAX
	92.71	309.04	-44.84	0.00	-130.58	MIN
1173	136.06	453.55	-30.80	0.00	-93.46	MAX
	92.71	309.04	-44.84	0.00	-130.58	MIN
1174	136.06	453.55	-30.80	0.00	-93.46	MAX
	92.71	309.04	-44.84	0.00	-130.58	MIN
1175	-15.90	0.95	-0.46	-48.69	-2.90	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-29.54	-0.31	-5.04	-127.20	-11.97	MIN
1176	-15.53	5.60	0.13	-47.16	-6.85	MAX
	-25.21	-0.04	-6.59	-95.13	-22.86	MIN
1177	-14.23	15.34	-0.43	-52.93	-17.32	MAX
	-23.76	1.56	-9.43	-86.02	-46.02	MIN
1178	-12.70	30.70	-2.39	-61.23	-33.40	MAX
	-20.23	6.18	-10.89	-82.42	-72.27	MIN
1179	-11.74	52.36	-5.59	-64.85	-54.10	MAX
	-13.92	15.56	-13.09	-71.63	-99.15	MIN
1180	-7.99	80.13	-8.76	-51.88	-75.07	MAX
	-11.54	30.49	-16.67	-62.32	-120.65	MIN
1181	-4.67	112.43	-11.01	-29.86	-91.56	MAX
	-10.22	50.30	-19.44	-46.49	-132.72	MIN
1182	-2.63	148.64	-12.16	-11.40	-101.02	MAX
	-8.02	74.52	-20.54	-30.25	-135.62	MIN
1183	-0.30	184.20	-12.57	0.58	-103.72	MAX
	-4.95	100.04	-19.98	-16.60	-132.42	MIN
1184	3.00	217.69	-12.68	8.97	-101.79	MAX
	-1.60	125.34	-19.16	-5.82	-126.31	MIN
1185	6.74	248.75	-12.86	15.60	-97.21	MAX
	1.84	149.76	-18.90	2.63	-118.90	MIN
1186	10.68	277.55	-13.32	21.64	-91.17	MAX
	5.25	172.85	-19.47	9.66	-110.77	MIN
1187	14.80	304.22	-14.17	27.73	-84.33	MAX
	8.67	194.39	-20.89	15.99	-102.28	MIN
1188	19.29	328.74	-15.45	34.16	-77.20	MAX
	12.27	214.18	-23.12	22.08	-93.87	MIN
1189	24.55	351.11	-17.24	40.86	-70.31	MAX
	16.37	232.02	-26.21	28.05	-86.34	MIN
1190	31.34	371.30	-19.81	47.27	-64.51	MAX
	21.56	247.72	-30.38	33.51	-81.02	MIN
1191	40.80	388.28	-23.56	52.11	-60.75	MAX
	28.76	260.71	-35.91	37.28	-79.06	MIN
1192	57.69	402.18	-28.68	52.58	-59.33	MAX
	40.37	271.04	-42.69	36.63	-80.07	MIN
1193	82.16	411.48	-33.67	45.16	-59.00	MAX
	56.47	278.15	-49.56	30.24	-81.56	MIN
1194	112.54	421.28	-37.01	23.79	-58.25	MAX
	76.38	285.40	-53.88	15.58	-81.65	MIN
1195	128.18	427.27	-37.11	0.00	-57.68	MAX
	86.86	289.52	-54.25	0.00	-81.33	MIN
1196	128.18	427.27	-37.11	0.00	-57.68	MAX
	86.86	289.52	-54.25	0.00	-81.33	MIN
1197	128.18	427.27	-37.11	0.00	-57.68	MAX
	86.86	289.52	-54.25	0.00	-81.33	MIN
1198	128.18	427.27	-37.11	0.00	-57.68	MAX
	86.86	289.52	-54.25	0.00	-81.33	MIN
1199	128.18	427.27	-37.11	0.00	-57.68	MAX
	86.86	289.52	-54.25	0.00	-81.33	MIN
1200	-7.44	0.63	-0.52	-36.50	-5.05	MAX
	-16.07	0.00	-3.08	-94.09	-15.60	MIN
1201	-7.04	5.99	-0.23	-33.73	-10.47	MAX
	-11.48	1.05	-3.73	-68.15	-29.06	MIN
1202	-6.24	17.33	-0.73	-35.43	-22.42	MAX
	-10.20	4.40	-5.67	-56.97	-54.57	MIN
1203	-5.34	34.50	-1.99	-38.25	-36.70	MAX
	-8.33	10.83	-6.82	-50.57	-77.85	MIN
1204	-4.71	56.80	-3.94	-39.04	-52.66	MAX
	-5.63	21.16	-8.42	-42.71	-98.57	MIN
1205	-3.11	83.69	-6.00	-31.44	-68.28	MAX
	-4.55	35.75	-10.47	-37.86	-114.61	MIN
1206	-1.49	114.21	-7.61	-19.22	-81.32	MAX
	-4.08	54.24	-12.40	-29.67	-124.43	MIN
1207	-0.62	148.42	-8.59	-7.85	-90.08	MAX
	-3.36	76.79	-13.50	-20.48	-127.78	MIN
1208	0.38	182.87	-9.00	0.72	-93.87	MAX
	-2.14	101.01	-13.76	-11.76	-125.69	MIN
1209	1.82	216.05	-9.18	7.09	-93.28	MAX
	-0.59	125.54	-13.70	-4.18	-119.90	MIN
1210	3.67	247.27	-9.43	12.40	-89.43	MAX
	1.12	149.50	-13.90	2.24	-111.74	MIN
1211	5.75	276.28	-9.94	17.45	-83.19	MAX
	2.90	172.31	-14.67	7.89	-101.89	MIN
1212	8.01	302.99	-10.82	22.78	-75.17	MAX
	4.75	193.58	-16.14	13.22	-90.70	MIN
1213	10.54	327.30	-12.15	28.75	-65.80	MAX
	6.75	213.01	-18.35	18.63	-78.46	MIN
1214	13.61	349.19	-14.08	35.66	-55.53	MAX
	9.14	230.41	-21.41	24.38	-65.75	MIN
1215	17.76	368.63	-16.90	43.57	-45.15	MAX
	12.30	245.68	-25.67	30.49	-54.18	MIN
1216	24.38	385.67	-21.55	51.82	-36.09	MAX
	17.07	258.82	-32.36	36.28	-44.13	MIN
1217	34.79	395.62	-28.83	56.95	-28.97	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	24.20	266.76	-42.74	39.38	-36.29	MIN
1218	61.77	398.77	-38.98	48.66	-21.48	MAX
	42.25	269.71	-57.30	33.21	-27.95	MIN
1219	101.52	397.21	-44.07	17.95	-15.16	MAX
	68.95	269.26	-64.72	12.17	-21.02	MIN
1220	118.15	393.82	-45.19	0.00	-13.16	MAX
	80.16	267.21	-66.31	0.00	-18.95	MIN
1221	118.15	393.82	-45.19	0.00	-13.16	MAX
	80.16	267.21	-66.31	0.00	-18.95	MIN
1222	118.15	393.82	-45.19	0.00	-13.16	MAX
	80.16	267.21	-66.31	0.00	-18.95	MIN
1223	118.15	393.82	-45.19	0.00	-13.16	MAX
	80.16	267.21	-66.31	0.00	-18.95	MIN
1224	118.15	393.82	-45.19	0.00	-13.16	MAX
	80.16	267.21	-66.31	0.00	-18.95	MIN
1225	-2.05	0.86	-0.31	-20.13	-6.36	MAX
	-5.02	0.19	-1.35	-52.39	-17.71	MIN
1226	-1.80	5.99	-0.17	-17.49	-12.70	MAX
	-2.66	1.67	-1.48	-35.45	-33.23	MIN
1227	-1.49	18.20	-0.43	-17.68	-25.53	MAX
	-2.34	5.98	-2.40	-28.23	-60.93	MIN
1228	-1.08	36.20	-1.03	-18.44	-38.88	MAX
	-1.84	13.36	-3.08	-24.07	-83.01	MIN
1229	-0.81	58.86	-1.97	-18.45	-52.61	MAX
	-1.06	24.19	-3.89	-20.16	-100.66	MIN
1230	-0.35	85.44	-2.99	-14.62	-65.64	MAX
	-0.74	38.64	-4.91	-17.88	-113.70	MIN
1231	0.05	115.10	-3.84	-9.01	-76.66	MAX
	-0.74	56.49	-5.90	-14.25	-121.59	MIN
1232	0.16	148.28	-4.39	-3.59	-84.44	MAX
	-0.70	78.14	-6.61	-10.13	-124.07	MIN
1233	0.32	181.95	-4.65	0.80	-88.05	MAX
	-0.46	101.54	-6.95	-5.90	-121.41	MIN
1234	0.70	214.72	-4.79	4.30	-87.46	MAX
	-0.05	125.47	-7.13	-1.97	-114.60	MIN
1235	1.30	245.77	-4.99	7.36	-83.13	MAX
	0.48	149.00	-7.42	1.58	-104.51	MIN
1236	2.04	274.62	-5.36	10.41	-75.55	MAX
	1.08	171.43	-8.04	4.85	-91.62	MIN
1237	2.86	300.97	-5.98	13.75	-65.03	MAX
	1.73	192.26	-9.07	8.07	-76.05	MIN
1238	3.80	324.60	-6.92	17.66	-51.68	MAX
	2.45	211.09	-10.56	11.49	-60.75	MIN
1239	4.96	345.30	-8.24	22.49	-35.45	MAX
	3.35	227.61	-12.60	15.36	-42.14	MIN
1240	6.67	363.04	-10.21	28.57	-10.36	MAX
	4.63	241.73	-15.51	19.87	-20.24	MIN
1241	9.63	378.47	-13.28	35.90	17.79	MAX
	6.74	253.84	-19.92	24.97	4.24	MIN
1242	17.02	396.26	-20.34	42.81	42.71	MAX
	11.77	267.18	-30.11	29.52	23.64	MIN
1243	21.55	390.04	-31.18	42.45	58.81	MAX
	14.76	263.82	-45.91	29.00	36.38	MIN
1244	113.49	391.20	-53.55	30.06	85.22	MAX
	76.96	265.12	-78.79	20.62	55.68	MIN
1245	113.49	378.32	-54.64	0.00	105.81	MAX
	76.97	256.57	-80.40	0.00	70.19	MIN
1246	113.49	378.32	-54.64	0.00	105.81	MAX
	76.97	256.57	-80.40	0.00	70.19	MIN
1247	113.49	378.32	-54.64	0.00	105.81	MAX
	76.97	256.57	-80.40	0.00	70.19	MIN
1248	113.49	378.32	-54.64	0.00	105.81	MAX
	76.97	256.57	-80.40	0.00	70.19	MIN
1249	113.49	378.32	-54.64	0.00	105.81	MAX
	76.97	256.57	-80.40	0.00	70.19	MIN
1250	-0.08	0.08	-0.07	-11.01	-8.59	MAX
	-0.38	-0.05	-0.32	-29.55	-25.96	MIN
1251	0.12	5.16	0.11	-8.88	-15.60	MAX
	-0.06	1.77	-0.03	-17.94	-43.47	MIN
1252	0.07	17.71	0.16	-8.82	-29.01	MAX
	0.00	6.39	-0.06	-13.97	-72.63	MIN
1253	0.26	35.98	0.06	-9.04	-41.89	MAX
	0.03	13.99	-0.15	-11.67	-93.27	MIN
1254	0.37	58.71	-0.19	-8.95	-54.64	MAX
	0.18	24.90	-0.34	-9.77	-108.89	MIN
1255	0.36	85.05	-0.52	-6.92	-66.47	MAX
	0.25	39.30	-0.67	-8.65	-119.67	MIN
1256	0.25	114.32	-0.82	-4.19	-76.42	MAX
	0.18	56.98	-1.08	-6.92	-125.28	MIN
1257	0.10	147.14	-1.00	-1.54	-83.42	MAX
	0.01	78.35	-1.44	-4.99	-125.53	MIN
1258	-0.01	180.45	-1.09	0.68	-86.41	MAX
	-0.14	101.38	-1.70	-2.90	-120.60	MIN
1259	-0.06	212.81	-1.18	2.54	-84.93	MAX

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
	-0.18	124.84	-1.94	-0.86	-111.08	MIN
1260	-0.07	243.31	-1.36	4.24	-78.98	MAX
	-0.16	147.79	-2.29	1.05	-97.37	MIN
1261	-0.08	271.38	-1.68	6.00	-68.63	MAX
	-0.12	169.50	-2.84	2.88	-80.47	MIN
1262	-0.09	296.62	-2.19	7.97	-53.79	MAX
	-0.11	189.42	-3.65	4.73	-63.09	MIN
1263	-0.15	318.62	-2.91	10.35	-28.70	MAX
	-0.17	207.00	-4.76	6.76	-40.16	MIN
1264	-0.28	336.74	-3.91	13.40	6.72	MAX
	-0.37	221.65	-6.25	9.15	-10.54	MIN
1265	-0.42	350.16	-5.27	17.42	51.94	MAX
	-0.60	232.74	-8.19	12.10	24.20	MIN
1266	-1.17	357.40	-7.59	22.82	110.77	MAX
	-1.74	239.26	-11.50	15.84	66.55	MIN
1267	0.70	359.42	-9.89	28.56	187.45	MAX
	0.50	241.90	-14.75	19.68	121.01	MIN
1268	-2.59	402.57	-23.71	36.29	254.37	MAX
	-3.84	272.17	-35.00	24.70	168.88	MIN
1269	97.21	398.28	-58.18	-15.74	230.90	MAX
	66.01	270.08	-85.63	-23.53	154.72	MIN
1270	97.21	398.28	-58.18	-15.74	230.90	MAX
	66.01	270.08	-85.63	-23.53	154.72	MIN
1271	97.21	398.28	-58.18	-15.74	230.90	MAX
	66.01	270.08	-85.63	-23.53	154.72	MIN
1272	97.21	398.28	-58.18	-15.74	230.90	MAX
	66.01	270.08	-85.63	-23.53	154.72	MIN
1273	97.21	398.28	-58.18	-15.74	230.90	MAX
	66.01	270.08	-85.63	-23.53	154.72	MIN

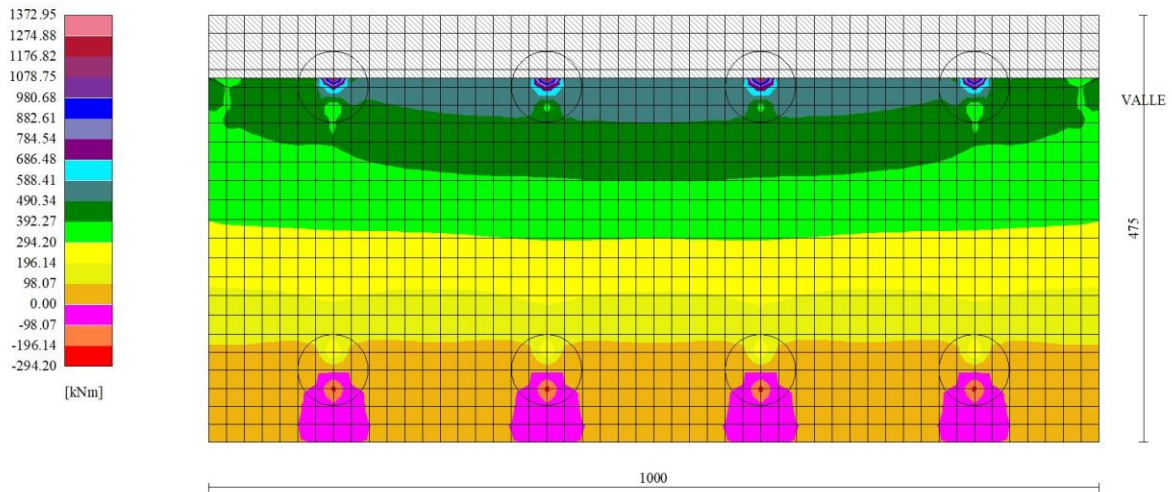


Fig. 14 - Piastra fondazione - Momento My (Combinazione n° 1)

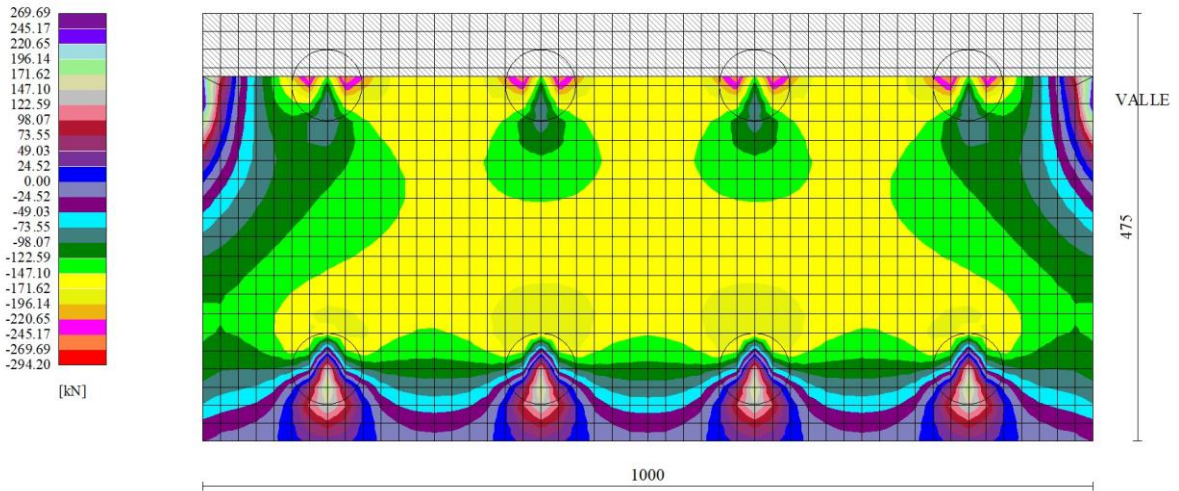


Fig. 15 - Piastra fondazione - Taglio Ty (Combinazione n° 1)

Sollecitazioni pali

Simbologia adottata

- N Sforzo normale, espresso in [kN]. Positivo se di compressione.
- T Taglio, espresso in [kN]. Positivo se diretto da monte verso valle
- M Momento, espresso in [kNm]. Positivo se tende le fibre contro terra (a monte)

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	243.72	493.52	-330.78	-858.87	149.83	389.04
14	1.95	267.63	492.93	4.25	11.03	424.28	1101.65
29	4.20	295.36	492.93	90.21	234.24	287.50	746.49
75	11.10	380.39	492.93	-0.41	-1.06	-12.12	-31.46
101	15.00	428.45	492.93	-0.34	-0.88	0.00	0.00

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	493.59	493.59	-330.78	-858.87	149.83	389.04
14	1.95	517.44	493.00	4.25	11.03	424.28	1101.65
29	4.20	545.17	493.00	90.21	234.24	287.50	746.49
75	11.10	630.20	493.00	-0.41	-1.06	-12.12	-31.46
101	15.00	678.27	493.00	-0.34	-0.88	0.00	0.00

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	212.36	493.58	-250.45	-1125.95	3.12	14.03
17	2.40	241.83	492.99	6.05	27.20	245.03	1101.58
32	4.65	269.56	492.99	52.12	234.33	162.37	729.97
77	11.40	352.75	492.99	-0.18	-0.82	-6.16	-27.70
101	15.00	397.11	492.99	-0.21	-0.93	0.00	0.00

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	473.86	493.49	-250.45	-1125.95	3.12	14.03
17	2.40	503.26	492.89	6.05	27.20	245.03	1101.58
32	4.65	530.99	492.89	52.12	234.33	162.37	729.97
77	11.40	614.18	492.89	-0.18	-0.82	-6.16	-27.70
101	15.00	658.54	492.89	-0.21	-0.93	0.00	0.00

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	217.11	493.58	-240.55	-1150.60	-4.87	-23.28
17	2.40	246.57	492.99	4.14	19.80	230.32	1101.65
32	4.65	274.30	492.99	48.98	234.27	154.20	737.56
77	11.40	357.49	492.99	-0.09	-0.45	-5.71	-27.33
101	15.00	401.85	492.99	-0.20	-0.93	0.00	0.00

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	462.84	493.58	-240.55	-1150.60	-4.87	-23.28
17	2.40	492.25	492.99	4.14	19.80	230.32	1101.65
32	4.65	519.97	492.99	48.98	234.27	154.20	737.56
77	11.40	603.16	492.99	-0.09	-0.45	-5.71	-27.33
101	15.00	647.52	492.99	-0.20	-0.93	0.00	0.00

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	231.23	493.54	-210.89	-1244.97	-28.58	-168.72
18	2.55	262.55	492.95	4.44	26.24	186.60	1101.59
33	4.80	290.27	492.95	39.69	234.29	123.82	730.97
101	15.00	415.98	492.95	-0.16	-0.95	0.00	0.00

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	429.89	493.54	-210.89	-1244.97	-28.58	-168.72
18	2.55	461.15	492.95	4.44	26.24	186.60	1101.59
33	4.80	488.88	492.95	39.69	234.29	123.82	730.97
101	15.00	614.58	492.95	-0.16	-0.95	0.00	0.00

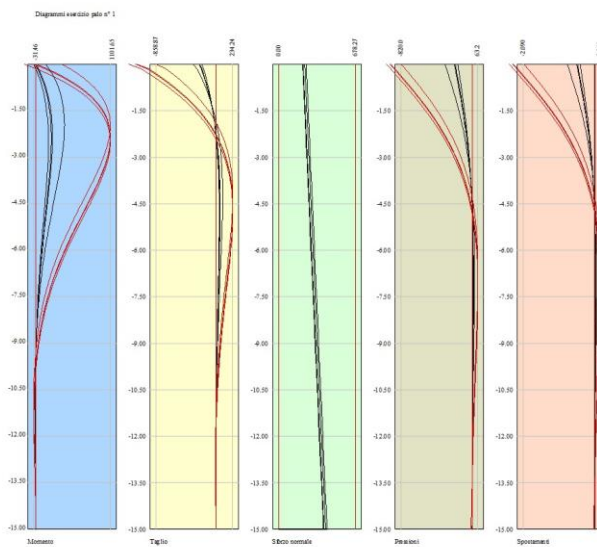


Fig. 16 - Sollecitazioni palo (Palo n° 1) (Inviluppo)

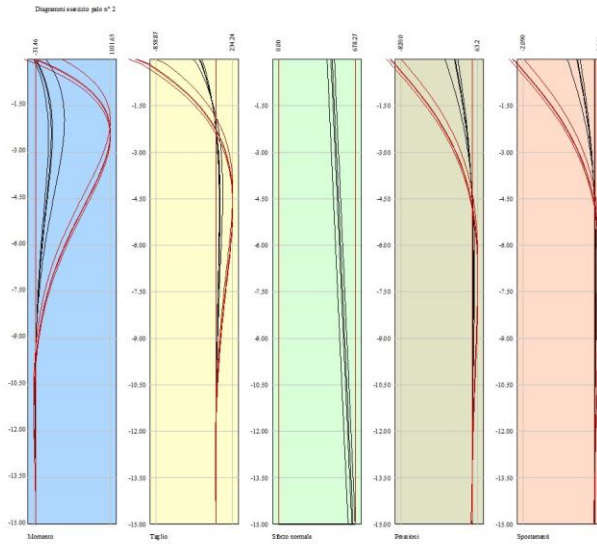


Fig. 17 - Sollecitazioni palo (Palo n° 2) (Inviluppo)

Elenco ferri

Simbologia adottata

n°	Indice del ferro
nf	numero ferri
D	diametro ferro espresso in [mm]
L	Lunghezza ferro espresso in [m]
P _{ferro}	Peso ferro espresso in [kN]

Piastra fondazione

n°	Tipo	nf	D [mm]	L [m]	P _f [kN]	P _{gf} [kN]	V _{cls} [mc]	
Totale							0.0000	47.50

Pali

Pali in c.a. (singolo palo della fila)

Simbologia adottata

n°	Indice della fila
nf	numero ferri
D	diametro ferro espresso in [mm]
L	Lunghezza ferro espresso in [m]
P _{ferro}	Peso ferro espresso in [kN]
V _{cls}	Volume calcestruzzo/malta espresso in [mc]

n°	Tipo ferro	nf	D [mm]	L [m]	P _{ferro} [kN]	V _{cls} [mc]
1	Ferri longitudinali	20	26.00	15.78	0.6450	
	Staffe/Spirale	1	10.00	352.07	2.1287	7.54
Totale (4 pali)					60.1127	30.16
2	Ferri longitudinali	20	26.00	15.78	0.6450	
	Staffe/Spirale	1	10.00	352.07	2.1287	7.54
Totale (4 pali)					60.1127	30.16

Computo metrico

	U.M.	Quantità	Prezzo unitario [Euro]	Importo [Euro]
Calcestruzzo in elevazione	[mc]	3.85	72.30	278.35
Calcestruzzo in fondazione	[mc]	4.75	61.97	294.36
Calcestruzzo magro	[mc]	4.95	46.48	230.08
Casseformi	[mq]	110.00	13.94	1533.40
Scavo a sezione obbligatoria	[mc]	47.50	9.30	441.75
Totale muro				2777.94
Calcestruzzo pali	[mc]	60.32	72.30	4361.03
Acciaio pali	[kN]	120.2253	0.90	11033.44
Perforazione	[m]	240.00	240.00	57600.00
Totale pali				72994.47
Totale				75772.41

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Progetto:
Ditta:
Comune:
Progettista:
Direttore dei Lavori:
Impresa:

Normative di riferimento

- Legge nr. 1086 del 05/11/1971.
Norme per la disciplina delle opere in conglomerato cementizio, normale e precompresso ed a struttura metallica.
- Legge nr. 64 del 02/02/1974.
Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche.
- D.M. LL.PP. del 11/03/1988.
Norme tecniche riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione e il collaudo delle opere di sostegno delle terre e delle opere di fondazione.
- D.M. LL.PP. del 14/02/1992.
Norme tecniche per l'esecuzione delle opere in cemento armato normale e precompresso e per le strutture metalliche.
- D.M. 9 Gennaio 1996
Norme Tecniche per il calcolo, l'esecuzione ed il collaudo delle strutture in cemento armato normale e precompresso e per le strutture metalliche
- D.M. 16 Gennaio 1996
Norme Tecniche relative ai 'Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi'
- D.M. 16 Gennaio 1996
Norme Tecniche per le costruzioni in zone sismiche
- Circolare Ministero LL.PP. 15 Ottobre 1996 N. 252 AA.GG./S.T.C.
Istruzioni per l'applicazione delle Norme Tecniche di cui al D.M. 9 Gennaio 1996
- Circolare Ministero LL.PP. 10 Aprile 1997 N. 65/AA.GG.
Istruzioni per l'applicazione delle Norme Tecniche per le costruzioni in zone sismiche di cui al D.M. 16 Gennaio 1996
- Norme Tecniche per le Costruzioni 2018 (D.M. 17 Gennaio 2018)
- Circolare C.S.LL.PP. 21/01/2019 n.7 - Istruzioni per l'applicazione dell'Aggiornamento delle Norme tecniche per le costruzioni di cui al D.M. 17 gennaio 2018

Richiami teorici

Il calcolo dei muri di sostegno viene eseguito secondo le seguenti fasi:

- Calcolo della spinta del terreno
- Verifica a ribaltamento
- Verifica a scorrimento del muro sul piano di posa
- Verifica della stabilità complesso fondazione terreno (carico limite)
- Verifica della stabilità globale

Se il muro è in calcestruzzo armato: Calcolo delle sollecitazioni sia del muro che della fondazione, progetto delle armature e relative verifiche dei materiali.

Se il muro è a gravità: Calcolo delle sollecitazioni sia del muro che della fondazione e verifica in diverse sezioni al ribaltamento, allo scorrimento ed allo schiacciamento.

Calcolo della spinta sul muro

Valori caratteristici e valori di calcolo

Effettuando il calcolo tramite gli Eurocodici è necessario fare la distinzione fra i parametri caratteristici ed i valori di calcolo (o di progetto) sia delle azioni che delle resistenze.

I valori di calcolo si ottengono dai valori caratteristici mediante l'applicazione di opportuni coefficienti di sicurezza parziali γ . In particolare si distinguono combinazioni di carico di tipo **A1-M1** nelle quali vengono incrementati i carichi e lasciati inalterati i parametri di resistenza del terreno e combinazioni di carico di tipo **A2-M2** nelle quali vengono ridotti i parametri di resistenza del terreno e incrementati i soli carichi variabili.

Metodo di Culmann

Il metodo di Culmann adotta le stesse ipotesi di base del metodo di Coulomb. La differenza sostanziale è che mentre Coulomb considera un terrapieno con superficie a pendenza costante e carico uniformemente distribuito (il che permette di ottenere una espressione in forma chiusa per il coefficiente di spinta) il metodo di Culmann consente di analizzare situazioni con profilo di forma generica e carichi sia concentrati che distribuiti comunque disposti. Inoltre, rispetto al metodo di Coulomb, risulta più immediato e lineare tener conto della coesione del masso spingente. Il metodo di Culmann, nato come metodo essenzialmente grafico, si è evoluto per essere trattato mediante analisi numerica (noto in questa forma come metodo del cuneo di tentativo). Come il metodo di Coulomb anche questo metodo considera una superficie di rottura rettilinea.

I passi del procedimento risolutivo sono i seguenti:

- si impone una superficie di rottura (angolo di inclinazione ρ rispetto all'orizzontale) e si considera il cuneo di spinta delimitato dalla superficie di rottura stessa, dalla parete su cui si calcola la spinta e dal profilo del terreno;
- si valutano tutte le forze agenti sul cuneo di spinta e cioè peso proprio (W), carichi sul terrapieno, resistenza per attrito e per coesione lungo la superficie di rottura (R e C) e resistenza per coesione lungo la parete (A);
- dalle equazioni di equilibrio si ricava il valore della spinta S sulla parete.

Questo processo viene iterato fino a trovare l'angolo di rottura per cui la spinta risulta massima.

La convergenza non si raggiunge se il terrapieno risulta inclinato di un angolo maggiore dell'angolo d'attrito del terreno.

Nei casi in cui è applicabile il metodo di Coulomb (profilo a monte rettilineo e carico uniformemente distribuito) i risultati ottenuti col metodo di Culmann coincidono con quelli del metodo di Coulomb.

Le pressioni sulla parete di spinta si ricavano derivando l'espressione della spinta S rispetto all'ordinata z . Noto il diagramma delle pressioni è possibile ricavare il punto di applicazione della spinta.

Spinta in presenza di falda

Nel caso in cui a monte del muro sia presente la falda il diagramma delle pressioni sul muro risulta modificato a causa della sottospinta che l'acqua esercita sul terreno. Il peso di volume del terreno al di sopra della linea di falda non subisce variazioni. Viceversa al di sotto del livello di falda va considerato il peso di volume di galleggiamento

$$\gamma' = \gamma_{\text{sat}} - \gamma_w$$

dove γ_{sat} è il peso di volume saturo del terreno (dipendente dall'indice dei pori) e γ_w è il peso specifico dell'acqua. Quindi il diagramma delle pressioni al di sotto della linea di falda ha una pendenza minore. Al diagramma così ottenuto va sommato il diagramma triangolare legato alla pressione idrostatica esercitata dall'acqua.

Spinta in presenza di sisma

Per tener conto dell'incremento di spinta dovuta al sisma si fa riferimento al metodo di Mononobe-Okabe (cui fa riferimento la Normativa Italiana).

La Normativa Italiana suggerisce di tener conto di un incremento di spinta dovuto al sisma nel modo seguente.

Detta ε l'inclinazione del terrapieno rispetto all'orizzontale e β l'inclinazione della parete rispetto alla verticale, si calcola la spinta S' considerando un'inclinazione del terrapieno e della parte pari a

$$\varepsilon' = \varepsilon + \theta \quad \beta' = \beta + \theta$$

dove $\theta = \arctg(k_h/(1 \pm k_v))$ essendo k_h il coefficiente sismico orizzontale e k_v il coefficiente sismico verticale, definito in funzione di k_h . In presenza di falda a monte, θ assume le seguenti espressioni:

Terreno a bassa permeabilità

$$\theta = \arctan\left(\frac{\gamma_{sat} k_h}{\gamma_{sat} - \gamma_w 1 \pm k_v}\right)$$

Terreno a permeabilità elevata

$$\theta = \arctan\left(\frac{\gamma k_h}{\gamma_{sat} - \gamma_w 1 \pm k_v}\right)$$

Detta S' la spinta calcolata in condizioni statiche l'incremento di spinta da applicare è espresso da

$$\Delta S = AS' - S$$

dove il coefficiente A vale

$$A = \frac{\cos^2(\beta + \theta)}{\cos^2 \beta \cos \theta}$$

In presenza di falda a monte, nel coefficiente A si tiene conto dell'influenza dei pesi di volume nel calcolo di θ .

Adottando il metodo di Mononobe-Okabe per il calcolo della spinta, il coefficiente A viene posto pari a 1.

Tale incremento di spinta è applicato a metà altezza della parete di spinta nel caso di forma rettangolare del diagramma di incremento sismico, allo stesso punto di applicazione della spinta statica nel caso in cui la forma del diagramma di incremento sismico è uguale a quella del diagramma statico.

Oltre a questo incremento bisogna tener conto delle forze d'inerzia orizzontali e verticali che si destano per effetto del sisma. Tali forze vengono valutate come

$$F_{IH} = k_h W \quad F_{IV} = \pm k_v W$$

dove W è il peso del muro, del terreno soprastante la mensola di monte ed i relativi sovraccarichi e va applicata nel baricentro dei pesi. Il metodo di Culmann tiene conto automaticamente dell'incremento di spinta. Basta inserire nell'equazione risolutiva la forza d'inerzia del cuneo di spinta. La superficie di rottura nel caso di sisma risulta meno inclinata della corrispondente superficie in assenza di sisma.

Verifica alla stabilità globale

La verifica alla stabilità globale del complesso muro+terreno deve fornire un coefficiente di sicurezza non inferiore a η_g .

Viene usata la tecnica della suddivisione a strisce della superficie di scorrimento da analizzare. La superficie di scorrimento viene supposta circolare e determinata in modo tale da non avere intersezione con il profilo del muro. In presenza di pali, per ogni centro vengono analizzate 3 famiglie di superfici di scorrimento: la prima famiglia di superfici passa per tacco della fondazione, la seconda per il punto centrale della lunghezza dei pali, la terza per il piede dei pali. Si determina il minimo coefficiente di sicurezza su una maglia di centri di dimensioni 20x20 posta in prossimità della sommità del muro. Il numero di strisce è pari a 25.

Si adotta per la verifica di stabilità globale il metodo di Bishop.

Il coefficiente di sicurezza nel metodo di Bishop si esprime secondo la seguente formula:

$$\eta = \frac{\sum_{i=0}^n \left[\frac{c_i b_i + (W_i - u_i b_i) \tan \varphi_i}{m} \right]}{\sum_{i=0}^n W_i \sin \alpha_i}$$

dove il termine m è espresso da

$$m = \left(1 + \frac{\tan \varphi_i \tan \alpha_i}{\eta} \right) \cos \alpha_i$$

In questa espressione n è il numero delle strisce considerate, b_i e α_i sono la larghezza e l'inclinazione della base della striscia i -esima rispetto all'orizzontale, W_i è il peso della striscia i -esima, c_i e φ_i sono le caratteristiche del terreno (coesione ed angolo di attrito) lungo la base della striscia ed u_i è la pressione neutra lungo la base della striscia.

L'espressione del coefficiente di sicurezza di Bishop contiene al secondo membro il termine m che è funzione di η . Quindi essa viene risolta per successive approssimazioni assumendo un valore iniziale per η da inserire nell'espressione di m ed iterare finquando il valore calcolato coincide con il valore assunto.

Analisi dei pali

Per l'analisi della capacità portante dei pali occorre determinare alcune caratteristiche del terreno in cui si va ad operare. In particolare bisogna conoscere l'angolo d'attrito ϕ e la coesione c . Per pali soggetti a carichi trasversali è necessario conoscere il modulo di reazione laterale o il modulo elastico laterale.

La capacità portante di un palo solitamente viene valutata come somma di due contributi: portata di base (o di punta) e portata per attrito laterale lungo il fusto. Cioè si assume valida l'espressione:

$$Q_t = Q_p + Q_l - W_p$$

dove:

Q_T portanza totale del palo
 Q_P portanza di base del palo
 Q_L portanza per attrito laterale del palo
 W_P peso proprio del palo

e le due componenti Q_p e Q_l sono calcolate in modo indipendente fra loro.

Dalla capacità portante del palo si ricava il carico ammissibile del palo Q_A applicando il coefficiente di sicurezza della portanza alla punta η_p ed il coefficiente di sicurezza della portanza per attrito laterale η_l .

Palo compresso:

$$Q_d = \frac{Q_p}{\eta_p} + \frac{Q_l}{\eta_l} - W_p$$

Palo teso:

$$Q_d = \frac{Q_l}{\eta_l} - W_p$$

Capacità portante di punta

In generale la capacità portante di punta viene calcolata tramite l'espressione:

$$Q_p = A_p \left(cN'_c + qN'_q + \frac{1}{2} B\gamma N'_\gamma \right)$$

dove:

A_p è l'area portante efficace della punta del palo
 c è la coesione
 q è la pressione geostatica alla quota della punta del palo
 γ è il peso specifico del terreno
 D è il diametro del palo
 N'_c, N'_q, N'_γ sono i coefficienti di capacità portante corretti per tener conto degli effetti di forma e di profondità.

Capacità portante per resistenza laterale

La resistenza laterale è data dall'integrale esteso a tutta la superficie laterale del palo delle tensioni tangenziali palo-terreno in condizioni limite:

$$Q_l = \int_S \tau_a dS$$

dove τ_a è dato dalla nota relazione di Coulomb

$$\tau_a = c_a + \sigma_h \tan \delta$$

dove:

c_a è l'adesione palo-terreno
 δ è l'angolo di attrito palo-terreno
 γ è il peso specifico del terreno
 z è la generica quota a partire dalla testa del palo
 L è la lunghezza del palo
 P è il perimetro del palo
 K_s è il coefficiente di spinta che dipende dalle caratteristiche meccaniche e fisiche del terreno dal suo stato di addensamento e dalle modalità di realizzazione del palo.

Portanza trasversale dei pali - Analisi ad elementi finiti

Nel modello di terreno alla Winkler il terreno viene schematizzato come una serie di molle elastiche indipendenti fra di loro. Le molle che schematizzano il terreno vengono caratterizzate tramite una costante elastica K espressa in $\text{Kg/cm}^2/\text{cm}$ che rappresenta la pressione (in Kg/cm^2) che bisogna applicare per ottenere l'abbassamento di 1 cm.

Nel metodo degli elementi finiti occorre discretizzare il particolare problema. Nel caso specifico il palo viene suddiviso in un certo numero di elementi di eguale lunghezza. Ogni elemento è caratterizzato da una sezione avente area ed inerzia coincidente con quella del palo.

Il terreno viene schematizzato come una serie di molle orizzontali che reagiscono agli spostamenti nei due versi. La rigidezza assiale della singola molla è proporzionale alla costante di Winkler orizzontale del terreno, al diametro del palo ed alla lunghezza dell'elemento. La molla, però, non viene vista come un elemento infinitamente elastico ma come un elemento con comportamento del tipo elastoplastico perfetto (diagramma sforzi-deformazioni di tipo bilatero). Essa presenta una resistenza crescente al crescere degli spostamenti fino a che l'entità degli spostamenti si mantiene al di sotto di un certo spostamento limite, X_{max} oppure fino a quando non si raggiunge il valore della pressione limite. Superato tale limite non si ha un incremento di resistenza. È evidente che assumendo un comportamento di questo tipo ci si addentra in un tipico problema non lineare che può essere risolto solo mediante una analisi al passo. Questa modellazione presenta il notevole vantaggio di poter schematizzare tutti quei comportamenti individuati da Broms e che sarebbe impossibile trattare in un modello numerico. In particolare risulta automatico analizzare casi in cui si ha insufficiente portanza non per rottura del palo ma per rottura del terreno (vedi il caso di un palo molto rigido in un terreno molle).

Determinazione degli scarichi sul palo.

Gli scarichi sui pali vengono determinati mediante il metodo delle rigidezze.

La piastra di fondazione viene considerata infinitamente rigida (3 gradi di libertà) ed i pali vengono considerati incastrati o incernierati (la scelta del vincolo viene fatta dall'Utente nella tabella CARATTERISTICHE del sottomenu PALI) a tale piastra.

Viene effettuata una prima analisi di ogni palo di ciascuna fila (i pali di ogni fila hanno le stesse caratteristiche) per costruire una curva carichi-spostamenti del palo. Questa curva viene costruita considerando il palo elastico. Si tratta, in definitiva, della matrice di rigidezza del palo K_e , costruita imponendo traslazioni e rotazioni unitarie per determinare le corrispondenti sollecitazioni in testa al palo.

Nota la matrice di rigidezza di ogni palo si assembla la matrice globale (di dimensioni 3×3) della palificata, K .

A questo punto, note le forze agenti in fondazione (N, T, M) si possono ricavare gli spostamenti della piastra (abbassamento, traslazione e rotazione) e le forze che si scaricano su ciascun palo. Infatti indicando con p il vettore dei carichi e con u il vettore degli spostamenti della piastra abbiamo:

$$u = K^{-1}p$$

Noti gli spostamenti della piastra, e quindi della testa dei pali, abbiamo gli scarichi su ciascun palo. Allora per ciascun palo viene effettuata un'analisi elastoplastica incrementale (tramite il metodo degli elementi finiti) che, tenendo conto della plasticizzazione del terreno, calcola le sollecitazioni in tutte le sezioni del palo.

Se, le caratteristiche del terreno (rappresentate da $K(h)$) sono tali che se non è possibile raggiungere l'equilibrio si ha collasso per 'rottura' del terreno.

Dati

Materiali

Simbologia adottata

n°	Indice materiale
Descr	Descrizione del materiale
Calcestruzzo armato	
C	Classe di resistenza del cls
A	Classe di resistenza dell'acciaio
γ	Peso specifico, espresso in [kN/mc]
R _{ck}	Resistenza caratteristica a compressione, espressa in [kPa]
E	Modulo elastico, espresso in [kPa]
ν	Coeff. di Poisson
n	Coeff. di omogenizzazione acciaio/cls
ntc	Coeff. di omogenizzazione cls tesato/compresso

Calcestruzzo armato

n°	Descr	C	A	γ	R _{ck}	E	ν	n	ntc
				[kN/mc]	[kPa]	[kPa]			
1	C30/37	C30/37	B450C	24.5170	35000	32587986	0.30	15.00	0.50

Acciai

Descr	f _{yk}	f _{uk}
	[kPa]	[kPa]
B450C	449936	539963

Tipologie pali

Simbologia adottata

n°	Indice tipologia palo
Descr	Descrizione tipologia palo
P	Contributo portanza palo (laterale e/o punta)
T	Tecnologia costruttiva (trivellato, infisso o elica continua)
V	Vincolo palo-fondazione: Cerniera o Incastro (libero o impedito di ruotare in testa)
Imat	Indice materiale che lo costituisce
BD	usa metodo di Bustamante-Doix
PN	Portanza nota
Pp, PI	Portanza di punta e laterale caratteristica, espressa in [kN]

n°	Descr	P	T	V	Imat	BD	PN	Pp	PI
1	Tipologia 1	Laterale + Punta	Trivellato	Incastro	1	NO	SI	493.00	1534.00

Geometria profilo terreno a monte del muro

Simbologia adottata

(Sistema di riferimento con origine in testa al muro, ascissa X positiva verso monte, ordinata Y positiva verso l'alto)

n°	numero ordine del punto
X	ascissa del punto espressa in [m]
Y	ordinata del punto espressa in [m]
A	inclinazione del tratto espressa in [°]

n°	X	Y	A
	[m]	[m]	[°]
1	0.00	0.00	0.000
2	30.00	5.00	9.462
3	31.00	5.00	0.000

Inclinazione terreno a valle del muro rispetto all'orizzontale 0.000 [°]

Falda

Simbologia adottata

(Sistema di riferimento con origine in testa al muro, ascissa X positiva verso monte, ordinata Y positiva verso l'alto)

n°	numero ordine del punto
X	ascissa del punto espressa in [m]
Y	ordinata del punto espressa in [m]
A	inclinazione del tratto espressa in [°]

n°	X	Y	A
----	---	---	---

	[m]	[m]	[°]
1	-5.00	-6.50	0.000
2	0.00	-6.50	0.000
3	5.00	-6.50	0.000

Geometria muro

Geometria paramento e fondazione

Lunghezza muro	10.00	[m]
Paramento		
Materiale	C30/37	
Altezza paramento	5.50	[m]
Altezza paramento libero	5.50	[m]
Spessore in sommità	0.70	[m]
Spessore all'attacco con la fondazione	0.70	[m]
Inclinazione paramento esterno	0.00	[°]
Inclinazione paramento interno	0.00	[°]
Fondazione		
Materiale	C30/37	
Lunghezza mensola di valle	4.05	[m]
Lunghezza mensola di monte	0.00	[m]
Lunghezza totale	4.75	[m]
Inclinazione piano di posa	0.00	[°]
Spessore	1.00	[m]
Spessore magrone	0.10	[m]

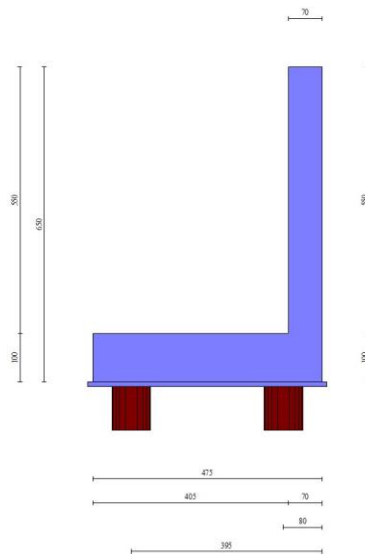


Fig. 1 - Sezione quotata del muro

Descrizione pali di fondazione

Simbologia adottata

n°	numero d'ordine della fila
X	ascissa della fila misurata dallo spigolo di monte della fondazione espressa in [m]
I	interasse tra i pali, espressa in [m]
f	franco laterale (distanza minima dal bordo laterale), espressa in [m]
Np	Numero di pali della fila
D	diametro dei pali della fila espresso in [cm]
L	lunghezza dei pali della fila espressa in [m]
α	inclinazione dei pali della fila rispetto alla verticale espressa in [°]
ALL	allineamento dei pali della fila rispetto al baricentro della fondazione (CENTRATI o SFALSATI)

n°	Tipologia	X	I	f	Np	D	L	α	ALL
----	-----------	---	---	---	----	---	---	----------	-----

n°	H	α	Terreno	Kwn	Kwt	Kw	Ks	Cesp	Kst _{sta}	Kst _{sis}
	[m]	[°]		[Kg/cm ³]	[Kg/cm ³]	[Kg/cm ³]				
1	5.50	0.000	Rilevato	0.000	0.000	0.000	0.500	1.000	---	---
2	1.50	0.000	coltre	0.000	0.000	20.068	0.500	1.000	---	---
3	30.00	0.000	SFT2	0.000	0.000	0.000	0.000	1.000	---	---

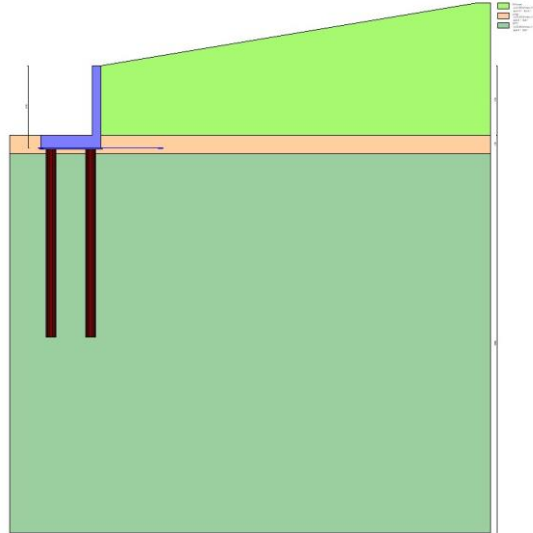


Fig. 3 - Stratigrafia

Condizioni di carico

Simbologia adottata

Carichi verticali positivi verso il basso.

Carichi orizzontali positivi verso sinistra.

Momento positivo senso antiorario.

X	Ascissa del punto di applicazione del carico concentrato espressa in [m]
F _x	Componente orizzontale del carico concentrato espressa in [kN]
F _y	Componente verticale del carico concentrato espressa in [kN]
M	Momento espresso in [kNm]
X _i	Ascissa del punto iniziale del carico ripartito espressa in [m]
X _f	Ascissa del punto finale del carico ripartito espressa in [m]
Q _i	Intensità del carico per x=X _i espressa in [kN]
Q _f	Intensità del carico per x=X _f espressa in [kN]

Condizione n° 1 (Condizione 1) - VARIABILE TF

Coeff. di combinazione $\Psi_0=0.75$ - $\Psi_1=0.75$ - $\Psi_2=0.00$

Carichi sul terreno

n°	Tipo	X	F _x	F _y	M	X _i	X _f	Q _i	Q _f
		[m]	[kN]	[kN]	[kNm]	[m]	[m]	[kN]	[kN]
1	Distribuito					0.50	20.00	20.0000	20.0000

Normativa

Normativa usata: **Norme Tecniche sulle Costruzioni 2018 (D.M. 17.01.2018) + Circolare C.S.LL.PP. 21/01/2019 n.7**

Coeff. parziali per le azioni o per l'effetto delle azioni

Carichi	Effetto		Combinazioni statiche				Combinazioni sismiche			
			HYD	UPL	EQU	A1	A2	EQU	A1	A2
Permanenti strutturali	Favorevoli	$\gamma_{G1, fav}$	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Permanenti strutturali	Sfavorevoli	$\gamma_{G1, sfav}$	1.10	1.10	1.30	1.30	1.00	1.00	1.00	1.00
Permanenti non strutturali	Favorevoli	$\gamma_{G2, fav}$	0.00	0.80	0.80	0.80	0.80	0.00	0.00	0.00
Permanenti non strutturali	Sfavorevoli	$\gamma_{G2, sfav}$	1.00	1.50	1.50	1.50	1.30	1.00	1.00	1.00
Variabili	Favorevoli	$\gamma_{Q, fav}$	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Variabili	Sfavorevoli	$\gamma_{Q, sfav}$	1.50	1.50	1.50	1.50	1.30	1.00	1.00	1.00
Variabili da traffico	Favorevoli	$\gamma_{QT, fav}$	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Variabili da traffico	Sfavorevoli	$\gamma_{QT, sfav}$	1.00	1.50	1.35	1.35	1.15	1.00	1.00	1.00

Coeff. parziali per i parametri geotecnici del terreno

Parametro		Combinazioni statiche		Combinazioni sismiche	
		M1	M2	M1	M2
Tangente dell'angolo di attrito	$\gamma_{\tan(\phi)}$	1.00	1.25	1.00	1.00
Coesione efficace	γ_c	1.00	1.25	1.00	1.00
Resistenza non drenata	γ_{cu}	1.00	1.40	1.00	1.00
Peso nell'unità di volume	γ_r	1.00	1.00	1.00	1.00

Coeff. parziali γ_R per le verifiche agli stati limite ultimi STR e GEO

Verifica	Combinazioni statiche			Combinazioni sismiche		
	R1	R2	R3	R1	R2	R3
Capacità portante	--	--	1.40	--	--	1.20
Scorrimento	--	--	1.10	--	--	1.00
Resistenza terreno a valle	--	--	1.40	--	--	1.20
Ribaltamento	--	--	1.15	--	--	1.00
Stabilità fronte di scavo	--	1.10	--	--	1.20	--

Carichi verticali. Coeff. parziali γ_R da applicare alle resistenze caratteristiche

Resistenza		Pali infissi			Pali trivellati			Pali ad elica continua		
		R1	R2	R3	R1	R2	R3	R1	R2	R3
Punta	γ_b	--	--	1.15	--	--	1.35	--	--	1.30
Laterale compressione	γ_s	--	--	1.15	--	--	1.15	--	--	1.15
Totale compressione	γ_t	--	--	1.15	--	--	1.30	--	--	1.25
Laterale trazione	γ_{st}	--	--	1.25	--	--	1.25	--	--	1.25

Carichi trasversali. Coeff. parziali γ_R da applicare alle resistenze caratteristiche

		R1	R2	R3
Trasversale	γ_t	--	--	1.30

Coefficienti di riduzione ζ per la determinazione della resistenza caratteristica dei pali

Numero di verticali indagate 1

$\zeta_3=1.70$ $\zeta_4=1.70$

Descrizione combinazioni di carico

Con riferimento alle azioni elementari prima determinate, si sono considerate le seguenti combinazioni di carico:

- Combinazione sismica, impiegata per gli stati limite ultimi connessi all'azione sismica E:

$$E + G_1 + G_2 + \Psi_{2,1} Q_{k1} + \Psi_{2,2} Q_{k2} + \Psi_{2,3} Q_{k3} + \dots$$

I valori dei coeff. $\Psi_{0,j}$, $\Psi_{1,j}$, $\Psi_{2,j}$ sono definiti nelle singole condizioni variabili. per I valori dei coeff. γ_G e γ_Q , sono definiti nella tabella normativa.

In particolare si sono considerate le seguenti combinazioni:

Simbologia adottata

γ Coefficiente di partecipazione della condizione
 Ψ Coefficiente di combinazione della condizione

Combinazione n° 1 - STR (A1-M1-R3) H + V

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Favorevole
Peso terrapieno	1.00	--	Favorevole
Spinta terreno	1.00	--	Sfavorevole

Combinazione n° 2 - STR (A1-M1-R3) H - V

Condizione	γ	Ψ	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole

Dati sismici

	Simbolo	U.M.	SLU	SLE
Accelerazione al suolo	a_g	[m/s ²]	3.385	0.000

	Simbolo	U.M.		SLU	SLE
Accelerazione al suolo	a_g/g	[%]		0.345	0.000
Massimo fattore amplificazione spettro orizzontale	F0			2.354	2.430
Periodo inizio tratto spettro a velocità costante	Tc*			0.425	0.370
Tipo di sottosuolo - Coefficiente stratigrafico	Ss		C	1.210	1.500
Categoria topografica - Coefficiente amplificazione topografica	St		T1	1.000	

Stato limite ...	Coeff. di riduzione β_m	kh	kv
Ultimo	0.760	31.731	15.866
Ultimo - Ribaltamento	1.000	41.752	20.876
Esercizio	0.200	0.000	0.000

Forma diagramma incremento sismico **Stessa forma del diagramma statico**

Opzioni di calcolo

Spinta

Metodo di calcolo della spinta	Culmann
Tipo di spinta	Spinta a riposo
Terreno a bassa permeabilità	NO
Superficie di spinta limitata	NO

Stabilità globale

Metodo di calcolo della stabilità globale	Bishop
---	--------

Altro

Partecipazione spinta passiva terreno antistante	0.00
Partecipazione resistenza passiva dente di fondazione	50.00
Componente verticale della spinta nel calcolo delle sollecitazioni	SI
Considera terreno sulla fondazione di valle	NO
Considera spinta e peso acqua fondazione di valle	NO

Spostamenti

Modello a blocchi	
Non è stato richiesto il calcolo degli spostamenti	
Spostamento limite	10.00 [cm]

Opzioni calcolo pali

Portanza verticale

Metodo di calcolo della portanza alla punta	Berezantzev
Metodo di calcolo della portanza alla laterale	Integrazione delle tensioni tangenziali ($k_s \sigma_v \tan(\delta) + c_a$)
Correzione angolo di attrito in funzione del tipo di palo (infisso/trivellato)	Attiva
Andamento pressione verticale nel calcolo della portanza alla punta	σ_v con la profondità Pressione geostatica
Andamento pressione verticale nel calcolo della portanza laterale	Pressione geostatica
Applica coeff. parziale azione peso proprio palo e attrito negativo	

Portanza trasversale

Costante di Winkler: costante pari a 3.00 [Kg/cm ² /cm] Criterio rottura palo-terreno	
- Spostamento limite	Non attivo
- Pressione limite	Pressione limite costante $p_l = 35.69$ [kPa]
- Palo infinitamente elastico	Attivo

Cedimenti

Metodo di calcolo	Metodo agli elementi finiti
Spostamento limite alla punta	1.00 [cm]
Spostamento limite laterale	0.50 [cm]

Specifiche per le verifiche nelle combinazioni allo Stato Limite Ultimo (SLU)

	SLU	Eccezionale
Coefficiente di sicurezza calcestruzzo a compressione	1.50	1.00
Coefficiente di sicurezza acciaio	1.15	1.00
Fattore di riduzione da resistenza cubica a cilindrica	0.83	0.83
Fattore di riduzione per carichi di lungo periodo	0.85	0.85
Coefficiente di sicurezza per la sezione	1.00	1.00

Risultati per combinazione

Spinta e forze

Simbologia adottata

Ic	Indice della combinazione
A	Tipo azione
I	Inclinazione della spinta, espressa in [°]
V	Valore dell'azione, espressa in [kN]
Cx, Cy	Componente in direzione X ed Y dell'azione, espressa in [kN]
Px, Py	Coordinata X ed Y del punto di applicazione dell'azione, espressa in [m]

Ic	A	V [kN]	I [°]	Cx [kN]	Cy [kN]	Px [m]	Py [m]
1	Spinta statica	131.61	12.62	128.43	28.75	0.00	-3.47
	Incremento di spinta sismica		268.37	261.89	58.63	0.00	-4.33
	Peso/Inerzia muro			66.90	210.85/33.45	-1.47	-4.55
	Peso dell'acqua sulla fondazione di valle				0.00	0.00	0.00
	Resistenza pali				-8792.72		
2	Spinta statica	131.61	14.32	127.52	32.56	0.00	-3.47
	Incremento di spinta sismica		224.27	217.30	55.49	0.00	-4.33
	Peso/Inerzia muro			66.90	210.85/-33.45	-1.47	-4.55
	Peso dell'acqua sulla fondazione di valle				0.00	0.00	0.00
	Resistenza pali				-7917.66		

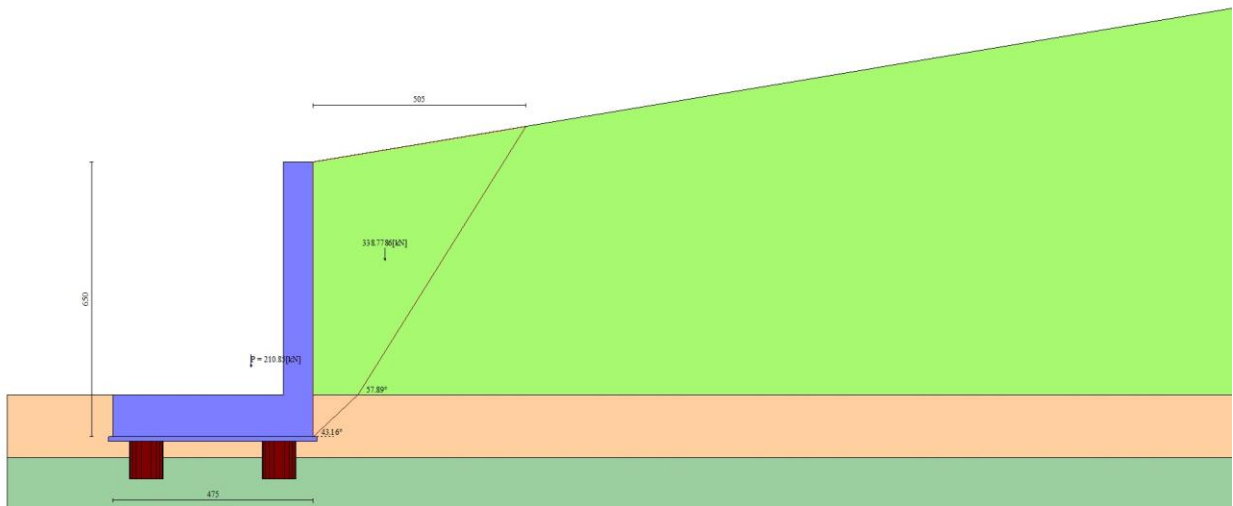


Fig. 4 - Cuneo di spinta (combinazione statica) (Combinazione n° 1)

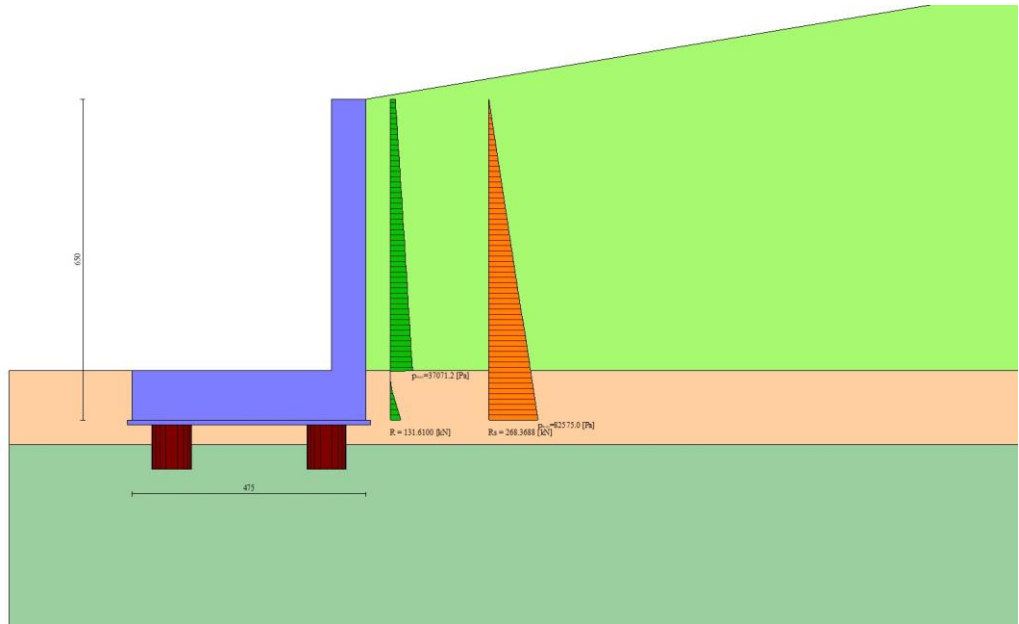


Fig. 5 - Diagramma delle pressioni (combinazione statica) (Combinazione n° 1)

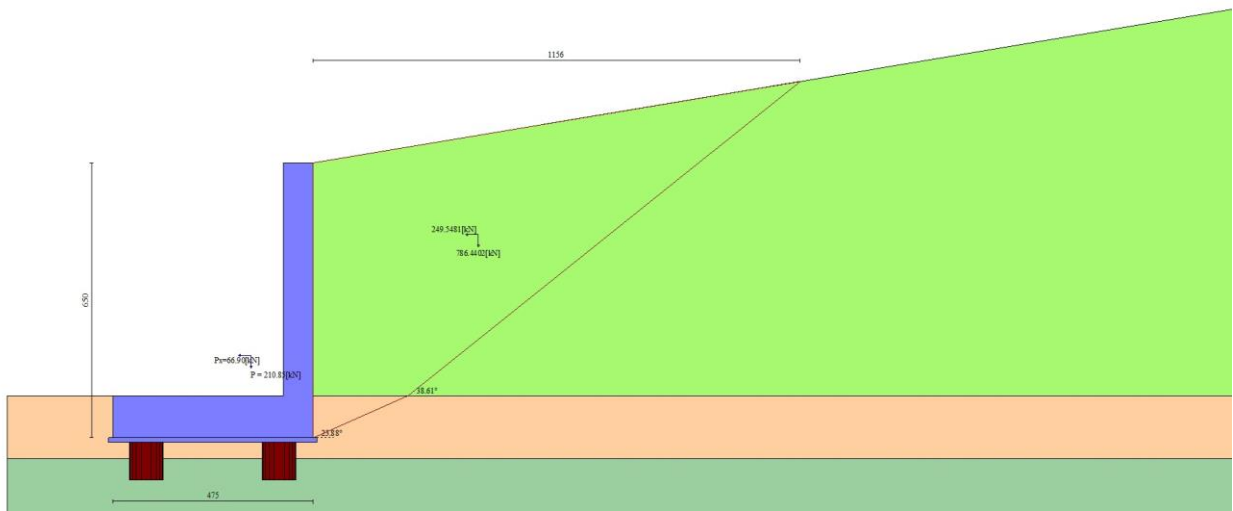


Fig. 6 - Cuneo di spinta (combinazione sismica) (Combinazione n° 1)

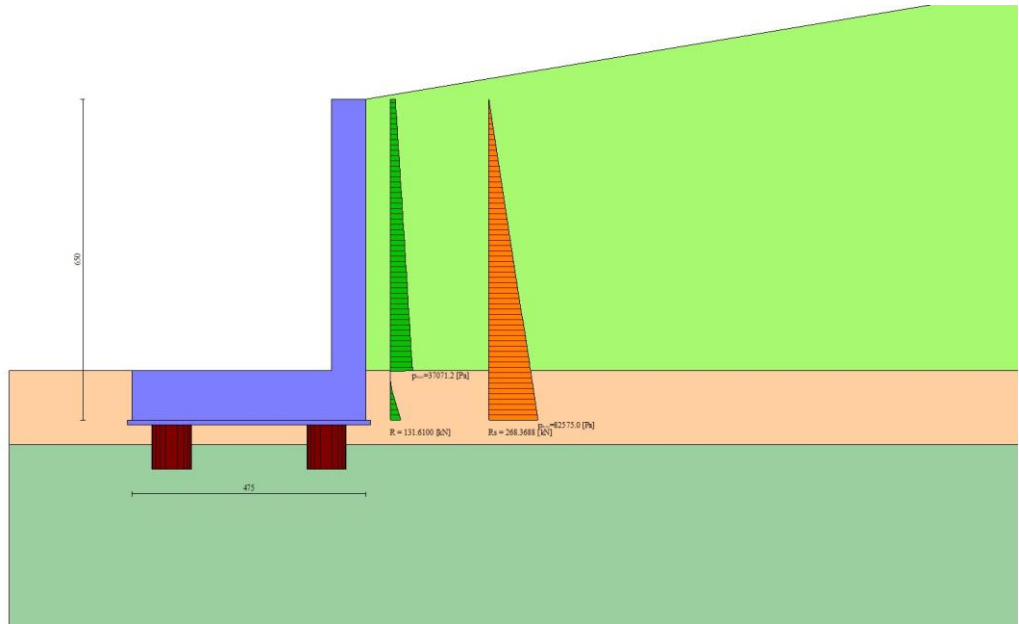


Fig. 7 - Diagramma delle pressioni (combinazione sismica) (Combinazione n° 1)

Scarichi in testa ai pali

Simbologia adottata

- Cmb Indice/Tipo combinazione
- Ip Indice palo
- N Sforzo normale, espresso in [kN]
- M Momento, espresso in [kNm]
- T Taglio, espresso in [kN]

Cmb	Ip	N [kN]	M [kNm]	T [kN]
1 - STR (A1-M1-R3) H + V	1	333.24	694.41	-571.53
	2	495.91	694.41	-571.53
2 - STR (A1-M1-R3) H - V	1	168.44	514.90	-514.65
	2	495.11	514.90	-514.65

Verifiche geotecniche

Quadro riassuntivo coeff. di sicurezza calcolati

Simbologia adottata

- Cmb Indice/Tipo combinazione
- S Sisma (H: componente orizzontale, V: componente verticale)
- FS_{SCO} Coeff. di sicurezza allo scorrimento
- FS_{RIB} Coeff. di sicurezza al ribaltamento
- FS_{QLIM} Coeff. di sicurezza a carico limite
- FS_{STAB} Coeff. di sicurezza a stabilità globale
- FS_{HYD} Coeff. di sicurezza a sifonamento
- FS_{SUPL} Coeff. di sicurezza a sollevamento

Cmb	Sismica	FS _{SCO}	FS _{RIB}	FS _{QLIM}	FS _{STAB}	FS _{HYD}	FS _{SUPL}
1 - STR (A1-M1-R3)	H + V	19.231					
2 - STR (A1-M1-R3)	H - V	19.231					

Verifiche portanza trasversale (scorrimento)

Simbologia adottata

- Ic Indice/Tipo combinazione
- Ip Indice palo
- T Carico orizzontale agente alla testa del palo, espresso in [kN]
- Td Portanza trasversale di progetto, espresso in [kN]
- FSo Fattore di sicurezza (Td/T)

Ic	Ip	T [kN]	Td [kN]	FSo
1 - STR (A1-M1-R3) H + V	1	-571.53	10990.90	19.231

Ic	Ip	T	Td	FSo
		[kN]	[kN]	
	2	-571.53	10990.90	19.231
2 - STR (A1-M1-R3) H - V	1	-514.65	9897.07	19.231
	2	-514.65	9897.07	19.231

Verifiche portanza verticale

Simbologia adottata

Ic	Indice/Tipo combinazione
Ip	Indice palo
N	Carico verticale agente alla testa del palo, espresso in [kN]
Pd	Portanza di progetto, espresso in [kN]
FSv	Fattore di sicurezza (Pd/N)

Ic	Ip	N	Pd	FSv
		[kN]	[kN]	
1 - STR (A1-M1-R3) H + V	1	333.24	1514.24	4.544
	2	495.91	1514.24	3.053
2 - STR (A1-M1-R3) H - V	1	168.44	1514.24	8.990
	2	495.11	1514.24	3.058

Dettagli calcolo portanza verticale

Simbologia adottata

n°	Indice palo
Nc, Nq	Coeff. di capacità portante
N'c, N'q	Coeff. di capacità portante corretti
Zc	Massima profondità andamento pressione geostatica, espressa in [m]
Pp, Pl	Portanza di punta e laterale caratteristica, espresse in [kN]
A	Attrito negativo, espresso in [kN]
Wp	Peso palo, espresso in [kN]

n°	Nc	N'c	Nq	N'q	Zc	Pp	Pl	A	Wp
					[m]	[kN]	[kN]	[kN]	[kN]
1	0.000	0.000	0.000	0.000	--	493.00	1534.00	0.00	184.85
						493.00	1534.00		
2	0.000	0.000	0.000	0.000	--	493.00	1534.00	0.00	184.85
						493.00	1534.00		

Sollecitazioni

Elementi calcolati a trave

Simbologia adottata

N	Sforzo normale, espresso in [kN]. Positivo se di compressione.
T	Taglio, espresso in [kN]. Positivo se diretto da monte verso valle
M	Momento, espresso in [kNm]. Positivo se tende le fibre contro terra (a monte)

Elementi calcolati a piastra

Simbologia adottata

Mx, My	Momenti flettenti, espresso in [kNm]
Mxy	Momento torcente, espresso in [kNm]. Positivo se diretto da monte verso valle
Tx, Ty	Tagli, espresso in [kN]. Positivo se tende le fibre contro terra (a monte)

I momenti flettenti sono positivi se tendono le fibre inferiori (intradosso fondazione, paramento esterno)

Paramento

Combinazione n° 1 - STR (A1-M1-R3) H + V

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	1.99	1.40	-0.03
3	-0.20	4.02	2.96	0.08
4	-0.30	6.11	4.67	0.33
5	-0.40	8.24	6.53	0.74
6	-0.50	10.42	8.55	1.34
7	-0.60	12.65	10.72	2.12
8	-0.70	14.92	13.04	3.11
9	-0.80	17.25	15.51	4.32
10	-0.90	19.62	18.13	5.77
11	-1.00	22.04	20.91	7.48
12	-1.10	24.51	23.84	9.45

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
13	-1.20	27.02	26.93	11.71
14	-1.30	29.59	30.16	14.26
15	-1.40	32.20	33.55	17.13
16	-1.50	34.86	37.10	20.33
17	-1.60	37.57	40.79	23.88
18	-1.70	40.33	44.64	27.79
19	-1.80	43.14	48.64	32.07
20	-1.90	45.99	52.79	36.74
21	-2.00	48.89	57.10	41.82
22	-2.10	51.84	61.56	47.32
23	-2.20	54.84	66.17	53.25
24	-2.30	57.89	70.93	59.64
25	-2.40	60.98	75.85	66.50
26	-2.50	64.13	80.92	73.83
27	-2.60	67.32	86.14	81.67
28	-2.70	70.56	91.52	90.02
29	-2.80	73.84	97.04	98.89
30	-2.90	77.18	102.72	108.31
31	-3.00	80.56	108.56	118.29
32	-3.10	83.99	114.54	128.85
33	-3.20	87.47	120.68	139.99
34	-3.30	91.00	126.97	151.74
35	-3.40	94.58	133.42	164.10
36	-3.50	98.20	140.02	177.11
37	-3.60	101.88	146.77	190.76
38	-3.70	105.60	153.67	205.08
39	-3.80	109.37	160.72	220.08
40	-3.90	113.18	167.93	235.77
41	-4.00	117.05	175.29	252.18
42	-4.10	120.96	182.81	269.32
43	-4.20	124.92	190.47	287.19
44	-4.30	128.93	198.29	305.83
45	-4.40	132.99	206.27	325.24
46	-4.50	137.10	214.39	345.43
47	-4.60	141.25	222.67	366.43
48	-4.70	145.46	231.10	388.25
49	-4.80	149.71	239.68	410.90
50	-4.90	154.01	248.42	434.40
51	-5.00	158.35	257.31	458.76
52	-5.10	162.75	266.35	484.00
53	-5.20	167.19	275.54	510.14
54	-5.30	171.68	284.89	537.19
55	-5.40	176.22	294.39	565.17
56	-5.50	180.81	304.04	594.08

Combinazione n° 2 - STR (A1-M1-R3) H - V

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	1.99	1.40	-0.03
3	-0.20	4.02	2.96	0.08
4	-0.30	6.11	4.68	0.33
5	-0.40	8.24	6.54	0.74
6	-0.50	10.42	8.57	1.34
7	-0.60	12.65	10.74	2.12
8	-0.70	14.93	13.07	3.11
9	-0.80	17.26	15.55	4.33
10	-0.90	19.64	18.19	5.78
11	-1.00	22.06	20.98	7.49
12	-1.10	24.53	23.93	9.47
13	-1.20	27.06	27.03	11.74
14	-1.30	29.63	30.28	14.30
15	-1.40	32.24	33.69	17.18
16	-1.50	34.91	37.25	20.39
17	-1.60	37.63	40.97	23.95
18	-1.70	40.39	44.84	27.88
19	-1.80	43.21	48.86	32.18
20	-1.90	46.07	53.04	36.87
21	-2.00	48.98	57.37	41.97
22	-2.10	51.94	61.86	47.49
23	-2.20	54.95	66.50	53.46
24	-2.30	58.00	71.30	59.88
25	-2.40	61.11	76.24	66.77
26	-2.50	64.26	81.35	74.14

n°	X [m]	N [kN]	T [kN]	M [kNm]
27	-2.60	67.46	86.61	82.02
28	-2.70	70.71	92.02	90.41
29	-2.80	74.01	97.58	99.34
30	-2.90	77.36	103.30	108.81
31	-3.00	80.76	109.18	118.84
32	-3.10	84.20	115.21	129.46
33	-3.20	87.70	121.39	140.66
34	-3.30	91.24	127.72	152.48
35	-3.40	94.83	134.21	164.92
36	-3.50	98.47	140.86	178.00
37	-3.60	102.16	147.66	191.73
38	-3.70	105.89	154.61	206.14
39	-3.80	109.68	161.72	221.23
40	-3.90	113.51	168.98	237.02
41	-4.00	117.40	176.39	253.53
42	-4.10	121.33	183.96	270.77
43	-4.20	125.31	191.69	288.76
44	-4.30	129.34	199.57	307.51
45	-4.40	133.41	207.60	327.04
46	-4.50	137.54	215.78	347.37
47	-4.60	141.71	224.12	368.50
48	-4.70	145.93	232.62	390.46
49	-4.80	150.21	241.27	413.26
50	-4.90	154.53	250.07	436.91
51	-5.00	158.89	259.02	461.44
52	-5.10	163.31	268.14	486.85
53	-5.20	167.78	277.40	513.16
54	-5.30	172.29	286.82	540.39
55	-5.40	176.85	296.39	568.55
56	-5.50	181.47	306.12	597.67

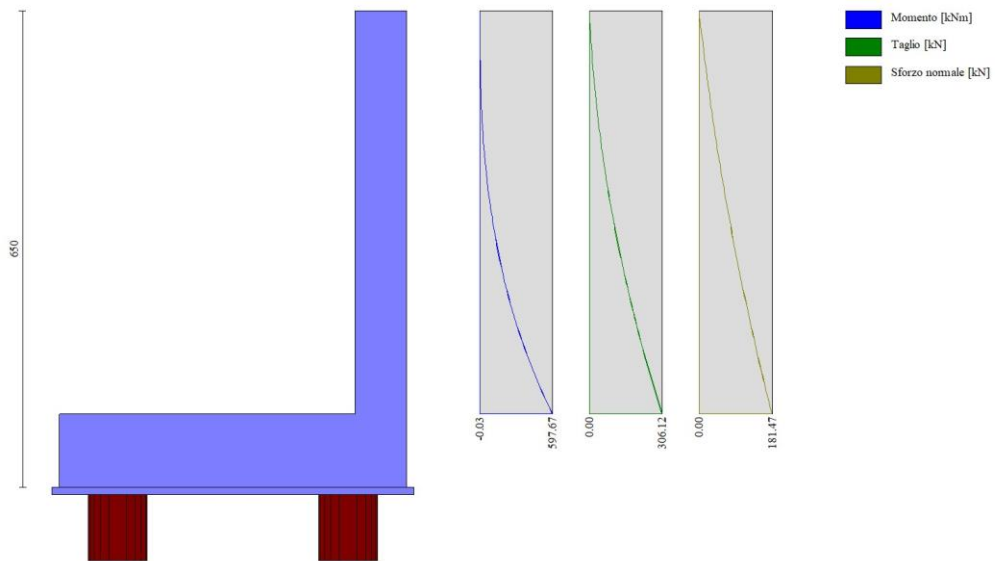


Fig. 8 - Paramento (Inviluppo)

Piastra fondazione

Combinazione n° 1 - STR (A1-M1-R3) H + V

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1	-1.24	-0.48	1.08	79.36	-72.16
2	-12.84	2.77	4.34	138.86	-47.53
3	-4.22	17.97	5.39	80.74	-86.37
4	0.71	14.16	0.56	40.71	-116.31
5	-38.12	2.49	10.54	248.74	-43.81
6	-21.12	20.09	14.19	155.14	-77.81
7	-3.99	51.22	8.29	51.39	-150.28
8	-0.22	47.54	0.97	25.11	-183.43

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
9	-18.77	53.17	20.42	104.91	-136.37
10	-62.45	4.80	18.58	339.03	-36.78
11	-46.40	22.22	26.87	216.67	-65.64
12	-45.13	54.93	36.38	160.80	-120.08
13	-3.42	96.55	9.07	32.26	-190.08
14	-0.76	93.18	1.03	15.22	-218.50
15	-14.46	98.52	20.81	69.88	-178.12
16	-36.38	99.22	35.65	118.22	-167.63
17	-76.94	7.48	28.06	391.51	-14.92
18	-71.04	24.19	43.09	254.98	-31.93
19	-84.98	52.25	61.20	219.77	-76.14
20	-74.51	95.83	54.39	187.49	-137.04
21	-1.26	148.24	9.20	15.40	-211.06
22	-0.56	144.84	1.00	6.85	-234.13
23	-5.87	150.47	20.68	35.39	-203.94
24	-14.64	151.92	33.60	62.99	-201.93
25	-28.89	151.30	54.13	109.08	-191.26
26	-76.10	4.83	32.89	370.08	29.65
27	-90.01	5.73	58.57	245.66	44.68
28	-98.96	43.66	94.96	257.29	36.03
29	-156.31	66.88	114.48	284.36	-38.47
30	-54.75	144.25	80.87	133.89	-139.19
31	1.26	202.73	9.87	-0.31	-216.11
32	-0.21	198.59	1.30	-0.88	-233.67
33	3.03	205.75	21.89	1.72	-212.34
34	7.12	209.58	37.10	3.63	-213.87
35	16.49	215.75	57.10	1.23	-210.13
36	55.15	242.32	118.47	-50.09	-186.24
37	-65.81	-6.42	26.15	252.76	83.79
38	-103.42	-45.22	49.84	166.57	155.98
39	-106.07	-101.02	114.13	197.18	265.63
40	-65.05	51.60	176.14	270.43	197.72
41	-78.50	138.20	415.29	81.84	30.88
42	-80.79	249.48	180.32	-101.06	-5.72
43	2.82	257.43	11.03	-12.69	-207.58
44	-0.11	252.39	2.09	-7.06	-219.18
45	8.24	261.69	24.18	-24.16	-204.79
46	16.66	268.08	40.55	-38.94	-203.58
47	29.26	282.53	66.50	-65.86	-193.71
48	10.98	306.24	101.84	-85.25	-153.44
49	-15.10	458.76	122.51	-64.61	-13.53
50	-59.77	-15.05	5.80	64.90	109.71
51	-108.67	-80.76	10.02	31.27	216.40
52	-140.83	-303.76	16.49	12.19	440.52
53	-228.79	-984.92	20.24	0.28	780.80
54	-83.32	138.04	22.69	-8.09	954.09
55	67.53	1280.78	24.53	-14.70	576.96
56	6.43	660.98	26.16	-20.40	118.62
57	3.08	312.59	12.02	-20.41	-188.60
58	-0.31	307.08	2.94	-11.01	-193.56
59	9.13	317.81	25.27	-38.71	-186.12
60	17.01	326.49	41.00	-57.77	-180.81
61	19.91	342.30	59.39	-75.04	-163.81
62	15.98	383.80	75.77	-79.89	-119.55
63	12.51	456.35	67.34	-62.85	-63.14
64	16.12	501.18	27.79	-26.00	-38.97
65	-63.56	-6.63	-14.67	-121.89	82.75
66	-100.99	-45.53	-30.07	-102.86	153.86
67	-102.55	-101.38	-81.59	-171.82	261.48
68	-59.92	51.26	-136.22	-269.15	191.90
69	-71.48	137.99	-370.55	-97.54	23.86
70	-71.74	249.46	-131.94	71.99	-13.58
71	-3.96	458.97	-70.92	24.05	-21.97
72	25.92	456.92	-12.50	11.08	-72.10
73	2.85	363.19	12.47	-23.21	-163.55
74	-0.52	357.60	3.70	-12.59	-161.27
75	8.78	368.76	24.91	-42.65	-162.86
76	15.52	377.40	37.33	-58.38	-156.78
77	20.90	393.51	48.62	-68.44	-140.97
78	24.26	419.88	53.79	-68.26	-115.63
79	27.81	450.17	47.38	-54.75	-90.07
80	34.20	465.15	29.46	-31.38	-81.22
81	43.47	451.13	10.79	-7.70	-99.63
82	-72.79	4.33	-21.78	-235.78	27.42
83	-86.06	5.10	-39.62	-178.39	40.24
84	-92.56	42.98	-63.81	-229.06	27.51

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
85	-146.50	66.27	-76.27	-281.03	-50.22
86	-41.02	143.90	-38.05	-148.19	-153.24
87	73.06	242.38	-72.12	21.96	-201.85
88	33.12	306.73	-52.37	45.39	-170.16
89	42.65	385.02	-23.12	28.82	-137.27
90	55.40	421.87	2.11	6.76	-134.55
91	2.90	407.97	12.67	-23.42	-136.54
92	-0.55	402.46	4.36	-12.85	-126.35
93	9.02	413.06	23.98	-41.69	-139.90
94	16.81	420.34	33.60	-54.42	-137.06
95	24.71	431.35	40.54	-60.98	-128.26
96	32.24	445.76	43.00	-59.93	-115.75
97	39.88	459.42	39.47	-51.02	-105.32
98	48.29	465.59	31.18	-36.75	-104.22
99	57.78	460.89	22.12	-22.04	-115.69
100	67.82	448.74	16.28	-11.75	-136.34
101	-75.07	6.59	-17.57	-250.87	-18.57
102	-67.37	23.27	-25.52	-181.76	-38.98
103	-76.95	51.33	-32.32	-187.01	-89.25
104	-60.86	95.08	-18.98	-180.95	-154.69
105	-8.99	150.98	-14.42	-121.19	-212.07
106	42.90	216.06	-14.08	-27.89	-233.11
107	62.13	283.53	-20.48	27.10	-218.25
108	59.58	344.37	-10.32	25.12	-189.80
109	67.16	396.73	3.58	8.60	-168.80
110	77.49	435.99	14.87	-8.22	-158.78
111	3.37	446.82	13.11	-23.15	-109.54
112	-0.41	441.20	5.12	-12.90	-90.51
113	10.30	451.11	23.81	-40.31	-118.80
114	19.52	456.18	31.76	-51.23	-121.32
115	29.60	462.78	36.85	-56.46	-119.20
116	39.79	470.38	38.64	-56.10	-115.08
117	49.90	477.05	37.04	-50.80	-112.55
118	60.00	480.39	32.92	-42.30	-115.03
119	70.05	479.23	28.03	-33.20	-124.00
120	79.82	474.73	24.09	-26.02	-137.98
121	88.92	469.34	21.87	-22.22	-153.56
122	-66.06	3.28	-8.95	-188.36	-42.06
123	-45.61	21.13	-11.17	-135.54	-75.34
124	-37.16	53.99	-10.51	-122.46	-137.31
125	-20.06	98.61	-3.91	-107.60	-190.19
126	10.62	151.93	2.00	-72.13	-228.32
127	41.50	210.49	1.53	-28.22	-243.04
128	59.89	269.97	0.92	1.72	-234.83
129	69.23	329.86	3.32	9.53	-214.04
130	76.24	382.28	9.84	1.10	-192.70
131	85.87	427.02	16.42	-10.83	-177.05
132	97.01	465.23	21.18	-21.87	-167.27
133	4.16	480.23	14.16	-23.63	-82.84
134	-0.24	474.08	6.17	-13.36	-53.55
135	12.21	483.84	24.95	-40.36	-99.31
136	23.02	487.12	32.20	-50.38	-107.74
137	34.98	490.79	36.44	-55.15	-111.23
138	47.15	494.78	37.96	-55.68	-112.52
139	59.06	498.40	37.13	-52.96	-114.35
140	70.52	500.80	34.62	-48.16	-118.93
141	81.41	501.59	31.36	-42.63	-127.19
142	91.60	501.07	28.22	-37.55	-138.42
143	100.89	500.10	25.69	-33.70	-150.67
144	109.13	499.56	23.85	-31.31	-161.69
145	-52.86	0.05	-1.82	-84.26	-50.24
146	-26.05	19.22	-0.47	-66.26	-88.76
147	-12.75	52.69	2.35	-60.94	-154.69
148	2.96	98.57	7.04	-54.14	-201.84
149	23.59	151.41	10.39	-40.26	-232.47
150	44.68	207.94	11.82	-23.29	-244.85
151	61.29	265.28	12.12	-10.86	-240.35
152	73.15	323.35	13.55	-7.02	-224.62
153	82.77	376.23	16.17	-10.63	-205.44
154	92.72	422.67	19.14	-17.33	-188.80
155	103.95	463.44	21.37	-24.10	-176.89
156	116.22	500.05	22.52	-30.14	-169.73
157	5.11	508.82	15.96	-25.33	-55.78
158	-0.14	501.55	7.60	-14.55	-14.10
159	14.53	512.25	27.47	-42.39	-80.83
160	27.09	514.41	34.58	-51.88	-95.48

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
161	40.87	516.31	38.33	-56.28	-103.59
162	54.74	518.33	39.43	-57.40	-108.30
163	68.12	520.54	38.47	-56.51	-112.45
164	80.77	522.87	36.14	-54.39	-118.33
165	92.57	525.20	33.13	-51.43	-126.94
166	103.45	527.45	30.05	-47.86	-137.78
167	113.27	529.61	27.24	-43.86	-149.25
168	121.91	531.81	24.77	-39.68	-159.41
169	129.26	534.22	22.59	-35.53	-166.77
170	-44.31	-0.53	4.32	34.92	-52.18
171	-16.69	18.51	7.85	11.14	-92.05
172	-2.08	52.18	13.08	-1.62	-159.15
173	12.74	98.29	16.22	-8.80	-205.00
174	30.67	151.22	18.23	-13.19	-233.81
175	49.14	207.46	19.61	-16.25	-245.79
176	64.83	264.27	20.61	-18.69	-242.56
177	77.49	322.14	21.35	-21.04	-228.64
178	87.94	375.20	21.82	-23.28	-210.53
179	98.39	422.41	22.02	-25.48	-193.92
180	109.77	464.16	21.91	-27.64	-181.49
181	122.15	501.83	21.45	-29.70	-173.78
182	135.28	537.00	20.61	-31.54	-170.48
183	6.21	533.10	18.50	-28.49	-27.36
184	-0.19	523.84	9.43	-16.66	30.03
185	17.32	537.04	31.30	-46.46	-63.10
186	31.89	538.77	38.61	-55.20	-84.69
187	47.57	539.56	41.96	-58.63	-96.67
188	63.04	540.23	42.36	-59.77	-102.94
189	77.70	541.51	40.55	-60.39	-107.52
190	91.35	544.12	37.32	-60.86	-113.89
191	104.00	548.28	33.57	-60.49	-123.74
192	115.61	553.42	30.02	-58.34	-136.33
193	126.08	558.62	26.94	-54.00	-149.30
194	135.23	563.33	24.23	-47.82	-160.28
195	142.88	567.47	21.72	-40.57	-167.79
196	148.94	571.18	19.36	-33.03	-171.31
197	-45.16	0.03	10.45	154.34	-50.49
198	-18.38	19.20	16.13	88.85	-89.30
199	-4.95	52.74	23.74	58.01	-155.82
200	10.98	98.75	25.30	36.86	-203.58
201	31.92	151.82	25.96	14.16	-234.78
202	53.38	208.66	27.29	-8.96	-247.67
203	70.40	266.41	28.99	-26.33	-243.61
204	82.70	325.03	29.05	-34.90	-228.23
205	92.74	378.56	27.40	-35.84	-209.30
206	103.05	425.75	24.87	-33.61	-192.80
207	114.56	467.37	22.46	-31.21	-180.90
208	126.98	504.94	20.47	-29.36	-173.60
209	140.02	540.16	18.78	-27.75	-170.33
210	153.44	574.51	17.21	-25.80	-170.82
211	7.60	553.36	21.82	-33.51	3.56
212	-0.48	540.61	11.76	-20.04	81.96
213	20.90	558.82	36.45	-52.68	-46.54
214	37.87	560.76	44.20	-59.59	-76.67
215	55.66	560.87	47.23	-60.50	-91.90
216	72.68	559.92	46.76	-60.62	-97.16
217	88.36	559.45	43.34	-62.91	-98.98
218	102.77	562.11	37.95	-67.17	-104.38
219	116.04	569.16	32.29	-70.69	-116.87
220	128.26	578.82	27.84	-70.47	-134.38
221	139.30	588.04	24.80	-65.35	-151.69
222	148.98	595.42	22.39	-56.33	-164.91
223	157.01	601.14	20.05	-45.35	-172.92
224	163.05	605.67	17.68	-33.94	-176.18
225	167.15	609.29	15.60	-22.95	-175.19
226	-50.85	3.24	17.54	259.17	-42.58
227	-30.45	21.08	26.71	159.04	-76.44
228	-21.75	54.07	36.39	120.50	-139.61
229	-4.17	98.96	35.97	91.24	-193.73
230	27.16	152.73	34.03	46.86	-233.02
231	58.81	211.91	37.24	-3.32	-248.77
232	78.03	272.19	39.86	-38.33	-241.43
233	88.29	333.16	38.99	-51.03	-221.34
234	96.19	386.86	33.52	-47.30	-200.52
235	106.59	433.09	27.48	-39.99	-185.16
236	118.34	473.01	22.69	-33.52	-175.43

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
237	130.82	509.24	19.34	-28.49	-169.62
238	143.63	543.59	17.01	-24.17	-166.75
239	156.59	577.33	15.33	-19.44	-166.61
240	169.56	611.67	14.10	-13.23	-169.75
241	9.83	569.99	26.29	-41.04	37.92
242	-0.88	551.00	14.69	-25.25	146.35
243	25.99	577.88	43.19	-61.32	-32.26
244	46.02	581.09	51.33	-64.08	-74.01
245	65.94	581.29	54.28	-59.30	-92.54
246	84.44	577.88	53.32	-56.21	-92.68
247	100.81	571.99	47.86	-60.92	-84.56
248	115.24	572.12	37.80	-72.45	-84.87
249	129.02	585.69	27.87	-83.44	-103.83
250	141.48	604.61	22.50	-86.23	-133.24
251	152.83	619.78	20.62	-78.84	-158.95
252	163.12	629.66	19.66	-64.99	-174.71
253	171.61	636.31	17.83	-49.24	-182.20
254	177.78	641.60	15.65	-33.92	-184.73
255	181.12	645.49	13.80	-19.15	-183.43
256	182.45	648.05	12.99	-5.04	-177.54
257	-52.73	6.52	26.07	322.92	-19.37
258	-45.13	23.19	40.85	206.83	-40.69
259	-54.29	51.42	57.82	186.70	-92.83
260	-37.43	95.57	50.54	166.17	-160.17
261	15.49	152.12	49.89	97.33	-219.33
262	68.60	218.12	52.25	-2.46	-241.92
263	89.18	286.76	60.66	-62.75	-228.37
264	88.11	349.19	52.10	-65.91	-200.98
265	97.12	403.43	39.36	-54.32	-180.77
266	108.73	444.89	28.78	-42.40	-171.22
267	121.19	480.76	21.99	-33.26	-166.13
268	133.82	514.36	17.79	-26.54	-162.97
269	146.38	547.02	15.18	-20.86	-160.78
270	158.77	579.40	13.63	-14.66	-159.47
271	170.92	612.30	13.06	-6.22	-159.76
272	182.62	647.40	13.73	6.16	-164.12
273	14.03	584.10	32.87	-51.35	75.56
274	-2.59	553.04	19.57	-32.99	229.77
275	35.15	594.50	53.09	-72.28	-22.30
276	57.63	597.84	59.81	-67.97	-78.19
277	79.93	604.02	61.51	-51.90	-104.75
278	99.68	599.86	64.21	-40.04	-97.65
279	115.45	575.55	57.50	-47.55	-59.74
280	128.64	560.92	36.76	-75.04	-38.98
281	142.94	594.40	16.65	-102.26	-79.90
282	155.64	636.93	11.57	-108.68	-140.65
283	166.33	657.88	15.97	-93.87	-176.64
284	177.20	666.24	16.88	-70.97	-190.03
285	187.42	674.00	15.55	-50.10	-194.64
286	193.40	679.78	13.40	-32.44	-195.63
287	196.05	684.07	11.63	-15.44	-194.60
288	194.78	686.49	11.44	3.46	-190.35
289	193.52	688.53	14.28	23.13	-178.15
290	-43.96	4.23	30.14	309.65	26.30
291	-57.36	4.96	54.62	205.77	37.85
292	-63.24	43.05	88.72	231.16	22.50
293	-116.03	66.85	107.07	268.52	-57.87
294	-9.01	145.32	72.63	126.34	-163.30
295	106.86	244.99	109.36	-50.62	-214.02
296	68.87	310.87	91.63	-79.69	-184.07
297	80.57	391.22	64.04	-68.59	-152.60
298	95.42	430.51	40.11	-51.81	-150.95
299	109.75	460.23	26.90	-38.52	-153.43
300	123.34	489.51	19.62	-29.48	-155.36
301	136.22	519.60	15.53	-23.17	-155.60
302	148.55	550.17	13.13	-17.93	-154.15
303	160.41	580.70	11.84	-12.09	-151.12
304	171.81	610.90	11.88	-3.71	-146.66
305	182.73	641.48	14.20	10.02	-141.94
306	193.46	678.27	21.44	33.57	-144.72
307	25.21	602.57	48.03	-61.99	108.32
308	1.21	548.40	24.47	-41.66	339.53
309	50.80	601.40	68.21	-80.85	-15.94
310	82.85	611.81	68.50	-70.56	-87.01
311	94.93	621.57	66.06	-41.47	-127.91
312	118.88	647.94	72.17	-2.82	-133.06

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
313	141.26	590.43	89.73	-4.05	-49.38
314	128.00	457.50	35.06	-71.84	44.29
315	166.40	615.46	-18.49	-139.72	-69.73
316	170.24	697.70	2.33	-140.81	-177.27
317	174.91	695.21	13.27	-100.52	-203.73
318	195.78	707.13	15.53	-66.43	-208.34
319	204.84	714.65	13.17	-45.08	-207.35
320	210.16	720.82	11.22	-28.62	-206.16
321	212.34	725.35	9.66	-12.88	-205.91
322	211.08	728.75	8.52	6.36	-205.86
323	198.65	728.22	12.86	36.94	-201.12
324	203.37	742.74	26.81	72.39	-176.00
325	-29.15	-6.79	22.84	198.27	81.23
326	-66.73	-45.76	44.59	133.41	150.64
327	-67.37	-101.36	105.66	177.19	254.77
328	-23.11	51.89	165.92	259.65	181.76
329	-32.51	139.63	403.86	78.28	10.62
330	-30.26	252.55	167.81	-98.51	-29.44
331	40.21	463.89	108.81	-56.64	-40.00
332	73.09	464.32	52.13	-49.56	-91.90
333	93.57	461.46	30.32	-36.42	-120.80
334	110.59	474.66	20.22	-27.67	-137.82
335	125.18	496.99	15.25	-22.16	-146.66
336	138.31	523.94	12.48	-18.47	-149.88
337	150.46	552.77	10.77	-15.40	-148.98
338	161.89	581.63	9.75	-11.86	-144.28
339	172.71	608.76	9.65	-6.47	-134.77
340	183.07	631.75	11.81	3.05	-117.76
341	192.78	646.75	19.96	21.83	-88.51
342	210.27	673.37	51.68	65.28	-72.03
343	32.47	586.21	71.55	-62.16	128.75
344	-4.62	607.99	54.48	-53.56	433.10
345	92.18	599.48	89.45	-70.72	-6.52
346	121.42	619.68	78.21	-64.60	-94.41
347	140.84	645.79	63.33	-42.09	-154.87
348	98.87	650.82	78.23	23.27	-186.50
349	209.70	813.26	118.65	58.09	-181.58
350	82.30	13.42	33.91	-58.63	231.70
351	231.15	844.97	-49.31	-175.75	-201.46
352	142.61	714.63	-4.35	-141.70	-230.62
353	208.57	742.13	18.09	-75.99	-232.87
354	216.60	748.09	12.87	-48.82	-223.41
355	222.36	755.49	11.30	-32.75	-216.50
356	225.96	761.46	9.70	-21.65	-213.21
357	228.54	766.58	8.51	-11.17	-213.76
358	229.23	770.62	8.21	3.01	-218.35
359	228.21	776.81	5.18	27.05	-226.39
360	170.09	762.52	30.81	88.37	-224.27
361	267.68	907.52	80.15	116.84	-197.59
362	-21.08	-15.29	2.07	14.88	107.69
363	-70.08	-81.10	3.82	3.50	212.15
364	-100.90	-303.82	6.38	-2.61	431.76
365	-186.55	-984.29	7.91	-6.00	767.71
366	-38.10	139.84	8.85	-7.97	937.22
367	116.15	1284.25	9.45	-9.23	556.96
368	58.67	666.54	9.81	-10.14	96.07
369	72.38	509.60	9.99	-10.90	-63.60
370	94.38	476.91	9.99	-11.56	-107.51
371	112.17	481.29	9.82	-12.13	-131.80
372	127.16	500.68	9.47	-12.61	-143.54
373	140.32	526.44	8.94	-12.99	-147.90
374	152.34	554.68	8.24	-13.21	-147.13
375	163.53	582.95	7.39	-13.24	-141.60
376	174.06	608.74	6.41	-12.99	-129.76
377	183.81	627.14	5.35	-12.39	-106.38
378	192.34	624.55	4.29	-11.31	-54.97
379	184.38	529.27	3.34	-9.52	35.16
380	129.43	92.47	2.68	-6.90	229.50
381	169.77	581.43	121.28	-45.13	166.63
382	142.10	588.87	130.55	36.90	390.51
383	151.18	590.74	100.49	-26.47	2.56
384	168.32	629.30	83.76	-36.40	-97.09
385	189.79	669.47	74.52	-24.19	-172.58
386	225.05	723.15	32.50	-30.69	-239.30
387	204.79	753.93	319.49	-46.01	-343.53
388	479.68	1818.76	33.52	-26.89	299.62

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
389	220.70	791.87	-250.73	-8.17	-362.63
390	257.44	800.40	41.48	-24.43	-282.45
391	239.66	788.51	8.27	-31.53	-250.77
392	236.83	792.67	11.87	-17.85	-230.25
393	238.63	798.13	9.69	-12.97	-219.93
394	240.68	803.69	8.96	-9.24	-215.33
395	243.04	809.18	8.66	-5.82	-216.32
396	245.85	815.26	7.77	-1.85	-223.45
397	253.71	823.56	13.62	10.29	-241.68
398	277.17	849.41	-16.27	1.00	-272.59
399	247.01	856.90	280.52	-18.10	-354.41
400	513.77	1902.56	2.36	-2.83	302.46
401	-24.64	-6.79	-18.68	-168.36	81.09
402	-62.17	-45.71	-36.94	-126.30	150.39
403	-62.80	-101.21	-92.89	-182.32	254.32
404	-18.52	52.18	-150.08	-271.57	181.14
405	-27.93	140.12	-386.13	-94.16	9.85
406	-25.68	253.26	-148.88	80.09	-30.32
407	44.78	464.86	-89.14	36.39	-40.97
408	77.62	465.61	-32.09	27.77	-92.91
409	98.04	463.10	-10.27	13.30	-121.81
410	114.97	476.66	-0.51	3.38	-138.77
411	129.43	499.37	3.78	-3.14	-147.49
412	142.38	526.69	5.50	-7.61	-150.51
413	154.31	555.87	5.83	-11.17	-149.34
414	165.48	585.04	5.16	-14.80	-144.28
415	175.99	612.40	3.31	-19.73	-134.34
416	186.00	635.52	-0.97	-28.09	-116.85
417	195.34	650.53	-11.25	-44.70	-87.06
418	212.41	677.03	-44.89	-84.57	-70.06
419	269.39	910.95	-74.68	-130.84	-195.18
420	248.18	859.97	-275.71	12.35	-351.73
421	167.55	558.48	123.40	0.00	197.34
422	174.66	582.22	102.75	0.00	5.01
423	190.94	636.46	84.92	0.00	-97.42
424	201.91	673.04	71.08	0.00	-176.51
425	236.32	787.74	66.39	0.00	-267.52
426	141.36	471.21	85.98	0.00	-378.63
427	1231.76	4105.87	33.19	0.00	230.71
428	153.53	511.76	-17.86	0.00	-397.32
429	261.22	870.75	7.01	0.00	-310.03
430	240.70	802.33	11.30	0.00	-254.26
431	244.89	816.31	10.28	0.00	-231.41
432	245.80	819.33	9.41	0.00	-220.12
433	247.49	824.97	8.75	0.00	-215.16
434	249.06	830.19	8.52	0.00	-216.23
435	251.56	838.54	8.94	0.00	-224.03
436	251.10	836.99	10.17	0.00	-244.28
437	275.85	919.50	17.77	0.00	-298.98
438	173.09	576.96	47.23	0.00	-387.62
439	1257.21	4190.71	2.28	0.00	235.33
440	173.94	579.81	-42.58	0.00	-384.85
441	173.94	579.81	-42.58	0.00	-384.85
442	173.94	579.81	-42.58	0.00	-384.85
443	173.94	579.81	-42.58	0.00	-384.85
444	173.94	579.81	-42.58	0.00	-384.85
445	173.94	579.81	-42.58	0.00	-384.85
446	173.94	579.81	-42.58	0.00	-384.85
447	173.94	579.81	-42.58	0.00	-384.85
448	173.94	579.81	-42.58	0.00	-384.85
449	173.94	579.81	-42.58	0.00	-384.85
450	173.94	579.81	-42.58	0.00	-384.85
451	173.94	579.81	-42.58	0.00	-384.85
452	173.94	579.81	-42.58	0.00	-384.85
453	173.94	579.81	-42.58	0.00	-384.85
454	173.94	579.81	-42.58	0.00	-384.85
455	173.94	579.81	-42.58	0.00	-384.85
456	173.94	579.81	-42.58	0.00	-384.85
457	173.94	579.81	-42.58	0.00	-384.85
458	173.94	579.81	-42.58	0.00	-384.85
459	173.94	579.81	-42.58	0.00	-384.85
460	173.94	579.81	-42.58	0.00	-384.85
461	173.94	579.81	-42.58	0.00	-384.85
462	-34.95	4.24	-25.97	-279.29	26.03
463	-48.26	5.05	-46.95	-198.32	37.34
464	-54.11	43.35	-75.90	-236.03	21.58

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
465	-106.88	67.44	-91.18	-280.20	-59.13
466	0.14	146.28	-54.82	-142.02	-164.85
467	116.01	246.40	-90.33	32.36	-215.80
468	78.00	312.80	-71.84	59.55	-186.03
469	89.64	393.77	-43.85	46.83	-154.67
470	104.39	433.75	-19.87	28.64	-153.02
471	118.55	464.21	-6.95	14.09	-155.39
472	131.89	494.25	-0.32	3.96	-157.07
473	144.44	525.09	2.78	-3.24	-156.93
474	156.34	556.37	3.84	-9.09	-154.94
475	167.67	587.52	3.45	-15.12	-151.21
476	178.46	618.20	1.48	-23.15	-145.89
477	188.69	649.07	-2.97	-35.79	-140.18
478	198.66	685.90	-12.35	-57.22	-141.89
479	207.73	750.14	-19.68	-92.43	-172.11
480	173.58	769.49	-25.02	-102.98	-219.48
481	279.57	855.68	21.39	-7.03	-267.24
482	277.59	925.32	-12.81	0.00	-293.46
483	277.59	925.32	-12.81	0.00	-293.46
484	277.59	925.32	-12.81	0.00	-293.46
485	277.59	925.32	-12.81	0.00	-293.46
486	277.59	925.32	-12.81	0.00	-293.46
487	277.59	925.32	-12.81	0.00	-293.46
488	277.59	925.32	-12.81	0.00	-293.46
489	277.59	925.32	-12.81	0.00	-293.46
490	277.59	925.32	-12.81	0.00	-293.46
491	277.59	925.32	-12.81	0.00	-293.46
492	277.59	925.32	-12.81	0.00	-293.46
493	277.59	925.32	-12.81	0.00	-293.46
494	277.59	925.32	-12.81	0.00	-293.46
495	277.59	925.32	-12.81	0.00	-293.46
496	277.59	925.32	-12.81	0.00	-293.46
497	277.59	925.32	-12.81	0.00	-293.46
498	277.59	925.32	-12.81	0.00	-293.46
499	277.59	925.32	-12.81	0.00	-293.46
500	277.59	925.32	-12.81	0.00	-293.46
501	277.59	925.32	-12.81	0.00	-293.46
502	277.59	925.32	-12.81	0.00	-293.46
503	277.59	925.32	-12.81	0.00	-293.46
504	277.59	925.32	-12.81	0.00	-293.46
505	277.59	925.32	-12.81	0.00	-293.46
506	-39.29	6.53	-21.87	-291.82	-19.78
507	-31.57	23.33	-33.13	-198.82	-41.44
508	-40.67	51.85	-44.93	-191.10	-94.21
509	-23.78	96.42	-34.56	-177.45	-162.09
510	29.18	153.51	-31.96	-112.68	-221.70
511	82.32	220.18	-33.08	-15.54	-244.67
512	102.89	289.60	-40.69	42.79	-231.40
513	101.77	352.96	-31.67	44.22	-204.19
514	110.66	408.23	-18.81	31.10	-184.00
515	122.04	450.80	-8.45	17.77	-174.30
516	134.16	487.82	-2.23	7.37	-168.87
517	146.31	522.57	1.05	-0.42	-165.14
518	158.25	556.32	2.38	-6.88	-162.15
519	169.89	589.67	2.31	-13.47	-159.78
520	181.12	623.32	0.96	-21.74	-158.80
521	191.80	658.91	-1.83	-33.18	-161.66
522	201.55	700.16	-4.57	-48.10	-174.06
523	205.38	739.55	-5.14	-58.24	-195.41
524	233.60	787.54	1.17	-42.68	-219.31
525	257.45	833.28	-7.96	-16.78	-233.73
526	253.81	846.03	-4.68	0.00	-236.07
527	253.81	846.03	-4.68	0.00	-236.07
528	253.81	846.03	-4.68	0.00	-236.07
529	253.81	846.03	-4.68	0.00	-236.07
530	253.81	846.03	-4.68	0.00	-236.07
531	253.81	846.03	-4.68	0.00	-236.07
532	253.81	846.03	-4.68	0.00	-236.07
533	253.81	846.03	-4.68	0.00	-236.07
534	253.81	846.03	-4.68	0.00	-236.07
535	253.81	846.03	-4.68	0.00	-236.07
536	253.81	846.03	-4.68	0.00	-236.07
537	253.81	846.03	-4.68	0.00	-236.07
538	253.81	846.03	-4.68	0.00	-236.07
539	253.81	846.03	-4.68	0.00	-236.07
540	253.81	846.03	-4.68	0.00	-236.07

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
541	253.81	846.03	-4.68	0.00	-236.07
542	253.81	846.03	-4.68	0.00	-236.07
543	253.81	846.03	-4.68	0.00	-236.07
544	253.81	846.03	-4.68	0.00	-236.07
545	253.81	846.03	-4.68	0.00	-236.07
546	253.81	846.03	-4.68	0.00	-236.07
547	253.81	846.03	-4.68	0.00	-236.07
548	253.81	846.03	-4.68	0.00	-236.07
549	253.81	846.03	-4.68	0.00	-236.07
550	253.81	846.03	-4.68	0.00	-236.07
551	253.81	846.03	-4.68	0.00	-236.07
552	-33.07	3.25	-13.29	-227.05	-43.12
553	-12.53	21.25	-18.94	-150.24	-77.44
554	-3.74	54.60	-23.42	-124.22	-141.48
555	13.91	100.03	-19.89	-101.93	-196.34
556	45.33	154.51	-15.98	-61.69	-236.27
557	77.05	214.57	-17.90	-14.27	-252.56
558	96.33	275.87	-19.67	18.66	-245.64
559	106.58	338.07	-18.26	29.47	-225.82
560	114.37	393.15	-12.58	24.02	-205.06
561	124.55	440.86	-6.65	15.11	-189.54
562	135.91	482.33	-2.31	7.14	-179.37
563	147.81	520.13	0.21	0.79	-172.83
564	159.85	555.98	1.36	-4.58	-168.92
565	171.83	591.07	1.51	-9.97	-167.40
566	183.61	626.51	0.86	-16.28	-168.83
567	195.12	663.62	-0.15	-23.74	-174.60
568	205.90	702.32	-0.81	-30.31	-185.20
569	220.45	744.28	0.05	-29.49	-198.50
570	236.75	785.45	-1.06	-20.13	-209.10
571	251.07	828.79	-1.32	-5.32	-213.01
572	255.36	851.20	-2.67	0.00	-213.22
573	255.36	851.20	-2.67	0.00	-213.22
574	255.36	851.20	-2.67	0.00	-213.22
575	255.36	851.20	-2.67	0.00	-213.22
576	255.36	851.20	-2.67	0.00	-213.22
577	255.36	851.20	-2.67	0.00	-213.22
578	255.36	851.20	-2.67	0.00	-213.22
579	255.36	851.20	-2.67	0.00	-213.22
580	255.36	851.20	-2.67	0.00	-213.22
581	255.36	851.20	-2.67	0.00	-213.22
582	255.36	851.20	-2.67	0.00	-213.22
583	255.36	851.20	-2.67	0.00	-213.22
584	255.36	851.20	-2.67	0.00	-213.22
585	255.36	851.20	-2.67	0.00	-213.22
586	255.36	851.20	-2.67	0.00	-213.22
587	255.36	851.20	-2.67	0.00	-213.22
588	255.36	851.20	-2.67	0.00	-213.22
589	255.36	851.20	-2.67	0.00	-213.22
590	255.36	851.20	-2.67	0.00	-213.22
591	255.36	851.20	-2.67	0.00	-213.22
592	255.36	851.20	-2.67	0.00	-213.22
593	255.36	851.20	-2.67	0.00	-213.22
594	255.36	851.20	-2.67	0.00	-213.22
595	255.36	851.20	-2.67	0.00	-213.22
596	255.36	851.20	-2.67	0.00	-213.22
597	255.36	851.20	-2.67	0.00	-213.22
598	255.36	851.20	-2.67	0.00	-213.22
599	255.36	851.20	-2.67	0.00	-213.22
600	-23.18	0.04	-6.16	-120.95	-51.16
601	3.76	19.39	-8.31	-79.01	-90.56
602	17.30	53.34	-10.70	-60.82	-158.19
603	33.38	100.01	-9.13	-46.73	-206.93
604	54.48	153.93	-7.79	-28.29	-239.00
605	76.11	211.83	-7.79	-8.06	-252.62
606	93.28	270.83	-8.57	7.07	-249.14
607	105.67	330.98	-8.00	13.55	-234.15
608	115.70	386.22	-6.02	12.54	-215.36
609	125.83	435.28	-3.46	8.43	-198.70
610	136.96	478.87	-1.36	4.24	-186.32
611	148.76	518.44	-0.03	0.73	-178.16
612	160.91	555.62	0.63	-2.28	-173.62
613	173.16	591.76	0.77	-5.26	-172.41
614	185.42	628.04	0.58	-8.55	-174.65
615	197.67	665.31	0.28	-11.93	-180.35
616	210.64	704.38	0.22	-13.89	-188.69

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
617	224.68	745.46	0.06	-12.67	-197.15
618	238.48	785.96	-0.26	-7.93	-202.56
619	249.97	827.07	-1.13	-2.26	-203.57
620	254.11	847.03	-1.18	0.00	-202.99
621	254.11	847.03	-1.18	0.00	-202.99
622	254.11	847.03	-1.18	0.00	-202.99
623	254.11	847.03	-1.18	0.00	-202.99
624	254.11	847.03	-1.18	0.00	-202.99
625	-18.34	-0.54	0.00	0.00	-52.97
626	9.43	18.69	0.00	0.00	-93.57
627	24.22	52.83	0.00	0.00	-162.06
628	39.27	99.67	0.00	0.00	-209.17
629	57.50	153.58	0.00	0.00	-239.11
630	76.29	211.05	0.00	0.00	-252.06
631	92.29	269.32	0.00	0.00	-249.61
632	105.21	329.01	0.00	0.00	-236.23
633	115.80	384.11	0.00	0.00	-218.37
634	126.21	433.56	0.00	0.00	-201.65
635	137.29	477.71	0.00	0.00	-188.71
636	149.08	517.85	0.00	0.00	-180.05
637	161.27	555.47	0.00	0.00	-175.29
638	173.64	591.96	0.00	0.00	-174.14
639	186.07	628.44	0.00	0.00	-176.47
640	198.75	665.89	0.00	0.00	-181.96
641	211.97	704.93	0.00	0.00	-189.40
642	225.95	745.98	0.00	0.00	-196.40
643	238.73	786.01	0.00	0.00	-200.38
644	249.62	826.65	0.00	0.00	-200.55
645	254.02	846.75	0.00	0.00	-199.76
646	254.02	846.75	0.00	0.00	-199.76
647	254.02	846.75	0.00	0.00	-199.76
648	254.02	846.75	0.00	0.00	-199.76
649	254.02	846.75	0.00	0.00	-199.76
650	-23.18	0.04	6.16	120.95	-51.16
651	3.76	19.39	8.31	79.01	-90.56
652	17.30	53.34	10.70	60.82	-158.19
653	33.38	100.01	9.13	46.73	-206.93
654	54.48	153.93	7.79	28.29	-239.00
655	76.11	211.83	7.79	8.06	-252.62
656	93.28	270.83	8.57	-7.07	-249.14
657	105.67	330.98	8.00	-13.55	-234.15
658	115.70	386.22	6.02	-12.54	-215.36
659	125.83	435.28	3.46	-8.43	-198.70
660	136.96	478.87	1.36	-4.24	-186.32
661	148.76	518.44	0.03	-0.73	-178.16
662	160.91	555.62	-0.63	2.28	-173.62
663	173.16	591.76	-0.77	5.26	-172.41
664	185.42	628.04	-0.58	8.55	-174.65
665	197.67	665.31	-0.28	11.93	-180.35
666	210.64	704.38	-0.22	13.89	-188.69
667	224.68	745.46	-0.06	12.67	-197.15
668	238.48	785.96	0.26	7.93	-202.56
669	249.97	827.07	1.13	2.26	-203.57
670	254.11	847.03	1.18	0.00	-202.99
671	254.11	847.03	1.18	0.00	-202.99
672	254.11	847.03	1.18	0.00	-202.99
673	254.11	847.03	1.18	0.00	-202.99
674	254.11	847.03	1.18	0.00	-202.99
675	-33.07	3.25	13.29	227.05	-43.12
676	-12.53	21.25	18.94	150.24	-77.44
677	-3.74	54.60	23.42	124.22	-141.48
678	13.91	100.03	19.89	101.93	-196.34
679	45.33	154.51	15.98	61.69	-236.27
680	77.05	214.57	17.90	14.27	-252.56
681	96.33	275.87	19.67	-18.66	-245.64
682	106.58	338.07	18.26	-29.47	-225.82
683	114.37	393.15	12.58	-24.02	-205.06
684	124.55	440.86	6.65	-15.11	-189.54
685	135.91	482.33	2.31	-7.14	-179.37
686	147.81	520.13	-0.21	-0.79	-172.83
687	159.85	555.98	-1.36	4.58	-168.92
688	171.83	591.07	-1.51	9.97	-167.40
689	183.61	626.51	-0.86	16.28	-168.83
690	195.12	663.62	0.15	23.74	-174.60
691	205.90	702.32	0.81	30.31	-185.20
692	220.45	744.28	-0.05	29.49	-198.50

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
693	236.75	785.45	1.06	20.13	-209.10
694	251.07	828.79	1.32	5.32	-213.01
695	255.36	851.20	2.67	0.00	-213.22
696	255.36	851.20	2.67	0.00	-213.22
697	255.36	851.20	2.67	0.00	-213.22
698	255.36	851.20	2.67	0.00	-213.22
699	255.36	851.20	2.67	0.00	-213.22
700	-39.29	6.53	21.87	291.82	-19.78
701	-31.57	23.33	33.13	198.82	-41.44
702	-40.67	51.85	44.93	191.10	-94.21
703	-23.78	96.42	34.56	177.45	-162.09
704	29.18	153.51	31.96	112.68	-221.70
705	82.32	220.18	33.08	15.54	-244.67
706	102.89	289.60	40.69	-42.79	-231.40
707	101.77	352.96	31.67	-44.22	-204.19
708	110.66	408.23	18.81	-31.10	-184.00
709	122.04	450.80	8.45	-17.77	-174.30
710	134.16	487.82	2.23	-7.37	-168.87
711	146.31	522.57	-1.05	0.42	-165.14
712	158.25	556.32	-2.38	6.88	-162.15
713	169.89	589.67	-2.31	13.47	-159.78
714	181.12	623.32	-0.96	21.74	-158.80
715	191.80	658.91	1.83	33.18	-161.66
716	201.55	700.16	4.57	48.10	-174.06
717	205.38	739.55	5.14	58.24	-195.41
718	233.60	787.54	-1.17	42.68	-219.31
719	257.45	833.28	7.96	16.78	-233.73
720	253.81	846.03	4.68	0.00	-236.07
721	253.81	846.03	4.68	0.00	-236.07
722	253.81	846.03	4.68	0.00	-236.07
723	253.81	846.03	4.68	0.00	-236.07
724	253.81	846.03	4.68	0.00	-236.07
725	-34.95	4.24	25.97	279.29	26.03
726	-48.26	5.05	46.95	198.32	37.34
727	-54.11	43.35	75.90	236.03	21.58
728	-106.88	67.44	91.18	280.20	-59.13
729	0.14	146.28	54.82	142.02	-164.85
730	116.01	246.40	90.33	-32.36	-215.80
731	78.00	312.80	71.84	-59.55	-186.03
732	89.64	393.77	43.85	-46.83	-154.67
733	104.39	433.75	19.87	-28.64	-153.02
734	118.55	464.21	6.95	-14.09	-155.39
735	131.89	494.25	0.32	-3.96	-157.07
736	144.44	525.09	-2.78	3.24	-156.93
737	156.34	556.37	-3.84	9.09	-154.94
738	167.67	587.52	-3.45	15.12	-151.21
739	178.46	618.20	-1.48	23.15	-145.89
740	188.69	649.07	2.97	35.79	-140.18
741	198.66	685.90	12.35	57.22	-141.89
742	207.73	750.14	19.68	92.43	-172.11
743	173.58	769.49	25.02	102.98	-219.48
744	279.57	855.68	-21.39	7.03	-267.24
745	277.59	925.32	12.81	0.00	-293.46
746	277.59	925.32	12.81	0.00	-293.46
747	277.59	925.32	12.81	0.00	-293.46
748	277.59	925.32	12.81	0.00	-293.46
749	277.59	925.32	12.81	0.00	-293.46
750	-24.64	-6.79	18.68	168.36	81.09
751	-62.17	-45.71	36.94	126.30	150.39
752	-62.80	-101.21	92.89	182.32	254.32
753	-18.52	52.18	150.08	271.57	181.14
754	-27.93	140.12	386.13	94.16	9.85
755	-25.68	253.26	148.88	-80.09	-30.32
756	44.78	464.86	89.14	-36.39	-40.97
757	77.62	465.61	32.09	-27.77	-92.91
758	98.04	463.10	10.27	-13.30	-121.81
759	114.97	476.66	0.51	-3.38	-138.77
760	129.43	499.37	-3.78	3.14	-147.49
761	142.38	526.69	-5.50	7.61	-150.51
762	154.31	555.87	-5.83	11.17	-149.34
763	165.48	585.04	-5.16	14.80	-144.28
764	175.99	612.40	-3.31	19.73	-134.34
765	186.00	635.52	0.97	28.09	-116.85
766	195.34	650.53	11.25	44.70	-87.06
767	212.41	677.03	44.89	84.57	-70.06
768	269.39	910.95	74.68	130.84	-195.18

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
769	248.18	859.97	275.71	-12.35	-351.73
770	173.94	579.81	42.58	0.00	-384.85
771	173.94	579.81	42.58	0.00	-384.85
772	173.94	579.81	42.58	0.00	-384.85
773	173.94	579.81	42.58	0.00	-384.85
774	173.94	579.81	42.58	0.00	-384.85
775	-21.08	-15.29	-2.07	-14.88	107.69
776	-70.08	-81.10	-3.82	-3.50	212.15
777	-100.90	-303.82	-6.38	2.61	431.76
778	-186.55	-984.29	-7.91	6.00	767.71
779	-38.10	139.84	-8.85	7.97	937.22
780	116.15	1284.25	-9.45	9.23	556.96
781	58.67	666.54	-9.81	10.14	96.07
782	72.38	509.60	-9.99	10.90	-63.60
783	94.38	476.91	-9.99	11.56	-107.51
784	112.17	481.29	-9.82	12.13	-131.80
785	127.16	500.68	-9.47	12.61	-143.54
786	140.32	526.44	-8.94	12.99	-147.90
787	152.34	554.68	-8.24	13.21	-147.13
788	163.53	582.95	-7.39	13.24	-141.60
789	174.06	608.74	-6.41	12.99	-129.76
790	183.81	627.14	-5.35	12.39	-106.38
791	192.34	624.55	-4.29	11.31	-54.97
792	184.38	529.27	-3.34	9.52	35.16
793	129.43	92.47	-2.68	6.90	229.50
794	513.77	1902.56	-2.36	2.83	302.46
795	1257.21	4190.71	-2.28	0.00	235.33
796	1257.21	4190.71	-2.28	0.00	235.33
797	1257.21	4190.71	-2.28	0.00	235.33
798	1257.21	4190.71	-2.28	0.00	235.33
799	1257.21	4190.71	-2.28	0.00	235.33
800	-29.15	-6.79	-22.84	-198.27	81.23
801	-66.73	-45.76	-44.59	-133.41	150.64
802	-67.37	-101.36	-105.66	-177.19	254.77
803	-23.11	51.89	-165.92	-259.65	181.76
804	-32.51	139.63	-403.86	-78.28	10.62
805	-30.26	252.55	-167.81	98.51	-29.44
806	40.21	463.89	-108.81	56.64	-40.00
807	73.09	464.32	-52.13	49.56	-91.90
808	93.57	461.46	-30.32	36.42	-120.80
809	110.59	474.66	-20.22	27.67	-137.82
810	125.18	496.99	-15.25	22.16	-146.66
811	138.31	523.94	-12.48	18.47	-149.88
812	150.46	552.77	-10.77	15.40	-148.98
813	161.89	581.63	-9.75	11.86	-144.28
814	172.71	608.76	-9.65	6.47	-134.77
815	183.07	631.75	-11.81	-3.05	-117.76
816	192.78	646.75	-19.96	-21.83	-88.51
817	210.27	673.37	-51.68	-65.28	-72.03
818	267.68	907.52	-80.15	-116.84	-197.59
819	247.01	856.90	-280.52	18.10	-354.41
820	173.09	576.96	-47.23	0.00	-387.62
821	173.09	576.96	-47.23	0.00	-387.62
822	173.09	576.96	-47.23	0.00	-387.62
823	173.09	576.96	-47.23	0.00	-387.62
824	173.09	576.96	-47.23	0.00	-387.62
825	-43.96	4.23	-30.14	-309.65	26.30
826	-57.36	4.96	-54.62	-205.77	37.85
827	-63.24	43.05	-88.72	-231.16	22.50
828	-116.03	66.85	-107.07	-268.52	-57.87
829	-9.01	145.32	-72.63	-126.34	-163.30
830	106.86	244.99	-109.36	50.62	-214.02
831	68.87	310.87	-91.63	79.69	-184.07
832	80.57	391.22	-64.04	68.59	-152.60
833	95.42	430.51	-40.11	51.81	-150.95
834	109.75	460.23	-26.90	38.52	-153.43
835	123.34	489.51	-19.62	29.48	-155.36
836	136.22	519.60	-15.53	23.17	-155.60
837	148.55	550.17	-13.13	17.93	-154.15
838	160.41	580.70	-11.84	12.09	-151.12
839	171.81	610.90	-11.88	3.71	-146.66
840	182.73	641.48	-14.20	-10.02	-141.94
841	193.46	678.27	-21.44	-33.57	-144.72
842	203.37	742.74	-26.81	-72.39	-176.00
843	170.09	762.52	-30.81	-88.37	-224.27
844	277.17	849.41	16.27	-1.00	-272.59

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
845	275.85	919.50	-17.77	0.00	-298.98
846	275.85	919.50	-17.77	0.00	-298.98
847	275.85	919.50	-17.77	0.00	-298.98
848	275.85	919.50	-17.77	0.00	-298.98
849	275.85	919.50	-17.77	0.00	-298.98
850	-52.73	6.52	-26.07	-322.92	-19.37
851	-45.13	23.19	-40.85	-206.83	-40.69
852	-54.29	51.42	-57.82	-186.70	-92.83
853	-37.43	95.57	-50.54	-166.17	-160.17
854	15.49	152.12	-49.89	-97.33	-219.33
855	68.60	218.12	-52.25	2.46	-241.92
856	89.18	286.76	-60.66	62.75	-228.37
857	88.11	349.19	-52.10	65.91	-200.98
858	97.12	403.43	-39.36	54.32	-180.77
859	108.73	444.89	-28.78	42.40	-171.22
860	121.19	480.76	-21.99	33.26	-166.13
861	133.82	514.36	-17.79	26.54	-162.97
862	146.38	547.02	-15.18	20.86	-160.78
863	158.77	579.40	-13.63	14.66	-159.47
864	170.92	612.30	-13.06	6.22	-159.76
865	182.62	647.40	-13.73	-6.16	-164.12
866	193.52	688.53	-14.28	-23.13	-178.15
867	198.65	728.22	-12.86	-36.94	-201.12
868	228.21	776.81	-5.18	-27.05	-226.39
869	253.71	823.56	-13.62	-10.29	-241.68
870	251.10	836.99	-10.17	0.00	-244.28
871	251.10	836.99	-10.17	0.00	-244.28
872	251.10	836.99	-10.17	0.00	-244.28
873	251.10	836.99	-10.17	0.00	-244.28
874	251.10	836.99	-10.17	0.00	-244.28
875	-50.85	3.24	-17.54	-259.17	-42.58
876	-30.45	21.08	-26.71	-159.04	-76.44
877	-21.75	54.07	-36.39	-120.50	-139.61
878	-4.17	98.96	-35.97	-91.24	-193.73
879	27.16	152.73	-34.03	-46.86	-233.02
880	58.81	211.91	-37.24	3.32	-248.77
881	78.03	272.19	-39.86	38.33	-241.43
882	88.29	333.16	-38.99	51.03	-221.34
883	96.19	386.86	-33.52	47.30	-200.52
884	106.59	433.09	-27.48	39.99	-185.16
885	118.34	473.01	-22.69	33.52	-175.43
886	130.82	509.24	-19.34	28.49	-169.62
887	143.63	543.59	-17.01	24.17	-166.75
888	156.59	577.33	-15.33	19.44	-166.61
889	169.56	611.67	-14.10	13.23	-169.75
890	182.45	648.05	-12.99	5.04	-177.54
891	194.78	686.49	-11.44	-3.46	-190.35
892	211.08	728.75	-8.52	-6.36	-205.86
893	229.23	770.62	-8.21	-3.01	-218.35
894	245.85	815.26	-7.77	1.85	-223.45
895	251.56	838.54	-8.94	0.00	-224.03
896	251.56	838.54	-8.94	0.00	-224.03
897	251.56	838.54	-8.94	0.00	-224.03
898	251.56	838.54	-8.94	0.00	-224.03
899	251.56	838.54	-8.94	0.00	-224.03
900	-45.16	0.03	-10.45	-154.34	-50.49
901	-18.38	19.20	-16.13	-88.85	-89.30
902	-4.95	52.74	-23.74	-58.01	-155.82
903	10.98	98.75	-25.30	-36.86	-203.58
904	31.92	151.82	-25.96	-14.16	-234.78
905	53.38	208.66	-27.29	8.96	-247.67
906	70.40	266.41	-28.99	26.33	-243.61
907	82.70	325.03	-29.05	34.90	-228.23
908	92.74	378.56	-27.40	35.84	-209.30
909	103.05	425.75	-24.87	33.61	-192.80
910	114.56	467.37	-22.46	31.21	-180.90
911	126.98	504.94	-20.47	29.36	-173.60
912	140.02	540.16	-18.78	27.75	-170.33
913	153.44	574.51	-17.21	25.80	-170.82
914	167.15	609.29	-15.60	22.95	-175.19
915	181.12	645.49	-13.80	19.15	-183.43
916	196.05	684.07	-11.63	15.44	-194.60
917	212.34	725.35	-9.66	12.88	-205.91
918	228.54	766.58	-8.51	11.17	-213.76
919	243.04	809.18	-8.66	5.82	-216.32
920	249.06	830.19	-8.52	0.00	-216.23

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
921	249.06	830.19	-8.52	0.00	-216.23
922	249.06	830.19	-8.52	0.00	-216.23
923	249.06	830.19	-8.52	0.00	-216.23
924	249.06	830.19	-8.52	0.00	-216.23
925	-44.31	-0.53	-4.32	-34.92	-52.18
926	-16.69	18.51	-7.85	-11.14	-92.05
927	-2.08	52.18	-13.08	1.62	-159.15
928	12.74	98.29	-16.22	8.80	-205.00
929	30.67	151.22	-18.23	13.19	-233.81
930	49.14	207.46	-19.61	16.25	-245.79
931	64.83	264.27	-20.61	18.69	-242.56
932	77.49	322.14	-21.35	21.04	-228.64
933	87.94	375.20	-21.82	23.28	-210.53
934	98.39	422.41	-22.02	25.48	-193.92
935	109.77	464.16	-21.91	27.64	-181.49
936	122.15	501.83	-21.45	29.70	-173.78
937	135.28	537.00	-20.61	31.54	-170.48
938	148.94	571.18	-19.36	33.03	-171.31
939	163.05	605.67	-17.68	33.94	-176.18
940	177.78	641.60	-15.65	33.92	-184.73
941	193.40	679.78	-13.40	32.44	-195.63
942	210.16	720.82	-11.22	28.62	-206.16
943	225.96	761.46	-9.70	21.65	-213.21
944	240.68	803.69	-8.96	9.24	-215.33
945	247.49	824.97	-8.75	0.00	-215.16
946	247.49	824.97	-8.75	0.00	-215.16
947	247.49	824.97	-8.75	0.00	-215.16
948	247.49	824.97	-8.75	0.00	-215.16
949	247.49	824.97	-8.75	0.00	-215.16
950	-52.86	0.05	1.82	84.26	-50.24
951	-26.05	19.22	0.47	66.26	-88.76
952	-12.75	52.69	-2.35	60.94	-154.69
953	2.96	98.57	-7.04	54.14	-201.84
954	23.59	151.41	-10.39	40.26	-232.47
955	44.68	207.94	-11.82	23.29	-244.85
956	61.29	265.28	-12.12	10.86	-240.35
957	73.15	323.35	-13.55	7.02	-224.62
958	82.77	376.23	-16.17	10.63	-205.44
959	92.72	422.67	-19.14	17.33	-188.80
960	103.95	463.44	-21.37	24.10	-176.89
961	116.22	500.05	-22.52	30.14	-169.73
962	129.26	534.22	-22.59	35.53	-166.77
963	142.88	567.47	-21.72	40.57	-167.79
964	157.01	601.14	-20.05	45.35	-172.92
965	171.61	636.31	-17.83	49.24	-182.20
966	187.42	674.00	-15.55	50.10	-194.64
967	204.84	714.65	-13.17	45.08	-207.35
968	222.36	755.49	-11.30	32.75	-216.50
969	238.63	798.13	-9.69	12.97	-219.93
970	245.80	819.33	-9.41	0.00	-220.12
971	245.80	819.33	-9.41	0.00	-220.12
972	245.80	819.33	-9.41	0.00	-220.12
973	245.80	819.33	-9.41	0.00	-220.12
974	245.80	819.33	-9.41	0.00	-220.12
975	-66.06	3.28	8.95	188.36	-42.06
976	-45.61	21.13	11.17	135.54	-75.34
977	-37.16	53.99	10.51	122.46	-137.31
978	-20.06	98.61	3.91	107.60	-190.19
979	10.62	151.93	-2.00	72.13	-228.32
980	41.50	210.49	-1.53	28.22	-243.04
981	59.89	269.97	-0.92	-1.72	-234.83
982	69.23	329.86	-3.32	-9.53	-214.04
983	76.24	382.28	-9.84	-1.10	-192.70
984	85.87	427.02	-16.42	10.83	-177.05
985	97.01	465.23	-21.18	21.87	-167.27
986	109.13	499.56	-23.85	31.31	-161.69
987	121.91	531.81	-24.77	39.68	-159.41
988	135.23	563.33	-24.23	47.82	-160.28
989	148.98	595.42	-22.39	56.33	-164.91
990	163.12	629.66	-19.66	64.99	-174.71
991	177.20	666.24	-16.88	70.97	-190.03
992	195.78	707.13	-15.53	66.43	-208.34
993	216.60	748.09	-12.87	48.82	-223.41
994	236.83	792.67	-11.87	17.85	-230.25
995	244.89	816.31	-10.28	0.00	-231.41
996	244.89	816.31	-10.28	0.00	-231.41

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
997	244.89	816.31	-10.28	0.00	-231.41
998	244.89	816.31	-10.28	0.00	-231.41
999	244.89	816.31	-10.28	0.00	-231.41
1000	-75.07	6.59	17.57	250.87	-18.57
1001	-67.37	23.27	25.52	181.76	-38.98
1002	-76.95	51.33	32.32	187.01	-89.25
1003	-60.86	95.08	18.98	180.95	-154.69
1004	-8.99	150.98	14.42	121.19	-212.07
1005	42.90	216.06	14.08	27.89	-233.11
1006	62.13	283.53	20.48	-27.10	-218.25
1007	59.58	344.37	10.32	-25.12	-189.80
1008	67.16	396.73	-3.58	-8.60	-168.80
1009	77.49	435.99	-14.87	8.22	-158.78
1010	88.92	469.34	-21.87	22.22	-153.56
1011	100.89	500.10	-25.69	33.70	-150.67
1012	113.27	529.61	-27.24	43.86	-149.25
1013	126.08	558.62	-26.94	54.00	-149.30
1014	139.30	588.04	-24.80	65.35	-151.69
1015	152.83	619.78	-20.62	78.84	-158.95
1016	166.33	657.88	-15.97	93.87	-176.64
1017	174.91	695.21	-13.27	100.52	-203.73
1018	208.57	742.13	-18.09	75.99	-232.87
1019	239.66	788.51	-8.27	31.53	-250.77
1020	240.70	802.33	-11.30	0.00	-254.26
1021	240.70	802.33	-11.30	0.00	-254.26
1022	240.70	802.33	-11.30	0.00	-254.26
1023	240.70	802.33	-11.30	0.00	-254.26
1024	240.70	802.33	-11.30	0.00	-254.26
1025	-72.79	4.33	21.78	235.78	27.42
1026	-86.06	5.10	39.62	178.39	40.24
1027	-92.56	42.98	63.81	229.06	27.51
1028	-146.50	66.27	76.27	281.03	-50.22
1029	-41.02	143.90	38.05	148.19	-153.24
1030	73.06	242.38	72.12	-21.96	-201.85
1031	33.12	306.73	52.37	-45.39	-170.16
1032	42.65	385.02	23.12	-28.82	-137.27
1033	55.40	421.87	-2.11	-6.76	-134.55
1034	67.82	448.74	-16.28	11.75	-136.34
1035	79.82	474.73	-24.09	26.02	-137.98
1036	91.60	501.07	-28.22	37.55	-138.42
1037	103.45	527.45	-30.05	47.86	-137.78
1038	115.61	553.42	-30.02	58.34	-136.33
1039	128.26	578.82	-27.84	70.47	-134.38
1040	141.48	604.61	-22.50	86.23	-133.24
1041	155.64	636.93	-11.57	108.68	-140.65
1042	170.24	697.70	-2.33	140.81	-177.27
1043	142.61	714.63	4.35	141.70	-230.62
1044	257.44	800.40	-41.48	24.43	-282.45
1045	261.22	870.75	-7.01	0.00	-310.03
1046	261.22	870.75	-7.01	0.00	-310.03
1047	261.22	870.75	-7.01	0.00	-310.03
1048	261.22	870.75	-7.01	0.00	-310.03
1049	261.22	870.75	-7.01	0.00	-310.03
1050	-63.56	-6.63	14.67	121.89	82.75
1051	-100.99	-45.53	30.07	102.86	153.86
1052	-102.55	-101.38	81.59	171.82	261.48
1053	-59.92	51.26	136.22	269.15	191.90
1054	-71.48	137.99	370.55	97.54	23.86
1055	-71.74	249.46	131.94	-71.99	-13.58
1056	-3.96	458.97	70.92	-24.05	-21.97
1057	25.92	456.92	12.50	-11.08	-72.10
1058	43.47	451.13	-10.79	7.70	-99.63
1059	57.78	460.89	-22.12	22.04	-115.69
1060	70.05	479.23	-28.03	33.20	-124.00
1061	81.41	501.59	-31.36	42.63	-127.19
1062	92.57	525.20	-33.13	51.43	-126.94
1063	104.00	548.28	-33.57	60.49	-123.74
1064	116.04	569.16	-32.29	70.69	-116.87
1065	129.02	585.69	-27.87	83.44	-103.83
1066	142.94	594.40	-16.65	102.26	-79.90
1067	166.40	615.46	18.49	139.72	-69.73
1068	231.15	844.97	49.31	175.75	-201.46
1069	220.70	791.87	250.73	8.17	-362.63
1070	153.53	511.76	17.86	0.00	-397.32
1071	153.53	511.76	17.86	0.00	-397.32
1072	153.53	511.76	17.86	0.00	-397.32

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1073	153.53	511.76	17.86	0.00	-397.32
1074	153.53	511.76	17.86	0.00	-397.32
1075	-59.77	-15.05	-5.80	-64.90	109.71
1076	-108.67	-80.76	-10.02	-31.27	216.40
1077	-140.83	-303.76	-16.49	-12.19	440.52
1078	-228.79	-984.92	-20.24	-0.28	780.80
1079	-83.32	138.04	-22.69	8.09	954.09
1080	67.53	1280.78	-24.53	14.70	576.96
1081	6.43	660.98	-26.16	20.40	118.62
1082	16.12	501.18	-27.79	26.00	-38.97
1083	34.20	465.15	-29.46	31.38	-81.22
1084	48.29	465.59	-31.18	36.75	-104.22
1085	60.00	480.39	-32.92	42.30	-115.03
1086	70.52	500.80	-34.62	48.16	-118.93
1087	80.77	522.87	-36.14	54.39	-118.33
1088	91.35	544.12	-37.32	60.86	-113.89
1089	102.77	562.11	-37.95	67.17	-104.38
1090	115.24	572.12	-37.80	72.45	-84.87
1091	128.64	560.92	-36.76	75.04	-38.98
1092	128.00	457.50	-35.06	71.84	44.29
1093	82.30	13.42	-33.91	58.63	231.70
1094	479.68	1818.76	-33.52	26.89	299.62
1095	1231.76	4105.87	-33.19	0.00	230.71
1096	1231.76	4105.87	-33.19	0.00	230.71
1097	1231.76	4105.87	-33.19	0.00	230.71
1098	1231.76	4105.87	-33.19	0.00	230.71
1099	1231.76	4105.87	-33.19	0.00	230.71
1100	-65.81	-6.42	-26.15	-252.76	83.79
1101	-103.42	-45.22	-49.84	-166.57	155.98
1102	-106.07	-101.02	-114.13	-197.18	265.63
1103	-65.05	51.60	-176.14	-270.43	197.72
1104	-78.50	138.20	-415.29	-81.84	30.88
1105	-80.79	249.48	-180.32	101.06	-5.72
1106	-15.10	458.76	-122.51	64.61	-13.53
1107	12.51	456.35	-67.34	62.85	-63.14
1108	27.81	450.17	-47.38	54.75	-90.07
1109	39.88	459.42	-39.47	51.02	-105.32
1110	49.90	477.05	-37.04	50.80	-112.55
1111	59.06	498.40	-37.13	52.96	-114.35
1112	68.12	520.54	-38.47	56.51	-112.45
1113	77.70	541.51	-40.55	60.39	-107.52
1114	88.36	559.45	-43.34	62.91	-98.98
1115	100.81	571.99	-47.86	60.92	-84.56
1116	115.45	575.55	-57.50	47.55	-59.74
1117	141.26	590.43	-89.73	4.05	-49.38
1118	209.70	813.26	-118.65	-58.09	-181.58
1119	204.79	753.93	-319.49	46.01	-343.53
1120	141.36	471.21	-85.98	0.00	-378.63
1121	141.36	471.21	-85.98	0.00	-378.63
1122	141.36	471.21	-85.98	0.00	-378.63
1123	141.36	471.21	-85.98	0.00	-378.63
1124	141.36	471.21	-85.98	0.00	-378.63
1125	-76.10	4.83	-32.89	-370.08	29.65
1126	-90.01	5.73	-58.57	-245.66	44.68
1127	-98.96	43.66	-94.96	-257.29	36.03
1128	-156.31	66.88	-114.48	-284.36	-38.47
1129	-54.75	144.25	-80.87	-133.89	-139.19
1130	55.15	242.32	-118.47	50.09	-186.24
1131	10.98	306.24	-101.84	85.25	-153.44
1132	15.98	383.80	-75.77	79.89	-119.55
1133	24.26	419.88	-53.79	68.26	-115.63
1134	32.24	445.76	-43.00	59.93	-115.75
1135	39.79	470.38	-38.64	56.10	-115.08
1136	47.15	494.78	-37.96	55.68	-112.52
1137	54.74	518.33	-39.43	57.40	-108.30
1138	63.04	540.23	-42.36	59.77	-102.94
1139	72.68	559.92	-46.76	60.62	-97.16
1140	84.44	577.88	-53.32	56.21	-92.68
1141	99.68	599.86	-64.21	40.04	-97.65
1142	118.88	647.94	-72.17	2.82	-133.06
1143	98.87	650.82	-78.23	-23.27	-186.50
1144	225.05	723.15	-32.50	30.69	-239.30
1145	236.32	787.74	-66.39	0.00	-267.52
1146	236.32	787.74	-66.39	0.00	-267.52
1147	236.32	787.74	-66.39	0.00	-267.52
1148	236.32	787.74	-66.39	0.00	-267.52

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1149	236.32	787.74	-66.39	0.00	-267.52
1150	-76.94	7.48	-28.06	-391.51	-14.92
1151	-71.04	24.19	-43.09	-254.98	-31.93
1152	-84.98	52.25	-61.20	-219.77	-76.14
1153	-74.51	95.83	-54.39	-187.49	-137.04
1154	-28.89	151.30	-54.13	-109.08	-191.26
1155	16.49	215.75	-57.10	-1.23	-210.13
1156	29.26	282.53	-66.50	65.86	-193.71
1157	19.91	342.30	-59.39	75.04	-163.81
1158	20.90	393.51	-48.62	68.44	-140.97
1159	24.71	431.35	-40.54	60.98	-128.26
1160	29.60	462.78	-36.85	56.46	-119.20
1161	34.98	490.79	-36.44	55.15	-111.23
1162	40.87	516.31	-38.33	56.28	-103.59
1163	47.57	539.56	-41.96	58.63	-96.67
1164	55.66	560.87	-47.23	60.50	-91.90
1165	65.94	581.29	-54.28	59.30	-92.54
1166	79.93	604.02	-61.51	51.90	-104.75
1167	94.93	621.57	-66.06	41.47	-127.91
1168	140.84	645.79	-63.33	42.09	-154.87
1169	189.79	669.47	-74.52	24.19	-172.58
1170	201.91	673.04	-71.08	0.00	-176.51
1171	201.91	673.04	-71.08	0.00	-176.51
1172	201.91	673.04	-71.08	0.00	-176.51
1173	201.91	673.04	-71.08	0.00	-176.51
1174	201.91	673.04	-71.08	0.00	-176.51
1175	-62.45	4.80	-18.58	-339.03	-36.78
1176	-46.40	22.22	-26.87	-216.67	-65.64
1177	-45.13	54.93	-36.38	-160.80	-120.08
1178	-36.38	99.22	-35.65	-118.22	-167.63
1179	-14.64	151.92	-33.60	-62.99	-201.93
1180	7.12	209.58	-37.10	-3.63	-213.87
1181	16.66	268.08	-40.55	38.94	-203.58
1182	17.01	326.49	-41.00	57.77	-180.81
1183	15.52	377.40	-37.33	58.38	-156.78
1184	16.81	420.34	-33.60	54.42	-137.06
1185	19.52	456.18	-31.76	51.23	-121.32
1186	23.02	487.12	-32.20	50.38	-107.74
1187	27.09	514.41	-34.58	51.88	-95.48
1188	31.89	538.77	-38.61	55.20	-84.69
1189	37.87	560.76	-44.20	59.59	-76.67
1190	46.02	581.09	-51.33	64.08	-74.01
1191	57.63	597.84	-59.81	67.97	-78.19
1192	82.85	611.81	-68.50	70.56	-87.01
1193	121.42	619.68	-78.21	64.60	-94.41
1194	168.32	629.30	-83.76	36.40	-97.09
1195	190.94	636.46	-84.92	0.00	-97.42
1196	190.94	636.46	-84.92	0.00	-97.42
1197	190.94	636.46	-84.92	0.00	-97.42
1198	190.94	636.46	-84.92	0.00	-97.42
1199	190.94	636.46	-84.92	0.00	-97.42
1200	-38.12	2.49	-10.54	-248.74	-43.81
1201	-21.12	20.09	-14.19	-155.14	-77.81
1202	-18.77	53.17	-20.42	-104.91	-136.37
1203	-14.46	98.52	-20.81	-69.88	-178.12
1204	-5.87	150.47	-20.68	-35.39	-203.94
1205	3.03	205.75	-21.89	-1.72	-212.34
1206	8.24	261.69	-24.18	24.16	-204.79
1207	9.13	317.81	-25.27	38.71	-186.12
1208	8.78	368.76	-24.91	42.65	-162.86
1209	9.02	413.06	-23.98	41.69	-139.90
1210	10.30	451.11	-23.81	40.31	-118.80
1211	12.21	483.84	-24.95	40.36	-99.31
1212	14.53	512.25	-27.47	42.39	-80.83
1213	17.32	537.04	-31.30	46.46	-63.10
1214	20.90	558.82	-36.45	52.68	-46.54
1215	25.99	577.88	-43.19	61.32	-32.26
1216	35.15	594.50	-53.09	72.28	-22.30
1217	50.80	601.40	-68.21	80.85	-15.94
1218	92.18	599.48	-89.45	70.72	-6.52
1219	151.18	590.74	-100.49	26.47	2.56
1220	174.66	582.22	-102.75	0.00	5.01
1221	174.66	582.22	-102.75	0.00	5.01
1222	174.66	582.22	-102.75	0.00	5.01
1223	174.66	582.22	-102.75	0.00	5.01
1224	174.66	582.22	-102.75	0.00	5.01

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1225	-12.84	2.77	-4.34	-138.86	-47.53
1226	-4.22	17.97	-5.39	-80.74	-86.37
1227	-3.99	51.22	-8.29	-51.39	-150.28
1228	-3.42	96.55	-9.07	-32.26	-190.08
1229	-1.26	148.24	-9.20	-15.40	-211.06
1230	1.26	202.73	-9.87	0.31	-216.11
1231	2.82	257.43	-11.03	12.69	-207.58
1232	3.08	312.59	-12.02	20.41	-188.60
1233	2.85	363.19	-12.47	23.21	-163.55
1234	2.90	407.97	-12.67	23.42	-136.54
1235	3.37	446.82	-13.11	23.15	-109.54
1236	4.16	480.23	-14.16	23.63	-82.84
1237	5.11	508.82	-15.96	25.33	-55.78
1238	6.21	533.10	-18.50	28.49	-27.36
1239	7.60	553.36	-21.82	33.51	3.56
1240	9.83	569.99	-26.29	41.04	37.92
1241	14.03	584.10	-32.87	51.35	75.56
1242	25.21	602.57	-48.03	61.99	108.32
1243	32.47	586.21	-71.55	62.16	128.75
1244	169.77	581.43	-121.28	45.13	166.63
1245	167.55	558.48	-123.40	0.00	197.34
1246	167.55	558.48	-123.40	0.00	197.34
1247	167.55	558.48	-123.40	0.00	197.34
1248	167.55	558.48	-123.40	0.00	197.34
1249	167.55	558.48	-123.40	0.00	197.34
1250	-1.24	-0.48	-1.08	-79.36	-72.16
1251	0.71	14.16	-0.56	-40.71	-116.31
1252	-0.22	47.54	-0.97	-25.11	-183.43
1253	-0.76	93.18	-1.03	-15.22	-218.50
1254	-0.56	144.84	-1.00	-6.85	-234.13
1255	-0.21	198.59	-1.30	0.88	-233.67
1256	-0.11	252.39	-2.09	7.06	-219.18
1257	-0.31	307.08	-2.94	11.01	-193.56
1258	-0.52	357.60	-3.70	12.59	-161.27
1259	-0.55	402.46	-4.36	12.85	-126.35
1260	-0.41	441.20	-5.12	12.90	-90.51
1261	-0.24	474.08	-6.17	13.36	-53.55
1262	-0.14	501.55	-7.60	14.55	-14.10
1263	-0.19	523.84	-9.43	16.66	30.03
1264	-0.48	540.61	-11.76	20.04	81.96
1265	-0.88	551.00	-14.69	25.25	146.35
1266	-2.59	553.04	-19.57	32.99	229.77
1267	1.21	548.40	-24.47	41.66	339.53
1268	-4.62	607.99	-54.48	53.56	433.10
1269	142.10	588.87	-130.55	-36.90	390.51
1270	142.10	588.87	-130.55	-36.90	390.51
1271	142.10	588.87	-130.55	-36.90	390.51
1272	142.10	588.87	-130.55	-36.90	390.51
1273	142.10	588.87	-130.55	-36.90	390.51

Combinazione n° 2 - STR (A1-M1-R3) H - V

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1	-0.95	-0.34	1.08	79.36	-56.91
2	-10.26	2.77	4.34	138.86	-37.69
3	-3.69	17.97	5.39	80.74	-68.83
4	0.71	14.16	0.56	40.71	-92.25
5	-30.83	2.49	10.54	248.74	-34.51
6	-17.91	20.09	14.19	155.14	-61.73
7	-3.43	51.22	8.29	51.39	-120.78
8	-0.14	47.54	0.97	25.11	-146.81
9	-15.92	53.17	20.42	104.91	-109.39
10	-51.56	4.80	18.58	339.03	-28.60
11	-39.37	22.22	26.87	216.67	-51.54
12	-38.04	54.93	36.38	160.80	-95.67
13	-2.89	96.55	9.07	32.26	-154.71
14	-0.49	93.18	1.03	15.22	-177.07
15	-12.41	98.52	20.81	69.88	-145.04
16	-31.00	99.22	35.65	118.22	-136.20
17	-65.69	7.48	28.06	391.51	-11.21
18	-61.12	24.19	43.09	254.98	-24.27
19	-71.23	52.25	61.20	219.77	-59.49
20	-62.91	95.83	54.39	187.49	-110.91
21	-1.18	148.24	9.20	16.81	-174.56

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
22	-0.31	144.84	1.00	7.69	-192.64
23	-5.76	150.47	20.68	37.69	-169.16
24	-14.34	151.92	33.60	65.76	-168.05
25	-28.27	151.30	54.13	112.02	-160.76
26	-68.66	4.83	32.89	370.08	29.65
27	-79.04	5.73	58.57	245.66	44.68
28	-85.88	43.66	94.96	257.29	36.03
29	-129.04	66.88	114.48	284.36	-29.35
30	-53.83	144.25	80.87	136.72	-122.85
31	1.26	202.73	9.87	4.56	-182.22
32	-0.06	198.59	1.30	1.66	-195.81
33	3.03	205.75	21.89	11.44	-180.07
34	7.12	209.58	37.10	19.45	-183.14
35	16.49	215.75	57.10	26.43	-184.37
36	55.15	242.32	118.47	-5.66	-176.64
37	-63.84	-4.55	26.15	252.76	83.79
38	-92.17	-33.94	49.84	166.57	155.98
39	-95.73	-77.61	114.13	197.18	265.63
40	-65.05	51.60	176.14	270.43	197.72
41	-77.48	138.20	415.29	84.30	30.88
42	-76.47	249.48	180.32	-51.86	-5.72
43	2.82	257.43	11.03	-5.60	-179.06
44	-0.01	252.39	2.09	-3.39	-187.87
45	8.24	261.69	24.18	-9.95	-178.24
46	16.66	268.08	40.55	-16.36	-180.23
47	29.26	282.53	66.50	-32.16	-178.32
48	10.98	306.24	101.84	-43.58	-153.44
49	-15.10	458.76	122.51	-32.34	-13.53
50	-59.77	-10.83	5.80	64.90	109.71
51	-97.21	-60.20	10.02	31.27	216.40
52	-123.80	-229.03	16.49	12.19	440.52
53	-191.10	-736.98	20.24	0.70	780.80
54	-82.64	138.04	22.69	-6.21	954.09
55	67.53	1280.78	24.53	-11.68	576.96
56	6.43	660.98	26.16	-16.47	118.62
57	3.08	312.59	12.02	-12.57	-167.11
58	-0.20	307.08	2.94	-6.92	-170.67
59	9.13	317.81	25.27	-23.46	-166.81
60	17.01	326.49	41.00	-35.08	-165.92
61	19.91	342.30	59.39	-46.11	-158.18
62	15.98	383.80	75.77	-50.08	-119.55
63	12.51	456.35	67.34	-41.51	-63.14
64	16.12	501.18	27.79	-21.27	-38.97
65	-61.78	-4.72	-10.01	-90.77	82.75
66	-90.04	-34.24	-20.56	-82.23	153.86
67	-92.74	-78.01	-57.80	-143.78	261.48
68	-59.92	51.26	-98.16	-223.31	191.90
69	-71.48	137.99	-272.19	-96.25	23.86
70	-68.90	249.46	-95.62	71.99	-13.58
71	-3.96	458.97	-50.53	24.05	-21.97
72	25.92	456.92	-6.90	11.08	-72.10
73	2.85	363.19	12.47	-15.91	-149.39
74	-0.39	357.60	3.70	-8.72	-147.28
75	8.78	368.76	24.91	-28.95	-150.51
76	15.52	377.40	37.33	-39.46	-148.77
77	20.90	393.51	48.62	-46.49	-140.82
78	24.26	419.88	53.79	-47.25	-115.63
79	27.81	450.17	47.38	-39.72	-90.07
80	34.20	465.15	29.46	-25.98	-81.22
81	43.47	451.13	10.95	-7.70	-99.63
82	-65.50	4.33	-15.24	-180.05	27.42
83	-75.53	5.10	-27.46	-143.51	40.24
84	-80.44	42.98	-44.29	-190.73	27.51
85	-120.82	66.27	-53.47	-240.54	-38.64
86	-41.02	143.90	-25.79	-147.31	-134.24
87	73.06	242.38	-51.84	21.96	-189.64
88	33.12	306.73	-37.50	45.39	-170.16
89	42.65	385.02	-15.49	28.82	-137.27
90	55.40	421.87	3.85	6.76	-134.55
91	2.90	407.97	12.67	-17.22	-128.96
92	-0.42	402.46	4.36	-9.52	-120.58
93	9.02	413.06	23.98	-30.45	-133.20
94	16.81	420.34	33.60	-39.60	-133.54
95	24.71	431.35	40.54	-44.59	-128.26
96	32.24	445.76	43.00	-44.58	-115.75
97	39.88	459.42	39.47	-39.46	-105.32

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
98	48.29	465.59	31.18	-30.78	-104.22
99	57.78	460.89	22.12	-21.67	-115.69
100	67.82	448.74	16.28	-11.75	-136.34
101	-63.43	6.59	-12.22	-192.33	-13.86
102	-57.71	23.27	-17.17	-146.22	-29.52
103	-64.38	51.33	-21.17	-156.31	-69.52
104	-51.50	95.08	-11.15	-159.94	-124.82
105	-8.99	150.98	-8.39	-120.43	-177.64
106	42.90	216.06	-8.87	-27.89	-203.53
107	62.13	283.53	-13.89	27.10	-199.34
108	59.58	344.37	-6.13	25.12	-180.99
109	67.16	396.73	4.68	8.60	-165.71
110	77.49	435.99	14.87	-8.22	-157.59
111	3.37	446.82	13.11	-18.08	-107.45
112	-0.32	441.20	5.12	-10.12	-90.51
113	10.30	451.11	23.81	-31.31	-116.32
114	19.52	456.18	31.76	-39.71	-120.56
115	29.60	462.78	36.85	-43.93	-119.20
116	39.79	470.38	38.64	-44.25	-115.08
117	49.90	477.05	37.04	-41.15	-112.55
118	60.00	480.39	32.92	-35.81	-115.03
119	70.05	479.23	28.03	-29.92	-124.00
120	79.82	474.73	24.09	-25.10	-137.98
121	88.92	469.34	21.87	-22.22	-152.71
122	-53.45	3.28	-5.95	-143.92	-32.43
123	-38.17	21.13	-6.81	-108.89	-58.72
124	-31.21	53.99	-5.43	-103.30	-108.78
125	-17.44	98.61	-0.34	-95.88	-153.92
126	10.62	151.93	3.75	-71.15	-189.45
127	41.50	210.49	2.99	-28.22	-207.54
128	59.89	269.97	2.34	1.72	-207.14
129	69.23	329.86	4.26	9.53	-195.29
130	76.24	382.28	9.84	1.10	-181.10
131	85.87	427.02	16.42	-10.83	-169.88
132	97.01	465.23	21.18	-21.51	-162.34
133	4.16	480.23	14.16	-19.44	-82.84
134	-0.19	474.08	6.17	-11.03	-53.55
135	12.21	483.84	24.95	-33.08	-99.31
136	23.02	487.12	32.20	-41.22	-107.74
137	34.98	490.79	36.44	-45.22	-111.23
138	47.15	494.78	37.96	-46.00	-112.52
139	59.06	498.40	37.13	-44.36	-114.35
140	70.52	500.80	34.62	-41.16	-118.93
141	81.41	501.59	31.36	-37.29	-127.19
142	91.60	501.07	28.22	-33.57	-138.42
143	100.89	500.10	25.69	-30.51	-149.56
144	109.13	499.56	23.85	-28.26	-157.60
145	-41.36	0.05	-0.74	-62.73	-39.09
146	-21.30	19.22	0.86	-52.86	-69.69
147	-10.73	52.69	3.72	-51.49	-123.15
148	2.96	98.57	7.50	-48.27	-163.60
149	23.59	151.41	10.39	-38.81	-192.40
150	44.68	207.94	11.82	-23.29	-207.50
151	61.29	265.28	12.12	-10.86	-209.22
152	73.15	323.35	13.55	-7.02	-201.25
153	82.77	376.23	16.17	-10.63	-189.22
154	92.72	422.67	19.14	-17.33	-177.85
155	103.95	463.44	21.37	-22.26	-169.17
156	116.22	500.05	22.52	-26.72	-163.52
157	5.11	508.82	15.96	-21.72	-55.78
158	-0.12	501.55	7.60	-12.50	-14.10
159	14.53	512.25	27.47	-36.30	-80.83
160	27.09	514.41	34.58	-44.39	-95.48
161	40.87	516.31	38.33	-48.17	-103.59
162	54.74	518.33	39.43	-49.20	-108.30
163	68.12	520.54	38.47	-48.54	-112.45
164	80.77	522.87	36.14	-46.84	-118.33
165	92.57	525.20	33.13	-44.41	-126.94
166	103.45	527.45	30.05	-41.43	-137.78
167	113.27	529.61	27.24	-38.06	-147.58
168	121.91	531.81	24.77	-34.46	-155.17
169	129.26	534.22	22.59	-30.82	-160.71
170	-33.94	-0.47	4.32	34.92	-40.70
171	-13.26	18.51	7.85	11.14	-72.43
172	-1.73	52.18	13.08	-1.18	-126.88
173	12.74	98.29	16.22	-7.38	-166.26

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
174	30.67	151.22	18.23	-11.15	-193.41
175	49.14	207.46	19.61	-13.78	-207.91
176	64.83	264.27	20.61	-15.89	-210.40
177	77.49	322.14	21.35	-17.92	-203.79
178	87.94	375.20	21.82	-19.88	-192.73
179	98.39	422.41	22.02	-21.83	-181.57
180	109.77	464.16	21.91	-23.76	-172.67
181	122.15	501.83	21.45	-25.60	-166.70
182	135.28	537.00	20.61	-27.28	-163.67
183	6.21	533.10	18.50	-25.20	-27.36
184	-0.17	523.84	9.43	-14.72	30.03
185	17.32	537.04	31.30	-41.16	-63.10
186	31.89	538.77	38.61	-49.01	-84.69
187	47.57	539.56	41.96	-52.08	-96.67
188	63.04	540.23	42.36	-52.90	-102.94
189	77.70	541.51	40.55	-52.97	-107.52
190	91.35	544.12	37.32	-52.72	-113.89
191	104.00	548.28	33.57	-51.75	-123.74
192	115.61	553.42	30.02	-49.48	-136.33
193	126.08	558.62	26.94	-45.65	-146.81
194	135.23	563.33	24.23	-40.53	-155.01
195	142.88	567.47	21.72	-34.67	-160.66
196	148.94	571.18	19.36	-28.65	-163.47
197	-34.75	0.03	10.45	154.34	-39.28
198	-14.72	19.20	16.13	88.85	-70.12
199	-4.06	52.74	23.74	58.01	-124.07
200	10.98	98.75	25.30	36.86	-165.04
201	31.92	151.82	25.96	16.75	-194.34
202	53.38	208.66	27.29	-1.38	-209.91
203	70.40	266.41	28.99	-15.89	-212.03
204	82.70	325.03	29.05	-24.18	-204.39
205	92.74	378.56	27.40	-26.53	-192.62
206	103.05	425.75	24.87	-26.13	-181.40
207	114.56	467.37	22.46	-25.27	-172.76
208	126.98	504.94	20.47	-24.57	-167.02
209	140.02	540.16	18.78	-23.90	-163.95
210	153.44	574.51	17.21	-22.88	-163.45
211	7.60	553.36	21.82	-30.23	3.56
212	-0.43	540.61	11.76	-18.01	81.96
213	20.90	558.82	36.45	-47.85	-46.54
214	37.87	560.76	44.20	-54.63	-76.67
215	55.66	560.87	47.23	-55.81	-91.90
216	72.68	559.92	46.76	-55.61	-97.16
217	88.36	559.45	43.34	-56.45	-98.98
218	102.77	562.11	37.95	-58.43	-104.38
219	116.04	569.16	32.29	-59.80	-116.87
220	128.26	578.82	27.84	-58.56	-134.38
221	139.30	588.04	24.80	-53.97	-147.85
222	148.98	595.42	22.39	-46.75	-157.55
223	157.01	601.14	20.05	-38.24	-163.50
224	163.05	605.67	17.68	-29.51	-166.06
225	167.15	609.29	15.60	-21.15	-165.63
226	-40.38	3.24	17.54	259.17	-32.82
227	-25.18	21.08	26.71	159.04	-59.59
228	-18.01	54.07	36.39	120.50	-110.65
229	-3.82	98.96	35.97	91.24	-156.85
230	27.16	152.73	34.03	49.84	-193.41
231	58.81	211.91	37.24	10.68	-212.43
232	78.03	272.19	39.86	-19.00	-212.83
233	88.29	333.16	38.99	-32.45	-201.66
234	96.19	386.86	33.52	-32.75	-187.99
235	106.59	433.09	27.48	-29.45	-177.09
236	118.34	473.01	22.69	-26.05	-169.65
237	130.82	509.24	19.34	-23.26	-164.75
238	143.63	543.59	17.01	-20.74	-161.84
239	156.59	577.33	15.33	-17.80	-160.82
240	169.56	611.67	14.10	-13.23	-162.08
241	9.83	569.99	26.29	-37.36	37.92
242	-0.80	551.00	14.69	-22.82	146.35
243	25.99	577.88	43.19	-56.59	-32.26
244	46.02	581.09	51.33	-60.52	-74.01
245	65.94	581.29	54.28	-57.46	-92.54
246	84.44	577.88	53.32	-54.63	-92.68
247	100.81	571.99	47.86	-56.69	-84.56
248	115.24	572.12	37.80	-63.20	-84.87
249	129.02	585.69	27.87	-69.30	-103.83

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
250	141.48	604.61	22.50	-69.81	-133.24
251	152.83	619.78	20.62	-63.45	-152.40
252	163.12	629.66	19.66	-52.79	-163.75
253	171.61	636.31	17.83	-40.97	-169.20
254	177.78	641.60	15.65	-29.57	-171.16
255	181.12	645.49	13.80	-18.64	-170.43
256	182.45	648.05	12.99	-5.04	-166.53
257	-44.25	6.52	26.07	322.92	-14.48
258	-38.65	23.19	40.85	206.83	-30.87
259	-44.97	51.42	57.82	186.70	-72.42
260	-31.42	95.57	50.54	166.17	-129.35
261	15.49	152.12	49.89	100.38	-183.74
262	68.60	218.12	52.25	21.14	-211.03
263	89.18	286.76	60.66	-31.91	-208.07
264	88.11	349.19	52.10	-40.72	-190.75
265	97.12	403.43	39.36	-36.59	-176.26
266	108.73	444.89	28.78	-30.43	-168.65
267	121.19	480.76	21.99	-25.29	-163.98
268	133.82	514.36	17.79	-21.35	-160.65
269	146.38	547.02	15.18	-17.87	-158.05
270	158.77	579.40	13.63	-13.88	-156.12
271	170.92	612.30	13.06	-6.22	-155.34
272	182.62	647.40	13.73	6.16	-157.38
273	14.03	584.10	32.87	-46.71	75.56
274	-2.33	553.04	19.57	-29.74	229.77
275	35.15	594.50	53.09	-66.99	-22.30
276	57.63	597.84	59.81	-65.76	-75.60
277	79.93	604.02	61.51	-51.90	-101.11
278	99.68	599.86	64.21	-40.04	-97.65
279	115.45	575.55	57.50	-47.55	-59.74
280	128.64	560.92	36.76	-65.57	-38.98
281	142.94	594.40	16.65	-82.13	-79.90
282	155.64	636.93	11.70	-84.74	-138.79
283	166.33	657.88	15.97	-73.25	-164.24
284	177.20	666.24	16.88	-56.44	-173.66
285	187.42	674.00	15.55	-41.20	-177.00
286	193.40	679.78	13.40	-28.34	-177.78
287	196.05	684.07	11.63	-15.44	-177.12
288	194.78	686.49	11.44	3.46	-174.25
289	193.52	688.53	14.28	23.13	-166.02
290	-40.73	4.23	30.14	309.65	26.30
291	-50.94	4.96	54.62	205.77	37.85
292	-55.32	43.05	88.72	231.16	22.50
293	-94.71	66.85	107.07	268.52	-44.94
294	-9.01	145.32	72.63	129.05	-142.68
295	106.86	244.99	109.36	-7.73	-199.99
296	68.87	310.87	91.63	-40.64	-184.07
297	80.57	391.22	64.04	-42.26	-152.60
298	95.42	430.51	40.11	-34.84	-150.95
299	109.75	460.23	26.90	-27.61	-153.43
300	123.34	489.51	19.62	-22.41	-155.36
301	136.22	519.60	15.53	-18.64	-155.60
302	148.55	550.17	13.13	-15.38	-153.76
303	160.41	580.70	11.84	-11.57	-150.53
304	171.81	610.90	11.88	-3.71	-146.39
305	182.73	641.48	14.20	10.02	-141.94
306	193.46	678.27	21.44	33.57	-142.94
307	25.21	602.57	48.03	-55.98	108.32
308	1.21	548.40	24.47	-37.32	339.53
309	50.80	601.40	68.21	-74.50	-15.94
310	82.85	611.81	68.50	-68.63	-79.31
311	94.93	621.57	66.06	-41.47	-115.58
312	118.88	647.94	72.17	-2.82	-125.49
313	141.26	590.43	89.73	-4.05	-49.38
314	128.00	457.50	35.06	-62.83	44.29
315	166.40	615.46	-10.04	-104.78	-69.73
316	170.24	697.70	4.67	-104.25	-164.19
317	174.91	695.21	13.27	-76.01	-181.86
318	195.78	707.13	15.53	-51.91	-185.24
319	204.84	714.65	13.17	-36.85	-184.80
320	210.16	720.82	11.22	-25.06	-184.02
321	212.34	725.35	9.66	-12.88	-183.69
322	211.08	728.75	8.52	6.36	-183.39
323	198.65	728.22	12.86	36.94	-180.05
324	203.37	742.74	26.81	72.39	-163.67
325	-29.15	-4.86	22.84	198.27	81.23

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
326	-60.68	-34.50	44.59	133.41	150.64
327	-62.62	-78.16	105.66	177.19	254.77
328	-23.11	51.89	165.92	259.65	181.76
329	-32.51	139.63	403.86	80.33	10.62
330	-30.26	252.55	167.81	-50.89	-29.44
331	40.21	463.89	108.81	-26.88	-40.00
332	73.09	464.32	52.13	-31.53	-91.90
333	93.57	461.46	30.32	-25.30	-120.80
334	110.59	474.66	20.22	-20.50	-137.82
335	125.18	496.99	15.25	-17.34	-146.66
336	138.31	523.94	12.48	-15.16	-149.88
337	150.46	552.77	10.77	-13.27	-148.98
338	161.89	581.63	9.75	-10.96	-144.28
339	172.71	608.76	9.65	-6.47	-134.77
340	183.07	631.75	11.81	3.05	-117.76
341	192.78	646.75	19.96	21.83	-88.51
342	210.27	673.37	51.68	65.28	-72.03
343	32.47	586.21	71.55	-55.71	128.75
344	-4.36	607.99	54.48	-47.61	433.10
345	92.18	599.48	89.45	-64.55	-6.52
346	121.42	619.68	78.21	-61.91	-81.85
347	140.84	645.79	63.33	-42.09	-131.45
348	98.87	650.82	78.23	23.27	-158.69
349	209.70	813.26	118.65	58.09	-156.06
350	91.21	113.92	33.91	-51.29	231.70
351	231.15	844.97	-32.72	-128.08	-173.41
352	142.61	714.63	0.00	-100.24	-197.17
353	208.57	742.13	18.09	-54.93	-199.40
354	216.60	748.09	12.87	-37.84	-194.15
355	222.36	755.49	11.30	-26.89	-189.95
356	225.96	761.46	9.70	-18.99	-187.73
357	228.54	766.58	8.51	-11.17	-187.72
358	229.23	770.62	8.21	3.01	-190.05
359	228.21	776.81	5.18	27.05	-194.22
360	170.09	762.52	30.81	88.37	-192.22
361	267.68	907.52	80.15	116.84	-170.74
362	-21.08	-11.03	2.07	14.88	107.69
363	-64.12	-60.58	3.82	3.50	212.15
364	-89.61	-229.30	6.38	-2.14	431.76
365	-154.95	-736.83	7.91	-5.10	767.71
366	-38.10	139.84	8.85	-6.82	937.22
367	116.15	1284.25	9.45	-7.92	556.96
368	58.67	666.54	9.81	-8.70	96.07
369	72.38	509.60	9.99	-9.37	-63.60
370	94.38	476.91	9.99	-9.95	-107.51
371	112.17	481.29	9.82	-10.46	-131.80
372	127.16	500.68	9.47	-10.90	-143.54
373	140.32	526.44	8.94	-11.25	-147.90
374	152.34	554.68	8.24	-11.47	-147.13
375	163.53	582.95	7.39	-11.52	-141.60
376	174.06	608.74	6.41	-11.33	-129.76
377	183.81	627.14	5.35	-10.84	-106.38
378	192.34	624.55	4.29	-9.92	-54.97
379	184.38	529.27	3.34	-8.38	35.16
380	132.41	183.49	2.68	-6.09	229.50
381	169.77	581.43	121.28	-39.88	166.63
382	142.10	588.87	130.55	36.90	390.51
383	151.18	590.74	100.49	-24.02	2.56
384	168.32	629.30	83.76	-33.54	-81.68
385	189.79	669.47	74.52	-24.19	-141.10
386	225.05	723.15	32.50	-30.69	-185.72
387	204.79	753.93	319.49	-42.35	-254.93
388	479.68	1818.76	33.52	-23.53	299.62
389	220.70	791.87	-181.77	-5.05	-271.56
390	257.44	800.40	41.48	-13.98	-223.27
391	239.66	788.51	9.18	-21.57	-209.10
392	236.83	792.67	11.87	-14.11	-197.41
393	238.63	798.13	9.69	-10.82	-191.21
394	240.68	803.69	8.96	-8.12	-188.10
395	243.04	809.18	8.66	-5.69	-188.23
396	245.85	815.26	7.77	-1.85	-191.80
397	253.71	823.56	13.62	10.29	-201.64
398	277.17	849.41	-12.28	1.00	-215.26
399	247.01	856.90	280.52	-17.97	-265.09
400	513.77	1902.56	2.36	-2.51	302.46
401	-24.64	-4.86	-13.42	-130.21	81.09

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
402	-56.75	-34.46	-26.41	-102.20	150.39
403	-58.68	-78.04	-67.42	-152.91	254.32
404	-18.52	52.18	-110.00	-225.74	181.14
405	-27.93	140.12	-285.54	-93.91	9.85
406	-25.68	253.26	-110.20	80.09	-30.32
407	44.78	464.86	-66.28	36.39	-40.97
408	77.62	465.61	-23.91	27.77	-92.91
409	98.04	463.10	-7.41	13.30	-121.81
410	114.97	476.66	0.09	3.38	-138.77
411	129.43	499.37	3.78	-3.14	-147.49
412	142.38	526.69	5.50	-7.42	-150.51
413	154.31	555.87	5.83	-9.79	-149.34
414	165.48	585.04	5.16	-12.23	-144.28
415	175.99	612.40	3.31	-15.54	-134.34
416	186.00	635.52	-0.39	-21.08	-116.85
417	195.34	650.53	-8.19	-31.91	-87.06
418	212.41	677.03	-33.13	-56.62	-70.06
419	269.39	910.95	-54.89	-88.85	-168.72
420	248.18	859.97	-203.59	12.87	-262.83
421	167.55	558.48	123.40	0.00	197.34
422	174.66	582.22	102.75	0.00	5.01
423	190.94	636.46	84.92	0.00	-81.20
424	201.91	673.04	71.08	0.00	-142.94
425	236.32	787.74	66.39	0.00	-199.81
426	141.36	471.21	85.98	0.00	-269.53
427	1231.76	4105.87	33.19	0.00	230.71
428	153.53	511.76	-9.05	0.00	-285.79
429	261.22	870.75	9.01	0.00	-236.78
430	240.70	802.33	11.51	0.00	-210.51
431	244.89	816.31	10.28	0.00	-197.60
432	245.80	819.33	9.41	0.00	-190.85
433	247.49	824.97	8.75	0.00	-187.50
434	249.06	830.19	8.52	0.00	-187.62
435	251.56	838.54	8.94	0.00	-191.49
436	251.10	836.99	10.17	0.00	-202.28
437	275.85	919.50	17.77	0.00	-227.74
438	173.09	576.96	47.23	0.00	-278.02
439	1257.21	4190.71	2.28	0.00	235.33
440	173.94	579.81	-30.64	0.00	-275.69
441	173.94	579.81	-30.64	0.00	-275.69
442	173.94	579.81	-30.64	0.00	-275.69
443	173.94	579.81	-30.64	0.00	-275.69
444	173.94	579.81	-30.64	0.00	-275.69
445	173.94	579.81	-30.64	0.00	-275.69
446	173.94	579.81	-30.64	0.00	-275.69
447	173.94	579.81	-30.64	0.00	-275.69
448	173.94	579.81	-30.64	0.00	-275.69
449	173.94	579.81	-30.64	0.00	-275.69
450	173.94	579.81	-30.64	0.00	-275.69
451	173.94	579.81	-30.64	0.00	-275.69
452	173.94	579.81	-30.64	0.00	-275.69
453	173.94	579.81	-30.64	0.00	-275.69
454	173.94	579.81	-30.64	0.00	-275.69
455	173.94	579.81	-30.64	0.00	-275.69
456	173.94	579.81	-30.64	0.00	-275.69
457	173.94	579.81	-30.64	0.00	-275.69
458	173.94	579.81	-30.64	0.00	-275.69
459	173.94	579.81	-30.64	0.00	-275.69
460	173.94	579.81	-30.64	0.00	-275.69
461	173.94	579.81	-30.64	0.00	-275.69
462	-32.97	4.24	-18.83	-217.27	26.03
463	-43.10	5.05	-33.73	-160.63	37.34
464	-47.46	43.35	-54.66	-196.87	21.58
465	-86.83	67.44	-66.26	-240.15	-46.01
466	0.14	146.28	-40.22	-142.02	-144.01
467	116.01	246.40	-67.55	32.36	-201.53
468	78.00	312.80	-54.36	59.55	-186.03
469	89.64	393.77	-33.51	46.83	-154.67
470	104.39	433.75	-15.33	28.64	-153.02
471	118.55	464.21	-5.35	14.09	-155.39
472	131.89	494.25	-0.15	3.96	-157.07
473	144.44	525.09	2.78	-3.24	-156.93
474	156.34	556.37	3.84	-8.06	-154.54
475	167.67	587.52	3.45	-12.09	-150.71
476	178.46	618.20	1.48	-17.48	-145.85
477	188.69	649.07	-2.19	-25.89	-140.18

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
478	198.66	685.90	-9.27	-39.86	-140.62
479	207.73	750.14	-14.60	-62.01	-160.44
480	173.58	769.49	-18.10	-66.41	-188.21
481	279.57	855.68	21.39	1.23	-210.77
482	277.59	925.32	-8.33	0.00	-223.09
483	277.59	925.32	-8.33	0.00	-223.09
484	277.59	925.32	-8.33	0.00	-223.09
485	277.59	925.32	-8.33	0.00	-223.09
486	277.59	925.32	-8.33	0.00	-223.09
487	277.59	925.32	-8.33	0.00	-223.09
488	277.59	925.32	-8.33	0.00	-223.09
489	277.59	925.32	-8.33	0.00	-223.09
490	277.59	925.32	-8.33	0.00	-223.09
491	277.59	925.32	-8.33	0.00	-223.09
492	277.59	925.32	-8.33	0.00	-223.09
493	277.59	925.32	-8.33	0.00	-223.09
494	277.59	925.32	-8.33	0.00	-223.09
495	277.59	925.32	-8.33	0.00	-223.09
496	277.59	925.32	-8.33	0.00	-223.09
497	277.59	925.32	-8.33	0.00	-223.09
498	277.59	925.32	-8.33	0.00	-223.09
499	277.59	925.32	-8.33	0.00	-223.09
500	277.59	925.32	-8.33	0.00	-223.09
501	277.59	925.32	-8.33	0.00	-223.09
502	277.59	925.32	-8.33	0.00	-223.09
503	277.59	925.32	-8.33	0.00	-223.09
504	277.59	925.32	-8.33	0.00	-223.09
505	277.59	925.32	-8.33	0.00	-223.09
506	-32.67	6.53	-15.91	-227.60	-14.81
507	-26.97	23.33	-23.71	-161.00	-31.50
508	-33.25	51.85	-32.02	-160.01	-73.59
509	-19.65	96.42	-24.57	-157.21	-130.98
510	29.18	153.51	-23.53	-112.68	-185.77
511	82.32	220.18	-25.31	-15.54	-213.41
512	102.89	289.60	-31.44	42.79	-210.72
513	101.77	352.96	-24.71	44.22	-193.57
514	110.66	408.23	-14.86	31.10	-179.13
515	122.04	450.80	-6.80	17.77	-171.42
516	134.16	487.82	-1.89	7.37	-166.47
517	146.31	522.57	1.05	-0.42	-162.67
518	158.25	556.32	2.38	-6.18	-159.40
519	169.89	589.67	2.31	-10.57	-156.57
520	181.12	623.32	0.96	-16.11	-154.69
521	191.80	658.91	-1.47	-23.69	-155.44
522	201.55	700.16	-3.53	-33.33	-162.68
523	205.38	739.55	-3.81	-39.09	-175.30
524	233.60	787.54	1.26	-25.82	-188.28
525	257.45	833.28	-5.05	-8.66	-194.95
526	253.81	846.03	-2.50	0.00	-195.37
527	253.81	846.03	-2.50	0.00	-195.37
528	253.81	846.03	-2.50	0.00	-195.37
529	253.81	846.03	-2.50	0.00	-195.37
530	253.81	846.03	-2.50	0.00	-195.37
531	253.81	846.03	-2.50	0.00	-195.37
532	253.81	846.03	-2.50	0.00	-195.37
533	253.81	846.03	-2.50	0.00	-195.37
534	253.81	846.03	-2.50	0.00	-195.37
535	253.81	846.03	-2.50	0.00	-195.37
536	253.81	846.03	-2.50	0.00	-195.37
537	253.81	846.03	-2.50	0.00	-195.37
538	253.81	846.03	-2.50	0.00	-195.37
539	253.81	846.03	-2.50	0.00	-195.37
540	253.81	846.03	-2.50	0.00	-195.37
541	253.81	846.03	-2.50	0.00	-195.37
542	253.81	846.03	-2.50	0.00	-195.37
543	253.81	846.03	-2.50	0.00	-195.37
544	253.81	846.03	-2.50	0.00	-195.37
545	253.81	846.03	-2.50	0.00	-195.37
546	253.81	846.03	-2.50	0.00	-195.37
547	253.81	846.03	-2.50	0.00	-195.37
548	253.81	846.03	-2.50	0.00	-195.37
549	253.81	846.03	-2.50	0.00	-195.37
550	253.81	846.03	-2.50	0.00	-195.37
551	253.81	846.03	-2.50	0.00	-195.37
552	-25.07	3.25	-9.69	-177.43	-33.27
553	-9.75	21.25	-13.52	-121.72	-60.42

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
554	-2.51	54.60	-16.58	-105.02	-112.22
555	13.91	100.03	-14.14	-91.25	-159.06
556	45.33	154.51	-11.82	-61.69	-196.20
557	77.05	214.57	-13.87	-14.27	-215.70
558	96.33	275.87	-15.55	18.66	-216.50
559	106.58	338.07	-14.55	29.47	-205.59
560	114.37	393.15	-10.15	24.02	-192.02
561	124.55	440.86	-5.49	15.11	-181.01
562	135.91	482.33	-2.03	7.14	-173.23
563	147.81	520.13	0.21	0.79	-167.73
564	159.85	555.98	1.36	-4.17	-163.94
565	171.83	591.07	1.51	-7.75	-161.75
566	183.61	626.51	0.86	-11.96	-161.53
567	195.12	663.62	-0.15	-16.87	-164.25
568	205.90	702.32	-0.70	-20.97	-170.05
569	220.45	744.28	0.08	-19.63	-177.28
570	236.75	785.45	-0.48	-12.74	-182.30
571	251.07	828.79	-0.42	-3.13	-183.02
572	255.36	851.20	-1.37	0.00	-182.39
573	255.36	851.20	-1.37	0.00	-182.39
574	255.36	851.20	-1.37	0.00	-182.39
575	255.36	851.20	-1.37	0.00	-182.39
576	255.36	851.20	-1.37	0.00	-182.39
577	255.36	851.20	-1.37	0.00	-182.39
578	255.36	851.20	-1.37	0.00	-182.39
579	255.36	851.20	-1.37	0.00	-182.39
580	255.36	851.20	-1.37	0.00	-182.39
581	255.36	851.20	-1.37	0.00	-182.39
582	255.36	851.20	-1.37	0.00	-182.39
583	255.36	851.20	-1.37	0.00	-182.39
584	255.36	851.20	-1.37	0.00	-182.39
585	255.36	851.20	-1.37	0.00	-182.39
586	255.36	851.20	-1.37	0.00	-182.39
587	255.36	851.20	-1.37	0.00	-182.39
588	255.36	851.20	-1.37	0.00	-182.39
589	255.36	851.20	-1.37	0.00	-182.39
590	255.36	851.20	-1.37	0.00	-182.39
591	255.36	851.20	-1.37	0.00	-182.39
592	255.36	851.20	-1.37	0.00	-182.39
593	255.36	851.20	-1.37	0.00	-182.39
594	255.36	851.20	-1.37	0.00	-182.39
595	255.36	851.20	-1.37	0.00	-182.39
596	255.36	851.20	-1.37	0.00	-182.39
597	255.36	851.20	-1.37	0.00	-182.39
598	255.36	851.20	-1.37	0.00	-182.39
599	255.36	851.20	-1.37	0.00	-182.39
600	-15.82	0.04	-4.51	-94.66	-39.83
601	4.32	19.39	-5.92	-64.07	-71.16
602	17.30	53.34	-7.58	-51.59	-126.05
603	33.38	100.01	-6.51	-42.10	-167.88
604	54.48	153.93	-5.79	-28.29	-197.95
605	76.11	211.83	-6.09	-8.06	-214.18
606	93.28	270.83	-6.86	7.07	-216.84
607	105.67	330.98	-6.49	13.55	-209.59
608	115.70	386.22	-4.94	12.54	-197.99
609	125.83	435.28	-2.90	8.43	-186.69
610	136.96	478.87	-1.22	4.24	-177.67
611	148.76	518.44	-0.03	0.73	-171.22
612	160.91	555.62	0.63	-2.10	-167.08
613	173.16	591.76	0.77	-4.07	-165.14
614	185.42	628.04	0.58	-6.26	-165.48
615	197.67	665.31	0.28	-8.46	-168.10
616	210.64	704.38	0.22	-9.59	-172.35
617	224.68	745.46	0.08	-8.50	-176.45
618	238.48	785.96	-0.02	-5.15	-178.35
619	249.97	827.07	-0.56	-1.42	-177.52
620	254.11	847.03	-0.58	0.00	-176.49
621	254.11	847.03	-0.58	0.00	-176.49
622	254.11	847.03	-0.58	0.00	-176.49
623	254.11	847.03	-0.58	0.00	-176.49
624	254.11	847.03	-0.58	0.00	-176.49
625	-11.58	-0.47	0.00	0.00	-41.35
626	9.43	18.69	0.00	0.00	-73.68
627	24.22	52.83	0.00	0.00	-129.31
628	39.27	99.67	0.00	0.00	-169.78
629	57.50	153.58	0.00	0.00	-197.93

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
630	76.29	211.05	0.00	0.00	-213.31
631	92.29	269.32	0.00	0.00	-216.52
632	105.21	329.01	0.00	0.00	-210.45
633	115.80	384.11	0.00	0.00	-199.67
634	126.21	433.56	0.00	0.00	-188.48
635	137.29	477.71	0.00	0.00	-179.19
636	149.08	517.85	0.00	0.00	-172.45
637	161.27	555.47	0.00	0.00	-168.20
638	173.64	591.96	0.00	0.00	-166.30
639	186.07	628.44	0.00	0.00	-166.72
640	198.75	665.89	0.00	0.00	-169.18
641	211.97	704.93	0.00	0.00	-172.81
642	225.95	745.98	0.00	0.00	-175.98
643	238.73	786.01	0.00	0.00	-177.03
644	249.62	826.65	0.00	0.00	-175.71
645	254.02	846.75	0.00	0.00	-174.57
646	254.02	846.75	0.00	0.00	-174.57
647	254.02	846.75	0.00	0.00	-174.57
648	254.02	846.75	0.00	0.00	-174.57
649	254.02	846.75	0.00	0.00	-174.57
650	-15.82	0.04	6.16	120.95	-39.83
651	4.32	19.39	8.31	79.01	-71.16
652	17.30	53.34	10.70	60.82	-126.05
653	33.38	100.01	9.13	46.73	-167.88
654	54.48	153.93	7.79	28.75	-197.95
655	76.11	211.83	7.79	13.11	-214.18
656	93.28	270.83	8.57	0.53	-216.84
657	105.67	330.98	8.00	-5.93	-209.59
658	115.70	386.22	6.02	-6.58	-197.99
659	125.83	435.28	3.46	-4.51	-186.69
660	136.96	478.87	1.36	-2.05	-177.67
661	148.76	518.44	0.14	0.14	-171.22
662	160.91	555.62	-0.40	2.28	-167.08
663	173.16	591.76	-0.52	5.26	-165.14
664	185.42	628.04	-0.37	8.55	-165.48
665	197.67	665.31	-0.14	11.93	-168.10
666	210.64	704.38	-0.11	13.89	-172.35
667	224.68	745.46	-0.06	12.67	-176.45
668	238.48	785.96	0.26	7.93	-178.35
669	249.97	827.07	1.13	2.26	-177.52
670	254.11	847.03	1.18	0.00	-176.49
671	254.11	847.03	1.18	0.00	-176.49
672	254.11	847.03	1.18	0.00	-176.49
673	254.11	847.03	1.18	0.00	-176.49
674	254.11	847.03	1.18	0.00	-176.49
675	-25.07	3.25	13.29	227.05	-33.27
676	-9.75	21.25	18.94	150.24	-60.42
677	-2.51	54.60	23.42	124.22	-112.22
678	13.91	100.03	19.89	101.93	-159.06
679	45.33	154.51	15.98	62.47	-196.20
680	77.05	214.57	17.90	25.69	-215.70
681	96.33	275.87	19.67	-2.18	-216.50
682	106.58	338.07	18.26	-13.98	-205.59
683	114.37	393.15	12.58	-12.77	-192.02
684	124.55	440.86	6.65	-8.05	-181.01
685	135.91	482.33	2.31	-3.30	-173.23
686	147.81	520.13	0.00	0.68	-167.73
687	159.85	555.98	-0.94	4.58	-163.94
688	171.83	591.07	-1.06	9.97	-161.75
689	183.61	626.51	-0.55	16.28	-161.53
690	195.12	663.62	0.24	23.74	-164.25
691	205.90	702.32	0.81	30.31	-170.05
692	220.45	744.28	-0.05	29.49	-177.28
693	236.75	785.45	1.06	20.13	-182.30
694	251.07	828.79	1.32	5.32	-183.02
695	255.36	851.20	2.67	0.00	-182.39
696	255.36	851.20	2.67	0.00	-182.39
697	255.36	851.20	2.67	0.00	-182.39
698	255.36	851.20	2.67	0.00	-182.39
699	255.36	851.20	2.67	0.00	-182.39
700	-32.67	6.53	21.87	291.82	-14.81
701	-26.97	23.33	33.13	198.82	-31.50
702	-33.25	51.85	44.93	191.10	-73.59
703	-19.65	96.42	34.56	177.45	-130.98
704	29.18	153.51	31.96	113.47	-185.77
705	82.32	220.18	33.08	36.53	-213.41

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
706	102.89	289.60	40.69	-14.81	-210.72
707	101.77	352.96	31.67	-22.12	-193.57
708	110.66	408.23	18.81	-16.63	-179.13
709	122.04	450.80	8.45	-9.23	-171.42
710	134.16	487.82	2.23	-2.95	-166.47
711	146.31	522.57	-0.73	1.97	-162.67
712	158.25	556.32	-1.81	6.88	-159.40
713	169.89	589.67	-1.76	13.47	-156.57
714	181.12	623.32	-0.69	21.74	-154.69
715	191.80	658.91	1.83	33.18	-155.44
716	201.55	700.16	4.57	48.10	-162.68
717	205.38	739.55	5.14	58.24	-175.30
718	233.60	787.54	-1.17	42.68	-188.28
719	257.45	833.28	7.96	16.78	-194.95
720	253.81	846.03	4.68	0.00	-195.37
721	253.81	846.03	4.68	0.00	-195.37
722	253.81	846.03	4.68	0.00	-195.37
723	253.81	846.03	4.68	0.00	-195.37
724	253.81	846.03	4.68	0.00	-195.37
725	-32.97	4.24	25.97	279.29	26.03
726	-43.10	5.05	46.95	198.32	37.34
727	-47.46	43.35	75.90	236.03	21.58
728	-86.83	67.44	91.18	280.20	-46.01
729	0.14	146.28	54.82	142.45	-144.01
730	116.01	246.40	90.33	7.92	-201.53
731	78.00	312.80	71.84	-23.36	-186.03
732	89.64	393.77	43.85	-23.56	-154.67
733	104.39	433.75	19.87	-14.91	-153.02
734	118.55	464.21	6.95	-6.56	-155.39
735	131.89	494.25	0.32	-0.36	-157.07
736	144.44	525.09	-2.30	4.22	-156.93
737	156.34	556.37	-3.15	9.09	-154.54
738	167.67	587.52	-2.83	15.12	-150.71
739	178.46	618.20	-1.26	23.15	-145.85
740	188.69	649.07	2.97	35.79	-140.18
741	198.66	685.90	12.35	57.22	-140.62
742	207.73	750.14	19.68	92.43	-160.44
743	173.58	769.49	25.02	102.98	-188.21
744	279.57	855.68	-16.88	7.03	-210.77
745	277.59	925.32	12.81	0.00	-223.09
746	277.59	925.32	12.81	0.00	-223.09
747	277.59	925.32	12.81	0.00	-223.09
748	277.59	925.32	12.81	0.00	-223.09
749	277.59	925.32	12.81	0.00	-223.09
750	-24.64	-4.86	18.68	168.36	81.09
751	-56.75	-34.46	36.94	126.30	150.39
752	-58.68	-78.04	92.89	182.32	254.32
753	-18.52	52.18	150.08	271.57	181.14
754	-27.93	140.12	386.13	94.16	9.85
755	-25.68	253.26	148.88	-35.10	-30.32
756	44.78	464.86	89.14	-9.50	-40.97
757	77.62	465.61	32.09	-12.79	-92.91
758	98.04	463.10	10.27	-5.39	-121.81
759	114.97	476.66	0.51	0.45	-138.77
760	129.43	499.37	-3.43	4.52	-147.49
761	142.38	526.69	-4.78	7.61	-150.51
762	154.31	555.87	-5.02	11.17	-149.34
763	165.48	585.04	-4.45	14.80	-144.28
764	175.99	612.40	-2.95	19.73	-134.34
765	186.00	635.52	0.97	28.09	-116.85
766	195.34	650.53	11.25	44.70	-87.06
767	212.41	677.03	44.89	84.57	-70.06
768	269.39	910.95	74.68	130.84	-168.72
769	248.18	859.97	275.71	-12.35	-262.83
770	173.94	579.81	42.58	0.00	-275.69
771	173.94	579.81	42.58	0.00	-275.69
772	173.94	579.81	42.58	0.00	-275.69
773	173.94	579.81	42.58	0.00	-275.69
774	173.94	579.81	42.58	0.00	-275.69
775	-21.08	-11.03	-1.81	-13.16	107.69
776	-64.12	-60.58	-3.34	-3.20	212.15
777	-89.61	-229.30	-5.57	2.61	431.76
778	-154.95	-736.83	-6.91	6.00	767.71
779	-38.10	139.84	-7.74	7.97	937.22
780	116.15	1284.25	-8.27	9.23	556.96
781	58.67	666.54	-8.59	10.14	96.07

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
782	72.38	509.60	-8.76	10.90	-63.60
783	94.38	476.91	-8.77	11.56	-107.51
784	112.17	481.29	-8.63	12.13	-131.80
785	127.16	500.68	-8.33	12.61	-143.54
786	140.32	526.44	-7.88	12.99	-147.90
787	152.34	554.68	-7.28	13.21	-147.13
788	163.53	582.95	-6.54	13.24	-141.60
789	174.06	608.74	-5.69	12.99	-129.76
790	183.81	627.14	-4.76	12.39	-106.38
791	192.34	624.55	-3.83	11.31	-54.97
792	184.38	529.27	-2.99	9.52	35.16
793	132.41	183.49	-2.41	6.90	229.50
794	513.77	1902.56	-2.12	2.83	302.46
795	1257.21	4190.71	-2.05	0.00	235.33
796	1257.21	4190.71	-2.05	0.00	235.33
797	1257.21	4190.71	-2.05	0.00	235.33
798	1257.21	4190.71	-2.05	0.00	235.33
799	1257.21	4190.71	-2.05	0.00	235.33
800	-29.15	-4.86	-17.06	-156.65	81.23
801	-60.68	-34.50	-33.09	-108.69	150.64
802	-62.62	-78.16	-78.58	-148.70	254.77
803	-23.11	51.89	-123.84	-215.62	181.76
804	-32.51	139.63	-301.04	-78.28	10.62
805	-30.26	252.55	-126.76	98.51	-29.44
806	40.21	463.89	-83.50	56.64	-40.00
807	73.09	464.32	-41.47	49.56	-91.90
808	93.57	461.46	-25.01	36.42	-120.80
809	110.59	474.66	-17.24	27.67	-137.82
810	125.18	496.99	-13.32	22.16	-146.66
811	138.31	523.94	-11.08	18.47	-149.88
812	150.46	552.77	-9.65	15.40	-148.98
813	161.89	581.63	-8.75	11.86	-144.28
814	172.71	608.76	-8.54	7.32	-134.77
815	183.07	631.75	-10.03	0.82	-117.76
816	192.78	646.75	-15.96	-11.85	-88.51
817	210.27	673.37	-39.20	-39.65	-72.03
818	267.68	907.52	-59.80	-76.49	-170.74
819	247.01	856.90	-207.92	18.10	-265.09
820	173.09	576.96	-34.83	0.00	-278.02
821	173.09	576.96	-34.83	0.00	-278.02
822	173.09	576.96	-34.83	0.00	-278.02
823	173.09	576.96	-34.83	0.00	-278.02
824	173.09	576.96	-34.83	0.00	-278.02
825	-40.73	4.23	-22.48	-244.08	26.30
826	-50.94	4.96	-40.43	-167.40	37.85
827	-55.32	43.05	-65.85	-192.90	22.50
828	-94.71	66.85	-80.14	-230.23	-44.94
829	-9.01	145.32	-55.78	-126.34	-142.68
830	106.86	244.99	-84.19	50.62	-199.99
831	68.87	310.87	-71.68	79.69	-184.07
832	80.57	391.22	-51.20	68.59	-152.60
833	95.42	430.51	-33.09	51.81	-150.95
834	109.75	460.23	-22.89	38.52	-153.43
835	123.34	489.51	-17.15	29.48	-155.36
836	136.22	519.60	-13.84	23.17	-155.60
837	148.55	550.17	-11.84	17.93	-153.76
838	160.41	580.70	-10.70	12.09	-150.53
839	171.81	610.90	-10.58	5.94	-146.39
840	182.73	641.48	-12.17	-3.36	-141.94
841	193.46	678.27	-17.36	-19.13	-142.94
842	203.37	742.74	-20.98	-44.39	-163.67
843	170.09	762.52	-23.29	-53.52	-192.22
844	277.17	849.41	16.27	6.56	-215.26
845	275.85	919.50	-12.79	0.00	-227.74
846	275.85	919.50	-12.79	0.00	-227.74
847	275.85	919.50	-12.79	0.00	-227.74
848	275.85	919.50	-12.79	0.00	-227.74
849	275.85	919.50	-12.79	0.00	-227.74
850	-44.25	6.52	-19.59	-255.01	-14.48
851	-38.65	23.19	-30.45	-168.24	-30.87
852	-44.97	51.42	-43.27	-156.44	-72.42
853	-31.42	95.57	-38.52	-147.65	-129.35
854	15.49	152.12	-39.17	-97.33	-183.74
855	68.60	218.12	-42.06	2.46	-211.03
856	89.18	286.76	-48.90	62.75	-208.07
857	88.11	349.19	-42.60	65.91	-190.75

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
858	97.12	403.43	-32.88	54.32	-176.26
859	108.73	444.89	-24.66	42.40	-168.65
860	121.19	480.76	-19.28	33.26	-163.98
861	133.82	514.36	-15.87	26.54	-160.65
862	146.38	547.02	-13.69	20.86	-158.05
863	158.77	579.40	-12.34	14.66	-156.12
864	170.92	612.30	-11.73	8.26	-155.34
865	182.62	647.40	-12.03	-0.09	-157.38
866	193.52	688.53	-12.18	-11.46	-166.02
867	198.65	728.22	-10.70	-20.37	-180.05
868	228.21	776.81	-4.41	-12.04	-194.22
869	253.71	823.56	-10.12	-2.92	-201.64
870	251.10	836.99	-7.42	0.00	-202.28
871	251.10	836.99	-7.42	0.00	-202.28
872	251.10	836.99	-7.42	0.00	-202.28
873	251.10	836.99	-7.42	0.00	-202.28
874	251.10	836.99	-7.42	0.00	-202.28
875	-40.38	3.24	-13.40	-205.66	-32.82
876	-25.18	21.08	-20.29	-129.63	-59.59
877	-18.01	54.07	-27.88	-102.02	-110.65
878	-3.82	98.96	-28.16	-82.21	-156.85
879	27.16	152.73	-27.56	-46.86	-193.41
880	58.81	211.91	-30.75	3.32	-212.43
881	78.03	272.19	-33.20	38.33	-212.83
882	88.29	333.16	-32.69	51.03	-201.66
883	96.19	386.86	-28.50	47.30	-187.99
884	106.59	433.09	-23.77	39.99	-177.09
885	118.34	473.01	-19.94	33.52	-169.65
886	130.82	509.24	-17.22	28.49	-164.75
887	143.63	543.59	-15.27	24.17	-161.84
888	156.59	577.33	-13.81	19.44	-160.82
889	169.56	611.67	-12.69	13.74	-162.08
890	182.45	648.05	-11.62	8.25	-166.53
891	194.78	686.49	-10.14	2.53	-174.25
892	211.08	728.75	-7.55	0.67	-183.39
893	229.23	770.62	-6.85	2.32	-190.05
894	245.85	815.26	-6.18	3.19	-191.80
895	251.56	838.54	-6.96	0.00	-191.49
896	251.56	838.54	-6.96	0.00	-191.49
897	251.56	838.54	-6.96	0.00	-191.49
898	251.56	838.54	-6.96	0.00	-191.49
899	251.56	838.54	-6.96	0.00	-191.49
900	-34.75	0.03	-8.24	-123.93	-39.28
901	-14.72	19.20	-12.73	-72.85	-70.12
902	-4.06	52.74	-18.93	-49.39	-124.07
903	10.98	98.75	-20.59	-33.78	-165.04
904	31.92	151.82	-21.61	-14.16	-194.34
905	53.38	208.66	-23.09	8.96	-209.91
906	70.40	266.41	-24.69	26.33	-212.03
907	82.70	325.03	-24.89	34.90	-204.39
908	92.74	378.56	-23.66	35.84	-192.62
909	103.05	425.75	-21.68	33.61	-181.40
910	114.56	467.37	-19.76	31.21	-172.76
911	126.98	504.94	-18.13	29.36	-167.02
912	140.02	540.16	-16.70	27.75	-163.95
913	153.44	574.51	-15.35	25.80	-163.45
914	167.15	609.29	-13.93	22.95	-165.63
915	181.12	645.49	-12.32	19.15	-170.43
916	196.05	684.07	-10.38	16.06	-177.12
917	212.34	725.35	-8.54	13.90	-183.69
918	228.54	766.58	-7.35	11.64	-187.72
919	243.04	809.18	-7.25	5.82	-188.23
920	249.06	830.19	-7.10	0.00	-187.62
921	249.06	830.19	-7.10	0.00	-187.62
922	249.06	830.19	-7.10	0.00	-187.62
923	249.06	830.19	-7.10	0.00	-187.62
924	249.06	830.19	-7.10	0.00	-187.62
925	-33.94	-0.47	-3.76	-30.51	-40.70
926	-13.26	18.51	-6.81	-9.87	-72.43
927	-1.73	52.18	-11.36	1.62	-126.88
928	12.74	98.29	-14.08	8.80	-166.26
929	30.67	151.22	-15.85	13.19	-193.41
930	49.14	207.46	-17.07	16.25	-207.91
931	64.83	264.27	-17.97	18.69	-210.40
932	77.49	322.14	-18.64	21.04	-203.79
933	87.94	375.20	-19.10	23.28	-192.73

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
934	98.39	422.41	-19.30	25.48	-181.57
935	109.77	464.16	-19.24	27.64	-172.67
936	122.15	501.83	-18.87	29.70	-166.70
937	135.28	537.00	-18.15	31.54	-163.67
938	148.94	571.18	-17.06	33.03	-163.47
939	163.05	605.67	-15.60	33.94	-166.06
940	177.78	641.60	-13.82	33.92	-171.16
941	193.40	679.78	-11.84	32.44	-177.78
942	210.16	720.82	-9.92	28.62	-184.02
943	225.96	761.46	-8.58	21.65	-187.73
944	240.68	803.69	-7.93	9.24	-188.10
945	247.49	824.97	-7.75	0.00	-187.50
946	247.49	824.97	-7.75	0.00	-187.50
947	247.49	824.97	-7.75	0.00	-187.50
948	247.49	824.97	-7.75	0.00	-187.50
949	247.49	824.97	-7.75	0.00	-187.50
950	-41.36	0.05	1.82	84.26	-39.09
951	-21.30	19.22	0.47	66.26	-69.69
952	-10.73	52.69	-2.35	60.94	-123.15
953	2.96	98.57	-7.04	54.14	-163.60
954	23.59	151.41	-9.99	40.26	-192.40
955	44.68	207.94	-10.95	25.96	-207.50
956	61.29	265.28	-11.15	15.70	-209.22
957	73.15	323.35	-12.32	11.52	-201.25
958	82.77	376.23	-14.47	13.14	-189.22
959	92.72	422.67	-16.90	17.49	-177.85
960	103.95	463.44	-18.73	24.10	-169.17
961	116.22	500.05	-19.68	30.14	-163.52
962	129.26	534.22	-19.72	35.53	-160.71
963	142.88	567.47	-18.97	40.57	-160.66
964	157.01	601.14	-17.52	45.35	-163.50
965	171.61	636.31	-15.61	49.24	-169.20
966	187.42	674.00	-13.63	50.10	-177.00
967	204.84	714.65	-11.65	45.08	-184.80
968	222.36	755.49	-10.17	32.75	-189.95
969	238.63	798.13	-8.98	12.97	-191.21
970	245.80	819.33	-8.76	0.00	-190.85
971	245.80	819.33	-8.76	0.00	-190.85
972	245.80	819.33	-8.76	0.00	-190.85
973	245.80	819.33	-8.76	0.00	-190.85
974	245.80	819.33	-8.76	0.00	-190.85
975	-53.45	3.28	8.95	188.36	-32.43
976	-38.17	21.13	11.17	135.54	-58.72
977	-31.21	53.99	10.51	122.46	-108.78
978	-17.44	98.61	3.91	107.60	-153.92
979	10.62	151.93	-2.00	72.13	-189.45
980	41.50	210.49	-1.53	37.36	-207.54
981	59.89	269.97	-0.92	12.05	-207.14
982	69.23	329.86	-3.32	2.83	-195.29
983	76.24	382.28	-9.44	6.64	-181.10
984	85.87	427.02	-14.71	14.03	-169.88
985	97.01	465.23	-18.58	21.87	-162.34
986	109.13	499.56	-20.77	31.31	-157.60
987	121.91	531.81	-21.52	39.68	-155.17
988	135.23	563.33	-21.05	47.82	-155.01
989	148.98	595.42	-19.49	56.33	-157.55
990	163.12	629.66	-17.20	64.99	-163.75
991	177.20	666.24	-14.86	70.97	-173.66
992	195.78	707.13	-13.70	66.43	-185.24
993	216.60	748.09	-11.77	48.82	-194.15
994	236.83	792.67	-11.18	17.85	-197.41
995	244.89	816.31	-10.02	0.00	-197.60
996	244.89	816.31	-10.02	0.00	-197.60
997	244.89	816.31	-10.02	0.00	-197.60
998	244.89	816.31	-10.02	0.00	-197.60
999	244.89	816.31	-10.02	0.00	-197.60
1000	-63.43	6.59	17.57	250.87	-13.86
1001	-57.71	23.27	25.52	181.76	-29.52
1002	-64.38	51.33	32.32	187.01	-69.52
1003	-51.50	95.08	18.98	180.95	-124.82
1004	-8.99	150.98	14.42	121.19	-177.64
1005	42.90	216.06	14.08	46.72	-203.53
1006	62.13	283.53	20.48	-1.78	-199.34
1007	59.58	344.37	10.32	-6.15	-180.99
1008	67.16	396.73	-3.58	2.31	-165.71
1009	77.49	435.99	-13.60	12.79	-157.59

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1010	88.92	469.34	-19.24	22.28	-152.71
1011	100.89	500.10	-22.37	33.70	-149.56
1012	113.27	529.61	-23.64	43.86	-147.58
1013	126.08	558.62	-23.40	54.00	-146.81
1014	139.30	588.04	-21.64	65.35	-147.85
1015	152.83	619.78	-18.25	78.84	-152.40
1016	166.33	657.88	-14.50	93.87	-164.24
1017	174.91	695.21	-12.34	100.52	-181.86
1018	208.57	742.13	-16.10	75.99	-199.40
1019	239.66	788.51	-8.27	31.53	-209.10
1020	240.70	802.33	-11.30	0.00	-210.51
1021	240.70	802.33	-11.30	0.00	-210.51
1022	240.70	802.33	-11.30	0.00	-210.51
1023	240.70	802.33	-11.30	0.00	-210.51
1024	240.70	802.33	-11.30	0.00	-210.51
1025	-65.50	4.33	21.78	235.78	27.42
1026	-75.53	5.10	39.62	178.39	40.24
1027	-80.44	42.98	63.81	229.06	27.51
1028	-120.82	66.27	76.27	281.03	-38.64
1029	-41.02	143.90	38.05	148.19	-134.24
1030	73.06	242.38	72.12	16.31	-189.64
1031	33.12	306.73	52.37	-11.79	-170.16
1032	42.65	385.02	23.12	-8.69	-137.27
1033	55.40	421.87	-2.11	3.33	-134.55
1034	67.82	448.74	-14.96	15.20	-136.34
1035	79.82	474.73	-21.23	26.02	-137.98
1036	91.60	501.07	-24.62	37.55	-138.42
1037	103.45	527.45	-26.15	47.86	-137.78
1038	115.61	553.42	-26.15	58.34	-136.33
1039	128.26	578.82	-24.39	70.47	-134.38
1040	141.48	604.61	-20.15	86.23	-133.24
1041	155.64	636.93	-11.57	108.68	-138.79
1042	170.24	697.70	-2.33	140.81	-164.19
1043	142.61	714.63	4.35	141.70	-197.17
1044	257.44	800.40	-34.46	24.43	-223.27
1045	261.22	870.75	-7.01	0.00	-236.78
1046	261.22	870.75	-7.01	0.00	-236.78
1047	261.22	870.75	-7.01	0.00	-236.78
1048	261.22	870.75	-7.01	0.00	-236.78
1049	261.22	870.75	-7.01	0.00	-236.78
1050	-61.78	-4.72	14.67	121.89	82.75
1051	-90.04	-34.24	30.07	102.86	153.86
1052	-92.74	-78.01	81.59	171.82	261.48
1053	-59.92	51.26	136.22	269.15	191.90
1054	-71.48	137.99	370.55	97.54	23.86
1055	-68.90	249.46	131.94	-28.86	-13.58
1056	-3.96	458.97	70.92	0.30	-21.97
1057	25.92	456.92	12.50	0.73	-72.10
1058	43.47	451.13	-10.79	11.90	-99.63
1059	57.78	460.89	-19.87	22.04	-115.69
1060	70.05	479.23	-24.67	33.20	-124.00
1061	81.41	501.59	-27.44	42.63	-127.19
1062	92.57	525.20	-28.95	51.43	-126.94
1063	104.00	548.28	-29.36	60.49	-123.74
1064	116.04	569.16	-28.35	70.69	-116.87
1065	129.02	585.69	-24.86	83.44	-103.83
1066	142.94	594.40	-16.22	102.26	-79.90
1067	166.40	615.46	18.49	139.72	-69.73
1068	231.15	844.97	49.31	175.75	-173.41
1069	220.70	791.87	250.73	8.17	-271.56
1070	153.53	511.76	17.86	0.00	-285.79
1071	153.53	511.76	17.86	0.00	-285.79
1072	153.53	511.76	17.86	0.00	-285.79
1073	153.53	511.76	17.86	0.00	-285.79
1074	153.53	511.76	17.86	0.00	-285.79
1075	-59.77	-10.83	-4.96	-55.22	109.71
1076	-97.21	-60.20	-8.58	-26.65	216.40
1077	-123.80	-229.03	-14.13	-10.60	440.52
1078	-191.10	-736.98	-17.38	-0.28	780.80
1079	-82.64	138.04	-19.53	8.09	954.09
1080	67.53	1280.78	-21.20	14.70	576.96
1081	6.43	660.98	-22.69	20.40	118.62
1082	16.12	501.18	-24.19	26.00	-38.97
1083	34.20	465.15	-25.73	31.38	-81.22
1084	48.29	465.59	-27.30	36.75	-104.22
1085	60.00	480.39	-28.87	42.30	-115.03

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1086	70.52	500.80	-30.38	48.16	-118.93
1087	80.77	522.87	-31.72	54.39	-118.33
1088	91.35	544.12	-32.75	60.86	-113.89
1089	102.77	562.11	-33.28	67.17	-104.38
1090	115.24	572.12	-33.12	72.45	-84.87
1091	128.64	560.92	-32.19	75.04	-38.98
1092	128.00	457.50	-30.67	71.84	44.29
1093	91.21	113.92	-29.66	58.63	231.70
1094	479.68	1818.76	-29.31	26.89	299.62
1095	1231.76	4105.87	-29.02	0.00	230.71
1096	1231.76	4105.87	-29.02	0.00	230.71
1097	1231.76	4105.87	-29.02	0.00	230.71
1098	1231.76	4105.87	-29.02	0.00	230.71
1099	1231.76	4105.87	-29.02	0.00	230.71
1100	-63.84	-4.55	-19.82	-201.96	83.79
1101	-92.17	-33.94	-37.48	-136.45	155.98
1102	-95.73	-77.61	-85.67	-165.79	265.63
1103	-65.05	51.60	-132.43	-225.34	197.72
1104	-77.48	138.20	-310.71	-81.84	30.88
1105	-76.47	249.48	-137.43	101.06	-5.72
1106	-15.10	458.76	-95.28	64.61	-13.53
1107	12.51	456.35	-54.65	62.85	-63.14
1108	27.81	450.17	-39.86	54.75	-90.07
1109	39.88	459.42	-34.05	51.02	-105.32
1110	49.90	477.05	-32.38	50.80	-112.55
1111	59.06	498.40	-32.65	52.96	-114.35
1112	68.12	520.54	-33.88	56.51	-112.45
1113	77.70	541.51	-35.67	60.39	-107.52
1114	88.36	559.45	-37.97	62.91	-98.98
1115	100.81	571.99	-41.49	60.92	-84.56
1116	115.45	575.55	-48.70	48.83	-59.74
1117	141.26	590.43	-72.37	21.00	-49.38
1118	209.70	813.26	-93.36	-25.12	-156.06
1119	204.79	753.93	-241.88	46.01	-254.93
1120	141.36	471.21	-68.60	0.00	-269.53
1121	141.36	471.21	-68.60	0.00	-269.53
1122	141.36	471.21	-68.60	0.00	-269.53
1123	141.36	471.21	-68.60	0.00	-269.53
1124	141.36	471.21	-68.60	0.00	-269.53
1125	-68.66	4.83	-24.73	-293.66	29.65
1126	-79.04	5.73	-43.67	-200.48	44.68
1127	-85.88	43.66	-70.98	-215.11	36.03
1128	-129.04	66.88	-86.26	-244.41	-29.35
1129	-53.83	144.25	-62.66	-133.89	-122.85
1130	55.15	242.32	-91.89	50.09	-176.64
1131	10.98	306.24	-80.43	85.25	-153.44
1132	15.98	383.80	-61.34	79.89	-119.55
1133	24.26	419.88	-44.99	68.26	-115.63
1134	32.24	445.76	-36.93	59.93	-115.75
1135	39.79	470.38	-33.75	56.10	-115.08
1136	47.15	494.78	-33.42	55.68	-112.52
1137	54.74	518.33	-34.79	57.40	-108.30
1138	63.04	540.23	-37.32	59.77	-102.94
1139	72.68	559.92	-40.98	60.62	-97.16
1140	84.44	577.88	-46.25	56.21	-92.68
1141	99.68	599.86	-54.62	45.41	-97.65
1142	118.88	647.94	-60.49	21.53	-125.49
1143	98.87	650.82	-64.60	3.48	-158.69
1144	225.05	723.15	-30.21	34.28	-185.72
1145	236.32	787.74	-55.14	0.00	-199.81
1146	236.32	787.74	-55.14	0.00	-199.81
1147	236.32	787.74	-55.14	0.00	-199.81
1148	236.32	787.74	-55.14	0.00	-199.81
1149	236.32	787.74	-55.14	0.00	-199.81
1150	-65.69	7.48	-21.16	-310.45	-11.21
1151	-61.12	24.19	-32.19	-207.80	-24.27
1152	-71.23	52.25	-45.88	-184.45	-59.49
1153	-62.91	95.83	-41.53	-166.68	-110.91
1154	-28.27	151.30	-42.57	-109.08	-160.76
1155	16.49	215.75	-46.07	-1.23	-184.37
1156	29.26	282.53	-53.85	65.86	-178.32
1157	19.91	342.30	-48.88	75.04	-158.18
1158	20.90	393.51	-40.91	68.44	-140.82
1159	24.71	431.35	-34.88	60.98	-128.26
1160	29.60	462.78	-32.21	56.46	-119.20
1161	34.98	490.79	-32.09	55.15	-111.23

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1162	40.87	516.31	-33.82	56.28	-103.59
1163	47.57	539.56	-36.97	58.63	-96.67
1164	55.66	560.87	-41.44	60.50	-91.90
1165	65.94	581.29	-47.30	59.30	-92.54
1166	79.93	604.02	-53.26	54.56	-101.11
1167	94.93	621.57	-57.00	48.56	-115.58
1168	140.84	645.79	-55.06	48.63	-131.45
1169	189.79	669.47	-63.18	27.27	-141.10
1170	201.91	673.04	-60.49	0.00	-142.94
1171	201.91	673.04	-60.49	0.00	-142.94
1172	201.91	673.04	-60.49	0.00	-142.94
1173	201.91	673.04	-60.49	0.00	-142.94
1174	201.91	673.04	-60.49	0.00	-142.94
1175	-51.56	4.80	-14.13	-269.16	-28.60
1176	-39.37	22.22	-20.20	-176.55	-51.54
1177	-38.04	54.93	-27.52	-136.09	-95.67
1178	-31.00	99.22	-27.52	-106.35	-136.20
1179	-14.34	151.92	-26.89	-62.99	-168.05
1180	7.12	209.58	-30.43	-3.63	-183.14
1181	16.66	268.08	-33.67	38.94	-180.23
1182	17.01	326.49	-34.37	57.77	-165.92
1183	15.52	377.40	-31.76	58.38	-148.77
1184	16.81	420.34	-29.02	54.42	-133.54
1185	19.52	456.18	-27.76	51.23	-120.56
1186	23.02	487.12	-28.31	50.38	-107.74
1187	27.09	514.41	-30.44	51.88	-95.48
1188	31.89	538.77	-33.95	55.20	-84.69
1189	37.87	560.76	-38.77	59.59	-76.67
1190	46.02	581.09	-44.88	64.08	-74.01
1191	57.63	597.84	-52.16	67.97	-75.60
1192	82.85	611.81	-59.73	70.56	-79.31
1193	121.42	619.68	-67.83	64.60	-81.85
1194	168.32	629.30	-72.42	36.40	-81.68
1195	190.94	636.46	-73.21	0.00	-81.20
1196	190.94	636.46	-73.21	0.00	-81.20
1197	190.94	636.46	-73.21	0.00	-81.20
1198	190.94	636.46	-73.21	0.00	-81.20
1199	190.94	636.46	-73.21	0.00	-81.20
1200	-30.83	2.49	-8.09	-197.72	-34.51
1201	-17.91	20.09	-10.75	-126.41	-61.73
1202	-15.92	53.17	-15.58	-89.05	-109.39
1203	-12.41	98.52	-16.23	-63.45	-145.04
1204	-5.76	150.47	-16.68	-35.39	-169.16
1205	3.03	205.75	-18.19	-1.72	-180.07
1206	8.24	261.69	-20.37	24.16	-178.24
1207	9.13	317.81	-21.49	38.71	-166.81
1208	8.78	368.76	-21.36	42.65	-150.51
1209	9.02	413.06	-20.76	41.69	-133.20
1210	10.30	451.11	-20.76	40.31	-116.32
1211	12.21	483.84	-21.84	40.36	-99.31
1212	14.53	512.25	-24.07	42.39	-80.83
1213	17.32	537.04	-27.42	46.46	-63.10
1214	20.90	558.82	-31.89	52.68	-46.54
1215	25.99	577.88	-37.73	61.32	-32.26
1216	35.15	594.50	-46.32	72.28	-22.30
1217	50.80	601.40	-59.44	80.85	-15.94
1218	92.18	599.48	-77.91	70.72	-6.52
1219	151.18	590.74	-87.40	26.47	2.56
1220	174.66	582.22	-89.36	0.00	5.01
1221	174.66	582.22	-89.36	0.00	5.01
1222	174.66	582.22	-89.36	0.00	5.01
1223	174.66	582.22	-89.36	0.00	5.01
1224	174.66	582.22	-89.36	0.00	5.01
1225	-10.26	2.77	-3.36	-110.32	-37.69
1226	-3.69	17.97	-4.10	-65.78	-68.83
1227	-3.43	51.22	-6.36	-43.72	-120.78
1228	-2.89	96.55	-7.11	-29.52	-154.71
1229	-1.18	148.24	-7.48	-15.40	-174.56
1230	1.26	202.73	-8.27	0.31	-182.22
1231	2.82	257.43	-9.39	12.69	-179.06
1232	3.08	312.59	-10.30	20.41	-167.11
1233	2.85	363.19	-10.73	23.21	-149.39
1234	2.90	407.97	-10.95	23.42	-128.96
1235	3.37	446.82	-11.37	23.15	-107.45
1236	4.16	480.23	-12.32	23.63	-82.84
1237	5.11	508.82	-13.90	25.33	-55.78

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]
1238	6.21	533.10	-16.12	28.49	-27.36
1239	7.60	553.36	-19.02	33.51	3.56
1240	9.83	569.99	-22.92	41.04	37.92
1241	14.03	584.10	-28.62	51.35	75.56
1242	25.21	602.57	-41.83	61.99	108.32
1243	32.47	586.21	-62.42	62.16	128.75
1244	169.77	581.43	-106.06	45.13	166.63
1245	167.55	558.48	-107.97	0.00	197.34
1246	167.55	558.48	-107.97	0.00	197.34
1247	167.55	558.48	-107.97	0.00	197.34
1248	167.55	558.48	-107.97	0.00	197.34
1249	167.55	558.48	-107.97	0.00	197.34
1250	-0.95	-0.34	-0.83	-62.92	-56.91
1251	0.71	14.16	-0.39	-33.19	-92.25
1252	-0.14	47.54	-0.68	-21.42	-146.81
1253	-0.49	93.18	-0.75	-14.03	-177.07
1254	-0.31	144.84	-0.80	-6.85	-192.64
1255	-0.06	198.59	-1.12	0.88	-195.81
1256	-0.01	252.39	-1.79	7.06	-187.87
1257	-0.20	307.08	-2.49	11.01	-170.67
1258	-0.39	357.60	-3.09	12.59	-147.28
1259	-0.42	402.46	-3.62	12.85	-120.58
1260	-0.32	441.20	-4.27	12.90	-90.51
1261	-0.19	474.08	-5.17	13.36	-53.55
1262	-0.12	501.55	-6.42	14.55	-14.10
1263	-0.17	523.84	-8.04	16.66	30.03
1264	-0.43	540.61	-10.08	20.04	81.96
1265	-0.80	551.00	-12.66	25.25	146.35
1266	-2.33	553.04	-16.94	32.99	229.77
1267	1.21	548.40	-21.18	41.66	339.53
1268	-4.36	607.99	-47.66	53.56	433.10
1269	142.10	588.87	-114.45	-32.20	390.51
1270	142.10	588.87	-114.45	-32.20	390.51
1271	142.10	588.87	-114.45	-32.20	390.51
1272	142.10	588.87	-114.45	-32.20	390.51
1273	142.10	588.87	-114.45	-32.20	390.51

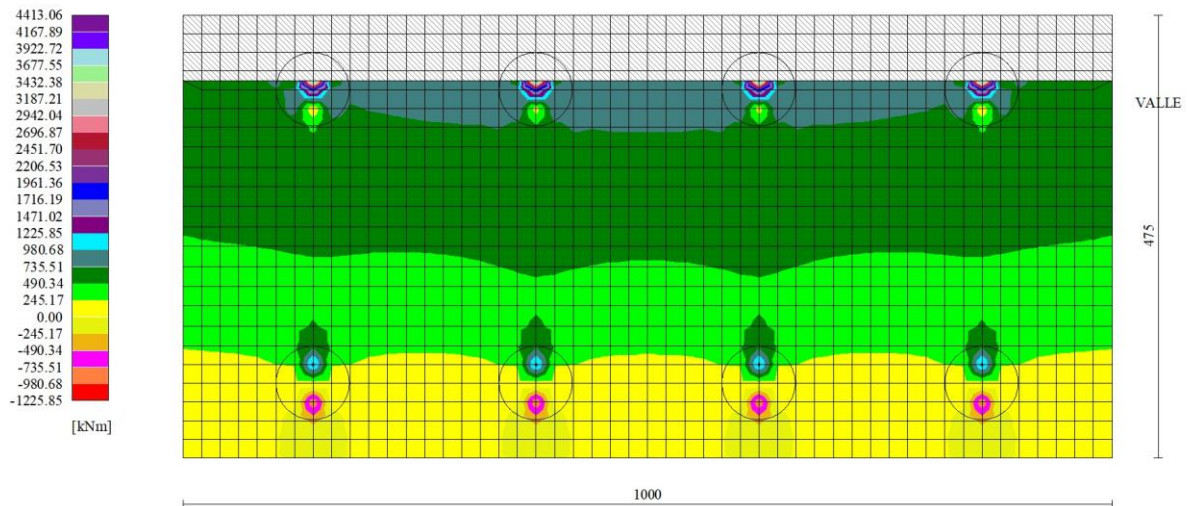


Fig. 9 - Piastra fondazione - Momenti My (Combinazione n° 1)

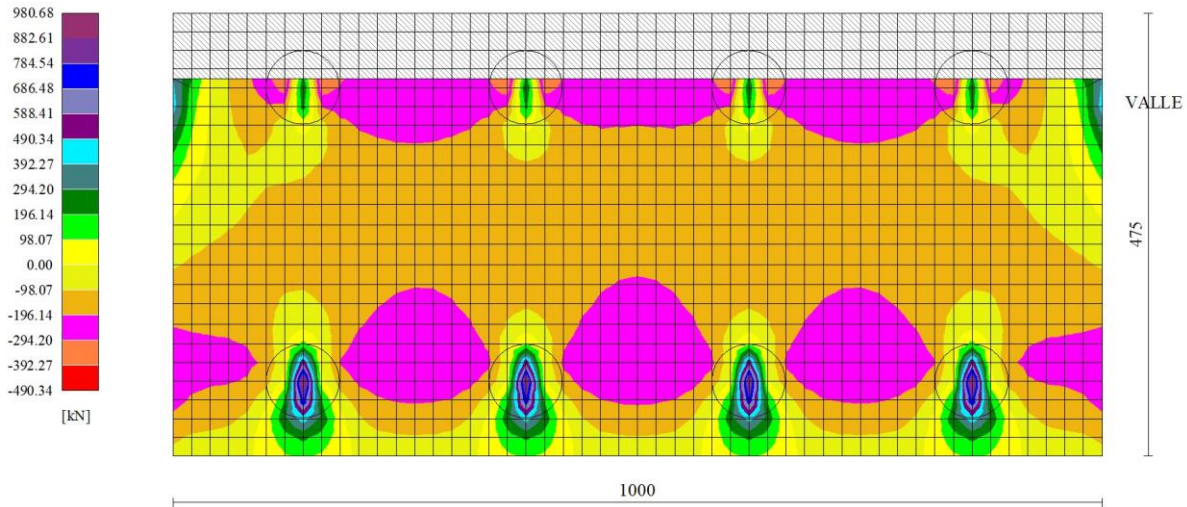


Fig. 10 - Piastra fondazione - Taglio Ty (Combinazione n° 1)

Sollecitazioni pali

Simbologia adottata

- N Sforzo normale, espresso in [kN]. Positivo se di compressione.
 T Taglio, espresso in [kN]. Positivo se diretto da monte verso valle
 M Momento, espresso in [kNm]. Positivo se tende le fibre contro terra (a monte)

Combinazione n° 1 - STR (A1-M1-R3) H + V

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	333.24	492.95	-571.53	-14288.16	694.41	17360.32
12	1.65	353.57	492.95	8.50	212.61	1109.86	27746.38
29	4.20	384.99	492.95	219.67	5491.87	723.73	18093.22
77	11.40	473.72	492.95	-1.23	-30.74	-25.33	-633.19
101	15.00	518.09	492.95	-0.84	-20.91	0.00	0.00

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	495.91	492.81	-571.53	-14288.16	694.41	17360.32
12	1.65	516.24	492.81	8.50	212.61	1109.86	27746.38
29	4.20	547.67	492.81	219.67	5491.87	723.73	18093.22
77	11.40	636.40	492.81	-1.23	-30.74	-25.33	-633.19
101	15.00	680.76	492.81	-0.84	-20.91	0.00	0.00

Combinazione n° 2 - STR (A1-M1-R3) H - V

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	168.44	492.96	-514.65	-12866.19	514.90	12872.46
13	1.80	190.63	492.96	13.31	332.76	910.96	22774.03
29	4.20	220.20	492.96	180.24	4506.04	614.16	15354.09
77	11.40	308.93	492.96	-0.08	-1.92	-19.78	-494.53
101	15.00	353.30	492.96	-0.69	-17.31	0.00	0.00

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	495.11	492.98	-514.65	-12866.19	514.90	12872.46
13	1.80	517.29	492.98	13.31	332.76	910.96	22774.03
29	4.20	546.87	492.98	180.24	4506.04	614.16	15354.09

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
77	11.40	635.60	492.98	-0.08	-1.92	-19.78	-494.53
101	15.00	679.96	492.98	-0.69	-17.31	0.00	0.00

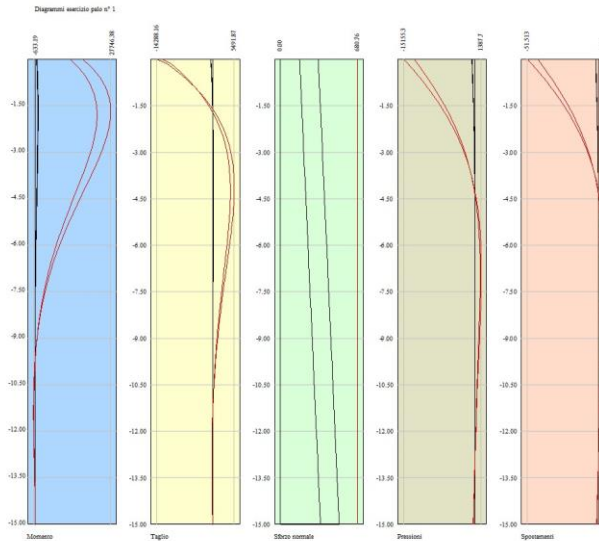


Fig. 11 - Sollecitazioni palo (Palo n° 1) (Involuppo)

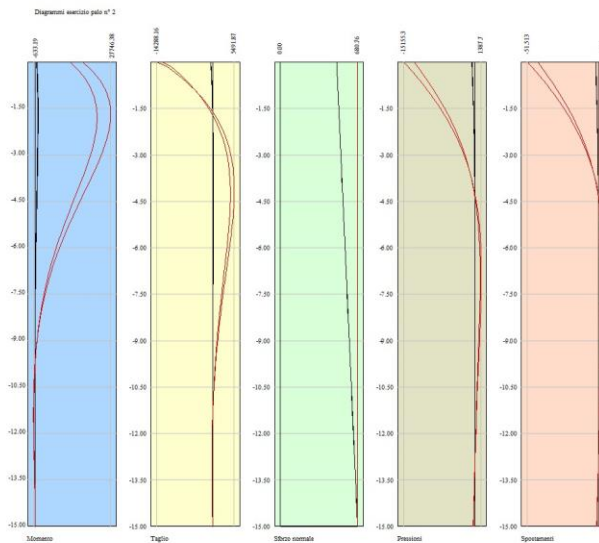


Fig. 12 - Sollecitazioni palo (Palo n° 2) (Involuppo)

Verifiche strutturali

Verifiche a flessione

Elementi calcolati a trave

Simbologia adottata

n°	indice sezione
Y	ordinata sezione espressa in [m]
B	larghezza sezione espressa in [cm]
H	altezza sezione espressa in [cm]
Afi	area ferri inferiori espressa in [cmq]
Afs	area ferri superiori espressa in [cmq]
M	momento agente espressa in [kNm]
N	sforzo normale agente espressa in [kN]

Mu momento ultimi espresso in [kNm]
 Nu sforzo normale ultimo espressa in [kN]
 FS fattore di sicurezza (rapporto tra sollecitazione ultima e sollecitazione agente)

Elementi calcolati a piastra

Simbologia adottata

n° indice sezione
 Y ordinata sezione espressa in [m]
 B larghezza sezione espressa in [cm]
 H altezza sezione espressa in [cm]
 Afi, Afs area ferri inferiori e superiori, espresso in [cmq]
 Mp, Mn momento positivo e negativo agente espressa in [kNm]
 Mu momento ultimi espresso in [kNm]
 FS fattore di sicurezza (rapporto tra sollecitazione ultima e sollecitazione agente)

Pali in c.a.

Combinazione n° 1 - STR (A1-M1-R3) H + V

Ip	Is	Ar	M	N	Mu	Nu	FS
		[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	12	221.67	1109.86	353.57	1117.88	353.57	1.007
2	12	226.19	1109.86	516.24	1118.93	516.24	1.008

Combinazione n° 2 - STR (A1-M1-R3) H - V

Ip	Is	Ar	M	N	Mu	Nu	FS
		[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	13	221.67	910.96	190.63	1126.15	190.63	1.236
2	13	226.19	910.96	517.29	1118.87	517.29	1.228

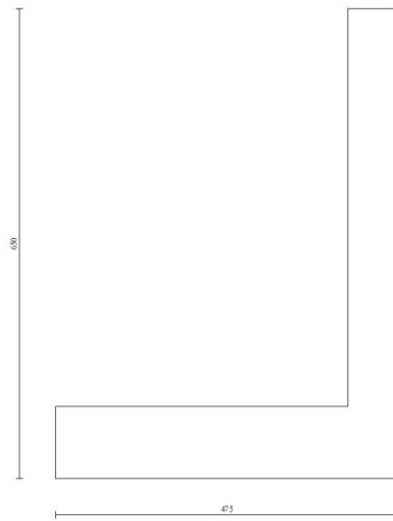


Fig. 13 - Paramento (Inviluppo)

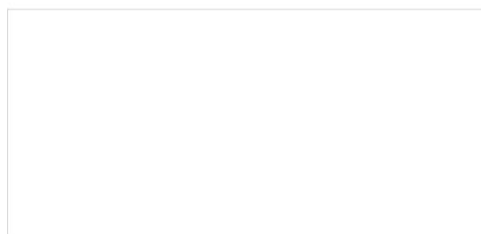


Fig. 14 - Piastra fondazione dir. X (Inviluppo)

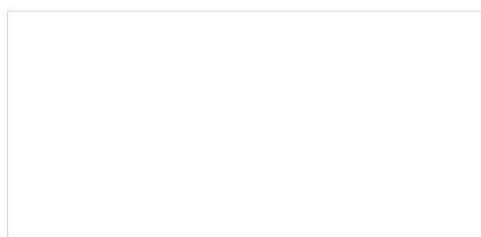


Fig. 15 - Piastra fondazione dir. Y (Inviluppo)

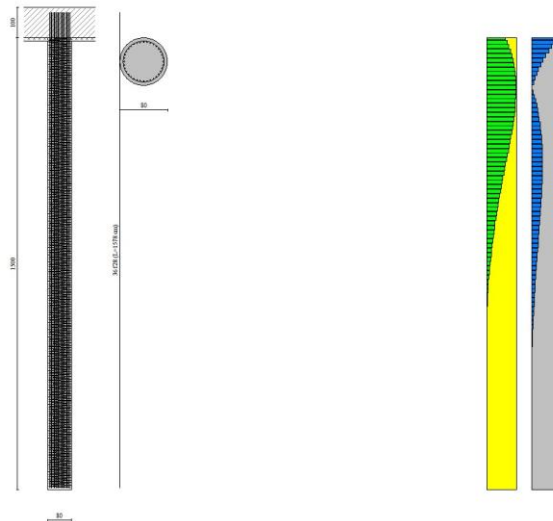


Fig. 16 - Pali (Palo n° 1) (Inviluppo)

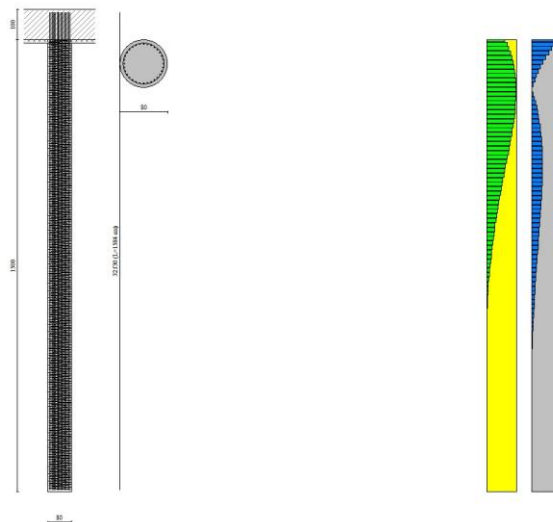


Fig. 17 - Pali (Palo n° 2) (Inviluppo)

Verifiche a taglio

Simbologia adottata

I_s	indice sezione
Y	ordinata sezione espressa in [m]
B	larghezza sezione espressa in [cm]
H	altezza sezione espressa in [cm]
A_{sw}	area ferri a taglio espresso in [cm ²]
$\cotg\theta$	inclinazione delle bielle compresse, θ inclinazione dei puntoni di calcestruzzo
V_{Rcd}	resistenza di progetto a 'taglio compressione' espressa in [kN]
V_{Rsd}	resistenza di progetto a 'taglio trazione' espressa in [kN]
V_{Rd}	resistenza di progetto a taglio espresso in [kN]. Per elementi con armature trasversali resistenti al taglio ($A_{sw}>0.0$) $V_{Rd}=\min(V_{Rcd}, V_{Rsd})$.
T	taglio agente espressa in [kN]
FS	fattore di sicurezza (rapporto tra sollecitazione resistente e sollecitazione agente)

Pali in c.a.

La verifica a taglio sui pali circolari in c.a. viene eseguita considerando una sezione quadrata inscritta nella circonferenza. Se D è il diametro del palo, il lato della sezione quadrata sulla quale si esegue la verifica è $L = 2^{0.5}/2 D$.

Combinazione n° 1 - STR (A1-M1-R3) H + V

Ip	Is	L	A _{sw} [cm]	s [cmq]	cotgθ [cm]	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
1	1	56.57	0.00	0	2.500	777.42	776.94	776.94	571.53	1.046
2	1	56.57	0.00	0	2.500	799.99	776.94	776.94	571.53	1.046

Combinazione n° 2 - STR (A1-M1-R3) H - V

Ip	Is	L	A _{sw} [cm]	s [cmq]	cotgθ [cm]	V _{Rcd} [kN]	V _{Rsd} [kN]	V _{Rd} [kN]	T [kN]	FS
1	1	56.57	0.00	0	2.500	754.57	776.94	754.57	514.65	1.128
2	1	56.57	0.00	0	2.500	799.88	776.94	776.94	514.65	1.161

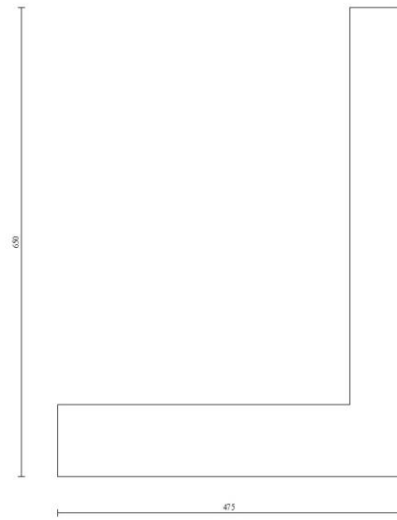


Fig. 18 - Paramento (Inviluppo)

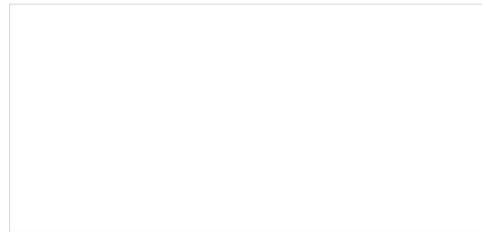


Fig. 19 - Piastra fondazione dir. X (Inviluppo)

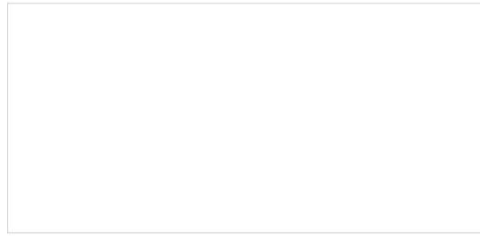


Fig. 20 - Piastra fondazione dir. Y (Inviluppo)

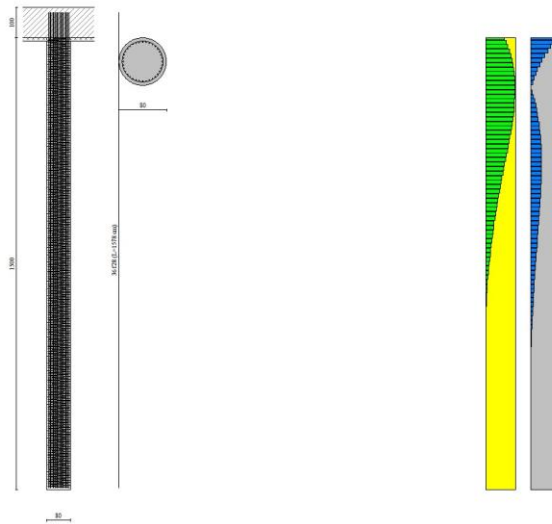


Fig. 21 - Pali (Palo n° 1) (Inviluppo)

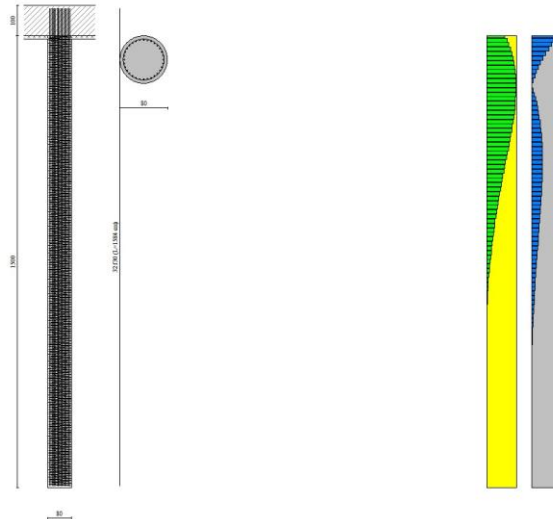


Fig. 22 - Pali (Palo n° 2) (Inviluppo)

Verifica a punzonamento

Simbologia adottata

OP	Oggetto che viene punzonato
P	Oggetto che punzona
c_1, c_2	Dimensioni pilastro nelle due direzioni, espressa in [mm]
d	Altezza utile della fondazione, espressa in [mm]
u_0	Lunghezza perimetro di verifica a faccia pilastro, espresso in [mm]
u_1	Lunghezza perimetro di verifica per effetto della diffusione, espresso in [mm]
ρ_y, ρ_z	Percentuali di armatura piastra in zona tesa
d_{pc}, d_{dc}	distanza della prima e dell'ultima cucitura dalla faccia del pilastro
$V_{Ed,i}$	Tensione di taglio sul perimetro del pilastro, espressa in [kPa]
$V_{Rd,max}$	Valore di progetto del massimo taglio-punzonamento resistente, espressa in [kPa]
$V_{Ed,f}$	Tensione di taglio sul perimetro di verifica u_1 , espresso in [kPa]
$V_{Rd,cf}$	Valore di progetto del taglio-punzonamento resistente senza armature sul perimetro di verifica u_1 , espresso in [kPa]
$V_{Rd,cs}$	Valore di progetto del taglio-punzonamento resistente con armature, espresso in [kPa]
n_s	Numero di serie di cuciture
n_c	Numero di cuciture
FS	Fattore di sicurezza (minore tra i rapporti $V_{Rd,max}/V_{Ed,i}$, $V_{Rd,cf}/V_{Ed,f}$ e $V_{Rd,cs}/V_{Ed,f}$)

Risultati per inviluppo

Spinta e forze

Simbologia adottata

Ic	Indice della combinazione
A	Tipo azione
I	Inclinazione della spinta, espressa in [°]
V	Valore dell'azione, espressa in [kN]
Cx, Cy	Componente in direzione X ed Y dell'azione, espressa in [kN]
Px, Py	Coordinata X ed Y del punto di applicazione dell'azione, espressa in [m]

Ic	A	V [kN]	I [°]	Cx [kN]	Cy [kN]	Px [m]	Py [m]
1	Spinta statica	131.61	12.62	128.43	28.75	0.00	-3.47
	Incremento di spinta sismica		268.37	261.89	58.63	0.00	-4.33
	Peso/Inerzia muro			66.90	210.85/33.45	-1.47	-4.55
	Peso dell'acqua sulla fondazione di valle				0.00	0.00	0.00
	Resistenza pali			-8792.72			

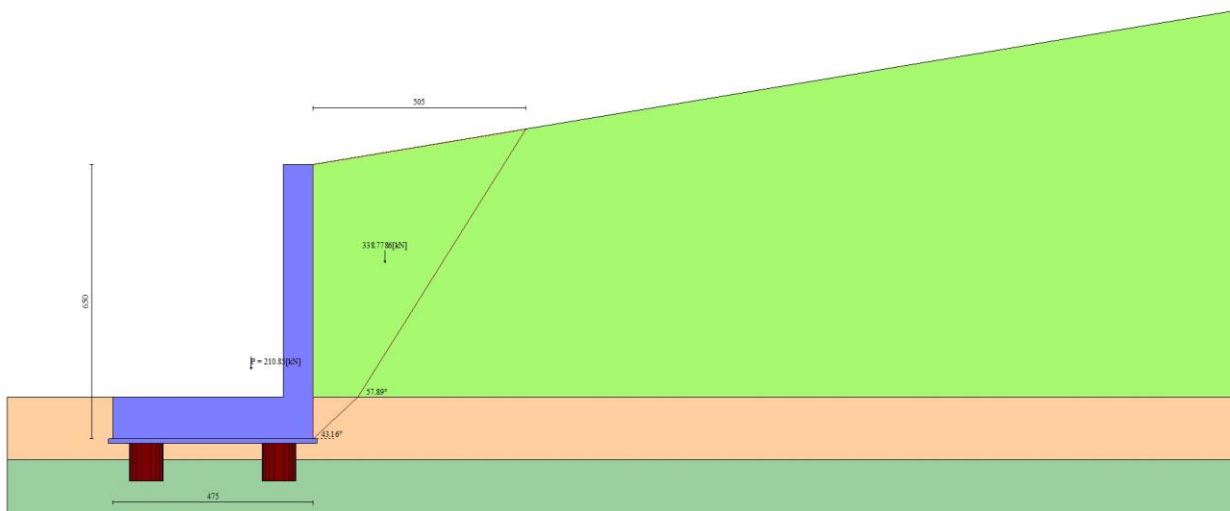


Fig. 23 - Cuneo di spinta (combinazione statica) (Combinazione n° 1)

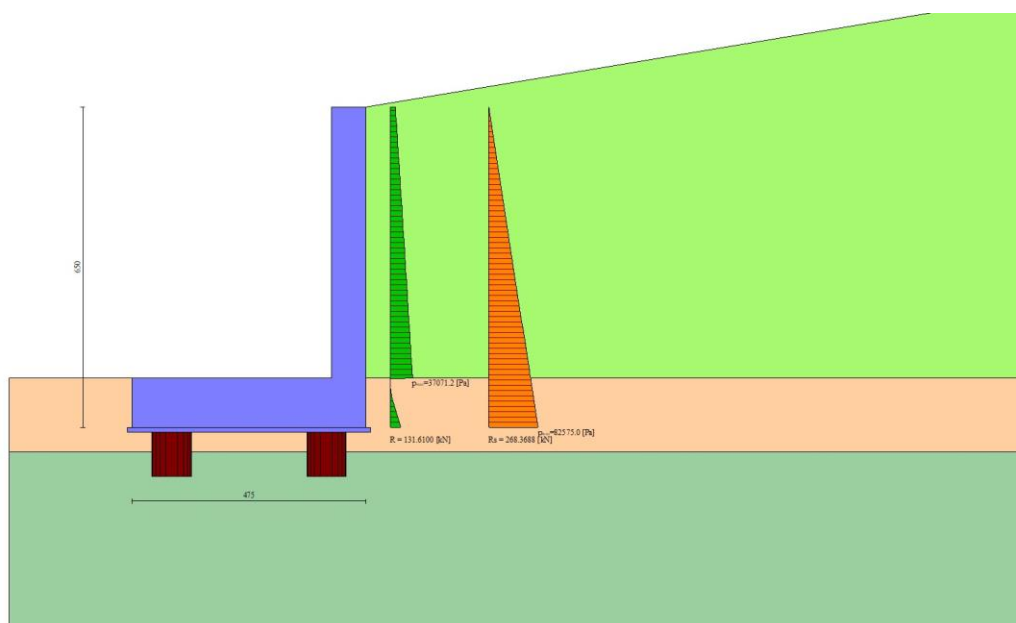


Fig. 24 - Diagramma delle pressioni (combinazione statica) (Combinazione n° 1)

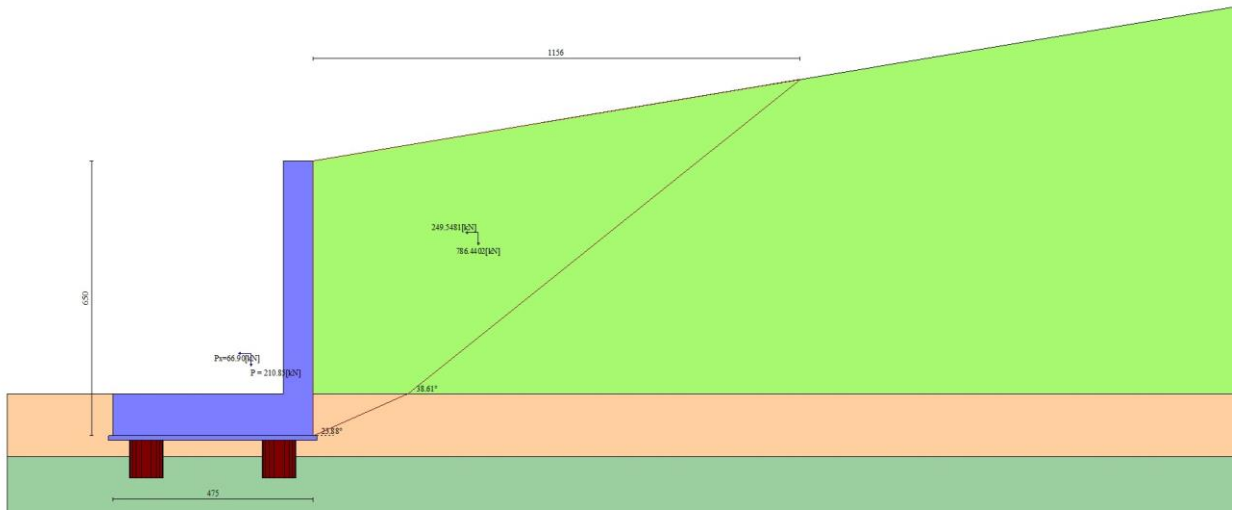


Fig. 25 - Cuneo di spinta (combinazione sismica) (Combinazione n° 1)

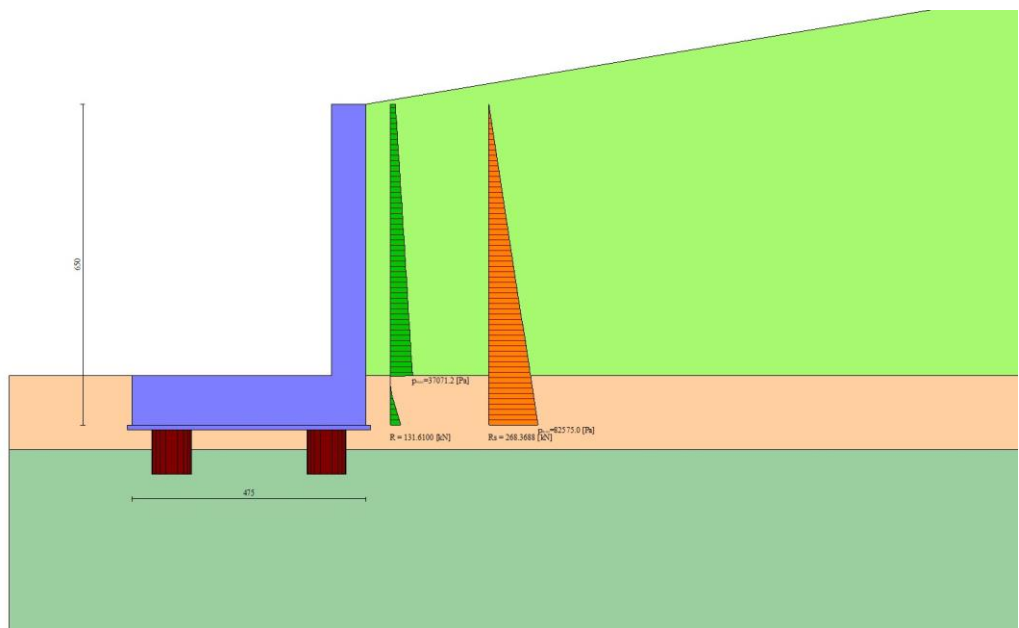


Fig. 26 - Diagramma delle pressioni (combinazione sismica) (Combinazione n° 1)

Scarichi in testa ai pali

Simbologia adottata

- Cmb Indice/Tipo combinazione
- Ip Indice palo
- N Sforzo normale, espresso in [kN]
- M Momento, espresso in [kNm]
- T Taglio, espresso in [kN]

Cmb	Ip	N [kN]	M [kNm]	T [kN]
1 - STR (A1-M1-R3) H + V	1	333.24	694.41	-571.53
	2	495.91	694.41	-571.53

Verifiche geotecniche

Quadro riassuntivo coeff. di sicurezza calcolati

Simbologia adottata

Cmb	Indice/Tipo combinazione
S	Sisma (H: componente orizzontale, V: componente verticale)
FS _{SCO}	Coeff. di sicurezza allo scorrimento
FS _{RIB}	Coeff. di sicurezza al ribaltamento
FS _{QLIM}	Coeff. di sicurezza a carico limite
FS _{STAB}	Coeff. di sicurezza a stabilità globale
FS _{HYD}	Coeff. di sicurezza a sifonamento
FS _{UPL}	Coeff. di sicurezza a sollevamento

Cmb	Sismica	FS _{SCO}	FS _{RIB}	FS _{QLIM}	FS _{STAB}	FS _{HYD}	FS _{UPL}
1 - STR (A1-M1-R3)	H + V	19.231					
2 - STR (A1-M1-R3)	H - V	19.231					

Verifiche portanza trasversale (scorrimento)**Simbologia adottata**

Ic	Indice/Tipo combinazione
Ip	Indice palo
T	Carico orizzontale agente alla testa del palo, espresso in [kN]
Td	Portanza trasversale di progetto, espresso in [kN]
FS _o	Fattore di sicurezza (Td/T)

Ic	Ip	T	Td	FS _o
		[kN]	[kN]	
1 - STR (A1-M1-R3) H + V	1	-571.53	10990.90	19.231
	2	-571.53	10990.90	19.231

Verifiche portanza verticale**Simbologia adottata**

Ic	Indice/Tipo combinazione
Ip	Indice palo
N	Carico verticale agente alla testa del palo, espresso in [kN]
Pd	Portanza di progetto, espresso in [kN]
FS _v	Fattore di sicurezza (Pd/N)

Ic	Ip	N	Pd	FS _v
		[kN]	[kN]	
1 - STR (A1-M1-R3) H + V	1	333.24	1514.24	4.544
	2	495.91	1514.24	3.053

Dettagli calcolo portanza verticale**Simbologia adottata**

n°	Indice palo
Nc, Nq	Coeff. di capacità portante
N'c, N'q	Coeff. di capacità portante corretti
Zc	Massima profondità andamento pressione geostatica, espressa in [m]
Pp, Pl	Portanza di punta e laterale caratteristica, espresse in [kN]
A	Attrito negativo, espresso in [kN]
Wp	Peso palo, espresso in [kN]

n°	Nc	N'c	Nq	N'q	Zc	Pp	Pl	A	Wp
					[m]	[kN]	[kN]	[kN]	[kN]
1	0.000	0.000	0.000	0.000	--	493.00	1534.00	0.00	184.85
						493.00	1534.00		
2	0.000	0.000	0.000	0.000	--	493.00	1534.00	0.00	184.85
						493.00	1534.00		

Sollecitazioni**Elementi calcolati a trave****Simbologia adottata**

N	Sforzo normale, espresso in [kN]. Positivo se di compressione.
T	Taglio, espresso in [kN]. Positivo se diretto da monte verso valle
M	Momento, espresso in [kNm]. Positivo se tende le fibre contro terra (a monte)

Elementi calcolati a piastra**Simbologia adottata**

Mx, My	Momenti flettenti, espresso in [kNm]
Mxy	Momento torcente, espresso in [kNm]. Positivo se diretto da monte verso valle
Tx, Ty	Tagli, espresso in [kN]. Positivo se tende le fibre contro terra (a monte)

I momenti flettenti sono positivi se tendono le fibre inferiori (intradosso fondazione, paramento esterno)

Paramento

n°	X	Nmin	Nmax	Tmin	Tmax	Mmin	Mmax
	[m]	[kN]	[kN]	[kN]	[kN]	[kNm]	[kNm]
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	-0.10	1.99	1.99	1.40	1.40	-0.03	-0.03
3	-0.20	4.02	4.02	2.96	2.96	0.08	0.08
4	-0.30	6.11	6.11	4.67	4.68	0.33	0.33
5	-0.40	8.24	8.24	6.53	6.54	0.74	0.74
6	-0.50	10.42	10.42	8.55	8.57	1.34	1.34
7	-0.60	12.65	12.65	10.72	10.74	2.12	2.12
8	-0.70	14.92	14.93	13.04	13.07	3.11	3.11
9	-0.80	17.25	17.26	15.51	15.55	4.32	4.33
10	-0.90	19.62	19.64	18.13	18.19	5.77	5.78
11	-1.00	22.04	22.06	20.91	20.98	7.48	7.49
12	-1.10	24.51	24.53	23.84	23.93	9.45	9.47
13	-1.20	27.02	27.06	26.93	27.03	11.71	11.74
14	-1.30	29.59	29.63	30.16	30.28	14.26	14.30
15	-1.40	32.20	32.24	33.55	33.69	17.13	17.18
16	-1.50	34.86	34.91	37.10	37.25	20.33	20.39
17	-1.60	37.57	37.63	40.79	40.97	23.88	23.95
18	-1.70	40.33	40.39	44.64	44.84	27.79	27.88
19	-1.80	43.14	43.21	48.64	48.86	32.07	32.18
20	-1.90	45.99	46.07	52.79	53.04	36.74	36.87
21	-2.00	48.89	48.98	57.10	57.37	41.82	41.97
22	-2.10	51.84	51.94	61.56	61.86	47.32	47.49
23	-2.20	54.84	54.95	66.17	66.50	53.25	53.46
24	-2.30	57.89	58.00	70.93	71.30	59.64	59.88
25	-2.40	60.98	61.11	75.85	76.24	66.50	66.77
26	-2.50	64.13	64.26	80.92	81.35	73.83	74.14
27	-2.60	67.32	67.46	86.14	86.61	81.67	82.02
28	-2.70	70.56	70.71	91.52	92.02	90.02	90.41
29	-2.80	73.84	74.01	97.04	97.58	98.89	99.34
30	-2.90	77.18	77.36	102.72	103.30	108.31	108.81
31	-3.00	80.56	80.76	108.56	109.18	118.29	118.84
32	-3.10	83.99	84.20	114.54	115.21	128.85	129.46
33	-3.20	87.47	87.70	120.68	121.39	139.99	140.66
34	-3.30	91.00	91.24	126.97	127.72	151.74	152.48
35	-3.40	94.58	94.83	133.42	134.21	164.10	164.92
36	-3.50	98.20	98.47	140.02	140.86	177.11	178.00
37	-3.60	101.88	102.16	146.77	147.66	190.76	191.73
38	-3.70	105.60	105.89	153.67	154.61	205.08	206.14
39	-3.80	109.37	109.68	160.72	161.72	220.08	221.23
40	-3.90	113.18	113.51	167.93	168.98	235.77	237.02
41	-4.00	117.05	117.40	175.29	176.39	252.18	253.53
42	-4.10	120.96	121.33	182.81	183.96	269.32	270.77
43	-4.20	124.92	125.31	190.47	191.69	287.19	288.76
44	-4.30	128.93	129.34	198.29	199.57	305.83	307.51
45	-4.40	132.99	133.41	206.27	207.60	325.24	327.04
46	-4.50	137.10	137.54	214.39	215.78	345.43	347.37
47	-4.60	141.25	141.71	222.67	224.12	366.43	368.50
48	-4.70	145.46	145.93	231.10	232.62	388.25	390.46
49	-4.80	149.71	150.21	239.68	241.27	410.90	413.26
50	-4.90	154.01	154.53	248.42	250.07	434.40	436.91
51	-5.00	158.35	158.89	257.31	259.02	458.76	461.44
52	-5.10	162.75	163.31	266.35	268.14	484.00	486.85
53	-5.20	167.19	167.78	275.54	277.40	510.14	513.16
54	-5.30	171.68	172.29	284.89	286.82	537.19	540.39
55	-5.40	176.22	176.85	294.39	296.39	565.17	568.55
56	-5.50	180.81	181.47	304.04	306.12	594.08	597.67

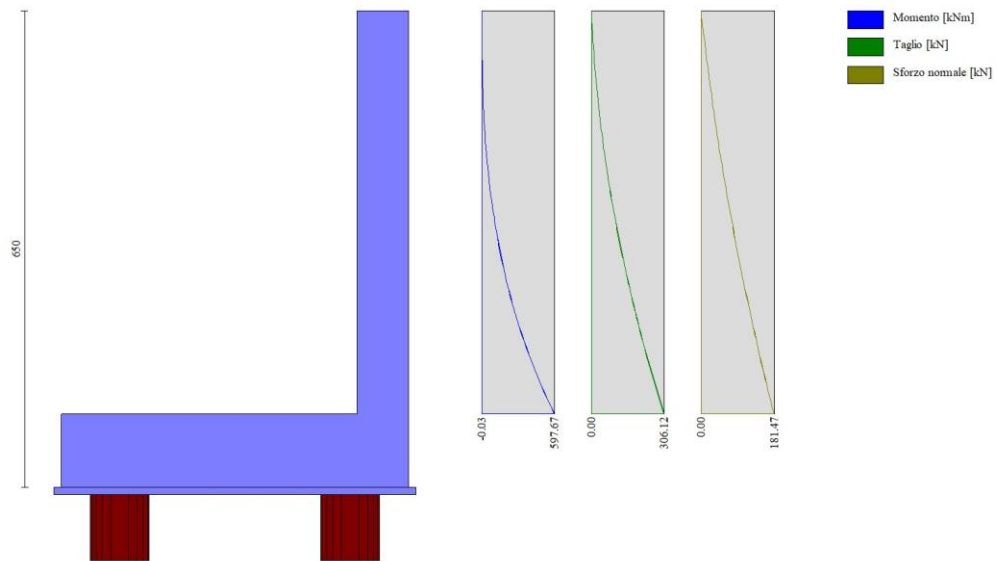


Fig. 27 - Paramento

Piastra fondazione

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]		
1	-0.95	-0.34	1.08	79.36	-56.91	MAX	
	-1.24	-0.48	0.83	62.92	-72.16	MIN	
2	-10.26	2.77	4.34	138.86	-37.69	MAX	
	-12.84	2.14	3.36	110.32	-47.53	MIN	
3	-3.69	17.97	5.39	80.74	-68.83	MAX	
	-4.22	14.03	4.10	65.78	-86.37	MIN	
4	0.71	14.16	0.56	40.71	-92.25	MAX	
	0.52	11.19	0.39	33.19	-116.31	MIN	
5	-30.83	2.49	10.54	248.74	-34.51	MAX	
	-38.12	1.88	8.09	197.72	-43.81	MIN	
6	-17.91	20.09	14.19	155.14	-61.73	MAX	
	-21.12	15.44	10.75	126.41	-77.81	MIN	
7	-3.43	51.22	8.29	51.39	-120.78	MAX	
	-3.99	40.34	6.36	43.72	-150.28	MIN	
8	-0.14	47.54	0.97	25.11	-146.81	MAX	
	-0.22	37.70	0.68	21.42	-183.43	MIN	
9	-15.92	53.17	20.42	104.91	-109.39	MAX	
	-18.77	41.36	15.58	89.05	-136.37	MIN	
10	-51.56	4.80	18.58	339.03	-28.60	MAX	
	-62.45	3.53	14.13	269.16	-36.78	MIN	
11	-39.37	22.22	26.87	216.67	-51.54	MAX	
	-46.40	16.74	20.20	176.55	-65.64	MIN	
12	-38.04	54.93	36.38	160.80	-95.67	MAX	
	-45.13	41.88	27.52	136.09	-120.08	MIN	
13	-2.89	96.55	9.07	32.26	-154.71	MAX	
	-3.42	76.66	7.11	29.52	-190.08	MIN	
14	-0.49	93.18	1.03	15.22	-177.07	MAX	
	-0.76	74.32	0.75	14.03	-218.50	MIN	
15	-12.41	98.52	20.81	69.88	-145.04	MAX	
	-14.46	77.43	16.23	63.45	-178.12	MIN	
16	-31.00	99.22	35.65	118.22	-136.20	MAX	
	-36.38	76.63	27.52	106.35	-167.63	MIN	
17	-65.69	7.48	28.06	391.51	-11.21	MAX	
	-76.94	5.48	21.16	310.45	-14.92	MIN	
18	-61.12	24.19	43.09	254.98	-24.27	MAX	
	-71.04	17.88	32.19	207.80	-31.93	MIN	
19	-71.23	52.25	61.20	219.77	-59.49	MAX	
	-84.98	38.78	45.88	184.45	-76.14	MIN	
20	-62.91	95.83	54.39	187.49	-110.91	MAX	
	-74.51	72.04	41.53	166.68	-137.04	MIN	
21	-1.18	148.24	9.20	16.81	-174.56	MAX	
	-1.26	118.78	7.48	15.40	-211.06	MIN	
22	-0.31	144.84	1.00	7.69	-192.64	MAX	
	-0.56	116.44	0.80	6.85	-234.13	MIN	
23	-5.76	150.47	20.68	37.69	-169.16	MAX	
	-5.87	119.60	16.68	35.39	-203.94	MIN	
24	-14.34	151.92	33.60	65.76	-168.05	MAX	
	-14.64	119.10	26.89	62.99	-201.93	MIN	
25	-28.27	151.30	54.13	112.02	-160.76	MAX	
	-28.89	116.09	42.57	109.08	-191.26	MIN	

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
26	-68.66	4.83	32.89	370.08	29.65	MAX
	-76.10	3.58	24.73	293.66	23.92	MIN
27	-79.04	5.73	58.57	245.66	44.68	MAX
	-90.01	3.88	43.67	200.48	36.27	MIN
28	-85.88	43.66	94.96	257.29	36.03	MAX
	-98.96	31.26	70.98	215.11	31.53	MIN
29	-129.04	66.88	114.48	284.36	-29.35	MAX
	-156.31	47.64	86.26	244.41	-38.47	MIN
30	-53.83	144.25	80.87	136.72	-122.85	MAX
	-54.75	106.56	62.66	133.89	-139.19	MIN
31	1.26	202.73	9.87	4.56	-182.22	MAX
	0.74	164.07	8.27	-0.31	-216.11	MIN
32	-0.06	198.59	1.30	1.66	-195.81	MAX
	-0.21	161.15	1.12	-0.88	-233.67	MIN
33	3.03	205.75	21.89	11.44	-180.07	MAX
	1.05	165.52	18.19	1.72	-212.34	MIN
34	7.12	209.58	37.10	19.45	-183.14	MAX
	2.21	166.91	30.43	3.63	-213.87	MIN
35	16.49	215.75	57.10	26.43	-184.37	MAX
	6.06	169.25	46.07	1.23	-210.13	MIN
36	55.15	242.32	118.47	-5.66	-176.64	MAX
	29.76	185.87	91.89	-50.09	-186.24	MIN
37	-63.84	-4.55	26.15	252.76	83.79	MAX
	-65.81	-6.42	19.82	201.96	66.51	MIN
38	-92.17	-33.94	49.84	166.57	155.98	MAX
	-103.42	-45.22	37.48	136.45	125.03	MIN
39	-95.73	-77.61	114.13	197.18	265.63	MAX
	-106.07	-101.02	85.67	165.79	211.77	MIN
40	-65.05	51.60	176.14	270.43	197.72	MAX
	-67.24	33.13	132.43	225.34	151.83	MIN
41	-77.48	138.20	415.29	84.30	30.88	MAX
	-78.50	98.55	310.71	81.84	2.66	MIN
42	-76.47	249.48	180.32	-51.86	-5.72	MAX
	-80.79	187.88	137.43	-101.06	-50.17	MIN
43	2.82	257.43	11.03	-5.60	-179.06	MAX
	1.93	210.52	9.39	-12.69	-207.58	MIN
44	-0.01	252.39	2.09	-3.39	-187.87	MAX
	-0.11	206.86	1.79	-7.06	-219.18	MIN
45	8.24	261.69	24.18	-9.95	-178.24	MAX
	5.08	213.09	20.37	-24.16	-204.79	MIN
46	16.66	268.08	40.55	-16.36	-180.23	MAX
	9.72	216.77	33.67	-38.94	-203.58	MIN
47	29.26	282.53	66.50	-32.16	-178.32	MAX
	16.52	226.07	53.85	-65.86	-193.71	MIN
48	10.98	306.24	101.84	-43.58	-153.44	MAX
	-0.24	242.21	80.43	-85.25	-158.28	MIN
49	-15.10	458.76	122.51	-32.34	-13.53	MAX
	-23.28	353.51	95.28	-64.61	-66.12	MIN
50	-59.77	-10.83	5.80	64.90	109.71	MAX
	-60.32	-15.05	4.96	55.22	86.83	MIN
51	-97.21	-60.20	10.02	31.27	216.40	MAX
	-108.67	-80.76	8.58	26.65	173.82	MIN
52	-123.80	-229.03	16.49	12.19	440.52	MAX
	-140.83	-303.76	14.13	10.60	346.08	MIN
53	-191.10	-736.98	20.24	0.70	780.80	MAX
	-228.79	-984.92	17.38	0.28	583.60	MIN
54	-82.64	138.04	22.69	-6.21	954.09	MAX
	-83.32	97.57	19.53	-8.09	686.83	MIN
55	67.53	1280.78	24.53	-11.68	576.96	MAX
	31.33	950.96	21.20	-14.70	381.64	MIN
56	6.43	660.98	26.16	-16.47	118.62	MAX
	-9.06	502.22	22.69	-20.40	26.37	MIN
57	3.08	312.59	12.02	-12.57	-167.11	MAX
	2.14	258.44	10.30	-20.41	-188.60	MIN
58	-0.20	307.08	2.94	-6.92	-170.67	MAX
	-0.31	254.34	2.49	-11.01	-193.56	MIN
59	9.13	317.81	25.27	-23.46	-166.81	MAX
	5.98	261.98	21.49	-38.71	-186.12	MIN
60	17.01	326.49	41.00	-35.08	-165.92	MAX
	10.65	267.87	34.37	-57.77	-180.81	MIN
61	19.91	342.30	59.39	-46.11	-158.18	MAX
	11.10	278.96	48.88	-75.04	-163.81	MIN
62	15.98	383.80	75.77	-50.08	-119.55	MAX
	6.15	309.17	61.34	-79.89	-131.95	MIN
63	12.51	456.35	67.34	-41.51	-63.14	MAX
	1.91	362.74	54.65	-62.85	-98.61	MIN
64	16.12	501.18	27.79	-21.27	-38.97	MAX
	4.34	395.96	24.19	-26.00	-85.82	MIN
65	-61.78	-4.72	-10.01	-90.77	82.75	MAX
	-63.56	-6.63	-14.67	-121.89	65.76	MIN
66	-90.04	-34.24	-20.56	-82.23	153.86	MAX
	-100.99	-45.53	-30.07	-102.86	123.45	MIN
67	-92.74	-78.01	-57.80	-143.78	261.48	MAX
	-102.55	-101.38	-81.59	-171.82	208.57	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
68	-59.92	51.26	-98.16	-223.31	191.90	MAX
	-62.94	32.66	-136.22	-269.15	147.23	MIN
69	-71.48	137.99	-272.19	-96.25	23.86	MAX
	-71.62	98.11	-370.55	-97.54	-3.04	MIN
70	-68.90	249.46	-95.62	71.99	-13.58	MAX
	-71.74	187.55	-131.94	28.86	-56.71	MIN
71	-3.96	458.97	-50.53	24.05	-21.97	MAX
	-13.94	353.34	-70.92	-0.30	-73.32	MIN
72	25.92	456.92	-6.90	11.08	-72.10	MAX
	13.19	362.88	-12.50	-0.73	-106.43	MIN
73	2.85	363.19	12.47	-15.91	-149.39	MAX
	2.05	303.47	10.73	-23.21	-163.55	MIN
74	-0.39	357.60	3.70	-8.72	-147.28	MAX
	-0.52	299.19	3.09	-12.59	-161.27	MIN
75	8.78	368.76	24.91	-28.95	-150.51	MAX
	6.09	307.50	21.36	-42.65	-162.86	MIN
76	15.52	377.40	37.33	-39.46	-148.77	MAX
	10.44	313.72	31.76	-58.38	-156.78	MIN
77	20.90	393.51	48.62	-46.49	-140.82	MAX
	13.53	325.47	40.91	-68.44	-140.97	MIN
78	24.26	419.88	53.79	-47.25	-115.63	MAX
	15.10	344.96	44.99	-68.26	-126.54	MIN
79	27.81	450.17	47.38	-39.72	-90.07	MAX
	17.22	367.48	39.86	-54.75	-111.73	MIN
80	34.20	465.15	29.46	-25.98	-81.22	MAX
	22.27	378.57	25.73	-31.38	-107.26	MIN
81	43.47	451.13	10.95	-7.70	-99.63	MAX
	30.45	367.99	10.79	-11.90	-120.23	MIN
82	-65.50	4.33	-15.24	-180.05	27.42	MAX
	-72.79	3.18	-21.78	-235.78	22.31	MIN
83	-75.53	5.10	-27.46	-143.51	40.24	MAX
	-86.06	3.28	-39.62	-178.39	32.96	MIN
84	-80.44	42.98	-44.29	-190.73	27.51	MAX
	-92.56	30.47	-63.81	-229.06	24.99	MIN
85	-120.82	66.27	-53.47	-240.54	-38.64	MAX
	-146.50	46.73	-76.27	-281.03	-50.22	MIN
86	-41.02	143.90	-25.79	-147.31	-134.24	MAX
	-42.36	105.71	-38.05	-148.19	-153.24	MIN
87	73.06	242.38	-51.84	21.96	-189.64	MAX
	44.72	185.26	-72.12	-16.31	-201.85	MIN
88	33.12	306.73	-37.50	45.39	-170.16	MAX
	18.28	241.93	-52.37	11.79	-172.57	MIN
89	42.65	385.02	-15.49	28.82	-137.27	MAX
	28.55	309.51	-23.12	8.69	-147.45	MIN
90	55.40	421.87	3.85	6.76	-134.55	MAX
	41.38	346.04	2.11	-3.33	-143.40	MIN
91	2.90	407.97	12.67	-17.22	-128.96	MAX
	2.21	344.30	10.95	-23.42	-136.54	MIN
92	-0.42	402.46	4.36	-9.52	-120.58	MAX
	-0.55	339.94	3.62	-12.85	-126.35	MIN
93	9.02	413.06	23.98	-30.45	-133.20	MAX
	6.74	348.15	20.76	-41.69	-139.90	MIN
94	16.81	420.34	33.60	-39.60	-133.54	MAX
	12.43	353.54	29.02	-54.42	-137.06	MIN
95	24.71	431.35	40.54	-44.59	-128.26	MAX
	18.13	361.73	34.88	-60.98	-129.98	MIN
96	32.24	445.76	43.00	-44.58	-115.75	MAX
	23.63	372.49	36.93	-59.93	-123.79	MIN
97	39.88	459.42	39.47	-39.46	-105.32	MAX
	29.50	382.71	34.05	-51.02	-118.66	MIN
98	48.29	465.59	31.18	-30.78	-104.22	MAX
	36.43	387.31	27.30	-36.75	-119.35	MIN
99	57.78	460.89	22.12	-21.67	-115.69	MAX
	44.71	383.72	19.87	-22.04	-127.99	MIN
100	67.82	448.74	16.28	-11.75	-136.34	MAX
	53.83	374.53	14.96	-15.20	-142.36	MIN
101	-63.43	6.59	-12.22	-192.33	-13.86	MAX
	-75.07	4.77	-17.57	-250.87	-18.57	MIN
102	-57.71	23.27	-17.17	-146.22	-29.52	MAX
	-67.37	16.99	-25.52	-181.76	-38.98	MIN
103	-64.38	51.33	-21.17	-156.31	-69.52	MAX
	-76.95	37.65	-32.32	-187.01	-89.25	MIN
104	-51.50	95.08	-11.15	-159.94	-124.82	MAX
	-60.86	70.79	-18.98	-180.95	-154.69	MIN
105	-8.99	150.98	-8.39	-120.43	-177.64	MAX
	-11.72	114.95	-14.42	-121.19	-212.07	MIN
106	42.90	216.06	-8.87	-27.89	-203.53	MAX
	28.02	168.49	-14.08	-46.72	-233.11	MIN
107	62.13	283.53	-13.89	27.10	-199.34	MAX
	43.91	225.83	-20.48	1.78	-218.25	MIN
108	59.58	344.37	-6.13	25.12	-180.99	MAX
	44.30	279.67	-10.32	6.15	-189.80	MIN
109	67.16	396.73	4.68	8.60	-165.71	MAX
	52.47	327.27	3.58	-2.31	-168.80	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
110	77.49	435.99	14.87	-8.22	-157.59	MAX
	62.84	364.92	13.60	-12.79	-158.78	MIN
111	3.37	446.82	13.11	-18.08	-107.45	MAX
	2.74	380.60	11.37	-23.15	-109.54	MIN
112	-0.32	441.20	5.12	-10.12	-90.51	MAX
	-0.41	375.98	4.27	-12.90	-91.86	MIN
113	10.30	451.11	23.81	-31.31	-116.32	MAX
	8.24	383.96	20.76	-40.31	-118.80	MIN
114	19.52	456.18	31.76	-39.71	-120.56	MAX
	15.53	387.81	27.76	-51.23	-121.32	MIN
115	29.60	462.78	36.85	-43.93	-119.20	MAX
	23.49	392.80	32.21	-56.46	-121.53	MIN
116	39.79	470.38	38.64	-44.25	-115.08	MAX
	31.62	398.54	33.75	-56.10	-120.92	MIN
117	49.90	477.05	37.04	-41.15	-112.55	MAX
	39.87	403.60	32.38	-50.80	-121.07	MIN
118	60.00	480.39	32.92	-35.81	-115.03	MAX
	48.36	406.14	28.87	-42.30	-124.24	MIN
119	70.05	479.23	28.03	-29.92	-124.00	MAX
	57.08	405.28	24.67	-33.20	-131.43	MIN
120	79.82	474.73	24.09	-25.10	-137.98	MAX
	65.80	401.89	21.23	-26.02	-141.67	MIN
121	88.92	469.34	21.87	-22.22	-152.71	MAX
	74.08	397.86	19.24	-22.28	-153.56	MIN
122	-53.45	3.28	-5.95	-143.92	-32.43	MAX
	-66.06	2.33	-8.95	-188.36	-42.06	MIN
123	-38.17	21.13	-6.81	-108.89	-58.72	MAX
	-45.61	15.64	-11.17	-135.54	-75.34	MIN
124	-31.21	53.99	-5.43	-103.30	-108.78	MAX
	-37.16	40.57	-10.51	-122.46	-137.31	MIN
125	-17.44	98.61	-0.34	-95.88	-153.92	MAX
	-20.06	75.21	-3.91	-107.60	-190.19	MIN
126	10.62	151.93	3.75	-71.15	-189.45	MAX
	6.54	117.88	2.00	-72.13	-228.32	MIN
127	41.50	210.49	2.99	-28.22	-207.54	MAX
	30.63	166.24	1.53	-37.36	-243.04	MIN
128	59.89	269.97	2.34	1.72	-207.14	MAX
	45.53	216.85	0.92	-12.05	-234.83	MIN
129	69.23	329.86	4.26	9.53	-195.29	MAX
	54.13	269.26	3.32	-2.83	-214.04	MIN
130	76.24	382.28	9.84	1.10	-181.10	MAX
	61.35	316.58	9.44	-6.64	-192.70	MIN
131	85.87	427.02	16.42	-10.83	-169.88	MAX
	70.78	358.21	14.71	-14.03	-177.05	MIN
132	97.01	465.23	21.18	-21.51	-162.34	MAX
	81.51	394.82	18.58	-21.87	-167.27	MIN
133	4.16	480.23	14.16	-19.44	-82.84	MAX
	3.52	412.53	12.32	-23.63	-85.18	MIN
134	-0.19	474.08	6.17	-11.03	-53.55	MAX
	-0.24	407.30	5.17	-13.36	-60.96	MIN
135	12.21	483.84	24.95	-33.08	-99.31	MAX
	10.23	415.48	21.84	-40.36	-99.95	MIN
136	23.02	487.12	32.20	-41.22	-107.74	MAX
	19.22	418.05	28.31	-50.38	-108.77	MIN
137	34.98	490.79	36.44	-45.22	-111.23	MAX
	29.17	420.89	32.09	-55.15	-113.84	MIN
138	47.15	494.78	37.96	-46.00	-112.52	MAX
	39.33	423.98	33.42	-55.68	-117.06	MIN
139	59.06	498.40	37.13	-44.36	-114.35	MAX
	49.36	426.81	32.65	-52.96	-120.28	MIN
140	70.52	500.80	34.62	-41.16	-118.93	MAX
	59.13	428.74	30.38	-48.16	-125.01	MIN
141	81.41	501.59	31.36	-37.29	-127.19	MAX
	68.55	429.44	27.44	-42.63	-131.91	MIN
142	91.60	501.07	28.22	-33.57	-138.42	MAX
	77.48	429.17	24.62	-37.55	-140.51	MIN
143	100.89	500.10	25.69	-30.51	-149.56	MAX
	85.73	428.56	22.37	-33.70	-150.67	MIN
144	109.13	499.56	23.85	-28.26	-157.60	MAX
	93.06	428.30	20.77	-31.31	-161.69	MIN
145	-41.36	0.05	-0.74	-62.73	-39.09	MAX
	-52.86	-0.05	-1.82	-84.26	-50.24	MIN
146	-21.30	19.22	0.86	-52.86	-69.69	MAX
	-26.05	14.42	-0.47	-66.26	-88.76	MIN
147	-10.73	52.69	3.72	-51.49	-123.15	MAX
	-12.75	40.19	2.35	-60.94	-154.69	MIN
148	2.96	98.57	7.50	-48.27	-163.60	MAX
	1.94	76.17	7.04	-54.14	-201.84	MIN
149	23.59	151.41	10.39	-38.81	-192.40	MAX
	18.39	118.67	9.99	-40.26	-232.47	MIN
150	44.68	207.94	11.82	-23.29	-207.50	MAX
	35.18	165.39	10.95	-25.96	-244.85	MIN
151	61.29	265.28	12.12	-10.86	-209.22	MAX
	48.69	214.07	11.15	-15.70	-240.35	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
152	73.15	323.35	13.55	-7.02	-201.25	MAX
	58.93	264.76	12.32	-11.52	-224.62	MIN
153	82.77	376.23	16.17	-10.63	-189.22	MAX
	67.81	312.19	14.47	-13.14	-205.44	MIN
154	92.72	422.67	19.14	-17.33	-177.85	MAX
	77.23	355.02	16.90	-17.49	-188.80	MIN
155	103.95	463.44	21.37	-22.26	-169.17	MAX
	87.83	393.57	18.73	-24.10	-176.89	MIN
156	116.22	500.05	22.52	-26.72	-163.52	MAX
	99.35	428.86	19.68	-30.14	-169.73	MIN
157	5.11	508.82	15.96	-21.72	-55.78	MAX
	4.43	440.40	13.90	-25.33	-61.73	MIN
158	-0.12	501.55	7.60	-12.50	-14.10	MAX
	-0.14	434.07	6.42	-14.55	-26.82	MIN
159	14.53	512.25	27.47	-36.30	-80.83	MAX
	12.55	443.34	24.07	-42.39	-83.75	MIN
160	27.09	514.41	34.58	-44.39	-95.48	MAX
	23.36	445.14	30.44	-51.88	-97.70	MIN
161	40.87	516.31	38.33	-48.17	-103.59	MAX
	35.22	446.71	33.82	-56.28	-106.47	MIN
162	54.74	518.33	39.43	-49.20	-108.30	MAX
	47.15	448.38	34.79	-57.40	-112.34	MIN
163	68.12	520.54	38.47	-48.54	-112.45	MAX
	58.67	450.24	33.88	-56.51	-117.35	MIN
164	80.77	522.87	36.14	-46.84	-118.33	MAX
	69.58	452.22	31.72	-54.39	-123.11	MIN
165	92.57	525.20	33.13	-44.41	-126.94	MAX
	79.77	454.22	28.95	-51.43	-130.40	MIN
166	103.45	527.45	30.05	-41.43	-137.78	MAX
	89.17	456.17	26.15	-47.86	-138.90	MIN
167	113.27	529.61	27.24	-38.06	-147.58	MAX
	97.67	458.07	23.64	-43.86	-149.25	MIN
168	121.91	531.81	24.77	-34.46	-155.17	MAX
	105.16	460.00	21.52	-39.68	-159.41	MIN
169	129.26	534.22	22.59	-30.82	-160.71	MAX
	111.54	462.12	19.72	-35.53	-166.77	MIN
170	-33.94	-0.47	4.32	34.92	-40.70	MAX
	-44.31	-0.53	3.76	30.51	-52.18	MIN
171	-13.26	18.51	7.85	11.14	-72.43	MAX
	-16.69	13.96	6.81	9.87	-92.05	MIN
172	-1.73	52.18	13.08	-1.18	-126.88	MAX
	-2.08	40.00	11.36	-1.62	-159.15	MIN
173	12.74	98.29	16.22	-7.38	-166.26	MAX
	10.26	76.27	14.08	-8.80	-205.00	MIN
174	30.67	151.22	18.23	-11.15	-193.41	MAX
	24.70	118.89	15.85	-13.19	-233.81	MIN
175	49.14	207.46	19.61	-13.78	-207.91	MAX
	39.54	165.38	17.07	-16.25	-245.79	MIN
176	64.83	264.27	20.61	-15.89	-210.40	MAX
	52.37	213.58	17.97	-18.69	-242.56	MIN
177	77.49	322.14	21.35	-17.92	-203.79	MAX
	63.17	264.01	18.64	-21.04	-228.64	MIN
178	87.94	375.20	21.82	-19.88	-192.73	MAX
	72.60	311.52	19.10	-23.28	-210.53	MIN
179	98.39	422.41	22.02	-21.83	-181.57	MAX
	82.32	354.93	19.30	-25.48	-193.92	MIN
180	109.77	464.16	21.91	-23.76	-172.67	MAX
	92.97	394.28	19.24	-27.64	-181.49	MIN
181	122.15	501.83	21.45	-25.60	-166.70	MAX
	104.54	430.44	18.87	-29.70	-173.78	MIN
182	135.28	537.00	20.61	-27.28	-163.67	MAX
	116.75	464.53	18.15	-31.54	-170.48	MIN
183	6.21	533.10	18.50	-25.20	-27.36	MAX
	5.47	464.46	16.12	-28.49	-36.32	MIN
184	-0.17	523.84	9.43	-14.72	30.03	MAX
	-0.19	456.30	8.04	-16.66	12.32	MIN
185	17.32	537.04	31.30	-41.16	-63.10	MAX
	15.25	467.97	27.42	-46.46	-67.60	MIN
186	31.89	538.77	38.61	-49.01	-84.69	MAX
	28.10	469.57	33.95	-55.20	-87.55	MIN
187	47.57	539.56	41.96	-52.08	-96.67	MAX
	41.92	470.40	36.97	-58.63	-99.73	MIN
188	63.04	540.23	42.36	-52.90	-102.94	MAX
	55.54	471.17	37.32	-59.77	-107.11	MIN
189	77.70	541.51	40.55	-52.97	-107.52	MAX
	68.39	472.46	35.67	-60.39	-112.66	MIN
190	91.35	544.12	37.32	-52.72	-113.89	MAX
	80.28	474.79	32.75	-60.86	-118.94	MIN
191	104.00	548.28	33.57	-51.75	-123.74	MAX
	91.17	478.34	29.36	-60.49	-127.20	MIN
192	115.61	553.42	30.02	-49.48	-136.33	MAX
	101.07	482.63	26.15	-58.34	-137.01	MIN
193	126.08	558.62	26.94	-45.65	-146.81	MAX
	109.94	486.98	23.40	-54.00	-149.30	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
194	135.23	563.33	24.23	-40.53	-155.01	MAX
	117.67	490.94	21.05	-47.82	-160.28	MIN
195	142.88	567.47	21.72	-34.67	-160.66	MAX
	124.18	494.46	18.97	-40.57	-167.79	MIN
196	148.94	571.18	19.36	-28.65	-163.47	MAX
	129.38	497.67	17.06	-33.03	-171.31	MIN
197	-34.75	0.03	10.45	154.34	-39.28	MAX
	-45.16	-0.06	8.24	123.93	-50.49	MIN
198	-14.72	19.20	16.13	88.85	-70.12	MAX
	-18.38	14.39	12.73	72.85	-89.30	MIN
199	-4.06	52.74	23.74	58.01	-124.07	MAX
	-4.95	40.20	18.93	49.39	-155.82	MIN
200	10.98	98.75	25.30	36.86	-165.04	MAX
	8.82	76.28	20.59	33.78	-203.58	MIN
201	31.92	151.82	25.96	16.75	-194.34	MAX
	25.54	118.95	21.61	14.16	-234.78	MIN
202	53.38	208.66	27.29	-1.38	-209.91	MAX
	42.66	165.93	23.09	-8.96	-247.67	MIN
203	70.40	266.41	28.99	-15.89	-212.03	MAX
	56.52	214.95	24.69	-26.33	-243.61	MIN
204	82.70	325.03	29.05	-24.18	-204.39	MAX
	67.16	266.10	24.89	-34.90	-228.23	MIN
205	92.74	378.56	27.40	-26.53	-192.62	MAX
	76.41	314.09	23.66	-35.84	-209.30	MIN
206	103.05	425.75	24.87	-26.13	-181.40	MAX
	86.14	357.59	21.68	-33.61	-192.80	MIN
207	114.56	467.37	22.46	-25.27	-172.76	MAX
	96.99	396.91	19.76	-31.21	-180.90	MIN
208	126.98	504.94	20.47	-24.57	-167.02	MAX
	108.66	433.05	18.13	-29.36	-173.60	MIN
209	140.02	540.16	18.78	-23.90	-163.95	MAX
	120.85	467.25	16.70	-27.75	-170.33	MIN
210	153.44	574.51	17.21	-22.88	-163.45	MAX
	133.32	500.58	15.35	-25.80	-170.82	MIN
211	7.60	553.36	21.82	-30.23	3.56	MAX
	6.75	484.80	19.02	-33.51	-8.03	MIN
212	-0.43	540.61	11.76	-18.01	81.96	MAX
	-0.48	473.51	10.08	-20.04	59.08	MIN
213	20.90	558.82	36.45	-47.85	-46.54	MAX
	18.62	489.75	31.89	-52.68	-51.86	MIN
214	37.87	560.76	44.20	-54.63	-76.67	MAX
	33.82	491.70	38.77	-59.59	-79.33	MIN
215	55.66	560.87	47.23	-55.81	-91.90	MAX
	49.80	492.19	41.44	-60.50	-94.72	MIN
216	72.68	559.92	46.76	-55.61	-97.16	MAX
	65.08	491.94	40.98	-60.62	-101.94	MIN
217	88.36	559.45	43.34	-56.45	-98.98	MAX
	79.07	492.11	37.97	-62.91	-105.87	MIN
218	102.77	562.11	37.95	-58.43	-104.38	MAX
	91.71	494.69	33.28	-67.17	-111.63	MIN
219	116.04	569.16	32.29	-59.80	-116.87	MAX
	103.10	500.61	28.35	-70.69	-121.81	MIN
220	128.26	578.82	27.84	-58.56	-134.38	MAX
	113.37	508.48	24.39	-70.47	-135.06	MIN
221	139.30	588.04	24.80	-53.97	-147.85	MAX
	122.51	516.00	21.64	-65.35	-151.69	MIN
222	148.98	595.42	22.39	-46.75	-157.55	MAX
	130.50	522.09	19.49	-56.33	-164.91	MIN
223	157.01	601.14	20.05	-38.24	-163.50	MAX
	137.17	526.90	17.52	-45.35	-172.92	MIN
224	163.05	605.67	17.68	-29.51	-166.06	MAX
	142.31	530.80	15.60	-33.94	-176.18	MIN
225	167.15	609.29	15.60	-21.15	-165.63	MAX
	145.97	534.01	13.93	-22.95	-175.19	MIN
226	-40.38	3.24	17.54	259.17	-32.82	MAX
	-50.85	2.29	13.40	205.66	-42.58	MIN
227	-25.18	21.08	26.71	159.04	-59.59	MAX
	-30.45	15.58	20.29	129.63	-76.44	MIN
228	-18.01	54.07	36.39	120.50	-110.65	MAX
	-21.75	40.58	27.88	102.02	-139.61	MIN
229	-3.82	98.96	35.97	91.24	-156.85	MAX
	-4.17	75.41	28.16	82.21	-193.73	MIN
230	27.16	152.73	34.03	49.84	-193.41	MAX
	20.73	118.42	27.56	46.86	-233.02	MIN
231	58.81	211.91	37.24	10.68	-212.43	MAX
	45.50	167.28	30.75	-3.32	-248.77	MIN
232	78.03	272.19	39.86	-19.00	-212.83	MAX
	61.14	218.56	33.20	-38.33	-241.43	MIN
233	88.29	333.16	38.99	-32.45	-201.66	MAX
	70.55	271.89	32.69	-51.03	-221.34	MIN
234	96.19	386.86	33.52	-32.75	-187.99	MAX
	78.55	320.33	28.50	-47.30	-200.52	MIN
235	106.59	433.09	27.48	-29.45	-177.09	MAX
	88.66	363.27	23.77	-39.99	-185.16	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
236	118.34 99.93	473.01 401.40	22.69 19.94	-26.05 -33.52	-169.65 -175.43	MAX MIN
237	130.82 111.81	509.24 436.60	19.34 17.22	-23.26 -28.49	-164.75 -169.62	MAX MIN
238	143.63 123.96	543.59 470.17	17.01 15.27	-20.74 -24.17	-161.84 -166.75	MAX MIN
239	156.59 136.19	577.33 503.10	15.33 13.81	-17.80 -19.44	-160.82 -166.61	MAX MIN
240	169.56 148.35	611.67 536.27	14.10 12.69	-13.23 -13.74	-162.08 -169.75	MAX MIN
241	9.83 8.73	569.99 501.61	26.29 22.92	-37.36 -41.04	37.92 23.88	MAX MIN
242	-0.80 -0.88	551.00 484.81	14.69 12.66	-22.82 -25.25	146.35 117.37	MAX MIN
243	25.99 23.27	577.88 508.78	43.19 37.73	-56.59 -61.32	-32.26 -37.43	MAX MIN
244	46.02 41.39	581.09 511.95	51.33 44.88	-60.52 -64.08	-74.01 -75.01	MAX MIN
245	65.94 59.56	581.29 512.81	54.28 47.30	-57.46 -59.30	-92.54 -93.76	MAX MIN
246	84.44 76.47	577.88 511.06	53.32 46.25	-54.63 -56.21	-92.68 -98.08	MAX MIN
247	100.81 91.34	571.99 507.52	47.86 41.49	-56.69 -60.92	-84.56 -95.50	MAX MIN
248	115.24 104.18	572.12 508.50	37.80 33.12	-63.20 -72.45	-84.87 -97.87	MAX MIN
249	129.02 115.90	585.69 519.53	27.87 24.86	-69.30 -83.44	-103.83 -112.55	MAX MIN
250	141.48 126.15	604.61 534.52	22.50 20.15	-69.81 -86.23	-133.24 -133.94	MAX MIN
251	152.83 135.29	619.78 546.59	20.62 18.25	-63.45 -78.84	-152.40 -158.95	MAX MIN
252	163.12 143.55	629.66 554.63	19.66 17.20	-52.79 -64.99	-163.75 -174.71	MAX MIN
253	171.61 150.46	636.31 560.20	17.83 15.61	-49.97 -49.24	-169.20 -182.20	MAX MIN
254	177.78 155.64	641.60 564.75	15.65 13.82	-29.57 -33.92	-171.16 -184.73	MAX MIN
255	181.12 158.72	645.49 568.24	13.80 12.32	-18.64 -19.15	-170.43 -183.43	MAX MIN
256	182.45 160.35	648.05 570.73	12.99 11.62	-5.04 -8.25	-166.53 -177.54	MAX MIN
257	-44.25 -52.73	6.52 4.71	26.07 19.59	322.92 255.01	-14.48 -19.37	MAX MIN
258	-38.65 -45.13	23.19 16.88	40.85 30.45	206.83 168.24	-30.87 -40.69	MAX MIN
259	-44.97 -54.29	51.42 37.65	57.82 43.27	186.70 156.44	-72.42 -92.83	MAX MIN
260	-31.42 -37.43	95.57 71.05	50.54 38.52	166.17 147.65	-129.35 -160.17	MAX MIN
261	15.49 9.27	152.12 115.70	49.89 39.17	100.38 97.33	-183.74 -219.33	MAX MIN
262	68.60 50.10	218.12 169.97	52.25 42.06	21.14 -2.46	-211.03 -241.92	MAX MIN
263	89.18 67.17	286.76 228.29	60.66 48.90	-31.91 -62.75	-208.07 -228.37	MAX MIN
264	88.11 68.86	349.19 283.49	52.10 42.60	-40.72 -65.91	-190.75 -200.98	MAX MIN
265	97.12 78.29	403.43 332.73	39.36 32.88	-36.59 -54.32	-176.26 -180.77	MAX MIN
266	108.73 89.79	444.89 372.33	28.78 24.66	-30.43 -42.40	-168.65 -171.22	MAX MIN
267	121.19 101.95	480.76 407.52	21.99 19.28	-25.29 -33.26	-163.98 -166.13	MAX MIN
268	133.82 114.19	514.36 440.77	17.79 15.87	-21.35 -26.54	-160.65 -162.97	MAX MIN
269	146.38 126.32	547.02 473.10	15.18 13.69	-17.87 -20.86	-158.05 -160.78	MAX MIN
270	158.77 138.27	579.40 505.03	13.63 12.34	-13.88 -14.66	-156.12 -159.47	MAX MIN
271	170.92 149.94	612.30 537.17	13.06 11.73	-6.22 -8.26	-155.34 -159.76	MAX MIN
272	182.62 161.18	647.40 570.79	13.73 12.03	6.16 0.09	-157.38 -164.12	MAX MIN
273	14.03 12.40	584.10 515.72	32.87 28.62	-46.71 -51.35	75.56 59.08	MAX MIN
274	-2.33 -2.59	553.04 488.27	19.57 16.94	-29.74 -32.99	229.77 192.74	MAX MIN
275	35.15 31.35	594.50 525.17	53.09 46.32	-66.99 -72.28	-22.30 -26.18	MAX MIN
276	57.63 51.97	597.84 528.58	59.81 52.16	-65.76 -67.97	-75.60 -78.19	MAX MIN
277	79.93 72.52	604.02 534.47	61.51 53.26	-51.90 -54.56	-101.11 -104.75	MAX MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
278	99.68 90.83	599.86 532.87	64.21 54.62	-40.04 -45.41	-97.65 -100.97	MAX MIN
279	115.45 105.68	575.55 516.22	57.50 48.70	-47.55 -48.83	-59.74 -78.55	MAX MIN
280	128.64 117.74	560.92 506.61	36.76 32.19	-65.57 -75.04	-38.98 -67.02	MAX MIN
281	142.94 129.64	594.40 532.75	16.65 16.22	-82.13 -102.26	-79.90 -96.29	MAX MIN
282	155.64 139.65	636.93 565.39	11.70 11.57	-84.74 -108.68	-138.79 -140.65	MAX MIN
283	166.33 147.96	657.88 581.74	15.97 14.50	-73.25 -93.87	-164.24 -176.64	MAX MIN
284	177.20 156.49	666.24 588.65	16.88 14.86	-56.44 -70.97	-173.66 -190.03	MAX MIN
285	187.42 164.59	674.00 595.08	15.55 13.63	-41.20 -50.10	-177.00 -194.64	MAX MIN
286	193.40 169.57	679.78 600.04	13.40 11.84	-28.34 -32.44	-177.78 -195.63	MAX MIN
287	196.05 172.10	684.07 603.92	11.63 10.38	-15.44 -16.06	-177.12 -194.60	MAX MIN
288	194.78 171.79	686.49 606.44	11.44 10.14	3.46 -2.53	-174.25 -190.35	MAX MIN
289	193.52 171.63	688.53 608.66	14.28 12.18	23.13 11.46	-166.02 -178.15	MAX MIN
290	-40.73 -43.96	4.23 3.09	30.14 22.48	309.65 244.08	26.30 21.44	MAX MIN
291	-50.94 -57.36	4.96 3.11	54.62 40.43	205.77 167.40	37.85 31.07	MAX MIN
292	-55.32 -63.24	43.05 30.41	88.72 65.85	231.16 192.90	22.50 20.94	MAX MIN
293	-94.71 -116.03	66.85 47.01	107.07 80.14	268.52 230.23	-44.94 -57.87	MAX MIN
294	-9.01 -14.92	145.32 106.62	72.63 55.78	129.05 126.34	-142.68 -163.30	MAX MIN
295	106.86 73.73	244.99 187.11	109.36 84.19	-7.73 -50.62	-199.99 -214.02	MAX MIN
296	68.87 49.00	310.87 245.05	91.63 71.68	-40.64 -79.69	-184.07 -184.55	MAX MIN
297	80.57 61.16	391.22 314.39	64.04 51.20	-42.26 -68.59	-152.60 -160.82	MAX MIN
298	95.42 75.84	430.51 353.05	40.11 33.09	-34.84 -51.81	-150.95 -157.86	MAX MIN
299	109.75 89.98	460.23 384.07	26.90 22.89	-27.61 -38.52	-153.43 -157.56	MAX MIN
300	123.34 103.36	489.51 414.38	19.62 17.15	-22.41 -29.48	-155.36 -157.24	MAX MIN
301	136.22 116.05	519.60 445.01	15.53 13.84	-18.64 -23.17	-155.60 -156.00	MAX MIN
302	148.55 128.20	550.17 475.78	13.13 11.84	-15.38 -17.93	-153.76 -154.15	MAX MIN
303	160.41 139.88	580.70 506.33	11.84 10.70	-11.57 -12.09	-150.53 -151.12	MAX MIN
304	171.81 151.15	610.90 536.49	11.88 10.58	-3.71 -5.94	-146.39 -146.66	MAX MIN
305	182.73 161.99	641.48 566.81	14.20 12.17	10.02 3.36	-141.94 -142.15	MAX MIN
306	193.46 172.57	678.27 601.69	21.44 17.36	33.57 19.13	-142.94 -144.72	MAX MIN
307	25.21 22.16	602.57 533.14	48.03 41.83	-55.98 -61.99	108.32 90.04	MAX MIN
308	1.21 0.97	548.40 485.25	24.47 21.18	-37.32 -41.66	339.53 291.33	MAX MIN
309	50.80 44.93	601.40 532.37	68.21 59.44	-74.50 -80.85	-15.94 -17.87	MAX MIN
310	82.85 73.86	611.81 541.90	68.50 59.73	-68.63 -70.56	-79.31 -87.01	MAX MIN
311	94.93 86.95	621.57 551.46	66.06 57.00	-41.47 -48.56	-115.58 -127.91	MAX MIN
312	118.88 108.42	647.94 573.52	72.17 60.49	-2.82 -21.53	-125.49 -133.06	MAX MIN
313	141.26 128.78	590.43 533.65	89.73 72.37	-4.05 -21.00	-49.38 -69.87	MAX MIN
314	128.00 121.77	457.50 437.47	35.06 30.67	-62.83 -71.84	44.29 -4.01	MAX MIN
315	166.40 150.73	615.46 555.58	-10.04 -18.49	-104.78 -139.72	-69.73 -87.70	MAX MIN
316	170.24 153.28	697.70 617.13	4.67 2.33	-104.25 -140.81	-164.19 -177.27	MAX MIN
317	174.91 156.88	695.21 616.01	13.27 12.34	-76.01 -100.52	-181.86 -203.73	MAX MIN
318	195.78 172.69	707.13 625.48	15.53 13.70	-51.91 -66.43	-185.24 -208.34	MAX MIN
319	204.84 179.92	714.65 631.75	13.17 11.65	-36.85 -45.08	-184.80 -207.35	MAX MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
320	210.16 184.37	720.82 637.06	11.22 9.92	-25.06 -28.62	-184.02 -206.16	MAX MIN
321	212.34 186.46	725.35 641.17	9.66 8.54	-12.88 -13.90	-183.69 -205.91	MAX MIN
322	211.08 186.04	728.75 644.53	8.52 7.55	6.36 -0.67	-183.39 -205.86	MAX MIN
323	198.65 177.58	728.22 645.06	12.86 10.70	36.94 20.37	-180.05 -201.12	MAX MIN
324	203.37 182.17	742.74 656.76	26.81 20.98	72.39 44.39	-163.67 -176.00	MAX MIN
325	-29.15 -32.20	-4.86 -6.79	22.84 17.06	198.27 156.65	81.23 64.60	MAX MIN
326	-60.68 -66.73	-34.50 -45.76	44.59 33.09	133.41 108.69	150.64 120.93	MAX MIN
327	-62.62 -67.37	-78.16 -101.36	105.66 78.58	177.19 148.70	254.77 203.19	MAX MIN
328	-23.11 -31.41	51.89 32.90	165.92 123.84	259.65 215.62	181.76 138.91	MAX MIN
329	-32.51 -38.22	139.63 99.09	403.86 301.04	80.33 78.28	10.62 -14.10	MAX MIN
330	-30.26 -33.33	252.55 189.68	167.81 126.76	-50.89 -98.51	-29.44 -70.17	MAX MIN
331	40.21 23.98	463.89 356.98	108.81 83.50	-26.88 -56.64	-40.00 -88.84	MAX MIN
332	73.09 53.72	464.32 368.65	52.13 41.47	-31.53 -49.56	-91.90 -123.69	MAX MIN
333	93.57 73.54	461.46 376.32	30.32 25.01	-25.30 -36.42	-120.80 -138.90	MAX MIN
334	110.59 90.19	474.66 395.11	20.22 17.24	-20.50 -27.67	-137.82 -147.69	MAX MIN
335	125.18 104.63	496.99 420.25	15.25 13.32	-17.34 -22.16	-146.66 -151.76	MAX MIN
336	138.31 117.70	523.94 448.54	12.48 11.08	-15.16 -18.47	-149.88 -152.38	MAX MIN
337	150.46 129.84	552.77 478.00	10.77 9.65	-13.27 -15.40	-148.98 -150.39	MAX MIN
338	161.89 141.33	581.63 507.31	9.75 8.75	-10.96 -11.86	-144.28 -145.91	MAX MIN
339	172.71 152.28	608.76 535.18	9.65 8.54	-6.47 -7.32	-134.77 -138.21	MAX MIN
340	183.07 162.87	631.75 559.88	11.81 10.03	3.05 -0.82	-117.76 -125.48	MAX MIN
341	192.78 173.03	646.75 578.71	19.96 15.96	21.83 11.85	-88.51 -104.54	MAX MIN
342	210.27 188.99	673.37 606.53	51.68 39.20	65.28 39.65	-72.03 -90.42	MAX MIN
343	32.47 28.47	586.21 519.31	71.55 62.42	-55.71 -62.16	128.75 109.75	MAX MIN
344	-4.36 -4.62	607.99 537.94	54.48 47.66	-47.61 -53.56	433.10 375.82	MAX MIN
345	92.18 81.12	599.48 531.06	89.45 77.91	-64.55 -70.72	-6.52 -7.26	MAX MIN
346	121.42 107.13	619.68 548.95	78.21 67.83	-61.91 -64.60	-81.85 -94.41	MAX MIN
347	140.84 124.82	645.79 571.87	63.33 55.06	-42.09 -48.63	-131.45 -154.87	MAX MIN
348	98.87 97.25	650.82 579.56	78.23 64.60	23.27 -3.48	-158.69 -186.50	MAX MIN
349	209.70 183.20	813.26 704.03	118.65 93.36	58.09 25.12	-156.06 -181.58	MAX MIN
350	91.21 82.30	113.92 13.42	33.91 29.66	-51.29 -58.63	231.70 151.05	MAX MIN
351	231.15 201.94	844.97 731.78	-32.72 -49.31	-128.08 -175.75	-173.41 -201.46	MAX MIN
352	142.61 135.47	714.63 635.42	0.00 -4.35	-100.24 -141.70	-197.17 -230.62	MAX MIN
353	208.57 184.07	742.13 656.21	18.09 16.10	-54.93 -75.99	-199.40 -232.87	MAX MIN
354	216.60 190.47	748.09 661.37	12.87 11.77	-37.84 -48.82	-194.15 -223.41	MAX MIN
355	222.36 195.29	755.49 667.70	11.30 10.17	-26.89 -32.75	-189.95 -216.50	MAX MIN
356	225.96 198.42	761.46 672.93	9.70 8.58	-18.99 -21.65	-187.73 -213.21	MAX MIN
357	228.54 200.70	766.58 677.49	8.51 7.35	-11.17 -11.64	-187.72 -213.76	MAX MIN
358	229.23 201.52	770.62 681.25	8.21 6.85	3.01 -2.32	-190.05 -218.35	MAX MIN
359	228.21 201.24	776.81 686.79	5.18 4.41	27.05 12.04	-194.22 -226.39	MAX MIN
360	170.09 159.51	762.52 677.64	30.81 23.29	88.37 53.52	-192.22 -224.27	MAX MIN
361	267.68 233.88	907.52 786.88	80.15 59.80	116.84 76.49	-170.74 -197.59	MAX MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]		
362	-21.08	-11.03	2.07	14.88	107.69		MAX
	-27.02	-15.29	1.81	13.16	85.31		MIN
363	-64.12	-60.58	3.82	3.50	212.15		MAX
	-70.08	-81.10	3.34	3.20	170.51		MIN
364	-89.61	-229.30	6.38	-2.14	431.76		MAX
	-100.90	-303.82	5.57	-2.61	339.08		MIN
365	-154.95	-736.83	7.91	-5.10	767.71		MAX
	-186.55	-984.29	6.91	-6.00	572.92		MIN
366	-38.10	139.84	8.85	-6.82	937.22		MAX
	-43.94	98.57	7.74	-7.97	672.79		MIN
367	116.15	1284.25	9.45	-7.92	556.96		MAX
	72.96	953.26	8.27	-9.23	364.70		MIN
368	58.67	666.54	9.81	-8.70	96.07		MAX
	35.71	506.25	8.59	-10.14	6.99		MIN
369	72.38	509.60	9.99	-9.37	-63.60		MAX
	52.60	402.43	8.76	-10.90	-107.29		MIN
370	94.38	476.91	9.99	-9.95	-107.51		MAX
	73.96	387.98	8.77	-11.56	-130.48		MIN
371	112.17	481.29	9.82	-10.46	-131.80		MAX
	91.38	400.23	8.63	-12.13	-143.94		MIN
372	127.16	500.68	9.47	-10.90	-143.54		MAX
	106.22	423.19	8.33	-12.61	-149.85		MIN
373	140.32	526.44	8.94	-11.25	-147.90		MAX
	119.38	450.61	7.88	-12.99	-151.18		MIN
374	152.34	554.68	8.24	-11.47	-147.13		MAX
	131.47	479.65	7.28	-13.21	-149.21		MIN
375	163.53	582.95	7.39	-11.52	-141.60		MAX
	142.81	508.53	6.54	-13.24	-144.11		MIN
376	174.06	608.74	6.41	-11.33	-129.76		MAX
	153.58	535.41	5.69	-12.99	-134.75		MIN
377	183.81	627.14	5.35	-10.84	-106.38		MAX
	163.78	556.71	4.76	-12.39	-117.56		MIN
378	192.34	624.55	4.29	-9.92	-54.97		MAX
	173.21	562.48	3.83	-11.31	-81.82		MIN
379	184.38	529.27	3.34	-8.38	35.16		MAX
	170.95	500.57	2.99	-9.52	-12.78		MIN
380	132.41	183.49	2.68	-6.09	229.50		MAX
	129.43	92.47	2.41	-6.90	148.36		MIN
381	169.77	581.43	121.28	-39.88	166.63		MAX
	150.14	515.42	106.06	-45.13	144.00		MIN
382	142.10	588.87	130.55	36.90	390.51		MAX
	126.08	522.07	114.45	32.20	340.07		MIN
383	151.18	590.74	100.49	-24.02	2.56		MAX
	133.49	523.34	87.40	-26.47	2.13		MIN
384	168.32	629.30	83.76	-33.54	-81.68		MAX
	148.29	556.67	72.42	-36.40	-97.09		MIN
385	189.79	669.47	74.52	-24.19	-141.10		MAX
	166.06	590.96	63.18	-27.27	-172.58		MIN
386	225.05	723.15	32.50	-30.69	-185.72		MAX
	194.66	635.16	30.21	-34.28	-239.30		MIN
387	204.79	753.93	319.49	-42.35	-254.93		MAX
	181.93	661.62	241.88	-46.01	-343.53		MIN
388	479.68	1818.76	33.52	-23.53	299.62		MAX
	386.94	1453.77	29.31	-26.89	224.36		MIN
389	220.70	791.87	-181.77	-5.05	-271.56		MAX
	195.83	694.80	-250.73	-8.17	-362.63		MIN
390	257.44	800.40	41.48	-13.98	-223.27		MAX
	222.98	702.73	34.46	-24.43	-282.45		MIN
391	239.66	788.51	9.18	-21.57	-209.10		MAX
	209.68	695.06	8.27	-31.53	-250.77		MIN
392	236.83	792.67	11.87	-14.11	-197.41		MAX
	208.24	699.53	11.18	-17.85	-230.25		MIN
393	238.63	798.13	9.69	-10.82	-191.21		MAX
	210.07	704.70	8.98	-12.97	-219.93		MIN
394	240.68	803.69	8.96	-8.12	-188.10		MAX
	211.95	709.73	7.93	-9.24	-215.33		MIN
395	243.04	809.18	8.66	-5.69	-188.23		MAX
	213.95	714.49	7.25	-5.82	-216.32		MIN
396	245.85	815.26	7.77	-1.85	-191.80		MAX
	216.18	719.51	6.18	-3.19	-223.45		MIN
397	253.71	823.56	13.62	10.29	-201.64		MAX
	222.04	726.06	10.12	2.92	-241.68		MIN
398	277.17	849.41	-12.28	1.00	-215.26		MAX
	240.32	746.02	-16.27	-6.56	-272.59		MIN
399	247.01	856.90	280.52	-17.97	-265.09		MAX
	218.94	752.19	207.92	-18.10	-354.41		MIN
400	513.77	1902.56	2.36	-2.51	302.46		MAX
	416.87	1527.62	2.12	-2.83	226.09		MIN
401	-24.64	-4.86	-13.42	-130.21	81.09		MAX
	-28.31	-6.79	-18.68	-168.36	64.49		MIN
402	-56.75	-34.46	-26.41	-102.20	150.39		MAX
	-62.17	-45.71	-36.94	-126.30	120.72		MIN
403	-58.68	-78.04	-67.42	-152.91	254.32		MAX
	-62.80	-101.21	-92.89	-182.32	202.81		MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
404	-18.52	52.18	-110.00	-225.74	181.14	MAX
	-27.46	33.14	-150.08	-271.57	138.38	MIN
405	-27.93	140.12	-285.54	-93.91	9.85	MAX
	-34.27	99.50	-386.13	-94.16	-14.76	MIN
406	-25.68	253.26	-110.20	80.09	-30.32	MAX
	-29.38	190.27	-148.88	35.10	-70.93	MIN
407	44.78	464.86	-66.28	36.39	-40.97	MAX
	27.92	357.79	-89.14	9.50	-89.68	MIN
408	77.62	465.61	-23.91	27.77	-92.91	MAX
	57.64	369.74	-32.09	12.79	-124.58	MIN
409	98.04	463.10	-7.41	13.30	-121.81	MAX
	77.41	377.71	-10.27	5.39	-139.80	MIN
410	114.97	476.66	0.09	3.38	-138.77	MAX
	93.99	396.82	-0.51	-0.45	-148.55	MIN
411	129.43	499.37	3.78	-3.14	-147.49	MAX
	108.31	422.29	3.43	-4.52	-152.52	MIN
412	142.38	526.69	5.50	-7.42	-150.51	MAX
	121.23	450.91	4.78	-7.61	-152.97	MIN
413	154.31	555.87	5.83	-9.79	-149.34	MAX
	133.19	480.69	5.02	-11.17	-150.75	MIN
414	165.48	585.04	5.16	-12.23	-144.28	MAX
	144.45	510.28	4.45	-14.80	-145.97	MIN
415	175.99	612.40	3.31	-15.54	-134.34	MAX
	155.14	538.36	2.95	-19.73	-137.90	MIN
416	186.00	635.52	-0.39	-21.08	-116.85	MAX
	165.43	563.18	-0.97	-28.09	-124.75	MIN
417	195.34	650.53	-8.19	-31.91	-87.06	MAX
	175.27	582.05	-11.25	-44.70	-103.35	MIN
418	212.41	677.03	-33.13	-56.62	-70.06	MAX
	190.87	609.77	-44.89	-84.57	-88.78	MIN
419	269.39	910.95	-54.89	-88.85	-168.72	MAX
	235.39	789.94	-74.68	-130.84	-195.18	MIN
420	248.18	859.97	-203.59	12.87	-262.83	MAX
	219.99	754.95	-275.71	12.35	-351.73	MIN
421	167.55	558.48	123.40	0.00	197.34	MAX
	148.58	495.27	107.97	0.00	171.23	MIN
422	174.66	582.22	102.75	0.00	5.01	MAX
	154.76	515.85	89.36	0.00	4.71	MIN
423	190.94	636.46	84.92	0.00	-81.20	MAX
	168.71	562.37	73.21	0.00	-97.42	MIN
424	201.91	673.04	71.08	0.00	-142.94	MAX
	178.33	594.42	60.49	0.00	-176.51	MIN
425	236.32	787.74	66.39	0.00	-199.81	MAX
	204.85	682.84	55.14	0.00	-267.52	MIN
426	141.36	471.21	85.98	0.00	-269.53	MAX
	135.17	450.58	68.60	0.00	-378.63	MIN
427	1231.76	4105.87	33.19	0.00	230.71	MAX
	944.48	3148.25	29.02	0.00	183.90	MIN
428	153.53	511.76	-9.05	0.00	-285.79	MAX
	145.81	486.04	-17.86	0.00	-397.32	MIN
429	261.22	870.75	9.01	0.00	-236.78	MAX
	226.63	755.42	7.01	0.00	-310.03	MIN
430	240.70	802.33	11.51	0.00	-210.51	MAX
	212.23	707.45	11.30	0.00	-254.26	MIN
431	244.89	816.31	10.28	0.00	-197.60	MAX
	215.87	719.56	10.02	0.00	-231.41	MIN
432	245.80	819.33	9.41	0.00	-190.85	MAX
	216.93	723.09	8.76	0.00	-220.12	MIN
433	247.49	824.97	8.75	0.00	-187.50	MAX
	218.46	728.21	7.75	0.00	-215.16	MIN
434	249.06	830.19	8.52	0.00	-187.62	MAX
	219.82	732.72	7.10	0.00	-216.23	MIN
435	251.56	838.54	8.94	0.00	-191.49	MAX
	221.78	739.26	6.96	0.00	-224.03	MIN
436	251.10	836.99	10.17	0.00	-202.28	MAX
	221.44	738.14	7.42	0.00	-244.28	MIN
437	275.85	919.50	17.77	0.00	-227.74	MAX
	239.56	798.55	12.79	0.00	-298.98	MIN
438	173.09	576.96	47.23	0.00	-278.02	MAX
	163.09	543.64	34.83	0.00	-387.62	MIN
439	1257.21	4190.71	2.28	0.00	235.33	MAX
	966.92	3223.07	2.05	0.00	187.18	MIN
440	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
441	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
442	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
443	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
444	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
445	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
446	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
447	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
448	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
449	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
450	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
451	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
452	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
453	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
454	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
455	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
456	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
457	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
458	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
459	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
460	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
461	173.94	579.81	-30.64	0.00	-275.69	MAX
	163.86	546.21	-42.58	0.00	-384.85	MIN
462	-32.97	4.24	-18.83	-217.27	26.03	MAX
	-34.95	3.10	-25.97	-279.29	21.22	MIN
463	-43.10	5.05	-33.73	-160.63	37.34	MAX
	-48.26	3.18	-46.95	-198.32	30.65	MIN
464	-47.46	43.35	-54.66	-196.87	21.58	MAX
	-54.11	30.64	-75.90	-236.03	20.17	MIN
465	-86.83	67.44	-66.26	-240.15	-46.01	MAX
	-106.88	47.49	-91.18	-280.20	-59.13	MIN
466	0.14	146.28	-40.22	-142.02	-144.01	MAX
	-7.02	107.40	-54.82	-142.45	-164.85	MIN
467	116.01	246.40	-67.55	32.36	-201.53	MAX
	81.63	188.28	-90.33	-7.92	-215.80	MIN
468	78.00	312.80	-54.36	59.55	-186.03	MAX
	56.89	246.66	-71.84	23.36	-186.27	MIN
469	89.64	393.77	-33.51	46.83	-154.67	MAX
	69.01	316.54	-43.85	23.56	-162.64	MIN
470	104.39	433.75	-15.33	28.64	-153.02	MAX
	83.61	355.80	-19.87	14.91	-159.70	MIN
471	118.55	464.21	-5.35	14.09	-155.39	MAX
	97.60	387.46	-6.95	6.56	-159.32	MIN
472	131.89	494.25	-0.15	3.96	-157.07	MAX
	110.77	418.44	-0.32	0.36	-158.81	MIN
473	144.44	525.09	2.78	-3.24	-156.93	MAX
	123.18	449.75	2.30	-4.22	-157.25	MIN
474	156.34	556.37	3.84	-8.06	-154.54	MAX
	134.96	481.16	3.15	-9.09	-154.94	MIN
475	167.67	587.52	3.45	-12.09	-150.71	MAX
	146.20	512.27	2.83	-15.12	-151.21	MIN
476	178.46	618.20	1.48	-17.48	-145.85	MAX
	156.95	542.87	1.26	-23.15	-145.89	MIN
477	188.69	649.07	-2.19	-25.89	-140.18	MAX
	167.19	573.47	-2.97	-35.79	-140.76	MIN
478	198.66	685.90	-9.27	-39.86	-140.62	MAX
	177.12	608.42	-12.35	-57.22	-141.89	MIN
479	207.73	750.14	-14.60	-62.01	-160.44	MAX
	186.00	663.32	-19.68	-92.43	-172.11	MIN
480	173.58	769.49	-18.10	-66.41	-188.21	MAX
	162.58	683.85	-25.02	-102.98	-219.48	MIN
481	279.57	855.68	21.39	1.23	-210.77	MAX
	242.47	751.65	16.88	-7.03	-267.24	MIN
482	277.59	925.32	-8.33	0.00	-223.09	MAX
	241.14	803.80	-12.81	0.00	-293.46	MIN
483	277.59	925.32	-8.33	0.00	-223.09	MAX
	241.14	803.80	-12.81	0.00	-293.46	MIN
484	277.59	925.32	-8.33	0.00	-223.09	MAX
	241.14	803.80	-12.81	0.00	-293.46	MIN
485	277.59	925.32	-8.33	0.00	-223.09	MAX
	241.14	803.80	-12.81	0.00	-293.46	MIN
486	277.59	925.32	-8.33	0.00	-223.09	MAX
	241.14	803.80	-12.81	0.00	-293.46	MIN
487	277.59	925.32	-8.33	0.00	-223.09	MAX
	241.14	803.80	-12.81	0.00	-293.46	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
488	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
489	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
490	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
491	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
492	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
493	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
494	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
495	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
496	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
497	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
498	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
499	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
500	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
501	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
502	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
503	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
504	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
505	277.59 241.14	925.32 803.80	-8.33 -12.81	0.00 0.00	-223.09 -293.46	MAX MIN
506	-32.67 -39.29	6.53 4.71	-15.91 -21.87	-227.60 -291.82	-14.81 -19.78	MAX MIN
507	-26.97 -31.57	23.33 16.99	-23.71 -33.13	-161.00 -198.82	-31.50 -41.44	MAX MIN
508	-33.25 -40.67	51.85 37.98	-32.02 -44.93	-160.01 -191.10	-73.59 -94.21	MAX MIN
509	-19.65 -23.78	96.42 71.74	-24.57 -34.56	-157.21 -177.45	-130.98 -162.09	MAX MIN
510	29.18 21.08	153.51 116.85	-23.53 -31.96	-112.68 -113.47	-185.77 -221.70	MAX MIN
511	82.32 61.93	220.18 171.68	-25.31 -33.08	-15.54 -36.53	-213.41 -244.67	MAX MIN
512	102.89 79.02	289.60 230.66	-31.44 -40.69	42.79 14.81	-210.72 -231.40	MAX MIN
513	101.77 80.67	352.96 286.66	-24.71 -31.67	44.22 22.12	-193.57 -204.19	MAX MIN
514	110.66 90.00	408.23 336.80	-14.86 -18.81	31.10 16.63	-179.13 -184.00	MAX MIN
515	122.04 101.32	450.80 377.37	-6.80 -8.45	17.77 9.23	-171.42 -174.30	MAX MIN
516	134.16 113.19	487.82 413.58	-1.89 -2.23	7.37 2.95	-166.47 -168.87	MAX MIN
517	146.31 125.03	522.57 447.85	1.05 0.73	-0.42 -1.97	-162.67 -165.14	MAX MIN
518	158.25 136.64	556.32 481.16	2.38 1.81	-6.18 -6.88	-159.40 -162.15	MAX MIN
519	169.89 147.93	589.67 513.97	2.31 1.76	-10.57 -13.47	-156.57 -159.78	MAX MIN
520	181.12 158.83	623.32 546.81	0.96 0.69	-16.11 -21.74	-154.69 -158.80	MAX MIN
521	191.80 169.18	658.91 580.88	-1.47 -1.83	-23.69 -33.18	-155.44 -161.66	MAX MIN
522	201.55 178.64	700.16 618.90	-3.53 -4.57	-33.33 -48.10	-162.68 -174.06	MAX MIN
523	205.38 183.49	739.55 655.10	-3.81 -5.14	-39.09 -58.24	-175.30 -195.41	MAX MIN
524	233.60 206.00	787.54 696.35	1.26 1.17	-25.82 -42.68	-188.28 -219.31	MAX MIN
525	257.45 225.37	833.28 734.77	-5.05 -7.96	-8.66 -16.78	-194.95 -233.73	MAX MIN
526	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
527	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
528	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
529	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
530	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
531	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
532	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
533	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
534	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
535	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
536	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
537	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
538	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
539	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
540	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
541	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
542	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
543	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
544	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
545	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
546	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
547	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
548	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
549	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
550	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
551	253.81 223.89	846.03 746.29	-2.50 -4.68	0.00 0.00	-195.37 -236.07	MAX MIN
552	-25.07 -33.07	3.25 2.29	-9.69 -13.29	-177.43 -227.05	-33.27 -43.12	MAX MIN
553	-9.75 -12.53	21.25 15.71	-13.52 -18.94	-121.72 -150.24	-60.42 -77.44	MAX MIN
554	-2.51 -3.74	54.60 41.00	-16.58 -23.42	-105.02 -124.22	-112.22 -141.48	MAX MIN
555	13.91 11.76	100.03 76.28	-14.14 -19.89	-91.25 -101.93	-159.06 -196.34	MAX MIN
556	45.33 36.40	154.51 119.87	-11.82 -15.98	-61.69 -62.47	-196.20 -236.27	MAX MIN
557	77.05 61.24	214.57 169.46	-13.87 -17.90	-14.27 -25.69	-215.70 -252.56	MAX MIN
558	96.33 76.94	275.87 221.61	-15.55 -19.67	18.66 2.18	-216.50 -245.64	MAX MIN
559	106.58 86.36	338.07 276.01	-14.55 -18.26	29.47 13.98	-205.59 -225.82	MAX MIN
560	114.37 94.29	393.15 325.64	-10.15 -12.58	24.02 12.77	-192.02 -205.06	MAX MIN
561	124.55 104.22	440.86 369.89	-5.49 -6.65	15.11 8.05	-181.01 -189.54	MAX MIN
562	135.91 115.16	482.33 409.40	-2.03 -2.31	7.14 3.30	-173.23 -179.37	MAX MIN
563	147.81 126.56	520.13 445.99	0.21 0.00	0.79 -0.68	-167.73 -172.83	MAX MIN
564	159.85 138.04	555.98 480.91	1.36 0.94	-4.17 -4.58	-163.94 -168.92	MAX MIN
565	171.83 149.43	591.07 515.06	1.51 1.06	-7.75 -9.97	-161.75 -167.40	MAX MIN
566	183.61 160.58	626.51 549.23	0.86 0.55	-11.96 -16.28	-161.53 -168.83	MAX MIN
567	195.12 171.39	663.62 584.39	-0.15 -0.24	-16.87 -23.74	-164.25 -174.60	MAX MIN
568	205.90 181.50	702.32 620.38	-0.70 -0.81	-20.97 -30.31	-170.05 -185.20	MAX MIN
569	220.45 194.25	744.28 658.27	0.08 0.05	-19.63 -29.49	-177.28 -198.50	MAX MIN
570	236.75 208.15	785.45 694.45	-0.48 -1.06	-12.74 -20.13	-182.30 -209.10	MAX MIN
571	251.07 220.83	828.79 731.64	-0.42 -1.32	-3.13 -5.32	-183.02 -213.01	MAX MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
572	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
573	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
574	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
575	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
576	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
577	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
578	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
579	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
580	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
581	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
582	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
583	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
584	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
585	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
586	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
587	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
588	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
589	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
590	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
591	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
592	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
593	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
594	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
595	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
596	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
597	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
598	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
599	255.36 225.20	851.20 750.66	-1.37 -2.67	0.00 0.00	-182.39 -213.22	MAX MIN
600	-15.82 -23.18	0.04 -0.06	-4.51 -6.16	-94.66 -120.95	-39.83 -51.16	MAX MIN
601	4.32 3.76	19.39 14.53	-5.92 -8.31	-64.07 -79.01	-71.16 -90.56	MAX MIN
602	17.30 15.09	53.34 40.68	-7.58 -10.70	-51.59 -60.82	-126.05 -158.19	MAX MIN
603	33.38 28.10	100.01 77.28	-6.51 -9.13	-42.10 -46.73	-167.88 -206.93	MAX MIN
604	54.48 44.99	153.93 120.66	-5.79 -7.79	-28.29 -28.75	-197.95 -239.00	MAX MIN
605	76.11 62.27	211.83 168.52	-6.09 -7.79	-8.06 -13.11	-214.18 -252.62	MAX MIN
606	93.28 76.28	270.83 218.61	-6.86 -8.57	7.07 -0.53	-216.84 -249.14	MAX MIN
607	105.67 87.02	330.98 271.08	-6.49 -8.00	13.55 5.93	-209.59 -234.15	MAX MIN
608	115.70 96.27	386.22 320.56	-4.94 -6.02	12.54 6.58	-197.99 -215.36	MAX MIN
609	125.83 105.87	435.28 365.70	-2.90 -3.46	8.43 4.51	-186.69 -198.70	MAX MIN
610	136.96 116.40	478.87 406.76	-1.22 -1.36	4.24 2.05	-177.67 -186.32	MAX MIN
611	148.76 127.55	518.44 444.69	-0.03 -0.14	0.73 -0.14	-171.22 -178.16	MAX MIN
612	160.91 138.98	555.62 480.64	0.63 0.40	-2.10 -2.28	-167.08 -173.62	MAX MIN
613	173.16 150.46	591.76 515.59	0.77 0.52	-4.07 -5.26	-165.14 -172.41	MAX MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
614	185.42	628.04	0.58	-6.26	-165.48	MAX
	161.86	550.39	0.37	-8.55	-174.65	MIN
615	197.67	665.31	0.28	-8.46	-168.10	MAX
	173.14	585.63	0.14	-11.93	-180.35	MIN
616	210.64	704.38	0.22	-9.59	-172.35	MAX
	184.84	621.81	0.11	-13.89	-188.69	MIN
617	224.68	745.46	0.08	-8.50	-176.45	MAX
	197.27	658.96	0.06	-12.67	-197.15	MIN
618	238.48	785.96	-0.02	-5.15	-178.35	MAX
	209.45	694.72	-0.26	-7.93	-202.56	MIN
619	249.97	827.07	-0.56	-1.42	-177.52	MAX
	220.11	730.50	-1.13	-2.26	-203.57	MIN
620	254.11	847.03	-0.58	0.00	-176.49	MAX
	224.36	747.86	-1.18	0.00	-202.99	MIN
621	254.11	847.03	-0.58	0.00	-176.49	MAX
	224.36	747.86	-1.18	0.00	-202.99	MIN
622	254.11	847.03	-0.58	0.00	-176.49	MAX
	224.36	747.86	-1.18	0.00	-202.99	MIN
623	254.11	847.03	-0.58	0.00	-176.49	MAX
	224.36	747.86	-1.18	0.00	-202.99	MIN
624	254.11	847.03	-0.58	0.00	-176.49	MAX
	224.36	747.86	-1.18	0.00	-202.99	MIN
625	-11.58	-0.47	0.00	0.00	-41.35	MAX
	-18.34	-0.54	0.00	0.00	-52.97	MIN
626	9.43	18.69	0.00	0.00	-73.68	MAX
	9.21	14.10	0.00	0.00	-93.57	MIN
627	24.22	52.83	0.00	0.00	-129.31	MAX
	20.88	40.50	0.00	0.00	-162.06	MIN
628	39.27	99.67	0.00	0.00	-169.78	MAX
	33.09	77.36	0.00	0.00	-209.17	MIN
629	57.50	153.58	0.00	0.00	-197.93	MAX
	47.80	120.79	0.00	0.00	-239.11	MIN
630	76.29	211.05	0.00	0.00	-213.31	MAX
	62.95	168.29	0.00	0.00	-252.06	MIN
631	92.29	269.32	0.00	0.00	-216.52	MAX
	76.06	217.74	0.00	0.00	-249.61	MIN
632	105.21	329.01	0.00	0.00	-210.45	MAX
	87.12	269.73	0.00	0.00	-236.23	MIN
633	115.80	384.11	0.00	0.00	-199.67	MAX
	96.70	319.02	0.00	0.00	-218.37	MIN
634	126.21	433.56	0.00	0.00	-188.48	MAX
	106.40	364.41	0.00	0.00	-201.65	MIN
635	137.29	477.71	0.00	0.00	-179.19	MAX
	116.82	405.88	0.00	0.00	-188.71	MIN
636	149.08	517.85	0.00	0.00	-172.45	MAX
	127.89	444.24	0.00	0.00	-180.05	MIN
637	161.27	555.47	0.00	0.00	-168.20	MAX
	139.31	480.53	0.00	0.00	-175.29	MIN
638	173.64	591.96	0.00	0.00	-166.30	MAX
	150.83	515.74	0.00	0.00	-174.14	MIN
639	186.07	628.44	0.00	0.00	-166.72	MAX
	162.32	550.70	0.00	0.00	-176.47	MIN
640	198.75	665.89	0.00	0.00	-169.18	MAX
	173.90	586.05	0.00	0.00	-181.96	MIN
641	211.97	704.93	0.00	0.00	-172.81	MAX
	185.78	622.17	0.00	0.00	-189.40	MIN
642	225.95	745.98	0.00	0.00	-175.98	MAX
	198.19	659.30	0.00	0.00	-196.40	MIN
643	238.73	786.01	0.00	0.00	-177.03	MAX
	209.65	694.72	0.00	0.00	-200.38	MIN
644	249.62	826.65	0.00	0.00	-175.71	MAX
	219.89	730.23	0.00	0.00	-200.55	MIN
645	254.02	846.75	0.00	0.00	-174.57	MAX
	224.32	747.74	0.00	0.00	-199.76	MIN
646	254.02	846.75	0.00	0.00	-174.57	MAX
	224.32	747.74	0.00	0.00	-199.76	MIN
647	254.02	846.75	0.00	0.00	-174.57	MAX
	224.32	747.74	0.00	0.00	-199.76	MIN
648	254.02	846.75	0.00	0.00	-174.57	MAX
	224.32	747.74	0.00	0.00	-199.76	MIN
649	254.02	846.75	0.00	0.00	-174.57	MAX
	224.32	747.74	0.00	0.00	-199.76	MIN
650	-15.82	0.04	6.16	120.95	-39.83	MAX
	-23.18	-0.06	4.51	94.66	-51.16	MIN
651	4.32	19.39	8.31	79.01	-71.16	MAX
	3.76	14.53	5.92	64.07	-90.56	MIN
652	17.30	53.34	10.70	60.82	-126.05	MAX
	15.09	40.68	7.58	51.59	-158.19	MIN
653	33.38	100.01	9.13	46.73	-167.88	MAX
	28.10	77.28	6.51	42.10	-206.93	MIN
654	54.48	153.93	7.79	28.75	-197.95	MAX
	44.99	120.66	5.79	28.29	-239.00	MIN
655	76.11	211.83	7.79	13.11	-214.18	MAX
	62.27	168.52	6.09	8.06	-252.62	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
656	93.28	270.83	8.57	0.53	-216.84	MAX
	76.28	218.61	6.86	-7.07	-249.14	MIN
657	105.67	330.98	8.00	-5.93	-209.59	MAX
	87.02	271.08	6.49	-13.55	-234.15	MIN
658	115.70	386.22	6.02	-6.58	-197.99	MAX
	96.27	320.56	4.94	-12.54	-215.36	MIN
659	125.83	435.28	3.46	-4.51	-186.69	MAX
	105.87	365.70	2.90	-8.43	-198.70	MIN
660	136.96	478.87	1.36	-2.05	-177.67	MAX
	116.40	406.76	1.22	-4.24	-186.32	MIN
661	148.76	518.44	0.14	0.14	-171.22	MAX
	127.55	444.69	0.03	-0.73	-178.16	MIN
662	160.91	555.62	-0.40	2.28	-167.08	MAX
	138.98	480.64	-0.63	2.10	-173.62	MIN
663	173.16	591.76	-0.52	5.26	-165.14	MAX
	150.46	515.59	-0.77	4.07	-172.41	MIN
664	185.42	628.04	-0.37	8.55	-165.48	MAX
	161.86	550.39	-0.58	6.26	-174.65	MIN
665	197.67	665.31	-0.14	11.93	-168.10	MAX
	173.14	585.63	-0.28	8.46	-180.35	MIN
666	210.64	704.38	-0.11	13.89	-172.35	MAX
	184.84	621.81	-0.22	9.59	-188.69	MIN
667	224.68	745.46	-0.06	12.67	-176.45	MAX
	197.27	658.96	-0.08	8.50	-197.15	MIN
668	238.48	785.96	0.26	7.93	-178.35	MAX
	209.45	694.72	0.02	5.15	-202.56	MIN
669	249.97	827.07	1.13	2.26	-177.52	MAX
	220.11	730.50	0.56	1.42	-203.57	MIN
670	254.11	847.03	1.18	0.00	-176.49	MAX
	224.36	747.86	0.58	0.00	-202.99	MIN
671	254.11	847.03	1.18	0.00	-176.49	MAX
	224.36	747.86	0.58	0.00	-202.99	MIN
672	254.11	847.03	1.18	0.00	-176.49	MAX
	224.36	747.86	0.58	0.00	-202.99	MIN
673	254.11	847.03	1.18	0.00	-176.49	MAX
	224.36	747.86	0.58	0.00	-202.99	MIN
674	254.11	847.03	1.18	0.00	-176.49	MAX
	224.36	747.86	0.58	0.00	-202.99	MIN
675	-25.07	3.25	13.29	227.05	-33.27	MAX
	-33.07	2.29	9.69	177.43	-43.12	MIN
676	-9.75	21.25	18.94	150.24	-60.42	MAX
	-12.53	15.71	13.52	121.72	-77.44	MIN
677	-2.51	54.60	23.42	124.22	-112.22	MAX
	-3.74	41.00	16.58	105.02	-141.48	MIN
678	13.91	100.03	19.89	101.93	-159.06	MAX
	11.76	76.28	14.14	91.25	-196.34	MIN
679	45.33	154.51	15.98	62.47	-196.20	MAX
	36.40	119.87	11.82	61.69	-236.27	MIN
680	77.05	214.57	17.90	25.69	-215.70	MAX
	61.24	169.46	13.87	14.27	-252.56	MIN
681	96.33	275.87	19.67	-2.18	-216.50	MAX
	76.94	221.61	15.55	-18.66	-245.64	MIN
682	106.58	338.07	18.26	-13.98	-205.59	MAX
	86.36	276.01	14.55	-29.47	-225.82	MIN
683	114.37	393.15	12.58	-12.77	-192.02	MAX
	94.29	325.64	10.15	-24.02	-205.06	MIN
684	124.55	440.86	6.65	-8.05	-181.01	MAX
	104.22	369.89	5.49	-15.11	-189.54	MIN
685	135.91	482.33	2.31	-3.30	-173.23	MAX
	115.16	409.40	2.03	-7.14	-179.37	MIN
686	147.81	520.13	0.00	0.68	-167.73	MAX
	126.56	445.99	-0.21	-0.79	-172.83	MIN
687	159.85	555.98	-0.94	4.58	-163.94	MAX
	138.04	480.91	-1.36	4.17	-168.92	MIN
688	171.83	591.07	-1.06	9.97	-161.75	MAX
	149.43	515.06	-1.51	7.75	-167.40	MIN
689	183.61	626.51	-0.55	16.28	-161.53	MAX
	160.58	549.23	-0.86	11.96	-168.83	MIN
690	195.12	663.62	0.24	23.74	-164.25	MAX
	171.39	584.39	0.15	16.87	-174.60	MIN
691	205.90	702.32	0.81	30.31	-170.05	MAX
	181.50	620.38	0.70	20.97	-185.20	MIN
692	220.45	744.28	-0.05	29.49	-177.28	MAX
	194.25	658.27	-0.08	19.63	-198.50	MIN
693	236.75	785.45	1.06	20.13	-182.30	MAX
	208.15	694.45	0.48	12.74	-209.10	MIN
694	251.07	828.79	1.32	5.32	-183.02	MAX
	220.83	731.64	0.42	3.13	-213.01	MIN
695	255.36	851.20	2.67	0.00	-182.39	MAX
	225.20	750.66	1.37	0.00	-213.22	MIN
696	255.36	851.20	2.67	0.00	-182.39	MAX
	225.20	750.66	1.37	0.00	-213.22	MIN
697	255.36	851.20	2.67	0.00	-182.39	MAX
	225.20	750.66	1.37	0.00	-213.22	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
698	255.36	851.20	2.67	0.00	-182.39	MAX
	225.20	750.66	1.37	0.00	-213.22	MIN
699	255.36	851.20	2.67	0.00	-182.39	MAX
	225.20	750.66	1.37	0.00	-213.22	MIN
700	-32.67	6.53	21.87	291.82	-14.81	MAX
	-39.29	4.71	15.91	227.60	-19.78	MIN
701	-26.97	23.33	33.13	198.82	-31.50	MAX
	-31.57	16.99	23.71	161.00	-41.44	MIN
702	-33.25	51.85	44.93	191.10	-73.59	MAX
	-40.67	37.98	32.02	160.01	-94.21	MIN
703	-19.65	96.42	34.56	177.45	-130.98	MAX
	-23.78	71.74	24.57	157.21	-162.09	MIN
704	29.18	153.51	31.96	113.47	-185.77	MAX
	21.08	116.85	23.53	112.68	-221.70	MIN
705	82.32	220.18	33.08	36.53	-213.41	MAX
	61.93	171.68	25.31	15.54	-244.67	MIN
706	102.89	289.60	40.69	-14.81	-210.72	MAX
	79.02	230.66	31.44	-42.79	-231.40	MIN
707	101.77	352.96	31.67	-22.12	-193.57	MAX
	80.67	286.66	24.71	-44.22	-204.19	MIN
708	110.66	408.23	18.81	-16.63	-179.13	MAX
	90.00	336.80	14.86	-31.10	-184.00	MIN
709	122.04	450.80	8.45	-9.23	-171.42	MAX
	101.32	377.37	6.80	-17.77	-174.30	MIN
710	134.16	487.82	2.23	-2.95	-166.47	MAX
	113.19	413.58	1.89	-7.37	-168.87	MIN
711	146.31	522.57	-0.73	1.97	-162.67	MAX
	125.03	447.85	-1.05	0.42	-165.14	MIN
712	158.25	556.32	-1.81	6.88	-159.40	MAX
	136.64	481.16	-2.38	6.18	-162.15	MIN
713	169.89	589.67	-1.76	13.47	-156.57	MAX
	147.93	513.97	-2.31	10.57	-159.78	MIN
714	181.12	623.32	-0.69	21.74	-154.69	MAX
	158.83	546.81	-0.96	16.11	-158.80	MIN
715	191.80	658.91	1.83	33.18	-155.44	MAX
	169.18	580.88	1.47	23.69	-161.66	MIN
716	201.55	700.16	4.57	48.10	-162.68	MAX
	178.64	618.90	3.53	33.33	-174.06	MIN
717	205.38	739.55	5.14	58.24	-175.30	MAX
	183.49	655.10	3.81	39.09	-195.41	MIN
718	233.60	787.54	-1.17	42.68	-188.28	MAX
	206.00	696.35	-1.26	25.82	-219.31	MIN
719	257.45	833.28	7.96	16.78	-194.95	MAX
	225.37	734.77	5.05	8.66	-233.73	MIN
720	253.81	846.03	4.68	0.00	-195.37	MAX
	223.89	746.29	2.50	0.00	-236.07	MIN
721	253.81	846.03	4.68	0.00	-195.37	MAX
	223.89	746.29	2.50	0.00	-236.07	MIN
722	253.81	846.03	4.68	0.00	-195.37	MAX
	223.89	746.29	2.50	0.00	-236.07	MIN
723	253.81	846.03	4.68	0.00	-195.37	MAX
	223.89	746.29	2.50	0.00	-236.07	MIN
724	253.81	846.03	4.68	0.00	-195.37	MAX
	223.89	746.29	2.50	0.00	-236.07	MIN
725	-32.97	4.24	25.97	279.29	26.03	MAX
	-34.95	3.10	18.83	217.27	21.22	MIN
726	-43.10	5.05	46.95	198.32	37.34	MAX
	-48.26	3.18	33.73	160.63	30.65	MIN
727	-47.46	43.35	75.90	236.03	21.58	MAX
	-54.11	30.64	54.66	196.87	20.17	MIN
728	-86.83	67.44	91.18	280.20	-46.01	MAX
	-106.88	47.49	66.26	240.15	-59.13	MIN
729	0.14	146.28	54.82	142.45	-144.01	MAX
	-7.02	107.40	40.22	142.02	-164.85	MIN
730	116.01	246.40	90.33	7.92	-201.53	MAX
	81.63	188.28	67.55	-32.36	-215.80	MIN
731	78.00	312.80	71.84	-23.36	-186.03	MAX
	56.89	246.66	54.36	-59.55	-186.27	MIN
732	89.64	393.77	43.85	-23.56	-154.67	MAX
	69.01	316.54	33.51	-46.83	-162.64	MIN
733	104.39	433.75	19.87	-14.91	-153.02	MAX
	83.61	355.80	15.33	-28.64	-159.70	MIN
734	118.55	464.21	6.95	-6.56	-155.39	MAX
	97.60	387.46	5.35	-14.09	-159.32	MIN
735	131.89	494.25	0.32	-0.36	-157.07	MAX
	110.77	418.44	0.15	-3.96	-158.81	MIN
736	144.44	525.09	-2.30	4.22	-156.93	MAX
	123.18	449.75	-2.78	3.24	-157.25	MIN
737	156.34	556.37	-3.15	9.09	-154.54	MAX
	134.96	481.16	-3.84	8.06	-154.94	MIN
738	167.67	587.52	-2.83	15.12	-150.71	MAX
	146.20	512.27	-3.45	12.09	-151.21	MIN
739	178.46	618.20	-1.26	23.15	-145.85	MAX
	156.95	542.87	-1.48	17.48	-145.89	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
740	188.69	649.07	2.97	35.79	-140.18	MAX
	167.19	573.47	2.19	25.89	-140.76	MIN
741	198.66	685.90	12.35	57.22	-140.62	MAX
	177.12	608.42	9.27	39.86	-141.89	MIN
742	207.73	750.14	19.68	92.43	-160.44	MAX
	186.00	663.32	14.60	62.01	-172.11	MIN
743	173.58	769.49	25.02	102.98	-188.21	MAX
	162.58	683.85	18.10	66.41	-219.48	MIN
744	279.57	855.68	-16.88	7.03	-210.77	MAX
	242.47	751.65	-21.39	-1.23	-267.24	MIN
745	277.59	925.32	12.81	0.00	-223.09	MAX
	241.14	803.80	8.33	0.00	-293.46	MIN
746	277.59	925.32	12.81	0.00	-223.09	MAX
	241.14	803.80	8.33	0.00	-293.46	MIN
747	277.59	925.32	12.81	0.00	-223.09	MAX
	241.14	803.80	8.33	0.00	-293.46	MIN
748	277.59	925.32	12.81	0.00	-223.09	MAX
	241.14	803.80	8.33	0.00	-293.46	MIN
749	277.59	925.32	12.81	0.00	-223.09	MAX
	241.14	803.80	8.33	0.00	-293.46	MIN
750	-24.64	-4.86	18.68	168.36	81.09	MAX
	-28.31	-6.79	13.42	130.21	64.49	MIN
751	-56.75	-34.46	36.94	126.30	150.39	MAX
	-62.17	-45.71	26.41	102.20	120.72	MIN
752	-58.68	-78.04	92.89	182.32	254.32	MAX
	-62.80	-101.21	67.42	152.91	202.81	MIN
753	-18.52	52.18	150.08	271.57	181.14	MAX
	-27.46	33.14	110.00	225.74	138.38	MIN
754	-27.93	140.12	386.13	94.16	9.85	MAX
	-34.27	99.50	285.54	93.91	-14.76	MIN
755	-25.68	253.26	148.88	-35.10	-30.32	MAX
	-29.38	190.27	110.20	-80.09	-70.93	MIN
756	44.78	464.86	89.14	-9.50	-40.97	MAX
	27.92	357.79	66.28	-36.39	-89.68	MIN
757	77.62	465.61	32.09	-12.79	-92.91	MAX
	57.64	369.74	23.91	-27.77	-124.58	MIN
758	98.04	463.10	10.27	-5.39	-121.81	MAX
	77.41	377.71	7.41	-13.30	-139.80	MIN
759	114.97	476.66	0.51	0.45	-138.77	MAX
	93.99	396.82	-0.09	-3.38	-148.55	MIN
760	129.43	499.37	-3.43	4.52	-147.49	MAX
	108.31	422.29	-3.78	3.14	-152.52	MIN
761	142.38	526.69	-4.78	7.61	-150.51	MAX
	121.23	450.91	-5.50	7.42	-152.97	MIN
762	154.31	555.87	-5.02	11.17	-149.34	MAX
	133.19	480.69	-5.83	9.79	-150.75	MIN
763	165.48	585.04	-4.45	14.80	-144.28	MAX
	144.45	510.28	-5.16	12.23	-145.97	MIN
764	175.99	612.40	-2.95	19.73	-134.34	MAX
	155.14	538.36	-3.31	15.54	-137.90	MIN
765	186.00	635.52	0.97	28.09	-116.85	MAX
	165.43	563.18	0.39	21.08	-124.75	MIN
766	195.34	650.53	11.25	44.70	-87.06	MAX
	175.27	582.05	8.19	31.91	-103.35	MIN
767	212.41	677.03	44.89	84.57	-70.06	MAX
	190.87	609.77	33.13	56.62	-88.78	MIN
768	269.39	910.95	74.68	130.84	-168.72	MAX
	235.39	789.94	54.89	88.85	-195.18	MIN
769	248.18	859.97	275.71	-12.35	-262.83	MAX
	219.99	754.95	203.59	-12.87	-351.73	MIN
770	173.94	579.81	42.58	0.00	-275.69	MAX
	163.86	546.21	30.64	0.00	-384.85	MIN
771	173.94	579.81	42.58	0.00	-275.69	MAX
	163.86	546.21	30.64	0.00	-384.85	MIN
772	173.94	579.81	42.58	0.00	-275.69	MAX
	163.86	546.21	30.64	0.00	-384.85	MIN
773	173.94	579.81	42.58	0.00	-275.69	MAX
	163.86	546.21	30.64	0.00	-384.85	MIN
774	173.94	579.81	42.58	0.00	-275.69	MAX
	163.86	546.21	30.64	0.00	-384.85	MIN
775	-21.08	-11.03	-1.81	-13.16	107.69	MAX
	-27.02	-15.29	-2.07	-14.88	85.31	MIN
776	-64.12	-60.58	-3.34	-3.20	212.15	MAX
	-70.08	-81.10	-3.82	-3.50	170.51	MIN
777	-89.61	-229.30	-5.57	2.61	431.76	MAX
	-100.90	-303.82	-6.38	2.14	339.08	MIN
778	-154.95	-736.83	-6.91	6.00	767.71	MAX
	-186.55	-984.29	-7.91	5.10	572.92	MIN
779	-38.10	139.84	-7.74	7.97	937.22	MAX
	-43.94	98.57	-8.85	6.82	672.79	MIN
780	116.15	1284.25	-8.27	9.23	556.96	MAX
	72.96	953.26	-9.45	7.92	364.70	MIN
781	58.67	666.54	-8.59	10.14	96.07	MAX
	35.71	506.25	-9.81	8.70	6.99	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
782	72.38	509.60	-8.76	10.90	-63.60	MAX
	52.60	402.43	-9.99	9.37	-107.29	MIN
783	94.38	476.91	-8.77	11.56	-107.51	MAX
	73.96	387.98	-9.99	9.95	-130.48	MIN
784	112.17	481.29	-8.63	12.13	-131.80	MAX
	91.38	400.23	-9.82	10.46	-143.94	MIN
785	127.16	500.68	-8.33	12.61	-143.54	MAX
	106.22	423.19	-9.47	10.90	-149.85	MIN
786	140.32	526.44	-7.88	12.99	-147.90	MAX
	119.38	450.61	-8.94	11.25	-151.18	MIN
787	152.34	554.68	-7.28	13.21	-147.13	MAX
	131.47	479.65	-8.24	11.47	-149.21	MIN
788	163.53	582.95	-6.54	13.24	-141.60	MAX
	142.81	508.53	-7.39	11.52	-144.11	MIN
789	174.06	608.74	-5.69	12.99	-129.76	MAX
	153.58	535.41	-6.41	11.33	-134.75	MIN
790	183.81	627.14	-4.76	12.39	-106.38	MAX
	163.78	556.71	-5.35	10.84	-117.56	MIN
791	192.34	624.55	-3.83	11.31	-54.97	MAX
	173.21	562.48	-4.29	9.92	-81.82	MIN
792	184.38	529.27	-2.99	9.52	35.16	MAX
	170.95	500.57	-3.34	8.38	-12.78	MIN
793	132.41	183.49	-2.41	6.90	229.50	MAX
	129.43	92.47	-2.68	6.09	148.36	MIN
794	513.77	1902.56	-2.12	2.83	302.46	MAX
	416.87	1527.62	-2.36	2.51	226.09	MIN
795	1257.21	4190.71	-2.05	0.00	235.33	MAX
	966.92	3223.07	-2.28	0.00	187.18	MIN
796	1257.21	4190.71	-2.05	0.00	235.33	MAX
	966.92	3223.07	-2.28	0.00	187.18	MIN
797	1257.21	4190.71	-2.05	0.00	235.33	MAX
	966.92	3223.07	-2.28	0.00	187.18	MIN
798	1257.21	4190.71	-2.05	0.00	235.33	MAX
	966.92	3223.07	-2.28	0.00	187.18	MIN
799	1257.21	4190.71	-2.05	0.00	235.33	MAX
	966.92	3223.07	-2.28	0.00	187.18	MIN
800	-29.15	-4.86	-17.06	-156.65	81.23	MAX
	-32.20	-6.79	-22.84	-198.27	64.60	MIN
801	-60.68	-34.50	-33.09	-108.69	150.64	MAX
	-66.73	-45.76	-44.59	-133.41	120.93	MIN
802	-62.62	-78.16	-78.58	-148.70	254.77	MAX
	-67.37	-101.36	-105.66	-177.19	203.19	MIN
803	-23.11	51.89	-123.84	-215.62	181.76	MAX
	-31.41	32.90	-165.92	-259.65	138.91	MIN
804	-32.51	139.63	-301.04	-78.28	10.62	MAX
	-38.22	99.09	-403.86	-80.33	-14.10	MIN
805	-30.26	252.55	-126.76	98.51	-29.44	MAX
	-33.33	189.68	-167.81	50.89	-70.17	MIN
806	40.21	463.89	-83.50	56.64	-40.00	MAX
	23.98	356.98	-108.81	26.88	-88.84	MIN
807	73.09	464.32	-41.47	49.56	-91.90	MAX
	53.72	368.65	-52.13	31.53	-123.69	MIN
808	93.57	461.46	-25.01	36.42	-120.80	MAX
	73.54	376.32	-30.32	25.30	-138.90	MIN
809	110.59	474.66	-17.24	27.67	-137.82	MAX
	90.19	395.11	-20.22	20.50	-147.69	MIN
810	125.18	496.99	-13.32	22.16	-146.66	MAX
	104.63	420.25	-15.25	17.34	-151.76	MIN
811	138.31	523.94	-11.08	18.47	-149.88	MAX
	117.70	448.54	-12.48	15.16	-152.38	MIN
812	150.46	552.77	-9.65	15.40	-148.98	MAX
	129.84	478.00	-10.77	13.27	-150.39	MIN
813	161.89	581.63	-8.75	11.86	-144.28	MAX
	141.33	507.31	-9.75	10.96	-145.91	MIN
814	172.71	608.76	-8.54	7.32	-134.77	MAX
	152.28	535.18	-9.65	6.47	-138.21	MIN
815	183.07	631.75	-10.03	0.82	-117.76	MAX
	162.87	559.88	-11.81	-3.05	-125.48	MIN
816	192.78	646.75	-15.96	-11.85	-88.51	MAX
	173.03	578.71	-19.96	-21.83	-104.54	MIN
817	210.27	673.37	-39.20	-39.65	-72.03	MAX
	188.99	606.53	-51.68	-65.28	-90.42	MIN
818	267.68	907.52	-59.80	-76.49	-170.74	MAX
	233.88	786.88	-80.15	-116.84	-197.59	MIN
819	247.01	856.90	-207.92	18.10	-265.09	MAX
	218.94	752.19	-280.52	17.97	-354.41	MIN
820	173.09	576.96	-34.83	0.00	-278.02	MAX
	163.09	543.64	-47.23	0.00	-387.62	MIN
821	173.09	576.96	-34.83	0.00	-278.02	MAX
	163.09	543.64	-47.23	0.00	-387.62	MIN
822	173.09	576.96	-34.83	0.00	-278.02	MAX
	163.09	543.64	-47.23	0.00	-387.62	MIN
823	173.09	576.96	-34.83	0.00	-278.02	MAX
	163.09	543.64	-47.23	0.00	-387.62	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
824	173.09 163.09	576.96 543.64	-34.83 -47.23	0.00 0.00	-278.02 -387.62	MAX MIN
825	-40.73 -43.96	4.23 3.09	-22.48 -30.14	-244.08 -309.65	26.30 21.44	MAX MIN
826	-50.94 -57.36	4.96 3.11	-40.43 -54.62	-167.40 -205.77	37.85 31.07	MAX MIN
827	-55.32 -63.24	43.05 30.41	-65.85 -88.72	-192.90 -231.16	22.50 20.94	MAX MIN
828	-94.71 -116.03	66.85 47.01	-80.14 -107.07	-230.23 -268.52	-44.94 -57.87	MAX MIN
829	-9.01 -14.92	145.32 106.62	-55.78 -72.63	-126.34 -129.05	-142.68 -163.30	MAX MIN
830	106.86 73.73	244.99 187.11	-84.19 -109.36	50.62 7.73	-199.99 -214.02	MAX MIN
831	68.87 49.00	310.87 245.05	-71.68 -91.63	79.69 40.64	-184.07 -184.55	MAX MIN
832	80.57 61.16	391.22 314.39	-51.20 -64.04	68.59 42.26	-152.60 -160.82	MAX MIN
833	95.42 75.84	430.51 353.05	-33.09 -40.11	51.81 34.84	-150.95 -157.86	MAX MIN
834	109.75 89.98	460.23 384.07	-22.89 -26.90	38.52 27.61	-153.43 -157.56	MAX MIN
835	123.34 103.36	489.51 414.38	-17.15 -19.62	29.48 22.41	-155.36 -157.24	MAX MIN
836	136.22 116.05	519.60 445.01	-13.84 -15.53	23.17 18.64	-155.60 -156.00	MAX MIN
837	148.55 128.20	550.17 475.78	-11.84 -13.13	17.93 15.38	-153.76 -154.15	MAX MIN
838	160.41 139.88	580.70 506.33	-10.70 -11.84	12.09 11.57	-150.53 -151.12	MAX MIN
839	171.81 151.15	610.90 536.49	-10.58 -11.88	5.94 3.71	-146.39 -146.66	MAX MIN
840	182.73 161.99	641.48 566.81	-12.17 -14.20	-3.36 -10.02	-141.94 -142.15	MAX MIN
841	193.46 172.57	678.27 601.69	-17.36 -21.44	-19.13 -33.57	-142.94 -144.72	MAX MIN
842	203.37 182.17	742.74 656.76	-20.98 -26.81	-44.39 -72.39	-163.67 -176.00	MAX MIN
843	170.09 159.51	762.52 677.64	-23.29 -30.81	-53.52 -88.37	-192.22 -224.27	MAX MIN
844	277.17 240.32	849.41 746.02	16.27 12.28	6.56 -1.00	-215.26 -272.59	MAX MIN
845	275.85 239.56	919.50 798.55	-12.79 -17.77	0.00 0.00	-227.74 -298.98	MAX MIN
846	275.85 239.56	919.50 798.55	-12.79 -17.77	0.00 0.00	-227.74 -298.98	MAX MIN
847	275.85 239.56	919.50 798.55	-12.79 -17.77	0.00 0.00	-227.74 -298.98	MAX MIN
848	275.85 239.56	919.50 798.55	-12.79 -17.77	0.00 0.00	-227.74 -298.98	MAX MIN
849	275.85 239.56	919.50 798.55	-12.79 -17.77	0.00 0.00	-227.74 -298.98	MAX MIN
850	-44.25 -52.73	6.52 4.71	-19.59 -26.07	-255.01 -322.92	-14.48 -19.37	MAX MIN
851	-38.65 -45.13	23.19 16.88	-30.45 -40.85	-168.24 -206.83	-30.87 -40.69	MAX MIN
852	-44.97 -54.29	51.42 37.65	-43.27 -57.82	-156.44 -186.70	-72.42 -92.83	MAX MIN
853	-31.42 -37.43	95.57 71.05	-38.52 -50.54	-147.65 -166.17	-129.35 -160.17	MAX MIN
854	15.49 9.27	152.12 115.70	-39.17 -49.89	-97.33 -100.38	-183.74 -219.33	MAX MIN
855	68.60 50.10	218.12 169.97	-42.06 -52.25	2.46 -21.14	-211.03 -241.92	MAX MIN
856	89.18 67.17	286.76 228.29	-48.90 -60.66	62.75 31.91	-208.07 -228.37	MAX MIN
857	88.11 68.86	349.19 283.49	-42.60 -52.10	65.91 40.72	-190.75 -200.98	MAX MIN
858	97.12 78.29	403.43 332.73	-32.88 -39.36	54.32 36.59	-176.26 -180.77	MAX MIN
859	108.73 89.79	444.89 372.33	-24.66 -28.78	42.40 30.43	-168.65 -171.22	MAX MIN
860	121.19 101.95	480.76 407.52	-19.28 -21.99	33.26 25.29	-163.98 -166.13	MAX MIN
861	133.82 114.19	514.36 440.77	-15.87 -17.79	26.54 21.35	-160.65 -162.97	MAX MIN
862	146.38 126.32	547.02 473.10	-13.69 -15.18	20.86 17.87	-158.05 -160.78	MAX MIN
863	158.77 138.27	579.40 505.03	-12.34 -13.63	14.66 13.88	-156.12 -159.47	MAX MIN
864	170.92 149.94	612.30 537.17	-11.73 -13.06	8.26 6.22	-155.34 -159.76	MAX MIN
865	182.62 161.18	647.40 570.79	-12.03 -13.73	-0.09 -6.16	-157.38 -164.12	MAX MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
866	193.52	688.53	-12.18	-11.46	-166.02	MAX
	171.63	608.66	-14.28	-23.13	-178.15	MIN
867	198.65	728.22	-10.70	-20.37	-180.05	MAX
	177.58	645.06	-12.86	-36.94	-201.12	MIN
868	228.21	776.81	-4.41	-12.04	-194.22	MAX
	201.24	686.79	-5.18	-27.05	-226.39	MIN
869	253.71	823.56	-10.12	-2.92	-201.64	MAX
	222.04	726.06	-13.62	-10.29	-241.68	MIN
870	251.10	836.99	-7.42	0.00	-202.28	MAX
	221.44	738.14	-10.17	0.00	-244.28	MIN
871	251.10	836.99	-7.42	0.00	-202.28	MAX
	221.44	738.14	-10.17	0.00	-244.28	MIN
872	251.10	836.99	-7.42	0.00	-202.28	MAX
	221.44	738.14	-10.17	0.00	-244.28	MIN
873	251.10	836.99	-7.42	0.00	-202.28	MAX
	221.44	738.14	-10.17	0.00	-244.28	MIN
874	251.10	836.99	-7.42	0.00	-202.28	MAX
	221.44	738.14	-10.17	0.00	-244.28	MIN
875	-40.38	3.24	-13.40	-205.66	-32.82	MAX
	-50.85	2.29	-17.54	-259.17	-42.58	MIN
876	-25.18	21.08	-20.29	-129.63	-59.59	MAX
	-30.45	15.58	-26.71	-159.04	-76.44	MIN
877	-18.01	54.07	-27.88	-102.02	-110.65	MAX
	-21.75	40.58	-36.39	-120.50	-139.61	MIN
878	-3.82	98.96	-28.16	-82.21	-156.85	MAX
	-4.17	75.41	-35.97	-91.24	-193.73	MIN
879	27.16	152.73	-27.56	-46.86	-193.41	MAX
	20.73	118.42	-34.03	-49.84	-233.02	MIN
880	58.81	211.91	-30.75	3.32	-212.43	MAX
	45.50	167.28	-37.24	-10.68	-248.77	MIN
881	78.03	272.19	-33.20	38.33	-212.83	MAX
	61.14	218.56	-39.86	19.00	-241.43	MIN
882	88.29	333.16	-32.69	51.03	-201.66	MAX
	70.55	271.89	-38.99	32.45	-221.34	MIN
883	96.19	386.86	-28.50	47.30	-187.99	MAX
	78.55	320.33	-33.52	32.75	-200.52	MIN
884	106.59	433.09	-23.77	39.99	-177.09	MAX
	88.66	363.27	-27.48	29.45	-185.16	MIN
885	118.34	473.01	-19.94	33.52	-169.65	MAX
	99.93	401.40	-22.69	26.05	-175.43	MIN
886	130.82	509.24	-17.22	28.49	-164.75	MAX
	111.81	436.60	-19.34	23.26	-169.62	MIN
887	143.63	543.59	-15.27	24.17	-161.84	MAX
	123.96	470.17	-17.01	20.74	-166.75	MIN
888	156.59	577.33	-13.81	19.44	-160.82	MAX
	136.19	503.10	-15.33	17.80	-166.61	MIN
889	169.56	611.67	-12.69	13.74	-162.08	MAX
	148.35	536.27	-14.10	13.23	-169.75	MIN
890	182.45	648.05	-11.62	8.25	-166.53	MAX
	160.35	570.73	-12.99	5.04	-177.54	MIN
891	194.78	686.49	-10.14	2.53	-174.25	MAX
	171.79	606.44	-11.44	-3.46	-190.35	MIN
892	211.08	728.75	-7.55	0.67	-183.39	MAX
	186.04	644.53	-8.52	-6.36	-205.86	MIN
893	229.23	770.62	-6.85	2.32	-190.05	MAX
	201.52	681.25	-8.21	-3.01	-218.35	MIN
894	245.85	815.26	-6.18	3.19	-191.80	MAX
	216.18	719.51	-7.77	1.85	-223.45	MIN
895	251.56	838.54	-6.96	0.00	-191.49	MAX
	221.78	739.26	-8.94	0.00	-224.03	MIN
896	251.56	838.54	-6.96	0.00	-191.49	MAX
	221.78	739.26	-8.94	0.00	-224.03	MIN
897	251.56	838.54	-6.96	0.00	-191.49	MAX
	221.78	739.26	-8.94	0.00	-224.03	MIN
898	251.56	838.54	-6.96	0.00	-191.49	MAX
	221.78	739.26	-8.94	0.00	-224.03	MIN
899	251.56	838.54	-6.96	0.00	-191.49	MAX
	221.78	739.26	-8.94	0.00	-224.03	MIN
900	-34.75	0.03	-8.24	-123.93	-39.28	MAX
	-45.16	-0.06	-10.45	-154.34	-50.49	MIN
901	-14.72	19.20	-12.73	-72.85	-70.12	MAX
	-18.38	14.39	-16.13	-88.85	-89.30	MIN
902	-4.06	52.74	-18.93	-49.39	-124.07	MAX
	-4.95	40.20	-23.74	-58.01	-155.82	MIN
903	10.98	98.75	-20.59	-33.78	-165.04	MAX
	8.82	76.28	-25.30	-36.86	-203.58	MIN
904	31.92	151.82	-21.61	-14.16	-194.34	MAX
	25.54	118.95	-25.96	-16.75	-234.78	MIN
905	53.38	208.66	-23.09	8.96	-209.91	MAX
	42.66	165.93	-27.29	1.38	-247.67	MIN
906	70.40	266.41	-24.69	26.33	-212.03	MAX
	56.52	214.95	-28.99	15.89	-243.61	MIN
907	82.70	325.03	-24.89	34.90	-204.39	MAX
	67.16	266.10	-29.05	24.18	-228.23	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
908	92.74 76.41	378.56 314.09	-23.66 -27.40	35.84 26.53	-192.62 -209.30	MAX MIN
909	103.05 86.14	425.75 357.59	-21.68 -24.87	33.61 26.13	-181.40 -192.80	MAX MIN
910	114.56 96.99	467.37 396.91	-19.76 -22.46	31.21 25.27	-172.76 -180.90	MAX MIN
911	126.98 108.66	504.94 433.05	-18.13 -20.47	29.36 24.57	-167.02 -173.60	MAX MIN
912	140.02 120.85	540.16 467.25	-16.70 -18.78	27.75 23.90	-163.95 -170.33	MAX MIN
913	153.44 133.32	574.51 500.58	-15.35 -17.21	25.80 22.88	-163.45 -170.82	MAX MIN
914	167.15 145.97	609.29 534.01	-13.93 -15.60	22.95 21.15	-165.63 -175.19	MAX MIN
915	181.12 158.72	645.49 568.24	-12.32 -13.80	19.15 18.64	-170.43 -183.43	MAX MIN
916	196.05 172.10	684.07 603.92	-10.38 -11.63	16.06 15.44	-177.12 -194.60	MAX MIN
917	212.34 186.46	725.35 641.17	-8.54 -9.66	13.90 12.88	-183.69 -205.91	MAX MIN
918	228.54 200.70	766.58 677.49	-7.35 -8.51	11.64 11.17	-187.72 -213.76	MAX MIN
919	243.04 213.95	809.18 714.49	-7.25 -8.66	5.82 5.69	-188.23 -216.32	MAX MIN
920	249.06 219.82	830.19 732.72	-7.10 -8.52	0.00 0.00	-187.62 -216.23	MAX MIN
921	249.06 219.82	830.19 732.72	-7.10 -8.52	0.00 0.00	-187.62 -216.23	MAX MIN
922	249.06 219.82	830.19 732.72	-7.10 -8.52	0.00 0.00	-187.62 -216.23	MAX MIN
923	249.06 219.82	830.19 732.72	-7.10 -8.52	0.00 0.00	-187.62 -216.23	MAX MIN
924	249.06 219.82	830.19 732.72	-7.10 -8.52	0.00 0.00	-187.62 -216.23	MAX MIN
925	-33.94 -44.31	-0.47 -0.53	-3.76 -4.32	-30.51 -34.92	-40.70 -52.18	MAX MIN
926	-13.26 -16.69	18.51 13.96	-6.81 -7.85	-9.87 -11.14	-72.43 -92.05	MAX MIN
927	-1.73 -2.08	52.18 40.00	-11.36 -13.08	1.62 1.18	-126.88 -159.15	MAX MIN
928	12.74 10.26	98.29 76.27	-14.08 -16.22	8.80 7.38	-166.26 -205.00	MAX MIN
929	30.67 24.70	151.22 118.89	-15.85 -18.23	13.19 11.15	-193.41 -233.81	MAX MIN
930	49.14 39.54	207.46 165.38	-17.07 -19.61	16.25 13.78	-207.91 -245.79	MAX MIN
931	64.83 52.37	264.27 213.58	-17.97 -20.61	18.69 15.89	-210.40 -242.56	MAX MIN
932	77.49 63.17	322.14 264.01	-18.64 -21.35	21.04 17.92	-203.79 -228.64	MAX MIN
933	87.94 72.60	375.20 311.52	-19.10 -21.82	23.28 19.88	-192.73 -210.53	MAX MIN
934	98.39 82.32	422.41 354.93	-19.30 -22.02	25.48 21.83	-181.57 -193.92	MAX MIN
935	109.77 92.97	464.16 394.28	-19.24 -21.91	27.64 23.76	-172.67 -181.49	MAX MIN
936	122.15 104.54	501.83 430.44	-18.87 -21.45	29.70 25.60	-166.70 -173.78	MAX MIN
937	135.28 116.75	537.00 464.53	-18.15 -20.61	31.54 27.28	-163.67 -170.48	MAX MIN
938	148.94 129.38	571.18 497.67	-17.06 -19.36	33.03 28.65	-163.47 -171.31	MAX MIN
939	163.05 142.31	605.67 530.80	-15.60 -17.68	33.94 29.51	-166.06 -176.18	MAX MIN
940	177.78 155.64	641.60 564.75	-13.82 -15.65	33.92 29.57	-171.16 -184.73	MAX MIN
941	193.40 169.57	679.78 600.04	-11.84 -13.40	32.44 28.34	-177.78 -195.63	MAX MIN
942	210.16 184.37	720.82 637.06	-9.92 -11.22	28.62 25.06	-184.02 -206.16	MAX MIN
943	225.96 198.42	761.46 672.93	-8.58 -9.70	21.65 18.99	-187.73 -213.21	MAX MIN
944	240.68 211.95	803.69 709.73	-7.93 -8.96	9.24 8.12	-188.10 -215.33	MAX MIN
945	247.49 218.46	824.97 728.21	-7.75 -8.75	0.00 0.00	-187.50 -215.16	MAX MIN
946	247.49 218.46	824.97 728.21	-7.75 -8.75	0.00 0.00	-187.50 -215.16	MAX MIN
947	247.49 218.46	824.97 728.21	-7.75 -8.75	0.00 0.00	-187.50 -215.16	MAX MIN
948	247.49 218.46	824.97 728.21	-7.75 -8.75	0.00 0.00	-187.50 -215.16	MAX MIN
949	247.49 218.46	824.97 728.21	-7.75 -8.75	0.00 0.00	-187.50 -215.16	MAX MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
950	-41.36	0.05	1.82	84.26	-39.09	MAX
	-52.86	-0.05	0.74	62.73	-50.24	MIN
951	-21.30	19.22	0.47	66.26	-69.69	MAX
	-26.05	14.42	-0.86	52.86	-88.76	MIN
952	-10.73	52.69	-2.35	60.94	-123.15	MAX
	-12.75	40.19	-3.72	51.49	-154.69	MIN
953	2.96	98.57	-7.04	54.14	-163.60	MAX
	1.94	76.17	-7.50	48.27	-201.84	MIN
954	23.59	151.41	-9.99	40.26	-192.40	MAX
	18.39	118.67	-10.39	38.81	-232.47	MIN
955	44.68	207.94	-10.95	25.96	-207.50	MAX
	35.18	165.39	-11.82	23.29	-244.85	MIN
956	61.29	265.28	-11.15	15.70	-209.22	MAX
	48.69	214.07	-12.12	10.86	-240.35	MIN
957	73.15	323.35	-12.32	11.52	-201.25	MAX
	58.93	264.76	-13.55	7.02	-224.62	MIN
958	82.77	376.23	-14.47	13.14	-189.22	MAX
	67.81	312.19	-16.17	10.63	-205.44	MIN
959	92.72	422.67	-16.90	17.49	-177.85	MAX
	77.23	355.02	-19.14	17.33	-188.80	MIN
960	103.95	463.44	-18.73	24.10	-169.17	MAX
	87.83	393.57	-21.37	22.26	-176.89	MIN
961	116.22	500.05	-19.68	30.14	-163.52	MAX
	99.35	428.86	-22.52	26.72	-169.73	MIN
962	129.26	534.22	-19.72	35.53	-160.71	MAX
	111.54	462.12	-22.59	30.82	-166.77	MIN
963	142.88	567.47	-18.97	40.57	-160.66	MAX
	124.18	494.46	-21.72	34.67	-167.79	MIN
964	157.01	601.14	-17.52	45.35	-163.50	MAX
	137.17	526.90	-20.05	38.24	-172.92	MIN
965	171.61	636.31	-15.61	49.24	-169.20	MAX
	150.46	560.20	-17.83	40.97	-182.20	MIN
966	187.42	674.00	-13.63	50.10	-177.00	MAX
	164.59	595.08	-15.55	41.20	-194.64	MIN
967	204.84	714.65	-11.65	45.08	-184.80	MAX
	179.92	631.75	-13.17	36.85	-207.35	MIN
968	222.36	755.49	-10.17	32.75	-189.95	MAX
	195.29	667.70	-11.30	26.89	-216.50	MIN
969	238.63	798.13	-8.98	12.97	-191.21	MAX
	210.07	704.70	-9.69	10.82	-219.93	MIN
970	245.80	819.33	-8.76	0.00	-190.85	MAX
	216.93	723.09	-9.41	0.00	-220.12	MIN
971	245.80	819.33	-8.76	0.00	-190.85	MAX
	216.93	723.09	-9.41	0.00	-220.12	MIN
972	245.80	819.33	-8.76	0.00	-190.85	MAX
	216.93	723.09	-9.41	0.00	-220.12	MIN
973	245.80	819.33	-8.76	0.00	-190.85	MAX
	216.93	723.09	-9.41	0.00	-220.12	MIN
974	245.80	819.33	-8.76	0.00	-190.85	MAX
	216.93	723.09	-9.41	0.00	-220.12	MIN
975	-53.45	3.28	8.95	188.36	-32.43	MAX
	-66.06	2.33	5.95	143.92	-42.06	MIN
976	-38.17	21.13	11.17	135.54	-58.72	MAX
	-45.61	15.64	6.81	108.89	-75.34	MIN
977	-31.21	53.99	10.51	122.46	-108.78	MAX
	-37.16	40.57	5.43	103.30	-137.31	MIN
978	-17.44	98.61	3.91	107.60	-153.92	MAX
	-20.06	75.21	0.34	95.88	-190.19	MIN
979	10.62	151.93	-2.00	72.13	-189.45	MAX
	6.54	117.88	-3.75	71.15	-228.32	MIN
980	41.50	210.49	-1.53	37.36	-207.54	MAX
	30.63	166.24	-2.99	28.22	-243.04	MIN
981	59.89	269.97	-0.92	12.05	-207.14	MAX
	45.53	216.85	-2.34	-1.72	-234.83	MIN
982	69.23	329.86	-3.32	2.83	-195.29	MAX
	54.13	269.26	-4.26	-9.53	-214.04	MIN
983	76.24	382.28	-9.44	6.64	-181.10	MAX
	61.35	316.58	-9.84	-1.10	-192.70	MIN
984	85.87	427.02	-14.71	14.03	-169.88	MAX
	70.78	358.21	-16.42	10.83	-177.05	MIN
985	97.01	465.23	-18.58	21.87	-162.34	MAX
	81.51	394.82	-21.18	21.51	-167.27	MIN
986	109.13	499.56	-20.77	31.31	-157.60	MAX
	93.06	428.30	-23.85	28.26	-161.69	MIN
987	121.91	531.81	-21.52	39.68	-155.17	MAX
	105.16	460.00	-24.77	34.46	-159.41	MIN
988	135.23	563.33	-21.05	47.82	-155.01	MAX
	117.67	490.94	-24.23	40.53	-160.28	MIN
989	148.98	595.42	-19.49	56.33	-157.55	MAX
	130.50	522.09	-22.39	46.75	-164.91	MIN
990	163.12	629.66	-17.20	64.99	-163.75	MAX
	143.55	554.63	-19.66	52.79	-174.71	MIN
991	177.20	666.24	-14.86	70.97	-173.66	MAX
	156.49	588.65	-16.88	56.44	-190.03	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
992	195.78	707.13	-13.70	66.43	-185.24	MAX
	172.69	625.48	-15.53	51.91	-208.34	MIN
993	216.60	748.09	-11.77	48.82	-194.15	MAX
	190.47	661.37	-12.87	37.84	-223.41	MIN
994	236.83	792.67	-11.18	17.85	-197.41	MAX
	208.24	699.53	-11.87	14.11	-230.25	MIN
995	244.89	816.31	-10.02	0.00	-197.60	MAX
	215.87	719.56	-10.28	0.00	-231.41	MIN
996	244.89	816.31	-10.02	0.00	-197.60	MAX
	215.87	719.56	-10.28	0.00	-231.41	MIN
997	244.89	816.31	-10.02	0.00	-197.60	MAX
	215.87	719.56	-10.28	0.00	-231.41	MIN
998	244.89	816.31	-10.02	0.00	-197.60	MAX
	215.87	719.56	-10.28	0.00	-231.41	MIN
999	244.89	816.31	-10.02	0.00	-197.60	MAX
	215.87	719.56	-10.28	0.00	-231.41	MIN
1000	-63.43	6.59	17.57	250.87	-13.86	MAX
	-75.07	4.77	12.22	192.33	-18.57	MIN
1001	-57.71	23.27	25.52	181.76	-29.52	MAX
	-67.37	16.99	17.17	146.22	-38.98	MIN
1002	-64.38	51.33	32.32	187.01	-69.52	MAX
	-76.95	37.65	21.17	156.31	-89.25	MIN
1003	-51.50	95.08	18.98	180.95	-124.82	MAX
	-60.86	70.79	11.15	159.94	-154.69	MIN
1004	-8.99	150.98	14.42	121.19	-177.64	MAX
	-11.72	114.95	8.39	120.43	-212.07	MIN
1005	42.90	216.06	14.08	46.72	-203.53	MAX
	28.02	168.49	8.87	27.89	-233.11	MIN
1006	62.13	283.53	20.48	-1.78	-199.34	MAX
	43.91	225.83	13.89	-27.10	-218.25	MIN
1007	59.58	344.37	10.32	-6.15	-180.99	MAX
	44.30	279.67	6.13	-25.12	-189.80	MIN
1008	67.16	396.73	-3.58	2.31	-165.71	MAX
	52.47	327.27	-4.68	-8.60	-168.80	MIN
1009	77.49	435.99	-13.60	12.79	-157.59	MAX
	62.84	364.92	-14.87	8.22	-158.78	MIN
1010	88.92	469.34	-19.24	22.28	-152.71	MAX
	74.08	397.86	-21.87	22.22	-153.56	MIN
1011	100.89	500.10	-22.37	33.70	-149.56	MAX
	85.73	428.56	-25.69	30.51	-150.67	MIN
1012	113.27	529.61	-23.64	43.86	-147.58	MAX
	97.67	458.07	-27.24	38.06	-149.25	MIN
1013	126.08	558.62	-23.40	54.00	-146.81	MAX
	109.94	486.98	-26.94	45.65	-149.30	MIN
1014	139.30	588.04	-21.64	65.35	-147.85	MAX
	122.51	516.00	-24.80	53.97	-151.69	MIN
1015	152.83	619.78	-18.25	78.84	-152.40	MAX
	135.29	546.59	-20.62	63.45	-158.95	MIN
1016	166.33	657.88	-14.50	93.87	-164.24	MAX
	147.96	581.74	-15.97	73.25	-176.64	MIN
1017	174.91	695.21	-12.34	100.52	-181.86	MAX
	156.88	616.01	-13.27	76.01	-203.73	MIN
1018	208.57	742.13	-16.10	75.99	-199.40	MAX
	184.07	656.21	-18.09	54.93	-232.87	MIN
1019	239.66	788.51	-8.27	31.53	-209.10	MAX
	209.68	695.06	-9.18	21.57	-250.77	MIN
1020	240.70	802.33	-11.30	0.00	-210.51	MAX
	212.23	707.45	-11.51	0.00	-254.26	MIN
1021	240.70	802.33	-11.30	0.00	-210.51	MAX
	212.23	707.45	-11.51	0.00	-254.26	MIN
1022	240.70	802.33	-11.30	0.00	-210.51	MAX
	212.23	707.45	-11.51	0.00	-254.26	MIN
1023	240.70	802.33	-11.30	0.00	-210.51	MAX
	212.23	707.45	-11.51	0.00	-254.26	MIN
1024	240.70	802.33	-11.30	0.00	-210.51	MAX
	212.23	707.45	-11.51	0.00	-254.26	MIN
1025	-65.50	4.33	21.78	235.78	27.42	MAX
	-72.79	3.18	15.24	180.05	22.31	MIN
1026	-75.53	5.10	39.62	178.39	40.24	MAX
	-86.06	3.28	27.46	143.51	32.96	MIN
1027	-80.44	42.98	63.81	229.06	27.51	MAX
	-92.56	30.47	44.29	190.73	24.99	MIN
1028	-120.82	66.27	76.27	281.03	-38.64	MAX
	-146.50	46.73	53.47	240.54	-50.22	MIN
1029	-41.02	143.90	38.05	148.19	-134.24	MAX
	-42.36	105.71	25.79	147.31	-153.24	MIN
1030	73.06	242.38	72.12	16.31	-189.64	MAX
	44.72	185.26	51.84	-21.96	-201.85	MIN
1031	33.12	306.73	52.37	-11.79	-170.16	MAX
	18.28	241.93	37.50	-45.39	-172.57	MIN
1032	42.65	385.02	23.12	-8.69	-137.27	MAX
	28.55	309.51	15.49	-28.82	-147.45	MIN
1033	55.40	421.87	-2.11	3.33	-134.55	MAX
	41.38	346.04	-3.85	-6.76	-143.40	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
1034	67.82	448.74	-14.96	15.20	-136.34	MAX
	53.83	374.53	-16.28	11.75	-142.36	MIN
1035	79.82	474.73	-21.23	26.02	-137.98	MAX
	65.80	401.89	-24.09	25.10	-141.67	MIN
1036	91.60	501.07	-24.62	37.55	-138.42	MAX
	77.48	429.17	-28.22	33.57	-140.51	MIN
1037	103.45	527.45	-26.15	47.86	-137.78	MAX
	89.17	456.17	-30.05	41.43	-138.90	MIN
1038	115.61	553.42	-26.15	58.34	-136.33	MAX
	101.07	482.63	-30.02	49.48	-137.01	MIN
1039	128.26	578.82	-24.39	70.47	-134.38	MAX
	113.37	508.48	-27.84	58.56	-135.06	MIN
1040	141.48	604.61	-20.15	86.23	-133.24	MAX
	126.15	534.52	-22.50	69.81	-133.94	MIN
1041	155.64	636.93	-11.57	108.68	-138.79	MAX
	139.65	565.39	-11.70	84.74	-140.65	MIN
1042	170.24	697.70	-2.33	140.81	-164.19	MAX
	153.28	617.13	-4.67	104.25	-177.27	MIN
1043	142.61	714.63	4.35	141.70	-197.17	MAX
	135.47	635.42	0.00	100.24	-230.62	MIN
1044	257.44	800.40	-34.46	24.43	-223.27	MAX
	222.98	702.73	-41.48	13.98	-282.45	MIN
1045	261.22	870.75	-7.01	0.00	-236.78	MAX
	226.63	755.42	-9.01	0.00	-310.03	MIN
1046	261.22	870.75	-7.01	0.00	-236.78	MAX
	226.63	755.42	-9.01	0.00	-310.03	MIN
1047	261.22	870.75	-7.01	0.00	-236.78	MAX
	226.63	755.42	-9.01	0.00	-310.03	MIN
1048	261.22	870.75	-7.01	0.00	-236.78	MAX
	226.63	755.42	-9.01	0.00	-310.03	MIN
1049	261.22	870.75	-7.01	0.00	-236.78	MAX
	226.63	755.42	-9.01	0.00	-310.03	MIN
1050	-61.78	-4.72	14.67	121.89	82.75	MAX
	-63.56	-6.63	10.01	90.77	65.76	MIN
1051	-90.04	-34.24	30.07	102.86	153.86	MAX
	-100.99	-45.53	20.56	82.23	123.45	MIN
1052	-92.74	-78.01	81.59	171.82	261.48	MAX
	-102.55	-101.38	57.80	143.78	208.57	MIN
1053	-59.92	51.26	136.22	269.15	191.90	MAX
	-62.94	32.66	98.16	223.31	147.23	MIN
1054	-71.48	137.99	370.55	97.54	23.86	MAX
	-71.62	98.11	272.19	96.25	-3.04	MIN
1055	-68.90	249.46	131.94	-28.86	-13.58	MAX
	-71.74	187.55	95.62	-71.99	-56.71	MIN
1056	-3.96	458.97	70.92	0.30	-21.97	MAX
	-13.94	353.34	50.53	-24.05	-73.32	MIN
1057	25.92	456.92	12.50	0.73	-72.10	MAX
	13.19	362.88	6.90	-11.08	-106.43	MIN
1058	43.47	451.13	-10.79	11.90	-99.63	MAX
	30.45	367.99	-10.95	7.70	-120.23	MIN
1059	57.78	460.89	-19.87	22.04	-115.69	MAX
	44.71	383.72	-22.12	21.67	-127.99	MIN
1060	70.05	479.23	-24.67	33.20	-124.00	MAX
	57.08	405.28	-28.03	29.92	-131.43	MIN
1061	81.41	501.59	-27.44	42.63	-127.19	MAX
	68.55	429.44	-31.36	37.29	-131.91	MIN
1062	92.57	525.20	-28.95	51.43	-126.94	MAX
	79.77	454.22	-33.13	44.41	-130.40	MIN
1063	104.00	548.28	-29.36	60.49	-123.74	MAX
	91.17	478.34	-33.57	51.75	-127.20	MIN
1064	116.04	569.16	-28.35	70.69	-116.87	MAX
	103.10	500.61	-32.29	59.80	-121.81	MIN
1065	129.02	585.69	-24.86	83.44	-103.83	MAX
	115.90	519.53	-27.87	69.30	-112.55	MIN
1066	142.94	594.40	-16.22	102.26	-79.90	MAX
	129.64	532.75	-16.65	82.13	-96.29	MIN
1067	166.40	615.46	18.49	139.72	-69.73	MAX
	150.73	555.58	10.04	104.78	-87.70	MIN
1068	231.15	844.97	49.31	175.75	-173.41	MAX
	201.94	731.78	32.72	128.08	-201.46	MIN
1069	220.70	791.87	250.73	8.17	-271.56	MAX
	195.83	694.80	181.77	5.05	-362.63	MIN
1070	153.53	511.76	17.86	0.00	-285.79	MAX
	145.81	486.04	9.05	0.00	-397.32	MIN
1071	153.53	511.76	17.86	0.00	-285.79	MAX
	145.81	486.04	9.05	0.00	-397.32	MIN
1072	153.53	511.76	17.86	0.00	-285.79	MAX
	145.81	486.04	9.05	0.00	-397.32	MIN
1073	153.53	511.76	17.86	0.00	-285.79	MAX
	145.81	486.04	9.05	0.00	-397.32	MIN
1074	153.53	511.76	17.86	0.00	-285.79	MAX
	145.81	486.04	9.05	0.00	-397.32	MIN
1075	-59.77	-10.83	-4.96	-55.22	109.71	MAX
	-60.32	-15.05	-5.80	-64.90	86.83	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
1076	-97.21 -108.67	-60.20 -80.76	-8.58 -10.02	-26.65 -31.27	216.40 173.82	MAX MIN
1077	-123.80 -140.83	-229.03 -303.76	-14.13 -16.49	-10.60 -12.19	440.52 346.08	MAX MIN
1078	-191.10 -228.79	-736.98 -984.92	-17.38 -20.24	-0.28 -0.70	780.80 583.60	MAX MIN
1079	-82.64 -83.32	138.04 97.57	-19.53 -22.69	8.09 6.21	954.09 686.83	MAX MIN
1080	67.53 31.33	1280.78 950.96	-21.20 -24.53	14.70 11.68	576.96 381.64	MAX MIN
1081	6.43 -9.06	660.98 502.22	-22.69 -26.16	20.40 16.47	118.62 26.37	MAX MIN
1082	16.12 4.34	501.18 395.96	-24.19 -27.79	26.00 21.27	-38.97 -85.82	MAX MIN
1083	34.20 22.27	465.15 378.57	-25.73 -29.46	31.38 25.98	-81.22 -107.26	MAX MIN
1084	48.29 36.43	465.59 387.31	-27.30 -31.18	36.75 30.78	-104.22 -119.35	MAX MIN
1085	60.00 48.36	480.39 406.14	-28.87 -32.92	42.30 35.81	-115.03 -124.24	MAX MIN
1086	70.52 59.13	500.80 428.74	-30.38 -34.62	48.16 41.16	-118.93 -125.01	MAX MIN
1087	80.77 69.58	522.87 452.22	-31.72 -36.14	54.39 46.84	-118.33 -123.11	MAX MIN
1088	91.35 80.28	544.12 474.79	-32.75 -37.32	60.86 52.72	-113.89 -118.94	MAX MIN
1089	102.77 91.71	562.11 494.69	-33.28 -37.95	67.17 58.43	-104.38 -111.63	MAX MIN
1090	115.24 104.18	572.12 508.50	-33.12 -37.80	72.45 63.20	-84.87 -97.87	MAX MIN
1091	128.64 117.74	560.92 506.61	-32.19 -36.76	75.04 65.57	-38.98 -67.02	MAX MIN
1092	128.00 121.77	457.50 437.47	-30.67 -35.06	71.84 62.83	44.29 -4.01	MAX MIN
1093	91.21 82.30	113.92 13.42	-29.66 -33.91	58.63 51.29	231.70 151.05	MAX MIN
1094	479.68 386.94	1818.76 1453.77	-29.31 -33.52	26.89 23.53	299.62 224.36	MAX MIN
1095	1231.76 944.48	4105.87 3148.25	-29.02 -33.19	0.00 0.00	230.71 183.90	MAX MIN
1096	1231.76 944.48	4105.87 3148.25	-29.02 -33.19	0.00 0.00	230.71 183.90	MAX MIN
1097	1231.76 944.48	4105.87 3148.25	-29.02 -33.19	0.00 0.00	230.71 183.90	MAX MIN
1098	1231.76 944.48	4105.87 3148.25	-29.02 -33.19	0.00 0.00	230.71 183.90	MAX MIN
1099	1231.76 944.48	4105.87 3148.25	-29.02 -33.19	0.00 0.00	230.71 183.90	MAX MIN
1100	-63.84 -65.81	-4.55 -6.42	-19.82 -26.15	-201.96 -252.76	83.79 66.51	MAX MIN
1101	-92.17 -103.42	-33.94 -45.22	-37.48 -49.84	-136.45 -166.57	155.98 125.03	MAX MIN
1102	-95.73 -106.07	-77.61 -101.02	-85.67 -114.13	-165.79 -197.18	265.63 211.77	MAX MIN
1103	-65.05 -67.24	51.60 33.13	-132.43 -176.14	-225.34 -270.43	197.72 151.83	MAX MIN
1104	-77.48 -78.50	138.20 98.55	-310.71 -415.29	-81.84 -84.30	30.88 2.66	MAX MIN
1105	-76.47 -80.79	249.48 187.88	-137.43 -180.32	101.06 51.86	-5.72 -50.17	MAX MIN
1106	-15.10 -23.28	458.76 353.51	-95.28 -122.51	64.61 32.34	-13.53 -66.12	MAX MIN
1107	12.51 1.91	456.35 362.74	-54.65 -67.34	62.85 41.51	-63.14 -98.61	MAX MIN
1108	27.81 17.22	450.17 367.48	-39.86 -47.38	54.75 39.72	-90.07 -111.73	MAX MIN
1109	39.88 29.50	459.42 382.71	-34.05 -39.47	51.02 39.46	-105.32 -118.66	MAX MIN
1110	49.90 39.87	477.05 403.60	-32.38 -37.04	50.80 41.15	-112.55 -121.07	MAX MIN
1111	59.06 49.36	498.40 426.81	-32.65 -37.13	52.96 44.36	-114.35 -120.28	MAX MIN
1112	68.12 58.67	520.54 450.24	-33.88 -38.47	56.51 48.54	-112.45 -117.35	MAX MIN
1113	77.70 68.39	541.51 472.46	-35.67 -40.55	60.39 52.97	-107.52 -112.66	MAX MIN
1114	88.36 79.07	559.45 492.11	-37.97 -43.34	62.91 56.45	-98.98 -105.87	MAX MIN
1115	100.81 91.34	571.99 507.52	-41.49 -47.86	60.92 56.69	-84.56 -95.50	MAX MIN
1116	115.45 105.68	575.55 516.22	-48.70 -57.50	48.83 47.55	-59.74 -78.55	MAX MIN
1117	141.26 128.78	590.43 533.65	-72.37 -89.73	21.00 4.05	-49.38 -69.87	MAX MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
1118	209.70	813.26	-93.36	-25.12	-156.06	MAX
	183.20	704.03	-118.65	-58.09	-181.58	MIN
1119	204.79	753.93	-241.88	46.01	-254.93	MAX
	181.93	661.62	-319.49	42.35	-343.53	MIN
1120	141.36	471.21	-68.60	0.00	-269.53	MAX
	135.17	450.58	-85.98	0.00	-378.63	MIN
1121	141.36	471.21	-68.60	0.00	-269.53	MAX
	135.17	450.58	-85.98	0.00	-378.63	MIN
1122	141.36	471.21	-68.60	0.00	-269.53	MAX
	135.17	450.58	-85.98	0.00	-378.63	MIN
1123	141.36	471.21	-68.60	0.00	-269.53	MAX
	135.17	450.58	-85.98	0.00	-378.63	MIN
1124	141.36	471.21	-68.60	0.00	-269.53	MAX
	135.17	450.58	-85.98	0.00	-378.63	MIN
1125	-68.66	4.83	-24.73	-293.66	29.65	MAX
	-76.10	3.58	-32.89	-370.08	23.92	MIN
1126	-79.04	5.73	-43.67	-200.48	44.68	MAX
	-90.01	3.88	-58.57	-245.66	36.27	MIN
1127	-85.88	43.66	-70.98	-215.11	36.03	MAX
	-98.96	31.26	-94.96	-257.29	31.53	MIN
1128	-129.04	66.88	-86.26	-244.41	-29.35	MAX
	-156.31	47.64	-114.48	-284.36	-38.47	MIN
1129	-53.83	144.25	-62.66	-133.89	-122.85	MAX
	-54.75	106.56	-80.87	-136.72	-139.19	MIN
1130	55.15	242.32	-91.89	50.09	-176.64	MAX
	29.76	185.87	-118.47	5.66	-186.24	MIN
1131	10.98	306.24	-80.43	85.25	-153.44	MAX
	-0.24	242.21	-101.84	43.58	-158.28	MIN
1132	15.98	383.80	-61.34	79.89	-119.55	MAX
	6.15	309.17	-75.77	50.08	-131.95	MIN
1133	24.26	419.88	-44.99	68.26	-115.63	MAX
	15.10	344.96	-53.79	47.25	-126.54	MIN
1134	32.24	445.76	-36.93	59.93	-115.75	MAX
	23.63	372.49	-43.00	44.58	-123.79	MIN
1135	39.79	470.38	-33.75	56.10	-115.08	MAX
	31.62	398.54	-38.64	44.25	-120.92	MIN
1136	47.15	494.78	-33.42	55.68	-112.52	MAX
	39.33	423.98	-37.96	46.00	-117.06	MIN
1137	54.74	518.33	-34.79	57.40	-108.30	MAX
	47.15	448.38	-39.43	49.20	-112.34	MIN
1138	63.04	540.23	-37.32	59.77	-102.94	MAX
	55.54	471.17	-42.36	52.90	-107.11	MIN
1139	72.68	559.92	-40.98	60.62	-97.16	MAX
	65.08	491.94	-46.76	55.61	-101.94	MIN
1140	84.44	577.88	-46.25	56.21	-92.68	MAX
	76.47	511.06	-53.32	54.63	-98.08	MIN
1141	99.68	599.86	-54.62	45.41	-97.65	MAX
	90.83	532.87	-64.21	40.04	-100.97	MIN
1142	118.88	647.94	-60.49	21.53	-125.49	MAX
	108.42	573.52	-72.17	2.82	-133.06	MIN
1143	98.87	650.82	-64.60	3.48	-158.69	MAX
	97.25	579.56	-78.23	-23.27	-186.50	MIN
1144	225.05	723.15	-30.21	34.28	-185.72	MAX
	194.66	635.16	-32.50	30.69	-239.30	MIN
1145	236.32	787.74	-55.14	0.00	-199.81	MAX
	204.85	682.84	-66.39	0.00	-267.52	MIN
1146	236.32	787.74	-55.14	0.00	-199.81	MAX
	204.85	682.84	-66.39	0.00	-267.52	MIN
1147	236.32	787.74	-55.14	0.00	-199.81	MAX
	204.85	682.84	-66.39	0.00	-267.52	MIN
1148	236.32	787.74	-55.14	0.00	-199.81	MAX
	204.85	682.84	-66.39	0.00	-267.52	MIN
1149	236.32	787.74	-55.14	0.00	-199.81	MAX
	204.85	682.84	-66.39	0.00	-267.52	MIN
1150	-65.69	7.48	-21.16	-310.45	-11.21	MAX
	-76.94	5.48	-28.06	-391.51	-14.92	MIN
1151	-61.12	24.19	-32.19	-207.80	-24.27	MAX
	-71.04	17.88	-43.09	-254.98	-31.93	MIN
1152	-71.23	52.25	-45.88	-184.45	-59.49	MAX
	-84.98	38.78	-61.20	-219.77	-76.14	MIN
1153	-62.91	95.83	-41.53	-166.68	-110.91	MAX
	-74.51	72.04	-54.39	-187.49	-137.04	MIN
1154	-28.27	151.30	-42.57	-109.08	-160.76	MAX
	-28.89	116.09	-54.13	-112.02	-191.26	MIN
1155	16.49	215.75	-46.07	-1.23	-184.37	MAX
	6.06	169.25	-57.10	-26.43	-210.13	MIN
1156	29.26	282.53	-53.85	65.86	-178.32	MAX
	16.52	226.07	-66.50	32.16	-193.71	MIN
1157	19.91	342.30	-48.88	75.04	-158.18	MAX
	11.10	278.96	-59.39	46.11	-163.81	MIN
1158	20.90	393.51	-40.91	68.44	-140.82	MAX
	13.53	325.47	-48.62	46.49	-140.97	MIN
1159	24.71	431.35	-34.88	60.98	-128.26	MAX
	18.13	361.73	-40.54	44.59	-129.98	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
1160	29.60	462.78	-32.21	56.46	-119.20	MAX
	23.49	392.80	-36.85	43.93	-121.53	MIN
1161	34.98	490.79	-32.09	55.15	-111.23	MAX
	29.17	420.89	-36.44	45.22	-113.84	MIN
1162	40.87	516.31	-33.82	56.28	-103.59	MAX
	35.22	446.71	-38.33	48.17	-106.47	MIN
1163	47.57	539.56	-36.97	58.63	-96.67	MAX
	41.92	470.40	-41.96	52.08	-99.73	MIN
1164	55.66	560.87	-41.44	60.50	-91.90	MAX
	49.80	492.19	-47.23	55.81	-94.72	MIN
1165	65.94	581.29	-47.30	59.30	-92.54	MAX
	59.56	512.81	-54.28	57.46	-93.76	MIN
1166	79.93	604.02	-53.26	54.56	-101.11	MAX
	72.52	534.47	-61.51	51.90	-104.75	MIN
1167	94.93	621.57	-57.00	48.56	-115.58	MAX
	86.95	551.46	-66.06	41.47	-127.91	MIN
1168	140.84	645.79	-55.06	48.63	-131.45	MAX
	124.82	571.87	-63.33	42.09	-154.87	MIN
1169	189.79	669.47	-63.18	27.27	-141.10	MAX
	166.06	590.96	-74.52	24.19	-172.58	MIN
1170	201.91	673.04	-60.49	0.00	-142.94	MAX
	178.33	594.42	-71.08	0.00	-176.51	MIN
1171	201.91	673.04	-60.49	0.00	-142.94	MAX
	178.33	594.42	-71.08	0.00	-176.51	MIN
1172	201.91	673.04	-60.49	0.00	-142.94	MAX
	178.33	594.42	-71.08	0.00	-176.51	MIN
1173	201.91	673.04	-60.49	0.00	-142.94	MAX
	178.33	594.42	-71.08	0.00	-176.51	MIN
1174	201.91	673.04	-60.49	0.00	-142.94	MAX
	178.33	594.42	-71.08	0.00	-176.51	MIN
1175	-51.56	4.80	-14.13	-269.16	-28.60	MAX
	-62.45	3.53	-18.58	-339.03	-36.78	MIN
1176	-39.37	22.22	-20.20	-176.55	-51.54	MAX
	-46.40	16.74	-26.87	-216.67	-65.64	MIN
1177	-38.04	54.93	-27.52	-136.09	-95.67	MAX
	-45.13	41.88	-36.38	-160.80	-120.08	MIN
1178	-31.00	99.22	-27.52	-106.35	-136.20	MAX
	-36.38	76.63	-35.65	-118.22	-167.63	MIN
1179	-14.34	151.92	-26.89	-62.99	-168.05	MAX
	-14.64	119.10	-33.60	-65.76	-201.93	MIN
1180	7.12	209.58	-30.43	-3.63	-183.14	MAX
	2.21	166.91	-37.10	-19.45	-213.87	MIN
1181	16.66	268.08	-33.67	38.94	-180.23	MAX
	9.72	216.77	-40.55	16.36	-203.58	MIN
1182	17.01	326.49	-34.37	57.77	-165.92	MAX
	10.65	267.87	-41.00	35.08	-180.81	MIN
1183	15.52	377.40	-31.76	58.38	-148.77	MAX
	10.44	313.72	-37.33	39.46	-156.78	MIN
1184	16.81	420.34	-29.02	54.42	-133.54	MAX
	12.43	353.54	-33.60	39.60	-137.06	MIN
1185	19.52	456.18	-27.76	51.23	-120.56	MAX
	15.53	387.81	-31.76	39.71	-121.32	MIN
1186	23.02	487.12	-28.31	50.38	-107.74	MAX
	19.22	418.05	-32.20	41.22	-108.77	MIN
1187	27.09	514.41	-30.44	51.88	-95.48	MAX
	23.36	445.14	-34.58	44.39	-97.70	MIN
1188	31.89	538.77	-33.95	55.20	-84.69	MAX
	28.10	469.57	-38.61	49.01	-87.55	MIN
1189	37.87	560.76	-38.77	59.59	-76.67	MAX
	33.82	491.70	-44.20	54.63	-79.33	MIN
1190	46.02	581.09	-44.88	64.08	-74.01	MAX
	41.39	511.95	-51.33	60.52	-75.01	MIN
1191	57.63	597.84	-52.16	67.97	-75.60	MAX
	51.97	528.58	-59.81	65.76	-78.19	MIN
1192	82.85	611.81	-59.73	70.56	-79.31	MAX
	73.86	541.90	-68.50	68.63	-87.01	MIN
1193	121.42	619.68	-67.83	64.60	-81.85	MAX
	107.13	548.95	-78.21	61.91	-94.41	MIN
1194	168.32	629.30	-72.42	36.40	-81.68	MAX
	148.29	556.67	-83.76	33.54	-97.09	MIN
1195	190.94	636.46	-73.21	0.00	-81.20	MAX
	168.71	562.37	-84.92	0.00	-97.42	MIN
1196	190.94	636.46	-73.21	0.00	-81.20	MAX
	168.71	562.37	-84.92	0.00	-97.42	MIN
1197	190.94	636.46	-73.21	0.00	-81.20	MAX
	168.71	562.37	-84.92	0.00	-97.42	MIN
1198	190.94	636.46	-73.21	0.00	-81.20	MAX
	168.71	562.37	-84.92	0.00	-97.42	MIN
1199	190.94	636.46	-73.21	0.00	-81.20	MAX
	168.71	562.37	-84.92	0.00	-97.42	MIN
1200	-30.83	2.49	-8.09	-197.72	-34.51	MAX
	-38.12	1.88	-10.54	-248.74	-43.81	MIN
1201	-17.91	20.09	-10.75	-126.41	-61.73	MAX
	-21.12	15.44	-14.19	-155.14	-77.81	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
1202	-15.92	53.17	-15.58	-89.05	-109.39	MAX
	-18.77	41.36	-20.42	-104.91	-136.37	MIN
1203	-12.41	98.52	-16.23	-63.45	-145.04	MAX
	-14.46	77.43	-20.81	-69.88	-178.12	MIN
1204	-5.76	150.47	-16.68	-35.39	-169.16	MAX
	-5.87	119.60	-20.68	-37.69	-203.94	MIN
1205	3.03	205.75	-18.19	-1.72	-180.07	MAX
	1.05	165.52	-21.89	-11.44	-212.34	MIN
1206	8.24	261.69	-20.37	24.16	-178.24	MAX
	5.08	213.09	-24.18	9.95	-204.79	MIN
1207	9.13	317.81	-21.49	38.71	-166.81	MAX
	5.98	261.98	-25.27	23.46	-186.12	MIN
1208	8.78	368.76	-21.36	42.65	-150.51	MAX
	6.09	307.50	-24.91	28.95	-162.86	MIN
1209	9.02	413.06	-20.76	41.69	-133.20	MAX
	6.74	348.15	-23.98	30.45	-139.90	MIN
1210	10.30	451.11	-20.76	40.31	-116.32	MAX
	8.24	383.96	-23.81	31.31	-118.80	MIN
1211	12.21	483.84	-21.84	40.36	-99.31	MAX
	10.23	415.48	-24.95	33.08	-99.95	MIN
1212	14.53	512.25	-24.07	42.39	-80.83	MAX
	12.55	443.34	-27.47	36.30	-83.75	MIN
1213	17.32	537.04	-27.42	46.46	-63.10	MAX
	15.25	467.97	-31.30	41.16	-67.60	MIN
1214	20.90	558.82	-31.89	52.68	-46.54	MAX
	18.62	489.75	-36.45	47.85	-51.86	MIN
1215	25.99	577.88	-37.73	61.32	-32.26	MAX
	23.27	508.78	-43.19	56.59	-37.43	MIN
1216	35.15	594.50	-46.32	72.28	-22.30	MAX
	31.35	525.17	-53.09	66.99	-26.18	MIN
1217	50.80	601.40	-59.44	80.85	-15.94	MAX
	44.93	532.37	-68.21	74.50	-17.87	MIN
1218	92.18	599.48	-77.91	70.72	-6.52	MAX
	81.12	531.06	-89.45	64.55	-7.26	MIN
1219	151.18	590.74	-87.40	26.47	2.56	MAX
	133.49	523.34	-100.49	24.02	2.13	MIN
1220	174.66	582.22	-89.36	0.00	5.01	MAX
	154.76	515.85	-102.75	0.00	4.71	MIN
1221	174.66	582.22	-89.36	0.00	5.01	MAX
	154.76	515.85	-102.75	0.00	4.71	MIN
1222	174.66	582.22	-89.36	0.00	5.01	MAX
	154.76	515.85	-102.75	0.00	4.71	MIN
1223	174.66	582.22	-89.36	0.00	5.01	MAX
	154.76	515.85	-102.75	0.00	4.71	MIN
1224	174.66	582.22	-89.36	0.00	5.01	MAX
	154.76	515.85	-102.75	0.00	4.71	MIN
1225	-10.26	2.77	-3.36	-110.32	-37.69	MAX
	-12.84	2.14	-4.34	-138.86	-47.53	MIN
1226	-3.69	17.97	-4.10	-65.78	-68.83	MAX
	-4.22	14.03	-5.39	-80.74	-86.37	MIN
1227	-3.43	51.22	-6.36	-43.72	-120.78	MAX
	-3.99	40.34	-8.29	-51.39	-150.28	MIN
1228	-2.89	96.55	-7.11	-29.52	-154.71	MAX
	-3.42	76.66	-9.07	-32.26	-190.08	MIN
1229	-1.18	148.24	-7.48	-15.40	-174.56	MAX
	-1.26	118.78	-9.20	-16.81	-211.06	MIN
1230	1.26	202.73	-8.27	0.31	-182.22	MAX
	0.74	164.07	-9.87	-4.56	-216.11	MIN
1231	2.82	257.43	-9.39	12.69	-179.06	MAX
	1.93	210.52	-11.03	5.60	-207.58	MIN
1232	3.08	312.59	-10.30	20.41	-167.11	MAX
	2.14	258.44	-12.02	12.57	-188.60	MIN
1233	2.85	363.19	-10.73	23.21	-149.39	MAX
	2.05	303.47	-12.47	15.91	-163.55	MIN
1234	2.90	407.97	-10.95	23.42	-128.96	MAX
	2.21	344.30	-12.67	17.22	-136.54	MIN
1235	3.37	446.82	-11.37	23.15	-107.45	MAX
	2.74	380.60	-13.11	18.08	-109.54	MIN
1236	4.16	480.23	-12.32	23.63	-82.84	MAX
	3.52	412.53	-14.16	19.44	-85.18	MIN
1237	5.11	508.82	-13.90	25.33	-55.78	MAX
	4.43	440.40	-15.96	21.72	-61.73	MIN
1238	6.21	533.10	-16.12	28.49	-27.36	MAX
	5.47	464.46	-18.50	25.20	-36.32	MIN
1239	7.60	553.36	-19.02	33.51	3.56	MAX
	6.75	484.80	-21.82	30.23	-8.03	MIN
1240	9.83	569.99	-22.92	41.04	37.92	MAX
	8.73	501.61	-26.29	37.36	23.88	MIN
1241	14.03	584.10	-28.62	51.35	75.56	MAX
	12.40	515.72	-32.87	46.71	59.08	MIN
1242	25.21	602.57	-41.83	61.99	108.32	MAX
	22.16	533.14	-48.03	55.98	90.04	MIN
1243	32.47	586.21	-62.42	62.16	128.75	MAX
	28.47	519.31	-71.55	55.71	109.75	MIN

In	Mx [kNm]	My [kNm]	Mxy [kNm]	Tx [kN]	Ty [kN]	
1244	169.77 150.14	581.43 515.42	-106.06 -121.28	45.13 39.88	166.63 144.00	MAX MIN
1245	167.55 148.58	558.48 495.27	-107.97 -123.40	0.00 0.00	197.34 171.23	MAX MIN
1246	167.55 148.58	558.48 495.27	-107.97 -123.40	0.00 0.00	197.34 171.23	MAX MIN
1247	167.55 148.58	558.48 495.27	-107.97 -123.40	0.00 0.00	197.34 171.23	MAX MIN
1248	167.55 148.58	558.48 495.27	-107.97 -123.40	0.00 0.00	197.34 171.23	MAX MIN
1249	167.55 148.58	558.48 495.27	-107.97 -123.40	0.00 0.00	197.34 171.23	MAX MIN
1250	-0.95 -1.24	-0.34 -0.48	-0.83 -1.08	-62.92 -79.36	-56.91 -72.16	MAX MIN
1251	0.71 0.52	14.16 11.19	-0.39 -0.56	-33.19 -40.71	-92.25 -116.31	MAX MIN
1252	-0.14 -0.22	47.54 37.70	-0.68 -0.97	-21.42 -25.11	-146.81 -183.43	MAX MIN
1253	-0.49 -0.76	93.18 74.32	-0.75 -1.03	-14.03 -15.22	-177.07 -218.50	MAX MIN
1254	-0.31 -0.56	144.84 116.44	-0.80 -1.00	-6.85 -7.69	-192.64 -234.13	MAX MIN
1255	-0.06 -0.21	198.59 161.15	-1.12 -1.30	0.88 -1.66	-195.81 -233.67	MAX MIN
1256	-0.01 -0.11	252.39 206.86	-1.79 -2.09	7.06 3.39	-187.87 -219.18	MAX MIN
1257	-0.20 -0.31	307.08 254.34	-2.49 -2.94	11.01 6.92	-170.67 -193.56	MAX MIN
1258	-0.39 -0.52	357.60 299.19	-3.09 -3.70	12.59 8.72	-147.28 -161.27	MAX MIN
1259	-0.42 -0.55	402.46 339.94	-3.62 -4.36	12.85 9.52	-120.58 -126.35	MAX MIN
1260	-0.32 -0.41	441.20 375.98	-4.27 -5.12	12.90 10.12	-90.51 -91.86	MAX MIN
1261	-0.19 -0.24	474.08 407.30	-5.17 -6.17	13.36 11.03	-53.55 -60.96	MAX MIN
1262	-0.12 -0.14	501.55 434.07	-6.42 -7.60	14.55 12.50	-14.10 -26.82	MAX MIN
1263	-0.17 -0.19	523.84 456.30	-8.04 -9.43	16.66 14.72	30.03 12.32	MAX MIN
1264	-0.43 -0.48	540.61 473.51	-10.08 -11.76	20.04 18.01	81.96 59.08	MAX MIN
1265	-0.80 -0.88	551.00 484.81	-12.66 -14.69	25.25 22.82	146.35 117.37	MAX MIN
1266	-2.33 -2.59	553.04 488.27	-16.94 -19.57	32.99 29.74	229.77 192.74	MAX MIN
1267	1.21 0.97	548.40 485.25	-21.18 -24.47	41.66 37.32	339.53 291.33	MAX MIN
1268	-4.36 -4.62	607.99 537.94	-47.66 -54.48	53.56 47.61	433.10 375.82	MAX MIN
1269	142.10 126.08	588.87 522.07	-114.45 -130.55	-32.20 -36.90	390.51 340.07	MAX MIN
1270	142.10 126.08	588.87 522.07	-114.45 -130.55	-32.20 -36.90	390.51 340.07	MAX MIN
1271	142.10 126.08	588.87 522.07	-114.45 -130.55	-32.20 -36.90	390.51 340.07	MAX MIN
1272	142.10 126.08	588.87 522.07	-114.45 -130.55	-32.20 -36.90	390.51 340.07	MAX MIN
1273	142.10 126.08	588.87 522.07	-114.45 -130.55	-32.20 -36.90	390.51 340.07	MAX MIN

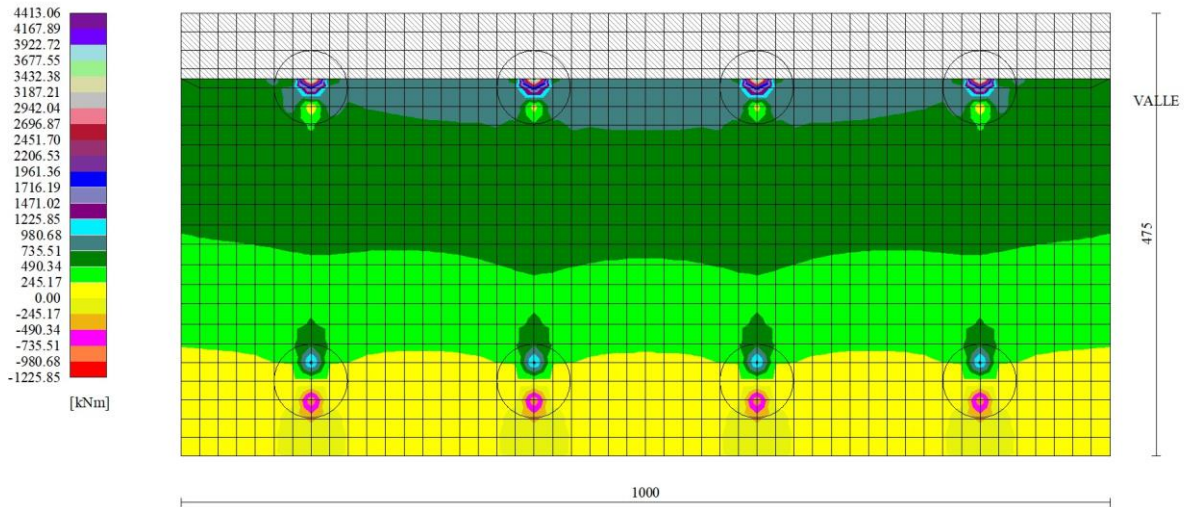


Fig. 28 - Piastra fondazione - Momento My (Combinazione n° 1)

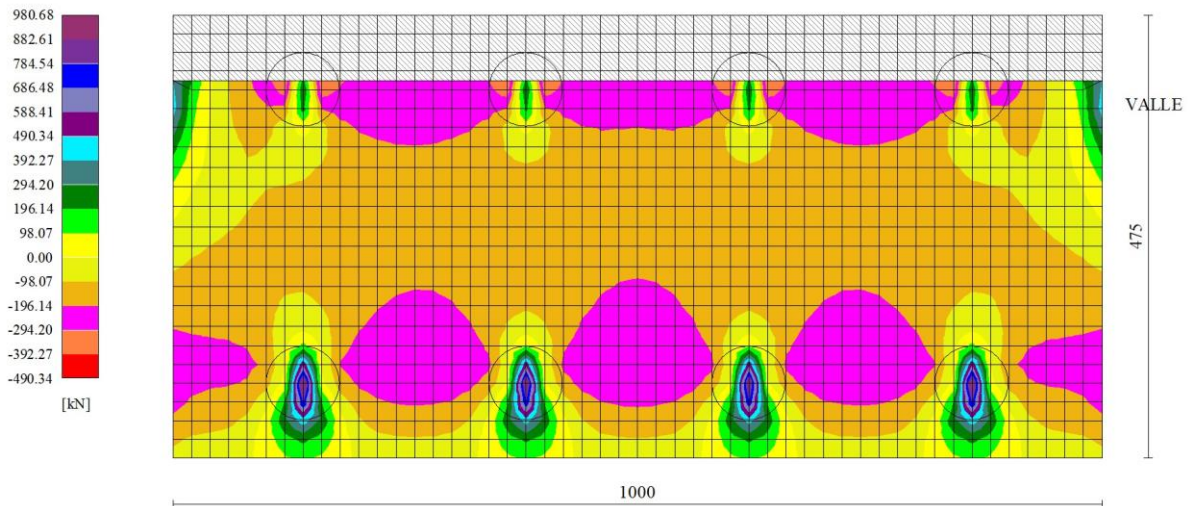


Fig. 29 - Piastra fondazione - Taglio Ty (Combinazione n° 1)

Sollecitazioni pali

Simbologia adottata

- N Sforzo normale, espresso in [kN]. Positivo se di compressione.
- T Taglio, espresso in [kN]. Positivo se diretto da monte verso valle
- M Momento, espresso in [kNm]. Positivo se tende le fibre contro terra (a monte)

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	333.24	492.95	-571.53	-14288.16	694.41	17360.32
12	1.65	353.57	492.95	8.50	212.61	1109.86	27746.38
29	4.20	384.99	492.95	219.67	5491.87	723.73	18093.22
77	11.40	473.72	492.95	-1.23	-30.74	-25.33	-633.19
101	15.00	518.09	492.95	-0.84	-20.91	0.00	0.00

Palo n° 2

n°	Y	Ne	Nr	Te	Tr	Me	Mr
----	---	----	----	----	----	----	----

	[m]	[kN]	[kN]	[kN]	[kN]	[kNm]	[kNm]
1	0.00	495.91	492.81	-571.53	-14288.16	694.41	17360.32
12	1.65	516.24	492.81	8.50	212.61	1109.86	27746.38
29	4.20	547.67	492.81	219.67	5491.87	723.73	18093.22
77	11.40	636.40	492.81	-1.23	-30.74	-25.33	-633.19
101	15.00	680.76	492.81	-0.84	-20.91	0.00	0.00

Palo n° 1

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	168.44	492.96	-514.65	-12866.19	514.90	12872.46
13	1.80	190.63	492.96	13.31	332.76	910.96	22774.03
29	4.20	220.20	492.96	180.24	4506.04	614.16	15354.09
77	11.40	308.93	492.96	-0.08	-1.92	-19.78	-494.53
101	15.00	353.30	492.96	-0.69	-17.31	0.00	0.00

Palo n° 2

n°	Y [m]	Ne [kN]	Nr [kN]	Te [kN]	Tr [kN]	Me [kNm]	Mr [kNm]
1	0.00	495.11	492.98	-514.65	-12866.19	514.90	12872.46
13	1.80	517.29	492.98	13.31	332.76	910.96	22774.03
29	4.20	546.87	492.98	180.24	4506.04	614.16	15354.09
77	11.40	635.60	492.98	-0.08	-1.92	-19.78	-494.53
101	15.00	679.96	492.98	-0.69	-17.31	0.00	0.00

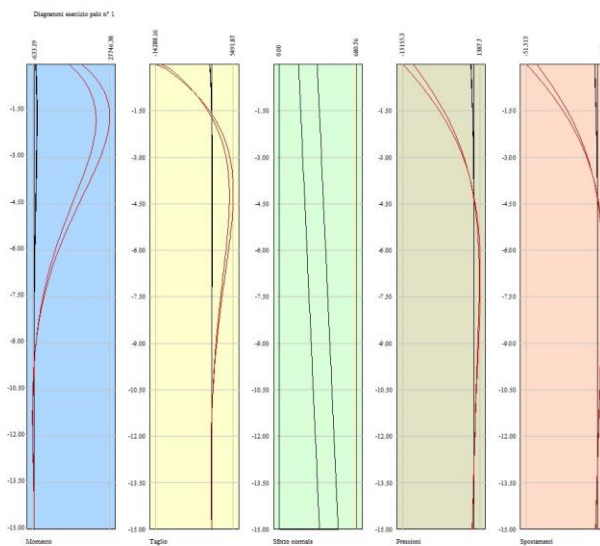


Fig. 30 - Sollecitazioni palo (Palo n° 1) (Inviluppo)

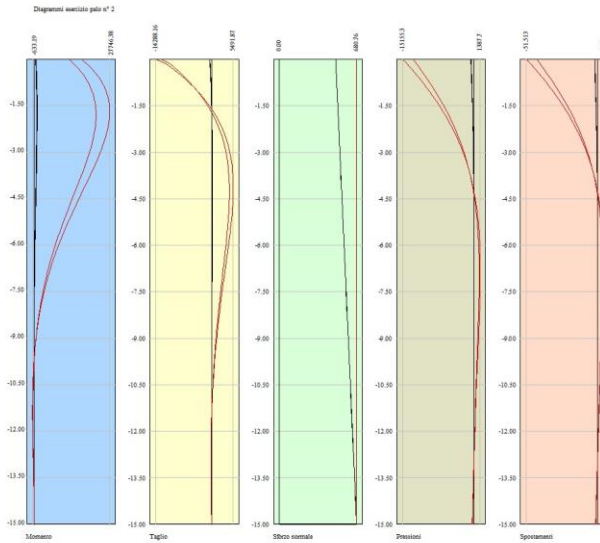


Fig. 31 - Sollecitazioni palo (Palo n° 2) (Involuppo)

Verifiche strutturali

Verifiche a flessione

Elementi calcolati a trave

Simbologia adottata

- n° indice sezione
- Y ordinata sezione espressa in [m]
- B larghezza sezione espressa in [cm]
- H altezza sezione espressa in [cm]
- Afi area ferri inferiori espressa in [cmq]
- Afs area ferri superiori espressa in [cmq]
- M momento agente espressa in [kNm]
- N sforzo normale agente espressa in [kN]
- Mu momento ultimi espresso in [kNm]
- Nu sforzo normale ultimo espressa in [kN]
- FS fattore di sicurezza (rapporto tra sollecitazione ultima e sollecitazione agente)

Elementi calcolati a piastra

Simbologia adottata

- n° indice sezione
- Y ordinata sezione espressa in [m]
- B larghezza sezione espressa in [cm]
- H altezza sezione espressa in [cm]
- Afi, Afs area ferri inferiori e superiori, espresso in [cmq]
- Mp, Mn momento positivo e negativo agente espressa in [kNm]
- Mu momento ultimi espresso in [kNm]
- FS fattore di sicurezza (rapporto tra sollecitazione ultima e sollecitazione agente)

Pali in c.a.

Ip	Is	Ar	M	N	Mu	Nu	FS
		[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	12	221.67	1109.86	353.57	1117.88	353.57	1.007
2	12	226.19	1109.86	516.24	1118.93	516.24	1.008

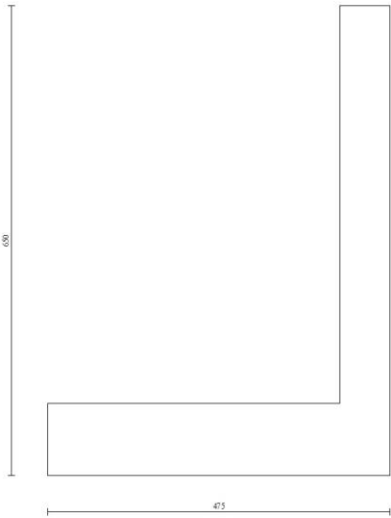


Fig. 32 - Paramento (Inviluppo)

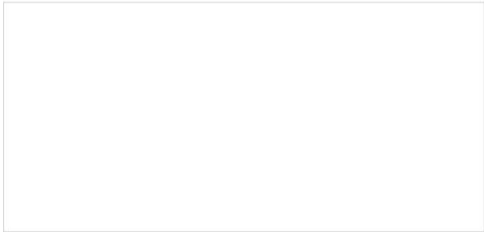


Fig. 33 - Piastra fondazione dir. X (Inviluppo)

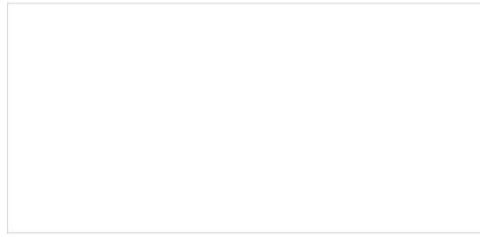


Fig. 34 - Piastra fondazione dir. Y (Inviluppo)

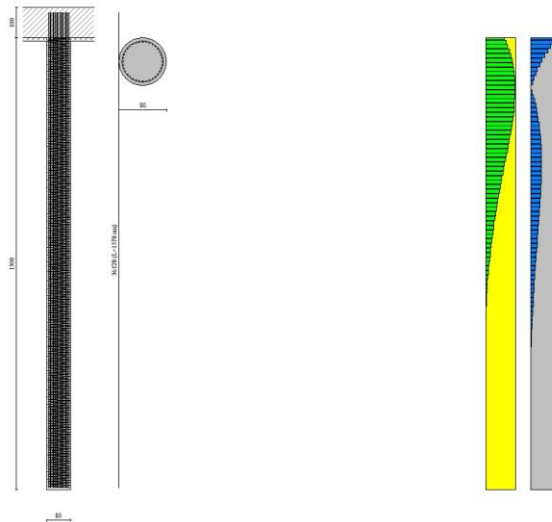


Fig. 35 - Pali (Palo n° 1) (Inviluppo)

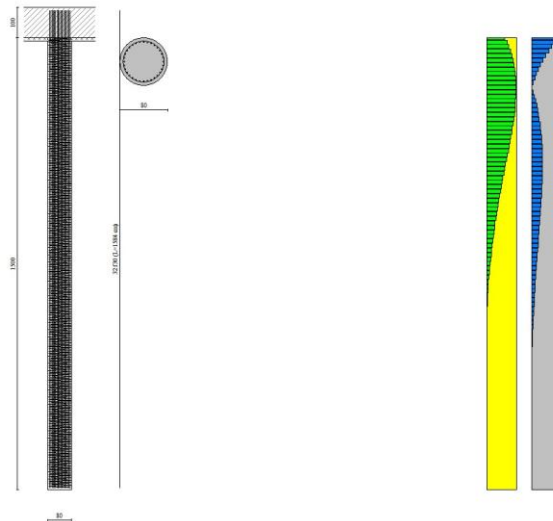


Fig. 36 - Pali (Palo n° 2) (Involuppo)

Verifiche a taglio

Simbologia adottata

Is	indice sezione
Y	ordinata sezione espressa in [m]
B	larghezza sezione espressa in [cm]
H	altezza sezione espressa in [cm]
A _{sw}	area ferri a taglio espressa in [cmq]
cotgθ	inclinazione delle bielle compresse, θ inclinazione dei puntoni di calcestruzzo
V _{Rcd}	resistenza di progetto a 'taglio compressione' espressa in [kN]
V _{Rsd}	resistenza di progetto a 'taglio trazione' espressa in [kN]
V _{Rd}	resistenza di progetto a taglio espressa in [kN]. Per elementi con armature trasversali resistenti al taglio (A _{sw} >0.0) V _{Rd} =min(V _{Rcd} , V _{Rsd}).
T	taglio agente espressa in [kN]
FS	fattore di sicurezza (rapporto tra sollecitazione resistente e sollecitazione agente)

Pali in c.a.

La verifica a taglio sui pali circolari in c.a. viene eseguita considerando una sezione quadrata inscritta nella circonferenza. Se D è il diametro del palo, il lato della sezione quadrata sulla quale si esegue la verifica è $L = 2^{0.5}/2 D$.

Ip	Is	L	A _{sw}	s	cotgθ	V _{Rcd}	V _{Rsd}	V _{Rd}	T	FS
		[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	1	56.57	157.08	9	2.500	754.57	776.94	754.57	571.53	1.046
2	1	56.57	157.08	9	2.500	799.88	776.94	776.94	571.53	1.046

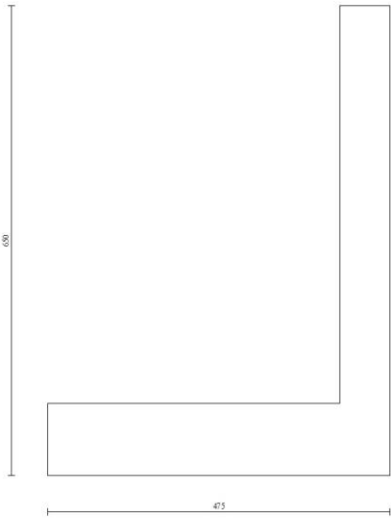


Fig. 37 - Paramento (Inviluppo)

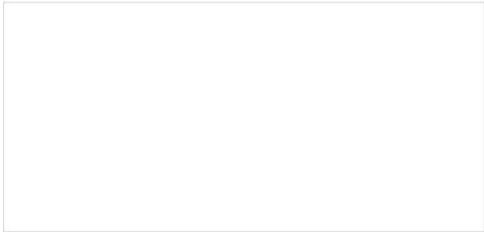


Fig. 38 - Piastra fondazione dir. X (Inviluppo)

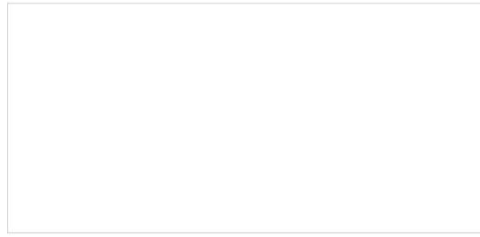


Fig. 39 - Piastra fondazione dir. Y (Inviluppo)

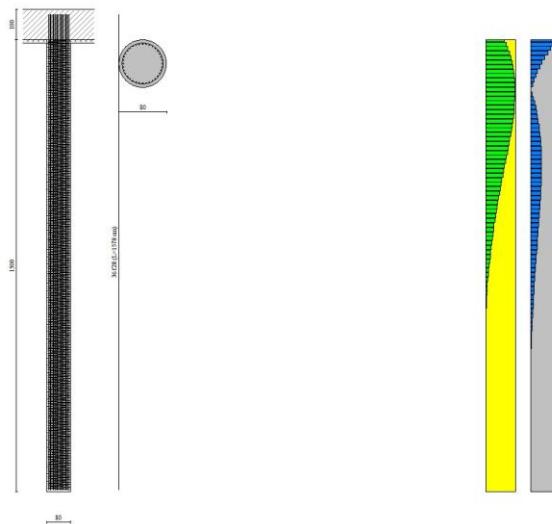


Fig. 40 - Pali (Palo n° 1) (Inviluppo)

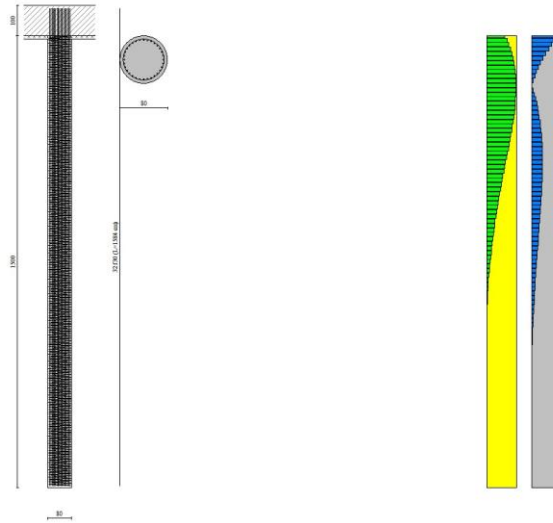


Fig. 41 - Pali (Palo n° 2) (Inviluppo)

Verifica a punzonamento

Simbologia adottata

OP	Oggetto che viene punzonato
P	Oggetto che punzona
c_1, c_2	Dimensioni pilastro nelle due direzioni, espressa in [mm]
d	Altezza utile della fondazione, espressa in [mm]
u_0	Lunghezza perimetro di verifica a faccia pilastro, espresso in [mm]
u_1	Lunghezza perimetro di verifica per effetto della diffusione, espresso in [mm]
ρ_y, ρ_z	Percentuali di armatura piastra in zona tesa
d_{pc}, d_{dc}	distanza della prima e dell'ultima cucitura dalla faccia del pilastro
$V_{Ed,i}$	Tensione di taglio sul perimetro del pilastro, espressa in [kPa]
$V_{Rd,max}$	Valore di progetto del massimo taglio-punzonamento resistente, espressa in [kPa]
$V_{Ed,f}$	Tensione di taglio sul perimetro di verifica u_1 , espresso in [kPa]
$V_{Rd,cf}$	Valore di progetto del taglio-punzonamento resistente senza armature sul perimetro di verifica u_1 , espresso in [kPa]
$V_{Rd,cs}$	Valore di progetto del taglio-punzonamento resistente con armature, espresso in [kPa]
n_s	Numero di serie di cuciture
n_c	Numero di cuciture
FS	Fattore di sicurezza (minore tra i rapporti $V_{Rd,max}/V_{Ed,i}$, $V_{Rd,cf}/V_{Ed,f}$ e $V_{Rd,cs}/V_{Ed,f}$)

Elenco ferri

Simbologia adottata

n°	Indice del ferro
nf	numero ferri
D	diametro ferro espresso in [mm]
L	Lunghezza ferro espresso in [m]
P _{ferro}	Peso ferro espresso in [kN]

Piastra fondazione

n°	Tipo	nf	D [mm]	L [m]	P _f [kN]	P _{gf} [kN]	V _{cls} [mc]
	Totale					0.0000	47.50

Pali

Pali in c.a. (singolo palo della fila)

Simbologia adottata

n°	Indice della fila
nf	numero ferri
D	diametro ferro espresso in [mm]
L	Lunghezza ferro espresso in [m]
P _{ferro}	Peso ferro espresso in [kN]
V _{cls}	Volume calcestruzzo/malta espresso in [mc]

n°	Tipo ferro	nf	D [mm]	L [m]	P _{ferro} [kN]	V _{cls} [mc]
1	Ferri longitudinali	36	28.00	15.84	0.7509	
	Staffe/Spirale	1	10.00	389.11	2.3527	7.54
	Totale (4 pali)				117.5344	30.16
2	Ferri longitudinali	32	30.00	15.90	0.8652	
	Staffe/Spirale	1	10.00	390.19	2.3592	7.54
	Totale (4 pali)				120.1850	30.16

Computo metrico

	U.M.	Quantità	Prezzo unitario [Euro]	Importo [Euro]
Calcestruzzo in elevazione	[mc]	3.85	72.30	278.35
Calcestruzzo in fondazione	[mc]	4.75	61.97	294.36
Calcestruzzo magro	[mc]	4.95	46.48	230.08
Casseformi	[mq]	110.00	13.94	1533.40
Scavo a sezione obbligatoria	[mc]	47.50	9.30	441.75
Totale muro				2777.94
Calcestruzzo pali	[mc]	60.32	72.30	4361.03
Acciaio pali	[kN]	237.7194	0.90	21816.22
Perforazione	[m]	240.00	240.00	57600.00
Totale pali				83777.26
Totale				86555.19

Dichiarazioni secondo N.T.C. 2018 (punto 10.2)

Analisi e verifiche svolte con l'ausilio di codici di calcolo

Il sottoscritto, in qualità di calcolatore delle opere in progetto, dichiara quanto segue.

Tipo di analisi svolta

L'analisi strutturale e le verifiche sono condotte con l'ausilio di un codice di calcolo automatico. La verifica della sicurezza degli elementi strutturali è stata valutata con i metodi della scienza delle costruzioni.

Il calcolo dei muri di sostegno viene eseguito secondo le seguenti fasi:

- Calcolo della spinta del terreno
- Verifica a ribaltamento
- Verifica a scorrimento del muro sul piano di posa
- Verifica della stabilità complesso fondazione terreno (carico limite)
- Verifica della stabilità globale
- Calcolo delle sollecitazioni sia del muro che della fondazione, progetto delle armature e relative verifiche dei materiali.
- Calcolo della portanza assiale e trasversale dei pali. Progetto e verifica delle armature dei pali inseriti.

L'analisi strutturale sotto le azioni sismiche è condotta con il metodo dell'analisi statica equivalente secondo le disposizioni del capitolo 7 del D.M. 17/07/2018.

La verifica delle sezioni degli elementi strutturali è eseguita con il metodo degli Stati Limite. Le combinazioni di carico adottate sono esaustive relativamente agli scenari di carico più gravosi cui l'opera sarà soggetta.

Origine e caratteristiche dei codici di calcolo

Titolo	MAX - Analisi e Calcolo Muri di Sostegno
Versione	15.0
Produttore	Aztec Informatica srl, Casali del Manco - loc. Casole Bruzio (CS)
Utente	NET ENGINEERING S.P.A.
Licenza	AIR011090

Affidabilità dei codici di calcolo

Un attento esame preliminare della documentazione a corredo del software ha consentito di valutarne l'affidabilità. La documentazione fornita dal produttore del software contiene un'esauriente descrizione delle basi teoriche, degli algoritmi impiegati e l'individuazione dei campi d'impiego. La società produttrice Aztec Informatica srl ha verificato l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche.

Modalità di presentazione dei risultati

La relazione di calcolo strutturale presenta i dati di calcolo tale da garantirne la leggibilità, la corretta interpretazione e la riproducibilità. La relazione di calcolo illustra in modo esaustivo i dati in ingresso ed i risultati delle analisi in forma tabellare.

Informazioni generali sull'elaborazione

Il software prevede una serie di controlli automatici che consentono l'individuazione di errori di modellazione, di non rispetto di limitazioni geometriche e di armatura e di presenza di elementi non verificati. Il codice di calcolo consente di visualizzare e controllare, sia in forma grafica che tabellare, i dati del modello strutturale, in modo da avere una visione consapevole del comportamento corretto del modello strutturale.

Giudizio motivato di accettabilità dei risultati

I risultati delle elaborazioni sono stati sottoposti a controlli dal sottoscritto utente del software. Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali. Inoltre sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni.

In base a quanto sopra, io sottoscritto asserisco che l'elaborazione è corretta ed idonea al caso specifico, pertanto i risultati di calcolo sono da ritenersi validi ed accettabili.

Luogo e data

Il progettista
()

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Slide Analysis Information

SLIDE - An Interactive Slope Stability Program

Project Summary

File Name: SLIDE MURO PALI RI11 sis CND.slim
 Slide Modeler Version: 7.038
 Project Title: SLIDE - An Interactive Slope Stability Program
 Date Created: 10/06/2022, 13:43:16

General Settings

Units of Measurement: Metric Units
 Time Units: days
 Permeability Units: meters/second
 Failure Direction: Right to Left
 Data Output: Standard
 Maximum Material Properties: 20
 Maximum Support Properties: 20

Design Standard

Selected Type: Eurocode 7 (User Defined)
 Name: A2+M2+R2

Type	Partial Factor
Permanent Actions: Unfavourable	1
Permanent Actions: Favourable	1
Variable Actions: Unfavourable	1
Variable Actions: Favourable	0
Effective cohesion	1
Coefficient of shearing resistance	1
Undrained strength	1
Weight density	1
Shear strength (other models)	1
Earth resistance	1
Tensile and plate strength	1.1
Shear strength	1.1
Compressive strength	1.1
Bond strength	1.1
Seismic Coefficient	1

Analysis Options

Slices Type: Vertical

Analysis Methods Used

Bishop simplified
 GLE/Morgenstern-Price with interslice force function (Half Sine)

Number of slices: 50
 Tolerance: 0.005
 Maximum number of iterations: 75
 Check $\alpha < 0.2$: Yes
 Create Interslice boundaries at intersections with water tables and piezos: Yes
 Initial trial value of FS: 1
 Steffensen Iteration: Yes

Groundwater Analysis

Groundwater Method: Water Surfaces
 Pore Fluid Unit Weight [kN/m³]: 9.81
 Use negative pore pressure cutoff: Yes
 Maximum negative pore pressure [kPa]: 0
 Advanced Groundwater Method: None

Random Numbers

Pseudo-random Seed: 10116
 Random Number Generation Method: Park and Miller v.3

Surface Options

Surface Type: Circular
 Search Method: Slope Search
 Number of Surfaces: 5000
 Upper Angle: Not Defined
 Lower Angle: Not Defined
 Composite Surfaces: Disabled
 Reverse Curvature: Invalid Surfaces
 Minimum Elevation: Not Defined
 Minimum Depth: Not Defined
 Minimum Area: Not Defined
 Minimum Weight: Not Defined






Seismic

Advanced seismic analysis: No
 Staged pseudostatic analysis: No

Loading

Seismic Load Coefficient (Horizontal): 0.318
 Seismic Load Coefficient (Vertical): -0.159

Material Properties

Property	Riemp	coltre	SFT2	CLS	SFT2>15
Color					
Strength Type	Mohr-Coulomb	Undrained	Undrained	Infinite strength	Undrained
Unit Weight [kN/m ³]	19	20	20	20	20
Cohesion [kPa]	0				
Friction Angle [deg]	35				
Cohesion Type		90	100		250
Water Surface	Water Table	Water Table	Water Table	Water Table	Water Table
Hu Value	1	0	0	0	0

Support Properties

Support 1

Support Type: Micro-Pile
 Force Application: Active
 Out-of-Plane Spacing: 2.4 m

Pile Shear Strength: 900 kN
Force Direction: Perpendicular to Pile

Global Minimums

Method: bishop simplified

FS	1.450580
Center:	1776.999, 833.209
Radius:	38.020
Left Slip Surface Endpoint:	1755.925, 801.564
Right Slip Surface Endpoint:	1811.542, 817.324
Resisting Moment:	234870 kN-m
Driving Moment:	161915 kN-m
Active Support Moment:	-25758.5 kN-m
Total Slice Area:	523.446 m ²
Surface Horizontal Width:	55.617 m
Surface Average Height:	9.41162 m

Method: gle/morgenstern-price

FS	1.449260
Center:	1776.999, 833.209
Radius:	38.020
Left Slip Surface Endpoint:	1755.925, 801.564
Right Slip Surface Endpoint:	1811.542, 817.324
Resisting Moment:	234656 kN-m
Driving Moment:	161915 kN-m
Resisting Horizontal Force:	5267.69 kN
Driving Horizontal Force:	3634.76 kN
Active Support Moment:	-25758.5 kN-m
Active Horizontal Support Force:	-681.818 kN
Total Slice Area:	523.446 m ²
Surface Horizontal Width:	55.617 m
Surface Average Height:	9.41162 m

Valid / Invalid Surfaces

Method: bishop simplified

Number of Valid Surfaces: 2428
Number of Invalid Surfaces: 2572

Error Codes:

Error Code -99 reported for 1777 surfaces
Error Code -107 reported for 26 surfaces
Error Code -112 reported for 342 surfaces
Error Code -114 reported for 427 surfaces

Method: gle/morgenstern-price

Number of Valid Surfaces: 2359
Number of Invalid Surfaces: 2641

Error Codes:

Error Code -99 reported for 1777 surfaces
Error Code -107 reported for 26 surfaces
Error Code -108 reported for 68 surfaces
Error Code -111 reported for 1 surface
Error Code -112 reported for 342 surfaces
Error Code -114 reported for 427 surfaces

Error Codes

The following errors were encountered during the computation:

- 99 = Slip surface intersects an infinite strength material. If infinite strength regions are defined for a model, a large number of potential slip surfaces may show this error code. This is Normal.
- 107 = Total driving moment or total driving force is negative. This will occur if the wrong failure direction is specified, or if high external or anchor loads are applied against the failure direction.
- 108 = Total driving moment or total driving force < 0.1. This is to limit the calculation of extremely high safety factors if the driving force is very small (0.1 is an arbitrary number).
- 111 = safety factor equation did not converge
- 112 = The coefficient $M\text{-Alpha} = \cos(\alpha)(1 + \tan(\alpha)\tan(\phi))/F < 0.2$ for the final iteration of the safety factor calculation. This screens out some slip surfaces which may not be valid in the context of the analysis, in particular, deep seated slip surfaces with many high negative base angle slices in the passive zone.
- 114 = Surface with Reverse Curvature.

Slice Data

Global Minimum Query (bishop simplified) - Safety Factor: 1.45058

Slice Number	Width [m]	Weight [kN]	Angle of Slice Base [degrees]	Base Material	Base Cohesion [kPa]	Base Friction Angle [degrees]	Shear Stress [kPa]	Shear Strength [kPa]	Base Normal Stress [kPa]	Pore Pressure [kPa]	Effective Normal Stress [kPa]	Base Vertical Stress [kPa]	Effective Vertical Stress [kPa]
1	1.58497	15.0572	-32.249	Riemp	0	35	5.54406	8.0421	11.4853	0	11.4853	7.9874	7.9874
2	0.83605	19.9382	-30.1085	coltre	90	0	62.0441	90	56.0127	0	56.0127	20.0347	20.0347
3	1.14564	39.9718	-28.3989	coltre	90	0	62.0441	90	62.8683	0	62.8683	29.3227	29.3227
4	1.14564	53.5987	-26.4534	coltre	90	0	62.0441	90	70.1986	0	70.1986	39.3275	39.3275
5	1.14564	66.1217	-24.5401	coltre	90	0	62.0441	90	76.8497	0	76.8497	48.5221	48.5221
6	1.14564	77.5926	-22.6557	coltre	90	0	62.0441	90	82.8412	0	82.8412	56.9439	56.9439
7	1.14564	88.0558	-20.7968	coltre	90	0	62.0441	90	88.191	0	88.191	64.6266	64.6266
8	1.12778	95.9629	-18.9748	SFT2	100	0	68.9379	100	95.2499	0	95.2499	71.5466	71.5466
9	1.12778	104.27	-17.1866	SFT2	100	0	68.9379	100	99.0649	0	99.0649	77.7427	77.7427
10	1.12778	111.711	-15.4156	SFT2	100	0	68.9379	100	102.302	0	102.302	83.2928	83.2928
11	1.12778	118.309	-13.6595	SFT2	100	0	68.9379	100	104.969	0	104.969	88.215	88.215
12	1.12778	124.084	-11.9165	SFT2	100	0	68.9379	100	107.071	0	107.071	92.523	92.523
13	1.12778	129.16	-10.1846	SFT2	100	0	68.9379	100	108.694	0	108.694	96.3093	96.3093
14	1.12778	134.358	-8.46202	SFT2	100	0	68.9379	100	110.443	0	110.443	100.187	100.187
15	1.12778	137.755	-6.74715	SFT2	100	0	68.9379	100	110.877	0	110.877	102.721	102.721
16	1.12778	140.381	-5.03833	SFT2	100	0	68.9379	100	110.758	0	110.758	104.68	104.68
17	1.12778	204.754	-3.334	SFT2	100	0	68.9379	100	156.702	0	156.702	152.686	152.686
18	1.12778	264.82	-1.63262	SFT2	100	0	68.9379	100	199.444	0	199.444	197.479	197.479
19	1.12778	274.223	0.0673149	SFT2	100	0	68.9379	100	204.411	0	204.411	204.492	204.492
20	1.12778	283.795	1.76731	SFT2	100	0	68.9379	100	209.505	0	209.505	211.632	211.632
21	1.12778	292.612	3.46887	SFT2	100	0	68.9379	100	214.028	0	214.028	218.207	218.207
22	1.12778	300.669	5.1735	SFT2	100	0	68.9379	100	217.975	0	217.975	224.217	224.217
23	1.12778	307.961	6.88274	SFT2	100	0	68.9379	100	221.336	0	221.336	229.657	229.657
24	1.12778	314.483	8.59816	SFT2	100	0	68.9379	100	224.097	0	224.097	234.521	234.521
25	1.12778	320.223	10.3214	SFT2	100	0	68.9379	100	226.248	0	226.248	238.803	238.803
26	1.12778	325.17	12.0541	SFT2	100	0	68.9379	100	227.772	0	227.772	242.493	242.493
27	1.12778	329.31	13.7981	SFT2	100	0	68.9379	100	228.651	0	228.651	245.582	245.582
28	1.12778	332.44	15.5553	SFT2	100	0	68.9379	100	228.728	0	228.728	247.917	247.917
29	1.12778	334.219	17.3276	SFT2	100	0	68.9379	100	227.737	0	227.737	249.245	249.245
30	1.12778	335.101	19.1172	SFT2	100	0	68.9379	100	226.009	0	226.009	249.904	249.904
31	1.12778	335.087	20.9264	SFT2	100	0	68.9379	100	223.534	0	223.534	249.895	249.895
32	1.12778	334.146	22.7578	SFT2	100	0	68.9379	100	220.276	0	220.276	249.195	249.195
33	1.12778	332.243	24.6141	SFT2	100	0	68.9379	100	216.194	0	216.194	247.777	247.777
34	1.12778	329.333	26.4984	SFT2	100	0	68.9379	100	211.241	0	211.241	245.609	245.609
35	1.12778	325.37	28.4141	SFT2	100	0	68.9379	100	205.359	0	205.359	242.656	242.656
36	1.07861	306.461	30.3219	SFT2	100	0	68.9379	100	198.655	0	198.655	238.974	238.974
37	1.07861	300.793	32.2242	SFT2	100	0	68.9379	100	191.104	0	191.104	234.557	234.557
38	1.07861	294.032	34.1672	SFT2	100	0	68.9379	100	182.494	0	182.494	229.287	229.287
39	1.07861	286.103	36.1561	SFT2	100	0	68.9379	100	172.733	0	172.733	223.107	223.107
40	1.07861	276.916	38.197	SFT2	100	0	68.9379	100	161.703	0	161.703	215.946	215.946
41	1.07861	266.366	40.2968	SFT2	100	0	68.9379	100	149.266	0	149.266	207.723	207.723
42	1.07861	254.322	42.4642	SFT2	100	0	68.9379	100	135.244	0	135.244	198.335	198.335
43	1.04247	231.633	44.6705	coltre	90	0	62.0441	90	125.569	0	125.569	186.903	186.903
44	1.04247	210.078	46.9253	coltre	90	0	62.0441	90	103.157	0	103.157	169.517	169.517
45	1.04247	185.829	49.2797	coltre	90	0	62.0441	90	77.8761	0	77.8761	149.957	149.957
46	1.04247	159.416	51.7528	coltre	90	0	62.0441	90	49.9433	0	49.9433	128.654	128.654
47	1.04247	130.467	54.3703	coltre	90	0	62.0441	90	18.7365	0	18.7365	105.304	105.304
48	1.04247	98.4615	57.1677	coltre	90	0	62.0441	90	-16.6646	0	-16.6646	79.4899	79.4899
49	1.04247	62.6457	60.1972	coltre	90	0	62.0441	90	-57.7197	0	-57.7197	50.6033	50.6033
50	1.04247	21.836	63.5411	coltre	90	0	62.0441	90	-106.974	0	-106.974	17.6906	17.6906

Global Minimum Query (gle/morgenstern-price) - Safety Factor: 1.44926



Slice Number	Width [m]	Weight [kN]	Angle of Slice Base [degrees]	Base Material	Base Cohesion [kPa]	Base Friction Angle [degrees]	Shear Stress [kPa]	Shear Strength [kPa]	Base Normal Stress [kPa]	Pore Pressure [kPa]	Effective Normal Stress [kPa]	Base Vertical Stress [kPa]	Effective Vertical Stress [kPa]
1	1.58497	15.0572	-32.249	Riemp	0	35	5.88995	8.53607	12.1908	0	12.1908	8.47464	8.47464
2	0.83605	19.9382	-30.1085	coltre	90	0	62.1007	90	62.8961	0	62.8961	26.8852	26.8852
3	1.14564	39.9718	-28.3989	coltre	90	0	62.1007	90	74.8805	0	74.8805	41.3043	41.3043
4	1.14564	53.5987	-26.4534	coltre	90	0	62.1007	90	87.9401	0	87.9401	57.0409	57.0409
5	1.14564	66.1217	-24.5401	coltre	90	0	62.1007	90	99.9283	0	99.9283	71.5748	71.5748
6	1.14564	77.5926	-22.6557	coltre	90	0	62.1007	90	110.703	0	110.703	84.7824	84.7824
7	1.14564	88.0558	-20.7968	coltre	90	0	62.1007	90	120.151	0	120.151	96.5654	96.5654
8	1.12778	95.9629	-18.9748	SFT2	100	0	69.0007	100	132.658	0	132.658	108.933	108.933
9	1.12778	104.27	-17.1866	SFT2	100	0	69.0007	100	139.356	0	139.356	118.014	118.014
10	1.12778	111.711	-15.4156	SFT2	100	0	69.0007	100	144.587	0	144.587	125.561	125.561
11	1.12778	118.309	-13.6595	SFT2	100	0	69.0007	100	148.358	0	148.358	131.589	131.589
12	1.12778	124.084	-11.9165	SFT2	100	0	69.0007	100	150.705	0	150.705	136.144	136.144
13	1.12778	129.16	-10.1846	SFT2	100	0	69.0007	100	151.758	0	151.758	139.362	139.362
14	1.12778	134.358	-8.46202	SFT2	100	0	69.0007	100	280.585	0	280.585	270.32	270.32
15	1.12778	137.755	-6.74715	SFT2	100	0	69.0007	100	157.078	0	157.078	148.914	148.914
16	1.12778	140.381	-5.03833	SFT2	100	0	69.0007	100	153.837	0	153.837	147.754	147.754
17	1.12778	204.754	-3.334	SFT2	100	0	69.0007	100	329.597	0	329.597	325.577	325.577
18	1.12778	264.82	-1.63262	SFT2	100	0	69.0007	100	224.231	0	224.231	222.264	222.264
19	1.12778	274.223	0.0673149	SFT2	100	0	69.0007	100	221.404	0	221.404	221.485	221.485
20	1.12778	283.795	1.76731	SFT2	100	0	69.0007	100	218.397	0	218.397	220.526	220.526
21	1.12778	292.612	3.46887	SFT2	100	0	69.0007	100	214.784	0	214.784	218.967	218.967
22	1.12778	300.669	5.1735	SFT2	100	0	69.0007	100	210.708	0	210.708	216.956	216.956
23	1.12778	307.961	6.88274	SFT2	100	0	69.0007	100	206.295	0	206.295	214.624	214.624
24	1.12778	314.483	8.59816	SFT2	100	0	69.0007	100	201.653	0	201.653	212.086	212.086
25	1.12778	320.223	10.3214	SFT2	100	0	69.0007	100	196.877	0	196.877	209.443	209.443
26	1.12778	325.17	12.0541	SFT2	100	0	69.0007	100	192.042	0	192.042	206.777	206.777
27	1.12778	329.31	13.7981	SFT2	100	0	69.0007	100	187.212	0	187.212	204.158	204.158
28	1.12778	332.44	15.5553	SFT2	100	0	69.0007	100	182.334	0	182.334	201.541	201.541
29	1.12778	334.219	17.3276	SFT2	100	0	69.0007	100	177.274	0	177.274	198.802	198.802
30	1.12778	335.101	19.1172	SFT2	100	0	69.0007	100	172.308	0	172.308	196.225	196.225
31	1.12778	335.087	20.9264	SFT2	100	0	69.0007	100	167.456	0	167.456	193.841	193.841
32	1.12778	334.146	22.7578	SFT2	100	0	69.0007	100	162.711	0	162.711	191.657	191.657
33	1.12778	332.243	24.6141	SFT2	100	0	69.0007	100	158.055	0	158.055	189.666	189.666
34	1.12778	329.333	26.4984	SFT2	100	0	69.0007	100	153.452	0	153.452	187.852	187.852
35	1.12778	325.37	28.4141	SFT2	100	0	69.0007	100	148.853	0	148.853	186.183	186.183
36	1.07861	306.461	30.3219	SFT2	100	0	69.0007	100	144.294	0	144.294	184.65	184.65
37	1.07861	300.793	32.2242	SFT2	100	0	69.0007	100	139.686	0	139.686	183.178	183.178
38	1.07861	294.032	34.1672	SFT2	100	0	69.0007	100	134.826	0	134.826	181.661	181.661
39	1.07861	286.103	36.1561	SFT2	100	0	69.0007	100	129.579	0	129.579	179.999	179.999
40	1.07861	276.916	38.197	SFT2	100	0	69.0007	100	123.778	0	123.778	178.07	178.07
41	1.07861	266.366	40.2968	SFT2	100	0	69.0007	100	117.208	0	117.208	175.719	175.719
42	1.07861	254.322	42.4642	SFT2	100	0	69.0007	100	109.606	0	109.606	172.754	172.754
43	1.04247	231.633	44.6705	coltre	90	0	62.1007	90	104.572	0	104.572	165.963	165.963
44	1.04247	210.078	46.9253	coltre	90	0	62.1007	90	90.6385	0	90.6385	157.06	157.06
45	1.04247	185.829	49.2797	coltre	90	0	62.1007	90	73.6846	0	73.6846	145.832	145.832
46	1.04247	159.416	51.7528	coltre	90	0	62.1007	90	53.3781	0	53.3781	132.16	132.16
47	1.04247	130.467	54.3703	coltre	90	0	62.1007	90	28.5313	0	28.5313	115.178	115.178
48	1.04247	98.4615	57.1677	coltre	90	0	62.1007	90	-2.70418	0	-2.70418	93.538	93.538
49	1.04247	62.6457	60.1972	coltre	90	0	62.1007	90	-43.4745	0	-43.4745	64.9471	64.9471
50	1.04247	21.836	63.5411	coltre	90	0	62.1007	90	-99.8008	0	-99.8008	24.9777	24.9777

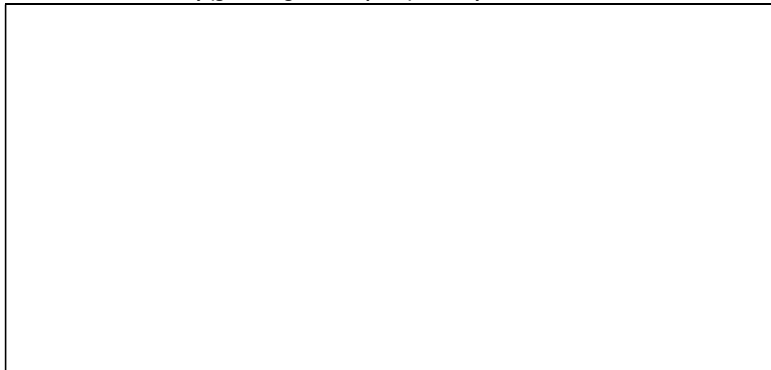
Interslice Data

Global Minimum Query (bishop simplified) - Safety Factor: 1.45058

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Slice Number	X coordinate [m]	Y coordinate - Bottom [m]	Interslice Normal Force [kN]	Interslice Shear Force [kN]	Interslice Force Angle [degrees]
1	1755.93	801.564	0	0	0
2	1757.51	800.564	15.479	0	0
3	1758.35	800.079	88.135	0	0
4	1759.49	799.459	185.404	0	0
5	1760.64	798.889	279.413	0	0
6	1761.78	798.366	369.621	0	0
7	1762.93	797.888	455.599	0	0
8	1764.07	797.453	537.008	0	0
9	1765.2	797.065	621.127	0	0
10	1766.33	796.716	700.225	0	0
11	1767.46	796.405	774.214	0	0
12	1768.59	796.131	843.061	0	0
13	1769.71	795.893	906.785	0	0
14	1770.84	795.691	965.434	0	0
15	1771.97	795.523	1359.85	0	0
16	1773.1	795.39	1408.54	0	0
17	1774.22	795.29	1452.61	0	0
18	1775.35	795.224	1816.4	0	0
19	1776.48	795.192	1816.3	0	0
20	1777.61	795.194	1806.52	0	0
21	1778.74	795.228	1786.69	0	0
22	1779.86	795.297	1756.7	0	0
23	1780.99	795.399	1716.53	0	0
24	1782.12	795.535	1666.17	0	0
25	1783.25	795.706	1605.65	0	0
26	1784.37	795.911	1535.05	0	0
27	1785.5	796.152	1454.5	0	0
28	1786.63	796.429	1364.14	0	0
29	1787.76	796.743	1264.32	0	0
30	1788.89	797.095	1155.61	0	0
31	1790.01	797.485	1038.4	0	0
32	1791.14	797.917	913.144	0	0
33	1792.27	798.39	780.374	0	0
34	1793.4	798.906	640.719	0	0
35	1794.52	799.469	494.921	0	0
36	1795.65	800.079	343.855	0	0
37	1796.73	800.71	195.393	0	0
38	1797.81	801.39	44.1275	0	0
39	1798.89	802.122	-108.67	0	0
40	1799.97	802.91	-261.478	0	0
41	1801.05	803.759	-412.461	0	0
42	1802.12	804.673	-559.375	0	0
43	1803.2	805.66	-699.44	0	0
44	1804.24	806.691	-837.863	0	0
45	1805.29	807.806	-955.047	0	0
46	1806.33	809.017	-1043.82	0	0
47	1807.37	810.339	-1095.92	0	0
48	1808.41	811.794	-1100.02	0	0
49	1809.46	813.41	-1039.77	0	0
50	1810.5	815.23	-889.996	0	0
51	1811.54	817.324	0	0	0

Global Minimum Query (gle/morgenstern-price) - Safety Factor: 1.44926



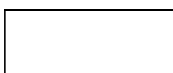
Slice Number	X coordinate [m]	Y coordinate - Bottom [m]	Interslice Normal Force [kN]	Interslice Shear Force [kN]	Interslice Force Angle [degrees]
1	1755.93	801.564	0	0	0
2	1757.51	800.564	16.7556	0.760747	2.59959
3	1758.35	800.079	92.9249	6.43305	3.96018
4	1759.49	799.459	197.875	20.1073	5.80226
5	1760.64	798.889	302.239	40.3724	7.6084
6	1761.78	798.366	404.761	66.7776	9.36829
7	1762.93	797.888	504.303	98.6883	11.0724
8	1764.07	797.453	599.86	135.32	12.7123
9	1765.2	797.065	698.749	177.545	14.2566
10	1766.33	796.716	792.164	223.045	15.7253
11	1767.46	796.405	879.567	270.815	17.1134
12	1768.59	796.131	960.571	319.85	18.4167
13	1769.71	795.893	1034.94	369.176	19.632
14	1770.84	795.691	1102.58	417.874	20.7565
15	1771.97	795.523	1525.81	609.931	21.7887
16	1773.1	795.39	1580.92	662.199	22.7273
17	1774.22	795.29	1629.54	710.961	23.5714
18	1775.35	795.224	2004.96	906.144	24.3206
19	1776.48	795.192	2005.92	934.305	24.9749
20	1777.61	795.194	1996.38	953.689	25.5342
21	1778.74	795.228	1976.5	963.947	25.9987
22	1779.86	795.297	1946.73	965.035	26.3686
23	1780.99	795.399	1907.57	957.077	26.6441
24	1782.12	795.535	1859.52	940.352	26.8255
25	1783.25	795.706	1803.09	915.277	26.9131
26	1784.37	795.911	1738.79	882.392	26.9066
27	1785.5	796.152	1667.1	842.345	26.8064
28	1786.63	796.429	1588.49	795.877	26.6121
29	1787.76	796.743	1503.5	743.849	26.3237
30	1788.89	797.095	1412.8	687.269	25.941
31	1790.01	797.485	1316.85	627.078	25.4636
32	1791.14	797.917	1216.04	564.245	24.8914
33	1792.27	798.39	1110.77	499.763	24.2242
34	1793.4	798.906	1001.42	434.639	23.4619
35	1794.52	799.469	888.373	369.885	22.605
36	1795.65	800.079	772.048	306.512	21.6537
37	1796.73	800.71	658.132	248.113	20.6562
38	1797.81	801.39	542.076	192.752	19.5744
39	1798.89	802.122	424.431	141.27	18.4098
40	1799.97	802.91	305.887	94.4815	17.1647
41	1801.05	803.759	187.344	53.161	15.8419
42	1802.12	804.673	70.0025	18.0322	14.445
43	1803.2	805.66	-44.5009	-10.2561	12.9783
44	1804.24	806.691	-161.067	-32.7675	11.4993
45	1805.29	807.806	-264.073	-46.3991	9.96547
46	1806.33	809.017	-347.548	-51.2151	8.38285
47	1807.37	810.339	-403.974	-47.8738	6.75844
48	1808.41	811.794	-422.102	-37.669	5.09965
49	1809.46	813.41	-384.183	-22.923	3.41461
50	1810.5	815.23	-260.118	-7.77367	1.71178
51	1811.54	817.324	0	0	0

List Of Coordinates

Water Table

X	Y
1742.91	800.079
1813.67	800.079

External Boundary



X	Y
1803.67	817.324
1786.95	811.236
1775.48	807.064
1774.78	807.064
1774.78	801.564
1770.73	801.564
1742.91	801.564
1742.91	800.564
1742.91	800.079
1742.91	793.055
1742.91	785.632
1742.91	757.324
1813.67	757.324
1813.67	800.079
1813.67	801.564
1813.67	802.703
1813.67	807.886
1813.67	817.324

Material Boundary

X	Y
1770.73	801.564
1770.73	800.564
1775.48	800.564
1775.48	801.564
1775.48	807.064

Material Boundary

X	Y
1742.91	800.079
1776.71	800.079
1802.64	800.079
1813.67	800.079

Material Boundary

X	Y
1775.48	800.564
1776.56	801.564
1786.95	811.236

Material Boundary

X	Y
1742.91	793.055
1776.71	800.079
1786.95	802.206

Material Boundary

X	Y
1786.95	802.206
1813.67	807.886

Material Boundary

X	Y
1742.91	800.564
1770.73	800.564

Material Boundary

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X	Y
1742.91	785.632
1787.32	796.436

Material Boundary

X	Y
1787.32	796.436
1802.64	800.079
1813.67	802.703

Slide Analysis Information

SLIDE - An Interactive Slope Stability Program

Project Summary

File Name: SLIDE MURO PALI RI11 sta.slim
 Slide Modeler Version: 7.038
 Project Title: SLIDE - An Interactive Slope Stability Program
 Date Created: 10/06/2022, 13:43:16

General Settings

Units of Measurement: Metric Units
 Time Units: days
 Permeability Units: meters/second
 Failure Direction: Right to Left
 Data Output: Standard
 Maximum Material Properties: 20
 Maximum Support Properties: 20

Design Standard

Selected Type: Eurocode 7 (User Defined)
 Name: A2+M2+R2

Type	Partial Factor
Permanent Actions: Unfavourable	1
Permanent Actions: Favourable	1
Variable Actions: Unfavourable	1.3
Variable Actions: Favourable	0
Effective cohesion	1.25
Coefficient of shearing resistance	1.25
Undrained strength	1.4
Weight density	1
Shear strength (other models)	1
Earth resistance	1
Tensile and plate strength	1.1
Shear strength	1.1
Compressive strength	1.1
Bond strength	1.1
Seismic Coefficient	1

Analysis Options

Slices Type: Vertical

Analysis Methods Used

Bishop simplified
 GLE/Morgenstern-Price with interslice force function (Half Sine)

Number of slices: 50
 Tolerance: 0.005
 Maximum number of iterations: 75
 Check $\alpha < 0.2$: Yes
 Create Interslice boundaries at intersections with water tables and piezos: Yes
 Initial trial value of FS: 1
 Steffensen Iteration: Yes

Groundwater Analysis

Groundwater Method: Water Surfaces
 Pore Fluid Unit Weight [kN/m³]: 9.81
 Use negative pore pressure cutoff: Yes
 Maximum negative pore pressure [kPa]: 0
 Advanced Groundwater Method: None

Random Numbers

Pseudo-random Seed: 10116
 Random Number Generation Method: Park and Miller v.3

Surface Options

Surface Type: Circular
 Search Method: Slope Search
 Number of Surfaces: 5000
 Upper Angle: Not Defined
 Lower Angle: Not Defined
 Composite Surfaces: Disabled
 Reverse Curvature: Invalid Surfaces
 Minimum Elevation: Not Defined
 Minimum Depth: Not Defined
 Minimum Area: Not Defined
 Minimum Weight: Not Defined

Seismic

Advanced seismic analysis: No
 Staged pseudostatic analysis: No






Loading

1 Distributed Load present

Distributed Load 1

Distribution: Constant
 Magnitude [kPa]: 20
 Orientation: Vertical
 Load Action: Variable

Material Properties

Property	Riemp	coltre	SFT2	CLS	SFT2>15
Color					
Strength Type	Mohr-Coulomb	Mohr-Coulomb	Mohr-Coulomb	Infinite strength	Mohr-Coulomb
Unit Weight [kN/m ³]	19	20	20	20	20
Cohesion [kPa]	0	8	2		40
Friction Angle [deg]	35	27	27		28
Water Surface	Water Table	Water Table	Water Table	Water Table	Water Table
Hu Value	1	0	0	0	0

Support Properties

Support 1

Support Type: Micro-Pile
 Force Application: Active
 Out-of-Plane Spacing: 2.4 m
 Pile Shear Strength: 900 kN
 Force Direction: Perpendicular to Pile

Global Minimums

Method: bishop simplified

FS	1.836370
Center:	1774.048, 834.752
Radius:	36.539
Left Slip Surface Endpoint:	1758.762, 801.564
Right Slip Surface Endpoint:	1806.163, 817.324
Resisting Moment:	113195 kN-m
Driving Moment:	61640.7 kN-m
Active Support Moment:	-24877 kN-m
Total Slice Area:	307.732 m ²
Surface Horizontal Width:	47.4009 m
Surface Average Height:	6.49211 m

Method: gle/morgenstern-price

FS	1.828050
Center:	1774.048, 834.752
Radius:	36.539
Left Slip Surface Endpoint:	1758.762, 801.564
Right Slip Surface Endpoint:	1806.163, 817.324
Resisting Moment:	112682 kN-m
Driving Moment:	61640.7 kN-m
Resisting Horizontal Force:	2753.45 kN
Driving Horizontal Force:	1506.22 kN
Active Support Moment:	-24877 kN-m
Active Horizontal Support Force:	-681.818 kN
Total Slice Area:	307.732 m ²
Surface Horizontal Width:	47.4009 m
Surface Average Height:	6.49211 m

Valid / Invalid Surfaces

Method: bishop simplified

Number of Valid Surfaces: 2757
 Number of Invalid Surfaces: 2243

Error Codes:

Error Code -99 reported for 1744 surfaces
 Error Code -107 reported for 80 surfaces
 Error Code -112 reported for 21 surfaces
 Error Code -114 reported for 398 surfaces

Method: gle/morgenstern-price

Number of Valid Surfaces: 2733
 Number of Invalid Surfaces: 2267

Error Codes:

Error Code -99 reported for 1744 surfaces
 Error Code -107 reported for 80 surfaces
 Error Code -108 reported for 24 surfaces
 Error Code -112 reported for 21 surfaces
 Error Code -114 reported for 398 surfaces

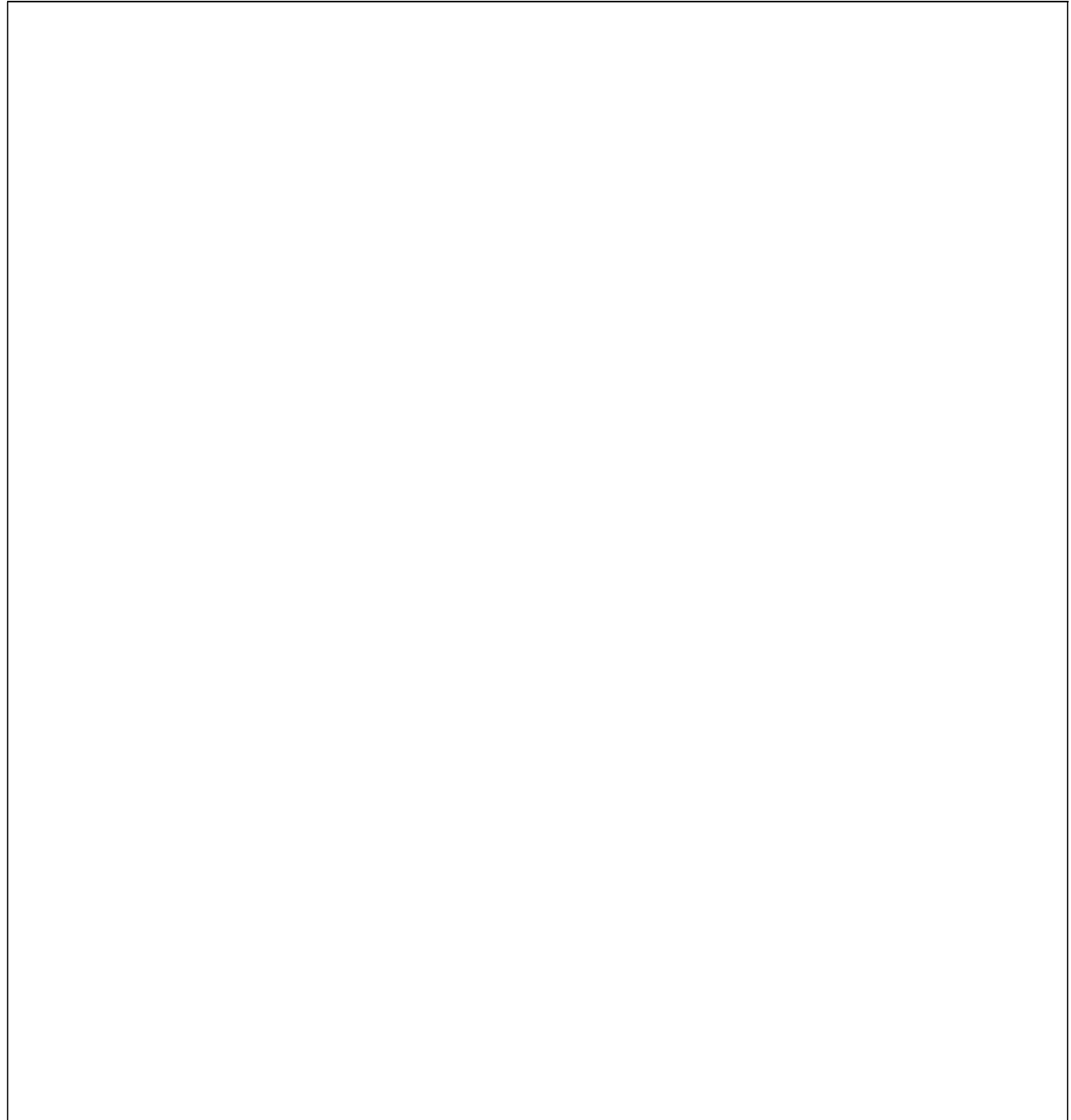
Error Codes

The following errors were encountered during the computation:

- 99 = Slip surface intersects an infinite strength material. If infinite strength regions are defined for a model, a large number of potential slip surfaces may show this error code. This is Normal.
- 107 = Total driving moment or total driving force is negative. This will occur if the wrong failure direction is specified, or if high external or anchor loads are applied against the failure direction.
- 108 = Total driving moment or total driving force < 0.1 . This is to limit the calculation of extremely high safety factors if the driving force is very small (0.1 is an arbitrary number).
- 112 = The coefficient $M\text{-Alpha} = \cos(\alpha)(1 + \tan(\alpha)\tan(\phi)/F) < 0.2$ for the final iteration of the safety factor calculation. This screens out some slip surfaces which may not be valid in the context of the analysis, in particular, deep seated slip surfaces with many high negative base angle slices in the passive zone.
- 114 = Surface with Reverse Curvature.

Slice Data

Global Minimum Query (bishop simplified) - Safety Factor: 1.83637



Slice Number	Width [m]	Weight [kN]	Angle of Slice Base [degrees]	Base Material	Base Cohesion [kPa]	Base Friction Angle [degrees]	Shear Stress [kPa]	Shear Strength [kPa]	Base Normal Stress [kPa]	Pore Pressure [kPa]	Effective Normal Stress [kPa]	Base Vertical Stress [kPa]	Effective Vertical Stress [kPa]
1	0.796967	2.69222	-24.0453	Riemp	0	29.2561	1.19273	2.1903	3.91008	0	3.91008	3.37791	3.37791
2	0.796967	7.90652	-22.6838	Riemp	0	29.2561	3.46829	6.36906	11.37	0	11.37	9.92028	9.92028
3	0.796967	12.7855	-21.3358	Riemp	0	29.2561	5.55536	10.2017	18.2119	0	18.2119	16.0419	16.0419
4	1.36695	32.5992	-19.5277	coltre	6.4	22.1768	9.52858	17.498	27.2264	0	27.2264	23.847	23.847
5	0.961708	30.5311	-17.5994	coltre	6.4	22.1768	11.3294	20.805	35.3393	0	35.3393	31.7456	31.7456
6	0.961708	36.1211	-16.0239	coltre	6.4	22.1768	12.6269	23.1877	41.1846	0	41.1846	37.5582	37.5582
7	0.961708	41.1625	-14.4606	coltre	6.4	22.1768	13.774	25.2942	46.3524	0	46.3524	42.8003	42.8003
8	0.961708	45.6673	-12.9084	coltre	6.4	22.1768	14.777	27.1361	50.8712	0	50.8712	47.4845	47.4845
9	0.961708	49.6461	-11.3657	coltre	6.4	22.1768	15.6416	28.7237	54.766	0	54.766	51.6219	51.6219
10	0.961708	53.108	-9.83128	coltre	6.4	22.1768	16.3725	30.066	58.0588	0	58.0588	55.2216	55.2216
11	0.961708	56.0606	-8.30399	coltre	6.4	22.1768	16.9742	31.1709	60.7695	0	60.7695	58.292	58.292
12	0.960216	58.4183	-6.7838	SFT2	1.6	22.1768	14.7654	27.1148	62.5945	0	62.5945	60.8381	60.8381
13	0.960216	60.8038	-5.26957	SFT2	1.6	22.1768	15.239	27.9845	64.7281	0	64.7281	63.3225	63.3225
14	0.960216	62.7818	-3.75903	SFT2	1.6	22.1768	15.612	28.6694	66.4084	0	66.4084	65.3827	65.3827
15	0.960216	63.75	-2.2511	SFT2	1.6	22.1768	15.7456	28.9147	67.0102	0	67.0102	66.3912	66.3912
16	0.960216	64.2323	-0.744737	SFT2	1.6	22.1768	15.7652	28.9507	67.0985	0	67.0985	66.8936	66.8936
17	0.960216	89.44	0.761115	SFT2	1.6	22.1768	21.4836	39.4518	92.8604	0	92.8604	93.1458	93.1458
18	0.960216	167.124	2.26749	SFT2	1.6	22.1768	39.161	71.914	172.499	0	172.499	174.05	174.05
19	0.960216	169.455	3.77544	SFT2	1.6	22.1768	40.1745	73.7752	177.065	0	177.065	179.716	179.716
20	0.960216	175.228	5.28602	SFT2	1.6	22.1768	46.564	85.5088	205.85	0	205.85	210.159	210.159
21	0.960216	180.51	6.80029	SFT2	1.6	22.1768	47.4845	87.1992	209.997	0	209.997	215.659	215.659
22	0.960216	185.297	8.31935	SFT2	1.6	22.1768	48.281	88.6617	213.585	0	213.585	220.645	220.645
23	0.960216	189.583	9.84433	SFT2	1.6	22.1768	48.9535	89.8967	216.615	0	216.615	225.109	225.109
24	0.960216	193.363	11.3764	SFT2	1.6	22.1768	49.502	90.9039	219.086	0	219.086	229.046	229.046
25	0.960216	196.628	12.9168	SFT2	1.6	22.1768	49.9261	91.6828	220.997	0	220.997	232.447	232.447
26	0.960216	199.369	14.4667	SFT2	1.6	22.1768	50.2252	92.232	222.344	0	222.344	235.302	235.302
27	0.960216	201.576	16.0275	SFT2	1.6	22.1768	50.3981	92.5496	223.123	0	223.123	237.601	237.601
28	0.960216	203.237	17.6006	SFT2	1.6	22.1768	50.4438	92.6334	223.329	0	223.329	239.332	239.332
29	0.921677	196.126	19.1555	SFT2	1.6	22.1768	50.3646	92.488	222.972	0	222.972	240.467	240.467
30	0.921677	196.569	20.693	SFT2	1.6	22.1768	50.1499	92.0938	222.005	0	222.005	240.948	240.948
31	0.921677	196.127	22.2462	SFT2	1.6	22.1768	49.733	91.3281	220.127	0	220.127	240.469	240.469
32	0.921677	195.087	23.8169	SFT2	1.6	22.1768	49.1793	90.3114	217.633	0	217.633	239.341	239.341
33	0.921677	193.486	25.4068	SFT2	1.6	22.1768	48.4991	89.0623	214.568	0	214.568	237.604	237.604
34	0.921677	191.303	27.018	SFT2	1.6	22.1768	47.689	87.5747	210.919	0	210.919	235.236	235.236
35	0.921677	188.513	28.6527	SFT2	1.6	22.1768	46.7454	85.8419	206.668	0	206.668	232.21	232.21
36	0.921677	185.089	30.3133	SFT2	1.6	22.1768	45.6642	83.8563	201.797	0	201.797	228.495	228.495
37	0.943859	185.294	32.0233	coltre	6.4	22.1768	46.7192	85.7937	194.774	0	194.774	223.994	223.994
38	0.943859	180.246	33.7865	coltre	6.4	22.1768	45.2914	83.1718	188.342	0	188.342	218.646	218.646
39	0.943859	174.396	35.587	coltre	6.4	22.1768	43.7009	80.251	181.176	0	181.176	212.447	212.447
40	0.943859	167.687	37.4289	coltre	6.4	22.1768	41.9397	77.0168	173.242	0	173.242	205.34	205.34
41	0.943859	160.058	39.3174	coltre	6.4	22.1768	39.999	73.4529	164.498	0	164.498	197.258	197.258
42	0.943859	151.432	41.2584	coltre	6.4	22.1768	37.8681	69.5399	154.899	0	154.899	188.118	188.118
43	0.943859	141.718	43.2591	coltre	6.4	22.1768	35.5352	65.2558	144.389	0	144.389	177.828	177.828
44	0.943859	130.809	45.3279	coltre	6.4	22.1768	32.9858	60.5742	132.903	0	132.903	166.269	166.269
45	0.943859	118.569	47.4754	coltre	6.4	22.1768	30.2033	55.4645	120.368	0	120.368	153.301	153.301
46	0.943859	104.83	49.7149	coltre	6.4	22.1768	27.1677	49.89	106.692	0	106.692	138.745	138.745
47	0.943859	89.3759	52.0633	coltre	6.4	22.1768	23.855	43.8066	91.768	0	91.768	122.371	122.371
48	0.943859	70.6105	54.5428	coltre	6.4	22.1768	17.0215	31.2577	60.9824	0	60.9824	84.8834	84.8834
49	0.943859	44.7151	57.1842	coltre	6.4	22.1768	10.4165	19.1286	31.2265	0	31.2265	47.38	47.38
50	0.943859	15.4499	60.0315	coltre	6.4	22.1768	5.14039	9.43966	7.4571	0	7.4571	16.3718	16.3718

Global Minimum Query (gle/morgenstern-price) - Safety Factor: 1.82805

Slice Number	Width [m]	Weight [kN]	Angle of Slice Base [degrees]	Base Material	Base Cohesion [kPa]	Base Friction Angle [degrees]	Shear Stress [kPa]	Shear Strength [kPa]	Base Normal Stress [kPa]	Pore Pressure [kPa]	Effective Normal Stress [kPa]	Base Vertical Stress [kPa]	Effective Vertical Stress [kPa]
1	0.796967	2.69222	-24.0453	Riemp	0	29.2561	1.2213	2.23259	3.98558	0	3.98558	3.44067	3.44067
2	0.796967	7.90652	-22.6838	Riemp	0	29.2561	3.63416	6.64342	11.8597	0	11.8597	10.3407	10.3407
3	0.796967	12.7855	-21.3358	Riemp	0	29.2561	5.96165	10.8982	19.4553	0	19.4553	17.1267	17.1267
4	1.36695	32.5992	-19.5277	coltre	6.4	22.1768	10.1906	18.6289	30.0008	0	30.0008	26.3865	26.3865
5	0.961708	30.5311	-17.5994	coltre	6.4	22.1768	12.4069	22.6804	39.9401	0	39.9401	36.0045	36.0045
6	0.961708	36.1211	-16.0239	coltre	6.4	22.1768	14.0676	25.7163	47.388	0	47.388	43.3478	43.3478
7	0.961708	41.1625	-14.4606	coltre	6.4	22.1768	15.573	28.4682	54.1391	0	54.1391	50.123	50.123
8	0.961708	45.6673	-12.9084	coltre	6.4	22.1768	16.9116	30.9153	60.1425	0	60.1425	56.2666	56.2666
9	0.961708	49.6461	-11.3657	coltre	6.4	22.1768	18.0744	33.0409	65.3571	0	65.3571	61.7239	61.7239
10	0.961708	53.108	-9.83128	coltre	6.4	22.1768	19.0544	34.8324	69.7521	0	69.7521	66.4501	66.4501
11	0.961708	56.0606	-8.30399	coltre	6.4	22.1768	19.8474	36.282	73.3084	0	73.3084	70.4115	70.4115
12	0.960216	58.4183	-6.7838	SFT2	1.6	22.1768	17.5651	32.1098	74.8487	0	74.8487	72.7592	72.7592
13	0.960216	60.8038	-5.26957	SFT2	1.6	22.1768	18.0899	33.0693	77.2024	0	77.2024	75.5339	75.5339
14	0.960216	62.7818	-3.75903	SFT2	1.6	22.1768	45.1269	82.4942	198.455	0	198.455	195.49	195.49
15	0.960216	63.75	-2.2511	SFT2	1.6	22.1768	19.9288	36.4309	85.4494	0	85.4494	84.666	84.666
16	0.960216	64.2323	-	SFT2	1.6	22.1768	19.6775	35.9714	84.322	0	84.322	84.0662	84.0662
17	0.960216	89.44	0.744737	SFT2	1.6	22.1768	54.8826	100.328	242.206	0	242.206	242.936	242.936
18	0.960216	167.124	2.26749	SFT2	1.6	22.1768	45.1611	82.5567	198.608	0	198.608	200.396	200.396
19	0.960216	169.455	3.77544	SFT2	1.6	22.1768	45.5375	83.2449	200.296	0	200.296	203.301	203.301
20	0.960216	175.228	5.28602	SFT2	1.6	22.1768	51.5075	94.1583	227.07	0	227.07	231.835	231.835
21	0.960216	180.51	6.80029	SFT2	1.6	22.1768	51.5847	94.2994	227.416	0	227.416	233.568	233.568
22	0.960216	185.297	8.31935	SFT2	1.6	22.1768	51.4739	94.0969	226.92	0	226.92	234.447	234.447
23	0.960216	189.583	9.84433	SFT2	1.6	22.1768	51.1946	93.5862	225.667	0	225.667	234.55	234.55
24	0.960216	193.363	11.3764	SFT2	1.6	22.1768	50.7661	92.8029	223.745	0	223.745	233.959	233.959
25	0.960216	196.628	12.9168	SFT2	1.6	22.1768	50.2073	91.7815	221.239	0	221.239	232.753	232.753
26	0.960216	199.369	14.4667	SFT2	1.6	22.1768	49.5363	90.5548	218.229	0	218.229	231.01	231.01
27	0.960216	201.576	16.0275	SFT2	1.6	22.1768	48.7696	89.1532	214.791	0	214.791	228.801	228.801
28	0.960216	203.237	17.6006	SFT2	1.6	22.1768	47.922	87.6039	210.99	0	210.99	226.193	226.193
29	0.921677	196.126	19.1555	SFT2	1.6	22.1768	47.0269	85.9675	206.975	0	206.975	223.311	223.311
30	0.921677	196.569	20.693	SFT2	1.6	22.1768	46.0825	84.2412	202.741	0	202.741	220.148	220.148
31	0.921677	196.127	22.2462	SFT2	1.6	22.1768	45.0185	82.2961	197.969	0	197.969	216.383	216.383
32	0.921677	195.087	23.8169	SFT2	1.6	22.1768	43.9061	80.2625	192.98	0	192.98	212.36	212.36
33	0.921677	193.486	25.4068	SFT2	1.6	22.1768	42.7611	78.1694	187.845	0	187.845	208.156	208.156
34	0.921677	191.303	27.018	SFT2	1.6	22.1768	41.5851	76.0197	182.571	0	182.571	203.776	203.776
35	0.921677	188.513	28.6527	SFT2	1.6	22.1768	40.3781	73.8131	177.158	0	177.158	199.221	199.221
36	0.921677	185.089	30.3133	SFT2	1.6	22.1768	39.1378	71.5458	171.596	0	171.596	194.478	194.478
37	0.943859	185.294	32.0233	coltre	6.4	22.1768	40.3068	73.6828	165.063	0	165.063	190.272	190.272
38	0.943859	180.246	33.7865	coltre	6.4	22.1768	38.9196	71.1469	158.842	0	158.842	184.883	184.883
39	0.943859	174.396	35.587	coltre	6.4	22.1768	37.4776	68.5109	152.375	0	152.375	179.193	179.193
40	0.943859	167.687	37.4289	coltre	6.4	22.1768	35.9706	65.7561	145.616	0	145.616	173.146	173.146
41	0.943859	160.058	39.3174	coltre	6.4	22.1768	34.3861	62.8595	138.51	0	138.51	166.672	166.672
42	0.943859	151.432	41.2584	coltre	6.4	22.1768	32.7085	59.7927	130.987	0	130.987	159.68	159.68
43	0.943859	141.718	43.2591	coltre	6.4	22.1768	30.9188	56.5211	122.961	0	122.961	152.055	152.055
44	0.943859	130.809	45.3279	coltre	6.4	22.1768	28.9935	53.0015	114.326	0	114.326	143.653	143.653
45	0.943859	118.569	47.4754	coltre	6.4	22.1768	26.9029	49.1799	104.95	0	104.95	134.284	134.284
46	0.943859	104.83	49.7149	coltre	6.4	22.1768	24.6093	44.9871	94.6644	0	94.6644	123.698	123.698
47	0.943859	89.3759	52.0633	coltre	6.4	22.1768	22.0638	40.3337	83.2482	0	83.2482	111.553	111.553
48	0.943859	70.6105	54.5428	coltre	6.4	22.1768	16.1131	29.4555	56.5612	0	56.5612	79.1867	79.1867
49	0.943859	44.7151	57.1842	coltre	6.4	22.1768	10.1324	18.5225	29.7398	0	29.7398	45.4527	45.4527
50	0.943859	15.4499	60.0315	coltre	6.4	22.1768	5.13307	9.38351	7.31934	0	7.31934	16.2214	16.2214

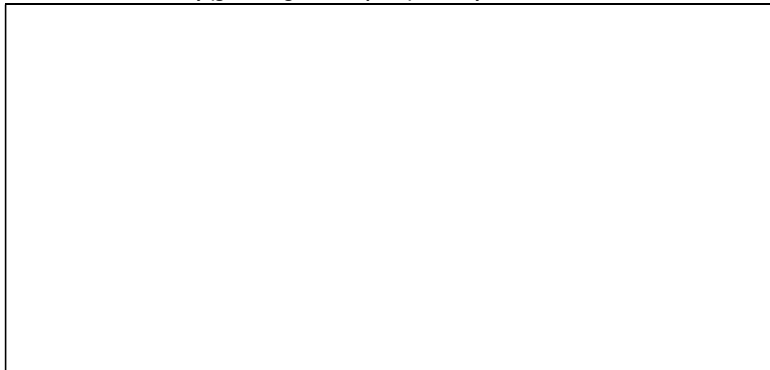
Interslice Data

Global Minimum Query (bishop simplified) - Safety Factor: 1.83637

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Slice Number	X coordinate [m]	Y coordinate - Bottom [m]	Interslice Normal Force [kN]	Interslice Shear Force [kN]	Interslice Force Angle [degrees]
1	1758.76	801.564	0	0	0
2	1759.56	801.208	2.34063	0	0
3	1760.36	800.875	8.89133	0	0
4	1761.15	800.564	18.9866	0	0
5	1762.52	800.079	45.2071	0	0
6	1763.48	799.774	66.8798	0	0
7	1764.44	799.498	90.3943	0	0
8	1765.41	799.25	115.132	0	0
9	1766.37	799.029	140.551	0	0
10	1767.33	798.836	166.176	0	0
11	1768.29	798.669	191.592	0	0
12	1769.25	798.529	216.441	0	0
13	1770.21	798.415	237.764	0	0
14	1771.17	798.326	258.125	0	0
15	1772.13	798.263	618.209	0	0
16	1773.09	798.225	635.853	0	0
17	1774.05	798.213	651.823	0	0
18	1775.01	798.226	1012.17	0	0
19	1775.97	798.264	1043.2	0	0
20	1776.93	798.327	1070.55	0	0
21	1777.89	798.416	1096.96	0	0
22	1778.85	798.53	1118.49	0	0
23	1779.81	798.671	1134.85	0	0
24	1780.77	798.837	1145.74	0	0
25	1781.73	799.03	1150.93	0	0
26	1782.69	799.251	1150.19	0	0
27	1783.66	799.498	1143.32	0	0
28	1784.62	799.774	1130.15	0	0
29	1785.58	800.079	1110.54	0	0
30	1786.5	800.399	1085.56	0	0
31	1787.42	800.747	1054.48	0	0
32	1788.34	801.124	1017.31	0	0
33	1789.26	801.531	974.086	0	0
34	1790.18	801.969	924.838	0	0
35	1791.11	802.439	869.649	0	0
36	1792.03	802.942	808.639	0	0
37	1792.95	803.481	741.97	0	0
38	1793.89	804.072	671.073	0	0
39	1794.84	804.703	594.863	0	0
40	1795.78	805.379	513.728	0	0
41	1796.72	806.101	428.153	0	0
42	1797.67	806.874	338.733	0	0
43	1798.61	807.702	246.209	0	0
44	1799.56	808.59	151.496	0	0
45	1800.5	809.545	55.7336	0	0
46	1801.44	810.574	-39.6456	0	0
47	1802.39	811.688	-132.819	0	0
48	1803.33	812.898	-221.427	0	0
49	1804.28	814.224	-286.188	0	0
50	1805.22	815.687	-322.066	0	0
51	1806.16	817.324	0	0	0

Global Minimum Query (gle/morgenstern-price) - Safety Factor: 1.82805



Slice Number	X coordinate [m]	Y coordinate - Bottom [m]	Interslice Normal Force [kN]	Interslice Shear Force [kN]	Interslice Force Angle [degrees]
1	1758.76	801.564	0	0	0
2	1759.56	801.208	2.39091	0.0496673	1.19006
3	1760.36	800.875	9.23891	0.383312	2.37578
4	1761.15	800.564	20.0483	1.24477	3.55285
5	1762.52	800.079	48.528	4.70654	5.53957
6	1763.48	799.774	72.6482	8.79611	6.90366
7	1764.44	799.498	99.2706	14.3623	8.23233
8	1765.41	799.25	127.68	21.4107	9.51938
9	1766.37	799.029	157.206	29.8726	10.7592
10	1767.33	798.836	187.229	39.6142	11.9465
11	1768.29	798.669	217.185	50.4482	13.0769
12	1769.25	798.529	246.569	62.1452	14.1462
13	1770.21	798.415	271.991	73.6402	15.1494
14	1771.17	798.326	296.204	85.4118	16.0852
15	1772.13	798.263	692.981	211.218	16.951
16	1773.09	798.225	715.349	228.914	17.7448
17	1774.05	798.213	735.303	245.529	18.465
18	1775.01	798.226	1125.84	390.077	19.11
19	1775.97	798.264	1161.67	415.451	19.6787
20	1776.93	798.327	1192.72	438.137	20.1704
21	1777.89	798.416	1222.02	458.949	20.5845
22	1778.85	798.53	1245.53	476.125	20.9202
23	1779.81	798.671	1263.12	489.356	21.1773
24	1780.77	798.837	1274.69	498.41	21.3557
25	1781.73	799.03	1280.23	503.138	21.4551
26	1782.69	799.251	1279.73	503.471	21.4757
27	1783.66	799.498	1273.25	499.417	21.417
28	1784.62	799.774	1260.85	491.06	21.2793
29	1785.58	800.079	1242.61	478.556	21.0628
30	1786.5	800.399	1219.71	462.857	20.7808
31	1787.42	800.747	1191.61	443.789	20.4267
32	1788.34	801.124	1158.49	421.669	20.0006
33	1789.26	801.531	1120.46	396.845	19.5031
34	1790.18	801.969	1077.65	369.697	18.935
35	1791.11	802.439	1030.19	340.637	18.2967
36	1792.03	802.942	978.198	310.107	17.5896
37	1792.95	803.481	921.815	278.573	16.8148
38	1793.89	804.072	862.433	246.532	15.9529
39	1794.84	804.703	798.867	214.412	15.0238
40	1795.78	805.379	731.338	182.749	14.0299
41	1796.72	806.101	660.11	152.086	12.9743
42	1797.67	806.874	585.506	122.959	11.86
43	1798.61	807.702	507.934	95.8942	10.6912
44	1799.56	808.59	427.918	71.3946	9.47208
45	1800.5	809.545	346.144	49.9274	8.20767
46	1801.44	810.574	263.535	31.9066	6.90329
47	1802.39	811.688	181.358	17.6698	5.56479
48	1803.33	812.898	101.391	7.44293	4.19845
49	1804.28	814.224	41.642	2.04458	2.81091
50	1805.22	815.687	7.679	0.188885	1.40905
51	1806.16	817.324	0	0	0

List Of Coordinates

Water Table

X	Y
1742.91	800.079
1813.67	800.079

Distributed Load

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X	Y
1776.82	807.55
1786.95	811.236
1803.67	817.324

External Boundary

X	Y
1803.67	817.324
1786.95	811.236
1775.48	807.064
1774.78	807.064
1774.78	801.564
1770.73	801.564
1742.91	801.564
1742.91	800.564
1742.91	800.079
1742.91	793.055
1742.91	785.632
1742.91	757.324
1813.67	757.324
1813.67	800.079
1813.67	801.564
1813.67	802.703
1813.67	807.886
1813.67	817.324

Material Boundary

X	Y
1770.73	801.564
1770.73	800.564
1775.48	800.564
1775.48	801.564
1775.48	807.064

Material Boundary

X	Y
1742.91	800.079
1776.71	800.079
1802.64	800.079
1813.67	800.079

Material Boundary

X	Y
1775.48	800.564
1776.56	801.564
1786.95	811.236

Material Boundary

X	Y
1742.91	793.055
1776.71	800.079
1786.95	802.206

Material Boundary

X	Y
1786.95	802.206
1813.67	807.886

Material Boundary

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X	Y
1742.91	800.564
1770.73	800.564

Material Boundary

X	Y
1742.91	785.632
1787.32	796.436

Material Boundary

X	Y
1787.32	796.436
1802.64	800.079
1813.67	802.703

Slide Analysis Information

SLIDE - An Interactive Slope Stability Program

Project Summary

File Name: SLIDE MURO PALI RI11 sta CND.slim
 Slide Modeler Version: 7.038
 Project Title: SLIDE - An Interactive Slope Stability Program
 Date Created: 10/06/2022, 13:43:16

General Settings

Units of Measurement: Metric Units
 Time Units: days
 Permeability Units: meters/second
 Failure Direction: Right to Left
 Data Output: Standard
 Maximum Material Properties: 20
 Maximum Support Properties: 20

Design Standard

Selected Type: Eurocode 7 (User Defined)
 Name: A2+M2+R2

Type	Partial Factor
Permanent Actions: Unfavourable	1
Permanent Actions: Favourable	1
Variable Actions: Unfavourable	1.3
Variable Actions: Favourable	0
Effective cohesion	1.25
Coefficient of shearing resistance	1.25
Undrained strength	1.4
Weight density	1
Shear strength (other models)	1
Earth resistance	1
Tensile and plate strength	1.1
Shear strength	1.1
Compressive strength	1.1
Bond strength	1.1
Seismic Coefficient	1

Analysis Options

Slices Type: Vertical

Analysis Methods Used

Bishop simplified
 GLE/Morgenstern-Price with interslice force function (Half Sine)

Number of slices: 50
 Tolerance: 0.005
 Maximum number of iterations: 75
 Check $m_{\alpha} < 0.2$: Yes
 Create Interslice boundaries at intersections with water tables and piezos: Yes
 Initial trial value of FS: 1
 Steffensen Iteration: Yes

Groundwater Analysis

Groundwater Method: Water Surfaces
 Pore Fluid Unit Weight [kN/m³]: 9.81
 Use negative pore pressure cutoff: Yes
 Maximum negative pore pressure [kPa]: 0
 Advanced Groundwater Method: None

Random Numbers

Pseudo-random Seed: 10116
 Random Number Generation Method: Park and Miller v.3

Surface Options

Surface Type: Circular
 Search Method: Slope Search
 Number of Surfaces: 5000
 Upper Angle: Not Defined
 Lower Angle: Not Defined
 Composite Surfaces: Disabled
 Reverse Curvature: Invalid Surfaces
 Minimum Elevation: Not Defined
 Minimum Depth: Not Defined
 Minimum Area: Not Defined
 Minimum Weight: Not Defined

Seismic

Advanced seismic analysis: No
 Staged pseudostatic analysis: No






Loading

1 Distributed Load present

Distributed Load 1

Distribution: Constant
 Magnitude [kPa]: 20
 Orientation: Vertical
 Load Action: Variable

Material Properties

Property	Riemp	coltre	SFT2	CLS	SFT2>15
Color					
Strength Type	Mohr-Coulomb	Undrained	Undrained	Infinite strength	Undrained
Unit Weight [kN/m ³]	19	20	20	20	20
Cohesion [kPa]	0				
Friction Angle [deg]	35				
Cohesion Type		90	100		250
Water Surface	Water Table	Water Table	Water Table	Water Table	Water Table
Hu Value	1	0	0	0	0

Support Properties

Support 1

Support Type: Micro-Pile
 Force Application: Active
 Out-of-Plane Spacing: 2.4 m
 Pile Shear Strength: 900 kN
 Force Direction: Perpendicular to Pile

Global Minimums

Method: bishop simplified

FS	1.711880
Center:	1779.014, 830.895
Radius:	35.408
Left Slip Surface Endpoint:	1759.180, 801.564
Right Slip Surface Endpoint:	1811.718, 817.324
Resisting Moment:	149372 kN-m
Driving Moment:	87255.9 kN-m
Active Support Moment:	-23773.4 kN-m
Total Slice Area:	512.611 m ²
Surface Horizontal Width:	52.5389 m
Surface Average Height:	9.7568 m

Method: gle/morgenstern-price

FS	1.715420
Center:	1782.450, 826.565
Radius:	30.443
Left Slip Surface Endpoint:	1765.081, 801.564
Right Slip Surface Endpoint:	1811.457, 817.324
Resisting Moment:	116602 kN-m
Driving Moment:	67972.6 kN-m
Resisting Horizontal Force:	3141.58 kN
Driving Horizontal Force:	1831.37 kN
Active Support Moment:	-19716.7 kN-m
Active Horizontal Support Force:	-681.818 kN
Total Slice Area:	483.906 m ²
Surface Horizontal Width:	46.3753 m
Surface Average Height:	10.4346 m

Valid / Invalid Surfaces

Method: bishop simplified

Number of Valid Surfaces: 2435
 Number of Invalid Surfaces: 2565

Error Codes:

Error Code -99 reported for 1744 surfaces
 Error Code -107 reported for 80 surfaces
 Error Code -112 reported for 343 surfaces
 Error Code -114 reported for 398 surfaces

Method: gle/morgenstern-price

Number of Valid Surfaces: 2353
 Number of Invalid Surfaces: 2647

Error Codes:

Error Code -99 reported for 1744 surfaces
 Error Code -107 reported for 80 surfaces
 Error Code -108 reported for 79 surfaces
 Error Code -112 reported for 346 surfaces
 Error Code -114 reported for 398 surfaces

Error Codes

The following errors were encountered during the computation:

- 99 = Slip surface intersects an infinite strength material. If infinite strength regions are defined for a model, a large number of potential slip surfaces may show this error code. This is Normal.
- 107 = Total driving moment or total driving force is negative. This will occur if the wrong failure direction is specified, or if high external or anchor loads are applied against the failure direction.
- 108 = Total driving moment or total driving force < 0.1. This is to limit the calculation of extremely high safety factors if the driving force is very small (0.1 is an arbitrary number).
- 112 = The coefficient $M\text{-Alpha} = \cos(\alpha)(1 + \tan(\alpha)\tan(\phi)/F) < 0.2$ for the final iteration of the safety factor calculation. This screens out some slip surfaces which may not be valid in the context of the analysis, in particular, deep seated slip surfaces with many high negative base angle slices in the passive zone.
- 114 = Surface with Reverse Curvature.

Slice Data

Global Minimum Query (bishop simplified) - Safety Factor: 1.71188

Global Minimum Query (bishop simplified) - Safety Factor: 1.71188

Slice Number	Width [m]	Weight [kN]	Angle of Slice Base [degrees]	Base Material	Base Cohesion [kPa]	Base Friction Angle [degrees]	Shear Stress [kPa]	Shear Strength [kPa]	Base Normal Stress [kPa]	Pore Pressure [kPa]	Effective Normal Stress [kPa]	Base Vertical Stress [kPa]	Effective Vertical Stress [kPa]
1	1.5658	14.8751	-32.5644	Riemp	0	29.2561	3.92918	6.72628	12.0077	0	12.0077	9.49828	9.49828
2	0.830207	19.7988	-30.2832	coltre	64.2857	0	37.5527	64.2857	45.7623	0	45.7623	23.833	23.833
3	1.15282	40.2806	-28.4445	coltre	64.2857	0	37.5527	64.2857	55.2694	0	55.2694	34.927	34.927
4	1.15282	54.0605	-26.3428	coltre	64.2857	0	37.5527	64.2857	65.476	0	65.476	46.8814	46.8814
5	1.15282	66.6358	-24.2787	coltre	64.2857	0	37.5527	64.2857	74.7297	0	74.7297	57.7909	57.7909
6	1.15282	78.0668	-22.2476	coltre	64.2857	0	37.5527	64.2857	83.0691	0	83.0691	67.7077	67.7077
7	1.00886	76.855	-20.3691	SFT2	71.4286	0	41.7252	71.4286	91.6609	0	91.6609	76.1691	76.1691
8	1.00886	84.0665	-18.6369	SFT2	71.4286	0	41.7252	71.4286	97.3904	0	97.3904	83.3184	83.3184
9	1.00886	90.5958	-16.9222	SFT2	71.4286	0	41.7252	71.4286	102.486	0	102.486	89.7912	89.7912
10	1.00886	96.4621	-15.223	SFT2	71.4286	0	41.7252	71.4286	106.962	0	106.962	95.6072	95.6072
11	1.00886	102.18	-13.5374	SFT2	71.4286	0	41.7252	71.4286	111.321	0	111.321	101.275	101.275
12	1.00886	107.28	-11.8637	SFT2	71.4286	0	41.7252	71.4286	115.096	0	115.096	106.331	106.331
13	1.00886	111.25	-10.2003	SFT2	71.4286	0	41.7252	71.4286	117.775	0	117.775	110.267	110.267
14	1.00886	114.61	-8.54542	SFT2	71.4286	0	41.7252	71.4286	119.869	0	119.869	113.599	113.599
15	1.00886	170.467	-6.89774	SFT2	71.4286	0	41.7252	71.4286	174.014	0	174.014	168.966	168.966
16	1.00886	227.827	-5.25579	SFT2	71.4286	0	41.7252	71.4286	229.66	0	229.66	225.822	225.822
17	1.00886	235.795	-3.61815	SFT2	71.4286	0	41.7252	71.4286	236.36	0	236.36	233.721	233.721
18	1.00886	244.777	-1.98347	SFT2	71.4286	0	41.7252	71.4286	244.07	0	244.07	242.625	242.625
19	1.00886	253.178	-0.350408	SFT2	71.4286	0	41.7252	71.4286	251.208	0	251.208	250.953	250.953
20	1.00886	260.998	1.28237	SFT2	71.4286	0	41.7252	71.4286	285.441	0	285.441	286.375	286.375
21	1.00886	268.238	2.91619	SFT2	71.4286	0	41.7252	71.4286	291.425	0	291.425	293.551	293.551
22	1.00886	274.895	4.55239	SFT2	71.4286	0	41.7252	71.4286	296.829	0	296.829	300.151	300.151
23	1.00886	280.967	6.19233	SFT2	71.4286	0	41.7252	71.4286	301.643	0	301.643	306.17	306.17
24	1.00886	286.448	7.83737	SFT2	71.4286	0	41.7252	71.4286	305.86	0	305.86	311.604	311.604
25	1.00886	291.332	9.48895	SFT2	71.4286	0	41.7252	71.4286	309.47	0	309.47	316.445	316.445
26	1.00886	295.611	11.1485	SFT2	71.4286	0	41.7252	71.4286	312.465	0	312.465	320.688	320.688
27	1.00886	299.224	12.8177	SFT2	71.4286	0	41.7252	71.4286	314.777	0	314.777	324.27	324.27
28	1.00886	301.782	14.4979	SFT2	71.4286	0	41.7252	71.4286	316.017	0	316.017	326.807	326.807
29	1.00886	303.604	16.1911	SFT2	71.4286	0	41.7252	71.4286	316.498	0	316.498	328.613	328.613
30	1.00886	304.771	17.8988	SFT2	71.4286	0	41.7252	71.4286	316.294	0	316.294	329.77	329.77
31	1.00886	305.264	19.6233	SFT2	71.4286	0	41.7252	71.4286	315.383	0	315.383	330.26	330.26
32	1.00886	305.062	21.3664	SFT2	71.4286	0	41.7252	71.4286	313.738	0	313.738	330.062	330.062
33	1.00886	304.141	23.1306	SFT2	71.4286	0	41.7252	71.4286	311.326	0	311.326	329.15	329.15
34	1.00886	302.474	24.9183	SFT2	71.4286	0	41.7252	71.4286	308.114	0	308.114	327.498	327.498
35	1.00886	300.028	26.7323	SFT2	71.4286	0	41.7252	71.4286	304.06	0	304.06	325.075	325.075
36	1.00886	296.768	28.5758	SFT2	71.4286	0	41.7252	71.4286	299.117	0	299.117	321.844	321.844
37	1.08246	313.799	30.5221	SFT2	71.4286	0	41.7252	71.4286	292.981	0	292.981	317.58	317.58
38	1.08246	307.934	32.5782	SFT2	71.4286	0	41.7252	71.4286	285.501	0	285.501	312.163	312.163
39	1.08246	300.868	34.6827	SFT2	71.4286	0	41.7252	71.4286	276.764	0	276.764	305.637	305.637
40	1.08246	292.51	36.8422	SFT2	71.4286	0	41.7252	71.4286	266.655	0	266.655	297.917	297.917
41	1.08246	282.75	39.0646	SFT2	71.4286	0	41.7252	71.4286	255.036	0	255.036	288.903	288.903
42	1.08246	271.454	41.3596	SFT2	71.4286	0	41.7252	71.4286	241.735	0	241.735	278.469	278.469
43	1.08246	257.996	43.7387	SFT2	71.4286	0	41.7252	71.4286	217.03	0	217.03	256.957	256.957
44	1.09835	239.763	46.2359	coltre	64.2857	0	37.5527	64.2857	179.113	0	179.113	218.322	218.322
45	1.09835	213.352	48.8719	coltre	64.2857	0	37.5527	64.2857	151.273	0	151.273	194.278	194.278
46	1.09835	184.286	51.6556	coltre	64.2857	0	37.5527	64.2857	120.344	0	120.344	167.818	167.818
47	1.09835	152.046	54.6233	coltre	64.2857	0	37.5527	64.2857	85.58	0	85.58	138.467	138.467
48	1.09835	115.878	57.8276	coltre	64.2857	0	37.5527	64.2857	45.8471	0	45.8471	105.544	105.544
49	1.09835	74.6202	61.3506	coltre	64.2857	0	37.5527	64.2857	-0.749503	0	-0.749503	67.9858	67.9858
50	1.09835	26.2696	65.3343	coltre	64.2857	0	37.5527	64.2857	-57.8005	0	-57.8005	23.9737	23.9737

Global Minimum Query (gle/morgenstern-price) - Safety Factor: 1.71542

Slice Number	Width [m]	Weight [kN]	Angle of Slice Base [degrees]	Base Material	Base Cohesion [kPa]	Base Friction Angle [degrees]	Shear Stress [kPa]	Shear Strength [kPa]	Base Normal Stress [kPa]	Pore Pressure [kPa]	Effective Normal Stress [kPa]	Base Vertical Stress [kPa]	Effective Vertical Stress [kPa]
1	0.768073	3.76847	-33.9174	Riemp	0	29.2561	2.07655	3.56216	6.35911	0	6.35911	4.96281	4.96281
2	0.768073	11.0652	-32.1923	Riemp	0	29.2561	6.07152	10.4152	18.5931	0	18.5931	14.7708	14.7708
3	0.825095	19.6769	-30.4376	coltre	64.2857	0	37.4752	64.2857	47.8289	0	47.8289	25.8094	25.8094
4	0.903818	30.3841	-28.5685	coltre	64.2857	0	37.4752	64.2857	57.3391	0	57.3391	36.9337	36.9337
5	0.903818	38.9313	-26.6483	coltre	64.2857	0	37.4752	64.2857	66.6309	0	66.6309	47.8252	47.8252
6	0.903818	46.7982	-24.76	coltre	64.2857	0	37.4752	64.2857	75.2197	0	75.2197	57.9355	57.9355
7	0.940696	56.7211	-22.8625	SFT2	71.4286	0	41.6391	71.4286	85.7172	0	85.7172	68.1602	68.1602
8	0.940696	64.4208	-20.9538	SFT2	71.4286	0	41.6391	71.4286	121.533	0	121.533	105.587	105.587
9	0.940696	70.8684	-19.0692	SFT2	71.4286	0	41.6391	71.4286	103.714	0	103.714	89.3203	89.3203
10	0.940696	76.6676	-17.2058	SFT2	71.4286	0	41.6391	71.4286	109.289	0	109.289	96.3949	96.3949
11	0.940696	89.9342	-15.3609	SFT2	71.4286	0	41.6391	71.4286	160.588	0	160.588	149.149	149.149
12	0.940696	188.221	-13.5323	SFT2	71.4286	0	41.6391	71.4286	232.177	0	232.177	222.155	222.155
13	0.940696	193.518	-11.7177	SFT2	71.4286	0	41.6391	71.4286	236.487	0	236.487	227.851	227.851
14	0.940696	203.844	-9.91485	SFT2	71.4286	0	41.6391	71.4286	245.935	0	245.935	238.657	238.657
15	0.940696	213.597	-8.12191	SFT2	71.4286	0	41.6391	71.4286	254.414	0	254.414	248.472	248.472
16	0.940696	222.785	-6.33696	SFT2	71.4286	0	41.6391	71.4286	261.937	0	261.937	257.313	257.313
17	0.940696	231.417	-4.55817	SFT2	71.4286	0	41.6391	71.4286	268.522	0	268.522	265.202	265.202
18	0.940696	239.496	-2.78377	SFT2	71.4286	0	41.6391	71.4286	274.193	0	274.193	272.168	272.168
19	0.940696	247.026	-1.01204	SFT2	71.4286	0	41.6391	71.4286	278.979	0	278.979	278.243	278.243
20	0.940696	254.009	0.758713	SFT2	71.4286	0	41.6391	71.4286	310.523	0	310.523	311.074	311.074
21	0.940696	260.444	2.5302	SFT2	71.4286	0	41.6391	71.4286	313.499	0	313.499	315.339	315.339
22	0.940696	266.33	4.30411	SFT2	71.4286	0	41.6391	71.4286	315.688	0	315.688	318.822	318.822
23	0.940696	271.664	6.08216	SFT2	71.4286	0	41.6391	71.4286	317.131	0	317.131	321.568	321.568
24	0.940696	276.437	7.86613	SFT2	71.4286	0	41.6391	71.4286	317.863	0	317.863	323.616	323.616
25	0.940696	280.332	9.6578	SFT2	71.4286	0	41.6391	71.4286	317.605	0	317.605	324.691	324.691
26	0.940696	283.474	11.4591	SFT2	71.4286	0	41.6391	71.4286	316.534	0	316.534	324.974	324.974
27	1.04739	318.6	13.3755	SFT2	71.4286	0	41.6391	71.4286	314.744	0	314.744	324.645	324.645
28	0.93035	285.01	15.2964	SFT2	71.4286	0	41.6391	71.4286	312.385	0	312.385	323.773	323.773
29	0.93035	286.278	17.1202	SFT2	71.4286	0	41.6391	71.4286	309.61	0	309.61	322.436	322.436
30	0.93035	286.938	18.9621	SFT2	71.4286	0	41.6391	71.4286	306.336	0	306.336	320.643	320.643
31	0.93035	286.973	20.8246	SFT2	71.4286	0	41.6391	71.4286	302.572	0	302.572	318.41	318.41
32	0.93035	286.359	22.7105	SFT2	71.4286	0	41.6391	71.4286	298.326	0	298.326	315.753	315.753
33	0.93035	285.07	24.6228	SFT2	71.4286	0	41.6391	71.4286	293.593	0	293.593	312.676	312.676
34	0.93035	283.076	26.5648	SFT2	71.4286	0	41.6391	71.4286	288.361	0	288.361	309.181	309.181
35	0.93035	280.342	28.5403	SFT2	71.4286	0	41.6391	71.4286	282.608	0	282.608	305.254	305.254
36	0.932686	277.515	30.5562	SFT2	71.4286	0	41.6391	71.4286	276.29	0	276.29	300.872	300.872
37	0.932686	273.145	32.6176	SFT2	71.4286	0	41.6391	71.4286	269.356	0	269.356	296.003	296.003
38	0.932686	267.88	34.7277	SFT2	71.4286	0	41.6391	71.4286	261.747	0	261.747	290.609	290.609
39	0.932686	261.653	36.8932	SFT2	71.4286	0	41.6391	71.4286	253.374	0	253.374	284.63	284.63
40	0.932686	254.381	39.1222	SFT2	71.4286	0	41.6391	71.4286	244.125	0	244.125	277.991	277.991
41	0.932686	245.962	41.4242	SFT2	71.4286	0	41.6391	71.4286	233.849	0	233.849	270.59	270.59
42	0.932686	235.919	43.8112	SFT2	71.4286	0	41.6391	71.4286	213.387	0	213.387	253.333	253.333
43	0.932686	219.872	46.298	SFT2	71.4286	0	41.6391	71.4286	178.232	0	178.232	221.802	221.802
44	0.933856	201.035	48.9056	coltre	64.2857	0	37.4752	64.2857	160.873	0	160.873	203.84	203.84
45	0.933856	180.01	51.6595	coltre	64.2857	0	37.4752	64.2857	137.294	0	137.294	184.676	184.676
46	0.933856	156.715	54.5933	coltre	64.2857	0	37.4752	64.2857	110.455	0	110.455	163.174	163.174
47	0.933856	130.62	57.7577	coltre	64.2857	0	37.4752	64.2857	79.1571	0	79.1571	138.569	138.569
48	0.933856	100.911	61.2315	coltre	64.2857	0	37.4752	64.2857	41.391	0	41.391	109.647	109.647
49	0.933856	66.1969	65.1493	coltre	64.2857	0	37.4752	64.2857	-6.67534	0	-6.67534	74.2404	74.2404
50	0.933856	23.6835	69.785	coltre	64.2857	0	37.4752	64.2857	-74.1222	0	-74.1222	27.6501	27.6501

Interslice Data

Global Minimum Query (bishop simplified) - Safety Factor: 1.71188

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Slice Number	X coordinate [m]	Y coordinate - Bottom [m]	Interslice Normal Force [kN]	Interslice Shear Force [kN]	Interslice Force Angle [degrees]
1	1759.18	801.564	0	0	0
2	1760.75	800.564	18.1557	0	0
3	1761.58	800.079	71.4968	0	0
4	1762.73	799.454	149.273	0	0
5	1763.88	798.884	229.911	0	0
6	1765.03	798.364	312.032	0	0
7	1766.19	797.892	394.467	0	0
8	1767.2	797.517	470.867	0	0
9	1768.2	797.177	546.07	0	0
10	1769.21	796.87	619.593	0	0
11	1770.22	796.596	691.024	0	0
12	1771.23	796.353	760.131	0	0
13	1772.24	796.141	1167.5	0	0
14	1773.25	795.959	1230.94	0	0
15	1774.26	795.808	1291.18	0	0
16	1775.27	795.686	1695.4	0	0
17	1776.28	795.593	1758.77	0	0
18	1777.28	795.529	1815.92	0	0
19	1778.29	795.494	1866.51	0	0
20	1779.3	795.488	1910.13	0	0
21	1780.31	795.511	1945.75	0	0
22	1781.32	795.562	1972.84	0	0
23	1782.33	795.642	1991.06	0	0
24	1783.34	795.752	2000.11	0	0
25	1784.35	795.891	1999.7	0	0
26	1785.36	796.059	1989.58	0	0
27	1786.36	796.258	1969.52	0	0
28	1787.37	796.488	1939.34	0	0
29	1788.38	796.748	1898.96	0	0
30	1789.39	797.041	1848.32	0	0
31	1790.4	797.367	1787.33	0	0
32	1791.41	797.727	1715.95	0	0
33	1792.42	798.122	1634.19	0	0
34	1793.43	798.553	1542.09	0	0
35	1794.44	799.021	1439.74	0	0
36	1795.44	799.529	1327.31	0	0
37	1796.45	800.079	1205.01	0	0
38	1797.54	800.717	1063.17	0	0
39	1798.62	801.409	910.83	0	0
40	1799.7	802.158	748.657	0	0
41	1800.78	802.969	577.527	0	0
42	1801.87	803.847	398.592	0	0
43	1802.95	804.8	213.363	0	0
44	1804.03	805.836	33.6937	0	0
45	1805.13	806.983	-130.492	0	0
46	1806.23	808.241	-279.548	0	0
47	1807.33	809.629	-405.432	0	0
48	1808.42	811.176	-496.594	0	0
49	1809.52	812.922	-535.426	0	0
50	1810.62	814.933	-492.702	0	0
51	1811.72	817.324	0	0	0

Global Minimum Query (gle/morgenstern-price) - Safety Factor: 1.71542

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Slice Number	X coordinate [m]	Y coordinate - Bottom [m]	Interslice Normal Force [kN]	Interslice Shear Force [kN]	Interslice Force Angle [degrees]
1	1765.08	801.564	0	0	0
2	1765.85	801.047	4.88132	0.0418022	0.490652
3	1766.62	800.564	18.5414	0.317137	0.979907
4	1767.44	800.079	72.6912	1.90645	1.50233
5	1768.35	799.587	134.826	4.87049	2.06887
6	1769.25	799.133	198.962	9.12971	2.62727
7	1770.15	798.716	264.234	14.6589	3.17534
8	1771.09	798.32	337.455	22.0147	3.73254
9	1772.04	797.959	411.366	30.8991	4.27394
10	1772.98	797.634	491.314	40.0198	4.79731
11	1773.92	797.343	577.371	50.9971	5.30053
12	1774.86	797.085	670.1327	63.361	5.78159
13	1775.8	796.858	770.1418.79	78.095	6.23852
14	1776.74	796.663	878.1504.15	94.888	6.6696
15	1777.68	796.499	993.811583.81	113.52	7.07314
16	1778.62	796.364	1117.191657.19	134.631	7.44758
17	1779.56	796.26	1248.781723.78	157.869	7.79153
18	1780.5	796.185	1388.141783.14	183.898	8.10377
19	1781.44	796.139	1534.91834.9	214.401	8.38309
20	1782.38	796.123	1687.761878.76	248.092	8.62851
21	1783.32	796.135	1848.111914.11	284.66	8.83917
22	1784.26	796.177	2016.31940.3	324.809	9.01428
23	1785.21	796.247	2192.171957.17	368.355	9.15329
24	1786.15	796.348	2376.611964.61	415.155	9.25562
25	1787.09	796.478	2569.521962.52	465.115	9.32104
26	1788.03	796.638	2780.91950.9	518.195	9.34927
27	1788.97	796.828	3009.761929.76	574.401	9.34021
28	1790.02	797.077	3256.041895.04	633.86	9.28632
29	1790.95	797.332	3519.351854.35	696.334	9.19984
30	1791.88	797.618	3799.411804.41	762.291	9.07744
31	1792.81	797.938	4095.281745.28	831.911	8.91946
32	1793.74	798.292	4406.771677	905.411	8.7265
33	1794.67	798.681	4734.631599.63	982.042	8.49915
34	1795.6	799.108	5078.241513.24	1061.092	8.23823
35	1796.53	799.573	5437.891417.89	1142.876	7.9447
36	1797.46	800.079	5813.691313.69	1226.738	7.61947
37	1798.39	800.63	6205.441200.44	1312.991	7.26295
38	1799.32	801.226	6613.561078.56	1401.083	6.87711
39	1800.26	801.873	7038.227948.227	1491.424	6.46344
40	1801.19	802.573	7479.726809.726	1583.409	6.02346
41	1802.12	803.332	7937.427663.427	1676.688	5.55887
42	1803.05	804.155	8411.863509.863	1771.2482	5.07147
43	1803.99	805.049	8902.821357.821	1867.558	4.56315
44	1804.92	806.025	9400.767222.767	1965.179	4.03596
45	1805.85	807.096	9905.561785.5617	2064.202	3.49134
46	1806.79	808.277	10427.5043-41.5043	2164.12585	2.93213
47	1807.72	809.59	10966.569-151.569	2264.24829	2.36063
48	1808.66	811.071	11523.719-233.719	2364.26006	1.77922
49	1809.59	812.772	12097.077-269.077	2464.59091	1.19033
50	1810.52	814.788	12687.574-220.574	2564.29615	0.596421
51	1811.46	817.324	0	0	0

List Of Coordinates

Water Table

X	Y
1742.91	800.079
1813.67	800.079

Distributed Load

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X	Y
1776.82	807.55
1786.95	811.236
1803.67	817.324

External Boundary

X	Y
1803.67	817.324
1786.95	811.236
1775.48	807.064
1774.78	807.064
1774.78	801.564
1770.73	801.564
1742.91	801.564
1742.91	800.564
1742.91	800.079
1742.91	793.055
1742.91	785.632
1742.91	757.324
1813.67	757.324
1813.67	800.079
1813.67	801.564
1813.67	802.703
1813.67	807.886
1813.67	817.324

Material Boundary

X	Y
1770.73	801.564
1770.73	800.564
1775.48	800.564
1775.48	801.564
1775.48	807.064

Material Boundary

X	Y
1742.91	800.079
1776.71	800.079
1802.64	800.079
1813.67	800.079

Material Boundary

X	Y
1775.48	800.564
1776.56	801.564
1786.95	811.236

Material Boundary

X	Y
1742.91	793.055
1776.71	800.079
1786.95	802.206

Material Boundary

X	Y
1786.95	802.206
1813.67	807.886

Material Boundary

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X	Y
1742.91	800.564
1770.73	800.564

Material Boundary

X	Y
1742.91	785.632
1787.32	796.436

Material Boundary

X	Y
1787.32	796.436
1802.64	800.079
1813.67	802.703