

COMMITTENTE:



ALTA SORVEGLIANZA:



GENERAL CONTRACTOR:



INFRASTRUTTURE FERROVIARIE STRATEGICHE DEFINITE DALLA LEGGE OBIETTIVO N. 443/01

**TRATTA A.V. /A.C. TERZO VALICO DEI GIOVI
PROGETTO ESECUTIVO**

Scatolare fosso 2 Libarna al km 28+650.47

Relazione di calcolo

GENERAL CONTRACTOR	DIRETTORE DEI LAVORI
Consorzio Cociv Ing.P.P.Marcheselli	

COMMESSA	LOTTO	FASE	ENTE	TIPO DOC.	OPERA/DISCIPLINA	PROGR.	REV.
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Progettazione :								
Rev	Descrizione	Redatto	Data	Verificato	Data	Progettista Integratore	Data	IL PROGETTISTA
A00	Prima Emissione	ALPINA <i>Adriano Fara</i>	27/09/2013	COCIV <i>[Signature]</i>	27/09/2013	A. Palomba <i>[Signature]</i>	30/09/2013	 Consorzio Collegamenti Integrati Veloci Dott. Ing. Alto Mancarella Ordine Ingegneri Prov. TO n. 6271 R

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1. PREMESSA

Con la presente relazione si intende fornire i calcoli statici e le verifiche di sicurezza del tombino idraulico ferroviario IN1Y posto alla progressiva 28+650.48 (rilevato ferroviario R111).

Il tombino idraulico di dimensioni 4.0x4.0 m costituisce il passaggio sotto la linea ferroviaria AC Milano –Genova del canale idraulico denominato “fosso2”, appartenente al reticolo idrografico minore del torrente Scrivia in zona Libarna nel Comune di Arquata Scrivia (AL).

Il fosso in esame subito a valle della linea ferroviaria in progetto recapita nel Rio Pradella oggetto della wbs IN11.

Le dimensioni nette interne sono pari a 4.00x4.00 m, ed il ricoprimento è di circa 6.10 m, la struttura scatolare a sezione quadrata è realizzata in calcestruzzo armato gettato in opera.

L'opera ricade in zona sismica di III categoria ($S=6$).

Le verifiche di sicurezza vengono effettuate con il metodo delle Tensioni Ammissibili.

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2. CARATTERISTICHE DEI MATERIALI

2.1. Calcestruzzo

Per il magrone di sottofondazione si prevede l'utilizzo di calcestruzzo di classe Rck 15.

Per la realizzazione dello scatolare di linea si prevede l'utilizzo di calcestruzzo avente classe di resistenza C32/40 ($R_{ck} \geq 40 \text{ N/mm}^2$) che presenta le seguenti caratteristiche:

Resistenza caratteristica a compressione (cilindrica)	$f_{ck} = 0.83 \times R_{ck} = 33.20 \text{ N/mm}^2$
Resistenza media a compressione	$f_{cm} = f_{ck} + 8 = 41.20 \text{ N/mm}^2$
Modulo elastico	$E_{cm} = 22000 \cdot (f_{cm}/10)^{0.3} = 33643 \text{ N/mm}^2$
Resistenza di calcolo a compressione	$f_{cd} = \alpha_{cc} \cdot f_{ck} / \gamma_c = 0.85 \cdot f_{ck} / 1.5 = 18.81 \text{ N/mm}^2$
Resistenza a trazione media	$f_{ctm} = 0.30 \cdot f_{ck}^{2/3} = 3.10 \text{ N/mm}^2$
Resistenza a trazione	$f_{ctk} = 0.7 \cdot f_{ctm} = 2.17 \text{ N/mm}^2$
Resistenza a trazione di calcolo	$f_{ctd} = f_{ctk} / \gamma_c = 1.45 \text{ N/mm}^2$
Tensioni ammissibili	$\sigma_c = 12.20 \text{ N/mm}^2$
	$\tau_{c0} = 7.00 \text{ N/mm}^2$
	$\tau_{c1} = 21.10 \text{ N/mm}^2$

2.2. Acciaio per cemento 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	$\geq 450 \text{ MPa}$
Limite di rottura f_t	$\geq 540 \text{ MPa}$
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 $f_y \text{ misurato} / f_{ynom}$	$\leq 1,25$

Tensione di snervamento caratteristica	$f_{yk} \geq 450 \text{ N/mm}^2$
Tensione caratteristica a rottura	$f_{tk} \geq 540 \text{ N/mm}^2$
Tensione ammissibile	$\sigma_s = 260.00 \text{ N/mm}^2$

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2.3. Durabilità e prescrizioni sui materiali

Per garantire la durabilità delle strutture in calcestruzzo armato ordinario, esposte all'azione dell'ambiente, si devono adottare i provvedimenti atti a limitare gli effetti di degrado indotti dall'attacco chimico, fisico e derivante dalla corrosione delle armature e dai cicli di gelo e disgelo.

Al fine di ottenere la prestazione richiesta in funzione delle condizioni ambientali, nonché per la definizione della relativa classe, si fa riferimento alle indicazioni contenute nelle Linee Guida sul calcestruzzo strutturale edite dal Servizio Tecnico Centrale del Consiglio Superiore dei Lavori Pubblici ovvero alle norme UNI EN 206-1:2006 ed UNI 11104:2004.

Per le opere della presente relazione si adotta quanto segue:

Fondazione CLASSE DI ESPOSIZIONE XC2

Elevazione CLASSE DI ESPOSIZIONE XC2

Nel caso in esame la struttura si trova a permanente contatto con il terreno pertanto deve essere condotta la verifica a fessurazione per la combinazione TA5. Per questa verifica si considerano, in accordo con l'Istruzione n. I/SC/PS-OM/2298 "Sovraccarichi per il calcolo dei ponti ferroviari. Istruzioni per la progettazione, l'esecuzione ed il collaudo", i seguenti limiti di apertura delle fessure:

- superfici in contatto permanente con il terreno (superfici esterne) wk = 0.10 mm;
- superfici non in contatto permanente con il terreno (superfici interne) wk = 0.20 mm.

Il copriferro minimo assunto è pari a 4 cm.

L'apertura a fessure minima di 0.10 mm per le superfici esterne è portata a 0.15 mm essendo il copriferro dell'armatura trasversale (interna a quella longitudinale) pari a circa 6 cm ($c/c_{min} \leq 1.5$, con $c_{min}=4cm$).

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3. NORMATIVA DI RIFERIMENTO

Il dimensionamento e la verifica degli elementi strutturali sono stati condotti nel rispetto delle vigenti normative di seguito riportate:

- D.M. 09/01/1996: "Norme tecniche per l'esecuzione delle opere in cemento armato normale e precompresso e per le strutture metalliche";
- D.M. 16/01/1996: "Norme tecniche relative ai criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e dei sovraccarichi";
- Circ. Min. 04/07/1996 n. 156 STC: "Istruzioni per l'applicazione delle Norme tecniche relative ai criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e dei sovraccarichi";
- L. 05/11/1971 n. 1086: "Norme per la disciplina delle opere in conglomerato cementizio armato normale e precompresso ed a struttura metallica";
- D.M. 14/02/1992: "Norme tecniche per l'esecuzione delle opere in cemento armato normale e precompresso e per le strutture metalliche" (valido per il metodo alle tensioni ammissibili);
- Circ. Min. 24/06/1993 n. 37406: "Istruzioni relative alle Norme tecniche per l'esecuzione delle opere in cemento armato normale e precompresso e per le strutture metalliche" (valido per il metodo alle tensioni ammissibili);
- Circ. Min. 15/10/1996 n. 252: "Istruzioni relative alle Norme tecniche per l'esecuzione delle opere in cemento armato normale e precompresso e per le strutture metalliche";
- L. 02/02/1974 n. 64: "Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche";
- D.M. 16/01/1996: "Norme tecniche per le costruzioni in zona sismica";
- Ordinanza n. 3274: "Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica";
- Circ. Min. 10/04/1997 n. 65: "Istruzioni per l'applicazione delle Norme tecniche per le costruzioni in zona sismica di cui al D.M. 16/01/1996";
- Asa Servizi di Ingegneria (Ferrovie dello Stato), Istruzione n. I/SC/PS-OM/2298 del 02/06/1995, Testo completo delle relative integrazioni: 13/01/1997: "Sovraccarichi per il calcolo dei ponti ferroviari. Istruzioni per la progettazione, l'esecuzione ed il collaudo";
- Ferrovie dello Stato - Istruzione F.S. 44/b (Testo aggiornato secondo il D.M. 16/01/1999): "Istruzioni tecniche per i manufatti sotto binario da costruire in zona sismica".

4. GEOMETRIA

Il tombino è realizzato in cemento armato gettato in opera, ha sezione scatolare cava di dimensioni interne nette $b \times h = 4.00 \times 4.00$ m. Le pareti laterali hanno spessore 60 cm, la soletta superiore ha spessore 60 cm e quella inferiore 70 cm.

Al di sotto del ballast è previsto uno strato di supercompattato di 30 cm di spessore.

Il ricoprimento della struttura a partire dal piano ferro è pari a circa 6.1 m, considerando la presenza del ballast (80 cm) del supercompattato (30 cm) il rilevato ha un'altezza pari a circa 5.07 m.

Si riporta nel seguito una sezione trasversale dell'opera.

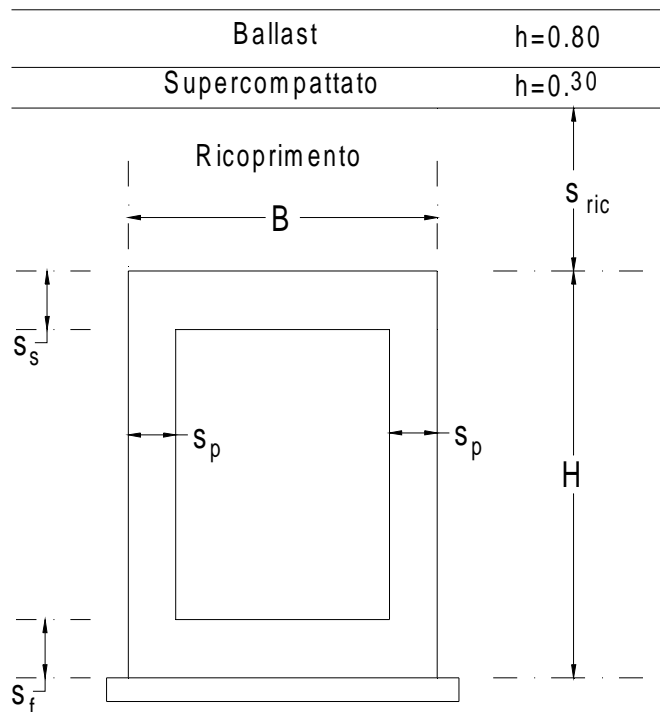


Figura 1 – Sezione trasversale dell'opera

B	= 5.20 m	larghezza scatolare
H	= 5.30 m	altezza totale
S_f	= 0.70 m	spessore soletta di fondazione
S_p	= 0.60 m	spessore pareti
S_s	= 0.60 m	spessore soletta superiore
S_{ric}	= 4.97 m	spessore del ricoprimento

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L'opera non è interessata dalla presenza della falda, posta al di sotto dell'intradosso della fondazione.

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5. DEFINIZIONE DEL COEFFICIENTE DI SOTTOFONDO K_S

Ai fini del calcolo strutturale dei tombini che attraversano la linea ferroviaria, la costante di sottofondo K_S è stata definita come rapporto tra la pressione p esercitata dalla fondazione ed il corrispondente cedimento s :

$$K_S = p / s \quad [\text{kN/m}^3]$$

K_S dipende in maniera significativa da:

- Profilo di rigidità del sottosuolo nell'area di influenza della fondazione;
- Dimensioni della fondazione;
- Quota d'imposta della fondazione da p.c.;
- Pressione esercitata dalla fondazione sul terreno.

Alla luce del numero significativo di tombini per i quali è necessario definire il coefficiente K_S , si è deciso di sviluppare degli abachi attraverso i quali, una volta noti i valori di B (lato minore fondazione), z (quota d'imposta fondazione) e p (pressione esercitata dalla fondazione sul terreno) sia possibile definire il valore di K_S da utilizzare per l'opera in oggetto, avendo assunto un profilo di rigidità del terreno cautelativo per rappresentare in modo adeguato le caratteristiche di deformabilità dell'intera tratta.

I calcoli parametrici del cedimento sono stati eseguiti secondo il metodo del cedimento monodimensionale in cui sono stati fatti variare i valori di B , z e p e quindi calcolati i corrispondenti valori di K_S sulla base della definizione $K_S = p / s$.

Il calcolo è stato basato sulle seguenti ipotesi:

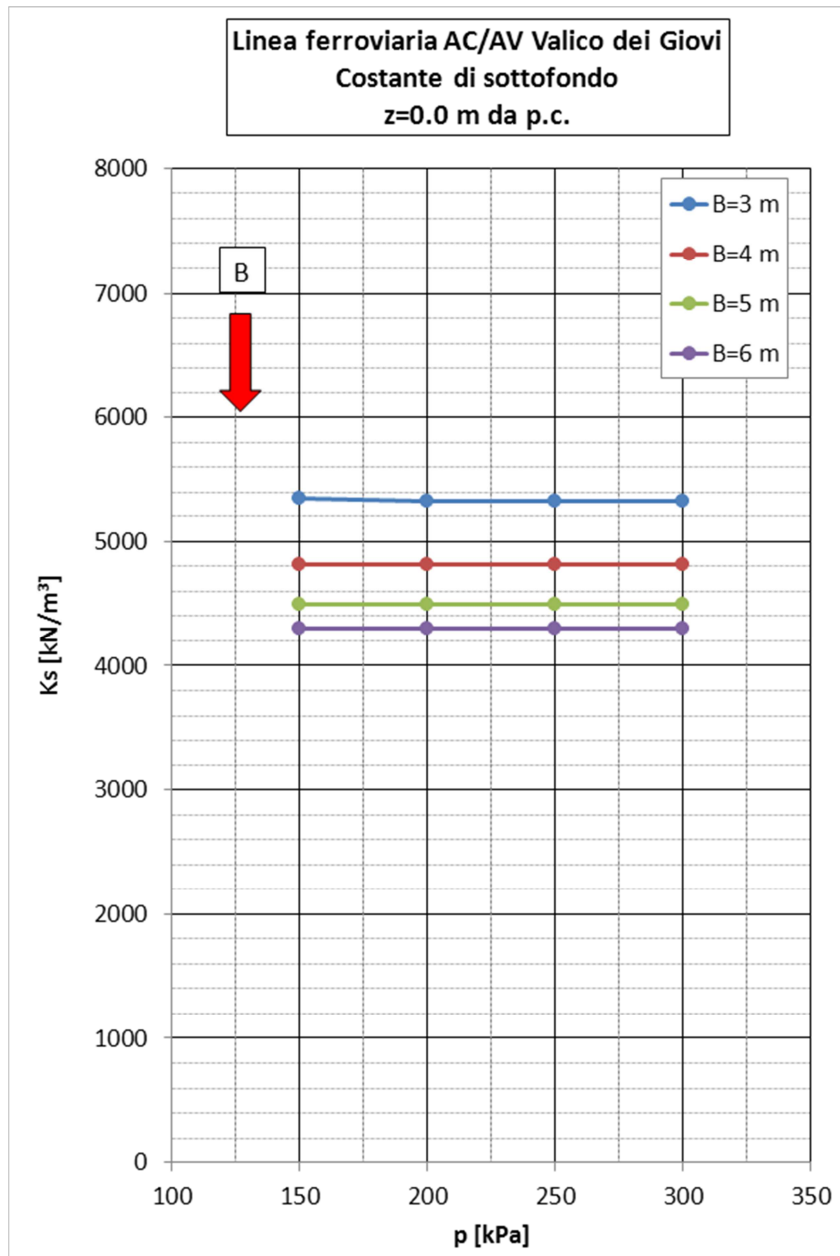
- comportamento rigido della fondazione;
- estensione dell'area di influenza lungo la quale è calcolato il cedimento fino alla quota in cui il carico trasmesso dalla fondazione comporta un incremento del 10% dello stato di sforzo iniziale presente nel terreno.

Sono stati considerati i seguenti valori dei parametri di progetto:

- Lato minore della fondazione $B = 3.0, 4.0, 5.0$ e 6.0 m;
- Quota d'imposta $z = 0.0$ m
- Pressione trasmessa dalla fondazione al terreno $p = 150, 200, 250, 300$ kPa;

Nell'abaco, per ogni quota d'imposta z considerata è definito il valore di K_S in funzione della larghezza della fondazione B e del carico totale p agente su di essa.

La costante di sottofondo adottata per la modellazione, funzione del tipo di terreno presente in situ, è pari a $K_S = 4550$ kN/m³.



6. ANALISI DEI CARICHI

Nel seguente paragrafo si descrivono i carichi elementari che agiscono sulla struttura in oggetto. Tali azioni sono definite secondo le vigenti normative e sono utilizzate per la generazione delle combinazioni di carico nell'ambito delle verifiche alle tensioni ammissibili eseguite. Tutti i carichi elementari si riferiscono a un concio longitudinale di larghezza unitaria, pertanto sono tutti definiti rispetto all'unità di lunghezza.

Per i materiali si assumono i seguenti pesi specifici:

calcestruzzo armato:	$\gamma_{c.a.}$	= 25 kN/m ³
rilevato:	γ_{ril}	= 20 kN/m ³
sovrastuttura ferroviaria:	γ_{ric}	= 22 kN/m ³
massicciata + armamento:	$\gamma_{ballast}$	= 18 kN/m ³

6.1. Peso proprio strutture

Il peso proprio delle strutture è assegnato automaticamente dal programma di calcolo.

6.2. Carichi permanenti portati

Si assumono i seguenti carichi permanenti:

Ricoprimento soletta superiore	$S_{ric} \cdot \gamma_{ril}$
Supercompattato	$h_s \cdot \gamma_{ric}$
Ballast	$h_b \cdot \gamma_{ballast}$

I permanenti portati hanno l'andamento riportato in figura seguente:

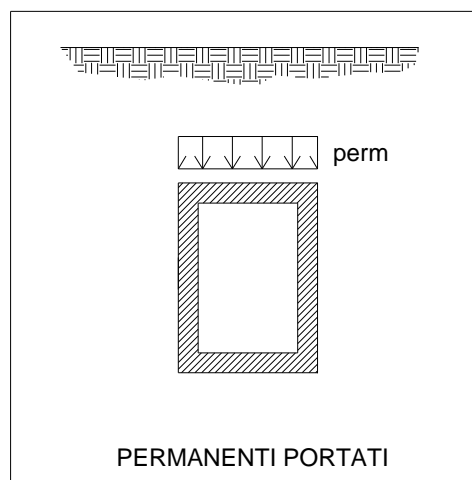


Figura 2 – Schema carichi permanenti

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6.3. Spinta del terreno

Le azioni del terreno (spinta sulle pareti, peso del ricoprimento) vengono valutate per i seguenti parametri:

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

$$\phi = 35^\circ$$

$$c = 0$$

La pressione orizzontale efficace del terreno, σ'_h , sul manufatto viene posta pari ad una frazione della tensione verticale efficace litostatica:

$$\sigma'_h = K \sigma'_v$$

con: σ'_v = tensione efficace verticale

K = coefficiente di spinta

La tensione verticale litostatica ha la seguente espressione:

$$\sigma_v(z) = h_b \cdot \gamma_b + h_s \cdot \gamma_s + (s_{ric} + z) \cdot \gamma_t$$

dove: s_{ric} = ricoprimento del manufatto

z = distanza dall'estradosso del manufatto

h_b = spessore del ballast

h_s = spessore del supercompattato

γ_t = peso specifico del terreno

γ_b = peso specifico del ballast

γ_s = peso proprio del supercompattato

La pressione orizzontale ha l'andamento riportato in figura seguente:

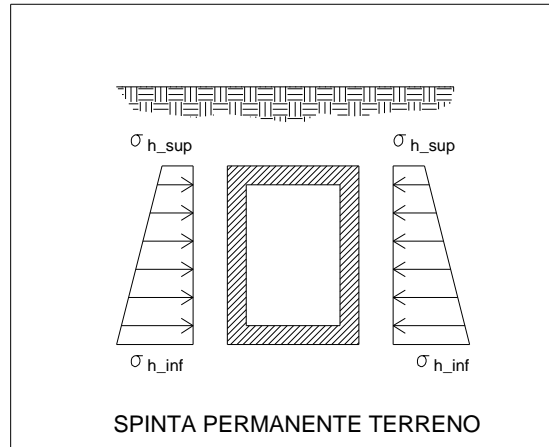


Figura 3 – Schema carichi spinta terreno

La spinta permanente del terreno viene analizzata in tre diverse condizioni:

- $K = K_0 = 1 - \sin\phi$ per entrambi i montanti
- $K = K_0 = 1 - \sin\phi$ per il montante sinistro
 $K = 0.6 \quad K_0 = 0.6 (1 - \sin\phi)$ per il montante destro
- $K = 0.6 \quad K_a = 0.6 (1 - \sin\phi) / (1 + \sin\phi)$ per entrambi i montanti

6.4. Spinte e sottospinte idrauliche

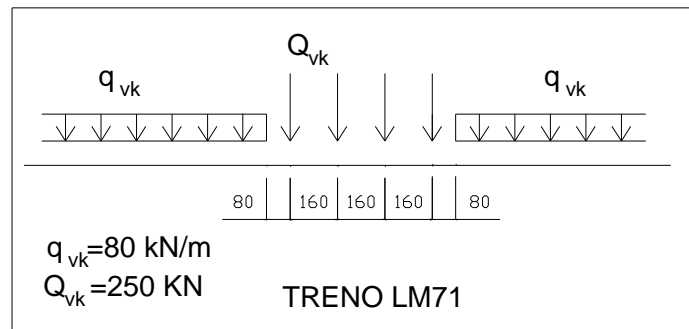
La presenza della falda comporta azioni idrostatiche sui piedritti e sulla soletta di fondazione. Esse risultano pari a:

- Spinta orizzontale sui piedritti: $\sigma_h(z) = (z - z_f) \cdot \gamma_w$
- Sottospinta sulla soletta inferiore: $\sigma_v(z) = (z_s - z_f) \cdot \gamma_w$
 dove z_s = quota della soletta inferiore.

Per la posizione della falda rispetto all'opera in oggetto non si hanno azioni idrostatiche.

6.5. Sovraccarico accidentale LM71

Il sovraccarico accidentale LM71 è assunto come in figura.


Figura 4 – Schema di carico treno LM71

dove:

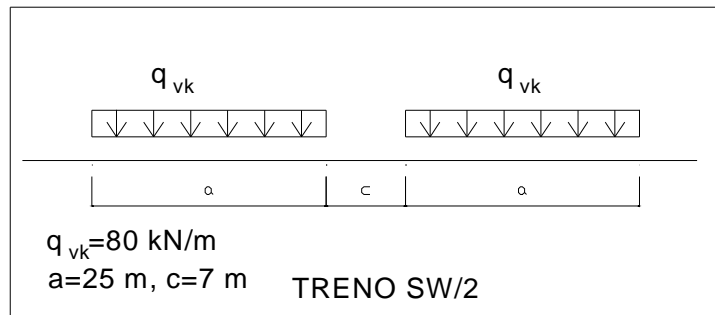
Q_{vk} = 4 assi da 250 kN disposti ad interasse di 1.60 m

q_k = carico distribuito di 80 kN/m in entrambe le direzioni, a partire da 0.80 m dagli assi di estremità e per una lunghezza illimitata

Lo scatolare viene assimilato ad un ponte di categoria A, pertanto tutti i carichi sopra descritti vengono moltiplicati per un coefficiente di adattamento $\alpha = 1.1$.

6.6. Sovraccarico accidentale SW2

Il sovraccarico accidentale SW/2 è assunto come in figura.


Figura 5 – Schema di carico treno SW2

dove:

q_k = carico distribuito di 150 kN/m su due stese per una lunghezza ciascuna pari a 25 m e intervallato da 7 m

Lo scatolare viene assimilato ad un ponte di categoria A, pertanto tutti i carichi sopra descritti vengono moltiplicati per un coefficiente di adattamento $\alpha = 1.0$.

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6.7. Incremento dinamico

Tutti i carichi accidentali ferroviari vengono amplificati per un coefficiente dinamico determinato in relazione ad una linea con ridotto standard manutentivo.

Per scatolari di luce netta inferiore a 8.00 m e altezza netta inferiore a 5.00 m esso vale $\phi_3 = 1.35$.

Per ricoprimenti maggiori di 1.0 m il coefficiente dinamico può essere ridotto secondo l'espressione:

$$\phi_{3,rid} = \phi_3 - (h - 1.00) / 10$$

essendo h la distanza tra estradosso soletta superiore e faccia superiore delle traversine e dovendo comunque risultare $\phi_{3,rid} > 1$.

Per h maggiore di 2.50 m il coefficiente dinamico può essere assunto unitario.

Essendo nel presente caso h=6.10 m circa, il coefficiente dinamico assume valore unitario.

$$\phi_3 = 1.00$$

6.8. Spinta del terreno per sovraccarico LM71 e SW2

La pressione orizzontale efficace del terreno, σ'_{hq} , sul manufatto dovuta al transito del treno LM71 o SW/2 viene posta pari ad una frazione della tensione verticale efficace accidentale:

$$\sigma'_{hq} = K \cdot \sigma'_{vq}$$

con: σ'_{vq} = tensione efficace verticale dovuta al treno LM71 o SW/2

$$K = K_0 = 1 - \sin\phi$$

avendo assunto un coefficiente di spinta pari a quello a riposo per l'elevata rigidità dello scatolare.

La pressione orizzontale accidentale viene applicata sul solo montante sinistro, secondo l'andamento riportato in figura

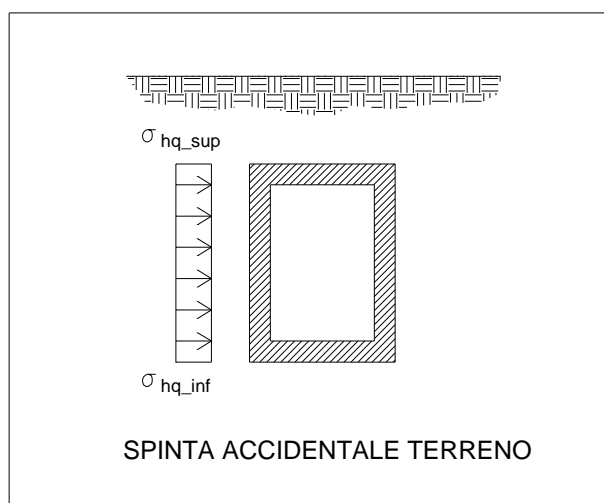


Figura 6 – Schema di carico spinta del terreno per sovraccarico ferroviario

6.9. Avviamento LM71

La forza di avviamento del treno LM71 viene assunta pari a:

$$Q=33 \cdot L \text{ kN}$$

con L la lunghezza di binario interessata dallo scatolare, assunta uguale alla larghezza dello scatolare stesso. Tale risultante non dovrà superare 1000 kN.

La risultante di avviamento viene ripartita sulla soletta superiore con andamento riportato in figura:

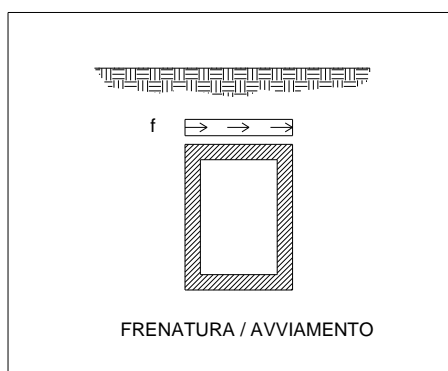


Figura 7 – Schema di carico avviamento LM71

6.10. Frenatura SW/2

La forza di frenatura del treno SW/2 viene assunta pari a:

$$Q=35 \cdot L \text{ kN}$$

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La risultante di frenatura viene ripartita sulla soletta superiore con andamento riportato in figura precedente.

6.11. Temperatura

Si assume una variazione termica uniforme di $\Delta T=15^{\circ}\text{C}$ sulla soletta superiore. Poiché gli effetti della variazione termica possono essere valutati in corrispondenza di un modulo di deformabilità 3 volte inferiore, gli effetti termici equivalgono a quelli prodotti da una variazione termica pari a $\Delta T=15/3=5^{\circ}\text{C}$ e modulo di deformabilità intero.

6.12. Carichi sismici

La verifica in condizione sismica è condotta solo nei casi in cui il ricoprimento è inferiore alla metà dell'altezza totale dello scatolare, $s_{ric} < H/2$. Essendo lo spessore di ricoprimento pari a 5 m circa e l'altezza totale dello scatolare pari a $H=5.30$ m, la verifica in condizione sismica potrà essere omessa.

$$s_{ric} = 5.00 \text{ m}$$

$$H = 5.30 \text{ m}$$

$$s_{ric} > 2.65 \text{ m}$$

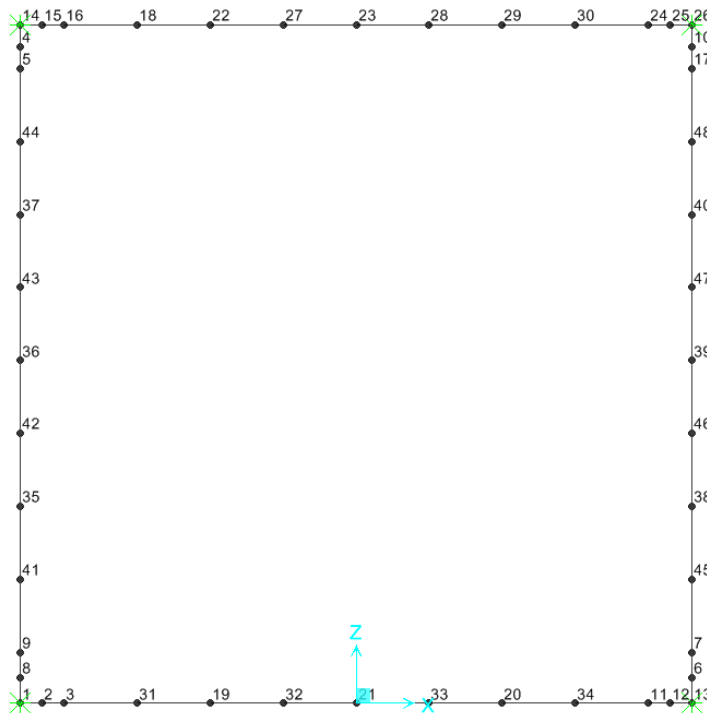
7. CALCOLO DELLE SOLLECITAZIONI

La verifica dello scatolare viene condotto con programma di calcolo automatico che determina, tenendo conto delle azioni descritte, le sollecitazioni massime nei singoli elementi strutturali; nei nodi significativi sono poi effettuate le verifiche di sicurezza con il metodo delle tensioni ammissibili.

7.1. Modello di calcolo

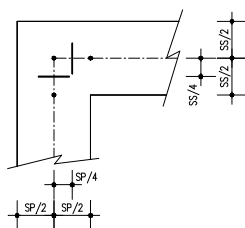
Il modello di calcolo è costituito da un telaio piano che rappresenta una striscia di scatolare di larghezza unitaria. Le solette, di copertura e fondazione, ed i montanti sono modellati da elementi trave, posti in corrispondenza della rispettiva linea media. L'elemento trave che rappresenta la soletta di fondazione è considerato poggiante su di un letto di molle con assegnata costante di Winkler.

Il modello di calcolo, insieme alla numerazione dei nodi, è riportato in figura successiva.

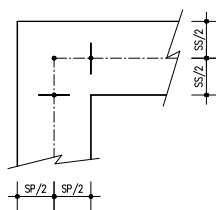


Le verifiche strutturali sono eseguite in corrispondenza delle sezioni più sollecitate. Con riferimento alle sezioni di incastro, i valori di sollecitazione flettente e tagliante – utilizzati per le verifiche – sono stati valutati come illustrato nel seguente schema:

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VERIFICHE A FLESSIONE



VERIFICHE A FESSURAZIONE E TAGLIO

Nello specifico le azioni per le verifiche flessionali sono ricavate dal modello numerico in corrispondenza della sezione posta a un quarto dello spessore dall'asse dell'elemento finito, l'azione tagliante e le azioni per le verifiche a fessurazione vengono invece valutate in corrispondenza della sezione posta a un mezzo dello spessore dall'asse dell'elemento finito.

7.2. Geometria delle aste

Gli spessori delle aste nel modello rispettano la geometria dello scatolare. In particolare:

- Soletta inferiore: Sezione 100x70 cm
- Soletta superiore: Sezione 100x60 cm
- Pareti laterali: Sezione 100x60 cm

7.3. Condizioni di carico

Si analizzano le seguenti condizioni di carico elementari

1. Pesi propri
2. Permanenti portati
3. Spinta del terreno simmetrica per $K=K_0$
4. Spinta del terreno per $K=K_0$ (montante sinistro) e $K=0.6K_0$ (montante destro)
5. Spinta del terreno simmetrica per $K=0.6K_a$
6. Accidentale LM71 in mezzeria
7. Accidentale LM71 in appoggio
8. Spinta del terreno a riposo per LM71 montante sinistro
9. Avviamento LM71
10. Accidentale SW/2 in mezzeria
11. Spinta del terreno a riposo per SW/2 montante sinistro
12. Frenatura SW/2
13. Temperatura

7.4. Analisi dei carichi sulle aste e ai nodi del modello

In relazione alle dimensioni dello scatolare in oggetto ed all'effettivo ricoprimento, si riportano le azioni sulle aste del modello di calcolo, per le diverse condizioni di carico elementari riportate in precedenza.

CONDIZIONE DI CARICO N°1: Peso proprio

Applicato automaticamente dal programma di calcolo ad ogni asta.

CONDIZIONE DI CARICO N°2: Permanenti portati

Soletta superiore:

Elemento	Spess.	γ	Peso
Ballast	0.80 m	18 kN/m ³	14.40 kN/m
Supercompattato	0.30 m	22 kN/m ³	6.60 kN/m
Ricoprimento	4.97 m	20 kN/m ³	99.40 kN/m
Totale			120.40 kN/m

CONDIZIONE DI CARICO N°3: Spinta a riposo simmetrica

$$K = K_0 = 1 - \sin\phi = 0.426$$

$$\sigma_{h1} = 0.426 \cdot [18 \cdot 0.8 + 22 \cdot 0.3 + 20 \cdot (4.97 + 0.60/2)] \cdot c = 53.90 \cdot c \text{ kN/m}$$

$$\sigma_{h2} = 0.426 \cdot [18 \cdot 0.8 + 22 \cdot 0.3 + 20 \cdot (4.97 + 0.60 + 4.00 + 0.70/2)] \cdot c = 93.56 \cdot c \text{ kN/m}$$

$$F1 = 0.426 \cdot [(18 \cdot 0.8 + 22 \cdot 0.3 + 20 \cdot 4.97) \cdot 0.60/2 + 20 \cdot 0.60/2 \cdot 0.60/2 \cdot 1/2] \cdot c = 15.79 \cdot c \text{ kN}$$

$$F2 = 0.426 \cdot [(18 \cdot 0.8 + 22 \cdot 0.3 + 20 \cdot (4.97 + 0.60 + 4.00 + 0.70/2)) \cdot 0.70/2 + 20 \cdot 0.70/2 \cdot 0.70/2 \cdot 1/2] \cdot c = 33.27 \cdot c \text{ kN}$$

c = coefficienti moltiplicativi: parete sx = 1.0, parete dx = 1.0

Parete sinistra

Parete destra

$$\sigma_{h1} = 53.90 \text{ kN/m}$$

$$\sigma_{h1} = 53.90 \text{ kN/m}$$

$$\sigma_{h2} = 93.56 \text{ kN/m}$$

$$\sigma_{h2} = 93.56 \text{ kN/m}$$

$$F1 = 15.79 \text{ kN}$$

$$F1 = 15.79 \text{ kN}$$

$$F2 = 33.27 \text{ kN}$$

$$F2 = 33.27 \text{ kN}$$

CONDIZIONE DI CARICO N°4: Spinta a riposo sulla parete sinistra

$$K = K_0 = 1 - \sin\phi = 0.426$$

$$\sigma_{h1} = 0.426 \cdot [18 \cdot 0.8 + 22 \cdot 0.3 + 20 \cdot (4.97 + 0.60/2)] \cdot c = 53.90 \cdot c \text{ kN/m}$$

$$\sigma_{h2} = 0.426 \cdot [18 \cdot 0.8 + 22 \cdot 0.3 + 20 \cdot (4.97 + 0.60 + 4.00 + 0.70/2)] \cdot c = 93.56 \cdot c \text{ kN/m}$$

$$F1 = 0.426 \cdot [(18 \cdot 0.8 + 22 \cdot 0.3 + 20 \cdot 4.97) \cdot 0.60/2 + 20 \cdot 0.60/2 \cdot 0.60/2 \cdot 1/2] \cdot c = 15.79 \cdot c \text{ kN}$$

$$F2 = 0.426 \cdot [18 \cdot 0.8 + 22 \cdot 0.3 + 20 \cdot (4.97 + 0.60 + 4.00 + 0.70/2)] \cdot 0.70/2 + 20 \cdot 0.70/2 \cdot 0.70/2 \cdot 1/2] \cdot c = 33.27 \cdot c \text{ kN}$$

c = coefficienti moltiplicativi: parete sx =1.0, parete dx=0.6

Parete sinistra

Parete destra

$$\sigma_{h1} = 53.90 \text{ kN/m}$$

$$\sigma_{h1} = 32.34 \text{ kN/m}$$

$$\sigma_{h2} = 93.56 \text{ kN/m}$$

$$\sigma_{h2} = 56.13 \text{ kN/m}$$

$$F1 = 15.79 \text{ kN}$$

$$F1 = 9.47 \text{ kN}$$

$$F2 = 33.27 \text{ kN}$$

$$F2 = 19.96 \text{ kN}$$

CONDIZIONE DI CARICO N°5: Spinta attiva simmetrica

$$K = K_a = (1 - \sin\phi)/(1 + \sin\phi) = 0.271$$

$$\sigma_{h1} = 0.271 \cdot [18 \cdot 0.8 + 22 \cdot 0.3 + 20 \cdot (4.97 + 0.60/2)] \cdot c = 34.25 \cdot c \text{ kN/m}$$

$$\sigma_{h2} = 0.271 \cdot [18 \cdot 0.8 + 22 \cdot 0.3 + 20 \cdot (4.97 + 0.60 + 4.00 + 0.70/2)] \cdot c = 59.46 \cdot c \text{ kN/m}$$

$$F1 = 0.271 \cdot [(18 \cdot 0.8 + 22 \cdot 0.3 + 20 \cdot 4.97) \cdot 0.60/2 + 20 \cdot 0.60/2 \cdot 0.60/2 \cdot 1/2] \cdot c = 10.03 \cdot c \text{ kN}$$

$$F2 = 0.271 \cdot [(18 \cdot 0.8 + 22 \cdot 0.3 + 20 \cdot (4.97 + 0.60 + 4.00 + 0.70/2)) \cdot 0.70/2 + 20 \cdot 0.70/2 \cdot 0.70/2 \cdot 1/2] \cdot c = 21.14 \cdot c \text{ kN}$$

c = coefficienti moltiplicativi: parete sx =0.6, parete dx=0.6

Parete sinistra

Parete destra

$$\sigma_{h1} = 20.55 \text{ kN/m}$$

$$\sigma_{h1} = 20.55 \text{ kN/m}$$

$$\sigma_{h2} = 35.67 \text{ kN/m}$$

$$\sigma_{h2} = 35.67 \text{ kN/m}$$

$$F1 = 6.02 \text{ kN}$$

$$F1 = 6.02 \text{ kN}$$

$$F2 = 12.68 \text{ kN}$$

$$F2 = 12.68 \text{ kN}$$

Coefficiente dinamico

Per ricoprimenti dello scatolare maggiore di 2.50 m, il coefficiente dinamico è assunto pari a 1.00.

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$$\phi_3 = 1.000$$

Ripartizione trasversale del carico:

Diffondendo il carico nel ricoprimento, supponendo una diffusione di 1:4 all'interno del ballast, di ϕ nel terreno di ricoprimento e all'interno del supercompattato e 1:1 all'interno della soletta, l'impronta di carico in senso trasversale all'estradosso soletta superiore vale:

$$b_d = 2.60 + 2 (0.8/4 + (0.30 + 4.97) \cdot \tan 35^\circ + 0.60/2) = \mathbf{8.59 \text{ m}}$$

Si ha la sovrapposizione dei carichi dei tre binari che sono posti a interasse di 4.5 m.

Per $b_d > 4.5 \text{ m}$ si assume $b_d = \mathbf{4.5 \text{ m}}$.

CONDIZIONE DI CARICO N°6: Treno LM71 in mezzeria

Il treno LM71 viene schematizzato con un carico ripartito di

$$q_1 = (4 \cdot 250) / (4 \cdot 1.6) = 156 \text{ kN/m}$$

su una lunghezza di $L_q = 4 \cdot 1.6 = 6.4 \text{ m}$ e con un carico ripartito di

$$q_2 = 80 \text{ kN/m}$$

all'esterno di L_q .

Il coefficiente di adattamento α vale 1.1.

Per la ripartizione del carico in senso trasversale, il carico verticale dovuto al transito del treno vale pertanto:

$$q_{sf1} = \phi_3 \alpha q_1 / b_d = 1.000 \cdot 1.1 \cdot 156 / 4.50 = \mathbf{38.19 \text{ kN/m}}$$
 per tutto lo sviluppo della soletta

$$P_{sf1} = q_{sf1} \cdot sp / 2 = 38.19 \cdot 0.6 / 2 = \mathbf{11.46 \text{ kN}}$$

Essendo lo sviluppo del tombino inferiore a 6.4 m sulla soletta insiste il solo carico q_1 .

CONDIZIONE DI CARICO N°7: Treno LM71 in appoggio

Essendo lo sviluppo del tombino inferiore a 6.4 m la condizione di carico N. 7 è uguale alla condizione di carico N.6.

CONDIZIONE DI CARICO N°8: Spinta a riposo treno LM71 sulla parete sinistra

Coefficiente di spinta: $K = 0.426$.

In corrispondenza degli estremi delle aste che rappresentano le pareti, la pressione della terra dovuta al transito del LM71 vale:

$$\sigma_h = K \alpha q_1 / b_d = \mathbf{16.29 \text{ kN/m}}$$

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Le risultanti orizzontali della pressione del terreno in corrispondenza della soletta superiore ed inferiore sono:

$$F1 = \sigma_h \cdot ss/2 = \mathbf{4.89 \text{ kN}}$$

$$F2 = \sigma_h \cdot si/2 = \mathbf{5.70 \text{ kN}}$$

CONDIZIONE DI CARICO N°9: Avviamento treno LM71

La forza di avviamento a metro lineare viene valutata come:

$$p = \max(1000, 33 \times L_{\text{tot}}) / L_{\text{calc}} / b_d = \max(1000, 33 \cdot 5.20) / 4.60 / 4.50 = \mathbf{8.29 \text{ kN/m}}$$

con $f = 33 \text{ kN/m}$: forza di avviamento LM71 per binario

100 kN: massima forza di avviamento

$$L_{\text{tot}} = \text{larghezza totale del tombino} = 5.20 \text{ m}$$

$$L_{\text{calc}} = \text{larghezza di calcolo del tombino} = 4.60 \text{ m}$$

$$b_d = \text{larghezza trasversale collaborante} = 4.50 \text{ m}$$

CONDIZIONE DI CARICO N°10: Treno SW/2 in mezzeria

Il treno SW/2 viene schematizzato con un carico ripartito di

$$q_1 = 150 \text{ kN/m}$$

su una lunghezza di $L = 15.0 \text{ m}$

Il coefficiente di adattamento α vale 1.00.

Per la diffusione del carico in senso trasversale, il carico verticale dovuto al transito del treno vale pertanto:

$$q_{\text{sf}} = \phi_3 \alpha q_1 / b_d = \mathbf{33.33 \text{ kN/m}}$$

$$P_{\text{sf1}} = q_{\text{sf}} \cdot sp / 2 = \mathbf{10.00 \text{ kN}}$$

CONDIZIONE DI CARICO N°11: Spinta a riposo treno SW/2 sulla parete sinistra

Coefficiente di spinta: $K = 0.426$

In corrispondenza degli estremi delle aste che rappresentano le pareti, la pressione della terra dovuta al transito del SW/2 vale:

$$\sigma_h = K \alpha q_1 / b_d = \mathbf{14.21 \text{ kN/m}}$$

Le risultanti orizzontali della pressione del terreno in corrispondenza della soletta superiore ed inferiore sono:

$$F1 = \sigma_h \cdot ss/2 = \mathbf{4.26 \text{ kN}}$$

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$$F2 = \sigma_h \cdot si/2 = 4.97 \text{ kN}$$

CONDIZIONE DI CARICO N°12: Frenatura treno SW/2

La forza di frenatura viene valutata come

$$p = 35 \cdot L_{tot}/L_{calc} / b_d = 8.79 \text{ kN/m}$$

con $f = 35 \text{ kN/m}$: forza di frenatura SW/2 per binario

$$L_{tot} = \text{larghezza totale del tombino} = 5.20 \text{ m}$$

$$L_{calc} = \text{larghezza di calcolo del tombino} = 4.60 \text{ m}$$

$$b_d = \text{larghezza trasversale collaborante} = 4.50 \text{ m}$$

CONDIZIONE DI CARICO N°13: Variazioni termiche

Una variazione termica uniforme della soletta superiore pari a

$$\Delta T = 15^\circ\text{C}$$

ed un modulo di deformabilità ridotto ad 1/3 equivalgono ad assumere una variazione termica di

$$\Delta T = 15/3 = 5^\circ\text{C}$$

7.5. Combinazioni di carico

In relazione alle condizioni elementari di carico riportate ai paragrafi precedenti, le verifiche di sicurezza vengono condotte per le seguenti combinazioni di carico:

Comb. TA1	num.comb 54	da comb 1	a comb 54
Comb. TA2	num.comb 54	da comb 55	a comb 108
Comb. TA3	num.comb 6	da comb 109	a comb 114
Comb. TA5	num.comb 18	da comb 115	a comb 132
Sisma	num.comb 2	da comb 133	a comb 134

All'interno delle 54 combinazioni TA1 e TA2 le prime 18 combinazioni si riferiscono rispettivamente al gruppo di verifica 1, le seconde 18 al gruppo 3_a e le terze 18 al gruppo di verifica 3_b, così definiti:

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	Accidentale verticale (LM71 o SW/2)	Frenatura o avviamento
Gruppo 1	1.00	0.00
Gruppo 3_a	1.00	1.00
Gruppo 3_b	0.70	1.00

All'interno di ognuna delle 18 combinazioni, le prime, le seconde e le terze 6 combinazioni si riferiscono rispettivamente alle tre condizioni di spinta statica del terreno (K_0 sui due montanti, K_0 sul montante sinistro e $0.6K_0$ sul montante destro, $0.6K_a$ sui due montanti). All'interno di ognuna delle sei combinazioni, le prime tre e le seconde tre si riferiscono rispettivamente alle condizioni con + e - ΔT , mentre ognuna delle tre combinazioni si riferisce alle condizioni LM71 in mezzeria, LM71 in appoggio e SW/2 in mezzeria.

All'interno delle 6 combinazioni TA3, non essendo presente il sovraccarico accidentale e la relativa frenatura/avviamento, le prime, le seconde e le terze 2 combinazioni si riferiscono rispettivamente alle tre condizioni di spinta statica del terreno (K_0 sui due montanti, K_0 sul montante sinistro e $0.6K_0$ sul montante destro, $0.6K_a$ sui due montanti). All'interno di ognuna delle 2 combinazioni, la prima e la seconda si riferiscono rispettivamente alle condizioni con + e - ΔT .

All'interno delle 18 combinazioni TA5, essendoci un solo gruppo di verifica, così definito:

	Accidentale verticale (LM71 o SW/2)	Frenatura o avviamento
Gruppo 6	0.80	0.80

le prime, le seconde e le terze 6 combinazioni si riferiscono rispettivamente alle tre condizioni di spinta statica del terreno (K_0 sui due montanti, K_0 sul montante sinistro e $0.6K_0$ sul montante destro, $0.6K_a$ sui due montanti). All'interno di ognuna delle sei combinazioni, le prime tre e le seconde tre si riferiscono rispettivamente alle condizioni con + e - ΔT , mentre ognuna delle tre combinazioni si riferisce alle condizioni LM71 in mezzeria, LM71 in appoggio e SW/2 in mezzeria.

Le due combinazioni sismiche, se presenti, si riferiscono a sisma + e sisma -, con le componenti sismiche sommate come da normativa ($\alpha = (\alpha_h^2 + \alpha_v^2)^{1/2}$).

Gli effettivi coefficienti moltiplicativi adottati nelle 134 combinazioni di carico, in relazione alle 15 condizioni elementari di carico, sono riportati nelle tabelle che seguono.

Le verifiche di sicurezza in termini tensionali vengono condotte per le sole combinazioni TA1, TA2, TA3 e Fase sismica, rispettivamente rappresentate dalle combinazioni da 1 a 114 e da 133 a 134,

essendo le altre sicuramente verificate. Le verifiche a fessurazione vengono condotte per le combinazioni da 115 a 132.

Le combinazioni di carico studiate sono le seguenti:

Combinazione T.A.1													
n°	Nome	Condizioni di carico											
		1+2	3	4	5	6	7	8	9	10	11	12	13
1	TAIG1A1	1	1	-	-	1	-	1	-	-	-	-	0.6
2	TAIG1B1	1	1	-	-	-	1	1	-	-	-	-	0.6
3	TAIG1C1	1	1	-	-	-	-	-	-	1	1	-	0.6
4	TAIG1D1	1	1	-	-	1	-	1	-	-	-	-	-0.6
5	TAIG1E1	1	1	-	-	-	1	1	-	-	-	-	-0.6
6	TAIG1F1	1	1	-	-	-	-	-	-	1	1	-	-0.6
7	TAIG1A2	1	-	1	-	1	-	1	-	-	-	-	0.6
8	TAIG1B2	1	-	1	-	-	1	1	-	-	-	-	0.6
9	TAIG1C2	1	-	1	-	-	-	-	-	1	1	-	0.6
10	TAIG1D2	1	-	1	-	1	-	1	-	-	-	-	-0.6
11	TAIG1E2	1	-	1	-	-	1	1	-	-	-	-	-0.6
12	TAIG1F2	1	-	1	-	-	-	-	-	1	1	-	-0.6
13	TAIG1A3	1	-	-	1	1	-	1	-	-	-	-	0.6
14	TAIG1B3	1	-	-	1	-	1	1	-	-	-	-	0.6
15	TAIG1C3	1	-	-	1	-	-	-	-	1	1	-	0.6
16	TAIG1D3	1	-	-	1	1	-	1	-	-	-	-	-0.6
17	TAIG1E3	1	-	-	1	-	1	1	-	-	-	-	-0.6
18	TAIG1F3	1	-	-	1	-	-	-	-	1	1	-	-0.6
19	TAIG31A1	1	1	-	-	1	-	1	1	-	-	-	0.6
20	TAIG31B1	1	1	-	-	-	1	1	1	-	-	-	0.6
21	TAIG31C1	1	1	-	-	-	-	-	-	1	1	1	0.6
22	TAIG31D1	1	1	-	-	1	-	1	1	-	-	-	-0.6
23	TAIG31E1	1	1	-	-	-	1	1	1	-	-	-	-0.6
24	TAIG31F1	1	1	-	-	-	-	-	-	1	1	1	-0.6
25	TAIG31A2	1	-	1	-	1	-	1	1	-	-	-	0.6
26	TAIG31B2	1	-	1	-	-	1	1	1	-	-	-	0.6
27	TAIG31C2	1	-	1	-	-	-	-	-	1	1	1	0.6
28	TAIG31D2	1	-	1	-	1	-	1	1	-	-	-	-0.6
29	TAIG31E2	1	-	1	-	-	1	1	1	-	-	-	-0.6
30	TAIG31F2	1	-	1	-	-	-	-	-	1	1	1	-0.6
31	TAIG31A3	1	-	-	1	1	-	1	1	-	-	-	0.6
32	TAIG31B3	1	-	-	1	-	1	1	1	-	-	-	0.6
33	TAIG31C3	1	-	-	1	-	-	-	-	1	1	1	0.6
34	TAIG31D3	1	-	-	1	1	-	1	1	-	-	-	-0.6
35	TAIG31E3	1	-	-	1	-	1	1	1	-	-	-	-0.6
36	TAIG31F3	1	-	-	1	-	-	-	-	1	1	1	-0.6
37	TAIG32A1	1	1	-	-	0.7	-	0.7	1	-	-	-	0.6
38	TAIG32B1	1	1	-	-	-	0.7	0.7	1	-	-	-	0.6
39	TAIG32C1	1	1	-	-	-	-	-	-	0.7	0.7	1	0.6
40	TAIG32D1	1	1	-	-	0.7	-	0.7	1	-	-	-	-0.6
41	TAIG32E1	1	1	-	-	-	0.7	0.7	1	-	-	-	-0.6
42	TAIG32F1	1	1	-	-	-	-	-	-	0.7	0.7	1	-0.6
43	TAIG32A2	1	-	1	-	0.7	-	0.7	1	-	-	-	0.6
44	TAIG32B2	1	-	1	-	-	0.7	0.7	1	-	-	-	0.6
45	TAIG32C2	1	-	1	-	-	-	-	-	0.7	0.7	1	0.6

46	TA1G32D2	1	-	1	-	0.7	-	0.7	1	-	-	-	-0.6
47	TA1G32E2	1	-	1	-	-	0.7	0.7	1	-	-	-	-0.6
48	TA1G32F2	1	-	1	-	-	-	-	-	0.7	0.7	1	-0.6
49	TA1G32A3	1	-	-	1	0.7	-	0.7	1	-	-	-	0.6
50	TA1G32B3	1	-	-	1	-	0.7	0.7	1	-	-	-	0.6
51	TA1G32C3	1	-	-	1	-	-	-	-	0.7	0.7	1	0.6
52	TA1G32D3	1	-	-	1	0.7	-	0.7	1	-	-	-	-0.6
53	TA1G32E3	1	-	-	1	-	0.7	0.7	1	-	-	-	-0.6
54	TA1G32F3	1	-	-	1	-	-	-	-	0.7	0.7	1	-0.6

Combinazione T.A.2

n°	Nome	Condizioni di carico											
		1+2	3	4	5	6	7	8	9	10	11	12	13
55	TA2G1A1	1	1	-	-	0.8	-	0.8	-	-	-	-	1
56	TA2G1B1	1	1	-	-	-	0.8	0.8	-	-	-	-	1
57	TA2G1C1	1	1	-	-	-	-	-	-	0.8	0.8	-	1
58	TA2G1D1	1	1	-	-	0.8	-	0.8	-	-	-	-	-1
59	TA2G1E1	1	1	-	-	-	0.8	0.8	-	-	-	-	-1
60	TA2G1F1	1	1	-	-	-	-	-	-	0.8	0.8	-	-1
61	TA2G1A2	1	-	1	-	0.8	-	0.8	-	-	-	-	1
62	TA2G1B2	1	-	1	-	-	0.8	0.8	-	-	-	-	1
63	TA2G1C2	1	-	1	-	-	-	-	-	0.8	0.8	-	1
64	TA2G1D2	1	-	1	-	0.8	-	0.8	-	-	-	-	-1
65	TA2G1E2	1	-	1	-	-	0.8	0.8	-	-	-	-	-1
66	TA2G1F2	1	-	1	-	-	-	-	-	0.8	0.8	-	-1
67	TA2G1A3	1	-	-	1	0.8	-	0.8	-	-	-	-	1
68	TA2G1B3	1	-	-	1	-	0.8	0.8	-	-	-	-	1
69	TA2G1C3	1	-	-	1	-	-	-	-	0.8	0.8	-	1
70	TA2G1D3	1	-	-	1	0.8	-	0.8	-	-	-	-	-1
71	TA2G1E3	1	-	-	1	-	0.8	0.8	-	-	-	-	-1
72	TA2G1F3	1	-	-	1	-	-	-	-	0.8	0.8	-	-1
73	TA2G31A1	1	1	-	-	0.8	-	0.8	0.8	-	-	-	1
74	TA2G31B1	1	1	-	-	-	0.8	0.8	0.8	-	-	-	1
75	TA2G31C1	1	1	-	-	-	-	-	-	0.8	0.8	0.8	1
76	TA2G31D1	1	1	-	-	0.8	-	0.8	0.8	-	-	-	-1
77	TA2G31E1	1	1	-	-	-	0.8	0.8	0.8	-	-	-	-1
78	TA2G31F1	1	1	-	-	-	-	-	-	0.8	0.8	0.8	-1
79	TA2G31A2	1	-	1	-	0.8	-	0.8	0.8	-	-	-	1
80	TA2G31B2	1	-	1	-	-	0.8	0.8	0.8	-	-	-	1
81	TA2G31C2	1	-	1	-	-	-	-	-	0.8	0.8	0.8	1
82	TA2G31D2	1	-	1	-	0.8	-	0.8	0.8	-	-	-	-1
83	TA2G31E2	1	-	1	-	-	0.8	0.8	0.8	-	-	-	-1
84	TA2G31F2	1	-	1	-	-	-	-	-	0.8	0.8	0.8	-1
85	TA2G31A3	1	-	-	1	0.8	-	0.8	0.8	-	-	-	1
86	TA2G31B3	1	-	-	1	-	0.8	0.8	0.8	-	-	-	1
87	TA2G31C3	1	-	-	1	-	-	-	-	0.8	0.8	0.8	1
88	TA2G31D3	1	-	-	1	0.8	-	0.8	0.8	-	-	-	-1
89	TA2G31E3	1	-	-	1	-	0.8	0.8	0.8	-	-	-	-1
90	TA2G31F3	1	-	-	1	-	-	-	-	0.8	0.8	0.8	-1
91	TA2G32A1	1	1	-	-	0.56	-	0.56	0.8	-	-	-	1
92	TA2G32B1	1	1	-	-	-	0.56	0.56	0.8	-	-	-	1
93	TA2G32C1	1	1	-	-	-	-	-	-	0.56	0.56	0.8	1
94	TA2G32D1	1	1	-	-	0.56	-	0.56	0.8	-	-	-	-1

95	TA2G32E1	1	1	-	-	-	0.56	0.56	0.8	-	-	-	-1
96	TA2G32F1	1	1	-	-	-	-	-	-	0.56	0.56	0.8	-1
97	TA2G32A2	1	-	1	-	0.56	-	0.56	0.8	-	-	-	1
98	TA2G32B2	1	-	1	-	-	0.56	0.56	0.8	-	-	-	1
99	TA2G32C2	1	-	1	-	-	-	-	-	0.56	0.56	0.8	1
100	TA2G32D2	1	-	1	-	0.56	-	0.56	0.8	-	-	-	-1
101	TA2G32E2	1	-	1	-	-	0.56	0.56	0.8	-	-	-	-1
102	TA2G32F2	1	-	1	-	-	-	-	-	0.56	0.56	0.8	-1
103	TA2G32A3	1	-	-	1	0.56	-	0.56	0.8	-	-	-	1
104	TA2G32B3	1	-	-	1	-	0.56	0.56	0.8	-	-	-	1
105	TA2G32C3	1	-	-	1	-	-	-	-	0.56	0.56	0.8	1
106	TA2G32D3	1	-	-	1	0.56	-	0.56	0.8	-	-	-	-1
107	TA2G32E3	1	-	-	1	-	0.56	0.56	0.8	-	-	-	-1
108	TA2G32F3	1	-	-	1	-	-	-	-	0.56	0.56	0.8	-1

Combinazione T.A.3

n°	Nome	Condizioni di carico											
		1+2	3	4	5	6	7	8	9	10	11	12	13
109	TA3SCAR1	1	1	-	-	-	-	-	-	-	-	-	0.6
110	TA3SCAR2	1	1	-	-	-	-	-	-	-	-	-	-0.6
111	TA3SCAR3	1	-	1	-	-	-	-	-	-	-	-	0.6
112	TA3SCAR4	1	-	1	-	-	-	-	-	-	-	-	-0.6
113	TA3SCAR5	1	-	-	1	-	-	-	-	-	-	-	0.6
114	TA3SCAR6	1	-	-	1	-	-	-	-	-	-	-	-0.6

Combinazione T.A.5

n°	Nome	Condizioni di carico											
		1+2	3	4	5	6	7	8	9	10	11	12	13
115	TA5G61A1	1	1	-	-	0.8	-	0.8	0.8	-	-	-	0.6
116	TA5G61B1	1	1	-	-	-	0.8	0.8	0.8	-	-	-	0.6
117	TA5G61C1	1	1	-	-	-	-	-	-	0.8	0.8	0.8	0.6
118	TA5G61D1	1	1	-	-	0.8	-	0.8	0.8	-	-	-	-0.6
119	TA5G61E1	1	1	-	-	-	0.8	0.8	0.8	-	-	-	-0.6
120	TA5G61F1	1	1	-	-	-	-	-	-	0.8	0.8	0.8	-0.6
121	TA5G61A2	1	-	1	-	0.8	-	0.8	0.8	-	-	-	0.6
122	TA5G61B2	1	-	1	-	-	0.8	0.8	0.8	-	-	-	0.6
123	TA5G61C2	1	-	1	-	-	-	-	-	0.8	0.8	0.8	0.6
124	TA5G61D2	1	-	1	-	0.8	-	0.8	0.8	-	-	-	-0.6
125	TA5G61E2	1	-	1	-	-	0.8	0.8	0.8	-	-	-	-0.6
126	TA5G61F2	1	-	1	-	-	-	-	-	0.8	0.8	0.8	-0.6
127	TA5G61A3	1	-	-	1	0.8	-	0.8	0.8	-	-	-	0.6
128	TA5G61B3	1	-	-	1	-	0.8	0.8	0.8	-	-	-	0.6
129	TA5G61C3	1	-	-	1	-	-	-	-	0.8	0.8	0.8	0.6
130	TA5G61D3	1	-	-	1	0.8	-	0.8	0.8	-	-	-	-0.6
131	TA5G61E3	1	-	-	1	-	0.8	0.8	0.8	-	-	-	-0.6
132	TA5G61F3	1	-	-	1	-	-	-	-	0.8	0.8	0.8	-0.6

Sisma

n°	Nome	Condizioni di carico
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		1+2	3	14			
				Spinta sismica	Inerzia pos.*	Inerzia neg.*	Treno sismico
133	TASISMAP	1	1	1	1	-	1
134	TASISMAN	1	1	1	-	1	1

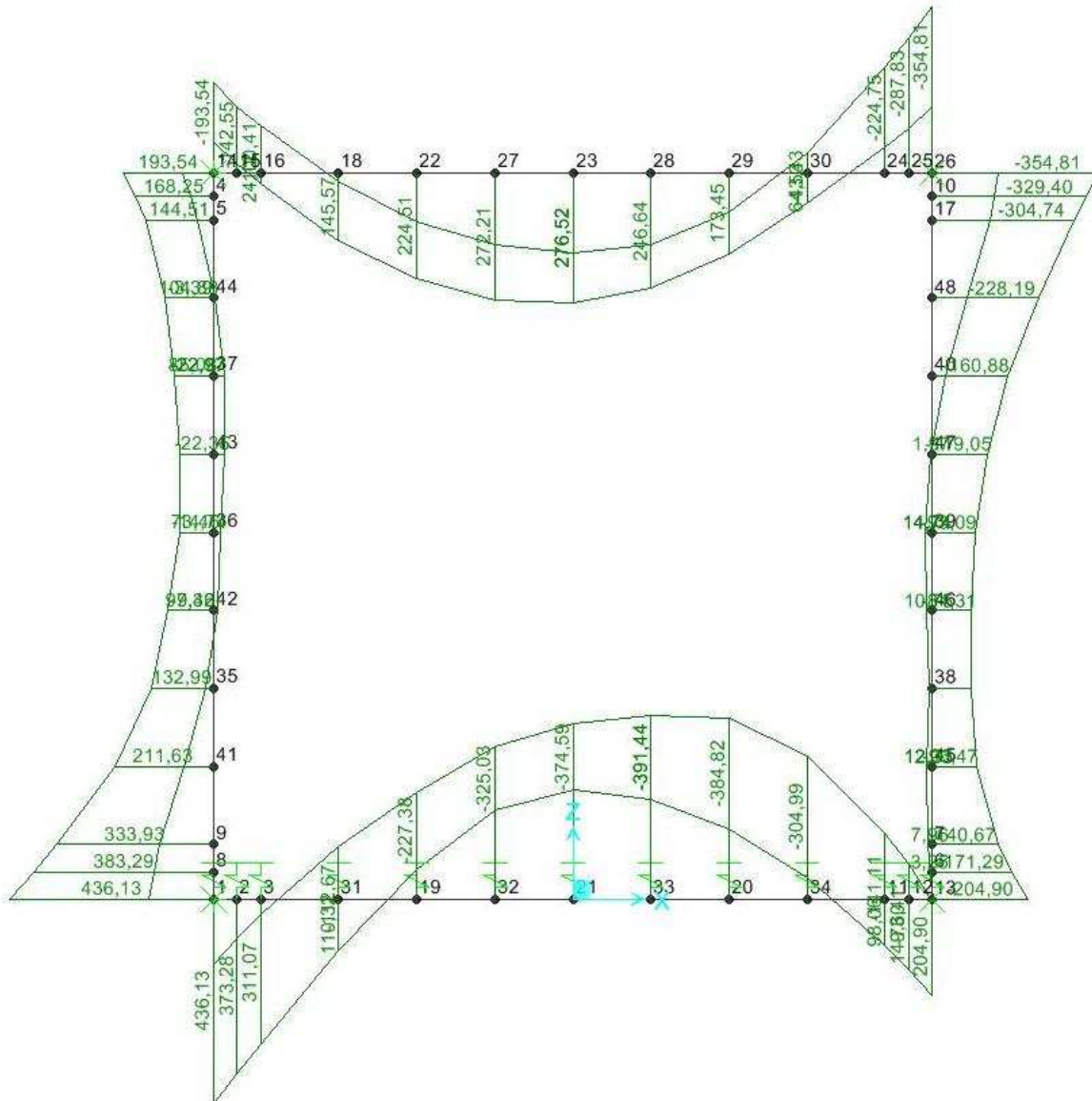
* Inerzia pos e inerzia neg sono date dalla radice della somma dei quadrati delle componenti di inerzia orizzontale e verticale ($\alpha = (\alpha_h^2 + \alpha_v^2)^{1/2}$), con la componente verticale rivolta rispettivamente verso l'alto e verso il basso.

Nelle colonne 'Nome' è indicato il nome con cui sono stati chiamati i gruppi e le condizioni di carico nel modello di calcolo in modo da poterli distinguere nei tabulati.

7.6. Diagrammi di involuppo

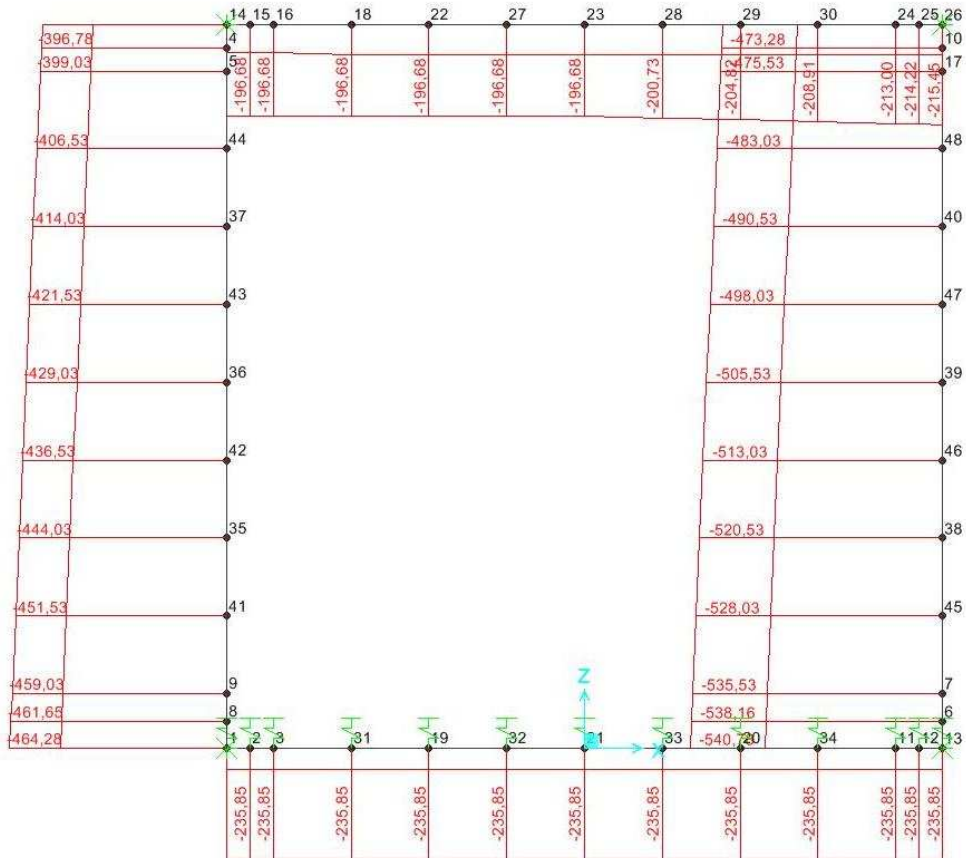
Di seguito si riportano i diagrammi delle sollecitazioni flettenti, taglianti e flessionali agenti sulla struttura nella condizione di involuppo delle combinazioni TA:

Momento flettente:

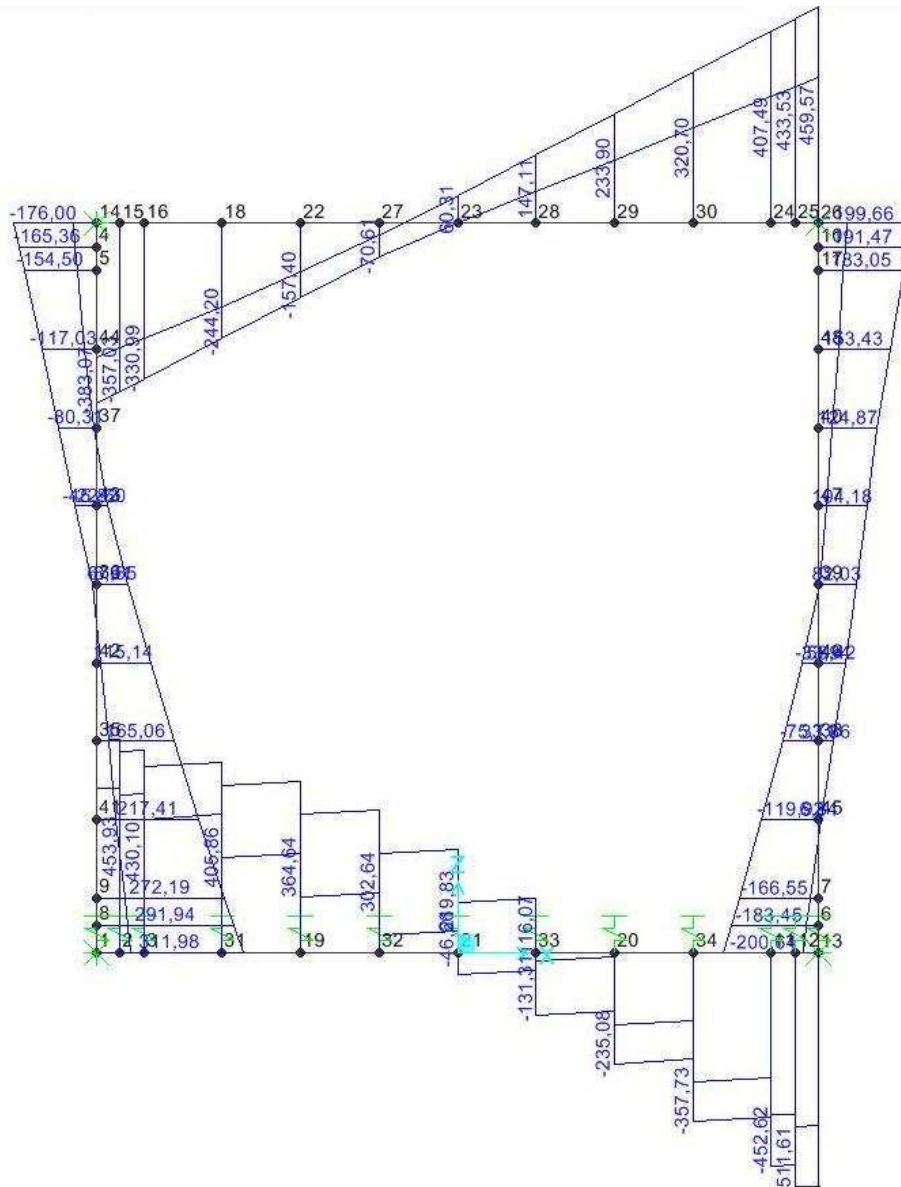




Azione assiale:

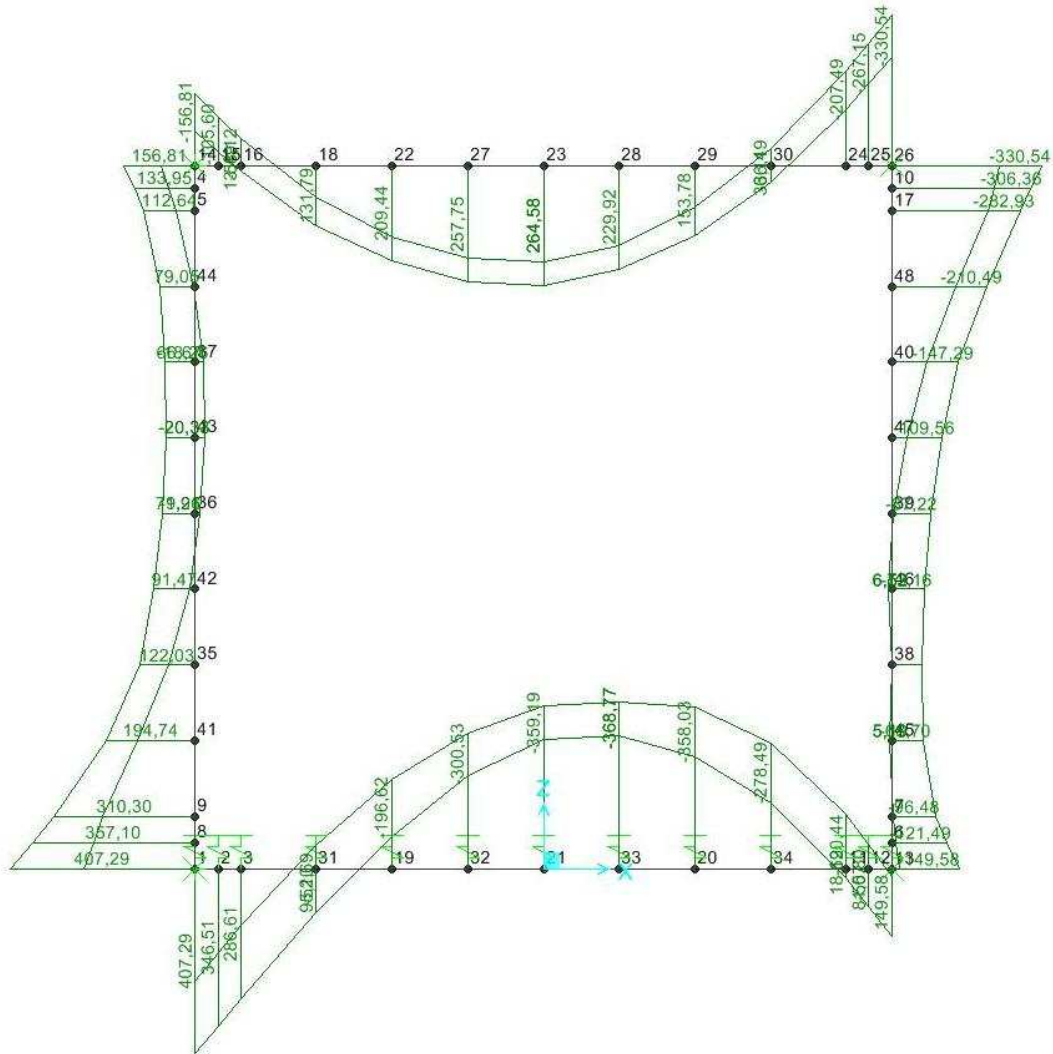


Azione tagliante:

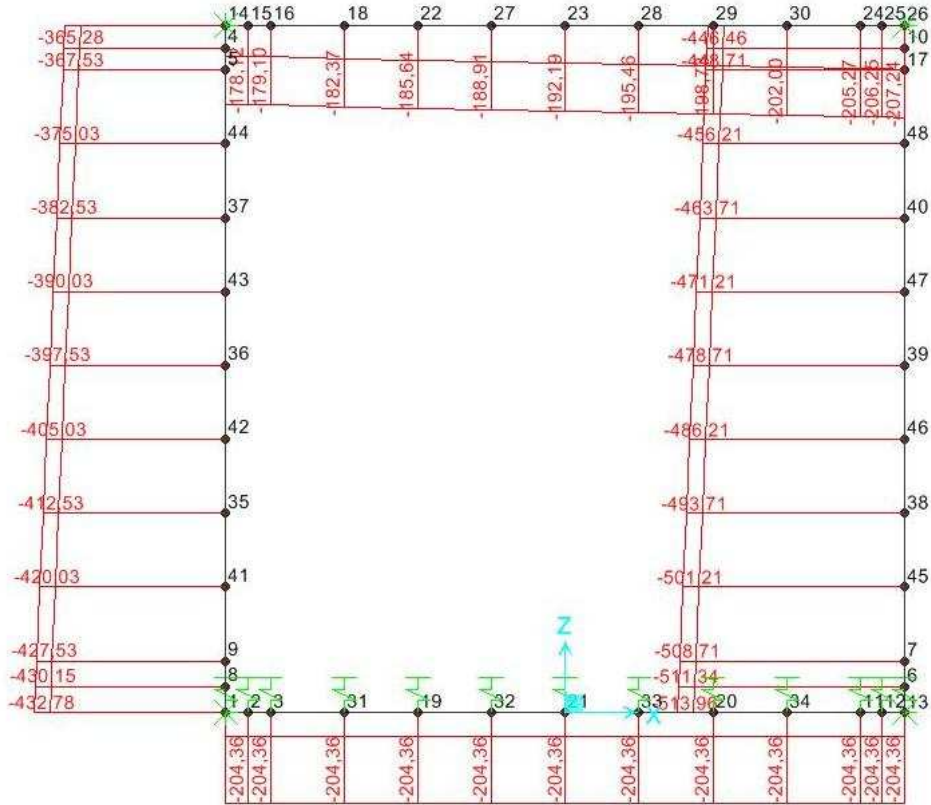


Di seguito si riportano i diagrammi delle sollecitazioni flettenti e flessionali agenti sulla struttura nella condizione di inviluppo delle combinazioni TA5:

Momento flettente:



Azione assiale:

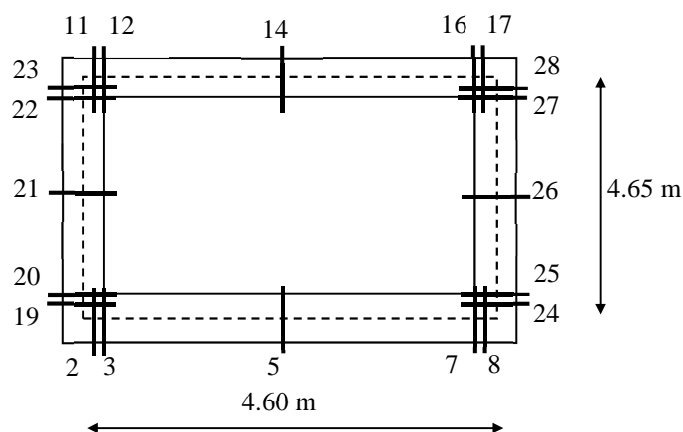


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8. VERIFICHE

Si forniscono nel seguito le verifiche alle tensioni ammissibili ed alla fessurazione nelle sezioni principali di ciascun elemento strutturale (platea, montanti e soletta).

Il momento flettente si verifica, oltre che nelle sezioni di mezzeria, anche nelle sezioni a metà tra asse piedritto e sezione d'attacco piedritto – soletta, nel caso delle verifiche della soletta, e in quelle a metà tra asse soletta e sezione d'attacco soletta – piedritto, per le verifiche del piedritto. Il taglio si verifica nelle sezioni d'attacco degli elementi.



Nelle solette superiore e inferiore, il copriferro netto delle armature trasversali è di 56 mm (allo spessore minimo del copriferro di 40 mm si è sommato il diametro dell'armatura longitudinale costituita da $\phi 16$), nei piedritti, il copriferro netto delle armature verticali è di 70 mm (allo spessore minimo del copriferro di 40 mm si è sommato il diametro dell'armatura longitudinale costituita da $\phi 16$ e il diametro degli spilli costituita da $\phi 14$).

Per la disposizione delle armature si rimanda agli elaborati specifici, nelle tabelle di verifica sono riportate le armature compresse e tese per ciascun nodo in cui è stata condotta la verifica.

La soletta di copertura è così armata:

- all'incastro con il piedritto con un'armatura al lembo superiore (lembo teso) costituita da $\phi 26/20$ e al lembo inferiore (lembo compresso) costituita da $\phi 24/20$;
- in mezzeria con un'armatura al lembo inferiore (lembo teso) costituita da $\phi 24/20 + \phi 24/40$ e al lembo superiore (lembo compresso) costituita da $\phi 26/20$.

La soletta di fondazione è così armata:

- all'incastro con il piedritto con un'armatura al lembo inferiore (lembo teso) costituita da $\phi 26/20$ e al lembo superiore (lembo compresso) costituita da $\phi 26/20$;
- in mezzeria con un'armatura al lembo superiore (lembo teso) costituita da $\phi 26/20 + \phi 26/40$ e al lembo inferiore (lembo compresso) costituita da $\phi 26/20$.

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I piedritti sono armati per tutto il loro sviluppo con un'armatura al lembo esterno (lembo teso) costituita da $\phi 26/20 + \phi 26/40$ e al lembo interno (lembo compresso) costituita da $\phi 16/20$.

8.1. Verifiche alle tensioni ammissibili

	Sez.	M (kNm)	N (kN)	A_s (mm ²)	A'_s (mm ²)	X (mm)	σ_c (N/mm ²)	σ_s (N/mm ²)
Soletta inferiore sp. 70 cm	2	373.28	-65.78	$\phi 26/20$	$\phi 26/20$	169.5	-6.02	245.9
	5	-391.44	-65.78	$\phi 26/20 + \phi 26/40$	$\phi 26/20$	201.8	-5.47	174.5
Soletta superiore sp. 60 cm	14	276.52	-44.73	$\phi 24/20 + \phi 24/40$	$\phi 26/20$	169.8	-5.39	172.4
	17	-287.83	-44.73	$\phi 26/20$	$\phi 24/20$	155.0	-6.26	227.7
Piedritto sinistro sp. 60 cm	19	383.29	-353.02	$\phi 26/20 + \phi 26/40$	$\phi 16/20$	221.7	-8.59	171.7
	21	-14.74	-320.39	$\phi 16/20$	$\phi 26/20 + \phi 26/40$	818.5	-0.68	3.7
	23	168.25	-288.14	$\phi 26/20 + \phi 26/40$	$\phi 16/20$	252.3	-3.90	61.4
Piedritto destro sp. 60 cm	24	171.29	-378.55	$\phi 26/20 + \phi 26/40$	$\phi 16/20$	273.0	-4.03	54.0
	26	-14.74	-345.92	$\phi 16/20$	$\phi 26/20 + \phi 26/40$	829.3	-0.73	4.1
	28	329.40	-313.67	$\phi 26/20 + \phi 26/40$	$\phi 16/20$	222.8	-7.41	146.8

A_s : armatura tesa

A'_s : armatura compressa

X : posizione asse neutro da lembo compresso

Nelle verifiche delle solette si è trascurata l'azione assiale di compressione.

	Sezione	T (kN)	b (mm)	d (mm)	τ (N/mm ²)	
Soletta inferiore	3	430.10	1000	644	0.74	$> \tau_{co} = 0.73 \text{ N/mm}^2$
	7	452.62	1000	644	0.78	$> \tau_{co} = 0.73 \text{ N/mm}^2$
Soletta superiore	12	330.99	1000	544	0.68	$< \tau_{co} = 0.73 \text{ N/mm}^2$
	16	407.49	1000	544	0.83	$> \tau_{co} = 0.73 \text{ N/mm}^2$
Piedritto	20	272.19	1000	530	0.57	$< \tau_{co} = 0.73 \text{ N/mm}^2$

sinistro	22	154.50	1000	530	0.32	$< \tau_{co} = 0.73 \text{ N/mm}^2$
Piedritto destro	25	166.55	1000	530	0.35	$< \tau_{co} = 0.73 \text{ N/mm}^2$
	27	183.05	1000	530	0.38	$< \tau_{co} = 0.73 \text{ N/mm}^2$

Nella soletta superiore la tensione tangenziale supera la τ_{co} (rimanendo inferiore alla τ_{c1}), per cui è necessario disporre un'armatura a taglio costituita da $\phi 14$ disposti a maglia $20 \times 20 \text{ cm}$ ($A_{st} = 3850 \text{ mm}^2$) in corrispondenza del tratto di 0.60 m in corrispondenza dell'attacco della soletta con i piedritti.

$$A_{st} = T_{max} \cdot 100 / (0.9 \cdot h \cdot \sigma_f) = 3472 \text{ mm}^2$$

Nella soletta inferiore la tensione tangenziale supera la τ_{co} (rimanendo inferiore alla τ_{c1}), per cui è necessario disporre un'armatura a taglio costituita da $\phi 14$ disposti a maglia $20 \times 20 \text{ cm}$ ($A_{st} = 3850 \text{ mm}^2$) in corrispondenza del tratto di 0.6 m in corrispondenza dell'attacco della soletta con i piedritti.

$$A_{st} = T_{max} \cdot 100 / (0.9 \cdot h \cdot \sigma_f) = 3254 \text{ mm}^2$$

Nei piedritti la tensione tangenziale è sempre inferiore alla τ_{co} , non è necessario disporre un'apposita armatura a taglio, si dispongono spilli $\phi 14$ disposti a maglia $40 \times 40 \text{ cm}$.

8.2. Verifiche a fessurazione

Le verifiche a fessurazione vengono condotte per la condizione di carico TA5. Dovrà risultare:

- a contatto con il terreno $w_k \leq 0.15 \text{ mm}$;
- non a contatto con il terreno $w_k \leq 0.2 \text{ mm}$.

Il prospetto seguente riassume i risultati delle verifiche.

	Sez.	M (kNm)	N (kN)	A_s (mm^2)	A'_s (mm^2)	w (mm)	w_k (mm)
Soletta inferiore	3	286.61	-52.94	$\phi 26/20$	$\phi 26/20$	0.15	0.15
	5	-368.77	-52.94	$\phi 26/20 + \phi 26/40$	$\phi 26/20$	0.18	0.20
Soletta superiore	14	264.58	-83.59	$\phi 24/20 + \phi 24/40$	$\phi 26/20$	0.17	0.20
	16	-207.49	-96.67	$\phi 26/20$	$\phi 24/20$	0.12	0.15
Piedritti	20	310.30	-392.58	$\phi 26/20 + \phi 26/40$	$\phi 16/20$	0.14	0.15

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Foglio 41 di 182		

	27	-282.93	-412.28	$\phi 26/20 +$ $\phi 26/40$	$\phi 16/20$	-	0.15
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Nelle verifiche delle solette si è trascurata l'azione assiale di compressione.

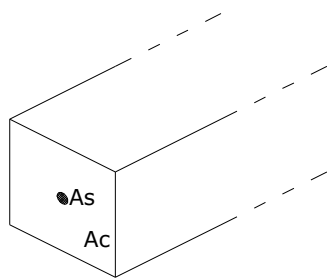
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9. VERIFICA EFFETTI LONGITUDINALI DA RITIRO

Vengono discussi brevemente gli effetti dovuti al ritiro nel calcestruzzo che provocano stati interni di coazione con l'armatura. Scopo della trattazione è quello di verificare l'armatura minima longitudinale dello scatolare.

9.1. Coazioni interne dovute ai fenomeni di ritiro

Per il calcolo delle coazioni interne dovute ai fenomeni di ritiro si consideri una sezione di area unitaria A_c con un'unica barra di armatura di area A_s come rappresentato nell'immagine sottostante:



Si assumono le seguenti ipotesi:

perfetta aderenza tra calcestruzzo ed acciaio;

deformata piana della sezione in calcestruzzo;

comportamento del calcestruzzo e dell'acciaio elastico e lineare,

Le equazioni di equilibrio, congruenza e legame dell'insieme calcestruzzo + acciaio che governano il fenomeno sono:

$$N_c + N_s = 0 \quad (\text{equazione di equilibrio})$$

$$\varepsilon_r = \varepsilon_s - \varepsilon_c \quad (\text{equazione di congruenza})$$

$$N_c = A_c \sigma_c = A_c E_c \varepsilon_c \quad (\text{equazione legame costitutivo del calcestruzzo})$$

$$N_s = A_s \sigma_s = A_s E_s \varepsilon_s \quad (\text{equazione legame costitutivo dell'acciaio})$$

Sostituendo le equazioni di legame in quella di equilibrio ed esprimendo la deformazione del calcestruzzo in funzione di quella dell'acciaio si ha:

$$N_s = -N_c = A_s E_s A_c E_c \varepsilon_r / (A_s E_s + A_c E_c)$$

Il comportamento viscoso del calcestruzzo viene considerato attraverso l'abbattimento del modulo elastico, pertanto è necessario sostituire il valore di E_c con E_c^* . La tensione sull'acciaio e sul calcestruzzo risultano quindi pari a:

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$$\sigma_s = A_c E_c^* E_s \varepsilon_r / (A_s E_s + A_c E_c^*)$$

$$\sigma_c = -A_s E_c^* E_s \varepsilon_r / (A_s E_s + A_c E_c^*)$$

9.2. Calcolo delle sollecitazioni longitudinali dovute ai fenomeni di ritiro

L'analisi delle sollecitazioni viene svolta per una striscia di larghezza unitaria, assumendo la dimensione convenzionale h_0 pari a $2 \times A/u = 2 \times H$, ed un calcestruzzo C32/40.

Fondazione:

Caratteristiche della sezione:

$$B = 100 \text{ cm}$$

$$H = 70 \text{ cm}$$

$$A_{s, \text{long}} = 1 + 1 \varnothing 16 / 20 = 2010 \text{ mm}^2$$

$$E_s = 210000 \text{ N/mm}^2$$

$$E_c = 36050 \text{ N/mm}^2$$

Deformazione da ritiro:

$$\text{U.R.} = 75\%$$

$$\varepsilon_r = \varepsilon_{ca} + \varepsilon_{cd} = 0.35 \text{ ‰}$$

A favore di sicurezza, si assume una deformazione $\varepsilon_r = 0.35 \text{ ‰}$.

Effetto viscosità:

Il modulo viscoso a tempo infinito, in considerazione del valore di h_0 , della resistenza del calcestruzzo e della U.R., può cautelativamente essere assunto pari a $\phi (t = \infty) = 1.6$. Il modulo elastico ridotto del calcestruzzo risulta quindi pari a:

$$E_c^* = E_c / (1 + \phi) = 13865 \text{ N/mm}^2$$

Tensioni nei materiali:

$$\sigma_s = -(1000 \times 700) \times 13865 \times 210000 \times 0.00035 / (2010 \times 210000 + 1000 \times 700 \times 13865) = -67.03 \text{ N/mm}^2$$

$$\sigma_c = 2010 \times 13865 \times 210000 \times 0.00035 / (2010 \times 210000 + 1000 \times 700 \times 13865) = 0.19 \text{ N/mm}^2$$

La sollecitazione sul calcestruzzo risulta molto inferiore rispetto alla resistenza a trazione e quindi non porta a fessurazione il calcestruzzo; la sollecitazione sull'acciaio risulta modesta ed accettabile per le normali condizioni di esercizio della struttura.

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Soletta copertura:

Caratteristiche della sezione:

$$B = 100 \text{ cm}$$

$$H = 60 \text{ cm}$$

$$A_{s, \text{long}} = 1+1\varnothing 16/20 = 2010 \text{ mm}^2$$

$$E_s = 210000 \text{ N/mm}^2$$

$$E_c = 36050 \text{ N/mm}^2$$

Deformazione da ritiro:

$$\text{U.R.} = 75\%$$

$$\varepsilon_r = \varepsilon_{ca} + \varepsilon_{cd} = 0.35 \text{ ‰}$$

A favore di sicurezza, si assume una deformazione $\varepsilon_r = 0.35 \text{ ‰}$.

Effetto viscosità:

Il modulo viscoso a tempo infinito, in considerazione del valore di h_0 , della resistenza del calcestruzzo e della U.R., può cautelativamente essere assunto pari a $\phi (t = \infty) = 1.6$. Il modulo elastico ridotto del calcestruzzo risulta quindi pari a:

$$E_c^* = E_c / (1 + \phi) = 13865 \text{ N/mm}^2$$

Tensioni nei materiali:

$$\sigma_s = -(1000 \times 600) \times 13865 \times 210000 \times 0.00035 / (2010 \times 210000 + 1000 \times 600 \times 13865) = -66.65 \text{ N/mm}^2$$

$$\sigma_c = 2010 \times 13865 \times 200000 \times 0.00035 / (2010 \times 210000 + 1000 \times 600 \times 13865) = 0.22 \text{ N/mm}^2$$

La sollecitazione sul calcestruzzo risulta molto inferiore rispetto alla resistenza a trazione e quindi non porta a fessurazione il calcestruzzo; la sollecitazione sull'acciaio risulta modesta ed accettabile per le normali condizioni di esercizio della struttura.

10. VERIFICA MURI DI IMBOCCO

L'opera prevede agli imbocchi dei muri di sostegno del rilevato, si tratta di muri a mensola in c.a. avente all'imbocco altezza di 3.60 m e allo sbocco altezza massima di 5.40 m.

Il muro all'imbocco di altezza 3.60 m ha una fondazione di altezza 0.60 m e larghezza 3.50 m e paramento verticale inclinato a monte con pendenza 1/10 e larghezza minima in testa di 0.30 m.

Il muro allo sbocco di altezza massima 5.40 m ha una fondazione di altezza 0.90 m e larghezza 4.80 m e paramento verticale inclinato a monte con pendenza 1/10 e larghezza minima in testa di 0.40 m.

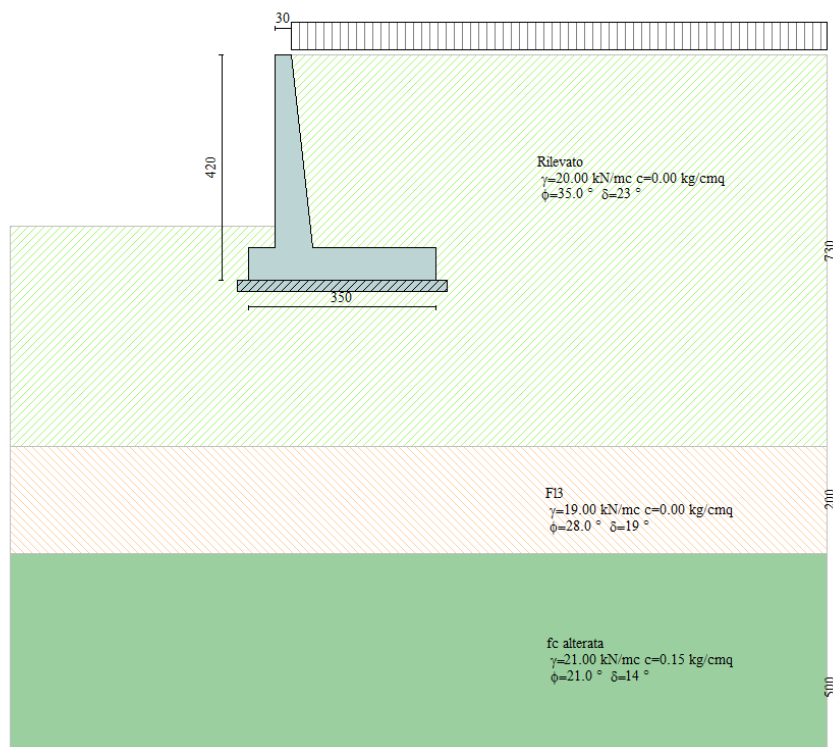
Di seguito si eseguono il calcolo e le verifiche di stabilità e strutturali dei muri in oggetto, mediante il programma MAX 10.0 della Aztec Informatica.

10.1. Stratigrafia e parametri geotecnici

Muro imbocco:

Il piano di imposta del muro è posto a circa 3.0 m sopra il p.c.

Rinterro:	H = 7.3 m;	$\gamma = 20 \text{ kN/m}^3$;	c = 0 kPa;	$\phi = 35^\circ$;	$\delta = 23^\circ$.
Unità fl3:	H = 2 m da pc;	$\gamma = 19 \text{ kN/m}^3$;	c = 0 kPa;	$\phi = 28^\circ$;	$\delta = 19^\circ$.
Unità fc_alterata:	H = - m;	$\gamma = 21 \text{ kN/m}^3$;	c = 0.15 kPa;	$\phi = 21^\circ$;	$\delta = 14^\circ$.



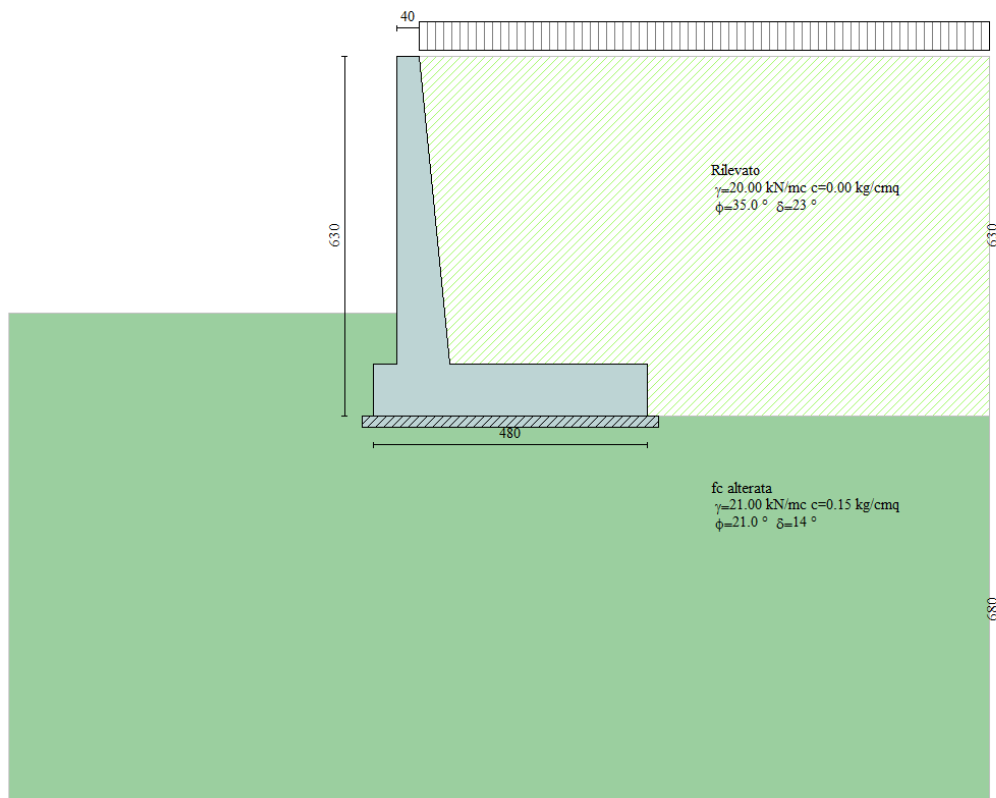
Muro sbocco:

Il piano di imposta del muro è posto a circa 2.0 m al di sotto del p.c.

Rinterro: $H = 6.3 \text{ m}$; $\gamma = 20 \text{ kN/m}^3$; $c = 0 \text{ kPa}$; $\phi = 35^\circ$; $\delta = 23^\circ$.

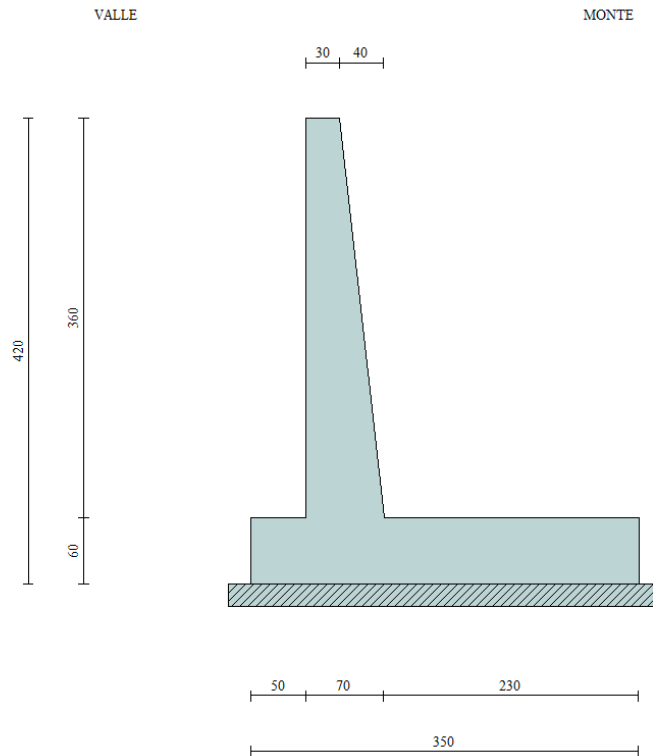
Unità fl3: $H = 0 \text{ m}$; $\gamma = 19 \text{ kN/m}^3$; $c = 0 \text{ kPa}$; $\phi = 28^\circ$; $\delta = 19^\circ$.

Unità fc_alterata: $H = - \text{ m}$; $\gamma = 21 \text{ kN/m}^3$; $c = 0.15 \text{ kPa}$; $\phi = 21^\circ$; $\delta = 14^\circ$.



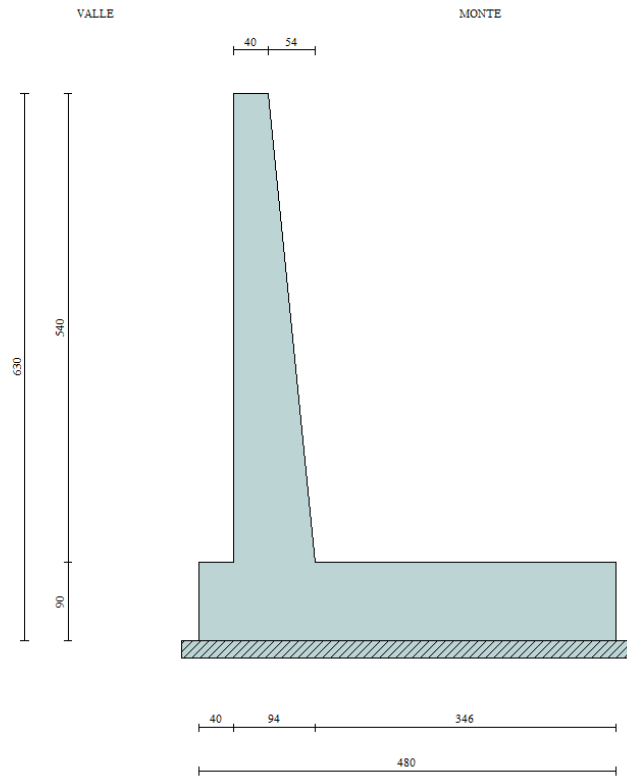
10.2. Geometria

Muro imbocco:





Muro sbocco:



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10.3. Analisi dei carichi e condizioni di carico

Peso proprio: $\gamma_{cls} = 25 \text{ kN/m}^3$

Sisma

Si considera un'azione sismica di terza categoria, con $K_n = 0.04$.

Carichi variabili sul rilevato

sovraccarico in esercizio..... $q_{statico} = 10.00 \text{ kN/m}^2$

sovraccarico ferroviario sismico..... $q_{sismico} = 0.00 \text{ kN/m}^2$

Per il calcolo si utilizza il programma MAX 10.0 "Analisi e calcolo dei muri di sostegno" della Aztec Informatica.

Il programma calcola le sollecitazioni nel muro e nella fondazione, gli sforzi sul terreno, verifica lo scorrimento e il ribaltamento nonché la stabilità globale dell'opera.

Il programma Max 10.0, una volta inserita la geometria del muro, i parametri del terreno, i carichi esterni e il coefficiente di intensità sismica svolge autonomamente il calcolo del muro per le varie verifiche di resistenza e stabilità.

Si prendono in esame due condizioni di carico





1. **condizione di esercizio** : permanenti + variabili
2. **condizione sismica** : permanenti + sisma

10.4. Risultati delle analisi e verifiche di stabilità

Muro imbocco:

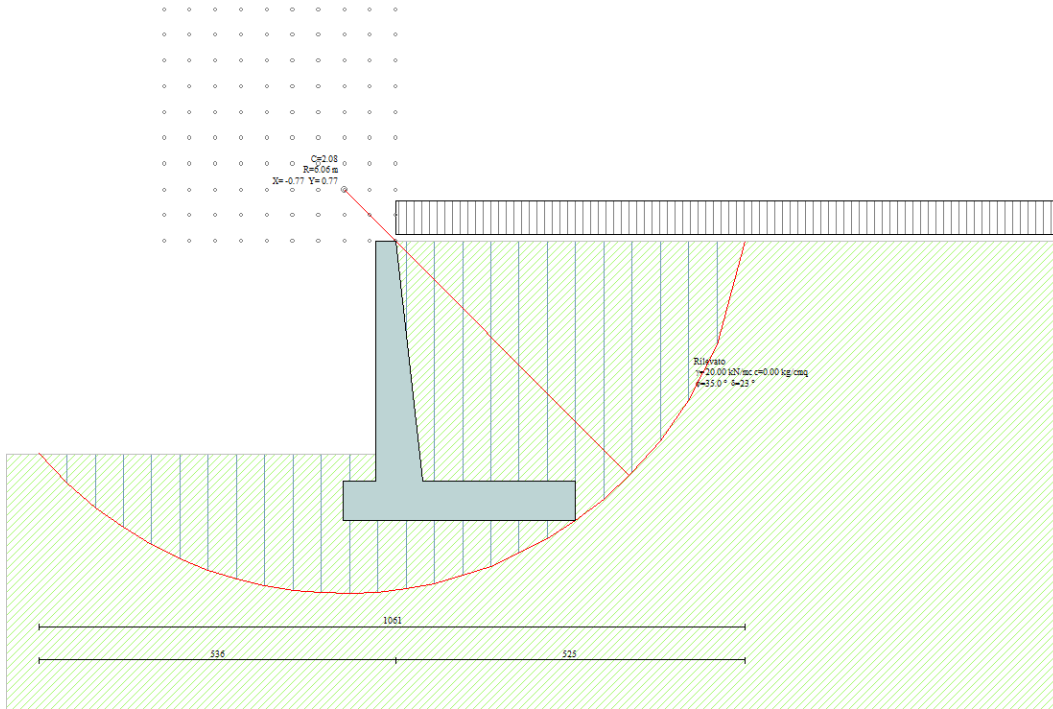
Risultati combinazione n° 1				
Tensioni ammissibili				
Coefficienti sicurezza	Spinta	Forze	Risultanti	
	CALCOLATI		RICHESTI	
Coefficiente di sicurezza a ribaltamento	8.83		1.50	
Coefficiente di sicurezza a scorrimento	2.86		1.30	
Coefficiente di sicurezza a carico limite	14.07		2.00	
Coefficiente di sicurezza stabilità globale	2.08		1.30	

Help

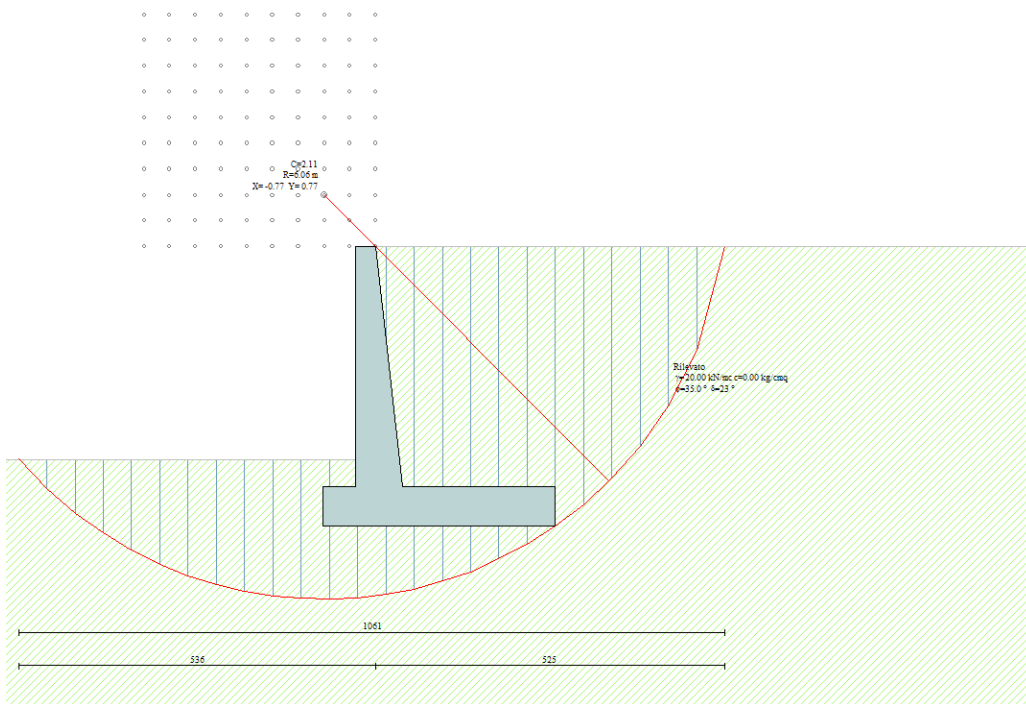
Risultati combinazione n° 2				
Tensioni ammissibili - Sismica				
Coefficienti sicurezza	Spinta	Forze	Risultanti	
	CALCOLATI		RICHESTI	
Coefficiente di sicurezza a ribaltamento	6.76		1.50	
Coefficiente di sicurezza a scorrimento	2.35		1.30	
Coefficiente di sicurezza a carico limite	14.20		2.00	
Coefficiente di sicurezza stabilità globale	2.11		1.30	

Help

Combinazione 1 – statica



Combinazione 2 – sismica







Muro sbocco:

Risultati combinazione n° 1

Tensioni ammissibili			
Coefficienti sicurezza	Spinta	Forze	Risultanti
	CALCOLATI		RICHIESTI
Coefficiente di sicurezza a ribaltamento	7.94		1.50
Coefficiente di sicurezza a scorrimento	1.65		1.30
Coefficiente di sicurezza a carico limite	3.38		2.00
Coefficiente di sicurezza stabilità globale	1.87		1.30

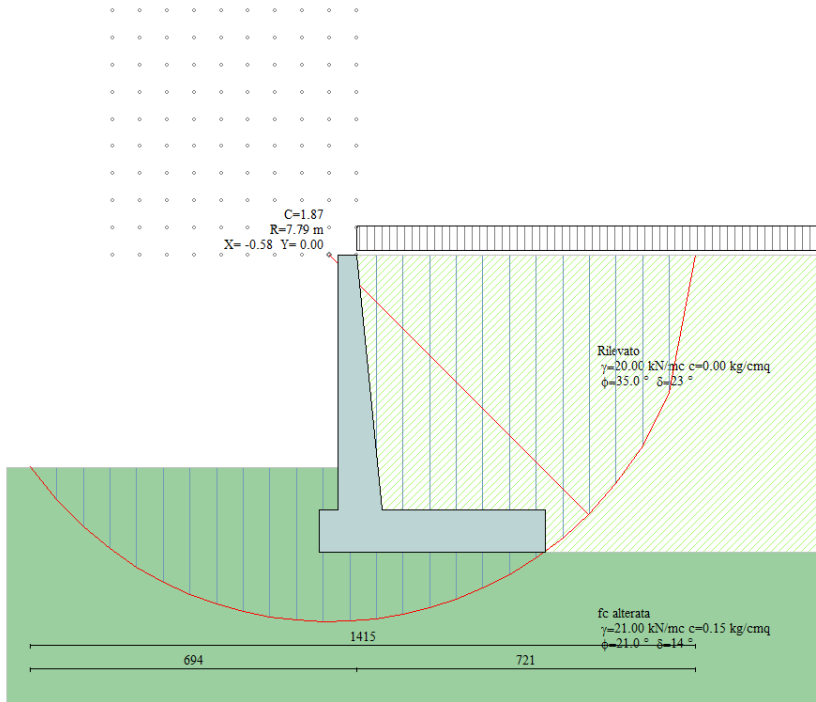
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Risultati combinazione n° 2

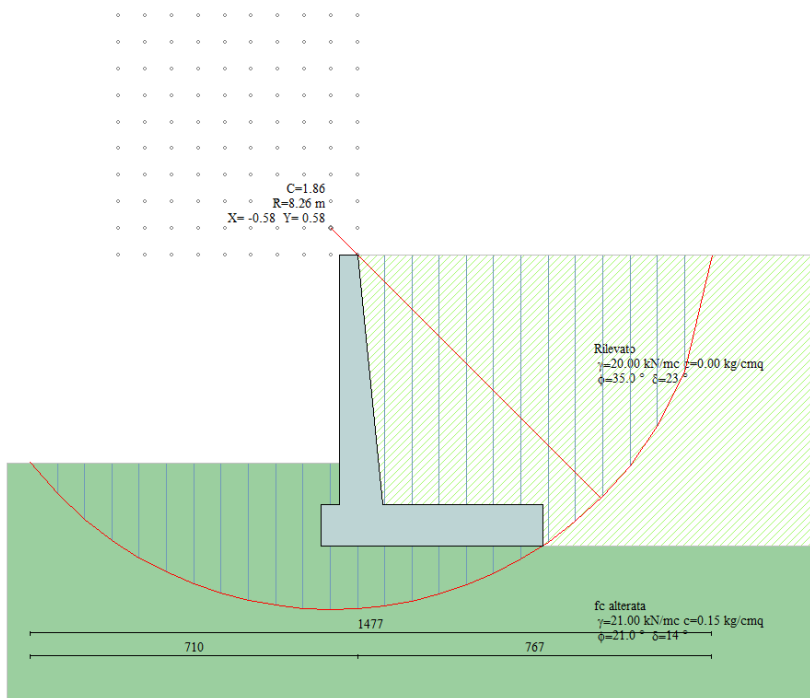
Tensioni ammissibili - Sismica			
Coefficienti sicurezza	Spinta	Forze	Risultanti
	CALCOLATI		RICHIESTI
Coefficiente di sicurezza a ribaltamento	5.80		1.50
Coefficiente di sicurezza a scorrimento	1.32		1.30
Coefficiente di sicurezza a carico limite	3.09		2.00
Coefficiente di sicurezza stabilità globale	1.86		1.30

Help

Combinazione 1 – statica

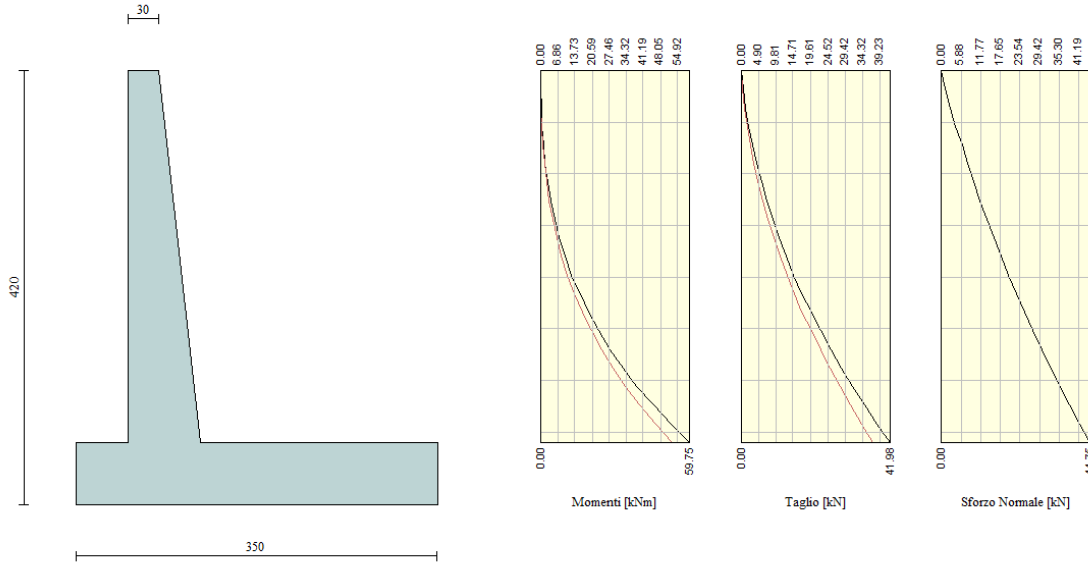


Combinazione 2 – sismica



10.5. Verifiche strutturali

Muro imbocco elevazione



$$M = 59.75 \text{ kNm/m}$$

$$N = 44.75 \text{ kN/m}$$

$$T = 41.98 \text{ kN/m}$$

L'elevazione è costituita da un calcestruzzo di classe C32/40, ha uno spessore di verifica di 70 cm. L'armatura verticale è costituita da $\phi 16/20$ e quella longitudinale da $\phi 16/20$, non è necessario disporre armatura a taglio, si dispongono comunque spilli $\phi 10/40 \times 40$. La distanza tra la barra di armatura e il lembo esterno della sezione è stata calcolata come segue: al copriferro minimo (4.0 cm) è stato sommato il diametro della barra di armatura esterna che si sviluppa in senso longitudinale (16 mm), il diametro dello spillo (10 mm), per cui il copriferro di verifica è 6.6 cm.

Momento massimo	M =	59.75	kNm
Azione assiale	N =	-44.75	kN

Verifiche di resistenza			
Asse neutro (da lembo compresso)	x =	14.34	cm
Momento di inerzia sezione parzializzata	J =	456748	cm ⁴
eccentricità	e =	133.52	cm
tensione cls	$\sigma_c =$	1.59	MPa
tensione acciaio layer 1	$\sigma_{s1} =$	-80.0	MPa
tensione acciaio layer 2	$\sigma_{s2} =$		MPa

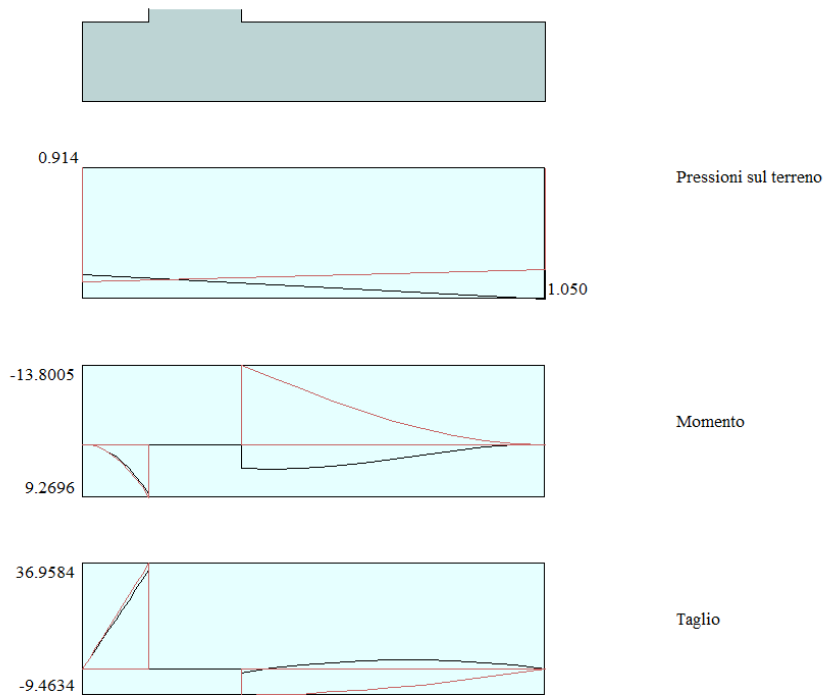
Verifica a fessurazione

Asse neutro (da lembo compresso)	x =	14.34	cm
eccentricità	e =	133.52	cm
tensione cls per fessurazione	$\sigma_c =$	1.59	MPa
tensione acciaio per fessurazione	$\sigma_{s1} =$	80.0	MPa
momento di fessurazione	M _{cr} =	307.85	kNm
azione assiale per apertura fessure	N _{cr} =	230.56	kN
tensione cls prima fessurazione	$\sigma_{cr} =$	8.17	MPa
tensione acciaio prima fessurazione	$\sigma_{sr} =$	412.4	MPa
		M _{cr} > M	

Verifica a taglio

massimo sforzo di taglio	$\tau_{max} =$	0.07	MPa
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La sezione non si fessura nemmeno sotto i massimi carichi di esercizio, pertanto anche la verifica a fessurazione è automaticamente soddisfatta. Il massimo sforzo tagliante è inferiore a τ_{c0} , per cui non si rende necessaria un'apposita armatura a taglio.

Muro imbocco fondazione

$$M = 13.80 \text{ kNm/m}$$

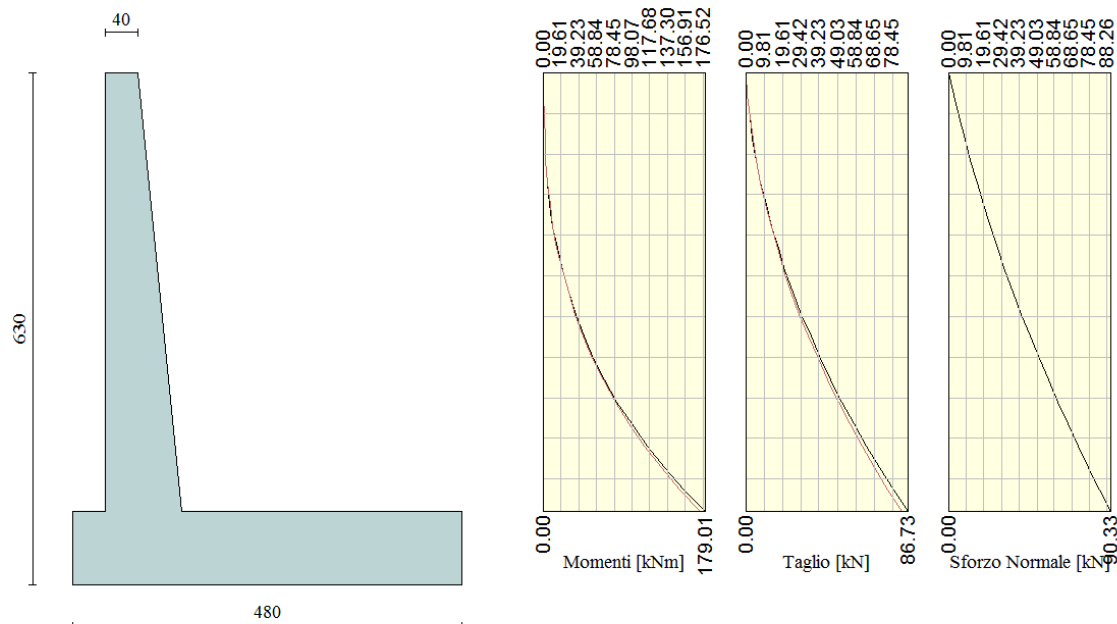
$$T = 36.96 \text{ kN/m}$$

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La fondazione è costituita da un calcestruzzo di classe C32/40, ha uno spessore di verifica di 60 cm. L'armatura trasversale è costituita da $\phi 16/20$ e quella longitudinale da $\phi 16/20$, non è necessario disporre armatura a taglio. La distanza tra la barra di armatura e il lembo esterno della sezione è stata calcolata come segue: al copriferro minimo (4.0 cm) è stato sommato il diametro della barra di armatura esterna che si sviluppa in senso longitudinale (16 mm), per cui il copriferro di verifica è 5.6 cm.

Momento massimo	M =	13.80	kNm
Taglio massimo	T =	36.96	kN
Verifiche di resistenza			
Asse neutro (da lembo compresso)	x =	10.77	cm
Momento di inerzia sezione parzializzata	J =	321144	cm ⁴
tensione cls	$\sigma_c =$	0.46	MPa
tensione acciaio layer 1	$\sigma_{s1} =$	-27.6	MPa
tensione acciaio layer 2	$\sigma_{s2} =$		MPa
Verifica a fessurazione			
tensione cls per fessurazione	$\sigma_c =$	0.46	MPa
tensione acciaio per fessurazione	$\sigma_{s1} =$	27.6	MPa
momento di prima fessurazione	$M_{fck} =$	175.05	kNm
momento di apertura fessure	$M_{fctm} =$	208.40	kNm
tensione acciaio per M_{fctm}	$\sigma_{sr} =$	416.9	MPa
		$M_{cr} > M$	mm
Verifica a taglio			
massimo sforzo di taglio	$\tau_{max} =$	0.08	MPa

La sezione non si fessura nemmeno sotto i massimi carichi di esercizio, pertanto anche la verifica a fessurazione è automaticamente soddisfatta. Il massimo sforzo tagliante è inferiore a τ_{c0} , per cui non si rende necessaria un'apposita armatura a taglio.

Muro sbocco elevazione

$$M = 179.01 \text{ kNm/m}$$

$$N = 90.33 \text{ kN/m}$$

$$T = 86.73 \text{ kN/m}$$

L'elevazione è costituita da un calcestruzzo di classe C32/40, ha uno spessore di verifica di 90 cm. L'armatura verticale è costituita da $\phi 20/20$ al lembo interno e $\phi 16/20$ a quello esterno e quella longitudinale da $\phi 16/20$, non è necessario disporre armatura a taglio, si dispongono comunque spilli $\phi 10/40 \times 40$. La distanza tra la barra di armatura e il lembo esterno della sezione è stata calcolata come segue: al copriferro minimo (4.0 cm) è stato sommato il diametro della barra di armatura esterna che si sviluppa in senso longitudinale (16 mm), il diametro dello spillo (10 mm), per cui il copriferro di verifica è 6.6 cm.

Momento massimo	M =	179.01	kNm
Azione assiale	N =	-90.33	kN

Verifiche di resistenza			
Asse neutro (da lembo compresso)	x =	19.91	cm
Momento di inerzia sezione parzializzata	J =	1206712	cm ⁴
eccentricità	e =	198.17	cm
tensione cls	$\sigma_c =$	2.58	MPa
tensione acciaio layer 1	$\sigma_{s1} =$	-121.5	MPa

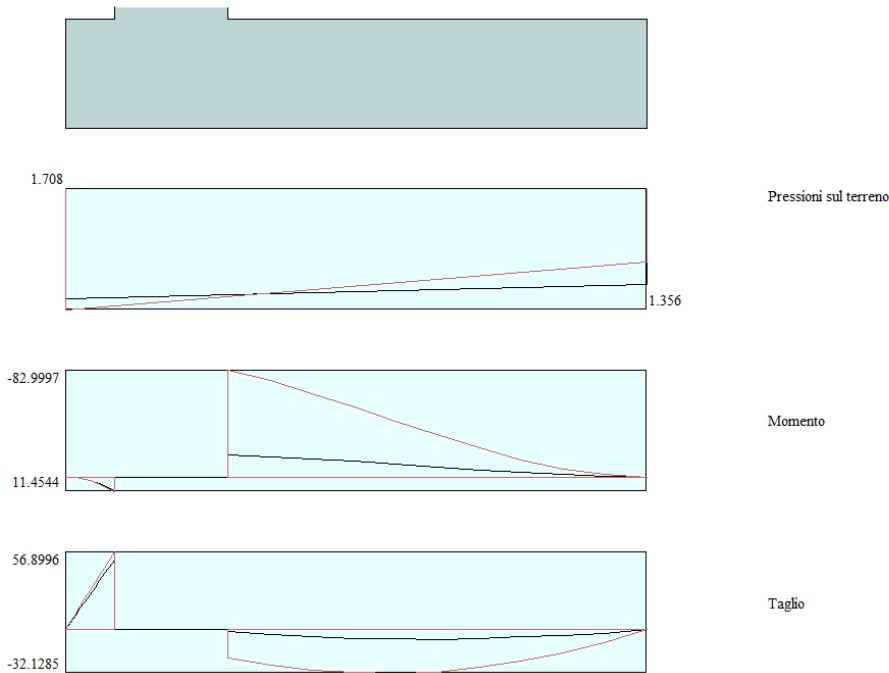
tensione acciaio layer 2 $\sigma_{s2} =$ MPa

Verifica a fessurazione			
Asse neutro (da lembo compresso)	x =	19.91	cm
eccentricità	e =	198.17	cm
tensione cls per fessurazione	$\sigma_c =$	2.58	MPa
tensione acciaio per fessurazione	$\sigma_{s1} =$	121.5	MPa
momento di fessurazione	Mcr =	509.86	kNm
azione assiale per apertura fessure	Ncr =	257.28	kN
tensione cls prima fessurazione	$\sigma_{cr} =$	7.35	MPa
tensione acciaio prima fessurazione	$\sigma_{sr} =$	345.9	MPa
		Mcr > M	

Verifica a taglio
 massimo sforzo di taglio $\tau_{max} =$ 0.12 MPa

La sezione non si fessura nemmeno sotto i massimi carichi di esercizio, pertanto anche la verifica a fessurazione è automaticamente soddisfatta. Il massimo sforzo tagliante è inferiore a τ_{c0} , per cui non si rende necessaria un'apposita armatura a taglio.

Muro sbocco fondazione



M = 83.00 kNm/m

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$$T = 56.90 \text{ kN/m}$$

La fondazione è costituita da un calcestruzzo di classe C32/40, ha uno spessore di verifica di 90 cm. L'armatura trasversale è costituita da $\phi 20/20$ e quella longitudinale da $\phi 16/20$, non è necessario disporre armatura a taglio. La distanza tra la barra di armatura e il lembo esterno della sezione è stata calcolata come segue: al copriferro minimo (4.0 cm) è stato sommato il diametro della barra di armatura esterna che si sviluppa in senso longitudinale (16 mm), per cui il copriferro di verifica è 5.6 cm.

Momento massimo	M =	83.00	kNm
Taglio massimo	T =	56.90	kN
Verifiche di resistenza			
Asse neutro (da lembo compresso)	x =	16.41	cm
Momento di inerzia sezione parzializzata	J =	1227356	cm ⁴
tensione cls	$\sigma_c =$	1.11	MPa
tensione acciaio layer 1	$\sigma_{s1} =$	-67.9	MPa
tensione acciaio layer 2	$\sigma_{s2} =$		MPa
Verifica a fessurazione			
tensione cls per fessurazione	$\sigma_c =$	1.11	MPa
tensione acciaio per fessurazione	$\sigma_{s1} =$	67.9	MPa
momento di prima fessurazione	$M_{fctk} =$	401.26	kNm
momento di apertura fessure	$M_{fctm} =$	477.69	kNm
tensione acciaio per M_{fctm}	$\sigma_{sr} =$	391.1	MPa
		$M_{cr} > M$	mm
Verifica a taglio			
massimo sforzo di taglio	$\tau_{max} =$	0.07	MPa

La sezione non si fessura nemmeno sotto i massimi carichi di esercizio, pertanto anche la verifica a fessurazione è automaticamente soddisfatta. Il massimo sforzo tagliante è inferiore a τ_{c0} , per cui non si rende necessaria un'apposita armatura a taglio.

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11. TABULATI DI CALCOLO

11.1. Dati di input scatolare

File C:\Documents and Settings\galbieri\Desktop\Business\Scatolare\Sezione IN1Y\Relazione tecnica\Tabualti di calcolo\Input.txt was saved on 7/24/13 at 12.11.49

TABLE: "PROGRAM CONTROL"

ProgramName=SAP2000 Version=15.0.0 ProgLevel=Ultimate LicenseNum=2D551 LicenseOS=Yes LicenseSC=Yes
LicenseBR=No LicenseHT=No CurrUnits="KN, m, C" SteelCode=AISC-ASD89 ConcCode="ACI 318-99" AlumCode="AA-ASD
2000" - ColdCode=AISI-ASD96 BridgeCode="AASHTO LRFD 2007" RegenHinge=No

TABLE: "ACTIVE DEGREES OF FREEDOM"

UX=Yes UY=Yes UZ=Yes RX=Yes RY=Yes RZ=Yes

TABLE: "ANALYSIS OPTIONS"

Solver=Advanced SolverProc=Auto Force32Bit=No StiffCase=None GeomMod=No

TABLE: "COORDINATE SYSTEMS"

Name=GLOBAL Type=Cartesian X=0 Y=0 Z=0 AboutZ=0 AboutY=0 AboutX=0

TABLE: "GRID LINES"

CoordSys	AxisDir	XRYZCoord	LineType	LineColor	Visible	BubbleLoc
GLOBAL	X	-2,3	Primary	Cyan	Yes	End
GLOBAL	X	-2,25	Primary	Gray4	Yes	End
GLOBAL	X	-2,15	Primary	Cyan	Yes	End
GLOBAL	X	-2,125	Primary	Gray4	Yes	End
GLOBAL	X	-2	Primary	Cyan	Yes	End
GLOBAL	X	-1	Primary	Gray4	Yes	End
GLOBAL	X	0	Primary	Gray4	Yes	End
GLOBAL	X	1	Primary	Gray4	Yes	End
GLOBAL	X	2	Primary	Cyan	Yes	End
GLOBAL	X	2,125	Primary	Gray4	Yes	End
GLOBAL	X	2,15	Primary	Cyan	Yes	End
GLOBAL	X	2,25	Primary	Gray4	Yes	End
GLOBAL	X	2,3	Primary	Cyan	Yes	End
GLOBAL	Y	0	Primary	Gray4	Yes	End
GLOBAL	Z	0	Primary	Gray8Dark	Yes	End
GLOBAL	Z	0,125	Primary	Gray8Dark	Yes	End
GLOBAL	Z	0,175	Primary	Gray8Dark	Yes	End
GLOBAL	Z	0,25	Primary	Gray8Dark	Yes	End
GLOBAL	Z	0,35	Primary	Gray8Dark	Yes	End
GLOBAL	Z	2,75	Primary	Gray8Dark	Yes	End
GLOBAL	Z	2,875	Primary	Gray8Dark	Yes	End
GLOBAL	Z	3	Primary	Gray8Dark	Yes	End
GLOBAL	Z	4,35	Primary	Gray8Dark	Yes	End
GLOBAL	Z	4,5	Primary	Gray8Dark	Yes	End
GLOBAL	Z	4,65	Primary	Gray8Dark	Yes	End

TABLE: "MATERIAL PROPERTIES 01 - GENERAL"

Material=A416Gr270 Type=Tendon SymType=Uniaxial TempDepend=No Color=Yellow Notes="ASTM A416 Grade 270 added 11/07/2013 16.32.19"
Material=A615Gr60 Type=Rebar SymType=Uniaxial TempDepend=No Color=Green Notes="ASTM A615 Grade 60 added 04/07/2013 15.45.09"
Material=CONC Type=Concrete SymType=Isotropic TempDepend=No Color=Black Notes="Normalweight f'c = 4 ksi added 04/07/2013 15.45.09"
Material=OTHER Type=Other SymType=Isotropic TempDepend=No Color=Black Notes="Material added 04/07/2013 15.45.09"
Material=REBAR Type=Rebar SymType=Uniaxial TempDepend=No Color=Green Notes="ASTM A615 Grade 60 added 04/07/2013 15.45.09"
Material=STEEL Type=Steel SymType=Isotropic TempDepend=No Color=Black Notes="ASTM A36 added 04/07/2013 15.45.09"

TABLE: "MATERIAL PROPERTIES 02 - BASIC MECHANICAL PROPERTIES"

Material=A416Gr270 UnitWeight=76,9728639422648 UnitMass=7,84904737995992 E1=196500599,8512 A1=0,0000117
Material=A615Gr60 UnitWeight=76,9728639422648 UnitMass=7,84904737995992 E1=199947978,795958 A1=0,0000117
Material=CONC UnitWeight=25 UnitMass=2,40070009231567 E1=33722000 G12=14661739,0544428
U12=0,150000005960464 A1=1,20000004244503E-05



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Material=OTHER UnitWeight=23,5616092681885 UnitMass=2,40068006515503 E1=24821130 G12=10342137,474315
 U12=0,200000002980232 A1=9,89999989542412E-06
 Material=REBAR UnitWeight=76,9728639422648 UnitMass=7,84904737995992 E1=199947978,795958 A1=0,0000117
 Material=STEEL UnitWeight=76,8195571899414 UnitMass=7,82710123062134 E1=199948000 G12=76903076,2178799
 U12=0,300000011920929 A1=1,16999999590917E-05

TABLE: "MATERIAL PROPERTIES 03A - STEEL DATA"
 Material=STEEL Fy=248211,296875 Fu=310264,12109375 EffFy=372316,9453125 EffFu=341290,533203125
 SSCurveOpt="User Defined" SSHysType=Kinematic

TABLE: "MATERIAL PROPERTIES 03B - CONCRETE DATA"
 Material=CONC Fc=27579 LtWtConc=No SSCurveOpt="User Defined" SSHysType=Kinematic FAngle=0 DAngle=0

TABLE: "MATERIAL PROPERTIES 03E - REBAR DATA"
 Material=A615Gr60 Fy=413685,473370947 Fu=620528,21005642 EffFy=455054,020708041 EffFu=682581,031062062
 SSCurveOpt=Simple SSHysType=Kinematic SHard=0,01 SCap=0,09 FinalSlope=-0,1 UseCTDef=No
 Material=REBAR Fy=275790 Fu=413685 EffFy=303369 EffFu=455053,5 SSCurveOpt=Simple SSHysType=Kinematic
 SHard=0,01 SCap=0,09 FinalSlope=-0,1 UseCTDef=No

TABLE: "MATERIAL PROPERTIES 03F - TENDON DATA"
 Material=A416Gr270 Fy=1689905,15872032 Fu=1861584,63016926 SSCurveOpt="270 ksi" SSHysType=Kinematic
 FinalSlope=-0,1

TABLE: "MATERIAL PROPERTIES 03G - OTHER DATA"
 Material=OTHER SSHysType=Elastic FAngle=0 DAngle=0

TABLE: "MATERIAL PROPERTIES 04 - USER STRESS-STRAIN CURVES"
 Material=CONC Point=1 Strain=-0,05 Stress=0 PointID=-E
 Material=CONC Point=2 Strain=-0,035 Stress=-206842,736685473 PointID=-D
 Material=CONC Point=3 Strain=-0,02 Stress=-413685,473370947 PointID=-C
 Material=CONC Point=4 Strain=-2,06896551724138E-03 Stress=-413685,473370947 PointID=-B
 Material=CONC Point=5 Strain=0 Stress=0 PointID=A
 Material=CONC Point=6 Strain=2,06896551724138E-03 Stress=413685,473370947 PointID=B
 Material=CONC Point=7 Strain=0,02 Stress=413685,473370947
 Material=CONC Point=8 Strain=0,05 Stress=517106,841713683 PointID=C
 Material=CONC Point=9 Strain=0,08 Stress=517106,841713683 PointID=D
 Material=CONC Point=10 Strain=0,1 Stress=413685,473370947 PointID=E
 Material=OTHER Point=1 Strain=-4,02882544025997E-08 Stress=-1
 Material=OTHER Point=2 Strain=0 Stress=0 PointID=A
 Material=OTHER Point=3 Strain=4,02882544025997E-08 Stress=1
 Material=STEEL Point=1 Strain=-0,05 Stress=0 PointID=-E
 Material=STEEL Point=2 Strain=-0,035 Stress=-124105,642011284 PointID=-D
 Material=STEEL Point=3 Strain=-0,02 Stress=-248211,284022568 PointID=-C
 Material=STEEL Point=4 Strain=-1,24137931034483E-03 Stress=-248211,284022568 PointID=-B
 Material=STEEL Point=5 Strain=0 Stress=0 PointID=A
 Material=STEEL Point=6 Strain=1,24137931034483E-03 Stress=248211,284022568 PointID=B
 Material=STEEL Point=7 Strain=0,02 Stress=248211,284022568
 Material=STEEL Point=8 Strain=0,05 Stress=399895,957591915 PointID=C
 Material=STEEL Point=9 Strain=0,08 Stress=399895,957591915 PointID=D
 Material=STEEL Point=10 Strain=0,1 Stress=248211,284022568 PointID=E

TABLE: "MATERIAL PROPERTIES 06 - DAMPING PARAMETERS"
 Material=A416Gr270 ModalRatio=0 VisMass=0 VisStiff=0 HysMass=0 HysStiff=0
 Material=A615Gr60 ModalRatio=0 VisMass=0 VisStiff=0 HysMass=0 HysStiff=0
 Material=CONC ModalRatio=0 VisMass=0 VisStiff=0 HysMass=0 HysStiff=0
 Material=OTHER ModalRatio=0 VisMass=0 VisStiff=0 HysMass=0 HysStiff=0
 Material=REBAR ModalRatio=0 VisMass=0 VisStiff=0 HysMass=0 HysStiff=0
 Material=STEEL ModalRatio=0 VisMass=0 VisStiff=0 HysMass=0 HysStiff=0

TABLE: "FRAME SECTION PROPERTIES 01 - GENERAL"
 SectionName=100X45 Material=CONC Shape=Rectangular t3=0,449999988079071 t2=1 Area=0,449999988079071
 TorsConst=2,17931102961302E-02 I33=7,59375002235174E-03 I22=3,75000014901161E-02 AS2=0,375 AS3=0,375 _
 S33=3,37500013411045E-02 S22=7,50000029802322E-02 Z33=5,06250001490116E-02 Z22=0,124999997019768
 R33=0,129903808236122 R22=0,288675129413605 ConcCol=Yes ConcBeam=No Color=Black TotalWt=0 TotalMass=0
 FromFile=No _
 AMod=1 A2Mod=1 A3Mod=1 JMod=1 I2Mod=1 I3Mod=1 MMod=1 WMod=1
 SectionName=100X50 Material=CONC Shape=Rectangular t3=0,5 t2=1 Area=0,5 TorsConst=2,86100301891565E-
 02 I33=1,04166697710752E-02 I22=4,16666716337204E-02 AS2=0,416666686534882 AS3=0,416666686534882 _
 S33=4,16666679084301E-02 S22=8,3333358168602E-02 Z33=0,0625 Z22=0,125 R33=0,144337564706802
 R22=0,288675129413605 ConcCol=Yes ConcBeam=No Color=Black TotalWt=0 TotalMass=0 FromFile=No AMod=1
 A2Mod=1 _
 A3Mod=1 JMod=1 I2Mod=1 I3Mod=1 MMod=1 WMod=1
 SectionName=100X55 Material=CONC Shape=Rectangular t3=0,550000011920929 t2=1 Area=0,550000011920929
 TorsConst=0,03638856112957 I33=1,38645796105266E-02 I22=4,5833306014538E-02 AS2=0,458333313465118 _
 AS3=0,458333313465118 S33=5,04166670143604E-02 S22=9,16666686534882E-02 Z33=7,56250023841858E-02
 Z22=0,137500002980232 R33=0,158771321177483 R22=0,288675129413605 ConcCol=No ConcBeam=Yes Color=Black
 TotalWt=0 _
 TotalMass=0 FromFile=No AMod=1 A2Mod=1 A3Mod=1 JMod=1 I2Mod=1 I3Mod=1 MMod=1 WMod=1
 SectionName=100X60 Material=CONC Shape=Rectangular t3=0,6 t2=1 Area=0,6 TorsConst=0,0450779328
 I33=0,018 I22=0,05 AS2=0,5 AS3=0,5 S33=0,06 S22=0,1 Z33=0,09 Z22=0,15 R33=0,173205080756888 _

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R22=0,288675134594813 ConcCol=Yes ConcBeam=No Color=Yellow TotalWt=208,5
TotalMass=20,0218387699127 FromFile=No AMod=1 A2Mod=1 A3Mod=1 JMod=1 I2Mod=1 I3Mod=1 MMod=1 WMod=1
Notes="Added 15/07/2013 16.57.04"
SectionName=100X70 Material=CONC Shape=Rectangular t3=0,7 t2=1 Area=0,7 TorsConst=6,49211735083333E-
02 I33=2,85833333333333E-02 I22=5,83333333333333E-02 AS2=0,583333333333333 AS3=0,583333333333333 _
S33=8,16666666666667E-02 S22=0,116666666666667 Z33=0,1225 Z22=0,175 R33=0,202072594216369
R22=0,288675134594813 ConcCol=Yes ConcBeam=No Color=Blue TotalWt=80,5 TotalMass=7,73025429725647
FromFile=No AMod=1 _
A2Mod=1 A3Mod=1 JMod=1 I2Mod=1 I3Mod=1 MMod=1 WMod=1 Notes="Added 15/07/2013 16.57.48"

TABLE: "FRAME SECTION PROPERTIES 02 - CONCRETE COLUMN"

SectionName=100X45	RebarMatL=A615Gr60	RebarMatC=REBAR	ReinfConfig=Rectangular	LatReinf=Ties	Cover=0,04
NumBars3Dir=3	NumBars2Dir=3	BarSizeL=#9	BarSizeC=#4	SpacingC=0,15	NumCBars2=3
ReinfType=Check					NumCBars3=3
SectionName=100X50	RebarMatL=A615Gr60	RebarMatC=REBAR	ReinfConfig=Rectangular	LatReinf=Ties	Cover=0,04
NumBars3Dir=3	NumBars2Dir=3	BarSizeL=#9	BarSizeC=#4	SpacingC=0,15	NumCBars2=3
ReinfType=Check					NumCBars3=3
SectionName=100X60	RebarMatL=A615Gr60	RebarMatC=A615Gr60	ReinfConfig=Rectangular	LatReinf=Ties	
Cover=0,04	NumBars3Dir=3	NumBars2Dir=3	BarSizeL=#9	BarSizeC=#4	SpacingC=0,15
ReinfType=Design					NumCBars2=3
					NumCBars3=3
SectionName=100X70	RebarMatL=A615Gr60	RebarMatC=A615Gr60	ReinfConfig=Rectangular	LatReinf=Ties	
Cover=0,04	NumBars3Dir=3	NumBars2Dir=3	BarSizeL=#9	BarSizeC=#4	SpacingC=0,15
ReinfType=Design					NumCBars2=3
					NumCBars3=3

TABLE: "FRAME SECTION PROPERTIES 03 - CONCRETE BEAM"

SectionName=100X55 RebarMatL=A615Gr60 RebarMatC=REBAR TopCover=3,99999991059303E-02
BotCover=3,99999991059303E-02 TopLeftArea=0 TopRightArea=0 BotLeftArea=0 BotRightArea=0

TABLE: "LOAD PATTERN DEFINITIONS"

LoadPat=1PESOPR	DesignType=OTHER	SelfWtMult=1
LoadPat=2PERMAN	DesignType=OTHER	SelfWtMult=0
LoadPat=3TERRSIM	DesignType=OTHER	SelfWtMult=0
LoadPat=4TERRASI	DesignType=OTHER	SelfWtMult=0
LoadPat=5TERRATT	DesignType=OTHER	SelfWtMult=0
LoadPat=6LM71CEN	DesignType=OTHER	SelfWtMult=0
LoadPat=7LM71DIS	DesignType=OTHER	SelfWtMult=0
LoadPat=8SPLM71	DesignType=OTHER	SelfWtMult=0
LoadPat=9AVVLM71	DesignType=OTHER	SelfWtMult=0
LoadPat=10SW2CEN	DesignType=OTHER	SelfWtMult=0
LoadPat=11SPSW2	DesignType=OTHER	SelfWtMult=0
LoadPat=12FRESW2	DesignType=OTHER	SelfWtMult=0
LoadPat=13TEMPER	DesignType=OTHER	SelfWtMult=0
LoadPat=SPSISMIC	DesignType=OTHER	SelfWtMult=0
LoadPat=SOVRSISM	DesignType=OTHER	SelfWtMult=0
LoadPat=SOVRSISV	DesignType=OTHER	SelfWtMult=0
LoadPat=INERZIAH	DesignType=OTHER	SelfWtMult=0
LoadPat=INERZIAV	DesignType=OTHER	SelfWtMult=0

TABLE: "COMBINATION DEFINITIONS"

ComboName=TA1G1A1	ComboType="Linear Add"	AutoDesign=No	CaseType="Linear Static"	CaseName=1PESOPR
ScaleFactor=1	SteelDesign=None	ConcDesign=None	AlumDesign=None	ColdDesign=None
ComboName=TA1G1A1	CaseType="Linear Static"	CaseName=2PERMAN	ScaleFactor=1	
ComboName=TA1G1A1	CaseType="Linear Static"	CaseName=3TERRSIM	ScaleFactor=1	
ComboName=TA1G1A1	CaseType="Linear Static"	CaseName=6LM71CEN	ScaleFactor=1	
ComboName=TA1G1A1	CaseType="Linear Static"	CaseName=8SPLM71	ScaleFactor=1	
ComboName=TA1G1A1	CaseType="Linear Static"	CaseName=13TEMPER	ScaleFactor=0,600000023841858	
ComboName=TA1G1B1	ComboType="Linear Add"	AutoDesign=No	CaseType="Linear Static"	CaseName=1PESOPR
ScaleFactor=1	SteelDesign=None	ConcDesign=None	AlumDesign=None	ColdDesign=None
ComboName=TA1G1B1	CaseType="Linear Static"	CaseName=2PERMAN	ScaleFactor=1	
ComboName=TA1G1B1	CaseType="Linear Static"	CaseName=3TERRSIM	ScaleFactor=1	
ComboName=TA1G1B1	CaseType="Linear Static"	CaseName=7LM71DIS	ScaleFactor=1	
ComboName=TA1G1B1	CaseType="Linear Static"	CaseName=8SPLM71	ScaleFactor=1	
ComboName=TA1G1B1	CaseType="Linear Static"	CaseName=13TEMPER	ScaleFactor=0,600000023841858	
ComboName=TA1G1C1	ComboType="Linear Add"	AutoDesign=No	CaseType="Linear Static"	CaseName=1PESOPR
ScaleFactor=1	SteelDesign=None	ConcDesign=None	AlumDesign=None	ColdDesign=None
ComboName=TA1G1C1	CaseType="Linear Static"	CaseName=2PERMAN	ScaleFactor=1	
ComboName=TA1G1C1	CaseType="Linear Static"	CaseName=3TERRSIM	ScaleFactor=1	
ComboName=TA1G1C1	CaseType="Linear Static"	CaseName=10SW2CEN	ScaleFactor=1	
ComboName=TA1G1C1	CaseType="Linear Static"	CaseName=11SPSW2	ScaleFactor=1	
ComboName=TA1G1C1	CaseType="Linear Static"	CaseName=13TEMPER	ScaleFactor=0,600000023841858	
ComboName=TA1G1D1	ComboType="Linear Add"	AutoDesign=No	CaseType="Linear Static"	CaseName=1PESOPR
ScaleFactor=1	SteelDesign=None	ConcDesign=None	AlumDesign=None	ColdDesign=None
ComboName=TA1G1D1	CaseType="Linear Static"	CaseName=2PERMAN	ScaleFactor=1	
ComboName=TA1G1D1	CaseType="Linear Static"	CaseName=3TERRSIM	ScaleFactor=1	
ComboName=TA1G1D1	CaseType="Linear Static"	CaseName=6LM71CEN	ScaleFactor=1	
ComboName=TA1G1D1	CaseType="Linear Static"	CaseName=8SPLM71	ScaleFactor=1	
ComboName=TA1G1D1	CaseType="Linear Static"	CaseName=13TEMPER	ScaleFactor=-0,600000023841858	
ComboName=TA1G1E1	ComboType="Linear Add"	AutoDesign=No	CaseType="Linear Static"	CaseName=1PESOPR
ScaleFactor=1	SteelDesign=None	ConcDesign=None	AlumDesign=None	ColdDesign=None
ComboName=TA1G1E1	CaseType="Linear Static"	CaseName=2PERMAN	ScaleFactor=1	
ComboName=TA1G1E1	CaseType="Linear Static"	CaseName=3TERRSIM	ScaleFactor=1	
ComboName=TA1G1E1	CaseType="Linear Static"	CaseName=7LM71DIS	ScaleFactor=1	



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ComboName=ENVETA ComboType=Envelope AutoDesign=No CaseType="Response Combo" CaseName=ENVETA3
ScaleFactor=1 SteelDesign=None ConcDesign=None AlumDesign=None ColdDesign=None
ComboName=ENVETA CaseType="Response Combo" CaseName=ENVETA1 ScaleFactor=1
ComboName=ENVETA CaseType="Response Combo" CaseName=ENVETA2 ScaleFactor=1
ComboName=ENVETA CaseType="Response Combo" CaseName=ENVSISMA ScaleFactor=1

TABLE: "LOAD CASE DEFINITIONS"

Case=1PESOPR	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=2PERMAN	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=3TERRSIM	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=4TERRASI	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=5TERRATT	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=6LM71CEN	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=7LM71DIS	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=8SPLM71	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=9AVVLM71	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=10SW2CEN	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=11SPSW2	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=12FRESW2	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=13TEMPER	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=SPSISMIC	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=SOVRSISM	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=SOVRSISV	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=INERZIAH	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	
Case=INERZIAV	Type=LinStatic	InitialCond=Zero	DesTypeOpt="Prog Det"	DesignType=OTHER	DesActOpt="Prog
Det "	DesignAct=Other	AutoType=None	RunCase=Yes	CaseStatus=Finished	

TABLE: "CASE - STATIC 1 - LOAD ASSIGNMENTS"

Case=1PESOPR	LoadType="Load pattern"	LoadName=1PESOPR	LoadSF=1
Case=2PERMAN	LoadType="Load pattern"	LoadName=2PERMAN	LoadSF=1
Case=3TERRSIM	LoadType="Load pattern"	LoadName=3TERRSIM	LoadSF=1
Case=4TERRASI	LoadType="Load pattern"	LoadName=4TERRASI	LoadSF=1
Case=5TERRATT	LoadType="Load pattern"	LoadName=5TERRATT	LoadSF=1
Case=6LM71CEN	LoadType="Load pattern"	LoadName=6LM71CEN	LoadSF=1
Case=7LM71DIS	LoadType="Load pattern"	LoadName=7LM71DIS	LoadSF=1
Case=8SPLM71	LoadType="Load pattern"	LoadName=8SPLM71	LoadSF=1
Case=9AVVLM71	LoadType="Load pattern"	LoadName=9AVVLM71	LoadSF=1
Case=10SW2CEN	LoadType="Load pattern"	LoadName=10SW2CEN	LoadSF=1
Case=11SPSW2	LoadType="Load pattern"	LoadName=11SPSW2	LoadSF=1
Case=12FRESW2	LoadType="Load pattern"	LoadName=12FRESW2	LoadSF=1
Case=13TEMPER	LoadType="Load pattern"	LoadName=13TEMPER	LoadSF=1
Case=SPSISMIC	LoadType="Load pattern"	LoadName=SPSISMIC	LoadSF=1
Case=SOVRSISM	LoadType="Load pattern"	LoadName=SOVRSISM	LoadSF=1
Case=SOVRSISV	LoadType="Load pattern"	LoadName=SOVRSISV	LoadSF=1
Case=INERZIAH	LoadType="Load pattern"	LoadName=INERZIAH	LoadSF=1
Case=INERZIAV	LoadType="Load pattern"	LoadName=INERZIAV	LoadSF=1

TABLE: "JOINT COORDINATES"

Joint=1	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,3	Y=0	Z=0	SpecialJt=No	GlobalX=-2,3	GlobalY=0	GlobalZ=0
Joint=2	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,15	Y=0	Z=0	SpecialJt=No	GlobalX=-2,15	GlobalY=0	GlobalZ=0
Joint=3	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2	Y=0	Z=0	SpecialJt=No	GlobalX=-2	GlobalY=0	GlobalZ=0
Joint=4	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,3	Y=0	Z=4,5	SpecialJt=Yes	GlobalX=-2,3	GlobalY=0	GlobalZ=4,5
Joint=5	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,3	Y=0	Z=4,35	SpecialJt=Yes	GlobalX=-2,3	GlobalY=0	GlobalZ=4,35
Joint=6	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,3	Y=0	Z=0,175	SpecialJt=Yes	GlobalX=2,3	GlobalY=0	GlobalZ=0,175
Joint=7	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,3	Y=0	Z=0,35	SpecialJt=Yes	GlobalX=2,3	GlobalY=0	GlobalZ=0,35
Joint=8	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,3	Y=0	Z=0,175	SpecialJt=Yes	GlobalX=-2,3	GlobalY=0	GlobalZ=0,175

Joint=9	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,3	Y=0	Z=0,35	SpecialJt=Yes	GlobalX=-2,3	GlobalY=0	GlobalZ=0,35
Joint=10	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,3	Y=0	Z=4,5	SpecialJt=Yes	GlobalX=2,3	GlobalY=0	GlobalZ=4,5
Joint=11	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2	Y=0	Z=0	SpecialJt=No	GlobalX=2	GlobalY=0	GlobalZ=0
Joint=12	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,15	Y=0	Z=0	SpecialJt=No	GlobalX=2,15	GlobalY=0	GlobalZ=0
Joint=13	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,3	Y=0	Z=0	SpecialJt=No	GlobalX=2,3	GlobalY=0	GlobalZ=0
Joint=14	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,3	Y=0	Z=4,65	SpecialJt=No	GlobalX=-2,3	GlobalY=0	GlobalZ=4,65
Joint=15	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,15	Y=0	Z=4,65	SpecialJt=No	GlobalX=-2,15	GlobalY=0	GlobalZ=4,65
Joint=16	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2	Y=0	Z=4,65	SpecialJt=No	GlobalX=-2	GlobalY=0	GlobalZ=4,65
Joint=17	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,3	Y=0	Z=4,35	SpecialJt=Yes	GlobalX=2,3	GlobalY=0	GlobalZ=4,35
Joint=18	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-1,5	Y=0	Z=4,65	SpecialJt=No	GlobalX=-1,5	GlobalY=0	GlobalZ=4,65
Joint=19	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-1	Y=0	Z=0	SpecialJt=Yes	GlobalX=-1	GlobalY=0	GlobalZ=0
Joint=20	CoordSys=GLOBAL	CoordType=Cartesian	XorR=1	Y=0	Z=0	SpecialJt=Yes	GlobalX=1	GlobalY=0	GlobalZ=0
Joint=21	CoordSys=GLOBAL	CoordType=Cartesian	XorR=0	Y=0	Z=0	SpecialJt=Yes	GlobalX=0	GlobalY=0	GlobalZ=0
Joint=22	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-1	Y=0	Z=4,65	SpecialJt=Yes	GlobalX=-1	GlobalY=0	GlobalZ=4,65
Joint=23	CoordSys=GLOBAL	CoordType=Cartesian	XorR=0	Y=0	Z=4,65	SpecialJt=Yes	GlobalX=0	GlobalY=0	GlobalZ=4,65
Joint=24	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2	Y=0	Z=4,65	SpecialJt=No	GlobalX=2	GlobalY=0	GlobalZ=4,65
Joint=25	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,15	Y=0	Z=4,65	SpecialJt=No	GlobalX=2,15	GlobalY=0	GlobalZ=4,65
Joint=26	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,3	Y=0	Z=4,65	SpecialJt=No	GlobalX=2,3	GlobalY=0	GlobalZ=4,65
Joint=27	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-0,5	Y=0	Z=4,65	SpecialJt=No	GlobalX=-0,5	GlobalY=0	GlobalZ=4,65
Joint=28	CoordSys=GLOBAL	CoordType=Cartesian	XorR=0,5	Y=0	Z=4,65	SpecialJt=No	GlobalX=0,5	GlobalY=0	GlobalZ=4,65
Joint=29	CoordSys=GLOBAL	CoordType=Cartesian	XorR=1	Y=0	Z=4,65	SpecialJt=Yes	GlobalX=1	GlobalY=0	GlobalZ=4,65
Joint=30	CoordSys=GLOBAL	CoordType=Cartesian	XorR=1,5	Y=0	Z=4,65	SpecialJt=No	GlobalX=1,5	GlobalY=0	GlobalZ=4,65
Joint=31	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-1,5	Y=0	Z=0	SpecialJt=No	GlobalX=-1,5	GlobalY=0	GlobalZ=0
Joint=32	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-0,5	Y=0	Z=0	SpecialJt=No	GlobalX=-0,5	GlobalY=0	GlobalZ=0
Joint=33	CoordSys=GLOBAL	CoordType=Cartesian	XorR=0,5	Y=0	Z=0	SpecialJt=No	GlobalX=0,5	GlobalY=0	GlobalZ=0
Joint=34	CoordSys=GLOBAL	CoordType=Cartesian	XorR=1,5	Y=0	Z=0	SpecialJt=No	GlobalX=1,5	GlobalY=0	GlobalZ=0
Joint=35	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,3	Y=0	Z=1,35	SpecialJt=No	GlobalX=-2,3	GlobalY=0	GlobalZ=1,35
Joint=36	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,3	Y=0	Z=2,35	SpecialJt=No	GlobalX=-2,3	GlobalY=0	GlobalZ=2,35
Joint=37	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,3	Y=0	Z=3,35	SpecialJt=No	GlobalX=-2,3	GlobalY=0	GlobalZ=3,35
Joint=38	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,3	Y=0	Z=1,35	SpecialJt=No	GlobalX=2,3	GlobalY=0	GlobalZ=1,35
Joint=39	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,3	Y=0	Z=2,35	SpecialJt=No	GlobalX=2,3	GlobalY=0	GlobalZ=2,35
Joint=40	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,3	Y=0	Z=3,35	SpecialJt=No	GlobalX=2,3	GlobalY=0	GlobalZ=3,35
Joint=41	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,3	Y=0	Z=0,85	SpecialJt=No	GlobalX=-2,3	GlobalY=0	GlobalZ=0,85
Joint=42	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,3	Y=0	Z=1,85	SpecialJt=No	GlobalX=-2,3	GlobalY=0	GlobalZ=1,85
Joint=43	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,3	Y=0	Z=2,85	SpecialJt=No	GlobalX=-2,3	GlobalY=0	GlobalZ=2,85
Joint=44	CoordSys=GLOBAL	CoordType=Cartesian	XorR=-2,3	Y=0	Z=3,85	SpecialJt=No	GlobalX=-2,3	GlobalY=0	GlobalZ=3,85
Joint=45	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,3	Y=0	Z=0,85	SpecialJt=No	GlobalX=2,3	GlobalY=0	GlobalZ=0,85
Joint=46	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,3	Y=0	Z=1,85	SpecialJt=No	GlobalX=2,3	GlobalY=0	GlobalZ=1,85
Joint=47	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,3	Y=0	Z=2,85	SpecialJt=No	GlobalX=2,3	GlobalY=0	GlobalZ=2,85
Joint=48	CoordSys=GLOBAL	CoordType=Cartesian	XorR=2,3	Y=0	Z=3,85	SpecialJt=No	GlobalX=2,3	GlobalY=0	GlobalZ=3,85

TABLE: "JOINT RESTRAINT ASSIGNMENTS"

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio</p>	
<p>83 di 182</p>	

Frame=4	LoadPat=8SPLM71	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	
RelDistB=0,	428571428571429	AbsDistA=0	AbsDistB=0,075	FOverLA=16,29	FOverLB=16,29		
Frame=4	LoadPat=8SPLM71	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0,	428571428571429
RelDistB=1	AbsDistA=0,075	AbsDistB=0,175	FOverLA=16,29	FOverLB=16,29			
Frame=4	LoadPat=11SPSW2	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	
RelDistB=0,	428571428571429	AbsDistA=0	AbsDistB=0,075	FOverLA=14,21	FOverLB=14,21		
Frame=4	LoadPat=11SPSW2	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0,	428571428571429
RelDistB=1	AbsDistA=0,075	AbsDistB=0,175	FOverLA=14,21	FOverLB=14,21			
Frame=6	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=56,8161290322581	FOverLB=55,358064516129				
Frame=6	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=56,8161290322581	FOverLB=55,358064516129				
Frame=6	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=21,6622580645161	FOverLB=21,1061290322581				
Frame=6	LoadPat=8SPLM71	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=16,29	FOverLB=16,29				
Frame=6	LoadPat=11SPSW2	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=14,21	FOverLB=14,21				
Frame=7	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=55,358064516129	FOverLB=53,9				
Frame=7	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=55,358064516129	FOverLB=53,9				
Frame=7	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=21,1061290322581	FOverLB=20,55				
Frame=7	LoadPat=8SPLM71	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=16,29	FOverLB=16,29				
Frame=7	LoadPat=11SPSW2	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=14,21	FOverLB=14,21				
Frame=8	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,175	FOverLA=-99,1	FOverLB=-97,3989247311828				
Frame=8	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,175	FOverLA=-59,46	FOverLB=-58,4393548387097				
Frame=8	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,175	FOverLA=-37,79	FOverLB=-37,1411827956989				
Frame=9	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,175	FOverLA=-97,3989247311828	FOverLB=-95,6978494623656				
Frame=9	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,175	FOverLA=-58,4393548387097	FOverLB=-57,4187096774194				
Frame=9	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,175	FOverLA=-37,1411827956989	FOverLB=-36,4923655913978				
Frame=15	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=-56,8161290322581	FOverLB=-55,358064516129				
Frame=15	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=-34,0896774193548	FOverLB=-33,2148387096774				
Frame=15	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=-21,6622580645161	FOverLB=-21,1061290322581				
Frame=16	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=-55,358064516129	FOverLB=-53,9				
Frame=16	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=-33,2148387096774	FOverLB=-32,34				
Frame=16	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,15	FOverLA=-21,1061290322581	FOverLB=-20,55				
Frame=25	LoadPat=2PERMAN	CoordSys=GLOBAL	Type=Force	Dir=Gravity	DistType=RelDist	RelDistA=0	
RelDistB=1	AbsDistA=0	AbsDistB=0,5	FOverLA=120,4	FOverLB=120,4			
Frame=25	LoadPat=9AVVLM71	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=8,18	FOverLB=8,18				
Frame=25	LoadPat=10SW2CEN	CoordSys=GLOBAL	Type=Force	Dir=Gravity	DistType=RelDist	RelDistA=0	
RelDistB=1	AbsDistA=0	AbsDistB=0,5	FOverLA=33,3	FOverLB=33,3			
Frame=25	LoadPat=12FRESW2	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=8,68	FOverLB=8,68				
Frame=25	LoadPat=6LM71CEN	CoordSys=GLOBAL	Type=Force	Dir=Gravity	DistType=RelDist	RelDistA=0	
RelDistB=1	AbsDistA=0	AbsDistB=0,5	FOverLA=38,19	FOverLB=38,19			
Frame=25	LoadPat=7LM71DIS	CoordSys=GLOBAL	Type=Force	Dir=Gravity	DistType=RelDist	RelDistA=0	
RelDistB=1	AbsDistA=0	AbsDistB=0,5	FOverLA=38,19	FOverLB=38,19			
Frame=26	LoadPat=2PERMAN	CoordSys=GLOBAL	Type=Force	Dir=Gravity	DistType=RelDist	RelDistA=0	
RelDistB=1	AbsDistA=0	AbsDistB=0,5	FOverLA=120,4	FOverLB=120,4			
Frame=26	LoadPat=9AVVLM71	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=8,18	FOverLB=8,18				
Frame=26	LoadPat=10SW2CEN	CoordSys=GLOBAL	Type=Force	Dir=Gravity	DistType=RelDist	RelDistA=0	
RelDistB=1	AbsDistA=0	AbsDistB=0,5	FOverLA=33,3	FOverLB=33,3			
Frame=26	LoadPat=12FRESW2	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=8,68	FOverLB=8,68				
Frame=26	LoadPat=6LM71CEN	CoordSys=GLOBAL	Type=Force	Dir=Gravity	DistType=RelDist	RelDistA=0	
RelDistB=1	AbsDistA=0	AbsDistB=0,5	FOverLA=38,19	FOverLB=38,19			
Frame=26	LoadPat=7LM71DIS	CoordSys=GLOBAL	Type=Force	Dir=Gravity	DistType=RelDist	RelDistA=0	
RelDistB=1	AbsDistA=0	AbsDistB=0,5	FOverLA=38,19	FOverLB=38,19			
Frame=27	LoadPat=2PERMAN	CoordSys=GLOBAL	Type=Force	Dir=Gravity	DistType=RelDist	RelDistA=0	
RelDistB=1	AbsDistA=0	AbsDistB=0,5	FOverLA=120,4	FOverLB=120,4			
Frame=27	LoadPat=9AVVLM71	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=8,18	FOverLB=8,18				
Frame=27	LoadPat=10SW2CEN	CoordSys=GLOBAL	Type=Force	Dir=Gravity	DistType=RelDist	RelDistA=0	
RelDistB=1	AbsDistA=0	AbsDistB=0,5	FOverLA=33,3	FOverLB=33,3			

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>	<p>Foglio 85 di 182</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00 Relazione di calcolo</p>		

Frame=10	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0,625	
RelDistB=1	AbsDistA=0,3125	AbsDistB=0,5	FOverLA=87,8	FOverLB=85,9774193548387			
Frame=10	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	
RelDistB=0,625	AbsDistA=0	AbsDistB=0,3125	FOverLA=34,6386021505376	FOverLB=33,48			
Frame=10	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0,625	
RelDistB=1	AbsDistA=0,3125	AbsDistB=0,5	FOverLA=33,48	FOverLB=32,7848387096774			
Frame=10	LoadPat=8SPLM71	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=16,29	FOverLB=16,29				
Frame=10	LoadPat=11SPSW2	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=14,21	FOverLB=14,21				
Frame=17	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=85,9774193548387	FOverLB=81,1172043010753				
Frame=17	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=85,9774193548387	FOverLB=81,1172043010753				
Frame=17	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=32,7848387096774	FOverLB=30,9310752688172				
Frame=17	LoadPat=8SPLM71	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=16,29	FOverLB=16,29				
Frame=17	LoadPat=11SPSW2	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=14,21	FOverLB=14,21				
Frame=18	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=81,1172043010753	FOverLB=76,2569892473118				
Frame=18	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=81,1172043010753	FOverLB=76,2569892473118				
Frame=18	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=30,9310752688172	FOverLB=29,077311827957				
Frame=18	LoadPat=8SPLM71	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=16,29	FOverLB=16,29				
Frame=18	LoadPat=11SPSW2	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=14,21	FOverLB=14,21				
Frame=19	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=76,2569892473118	FOverLB=71,3967741935484				
Frame=19	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=76,2569892473118	FOverLB=71,3967741935484				
Frame=19	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=29,077311827957	FOverLB=27,2235483870968				
Frame=19	LoadPat=8SPLM71	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=16,29	FOverLB=16,29				
Frame=19	LoadPat=11SPSW2	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=14,21	FOverLB=14,21				
Frame=20	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=71,3967741935484	FOverLB=66,536559139785				
Frame=20	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=71,3967741935484	FOverLB=66,536559139785				
Frame=20	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=27,2235483870968	FOverLB=25,3697849462366				
Frame=20	LoadPat=8SPLM71	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=16,29	FOverLB=16,29				
Frame=20	LoadPat=11SPSW2	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=14,21	FOverLB=14,21				
Frame=21	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
RelDistB=0,275000000000001	AbsDistA=0	AbsDistB=0,137500000000001	FOverLA=66,536559139785	FOverLB=65,2			
Frame=21	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
RelDistA=0,275000000000001	RelDistB=1	AbsDistA=0,137500000000001	AbsDistB=0,5	FOverLA=65,2			
FOverLB=61,6763440860215							
Frame=21	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
RelDistB=0,275000000000001	AbsDistA=0	AbsDistB=0,137500000000001	FOverLA=66,536559139785	FOverLB=65,2			
Frame=21	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
RelDistA=0,275000000000001	RelDistB=1	AbsDistA=0,137500000000001	AbsDistB=0,5	FOverLA=65,2			
FOverLB=61,6763440860215							
Frame=21	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
RelDistB=0,275000000000001	AbsDistA=0	AbsDistB=0,137500000000001	FOverLA=25,3697849462366	FOverLB=24,86			
Frame=21	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
RelDistA=0,275000000000001	RelDistB=1	AbsDistA=0,137500000000001	AbsDistB=0,5	FOverLA=24,86			
FOverLB=23,5160215053763							
Frame=21	LoadPat=8SPLM71	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=16,29	FOverLB=16,29				
Frame=21	LoadPat=11SPSW2	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=14,21	FOverLB=14,21				
Frame=22	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=61,6763440860215	FOverLB=56,8161290322581				
Frame=22	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=61,6763440860215	FOverLB=56,8161290322581				
Frame=22	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=23,5160215053763	FOverLB=21,6622580645161				
Frame=22	LoadPat=8SPLM71	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=16,29	FOverLB=16,29				
Frame=22	LoadPat=11SPSW2	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=14,21	FOverLB=14,21				
Frame=28	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-95,6978494623656	FOverLB=-90,8376344086021				



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Frame=28	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-57,4187096774194	FOverLB=-54,5025806451613				
Frame=28	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-36,4923655913978	FOverLB=-34,6386021505376				
Frame=29	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	
RelDistB=0,625	AbsDistA=0	AbsDistB=0,3125	FOverLA=-90,8376344086021	FOverLB=-87,8			
Frame=29	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0,625	
RelDistB=1	AbsDistA=0,3125	AbsDistB=0,5	FOverLA=-87,8	FOverLB=-85,9774193548387			
Frame=29	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	
RelDistB=0,625	AbsDistA=0,3125	AbsDistB=0,5	FOverLA=-54,5025806451613	FOverLB=-52,68			
Frame=29	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0,625	
RelDistB=1	AbsDistA=0,3125	AbsDistB=0,5	FOverLA=-52,68	FOverLB=-51,5864516129032			
Frame=29	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	
RelDistB=0,625	AbsDistA=0	AbsDistB=0,3125	FOverLA=-34,6386021505376	FOverLB=-33,48			
Frame=29	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0,625	
RelDistB=1	AbsDistA=0,3125	AbsDistB=0,5	FOverLA=-32,7848387096774	FOverLB=-32,7848387096774			
Frame=43	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-85,9774193548387	FOverLB=-81,1172043010753				
Frame=43	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-51,5864516129032	FOverLB=-48,6703225806452				
Frame=43	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-32,7848387096774	FOverLB=-30,9310752688172				
Frame=44	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-81,1172043010753	FOverLB=-76,2569892473118				
Frame=44	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-48,6703225806452	FOverLB=-45,7541935483871				
Frame=44	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-30,9310752688172	FOverLB=-29,077311827957				
Frame=45	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-76,2569892473118	FOverLB=-71,3967741935484				
Frame=45	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-45,7541935483871	FOverLB=-42,838064516129				
Frame=45	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-29,077311827957	FOverLB=-27,2235483870968				
Frame=46	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-71,3967741935484	FOverLB=-66,536559139785				
Frame=46	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-42,838064516129	FOverLB=-39,921935483871				
Frame=46	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-27,2235483870968	FOverLB=-25,3697849462366				
Frame=47	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	
RelDistB=0,275000000000001	AbsDistA=0	AbsDistB=0,137500000000001	FOverLA=-66,536559139785	FOverLB=-65,2			
Frame=47	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	
RelDistB=0,275000000000001	RelDistB=1	AbsDistA=0,137500000000001	AbsDistB=0,5	FOverLA=-65,2	FOverLB=-61,6763440860215		
Frame=47	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	
RelDistB=0,275000000000001	AbsDistA=0	AbsDistB=0,137500000000001	FOverLA=-39,921935483871	FOverLB=-39,12			
Frame=47	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	
RelDistB=0,275000000000001	RelDistB=1	AbsDistA=0,137500000000001	AbsDistB=0,5	FOverLA=-39,12	FOverLB=-37,0058064516129		
Frame=47	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	
RelDistB=0,275000000000001	AbsDistA=0	AbsDistB=0,137500000000001	FOverLA=-25,3697849462366	FOverLB=-24,86			
Frame=47	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	
RelDistB=0,275000000000001	RelDistB=1	AbsDistA=0,137500000000001	AbsDistB=0,5	FOverLA=-24,86	FOverLB=-23,5160215053763		
Frame=48	LoadPat=3TERRSIM	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-61,6763440860215	FOverLB=-56,8161290322581				
Frame=48	LoadPat=4TERRASI	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-37,0058064516129	FOverLB=-34,0896774193548				
Frame=48	LoadPat=5TERRATT	CoordSys=GLOBAL	Type=Force	Dir=X	DistType=RelDist	RelDistA=0	RelDistB=1
AbsDistA=0	AbsDistB=0,5	FOverLA=-23,5160215053763	FOverLB=-21,6622580645161				

TABLE: "FRAME LOADS - TEMPERATURE"

Frame=13	LoadPat=13TEMPER	Type=Temperature	Temp=5	JtPattern=None
Frame=14	LoadPat=13TEMPER	Type=Temperature	Temp=5	JtPattern=None
Frame=23	LoadPat=13TEMPER	Type=Temperature	Temp=5	JtPattern=None
Frame=24	LoadPat=13TEMPER	Type=Temperature	Temp=5	JtPattern=None
Frame=25	LoadPat=13TEMPER	Type=Temperature	Temp=5	JtPattern=None
Frame=26	LoadPat=13TEMPER	Type=Temperature	Temp=5	JtPattern=None
Frame=27	LoadPat=13TEMPER	Type=Temperature	Temp=5	JtPattern=None
Frame=30	LoadPat=13TEMPER	Type=Temperature	Temp=5	JtPattern=None
Frame=31	LoadPat=13TEMPER	Type=Temperature	Temp=5	JtPattern=None
Frame=32	LoadPat=13TEMPER	Type=Temperature	Temp=5	JtPattern=None
Frame=33	LoadPat=13TEMPER	Type=Temperature	Temp=5	JtPattern=None
Frame=34	LoadPat=13TEMPER	Type=Temperature	Temp=5	JtPattern=None

END TABLE DATA

11.2. Dati di output scatolare

File C:\Documents and Settings\galbieri\Desktop\Business\Scatolare\Sezione IN1Y\Relazione tecnica\Tabualti di calcolo\Output.txt was saved on 7/24/13 at 12.12.26

TABLE: "PROGRAM CONTROL"

ProgramName=SAP2000 Version=15.0.0 ProgLevel=Ultimate LicenseNum=2D551 LicenseOS=Yes LicenseSC=Yes
LicenseBR=No LicenseHT=No CurrUnits="KN, m, C" SteelCode=AISC-ASD89 ConcCode="ACI 318-99" AlumCode="AA-ASD
2000" -
ColdCode=AISI-ASD96 BridgeCode="AASHTO LRFD 2007" RegenHinge=No

TABLE: "JOINT REACTIONS"

Joint	OutputCase	CaseType	StepType	F1	F2	F3	M1	M2	M3
F3=10,2692493986243	ENVETA5	Combination	Max	-92,1876013719979	F2=0				
F3=3,30097377497645	ENVETA5	Combination	Min	-261,873201474097	F2=0				
F3=14,188335476382	ENVETA	Combination	Max	-8,44302269309931E-13	F2=0				
F3=2,37209598074889	ENVETA	Combination	Min	-286,666499995858	F2=0				
M2=0 M3=0	ENVETA5	Combination	Max	F1=0	F2=0	F3=21,3083114302561	M1=0		
M2=0 M3=0	ENVETA5	Combination	Min	F1=0	F2=0	F3=8,25795800215312	M1=0		
M2=0 M3=0	ENVETA	Combination	Max	F1=0	F2=0	F3=28,345474049654	M1=0		
M2=0 M3=0	ENVETA	Combination	Min	F1=0	F2=0	F3=6,59630765921231	M1=0		
M2=0 M3=0	ENVETA5	Combination	Max	F1=0	F2=0	F3=47,8292234916833	M1=0		
M2=0 M3=0	ENVETA5	Combination	Min	F1=0	F2=0	F3=21,4675241612601	M1=0		
M2=0 M3=0	ENVETA	Combination	Max	F1=0	F2=0	F3=61,3427128540393	M1=0		
M2=0 M3=0	ENVETA	Combination	Min	F1=0	F2=0	F3=18,2911776870658	M1=0		
M2=0 M3=0	ENVETA5	Combination	Max	F1=0	F2=0	F3=120,511630600739	M1=0		
M2=0 M3=0	ENVETA5	Combination	Min	F1=0	F2=0	F3=92,3374052529251	M1=0		
M2=0 M3=0	ENVETA	Combination	Max	F1=0	F2=0	F3=129,217172432458	M1=0		
M2=0 M3=0	ENVETA	Combination	Min	F1=0	F2=0	F3=59,8895736911928	M1=0		
M2=0 M3=0	ENVETA5	Combination	Max	F1=0	F2=0	F3=57,3945654160521	M1=0		
M2=0 M3=0	ENVETA5	Combination	Min	F1=0	F2=0	F3=43,4477573727174	M1=0		
M2=0 M3=0	ENVETA	Combination	Max	F1=0	F2=0	F3=61,6207749336728	M1=0		
M2=0 M3=0	ENVETA	Combination	Min	F1=0	F2=0	F3=27,6724960951127	M1=0		
M2=0 M3=0	ENVETA5	Combination	Max	F1=0	F2=0	F3=29,5850255332608	M1=0		
M2=0 M3=0	ENVETA5	Combination	Min	F1=0	F2=0	F3=22,1386749734714	M1=0		
M2=0 M3=0	ENVETA	Combination	Max	F1=0	F2=0	F3=31,8024449056546	M1=0		
M2=0 M3=0	ENVETA	Combination	Min	F1=0	F2=0	F3=13,8506746506242	M1=0		
M2=0 M3=0	ENVETA5	Combination	Max	F1=0	F2=0	F3=0	M1=0	M2=0	M3=0
M2=0 M3=0	ENVETA5	Combination	Min	F1=0	F2=0	F3=0	M1=0	M2=0	M3=0
M2=0 M3=0	ENVETA	Combination	Max	F1=0	F2=0	F3=0	M1=0	M2=0	M3=0
M2=0 M3=0	ENVETA	Combination	Min	F1=0	F2=0	F3=0	M1=0	M2=0	M3=0
M2=0 M3=0	ENVETA5	Combination	Max	F1=0	F2=0	F3=90,6680063399533	M1=0		
M2=0 M3=0	ENVETA5	Combination	Min	F1=0	F2=0	F3=69,43366363482	M1=0		
M2=0 M3=0	ENVETA	Combination	Max	F1=0	F2=0	F3=101,005338111365	M1=0		
M2=0 M3=0	ENVETA	Combination	Min	F1=0	F2=0	F3=66,3650570941047	M1=0		
M2=0 M3=0	ENVETA5	Combination	Max	F1=0	F2=0	F3=146,353348828247	M1=0		
M2=0 M3=0	ENVETA5	Combination	Min	F1=0	F2=0	F3=123,680455501306	M1=0		
M2=0 M3=0	ENVETA	Combination	Max	F1=0	F2=0	F3=155,157567967331	M1=0		
M2=0 M3=0	ENVETA	Combination	Min	F1=0	F2=0	F3=91,3756414442476	M1=0		



Joint=21 M2=0 M3=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=0	F2=0	F3=108,282179267847	M1=0
Joint=21 M2=0 M3=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=0	F2=0	F3=105,935086784416	M1=0
Joint=21 M2=0 M3=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=0	F2=0	F3=112,567356444092	M1=0
Joint=21 M2=0 M3=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=0	F2=0	F3=90,9878255538126	M1=0
Joint=26 M2=0 M3=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=0	F2=0	F3=0	M1=0 M2=0 M3=0
Joint=26 M2=0 M3=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=0	F2=0	F3=0	M1=0 M2=0 M3=0
Joint=26 M2=0 M3=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=0	F2=0	F3=0	M1=0 M2=0 M3=0
Joint=26 M2=0 M3=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=0	F2=0	F3=0	M1=0 M2=0 M3=0
Joint=31 M2=0 M3=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=0	F2=0	F3=82,0714857807396	M1=0
Joint=31 M2=0 M3=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=0	F2=0	F3=51,2636522529316	M1=0
Joint=31 M2=0 M3=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=0	F2=0	F3=95,4636582098436	M1=0
Joint=31 M2=0 M3=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=0	F2=0	F3=47,5864893804928	M1=0
Joint=32 M2=0 M3=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=0	F2=0	F3=99,3949340638505	M1=0
Joint=32 M2=0 M3=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=0	F2=0	F3=87,6561575843699	M1=0
Joint=32 M2=0 M3=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=0	F2=0	F3=106,697794717105	M1=0
Joint=32 M2=0 M3=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=0	F2=0	F3=81,3240666611783	M1=0
Joint=33 M2=0 M3=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=0	F2=0	F3=127,174805731538	M1=0
Joint=33 M2=0 M3=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=0	F2=0	F3=114,686505206228	M1=0
Joint=33 M2=0 M3=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=0	F2=0	F3=133,71185018736	M1=0
Joint=33 M2=0 M3=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=0	F2=0	F3=91,0881099877493	M1=0
Joint=34 M2=0 M3=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=0	F2=0	F3=165,775884421593	M1=0
Joint=34 M2=0 M3=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=0	F2=0	F3=132,850273960675	M1=0
Joint=34 M2=0 M3=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=0	F2=0	F3=176,865461469325	M1=0
Joint=34 M2=0 M3=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=0	F2=0	F3=91,7720807415617	M1=0

TABLE: "ELEMENT FORCES - FRAMES"

Frame=1	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	P=-52,9364378195596
V2=422,553271370707	V3=0	T=0	M2=0	M3=407,289612943666	S11Max=4880,88011216893
PtS11Max=1	x2S11Max=-0,35	x3S11Max=-0,5	S11Min=-3090,85405684631	PtS11Min=3	x2S11Min=0,35
x3S11Min=-0,5	FrameElem=1	ElemStation=0	Frame=1	Station=0,15	OutputCase=ENVETA5
CaseType=Combination	StepType=Max	P=-52,9364378195596	V2=425,178271370707	V3=0	T=0
M2=0	M3=346,513754572416	S11Max=4136,68592803118	PtS11Max=1	x2S11Max=-0,35	x3S11Max=-0,5
S11Min=-2329,54403949116	PtS11Min=3	x2S11Min=0,35	x3S11Min=-0,5	FrameElem=1	ElemStation=0,15
Frame=1	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	P=-204,358814631231
V2=394,523781406123	V3=0	T=0	M2=0	M3=246,084873779538	S11Max=2935,71428061177
PtS11Max=1	x2S11Max=-0,35	x3S11Max=-0,5	S11Min=-5093,55938849228	PtS11Min=3	x2S11Min=0,35
x3S11Min=-0,5	FrameElem=1	ElemStation=0	Frame=1	Station=0,15	OutputCase=ENVETA5
CaseType=Combination	StepType=Min	P=-204,358814631231	V2=397,148781406123	V3=0	T=0
M2=0	M3=183,911222362201	S11Max=2174,40426325662	PtS11Max=1	x2S11Max=-0,35	x3S11Max=-0,5
S11Min=-4349,36520435453	PtS11Min=3	x2S11Min=0,35	x3S11Min=-0,5	FrameElem=1	ElemStation=0,15
Frame=1	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	P=-44,7225659594841
V2=451,3068125655	V3=0	T=0	M2=0	M3=436,127174700652	S11Max=5245,72721593213
PtS11Max=1	x2S11Max=-0,35	x3S11Max=-0,5	S11Min=-1821,00629412284	PtS11Min=3	x2S11Min=0,35
x3S11Min=-0,5	FrameElem=1	ElemStation=0	Frame=1	Station=0,15	OutputCase=ENVETA
CaseType=Combination	StepType=Max	P=-44,7225659594841	V2=453,9318125655	V3=0	T=0
M2=0	M3=373,280043507911	S11Max=4476,17050744958	PtS11Max=1	x2S11Max=-0,35	x3S11Max=-0,5
S11Min=-1144,00958458549	PtS11Min=3	x2S11Min=0,35	x3S11Min=-0,5	FrameElem=1	ElemStation=0,15
Frame=1	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	P=-235,851820656929
V2=348,619869371993	V3=0	T=0	M2=0	M3=138,706455787457	S11Max=1575,88650067202
PtS11Max=1	x2S11Max=-0,35	x3S11Max=-0,5	S11Min=-5434,93828694098	PtS11Min=3	x2S11Min=0,35
x3S11Min=-0,5	FrameElem=1	ElemStation=0	Frame=1	Station=0,15	OutputCase=ENVETA
CaseType=Combination	StepType=Min	P=-235,851820656929	V2=351,244869371993	V3=0	T=0
M2=0	M3=83,4183911752396	S11Max=898,889791134669	PtS11Max=1	x2S11Max=-0,35	x3S11Max=-0,5
S11Min=-4665,38157845844	PtS11Min=3	x2S11Min=0,35	x3S11Min=-0,5	FrameElem=1	ElemStation=0,15

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio</p>	
<p>89 di 182</p>	

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Frame=2 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195596
V2=403,942288314984 V3=0 T=0 M2=0 M3=346,513754572436 S11Max=4136,68592803142 PtS11Max=1 x2S11Max=-
0,35 x3S11Max=-0,5 _
S11Min=-2329,54403949089 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=2 ElemStation=0
Frame=2 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195596
V2=406,567288314984 V3=0 T=0 M2=0 M3=286,61435322566 S11Max=3403,22387072396 PtS11Max=1 x2S11Max=-0,35
-
x3S11Max=-0,5 S11Min=-1602,16443099762 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=2
ElemStation=0,15
Frame=2 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631231
V2=388,88100170451 V3=0 T=0 M2=0 M3=183,911222362179 S11Max=2174,40426325635 PtS11Max=1 x2S11Max=-0,35
x3S11Max=-0,5 _
S11Min=-4349,36520435478 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=2 ElemStation=0
Frame=2 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631231
V2=391,50600170451 V3=0 T=0 M2=0 M3=124,508554335229 S11Max=1447,02465476309 PtS11Max=1 x2S11Max=-0,35
-
x3S11Max=-0,5 S11Min=-3615,90314704731 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=2
ElemStation=0,15
Frame=2 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594842
V2=427,477569032588 V3=0 T=0 M2=0 M3=373,280043507934 S11Max=4476,17050744987 PtS11Max=1 x2S11Max=-
0,35 x3S11Max=-0,5 _
S11Min=-1144,00958458524 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=2 ElemStation=0
Frame=2 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594842
V2=430,102569032588 V3=0 T=0 M2=0 M3=311,068000118683 S11Max=3714,39038431618 PtS11Max=1 x2S11Max=-
0,35 _
x3S11Max=-0,5 S11Min=-513,151328154538 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=2
ElemStation=0,15
Frame=2 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,851820656929
V2=336,330487803779 V3=0 T=0 M2=0 M3=83,4183911752193 S11Max=898,889791134419 PtS11Max=1 x2S11Max=-
0,35 x3S11Max=-0,5 _
S11Min=-4665,38157845872 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=2 ElemStation=0
Frame=2 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,851820656929
V2=338,955487803779 V3=0 T=0 M2=0 M3=31,8983002333789 S11Max=268,03153470372 PtS11Max=1 x2S11Max=-0,35
x3S11Max=-0,5 _
S11Min=-3903,60145532503 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=2 ElemStation=0,15
Frame=3 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-397,830828929518
V2=296,540948119322 V3=0 T=0 M2=0 M3=407,289612943684 S11Max=6109,40984708603 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-4807,01189729357 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=3 ElemStation=0
Frame=3 Station=0,175 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-395,205828929518
V2=277,06669217136 V3=0 T=0 M2=0 M3=357,103285704091 S11Max=5277,34605975949 PtS11Max=1 x2S11Max=-0,3
-
x3S11Max=-0,5 S11Min=-4438,61320866607 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=3
ElemStation=0,175
Frame=3 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-432,777792836376
V2=129,090522994839 V3=0 T=0 M2=0 M3=246,084873779547 S11Max=3395,81722869133 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-7466,9105843701 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=3 ElemStation=0
Frame=3 Station=0,175 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-430,152792836376
V2=120,544644470571 V3=0 T=0 M2=0 M3=224,243452461897 S11Max=3036,16854006383 PtS11Max=1 x2S11Max=-0,3
-
x3S11Max=-0,5 S11Min=-6626,09679704356 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=3
ElemStation=0,175
Frame=3 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-355,642428349702
V2=311,980374848957 V3=0 T=0 M2=0 M3=436,127174700668 S11Max=6568,53263095642 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-2947,05759645959 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=3 ElemStation=0
Frame=3 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Max P=-353,017428349702
V2=291,935968934979 V3=0 T=0 M2=0 M3=383,288835905416 S11Max=5692,26865103555 PtS11Max=1 x2S11Max=-0,3
-
x3S11Max=-0,5 S11Min=-2741,18693570943 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=3
ElemStation=0,175
Frame=3 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-464,279628325603
V2=72,3719277077871 V3=0 T=0 M2=0 M3=138,70645578749 S11Max=1676,49092979007 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-7969,03985906586 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=3 ElemStation=0
Frame=3 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Min P=-461,654628325603
V2=65,8154492131634 V3=0 T=0 M2=0 M3=126,61671614248 S11Max=1479,37026903991 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-7084,02587914499 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=3 ElemStation=0,175
Frame=4 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-395,205828928866
V2=277,066692171345 V3=0 T=0 M2=0 M3=357,103285704101 S11Max=5277,34605976183 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-4438,6132086658 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=4 ElemStation=0
Frame=4 Station=0,175 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-392,580828928866
V2=257,890124395426 V3=0 T=0 M2=0 M3=310,298905540351 S11Max=4501,64805703266 PtS11Max=1 x2S11Max=-0,3
-
x3S11Max=-0,5 S11Min=-4094,97441551008 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=4
ElemStation=0,175
Frame=4 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-430,15279283554
V2=120,544644470568 V3=0 T=0 M2=0 M3=224,243452461899 S11Max=3036,16854006418 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _

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S11Min=-6626,09679704155 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=4 ElemStation=0
 Frame=4 Station=0,175 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-427,52779283554
 V2=112,112308957053 V3=0 T=0 M2=0 M3=203,887624872556 S11Max=2701,27974690845 PtS11Max=1 x2S11Max=-0,3
 -
 x3S11Max=-0,5 S11Min=-5841,64879431238 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=4
 ElemStation=0,175
 Frame=4 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-353,01742834877
 V2=291,935968934963 V3=0 T=0 M2=0 M3=383,288835905427 S11Max=5692,26865103806 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-2741,18693570865 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=4 ElemStation=0
 Frame=4 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Max P=-350,39242834877
 V2=272,189251193028 V3=0 T=0 M2=0 M3=333,93222043007 S11Max=4874,03339311544 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-2554,27375367713 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=4 ElemStation=0,175
 Frame=4 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-461,654628324906
 V2=65,8154492131635 V3=0 T=0 M2=0 M3=126,61671614248 S11Max=1479,37026904067 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-7084,02587914284 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=4 ElemStation=0
 Frame=4 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Min P=-459,029628324906
 V2=59,3725137292925 V3=0 T=0 M2=0 M3=115,664425220588 S11Max=1301,20708700915 PtS11Max=1 x2S11Max=-0,3
 -
 x3S11Max=-0,5 S11Min=-6257,04062122022 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=4
 ElemStation=0,175
 Frame=5 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-392,580828929285
 V2=257,890124395438 V3=0 T=0 M2=0 M3=310,29890554035 S11Max=4501,64805703162 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-4094,97441551054 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=5 ElemStation=0
 Frame=5 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-385,080828929285
 V2=204,7402533306 V3=0 T=0 M2=0 M3=194,742565589127 S11Max=2588,20905784458 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-2791,41360728765 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=5 ElemStation=0,5
 Frame=5 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-427,527792836027
 V2=112,112308957059 V3=0 T=0 M2=0 M3=203,887624872553 S11Max=2701,27974690791 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-5841,64879431337 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=5 ElemStation=0
 Frame=5 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-420,027792836027
 V2=88,6455669368767 V3=0 T=0 M2=0 M3=126,42397637918 S11Max=1422,71893868503 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-3903,20979512632 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=5 ElemStation=0,5
 Frame=5 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-350,392428349236
 V2=272,189251193039 V3=0 T=0 M2=0 M3=333,932220430069 S11Max=4874,03339311436 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-2554,27375367771 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=5 ElemStation=0
 Frame=5 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-342,892428349236
 V2=217,410380225298 V3=0 T=0 M2=0 M3=211,633567055771 S11Max=2848,22250354273 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-1666,52790533329 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=5 ElemStation=0,5
 Frame=5 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-459,029628325428
 V2=59,3725137292926 V3=0 T=0 M2=0 M3=115,664425220588 S11Max=1301,20708700857 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-6257,04062122127 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=5 ElemStation=0
 Frame=5 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-451,529628325428
 V2=41,5897717938087 V3=0 T=0 M2=0 M3=63,1496743199239 S11Max=438,461238664169 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-4206,22973164965 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=5 ElemStation=0,5
 Frame=6 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-332,580828929378 V2=-
 48,3603247699572 V3=0 T=0 M2=0 M3=112,636336308089 S11Max=1264,72595040838 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-1272,59163397472 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=6 ElemStation=0
 Frame=6 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-330,330828929378 V2=-
 53,522753831344 V3=0 T=0 M2=0 M3=133,953932137478 S11Max=1623,76921423152 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 S11Min=-1524,20140290677 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=6
 ElemStation=0,15
 Frame=6 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-367,527792835866 V2=-
 136,915147450176 V3=0 T=0 M2=0 M3=43,0974151455452 S11Max=163,98887087679 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-2489,81859319459 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=6 ElemStation=0
 Frame=6 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-365,277792835866 V2=-
 147,283011995433 V3=0 T=0 M2=0 M3=58,4190012814683 S11Max=423,098639808841 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 S11Min=-2841,36185701773 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=6
 ElemStation=0,15
 Frame=6 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-290,392428349469 V2=-
 41,0679536580744 V3=0 T=0 M2=0 M3=144,514807416887 S11Max=1850,68523266252 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-1122,77175397948 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=6 ElemStation=0
 Frame=6 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max P=-288,142428349469 V2=-
 45,767632664923 V3=0 T=0 M2=0 M3=168,24602657509 S11Max=2219,95627313749 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -
 S11Min=-1361,38236725544 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=6 ElemStation=0,15
 Frame=6 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-399,029628325255 V2=-
 154,500851379951 V3=0 T=0 M2=0 M3=35,1494207617602 S11Max=13,9437988817777 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 -



S11Min=-3045,52444011924 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=6 ElemStation=0
 Frame=6 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min P=-396,779628325255 V2=-
 165,35741589608 V3=0 T=0 M2=0 M3=49,7693183128196 S11Max=269,044071526655 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 _
 S11Min=-3437,69661566995 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=6 ElemStation=0,15
 Frame=7 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-330,330828928587 V2=-
 53,5227538316628 V3=0 T=0 M2=0 M3=133,953932137517 S11Max=1623,76921423474 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 _
 S11Min=-1524,2014029043 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=7 ElemStation=0
 Frame=7 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-328,080828928587 V2=-
 58,601763538211 V3=0 T=0 M2=0 M3=156,810304422935 S11Max=2008,45875232505 PtS11Max=1 x2S11Max=-0,3 _
 x3S11Max=-0,5 S11Min=-1800,8334460949 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=7
 ElemStation=0,15
 Frame=7 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-365,277792834327 V2=-
 147,283011995752 V3=0 T=0 M2=0 M3=58,4190012813994 S11Max=423,098639809012 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 _
 S11Min=-2841,36185701583 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=7 ElemStation=0
 Frame=7 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-363,027792834327 V2=-
 157,43216686359 V3=0 T=0 M2=0 M3=75,2419238728355 S11Max=707,230682999614 PtS11Max=1 x2S11Max=-0,3 _
 x3S11Max=-0,5 S11Min=-3218,55139510613 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=7
 ElemStation=0,15
 Frame=7 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-288,142428348305 V2=-
 45,7676326649448 V3=0 T=0 M2=0 M3=168,246026575129 S11Max=2219,95627313944 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 _
 S11Min=-1361,3823672529 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=7 ElemStation=0
 Frame=7 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max P=-285,892428348305 V2=-
 50,3838923169547 V3=0 T=0 M2=0 M3=193,540133564215 S11Max=2609,98658780795 PtS11Max=1 x2S11Max=-0,3 _
 x3S11Max=-0,5 S11Min=-1624,48237966015 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=7
 ElemStation=0,15
 Frame=7 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-396,779628323857 V2=-
 165,357415896595 V3=0 T=0 M2=0 M3=49,7693183127439 S11Max=269,044071526693 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 _
 S11Min=-3437,69661566836 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=7 ElemStation=0
 Frame=7 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min P=-394,529628323857 V2=-
 175,995270735304 V3=0 T=0 M2=0 M3=65,780319057179 S11Max=550,232368366664 PtS11Max=1 x2S11Max=-0,3
 x3S11Max=-0,5 _
 S11Min=-3856,52262813117 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=7 ElemStation=0,15
 Frame=8 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-477,525601482474 V2=-
 39,5164378195836 V3=0 T=0 M2=0 M3=-17,0518466193991 S11Max=1697,0919252925 PtS11Max=3 x2S11Max=0,3
 x3S11Max=-0,5 _
 S11Min=-1128,83816924707 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=8 ElemStation=0
 Frame=8 Station=0,175 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-474,900601482474 V2=-
 32,9599593249599 V3=0 T=0 M2=0 M3=-9,24039482559791 S11Max=1233,26265225661 PtS11Max=3 x2S11Max=0,3 _
 x3S11Max=-0,5 S11Min=-990,298394751354 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=8
 ElemStation=0,175
 Frame=8 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-513,964981180085 V2=-
 169,148814631252 V3=0 T=0 M2=0 M3=-149,578075665799 S11Max=-572,410858310151 PtS11Max=3 x2S11Max=0,3
 x3S11Max=-0,5 _
 S11Min=-3300,8115066105 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=8 ElemStation=0
 Frame=8 Station=0,175 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-511,339981180085 V2=-
 151,955158717273 V3=0 T=0 M2=0 M3=-121,485819283645 S11Max=-698,226721540171 PtS11Max=3 x2S11Max=0,3 _
 x3S11Max=-0,5 S11Min=-2832,2061448403 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=8
 ElemStation=0,175
 Frame=8 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-381,169999998993 V2=-
 31,3025659595105 V3=0 T=0 M2=0 M3=-3,1288975508075 S11Max=2779,6624977908 PtS11Max=3 x2S11Max=0,3
 x3S11Max=-0,5 _
 S11Min=-938,491874873969 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=8 ElemStation=0
 Frame=8 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Max P=-378,544999998993 V2=-
 24,7460874648868 V3=0 T=0 M2=0 M3=3,24512666748091 S11Max=2223,97862384664 PtS11Max=3 x2S11Max=0,3 _
 x3S11Max=-0,5 S11Min=-822,915748894394 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=8
 ElemStation=0,175
 Frame=8 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-540,781831564849 V2=-
 200,641820656944 V3=0 T=0 M2=0 M3=-204,896749867349 S11Max=-849,154760094618 PtS11Max=3 x2S11Max=0,3
 x3S11Max=-0,5 _
 S11Min=-4056,60339675102 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=8 ElemStation=0
 Frame=8 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Min P=-538,156831564849 V2=-
 183,448164742965 V3=0 T=0 M2=0 M3=-171,293217430699 S11Max=-896,928052608082 PtS11Max=0 x2S11Max=0
 x3S11Max=0 _
 S11Min=-3494,39259745238 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=8 ElemStation=0,175
 Frame=9 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-474,900601482663 V2=-
 32,9599593249422 V3=0 T=0 M2=0 M3=-9,24039482563247 S11Max=1233,26265225661 PtS11Max=3 x2S11Max=0,3
 x3S11Max=-0,5 _
 S11Min=-990,298394753072 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=9 ElemStation=0
 Frame=9 Station=0,175 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-472,275601482663 V2=-
 26,5170238410713 V3=0 T=0 M2=0 M3=-3,11490514406988 S11Max=819,147413718996 PtS11Max=3 x2S11Max=0,3 _
 x3S11Max=-0,5 S11Min=-881,587040956354 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=9
 ElemStation=0,175
 Frame=9 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-511,339981180644 V2=-
 151,955158717248 V3=0 T=0 M2=0 M3=-121,485819283663 S11Max=-698,226721540526 PtS11Max=3 x2S11Max=0,3
 x3S11Max=-0,5 _
 S11Min=-2832,20614484071 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=9 ElemStation=0

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio 92 di 182</p>	

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Frame=9 Station=0,175 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-508,714981180644 V2=-
135,059190975312 V3=0 T=0 M2=0 M3=-96,480148101107 S11Max=-794,214164071566 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-2413,31481756878 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=9
ElemStation=0,175
Frame=9 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-378,54499998996 V2=-
24,7460874648658 V3=0 T=0 M2=0 M3=3,24512666744288 S11Max=2223,97862384666 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-822,91574889626 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=9 ElemStation=0
Frame=9 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Max P=-375,91999998996 V2=-
18,3031519809949 V3=0 T=0 M2=0 M3=7,95912455398479 S11Max=1718,00878440072 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-737,1680436157 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=9
ElemStation=0,175
Frame=9 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-538,156831565431 V2=-
183,44816474296 V3=0 T=0 M2=0 M3=-171,2932174307 S11Max=-896,928052609052 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-3494,39259745245 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=9 ElemStation=0
Frame=9 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Min P=-535,531831565431 V2=-
166,552197001025 V3=0 T=0 M2=0 M3=-140,672527063944 S11Max=-892,553052609052 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-2981,89583265204 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=9 ElemStation=0,175
Frame=10 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-385,080828929437
V2=204,740253330549 V3=0 T=0 M2=0 M3=194,742565589133 S11Max=2588,20905784459 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-2791,41360728757 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=10 ElemStation=0
Frame=10 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-377,580828929437
V2=154,020489792593 V3=0 T=0 M2=0 M3=122,02545578455 S11Max=1346,21127501608 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-1626,24833799008 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=10 ElemStation=0,5
Frame=10 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-420,027792835853
V2=88,6455669368426 V3=0 T=0 M2=0 M3=126,423976379184 S11Max=1422,71893868522 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-3903,20979512652 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=10 ElemStation=0
Frame=10 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-412,527792835853
V2=66,1057066370907 V3=0 T=0 M2=0 M3=57,2640602213341 S11Max=282,553669387725 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-2721,30391780224 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=10
ElemStation=0,5
Frame=10 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-342,892428349294
V2=217,410380225242 V3=0 T=0 M2=0 M3=211,633567055778 S11Max=2848,22250354275 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-1666,527905333 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=10 ElemStation=0
Frame=10 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-335,392428349294
V2=165,061616784382 V3=0 T=0 M2=0 M3=132,988643779574 S11Max=1507,42782952057 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-869,810928541211 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=10 ElemStation=0,5
Frame=10 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-451,529628325196
V2=41,5897717938092 V3=0 T=0 M2=0 M3=63,1496743199237 S11Max=438,461238664455 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-4206,22973164986 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=10 ElemStation=0
Frame=10 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-444,029628325196
V2=24,7339115787555 V3=0 T=0 M2=0 M3=16,0966557124163 S11Max=-333,255738127335 PtS11Max=1 x2S11Max=-
0,3
x3S11Max=-0,5 S11Min=-2925,52696313191 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=10
ElemStation=0,5
Frame=11 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195691 V2=-
417,072112828023 V3=0 T=0 M2=0 M3=18,6916613188983 S11Max=1373,45272973897 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5
S11Min=-75,6234825993845 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=11 ElemStation=0
Frame=11 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195691 V2=-
414,447112828023 V3=0 T=0 M2=0 M3=81,0731616893804 S11Max=700,791428355943 PtS11Max=1 x2S11Max=-0,35
x3S11Max=-0,5 S11Min=-75,6234825993845 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=11
ElemStation=0,15
Frame=11 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631244 V2=-
432,251285679101 V3=0 T=0 M2=0 M3=-120,440455262541 S11Max=-291,94116375892 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-1576,10943995592 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=11 ElemStation=0
Frame=11 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631244 V2=-
429,626285679101 V3=0 T=0 M2=0 M3=-55,8020217277636 S11Max=-291,94116375892 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-1284,67375587378 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=11 ElemStation=0,15
Frame=11 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594937 V2=-
344,779772944672 V3=0 T=0 M2=0 M3=98,0643266770877 S11Max=1638,27475416787 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5
S11Min=-63,8893799421338 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=11 ElemStation=0
Frame=11 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594937 V2=-
342,154772944672 V3=0 T=0 M2=0 M3=149,601976065067 S11Max=1494,92975904193 PtS11Max=1 x2S11Max=-0,35
x3S11Max=-0,5 S11Min=-63,8893799421338 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=11
ElemStation=0,15
Frame=11 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,851820656938 V2=-
452,624507173965 V3=0 T=0 M2=0 M3=-141,109302207226 S11Max=-336,931172367054 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-1817,46325907031 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=11 ElemStation=0

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IG51-02-E-CV-CL-IN1Y-0X-001_A00
Relazione di calcolo

Foglio
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Frame=11 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,851820656938 V2=-449,999507173965 V3=0 T=0 M2=0 M3=-73,4148854482186 S11Max=-336,931172367054 PtS11Max=0 x2S11Max=0 x3S11Max=0
 S11Min=-2168,79210377604 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=11 ElemStation=0,15

Frame=12 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195671 V2=-457,967198574632 V3=0 T=0 M2=0 M3=81,0731616894594 S11Max=700,791428356912 PtS11Max=1 x2S11Max=-0,35 x3S11Max=-0,5 S11Min=-75,6234825993815 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=12 ElemStation=0

Frame=12 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195671 V2=-455,342198574632 V3=0 T=0 M2=0 M3=149,578075665791 S11Max=1539,62710969975 PtS11Max=1 x2S11Max=-0,35 x3S11Max=-0,5 S11Min=-310,126476978066 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=12 ElemStation=0,15

Frame=12 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631242 V2=-487,01102939529 V3=0 T=0 M2=0 M3=-55,8020217277336 S11Max=-291,941163758917 PtS11Max=0 x2S11Max=0 x3S11Max=0
 S11Min=-1284,67375587475 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=12 ElemStation=0

Frame=12 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631242 V2=-484,38602939529 V3=0 T=0 M2=0 M3=17,0518466193518 S11Max=107,469766761163 PtS11Max=1 x2S11Max=-0,35 x3S11Max=-0,5 S11Min=-2123,50943721759 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=12 ElemStation=0,15

Frame=12 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594909 V2=-369,899597413851 V3=0 T=0 M2=0 M3=149,601976065115 S11Max=1494,92975904251 PtS11Max=1 x2S11Max=-0,35 x3S11Max=-0,5
 S11Min=-63,8893799421299 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=12 ElemStation=0

Frame=12 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594909 V2=-367,274597413851 V3=0 T=0 M2=0 M3=204,896749867329 S11Max=2172,00862192677 PtS11Max=1 x2S11Max=-0,35 x3S11Max=-0,5 S11Min=-127,907283684912 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=12 ElemStation=0,15

Frame=12 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,85182065694 V2=-511,610460407685 V3=0 T=0 M2=0 M3=-73,4148854481895 S11Max=-336,931172367058 PtS11Max=0 x2S11Max=0 x3S11Max=0
 S11Min=-2168,79210377663 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=12 ElemStation=0

Frame=12 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,85182065694 V2=-508,985460407685 V3=0 T=0 M2=0 M3=3,12889755075319 S11Max=-51,2812212174867 PtS11Max=1 x2S11Max=-0,35 x3S11Max=-0,5 S11Min=-2845,87096666089 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=12 ElemStation=0,15

Frame=13 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-68,5337635951587 V2=-320,080828810169 V3=0 T=0 M2=0 M3=-75,2419238728769 S11Max=2318,28146218199 PtS11Max=3 x2S11Max=0,3 x3S11Max=-0,5
 S11Min=-1481,16934613022 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=13 ElemStation=0

Frame=13 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-69,5153636097856 V2=-295,774828750624 V3=0 T=0 M2=0 M3=-29,0527495558175 S11Max=1463,11198049431 PtS11Max=3 x2S11Max=0,3 x3S11Max=-0,5 S11Min=-713,085774205102 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=13 ElemStation=0,15

Frame=13 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-177,134166920541 V2=-353,859792699467 V3=0 T=0 M2=0 M3=-156,810304422973 S11Max=1026,89478296567 PtS11Max=3 x2S11Max=0,3 x3S11Max=-0,5
 S11Min=-2908,72868525046 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=13 ElemStation=0

Frame=13 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-178,115766935168 V2=-328,966992631178 V3=0 T=0 M2=0 M3=-105,598295523175 S11Max=255,339210988815 PtS11Max=3 x2S11Max=0,3 x3S11Max=-0,5 S11Min=-2056,83120361153 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=13 ElemStation=0,15

Frame=13 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-59,3858922650946 V2=-285,892428349236 V3=0 T=0 M2=0 M3=-65,7803190572266 S11Max=2903,3593400507 PtS11Max=3 x2S11Max=0,3 x3S11Max=-0,5
 S11Min=-1313,56695346905 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=13 ElemStation=0

Frame=13 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max P=-60,5371493889558 V2=-265,582428349236 V3=0 T=0 M2=0 M3=-19,4804206875345 S11Max=2085,22229200565 PtS11Max=3 x2S11Max=0,3 x3S11Max=-0,5 S11Min=-553,793712034454 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=13 ElemStation=0,15

Frame=13 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-196,675270734092 V2=-383,06962832535 V3=0 T=0 M2=0 M3=-193,540133564245 S11Max=879,110348438507 PtS11Max=3 x2S11Max=0,3 x3S11Max=-0,5
 S11Min=-3547,97844542414 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=13 ElemStation=0

Frame=13 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min P=-196,675270734092 V2=-357,03112832535 V3=0 T=0 M2=0 M3=-142,55144526837 S11Max=95,5536442166962 PtS11Max=3 x2S11Max=0,3 x3S11Max=-0,5
 S11Min=-2666,49255027335 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=13 ElemStation=0,15

Frame=14 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-69,5153636116171 V2=-295,774828750339 V3=0 T=0 M2=0 M3=-29,0527495557743 S11Max=1463,11198049153 PtS11Max=3 x2S11Max=0,3 x3S11Max=-0,5
 S11Min=-713,085774210166 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=14 ElemStation=0

Frame=14 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-70,4969636262441 V2=-271,468828690794 V3=0 T=0 M2=0 M3=13,4905247523106 S11Max=671,470476340016 PtS11Max=3 x2S11Max=0,3 x3S11Max=-0,5 S11Min=-117,494939377074 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=14 ElemStation=0,15

Frame=14 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-178,115766937 V2=-328,966992630475 V3=0 T=0 M2=0 M3=-105,598295523192 S11Max=255,339210982312 PtS11Max=3 x2S11Max=0,3 x3S11Max=-0,5
 S11Min=-2056,83120361486 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=14 ElemStation=0

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>	
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>		<p>Foglio 94 di 182</p>

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Frame=14 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-179,097366951627 V2=-
304,074192562186 V3=0 T=0 M2=0 M3=-58,1202066337504 S11Max=-298,495611586044 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-1267,16572214855 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=14 ElemStation=0,15
Frame=14 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-60,5371493902282 V2=-
265,582428348948 V3=0 T=0 M2=0 M3=-19,4804206874888 S11Max=2085,22229200604 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-553,793712040145 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=14 ElemStation=0
Frame=14 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max P=-61,5787494057493 V2=-
245,272428348948 V3=0 T=0 M2=0 M3=24,1201435557576 S11Max=1382,83479200606 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-102,631249009582 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=14
ElemStation=0,15
Frame=14 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-196,675270735493 V2=-
357,03112832463 V3=0 T=0 M2=0 M3=-142,551445268394 S11Max=95,5536442094829 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-2666,49255027375 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=14 ElemStation=0
Frame=14 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min P=-196,675270735493 V2=-
330,99262832463 V3=0 T=0 M2=0 M3=-100,408195268395 S11Max=-327,792117892489 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-1964,10505027378 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=14 ElemStation=0,15
Frame=15 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-412,275601481638
V2=174,839148013917 V3=0 T=0 M2=0 M3=-211,524755204985 S11Max=3967,69628929209 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-4224,49672980021 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=15 ElemStation=0
Frame=15 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-410,025601481638
V2=183,252212530047 V3=0 T=0 M2=0 M3=-224,709018924396 S11Max=4361,93517591786 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-4445,84799414349 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=15
ElemStation=0,15
Frame=15 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-448,714981180039
V2=86,2843253337057 V3=0 T=0 M2=0 M3=-282,933275475529 S11Max=2820,10023753416 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-5463,41289322554 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=15 ElemStation=0
Frame=15 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-446,464981180039
V2=89,4919543659638 V3=0 T=0 M2=0 M3=-306,362608673075 S11Max=3043,58796619101 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-5850,15177985131 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=15
ElemStation=0,15
Frame=15 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-315,919999998065
V2=183,053019874046 V3=0 T=0 M2=0 M3=-124,295174614872 S11Max=4286,45809736325 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-2598,11957691131 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=15 ElemStation=0
Frame=15 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max P=-313,669999998065
V2=191,466084390175 V3=0 T=0 M2=0 M3=-132,551114851017 S11Max=4701,23166363934 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-2731,96858084706 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=15
ElemStation=0,15
Frame=15 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-475,531831564849
V2=53,4288354452665 V3=0 T=0 M2=0 M3=-304,740668998279 S11Max=1545,05291025109 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-5871,5642025794 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=15 ElemStation=0
Frame=15 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min P=-473,281831564849
V2=56,6364644775246 V3=0 T=0 M2=0 M3=-329,402082974845 S11Max=1686,40191418683 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-6278,8377688555 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=15
ElemStation=0,15
Frame=16 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-410,025601481918
V2=183,252212530699 V3=0 T=0 M2=0 M3=-224,709018924337 S11Max=4361,93517591692 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-4445,84799414282 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=16 ElemStation=0
Frame=16 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-407,775601481918
V2=191,446567369408 V3=0 T=0 M2=0 M3=-238,368170547071 S11Max=4768,62962706189 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-4670,61519166662 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=16
ElemStation=0,15
Frame=16 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-446,464981180132
V2=89,4919543666111 V3=0 T=0 M2=0 M3=-306,36260867301 S11Max=3043,58796618988 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-5850,15177985037 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=16 ElemStation=0
Frame=16 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-444,214981180132
V2=92,6161640440304 V3=0 T=0 M2=0 M3=-330,539275741707 S11Max=3274,99049323544 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-6249,34623099533 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=16
ElemStation=0,15
Frame=16 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-313,66999999853
V2=191,466084390999 V3=0 T=0 M2=0 M3=-132,551114851017 S11Max=4701,2316636384 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-2731,96858084783 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=16 ElemStation=0
Frame=16 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max P=-311,41999999853
V2=199,6604392297 V3=0 T=0 M2=0 M3=-141,281942990387 S11Max=5128,46079443409 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-2873,73238317067 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=16 ElemStation=0,15

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<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>	<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p> <p>Foglio 95 di 182</p>
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Frame=16 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-473,281831564849
V2=56,6364644775201 V3=0 T=0 M2=0 M3=-329,402082974765 S11Max=1686,40191418605 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-6278,83776885416 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=16 ElemStation=0
Frame=16 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min P=-471,031831564849
V2=59,7606741549395 V3=0 T=0 M2=0 M3=-354,810830822507 S11Max=1835,66571650889 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-6698,56689964985 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=16
ElemStation=0,15
Frame=17 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-377,580828929111
V2=154,02048979264 V3=0 T=0 M2=0 M3=122,025455784547 S11Max=1346,21127501616 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-1626,24833798967 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=17 ElemStation=0
Frame=17 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-370,080828929111
V2=105,730833781565 V3=0 T=0 M2=0 M3=91,4721600173217 S11Max=849,48967889573 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-866,688983376132 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=17 ElemStation=0,5
Frame=17 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-412,527792835783
V2=66,105706637135 V3=0 T=0 M2=0 M3=57,2640602213308 S11Max=282,553669388019 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-2721,30391780209 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=17 ElemStation=0
Frame=17 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-405,027792835783
V2=44,4927280578131 V3=0 T=0 M2=0 M3=12,4404989445183 S11Max=-452,005685225522 PtS11Max=1 x2S11Max=-
0,3
x3S11Max=-0,5 S11Min=-2199,58232168166 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=17
ElemStation=0,5
Frame=17 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-335,392428349062
V2=165,061616784426 V3=0 T=0 M2=0 M3=132,988643779572 S11Max=1507,42782952062 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-869,810928541023 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=17 ElemStation=0
Frame=17 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-327,892428349062
V2=115,142960870447 V3=0 T=0 M2=0 M3=97,3220344921788 S11Max=925,484341397409 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-546,487380581769 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=17 ElemStation=0,5
Frame=17 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-444,029628325138
V2=24,7339115787559 V3=0 T=0 M2=0 M3=16,0966557124166 S11Max=-333,255738127135 PtS11Max=1 x2S11Max=-
0,3 x3S11Max=-0,5
S11Min=-2925,52696313176 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=17 ElemStation=0
Frame=17 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-436,529628325138
V2=8,80493308413222 V3=0 T=0 M2=0 M3=-9,4620080563808 S11Max=-727,549380541896 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-2318,58347500855 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=17 ElemStation=0,5
Frame=18 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-370,080828929227
V2=105,730833781477 V3=0 T=0 M2=0 M3=91,4721600173338 S11Max=849,489678896357 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-866,688983376257 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=18 ElemStation=0
Frame=18 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-362,580828929227
V2=59,8712852972847 V3=0 T=0 M2=0 M3=71,9096331158491 S11Max=535,947563871612 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-604,301381548711 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=18
ElemStation=0,5
Frame=18 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-405,027792835527
V2=44,492728057783 V3=0 T=0 M2=0 M3=12,4404989445373 S11Max=-452,005685225012 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-2199,58232168144 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=18 ElemStation=0
Frame=18 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-397,527792835527
V2=21,0932550430362 V3=0 T=0 M2=0 M3=-9,26176121464276 S11Max=-662,546321392545 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-1861,04020665669 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=18 ElemStation=0,5
Frame=18 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-327,892428349178
V2=115,142960870363 V3=0 T=0 M2=0 M3=97,3220344921938 S11Max=925,484341398144 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-546,487380581963 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=18 ElemStation=0
Frame=18 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-320,392428349178
V2=67,6544124832658 V3=0 T=0 M2=0 M3=73,4606940219925 S11Max=549,467630732794 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-533,987380581963 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=18 ElemStation=0,5
Frame=18 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-436,529628324905
V2=8,80493308414393 V3=0 T=0 M2=0 M3=-9,4620080563815 S11Max=-727,549380541509 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-2318,58347500832 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=18 ElemStation=0
Frame=18 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-429,029628324905 V2=-
8,91053984590462 V3=0 T=0 M2=0 M3=-14,7413707499166 S11Max=-715,049380541509 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-1931,04928270859 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=18 ElemStation=0,5
Frame=19 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-362,580828929076
V2=59,8712852973975 V3=0 T=0 M2=0 M3=71,9096331158499 S11Max=535,947563871335 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-604,301381548459 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=19 ElemStation=0
Frame=19 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-355,080828929076
V2=16,4418443400865 V3=0 T=0 M2=0 M3=63,8837540286839 S11Max=424,243958387728 PtS11Max=1 x2S11Max=-0,3

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<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>	<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p> <p>Foglio 96 di 182</p>
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x3S11Max=-0,5 S11Min=-591,801381548459 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=19
ElemStation=0,5
Frame=19 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-397,527792835701
V2=21,0932550430067 V3=0 T=0 M2=0 M3=-9,26176121464038 S11Max=-662,546321392835 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1861,04020665699 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=19 ElemStation=0
Frame=19 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-390,027792835701 V2=-
21,5041859019065 V3=0 T=0 M2=0 M3=-20,3275218104619 S11Max=-650,046321392835 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1714,77555520423 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=19 ElemStation=0,5
Frame=19 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-320,392428348887
V2=67,6544124833749 V3=0 T=0 M2=0 M3=73,4606940219935 S11Max=549,467630732724 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-533,987380581478 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=19 ElemStation=0
Frame=19 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-312,892428348887
V2=22,5959716231599 V3=0 T=0 M2=0 M3=71,6167654493144 S11Max=629,579424154782 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-521,487380581478 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=19 ElemStation=0,5
Frame=19 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-429,029628325021 V2=-
8,9105398459028 V3=0 T=0 M2=0 M3=-14,7413707499163 S11Max=-715,049380541702 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1931,04928270874 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=19 ElemStation=0
Frame=19 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-421,529628325021 V2=-
45,8239807061179 V3=0 T=0 M2=0 M3=-22,3528436315647 S11Max=-702,549380541702 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1883,81966683677 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=19 ElemStation=0,5
Frame=20 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-355,080828929273
V2=16,4418443399093 V3=0 T=0 M2=0 M3=63,8837540286932 S11Max=424,243958387527 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-591,801381548789 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=20 ElemStation=0
Frame=20 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-347,580828929273 V2=-
11,8123030706011 V3=0 T=0 M2=0 M3=66,666391346704 S11Max=482,127214986901 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-579,301381548789 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=20
ElemStation=0,5
Frame=20 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-390,027792835783 V2=-
21,5041859018465 V3=0 T=0 M2=0 M3=-20,3275218104409 S11Max=-650,046321392972 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1714,77555520453 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=20 ElemStation=0
Frame=20 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-382,527792835783 V2=-
62,2068031701736 V3=0 T=0 M2=0 M3=-18,2569980645499 S11Max=-637,546321392972 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1748,65284383804 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=20 ElemStation=0,5
Frame=20 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-312,892428349178
V2=22,5959716229848 V3=0 T=0 M2=0 M3=71,6167654493142 S11Max=629,579424154486 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-521,487380581963 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=20 ElemStation=0
Frame=20 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-305,392428349178 V2=-
6,6180708875306 V3=0 T=0 M2=0 M3=85,0786582262384 S11Max=866,44430376989 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-508,987380581963 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=20 ElemStation=0,5
Frame=20 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-421,529628325022 V2=-
45,8239807061191 V3=0 T=0 M2=0 M3=-22,3528436315447 S11Max=-702,549380541703 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1883,81966683709 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=20 ElemStation=0
Frame=20 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-414,029628325022 V2=-
80,3073140394524 V3=0 T=0 M2=0 M3=-22,9670440308665 S11Max=-690,049380541703 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-2033,4992792445 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=20 ElemStation=0,5
Frame=21 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-347,580828929204 V2=-
11,812303070592 V3=0 T=0 M2=0 M3=66,6663913466907 S11Max=482,127214987058 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-579,301381548673 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=21 ElemStation=0
Frame=21 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-340,080828929204 V2=-
30,5497547805912 V3=0 T=0 M2=0 M3=79,0494749498045 S11Max=693,084576234972 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-621,62914002405 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=21
ElemStation=0,5
Frame=21 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-382,527792835574 V2=-
62,2068031701657 V3=0 T=0 M2=0 M3=-18,2569980645826 S11Max=-637,546321392624 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1748,65284383747 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=21 ElemStation=0
Frame=21 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-375,027792835574 V2=-
100,776029073713 V3=0 T=0 M2=0 M3=3,28966550852263 S11Max=-512,613271537484 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-1942,53757055603 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=21
ElemStation=0,5
Frame=21 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-305,392428349062 V2=-
6,61807088754033 V3=0 T=0 M2=0 M3=85,0786582262388 S11Max=866,444303770089 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-508,987380581769 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=21 ElemStation=0
Frame=21 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-297,892428349062 V2=-
24,7998838502323 V3=0 T=0 M2=0 M3=104,882997239722 S11Max=1209,01662066148 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-511,291236298571 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=21
ElemStation=0,5

<p>GENERAL CONTRACTOR</p> 	<p>ALTA SORVEGLIANZA</p> 
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio 97 di 182</p>	

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Frame=21 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-414,029628324964 V2=-
80,3073140394527 V3=0 T=0 M2=0 M3=-22,9670440308987 S11Max=-690,049380541607 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-2033,49927924435 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=21 ElemStation=0
Frame=21 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-406,529628324964 V2=-
117,027593764786 V3=0 T=0 M2=0 M3=-3,39460464535443 S11Max=-641,75618513826 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-2362,81371172185 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=21
ElemStation=0,5
Frame=22 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-340,080828929401 V2=-
30,5497547806768 V3=0 T=0 M2=0 M3=79,0494749498028 S11Max=693,084576235074 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-621,629140025166 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=22 ElemStation=0
Frame=22 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-332,580828929401 V2=-
48,3603247702459 V3=0 T=0 M2=0 M3=112,636336308115 S11Max=1264,72595040866 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-1272,59163397464 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=22
ElemStation=0,5
Frame=22 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-375,027792835957 V2=-
100,776029073798 V3=0 T=0 M2=0 M3=3,2896655085698 S11Max=-512,613271537798 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-1942,53757055664 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=22 ElemStation=0
Frame=22 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-367,527792835957 V2=-
136,915147450464 V3=0 T=0 M2=0 M3=43,0974151455381 S11Max=163,988870876633 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-2489,81859319517 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=22
ElemStation=0,5
Frame=22 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-297,892428349353 V2=-
24,7998838501909 V3=0 T=0 M2=0 M3=104,882997239722 S11Max=1209,016620661 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-511,291236299711 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=22 ElemStation=0
Frame=22 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-290,392428349353 V2=-
41,0679536579659 V3=0 T=0 M2=0 M3=144,514807416891 S11Max=1850,68523266252 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-1122,77175397931 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=22
ElemStation=0,5
Frame=22 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-406,52962832537 V2=-
117,027593764847 V3=0 T=0 M2=0 M3=-3,39460464530089 S11Max=-641,756185138621 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-2362,81371172246 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=22 ElemStation=0
Frame=22 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-399,02962832537 V2=-
154,50085138034 V3=0 T=0 M2=0 M3=35,1494207617526 S11Max=13,9437988815546 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-3045,52444011973 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=22 ElemStation=0,5
Frame=23 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-96,6729640149355
V2=385,261380910261 V3=0 T=0 M2=0 M3=-122,980187748935 S11Max=3172,99710514153 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-2210,79140250714 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=23 ElemStation=0
Frame=23 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-97,6545640295625
V2=410,15418097855 V3=0 T=0 M2=0 M3=-178,807219142898 S11Max=4165,63055747815 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-3142,87792576424 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=23
ElemStation=0,15
Frame=23 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-205,273367340319
V2=351,163601246002 V3=0 T=0 M2=0 M3=-207,493021448212 S11Max=1888,54818912402 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-3743,43694313221 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=23 ElemStation=0
Frame=23 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-206,254967354946
V2=375,469601305547 V3=0 T=0 M2=0 M3=-267,149188589872 S11Max=2817,36271233236 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-4739,34239551759 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=23
ElemStation=0,15
Frame=23 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549343
V2=407,494831568447 V3=0 T=0 M2=0 M3=-53,948942990395 S11Max=3447,75548372268 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-1008,78350676481 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=23 ElemStation=0
Frame=23 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549343
V2=433,533331568447 V3=0 T=0 M2=0 M3=-96,0921929904196 S11Max=4496,99568764379 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-1711,17100676522 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=23
ElemStation=0,15
Frame=23 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-212,996439229905
V2=270,800000000158 V3=0 T=0 M2=0 M3=-224,75083135204 S11Max=789,514592915026 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-4043,93889467865 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=23 ElemStation=0
Frame=23 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min P=-214,223439229905
V2=291,110000000158 V3=0 T=0 M2=0 M3=-287,827943587306 S11Max=1491,90209291544 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-5097,26909859976 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=23
ElemStation=0,15
Frame=24 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-97,6545640302749
V2=410,154180977743 V3=0 T=0 M2=0 M3=-178,807219142911 S11Max=4165,63055747519 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-3142,87792576565 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=24 ElemStation=0

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<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>	<p>Foglio 98 di 182</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00 Relazione di calcolo</p>		

```

Frame=24 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-98,6361640449018
V2=435,046981046032 V3=0 T=0 M2=0 M3=-238,368170547039 S11Max=5220,49600998052 PtS11Max=3 x2S11Max=0,3
-
x3S11Max=-0,5 S11Min=-4137,19644919215 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=24
ElemStation=0,15
Frame=24 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-206,254967355654
V2=375,469601305134 V3=0 T=0 M2=0 M3=-267,149188589858 S11Max=2817,3627123314 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-4739,34239552008 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=24 ElemStation=0
Frame=24 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-207,236567370281
V2=399,775601364679 V3=0 T=0 M2=0 M3=-330,539275741641 S11Max=3808,40923570915 PtS11Max=3 x2S11Max=0,3
-
x3S11Max=-0,5 S11Min=-5797,47984807417 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=24
ElemStation=0,15
Frame=24 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549374
V2=433,533331567656 V3=0 T=0 M2=0 M3=-96,0921929904253 S11Max=4496,99568764052 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-1711,17100676532 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=24 ElemStation=0
Frame=24 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549374
V2=459,571831567656 V3=0 T=0 M2=0 M3=-141,281942990354 S11Max=5611,33214155966 PtS11Max=3 x2S11Max=0,3
-
x3S11Max=-0,5 S11Min=-2464,33350676413 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=24
ElemStation=0,15
Frame=24 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-214,223439230791
V2=291,109999999519 V3=0 T=0 M2=0 M3=-287,827943587292 S11Max=1491,90209291553 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-5097,26909860255 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=24 ElemStation=0
Frame=24 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min P=-215,450439230791
V2=311,419999999519 V3=0 T=0 M2=0 M3=-354,81083082244 S11Max=2245,06459291433 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-6215,69555252168 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=24 ElemStation=0,15
Frame=25 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-70,4969636255576 V2=-
271,468828690719 V3=0 T=0 M2=0 M3=13,4905247523038 S11Max=671,470476341291 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-117,494939375929 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=25 ElemStation=0
Frame=25 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-73,7689636743142 V2=-
190,448828492235 V3=0 T=0 M2=0 M3=131,78934540391 S11Max=1955,28900186553 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-1471,70285909996 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=25
ElemStation=0,5
Frame=25 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-179,097366950938 V2=-
304,074192562194 V3=0 T=0 M2=0 M3=-58,120206633739 S11Max=-298,495611584896 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-1267,16572214721 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=25 ElemStation=0
Frame=25 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-182,369366999694 V2=-
221,098192334564 V3=0 T=0 M2=0 M3=70,3534832345823 S11Max=873,41324871945 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-2437,68917826479 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=25
ElemStation=0,5
Frame=25 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-61,5787494049517 V2=-
245,272428348833 V3=0 T=0 M2=0 M3=24,1201435557538 S11Max=1382,83479200602 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-102,631249008253 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=25 ElemStation=0
Frame=25 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,0507494566885 V2=-
177,572428348833 V3=0 T=0 M2=0 M3=145,565865592195 S11Max=2181,56921795186 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-591,74854132698 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=25
ElemStation=0,5
Frame=25 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-196,675270735143 V2=-
330,992628324647 V3=0 T=0 M2=0 M3=-100,408195268392 S11Max=-327,792117891905 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-1964,10505027373 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=25 ElemStation=0
Frame=25 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-196,675270735143 V2=-
244,197628324647 V3=0 T=0 M2=0 M3=18,0668047315873 S11Max=10,4782830592639 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-2670,62630178796 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=25
ElemStation=0,5
Frame=26 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-73,7689636741947 V2=-
190,448828492237 V3=0 T=0 M2=0 M3=131,789345403882 S11Max=1955,28900186526 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-1471,7028591 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=26 ElemStation=0
Frame=26 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-77,0409637229512 V2=-
109,428828293753 V3=0 T=0 M2=0 M3=209,437237978809 S11Max=3362,21902677523 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-2939,70952622046 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=26
ElemStation=0,5
Frame=26 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-182,369366999575 V2=-
221,09819233454 V3=0 T=0 M2=0 M3=70,3534832345592 S11Max=873,413248718642 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-2437,68917826413 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=26 ElemStation=0
Frame=26 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-185,641367048332 V2=-
138,12219210691 V3=0 T=0 M2=0 M3=158,086683256613 S11Max=2329,84658233331 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-3727,16434975882 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=26
ElemStation=0,5
Frame=26 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,0507494569134 V2=-
177,572428348836 V3=0 T=0 M2=0 M3=145,565865592164 S11Max=2181,5692179516 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5

```

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio 99 di 182</p>	

S11Min=-591,748541326575 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=26 ElemStation=0
Frame=26 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549342 V2=-
103,563237859989 V3=0 T=0 M2=0 M3=224,508782098202 S11Max=3608,71964179467 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-2002,16520799282 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=26
ElemStation=0,5
Frame=26 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-196,67527073491 V2=-
244,197628324606 V3=0 T=0 M2=0 M3=18,066804731563 S11Max=10,4782830588585 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-2670,6263017872 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=26 ElemStation=0
Frame=26 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-196,67527073491 V2=-
157,402628324606 V3=0 T=0 M2=0 M3=102,691804731538 S11Max=1420,8949497251 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-3983,04853871914 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=26 ElemStation=0,5
Frame=27 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-77,0409637228322 V2=-
109,428828293717 V3=0 T=0 M2=0 M3=209,437237978818 S11Max=3362,21902677559 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-2939,70952622038 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=27 ElemStation=0
Frame=27 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-80,3129637715888 V2=-
28,4088280952338 V3=0 T=0 M2=0 M3=257,754333975346 S11Max=4162,05062663645 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-3732,54952501983 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=27
ElemStation=0,5
Frame=27 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-185,641367048213 V2=-
138,122192106879 V3=0 T=0 M2=0 M3=158,086683256629 S11Max=2329,84658233394 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-3727,16434975884 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=27 ElemStation=0
Frame=27 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-188,913367096969 V2=-
55,1461918792493 V3=0 T=0 M2=0 M3=205,309883179423 S11Max=3111,11324762761 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-4429,76050587508 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=27
ElemStation=0,5
Frame=27 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549344 V2=-
103,563237859954 V3=0 T=0 M2=0 M3=224,50878209821 S11Max=3608,71964179506 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-2002,16520799301 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=27 ElemStation=0
Frame=27 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549344 V2=-
24,2082380584375 V3=0 T=0 M2=0 M3=272,211402139664 S11Max=4396,94664248595 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 S11Min=-2848,41520799224 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=27
ElemStation=0,5
Frame=27 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-196,67527073491 V2=-
157,402628324564 V3=0 T=0 M2=0 M3=102,691804731549 S11Max=1420,89494972529 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-3983,04853871909 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=27 ElemStation=0
Frame=27 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-196,67527073491 V2=-
70,6076283245635 V3=0 T=0 M2=0 M3=153,466804731503 S11Max=2267,14494972452 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5
S11Min=-4676,76676216951 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=27 ElemStation=0,5
Frame=28 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-472,275601482231 V2=-
26,5170238410782 V3=0 T=0 M2=0 M3=-3,11490514405674 S11Max=819,147413719536 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-881,587040955806 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=28 ElemStation=0
Frame=28 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-464,775601482231 V2=-
1,37575180172561 V3=0 T=0 M2=0 M3=5,18854064505841 S11Max=352,25959009165 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-774,626002470385 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=28 ElemStation=0,5
Frame=28 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-508,714981180679 V2=-
135,059190975329 V3=0 T=0 M2=0 M3=-96,4801481011007 S11Max=-794,214164071769 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-2413,31481756834 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=28
ElemStation=0
Frame=28 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-501,214981180679 V2=-
88,4253200075868 V3=0 T=0 M2=0 M3=-68,7043163584984 S11Max=-835,358301967799 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-1937,88428852496 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=28 ElemStation=0,5
Frame=28 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-375,919999998704 V2=-
18,3031519810034 V3=0 T=0 M2=0 M3=7,95912455400042 S11Max=1718,0087844012 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-737,168043615051 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=28 ElemStation=0
Frame=28 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-368,419999998704
V2=6,83812005834922 V3=0 T=0 M2=0 M3=12,3259448832048 S11Max=993,782506289299 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-627,97895059275 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=28 ElemStation=0,5
Frame=28 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-535,531831565489 V2=-
166,552197001027 V3=0 T=0 M2=0 M3=-140,672527063943 S11Max=-892,553052609149 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-2981,89583265154 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=28 ElemStation=0
Frame=28 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-528,031831565489 V2=-
119,918326033285 V3=0 T=0 M2=0 M3=-96,4689503772287 S11Max=-880,053052609149 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-2328,41331239003 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=28 ElemStation=0,5
Frame=29 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-464,775601481696 V2=-
1,37575180177175 V3=0 T=0 M2=0 M3=5,18854064504523 S11Max=352,259590092877 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-774,626002469494 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=29 ElemStation=0

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio</p>	
<p>100 di 182</p>	

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Frame=29 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-457,275601481696
V2=25,1465062627444 V3=0 T=0 M2=0 M3=-0,133658727119989 S11Max=333,617841826407 PtS11Max=3
x2S11Max=0,3 _
x3S11Max=-0,5 S11Min=-806,899600672052 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=29
ElemStation=0,5
Frame=29 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-501,214981179701 V2=-
88,4253200075787 V3=0 T=0 M2=0 M3=-68,7043163585092 S11Max=-835,358301966169 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1937,8842885241 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=29 ElemStation=0
Frame=29 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-493,714981179701 V2=-
44,2215565667185 V3=0 T=0 M2=0 M3=-66,8358114625211 S11Max=-802,444309768052 PtS11Max=3 x2S11Max=0,3 _
x3S11Max=-0,5 S11Min=-1894,24254025763 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=29
ElemStation=0,5
Frame=29 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-368,419999998355
V2=6,83812005829867 V3=0 T=0 M2=0 M3=12,3259448831909 S11Max=993,782506289888 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 _
S11Min=-627,978950591508 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=29 ElemStation=0
Frame=29 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-360,919999998355
V2=33,3603781228148 V3=0 T=0 M2=0 M3=4,39693362126992 S11Max=701,345008955032 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 _
S11Min=-721,18404082448 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=29 ElemStation=0,5
Frame=29 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-528,031831564442 V2=-
119,918326033285 V3=0 T=0 M2=0 M3=-96,4689503772292 S11Max=-880,053052607403 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-2328,41331238924 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=29 ElemStation=0
Frame=29 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-520,531831564442 V2=-
75,7145625924249 V3=0 T=0 M2=0 M3=-83,6608268346546 S11Max=-867,553052607403 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-2181,69015435086 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=29 ElemStation=0,5
Frame=30 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-80,3129637717491 V2=-
28,4088280954611 V3=0 T=0 M2=0 M3=257,754333975331 S11Max=4162,05062663593 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-3732,54952502036 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=30 ElemStation=0
Frame=30 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-83,5849638205057
V2=53,3573799992864 V3=0 T=0 M2=0 M3=264,583429858149 S11Max=4270,41555793498 PtS11Max=1 x2S11Max=-0,3
_
x3S11Max=-0,5 S11Min=-3850,22285550101 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=30
ElemStation=0,5
Frame=30 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-188,913367097129 V2=-
55,1461918794557 V3=0 T=0 M2=0 M3=205,30988317942 S11Max=3111,11324762698 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-4429,7605058751 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=30 ElemStation=0
Frame=30 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-192,185367145886
V2=27,0836004519104 V3=0 T=0 M2=0 M3=212,023083003085 S11Max=3217,21324460184 PtS11Max=1 x2S11Max=-0,3
_
x3S11Max=-0,5 S11Min=-4549,03210400333 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=30
ElemStation=0,5
Frame=30 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549345 V2=-
24,2082380586599 V3=0 T=0 M2=0 M3=272,211402139647 S11Max=4396,94664248534 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-2848,41520799207 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=30 ElemStation=0
Frame=30 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549345
V2=60,3148315679843 V3=0 T=0 M2=0 M3=276,516522181209 S11Max=4461,88197651138 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-3130,49854132622 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=30 ElemStation=0,5
Frame=30 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-196,675270735027 V2=-
70,6076283247901 V3=0 T=0 M2=0 M3=153,466804731492 S11Max=2267,14494972435 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-4676,76676216956 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=30 ElemStation=0
Frame=30 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-196,675270735027 V2=-
9,96607241820862E-11 V3=0 T=0 M2=0 M3=170,391804731542 S11Max=2549,22828305851 PtS11Max=1 x2S11Max=-
0,3 _
x3S11Max=-0,5 S11Min=-4755,33542952894 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=30
ElemStation=0,5
Frame=31 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-83,584963820852
V2=53,3573799995907 V3=0 T=0 M2=0 M3=264,583429858159 S11Max=4270,41555793455 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-3850,22285550142 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=31 ElemStation=0
Frame=31 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-86,8569638696086
V2=136,333380227221 V3=0 T=0 M2=0 M3=229,924525627022 S11Max=3687,31382066768 PtS11Max=1 x2S11Max=-0,3
_
x3S11Max=-0,5 S11Min=-3239,79009201212 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=31
ElemStation=0,5
Frame=31 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-192,185367146232
V2=27,0836004522121 V3=0 T=0 M2=0 M3=212,023083003104 S11Max=3217,21324460203 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-4549,03210400406 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=31 ElemStation=0
Frame=31 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-195,457367194989
V2=108,103600650696 V3=0 T=0 M2=0 M3=178,226282727376 S11Max=2648,14657325368 PtS11Max=1 x2S11Max=-0,3
_
x3S11Max=-0,5 S11Min=-3976,83703356637 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=31
ElemStation=0,5

```

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio 101 di 182</p>	

```

Frame=31 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549344
V2=60,3148315683009 V3=0 T=0 M2=0 M3=276,516522181219 S11Max=4461,88197651082 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-3130,49854132629 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=31 ElemStation=0
Frame=31 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549344
V2=147,109831568301 V3=0 T=0 M2=0 M3=246,643016731508 S11Max=3963,925499842 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-2795,47578234501 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=31 ElemStation=0,5
Frame=31 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-196,675270735259
V2=1,44126488457204E-10 V3=0 T=0 M2=0 M3=170,391804731546 S11Max=2549,22828305858 PtS11Max=1
x2S11Max=-0,3 _
x3S11Max=-0,5 S11Min=-4755,33542952983 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=31
ElemStation=0
Frame=31 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-200,726439231081
V2=67,700000001441 V3=0 T=0 M2=0 M3=153,466804731474 S11Max=2267,14494972404 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-4257,50839120826 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=31 ElemStation=0,5
Frame=32 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-86,856963869396
V2=136,3338022699 V3=0 T=0 M2=0 M3=229,924525627055 S11Max=3687,31382066859 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-3239,79009201215 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=32 ElemStation=0
Frame=32 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-90,1289639181526
V2=219,30938045462 V3=0 T=0 M2=0 M3=153,7776212822 S11Max=2412,74541483974 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-1794,40032209173 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=32 ElemStation=0,5
Frame=32 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-195,457367194777
V2=108,103600650461 V3=0 T=0 M2=0 M3=178,226282727412 S11Max=2648,14657325401 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-3976,83703356658 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=32 ElemStation=0
Frame=32 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-198,729367243533
V2=189,123600848945 V3=0 T=0 M2=0 M3=91,3934725824234 S11Max=1252,04876398905 PtS11Max=1 x2S11Max=-0,3
_
x3S11Max=-0,5 S11Min=-2713,17529456692 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=32
ElemStation=0,5
Frame=32 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549341
V2=147,109831568059 V3=0 T=0 M2=0 M3=246,643016731543 S11Max=3963,92549984297 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-2795,47578234473 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=32 ElemStation=0
Frame=32 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549341
V2=233,904831568059 V3=0 T=0 M2=0 M3=173,453080893891 S11Max=2744,09323588211 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-1663,14396506377 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=32 ElemStation=0,5
Frame=32 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-200,726439230816
V2=67,6999999999816 V3=0 T=0 M2=0 M3=153,466804731507 S11Max=2267,1449497246 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-4257,50839120846 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=32 ElemStation=0
Frame=32 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-204,816439230816
V2=135,399999999982 V3=0 T=0 M2=0 M3=83,8678043413766 S11Max=1132,44951298212 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-3037,67612724759 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=32 ElemStation=0,5
Frame=33 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-90,1289639179415
V2=219,309380454519 V3=0 T=0 M2=0 M3=153,777621282201 S11Max=2412,74541484011 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-1794,4003220917 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=33 ElemStation=0
Frame=33 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-93,4009639666981
V2=302,285380682149 V3=0 T=0 M2=0 M3=36,1427168235913 S11Max=446,710340448691 PtS11Max=1 x2S11Max=-0,3
_
x3S11Max=-0,5 S11Min=-155,66827327783 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=33
ElemStation=0,5
Frame=33 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-198,729367243322
V2=189,123600848859 V3=0 T=0 M2=0 M3=91,3934725824289 S11Max=1252,04876398926 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-2713,17529456658 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=33 ElemStation=0
Frame=33 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-202,001367292079
V2=270,143601047342 V3=0 T=0 M2=0 M3=-36,1871137171759 S11Max=-336,668945486798 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-880,081007757047 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=33 ElemStation=0,5
Frame=33 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549352
V2=233,904831567955 V3=0 T=0 M2=0 M3=173,453080893893 S11Max=2744,09323588233 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-1663,14396506373 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=33 ElemStation=0
Frame=33 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-65,7806741549352
V2=320,699831567956 V3=0 T=0 M2=0 M3=64,5260570096076 S11Max=965,799826568569 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-109,634456924892 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=33 ElemStation=0,5
Frame=33 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-204,816439230551
V2=135,3999999999877 V3=0 T=0 M2=0 M3=83,8678043413818 S11Max=1132,44951298233 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-3037,67612724744 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=33 ElemStation=0
Frame=33 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-208,906439230551
V2=203,0999999999877 V3=0 T=0 M2=0 M3=-43,4281438909437 S11Max=-348,177398717586 PtS11Max=0 x2S11Max=0
x3S11Max=0 _

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<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio</p>	
<p>102 di 182</p>	

S11Min=-1185,06874041835 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=33 ElemStation=0,5
Frame=34 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-93,4009639669505
V2=302,28538068231 V3=0 T=0 M2=0 M3=36,1427168235504 S11Max=446,71034044759 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-155,668273278251 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=34 ElemStation=0
Frame=34 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-96,6729640157071
V2=385,26138090994 V3=0 T=0 M2=0 M3=-122,98018774895 S11Max=3172,99710513922 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 _
S11Min=-2210,79140250869 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=34 ElemStation=0,5
Frame=34 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-202,001367292333
V2=270,143601047512 V3=0 T=0 M2=0 M3=-36,1871137171907 S11Max=-336,668945487222 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-880,081007757253 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=34 ElemStation=0
Frame=34 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-205,27336734109
V2=351,163601245996 V3=0 T=0 M2=0 M3=-207,49302144822 S11Max=1888,548189123 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 _
S11Min=-3743,4369431348 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=34 ElemStation=0,5
Frame=34 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-65,7806741549347
V2=320,699831568114 V3=0 T=0 M2=0 M3=64,5260570095903 S11Max=965,79982656828 PtS11Max=1 x2S11Max=-0,3
x3S11Max=-0,5 _
S11Min=-109,634456924891 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=34 ElemStation=0
Frame=34 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-65,7806741549347
V2=407,494831568114 V3=0 T=0 M2=0 M3=-53,9489429904284 S11Max=3447,75548371998 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 _
S11Min=-1008,78350676537 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=34 ElemStation=0,5
Frame=34 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-208,906439230869
V2=203,100000000032 V3=0 T=0 M2=0 M3=-43,4281438909597 S11Max=-348,177398718115 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1185,06874041806 PtS11Min=3 x2S11Min=0,3 x3S11Min=-0,5 FrameElem=34 ElemStation=0
Frame=34 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-212,996439230869
V2=270,800000000032 V3=0 T=0 M2=0 M3=-224,750831352044 S11Max=789,514592915583 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 _
S11Min=-4043,93889468149 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=34 ElemStation=0,5
Frame=35 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195596
V2=378,651395905404 V3=0 T=0 M2=0 M3=286,614353225684 S11Max=3403,22387072425 PtS11Max=1 x2S11Max=-
0,35 x3S11Max=-0,5 _
S11Min=-1602,16443099783 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=35 ElemStation=0
Frame=35 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195596
V2=387,401395905404 V3=0 T=0 M2=0 M3=95,1011552729849 S11Max=1058,16430395651 PtS11Max=1 x2S11Max=-
0,35 _
x3S11Max=-0,5 S11Min=-75,6234825993709 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=35
ElemStation=0,5
Frame=35 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631231
V2=350,023985600489 V3=0 T=0 M2=0 M3=124,508554335246 S11Max=1447,0246547633 PtS11Max=1 x2S11Max=-0,35
x3S11Max=-0,5 _
S11Min=-3615,90314704761 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=35 ElemStation=0
Frame=35 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631231
V2=358,773985600489 V3=0 T=0 M2=0 M3=-52,6909384649986 S11Max=-291,941163758901 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1270,84358027986 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=35 ElemStation=0,5
Frame=35 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-44,7225659594842
V2=397,11462544449 V3=0 T=0 M2=0 M3=311,068000118706 S11Max=3714,39038431647 PtS11Max=1 x2S11Max=-0,35
x3S11Max=-0,5 _
S11Min=-513,151328154504 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=35 ElemStation=0
Frame=35 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-44,7225659594842
V2=405,86462544449 V3=0 T=0 M2=0 M3=110,323187396465 S11Max=1257,11245667911 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 _
S11Min=-63,8893799421202 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=35 ElemStation=0,5
Frame=35 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-235,851820656929
V2=284,768084856157 V3=0 T=0 M2=0 M3=31,8983002333761 S11Max=268,031534703686 PtS11Max=1 x2S11Max=-
0,35 x3S11Max=-0,5 _
S11Min=-3903,60145532532 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=35 ElemStation=0
Frame=35 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-235,851820656929
V2=293,518084856157 V3=0 T=0 M2=0 M3=-112,673242194703 S11Max=-336,931172367041 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1502,23225012993 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=35 ElemStation=0,5
Frame=36 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195599
V2=334,987612520215 V3=0 T=0 M2=0 M3=95,1011552730177 S11Max=1058,16430395691 PtS11Max=1 x2S11Max=-
0,35 x3S11Max=-0,5 _
S11Min=-75,6234825993714 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=36 ElemStation=0
Frame=36 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195599
V2=343,737612520215 V3=0 T=0 M2=0 M3=-71,7625343966118 S11Max=2331,99738105032 PtS11Max=3
x2S11Max=0,35 _
x3S11Max=-0,5 S11Min=-987,010954658493 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=36
ElemStation=0,5
Frame=36 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631231
V2=277,852630951861 V3=0 T=0 M2=0 M3=-52,6909384649825 S11Max=-291,9411637589 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1270,84358028026 PtS11Min=3 x2S11Min=0,35 x3S11Min=-0,5 FrameElem=36 ElemStation=0
Frame=36 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631231
V2=286,602630951861 V3=0 T=0 M2=0 M3=-196,622370531392 S11Max=770,438867299346 PtS11Max=3
x2S11Max=0,35 _

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio 103 di 182</p>	

x3S11Max=-0,5 S11Min=-2483,24434624906 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=36
ElemStation=0,5
Frame=36 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594846
V2=355,885575594498 V3=0 T=0 M2=0 M3=110,323187396494 S11Max=1257,11245667893 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 _
S11Min=-63,8893799421209 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=36 ElemStation=0
Frame=36 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594846
V2=364,635575594498 V3=0 T=0 M2=0 M3=-63,4489818120236 S11Max=2688,84247139039 PtS11Max=3
x2S11Max=0,35 _
x3S11Max=-0,5 S11Min=-882,297762891011 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=36
ElemStation=0,5
Frame=36 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,851820656928
V2=201,707664209051 V3=0 T=0 M2=0 M3=-112,673242194688 S11Max=-336,931172367041 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1502,23225012975 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=36 ElemStation=0
Frame=36 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,851820656928
V2=210,457664209051 V3=0 T=0 M2=0 M3=-227,380650414106 S11Max=671,554852913648 PtS11Max=3
x2S11Max=0,35 _
x3S11Max=-0,5 S11Min=-2879,66325303671 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=36
ElemStation=0,5
Frame=37 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,93643781956
V2=272,79938105222 V3=0 T=0 M2=0 M3=-71,7625343966425 S11Max=2331,99738105061 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 _
S11Min=-987,01095465887 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=37 ElemStation=0
Frame=37 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,93643781956
V2=281,54938105222 V3=0 T=0 M2=0 M3=-207,373921579415 S11Max=3604,39457969078 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 _
S11Min=-2647,55855281527 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=37 ElemStation=0,5
Frame=37 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631231
V2=197,498269091218 V3=0 T=0 M2=0 M3=-196,622370531415 S11Max=770,438867299722 PtS11Max=3
x2S11Max=0,35 x3S11Max=-0,5 _
S11Min=-2483,24434624935 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=37 ElemStation=0
Frame=37 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631231
V2=206,248269091218 V3=0 T=0 M2=0 M3=-300,534808420362 S11Max=2430,98646545612 PtS11Max=3
x2S11Max=0,35 _
x3S11Max=-0,5 S11Min=-3755,64154488952 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=37
ElemStation=0,5
Frame=37 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594846
V2=293,891342734082 V3=0 T=0 M2=0 M3=-63,448981812056 S11Max=2688,84247139065 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 _
S11Min=-882,297762891408 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=37 ElemStation=0
Frame=37 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594846
V2=302,641342734082 V3=0 T=0 M2=0 M3=-190,075618774377 S11Max=3889,26474925493 PtS11Max=3
x2S11Max=0,35 _
x3S11Max=-0,5 S11Min=-2480,73260870866 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=37
ElemStation=0,5
Frame=37 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,851820656929
V2=119,082022764551 V3=0 T=0 M2=0 M3=-227,380650414128 S11Max=671,554852914044 PtS11Max=3
x2S11Max=0,35 x3S11Max=-0,5 _
S11Min=-2879,66325303698 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=37 ElemStation=0
Frame=37 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,851820656929
V2=127,832022764551 V3=0 T=0 M2=0 M3=-325,031356875474 S11Max=2174,18050413323 PtS11Max=3
x2S11Max=0,35 _
x3S11Max=-0,5 S11Min=-4070,68684769546 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=37
ElemStation=0,5
Frame=38 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195601
V2=192,032850253814 V3=0 T=0 M2=0 M3=-207,373921579467 S11Max=3604,39457969152 PtS11Max=3
x2S11Max=0,35 x3S11Max=-0,5 _
S11Min=-2647,5585528159 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=38 ElemStation=0
Frame=38 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195601
V2=200,782850253814 V3=0 T=0 M2=0 M3=-285,578223339726 S11Max=4322,63297403727 PtS11Max=3
x2S11Max=0,35 _
x3S11Max=-0,5 S11Min=-3788,81736791882 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=38
ElemStation=0,5
Frame=38 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631231
V2=108,82806818029 V3=0 T=0 M2=0 M3=-300,534808420423 S11Max=2430,98646545676 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 _
S11Min=-3755,64154489027 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=38 ElemStation=0
Frame=38 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631231
V2=117,57806818029 V3=0 T=0 M2=0 M3=-359,190943958659 S11Max=3204,93504040102 PtS11Max=3 x2S11Max=0,35
_

x3S11Max=-0,5 S11Min=-4473,87993923601 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=38
ElemStation=0,5
Frame=38 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594847
V2=211,081188409515 V3=0 T=0 M2=0 M3=-190,07561877442 S11Max=3889,26474925567 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 _
S11Min=-2480,73260870918 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=38 ElemStation=0
Frame=38 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594847
V2=219,831188409515 V3=0 T=0 M2=0 M3=-232,237842832951 S11Max=4521,67849709188 PtS11Max=3
x2S11Max=0,35 _
x3S11Max=-0,5 S11Min=-3180,65986011746 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=38
ElemStation=0,5

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio</p>	
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Frame=38 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,851820656929
V2=36,7439127768334 V3=0 T=0 M2=0 M3=-325,031356875535 S11Max=2174,18050413375 PtS11Max=3
x2S11Max=0,35 x3S11Max=-0,5
S11Min=-4070,68684769621 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=38 ElemStation=0
Frame=38 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,851820656929
V2=45,4939127768334 V3=0 T=0 M2=0 M3=-374,586900424588 S11Max=2506,79751538338 PtS11Max=3
x2S11Max=0,35
x3S11Max=-0,5 S11Min=-4677,48942176624 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=38
ElemStation=0,5
Frame=39 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,93643781956
V2=92,5530271881791 V3=0 T=0 M2=0 M3=-285,57822339677 S11Max=4322,63297403664 PtS11Max=3
x2S11Max=0,35 x3S11Max=-0,5
S11Min=-3788,81736791821 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=39 ElemStation=0
Frame=39 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,93643781956
V2=101,303027188179 V3=0 T=0 M2=0 M3=-293,548803104547 S11Max=4432,43135489657 PtS11Max=3
x2S11Max=0,35 x3S11Max=-0,5
S11Min=-3886,41630381458 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=39 ElemStation=0,5
Frame=39 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631231
V2=11,5661595297407 V3=0 T=0 M2=0 M3=-359,190943958607 S11Max=3204,93504040041 PtS11Max=3
x2S11Max=0,35 x3S11Max=-0,5
S11Min=-4473,87993923538 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=39 ElemStation=0
Frame=39 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631231
V2=20,3161595297407 V3=0 T=0 M2=0 M3=-368,765677243646 S11Max=3302,53397629678 PtS11Max=3
x2S11Max=0,35
x3S11Max=-0,5 S11Min=-4616,82644380616 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=39
ElemStation=0,5
Frame=39 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594847
V2=107,316188167634 V3=0 T=0 M2=0 M3=-232,2378428329 S11Max=4521,67849709124 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5
S11Min=-3180,65986011684 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=39 ElemStation=0
Frame=39 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594847
V2=116,066188167634 V3=0 T=0 M2=0 M3=-211,639975511348 S11Max=4721,86357782539 PtS11Max=3
x2S11Max=0,35
x3S11Max=-0,5 S11Min=-2928,44107658763 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=39
ElemStation=0,5
Frame=39 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,851820656929 V2=-
46,6595656674422 V3=0 T=0 M2=0 M3=-374,586900424533 S11Max=2506,79751538275 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5
S11Min=-4677,48942176556 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=39 ElemStation=0
Frame=39 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,851820656929 V2=-
37,9095656674422 V3=0 T=0 M2=0 M3=-391,444357065824 S11Max=2254,57873185355 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 S11Min=-4882,79046142048 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=39
ElemStation=0,5
Frame=40 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195602 V2=-
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x3S11Max=-0,5 S11Min=-3886,41630381447 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=40
ElemStation=0
Frame=40 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195602 V2=-
16,4697787114274 V3=0 T=0 M2=0 M3=-248,484965585141 S11Max=4282,6668206115 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 S11Min=-3334,61421174022 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=40
ElemStation=0,5
Frame=40 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631232 V2=-
95,1367054470386 V3=0 T=0 M2=0 M3=-368,765677243631 S11Max=3302,53397629666 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 S11Min=-4616,82644380597 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=40
ElemStation=0
Frame=40 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631232 V2=-
86,3867054470386 V3=0 T=0 M2=0 M3=-358,026272683795 S11Max=2750,73188422241 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 S11Min=-4485,32353082839 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=40
ElemStation=0,5
Frame=40 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594848 V2=-
16,8351545975358 V3=0 T=0 M2=0 M3=-211,639975511348 S11Max=4721,86357782527 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5
S11Min=-2928,44107658763 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=40 ElemStation=0
Frame=40 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594848 V2=-
8,08515459753584 V3=0 T=0 M2=0 M3=-149,806888514761 S11Max=4622,46302225645 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 S11Min=-2171,3012358131 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=40
ElemStation=0,5
Frame=40 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,85182065693 V2=-
131,311729567238 V3=0 T=0 M2=0 M3=-391,444357065807 S11Max=2254,57873185355 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5
S11Min=-4882,79046142027 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=40 ElemStation=0
Frame=40 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,85182065693 V2=-
122,561729567238 V3=0 T=0 M2=0 M3=-384,818010767792 S11Max=1497,43889107901 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 S11Min=-4801,65152715885 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=40
ElemStation=0,5
Frame=41 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195604 V2=-
159,901779679219 V3=0 T=0 M2=0 M3=-248,484965585112 S11Max=4282,66682061096 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 S11Min=-3334,61421173986 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=41
ElemStation=0
Frame=41 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,9364378195604 V2=-
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```




```

x3S11Max=-0,5 S11Min=-2078,73774281812 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=41
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Frame=41 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631231 V2=-
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x3S11Max=-0,5 S11Min=-4485,32353082786 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=41
ElemStation=0
Frame=41 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631231 V2=-
204,297585455319 V3=0 T=0 M2=0 M3=-278,489835078425 S11Max=1494,85541530031 PtS11Max=3 x2S11Max=0,35 _
x3S11Max=-0,5 S11Min=-3511,40796831366 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=41
ElemStation=0,5
Frame=41 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,722565959485 V2=-
153,225067643448 V3=0 T=0 M2=0 M3=-149,806888514732 S11Max=4622,46302225588 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 _
S11Min=-2171,30123581274 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=41 ElemStation=0
Frame=41 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,722565959485 V2=-
144,475067643448 V3=0 T=0 M2=0 M3=-46,626801104136 S11Max=3645,00805597355 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 _
S11Min=-907,87159405034 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=41 ElemStation=0,5
Frame=41 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,85182065693 V2=-
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x3S11Max=-0,5 _
S11Min=-4801,65152715827 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=41 ElemStation=0
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ElemStation=0,5
Frame=42 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,936437819569 V2=-
313,647545823642 V3=0 T=0 M2=0 M3=-145,921720623213 S11Max=3308,75125809761 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 _
S11Min=-2078,73774281867 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=42 ElemStation=0
Frame=42 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-52,936437819569 V2=-
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x3S11Max=-0,5 S11Min=-75,6234825993844 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=42
ElemStation=0,5
Frame=42 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631244 V2=-
340,427977692429 V3=0 T=0 M2=0 M3=-278,489835078496 S11Max=1494,85541530083 PtS11Max=3 x2S11Max=0,35 _
x3S11Max=-0,5 S11Min=-3511,40796831455 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=42
ElemStation=0
Frame=42 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-204,358814631244 V2=-
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x3S11Max=0 _
S11Min=-1576,10943995626 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=42 ElemStation=0,5
Frame=42 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-44,7225659594936 V2=-
273,803037501931 V3=0 T=0 M2=0 M3=-46,6268011041796 S11Max=3645,00805597446 PtS11Max=3 x2S11Max=0,35
x3S11Max=-0,5 _
S11Min=-907,871594050886 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=42 ElemStation=0
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x3S11Max=-0,5 _
S11Min=-63,8893799421337 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=42 ElemStation=0,5
Frame=42 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,851820656938 V2=-
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x3S11Max=-0,5 _
S11Min=-3824,19656087691 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=42 ElemStation=0
Frame=42 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-235,851820656938 V2=-
348,976986979248 V3=0 T=0 M2=0 M3=-141,109302207251 S11Max=-336,931172367055 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1817,46325907063 PtS11Min=1 x2S11Min=-0,35 x3S11Min=-0,5 FrameElem=42 ElemStation=0,5
Frame=43 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-457,27560148172
V2=25,1465062628143 V3=0 T=0 M2=0 M3=-0,133658727111782 S11Max=333,617841826155 PtS11Max=3
x2S11Max=0,3 x3S11Max=-0,5 _
S11Min=-806,899600671954 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=43 ElemStation=0
Frame=43 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-449,77560148172
V2=50,2106998112013 V3=0 T=0 M2=0 M3=6,51862111040622 S11Max=451,579588183644 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 _
S11Min=-749,626002469533 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=43 ElemStation=0,5
Frame=43 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-493,714981179911 V2=-
44,221565667274 V3=0 T=0 M2=0 M3=-66,8358114625269 S11Max=-802,444309768227 PtS11Max=3 x2S11Max=0,3 _
x3S11Max=-0,5 S11Min=-1894,24254025807 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=43
ElemStation=0
Frame=43 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-486,214981179911 V2=-
2,44790065274896 V3=0 T=0 M2=0 M3=-73,1635162439762 S11Max=-810,358301966518 PtS11Max=0 x2S11Max=0
x3S11Max=0 _
S11Min=-1987,20428661557 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=43 ElemStation=0,5
Frame=43 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-360,919999998472
V2=33,3603781228934 V3=0 T=0 M2=0 M3=4,39693362127849 S11Max=701,345008954837 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 _
S11Min=-721,184040824366 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=43 ElemStation=0
Frame=43 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-353,419999998472
V2=58,4245716712805 V3=0 T=0 M2=0 M3=10,7485468611024 S11Max=623,62652317676 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 _
S11Min=-589,033333330787 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=43 ElemStation=0,5

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<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio 106 di 182</p>	

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Frame=43 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-520,531831564675 V2=-
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x3S11Max=0
S11Min=-2181,69015435128 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=43 ElemStation=0
Frame=43 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-513,031831564675 V2=-
33,9409066784439 V3=0 T=0 M2=0 M3=-84,308028557907 S11Max=-855,053052607791 PtS11Max=0 x2S11Max=0
x3S11Max=0
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Frame=44 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-449,775601481545
V2=50,2106998112274 V3=0 T=0 M2=0 M3=6,51862111039265 S11Max=451,579588184205 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-749,626002469242 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=44 ElemStation=0
Frame=44 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-442,275601481545
V2=73,8168288434855 V3=0 T=0 M2=0 M3=-3,94851920891673 S11Max=698,42081482853 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-802,934655951196 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=44 ElemStation=0,5
Frame=44 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-486,21498117955 V2=-
2,44790065276249 V3=0 T=0 M2=0 M3=-73,1635162439738 S11Max=-810,358301965917 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-1987,20428661492 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=44 ElemStation=0
Frame=44 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-478,71498117955
V2=35,5447554410466 V3=0 T=0 M2=0 M3=-87,2239898426333 S11Max=-671,317348987305 PtS11Max=3
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x3S11Max=-0,5 S11Min=-2209,04551325925 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=44
ElemStation=0,5
Frame=44 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-353,419999998297
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x3S11Max=-0,5
S11Min=-589,033333330496 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=44 ElemStation=0
Frame=44 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-345,919999998297
V2=82,0307007035677 V3=0 T=0 M2=0 M3=14,7413707499394 S11Max=782,456944532917 PtS11Max=3 x2S11Max=0,3
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S11Min=-576,533333330496 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=44 ElemStation=0,5
Frame=44 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-513,031831564267 V2=-
33,9409066784458 V3=0 T=0 M2=0 M3=-84,3080285579039 S11Max=-855,053052607112 PtS11Max=0 x2S11Max=0
x3S11Max=0
S11Min=-2186,6410954196 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=44 ElemStation=0
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V2=2,6892655279304 V3=0 T=0 M2=0 M3=-93,0878538392473 S11Max=-822,222845829494 PtS11Max=3
x2S11Max=0,3
x3S11Max=-0,5 S11Min=-2343,40109394366 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=44
ElemStation=0,5
Frame=45 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-442,275601481428
V2=73,8168288433396 V3=0 T=0 M2=0 M3=-3,94851920891696 S11Max=698,420814828576 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-802,934655951004 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=45 ElemStation=0
Frame=45 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-434,775601481428
V2=95,9648933594686 V3=0 T=0 M2=0 M3=-32,4705870312945 S11Max=1083,23950423501 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5 S11Min=-1265,80245299064 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=45
ElemStation=0,5
Frame=45 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-478,714981179317
V2=35,5447554409776 V3=0 T=0 M2=0 M3=-87,2239898426244 S11Max=-671,317348987107 PtS11Max=3
x2S11Max=0,3 x3S11Max=-0,5
S11Min=-2209,0455132589 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=45 ElemStation=0
Frame=45 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-471,214981179317
V2=49,619970494741 V3=0 T=0 M2=0 M3=-109,56311120701 S11Max=-183,449551947487 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-2568,86420266532 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=45 ElemStation=0,5
Frame=45 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-345,91999999818
V2=82,0307007034042 V3=0 T=0 M2=0 M3=14,7413707499392 S11Max=782,456944532866 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-576,533333330301 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=45 ElemStation=0
Frame=45 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-338,41999999818
V2=104,178765219533 V3=0 T=0 M2=0 M3=1,96580594041491 S11Max=1196,6545158042 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-564,033333330301 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=45 ElemStation=0,5
Frame=45 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-505,531831564034
V2=2,6892655279445 V3=0 T=0 M2=0 M3=-93,0878538392326 S11Max=-822,222845829296 PtS11Max=3
x2S11Max=0,3 x3S11Max=-0,5
S11Min=-2343,40109394328 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=45 ElemStation=0
Frame=45 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-498,031831564034
V2=16,7644806065579 V3=0 T=0 M2=0 M3=-119,049696939633 S11Max=-596,796765670564 PtS11Max=3
x2S11Max=0,3
x3S11Max=-0,5 S11Min=-2771,66871551691 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=45
ElemStation=0,5
Frame=46 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-434,775601481918
V2=95,9648933596306 V3=0 T=0 M2=0 M3=-32,4705870312823 S11Max=1083,23950423446 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-1265,80245299125 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=46 ElemStation=0

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<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio</p>	
<p>107 di 182</p>	

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Frame=46 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-427,275601481918
V2=116,654893359631 V3=0 T=0 M2=0 M3=-78,0972191422232 S11Max=1681,96598777949 PtS11Max=3 x2S11Max=0,3
-
x3S11Max=-0,5 S11Min=-2013,74632150693 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=46
ElemStation=0,5
Frame=46 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-471,214981179806
V2=49,6199704948086 V3=0 T=0 M2=0 M3=-109,563111207026 S11Max=-183,449551948506 PtS11Max=3
x2S11Max=0,3 x3S11Max=-0,5
S11Min=-2568,86420266641 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=46 ElemStation=0
Frame=46 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-463,714981179806
V2=62,768303828142 V3=0 T=0 M2=0 M3=-147,28945738475 S11Max=589,494316567175 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-3227,68259171216 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=46 ElemStation=0,5
Frame=46 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-338,41999999853
V2=104,178765219713 V3=0 T=0 M2=0 M3=1,96580594041533 S11Max=1196,65451580367 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-564,033333330884 PtS11Min=0 x2S11Min=0 x3S11Min=0 FrameElem=46 ElemStation=0
Frame=46 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-330,91999999853
V2=124,868765219713 V3=0 T=0 M2=0 M3=-27,9143231576372 S11Max=1863,82993151605 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-1016,77205262485 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=46 ElemStation=0,5
Frame=46 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-498,031831564558
V2=16,7644806065557 V3=0 T=0 M2=0 M3=-119,049696939654 S11Max=-596,796765671155 PtS11Max=3
x2S11Max=0,3 x3S11Max=-0,5
S11Min=-2771,66871551813 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=46 ElemStation=0
Frame=46 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-490,531831564558
V2=29,912813939889 V3=0 T=0 M2=0 M3=-160,882979047418 S11Max=-86,2946140369465 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-3498,93603673123 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=46 ElemStation=0,5
Frame=47 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-427,275601481801
V2=116,654893359634 V3=0 T=0 M2=0 M3=-78,0972191421999 S11Max=1681,96598777988 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-2013,74632150635 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=47 ElemStation=0
Frame=47 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-419,775601481801
V2=145,216029734162 V3=0 T=0 M2=0 M3=-140,357991038098 S11Max=2747,73570842916 PtS11Max=3 x2S11Max=0,3
-
x3S11Max=-0,5 S11Min=-3038,92585310465 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=47
ElemStation=0,5
Frame=47 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-463,714981179713
V2=62,7683038281423 V3=0 T=0 M2=0 M3=-147,289457384764 S11Max=589,49431656698 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-3227,68259171224 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=47 ElemStation=0
Frame=47 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-456,214981179713
V2=74,9897554410456 V3=0 T=0 M2=0 M3=-210,48564062372 S11Max=1639,67384816529 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-4268,45231236152 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=47 ElemStation=0,5
Frame=47 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-330,919999998413
V2=124,868765219716 V3=0 T=0 M2=0 M3=-27,9143231576371 S11Max=1863,8299315165 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-1016,77205262466 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=47 ElemStation=0
Frame=47 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-323,419999998413
V2=153,429901594244 V3=0 T=0 M2=0 M3=-74,4285920406355 S11Max=2998,04858433313 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-1779,5098673413 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=47 ElemStation=0,5
Frame=47 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-490,531831564442
V2=29,9128139398895 V3=0 T=0 M2=0 M3=-160,882979047434 S11Max=-86,2946140367531 PtS11Max=3
x2S11Max=0,3 x3S11Max=-0,5
S11Min=-3498,93603673129 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=47 ElemStation=0
Frame=47 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-483,031831564442
V2=42,1342655527928 V3=0 T=0 M2=0 M3=-228,186098216431 S11Max=701,443200679886 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-4608,15468954792 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=47 ElemStation=0,5
Frame=48 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-419,775601481964
V2=145,216029734208 V3=0 T=0 M2=0 M3=-140,357991038081 S11Max=2747,73570842809 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-3038,92585310463 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=48 ElemStation=0
Frame=48 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max P=-412,275601481964
V2=174,839148013778 V3=0 T=0 M2=0 M3=-211,524755205014 S11Max=3967,69628929327 PtS11Max=3 x2S11Max=0,3
-
x3S11Max=-0,5 S11Min=-4224,49672980084 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=48
ElemStation=0,5
Frame=48 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-456,214981180132
V2=74,9897554410918 V3=0 T=0 M2=0 M3=-210,485640623698 S11Max=1639,67384816472 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-4268,45231236185 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=48 ElemStation=0
Frame=48 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min P=-448,714981180132
V2=86,284325333565 V3=0 T=0 M2=0 M3=-282,933275475609 S11Max=2820,10023753409 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5
S11Min=-5463,41289322704 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=48 ElemStation=0,5
Frame=48 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max P=-323,419999998529
V2=153,429901594301 V3=0 T=0 M2=0 M3=-74,4285920406354 S11Max=2998,04858433198 PtS11Max=3 x2S11Max=0,3
x3S11Max=-0,5

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S11Min=-1779,50986734149 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=48 ElemStation=0
 Frame=48 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max P=-315,91999998529
 V2=183,053019873871 V3=0 T=0 M2=0 M3=-124,295174614871 S11Max=4286,45809736462 PtS11Max=3 x2S11Max=0,3
 x3S11Max=-0,5 _
 S11Min=-2598,11957691208 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=48 ElemStation=0,5
 Frame=48 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min P=-483,031831564907
 V2=42,134265527924 V3=0 T=0 M2=0 M3=-228,186098216409 S11Max=701,443200679693 PtS11Max=3 x2S11Max=0,3
 x3S11Max=-0,5 _
 S11Min=-4608,15468954833 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=48 ElemStation=0
 Frame=48 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min P=-475,531831564907
 V2=53,4288354452656 V3=0 T=0 M2=0 M3=-304,740668998367 S11Max=1545,0529102503 PtS11Max=3 x2S11Max=0,3
 x3S11Max=-0,5 _
 S11Min=-5871,56420258096 PtS11Min=1 x2S11Min=-0,3 x3S11Min=-0,5 FrameElem=48 ElemStation=0,5

TABLE: "ELEMENT STRESSES - FRAMES"

Frame	Station	OutputCase	CaseType	StepType	Point	X2	X3	S11
75,6234825993709	0	ENVETA5	Combination	Max	0	0	0	-
75,6234825993709	0,15	ENVETA5	Combination	Max	1	-0,35	0,5	-
S11=4880,88011216893	0	ENVETA5	Combination	Max	2	-0,35	0,5	0
S11=4880,88011216893	0,15	ENVETA5	Combination	Max	3	0,35	-0,5	0
S11=-3090,85405684631	0	ENVETA5	Combination	Max	4	0,35	0,5	0
S11=-3090,85405684631	0,15	ENVETA5	Combination	Max	0	0	0	-
75,6234825993709	0,15	ENVETA5	Combination	Max	1	-0,35	-0,5	0,15
S11=4136,68592803118	0,15	ENVETA5	Combination	Max	2	-0,35	0,5	0,15
S11=4136,68592803118	0,15	ENVETA5	Combination	Max	3	0,35	-0,5	0,15
S11=-2329,54403949116	0,15	ENVETA5	Combination	Max	4	0,35	0,5	0,15
S11=-2329,54403949116	0,15	ENVETA5	Combination	Max	0	0	0	-
291,941163758901	0	ENVETA5	Combination	Min	1	-0,35	-0,5	0
S11=2935,71428061177	0	ENVETA5	Combination	Min	2	-0,35	0,5	0
S11=2935,71428061177	0,15	ENVETA5	Combination	Min	3	0,35	-0,5	0
S11=-5093,55938849228	0,15	ENVETA5	Combination	Min	4	0,35	0,5	0
S11=-5093,55938849228	0,15	ENVETA5	Combination	Min	0	0	0	-
291,941163758901	0,15	ENVETA5	Combination	Min	1	-0,35	-0,5	0,15
S11=2174,40426325662	0,15	ENVETA5	Combination	Min	2	-0,35	0,5	0,15
S11=2174,40426325662	0,15	ENVETA5	Combination	Min	3	0,35	-0,5	0,15
S11=-4349,36520435453	0,15	ENVETA5	Combination	Min	4	0,35	0,5	0,15
S11=-4349,36520435453	0,15	ENVETA5	Combination	Min	0	0	0	-
63,8893799421202	0	ENVETA5	Combination	Max	1	-0,35	-0,5	0
S11=5245,72721593213	0	ENVETA5	Combination	Max	2	-0,35	0,5	0
S11=5245,72721593213	0,15	ENVETA5	Combination	Max	3	0,35	-0,5	0
S11=-1821,00629412284	0,15	ENVETA5	Combination	Max	4	0,35	0,5	0
S11=-1821,00629412284	0,15	ENVETA5	Combination	Max	0	0	0	-
63,8893799421202	0,15	ENVETA5	Combination	Max	1	-0,35	-0,5	0,15
S11=4476,17050744958	0,15	ENVETA5	Combination	Max	2	-0,35	0,5	0,15
S11=4476,17050744958	0,15	ENVETA5	Combination	Max	3	0,35	-0,5	0,15
S11=-1144,00958458549	0,15	ENVETA5	Combination	Max	4	0,35	0,5	0,15
S11=-1144,00958458549	0,15	ENVETA5	Combination	Max	0	0	0	-
336,931172367041	0	ENVETA5	Combination	Min	1	-0,35	-0,5	0
S11=1575,88650067202	0	ENVETA5	Combination	Min	2	-0,35	0,5	0
S11=1575,88650067202	0,15	ENVETA5	Combination	Min	3	0,35	-0,5	0



Frame=1 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5	S11=-5434,93828694098 IsS11Max=No IsS11Min=Yes FrameElem=1 ElemStation=0
Frame=1 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5	S11=-5434,93828694098 IsS11Max=No IsS11Min=No FrameElem=1 ElemStation=0
Frame=1 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-336,931172367041 IsS11Max=No IsS11Min=No FrameElem=1 ElemStation=0,15	
Frame=1 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5	S11=898,889791134669 IsS11Max=Yes IsS11Min=No FrameElem=1 ElemStation=0,15
Frame=1 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5	S11=898,889791134669 IsS11Max=No IsS11Min=No FrameElem=1 ElemStation=0,15
Frame=1 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5	S11=-4665,38157845844 IsS11Max=No IsS11Min=Yes FrameElem=1 ElemStation=0,15
Frame=1 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5	S11=-4665,38157845844 IsS11Max=No IsS11Min=No FrameElem=1 ElemStation=0,15
Frame=2 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-75,6234825993709 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0	
Frame=2 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5	S11=4136,68592803142 IsS11Max=Yes IsS11Min=No FrameElem=2 ElemStation=0
Frame=2 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5	S11=4136,68592803142 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0
Frame=2 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5	S11=-2329,54403949089 IsS11Max=No IsS11Min=Yes FrameElem=2 ElemStation=0
Frame=2 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5	S11=-2329,54403949089 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0
Frame=2 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-75,6234825993709 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0,15	
Frame=2 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5	S11=3403,22387072396 IsS11Max=Yes IsS11Min=No FrameElem=2 ElemStation=0,15
Frame=2 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5	S11=3403,22387072396 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0,15
Frame=2 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5	S11=-1602,16443099762 IsS11Max=No IsS11Min=Yes FrameElem=2 ElemStation=0,15
Frame=2 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5	S11=-1602,16443099762 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0,15
Frame=2 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-291,941163758901 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0	
Frame=2 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5	S11=2174,40426325635 IsS11Max=Yes IsS11Min=No FrameElem=2 ElemStation=0
Frame=2 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5	S11=2174,40426325635 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0
Frame=2 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5	S11=-4349,36520435478 IsS11Max=No IsS11Min=Yes FrameElem=2 ElemStation=0
Frame=2 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5	S11=-4349,36520435478 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0
Frame=2 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-291,941163758901 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0,15	
Frame=2 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5	S11=1447,02465476309 IsS11Max=Yes IsS11Min=No FrameElem=2 ElemStation=0,15
Frame=2 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5	S11=1447,02465476309 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0,15
Frame=2 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5	S11=-3615,90314704731 IsS11Max=No IsS11Min=Yes FrameElem=2 ElemStation=0,15
Frame=2 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5	S11=-3615,90314704731 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0,15
Frame=2 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-63,8893799421202 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0	
Frame=2 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5	S11=4476,17050744987 IsS11Max=Yes IsS11Min=No FrameElem=2 ElemStation=0
Frame=2 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5	S11=4476,17050744987 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0
Frame=2 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5	S11=-1144,00958458524 IsS11Max=No IsS11Min=Yes FrameElem=2 ElemStation=0
Frame=2 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5	S11=-1144,00958458524 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0
Frame=2 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-63,8893799421202 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0,15	
Frame=2 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5	S11=3714,39038431618 IsS11Max=Yes IsS11Min=No FrameElem=2 ElemStation=0,15
Frame=2 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5	S11=3714,39038431618 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0,15
Frame=2 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5	S11=-513,151328154538 IsS11Max=No IsS11Min=Yes FrameElem=2 ElemStation=0,15
Frame=2 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5	S11=-513,151328154538 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0,15
Frame=2 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-336,931172367041 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0	
Frame=2 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5	S11=898,889791134419 IsS11Max=Yes IsS11Min=No FrameElem=2 ElemStation=0
Frame=2 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5	S11=898,889791134419 IsS11Max=No IsS11Min=No FrameElem=2 ElemStation=0
Frame=2 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5	S11=-4665,38157845872 IsS11Max=No IsS11Min=Yes FrameElem=2 ElemStation=0



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Frame=2	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,35	X3=0,5	
S11=-4665,38157845872	IsS11Max=No	IsS11Min=No	FrameElem=2	ElemStation=0				
Frame=2	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
336,931172367041	IsS11Max=No	IsS11Min=No	FrameElem=2	ElemStation=0,15				
Frame=2	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,35	X3=-0,5	
S11=268,03153470372	IsS11Max=Yes	IsS11Min=No	FrameElem=2	ElemStation=0,15				
Frame=2	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,35	X3=0,5	
S11=268,03153470372	IsS11Max=No	IsS11Min=No	FrameElem=2	ElemStation=0,15				
Frame=2	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,35	X3=-0,5	
S11=-3903,60145532503	IsS11Max=No	IsS11Min=Yes	FrameElem=2	ElemStation=0,15				
Frame=2	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,35	X3=0,5	
S11=-3903,60145532503	IsS11Max=No	IsS11Min=No	FrameElem=2	ElemStation=0,15				
Frame=3	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
663,051381549197	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=6109,40984708603	IsS11Max=Yes	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=6109,40984708603	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-4807,01189729357	IsS11Max=No	IsS11Min=Yes	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-4807,01189729357	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	
S11=-658,676381549197	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=5277,34605975949	IsS11Max=Yes	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=5277,34605975949	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-4438,61320866607	IsS11Max=No	IsS11Min=Yes	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-4438,61320866607	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
721,29632139396	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=3395,81722869133	IsS11Max=Yes	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=3395,81722869133	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-7466,9105843701	IsS11Max=No	IsS11Min=Yes	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-7466,9105843701	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	
S11=-716,92132139396	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=3036,16854006383	IsS11Max=Yes	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=3036,16854006383	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-6626,09679704356	IsS11Max=No	IsS11Min=Yes	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-6626,09679704356	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
592,737380582836	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=6568,53263095642	IsS11Max=Yes	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=6568,53263095642	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-2947,05759645959	IsS11Max=No	IsS11Min=Yes	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	S11=-
2947,05759645959	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
588,362380582836	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=5692,26865103555	IsS11Max=Yes	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=5692,26865103555	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-2741,18693570943	IsS11Max=No	IsS11Min=Yes	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-2741,18693570943	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
773,799380542672	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=1676,49092979007	IsS11Max=Yes	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=1676,49092979007	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-7969,03985906586	IsS11Max=No	IsS11Min=Yes	FrameElem=3	ElemStation=0				
Frame=3	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	S11=-
7969,03985906586	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0				



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Frame=3	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
769,424380542672	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=1479,37026903991	IsS11Max=Yes	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=1479,37026903991	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-7084,02587914499	IsS11Max=No	IsS11Min=Yes	FrameElem=3	ElemStation=0,175				
Frame=3	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-7084,02587914499	IsS11Max=No	IsS11Min=No	FrameElem=3	ElemStation=0,175				
Frame=4	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
658,67638154811	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=5277,34605976183	IsS11Max=Yes	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=5277,34605976183	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-4438,6132086658	IsS11Max=No	IsS11Min=Yes	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-4438,6132086658	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	
S11=-654,30138154811	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=4501,64805703266	IsS11Max=Yes	IsS11Min=No	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=4501,64805703266	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-4094,97441551008	IsS11Max=No	IsS11Min=Yes	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-4094,97441551008	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
716,921321392566	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=3036,16854006418	IsS11Max=Yes	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=3036,16854006418	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-6626,09679704155	IsS11Max=No	IsS11Min=Yes	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-6626,09679704155	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	
S11=-712,546321392566	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=2701,27974690845	IsS11Max=Yes	IsS11Min=No	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=2701,27974690845	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-5841,64879431238	IsS11Max=No	IsS11Min=Yes	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-5841,64879431238	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
588,362380581284	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=5692,26865103806	IsS11Max=Yes	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=5692,26865103806	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-2741,18693570865	IsS11Max=No	IsS11Min=Yes	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	S11=-
2741,18693570865	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
583,987380581284	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=4874,03339311544	IsS11Max=Yes	IsS11Min=No	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=4874,03339311544	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-2554,27375367713	IsS11Max=No	IsS11Min=Yes	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-2554,27375367713	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0,175				
Frame=4	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
769,42438054151	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=1479,37026904067	IsS11Max=Yes	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=1479,37026904067	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-7084,02587914284	IsS11Max=No	IsS11Min=Yes	FrameElem=4	ElemStation=0				
Frame=4	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	S11=-
7084,02587914284	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0				
Frame=4	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
765,04938054151	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0,175				



Frame=4	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5
S11=1301,20708700915	IsS11Max=Yes	IsS11Min=No	FrameElem=4	ElemStation=0,175			
Frame=4	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5
S11=1301,20708700915	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0,175			
Frame=4	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5
S11=-6257,04062122022	IsS11Max=No	IsS11Min=Yes	FrameElem=4	ElemStation=0,175			
Frame=4	Station=0,175	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5
S11=-6257,04062122022	IsS11Max=No	IsS11Min=No	FrameElem=4	ElemStation=0,175			
Frame=5	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0
S11=654,301381548808	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5
S11=4501,64805703162	IsS11Max=Yes	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5
S11=4501,64805703162	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5
S11=-4094,97441551054	IsS11Max=No	IsS11Min=Yes	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5
S11=-4094,97441551054	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0
S11=641,801381548808	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5
S11=2588,20905784458	IsS11Max=Yes	IsS11Min=No	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5
S11=2588,20905784458	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5
S11=-2791,41360728765	IsS11Max=No	IsS11Min=Yes	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5
S11=-2791,41360728765	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0
S11=712,546321393378	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5
S11=2701,27974690791	IsS11Max=Yes	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5
S11=2701,27974690791	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5
S11=-5841,64879431337	IsS11Max=No	IsS11Min=Yes	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5
S11=-5841,64879431337	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0
S11=700,046321393378	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5
S11=1422,71893868503	IsS11Max=Yes	IsS11Min=No	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5
S11=1422,71893868503	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5
S11=-3903,20979512632	IsS11Max=No	IsS11Min=Yes	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5
S11=-3903,20979512632	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0
S11=583,98738058206	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5
S11=4874,03339311436	IsS11Max=Yes	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5
S11=4874,03339311436	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5
S11=-2554,27375367771	IsS11Max=No	IsS11Min=Yes	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5
S11=2554,27375367771	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0
S11=571,48738058206	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5
S11=2848,22250354273	IsS11Max=Yes	IsS11Min=No	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5
S11=2848,22250354273	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5
S11=-1666,52790533329	IsS11Max=No	IsS11Min=Yes	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5
S11=-1666,52790533329	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0
S11=765,049380542381	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5
S11=1301,20708700857	IsS11Max=Yes	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5
S11=1301,20708700857	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5
S11=-6257,04062122127	IsS11Max=No	IsS11Min=Yes	FrameElem=5	ElemStation=0			
Frame=5	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5
S11=6257,04062122127	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0			
Frame=5	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0
S11=752,549380542381	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0,5			
Frame=5	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5
S11=438,461238664169	IsS11Max=Yes	IsS11Min=No	FrameElem=5	ElemStation=0,5			



Frame=5	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=438,461238664169	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0,5				
Frame=5	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-4206,22973164965	IsS11Max=No	IsS11Min=Yes	FrameElem=5	ElemStation=0,5				
Frame=5	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-4206,22973164965	IsS11Max=No	IsS11Min=No	FrameElem=5	ElemStation=0,5				
Frame=6	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
554,301381548964	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=1264,72595040838	IsS11Max=Yes	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=1264,72595040838	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-1272,59163397472	IsS11Max=No	IsS11Min=Yes	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-1272,59163397472	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
550,551381548964	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=1623,76921423152	IsS11Max=Yes	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=1623,76921423152	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-1524,20140290677	IsS11Max=No	IsS11Min=Yes	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-1524,20140290677	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
612,546321393109	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=163,98887087679	IsS11Max=Yes	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=163,98887087679	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-2489,81859319459	IsS11Max=No	IsS11Min=Yes	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-2489,81859319459	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
608,796321393109	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=423,098639808841	IsS11Max=Yes	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=423,098639808841	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-2841,36185701773	IsS11Max=No	IsS11Min=Yes	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-2841,36185701773	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
483,987380582448	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=1850,68523266252	IsS11Max=Yes	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=1850,68523266252	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-1122,77175397948	IsS11Max=No	IsS11Min=Yes	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	S11=-
1122,77175397948	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
480,237380582448	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=2219,95627313749	IsS11Max=Yes	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=2219,95627313749	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-1361,38236725544	IsS11Max=No	IsS11Min=Yes	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-1361,38236725544	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
665,049380542093	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=13,9437988817777	IsS11Max=Yes	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=13,9437988817777	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-3045,52444011924	IsS11Max=No	IsS11Min=Yes	FrameElem=6	ElemStation=0				
Frame=6	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	S11=-
3045,52444011924	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0				
Frame=6	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
661,299380542093	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=269,044071526655	IsS11Max=Yes	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=269,044071526655	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0,15				

Frame=6	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-3437,69661566995	IsS11Max=No	IsS11Min=Yes	FrameElem=6	ElemStation=0,15				
Frame=6	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-3437,69661566995	IsS11Max=No	IsS11Min=No	FrameElem=6	ElemStation=0,15				
Frame=7	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
550,551381547644	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=1623,76921423474	IsS11Max=Yes	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=1623,76921423474	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-1524,2014029043	IsS11Max=No	IsS11Min=Yes	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-1524,2014029043	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
546,801381547644	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=2008,45875232505	IsS11Max=Yes	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=2008,45875232505	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-1800,8334460949	IsS11Max=No	IsS11Min=Yes	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-1800,8334460949	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
608,796321390545	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=423,098639809012	IsS11Max=Yes	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=423,098639809012	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-2841,36185701583	IsS11Max=No	IsS11Min=Yes	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-2841,36185701583	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
605,046321390545	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=707,230682999614	IsS11Max=Yes	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=707,230682999614	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-3218,55139510613	IsS11Max=No	IsS11Min=Yes	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-3218,55139510613	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
480,237380580508	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=2219,95627313944	IsS11Max=Yes	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=2219,95627313944	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-1361,3823672529	IsS11Max=No	IsS11Min=Yes	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	S11=-
1361,3823672529	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
476,487380580508	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=2609,98658780795	IsS11Max=Yes	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=2609,98658780795	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-1624,48237966015	IsS11Max=No	IsS11Min=Yes	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-1624,48237966015	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
661,299380539761	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=269,044071526693	IsS11Max=Yes	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=269,044071526693	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-3437,69661566836	IsS11Max=No	IsS11Min=Yes	FrameElem=7	ElemStation=0				
Frame=7	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	S11=-
3437,69661566836	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0				
Frame=7	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
657,549380539761	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=550,232368366664	IsS11Max=Yes	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=550,232368366664	IsS11Max=No	IsS11Min=No	FrameElem=7	ElemStation=0,15				
Frame=7	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-3856,52262813117	IsS11Max=No	IsS11Min=Yes	FrameElem=7	ElemStation=0,15				

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio 115 di 182</p>	

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Frame=7 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
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Frame=8 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
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Frame=8 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
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Frame=8 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-1128,83816924707 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0
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S11=1697,0919252925 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0
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S11=-990,298394751354 IsS11Max=No IsS11Min=Yes FrameElem=8 ElemStation=0,175
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S11=-990,298394751354 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0,175
Frame=8 Station=0,175 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=1233,26265225661 IsS11Max=Yes IsS11Min=No FrameElem=8 ElemStation=0,175
Frame=8 Station=0,175 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=1233,26265225661 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0,175
Frame=8 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
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Frame=8 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
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Frame=8 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-3300,8115066105 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0
Frame=8 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
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Frame=8 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
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Frame=8 Station=0,175 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0
S11=-852,233301966809 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0,175
Frame=8 Station=0,175 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-2832,2061448403 IsS11Max=No IsS11Min=Yes FrameElem=8 ElemStation=0,175
Frame=8 Station=0,175 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-2832,2061448403 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0,175
Frame=8 Station=0,175 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-698,226721540171 IsS11Max=Yes IsS11Min=No FrameElem=8 ElemStation=0,175
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S11=-698,226721540171 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0,175
Frame=8 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
635,283333331656 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0
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S11=-938,491874873969 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0
Frame=8 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=2779,6624977908 IsS11Max=Yes IsS11Min=No FrameElem=8 ElemStation=0
Frame=8 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=2779,6624977908 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0
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Frame=8 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-822,915748894394 IsS11Max=No IsS11Min=Yes FrameElem=8 ElemStation=0,175
Frame=8 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-822,915748894394 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0,175
Frame=8 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
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Frame=8 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=2223,97862384664 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0,175
Frame=8 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
901,303052608082 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0
Frame=8 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
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Frame=8 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-4056,60339675102 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0
Frame=8 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
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Frame=8 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5 S11=-
849,154760094618 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0
Frame=8 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
896,928052608082 IsS11Max=Yes IsS11Min=No FrameElem=8 ElemStation=0,175
Frame=8 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-3494,39259745238 IsS11Max=No IsS11Min=Yes FrameElem=8 ElemStation=0,175
Frame=8 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-3494,39259745238 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0,175
Frame=8 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-951,013497066091 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0,175
Frame=8 Station=0,175 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-951,013497066091 IsS11Max=No IsS11Min=No FrameElem=8 ElemStation=0,175

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791,501002471105	Frame=9 Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0				
	Frame=9 Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=-990,298394753072	IsS11Max=No	IsS11Min=Yes	FrameElem=9	ElemStation=0				
	Frame=9 Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=-990,298394753072	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0				
	Frame=9 Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=1233,26265225661	IsS11Max=Yes	IsS11Min=No	FrameElem=9	ElemStation=0				
	Frame=9 Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=1233,26265225661	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0				
	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	
S11=-787,126002471105	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0,175				
	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=-881,587040956354	IsS11Max=No	IsS11Min=Yes	FrameElem=9	ElemStation=0,175				
	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=-881,587040956354	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0,175				
	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=819,147413718996	IsS11Max=Yes	IsS11Min=No	FrameElem=9	ElemStation=0,175				
	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=819,147413718996	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0,175				
	Frame=9 Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
852,23330196774	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0				
	Frame=9 Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-2832,20614484071	IsS11Max=No	IsS11Min=Yes	FrameElem=9	ElemStation=0				
	Frame=9 Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-2832,20614484071	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0				
	Frame=9 Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-698,226721540526	IsS11Max=Yes	IsS11Min=No	FrameElem=9	ElemStation=0				
	Frame=9 Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-698,226721540526	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0				
	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	
S11=-847,85830196774	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0,175				
	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-2413,31481756878	IsS11Max=No	IsS11Min=Yes	FrameElem=9	ElemStation=0,175				
	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-2413,31481756878	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0,175				
	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-794,214164071566	IsS11Max=Yes	IsS11Min=No	FrameElem=9	ElemStation=0,175				
	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-794,214164071566	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0,175				
	Frame=9 Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
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	Frame=9 Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
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	Frame=9 Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
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626,53333333166	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0,175				
	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
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	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=1718,00878440072	IsS11Max=Yes	IsS11Min=No	FrameElem=9	ElemStation=0,175				
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S11=1718,00878440072	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0,175				
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896,928052609052	IsS11Max=Yes	IsS11Min=No	FrameElem=9	ElemStation=0				
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S11=-3494,39259745245	IsS11Max=No	IsS11Min=Yes	FrameElem=9	ElemStation=0				
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	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
892,553052609052	IsS11Max=Yes	IsS11Min=No	FrameElem=9	ElemStation=0,175				
	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-2981,89583265204	IsS11Max=No	IsS11Min=Yes	FrameElem=9	ElemStation=0,175				
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S11=-2981,89583265204	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0,175				
	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-1023,04381333891	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0,175				
	Frame=9 Station=0,175	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-1023,04381333891	IsS11Max=No	IsS11Min=No	FrameElem=9	ElemStation=0,175				
	Frame=10 Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
641,801381549061	IsS11Max=No	IsS11Min=No	FrameElem=10	ElemStation=0				

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio</p>	
<p>118 di 182</p>	

Frame=11 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-,0,35 X3=0,5
S11=-63,0636782213896 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-,0,5
S11=1373,45272973897 IsS11Max=Yes IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5
S11=1373,45272973897 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0
S11=-75,6234825993845 IsS11Max=No IsS11Min=Yes FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-,0,35 X3=-,0,5
S11=700,791428355943 IsS11Max=Yes IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-,0,35 X3=0,5
S11=700,791428355943 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-,0,5
S11=581,961706864143 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5
S11=581,961706864143 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
291,94116375892 IsS11Max=Yes IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-,0,35 X3=-,0,5
S11=-1576,10943995592 IsS11Max=No IsS11Min=Yes FrameElem=11 ElemStation=0
Frame=11 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-,0,35 X3=0,5
S11=-1576,10943995592 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-,0,5
S11=-520,818649296451 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5
S11=-520,818649296451 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0
S11=-291,94116375892 IsS11Max=Yes IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-,0,35 X3=-,0,5
S11=-784,618417081089 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-,0,35 X3=0,5
S11=-784,618417081089 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-,0,5
S11=-1284,67375587378 IsS11Max=No IsS11Min=Yes FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5
S11=-1284,67375587378 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
63,8893799421338 IsS11Max=No IsS11Min=Yes FrameElem=11 ElemStation=0
Frame=11 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-,0,35 X3=-,0,5
S11=863,856501229938 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-,0,35 X3=0,5
S11=863,856501229938 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-,0,5
S11=1638,27475416787 IsS11Max=Yes IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5
S11=1638,27475416787 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
63,8893799421338 IsS11Max=No IsS11Min=Yes FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-,0,35 X3=-,0,5
S11=1494,92975904193 IsS11Max=Yes IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-,0,35 X3=0,5
S11=1494,92975904193 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-,0,5
S11=809,363528547373 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5
S11=809,363528547373 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
336,931172367054 IsS11Max=Yes IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-,0,35 X3=-,0,5
S11=-1817,46325907031 IsS11Max=No IsS11Min=Yes FrameElem=11 ElemStation=0
Frame=11 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-,0,35 X3=0,5
S11=-1817,46325907031 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-,0,5
S11=-1537,71884596405 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5
S11=-1537,71884596405 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0
Frame=11 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
336,931172367054 IsS11Max=Yes IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-,0,35 X3=-,0,5
S11=-988,552033449819 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-,0,35 X3=0,5
S11=-988,552033449819 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-,0,5
S11=-2168,79210377604 IsS11Max=No IsS11Min=Yes FrameElem=11 ElemStation=0,15
Frame=11 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5
S11=-2168,79210377604 IsS11Max=No IsS11Min=No FrameElem=11 ElemStation=0,15
Frame=12 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
75,6234825993815 IsS11Max=No IsS11Min=Yes FrameElem=12 ElemStation=0
Frame=12 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-,0,35 X3=-,0,5
S11=700,791428356912 IsS11Max=Yes IsS11Min=No FrameElem=12 ElemStation=0
Frame=12 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-,0,35 X3=0,5
S11=700,791428356912 IsS11Max=No IsS11Min=No FrameElem=12 ElemStation=0

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio 119 di 182</p>	

Frame=12	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,35	X3=-0,5	
S11=581,961706863798	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0				
Frame=12	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,35	X3=0,5	
S11=581,961706863798	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0				
Frame=12	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	
S11=-75,6234825993815	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,35	X3=-0,5	
S11=1539,62710969975	IsS11Max=Yes	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,35	X3=0,5	
S11=1539,62710969975	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,35	X3=-0,5	
S11=-310,126476978066	IsS11Max=No	IsS11Min=Yes	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,35	X3=0,5	
S11=-310,126476978066	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
291,941163758917	IsS11Max=Yes	IsS11Min=No	FrameElem=12	ElemStation=0				
Frame=12	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,35	X3=-0,5	
S11=-784,618417080699	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0				
Frame=12	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,35	X3=0,5	
S11=-784,618417080699	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0				
Frame=12	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,35	X3=-0,5	
S11=-1284,67375587475	IsS11Max=No	IsS11Min=Yes	FrameElem=12	ElemStation=0				
Frame=12	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,35	X3=0,5	
S11=-1284,67375587475	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0				
Frame=12	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	
S11=-291,941163758917	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,35	X3=-0,5	
S11=107,469766761163	IsS11Max=Yes	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,35	X3=0,5	
S11=107,469766761163	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,35	X3=-0,5	
S11=-2123,50943721759	IsS11Max=No	IsS11Min=Yes	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,35	X3=0,5	
S11=-2123,50943721759	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
63,8893799421299	IsS11Max=No	IsS11Min=Yes	FrameElem=12	ElemStation=0				
Frame=12	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,35	X3=-0,5	
S11=1494,92975904251	IsS11Max=Yes	IsS11Min=No	FrameElem=12	ElemStation=0				
Frame=12	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,35	X3=0,5	
S11=1494,92975904251	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0				
Frame=12	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,35	X3=-0,5	
S11=809,36352854704	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0				
Frame=12	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,35	X3=0,5	
S11=809,36352854704	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0				
Frame=12	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
63,8893799421299	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,35	X3=-0,5	
S11=2172,00862192677	IsS11Max=Yes	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,35	X3=0,5	
S11=2172,00862192677	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,35	X3=-0,5	
S11=-127,907283684912	IsS11Max=No	IsS11Min=Yes	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,35	X3=0,5	
S11=-127,907283684912	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
336,931172367058	IsS11Max=Yes	IsS11Min=No	FrameElem=12	ElemStation=0				
Frame=12	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,35	X3=-0,5	
S11=-988,552033449438	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0				
Frame=12	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,35	X3=0,5	
S11=-988,552033449438	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0				
Frame=12	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,35	X3=-0,5	
S11=-2168,79210377663	IsS11Max=No	IsS11Min=Yes	FrameElem=12	ElemStation=0				
Frame=12	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,35	X3=0,5	
S11=-2168,79210377663	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0				
Frame=12	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
336,931172367058	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,35	X3=-0,5	
S11=-51,2812212174867	IsS11Max=Yes	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,35	X3=0,5	
S11=-51,2812212174867	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,35	X3=-0,5	
S11=-2845,87096666089	IsS11Max=No	IsS11Min=Yes	FrameElem=12	ElemStation=0,15				
Frame=12	Station=0,15	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,35	X3=0,5	
S11=-2845,87096666089	IsS11Max=No	IsS11Min=No	FrameElem=12	ElemStation=0,15				
Frame=13	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
114,222939325264	IsS11Max=No	IsS11Min=No	FrameElem=13	ElemStation=0				
Frame=13	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=-1481,16934613022	IsS11Max=No	IsS11Min=Yes	FrameElem=13	ElemStation=0				
Frame=13	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=-1481,16934613022	IsS11Max=No	IsS11Min=No	FrameElem=13	ElemStation=0				
Frame=13	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=2318,28146218199	IsS11Max=Yes	IsS11Min=No	FrameElem=13	ElemStation=0				

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio</p>	
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Frame=13 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=2318,28146218199 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0
Frame=13 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0
S11=-115,858939349643 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-713,085774205102 IsS11Max=No IsS11Min=Yes FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-713,085774205102 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=1463,11198049431 IsS11Max=Yes IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=1463,11198049431 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
295,223611534235 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0
Frame=13 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-2908,72868525046 IsS11Max=No IsS11Min=Yes FrameElem=13 ElemStation=0
Frame=13 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-2908,72868525046 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0
Frame=13 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=1026,89478296567 IsS11Max=Yes IsS11Min=No FrameElem=13 ElemStation=0
Frame=13 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=1026,89478296567 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0
Frame=13 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0
S11=-296,859611558614 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-2056,83120361153 IsS11Max=No IsS11Min=Yes FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-2056,83120361153 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=255,339210988815 IsS11Max=Yes IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=255,339210988815 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
98,976487108491 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0
Frame=13 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-1313,56695346905 IsS11Max=No IsS11Min=Yes FrameElem=13 ElemStation=0
Frame=13 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-1313,56695346905 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0
Frame=13 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=2903,3593400507 IsS11Max=Yes IsS11Min=No FrameElem=13 ElemStation=0
Frame=13 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=2903,3593400507 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0
Frame=13 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
100,895248981593 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-553,793712034454 IsS11Max=No IsS11Min=Yes FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-553,793712034454 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=2085,22229200565 IsS11Max=Yes IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=2085,22229200565 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
327,792117890153 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0
Frame=13 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-3547,97844542414 IsS11Max=No IsS11Min=Yes FrameElem=13 ElemStation=0
Frame=13 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-3547,97844542414 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0
Frame=13 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=879,110348438507 IsS11Max=Yes IsS11Min=No FrameElem=13 ElemStation=0
Frame=13 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=879,110348438507 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0
Frame=13 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
327,792117890153 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-2666,49255027335 IsS11Max=No IsS11Min=Yes FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-2666,49255027335 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=95,5536442166962 IsS11Max=Yes IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=13 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=95,5536442166962 IsS11Max=No IsS11Min=No FrameElem=13 ElemStation=0,15
Frame=14 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
115,858939352695 IsS11Max=No IsS11Min=No FrameElem=14 ElemStation=0
Frame=14 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-713,085774210166 IsS11Max=No IsS11Min=Yes FrameElem=14 ElemStation=0
Frame=14 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-713,085774210166 IsS11Max=No IsS11Min=No FrameElem=14 ElemStation=0
Frame=14 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=1463,11198049153 IsS11Max=Yes IsS11Min=No FrameElem=14 ElemStation=0
Frame=14 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=1463,11198049153 IsS11Max=No IsS11Min=No FrameElem=14 ElemStation=0

```




Table with columns for Frame, Station, OutputCase, IsS11Max, IsS11Min, CaseType, FrameElem, ElemStation, StepType, Point, X2, X3, and S11. The table contains numerous rows of data for various station elements, including Frame 14, 15, and 296, across various stations and output cases.

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio</p>	
<p>122 di 182</p>	

Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5
S11=-4445,84799414349	IsS11Max=No	IsS11Min=Yes	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5
S11=-4445,84799414349	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5
S11=4361,93517591786	IsS11Max=Yes	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5
S11=4361,93517591786	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0
S11=747,858301966731	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5
S11=-5463,41289322554	IsS11Max=No	IsS11Min=Yes	FrameElem=15	ElemStation=0			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5
S11=-5463,41289322554	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5
S11=2820,10023753416	IsS11Max=Yes	IsS11Min=No	FrameElem=15	ElemStation=0			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5
S11=2820,10023753416	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0
S11=-744,108301966731	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5
S11=-5850,15177985131	IsS11Max=No	IsS11Min=Yes	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5
S11=-5850,15177985131	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5
S11=3043,58796619101	IsS11Max=Yes	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5
S11=3043,58796619101	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0
S11=526,533333330108	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5
S11=-2598,11957691131	IsS11Max=No	IsS11Min=Yes	FrameElem=15	ElemStation=0			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5
S11=-2598,11957691131	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5
S11=4286,45809736325	IsS11Max=Yes	IsS11Min=No	FrameElem=15	ElemStation=0			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5
S11=4286,45809736325	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0
S11=522,783333330108	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5
S11=-2731,96858084706	IsS11Max=No	IsS11Min=Yes	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5
S11=-2731,96858084706	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5
S11=4701,23166363934	IsS11Max=Yes	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5
S11=4701,23166363934	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0
S11=792,553052608082	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5
S11=-5871,5642025794	IsS11Max=No	IsS11Min=Yes	FrameElem=15	ElemStation=0			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5
S11=-5871,5642025794	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5
S11=1545,05291025109	IsS11Max=Yes	IsS11Min=No	FrameElem=15	ElemStation=0			
Frame=15	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5
S11=1545,05291025109	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0
S11=788,803052608082	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5
S11=-6278,8377688555	IsS11Max=No	IsS11Min=Yes	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5
S11=-6278,8377688555	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5
S11=1686,40191418683	IsS11Max=Yes	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=15	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5
S11=1686,40191418683	IsS11Max=No	IsS11Min=No	FrameElem=15	ElemStation=0,15			
Frame=16	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0
S11=683,376002469863	IsS11Max=No	IsS11Min=No	FrameElem=16	ElemStation=0			
Frame=16	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5
S11=-4445,84799414282	IsS11Max=No	IsS11Min=Yes	FrameElem=16	ElemStation=0			
Frame=16	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5
S11=-4445,84799414282	IsS11Max=No	IsS11Min=No	FrameElem=16	ElemStation=0			
Frame=16	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5
S11=4361,93517591692	IsS11Max=Yes	IsS11Min=No	FrameElem=16	ElemStation=0			
Frame=16	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5
S11=4361,93517591692	IsS11Max=No	IsS11Min=No	FrameElem=16	ElemStation=0			
Frame=16	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0
S11=-679,626002469863	IsS11Max=No	IsS11Min=No	FrameElem=16	ElemStation=0,15			
Frame=16	Station=0,15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5
S11=-4670,61519166662	IsS11Max=No	IsS11Min=Yes	FrameElem=16	ElemStation=0,15			

<p>GENERAL CONTRACTOR</p> 	<p>ALTA SORVEGLIANZA</p> 
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio</p>	
<p>123 di 182</p>	

Frame=16 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-4670,61519166662 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=16 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=4768,62962706189 IsS11Max=Yes IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=16 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=4768,62962706189 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=16 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
744,108301966887 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0
Frame=16 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-5850,15177985037 IsS11Max=No IsS11Min=Yes FrameElem=16 ElemStation=0
Frame=16 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-5850,15177985037 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0
Frame=16 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=3043,58796618988 IsS11Max=Yes IsS11Min=No FrameElem=16 ElemStation=0
Frame=16 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=3043,58796618988 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0
Frame=16 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0
S11=-740,358301966887 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=16 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-6249,34623099533 IsS11Max=No IsS11Min=Yes FrameElem=16 ElemStation=0,15
Frame=16 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-6249,34623099533 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=16 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=3274,99049323544 IsS11Max=Yes IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=16 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=3274,99049323544 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=16 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
522,78333330883 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0
Frame=16 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-2731,96858084783 IsS11Max=No IsS11Min=Yes FrameElem=16 ElemStation=0
Frame=16 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-2731,96858084783 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0
Frame=16 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=4701,2316636384 IsS11Max=Yes IsS11Min=No FrameElem=16 ElemStation=0
Frame=16 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=4701,2316636384 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0
Frame=16 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
519,03333330883 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=16 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-2873,73238317067 IsS11Max=No IsS11Min=Yes FrameElem=16 ElemStation=0,15
Frame=16 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-2873,73238317067 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=16 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=5128,46079443409 IsS11Max=Yes IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=16 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=5128,46079443409 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=16 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
788,803052608082 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0
Frame=16 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-6278,83776885416 IsS11Max=No IsS11Min=Yes FrameElem=16 ElemStation=0
Frame=16 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-6278,83776885416 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0
Frame=16 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=1686,40191418605 IsS11Max=Yes IsS11Min=No FrameElem=16 ElemStation=0
Frame=16 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=1686,40191418605 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0
Frame=16 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
785,053052608082 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=16 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-6698,56689964985 IsS11Max=No IsS11Min=Yes FrameElem=16 ElemStation=0,15
Frame=16 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-6698,56689964985 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=16 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=1835,66571650889 IsS11Max=Yes IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=16 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=1835,66571650889 IsS11Max=No IsS11Min=No FrameElem=16 ElemStation=0,15
Frame=17 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
629,301381548518 IsS11Max=No IsS11Min=No FrameElem=17 ElemStation=0
Frame=17 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=1346,21127501616 IsS11Max=Yes IsS11Min=No FrameElem=17 ElemStation=0
Frame=17 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=1346,21127501616 IsS11Max=No IsS11Min=No FrameElem=17 ElemStation=0
Frame=17 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-1626,24833798967 IsS11Max=No IsS11Min=Yes FrameElem=17 ElemStation=0
Frame=17 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-1626,24833798967 IsS11Max=No IsS11Min=No FrameElem=17 ElemStation=0
Frame=17 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
616,801381548518 IsS11Max=No IsS11Min=No FrameElem=17 ElemStation=0,5
Frame=17 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=849,48967889573 IsS11Max=Yes IsS11Min=No FrameElem=17 ElemStation=0,5
Frame=17 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=849,48967889573 IsS11Max=No IsS11Min=No FrameElem=17 ElemStation=0,5

Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-866,688983376132	IsS11Max=No	IsS11Min=Yes	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-866,688983376132	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
687,546321392971	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=282,553669388019	IsS11Max=Yes	IsS11Min=No	FrameElem=17	ElemStation=0				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=282,553669388019	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-2721,30391780209	IsS11Max=No	IsS11Min=Yes	FrameElem=17	ElemStation=0				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-2721,30391780209	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
675,046321392971	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-452,005685225522	IsS11Max=Yes	IsS11Min=No	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-452,005685225522	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-2199,58232168166	IsS11Max=No	IsS11Min=Yes	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-2199,58232168166	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
558,987380581769	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=1507,42782952062	IsS11Max=Yes	IsS11Min=No	FrameElem=17	ElemStation=0				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=1507,42782952062	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-869,810928541023	IsS11Max=No	IsS11Min=Yes	FrameElem=17	ElemStation=0				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-869,810928541023	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
546,487380581769	IsS11Max=No	IsS11Min=Yes	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=925,484341397409	IsS11Max=Yes	IsS11Min=No	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=925,484341397409	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-431,333199061066	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-431,333199061066	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
740,049380541896	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-333,255738127135	IsS11Max=Yes	IsS11Min=No	FrameElem=17	ElemStation=0				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-333,255738127135	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-2925,52696313176	IsS11Max=No	IsS11Min=Yes	FrameElem=17	ElemStation=0				
Frame=17	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-2925,52696313176	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
727,549380541896	IsS11Max=Yes	IsS11Min=No	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-746,733467607092	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-746,733467607092	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-2318,58347500855	IsS11Max=No	IsS11Min=Yes	FrameElem=17	ElemStation=0,5				
Frame=17	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-2318,58347500855	IsS11Max=No	IsS11Min=No	FrameElem=17	ElemStation=0,5				
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
616,801381548711	IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0				
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=849,489678896357	IsS11Max=Yes	IsS11Min=No	FrameElem=18	ElemStation=0				
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=849,489678896357	IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0				
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-866,688983376257	IsS11Max=No	IsS11Min=Yes	FrameElem=18	ElemStation=0				
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-866,688983376257	IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0				
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
604,301381548711	IsS11Max=No	IsS11Min=Yes	FrameElem=18	ElemStation=0,5				
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=535,947563871612	IsS11Max=Yes	IsS11Min=No	FrameElem=18	ElemStation=0,5				
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=535,947563871612	IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0,5				
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-492,484647389922	IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0,5				



Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-492,484647389922		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
675,046321392545		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-452,005685225012		IsS11Max=Yes	IsS11Min=No	FrameElem=18	ElemStation=0			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-452,005685225012		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-2199,58232168144		IsS11Max=No	IsS11Min=Yes	FrameElem=18	ElemStation=0			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-2199,58232168144		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
662,546321392545		IsS11Max=Yes	IsS11Min=No	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-804,831765777389		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-804,831765777389		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-1861,04020665669		IsS11Max=No	IsS11Min=Yes	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-1861,04020665669		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
546,487380581963		IsS11Max=No	IsS11Min=Yes	FrameElem=18	ElemStation=0			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=925,484341398144		IsS11Max=Yes	IsS11Min=No	FrameElem=18	ElemStation=0			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=925,484341398144		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-431,333199060862		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-431,333199060862		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
533,987380581963		IsS11Max=No	IsS11Min=Yes	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=549,467630732794		IsS11Max=Yes	IsS11Min=No	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=549,467630732794		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-330,843820835276		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-330,843820835276		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
727,549380541509		IsS11Max=Yes	IsS11Min=No	FrameElem=18	ElemStation=0			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-746,733467606912		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-746,733467606912		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-2318,58347500832		IsS11Max=No	IsS11Min=Yes	FrameElem=18	ElemStation=0			
Frame=18	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-2318,58347500832		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
715,049380541509		IsS11Max=Yes	IsS11Min=No	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-840,44444460559		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-840,44444460559		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-1931,04928270859		IsS11Max=No	IsS11Min=Yes	FrameElem=18	ElemStation=0,5			
Frame=18	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-1931,04928270859		IsS11Max=No	IsS11Min=No	FrameElem=18	ElemStation=0,5			
Frame=19	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
604,301381548459		IsS11Max=No	IsS11Min=Yes	FrameElem=19	ElemStation=0			
Frame=19	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=535,947563871335		IsS11Max=Yes	IsS11Min=No	FrameElem=19	ElemStation=0			
Frame=19	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=535,947563871335		IsS11Max=No	IsS11Min=No	FrameElem=19	ElemStation=0			
Frame=19	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-492,484647390097		IsS11Max=No	IsS11Min=No	FrameElem=19	ElemStation=0			
Frame=19	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-492,484647390097		IsS11Max=No	IsS11Min=No	FrameElem=19	ElemStation=0			
Frame=19	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
591,801381548459		IsS11Max=No	IsS11Min=Yes	FrameElem=19	ElemStation=0,5			
Frame=19	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=424,243958387728		IsS11Max=Yes	IsS11Min=No	FrameElem=19	ElemStation=0,5			
Frame=19	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=424,243958387728		IsS11Max=No	IsS11Min=No	FrameElem=19	ElemStation=0,5			
Frame=19	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-253,009351374095		IsS11Max=No	IsS11Min=No	FrameElem=19	ElemStation=0,5			
Frame=19	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-253,009351374095		IsS11Max=No	IsS11Min=No	FrameElem=19	ElemStation=0,5			



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Frame=20	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-940,154457691751		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0			
Frame=20	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-940,154457691751		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0			
Frame=20	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-1714,77555520453		IsS11Max=No	IsS11Min=Yes	FrameElem=20	ElemStation=0			
Frame=20	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-1714,77555520453		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0			
Frame=20	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
637,546321392972		IsS11Max=Yes	IsS11Min=No	FrameElem=20	ElemStation=0,5			
Frame=20	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-892,151696559427		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0,5			
Frame=20	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-892,151696559427		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0,5			
Frame=20	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-1748,65284383804		IsS11Max=No	IsS11Min=Yes	FrameElem=20	ElemStation=0,5			
Frame=20	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-1748,65284383804		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0,5			
Frame=20	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
521,487380581963		IsS11Max=No	IsS11Min=Yes	FrameElem=20	ElemStation=0			
Frame=20	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=629,579424154486		IsS11Max=Yes	IsS11Min=No	FrameElem=20	ElemStation=0			
Frame=20	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=629,579424154486		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0			
Frame=20	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-203,872895953998		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0			
Frame=20	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-203,872895953998		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0			
Frame=20	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
508,987380581963		IsS11Max=No	IsS11Min=Yes	FrameElem=20	ElemStation=0,5			
Frame=20	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=866,44430376989		IsS11Max=Yes	IsS11Min=No	FrameElem=20	ElemStation=0,5			
Frame=20	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=866,44430376989		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0,5			
Frame=20	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-198,241318272294		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0,5			
Frame=20	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-198,241318272294		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0,5			
Frame=20	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
702,549380541703		IsS11Max=Yes	IsS11Min=No	FrameElem=20	ElemStation=0			
Frame=20	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-993,878581622967		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0			
Frame=20	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-993,878581622967		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0			
Frame=20	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-1883,81966683709		IsS11Max=No	IsS11Min=Yes	FrameElem=20	ElemStation=0			
Frame=20	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-1883,81966683709		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0			
Frame=20	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
690,049380541703		IsS11Max=Yes	IsS11Min=No	FrameElem=20	ElemStation=0,5			
Frame=20	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-990,372714920839		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0,5			
Frame=20	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-990,372714920839		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0,5			
Frame=20	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-2033,4992792445		IsS11Max=No	IsS11Min=Yes	FrameElem=20	ElemStation=0,5			
Frame=20	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-2033,4992792445		IsS11Max=No	IsS11Min=No	FrameElem=20	ElemStation=0,5			
Frame=21	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
579,301381548673		IsS11Max=No	IsS11Min=Yes	FrameElem=21	ElemStation=0			
Frame=21	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=482,127214987058		IsS11Max=Yes	IsS11Min=No	FrameElem=21	ElemStation=0			
Frame=21	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=482,127214987058		IsS11Max=No	IsS11Min=No	FrameElem=21	ElemStation=0			
Frame=21	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-275,018080472297		IsS11Max=No	IsS11Min=No	FrameElem=21	ElemStation=0			
Frame=21	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-275,018080472297		IsS11Max=No	IsS11Min=No	FrameElem=21	ElemStation=0			
Frame=21	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
566,801381548673		IsS11Max=No	IsS11Min=No	FrameElem=21	ElemStation=0,5			
Frame=21	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=693,084576234972		IsS11Max=Yes	IsS11Min=No	FrameElem=21	ElemStation=0,5			
Frame=21	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=693,084576234972		IsS11Max=No	IsS11Min=No	FrameElem=21	ElemStation=0,5			
Frame=21	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-621,62914002405		IsS11Max=No	IsS11Min=Yes	FrameElem=21	ElemStation=0,5			
Frame=21	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-621,62914002405		IsS11Max=No	IsS11Min=No	FrameElem=21	ElemStation=0,5			
Frame=21	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
637,546321392624		IsS11Max=Yes	IsS11Min=No	FrameElem=21	ElemStation=0			
Frame=21	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-892,151696559885		IsS11Max=No	IsS11Min=No	FrameElem=21	ElemStation=0			

<p>GENERAL CONTRACTOR</p> 	<p>ALTA SORVEGLIANZA</p> 
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio</p>	
<p>128 di 182</p>	

Frame=21 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-892,151696559885 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0
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S11=-1748,65284383747 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0
Frame=21 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-625,046321392624 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0,5
Frame=21 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-512,613271537484 IsS11Max=Yes IsS11Min=No FrameElem=21 ElemStation=0,5
Frame=21 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-512,613271537484 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0,5
Frame=21 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-1942,53757055603 IsS11Max=No IsS11Min=Yes FrameElem=21 ElemStation=0,5
Frame=21 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-1942,53757055603 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0,5
Frame=21 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-508,987380581769 IsS11Max=No IsS11Min=Yes FrameElem=21 ElemStation=0
Frame=21 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=866,444303770089 IsS11Max=Yes IsS11Min=No FrameElem=21 ElemStation=0
Frame=21 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=866,444303770089 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0
Frame=21 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-198,241318271684 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0
Frame=21 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-198,241318271684 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0
Frame=21 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-496,487380581769 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0,5
Frame=21 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=1209,01662066148 IsS11Max=Yes IsS11Min=No FrameElem=21 ElemStation=0,5
Frame=21 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=1209,01662066148 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0,5
Frame=21 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-511,291236298571 IsS11Max=No IsS11Min=Yes FrameElem=21 ElemStation=0,5
Frame=21 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-511,291236298571 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0,5
Frame=21 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-690,049380541607 IsS11Max=Yes IsS11Min=No FrameElem=21 ElemStation=0
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Frame=21 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-2033,49927924435 IsS11Max=No IsS11Min=Yes FrameElem=21 ElemStation=0
Frame=21 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-2033,49927924435 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0
Frame=21 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-677,549380541607 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0,5
Frame=21 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-641,75618513826 IsS11Max=Yes IsS11Min=No FrameElem=21 ElemStation=0,5
Frame=21 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-641,75618513826 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0,5
Frame=21 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-2362,81371172185 IsS11Max=No IsS11Min=Yes FrameElem=21 ElemStation=0,5
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S11=-2362,81371172185 IsS11Max=No IsS11Min=No FrameElem=21 ElemStation=0,5
Frame=22 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-566,801381549002 IsS11Max=No IsS11Min=No FrameElem=22 ElemStation=0
Frame=22 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=693,084576235074 IsS11Max=Yes IsS11Min=No FrameElem=22 ElemStation=0
Frame=22 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=693,084576235074 IsS11Max=No IsS11Min=No FrameElem=22 ElemStation=0
Frame=22 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-621,629140025166 IsS11Max=No IsS11Min=Yes FrameElem=22 ElemStation=0
Frame=22 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-621,629140025166 IsS11Max=No IsS11Min=No FrameElem=22 ElemStation=0
Frame=22 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-554,301381549002 IsS11Max=No IsS11Min=No FrameElem=22 ElemStation=0,5
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S11=1264,72595040866 IsS11Max=Yes IsS11Min=No FrameElem=22 ElemStation=0,5
Frame=22 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=1264,72595040866 IsS11Max=No IsS11Min=No FrameElem=22 ElemStation=0,5
Frame=22 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-1272,59163397464 IsS11Max=No IsS11Min=Yes FrameElem=22 ElemStation=0,5
Frame=22 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-1272,59163397464 IsS11Max=No IsS11Min=No FrameElem=22 ElemStation=0,5
Frame=22 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-625,046321393262 IsS11Max=No IsS11Min=No FrameElem=22 ElemStation=0
Frame=22 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-512,613271537798 IsS11Max=Yes IsS11Min=No FrameElem=22 ElemStation=0
Frame=22 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-512,613271537798 IsS11Max=No IsS11Min=No FrameElem=22 ElemStation=0

Frame=22 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5			
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Frame=22 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-			
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Frame=22 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5			
S11=163,988870876633 IsS11Max=Yes IsS11Min=No FrameElem=22 ElemStation=0,5			
Frame=22 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5			
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S11=-2489,81859319517 IsS11Max=No IsS11Min=Yes FrameElem=22 ElemStation=0,5			
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Frame=22 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-			
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S11=1209,016620661 IsS11Max=Yes IsS11Min=No FrameElem=22 ElemStation=0			
Frame=22 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5			
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Frame=22 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5			
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Frame=22 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5			
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Frame=22 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-			
483,987380582254 IsS11Max=No IsS11Min=No FrameElem=22 ElemStation=0,5			
Frame=22 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5			
S11=1850,68523266252 IsS11Max=Yes IsS11Min=No FrameElem=22 ElemStation=0,5			
Frame=22 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5			
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Frame=22 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5			
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Frame=22 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-			
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Frame=22 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5			
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Frame=22 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-			
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Frame=22 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5			
S11=13,9437988815546 IsS11Max=Yes IsS11Min=No FrameElem=22 ElemStation=0,5			
Frame=22 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5			
S11=13,9437988815546 IsS11Max=No IsS11Min=No FrameElem=22 ElemStation=0,5			
Frame=22 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5			
S11=-3045,52444011973 IsS11Max=No IsS11Min=Yes FrameElem=22 ElemStation=0,5			
Frame=22 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5			
S11=-3045,52444011973 IsS11Max=No IsS11Min=No FrameElem=22 ElemStation=0,5			
Frame=23 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-			
161,121606691559 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0			
Frame=23 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5			
S11=-2210,79140250714 IsS11Max=No IsS11Min=Yes FrameElem=23 ElemStation=0			
Frame=23 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5			
S11=-2210,79140250714 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0			
Frame=23 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5			
S11=3172,99710514153 IsS11Max=Yes IsS11Min=No FrameElem=23 ElemStation=0			
Frame=23 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5			
S11=3172,99710514153 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0			
Frame=23 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0			
S11=-162,757606715937 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0,15			
Frame=23 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5			
S11=-3142,87792576424 IsS11Max=No IsS11Min=Yes FrameElem=23 ElemStation=0,15			
Frame=23 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5			
S11=-3142,87792576424 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0,15			
Frame=23 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5			
S11=4165,63055747815 IsS11Max=Yes IsS11Min=No FrameElem=23 ElemStation=0,15			
Frame=23 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5			
S11=4165,63055747815 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0,15			
Frame=23 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-			
342,122278900531 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0			
Frame=23 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5			
S11=-3743,43694313221 IsS11Max=No IsS11Min=Yes FrameElem=23 ElemStation=0			
Frame=23 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5			
S11=-3743,43694313221 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0			
Frame=23 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5			
S11=1888,54818912402 IsS11Max=Yes IsS11Min=No FrameElem=23 ElemStation=0			

Frame=23 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=1888,54818912402 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0
Frame=23 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0
S11=-343,758278924909 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0,15
Frame=23 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-4739,34239551759 IsS11Max=No IsS11Min=Yes FrameElem=23 ElemStation=0,15
Frame=23 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-4739,34239551759 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0,15
Frame=23 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=2817,36271233236 IsS11Max=Yes IsS11Min=No FrameElem=23 ElemStation=0,15
Frame=23 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=2817,36271233236 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0,15
Frame=23 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
109,63445692489 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0
Frame=23 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-1008,78350676481 IsS11Max=No IsS11Min=Yes FrameElem=23 ElemStation=0
Frame=23 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-1008,78350676481 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0
Frame=23 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=3447,75548372268 IsS11Max=Yes IsS11Min=No FrameElem=23 ElemStation=0
Frame=23 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=3447,75548372268 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0
Frame=23 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
109,63445692489 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0,15
Frame=23 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-1711,17100676522 IsS11Max=No IsS11Min=Yes FrameElem=23 ElemStation=0,15
Frame=23 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-1711,17100676522 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0,15
Frame=23 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=4496,99568764379 IsS11Max=Yes IsS11Min=No FrameElem=23 ElemStation=0,15
Frame=23 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=4496,99568764379 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0,15
Frame=23 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
354,994065383175 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0
Frame=23 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-4043,93889467865 IsS11Max=No IsS11Min=Yes FrameElem=23 ElemStation=0
Frame=23 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-4043,93889467865 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0
Frame=23 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=789,514592915026 IsS11Max=Yes IsS11Min=No FrameElem=23 ElemStation=0
Frame=23 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=789,514592915026 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0
Frame=23 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
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Frame=23 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-5097,26909859976 IsS11Max=No IsS11Min=Yes FrameElem=23 ElemStation=0,15
Frame=23 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-5097,26909859976 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0,15
Frame=23 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=1491,90209291544 IsS11Max=Yes IsS11Min=No FrameElem=23 ElemStation=0,15
Frame=23 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=1491,90209291544 IsS11Max=No IsS11Min=No FrameElem=23 ElemStation=0,15
Frame=24 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
162,757606717125 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-3142,87792576565 IsS11Max=No IsS11Min=Yes FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-3142,87792576565 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=4165,63055747519 IsS11Max=Yes IsS11Min=No FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=4165,63055747519 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0
Frame=24 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0
S11=-164,393606741503 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0,15
Frame=24 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-4137,19644919215 IsS11Max=No IsS11Min=Yes FrameElem=24 ElemStation=0,15
Frame=24 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-4137,19644919215 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0,15
Frame=24 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=5220,49600998052 IsS11Max=Yes IsS11Min=No FrameElem=24 ElemStation=0,15
Frame=24 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=5220,49600998052 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0,15
Frame=24 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
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Frame=24 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-4739,34239552008 IsS11Max=No IsS11Min=Yes FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-4739,34239552008 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=2817,3627123314 IsS11Max=Yes IsS11Min=No FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=2817,3627123314 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0



Frame=24 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0
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Frame=24 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
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Frame=24 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-5797,47984807417 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0,15
Frame=24 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=3808,40923570915 IsS11Max=Yes IsS11Min=No FrameElem=24 ElemStation=0,15
Frame=24 Station=0,15 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=3808,40923570915 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0,15
Frame=24 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
109,634456924896 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-1711,17100676532 IsS11Max=No IsS11Min=Yes FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-1711,17100676532 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=4496,99568764052 IsS11Max=Yes IsS11Min=No FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=4496,99568764052 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0
Frame=24 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
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Frame=24 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-2464,33350676413 IsS11Max=No IsS11Min=Yes FrameElem=24 ElemStation=0,15
Frame=24 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-2464,33350676413 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0,15
Frame=24 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=5611,33214155966 IsS11Max=Yes IsS11Min=No FrameElem=24 ElemStation=0,15
Frame=24 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=5611,33214155966 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0,15
Frame=24 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
357,039065384651 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-5097,26909860255 IsS11Max=No IsS11Min=Yes FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-5097,26909860255 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=1491,90209291553 IsS11Max=Yes IsS11Min=No FrameElem=24 ElemStation=0
Frame=24 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=1491,90209291553 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0
Frame=24 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
359,084065384651 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0,15
Frame=24 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-6215,69555252168 IsS11Max=No IsS11Min=Yes FrameElem=24 ElemStation=0,15
Frame=24 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-6215,69555252168 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0,15
Frame=24 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=2245,06459291433 IsS11Max=Yes IsS11Min=No FrameElem=24 ElemStation=0,15
Frame=24 Station=0,15 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=2245,06459291433 IsS11Max=No IsS11Min=No FrameElem=24 ElemStation=0,15
Frame=25 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
117,494939375929 IsS11Max=No IsS11Min=Yes FrameElem=25 ElemStation=0
Frame=25 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-5,76720243243876 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0
Frame=25 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-5,76720243243876 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0
Frame=25 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=671,470476341291 IsS11Max=Yes IsS11Min=No FrameElem=25 ElemStation=0
Frame=25 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=671,470476341291 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0
Frame=25 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
122,948272790524 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0,5
Frame=25 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=1955,28900186553 IsS11Max=Yes IsS11Min=No FrameElem=25 ElemStation=0,5
Frame=25 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=1955,28900186553 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0,5
Frame=25 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-1471,70285909996 IsS11Max=No IsS11Min=Yes FrameElem=25 ElemStation=0,5
Frame=25 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-1471,70285909996 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0,5
Frame=25 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
298,495611584896 IsS11Max=Yes IsS11Min=No FrameElem=25 ElemStation=0
Frame=25 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-1267,16572214721 IsS11Max=No IsS11Min=Yes FrameElem=25 ElemStation=0
Frame=25 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-1267,16572214721 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0
Frame=25 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-456,747338206485 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0
Frame=25 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-456,747338206485 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0
Frame=25 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
303,948944999491 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0,5

Frame=25 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	
S11=873,41324871945 IsS11Max=Yes IsS11Min=No FrameElem=25 ElemStation=0,5	
Frame=25 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	
S11=873,41324871945 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0,5	
Frame=25 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	
S11=-2437,68917826479 IsS11Max=No IsS11Min=Yes FrameElem=25 ElemStation=0,5	
Frame=25 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	
S11=-2437,68917826479 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0,5	
Frame=25 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	
102,631249008253 IsS11Max=No IsS11Min=Yes FrameElem=25 ElemStation=0	
Frame=25 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	
S11=170,712358683239 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0	
Frame=25 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	
S11=170,712358683239 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0	
Frame=25 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	
S11=1382,83479200602 IsS11Max=Yes IsS11Min=No FrameElem=25 ElemStation=0	
Frame=25 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	
S11=1382,83479200602 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0	
Frame=25 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	
108,417915761148 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0,5	
Frame=25 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	
S11=2181,56921795186 IsS11Max=Yes IsS11Min=No FrameElem=25 ElemStation=0,5	
Frame=25 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	
S11=2181,56921795186 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0,5	
Frame=25 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	
S11=-591,74854132698 IsS11Max=No IsS11Min=Yes FrameElem=25 ElemStation=0,5	
Frame=25 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	
S11=-591,74854132698 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0,5	
Frame=25 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	
327,792117891905 IsS11Max=Yes IsS11Min=No FrameElem=25 ElemStation=0	
Frame=25 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	
S11=-1964,10505027373 IsS11Max=No IsS11Min=Yes FrameElem=25 ElemStation=0	
Frame=25 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	
S11=-1964,10505027373 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0	
Frame=25 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	
S11=-634,912398189314 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0	
Frame=25 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	
S11=-634,912398189314 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0	
Frame=25 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	
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Frame=25 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	
S11=10,4782830592639 IsS11Max=Yes IsS11Min=No FrameElem=25 ElemStation=0,5	
Frame=25 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	
S11=10,4782830592639 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0,5	
Frame=25 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	
S11=-2670,62630178796 IsS11Max=No IsS11Min=Yes FrameElem=25 ElemStation=0,5	
Frame=25 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	
S11=-2670,62630178796 IsS11Max=No IsS11Min=No FrameElem=25 ElemStation=0,5	
Frame=26 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	
122,948272790324 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0	
Frame=26 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	
S11=1955,28900186526 IsS11Max=Yes IsS11Min=No FrameElem=26 ElemStation=0	
Frame=26 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	
S11=1955,28900186526 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0	
Frame=26 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	
S11=-1471,7028591 IsS11Max=No IsS11Min=Yes FrameElem=26 ElemStation=0	
Frame=26 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	
S11=-1471,7028591 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0	
Frame=26 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	
128,401606204919 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0,5	
Frame=26 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	
S11=3362,21902677523 IsS11Max=Yes IsS11Min=No FrameElem=26 ElemStation=0,5	
Frame=26 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	
S11=3362,21902677523 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0,5	
Frame=26 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	
S11=-2939,70952622046 IsS11Max=No IsS11Min=Yes FrameElem=26 ElemStation=0,5	
Frame=26 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	
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Frame=26 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	
303,948944999292 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0	
Frame=26 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	
S11=873,413248718642 IsS11Max=Yes IsS11Min=No FrameElem=26 ElemStation=0	
Frame=26 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	
S11=873,413248718642 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0	
Frame=26 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	
S11=-2437,68917826413 IsS11Max=No IsS11Min=Yes FrameElem=26 ElemStation=0	
Frame=26 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	
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Frame=26 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	
309,402278413887 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0,5	
Frame=26 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	
S11=2329,84658233331 IsS11Max=Yes IsS11Min=No FrameElem=26 ElemStation=0,5	



Frame=26 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=2329,84658233331 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0,5
Frame=26 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-3727,16434975882 IsS11Max=No IsS11Min=Yes FrameElem=26 ElemStation=0,5
Frame=26 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-3727,16434975882 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0,5
Frame=26 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
108,417915761522 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0
Frame=26 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=2181,5692179516 IsS11Max=Yes IsS11Min=No FrameElem=26 ElemStation=0
Frame=26 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=2181,5692179516 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0
Frame=26 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-591,748541326575 IsS11Max=No IsS11Min=Yes FrameElem=26 ElemStation=0
Frame=26 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-591,748541326575 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0
Frame=26 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
109,63445692489 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0,5
Frame=26 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=3608,71964179467 IsS11Max=Yes IsS11Min=No FrameElem=26 ElemStation=0,5
Frame=26 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=3608,71964179467 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0,5
Frame=26 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-2002,16520799282 IsS11Max=No IsS11Min=Yes FrameElem=26 ElemStation=0,5
Frame=26 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-2002,16520799282 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0,5
Frame=26 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
327,792117891517 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0
Frame=26 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=10,4782830588585 IsS11Max=Yes IsS11Min=No FrameElem=26 ElemStation=0
Frame=26 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=10,4782830588585 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0
Frame=26 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-2670,6263017872 IsS11Max=No IsS11Min=Yes FrameElem=26 ElemStation=0
Frame=26 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-2670,6263017872 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0
Frame=26 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
327,792117891517 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0,5
Frame=26 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=1420,8949497251 IsS11Max=Yes IsS11Min=No FrameElem=26 ElemStation=0,5
Frame=26 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=1420,8949497251 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0,5
Frame=26 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-3983,04853871914 IsS11Max=No IsS11Min=Yes FrameElem=26 ElemStation=0,5
Frame=26 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-3983,04853871914 IsS11Max=No IsS11Min=No FrameElem=26 ElemStation=0,5
Frame=27 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
128,40160620472 IsS11Max=No IsS11Min=No FrameElem=27 ElemStation=0
Frame=27 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=3362,21902677559 IsS11Max=Yes IsS11Min=No FrameElem=27 ElemStation=0
Frame=27 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=3362,21902677559 IsS11Max=No IsS11Min=No FrameElem=27 ElemStation=0
Frame=27 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-2939,70952622038 IsS11Max=No IsS11Min=Yes FrameElem=27 ElemStation=0
Frame=27 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-2939,70952622038 IsS11Max=No IsS11Min=No FrameElem=27 ElemStation=0
Frame=27 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
133,854939619315 IsS11Max=No IsS11Min=No FrameElem=27 ElemStation=0,5
Frame=27 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=4162,05062663645 IsS11Max=Yes IsS11Min=No FrameElem=27 ElemStation=0,5
Frame=27 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=4162,05062663645 IsS11Max=No IsS11Min=No FrameElem=27 ElemStation=0,5
Frame=27 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-3732,54952501983 IsS11Max=No IsS11Min=Yes FrameElem=27 ElemStation=0,5
Frame=27 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-3732,54952501983 IsS11Max=No IsS11Min=No FrameElem=27 ElemStation=0,5
Frame=27 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
309,402278413688 IsS11Max=No IsS11Min=No FrameElem=27 ElemStation=0
Frame=27 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=2329,84658233394 IsS11Max=Yes IsS11Min=No FrameElem=27 ElemStation=0
Frame=27 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=2329,84658233394 IsS11Max=No IsS11Min=No FrameElem=27 ElemStation=0
Frame=27 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-3727,16434975884 IsS11Max=No IsS11Min=Yes FrameElem=27 ElemStation=0
Frame=27 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-3727,16434975884 IsS11Max=No IsS11Min=No FrameElem=27 ElemStation=0
Frame=27 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
314,855611828282 IsS11Max=No IsS11Min=No FrameElem=27 ElemStation=0,5
Frame=27 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=3111,11324762761 IsS11Max=Yes IsS11Min=No FrameElem=27 ElemStation=0,5
Frame=27 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=3111,11324762761 IsS11Max=No IsS11Min=No FrameElem=27 ElemStation=0,5



Frame=27	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-4429,76050587508		IsS11Max=No	IsS11Min=Yes	FrameElem=27	ElemStation=0,5			
Frame=27	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-4429,76050587508		IsS11Max=No	IsS11Min=No	FrameElem=27	ElemStation=0,5			
Frame=27	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
109,634456924891		IsS11Max=No	IsS11Min=No	FrameElem=27	ElemStation=0			
Frame=27	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=3608,71964179506		IsS11Max=Yes	IsS11Min=No	FrameElem=27	ElemStation=0			
Frame=27	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=3608,71964179506		IsS11Max=No	IsS11Min=No	FrameElem=27	ElemStation=0			
Frame=27	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-2002,16520799301		IsS11Max=No	IsS11Min=Yes	FrameElem=27	ElemStation=0			
Frame=27	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-2002,16520799301		IsS11Max=No	IsS11Min=No	FrameElem=27	ElemStation=0			
Frame=27	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
109,634456924891		IsS11Max=No	IsS11Min=No	FrameElem=27	ElemStation=0,5			
Frame=27	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=4396,94664248595		IsS11Max=Yes	IsS11Min=No	FrameElem=27	ElemStation=0,5			
Frame=27	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=4396,94664248595		IsS11Max=No	IsS11Min=No	FrameElem=27	ElemStation=0,5			
Frame=27	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=-2848,41520799224		IsS11Max=No	IsS11Min=Yes	FrameElem=27	ElemStation=0,5			
Frame=27	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-2848,41520799224		IsS11Max=No	IsS11Min=No	FrameElem=27	ElemStation=0,5			
Frame=27	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
327,792117891517		IsS11Max=No	IsS11Min=No	FrameElem=27	ElemStation=0			
Frame=27	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=1420,89494972529		IsS11Max=Yes	IsS11Min=No	FrameElem=27	ElemStation=0			
Frame=27	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=1420,89494972529		IsS11Max=No	IsS11Min=No	FrameElem=27	ElemStation=0			
Frame=27	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-3983,04853871909		IsS11Max=No	IsS11Min=Yes	FrameElem=27	ElemStation=0			
Frame=27	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-3983,04853871909		IsS11Max=No	IsS11Min=No	FrameElem=27	ElemStation=0			
Frame=27	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
327,792117891517		IsS11Max=No	IsS11Min=No	FrameElem=27	ElemStation=0,5			
Frame=27	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=2267,14494972452		IsS11Max=Yes	IsS11Min=No	FrameElem=27	ElemStation=0,5			
Frame=27	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=2267,14494972452		IsS11Max=No	IsS11Min=No	FrameElem=27	ElemStation=0,5			
Frame=27	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-4676,76676216951		IsS11Max=No	IsS11Min=Yes	FrameElem=27	ElemStation=0,5			
Frame=27	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-4676,76676216951		IsS11Max=No	IsS11Min=No	FrameElem=27	ElemStation=0,5			
Frame=28	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
787,126002470385		IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0			
Frame=28	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=-881,587040955806		IsS11Max=No	IsS11Min=Yes	FrameElem=28	ElemStation=0			
Frame=28	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=-881,587040955806		IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0			
Frame=28	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=819,147413719536		IsS11Max=Yes	IsS11Min=No	FrameElem=28	ElemStation=0			
Frame=28	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=819,147413719536		IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0			
Frame=28	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
774,626002470385		IsS11Max=No	IsS11Min=Yes	FrameElem=28	ElemStation=0,5			
Frame=28	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=-730,696277803887		IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0,5			
Frame=28	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=-730,696277803887		IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0,5			
Frame=28	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=352,25959009165		IsS11Max=Yes	IsS11Min=No	FrameElem=28	ElemStation=0,5			
Frame=28	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=352,25959009165		IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0,5			
Frame=28	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
847,858301967799		IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0			
Frame=28	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-2413,31481756834		IsS11Max=No	IsS11Min=Yes	FrameElem=28	ElemStation=0			
Frame=28	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-2413,31481756834		IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0			
Frame=28	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-794,214164071769		IsS11Max=Yes	IsS11Min=No	FrameElem=28	ElemStation=0			
Frame=28	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-794,214164071769		IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0			
Frame=28	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
835,358301967799		IsS11Max=Yes	IsS11Min=No	FrameElem=28	ElemStation=0,5			
Frame=28	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-1937,88428852496		IsS11Max=No	IsS11Min=Yes	FrameElem=28	ElemStation=0,5			
Frame=28	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-1937,88428852496		IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0,5			
Frame=28	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-908,750895035971		IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0,5			



Frame=28	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5		
S11=-908,750895035971	IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0,5					
Frame=28	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-	
626,533333331173	IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0					
Frame=28	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5		
S11=-737,168043615051	IsS11Max=No	IsS11Min=Yes	FrameElem=28	ElemStation=0					
Frame=28	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5		
S11=-737,168043615051	IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0					
Frame=28	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5		
S11=1718,0087844012	IsS11Max=Yes	IsS11Min=No	FrameElem=28	ElemStation=0					
Frame=28	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5		
S11=1718,0087844012	IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0					
Frame=28	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-	
614,033333331173	IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0,5					
Frame=28	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5		
S11=-627,97895059275	IsS11Max=No	IsS11Min=Yes	FrameElem=28	ElemStation=0,5					
Frame=28	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5		
S11=-627,97895059275	IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0,5					
Frame=28	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5		
S11=993,782506289299	IsS11Max=Yes	IsS11Min=No	FrameElem=28	ElemStation=0,5					
Frame=28	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5		
S11=993,782506289299	IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0,5					
Frame=28	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-	
892,553052609149	IsS11Max=Yes	IsS11Min=No	FrameElem=28	ElemStation=0					
Frame=28	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5		
S11=-2981,89583265154	IsS11Max=No	IsS11Min=Yes	FrameElem=28	ElemStation=0					
Frame=28	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5		
S11=-2981,89583265154	IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0					
Frame=28	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5		
S11=-1023,04381333918	IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0					
Frame=28	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5		
S11=-1023,04381333918	IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0					
Frame=28	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-	
880,053052609149	IsS11Max=Yes	IsS11Min=No	FrameElem=28	ElemStation=0,5					
Frame=28	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5		
S11=-2328,41331239003	IsS11Max=No	IsS11Min=Yes	FrameElem=28	ElemStation=0,5					
Frame=28	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5		
S11=-2328,41331239003	IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0,5					
Frame=28	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5		
S11=-1069,13161213609	IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0,5					
Frame=28	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5		
S11=-1069,13161213609	IsS11Max=No	IsS11Min=No	FrameElem=28	ElemStation=0,5					
Frame=29	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-	
774,626002469494	IsS11Max=No	IsS11Min=Yes	FrameElem=29	ElemStation=0					
Frame=29	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5		
S11=-730,696277802632	IsS11Max=No	IsS11Min=No	FrameElem=29	ElemStation=0					
Frame=29	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5		
S11=-730,696277802632	IsS11Max=No	IsS11Min=No	FrameElem=29	ElemStation=0					
Frame=29	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5		
S11=352,259590092877	IsS11Max=Yes	IsS11Min=No	FrameElem=29	ElemStation=0					
Frame=29	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5		
S11=352,259590092877	IsS11Max=No	IsS11Min=No	FrameElem=29	ElemStation=0					
Frame=29	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-	
762,126002469494	IsS11Max=No	IsS11Min=No	FrameElem=29	ElemStation=0,5					
Frame=29	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5		
S11=-806,899600672052	IsS11Max=No	IsS11Min=Yes	FrameElem=29	ElemStation=0,5					
Frame=29	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5		
S11=-806,899600672052	IsS11Max=No	IsS11Min=No	FrameElem=29	ElemStation=0,5					
Frame=29	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5		
S11=333,617841826407	IsS11Max=Yes	IsS11Min=No	FrameElem=29	ElemStation=0,5					
Frame=29	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5		
S11=333,617841826407	IsS11Max=No	IsS11Min=No	FrameElem=29	ElemStation=0,5					
Frame=29	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-	
835,358301966169	IsS11Max=Yes	IsS11Min=No	FrameElem=29	ElemStation=0					
Frame=29	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5		
S11=-1937,8842885241	IsS11Max=No	IsS11Min=Yes	FrameElem=29	ElemStation=0					
Frame=29	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5		
S11=-1937,8842885241	IsS11Max=No	IsS11Min=No	FrameElem=29	ElemStation=0					
Frame=29	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5		
S11=-908,750895033999	IsS11Max=No	IsS11Min=No	FrameElem=29	ElemStation=0					
Frame=29	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5		
S11=-908,750895033999	IsS11Max=No	IsS11Min=No	FrameElem=29	ElemStation=0					
Frame=29	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-	
822,858301966169	IsS11Max=No	IsS11Min=No	FrameElem=29	ElemStation=0,5					
Frame=29	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5		
S11=-1894,24254025763	IsS11Max=No	IsS11Min=Yes	FrameElem=29	ElemStation=0,5					
Frame=29	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5		
S11=-1894,24254025763	IsS11Max=No	IsS11Min=No	FrameElem=29	ElemStation=0,5					
Frame=29	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5		
S11=-802,444309768052	IsS11Max=Yes	IsS11Min=No	FrameElem=29	ElemStation=0,5					
Frame=29	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5		
S11=-802,444309768052	IsS11Max=No	IsS11Min=No	FrameElem=29	ElemStation=0,5					

Frame=29 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
614,03333330592 IsS11Max=No IsS11Min=No FrameElem=29 ElemStation=0
Frame=29 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-627,978950591508 IsS11Max=No IsS11Min=Yes FrameElem=29 ElemStation=0
Frame=29 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-627,978950591508 IsS11Max=No IsS11Min=No FrameElem=29 ElemStation=0
Frame=29 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=993,782506289888 IsS11Max=Yes IsS11Min=No FrameElem=29 ElemStation=0
Frame=29 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=993,782506289888 IsS11Max=No IsS11Min=No FrameElem=29 ElemStation=0
Frame=29 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
601,53333330592 IsS11Max=No IsS11Min=No FrameElem=29 ElemStation=0,5
Frame=29 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-721,18404082448 IsS11Max=No IsS11Min=Yes FrameElem=29 ElemStation=0,5
Frame=29 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-721,18404082448 IsS11Max=No IsS11Min=No FrameElem=29 ElemStation=0,5
Frame=29 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=701,345008955032 IsS11Max=Yes IsS11Min=No FrameElem=29 ElemStation=0,5
Frame=29 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=701,345008955032 IsS11Max=No IsS11Min=No FrameElem=29 ElemStation=0,5
Frame=29 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
880,053052607403 IsS11Max=Yes IsS11Min=No FrameElem=29 ElemStation=0
Frame=29 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-2328,41331238924 IsS11Max=No IsS11Min=Yes FrameElem=29 ElemStation=0
Frame=29 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-2328,41331238924 IsS11Max=No IsS11Min=No FrameElem=29 ElemStation=0
Frame=29 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-1069,13161213396 IsS11Max=No IsS11Min=No FrameElem=29 ElemStation=0
Frame=29 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-1069,13161213396 IsS11Max=No IsS11Min=No FrameElem=29 ElemStation=0
Frame=29 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
867,553052607403 IsS11Max=Yes IsS11Min=No FrameElem=29 ElemStation=0,5
Frame=29 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-2181,69015435086 IsS11Max=No IsS11Min=Yes FrameElem=29 ElemStation=0,5
Frame=29 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-2181,69015435086 IsS11Max=No IsS11Min=No FrameElem=29 ElemStation=0,5
Frame=29 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-895,93878703207 IsS11Max=No IsS11Min=No FrameElem=29 ElemStation=0,5
Frame=29 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-895,93878703207 IsS11Max=No IsS11Min=No FrameElem=29 ElemStation=0,5
Frame=30 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
133,854939619582 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=4162,05062663593 IsS11Max=Yes IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=4162,05062663593 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-3732,54952502036 IsS11Max=No IsS11Min=Yes FrameElem=30 ElemStation=0
Frame=30 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-3732,54952502036 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
139,308273034176 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=4270,41555793498 IsS11Max=Yes IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=4270,41555793498 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-3850,22285550101 IsS11Max=No IsS11Min=Yes FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-3850,22285550101 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
314,855611828549 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=3111,11324762698 IsS11Max=Yes IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=3111,11324762698 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-4429,7605058751 IsS11Max=No IsS11Min=Yes FrameElem=30 ElemStation=0
Frame=30 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-4429,7605058751 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
320,308945243143 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=3217,21324460184 IsS11Max=Yes IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=3217,21324460184 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-4549,03210400333 IsS11Max=No IsS11Min=Yes FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-4549,03210400333 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
109,634456924891 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0

Frame=30 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=4396,94664248534 IsS11Max=Yes IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=4396,94664248534 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-2848,41520799207 IsS11Max=No IsS11Min=Yes FrameElem=30 ElemStation=0
Frame=30 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-2848,41520799207 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
109,634456924891 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=4461,88197651138 IsS11Max=Yes IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=4461,88197651138 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-3130,49854132622 IsS11Max=No IsS11Min=Yes FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-3130,49854132622 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
327,792117891711 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=2267,14494972435 IsS11Max=Yes IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=2267,14494972435 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-4676,76676216956 IsS11Max=No IsS11Min=Yes FrameElem=30 ElemStation=0
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S11=-4676,76676216956 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0
Frame=30 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
327,792117891711 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=2549,22828305851 IsS11Max=Yes IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=2549,22828305851 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-4755,33542952894 IsS11Max=No IsS11Min=Yes FrameElem=30 ElemStation=0,5
Frame=30 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-4755,33542952894 IsS11Max=No IsS11Min=No FrameElem=30 ElemStation=0,5
Frame=31 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
139,308273034753 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0
Frame=31 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=4270,41555793455 IsS11Max=Yes IsS11Min=No FrameElem=31 ElemStation=0
Frame=31 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=4270,41555793455 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0
Frame=31 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-3850,22285550142 IsS11Max=No IsS11Min=Yes FrameElem=31 ElemStation=0
Frame=31 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=-3850,22285550142 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0
Frame=31 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
144,761606449348 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0,5
Frame=31 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=3687,31382066768 IsS11Max=Yes IsS11Min=No FrameElem=31 ElemStation=0,5
Frame=31 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=3687,31382066768 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0,5
Frame=31 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=-3239,79009201212 IsS11Max=No IsS11Min=Yes FrameElem=31 ElemStation=0,5
Frame=31 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
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320,308945243721 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0
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S11=3217,21324460203 IsS11Max=Yes IsS11Min=No FrameElem=31 ElemStation=0
Frame=31 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=3217,21324460203 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0
Frame=31 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-4549,03210400406 IsS11Max=No IsS11Min=Yes FrameElem=31 ElemStation=0
Frame=31 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-4549,03210400406 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0
Frame=31 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
325,762278658315 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0,5
Frame=31 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=2648,14657325368 IsS11Max=Yes IsS11Min=No FrameElem=31 ElemStation=0,5
Frame=31 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=2648,14657325368 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0,5
Frame=31 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-3976,83703356637 IsS11Max=No IsS11Min=Yes FrameElem=31 ElemStation=0,5
Frame=31 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-3976,83703356637 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0,5
Frame=31 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
109,634456924891 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0
Frame=31 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=4461,88197651082 IsS11Max=Yes IsS11Min=No FrameElem=31 ElemStation=0



Frame=31 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=4461,88197651082 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0
Frame=31 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=-3130,49854132629 IsS11Max=No IsS11Min=Yes FrameElem=31 ElemStation=0
Frame=31 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	S11=-3130,49854132629 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0
Frame=31 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	109,634456924891 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0,5
Frame=31 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=3963,925499842 IsS11Max=Yes IsS11Min=No FrameElem=31 ElemStation=0,5
Frame=31 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=3963,925499842 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0,5
Frame=31 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=-2795,47578234501 IsS11Max=No IsS11Min=Yes FrameElem=31 ElemStation=0,5
Frame=31 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	S11=-2795,47578234501 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0,5
Frame=31 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	327,792117892099 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0
Frame=31 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	S11=2549,22828305858 IsS11Max=Yes IsS11Min=No FrameElem=31 ElemStation=0
Frame=31 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=2549,22828305858 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0
Frame=31 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	S11=-4755,33542952983 IsS11Max=No IsS11Min=Yes FrameElem=31 ElemStation=0
Frame=31 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=-4755,33542952983 IsS11Max=No IsS11Min=No FrameElem=31 ElemStation=0
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Frame=31 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	S11=-4257,50839120826 IsS11Max=No IsS11Min=Yes FrameElem=31 ElemStation=0,5
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Frame=32 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=2412,74541483974 IsS11Max=Yes IsS11Min=No FrameElem=32 ElemStation=0,5
Frame=32 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=2412,74541483974 IsS11Max=No IsS11Min=No FrameElem=32 ElemStation=0,5
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Frame=32 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	S11=-1794,40032209173 IsS11Max=No IsS11Min=No FrameElem=32 ElemStation=0,5
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Frame=32 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	S11=2648,14657325401 IsS11Max=Yes IsS11Min=No FrameElem=32 ElemStation=0
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Frame=32 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=-3976,83703356658 IsS11Max=No IsS11Min=No FrameElem=32 ElemStation=0
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Frame=32 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=-2713,17529456692 IsS11Max=No IsS11Min=No FrameElem=32 ElemStation=0,5
Frame=32 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	109,634456924891 IsS11Max=No IsS11Min=No FrameElem=32 ElemStation=0
Frame=32 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=3963,92549984297 IsS11Max=Yes IsS11Min=No FrameElem=32 ElemStation=0
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Frame=32 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=-2795,47578234473 IsS11Max=No IsS11Min=Yes FrameElem=32 ElemStation=0
Frame=32 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	S11=-2795,47578234473 IsS11Max=No IsS11Min=No FrameElem=32 ElemStation=0
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Frame=32 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=2744,09323588211 IsS11Max=Yes IsS11Min=No FrameElem=32 ElemStation=0,5
Frame=32 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=2744,09323588211 IsS11Max=No IsS11Min=No FrameElem=32 ElemStation=0,5
Frame=32 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=-1663,14396506377 IsS11Max=No IsS11Min=Yes FrameElem=32 ElemStation=0,5
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Frame=32 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	S11=-4257,50839120846 IsS11Max=No IsS11Min=Yes FrameElem=32 ElemStation=0
Frame=32 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=-4257,50839120846 IsS11Max=No IsS11Min=No FrameElem=32 ElemStation=0
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Frame=32 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=1132,44951298212 IsS11Max=No IsS11Min=No FrameElem=32 ElemStation=0,5
Frame=32 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	S11=-3037,67612724759 IsS11Max=No IsS11Min=Yes FrameElem=32 ElemStation=0,5
Frame=32 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=-3037,67612724759 IsS11Max=No IsS11Min=No FrameElem=32 ElemStation=0,5
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Frame=33 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=2412,74541484011 IsS11Max=Yes IsS11Min=No FrameElem=33 ElemStation=0
Frame=33 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=2412,74541484011 IsS11Max=No IsS11Min=No FrameElem=33 ElemStation=0
Frame=33 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=-1794,4003220917 IsS11Max=No IsS11Min=Yes FrameElem=33 ElemStation=0
Frame=33 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	S11=-1794,4003220917 IsS11Max=No IsS11Min=No FrameElem=33 ElemStation=0
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Frame=33 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=446,710340448691 IsS11Max=Yes IsS11Min=No FrameElem=33 ElemStation=0,5
Frame=33 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=446,710340448691 IsS11Max=No IsS11Min=No FrameElem=33 ElemStation=0,5
Frame=33 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=326,156116148818 IsS11Max=No IsS11Min=No FrameElem=33 ElemStation=0,5
Frame=33 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	S11=326,156116148818 IsS11Max=No IsS11Min=No FrameElem=33 ElemStation=0,5
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Frame=33 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=1252,04876398926 IsS11Max=No IsS11Min=No FrameElem=33 ElemStation=0
Frame=33 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	S11=-2713,17529456658 IsS11Max=No IsS11Min=Yes FrameElem=33 ElemStation=0
Frame=33 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=-2713,17529456658 IsS11Max=No IsS11Min=No FrameElem=33 ElemStation=0
Frame=33 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	336,668945486798 IsS11Max=Yes IsS11Min=No FrameElem=33 ElemStation=0,5
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Frame=33 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=-880,081007757047 IsS11Max=No IsS11Min=No FrameElem=33 ElemStation=0,5
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Frame=33 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=-758,046887004351 IsS11Max=No IsS11Min=No FrameElem=33 ElemStation=0,5
Frame=33 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	109,634456924892 IsS11Max=No IsS11Min=No FrameElem=33 ElemStation=0
Frame=33 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=2744,09323588233 IsS11Max=Yes IsS11Min=No FrameElem=33 ElemStation=0
Frame=33 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=2744,09323588233 IsS11Max=No IsS11Min=No FrameElem=33 ElemStation=0
Frame=33 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=-1663,14396506373 IsS11Max=No IsS11Min=Yes FrameElem=33 ElemStation=0



GENERAL CONTRACTOR

ALTA SORVEGLIANZA

IG51-02-E-CV-CL-IN1Y-0X-001_A00

Foglio

Relazione di calcolo

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Frame=33	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=-1663,14396506373	IsS11Max=No	IsS11Min=No	FrameElem=33	ElemStation=0				
Frame=33	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
109,634456924892	IsS11Max=No	IsS11Min=Yes	FrameElem=33	ElemStation=0,5				
Frame=33	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=965,799826568569	IsS11Max=Yes	IsS11Min=No	FrameElem=33	ElemStation=0,5				
Frame=33	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=965,799826568569	IsS11Max=No	IsS11Min=No	FrameElem=33	ElemStation=0,5				
Frame=33	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=436,032534039926	IsS11Max=No	IsS11Min=No	FrameElem=33	ElemStation=0,5				
Frame=33	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=436,032534039926	IsS11Max=No	IsS11Min=No	FrameElem=33	ElemStation=0,5				
Frame=33	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
341,360732050919	IsS11Max=No	IsS11Min=No	FrameElem=33	ElemStation=0				
Frame=33	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=1132,44951298233	IsS11Max=Yes	IsS11Min=No	FrameElem=33	ElemStation=0				
Frame=33	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=1132,44951298233	IsS11Max=No	IsS11Min=No	FrameElem=33	ElemStation=0				
Frame=33	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-3037,67612724744	IsS11Max=No	IsS11Min=Yes	FrameElem=33	ElemStation=0				
Frame=33	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-3037,67612724744	IsS11Max=No	IsS11Min=No	FrameElem=33	ElemStation=0				
Frame=33	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
348,177398717586	IsS11Max=Yes	IsS11Min=No	FrameElem=33	ElemStation=0,5				
Frame=33	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-1011,57226232486	IsS11Max=No	IsS11Min=No	FrameElem=33	ElemStation=0,5				
Frame=33	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-1011,57226232486	IsS11Max=No	IsS11Min=No	FrameElem=33	ElemStation=0,5				
Frame=33	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-1185,06874041835	IsS11Max=No	IsS11Min=Yes	FrameElem=33	ElemStation=0,5				
Frame=33	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-1185,06874041835	IsS11Max=No	IsS11Min=No	FrameElem=33	ElemStation=0,5				
Frame=34	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
155,668273278251	IsS11Max=No	IsS11Min=Yes	FrameElem=34	ElemStation=0				
Frame=34	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=446,71034044759	IsS11Max=Yes	IsS11Min=No	FrameElem=34	ElemStation=0				
Frame=34	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=446,71034044759	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0				
Frame=34	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=326,156116149105	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0				
Frame=34	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=326,156116149105	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0				
Frame=34	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
161,121606692845	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0,5				
Frame=34	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=-2210,79140250869	IsS11Max=No	IsS11Min=Yes	FrameElem=34	ElemStation=0,5				
Frame=34	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=-2210,79140250869	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0,5				
Frame=34	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=3172,99710513922	IsS11Max=Yes	IsS11Min=No	FrameElem=34	ElemStation=0,5				
Frame=34	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=3172,99710513922	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0,5				
Frame=34	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
336,668945487222	IsS11Max=Yes	IsS11Min=No	FrameElem=34	ElemStation=0				
Frame=34	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-880,081007757253	IsS11Max=No	IsS11Min=Yes	FrameElem=34	ElemStation=0				
Frame=34	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-880,081007757253	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0				
Frame=34	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=-758,046887004092	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0				
Frame=34	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=-758,046887004092	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0				
Frame=34	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
342,122278901816	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0,5				
Frame=34	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5	
S11=-3743,4369431348	IsS11Max=No	IsS11Min=Yes	FrameElem=34	ElemStation=0,5				
Frame=34	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5	
S11=-3743,4369431348	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0,5				
Frame=34	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5	
S11=1888,548189123	IsS11Max=Yes	IsS11Min=No	FrameElem=34	ElemStation=0,5				
Frame=34	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5	
S11=1888,548189123	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0,5				
Frame=34	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
109,634456924891	IsS11Max=No	IsS11Min=Yes	FrameElem=34	ElemStation=0				
Frame=34	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5	
S11=965,79982656828	IsS11Max=Yes	IsS11Min=No	FrameElem=34	ElemStation=0				
Frame=34	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5	
S11=965,79982656828	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0				
Frame=34	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5	
S11=436,032534040243	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0				
Frame=34	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5	
S11=436,032534040243	IsS11Max=No	IsS11Min=No	FrameElem=34	ElemStation=0				

Relazione di calcolo	
Frame=34 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	109,634456924891 IsS11Max=No IsS11Min=No FrameElem=34 ElemStation=0,5
Frame=34 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=-1008,78350676537 IsS11Max=No IsS11Min=Yes FrameElem=34 ElemStation=0,5
Frame=34 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=-1008,78350676537 IsS11Max=No IsS11Min=No FrameElem=34 ElemStation=0,5
Frame=34 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=3447,75548371998 IsS11Max=Yes IsS11Min=No FrameElem=34 ElemStation=0,5
Frame=34 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	S11=3447,75548371998 IsS11Max=No IsS11Min=No FrameElem=34 ElemStation=0,5
Frame=34 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	348,177398718115 IsS11Max=Yes IsS11Min=No FrameElem=34 ElemStation=0
Frame=34 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	S11=-1011,57226232508 IsS11Max=No IsS11Min=No FrameElem=34 ElemStation=0
Frame=34 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=-1011,57226232508 IsS11Max=No IsS11Min=No FrameElem=34 ElemStation=0
Frame=34 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	S11=-1185,06874041806 IsS11Max=No IsS11Min=Yes FrameElem=34 ElemStation=0
Frame=34 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=-1185,06874041806 IsS11Max=No IsS11Min=No FrameElem=34 ElemStation=0
Frame=34 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	354,994065384782 IsS11Max=No IsS11Min=No FrameElem=34 ElemStation=0,5
Frame=34 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	S11=-4043,93889468149 IsS11Max=No IsS11Min=Yes FrameElem=34 ElemStation=0,5
Frame=34 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=-4043,93889468149 IsS11Max=No IsS11Min=No FrameElem=34 ElemStation=0,5
Frame=34 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	S11=789,514592915583 IsS11Max=Yes IsS11Min=No FrameElem=34 ElemStation=0,5
Frame=34 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=789,514592915583 IsS11Max=No IsS11Min=No FrameElem=34 ElemStation=0,5
Frame=35 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	75,6234825993709 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5	S11=3403,22387072425 IsS11Max=Yes IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5	S11=3403,22387072425 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5	S11=-1602,16443099783 IsS11Max=No IsS11Min=Yes FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5	S11=-1602,16443099783 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	75,6234825993709 IsS11Max=No IsS11Min=Yes FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5	S11=1058,16430395651 IsS11Max=Yes IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5	S11=1058,16430395651 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5	S11=567,625276760265 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5	S11=567,625276760265 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	291,941163758901 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5	S11=1447,0246547633 IsS11Max=Yes IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5	S11=1447,0246547633 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5	S11=-3615,90314704761 IsS11Max=No IsS11Min=Yes FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5	S11=-3615,90314704761 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	291,941163758901 IsS11Max=Yes IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5	S11=-722,765052994802 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5	S11=-722,765052994802 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5	S11=-1270,84358027986 IsS11Max=No IsS11Min=Yes FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5	S11=-1270,84358027986 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	63,8893799421202 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5	S11=3714,39038431647 IsS11Max=Yes IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5	S11=3714,39038431647 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5	S11=-513,151328154504 IsS11Max=No IsS11Min=Yes FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5	S11=-513,151328154504 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	63,8893799421202 IsS11Max=No IsS11Min=Yes FrameElem=35 ElemStation=0,5



Frame=35 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5	S11=1256,29063669719 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5	S11=1256,29063669719 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5	S11=1257,11245667911 IsS11Max=Yes IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5	S11=1257,11245667911 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	S11=336,931172367041 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5	S11=268,031534703686 IsS11Max=Yes IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5	S11=268,031534703686 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5	S11=-3903,60145532532 IsS11Max=No IsS11Min=Yes FrameElem=35 ElemStation=0
Frame=35 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5	S11=-3903,60145532532 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0
Frame=35 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	S11=336,931172367041 IsS11Max=Yes IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5	S11=-1502,23225012993 IsS11Max=No IsS11Min=Yes FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5	S11=-1502,23225012993 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5	S11=-1445,50170770604 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=35 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5	S11=-1445,50170770604 IsS11Max=No IsS11Min=No FrameElem=35 ElemStation=0,5
Frame=36 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	S11=75,6234825993714 IsS11Max=No IsS11Min=Yes FrameElem=36 ElemStation=0
Frame=36 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5	S11=1058,16430395691 IsS11Max=Yes IsS11Min=No FrameElem=36 ElemStation=0
Frame=36 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5	S11=1058,16430395691 IsS11Max=No IsS11Min=No FrameElem=36 ElemStation=0
Frame=36 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5	S11=567,625276760069 IsS11Max=No IsS11Min=No FrameElem=36 ElemStation=0
Frame=36 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5	S11=567,625276760069 IsS11Max=No IsS11Min=No FrameElem=36 ElemStation=0
Frame=36 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	S11=75,6234825993714 IsS11Max=No IsS11Min=No FrameElem=36 ElemStation=0,5
Frame=36 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5	S11=-987,010954658493 IsS11Max=No IsS11Min=Yes FrameElem=36 ElemStation=0,5
Frame=36 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5	S11=-987,010954658493 IsS11Max=No IsS11Min=No FrameElem=36 ElemStation=0,5
Frame=36 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5	S11=2331,99738105032 IsS11Max=Yes IsS11Min=No FrameElem=36 ElemStation=0,5
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Frame=36 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5	S11=-1270,84358028026 IsS11Max=No IsS11Min=Yes FrameElem=36 ElemStation=0
Frame=36 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5	S11=-1270,84358028026 IsS11Max=No IsS11Min=No FrameElem=36 ElemStation=0
Frame=36 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	S11=291,9411637589 IsS11Max=No IsS11Min=No FrameElem=36 ElemStation=0,5
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S11=-2480,73260870866 IsS11Max=No IsS11Min=No FrameElem=37 ElemStation=0,5



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<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio</p> <p>145 di 182</p>	

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Frame=38 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5
S11=-4677,48942176624 IsS11Max=No IsS11Min=Yes FrameElem=38 ElemStation=0,5
Frame=38 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5
S11=-4677,48942176624 IsS11Max=No IsS11Min=No FrameElem=38 ElemStation=0,5
Frame=38 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5
S11=2506,79751538338 IsS11Max=Yes IsS11Min=No FrameElem=38 ElemStation=0,5
Frame=38 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5
S11=2506,79751538338 IsS11Max=No IsS11Min=No FrameElem=38 ElemStation=0,5
Frame=39 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
75,6234825993715 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0
Frame=39 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5
S11=-3788,81736791821 IsS11Max=No IsS11Min=Yes FrameElem=39 ElemStation=0
Frame=39 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5
S11=-3788,81736791821 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0
Frame=39 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5
S11=4322,63297403664 IsS11Max=Yes IsS11Min=No FrameElem=39 ElemStation=0
Frame=39 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5
S11=4322,63297403664 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0
Frame=39 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
75,6234825993715 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0,5
Frame=39 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5
S11=-3886,41630381458 IsS11Max=No IsS11Min=Yes FrameElem=39 ElemStation=0,5
Frame=39 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5
S11=-3886,41630381458 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0,5
Frame=39 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5
S11=4432,43135489657 IsS11Max=Yes IsS11Min=No FrameElem=39 ElemStation=0,5
Frame=39 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5
S11=4432,43135489657 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0,5
Frame=39 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
291,941163758901 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0
Frame=39 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5
S11=-4473,87993923538 IsS11Max=No IsS11Min=Yes FrameElem=39 ElemStation=0
Frame=39 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5
S11=-4473,87993923538 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0
Frame=39 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5
S11=3204,93504040041 IsS11Max=Yes IsS11Min=No FrameElem=39 ElemStation=0
Frame=39 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5
S11=3204,93504040041 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0
Frame=39 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
291,941163758901 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0,5
Frame=39 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5
S11=-4616,82644380616 IsS11Max=No IsS11Min=Yes FrameElem=39 ElemStation=0,5
Frame=39 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5
S11=-4616,82644380616 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0,5
Frame=39 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5
S11=3302,53397629678 IsS11Max=Yes IsS11Min=No FrameElem=39 ElemStation=0,5
Frame=39 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5
S11=3302,53397629678 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0,5
Frame=39 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
63,889379942121 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0
Frame=39 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5
S11=-3180,65986011684 IsS11Max=No IsS11Min=Yes FrameElem=39 ElemStation=0
Frame=39 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5
S11=-3180,65986011684 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0
Frame=39 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5
S11=4521,67849709124 IsS11Max=Yes IsS11Min=No FrameElem=39 ElemStation=0
Frame=39 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5
S11=4521,67849709124 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0
Frame=39 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
63,889379942121 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0,5
Frame=39 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5
S11=-2928,44107658763 IsS11Max=No IsS11Min=Yes FrameElem=39 ElemStation=0,5
Frame=39 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5
S11=-2928,44107658763 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0,5
Frame=39 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5
S11=4721,86357782539 IsS11Max=Yes IsS11Min=No FrameElem=39 ElemStation=0,5
Frame=39 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5
S11=4721,86357782539 IsS11Max=No IsS11Min=No FrameElem=39 ElemStation=0,5



Frame=39	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
336,931172367042		IsS11Max=No IsS11Min=No	FrameElem=39	ElemStation=0				
Frame=39	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,35	X3=-0,5	
S11=-4677,48942176556		IsS11Max=No IsS11Min=Yes	FrameElem=39	ElemStation=0				
Frame=39	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,35	X3=0,5	
S11=-4677,48942176556		IsS11Max=No IsS11Min=No	FrameElem=39	ElemStation=0				
Frame=39	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,35	X3=-0,5	
S11=2506,79751538275		IsS11Max=Yes IsS11Min=No	FrameElem=39	ElemStation=0				
Frame=39	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,35	X3=0,5	
S11=2506,79751538275		IsS11Max=No IsS11Min=No	FrameElem=39	ElemStation=0				
Frame=39	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
336,931172367042		IsS11Max=No IsS11Min=No	FrameElem=39	ElemStation=0,5				
Frame=39	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,35	X3=-0,5	
S11=-4882,79046142048		IsS11Max=No IsS11Min=Yes	FrameElem=39	ElemStation=0,5				
Frame=39	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,35	X3=0,5	
S11=-4882,79046142048		IsS11Max=No IsS11Min=No	FrameElem=39	ElemStation=0,5				
Frame=39	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,35	X3=-0,5	
S11=2254,57873185355		IsS11Max=Yes IsS11Min=No	FrameElem=39	ElemStation=0,5				
Frame=39	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,35	X3=0,5	
S11=2254,57873185355		IsS11Max=No IsS11Min=No	FrameElem=39	ElemStation=0,5				
Frame=40	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
75,6234825993717		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,35	X3=-0,5	
S11=-3886,41630381447		IsS11Max=No IsS11Min=Yes	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,35	X3=0,5	
S11=-3886,41630381447		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,35	X3=-0,5	
S11=4432,43135489647		IsS11Max=Yes IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,35	X3=0,5	
S11=4432,43135489647		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
75,6234825993717		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,35	X3=-0,5	
S11=-3334,61421174022		IsS11Max=No IsS11Min=Yes	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,35	X3=0,5	
S11=-3334,61421174022		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,35	X3=-0,5	
S11=4282,6668206115		IsS11Max=Yes IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,35	X3=0,5	
S11=4282,6668206115		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
291,941163758903		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,35	X3=-0,5	
S11=-4616,82644380597		IsS11Max=No IsS11Min=Yes	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,35	X3=0,5	
S11=-4616,82644380597		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,35	X3=-0,5	
S11=3302,53397629666		IsS11Max=Yes IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,35	X3=0,5	
S11=3302,53397629666		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
291,941163758903		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,35	X3=-0,5	
S11=-4485,32353082839		IsS11Max=No IsS11Min=Yes	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,35	X3=0,5	
S11=-4485,32353082839		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,35	X3=-0,5	
S11=2750,73188422241		IsS11Max=Yes IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,35	X3=0,5	
S11=2750,73188422241		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
63,8893799421211		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,35	X3=-0,5	
S11=-2928,44107658763		IsS11Max=No IsS11Min=Yes	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,35	X3=0,5	
S11=-2928,44107658763		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,35	X3=-0,5	
S11=4721,86357782527		IsS11Max=Yes IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,35	X3=0,5	
S11=4721,86357782527		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
63,8893799421211		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,35	X3=-0,5	
S11=-2171,3012358131		IsS11Max=No IsS11Min=Yes	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,35	X3=0,5	
S11=-2171,3012358131		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,35	X3=-0,5	
S11=4622,46302225645		IsS11Max=Yes IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,35	X3=0,5	
S11=4622,46302225645		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
336,931172367043		IsS11Max=No IsS11Min=No	FrameElem=40	ElemStation=0				



Frame=40	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,35	X3=-0,5	
S11=-4882,79046142027	IsS11Max=No	IsS11Min=Yes	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,35	X3=0,5	
S11=-4882,79046142027	IsS11Max=No	IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,35	X3=-0,5	
S11=2254,57873185355	IsS11Max=Yes	IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,35	X3=0,5	
S11=2254,57873185355	IsS11Max=No	IsS11Min=No	FrameElem=40	ElemStation=0				
Frame=40	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
336,931172367043	IsS11Max=No	IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,35	X3=-0,5	
S11=-4801,65152715885	IsS11Max=No	IsS11Min=Yes	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,35	X3=0,5	
S11=-4801,65152715885	IsS11Max=No	IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,35	X3=-0,5	
S11=1497,43889107901	IsS11Max=Yes	IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=40	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,35	X3=0,5	
S11=1497,43889107901	IsS11Max=No	IsS11Min=No	FrameElem=40	ElemStation=0,5				
Frame=41	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
75,623482599372	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0				
Frame=41	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,35	X3=-0,5	
S11=-3334,61421173986	IsS11Max=No	IsS11Min=Yes	FrameElem=41	ElemStation=0				
Frame=41	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,35	X3=0,5	
S11=-3334,61421173986	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0				
Frame=41	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,35	X3=-0,5	
S11=4282,66682061096	IsS11Max=Yes	IsS11Min=No	FrameElem=41	ElemStation=0				
Frame=41	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,35	X3=0,5	
S11=4282,66682061096	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0				
Frame=41	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
75,623482599372	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,35	X3=-0,5	
S11=-2078,73774281812	IsS11Max=No	IsS11Min=Yes	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,35	X3=0,5	
S11=-2078,73774281812	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,35	X3=-0,5	
S11=3308,75125809676	IsS11Max=Yes	IsS11Min=No	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,35	X3=0,5	
S11=3308,75125809676	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
291,941163758902	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0				
Frame=41	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,35	X3=-0,5	
S11=-4485,32353082786	IsS11Max=No	IsS11Min=Yes	FrameElem=41	ElemStation=0				
Frame=41	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,35	X3=0,5	
S11=-4485,32353082786	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0				
Frame=41	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,35	X3=-0,5	
S11=2750,73188422206	IsS11Max=Yes	IsS11Min=No	FrameElem=41	ElemStation=0				
Frame=41	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,35	X3=0,5	
S11=2750,73188422206	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0				
Frame=41	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
291,941163758902	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,35	X3=-0,5	
S11=-3511,40796831366	IsS11Max=No	IsS11Min=Yes	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,35	X3=0,5	
S11=-3511,40796831366	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,35	X3=-0,5	
S11=1494,85541530031	IsS11Max=Yes	IsS11Min=No	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,35	X3=0,5	
S11=1494,85541530031	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
63,8893799421214	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0				
Frame=41	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,35	X3=-0,5	
S11=-2171,30123581274	IsS11Max=No	IsS11Min=Yes	FrameElem=41	ElemStation=0				
Frame=41	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,35	X3=0,5	
S11=-2171,30123581274	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0				
Frame=41	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,35	X3=-0,5	
S11=4622,46302225588	IsS11Max=Yes	IsS11Min=No	FrameElem=41	ElemStation=0				
Frame=41	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,35	X3=0,5	
S11=4622,46302225588	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0				
Frame=41	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-
63,8893799421214	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=0,35	X3=-0,5	
S11=-907,87159405034	IsS11Max=No	IsS11Min=Yes	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,35	X3=0,5	
S11=-907,87159405034	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,35	X3=-0,5	
S11=3645,00805597355	IsS11Max=Yes	IsS11Min=No	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,35	X3=0,5	
S11=3645,00805597355	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0,5				
Frame=41	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-
336,931172367043	IsS11Max=No	IsS11Min=No	FrameElem=41	ElemStation=0				
Frame=41	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,35	X3=-0,5	
S11=-4801,65152715827	IsS11Max=No	IsS11Min=Yes	FrameElem=41	ElemStation=0				

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio</p>	
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Frame=41 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5
S11=-4801,65152715827 IsS11Max=No IsS11Min=No FrameElem=41 ElemStation=0
Frame=41 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5
S11=1497,43889107866 IsS11Max=Yes IsS11Min=No FrameElem=41 ElemStation=0
Frame=41 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5
S11=1497,43889107866 IsS11Max=No IsS11Min=No FrameElem=41 ElemStation=0
Frame=41 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
336,931172367043 IsS11Max=No IsS11Min=No FrameElem=41 ElemStation=0,5
Frame=41 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5
S11=-3824,19656087595 IsS11Max=No IsS11Min=Yes FrameElem=41 ElemStation=0,5
Frame=41 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5
S11=-3824,19656087595 IsS11Max=No IsS11Min=No FrameElem=41 ElemStation=0,5
Frame=41 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5
S11=234,009249316255 IsS11Max=Yes IsS11Min=No FrameElem=41 ElemStation=0,5
Frame=41 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5
S11=234,009249316255 IsS11Max=No IsS11Min=No FrameElem=41 ElemStation=0,5
Frame=42 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
75,6234825993844 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5
S11=-2078,73774281867 IsS11Max=No IsS11Min=Yes FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5
S11=-2078,73774281867 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5
S11=3308,75125809761 IsS11Max=Yes IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5
S11=3308,75125809761 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
75,6234825993844 IsS11Max=No IsS11Min=Yes FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5
S11=-63,0636782214266 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5
S11=-63,0636782214266 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5
S11=1373,45272973931 IsS11Max=Yes IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5
S11=1373,45272973931 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
291,94116375892 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5
S11=-3511,40796831455 IsS11Max=No IsS11Min=Yes FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5
S11=-3511,40796831455 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5
S11=1494,85541530083 IsS11Max=Yes IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5
S11=1494,85541530083 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
291,94116375892 IsS11Max=Yes IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5
S11=-1576,10943995626 IsS11Max=No IsS11Min=Yes FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5
S11=-1576,10943995626 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5
S11=-520,818649296414 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5
S11=-520,818649296414 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
63,8893799421337 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5
S11=-907,871594050886 IsS11Max=No IsS11Min=Yes FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5
S11=-907,871594050886 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5
S11=3645,00805597446 IsS11Max=Yes IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5
S11=3645,00805597446 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
63,8893799421337 IsS11Max=No IsS11Min=Yes FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,35 X3=-0,5
S11=863,856501229758 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,35 X3=0,5
S11=863,856501229758 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,35 X3=-0,5
S11=1638,27475416818 IsS11Max=Yes IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,35 X3=0,5
S11=1638,27475416818 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
336,931172367055 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5
S11=-3824,19656087691 IsS11Max=No IsS11Min=Yes FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5
S11=-3824,19656087691 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>	
<p>Foglio</p> <p>149 di 182</p>	

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Frame=42 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5
S11=234,009249316777 IsS11Max=Yes IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5
S11=234,009249316777 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0
Frame=42 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
336,931172367055 IsS11Max=Yes IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,35 X3=-0,5
S11=-1817,46325907063 IsS11Max=No IsS11Min=Yes FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,35 X3=0,5
S11=-1817,46325907063 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,35 X3=-0,5
S11=-1537,71884596387 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=42 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,35 X3=0,5
S11=-1537,71884596387 IsS11Max=No IsS11Min=No FrameElem=42 ElemStation=0,5
Frame=43 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
762,126002469533 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-806,899600671954 IsS11Max=No IsS11Min=Yes FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-806,899600671954 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=333,617841826155 IsS11Max=Yes IsS11Min=No FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=333,617841826155 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0
Frame=43 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
749,626002469533 IsS11Max=No IsS11Min=Yes FrameElem=43 ElemStation=0,5
Frame=43 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-640,982317296104 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0,5
Frame=43 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-640,982317296104 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0,5
Frame=43 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=451,579588183644 IsS11Max=Yes IsS11Min=No FrameElem=43 ElemStation=0,5
Frame=43 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=451,579588183644 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0,5
Frame=43 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
822,858301966518 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-1894,24254025807 IsS11Max=No IsS11Min=Yes FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-1894,24254025807 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-802,444309768227 IsS11Max=Yes IsS11Min=No FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-802,444309768227 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0
Frame=43 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
810,358301966518 IsS11Max=Yes IsS11Min=No FrameElem=43 ElemStation=0,5
Frame=43 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-1987,20428661557 IsS11Max=No IsS11Min=Yes FrameElem=43 ElemStation=0,5
Frame=43 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-1987,20428661557 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0,5
Frame=43 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-858,269687642978 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0,5
Frame=43 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-858,269687642978 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0,5
Frame=43 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
601,533333330787 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-721,184040824366 IsS11Max=No IsS11Min=Yes FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-721,184040824366 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=701,345008954837 IsS11Max=Yes IsS11Min=No FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=701,345008954837 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0
Frame=43 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
589,033333330787 IsS11Max=No IsS11Min=Yes FrameElem=43 ElemStation=0,5
Frame=43 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-431,33319905736 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0,5
Frame=43 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-431,33319905736 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0,5
Frame=43 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=623,62652317676 IsS11Max=Yes IsS11Min=No FrameElem=43 ElemStation=0,5
Frame=43 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=623,62652317676 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0,5
Frame=43 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
867,553052607791 IsS11Max=Yes IsS11Min=No FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-2181,69015435128 IsS11Max=No IsS11Min=Yes FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-2181,69015435128 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0
Frame=43 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-895,93878703223 IsS11Max=No IsS11Min=No FrameElem=43 ElemStation=0

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IG51-02-E-CV-CL-IN1Y-0X-001_A00
Relazione di calcolo

Frame=43	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5		
S11=-895,93878703223	IsS11Max=No	IsS11Min=No	FrameElem=43	ElemStation=0					
Frame=43	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-	
855,053052607791	IsS11Max=Yes	IsS11Min=No	FrameElem=43	ElemStation=0,5					
Frame=43	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5		
S11=-2186,64109542014	IsS11Max=No	IsS11Min=Yes	FrameElem=43	ElemStation=0,5					
Frame=43	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5		
S11=-2186,64109542014	IsS11Max=No	IsS11Min=No	FrameElem=43	ElemStation=0,5					
Frame=43	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5		
S11=-906,572105378223	IsS11Max=No	IsS11Min=No	FrameElem=43	ElemStation=0,5					
Frame=43	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5		
S11=-906,572105378223	IsS11Max=No	IsS11Min=No	FrameElem=43	ElemStation=0,5					
Frame=44	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-	
749,626002469242	IsS11Max=No	IsS11Min=Yes	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5		
S11=-640,98231729604	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5		
S11=-640,98231729604	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5		
S11=451,579588184205	IsS11Max=Yes	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5		
S11=451,579588184205	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-	
737,126002469242	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5		
S11=-802,934655951196	IsS11Max=No	IsS11Min=Yes	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5		
S11=-802,934655951196	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5		
S11=698,42081482853	IsS11Max=Yes	IsS11Min=No	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5		
S11=698,42081482853	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-	
810,358301965917	IsS11Max=Yes	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5		
S11=-1987,20428661492	IsS11Max=No	IsS11Min=Yes	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5		
S11=-1987,20428661492	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5		
S11=-858,269687642462	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5		
S11=-858,269687642462	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-	
797,858301965917	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5		
S11=-2209,04551325925	IsS11Max=No	IsS11Min=Yes	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5		
S11=-2209,04551325925	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5		
S11=-671,317348987305	IsS11Max=Yes	IsS11Min=No	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5		
S11=-671,317348987305	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-	
589,033333330496	IsS11Max=No	IsS11Min=Yes	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5		
S11=-431,333199057053	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5		
S11=-431,333199057053	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5		
S11=623,626523177193	IsS11Max=Yes	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5		
S11=623,626523177193	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0	S11=-	
576,533333330496	IsS11Max=No	IsS11Min=Yes	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5		
S11=-330,843820831515	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5		
S11=-330,843820831515	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5		
S11=782,456944532917	IsS11Max=Yes	IsS11Min=No	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5		
S11=782,456944532917	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0,5					
Frame=44	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0	S11=-	
855,053052607112	IsS11Max=Yes	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5		
S11=-2186,6410954196	IsS11Max=No	IsS11Min=Yes	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5		
S11=-2186,6410954196	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5		
S11=-906,572105377655	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0					
Frame=44	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5		
S11=-906,572105377655	IsS11Max=No	IsS11Min=No	FrameElem=44	ElemStation=0					

Frame=44 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	842,553052607112 IsS11Max=No IsS11Min=No FrameElem=44 ElemStation=0,5
Frame=44 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	S11=-2343,40109394366 IsS11Max=No IsS11Min=Yes FrameElem=44 ElemStation=0,5
Frame=44 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=-2343,40109394366 IsS11Max=No IsS11Min=No FrameElem=44 ElemStation=0,5
Frame=44 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	S11=-822,222845829494 IsS11Max=Yes IsS11Min=No FrameElem=44 ElemStation=0,5
Frame=44 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=-822,222845829494 IsS11Max=No IsS11Min=No FrameElem=44 ElemStation=0,5
Frame=45 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	737,126002469047 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0
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Frame=45 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=-802,934655951004 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0
Frame=45 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=698,420814828576 IsS11Max=Yes IsS11Min=No FrameElem=45 ElemStation=0
Frame=45 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	S11=698,420814828576 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0
Frame=45 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	724,626002469047 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0,5
Frame=45 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=-1265,80245299064 IsS11Max=No IsS11Min=Yes FrameElem=45 ElemStation=0,5
Frame=45 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=-1265,80245299064 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0,5
Frame=45 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=1083,23950423501 IsS11Max=Yes IsS11Min=No FrameElem=45 ElemStation=0,5
Frame=45 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	S11=1083,23950423501 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0,5
Frame=45 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	797,858301965529 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0
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Frame=45 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=-2209,0455132589 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0
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Frame=45 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=-671,317348987107 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0
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Frame=45 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	S11=-2568,86420266532 IsS11Max=No IsS11Min=Yes FrameElem=45 ElemStation=0,5
Frame=45 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=-2568,86420266532 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0,5
Frame=45 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	S11=-183,449551947487 IsS11Max=Yes IsS11Min=No FrameElem=45 ElemStation=0,5
Frame=45 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=-183,449551947487 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0,5
Frame=45 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	576,533333330301 IsS11Max=No IsS11Min=Yes FrameElem=45 ElemStation=0
Frame=45 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=-330,843820831322 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0
Frame=45 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=-330,843820831322 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0
Frame=45 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=782,456944532866 IsS11Max=Yes IsS11Min=No FrameElem=45 ElemStation=0
Frame=45 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	S11=782,456944532866 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0
Frame=45 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	564,033333330301 IsS11Max=No IsS11Min=Yes FrameElem=45 ElemStation=0,5
Frame=45 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=-531,269900990067 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0,5
Frame=45 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=-531,269900990067 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0,5
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Frame=45 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	S11=-2343,40109394328 IsS11Max=No IsS11Min=Yes FrameElem=45 ElemStation=0
Frame=45 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=-2343,40109394328 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0
Frame=45 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	S11=-822,222845829296 IsS11Max=Yes IsS11Min=No FrameElem=45 ElemStation=0
Frame=45 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=-822,222845829296 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0
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Frame=45 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
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Frame=45 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-2771,66871551691 IsS11Max=No IsS11Min=No FrameElem=45 ElemStation=0,5
Frame=45 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
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Frame=45 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
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S11=-1265,80245299125 IsS11Max=No IsS11Min=Yes FrameElem=46 ElemStation=0
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S11=-1265,80245299125 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0
Frame=46 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=1083,23950423446 IsS11Max=Yes IsS11Min=No FrameElem=46 ElemStation=0
Frame=46 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
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Frame=46 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
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Frame=46 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-2013,74632150693 IsS11Max=No IsS11Min=Yes FrameElem=46 ElemStation=0,5
Frame=46 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-2013,74632150693 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0,5
Frame=46 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=1681,96598777949 IsS11Max=Yes IsS11Min=No FrameElem=46 ElemStation=0,5
Frame=46 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=1681,96598777949 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0,5
Frame=46 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
785,358301966343 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0
Frame=46 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-2568,86420266641 IsS11Max=No IsS11Min=Yes FrameElem=46 ElemStation=0
Frame=46 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-2568,86420266641 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0
Frame=46 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
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Frame=46 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
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Frame=46 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-3227,68259171216 IsS11Max=No IsS11Min=Yes FrameElem=46 ElemStation=0,5
Frame=46 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-3227,68259171216 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0,5
Frame=46 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=589,494316567175 IsS11Max=Yes IsS11Min=No FrameElem=46 ElemStation=0,5
Frame=46 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=589,494316567175 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0,5
Frame=46 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
564,03333330884 IsS11Max=No IsS11Min=Yes FrameElem=46 ElemStation=0
Frame=46 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-531,269900990644 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0
Frame=46 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-531,269900990644 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0
Frame=46 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=1196,65451580367 IsS11Max=Yes IsS11Min=No FrameElem=46 ElemStation=0
Frame=46 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=1196,65451580367 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0
Frame=46 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-
551,53333330884 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0,5
Frame=46 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5
S11=-1016,77205262485 IsS11Max=No IsS11Min=Yes FrameElem=46 ElemStation=0,5
Frame=46 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5
S11=-1016,77205262485 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0,5
Frame=46 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5
S11=1863,82993151605 IsS11Max=Yes IsS11Min=No FrameElem=46 ElemStation=0,5
Frame=46 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5
S11=1863,82993151605 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0,5
Frame=46 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
830,053052607597 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0
Frame=46 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-2771,66871551813 IsS11Max=No IsS11Min=Yes FrameElem=46 ElemStation=0
Frame=46 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5
S11=-2771,66871551813 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0
Frame=46 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5
S11=-596,796765671155 IsS11Max=Yes IsS11Min=No FrameElem=46 ElemStation=0
Frame=46 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
S11=-596,796765671155 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0
Frame=46 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-
817,553052607597 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0,5
Frame=46 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5
S11=-3498,93603673123 IsS11Max=No IsS11Min=Yes FrameElem=46 ElemStation=0,5



Frame=46 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=-3498,93603673123 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0,5
Frame=46 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	S11=-86,2946140369465 IsS11Max=Yes IsS11Min=No FrameElem=46 ElemStation=0,5
Frame=46 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=-86,2946140369465 IsS11Max=No IsS11Min=No FrameElem=46 ElemStation=0,5
Frame=47 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	712,126002469668 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=-2013,74632150635 IsS11Max=No IsS11Min=Yes FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=-2013,74632150635 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=1681,96598777988 IsS11Max=Yes IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	S11=1681,96598777988 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	699,626002469668 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0,5
Frame=47 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=-3038,92585310465 IsS11Max=No IsS11Min=Yes FrameElem=47 ElemStation=0,5
Frame=47 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=-3038,92585310465 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0,5
Frame=47 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=2747,73570842916 IsS11Max=Yes IsS11Min=No FrameElem=47 ElemStation=0,5
Frame=47 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	S11=2747,73570842916 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0,5
Frame=47 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	772,858301966188 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	S11=-3227,68259171224 IsS11Max=No IsS11Min=Yes FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=-3227,68259171224 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	S11=589,49431656698 IsS11Max=Yes IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=589,49431656698 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	760,358301966188 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0,5
Frame=47 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	S11=-4268,45231236152 IsS11Max=No IsS11Min=Yes FrameElem=47 ElemStation=0,5
Frame=47 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=-4268,45231236152 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0,5
Frame=47 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	S11=1639,67384816529 IsS11Max=Yes IsS11Min=No FrameElem=47 ElemStation=0,5
Frame=47 Station=0,5 OutputCase=ENVETA5 CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=1639,67384816529 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0,5
Frame=47 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	551,533333330689 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=-1016,77205262466 IsS11Max=No IsS11Min=Yes FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=-1016,77205262466 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=1863,8299315165 IsS11Max=Yes IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	S11=1863,8299315165 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=0 X2=0 X3=0 S11=-	539,033333330689 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0,5
Frame=47 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=1 X2=-0,3 X3=-0,5	S11=-1779,5098673413 IsS11Max=No IsS11Min=Yes FrameElem=47 ElemStation=0,5
Frame=47 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=2 X2=-0,3 X3=0,5	S11=-1779,5098673413 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0,5
Frame=47 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=3 X2=0,3 X3=-0,5	S11=2998,04858433313 IsS11Max=Yes IsS11Min=No FrameElem=47 ElemStation=0,5
Frame=47 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Max Point=4 X2=0,3 X3=0,5	S11=2998,04858433313 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0,5
Frame=47 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	817,553052607403 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	S11=-3498,93603673129 IsS11Max=No IsS11Min=Yes FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=-3498,93603673129 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=3 X2=0,3 X3=-0,5	S11=-86,2946140367531 IsS11Max=Yes IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5	S11=-86,2946140367531 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0
Frame=47 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=0 X2=0 X3=0 S11=-	805,053052607403 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0,5
Frame=47 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=1 X2=-0,3 X3=-0,5	S11=-4608,15468954792 IsS11Max=No IsS11Min=Yes FrameElem=47 ElemStation=0,5
Frame=47 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=2 X2=-0,3 X3=0,5	S11=-4608,15468954792 IsS11Max=No IsS11Min=No FrameElem=47 ElemStation=0,5

Frame=47	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5
S11=701,443200679886	IsS11Max=Yes	IsS11Min=No	FrameElem=47	ElemStation=0,5	Point=4	X2=0,3	X3=0,5
Frame=47	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5
S11=701,443200679886	IsS11Max=No	IsS11Min=No	FrameElem=47	ElemStation=0,5	Point=0	X2=0	X3=0
Frame=48	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0
S11=699,626002469939	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0	Point=1	X2=-0,3	X3=-0,5
Frame=48	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5
S11=-3038,92585310463	IsS11Max=No	IsS11Min=Yes	FrameElem=48	ElemStation=0	Point=2	X2=-0,3	X3=0,5
Frame=48	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5
S11=-3038,92585310463	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0	Point=3	X2=0,3	X3=-0,5
Frame=48	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5
S11=2747,73570842809	IsS11Max=Yes	IsS11Min=No	FrameElem=48	ElemStation=0	Point=4	X2=0,3	X3=0,5
Frame=48	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5
S11=2747,73570842809	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0	Point=0	X2=0	X3=0
Frame=48	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0
S11=687,126002469939	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=1	X2=-0,3	X3=-0,5
Frame=48	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5
S11=-4224,49672980084	IsS11Max=No	IsS11Min=Yes	FrameElem=48	ElemStation=0,5	Point=2	X2=-0,3	X3=0,5
Frame=48	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5
S11=-4224,49672980084	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=3	X2=0,3	X3=-0,5
Frame=48	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5
S11=3967,69628929327	IsS11Max=Yes	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=4	X2=0,3	X3=0,5
Frame=48	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5
S11=3967,69628929327	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=0	X2=0	X3=0
Frame=48	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0
S11=760,358301966886	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0	Point=1	X2=-0,3	X3=-0,5
Frame=48	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5
S11=-4268,45231236185	IsS11Max=No	IsS11Min=Yes	FrameElem=48	ElemStation=0	Point=2	X2=-0,3	X3=0,5
Frame=48	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5
S11=-4268,45231236185	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0	Point=3	X2=0,3	X3=-0,5
Frame=48	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5
S11=1639,67384816472	IsS11Max=Yes	IsS11Min=No	FrameElem=48	ElemStation=0	Point=4	X2=0,3	X3=0,5
Frame=48	Station=0	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5
S11=1639,67384816472	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0	Point=0	X2=0	X3=0
Frame=48	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0
S11=747,858301966886	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=1	X2=-0,3	X3=-0,5
Frame=48	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5
S11=-5463,41289322704	IsS11Max=No	IsS11Min=Yes	FrameElem=48	ElemStation=0,5	Point=2	X2=-0,3	X3=0,5
Frame=48	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5
S11=-5463,41289322704	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=3	X2=0,3	X3=-0,5
Frame=48	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5
S11=2820,10023753409	IsS11Max=Yes	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=4	X2=0,3	X3=0,5
Frame=48	Station=0,5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5
S11=2820,10023753409	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=0	X2=0	X3=0
Frame=48	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0
S11=539,03333330882	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0	Point=1	X2=-0,3	X3=-0,5
Frame=48	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5
S11=-1779,50986734149	IsS11Max=No	IsS11Min=Yes	FrameElem=48	ElemStation=0	Point=2	X2=-0,3	X3=0,5
Frame=48	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5
S11=-1779,50986734149	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0	Point=3	X2=0,3	X3=-0,5
Frame=48	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5
S11=2998,04858433198	IsS11Max=Yes	IsS11Min=No	FrameElem=48	ElemStation=0	Point=4	X2=0,3	X3=0,5
Frame=48	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5
S11=2998,04858433198	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0	Point=0	X2=0	X3=0
Frame=48	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=0	X2=0	X3=0
S11=526,53333330882	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=1	X2=-0,3	X3=-0,5
Frame=48	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=1	X2=-0,3	X3=-0,5
S11=-2598,11957691208	IsS11Max=No	IsS11Min=Yes	FrameElem=48	ElemStation=0,5	Point=2	X2=-0,3	X3=0,5
Frame=48	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=2	X2=-0,3	X3=0,5
S11=-2598,11957691208	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=3	X2=0,3	X3=-0,5
Frame=48	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=3	X2=0,3	X3=-0,5
S11=4286,45809736462	IsS11Max=Yes	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=4	X2=0,3	X3=0,5
Frame=48	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	Point=4	X2=0,3	X3=0,5
S11=4286,45809736462	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=0	X2=0	X3=0
Frame=48	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0
S11=805,053052608179	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0	Point=1	X2=-0,3	X3=-0,5
Frame=48	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5
S11=-4608,15468954833	IsS11Max=No	IsS11Min=Yes	FrameElem=48	ElemStation=0	Point=2	X2=-0,3	X3=0,5
Frame=48	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5
S11=-4608,15468954833	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0	Point=3	X2=0,3	X3=-0,5
Frame=48	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5
S11=701,443200679693	IsS11Max=Yes	IsS11Min=No	FrameElem=48	ElemStation=0	Point=4	X2=0,3	X3=0,5
Frame=48	Station=0	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=4	X2=0,3	X3=0,5
S11=701,443200679693	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0	Point=0	X2=0	X3=0
Frame=48	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=0	X2=0	X3=0
S11=792,553052608179	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=1	X2=-0,3	X3=-0,5
Frame=48	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=1	X2=-0,3	X3=-0,5
S11=-5871,56420258096	IsS11Max=No	IsS11Min=Yes	FrameElem=48	ElemStation=0,5	Point=2	X2=-0,3	X3=0,5
Frame=48	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=2	X2=-0,3	X3=0,5
S11=-5871,56420258096	IsS11Max=No	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=3	X2=0,3	X3=-0,5
Frame=48	Station=0,5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	Point=3	X2=0,3	X3=-0,5
S11=1545,0529102503	IsS11Max=Yes	IsS11Min=No	FrameElem=48	ElemStation=0,5	Point=3	X2=0,3	X3=-0,5



Frame=48 Station=0,5 OutputCase=ENVETA CaseType=Combination StepType=Min Point=4 X2=0,3 X3=0,5
 S11=1545,0529102503 IsS11Max=No IsS11Min=No FrameElem=48 ElemStation=0,5

TABLE: "ELEMENT JOINT FORCES - FRAMES"

Frame=1 Joint=1 OutputCase=ENVETA5 CaseType=Combination StepType=Max	F1=204,358814631231	F2=0	F3=-
394,523781406165 M1=0 M2=407,289612943669 M3=0 FrameElem=1			
Frame=1 Joint=2 OutputCase=ENVETA5 CaseType=Combination StepType=Max	F1=-52,9364378195596	F2=0	F3=-
F3=425,178271370855 M1=0 M2=-183,911222362194 M3=0 FrameElem=1			
Frame=1 Joint=1 OutputCase=ENVETA5 CaseType=Combination StepType=Min	F1=52,9364378195596	F2=0	F3=-
422,553271370855 M1=0 M2=246,084873779539 M3=0 FrameElem=1			
Frame=1 Joint=2 OutputCase=ENVETA5 CaseType=Combination StepType=Min	F1=-204,358814631231	F2=0	F3=-
F3=397,148781406165 M1=0 M2=-346,513754572433 M3=0 FrameElem=1			
Frame=1 Joint=1 OutputCase=ENVETA CaseType=Combination StepType=Max	F1=235,851820656929	F2=0	F3=-
348,619869372056 M1=0 M2=436,127174700655 M3=0 FrameElem=1			
Frame=1 Joint=2 OutputCase=ENVETA CaseType=Combination StepType=Max	F1=-44,7225659594841	F2=0	F3=-
F3=453,931812565661 M1=0 M2=-83,4183911752257 M3=0 FrameElem=1			
Frame=1 Joint=1 OutputCase=ENVETA CaseType=Combination StepType=Min	F1=44,7225659594841	F2=0	F3=-
451,306812565661 M1=0 M2=138,706455787458 M3=0 FrameElem=1			
Frame=1 Joint=2 OutputCase=ENVETA CaseType=Combination StepType=Min	F1=-235,851820656929	F2=0	F3=-
F3=351,244869372056 M1=0 M2=-373,280043507927 M3=0 FrameElem=1			
Frame=2 Joint=2 OutputCase=ENVETA5 CaseType=Combination StepType=Max	F1=204,358814631231	F2=0	F3=-
388,881001704443 M1=0 M2=346,513754572437 M3=0 FrameElem=2			
Frame=2 Joint=3 OutputCase=ENVETA5 CaseType=Combination StepType=Max	F1=-52,9364378195596	F2=0	F3=-
F3=406,567288314925 M1=0 M2=-124,508554335239 M3=0 FrameElem=2			
Frame=2 Joint=2 OutputCase=ENVETA5 CaseType=Combination StepType=Min	F1=52,9364378195596	F2=0	F3=-
403,942288314925 M1=0 M2=183,911222362178 M3=0 FrameElem=2			
Frame=2 Joint=3 OutputCase=ENVETA5 CaseType=Combination StepType=Min	F1=-204,358814631231	F2=0	F3=-
F3=391,506001704443 M1=0 M2=-286,614353225683 M3=0 FrameElem=2			
Frame=2 Joint=2 OutputCase=ENVETA CaseType=Combination StepType=Max	F1=235,851820656929	F2=0	F3=-
336,330487803692 M1=0 M2=373,280043507935 M3=0 FrameElem=2			
Frame=2 Joint=3 OutputCase=ENVETA CaseType=Combination StepType=Max	F1=-44,7225659594842	F2=0	F3=-
F3=430,102569032537 M1=0 M2=-31,8983002333839 M3=0 FrameElem=2			
Frame=2 Joint=2 OutputCase=ENVETA CaseType=Combination StepType=Min	F1=44,7225659594842	F2=0	F3=-
427,477569032537 M1=0 M2=83,4183911752166 M3=0 FrameElem=2			
Frame=2 Joint=3 OutputCase=ENVETA CaseType=Combination StepType=Min	F1=-235,851820656929	F2=0	F3=-
F3=338,955487803692 M1=0 M2=-311,068000118703 M3=0 FrameElem=2			
Frame=3 Joint=1 OutputCase=ENVETA5 CaseType=Combination StepType=Max	F1=-129,090522994839	F2=0	F3=-
F3=432,777792836376 M1=0 M2=-246,084873779545 M3=0 FrameElem=3			
Frame=3 Joint=8 OutputCase=ENVETA5 CaseType=Combination StepType=Max	F1=277,066692171359	F2=0	F3=-
395,205828929518 M1=0 M2=357,103285704098 M3=0 FrameElem=3			
Frame=3 Joint=1 OutputCase=ENVETA5 CaseType=Combination StepType=Min	F1=-296,540948119321	F2=0	F3=-
F3=397,830828929518 M1=0 M2=-407,289612943683 M3=0 FrameElem=3			
Frame=3 Joint=8 OutputCase=ENVETA5 CaseType=Combination StepType=Min	F1=120,544644470571	F2=0	F3=-
430,152792836376 M1=0 M2=224,243452461898 M3=0 FrameElem=3			
Frame=3 Joint=1 OutputCase=ENVETA CaseType=Combination StepType=Max	F1=-72,3719277077871	F2=0	F3=-
F3=464,279628325603 M1=0 M2=-138,70645578749 M3=0 FrameElem=3			
Frame=3 Joint=8 OutputCase=ENVETA CaseType=Combination StepType=Max	F1=291,935968934978	F2=0	F3=-
353,017428349702 M1=0 M2=383,288835905424 M3=0 FrameElem=3			
Frame=3 Joint=1 OutputCase=ENVETA CaseType=Combination StepType=Min	F1=-311,980374848957	F2=0	F3=-
F3=355,642428349702 M1=0 M2=-436,127174700667 M3=0 FrameElem=3			
Frame=3 Joint=8 OutputCase=ENVETA CaseType=Combination StepType=Min	F1=65,8154492131635	F2=0	F3=-
461,654628325603 M1=0 M2=126,61671614248 M3=0 FrameElem=3			
Frame=4 Joint=8 OutputCase=ENVETA5 CaseType=Combination StepType=Max	F1=-120,544644470568	F2=0	F3=-
F3=430,15279283554 M1=0 M2=-224,2434524619 M3=0 FrameElem=4			
Frame=4 Joint=9 OutputCase=ENVETA5 CaseType=Combination StepType=Max	F1=257,890124395426	F2=0	F3=-
392,580828928866 M1=0 M2=310,298905540355 M3=0 FrameElem=4			
Frame=4 Joint=8 OutputCase=ENVETA5 CaseType=Combination StepType=Min	F1=-277,066692171345	F2=0	F3=-
F3=395,205828928866 M1=0 M2=-357,103285704103 M3=0 FrameElem=4			
Frame=4 Joint=9 OutputCase=ENVETA5 CaseType=Combination StepType=Min	F1=112,112308957053	F2=0	F3=-
427,52779283554 M1=0 M2=203,887624872559 M3=0 FrameElem=4			
Frame=4 Joint=8 OutputCase=ENVETA CaseType=Combination StepType=Max	F1=-65,8154492131635	F2=0	F3=-
F3=461,654628324906 M1=0 M2=-126,61671614248 M3=0 FrameElem=4			
Frame=4 Joint=9 OutputCase=ENVETA CaseType=Combination StepType=Max	F1=272,189251193027	F2=0	F3=-
350,39242834877 M1=0 M2=333,932220430075 M3=0 FrameElem=4			
Frame=4 Joint=8 OutputCase=ENVETA CaseType=Combination StepType=Min	F1=-291,935968934962	F2=0	F3=-
F3=353,01742834877 M1=0 M2=-383,288835905428 M3=0 FrameElem=4			
Frame=4 Joint=9 OutputCase=ENVETA CaseType=Combination StepType=Min	F1=59,3725137292926	F2=0	F3=-
459,029628324906 M1=0 M2=115,664425220588 M3=0 FrameElem=4			
Frame=5 Joint=9 OutputCase=ENVETA5 CaseType=Combination StepType=Max	F1=-112,112308957056	F2=0	F3=-
F3=427,527792836027 M1=0 M2=-203,887624872555 M3=0 FrameElem=5			
Frame=5 Joint=41 OutputCase=ENVETA5 CaseType=Combination StepType=Max	F1=204,740253330604	F2=0	F3=-
385,080828929285 M1=0 M2=194,742565589126 M3=0 FrameElem=5			
Frame=5 Joint=9 OutputCase=ENVETA5 CaseType=Combination StepType=Min	F1=-257,890124395442	F2=0	F3=-
F3=392,580828929285 M1=0 M2=-310,29890554035 M3=0 FrameElem=5			
Frame=5 Joint=41 OutputCase=ENVETA5 CaseType=Combination StepType=Min	F1=88,6455669368741	F2=0	F3=-
420,027792836027 M1=0 M2=126,423976379184 M3=0 FrameElem=5			
Frame=5 Joint=9 OutputCase=ENVETA CaseType=Combination StepType=Max	F1=-59,3725137292927	F2=0	F3=-
F3=459,029628325428 M1=0 M2=-115,664425220588 M3=0 FrameElem=5			
Frame=5 Joint=41 OutputCase=ENVETA CaseType=Combination StepType=Max	F1=217,410380225302	F2=0	F3=-
342,892428349236 M1=0 M2=211,63356705577 M3=0 FrameElem=5			
Frame=5 Joint=9 OutputCase=ENVETA CaseType=Combination StepType=Min	F1=-272,189251193044	F2=0	F3=-
F3=350,392428349236 M1=0 M2=-333,932220430069 M3=0 FrameElem=5			

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>	
<p>IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p>Relazione di calcolo</p>		<p>Foglio 156 di 182</p>

Frame=5	Joint=41	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=41,5897717938088	F2=0	F3=-
451,529628325428	M1=0	M2=63,1496743199236	M3=0	FrameElem=5			
Frame=6	Joint=5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=136,915147450218	F2=0	F3=-
F3=367,527792835866	M1=0	M2=-43,0974151455452	M3=0	FrameElem=6			
Frame=6	Joint=4	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-53,5227538313866	F2=0	F3=-
330,330828929378	M1=0	M2=133,953932137486	M3=0	FrameElem=6			
Frame=6	Joint=5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=48,3603247699997	F2=0	F3=-
F3=332,580828929378	M1=0	M2=-112,636336308087	M3=0	FrameElem=6			
Frame=6	Joint=4	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-147,283011995476	F2=0	F3=-
365,277792835866	M1=0	M2=58,4190012814816	M3=0	FrameElem=6			
Frame=6	Joint=5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=154,500851380024	F2=0	F3=-
F3=399,029628325255	M1=0	M2=-35,14942076176	M3=0	FrameElem=6			
Frame=6	Joint=4	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-45,76763266493	F2=0	F3=-
288,142428349469	M1=0	M2=168,246026575113	M3=0	FrameElem=6			
Frame=6	Joint=5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=41,0679536580814	F2=0	F3=-
F3=290,392428349469	M1=0	M2=-144,514807416889	M3=0	FrameElem=6			
Frame=6	Joint=4	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-165,357415896153	F2=0	F3=-
396,779628325255	M1=0	M2=49,76931831283	M3=0	FrameElem=6			
Frame=7	Joint=4	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=147,283011995882	F2=0	F3=-
F3=365,277792834327	M1=0	M2=-58,4190012814217	M3=0	FrameElem=7			
Frame=7	Joint=14	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-58,6017635383409	F2=0	F3=-
F3=-328,080828928587	M1=0	M2=156,81030442293	M3=0	FrameElem=7			
Frame=7	Joint=4	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=53,5227538317928	F2=0	F3=-
F3=330,330828928587	M1=0	M2=-133,953932137515	M3=0	FrameElem=7			
Frame=7	Joint=14	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-157,43216686372	F2=0	F3=-
363,027792834327	M1=0	M2=75,241923872829	M3=0	FrameElem=7			
Frame=7	Joint=4	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=165,357415896712	F2=0	F3=-
F3=396,779628323857	M1=0	M2=-49,7693183127679	M3=0	FrameElem=7			
Frame=7	Joint=14	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-50,3838923169742	F2=0	F3=-
285,892428348305	M1=0	M2=193,540133564204	M3=0	FrameElem=7			
Frame=7	Joint=4	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=45,7676326649642	F2=0	F3=-
F3=288,142428348305	M1=0	M2=-168,246026575127	M3=0	FrameElem=7			
Frame=7	Joint=14	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-175,995270735421	F2=0	F3=-
394,529628323857	M1=0	M2=65,7803190571747	M3=0	FrameElem=7			
Frame=8	Joint=13	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=169,148814631252	F2=0	F3=-
F3=513,964981180085	M1=0	M2=149,578075665799	M3=0	FrameElem=8			
Frame=8	Joint=6	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-32,95995932496	F2=0	F3=-
474,900601482474	M1=0	M2=-9,24039482558837	M3=0	FrameElem=8			
Frame=8	Joint=13	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=39,5164378195837	F2=0	F3=-
F3=477,525601482474	M1=0	M2=17,0518466193991	M3=0	FrameElem=8			
Frame=8	Joint=6	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-151,955158717273	F2=0	F3=-
511,339981180085	M1=0	M2=-121,485819283644	M3=0	FrameElem=8			
Frame=8	Joint=13	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=200,641820656944	F2=0	F3=-
F3=540,781831564849	M1=0	M2=204,896749867349	M3=0	FrameElem=8			
Frame=8	Joint=6	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-24,746087464887	F2=0	F3=-
378,544999998993	M1=0	M2=3,24512666749133	M3=0	FrameElem=8			
Frame=8	Joint=13	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=31,3025659595106	F2=0	F3=-
F3=381,169999998993	M1=0	M2=3,12889755080753	M3=0	FrameElem=8			
Frame=8	Joint=6	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-183,448164742965	F2=0	F3=-
538,156831564849	M1=0	M2=-171,293217430699	M3=0	FrameElem=8			
Frame=9	Joint=6	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=151,955158717253	F2=0	F3=-
F3=511,339981180644	M1=0	M2=121,485819283662	M3=0	FrameElem=9			
Frame=9	Joint=7	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-26,5170238410701	F2=0	F3=-
472,275601482663	M1=0	M2=-3,11490514405853	M3=0	FrameElem=9			
Frame=9	Joint=6	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=32,9599593249411	F2=0	F3=-
F3=474,900601482663	M1=0	M2=9,24039482563075	M3=0	FrameElem=9			
Frame=9	Joint=7	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-135,059190975317	F2=0	F3=-
508,714981180644	M1=0	M2=-96,4801481011042	M3=0	FrameElem=9			
Frame=9	Joint=6	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=183,448164742961	F2=0	F3=-
F3=538,156831565431	M1=0	M2=171,2932174307	M3=0	FrameElem=9			
Frame=9	Joint=7	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-18,3031519809934	F2=0	F3=-
375,919999998996	M1=0	M2=7,95912455399792	M3=0	FrameElem=9			
Frame=9	Joint=6	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=24,7460874648643	F2=0	F3=-
F3=378,544999998996	M1=0	M2=-3,24512666744462	M3=0	FrameElem=9			
Frame=9	Joint=7	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-166,552197001025	F2=0	F3=-
535,531831565431	M1=0	M2=-140,672527063944	M3=0	FrameElem=9			
Frame=10	Joint=41	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-88,6455669368426	F2=0	F3=-
F3=420,027792835853	M1=0	M2=-126,423976379182	M3=0	FrameElem=10			
Frame=10	Joint=35	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=154,020489792595	F2=0	F3=-
F3=-377,580828929437	M1=0	M2=122,025455784551	M3=0	FrameElem=10			
Frame=10	Joint=41	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-204,740253330551	F2=0	F3=-
F3=385,080828929437	M1=0	M2=-194,74256558913	M3=0	FrameElem=10			
Frame=10	Joint=35	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=66,1057066370907	F2=0	F3=-
F3=-412,527792835853	M1=0	M2=57,2640602213318	M3=0	FrameElem=10			
Frame=10	Joint=41	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-41,589771793809	F2=0	F3=-
F3=451,529628325196	M1=0	M2=-63,1496743199236	M3=0	FrameElem=10			
Frame=10	Joint=35	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=165,061616784384	F2=0	F3=-
335,392428349294	M1=0	M2=132,988643779576	M3=0	FrameElem=10			
Frame=10	Joint=41	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-217,410380225244	F2=0	F3=-
F3=342,892428349294	M1=0	M2=-211,633567055775	M3=0	FrameElem=10			
Frame=10	Joint=35	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=24,7339115787553	F2=0	F3=-
444,029628325196	M1=0	M2=16,0966557124161	M3=0	FrameElem=10			

Frame=11	Joint=11	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=204,358814631244	F2=0
F3=432,251285679125	M1=0	M2=18,6916613189036	M3=0	FrameElem=11		
Frame=11	Joint=12	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-52,9364378195691	F2=0
F3=-414,447112828039	M1=0	M2=55,8020217277588	M3=0	FrameElem=11		
Frame=11	Joint=11	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=52,9364378195691	F2=0
F3=417,072112828039	M1=0	M2=-120,44045526254	M3=0	FrameElem=11		
Frame=11	Joint=12	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-204,358814631244	F2=0
F3=-429,626285679125	M1=0	M2=-81,0731616894119	M3=0	FrameElem=11		
Frame=11	Joint=11	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=235,851820656938	F2=0
F3=452,624507173982	M1=0	M2=98,064326677088	M3=0	FrameElem=11		
Frame=11	Joint=12	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-44,7225659594937	F2=0
F3=-342,154772944705	M1=0	M2=73,4148854482158	M3=0	FrameElem=11		
Frame=11	Joint=11	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=44,7225659594937	F2=0
F3=344,779772944705	M1=0	M2=-141,109302207225	M3=0	FrameElem=11		
Frame=11	Joint=12	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-235,851820656938	F2=0
F3=-449,999507173982	M1=0	M2=-149,601976065094	M3=0	FrameElem=11		
Frame=12	Joint=12	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=204,358814631244	F2=0
F3=487,011029395407	M1=0	M2=81,073161689466	M3=0	FrameElem=12		
Frame=12	Joint=13	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-52,9364378195671	F2=0
F3=-455,342198574664	M1=0	M2=-17,0518466193958	M3=0	FrameElem=12		
Frame=12	Joint=12	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=52,9364378195671	F2=0
F3=457,967198574664	M1=0	M2=-55,802021727723	M3=0	FrameElem=12		
Frame=12	Joint=13	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-204,358814631242	F2=0
F3=-484,386029395407	M1=0	M2=-149,578075665805	M3=0	FrameElem=12		
Frame=12	Joint=12	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=235,85182065694	F2=0
F3=511,610460407822	M1=0	M2=149,601976065122	M3=0	FrameElem=12		
Frame=12	Joint=13	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-44,7225659594909	F2=0
F3=-367,274597413875	M1=0	M2=-3,1288975508043	M3=0	FrameElem=12		
Frame=12	Joint=12	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=44,7225659594909	F2=0
F3=369,899597413875	M1=0	M2=-73,4148854481798	M3=0	FrameElem=12		
Frame=12	Joint=13	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-235,85182065694	F2=0
F3=508,985460407822	M1=0	M2=-204,896749867352	M3=0	FrameElem=12		F3=-
Frame=13	Joint=14	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=177,134166920523	F2=0
F3=353,859792699453	M1=0	M2=-75,2419238728767	M3=0	FrameElem=13		
Frame=13	Joint=15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-69,5153636097676	F2=0
F3=-295,774828750558	M1=0	M2=105,59829552319	M3=0	FrameElem=13		
Frame=13	Joint=14	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=68,5337635951407	F2=0
F3=320,080828810103	M1=0	M2=-156,810304422974	M3=0	FrameElem=13		
Frame=13	Joint=15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-178,11576693515	F2=0
F3=-328,966992631164	M1=0	M2=29,0527495558366	M3=0	FrameElem=13		
Frame=13	Joint=14	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=196,675270734092	F2=0
F3=383,069628325327	M1=0	M2=-65,7803190572266	M3=0	FrameElem=13		
Frame=13	Joint=15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-60,5371493890122	F2=0
F3=-265,582428349198	M1=0	M2=142,55144526838	M3=0	FrameElem=13		
Frame=13	Joint=14	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=59,3858922651652	F2=0
F3=285,892428349198	M1=0	M2=-193,540133564246	M3=0	FrameElem=13		
Frame=13	Joint=15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-196,675270734092	F2=0
F3=-357,031128325327	M1=0	M2=19,4804206875526	M3=0	FrameElem=13		
Frame=14	Joint=15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=178,115766936982	F2=0
F3=328,966992630287	M1=0	M2=-29,0527495557814	M3=0	FrameElem=14		
Frame=14	Joint=16	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-70,4969636262261	F2=0
F3=-271,468828690588	M1=0	M2=58,1202066337434	M3=0	FrameElem=14		
Frame=14	Joint=15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=69,5153636115991	F2=0
F3=295,774828750133	M1=0	M2=-105,598295523199	M3=0	FrameElem=14		
Frame=14	Joint=16	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-179,097366951609	F2=0
F3=-304,074192561998	M1=0	M2=-13,4905247522972	M3=0	FrameElem=14		
Frame=14	Joint=15	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=196,675270735493	F2=0
F3=357,031128324435	M1=0	M2=-19,4804206874957	M3=0	FrameElem=14		
Frame=14	Joint=16	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-61,5787494058057	F2=0
F3=-245,272428348723	M1=0	M2=100,408195268398	M3=0	FrameElem=14		
Frame=14	Joint=15	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=60,5371493902846	F2=0
F3=265,582428348723	M1=0	M2=-142,551445268401	M3=0	FrameElem=14		
Frame=14	Joint=16	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-196,675270735493	F2=0
F3=-330,992628324435	M1=0	M2=-24,1201435557479	M3=0	FrameElem=14		
Frame=15	Joint=17	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-86,2843253337375	F2=0
F3=448,714981180039	M1=0	M2=282,933275475554	M3=0	FrameElem=15		
Frame=15	Joint=10	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=183,252212530079	F2=0
F3=-410,025601481638	M1=0	M2=-224,709018924402	M3=0	FrameElem=15		
Frame=15	Joint=17	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-174,83914801395	F2=0
F3=412,275601481638	M1=0	M2=211,524755204988	M3=0	FrameElem=15		
Frame=15	Joint=10	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=89,4919543659956	F2=0
F3=-446,464981180039	M1=0	M2=-306,362608673127	M3=0	FrameElem=15		
Frame=15	Joint=17	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-53,4288354452664	F2=0
F3=475,531831564849	M1=0	M2=304,740668998306	M3=0	FrameElem=15		
Frame=15	Joint=10	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=191,466084390216	F2=0
F3=313,66999998065	M1=0	M2=-132,551114851017	M3=0	FrameElem=15		F3=-
Frame=15	Joint=17	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-183,053019874087	F2=0
F3=315,91999998065	M1=0	M2=124,295174614872	M3=0	FrameElem=15		
Frame=15	Joint=10	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=56,6364644775244	F2=0
F3=473,281831564849	M1=0	M2=-329,402082974898	M3=0	FrameElem=15		F3=-
Frame=16	Joint=10	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-89,4919543666562	F2=0
F3=446,464981180132	M1=0	M2=306,36260867299	M3=0	FrameElem=16		



Frame=16 Joint=26 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=191,446567369454 F2=0					
F3=-407,775601481918 M1=0 M2=-238,368170547078 M3=0 FrameElem=16					
Frame=16 Joint=10 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-183,252212530744 F2=0					
F3=410,025601481918 M1=0 M2=224,709018924335 M3=0 FrameElem=16					
Frame=16 Joint=26 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=92,6161640440756 F2=0					
F3=-444,214981180132 M1=0 M2=-330,53927574169 M3=0 FrameElem=16					
Frame=16 Joint=10 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-56,6364644775201 F2=0					
F3=473,281831564849 M1=0 M2=329,402082974745 M3=0 FrameElem=16					
Frame=16 Joint=26 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=199,660439229756 F2=0 F3=-					
311,41999999853 M1=0 M2=-141,281942990387 M3=0 FrameElem=16					
Frame=16 Joint=10 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-191,466084391047 F2=0					
F3=313,66999999853 M1=0 M2=132,551114851017 M3=0 FrameElem=16					
Frame=16 Joint=26 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=59,7606741549395 F2=0 F3=-					
471,031831564849 M1=0 M2=-354,810830822491 M3=0 FrameElem=16					
Frame=17 Joint=35 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-66,105706637128 F2=0					
F3=412,527792835783 M1=0 M2=-57,2640602213289 M3=0 FrameElem=17					
Frame=17 Joint=42 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=105,730833781573 F2=0					
F3=-370,080828929111 M1=0 M2=91,4721600173201 M3=0 FrameElem=17					
Frame=17 Joint=35 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-154,020489792648 F2=0					
F3=377,580828929111 M1=0 M2=-122,02545578455 M3=0 FrameElem=17					
Frame=17 Joint=42 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=44,4927280578062 F2=0					
F3=-405,027792835783 M1=0 M2=12,4404989445286 M3=0 FrameElem=17					
Frame=17 Joint=35 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-24,7339115787559 F2=0					
F3=444,029628325138 M1=0 M2=-16,0966557124165 M3=0 FrameElem=17					
Frame=17 Joint=42 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=115,142960870457 F2=0 F3=-					
327,892428349062 M1=0 M2=97,3220344921768 M3=0 FrameElem=17					
Frame=17 Joint=35 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-165,061616784435 F2=0					
F3=335,392428349062 M1=0 M2=-132,988643779574 M3=0 FrameElem=17					
Frame=17 Joint=42 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=8,80493308413229 F2=0 F3=-					
436,529628325138 M1=0 M2=-9,46200805638149 M3=0 FrameElem=17					
Frame=18 Joint=42 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-44,4927280577822 F2=0					
F3=405,027792835527 M1=0 M2=-12,440498944538 M3=0 FrameElem=18					
Frame=18 Joint=36 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=59,8712852972761 F2=0					
F3=-362,580828929227 M1=0 M2=71,9096331158429 M3=0 FrameElem=18					
Frame=18 Joint=42 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-105,730833781469 F2=0					
F3=370,080828929227 M1=0 M2=-91,4721600173302 M3=0 FrameElem=18					
Frame=18 Joint=36 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=21,0932550430353 F2=0					
F3=-397,527792835527 M1=0 M2=-9,26176121464469 M3=0 FrameElem=18					
Frame=18 Joint=42 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-8,80493308414441 F2=0					
F3=436,529628324905 M1=0 M2=9,46200805638132 M3=0 FrameElem=18					
Frame=18 Joint=36 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=67,6544124832572 F2=0 F3=-					
320,392428349178 M1=0 M2=73,4606940219848 M3=0 FrameElem=18					
Frame=18 Joint=42 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-115,142960870354 F2=0					
F3=327,892428349178 M1=0 M2=-97,3220344921893 M3=0 FrameElem=18					
Frame=18 Joint=36 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-8,91053984590425 F2=0					
F3=-429,029628324905 M1=0 M2=-14,7413707499164 M3=0 FrameElem=18					
Frame=19 Joint=36 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-21,0932550430193 F2=0					
F3=397,527792835701 M1=0 M2=9,2617612146442 M3=0 FrameElem=19					
Frame=19 Joint=43 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=16,4418443400776 F2=0					
F3=-355,080828929076 M1=0 M2=63,8837540286864 M3=0 FrameElem=19					
Frame=19 Joint=36 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-59,8712852973886 F2=0					
F3=362,580828929076 M1=0 M2=-71,9096331158473 M3=0 FrameElem=19					
Frame=19 Joint=43 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-21,504185901894 F2=0					
F3=-390,027792835701 M1=0 M2=-20,3275218104483 M3=0 FrameElem=19					
Frame=19 Joint=36 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=8,91053984590348 F2=0					
F3=429,029628325021 M1=0 M2=14,7413707499162 M3=0 FrameElem=19					
Frame=19 Joint=43 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=22,5959716231502 F2=0 F3=-					
312,892428348887 M1=0 M2=71,6167654493144 M3=0 FrameElem=19					
Frame=19 Joint=36 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-67,6544124833652 F2=0					
F3=320,392428348887 M1=0 M2=-73,4606940219903 M3=0 FrameElem=19					
Frame=19 Joint=43 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-45,8239807061185 F2=0					
F3=-421,529628325021 M1=0 M2=-22,3528436315516 M3=0 FrameElem=19					
Frame=20 Joint=43 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=21,5041859018572 F2=0					
F3=390,027792835783 M1=0 M2=20,3275218104436 M3=0 FrameElem=20					
Frame=20 Joint=37 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-11,8123030706032 F2=0					
F3=-347,580828929273 M1=0 M2=66,6663913467013 M3=0 FrameElem=20					
Frame=20 Joint=43 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-16,4418443399271 F2=0					
F3=355,080828929273 M1=0 M2=-63,8837540286903 M3=0 FrameElem=20					
Frame=20 Joint=37 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-62,206803170176 F2=0					
F3=-382,527792835783 M1=0 M2=-18,2569980645689 M3=0 FrameElem=20					
Frame=20 Joint=43 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=45,8239807061198 F2=0					
F3=421,529628325022 M1=0 M2=22,3528436315471 M3=0 FrameElem=20					
Frame=20 Joint=37 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-6,61807088754361 F2=0					
F3=-305,392428349178 M1=0 M2=85,0786582262388 M3=0 FrameElem=20					
Frame=20 Joint=43 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-22,5959716230021 F2=0					
F3=312,892428349178 M1=0 M2=-71,6167654493142 M3=0 FrameElem=20					
Frame=20 Joint=37 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-80,3073140394531 F2=0					
F3=-414,029628325022 M1=0 M2=-22,9670440308853 M3=0 FrameElem=20					
Frame=21 Joint=37 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=62,206803170179 F2=0					
F3=382,527792835574 M1=0 M2=18,2569980645762 M3=0 FrameElem=21					
Frame=21 Joint=44 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-30,5497547806042 F2=0					
F3=-340,080828929204 M1=0 M2=79,0494749498115 M3=0 FrameElem=21					



Frame=21	Joint=37	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=11,812303070605	F2=0	
F3=347,580828929204	M1=0	M2=-66,6663913466918	M3=0	FrameElem=21			
Frame=21	Joint=44	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-100,776029073727	F2=0	
F3=-375,027792835574	M1=0	M2=3,28966550854223	M3=0	FrameElem=21			
Frame=21	Joint=37	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=80,3073140394526	F2=0	
F3=414,029628324964	M1=0	M2=22,9670440308922	M3=0	FrameElem=21			
Frame=21	Joint=44	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-24,7998838502242	F2=0	
F3=-297,892428349062	M1=0	M2=104,882997239722	M3=0	FrameElem=21			
Frame=21	Joint=37	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=6,61807088752728	F2=0	
F3=305,392428349062	M1=0	M2=-85,0786582262387	M3=0	FrameElem=21			
Frame=21	Joint=44	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-117,027593764789	F2=0	
F3=-406,529628324964	M1=0	M2=-3,39460464533317	M3=0	FrameElem=21			
Frame=22	Joint=44	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=100,776029073788	F2=0	
F3=375,027792835957	M1=0	M2=-3,28966550857018	M3=0	FrameElem=22			
Frame=22	Joint=5	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-48,3603247702359	F2=0	
F3=-332,580828929401	M1=0	M2=112,63633630811	M3=0	FrameElem=22			
Frame=22	Joint=44	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=30,5497547806668	F2=0	
F3=340,080828929401	M1=0	M2=-79,0494749497958	M3=0	FrameElem=22			
Frame=22	Joint=5	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-136,915147450454	F2=0	
F3=-367,527792835957	M1=0	M2=43,0974151455377	M3=0	FrameElem=22			
Frame=22	Joint=44	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=117,027593764846	F2=0	
F3=406,52962832537	M1=0	M2=3,39460464530025	M3=0	FrameElem=22			
Frame=22	Joint=5	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-41,0679536579644	F2=0	F3=-
290,392428349353	M1=0	M2=144,51480741689	M3=0	FrameElem=22			
Frame=22	Joint=44	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=24,7998838501895	F2=0	
F3=297,892428349353	M1=0	M2=-104,882997239722	M3=0	FrameElem=22			
Frame=22	Joint=5	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-154,500851380339	F2=0	F3=-
399,02962832537	M1=0	M2=35,1494207617523	M3=0	FrameElem=22			
Frame=23	Joint=24	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=205,273367340301	F2=0	
F3=-351,163601245975	M1=0	M2=-122,980187748939	M3=0	FrameElem=23			
Frame=23	Joint=25	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-97,6545640295445	F2=0	
F3=410,154180978453	M1=0	M2=267,149188589856	M3=0	FrameElem=23			
Frame=23	Joint=24	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=96,6729640149175	F2=0	
F3=-385,261380910164	M1=0	M2=-207,493021448222	M3=0	FrameElem=23			
Frame=23	Joint=25	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-206,254967354928	F2=0	
F3=375,46960130552	M1=0	M2=178,807219142907	M3=0	FrameElem=23			
Frame=23	Joint=24	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=212,996439229883	F2=0	F3=-
270,80000000015	M1=0	M2=-53,9489429904	M3=0	FrameElem=23			
Frame=23	Joint=25	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-65,7806741549341	F2=0	
F3=433,53333156834	M1=0	M2=287,827943587288	M3=0	FrameElem=23			
Frame=23	Joint=24	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=65,7806741549341	F2=0	F3=-
407,49483156834	M1=0	M2=-224,75083135205	M3=0	FrameElem=23			
Frame=23	Joint=25	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-214,223439229883	F2=0	
F3=291,11000000015	M1=0	M2=96,0921929904285	M3=0	FrameElem=23			
Frame=24	Joint=25	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=206,254967355636	F2=0	
F3=-375,46960130523	M1=0	M2=-178,807219142907	M3=0	FrameElem=24			
Frame=24	Joint=26	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-98,6361640448838	F2=0	
F3=435,046981046171	M1=0	M2=330,539275741654	M3=0	FrameElem=24			
Frame=24	Joint=25	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=97,6545640302568	F2=0	
F3=-410,154180977882	M1=0	M2=-267,149188589857	M3=0	FrameElem=24			
Frame=24	Joint=26	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-207,236567370263	F2=0	
F3=399,775601364775	M1=0	M2=238,368170547064	M3=0	FrameElem=24			
Frame=24	Joint=25	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=214,223439230768	F2=0	F3=-
291,109999999634	M1=0	M2=-96,0921929904254	M3=0	FrameElem=24			
Frame=24	Joint=26	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-65,7806741549372	F2=0	
F3=459,571831567788	M1=0	M2=354,810830822451	M3=0	FrameElem=24			
Frame=24	Joint=25	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=65,7806741549372	F2=0	F3=-
433,533331567788	M1=0	M2=-287,82794358729	M3=0	FrameElem=24			
Frame=24	Joint=26	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-215,450439230768	F2=0	
F3=311,419999999634	M1=0	M2=141,281942990394	M3=0	FrameElem=24			
Frame=25	Joint=16	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=179,097366950971	F2=0	
F3=304,074192562196	M1=0	M2=13,4905247522961	M3=0	FrameElem=25			
Frame=25	Joint=18	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-73,7689636743477	F2=0	
F3=-190,448828492252	M1=0	M2=-70,3534832345642	M3=0	FrameElem=25			
Frame=25	Joint=16	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=70,4969636255911	F2=0	
F3=271,468828690735	M1=0	M2=-58,1202066337447	M3=0	FrameElem=25			
Frame=25	Joint=18	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-182,369366999728	F2=0	
F3=-221,098192334566	M1=0	M2=-131,789345403901	M3=0	FrameElem=25			
Frame=25	Joint=16	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=196,675270735143	F2=0	
F3=330,992628324654	M1=0	M2=24,1201435557456	M3=0	FrameElem=25			
Frame=25	Joint=18	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-65,050749456722	F2=0	F3=-
177,572428348847	M1=0	M2=-18,0668047315723	M3=0	FrameElem=25			
Frame=25	Joint=16	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=61,5787494049852	F2=0	
F3=245,272428348847	M1=0	M2=-100,408195268396	M3=0	FrameElem=25			
Frame=25	Joint=18	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-196,675270735143	F2=0	
F3=-244,197628324654	M1=0	M2=-145,565865592184	M3=0	FrameElem=25			
Frame=26	Joint=18	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=182,369366999609	F2=0	
F3=221,098192334576	M1=0	M2=131,789345403886	M3=0	FrameElem=26			
Frame=26	Joint=22	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-77,0409637229848	F2=0	
F3=-109,428828293793	M1=0	M2=-158,086683256626	M3=0	FrameElem=26			
Frame=26	Joint=18	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=73,7689636742282	F2=0	
F3=190,448828492277	M1=0	M2=70,353483234563	M3=0	FrameElem=26			

<p>GENERAL CONTRACTOR</p>  <p>Consorzio Collegamenti Integrati Veloci</p>	<p>ALTA SORVEGLIANZA</p>  <p>GRUPPO FERROVIE DELLO STATO ITALIANE</p>
<p style="text-align: center;">IG51-02-E-CV-CL-IN1Y-0X-001_A00</p> <p style="text-align: center;">Relazione di calcolo</p> <p style="text-align: right;">Foglio 160 di 182</p>	

Frame=26	Joint=22	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-185,641367048366	F2=0
F3=-138,122192106946	M1=0	M2=-209,437237978816	M3=0	FrameElem=26		
Frame=26	Joint=18	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=196,67527073491	F2=0
F3=244,197628324644	M1=0	M2=145,565865592168	M3=0	FrameElem=26		
Frame=26	Joint=22	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-65,7806741549342	F2=0
F3=-103,563237860027	M1=0	M2=-102,691804731545	M3=0	FrameElem=26		
Frame=26	Joint=18	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=65,050749456947	F2=0
F3=177,572428348874	M1=0	M2=18,0668047315665	M3=0	FrameElem=26		
Frame=26	Joint=22	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-196,67527073491	F2=0
F3=157,402628324644	M1=0	M2=-224,508782098208	M3=0	FrameElem=26		F3=-
Frame=27	Joint=22	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=185,641367048246	F2=0
F3=138,122192106877	M1=0	M2=209,437237978819	M3=0	FrameElem=27		
Frame=27	Joint=27	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-80,3129637716224	F2=0
F3=-28,4088280952319	M1=0	M2=-205,309883179448	M3=0	FrameElem=27		
Frame=27	Joint=22	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=77,0409637228658	F2=0
F3=109,428828293715	M1=0	M2=158,086683256632	M3=0	FrameElem=27		
Frame=27	Joint=27	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-188,913367097003	F2=0
F3=-55,1461918792468	M1=0	M2=-257,754333975357	M3=0	FrameElem=27		
Frame=27	Joint=22	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=196,67527073491	F2=0
F3=157,402628324562	M1=0	M2=224,50878209821	M3=0	FrameElem=27		
Frame=27	Joint=27	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-65,7806741549344	F2=0
F3=-24,2082380584364	M1=0	M2=-153,466804731521	M3=0	FrameElem=27		
Frame=27	Joint=22	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=65,7806741549344	F2=0
F3=103,563237859953	M1=0	M2=102,691804731552	M3=0	FrameElem=27		
Frame=27	Joint=27	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-196,67527073491	F2=0
F3=70,6076283245617	M1=0	M2=-272,211402139672	M3=0	FrameElem=27		F3=-
Frame=28	Joint=7	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=135,059190975327	F2=0
F3=508,714981180679	M1=0	M2=96,4801481011015	M3=0	FrameElem=28		
Frame=28	Joint=45	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-1,37575180172718	F2=0
F3=-464,775601482231	M1=0	M2=5,18854064506013	M3=0	FrameElem=28		
Frame=28	Joint=7	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=26,5170238410768	F2=0
F3=472,275601482231	M1=0	M2=3,1149051440564	M3=0	FrameElem=28		
Frame=28	Joint=45	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-88,4253200075853	F2=0
F3=-501,214981180679	M1=0	M2=-68,7043163585015	M3=0	FrameElem=28		
Frame=28	Joint=7	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=166,552197001027	F2=0
F3=535,531831565489	M1=0	M2=140,672527063943	M3=0	FrameElem=28		
Frame=28	Joint=45	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=6,83812005834802	F2=0
F3=368,419999998704	M1=0	M2=12,3259448832069	M3=0	FrameElem=28		F3=-
Frame=28	Joint=7	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=18,3031519810016	F2=0
F3=375,919999998704	M1=0	M2=-7,95912455400078	M3=0	FrameElem=28		
Frame=28	Joint=45	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-119,918326033285	F2=0
F3=-528,031831565489	M1=0	M2=-96,4689503772289	M3=0	FrameElem=28		
Frame=29	Joint=45	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=88,4253200075821	F2=0
F3=501,214981179701	M1=0	M2=68,7043163585082	M3=0	FrameElem=29		
Frame=29	Joint=38	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=25,1465062627529	F2=0
F3=-457,275601481696	M1=0	M2=-0,133658727117608	M3=0	FrameElem=29		
Frame=29	Joint=45	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=1,37575180176319	F2=0
F3=464,775601481696	M1=0	M2=-5,18854064504543	M3=0	FrameElem=29		
Frame=29	Joint=38	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-44,2215565667219	F2=0
F3=-493,714981179701	M1=0	M2=-66,8358114625242	M3=0	FrameElem=29		
Frame=29	Joint=45	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=119,918326033286	F2=0
F3=528,031831564442	M1=0	M2=96,4689503772292	M3=0	FrameElem=29		
Frame=29	Joint=38	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=33,3603781228241	F2=0
F3=360,919999998355	M1=0	M2=4,39693362127303	M3=0	FrameElem=29		F3=-
Frame=29	Joint=45	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-6,83812005830794	F2=0
F3=368,419999998355	M1=0	M2=-12,3259448831911	M3=0	FrameElem=29		
Frame=29	Joint=38	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-75,7145625924255	F2=0
F3=-520,531831564442	M1=0	M2=-83,6608268346562	M3=0	FrameElem=29		
Frame=30	Joint=27	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=188,913367097163	F2=0
F3=55,1461918795026	M1=0	M2=257,75433397533	M3=0	FrameElem=30		
Frame=30	Joint=23	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-83,5849638205393	F2=0
F3=53,3573799992395	M1=0	M2=-212,023083003112	M3=0	FrameElem=30		
Frame=30	Joint=27	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=80,3129637717827	F2=0
F3=28,4088280955124	M1=0	M2=205,30988317942	M3=0	FrameElem=30		
Frame=30	Joint=23	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-192,18536714592	F2=0
F3=27,0836004518592	M1=0	M2=-264,583429858171	M3=0	FrameElem=30		
Frame=30	Joint=27	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=196,675270735027	F2=0
F3=70,6076283248378	M1=0	M2=272,211402139646	M3=0	FrameElem=30		
Frame=30	Joint=23	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-65,7806741549346	F2=0
F3=60,3148315679368	M1=0	M2=-170,391804731564	M3=0	FrameElem=30		
Frame=30	Joint=27	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=65,7806741549346	F2=0
F3=24,2082380587102	M1=0	M2=153,466804731493	M3=0	FrameElem=30		
Frame=30	Joint=23	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-196,675270735027	F2=0
F3=-1,43632935119421E-10	M1=0	M2=-276,516522181231	M3=0	FrameElem=30		
Frame=31	Joint=23	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=192,185367146266	F2=0
F3=-27,0836004521666	M1=0	M2=264,583429858157	M3=0	FrameElem=31		
Frame=31	Joint=28	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-86,8569638696422	F2=0
F3=136,333380227177	M1=0	M2=-178,226282727429	M3=0	FrameElem=31		
Frame=31	Joint=23	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=83,5849638208855	F2=0
F3=-53,3573799995465	M1=0	M2=212,023083003102	M3=0	FrameElem=31		
Frame=31	Joint=28	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-195,457367195023	F2=0
F3=108,10360065065	M1=0	M2=-229,924525627065	M3=0	FrameElem=31		

Frame=31 Joint=23 OutputCase=ENVETA CaseType=Combination StepType=Max F1=196,675270735259 F2=0 F3=-
1,02740305087921E-10 M1=0 M2=276,516522181217 M3=0 FrameElem=31
Frame=31 Joint=28 OutputCase=ENVETA CaseType=Combination StepType=Max F1=-65,7806741549344 F2=0
F3=147,109831568256 M1=0 M2=-153,466804731523 M3=0 FrameElem=31
Frame=31 Joint=23 OutputCase=ENVETA CaseType=Combination StepType=Min F1=65,7806741549344 F2=0 F3=-
60,3148315682559 M1=0 M2=170,391804731546 M3=0 FrameElem=31
Frame=31 Joint=28 OutputCase=ENVETA CaseType=Combination StepType=Min F1=-200,726439231123 F2=0
F3=67,700000001027 M1=0 M2=-246,643016731552 M3=0 FrameElem=31
Frame=32 Joint=28 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=195,45736719481 F2=0 F3=-
108,103600650418 M1=0 M2=229,924525627048 M3=0 FrameElem=32
Frame=32 Joint=29 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-90,1289639181862 F2=0
F3=219,309380454575 M1=0 M2=-91,3934725824546 M3=0 FrameElem=32
Frame=32 Joint=28 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=86,8569638694296 F2=0
F3=-136,333380226945 M1=0 M2=178,226282727409 M3=0 FrameElem=32
Frame=32 Joint=29 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-198,729367243567 F2=0
F3=189,123600848901 M1=0 M2=-153,77762128223 M3=0 FrameElem=32
Frame=32 Joint=28 OutputCase=ENVETA CaseType=Combination StepType=Max F1=200,726439230858 F2=0 F3=-
67,699999999387 M1=0 M2=246,643016731537 M3=0 FrameElem=32
Frame=32 Joint=29 OutputCase=ENVETA CaseType=Combination StepType=Max F1=-65,7806741549341 F2=0
F3=233,904831568016 M1=0 M2=-83,8678043414076 M3=0 FrameElem=32
Frame=32 Joint=28 OutputCase=ENVETA CaseType=Combination StepType=Min F1=65,7806741549341 F2=0 F3=-
147,109831568016 M1=0 M2=153,466804731503 M3=0 FrameElem=32
Frame=32 Joint=29 OutputCase=ENVETA CaseType=Combination StepType=Min F1=-204,816439230858 F2=0
F3=135,39999999939 M1=0 M2=-173,453080893921 M3=0 FrameElem=32
Frame=33 Joint=29 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=198,729367243355 F2=0
F3=-189,123600848822 M1=0 M2=153,777621282204 M3=0 FrameElem=33
Frame=33 Joint=30 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-93,4009639667316 F2=0
F3=302,285380682119 M1=0 M2=36,1871137171733 M3=0 FrameElem=33
Frame=33 Joint=29 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=90,128963917975 F2=0 F3=-
219,309380454489 M1=0 M2=91,3934725824274 M3=0 FrameElem=33
Frame=33 Joint=30 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-202,001367292112 F2=0
F3=270,143601047306 M1=0 M2=-36,1427168235804 M3=0 FrameElem=33
Frame=33 Joint=29 OutputCase=ENVETA CaseType=Combination StepType=Max F1=204,816439230593 F2=0 F3=-
135,399999999836 M1=0 M2=173,453080893896 M3=0 FrameElem=33
Frame=33 Joint=30 OutputCase=ENVETA CaseType=Combination StepType=Max F1=-65,7806741549352 F2=0
F3=320,699831567928 M1=0 M2=43,4281438909423 M3=0 FrameElem=33
Frame=33 Joint=29 OutputCase=ENVETA CaseType=Combination StepType=Min F1=65,7806741549352 F2=0 F3=-
233,904831567928 M1=0 M2=83,867804341381 M3=0 FrameElem=33
Frame=33 Joint=30 OutputCase=ENVETA CaseType=Combination StepType=Min F1=-208,906439230593 F2=0
F3=203,099999999836 M1=0 M2=-64,5260570096082 M3=0 FrameElem=33
Frame=34 Joint=30 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=202,001367292366 F2=0
F3=-270,143601047468 M1=0 M2=36,1427168235442 M3=0 FrameElem=34
Frame=34 Joint=24 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-96,6729640157409 F2=0
F3=385,261380909898 M1=0 M2=207,4930214482 M3=0 FrameElem=34
Frame=34 Joint=30 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=93,4009639669843 F2=0
F3=-302,285380682268 M1=0 M2=-36,1871137171992 M3=0 FrameElem=34
Frame=34 Joint=24 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-205,273367341123 F2=0
F3=351,163601245952 M1=0 M2=122,980187748936 M3=0 FrameElem=34
Frame=34 Joint=30 OutputCase=ENVETA CaseType=Combination StepType=Max F1=208,906439230911 F2=0 F3=-
203,099999999999 M1=0 M2=64,5260570095864 M3=0 FrameElem=34
Frame=34 Joint=24 OutputCase=ENVETA CaseType=Combination StepType=Max F1=-65,780674154935 F2=0
F3=407,494831568073 M1=0 M2=224,750831352025 M3=0 FrameElem=34
Frame=34 Joint=30 OutputCase=ENVETA CaseType=Combination StepType=Min F1=65,780674154935 F2=0 F3=-
320,699831568073 M1=0 M2=-43,4281438909688 M3=0 FrameElem=34
Frame=34 Joint=24 OutputCase=ENVETA CaseType=Combination StepType=Min F1=-212,996439230911 F2=0
F3=270,799999999999 M1=0 M2=53,9489429904079 M3=0 FrameElem=34
Frame=35 Joint=3 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=204,358814631231 F2=0 F3=-
350,023985600502 M1=0 M2=286,614353225676 M3=0 FrameElem=35
Frame=35 Joint=31 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-52,9364378195596 F2=0
F3=387,401395905445 M1=0 M2=52,6909384649992 M3=0 FrameElem=35
Frame=35 Joint=3 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=52,9364378195596 F2=0 F3=-
378,651395905445 M1=0 M2=124,508554335241 M3=0 FrameElem=35
Frame=35 Joint=31 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-204,358814631231 F2=0
F3=358,773985600502 M1=0 M2=-95,1011552729635 M3=0 FrameElem=35
Frame=35 Joint=3 OutputCase=ENVETA CaseType=Combination StepType=Max F1=235,851820656929 F2=0 F3=-
284,768084856173 M1=0 M2=311,068000118699 M3=0 FrameElem=35
Frame=35 Joint=31 OutputCase=ENVETA CaseType=Combination StepType=Max F1=-44,7225659594842 F2=0
F3=405,864625444533 M1=0 M2=112,67324219471 M3=0 FrameElem=35
Frame=35 Joint=3 OutputCase=ENVETA CaseType=Combination StepType=Min F1=44,7225659594842 F2=0 F3=-
397,114625444533 M1=0 M2=31,8983002333699 M3=0 FrameElem=35
Frame=35 Joint=31 OutputCase=ENVETA CaseType=Combination StepType=Min F1=-235,851820656929 F2=0
F3=293,518084856173 M1=0 M2=-110,323187396443 M3=0 FrameElem=35
Frame=36 Joint=31 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=204,35881463123 F2=0 F3=-
277,852630951875 M1=0 M2=95,1011552730189 M3=0 FrameElem=36
Frame=36 Joint=19 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-52,9364378195599 F2=0
F3=343,737612520213 M1=0 M2=196,622370531408 M3=0 FrameElem=36
Frame=36 Joint=31 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=52,9364378195599 F2=0
F3=-334,987612520213 M1=0 M2=-52,6909384649808 M3=0 FrameElem=36
Frame=36 Joint=19 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-204,35881463123 F2=0
F3=286,602630951875 M1=0 M2=71,762534396635 M3=0 FrameElem=36
Frame=36 Joint=31 OutputCase=ENVETA CaseType=Combination StepType=Max F1=235,851820656928 F2=0 F3=-
201,707664209053 M1=0 M2=110,323187396496 M3=0 FrameElem=36



Frame=36	Joint=19	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-44,7225659594846	F2=0	
F3=364,635575594496 M1=0 M2=227,380650414119 M3=0 FrameElem=36							
Frame=36	Joint=31	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=44,7225659594846	F2=0	F3=-
355,885575594496 M1=0 M2=-112,673242194687 M3=0 FrameElem=36							
Frame=36	Joint=19	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-235,851820656928	F2=0	
F3=210,457664209053 M1=0 M2=63,4489818120466 M3=0 FrameElem=36							
Frame=37	Joint=19	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=204,358814631231	F2=0	
F3=-197,498269091221 M1=0 M2=-71,7625343966452 M3=0 FrameElem=37							
Frame=37	Joint=32	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-52,93643781956	F2=0	
F3=281,549381052222 M1=0 M2=300,534808420363 M3=0 FrameElem=37							
Frame=37	Joint=19	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=52,93643781956	F2=0	F3=-
272,799381052222 M1=0 M2=-196,622370531415 M3=0 FrameElem=37							
Frame=37	Joint=32	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-204,358814631231	F2=0	
F3=206,248269091221 M1=0 M2=207,373921579412 M3=0 FrameElem=37							
Frame=37	Joint=19	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=235,851820656929	F2=0	F3=-
119,08202276455 M1=0 M2=-63,4489818120585 M3=0 FrameElem=37							
Frame=37	Joint=32	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-44,7225659594846	F2=0	
F3=302,641342734086 M1=0 M2=325,031356875472 M3=0 FrameElem=37							
Frame=37	Joint=19	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=44,7225659594846	F2=0	F3=-
293,891342734086 M1=0 M2=-227,380650414128 M3=0 FrameElem=37							
Frame=37	Joint=32	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-235,851820656929	F2=0	
F3=127,83202276455 M1=0 M2=190,075618774373 M3=0 FrameElem=37							
Frame=38	Joint=32	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=204,358814631231	F2=0	
F3=-108,828068180268 M1=0 M2=-207,37392157946 M3=0 FrameElem=38							
Frame=38	Joint=21	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-52,9364378195601	F2=0	
F3=200,782850253787 M1=0 M2=359,190943958641 M3=0 FrameElem=38							
Frame=38	Joint=32	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=52,9364378195601	F2=0	
F3=-192,032850253787 M1=0 M2=-300,534808420416 M3=0 FrameElem=38							
Frame=38	Joint=21	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-204,358814631231	F2=0	
F3=117,578068180268 M1=0 M2=285,578223339714 M3=0 FrameElem=38							
Frame=38	Joint=32	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=235,851820656929	F2=0	F3=-
36,7439127768102 M1=0 M2=-190,075618774412 M3=0 FrameElem=38							
Frame=38	Joint=21	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-44,7225659594847	F2=0	
F3=219,831188409488 M1=0 M2=374,58690042457 M3=0 FrameElem=38							
Frame=38	Joint=32	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=44,7225659594847	F2=0	F3=-
211,081188409488 M1=0 M2=-325,031356875529 M3=0 FrameElem=38							
Frame=38	Joint=21	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-235,851820656929	F2=0	
F3=45,4939127768102 M1=0 M2=232,237842832933 M3=0 FrameElem=38							
Frame=39	Joint=21	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=204,358814631231	F2=0	
F3=-11,5661595297456 M1=0 M2=-285,578223339666 M3=0 FrameElem=39							
Frame=39	Joint=33	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-52,93643781956	F2=0	
F3=101,303027188185 M1=0 M2=368,765677243643 M3=0 FrameElem=39							
Frame=39	Joint=21	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=52,93643781956	F2=0	F3=-
92,5530271881852 M1=0 M2=-359,190943958598 M3=0 FrameElem=39							
Frame=39	Joint=33	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-204,358814631231	F2=0	
F3=20,3161595297456 M1=0 M2=293,548803104547 M3=0 FrameElem=39							
Frame=39	Joint=21	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=235,851820656929	F2=0	
F3=46,6595656674389 M1=0 M2=-232,23784283289 M3=0 FrameElem=39							
Frame=39	Joint=33	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-44,7225659594847	F2=0	
F3=116,066188167641 M1=0 M2=391,444357065821 M3=0 FrameElem=39							
Frame=39	Joint=21	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=44,7225659594847	F2=0	F3=-
107,316188167641 M1=0 M2=-374,586900424524 M3=0 FrameElem=39							
Frame=39	Joint=33	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-235,851820656929	F2=0	
F3=-37,9095656674389 M1=0 M2=211,639975511347 M3=0 FrameElem=39							
Frame=40	Joint=33	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=204,358814631232	F2=0	
F3=95,1367054470455 M1=0 M2=-293,548803104529 M3=0 FrameElem=40							
Frame=40	Joint=20	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-52,9364378195602	F2=0	
F3=-16,4697787114182 M1=0 M2=358,026272683756 M3=0 FrameElem=40							
Frame=40	Joint=33	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=52,9364378195602	F2=0	
F3=25,2197787114182 M1=0 M2=-368,765677243624 M3=0 FrameElem=40							
Frame=40	Joint=20	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-204,358814631232	F2=0	
F3=-86,3867054470455 M1=0 M2=248,484965585115 M3=0 FrameElem=40							
Frame=40	Joint=33	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=235,85182065693	F2=0	
F3=131,311729567239 M1=0 M2=-211,639975511339 M3=0 FrameElem=40							
Frame=40	Joint=20	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-44,7225659594848	F2=0	
F3=-8,08515459752496 M1=0 M2=384,81801076775 M3=0 FrameElem=40							
Frame=40	Joint=33	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=44,7225659594848	F2=0	
F3=16,835154597525 M1=0 M2=-391,4443570658 M3=0 FrameElem=40							
Frame=40	Joint=20	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-235,85182065693	F2=0	F3=-
122,561729567239 M1=0 M2=149,80688851473 M3=0 FrameElem=40							
Frame=41	Joint=20	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=204,358814631231	F2=0	
F3=213,047585455327 M1=0 M2=-248,484965585111 M3=0 FrameElem=41							
Frame=41	Joint=34	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-52,9364378195604	F2=0	
F3=-151,151779679226 M1=0 M2=278,489835078469 M3=0 FrameElem=41							
Frame=41	Joint=20	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=52,9364378195604	F2=0	
F3=159,901779679226 M1=0 M2=-358,02627268375 M3=0 FrameElem=41							
Frame=41	Joint=34	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-204,358814631231	F2=0	
F3=-204,297585455327 M1=0 M2=145,921720623202 M3=0 FrameElem=41							
Frame=41	Joint=20	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=235,85182065693	F2=0	
F3=235,083808394007 M1=0 M2=-149,806888514731 M3=0 FrameElem=41							
Frame=41	Joint=34	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-44,722565959485	F2=0	F3=-
144,475067643455 M1=0 M2=304,992521854733 M3=0 FrameElem=41							



Frame=41 Joint=20 OutputCase=ENVETA CaseType=Combination StepType=Min F1=44,722565959485 F2=0
F3=153,225067643455 M1=0 M2=-384,818010767742 M3=0 FrameElem=41
Frame=41 Joint=34 OutputCase=ENVETA CaseType=Combination StepType=Min F1=-235,85182065693 F2=0 F3=-
226,333808394007 M1=0 M2=46,6268011041675 M3=0 FrameElem=41
Frame=42 Joint=34 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=204,358814631244 F2=0
F3=340,427977692445 M1=0 M2=-145,921720623204 M3=0 FrameElem=42
Frame=42 Joint=11 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-52,936437819569 F2=0
F3=-304,897545823678 M1=0 M2=120,440455262555 M3=0 FrameElem=42
Frame=42 Joint=34 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=52,936437819569 F2=0
F3=313,647545823678 M1=0 M2=-278,489835078493 M3=0 FrameElem=42
Frame=42 Joint=11 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-204,358814631244 F2=0
F3=-331,677977692445 M1=0 M2=-18,6916613189097 M3=0 FrameElem=42
Frame=42 Joint=34 OutputCase=ENVETA CaseType=Combination StepType=Max F1=235,851820656938 F2=0
F3=357,72698697926 M1=0 M2=-46,626801104172 M3=0 FrameElem=42
Frame=42 Joint=11 OutputCase=ENVETA CaseType=Combination StepType=Max F1=-44,7225659594936 F2=0
F3=-265,053037501961 M1=0 M2=141,109302207238 M3=0 FrameElem=42
Frame=42 Joint=34 OutputCase=ENVETA CaseType=Combination StepType=Min F1=44,7225659594936 F2=0
F3=273,803037501961 M1=0 M2=-304,992521854761 M3=0 FrameElem=42
Frame=42 Joint=11 OutputCase=ENVETA CaseType=Combination StepType=Min F1=-235,851820656938 F2=0
F3=-348,97698697926 M1=0 M2=-98,0643266770879 M3=0 FrameElem=42
Frame=43 Joint=38 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=44,2215565667353 F2=0
F3=493,714981179911 M1=0 M2=66,8358114625268 M3=0 FrameElem=43
Frame=43 Joint=46 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=50,2106998111965 F2=0
F3=-449,77560148172 M1=0 M2=6,5186211104026 M3=0 FrameElem=43
Frame=43 Joint=38 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-25,1465062628094 F2=0
F3=457,27560148172 M1=0 M2=0,133658727118212 M3=0 FrameElem=43
Frame=43 Joint=46 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-2,44790065275685 F2=0
F3=-486,214981179911 M1=0 M2=-73,1635162439751 M3=0 FrameElem=43
Frame=43 Joint=38 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=75,714562592423 F2=0
F3=520,531831564675 M1=0 M2=83,6608268346592 M3=0 FrameElem=43
Frame=43 Joint=46 OutputCase=ENVETA CaseType=Combination StepType=Max F1=58,4245716712771 F2=0 F3=-
353,419999998472 M1=0 M2=10,7485468610983 M3=0 FrameElem=43
Frame=43 Joint=38 OutputCase=ENVETA CaseType=Combination StepType=Min F1=-33,36037812289 F2=0
F3=360,919999998472 M1=0 M2=-4,39693362127197 M3=0 FrameElem=43
Frame=43 Joint=46 OutputCase=ENVETA CaseType=Combination StepType=Min F1=-33,9409066784445 F2=0
F3=-513,031831564675 M1=0 M2=-84,3080285579037 M3=0 FrameElem=43
Frame=44 Joint=46 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=2,44790065276096 F2=0
F3=486,21498117955 M1=0 M2=73,1635162439728 M3=0 FrameElem=44
Frame=44 Joint=39 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=73,8168288435059 F2=0
F3=-442,275601481545 M1=0 M2=-3,94851920891422 M3=0 FrameElem=44
Frame=44 Joint=46 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-50,2106998112478 F2=0
F3=449,775601481545 M1=0 M2=-6,5186211103907 M3=0 FrameElem=44
Frame=44 Joint=39 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=35,5447554410435 F2=0
F3=-478,71498117955 M1=0 M2=-87,2239898426229 M3=0 FrameElem=44
Frame=44 Joint=46 OutputCase=ENVETA CaseType=Combination StepType=Max F1=33,9409066784458 F2=0
F3=513,031831564267 M1=0 M2=84,3080285579031 M3=0 FrameElem=44
Frame=44 Joint=39 OutputCase=ENVETA CaseType=Combination StepType=Max F1=82,0307007035873 F2=0 F3=-
345,919999998297 M1=0 M2=14,741370749939 M3=0 FrameElem=44
Frame=44 Joint=46 OutputCase=ENVETA CaseType=Combination StepType=Min F1=-58,4245716713293 F2=0
F3=353,419999998297 M1=0 M2=-10,7485468610885 M3=0 FrameElem=44
Frame=44 Joint=39 OutputCase=ENVETA CaseType=Combination StepType=Min F1=2,68926555279289 F2=0 F3=-
505,531831564267 M1=0 M2=-93,0878538392418 M3=0 FrameElem=44
Frame=45 Joint=39 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-35,5447554409852 F2=0
F3=478,714981179317 M1=0 M2=87,2239898426226 M3=0 FrameElem=45
Frame=45 Joint=47 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=95,9648933594758 F2=0
F3=-434,775601481428 M1=0 M2=-32,4705870312818 M3=0 FrameElem=45
Frame=45 Joint=39 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-73,8168288433468 F2=0
F3=442,275601481428 M1=0 M2=3,94851920891371 M3=0 FrameElem=45
Frame=45 Joint=47 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=49,6199704947487 F2=0
F3=-471,214981179317 M1=0 M2=-109,563111207014 M3=0 FrameElem=45
Frame=45 Joint=39 OutputCase=ENVETA CaseType=Combination StepType=Max F1=-2,68926555279472 F2=0
F3=505,531831564034 M1=0 M2=93,0878538392312 M3=0 FrameElem=45
Frame=45 Joint=47 OutputCase=ENVETA CaseType=Combination StepType=Max F1=104,178765219542 F2=0 F3=-
338,41999999818 M1=0 M2=1,96580594041455 M3=0 FrameElem=45
Frame=45 Joint=39 OutputCase=ENVETA CaseType=Combination StepType=Min F1=-82,0307007034133 F2=0
F3=345,91999999818 M1=0 M2=-14,7413707499392 M3=0 FrameElem=45
Frame=45 Joint=47 OutputCase=ENVETA CaseType=Combination StepType=Min F1=16,7644806065582 F2=0 F3=-
498,031831564034 M1=0 M2=-119,049696939639 M3=0 FrameElem=45
Frame=46 Joint=47 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=-49,6199704948113 F2=0
F3=471,214981179806 M1=0 M2=109,563111207027 M3=0 FrameElem=46
Frame=46 Joint=40 OutputCase=ENVETA5 CaseType=Combination StepType=Max F1=116,654893359653 F2=0
F3=-427,275601481918 M1=0 M2=-78,0972191422115 M3=0 FrameElem=46
Frame=46 Joint=47 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=-95,9648933596528 F2=0
F3=434,775601481918 M1=0 M2=32,4705870312858 M3=0 FrameElem=46
Frame=46 Joint=40 OutputCase=ENVETA5 CaseType=Combination StepType=Min F1=62,7683038281446 F2=0
F3=-463,714981179806 M1=0 M2=-147,289457384757 M3=0 FrameElem=46
Frame=46 Joint=47 OutputCase=ENVETA CaseType=Combination StepType=Max F1=-16,7644806065554 F2=0
F3=498,031831564558 M1=0 M2=119,049696939654 M3=0 FrameElem=46
Frame=46 Joint=40 OutputCase=ENVETA CaseType=Combination StepType=Max F1=124,868765219736 F2=0 F3=-
330,91999999853 M1=0 M2=-27,9143231576371 M3=0 FrameElem=46
Frame=46 Joint=47 OutputCase=ENVETA CaseType=Combination StepType=Min F1=-104,178765219736 F2=0
F3=338,41999999853 M1=0 M2=-1,96580594041551 M3=0 FrameElem=46



Frame=46	Joint=40	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=29,9128139398888	F2=0	F3=-
490,531831564558	M1=0	M2=-160,882979047426	M3=0	FrameElem=46			
Frame=47	Joint=40	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-62,7683038281509	F2=0	F3=-
F3=463,714981179713	M1=0	M2=147,289457384765	M3=0	FrameElem=47			
Frame=47	Joint=48	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=145,21602973417	F2=0	F3=-
419,775601481801	M1=0	M2=-140,357991038092	M3=0	FrameElem=47			
Frame=47	Joint=40	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-116,654893359605	F2=0	F3=-
F3=427,275601481801	M1=0	M2=78,097219142202	M3=0	FrameElem=47			
Frame=47	Joint=48	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=74,9897554410541	F2=0	F3=-
F3=-456,214981179713	M1=0	M2=-210,485640623707	M3=0	FrameElem=47			
Frame=47	Joint=40	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-29,9128139398894	F2=0	F3=-
F3=490,531831564442	M1=0	M2=160,882979047436	M3=0	FrameElem=47			
Frame=47	Joint=48	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=153,429901594255	F2=0	F3=-
323,419999998413	M1=0	M2=-74,4285920406355	M3=0	FrameElem=47			
Frame=47	Joint=40	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-124,868765219689	F2=0	F3=-
F3=330,919999998413	M1=0	M2=27,9143231576371	M3=0	FrameElem=47			
Frame=47	Joint=48	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=42,1342655527926	F2=0	F3=-
483,031831564442	M1=0	M2=-228,18609821642	M3=0	FrameElem=47			
Frame=48	Joint=48	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=-74,989755441092	F2=0	F3=-
F3=456,214981180132	M1=0	M2=210,485640623704	M3=0	FrameElem=48			
Frame=48	Joint=17	OutputCase=ENVETA5	CaseType=Combination	StepType=Max	F1=174,839148013778	F2=0	F3=-
F3=-412,275601481964	M1=0	M2=-211,524755205022	M3=0	FrameElem=48			
Frame=48	Joint=48	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=-145,216029734208	F2=0	F3=-
F3=419,775601481964	M1=0	M2=140,357991038081	M3=0	FrameElem=48			
Frame=48	Joint=17	OutputCase=ENVETA5	CaseType=Combination	StepType=Min	F1=86,2843253335651	F2=0	F3=-
F3=-448,714981180132	M1=0	M2=-282,933275475615	M3=0	FrameElem=48			
Frame=48	Joint=48	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=-42,1342655527926	F2=0	F3=-
F3=483,031831564907	M1=0	M2=228,186098216416	M3=0	FrameElem=48			
Frame=48	Joint=17	OutputCase=ENVETA	CaseType=Combination	StepType=Max	F1=183,053019873872	F2=0	F3=-
F3=315,919999998529	M1=0	M2=-124,295174614872	M3=0	FrameElem=48			
Frame=48	Joint=48	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=-153,429901594302	F2=0	F3=-
F3=323,419999998529	M1=0	M2=74,4285920406355	M3=0	FrameElem=48			
Frame=48	Joint=17	OutputCase=ENVETA	CaseType=Combination	StepType=Min	F1=53,4288354452657	F2=0	F3=-
475,531831564907	M1=0	M2=-304,740668998375	M3=0	FrameElem=48			

TABLE: "BASE REACTIONS"

OutputCase=ENVETA5	CaseType=Combination	StepType=Max	GlobalFX=-92,1876013719979	GlobalFY=0	GlobalFZ=1001,71520236675	GlobalMX=0	GlobalMY=-287,281654270766	GlobalMZ=0	GlobalX=0	GlobalY=0	GlobalZ=0
XCentroidFX=0	YCentroidFX=0	ZCentroidFX=0	XCentroidFY=0	YCentroidFY=0	ZCentroidFY=0	XCentroidFZ=0	YCentroidFZ=0	ZCentroidFZ=0			
OutputCase=ENVETA5	CaseType=Combination	StepType=Min	GlobalFX=-261,873201474097	GlobalFY=0	GlobalFZ=981,38400206349	GlobalMX=0	GlobalMY=-626,693524436471	GlobalMZ=0	GlobalX=0	GlobalY=0	GlobalZ=0
XCentroidFX=0	YCentroidFX=0	ZCentroidFX=0	XCentroidFY=0	YCentroidFY=0	ZCentroidFY=0	XCentroidFZ=0	YCentroidFZ=0	ZCentroidFZ=0			
OutputCase=ENVETA	CaseType=Combination	StepType=Max	GlobalFX=-8,51407696667532E-13	GlobalFY=0	GlobalFZ=1041,433999999941	GlobalMX=0	GlobalMY=1,52686902010757E-09	GlobalMZ=0	GlobalX=0	GlobalY=0	GlobalZ=0
XCentroidFX=0	YCentroidFX=0	ZCentroidFX=0	XCentroidFY=0	YCentroidFY=0	ZCentroidFY=0	XCentroidFZ=0	YCentroidFZ=0	ZCentroidFZ=0			
OutputCase=ENVETA	CaseType=Combination	StepType=Min	GlobalFX=-286,666499995858	GlobalFY=0	GlobalFZ=842,839999999358	GlobalMX=0	GlobalMY=-701,458312477913	GlobalMZ=0	GlobalX=0	GlobalY=0	GlobalZ=0
XCentroidFX=0	YCentroidFX=0	ZCentroidFX=0	XCentroidFY=0	YCentroidFY=0	ZCentroidFY=0	XCentroidFZ=0	YCentroidFZ=0	ZCentroidFZ=0			

END TABLE DATA

GENERAL CONTRACTOR  Consorzio Collegamenti Integrati Veloci	ALTA SORVEGLIANZA  GRUPPO FERROVIE DELLO STATO ITALIANE
	IG51-02-E-CV-CL-IN1Y-0X-001_A00 Relazione di calcolo
	Foglio 165 di 182

11.3. Muro imbocco – input e output

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 spinta sul muro

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 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

$$\epsilon' = \epsilon + \theta$$

$$\beta' = \beta + \theta$$

dove $\theta = \arctg(C)$ essendo C il coefficiente di intensità sismica.

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

$$A = \frac{\cos^2(\beta + \theta)}{\cos^2\beta \cos\theta}$$

Adottando il metodo di Mononobe-Okabe per il calcolo della spinta, il coefficiente A viene posto pari a 1.

Tale incremento di spinta deve essere applicato ad una distanza dalla base pari a 2/3 dell'altezza del muro stesso.

Oltre a questo incremento bisogna tener conto delle forze d'inerzia orizzontali che si destano per effetto del sisma. Tale forza viene valutata come

$$F_i = CW$$

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 a ribaltamento

La verifica a ribaltamento consiste nel determinare il momento risultante di tutte le forze che tendono a fare ribaltare il muro (momento ribaltante M_r) ed il momento risultante di tutte le forze che tendono a stabilizzare il muro (momento stabilizzante M_s) rispetto allo spigolo a valle della fondazione e verificare che il rapporto M_s/M_r sia maggiore di un determinato coefficiente di sicurezza η_r .

La Normativa Italiana (D.M. 1988) impone che sia $\eta_r \geq 1.5$.

Deve quindi essere verificata la seguente diseuguaglianza

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$$\frac{M_s}{M_r} \geq \eta_r$$

Il momento ribaltante M_r è dato dalla componente orizzontale della spinta S , dalle forze di inerzia del muro e del terreno gravante sulla fondazione di monte (caso di presenza di sisma) per i rispettivi bracci. Nel momento stabilizzante interviene il peso del muro (applicato nel baricentro) ed il peso del terreno gravante sulla fondazione di monte. Per quanto riguarda invece la componente verticale della spinta essa sarà stabilizzante se l'angolo d'attrito terra-muro δ è positivo, ribaltante se δ è negativo. δ è positivo quando è il terrapieno che scorre rispetto al muro, negativo quando è il muro che tende a scorrere rispetto al terrapieno (questo può essere il caso di una spalla da ponte gravata da carichi notevoli). Se sono presenti dei tiranti essi contribuiscono al momento stabilizzante. Questa verifica ha significato solo per fondazione superficiale e non per fondazione su pali.

Verifica a scorrimento

Per la verifica a scorrimento del muro lungo il piano di fondazione deve risultare che la somma di tutte le forze parallele al piano di posa che tendono a fare scorrere il muro deve essere minore di tutte le forze, parallele al piano di scorrimento, che si oppongono allo scivolamento, secondo un certo coefficiente di sicurezza. La verifica a scorrimento risulta soddisfatta se il rapporto fra la risultante delle forze resistenti allo scivolamento F_r e la risultante delle forze che tendono a fare scorrere il muro F_s risulta maggiore di un determinato coefficiente di sicurezza η_s . La Normativa Italiana (D.M. 1988) impone che $\eta_s \geq 1.3$.

$$\frac{F_r}{F_s} \geq \eta_s$$

Le forze che intervengono nella F_s sono: la componente della spinta parallela al piano di fondazione e la componente delle forze d'inerzia parallela al piano di fondazione. La forza resistente è data dalla resistenza d'attrito e dalla resistenza per adesione lungo la base della fondazione. Detta N la componente normale al piano di fondazione del carico totale gravante in fondazione e indicando con δ_r l'angolo d'attrito terreno-fondazione, con c_a l'adesione terreno-fondazione e con B_r la larghezza della fondazione reagente, la forza resistente può esprimersi come

$$F_r = N \operatorname{tg} \delta_r + c_a B_r$$

La Normativa consente di computare, nelle forze resistenti, una aliquota dell'eventuale spinta dovuta al terreno posto a valle del muro. In tal caso, però, il coefficiente di sicurezza deve essere aumentato opportunamente. L'aliquota di spinta passiva che si può considerare ai fini della verifica a scorrimento non può comunque superare il 50 per cento.

Per quanto riguarda l'angolo d'attrito terra-fondazione, δ_r , diversi autori suggeriscono di assumere un valore di δ_r pari all'angolo d'attrito del terreno di fondazione.

Verifica al carico limite

Il rapporto fra il carico limite in fondazione e la componente normale della risultante dei carichi trasmessi dal muro sul terreno di fondazione deve essere superiore a η_q . Cioè, detto Q_u , il carico limite ed R la risultante verticale dei carichi in fondazione, deve essere:

$$\frac{Q_u}{R} \geq \eta_q$$

La Normativa Italiana (D.M. 1988) impone che $\eta_q \geq 2.0$.

Si adotta per il calcolo del carico limite in fondazione il metodo di MEYERHOF.

L'espressione del carico ultimo è data dalla relazione:

$$Q_u = c N_c d_c i_c + q N_q d_q i_q + 0.5 \gamma B N_\gamma d_\gamma i_\gamma$$

In questa espressione

c coesione del terreno in fondazione;
 ϕ angolo di attrito del terreno in fondazione;
 γ peso di volume del terreno in fondazione;
 B larghezza della fondazione;
 D profondità del piano di posa;
 q pressione geostatica alla quota del piano di posa.

I vari fattori che compaiono nella formula sono dati da:

$$A = e^{\pi \operatorname{tg} \phi}$$

$$N_q = A \operatorname{tg}^2(45^\circ + \phi/2)$$

$$N_c = (N_q - 1) \operatorname{ctg} \phi$$

$$N_\gamma = (N_q - 1) \operatorname{tg} (1.4\phi)$$

Indichiamo con K_p il coefficiente di spinta passiva espresso da:

$$K_p = \operatorname{tg}^2(45^\circ + \phi/2)$$

I fattori d e i che compaiono nella formula sono rispettivamente i fattori di profondità ed i fattori di inclinazione del carico espressi dalle seguenti relazioni:

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Fattori di profondità

$$d_q = 1 + 0.2 \frac{D}{B} \sqrt{K_p}$$

$$d_q = d_y = 1 \quad \text{per } \phi = 0$$

$$d_q = d_y = 1 + 0.1 \frac{D}{B} \sqrt{K_p} \quad \text{per } \phi > 0$$

Fattori di inclinazione

Indicando con θ l'angolo che la risultante dei carichi forma con la verticale (espresso in gradi) e con ϕ l'angolo d'attrito del terreno di posa abbiamo:

$$i_c = i_q = (1 - \theta^\circ/90)^\circ$$

$$i_y = (1 - \frac{\theta^\circ}{\phi^\circ})^\circ \quad \text{per } \phi > 0$$

$$i_y = 0 \quad \text{per } \phi = 0$$

Verifica alla stabilità globale

La verifica alla stabilità globale del complesso muro+terreno deve fornire un coefficiente di sicurezza non inferiore a η_g

La Normativa Italiana (D.M. 1988) impone che $\eta_g \geq 1.3$

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 o con i pali di fondazione. Si determina il minimo coefficiente di sicurezza su una maglia di centri di dimensioni 10x10 posta in prossimità della sommità del muro. Il numero di strisce è pari a 50.

Il coefficiente di sicurezza fornito da Fellenius si esprime secondo la seguente formula:

$$\eta = \frac{\sum_i^n \left(\frac{c_i b_i}{\cos \alpha_i} + [W_i \cos \alpha_i - u_i l_i] \tan \phi_i \right)}{\sum_i^n W_i \sin \alpha_i}$$

dove 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 e c_i e ϕ_i sono le caratteristiche del terreno (coesione ed angolo di attrito) lungo la base della striscia.

Inoltre u_i ed l_i rappresentano la pressione neutra lungo la base della striscia e la lunghezza della base della striscia ($l_i = b_i / \cos \alpha_i$).

Quindi, assunto un cerchio di tentativo lo si suddivide in n strisce e dalla formula precedente si ricava η . Questo procedimento viene eseguito per il numero di centri prefissato e viene assunto come coefficiente di sicurezza della scarpata il minimo dei coefficienti così determinati.

Normativa

Spinte e verifiche secondo :

- D.M. 11/03/1988
- D.M. 16/01/1996

Geometria muro e fondazione

Descrizione	Muro a mensola in c.a.
Altezza del paramento	3.60 [m]
Spessore in sommità	0.30 [m]
Spessore all'attacco con la fondazione	0.70 [m]
Inclinazione paramento esterno	0.00 [%]
Inclinazione paramento interno	11.00 [%]
Lunghezza del muro	10.00 [m]
Fondazione	
Lunghezza mensola fondazione di valle	0.50 [m]
Lunghezza mensola fondazione di monte	2.30 [m]

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Lunghezza totale fondazione	3.50 [m]
Inclinazione piano di posa della fondazione	0.00 [%]
Spessore fondazione	0.60 [m]
Spessore magrone	0.20 [m]

Geometria profilo terreno a monte del muro

Simbologia adottata e sistema di riferimento

(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
1	10.00	0.00	0.00

Terreno a valle del muro

Inclinazione terreno a valle del muro rispetto all'orizzontale	0.00	[%]
Altezza del rinterro rispetto all'attacco fondaz.valle-paramento	0.40	[m]

Descrizione terreni

Simbologia adottata

Nr.	Indice del terreno
Descrizione	Descrizione terreno
γ	Peso di volume del terreno espresso in [kN/mc]
γ_s	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 [kg/cm ²]
c_a	Adesione terra-muro espressa in [kg/cm ²]

Descrizione	γ	γ_s	ϕ	δ	c	c_a
Rilevato	20.00	20.00	35.00	23.33	0.000	0.000
F13	19.00	19.00	28.00	18.67	0.000	0.000
fc alterata	21.00	21.00	21.00	14.00	0.150	0.000

Stratigrafia

Simbologia adottata

N	Indice dello strato
H	Spessore dello strato espresso in [m]
a	Inclinazione espressa in [%]
K_w	Costante di Winkler orizzontale espressa in Kg/cm ² /cm
K_s	Coefficiente di spinta
Terreno	Terreno dello strato

Nr.	H	a	K_w	K_s	Terreno
1	7.30	0.00	7.79	0.00	Rilevato
2	2.00	0.00	3.35	0.00	F13
3	5.00	0.00	0.00	0.00	fc alterata

Condizioni di carico

Simbologia e convenzioni di segno adottate

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/m]
Q_f	Intensità del carico per $x=X_f$ espressa in [kN/m]
D/C	Tipo carico : D=distribuito C=concentrato

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Condizione n° 1 (Sovraccarico stradale)

D Profilo $X_f=0.00$ $X_f=10.00$ $Q_f=10.0000$ $Q_f=10.0000$

Descrizione combinazioni di carico

Simbologia adottata

C Coefficiente totale di partecipazione della condizione

Combinazione n° 1 Tensioni ammissibili

	C
Peso proprio	1.00
Spinta terreno	1.00
Sovraccarico stradale	1.00

Combinazione n° 2 Tensioni ammissibili - Sismica

	C
Peso proprio	1.00
Spinta terreno	1.00

Impostazioni di analisi

Metodo verifica sezioni

Tensioni ammissibili

Impostazioni avanzate

Diagramma correttivo per eccentricità negativa con aliquota di parzializzazione pari a 0.00

Quadro riassuntivo coeff. di sicurezza calcolati

Simbologia adottata

C Identificativo della combinazione
Tipo Tipo combinazione
Sisma Combinazione sismica
 CS_{SCO} Coeff. di sicurezza allo scorrimento
 CS_{RIB} Coeff. di sicurezza al ribaltamento
 CS_{QLM} Coeff. di sicurezza a carico limite
 CS_{STAB} Coeff. di sicurezza a stabilità globale

C	Tipo	Sisma	CS_{SCO}	CS_{RIB}	CS_{QLM}	CS_{STAB}
1	TAMM - [2]	--	2.86	8.83	14.07	2.08
2	TAMM - [3]	Orizzontale	2.35	6.76	14.20	2.11

Analisi della spinta e verifiche

Sistema di riferimento adottato per le coordinate :

Origine in testa al muro (spigolo di monte)

Ascisse X (espresse in [m]) positive verso monte

Ordinate Y (espresse in [m]) positive verso l'alto

Le forze orizzontali sono considerate positive se agenti da monte verso valle

Le forze verticali sono considerate positive se agenti dall'alto verso il basso

Calcolo riferito ad 1 metro di muro

Tipo di analisi

Calcolo della spinta
Calcolo del carico limite
Calcolo della stabilità globale
Calcolo della spinta in condizioni di

metodo di Culmann
metodo di Meyerhof
metodo di Fellenius
Spinta attiva

Sisma

Coefficiente di intensità sismica (percento)
Forma diagramma incremento sismico

4.00
Triangolare con vertice in basso

Partecipazione spinta passiva (percento)
Lunghezza del muro

0.0
10.00 [m]

Peso muro
Baricentro del muro

97.2600 [kN]
X=0.49 Y=-3.04

Superficie di spinta

Punto inferiore superficie di spinta
Punto superiore superficie di spinta

X = 2.70 Y = -4.20
X = 2.70 Y = 0.00

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Altezza della superficie di spinta	4.20	[m]
Inclinazione superficie di spinta (rispetto alla verticale)	0.00	[%]

COMBINAZIONE n° 1

Valore della spinta statica	53.3421	[kN]		
Componente orizzontale della spinta statica	48.9808	[kN]		
Componente verticale della spinta statica	21.1249	[kN]		
Punto d'applicazione della spinta	X = 2.70	[m]	Y = -2.66	[m]
Inclinaz. della spinta rispetto alla normale alla superficie	43.13	[%]		
Inclinazione linea di rottura in condizioni statiche	166.05	[%]		

Peso terrapieno gravante sulla fondazione a monte	206.8160	[kN]		
Baricentro terrapieno gravante sulla fondazione a monte	X = 1.44	[m]	Y = -1.75	[m]

Risultanti

Risultante dei carichi applicati in dir. orizzontale	48.9808	[kN]
Risultante dei carichi applicati in dir. verticale	325.2009	[kN]
Momento ribaltante rispetto allo spigolo a valle	75.2078	[kNm]
Momento stabilizzante rispetto allo spigolo a valle	663.8506	[kNm]
Sforzo normale sul piano di posa della fondazione	325.2009	[kN]
Sforzo tangenziale sul piano di posa della fondazione	48.9808	[kN]
Eccentricità rispetto al baricentro della fondazione	-0.06	[m]
Risultante in fondazione	328.8689	[kN]
Inclinazione della risultante (rispetto alla normale)	15.06	[%]
Momento rispetto al baricentro della fondazione	-20.1916	[kNm]
Carico ultimo della fondazione	4574.8454	[kN]

Tensioni sul terreno

Lunghezza fondazione reagente	3.50	[m]
Tensione terreno allo spigolo di valle	0.8475	[kg/cmq]
Tensione terreno allo spigolo di monte	1.0496	[kg/cmq]

Fattori per il calcolo della capacità portante

$N_c = 46.12$	$N'_c = 41.91$
$N_q = 33.30$	$N'_q = 28.76$
$N_\gamma = 37.15$	$N'_\gamma = 22.36$

COEFFICIENTI DI SICUREZZA

Coefficiente di sicurezza a ribaltamento	8.83
Coefficiente di sicurezza a scorrimento	2.86
Coefficiente di sicurezza a carico ultimo	14.07
Coefficiente di sicurezza a stabilità globale	2.08

Stabilità globale muro + terreno

Combinazione n° 1

Le ascisse X sono considerate positive verso monte
Le ordinate Y sono considerate positive verso l'alto
Origine in testa al muro (spigolo contro terra)

W	peso della striscia espresso in [kN]
α	angolo fra la base della striscia e l'orizzontale espresso in [°] (positivo antiorario)
ϕ	angolo d'attrito del terreno lungo la base della striscia
c	coesione del terreno lungo la base della striscia espressa in [kg/cmq]
b	larghezza della striscia espressa in [m]
u	pressione neutra lungo la base della striscia espressa in [kg/cmq]

Metodo di Fellenius

Numero di cerchi analizzati	36
Numero di strisce	25

Cerchio critico

Coordinate del centro	X[m]= -0.77	Y[m]= 0.77
Raggio del cerchio	R[m]= 6.06	
Ascissa a valle del cerchio	Xi[m]= -5.36	
Ascissa a monte del cerchio	Xs[m]= 5.25	
Larghezza della striscia	dx[m]= 0.42	
Coefficiente di sicurezza C=	2.08	

Le strisce sono numerate da monte verso valle

Caratteristiche delle strisce

Striscia	W	$\alpha(^{\circ})$	$W \sin \alpha$	$b / \cos \alpha$	ϕ	c	u
1	1105.71	74.72	1066.62	1.61	35.00	0.000	0.000
2	2139.31	63.01	1906.23	0.94	35.00	0.000	0.000
3	2763.39	55.08	2265.76	0.74	35.00	0.000	0.000
4	3234.70	48.54	2424.17	0.64	35.00	0.000	0.000
5	3612.82	42.78	2453.62	0.58	35.00	0.000	0.000

6	3924.01	37.51	2389.55	0.54	35.00	0.000	0.000
7	4310.32	32.60	2322.49	0.50	35.00	0.000	0.000
8	4527.66	27.95	2122.19	0.48	35.00	0.000	0.000
9	4705.09	23.49	1875.59	0.46	35.00	0.000	0.000
10	4848.92	19.18	1593.15	0.45	35.00	0.000	0.000
11	4962.05	14.98	1282.66	0.44	35.00	0.000	0.000
12	5180.07	10.86	976.12	0.43	35.00	0.000	0.000
13	5552.68	6.80	657.34	0.43	35.00	0.000	0.000
14	2192.98	2.77	105.99	0.43	35.00	0.000	0.000
15	1838.49	-1.24	-39.93	0.42	35.00	0.000	0.000
16	1784.89	-5.27	-163.80	0.43	35.00	0.000	0.000
17	1737.81	-9.31	-281.22	0.43	35.00	0.000	0.000
18	1663.85	-13.41	-385.81	0.44	35.00	0.000	0.000
19	1561.82	-17.57	-471.58	0.45	35.00	0.000	0.000
20	1429.94	-21.84	-531.95	0.46	35.00	0.000	0.000
21	1265.68	-26.24	-559.54	0.47	35.00	0.000	0.000
22	1065.48	-30.81	-545.72	0.49	35.00	0.000	0.000
23	824.21	-35.61	-479.94	0.52	35.00	0.000	0.000
24	534.30	-40.73	-348.61	0.56	35.00	0.000	0.000
25	183.84	-46.28	-132.86	0.61	35.00	0.000	0.000

 $\Sigma W_i = 656.5660$ [kN]

 $\Sigma W_i \sin \alpha_i = 191.2379$ [kN]

 $\Sigma W_i \cos \alpha_i \tan \phi_i = 397.4374$ [kN]

 $\Sigma c_i b_i / \cos \alpha_i = 0.0000$ [kN]

Sollecitazioni paramento

Combinazione n° 1

L'ordinata Y (espressa in m) è considerata positiva verso il basso con origine in testa al muro

Momento positivo se tende le fibre contro terra (a monte), espresso in kNm

Sforzo normale positivo di compressione, espresso in kN

Taglio positivo se diretto da monte verso valle, espresso in kN

Nr.	Y	N	M	T
1	0.00	0.0000	0.0000	0.0000
2	0.18	1.3944	0.0527	0.5367
3	0.36	2.8775	0.2312	1.2396
4	0.54	4.4493	0.5663	2.1072
5	0.72	6.1099	1.0884	3.1393
6	0.90	7.8593	1.8281	4.3358
7	1.08	9.6974	2.8158	5.6966
8	1.26	11.6242	4.0820	7.2219
9	1.44	13.6398	5.6571	8.9115
10	1.62	15.7441	7.5716	10.7656
11	1.80	17.9372	9.8561	12.7840
12	1.98	20.2190	12.5410	14.9669
13	2.16	22.5895	15.6567	17.3141
14	2.34	25.0488	19.2338	19.8258
15	2.52	27.5968	23.3027	22.5018
16	2.70	30.2336	27.8939	25.3422
17	2.88	32.9591	33.0379	28.3471
18	3.06	35.7734	38.7651	31.5163
19	3.24	38.6764	45.1061	34.8500
20	3.42	41.6682	52.0912	38.3480
21	3.60	44.7486	59.7498	41.9841

Sollecitazioni fondazione di valle

Combinazione n° 1

L'ascissa X (espressa in m) è considerata positiva verso monte con origine in corrispondenza dell'estremo libero della fondazione di valle

Momento positivo se tende le fibre inferiori, espresso in kNm

Taglio positivo se diretto verso l'alto, espresso in kN

Nr.	X	M	T
1	0.00	0.0000	0.0000
2	0.05	0.0853	3.4125
3	0.10	0.3415	6.8392
4	0.15	0.7694	10.2801
5	0.20	1.3697	13.7351
6	0.25	2.1432	17.2043
7	0.30	3.0904	20.6877
8	0.35	4.2122	24.1853
9	0.40	5.5092	27.6970
10	0.45	6.9821	31.2230
11	0.50	8.6317	34.7631

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Sollecitazioni fondazione di monte

Combinazione n° 1

L'ascissa X(espressa in m) è considerata positiva verso valle con origine in corrispondenza dell'estremo libero della fondazione di monte

Momento positivo se tende le fibre inferiori, espresso in kNm

Taglio positivo se diretto verso l'alto, espresso in kN

Nr.	X	M	T
1	0.00	0.0000	0.0000
2	0.23	0.1454	1.2147
3	0.46	0.5357	2.1293
4	0.69	1.1019	2.7440
5	0.92	1.7750	3.0587
6	1.15	2.4860	3.0735
7	1.38	3.1658	2.7882
8	1.61	3.7455	2.2030
9	1.84	4.1562	1.3178
10	2.07	4.3287	0.1326
11	2.30	4.1942	-1.3526

COMBINAZIONE n° 2

Valore della spinta statica	43.0794	[kN]		
Componente orizzontale della spinta statica	39.5572	[kN]		
Componente verticale della spinta statica	17.0606	[kN]		
Punto d'applicazione della spinta	X = 2.70	[m]	Y = -2.80	[m]
Inclinaz. della spinta rispetto alla normale alla superficie	43.13	[%]		
Inclinazione linea di rottura in condizioni statiche	166.05	[%]		

Incremento sismico della spinta	4.0574	[kN]		
Punto d'applicazione dell'incremento sismico di spinta	X = 2.70	[m]	Y = -1.40	[m]
Inclinazione linea di rottura in condizioni sismiche	154.02	[%]		

Peso terrapieno gravante sulla fondazione a monte	179.8560	[kN]		
Baricentro terrapieno gravante sulla fondazione a monte	X = 1.44	[m]	Y = -1.75	[m]
Inerzia del muro	3.8904	[kN]		
Inerzia del terrapieno fondazione di monte	7.1942	[kN]		

Risultanti

Risultante dei carichi applicati in dir. orizzontale	54.3675	[kN]
Risultante dei carichi applicati in dir. verticale	295.7834	[kN]
Momento ribaltante rispetto allo spigolo a valle	87.9671	[kNm]
Momento stabilizzante rispetto allo spigolo a valle	594.7506	[kNm]
Sforzo normale sul piano di posa della fondazione	295.7834	[kN]
Sforzo tangenziale sul piano di posa della fondazione	54.3675	[kN]
Eccentricità rispetto al baricentro della fondazione	0.03	[m]
Risultante in fondazione	300.7385	[kN]
Inclinazione della risultante (rispetto alla normale)	18.38	[%]
Momento rispetto al baricentro della fondazione	10.2459	[kNm]
Carico ultimo della fondazione	4199.0618	[kN]

Tensioni sul terreno

Lunghezza fondazione reagente	3.50	[m]
Tensione terreno allo spigolo di valle	0.9140	[kg/cmq]
Tensione terreno allo spigolo di monte	0.8114	[kg/cmq]

Fattori per il calcolo della capacità portante

$N_c = 46.12$	$N'_c = 40.03$
$N_q = 33.30$	$N'_q = 27.47$
$N_\gamma = 37.15$	$N'_\gamma = 19.34$

COEFFICIENTI DI SICUREZZA

Coefficiente di sicurezza a ribaltamento	6.76
Coefficiente di sicurezza a scorrimento	2.35
Coefficiente di sicurezza a carico ultimo	14.20
Coefficiente di sicurezza a stabilità globale	2.11

Stabilità globale muro + terreno

Combinazione n° 2

Le ascisse X sono considerate positive verso monte

Le ordinate Y sono considerate positive verso l'alto

Origine in testa al muro (spigolo contro terra)

W peso della striscia espresso in [kN]

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α angolo fra la base della striscia e l'orizzontale espresso in [°] (positivo antiorario)
 ϕ angolo d'attrito del terreno lungo la base della striscia
 c coesione del terreno lungo la base della striscia espressa in [kg/cmq]
 b larghezza della striscia espressa in [m]
 u pressione neutra lungo la base della striscia espressa in [kg/cmq]

Metodo di Fellenius

Numero di cerchi analizzati 36
Numero di strisce 25

Cerchio critico

Coordinate del centro X[m]= -0.77 Y[m]= 0.77

Raggio del cerchio R[m]= 6.06

Ascissa a valle del cerchio Xi[m]= -5.36

Ascissa a monte del cerchio Xs[m]= 5.25

Larghezza della striscia dx[m]= 0.42

Coefficiente di sicurezza C= 2.11

Le strisce sono numerate da monte verso valle

Caratteristiche delle strisce

Striscia	W	$\alpha(^{\circ})$	$W\sin\alpha$	$b/\cos\alpha$	ϕ	c	u
1	672.78	74.72	648.99	1.61	35.00	0.000	0.000
2	1706.38	63.01	1520.47	0.94	35.00	0.000	0.000
3	2330.46	55.08	1910.79	0.74	35.00	0.000	0.000
4	2801.77	48.54	2099.72	0.64	35.00	0.000	0.000
5	3179.89	42.78	2159.60	0.58	35.00	0.000	0.000
6	3491.08	37.51	2125.91	0.54	35.00	0.000	0.000
7	3877.39	32.60	2089.22	0.50	35.00	0.000	0.000
8	4094.73	27.95	1919.26	0.48	35.00	0.000	0.000
9	4272.15	23.49	1703.01	0.46	35.00	0.000	0.000
10	4415.99	19.18	1450.91	0.45	35.00	0.000	0.000
11	4529.12	14.98	1170.75	0.44	35.00	0.000	0.000
12	4747.14	10.86	894.54	0.43	35.00	0.000	0.000
13	5393.68	6.80	638.52	0.43	35.00	0.000	0.000
14	2192.98	2.77	105.99	0.43	35.00	0.000	0.000
15	1838.49	-1.24	-39.93	0.42	35.00	0.000	0.000
16	1784.89	-5.27	-163.80	0.43	35.00	0.000	0.000
17	1737.81	-9.31	-281.22	0.43	35.00	0.000	0.000
18	1663.85	-13.41	-385.81	0.44	35.00	0.000	0.000
19	1561.82	-17.57	-471.58	0.45	35.00	0.000	0.000
20	1429.94	-21.84	-531.95	0.46	35.00	0.000	0.000
21	1265.68	-26.24	-559.54	0.47	35.00	0.000	0.000
22	1065.48	-30.81	-545.72	0.49	35.00	0.000	0.000
23	824.21	-35.61	-479.94	0.52	35.00	0.000	0.000
24	534.30	-40.73	-348.61	0.56	35.00	0.000	0.000
25	183.84	-46.28	-132.86	0.61	35.00	0.000	0.000

$\Sigma W_i = 604.0587$ [kN]

$\Sigma W_i \sin\alpha_i = 161.7803$ [kN]

$\Sigma W_i \cos\alpha_i \tan\phi_i = 369.5539$ [kN]

$\Sigma c_i b_i / \cos\alpha_i = 0.0000$ [kN]

Sollecitazioni paramento

Combinazione n° 2

L'ordinata Y (espressa in m) è considerata positiva verso il basso con origine in testa al muro

Momento positivo se tende le fibre contro terra (a monte), espresso in kNm

Sforzo normale positivo di compressione, espresso in kN

Taglio positivo se diretto da monte verso valle, espresso in kN

Nr.	Y	N	M	T
1	0.00	0.0000	0.0000	0.0000
2	0.18	1.3944	0.0415	0.4105
3	0.36	2.8775	0.1850	0.9750
4	0.54	4.4493	0.4592	1.6934
5	0.72	6.1099	0.8927	2.5659
6	0.90	7.8593	1.5140	3.5922
7	1.08	9.6974	2.3518	4.7726
8	1.26	11.6242	3.4346	6.1070
9	1.44	13.6398	4.7910	7.5953
10	1.62	15.7441	6.4498	9.2375
11	1.80	17.9372	8.4394	11.0338
12	1.98	20.2190	10.7884	12.9840
13	2.16	22.5895	13.5255	15.0882
14	2.34	25.0488	16.6793	17.3464
15	2.52	27.5968	20.2783	19.7585
16	2.70	30.2336	24.3512	22.3247

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17	2.88	32.9591	28.9265	25.0448
18	3.06	35.7734	34.0329	27.9188
19	3.24	38.6764	39.6990	30.9469
20	3.42	41.6682	45.9533	34.1289
21	3.60	44.7486	52.8233	37.4385

Sollecitazioni fondazione di valle

Combinazione n° 2

L'ascissa X(espressa in m) è considerata positiva verso monte con origine in corrispondenza dell'estremo libero della fondazione di valle

Momento positivo se tende le fibre inferiori, espresso in kNm

Taglio positivo se diretto verso l'alto, espresso in kN

Nr.	X	M	T
1	0.00	0.0000	0.0000
2	0.05	0.0932	3.7282
3	0.10	0.3727	7.4492
4	0.15	0.8380	11.1630
5	0.20	1.4889	14.8697
6	0.25	2.3249	18.5691
7	0.30	3.3457	22.2614
8	0.35	4.5509	25.9464
9	0.40	5.9402	29.6243
10	0.45	7.5132	33.2949
11	0.50	9.2696	36.9584

Sollecitazioni fondazione di monte

Combinazione n° 2

L'ascissa X(espressa in m) è considerata positiva verso valle con origine in corrispondenza dell'estremo libero della fondazione di monte

Momento positivo se tende le fibre inferiori, espresso in kNm

Taglio positivo se diretto verso l'alto, espresso in kN

Nr.	X	M	T
1	0.00	0.0000	0.0000
2	0.23	-0.1905	-1.6313
3	0.46	-0.7387	-3.1104
4	0.69	-1.6097	-4.4373
5	0.92	-2.7682	-5.6120
6	1.15	-4.1795	-6.6345
7	1.38	-5.8084	-7.5047
8	1.61	-7.6200	-8.2227
9	1.84	-9.5792	-8.7885
10	2.07	-11.6510	-9.2020
11	2.30	-13.8005	-9.4634

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11.4. Muro sbocco – input e output

Geometria muro e fondazione

Descrizione	Muro a mensola in c.a.
Altezza del paramento	5.40 [m]
Spessore in sommità	0.40 [m]
Spessore all'attacco con la fondazione	0.94 [m]
Inclinazione paramento esterno	0.00 [%]
Inclinazione paramento interno	10.00 [%]
Lunghezza del muro	10.00 [m]
<u>Fondazione</u>	
Lunghezza mensola fondazione di valle	0.40 [m]
Lunghezza mensola fondazione di monte	3.46 [m]
Lunghezza totale fondazione	4.80 [m]
Inclinazione piano di posa della fondazione	0.00 [%]
Spessore fondazione	0.90 [m]
Spessore magrone	0.20 [m]

Materiali utilizzati per la struttura

<i>Calcestruzzo</i>	
Peso specifico	25.000 [kN/mc]
Resistenza caratteristica a compressione R_{bk}	250.0 [kg/cm ²]
Tensione ammissibile a compressione σ_c	85.0 [kg/cm ²]
Tensione tangenziale ammissibile τ_{c0}	5.3 [kg/cm ²]
Tensione tangenziale ammissibile τ_{c1}	16.9 [kg/cm ²]
<i>Acciaio</i>	
Tipo	FeB44K
Tensione ammissibile σ_{ba}	2600.0 [kg/cm ²]

Geometria profilo terreno a monte del muro

Simbologia adottata e sistema di riferimento

(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
1	10.00	0.00	0.00

Terreno a valle del muro

Inclinazione terreno a valle del muro rispetto all'orizzontale	0.00	[%]
Altezza del rinterro rispetto all'attacco fondaz.valle-paramento	0.90	[m]

Descrizione terreni

Simbologia adottata

Nr.	Indice del terreno
Descrizione	Descrizione terreno
γ	Peso di volume del terreno espresso in [kN/mc]
γ_s	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 [kg/cm ²]
c_a	Adesione terra-muro espressa in [kg/cm ²]

Descrizione	γ	γ_s	ϕ	δ	c	c_a
Rilevato	20.00	20.00	35.00	23.33	0.000	0.000
FI3	19.00	19.00	28.00	18.67	0.000	0.000
fc alterata	21.00	21.00	21.00	14.00	0.150	0.000

Stratigrafia

Simbologia adottata

N	Indice dello strato
H	Spessore dello strato espresso in [m]
a	Inclinazione espressa in [%]
Kw	Costante di Winkler orizzontale espressa in Kg/cm ² /cm
Ks	Coefficiente di spinta
Terreno	Terreno dello strato

Nr.	H	a	Kw	Ks	Terreno
1	6.30	0.00	12.51	0.00	Rilevato
2	6.80	0.00	3.35	0.00	fc alterata

Condizioni di carico

Simbologia e convenzioni di segno adottate

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/m]
Q _f	Intensità del carico per x=X _f espressa in [kN/m]
D / C	Tipo carico : D=distribuito C=concentrato

Condizione n° 1 (Sovraccarico stradale)

D	Profilo	X _i =0.00	X _f =10.00	Q _i =10.0000	Q _f =10.0000
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Descrizione combinazioni di carico

Simbologia adottata

C Coefficiente totale di partecipazione della condizione

Combinazione n° 1 Tensioni ammissibili

	C
Peso proprio	1.00
Spinta terreno	1.00
Sovraccarico stradale	1.00

Combinazione n° 2 Tensioni ammissibili - Sismica

	C
Peso proprio	1.00
Spinta terreno	1.00

Impostazioni di analisi

Metodo verifica sezioni

Tensioni ammissibili

Impostazioni avanzate

Diagramma correttivo per eccentricità negativa con aliquota di parzializzazione pari a 0.00

Quadro riassuntivo coeff. di sicurezza calcolati

Simbologia adottata

C	Identificativo della combinazione
Tipo	Tipo combinazione
Sisma	Combinazione sismica
CS _{SCO}	Coeff. di sicurezza allo scorrimento
CS _{RIB}	Coeff. di sicurezza al ribaltamento
CS _{QLIM}	Coeff. di sicurezza a carico limite
CS _{STAB}	Coeff. di sicurezza a stabilità globale

C	Tipo	Sisma	CS _{SCO}	CS _{RIB}	CS _{qlim}	CS _{stab}
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1	TAMM - [2]	--	1.65	7.94	3.38	1.87
2	TAMM - [3]	Orizzontale	1.32	5.80	3.09	1.86

Analisi della spinta e verifiche

Sistema di riferimento adottato per le coordinate :

Origine in testa al muro (spigolo di monte)

Ascisse X (esprese in [m]) positive verso monte

Ordinate Y (esprese in [m]) positive verso l'alto

Le forze orizzontali sono considerate positive se agenti da monte verso valle

Le forze verticali sono considerate positive se agenti dall'alto verso il basso

Calcolo riferito ad 1 metro di muro

Tipo di analisi

Calcolo della spinta

Calcolo del carico limite

Calcolo della stabilità globale

Calcolo della spinta in condizioni di

metodo di Culmann

metodo di Meyerhof

metodo di Fellenius

Spinta attiva

Sisma

Coefficiente di intensità sismica (percento)

Forma diagramma incremento sismico

4.00

Triangolare con vertice in basso

Partecipazione spinta passiva (percento)

Lunghezza del muro

0.0

10.00 [m]

Peso muro

Baricentro del muro

198.4500 [kN]

X=0.85 Y=-4.58

Superficie di spinta

Punto inferiore superficie di spinta

Punto superiore superficie di spinta

Altezza della superficie di spinta

Inclinazione superficie di spinta (rispetto alla verticale)

X = 4.00 Y = -6.30

X = 4.00 Y = 0.00

6.30 [m]

0.00 [%]

COMBINAZIONE n° 1

Valore della spinta statica

Componente orizzontale della spinta statica

Componente verticale della spinta statica

Punto d'applicazione della spinta

Inclinaz. della spinta rispetto alla normale alla superficie

Inclinazione linea di rottura in condizioni statiche

112.5887 [kN]

103.3833 [kN]

44.5881 [kN]

X = 4.00 [m]

43.13 [%]

122.33 [%]

Y = -4.06 [m]

Peso terrapieno gravante sulla fondazione a monte

Baricentro terrapieno gravante sulla fondazione a monte

442.8400 [kN]

X = 2.13 [m]

Y = -2.63 [m]

Risultanti

Risultante dei carichi applicati in dir. orizzontale

Risultante dei carichi applicati in dir. verticale

Momento ribaltante rispetto allo spigolo a valle

Momento stabilizzante rispetto allo spigolo a valle

Sforzo normale sul piano di posa della fondazione

Sforzo tangenziale sul piano di posa della fondazione

Eccentricità rispetto al baricentro della fondazione

Risultante in fondazione

Inclinazione della risultante (rispetto alla normale)

Momento rispetto al baricentro della fondazione

Carico ultimo della fondazione

103.3833 [kN]

685.8781 [kN]

231.6158 [kNm]

1839.6367 [kNm]

685.8781 [kN]

103.3833 [kN]

0.06 [m]

693.6259 [kN]

15.07 [%]

38.0865 [kNm]

2319.3202 [kN]

Tensioni sul terreno

Lunghezza fondazione reagente

Tensione terreno allo spigolo di valle

Tensione terreno allo spigolo di monte

4.80 [m]

1.5582 [kg/cm²]

1.3559 [kg/cm²]

Fattori per il calcolo della capacità portante

N_c = 15.81

N_q = 7.07

N_γ = 3.42

N_c' = 14.36

N_q' = 6.10

N_γ' = 1.26

COEFFICIENTI DI SICUREZZA

Coefficiente di sicurezza a ribaltamento

7.94

Coefficiente di sicurezza a scorrimento	1.65
Coefficiente di sicurezza a carico ultimo	3.38
Coefficiente di sicurezza a stabilità globale	1.87

Stabilità globale muro + terreno

Combinazione n° 1

Le ascisse X sono considerate positive verso monte

Le ordinate Y sono considerate positive verso l'alto

Origine in testa al muro (spigolo contro terra)

W	peso della striscia espresso in [kN]
α	angolo fra la base della striscia e l'orizzontale espresso in [°] (positivo antiorario)
ϕ	angolo d'attrito del terreno lungo la base della striscia
c	coesione del terreno lungo la base della striscia espressa in [kg/cmq]
b	larghezza della striscia espressa in [m]
u	pressione neutra lungo la base della striscia espressa in [kg/cmq]

Metodo di Fellenius

Numero di cerchi analizzati 36

Numero di strisce 25

Cerchio critico

Coordinate del centro X[m]= -0.58 Y[m]= 0.00

Raggio del cerchio R[m]= 7.79

Ascissa a valle del cerchio Xi[m]= -6.94

Ascissa a monte del cerchio Xs[m]= 7.21

Larghezza della striscia dx[m]= 0.57

Coefficiente di sicurezza C= 1.87

Le strisce sono numerate da monte verso valle

Caratteristiche delle strisce

Striscia	W	$\alpha(^{\circ})$	$W\sin\alpha$	$b/\cos\alpha$	ϕ	c	u
1	2259.98	79.01	2218.52	2.97	35.00	0.000	0.000
2	4594.35	63.37	4106.83	1.26	35.00	0.000	0.000
3	5714.07	55.07	4684.91	0.99	35.00	0.000	0.000
4	6548.93	48.30	4889.74	0.85	35.00	0.000	0.000
5	7213.66	42.35	4859.41	0.77	35.00	0.000	0.000
6	7843.81	36.92	4712.10	0.71	30.68	0.046	0.000
7	8480.98	31.86	4477.09	0.67	21.00	0.150	0.000
8	8867.37	27.07	4035.44	0.64	21.00	0.150	0.000
9	9183.01	22.48	3510.66	0.61	21.00	0.150	0.000
10	9435.41	18.03	2920.48	0.60	21.00	0.150	0.000
11	9629.79	13.70	2279.93	0.58	21.00	0.150	0.000
12	9807.16	9.44	1608.35	0.57	21.00	0.150	0.000
13	10779.78	5.24	983.57	0.57	21.00	0.150	0.000
14	7068.99	1.06	130.69	0.57	21.00	0.150	0.000
15	3895.70	-3.11	-211.40	0.57	21.00	0.150	0.000
16	3797.83	-7.30	-482.40	0.57	21.00	0.150	0.000
17	3683.92	-11.52	-735.97	0.58	21.00	0.150	0.000
18	3516.75	-15.82	-958.46	0.59	21.00	0.150	0.000
19	3293.27	-20.20	-1137.20	0.60	21.00	0.150	0.000
20	3009.07	-24.71	-1258.07	0.62	21.00	0.150	0.000
21	2657.77	-29.40	-1304.67	0.65	21.00	0.150	0.000
22	2230.55	-34.31	-1257.39	0.69	21.00	0.150	0.000
23	1730.14	-39.54	-1101.38	0.73	35.00	0.000	0.000
24	1131.30	-45.20	-802.68	0.80	35.00	0.000	0.000
25	391.34	-51.50	-306.27	0.91	35.00	0.000	0.000

$\Sigma W_i = 1341.2272$ [kN]

$\Sigma W_i \sin\alpha_i = 351.6899$ [kN]

$\Sigma W_i \cos\alpha_i \tan\phi_i = 512.8253$ [kN]

$\Sigma c_i b_i / \cos\alpha_i = 145.4248$ [kN]

Sollecitazioni paramento

Combinazione n° 1

L'ordinata Y (espressa in m) è considerata positiva verso il basso con origine in testa al muro

Momento positivo se tende le fibre contro terra (a monte), espresso in kNm

Sforzo normale positivo di compressione, espresso in kN

Taglio positivo se diretto da monte verso valle, espresso in kN

Nr.	Y	N	M	T
1	0.00	0.0000	0.0000	0.0000
2	0.27	2.7908	0.1264	0.8589

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3	0.54	5.7633	0.5734	2.0858
4	0.81	8.9174	1.4427	3.6792
5	1.08	12.2532	2.8356	5.6387
6	1.35	15.7706	4.8534	7.9643
7	1.62	19.4696	7.5975	10.6561
8	1.89	23.3503	11.1692	13.7140
9	2.16	27.4127	15.6698	17.1381
10	2.43	31.6567	21.2007	20.9283
11	2.70	36.0823	27.8631	25.0846
12	2.97	40.6896	35.7584	29.6071
13	3.24	45.4785	44.9879	34.4957
14	3.51	50.4491	55.6530	39.7504
15	3.78	55.6013	67.8549	45.3713
16	4.05	60.9352	81.6950	51.3583
17	4.32	66.4507	97.2747	57.7114
18	4.59	72.1479	114.6952	64.4307
19	4.86	78.0267	134.0578	71.5161
20	5.13	84.0871	155.4640	78.9677
21	5.40	90.3292	179.0107	86.7268

Sollecitazioni fondazione di valle

Combinazione n° 1

L'ascissa X(espressa in m) è considerata positiva verso monte con origine in corrispondenza dell'estremo libero della fondazione di valle

Momento positivo se tende le fibre inferiori, espresso in kNm

Taglio positivo se diretto verso l'alto, espresso in kN

Nr.	X	M	T
1	0.00	0.0000	0.0000
2	0.04	0.1042	5.2091
3	0.08	0.4166	10.4115
4	0.12	0.9370	15.6074
5	0.16	1.6651	20.7966
6	0.20	2.6007	25.9793
7	0.24	3.7434	31.1553
8	0.28	5.0930	36.3247
9	0.32	6.6493	41.4875
10	0.36	8.4119	46.6437
11	0.40	10.3807	51.7932

Sollecitazioni fondazione di monte

Combinazione n° 1

L'ascissa X(espressa in m) è considerata positiva verso valle con origine in corrispondenza dell'estremo libero della fondazione di monte

Momento positivo se tende le fibre inferiori, espresso in kNm

Taglio positivo se diretto verso l'alto, espresso in kN

Nr.	X	M	T
1	0.00	0.0000	0.0000
2	0.35	-0.4220	-2.3570
3	0.69	-1.5740	-4.2193
4	1.04	-3.2847	-5.5868
5	1.38	-5.3830	-6.4595
6	1.73	-7.6976	-6.8376
7	2.08	-10.0575	-6.7208
8	2.42	-12.2914	-6.1094
9	2.77	-14.2281	-5.0032
10	3.11	-15.6965	-3.4022
11	3.46	-16.5254	-1.3065

COMBINAZIONE n° 2

Valore della spinta statica	97.1736	[kN]		
Componente orizzontale della spinta statica	89.2286	[kN]		
Componente verticale della spinta statica	38.4833	[kN]		
Punto d'applicazione della spinta	X = 4.00	[m]	Y = -4.20	[m]
Inclinaz. della spinta rispetto alla normale alla superficie	43.13	[%]		
Inclinazione linea di rottura in condizioni statiche	122.33	[%]		
Incremento sismico della spinta	9.1043	[kN]		
Punto d'applicazione dell'incremento sismico di spinta	X = 4.00	[m]	Y = -2.10	[m]
Inclinazione linea di rottura in condizioni sismiche	114.22	[%]		
Peso terrapieno gravante sulla fondazione a monte	402.8400	[kN]		
Baricentro terrapieno gravante sulla fondazione a monte	X = 2.13	[m]	Y = -2.63	[m]
Inerzia del muro	7.9380	[kN]		
Inerzia del terrapieno fondazione di monte	16.1136	[kN]		

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Risultanti

Risultante dei carichi applicati in dir. orizzontale	121.6401	[kN]
Risultante dei carichi applicati in dir. verticale	643.3788	[kN]
Momento ribaltante rispetto allo spigolo a valle	294.9159	[kNm]
Momento stabilizzante rispetto allo spigolo a valle	1710.3706	[kNm]
Sforzo normale sul piano di posa della fondazione	643.3788	[kN]
Sforzo tangenziale sul piano di posa della fondazione	121.6401	[kN]
Eccentricità rispetto al baricentro della fondazione	0.20	[m]
Risultante in fondazione	654.7768	[kN]
Inclinazione della risultante (rispetto alla normale)	18.91	[%]
Momento rispetto al baricentro della fondazione	128.6545	[kNm]
Carico ultimo della fondazione	1990.3440	[kN]

Tensioni sul terreno

Lunghezza fondazione reagente	4.80	[m]
Tensione terreno allo spigolo di valle	1.7084	[kg/cmq]
Tensione terreno allo spigolo di monte	1.0251	[kg/cmq]

Fattori per il calcolo della capacità portante

$N_c = 15.81$	$N'_c = 13.62$
$N_q = 7.07$	$N'_q = 5.79$
$N_\gamma = 3.42$	$N'_\gamma = 0.87$

COEFFICIENTI DI SICUREZZA

Coefficiente di sicurezza a ribaltamento	5.80
Coefficiente di sicurezza a scorrimento	1.32
Coefficiente di sicurezza a carico ultimo	3.09
Coefficiente di sicurezza a stabilità globale	1.86

Stabilità globale muro + terreno

Combinazione n° 2

Le ascisse X sono considerate positive verso monte

Le ordinate Y sono considerate positive verso l'alto

Origine in testa al muro (spigolo contro terra)

W	peso della striscia espresso in [kN]
α	angolo fra la base della striscia e l'orizzontale espresso in [°] (positivo antiorario)
ϕ	angolo d'attrito del terreno lungo la base della striscia
c	coesione del terreno lungo la base della striscia espressa in [kg/cmq]
b	larghezza della striscia espressa in [m]
u	pressione neutra lungo la base della striscia espressa in [kg/cmq]

Metodo di Fellenius

Numero di cerchi analizzati 36

Numero di strisce 25

Cerchio critico

Coordinate del centro X[m]= -0.58 Y[m]= 0.58

Raggio del cerchio R[m]= 8.26

Ascissa a valle del cerchio Xi[m]= -7.10

Ascissa a monte del cerchio Xs[m]= 7.67

Larghezza della striscia dx[m]= 0.59

Coefficiente di sicurezza C= 1.86

Le strisce sono numerate da monte verso valle

Caratteristiche delle strisce

Striscia	W	α (°)	Wsin α	b/cos α	ϕ	c	u
1	1523.33	76.85	1483.37	2.60	35.00	0.000	0.000
2	3755.76	63.35	3356.68	1.32	35.00	0.000	0.000
3	4976.65	55.18	4085.74	1.03	35.00	0.000	0.000
4	5890.69	48.50	4411.76	0.89	35.00	0.000	0.000
5	6620.46	42.62	4482.85	0.80	35.00	0.000	0.000
6	7218.68	37.26	4370.23	0.74	35.00	0.000	0.000
7	7934.31	32.26	4234.91	0.70	24.16	0.116	0.000
8	8418.37	27.52	3890.29	0.67	21.00	0.150	0.000
9	8769.62	22.99	3424.65	0.64	21.00	0.150	0.000
10	9052.39	18.60	2886.99	0.62	21.00	0.150	0.000
11	9272.43	14.32	2293.41	0.61	21.00	0.150	0.000
12	9433.77	10.12	1658.06	0.60	21.00	0.150	0.000
13	10287.69	5.98	1071.82	0.59	21.00	0.150	0.000
14	8750.26	1.87	285.37	0.59	21.00	0.150	0.000
15	3987.35	-2.23	-155.34	0.59	21.00	0.150	0.000
16	3848.44	-6.35	-425.37	0.59	21.00	0.150	0.000
17	3737.67	-10.49	-680.65	0.60	21.00	0.150	0.000
18	3570.44	-14.70	-905.76	0.61	21.00	0.150	0.000
19	3343.89	-18.98	-1087.66	0.62	21.00	0.150	0.000
20	3053.76	-23.38	-1211.92	0.64	21.00	0.150	0.000

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21	2694.01	-27.94	-1262.06	0.67	21.00	0.150	0.000
22	2257.18	-32.69	-1219.10	0.70	21.00	0.150	0.000
23	1748.21	-37.72	-1069.49	0.75	35.00	0.000	0.000
24	1139.70	-43.12	-778.97	0.81	35.00	0.000	0.000
25	396.25	-49.05	-299.30	0.90	35.00	0.000	0.000

$\Sigma W_i = 1291.3730$ [kN]
 $\Sigma W_i \sin \alpha_i = 322.0606$ [kN]
 $\Sigma W_i \cos \alpha_i \tan \phi_i = 505.4889$ [kN]
 $\Sigma c_i b_i / \cos \alpha_i = 145.6885$ [kN]

Sollecitazioni paramento

Combinazione n° 2

L'ordinata Y (espressa in m) è considerata positiva verso il basso con origine in testa al muro
Momento positivo se tende le fibre contro terra (a monte), espresso in kNm
Sforzo normale positivo di compressione, espresso in kN
Taglio positivo se diretto da monte verso valle, espresso in kN

Nr.	Y	N	M	T
1	0.00	0.0000	0.0000	0.0000
2	0.27	2.7908	0.1334	0.9069
3	0.54	5.7633	0.5969	2.1558
4	0.81	8.9174	1.4853	3.7467
5	1.08	12.2532	2.8934	5.6796
6	1.35	15.7706	4.9160	7.9546
7	1.62	19.4696	7.6479	10.5715
8	1.89	23.3503	11.1839	13.5304
9	2.16	27.4127	15.6189	16.8314
10	2.43	31.6567	21.0476	20.4744
11	2.70	36.0823	27.5649	24.4593
12	2.97	40.6896	35.2655	28.7863
13	3.24	45.4785	44.2443	33.4553
14	3.51	50.4491	54.5961	38.4663
15	3.78	55.6013	66.4157	43.8193
16	4.05	60.9352	79.7979	49.5143
17	4.32	66.4507	94.8375	55.5513
18	4.59	72.1479	111.6294	61.9303
19	4.86	78.0267	130.2683	68.6513
20	5.13	84.0871	150.8490	75.7143
21	5.40	90.3292	173.4622	83.0608

Sollecitazioni fondazione di valle

Combinazione n° 2

L'ascissa X (espressa in m) è considerata positiva verso monte con origine in corrispondenza dell'estremo libero della fondazione di valle
Momento positivo se tende le fibre inferiori, espresso in kNm
Taglio positivo se diretto verso l'alto, espresso in kN

Nr.	X	M	T
1	0.00	0.0000	0.0000
2	0.04	0.1159	5.7905
3	0.08	0.4629	11.5586
4	0.12	1.0403	17.3044
5	0.16	1.8470	23.0279
6	0.20	2.8822	28.7290
7	0.24	4.1450	34.4078
8	0.28	5.6345	40.0643
9	0.32	7.3499	45.6984
10	0.36	9.2901	51.3102
11	0.40	11.4544	56.8996

Sollecitazioni fondazione di monte

Combinazione n° 2

L'ascissa X (espressa in m) è considerata positiva verso valle con origine in corrispondenza dell'estremo libero della fondazione di monte
Momento positivo se tende le fibre inferiori, espresso in kNm
Taglio positivo se diretto verso l'alto, espresso in kN

Nr.	X	M	T
1	0.00	0.0000	0.0000
2	0.35	-1.6974	-9.5328
3	0.69	-6.4040	-17.3944

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4	1.04	-13.5415	-23.5847
5	1.38	-22.5318	-28.1039
6	1.73	-32.7967	-30.9518
7	2.08	-43.7577	-32.1285
8	2.42	-54.8368	-31.6339
9	2.77	-65.4556	-29.4682
10	3.11	-75.0360	-25.6312
11	3.46	-82.9997	-20.1229