REGIONE SICILIA

PROVINCIA DI PALERMO
COMUNI DI CASTELLANA SICULA - PETRALIA SOTTANA

PROVINCIA DI CALTANISSETTA
COMUNI DI RESUTTANO - SANTA CATERINA VILLARMOSA - VILLALBA

Il Committente:

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Il Progettista:

Agon engineering

Entrope srl

dott. ing. VITTORIO RANDAZZO

dott. ing. VINCENZO DI MARCO

Titolo del progetto:

PARCO EOLICO "SAN NICOLA" POTENZA NOMINALE 39,6 MW

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PROGETTO DEFINITIVO	NPS7_RES_D10_REL

ID PROGETTO:				TIPOLOGIA:		FORMATO:	A4

TITOLO:

RELAZIONE DI PREDIMENSIONAMENTO DELLE FONDAZIONI

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INTESTAZIONE

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RELAZIONE TECNICA

OGGETTO: Predimensionamento opere di fondazione per il parco eolico “San Nicola” sito in C.da Manche di Raffa nel comune di Resuttano (CL).

1. GENERALITA'.

La seguente relazione di calcolo preliminare si riferisce al predimensionamento del plinto di fondazione tipo di una torre-aerogeneratore del tipo SG 6.6-170 da installarsi in agro del comune di Resuttano della provincia di Caltanissetta nell’ambito del parco comprendente n.6 torri eoliche da 6.6 Mw cadauna per complessivi 36.6 Mw.

Tutte le calcolazioni sono state eseguite nel rispetto dei metodi della Scienza delle Costruzioni ed in ossequio alle normative attualmente vigenti. In particolare, il criterio di progettazione e verifica adottato è quello degli stati limite.

Il predimensionamento geometrico delle opere in calcestruzzo armato e il progetto delle relative armature, ha come supporto le sollecitazioni al piede della torre fornite dal produttore dell'aerogeneratore.

Sulla scorta dei risultati delle prove sui terreni oggetto dell'intervento di che trattasi di cui alla relazione geologica redatta dal Dott. Geol. Giuseppe Massimo Volo si sono individuate le caratteristiche geotecniche degli stessi nonché la scelta della tipologia fondale da porre in essere. La quantificazione delle opere sarà eseguita in fase di progettazione esecutiva, a valle di una più dettagliata indagine geologica e geotecnica come previsto dalle normative vigenti.

Il rotore dell’aerogeneratore Siemens Gamesa SG 6.6-170 ha un diametro di 170 m, cui corrisponde un’area spazzata di circa 22.498,00 m^2.

Esso è costituito da tre pale rotoriche che sviluppano la potenza nominale effettiva di 6600 KW.

La turbina eolica è installata in sommità di una torre tubolare costituita da n. 4 elementi tronco-conici in acciaio di differenti dimensioni, che raggiungono un’altezza al mozzo di 115÷125 ml ed un'altezza complessiva di 200÷210 ml dal piano campagna.

2. DESCRIZIONE.

Il plinto calcolato è costituito da un prisma regolare a base circolare sormontato da un cilindro di cui di seguito si riportano le caratteristiche geometriche.

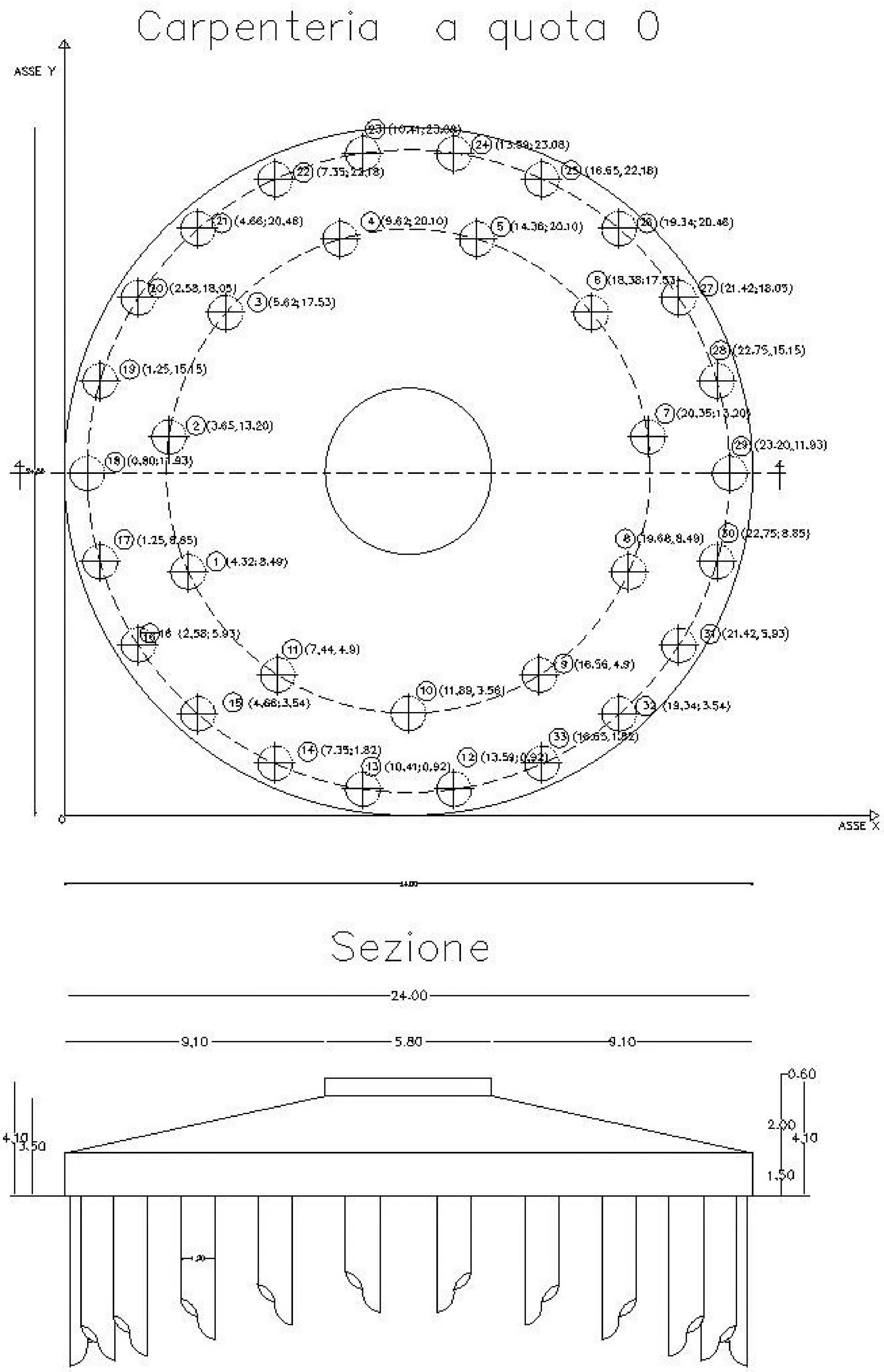


Figura 1

Sulla base delle caratteristiche dei terreni interessati, evidenziate dai risultati delle prove di cui alla relazione geologica a firma del dott. Volo, si ritiene opportuno porre il plinto di fondazione del diametro di mt 24.00, su fondazione indiretta costituita da n.33 pali dello Φ= 120 cm disposti su due file concentriche, disposti secondo la figura, ammorsati nei terreni fondali per mt.25,00. La distanza fra i pali della fila esterna e il centro della fondazione (Dext) è di 11,20 mt , mentre quella fra i pali della fila interna e il centro della fondazione (Dint) è di 8,44 mt. L'interasse tra i pali è pari a 3.20 mt. per la fila esterna e a 4.82 mt. per la fila interna.

Nell'esecuzione del progetto, nel calcolo strutturale, e nelle modalità di posa in opera si è fatto riferimento alla seguente normativa:

- Legge 5 Novembre 1971 n.1086 (G.U. 21 dicembre 1971 n.321) "Norme per la disciplina delle opere di conglomerato cementizio armato, normale e precompresso ed a struttura metallica";
- D.M. del 24/1/1986 - Norme tecniche relative alle costruzioni sismiche;
- Legge 2 febbraio 1974 n.64 (G.U. 21 marzo 1974 n.76) "Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche" Indicazioni progettive per le nuove costruzioni in zone sismiche a cura del Ministero per la Ricerca scientifica - Roma 1981;
- D.M. Infrastrutture Trasporti 14 gennaio 2008 (G.U. 4 febbraio 2008 n.29 - Suppl. Ord.) "Norme tecniche per le costruzioni" Inoltre, in mancanza di specifiche indicazioni, ad indicazione della norma precedente e per quanto con esse non in contrasto, sono state utilizzate le indicazioni contenute nella Circolare 2 febbraio 2009 n.617 del Ministero delle Infrastrutture e dei Trasporti (G.U. 26 febbraio 2009 n. 27 - Suppl. Ord.) "Istruzioni per l'applicazione delle 'Norme Tecniche per le costruzioni' di cui al D.M. 14 gennaio 2008" e successive modifiche ed integrazioni di cui al DM del 17/01/2018;
- Circolare 2 febbraio 2009 n.617 del Ministero delle Infrastrutture e dei Trasporti (G.U. 26 febbraio 2009 n. 27 – Suppl. Ord.) "Istruzioni per l'applicazione delle 'Norme Tecniche per le costruzioni' di cui al D.M. 14 gennaio 2008" e successive modifiche ed integrazioni con la Circolare n.7 del 21/01/2019;
- IEC 61400-1, 2° Edition, February 1999. Wind turbine generator system – Part 1:
- Safety requirements ;
- UNI 9858. Concrete. Performance, production, placing and compliance criteria.
- UNI ENV 1992-1-1 del 31-01-1993 Eurocodice 2. Progettazione delle strutture di calcestruzzo.

Inoltre per il calcolo di progetto della torre di sostegno dell'aerogeneratore, eseguito dal produttore, le sollecitazioni massime sono state determinate sulla scorta di quanto previsto dalle:

1. EC_Ed3_NCV_00_08010000_A_10_07_17p0 per l'azione FXTB;
2. IEC_Ed3_NCV_60_01030000_A_05_12p0 per l'azione FYZTB;
3. EC_Ed3_NCV_60_01040000_B_02_01_01_11p0 per il momento MXTB;
4. IEC_Ed3_NCV_60_01030000_A_05_12p0 per il momento MYTB.

Le sollecitazioni al piede della torre fornite dal produttore dell'aerogeneratore in riferimento ai carichi "Extreme Loads" sono quelle di cui alla tabella 1:

Tabella 1

Load case	DLC Type	Load factor	F_{xy} (kN)	F_z (kN)	M_{xy} (kNm)	Mxy+ΔMxy (kNm)	M_z (kNm)
ULS without Psf	A	1.0	1498	6566	179651	185069	2231
ULS with Psf	A	1.1 0.9	1648	7222 5909	197616	**203034**	2454
ULS with Psf (Torsion)	N	1.35/1.1* 0.9	441	6985 * 5715	49389	54806	**18061**

Table 2 SG 6.6-170 T115-58B Factored/Unfactored Extreme loads at base of the tower

Come si può notare dalla Tabella precedente, i valori più gravosi in prossimità del collegamento della torre con la fondazione (quota 0), posti alla base del calcolo di predimensionamento, risultano essere:

- N= 7222 kN
- V= 1648 kN
- Mf= 203034 kNm
- Mt= 18061 kNm

Le verifiche della struttura di fondazione sono state di seguito condotte col metodo degli stati limite in accordo con le modalità operative di cui alle NTC 2018. Si rappresenta che si è fissato lo zero sismico alla base della torre pertanto l'analisi della fondazione è stata svolta solo in ambito statico.

Il carico prodotto dal vento non sarà mai statico su una sola direzione, ma potrà variare su 360 gradi, per tale motivo nella progettazione delle armature si prende in considerazione la zona più sollecitata per il calcolo delle armature all'interno del plinto, armando in modo omogeneo (in senso radiale e concentrica) tutti i 360 gradi che compongono il plinto di fondazione.

Ai carichi verticali, oltre al peso della torre, della navicella e del rotore contemplati nella ipotesi di carico precedente, va sommato il peso del plinto di fondazione di entità non trascurabile nonché il terreno di copertura del plinto stesso.

Il software strutturale utilizzato, in automatico genera il peso proprio della struttura di fondazione, in base al materiale impiegato e alla geometria del plinto stabilita dal progettista.

I dati inseriti nel software strutturale, derivano dalla combinazione della condizione Extreme 6.1 con il peso proprio G1 moltiplicati per il coefficiente parziale 1.35, così come previsto dalla IEC 61400-1.

3. OPERE DI FONDAZIONE.

Come anticipato nei paragrafi precedenti le fondazioni saranno di tipo indiretto con pali dello Φ 120 cm ammorsati, superato il primo strato di terreno agrario dello spessore di circa 1,00 mt, nelle tipologie degli strati successivi aventi caratteristiche e spessori di cui al riepilogo che segue.

Infine le armature di seguito descritte sono state calcolate sulla scorta dei valori relativi alle sollecitazioni più gravose, in quanto ai valori di Wood Armer per i momenti M_{zz} e M_{xx}, della torre denominata WTG_9 .

La testa dei pali sarà ammorsata ad una plinto di fondazione di spessore variabile al cui culmine verrà collocata la torre-aerogeneratore . Detto plinto è stato discretizzato con elementi tipo shell di sezione variabile.

Per i terreni interessati dall'ammorsamento dei pali si sono utilizzati i seguenti valori:

Per la torre denominata WTG_9):

Strato detritico di natura calcarea:

- Peso per unità di volume (γ_a) = 1.920 [daN/m^3];
- Peso di volume saturo (γ_s) = 1.890 [daN/m^3];
- Angolo di attrito interno (φ')= 26°;
- Coesione non drenata (C_u)= 0,56 [daN/cm^2] ;
- Coesione drenata (C')= 0,19 [daN/cm^2] ;
- Modulo elastico longitudinale E'= 261 [daN/cm^2] ;
- Modulo edometrico E_d= 261 [daN/cm^2] ;

- Modulo elastico tangenziale G= 108.75 [daN/cm^2] ;
- Coefficiente di Poisson ν= 0.2 ;

Materiali utilizzati :

1. Plinto di fondazione.

Calcestruzzo classe C40/50 :

- P <daN/mc>2500 ;
- E <daN/cmq>355471.00;
- G <daN/cmq>161578.00;
- ν =0.1;
- α= 1.00E-05.

Calcestruzzo classe C50/60 :

- P <daN/mc>2500 ;
- E <daN/cmq>372393.00;
- G <daN/cmq>169270.00;
- ν =0.1;
- α= 1.00E-05

Tipo di acciaio B450C:

- E <daN/cmq>2060000.00;
- Fyk <daN/cmq> 4500

Pali di fondazione.

Calcestruzzo classe C30/37 :

- P <daN/mc>2500 ;
- E <daN/cmq>330194.00;
- G <daN/cmq>159036.00;
- ν =0.1;
- α= 1.00E-05.

Tipo di acciaio B450C:

- E <daN/cmq>2060000.00;

- F_{yk} <daN/cmq> 4500

Per i dettagli vedasi la relazione geologica e la relazione di calcolo allegate.

4. CARATTERISTICHE DEL PROGRAMMA DI CALCOLO E PROGETTO DELLE ARMATURE.

4.1 Programma di calcolo

Si tratta di una procedura volta alla progettazione di strutture in c.a. in zona sismica e non, che si avvale come solutori dei programmi agli elementi finiti (F.E.M.) . Il plinto di fondazione è stato modellato con elementi di tipo bidimensionale (Shell), di spessore variabile, a comportamento flessionale-membranale.
La colonna stratigrafica inserita per il calcolo dello stato tensionale e deformativo dei pali di fondazione è dedotta dai valori riportati nella relazione geologica.
Il programma è rappresentato da un pre-processore per la generazione dei file di input del solutore agli elementi finiti e da un post-processore per il calcolo delle sezioni e la generazione delle armature secondo la legislazione vigente.
Le figure seguenti mostrano la struttura discretizzata secondo il modello di calcolo adottato:

VISTA ASSONOMETRICA DEL MODELLO

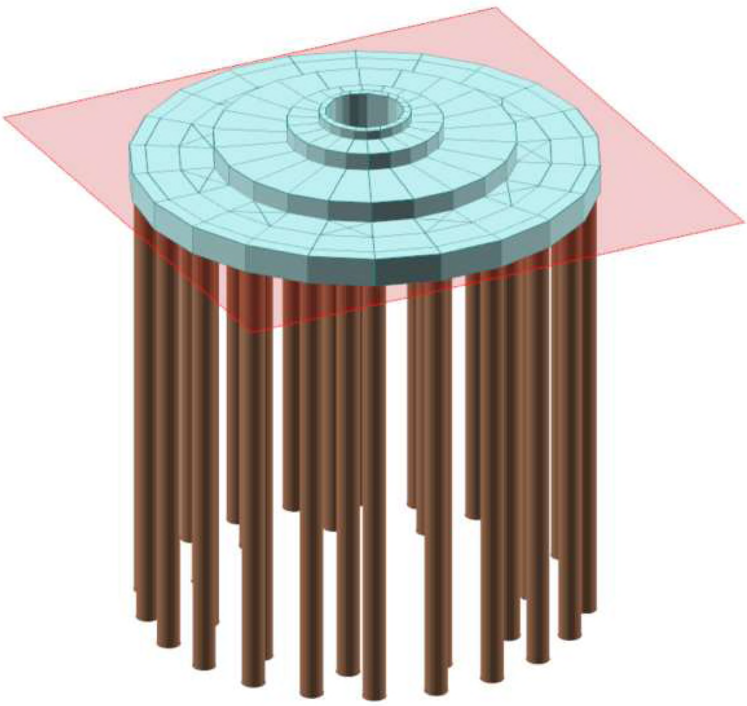


Figura 2

PLANIMETRIA

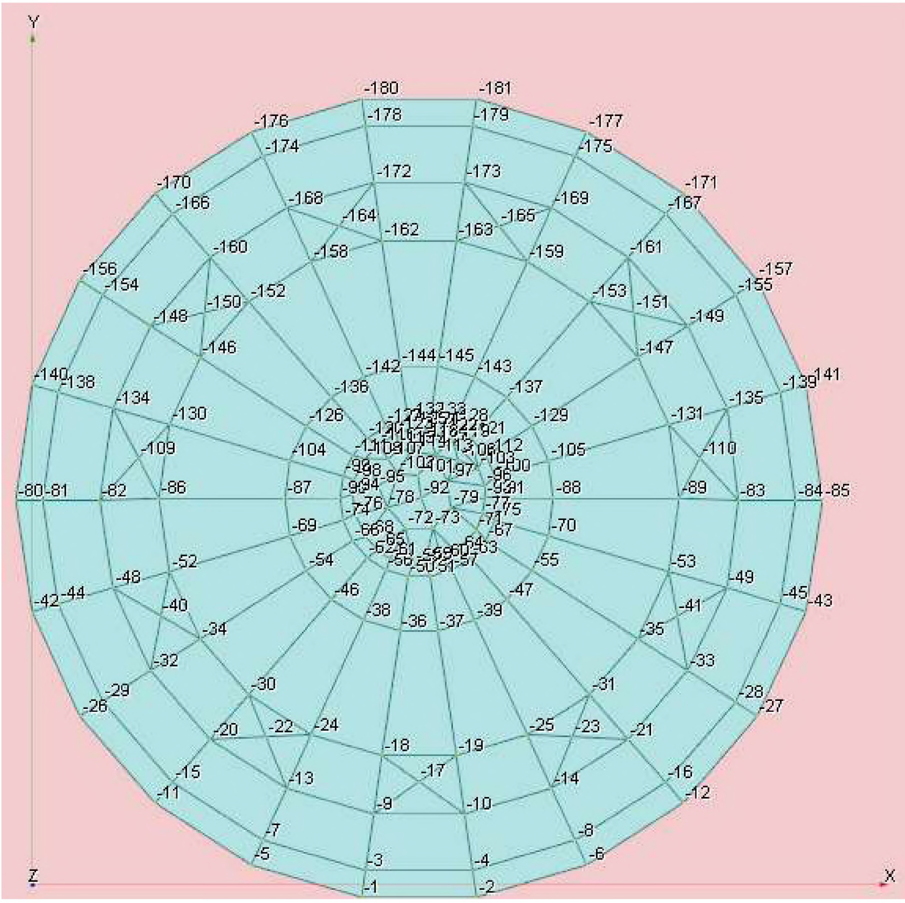


Figura 3

Le dimensioni dell'armatura superiore ed inferiore della platea, relative alla fondazione della torre denominata WTG_9 che ha espresso i valori più rappresentativi in termini di sollecitazioni sulle sezioni considerate, vengono determinate seguendo l'approccio Wood Armer per individuare i momenti di progetto sui quali dimensionare l'armatura. In questo modo infatti non si trascura il contributo del momento torcente mxy che agisce sui lati dell'elemento shell.

Nella figura successiva si riportano i diagrammi di Wood Armer, utilizzati per il calcolo delle armature, dei momenti Mx ed Mzz:

PARTICOLARE DEL DIAGRAMMA DI WOOD ARMER RELATIVO A MXX .

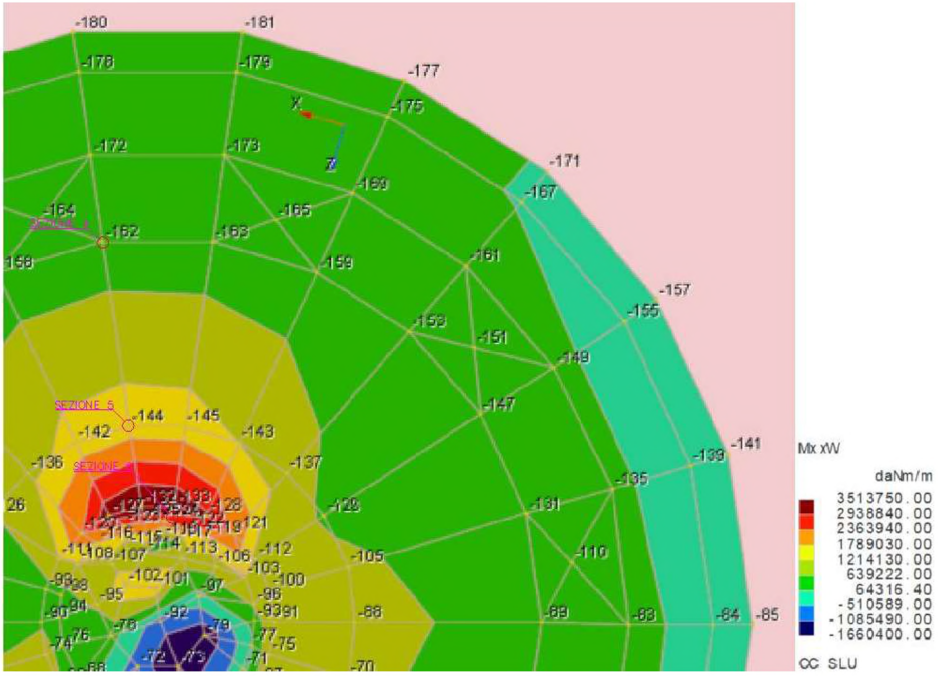


Figura 4

PARTICOLARE DEL DIAGRAMMA DI WOOD ARMER RELATIVO A Mzz .

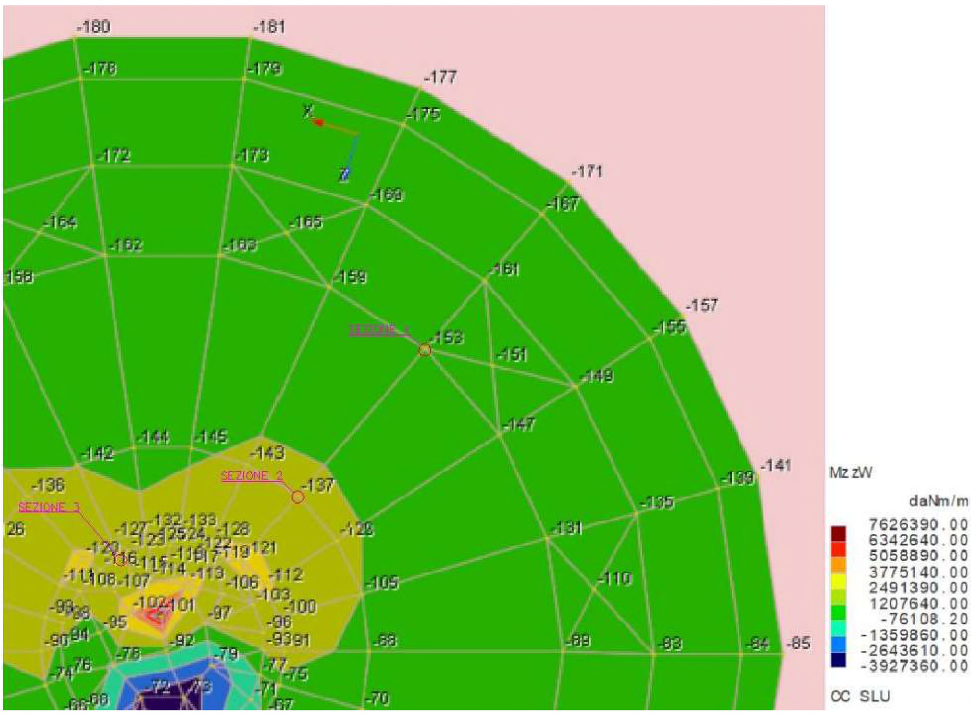


Figura 5

4.2 Progetto delle armature.

Partendo dalle sollecitazioni valutate nella condizione di carico definita nel paragrafo 2 è stata calcolata l'armatura da adottare, riportata nelle figure seguenti. Si rimanda ai tabulati di calcolo per i dettagli.

Dal progetto delle sezioni più sollecitate, in direzione x e z (vedi assi locali in figura) dei singoli elementi shell della fondazione, si evince quanto rappresentato di seguito:

ARMATURA RADIALE E CONCENTRICA

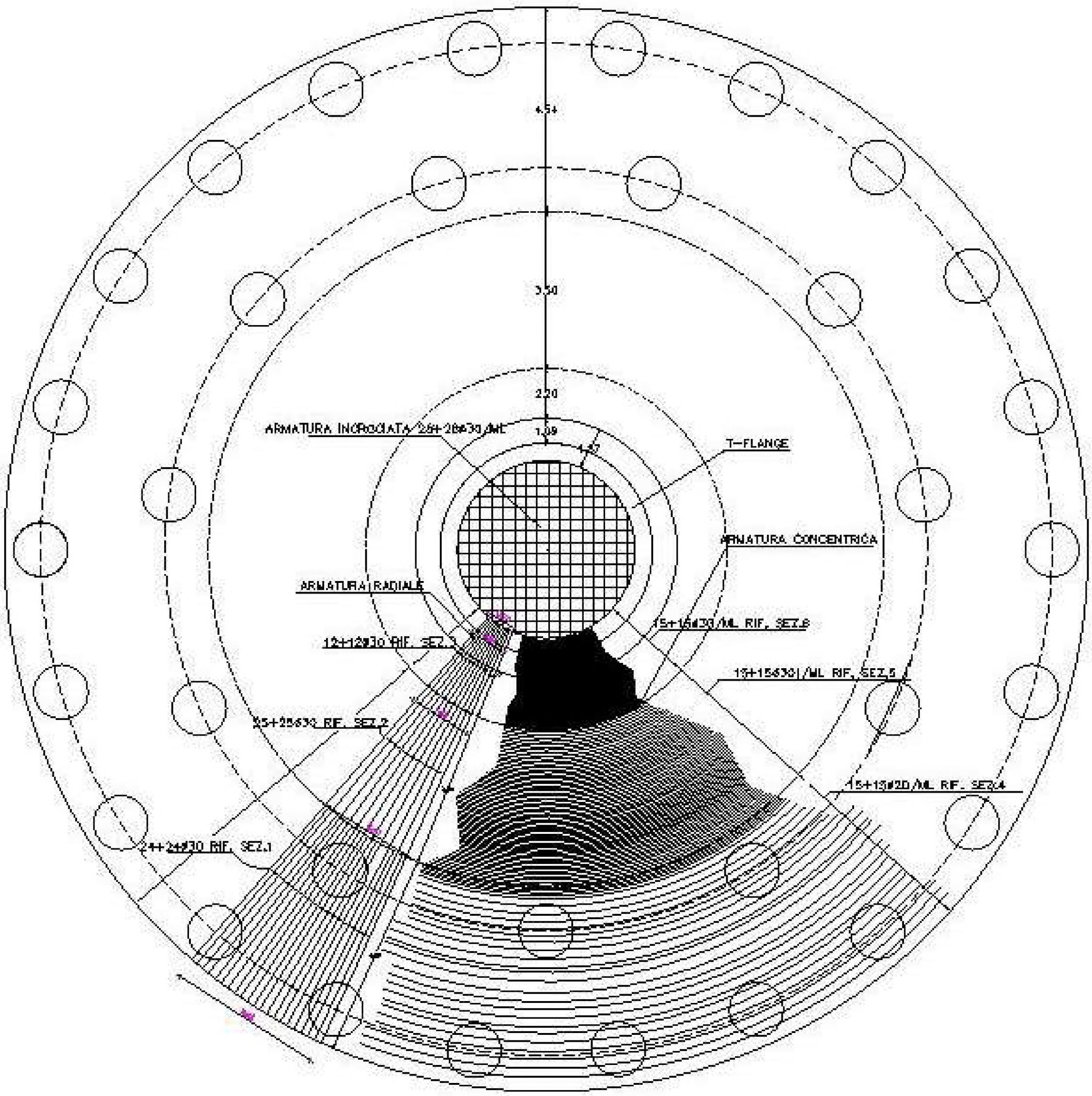


Figura 6

ARMATURA RADIALE DELLE SEZIONI TIPO

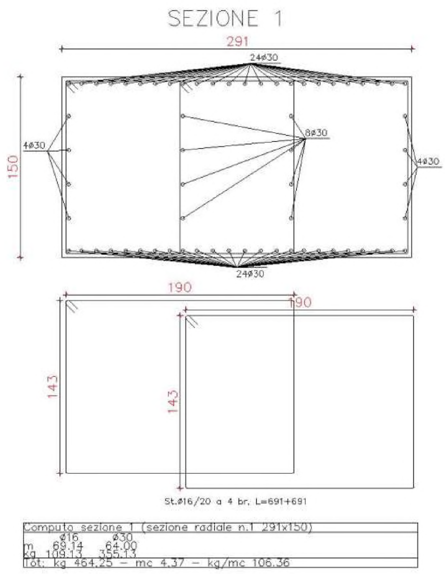


Figura 7

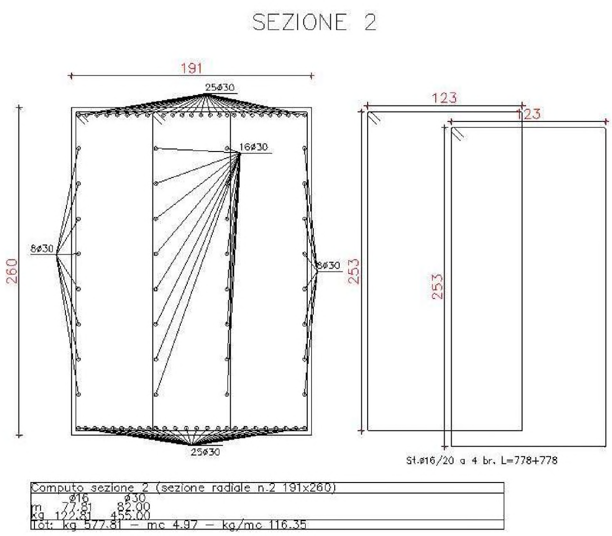
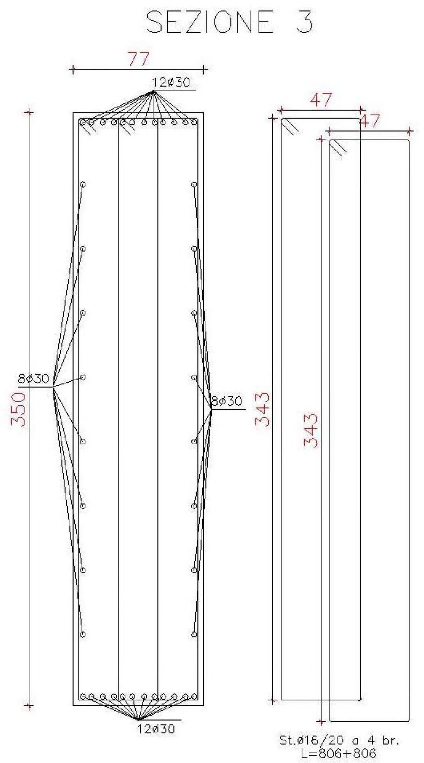


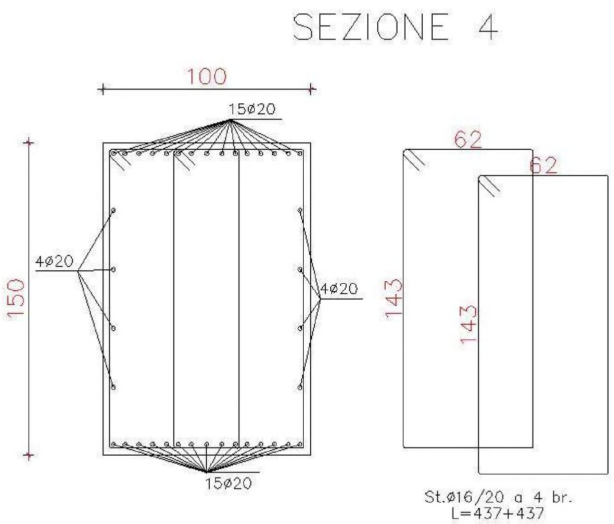
Figura 8



Computo sezione 3 (sezione radiale n.3 77x350)		
	ø16	ø30
m	80.61	40.00
kg	127.22	221.95
Tot: kg 349.18 – mc 2.69 – kg/mc 129.56		

Figura 9

ARMATURA CONCENTRICA DELLE SEZIONI TIPO



Computo sezione 4 (sezione concentrica n.4 100x150)		
	ø16	ø20
m	43.67	38.00
kg	68.93	93.71
Tot: kg 162.65 – mc 1.50 – kg/mc 108.43		

Figura 10

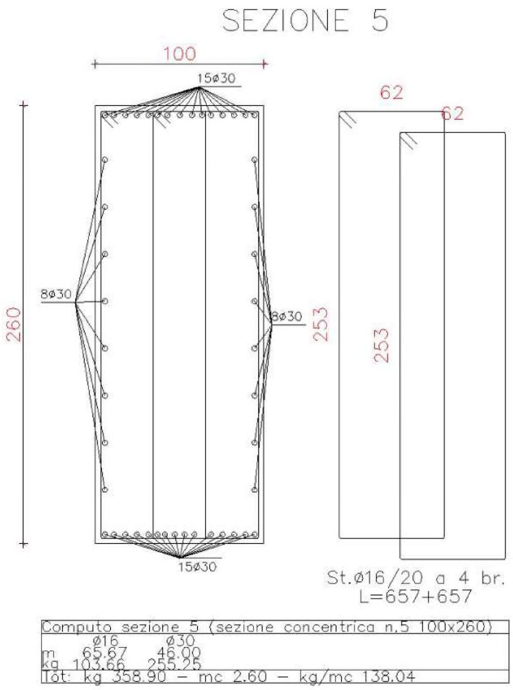


Figura 11

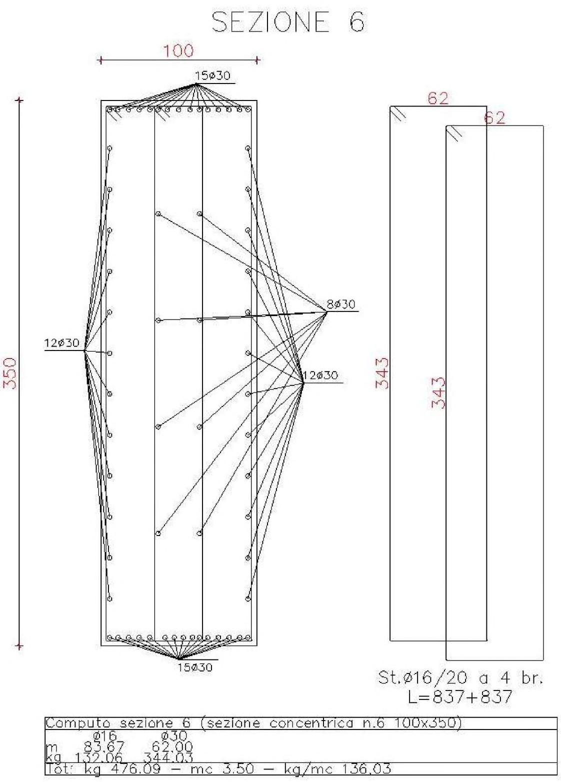
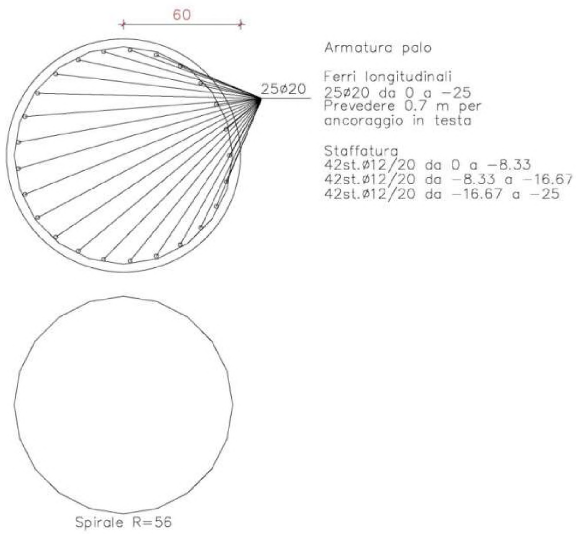


Figura 12

ARMATURA DEL PALO TIPO



Computo palo tipo		
	ø12	ø20
m	441.52	642.50
kg	391.99	1584.50
Tot: kg 1976.49 – mc 28.27 – kg/mc 69.90		

Figura 13

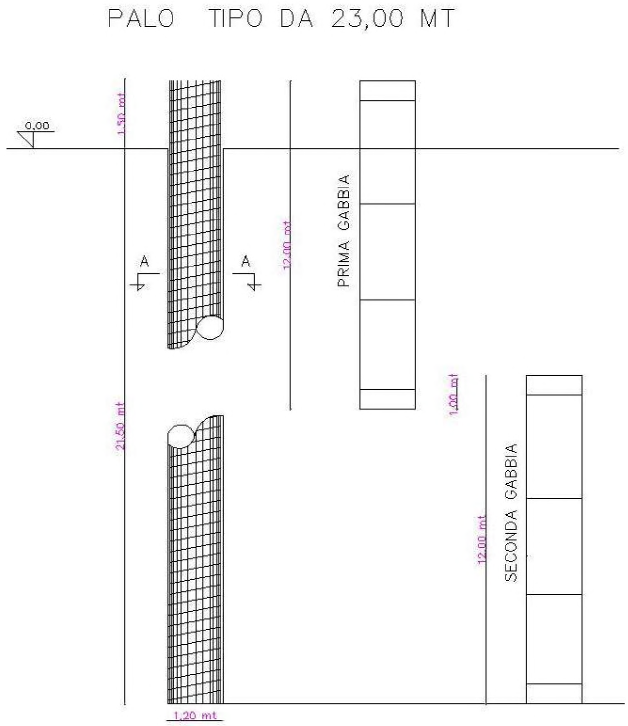


Figura 14

RELAZIONE DI CALCOLO

Sommario

Relazione di calcolo

Introduzione

Sistemi di riferimento

Le coordinate, i carichi concentrati, i cedimenti, le reazioni vincolari e gli spostamenti dei NODI sono riferiti ad una terna destra cartesiana globale con l'asse Z verticale rivolto verso l'alto.
I carichi in coordinate locali e le sollecitazioni delle ASTE sono riferite ad una terna destra cartesiana locale così definita:
- origine nel nodo iniziale dell'asta;
- asse X coincidente con l'asse dell'asta e con verso dal nodo iniziale al nodo finale;
- immaginando la trave a sezione rettangolare l'asse Y è parallelo alla base e l'asse Z è parallelo all'altezza. La rotazione dell'asta comporta quindi una rotazione di tutta la terna locale.

Si può immaginare la terna locale di un'asta comunque disposta nello spazio come derivante da quella globale dopo una serie di trasformazioni:
- una rotazione intorno all'asse Z che porti l'asse X a coincidere con la proiezione dell'asse dell'asta sul piano orizzontale;
- una traslazione lungo il nuovo asse X così definito in modo da portare l'origine a coincidere con la proiezione del nodo iniziale dell'asta sul piano orizzontale;
- una traslazione lungo l'asse Z che porti l'origine a coincidere con il nodo iniziale dell'asta;
- una rotazione intorno all'asse Y così definito che porti l'asse X a coincidere con l'asse dell'asta;
- una rotazione intorno all'asse X così definito pari alla rotazione dell'asta.

In pratica le travi prive di rotazione avranno sempre l'asse Z rivolto verso l'alto e l'asse Y nel piano del solaio, mentre i pilastri privi di rotazione avranno l'asse Y parallelo all'asse Y globale e l'asse Z parallelo ma controverso all'asse X globale. Da notare quindi che per i pi

Le sollecitazioni ed i carichi in coordinate locali negli ELEMENTI BIDIMENSIONALI e nei MURI sono riferiti ad una terna destra cartesiana locale così definita:
- origine nel primo nodo dell'elemento;
- asse X coincidente con la congiungente il primo ed il secondo nodo dell'elemento;
- asse Y definito come prodotto vettoriale fra il versore dell'asse X e il versore della congiungente il primo e il quarto nodo. Asse Z a formare con gli altri due una terna destrorsa.

Praticamente un elemento verticale con l'asse X locale coincidente con l'asse X globale ha anche gli altri assi locali coincidenti con quelli globali.

Rotazioni e momenti

Seguendo il principio adottato per tutti i carichi che sono positivi se CONTROVERSI agli assi, anche i momenti concentrati e le rotazioni impresse in coordinate globali risultano positivi se CONTROVERSI al segno positivo delle rotazioni. Il segno positivo dei momenti e delle rotazioni

Normativa di riferimento

La normativa di riferimento è la seguente:
- Legge n. 64 del 2/2/1974 - Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche.

- D.M. del 24/1/1986 - Norme tecniche relative alle costruzioni sismiche.

- Legge n. 1086 del 5/11/1971 - Norme per la disciplina delle opere di conglomerato cementizio armato, normale e precompresso ed a struttura metallica.

- D.M. del 14/2/1992 - Norme tecniche per l'esecuzione delle opere in c.a. normale e precompresso e per le strutture metalliche.

- D.M. del 9/1/1996 - Norme tecniche per l'esecuzione delle opere in c.a. normale e precompresso e per le strutture metalliche.

- D.M. del 16/1/1996 - Norme tecniche per le costruzioni in zone sismiche.

- Circolare n. 21745 del 30/7/1981 - Legge n. 219 del 14/5/1981 - Art. 10 - Istruzioni relative al rafforzamento degli edifici in muratura danneggiati dal sisma.

- Regione Autonoma Friuli Venezia Giulia - Legge Regionale n. 30 del 20/6/1977 - Documentazione tecnica per la progettazione e direzione delle opere di riparazione degli edifici - Documento Tecnico n. 2 - Raccomandazioni per la riparazione strutturale degli edifici in muratura.

- D.M. del 20/11/1987 - Norme Tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento.

- Norme Tecniche C.N.R. n. 10011-85 del 18/4/1985 - Costruzioni di acciaio - Istruzioni per il calcolo, l'esecuzione, il collaudo e la manutenzione.

- Norme Tecniche C.N.R. n. 10025-
84 del 14/12/1984 - Istruzioni per il progetto, l'esecuzione ed il controllo delle strutture prefabbricate in conglomerato cementizio e per le strutture costruite con sistemi industrializzati di acciaio - Istruzioni per il calcolo, l'esecuzione, il collaudo e la manutenzione.

- Circolare n. 65 del 10/4/1997 - Istruzioni per l'applicazione delle "Norme tecniche per le costruzioni in zone sismiche" di cui al D.M. del 16/1/1996.

- DIN 1052 - Metodi di verifica per il legno.

- D.M. del 17/1/2018 - Norme tecniche per le costruzioni.

- Circolare n. 7 del 21/1/2019 - Istruzioni per l'applicazione dell'«Aggiornamento delle "Norme tecniche per le costruzioni"» di cui al decreto ministeriale 17 gennaio 2018.

- Documento Tecnico CNR-DT 200 R1/2012 - Istruzioni per la Progettazione, l'Esecuzione ed il Controllo di Interventi di Consolidamento Statico mediante l'utilizzo di Compositi Fibrorinforzati.

- Eurocodice 2 - Progettazione delle strutture di calcestruzzo.

- Eurocodice 3 - Progettazione delle strutture in acciaio.

- Eurocodice 5 - Progettazione delle strutture di legno.

Unità di misura

Le unità di misura adottate sono le seguenti:
- lunghezze : m
- forze : daN
- masse : kg
- temperature : gradi centigradi
- angoli : gradi sessadecimali o radianti

Geometria

Elenco vincoli nodi

Simbologia
Comm. = Commento
Kt = Coeff. di sottofondo su suolo elastico alla Winkler
Ly = Lunghezza (dir. Y locale)
Lz = Larghezza (dir. Z locale)
RL = Rotazione libera
Rx = Rotazione intorno all'asse X (L=libera, B=bloccata, E=elastica)
Ry = Rotazione intorno all'asse Y (L=libera, B=bloccata, E=elastica)
Rz = Rotazione intorno all'asse Z (L=libera, B=bloccata, E=elastica)
Sx = Spostamento in dir. X (L=libero, B=bloccato, E=elastico)
Sy = Spostamento in dir. Y (L=libero, B=bloccato, E=elastico)
Sz = Spostamento in dir. Z (L=libero, B=bloccato, E=elastico)
TV = Tipo vincolo se valutato da stratigrafia
  SP = Plinto senza pali
  CP = Palo o plinto con pali
Vn = Numero del vincolo nodo

Vn	Comm.	TV	Sx	Sy	Sz	Rx	Ry	Rz	RL	Ly <m>	Lz <m>	Kt <daN/cmc>
1	Libero		L	L	L	L	L	L				
4	palo	CP	E	E	E	E	E	B				f(strat.)
4	palo	SP	B	B	E	B	B	B				f(strat.)

Elenco costanti elastiche nodali

Simbologia
KRx = Costante elastica intorno all'asse X
KRy = Costante elastica intorno all'asse Y
KRz = Costante elastica intorno all'asse Z
Kx = Costante elastica in dir. X
Ky = Costante elastica in dir. Y
Kz = Costante elastica in dir. Z
Nodo = Numero del nodo

Nodo	Kx <daN/cm>	Ky <daN/cm>	Kz <daN/cm>	KRx <daNm/rad>	KRy <daNm/rad>	KRz <daNm/rad>
-179	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-178	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-175	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-174	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-167	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-166	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-165	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-164	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-155	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-154	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-151	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-150	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-139	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-138	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-110	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-109	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-84	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-81	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-45	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-44	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-41	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-40	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-29	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-28	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-23	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-22	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-17	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-16	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-15	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-8	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-7	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-4	102029.00	102029.00	369542.00	91189800.00	91189800.00	--
-3	102029.00	102029.00	369542.00	91189800.00	91189800.00	--

Elenco nodi

Simbologia
Imp. = Numero dell'impalcato
Nodo = Numero del nodo
Vn = Numero del vincolo nodo
X = Coordinata X del nodo
Y = Coordinata Y del nodo
Z = Coordinata Z del nodo

Nodo	X <m>	Y <m>	Z <m>	Imp.	Vn
-181	13.21	23.38	0.00	0	1
-180	9.79	23.38	0.00	0	1
-179	13.09	22.58	0.00	0	4
-178	9.91	22.58	0.00	0	4
-177	16.48	22.40	0.00	0	1
-176	6.51	22.40	0.00	0	1
-175	16.15	21.68	0.00	0	4
-174	6.85	21.68	0.00	0	4
-173	12.85	20.90	0.00	0	1
-172	10.15	20.90	0.00	0	1
-171	19.36	20.57	0.00	0	1
-170	3.64	20.57	0.00	0	1
-169	15.44	20.14	0.00	0	1
-168	7.56	20.14	0.00	0	1
-167	18.84	19.96	0.00	0	4
-166	4.16	19.96	0.00	0	4
-165	13.88	19.60	0.00	0	4
-164	9.12	19.60	0.00	0	4
-163	12.61	19.16	0.00	0	1
-162	10.39	19.16	0.00	0	1
-161	17.72	18.67	0.00	0	1
-160	5.28	18.67	0.00	0	1
-159	14.72	18.54	0.00	0	1
-158	8.28	18.54	0.00	0	1
-157	21.56	17.99	0.00	0	1
-156	1.40	17.99	0.00	0	1
-155	20.92	17.55	0.00	0	4
-154	2.08	17.55	0.00	0	4
-153	16.57	17.35	0.00	0	1
-152	6.43	17.35	0.00	0	1
-151	17.88	17.03	0.00	0	4
-150	5.12	17.03	0.00	0	4
-149	19.49	16.62	0.00	0	1
-148	3.51	16.62	0.00	0	1
-147	18.01	15.69	0.00	0	1
-146	4.99	15.69	0.00	0	1
-145	12.06	15.43	0.00	0	1
-144	10.94	15.43	0.00	0	1
-143	13.15	15.11	0.00	0	1
-142	9.85	15.11	0.00	0	1
-141	23.01	14.87	0.00	0	1
-140	-0.01	14.87	0.00	0	1
-139	22.25	14.65	0.00	0	4
-138	0.75	14.65	0.00	0	4
-137	14.11	14.50	0.00	0	1
-136	8.89	14.50	0.00	0	1
-135	20.67	14.17	0.00	0	1
-134	2.39	14.17	0.00	0	1
-133	11.83	13.83	0.00	0	1
-132	11.17	13.83	0.00	0	1
-131	18.93	13.69	0.00	0	1
-130	4.07	13.69	0.00	0	1
-129	14.86	13.64	0.00	0	1
-128	12.48	13.64	0.00	0	1
-127	10.52	13.64	0.00	0	1
-126	8.14	13.64	0.00	0	1
-125	11.26	13.56	-0.00	0	1
-124	11.64	13.54	-0.00	0	1
-123	10.83	13.44	0.00	0	1
-122	12.12	13.38	0.00	0	1
-121	13.04	13.28	0.00	0	1
-120	9.96	13.28	0.00	0	1
-119	12.49	13.21	0.00	0	1
-118	11.60	13.18	0.00	0	1
-117	11.90	13.12	0.00	0	1
-116	10.31	13.09	0.00	0	1
-115	10.89	13.00	0.00	0	1
-114	11.25	12.89	-0.00	0	1
-113	11.98	12.78	-0.00	0	1
-112	13.48	12.77	0.00	0	1
-111	9.52	12.77	0.00	0	1
-110	19.85	12.70	0.00	0	4
-109	3.15	12.70	0.00	0	4
-108	9.89	12.67	0.00	0	1
-107	10.58	12.66	0.00	0	1
-106	12.68	12.61	0.00	0	1
-105	15.35	12.61	0.00	0	1
-104	7.65	12.61	0.00	0	1
-103	13.26	12.39	0.00	0	1
-102	10.86	12.23	0.00	0	1
-101	11.47	12.17	-0.00	0	1
-100	13.75	12.16	0.00	0	1
-99	9.24	12.16	0.00	0	1
-98	9.56	12.04	0.00	0	1
-97	12.32	12.02	0.00	0	1
-96	13.45	11.86	0.00	0	1
-95	10.28	11.85	0.00	0	1
-94	9.53	11.61	0.00	0	1
-93	13.46	11.53	-0.00	0	1
-92	11.57	11.51	-0.00	0	1
-91	13.85	11.50	0.00	0	1
-90	9.15	11.50	0.00	0	1
-89	19.24	11.49	0.00	0	1
-88	15.49	11.49	0.00	0	1
-87	7.51	11.49	0.00	0	1
-86	3.76	11.49	0.00	0	1
-85	23.50	11.43	0.00	0	1
-84	22.70	11.43	0.00	0	4
-83	21.00	11.43	0.00	0	1
-82	2.00	11.43	0.00	0	1
-81	0.30	11.43	0.00	0	4
-80	-0.50	11.43	0.00	0	1
-79	12.45	11.22	0.00	0	1
-78	10.56	11.22	0.00	0	1
-77	13.39	11.03	0.00	0	1
-76	9.59	11.03	0.00	0	1
-75	13.75	10.84	0.00	0	1
-74	9.24	10.84	0.00	0	1
-73	11.91	10.61	0.00	0	1
-72	11.10	10.60	0.00	0	1
-71	13.22	10.56	0.00	0	1
-70	15.35	10.37	0.00	0	1
-69	7.65	10.37	0.00	0	1
-68	9.92	10.34	0.00	0	1
-67	13.48	10.23	0.00	0	1
-66	9.52	10.23	0.00	0	1
-65	10.27	9.96	0.00	0	1
-64	12.59	9.89	0.00	0	1
-63	13.04	9.72	0.00	0	1
-62	9.96	9.72	0.00	0	1
-61	10.64	9.68	0.00	0	1
-60	12.20	9.64	0.00	0	1
-59	11.67	9.53	0.00	0	1
-58	11.33	9.52	0.00	0	1
-57	12.48	9.36	0.00	0	1
-56	10.52	9.36	0.00	0	1
-55	14.86	9.34	0.00	0	1
-54	8.14	9.34	0.00	0	1

-53	18.93	9.31	0.00	0	1
-52	4.07	9.31	0.00	0	1
-51	11.83	9.17	0.00	0	1
-50	11.17	9.17	0.00	0	1
-49	20.67	8.83	0.00	0	1
-48	2.39	8.83	0.00	0	1
-47	14.11	8.48	0.00	0	1
-46	8.89	8.48	0.00	0	1
-45	22.25	8.35	0.00	0	4
-44	0.75	8.35	0.00	0	4
-43	23.01	8.12	0.00	0	1
-42	-0.01	8.12	0.00	0	1
-41	19.18	7.99	0.00	0	4
-40	3.82	7.99	0.00	0	4
-39	13.15	7.87	0.00	0	1
-38	9.85	7.87	0.00	0	1
-37	12.06	7.55	0.00	0	1
-36	10.94	7.55	0.00	0	1
-35	18.01	7.31	0.00	0	1
-34	4.99	7.31	0.00	0	1
-33	19.49	6.37	0.00	0	1
-32	3.51	6.37	0.00	0	1
-31	16.57	5.65	0.00	0	1
-30	6.43	5.65	0.00	0	1
-29	2.08	5.45	0.00	0	4
-28	20.92	5.43	0.00	0	4
-27	21.56	5.01	0.00	0	1
-26	1.40	5.01	0.00	0	1
-25	14.72	4.46	0.00	0	1
-24	8.28	4.46	0.00	0	1
-23	16.06	4.40	0.00	0	4
-22	6.94	4.40	0.00	0	4
-21	17.72	4.32	0.00	0	1
-20	5.28	4.32	0.00	0	1
-19	12.61	3.84	0.00	0	1
-18	10.39	3.84	0.00	0	1
-17	11.50	3.06	0.00	0	4
-16	18.84	3.04	0.00	0	4
-15	4.16	3.04	0.00	0	4
-14	15.44	2.86	0.00	0	1
-13	7.56	2.86	0.00	0	1
-12	19.36	2.43	0.00	0	1
-11	3.64	2.43	0.00	0	1
-10	12.85	2.10	0.00	0	1
-9	10.15	2.10	0.00	0	1
-8	16.15	1.32	0.00	0	4
-7	6.85	1.32	0.00	0	4
-6	16.48	0.58	0.00	0	1
-5	6.51	0.58	0.00	0	1
-4	13.09	0.42	0.00	0	4
-3	9.91	0.42	0.00	0	4
-2	13.21	-0.38	0.00	0	1
-1	9.79	-0.38	0.00	0	1

Elenco materiali

Simbologia
α = Coeff. di dilatazione termica
ν = Coeff. di Poisson
Comm. = Commento
E = Modulo elastico
G = Modulo elastico tangenziale
Mat. = Numero del materiale
P = Peso specifico

Mat.	Comm.	P <daN/mc>	E <daN/cmq>	G <daN/cmq>	ν	α
10	Calcestruzzo classe C40/50	2500	355471.00	161578.00	0.1	1.00E-05

Elenco sezioni aste

Simbologia
B = Base
C = Numero del criterio di progetto
Comm. = Commento
Crit. C.F. = Criterio di progetto collegamento finale
Crit. C.I. = Criterio di progetto collegamento iniziale
H = Altezza
Ma = Numero del materiale
Mem. = Membratura
  G = Generica
Sez. = Numero della sezione
Tipo = Tipologia
  R = Rettangolare
Ver. = Verifica prevista
  C = Cemento armato

Sez.	Comm.	Tipo	Mem.	Ver.	B <cm>	H <cm>	Ma	C	Crit. C.I.	Crit. C.F.
1	SEZIONE RADIALE N.1 291X150	R	G	C	291.00	150.00	10	3		
2	SEZIONE RADIALE N.2 191X260	R	G	C	191.00	260.00	10	3		
3	SEZIONE RADIALE N.3 77X350	R	G	C	77.00	350.00	10	3		
4	SEZIONE CONCENTRICA N.4 100X150	R	G	C	100.00	150.00	10	3		
5	SEZIONE CONCENTRICA N.5 100X260	R	G	C	100.00	260.00	10	3		
6	SEZIONE CONCENTRICA N.6 100X350	R	G	C	100.00	350.00	10	3		

Elenco tipi elementi bidimensionali

Simbologia
Ang. att. = Angolo di attrito
Ang. dil. = Angolo di dilatanza
Coes. = Coesione
Comm. = Commento
Crit. = Numero del criterio di progetto
DP = Drucker-Prager
Kt = Coeff. di sottofondo su suolo elastico alla Winkler
Mat. = Numero del materiale
Spess. = Spessore
Tb = Numero del tipo muro/elemento bidimensionale
Tipo = Tipologia
  F = Membranale e Flessionale
  M = Membranale
  W-RC = Winkler resistente solo a compressione
  W-RTC = Winkler resistente a trazione e a compressione
Uso = Utilizzo
  S = Soletta/Platea

Tb	Comm.	Tipo	Uso	Spess. <cm>	Kt <daN/cmc>	DP	Ang. att. <grad>	Coes. <daN/mq>	Ang. dil. <grad>	Crit.	Mat.
1	Platea h=1.50 mt	F	S	150.00		N	0.00	0.00	0.00	3	10
2	Platea H=2.6 mt	F	S	260.00		N	0.00	0.00	0.00	3	10
3	Platea H=3 .50 mt	F	S	350.00		N	0.00	0.00	0.00	3	10
4	NODO CENTRALE 1.50 MT	F	S	150.00		N	0.00	0.00	0.00	3	10
5	SEZIONE COLLARE H= 4.00 ML	F	S	400.00		N	0.00	0.00	0.00	3	10

Elenco elementi bidimensionali

Simbologia
Bid. = Numero del muro/elemento bidimensionale
Dy1 = Scost. filo fisso Y1
Dy2 = Scost. filo fisso Y2
FF = Filo fisso
Kt = Coeff. di sottofondo su suolo elastico alla Winkler
NN = Nodi
Tb = Numero del tipo muro/elemento bidimensionale

Bid.	Tb	FF	Dy1 <cm>	Dy2 <cm>	Kt <daN/cmc>	NN
2	2	33	0.00	0.00		-152 -146 -126 -136
2	2	33	0.00	0.00		-158 -152 -136 -142
2	2	33	0.00	0.00		-52 -34 -54 -69
2	2	33	0.00	0.00		-86 -52 -69 -87
2	2	33	0.00	0.00		-162 -158 -142 -144
2	2	33	0.00	0.00		-163 -162 -144 -145
2	2	33	0.00	0.00		-159 -163 -145 -143
2	2	33	0.00	0.00		-153 -159 -143 -137
2	2	33	0.00	0.00		-147 -153 -137 -129
2	2	33	0.00	0.00		-131 -147 -129 -105

2	2	33	0.00	0.00		-89 -131 -105 -88
2	2	33	0.00	0.00		-53 -89 -88 -70
2	2	33	0.00	0.00		-35 -53 -70 -55
2	2	33	0.00	0.00		-31 -35 -55 -47
2	2	33	0.00	0.00		-25 -31 -47 -39
2	2	33	0.00	0.00		-19 -25 -39 -37
2	2	33	0.00	0.00		-18 -19 -37 -36
2	2	33	0.00	0.00		-24 -18 -36 -38
2	1	33	0.00	0.00		-13 -9 -18 -24
2	1	33	0.00	0.00		-175 -179 -173 -169
2	1	33	0.00	0.00		-172 -164 -162
2	1	33	0.00	0.00		-181 -180 -178 -179
2	1	33	0.00	0.00		-32 -20 -30 -34
2	1	33	0.00	0.00		-167 -175 -169 -161
2	1	33	0.00	0.00		-164 -158 -162
2	1	33	0.00	0.00		-155 -167 -161 -149
2	1	33	0.00	0.00		-82 -48 -52 -86
2	1	33	0.00	0.00		-80 -42 -44 -81
2	1	33	0.00	0.00		-164 -168 -158
2	1	33	0.00	0.00		-140 -80 -81 -138
2	2	33	0.00	0.00		-130 -86 -87 -104
2	2	33	0.00	0.00		-146 -130 -104 -126
2	1	33	0.00	0.00		-148 -134 -130 -146
2	1	33	0.00	0.00		-156 -140 -138 -154
2	1	33	0.00	0.00		-173 -165 -169
2	1	33	0.00	0.00		-170 -156 -154 -166
2	1	33	0.00	0.00		-168 -160 -152 -158
2	1	33	0.00	0.00		-176 -170 -166 -174
2	1	33	0.00	0.00		-161 -153 -151
2	1	33	0.00	0.00		-177 -181 -179 -175
2	1	33	0.00	0.00		-173 -172 -162 -163
2	1	33	0.00	0.00		-171 -177 -175 -167
2	1	33	0.00	0.00		-151 -147 -149
2	1	33	0.00	0.00		-157 -171 -167 -155
2	1	33	0.00	0.00		-161 -169 -159 -153
2	1	33	0.00	0.00		-180 -176 -174 -178
2	1	33	0.00	0.00		-153 -147 -151
2	1	33	0.00	0.00		-141 -157 -155 -139
2	1	33	0.00	0.00		-135 -149 -147 -131
2	1	33	0.00	0.00		-139 -155 -149 -135
2	1	33	0.00	0.00		-165 -159 -169
2	1	33	0.00	0.00		-85 -141 -139 -84
2	1	33	0.00	0.00		-49 -83 -89 -53
2	1	33	0.00	0.00		-43 -85 -84 -45
2	1	33	0.00	0.00		-165 -163 -159
2	1	33	0.00	0.00		-84 -139 -135 -83
2	1	33	0.00	0.00		-21 -33 -35 -31
2	1	33	0.00	0.00		-27 -43 -45 -28
2	1	33	0.00	0.00		-173 -163 -165
2	1	33	0.00	0.00		-45 -84 -83 -49
2	1	33	0.00	0.00		-10 -14 -25 -19
2	1	33	0.00	0.00		-28 -45 -49 -33
2	1	33	0.00	0.00		-172 -168 -164
2	1	33	0.00	0.00		-12 -27 -28 -16
2	2	33	0.00	0.00		-34 -30 -46 -54
2	2	33	0.00	0.00		-30 -24 -38 -46
2	3	33	0.00	0.00		-46 -38 -56 -62
2	3	33	0.00	0.00		-54 -46 -62 -66
2	3	33	0.00	0.00		-69 -54 -66 -74
2	3	33	0.00	0.00		-87 -69 -74 -90
2	3	33	0.00	0.00		-104 -87 -90 -99
2	3	33	0.00	0.00		-126 -104 -99 -111
2	3	33	0.00	0.00		-136 -126 -111 -120
2	3	33	0.00	0.00		-142 -136 -120 -127
2	3	33	0.00	0.00		-144 -142 -127 -132
2	3	33	0.00	0.00		-145 -144 -132 -133
2	3	33	0.00	0.00		-143 -145 -133 -128
2	3	33	0.00	0.00		-137 -143 -128 -121
2	3	33	0.00	0.00		-129 -137 -121 -112
2	3	33	0.00	0.00		-105 -129 -112 -100
2	3	33	0.00	0.00		-88 -105 -100 -91
2	3	33	0.00	0.00		-70 -88 -91 -75
2	3	33	0.00	0.00		-55 -70 -75 -67
2	3	33	0.00	0.00		-47 -55 -67 -63
2	3	33	0.00	0.00		-39 -47 -63 -57
2	3	33	0.00	0.00		-37 -39 -57 -51
2	3	33	0.00	0.00		-36 -37 -51 -50
2	3	33	0.00	0.00		-38 -36 -50 -56
2	5	33	0.00	0.00		-66 -62 -65 -68
2	4	33	0.00	0.00		-68 -78 -76
2	4	33	0.00	0.00		-122 -124 -118 -117
2	4	33	0.00	0.00		-78 -68 -65 -72
2	4	33	0.00	0.00		-61 -72 -65
2	4	33	0.00	0.00		-119 -122 -117 -113
2	4	33	0.00	0.00		-72 -61 -58
2	5	33	0.00	0.00		-50 -51 -59 -58
2	4	33	0.00	0.00		-72 -58 -59 -73
2	4	33	0.00	0.00		-73 -59 -60
2	4	33	0.00	0.00		-102 -114 -115 -107
2	4	33	0.00	0.00		-116 -107 -115 -123
2	4	33	0.00	0.00		-73 -79 -97 -92
2	4	33	0.00	0.00		-125 -123 -115 -114
2	4	33	0.00	0.00		-76 -78 -95 -94
2	4	33	0.00	0.00		-106 -97 -103
2	5	33	0.00	0.00		-121 -128 -122 -119
2	5	33	0.00	0.00		-128 -133 -124 -122
2	4	33	0.00	0.00		-101 -92 -97 -113
2	4	33	0.00	0.00		-102 -78 -92 -101
2	4	33	0.00	0.00		-113 -114 -102 -101
2	4	33	0.00	0.00		-102 -95 -78
2	4	33	0.00	0.00		-113 -106 -119
2	4	33	0.00	0.00		-79 -77 -93
2	5	33	0.00	0.00		-91 -100 -96 -93
2	4	33	0.00	0.00		-79 -93 -96 -97
2	4	33	0.00	0.00		-97 -96 -103
2	4	33	0.00	0.00		-73 -60 -64
2	5	33	0.00	0.00		-63 -67 -71 -64
2	4	33	0.00	0.00		-73 -64 -71 -79
2	4	33	0.00	0.00		-79 -71 -77
2	5	33	0.00	0.00		-90 -74 -76 -94
2	5	33	0.00	0.00		-133 -132 -125 -124
2	5	33	0.00	0.00		-111 -99 -98 -108
2	5	33	0.00	0.00		-99 -90 -94 -98
2	4	33	0.00	0.00		-107 -116 -108
2	5	33	0.00	0.00		-120 -111 -108 -116
2	4	33	0.00	0.00		-108 -98 -94 -95
2	5	33	0.00	0.00		-127 -120 -116 -123
2	5	33	0.00	0.00		-74 -66 -68 -76
2	1	33	0.00	0.00		-16 -28 -33 -21
2	1	33	0.00	0.00		-8 -16 -21 -14
2	1	33	0.00	0.00		-4 -8 -14 -10
2	1	33	0.00	0.00		-3 -4 -10 -9
2	1	33	0.00	0.00		-7 -3 -9 -13
2	1	33	0.00	0.00		-15 -7 -13 -20
2	1	33	0.00	0.00		-179 -178 -172 -173
2	1	33	0.00	0.00		-29 -15 -20 -32
2	1	33	0.00	0.00		-44 -29 -32 -48
2	1	33	0.00	0.00		-6 -12 -16 -8
2	1	33	0.00	0.00		-81 -44 -48 -82
2	1	33	0.00	0.00		-138 -81 -82 -134
2	1	33	0.00	0.00		-2 -6 -8 -4
2	1	33	0.00	0.00		-154 -138 -134 -148
2	1	33	0.00	0.00		-1 -2 -4 -3
2	1	33	0.00	0.00		-166 -154 -148 -160
2	1	33	0.00	0.00		-5 -1 -3 -7
2	1	33	0.00	0.00		-11 -5 -7 -15
2	1	33	0.00	0.00		-174 -166 -160 -168
2	1	33	0.00	0.00		-26 -11 -15 -29
2	1	33	0.00	0.00		-42 -26 -29 -44

2	1	33	0.00	0.00		-178 -174 -168 -172
2	1	33	0.00	0.00		-161 -151 -149
2	1	33	0.00	0.00		-131 -89 -110
2	1	33	0.00	0.00		-135 -131 -110
2	1	33	0.00	0.00		-110 -89 -83
2	1	33	0.00	0.00		-135 -110 -83
2	1	33	0.00	0.00		-53 -35 -41
2	1	33	0.00	0.00		-53 -41 -49
2	1	33	0.00	0.00		-41 -35 -33
2	1	33	0.00	0.00		-41 -33 -49
2	1	33	0.00	0.00		-31 -25 -23
2	1	33	0.00	0.00		-23 -25 -14
2	1	33	0.00	0.00		-23 -14 -21
2	1	33	0.00	0.00		-31 -23 -21
2	1	33	0.00	0.00		-18 -17 -19
2	1	33	0.00	0.00		-18 -9 -17
2	1	33	0.00	0.00		-17 -9 -10
2	1	33	0.00	0.00		-19 -17 -10
2	1	33	0.00	0.00		-30 -20 -22
2	1	33	0.00	0.00		-22 -20 -13
2	1	33	0.00	0.00		-22 -13 -24
2	1	33	0.00	0.00		-30 -22 -24
2	1	33	0.00	0.00		-52 -48 -40
2	1	33	0.00	0.00		-48 -32 -40
2	1	33	0.00	0.00		-40 -32 -34
2	1	33	0.00	0.00		-52 -40 -34
2	1	33	0.00	0.00		-134 -109 -130
2	1	33	0.00	0.00		-134 -82 -109
2	1	33	0.00	0.00		-109 -82 -86
2	1	33	0.00	0.00		-130 -109 -86
2	1	33	0.00	0.00		-160 -150 -152
2	1	33	0.00	0.00		-160 -148 -150
2	1	33	0.00	0.00		-150 -148 -146
2	1	33	0.00	0.00		-150 -146 -152
2	5	33	0.00	0.00		-112 -121 -103
2	4	33	0.00	0.00		-119 -106 -103
2	5	33	0.00	0.00		-96 -100 -112 -103
2	5	33	0.00	0.00		-77 -75 -91 -93
2	5	33	0.00	0.00		-71 -67 -75 -77
2	5	33	0.00	0.00		-60 -57 -63 -64
2	5	33	0.00	0.00		-59 -51 -57 -60
2	5	33	0.00	0.00		-61 -56 -50 -58
2	5	33	0.00	0.00		-62 -56 -61 -65
2	5	33	0.00	0.00		-119 -103 -121
2	4	33	0.00	0.00		-113 -97 -106
2	4	33	0.00	0.00		-102 -107 -108 -95
2	4	33	0.00	0.00		-124 -125 -114 -118
2	5	33	0.00	0.00		-132 -127 -123 -125
2	4	33	0.00	0.00		-113 -117 -118 -114
2	4	33	0.00	0.00		-73 -92 -78 -72

Elenco tipi plinti/pali

Simbologia
Comm. = Commento
Crit. = Numero del criterio di progetto
Dp = Diametro pali
Lp = Lunghezza pali
R = Rotazione testa
  B = Bloccata
  L = Libera
Tipo = Tipologia
  P = Palo
Tl = Numero del tipo plinto/palo
Tp = Tipo palo
  T = Trivellato

Tl	Tipo	Tp	Comm.	Lp <m>	R	Dp <m>	Crit.
1	P	T	Palo singolo	21.50	L	1.20	3

Elenco plinti/pali

Simbologia
Kt = Coeff. di sottofondo su suolo elastico alla Winkler
Nodo = Nodo plinto/palo
PL = Plinto/Palo
Tl = Numero del tipo plinto/palo

PL	Tl	Nodo	Kt <daN/cmc>
1	1	-40	---
2	1	-109	---
3	1	-150	---
4	1	-164	---
5	1	-165	---
6	1	-151	---
7	1	-110	---
8	1	-41	---
9	1	-23	---
10	1	-17	---
11	1	-22	---
12	1	-4	---
13	1	-3	---
14	1	-7	---
15	1	-15	---
16	1	-29	---
17	1	-44	---
18	1	-81	---
19	1	-138	---
20	1	-154	---
21	1	-166	---
22	1	-174	---
23	1	-178	---
24	1	-179	---
25	1	-175	---
26	1	-167	---
27	1	-155	---
28	1	-139	---
29	1	-84	---
30	1	-45	---
31	1	-28	---
32	1	-16	---
33	1	-8	---

Carichi

Elenco tipi CCE

Simbologia
γ max = Coeff. γ_{max}
γ min. = Coeff. $\gamma_{min.}$
ψ_0 = Coeff. ψ_0
$\psi_{0,s}$ = Coeff. ψ_0 sismico (D.M. 96)
ψ_1 = Coeff. ψ_1
ψ_2 = Coeff. ψ_2
Comm. = Commento
Durata = Durata del carico
  P = Permanente
Tipo = Tipologia
  G = Permanente
Qv = Variabile vento
Tipo CCE = Tipo condizione di carico elementare

Tipo CCE	Comm.	Tipo	Durata	γ min.	γ max	ψ_0	ψ_1	ψ_2	$\psi_{0,s}$
1	D.M. 18 Permanenti strutturali	G	P	1.00	1.35				

Condizioni di carico elementari

Simbologia
CCE = Numero della condizione di carico elementare
Comm. = Commento
Dir. = Direzione del vento
Jpx = Moltiplicatore del momento d'inerzia intorno all'asse X

Jpy = Moltiplicatore del momento d'inerzia intorno all'asse Y
Jpz = Moltiplicatore del momento d'inerzia intorno all'asse Z
Mx = Moltiplicatore della massa in dir. X
My = Moltiplicatore della massa in dir. Y
Mz = Moltiplicatore della massa in dir. Z
Sic. = Contributo alla sicurezza
  S = a sfavore
Tipo = Tipologia di pressione vento
  M = Massimizzata
  E = Esterna
  I = Interna
Tipo CCE = Tipo di CCE per calcolo agli stati limite
Var. = Tipo di variabilità
  B = di base
s = Coeff. di riduzione (T.A. o S.L. D.M. 96)

CCE	Comm.	Tipo CCE	Sic.	Var.	s	Dir. <grad>	Tipo	Mx	My	Mz	Jpx	Jpy	Jpz
1		1	S	--	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00

Elenco carichi nodi

Condizione di carico n. 1:
Carichi concentrati

Simbologia
Fx = Componente X della forza applicata
Fy = Componente Y della forza applicata
Fz = Componente Z della forza applicata
Mx = Momento intorno all'asse X
My = Momento intorno all'asse Y
Mz = Momento intorno all'asse Z
Nodo = Numero del nodo

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
-92	164800.00	0.00	722200.00	20303400.00	0.00	1806100.00

Elenco carichi elementi bidimensionali

Condizione di carico n. 1:
Carichi uniformi

Simbologia
Bid. = Numero del muro/elemento bidimensionale
DC = Direzione del carico
  G = secondo gli assi globali
  L = secondo gli assi locali
N1 = Nodo1
N2 = Nodo2
N3 = Nodo3
N4 = Nodo4
Qx = Carico in dir. X
Qy = Carico in dir. Y
Qz = Carico in dir. Z
T = Tipo di carico
  PP = Peso proprio
  M = Manuale

Bid.	N1	N2	N3	N4	T	DC	Qx <daN/mq>	Qy <daN/mq>	Qz <daN/mq>
2	--	--	--	--	M	G	0.00	0.00	3059.00

Elenco peso proprio elementi bidimensionali

Simbologia
Comm. = Commento
Mat. = Materiale
P = Peso specifico
PQ = Peso specifico per unità di superficie
Spess. = Spessore
Tb = Numero del tipo muro/elemento bidimensionale

Tb	Comm.	Spess. <cm>	Mat.	P <daN/mc>	PQ <daN/mq>
1	Platea h=1.50 mt	150.00	Calcestruzzo classe C40/50	2500.00	3750.00
2	Platea H=2.6 mt	260.00	Calcestruzzo classe C40/50	2500.00	6500.00
3	Platea H=3 .50 mt	350.00	Calcestruzzo classe C40/50	2500.00	8750.00
4	NODO CENTRALE 1.50 MT	150.00	Calcestruzzo classe C40/50	2500.00	3750.00
5	SEZIONE COLLARE H= 4.00 ML	400.00	Calcestruzzo classe C40/50	2500.00	10000.00

Risultati del calcolo

Parametri di calcolo

La modellazione della struttura e la rielaborazione dei risultati del calcolo sono stati effettuati con:
ModeSt ver. 8.32, licenza n. 7116, prodotto da Tecnisoft s.a.s. - Prato
La struttura è stata calcolata utilizzando come solutore agli elementi finiti:
Xfinest ver. 9.6.4, licenza n. -1338054447, prodotto da Ce.A.S. S.r.l. - Milano

Tipo di normativa: stati limite D.M. 18
Tipo di calcolo: statico
Vincoli esterni: Considera sempre vincoli assegnati in modellazione
Schematizzazione piani rigidi: nessun impalcato rigido
Modalità di recupero masse secondarie: mantenere sul nodo masse e forze relative

Generazione combinazioni
- Tipo di analisi: Lineare
- Valuta spostamenti e non sollecitazioni: No
- Buckling: No

Opzioni di calcolo
- Sono state considerate infinitamente rigide le zone di connessione fra travi, pilastri ed elementi bidimensionali con una riduzione del 20%
- Calcolo con offset rigidi dai nodi: No
- Uniformare i carichi variabili: No
- Massimizzare i carichi variabili: No
- Recupero carichi zone rigide: taglio e momento flettente

Opzioni del solutore
Opzioni generali:
- Trascura deformabilità a taglio delle aste: No
- Analisi dinamica con metodo di Lanczos: Sì
- Check sequenza di Sturm: Sì
- Usa formulazione secante per buckling: No
- Trascura buckling torsionale: No

- Tipo di elemento bidimensionale: QF46
- Calcolo sforzo nei nodi: No

Opzioni per analisi P-Delta:
- Numero massimo di iterazioni: 15
- Valore della norma euclidea degli spostamenti: 1.0000E-04

Opzioni per analisi pushover:
- Esegui analisi in regime di piccoli spostamenti: Sì

Opzioni per analisi pushover murature:
- Interrompi analisi nel caso di plasticizzazione per carichi statici: Sì
- Utilizza sforzo normale medio: Sì

Metodo di convergenza:
- Forze e momenti residui (F)
  Valore della norma euclidea delle forze: 1.0000E-03
  Valore della norma euclidea dei momenti: 1.0000E-02

- Opzioni aggiuntive per analisi non lineari in presenza di elementi bidimensionali con comportamento Drucker-Prager:
OPTION PARAM AUTO_INCREMENT=YES
OPTION PARAM LINE_SEARCHES=YES
OPTION PARAM BGINCRS=1.0
OPTION PARAM AVINCRS=1.0

Dati struttura
- Edificio esistente: No
- Tipo di opera: Grande opera
- Vita nominale V_N: 100.00
- Classe d'uso: Classe III
- Forze orizzontali convenzionali per stati limite non sismici: No
- Genera stati limite per verifiche di resistenza al fuoco: No

Ambienti di caricoSimbologia
N = Numero
Comm. = Commento
1 =
F = azioni orizzontali convenzionali
SLU = Stato limite ultimo
SLR = Stato limite per combinazioni rare
SLF = Stato limite per combinazioni frequenti
SLQ/D = Stato limite per combinazioni quasi permanenti o di danno
S = Sì
N = No

N	Comm.	1	SLU	SLR	SLF	SLQ
1	Calcolo statico	S	S	S	S	S

Elenco combinazioni di carico simboliche

Simbologia
CC = Numero della combinazione delle condizioni di carico elementari
Comm. = Commento
TCC = Tipo di combinazione di carico
SLU = Stato limite ultimo
SLE R = Stato limite d'esercizio, combinazione rara
SLE F = Stato limite d'esercizio, combinazione frequente
SLE Q = Stato limite d'esercizio, combinazione quasi permanente

CC	Comm.	TCC	1
1	Amb. 1 (SLU)	SLU	γ max
2	Amb. 1 (SLE R)	SLE R	1
3	Amb. 1 (SLE F)	SLE F	1
4	Amb. 1 (SLE Q)	SLE Q	1

Genera le combinazioni con un solo carico di tipo variabile come di base: No

Considera sollecitazioni dinamiche con segno dei modi principali: No

Combinazioni delle CCE

Simbologia
An. = Tipo di analisi
L = Lineare
NL = Non lineare
PD = P-Delta
Bk = Buckling
S = Si
N = No
CC = Numero della combinazione delle condizioni di carico elementari
Comm. = Commento
TCC = Tipo di combinazione di carico
SLU = Stato limite ultimo
SLE R = Stato limite d'esercizio, combinazione rara
SLE F = Stato limite d'esercizio, combinazione frequente
SLE Q = Stato limite d'esercizio, combinazione quasi permanente

CC	Comm.	TCC	An.	Bk	1
1	Amb. 1 (SLU)	SLU	L	N	1.35
2	Amb. 1 (SLE R)	SLE R	L	N	1.00
3	Amb. 1 (SLE F)	SLE F	L	N	1.00
4	Amb. 1 (SLE Q)	SLE Q	L	N	1.00

Spostamenti dei nodi

Simbologia
CC = Numero della combinazione delle condizioni di carico elementari
Nodo = Numero del nodo
Rx = Rotazione intorno all'asse X
Ry = Rotazione intorno all'asse Y
Rz = Rotazione intorno all'asse Z
Sx = Spostamento in dir. X
Sy = Spostamento in dir. Y
Sz = Spostamento in dir. Z
TCC = Tipo di combinazione di carico
SLU = Stato limite ultimo
SLE R = Stato limite d'esercizio, combinazione rara
SLE F = Stato limite d'esercizio, combinazione frequente
SLE Q = Stato limite d'esercizio, combinazione quasi permanente

I valori degli spostamenti nodali per CC di tipo sismico sono amplificati come da normativa

Nodo		Sx <cm>	CC	TCC	Sy <cm>	CC	TCC	Sz <cm>	CC	TCC	Rx <rad>	CC	TCC	Ry <rad>	CC	TCC	Rz <rad>	CC	TCC
-181	Max	-0.04	2	SLE R	-0.00	2	SLE R	-0.61	2	SLE R	0.00	1	SLU	0.00	2	SLE R	0.00	2	SLE R
-181	Min.	-0.05	1	SLU	-0.00	1	SLU	-0.82	1	SLU	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-180	Max	-0.04	2	SLE R	0.00	1	SLU	-0.61	2	SLE R	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-180	Min.	-0.05	1	SLU	0.00	2	SLE R	-0.82	1	SLU	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-179	Max	-0.04	2	SLE R	-0.00	2	SLE R	-0.64	2	SLE R	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-179	Min.	-0.05	1	SLU	-0.00	1	SLU	-0.86	1	SLU	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-178	Max	-0.04	2	SLE R	0.00	1	SLU	-0.64	2	SLE R	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-178	Min.	-0.05	1	SLU	0.00	2	SLE R	-0.86	1	SLU	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-177	Max	-0.04	2	SLE R	-0.00	2	SLE R	-0.58	2	SLE R	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-177	Min.	-0.05	1	SLU	-0.01	1	SLU	-0.79	1	SLU	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-176	Max	-0.04	2	SLE R	0.01	1	SLU	-0.58	2	SLE R	0.00	1	SLU	0.00	1	SLU	0.00	2	SLE R
-176	Min.	-0.05	1	SLU	0.00	2	SLE R	-0.78	1	SLU	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-175	Max	-0.04	2	SLE R	-0.00	2	SLE R	-0.61	2	SLE R	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-175	Min.	-0.06	1	SLU	-0.01	1	SLU	-0.83	1	SLU	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-174	Max	-0.04	2	SLE R	0.01	1	SLU	-0.61	2	SLE R	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-174	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.82	1	SLU	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-173	Max	-0.04	2	SLE R	0.00	2	SLE R	-0.71	2	SLE R	0.00	1	SLU	0.00	2	SLE R	0.00	2	SLE R
-173	Min.	-0.06	1	SLU	-0.00	1	SLU	-0.95	1	SLU	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-172	Max	-0.04	2	SLE R	0.00	1	SLU	-0.70	2	SLE R	0.00	1	SLU	0.00	1	SLU	0.00	2	SLE R
-172	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.95	1	SLU	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-171	Max	-0.04	2	SLE R	-0.01	2	SLE R	-0.53	2	SLE R	0.00	1	SLU	0.00	2	SLE R	0.00	2	SLE R
-171	Min.	-0.06	1	SLU	-0.01	1	SLU	-0.72	1	SLU	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-170	Max	-0.04	2	SLE R	0.01	1	SLU	-0.53	2	SLE R	0.00	1	SLU	0.00	1	SLU	0.00	2	SLE R
-170	Min.	-0.06	1	SLU	0.01	2	SLE R	-0.72	1	SLU	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-169	Max	-0.04	2	SLE R	-0.00	2	SLE R	-0.68	2	SLE R	0.00	1	SLU	0.00	2	SLE R	0.00	2	SLE R
-169	Min.	-0.06	1	SLU	-0.00	1	SLU	-0.92	1	SLU	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-168	Max	-0.04	2	SLE R	0.00	1	SLU	-0.68	2	SLE R	0.00	1	SLU	0.00	1	SLU	0.00	2	SLE R
-168	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.91	1	SLU	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-167	Max	-0.04	2	SLE R	-0.01	2	SLE R	-0.56	2	SLE R	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-167	Min.	-0.06	1	SLU	-0.01	1	SLU	-0.76	1	SLU	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-166	Max	-0.04	2	SLE R	0.01	1	SLU	-0.56	2	SLE R	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-166	Min.	-0.06	1	SLU	0.01	2	SLE R	-0.76	1	SLU	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-165	Max	-0.04	2	SLE R	-0.00	2	SLE R	-0.73	2	SLE R	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-165	Min.	-0.06	1	SLU	-0.00	1	SLU	-0.98	1	SLU	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-164	Max	-0.04	2	SLE R	0.00	1	SLU	-0.72	2	SLE R	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-164	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.98	1	SLU	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-163	Max	-0.04	2	SLE R	0.00	2	SLE R	-0.76	2	SLE R	0.00	1	SLU	0.00	2	SLE R	0.00	2	SLE R
-163	Min.	-0.06	1	SLU	-0.00	1	SLU	-1.02	1	SLU	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-162	Max	-0.04	2	SLE R	0.00	1	SLU	-0.76	2	SLE R	0.00	1	SLU	0.00	1	SLU	0.00	2	SLE R
-162	Min.	-0.06	1	SLU	0.00	2	SLE R	-1.02	1	SLU	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-161	Max	-0.04	2	SLE R	-0.00	2	SLE R	-0.63	2	SLE R	0.00	1	SLU	0.00	2	SLE R	0.00	2	SLE R
-161	Min.	-0.06	1	SLU	-0.01	1	SLU	-0.85	1	SLU	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-160	Max	-0.04	2	SLE R	0.01	1	SLU	-0.63	2	SLE R	0.00	1	SLU	0.00	1	SLU	0.00	2	SLE R
-160	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.85	1	SLU	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-159	Max	-0.04	2	SLE R	-0.00	2	SLE R	-0.73	2	SLE R	0.00	1	SLU	0.00	2	SLE R	0.00	2	SLE R
-159	Min.	-0.06	1	SLU	-0.00	1	SLU	-0.99	1	SLU	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-158	Max	-0.04	2	SLE R	0.00	1	SLU	-0.73	2	SLE R	0.00	1	SLU	0.00	1	SLU	0.00	2	SLE R
-158	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.98	1	SLU	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-157	Max	-0.04	2	SLE R	-0.01	2	SLE R	-0.47	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-157	Min.	-0.06	1	SLU	-0.01	1	SLU	-0.63	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-156	Max	-0.04	2	SLE R	0.01	1	SLU	-0.46	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-156	Min.	-0.06	1	SLU	0.01	2	SLE R	-0.63	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	2	SLE R
-155	Max	-0.04	2	SLE R	-0.01	2	SLE R	-0.50	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-155	Min.	-0.06	1	SLU	-0.01	1	SLU	-0.67	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-154	Max	-0.04	2	SLE R	0.01	1	SLU	-0.49	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-154	Min.	-0.06	1	SLU	0.01	2	SLE R	-0.67	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-153	Max	-0.04	2	SLE R	-0.00	2	SLE R	-0.68	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-153	Min.	-0.06	1	SLU	-0.01	1	SLU	-0.92	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-152	Max	-0.04	2	SLE R	0.01	1	SLU	-0.68	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-152	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.92	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-151	Max	-0.04	2	SLE R	-0.00	2	SLE R	-0.63	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-151	Min.	-0.06	1	SLU	-0.01	1	SLU	-0.85	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-150	Max	-0.04	2	SLE R	0.01	1	SLU	-0.62	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-150	Min.	-0.06	1	SLU	0.01	2	SLE R	-0.84	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-149	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.56	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-149	Min.	-0.06	1	SLU	-0.01	1	SLU	-0.76	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-148	Max	-0.05	2	SLE R	0.01	1	SLU	-0.56	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-148	Min.	-0.06	1	SLU	0.01	2	SLE R	-0.75	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-147	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.61	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-147	Min.	-0.06	1	SLU	-0.01	1	SLU	-0.83	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-146	Max	-0.05	2	SLE R	0.01	1	SLU	-0.61	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-146	Min.	-0.06	1	SLU	0.01	2	SLE R	-0.82	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-145	Max	-0.05	2	SLE R	0.00	2	SLE R	-0.76	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-145	Min.	-0.06	1	SLU	0.00	1	SLU	-1.02	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-144	Max	-0.05	2	SLE R	0.00	1	SLU	-0.76	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-144	Min.	-0.06	1	SLU	0.00	2	SLE R	-1.02	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-143	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.74	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-143	Min.	-0.06	1	SLU	-0.00	1	SLU	-1.00	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-142	Max	-0.05	2	SLE R	0.00	1	SLU	-0.74	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-142	Min.	-0.06	1	SLU	0.00	2	SLE R	-1.00	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU

-141	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.39	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-141	Min.	-0.06	1	SLU	-0.01	1	SLU	-0.52	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	2	SLE R
-140	Max	-0.05	2	SLE R	0.01	1	SLU	-0.38	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-140	Min.	-0.06	1	SLU	0.01	2	SLE R	-0.52	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-139	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.41	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-139	Min.	-0.06	1	SLU	-0.01	1	SLU	-0.56	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-138	Max	-0.05	2	SLE R	0.01	1	SLU	-0.41	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-138	Min.	-0.06	1	SLU	0.01	2	SLE R	-0.55	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-137	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.70	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-137	Min.	-0.06	1	SLU	-0.00	1	SLU	-0.95	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-136	Max	-0.05	2	SLE R	0.00	1	SLU	-0.70	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-136	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.94	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-135	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.47	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-135	Min.	-0.06	1	SLU	-0.01	1	SLU	-0.64	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-134	Max	-0.05	2	SLE R	0.01	1	SLU	-0.47	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-134	Min.	-0.06	1	SLU	0.01	2	SLE R	-0.64	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-133	Max	-0.05	2	SLE R	0.00	1	SLU	-0.74	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-133	Min.	-0.06	1	SLU	0.00	2	SLE R	-1.00	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-132	Max	-0.05	2	SLE R	0.00	1	SLU	-0.74	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-132	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.99	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-131	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.53	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-131	Min.	-0.06	1	SLU	-0.01	1	SLU	-0.72	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-130	Max	-0.05	2	SLE R	0.01	1	SLU	-0.53	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-130	Min.	-0.06	1	SLU	0.01	2	SLE R	-0.71	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-129	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.65	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-129	Min.	-0.06	1	SLU	-0.00	1	SLU	-0.88	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-128	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.72	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-128	Min.	-0.06	1	SLU	-0.00	1	SLU	-0.97	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-127	Max	-0.05	2	SLE R	0.00	1	SLU	-0.72	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-127	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.97	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-126	Max	-0.05	2	SLE R	0.00	1	SLU	-0.65	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-126	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.87	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-125	Max	-0.05	2	SLE R	0.00	1	SLU	-0.73	2	SLE R	0.00	2	SLE R	0.00	1	SLU	-0.00	2	SLE R
-125	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.99	1	SLU	0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-124	Max	-0.05	2	SLE R	0.00	1	SLU	-0.74	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-124	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.99	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-123	Max	-0.05	2	SLE R	0.00	1	SLU	-0.73	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-123	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.98	1	SLU	0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-122	Max	-0.05	2	SLE R	0.00	1	SLU	-0.73	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-122	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.98	1	SLU	0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-121	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.69	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-121	Min.	-0.06	1	SLU	-0.00	1	SLU	-0.93	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-120	Max	-0.05	2	SLE R	0.00	1	SLU	-0.69	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-120	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.93	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-119	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.71	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-119	Min.	-0.06	1	SLU	-0.00	1	SLU	-0.96	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-118	Max	-0.05	2	SLE R	0.00	1	SLU	-0.74	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	-0.00	2	SLE R
-118	Min.	-0.07	1	SLU	0.00	2	SLE R	-1.01	1	SLU	0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-117	Max	-0.05	2	SLE R	0.00	1	SLU	-0.74	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-117	Min.	-0.06	1	SLU	0.00	2	SLE R	-1.00	1	SLU	0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-116	Max	-0.05	2	SLE R	0.00	1	SLU	-0.70	2	SLE R	0.00	2	SLE R	0.00	1	SLU	-0.00	2	SLE R
-116	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.94	1	SLU	0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-115	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.73	2	SLE R	0.00	2	SLE R	0.00	1	SLU	-0.00	2	SLE R
-115	Min.	-0.06	1	SLU	-0.00	1	SLU	-0.99	1	SLU	0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-114	Max	-0.04	2	SLE R	0.00	2	SLE R	-0.76	2	SLE R	0.00	2	SLE R	0.00	1	SLU	-0.00	2	SLE R
-114	Min.	-0.06	1	SLU	-0.00	1	SLU	-1.02	1	SLU	-0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-113	Max	-0.05	2	SLE R	0.00	1	SLU	-0.75	2	SLE R	-0.00	2	SLE R	0.00	1	SLU	-0.00	2	SLE R
-113	Min.	-0.07	1	SLU	0.00	2	SLE R	-1.01	1	SLU	-0.00	1	SLU	0.00	2	SLE R	-0.01	1	SLU
-112	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.65	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-112	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.88	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-111	Max	-0.05	2	SLE R	0.00	1	SLU	-0.65	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-111	Min.	-0.06	1	SLU	0.00	2	SLE R	-0.87	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-110	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.46	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-110	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.62	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-109	Max	-0.05	2	SLE R	0.01	1	SLU	-0.46	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-109	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.62	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-108	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.66	2	SLE R	0.00	2	SLE R	0.00	1	SLU	-0.00	2	SLE R
-108	Min.	-0.06	1	SLU	-0.00	1	SLU	-0.89	1	SLU	0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-107	Max	-0.04	2	SLE R	0.01	1	SLU	-0.71	2	SLE R	0.00	2	SLE R	0.00	1	SLU	-0.00	2	SLE R
-107	Min.	-0.06	1	SLU	0.01	2	SLE R	-0.96	1	SLU	-0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-106	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.69	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	-0.00	2	SLE R
-106	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.93	1	SLU	0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-105	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.59	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-105	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.79	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-104	Max	-0.05	2	SLE R	0.00	1	SLU	-0.59	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-104	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.79	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-103	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.64	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-103	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.86	1	SLU	0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-102	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.70	2	SLE R	-0.00	2	SLE R	0.00	2	SLE R	-0.01	2	SLE R
-102	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.95	1	SLU	-0.00	1	SLU	0.00	1	SLU	-0.01	1	SLU
-101	Max	-0.04	2	SLE R	0.00	2	SLE R	-0.76	2	SLE R	-0.00	2	SLE R	0.00	2	SLE R	-0.00	2	SLE R
-101	Min.	-0.05	1	SLU	-0.00	1	SLU	-1.02	1	SLU	-0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-100	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.60	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-100	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.81	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-99	Max	-0.05	2	SLE R	0.00	1	SLU	-0.60	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-99	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.81	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-98	Max	-0.05	2	SLE R	0.00	1	SLU	-0.60	2	SLE R	0.00	2	SLE R	0.00	1	SLU	-0.00	2	SLE R
-98	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.80	1	SLU	0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-97	Max	-0.04	2	SLE R	-0.00	2	SLE R	-0.69	2	SLE R	-0.00	2	SLE R	0.00	1	SLU	-0.00	2	SLE R
-97	Min.	-0.05	1	SLU	-0.00	1	SLU	-0.93	1	SLU	-0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-96	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.58	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	-0.00	2	SLE R
-96	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.79	1	SLU	0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-95	Max	-0.05	2	SLE R	0.01	1	SLU	-0.60	2	SLE R	0.00	2	SLE R	0.00	1	SLU	-0.00	2	SLE R
-95	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.81	1	SLU	-0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-94	Max	-0.05	2	SLE R	0.00	1	SLU	-0.56	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-94	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.75	1	SLU	0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-93	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.56	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	-0.00	2	SLE R
-93	Min.	-0.06	1	SLU	-0.00	1	SLU	-0.75	1	SLU	0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-92	Max	-0.06	2	SLE R	-0.00	2	SLE R	-0.59	2	SLE R	-0.01	2	SLE R	0.00	1	SLU	-0.01	2	SLE R
-92	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.79	1	SLU	-0.01	1	SLU	0.00	2	SLE R	-0.02	1	SLU
-91	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.55	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-91	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.74	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-90	Max	-0.05	2	SLE R	0.00	1	SLU	-0.54	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-90	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.73	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-89	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.44	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-89	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.59	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-88	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.52	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-88	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.70	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-87	Max	-0.05	2	SLE R	0.00	1	SLU	-0.52	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-87	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.70	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-86	Max	-0.05	2	SLE R	0.01	1	SLU	-0.44	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-86	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.59	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-85	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.30	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-85	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.40	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-84	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.32	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-84	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.44	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-83	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.38	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-83	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.52	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-82	Max	-0.05	2	SLE R	0.01	1	SLU	-0.38	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-82	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.51	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-81	Max	-0.05	2	SLE R	0.01	1	SLU	-0.32	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-81	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.43	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-80	Max	-0.05	2	SLE R	0.01	1	SLU	-0.29	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-80	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.40	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	2	SLE R
-79	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.52	2	SLE R	-0.00	2	SLE R	0.00	2	SLE R	-0.01	2	SLE R
-79	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.70	1	SLU	-0.00	1	SLU	0.00	1	SLU	-0.01	1	SLU
-78	Max	-0.05	2	SLE R	0.01	1	SLU	-0.52	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-78	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.71	1	SLU	-0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-77	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.51	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	-0.00	2	SLE R
-77	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.68	1	SLU	0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-76	Max	-0.05	2	SLE R	0.00	1	SLU	-0.51	2	SLE R	0.00	2	SLE R	0.00	1	SLU	-0.00	2	SLE R
-76	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.69	1	SLU	0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-75	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.49	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-75	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.66	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-74	Max	-0.05	2	SLE R	0.00	1	SLU	-0.49	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-74	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.66	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-73	Max	-0.06	2	SLE R	-0.00	2	SLE R	-0.39	2	SLE R	-0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-73	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.53	1	SLU	-0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-72	Max	-0.06	2	SLE R	0.00	1	SLU	-0.41	2	SLE R	-0.00	2	SLE R	0.00	1	SLU	-0.01	2	SLE R

-72	Min.	-0.08	1	SLU	0.00	2	SLE R	-0.55	1	SLU	-0.00	1	SLU	0.00	2	SLE R	-0.01	1	SLU
-71	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.46	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-71	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.62	1	SLU	0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-70	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.45	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-70	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.61	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-69	Max	-0.05	2	SLE R	0.01	1	SLU	-0.45	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-69	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.61	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-68	Max	-0.05	2	SLE R	0.00	1	SLU	-0.44	2	SLE R	0.00	2	SLE R	0.00	1	SLU	-0.00	2	SLE R
-68	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.60	1	SLU	0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-67	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.44	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-67	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.59	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-66	Max	-0.05	2	SLE R	0.00	1	SLU	-0.44	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-66	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.60	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-65	Max	-0.05	2	SLE R	0.00	1	SLU	-0.41	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	-0.00	2	SLE R
-65	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.55	1	SLU	0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-64	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.40	2	SLE R	0.00	2	SLE R	0.00	1	SLU	-0.00	2	SLE R
-64	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.54	1	SLU	0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-63	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.40	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-63	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.54	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-62	Max	-0.05	2	SLE R	0.00	1	SLU	-0.40	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-62	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.54	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-61	Max	-0.05	2	SLE R	0.00	1	SLU	-0.38	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	-0.00	2	SLE R
-61	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.52	1	SLU	0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-60	Max	-0.05	2	SLE R	0.00	2	SLE R	-0.38	2	SLE R	0.00	2	SLE R	0.00	1	SLU	-0.00	2	SLE R
-60	Min.	-0.07	1	SLU	0.00	1	SLU	-0.51	1	SLU	0.00	1	SLU	0.00	2	SLE R	-0.00	1	SLU
-59	Max	-0.05	2	SLE R	0.00	1	SLU	-0.36	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	-0.00	2	SLE R
-59	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.49	1	SLU	0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-58	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.36	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	-0.00	2	SLE R
-58	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.49	1	SLU	0.00	1	SLU	0.00	1	SLU	-0.00	1	SLU
-57	Max	-0.05	2	SLE R	0.00	2	SLE R	-0.37	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-57	Min.	-0.07	1	SLU	0.00	1	SLU	-0.50	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-56	Max	-0.05	2	SLE R	0.00	1	SLU	-0.37	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-56	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.50	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-55	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.39	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-55	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.53	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-54	Max	-0.05	2	SLE R	0.00	1	SLU	-0.39	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-54	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.53	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-53	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.35	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-53	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.47	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-52	Max	-0.05	2	SLE R	0.01	1	SLU	-0.35	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-52	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.47	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-51	Max	-0.05	2	SLE R	0.00	1	SLU	-0.35	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-51	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.48	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-50	Max	-0.05	2	SLE R	0.00	2	SLE R	-0.35	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-50	Min.	-0.07	1	SLU	0.00	1	SLU	-0.48	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-49	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.29	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-49	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.39	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-48	Max	-0.05	2	SLE R	0.01	1	SLU	-0.29	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-48	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.40	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-47	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.34	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-47	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.46	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-46	Max	-0.05	2	SLE R	0.00	1	SLU	-0.34	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-46	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.46	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-45	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.23	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-45	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.32	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-44	Max	-0.05	2	SLE R	0.01	1	SLU	-0.24	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-44	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.32	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-43	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.21	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-43	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.28	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	2	SLE R
-42	Max	-0.05	2	SLE R	0.01	1	SLU	-0.21	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-42	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.28	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-41	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.28	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-41	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.38	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-40	Max	-0.05	2	SLE R	0.01	1	SLU	-0.28	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-40	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.38	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-39	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.30	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-39	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.41	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-38	Max	-0.05	2	SLE R	0.00	1	SLU	-0.30	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-38	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.41	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-37	Max	-0.05	2	SLE R	0.00	2	SLE R	-0.28	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-37	Min.	-0.07	1	SLU	0.00	1	SLU	-0.38	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-36	Max	-0.05	2	SLE R	0.00	1	SLU	-0.28	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-36	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.38	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-35	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.27	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-35	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.36	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-34	Max	-0.05	2	SLE R	0.01	1	SLU	-0.27	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-34	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.36	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-33	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.21	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-33	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.28	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-32	Max	-0.05	2	SLE R	0.01	1	SLU	-0.21	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-32	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.28	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-31	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.20	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-31	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.27	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-30	Max	-0.05	2	SLE R	0.00	1	SLU	-0.20	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-30	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.27	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-29	Max	-0.05	2	SLE R	0.01	1	SLU	-0.15	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-29	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.21	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-28	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.15	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-28	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.21	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-27	Max	-0.05	2	SLE R	-0.01	2	SLE R	-0.13	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-27	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.17	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-26	Max	-0.05	2	SLE R	0.01	1	SLU	-0.13	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-26	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.17	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	2	SLE R
-25	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.15	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-25	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.20	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-24	Max	-0.05	2	SLE R	0.00	1	SLU	-0.15	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-24	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.20	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-23	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.14	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-23	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.19	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-22	Max	-0.05	2	SLE R	0.00	1	SLU	-0.15	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-22	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.20	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-21	Max	-0.05	2	SLE R	-0.00	2	SLE R	-0.14	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-21	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.19	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-20	Max	-0.05	2	SLE R	0.01	1	SLU	-0.14	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-20	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.19	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-19	Max	-0.06	2	SLE R	0.00	2	SLE R	-0.12	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-19	Min.	-0.08	1	SLU	0.00	1	SLU	-0.17	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-18	Max	-0.05	2	SLE R	0.00	1	SLU	-0.13	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-18	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.17	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-17	Max	-0.06	2	SLE R	0.00	2	SLE R	-0.09	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-17	Min.	-0.07	1	SLU	0.00	1	SLU	-0.13	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-16	Max	-0.06	2	SLE R	-0.01	2	SLE R	-0.08	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-16	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.11	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-15	Max	-0.06	2	SLE R	0.01	1	SLU	-0.09	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-15	Min.	-0.07	1	SLU	0.01	2	SLE R	-0.12	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-14	Max	-0.06	2	SLE R	-0.00	2	SLE R	-0.09	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-14	Min.	-0.08	1	SLU	-0.00	1	SLU	-0.12	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-13	Max	-0.06	2	SLE R	0.00	1	SLU	-0.09	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-13	Min.	-0.07	1	SLU	0.00	2	SLE R	-0.12	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-12	Max	-0.06	2	SLE R	-0.01	2	SLE R	-0.06	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-12	Min.	-0.07	1	SLU	-0.01	1	SLU	-0.08	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	2	SLE R
-11	Max	-0.06	2	SLE R	0.01	1	SLU	-0.06	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-11	Min.	-0.08	1	SLU	0.01	2	SLE R	-0.09	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-10	Max	-0.06	2	SLE R	0.00	2	SLE R	-0.06	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	2	SLE R
-10	Min.	-0.07	1	SLU	-0.00	1	SLU	-0.09	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-9	Max	-0.06	2	SLE R	0.00	1	SLU	-0.06	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-9	Min.	-0.08	1	SLU	0.00	2	SLE R	-0.09	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-8	Max	-0.06	2	SLE R	-0.00	2	SLE R	-0.04	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-8	Min.	-0.08	1	SLU	-0.00	1	SLU	-0.05	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-7	Max	-0.06	2	SLE R	0.00	1	SLU	-0.04	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-7	Min.	-0.08	1	SLU	0.00	2	SLE R	-0.05	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	1	SLU
-6	Max	-0.06	2	SLE R	-0.00	2	SLE R	-0.01	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-6	Min.	-0.08	1	SLU	-0.00	1	SLU	-0.02	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-5	Max	-0.06	2	SLE R	0.00	1	SLU	-0.02	2	SLE R	0.00	2	SLE R	0.00	1	SLU	0.00	1	SLU
-5	Min.	-0.08	1	SLU	0.00	2	SLE R	-0.02	1	SLU	0.00	1	SLU	0.00	2	SLE R	0.00	2	SLE R
-4	Max	-0.06	2	SLE R	-0.00	2	SLE R	-0.01	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-4	Min.	-0.08	1	SLU	-0.00	1	SLU	-0.02	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU
-3	Max	-0.06	2	SLE R	0.00	1	SLU	-0.01	2	SLE R	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-3	Min.	-0.08	1	SLU	0.00	2	SLE R	-0.02	1	SLU	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU

-2	Max	-0.06	2	SLE R	-0.00	2	SLE R	0.01	1	SLU	0.00	2	SLE R	0.00	2	SLE R	0.00	1	SLU
-2	Min.	-0.08	1	SLU	-0.00	1	SLU	0.01	2	SLE R	0.00	1	SLU	0.00	1	SLU	0.00	2	SLE R
-1	Max	-0.06	2	SLE R	0.00	1	SLU	0.01	1	SLU	0.00	2	SLE R	0.00	2	SLE R	0.00	2	SLE R
-1	Min.	-0.08	1	SLU	0.00	2	SLE R	0.01	2	SLE R	0.00	1	SLU	0.00	1	SLU	0.00	1	SLU

Min = -1.02
Max = 0.01

Reazioni vincolari

Simbologia
CC = Numero della combinazione delle condizioni di carico elementari
Fx = Reazione vincolare (forza) in dir. X
Fy = Reazione vincolare (forza) in dir. Y
Fz = Reazione vincolare (forza) in dir. Z
Mx = Reazione vincolare (momento) intorno all'asse X
My = Reazione vincolare (momento) intorno all'asse Y
Mz = Reazione vincolare (momento) intorno all'asse Z
Nodo = Numero del nodo
TCC = Tipo di combinazione di carico
  SLU = Stato limite ultimo
  SLE R = Stato limite d'esercizio, combinazione rara
  SLE F = Stato limite d'esercizio, combinazione frequente
  SLE Q = Stato limite d'esercizio, combinazione quasi permanente

Nodo		CC	TCC	Fx <daN>	CC	TCC	Fy <daN>	CC	TCC	Fz <daN>	CC	TCC	Mx <daNm>	CC	TCC	My <daNm>	CC	TCC	Mz <daNm>
-179	Max	1	SLU	5547.49	1	SLU	164.82	1	SLU	317954.00	2	SLE R	-34458.70	1	SLU	11488.90	1	SLU	17273.80
-179	Min	2	SLE R	4109.25	2	SLE R	122.09	2	SLE R	235522.00	1	SLU	-46519.30	2	SLE R	8510.29	1	SLU	12795.40
-178	Max	1	SLU	5541.32	2	SLE R	-134.57	1	SLU	317570.00	2	SLE R	-34402.00	2	SLE R	-8943.95	1	SLU	14338.30
-178	Min	2	SLE R	4104.68	1	SLU	-181.67	2	SLE R	235237.00	1	SLU	-46442.70	2	SLE R	-12074.30	1	SLU	10620.90
-175	Max	1	SLU	5646.93	1	SLU	517.84	1	SLU	305679.00	2	SLE R	-27154.70	1	SLU	32801.10	1	SLU	14669.70
-175	Min	2	SLE R	4182.91	2	SLE R	383.59	2	SLE R	226429.00	1	SLU	-36658.80	2	SLE R	24297.10	1	SLU	10866.40
-174	Max	1	SLU	5655.77	2	SLE R	-381.31	1	SLU	304602.00	2	SLE R	-27010.90	2	SLE R	-24630.70	1	SLU	16522.30
-174	Min	2	SLE R	4189.46	1	SLU	-514.77	2	SLE R	225631.00	1	SLU	-36464.70	2	SLE R	-33251.40	1	SLU	12238.70
-167	Max	1	SLU	5850.73	1	SLU	796.55	1	SLU	281350.00	2	SLE R	-14670.30	1	SLU	47749.20	1	SLU	19207.70
-167	Min	2	SLE R	4333.87	2	SLE R	590.03	2	SLE R	208407.00	1	SLU	-19805.00	2	SLE R	35369.80	1	SLU	14227.90
-166	Max	1	SLU	5844.60	2	SLE R	-592.07	1	SLU	279714.00	2	SLE R	-14499.20	2	SLE R	-35574.00	1	SLU	14783.00
-166	Min	2	SLE R	4329.33	1	SLU	-799.29	2	SLE R	207195.00	1	SLU	-19574.00	2	SLE R	-48024.80	1	SLU	10950.40
-165	Max	1	SLU	5897.94	1	SLU	269.95	1	SLU	361932.00	2	SLE R	-17001.10	1	SLU	19142.70	1	SLU	121828.00
-165	Min	2	SLE R	4368.84	2	SLE R	199.96	2	SLE R	268098.00	1	SLU	-22951.50	2	SLE R	14179.80	1	SLU	90243.20
-164	Max	1	SLU	5879.64	2	SLE R	-193.67	1	SLU	361205.00	2	SLE R	-16935.80	2	SLE R	-14663.70	1	SLU	115417.00
-164	Min	2	SLE R	4355.29	1	SLU	-261.45	2	SLE R	267559.00	1	SLU	-22863.30	2	SLE R	-19796.00	1	SLU	85493.70
-155	Max	1	SLU	6135.28	1	SLU	1022.37	1	SLU	247713.00	1	SLU	775.25	1	SLU	53948.50	1	SLU	16499.90
-155	Min	2	SLE R	4544.65	2	SLE R	757.31	2	SLE R	183491.00	2	SLE R	574.26	2	SLE R	39961.90	1	SLU	12222.10
-154	Max	1	SLU	6126.40	2	SLE R	-754.23	1	SLU	245829.00	1	SLU	819.45	2	SLE R	-39906.10	1	SLU	15235.00
-154	Min	2	SLE R	4538.08	1	SLU	-1018.21	2	SLE R	182096.00	2	SLE R	607.00	2	SLE R	-53873.20	1	SLU	11285.20
-151	Max	1	SLU	6196.40	1	SLU	685.61	1	SLU	313420.00	1	SLU	5632.34	1	SLU	44504.10	1	SLU	142268.00
-151	Min	2	SLE R	4589.92	2	SLE R	507.86	2	SLE R	232163.00	2	SLE R	4172.11	2	SLE R	32966.00	1	SLU	105383.00
-150	Max	1	SLU	6181.08	2	SLE R	-513.82	1	SLU	311581.00	1	SLU	6144.60	2	SLE R	-33403.10	1	SLU	113050.00
-150	Min	2	SLE R	4578.58	1	SLU	-693.65	2	SLE R	230800.00	2	SLE R	4551.56	2	SLE R	-45094.20	1	SLU	83741.00
-139	Max	1	SLU	6448.49	1	SLU	1134.77	1	SLU	206632.00	1	SLU	20652.20	1	SLU	51209.10	1	SLU	19244.50
-139	Min	2	SLE R	4776.66	2	SLE R	840.57	2	SLE R	153061.00	2	SLE R	15297.90	2	SLE R	37932.60	1	SLU	14255.20
-138	Max	1	SLU	6445.05	2	SLE R	-836.84	1	SLU	205015.00	1	SLU	20128.10	2	SLE R	-37912.60	1	SLU	18452.50
-138	Min	2	SLE R	4774.11	1	SLU	-1129.74	2	SLE R	151863.00	2	SLE R	14909.70	2	SLE R	-51182.00	1	SLU	13668.50
-110	Max	1	SLU	6656.13	1	SLU	866.57	1	SLU	230820.00	1	SLU	39674.30	1	SLU	40057.70	1	SLU	163943.00
-110	Min	2	SLE R	4930.47	2	SLE R	641.91	2	SLE R	170978.00	2	SLE R	29388.40	2	SLE R	29672.40	1	SLU	121439.00
-109	Max	1	SLU	6675.46	2	SLE R	-655.14	1	SLU	229635.00	1	SLU	38883.30	2	SLE R	-29715.90	1	SLU	122198.00
-109	Min	2	SLE R	4944.79	1	SLU	-884.43	2	SLE R	170100.00	2	SLE R	28802.40	2	SLE R	-40116.40	1	SLU	90517.10
-84	Max	1	SLU	6795.32	1	SLU	1143.95	1	SLU	161013.00	1	SLU	36073.40	1	SLU	41608.80	1	SLU	21206.80
-84	Min	2	SLE R	5033.57	2	SLE R	847.37	2	SLE R	119269.00	2	SLE R	26721.00	2	SLE R	30821.30	1	SLU	15708.70
-81	Max	1	SLU	6796.95	2	SLE R	-864.51	1	SLU	160249.00	1	SLU	35337.90	2	SLE R	-30788.90	1	SLU	13522.10
-81	Min	2	SLE R	5034.77	1	SLU	-1167.09	2	SLE R	118703.00	2	SLE R	26176.20	2	SLE R	-41565.10	1	SLU	10016.40
-45	Max	1	SLU	7094.32	1	SLU	1090.02	1	SLU	117052.00	1	SLU	44287.70	1	SLU	29193.00	1	SLU	18704.80
-45	Min	2	SLE R	5255.06	2	SLE R	807.42	2	SLE R	86705.10	2	SLE R	32805.70	2	SLE R	21624.40	1	SLU	13855.40
-44	Max	1	SLU	7098.27	2	SLE R	-792.07	1	SLU	117290.00	1	SLU	43403.50	2	SLE R	-21677.50	1	SLU	23043.00
-44	Min	2	SLE R	5257.98	1	SLU	-1069.29	2	SLE R	86881.70	2	SLE R	32150.80	2	SLE R	-29264.60	1	SLU	17068.90
-41	Max	1	SLU	7119.99	1	SLU	771.06	1	SLU	140336.00	1	SLU	54109.70	1	SLU	17834.00	1	SLU	167761.00
-41	Min	2	SLE R	5274.07	2	SLE R	571.15	2	SLE R	103953.00	2	SLE R	40081.30	2	SLE R	13210.40	1	SLU	124267.00
-40	Max	1	SLU	7174.30	2	SLE R	-569.23	1	SLU	140985.00	1	SLU	53287.40	2	SLE R	-13358.70	1	SLU	141030.00
-40	Min	2	SLE R	5314.29	1	SLU	-768.47	2	SLE R	104433.00	2	SLE R	39472.10	2	SLE R	-18034.30	1	SLU	104467.00
-29	Max	1	SLU	7393.06	2	SLE R	-693.00	1	SLU	77295.90	1	SLU	45596.60	2	SLE R	-12449.50	1	SLU	14957.20
-29	Min	2	SLE R	5476.34	1	SLU	-935.54	2	SLE R	57256.20	2	SLE R	33775.30	2	SLE R	-16806.80	1	SLU	11079.40
-28	Max	1	SLU	7376.75	1	SLU	907.60	1	SLU	75796.60	1	SLU	46133.80	1	SLU	16556.40	1	SLU	24840.50
-28	Min	2	SLE R	5464.26	2	SLE R	672.29	2	SLE R	56145.60	2	SLE R	34173.10	2	SLE R	12264.00	1	SLU	18400.40
-23	Max	1	SLU	7460.22	1	SLU	465.33	1	SLU	72030.50	1	SLU	48744.90	1	SLU	2301.47	1	SLU	184495.00
-23	Min	2	SLE R	5526.09	2	SLE R	344.69	2	SLE R	53355.90	2	SLE R	36107.30	2	SLE R	1704.79	1	SLU	136663.00
-22	Max	1	SLU	7491.53	2	SLE R	-314.61	1	SLU	73396.10	1	SLU	48745.20	2	SLE R	-1541.38	1	SLU	168768.00
-22	Min	2	SLE R	5549.28	1	SLU	-424.72	2	SLE R	54367.50	2	SLE R	36107.60	2	SLE R	-2080.87	1	SLU	125013.00
-17	Max	1	SLU	7606.49	1	SLU	22.63	1	SLU	47373.90	1	SLU	43476.00	1	SLU	462.29	1	SLU	188415.00
-17	Min	2	SLE R	5634.44	2	SLE R	16.76	2	SLE R	35091.80	2	SLE R	32204.40	2	SLE R	342.44	1	SLU	139567.00
-16	Max	1	SLU	7602.11	1	SLU	719.41	1	SLU	42291.80	1	SLU	43493.70	1	SLU	7315.00	1	SLU	20344.20
-16	Min	2	SLE R	5631.19	2	SLE R	532.90	2	SLE R	31327.20	2	SLE R	32217.50	2	SLE R	5418.52	1	SLU	15069.80
-15	Max	1	SLU	7579.82	2	SLE R	-520.31	1	SLU	43794.90	1	SLU	43381.10	2	SLE R	-5379.79	1	SLU	26992.80
-15	Min	2	SLE R	5614.68	1	SLU	-702.41	2	SLE R	32440.70	2	SLE R	32134.20	2	SLE R	-7262.72	1	SLU	19994.70
-8	Max	1	SLU	7740.04	1	SLU	426.01	1	SLU	18512.80	1	SLU	39347.50	1	SLU	2158.76	1	SLU	27501.80
-8	Min	2	SLE R	5733.36	2	SLE R	315.56	2	SLE R	13713.20	2	SLE R	29146.30	2	SLE R	1599.08	1	SLU	20371.70
-7	Max	1	SLU	7769.58	2	SLE R	-331.70	1	SLU	19749.60	1	SLU	39446.20	2	SLE R	-1282.40	1	SLU	17134.40
-7	Min	2	SLE R	5755.24	1	SLU	-447.79	2	SLE R	14629.30	2	SLE R	29219.40	2	SLE R	-1731.24	1	SLU	12692.10
-4	Max	1	SLU	7845.26	1	SLU	150.25	1	SLU	6326.08	1	SLU	36496.80	1	SLU	601.83	1	SLU	19713.90
-4	Min	2	SLE R	5811.31	2	SLE R	111.30	2	SLE R	4685.99	2	SLE R	27034.70	2	SLE R	445.80	1	SLU	14602.90
-3	Max	1	SLU	7807.29	2	SLE R	-115.71	1	SLU	6799.50	1	SLU	36576.50	1	SLU	118.89	1	SLU	29658.50
-3	Min	2	SLE R	5783.18	1	SLU	-156.21	2	SLE R	5036.67	2	SLE R	27093.70	2	SLE R	88.07	1	SLU	21969.30

Sollecitazioni elementi bidimensionali

Simbologia
σ_{xx} = Tensione normale sulle facce perp. all'asse X
σ_{zz} = Tensione normale sulle facce perp. all'asse Z
τ_{xy} = Tensione in dir. Y sulle facce perp. all'asse X
τ_{xz} = Tensione in dir. Z sulle facce perp. all'asse X
τ_{zy} = Tensione in dir. Y sulle facce perp. all'asse Z
Bid. = Numero del muro/elemento bidimensionale
CC = Numero della combinazione delle condizioni di carico elementari
Mxx = Momento che provoca variazione di tensione sulle facce perp. all'asse X
Mxz = Momento che provoca variazione di tensione tangenziale sulle facce perp. all'asse X
Mzz = Momento che provoca variazione di tensione sulle facce perp. all'asse Z
Nodo = Numero del nodo
TCC = Tipo di combinazione di carico
  SLU = Stato limite ultimo
  SLE R = Stato limite d'esercizio, combinazione rara
  SLE F = Stato limite d'esercizio, combinazione frequente
  SLE Q = Stato limite d'esercizio, combinazione quasi permanente

Bid. 2

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	1	SLU	-102	-468498	1	SLU	-97	619837	**σ_{zz} <daN/mq>**	1	SLU	-116	-275734	1	SLU	-64	348910
τ_{xz} <daN/mq>	1	SLU	-92	-317657	1	SLU	-61	285244	**Mxx <daNm/m>**	1	SLU	-72	-5788150	1	SLU	-113	7644520
Mzz <daNm/m>	1	SLU	-92	-5972410	1	SLU	-113	3029430	**Mxz <daNm/m>**	1	SLU	-101	-2533650	1	SLU	-73	4519070
τ_{zy} <daN/mq>	1	SLU	-73	-1835810	1	SLU	-114	2634490	**τ_{xy} <daN/mq>**	1	SLU	-92	-2879620	1	SLU	-113	3757820

Criteri di progetto utilizzati

Sezioni generiche

Generali	
Stampe	
Tipo di relazione	Estesa

Specifici	**3**
Materiali	
-Considera come elemento esistente	No
-Calcestruzzo	
-Livello di conoscenza	LC2
-Fattore di confidenza	1.20
-Tipo di calcestruzzo	C40/50
-Rck calcestruzzo	500.00
-Modulo elastico <daN/cmq>	355471.00
-Resistenza caratteristica cilindrica (Fck)	415.00
-Resistenza caratteristica a trazione (Fctk)	25.17
-Resistenza media (Fcm) <daN/cmq>	495.00

-Resistenza media a trazione (Fctm) <daN/cmq>	35.96
-σ amm. calcestruzzo <daN/cmq>	147.50
-τ_{c0} <daN/cmq>	8.70
-τ_{c1} <daN/cmq>	24.00
-Riduci Fcd per tutte le verifiche secondo il D.M. 18	Si
-γ_C per stati limite ultimi	
-Automatico	x
-Pari a	
-Acciaio	
-Livello di conoscenza	LC2
-Fattore di confidenza	1.20
-Tipo di acciaio	B450C
-Modulo elastico <daN/cmq>	2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cmq>	4500.00
-Tensione media di snervamento (Fym) <daN/cmq>	4500.00
-Sigma amm. acciaio <daN/cmq>	2600.00
-Sigma amm. reti e tralicci <daN/cmq>	2600.00
-Allungamento per verifiche di duttilità (Agt) <%>	4.00
-γ_S per stati limite ultimi	
-Automatico	x
-Pari a	
-Coeff. di omogeneizzazione	15.00
Parametri per analisi pushover	
Numero fibre	200.00
Fattore di confinamento nucleo interno	1.00
Fattore di incrudimento acciaio <%>	0.10
Posizione barre e normativa	
Copriferro reale al bordo staffa <cm>	2.50
Diametro staffa teorica <mm>	8.00
Distanza fra ferri su più strati <cm>	1.00
Verifica con barre in posizione teorica	Si
-Copriferro <cm>	3.00
Normativa di riferimento	
-Relativa alle travi	
-Relativa ai pilastri	
-Relativa solo al controllo sulle tensioni	x
Elemento dissipativo	No
Verifiche secondo Circ. 65 del 10/04/97	No
Verifiche e sollecitazioni	
Passo di verifica <m>	0.50
Integrare lo scorrimento lungo il tratto	Si
-Lunghezza del tratto <m>	1.00
Verifiche a pressoflessione	Si
Verifiche a flessione/pressoflessione retta	No
-Considera My	
-Considera Mz	
-Considera My e Mz	
Verifiche di stabilità in direzione Z locale	No
-Coeff. Ωb	
Integrare lo scorrimento lungo il tratto	No
-Coeff. β	
Tipo verifica di stabilità	
-Per N*Ω-M e per N-c*M (standard)	Si
-Per N*Ω-c*M (doppia)	No
-Per N*Ω (sforzo normale e momento nullo)	No
-Per c*M (momento e sforzo normale nullo)	No
Verifiche a taglio	
Modalità di calcolo Vrdu	
-Considera Vrdu minimo	
-Considera Vrdu calcolato in corrispondenza di bw minimo	
-Considera Vrdu in corrispondenza di bw medio	x
-Considera Vrdu in corrispondenza di bw massimo	
-Considera sempre Af Staffe non proiettata in direzione del taglio	Si
-Verifica a taglio con traliccio ad inclinazione variabile	Si
-Limita ctg θ a	2.50
Dati per progettazione agli stati limite	
Condizioni ambientali	
-Ordinarie	x
-Aggressive	
-Molto aggressive	
Usa dominio N-M per flessioni rette	No
-Ricerca della sicurezza con sforzo normale costante	
-Ricerca della sicurezza con eccentricità costante	
Controllo rapporto X/D	No
Classificazione barre tese/compresse	
-Solo le barre con deformazione percentuale rispetto	
alla barra più tesa/compressa non inferiore a <%>	30.00
-In funzione della deformazione	
Dati per verifiche di resistenza al fuoco	
-Tempo di verifica (REI) <minuti>	120.00
Dimensione MESH <cm>	2.00
-Passo di calcolo <secondi>	10.00
-Temperatura ambiente <C°>	20.00
-Coeff. di convezione a temperatura ambiente <W/mq K>	9.00
-Tipo di aggregati	SILICEI
-Massa volumica iniziale <kg/mc>	2300.00
-Umidità iniziale <%>	3.00
-Fattore di interpolazione conducibilità	0.50

Plinti/Pali

Generali	
Parametri di progetto	
Progettazione e verifica dell'armatura con sollecitazioni più gravose	Si
Parametri di disegno	
Scala disegno plinti	25.00
Disegno ancoraggi non necessari	Si
Copriferro per calcolo lunghezze ferri plinto <cm>	3.00
Copriferro per calcolo lunghezze ferri bicchiere <cm>	2.00
Calcolo lunghezza ferri semplificato	Si
Diametro per calcolo lunghezze ferri plinto <mm>	10.00
Diametro per calcolo lunghezze ferri bicchiere <mm>	10.00
Stampe	
Tipo di relazione	Estesa

Specifici	3
Materiali	
-Considera come elemento esistente	No
-Calcestruzzo	
-Livello di conoscenza	LC2
-Fattore di confidenza	1.20
-Tipo di calcestruzzo	C30/37
-Rck calcestruzzo	370.00
-Modulo elastico <daN/cmq>	330194.00
-Resistenza caratteristica cilindrica (Fck)	307.10
-Resistenza caratteristica a trazione (Fctk)	20.59
-Resistenza media (Fcm) <daN/cmq>	387.10
-Resistenza media a trazione (Fctm) <daN/cmq>	29.42
-σ amm. calcestruzzo <daN/cmq>	115.00
-τ_{c0} <daN/cmq>	6.90
-τ_{c1} <daN/cmq>	20.30
-Riduci Fcd per tutte le verifiche secondo il D.M. 18	Si
-γ_C per stati limite ultimi	
-Automatico	x
-Pari a	
-Acciaio	
-Livello di conoscenza	LC2
-Fattore di confidenza	1.20
-Tipo di acciaio	B450C
-Modulo elastico <daN/cmq>	2060000.00

-Tensione caratteristica di snervamento (Fyk) <daN/cmq>	4500.00
-Tensione media di snervamento (Fym) <daN/cmq>	4500.00
-Sigma amm. acciaio <daN/cmq>	2600.00
-Sigma amm. reti e tralicci <daN/cmq>	2600.00
-Allungamento per verifiche di duttilità (Agt) <%>	4.00
-γ_S per stati limite ultimi	
-Automatico	x
-Pari a	
-Coeff. di omogeneizzazione	15.00
Parametri di calcolo	
Copriferro teorico di calcolo <cm>	4.00
Angolo limite plinti snelli/tozzi <grad>	30.00
Considerare snelli plinti ambigui	Si
Peso specifico calcestruzzo plinto <daN/mc>	2500.00
Sovraccarichi agenti sul plinto <daN/mq>	0.00
Sollecitazioni dissipative amplificate	Si
Detrazione peso proprio e sovraccarichi	Si
Calcolo momenti con metodo dei trapezi	Si
Sezione verifica plinti a bicchiere	
-A filo parete	x
-In asse alla parete	
Raffittimento armatura zona centrale	No
Armatura base	
Elenco diametri utilizzabili 1 <mm>	20
Elenco diametri utilizzabili 2 <mm>	
Elenco diametri utilizzabili 3 <mm>	
Elenco diametri utilizzabili 4 <mm>	
Elenco diametri utilizzabili 5 <mm>	
Elenco diametri utilizzabili 6 <mm>	
Elenco diametri utilizzabili 7 <mm>	
Passi utilizzabili	
-Minimo <cm>	5.00
-Massimo <cm>	25.00
-Incremento <cm>	2.00
Elemento costante	
-Diametro	x
-Passo	
Tipo di ottimizzazione armatura	
-Minimizza il peso complessivo dei ferri	
-Minimizza il numero dei ferri	x
Lunghezza risvolto ferri inferiori	
-Pari a <cm>	
-Come percentuale dell'altezza del plinto <%>	50.00
Min. armatura superiore	Si
Diametro staffoni di montaggio <mm>	10.00
Staffoni orizzontali di montaggio	Si
-Max distanza <cm>	60.00
Staffoni verticali di montaggio	Si
-Max distanza <cm>	20.00
Lunghezza risvolto staffoni orizzontali	
-Pari a <cm>	
-Come percentuale del lato del plinto <%>	20.00
-Unico ferro lungo il perimetro del plinto	
Armatura a punzonamento	
Elenco diametri utilizzabili 1 <mm>	20
Elenco diametri utilizzabili 2 <mm>	
Elenco diametri utilizzabili 3 <mm>	
Elenco diametri utilizzabili 4 <mm>	
Elenco diametri utilizzabili 5 <mm>	
Elenco diametri utilizzabili 6 <mm>	
Elenco diametri utilizzabili 7 <mm>	
Passi utilizzabili	
-Minimo <cm>	5.00
-Massimo <cm>	15.00
-Incremento <cm>	2.00
Allargamento piastra pilastri in acciaio <cm>	5.00
Distanza dal bordo libero (D.M. 92/96)	
-Distanza imposta a <cm>	
-Distanza come un moltiplicatore dello spessore del plinto	0.50
Moltiplicatore altezza utile per valutare perimetro efficace (D.M. 08)	2.00
Collaborazione pilastro-bicchiere	
Valutata sulla superficie di contatto fra pilastro e bicchiere	Si
-Valutata come moltiplicatore del valore della resistenza	x
a trazione del plinto	
Plinti poligonali su pali	
Rete elettrosaldata inferiore	Si
-Diametro <mm>	8.00
-Passo <cm>	20.00
Rete elettrosaldata superiore	Si
-Diametro <mm>	8.00
-Passo <cm>	20.00
Distanziatori	Si
-Diametro <mm>	6.00
-Dimensioni <cm>	10.00
-Numero	4.00
Materiali bicchiere	
-Considera come elemento esistente	No
-Calcestruzzo	
-Livello di conoscenza	LC2
-Fattore di confidenza	1.20
-Tipo di calcestruzzo	C28/35
-Rck calcestruzzo	350.00
-Modulo elastico <daN/cmq>	325881.00
-Resistenza caratteristica cilindrica (Fck)	290.50
-Resistenza caratteristica a trazione (Fctk)	19.84
-Resistenza media (Fcm) <daN/cmq>	370.50
-Resistenza media a trazione (Fctm) <daN/cmq>	28.35
-σ amm. calcestruzzo <daN/cmq>	110.00
-$\tau c0$ <daN/cmq>	6.70
-$\tau c1$ <daN/cmq>	19.70
-Riduci Fcd per tutte le verifiche secondo il D.M. 18	No
-γ_C per stati limite ultimi	
-Automatico	x
-Pari a	
-Acciaio	
-Livello di conoscenza	LC2
-Fattore di confidenza	1.20
-Tipo di acciaio	B450C
-Modulo elastico <daN/cmq>	2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cmq>	4300.00
-Tensione media di snervamento (Fym) <daN/cmq>	4300.00
-Sigma amm. acciaio <daN/cmq>	2600.00
-Sigma amm. reti e tralicci <daN/cmq>	2600.00
-Allungamento per verifiche di duttilità (Agt) <%>	4.00
-γ_S per stati limite ultimi	
-Automatico	x
-Pari a	
-Coeff. di omogeneizzazione	15.00
Armatura bicchiere	
Copriferro teorico <cm>	3.00
Bicchiere con pareti organizzate	No
Rck calcestruzzo di riempimento <daN/cmq>	300.00
Resistenza teorica a trazione del calcestruzzo di riempimento <daN/cmq>	18.10
Denominatore momento flettente parete	16.00
Elenco diametri utilizzabili 1 <mm>	10
Elenco diametri utilizzabili 2 <mm>	12
Elenco diametri utilizzabili 3 <mm>	14
Elenco diametri utilizzabili 4 <mm>	16
Elenco diametri utilizzabili 5 <mm>	18
Elenco diametri utilizzabili 6 <mm>	
Elenco diametri utilizzabili 7 <mm>	
Passi utilizzabili	
-Minimo <cm>	5.00
-Massimo <cm>	15.00

-Incremento <cm>	2.00
Tipo di ottimizzazione armatura	
-Minimizza il peso complessivo dei ferri	
-Minimizza il numero dei ferri	x
Ferri orizzontali aggiuntivi nel fondo bicchiere	Si
-Distanza <cm>	15.00
Ferri verticali internamente al bicchiere	Si
-Max distanza <cm>	10.00
Dati per progettazione agli stati limite	
Condizioni ambientali	
-Ordinarie	
-Aggressive	x
-Molto aggressive	
Materiali pali e micropali Radice	
-Considera come elemento esistente	No
-Calcestruzzo	
-Livello di conoscenza	LC2
-Fattore di confidenza	1.20
-Tipo di calcestruzzo	C30/37
-Rck calcestruzzo	370.00
-Modulo elastico <daN/cmq>	330194.00
-Resistenza caratteristica cilindrica (Fck)	307.10
-Resistenza caratteristica a trazione (Fctk)	20.59
-Resistenza media (Fcm) <daN/cmq>	387.10
-Resistenza media a trazione (Fctm) <daN/cmq>	29.42
-σ amm. calcestruzzo <daN/cmq>	115.00
-τc0 <daN/cmq>	6.90
-τc1 <daN/cmq>	20.30
-Riduci Fcd per tutte le verifiche secondo il D.M. 18	No
-γ_C per stati limite ultimi	
-Automatico	x
-Pari a	
-Acciaio	
-Livello di conoscenza	LC2
-Fattore di confidenza	1.20
-Tipo di acciaio	B450C
-Modulo elastico <daN/cmq>	2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cmq>	4300.00
-Tensione media di snervamento (Fym) <daN/cmq>	4300.00
-Sigma amm. acciaio <daN/cmq>	2600.00
-Sigma amm. reti e tralicci <daN/cmq>	2600.00
-Allungamento per verifiche di duttilità (Agt) <%>	4.00
-γ_S per stati limite ultimi	
-Automatico	x
-Pari a	
-Coeff. di omogeneizzazione	15.00
Armatura a pressoflessione pali e micropali Radice	
Considera momenti da interazione cinematica	No
Elenco diametri ferri longitudinali 1 <mm>	20
Elenco diametri ferri longitudinali 2 <mm>	
Elenco diametri ferri longitudinali 3 <mm>	
Elenco diametri ferri longitudinali 4 <mm>	
Elenco diametri ferri longitudinali 5 <mm>	
Elenco diametri ferri longitudinali 6 <mm>	
Elenco diametri ferri longitudinali 7 <mm>	
Copriferro reale al bordo staffa <cm>	4.00
Diametro staffa teorica <mm>	12.00
Max distanza fra i ferri <cm>	25.00
Min. interferro ammissibile <cm>	5.00
Min. numero ferri	25.00
Alleggerimento ferri longitudinali	No
-Alla quota indicata <cm>	
-Come percentuale della lunghezza del palo	0.00
-Min. ferri rimanenti dopo alleggerimento	
-Pari a	
-Percentuale dell'armatura di testa del palo	50.00
Armatura a taglio pali e micropali Radice	
Elenco diametri staffe 1 <mm>	12
Elenco diametri staffe 2 <mm>	
Elenco diametri staffe 3 <mm>	
Elenco diametri staffe 4 <mm>	
Elenco diametri staffe 5 <mm>	
Elenco diametri staffe 6 <mm>	
Elenco diametri staffe 7 <mm>	
Passi staffe	
-Minimo <cm>	5.00
-Massimo <cm>	20.00
-Incremento <cm>	5.00
Tipo di minimizzazione staffatura	
-Minimizza il numero delle staffe	
-Minimizza il peso delle staffe	x
Staffatura a spirale	Si
Verifiche a taglio per sezioni circolari	
-Usa formulazione sezioni generiche	
-Considera rettangolo inscritto con B/H pari a	1.00
Verifiche a taglio per sezioni generiche	
-Considera Vrdu minimo	
-Considera Vrdu calcolato in corrispondenza di bw minimo	
-Considera Vrdu in corrispondenza di bw medio	x
-Considera Vrdu in corrispondenza di bw massimo	
-Considera sempre Af Staffe non proiettata in direzione del taglio	Si
Classificazione barre tese/compresse	
-Solo le barre con deformazione percentuale rispetto	
alla barra più tesa/compressa non inferiore a <%>	
-In funzione della deformazione	x
Micropali Tubfix	
-Considera come elemento esistente	No
-Livello di conoscenza	LC1
-Fattore di confidenza	1.35
-Tipo di acciaio per profilati a sezione cava	S235H
	UNI EN
	10210-1
-Modulo elastico	2100000.00
-Tensione caratteristica di snervamento (Fyk)	2350.00
Capacità portante	
Efficienza	
-Pari a	
-Automatica	x

Verifiche e armature plinti/pali

Simbologia

Az = Azioni ed effetti sul plinto/palo
RVN = Reazioni vincolari agenti
TAG = Effetti dovuti ai tagli
ECC = Effetti dovuti all'eccentricità
PP = Effetti dovuti al peso proprio
SVR = Effetti dovuti ai sovraccarichi e al peso del terreno
TOT = Azioni totali di calcolo
CC = Numero della combinazione delle condizioni di carico elementari
Caso = Caso di verifica
Cf = Copriferro
Cls = Tipo di calcestruzzo
Dp = Diametro pali
Fcd = Resistenza di calcolo a compressione del calcestruzzo
Fck = Resistenza caratteristica cilindrica a compressione del calcestruzzo
Fctd = Resistenza di calcolo a trazione del calcestruzzo
Fctk = Resistenza caratteristica a trazione del calcestruzzo
Fyd = Resistenza di calcolo dell'acciaio
Fyk = Tensione caratteristica di snervamento dell'acciaio
Mx = Momento intorno all'asse X
My = Momento intorno all'asse Y
Mz = Momento intorno all'asse Z
N = Sforzo normale
Palo = Numero del palo
TCC = Tipo di combinazione di carico
SLU = Stato limite ultimo
SLE R = Stato limite d'esercizio, combinazione rara
SLE F = Stato limite d'esercizio, combinazione frequente

SLE Q = Stato limite d'esercizio, combinazione quasi permanente
Tp = Tipo di acciaio
Tx = Taglio in dir. X
Ty = Taglio in dir. Y

Palo n. 1

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 1 (-40)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	140985.00	7174.30	-768.47	53287.40	-18034.30
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	140985.00	7174.30	-768.47	53287.40	-18034.30
2	2	SLE R	RVN	104433.00	5314.29	-569.23	39472.10	-13358.70
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	104433.00	5314.29	-569.23	39472.10	-13358.70
3	3	SLE F	RVN	104433.00	5314.29	-569.23	39472.10	-13358.70
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	104433.00	5314.29	-569.23	39472.10	-13358.70
4	4	SLE Q	RVN	104433.00	5314.29	-569.23	39472.10	-13358.70
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	104433.00	5314.29	-569.23	39472.10	-13358.70

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-140985.00	-7174.30	768.47	-53287.40	18034.30
2	2	SLE R	1	-104433.00	-5314.29	569.23	-39472.10	13358.70
3	3	SLE F	1	-104433.00	-5314.29	569.23	-39472.10	13358.70
4	4	SLE Q	1	-104433.00	-5314.29	569.23	-39472.10	13358.70

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-140985.00	52703.60	17836.70	-140985.00	192340.00	65075.90	2-3	161.25	3.649
2	59.72	1	SLU	-139948.00	55146.90	18663.60	-139948.00	191970.00	64959.20	2-3	161.25	3.481
3	119.44	1	SLU	-136208.00	54848.00	18562.50	-136208.00	190633.00	64538.00	2-3	161.25	3.476
4	179.17	1	SLU	-132491.00	52526.40	17776.70	-132491.00	189304.00	64118.60	2-3	161.25	3.604
5	238.89	1	SLU	-128795.00	48793.20	16513.30	-128795.00	187973.00	63700.00	2-3	161.25	3.853
6	298.61	1	SLU	-125120.00	44155.70	14943.80	-125120.00	186649.00	63283.00	2-3	161.25	4.228
7	358.33	1	SLU	-121466.00	39025.10	13207.50	-121466.00	185328.00	62867.30	2-3	161.25	4.750
8	418.06	1	SLU	-117831.00	33725.10	11413.70	-117831.00	184008.00	62452.60	2-3	161.25	5.458
9	477.78	1	SLU	-114216.00	28502.30	9646.15	-114216.00	182694.00	62027.80	2-3	161.25	6.412
10	537.50	1	SLU	-110619.00	23536.80	7965.67	-110619.00	181380.00	61592.40	2-3	161.25	7.709
11	597.22	1	SLU	-107040.00	18952.40	6414.15	-107040.00	180069.00	61158.00	2-3	161.25	9.505
12	656.94	1	SLU	-103479.00	14826.40	5017.75	-103479.00	178763.00	60725.50	2-3	161.25	12.062
13	716.67	1	SLU	-99934.40	11198.50	3789.96	-99934.40	177457.00	60293.10	2-3	161.25	15.853
14	776.39	1	SLU	-96406.40	8079.44	2734.36	-96406.40	176154.00	59862.30	2-3	161.25	21.812
15	836.11	1	SLU	-92894.00	5457.59	1847.04	-2571250.00	174856.00	59432.80	2-3	161.25	27.679
16	895.83	1	SLU	-89396.90	3305.47	1118.68	-2571250.00	173557.00	59003.70	2-3	161.25	28.762
17	955.56	1	SLU	-85914.30	1584.83	536.36	-2571250.00	172262.00	58575.90	2-3	161.25	29.928
18	1015.28	1	SLU	-82445.70	250.89	84.91	-2571250.00	170969.00	58149.20	2-3	161.25	31.187
19	1075.00	1	SLU	-78990.60	-744.22	-251.87	-2571250.00	-170012.00	-57456.00	2-3	341.25	32.551
20	1134.72	1	SLU	-75548.40	-1448.88	-490.35	-2571250.00	-168699.00	-57019.20	2-3	341.25	34.035
21	1194.44	1	SLU	-72118.40	-1909.97	-646.40	-2571250.00	-167388.00	-56583.40	2-3	341.25	35.653
22	1254.17	1	SLU	-68700.30	-2171.47	-734.90	-2571250.00	-166075.00	-56147.10	2-3	341.25	37.427
23	1313.89	1	SLU	-65293.40	-2273.61	-769.47	-2571250.00	-164764.00	-55711.90	2-3	341.25	39.380
24	1373.61	1	SLU	-61897.10	-2252.28	-762.25	-2571250.00	-163453.00	-55276.80	2-3	341.25	41.541
25	1433.33	1	SLU	-58510.90	-2138.88	-723.87	-2571250.00	-162141.00	-54841.80	2-3	341.25	43.945
26	1493.06	1	SLU	-55134.30	-1960.34	-663.45	-2571250.00	-160832.00	-54407.70	2-3	341.25	46.636
27	1552.78	1	SLU	-51766.60	-1739.32	-588.65	-2571250.00	-159519.00	-53972.90	2-3	341.25	49.670
28	1612.50	1	SLU	-48407.40	-1494.64	-505.84	-2571250.00	-158208.00	-53538.80	2-3	341.25	53.117
29	1672.22	1	SLU	-45056.20	-1241.63	-420.21	-2571250.00	-156897.00	-53104.90	2-3	341.25	57.068
30	1731.94	1	SLU	-41712.20	-992.66	-335.95	-2571250.00	-155583.00	-52670.60	2-3	341.25	61.643
31	1791.67	1	SLU	-38375.10	-757.64	-256.41	-2571250.00	-154271.00	-52236.80	2-3	341.25	67.003
32	1851.39	1	SLU	-35044.20	-544.48	-184.27	-2571250.00	-152956.00	-51802.70	2-3	341.25	73.372
33	1911.11	1	SLU	-31719.00	-359.60	-121.70	-2571250.00	-151641.00	-51368.50	2-3	341.25	81.063
34	1970.83	1	SLU	-28399.10	-208.31	-70.50	-2571250.00	-150327.00	-50934.50	2-3	341.25	90.540
35	2030.56	1	SLU	-25083.70	-95.21	-32.22	-2571250.00	-149004.00	-50503.70	2-3	341.25	>100
36	2090.28	1	SLU	-21772.40	-24.45	-8.28	-2571250.00	-147672.00	-50085.20	2-3	341.25	>100
37	2150.00	1	SLU	-18464.70	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7174.30	-768.47	0.85	11.31	7215.34	1.00	32294.70	351863.00	32294.70	4.476
2	59.72	1	SLU	1657.79	-177.57	0.85	11.31	1667.27	1.00	32294.70	351714.00	32294.70	19.370
3	119.44	1	SLU	-2497.77	267.55	0.85	11.31	2512.06	1.00	32294.70	351178.00	32294.70	12.856
4	179.17	1	SLU	-5484.73	587.49	0.85	11.31	5516.10	1.00	32294.70	350646.00	32294.70	5.855
5	238.89	1	SLU	-7490.48	802.33	0.85	11.31	7533.33	1.00	32294.70	350117.00	32294.70	4.287
6	298.61	1	SLU	-8691.59	930.99	0.85	11.31	8741.31	1.00	32294.70	349590.00	32294.70	3.695
7	358.33	1	SLU	-9249.82	990.78	0.85	11.31	9302.74	1.00	32294.70	349067.00	32294.70	3.472
8	418.06	1	SLU	-9309.77	997.20	0.85	11.31	9363.03	1.00	32294.70	348546.00	32294.70	3.449
9	477.78	1	SLU	-8997.76	963.78	0.85	11.31	9049.23	1.00	32294.70	348028.00	32294.70	3.569
10	537.50	1	SLU	-8421.69	902.08	0.85	11.31	8469.87	1.00	32294.70	347513.00	32294.70	3.813
11	597.22	1	SLU	-7671.72	821.75	0.85	11.31	7715.60	1.00	32294.70	347000.00	32294.70	4.186
12	656.94	1	SLU	-6821.35	730.66	0.85	11.31	6860.37	1.00	32294.70	346490.00	32294.70	4.707
13	716.67	1	SLU	-5928.92	635.07	0.85	11.31	5962.83	1.00	32294.70	345983.00	32294.70	5.416
14	776.39	1	SLU	-5039.30	539.78	0.85	11.31	5068.12	1.00	32294.70	345477.00	32294.70	6.372
15	836.11	1	SLU	-4185.64	448.34	0.85	11.31	4209.58	1.00	32294.70	344974.00	32294.70	7.672
16	895.83	1	SLU	-3391.14	363.24	0.85	11.31	3410.54	1.00	32294.70	344473.00	32294.70	9.469
17	955.56	1	SLU	-2670.73	286.07	0.85	11.31	2686.01	1.00	32294.70	343974.00	32294.70	12.023
18	1015.28	1	SLU	-2032.63	217.72	0.85	11.31	2044.25	1.00	32294.70	343478.00	32294.70	15.798
19	1075.00	1	SLU	-1479.78	158.50	0.85	11.31	1488.24	1.00	32294.70	342983.00	32294.70	21.700
20	1134.72	1	SLU	-1011.12	108.31	0.85	11.31	1016.91	1.00	32294.70	342490.00	32294.70	31.758
21	1194.44	1	SLU	-622.67	66.70	0.85	11.31	626.23	1.00	32294.70	341998.00	32294.70	51.570
22	1254.17	1	SLU	-308.42	33.04	0.85	11.31	310.18	1.00	32294.70	341509.00	32294.70	>100
23	1313.89	1	SLU	-61.16	6.55	0.85	11.31	61.51	1.00	32294.70	341021.00	32294.70	>100
24	1373.61	1	SLU	126.94	-13.60	0.85	11.31	127.67	1.00	32294.70	340534.00	32294.70	>100
25	1433.33	1	SLU	263.82	-28.26	0.85	11.31	265.33	1.00	32294.70	340049.00	32294.70	>100
26	1493.06	1	SLU	357.20	-38.26	0.85	11.31	359.24	1.00	32294.70	339566.00	32294.70	89.896
27	1552.78	1	SLU	414.24	-44.37	0.85	11.31	416.61	1.00	32294.70	339083.00	32294.70	77.518
28	1612.50	1	SLU	441.42	-47.28	0.85	11.31	443.95	1.00	32294.70	338602.00	32294.70	72.745
29	1672.22	1	SLU	444.39	-47.60	0.85	11.31	446.93	1.00	32294.70	338122.00	32294.70	72.258
30	1731.94	1	SLU	427.94	-45.84	0.85	11.31	430.38	1.00	32294.70	337643.00	32294.70	75.037
31	1791.67	1	SLU	395.95	-42.41	0.85	11.31	398.22	1.00	32294.70	337165.00	32294.70	81.098
32	1851.39	1	SLU	351.51	-37.65	0.85	11.31	353.52	1.00	32294.70	336688.00	32294.70	91.352
33	1911.11	1	SLU	296.87	-31.80	0.85	11.31	298.57	1.00	32294.70	336211.00	32294.70	>100
34	1970.83	1	SLU	233.62	-25.02	0.85	11.31	234.96	1.00	32294.70	335736.00	32294.70	>100
35	2030.56	1	SLU	162.76	-17.43	0.85	11.31	163.69	1.00	32294.70	335261.00	32294.70	>100
36	2090.28	1	SLU	84.82	-9.08	0.85	11.31	85.30	1.00	32294.70	334787.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-104433.00	13212.40	39039.70	37.70	40.84	36.04	495.93	
39	59.72	2	SLE R	-103901.00	13824.90	40849.60	37.70	40.84	37.99	521.04	
40	119.44	2	SLE R	-101164.00	13750.00	40628.20	37.70	40.84	37.90	519.19	
41	179.17	2	SLE R	-98444.30	13168.00	38908.40	37.70	40.84	36.21	496.50	
42	238.89	2	SLE R	-95740.40	12232.10	36143.10	37.70	40.84	33.41	459.47	

43	298.61	2	SLE R	-93052.00	11069.50	32708.00	34.56	43.98	29.96	413.87	
44	358.33	2	SLE R	-90378.90	9783.30	28907.50	31.42	47.12	26.26	364.75	
45	418.06	2	SLE R	-87720.50	8454.61	24981.50	31.42	47.12	22.64	316.45	
46	477.78	2	SLE R	-85076.40	7145.30	21112.80	25.13	53.41	19.35	272.24	
47	537.50	2	SLE R	-82446.30	5900.49	17434.70	18.85	59.69	16.53	234.02	
48	597.22	2	SLE R	-79829.50	4751.22	14038.80	12.57	65.97	14.20	202.17	
49	656.94	2	SLE R	-77225.80	3716.85	10982.50	0.00	78.54	12.28	175.77	
50	716.67	2	SLE R	-74634.70	2807.38	8295.19	0.00	78.54	10.60	152.64	
51	776.39	2	SLE R	-72055.70	2025.45	5984.77	0.00	78.54	9.13	132.33	
52	836.11	2	SLE R	-69488.60	1368.17	4042.66	0.00	78.54	7.86	114.76	
53	895.83	2	SLE R	-66932.70	828.65	2448.50	0.00	78.54	6.78	99.80	
54	955.56	2	SLE R	-64387.80	397.30	1173.95	0.00	78.54	5.88	87.23	
55	1015.28	2	SLE R	-61853.40	62.90	185.85	0.00	78.54	5.13	76.80	
56	1075.00	2	SLE R	-59329.00	-186.57	-551.27	0.00	78.54	5.12	76.41	
57	1134.72	2	SLE R	-56814.40	-363.22	-1073.25	0.00	78.54	5.20	77.20	
58	1194.44	2	SLE R	-54309.00	-478.81	-1414.79	0.00	78.54	5.19	76.66	
59	1254.17	2	SLE R	-51812.50	-544.37	-1608.50	0.00	78.54	5.09	75.05	
60	1313.89	2	SLE R	-49324.40	-569.98	-1684.16	0.00	78.54	4.93	72.57	
61	1373.61	2	SLE R	-46844.40	-564.63	-1668.36	0.00	78.54	4.72	69.43	
62	1433.33	2	SLE R	-44372.00	-536.20	-1584.36	0.00	78.54	4.47	65.80	
63	1493.06	2	SLE R	-41906.90	-491.44	-1452.10	0.00	78.54	4.20	61.82	
64	1552.78	2	SLE R	-39448.60	-436.04	-1288.39	0.00	78.54	3.91	57.61	
65	1612.50	2	SLE R	-36996.70	-374.69	-1107.14	0.00	78.54	3.61	53.28	
66	1672.22	2	SLE R	-34550.90	-311.27	-919.73	0.00	78.54	3.31	48.92	
67	1731.94	2	SLE R	-32110.70	-248.85	-735.31	0.00	78.54	3.01	44.58	
68	1791.67	2	SLE R	-29675.80	-189.93	-561.21	0.00	78.54	2.72	40.33	
69	1851.39	2	SLE R	-27245.70	-136.50	-403.32	0.00	78.54	2.43	36.20	
70	1911.11	2	SLE R	-24820.00	-90.15	-266.37	0.00	78.54	2.16	32.23	
71	1970.83	2	SLE R	-22398.40	-52.22	-154.30	0.00	78.54	1.90	28.45	
72	2030.56	2	SLE R	-19980.40	-23.87	-70.52	0.00	78.54	1.66	24.88	
73	2090.28	2	SLE R	-17565.70	-6.13	-18.11	0.00	78.54	1.44	21.55	
74	2150.00	2	SLE R	-15153.90	0.00	0.00	0.00	78.54	1.23	18.48	
75	0.00	4	SLE Q	-104433.00	13212.40	39039.70	37.70	40.84	36.04	495.93	
76	59.72	4	SLE Q	-103901.00	13824.90	40849.60	37.70	40.84	37.99	521.04	
77	119.44	4	SLE Q	-101164.00	13750.00	40628.20	37.70	40.84	37.90	519.19	
78	179.17	4	SLE Q	-98444.30	13168.00	38908.40	37.70	40.84	36.21	496.50	
79	238.89	4	SLE Q	-95740.40	12232.10	36143.10	37.70	40.84	33.41	459.47	
80	298.61	4	SLE Q	-93052.00	11069.50	32708.00	34.56	43.98	29.96	413.87	
81	358.33	4	SLE Q	-90378.90	9783.30	28907.50	31.42	47.12	26.26	364.75	
82	418.06	4	SLE Q	-87720.50	8454.61	24981.50	31.42	47.12	22.64	316.45	
83	477.78	4	SLE Q	-85076.40	7145.30	21112.80	25.13	53.41	19.35	272.24	
84	537.50	4	SLE Q	-82446.30	5900.49	17434.70	18.85	59.69	16.53	234.02	
85	597.22	4	SLE Q	-79829.50	4751.22	14038.80	12.57	65.97	14.20	202.17	
86	656.94	4	SLE Q	-77225.80	3716.85	10982.50	0.00	78.54	12.28	175.77	
87	716.67	4	SLE Q	-74634.70	2807.38	8295.19	0.00	78.54	10.60	152.64	
88	776.39	4	SLE Q	-72055.70	2025.45	5984.77	0.00	78.54	9.13	132.33	
89	836.11	4	SLE Q	-69488.60	1368.17	4042.66	0.00	78.54	7.86	114.76	
90	895.83	4	SLE Q	-66932.70	828.65	2448.50	0.00	78.54	6.78	99.80	
91	955.56	4	SLE Q	-64387.80	397.30	1173.95	0.00	78.54	5.88	87.23	
92	1015.28	4	SLE Q	-61853.40	62.90	185.85	0.00	78.54	5.13	76.80	
93	1075.00	4	SLE Q	-59329.00	-186.57	-551.27	0.00	78.54	5.12	76.41	
94	1134.72	4	SLE Q	-56814.40	-363.22	-1073.25	0.00	78.54	5.20	77.20	
95	1194.44	4	SLE Q	-54309.00	-478.81	-1414.79	0.00	78.54	5.19	76.66	
96	1254.17	4	SLE Q	-51812.50	-544.37	-1608.50	0.00	78.54	5.09	75.05	
97	1313.89	4	SLE Q	-49324.40	-569.98	-1684.16	0.00	78.54	4.93	72.57	
98	1373.61	4	SLE Q	-46844.40	-564.63	-1668.36	0.00	78.54	4.72	69.43	
99	1433.33	4	SLE Q	-44372.00	-536.20	-1584.36	0.00	78.54	4.47	65.80	
100	1493.06	4	SLE Q	-41906.90	-491.44	-1452.10	0.00	78.54	4.20	61.82	
101	1552.78	4	SLE Q	-39448.60	-436.04	-1288.39	0.00	78.54	3.91	57.61	
102	1612.50	4	SLE Q	-36996.70	-374.69	-1107.14	0.00	78.54	3.61	53.28	
103	1672.22	4	SLE Q	-34550.90	-311.27	-919.73	0.00	78.54	3.31	48.92	
104	1731.94	4	SLE Q	-32110.70	-248.85	-735.31	0.00	78.54	3.01	44.58	
105	1791.67	4	SLE Q	-29675.80	-189.93	-561.21	0.00	78.54	2.72	40.33	
106	1851.39	4	SLE Q	-27245.70	-136.50	-403.32	0.00	78.54	2.43	36.20	
107	1911.11	4	SLE Q	-24820.00	-90.15	-266.37	0.00	78.54	2.16	32.23	
108	1970.83	4	SLE Q	-22398.40	-52.22	-154.30	0.00	78.54	1.90	28.45	
109	2030.56	4	SLE Q	-19980.40	-23.87	-70.52	0.00	78.54	1.66	24.88	
110	2090.28	4	SLE Q	-17565.70	-6.13	-18.11	0.00	78.54	1.44	21.55	
111	2150.00	4	SLE Q	-15153.90	0.00	0.00	0.00	78.54	1.23	18.48	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_S <cmq>	A_{C} eff <cmq>	σ_S <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-104433.00	39039.70	13212.40	46.00	136.36	0.50	20.00	187.61	18.85	901.07	369.45	0.11	0.03
76	59.72	4	SLE Q	-103901.00	40849.60	13824.90	46.00	136.36	0.50	20.00	191.56	18.85	938.35	423.04	0.12	0.04
77	119.44	4	SLE Q	-101164.00	40628.20	13750.00	46.00	136.36	0.50	20.00	193.13	18.85	953.10	436.35	0.13	0.04
78	179.17	4	SLE Q	-98444.30	38908.40	13168.00	46.00	136.36	0.50	20.00	191.96	18.85	942.05	406.62	0.12	0.04
79	238.89	4	SLE Q	-95740.40	36143.10	12232.10	46.00	136.36	0.50	20.00	188.40	18.85	908.58	348.23	0.10	0.03
80	298.61	4	SLE Q	-93052.00	32708.00	11069.50	46.00	136.36	0.50	20.00	182.30	18.85	851.05	275.30	0.08	0.02
81	358.33	4	SLE Q	-90378.90	28907.50	9783.30	46.00	136.36	0.50	20.00	212.22	12.57	755.37	200.15	0.06	0.02
82	418.06	4	SLE Q	-87720.50	24981.50	8454.61	46.00	136.36	0.50	20.00	187.15	12.57	597.85	132.28	0.04	0.01
83	477.78	4	SLE Q	-85076.40	21112.80	7145.30	46.00	136.36	0.50	20.00	157.65	12.57	412.50	77.19	0.02	0.01
84	537.50	4	SLE Q	-82446.30	17434.70	5900.49	46.00	136.36	0.50	20.00	164.66	6.28	228.26	36.16	0.01	0.00
112	0.00	3	SLE F	-104433.00	39039.70	13212.40	46.00	136.36	0.50	20.00	187.61	18.85	901.07	369.45	0.11	0.03
113	59.72	3	SLE F	-103901.00	40849.60	13824.90	46.00	136.36	0.50	20.00	191.56	18.85	938.35	423.04	0.12	0.04
114	119.44	3	SLE F	-101164.00	40628.20	13750.00	46.00	136.36	0.50	20.00	193.13	18.85	953.10	436.35	0.13	0.04
115	179.17	3	SLE F	-98444.30	38908.40	13168.00	46.00	136.36	0.50	20.00	191.96	18.85	942.05	406.62	0.12	0.04
116	238.89	3	SLE F	-95740.40	36143.10	12232.10	46.00	136.36	0.50	20.00	188.40	18.85	908.58	348.23	0.10	0.03
117	298.61	3	SLE F	-93052.00	32708.00	11069.50	46.00	136.36	0.50	20.00	182.30	18.85	851.05	275.30	0.08	0.02
118	358.33	3	SLE F	-90378.90	28907.50	9783.30	46.00	136.36	0.50	20.00	212.22	12.57	755.37	200.15	0.06	0.02
119	418.06	3	SLE F	-87720.50	24981.50	8454.61	46.00	136.36	0.50	20.00	187.15	12.57	597.85	132.28	0.04	0.01
120	477.78	3	SLE F	-85076.40	21112.80	7145.30	46.00	136.36	0.50	20.00	157.65	12.57	412.50	77.19	0.02	0.01
121	537.50	3	SLE F	-82446.30	17434.70	5900.49	46.00	136.36	0.50	20.00	164.66	6.28	228.26	36.16	0.01	0.00

Verifiche principali

Caso	Tipo
3	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
49	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sf max (max traz.),C.Q.Per. - Wk Max
86	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 2

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 2 (-109)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	229635.00	6675.46	-884.43	38883.30	-40116.40
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	229635.00	6675.46	-884.43	38883.30	-40116.40
2	2	SLE R	RVN	170100.00	4944.79	-655.14	28802.40	-29715.90
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	170100.00	4944.79	-655.14	28802.40	-29715.90
3	3	SLE F	RVN	170100.00	4944.79	-655.14	28802.40	-29715.90
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	170100.00	4944.79	-655.14	28802.40	-29715.90
4	4	SLE Q	RVN	170100.00	4944.79	-655.14	28802.40	-29715.90
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	170100.00	4944.79	-655.14	28802.40	-29715.90

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-229635.00	-6675.46	884.43	-38883.30	40116.40
2	2	SLE R	1	-170100.00	-4944.79	655.14	-28802.40	29715.90
3	3	SLE F	1	-170100.00	-4944.79	655.14	-28802.40	29715.90
4	4	SLE Q	1	-170100.00	-4944.79	655.14	-28802.40	29715.90

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-229635.00	38466.10	39685.90	-229635.00	161772.00	168851.00	2-3	133.75	4.231
2	59.72	1	SLU	-228405.00	40094.80	41366.30	-228405.00	161499.00	168562.00	2-3	133.75	4.052
3	119.44	1	SLU	-223611.00	39767.90	41029.10	-223611.00	160433.00	167433.00	2-3	133.75	4.058
4	179.17	1	SLU	-218173.00	38002.90	39208.10	-218173.00	159221.00	166148.00	2-3	133.75	4.214
5	238.89	1	SLU	-212089.00	35238.60	36356.10	-212089.00	157857.00	164704.00	2-3	133.75	4.506
6	298.61	1	SLU	-205937.00	31838.90	32848.60	-205937.00	156472.00	163237.00	2-3	133.75	4.943
7	358.33	1	SLU	-199819.00	28098.00	28989.10	-199819.00	155089.00	161773.00	2-3	133.75	5.551
8	418.06	1	SLU	-193733.00	24247.20	25016.20	-193733.00	153689.00	160316.00	2-3	133.75	6.375
9	477.78	1	SLU	-187680.00	20462.40	21111.30	-187680.00	152124.00	158943.00	2-3	133.75	7.483
10	537.50	1	SLU	-181656.00	16871.40	17406.40	-181656.00	150555.00	157571.00	2-3	133.75	8.990
11	597.22	1	SLU	-175663.00	13561.70	13991.80	-175663.00	149073.00	156022.00	2-3	133.75	11.074
12	656.94	1	SLU	-169698.00	10587.60	10923.40	-169698.00	147595.00	154465.00	2-3	133.75	14.044
13	716.67	1	SLU	-163760.00	7976.43	8229.38	-2571250.00	146113.00	152904.00	2-3	133.75	15.701
14	776.39	1	SLU	-157850.00	5734.64	5916.50	-2571250.00	144630.00	151342.00	2-3	133.75	16.289
15	836.11	1	SLU	-151965.00	3852.99	3975.18	-2571250.00	143147.00	149780.00	2-3	133.75	16.920
16	895.83	1	SLU	-146105.00	2310.91	2384.19	-2571250.00	141658.00	148213.00	2-3	133.75	17.599
17	955.56	1	SLU	-140269.00	1080.19	1114.45	-2571250.00	140170.00	146646.00	2-3	133.75	18.331
18	1015.28	1	SLU	-134456.00	128.12	132.19	-2571250.00	138680.00	145077.00	2-3	133.75	19.123
19	1075.00	1	SLU	-128664.00	-580.17	-598.57	-2571250.00	-137398.00	-143289.00	2-3	313.75	19.984
20	1134.72	1	SLU	-122894.00	-1079.78	-1114.03	-2571250.00	-135951.00	-141758.00	2-3	313.75	20.922
21	1194.44	1	SLU	-117143.00	-1404.66	-1449.21	-2571250.00	-134502.00	-140226.00	2-3	313.75	21.950
22	1254.17	1	SLU	-111412.00	-1586.60	-1636.92	-2571250.00	-133045.00	-138701.00	2-3	313.75	23.079
23	1313.89	1	SLU	-105699.00	-1654.62	-1707.09	-2571250.00	-131401.00	-137271.00	2-3	313.75	24.326
24	1373.61	1	SLU	-100003.00	-1634.57	-1686.40	-2571250.00	-129757.00	-135841.00	2-3	313.75	25.712
25	1433.33	1	SLU	-94324.00	-1549.04	-1598.16	-2571250.00	-128205.00	-134224.00	2-3	313.75	27.260
26	1493.06	1	SLU	-88659.90	-1417.37	-1462.31	-2571250.00	-126656.00	-132594.00	2-3	313.75	29.001
27	1552.78	1	SLU	-83010.30	-1255.82	-1295.65	-2571250.00	-125106.00	-130962.00	2-3	313.75	30.975
28	1612.50	1	SLU	-77374.30	-1077.87	-1112.05	-2571250.00	-123548.00	-129321.00	2-3	313.75	33.231
29	1672.22	1	SLU	-71750.80	-894.46	-922.83	-2571250.00	-121988.00	-127678.00	2-3	313.75	35.836
30	1731.94	1	SLU	-66139.10	-714.42	-737.08	-2571250.00	-120425.00	-126031.00	2-3	313.75	38.876
31	1791.67	1	SLU	-60538.20	-544.79	-562.07	-2571250.00	-118856.00	-124378.00	2-3	313.75	42.473
32	1851.39	1	SLU	-54947.10	-391.20	-403.61	-2571250.00	-117286.00	-122722.00	2-3	313.75	46.795
33	1911.11	1	SLU	-49365.00	-258.17	-266.36	-2571250.00	-115709.00	-121058.00	2-3	313.75	52.086
34	1970.83	1	SLU	-43791.00	-149.45	-154.19	-2571250.00	-114130.00	-119391.00	2-3	313.75	58.716
35	2030.56	1	SLU	-38224.10	-68.26	-70.42	-2571250.00	-112548.00	-117720.00	2-3	313.75	67.268
36	2090.28	1	SLU	-32663.40	-17.52	-18.07	-2571250.00	-110959.00	-116041.00	2-3	313.75	78.720
37	2150.00	1	SLU	-27108.10	0.00	0.00	-2571250.00					94.852

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	6675.46	-884.43	0.85	11.31	6733.80	1.00	32294.70	364561.00	32294.70	4.796
2	59.72	1	SLU	1330.94	-176.34	0.85	11.31	1342.57	1.00	32294.70	364385.00	32294.70	24.054
3	119.44	1	SLU	-2684.53	355.67	0.85	11.31	2707.99	1.00	32294.70	363698.00	32294.70	11.926
4	179.17	1	SLU	-5560.41	736.70	0.85	11.31	5609.00	1.00	32294.70	362919.00	32294.70	5.758
5	238.89	1	SLU	-7480.87	991.14	0.85	11.31	7546.25	1.00	32294.70	362048.00	32294.70	4.280
6	298.61	1	SLU	-8619.08	1141.95	0.85	11.31	8694.40	1.00	32294.70	361166.00	32294.70	3.714
7	358.33	1	SLU	-9133.43	1210.09	0.85	11.31	9213.25	1.00	32294.70	360290.00	32294.70	3.505
8	418.06	1	SLU	-9165.29	1214.31	0.85	11.31	9245.38	1.00	32294.70	359418.00	32294.70	3.493
9	477.78	1	SLU	-8837.96	1170.95	0.85	11.31	8915.19	1.00	32294.70	358551.00	32294.70	3.622
10	537.50	1	SLU	-8256.66	1093.93	0.85	11.31	8328.81	1.00	32294.70	357688.00	32294.70	3.877
11	597.22	1	SLU	-7509.13	994.89	0.85	11.31	7574.75	1.00	32294.70	356830.00	32294.70	4.263
12	656.94	1	SLU	-6666.81	883.29	0.85	11.31	6725.06	1.00	32294.70	355975.00	32294.70	4.802
13	716.67	1	SLU	-5786.28	766.63	0.85	11.31	5836.84	1.00	32294.70	355125.00	32294.70	5.533
14	776.39	1	SLU	-4910.96	650.66	0.85	11.31	4953.88	1.00	32294.70	354278.00	32294.70	6.519
15	836.11	1	SLU	-4072.86	539.62	0.85	11.31	4108.45	1.00	32294.70	353435.00	32294.70	7.861
16	895.83	1	SLU	-3294.25	436.46	0.85	11.31	3323.04	1.00	32294.70	352596.00	32294.70	9.718
17	955.56	1	SLU	-2589.38	343.07	0.85	11.31	2612.00	1.00	32294.70	351760.00	32294.70	12.364
18	1015.28	1	SLU	-1965.96	260.47	0.85	11.31	1983.14	1.00	32294.70	350927.00	32294.70	16.285
19	1075.00	1	SLU	-1426.62	189.01	0.85	11.31	1439.09	1.00	32294.70	350098.00	32294.70	22.441
20	1134.72	1	SLU	-970.08	128.53	0.85	11.31	978.56	1.00	32294.70	349271.00	32294.70	33.002
21	1194.44	1	SLU	-592.26	78.47	0.85	11.31	597.44	1.00	32294.70	348448.00	32294.70	54.056
22	1254.17	1	SLU	-287.15	38.04	0.85	11.31	289.66	1.00	32294.70	347627.00	32294.70	>100
23	1313.89	1	SLU	-47.57	6.30	0.85	11.31	47.98	1.00	32294.70	346808.00	32294.70	>100
24	1373.61	1	SLU	134.23	-17.78	0.85	11.31	135.40	1.00	32294.70	345993.00	32294.70	>100
25	1433.33	1	SLU	266.07	-35.25	0.85	11.31	268.40	1.00	32294.70	345179.00	32294.70	>100
26	1493.06	1	SLU	355.54	-47.11	0.85	11.31	358.65	1.00	32294.70	344368.00	32294.70	90.046
27	1552.78	1	SLU	409.68	-54.28	0.85	11.31	413.26	1.00	32294.70	343558.00	32294.70	78.146
28	1612.50	1	SLU	434.83	-57.61	0.85	11.31	438.63	1.00	32294.70	342751.00	32294.70	73.626
29	1672.22	1	SLU	436.54	-57.84	0.85	11.31	440.35	1.00	32294.70	341946.00	32294.70	73.339
30	1731.94	1	SLU	419.46	-55.58	0.85	11.31	423.13	1.00	32294.70	341142.00	32294.70	76.323
31	1791.67	1	SLU	387.43	-51.33	0.85	11.31	390.82	1.00	32294.70	340340.00	32294.70	82.634
32	1851.39	1	SLU	343.42	-45.50	0.85	11.31	346.43	1.00	32294.70	339539.00	32294.70	93.223
33	1911.11	1	SLU	289.66	-38.38	0.85	11.31	292.19	1.00	32294.70	338739.00	32294.70	>100
34	1970.83	1	SLU	227.68	-30.16	0.85	11.31	229.67	1.00	32294.70	337941.00	32294.70	>100
35	2030.56	1	SLU	158.45	-20.99	0.85	11.31	159.83	1.00	32294.70	337143.00	32294.70	>100
36	2090.28	1	SLU	82.49	-10.93	0.85	11.31	83.21	1.00	32294.70	336347.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_c <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-170100.00	29397.00	28493.40	21.99	56.55	35.86	509.46	
39	59.72	2	SLE R	-168870.00	30641.70	29699.80	25.13	53.41	37.02	524.99	
40	119.44	2	SLE R	-164331.00	30391.90	29457.70	25.13	53.41	36.60	518.65	
41	179.17	2	SLE R	-159818.00	29043.00	28150.30	25.13	53.41	35.08	497.43	
42	238.89	2	SLE R	-155331.00	26930.50	26102.70	21.99	56.55	32.83	466.34	
43	298.61	2	SLE R	-150870.00	24332.30	23584.40	18.85	59.69	30.20	430.01	
44	358.33	2	SLE R	-146434.00	21473.40	20813.30	12.57	65.97	27.47	392.18	
45	418.06	2	SLE R	-142021.00	18530.50	17960.90	6.28	72.26	24.82	355.43	
46	477.78	2	SLE R	-137631.00	15638.00	15157.30	0.00	78.54	22.35	321.09	
47	537.50	2	SLE R	-133264.00	12893.60	12497.30	0.00	78.54	20.03	288.87	
48	597.22	2	SLE R	-128919.00	10364.30	10045.70	0.00	78.54	17.88	258.78	
49	656.94	2	SLE R	-124595.00	8091.40	7842.68	0.00	78.54	15.90	231.22	
50	716.67	2	SLE R	-120291.00	6095.84	5908.47	0.00	78.54	14.13	206.42	
51	776.39	2	SLE R	-116007.00	4382.59	4247.88	0.00	78.54	12.56	184.40	
52	836.11	2	SLE R	-111741.00	2944.58	2854.07	0.00	78.54	11.18	165.10	
53	895.83	2	SLE R	-107494.00	1766.07	1711.78	0.00	78.54	10.00	148.37	
54	955.56	2	SLE R	-103264.00	825.52	800.14	0.00	78.54	8.98	134.00	
55	1015.28	2	SLE R	-99051.60	97.92	94.91	0.00	78.54	8.12	121.73	
56	1075.00	2	SLE R	-94855.00	-443.38	-429.75	0.00	78.54	8.03	119.97	
57	1134.72	2	SLE R	-90673.80	-825.21	-799.84	0.00	78.54	7.96	118.59	
58	1194.44	2	SLE R	-86507.50	-1073.49	-1040.49	0.00	78.54	7.80	115.93	
59	1254.17	2	SLE R	-82355.30	-1212.53	-1175.26	0.00	78.54	7.56	112.23	
60	1313.89	2	SLE R	-78216.50	-1264.51	-1225.64	0.00	78.54	7.26	107.69	
61	1373.61	2	SLE R	-74090.40	-1249.19	-1210.79	0.00	78.54	6.91	102.51	
62	1433.33	2	SLE R	-69976.50	-1183.82	-1147.43	0.00	78.54	6.53	96.85	
63	1493.06	2	SLE R	-65873.90	-1083.20	-1049.90	0.00	78.54	6.13	90.87	
64	1552.78	2	SLE R	-61782.20	-959.74	-930.24	0.00	78.54	5.71	84.68	
65	1612.50	2	SLE R	-57700.50	-823.74	-798.42	0.00	78.54	5.28	78.38	
66	1672.22	2	SLE R	-53628.20	-683.57	-662.56	0.00	78.54	4.85	72.05	
67	1731.94	2	SLE R	-49564.60	-545.98	-529.20	0.00	78.54	4.42	65.75	
68	1791.67	2	SLE R	-45509.20	-416.35	-403.55	0.00	78.54	4.00	59.54	
69	1851.39	2	SLE R	-41461.20	-298.97	-289.78	0.00	78.54	3.58	53.46	
70	1911.11	2	SLE R	-37419.90	-197.30	-191.24	0.00	78.54	3.18	47.55	
71	1970.83	2	SLE R	-33384.80	-114.21	-110.70	0.00	78.54	2.80	41.82	
72	2030.56	2	SLE R	-29355.00	-52.17	-50.56	0.00	78.54	2.42	36.30	
73	2090.28	2	SLE R	-25330.10	-13.39	-12.98	0.00	78.54	2.07	31.01	
74	2150.00	2	SLE R	-21309.30	0.00	0.00	0.00	78.54	1.73	25.98	
75	0.00	4	SLE Q	-170100.00	29397.00	28493.40	21.99	56.55	35.86	509.46	
76	59.72	4	SLE Q	-168870.00	30641.70	29699.80	25.13	53.41	37.02	524.99	
77	119.44	4	SLE Q	-164331.00	30391.90	29457.70	25.13	53.41	36.60	518.65	
78	179.17	4	SLE Q	-159818.00	29043.00	28150.30	25.13	53.41	35.08	497.43	
79	238.89	4	SLE Q	-155331.00	26930.50	26102.70	21.99	56.55	32.83	466.34	
80	298.61	4	SLE Q	-150870.00	24332.30	23584.40	18.85	59.69	30.20	430.01	
81	358.33	4	SLE Q	-146434.00	21473.40	20813.30	12.57	65.97	27.47	392.18	
82	418.06	4	SLE Q	-142021.00	18530.50	17960.90	6.28	72.26	24.82	355.43	

83	477.78	4	SLE Q	-137631.00	15638.00	15157.30	0.00	78.54	22.35	321.09	
84	537.50	4	SLE Q	-133264.00	12893.60	12497.30	0.00	78.54	20.03	288.87	
85	597.22	4	SLE Q	-128919.00	10364.30	10045.70	0.00	78.54	17.88	258.78	
86	656.94	4	SLE Q	-124595.00	8091.40	7842.68	0.00	78.54	15.90	231.22	
87	716.67	4	SLE Q	-120291.00	6095.84	5908.47	0.00	78.54	14.13	206.42	
88	776.39	4	SLE Q	-116007.00	4382.59	4247.88	0.00	78.54	12.56	184.40	
89	836.11	4	SLE Q	-111741.00	2944.58	2854.07	0.00	78.54	11.18	165.10	
90	895.83	4	SLE Q	-107494.00	1766.07	1711.78	0.00	78.54	10.00	148.37	
91	955.56	4	SLE Q	-103264.00	825.52	800.14	0.00	78.54	8.98	134.00	
92	1015.28	4	SLE Q	-99051.60	97.92	94.91	0.00	78.54	8.12	121.73	
93	1075.00	4	SLE Q	-94855.00	-443.38	-429.75	0.00	78.54	8.03	119.97	
94	1134.72	4	SLE Q	-90673.80	-825.21	-799.84	0.00	78.54	7.96	118.59	
95	1194.44	4	SLE Q	-86507.50	-1073.49	-1040.49	0.00	78.54	7.80	115.93	
96	1254.17	4	SLE Q	-82355.30	-1212.53	-1175.26	0.00	78.54	7.56	112.23	
97	1313.89	4	SLE Q	-78216.50	-1264.51	-1225.64	0.00	78.54	7.26	107.69	
98	1373.61	4	SLE Q	-74090.40	-1249.19	-1210.79	0.00	78.54	6.91	102.51	
99	1433.33	4	SLE Q	-69976.50	-1183.82	-1147.43	0.00	78.54	6.53	96.85	
100	1493.06	4	SLE Q	-65873.90	-1083.20	-1049.90	0.00	78.54	6.13	90.87	
101	1552.78	4	SLE Q	-61782.20	-959.74	-930.24	0.00	78.54	5.71	84.68	
102	1612.50	4	SLE Q	-57700.50	-823.74	-798.42	0.00	78.54	5.28	78.38	
103	1672.22	4	SLE Q	-53628.20	-683.57	-662.56	0.00	78.54	4.85	72.05	
104	1731.94	4	SLE Q	-49564.60	-545.98	-529.20	0.00	78.54	4.42	65.75	
105	1791.67	4	SLE Q	-45509.20	-416.35	-403.55	0.00	78.54	4.00	59.54	
106	1851.39	4	SLE Q	-41461.20	-298.97	-289.78	0.00	78.54	3.58	53.46	
107	1911.11	4	SLE Q	-37419.90	-197.30	-191.24	0.00	78.54	3.18	47.55	
108	1970.83	4	SLE Q	-33384.80	-114.21	-110.70	0.00	78.54	2.80	41.82	
109	2030.56	4	SLE Q	-29355.00	-52.17	-50.56	0.00	78.54	2.42	36.30	
110	2090.28	4	SLE Q	-25330.10	-13.39	-12.98	0.00	78.54	2.07	31.01	
111	2150.00	4	SLE Q	-21309.30	0.00	0.00	0.00	78.54	1.73	25.98	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_S <cmq>	A_{C} eff <cmq>	σ_S <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-170100.00	28493.40	29397.00	46.00	136.36	0.50	20.00	199.08	6.28	336.41	107.98	0.03	0.01
76	59.72	4	SLE Q	-168870.00	29699.80	30641.70	46.00	136.36	0.50	20.00	175.96	9.42	395.67	132.41	0.04	0.01
77	119.44	4	SLE Q	-164331.00	29457.70	30391.90	46.00	136.36	0.50	20.00	158.77	12.57	419.51	139.36	0.04	0.01
78	179.17	4	SLE Q	-159818.00	28150.30	29043.00	46.00	136.36	0.50	20.00	176.36	9.42	397.54	126.10	0.04	0.01
79	238.89	4	SLE Q	-155331.00	26102.70	26930.50	46.00	136.36	0.50	20.00	200.29	6.28	340.21	100.03	0.03	0.01
80	298.61	4	SLE Q	-150870.00	23584.40	24332.30	46.00	136.36	0.50	20.00	173.75	6.28	256.82	68.43	0.02	0.01
112	0.00	3	SLE F	-170100.00	28493.40	29397.00	46.00	136.36	0.50	20.00	199.08	6.28	336.41	107.98	0.03	0.01
113	59.72	3	SLE F	-168870.00	29699.80	30641.70	46.00	136.36	0.50	20.00	175.96	9.42	395.67	132.41	0.04	0.01
114	119.44	3	SLE F	-164331.00	29457.70	30391.90	46.00	136.36	0.50	20.00	158.77	12.57	419.51	139.36	0.04	0.01
115	179.17	3	SLE F	-159818.00	28150.30	29043.00	46.00	136.36	0.50	20.00	176.36	9.42	397.54	126.10	0.04	0.01
116	238.89	3	SLE F	-155331.00	26102.70	26930.50	46.00	136.36	0.50	20.00	200.29	6.28	340.21	100.03	0.03	0.01
117	298.61	3	SLE F	-150870.00	23584.40	24332.30	46.00	136.36	0.50	20.00	173.75	6.28	256.82	68.43	0.02	0.01

Verifiche principali

Caso	Tipo
2	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
46	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.),C.Q.Per. - Wk Max
77	C.Q.Per. - Sf max (max traz.)
83	C.Q.Per. - Sc max (min. compr.)
113	C.Freq - Wk Max

Palo n. 3

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 3 (-150)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	311581.00	6181.08	-693.65	6144.60	-45094.20
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	311581.00	6181.08	-693.65	6144.60	-45094.20
2	2	SLE R	RVN	230800.00	4578.58	-513.82	4551.56	-33403.10
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	230800.00	4578.58	-513.82	4551.56	-33403.10
3	3	SLE F	RVN	230800.00	4578.58	-513.82	4551.56	-33403.10
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	230800.00	4578.58	-513.82	4551.56	-33403.10
4	4	SLE Q	RVN	230800.00	4578.58	-513.82	4551.56	-33403.10
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	230800.00	4578.58	-513.82	4551.56	-33403.10

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-311581.00	-6181.08	693.65	-6144.60	45094.20
2	2	SLE R	1	-230800.00	-4578.58	513.82	-4551.56	33403.10
3	3	SLE F	1	-230800.00	-4578.58	513.82	-4551.56	33403.10
4	4	SLE Q	1	-230800.00	-4578.58	513.82	-4551.56	33403.10

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-311581.00	6075.77	44589.10	-311581.00	33868.30	257293.00	2-3	97.50	5.767
2	59.72	1	SLU	-310351.00	6384.03	46851.30	-310351.00	33823.80	256943.00	2-3	97.50	5.481
3	119.44	1	SLU	-305557.00	6368.27	46735.70	-305557.00	33649.90	255578.00	2-3	97.50	5.465
4	179.17	1	SLU	-300119.00	6112.77	44860.60	-300119.00	33452.10	254023.00	2-3	97.50	5.659
5	238.89	1	SLU	-294035.00	5689.20	41752.10	-294035.00	33230.20	252274.00	2-3	97.50	6.039
6	298.61	1	SLU	-287306.00	5157.17	37847.60	-287306.00	32983.90	250328.00	2-3	97.50	6.610
7	358.33	1	SLU	-279931.00	4565.06	33502.20	-279931.00	32713.10	248185.00	2-3	97.50	7.404
8	418.06	1	SLU	-271912.00	3951.05	28996.10	-271912.00	32222.70	245766.00	2-3	97.50	8.470
9	477.78	1	SLU	-263336.00	3344.31	24543.30	-2571250.00	31923.60	243024.00	2-3	97.50	9.764
10	537.50	1	SLU	-254803.00	2766.18	20300.60	-2571250.00	31574.30	240260.00	2-3	97.50	10.091
11	597.22	1	SLU	-246312.00	2231.44	16376.20	-2571250.00	31222.30	237486.00	2-3	97.50	10.439
12	656.94	1	SLU	-237861.00	1749.37	12838.30	-2571250.00	30868.50	234702.00	2-3	97.50	10.810
13	716.67	1	SLU	-229448.00	1324.85	9722.82	-2571250.00	30512.80	231909.00	2-3	97.50	11.206
14	776.39	1	SLU	-221073.00	959.31	7040.19	-2571250.00	30155.10	229106.00	2-3	97.50	11.631
15	836.11	1	SLU	-212735.00	651.56	4781.71	-2571250.00	29795.50	226292.00	2-3	97.50	12.087
16	895.83	1	SLU	-204431.00	398.54	2924.79	-2571250.00	29433.80	223467.00	2-3	97.50	12.578
17	955.56	1	SLU	-196160.00	195.86	1437.37	-2571250.00	29070.50	220633.00	2-3	97.50	13.108
18	1015.28	1	SLU	-187921.00	38.38	281.67	-2571250.00	28705.70	217791.00	2-3	97.50	13.683
19	1075.00	1	SLU	-179713.00	-79.43	-582.95	-2571250.00	-28252.40	-215404.00	2-3	277.50	14.307
20	1134.72	1	SLU	-171534.00	-163.19	-1197.65	-2571250.00	-27874.80	-212491.00	2-3	277.50	14.990
21	1194.44	1	SLU	-163384.00	-218.35	-1602.44	-2571250.00	-27495.00	-209563.00	2-3	277.50	15.738
22	1254.17	1	SLU	-155259.00	-250.03	-1834.95	-2571250.00	-27113.10	-206622.00	2-3	277.50	16.561
23	1313.89	1	SLU	-147161.00	-262.93	-1929.61	-2571250.00	-26729.20	-203669.00	2-3	277.50	17.472
24	1373.61	1	SLU	-139086.00	-261.24	-1917.22	-2571250.00	-26343.50	-200702.00	2-3	277.50	18.487
25	1433.33	1	SLU	-131034.00	-248.65	-1824.77	-2571250.00	-25956.00	-197723.00	2-3	277.50	19.623
26	1493.06	1	SLU	-123003.00	-228.29	-1675.42	-2571250.00	-25588.20	-194721.00	2-3	277.50	20.904
27	1552.78	1	SLU	-114993.00	-202.86	-1488.74	-2571250.00	-25239.50	-191692.00	2-3	277.50	22.360
28	1612.50	1	SLU	-107001.00	-174.54	-1280.94	-2571250.00	-24844.20	-188639.00	2-3	277.50	24.030
29	1672.22	1	SLU	-99026.30	-145.16	-1065.30	-2571250.00	-24448.10	-185578.00	2-3	277.50	25.965
30	1731.94	1	SLU	-91068.00	-116.17	-852.55	-2571250.00	-24050.10	-182500.00	2-3	277.50	28.234
31	1791.67	1	SLU	-83124.60	-88.75	-651.30	-2571250.00	-23651.50	-179415.00	2-3	277.50	30.932
32	1851.39	1	SLU	-75194.80	-63.83	-468.46	-2571250.00	-23252.00	-176320.00	2-3	277.50	34.194
33	1911.11	1	SLU	-67277.30	-42.19	-309.64	-2571250.00	-22851.60	-173212.00	2-3	277.50	38.219

34	1970.83	1	SLU	-59370.70	-24.46	-179.51	-2571250.00	-22450.60	-170094.00	2-3		277.50	43.308
35	2030.56	1	SLU	-51473.80	-11.19	-82.10	-2571250.00	-22049.10	-166967.00	2-3		277.50	49.953
36	2090.28	1	SLU	-43585.30	-2.88	-21.10	-2571250.00	-21647.20	-163830.00	2-3		277.50	58.993
37	2150.00	1	SLU	-35703.90	0.00	0.00	-2571250.00						72.016

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	6181.08	-693.65	0.85	11.31	6219.88	1.00	32294.70	376299.00	32294.70	5.192
2	59.72	1	SLU	1616.31	-181.38	0.85	11.31	1626.46	1.00	32294.70	376123.00	32294.70	19.856
3	119.44	1	SLU	-1831.67	205.55	0.85	11.31	1843.17	1.00	32294.70	375436.00	32294.70	17.521
4	179.17	1	SLU	-4319.25	484.71	0.85	11.31	4346.36	1.00	32294.70	374657.00	32294.70	7.430
5	238.89	1	SLU	-5999.18	673.24	0.85	11.31	6036.83	1.00	32294.70	373785.00	32294.70	5.350
6	298.61	1	SLU	-7015.69	787.31	0.85	11.31	7059.72	1.00	32294.70	372822.00	32294.70	4.574
7	358.33	1	SLU	-7501.14	841.79	0.85	11.31	7548.23	1.00	32294.70	371765.00	32294.70	4.278
8	418.06	1	SLU	-7574.06	849.97	0.85	11.31	7621.60	1.00	32294.70	370617.00	32294.70	4.237
9	477.78	1	SLU	-7338.12	823.50	0.85	11.31	7384.18	1.00	32294.70	369388.00	32294.70	4.373
10	537.50	1	SLU	-6882.05	772.32	0.85	11.31	6925.25	1.00	32294.70	368166.00	32294.70	4.663
11	597.22	1	SLU	-6280.08	704.76	0.85	11.31	6319.50	1.00	32294.70	366950.00	32294.70	5.110
12	656.94	1	SLU	-5592.83	627.64	0.85	11.31	5627.94	1.00	32294.70	365739.00	32294.70	5.738
13	716.67	1	SLU	-4868.52	546.35	0.85	11.31	4899.08	1.00	32294.70	364534.00	32294.70	6.592
14	776.39	1	SLU	-4144.31	465.08	0.85	11.31	4170.33	1.00	32294.70	363335.00	32294.70	7.744
15	836.11	1	SLU	-3447.77	386.91	0.85	11.31	3469.41	1.00	32294.70	362140.00	32294.70	9.308
16	895.83	1	SLU	-2798.23	314.02	0.85	11.31	2815.80	1.00	32294.70	360951.00	32294.70	11.469
17	955.56	1	SLU	-2208.26	247.81	0.85	11.31	2222.12	1.00	32294.70	359766.00	32294.70	14.533
18	1015.28	1	SLU	-1684.87	189.08	0.85	11.31	1695.45	1.00	32294.70	358586.00	32294.70	19.048
19	1075.00	1	SLU	-1230.72	138.11	0.85	11.31	1238.45	1.00	32294.70	357410.00	32294.70	26.077
20	1134.72	1	SLU	-845.14	94.84	0.85	11.31	850.44	1.00	32294.70	356239.00	32294.70	37.974
21	1194.44	1	SLU	-525.01	58.92	0.85	11.31	528.30	1.00	32294.70	355071.00	32294.70	61.129
22	1254.17	1	SLU	-265.56	29.80	0.85	11.31	267.23	1.00	32294.70	353907.00	32294.70	>100
23	1313.89	1	SLU	-60.99	6.84	0.85	11.31	61.38	1.00	32294.70	352747.00	32294.70	>100
24	1373.61	1	SLU	95.04	-10.67	0.85	11.31	95.64	1.00	32294.70	351591.00	32294.70	>100
25	1433.33	1	SLU	209.00	-23.45	0.85	11.31	210.31	1.00	32294.70	350437.00	32294.70	>100
26	1493.06	1	SLU	287.15	-32.22	0.85	11.31	288.95	1.00	32294.70	349287.00	32294.70	>100
27	1552.78	1	SLU	335.35	-37.63	0.85	11.31	337.45	1.00	32294.70	348140.00	32294.70	95.701
28	1612.50	1	SLU	358.89	-40.27	0.85	11.31	361.14	1.00	32294.70	346995.00	32294.70	89.424
29	1672.22	1	SLU	362.39	-40.67	0.85	11.31	364.67	1.00	32294.70	345853.00	32294.70	88.560
30	1731.94	1	SLU	349.77	-39.25	0.85	11.31	351.97	1.00	32294.70	344713.00	32294.70	91.754
31	1791.67	1	SLU	324.24	-36.39	0.85	11.31	326.28	1.00	32294.70	343575.00	32294.70	98.979
32	1851.39	1	SLU	288.31	-32.35	0.85	11.31	290.12	1.00	32294.70	342439.00	32294.70	>100
33	1911.11	1	SLU	243.84	-27.36	0.85	11.31	245.37	1.00	32294.70	341305.00	32294.70	>100
34	1970.83	1	SLU	192.13	-21.56	0.85	11.31	193.34	1.00	32294.70	340172.00	32294.70	>100
35	2030.56	1	SLU	134.01	-15.04	0.85	11.31	134.85	1.00	32294.70	339041.00	32294.70	>100
36	2090.28	1	SLU	69.90	-7.84	0.85	11.31	70.34	1.00	32294.70	337911.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_c <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-230800.00	33029.00	4500.57	0.00	78.54	35.86	514.48	
39	59.72	2	SLE R	-229571.00	34704.70	4728.91	0.00	78.54	36.62	524.80	
40	119.44	2	SLE R	-224777.00	34619.00	4717.24	0.00	78.54	36.19	518.36	
41	179.17	2	SLE R	-219338.00	33230.10	4527.98	0.00	78.54	35.03	501.92	
42	238.89	2	SLE R	-213254.00	30927.50	4214.22	0.00	78.54	33.34	478.25	
43	298.61	2	SLE R	-207068.00	28035.30	3820.13	0.00	78.54	31.34	450.30	
44	358.33	2	SLE R	-200915.00	24816.50	3381.53	0.00	78.54	29.18	420.09	
45	418.06	2	SLE R	-194795.00	21478.60	2926.70	0.00	78.54	26.95	389.07	
46	477.78	2	SLE R	-188707.00	18180.20	2477.26	0.00	78.54	24.75	358.37	
47	537.50	2	SLE R	-182650.00	15037.50	2049.03	0.00	78.54	22.63	328.81	
48	597.22	2	SLE R	-176622.00	12130.50	1652.92	0.00	78.54	20.64	300.95	
49	656.94	2	SLE R	-170624.00	9509.86	1295.83	0.00	78.54	18.79	275.14	
50	716.67	2	SLE R	-164653.00	7202.09	981.37	0.00	78.54	17.11	251.57	
51	776.39	2	SLE R	-158709.00	5214.96	710.60	0.00	78.54	15.60	230.31	
52	836.11	2	SLE R	-152790.00	3542.01	482.64	0.00	78.54	14.25	211.28	
53	895.83	2	SLE R	-146897.00	2166.51	295.21	0.00	78.54	13.06	194.39	
54	955.56	2	SLE R	-141028.00	1064.72	145.08	0.00	78.54	12.01	179.46	
55	1015.28	2	SLE R	-135182.00	208.65	28.43	0.00	78.54	11.10	166.29	
56	1075.00	2	SLE R	-129358.00	-431.81	-58.84	0.00	78.54	10.74	160.79	
57	1134.72	2	SLE R	-123555.00	-887.15	-120.88	0.00	78.54	10.50	156.94	
58	1194.44	2	SLE R	-117772.00	-1186.99	-161.74	0.00	78.54	10.19	152.03	
59	1254.17	2	SLE R	-112008.00	-1359.22	-185.21	0.00	78.54	9.81	146.22	
60	1313.89	2	SLE R	-106262.00	-1429.34	-194.76	0.00	78.54	9.38	139.71	
61	1373.61	2	SLE R	-100534.00	-1420.16	-193.51	0.00	78.54	8.91	132.66	
62	1433.33	2	SLE R	-94822.70	-1351.68	-184.18	0.00	78.54	8.41	125.21	
63	1493.06	2	SLE R	-89126.50	-1241.05	-169.11	0.00	78.54	7.89	117.48	
64	1552.78	2	SLE R	-83444.80	-1102.77	-150.26	0.00	78.54	7.35	109.57	
65	1612.50	2	SLE R	-77776.70	-948.84	-129.29	0.00	78.54	6.81	101.57	
66	1672.22	2	SLE R	-72121.30	-789.11	-107.53	0.00	78.54	6.27	93.54	
67	1731.94	2	SLE R	-66477.70	-631.52	-86.05	0.00	78.54	5.73	85.54	
68	1791.67	2	SLE R	-60845.00	-482.45	-65.74	0.00	78.54	5.20	77.61	
69	1851.39	2	SLE R	-55222.10	-347.01	-47.28	0.00	78.54	4.67	69.79	
70	1911.11	2	SLE R	-49608.30	-229.36	-31.25	0.00	78.54	4.15	62.11	
71	1970.83	2	SLE R	-44002.60	-132.97	-18.12	0.00	78.54	3.65	54.59	
72	2030.56	2	SLE R	-38404.00	-60.82	-8.29	0.00	78.54	3.15	47.26	
73	2090.28	2	SLE R	-32811.80	-15.63	-2.13	0.00	78.54	2.68	40.12	
74	2150.00	2	SLE R	-27224.80	0.00	0.00	0.00	78.54	2.21	33.19	
75	0.00	4	SLE Q	-230800.00	33029.00	4500.57	0.00	78.54	35.86	514.48	
76	59.72	4	SLE Q	-229571.00	34704.70	4728.91	0.00	78.54	36.62	524.80	
77	119.44	4	SLE Q	-224777.00	34619.00	4717.24	0.00	78.54	36.19	518.36	
78	179.17	4	SLE Q	-219338.00	33230.10	4527.98	0.00	78.54	35.03	501.92	
79	238.89	4	SLE Q	-213254.00	30927.50	4214.22	0.00	78.54	33.34	478.25	
80	298.61	4	SLE Q	-207068.00	28035.30	3820.13	0.00	78.54	31.34	450.30	
81	358.33	4	SLE Q	-200915.00	24816.50	3381.53	0.00	78.54	29.18	420.09	
82	418.06	4	SLE Q	-194795.00	21478.60	2926.70	0.00	78.54	26.95	389.07	
83	477.78	4	SLE Q	-188707.00	18180.20	2477.26	0.00	78.54	24.75	358.37	
84	537.50	4	SLE Q	-182650.00	15037.50	2049.03	0.00	78.54	22.63	328.81	
85	597.22	4	SLE Q	-176622.00	12130.50	1652.92	0.00	78.54	20.64	300.95	
86	656.94	4	SLE Q	-170624.00	9509.86	1295.83	0.00	78.54	18.79	275.14	
87	716.67	4	SLE Q	-164653.00	7202.09	981.37	0.00	78.54	17.11	251.57	
88	776.39	4	SLE Q	-158709.00	5214.96	710.60	0.00	78.54	15.60	230.31	
89	836.11	4	SLE Q	-152790.00	3542.01	482.64	0.00	78.54	14.25	211.28	
90	895.83	4	SLE Q	-146897.00	2166.51	295.21	0.00	78.54	13.06	194.39	
91	955.56	4	SLE Q	-141028.00	1064.72	145.08	0.00	78.54	12.01	179.46	
92	1015.28	4	SLE Q	-135182.00	208.65	28.43	0.00	78.54	11.10	166.29	
93	1075.00	4	SLE Q	-129358.00	-431.81	-58.84	0.00	78.54	10.74	160.79	
94	1134.72	4	SLE Q	-123555.00	-887.15	-120.88	0.00	78.54	10.50	156.94	
95	1194.44	4	SLE Q	-117772.00	-1186.99	-161.74	0.00	78.54	10.19	152.03	
96	1254.17	4	SLE Q	-112008.00	-1359.22	-185.21	0.00	78.54	9.81	146.22	
97	1313.89	4	SLE Q	-106262.00	-1429.34	-194.76	0.00	78.54	9.38	139.71	
98	1373.61	4	SLE Q	-100534.00	-1420.16	-193.51	0.00	78.54	8.91	132.66	
99	1433.33	4	SLE Q	-94822.70	-1351.68	-184.18	0.00	78.54	8.41	125.21	
100	1493.06	4	SLE Q	-89126.50	-1241.05	-169.11	0.00	78.54	7.89	117.48	
101	1552.78	4	SLE Q	-83444.80	-1102.77	-150.26	0.00	78.54	7.35	109.57	
102	1612.50	4	SLE Q	-77776.70	-948.84	-129.29	0.00	78.54	6.81	101.57	
103	1672.22	4	SLE Q	-72121.30	-789.11	-107.53	0.00	78.54	6.27	93.54	
104	1731.94	4	SLE Q	-66477.70	-631.52	-86.05	0.00	78.54	5.73	85.54	
105	1791.67	4	SLE Q	-60845.00	-482.45	-65.74	0.00	78.54	5.20	77.61	
106	1851.39	4	SLE Q	-55222.10	-347.01	-47.28	0.00	78.54	4.67	69.79	
107	1911.11	4	SLE Q	-49608.30	-229.36	-31.25	0.00	78.54	4.15	62.11	
108	1970.83	4	SLE Q	-44002.60	-132.97	-18.12	0.00	78.54	3.65	54.59	
109	2030.56	4	SLE Q	-38404.00	-60.82	-8.29	0.00	78.54	3.15	47.26	
110	2090.28	4	SLE Q	-32811.80	-15.63	-2.13	0.00	78.54	2.68	40.12	
111	2150.00	4	SLE Q	-27224.80	0.00	0.00	0.00	78.54	2.21	33.19	

Verifiche principali

Caso	Tipo
3	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sc max (min. compr.),C.Rare - Sf max (max traz.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sc max (min. compr.),C.Q.Per. - Sf max (max traz.)

Palo n. 4

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 4 (-164)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	361205.00	5879.64	-261.45	-22863.30	-19796.00
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	361205.00	5879.64	-261.45	-22863.30	-19796.00
2	2	SLE R	RVN	267559.00	4355.29	-193.67	-16935.80	-14663.70
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	267559.00	4355.29	-193.67	-16935.80	-14663.70
3	3	SLE F	RVN	267559.00	4355.29	-193.67	-16935.80	-14663.70
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	267559.00	4355.29	-193.67	-16935.80	-14663.70
4	4	SLE Q	RVN	267559.00	4355.29	-193.67	-16935.80	-14663.70
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	267559.00	4355.29	-193.67	-16935.80	-14663.70

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-361205.00	-5879.64	261.45	22863.30	19796.00
2	2	SLE R	1	-267559.00	-4355.29	193.67	16935.80	14663.70
3	3	SLE F	1	-267559.00	-4355.29	193.67	16935.80	14663.70
4	4	SLE Q	1	-267559.00	-4355.29	193.67	16935.80	14663.70

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-361205.00	-22568.60	19540.90	-2571250.00	-205598.00	180141.00	2-3	41.25	7.119
2	59.72	1	SLU	-359975.00	-24395.20	21122.40	-2571250.00	-205344.00	179925.00	2-3	41.25	7.143
3	119.44	1	SLU	-355181.00	-24816.20	21486.90	-2571250.00	-204342.00	179073.00	2-3	41.25	7.239
4	179.17	1	SLU	-349743.00	-24178.30	20934.60	-2571250.00	-203204.00	178105.00	2-3	41.25	7.352
5	238.89	1	SLU	-343659.00	-22779.40	19723.40	-2571250.00	-201918.00	177014.00	2-3	41.25	7.482
6	298.61	1	SLU	-336930.00	-20869.50	18069.70	-2571250.00	-200489.00	175802.00	2-3	41.25	7.631
7	358.33	1	SLU	-329555.00	-18653.70	16151.20	-2571250.00	-198911.00	174465.00	2-3	41.25	7.802
8	418.06	1	SLU	-321536.00	-16295.70	14109.60	-2571250.00	-197179.00	173001.00	2-3	41.25	7.997
9	477.78	1	SLU	-312871.00	-13922.70	12054.90	-2571250.00	-195280.00	171414.00	2-3	41.25	8.218
10	537.50	1	SLU	-303561.00	-11629.30	10069.20	-2571250.00	-193191.00	169711.00	2-3	41.25	8.470
11	597.22	1	SLU	-293606.00	-9482.88	8210.69	-2571250.00	-190945.00	167854.00	2-3	41.25	8.757
12	656.94	1	SLU	-283491.00	-7527.70	6517.81	-2571250.00	-188731.00	165701.00	2-3	41.25	9.070
13	716.67	1	SLU	-273422.00	-5789.36	5012.68	-2571250.00	-186507.00	163535.00	2-3	41.25	9.404
14	776.39	1	SLU	-263397.00	-4278.59	3704.59	-2571250.00	-184274.00	161356.00	2-3	41.25	9.762
15	836.11	1	SLU	-253416.00	-2994.67	2592.92	-2571250.00	-182033.00	159165.00	2-3	41.25	10.146
16	895.83	1	SLU	-243476.00	-1928.46	1669.74	-2571250.00	-179517.00	157098.00	2-3	41.25	10.561
17	955.56	1	SLU	-233575.00	-1064.88	922.02	-2571250.00	-176984.00	155004.00	2-3	41.25	11.008
18	1015.28	1	SLU	-223713.00	-385.08	333.42	-2571250.00	-174449.00	152863.00	2-3	41.25	11.493
19	1075.00	1	SLU	-213887.00	131.92	-114.22	-2571250.00	171676.00	-151084.00	2-3	221.25	12.021
20	1134.72	1	SLU	-204096.00	507.81	-439.69	-2571250.00	169228.00	-148990.00	2-3	221.25	12.598
21	1194.44	1	SLU	-194338.00	764.05	-661.55	-2571250.00	166883.00	-146611.00	2-3	221.25	13.231
22	1254.17	1	SLU	-184612.00	921.08	-797.51	-2571250.00	164531.00	-144213.00	2-3	221.25	13.928
23	1313.89	1	SLU	-174916.00	997.80	-863.94	-2571250.00	162173.00	-141797.00	2-3	221.25	14.700
24	1373.61	1	SLU	-165249.00	1011.30	-875.63	-2571250.00	159772.00	-139384.00	2-3	221.25	15.560
25	1433.33	1	SLU	-155609.00	976.70	-845.67	-2571250.00	157102.00	-137100.00	2-3	221.25	16.524
26	1493.06	1	SLU	-145994.00	907.09	-785.40	-2571250.00	154362.00	-134830.00	2-3	221.25	17.612
27	1552.78	1	SLU	-136402.00	813.63	-704.48	-2571250.00	151603.00	-132548.00	2-3	221.25	18.851
28	1612.50	1	SLU	-126833.00	705.70	-611.02	-2571250.00	148826.00	-130254.00	2-3	221.25	20.273
29	1672.22	1	SLU	-117285.00	591.03	-511.74	-2571250.00	146031.00	-127949.00	2-3	221.25	21.923
30	1731.94	1	SLU	-107756.00	475.97	-412.12	-2571250.00	143218.00	-125633.00	2-3	221.25	23.862
31	1791.67	1	SLU	-98244.70	365.69	-316.63	-2571250.00	140388.00	-123307.00	2-3	221.25	26.172
32	1851.39	1	SLU	-88749.20	264.41	-228.94	-2571250.00	137557.00	-120928.00	2-3	221.25	28.972
33	1911.11	1	SLU	-79268.20	175.62	-152.06	-2571250.00	134717.00	-118525.00	2-3	221.25	32.437
34	1970.83	1	SLU	-69800.20	102.27	-88.55	-2571250.00	131860.00	-116113.00	2-3	221.25	36.837
35	2030.56	1	SLU	-60343.50	46.98	-40.67	-2571250.00	130307.00	-112098.00	2-3	220.62	42.610
36	2090.28	1	SLU	-50896.70	12.12	-10.49	-2571250.00	127413.00	-109675.00	2-3	220.62	50.519
37	2150.00	1	SLU	-41458.20	0.00	0.00	-2571250.00					62.020

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	5879.64	-261.45	0.85	11.31	5885.45	1.00	32294.70	383407.00	32294.70	5.487
2	59.72	1	SLU	2349.63	-104.48	0.85	11.31	2351.95	1.00	32294.70	383231.00	32294.70	13.731
3	119.44	1	SLU	-358.86	15.96	0.85	11.31	359.21	1.00	32294.70	382544.00	32294.70	89.904
4	179.17	1	SLU	-2354.27	104.69	0.85	11.31	2356.60	1.00	32294.70	381765.00	32294.70	13.704
5	238.89	1	SLU	-3744.34	166.50	0.85	11.31	3748.04	1.00	32294.70	380894.00	32294.70	8.616
6	298.61	1	SLU	-4632.15	205.98	0.85	11.31	4636.73	1.00	32294.70	379930.00	32294.70	6.965
7	358.33	1	SLU	-5113.39	227.38	0.85	11.31	5118.45	1.00	32294.70	378873.00	32294.70	6.309
8	418.06	1	SLU	-5274.60	234.55	0.85	11.31	5279.81	1.00	32294.70	377725.00	32294.70	6.117
9	477.78	1	SLU	-5192.21	230.88	0.85	11.31	5197.34	1.00	32294.70	376484.00	32294.70	6.214
10	537.50	1	SLU	-4932.22	219.32	0.85	11.31	4937.09	1.00	32294.70	375150.00	32294.70	6.541
11	597.22	1	SLU	-4550.39	202.34	0.85	11.31	4554.89	1.00	32294.70	373724.00	32294.70	7.090
12	656.94	1	SLU	-4092.73	181.99	0.85	11.31	4096.77	1.00	32294.70	372275.00	32294.70	7.883
13	716.67	1	SLU	-3596.24	159.91	0.85	11.31	3599.80	1.00	32294.70	370833.00	32294.70	8.971
14	776.39	1	SLU	-3089.86	137.40	0.85	11.31	3092.92	1.00	32294.70	369397.00	32294.70	10.441
15	836.11	1	SLU	-2595.42	115.41	0.85	11.31	2597.98	1.00	32294.70	367967.00	32294.70	12.431
16	895.83	1	SLU	-2128.62	94.65	0.85	11.31	2130.72	1.00	32294.70	366543.00	32294.70	15.157
17	955.56	1	SLU	-1700.05	75.60	0.85	11.31	1701.73	1.00	32294.70	365125.00	32294.70	18.978
18	1015.28	1	SLU	-1316.11	58.52	0.85	11.31	1317.41	1.00	32294.70	363713.00	32294.70	24.514
19	1075.00	1	SLU	-979.82	43.57	0.85	11.31	980.79	1.00	32294.70	362305.00	32294.70	32.927
20	1134.72	1	SLU	-691.59	30.75	0.85	11.31	692.28	1.00	32294.70	360903.00	32294.70	46.650
21	1194.44	1	SLU	-449.93	20.01	0.85	11.31	450.37	1.00	32294.70	359505.00	32294.70	71.707
22	1254.17	1	SLU	-251.95	11.20	0.85	11.31	252.19	1.00	32294.70	358112.00	32294.70	>100
23	1313.89	1	SLU	-93.88	4.17	0.85	11.31	93.97	1.00	32294.70	356723.00	32294.70	>100
24	1373.61	1	SLU	28.54	-1.27	0.85	11.31	28.57	1.00	32294.70	355338.00	32294.70	>100
25	1433.33	1	SLU	119.76	-5.33	0.85	11.31	119.88	1.00	32294.70	353957.00	32294.70	>100
26	1493.06	1	SLU	184.18	-8.19	0.85	11.31	184.36	1.00	32294.70	352580.00	32294.70	>100
27	1552.78	1	SLU	225.95	-10.05	0.85	11.31	226.17	1.00	32294.70	351206.00	32294.70	>100
28	1612.50	1	SLU	248.86	-11.07	0.85	11.31	249.10	1.00	32294.70	349836.00	32294.70	>100
29	1672.22	1	SLU	256.26	-11.40	0.85	11.31	256.52	1.00	32294.70	348468.00	32294.70	>100
30	1731.94	1	SLU	251.01	-11.16	0.85	11.31	251.26	1.00	32294.70	347103.00	32294.70	>100
31	1791.67	1	SLU	235.46	-10.47	0.85	11.31	235.70	1.00	32294.70	345741.00	32294.70	>100
32	1851.39	1	SLU	211.46	-9.40	0.85	11.31	211.67	1.00	32294.70	344380.00	32294.70	>100
33	1911.11	1	SLU	180.39	-8.02	0.85	11.31	180.57	1.00	32294.70	343022.00	32294.70	>100
34	1970.83	1	SLU	143.24	-6.37	0.85	11.31	143.38	1.00	32294.70	341666.00	32294.70	>100
35	2030.56	1	SLU	100.60	-4.47	0.85	11.31	100.69	1.00	32294.70	340312.00	32294.70	>100
36	2090.28	1	SLU	52.81	-2.35	0.85	11.31	52.86	1.00	32294.70	338958.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_c <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-267559.00	14474.70	-16717.50	0.00	78.54	33.15	481.05	
39	59.72	2	SLE R	-266329.00	15646.30	-18070.50	0.00	78.54	33.98	492.09	
40	119.44	2	SLE R	-261536.00	15916.20	-18382.30	0.00	78.54	33.80	489.13	
41	179.17	2	SLE R	-256097.00	15507.10	-17909.80	0.00	78.54	33.03	478.12	
42	238.89	2	SLE R	-250013.00	14609.90	-16873.60	0.00	78.54	31.83	461.11	
43	298.61	2	SLE R	-243284.00	13385.00	-15458.90	0.00	78.54	30.32	439.80	
44	358.33	2	SLE R	-236023.00	11963.80	-13817.50	0.00	78.54	28.61	415.75	
45	418.06	2	SLE R	-228801.00	10451.50	-12070.90	0.00	78.54	26.83	390.76	
46	477.78	2	SLE R	-221616.00	8929.54	-10313.10	0.00	78.54	25.05	365.72	
47	537.50	2	SLE R	-214467.00	7458.65	-8614.31	0.00	78.54	23.31	341.27	
48	597.22	2	SLE R	-207353.00	6081.99	-7024.36	0.00	78.54	21.65	317.87	
49	656.94	2	SLE R	-200272.00	4828.01	-5576.07	0.00	78.54	20.08	295.82	
50	716.67	2	SLE R	-193225.00	3713.10	-4288.42	0.00	78.54	18.63	275.31	
51	776.39	2	SLE R	-186209.00	2744.14	-3169.32	0.00	78.54	17.30	256.39	
52	836.11	2	SLE R	-179223.00	1920.68	-2218.27	0.00	78.54	16.08	239.06	
53	895.83	2	SLE R	-172267.00	1236.85	-1428.49	0.00	78.54	14.98	223.27	
54	955.56	2	SLE R	-165339.00	682.98	-788.80	0.00	78.54	13.98	208.89	
55	1015.28	2	SLE R	-158438.00	246.97	-285.24	0.00	78.54	13.07	195.82	
56	1075.00	2	SLE R	-151562.00	-84.61	97.72	0.00	78.54	12.39	185.70	

57	1134.72	2	SLE R	-144712.00	-325.69	376.16	0.00	78.54	12.02	179.94	
58	1194.44	2	SLE R	-137885.00	-490.04	565.97	0.00	78.54	11.59	173.38	
59	1254.17	2	SLE R	-131080.00	-590.75	682.28	0.00	78.54	11.12	166.17	
60	1313.89	2	SLE R	-124297.00	-639.95	739.11	0.00	78.54	10.61	158.43	
61	1373.61	2	SLE R	-117534.00	-648.62	749.11	0.00	78.54	10.06	150.28	
62	1433.33	2	SLE R	-110790.00	-626.42	723.48	0.00	78.54	9.50	141.81	
63	1493.06	2	SLE R	-104065.00	-581.77	671.92	0.00	78.54	8.92	133.13	
64	1552.78	2	SLE R	-97356.10	-521.84	602.69	0.00	78.54	8.32	124.31	
65	1612.50	2	SLE R	-90663.30	-452.61	522.74	0.00	78.54	7.73	115.41	
66	1672.22	2	SLE R	-83985.40	-379.06	437.80	0.00	78.54	7.13	106.47	
67	1731.94	2	SLE R	-77321.10	-305.27	352.57	0.00	78.54	6.53	97.56	
68	1791.67	2	SLE R	-70669.40	-234.54	270.88	0.00	78.54	5.93	88.68	
69	1851.39	2	SLE R	-64029.30	-169.58	195.86	0.00	78.54	5.34	79.89	
70	1911.11	2	SLE R	-57399.60	-112.64	130.09	0.00	78.54	4.75	71.20	
71	1970.83	2	SLE R	-50779.30	-65.59	75.76	0.00	78.54	4.18	62.62	
72	2030.56	2	SLE R	-44167.30	-30.13	34.80	0.00	78.54	3.61	54.17	
73	2090.28	2	SLE R	-37562.50	-7.77	8.98	0.00	78.54	3.06	45.88	
74	2150.00	2	SLE R	-30963.80	0.00	0.00	0.00	78.54	2.52	37.75	
75	0.00	4	SLE Q	-267559.00	14474.70	-16717.50	0.00	78.54	33.15	481.05	
76	59.72	4	SLE Q	-266329.00	15646.30	-18070.50	0.00	78.54	33.98	492.09	
77	119.44	4	SLE Q	-261536.00	15916.20	-18382.30	0.00	78.54	33.80	489.13	
78	179.17	4	SLE Q	-256097.00	15507.10	-17909.80	0.00	78.54	33.03	478.12	
79	238.89	4	SLE Q	-250013.00	14609.90	-16873.60	0.00	78.54	31.83	461.11	
80	298.61	4	SLE Q	-243284.00	13385.00	-15458.90	0.00	78.54	30.32	439.80	
81	358.33	4	SLE Q	-236023.00	11963.80	-13817.50	0.00	78.54	28.61	415.75	
82	418.06	4	SLE Q	-228801.00	10451.50	-12070.90	0.00	78.54	26.83	390.76	
83	477.78	4	SLE Q	-221616.00	8929.54	-10313.10	0.00	78.54	25.05	365.72	
84	537.50	4	SLE Q	-214467.00	7458.65	-8614.31	0.00	78.54	23.31	341.27	
85	597.22	4	SLE Q	-207353.00	6081.99	-7024.36	0.00	78.54	21.65	317.87	
86	656.94	4	SLE Q	-200272.00	4828.01	-5576.07	0.00	78.54	20.08	295.82	
87	716.67	4	SLE Q	-193225.00	3713.10	-4288.42	0.00	78.54	18.63	275.31	
88	776.39	4	SLE Q	-186209.00	2744.14	-3169.32	0.00	78.54	17.30	256.39	
89	836.11	4	SLE Q	-179223.00	1920.68	-2218.27	0.00	78.54	16.08	239.06	
90	895.83	4	SLE Q	-172267.00	1236.85	-1428.49	0.00	78.54	14.98	223.27	
91	955.56	4	SLE Q	-165339.00	682.98	-788.80	0.00	78.54	13.98	208.89	
92	1015.28	4	SLE Q	-158438.00	246.97	-285.24	0.00	78.54	13.07	195.82	
93	1075.00	4	SLE Q	-151562.00	-84.61	97.72	0.00	78.54	12.39	185.70	
94	1134.72	4	SLE Q	-144712.00	-325.69	376.16	0.00	78.54	12.02	179.94	
95	1194.44	4	SLE Q	-137885.00	-490.04	565.97	0.00	78.54	11.59	173.38	
96	1254.17	4	SLE Q	-131080.00	-590.75	682.28	0.00	78.54	11.12	166.17	
97	1313.89	4	SLE Q	-124297.00	-639.95	739.11	0.00	78.54	10.61	158.43	
98	1373.61	4	SLE Q	-117534.00	-648.62	749.11	0.00	78.54	10.06	150.28	
99	1433.33	4	SLE Q	-110790.00	-626.42	723.48	0.00	78.54	9.50	141.81	
100	1493.06	4	SLE Q	-104065.00	-581.77	671.92	0.00	78.54	8.92	133.13	
101	1552.78	4	SLE Q	-97356.10	-521.84	602.69	0.00	78.54	8.32	124.31	
102	1612.50	4	SLE Q	-90663.30	-452.61	522.74	0.00	78.54	7.73	115.41	
103	1672.22	4	SLE Q	-83985.40	-379.06	437.80	0.00	78.54	7.13	106.47	
104	1731.94	4	SLE Q	-77321.10	-305.27	352.57	0.00	78.54	6.53	97.56	
105	1791.67	4	SLE Q	-70669.40	-234.54	270.88	0.00	78.54	5.93	88.68	
106	1851.39	4	SLE Q	-64029.30	-169.58	195.86	0.00	78.54	5.34	79.89	
107	1911.11	4	SLE Q	-57399.60	-112.64	130.09	0.00	78.54	4.75	71.20	
108	1970.83	4	SLE Q	-50779.30	-65.59	75.76	0.00	78.54	4.18	62.62	
109	2030.56	4	SLE Q	-44167.30	-30.13	34.80	0.00	78.54	3.61	54.17	
110	2090.28	4	SLE Q	-37562.50	-7.77	8.98	0.00	78.54	3.06	45.88	
111	2150.00	4	SLE Q	-30963.80	0.00	0.00	0.00	78.54	2.52	37.75	

Verifiche principali

Caso	Tipo
1	SLU N cost - min. sic.,SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
74	C.Rare - Sc max (min. compr.),C.Rare - Sf max (max traz.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
111	C.Q.Per. - Sc max (min. compr.),C.Q.Per. - Sf max (max traz.)

Palo n. 5

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 5 (-165)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	361932.00	5897.94	269.95	-22951.50	19142.70
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	361932.00	5897.94	269.95	-22951.50	19142.70
2	2	SLE R	RVN	268098.00	4368.84	199.96	-17001.10	14179.80
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	268098.00	4368.84	199.96	-17001.10	14179.80
3	3	SLE F	RVN	268098.00	4368.84	199.96	-17001.10	14179.80
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	268098.00	4368.84	199.96	-17001.10	14179.80
4	4	SLE Q	RVN	268098.00	4368.84	199.96	-17001.10	14179.80
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	268098.00	4368.84	199.96	-17001.10	14179.80

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-361932.00	-5897.94	-269.95	22951.50	-19142.70
2	2	SLE R	1	-268098.00	-4368.84	-199.96	17001.10	-14179.80
3	3	SLE F	1	-268098.00	-4368.84	-199.96	17001.10	-14179.80
4	4	SLE Q	1	-268098.00	-4368.84	-199.96	17001.10	-14179.80

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-361932.00	-22653.70	-18894.30	-2571250.00	-209826.00	-175983.00	2-3	320.00	7.104
2	59.72	1	SLU	-360702.00	-24522.00	-20452.60	-2571250.00	-209588.00	-175747.00	2-3	320.00	7.128
3	119.44	1	SLU	-355909.00	-24969.00	-20825.40	-2571250.00	-208594.00	-174848.00	2-3	320.00	7.224
4	179.17	1	SLU	-350470.00	-24344.60	-20304.60	-2571250.00	-207401.00	-173854.00	2-3	320.00	7.337
5	238.89	1	SLU	-344386.00	-22949.30	-19140.90	-2571250.00	-206054.00	-172733.00	2-3	320.00	7.466
6	298.61	1	SLU	-337657.00	-21035.60	-17544.70	-2571250.00	-204556.00	-171486.00	2-3	320.00	7.615
7	358.33	1	SLU	-330282.00	-18810.60	-15689.00	-2571250.00	-202899.00	-170109.00	2-3	320.00	7.785
8	418.06	1	SLU	-322263.00	-16439.90	-13711.70	-2571250.00	-201080.00	-168598.00	2-3	320.00	7.979
9	477.78	1	SLU	-313598.00	-14051.80	-11719.90	-2571250.00	-199097.00	-166952.00	2-3	320.00	8.199
10	537.50	1	SLU	-304288.00	-11742.30	-9793.67	-2571250.00	-196945.00	-165168.00	2-3	320.00	8.450
11	597.22	1	SLU	-294334.00	-9579.61	-7989.86	-2571250.00	-194621.00	-163242.00	2-3	320.00	8.736
12	656.94	1	SLU	-284193.00	-7608.66	-6345.99	-2571250.00	-192229.00	-161261.00	2-3	320.00	9.048
13	716.67	1	SLU	-274098.00	-5855.52	-4883.79	-2571250.00	-189824.00	-159270.00	2-3	320.00	9.381
14	776.39	1	SLU	-264048.00	-4331.24	-3612.46	-2571250.00	-187407.00	-157270.00	2-3	320.00	9.738
15	836.11	1	SLU	-254041.00	-3035.29	-2531.58	-2571250.00	-184977.00	-155260.00	2-3	320.00	10.121
16	895.83	1	SLU	-244076.00	-1958.61	-1633.57	-2571250.00	-182536.00	-153240.00	2-3	320.00	10.535
17	955.56	1	SLU	-234150.00	-1086.12	-905.88	-2571250.00	-180083.00	-151212.00	2-3	320.00	10.981
18	1015.28	1	SLU	-224263.00	-398.91	-332.71	-2571250.00	-177621.00	-149174.00	2-3	320.00	11.465
19	1075.00	1	SLU	-214412.00	124.08	103.49	-2571250.00	175178.00	147019.00	2-3	140.00	11.992
20	1134.72	1	SLU	-204596.00	504.70	420.95	-2571250.00	172590.00	144872.00	2-3	140.00	12.567
21	1194.44	1	SLU	-194814.00	764.54	637.66	-2571250.00	169988.00	142714.00	2-3	140.00	13.198
22	1254.17	1	SLU	-185063.00	924.16	770.79	-2571250.00	167374.00	140543.00	2-3	140.00	13.894
23	1313.89	1	SLU	-175343.00	1002.64	836.25	-2571250.00	164749.00	138359.00	2-3	140.00	14.664
24	1373.61	1	SLU	-165651.00	1017.21	848.40	-2571250.00	162111.00	136164.00	2-3	140.00	15.522
25	1433.33	1	SLU	-155986.00	983.09	819.95	-2571250.00	159463.00	133957.00	2-3	140.00	16.484
26	1493.06	1	SLU	-146347.00	913.52	761.92	-2571250.00	156804.00	131738.00	2-3	140.00	17.570
27	1552.78	1	SLU	-136732.00	819.77	683.73	-2571250.00	154133.00	129509.00	2-3	140.00	18.805

28	1612.50	1	SLU	-127138.00	711.29	593.25	-2571250.00	151453.00	127271.00	2-3	140.00	20.224
29	1672.22	1	SLU	-117566.00	595.90	497.01	-2571250.00	148761.00	125022.00	2-3	140.00	21.871
30	1731.94	1	SLU	-108013.00	480.04	400.37	-2571250.00	146060.00	122765.00	2-3	140.00	23.805
31	1791.67	1	SLU	-98477.10	368.91	307.69	-2571250.00	143461.00	120243.00	2-3	140.00	26.110
32	1851.39	1	SLU	-88957.60	266.80	222.53	-2571250.00	140618.00	117792.00	2-3	140.00	28.904
33	1911.11	1	SLU	-79452.60	177.25	147.83	-2571250.00	137709.00	115352.00	2-3	140.00	32.362
34	1970.83	1	SLU	-69960.50	103.24	86.11	-2571250.00	134777.00	112896.00	2-3	140.00	36.753
35	2030.56	1	SLU	-60479.90	47.43	39.56	-2571250.00	131823.00	110425.00	2-3	140.00	42.514
36	2090.28	1	SLU	-51009.10	12.24	10.21	-2571250.00	128847.00	107940.00	2-3	140.00	50.408
37	2150.00	1	SLU	-41546.60	0.00	0.00	-2571250.00					61.888

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	5897.94	269.95	0.85	11.31	5904.11	1.00	32294.70	383511.00	32294.70	5.470
2	59.72	1	SLU	2385.56	109.19	0.85	11.31	2388.05	1.00	32294.70	383335.00	32294.70	13.524
3	119.44	1	SLU	-311.23	-14.24	0.85	11.31	311.56	1.00	32294.70	382648.00	32294.70	>100
4	179.17	1	SLU	-2299.78	-105.26	0.85	11.31	2302.19	1.00	32294.70	381869.00	32294.70	14.028
5	238.89	1	SLU	-3686.85	-168.75	0.85	11.31	3690.71	1.00	32294.70	380998.00	32294.70	8.750
6	298.61	1	SLU	-4574.64	-209.38	0.85	11.31	4579.43	1.00	32294.70	380034.00	32294.70	7.052
7	358.33	1	SLU	-5058.06	-231.50	0.85	11.31	5063.36	1.00	32294.70	378978.00	32294.70	6.378
8	418.06	1	SLU	-5223.01	-239.06	0.85	11.31	5228.48	1.00	32294.70	377829.00	32294.70	6.177
9	477.78	1	SLU	-5145.36	-235.50	0.85	11.31	5150.75	1.00	32294.70	376588.00	32294.70	6.270
10	537.50	1	SLU	-4890.69	-223.84	0.85	11.31	4895.81	1.00	32294.70	375254.00	32294.70	6.596
11	597.22	1	SLU	-4514.40	-206.62	0.85	11.31	4519.12	1.00	32294.70	373828.00	32294.70	7.146
12	656.94	1	SLU	-4062.22	-185.93	0.85	11.31	4066.47	1.00	32294.70	372376.00	32294.70	7.942
13	716.67	1	SLU	-3570.97	-163.44	0.85	11.31	3574.71	1.00	32294.70	370930.00	32294.70	9.034
14	776.39	1	SLU	-3069.45	-140.49	0.85	11.31	3072.66	1.00	32294.70	369490.00	32294.70	10.510
15	836.11	1	SLU	-2579.38	-118.06	0.85	11.31	2582.08	1.00	32294.70	368057.00	32294.70	12.507
16	895.83	1	SLU	-2116.45	-96.87	0.85	11.31	2118.67	1.00	32294.70	366629.00	32294.70	15.243
17	955.56	1	SLU	-1691.23	-77.41	0.85	11.31	1693.00	1.00	32294.70	365208.00	32294.70	19.075
18	1015.28	1	SLU	-1310.11	-59.96	0.85	11.31	1311.48	1.00	32294.70	363791.00	32294.70	24.625
19	1075.00	1	SLU	-976.14	-44.68	0.85	11.31	977.16	1.00	32294.70	362380.00	32294.70	33.050
20	1134.72	1	SLU	-689.79	-31.57	0.85	11.31	690.51	1.00	32294.70	360974.00	32294.70	46.769
21	1194.44	1	SLU	-449.59	-20.58	0.85	11.31	450.06	1.00	32294.70	359573.00	32294.70	71.757
22	1254.17	1	SLU	-252.71	-11.57	0.85	11.31	252.97	1.00	32294.70	358176.00	32294.70	>100
23	1313.89	1	SLU	-95.43	-4.37	0.85	11.31	95.53	1.00	32294.70	356784.00	32294.70	>100
24	1373.61	1	SLU	26.45	1.21	0.85	11.31	26.48	1.00	32294.70	355396.00	32294.70	>100
25	1433.33	1	SLU	117.35	5.37	0.85	11.31	117.47	1.00	32294.70	354011.00	32294.70	>100
26	1493.06	1	SLU	181.62	8.31	0.85	11.31	181.81	1.00	32294.70	352631.00	32294.70	>100
27	1552.78	1	SLU	223.37	10.22	0.85	11.31	223.60	1.00	32294.70	351253.00	32294.70	>100
28	1612.50	1	SLU	246.37	11.28	0.85	11.31	246.63	1.00	32294.70	349879.00	32294.70	>100
29	1672.22	1	SLU	253.94	11.62	0.85	11.31	254.21	1.00	32294.70	348508.00	32294.70	>100
30	1731.94	1	SLU	248.92	11.39	0.85	11.31	249.18	1.00	32294.70	347140.00	32294.70	>100
31	1791.67	1	SLU	233.62	10.69	0.85	11.31	233.87	1.00	32294.70	345774.00	32294.70	>100
32	1851.39	1	SLU	209.91	9.61	0.85	11.31	210.13	1.00	32294.70	344410.00	32294.70	>100
33	1911.11	1	SLU	179.14	8.20	0.85	11.31	179.33	1.00	32294.70	343049.00	32294.70	>100
34	1970.83	1	SLU	142.29	6.51	0.85	11.31	142.44	1.00	32294.70	341689.00	32294.70	>100
35	2030.56	1	SLU	99.96	4.58	0.85	11.31	100.07	1.00	32294.70	340331.00	32294.70	>100
36	2090.28	1	SLU	52.49	2.40	0.85	11.31	52.54	1.00	32294.70	338975.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-268098.00	-13995.80	-16780.50	0.00	78.54	33.08	480.69	
39	59.72	2	SLE R	-266868.00	-15150.00	-18164.50	0.00	78.54	33.91	491.88	
40	119.44	2	SLE R	-262074.00	-15426.20	-18495.60	0.00	78.54	33.74	489.07	
41	179.17	2	SLE R	-256636.00	-15040.40	-18033.10	0.00	78.54	32.99	478.20	
42	238.89	2	SLE R	-250552.00	-14178.40	-16999.50	0.00	78.54	31.80	461.31	
43	298.61	2	SLE R	-243823.00	-12996.10	-15582.00	0.00	78.54	30.30	440.11	
44	358.33	2	SLE R	-236545.00	-11621.50	-13933.80	0.00	78.54	28.60	416.13	
45	418.06	2	SLE R	-229306.00	-10156.80	-12177.70	0.00	78.54	26.83	391.20	
46	477.78	2	SLE R	-222105.00	-8681.40	-10408.70	0.00	78.54	25.05	366.21	
47	537.50	2	SLE R	-214940.00	-7254.57	-8698.02	0.00	78.54	23.32	341.79	
48	597.22	2	SLE R	-207810.00	-5918.42	-7096.01	0.00	78.54	21.66	318.42	
49	656.94	2	SLE R	-200713.00	-4700.73	-5636.04	0.00	78.54	20.10	296.38	
50	716.67	2	SLE R	-193650.00	-3617.62	-4337.42	0.00	78.54	18.66	275.87	
51	776.39	2	SLE R	-186618.00	-2675.90	-3208.33	0.00	78.54	17.33	256.94	
52	836.11	2	SLE R	-179617.00	-1875.25	-2248.37	0.00	78.54	16.11	239.61	
53	895.83	2	SLE R	-172644.00	-1210.05	-1450.82	0.00	78.54	15.01	223.79	
54	955.56	2	SLE R	-165701.00	-671.02	-804.53	0.00	78.54	14.01	209.40	
55	1015.28	2	SLE R	-158784.00	-246.45	-295.49	0.00	78.54	13.11	196.30	
56	1075.00	2	SLE R	-151893.00	76.66	91.92	0.00	78.54	12.41	186.03	
57	1134.72	2	SLE R	-145026.00	311.81	373.86	0.00	78.54	12.04	180.22	
58	1194.44	2	SLE R	-138184.00	472.34	566.32	0.00	78.54	11.61	173.63	
59	1254.17	2	SLE R	-131364.00	570.96	684.56	0.00	78.54	11.14	166.39	
60	1313.89	2	SLE R	-124565.00	619.45	742.70	0.00	78.54	10.62	158.63	
61	1373.61	2	SLE R	-117787.00	628.44	753.49	0.00	78.54	10.08	150.47	
62	1433.33	2	SLE R	-111028.00	607.37	728.22	0.00	78.54	9.51	142.00	
63	1493.06	2	SLE R	-104287.00	564.39	676.68	0.00	78.54	8.93	133.31	
64	1552.78	2	SLE R	-97563.00	506.47	607.24	0.00	78.54	8.34	124.48	
65	1612.50	2	SLE R	-90855.00	439.44	526.88	0.00	78.54	7.74	115.57	
66	1672.22	2	SLE R	-84161.80	368.16	441.41	0.00	78.54	7.14	106.63	
67	1731.94	2	SLE R	-77482.40	296.57	355.58	0.00	78.54	6.54	97.71	
68	1791.67	2	SLE R	-70815.50	227.92	273.27	0.00	78.54	5.94	88.83	
69	1851.39	2	SLE R	-64160.30	164.83	197.63	0.00	78.54	5.35	80.03	
70	1911.11	2	SLE R	-57515.50	109.50	131.29	0.00	78.54	4.76	71.32	
71	1970.83	2	SLE R	-50880.10	63.78	76.47	0.00	78.54	4.19	62.73	
72	2030.56	2	SLE R	-44253.00	29.30	35.13	0.00	78.54	3.62	54.27	
73	2090.28	2	SLE R	-37633.10	7.56	9.07	0.00	78.54	3.07	45.97	
74	2150.00	2	SLE R	-31019.40	0.00	0.00	0.00	78.54	2.52	37.82	
75	0.00	4	SLE Q	-268098.00	-13995.80	-16780.50	0.00	78.54	33.08	480.69	
76	59.72	4	SLE Q	-266868.00	-15150.00	-18164.50	0.00	78.54	33.91	491.88	
77	119.44	4	SLE Q	-262074.00	-15426.20	-18495.60	0.00	78.54	33.74	489.07	
78	179.17	4	SLE Q	-256636.00	-15040.40	-18033.10	0.00	78.54	32.99	478.20	
79	238.89	4	SLE Q	-250552.00	-14178.40	-16999.50	0.00	78.54	31.80	461.31	
80	298.61	4	SLE Q	-243823.00	-12996.10	-15582.00	0.00	78.54	30.30	440.11	
81	358.33	4	SLE Q	-236545.00	-11621.50	-13933.80	0.00	78.54	28.60	416.13	
82	418.06	4	SLE Q	-229306.00	-10156.80	-12177.70	0.00	78.54	26.83	391.20	
83	477.78	4	SLE Q	-222105.00	-8681.40	-10408.70	0.00	78.54	25.05	366.21	
84	537.50	4	SLE Q	-214940.00	-7254.57	-8698.02	0.00	78.54	23.32	341.79	
85	597.22	4	SLE Q	-207810.00	-5918.42	-7096.01	0.00	78.54	21.66	318.42	
86	656.94	4	SLE Q	-200713.00	-4700.73	-5636.04	0.00	78.54	20.10	296.38	
87	716.67	4	SLE Q	-193650.00	-3617.62	-4337.42	0.00	78.54	18.66	275.87	
88	776.39	4	SLE Q	-186618.00	-2675.90	-3208.33	0.00	78.54	17.33	256.94	
89	836.11	4	SLE Q	-179617.00	-1875.25	-2248.37	0.00	78.54	16.11	239.61	
90	895.83	4	SLE Q	-172644.00	-1210.05	-1450.82	0.00	78.54	15.01	223.79	
91	955.56	4	SLE Q	-165701.00	-671.02	-804.53	0.00	78.54	14.01	209.40	
92	1015.28	4	SLE Q	-158784.00	-246.45	-295.49	0.00	78.54	13.11	196.30	
93	1075.00	4	SLE Q	-151893.00	76.66	91.92	0.00	78.54	12.41	186.03	
94	1134.72	4	SLE Q	-145026.00	311.81	373.86	0.00	78.54	12.04	180.22	
95	1194.44	4	SLE Q	-138184.00	472.34	566.32	0.00	78.54	11.61	173.63	
96	1254.17	4	SLE Q	-131364.00	570.96	684.56	0.00	78.54	11.14	166.39	
97	1313.89	4	SLE Q	-124565.00	619.45	742.70	0.00	78.54	10.62	158.63	
98	1373.61	4	SLE Q	-117787.00	628.44	753.49	0.00	78.54	10.08	150.47	
99	1433.33	4	SLE Q	-111028.00	607.37	728.22	0.00	78.54	9.51	142.00	
100	1493.06	4	SLE Q	-104287.00	564.39	676.68	0.00	78.54	8.93	133.31	
101	1552.78	4	SLE Q	-97563.00	506.47	607.24	0.00	78.54	8.34	124.48	
102	1612.50	4	SLE Q	-90855.00	439.44	526.88	0.00	78.54	7.74	115.57	
103	1672.22	4	SLE Q	-84161.80	368.16	441.41	0.00	78.54	7.14	106.63	
104	1731.94	4	SLE Q	-77482.40	296.57	355.58	0.00	78.54	6.54	97.71	
105	1791.67	4	SLE Q	-70815.50	227.92	273.27	0.00	78.54	5.94	88.83	
106	1851.39	4	SLE Q	-64160.30	164.83	197.63	0.00	78.54	5.35	80.03	
107	1911.11	4	SLE Q	-57515.50	109.50	131.29	0.00	78.54	4.76	71.32	
108	1970.83	4	SLE Q	-50880.10	63.78	76.47	0.00	78.54	4.19	62.73	
109	2030.56	4	SLE Q	-44253.00	29.30	35.13	0.00	78.54	3.62	54.27	
110	2090.28	4	SLE Q	-37633.10	7.56	9.07	0.00	78.54	3.07	45.97	
111	2150.00	4	SLE Q	-31019.40	0.00	0.00	0.00	78.54	2.52	37.82	

Verifiche principali

Caso	Tipo
1	SLU N cost - min. sic.,SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
74	C.Rare - Sc max (min. compr.),C.Rare - Sf max (max traz.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
111	C.Q.Per. - Sc max (min. compr.),C.Q.Per. - Sf max (max traz.)

Palo n. 6

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 6 (-151)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	313420.00	6196.40	685.61	5632.34	44504.10
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	313420.00	6196.40	685.61	5632.34	44504.10
2	2	SLE R	RVN	232163.00	4589.92	507.86	4172.11	32966.00
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	232163.00	4589.92	507.86	4172.11	32966.00
3	3	SLE F	RVN	232163.00	4589.92	507.86	4172.11	32966.00
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	232163.00	4589.92	507.86	4172.11	32966.00
4	4	SLE Q	RVN	232163.00	4589.92	507.86	4172.11	32966.00
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	232163.00	4589.92	507.86	4172.11	32966.00

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-313420.00	-6196.40	-685.61	-5632.34	-44504.10
2	2	SLE R	1	-232163.00	-4589.92	-507.86	-4172.11	-32966.00
3	3	SLE F	1	-232163.00	-4589.92	-507.86	-4172.11	-32966.00
4	4	SLE Q	1	-232163.00	-4589.92	-507.86	-4172.11	-32966.00

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-313420.00	5568.88	-44002.60	-313420.00	33858.60	-257687.00	2-3	262.50	5.860
2	59.72	1	SLU	-312190.00	5858.10	-46287.90	-312190.00	33812.00	-257322.00	2-3	262.50	5.563
3	119.44	1	SLU	-307397.00	5848.35	-46210.90	-307397.00	33629.80	-255895.00	2-3	262.50	5.541
4	179.17	1	SLU	-301958.00	5617.21	-44384.50	-301958.00	33422.60	-254271.00	2-3	262.50	5.732
5	238.89	1	SLU	-295874.00	5230.69	-41330.40	-295874.00	33189.80	-252440.00	2-3	262.50	6.112
6	298.61	1	SLU	-289145.00	4743.70	-37482.50	-289145.00	32931.30	-250404.00	2-3	262.50	6.685
7	358.33	1	SLU	-281771.00	4200.83	-33193.00	-281771.00	32646.70	-248159.00	2-3	262.50	7.481
8	418.06	1	SLU	-273751.00	3637.29	-28740.10	-273751.00	32335.20	-245696.00	2-3	262.50	8.554
9	477.78	1	SLU	-265116.00	3080.00	-24336.70	-2571250.00	31997.40	-243023.00	2-3	262.50	9.699
10	537.50	1	SLU	-256524.00	2548.68	-20138.40	-2571250.00	31658.80	-240343.00	2-3	262.50	10.023
11	597.22	1	SLU	-247974.00	2056.98	-16253.30	-2571250.00	31319.00	-237657.00	2-3	262.50	10.369
12	656.94	1	SLU	-239465.00	1613.51	-12749.20	-2571250.00	30978.00	-234964.00	2-3	262.50	10.738
13	716.67	1	SLU	-230994.00	1222.82	-9662.17	-2571250.00	30635.50	-232265.00	2-3	262.50	11.131
14	776.39	1	SLU	-222561.00	886.28	-7002.98	-2571250.00	30291.20	-229557.00	2-3	262.50	11.553
15	836.11	1	SLU	-214165.00	602.83	-4763.31	-2571250.00	29946.00	-226846.00	2-3	262.50	12.006
16	895.83	1	SLU	-205803.00	369.68	-2921.02	-2571250.00	29598.90	-224125.00	2-3	262.50	12.494
17	955.56	1	SLU	-197475.00	182.82	-1444.60	-2571250.00	29251.10	-221401.00	2-3	262.50	13.021
18	1015.28	1	SLU	-189179.00	37.56	-296.75	-2571250.00	28847.50	-218663.00	2-3	262.50	13.592
19	1075.00	1	SLU	-180914.00	-71.21	562.64	-2571250.00	-28393.30	215360.00	2-3	82.50	14.213
20	1134.72	1	SLU	-172679.00	-148.61	1174.28	-2571250.00	-28023.40	212484.00	2-3	82.50	14.890
21	1194.44	1	SLU	-164472.00	-199.67	1577.72	-2571250.00	-27651.80	209597.00	2-3	82.50	15.633
22	1254.17	1	SLU	-156291.00	-229.10	1810.22	-2571250.00	-27278.90	206703.00	2-3	82.50	16.452
23	1313.89	1	SLU	-148136.00	-241.20	1905.86	-2571250.00	-26904.90	203801.00	2-3	82.50	17.357
24	1373.61	1	SLU	-140006.00	-239.85	1895.17	-2571250.00	-26529.70	200891.00	2-3	82.50	18.365
25	1433.33	1	SLU	-131898.00	-228.42	1804.88	-2571250.00	-26153.50	197974.00	2-3	82.50	19.494
26	1493.06	1	SLU	-123811.00	-209.83	1657.96	-2571250.00	-25776.10	195048.00	2-3	82.50	20.767
27	1552.78	1	SLU	-115745.00	-186.52	1473.81	-2571250.00	-25397.90	192115.00	2-3	82.50	22.215
28	1612.50	1	SLU	-107698.00	-160.54	1268.53	-2571250.00	-24987.70	189170.00	2-3	82.50	23.875
29	1672.22	1	SLU	-99668.10	-133.56	1055.30	-2571250.00	-24382.00	186139.00	2-3	82.50	25.798
30	1731.94	1	SLU	-91654.60	-106.91	844.78	-2571250.00	-23972.10	182998.00	2-3	82.50	28.054
31	1791.67	1	SLU	-83656.10	-81.70	645.53	-2571250.00	-23560.20	179839.00	2-3	82.50	30.736
32	1851.39	1	SLU	-75671.20	-58.78	464.42	-2571250.00	-23146.30	176662.00	2-3	82.50	33.979
33	1911.11	1	SLU	-67698.70	-38.86	307.03	-2571250.00	-22730.90	173468.00	2-3	82.50	37.981
34	1970.83	1	SLU	-59737.30	-22.53	178.03	-2571250.00	-22314.00	170257.00	2-3	82.50	43.043
35	2030.56	1	SLU	-51785.60	-10.31	81.44	-2571250.00	-21895.90	167030.00	2-3	82.50	49.652
36	2090.28	1	SLU	-43842.30	-2.65	20.93	-2571250.00	-21476.80	163787.00	2-3	82.50	58.648
37	2150.00	1	SLU	-35906.20	0.00	0.00	-2571250.00					71.610

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	6196.40	685.61	0.85	11.31	6234.21	1.00	32294.70	376562.00	32294.70	5.180
2	59.72	1	SLU	1668.01	184.56	0.85	11.31	1678.19	1.00	32294.70	376386.00	32294.70	19.244
3	119.44	1	SLU	-1754.97	-194.18	0.85	11.31	1765.68	1.00	32294.70	375699.00	32294.70	18.290
4	179.17	1	SLU	-4226.94	-467.69	0.85	11.31	4252.73	1.00	32294.70	374920.00	32294.70	7.594
5	238.89	1	SLU	-5898.82	-652.68	0.85	11.31	5934.82	1.00	32294.70	374049.00	32294.70	5.442
6	298.61	1	SLU	-6913.20	-764.92	0.85	11.31	6955.39	1.00	32294.70	373085.00	32294.70	4.643
7	358.33	1	SLU	-7401.00	-818.89	0.85	11.31	7446.17	1.00	32294.70	372029.00	32294.70	4.337
8	418.06	1	SLU	-7479.49	-827.58	0.85	11.31	7525.14	1.00	32294.70	370880.00	32294.70	4.292
9	477.78	1	SLU	-7251.31	-802.33	0.85	11.31	7295.56	1.00	32294.70	369643.00	32294.70	4.427
10	537.50	1	SLU	-6804.32	-752.87	0.85	11.31	6845.85	1.00	32294.70	368412.00	32294.70	4.717
11	597.22	1	SLU	-6212.06	-687.34	0.85	11.31	6249.97	1.00	32294.70	367188.00	32294.70	5.167
12	656.94	1	SLU	-5534.62	-612.38	0.85	11.31	5568.40	1.00	32294.70	365969.00	32294.70	5.800
13	716.67	1	SLU	-4819.82	-533.29	0.85	11.31	4849.23	1.00	32294.70	364756.00	32294.70	6.660
14	776.39	1	SLU	-4104.54	-454.15	0.85	11.31	4129.58	1.00	32294.70	363548.00	32294.70	7.820
15	836.11	1	SLU	-3416.13	-377.98	0.85	11.31	3436.98	1.00	32294.70	362345.00	32294.70	9.396
16	895.83	1	SLU	-2773.86	-306.92	0.85	11.31	2790.79	1.00	32294.70	361147.00	32294.70	11.572
17	955.56	1	SLU	-2190.22	-242.34	0.85	11.31	2203.58	1.00	32294.70	359954.00	32294.70	14.656
18	1015.28	1	SLU	-1672.22	-185.03	0.85	11.31	1682.43	1.00	32294.70	358766.00	32294.70	19.195
19	1075.00	1	SLU	-1222.56	-135.27	0.85	11.31	1230.02	1.00	32294.70	357582.00	32294.70	26.255
20	1134.72	1	SLU	-840.63	-93.01	0.85	11.31	845.76	1.00	32294.70	356402.00	32294.70	38.184
21	1194.44	1	SLU	-523.40	-57.91	0.85	11.31	526.60	1.00	32294.70	355227.00	32294.70	61.327
22	1254.17	1	SLU	-266.18	-29.45	0.85	11.31	267.81	1.00	32294.70	354055.00	32294.70	>100
23	1313.89	1	SLU	-63.25	-7.00	0.85	11.31	63.64	1.00	32294.70	352887.00	32294.70	>100
24	1373.61	1	SLU	91.64	10.14	0.85	11.31	92.20	1.00	32294.70	351722.00	32294.70	>100
25	1433.33	1	SLU	204.88	22.67	0.85	11.31	206.13	1.00	32294.70	350561.00	32294.70	>100
26	1493.06	1	SLU	282.64	31.27	0.85	11.31	284.36	1.00	32294.70	349403.00	32294.70	>100
27	1552.78	1	SLU	330.72	36.59	0.85	11.31	332.74	1.00	32294.70	348247.00	32294.70	97.058
28	1612.50	1	SLU	354.34	39.21	0.85	11.31	356.51	1.00	32294.70	347095.00	32294.70	90.587
29	1672.22	1	SLU	358.09	39.62	0.85	11.31	360.28	1.00	32294.70	345944.00	32294.70	89.638
30	1731.94	1	SLU	345.84	38.27	0.85	11.31	347.95	1.00	32294.70	344797.00	32294.70	92.813
31	1791.67	1	SLU	320.76	35.49	0.85	11.31	322.72	1.00	32294.70	343651.00	32294.70	>100
32	1851.39	1	SLU	285.33	31.57	0.85	11.31	287.08	1.00	32294.70	342507.00	32294.70	>100
33	1911.11	1	SLU	241.41	26.71	0.85	11.31	242.89	1.00	32294.70	341365.00	32294.70	>100
34	1970.83	1	SLU	190.28	21.05	0.85	11.31	191.45	1.00	32294.70	340225.00	32294.70	>100
35	2030.56	1	SLU	132.76	14.69	0.85	11.31	133.57	1.00	32294.70	339086.00	32294.70	>100
36	2090.28	1	SLU	69.27	7.66	0.85	11.31	69.70	1.00	32294.70	337948.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-232163.00	-32594.50	4125.09	0.00	78.54	35.74	514.34	
39	59.72	2	SLE R	-230933.00	-34287.30	4339.33	0.00	78.54	36.52	524.85	
40	119.44	2	SLE R	-226140.00	-34230.30	4332.11	0.00	78.54	36.10	518.60	
41	179.17	2	SLE R	-220701.00	-32877.40	4160.90	0.00	78.54	34.96	502.37	
42	238.89	2	SLE R	-214617.00	-30615.10	3874.59	0.00	78.54	33.29	478.90	
43	298.61	2	SLE R	-208390.00	-27764.80	3513.85	0.00	78.54	31.31	451.08	
44	358.33	2	SLE R	-202197.00	-24587.40	3111.73	0.00	78.54	29.16	420.99	
45	418.06	2	SLE R	-196037.00	-21289.00	2694.29	0.00	78.54	26.95	390.07	
46	477.78	2	SLE R	-189908.00	-18027.20	2281.48	0.00	78.54	24.77	359.46	
47	537.50	2	SLE R	-183811.00	-14917.40	1887.91	0.00	78.54	22.66	329.96	
48	597.22	2	SLE R	-177744.00	-12039.40	1523.69	0.00	78.54	20.68	302.14	
49	656.94	2	SLE R	-171706.00	-9443.84	1195.19	0.00	78.54	18.84	276.36	
50	716.67	2	SLE R	-165696.00	-7157.17	905.80	0.00	78.54	17.17	252.81	

51	776.39	2	SLE R	-159712.00	-5187.39	656.51	0.00	78.54	15.67	231.53	
52	836.11	2	SLE R	-153755.00	-3528.38	446.54	0.00	78.54	14.32	212.50	
53	895.83	2	SLE R	-147823.00	-2163.72	273.84	0.00	78.54	13.14	195.59	
54	955.56	2	SLE R	-141915.00	-1070.07	135.43	0.00	78.54	12.09	180.62	
55	1015.28	2	SLE R	-136031.00	-219.81	27.82	0.00	78.54	11.17	167.41	
56	1075.00	2	SLE R	-130168.00	416.77	-52.75	0.00	78.54	10.80	161.64	
57	1134.72	2	SLE R	-124327.00	869.84	-110.08	0.00	78.54	10.56	157.71	
58	1194.44	2	SLE R	-118506.00	1168.68	-147.91	0.00	78.54	10.24	152.72	
59	1254.17	2	SLE R	-112704.00	1340.90	-169.70	0.00	78.54	9.85	146.85	
60	1313.89	2	SLE R	-106921.00	1411.75	-178.67	0.00	78.54	9.42	140.30	
61	1373.61	2	SLE R	-101155.00	1403.83	-177.67	0.00	78.54	8.95	133.22	
62	1433.33	2	SLE R	-95405.50	1336.95	-169.20	0.00	78.54	8.45	125.73	
63	1493.06	2	SLE R	-89671.70	1228.12	-155.43	0.00	78.54	7.92	117.98	
64	1552.78	2	SLE R	-83952.60	1091.71	-138.16	0.00	78.54	7.39	110.04	
65	1612.50	2	SLE R	-78247.10	939.65	-118.92	0.00	78.54	6.85	102.02	
66	1672.22	2	SLE R	-72554.40	781.70	-98.93	0.00	78.54	6.30	93.96	
67	1731.94	2	SLE R	-66873.50	625.76	-79.20	0.00	78.54	5.76	85.94	
68	1791.67	2	SLE R	-61203.60	478.17	-60.52	0.00	78.54	5.22	77.99	
69	1851.39	2	SLE R	-55543.60	344.01	-43.54	0.00	78.54	4.69	70.14	
70	1911.11	2	SLE R	-49892.70	227.43	-28.78	0.00	78.54	4.17	62.43	
71	1970.83	2	SLE R	-44249.90	131.87	-16.69	0.00	78.54	3.67	54.88	
72	2030.56	2	SLE R	-38614.40	60.33	-7.63	0.00	78.54	3.17	47.51	
73	2090.28	2	SLE R	-32985.20	15.51	-1.96	0.00	78.54	2.69	40.33	
74	2150.00	2	SLE R	-27361.30	0.00	0.00	0.00	78.54	2.22	33.36	
75	0.00	4	SLE Q	-232163.00	-32594.50	4125.09	0.00	78.54	35.74	514.34	
76	59.72	4	SLE Q	-230933.00	-34287.30	4339.33	0.00	78.54	36.52	524.85	
77	119.44	4	SLE Q	-226140.00	-34230.30	4332.11	0.00	78.54	36.10	518.60	
78	179.17	4	SLE Q	-220701.00	-32877.40	4160.90	0.00	78.54	34.96	502.37	
79	238.89	4	SLE Q	-214617.00	-30615.10	3874.59	0.00	78.54	33.29	478.90	
80	298.61	4	SLE Q	-208390.00	-27764.80	3513.85	0.00	78.54	31.31	451.08	
81	358.33	4	SLE Q	-202197.00	-24587.40	3111.73	0.00	78.54	29.16	420.99	
82	418.06	4	SLE Q	-196037.00	-21289.00	2694.29	0.00	78.54	26.95	390.07	
83	477.78	4	SLE Q	-189908.00	-18027.20	2281.48	0.00	78.54	24.77	359.46	
84	537.50	4	SLE Q	-183811.00	-14917.40	1887.91	0.00	78.54	22.66	329.96	
85	597.22	4	SLE Q	-177744.00	-12039.40	1523.69	0.00	78.54	20.68	302.14	
86	656.94	4	SLE Q	-171706.00	-9443.84	1195.19	0.00	78.54	18.84	276.36	
87	716.67	4	SLE Q	-165696.00	-7157.17	905.80	0.00	78.54	17.17	252.81	
88	776.39	4	SLE Q	-159712.00	-5187.39	656.51	0.00	78.54	15.67	231.53	
89	836.11	4	SLE Q	-153755.00	-3528.38	446.54	0.00	78.54	14.32	212.50	
90	895.83	4	SLE Q	-147823.00	-2163.72	273.84	0.00	78.54	13.14	195.59	
91	955.56	4	SLE Q	-141915.00	-1070.07	135.43	0.00	78.54	12.09	180.62	
92	1015.28	4	SLE Q	-136031.00	-219.81	27.82	0.00	78.54	11.17	167.41	
93	1075.00	4	SLE Q	-130168.00	416.77	-52.75	0.00	78.54	10.80	161.64	
94	1134.72	4	SLE Q	-124327.00	869.84	-110.08	0.00	78.54	10.56	157.71	
95	1194.44	4	SLE Q	-118506.00	1168.68	-147.91	0.00	78.54	10.24	152.72	
96	1254.17	4	SLE Q	-112704.00	1340.90	-169.70	0.00	78.54	9.85	146.85	
97	1313.89	4	SLE Q	-106921.00	1411.75	-178.67	0.00	78.54	9.42	140.30	
98	1373.61	4	SLE Q	-101155.00	1403.83	-177.67	0.00	78.54	8.95	133.22	
99	1433.33	4	SLE Q	-95405.50	1336.95	-169.20	0.00	78.54	8.45	125.73	
100	1493.06	4	SLE Q	-89671.70	1228.12	-155.43	0.00	78.54	7.92	117.98	
101	1552.78	4	SLE Q	-83952.60	1091.71	-138.16	0.00	78.54	7.39	110.04	
102	1612.50	4	SLE Q	-78247.10	939.65	-118.92	0.00	78.54	6.85	102.02	
103	1672.22	4	SLE Q	-72554.40	781.70	-98.93	0.00	78.54	6.30	93.96	
104	1731.94	4	SLE Q	-66873.50	625.76	-79.20	0.00	78.54	5.76	85.94	
105	1791.67	4	SLE Q	-61203.60	478.17	-60.52	0.00	78.54	5.22	77.99	
106	1851.39	4	SLE Q	-55543.60	344.01	-43.54	0.00	78.54	4.69	70.14	
107	1911.11	4	SLE Q	-49892.70	227.43	-28.78	0.00	78.54	4.17	62.43	
108	1970.83	4	SLE Q	-44249.90	131.87	-16.69	0.00	78.54	3.67	54.88	
109	2030.56	4	SLE Q	-38614.40	60.33	-7.63	0.00	78.54	3.17	47.51	
110	2090.28	4	SLE Q	-32985.20	15.51	-1.96	0.00	78.54	2.69	40.33	
111	2150.00	4	SLE Q	-27361.30	0.00	0.00	0.00	78.54	2.22	33.36	

Verifiche principali

Caso	Tipo
3	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sc max (min. compr.)
74	C.Rare - Sf max (max traz.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sc max (min. compr.)
111	C.Q.Per. - Sf max (max traz.)

Palo n. 7

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 7 (-110)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	230820.00	6656.13	866.57	39674.30	40057.70
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	230820.00	6656.13	866.57	39674.30	40057.70
2	2	SLE R	RVN	170978.00	4930.47	641.91	29388.40	29672.40
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	170978.00	4930.47	641.91	29388.40	29672.40
3	3	SLE F	RVN	170978.00	4930.47	641.91	29388.40	29672.40
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	170978.00	4930.47	641.91	29388.40	29672.40
4	4	SLE Q	RVN	170978.00	4930.47	641.91	29388.40	29672.40
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	170978.00	4930.47	641.91	29388.40	29672.40

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-230820.00	-6656.13	-866.57	-39674.30	-40057.70
2	2	SLE R	1	-170978.00	-4930.47	-641.91	-29388.40	-29672.40
3	3	SLE F	1	-170978.00	-4930.47	-641.91	-29388.40	-29672.40
4	4	SLE Q	1	-170978.00	-4930.47	-641.91	-29388.40	-29672.40

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-230820.00	39250.30	-39629.60	-230820.00	165642.00	-165890.00	2-3	225.00	4.203
2	59.72	1	SLU	-229590.00	40882.10	-41277.20	-229590.00	165362.00	-165591.00	2-3	225.00	4.028
3	119.44	1	SLU	-224797.00	40527.40	-40919.10	-224797.00	164264.00	-164417.00	2-3	225.00	4.035
4	179.17	1	SLU	-219358.00	38712.60	-39086.80	-219358.00	162988.00	-163093.00	2-3	225.00	4.191
5	238.89	1	SLU	-213274.00	35884.30	-36231.10	-213274.00	161551.00	-161601.00	2-3	225.00	4.481
6	298.61	1	SLU	-207087.00	32412.40	-32725.60	-207087.00	160084.00	-160078.00	2-3	225.00	4.915
7	358.33	1	SLU	-200934.00	28595.90	-28872.30	-200934.00	158616.00	-158552.00	2-3	225.00	5.519
8	418.06	1	SLU	-194813.00	24670.00	-24908.50	-194813.00	157148.00	-157026.00	2-3	225.00	6.337
9	477.78	1	SLU	-188724.00	20813.30	-21014.40	-188724.00	155683.00	-155502.00	2-3	225.00	7.440
10	537.50	1	SLU	-182666.00	17155.50	-17321.30	-182666.00	154215.00	-153973.00	2-3	225.00	8.939
11	597.22	1	SLU	-176638.00	13785.50	-13918.70	-176638.00	152750.00	-152447.00	2-3	225.00	11.016
12	656.94	1	SLU	-170639.00	10758.00	-10862.00	-170639.00	151285.00	-150920.00	2-3	225.00	13.978
13	716.67	1	SLU	-164668.00	8100.71	-8179.00	-2571250.00	149820.00	-149392.00	2-3	225.00	15.615
14	776.39	1	SLU	-158723.00	5819.97	-5876.22	-2571250.00	148357.00	-147865.00	2-3	225.00	16.200
15	836.11	1	SLU	-152804.00	3906.18	-3943.93	-2571250.00	146893.00	-146335.00	2-3	225.00	16.827
16	895.83	1	SLU	-146911.00	2338.23	-2360.83	-2571250.00	145430.00	-144807.00	2-3	225.00	17.502
17	955.56	1	SLU	-141041.00	1087.32	-1097.83	-2571250.00	143967.00	-143276.00	2-3	225.00	18.230
18	1015.28	1	SLU	-135194.00	120.03	-121.19	-2571250.00	142505.00	-141746.00	2-3	225.00	19.019

19	1075.00	1	SLU	-129369.00	-599.20	604.99	-2571250.00	-140378.00	140766.00	2-3	45.00	19.875
20	1134.72	1	SLU	-123566.00	-1106.14	1116.83	-2571250.00	-138881.00	139160.00	2-3	45.00	20.809
21	1194.44	1	SLU	-117782.00	-1435.38	1449.25	-2571250.00	-137385.00	137554.00	2-3	45.00	21.831
22	1254.17	1	SLU	-112018.00	-1619.29	1634.94	-2571250.00	-135888.00	135945.00	2-3	45.00	22.954
23	1313.89	1	SLU	-106272.00	-1687.42	1703.73	-2571250.00	-134389.00	134332.00	2-3	45.00	24.195
24	1373.61	1	SLU	-100543.00	-1666.09	1682.19	-2571250.00	-132890.00	132718.00	2-3	45.00	25.574
25	1433.33	1	SLU	-94831.00	-1578.27	1593.53	-2571250.00	-131390.00	131097.00	2-3	45.00	27.114
26	1493.06	1	SLU	-89134.30	-1443.65	1457.61	-2571250.00	-129889.00	129476.00	2-3	45.00	28.847
27	1552.78	1	SLU	-83452.00	-1278.77	1291.13	-2571250.00	-128381.00	127854.00	2-3	45.00	30.811
28	1612.50	1	SLU	-77783.40	-1097.31	1107.91	-2571250.00	-126843.00	126242.00	2-3	45.00	33.056
29	1672.22	1	SLU	-72127.50	-910.41	919.21	-2571250.00	-125304.00	124629.00	2-3	45.00	35.649
30	1731.94	1	SLU	-66483.40	-727.02	734.05	-2571250.00	-123763.00	123010.00	2-3	45.00	38.675
31	1791.67	1	SLU	-60850.10	-554.31	559.67	-2571250.00	-122222.00	121391.00	2-3	45.00	42.255
32	1851.39	1	SLU	-55226.70	-397.97	401.82	-2571250.00	-120678.00	119766.00	2-3	45.00	46.558
33	1911.11	1	SLU	-49612.40	-262.60	265.14	-2571250.00	-119051.00	118189.00	2-3	45.00	51.827
34	1970.83	1	SLU	-44006.10	-151.99	153.46	-2571250.00	-117297.00	116679.00	2-3	45.00	58.429
35	2030.56	1	SLU	-38407.10	-69.41	70.08	-2571250.00	-115534.00	115168.00	2-3	45.00	66.947
36	2090.28	1	SLU	-32814.20	-17.81	17.98	-2571250.00	-113768.00	113654.00	2-3	45.00	78.358
37	2150.00	1	SLU	-27226.80	0.00	0.00	-2571250.00					94.438

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	6656.13	866.57	0.85	11.31	6712.30	1.00	32294.70	364731.00	32294.70	4.811
2	59.72	1	SLU	1283.71	167.13	0.85	11.31	1294.54	1.00	32294.70	364554.00	32294.70	24.947
3	119.44	1	SLU	-2750.66	-358.11	0.85	11.31	2773.87	1.00	32294.70	363868.00	32294.70	11.643
4	179.17	1	SLU	-5638.02	-734.02	0.85	11.31	5685.61	1.00	32294.70	363089.00	32294.70	5.680
5	238.89	1	SLU	-7564.03	-984.78	0.85	11.31	7627.87	1.00	32294.70	362217.00	32294.70	4.234
6	298.61	1	SLU	-8703.17	-1133.08	0.85	11.31	8776.62	1.00	32294.70	361331.00	32294.70	3.680
7	358.33	1	SLU	-9214.99	-1199.72	0.85	11.31	9292.76	1.00	32294.70	360450.00	32294.70	3.475
8	418.06	1	SLU	-9241.85	-1203.21	0.85	11.31	9319.84	1.00	32294.70	359573.00	32294.70	3.465
9	477.78	1	SLU	-8907.88	-1159.73	0.85	11.31	8983.06	1.00	32294.70	358701.00	32294.70	3.595
10	537.50	1	SLU	-8318.98	-1083.06	0.85	11.31	8389.19	1.00	32294.70	357833.00	32294.70	3.850
11	597.22	1	SLU	-7563.42	-984.70	0.85	11.31	7627.25	1.00	32294.70	356970.00	32294.70	4.234
12	656.94	1	SLU	-6713.06	-873.99	0.85	11.31	6769.72	1.00	32294.70	356110.00	32294.70	4.770
13	716.67	1	SLU	-5824.80	-758.34	0.85	11.31	5873.96	1.00	32294.70	355255.00	32294.70	5.498
14	776.39	1	SLU	-4942.27	-643.44	0.85	11.31	4983.98	1.00	32294.70	354403.00	32294.70	6.480
15	836.11	1	SLU	-4097.62	-533.48	0.85	11.31	4132.20	1.00	32294.70	353556.00	32294.70	7.815
16	895.83	1	SLU	-3313.19	-431.35	0.85	11.31	3341.15	1.00	32294.70	352711.00	32294.70	9.666
17	955.56	1	SLU	-2603.27	-338.93	0.85	11.31	2625.24	1.00	32294.70	351871.00	32294.70	12.302
18	1015.28	1	SLU	-1975.58	-257.20	0.85	11.31	1992.25	1.00	32294.70	351033.00	32294.70	16.210
19	1075.00	1	SLU	-1432.68	-186.52	0.85	11.31	1444.78	1.00	32294.70	350199.00	32294.70	22.353
20	1134.72	1	SLU	-973.27	-126.71	0.85	11.31	981.49	1.00	32294.70	349368.00	32294.70	32.904
21	1194.44	1	SLU	-593.19	-77.23	0.85	11.31	598.20	1.00	32294.70	348539.00	32294.70	53.987
22	1254.17	1	SLU	-286.35	-37.28	0.85	11.31	288.77	1.00	32294.70	347713.00	32294.70	>100
23	1313.89	1	SLU	-45.51	-5.93	0.85	11.31	45.90	1.00	32294.70	346890.00	32294.70	>100
24	1373.61	1	SLU	137.15	17.86	0.85	11.31	138.30	1.00	32294.70	346070.00	32294.70	>100
25	1433.33	1	SLU	269.53	35.09	0.85	11.31	271.80	1.00	32294.70	345252.00	32294.70	>100
26	1493.06	1	SLU	359.26	46.77	0.85	11.31	362.30	1.00	32294.70	344436.00	32294.70	89.139
27	1552.78	1	SLU	413.46	53.83	0.85	11.31	416.95	1.00	32294.70	343622.00	32294.70	77.454
28	1612.50	1	SLU	438.52	57.09	0.85	11.31	442.22	1.00	32294.70	342810.00	32294.70	73.029
29	1672.22	1	SLU	440.00	57.28	0.85	11.31	443.71	1.00	32294.70	342000.00	32294.70	72.783
30	1731.94	1	SLU	422.62	55.02	0.85	11.31	426.18	1.00	32294.70	341191.00	32294.70	75.777
31	1791.67	1	SLU	390.21	50.80	0.85	11.31	393.50	1.00	32294.70	340384.00	32294.70	82.070
32	1851.39	1	SLU	345.78	45.02	0.85	11.31	348.70	1.00	32294.70	339579.00	32294.70	92.614
33	1911.11	1	SLU	291.57	37.96	0.85	11.31	294.03	1.00	32294.70	338775.00	32294.70	>100
34	1970.83	1	SLU	229.13	29.83	0.85	11.31	231.06	1.00	32294.70	337971.00	32294.70	>100
35	2030.56	1	SLU	159.42	20.76	0.85	11.31	160.77	1.00	32294.70	337169.00	32294.70	>100
36	2090.28	1	SLU	82.98	10.80	0.85	11.31	83.68	1.00	32294.70	336368.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-170978.00	-29355.30	29074.30	21.99	56.55	36.13	512.13	
39	59.72	2	SLE R	-169748.00	-30575.70	30283.10	21.99	56.55	37.28	527.47	
40	119.44	2	SLE R	-165184.00	-30310.40	30020.30	21.99	56.55	36.84	520.89	
41	179.17	2	SLE R	-160648.00	-28953.20	28676.00	21.99	56.55	35.29	499.42	
42	238.89	2	SLE R	-156137.00	-26837.80	26581.00	21.99	56.55	33.02	468.08	
43	298.61	2	SLE R	-151652.00	-24241.20	24009.20	18.85	59.69	30.36	431.53	
44	358.33	2	SLE R	-147192.00	-21386.90	21182.20	15.71	62.83	27.61	393.51	
45	418.06	2	SLE R	-142756.00	-18450.70	18274.10	9.42	69.11	24.94	356.61	
46	477.78	2	SLE R	-138343.00	-15566.30	15417.30	0.00	78.54	22.45	322.14	
47	537.50	2	SLE R	-133953.00	-12830.60	12707.80	0.00	78.54	20.13	289.82	
48	597.22	2	SLE R	-129585.00	-10310.20	10211.50	0.00	78.54	17.96	259.64	
49	656.94	2	SLE R	-125237.00	-8045.91	7968.90	0.00	78.54	15.97	232.02	
50	716.67	2	SLE R	-120910.00	-6058.52	6000.53	0.00	78.54	14.19	207.15	
51	776.39	2	SLE R	-116603.00	-4352.75	4311.09	0.00	78.54	12.61	185.08	
52	836.11	2	SLE R	-112315.00	-2921.43	2893.47	0.00	78.54	11.23	165.74	
53	895.83	2	SLE R	-108045.00	-1748.76	1732.02	0.00	78.54	10.04	148.97	
54	955.56	2	SLE R	-103793.00	-813.21	805.42	0.00	78.54	9.02	134.57	
55	1015.28	2	SLE R	-99558.00	-89.77	88.91	0.00	78.54	8.16	122.27	
56	1075.00	2	SLE R	-95339.00	448.14	-443.85	0.00	78.54	8.07	120.68	
57	1134.72	2	SLE R	-91135.60	827.28	-819.36	0.00	78.54	8.00	119.31	
58	1194.44	2	SLE R	-86947.10	1073.52	-1063.24	0.00	78.54	7.84	116.64	
59	1254.17	2	SLE R	-82772.70	1211.07	-1199.47	0.00	78.54	7.60	112.92	
60	1313.89	2	SLE R	-78611.80	1262.02	-1249.94	0.00	78.54	7.30	108.35	
61	1373.61	2	SLE R	-74463.80	1246.06	-1234.14	0.00	78.54	6.95	103.13	
62	1433.33	2	SLE R	-70327.90	1180.39	-1169.09	0.00	78.54	6.57	97.44	
63	1493.06	2	SLE R	-66203.50	1079.71	-1069.37	0.00	78.54	6.16	91.41	
64	1552.78	2	SLE R	-62089.90	956.39	-947.24	0.00	78.54	5.74	85.17	
65	1612.50	2	SLE R	-57986.40	820.68	-812.82	0.00	78.54	5.30	78.83	
66	1672.22	2	SLE R	-53892.40	680.89	-674.38	0.00	78.54	4.87	72.45	
67	1731.94	2	SLE R	-49807.10	543.74	-538.54	0.00	78.54	4.44	66.11	
68	1791.67	2	SLE R	-45730.00	414.57	-410.60	0.00	78.54	4.02	59.86	
69	1851.39	2	SLE R	-41660.40	297.64	-294.79	0.00	78.54	3.60	53.74	
70	1911.11	2	SLE R	-37597.50	196.40	-194.52	0.00	78.54	3.20	47.79	
71	1970.83	2	SLE R	-33540.80	113.67	-112.59	0.00	78.54	2.81	42.02	
72	2030.56	2	SLE R	-29489.60	51.91	-51.42	0.00	78.54	2.43	36.47	
73	2090.28	2	SLE R	-25443.20	13.32	-13.19	0.00	78.54	2.08	31.15	
74	2150.00	2	SLE R	-21400.90	0.00	0.00	0.00	78.54	1.74	26.09	
75	0.00	4	SLE Q	-170978.00	-29355.30	29074.30	21.99	56.55	36.13	512.13	
76	59.72	4	SLE Q	-169748.00	-30575.70	30283.10	21.99	56.55	37.28	527.47	
77	119.44	4	SLE Q	-165184.00	-30310.40	30020.30	21.99	56.55	36.84	520.89	
78	179.17	4	SLE Q	-160648.00	-28953.20	28676.00	21.99	56.55	35.29	499.42	
79	238.89	4	SLE Q	-156137.00	-26837.80	26581.00	21.99	56.55	33.02	468.08	
80	298.61	4	SLE Q	-151652.00	-24241.20	24009.20	18.85	59.69	30.36	431.53	
81	358.33	4	SLE Q	-147192.00	-21386.90	21182.20	15.71	62.83	27.61	393.51	
82	418.06	4	SLE Q	-142756.00	-18450.70	18274.10	9.42	69.11	24.94	356.61	
83	477.78	4	SLE Q	-138343.00	-15566.30	15417.30	0.00	78.54	22.45	322.14	
84	537.50	4	SLE Q	-133953.00	-12830.60	12707.80	0.00	78.54	20.13	289.82	
85	597.22	4	SLE Q	-129585.00	-10310.20	10211.50	0.00	78.54	17.96	259.64	
86	656.94	4	SLE Q	-125237.00	-8045.91	7968.90	0.00	78.54	15.97	232.02	
87	716.67	4	SLE Q	-120910.00	-6058.52	6000.53	0.00	78.54	14.19	207.15	
88	776.39	4	SLE Q	-116603.00	-4352.75	4311.09	0.00	78.54	12.61	185.08	
89	836.11	4	SLE Q	-112315.00	-2921.43	2893.47	0.00	78.54	11.23	165.74	
90	895.83	4	SLE Q	-108045.00	-1748.76	1732.02	0.00	78.54	10.04	148.97	
91	955.56	4	SLE Q	-103793.00	-813.21	805.42	0.00	78.54	9.02	134.57	
92	1015.28	4	SLE Q	-99558.00	-89.77	88.91	0.00	78.54	8.16	122.27	
93	1075.00	4	SLE Q	-95339.00	448.14	-443.85	0.00	78.54	8.07	120.68	
94	1134.72	4	SLE Q	-91135.60	827.28	-819.36	0.00	78.54	8.00	119.31	
95	1194.44	4	SLE Q	-86947.10	1073.52	-1063.24	0.00	78.54	7.84	116.64	
96	1254.17	4	SLE Q	-82772.70	1211.07	-1199.47	0.00	78.54	7.60	112.92	
97	1313.89	4	SLE Q	-78611.80	1262.02	-1249.94	0.00	78.54	7.30	108.35	
98	1373.61	4	SLE Q	-74463.80	1246.06	-1234.14	0.00	78.54	6.95	103.13	
99	1433.33	4	SLE Q	-70327.90	1180.39	-1169.09	0.00	78.54	6.57	97.44	
100	1493.06	4	SLE Q	-66203.50	1079.71	-1069.37	0.00	78.54	6.16	91.41	
101	1552.78	4	SLE Q	-62089.90	956.39	-947.24	0.00	78.54	5.74	85.17	
102	1612.50	4	SLE Q	-57986.40	820.68	-812.82	0.00	78.54	5.30	78.83	
103	1672.22	4	SLE Q	-53892.40	680.89	-674.38	0.00	78.54	4.87	72.45	
104	1731.94	4	SLE Q	-49807.10	543.74	-538.54	0.00	78.54	4.44	66.11	
105	1791.67	4	SLE Q	-45730.00	414.57	-410.60	0.00	78.54	4.02	59.86	
106	1851.39	4	SLE Q	-41660.40	297.64	-294.79	0.00	78.54	3.60	53.74	
107	1911.11	4	SLE Q	-37597.50	196.40	-194.52	0.00	78.54	3.20	47.79	
108	1970.83	4	SLE Q	-33540.80	113.67	-112.59	0.00	78.54	2.81	42.02	
109	2030.56	4	SLE Q	-29489.60	51.91	-51.42	0.00	78.54	2.43	36.47	
110	2090.28	4	SLE Q	-25443.20	13.32	-13.19	0.00	78.54	2.08	31.15	
111	2150.00	4	SLE Q	-21400.90	0.00	0.00	0.00	78.54	1.74	26.09	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	A_c $_{eff}$ <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-170978.00	29074.30	-29355.30	46.00	136.36	0.50	20.00	165.23	9.42	345.10	112.29	0.03	0.01
76	59.72	4	SLE Q	-169748.00	30283.10	-30575.70	46.00	136.36	0.50	20.00	177.68	9.42	403.74	136.79	0.04	0.01
77	119.44	4	SLE Q	-165184.00	30020.30	-30310.40	46.00	136.36	0.50	20.00	182.62	9.42	427.04	143.52	0.04	0.01
78	179.17	4	SLE Q	-160648.00	28676.00	-28953.20	46.00	136.36	0.50	20.00	177.83	9.42	404.46	129.76	0.04	0.01
79	238.89	4	SLE Q	-156137.00	26581.00	-26837.80	46.00	136.36	0.50	20.00	165.52	9.42	346.46	103.06	0.03	0.01
80	298.61	4	SLE Q	-151652.00	24009.20	-24241.20	46.00	136.36	0.50	20.00	175.51	6.28	262.34	70.82	0.02	0.01
112	0.00	3	SLE F	-170978.00	29074.30	-29355.30	46.00	136.36	0.50	20.00	165.23	9.42	345.10	112.29	0.03	0.01
113	59.72	3	SLE F	-169748.00	30283.10	-30575.70	46.00	136.36	0.50	20.00	177.68	9.42	403.74	136.79	0.04	0.01
114	119.44	3	SLE F	-165184.00	30020.30	-30310.40	46.00	136.36	0.50	20.00	182.62	9.42	427.04	143.52	0.04	0.01
115	179.17	3	SLE F	-160648.00	28676.00	-28953.20	46.00	136.36	0.50	20.00	177.83	9.42	404.46	129.76	0.04	0.01
116	238.89	3	SLE F	-156137.00	26581.00	-26837.80	46.00	136.36	0.50	20.00	165.52	9.42	346.46	103.06	0.03	0.01
117	298.61	3	SLE F	-151652.00	24009.20	-24241.20	46.00	136.36	0.50	20.00	175.51	6.28	262.34	70.82	0.02	0.01

Verifiche principali

Caso	Tipo
2	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
46	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sf max (max traz.),C.Q.Per. - Wk Max
83	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 8

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 8 (-41)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	140336.00	7119.99	771.06	54109.70	17834.00
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	140336.00	7119.99	771.06	54109.70	17834.00
2	2	SLE R	RVN	103953.00	5274.07	571.15	40081.30	13210.40
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	103953.00	5274.07	571.15	40081.30	13210.40
3	3	SLE F	RVN	103953.00	5274.07	571.15	40081.30	13210.40
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	103953.00	5274.07	571.15	40081.30	13210.40
4	4	SLE Q	RVN	103953.00	5274.07	571.15	40081.30	13210.40
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	103953.00	5274.07	571.15	40081.30	13210.40

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-140336.00	-7119.99	-771.06	-54109.70	-17834.00
2	2	SLE R	1	-103953.00	-5274.07	-571.15	-40081.30	-13210.40
3	3	SLE F	1	-103953.00	-5274.07	-571.15	-40081.30	-13210.40
4	4	SLE Q	1	-103953.00	-5274.07	-571.15	-40081.30	-13210.40

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-140336.00	53520.90	-17640.00	-140336.00	192533.00	-63054.60	2-3	198.12	3.595
2	59.72	1	SLU	-139308.00	55931.00	-18434.30	-139308.00	192178.00	-62939.00	2-3	198.12	3.434
3	119.44	1	SLU	-135586.00	55577.50	-18317.80	-135586.00	190893.00	-62520.30	2-3	198.12	3.433
4	179.17	1	SLU	-131886.00	53187.30	-17530.00	-131886.00	189614.00	-62103.70	2-3	198.12	3.563
5	238.89	1	SLU	-128208.00	49378.00	-16274.50	-128208.00	188339.00	-61688.30	2-3	198.12	3.812
6	298.61	1	SLU	-124551.00	44661.70	-14720.10	-124551.00	187067.00	-61274.00	2-3	198.12	4.186
7	358.33	1	SLU	-120914.00	39453.30	-13003.40	-120914.00	185801.00	-60861.60	2-3	198.12	4.707
8	418.06	1	SLU	-117297.00	34079.10	-11232.10	-117297.00	184537.00	-60450.00	2-3	198.12	5.412
9	477.78	1	SLU	-113698.00	28787.70	-9488.15	-113698.00	183278.00	-60039.70	2-3	198.12	6.363
10	537.50	1	SLU	-110119.00	23760.50	-7831.22	-110119.00	182024.00	-59631.10	2-3	198.12	7.656
11	597.22	1	SLU	-106557.00	19121.70	-6302.32	-106557.00	180771.00	-59223.10	2-3	198.12	9.448
12	656.94	1	SLU	-103013.00	14948.80	-4926.99	-103013.00	179523.00	-58816.60	2-3	198.12	12.002
13	716.67	1	SLU	-99485.40	11281.60	-3718.29	-99485.40	178282.00	-58350.90	2-3	198.12	15.792
14	776.39	1	SLU	-95974.20	8130.08	-2679.60	-95974.20	176344.00	-59708.50	2-3	198.75	21.749
15	836.11	1	SLU	-92478.70	5482.27	-1806.90	-2571250.00	175112.00	-59163.80	2-3	198.75	27.804
16	895.83	1	SLU	-88998.20	3309.96	-1090.93	-2571250.00	173806.00	-58719.40	2-3	198.75	28.891
17	955.56	1	SLU	-85532.30	1574.19	-518.84	-2571250.00	172495.00	-58282.70	2-3	198.75	30.062
18	1015.28	1	SLU	-82080.30	229.47	-75.63	-2571250.00	171189.00	-57847.40	2-3	198.75	31.326
19	1075.00	1	SLU	-78641.70	-772.79	254.70	-2571250.00	-170182.00	55728.50	2-3	18.12	32.696
20	1134.72	1	SLU	-75215.90	-1481.62	488.33	-2571250.00	-168898.00	55310.20	2-3	18.12	34.185
21	1194.44	1	SLU	-71802.40	-1944.49	640.89	-2571250.00	-167614.00	54892.00	2-3	18.12	35.810
22	1254.17	1	SLU	-68400.60	-2205.95	727.06	-2571250.00	-166332.00	54474.40	2-3	18.12	37.591
23	1313.89	1	SLU	-65010.00	-2306.67	760.25	-2571250.00	-165052.00	54057.70	2-3	18.12	39.552
24	1373.61	1	SLU	-61630.00	-2282.94	752.44	-2571250.00	-163772.00	53641.10	2-3	18.12	41.721
25	1433.33	1	SLU	-58260.00	-2166.51	714.06	-2571250.00	-162494.00	53224.90	2-3	18.12	44.134
26	1493.06	1	SLU	-54899.50	-1984.57	654.10	-2571250.00	-161218.00	52809.60	2-3	18.12	46.836
27	1552.78	1	SLU	-51548.00	-1760.02	580.09	-2571250.00	-159942.00	52394.10	2-3	18.12	49.881
28	1612.50	1	SLU	-48204.90	-1511.83	498.29	-2571250.00	-158666.00	51979.10	2-3	18.12	53.340
29	1672.22	1	SLU	-44869.70	-1255.48	413.79	-2571250.00	-157393.00	51564.60	2-3	18.12	57.305
30	1731.94	1	SLU	-41541.80	-1003.42	330.72	-2571250.00	-156118.00	51149.90	2-3	18.12	61.895
31	1791.67	1	SLU	-38220.70	-765.63	252.34	-2571250.00	-154845.00	50735.50	2-3	18.12	67.274
32	1851.39	1	SLU	-34905.80	-550.08	181.30	-2571250.00	-153572.00	50321.50	2-3	18.12	73.662
33	1911.11	1	SLU	-31596.60	-363.20	119.71	-2571250.00	-152299.00	49907.30	2-3	18.12	81.377
34	1970.83	1	SLU	-28292.60	-210.35	69.33	-2571250.00	-151025.00	49493.10	2-3	18.12	90.881
35	2030.56	1	SLU	-24993.10	-96.12	31.68	-2571250.00	-149757.00	49014.90	2-3	18.12	>100
36	2090.28	1	SLU	-21697.80	-24.68	8.13	-2571250.00	-147895.00	50059.80	2-3	18.75	>100
37	2150.00	1	SLU	-18406.00	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7119.99	771.06	0.85	11.31	7161.62	1.00	32294.70	351770.00	32294.70	4.509
2	59.72	1	SLU	1573.67	170.42	0.85	11.31	1582.87	1.00	32294.70	351623.00	32294.70	20.403
3	119.44	1	SLU	-2600.78	-281.65	0.85	11.31	2615.99	1.00	32294.70	351089.00	32294.70	12.345
4	179.17	1	SLU	-5597.81	-606.21	0.85	11.31	5630.54	1.00	32294.70	350559.00	32294.70	5.736
5	238.89	1	SLU	-7606.70	-823.76	0.85	11.31	7651.18	1.00	32294.70	350033.00	32294.70	4.221
6	298.61	1	SLU	-8805.69	-953.61	0.85	11.31	8857.18	1.00	32294.70	349509.00	32294.70	3.646
7	358.33	1	SLU	-9357.99	-1013.42	0.85	11.31	9412.70	1.00	32294.70	348988.00	32294.70	3.431
8	418.06	1	SLU	-9409.39	-1018.99	0.85	11.31	9464.41	1.00	32294.70	348470.00	32294.70	3.412
9	477.78	1	SLU	-9087.22	-984.10	0.85	11.31	9140.35	1.00	32294.70	347954.00	32294.70	3.533
10	537.50	1	SLU	-8500.19	-920.53	0.85	11.31	8549.89	1.00	32294.70	347441.00	32294.70	3.777
11	597.22	1	SLU	-7739.09	-838.10	0.85	11.31	7784.33	1.00	32294.70	346931.00	32294.70	4.149
12	656.94	1	SLU	-6877.87	-744.84	0.85	11.31	6918.08	1.00	32294.70	346424.00	32294.70	4.668
13	716.67	1	SLU	-5975.23	-647.09	0.85	11.31	6010.17	1.00	32294.70	345918.00	32294.70	5.373
14	776.39	1	SLU	-5076.26	-549.73	0.85	11.31	5105.94	1.00	32294.70	345415.00	32294.70	6.325
15	836.11	1	SLU	-4214.25	-456.38	0.85	11.31	4238.89	1.00	32294.70	344915.00	32294.70	7.619
16	895.83	1	SLU	-3412.46	-369.55	0.85	11.31	3432.41	1.00	32294.70	344416.00	32294.70	9.409
17	955.56	1	SLU	-2685.81	-290.86	0.85	11.31	2701.51	1.00	32294.70	343920.00	32294.70	11.954
18	1015.28	1	SLU	-2042.50	-221.19	0.85	11.31	2054.44	1.00	32294.70	343425.00	32294.70	15.720
19	1075.00	1	SLU	-1485.40	-160.86	0.85	11.31	1494.08	1.00	32294.70	342933.00	32294.70	21.615
20	1134.72	1	SLU	-1013.37	-109.74	0.85	11.31	1019.29	1.00	32294.70	342442.00	32294.70	31.683
21	1194.44	1	SLU	-622.31	-67.39	0.85	11.31	625.95	1.00	32294.70	341953.00	32294.70	51.593
22	1254.17	1	SLU	-306.14	-33.15	0.85	11.31	307.93	1.00	32294.70	341466.00	32294.70	>100
23	1313.89	1	SLU	-57.54	-6.23	0.85	11.31	57.87	1.00	32294.70	340980.00	32294.70	>100

24	1373.61	1	SLU	131.43	14.23	0.85	11.31	132.20	1.00	32294.70	340496.00	32294.70	>100
25	1433.33	1	SLU	268.79	29.11	0.85	11.31	270.37	1.00	32294.70	340013.00	32294.70	>100
26	1493.06	1	SLU	362.34	39.24	0.85	11.31	364.45	1.00	32294.70	339532.00	32294.70	88.611
27	1552.78	1	SLU	419.31	45.41	0.85	11.31	421.76	1.00	32294.70	339052.00	32294.70	76.572
28	1612.50	1	SLU	446.23	48.32	0.85	11.31	448.84	1.00	32294.70	338573.00	32294.70	71.951
29	1672.22	1	SLU	448.82	48.61	0.85	11.31	451.45	1.00	32294.70	338095.00	32294.70	71.536
30	1731.94	1	SLU	431.89	46.77	0.85	11.31	434.42	1.00	32294.70	337619.00	32294.70	74.340
31	1791.67	1	SLU	399.39	43.25	0.85	11.31	401.72	1.00	32294.70	337143.00	32294.70	80.391
32	1851.39	1	SLU	354.38	38.38	0.85	11.31	356.45	1.00	32294.70	336668.00	32294.70	90.601
33	1911.11	1	SLU	299.17	32.40	0.85	11.31	300.92	1.00	32294.70	336194.00	32294.70	>100
34	1970.83	1	SLU	235.34	25.49	0.85	11.31	236.71	1.00	32294.70	335721.00	32294.70	>100
35	2030.56	1	SLU	163.90	17.75	0.85	11.31	164.86	1.00	32294.70	335248.00	32294.70	>100
36	2090.28	1	SLU	85.38	9.25	0.85	11.31	85.88	1.00	32294.70	334776.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-103953.00	-13066.60	39645.10	34.56	43.98	36.59	499.70	
39	59.72	2	SLE R	-103427.00	-13655.10	41430.40	34.56	43.98	38.52	524.25	
40	119.44	2	SLE R	-100704.00	-13568.70	41168.50	34.56	43.98	38.40	521.85	
41	179.17	2	SLE R	-97996.70	-12985.20	39398.00	34.56	43.98	36.65	498.69	
42	238.89	2	SLE R	-95305.80	-12055.20	36576.30	34.56	43.98	33.79	461.23	
43	298.61	2	SLE R	-92630.50	-10903.80	33082.80	34.56	43.98	30.27	415.23	
44	358.33	2	SLE R	-89970.30	-9632.15	29224.60	34.56	43.98	26.50	365.71	
45	418.06	2	SLE R	-87324.70	-8320.09	25243.70	28.27	50.27	22.81	316.98	
46	477.78	2	SLE R	-84693.40	-7028.26	21324.20	21.99	56.55	19.46	272.36	
47	537.50	2	SLE R	-82075.90	-5800.90	17600.30	21.99	56.55	16.59	233.79	
48	597.22	2	SLE R	-79471.80	-4668.38	14164.20	9.42	69.11	14.23	201.70	
49	656.94	2	SLE R	-76880.70	-3649.62	11073.20	0.00	78.54	12.28	175.20	
50	716.67	2	SLE R	-74302.10	-2754.29	8356.72	0.00	78.54	10.59	152.07	
51	776.39	2	SLE R	-71735.60	-1984.89	6022.28	0.00	78.54	9.11	131.77	
52	836.11	2	SLE R	-69180.90	-1338.45	4060.94	0.00	78.54	7.84	114.23	
53	895.83	2	SLE R	-66637.40	-808.10	2451.82	0.00	78.54	6.75	99.29	
54	955.56	2	SLE R	-64104.80	-384.32	1166.07	0.00	78.54	5.85	86.74	
55	1015.28	2	SLE R	-61582.70	-56.02	169.98	0.00	78.54	5.10	76.33	
56	1075.00	2	SLE R	-59070.60	188.67	-572.44	0.00	78.54	5.11	76.26	
57	1134.72	2	SLE R	-56568.10	361.72	-1097.50	0.00	78.54	5.20	77.10	
58	1194.44	2	SLE R	-54074.90	474.73	-1440.37	0.00	78.54	5.18	76.61	
59	1254.17	2	SLE R	-51590.50	538.56	-1634.04	0.00	78.54	5.08	75.01	
60	1313.89	2	SLE R	-49114.50	563.15	-1708.64	0.00	78.54	4.92	72.55	
61	1373.61	2	SLE R	-46646.50	557.36	-1691.07	0.00	78.54	4.71	69.41	
62	1433.33	2	SLE R	-44186.20	528.93	-1604.82	0.00	78.54	4.47	65.77	
63	1493.06	2	SLE R	-41733.00	484.51	-1470.05	0.00	78.54	4.19	61.78	
64	1552.78	2	SLE R	-39286.70	429.69	-1303.72	0.00	78.54	3.90	57.56	
65	1612.50	2	SLE R	-36846.70	369.10	-1119.88	0.00	78.54	3.61	53.23	
66	1672.22	2	SLE R	-34412.80	306.51	-929.98	0.00	78.54	3.30	48.85	
67	1731.94	2	SLE R	-31984.50	244.97	-743.27	0.00	78.54	3.00	44.51	
68	1791.67	2	SLE R	-29561.40	186.92	-567.13	0.00	78.54	2.71	40.25	
69	1851.39	2	SLE R	-27143.10	134.30	-407.46	0.00	78.54	2.43	36.11	
70	1911.11	2	SLE R	-24729.30	88.67	-269.04	0.00	78.54	2.16	32.15	
71	1970.83	2	SLE R	-22319.50	51.35	-155.81	0.00	78.54	1.90	28.37	
72	2030.56	2	SLE R	-19913.30	23.47	-71.20	0.00	78.54	1.66	24.81	
73	2090.28	2	SLE R	-17510.40	6.03	-18.28	0.00	78.54	1.43	21.48	
74	2150.00	2	SLE R	-15110.40	0.00	0.00	0.00	78.54	1.23	18.42	
75	0.00	4	SLE Q	-103953.00	-13066.60	39645.10	34.56	43.98	36.59	499.70	
76	59.72	4	SLE Q	-103427.00	-13655.10	41430.40	34.56	43.98	38.52	524.25	
77	119.44	4	SLE Q	-100704.00	-13568.70	41168.50	34.56	43.98	38.40	521.85	
78	179.17	4	SLE Q	-97996.70	-12985.20	39398.00	34.56	43.98	36.65	498.69	
79	238.89	4	SLE Q	-95305.80	-12055.20	36576.30	34.56	43.98	33.79	461.23	
80	298.61	4	SLE Q	-92630.50	-10903.80	33082.80	34.56	43.98	30.27	415.23	
81	358.33	4	SLE Q	-89970.30	-9632.15	29224.60	34.56	43.98	26.50	365.71	
82	418.06	4	SLE Q	-87324.70	-8320.09	25243.70	28.27	50.27	22.81	316.98	
83	477.78	4	SLE Q	-84693.40	-7028.26	21324.20	21.99	56.55	19.46	272.36	
84	537.50	4	SLE Q	-82075.90	-5800.90	17600.30	21.99	56.55	16.59	233.79	
85	597.22	4	SLE Q	-79471.80	-4668.38	14164.20	9.42	69.11	14.23	201.70	
86	656.94	4	SLE Q	-76880.70	-3649.62	11073.20	0.00	78.54	12.28	175.20	
87	716.67	4	SLE Q	-74302.10	-2754.29	8356.72	0.00	78.54	10.59	152.07	
88	776.39	4	SLE Q	-71735.60	-1984.89	6022.28	0.00	78.54	9.11	131.77	
89	836.11	4	SLE Q	-69180.90	-1338.45	4060.94	0.00	78.54	7.84	114.23	
90	895.83	4	SLE Q	-66637.40	-808.10	2451.82	0.00	78.54	6.75	99.29	
91	955.56	4	SLE Q	-64104.80	-384.32	1166.07	0.00	78.54	5.85	86.74	
92	1015.28	4	SLE Q	-61582.70	-56.02	169.98	0.00	78.54	5.10	76.33	
93	1075.00	4	SLE Q	-59070.60	188.67	-572.44	0.00	78.54	5.11	76.26	
94	1134.72	4	SLE Q	-56568.10	361.72	-1097.50	0.00	78.54	5.20	77.10	
95	1194.44	4	SLE Q	-54074.90	474.73	-1440.37	0.00	78.54	5.18	76.61	
96	1254.17	4	SLE Q	-51590.50	538.56	-1634.04	0.00	78.54	5.08	75.01	
97	1313.89	4	SLE Q	-49114.50	563.15	-1708.64	0.00	78.54	4.92	72.55	
98	1373.61	4	SLE Q	-46646.50	557.36	-1691.07	0.00	78.54	4.71	69.41	
99	1433.33	4	SLE Q	-44186.20	528.93	-1604.82	0.00	78.54	4.47	65.77	
100	1493.06	4	SLE Q	-41733.00	484.51	-1470.05	0.00	78.54	4.19	61.78	
101	1552.78	4	SLE Q	-39286.70	429.69	-1303.72	0.00	78.54	3.90	57.56	
102	1612.50	4	SLE Q	-36846.70	369.10	-1119.88	0.00	78.54	3.61	53.23	
103	1672.22	4	SLE Q	-34412.80	306.51	-929.98	0.00	78.54	3.30	48.85	
104	1731.94	4	SLE Q	-31984.50	244.97	-743.27	0.00	78.54	3.00	44.51	
105	1791.67	4	SLE Q	-29561.40	186.92	-567.13	0.00	78.54	2.71	40.25	
106	1851.39	4	SLE Q	-27143.10	134.30	-407.46	0.00	78.54	2.43	36.11	
107	1911.11	4	SLE Q	-24729.30	88.67	-269.04	0.00	78.54	2.16	32.15	
108	1970.83	4	SLE Q	-22319.50	51.35	-155.81	0.00	78.54	1.90	28.37	
109	2030.56	4	SLE Q	-19913.30	23.47	-71.20	0.00	78.54	1.66	24.81	
110	2090.28	4	SLE Q	-17510.40	6.03	-18.28	0.00	78.54	1.43	21.48	
111	2150.00	4	SLE Q	-15110.40	0.00	0.00	0.00	78.54	1.23	18.42	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	$A_{c\&}$nbsp;$_{eff}$ <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-103953.00	39645.10	-13066.60	46.00	136.36	0.50	20.00	208.39	15.71	914.12	389.06	0.11	0.04
76	59.72	4	SLE Q	-103427.00	41430.40	-13655.10	46.00	136.36	0.50	20.00	212.88	15.71	949.39	442.99	0.13	0.05
77	119.44	4	SLE Q	-100704.00	41168.50	-13568.70	46.00	136.36	0.50	20.00	214.63	15.71	963.11	455.46	0.13	0.05
78	179.17	4	SLE Q	-97996.70	39398.00	-12985.20	46.00	136.36	0.50	20.00	213.20	15.71	951.87	423.86	0.12	0.04
79	238.89	4	SLE Q	-95305.80	36576.30	-12055.20	46.00	136.36	0.50	20.00	208.99	15.71	918.80	363.00	0.11	0.04
80	298.61	4	SLE Q	-92630.50	33082.80	-10903.80	46.00	136.36	0.50	20.00	201.77	15.71	862.12	287.28	0.08	0.03
81	358.33	4	SLE Q	-89970.30	29224.60	-9632.15	46.00	136.36	0.50	20.00	190.07	15.71	770.28	209.31	0.06	0.02
82	418.06	4	SLE Q	-87324.70	25243.70	-8320.09	46.00	136.36	0.50	20.00	170.28	15.71	614.80	138.85	0.04	0.01
83	477.78	4	SLE Q	-84693.40	21324.20	-7028.26	46.00	136.36	0.50	20.00	182.70	9.42	427.39	81.65	0.02	0.01
84	537.50	4	SLE Q	-82075.90	17600.30	-5800.90	46.00	136.36	0.50	20.00	244.68	3.14	239.82	39.09	0.01	0.00
112	0.00	3	SLE F	-103953.00	39645.10	-13066.60	46.00	136.36	0.50	20.00	208.39	15.71	914.12	389.06	0.11	0.04
113	59.72	3	SLE F	-103427.00	41430.40	-13655.10	46.00	136.36	0.50	20.00	212.88	15.71	949.39	442.99	0.13	0.05
114	119.44	3	SLE F	-100704.00	41168.50	-13568.70	46.00	136.36	0.50	20.00	214.63	15.71	963.11	455.46	0.13	0.05
115	179.17	3	SLE F	-97996.70	39398.00	-12985.20	46.00	136.36	0.50	20.00	213.20	15.71	951.87	423.86	0.12	0.04
116	238.89	3	SLE F	-95305.80	36576.30	-12055.20	46.00	136.36	0.50	20.00	208.99	15.71	918.80	363.00	0.11	0.04
117	298.61	3	SLE F	-92630.50	33082.80	-10903.80	46.00	136.36	0.50	20.00	201.77	15.71	862.12	287.28	0.08	0.03
118	358.33	3	SLE F	-89970.30	29224.60	-9632.15	46.00	136.36	0.50	20.00	190.07	15.71	770.28	209.31	0.06	0.02
119	418.06	3	SLE F	-87324.70	25243.70	-8320.09	46.00	136.36	0.50	20.00	170.28	15.71	614.80	138.85	0.04	0.01
120	477.78	3	SLE F	-84693.40	21324.20	-7028.26	46.00	136.36	0.50	20.00	182.70	9.42	427.39	81.65	0.02	0.01
121	537.50	3	SLE F	-82075.90	17600.30	-5800.90	46.00	136.36	0.50	20.00	244.68	3.14	239.82	39.09	0.01	0.00

Verifiche principali

Caso	Tipo
3	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
49	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sf max (max traz.),C.Q.Per. - Wk Max
86	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 9

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>

PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 9 (-23)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	72030.50	7460.22	465.33	48744.90	2301.47
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	72030.50	7460.22	465.33	48744.90	2301.47
2	2	SLE R	RVN	53355.90	5526.09	344.69	36107.30	1704.79
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	53355.90	5526.09	344.69	36107.30	1704.79
3	3	SLE F	RVN	53355.90	5526.09	344.69	36107.30	1704.79
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	53355.90	5526.09	344.69	36107.30	1704.79
4	4	SLE Q	RVN	53355.90	5526.09	344.69	36107.30	1704.79
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	53355.90	5526.09	344.69	36107.30	1704.79

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-72030.50	-7460.22	-465.33	-48744.90	-2301.47
2	2	SLE R	1	-53355.90	-5526.09	-344.69	-36107.30	-1704.79
3	3	SLE F	1	-53355.90	-5526.09	-344.69	-36107.30	-1704.79
4	4	SLE Q	1	-53355.90	-5526.09	-344.69	-36107.30	-1704.79

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-72030.50	48175.40	-2274.58	-72030.50	176485.00	-7981.73	2-3	182.50	3.663
2	59.72	1	SLU	-71945.40	51033.60	-2409.53	-71945.40	176451.00	-7979.79	2-3	182.50	3.457
3	119.44	1	SLU	-70098.20	51199.80	-2417.38	-70098.20	175703.00	-7937.92	2-3	182.50	3.431
4	179.17	1	SLU	-68262.50	49362.90	-2330.65	-68262.50	174961.00	-7896.36	2-3	182.50	3.544
5	238.89	1	SLU	-66437.90	46110.30	-2177.08	-66437.90	174222.00	-7855.10	2-3	182.50	3.778
6	298.61	1	SLU	-64624.10	41932.10	-1979.81	-64624.10	173488.00	-7814.15	2-3	182.50	4.137
7	358.33	1	SLU	-62820.90	37227.20	-1757.67	-62820.90	172757.00	-7773.42	2-3	182.50	4.640
8	418.06	1	SLU	-61027.90	32311.80	-1525.59	-61027.90	172026.00	-7732.66	2-3	182.50	5.323
9	477.78	1	SLU	-59244.90	27428.50	-1295.02	-59244.90	171299.00	-7692.18	2-3	182.50	6.245
10	537.50	1	SLU	-57471.60	22755.80	-1074.41	-57471.60	170576.00	-7651.98	2-3	182.50	7.495
11	597.22	1	SLU	-55707.60	18418.60	-869.62	-55707.60	169857.00	-7612.05	2-3	182.50	9.221
12	656.94	1	SLU	-53952.80	14496.20	-684.43	-53952.80	169140.00	-7572.31	2-3	182.50	11.667
13	716.67	1	SLU	-52206.70	11032.10	-520.88	-52206.70	168423.00	-7532.47	2-3	182.50	15.265
14	776.39	1	SLU	-50469.10	8040.82	-379.64	-50469.10	167710.00	-7492.88	2-3	182.50	20.855
15	836.11	1	SLU	-48739.80	5515.18	-260.40	-48739.80	167000.00	-7453.53	2-3	182.50	30.276
16	895.83	1	SLU	-47018.40	3432.17	-162.05	-47018.40	166293.00	-7414.41	2-3	182.50	48.445
17	955.56	1	SLU	-45304.80	1757.87	-83.00	-2571250.00	165589.00	-7375.53	2-3	182.50	56.755
18	1015.28	1	SLU	-43598.40	451.61	-21.32	-2571250.00	164884.00	-7336.42	2-3	182.50	58.976
19	1075.00	1	SLU	-41899.30	-530.75	25.06	-2571250.00	-164331.00	6719.22	2-3	2.50	61.367
20	1134.72	1	SLU	-40206.90	-1234.23	58.27	-2571250.00	-163650.00	6678.63	2-3	2.50	63.950
21	1194.44	1	SLU	-38521.10	-1702.77	80.40	-2571250.00	-162971.00	6638.26	2-3	2.50	66.749
22	1254.17	1	SLU	-36841.60	-1977.87	93.38	-2571250.00	-162285.00	6628.99	2-3	2.50	69.792
23	1313.89	1	SLU	-35168.10	-2097.64	99.04	-2571250.00	-161590.00	6655.43	2-3	2.50	73.113
24	1373.61	1	SLU	-33500.30	-2096.27	98.97	-33500.30	-160897.00	6681.37	2-3	2.50	76.734
25	1433.33	1	SLU	-31838.00	-2003.78	94.61	-31838.00	-160203.00	6711.23	2-3	2.50	79.931
26	1493.06	1	SLU	-30180.90	-1846.06	87.16	-2571250.00	-159511.00	6741.14	2-3	2.50	85.194
27	1552.78	1	SLU	-28528.80	-1644.98	77.67	-2571250.00	-158820.00	6770.52	2-3	2.50	90.128
28	1612.50	1	SLU	-26881.20	-1418.80	66.99	-2571250.00	-158132.00	6799.40	2-3	2.50	95.652
29	1672.22	1	SLU	-25238.10	-1182.46	55.83	-2571250.00	-157445.00	6827.80	2-3	2.50	>100
30	1731.94	1	SLU	-23599.10	-948.12	44.77	-2571250.00	-156759.00	6856.81	2-3	2.50	>100
31	1791.67	1	SLU	-21963.90	-725.57	34.26	-2571250.00	-156072.00	6889.38	2-3	2.50	>100
32	1851.39	1	SLU	-20332.30	-522.72	24.68	-2571250.00	-155386.00	6921.42	2-3	2.50	>100
33	1911.11	1	SLU	-18704.10	-346.02	16.34	-2571250.00	-154702.00	6952.96	2-3	2.50	>100
34	1970.83	1	SLU	-17078.80	-200.88	9.48	-2571250.00	-154018.00	6984.00	2-3	2.50	>100
35	2030.56	1	SLU	-15456.40	-92.00	4.34	-2571250.00	-153332.00	7000.49	2-3	2.50	>100
36	2090.28	1	SLU	-13836.50	-23.67	1.12	-2571250.00	-152632.00	6963.44	2-3	2.50	>100
37	2150.00	1	SLU	-12218.80	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7460.22	465.33	0.85	11.31	7474.72	1.00	32294.70	341986.00	32294.70	4.321
2	59.72	1	SLU	2323.75	144.94	0.85	11.31	2328.27	1.00	32294.70	341973.00	32294.70	13.871
3	119.44	1	SLU	-1575.40	-98.26	0.85	11.31	1578.46	1.00	32294.70	341709.00	32294.70	20.460
4	179.17	1	SLU	-4407.46	-274.91	0.85	11.31	4416.03	1.00	32294.70	341446.00	32294.70	7.313
5	238.89	1	SLU	-6339.56	-395.43	0.85	11.31	6351.88	1.00	32294.70	341185.00	32294.70	5.084
6	298.61	1	SLU	-7530.09	-469.68	0.85	11.31	7544.73	1.00	32294.70	340925.00	32294.70	4.280
7	358.33	1	SLU	-8124.95	-506.79	0.85	11.31	8140.74	1.00	32294.70	340667.00	32294.70	3.967
8	418.06	1	SLU	-8255.13	-514.91	0.85	11.31	8271.18	1.00	32294.70	340410.00	32294.70	3.904
9	477.78	1	SLU	-8035.60	-501.21	0.85	11.31	8051.21	1.00	32294.70	340154.00	32294.70	4.011
10	537.50	1	SLU	-7564.98	-471.86	0.85	11.31	7579.68	1.00	32294.70	339900.00	32294.70	4.261
11	597.22	1	SLU	-6926.04	-432.01	0.85	11.31	6939.51	1.00	32294.70	339648.00	32294.70	4.654
12	656.94	1	SLU	-6186.61	-385.89	0.85	11.31	6198.63	1.00	32294.70	339396.00	32294.70	5.210
13	716.67	1	SLU	-5400.81	-336.87	0.85	11.31	5411.30	1.00	32294.70	339146.00	32294.70	5.968
14	776.39	1	SLU	-4610.54	-287.58	0.85	11.31	4619.50	1.00	32294.70	338897.00	32294.70	6.991
15	836.11	1	SLU	-3847.06	-239.96	0.85	11.31	3854.53	1.00	32294.70	338650.00	32294.70	8.378
16	895.83	1	SLU	-3132.48	-195.39	0.85	11.31	3138.56	1.00	32294.70	338403.00	32294.70	10.290
17	955.56	1	SLU	-2481.32	-154.77	0.85	11.31	2486.15	1.00	32294.70	338158.00	32294.70	12.990
18	1015.28	1	SLU	-1901.94	-118.63	0.85	11.31	1905.64	1.00	32294.70	337913.00	32294.70	16.947
19	1075.00	1	SLU	-1397.76	-87.18	0.85	11.31	1400.47	1.00	32294.70	337670.00	32294.70	23.060
20	1134.72	1	SLU	-968.45	-60.41	0.85	11.31	970.33	1.00	32294.70	337427.00	32294.70	33.282
21	1194.44	1	SLU	-610.94	-38.11	0.85	11.31	612.12	1.00	32294.70	337186.00	32294.70	52.759
22	1254.17	1	SLU	-320.21	-19.97	0.85	11.31	320.84	1.00	32294.70	336945.00	32294.70	>100
23	1313.89	1	SLU	-90.08	-5.62	0.85	11.31	90.26	1.00	32294.70	336706.00	32294.70	>100
24	1373.61	1	SLU	86.30	5.38	0.85	11.31	86.47	1.00	32294.70	336467.00	32294.70	>100
25	1433.33	1	SLU	215.95	13.47	0.85	11.31	216.37	1.00	32294.70	336229.00	32294.70	>100
26	1493.06	1	SLU	305.72	19.07	0.85	11.31	306.31	1.00	32294.70	335991.00	32294.70	>100
27	1552.78	1	SLU	362.02	22.58	0.85	11.31	362.72	1.00	32294.70	335755.00	32294.70	89.034
28	1612.50	1	SLU	390.67	24.37	0.85	11.31	391.43	1.00	32294.70	335519.00	32294.70	82.505
29	1672.22	1	SLU	396.76	24.75	0.85	11.31	397.54	1.00	32294.70	335283.00	32294.70	81.237
30	1731.94	1	SLU	384.64	23.99	0.85	11.31	385.39	1.00	32294.70	335048.00	32294.70	83.798
31	1791.67	1	SLU	357.84	22.32	0.85	11.31	358.53	1.00	32294.70	334814.00	32294.70	90.075
32	1851.39	1	SLU	319.14	19.91	0.85	11.31	319.76	1.00	32294.70	334580.00	32294.70	>100
33	1911.11	1	SLU	270.62	16.88	0.85	11.31	271.15	1.00	32294.70	334347.00	32294.70	>100
34	1970.83	1	SLU	213.74	13.33	0.85	11.31	214.15	1.00	32294.70	334114.00	32294.70	>100
35	2030.56	1	SLU	149.40	9.32	0.85	11.31	149.69	1.00	32294.70	333882.00	32294.70	>100
36	2090.28	1	SLU	78.09	4.87	0.85	11.31	78.24	1.00	32294.70	333650.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-53355.90	-1684.87	35685.50	43.98	34.56	33.78	654.14	
39	59.72	2	SLE R	-53528.60	-1784.83	37802.60	47.12	31.42	36.01	726.88	
40	119.44	2	SLE R	-52193.90	-1790.65	37925.80	47.12	31.42	36.24	746.67	
41	179.17	2	SLE R	-50867.80	-1726.40	36565.10	47.12	31.42	34.90	713.55	
42	238.89	2	SLE R	-49550.00	-1612.65	34155.80	43.98	34.56	32.44	643.22	
43	298.61	2	SLE R	-48240.30	-1466.52	31060.80	40.84	37.70	29.26	549.44	
44	358.33	2	SLE R	-46938.50	-1301.98	27575.70	40.84	37.70	25.66	443.95	
45	418.06	2	SLE R	-45644.30	-1130.07	23934.70	40.84	37.70	21.89	336.71	
46	477.78	2	SLE R	-44357.50	-959.28	20317.40	40.84	37.70	18.18	246.61	
47	537.50	2	SLE R	-43078.00	-795.86	16856.20	34.56	43.98	14.73	201.89	
48	597.22	2	SLE R	-41805.50	-644.17	13643.40	31.42	47.12	11.72	162.54	
49	656.94	2	SLE R	-40539.90	-506.99	10738.00	25.13	53.41	9.31	130.51	
50	716.67	2	SLE R	-39280.80	-385.83	8171.94	15.71	62.83	7.50	106.16	
51	776.39	2	SLE R	-38028.20	-281.22	5956.16	0.00	78.54	6.17	88.09	
52	836.11	2	SLE R	-36781.70	-192.89	4085.32	0.00	78.54	5.10	73.46	
53	895.83	2	SLE R	-35541.30	-120.04	2542.35	0.00	78.54	4.20	61.14	
54	955.56	2	SLE R	-34306.70	-61.48	1302.13	0.00	78.54	3.46	50.95	
55	1015.28	2	SLE R	-33077.60	-15.79	334.53	0.00	78.54	2.86	42.67	
56	1075.00	2	SLE R	-31854.00	18.56	-393.15	0.00	78.54	2.79	41.61	
57	1134.72	2	SLE R	-30635.50	43.17	-914.25	0.00	78.54	2.96	43.79	
58	1194.44	2	SLE R	-29422.10	59.55	-1261.31	0.00	78.54	3.04	44.76	
59	1254.17	2	SLE R	-28213.40	69.17	-1465.09	0.00	78.54	3.05	44.72	

60	1313.89	2	SLE R	-27009.40	73.36	-1553.81	0.00	78.54	3.00	43.88	
61	1373.61	2	SLE R	-25809.80	73.31	-1552.79	0.00	78.54	2.90	42.41	
62	1433.33	2	SLE R	-24614.30	70.08	-1484.28	0.00	78.54	2.77	40.47	
63	1493.06	2	SLE R	-23422.90	64.56	-1367.45	0.00	78.54	2.61	38.19	
64	1552.78	2	SLE R	-22235.30	57.53	-1218.51	0.00	78.54	2.44	35.70	
65	1612.50	2	SLE R	-21051.40	49.62	-1050.96	0.00	78.54	2.26	33.07	
66	1672.22	2	SLE R	-19870.90	41.36	-875.90	0.00	78.54	2.07	30.40	
67	1731.94	2	SLE R	-18693.60	33.16	-702.31	0.00	78.54	1.88	27.74	
68	1791.67	2	SLE R	-17519.30	25.38	-537.46	0.00	78.54	1.70	25.15	
69	1851.39	2	SLE R	-16348.00	18.28	-387.20	0.00	78.54	1.53	22.66	
70	1911.11	2	SLE R	-15179.30	12.10	-256.31	0.00	78.54	1.37	20.31	
71	1970.83	2	SLE R	-14013.00	7.03	-148.80	0.00	78.54	1.22	18.13	
72	2030.56	2	SLE R	-12849.10	3.22	-68.15	0.00	78.54	1.08	16.15	
73	2090.28	2	SLE R	-11687.20	0.83	-17.53	0.00	78.54	0.96	14.37	
74	2150.00	2	SLE R	-10527.30	0.00	0.00	0.00	78.54	0.86	12.84	
75	0.00	4	SLE Q	-53355.90	-1684.87	35685.50	43.98	34.56	33.78	654.14	
76	59.72	4	SLE Q	-53528.60	-1784.83	37802.60	47.12	31.42	36.01	726.88	
77	119.44	4	SLE Q	-52193.90	-1790.65	37925.80	47.12	31.42	36.24	746.67	
78	179.17	4	SLE Q	-50867.80	-1726.40	36565.10	47.12	31.42	34.90	713.55	
79	238.89	4	SLE Q	-49550.00	-1612.65	34155.80	43.98	34.56	32.44	643.22	
80	298.61	4	SLE Q	-48240.30	-1466.52	31060.80	40.84	37.70	29.26	549.44	
81	358.33	4	SLE Q	-46938.50	-1301.98	27575.70	40.84	37.70	25.66	443.95	
82	418.06	4	SLE Q	-45644.30	-1130.07	23934.70	40.84	37.70	21.89	336.71	
83	477.78	4	SLE Q	-44357.50	-959.28	20317.40	40.84	37.70	18.18	246.61	
84	537.50	4	SLE Q	-43078.00	-795.86	16856.20	34.56	43.98	14.73	201.89	
85	597.22	4	SLE Q	-41805.50	-644.17	13643.40	31.42	47.12	11.72	162.54	
86	656.94	4	SLE Q	-40539.90	-506.99	10738.00	25.13	53.41	9.31	130.51	
87	716.67	4	SLE Q	-39280.80	-385.83	8171.94	15.71	62.83	7.50	106.16	
88	776.39	4	SLE Q	-38028.20	-281.22	5956.16	0.00	78.54	6.17	88.09	
89	836.11	4	SLE Q	-36781.70	-192.89	4085.32	0.00	78.54	5.10	73.46	
90	895.83	4	SLE Q	-35541.30	-120.04	2542.35	0.00	78.54	4.20	61.14	
91	955.56	4	SLE Q	-34306.70	-61.48	1302.13	0.00	78.54	3.46	50.95	
92	1015.28	4	SLE Q	-33077.60	-15.79	334.53	0.00	78.54	2.86	42.67	
93	1075.00	4	SLE Q	-31854.00	18.56	-393.15	0.00	78.54	2.79	41.61	
94	1134.72	4	SLE Q	-30635.50	43.17	-914.25	0.00	78.54	2.96	43.79	
95	1194.44	4	SLE Q	-29422.10	59.55	-1261.31	0.00	78.54	3.04	44.76	
96	1254.17	4	SLE Q	-28213.40	69.17	-1465.09	0.00	78.54	3.05	44.72	
97	1313.89	4	SLE Q	-27009.40	73.36	-1553.81	0.00	78.54	3.00	43.88	
98	1373.61	4	SLE Q	-25809.80	73.31	-1552.79	0.00	78.54	2.90	42.41	
99	1433.33	4	SLE Q	-24614.30	70.08	-1484.28	0.00	78.54	2.77	40.47	
100	1493.06	4	SLE Q	-23422.90	64.56	-1367.45	0.00	78.54	2.61	38.19	
101	1552.78	4	SLE Q	-22235.30	57.53	-1218.51	0.00	78.54	2.44	35.70	
102	1612.50	4	SLE Q	-21051.40	49.62	-1050.96	0.00	78.54	2.26	33.07	
103	1672.22	4	SLE Q	-19870.90	41.36	-875.90	0.00	78.54	2.07	30.40	
104	1731.94	4	SLE Q	-18693.60	33.16	-702.31	0.00	78.54	1.88	27.74	
105	1791.67	4	SLE Q	-17519.30	25.38	-537.46	0.00	78.54	1.70	25.15	
106	1851.39	4	SLE Q	-16348.00	18.28	-387.20	0.00	78.54	1.53	22.66	
107	1911.11	4	SLE Q	-15179.30	12.10	-256.31	0.00	78.54	1.37	20.31	
108	1970.83	4	SLE Q	-14013.00	7.03	-148.80	0.00	78.54	1.22	18.13	
109	2030.56	4	SLE Q	-12849.10	3.22	-68.15	0.00	78.54	1.08	16.15	
110	2090.28	4	SLE Q	-11687.20	0.83	-17.53	0.00	78.54	0.96	14.37	
111	2150.00	4	SLE Q	-10527.30	0.00	0.00	0.00	78.54	0.86	12.84	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	A_{C} eff <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-53355.90	35685.50	-1684.87	46.00	136.36	0.50	20.00	197.82	21.99	1163.51	654.14	0.19	0.06
76	59.72	4	SLE Q	-53528.60	37802.60	-1784.83	46.00	136.36	0.50	20.00	199.19	21.99	1178.66	726.88	0.21	0.07
77	119.44	4	SLE Q	-52193.90	37925.80	-1790.65	46.00	136.36	0.50	20.00	199.87	21.99	1186.04	746.67	0.22	0.07
78	179.17	4	SLE Q	-50867.80	36565.10	-1726.40	46.00	136.36	0.50	20.00	199.62	21.99	1183.29	713.55	0.21	0.07
79	238.89	4	SLE Q	-49550.00	34155.80	-1612.65	46.00	136.36	0.50	20.00	198.60	21.99	1172.10	643.22	0.19	0.06
80	298.61	4	SLE Q	-48240.30	31060.80	-1466.52	46.00	136.36	0.50	20.00	196.77	21.99	1152.04	549.44	0.16	0.05
81	358.33	4	SLE Q	-46938.50	27575.70	-1301.98	46.00	136.36	0.50	20.00	193.94	21.99	1120.92	443.95	0.13	0.04
82	418.06	4	SLE Q	-45644.30	23934.70	-1130.07	46.00	136.36	0.50	20.00	189.74	21.99	1074.72	336.71	0.10	0.03
83	477.78	4	SLE Q	-44357.50	20317.40	-959.28	46.00	136.36	0.50	20.00	219.95	15.71	1004.90	236.36	0.07	0.03
84	537.50	4	SLE Q	-43078.00	16856.20	-795.86	46.00	136.36	0.50	20.00	206.28	15.71	897.58	150.32	0.04	0.02
85	597.22	4	SLE Q	-41805.50	13643.40	-644.17	46.00	136.36	0.50	20.00	183.15	15.71	715.90	84.07	0.02	0.01
86	656.94	4	SLE Q	-40539.90	10738.00	-506.99	46.00	136.36	0.50	20.00	183.59	9.42	431.61	39.11	0.01	0.00
112	0.00	3	SLE F	-53355.90	35685.50	-1684.87	46.00	136.36	0.50	20.00	197.82	21.99	1163.51	654.14	0.19	0.06
113	59.72	3	SLE F	-53528.60	37802.60	-1784.83	46.00	136.36	0.50	20.00	199.19	21.99	1178.66	726.88	0.21	0.07
114	119.44	3	SLE F	-52193.90	37925.80	-1790.65	46.00	136.36	0.50	20.00	199.87	21.99	1186.04	746.67	0.22	0.07
115	179.17	3	SLE F	-50867.80	36565.10	-1726.40	46.00	136.36	0.50	20.00	199.62	21.99	1183.29	713.55	0.21	0.07
116	238.89	3	SLE F	-49550.00	34155.80	-1612.65	46.00	136.36	0.50	20.00	198.60	21.99	1172.10	643.22	0.19	0.06
117	298.61	3	SLE F	-48240.30	31060.80	-1466.52	46.00	136.36	0.50	20.00	196.77	21.99	1152.04	549.44	0.16	0.05
118	358.33	3	SLE F	-46938.50	27575.70	-1301.98	46.00	136.36	0.50	20.00	193.94	21.99	1120.92	443.95	0.13	0.04
119	418.06	3	SLE F	-45644.30	23934.70	-1130.07	46.00	136.36	0.50	20.00	189.74	21.99	1074.72	336.71	0.10	0.03
120	477.78	3	SLE F	-44357.50	20317.40	-959.28	46.00	136.36	0.50	20.00	219.95	15.71	1004.90	236.36	0.07	0.03
121	537.50	3	SLE F	-43078.00	16856.20	-795.86	46.00	136.36	0.50	20.00	206.28	15.71	897.58	150.32	0.04	0.02
122	597.22	3	SLE F	-41805.50	13643.40	-644.17	46.00	136.36	0.50	20.00	183.15	15.71	715.90	84.07	0.02	0.01
123	656.94	3	SLE F	-40539.90	10738.00	-506.99	46.00	136.36	0.50	20.00	183.59	9.42	431.61	39.11	0.01	0.00

Verifiche principali

Caso	Tipo
3	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
40	C.Rare - Sc min (max compr.),C.Rare - Sf max (max traz.),C.Rare - Sf min (max compr.)
51	C.Rare - Sc max (min. compr.)
77	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf max (max traz.),C.Q.Per. - Sf min (max compr.),C.Q.Per. - Wk Max
88	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 10

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 10 (-17)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	47373.90	7606.49	22.63	43476.00	462.29
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	47373.90	7606.49	22.63	43476.00	462.29
2	2	SLE R	RVN	35091.80	5634.44	16.76	32204.40	342.44
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	35091.80	5634.44	16.76	32204.40	342.44
3	3	SLE F	RVN	35091.80	5634.44	16.76	32204.40	342.44
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	35091.80	5634.44	16.76	32204.40	342.44
4	4	SLE Q	RVN	35091.80	5634.44	16.76	32204.40	342.44
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	35091.80	5634.44	16.76	32204.40	342.44

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-47373.90	-7606.49	-22.63	-43476.00	-462.29
2	2	SLE R	1	-35091.80	-5634.44	-16.76	-32204.40	-342.44
3	3	SLE F	1	-35091.80	-5634.44	-16.76	-32204.40	-342.44
4	4	SLE Q	1	-35091.80	-5634.44	-16.76	-32204.40	-342.44

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.

1	0.00	1	SLU	-47373.90	42940.50	-456.60	-47373.90	166643.00	-555.11	2-3	180.00	3.881
2	59.72	1	SLU	-47629.10	45975.40	-488.87	-47629.10	166749.00	-560.48	2-3	180.00	3.627
3	119.44	1	SLU	-46458.70	46466.50	-494.09	-46458.70	166265.00	-535.92	2-3	180.00	3.578
4	179.17	1	SLU	-45295.80	45051.60	-479.04	-45295.80	165785.00	-511.64	2-3	180.00	3.680
5	238.89	1	SLU	-44140.40	42277.20	-449.54	-44140.40	165306.00	-485.75	2-3	180.00	3.910
6	298.61	1	SLU	-42992.10	38600.50	-410.45	-42992.10	164829.00	-459.98	2-3	180.00	4.270
7	358.33	1	SLU	-41850.80	34395.10	-365.73	-41850.80	164355.00	-434.50	2-3	180.00	4.778
8	418.06	1	SLU	-40716.40	29958.70	-318.56	-40716.40	163883.00	-409.29	2-3	180.00	5.470
9	477.78	1	SLU	-39588.60	25520.70	-271.37	-39588.60	163415.00	-384.35	2-3	180.00	6.403
10	537.50	1	SLU	-38467.30	21251.50	-225.97	-38467.30	162949.00	-359.68	2-3	180.00	7.667
11	597.22	1	SLU	-37352.30	17271.00	-183.65	-37352.30	162485.00	-335.26	2-3	180.00	9.407
12	656.94	1	SLU	-36243.30	13657.20	-145.22	-36243.30	162024.00	-311.08	2-3	180.00	11.863
13	716.67	1	SLU	-35140.30	10454.10	-111.16	-35140.30	161541.00	-2010.35	2-3	180.62	15.453
14	776.39	1	SLU	-34043.00	7678.48	-81.65	-34043.00	161082.00	-1983.12	2-3	180.62	20.979
15	836.11	1	SLU	-32951.20	5326.61	-56.64	-32951.20	160625.00	-1956.13	2-3	180.62	30.156
16	895.83	1	SLU	-31864.80	3379.61	-35.94	-31864.80	160171.00	-1929.38	2-3	180.62	47.394
17	955.56	1	SLU	-30783.60	1808.08	-19.23	-2571250.00	159719.00	-1902.86	2-3	180.62	83.526
18	1015.28	1	SLU	-29707.50	575.94	-6.12	-2571250.00	159268.00	-1876.56	2-3	180.62	86.552
19	1075.00	1	SLU	-28636.20	-356.43	3.79	-2571250.00	-158868.00	1585.62	2-3	0.62	89.790
20	1134.72	1	SLU	-27569.50	-1029.77	10.95	-2571250.00	-158422.00	1608.45	2-3	0.62	93.264
21	1194.44	1	SLU	-26507.40	-1484.13	15.78	-2571250.00	-157977.00	1631.06	2-3	0.62	97.001
22	1254.17	1	SLU	-25449.60	-1757.46	18.69	-25449.60	-157533.00	1655.21	2-3	0.62	89.637
23	1313.89	1	SLU	-24395.90	-1884.82	20.04	-24395.90	-157090.00	1679.76	2-3	0.62	83.345
24	1373.61	1	SLU	-23346.30	-1897.73	20.18	-23346.30	-156649.00	1704.08	2-3	0.62	82.546
25	1433.33	1	SLU	-22300.40	-1824.01	19.40	-22300.40	-156209.00	1728.18	2-3	0.62	85.641
26	1493.06	1	SLU	-21258.10	-1687.70	17.95	-21258.10	-155770.00	1752.06	2-3	0.62	92.298
27	1552.78	1	SLU	-20219.40	-1509.22	16.05	-20219.40	-155333.00	1775.74	2-3	0.62	>100
28	1612.50	1	SLU	-19183.90	-1305.64	13.88	-19183.90	-154897.00	1799.22	2-3	0.62	>100
29	1672.22	1	SLU	-18151.60	-1091.03	11.60	-18151.60	-154463.00	1822.50	2-3	0.62	>100
30	1731.94	1	SLU	-17122.20	-876.88	9.32	-2571250.00	-154029.00	1845.60	2-3	0.62	>100
31	1791.67	1	SLU	-16095.60	-672.50	7.15	-2571250.00	-153596.00	1870.33	2-3	0.62	>100
32	1851.39	1	SLU	-15071.70	-485.44	5.16	-2571250.00	-153163.00	1895.47	2-3	0.62	>100
33	1911.11	1	SLU	-14050.20	-321.93	3.42	-2571250.00	-152731.00	1920.42	2-3	0.62	>100
34	1970.83	1	SLU	-13031.00	-187.21	1.99	-2571250.00	-152299.00	1945.19	2-3	0.62	>100
35	2030.56	1	SLU	-12013.90	-85.88	0.91	-2571250.00	-151869.00	1969.76	2-3	0.62	>100
36	2090.28	1	SLU	-10998.80	-22.13	0.24	-2571250.00	-151411.00	296.22	2-3	0.00	>100
37	2150.00	1	SLU	-9985.45	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7606.49	22.63	0.85	11.31	7606.52	1.00	32294.70	338454.00	32294.70	4.246
2	59.72	1	SLU	2761.23	8.22	0.85	11.31	2761.25	1.00	32294.70	338490.00	32294.70	11.696
3	119.44	1	SLU	-938.65	-2.79	0.85	11.31	938.65	1.00	32294.70	338323.00	32294.70	34.405
4	179.17	1	SLU	-3647.27	-10.85	0.85	11.31	3647.29	1.00	32294.70	338156.00	32294.70	8.854
5	238.89	1	SLU	-5516.90	-16.41	0.85	11.31	5516.93	1.00	32294.70	337991.00	32294.70	5.854
6	298.61	1	SLU	-6692.60	-19.91	0.85	11.31	6692.63	1.00	32294.70	337826.00	32294.70	4.825
7	358.33	1	SLU	-7308.51	-21.74	0.85	11.31	7308.54	1.00	32294.70	337663.00	32294.70	4.419
8	418.06	1	SLU	-7485.57	-22.27	0.85	11.31	7485.60	1.00	32294.70	337500.00	32294.70	4.314
9	477.78	1	SLU	-7330.27	-21.81	0.85	11.31	7330.30	1.00	32294.70	337339.00	32294.70	4.406
10	537.50	1	SLU	-6934.32	-20.63	0.85	11.31	6934.35	1.00	32294.70	337178.00	32294.70	4.657
11	597.22	1	SLU	-6374.93	-18.97	0.85	11.31	6374.96	1.00	32294.70	337018.00	32294.70	5.066
12	656.94	1	SLU	-5715.61	-17.01	0.85	11.31	5715.64	1.00	32294.70	336860.00	32294.70	5.650
13	716.67	1	SLU	-5007.30	-14.90	0.85	11.31	5007.32	1.00	32294.70	336702.00	32294.70	6.449
14	776.39	1	SLU	-4289.62	-12.76	0.85	11.31	4289.64	1.00	32294.70	336544.00	32294.70	7.529
15	836.11	1	SLU	-3592.30	-10.69	0.85	11.31	3592.32	1.00	32294.70	336388.00	32294.70	8.990
16	895.83	1	SLU	-2936.60	-8.74	0.85	11.31	2936.62	1.00	32294.70	336232.00	32294.70	10.997
17	955.56	1	SLU	-2336.69	-6.95	0.85	11.31	2336.70	1.00	32294.70	336078.00	32294.70	13.821
18	1015.28	1	SLU	-1800.93	-5.36	0.85	11.31	1800.93	1.00	32294.70	335923.00	32294.70	17.932
19	1075.00	1	SLU	-1333.04	-3.97	0.85	11.31	1333.05	1.00	32294.70	335770.00	32294.70	24.226
20	1134.72	1	SLU	-933.23	-2.78	0.85	11.31	933.24	1.00	32294.70	335617.00	32294.70	34.605
21	1194.44	1	SLU	-599.04	-1.78	0.85	11.31	599.04	1.00	32294.70	335465.00	32294.70	53.911
22	1254.17	1	SLU	-326.17	-0.97	0.85	11.31	326.17	1.00	32294.70	335313.00	32294.70	99.011
23	1313.89	1	SLU	-109.15	-0.32	0.85	11.31	109.15	1.00	32294.70	335163.00	32294.70	>100
24	1373.61	1	SLU	58.14	0.17	0.85	11.31	58.14	1.00	32294.70	335012.00	32294.70	>100
25	1433.33	1	SLU	182.04	0.54	0.85	11.31	182.04	1.00	32294.70	334862.00	32294.70	>100
26	1493.06	1	SLU	268.78	0.80	0.85	11.31	268.78	1.00	32294.70	334713.00	32294.70	>100
27	1552.78	1	SLU	324.21	0.96	0.85	11.31	324.21	1.00	32294.70	334564.00	32294.70	99.609
28	1612.50	1	SLU	353.68	1.05	0.85	11.31	353.68	1.00	32294.70	334416.00	32294.70	91.311
29	1672.22	1	SLU	361.86	1.08	0.85	11.31	361.86	1.00	32294.70	334268.00	32294.70	89.247
30	1731.94	1	SLU	352.75	1.05	0.85	11.31	352.75	1.00	32294.70	334121.00	32294.70	91.550
31	1791.67	1	SLU	329.64	0.98	0.85	11.31	329.64	1.00	32294.70	333974.00	32294.70	97.969
32	1851.39	1	SLU	295.10	0.88	0.85	11.31	295.10	1.00	32294.70	333827.00	32294.70	>100
33	1911.11	1	SLU	251.05	0.75	0.85	11.31	251.05	1.00	32294.70	333681.00	32294.70	>100
34	1970.83	1	SLU	198.86	0.59	0.85	11.31	198.86	1.00	32294.70	333535.00	32294.70	>100
35	2030.56	1	SLU	139.36	0.41	0.85	11.31	139.36	1.00	32294.70	333389.00	32294.70	>100
36	2090.28	1	SLU	73.01	0.22	0.85	11.31	73.01	1.00	32294.70	333244.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-35091.80	-338.22	31807.80	47.12	31.42	31.01	729.06	
39	59.72	2	SLE R	-35516.50	-362.12	34055.90	47.12	31.42	33.34	806.41	
40	119.44	2	SLE R	-34683.20	-365.99	34419.60	47.12	31.42	33.77	830.41	
41	179.17	2	SLE R	-33855.50	-354.85	33371.60	47.12	31.42	32.73	802.22	
42	238.89	2	SLE R	-33033.30	-333.00	31316.50	47.12	31.42	30.63	736.82	
43	298.61	2	SLE R	-32216.60	-304.04	28593.00	47.12	31.42	27.83	647.02	
44	358.33	2	SLE R	-31405.10	-270.91	25477.90	47.12	31.42	24.61	543.48	
45	418.06	2	SLE R	-30598.70	-235.97	22191.60	43.98	34.56	21.20	434.95	
46	477.78	2	SLE R	-29797.30	-201.01	18904.20	43.98	34.56	17.77	328.59	
47	537.50	2	SLE R	-29000.70	-167.39	15741.80	40.84	37.70	14.47	230.44	
48	597.22	2	SLE R	-28208.90	-136.03	12793.30	37.70	40.84	11.43	155.47	
49	656.94	2	SLE R	-27421.70	-107.57	10116.50	34.56	43.98	8.77	120.96	
50	716.67	2	SLE R	-26639.00	-82.34	7743.79	28.27	50.27	6.66	93.03	
51	776.39	2	SLE R	-25860.60	-60.48	5687.76	18.85	59.69	5.13	72.56	
52	836.11	2	SLE R	-25086.50	-41.95	3945.64	0.00	78.54	4.08	58.29	
53	895.83	2	SLE R	-24316.40	-26.62	2503.42	0.00	78.54	3.27	47.22	
54	955.56	2	SLE R	-23550.30	-14.24	1339.32	0.00	78.54	2.61	38.12	
55	1015.28	2	SLE R	-22788.00	-4.54	426.62	0.00	78.54	2.07	30.78	
56	1075.00	2	SLE R	-22029.50	2.81	-264.02	0.00	78.54	1.93	28.72	
57	1134.72	2	SLE R	-21274.50	8.11	-762.80	0.00	78.54	2.12	31.30	
58	1194.44	2	SLE R	-20523.10	11.69	-1099.35	0.00	78.54	2.24	32.75	
59	1254.17	2	SLE R	-19774.90	13.84	-1301.82	0.00	78.54	2.28	33.26	
60	1313.89	2	SLE R	-19030.00	14.85	-1396.16	0.00	78.54	2.27	33.02	
61	1373.61	2	SLE R	-18288.20	14.95	-1405.73	0.00	78.54	2.21	32.18	
62	1433.33	2	SLE R	-17549.40	14.37	-1351.12	0.00	78.54	2.13	30.90	
63	1493.06	2	SLE R	-16813.50	13.29	-1250.15	0.00	78.54	2.01	29.29	
64	1552.78	2	SLE R	-16080.30	11.89	-1117.94	0.00	78.54	1.89	27.46	
65	1612.50	2	SLE R	-15349.70	10.28	-967.14	0.00	78.54	1.75	25.51	
66	1672.22	2	SLE R	-14621.60	8.59	-808.17	0.00	78.54	1.61	23.51	
67	1731.94	2	SLE R	-13895.90	6.91	-649.54	0.00	78.54	1.47	21.51	
68	1791.67	2	SLE R	-13172.50	5.30	-498.15	0.00	78.54	1.33	19.56	
69	1851.39	2	SLE R	-12451.20	3.82	-359.59	0.00	78.54	1.20	17.71	
70	1911.11	2	SLE R	-11731.90	2.54	-238.47	0.00	78.54	1.08	15.98	
71	1970.83	2	SLE R	-11014.60	1.47	-138.68	0.00	78.54	0.97	14.40	
72	2030.56	2	SLE R	-10299.10	0.68	-63.61	0.00	78.54	0.87	13.00	
73	2090.28	2	SLE R	-9585.22	0.17	-16.39	0.00	78.54	0.79	11.80	
74	2150.00	2	SLE R	-8872.93	0.00	0.00	0.00	78.54	0.72	10.82	
75	0.00	4	SLE Q	-35091.80	-338.22	31807.80	47.12	31.42	31.01	729.06	
76	59.72	4	SLE Q	-35516.50	-362.12	34055.90	47.12	31.42	33.34	806.41	
77	119.44	4	SLE Q	-34683.20	-365.99	34419.60	47.12	31.42	33.77	830.41	
78	179.17	4	SLE Q	-33855.50	-354.85	33371.60	47.12	31.42	32.73	802.22	
79	238.89	4	SLE Q	-33033.30	-333.00	31316.50	47.12	31.42	30.63	736.82	
80	298.61	4	SLE Q	-32216.60	-304.04	28593.00	47.12	31.42	27.83	647.02	
81	358.33	4	SLE Q	-31405.10	-270.91	25477.90	47.12	31.42	24.61	543.48	
82	418.06	4	SLE Q	-30598.70	-235.97	22191.60	43.98	34.56	21.20	434.95	
83	477.78	4	SLE Q	-29797.30	-201.01	18904.20	43.98	34.56	17.77	328.59	
84	537.50	4	SLE Q	-29000.70	-167.39	15741.80	40.84	37.70	14.47	230.44	
85	597.22	4	SLE Q	-28208.90	-136.03	12793.30	37.70	40.84	11.43	155.47	
86	656.94	4	SLE Q	-27421.70	-107.57	10116.50	34.56	43.98	8.77	120.96	
87	716.67	4	SLE Q	-26639.00	-82.34	7743.79	28.27	50.27	6.66	93.03	
88	776.39	4	SLE Q	-25860.60	-60.48	5687.76	18.85	59.69	5.13	72.56	
89	836.11	4	SLE Q	-25086.50	-41.95	3945.64	0.00	78.54	4.08	58.29	
90	895.83	4	SLE Q	-24316.40	-26.62	2503.42	0.00	78.54	3.27	47.22	
91	955.56	4	SLE Q	-23550.30	-14.24	1339.32	0.00	78.54	2.61	38.12	
92	1015.28	4	SLE Q	-22788.00	-4.54	426.62	0.00	78.54	2.07	30.78	
93	1075.00	4	SLE Q	-22029.50	2.81	-264.02	0.00	78.54	1.93	28.72	
94	1134.72	4	SLE Q	-21274.50	8.11	-762.80	0.00	78.54	2.12	31.30	
95	1194.44	4	SLE Q	-20523.10	11.69	-1099.35	0.00	78.54	2.24	32.75	
96	1254.17	4	SLE Q	-19774.90	13.84	-1301.82	0.00	78.54	2.28	33.26	

97	1313.89	4	SLE Q	-19030.00	14.85	-1396.16	0.00	78.54	2.27	33.02	
98	1373.61	4	SLE Q	-18288.20	14.95	-1405.73	0.00	78.54	2.21	32.18	
99	1433.33	4	SLE Q	-17549.40	14.37	-1351.12	0.00	78.54	2.13	30.90	
100	1493.06	4	SLE Q	-16813.50	13.29	-1250.15	0.00	78.54	2.01	29.29	
101	1552.78	4	SLE Q	-16080.30	11.89	-1117.94	0.00	78.54	1.89	27.46	
102	1612.50	4	SLE Q	-15349.70	10.28	-967.14	0.00	78.54	1.75	25.51	
103	1672.22	4	SLE Q	-14621.60	8.59	-808.17	0.00	78.54	1.61	23.51	
104	1731.94	4	SLE Q	-13895.90	6.91	-649.54	0.00	78.54	1.47	21.51	
105	1791.67	4	SLE Q	-13172.50	5.30	-498.15	0.00	78.54	1.33	19.56	
106	1851.39	4	SLE Q	-12451.20	3.82	-359.59	0.00	78.54	1.20	17.71	
107	1911.11	4	SLE Q	-11731.90	2.54	-238.47	0.00	78.54	1.08	15.98	
108	1970.83	4	SLE Q	-11014.60	1.47	-138.68	0.00	78.54	0.97	14.40	
109	2030.56	4	SLE Q	-10299.10	0.68	-63.61	0.00	78.54	0.87	13.00	
110	2090.28	4	SLE Q	-9585.22	0.17	-16.39	0.00	78.54	0.79	11.80	
111	2150.00	4	SLE Q	-8872.93	0.00	0.00	0.00	78.54	0.72	10.82	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_S <cmq>	A_C $_{eff}$ <cmq>	σ_S <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-35091.80	31807.80	-338.22	46.00	136.36	0.50	20.00	203.98	21.99	1231.30	729.06	0.21	0.07
76	59.72	4	SLE Q	-35516.50	34055.90	-362.12	46.00	136.36	0.50	20.00	204.88	21.99	1241.24	806.41	0.23	0.08
77	119.44	4	SLE Q	-34683.20	34419.60	-365.99	46.00	136.36	0.50	20.00	205.40	21.99	1246.91	830.41	0.24	0.08
78	179.17	4	SLE Q	-33855.50	33371.60	-354.85	46.00	136.36	0.50	20.00	205.30	21.99	1245.82	802.22	0.23	0.08
79	238.89	4	SLE Q	-33033.30	31316.50	-333.00	46.00	136.36	0.50	20.00	204.71	21.99	1239.30	736.82	0.21	0.07
80	298.61	4	SLE Q	-32216.60	28593.00	-304.04	46.00	136.36	0.50	20.00	203.62	21.99	1227.36	647.02	0.19	0.07
81	358.33	4	SLE Q	-31405.10	25477.90	-270.91	46.00	136.36	0.50	20.00	201.96	21.99	1209.11	543.48	0.16	0.05
82	418.06	4	SLE Q	-30598.70	22191.60	-235.97	46.00	136.36	0.50	20.00	199.55	21.99	1182.56	434.95	0.13	0.04
83	477.78	4	SLE Q	-29797.30	18904.20	-201.01	46.00	136.36	0.50	20.00	196.08	21.99	1144.43	328.59	0.10	0.03
84	537.50	4	SLE Q	-29000.70	15741.80	-167.39	46.00	136.36	0.50	20.00	207.38	18.85	1087.42	230.44	0.07	0.02
85	597.22	4	SLE Q	-28208.90	12793.30	-136.03	46.00	136.36	0.50	20.00	197.70	18.85	996.20	145.99	0.04	0.01
86	656.94	4	SLE Q	-27421.70	10116.50	-107.57	46.00	136.36	0.50	20.00	199.72	15.71	846.03	80.25	0.02	0.01
87	716.67	4	SLE Q	-26639.00	7743.79	-82.34	46.00	136.36	0.50	20.00	179.74	12.57	551.27	36.03	0.01	0.00
88	776.39	4	SLE Q	-25860.60	5687.76	-60.48	46.00	136.36	0.50	20.00	227.69	3.14	213.15	10.67	0.00	0.00
112	0.00	3	SLE F	-35091.80	31807.80	-338.22	46.00	136.36	0.50	20.00	203.98	21.99	1231.30	729.06	0.21	0.07
113	59.72	3	SLE F	-35516.50	34055.90	-362.12	46.00	136.36	0.50	20.00	204.88	21.99	1241.24	806.41	0.23	0.08
114	119.44	3	SLE F	-34683.20	34419.60	-365.99	46.00	136.36	0.50	20.00	205.40	21.99	1246.91	830.41	0.24	0.08
115	179.17	3	SLE F	-33855.50	33371.60	-354.85	46.00	136.36	0.50	20.00	205.30	21.99	1245.82	802.22	0.23	0.08
116	238.89	3	SLE F	-33033.30	31316.50	-333.00	46.00	136.36	0.50	20.00	204.71	21.99	1239.30	736.82	0.21	0.07
117	298.61	3	SLE F	-32216.60	28593.00	-304.04	46.00	136.36	0.50	20.00	203.62	21.99	1227.36	647.02	0.19	0.07
118	358.33	3	SLE F	-31405.10	25477.90	-270.91	46.00	136.36	0.50	20.00	201.96	21.99	1209.11	543.48	0.16	0.05
119	418.06	3	SLE F	-30598.70	22191.60	-235.97	46.00	136.36	0.50	20.00	199.55	21.99	1182.56	434.95	0.13	0.04
120	477.78	3	SLE F	-29797.30	18904.20	-201.01	46.00	136.36	0.50	20.00	196.08	21.99	1144.43	328.59	0.10	0.03
121	537.50	3	SLE F	-29000.70	15741.80	-167.39	46.00	136.36	0.50	20.00	207.38	18.85	1087.42	230.44	0.07	0.02
122	597.22	3	SLE F	-28208.90	12793.30	-136.03	46.00	136.36	0.50	20.00	197.70	18.85	996.20	145.99	0.04	0.01
123	656.94	3	SLE F	-27421.70	10116.50	-107.57	46.00	136.36	0.50	20.00	199.72	15.71	846.03	80.25	0.02	0.01
124	716.67	3	SLE F	-26639.00	7743.79	-82.34	46.00	136.36	0.50	20.00	179.74	12.57	551.27	36.03	0.01	0.00
125	776.39	3	SLE F	-25860.60	5687.76	-60.48	46.00	136.36	0.50	20.00	227.69	3.14	213.15	10.67	0.00	0.00

Verifiche principali

Caso	Tipo
1	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
3	SLU N cost - min. sic.
40	C.Rare - Sc min (max compr.),C.Rare - Sf max (max traz.),C.Rare - Sf min (max compr.)
53	C.Rare - Sc max (min. compr.)
77	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf max (max traz.),C.Q.Per. - Sf min (max compr.),C.Q.Per. - Wk Max
90	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 11

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 11 (-22)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	73396.10	7491.53	-424.72	48745.20	-2080.87
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	73396.10	7491.53	-424.72	48745.20	-2080.87
2	2	SLE R	RVN	54367.50	5549.28	-314.61	36107.60	-1541.38
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	54367.50	5549.28	-314.61	36107.60	-1541.38
3	3	SLE F	RVN	54367.50	5549.28	-314.61	36107.60	-1541.38
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	54367.50	5549.28	-314.61	36107.60	-1541.38
4	4	SLE Q	RVN	54367.50	5549.28	-314.61	36107.60	-1541.38
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	54367.50	5549.28	-314.61	36107.60	-1541.38

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-73396.10	-7491.53	424.72	-48745.20	2080.87
2	2	SLE R	1	-54367.50	-5549.28	314.61	-36107.60	1541.38
3	3	SLE F	1	-54367.50	-5549.28	314.61	-36107.60	1541.38
4	4	SLE Q	1	-54367.50	-5549.28	314.61	-36107.60	1541.38

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-73396.10	48174.90	2056.52	-73396.10	176882.00	7465.61	2-3	177.50	3.672
2	59.72	1	SLU	-73292.10	51048.60	2179.20	-73292.10	176841.00	7463.17	2-3	177.50	3.464
3	119.44	1	SLU	-71407.50	51225.80	2186.76	-71407.50	176095.00	7418.65	2-3	177.50	3.438
4	179.17	1	SLU	-69534.50	49396.00	2108.65	-69534.50	175354.00	7374.39	2-3	177.50	3.550
5	238.89	1	SLU	-67672.80	46147.40	1969.97	-67672.80	174617.00	7330.46	2-3	177.50	3.784
6	298.61	1	SLU	-65822.20	41970.80	1791.68	-65822.20	173884.00	7286.85	2-3	177.50	4.143
7	358.33	1	SLU	-63982.30	37265.60	1590.82	-63982.30	173154.00	7243.55	2-3	177.50	4.646
8	418.06	1	SLU	-62152.90	32348.50	1380.92	-62152.90	172428.00	7200.30	2-3	177.50	5.330
9	477.78	1	SLU	-60333.60	27462.50	1172.34	-60333.60	171703.00	7157.11	2-3	177.50	6.252
10	537.50	1	SLU	-58524.10	22786.60	972.73	-58524.10	170983.00	7114.22	2-3	177.50	7.503
11	597.22	1	SLU	-56724.20	18445.70	787.42	-56724.20	170265.00	7071.61	2-3	177.50	9.230
12	656.94	1	SLU	-54933.60	14519.60	619.82	-54933.60	169551.00	7029.27	2-3	177.50	11.677
13	716.67	1	SLU	-53151.90	11051.80	471.79	-53151.90	168841.00	6987.20	2-3	177.50	15.276
14	776.39	1	SLU	-51378.90	8057.08	343.95	-51378.90	168131.00	6944.89	2-3	177.50	20.866
15	836.11	1	SLU	-49614.30	5528.25	235.99	-49614.30	167425.00	6902.83	2-3	177.50	30.283
16	895.83	1	SLU	-47857.70	3442.38	146.95	-47857.70	166721.00	6861.01	2-3	177.50	48.429
17	955.56	1	SLU	-46109.00	1765.57	75.37	-2571250.00	166020.00	6819.44	2-3	177.50	55.765
18	1015.28	1	SLU	-44367.80	457.15	19.52	-2571250.00	165322.00	6778.10	2-3	177.50	57.953
19	1075.00	1	SLU	-42633.80	-527.01	-22.50	-2571250.00	-164485.00	-7314.33	2-3	357.50	60.310
20	1134.72	1	SLU	-40906.80	-1231.97	-52.59	-2571250.00	-163771.00	-7274.82	2-3	357.50	62.856
21	1194.44	1	SLU	-39186.50	-1701.68	-72.64	-2571250.00	-163060.00	-7235.52	2-3	357.50	65.616
22	1254.17	1	SLU	-37472.50	-1977.67	-84.42	-2571250.00	-162350.00	-7196.42	2-3	357.50	68.617
23	1313.89	1	SLU	-35764.70	-2098.10	-89.57	-2571250.00	-161643.00	-7157.36	2-3	357.50	71.893
24	1373.61	1	SLU	-34062.70	-2097.18	-89.53	-2571250.00	-160935.00	-7118.13	2-3	357.50	75.486
25	1433.33	1	SLU	-32366.30	-2004.98	-85.59	-2571250.00	-160229.00	-7079.10	2-3	357.50	79.442
26	1493.06	1	SLU	-30675.10	-1847.39	-78.86	-2571250.00	-159525.00	-7040.23	2-3	357.50	83.822
27	1552.78	1	SLU	-28989.00	-1646.34	-70.28	-2571250.00	-158821.00	-6997.23	2-3	357.50	88.697
28	1612.50	1	SLU	-27307.50	-1420.09	-60.62	-2571250.00	-158117.00	-6948.80	2-3	357.50	94.159
29	1672.22	1	SLU	-25630.60	-1183.63	-50.53	-2571250.00	-157412.00	-6899.33	2-3	357.50	>100
30	1731.94	1	SLU	-23957.80	-949.13	-40.52	-2571250.00	-156708.00	-6850.01	2-3	357.50	>100
31	1791.67	1	SLU	-22288.90	-726.39	-31.01	-2571250.00	-156006.00	-6800.95	2-3	357.50	>100
32	1851.39	1	SLU	-20623.70	-523.34	-22.34	-2571250.00	-155305.00	-6752.14	2-3	357.50	>100
33	1911.11	1	SLU	-18961.80	-346.45	-14.79	-2571250.00	-154606.00	-6703.60	2-3	357.50	>100

34	1970.83	1	SLU	-17303.00	-201.14	-8.59	-2571250.00	-153905.00	-6654.63	2-3	357.50	>100
35	2030.56	1	SLU	-15647.10	-92.12	-3.93	-2571250.00	-153204.00	-6604.96	2-3	357.50	>100
36	2090.28	1	SLU	-13993.70	-23.70	-1.01	-2571250.00	-152504.00	-6555.52	2-3	357.50	>100
37	2150.00	1	SLU	-12342.50	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7491.53	-424.72	0.85	11.31	7503.56	1.00	32294.70	342181.00	32294.70	4.304
2	59.72	1	SLU	2346.03	-133.00	0.85	11.31	2349.80	1.00	32294.70	342166.00	32294.70	13.744
3	119.44	1	SLU	-1560.67	88.48	0.85	11.31	1563.18	1.00	32294.70	341896.00	32294.70	20.660
4	179.17	1	SLU	-4398.91	249.39	0.85	11.31	4405.97	1.00	32294.70	341628.00	32294.70	7.330
5	238.89	1	SLU	-6335.90	359.20	0.85	11.31	6346.08	1.00	32294.70	341362.00	32294.70	5.089
6	298.61	1	SLU	-7530.21	426.91	0.85	11.31	7542.30	1.00	32294.70	341096.00	32294.70	4.282
7	358.33	1	SLU	-8127.87	460.79	0.85	11.31	8140.92	1.00	32294.70	340833.00	32294.70	3.967
8	418.06	1	SLU	-8260.01	468.29	0.85	11.31	8273.28	1.00	32294.70	340571.00	32294.70	3.904
9	477.78	1	SLU	-8041.75	455.91	0.85	11.31	8054.66	1.00	32294.70	340310.00	32294.70	4.009
10	537.50	1	SLU	-7571.83	429.27	0.85	11.31	7583.99	1.00	32294.70	340051.00	32294.70	4.258
11	597.22	1	SLU	-6933.16	393.06	0.85	11.31	6944.29	1.00	32294.70	339793.00	32294.70	4.651
12	656.94	1	SLU	-6193.65	351.14	0.85	11.31	6203.59	1.00	32294.70	339537.00	32294.70	5.206
13	716.67	1	SLU	-5407.52	306.57	0.85	11.31	5416.20	1.00	32294.70	339282.00	32294.70	5.963
14	776.39	1	SLU	-4616.75	261.74	0.85	11.31	4624.16	1.00	32294.70	339028.00	32294.70	6.984
15	836.11	1	SLU	-3852.65	218.42	0.85	11.31	3858.84	1.00	32294.70	338775.00	32294.70	8.369
16	895.83	1	SLU	-3137.40	177.87	0.85	11.31	3142.44	1.00	32294.70	338523.00	32294.70	10.277
17	955.56	1	SLU	-2485.56	140.91	0.85	11.31	2489.55	1.00	32294.70	338273.00	32294.70	12.972
18	1015.28	1	SLU	-1905.50	108.03	0.85	11.31	1908.56	1.00	32294.70	338023.00	32294.70	16.921
19	1075.00	1	SLU	-1400.68	79.41	0.85	11.31	1402.93	1.00	32294.70	337775.00	32294.70	23.020
20	1134.72	1	SLU	-970.78	55.04	0.85	11.31	972.34	1.00	32294.70	337528.00	32294.70	33.213
21	1194.44	1	SLU	-612.74	34.74	0.85	11.31	613.72	1.00	32294.70	337281.00	32294.70	52.621
22	1254.17	1	SLU	-321.55	18.23	0.85	11.31	322.06	1.00	32294.70	337036.00	32294.70	>100
23	1313.89	1	SLU	-91.01	5.16	0.85	11.31	91.16	1.00	32294.70	336791.00	32294.70	>100
24	1373.61	1	SLU	85.71	-4.86	0.85	11.31	85.85	1.00	32294.70	336547.00	32294.70	>100
25	1433.33	1	SLU	215.64	-12.23	0.85	11.31	215.99	1.00	32294.70	336304.00	32294.70	>100
26	1493.06	1	SLU	305.63	-17.33	0.85	11.31	306.12	1.00	32294.70	336062.00	32294.70	>100
27	1552.78	1	SLU	362.10	-20.53	0.85	11.31	362.69	1.00	32294.70	335820.00	32294.70	89.044
28	1612.50	1	SLU	390.88	-22.16	0.85	11.31	391.51	1.00	32294.70	335580.00	32294.70	82.488
29	1672.22	1	SLU	397.07	-22.51	0.85	11.31	397.70	1.00	32294.70	335339.00	32294.70	81.203
30	1731.94	1	SLU	384.99	-21.83	0.85	11.31	385.61	1.00	32294.70	335100.00	32294.70	83.749
31	1791.67	1	SLU	358.21	-20.31	0.85	11.31	358.79	1.00	32294.70	334861.00	32294.70	90.011
32	1851.39	1	SLU	319.51	-18.11	0.85	11.31	320.02	1.00	32294.70	334622.00	32294.70	>100
33	1911.11	1	SLU	270.96	-15.36	0.85	11.31	271.40	1.00	32294.70	334384.00	32294.70	>100
34	1970.83	1	SLU	214.03	-12.13	0.85	11.31	214.37	1.00	32294.70	334147.00	32294.70	>100
35	2030.56	1	SLU	149.61	-8.48	0.85	11.31	149.85	1.00	32294.70	333909.00	32294.70	>100
36	2090.28	1	SLU	78.20	-4.43	0.85	11.31	78.33	1.00	32294.70	333673.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_c <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-54367.50	1523.35	35685.10	43.98	34.56	33.70	639.65	
39	59.72	2	SLE R	-54526.20	1614.22	37813.80	43.98	34.56	35.94	712.35	
40	119.44	2	SLE R	-53163.80	1619.82	37945.00	43.98	34.56	36.19	732.55	
41	179.17	2	SLE R	-51810.10	1561.96	36589.60	43.98	34.56	34.85	700.13	
42	238.89	2	SLE R	-50464.80	1459.24	34183.30	43.98	34.56	32.40	630.71	
43	298.61	2	SLE R	-49127.80	1327.17	31089.50	43.98	34.56	29.22	538.00	
44	358.33	2	SLE R	-47798.80	1178.39	27604.20	43.98	34.56	25.62	433.73	
45	418.06	2	SLE R	-46477.60	1022.90	23961.90	40.84	37.70	21.86	327.90	
46	477.78	2	SLE R	-45163.90	868.40	20342.60	37.70	40.84	18.15	247.87	
47	537.50	2	SLE R	-43857.70	720.54	16878.90	37.70	40.84	14.72	202.92	
48	597.22	2	SLE R	-42558.60	583.27	13663.50	31.42	47.12	11.73	163.53	
49	656.94	2	SLE R	-41266.40	459.13	10755.30	25.13	53.41	9.35	131.58	
50	716.67	2	SLE R	-39981.00	349.47	8186.55	15.71	62.83	7.56	107.31	
51	776.39	2	SLE R	-38702.10	254.78	5968.21	0.00	78.54	6.23	89.23	
52	836.11	2	SLE R	-37429.50	174.81	4095.00	0.00	78.54	5.16	74.48	
53	895.83	2	SLE R	-36163.00	108.85	2549.91	0.00	78.54	4.26	62.05	
54	955.56	2	SLE R	-34902.40	55.83	1307.83	0.00	78.54	3.51	51.77	
55	1015.28	2	SLE R	-33647.50	14.46	338.63	0.00	78.54	2.91	43.41	
56	1075.00	2	SLE R	-32398.10	-16.66	-390.38	0.00	78.54	2.84	42.24	
57	1134.72	2	SLE R	-31154.00	-38.96	-912.57	0.00	78.54	3.00	44.38	
58	1194.44	2	SLE R	-29915.00	-53.81	-1260.50	0.00	78.54	3.08	45.31	
59	1254.17	2	SLE R	-28680.80	-62.54	-1464.94	0.00	78.54	3.09	45.23	
60	1313.89	2	SLE R	-27451.30	-66.34	-1554.15	0.00	78.54	3.04	44.36	
61	1373.61	2	SLE R	-26226.30	-66.32	-1553.47	0.00	78.54	2.94	42.86	
62	1433.33	2	SLE R	-25005.60	-63.40	-1485.17	0.00	78.54	2.80	40.89	
63	1493.06	2	SLE R	-23789.00	-58.42	-1368.44	0.00	78.54	2.64	38.59	
64	1552.78	2	SLE R	-22576.20	-52.06	-1219.51	0.00	78.54	2.47	36.07	
65	1612.50	2	SLE R	-21367.20	-44.91	-1051.92	0.00	78.54	2.28	33.42	
66	1672.22	2	SLE R	-20161.60	-37.43	-876.76	0.00	78.54	2.09	30.73	
67	1731.94	2	SLE R	-18959.30	-30.01	-703.06	0.00	78.54	1.90	28.04	
68	1791.67	2	SLE R	-17760.10	-22.97	-538.07	0.00	78.54	1.72	25.42	
69	1851.39	2	SLE R	-16563.80	-16.55	-387.66	0.00	78.54	1.55	22.91	
70	1911.11	2	SLE R	-15370.20	-10.96	-256.63	0.00	78.54	1.38	20.54	
71	1970.83	2	SLE R	-14179.10	-6.36	-148.99	0.00	78.54	1.23	18.33	
72	2030.56	2	SLE R	-12990.30	-2.91	-68.24	0.00	78.54	1.09	16.32	
73	2090.28	2	SLE R	-11803.70	-0.75	-17.56	0.00	78.54	0.97	14.51	
74	2150.00	2	SLE R	-10618.90	0.00	0.00	0.00	78.54	0.86	12.95	
75	0.00	4	SLE Q	-54367.50	1523.35	35685.10	43.98	34.56	33.70	639.65	
76	59.72	4	SLE Q	-54526.20	1614.22	37813.80	43.98	34.56	35.94	712.35	
77	119.44	4	SLE Q	-53163.80	1619.82	37945.00	43.98	34.56	36.19	732.55	
78	179.17	4	SLE Q	-51810.10	1561.96	36589.60	43.98	34.56	34.85	700.13	
79	238.89	4	SLE Q	-50464.80	1459.24	34183.30	43.98	34.56	32.40	630.71	
80	298.61	4	SLE Q	-49127.80	1327.17	31089.50	43.98	34.56	29.22	538.00	
81	358.33	4	SLE Q	-47798.80	1178.39	27604.20	43.98	34.56	25.62	433.73	
82	418.06	4	SLE Q	-46477.60	1022.90	23961.90	40.84	37.70	21.86	327.90	
83	477.78	4	SLE Q	-45163.90	868.40	20342.60	37.70	40.84	18.15	247.87	
84	537.50	4	SLE Q	-43857.70	720.54	16878.90	37.70	40.84	14.72	202.92	
85	597.22	4	SLE Q	-42558.60	583.27	13663.50	31.42	47.12	11.73	163.53	
86	656.94	4	SLE Q	-41266.40	459.13	10755.30	25.13	53.41	9.35	131.58	
87	716.67	4	SLE Q	-39981.00	349.47	8186.55	15.71	62.83	7.56	107.31	
88	776.39	4	SLE Q	-38702.10	254.78	5968.21	0.00	78.54	6.23	89.23	
89	836.11	4	SLE Q	-37429.50	174.81	4095.00	0.00	78.54	5.16	74.48	
90	895.83	4	SLE Q	-36163.00	108.85	2549.91	0.00	78.54	4.26	62.05	
91	955.56	4	SLE Q	-34902.40	55.83	1307.83	0.00	78.54	3.51	51.77	
92	1015.28	4	SLE Q	-33647.50	14.46	338.63	0.00	78.54	2.91	43.41	
93	1075.00	4	SLE Q	-32398.10	-16.66	-390.38	0.00	78.54	2.84	42.24	
94	1134.72	4	SLE Q	-31154.00	-38.96	-912.57	0.00	78.54	3.00	44.38	
95	1194.44	4	SLE Q	-29915.00	-53.81	-1260.50	0.00	78.54	3.08	45.31	
96	1254.17	4	SLE Q	-28680.80	-62.54	-1464.94	0.00	78.54	3.09	45.23	
97	1313.89	4	SLE Q	-27451.30	-66.34	-1554.15	0.00	78.54	3.04	44.36	
98	1373.61	4	SLE Q	-26226.30	-66.32	-1553.47	0.00	78.54	2.94	42.86	
99	1433.33	4	SLE Q	-25005.60	-63.40	-1485.17	0.00	78.54	2.80	40.89	
100	1493.06	4	SLE Q	-23789.00	-58.42	-1368.44	0.00	78.54	2.64	38.59	
101	1552.78	4	SLE Q	-22576.20	-52.06	-1219.51	0.00	78.54	2.47	36.07	
102	1612.50	4	SLE Q	-21367.20	-44.91	-1051.92	0.00	78.54	2.28	33.42	
103	1672.22	4	SLE Q	-20161.60	-37.43	-876.76	0.00	78.54	2.09	30.73	
104	1731.94	4	SLE Q	-18959.30	-30.01	-703.06	0.00	78.54	1.90	28.04	
105	1791.67	4	SLE Q	-17760.10	-22.97	-538.07	0.00	78.54	1.72	25.42	
106	1851.39	4	SLE Q	-16563.80	-16.55	-387.66	0.00	78.54	1.55	22.91	
107	1911.11	4	SLE Q	-15370.20	-10.96	-256.63	0.00	78.54	1.38	20.54	
108	1970.83	4	SLE Q	-14179.10	-6.36	-148.99	0.00	78.54	1.23	18.33	
109	2030.56	4	SLE Q	-12990.30	-2.91	-68.24	0.00	78.54	1.09	16.32	
110	2090.28	4	SLE Q	-11803.70	-0.75	-17.56	0.00	78.54	0.97	14.51	
111	2150.00	4	SLE Q	-10618.90	0.00	0.00	0.00	78.54	0.86	12.95	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	A_c $_{eff}$ <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-54367.50	35685.10	1523.35	46.00	136.36	0.50	20.00	214.81	18.85	1157.41	639.65	0.19	0.07
76	59.72	4	SLE Q	-54526.20	37813.80	1614.22	46.00	136.36	0.50	20.00	216.49	18.85	1173.24	712.35	0.21	0.08
77	119.44	4	SLE Q	-53163.80	37945.00	1619.82	46.00	136.36	0.50	20.00	217.30	18.85	1180.93	732.55	0.21	0.08
78	179.17	4	SLE Q	-51810.10	36589.60	1561.96	46.00	136.36	0.50	20.00	217.00	18.85	1178.15	700.13	0.20	0.08
79	238.89	4	SLE Q	-50464.80	34183.30	1459.24	46.00	136.36	0.50	20.00	215.79	18.85	1166.66	630.71	0.18	0.07
80	298.61	4	SLE Q	-49127.80	31089.50	1327.17	46.00	136.36	0.50	20.00	213.60	18.85	1146.02	538.00	0.16	0.06
81	358.33	4	SLE Q	-47798.80	27604.20	1178.39	46.00	136.36	0.50	20.00	210.20	18.85	1114.03	433.73	0.13	0.05
82	418.06	4	SLE Q	-46477.60	23961.90	1022.90	46.00	136.36	0.50	20.00	205.16	18.85	1066.47	327.90	0.10	0.03
83	477.78	4	SLE Q	-45163.90	20342.60	868.40	46.00	136.36	0.50	20.00	197.50	18.85	994.35	229.16	0.07	0.02
84	537.50	4	SLE Q	-43857.70	16878.90	720.54	46.00	136.36	0.50	20.00	185.78	18.85	883.83	144.90	0.04	0.01
85	597.22	4	SLE Q	-42558.60	13663.50	583.27	46.00	136.36	0.50	20.00	202.21	12.57	692.50	80.42	0.02	0.01
86	656.94	4	SLE Q	-41266.40	10755.30	459.13	46.00	136.36	0.50	20.00	157.24	12.57	409.93	36.88	0.01	0.00
112	0.00	3	SLE F	-54367.50	35685.10	1523.35	46.00	136.36	0.50	20.00	214.81	18.85	1157.41	639.65	0.19	0.07
113	59.72	3	SLE F	-54526.20	37813.80	1614.22	46.00	136.36	0.50	20.00	216.49	18.85	1173.24	712.35	0.21	0.08

114	119.44	3	SLE F	-53163.80	37945.00	1619.82	46.00	136.36	0.50	20.00	217.30	18.85	1180.93	732.55	0.21	0.08
115	179.17	3	SLE F	-51810.10	36589.60	1561.96	46.00	136.36	0.50	20.00	217.00	18.85	1178.15	700.13	0.20	0.08
116	238.89	3	SLE F	-50464.80	34183.30	1459.24	46.00	136.36	0.50	20.00	215.79	18.85	1166.66	630.71	0.18	0.07
117	298.61	3	SLE F	-49127.80	31089.50	1327.17	46.00	136.36	0.50	20.00	213.60	18.85	1146.02	538.00	0.16	0.06
118	358.33	3	SLE F	-47798.80	27604.20	1178.39	46.00	136.36	0.50	20.00	210.20	18.85	1114.03	433.73	0.13	0.05
119	418.06	3	SLE F	-46477.60	23961.90	1022.90	46.00	136.36	0.50	20.00	205.16	18.85	1066.47	327.90	0.10	0.03
120	477.78	3	SLE F	-45163.90	20342.60	868.40	46.00	136.36	0.50	20.00	197.50	18.85	994.35	229.16	0.07	0.02
121	537.50	3	SLE F	-43857.70	16878.90	720.54	46.00	136.36	0.50	20.00	185.78	18.85	883.83	144.90	0.04	0.01
122	597.22	3	SLE F	-42558.60	13663.50	583.27	46.00	136.36	0.50	20.00	202.21	12.57	692.50	80.42	0.02	0.01
123	656.94	3	SLE F	-41266.40	10755.30	459.13	46.00	136.36	0.50	20.00	157.24	12.57	409.93	36.88	0.01	0.00

Verifiche principali

Caso	Tipo
3	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
40	C.Rare - Sc min (max compr.),C.Rare - Sf max (max traz.),C.Rare - Sf min (max compr.)
51	C.Rare - Sc max (min. compr.)
77	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf max (max traz.),C.Q.Per. - Sf min (max compr.),C.Q.Per. - Wk Max
88	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 12

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 12 (-4)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	6326.08	7845.26	150.25	36496.80	601.83
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	6326.08	7845.26	150.25	36496.80	601.83
2	2	SLE R	RVN	4685.99	5811.31	111.30	27034.70	445.80
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	4685.99	5811.31	111.30	27034.70	445.80
3	3	SLE F	RVN	4685.99	5811.31	111.30	27034.70	445.80
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	4685.99	5811.31	111.30	27034.70	445.80
4	4	SLE Q	RVN	4685.99	5811.31	111.30	27034.70	445.80
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	4685.99	5811.31	111.30	27034.70	445.80

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-6326.08	-7845.26	-150.25	-36496.80	-601.83
2	2	SLE R	1	-4685.99	-5811.31	-111.30	-27034.70	-445.80
3	3	SLE F	1	-4685.99	-5811.31	-111.30	-27034.70	-445.80
4	4	SLE Q	1	-4685.99	-5811.31	-111.30	-27034.70	-445.80

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-6326.08	36004.80	-593.72	-6326.08	149357.00	-2952.42	2-3	181.25	4.149
2	59.72	1	SLU	-7147.88	39301.80	-648.08	-7147.88	149707.00	-2975.88	2-3	181.25	3.809
3	119.44	1	SLU	-7104.05	40242.80	-663.60	-7104.05	149688.00	-2974.63	2-3	181.25	3.720
4	179.17	1	SLU	-7061.38	39400.00	-649.70	-7061.38	149670.00	-2973.41	2-3	181.25	3.799
5	238.89	1	SLU	-7019.86	37266.30	-614.52	-7019.86	149652.00	-2972.22	2-3	181.25	4.016
6	298.61	1	SLU	-6979.48	34256.60	-564.89	-6979.48	149635.00	-2971.07	2-3	181.25	4.368
7	358.33	1	SLU	-6940.24	30712.40	-506.44	-6940.24	149618.00	-2969.95	2-3	181.25	4.872
8	418.06	1	SLU	-6902.14	26907.30	-443.70	-6902.14	149602.00	-2968.86	2-3	181.25	5.560
9	477.78	1	SLU	-6865.16	23054.50	-380.17	-6865.16	149587.00	-2967.80	2-3	181.25	6.489
10	537.50	1	SLU	-6829.30	19313.80	-318.48	-6829.30	149571.00	-2966.78	2-3	181.25	7.745
11	597.22	1	SLU	-6794.55	15799.50	-260.53	-6794.55	149557.00	-2965.79	2-3	181.25	9.466
12	656.94	1	SLU	-6760.92	12587.80	-207.57	-6760.92	149542.00	-2964.82	2-3	181.25	11.881
13	716.67	1	SLU	-6728.38	9723.86	-160.34	-6728.38	149528.00	-2963.90	2-3	181.25	15.378
14	776.39	1	SLU	-6696.95	7227.70	-119.18	-6696.95	149515.00	-2963.00	2-3	181.25	20.688
15	836.11	1	SLU	-6666.60	5100.30	-84.10	-6666.60	149502.00	-2962.13	2-3	181.25	29.314
16	895.83	1	SLU	-6637.35	3328.33	-54.88	-6637.35	149490.00	-2961.30	2-3	181.25	44.917
17	955.56	1	SLU	-6609.18	1888.41	-31.14	-6609.18	149478.00	-2960.50	2-3	181.25	79.160
18	1015.28	1	SLU	-6582.08	750.59	-12.38	-6582.08	149466.00	-2959.72	2-3	181.25	>100
19	1075.00	1	SLU	-6556.06	-118.79	1.96	-2571250.00	-149557.00	2101.71	2-3	0.62	>100
20	1134.72	1	SLU	-6531.11	-754.86	12.45	-6531.11	-149546.00	2102.35	2-3	0.62	>100
21	1194.44	1	SLU	-6507.23	-1192.52	19.66	-6507.23	-149536.00	2102.97	2-3	0.62	>100
22	1254.17	1	SLU	-6484.40	-1465.13	24.16	-6484.40	-149526.00	2103.56	2-3	0.62	>100
23	1313.89	1	SLU	-6462.64	-1603.71	26.45	-6462.64	-149517.00	2104.12	2-3	0.62	93.228
24	1373.61	1	SLU	-6441.93	-1636.37	26.98	-6441.93	-149508.00	2104.66	2-3	0.62	91.363
25	1433.33	1	SLU	-6422.27	-1588.01	26.19	-6422.27	-149500.00	2105.17	2-3	0.62	94.139
26	1493.06	1	SLU	-6403.65	-1480.32	24.41	-6403.65	-149492.00	2105.66	2-3	0.62	>100
27	1552.78	1	SLU	-6386.09	-1331.81	21.96	-6386.09	-149484.00	2106.11	2-3	0.62	>100
28	1612.50	1	SLU	-6369.56	-1158.06	19.10	-6369.56	-149477.00	2106.54	2-3	0.62	>100
29	1672.22	1	SLU	-6354.08	-972.02	16.03	-6354.08	-149471.00	2106.94	2-3	0.62	>100
30	1731.94	1	SLU	-6339.63	-784.32	12.93	-6339.63	-149465.00	2107.31	2-3	0.62	>100
31	1791.67	1	SLU	-6326.21	-603.65	9.95	-6326.21	-149459.00	2107.67	2-3	0.62	>100
32	1851.39	1	SLU	-6313.83	-437.17	7.21	-6313.83	-149454.00	2107.98	2-3	0.62	>100
33	1911.11	1	SLU	-6302.48	-290.79	4.80	-2571250.00	-149449.00	2108.27	2-3	0.62	>100
34	1970.83	1	SLU	-6292.15	-169.57	2.80	-2571250.00	-149444.00	2108.54	2-3	0.62	>100
35	2030.56	1	SLU	-6282.85	-77.99	1.29	-2571250.00	-149440.00	2108.78	2-3	0.62	>100
36	2090.28	1	SLU	-6274.58	-20.15	0.33	-2571250.00	-149437.00	2109.00	2-3	0.62	>100
37	2150.00	1	SLU	-6267.33	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7845.26	150.25	0.85	11.31	7846.70	1.00	32294.70	332574.00	32294.70	4.116
2	59.72	1	SLU	3377.21	64.68	0.85	11.31	3377.83	1.00	32294.70	332692.00	32294.70	9.561
3	119.44	1	SLU	-66.44	-1.27	0.85	11.31	66.45	1.00	32294.70	332686.00	32294.70	>100
4	179.17	1	SLU	-2618.39	-50.15	0.85	11.31	2618.87	1.00	32294.70	332680.00	32294.70	12.332
5	238.89	1	SLU	-4411.19	-84.48	0.85	11.31	4412.00	1.00	32294.70	332674.00	32294.70	7.320
6	298.61	1	SLU	-5572.22	-106.72	0.85	11.31	5573.24	1.00	32294.70	332668.00	32294.70	5.795
7	358.33	1	SLU	-6220.15	-119.12	0.85	11.31	6221.29	1.00	32294.70	332662.00	32294.70	5.191
8	418.06	1	SLU	-6462.63	-123.77	0.85	11.31	6463.82	1.00	32294.70	332657.00	32294.70	4.996
9	477.78	1	SLU	-6395.03	-122.47	0.85	11.31	6396.20	1.00	32294.70	332651.00	32294.70	5.049
10	537.50	1	SLU	-6099.94	-116.82	0.85	11.31	6101.06	1.00	32294.70	332646.00	32294.70	5.293
11	597.22	1	SLU	-5647.34	-108.16	0.85	11.31	5648.37	1.00	32294.70	332641.00	32294.70	5.718
12	656.94	1	SLU	-5095.12	-97.58	0.85	11.31	5096.05	1.00	32294.70	332637.00	32294.70	6.337
13	716.67	1	SLU	-4490.03	-85.99	0.85	11.31	4490.85	1.00	32294.70	332632.00	32294.70	7.191
14	776.39	1	SLU	-3868.77	-74.09	0.85	11.31	3869.48	1.00	32294.70	332627.00	32294.70	8.346
15	836.11	1	SLU	-3259.14	-62.42	0.85	11.31	3259.74	1.00	32294.70	332623.00	32294.70	9.907
16	895.83	1	SLU	-2681.31	-51.35	0.85	11.31	2681.80	1.00	32294.70	332619.00	32294.70	12.042
17	955.56	1	SLU	-2149.01	-41.16	0.85	11.31	2149.41	1.00	32294.70	332615.00	32294.70	15.025
18	1015.28	1	SLU	-1670.67	-32.00	0.85	11.31	1670.98	1.00	32294.70	332611.00	32294.70	19.327
19	1075.00	1	SLU	-1250.48	-23.95	0.85	11.31	1250.71	1.00	32294.70	332607.00	32294.70	25.821
20	1134.72	1	SLU	-889.32	-17.03	0.85	11.31	889.48	1.00	32294.70	332604.00	32294.70	36.307
21	1194.44	1	SLU	-585.60	-11.21	0.85	11.31	585.70	1.00	32294.70	332600.00	32294.70	55.138
22	1254.17	1	SLU	-335.97	-6.43	0.85	11.31	336.04	1.00	32294.70	332597.00	32294.70	96.105
23	1313.89	1	SLU	-135.95	-2.60	0.85	11.31	135.97	1.00	32294.70	332594.00	32294.70	>100
24	1373.61	1	SLU	19.65	0.38	0.85	11.31	19.65	1.00	32294.70	332591.00	32294.70	>100
25	1433.33	1	SLU	136.24	2.61	0.85	11.31	136.27	1.00	32294.70	332588.00	32294.70	>100
26	1493.06	1	SLU	219.23	4.20	0.85	11.31	219.27	1.00	32294.70	332585.00	32294.70	>100
27	1552.78	1	SLU	273.75	5.24	0.85	11.31	273.80	1.00	32294.70	332583.00	32294.70	>100
28	1612.50	1	SLU	304.47	5.83	0.85	11.31	304.53	1.00	32294.70	332580.00	32294.70	>100
29	1672.22	1	SLU	315.57	6.04	0.85	11.31	315.63	1.00	32294.70	332578.00	32294.70	>100

30	1731.94	1	SLU	310.58	5.95	0.85	11.31	310.63	1.00	32294.70	332576.00	32294.70	>100
31	1791.67	1	SLU	292.43	5.60	0.85	11.31	292.48	1.00	32294.70	332574.00	32294.70	>100
32	1851.39	1	SLU	263.44	5.05	0.85	11.31	263.49	1.00	32294.70	332572.00	32294.70	>100
33	1911.11	1	SLU	225.34	4.32	0.85	11.31	225.38	1.00	32294.70	332571.00	32294.70	>100
34	1970.83	1	SLU	179.34	3.43	0.85	11.31	179.37	1.00	32294.70	332569.00	32294.70	>100
35	2030.56	1	SLU	126.22	2.42	0.85	11.31	126.24	1.00	32294.70	332568.00	32294.70	>100
36	2090.28	1	SLU	66.38	1.27	0.85	11.31	66.39	1.00	32294.70	332567.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_c <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-4685.99	-439.79	26670.20	53.41	25.13	27.03	946.17	
39	59.72	2	SLE R	-5530.43	-480.06	29112.50	53.41	25.13	29.50	1026.87	
40	119.44	2	SLE R	-5531.61	-491.56	29809.50	53.41	25.13	30.20	1053.33	
41	179.17	2	SLE R	-5533.69	-481.26	29185.20	53.41	25.13	29.57	1029.59	
42	238.89	2	SLE R	-5536.68	-455.20	27604.60	53.41	25.13	27.96	969.50	
43	298.61	2	SLE R	-5540.57	-418.44	25375.30	50.27	28.27	25.70	884.76	
44	358.33	2	SLE R	-5545.36	-375.14	22749.90	50.27	28.27	23.03	784.98	
45	418.06	2	SLE R	-5551.06	-328.67	19931.40	50.27	28.27	20.17	677.88	
46	477.78	2	SLE R	-5557.67	-281.60	17077.40	50.27	28.27	17.26	569.47	
47	537.50	2	SLE R	-5565.18	-235.91	14306.50	50.27	28.27	14.44	464.27	
48	597.22	2	SLE R	-5573.60	-192.99	11703.30	50.27	28.27	11.78	365.54	
49	656.94	2	SLE R	-5582.93	-153.76	9324.32	50.27	28.27	9.34	275.49	
50	716.67	2	SLE R	-5593.17	-118.77	7202.86	47.12	31.42	7.16	195.54	
51	776.39	2	SLE R	-5604.32	-88.28	5353.85	47.12	31.42	5.24	126.56	
52	836.11	2	SLE R	-5616.38	-62.30	3778.00	43.98	34.56	3.58	69.43	
53	895.83	2	SLE R	-5629.37	-40.65	2465.43	37.70	40.84	2.19	29.85	
54	955.56	2	SLE R	-5643.27	-23.07	1398.82	21.99	56.55	1.23	17.25	
55	1015.28	2	SLE R	-5658.09	-9.17	555.99	0.00	78.54	0.75	10.80	
56	1075.00	2	SLE R	-5673.83	1.45	-87.99	0.00	78.54	0.51	7.54	
57	1134.72	2	SLE R	-5690.51	9.22	-559.16	0.00	78.54	0.75	10.87	
58	1194.44	2	SLE R	-5708.11	14.57	-883.35	0.00	78.54	0.92	13.17	
59	1254.17	2	SLE R	-5726.64	17.90	-1085.28	12.57	65.97	1.03	14.66	
60	1313.89	2	SLE R	-5746.10	19.59	-1187.93	15.71	62.83	1.09	15.50	
61	1373.61	2	SLE R	-5766.50	19.99	-1212.12	15.71	62.83	1.11	15.72	
62	1433.33	2	SLE R	-5787.84	19.40	-1176.30	15.71	62.83	1.09	15.45	
63	1493.06	2	SLE R	-5810.13	18.08	-1096.53	12.57	65.97	1.04	14.84	
64	1552.78	2	SLE R	-5833.37	16.27	-986.52	0.00	78.54	0.99	14.05	
65	1612.50	2	SLE R	-5857.56	14.15	-857.82	0.00	78.54	0.92	13.17	
66	1672.22	2	SLE R	-5882.70	11.87	-720.01	0.00	78.54	0.85	12.24	
67	1731.94	2	SLE R	-5908.80	9.58	-580.98	0.00	78.54	0.78	11.29	
68	1791.67	2	SLE R	-5935.87	7.37	-447.15	0.00	78.54	0.71	10.38	
69	1851.39	2	SLE R	-5963.90	5.34	-323.83	0.00	78.54	0.65	9.55	
70	1911.11	2	SLE R	-5992.91	3.55	-215.40	0.00	78.54	0.60	8.82	
71	1970.83	2	SLE R	-6022.90	2.07	-125.61	0.00	78.54	0.55	8.23	
72	2030.56	2	SLE R	-6053.86	0.95	-57.77	0.00	78.54	0.52	7.79	
73	2090.28	2	SLE R	-6085.82	0.25	-14.92	0.00	78.54	0.50	7.53	
74	2150.00	2	SLE R	-6118.77	0.00	0.00	0.00	78.54	0.50	7.46	
75	0.00	4	SLE Q	-4685.99	-439.79	26670.20	53.41	25.13	27.03	946.17	
76	59.72	4	SLE Q	-5530.43	-480.06	29112.50	53.41	25.13	29.50	1026.87	
77	119.44	4	SLE Q	-5531.61	-491.56	29809.50	53.41	25.13	30.20	1053.33	
78	179.17	4	SLE Q	-5533.69	-481.26	29185.20	53.41	25.13	29.57	1029.59	
79	238.89	4	SLE Q	-5536.68	-455.20	27604.60	53.41	25.13	27.96	969.50	
80	298.61	4	SLE Q	-5540.57	-418.44	25375.30	50.27	28.27	25.70	884.76	
81	358.33	4	SLE Q	-5545.36	-375.14	22749.90	50.27	28.27	23.03	784.98	
82	418.06	4	SLE Q	-5551.06	-328.67	19931.40	50.27	28.27	20.17	677.88	
83	477.78	4	SLE Q	-5557.67	-281.60	17077.40	50.27	28.27	17.26	569.47	
84	537.50	4	SLE Q	-5565.18	-235.91	14306.50	50.27	28.27	14.44	464.27	
85	597.22	4	SLE Q	-5573.60	-192.99	11703.30	50.27	28.27	11.78	365.54	
86	656.94	4	SLE Q	-5582.93	-153.76	9324.32	50.27	28.27	9.34	275.49	
87	716.67	4	SLE Q	-5593.17	-118.77	7202.86	47.12	31.42	7.16	195.54	
88	776.39	4	SLE Q	-5604.32	-88.28	5353.85	47.12	31.42	5.24	126.56	
89	836.11	4	SLE Q	-5616.38	-62.30	3778.00	43.98	34.56	3.58	69.43	
90	895.83	4	SLE Q	-5629.37	-40.65	2465.43	37.70	40.84	2.19	29.85	
91	955.56	4	SLE Q	-5643.27	-23.07	1398.82	21.99	56.55	1.23	17.25	
92	1015.28	4	SLE Q	-5658.09	-9.17	555.99	0.00	78.54	0.75	10.80	
93	1075.00	4	SLE Q	-5673.83	1.45	-87.99	0.00	78.54	0.51	7.54	
94	1134.72	4	SLE Q	-5690.51	9.22	-559.16	0.00	78.54	0.75	10.87	
95	1194.44	4	SLE Q	-5708.11	14.57	-883.35	0.00	78.54	0.92	13.17	
96	1254.17	4	SLE Q	-5726.64	17.90	-1085.28	12.57	65.97	1.03	14.66	
97	1313.89	4	SLE Q	-5746.10	19.59	-1187.93	15.71	62.83	1.09	15.50	
98	1373.61	4	SLE Q	-5766.50	19.99	-1212.12	15.71	62.83	1.11	15.72	
99	1433.33	4	SLE Q	-5787.84	19.40	-1176.30	15.71	62.83	1.09	15.45	
100	1493.06	4	SLE Q	-5810.13	18.08	-1096.53	12.57	65.97	1.04	14.84	
101	1552.78	4	SLE Q	-5833.37	16.27	-986.52	0.00	78.54	0.99	14.05	
102	1612.50	4	SLE Q	-5857.56	14.15	-857.82	0.00	78.54	0.92	13.17	
103	1672.22	4	SLE Q	-5882.70	11.87	-720.01	0.00	78.54	0.85	12.24	
104	1731.94	4	SLE Q	-5908.80	9.58	-580.98	0.00	78.54	0.78	11.29	
105	1791.67	4	SLE Q	-5935.87	7.37	-447.15	0.00	78.54	0.71	10.38	
106	1851.39	4	SLE Q	-5963.90	5.34	-323.83	0.00	78.54	0.65	9.55	
107	1911.11	4	SLE Q	-5992.91	3.55	-215.40	0.00	78.54	0.60	8.82	
108	1970.83	4	SLE Q	-6022.90	2.07	-125.61	0.00	78.54	0.55	8.23	
109	2030.56	4	SLE Q	-6053.86	0.95	-57.77	0.00	78.54	0.52	7.79	
110	2090.28	4	SLE Q	-6085.82	0.25	-14.92	0.00	78.54	0.50	7.53	
111	2150.00	4	SLE Q	-6118.77	0.00	0.00	0.00	78.54	0.50	7.46	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	$A_{c\ eff}$ <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-4685.99	26670.20	-439.79	46.00	136.36	0.50	20.00	215.47	21.99	1357.63	946.17	0.28	0.10
76	59.72	4	SLE Q	-5530.43	29112.50	-480.06	46.00	136.36	0.50	20.00	215.33	21.99	1356.05	1026.87	0.30	0.11
77	119.44	4	SLE Q	-5531.61	29809.50	-491.56	46.00	136.36	0.50	20.00	215.37	21.99	1356.54	1053.33	0.31	0.11
78	179.17	4	SLE Q	-5533.69	29185.20	-481.26	46.00	136.36	0.50	20.00	215.33	21.99	1356.09	1029.59	0.30	0.11
79	238.89	4	SLE Q	-5536.68	27604.60	-455.20	46.00	136.36	0.50	20.00	215.22	21.99	1354.86	969.50	0.28	0.10
80	298.61	4	SLE Q	-5540.57	25375.30	-418.44	46.00	136.36	0.50	20.00	215.04	21.99	1352.87	884.76	0.26	0.09
81	358.33	4	SLE Q	-5545.36	22749.90	-375.14	46.00	136.36	0.50	20.00	214.78	21.99	1349.99	784.98	0.23	0.08
82	418.06	4	SLE Q	-5551.06	19931.40	-328.67	46.00	136.36	0.50	20.00	214.41	21.99	1346.00	677.88	0.20	0.07
83	477.78	4	SLE Q	-5557.67	17077.40	-281.60	46.00	136.36	0.50	20.00	213.92	21.99	1340.53	569.47	0.17	0.06
84	537.50	4	SLE Q	-5565.18	14306.50	-235.91	46.00	136.36	0.50	20.00	213.23	21.99	1332.95	464.27	0.14	0.05
85	597.22	4	SLE Q	-5573.60	11703.30	-192.99	46.00	136.36	0.50	20.00	212.25	21.99	1322.21	365.54	0.11	0.04
86	656.94	4	SLE Q	-5582.93	9324.32	-153.76	46.00	136.36	0.50	20.00	210.81	21.99	1306.44	275.49	0.08	0.03
87	716.67	4	SLE Q	-5593.17	7202.86	-118.77	46.00	136.36	0.50	20.00	208.59	21.99	1281.96	195.54	0.06	0.02
88	776.39	4	SLE Q	-5604.32	5353.85	-88.28	46.00	136.36	0.50	20.00	204.84	21.99	1240.69	126.56	0.04	0.01
89	836.11	4	SLE Q	-5616.38	3778.00	-62.30	46.00	136.36	0.50	20.00	197.71	21.99	1162.33	69.43	0.02	0.01
90	895.83	4	SLE Q	-5629.37	2465.43	-40.65	46.00	136.36	0.50	20.00	195.42	18.85	974.75	26.63	0.01	0.00
91	955.56	4	SLE Q	-5643.27	1398.82	-23.07	46.00	136.36	0.50	20.00	165.13	9.42	344.60	4.13	0.00	0.00
112	0.00	3	SLE F	-4685.99	26670.20	-439.79	46.00	136.36	0.50	20.00	215.47	21.99	1357.63	946.17	0.28	0.10
113	59.72	3	SLE F	-5530.43	29112.50	-480.06	46.00	136.36	0.50	20.00	215.33	21.99	1356.05	1026.87	0.30	0.11
114	119.44	3	SLE F	-5531.61	29809.50	-491.56	46.00	136.36	0.50	20.00	215.37	21.99	1356.54	1053.33	0.31	0.11
115	179.17	3	SLE F	-5533.69	29185.20	-481.26	46.00	136.36	0.50	20.00	215.33	21.99	1356.09	1029.59	0.30	0.11
116	238.89	3	SLE F	-5536.68	27604.60	-455.20	46.00	136.36	0.50	20.00	215.22	21.99	1354.86	969.50	0.28	0.10
117	298.61	3	SLE F	-5540.57	25375.30	-418.44	46.00	136.36	0.50	20.00	215.04	21.99	1352.87	884.76	0.26	0.09
118	358.33	3	SLE F	-5545.36	22749.90	-375.14	46.00	136.36	0.50	20.00	214.78	21.99	1349.99	784.98	0.23	0.08
119	418.06	3	SLE F	-5551.06	19931.40	-328.67	46.00	136.36	0.50	20.00	214.41	21.99	1346.00	677.88	0.20	0.07
120	477.78	3	SLE F	-5557.67	17077.40	-281.60	46.00	136.36	0.50	20.00	213.92	21.99	1340.53	569.47	0.17	0.06
121	537.50	3	SLE F	-5565.18	14306.50	-235.91	46.00	136.36	0.50	20.00	213.23	21.99	1332.95	464.27	0.14	0.05
122	597.22	3	SLE F	-5573.60	11703.30	-192.99	46.00	136.36	0.50	20.00	212.25	21.99	1322.21	365.54	0.11	0.04
123	656.94	3	SLE F	-5582.93	9324.32	-153.76	46.00	136.36	0.50	20.00	210.81	21.99	1306.44	275.49	0.08	0.03
124	716.67	3	SLE F	-5593.17	7202.86	-118.77	46.00	136.36	0.50	20.00	208.59	21.99	1281.96	195.54	0.06	0.02
125	776.39	3	SLE F	-5604.32	5353.85	-88.28	46.00	136.36	0.50	20.00	204.84	21.99	1240.69	126.56	0.04	0.01
126	836.11	3	SLE F	-5616.38	3778.00	-62.30	46.00	136.36	0.50	20.00	197.71	21.99	1162.33	69.43	0.02	0.01
127	895.83	3	SLE F	-5629.37	2465.43	-40.65	46.00	136.36	0.50	20.00	195.42	18.85	974.75	26.63	0.01	0.00
128	955.56	3	SLE F	-5643.27	1398.82	-23.07	46.00	136.36	0.50	20.00	165.13	9.42	344.60	4.13	0.00	0.00

Verifiche principali

Caso	Tipo
1	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
3	SLU N cost - min. sic.
40	C.Rare - Sc min (max compr.),C.Rare - Sf max (max traz.),C.Rare - Sf min (max compr.)
58	C.Rare - Sc max (min. compr.)
77	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf max (max traz.),C.Q.Per. - Sf min (max compr.),C.Q.Per. - Wk Max
95	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 13

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>

1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 13 (-3)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	6799.50	7807.29	-156.21	36576.50	118.89
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	6799.50	7807.29	-156.21	36576.50	118.89
2	2	SLE R	RVN	5036.67	5783.18	-115.71	27093.70	88.07
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	5036.67	5783.18	-115.71	27093.70	88.07
3	3	SLE F	RVN	5036.67	5783.18	-115.71	27093.70	88.07
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	5036.67	5783.18	-115.71	27093.70	88.07
4	4	SLE Q	RVN	5036.67	5783.18	-115.71	27093.70	88.07
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	5036.67	5783.18	-115.71	27093.70	88.07

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-6799.50	-7807.29	156.21	-36576.50	-118.89
2	2	SLE R	1	-5036.67	-5783.18	115.71	-27093.70	-88.07
3	3	SLE F	1	-5036.67	-5783.18	115.71	-27093.70	-88.07
4	4	SLE Q	1	-5036.67	-5783.18	115.71	-27093.70	-88.07

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-6799.50	36085.00	-117.30	-6799.50	149631.00	402.86	2-3	180.00	4.147
2	59.72	1	SLU	-7614.77	39361.50	-127.95	-7614.77	149978.00	381.00	2-3	180.00	3.810
3	119.44	1	SLU	-7557.94	40285.00	-130.95	-7557.94	149953.00	382.52	2-3	180.00	3.722
4	179.17	1	SLU	-7502.35	39427.60	-128.16	-7502.35	149930.00	384.01	2-3	180.00	3.803
5	238.89	1	SLU	-7447.98	37282.00	-121.19	-7447.98	149907.00	385.47	2-3	180.00	4.021
6	298.61	1	SLU	-7394.83	34262.90	-111.37	-7394.83	149884.00	386.90	2-3	180.00	4.375
7	358.33	1	SLU	-7342.88	30711.50	-99.83	-7342.88	149862.00	388.30	2-3	180.00	4.880
8	418.06	1	SLU	-7292.13	26901.10	-87.44	-7292.13	149840.00	389.66	2-3	180.00	5.570
9	477.78	1	SLU	-7242.57	23044.60	-74.91	-7242.57	149819.00	390.99	2-3	180.00	6.501
10	537.50	1	SLU	-7194.19	19301.50	-62.74	-7194.19	149799.00	392.29	2-3	180.00	7.761
11	597.22	1	SLU	-7146.99	15785.90	-51.31	-7146.99	149779.00	393.55	2-3	180.00	9.488
12	656.94	1	SLU	-7100.95	12573.80	-40.87	-7100.95	149759.00	394.79	2-3	180.00	11.910
13	716.67	1	SLU	-7056.07	9710.08	-31.56	-7056.07	149740.00	395.99	2-3	180.00	15.421
14	776.39	1	SLU	-7012.34	7214.60	-23.45	-7012.34	149721.00	397.16	2-3	180.00	20.753
15	836.11	1	SLU	-6969.75	5088.21	-16.54	-6969.75	149703.00	398.30	2-3	180.00	29.422
16	895.83	1	SLU	-6928.30	3317.45	-10.78	-6928.30	149686.00	399.41	2-3	180.00	45.121
17	955.56	1	SLU	-6887.99	1878.84	-6.11	-6887.99	149669.00	400.50	2-3	180.00	79.660
18	1015.28	1	SLU	-6848.79	742.36	-2.41	-6848.79	149652.00	401.54	2-3	180.00	>100
19	1075.00	1	SLU	-6810.72	-125.71	0.41	-2571250.00	-149636.00	402.56	2-3	0.00	>100
20	1134.72	1	SLU	-6773.75	-760.56	2.47	-6773.75	-149620.00	403.55	2-3	0.00	>100
21	1194.44	1	SLU	-6737.90	-1197.09	3.89	-6737.90	-149605.00	404.51	2-3	0.00	>100
22	1254.17	1	SLU	-6703.14	-1468.71	4.77	-6703.14	-149590.00	405.44	2-3	0.00	>100
23	1313.89	1	SLU	-6669.47	-1606.42	5.22	-6669.47	-149576.00	406.34	2-3	0.00	93.111
24	1373.61	1	SLU	-6636.89	-1638.34	5.33	-6636.89	-149562.00	407.22	2-3	0.00	91.288
25	1433.33	1	SLU	-6605.39	-1589.38	5.17	-6605.39	-149548.00	408.06	2-3	0.00	94.092
26	1493.06	1	SLU	-6574.97	-1481.20	4.81	-6574.97	-149535.00	408.87	2-3	0.00	>100
27	1552.78	1	SLU	-6545.63	-1332.32	4.33	-6545.63	-149523.00	409.65	2-3	0.00	>100
28	1612.50	1	SLU	-6517.35	-1158.30	3.77	-6517.35	-149511.00	410.41	2-3	0.00	>100
29	1672.22	1	SLU	-6490.14	-972.07	3.16	-6490.14	-149499.00	411.14	2-3	0.00	>100
30	1731.94	1	SLU	-6463.98	-784.25	2.55	-6463.98	-149488.00	411.84	2-3	0.00	>100
31	1791.67	1	SLU	-6438.88	-603.53	1.96	-6438.88	-149478.00	412.51	2-3	0.00	>100
32	1851.39	1	SLU	-6414.84	-437.03	1.42	-6414.84	-149467.00	413.15	2-3	0.00	>100
33	1911.11	1	SLU	-6391.83	-290.67	0.94	-2571250.00	-149458.00	413.77	2-3	0.00	>100
34	1970.83	1	SLU	-6369.87	-169.49	0.55	-2571250.00	-149448.00	414.35	2-3	0.00	>100
35	2030.56	1	SLU	-6348.95	-77.94	0.25	-2571250.00	-149439.00	414.91	2-3	0.00	>100
36	2090.28	1	SLU	-6329.06	-20.13	0.07	-2571250.00	-149431.00	415.45	2-3	0.00	>100
37	2150.00	1	SLU	-6310.21	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7807.29	-156.21	0.85	11.31	7808.85	1.00	32294.70	332642.00	32294.70	4.136
2	59.72	1	SLU	3344.96	-66.92	0.85	11.31	3345.63	1.00	32294.70	332759.00	32294.70	9.653
3	119.44	1	SLU	-93.22	1.87	0.85	11.31	93.24	1.00	32294.70	332751.00	32294.70	>100
4	179.17	1	SLU	-2640.09	52.82	0.85	11.31	2640.62	1.00	32294.70	332743.00	32294.70	12.230
5	238.89	1	SLU	-4428.29	88.60	0.85	11.31	4429.17	1.00	32294.70	332735.00	32294.70	7.291
6	298.61	1	SLU	-5585.25	111.75	0.85	11.31	5586.36	1.00	32294.70	332727.00	32294.70	5.781
7	358.33	1	SLU	-6229.66	124.64	0.85	11.31	6230.90	1.00	32294.70	332720.00	32294.70	5.183
8	418.06	1	SLU	-6469.16	129.43	0.85	11.31	6470.46	1.00	32294.70	332713.00	32294.70	4.991
9	477.78	1	SLU	-6399.11	128.03	0.85	11.31	6400.39	1.00	32294.70	332706.00	32294.70	5.046
10	537.50	1	SLU	-6102.04	122.09	0.85	11.31	6103.27	1.00	32294.70	332699.00	32294.70	5.291
11	597.22	1	SLU	-5647.89	113.00	0.85	11.31	5649.02	1.00	32294.70	332692.00	32294.70	5.717
12	656.94	1	SLU	-5094.50	101.93	0.85	11.31	5095.52	1.00	32294.70	332685.00	32294.70	6.338
13	716.67	1	SLU	-4488.57	89.81	0.85	11.31	4489.47	1.00	32294.70	332679.00	32294.70	7.193
14	776.39	1	SLU	-3866.74	77.36	0.85	11.31	3867.52	1.00	32294.70	332673.00	32294.70	8.350
15	836.11	1	SLU	-3256.77	65.16	0.85	11.31	3257.42	1.00	32294.70	332666.00	32294.70	9.914
16	895.83	1	SLU	-2678.78	53.60	0.85	11.31	2679.31	1.00	32294.70	332660.00	32294.70	12.053
17	955.56	1	SLU	-2146.46	42.95	0.85	11.31	2146.89	1.00	32294.70	332655.00	32294.70	15.043
18	1015.28	1	SLU	-1668.20	33.38	0.85	11.31	1668.54	1.00	32294.70	332649.00	32294.70	19.355
19	1075.00	1	SLU	-1248.17	24.97	0.85	11.31	1248.42	1.00	32294.70	332644.00	32294.70	25.869
20	1134.72	1	SLU	-887.21	17.75	0.85	11.31	887.39	1.00	32294.70	332638.00	32294.70	36.393
21	1194.44	1	SLU	-583.73	11.68	0.85	11.31	583.85	1.00	32294.70	332633.00	32294.70	55.314
22	1254.17	1	SLU	-334.36	6.69	0.85	11.31	334.43	1.00	32294.70	332628.00	32294.70	96.567
23	1313.89	1	SLU	-134.59	2.69	0.85	11.31	134.62	1.00	32294.70	332623.00	32294.70	>100
24	1373.61	1	SLU	20.76	-0.42	0.85	11.31	20.77	1.00	32294.70	332619.00	32294.70	>100
25	1433.33	1	SLU	137.13	-2.74	0.85	11.31	137.16	1.00	32294.70	332614.00	32294.70	>100
26	1493.06	1	SLU	219.91	-4.40	0.85	11.31	219.96	1.00	32294.70	332610.00	32294.70	>100
27	1552.78	1	SLU	274.24	-5.49	0.85	11.31	274.30	1.00	32294.70	332606.00	32294.70	>100
28	1612.50	1	SLU	304.81	-6.10	0.85	11.31	304.87	1.00	32294.70	332602.00	32294.70	>100
29	1672.22	1	SLU	315.77	-6.32	0.85	11.31	315.84	1.00	32294.70	332598.00	32294.70	>100
30	1731.94	1	SLU	310.68	-6.22	0.85	11.31	310.74	1.00	32294.70	332594.00	32294.70	>100
31	1791.67	1	SLU	292.44	-5.85	0.85	11.31	292.50	1.00	32294.70	332590.00	32294.70	>100
32	1851.39	1	SLU	263.39	-5.27	0.85	11.31	263.45	1.00	32294.70	332587.00	32294.70	>100
33	1911.11	1	SLU	225.25	-4.51	0.85	11.31	225.30	1.00	32294.70	332584.00	32294.70	>100
34	1970.83	1	SLU	179.25	-3.59	0.85	11.31	179.28	1.00	32294.70	332581.00	32294.70	>100
35	2030.56	1	SLU	126.13	-2.52	0.85	11.31	126.16	1.00	32294.70	332577.00	32294.70	>100
36	2090.28	1	SLU	66.33	-1.33	0.85	11.31	66.34	1.00	32294.70	332575.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_c <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-5036.67	-86.89	26729.60	50.27	28.27	27.09	942.83	
39	59.72	2	SLE R	-5876.27	-94.78	29156.70	50.27	28.27	29.54	1022.97	
40	119.44	2	SLE R	-5867.83	-97.00	29840.80	50.27	28.27	30.23	1049.06	
41	179.17	2	SLE R	-5860.34	-94.93	29205.70	50.27	28.27	29.59	1025.06	
42	238.89	2	SLE R	-5853.81	-89.77	27616.30	50.27	28.27	27.97	964.81	
43	298.61	2	SLE R	-5848.23	-82.50	25380.00	50.27	28.27	25.70	880.00	
44	358.33	2	SLE R	-5843.61	-73.95	22749.30	50.27	28.27	23.03	780.22	
45	418.06	2	SLE R	-5839.95	-64.77	19926.80	50.27	28.27	20.16	673.18	
46	477.78	2	SLE R	-5837.23	-55.49	17070.10	50.27	28.27	17.25	564.88	
47	537.50	2	SLE R	-5835.47	-46.47	14297.40	50.27	28.27	14.42	459.84	
48	597.22	2	SLE R	-5834.66	-38.01	11693.30	50.27	28.27	11.76	361.30	
49	656.94	2	SLE R	-5834.80	-30.28	9313.95	50.27	28.27	9.32	271.48	
50	716.67	2	SLE R	-5835.89	-23.38	7192.65	47.12	31.42	7.14	191.80	
51	776.39	2	SLE R	-5837.94	-17.37	5344.15	47.12	31.42	5.21	123.17	
52	836.11	2	SLE R	-5840.94	-12.25	3769.04	43.98	34.56	3.55	66.57	
53	895.83	2	SLE R	-5844.89	-7.99	2457.37	37.70	40.84	2.17	29.67	

54	955.56	2	SLE R	-5849.80	-4.52	1391.73	21.99	56.55	1.23	17.35	
55	1015.28	2	SLE R	-5855.66	-1.79	549.90	0.00	78.54	0.76	11.00	
56	1075.00	2	SLE R	-5862.47	0.30	-93.12	0.00	78.54	0.52	7.80	
57	1134.72	2	SLE R	-5870.24	1.83	-563.38	0.00	78.54	0.77	11.12	
58	1194.44	2	SLE R	-5878.97	2.88	-886.74	0.00	78.54	0.94	13.40	
59	1254.17	2	SLE R	-5888.66	3.54	-1087.93	9.42	69.11	1.04	14.86	
60	1313.89	2	SLE R	-5899.31	3.87	-1189.94	15.71	62.83	1.10	15.67	
61	1373.61	2	SLE R	-5910.92	3.94	-1213.58	15.71	62.83	1.12	15.87	
62	1433.33	2	SLE R	-5923.49	3.83	-1177.32	12.57	65.97	1.10	15.59	
63	1493.06	2	SLE R	-5937.04	3.57	-1097.19	9.42	69.11	1.05	14.98	
64	1552.78	2	SLE R	-5951.55	3.21	-986.90	0.00	78.54	0.99	14.19	
65	1612.50	2	SLE R	-5967.03	2.79	-858.00	0.00	78.54	0.93	13.30	
66	1672.22	2	SLE R	-5983.49	2.34	-720.05	0.00	78.54	0.86	12.36	
67	1731.94	2	SLE R	-6000.92	1.89	-580.92	0.00	78.54	0.79	11.40	
68	1791.67	2	SLE R	-6019.33	1.45	-447.06	0.00	78.54	0.72	10.48	
69	1851.39	2	SLE R	-6038.72	1.05	-323.72	0.00	78.54	0.66	9.64	
70	1911.11	2	SLE R	-6059.10	0.70	-215.31	0.00	78.54	0.60	8.90	
71	1970.83	2	SLE R	-6080.47	0.41	-125.55	0.00	78.54	0.56	8.30	
72	2030.56	2	SLE R	-6102.83	0.19	-57.73	0.00	78.54	0.53	7.85	
73	2090.28	2	SLE R	-6126.18	0.05	-14.91	0.00	78.54	0.51	7.57	
74	2150.00	2	SLE R	-6150.53	0.00	0.00	0.00	78.54	0.50	7.50	
75	0.00	4	SLE Q	-5036.67	-86.89	26729.60	50.27	28.27	27.09	942.83	
76	59.72	4	SLE Q	-5876.27	-94.78	29156.70	50.27	28.27	29.54	1022.97	
77	119.44	4	SLE Q	-5867.83	-97.00	29840.80	50.27	28.27	30.23	1049.06	
78	179.17	4	SLE Q	-5860.34	-94.93	29205.70	50.27	28.27	29.59	1025.06	
79	238.89	4	SLE Q	-5853.81	-89.77	27616.30	50.27	28.27	27.97	964.81	
80	298.61	4	SLE Q	-5848.23	-82.50	25380.00	50.27	28.27	25.70	880.00	
81	358.33	4	SLE Q	-5843.61	-73.95	22749.30	50.27	28.27	23.03	780.22	
82	418.06	4	SLE Q	-5839.95	-64.77	19926.80	50.27	28.27	20.16	673.18	
83	477.78	4	SLE Q	-5837.23	-55.49	17070.10	50.27	28.27	17.25	564.88	
84	537.50	4	SLE Q	-5835.47	-46.47	14297.40	50.27	28.27	14.42	459.84	
85	597.22	4	SLE Q	-5834.66	-38.01	11693.30	50.27	28.27	11.76	361.30	
86	656.94	4	SLE Q	-5834.80	-30.28	9313.95	50.27	28.27	9.32	271.48	
87	716.67	4	SLE Q	-5835.89	-23.38	7192.65	47.12	31.42	7.14	191.80	
88	776.39	4	SLE Q	-5837.94	-17.37	5344.15	47.12	31.42	5.21	123.17	
89	836.11	4	SLE Q	-5840.94	-12.25	3769.04	43.98	34.56	3.55	66.57	
90	895.83	4	SLE Q	-5844.89	-7.99	2457.37	37.70	40.84	2.17	29.67	
91	955.56	4	SLE Q	-5849.80	-4.52	1391.73	21.99	56.55	1.23	17.35	
92	1015.28	4	SLE Q	-5855.66	-1.79	549.90	0.00	78.54	0.76	11.00	
93	1075.00	4	SLE Q	-5862.47	0.30	-93.12	0.00	78.54	0.52	7.80	
94	1134.72	4	SLE Q	-5870.24	1.83	-563.38	0.00	78.54	0.77	11.12	
95	1194.44	4	SLE Q	-5878.97	2.88	-886.74	0.00	78.54	0.94	13.40	
96	1254.17	4	SLE Q	-5888.66	3.54	-1087.93	9.42	69.11	1.04	14.86	
97	1313.89	4	SLE Q	-5899.31	3.87	-1189.94	15.71	62.83	1.10	15.67	
98	1373.61	4	SLE Q	-5910.92	3.94	-1213.58	15.71	62.83	1.12	15.87	
99	1433.33	4	SLE Q	-5923.49	3.83	-1177.32	12.57	65.97	1.10	15.59	
100	1493.06	4	SLE Q	-5937.04	3.57	-1097.19	9.42	69.11	1.05	14.98	
101	1552.78	4	SLE Q	-5951.55	3.21	-986.90	0.00	78.54	0.99	14.19	
102	1612.50	4	SLE Q	-5967.03	2.79	-858.00	0.00	78.54	0.93	13.30	
103	1672.22	4	SLE Q	-5983.49	2.34	-720.05	0.00	78.54	0.86	12.36	
104	1731.94	4	SLE Q	-6000.92	1.89	-580.92	0.00	78.54	0.79	11.40	
105	1791.67	4	SLE Q	-6019.33	1.45	-447.06	0.00	78.54	0.72	10.48	
106	1851.39	4	SLE Q	-6038.72	1.05	-323.72	0.00	78.54	0.66	9.64	
107	1911.11	4	SLE Q	-6059.10	0.70	-215.31	0.00	78.54	0.60	8.90	
108	1970.83	4	SLE Q	-6080.47	0.41	-125.55	0.00	78.54	0.56	8.30	
109	2030.56	4	SLE Q	-6102.83	0.19	-57.73	0.00	78.54	0.53	7.85	
110	2090.28	4	SLE Q	-6126.18	0.05	-14.91	0.00	78.54	0.51	7.57	
111	2150.00	4	SLE Q	-6150.53	0.00	0.00	0.00	78.54	0.50	7.50	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	A_{C} eff <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-5036.67	26729.60	-86.89	46.00	136.36	0.50	20.00	199.92	25.13	1356.12	942.83	0.27	0.09
76	59.72	4	SLE Q	-5876.27	29156.70	-94.78	46.00	136.36	0.50	20.00	199.80	25.13	1354.65	1022.97	0.30	0.10
77	119.44	4	SLE Q	-5867.83	29840.80	-97.00	46.00	136.36	0.50	20.00	199.84	25.13	1355.20	1049.06	0.31	0.10
78	179.17	4	SLE Q	-5860.34	29205.70	-94.93	46.00	136.36	0.50	20.00	199.81	25.13	1354.75	1025.06	0.30	0.10
79	238.89	4	SLE Q	-5853.81	27616.30	-89.77	46.00	136.36	0.50	20.00	199.71	25.13	1353.48	964.81	0.28	0.10
80	298.61	4	SLE Q	-5848.23	25380.00	-82.50	46.00	136.36	0.50	20.00	199.54	25.13	1351.40	880.00	0.26	0.09
81	358.33	4	SLE Q	-5843.61	22749.30	-73.95	46.00	136.36	0.50	20.00	199.30	25.13	1348.39	780.22	0.23	0.08
82	418.06	4	SLE Q	-5839.95	19926.80	-64.77	46.00	136.36	0.50	20.00	198.97	25.13	1344.21	673.18	0.20	0.07
83	477.78	4	SLE Q	-5837.23	17070.10	-55.49	46.00	136.36	0.50	20.00	213.73	21.99	1338.48	564.88	0.16	0.06
84	537.50	4	SLE Q	-5835.47	14297.40	-46.47	46.00	136.36	0.50	20.00	213.00	21.99	1330.52	459.84	0.13	0.05
85	597.22	4	SLE Q	-5834.66	11693.30	-38.01	46.00	136.36	0.50	20.00	211.98	21.99	1319.24	361.30	0.11	0.04
86	656.94	4	SLE Q	-5834.80	9313.95	-30.28	46.00	136.36	0.50	20.00	210.47	21.99	1302.63	271.48	0.08	0.03
87	716.67	4	SLE Q	-5835.89	7192.65	-23.38	46.00	136.36	0.50	20.00	208.12	21.99	1276.79	191.80	0.06	0.02
88	776.39	4	SLE Q	-5837.94	5344.15	-17.37	46.00	136.36	0.50	20.00	204.14	21.99	1233.05	123.17	0.04	0.01
89	836.11	4	SLE Q	-5840.94	3769.04	-12.25	46.00	136.36	0.50	20.00	196.54	21.99	1149.54	66.57	0.02	0.01
90	895.83	4	SLE Q	-5844.89	2457.37	-7.99	46.00	136.36	0.50	20.00	192.50	18.85	947.18	24.77	0.01	0.00
91	955.56	4	SLE Q	-5849.80	1391.73	-4.52	46.00	136.36	0.50	20.00	186.39	6.28	296.55	3.57	0.00	0.00
112	0.00	3	SLE F	-5036.67	26729.60	-86.89	46.00	136.36	0.50	20.00	199.92	25.13	1356.12	942.83	0.27	0.09
113	59.72	3	SLE F	-5876.27	29156.70	-94.78	46.00	136.36	0.50	20.00	199.80	25.13	1354.65	1022.97	0.30	0.10
114	119.44	3	SLE F	-5867.83	29840.80	-97.00	46.00	136.36	0.50	20.00	199.84	25.13	1355.20	1049.06	0.31	0.10
115	179.17	3	SLE F	-5860.34	29205.70	-94.93	46.00	136.36	0.50	20.00	199.81	25.13	1354.75	1025.06	0.30	0.10
116	238.89	3	SLE F	-5853.81	27616.30	-89.77	46.00	136.36	0.50	20.00	199.71	25.13	1353.48	964.81	0.28	0.10
117	298.61	3	SLE F	-5848.23	25380.00	-82.50	46.00	136.36	0.50	20.00	199.54	25.13	1351.40	880.00	0.26	0.09
118	358.33	3	SLE F	-5843.61	22749.30	-73.95	46.00	136.36	0.50	20.00	199.30	25.13	1348.39	780.22	0.23	0.08
119	418.06	3	SLE F	-5839.95	19926.80	-64.77	46.00	136.36	0.50	20.00	198.97	25.13	1344.21	673.18	0.20	0.07
120	477.78	3	SLE F	-5837.23	17070.10	-55.49	46.00	136.36	0.50	20.00	213.73	21.99	1338.48	564.88	0.16	0.06
121	537.50	3	SLE F	-5835.47	14297.40	-46.47	46.00	136.36	0.50	20.00	213.00	21.99	1330.52	459.84	0.13	0.05
122	597.22	3	SLE F	-5834.66	11693.30	-38.01	46.00	136.36	0.50	20.00	211.98	21.99	1319.24	361.30	0.11	0.04
123	656.94	3	SLE F	-5834.80	9313.95	-30.28	46.00	136.36	0.50	20.00	210.47	21.99	1302.63	271.48	0.08	0.03
124	716.67	3	SLE F	-5835.89	7192.65	-23.38	46.00	136.36	0.50	20.00	208.12	21.99	1276.79	191.80	0.06	0.02
125	776.39	3	SLE F	-5837.94	5344.15	-17.37	46.00	136.36	0.50	20.00	204.14	21.99	1233.05	123.17	0.04	0.01
126	836.11	3	SLE F	-5840.94	3769.04	-12.25	46.00	136.36	0.50	20.00	196.54	21.99	1149.54	66.57	0.02	0.01
127	895.83	3	SLE F	-5844.89	2457.37	-7.99	46.00	136.36	0.50	20.00	192.50	18.85	947.18	24.77	0.01	0.00
128	955.56	3	SLE F	-5849.80	1391.73	-4.52	46.00	136.36	0.50	20.00	186.39	6.28	296.55	3.57	0.00	0.00

Verifiche principali

Caso	Tipo
1	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
3	SLU N cost - min. sic.
40	C.Rare - Sc min (max compr.),C.Rare - Sf max (max traz.),C.Rare - Sf min (max compr.)
58	C.Rare - Sc max (min. compr.)
77	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf max (max traz.),C.Q.Per. - Sf min (max compr.),C.Q.Per. - Wk Max
95	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 14

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 14 (-7)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	19749.60	7769.58	-447.79	39446.20	-1731.24
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	19749.60	7769.58	-447.79	39446.20	-1731.24
2	2	SLE R	RVN	14629.30	5755.24	-331.70	29219.40	-1282.40
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	14629.30	5755.24	-331.70	29219.40	-1282.40
3	3	SLE F	RVN	14629.30	5755.24	-331.70	29219.40	-1282.40
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	14629.30	5755.24	-331.70	29219.40	-1282.40
4	4	SLE Q	RVN	14629.30	5755.24	-331.70	29219.40	-1282.40
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00

	4	SLE Q	TOT	14629.30	5755.24	-331.70	29219.40	-1282.40

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-19749.60	-7769.58	447.79	-39446.20	1731.24
2	2	SLE R	1	-14629.30	-5755.24	331.70	-29219.40	1282.40
3	3	SLE F	1	-14629.30	-5755.24	331.70	-29219.40	1282.40
4	4	SLE Q	1	-14629.30	-5755.24	331.70	-29219.40	1282.40

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-19749.60	38934.90	1708.80	-19749.60	155141.00	6932.76	2-3	177.50	3.985
2	59.72	1	SLU	-20386.10	42136.90	1849.33	-20386.10	155409.00	6920.38	2-3	177.50	3.688
3	119.44	1	SLU	-19973.80	42898.80	1882.77	-19973.80	155235.00	6928.40	2-3	177.50	3.619
4	179.17	1	SLU	-19564.90	41821.50	1835.49	-19564.90	155063.00	6936.34	2-3	177.50	3.708
5	238.89	1	SLU	-19159.00	39421.10	1730.14	-19159.00	154893.00	6944.19	2-3	177.50	3.929
6	298.61	1	SLU	-18756.40	36131.10	1585.75	-18756.40	154723.00	6951.95	2-3	177.50	4.282
7	358.33	1	SLU	-18356.70	32307.20	1417.92	-18356.70	154555.00	6959.63	2-3	177.50	4.784
8	418.06	1	SLU	-17960.10	28233.60	1239.14	-17960.10	154389.00	6967.22	2-3	177.50	5.469
9	477.78	1	SLU	-17566.40	24130.80	1059.07	-17566.40	154223.00	6974.73	2-3	177.50	6.391
10	537.50	1	SLU	-17175.60	20163.50	884.95	-17175.60	154059.00	6982.16	2-3	177.50	7.641
11	597.22	1	SLU	-16787.60	16448.60	721.91	-16787.60	153896.00	6989.51	2-3	177.50	9.357
12	656.94	1	SLU	-16402.30	13063.30	573.33	-16402.30	153734.00	6996.78	2-3	177.50	11.769
13	716.67	1	SLU	-16019.70	10052.30	441.18	-16019.70	153573.00	7004.01	2-3	177.50	15.278
14	776.39	1	SLU	-15639.70	7434.57	326.29	-15639.70	153411.00	7004.65	2-3	177.50	20.637
15	836.11	1	SLU	-15262.20	5209.10	228.62	-15262.20	153248.00	6996.08	2-3	177.50	29.422
16	895.83	1	SLU	-14887.30	3360.29	147.48	-14887.30	153087.00	6987.57	2-3	177.50	45.561
17	955.56	1	SLU	-14514.70	1862.22	81.73	-14514.70	152926.00	6979.07	2-3	177.50	82.127
18	1015.28	1	SLU	-14144.60	682.38	29.95	-2571250.00	152766.00	6970.54	2-3	177.50	>100
19	1075.00	1	SLU	-13776.70	-215.44	-9.46	-2571250.00	-152412.00	-6549.04	2-3	357.50	>100
20	1134.72	1	SLU	-13411.10	-868.75	-38.13	-13411.10	-152257.00	-6538.13	2-3	357.50	>100
21	1194.44	1	SLU	-13047.70	-1314.63	-57.70	-13047.70	-152104.00	-6527.29	2-3	357.50	>100
22	1254.17	1	SLU	-12686.40	-1588.45	-69.72	-12686.40	-151951.00	-6516.51	2-3	357.50	95.655
23	1313.89	1	SLU	-12327.20	-1722.96	-75.62	-12327.20	-151798.00	-6505.81	2-3	357.50	88.100
24	1373.61	1	SLU	-11970.00	-1747.72	-76.71	-11970.00	-151647.00	-6495.18	2-3	357.50	86.764
25	1433.33	1	SLU	-11614.70	-1688.93	-74.13	-11614.70	-151497.00	-6484.60	2-3	357.50	89.695
26	1493.06	1	SLU	-11261.40	-1569.29	-68.87	-11261.40	-151347.00	-6474.09	2-3	357.50	96.439
27	1552.78	1	SLU	-10909.90	-1408.14	-61.80	-10909.90	-151198.00	-6463.65	2-3	357.50	>100
28	1612.50	1	SLU	-10560.10	-1221.72	-53.62	-10560.10	-151050.00	-6453.25	2-3	357.50	>100
29	1672.22	1	SLU	-10212.10	-1023.49	-44.92	-10212.10	-150902.00	-6442.91	2-3	357.50	>100
30	1731.94	1	SLU	-9865.76	-824.44	-36.18	-9865.76	-150756.00	-6432.64	2-3	357.50	>100
31	1791.67	1	SLU	-9521.01	-633.57	-27.81	-9521.01	-150609.00	-6422.41	2-3	357.50	>100
32	1851.39	1	SLU	-9177.83	-458.19	-20.11	-2571250.00	-150464.00	-6412.24	2-3	357.50	>100
33	1911.11	1	SLU	-8836.14	-304.38	-13.36	-2571250.00	-150319.00	-6402.12	2-3	357.50	>100
34	1970.83	1	SLU	-8495.89	-177.29	-7.78	-2571250.00	-150175.00	-6392.04	2-3	357.50	>100
35	2030.56	1	SLU	-8157.02	-81.44	-3.57	-2571250.00	-150031.00	-6381.73	2-3	357.50	>100
36	2090.28	1	SLU	-7819.49	-21.02	-0.92	-2571250.00	-149887.00	-6371.42	2-3	357.50	>100
37	2150.00	1	SLU	-7483.23	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7769.58	-447.79	0.85	11.31	7782.47	1.00	32294.70	334497.00	32294.70	4.150
2	59.72	1	SLU	3136.94	-180.79	0.85	11.31	3142.14	1.00	32294.70	334588.00	32294.70	10.278
3	119.44	1	SLU	-419.62	24.18	0.85	11.31	420.31	1.00	32294.70	334529.00	32294.70	76.835
4	179.17	1	SLU	-3041.79	175.31	0.85	11.31	3046.84	1.00	32294.70	334471.00	32294.70	10.599
5	238.89	1	SLU	-4870.47	280.70	0.85	11.31	4878.56	1.00	32294.70	334412.00	32294.70	6.620
6	298.61	1	SLU	-6040.54	348.14	0.85	11.31	6050.56	1.00	32294.70	334355.00	32294.70	5.337
7	358.33	1	SLU	-6677.24	384.83	0.85	11.31	6688.32	1.00	32294.70	334298.00	32294.70	4.829
8	418.06	1	SLU	-6893.89	397.32	0.85	11.31	6905.33	1.00	32294.70	334241.00	32294.70	4.677
9	477.78	1	SLU	-6790.62	391.37	0.85	11.31	6801.89	1.00	32294.70	334184.00	32294.70	4.748
10	537.50	1	SLU	-6453.92	371.96	0.85	11.31	6464.63	1.00	32294.70	334128.00	32294.70	4.996
11	597.22	1	SLU	-5956.89	343.32	0.85	11.31	5966.77	1.00	32294.70	334073.00	32294.70	5.412
12	656.94	1	SLU	-5359.85	308.91	0.85	11.31	5368.74	1.00	32294.70	334018.00	32294.70	6.015
13	716.67	1	SLU	-4711.37	271.54	0.85	11.31	4719.19	1.00	32294.70	333963.00	32294.70	6.843
14	776.39	1	SLU	-4049.43	233.38	0.85	11.31	4056.15	1.00	32294.70	333908.00	32294.70	7.962
15	836.11	1	SLU	-3402.68	196.11	0.85	11.31	3408.33	1.00	32294.70	333854.00	32294.70	9.475
16	895.83	1	SLU	-2791.79	160.90	0.85	11.31	2796.43	1.00	32294.70	333801.00	32294.70	11.549
17	955.56	1	SLU	-2230.71	128.56	0.85	11.31	2234.41	1.00	32294.70	333747.00	32294.70	14.453
18	1015.28	1	SLU	-1727.85	99.58	0.85	11.31	1730.72	1.00	32294.70	333694.00	32294.70	18.660
19	1075.00	1	SLU	-1287.23	74.19	0.85	11.31	1289.37	1.00	32294.70	333641.00	32294.70	25.047
20	1134.72	1	SLU	-909.47	52.42	0.85	11.31	910.97	1.00	32294.70	333589.00	32294.70	35.451
21	1194.44	1	SLU	-592.60	34.15	0.85	11.31	593.58	1.00	32294.70	333537.00	32294.70	54.406
22	1254.17	1	SLU	-332.90	19.19	0.85	11.31	333.46	1.00	32294.70	333485.00	32294.70	96.849
23	1313.89	1	SLU	-125.47	7.23	0.85	11.31	125.67	1.00	32294.70	333434.00	32294.70	>100
24	1373.61	1	SLU	35.28	-2.03	0.85	11.31	35.34	1.00	32294.70	333383.00	32294.70	>100
25	1433.33	1	SLU	155.14	-8.94	0.85	11.31	155.40	1.00	32294.70	333332.00	32294.70	>100
26	1493.06	1	SLU	239.87	-13.82	0.85	11.31	240.27	1.00	32294.70	333281.00	32294.70	>100
27	1552.78	1	SLU	294.90	-17.00	0.85	11.31	295.39	1.00	32294.70	333231.00	32294.70	>100
28	1612.50	1	SLU	325.20	-18.74	0.85	11.31	325.74	1.00	32294.70	333181.00	32294.70	99.143
29	1672.22	1	SLU	335.14	-19.32	0.85	11.31	335.70	1.00	32294.70	333131.00	32294.70	96.201
30	1731.94	1	SLU	328.48	-18.93	0.85	11.31	329.02	1.00	32294.70	333081.00	32294.70	98.154
31	1791.67	1	SLU	308.27	-17.77	0.85	11.31	308.78	1.00	32294.70	333032.00	32294.70	>100
32	1851.39	1	SLU	276.95	-15.96	0.85	11.31	277.41	1.00	32294.70	332983.00	32294.70	>100
33	1911.11	1	SLU	236.35	-13.62	0.85	11.31	236.74	1.00	32294.70	332934.00	32294.70	>100
34	1970.83	1	SLU	187.72	-10.82	0.85	11.31	188.03	1.00	32294.70	332885.00	32294.70	>100
35	2030.56	1	SLU	131.87	-7.60	0.85	11.31	132.09	1.00	32294.70	332836.00	32294.70	>100
36	2090.28	1	SLU	69.24	-3.99	0.85	11.31	69.36	1.00	32294.70	332788.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-14629.30	1265.78	28840.70	50.27	28.27	28.99	886.40	
39	59.72	2	SLE R	-15336.50	1369.88	31212.50	50.27	28.27	31.39	966.15	
40	119.44	2	SLE R	-15064.80	1394.65	31776.90	50.27	28.27	31.97	991.22	
41	179.17	2	SLE R	-14795.50	1359.62	30978.90	50.27	28.27	31.17	964.81	
42	238.89	2	SLE R	-14528.70	1281.58	29200.80	50.27	28.27	29.36	901.38	
43	298.61	2	SLE R	-14264.20	1174.63	26763.80	50.27	28.27	26.88	813.08	
44	358.33	2	SLE R	-14002.00	1050.31	23931.30	50.27	28.27	23.99	709.92	
45	418.06	2	SLE R	-13742.20	917.88	20913.80	50.27	28.27	20.90	599.94	
46	477.78	2	SLE R	-13484.50	784.50	17874.70	50.27	28.27	17.78	489.41	
47	537.50	2	SLE R	-13229.10	655.52	14935.90	50.27	28.27	14.76	383.10	
48	597.22	2	SLE R	-12975.80	534.75	12184.10	47.12	31.42	11.91	284.57	
49	656.94	2	SLE R	-12724.70	424.69	9676.50	43.98	34.56	9.29	196.51	
50	716.67	2	SLE R	-12475.60	326.80	7446.16	43.98	34.56	6.94	121.31	
51	776.39	2	SLE R	-12228.60	241.70	5507.09	37.70	40.84	4.91	67.11	
52	836.11	2	SLE R	-11983.50	169.35	3858.59	31.42	47.12	3.31	46.18	
53	895.83	2	SLE R	-11740.40	109.24	2489.10	18.85	59.69	2.27	32.22	
54	955.56	2	SLE R	-11499.20	60.54	1379.42	0.00	78.54	1.65	23.74	
55	1015.28	2	SLE R	-11259.90	22.18	505.46	0.00	78.54	1.18	17.29	
56	1075.00	2	SLE R	-11022.50	-7.00	-159.58	0.00	78.54	0.98	14.56	
57	1134.72	2	SLE R	-10786.80	-28.24	-643.51	0.00	78.54	1.21	17.66	
58	1194.44	2	SLE R	-10552.90	-42.74	-973.80	0.00	78.54	1.36	19.69	
59	1254.17	2	SLE R	-10320.70	-51.64	-1176.63	0.00	78.54	1.45	20.83	
60	1313.89	2	SLE R	-10090.20	-56.01	-1276.26	0.00	78.54	1.48	21.24	
61	1373.61	2	SLE R	-9861.37	-56.82	-1294.61	0.00	78.54	1.47	21.09	
62	1433.33	2	SLE R	-9634.13	-54.91	-1251.06	0.00	78.54	1.43	20.51	
63	1493.06	2	SLE R	-9408.45	-51.02	-1162.43	0.00	78.54	1.37	19.62	
64	1552.78	2	SLE R	-9184.32	-45.78	-1043.06	0.00	78.54	1.29	18.51	
65	1612.50	2	SLE R	-8961.68	-39.72	-904.98	0.00	78.54	1.20	17.27	
66	1672.22	2	SLE R	-8740.50	-33.27	-758.14	0.00	78.54	1.10	15.97	
67	1731.94	2	SLE R	-8520.75	-26.80	-610.70	0.00	78.54	1.01	14.67	
68	1791.67	2	SLE R	-8302.39	-20.60	-469.31	0.00	78.54	0.92	13.41	
69	1851.39	2	SLE R	-8085.39	-14.90	-339.40	0.00	78.54	0.83	12.24	
70	1911.11	2	SLE R	-7869.70	-9.90	-225.47	0.00	78.54	0.76	11.17	
71	1970.83	2	SLE R	-7655.29	-5.76	-131.32	0.00	78.54	0.69	10.25	
72	2030.56	2	SLE R	-7442.14	-2.65	-60.33	0.00	78.54	0.64	9.50	
73	2090.28	2	SLE R	-7230.20	-0.68	-15.57	0.00	78.54	0.60	8.92	
74	2150.00	2	SLE R	-7019.44	0.00	0.00	0.00	78.54	0.57	8.56	
75	0.00	4	SLE Q	-14629.30	1265.78	28840.70	50.27	28.27	28.99	886.40	
76	59.72	4	SLE Q	-15336.50	1369.88	31212.50	50.27	28.27	31.39	966.15	
77	119.44	4	SLE Q	-15064.80	1394.65	31776.90	50.27	28.27	31.97	991.22	
78	179.17	4	SLE Q	-14795.50	1359.62	30978.90	50.27	28.27	31.17	964.81	
79	238.89	4	SLE Q	-14528.70	1281.58	29200.80	50.27	28.27	29.36	901.38	
80	298.61	4	SLE Q	-14264.20	1174.63	26763.80	50.27	28.27	26.88	813.08	

81	358.33	4	SLE Q	-14002.00	1050.31	23931.30	50.27	28.27	23.99	709.92	
82	418.06	4	SLE Q	-13742.20	917.88	20913.80	50.27	28.27	20.90	599.94	
83	477.78	4	SLE Q	-13484.50	784.50	17874.70	50.27	28.27	17.78	489.41	
84	537.50	4	SLE Q	-13229.10	655.52	14935.90	50.27	28.27	14.76	383.10	
85	597.22	4	SLE Q	-12975.80	534.75	12184.10	47.12	31.42	11.91	284.57	
86	656.94	4	SLE Q	-12724.70	424.69	9676.50	43.98	34.56	9.29	196.51	
87	716.67	4	SLE Q	-12475.60	326.80	7446.16	43.98	34.56	6.94	121.31	
88	776.39	4	SLE Q	-12228.60	241.70	5507.09	37.70	40.84	4.91	67.11	
89	836.11	4	SLE Q	-11983.50	169.35	3858.59	31.42	47.12	3.31	46.18	
90	895.83	4	SLE Q	-11740.40	109.24	2489.10	18.85	59.69	2.27	32.22	
91	955.56	4	SLE Q	-11499.20	60.54	1379.42	0.00	78.54	1.65	23.74	
92	1015.28	4	SLE Q	-11259.90	22.18	505.46	0.00	78.54	1.18	17.29	
93	1075.00	4	SLE Q	-11022.50	-7.00	-159.58	0.00	78.54	0.98	14.56	
94	1134.72	4	SLE Q	-10786.80	-28.24	-643.51	0.00	78.54	1.21	17.66	
95	1194.44	4	SLE Q	-10552.90	-42.74	-973.80	0.00	78.54	1.36	19.69	
96	1254.17	4	SLE Q	-10320.70	-51.64	-1176.63	0.00	78.54	1.45	20.83	
97	1313.89	4	SLE Q	-10090.20	-56.01	-1276.26	0.00	78.54	1.48	21.24	
98	1373.61	4	SLE Q	-9861.37	-56.82	-1294.61	0.00	78.54	1.47	21.09	
99	1433.33	4	SLE Q	-9634.13	-54.91	-1251.06	0.00	78.54	1.43	20.51	
100	1493.06	4	SLE Q	-9408.45	-51.02	-1162.43	0.00	78.54	1.37	19.62	
101	1552.78	4	SLE Q	-9184.32	-45.78	-1043.06	0.00	78.54	1.29	18.51	
102	1612.50	4	SLE Q	-8961.68	-39.72	-904.98	0.00	78.54	1.20	17.27	
103	1672.22	4	SLE Q	-8740.50	-33.27	-758.14	0.00	78.54	1.10	15.97	
104	1731.94	4	SLE Q	-8520.75	-26.80	-610.70	0.00	78.54	1.01	14.67	
105	1791.67	4	SLE Q	-8302.39	-20.60	-469.31	0.00	78.54	0.92	13.41	
106	1851.39	4	SLE Q	-8085.39	-14.90	-339.40	0.00	78.54	0.83	12.24	
107	1911.11	4	SLE Q	-7869.70	-9.90	-225.47	0.00	78.54	0.76	11.17	
108	1970.83	4	SLE Q	-7655.29	-5.76	-131.32	0.00	78.54	0.69	10.25	
109	2030.56	4	SLE Q	-7442.14	-2.65	-60.33	0.00	78.54	0.64	9.50	
110	2090.28	4	SLE Q	-7230.20	-0.68	-15.57	0.00	78.54	0.60	8.92	
111	2150.00	4	SLE Q	-7019.44	0.00	0.00	0.00	78.54	0.57	8.56	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	$A_{C\ eff}$ <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-14629.30	28840.70	1265.78	46.00	136.36	0.50	20.00	196.96	25.13	1319.01	886.40	0.26	0.09
76	59.72	4	SLE Q	-15336.50	31212.50	1369.88	46.00	136.36	0.50	20.00	197.12	25.13	1321.02	966.15	0.28	0.09
77	119.44	4	SLE Q	-15064.80	31776.90	1394.65	46.00	136.36	0.50	20.00	197.30	25.13	1323.19	991.22	0.29	0.10
78	179.17	4	SLE Q	-14795.50	30978.90	1359.62	46.00	136.36	0.50	20.00	197.26	25.13	1322.75	964.81	0.28	0.09
79	238.89	4	SLE Q	-14528.70	29200.80	1281.58	46.00	136.36	0.50	20.00	197.06	25.13	1320.24	901.38	0.26	0.09
80	298.61	4	SLE Q	-14264.20	26763.80	1174.63	46.00	136.36	0.50	20.00	196.70	25.13	1315.73	813.08	0.24	0.08
81	358.33	4	SLE Q	-14002.00	23931.30	1050.31	46.00	136.36	0.50	20.00	196.16	25.13	1308.97	709.92	0.21	0.07
82	418.06	4	SLE Q	-13742.20	20913.80	917.88	46.00	136.36	0.50	20.00	195.40	25.13	1299.37	599.94	0.17	0.06
83	477.78	4	SLE Q	-13484.50	17874.70	784.50	46.00	136.36	0.50	20.00	194.33	25.13	1285.92	489.41	0.14	0.05
84	537.50	4	SLE Q	-13229.10	14935.90	655.52	46.00	136.36	0.50	20.00	207.22	21.99	1266.88	383.10	0.11	0.04
85	597.22	4	SLE Q	-12975.80	12184.10	534.75	46.00	136.36	0.50	20.00	204.69	21.99	1239.13	284.57	0.08	0.03
86	656.94	4	SLE Q	-12724.70	9676.50	424.69	46.00	136.36	0.50	20.00	218.98	18.85	1196.74	196.51	0.06	0.02
87	716.67	4	SLE Q	-12475.60	7446.16	326.80	46.00	136.36	0.50	20.00	211.50	18.85	1126.27	121.31	0.04	0.01
88	776.39	4	SLE Q	-12228.60	5507.09	241.70	46.00	136.36	0.50	20.00	197.51	18.85	994.39	62.02	0.02	0.01
89	836.11	4	SLE Q	-11983.50	3858.59	169.35	46.00	136.36	0.50	20.00	202.90	12.57	696.78	22.86	0.01	0.00
112	0.00	3	SLE F	-14629.30	28840.70	1265.78	46.00	136.36	0.50	20.00	196.96	25.13	1319.01	886.40	0.26	0.09
113	59.72	3	SLE F	-15336.50	31212.50	1369.88	46.00	136.36	0.50	20.00	197.12	25.13	1321.02	966.15	0.28	0.09
114	119.44	3	SLE F	-15064.80	31776.90	1394.65	46.00	136.36	0.50	20.00	197.30	25.13	1323.19	991.22	0.29	0.10
115	179.17	3	SLE F	-14795.50	30978.90	1359.62	46.00	136.36	0.50	20.00	197.26	25.13	1322.75	964.81	0.28	0.09
116	238.89	3	SLE F	-14528.70	29200.80	1281.58	46.00	136.36	0.50	20.00	197.06	25.13	1320.24	901.38	0.26	0.09
117	298.61	3	SLE F	-14264.20	26763.80	1174.63	46.00	136.36	0.50	20.00	196.70	25.13	1315.73	813.08	0.24	0.08
118	358.33	3	SLE F	-14002.00	23931.30	1050.31	46.00	136.36	0.50	20.00	196.16	25.13	1308.97	709.92	0.21	0.07
119	418.06	3	SLE F	-13742.20	20913.80	917.88	46.00	136.36	0.50	20.00	195.40	25.13	1299.37	599.94	0.17	0.06
120	477.78	3	SLE F	-13484.50	17874.70	784.50	46.00	136.36	0.50	20.00	194.33	25.13	1285.92	489.41	0.14	0.05
121	537.50	3	SLE F	-13229.10	14935.90	655.52	46.00	136.36	0.50	20.00	207.22	21.99	1266.88	383.10	0.11	0.04
122	597.22	3	SLE F	-12975.80	12184.10	534.75	46.00	136.36	0.50	20.00	204.69	21.99	1239.13	284.57	0.08	0.03
123	656.94	3	SLE F	-12724.70	9676.50	424.69	46.00	136.36	0.50	20.00	218.98	18.85	1196.74	196.51	0.06	0.02
124	716.67	3	SLE F	-12475.60	7446.16	326.80	46.00	136.36	0.50	20.00	211.50	18.85	1126.27	121.31	0.04	0.01
125	776.39	3	SLE F	-12228.60	5507.09	241.70	46.00	136.36	0.50	20.00	197.51	18.85	994.39	62.02	0.02	0.01
126	836.11	3	SLE F	-11983.50	3858.59	169.35	46.00	136.36	0.50	20.00	202.90	12.57	696.78	22.86	0.01	0.00

Verifiche principali

Caso	Tipo
1	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
3	SLU N cost - min. sic.
40	C.Rare - Sc min (max compr.),C.Rare - Sf max (max traz.),C.Rare - Sf min (max compr.)
61	C.Rare - Sc max (min. compr.)
77	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf max (max traz.),C.Q.Per. - Sf min (max compr.),C.Q.Per. - Wk Max
98	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 15

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 15 (-15)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	43794.90	7579.82	-702.41	43381.10	-7262.72
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	43794.90	7579.82	-702.41	43381.10	-7262.72
2	2	SLE R	RVN	32440.70	5614.68	-520.31	32134.20	-5379.79
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	32440.70	5614.68	-520.31	32134.20	-5379.79
3	3	SLE F	RVN	32440.70	5614.68	-520.31	32134.20	-5379.79
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	32440.70	5614.68	-520.31	32134.20	-5379.79
4	4	SLE Q	RVN	32440.70	5614.68	-520.31	32134.20	-5379.79
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	32440.70	5614.68	-520.31	32134.20	-5379.79

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-43794.90	-7579.82	702.41	-43381.10	7262.72
2	2	SLE R	1	-32440.70	-5614.68	520.31	-32134.20	5379.79
3	3	SLE F	1	-32440.70	-5614.68	520.31	-32134.20	5379.79
4	4	SLE Q	1	-32440.70	-5614.68	520.31	-32134.20	5379.79

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-43794.90	42849.20	7173.66	-43794.90	162916.00	27083.20	2-3	170.62	3.801
2	59.72	1	SLU	-44099.50	45835.60	7673.64	-44099.50	163040.00	27105.70	2-3	170.62	3.556
3	119.44	1	SLU	-43027.30	46296.00	7750.71	-43027.30	162604.00	27026.50	2-3	170.62	3.512
4	179.17	1	SLU	-41962.10	44865.00	7511.14	-41962.10	162171.00	26947.80	2-3	170.62	3.614
5	238.89	1	SLU	-40903.80	42085.70	7045.84	-40903.80	161740.00	26869.70	2-3	170.62	3.842
6	298.61	1	SLU	-39852.10	38412.70	6430.91	-39852.10	161312.00	26792.10	2-3	170.62	4.199
7	358.33	1	SLU	-38807.00	34217.30	5728.54	-38807.00	160886.00	26715.00	2-3	170.62	4.701
8	418.06	1	SLU	-37768.10	29795.00	4988.18	-37768.10	160463.00	26638.40	2-3	170.62	5.384
9	477.78	1	SLU	-36735.40	25373.80	4247.99	-36735.40	160043.00	26562.20	2-3	170.62	6.306
10	537.50	1	SLU	-35708.80	21122.70	3536.28	-35708.80	159624.00	26486.50	2-3	170.62	7.555
11	597.22	1	SLU	-34687.90	17160.50	2872.96	-34687.90	159207.00	26410.50	2-3	170.62	9.275
12	656.94	1	SLU	-33672.70	13564.60	2270.94	-33672.70	158791.00	26334.80	2-3	170.62	11.703
13	716.67	1	SLU	-32663.00	10378.30	1737.50	-32663.00	158378.00	26259.50	2-3	170.62	15.257
14	776.39	1	SLU	-31658.60	7618.00	1275.38	-31658.60	157967.00	26184.60	2-3	170.62	20.730
15	836.11	1	SLU	-30659.40	5279.82	883.93	-30659.40	157558.00	26110.20	2-3	170.62	29.833

16	895.83	1	SLU	-29665.20	3344.76	559.97	-29665.20	157151.00	26036.20	2-3		170.62	46.971
17	955.56	1	SLU	-28675.90	1783.41	298.57	-28675.90	156746.00	25962.60	2-3		170.62	87.866
18	1015.28	1	SLU	-27691.20	559.74	93.71	-2571250.00	156344.00	25889.40	2-3		170.62	92.854
19	1075.00	1	SLU	-26711.00	-365.74	-61.23	-2571250.00	-156113.00	-25896.90	2-3		350.62	96.262
20	1134.72	1	SLU	-25735.20	-1033.66	-173.05	-2571250.00	-155708.00	-25864.50	2-3		350.62	99.912
21	1194.44	1	SLU	-24763.60	-1483.87	-248.43	-2571250.00	-155299.00	-25831.60	2-3		350.62	>100
22	1254.17	1	SLU	-23796.00	-1754.20	-293.68	-23796.00	-154896.00	-25799.10	2-3		350.62	88.288
23	1313.89	1	SLU	-22832.30	-1879.50	-314.66	-22832.30	-154493.00	-25768.30	2-3		350.62	82.190
24	1373.61	1	SLU	-21872.40	-1891.17	-316.61	-21872.40	-154090.00	-25738.30	2-3		350.62	81.474
25	1433.33	1	SLU	-20916.00	-1816.86	-304.17	-20916.00	-153690.00	-25708.30	2-3		350.62	84.589
26	1493.06	1	SLU	-19963.00	-1680.47	-281.34	-19963.00	-153290.00	-25678.10	2-3		350.62	91.220
27	1552.78	1	SLU	-19013.30	-1502.30	-251.51	-19013.30	-152892.00	-25648.00	2-3		350.62	>100
28	1612.50	1	SLU	-18066.60	-1299.32	-217.53	-18066.60	-152493.00	-25600.70	2-3		350.62	>100
29	1672.22	1	SLU	-17122.90	-1085.51	-181.73	-17122.90	-152093.00	-25528.80	2-3		350.62	>100
30	1731.94	1	SLU	-16182.10	-872.27	-146.03	-2571250.00	-151694.00	-25457.20	2-3		350.62	>100
31	1791.67	1	SLU	-15243.80	-668.84	-111.97	-2571250.00	-151296.00	-25385.80	2-3		350.62	>100
32	1851.39	1	SLU	-14308.10	-482.72	-80.82	-2571250.00	-150899.00	-25314.60	2-3		350.62	>100
33	1911.11	1	SLU	-13374.60	-320.08	-53.59	-2571250.00	-150500.00	-25242.60	2-3		350.62	>100
34	1970.83	1	SLU	-12443.40	-186.11	-31.16	-2571250.00	-150103.00	-25170.80	2-3		350.62	>100
35	2030.56	1	SLU	-11514.20	-85.36	-14.29	-2571250.00	-149706.00	-25099.20	2-3		350.62	>100
36	2090.28	1	SLU	-10586.90	-21.99	-3.68	-2571250.00	-149310.00	-25027.80	2-3		350.62	>100
37	2150.00	1	SLU	-9661.26	0.00	0.00	-2571250.00						>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7579.82	-702.41	0.85	11.31	7612.30	1.00	32294.70	337941.00	32294.70	4.242
2	59.72	1	SLU	2721.66	-252.21	0.85	11.31	2733.32	1.00	32294.70	337985.00	32294.70	11.815
3	119.44	1	SLU	-986.28	91.40	0.85	11.31	990.50	1.00	32294.70	337831.00	32294.70	32.604
4	179.17	1	SLU	-3699.06	342.79	0.85	11.31	3714.90	1.00	32294.70	337679.00	32294.70	8.693
5	238.89	1	SLU	-5569.78	516.15	0.85	11.31	5593.65	1.00	32294.70	337527.00	32294.70	5.773
6	298.61	1	SLU	-6744.27	624.98	0.85	11.31	6773.16	1.00	32294.70	337376.00	32294.70	4.768
7	358.33	1	SLU	-7357.30	681.79	0.85	11.31	7388.83	1.00	32294.70	337227.00	32294.70	4.371
8	418.06	1	SLU	-7530.36	697.83	0.85	11.31	7562.63	1.00	32294.70	337078.00	32294.70	4.270
9	477.78	1	SLU	-7370.38	683.01	0.85	11.31	7401.96	1.00	32294.70	336930.00	32294.70	4.363
10	537.50	1	SLU	-6969.42	645.85	0.85	11.31	6999.28	1.00	32294.70	336783.00	32294.70	4.614
11	597.22	1	SLU	-6404.97	593.54	0.85	11.31	6432.41	1.00	32294.70	336637.00	32294.70	5.021
12	656.94	1	SLU	-5740.75	531.99	0.85	11.31	5765.34	1.00	32294.70	336491.00	32294.70	5.602
13	716.67	1	SLU	-5027.83	465.92	0.85	11.31	5049.38	1.00	32294.70	336347.00	32294.70	6.396
14	776.39	1	SLU	-4305.95	399.03	0.85	11.31	4324.40	1.00	32294.70	336203.00	32294.70	7.468
15	836.11	1	SLU	-3604.89	334.06	0.85	11.31	3620.33	1.00	32294.70	336060.00	32294.70	8.920
16	895.83	1	SLU	-2945.93	273.00	0.85	11.31	2958.55	1.00	32294.70	335917.00	32294.70	10.916
17	955.56	1	SLU	-2343.24	217.15	0.85	11.31	2353.28	1.00	32294.70	335776.00	32294.70	13.723
18	1015.28	1	SLU	-1805.16	167.28	0.85	11.31	1812.89	1.00	32294.70	335635.00	32294.70	17.814
19	1075.00	1	SLU	-1335.40	123.75	0.85	11.31	1341.12	1.00	32294.70	335494.00	32294.70	24.081
20	1134.72	1	SLU	-934.09	86.56	0.85	11.31	938.10	1.00	32294.70	335354.00	32294.70	34.426
21	1194.44	1	SLU	-598.76	55.49	0.85	11.31	601.32	1.00	32294.70	335215.00	32294.70	53.706
22	1254.17	1	SLU	-325.05	30.12	0.85	11.31	326.44	1.00	32294.70	335077.00	32294.70	98.929
23	1313.89	1	SLU	-107.45	9.96	0.85	11.31	107.91	1.00	32294.70	334939.00	32294.70	>100
24	1373.61	1	SLU	60.21	-5.58	0.85	11.31	60.47	1.00	32294.70	334801.00	32294.70	>100
25	1433.33	1	SLU	184.31	-17.08	0.85	11.31	185.10	1.00	32294.70	334664.00	32294.70	>100
26	1493.06	1	SLU	271.11	-25.12	0.85	11.31	272.27	1.00	32294.70	334528.00	32294.70	>100
27	1552.78	1	SLU	326.50	-30.26	0.85	11.31	327.90	1.00	32294.70	334392.00	32294.70	98.490
28	1612.50	1	SLU	355.84	-32.98	0.85	11.31	357.37	1.00	32294.70	334256.00	32294.70	90.369
29	1672.22	1	SLU	363.85	-33.72	0.85	11.31	365.40	1.00	32294.70	334121.00	32294.70	88.381
30	1731.94	1	SLU	354.52	-32.85	0.85	11.31	356.04	1.00	32294.70	333986.00	32294.70	90.705
31	1791.67	1	SLU	331.17	-30.69	0.85	11.31	332.59	1.00	32294.70	333852.00	32294.70	97.101
32	1851.39	1	SLU	296.37	-27.46	0.85	11.31	297.64	1.00	32294.70	333718.00	32294.70	>100
33	1911.11	1	SLU	252.07	-23.36	0.85	11.31	253.15	1.00	32294.70	333584.00	32294.70	>100
34	1970.83	1	SLU	199.61	-18.50	0.85	11.31	200.47	1.00	32294.70	333450.00	32294.70	>100
35	2030.56	1	SLU	139.86	-12.96	0.85	11.31	140.46	1.00	32294.70	333317.00	32294.70	>100
36	2090.28	1	SLU	73.26	-6.79	0.85	11.31	73.57	1.00	32294.70	333185.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-32440.70	5313.82	31740.10	47.12	31.42	31.09	776.89	
39	59.72	2	SLE R	-32902.00	5684.17	33952.30	47.12	31.42	33.36	854.11	
40	119.44	2	SLE R	-32141.40	5741.27	34293.30	47.12	31.42	33.75	876.79	
41	179.17	2	SLE R	-31386.10	5563.80	33233.30	47.12	31.42	32.70	846.60	
42	238.89	2	SLE R	-30635.90	5219.14	31174.60	47.12	31.42	30.61	778.75	
43	298.61	2	SLE R	-29890.70	4763.64	28453.80	47.12	31.42	27.83	686.17	
44	358.33	2	SLE R	-29150.30	4243.36	25346.10	47.12	31.42	24.64	579.57	
45	418.06	2	SLE R	-28414.80	3694.95	22070.40	47.12	31.42	21.26	467.70	
46	477.78	2	SLE R	-27683.80	3146.66	18795.40	43.98	34.56	17.86	357.64	
47	537.50	2	SLE R	-26957.40	2619.47	15646.40	40.84	37.70	14.58	255.24	
48	597.22	2	SLE R	-26235.30	2128.12	12711.50	40.84	37.70	11.53	165.69	
49	656.94	2	SLE R	-25517.60	1682.18	10047.90	34.56	43.98	8.84	122.12	
50	716.67	2	SLE R	-24804.00	1287.03	7687.62	28.27	50.27	6.63	92.93	
51	776.39	2	SLE R	-24094.50	944.73	5642.96	21.99	56.55	5.02	71.23	
52	836.11	2	SLE R	-23388.80	654.76	3910.98	0.00	78.54	3.93	56.30	
53	895.83	2	SLE R	-22687.10	414.79	2477.60	0.00	78.54	3.13	45.25	
54	955.56	2	SLE R	-21989.00	221.16	1321.04	0.00	78.54	2.47	36.19	
55	1015.28	2	SLE R	-21294.50	69.41	414.62	0.00	78.54	1.95	28.91	
56	1075.00	2	SLE R	-20603.40	-45.36	-270.92	0.00	78.54	1.82	27.05	
57	1134.72	2	SLE R	-19915.80	-128.19	-765.67	0.00	78.54	2.02	29.75	
58	1194.44	2	SLE R	-19231.30	-184.02	-1099.17	0.00	78.54	2.13	31.29	
59	1254.17	2	SLE R	-18550.00	-217.54	-1299.41	0.00	78.54	2.18	31.89	
60	1313.89	2	SLE R	-17871.80	-233.08	-1392.23	0.00	78.54	2.18	31.72	
61	1373.61	2	SLE R	-17196.40	-234.53	-1400.87	0.00	78.54	2.12	30.96	
62	1433.33	2	SLE R	-16523.90	-225.31	-1345.82	0.00	78.54	2.04	29.75	
63	1493.06	2	SLE R	-15854.10	-208.40	-1244.79	0.00	78.54	1.93	28.21	
64	1552.78	2	SLE R	-15186.80	-186.30	-1112.81	0.00	78.54	1.81	26.46	
65	1612.50	2	SLE R	-14522.00	-161.13	-962.46	0.00	78.54	1.68	24.57	
66	1672.22	2	SLE R	-13859.60	-134.62	-804.08	0.00	78.54	1.54	22.64	
67	1731.94	2	SLE R	-13199.50	-108.17	-646.13	0.00	78.54	1.41	20.70	
68	1791.67	2	SLE R	-12541.50	-82.94	-495.44	0.00	78.54	1.28	18.83	
69	1851.39	2	SLE R	-11885.60	-59.86	-357.57	0.00	78.54	1.15	17.04	
70	1911.11	2	SLE R	-11231.60	-39.69	-237.10	0.00	78.54	1.04	15.39	
71	1970.83	2	SLE R	-10579.40	-23.08	-137.86	0.00	78.54	0.93	13.88	
72	2030.56	2	SLE R	-9928.94	-10.59	-63.23	0.00	78.54	0.84	12.56	
73	2090.28	2	SLE R	-9280.11	-2.73	-16.29	0.00	78.54	0.76	11.43	
74	2150.00	2	SLE R	-8632.80	0.00	0.00	0.00	78.54	0.70	10.53	
75	0.00	4	SLE Q	-32440.70	5313.82	31740.10	47.12	31.42	31.09	776.89	
76	59.72	4	SLE Q	-32902.00	5684.17	33952.30	47.12	31.42	33.36	854.11	
77	119.44	4	SLE Q	-32141.40	5741.27	34293.30	47.12	31.42	33.75	876.79	
78	179.17	4	SLE Q	-31386.10	5563.80	33233.30	47.12	31.42	32.70	846.60	
79	238.89	4	SLE Q	-30635.90	5219.14	31174.60	47.12	31.42	30.61	778.75	
80	298.61	4	SLE Q	-29890.70	4763.64	28453.80	47.12	31.42	27.83	686.17	
81	358.33	4	SLE Q	-29150.30	4243.36	25346.10	47.12	31.42	24.64	579.57	
82	418.06	4	SLE Q	-28414.80	3694.95	22070.40	47.12	31.42	21.26	467.70	
83	477.78	4	SLE Q	-27683.80	3146.66	18795.40	43.98	34.56	17.86	357.64	
84	537.50	4	SLE Q	-26957.40	2619.47	15646.40	40.84	37.70	14.58	255.24	
85	597.22	4	SLE Q	-26235.30	2128.12	12711.50	40.84	37.70	11.53	165.69	
86	656.94	4	SLE Q	-25517.60	1682.18	10047.90	34.56	43.98	8.84	122.12	
87	716.67	4	SLE Q	-24804.00	1287.03	7687.62	28.27	50.27	6.63	92.93	
88	776.39	4	SLE Q	-24094.50	944.73	5642.96	21.99	56.55	5.02	71.23	
89	836.11	4	SLE Q	-23388.80	654.76	3910.98	0.00	78.54	3.93	56.30	
90	895.83	4	SLE Q	-22687.10	414.79	2477.60	0.00	78.54	3.13	45.25	
91	955.56	4	SLE Q	-21989.00	221.16	1321.04	0.00	78.54	2.47	36.19	
92	1015.28	4	SLE Q	-21294.50	69.41	414.62	0.00	78.54	1.95	28.91	
93	1075.00	4	SLE Q	-20603.40	-45.36	-270.92	0.00	78.54	1.82	27.05	
94	1134.72	4	SLE Q	-19915.80	-128.19	-765.67	0.00	78.54	2.02	29.75	
95	1194.44	4	SLE Q	-19231.30	-184.02	-1099.17	0.00	78.54	2.13	31.29	
96	1254.17	4	SLE Q	-18550.00	-217.54	-1299.41	0.00	78.54	2.18	31.89	
97	1313.89	4	SLE Q	-17871.80	-233.08	-1392.23	0.00	78.54	2.18	31.72	
98	1373.61	4	SLE Q	-17196.40	-234.53	-1400.87	0.00	78.54	2.12	30.96	
99	1433.33	4	SLE Q	-16523.90	-225.31	-1345.82	0.00	78.54	2.04	29.75	
100	1493.06	4	SLE Q	-15854.10	-208.40	-1244.79	0.00	78.54	1.93	28.21	
101	1552.78	4	SLE Q	-15186.80	-186.30	-1112.81	0.00	78.54	1.81	26.46	
102	1612.50	4	SLE Q	-14522.00	-161.13	-962.46	0.00	78.54	1.68	24.57	
103	1672.22	4	SLE Q	-13859.60	-134.62	-804.08	0.00	78.54	1.54	22.64	
104	1731.94	4	SLE Q	-13199.50	-108.17	-646.13	0.00	78.54	1.41	20.70	
105	1791.67	4	SLE Q	-12541.50	-82.94	-495.44	0.00	78.54	1.28	18.83	
106	1851.39	4	SLE Q	-11885.60	-59.86	-357.57	0.00	78.54	1.15	17.04	
107	1911.11	4	SLE Q	-11231.60	-39.69	-237.10	0.00	78.54	1.04	15.39	
108	1970.83	4	SLE Q	-10579.40	-23.08	-137.86	0.00	78.54	0.93	13.88	
109	2030.56	4	SLE Q	-9928.94	-10.59	-63.23	0.00	78.54	0.84	12.56	
110	2090.28	4	SLE Q	-9280.11	-2.73	-16.29	0.00	78.54	0.76	11.43	
111	2150.00	4	SLE Q	-8632.80	0.00	0.00	0.00	78.54	0.70	10.53	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	A_{C} eff <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-32440.70	31740.10	5313.82	46.00	136.36	0.50	20.00	206.94	21.99	1263.81	776.89	0.23	0.08
76	59.72	4	SLE Q	-32902.00	33952.30	5684.17	46.00	136.36	0.50	20.00	207.65	21.99	1271.58	854.11	0.25	0.09
77	119.44	4	SLE Q	-32141.40	34293.30	5741.27	46.00	136.36	0.50	20.00	208.06	21.99	1276.14	876.79	0.26	0.09
78	179.17	4	SLE Q	-31386.10	33233.30	5563.80	46.00	136.36	0.50	20.00	207.97	21.99	1275.12	846.60	0.25	0.09
79	238.89	4	SLE Q	-30635.90	31174.60	5219.14	46.00	136.36	0.50	20.00	207.47	21.99	1269.60	778.75	0.23	0.08
80	298.61	4	SLE Q	-29890.70	28453.80	4763.64	46.00	136.36	0.50	20.00	206.55	21.99	1259.56	686.17	0.20	0.07
81	358.33	4	SLE Q	-29150.30	25346.10	4243.36	46.00	136.36	0.50	20.00	205.15	21.99	1244.16	579.57	0.17	0.06
82	418.06	4	SLE Q	-28414.80	22070.40	3694.95	46.00	136.36	0.50	20.00	203.10	21.99	1221.58	467.70	0.14	0.05
83	477.78	4	SLE Q	-27683.80	18795.40	3146.66	46.00	136.36	0.50	20.00	200.09	21.99	1188.48	357.64	0.10	0.04
84	537.50	4	SLE Q	-26957.40	15646.40	2619.47	46.00	136.36	0.50	20.00	195.56	21.99	1138.73	255.24	0.07	0.02
85	597.22	4	SLE Q	-26235.30	12711.50	2128.12	46.00	136.36	0.50	20.00	204.57	18.85	1060.99	165.69	0.05	0.02
86	656.94	4	SLE Q	-25517.60	10047.90	1682.18	46.00	136.36	0.50	20.00	210.84	15.71	933.38	93.93	0.03	0.01
87	716.67	4	SLE Q	-24804.00	7687.62	1287.03	46.00	136.36	0.50	20.00	179.73	15.71	689.06	43.90	0.01	0.00
88	776.39	4	SLE Q	-24094.50	5642.96	944.73	46.00	136.36	0.50	20.00	160.52	9.42	322.89	14.63	0.00	0.00
112	0.00	3	SLE F	-32440.70	31740.10	5313.82	46.00	136.36	0.50	20.00	206.94	21.99	1263.81	776.89	0.23	0.08
113	59.72	3	SLE F	-32902.00	33952.30	5684.17	46.00	136.36	0.50	20.00	207.65	21.99	1271.58	854.11	0.25	0.09
114	119.44	3	SLE F	-32141.40	34293.30	5741.27	46.00	136.36	0.50	20.00	208.06	21.99	1276.14	876.79	0.26	0.09
115	179.17	3	SLE F	-31386.10	33233.30	5563.80	46.00	136.36	0.50	20.00	207.97	21.99	1275.12	846.60	0.25	0.09
116	238.89	3	SLE F	-30635.90	31174.60	5219.14	46.00	136.36	0.50	20.00	207.47	21.99	1269.60	778.75	0.23	0.08
117	298.61	3	SLE F	-29890.70	28453.80	4763.64	46.00	136.36	0.50	20.00	206.55	21.99	1259.56	686.17	0.20	0.07
118	358.33	3	SLE F	-29150.30	25346.10	4243.36	46.00	136.36	0.50	20.00	205.15	21.99	1244.16	579.57	0.17	0.06
119	418.06	3	SLE F	-28414.80	22070.40	3694.95	46.00	136.36	0.50	20.00	203.10	21.99	1221.58	467.70	0.14	0.05
120	477.78	3	SLE F	-27683.80	18795.40	3146.66	46.00	136.36	0.50	20.00	200.09	21.99	1188.48	357.64	0.10	0.04
121	537.50	3	SLE F	-26957.40	15646.40	2619.47	46.00	136.36	0.50	20.00	195.56	21.99	1138.73	255.24	0.07	0.02
122	597.22	3	SLE F	-26235.30	12711.50	2128.12	46.00	136.36	0.50	20.00	204.57	18.85	1060.99	165.69	0.05	0.02
123	656.94	3	SLE F	-25517.60	10047.90	1682.18	46.00	136.36	0.50	20.00	210.84	15.71	933.38	93.93	0.03	0.01
124	716.67	3	SLE F	-24804.00	7687.62	1287.03	46.00	136.36	0.50	20.00	179.73	15.71	689.06	43.90	0.01	0.00
125	776.39	3	SLE F	-24094.50	5642.96	944.73	46.00	136.36	0.50	20.00	160.52	9.42	322.89	14.63	0.00	0.00

Verifiche principali

Caso	Tipo
1	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
3	SLU N cost - min. sic.
40	C.Rare - Sc min (max compr.),C.Rare - Sf max (max traz.),C.Rare - Sf min (max compr.)
53	C.Rare - Sc max (min. compr.)
77	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf max (max traz.),C.Q.Per. - Sf min (max compr.),C.Q.Per. - Wk Max
90	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 16

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 16 (-29)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	77295.90	7393.06	-935.54	45596.60	-16806.80
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	77295.90	7393.06	-935.54	45596.60	-16806.80
2	2	SLE R	RVN	57256.20	5476.34	-693.00	33775.30	-12449.50
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	57256.20	5476.34	-693.00	33775.30	-12449.50
3	3	SLE F	RVN	57256.20	5476.34	-693.00	33775.30	-12449.50
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	57256.20	5476.34	-693.00	33775.30	-12449.50
4	4	SLE Q	RVN	57256.20	5476.34	-693.00	33775.30	-12449.50
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	57256.20	5476.34	-693.00	33775.30	-12449.50

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-77295.90	-7393.06	935.54	-45596.60	16806.80
2	2	SLE R	1	-57256.20	-5476.34	693.00	-33775.30	12449.50
3	3	SLE F	1	-57256.20	-5476.34	693.00	-33775.30	12449.50
4	4	SLE Q	1	-57256.20	-5476.34	693.00	-33775.30	12449.50

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-77295.90	45063.70	16610.40	-77295.90	167723.00	61405.30	2-3	160.00	3.719
2	59.72	1	SLU	-77138.00	47741.30	17597.30	-77138.00	167664.00	61385.40	2-3	160.00	3.509
3	119.44	1	SLU	-75146.40	47899.80	17655.70	-75146.40	166920.00	61134.00	2-3	160.00	3.482
4	179.17	1	SLU	-73166.90	46183.30	17023.10	-73166.90	166180.00	60884.00	2-3	160.00	3.596
5	238.89	1	SLU	-71199.40	43141.90	15902.00	-71199.40	165441.00	60635.80	2-3	160.00	3.832
6	298.61	1	SLU	-69243.60	39234.00	14461.50	-69243.60	164706.00	60388.80	2-3	160.00	4.195
7	358.33	1	SLU	-67299.00	34832.90	12839.30	-67299.00	163975.00	60143.00	2-3	160.00	4.705
8	418.06	1	SLU	-65365.40	30234.50	11144.40	-65365.40	163248.00	59898.30	2-3	160.00	5.396
9	477.78	1	SLU	-63442.50	25665.90	9460.37	-63442.50	162525.00	59654.80	2-3	160.00	6.329
10	537.50	1	SLU	-61529.90	21294.20	7848.98	-61529.90	161802.00	59413.00	2-3	160.00	7.595
11	597.22	1	SLU	-59627.40	17236.10	6353.17	-59627.40	161083.00	59172.30	2-3	160.00	9.342
12	656.94	1	SLU	-57734.60	13566.10	5000.43	-57734.60	160367.00	58932.60	2-3	160.00	11.817
13	716.67	1	SLU	-55851.20	10324.80	3805.68	-55851.20	159654.00	58693.90	2-3	160.00	15.458
14	776.39	1	SLU	-53976.90	7525.76	2773.98	-53976.90	158945.00	58456.10	2-3	160.00	21.114
15	836.11	1	SLU	-52111.40	5162.41	1902.85	-52111.40	158236.00	58219.70	2-3	160.00	30.645
16	895.83	1	SLU	-50254.50	3213.18	1184.37	-50254.50	157530.00	57984.60	2-3	160.00	49.018
17	955.56	1	SLU	-48405.70	1646.36	606.85	-2571250.00	156826.00	57750.20	2-3	160.00	53.119
18	1015.28	1	SLU	-46564.80	423.90	156.25	-2571250.00	156127.00	57496.90	2-3	160.00	55.219
19	1075.00	1	SLU	-44731.50	-495.49	-182.63	-2571250.00	-155682.00	-56255.30	2-3	340.00	57.482
20	1134.72	1	SLU	-42905.60	-1153.92	-425.33	-2571250.00	-154967.00	-56012.30	2-3	340.00	59.928
21	1194.44	1	SLU	-41086.60	-1592.51	-586.99	-2571250.00	-154248.00	-55776.90	2-3	340.00	62.581
22	1254.17	1	SLU	-39274.30	-1850.07	-681.93	-2571250.00	-153530.00	-55543.90	2-3	340.00	65.469
23	1313.89	1	SLU	-37468.50	-1962.28	-723.29	-2571250.00	-152814.00	-55311.40	2-3	340.00	68.624
24	1373.61	1	SLU	-35668.70	-1961.11	-722.86	-2571250.00	-152099.00	-55079.80	2-3	340.00	72.087
25	1433.33	1	SLU	-33874.80	-1874.68	-691.00	-2571250.00	-151384.00	-54849.40	2-3	340.00	75.904
26	1493.06	1	SLU	-32086.40	-1727.17	-636.63	-2571250.00	-150670.00	-54619.50	2-3	340.00	80.135
27	1552.78	1	SLU	-30303.20	-1539.10	-567.31	-2571250.00	-149959.00	-54389.90	2-3	340.00	84.851
28	1612.50	1	SLU	-28525.00	-1327.50	-489.31	-2571250.00	-149249.00	-54160.70	2-3	340.00	90.140
29	1672.22	1	SLU	-26751.40	-1106.40	-407.81	-2571250.00	-148540.00	-53932.10	2-3	340.00	96.116
30	1731.94	1	SLU	-24982.20	-887.15	-327.00	-2571250.00	-147830.00	-53704.80	2-3	340.00	>100
31	1791.67	1	SLU	-23217.10	-678.92	-250.25	-2571250.00	-147121.00	-53477.70	2-3	340.00	>100
32	1851.39	1	SLU	-21455.70	-489.12	-180.29	-2571250.00	-146413.00	-53250.80	2-3	340.00	>100
33	1911.11	1	SLU	-19697.90	-323.79	-119.35	-2571250.00	-145707.00	-53024.20	2-3	340.00	>100
34	1970.83	1	SLU	-17943.30	-187.97	-69.29	-2571250.00	-145001.00	-52797.50	2-3	340.00	>100
35	2030.56	1	SLU	-16191.50	-86.09	-31.73	-2571250.00	-144294.00	-52572.30	2-3	340.00	>100
36	2090.28	1	SLU	-14442.50	-22.15	-8.16	-2571250.00	-143587.00	-52347.30	2-3	340.00	>100
37	2150.00	1	SLU	-12695.80	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7393.06	-935.54	0.85	11.31	7452.02	1.00	32294.70	342740.00	32294.70	4.334
2	59.72	1	SLU	2306.32	-291.85	0.85	11.31	2324.72	1.00	32294.70	342717.00	32294.70	13.892
3	119.44	1	SLU	-1555.27	196.81	0.85	11.31	1567.67	1.00	32294.70	342432.00	32294.70	20.600
4	179.17	1	SLU	-4360.24	551.76	0.85	11.31	4395.02	1.00	32294.70	342148.00	32294.70	7.348
5	238.89	1	SLU	-6274.05	793.94	0.85	11.31	6324.08	1.00	32294.70	341867.00	32294.70	5.107
6	298.61	1	SLU	-7453.53	943.20	0.85	11.31	7512.97	1.00	32294.70	341586.00	32294.70	4.299
7	358.33	1	SLU	-8043.11	1017.80	0.85	11.31	8107.25	1.00	32294.70	341308.00	32294.70	3.983
8	418.06	1	SLU	-8172.52	1034.18	0.85	11.31	8237.69	1.00	32294.70	341031.00	32294.70	3.920

9	477.78	1	SLU	-7955.57	1006.73	0.85	11.31	8019.01	1.00	32294.70	340756.00	32294.70	4.027
10	537.50	1	SLU	-7489.94	947.80	0.85	11.31	7549.67	1.00	32294.70	340482.00	32294.70	4.278
11	597.22	1	SLU	-6857.57	867.78	0.85	11.31	6912.26	1.00	32294.70	340209.00	32294.70	4.672
12	656.94	1	SLU	-6125.64	775.16	0.85	11.31	6174.49	1.00	32294.70	339938.00	32294.70	5.230
13	716.67	1	SLU	-5347.74	676.72	0.85	11.31	5390.39	1.00	32294.70	339668.00	32294.70	5.991
14	776.39	1	SLU	-4565.37	577.72	0.85	11.31	4601.78	1.00	32294.70	339400.00	32294.70	7.018
15	836.11	1	SLU	-3809.48	482.07	0.85	11.31	3839.86	1.00	32294.70	339132.00	32294.70	8.410
16	895.83	1	SLU	-3101.98	392.54	0.85	11.31	3126.72	1.00	32294.70	338867.00	32294.70	10.329
17	955.56	1	SLU	-2457.26	310.95	0.85	11.31	2476.86	1.00	32294.70	338602.00	32294.70	13.039
18	1015.28	1	SLU	-1883.58	238.36	0.85	11.31	1898.61	1.00	32294.70	338338.00	32294.70	17.010
19	1075.00	1	SLU	-1384.35	175.18	0.85	11.31	1395.39	1.00	32294.70	338075.00	32294.70	23.144
20	1134.72	1	SLU	-959.25	121.39	0.85	11.31	966.90	1.00	32294.70	337814.00	32294.70	33.400
21	1194.44	1	SLU	-605.22	76.59	0.85	11.31	610.05	1.00	32294.70	337553.00	32294.70	52.938
22	1254.17	1	SLU	-317.33	40.16	0.85	11.31	319.86	1.00	32294.70	337294.00	32294.70	>100
23	1313.89	1	SLU	-89.43	11.32	0.85	11.31	90.14	1.00	32294.70	337035.00	32294.70	>100
24	1373.61	1	SLU	85.26	-10.79	0.85	11.31	85.94	1.00	32294.70	336777.00	32294.70	>100
25	1433.33	1	SLU	213.67	-27.04	0.85	11.31	215.37	1.00	32294.70	336520.00	32294.70	>100
26	1493.06	1	SLU	302.58	-38.29	0.85	11.31	305.00	1.00	32294.70	336264.00	32294.70	>100
27	1552.78	1	SLU	358.36	-45.35	0.85	11.31	361.22	1.00	32294.70	336009.00	32294.70	89.405
28	1612.50	1	SLU	386.75	-48.94	0.85	11.31	389.84	1.00	32294.70	335754.00	32294.70	82.842
29	1672.22	1	SLU	392.81	-49.71	0.85	11.31	395.94	1.00	32294.70	335500.00	32294.70	81.564
30	1731.94	1	SLU	380.83	-48.19	0.85	11.31	383.86	1.00	32294.70	335247.00	32294.70	84.131
31	1791.67	1	SLU	354.30	-44.83	0.85	11.31	357.13	1.00	32294.70	334994.00	32294.70	90.429
32	1851.39	1	SLU	316.00	-39.99	0.85	11.31	318.51	1.00	32294.70	334741.00	32294.70	>100
33	1911.11	1	SLU	267.97	-33.91	0.85	11.31	270.10	1.00	32294.70	334490.00	32294.70	>100
34	1970.83	1	SLU	211.65	-26.78	0.85	11.31	213.33	1.00	32294.70	334238.00	32294.70	>100
35	2030.56	1	SLU	147.94	-18.72	0.85	11.31	149.12	1.00	32294.70	333987.00	32294.70	>100
36	2090.28	1	SLU	77.32	-9.78	0.85	11.31	77.94	1.00	32294.70	333737.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_c <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-57256.20	12304.00	33380.50	43.98	34.56	33.33	604.30	
39	59.72	2	SLE R	-57375.00	13035.10	35364.00	43.98	34.56	35.56	675.95	
40	119.44	2	SLE R	-55933.30	13078.30	35481.30	43.98	34.56	35.81	696.37	
41	179.17	2	SLE R	-54500.80	12609.70	34209.90	43.98	34.56	34.48	665.02	
42	238.89	2	SLE R	-53077.10	11779.30	31957.00	43.98	34.56	32.04	597.32	
43	298.61	2	SLE R	-51662.10	10712.30	29062.20	43.98	34.56	28.88	506.91	
44	358.33	2	SLE R	-50255.60	9510.61	25802.20	40.84	37.70	25.29	405.57	
45	418.06	2	SLE R	-48857.20	8255.09	22396.00	37.70	40.84	21.56	303.39	
46	477.78	2	SLE R	-47466.80	7007.68	19011.70	37.70	40.84	17.91	245.26	
47	537.50	2	SLE R	-46084.10	5814.06	15773.50	34.56	43.98	14.55	201.21	
48	597.22	2	SLE R	-44709.00	4706.05	12767.50	28.27	50.27	11.67	163.05	
49	656.94	2	SLE R	-43341.20	3704.02	10049.00	21.99	56.55	9.39	132.37	
50	716.67	2	SLE R	-41980.40	2819.02	7647.98	12.57	65.97	7.67	109.03	
51	776.39	2	SLE R	-40626.50	2054.80	5574.64	0.00	78.54	6.38	91.32	
52	836.11	2	SLE R	-39279.20	1409.52	3824.01	0.00	78.54	5.30	76.56	
53	895.83	2	SLE R	-37938.30	877.31	2380.13	0.00	78.54	4.40	64.10	
54	955.56	2	SLE R	-36603.60	449.51	1219.53	0.00	78.54	3.65	53.77	
55	1015.28	2	SLE R	-35274.90	115.74	314.00	0.00	78.54	3.04	45.36	
56	1075.00	2	SLE R	-33952.00	-135.28	-367.03	0.00	78.54	2.96	44.14	
57	1134.72	2	SLE R	-32634.50	-315.06	-854.75	0.00	78.54	3.12	46.18	
58	1194.44	2	SLE R	-31322.50	-434.81	-1179.63	0.00	78.54	3.20	47.01	
59	1254.17	2	SLE R	-30015.50	-505.13	-1370.42	0.00	78.54	3.20	46.84	
60	1313.89	2	SLE R	-28713.40	-535.77	-1453.54	0.00	78.54	3.14	45.87	
61	1373.61	2	SLE R	-27416.00	-535.45	-1452.68	0.00	78.54	3.03	44.28	
62	1433.33	2	SLE R	-26123.00	-511.85	-1388.65	0.00	78.54	2.89	42.23	
63	1493.06	2	SLE R	-24834.40	-471.58	-1279.39	0.00	78.54	2.72	39.84	
64	1552.78	2	SLE R	-23549.70	-420.23	-1140.07	0.00	78.54	2.54	37.23	
65	1612.50	2	SLE R	-22269.00	-362.45	-983.33	0.00	78.54	2.35	34.50	
66	1672.22	2	SLE R	-20991.80	-302.08	-819.55	0.00	78.54	2.16	31.72	
67	1731.94	2	SLE R	-19718.10	-242.22	-657.15	0.00	78.54	1.96	28.95	
68	1791.67	2	SLE R	-18447.60	-185.37	-502.91	0.00	78.54	1.78	26.25	
69	1851.39	2	SLE R	-17180.10	-133.55	-362.31	0.00	78.54	1.60	23.65	
70	1911.11	2	SLE R	-15915.40	-88.40	-239.84	0.00	78.54	1.43	21.20	
71	1970.83	2	SLE R	-14653.30	-51.32	-139.24	0.00	78.54	1.27	18.91	
72	2030.56	2	SLE R	-13393.60	-23.50	-63.77	0.00	78.54	1.12	16.81	
73	2090.28	2	SLE R	-12136.10	-6.05	-16.41	0.00	78.54	1.00	14.92	
74	2150.00	2	SLE R	-10880.60	0.00	0.00	0.00	78.54	0.88	13.27	
75	0.00	4	SLE Q	-57256.20	12304.00	33380.50	43.98	34.56	33.33	604.30	
76	59.72	4	SLE Q	-57375.00	13035.10	35364.00	43.98	34.56	35.56	675.95	
77	119.44	4	SLE Q	-55933.30	13078.30	35481.30	43.98	34.56	35.81	696.37	
78	179.17	4	SLE Q	-54500.80	12609.70	34209.90	43.98	34.56	34.48	665.02	
79	238.89	4	SLE Q	-53077.10	11779.30	31957.00	43.98	34.56	32.04	597.32	
80	298.61	4	SLE Q	-51662.10	10712.30	29062.20	43.98	34.56	28.88	506.91	
81	358.33	4	SLE Q	-50255.60	9510.61	25802.20	40.84	37.70	25.29	405.57	
82	418.06	4	SLE Q	-48857.20	8255.09	22396.00	37.70	40.84	21.56	303.39	
83	477.78	4	SLE Q	-47466.80	7007.68	19011.70	37.70	40.84	17.91	245.26	
84	537.50	4	SLE Q	-46084.10	5814.06	15773.50	34.56	43.98	14.55	201.21	
85	597.22	4	SLE Q	-44709.00	4706.05	12767.50	28.27	50.27	11.67	163.05	
86	656.94	4	SLE Q	-43341.20	3704.02	10049.00	21.99	56.55	9.39	132.37	
87	716.67	4	SLE Q	-41980.40	2819.02	7647.98	12.57	65.97	7.67	109.03	
88	776.39	4	SLE Q	-40626.50	2054.80	5574.64	0.00	78.54	6.38	91.32	
89	836.11	4	SLE Q	-39279.20	1409.52	3824.01	0.00	78.54	5.30	76.56	
90	895.83	4	SLE Q	-37938.30	877.31	2380.13	0.00	78.54	4.40	64.10	
91	955.56	4	SLE Q	-36603.60	449.51	1219.53	0.00	78.54	3.65	53.77	
92	1015.28	4	SLE Q	-35274.90	115.74	314.00	0.00	78.54	3.04	45.36	
93	1075.00	4	SLE Q	-33952.00	-135.28	-367.03	0.00	78.54	2.96	44.14	
94	1134.72	4	SLE Q	-32634.50	-315.06	-854.75	0.00	78.54	3.12	46.18	
95	1194.44	4	SLE Q	-31322.50	-434.81	-1179.63	0.00	78.54	3.20	47.01	
96	1254.17	4	SLE Q	-30015.50	-505.13	-1370.42	0.00	78.54	3.20	46.84	
97	1313.89	4	SLE Q	-28713.40	-535.77	-1453.54	0.00	78.54	3.14	45.87	
98	1373.61	4	SLE Q	-27416.00	-535.45	-1452.68	0.00	78.54	3.03	44.28	
99	1433.33	4	SLE Q	-26123.00	-511.85	-1388.65	0.00	78.54	2.89	42.23	
100	1493.06	4	SLE Q	-24834.40	-471.58	-1279.39	0.00	78.54	2.72	39.84	
101	1552.78	4	SLE Q	-23549.70	-420.23	-1140.07	0.00	78.54	2.54	37.23	
102	1612.50	4	SLE Q	-22269.00	-362.45	-983.33	0.00	78.54	2.35	34.50	
103	1672.22	4	SLE Q	-20991.80	-302.08	-819.55	0.00	78.54	2.16	31.72	
104	1731.94	4	SLE Q	-19718.10	-242.22	-657.15	0.00	78.54	1.96	28.95	
105	1791.67	4	SLE Q	-18447.60	-185.37	-502.91	0.00	78.54	1.78	26.25	
106	1851.39	4	SLE Q	-17180.10	-133.55	-362.31	0.00	78.54	1.60	23.65	
107	1911.11	4	SLE Q	-15915.40	-88.40	-239.84	0.00	78.54	1.43	21.20	
108	1970.83	4	SLE Q	-14653.30	-51.32	-139.24	0.00	78.54	1.27	18.91	
109	2030.56	4	SLE Q	-13393.60	-23.50	-63.77	0.00	78.54	1.12	16.81	
110	2090.28	4	SLE Q	-12136.10	-6.05	-16.41	0.00	78.54	1.00	14.92	
111	2150.00	4	SLE Q	-10880.60	0.00	0.00	0.00	78.54	0.88	13.27	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	$A_{c\ eff}$ <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-57256.20	33380.50	12304.00	46.00	136.36	0.50	20.00	212.89	18.85	1139.36	604.30	0.18	0.06
76	59.72	4	SLE Q	-57375.00	35364.00	13035.10	46.00	136.36	0.50	20.00	214.76	18.85	1157.02	675.95	0.20	0.07
77	119.44	4	SLE Q	-55933.30	35481.30	13078.30	46.00	136.36	0.50	20.00	215.66	18.85	1165.49	696.37	0.20	0.07
78	179.17	4	SLE Q	-54500.80	34209.90	12609.70	46.00	136.36	0.50	20.00	215.34	18.85	1162.44	665.02	0.19	0.07
79	238.89	4	SLE Q	-53077.10	31957.00	11779.30	46.00	136.36	0.50	20.00	214.00	18.85	1149.80	597.32	0.17	0.06
80	298.61	4	SLE Q	-51662.10	29062.20	10712.30	46.00	136.36	0.50	20.00	211.59	18.85	1127.08	506.91	0.15	0.05
81	358.33	4	SLE Q	-50255.60	25802.20	9510.61	46.00	136.36	0.50	20.00	207.87	18.85	1092.03	405.57	0.12	0.04
82	418.06	4	SLE Q	-48857.20	22396.00	8255.09	46.00	136.36	0.50	20.00	202.26	18.85	1039.22	303.39	0.09	0.03
83	477.78	4	SLE Q	-47466.80	19011.70	7007.68	46.00	136.36	0.50	20.00	193.77	18.85	959.15	209.11	0.06	0.02
84	537.50	4	SLE Q	-46084.10	15773.50	5814.06	46.00	136.36	0.50	20.00	198.57	15.71	837.03	129.99	0.04	0.01
85	597.22	4	SLE Q	-44709.00	12767.50	4706.05	46.00	136.36	0.50	20.00	190.09	12.57	616.32	70.63	0.02	0.01
86	656.94	4	SLE Q	-43341.20	10049.00	3704.02	46.00	136.36	0.50	20.00	164.70	9.42	342.57	31.09	0.01	0.00
112	0.00	3	SLE F	-57256.20	33380.50	12304.00	46.00	136.36	0.50	20.00	212.89	18.85	1139.36	604.30	0.18	0.06
113	59.72	3	SLE F	-57375.00	35364.00	13035.10	46.00	136.36	0.50	20.00	214.76	18.85	1157.02	675.95	0.20	0.07
114	119.44	3	SLE F	-55933.30	35481.30	13078.30	46.00	136.36	0.50	20.00	215.66	18.85	1165.49	696.37	0.20	0.07
115	179.17	3	SLE F	-54500.80	34209.90	12609.70	46.00	136.36	0.50	20.00	215.34	18.85	1162.44	665.02	0.19	0.07
116	238.89	3	SLE F	-53077.10	31957.00	11779.30	46.00	136.36	0.50	20.00	214.00	18.85	1149.80	597.32	0.17	0.06
117	298.61	3	SLE F	-51662.10	29062.20	10712.30	46.00	136.36	0.50	20.00	211.59	18.85	1127.08	506.91	0.15	0.05
118	358.33	3	SLE F	-50255.60	25802.20	9510.61	46.00	136.36	0.50	20.00	207.87	18.85	1092.03	405.57	0.12	0.04
119	418.06	3	SLE F	-48857.20	22396.00	8255.09	46.00	136.36	0.50	20.00	202.26	18.85	1039.22	303.39	0.09	0.03
120	477.78	3	SLE F	-47466.80	19011.70	7007.68	46.00	136.36	0.50	20.00	193.77	18.85	959.15	209.11	0.06	0.02
121	537.50	3	SLE F	-46084.10	15773.50	5814.06	46.00	136.36	0.50	20.00	198.57	15.71	837.03	129.99	0.04	0.01
122	597.22	3	SLE F	-44709.00	12767.50	4706.05	46.00	136.36	0.50	20.00	190.09	12.57	616.32	70.63	0.02	0.01
123	656.94	3	SLE F	-43341.20	10049.00	3704.02	46.00	136.36	0.50	20.00	164.70	9.42	342.57	31.09	0.01	0.00

Verifiche principali

Caso	Tipo
3	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
40	C.Rare - Sc min (max compr.),C.Rare - Sf max (max traz.),C.Rare - Sf min (max compr.)

51	C.Rare - Sc max (min. compr.)
77	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf max (max traz.),C.Q.Per. - Sf min (max compr.),C.Q.Per. - Wk Max
88	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 17

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 17 (-44)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	117290.00	7098.27	-1069.29	43403.50	-29264.60
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	117290.00	7098.27	-1069.29	43403.50	-29264.60
2	2	SLE R	RVN	86881.70	5257.98	-792.07	32150.80	-21677.50
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	86881.70	5257.98	-792.07	32150.80	-21677.50
3	3	SLE F	RVN	86881.70	5257.98	-792.07	32150.80	-21677.50
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	86881.70	5257.98	-792.07	32150.80	-21677.50
4	4	SLE Q	RVN	86881.70	5257.98	-792.07	32150.80	-21677.50
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	86881.70	5257.98	-792.07	32150.80	-21677.50

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-117290.00	-7098.27	1069.29	-43403.50	29264.60
2	2	SLE R	1	-86881.70	-5257.98	792.07	-32150.80	21677.50
3	3	SLE F	1	-86881.70	-5257.98	792.07	-32150.80	21677.50
4	4	SLE Q	1	-86881.70	-5257.98	792.07	-32150.80	21677.50

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-117290.00	42916.80	28936.40	-117290.00	161441.00	107772.00	2-3	146.25	3.750
2	59.72	1	SLU	-116580.00	45104.40	30411.50	-116580.00	161211.00	107629.00	2-3	146.25	3.563
3	119.44	1	SLU	-113491.00	45000.40	30341.30	-113491.00	160211.00	107007.00	2-3	146.25	3.550
4	179.17	1	SLU	-110420.00	43200.30	29127.60	-110420.00	159213.00	106387.00	2-3	146.25	3.675
5	238.89	1	SLU	-107367.00	40211.00	27112.10	-107367.00	158217.00	105770.00	2-3	146.25	3.924
6	298.61	1	SLU	-104332.00	36454.00	24578.90	-104332.00	157226.00	105153.00	2-3	146.25	4.302
7	358.33	1	SLU	-101314.00	32271.30	21758.80	-101314.00	156243.00	104522.00	2-3	146.25	4.830
8	418.06	1	SLU	-98311.90	27933.00	18833.70	-98311.90	155260.00	103892.00	2-3	146.25	5.545
9	477.78	1	SLU	-95326.20	23645.40	15942.80	-95326.20	154283.00	103264.00	2-3	146.25	6.510
10	537.50	1	SLU	-92356.00	19559.60	13188.00	-92356.00	153309.00	102640.00	2-3	146.25	7.821
11	597.22	1	SLU	-89400.90	15780.00	10639.60	-89400.90	152335.00	102015.00	2-3	146.25	9.633
12	656.94	1	SLU	-86460.30	12372.30	8341.99	-86460.30	151366.00	101394.00	2-3	146.25	12.209
13	716.67	1	SLU	-83533.90	9371.26	6318.53	-83533.90	150401.00	100775.00	2-3	146.25	16.018
14	776.39	1	SLU	-80621.10	6786.94	4576.06	-80621.10	149436.00	100156.00	2-3	146.25	21.977
15	836.11	1	SLU	-77721.50	4611.04	3108.97	-77721.50	148474.00	99539.20	2-3	146.25	32.143
16	895.83	1	SLU	-74834.50	2821.85	1902.62	-2571250.00	147515.00	98924.60	2-3	146.25	34.359
17	955.56	1	SLU	-71959.80	1388.55	936.23	-2571250.00	146559.00	98311.30	2-3	146.25	35.732
18	1015.28	1	SLU	-69096.80	274.77	185.26	-2571250.00	145603.00	97698.70	2-3	146.25	37.212
19	1075.00	1	SLU	-66245.00	-558.62	-376.65	-2571250.00	-145119.00	-96590.90	2-3	326.25	38.814
20	1134.72	1	SLU	-63404.10	-1151.25	-776.22	-2571250.00	-144153.00	-95964.60	2-3	326.25	40.553
21	1194.44	1	SLU	-60573.50	-1541.63	-1039.44	-2571250.00	-143183.00	-95337.00	2-3	326.25	42.448
22	1254.17	1	SLU	-57752.80	-1766.01	-1190.72	-2571250.00	-142217.00	-94710.90	2-3	326.25	44.522
23	1313.89	1	SLU	-54941.50	-1857.55	-1252.45	-2571250.00	-141253.00	-94086.40	2-3	326.25	46.800
24	1373.61	1	SLU	-52139.20	-1845.93	-1244.61	-2571250.00	-140287.00	-93461.10	2-3	326.25	49.315
25	1433.33	1	SLU	-49345.40	-1757.13	-1184.74	-2571250.00	-139323.00	-92836.50	2-3	326.25	52.107
26	1493.06	1	SLU	-46559.60	-1613.48	-1087.88	-2571250.00	-138361.00	-92213.30	2-3	326.25	55.225
27	1552.78	1	SLU	-43781.50	-1433.81	-966.74	-2571250.00	-137399.00	-91589.80	2-3	326.25	58.729
28	1612.50	1	SLU	-41010.50	-1233.76	-831.86	-2571250.00	-136436.00	-90966.20	2-3	326.25	62.697
29	1672.22	1	SLU	-38246.10	-1026.13	-691.86	-2571250.00	-135475.00	-90343.70	2-3	326.25	67.229
30	1731.94	1	SLU	-35488.10	-821.25	-553.72	-2571250.00	-134514.00	-89721.20	2-3	326.25	72.454
31	1791.67	1	SLU	-32735.80	-627.42	-423.04	-2571250.00	-133549.00	-89100.30	2-3	326.25	78.546
32	1851.39	1	SLU	-29988.80	-451.31	-304.29	-2571250.00	-132573.00	-88487.70	2-3	326.25	85.740
33	1911.11	1	SLU	-27246.70	-298.31	-201.14	-2571250.00	-131599.00	-87875.60	2-3	326.25	94.369
34	1970.83	1	SLU	-24509.10	-172.94	-116.61	-2571250.00	-130620.00	-87262.90	2-3	326.25	>100
35	2030.56	1	SLU	-21775.50	-79.10	-53.33	-2571250.00	-129643.00	-86650.40	2-3	326.25	>100
36	2090.28	1	SLU	-19045.40	-20.33	-13.71	-2571250.00	-128668.00	-86038.60	2-3	326.25	>100
37	2150.00	1	SLU	-16318.50	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7098.27	-1069.29	0.85	11.31	7178.35	1.00	32294.70	348469.00	32294.70	4.499
2	59.72	1	SLU	1867.21	-281.28	0.85	11.31	1888.28	1.00	32294.70	348367.00	32294.70	17.103
3	119.44	1	SLU	-2084.63	314.03	0.85	11.31	2108.15	1.00	32294.70	347924.00	32294.70	15.319
4	179.17	1	SLU	-4936.27	743.61	0.85	11.31	4991.97	1.00	32294.70	347485.00	32294.70	6.469
5	238.89	1	SLU	-6862.65	1033.80	0.85	11.31	6940.08	1.00	32294.70	347047.00	32294.70	4.653
6	298.61	1	SLU	-8028.92	1209.49	0.85	11.31	8119.51	1.00	32294.70	346613.00	32294.70	3.977
7	358.33	1	SLU	-8586.68	1293.51	0.85	11.31	8683.56	1.00	32294.70	346180.00	32294.70	3.719
8	418.06	1	SLU	-8671.66	1306.31	0.85	11.31	8769.50	1.00	32294.70	345750.00	32294.70	3.683
9	477.78	1	SLU	-8402.65	1265.79	0.85	11.31	8497.46	1.00	32294.70	345323.00	32294.70	3.801
10	537.50	1	SLU	-7881.28	1187.25	0.85	11.31	7970.20	1.00	32294.70	344897.00	32294.70	4.052
11	597.22	1	SLU	-7192.58	1083.50	0.85	11.31	7273.73	1.00	32294.70	344474.00	32294.70	4.440
12	656.94	1	SLU	-6406.02	965.01	0.85	11.31	6478.29	1.00	32294.70	344053.00	32294.70	4.985
13	716.67	1	SLU	-5576.85	840.11	0.85	11.31	5639.77	1.00	32294.70	343633.00	32294.70	5.726
14	776.39	1	SLU	-4747.67	715.20	0.85	11.31	4801.23	1.00	32294.70	343216.00	32294.70	6.726
15	836.11	1	SLU	-3950.05	595.04	0.85	11.31	3994.62	1.00	32294.70	342801.00	32294.70	8.085
16	895.83	1	SLU	-3206.19	482.99	0.85	11.31	3242.37	1.00	32294.70	342387.00	32294.70	9.960
17	955.56	1	SLU	-2530.48	381.20	0.85	11.31	2559.03	1.00	32294.70	341976.00	32294.70	12.620
18	1015.28	1	SLU	-1930.98	290.89	0.85	11.31	1952.77	1.00	32294.70	341565.00	32294.70	16.538
19	1075.00	1	SLU	-1410.75	212.52	0.85	11.31	1426.66	1.00	32294.70	341157.00	32294.70	22.637
20	1134.72	1	SLU	-969.01	145.97	0.85	11.31	979.95	1.00	32294.70	340750.00	32294.70	32.956
21	1194.44	1	SLU	-602.24	90.72	0.85	11.31	609.03	1.00	32294.70	340345.00	32294.70	53.026
22	1254.17	1	SLU	-304.96	45.94	0.85	11.31	308.40	1.00	32294.70	339941.00	32294.70	>100
23	1313.89	1	SLU	-70.53	10.63	0.85	11.31	71.33	1.00	32294.70	339538.00	32294.70	>100
24	1373.61	1	SLU	108.30	-16.31	0.85	11.31	109.53	1.00	32294.70	339136.00	32294.70	>100
25	1433.33	1	SLU	238.94	-35.99	0.85	11.31	241.63	1.00	32294.70	338736.00	32294.70	>100
26	1493.06	1	SLU	328.55	-49.49	0.85	11.31	332.26	1.00	32294.70	338337.00	32294.70	97.198
27	1552.78	1	SLU	383.85	-57.82	0.85	11.31	388.18	1.00	32294.70	337939.00	32294.70	83.196
28	1612.50	1	SLU	410.88	-61.90	0.85	11.31	415.52	1.00	32294.70	337542.00	32294.70	77.722
29	1672.22	1	SLU	414.96	-62.51	0.85	11.31	419.64	1.00	32294.70	337146.00	32294.70	76.958
30	1731.94	1	SLU	400.56	-60.34	0.85	11.31	405.08	1.00	32294.70	336751.00	32294.70	79.724
31	1791.67	1	SLU	371.36	-55.94	0.85	11.31	375.55	1.00	32294.70	336357.00	32294.70	85.992
32	1851.39	1	SLU	330.23	-49.75	0.85	11.31	333.96	1.00	32294.70	335964.00	32294.70	96.703
33	1911.11	1	SLU	279.32	-42.08	0.85	11.31	282.47	1.00	32294.70	335571.00	32294.70	>100
34	1970.83	1	SLU	220.10	-33.16	0.85	11.31	222.58	1.00	32294.70	335179.00	32294.70	>100
35	2030.56	1	SLU	153.53	-23.13	0.85	11.31	155.26	1.00	32294.70	334787.00	32294.70	>100
36	2090.28	1	SLU	80.09	-12.07	0.85	11.31	81.00	1.00	32294.70	334396.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-86881.70	21434.40	31790.20	37.70	40.84	34.08	465.71	
39	59.72	2	SLE R	-86591.60	22527.00	33410.70	37.70	40.84	36.12	491.99	
40	119.44	2	SLE R	-84336.80	22475.00	33333.60	37.70	40.84	36.18	492.76	
41	179.17	2	SLE R	-82095.80	21576.00	32000.20	37.70	40.84	34.65	471.70	
42	238.89	2	SLE R	-79868.10	20083.00	29785.90	37.70	40.84	32.03	437.15	

43	298.61	2	SLE R	-77653.50	18206.60	27002.90	37.70	40.84	28.72	393.72	
44	358.33	2	SLE R	-75451.60	16117.60	23904.70	34.56	43.98	25.09	346.05	
45	418.06	2	SLE R	-73262.00	13950.90	20691.10	31.42	47.12	21.48	298.21	
46	477.78	2	SLE R	-71084.30	11809.50	17515.10	28.27	50.27	18.13	253.65	
47	537.50	2	SLE R	-68918.30	9768.88	14488.60	25.13	53.41	15.24	214.78	
48	597.22	2	SLE R	-66763.50	7881.18	11688.90	18.85	59.69	12.87	182.59	
49	656.94	2	SLE R	-64619.50	6179.25	9164.70	0.00	78.54	10.98	156.63	
50	716.67	2	SLE R	-62486.10	4680.39	6941.67	0.00	78.54	9.41	135.10	
51	776.39	2	SLE R	-60363.00	3389.68	5027.36	0.00	78.54	8.04	116.26	
52	836.11	2	SLE R	-58249.60	2302.94	3415.59	0.00	78.54	6.87	100.01	
53	895.83	2	SLE R	-56145.80	1409.35	2090.26	0.00	78.54	5.87	86.19	
54	955.56	2	SLE R	-54051.10	693.50	1028.56	0.00	78.54	5.04	74.63	
55	1015.28	2	SLE R	-51965.30	137.23	203.53	0.00	78.54	4.35	65.09	
56	1075.00	2	SLE R	-49887.90	-279.00	-413.79	0.00	78.54	4.31	64.32	
57	1134.72	2	SLE R	-47818.60	-574.98	-852.78	0.00	78.54	4.42	65.51	
58	1194.44	2	SLE R	-45757.20	-769.96	-1141.95	0.00	78.54	4.43	65.44	
59	1254.17	2	SLE R	-43703.20	-882.02	-1308.16	0.00	78.54	4.37	64.34	
60	1313.89	2	SLE R	-41656.40	-927.74	-1375.97	0.00	78.54	4.24	62.42	
61	1373.61	2	SLE R	-39616.30	-921.93	-1367.36	0.00	78.54	4.07	59.86	
62	1433.33	2	SLE R	-37582.80	-877.58	-1301.58	0.00	78.54	3.87	56.82	
63	1493.06	2	SLE R	-35555.30	-805.84	-1195.17	0.00	78.54	3.64	53.45	
64	1552.78	2	SLE R	-33533.70	-716.10	-1062.08	0.00	78.54	3.39	49.86	
65	1612.50	2	SLE R	-31517.50	-616.19	-913.90	0.00	78.54	3.13	46.15	
66	1672.22	2	SLE R	-29506.50	-512.49	-760.09	0.00	78.54	2.87	42.40	
67	1731.94	2	SLE R	-27500.20	-410.16	-608.33	0.00	78.54	2.61	38.67	
68	1791.67	2	SLE R	-25498.50	-313.36	-464.75	0.00	78.54	2.36	35.02	
69	1851.39	2	SLE R	-23500.90	-225.40	-334.30	0.00	78.54	2.12	31.48	
70	1911.11	2	SLE R	-21507.20	-148.99	-220.97	0.00	78.54	1.89	28.09	
71	1970.83	2	SLE R	-19517.00	-86.38	-128.11	0.00	78.54	1.67	24.88	
72	2030.56	2	SLE R	-17529.90	-39.51	-58.59	0.00	78.54	1.46	21.87	
73	2090.28	2	SLE R	-15545.70	-10.15	-15.06	0.00	78.54	1.27	19.08	
74	2150.00	2	SLE R	-13564.10	0.00	0.00	0.00	78.54	1.10	16.54	
75	0.00	4	SLE Q	-86881.70	21434.40	31790.20	37.70	40.84	34.08	465.71	
76	59.72	4	SLE Q	-86591.60	22527.00	33410.70	37.70	40.84	36.12	491.99	
77	119.44	4	SLE Q	-84336.80	22475.00	33333.60	37.70	40.84	36.18	492.76	
78	179.17	4	SLE Q	-82095.80	21576.00	32000.20	37.70	40.84	34.65	471.70	
79	238.89	4	SLE Q	-79868.10	20083.00	29785.90	37.70	40.84	32.03	437.15	
80	298.61	4	SLE Q	-77653.50	18206.60	27002.90	37.70	40.84	28.72	393.72	
81	358.33	4	SLE Q	-75451.60	16117.60	23904.70	34.56	43.98	25.09	346.05	
82	418.06	4	SLE Q	-73262.00	13950.90	20691.10	31.42	47.12	21.48	298.21	
83	477.78	4	SLE Q	-71084.30	11809.50	17515.10	28.27	50.27	18.13	253.65	
84	537.50	4	SLE Q	-68918.30	9768.88	14488.60	25.13	53.41	15.24	214.78	
85	597.22	4	SLE Q	-66763.50	7881.18	11688.90	18.85	59.69	12.87	182.59	
86	656.94	4	SLE Q	-64619.50	6179.25	9164.70	0.00	78.54	10.98	156.63	
87	716.67	4	SLE Q	-62486.10	4680.39	6941.67	0.00	78.54	9.41	135.10	
88	776.39	4	SLE Q	-60363.00	3389.68	5027.36	0.00	78.54	8.04	116.26	
89	836.11	4	SLE Q	-58249.60	2302.94	3415.59	0.00	78.54	6.87	100.01	
90	895.83	4	SLE Q	-56145.80	1409.35	2090.26	0.00	78.54	5.87	86.19	
91	955.56	4	SLE Q	-54051.10	693.50	1028.56	0.00	78.54	5.04	74.63	
92	1015.28	4	SLE Q	-51965.30	137.23	203.53	0.00	78.54	4.35	65.09	
93	1075.00	4	SLE Q	-49887.90	-279.00	-413.79	0.00	78.54	4.31	64.32	
94	1134.72	4	SLE Q	-47818.60	-574.98	-852.78	0.00	78.54	4.42	65.51	
95	1194.44	4	SLE Q	-45757.20	-769.96	-1141.95	0.00	78.54	4.43	65.44	
96	1254.17	4	SLE Q	-43703.20	-882.02	-1308.16	0.00	78.54	4.37	64.34	
97	1313.89	4	SLE Q	-41656.40	-927.74	-1375.97	0.00	78.54	4.24	62.42	
98	1373.61	4	SLE Q	-39616.30	-921.93	-1367.36	0.00	78.54	4.07	59.86	
99	1433.33	4	SLE Q	-37582.80	-877.58	-1301.58	0.00	78.54	3.87	56.82	
100	1493.06	4	SLE Q	-35555.30	-805.84	-1195.17	0.00	78.54	3.64	53.45	
101	1552.78	4	SLE Q	-33533.70	-716.10	-1062.08	0.00	78.54	3.39	49.86	
102	1612.50	4	SLE Q	-31517.50	-616.19	-913.90	0.00	78.54	3.13	46.15	
103	1672.22	4	SLE Q	-29506.50	-512.49	-760.09	0.00	78.54	2.87	42.40	
104	1731.94	4	SLE Q	-27500.20	-410.16	-608.33	0.00	78.54	2.61	38.67	
105	1791.67	4	SLE Q	-25498.50	-313.36	-464.75	0.00	78.54	2.36	35.02	
106	1851.39	4	SLE Q	-23500.90	-225.40	-334.30	0.00	78.54	2.12	31.48	
107	1911.11	4	SLE Q	-21507.20	-148.99	-220.97	0.00	78.54	1.89	28.09	
108	1970.83	4	SLE Q	-19517.00	-86.38	-128.11	0.00	78.54	1.67	24.88	
109	2030.56	4	SLE Q	-17529.90	-39.51	-58.59	0.00	78.54	1.46	21.87	
110	2090.28	4	SLE Q	-15545.70	-10.15	-15.06	0.00	78.54	1.27	19.08	
111	2150.00	4	SLE Q	-13564.10	0.00	0.00	0.00	78.54	1.10	16.54	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	A_{C} $_{eff}$ <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-86881.70	31790.20	21434.40	46.00	136.36	0.50	20.00	196.04	18.85	980.51	417.46	0.12	0.04
76	59.72	4	SLE Q	-86591.60	33410.70	22527.00	46.00	136.36	0.50	20.00	199.42	18.85	1012.41	476.57	0.14	0.05
77	119.44	4	SLE Q	-84336.80	33333.60	22475.00	46.00	136.36	0.50	20.00	200.85	18.85	1025.85	492.76	0.14	0.05
78	179.17	4	SLE Q	-82095.80	32000.20	21576.00	46.00	136.36	0.50	20.00	200.03	18.85	1018.17	463.46	0.13	0.05
79	238.89	4	SLE Q	-79868.10	29785.90	20083.00	46.00	136.36	0.50	20.00	197.29	18.85	992.34	403.18	0.12	0.04
80	298.61	4	SLE Q	-77653.50	27002.90	18206.60	46.00	136.36	0.50	20.00	192.46	18.85	946.79	325.83	0.09	0.03
81	358.33	4	SLE Q	-75451.60	23904.70	16117.60	46.00	136.36	0.50	20.00	185.01	18.85	876.65	243.75	0.07	0.02
82	418.06	4	SLE Q	-73262.00	20691.10	13950.90	46.00	136.36	0.50	20.00	214.06	12.57	766.91	167.16	0.05	0.02
83	477.78	4	SLE Q	-71084.30	17515.10	11809.50	46.00	136.36	0.50	20.00	184.77	12.57	582.87	103.24	0.03	0.01
84	537.50	4	SLE Q	-68918.30	14488.60	9768.88	46.00	136.36	0.50	20.00	171.22	9.42	373.32	54.96	0.02	0.00
112	0.00	3	SLE F	-86881.70	31790.20	21434.40	46.00	136.36	0.50	20.00	196.04	18.85	980.51	417.46	0.12	0.04
113	59.72	3	SLE F	-86591.60	33410.70	22527.00	46.00	136.36	0.50	20.00	199.42	18.85	1012.41	476.57	0.14	0.05
114	119.44	3	SLE F	-84336.80	33333.60	22475.00	46.00	136.36	0.50	20.00	200.85	18.85	1025.85	492.76	0.14	0.05
115	179.17	3	SLE F	-82095.80	32000.20	21576.00	46.00	136.36	0.50	20.00	200.03	18.85	1018.17	463.46	0.13	0.05
116	238.89	3	SLE F	-79868.10	29785.90	20083.00	46.00	136.36	0.50	20.00	197.29	18.85	992.34	403.18	0.12	0.04
117	298.61	3	SLE F	-77653.50	27002.90	18206.60	46.00	136.36	0.50	20.00	192.46	18.85	946.79	325.83	0.09	0.03
118	358.33	3	SLE F	-75451.60	23904.70	16117.60	46.00	136.36	0.50	20.00	185.01	18.85	876.65	243.75	0.07	0.02
119	418.06	3	SLE F	-73262.00	20691.10	13950.90	46.00	136.36	0.50	20.00	214.06	12.57	766.91	167.16	0.05	0.02
120	477.78	3	SLE F	-71084.30	17515.10	11809.50	46.00	136.36	0.50	20.00	184.77	12.57	582.87	103.24	0.03	0.01
121	537.50	3	SLE F	-68918.30	14488.60	9768.88	46.00	136.36	0.50	20.00	171.22	9.42	373.32	54.96	0.02	0.00

Verifiche principali

Caso	Tipo
3	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
40	C.Rare - Sc min (max compr.),C.Rare - Sf max (max traz.),C.Rare - Sf min (max compr.)
50	C.Rare - Sc max (min. compr.)
77	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf max (max traz.),C.Q.Per. - Sf min (max compr.),C.Q.Per. - Wk Max
87	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 18

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 18 (-81)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	160249.00	6796.95	-1167.09	35337.90	-41565.10
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	160249.00	6796.95	-1167.09	35337.90	-41565.10
2	2	SLE R	RVN	118703.00	5034.77	-864.51	26176.20	-30788.90
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	118703.00	5034.77	-864.51	26176.20	-30788.90
3	3	SLE F	RVN	118703.00	5034.77	-864.51	26176.20	-30788.90
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	118703.00	5034.77	-864.51	26176.20	-30788.90
4	4	SLE Q	RVN	118703.00	5034.77	-864.51	26176.20	-30788.90
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	118703.00	5034.77	-864.51	26176.20	-30788.90

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-160249.00	-6796.95	1167.09	-35337.90	41565.10
2	2	SLE R	1	-118703.00	-5034.77	864.51	-26176.20	30788.90
3	3	SLE F	1	-118703.00	-5034.77	864.51	-26176.20	30788.90
4	4	SLE Q	1	-118703.00	-5034.77	864.51	-26176.20	30788.90

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-160249.00	34952.60	41111.90	-160249.00	135473.00	160476.00	2-3	130.00	3.892
2	59.72	1	SLU	-159019.00	36539.40	42978.30	-159019.00	135207.00	160129.00	2-3	130.00	3.715
3	119.44	1	SLU	-154750.00	36317.60	42717.40	-154750.00	134281.00	158918.00	2-3	130.00	3.711
4	179.17	1	SLU	-150507.00	34762.50	40888.30	-150507.00	133357.00	157711.00	2-3	130.00	3.848
5	238.89	1	SLU	-146288.00	32278.10	37966.00	-146288.00	132394.00	156524.00	2-3	130.00	4.114
6	298.61	1	SLU	-142093.00	29199.30	34344.70	-142093.00	131333.00	155378.00	2-3	130.00	4.513
7	358.33	1	SLU	-137921.00	25797.50	30343.50	-137921.00	130279.00	154236.00	2-3	130.00	5.069
8	418.06	1	SLU	-133772.00	22286.30	26213.60	-133772.00	129219.00	153095.00	2-3	130.00	5.823
9	477.78	1	SLU	-129644.00	18828.50	22146.40	-129644.00	128166.00	151959.00	2-3	130.00	6.839
10	537.50	1	SLU	-125538.00	15542.60	18281.50	-125538.00	127109.00	150823.00	2-3	130.00	8.220
11	597.22	1	SLU	-121452.00	12510.20	14714.70	-121452.00	126056.00	149691.00	2-3	130.00	10.133
12	656.94	1	SLU	-117386.00	9781.94	11505.70	-117386.00	125003.00	148562.00	2-3	130.00	12.856
13	716.67	1	SLU	-113339.00	7383.95	8685.13	-113339.00	123950.00	147434.00	2-3	130.00	16.896
14	776.39	1	SLU	-109311.00	5322.95	6260.94	-109311.00	122901.00	146310.00	2-3	130.00	23.252
15	836.11	1	SLU	-105301.00	3591.10	4223.91	-2571250.00	121847.00	145187.00	2-3	130.00	24.418
16	895.83	1	SLU	-101307.00	2170.06	2552.46	-2571250.00	120798.00	144066.00	2-3	130.00	25.381
17	955.56	1	SLU	-97330.40	1034.41	1216.69	-2571250.00	119747.00	142947.00	2-3	130.00	26.418
18	1015.28	1	SLU	-93369.50	154.43	181.64	-2571250.00	118698.00	141832.00	2-3	130.00	27.538
19	1075.00	1	SLU	-89423.80	-501.61	-590.00	-2571250.00	-118161.00	-140339.00	2-3	310.00	28.753
20	1134.72	1	SLU	-85492.70	-965.74	-1135.92	-2571250.00	-117251.00	-139109.00	2-3	310.00	30.076
21	1194.44	1	SLU	-81575.50	-1268.99	-1492.61	-2571250.00	-116343.00	-137883.00	2-3	310.00	31.520
22	1254.17	1	SLU	-77671.60	-1440.48	-1694.32	-2571250.00	-115437.00	-136654.00	2-3	310.00	33.104
23	1313.89	1	SLU	-73780.50	-1506.80	-1772.33	-2571250.00	-114533.00	-135427.00	2-3	310.00	34.850
24	1373.61	1	SLU	-69901.30	-1491.68	-1754.54	-2571250.00	-113630.00	-134201.00	2-3	310.00	36.784
25	1433.33	1	SLU	-66033.60	-1415.87	-1665.38	-2571250.00	-112614.00	-133021.00	2-3	310.00	38.938
26	1493.06	1	SLU	-62176.60	-1297.17	-1525.75	-2571250.00	-111569.00	-131856.00	2-3	310.00	41.354
27	1552.78	1	SLU	-58329.80	-1150.54	-1353.29	-2571250.00	-110521.00	-130689.00	2-3	310.00	44.081
28	1612.50	1	SLU	-54492.50	-988.41	-1162.58	-2571250.00	-109453.00	-129530.00	2-3	310.00	47.185
29	1672.22	1	SLU	-50664.10	-820.88	-965.54	-2571250.00	-108381.00	-128371.00	2-3	310.00	50.751
30	1731.94	1	SLU	-46843.90	-656.13	-771.76	-2571250.00	-107307.00	-127211.00	2-3	310.00	54.890
31	1791.67	1	SLU	-43031.40	-500.68	-588.91	-2571250.00	-106235.00	-126051.00	2-3	310.00	59.753
32	1851.39	1	SLU	-39225.90	-359.75	-423.14	-2571250.00	-105156.00	-124890.00	2-3	310.00	65.550
33	1911.11	1	SLU	-35426.90	-237.55	-279.41	-2571250.00	-104080.00	-123728.00	2-3	310.00	72.579
34	1970.83	1	SLU	-31633.60	-137.59	-161.83	-2571250.00	-103000.00	-122565.00	2-3	310.00	81.282
35	2030.56	1	SLU	-27845.40	-62.87	-73.95	-2571250.00	-101918.00	-121402.00	2-3	310.00	92.340
36	2090.28	1	SLU	-24061.80	-16.14	-18.99	-2571250.00	-100837.00	-120238.00	2-3	310.00	>100
37	2150.00	1	SLU	-20282.10	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	6796.95	-1167.09	0.85	11.31	6896.42	1.00	32294.70	354622.00	32294.70	4.683
2	59.72	1	SLU	1521.43	-261.24	0.85	11.31	1543.70	1.00	32294.70	354446.00	32294.70	20.920
3	119.44	1	SLU	-2450.15	420.71	0.85	11.31	2486.00	1.00	32294.70	353834.00	32294.70	12.991
4	179.17	1	SLU	-5302.44	910.47	0.85	11.31	5380.04	1.00	32294.70	353227.00	32294.70	6.003
5	238.89	1	SLU	-7215.29	1238.92	0.85	11.31	7320.88	1.00	32294.70	352622.00	32294.70	4.411
6	298.61	1	SLU	-8358.01	1435.13	0.85	11.31	8480.33	1.00	32294.70	352021.00	32294.70	3.808
7	358.33	1	SLU	-8885.71	1525.74	0.85	11.31	9015.74	1.00	32294.70	351424.00	32294.70	3.582
8	418.06	1	SLU	-8936.94	1534.54	0.85	11.31	9067.73	1.00	32294.70	350830.00	32294.70	3.562
9	477.78	1	SLU	-8632.74	1482.31	0.85	11.31	8759.07	1.00	32294.70	350238.00	32294.70	3.687
10	537.50	1	SLU	-8076.45	1386.79	0.85	11.31	8194.64	1.00	32294.70	349650.00	32294.70	3.941
11	597.22	1	SLU	-7354.37	1262.80	0.85	11.31	7462.00	1.00	32294.70	349065.00	32294.70	4.328
12	656.94	1	SLU	-6536.86	1122.43	0.85	11.31	6632.52	1.00	32294.70	348482.00	32294.70	4.869
13	716.67	1	SLU	-5679.72	975.25	0.85	11.31	5762.84	1.00	32294.70	347903.00	32294.70	5.604
14	776.39	1	SLU	-4825.84	828.63	0.85	11.31	4896.46	1.00	32294.70	347326.00	32294.70	6.596
15	836.11	1	SLU	-4006.91	688.02	0.85	11.31	4065.55	1.00	32294.70	346751.00	32294.70	7.944
16	895.83	1	SLU	-3245.05	557.20	0.85	11.31	3292.54	1.00	32294.70	346179.00	32294.70	9.808
17	955.56	1	SLU	-2554.50	438.63	0.85	11.31	2591.89	1.00	32294.70	345610.00	32294.70	12.460
18	1015.28	1	SLU	-1943.06	333.64	0.85	11.31	1971.50	1.00	32294.70	345042.00	32294.70	16.381
19	1075.00	1	SLU	-1413.50	242.71	0.85	11.31	1434.19	1.00	32294.70	344477.00	32294.70	22.518
20	1134.72	1	SLU	-964.74	165.65	0.85	11.31	978.86	1.00	32294.70	343914.00	32294.70	32.992
21	1194.44	1	SLU	-592.91	101.81	0.85	11.31	601.59	1.00	32294.70	343353.00	32294.70	53.683
22	1254.17	1	SLU	-292.24	50.18	0.85	11.31	296.51	1.00	32294.70	342794.00	32294.70	>100
23	1313.89	1	SLU	-55.77	9.58	0.85	11.31	56.59	1.00	32294.70	342236.00	32294.70	>100
24	1373.61	1	SLU	124.01	-21.29	0.85	11.31	125.82	1.00	32294.70	341681.00	32294.70	>100
25	1433.33	1	SLU	254.73	-43.74	0.85	11.31	258.46	1.00	32294.70	341127.00	32294.70	>100
26	1493.06	1	SLU	343.80	-59.03	0.85	11.31	348.83	1.00	32294.70	340574.00	32294.70	92.580
27	1552.78	1	SLU	398.09	-68.35	0.85	11.31	403.91	1.00	32294.70	340023.00	32294.70	79.955
28	1612.50	1	SLU	423.80	-72.77	0.85	11.31	430.01	1.00	32294.70	339474.00	32294.70	75.103
29	1672.22	1	SLU	426.37	-73.21	0.85	11.31	432.61	1.00	32294.70	338925.00	32294.70	74.651
30	1731.94	1	SLU	410.37	-70.46	0.85	11.31	416.38	1.00	32294.70	338378.00	32294.70	77.561
31	1791.67	1	SLU	379.55	-65.17	0.85	11.31	385.10	1.00	32294.70	337832.00	32294.70	83.861
32	1851.39	1	SLU	336.82	-57.83	0.85	11.31	341.75	1.00	32294.70	337287.00	32294.70	94.498
33	1911.11	1	SLU	284.38	-48.83	0.85	11.31	288.54	1.00	32294.70	336743.00	32294.70	>100
34	1970.83	1	SLU	223.73	-38.42	0.85	11.31	227.00	1.00	32294.70	336199.00	32294.70	>100
35	2030.56	1	SLU	155.83	-26.76	0.85	11.31	158.11	1.00	32294.70	335657.00	32294.70	>100
36	2090.28	1	SLU	81.18	-13.94	0.85	11.31	82.37	1.00	32294.70	335115.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-118703.00	30453.30	25890.80	31.42	47.12	34.31	477.31	
39	59.72	2	SLE R	-117973.00	31835.80	27066.20	31.42	47.12	36.00	499.40	
40	119.44	2	SLE R	-114845.00	31642.50	26901.90	34.56	43.98	35.86	496.73	
41	179.17	2	SLE R	-111736.00	30287.60	25750.00	31.42	47.12	34.27	475.18	
42	238.89	2	SLE R	-108644.00	28123.00	23909.70	31.42	47.12	31.70	440.81	
43	298.61	2	SLE R	-105571.00	25440.50	21629.10	31.42	47.12	28.60	399.19	
44	358.33	2	SLE R	-102515.00	22476.60	19109.30	28.27	50.27	25.32	355.13	
45	418.06	2	SLE R	-99475.30	19417.50	16508.40	25.13	53.41	22.16	312.42	
46	477.78	2	SLE R	-96452.10	16404.80	13947.00	18.85	59.69	19.31	273.58	
47	537.50	2	SLE R	-93444.50	13541.90	11513.10	12.57	65.97	16.83	239.76	
48	597.22	2	SLE R	-90452.20	10899.80	9266.81	0.00	78.54	14.74	210.87	
49	656.94	2	SLE R	-87474.70	8522.74	7245.88	0.00	78.54	12.88	185.30	
50	716.67	2	SLE R	-84511.50	6433.43	5469.59	0.00	78.54	11.23	162.41	
51	776.39	2	SLE R	-81562.00	4637.74	3942.92	0.00	78.54	9.77	142.24	
52	836.11	2	SLE R	-78625.80	3128.82	2660.07	0.00	78.54	8.51	124.74	
53	895.83	2	SLE R	-75702.50	1890.71	1607.45	0.00	78.54	7.43	109.75	
54	955.56	2	SLE R	-72791.50	901.25	766.23	0.00	78.54	6.53	97.07	
55	1015.28	2	SLE R	-69892.40	134.55	114.39	0.00	78.54	5.77	86.46	
56	1075.00	2	SLE R	-67004.70	-437.04	-371.56	0.00	78.54	5.74	85.72	
57	1134.72	2	SLE R	-64127.90	-841.42	-715.36	0.00	78.54	5.78	85.94	
58	1194.44	2	SLE R	-61261.60	-1105.64	-940.00	0.00	78.54	5.73	84.88	
59	1254.17	2	SLE R	-58405.30	-1255.05	-1067.03	0.00	78.54	5.60	82.77	
60	1313.89	2	SLE R	-55558.50	-1312.83	-1116.15	0.00	78.54	5.41	79.83	
61	1373.61	2	SLE R	-52720.80	-1299.66	-1104.95	0.00	78.54	5.17	76.25	
62	1433.33	2	SLE R	-49891.70	-1233.61	-1048.79	0.00	78.54	4.89	72.19	
63	1493.06	2	SLE R	-47070.70	-1130.19	-960.86	0.00	78.54	4.59	67.80	
64	1552.78	2	SLE R	-44257.40	-1002.44	-852.25	0.00	78.54	4.28	63.20	
65	1612.50	2	SLE R	-41451.40	-861.17	-732.15	0.00	78.54	3.95	58.47	
66	1672.22	2	SLE R	-38652.10	-715.21	-608.06	0.00	78.54	3.63	53.72	
67	1731.94	2	SLE R	-35859.00	-571.67	-486.02	0.00	78.54	3.30	48.99	
68	1791.67	2	SLE R	-33071.90	-436.23	-370.88	0.00	78.54	2.98	44.34	
69	1851.39	2	SLE R	-30290.10	-313.44	-266.48	0.00	78.54	2.67	39.82	
70	1911.11	2	SLE R	-27513.30	-206.97	-175.96	0.00	78.54	2.38	35.45	
71	1970.83	2	SLE R	-24741.00	-119.88	-101.92	0.00	78.54	2.09	31.27	
72	2030.56	2	SLE R	-21972.70	-54.78	-46.57	0.00	78.54	1.82	27.29	
73	2090.28	2	SLE R	-19208.00	-14.07	-11.96	0.00	78.54	1.57	23.55	
74	2150.00	2	SLE R	-16446.40	0.00	0.00	0.00	78.54	1.34	20.05	
75	0.00	4	SLE Q	-118703.00	30453.30	25890.80	31.42	47.12	34.31	477.31	
76	59.72	4	SLE Q	-117973.00	31835.80	27066.20	31.42	47.12	36.00	499.40	
77	119.44	4	SLE Q	-114845.00	31642.50	26901.90	34.56	43.98	35.86	496.73	
78	179.17	4	SLE Q	-111736.00	30287.60	25750.00	31.42	47.12	34.27	475.18	
79	238.89	4	SLE Q	-108644.00	28123.00	23909.70	31.42	47.12	31.70	440.81	
80	298.61	4	SLE Q	-105571.00	25440.50	21629.10	31.42	47.12	28.60	399.19	
81	358.33	4	SLE Q	-102515.00	22476.60	19109.30	28.27	50.27	25.32	355.13	
82	418.06	4	SLE Q	-99475.30	19417.50	16508.40	25.13	53.41	22.16	312.42	
83	477.78	4	SLE Q	-96452.10	16404.80	13947.00	18.85	59.69	19.31	273.58	

84	537.50	4	SLE Q	-93444.50	13541.90	11513.10	12.57	65.97	16.83	239.76	
85	597.22	4	SLE Q	-90452.20	10899.80	9266.81	0.00	78.54	14.74	210.87	
86	656.94	4	SLE Q	-87474.70	8522.74	7245.88	0.00	78.54	12.88	185.30	
87	716.67	4	SLE Q	-84511.50	6433.43	5469.59	0.00	78.54	11.23	162.41	
88	776.39	4	SLE Q	-81562.00	4637.74	3942.92	0.00	78.54	9.77	142.24	
89	836.11	4	SLE Q	-78625.80	3128.82	2660.07	0.00	78.54	8.51	124.74	
90	895.83	4	SLE Q	-75702.50	1890.71	1607.45	0.00	78.54	7.43	109.75	
91	955.56	4	SLE Q	-72791.50	901.25	766.23	0.00	78.54	6.53	97.07	
92	1015.28	4	SLE Q	-69892.40	134.55	114.39	0.00	78.54	5.77	86.46	
93	1075.00	4	SLE Q	-67004.70	-437.04	-371.56	0.00	78.54	5.74	85.72	
94	1134.72	4	SLE Q	-64127.90	-841.42	-715.36	0.00	78.54	5.78	85.94	
95	1194.44	4	SLE Q	-61261.60	-1105.64	-940.00	0.00	78.54	5.73	84.88	
96	1254.17	4	SLE Q	-58405.30	-1255.05	-1067.03	0.00	78.54	5.60	82.77	
97	1313.89	4	SLE Q	-55558.50	-1312.83	-1116.15	0.00	78.54	5.41	79.83	
98	1373.61	4	SLE Q	-52720.80	-1299.66	-1104.95	0.00	78.54	5.17	76.25	
99	1433.33	4	SLE Q	-49891.70	-1233.61	-1048.79	0.00	78.54	4.89	72.19	
100	1493.06	4	SLE Q	-47070.70	-1130.19	-960.86	0.00	78.54	4.59	67.80	
101	1552.78	4	SLE Q	-44257.40	-1002.44	-852.25	0.00	78.54	4.28	63.20	
102	1612.50	4	SLE Q	-41451.40	-861.17	-732.15	0.00	78.54	3.95	58.47	
103	1672.22	4	SLE Q	-38652.10	-715.21	-608.06	0.00	78.54	3.63	53.72	
104	1731.94	4	SLE Q	-35859.00	-571.67	-486.02	0.00	78.54	3.30	48.99	
105	1791.67	4	SLE Q	-33071.90	-436.23	-370.88	0.00	78.54	2.98	44.34	
106	1851.39	4	SLE Q	-30290.10	-313.44	-266.48	0.00	78.54	2.67	39.82	
107	1911.11	4	SLE Q	-27513.30	-206.97	-175.96	0.00	78.54	2.38	35.45	
108	1970.83	4	SLE Q	-24741.00	-119.88	-101.92	0.00	78.54	2.09	31.27	
109	2030.56	4	SLE Q	-21972.70	-54.78	-46.57	0.00	78.54	1.82	27.29	
110	2090.28	4	SLE Q	-19208.00	-14.07	-11.96	0.00	78.54	1.57	23.55	
111	2150.00	4	SLE Q	-16446.40	0.00	0.00	0.00	78.54	1.34	20.05	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	A_{C} $_{eff}$ <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-118703.00	25890.80	30453.30	46.00	136.36	0.50	20.00	188.58	15.71	758.56	261.90	0.08	0.02
76	59.72	4	SLE Q	-117973.00	27066.20	31835.80	46.00	136.36	0.50	20.00	195.44	15.71	812.43	304.69	0.09	0.03
77	119.44	4	SLE Q	-114845.00	26901.90	31642.50	46.00	136.36	0.50	20.00	198.01	15.71	832.57	315.94	0.09	0.03
78	179.17	4	SLE Q	-111736.00	25750.00	30287.60	46.00	136.36	0.50	20.00	196.00	15.71	816.84	292.55	0.09	0.03
79	238.89	4	SLE Q	-108644.00	23909.70	28123.00	46.00	136.36	0.50	20.00	189.90	15.71	768.89	246.57	0.07	0.02
80	298.61	4	SLE Q	-105571.00	21629.10	25440.50	46.00	136.36	0.50	20.00	199.47	12.57	675.25	190.13	0.06	0.02
81	358.33	4	SLE Q	-102515.00	19109.30	22476.60	46.00	136.36	0.50	20.00	178.76	12.57	545.13	133.36	0.04	0.01
82	418.06	4	SLE Q	-99475.30	16508.40	19417.50	46.00	136.36	0.50	20.00	175.52	9.42	393.57	83.19	0.02	0.01
83	477.78	4	SLE Q	-96452.10	13947.00	16404.80	46.00	136.36	0.50	20.00	166.50	6.28	234.05	42.85	0.01	0.00
112	0.00	3	SLE F	-118703.00	25890.80	30453.30	46.00	136.36	0.50	20.00	188.58	15.71	758.56	261.90	0.08	0.02
113	59.72	3	SLE F	-117973.00	27066.20	31835.80	46.00	136.36	0.50	20.00	195.44	15.71	812.43	304.69	0.09	0.03
114	119.44	3	SLE F	-114845.00	26901.90	31642.50	46.00	136.36	0.50	20.00	198.01	15.71	832.57	315.94	0.09	0.03
115	179.17	3	SLE F	-111736.00	25750.00	30287.60	46.00	136.36	0.50	20.00	196.00	15.71	816.84	292.55	0.09	0.03
116	238.89	3	SLE F	-108644.00	23909.70	28123.00	46.00	136.36	0.50	20.00	189.90	15.71	768.89	246.57	0.07	0.02
117	298.61	3	SLE F	-105571.00	21629.10	25440.50	46.00	136.36	0.50	20.00	199.47	12.57	675.25	190.13	0.06	0.02
118	358.33	3	SLE F	-102515.00	19109.30	22476.60	46.00	136.36	0.50	20.00	178.76	12.57	545.13	133.36	0.04	0.01
119	418.06	3	SLE F	-99475.30	16508.40	19417.50	46.00	136.36	0.50	20.00	175.52	9.42	393.57	83.19	0.02	0.01
120	477.78	3	SLE F	-96452.10	13947.00	16404.80	46.00	136.36	0.50	20.00	166.50	6.28	234.05	42.85	0.01	0.00

Verifiche principali

Caso	Tipo
3	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
74	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sf max (max traz.),C.Q.Per. - Wk Max
111	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 19

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 19 (-138)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	205015.00	6445.05	-1129.74	20128.10	-51182.00
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	205015.00	6445.05	-1129.74	20128.10	-51182.00
2	2	SLE R	RVN	151863.00	4774.11	-836.84	14909.70	-37912.60
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	151863.00	4774.11	-836.84	14909.70	-37912.60
3	3	SLE F	RVN	151863.00	4774.11	-836.84	14909.70	-37912.60
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	151863.00	4774.11	-836.84	14909.70	-37912.60
4	4	SLE Q	RVN	151863.00	4774.11	-836.84	14909.70	-37912.60
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	151863.00	4774.11	-836.84	14909.70	-37912.60

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-205015.00	-6445.05	1129.74	-20128.10	51182.00
2	2	SLE R	1	-151863.00	-4774.11	836.84	-14909.70	37912.60
3	3	SLE F	1	-151863.00	-4774.11	836.84	-14909.70	37912.60
4	4	SLE Q	1	-151863.00	-4774.11	836.84	-14909.70	37912.60

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-205015.00	19913.00	50635.10	-205015.00	81764.30	210119.00	2-3	111.25	4.144
2	59.72	1	SLU	-203786.00	20740.00	52738.10	-203786.00	81610.00	209724.00	2-3	111.25	3.971
3	119.44	1	SLU	-198992.00	20559.50	52279.00	-198992.00	81008.30	208187.00	2-3	111.25	3.977
4	179.17	1	SLU	-193553.00	19638.40	49936.90	-193553.00	80319.50	206429.00	2-3	111.25	4.128
5	238.89	1	SLU	-188087.00	18203.30	46287.60	-188087.00	79625.60	204658.00	2-3	111.25	4.415
6	298.61	1	SLU	-182652.00	16441.80	41808.40	-182652.00	78930.00	202887.00	2-3	111.25	4.846
7	358.33	1	SLU	-177246.00	14505.60	36885.10	-177246.00	78235.90	201120.00	2-3	111.25	5.445
8	418.06	1	SLU	-171870.00	12513.90	31820.70	-171870.00	77540.90	199353.00	2-3	111.25	6.256
9	477.78	1	SLU	-166521.00	10557.40	26845.70	-166521.00	76846.30	197589.00	2-3	111.25	7.349
10	537.50	1	SLU	-161200.00	8701.92	22127.40	-161200.00	76151.50	195827.00	2-3	111.25	8.837
11	597.22	1	SLU	-155905.00	6992.38	17780.30	-155905.00	75456.50	194067.00	2-3	111.25	10.898
12	656.94	1	SLU	-150635.00	5456.63	13875.20	-150635.00	74761.70	192309.00	2-3	111.25	13.839
13	716.67	1	SLU	-145390.00	4108.70	10447.70	-2571250.00	74066.40	190552.00	2-3	111.25	17.685
14	776.39	1	SLU	-140169.00	2951.79	7505.86	-2571250.00	73371.70	188798.00	2-3	111.25	18.344
15	836.11	1	SLU	-134970.00	1981.03	5037.40	-2571250.00	72676.30	187044.00	2-3	111.25	19.050
16	895.83	1	SLU	-129793.00	1185.71	3015.05	-2571250.00	71981.70	185293.00	2-3	111.25	19.810
17	955.56	1	SLU	-124638.00	551.22	1401.65	-2571250.00	71286.40	183542.00	2-3	111.25	20.630
18	1015.28	1	SLU	-119503.00	60.60	154.08	-2571250.00	70592.00	181794.00	2-3	111.25	21.516
19	1075.00	1	SLU	-114388.00	-304.19	-773.51	-2571250.00	-69951.50	-179878.00	2-3	291.25	22.478
20	1134.72	1	SLU	-109291.00	-561.30	-1427.29	-2571250.00	-69227.70	-178056.00	2-3	291.25	23.527
21	1194.44	1	SLU	-104212.00	-728.27	-1851.86	-2571250.00	-68503.30	-176232.00	2-3	291.25	24.673
22	1254.17	1	SLU	-99149.80	-821.53	-2089.00	-2571250.00	-67778.50	-174407.00	2-3	291.25	25.933
23	1313.89	1	SLU	-94104.00	-856.06	-2176.80	-2571250.00	-67053.70	-172583.00	2-3	291.25	27.323
24	1373.61	1	SLU	-89073.60	-845.21	-2149.22	-2571250.00	-66327.80	-170756.00	2-3	291.25	28.867
25	1433.33	1	SLU	-84057.60	-800.64	-2035.90	-2571250.00	-65602.20	-168929.00	2-3	291.25	30.589
26	1493.06	1	SLU	-79055.40	-732.34	-1862.21	-2571250.00	-64875.90	-167100.00	2-3	291.25	32.525
27	1552.78	1	SLU	-74066.10	-648.69	-1649.50	-2571250.00	-64149.60	-165270.00	2-3	291.25	34.716
28	1612.50	1	SLU	-69088.90	-556.63	-1415.41	-2571250.00	-63422.90	-163438.00	2-3	291.25	37.217

29	1672.22	1	SLU	-64122.90	-461.82	-1174.31	-2571250.00	-62696.20	-161605.00	2-3		291.25	40.099
30	1731.94	1	SLU	-59167.40	-368.79	-937.76	-2571250.00	-61969.20	-159770.00	2-3		291.25	43.457
31	1791.67	1	SLU	-54221.50	-281.18	-714.98	-2571250.00	-61242.20	-157934.00	2-3		291.25	47.421
32	1851.39	1	SLU	-49284.50	-201.87	-513.32	-2571250.00	-60514.80	-156094.00	2-3		291.25	52.172
33	1911.11	1	SLU	-44355.60	-133.20	-338.71	-2571250.00	-59787.30	-154254.00	2-3		291.25	57.969
34	1970.83	1	SLU	-39433.90	-77.10	-196.04	-2571250.00	-59059.40	-152410.00	2-3		291.25	65.204
35	2030.56	1	SLU	-34518.60	-35.21	-89.53	-2571250.00	-58331.10	-150565.00	2-3		291.25	74.489
36	2090.28	1	SLU	-29608.90	-9.04	-22.97	-2571250.00	-57609.90	-148711.00	2-3		291.25	86.840
37	2150.00	1	SLU	-24704.10	0.00	0.00	-2571250.00						>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	6445.05	-1129.74	0.85	11.31	6543.31	1.00	32294.70	361034.00	32294.70	4.936
2	59.72	1	SLU	1240.67	-217.47	0.85	11.31	1259.58	1.00	32294.70	360858.00	32294.70	25.639
3	119.44	1	SLU	-2667.40	467.56	0.85	11.31	2708.06	1.00	32294.70	360172.00	32294.70	11.925
4	179.17	1	SLU	-5464.26	957.82	0.85	11.31	5547.57	1.00	32294.70	359393.00	32294.70	5.821
5	238.89	1	SLU	-7329.79	1284.82	0.85	11.31	7441.54	1.00	32294.70	358610.00	32294.70	4.340
6	298.61	1	SLU	-8433.03	1478.20	0.85	11.31	8561.60	1.00	32294.70	357831.00	32294.70	3.772
7	358.33	1	SLU	-8928.56	1565.07	0.85	11.31	9064.69	1.00	32294.70	357057.00	32294.70	3.563
8	418.06	1	SLU	-8954.30	1569.58	0.85	11.31	9090.83	1.00	32294.70	356287.00	32294.70	3.552
9	477.78	1	SLU	-8630.52	1512.82	0.85	11.31	8762.10	1.00	32294.70	355520.00	32294.70	3.686
10	537.50	1	SLU	-8059.79	1412.78	0.85	11.31	8182.68	1.00	32294.70	354758.00	32294.70	3.947
11	597.22	1	SLU	-7327.65	1284.45	0.85	11.31	7439.37	1.00	32294.70	354000.00	32294.70	4.341
12	656.94	1	SLU	-6503.69	1140.02	0.85	11.31	6602.85	1.00	32294.70	353245.00	32294.70	4.891
13	716.67	1	SLU	-5643.05	989.16	0.85	11.31	5729.09	1.00	32294.70	352494.00	32294.70	5.637
14	776.39	1	SLU	-4787.99	839.27	0.85	11.31	4860.99	1.00	32294.70	351746.00	32294.70	6.644
15	836.11	1	SLU	-3969.63	695.83	0.85	11.31	4030.16	1.00	32294.70	351001.00	32294.70	8.013
16	895.83	1	SLU	-3209.65	562.61	0.85	11.31	3258.59	1.00	32294.70	350260.00	32294.70	9.911
17	955.56	1	SLU	-2521.86	442.05	0.85	11.31	2560.31	1.00	32294.70	349521.00	32294.70	12.614
18	1015.28	1	SLU	-1913.75	335.46	0.85	11.31	1942.93	1.00	32294.70	348786.00	32294.70	16.622
19	1075.00	1	SLU	-1387.80	243.26	0.85	11.31	1408.96	1.00	32294.70	348053.00	32294.70	22.921
20	1134.72	1	SLU	-942.73	165.25	0.85	11.31	957.10	1.00	32294.70	347323.00	32294.70	33.742
21	1194.44	1	SLU	-574.52	100.71	0.85	11.31	583.28	1.00	32294.70	346595.00	32294.70	55.368
22	1254.17	1	SLU	-277.27	48.60	0.85	11.31	281.50	1.00	32294.70	345870.00	32294.70	>100
23	1313.89	1	SLU	-43.97	7.71	0.85	11.31	44.64	1.00	32294.70	345148.00	32294.70	>100
24	1373.61	1	SLU	132.97	-23.31	0.85	11.31	135.00	1.00	32294.70	344427.00	32294.70	>100
25	1433.33	1	SLU	261.20	-45.79	0.85	11.31	265.19	1.00	32294.70	343708.00	32294.70	>100
26	1493.06	1	SLU	348.13	-61.02	0.85	11.31	353.44	1.00	32294.70	342992.00	32294.70	91.374
27	1552.78	1	SLU	400.62	-70.22	0.85	11.31	406.73	1.00	32294.70	342277.00	32294.70	79.401
28	1612.50	1	SLU	424.88	-74.48	0.85	11.31	431.35	1.00	32294.70	341564.00	32294.70	74.868
29	1672.22	1	SLU	426.30	-74.72	0.85	11.31	432.80	1.00	32294.70	340853.00	32294.70	74.619
30	1731.94	1	SLU	409.45	-71.77	0.85	11.31	415.69	1.00	32294.70	340143.00	32294.70	77.690
31	1791.67	1	SLU	378.04	-66.27	0.85	11.31	383.81	1.00	32294.70	339435.00	32294.70	84.143
32	1851.39	1	SLU	335.00	-58.72	0.85	11.31	340.11	1.00	32294.70	338728.00	32294.70	94.955
33	1911.11	1	SLU	282.48	-49.51	0.85	11.31	286.78	1.00	32294.70	338022.00	32294.70	>100
34	1970.83	1	SLU	221.98	-38.91	0.85	11.31	225.36	1.00	32294.70	337317.00	32294.70	>100
35	2030.56	1	SLU	154.44	-27.07	0.85	11.31	156.80	1.00	32294.70	336612.00	32294.70	>100
36	2090.28	1	SLU	80.39	-14.09	0.85	11.31	81.61	1.00	32294.70	335909.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-151863.00	37507.50	14750.30	21.99	56.55	34.89	488.73	
39	59.72	2	SLE R	-150676.00	39065.30	15363.00	28.27	50.27	36.15	505.14	
40	119.44	2	SLE R	-146638.00	38725.20	15229.20	28.27	50.27	35.78	499.54	
41	179.17	2	SLE R	-142623.00	36990.30	14547.00	28.27	50.27	34.23	478.29	
42	238.89	2	SLE R	-138632.00	34287.10	13483.90	25.13	53.41	31.89	446.66	
43	298.61	2	SLE R	-134664.00	30969.20	12179.10	21.99	56.55	29.14	409.55	
44	358.33	2	SLE R	-130717.00	27322.30	10744.90	21.99	56.55	26.30	370.94	
45	418.06	2	SLE R	-126792.00	23570.90	9269.59	15.71	62.83	23.56	333.66	
46	477.78	2	SLE R	-122888.00	19885.70	7820.33	3.14	75.40	21.04	299.31	
47	537.50	2	SLE R	-119003.00	16390.70	6445.86	0.00	78.54	18.77	268.13	
48	597.22	2	SLE R	-115138.00	13170.60	5179.54	0.00	78.54	16.67	239.25	
49	656.94	2	SLE R	-111292.00	10277.90	4041.95	0.00	78.54	14.75	212.84	
50	716.67	2	SLE R	-107464.00	7739.01	3043.48	0.00	78.54	13.03	189.12	
51	776.39	2	SLE R	-103654.00	5559.90	2186.51	0.00	78.54	11.51	168.12	
52	836.11	2	SLE R	-99859.90	3731.41	1467.43	0.00	78.54	10.19	149.76	
53	895.83	2	SLE R	-96082.60	2233.37	878.31	0.00	78.54	9.05	133.91	
54	955.56	2	SLE R	-92320.90	1038.26	408.31	0.00	78.54	8.08	120.36	
55	1015.28	2	SLE R	-88574.30	114.14	44.89	0.00	78.54	7.26	108.85	
56	1075.00	2	SLE R	-84842.20	-572.97	-225.33	0.00	78.54	7.21	107.78	
57	1134.72	2	SLE R	-81123.90	-1057.25	-415.78	0.00	78.54	7.18	106.91	
58	1194.44	2	SLE R	-77418.80	-1371.75	-539.46	0.00	78.54	7.05	104.77	
59	1254.17	2	SLE R	-73726.40	-1547.41	-608.54	0.00	78.54	6.85	101.59	
60	1313.89	2	SLE R	-70046.00	-1612.44	-634.12	0.00	78.54	6.59	97.60	
61	1373.61	2	SLE R	-66377.00	-1592.01	-626.08	0.00	78.54	6.28	92.97	
62	1433.33	2	SLE R	-62718.90	-1508.07	-593.07	0.00	78.54	5.94	87.88	
63	1493.06	2	SLE R	-59071.00	-1379.42	-542.48	0.00	78.54	5.57	82.46	
64	1552.78	2	SLE R	-55432.70	-1221.85	-480.51	0.00	78.54	5.18	76.83	
65	1612.50	2	SLE R	-51803.50	-1048.45	-412.32	0.00	78.54	4.79	71.09	
66	1672.22	2	SLE R	-48182.70	-869.86	-342.09	0.00	78.54	4.40	65.33	
67	1731.94	2	SLE R	-44569.80	-694.64	-273.18	0.00	78.54	4.01	59.60	
68	1791.67	2	SLE R	-40964.10	-529.62	-208.28	0.00	78.54	3.62	53.95	
69	1851.39	2	SLE R	-37365.20	-380.24	-149.53	0.00	78.54	3.25	48.43	
70	1911.11	2	SLE R	-33772.30	-250.90	-98.67	0.00	78.54	2.88	43.07	
71	1970.83	2	SLE R	-30185.00	-145.22	-57.11	0.00	78.54	2.53	37.90	
72	2030.56	2	SLE R	-26602.50	-66.32	-26.08	0.00	78.54	2.20	32.94	
73	2090.28	2	SLE R	-23024.40	-17.02	-6.69	0.00	78.54	1.88	28.20	
74	2150.00	2	SLE R	-19450.10	0.00	0.00	0.00	78.54	1.58	23.71	
75	0.00	4	SLE Q	-151863.00	37507.50	14750.30	21.99	56.55	34.89	488.73	
76	59.72	4	SLE Q	-150676.00	39065.30	15363.00	28.27	50.27	36.15	505.14	
77	119.44	4	SLE Q	-146638.00	38725.20	15229.20	28.27	50.27	35.78	499.54	
78	179.17	4	SLE Q	-142623.00	36990.30	14547.00	28.27	50.27	34.23	478.29	
79	238.89	4	SLE Q	-138632.00	34287.10	13483.90	25.13	53.41	31.89	446.66	
80	298.61	4	SLE Q	-134664.00	30969.20	12179.10	21.99	56.55	29.14	409.55	
81	358.33	4	SLE Q	-130717.00	27322.30	10744.90	21.99	56.55	26.30	370.94	
82	418.06	4	SLE Q	-126792.00	23570.90	9269.59	15.71	62.83	23.56	333.66	
83	477.78	4	SLE Q	-122888.00	19885.70	7820.33	3.14	75.40	21.04	299.31	
84	537.50	4	SLE Q	-119003.00	16390.70	6445.86	0.00	78.54	18.77	268.13	
85	597.22	4	SLE Q	-115138.00	13170.60	5179.54	0.00	78.54	16.67	239.25	
86	656.94	4	SLE Q	-111292.00	10277.90	4041.95	0.00	78.54	14.75	212.84	
87	716.67	4	SLE Q	-107464.00	7739.01	3043.48	0.00	78.54	13.03	189.12	
88	776.39	4	SLE Q	-103654.00	5559.90	2186.51	0.00	78.54	11.51	168.12	
89	836.11	4	SLE Q	-99859.90	3731.41	1467.43	0.00	78.54	10.19	149.76	
90	895.83	4	SLE Q	-96082.60	2233.37	878.31	0.00	78.54	9.05	133.91	
91	955.56	4	SLE Q	-92320.90	1038.26	408.31	0.00	78.54	8.08	120.36	
92	1015.28	4	SLE Q	-88574.30	114.14	44.89	0.00	78.54	7.26	108.85	
93	1075.00	4	SLE Q	-84842.20	-572.97	-225.33	0.00	78.54	7.21	107.78	
94	1134.72	4	SLE Q	-81123.90	-1057.25	-415.78	0.00	78.54	7.18	106.91	
95	1194.44	4	SLE Q	-77418.80	-1371.75	-539.46	0.00	78.54	7.05	104.77	
96	1254.17	4	SLE Q	-73726.40	-1547.41	-608.54	0.00	78.54	6.85	101.59	
97	1313.89	4	SLE Q	-70046.00	-1612.44	-634.12	0.00	78.54	6.59	97.60	
98	1373.61	4	SLE Q	-66377.00	-1592.01	-626.08	0.00	78.54	6.28	92.97	
99	1433.33	4	SLE Q	-62718.90	-1508.07	-593.07	0.00	78.54	5.94	87.88	
100	1493.06	4	SLE Q	-59071.00	-1379.42	-542.48	0.00	78.54	5.57	82.46	
101	1552.78	4	SLE Q	-55432.70	-1221.85	-480.51	0.00	78.54	5.18	76.83	
102	1612.50	4	SLE Q	-51803.50	-1048.45	-412.32	0.00	78.54	4.79	71.09	
103	1672.22	4	SLE Q	-48182.70	-869.86	-342.09	0.00	78.54	4.40	65.33	
104	1731.94	4	SLE Q	-44569.80	-694.64	-273.18	0.00	78.54	4.01	59.60	
105	1791.67	4	SLE Q	-40964.10	-529.62	-208.28	0.00	78.54	3.62	53.95	
106	1851.39	4	SLE Q	-37365.20	-380.24	-149.53	0.00	78.54	3.25	48.43	
107	1911.11	4	SLE Q	-33772.30	-250.90	-98.67	0.00	78.54	2.88	43.07	
108	1970.83	4	SLE Q	-30185.00	-145.22	-57.11	0.00	78.54	2.53	37.90	
109	2030.56	4	SLE Q	-26602.50	-66.32	-26.08	0.00	78.54	2.20	32.94	
110	2090.28	4	SLE Q	-23024.40	-17.02	-6.69	0.00	78.54	1.88	28.20	
111	2150.00	4	SLE Q	-19450.10	0.00	0.00	0.00	78.54	1.58	23.71	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_S <cmq>	A_{C eff} <cmq>	σ_S <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-151863.00	14750.30	37507.50	46.00	136.36	0.50	20.00	184.31	9.42	435.00	147.02	0.04	0.01
76	59.72	4	SLE Q	-150676.00	15363.00	39065.30	46.00	136.36	0.50	20.00	197.80	9.42	498.57	175.21	0.05	0.02
77	119.44	4	SLE Q	-146638.00	15229.20	38725.20	46.00	136.36	0.50	20.00	203.03	9.42	523.21	182.36	0.05	0.02
78	179.17	4	SLE Q	-142623.00	14547.00	36990.30	46.00	136.36	0.50	20.00	197.90	9.42	499.04	166.06	0.05	0.02
79	238.89	4	SLE Q	-138632.00	13483.90	34287.10	46.00	136.36	0.50	20.00	184.69	9.42	436.78	134.94	0.04	0.01
80	298.61	4	SLE Q	-134664.00	12179.10	30969.20	46.00	136.36	0.50	20.00	165.38	9.42	345.80	97.57	0.03	0.01
81	358.33	4	SLE Q	-130717.00	10744.90	27322.30	46.00	136.36	0.50	20.00	243.60	3.14	238.13	60.59	0.02	0.01
112	0.00	3	SLE F	-151863.00	14750.30	37507.50	46.00	136.36	0.50	20.00	184.31	9.42	435.00	147.02	0.04	0.01
113	59.72	3	SLE F	-150676.00	15363.00	39065.30	46.00	136.36	0.50	20.00	197.80	9.42	498.57	175.21	0.05	0.02

114	119.44	3	SLE F	-146638.00	15229.20	38725.20	46.00	136.36	0.50	20.00	203.03	9.42	523.21	182.36	0.05	0.02
115	179.17	3	SLE F	-142623.00	14547.00	36990.30	46.00	136.36	0.50	20.00	197.90	9.42	499.04	166.06	0.05	0.02
116	238.89	3	SLE F	-138632.00	13483.90	34287.10	46.00	136.36	0.50	20.00	184.69	9.42	436.78	134.94	0.04	0.01
117	298.61	3	SLE F	-134664.00	12179.10	30969.20	46.00	136.36	0.50	20.00	165.38	9.42	345.80	97.57	0.03	0.01
118	358.33	3	SLE F	-130717.00	10744.90	27322.30	46.00	136.36	0.50	20.00	243.60	3.14	238.13	60.59	0.02	0.01

Verifiche principali

Caso	Tipo
2	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
47	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sf max (max traz.),C.Q.Per. - Wk Max
84	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 20

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 20 (-154)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	245829.00	6126.40	-1018.21	819.45	-53873.20
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	245829.00	6126.40	-1018.21	819.45	-53873.20
2	2	SLE R	RVN	182096.00	4538.08	-754.23	607.00	-39906.10
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	182096.00	4538.08	-754.23	607.00	-39906.10
3	3	SLE F	RVN	182096.00	4538.08	-754.23	607.00	-39906.10
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	182096.00	4538.08	-754.23	607.00	-39906.10
4	4	SLE Q	RVN	182096.00	4538.08	-754.23	607.00	-39906.10
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	182096.00	4538.08	-754.23	607.00	-39906.10

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-245829.00	-6126.40	1018.21	-819.45	53873.20
2	2	SLE R	1	-182096.00	-4538.08	754.23	-607.00	39906.10
3	3	SLE F	1	-182096.00	-4538.08	754.23	-607.00	39906.10
4	4	SLE Q	1	-182096.00	-4538.08	754.23	-607.00	39906.10

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-245829.00	810.78	53303.30	-245829.00	5320.06	238827.00	2-3	91.25	4.481
2	59.72	1	SLU	-244600.00	842.89	55414.40	-244600.00	5317.08	238435.00	2-3	91.25	4.303
3	119.44	1	SLU	-239806.00	834.44	54858.90	-239806.00	5305.27	236903.00	2-3	91.25	4.319
4	179.17	1	SLU	-234367.00	796.22	52346.40	-234367.00	5292.55	235154.00	2-3	91.25	4.493
5	238.89	1	SLU	-228284.00	737.39	48478.60	-228284.00	5278.07	233191.00	2-3	91.25	4.811
6	298.61	1	SLU	-221648.00	665.52	43753.30	-221648.00	5262.75	231038.00	2-3	91.25	5.281
7	358.33	1	SLU	-215050.00	586.72	38573.00	-215050.00	5247.71	228885.00	2-3	91.25	5.935
8	418.06	1	SLU	-208486.00	505.81	33253.40	-208486.00	5232.69	226735.00	2-3	91.25	6.819
9	477.78	1	SLU	-201956.00	426.42	28034.10	-201956.00	5218.35	224582.00	2-3	91.25	8.012
10	537.50	1	SLU	-195459.00	351.20	23089.30	-195459.00	5136.21	222411.00	2-3	91.25	9.634
11	597.22	1	SLU	-188994.00	281.96	18537.30	-188994.00	4917.80	220198.00	2-3	91.25	11.880
12	656.94	1	SLU	-182560.00	219.81	14451.20	-2571250.00	4692.69	217979.00	2-3	91.25	14.084
13	716.67	1	SLU	-176156.00	165.30	10867.30	-2571250.00	4466.35	215762.00	2-3	91.25	14.596
14	776.39	1	SLU	-169780.00	118.55	7793.57	-2571250.00	4237.49	213544.00	2-3	91.25	15.145
15	836.11	1	SLU	-163432.00	79.34	5216.25	-2571250.00	4166.08	211259.00	2-3	91.25	15.733
16	895.83	1	SLU	-157111.00	47.25	3106.38	-2571250.00	4139.04	208956.00	2-3	91.25	16.366
17	955.56	1	SLU	-150816.00	21.67	1424.65	-2571250.00	4117.61	206648.00	2-3	91.25	17.049
18	1015.28	1	SLU	-144545.00	1.91	125.64	-2571250.00	4127.40	204318.00	2-3	91.25	17.789
19	1075.00	1	SLU	-138297.00	-12.76	-838.87	-2571250.00	-4708.35	-201831.00	2-3	271.25	18.592
20	1134.72	1	SLU	-132072.00	-23.08	-1517.34	-2571250.00	-4690.85	-199569.00	2-3	271.25	19.468
21	1194.44	1	SLU	-125869.00	-29.76	-1956.54	-2571250.00	-4673.41	-197305.00	2-3	271.25	20.428
22	1254.17	1	SLU	-119686.00	-33.47	-2200.24	-2571250.00	-4655.67	-195042.00	2-3	271.25	21.483
23	1313.89	1	SLU	-113523.00	-34.81	-2288.32	-2571250.00	-4606.87	-192766.00	2-3	271.25	22.650
24	1373.61	1	SLU	-107378.00	-34.32	-2256.31	-2571250.00	-4367.44	-190437.00	2-3	271.25	23.946
25	1433.33	1	SLU	-101251.00	-32.48	-2135.17	-2571250.00	-4124.44	-188103.00	2-3	271.25	25.395
26	1493.06	1	SLU	-95140.60	-29.68	-1951.43	-2571250.00	-3874.50	-185764.00	2-3	271.25	27.026
27	1552.78	1	SLU	-89045.50	-26.27	-1727.36	-2571250.00	-3623.46	-183422.00	2-3	271.25	28.876
28	1612.50	1	SLU	-82964.80	-22.53	-1481.35	-2571250.00	-3529.49	-181020.00	2-3	271.25	30.992
29	1672.22	1	SLU	-76897.80	-18.68	-1228.38	-2571250.00	-3501.00	-178586.00	2-3	271.25	33.437
30	1731.94	1	SLU	-70843.30	-14.91	-980.48	-2571250.00	-3473.27	-176146.00	2-3	271.25	36.295
31	1791.67	1	SLU	-64800.30	-11.37	-747.22	-2571250.00	-3446.75	-173698.00	2-3	271.25	39.680
32	1851.39	1	SLU	-58767.90	-8.16	-536.25	-2571250.00	-3421.84	-171239.00	2-3	271.25	43.753
33	1911.11	1	SLU	-52745.10	-5.38	-353.71	-2571250.00	-3397.65	-168775.00	2-3	271.25	48.749
34	1970.83	1	SLU	-46730.90	-3.11	-204.65	-2571250.00	-3374.58	-166302.00	2-3	271.25	55.022
35	2030.56	1	SLU	-40724.30	-1.42	-93.43	-2571250.00	-3353.29	-163819.00	2-3	271.25	63.138
36	2090.28	1	SLU	-34724.40	-0.36	-23.97	-2571250.00	-3332.70	-161329.00	2-3	271.25	74.047
37	2150.00	1	SLU	-28730.10	0.00	0.00	-2571250.00					89.497

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	6126.40	-1018.21	0.85	11.31	6210.44	1.00	32294.70	366881.00	32294.70	5.200
2	59.72	1	SLU	1074.27	-178.54	0.85	11.31	1089.01	1.00	32294.70	366704.00	32294.70	29.655
3	119.44	1	SLU	-2714.49	451.15	0.85	11.31	2751.72	1.00	32294.70	366018.00	32294.70	11.736
4	179.17	1	SLU	-5421.05	900.98	0.85	11.31	5495.41	1.00	32294.70	365239.00	32294.70	5.877
5	238.89	1	SLU	-7221.24	1200.17	0.85	11.31	7320.29	1.00	32294.70	364367.00	32294.70	4.412
6	298.61	1	SLU	-8280.17	1376.17	0.85	11.31	8393.75	1.00	32294.70	363417.00	32294.70	3.847
7	358.33	1	SLU	-8748.69	1454.03	0.85	11.31	8868.70	1.00	32294.70	362472.00	32294.70	3.641
8	418.06	1	SLU	-8761.28	1456.13	0.85	11.31	8881.46	1.00	32294.70	361531.00	32294.70	3.636
9	477.78	1	SLU	-8435.13	1401.92	0.85	11.31	8550.83	1.00	32294.70	360596.00	32294.70	3.777
10	537.50	1	SLU	-7870.13	1308.02	0.85	11.31	7978.09	1.00	32294.70	359666.00	32294.70	4.048
11	597.22	1	SLU	-7149.51	1188.25	0.85	11.31	7247.58	1.00	32294.70	358740.00	32294.70	4.456
12	656.94	1	SLU	-6340.92	1053.86	0.85	11.31	6427.90	1.00	32294.70	357818.00	32294.70	5.024
13	716.67	1	SLU	-5497.92	913.76	0.85	11.31	5573.34	1.00	32294.70	356901.00	32294.70	5.795
14	776.39	1	SLU	-4661.53	774.75	0.85	11.31	4725.47	1.00	32294.70	355987.00	32294.70	6.834
15	836.11	1	SLU	-3861.88	641.85	0.85	11.31	3914.86	1.00	32294.70	355078.00	32294.70	8.249
16	895.83	1	SLU	-3119.94	518.53	0.85	11.31	3162.73	1.00	32294.70	354173.00	32294.70	10.211
17	955.56	1	SLU	-2448.99	407.02	0.85	11.31	2482.59	1.00	32294.70	353271.00	32294.70	13.008
18	1015.28	1	SLU	-1856.21	308.50	0.85	11.31	1881.67	1.00	32294.70	352373.00	32294.70	17.163
19	1075.00	1	SLU	-1343.88	223.35	0.85	11.31	1362.31	1.00	32294.70	351478.00	32294.70	23.706
20	1134.72	1	SLU	-910.65	151.35	0.85	11.31	923.14	1.00	32294.70	350586.00	32294.70	34.983
21	1194.44	1	SLU	-552.51	91.83	0.85	11.31	560.09	1.00	32294.70	349697.00	32294.70	57.660
22	1254.17	1	SLU	-263.65	43.82	0.85	11.31	267.27	1.00	32294.70	348812.00	32294.70	>100
23	1313.89	1	SLU	-37.15	6.17	0.85	11.31	37.66	1.00	32294.70	347929.00	32294.70	>100
24	1373.61	1	SLU	134.40	-22.34	0.85	11.31	136.25	1.00	32294.70	347049.00	32294.70	>100
25	1433.33	1	SLU	258.52	-42.97	0.85	11.31	262.06	1.00	32294.70	346171.00	32294.70	>100
26	1493.06	1	SLU	342.43	-56.91	0.85	11.31	347.12	1.00	32294.70	345296.00	32294.70	93.036
27	1552.78	1	SLU	392.85	-65.29	0.85	11.31	398.24	1.00	32294.70	344423.00	32294.70	81.094
28	1612.50	1	SLU	415.84	-69.11	0.85	11.31	421.54	1.00	32294.70	343552.00	32294.70	76.611
29	1672.22	1	SLU	416.66	-69.25	0.85	11.31	422.38	1.00	32294.70	342683.00	32294.70	76.459
30	1731.94	1	SLU	399.77	-66.44	0.85	11.31	405.26	1.00	32294.70	341816.00	32294.70	79.690
31	1791.67	1	SLU	368.79	-61.29	0.85	11.31	373.85	1.00	32294.70	340950.00	32294.70	86.384
32	1851.39	1	SLU	326.56	-54.27	0.85	11.31	331.04	1.00	32294.70	340086.00	32294.70	97.556

33	1911.11	1	SLU	275.18	-45.73	0.85	11.31	278.95	1.00	32294.70	339223.00	32294.70	>100
34	1970.83	1	SLU	216.11	-35.92	0.85	11.31	219.08	1.00	32294.70	338362.00	32294.70	>100
35	2030.56	1	SLU	150.28	-24.98	0.85	11.31	152.35	1.00	32294.70	337501.00	32294.70	>100
36	2090.28	1	SLU	78.18	-12.99	0.85	11.31	79.25	1.00	32294.70	336642.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_c <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-182096.00	39483.90	600.58	18.85	59.69	35.77	506.83	
39	59.72	2	SLE R	-180866.00	41047.70	624.36	18.85	59.69	36.70	519.28	
40	119.44	2	SLE R	-176073.00	40636.20	618.10	18.85	59.69	36.18	511.53	
41	179.17	2	SLE R	-171229.00	38775.10	589.79	18.85	59.69	34.69	490.86	
42	238.89	2	SLE R	-166414.00	35910.00	546.22	18.85	59.69	32.58	461.71	
43	298.61	2	SLE R	-161625.00	32409.90	492.98	12.57	65.97	30.13	428.08	
44	358.33	2	SLE R	-156863.00	28572.60	434.61	6.28	72.26	27.60	393.12	
45	418.06	2	SLE R	-152126.00	24632.10	374.67	0.00	78.54	25.12	358.88	
46	477.78	2	SLE R	-147415.00	20766.00	315.87	0.00	78.54	22.73	325.91	
47	537.50	2	SLE R	-142727.00	17103.10	260.15	0.00	78.54	20.45	294.41	
48	597.22	2	SLE R	-138063.00	13731.30	208.86	0.00	78.54	18.33	264.99	
49	656.94	2	SLE R	-133421.00	10704.60	162.82	0.00	78.54	16.39	238.03	
50	716.67	2	SLE R	-128801.00	8049.87	122.44	0.00	78.54	14.64	213.71	
51	776.39	2	SLE R	-124202.00	5773.01	87.81	0.00	78.54	13.08	192.07	
52	836.11	2	SLE R	-119623.00	3863.89	58.77	0.00	78.54	11.72	173.05	
53	895.83	2	SLE R	-115064.00	2301.02	35.00	0.00	78.54	10.54	156.49	
54	955.56	2	SLE R	-110523.00	1055.30	16.05	0.00	78.54	9.53	142.18	
55	1015.28	2	SLE R	-106001.00	93.07	1.42	0.00	78.54	8.66	129.90	
56	1075.00	2	SLE R	-101496.00	-621.38	-9.45	0.00	78.54	8.57	128.10	
57	1134.72	2	SLE R	-97007.00	-1123.95	-17.10	0.00	78.54	8.47	126.14	
58	1194.44	2	SLE R	-92534.20	-1449.29	-22.04	0.00	78.54	8.27	122.96	
59	1254.17	2	SLE R	-88076.50	-1629.81	-24.79	0.00	78.54	8.00	118.79	
60	1313.89	2	SLE R	-83633.20	-1695.05	-25.78	0.00	78.54	7.68	113.83	
61	1373.61	2	SLE R	-79203.50	-1671.34	-25.42	0.00	78.54	7.30	108.26	
62	1433.33	2	SLE R	-74786.80	-1581.61	-24.06	0.00	78.54	6.90	102.25	
63	1493.06	2	SLE R	-70382.20	-1445.51	-21.99	0.00	78.54	6.47	95.93	
64	1552.78	2	SLE R	-65989.20	-1279.53	-19.46	0.00	78.54	6.03	89.41	
65	1612.50	2	SLE R	-61606.90	-1097.30	-16.69	0.00	78.54	5.58	82.79	
66	1672.22	2	SLE R	-57234.60	-909.91	-13.84	0.00	78.54	5.12	76.15	
67	1731.94	2	SLE R	-52871.70	-726.28	-11.05	0.00	78.54	4.67	69.55	
68	1791.67	2	SLE R	-48517.40	-553.50	-8.42	0.00	78.54	4.23	63.03	
69	1851.39	2	SLE R	-44171.10	-397.23	-6.04	0.00	78.54	3.80	56.63	
70	1911.11	2	SLE R	-39831.90	-262.01	-3.99	0.00	78.54	3.37	50.40	
71	1970.83	2	SLE R	-35499.30	-151.59	-2.31	0.00	78.54	2.96	44.34	
72	2030.56	2	SLE R	-31172.40	-69.21	-1.05	0.00	78.54	2.57	38.49	
73	2090.28	2	SLE R	-26850.60	-17.75	-0.27	0.00	78.54	2.19	32.86	
74	2150.00	2	SLE R	-22533.20	0.00	0.00	0.00	78.54	1.83	27.47	
75	0.00	4	SLE Q	-182096.00	39483.90	600.58	18.85	59.69	35.77	506.83	
76	59.72	4	SLE Q	-180866.00	41047.70	624.36	18.85	59.69	36.70	519.28	
77	119.44	4	SLE Q	-176073.00	40636.20	618.10	18.85	59.69	36.18	511.53	
78	179.17	4	SLE Q	-171229.00	38775.10	589.79	18.85	59.69	34.69	490.86	
79	238.89	4	SLE Q	-166414.00	35910.00	546.22	18.85	59.69	32.58	461.71	
80	298.61	4	SLE Q	-161625.00	32409.90	492.98	12.57	65.97	30.13	428.08	
81	358.33	4	SLE Q	-156863.00	28572.60	434.61	6.28	72.26	27.60	393.12	
82	418.06	4	SLE Q	-152126.00	24632.10	374.67	0.00	78.54	25.12	358.88	
83	477.78	4	SLE Q	-147415.00	20766.00	315.87	0.00	78.54	22.73	325.91	
84	537.50	4	SLE Q	-142727.00	17103.10	260.15	0.00	78.54	20.45	294.41	
85	597.22	4	SLE Q	-138063.00	13731.30	208.86	0.00	78.54	18.33	264.99	
86	656.94	4	SLE Q	-133421.00	10704.60	162.82	0.00	78.54	16.39	238.03	
87	716.67	4	SLE Q	-128801.00	8049.87	122.44	0.00	78.54	14.64	213.71	
88	776.39	4	SLE Q	-124202.00	5773.01	87.81	0.00	78.54	13.08	192.07	
89	836.11	4	SLE Q	-119623.00	3863.89	58.77	0.00	78.54	11.72	173.05	
90	895.83	4	SLE Q	-115064.00	2301.02	35.00	0.00	78.54	10.54	156.49	
91	955.56	4	SLE Q	-110523.00	1055.30	16.05	0.00	78.54	9.53	142.18	
92	1015.28	4	SLE Q	-106001.00	93.07	1.42	0.00	78.54	8.66	129.90	
93	1075.00	4	SLE Q	-101496.00	-621.38	-9.45	0.00	78.54	8.57	128.10	
94	1134.72	4	SLE Q	-97007.00	-1123.95	-17.10	0.00	78.54	8.47	126.14	
95	1194.44	4	SLE Q	-92534.20	-1449.29	-22.04	0.00	78.54	8.27	122.96	
96	1254.17	4	SLE Q	-88076.50	-1629.81	-24.79	0.00	78.54	8.00	118.79	
97	1313.89	4	SLE Q	-83633.20	-1695.05	-25.78	0.00	78.54	7.68	113.83	
98	1373.61	4	SLE Q	-79203.50	-1671.34	-25.42	0.00	78.54	7.30	108.26	
99	1433.33	4	SLE Q	-74786.80	-1581.61	-24.06	0.00	78.54	6.90	102.25	
100	1493.06	4	SLE Q	-70382.20	-1445.51	-21.99	0.00	78.54	6.47	95.93	
101	1552.78	4	SLE Q	-65989.20	-1279.53	-19.46	0.00	78.54	6.03	89.41	
102	1612.50	4	SLE Q	-61606.90	-1097.30	-16.69	0.00	78.54	5.58	82.79	
103	1672.22	4	SLE Q	-57234.60	-909.91	-13.84	0.00	78.54	5.12	76.15	
104	1731.94	4	SLE Q	-52871.70	-726.28	-11.05	0.00	78.54	4.67	69.55	
105	1791.67	4	SLE Q	-48517.40	-553.50	-8.42	0.00	78.54	4.23	63.03	
106	1851.39	4	SLE Q	-44171.10	-397.23	-6.04	0.00	78.54	3.80	56.63	
107	1911.11	4	SLE Q	-39831.90	-262.01	-3.99	0.00	78.54	3.37	50.40	
108	1970.83	4	SLE Q	-35499.30	-151.59	-2.31	0.00	78.54	2.96	44.34	
109	2030.56	4	SLE Q	-31172.40	-69.21	-1.05	0.00	78.54	2.57	38.49	
110	2090.28	4	SLE Q	-26850.60	-17.75	-0.27	0.00	78.54	2.19	32.86	
111	2150.00	4	SLE Q	-22533.20	0.00	0.00	0.00	78.54	1.83	27.47	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	A_c $_{eff}$ <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-182096.00	600.58	39483.90	46.00	136.36	0.50	20.00	155.41	6.28	199.22	67.98	0.02	0.01
76	59.72	4	SLE Q	-180866.00	624.36	41047.70	46.00	136.36	0.50	20.00	170.16	6.28	245.55	86.62	0.03	0.01
77	119.44	4	SLE Q	-176073.00	618.10	40636.20	46.00	136.36	0.50	20.00	175.85	6.28	263.44	91.74	0.03	0.01
78	179.17	4	SLE Q	-171229.00	589.79	38775.10	46.00	136.36	0.50	20.00	169.43	6.28	243.24	81.08	0.02	0.01
79	238.89	4	SLE Q	-166414.00	546.22	35910.00	46.00	136.36	0.50	20.00	153.91	6.28	194.51	60.39	0.02	0.00
112	0.00	3	SLE F	-182096.00	600.58	39483.90	46.00	136.36	0.50	20.00	155.41	6.28	199.22	67.98	0.02	0.01
113	59.72	3	SLE F	-180866.00	624.36	41047.70	46.00	136.36	0.50	20.00	170.16	6.28	245.55	86.62	0.03	0.01
114	119.44	3	SLE F	-176073.00	618.10	40636.20	46.00	136.36	0.50	20.00	175.85	6.28	263.44	91.74	0.03	0.01
115	179.17	3	SLE F	-171229.00	589.79	38775.10	46.00	136.36	0.50	20.00	169.43	6.28	243.24	81.08	0.02	0.01
116	238.89	3	SLE F	-166414.00	546.22	35910.00	46.00	136.36	0.50	20.00	153.91	6.28	194.51	60.39	0.02	0.00

Verifiche principali

Caso	Tipo
2	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
46	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sf max (max traz.),C.Q.Per. - Wk Max
83	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 21

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 21 (-166)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	279714.00	5844.60	-799.29	-19574.00	-48024.80
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	279714.00	5844.60	-799.29	-19574.00	-48024.80
2	2	SLE R	RVN	207195.00	4329.33	-592.07	-14499.20	-35574.00
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	207195.00	4329.33	-592.07	-14499.20	-35574.00
3	3	SLE F	RVN	207195.00	4329.33	-592.07	-14499.20	-35574.00
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	207195.00	4329.33	-592.07	-14499.20	-35574.00
4	4	SLE Q	RVN	207195.00	4329.33	-592.07	-14499.20	-35574.00

	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	207195.00	4329.33	-592.07	-14499.20	-35574.00

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-279714.00	-5844.60	799.29	19574.00	48024.80
2	2	SLE R	1	-207195.00	-4329.33	592.07	14499.20	35574.00
3	3	SLE F	1	-207195.00	-4329.33	592.07	14499.20	35574.00
4	4	SLE Q	1	-207195.00	-4329.33	592.07	14499.20	35574.00

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-279714.00	-19367.80	47519.00	-279714.00	-95805.10	230980.00	2-3	67.50	4.873
2	59.72	1	SLU	-278484.00	-20119.60	49363.50	-278484.00	-95640.30	230640.00	2-3	67.50	4.684
3	119.44	1	SLU	-273690.00	-19906.90	48841.80	-273690.00	-94992.40	229308.00	2-3	67.50	4.706
4	179.17	1	SLU	-268252.00	-18987.10	46584.90	-268252.00	-94254.70	227792.00	2-3	67.50	4.900
5	238.89	1	SLU	-262168.00	-17577.80	43127.20	-262168.00	-93421.90	226086.00	2-3	67.50	5.253
6	298.61	1	SLU	-255439.00	-15859.40	38911.10	-255439.00	-92631.10	224060.00	2-3	67.50	5.770
7	358.33	1	SLU	-248064.00	-13977.50	34293.80	-248064.00	-91729.80	221809.00	2-3	67.50	6.481
8	418.06	1	SLU	-240464.00	-12046.30	29555.70	-240464.00	-90791.90	219469.00	2-3	67.50	7.442
9	477.78	1	SLU	-232902.00	-10152.60	24909.40	-232902.00	-89852.30	217126.00	2-3	67.50	8.736
10	537.50	1	SLU	-225379.00	-8359.12	20509.20	-225379.00	-88911.00	214778.00	2-3	67.50	10.496
11	597.22	1	SLU	-217892.00	-6708.75	16460.00	-2571250.00	-87967.40	212425.00	2-3	67.50	11.800
12	656.94	1	SLU	-210441.00	-5227.75	12826.30	-2571250.00	-87021.30	210067.00	2-3	67.50	12.218
13	716.67	1	SLU	-203025.00	-3929.18	9640.27	-2571250.00	-86071.00	207701.00	2-3	67.50	12.665
14	776.39	1	SLU	-195641.00	-2815.76	6908.48	-2571250.00	-85119.80	205334.00	2-3	67.50	13.143
15	836.11	1	SLU	-188289.00	-1882.45	4618.60	-2571250.00	-84165.80	202962.00	2-3	67.50	13.656
16	895.83	1	SLU	-180968.00	-1118.66	2744.64	-2571250.00	-83208.00	200583.00	2-3	67.50	14.208
17	955.56	1	SLU	-173677.00	-510.08	1251.50	-2571250.00	-82248.20	198201.00	2-3	67.50	14.805
18	1015.28	1	SLU	-166414.00	-40.22	98.67	-2571250.00	-81286.40	195817.00	2-3	67.50	15.451
19	1075.00	1	SLU	-159178.00	308.46	-756.81	-2571250.00	80030.60	-193912.00	2-3	247.50	16.153
20	1134.72	1	SLU	-151968.00	553.53	-1358.09	-2571250.00	79034.30	-191466.00	2-3	247.50	16.920
21	1194.44	1	SLU	-144783.00	711.96	-1746.80	-2571250.00	78034.60	-189013.00	2-3	247.50	17.759
22	1254.17	1	SLU	-137621.00	799.63	-1961.89	-2571250.00	77055.60	-186531.00	2-3	247.50	18.683
23	1313.89	1	SLU	-130482.00	830.99	-2038.83	-2571250.00	76082.90	-184031.00	2-3	247.50	19.706
24	1373.61	1	SLU	-123365.00	818.91	-2009.21	-2571250.00	75107.90	-181521.00	2-3	247.50	20.843
25	1433.33	1	SLU	-116267.00	774.62	-1900.55	-2571250.00	74131.10	-179005.00	2-3	247.50	22.115
26	1493.06	1	SLU	-109188.00	707.73	-1736.42	-2571250.00	73144.90	-176483.00	2-3	247.50	23.549
27	1552.78	1	SLU	-102127.00	626.29	-1536.60	-2571250.00	72118.40	-173953.00	2-3	247.50	25.177
28	1612.50	1	SLU	-95083.10	536.96	-1317.44	-2571250.00	71090.00	-171416.00	2-3	247.50	27.042
29	1672.22	1	SLU	-88054.40	445.17	-1092.23	-2571250.00	70059.00	-168871.00	2-3	247.50	29.201
30	1731.94	1	SLU	-81040.10	355.26	-871.63	-2571250.00	69026.60	-166321.00	2-3	247.50	31.728
31	1791.67	1	SLU	-74039.00	270.70	-664.15	-2571250.00	67992.00	-163759.00	2-3	247.50	34.728
32	1851.39	1	SLU	-67050.00	194.24	-476.56	-2571250.00	66956.20	-161192.00	2-3	247.50	38.348
33	1911.11	1	SLU	-60071.90	128.10	-314.29	-2571250.00	65919.20	-158619.00	2-3	247.50	42.803
34	1970.83	1	SLU	-53103.60	74.10	-181.81	-2571250.00	64881.10	-156037.00	2-3	247.50	48.419
35	2030.56	1	SLU	-46143.90	33.83	-82.99	-2571250.00	63842.40	-153447.00	2-3	247.50	55.722
36	2090.28	1	SLU	-39191.90	8.68	-21.29	-2571250.00	62803.00	-150851.00	2-3	247.50	65.607
37	2150.00	1	SLU	-32246.10	0.00	0.00	-2571250.00					79.738

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	5844.60	-799.29	0.85	11.31	5899.00	1.00	32294.70	371734.00	32294.70	5.475
2	59.72	1	SLU	981.94	-134.29	0.85	11.31	991.08	1.00	32294.70	371558.00	32294.70	32.586
3	119.44	1	SLU	-2662.73	364.15	0.85	11.31	2687.52	1.00	32294.70	370871.00	32294.70	12.017
4	179.17	1	SLU	-5264.40	719.94	0.85	11.31	5313.40	1.00	32294.70	370092.00	32294.70	6.078
5	238.89	1	SLU	-6992.77	956.31	0.85	11.31	7057.86	1.00	32294.70	369221.00	32294.70	4.576
6	298.61	1	SLU	-8007.17	1095.03	0.85	11.31	8081.70	1.00	32294.70	368257.00	32294.70	3.996
7	358.33	1	SLU	-8453.11	1156.02	0.85	11.31	8531.79	1.00	32294.70	367201.00	32294.70	3.785
8	418.06	1	SLU	-8460.27	1157.00	0.85	11.31	8539.01	1.00	32294.70	366112.00	32294.70	3.782
9	477.78	1	SLU	-8141.61	1113.42	0.85	11.31	8217.39	1.00	32294.70	365029.00	32294.70	3.930
10	537.50	1	SLU	-7593.42	1038.45	0.85	11.31	7664.10	1.00	32294.70	363951.00	32294.70	4.214
11	597.22	1	SLU	-6895.86	943.05	0.85	11.31	6960.05	1.00	32294.70	362879.00	32294.70	4.640
12	656.94	1	SLU	-6114.11	836.14	0.85	11.31	6171.02	1.00	32294.70	361812.00	32294.70	5.233
13	716.67	1	SLU	-5299.71	724.77	0.85	11.31	5349.04	1.00	32294.70	360749.00	32294.70	6.037
14	776.39	1	SLU	-4492.15	614.33	0.85	11.31	4533.96	1.00	32294.70	359692.00	32294.70	7.123
15	836.11	1	SLU	-3720.40	508.79	0.85	11.31	3755.03	1.00	32294.70	358639.00	32294.70	8.600
16	895.83	1	SLU	-3004.60	410.90	0.85	11.31	3032.56	1.00	32294.70	357590.00	32294.70	10.649
17	955.56	1	SLU	-2357.51	322.40	0.85	11.31	2379.45	1.00	32294.70	356546.00	32294.70	13.572
18	1015.28	1	SLU	-1785.97	244.24	0.85	11.31	1802.59	1.00	32294.70	355505.00	32294.70	17.916
19	1075.00	1	SLU	-1292.15	176.71	0.85	11.31	1304.18	1.00	32294.70	354469.00	32294.70	24.763
20	1134.72	1	SLU	-874.70	119.62	0.85	11.31	882.84	1.00	32294.70	353436.00	32294.70	36.580
21	1194.44	1	SLU	-529.72	72.44	0.85	11.31	534.64	1.00	32294.70	352407.00	32294.70	60.404
22	1254.17	1	SLU	-251.56	34.40	0.85	11.31	253.90	1.00	32294.70	351381.00	32294.70	>100
23	1313.89	1	SLU	-33.55	4.59	0.85	11.31	33.86	1.00	32294.70	350358.00	32294.70	>100
24	1373.61	1	SLU	131.49	-17.98	0.85	11.31	132.71	1.00	32294.70	349339.00	32294.70	>100
25	1433.33	1	SLU	250.80	-34.30	0.85	11.31	253.14	1.00	32294.70	348322.00	32294.70	>100
26	1493.06	1	SLU	331.38	-45.32	0.85	11.31	334.46	1.00	32294.70	347308.00	32294.70	96.558
27	1552.78	1	SLU	379.70	-51.93	0.85	11.31	383.23	1.00	32294.70	346297.00	32294.70	84.270
28	1612.50	1	SLU	401.60	-54.92	0.85	11.31	405.34	1.00	32294.70	345288.00	32294.70	79.673
29	1672.22	1	SLU	402.17	-55.00	0.85	11.31	405.92	1.00	32294.70	344281.00	32294.70	79.560
30	1731.94	1	SLU	385.70	-52.75	0.85	11.31	389.29	1.00	32294.70	343276.00	32294.70	82.958
31	1791.67	1	SLU	355.68	-48.64	0.85	11.31	359.00	1.00	32294.70	342273.00	32294.70	89.959
32	1851.39	1	SLU	314.86	-43.06	0.85	11.31	317.79	1.00	32294.70	341272.00	32294.70	>100
33	1911.11	1	SLU	265.24	-36.27	0.85	11.31	267.71	1.00	32294.70	340273.00	32294.70	>100
34	1970.83	1	SLU	208.26	-28.48	0.85	11.31	210.20	1.00	32294.70	339275.00	32294.70	>100
35	2030.56	1	SLU	144.79	-19.80	0.85	11.31	146.14	1.00	32294.70	338278.00	32294.70	>100
36	2090.28	1	SLU	75.31	-10.30	0.85	11.31	76.01	1.00	32294.70	337282.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-207195.00	35199.20	-14346.50	9.42	69.11	36.55	519.49	
39	59.72	2	SLE R	-205966.00	36565.60	-14903.40	9.42	69.11	37.29	529.32	
40	119.44	2	SLE R	-201172.00	36179.10	-14745.90	12.57	65.97	36.71	520.89	
41	179.17	2	SLE R	-195733.00	34507.30	-14064.50	9.42	69.11	35.29	501.02	
42	238.89	2	SLE R	-190204.00	31946.10	-13020.60	9.42	69.11	33.33	473.94	
43	298.61	2	SLE R	-184705.00	28823.00	-11747.70	0.00	78.54	31.09	442.95	
44	358.33	2	SLE R	-179237.00	25402.80	-10353.70	0.00	78.54	28.73	410.35	
45	418.06	2	SLE R	-173798.00	21893.10	-8923.19	0.00	78.54	26.33	377.21	
46	477.78	2	SLE R	-168387.00	18451.40	-7520.43	0.00	78.54	23.97	344.63	
47	537.50	2	SLE R	-163004.00	15192.00	-6191.94	0.00	78.54	21.72	313.45	
48	597.22	2	SLE R	-157647.00	12192.60	-4969.44	0.00	78.54	19.61	284.27	
49	656.94	2	SLE R	-152316.00	9500.98	-3872.41	0.00	78.54	17.68	257.45	
50	716.67	2	SLE R	-147010.00	7140.94	-2910.50	0.00	78.54	15.93	233.16	
51	776.39	2	SLE R	-141728.00	5117.39	-2085.75	0.00	78.54	14.37	211.44	
52	836.11	2	SLE R	-136469.00	3421.18	-1394.41	0.00	78.54	13.00	192.22	
53	895.83	2	SLE R	-131232.00	2033.06	-828.64	0.00	78.54	11.80	175.35	
54	955.56	2	SLE R	-126016.00	927.03	-377.84	0.00	78.54	10.76	160.65	
55	1015.28	2	SLE R	-120822.00	73.09	-29.79	0.00	78.54	9.86	147.86	
56	1075.00	2	SLE R	-115647.00	-560.60	228.49	0.00	78.54	9.71	145.26	
57	1134.72	2	SLE R	-110490.00	-1005.99	410.02	0.00	78.54	9.54	142.36	
58	1194.44	2	SLE R	-105352.00	-1293.93	527.38	0.00	78.54	9.28	138.28	
59	1254.17	2	SLE R	-100231.00	-1453.26	592.32	0.00	78.54	8.96	133.25	
60	1313.89	2	SLE R	-95126.50	-1510.25	615.55	0.00	78.54	8.57	127.46	
61	1373.61	2	SLE R	-90037.40	-1488.30	606.60	0.00	78.54	8.15	121.09	
62	1433.33	2	SLE R	-84962.90	-1407.81	573.80	0.00	78.54	7.69	114.29	
63	1493.06	2	SLE R	-79902.30	-1286.24	524.24	0.00	78.54	7.21	107.20	
64	1552.78	2	SLE R	-74854.80	-1138.23	463.92	0.00	78.54	6.72	99.92	
65	1612.50	2	SLE R	-69819.50	-975.88	397.75	0.00	78.54	6.22	92.54	
66	1672.22	2	SLE R	-64795.50	-809.06	329.76	0.00	78.54	5.72	85.15	
67	1731.94	2	SLE R	-59782.20	-645.65	263.15	0.00	78.54	5.22	77.80	
68	1791.67	2	SLE R	-54778.50	-491.97	200.52	0.00	78.54	4.73	70.53	
69	1851.39	2	SLE R	-49783.90	-353.01	143.88	0.00	78.54	4.24	63.38	
70	1911.11	2	SLE R	-44797.30	-232.80	94.89	0.00	78.54	3.77	56.39	
71	1970.83	2	SLE R	-39818.10	-134.68	54.89	0.00	78.54	3.31	49.57	
72	2030.56	2	SLE R	-34845.30	-61.47	25.06	0.00	78.54	2.87	42.95	
73	2090.28	2	SLE R	-29878.30	-15.77	6.43	0.00	78.54	2.44	36.55	
74	2150.00	2	SLE R	-24916.10	0.00	0.00	0.00	78.54	2.03	30.38	
75	0.00	4	SLE Q	-207195.00	35199.20	-14346.50	9.42	69.11	36.55	519.49	
76	59.72	4	SLE Q	-205966.00	36565.60	-14903.40	9.42	69.11	37.29	529.32	
77	119.44	4	SLE Q	-201172.00	36179.10	-14745.90	12.57	65.97	36.71	520.89	
78	179.17	4	SLE Q	-195733.00	34507.30	-14064.50	9.42	69.11	35.29	501.02	

79	238.89	4	SLE Q	-190204.00	31946.10	-13020.60	9.42	69.11	33.33	473.94	
80	298.61	4	SLE Q	-184705.00	28823.00	-11747.70	0.00	78.54	31.09	442.95	
81	358.33	4	SLE Q	-179237.00	25402.80	-10353.70	0.00	78.54	28.73	410.35	
82	418.06	4	SLE Q	-173798.00	21893.10	-8923.19	0.00	78.54	26.33	377.21	
83	477.78	4	SLE Q	-168387.00	18451.40	-7520.43	0.00	78.54	23.97	344.63	
84	537.50	4	SLE Q	-163004.00	15192.00	-6191.94	0.00	78.54	21.72	313.45	
85	597.22	4	SLE Q	-157647.00	12192.60	-4969.44	0.00	78.54	19.61	284.27	
86	656.94	4	SLE Q	-152316.00	9500.98	-3872.41	0.00	78.54	17.68	257.45	
87	716.67	4	SLE Q	-147010.00	7140.94	-2910.50	0.00	78.54	15.93	233.16	
88	776.39	4	SLE Q	-141728.00	5117.39	-2085.75	0.00	78.54	14.37	211.44	
89	836.11	4	SLE Q	-136469.00	3421.18	-1394.41	0.00	78.54	13.00	192.22	
90	895.83	4	SLE Q	-131232.00	2033.06	-828.64	0.00	78.54	11.80	175.35	
91	955.56	4	SLE Q	-126016.00	927.03	-377.84	0.00	78.54	10.76	160.65	
92	1015.28	4	SLE Q	-120822.00	73.09	-29.79	0.00	78.54	9.86	147.86	
93	1075.00	4	SLE Q	-115647.00	-560.60	228.49	0.00	78.54	9.71	145.26	
94	1134.72	4	SLE Q	-110490.00	-1005.99	410.02	0.00	78.54	9.54	142.36	
95	1194.44	4	SLE Q	-105352.00	-1293.93	527.38	0.00	78.54	9.28	138.28	
96	1254.17	4	SLE Q	-100231.00	-1453.26	592.32	0.00	78.54	8.96	133.25	
97	1313.89	4	SLE Q	-95126.50	-1510.25	615.55	0.00	78.54	8.57	127.46	
98	1373.61	4	SLE Q	-90037.40	-1488.30	606.60	0.00	78.54	8.15	121.09	
99	1433.33	4	SLE Q	-84962.90	-1407.81	573.80	0.00	78.54	7.69	114.29	
100	1493.06	4	SLE Q	-79902.30	-1286.24	524.24	0.00	78.54	7.21	107.20	
101	1552.78	4	SLE Q	-74854.80	-1138.23	463.92	0.00	78.54	6.72	99.92	
102	1612.50	4	SLE Q	-69819.50	-975.88	397.75	0.00	78.54	6.22	92.54	
103	1672.22	4	SLE Q	-64795.50	-809.06	329.76	0.00	78.54	5.72	85.15	
104	1731.94	4	SLE Q	-59782.20	-645.65	263.15	0.00	78.54	5.22	77.80	
105	1791.67	4	SLE Q	-54778.50	-491.97	200.52	0.00	78.54	4.73	70.53	
106	1851.39	4	SLE Q	-49783.90	-353.01	143.88	0.00	78.54	4.24	63.38	
107	1911.11	4	SLE Q	-44797.30	-232.80	94.89	0.00	78.54	3.77	56.39	
108	1970.83	4	SLE Q	-39818.10	-134.68	54.89	0.00	78.54	3.31	49.57	
109	2030.56	4	SLE Q	-34845.30	-61.47	25.06	0.00	78.54	2.87	42.95	
110	2090.28	4	SLE Q	-29878.30	-15.77	6.43	0.00	78.54	2.44	36.55	
111	2150.00	4	SLE Q	-24916.10	0.00	0.00	0.00	78.54	2.03	30.38	

Verifiche principali

Caso	Tipo
2	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
44	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sf max (max traz.)
81	C.Q.Per. - Sc max (min. compr.)

Palo n. 22

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 22 (-174)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	304602.00	5655.77	-514.77	-36464.70	-33251.40
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	304602.00	5655.77	-514.77	-36464.70	-33251.40
2	2	SLE R	RVN	225631.00	4189.46	-381.31	-27010.90	-24630.70
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	225631.00	4189.46	-381.31	-27010.90	-24630.70
3	3	SLE F	RVN	225631.00	4189.46	-381.31	-27010.90	-24630.70
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	225631.00	4189.46	-381.31	-27010.90	-24630.70
4	4	SLE Q	RVN	225631.00	4189.46	-381.31	-27010.90	-24630.70
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	225631.00	4189.46	-381.31	-27010.90	-24630.70

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-304602.00	-5655.77	514.77	36464.70	33251.40
2	2	SLE R	1	-225631.00	-4189.46	381.31	27010.90	24630.70
3	3	SLE F	1	-225631.00	-4189.46	381.31	27010.90	24630.70
4	4	SLE Q	1	-225631.00	-4189.46	381.31	27010.90	24630.70

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-304602.00	-36079.20	32899.80	-304602.00	-189554.00	174135.00	2-3	42.50	5.272
2	59.72	1	SLU	-303372.00	-37504.70	34199.70	-303372.00	-189290.00	173874.00	2-3	42.50	5.064
3	119.44	1	SLU	-298579.00	-37126.20	33854.60	-298579.00	-188262.00	172853.00	2-3	42.50	5.087
4	179.17	1	SLU	-293140.00	-35424.00	32302.40	-293140.00	-187091.00	171693.00	2-3	42.50	5.297
5	238.89	1	SLU	-287056.00	-32805.10	29914.30	-287056.00	-185773.00	170384.00	2-3	42.50	5.678
6	298.61	1	SLU	-280327.00	-29606.40	26997.50	-280327.00	-184307.00	168928.00	2-3	42.50	6.240
7	358.33	1	SLU	-272953.00	-26100.10	23800.10	-272953.00	-182691.00	167323.00	2-3	42.50	7.014
8	418.06	1	SLU	-264933.00	-22499.80	20517.10	-264933.00	-180920.00	165561.00	2-3	42.50	8.054
9	477.78	1	SLU	-256582.00	-18967.70	17296.30	-256582.00	-179064.00	163711.00	2-3	42.50	9.452
10	537.50	1	SLU	-248273.00	-15621.40	14244.90	-2571250.00	-177206.00	161856.00	2-3	42.50	10.357
11	597.22	1	SLU	-240005.00	-12541.20	11436.00	-2571250.00	-175345.00	159995.00	2-3	42.50	10.713
12	656.94	1	SLU	-231776.00	-9776.28	8914.78	-2571250.00	-173281.00	158232.00	2-3	42.50	11.094
13	716.67	1	SLU	-223585.00	-7351.31	6703.51	-2571250.00	-171177.00	156479.00	2-3	42.50	11.500
14	776.39	1	SLU	-215430.00	-5271.57	4807.03	-2571250.00	-169064.00	154721.00	2-3	42.50	11.935
15	836.11	1	SLU	-207310.00	-3527.79	3216.91	-2571250.00	-166942.00	152954.00	2-3	42.50	12.403
16	895.83	1	SLU	-199224.00	-2100.33	1915.25	-2571250.00	-164834.00	151139.00	2-3	42.50	12.906
17	955.56	1	SLU	-191171.00	-962.59	877.76	-2571250.00	-162719.00	149319.00	2-3	42.50	13.450
18	1015.28	1	SLU	-183148.00	-83.81	76.43	-2571250.00	-160598.00	147494.00	2-3	42.50	14.039
19	1075.00	1	SLU	-175156.00	568.63	-518.52	-2571250.00	159055.00	-145229.00	2-3	222.50	14.680
20	1134.72	1	SLU	-167192.00	1027.53	-936.98	-2571250.00	157078.00	-143229.00	2-3	222.50	15.379
21	1194.44	1	SLU	-159256.00	1324.55	-1207.83	-2571250.00	155099.00	-141221.00	2-3	222.50	16.145
22	1254.17	1	SLU	-151345.00	1489.30	-1358.06	-2571250.00	153048.00	-139245.00	2-3	222.50	16.989
23	1313.89	1	SLU	-143460.00	1548.78	-1412.30	-2571250.00	150814.00	-137360.00	2-3	222.50	17.923
24	1373.61	1	SLU	-135597.00	1527.01	-1392.45	-2571250.00	148567.00	-135469.00	2-3	222.50	18.962
25	1433.33	1	SLU	-127757.00	1444.96	-1317.62	-2571250.00	146309.00	-133572.00	2-3	222.50	20.126
26	1493.06	1	SLU	-119937.00	1320.56	-1204.19	-2571250.00	144041.00	-131671.00	2-3	222.50	21.438
27	1552.78	1	SLU	-112138.00	1168.89	-1065.88	-2571250.00	141764.00	-129764.00	2-3	222.50	22.929
28	1612.50	1	SLU	-104356.00	1002.39	-914.05	-2571250.00	139476.00	-127853.00	2-3	222.50	24.639
29	1672.22	1	SLU	-96591.50	831.19	-757.94	-2571250.00	137179.00	-125938.00	2-3	222.50	26.620
30	1731.94	1	SLU	-88842.70	663.42	-604.96	-2571250.00	134867.00	-124019.00	2-3	222.50	28.942
31	1791.67	1	SLU	-81108.40	505.59	-461.03	-2571250.00	132546.00	-122096.00	2-3	222.50	31.701
32	1851.39	1	SLU	-73387.40	362.83	-330.86	-2571250.00	130214.00	-120170.00	2-3	222.50	35.037
33	1911.11	1	SLU	-65678.30	239.32	-218.23	-2571250.00	127888.00	-118204.00	2-3	222.50	39.149
34	1970.83	1	SLU	-57979.90	138.46	-126.26	-2571250.00	125595.00	-116146.00	2-3	222.50	44.347
35	2030.56	1	SLU	-50291.00	63.21	-57.64	-2571250.00	123396.00	-113870.00	2-3	222.50	51.127
36	2090.28	1	SLU	-42610.30	16.22	-14.79	-2571250.00	121190.00	-111582.00	2-3	222.50	60.343
37	2150.00	1	SLU	-34936.60	0.00	0.00	-2571250.00					73.598

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	5655.77	-514.77	0.85	11.31	5679.15	1.00	32294.70	375299.00	32294.70	5.687
2	59.72	1	SLU	986.76	-89.81	0.85	11.31	990.84	1.00	32294.70	375123.00	32294.70	32.593
3	119.44	1	SLU	-2514.45	228.86	0.85	11.31	2524.84	1.00	32294.70	374436.00	32294.70	12.791
4	179.17	1	SLU	-5015.37	456.48	0.85	11.31	5036.10	1.00	32294.70	373657.00	32294.70	6.413
5	238.89	1	SLU	-6678.54	607.86	0.85	11.31	6706.15	1.00	32294.70	372786.00	32294.70	4.816

6	298.61	1	SLU	-7656.61	696.88	0.85	11.31	7688.26	1.00	32294.70	371822.00	32294.70	4.201
7	358.33	1	SLU	-8089.02	736.23	0.85	11.31	8122.45	1.00	32294.70	370766.00	32294.70	3.976
8	418.06	1	SLU	-8100.07	737.24	0.85	11.31	8133.56	1.00	32294.70	369617.00	32294.70	3.971
9	477.78	1	SLU	-7798.11	709.76	0.85	11.31	7830.34	1.00	32294.70	368421.00	32294.70	4.124
10	537.50	1	SLU	-7275.45	662.18	0.85	11.31	7305.52	1.00	32294.70	367231.00	32294.70	4.421
11	597.22	1	SLU	-6609.01	601.53	0.85	11.31	6636.33	1.00	32294.70	366046.00	32294.70	4.866
12	656.94	1	SLU	-5861.34	533.48	0.85	11.31	5885.57	1.00	32294.70	364868.00	32294.70	5.487
13	716.67	1	SLU	-5081.92	462.54	0.85	11.31	5102.93	1.00	32294.70	363694.00	32294.70	6.329
14	776.39	1	SLU	-4308.66	392.16	0.85	11.31	4326.47	1.00	32294.70	362526.00	32294.70	7.464
15	836.11	1	SLU	-3569.41	324.88	0.85	11.31	3584.16	1.00	32294.70	361363.00	32294.70	9.010
16	895.83	1	SLU	-2883.53	262.45	0.85	11.31	2895.45	1.00	32294.70	360205.00	32294.70	11.154
17	955.56	1	SLU	-2263.32	206.00	0.85	11.31	2272.67	1.00	32294.70	359051.00	32294.70	14.210
18	1015.28	1	SLU	-1715.37	156.13	0.85	11.31	1722.46	1.00	32294.70	357902.00	32294.70	18.749
19	1075.00	1	SLU	-1241.81	113.03	0.85	11.31	1246.94	1.00	32294.70	356757.00	32294.70	25.899
20	1134.72	1	SLU	-841.38	76.58	0.85	11.31	844.86	1.00	32294.70	355617.00	32294.70	38.225
21	1194.44	1	SLU	-510.37	46.45	0.85	11.31	512.48	1.00	32294.70	354480.00	32294.70	63.016
22	1254.17	1	SLU	-243.40	22.15	0.85	11.31	244.41	1.00	32294.70	353347.00	32294.70	>100
23	1313.89	1	SLU	-34.08	3.10	0.85	11.31	34.22	1.00	32294.70	352217.00	32294.70	>100
24	1373.61	1	SLU	124.46	-11.33	0.85	11.31	124.97	1.00	32294.70	351091.00	32294.70	>100
25	1433.33	1	SLU	239.14	-21.77	0.85	11.31	240.13	1.00	32294.70	349968.00	32294.70	>100
26	1493.06	1	SLU	316.67	-28.82	0.85	11.31	317.97	1.00	32294.70	348848.00	32294.70	>100
27	1552.78	1	SLU	363.24	-33.06	0.85	11.31	364.74	1.00	32294.70	347731.00	32294.70	88.541
28	1612.50	1	SLU	384.46	-34.99	0.85	11.31	386.05	1.00	32294.70	346616.00	32294.70	83.654
29	1672.22	1	SLU	385.20	-35.06	0.85	11.31	386.79	1.00	32294.70	345504.00	32294.70	83.494
30	1731.94	1	SLU	369.56	-33.64	0.85	11.31	371.09	1.00	32294.70	344394.00	32294.70	87.026
31	1791.67	1	SLU	340.91	-31.03	0.85	11.31	342.32	1.00	32294.70	343286.00	32294.70	94.341
32	1851.39	1	SLU	301.86	-27.47	0.85	11.31	303.11	1.00	32294.70	342180.00	32294.70	>100
33	1911.11	1	SLU	254.35	-23.15	0.85	11.31	255.41	1.00	32294.70	341076.00	32294.70	>100
34	1970.83	1	SLU	199.75	-18.18	0.85	11.31	200.58	1.00	32294.70	339973.00	32294.70	>100
35	2030.56	1	SLU	138.91	-12.64	0.85	11.31	139.48	1.00	32294.70	338872.00	32294.70	>100
36	2090.28	1	SLU	72.26	-6.58	0.85	11.31	72.56	1.00	32294.70	337772.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-225631.00	24370.20	-26725.30	0.00	78.54	36.95	528.94	
39	59.72	2	SLE R	-224401.00	25333.10	-27781.20	0.00	78.54	37.59	537.58	
40	119.44	2	SLE R	-219608.00	25077.50	-27500.90	0.00	78.54	37.01	529.13	
41	179.17	2	SLE R	-214169.00	23927.70	-26240.00	0.00	78.54	35.68	510.42	
42	238.89	2	SLE R	-208102.00	22158.70	-24300.10	0.00	78.54	33.83	484.53	
43	298.61	2	SLE R	-202070.00	19998.10	-21930.70	0.00	78.54	31.69	454.67	
44	358.33	2	SLE R	-196070.00	17629.70	-19333.40	0.00	78.54	29.40	422.69	
45	418.06	2	SLE R	-190102.00	15197.90	-16666.50	0.00	78.54	27.05	390.08	
46	477.78	2	SLE R	-184165.00	12812.10	-14050.20	0.00	78.54	24.75	357.99	
47	537.50	2	SLE R	-178259.00	10551.80	-11571.40	0.00	78.54	22.55	327.25	
48	597.22	2	SLE R	-172381.00	8471.14	-9289.76	0.00	78.54	20.48	298.41	
49	656.94	2	SLE R	-166532.00	6603.54	-7241.69	0.00	78.54	18.58	271.82	
50	716.67	2	SLE R	-160709.00	4965.56	-5445.42	0.00	78.54	16.85	247.66	
51	776.39	2	SLE R	-154913.00	3560.76	-3904.86	0.00	78.54	15.31	225.97	
52	836.11	2	SLE R	-149142.00	2382.90	-2613.18	0.00	78.54	13.94	206.66	
53	895.83	2	SLE R	-143396.00	1418.70	-1555.80	0.00	78.54	12.74	189.61	
54	955.56	2	SLE R	-137673.00	650.20	-713.03	0.00	78.54	11.69	174.63	
55	1015.28	2	SLE R	-131972.00	56.61	-62.08	0.00	78.54	10.77	161.50	
56	1075.00	2	SLE R	-126293.00	-384.09	421.21	0.00	78.54	10.56	157.99	
57	1134.72	2	SLE R	-120635.00	-694.06	761.13	0.00	78.54	10.34	154.32	
58	1194.44	2	SLE R	-114996.00	-894.69	981.15	0.00	78.54	10.03	149.54	
59	1254.17	2	SLE R	-109376.00	-1005.97	1103.19	0.00	78.54	9.66	143.85	
60	1313.89	2	SLE R	-103773.00	-1046.15	1147.24	0.00	78.54	9.23	137.44	
61	1373.61	2	SLE R	-98188.20	-1031.44	1131.12	0.00	78.54	8.77	130.48	
62	1433.33	2	SLE R	-92618.90	-976.02	1070.34	0.00	78.54	8.27	123.11	
63	1493.06	2	SLE R	-87064.80	-891.99	978.19	0.00	78.54	7.76	115.46	
64	1552.78	2	SLE R	-81524.80	-789.54	865.84	0.00	78.54	7.23	107.64	
65	1612.50	2	SLE R	-75998.20	-677.08	742.51	0.00	78.54	6.69	99.73	
66	1672.22	2	SLE R	-70484.00	-561.44	615.69	0.00	78.54	6.16	91.80	
67	1731.94	2	SLE R	-64981.20	-448.12	491.43	0.00	78.54	5.62	83.90	
68	1791.67	2	SLE R	-59489.10	-341.51	374.51	0.00	78.54	5.10	76.10	
69	1851.39	2	SLE R	-54006.60	-245.08	268.77	0.00	78.54	4.58	68.40	
70	1911.11	2	SLE R	-48533.00	-161.65	177.27	0.00	78.54	4.07	60.86	
71	1970.83	2	SLE R	-43067.30	-93.53	102.56	0.00	78.54	3.57	53.49	
72	2030.56	2	SLE R	-37608.60	-42.70	46.82	0.00	78.54	3.09	46.30	
73	2090.28	2	SLE R	-32156.10	-10.95	12.01	0.00	78.54	2.62	39.32	
74	2150.00	2	SLE R	-26708.80	0.00	0.00	0.00	78.54	2.17	32.56	
75	0.00	4	SLE Q	-225631.00	24370.20	-26725.30	0.00	78.54	36.95	528.94	
76	59.72	4	SLE Q	-224401.00	25333.10	-27781.20	0.00	78.54	37.59	537.58	
77	119.44	4	SLE Q	-219608.00	25077.50	-27500.90	0.00	78.54	37.01	529.13	
78	179.17	4	SLE Q	-214169.00	23927.70	-26240.00	0.00	78.54	35.68	510.42	
79	238.89	4	SLE Q	-208102.00	22158.70	-24300.10	0.00	78.54	33.83	484.53	
80	298.61	4	SLE Q	-202070.00	19998.10	-21930.70	0.00	78.54	31.69	454.67	
81	358.33	4	SLE Q	-196070.00	17629.70	-19333.40	0.00	78.54	29.40	422.69	
82	418.06	4	SLE Q	-190102.00	15197.90	-16666.50	0.00	78.54	27.05	390.08	
83	477.78	4	SLE Q	-184165.00	12812.10	-14050.20	0.00	78.54	24.75	357.99	
84	537.50	4	SLE Q	-178259.00	10551.80	-11571.40	0.00	78.54	22.55	327.25	
85	597.22	4	SLE Q	-172381.00	8471.14	-9289.76	0.00	78.54	20.48	298.41	
86	656.94	4	SLE Q	-166532.00	6603.54	-7241.69	0.00	78.54	18.58	271.82	
87	716.67	4	SLE Q	-160709.00	4965.56	-5445.42	0.00	78.54	16.85	247.66	
88	776.39	4	SLE Q	-154913.00	3560.76	-3904.86	0.00	78.54	15.31	225.97	
89	836.11	4	SLE Q	-149142.00	2382.90	-2613.18	0.00	78.54	13.94	206.66	
90	895.83	4	SLE Q	-143396.00	1418.70	-1555.80	0.00	78.54	12.74	189.61	
91	955.56	4	SLE Q	-137673.00	650.20	-713.03	0.00	78.54	11.69	174.63	
92	1015.28	4	SLE Q	-131972.00	56.61	-62.08	0.00	78.54	10.77	161.50	
93	1075.00	4	SLE Q	-126293.00	-384.09	421.21	0.00	78.54	10.56	157.99	
94	1134.72	4	SLE Q	-120635.00	-694.06	761.13	0.00	78.54	10.34	154.32	
95	1194.44	4	SLE Q	-114996.00	-894.69	981.15	0.00	78.54	10.03	149.54	
96	1254.17	4	SLE Q	-109376.00	-1005.97	1103.19	0.00	78.54	9.66	143.85	
97	1313.89	4	SLE Q	-103773.00	-1046.15	1147.24	0.00	78.54	9.23	137.44	
98	1373.61	4	SLE Q	-98188.20	-1031.44	1131.12	0.00	78.54	8.77	130.48	
99	1433.33	4	SLE Q	-92618.90	-976.02	1070.34	0.00	78.54	8.27	123.11	
100	1493.06	4	SLE Q	-87064.80	-891.99	978.19	0.00	78.54	7.76	115.46	
101	1552.78	4	SLE Q	-81524.80	-789.54	865.84	0.00	78.54	7.23	107.64	
102	1612.50	4	SLE Q	-75998.20	-677.08	742.51	0.00	78.54	6.69	99.73	
103	1672.22	4	SLE Q	-70484.00	-561.44	615.69	0.00	78.54	6.16	91.80	
104	1731.94	4	SLE Q	-64981.20	-448.12	491.43	0.00	78.54	5.62	83.90	
105	1791.67	4	SLE Q	-59489.10	-341.51	374.51	0.00	78.54	5.10	76.10	
106	1851.39	4	SLE Q	-54006.60	-245.08	268.77	0.00	78.54	4.58	68.40	
107	1911.11	4	SLE Q	-48533.00	-161.65	177.27	0.00	78.54	4.07	60.86	
108	1970.83	4	SLE Q	-43067.30	-93.53	102.56	0.00	78.54	3.57	53.49	
109	2030.56	4	SLE Q	-37608.60	-42.70	46.82	0.00	78.54	3.09	46.30	
110	2090.28	4	SLE Q	-32156.10	-10.95	12.01	0.00	78.54	2.62	39.32	
111	2150.00	4	SLE Q	-26708.80	0.00	0.00	0.00	78.54	2.17	32.56	

Verifiche principali

Caso	Tipo
2	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
43	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sf max (max traz.)
80	C.Q.Per. - Sc max (min. compr.)

Palo n. 23

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 23 (-178)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	317570.00	5541.32	-181.67	-46442.70	-12074.30

	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	317570.00	5541.32	-181.67	-46442.70	-12074.30
2	2	SLE R	RVN	235237.00	4104.68	-134.57	-34402.00	-8943.95
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	235237.00	4104.68	-134.57	-34402.00	-8943.95
3	3	SLE F	RVN	235237.00	4104.68	-134.57	-34402.00	-8943.95
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	235237.00	4104.68	-134.57	-34402.00	-8943.95
4	4	SLE Q	RVN	235237.00	4104.68	-134.57	-34402.00	-8943.95
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	235237.00	4104.68	-134.57	-34402.00	-8943.95

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-317570.00	-5541.32	181.67	46442.70	12074.30
2	2	SLE R	1	-235237.00	-4104.68	134.57	34402.00	8943.95
3	3	SLE F	1	-235237.00	-4104.68	134.57	34402.00	8943.95
4	4	SLE Q	1	-235237.00	-4104.68	134.57	34402.00	8943.95

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-317570.00	-45951.10	11946.50	-317570.00	-252839.00	65324.00	2-3	14.38	5.500
2	59.72	1	SLU	-316340.00	-47777.50	12421.40	-316340.00	-252488.00	65226.10	2-3	14.38	5.283
3	119.44	1	SLU	-311547.00	-47303.20	12298.00	-311547.00	-251117.00	64822.40	2-3	14.38	5.306
4	179.17	1	SLU	-306108.00	-45140.30	11735.70	-306108.00	-248814.00	67004.80	2-3	15.00	5.525
5	238.89	1	SLU	-300024.00	-41807.60	10869.30	-300024.00	-247058.00	66477.30	2-3	15.00	5.923
6	298.61	1	SLU	-293295.00	-37734.70	9810.40	-293295.00	-245098.00	65886.80	2-3	15.00	6.509
7	358.33	1	SLU	-285921.00	-33268.80	8649.32	-285921.00	-242938.00	65235.40	2-3	15.00	7.318
8	418.06	1	SLU	-277901.00	-28682.20	7456.88	-277901.00	-240573.00	64521.00	2-3	15.00	8.405
9	477.78	1	SLU	-269237.00	-24181.70	6286.83	-2571250.00	-237997.00	63741.20	2-3	15.00	9.550
10	537.50	1	SLU	-260508.00	-19917.50	5178.21	-2571250.00	-235380.00	62946.70	2-3	15.00	9.870
11	597.22	1	SLU	-251822.00	-15991.80	4157.60	-2571250.00	-232755.00	62148.70	2-3	15.00	10.211
12	656.94	1	SLU	-243177.00	-12467.70	3241.40	-2571250.00	-230124.00	61347.40	2-3	15.00	10.574
13	716.67	1	SLU	-234572.00	-9376.68	2437.78	-2571250.00	-227487.00	60542.80	2-3	15.00	10.961
14	776.39	1	SLU	-226005.00	-6725.42	1748.50	-2571250.00	-224843.00	59735.10	2-3	15.00	11.377
15	836.11	1	SLU	-217474.00	-4502.26	1170.51	-2571250.00	-222150.00	58986.30	2-3	15.00	11.823
16	895.83	1	SLU	-208980.00	-2682.20	697.33	-2571250.00	-219335.00	58399.70	2-3	15.00	12.304
17	955.56	1	SLU	-200519.00	-1231.37	320.14	-2571250.00	-216505.00	57814.80	2-3	15.00	12.823
18	1015.28	1	SLU	-192091.00	-110.63	28.76	-2571250.00	-213665.00	57232.40	2-3	15.00	13.386
19	1075.00	1	SLU	-183695.00	721.60	-187.60	-2571250.00	210796.00	-56278.20	2-3	195.00	13.997
20	1134.72	1	SLU	-175328.00	1307.11	-339.83	-2571250.00	207984.00	-55424.70	2-3	195.00	14.665
21	1194.44	1	SLU	-166990.00	1686.22	-438.39	-2571250.00	205165.00	-54568.20	2-3	195.00	15.398
22	1254.17	1	SLU	-158679.00	1896.68	-493.11	-2571250.00	202336.00	-53708.80	2-3	195.00	16.204
23	1313.89	1	SLU	-150394.00	1972.89	-512.92	-2571250.00	199497.00	-52845.00	2-3	195.00	17.097
24	1373.61	1	SLU	-142134.00	1945.48	-505.79	-2571250.00	196651.00	-51978.00	2-3	195.00	18.090
25	1433.33	1	SLU	-133897.00	1841.17	-478.67	-2571250.00	193767.00	-51153.80	2-3	195.00	19.203
26	1493.06	1	SLU	-125682.00	1682.83	-437.51	-2571250.00	190740.00	-50534.20	2-3	195.00	20.458
27	1552.78	1	SLU	-117487.00	1489.68	-387.29	-2571250.00	187699.00	-49917.00	2-3	195.00	21.885
28	1612.50	1	SLU	-109311.00	1277.57	-332.15	-2571250.00	184644.00	-49302.00	2-3	195.00	23.522
29	1672.22	1	SLU	-101154.00	1059.44	-275.44	-2571250.00	181574.00	-48690.20	2-3	195.00	25.419
30	1731.94	1	SLU	-93012.30	845.66	-219.86	-2571250.00	178967.00	-46125.30	2-3	194.38	27.644
31	1791.67	1	SLU	-84886.30	644.50	-167.56	-2571250.00	175863.00	-45530.80	2-3	194.38	30.291
32	1851.39	1	SLU	-76774.00	462.55	-120.25	-2571250.00	172749.00	-44938.30	2-3	194.38	33.491
33	1911.11	1	SLU	-68674.30	305.10	-79.32	-2571250.00	169622.00	-44347.40	2-3	194.38	37.441
34	1970.83	1	SLU	-60585.80	176.53	-45.90	-2571250.00	166475.00	-43569.60	2-3	194.38	42.440
35	2030.56	1	SLU	-52507.20	80.59	-20.95	-2571250.00	163304.00	-42590.20	2-3	194.38	48.969
36	2090.28	1	SLU	-44437.10	20.68	-5.38	-2571250.00	160117.00	-41595.70	2-3	194.38	57.863
37	2150.00	1	SLU	-36374.30	0.00	0.00	-2571250.00					70.689

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	5541.32	-181.67	0.85	11.31	5544.30	1.00	32294.70	377157.00	32294.70	5.825
2	59.72	1	SLU	978.87	-32.09	0.85	11.31	979.40	1.00	32294.70	376981.00	32294.70	32.974
3	119.44	1	SLU	-2442.99	80.09	0.85	11.31	2444.30	1.00	32294.70	376294.00	32294.70	13.212
4	179.17	1	SLU	-4887.78	160.25	0.85	11.31	4890.41	1.00	32294.70	375515.00	32294.70	6.604
5	238.89	1	SLU	-6514.21	213.57	0.85	11.31	6517.71	1.00	32294.70	374643.00	32294.70	4.955
6	298.61	1	SLU	-7471.31	244.95	0.85	11.31	7475.32	1.00	32294.70	373680.00	32294.70	4.320
7	358.33	1	SLU	-7895.25	258.85	0.85	11.31	7899.50	1.00	32294.70	372623.00	32294.70	4.088
8	418.06	1	SLU	-7907.45	259.25	0.85	11.31	7911.70	1.00	32294.70	371474.00	32294.70	4.082
9	477.78	1	SLU	-7613.71	249.62	0.85	11.31	7617.80	1.00	32294.70	370233.00	32294.70	4.239
10	537.50	1	SLU	-7104.21	232.91	0.85	11.31	7108.03	1.00	32294.70	368983.00	32294.70	4.543
11	597.22	1	SLU	-6454.10	211.60	0.85	11.31	6457.57	1.00	32294.70	367739.00	32294.70	5.001
12	656.94	1	SLU	-5724.47	187.68	0.85	11.31	5727.55	1.00	32294.70	366501.00	32294.70	5.638
13	716.67	1	SLU	-4963.69	162.74	0.85	11.31	4966.36	1.00	32294.70	365268.00	32294.70	6.503
14	776.39	1	SLU	-4208.79	137.99	0.85	11.31	4211.05	1.00	32294.70	364041.00	32294.70	7.669
15	836.11	1	SLU	-3487.00	114.32	0.85	11.31	3488.88	1.00	32294.70	362819.00	32294.70	9.256
16	895.83	1	SLU	-2817.25	92.36	0.85	11.31	2818.76	1.00	32294.70	361602.00	32294.70	11.457
17	955.56	1	SLU	-2211.56	72.51	0.85	11.31	2212.75	1.00	32294.70	360390.00	32294.70	14.595
18	1015.28	1	SLU	-1676.39	54.96	0.85	11.31	1677.29	1.00	32294.70	359183.00	32294.70	19.254
19	1075.00	1	SLU	-1213.84	39.80	0.85	11.31	1214.50	1.00	32294.70	357980.00	32294.70	26.591
20	1134.72	1	SLU	-822.69	26.97	0.85	11.31	823.13	1.00	32294.70	356782.00	32294.70	39.234
21	1194.44	1	SLU	-499.31	16.37	0.85	11.31	499.58	1.00	32294.70	355588.00	32294.70	64.644
22	1254.17	1	SLU	-238.47	7.82	0.85	11.31	238.59	1.00	32294.70	354397.00	32294.70	>100
23	1313.89	1	SLU	-33.92	1.11	0.85	11.31	33.94	1.00	32294.70	353211.00	32294.70	>100
24	1373.61	1	SLU	121.02	-3.97	0.85	11.31	121.08	1.00	32294.70	352027.00	32294.70	>100
25	1433.33	1	SLU	233.13	-7.64	0.85	11.31	233.25	1.00	32294.70	350847.00	32294.70	>100
26	1493.06	1	SLU	308.93	-10.13	0.85	11.31	309.10	1.00	32294.70	349671.00	32294.70	>100
27	1552.78	1	SLU	354.51	-11.62	0.85	11.31	354.70	1.00	32294.70	348497.00	32294.70	91.049
28	1612.50	1	SLU	375.31	-12.30	0.85	11.31	375.51	1.00	32294.70	347326.00	32294.70	86.003
29	1672.22	1	SLU	376.09	-12.33	0.85	11.31	376.29	1.00	32294.70	346157.00	32294.70	85.824
30	1731.94	1	SLU	360.87	-11.83	0.85	11.31	361.06	1.00	32294.70	344991.00	32294.70	89.443
31	1791.67	1	SLU	332.93	-10.91	0.85	11.31	333.10	1.00	32294.70	343827.00	32294.70	96.951
32	1851.39	1	SLU	294.81	-9.67	0.85	11.31	294.97	1.00	32294.70	342665.00	32294.70	>100
33	1911.11	1	SLU	248.44	-8.15	0.85	11.31	248.57	1.00	32294.70	341505.00	32294.70	>100
34	1970.83	1	SLU	195.12	-6.40	0.85	11.31	195.23	1.00	32294.70	340346.00	32294.70	>100
35	2030.56	1	SLU	135.69	-4.45	0.85	11.31	135.77	1.00	32294.70	339189.00	32294.70	>100
36	2090.28	1	SLU	70.59	-2.31	0.85	11.31	70.63	1.00	32294.70	338033.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-235237.00	8849.28	-34037.90	0.00	78.54	37.29	533.94	
39	59.72	2	SLE R	-234007.00	9201.01	-35390.80	0.00	78.54	37.91	542.26	
40	119.44	2	SLE R	-229214.00	9109.66	-35039.40	0.00	78.54	37.34	533.87	
41	179.17	2	SLE R	-223775.00	8693.12	-33437.20	0.00	78.54	36.04	515.60	
42	238.89	2	SLE R	-217691.00	8051.31	-30968.60	0.00	78.54	34.23	490.26	
43	298.61	2	SLE R	-211372.00	7266.96	-27951.60	0.00	78.54	32.10	460.65	
44	358.33	2	SLE R	-205088.00	6406.91	-24643.50	0.00	78.54	29.83	428.97	
45	418.06	2	SLE R	-198837.00	5523.62	-21246.00	0.00	78.54	27.50	396.68	
46	477.78	2	SLE R	-192618.00	4656.92	-17912.40	0.00	78.54	25.22	364.90	
47	537.50	2	SLE R	-186431.00	3835.71	-14753.70	0.00	78.54	23.03	334.42	
48	597.22	2	SLE R	-180275.00	3079.71	-11845.80	0.00	78.54	20.98	305.80	
49	656.94	2	SLE R	-174147.00	2401.04	-9235.36	0.00	78.54	19.09	279.38	
50	716.67	2	SLE R	-168049.00	1805.76	-6945.69	0.00	78.54	17.37	255.32	
51	776.39	2	SLE R	-161977.00	1295.18	-4981.79	0.00	78.54	15.83	233.66	
52	836.11	2	SLE R	-155932.00	867.05	-3335.01	0.00	78.54	14.46	214.33	
53	895.83	2	SLE R	-149913.00	516.54	-1986.81	0.00	78.54	13.25	197.21	
54	955.56	2	SLE R	-143917.00	237.14	-912.13	0.00	78.54	12.19	182.09	
55	1015.28	2	SLE R	-137946.00	21.31	-81.95	0.00	78.54	11.26	168.78	
56	1075.00	2	SLE R	-131997.00	-138.97	534.52	0.00	78.54	11.01	164.81	
57	1134.72	2	SLE R	-126069.00	-251.72	968.23	0.00	78.54	10.76	160.74	
58	1194.44	2	SLE R	-120162.00	-324.73	1249.05	0.00	78.54	10.43	155.57	
59	1254.17	2	SLE R	-114275.00	-365.26	1404.95	0.00	78.54	10.04	149.53	
60	1313.89	2	SLE R	-108406.00	-379.94	1461.40	0.00	78.54	9.59	142.78	
61	1373.61	2	SLE R	-102555.00	-374.66	1441.10	0.00	78.54	9.11	135.50	
62	1433.33	2	SLE R	-96720.50	-354.57	1363.83	0.00	78.54	8.59	127.82	
63	1493.06	2	SLE R	-90901.90	-324.08	1246.54	0.00	78.54	8.05	119.88	
64	1552.78	2	SLE R	-85098.20	-286.88	1103.46	0.00	78.54	7.51	111.76	
65	1612.50	2	SLE R	-79308.30	-246.04	946.35	0.00	78.54	6.95	103.56	
66	1672.22	2	SLE R	-73531.40	-204.03	784.77	0.00	78.54	6.40	95.35	

67	1731.94	2	SLE R	-67766.50	-162.86	626.42	0.00	78.54	5.84	87.17	
68	1791.67	2	SLE R	-62012.60	-124.12	477.41	0.00	78.54	5.30	79.07	
69	1851.39	2	SLE R	-56268.90	-89.08	342.63	0.00	78.54	4.76	71.09	
70	1911.11	2	SLE R	-50534.30	-58.76	226.00	0.00	78.54	4.23	63.25	
71	1970.83	2	SLE R	-44808.00	-34.00	130.76	0.00	78.54	3.71	55.58	
72	2030.56	2	SLE R	-39089.00	-15.52	59.70	0.00	78.54	3.21	48.09	
73	2090.28	2	SLE R	-33376.40	-3.98	15.32	0.00	78.54	2.72	40.81	
74	2150.00	2	SLE R	-27669.20	0.00	0.00	0.00	78.54	2.25	33.74	
75	0.00	4	SLE Q	-235237.00	8849.28	-34037.90	0.00	78.54	37.29	533.94	
76	59.72	4	SLE Q	-234007.00	9201.01	-35390.80	0.00	78.54	37.91	542.26	
77	119.44	4	SLE Q	-229214.00	9109.66	-35039.40	0.00	78.54	37.34	533.87	
78	179.17	4	SLE Q	-223775.00	8693.12	-33437.20	0.00	78.54	36.04	515.60	
79	238.89	4	SLE Q	-217691.00	8051.31	-30968.60	0.00	78.54	34.23	490.26	
80	298.61	4	SLE Q	-211372.00	7266.96	-27951.60	0.00	78.54	32.10	460.65	
81	358.33	4	SLE Q	-205088.00	6406.91	-24643.50	0.00	78.54	29.83	428.97	
82	418.06	4	SLE Q	-198837.00	5523.62	-21246.00	0.00	78.54	27.50	396.68	
83	477.78	4	SLE Q	-192618.00	4656.92	-17912.40	0.00	78.54	25.22	364.90	
84	537.50	4	SLE Q	-186431.00	3835.71	-14753.70	0.00	78.54	23.03	334.42	
85	597.22	4	SLE Q	-180275.00	3079.71	-11845.80	0.00	78.54	20.98	305.80	
86	656.94	4	SLE Q	-174147.00	2401.04	-9235.36	0.00	78.54	19.09	279.38	
87	716.67	4	SLE Q	-168049.00	1805.76	-6945.69	0.00	78.54	17.37	255.32	
88	776.39	4	SLE Q	-161977.00	1295.18	-4981.79	0.00	78.54	15.83	233.66	
89	836.11	4	SLE Q	-155932.00	867.05	-3335.01	0.00	78.54	14.46	214.33	
90	895.83	4	SLE Q	-149913.00	516.54	-1986.81	0.00	78.54	13.25	197.21	
91	955.56	4	SLE Q	-143917.00	237.14	-912.13	0.00	78.54	12.19	182.09	
92	1015.28	4	SLE Q	-137946.00	21.31	-81.95	0.00	78.54	11.26	168.78	
93	1075.00	4	SLE Q	-131997.00	-138.97	534.52	0.00	78.54	11.01	164.81	
94	1134.72	4	SLE Q	-126069.00	-251.72	968.23	0.00	78.54	10.76	160.74	
95	1194.44	4	SLE Q	-120162.00	-324.73	1249.05	0.00	78.54	10.43	155.57	
96	1254.17	4	SLE Q	-114275.00	-365.26	1404.95	0.00	78.54	10.04	149.53	
97	1313.89	4	SLE Q	-108406.00	-379.94	1461.40	0.00	78.54	9.59	142.78	
98	1373.61	4	SLE Q	-102555.00	-374.66	1441.10	0.00	78.54	9.11	135.50	
99	1433.33	4	SLE Q	-96720.50	-354.57	1363.83	0.00	78.54	8.59	127.82	
100	1493.06	4	SLE Q	-90901.90	-324.08	1246.54	0.00	78.54	8.05	119.88	
101	1552.78	4	SLE Q	-85098.20	-286.88	1103.46	0.00	78.54	7.51	111.76	
102	1612.50	4	SLE Q	-79308.30	-246.04	946.35	0.00	78.54	6.95	103.56	
103	1672.22	4	SLE Q	-73531.40	-204.03	784.77	0.00	78.54	6.40	95.35	
104	1731.94	4	SLE Q	-67766.50	-162.86	626.42	0.00	78.54	5.84	87.17	
105	1791.67	4	SLE Q	-62012.60	-124.12	477.41	0.00	78.54	5.30	79.07	
106	1851.39	4	SLE Q	-56268.90	-89.08	342.63	0.00	78.54	4.76	71.09	
107	1911.11	4	SLE Q	-50534.30	-58.76	226.00	0.00	78.54	4.23	63.25	
108	1970.83	4	SLE Q	-44808.00	-34.00	130.76	0.00	78.54	3.71	55.58	
109	2030.56	4	SLE Q	-39089.00	-15.52	59.70	0.00	78.54	3.21	48.09	
110	2090.28	4	SLE Q	-33376.40	-3.98	15.32	0.00	78.54	2.72	40.81	
111	2150.00	4	SLE Q	-27669.20	0.00	0.00	0.00	78.54	2.25	33.74	

Verifiche principali

Caso	Tipo
2	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc max (min. compr.),C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
76	C.Q.Per. - Sc max (min. compr.),C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sf max (max traz.)

Palo n. 24

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 24 (-179)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	317954.00	5547.49	164.82	-46519.30	11488.90
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	317954.00	5547.49	164.82	-46519.30	11488.90
2	2	SLE R	RVN	235522.00	4109.25	122.09	-34458.70	8510.29
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	235522.00	4109.25	122.09	-34458.70	8510.29
3	3	SLE F	RVN	235522.00	4109.25	122.09	-34458.70	8510.29
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	235522.00	4109.25	122.09	-34458.70	8510.29
4	4	SLE Q	RVN	235522.00	4109.25	122.09	-34458.70	8510.29
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	235522.00	4109.25	122.09	-34458.70	8510.29

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-317954.00	-5547.49	-164.82	46519.30	-11488.90
2	2	SLE R	1	-235522.00	-4109.25	-122.09	34458.70	-8510.29
3	3	SLE F	1	-235522.00	-4109.25	-122.09	34458.70	-8510.29
4	4	SLE Q	1	-235522.00	-4109.25	-122.09	34458.70	-8510.29

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-317954.00	-46026.40	-11367.20	-317954.00	-253832.00	-61766.00	2-3	346.25	5.510
2	59.72	1	SLU	-316725.00	-47862.70	-11820.70	-316725.00	-253474.00	-61688.10	2-3	346.25	5.291
3	119.44	1	SLU	-311931.00	-47392.40	-11704.50	-311931.00	-252076.00	-61383.90	2-3	346.25	5.315
4	179.17	1	SLU	-306493.00	-45229.00	-11170.20	-306493.00	-250484.00	-61037.20	2-3	346.25	5.534
5	238.89	1	SLU	-300409.00	-41892.60	-10346.20	-300409.00	-248690.00	-60647.10	2-3	346.25	5.932
6	298.61	1	SLU	-293679.00	-37813.80	-9338.89	-293679.00	-246693.00	-60213.00	2-3	346.25	6.520
7	358.33	1	SLU	-286305.00	-33340.30	-8234.08	-286305.00	-244492.00	-59734.50	2-3	346.25	7.329
8	418.06	1	SLU	-278286.00	-28745.40	-7099.28	-278286.00	-242078.00	-59210.70	2-3	346.25	8.417
9	477.78	1	SLU	-269621.00	-24236.40	-5985.67	-2571250.00	-239448.00	-58641.10	2-3	346.25	9.537
10	537.50	1	SLU	-260880.00	-19963.70	-4930.45	-2571250.00	-236773.00	-58062.90	2-3	346.25	9.856
11	597.22	1	SLU	-252181.00	-16030.00	-3958.94	-2571250.00	-234090.00	-57484.50	2-3	346.25	10.196
12	656.94	1	SLU	-243523.00	-12498.50	-3086.76	-2571250.00	-231399.00	-56905.90	2-3	346.25	10.559
13	716.67	1	SLU	-234905.00	-9400.76	-2321.71	-2571250.00	-228702.00	-56327.50	2-3	346.25	10.946
14	776.39	1	SLU	-226326.00	-6743.62	-1665.48	-2571250.00	-225997.00	-55749.40	2-3	346.25	11.361
15	836.11	1	SLU	-217783.00	-4515.40	-1115.17	-2571250.00	-223275.00	-55099.80	2-3	346.25	11.806
16	895.83	1	SLU	-209276.00	-2691.09	-664.62	-2571250.00	-220526.00	-54246.10	2-3	346.25	12.286
17	955.56	1	SLU	-200803.00	-1236.78	-305.45	-2571250.00	-217762.00	-53385.90	2-3	346.25	12.805
18	1015.28	1	SLU	-192363.00	-113.25	-27.97	-2571250.00	-214992.00	-52521.30	2-3	346.25	13.367
19	1075.00	1	SLU	-183954.00	721.15	178.10	-2571250.00	212010.00	51982.20	2-3	166.25	13.978
20	1134.72	1	SLU	-175575.00	1308.26	323.10	-2571250.00	209132.00	51375.40	2-3	166.25	14.645
21	1194.44	1	SLU	-167225.00	1688.51	417.01	-2571250.00	206245.00	50770.10	2-3	166.25	15.376
22	1254.17	1	SLU	-158902.00	1899.71	469.17	-2571250.00	203345.00	50167.00	2-3	166.25	16.181
23	1313.89	1	SLU	-150605.00	1976.34	488.10	-2571250.00	200435.00	49565.50	2-3	166.25	17.073
24	1373.61	1	SLU	-142333.00	1949.08	481.37	-2571250.00	197517.00	48965.50	2-3	166.25	18.065
25	1433.33	1	SLU	-134083.00	1844.72	455.59	-2571250.00	194585.00	48308.20	2-3	166.25	19.177
26	1493.06	1	SLU	-125856.00	1686.19	416.44	-2571250.00	191627.00	47408.80	2-3	166.25	20.430
27	1552.78	1	SLU	-117649.00	1492.72	368.66	-2571250.00	188656.00	46502.20	2-3	166.25	21.855
28	1612.50	1	SLU	-109462.00	1280.24	316.18	-2571250.00	185674.00	45586.50	2-3	166.25	23.490
29	1672.22	1	SLU	-101292.00	1061.70	262.21	-2571250.00	182679.00	44661.50	2-3	166.25	25.384
30	1731.94	1	SLU	-93138.90	847.50	209.31	-2571250.00	179677.00	43728.80	2-3	166.25	27.607
31	1791.67	1	SLU	-85001.00	645.92	159.52	-2571250.00	176660.00	42785.80	2-3	166.25	30.250
32	1851.39	1	SLU	-76876.80	463.58	114.49	-2571250.00	173635.00	41834.40	2-3	166.25	33.446
33	1911.11	1	SLU	-68765.30	305.79	75.52	-2571250.00	170538.00	40980.20	2-3	166.25	37.392
34	1970.83	1	SLU	-60664.90	176.94	43.70	-2571250.00	167322.00	40297.90	2-3	166.25	42.384
35	2030.56	1	SLU	-52574.50	80.78	19.95	-2571250.00	164083.00	39620.20	2-3	166.25	48.907
36	2090.28	1	SLU	-44492.60	20.72	5.12	-2571250.00	160801.00	38975.70	2-3	166.25	57.791

37	2150.00	1	SLU	-36418.00	0.00	0.00	-2571250.00					70.604

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	5547.49	164.82	0.85	11.31	5549.94	1.00	32294.70	377212.00	32294.70	5.819
2	59.72	1	SLU	987.47	29.34	0.85	11.31	987.91	1.00	32294.70	377036.00	32294.70	32.690
3	119.44	1	SLU	-2432.91	-72.28	0.85	11.31	2433.99	1.00	32294.70	376349.00	32294.70	13.268
4	179.17	1	SLU	-4877.00	-144.90	0.85	11.31	4879.15	1.00	32294.70	375570.00	32294.70	6.619
5	238.89	1	SLU	-6503.32	-193.22	0.85	11.31	6506.19	1.00	32294.70	374698.00	32294.70	4.964
6	298.61	1	SLU	-7460.75	-221.67	0.85	11.31	7464.05	1.00	32294.70	373735.00	32294.70	4.327
7	358.33	1	SLU	-7885.35	-234.28	0.85	11.31	7888.83	1.00	32294.70	372678.00	32294.70	4.094
8	418.06	1	SLU	-7898.41	-234.67	0.85	11.31	7901.90	1.00	32294.70	371530.00	32294.70	4.087
9	477.78	1	SLU	-7605.66	-225.97	0.85	11.31	7609.01	1.00	32294.70	370288.00	32294.70	4.244
10	537.50	1	SLU	-7097.20	-210.87	0.85	11.31	7100.33	1.00	32294.70	369036.00	32294.70	4.548
11	597.22	1	SLU	-6448.13	-191.58	0.85	11.31	6450.97	1.00	32294.70	367790.00	32294.70	5.006
12	656.94	1	SLU	-5719.50	-169.93	0.85	11.31	5722.03	1.00	32294.70	366550.00	32294.70	5.644
13	716.67	1	SLU	-4959.65	-147.36	0.85	11.31	4961.84	1.00	32294.70	365316.00	32294.70	6.509
14	776.39	1	SLU	-4205.60	-124.95	0.85	11.31	4207.45	1.00	32294.70	364087.00	32294.70	7.676
15	836.11	1	SLU	-3484.56	-103.53	0.85	11.31	3486.10	1.00	32294.70	362863.00	32294.70	9.264
16	895.83	1	SLU	-2815.46	-83.65	0.85	11.31	2816.70	1.00	32294.70	361645.00	32294.70	11.465
17	955.56	1	SLU	-2210.32	-65.67	0.85	11.31	2211.30	1.00	32294.70	360431.00	32294.70	14.604
18	1015.28	1	SLU	-1675.61	-49.78	0.85	11.31	1676.35	1.00	32294.70	359222.00	32294.70	19.265
19	1075.00	1	SLU	-1213.43	-36.05	0.85	11.31	1213.97	1.00	32294.70	358018.00	32294.70	26.603
20	1134.72	1	SLU	-822.57	-24.44	0.85	11.31	822.93	1.00	32294.70	356817.00	32294.70	39.244
21	1194.44	1	SLU	-499.41	-14.84	0.85	11.31	499.63	1.00	32294.70	355621.00	32294.70	64.637
22	1254.17	1	SLU	-238.72	-7.09	0.85	11.31	238.83	1.00	32294.70	354429.00	32294.70	>100
23	1313.89	1	SLU	-34.29	-1.02	0.85	11.31	34.31	1.00	32294.70	353241.00	32294.70	>100
24	1373.61	1	SLU	120.58	3.58	0.85	11.31	120.63	1.00	32294.70	352056.00	32294.70	>100
25	1433.33	1	SLU	232.66	6.91	0.85	11.31	232.76	1.00	32294.70	350874.00	32294.70	>100
26	1493.06	1	SLU	308.45	9.16	0.85	11.31	308.59	1.00	32294.70	349696.00	32294.70	>100
27	1552.78	1	SLU	354.04	10.52	0.85	11.31	354.20	1.00	32294.70	348520.00	32294.70	91.177
28	1612.50	1	SLU	374.87	11.14	0.85	11.31	375.03	1.00	32294.70	347347.00	32294.70	86.112
29	1672.22	1	SLU	375.69	11.16	0.85	11.31	375.85	1.00	32294.70	346177.00	32294.70	85.924
30	1731.94	1	SLU	360.52	10.71	0.85	11.31	360.68	1.00	32294.70	345009.00	32294.70	89.540
31	1791.67	1	SLU	332.62	9.88	0.85	11.31	332.77	1.00	32294.70	343844.00	32294.70	97.049
32	1851.39	1	SLU	294.56	8.75	0.85	11.31	294.69	1.00	32294.70	342680.00	32294.70	>100
33	1911.11	1	SLU	248.24	7.38	0.85	11.31	248.35	1.00	32294.70	341518.00	32294.70	>100
34	1970.83	1	SLU	194.98	5.79	0.85	11.31	195.06	1.00	32294.70	340358.00	32294.70	>100
35	2030.56	1	SLU	135.60	4.03	0.85	11.31	135.66	1.00	32294.70	339199.00	32294.70	>100
36	2090.28	1	SLU	70.55	2.10	0.85	11.31	70.58	1.00	32294.70	338041.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-235522.00	-8420.14	-34093.70	0.00	78.54	37.27	534.01	
39	59.72	2	SLE R	-234292.00	-8756.06	-35453.90	0.00	78.54	37.90	542.36	
40	119.44	2	SLE R	-229499.00	-8670.02	-35105.50	0.00	78.54	37.32	533.99	
41	179.17	2	SLE R	-224060.00	-8274.25	-33503.00	0.00	78.54	36.03	515.76	
42	238.89	2	SLE R	-217976.00	-7663.89	-31031.60	0.00	78.54	34.22	490.45	
43	298.61	2	SLE R	-211648.00	-6917.70	-28010.20	0.00	78.54	32.10	460.86	
44	358.33	2	SLE R	-205356.00	-6099.32	-24696.50	0.00	78.54	29.82	429.19	
45	418.06	2	SLE R	-199096.00	-5258.72	-21292.90	0.00	78.54	27.51	396.92	
46	477.78	2	SLE R	-192869.00	-4433.83	-17952.90	0.00	78.54	25.22	365.14	
47	537.50	2	SLE R	-186674.00	-3652.18	-14787.90	0.00	78.54	23.04	334.67	
48	597.22	2	SLE R	-180509.00	-2932.55	-11874.10	0.00	78.54	20.99	306.06	
49	656.94	2	SLE R	-174373.00	-2286.49	-9258.15	0.00	78.54	19.10	279.64	
50	716.67	2	SLE R	-168266.00	-1719.79	-6963.52	0.00	78.54	17.38	255.58	
51	776.39	2	SLE R	-162187.00	-1233.69	-4995.27	0.00	78.54	15.84	233.91	
52	836.11	2	SLE R	-156134.00	-826.05	-3344.74	0.00	78.54	14.47	214.58	
53	895.83	2	SLE R	-150106.00	-492.31	-1993.40	0.00	78.54	13.26	197.45	
54	955.56	2	SLE R	-144103.00	-226.26	-916.13	0.00	78.54	12.20	182.33	
55	1015.28	2	SLE R	-138123.00	-20.72	-83.89	0.00	78.54	11.27	169.01	
56	1075.00	2	SLE R	-132166.00	131.93	534.18	0.00	78.54	11.03	165.01	
57	1134.72	2	SLE R	-126230.00	239.34	969.08	0.00	78.54	10.78	160.91	
58	1194.44	2	SLE R	-120315.00	308.90	1250.75	0.00	78.54	10.44	155.74	
59	1254.17	2	SLE R	-114420.00	347.54	1407.20	0.00	78.54	10.05	149.68	
60	1313.89	2	SLE R	-108543.00	361.55	1463.95	0.00	78.54	9.60	142.93	
61	1373.61	2	SLE R	-102684.00	356.57	1443.76	0.00	78.54	9.11	135.64	
62	1433.33	2	SLE R	-96842.20	337.48	1366.46	0.00	78.54	8.60	127.96	
63	1493.06	2	SLE R	-91015.80	308.47	1249.03	0.00	78.54	8.06	120.00	
64	1552.78	2	SLE R	-85204.20	273.08	1105.72	0.00	78.54	7.51	111.88	
65	1612.50	2	SLE R	-79406.60	234.21	948.33	0.00	78.54	6.96	103.67	
66	1672.22	2	SLE R	-73621.90	194.23	786.45	0.00	78.54	6.40	95.45	
67	1731.94	2	SLE R	-67849.20	155.04	627.77	0.00	78.54	5.85	87.26	
68	1791.67	2	SLE R	-62087.50	118.17	478.46	0.00	78.54	5.30	79.16	
69	1851.39	2	SLE R	-56336.00	84.81	343.39	0.00	78.54	4.76	71.17	
70	1911.11	2	SLE R	-50593.70	55.94	226.51	0.00	78.54	4.23	63.32	
71	1970.83	2	SLE R	-44859.70	32.37	131.06	0.00	78.54	3.72	55.64	
72	2030.56	2	SLE R	-39133.00	14.78	59.84	0.00	78.54	3.21	48.15	
73	2090.28	2	SLE R	-33412.60	3.79	15.35	0.00	78.54	2.72	40.85	
74	2150.00	2	SLE R	-27697.70	0.00	0.00	0.00	78.54	2.25	33.77	
75	0.00	4	SLE Q	-235522.00	-8420.14	-34093.70	0.00	78.54	37.27	534.01	
76	59.72	4	SLE Q	-234292.00	-8756.06	-35453.90	0.00	78.54	37.90	542.36	
77	119.44	4	SLE Q	-229499.00	-8670.02	-35105.50	0.00	78.54	37.32	533.99	
78	179.17	4	SLE Q	-224060.00	-8274.25	-33503.00	0.00	78.54	36.03	515.76	
79	238.89	4	SLE Q	-217976.00	-7663.89	-31031.60	0.00	78.54	34.22	490.45	
80	298.61	4	SLE Q	-211648.00	-6917.70	-28010.20	0.00	78.54	32.10	460.86	
81	358.33	4	SLE Q	-205356.00	-6099.32	-24696.50	0.00	78.54	29.82	429.19	
82	418.06	4	SLE Q	-199096.00	-5258.72	-21292.90	0.00	78.54	27.51	396.92	
83	477.78	4	SLE Q	-192869.00	-4433.83	-17952.90	0.00	78.54	25.22	365.14	
84	537.50	4	SLE Q	-186674.00	-3652.18	-14787.90	0.00	78.54	23.04	334.67	
85	597.22	4	SLE Q	-180509.00	-2932.55	-11874.10	0.00	78.54	20.99	306.06	
86	656.94	4	SLE Q	-174373.00	-2286.49	-9258.15	0.00	78.54	19.10	279.64	
87	716.67	4	SLE Q	-168266.00	-1719.79	-6963.52	0.00	78.54	17.38	255.58	
88	776.39	4	SLE Q	-162187.00	-1233.69	-4995.27	0.00	78.54	15.84	233.91	
89	836.11	4	SLE Q	-156134.00	-826.05	-3344.74	0.00	78.54	14.47	214.58	
90	895.83	4	SLE Q	-150106.00	-492.31	-1993.40	0.00	78.54	13.26	197.45	
91	955.56	4	SLE Q	-144103.00	-226.26	-916.13	0.00	78.54	12.20	182.33	
92	1015.28	4	SLE Q	-138123.00	-20.72	-83.89	0.00	78.54	11.27	169.01	
93	1075.00	4	SLE Q	-132166.00	131.93	534.18	0.00	78.54	11.03	165.01	
94	1134.72	4	SLE Q	-126230.00	239.34	969.08	0.00	78.54	10.78	160.91	
95	1194.44	4	SLE Q	-120315.00	308.90	1250.75	0.00	78.54	10.44	155.74	
96	1254.17	4	SLE Q	-114420.00	347.54	1407.20	0.00	78.54	10.05	149.68	
97	1313.89	4	SLE Q	-108543.00	361.55	1463.95	0.00	78.54	9.60	142.93	
98	1373.61	4	SLE Q	-102684.00	356.57	1443.76	0.00	78.54	9.11	135.64	
99	1433.33	4	SLE Q	-96842.20	337.48	1366.46	0.00	78.54	8.60	127.96	
100	1493.06	4	SLE Q	-91015.80	308.47	1249.03	0.00	78.54	8.06	120.00	
101	1552.78	4	SLE Q	-85204.20	273.08	1105.72	0.00	78.54	7.51	111.88	
102	1612.50	4	SLE Q	-79406.60	234.21	948.33	0.00	78.54	6.96	103.67	
103	1672.22	4	SLE Q	-73621.90	194.23	786.45	0.00	78.54	6.40	95.45	
104	1731.94	4	SLE Q	-67849.20	155.04	627.77	0.00	78.54	5.85	87.26	
105	1791.67	4	SLE Q	-62087.50	118.17	478.46	0.00	78.54	5.30	79.16	
106	1851.39	4	SLE Q	-56336.00	84.81	343.39	0.00	78.54	4.76	71.17	
107	1911.11	4	SLE Q	-50593.70	55.94	226.51	0.00	78.54	4.23	63.32	
108	1970.83	4	SLE Q	-44859.70	32.37	131.06	0.00	78.54	3.72	55.64	
109	2030.56	4	SLE Q	-39133.00	14.78	59.84	0.00	78.54	3.21	48.15	
110	2090.28	4	SLE Q	-33412.60	3.79	15.35	0.00	78.54	2.72	40.85	
111	2150.00	4	SLE Q	-27697.70	0.00	0.00	0.00	78.54	2.25	33.77	

Verifiche principali

Caso	Tipo
2	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc max (min. compr.),C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
76	C.Q.Per. - Sc max (min. compr.),C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sf max (max traz.)

Palo n. 25

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 25 (-175)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	305679.00	5646.93	517.84	-36658.80	32801.10
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	305679.00	5646.93	517.84	-36658.80	32801.10
2	2	SLE R	RVN	226429.00	4182.91	383.59	-27154.70	24297.10
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	226429.00	4182.91	383.59	-27154.70	24297.10
3	3	SLE F	RVN	226429.00	4182.91	383.59	-27154.70	24297.10
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	226429.00	4182.91	383.59	-27154.70	24297.10
4	4	SLE Q	RVN	226429.00	4182.91	383.59	-27154.70	24297.10
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	226429.00	4182.91	383.59	-27154.70	24297.10

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-305679.00	-5646.93	-517.84	36658.80	-32801.10
2	2	SLE R	1	-226429.00	-4182.91	-383.59	27154.70	-24297.10
3	3	SLE F	1	-226429.00	-4182.91	-383.59	27154.70	-24297.10
4	4	SLE Q	1	-226429.00	-4182.91	-383.59	27154.70	-24297.10

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-305679.00	-36271.10	-32454.10	-305679.00	-191950.00	-171767.00	2-3	318.12	5.292
2	59.72	1	SLU	-304450.00	-37707.80	-33739.70	-304450.00	-191667.00	-171526.00	2-3	318.12	5.083
3	119.44	1	SLU	-299656.00	-37329.90	-33401.60	-299656.00	-190565.00	-170585.00	2-3	318.12	5.106
4	179.17	1	SLU	-294218.00	-35620.40	-31871.90	-294218.00	-189309.00	-169513.00	2-3	318.12	5.316
5	238.89	1	SLU	-288134.00	-32988.50	-29517.00	-288134.00	-187895.00	-168307.00	2-3	318.12	5.699
6	298.61	1	SLU	-281404.00	-29773.20	-26640.00	-281404.00	-186320.00	-166966.00	2-3	318.12	6.262
7	358.33	1	SLU	-274030.00	-26248.10	-23485.90	-274030.00	-184583.00	-165488.00	2-3	318.12	7.038
8	418.06	1	SLU	-266011.00	-22628.30	-20247.00	-266011.00	-182679.00	-163869.00	2-3	318.12	8.082
9	477.78	1	SLU	-257625.00	-19076.70	-17069.20	-257625.00	-180672.00	-162163.00	2-3	318.12	9.484
10	537.50	1	SLU	-249282.00	-15711.90	-14058.40	-2571250.00	-178659.00	-160454.00	2-3	318.12	10.315
11	597.22	1	SLU	-240979.00	-12614.30	-11286.90	-2571250.00	-176641.00	-158742.00	2-3	318.12	10.670
12	656.94	1	SLU	-232716.00	-9833.85	-8799.00	-2571250.00	-174620.00	-157028.00	2-3	318.12	11.049
13	716.67	1	SLU	-224490.00	-7395.12	-6616.90	-2571250.00	-174319.00	-153307.00	2-3	318.75	11.454
14	776.39	1	SLU	-216301.00	-5303.48	-4745.37	-2571250.00	-172279.00	-151592.00	2-3	318.75	11.887
15	836.11	1	SLU	-208148.00	-3549.66	-3176.12	-2571250.00	-170236.00	-149873.00	2-3	318.75	12.353
16	895.83	1	SLU	-200028.00	-2113.93	-1891.47	-2571250.00	-168251.00	-147999.00	2-3	318.75	12.854
17	955.56	1	SLU	-191941.00	-969.53	-867.51	-2571250.00	-164717.00	-147733.00	2-3	318.12	13.396
18	1015.28	1	SLU	-183885.00	-85.57	-76.57	-2571250.00	-162776.00	-145734.00	2-3	318.12	13.983
19	1075.00	1	SLU	-175860.00	570.77	510.70	-2571250.00	160254.00	144015.00	2-3	138.12	14.621
20	1134.72	1	SLU	-167863.00	1032.46	923.81	-2571250.00	158102.00	142180.00	2-3	138.12	15.318
21	1194.44	1	SLU	-159893.00	1331.34	1191.24	-2571250.00	157502.00	138535.00	2-3	138.75	16.081
22	1254.17	1	SLU	-151950.00	1497.18	1339.63	-2571250.00	155331.00	136698.00	2-3	138.75	16.922
23	1313.89	1	SLU	-144031.00	1557.13	1393.27	-2571250.00	153156.00	134858.00	2-3	138.75	17.852
24	1373.61	1	SLU	-136136.00	1535.35	1373.78	-2571250.00	150975.00	133013.00	2-3	138.75	18.887
25	1433.33	1	SLU	-128263.00	1452.93	1300.03	-2571250.00	148786.00	131163.00	2-3	138.75	20.047
26	1493.06	1	SLU	-120411.00	1327.90	1188.16	-2571250.00	146611.00	129267.00	2-3	138.75	21.354
27	1552.78	1	SLU	-112578.00	1175.43	1051.73	-2571250.00	144533.00	127140.00	2-3	138.75	22.840
28	1612.50	1	SLU	-104764.00	1008.03	901.95	-2571250.00	141063.00	126493.00	2-3	138.12	24.543
29	1672.22	1	SLU	-96967.50	835.89	747.92	-2571250.00	138985.00	124333.00	2-3	138.12	26.517
30	1731.94	1	SLU	-89186.30	667.19	596.98	-2571250.00	136904.00	122158.00	2-3	138.12	28.830
31	1791.67	1	SLU	-81419.80	508.47	454.96	-2571250.00	133429.00	121428.00	2-3	137.50	31.580
32	1851.39	1	SLU	-73666.50	364.91	326.51	-2571250.00	131319.00	119240.00	2-3	137.50	34.904
33	1911.11	1	SLU	-65925.20	240.69	215.36	-2571250.00	128960.00	117187.00	2-3	137.50	39.002
34	1970.83	1	SLU	-58194.70	139.26	124.61	-2571250.00	126586.00	115127.00	2-3	137.50	44.184
35	2030.56	1	SLU	-50473.70	63.58	56.89	-2571250.00	124196.00	113058.00	2-3	137.50	50.942
36	2090.28	1	SLU	-42760.90	16.31	14.59	-2571250.00	122938.00	109690.00	2-3	138.12	60.131
37	2150.00	1	SLU	-35055.10	0.00	0.00	-2571250.00					73.349

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	5646.93	517.84	0.85	11.31	5670.62	1.00	32294.70	375453.00	32294.70	5.695
2	59.72	1	SLU	990.50	90.83	0.85	11.31	994.66	1.00	32294.70	375277.00	32294.70	32.468
3	119.44	1	SLU	-2501.52	-229.40	0.85	11.31	2512.01	1.00	32294.70	374591.00	32294.70	12.856
4	179.17	1	SLU	-4996.11	-458.16	0.85	11.31	5017.08	1.00	32294.70	373812.00	32294.70	6.437
5	238.89	1	SLU	-6655.34	-610.32	0.85	11.31	6683.26	1.00	32294.70	372940.00	32294.70	4.832
6	298.61	1	SLU	-7631.36	-699.82	0.85	11.31	7663.38	1.00	32294.70	371976.00	32294.70	4.214
7	358.33	1	SLU	-8063.22	-739.42	0.85	11.31	8097.05	1.00	32294.70	370920.00	32294.70	3.988
8	418.06	1	SLU	-8074.86	-740.49	0.85	11.31	8108.74	1.00	32294.70	369771.00	32294.70	3.983
9	477.78	1	SLU	-7774.29	-712.93	0.85	11.31	7806.91	1.00	32294.70	368570.00	32294.70	4.137
10	537.50	1	SLU	-7253.57	-665.18	0.85	11.31	7284.01	1.00	32294.70	367375.00	32294.70	4.434
11	597.22	1	SLU	-6589.42	-604.27	0.85	11.31	6617.07	1.00	32294.70	366186.00	32294.70	4.881
12	656.94	1	SLU	-5844.19	-535.93	0.85	11.31	5868.72	1.00	32294.70	365002.00	32294.70	5.503
13	716.67	1	SLU	-5067.24	-464.68	0.85	11.31	5088.51	1.00	32294.70	363824.00	32294.70	6.347
14	776.39	1	SLU	-4296.38	-393.99	0.85	11.31	4314.40	1.00	32294.70	362651.00	32294.70	7.485
15	836.11	1	SLU	-3559.38	-326.41	0.85	11.31	3574.31	1.00	32294.70	361483.00	32294.70	9.035
16	895.83	1	SLU	-2875.56	-263.70	0.85	11.31	2887.62	1.00	32294.70	360320.00	32294.70	11.184
17	955.56	1	SLU	-2257.18	-206.99	0.85	11.31	2266.65	1.00	32294.70	359162.00	32294.70	14.248
18	1015.28	1	SLU	-1710.82	-156.89	0.85	11.31	1718.00	1.00	32294.70	358008.00	32294.70	18.798
19	1075.00	1	SLU	-1238.63	-113.59	0.85	11.31	1243.83	1.00	32294.70	356858.00	32294.70	25.964
20	1134.72	1	SLU	-839.34	-76.97	0.85	11.31	842.86	1.00	32294.70	355713.00	32294.70	38.316
21	1194.44	1	SLU	-509.25	-46.70	0.85	11.31	511.39	1.00	32294.70	354571.00	32294.70	63.151
22	1254.17	1	SLU	-243.02	-22.29	0.85	11.31	244.04	1.00	32294.70	353433.00	32294.70	>100
23	1313.89	1	SLU	-34.26	-3.14	0.85	11.31	34.40	1.00	32294.70	352299.00	32294.70	>100
24	1373.61	1	SLU	123.86	11.36	0.85	11.31	124.38	1.00	32294.70	351168.00	32294.70	>100
25	1433.33	1	SLU	238.25	21.85	0.85	11.31	239.25	1.00	32294.70	350040.00	32294.70	>100
26	1493.06	1	SLU	315.59	28.94	0.85	11.31	316.92	1.00	32294.70	348916.00	32294.70	>100
27	1552.78	1	SLU	362.07	33.20	0.85	11.31	363.59	1.00	32294.70	347794.00	32294.70	88.822
28	1612.50	1	SLU	383.26	35.15	0.85	11.31	384.87	1.00	32294.70	346674.00	32294.70	83.911
29	1672.22	1	SLU	384.02	35.22	0.85	11.31	385.63	1.00	32294.70	345558.00	32294.70	83.745
30	1731.94	1	SLU	368.45	33.79	0.85	11.31	370.00	1.00	32294.70	344443.00	32294.70	87.283
31	1791.67	1	SLU	339.90	31.17	0.85	11.31	341.33	1.00	32294.70	343331.00	32294.70	94.615
32	1851.39	1	SLU	300.98	27.60	0.85	11.31	302.24	1.00	32294.70	342220.00	32294.70	>100
33	1911.11	1	SLU	253.62	23.26	0.85	11.31	254.69	1.00	32294.70	341111.00	32294.70	>100
34	1970.83	1	SLU	199.19	18.27	0.85	11.31	200.02	1.00	32294.70	340004.00	32294.70	>100
35	2030.56	1	SLU	138.51	12.70	0.85	11.31	139.09	1.00	32294.70	338898.00	32294.70	>100
36	2090.28	1	SLU	72.06	6.61	0.85	11.31	72.36	1.00	32294.70	337793.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_c <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-226429.00	-24040.10	-26867.50	0.00	78.54	36.97	529.67	
39	59.72	2	SLE R	-225199.00	-24992.40	-27931.70	0.00	78.54	37.61	538.29	
40	119.44	2	SLE R	-220406.00	-24741.90	-27651.80	0.00	78.54	37.03	529.86	
41	179.17	2	SLE R	-214967.00	-23608.80	-26385.50	0.00	78.54	35.71	511.19	
42	238.89	2	SLE R	-208883.00	-21864.40	-24435.90	0.00	78.54	33.86	485.32	
43	298.61	2	SLE R	-202827.00	-19733.30	-22054.20	0.00	78.54	31.73	455.46	
44	358.33	2	SLE R	-196804.00	-17397.00	-19443.00	0.00	78.54	29.43	423.47	
45	418.06	2	SLE R	-190814.00	-14997.80	-16761.70	0.00	78.54	27.09	390.86	
46	477.78	2	SLE R	-184854.00	-12643.90	-14130.90	0.00	78.54	24.79	358.76	
47	537.50	2	SLE R	-178924.00	-10413.70	-11638.40	0.00	78.54	22.59	328.00	
48	597.22	2	SLE R	-173024.00	-8360.66	-9343.96	0.00	78.54	20.52	299.15	
49	656.94	2	SLE R	-167152.00	-6517.77	-7284.33	0.00	78.54	18.62	272.55	
50	716.67	2	SLE R	-161307.00	-4901.41	-5477.86	0.00	78.54	16.90	248.38	
51	776.39	2	SLE R	-155488.00	-3515.09	-3928.50	0.00	78.54	15.35	226.66	
52	836.11	2	SLE R	-149695.00	-2352.68	-2629.38	0.00	78.54	13.98	207.33	
53	895.83	2	SLE R	-143927.00	-1401.09	-1565.87	0.00	78.54	12.78	190.26	
54	955.56	2	SLE R	-138181.00	-642.60	-718.17	0.00	78.54	11.73	175.25	
55	1015.28	2	SLE R	-132459.00	-56.72	-63.39	0.00	78.54	10.81	162.10	
56	1075.00	2	SLE R	-126758.00	378.30	422.79	0.00	78.54	10.60	158.53	
57	1134.72	2	SLE R	-121077.00	684.31	764.79	0.00	78.54	10.37	154.82	
58	1194.44	2	SLE R	-115416.00	882.40	986.18	0.00	78.54	10.06	150.00	

59	1254.17	2	SLE R	-109775.00	992.32	1109.02	0.00	78.54	9.69	144.28	
60	1313.89	2	SLE R	-104151.00	1032.05	1153.43	0.00	78.54	9.26	137.84	
61	1373.61	2	SLE R	-98543.80	1017.61	1137.30	0.00	78.54	8.80	130.85	
62	1433.33	2	SLE R	-92952.90	962.99	1076.24	0.00	78.54	8.30	123.46	
63	1493.06	2	SLE R	-87377.30	880.12	983.63	0.00	78.54	7.78	115.79	
64	1552.78	2	SLE R	-81815.80	779.06	870.69	0.00	78.54	7.25	107.95	
65	1612.50	2	SLE R	-76267.80	668.11	746.69	0.00	78.54	6.72	100.02	
66	1672.22	2	SLE R	-70732.10	554.02	619.18	0.00	78.54	6.18	92.07	
67	1731.94	2	SLE R	-65208.00	442.21	494.22	0.00	78.54	5.64	84.16	
68	1791.67	2	SLE R	-59694.60	337.01	376.64	0.00	78.54	5.11	76.33	
69	1851.39	2	SLE R	-54190.90	241.86	270.31	0.00	78.54	4.59	68.62	
70	1911.11	2	SLE R	-48696.00	159.53	178.29	0.00	78.54	4.08	61.05	
71	1970.83	2	SLE R	-43209.10	92.30	103.16	0.00	78.54	3.58	53.65	
72	2030.56	2	SLE R	-37729.20	42.14	47.09	0.00	78.54	3.10	46.44	
73	2090.28	2	SLE R	-32255.50	10.81	12.08	0.00	78.54	2.63	39.44	
74	2150.00	2	SLE R	-26787.00	0.00	0.00	0.00	78.54	2.18	32.66	
75	0.00	4	SLE Q	-226429.00	-24040.10	-26867.50	0.00	78.54	36.97	529.67	
76	59.72	4	SLE Q	-225199.00	-24992.40	-27931.70	0.00	78.54	37.61	538.29	
77	119.44	4	SLE Q	-220406.00	-24741.90	-27651.80	0.00	78.54	37.03	529.86	
78	179.17	4	SLE Q	-214967.00	-23608.80	-26385.50	0.00	78.54	35.71	511.19	
79	238.89	4	SLE Q	-208883.00	-21864.40	-24435.90	0.00	78.54	33.86	485.32	
80	298.61	4	SLE Q	-202827.00	-19733.30	-22054.20	0.00	78.54	31.73	455.46	
81	358.33	4	SLE Q	-196804.00	-17397.00	-19443.00	0.00	78.54	29.43	423.47	
82	418.06	4	SLE Q	-190814.00	-14997.80	-16761.70	0.00	78.54	27.09	390.86	
83	477.78	4	SLE Q	-184854.00	-12643.90	-14130.90	0.00	78.54	24.79	358.76	
84	537.50	4	SLE Q	-178924.00	-10413.70	-11638.40	0.00	78.54	22.59	328.00	
85	597.22	4	SLE Q	-173024.00	-8360.66	-9343.96	0.00	78.54	20.52	299.15	
86	656.94	4	SLE Q	-167152.00	-6517.77	-7284.33	0.00	78.54	18.62	272.55	
87	716.67	4	SLE Q	-161307.00	-4901.41	-5477.86	0.00	78.54	16.90	248.38	
88	776.39	4	SLE Q	-155488.00	-3515.09	-3928.50	0.00	78.54	15.35	226.66	
89	836.11	4	SLE Q	-149695.00	-2352.68	-2629.38	0.00	78.54	13.98	207.33	
90	895.83	4	SLE Q	-143927.00	-1401.09	-1565.87	0.00	78.54	12.78	190.26	
91	955.56	4	SLE Q	-138181.00	-642.60	-718.17	0.00	78.54	11.73	175.25	
92	1015.28	4	SLE Q	-132459.00	-56.72	-63.39	0.00	78.54	10.81	162.10	
93	1075.00	4	SLE Q	-126758.00	378.30	422.79	0.00	78.54	10.60	158.53	
94	1134.72	4	SLE Q	-121077.00	684.31	764.79	0.00	78.54	10.37	154.82	
95	1194.44	4	SLE Q	-115416.00	882.40	986.18	0.00	78.54	10.06	150.00	
96	1254.17	4	SLE Q	-109775.00	992.32	1109.02	0.00	78.54	9.69	144.28	
97	1313.89	4	SLE Q	-104151.00	1032.05	1153.43	0.00	78.54	9.26	137.84	
98	1373.61	4	SLE Q	-98543.80	1017.61	1137.30	0.00	78.54	8.80	130.85	
99	1433.33	4	SLE Q	-92952.90	962.99	1076.24	0.00	78.54	8.30	123.46	
100	1493.06	4	SLE Q	-87377.30	880.12	983.63	0.00	78.54	7.78	115.79	
101	1552.78	4	SLE Q	-81815.80	779.06	870.69	0.00	78.54	7.25	107.95	
102	1612.50	4	SLE Q	-76267.80	668.11	746.69	0.00	78.54	6.72	100.02	
103	1672.22	4	SLE Q	-70732.10	554.02	619.18	0.00	78.54	6.18	92.07	
104	1731.94	4	SLE Q	-65208.00	442.21	494.22	0.00	78.54	5.64	84.16	
105	1791.67	4	SLE Q	-59694.60	337.01	376.64	0.00	78.54	5.11	76.33	
106	1851.39	4	SLE Q	-54190.90	241.86	270.31	0.00	78.54	4.59	68.62	
107	1911.11	4	SLE Q	-48696.00	159.53	178.29	0.00	78.54	4.08	61.05	
108	1970.83	4	SLE Q	-43209.10	92.30	103.16	0.00	78.54	3.58	53.65	
109	2030.56	4	SLE Q	-37729.20	42.14	47.09	0.00	78.54	3.10	46.44	
110	2090.28	4	SLE Q	-32255.50	10.81	12.08	0.00	78.54	2.63	39.44	
111	2150.00	4	SLE Q	-26787.00	0.00	0.00	0.00	78.54	2.18	32.66	

Verifiche principali

Caso	Tipo
2	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
42	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sf max (max traz.)
79	C.Q.Per. - Sc max (min. compr.)

Palo n. 26

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 26 (-167)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	281350.00	5850.73	796.55	-19805.00	47749.20
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	281350.00	5850.73	796.55	-19805.00	47749.20
2	2	SLE R	RVN	208407.00	4333.87	590.03	-14670.30	35369.80
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	208407.00	4333.87	590.03	-14670.30	35369.80
3	3	SLE F	RVN	208407.00	4333.87	590.03	-14670.30	35369.80
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	208407.00	4333.87	590.03	-14670.30	35369.80
4	4	SLE Q	RVN	208407.00	4333.87	590.03	-14670.30	35369.80
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	208407.00	4333.87	590.03	-14670.30	35369.80

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-281350.00	-5850.73	-796.55	19805.00	-47749.20
2	2	SLE R	1	-208407.00	-4333.87	-590.03	14670.30	-35369.80
3	3	SLE F	1	-208407.00	-4333.87	-590.03	14670.30	-35369.80
4	4	SLE Q	1	-208407.00	-4333.87	-590.03	14670.30	-35369.80

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-281350.00	-19596.10	-47245.60	-281350.00	-95666.50	-231055.00	2-3	292.50	4.889
2	59.72	1	SLU	-280120.00	-20361.60	-49091.20	-280120.00	-95525.40	-230703.00	2-3	292.50	4.698
3	119.44	1	SLU	-275326.00	-20149.90	-48580.80	-275326.00	-94973.70	-229325.00	2-3	292.50	4.719
4	179.17	1	SLU	-269888.00	-19221.40	-46342.20	-269888.00	-94344.80	-227753.00	2-3	292.50	4.914
5	238.89	1	SLU	-263804.00	-17796.70	-42907.40	-263804.00	-93637.60	-225985.00	2-3	292.50	5.266
6	298.61	1	SLU	-257075.00	-16058.50	-38716.70	-257075.00	-92852.00	-224021.00	2-3	292.50	5.786
7	358.33	1	SLU	-249700.00	-14154.30	-34125.70	-249700.00	-91984.50	-221851.00	2-3	292.50	6.501
8	418.06	1	SLU	-242048.00	-12199.90	-29413.50	-242048.00	-91079.20	-219585.00	2-3	292.50	7.465
9	477.78	1	SLU	-234436.00	-10283.00	-24791.90	-234436.00	-90173.00	-217318.00	2-3	292.50	8.766
10	537.50	1	SLU	-226862.00	-8467.32	-20414.50	-226862.00	-89266.00	-215049.00	2-3	292.50	10.535
11	597.22	1	SLU	-219324.00	-6796.35	-16385.80	-2571250.00	-88356.80	-212774.00	2-3	292.50	11.723
12	656.94	1	SLU	-211823.00	-5296.72	-12770.30	-2571250.00	-87446.90	-210498.00	2-3	292.50	12.139
13	716.67	1	SLU	-204356.00	-3981.69	-9599.75	-2571250.00	-86536.00	-208221.00	2-3	292.50	12.582
14	776.39	1	SLU	-196923.00	-2854.05	-6881.04	-2571250.00	-85623.40	-205942.00	2-3	292.50	13.057
15	836.11	1	SLU	-189521.00	-1908.74	-4601.91	-2571250.00	-84526.40	-203672.00	2-3	292.50	13.567
16	895.83	1	SLU	-182151.00	-1135.04	-2736.56	-2571250.00	-83359.20	-201405.00	2-3	292.50	14.116
17	955.56	1	SLU	-174810.00	-518.51	-1250.10	-2571250.00	-82186.20	-199137.00	2-3	292.50	14.709
18	1015.28	1	SLU	-167498.00	-42.42	-102.28	-2571250.00	-81170.80	-196713.00	2-3	292.50	15.351
19	1075.00	1	SLU	-160213.00	310.93	749.65	-2571250.00	80459.60	193769.00	2-3	112.50	16.049
20	1134.72	1	SLU	-152954.00	559.35	1348.58	-2571250.00	79486.80	191360.00	2-3	112.50	16.811
21	1194.44	1	SLU	-145720.00	720.02	1735.94	-2571250.00	78512.40	188948.00	2-3	112.50	17.645
22	1254.17	1	SLU	-138510.00	809.00	1950.47	-2571250.00	77535.60	186531.00	2-3	112.50	18.564
23	1313.89	1	SLU	-131323.00	840.93	2027.47	-2571250.00	76556.60	184109.00	2-3	112.50	19.580
24	1373.61	1	SLU	-124157.00	828.86	1998.35	-2571250.00	75576.40	181684.00	2-3	112.50	20.710
25	1433.33	1	SLU	-117011.00	784.13	1890.53	-2571250.00	74594.80	179255.00	2-3	112.50	21.974

26	1493.06	1	SLU	-109884.00	716.49	1727.45	-2571250.00	73526.20	176830.00	2-3	112.50	23.400
27	1552.78	1	SLU	-102776.00	634.10	1528.80	-2571250.00	72270.00	174420.00	2-3	112.50	25.018
28	1612.50	1	SLU	-95683.60	543.70	1310.85	-2571250.00	71007.20	172006.00	2-3	112.50	26.872
29	1672.22	1	SLU	-88607.30	450.79	1086.84	-2571250.00	69853.80	169486.00	2-3	112.50	29.018
30	1731.94	1	SLU	-81545.40	359.76	867.38	-2571250.00	68787.00	166875.00	2-3	112.50	31.532
31	1791.67	1	SLU	-74496.80	274.14	660.95	-2571250.00	67717.00	164253.00	2-3	112.50	34.515
32	1851.39	1	SLU	-67460.40	196.72	474.29	-2571250.00	66643.90	161620.00	2-3	112.50	38.115
33	1911.11	1	SLU	-60434.90	129.74	312.80	-2571250.00	65567.80	158975.00	2-3	112.50	42.546
34	1970.83	1	SLU	-53419.40	75.06	180.97	-2571250.00	64488.70	156317.00	2-3	112.50	48.133
35	2030.56	1	SLU	-46412.50	34.26	82.61	-2571250.00	63407.20	153646.00	2-3	112.50	55.400
36	2090.28	1	SLU	-39413.20	8.79	21.19	-2571250.00	62323.80	150963.00	2-3	112.50	65.238
37	2150.00	1	SLU	-32420.40	0.00	0.00	-2571250.00					79.310

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	5850.73	796.55	0.85	11.31	5904.70	1.00	32294.70	371968.00	32294.70	5.469
2	59.72	1	SLU	996.62	135.68	0.85	11.31	1005.81	1.00	32294.70	371792.00	32294.70	32.108
3	119.44	1	SLU	-2642.28	-359.73	0.85	11.31	2666.65	1.00	32294.70	371106.00	32294.70	12.111
4	179.17	1	SLU	-5240.43	-713.46	0.85	11.31	5288.78	1.00	32294.70	370327.00	32294.70	6.106
5	238.89	1	SLU	-6967.13	-948.54	0.85	11.31	7031.40	1.00	32294.70	369455.00	32294.70	4.593
6	298.61	1	SLU	-7981.27	-1086.61	0.85	11.31	8054.90	1.00	32294.70	368491.00	32294.70	4.009
7	358.33	1	SLU	-8428.00	-1147.43	0.85	11.31	8505.75	1.00	32294.70	367435.00	32294.70	3.797
8	418.06	1	SLU	-8436.70	-1148.62	0.85	11.31	8514.53	1.00	32294.70	366339.00	32294.70	3.793
9	477.78	1	SLU	-8120.10	-1105.51	0.85	11.31	8195.01	1.00	32294.70	365249.00	32294.70	3.941
10	537.50	1	SLU	-7574.26	-1031.20	0.85	11.31	7644.13	1.00	32294.70	364164.00	32294.70	4.225
11	597.22	1	SLU	-6879.17	-936.57	0.85	11.31	6942.63	1.00	32294.70	363084.00	32294.70	4.652
12	656.94	1	SLU	-6099.89	-830.47	0.85	11.31	6156.17	1.00	32294.70	362009.00	32294.70	5.246
13	716.67	1	SLU	-5287.88	-719.92	0.85	11.31	5336.66	1.00	32294.70	360940.00	32294.70	6.051
14	776.39	1	SLU	-4482.53	-610.27	0.85	11.31	4523.89	1.00	32294.70	359875.00	32294.70	7.139
15	836.11	1	SLU	-3712.80	-505.48	0.85	11.31	3747.06	1.00	32294.70	358815.00	32294.70	8.619
16	895.83	1	SLU	-2998.79	-408.27	0.85	11.31	3026.45	1.00	32294.70	357759.00	32294.70	10.671
17	955.56	1	SLU	-2353.25	-320.38	0.85	11.31	2374.96	1.00	32294.70	356708.00	32294.70	13.598
18	1015.28	1	SLU	-1783.02	-242.75	0.85	11.31	1799.47	1.00	32294.70	355660.00	32294.70	17.947
19	1075.00	1	SLU	-1290.30	-175.67	0.85	11.31	1302.20	1.00	32294.70	354617.00	32294.70	24.800
20	1134.72	1	SLU	-873.73	-118.95	0.85	11.31	881.79	1.00	32294.70	353577.00	32294.70	36.624
21	1194.44	1	SLU	-529.44	-72.08	0.85	11.31	534.32	1.00	32294.70	352541.00	32294.70	60.441
22	1254.17	1	SLU	-251.81	-34.28	0.85	11.31	254.13	1.00	32294.70	351508.00	32294.70	>100
23	1313.89	1	SLU	-34.19	-4.65	0.85	11.31	34.50	1.00	32294.70	350479.00	32294.70	>100
24	1373.61	1	SLU	130.59	17.78	0.85	11.31	131.79	1.00	32294.70	349452.00	32294.70	>100
25	1433.33	1	SLU	249.74	34.00	0.85	11.31	252.04	1.00	32294.70	348429.00	32294.70	>100
26	1493.06	1	SLU	330.23	44.96	0.85	11.31	333.27	1.00	32294.70	347408.00	32294.70	96.901
27	1552.78	1	SLU	378.53	51.54	0.85	11.31	382.02	1.00	32294.70	346390.00	32294.70	84.536
28	1612.50	1	SLU	400.47	54.52	0.85	11.31	404.16	1.00	32294.70	345374.00	32294.70	79.906
29	1672.22	1	SLU	401.11	54.61	0.85	11.31	404.81	1.00	32294.70	344360.00	32294.70	79.778
30	1731.94	1	SLU	384.73	52.38	0.85	11.31	388.28	1.00	32294.70	343349.00	32294.70	83.173
31	1791.67	1	SLU	354.83	48.31	0.85	11.31	358.10	1.00	32294.70	342339.00	32294.70	90.183
32	1851.39	1	SLU	314.13	42.77	0.85	11.31	317.03	1.00	32294.70	341331.00	32294.70	>100
33	1911.11	1	SLU	264.66	36.03	0.85	11.31	267.10	1.00	32294.70	340325.00	32294.70	>100
34	1970.83	1	SLU	207.82	28.29	0.85	11.31	209.73	1.00	32294.70	339320.00	32294.70	>100
35	2030.56	1	SLU	144.49	19.67	0.85	11.31	145.82	1.00	32294.70	338316.00	32294.70	>100
36	2090.28	1	SLU	75.16	10.23	0.85	11.31	75.85	1.00	32294.70	337314.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-208407.00	-34996.70	-14515.60	6.28	72.26	36.56	521.71	
39	59.72	2	SLE R	-207177.00	-36363.90	-15082.70	12.57	65.97	37.30	531.58	
40	119.44	2	SLE R	-202384.00	-35985.80	-14925.80	12.57	65.97	36.72	523.16	
41	179.17	2	SLE R	-196945.00	-34327.60	-14238.10	12.57	65.97	35.31	503.32	
42	238.89	2	SLE R	-191380.00	-31783.30	-13182.80	6.28	72.26	33.36	476.22	
43	298.61	2	SLE R	-185847.00	-28679.00	-11895.20	0.00	78.54	31.13	445.20	
44	358.33	2	SLE R	-180343.00	-25278.30	-10484.70	0.00	78.54	28.78	412.50	
45	418.06	2	SLE R	-174869.00	-21787.80	-9036.94	0.00	78.54	26.38	379.23	
46	477.78	2	SLE R	-169424.00	-18364.40	-7617.01	0.00	78.54	24.03	346.50	
47	537.50	2	SLE R	-164006.00	-15121.80	-6272.09	0.00	78.54	21.78	315.19	
48	597.22	2	SLE R	-158615.00	-12137.60	-5034.33	0.00	78.54	19.67	285.88	
49	656.94	2	SLE R	-153250.00	-9459.44	-3923.50	0.00	78.54	17.74	258.93	
50	716.67	2	SLE R	-147910.00	-7110.93	-2949.40	0.00	78.54	15.99	234.52	
51	776.39	2	SLE R	-142594.00	-5097.07	-2114.11	0.00	78.54	14.44	212.70	
52	836.11	2	SLE R	-137302.00	-3408.82	-1413.88	0.00	78.54	13.06	193.38	
53	895.83	2	SLE R	-132031.00	-2027.08	-840.77	0.00	78.54	11.86	176.42	
54	955.56	2	SLE R	-126783.00	-926.00	-384.08	0.00	78.54	10.82	161.63	
55	1015.28	2	SLE R	-121555.00	-75.76	-31.42	0.00	78.54	9.92	148.78	
56	1075.00	2	SLE R	-116346.00	555.29	230.32	0.00	78.54	9.77	146.06	
57	1134.72	2	SLE R	-111157.00	998.95	414.33	0.00	78.54	9.59	143.09	
58	1194.44	2	SLE R	-105986.00	1285.88	533.35	0.00	78.54	9.33	138.96	
59	1254.17	2	SLE R	-100832.00	1444.80	599.26	0.00	78.54	9.00	133.88	
60	1313.89	2	SLE R	-95694.90	1501.83	622.91	0.00	78.54	8.62	128.05	
61	1373.61	2	SLE R	-90573.10	1480.26	613.97	0.00	78.54	8.19	121.64	
62	1433.33	2	SLE R	-85466.20	1400.39	580.84	0.00	78.54	7.73	114.81	
63	1493.06	2	SLE R	-80373.10	1279.59	530.74	0.00	78.54	7.25	107.69	
64	1552.78	2	SLE R	-75293.20	1132.44	469.70	0.00	78.54	6.75	100.38	
65	1612.50	2	SLE R	-70225.60	971.00	402.74	0.00	78.54	6.25	92.98	
66	1672.22	2	SLE R	-65169.40	805.06	333.92	0.00	78.54	5.75	85.56	
67	1731.94	2	SLE R	-60123.90	642.50	266.49	0.00	78.54	5.25	78.17	
68	1791.67	2	SLE R	-55088.20	489.60	203.07	0.00	78.54	4.75	70.87	
69	1851.39	2	SLE R	-50061.40	351.32	145.72	0.00	78.54	4.27	63.70	
70	1911.11	2	SLE R	-45042.90	231.71	96.10	0.00	78.54	3.79	56.67	
71	1970.83	2	SLE R	-40031.60	134.05	55.60	0.00	78.54	3.33	49.82	
72	2030.56	2	SLE R	-35027.00	61.19	25.38	0.00	78.54	2.88	43.17	
73	2090.28	2	SLE R	-30028.00	15.70	6.51	0.00	78.54	2.45	36.73	
74	2150.00	2	SLE R	-25033.90	0.00	0.00	0.00	78.54	2.03	30.52	
75	0.00	4	SLE Q	-208407.00	-34996.70	-14515.60	6.28	72.26	36.56	521.71	
76	59.72	4	SLE Q	-207177.00	-36363.90	-15082.70	12.57	65.97	37.30	531.58	
77	119.44	4	SLE Q	-202384.00	-35985.80	-14925.80	12.57	65.97	36.72	523.16	
78	179.17	4	SLE Q	-196945.00	-34327.60	-14238.10	12.57	65.97	35.31	503.32	
79	238.89	4	SLE Q	-191380.00	-31783.30	-13182.80	6.28	72.26	33.36	476.22	
80	298.61	4	SLE Q	-185847.00	-28679.00	-11895.20	0.00	78.54	31.13	445.20	
81	358.33	4	SLE Q	-180343.00	-25278.30	-10484.70	0.00	78.54	28.78	412.50	
82	418.06	4	SLE Q	-174869.00	-21787.80	-9036.94	0.00	78.54	26.38	379.23	
83	477.78	4	SLE Q	-169424.00	-18364.40	-7617.01	0.00	78.54	24.03	346.50	
84	537.50	4	SLE Q	-164006.00	-15121.80	-6272.09	0.00	78.54	21.78	315.19	
85	597.22	4	SLE Q	-158615.00	-12137.60	-5034.33	0.00	78.54	19.67	285.88	
86	656.94	4	SLE Q	-153250.00	-9459.44	-3923.50	0.00	78.54	17.74	258.93	
87	716.67	4	SLE Q	-147910.00	-7110.93	-2949.40	0.00	78.54	15.99	234.52	
88	776.39	4	SLE Q	-142594.00	-5097.07	-2114.11	0.00	78.54	14.44	212.70	
89	836.11	4	SLE Q	-137302.00	-3408.82	-1413.88	0.00	78.54	13.06	193.38	
90	895.83	4	SLE Q	-132031.00	-2027.08	-840.77	0.00	78.54	11.86	176.42	
91	955.56	4	SLE Q	-126783.00	-926.00	-384.08	0.00	78.54	10.82	161.63	
92	1015.28	4	SLE Q	-121555.00	-75.76	-31.42	0.00	78.54	9.92	148.78	
93	1075.00	4	SLE Q	-116346.00	555.29	230.32	0.00	78.54	9.77	146.06	
94	1134.72	4	SLE Q	-111157.00	998.95	414.33	0.00	78.54	9.59	143.09	
95	1194.44	4	SLE Q	-105986.00	1285.88	533.35	0.00	78.54	9.33	138.96	
96	1254.17	4	SLE Q	-100832.00	1444.80	599.26	0.00	78.54	9.00	133.88	
97	1313.89	4	SLE Q	-95694.90	1501.83	622.91	0.00	78.54	8.62	128.05	
98	1373.61	4	SLE Q	-90573.10	1480.26	613.97	0.00	78.54	8.19	121.64	
99	1433.33	4	SLE Q	-85466.20	1400.39	580.84	0.00	78.54	7.73	114.81	
100	1493.06	4	SLE Q	-80373.10	1279.59	530.74	0.00	78.54	7.25	107.69	
101	1552.78	4	SLE Q	-75293.20	1132.44	469.70	0.00	78.54	6.75	100.38	
102	1612.50	4	SLE Q	-70225.60	971.00	402.74	0.00	78.54	6.25	92.98	
103	1672.22	4	SLE Q	-65169.40	805.06	333.92	0.00	78.54	5.75	85.56	
104	1731.94	4	SLE Q	-60123.90	642.50	266.49	0.00	78.54	5.25	78.17	
105	1791.67	4	SLE Q	-55088.20	489.60	203.07	0.00	78.54	4.75	70.87	
106	1851.39	4	SLE Q	-50061.40	351.32	145.72	0.00	78.54	4.27	63.70	
107	1911.11	4	SLE Q	-45042.90	231.71	96.10	0.00	78.54	3.79	56.67	
108	1970.83	4	SLE Q	-40031.60	134.05	55.60	0.00	78.54	3.33	49.82	
109	2030.56	4	SLE Q	-35027.00	61.19	25.38	0.00	78.54	2.88	43.17	
110	2090.28	4	SLE Q	-30028.00	15.70	6.51	0.00	78.54	2.45	36.73	
111	2150.00	4	SLE Q	-25033.90	0.00	0.00	0.00	78.54	2.03	30.52	

Verifiche principali

Caso	Tipo
2	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
44	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sf max (max traz.)

81	C.Q.Per. - Sc max (min. compr.)

Palo n. 27

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 27 (-155)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	247713.00	6135.28	1022.37	775.25	53948.50
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	247713.00	6135.28	1022.37	775.25	53948.50
2	2	SLE R	RVN	183491.00	4544.65	757.31	574.26	39961.90
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	183491.00	4544.65	757.31	574.26	39961.90
3	3	SLE F	RVN	183491.00	4544.65	757.31	574.26	39961.90
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	183491.00	4544.65	757.31	574.26	39961.90
4	4	SLE Q	RVN	183491.00	4544.65	757.31	574.26	39961.90
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	183491.00	4544.65	757.31	574.26	39961.90

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-247713.00	-6135.28	-1022.37	-775.25	-53948.50
2	2	SLE R	1	-183491.00	-4544.65	-757.31	-574.26	-39961.90
3	3	SLE F	1	-183491.00	-4544.65	-757.31	-574.26	-39961.90
4	4	SLE Q	1	-183491.00	-4544.65	-757.31	-574.26	-39961.90

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-247713.00	767.05	-53377.80	-247713.00	5021.71	-239818.00	2-3	268.75	4.493
2	59.72	1	SLU	-246483.00	797.44	-55492.30	-246483.00	5018.04	-239411.00	2-3	268.75	4.315
3	119.44	1	SLU	-241689.00	789.45	-54936.30	-241689.00	5003.58	-237823.00	2-3	268.75	4.330
4	179.17	1	SLU	-236251.00	753.30	-52420.50	-236251.00	4987.40	-236010.00	2-3	268.75	4.503
5	238.89	1	SLU	-230167.00	697.64	-48547.30	-230167.00	4969.20	-233974.00	2-3	268.75	4.820
6	298.61	1	SLU	-223476.00	629.64	-43815.50	-223476.00	4949.69	-231715.00	2-3	268.75	5.289
7	358.33	1	SLU	-216821.00	555.09	-38627.90	-216821.00	4930.28	-229458.00	2-3	268.75	5.941
8	418.06	1	SLU	-210201.00	478.54	-33300.90	-210201.00	4910.94	-227201.00	2-3	268.75	6.824
9	477.78	1	SLU	-203616.00	403.43	-28074.30	-203616.00	4892.20	-224938.00	2-3	268.75	8.013
10	537.50	1	SLU	-197064.00	332.27	-23122.40	-197064.00	4873.47	-222675.00	2-3	268.75	9.632
11	597.22	1	SLU	-190545.00	266.77	-18563.90	-190545.00	4854.78	-220412.00	2-3	268.75	11.875
12	656.94	1	SLU	-184056.00	207.97	-14472.00	-2571250.00	4836.62	-218144.00	2-3	268.75	13.970
13	716.67	1	SLU	-177597.00	156.39	-10883.10	-2571250.00	4818.40	-215877.00	2-3	268.75	14.478
14	776.39	1	SLU	-171168.00	112.16	-7804.91	-2571250.00	4800.26	-213608.00	2-3	268.75	15.022
15	836.11	1	SLU	-164766.00	75.07	-5223.90	-2571250.00	4782.49	-211336.00	2-3	268.75	15.605
16	895.83	1	SLU	-158391.00	44.71	-3111.01	-2571250.00	4764.58	-209064.00	2-3	268.75	16.233
17	955.56	1	SLU	-152042.00	20.50	-1426.86	-2571250.00	4746.83	-206790.00	2-3	268.75	16.911
18	1015.28	1	SLU	-145718.00	1.81	-125.97	-2571250.00	2368.11	-204538.00	2-3	269.38	17.645
19	1075.00	1	SLU	-139417.00	-12.07	839.94	-2571250.00	-4135.30	202407.00	2-3	88.75	18.443
20	1134.72	1	SLU	-133140.00	-21.83	1519.39	-2571250.00	-4145.73	200054.00	2-3	88.75	19.312
21	1194.44	1	SLU	-126884.00	-28.15	1959.24	-2571250.00	-4157.09	197694.00	2-3	88.75	20.265
22	1254.17	1	SLU	-120648.00	-31.66	2203.31	-2571250.00	-4168.59	195333.00	2-3	88.75	21.312
23	1313.89	1	SLU	-114433.00	-32.93	2291.53	-2571250.00	-4181.44	192966.00	2-3	88.75	22.470
24	1373.61	1	SLU	-108236.00	-32.47	2259.48	-2571250.00	-4195.89	190593.00	2-3	88.75	23.756
25	1433.33	1	SLU	-102057.00	-30.73	2138.19	-2571250.00	-4181.17	188208.00	2-3	88.75	25.194
26	1493.06	1	SLU	-95894.20	-28.08	1954.20	-2571250.00	-4159.97	185812.00	2-3	88.75	26.813
27	1552.78	1	SLU	-89747.30	-24.86	1729.81	-2571250.00	-4139.79	183413.00	2-3	88.75	28.650
28	1612.50	1	SLU	-83615.00	-21.32	1483.46	-2571250.00	-4120.11	181012.00	2-3	88.75	30.751
29	1672.22	1	SLU	-77496.30	-17.68	1230.13	-2571250.00	-4102.82	178602.00	2-3	88.75	33.179
30	1731.94	1	SLU	-71390.30	-14.11	981.88	-2571250.00	-2045.75	176210.00	2-3	89.38	36.017
31	1791.67	1	SLU	-65295.90	-10.75	748.29	-2571250.00	-2037.92	173793.00	2-3	89.38	39.378
32	1851.39	1	SLU	-59212.20	-7.72	537.02	-2571250.00	-2031.00	171369.00	2-3	89.38	43.424
33	1911.11	1	SLU	-53138.20	-5.09	354.21	-2571250.00	-2024.25	168943.00	2-3	89.38	48.388
34	1970.83	1	SLU	-47072.80	-2.95	204.94	-2571250.00	-2018.54	166510.00	2-3	89.38	54.623
35	2030.56	1	SLU	-41015.10	-1.34	93.56	-2571250.00	-2013.26	164072.00	2-3	89.38	62.690
36	2090.28	1	SLU	-34964.10	-0.34	24.00	-2571250.00	-2008.40	161631.00	2-3	89.38	73.540
37	2150.00	1	SLU	-28918.80	0.00	0.00	-2571250.00					88.913

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	6135.28	1022.37	0.85	11.31	6219.88	1.00	32294.70	367150.00	32294.70	5.192
2	59.72	1	SLU	1076.28	179.35	0.85	11.31	1091.12	1.00	32294.70	366974.00	32294.70	29.598
3	119.44	1	SLU	-2717.65	-452.86	0.85	11.31	2755.12	1.00	32294.70	366288.00	32294.70	11.722
4	179.17	1	SLU	-5427.93	-904.50	0.85	11.31	5502.77	1.00	32294.70	365509.00	32294.70	5.869
5	238.89	1	SLU	-7230.61	-1204.89	0.85	11.31	7330.31	1.00	32294.70	364637.00	32294.70	4.406
6	298.61	1	SLU	-8291.03	-1381.60	0.85	11.31	8405.36	1.00	32294.70	363679.00	32294.70	3.842
7	358.33	1	SLU	-8760.24	-1459.78	0.85	11.31	8881.04	1.00	32294.70	362725.00	32294.70	3.636
8	418.06	1	SLU	-8772.90	-1461.89	0.85	11.31	8893.87	1.00	32294.70	361777.00	32294.70	3.631
9	477.78	1	SLU	-8446.35	-1407.48	0.85	11.31	8562.82	1.00	32294.70	360834.00	32294.70	3.772
10	537.50	1	SLU	-7880.63	-1313.21	0.85	11.31	7989.30	1.00	32294.70	359895.00	32294.70	4.042
11	597.22	1	SLU	-7159.07	-1192.97	0.85	11.31	7257.79	1.00	32294.70	358962.00	32294.70	4.450
12	656.94	1	SLU	-6349.43	-1058.05	0.85	11.31	6436.98	1.00	32294.70	358032.00	32294.70	5.017
13	716.67	1	SLU	-5505.31	-917.39	0.85	11.31	5581.23	1.00	32294.70	357107.00	32294.70	5.786
14	776.39	1	SLU	-4667.81	-777.83	0.85	11.31	4732.17	1.00	32294.70	356186.00	32294.70	6.825
15	836.11	1	SLU	-3867.10	-644.40	0.85	11.31	3920.42	1.00	32294.70	355269.00	32294.70	8.238
16	895.83	1	SLU	-3124.16	-520.60	0.85	11.31	3167.24	1.00	32294.70	354356.00	32294.70	10.197
17	955.56	1	SLU	-2452.32	-408.65	0.85	11.31	2486.13	1.00	32294.70	353447.00	32294.70	12.990
18	1015.28	1	SLU	-1858.74	-309.74	0.85	11.31	1884.37	1.00	32294.70	352541.00	32294.70	17.138
19	1075.00	1	SLU	-1345.72	-224.25	0.85	11.31	1364.27	1.00	32294.70	351638.00	32294.70	23.672
20	1134.72	1	SLU	-911.91	-151.96	0.85	11.31	924.48	1.00	32294.70	350739.00	32294.70	34.933
21	1194.44	1	SLU	-553.29	-92.20	0.85	11.31	560.92	1.00	32294.70	349843.00	32294.70	57.575
22	1254.17	1	SLU	-264.03	-44.00	0.85	11.31	267.67	1.00	32294.70	348950.00	32294.70	>100
23	1313.89	1	SLU	-37.23	-6.20	0.85	11.31	37.74	1.00	32294.70	348059.00	32294.70	>100
24	1373.61	1	SLU	134.56	22.42	0.85	11.31	136.42	1.00	32294.70	347172.00	32294.70	>100
25	1433.33	1	SLU	258.85	43.13	0.85	11.31	262.42	1.00	32294.70	346287.00	32294.70	>100
26	1493.06	1	SLU	342.87	57.14	0.85	11.31	347.60	1.00	32294.70	345404.00	32294.70	92.908
27	1552.78	1	SLU	393.37	65.55	0.85	11.31	398.79	1.00	32294.70	344523.00	32294.70	80.981
28	1612.50	1	SLU	416.39	69.39	0.85	11.31	422.13	1.00	32294.70	343645.00	32294.70	76.504
29	1672.22	1	SLU	417.22	69.52	0.85	11.31	422.97	1.00	32294.70	342769.00	32294.70	76.352
30	1731.94	1	SLU	400.31	66.71	0.85	11.31	405.83	1.00	32294.70	341894.00	32294.70	79.578
31	1791.67	1	SLU	369.29	61.54	0.85	11.31	374.38	1.00	32294.70	341021.00	32294.70	86.262
32	1851.39	1	SLU	327.00	54.49	0.85	11.31	331.50	1.00	32294.70	340150.00	32294.70	97.418
33	1911.11	1	SLU	275.55	45.92	0.85	11.31	279.35	1.00	32294.70	339280.00	32294.70	>100
34	1970.83	1	SLU	216.41	36.06	0.85	11.31	219.39	1.00	32294.70	338411.00	32294.70	>100
35	2030.56	1	SLU	150.49	25.08	0.85	11.31	152.56	1.00	32294.70	337543.00	32294.70	>100
36	2090.28	1	SLU	78.29	13.05	0.85	11.31	79.37	1.00	32294.70	336676.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_c <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-183491.00	-39539.10	568.19	15.71	62.83	35.89	506.86	
39	59.72	2	SLE R	-182261.00	-41105.40	590.70	21.99	56.55	36.82	519.15	
40	119.44	2	SLE R	-177468.00	-40693.50	584.78	21.99	56.55	36.29	511.38	
41	179.17	2	SLE R	-172584.00	-38830.00	558.00	21.99	56.55	34.80	490.78	
42	238.89	2	SLE R	-167729.00	-35961.00	516.77	15.71	62.83	32.69	461.80	
43	298.61	2	SLE R	-162902.00	-32456.00	466.40	15.71	62.83	30.25	428.37	
44	358.33	2	SLE R	-158100.00	-28613.30	411.18	9.42	69.11	27.71	393.61	
45	418.06	2	SLE R	-153325.00	-24667.30	354.48	0.00	78.54	25.23	359.53	

46	477.78	2	SLE R	-148575.00	-20795.80	298.84	0.00	78.54	22.84	326.65	
47	537.50	2	SLE R	-143849.00	-17127.70	246.13	0.00	78.54	20.56	295.22	
48	597.22	2	SLE R	-139146.00	-13751.10	197.61	0.00	78.54	18.43	265.86	
49	656.94	2	SLE R	-134466.00	-10720.00	154.05	0.00	78.54	16.48	238.95	
50	716.67	2	SLE R	-129808.00	-8061.53	115.85	0.00	78.54	14.72	214.67	
51	776.39	2	SLE R	-125171.00	-5781.41	83.08	0.00	78.54	13.17	193.06	
52	836.11	2	SLE R	-120555.00	-3869.56	55.61	0.00	78.54	11.80	174.06	
53	895.83	2	SLE R	-115958.00	-2304.45	33.12	0.00	78.54	10.62	157.50	
54	955.56	2	SLE R	-111380.00	-1056.93	15.19	0.00	78.54	9.60	143.19	
55	1015.28	2	SLE R	-106820.00	-93.31	1.34	0.00	78.54	8.73	130.89	
56	1075.00	2	SLE R	-102278.00	622.18	-8.94	0.00	78.54	8.64	129.08	
57	1134.72	2	SLE R	-97752.70	1125.48	-16.17	0.00	78.54	8.53	127.11	
58	1194.44	2	SLE R	-93243.10	1451.29	-20.86	0.00	78.54	8.33	123.90	
59	1254.17	2	SLE R	-88748.70	1632.08	-23.45	0.00	78.54	8.06	119.69	
60	1313.89	2	SLE R	-84268.90	1697.43	-24.39	0.00	78.54	7.73	114.69	
61	1373.61	2	SLE R	-79802.70	1673.69	-24.05	0.00	78.54	7.35	109.08	
62	1433.33	2	SLE R	-75349.60	1583.85	-22.76	0.00	78.54	6.94	103.02	
63	1493.06	2	SLE R	-70908.80	1447.56	-20.80	0.00	78.54	6.51	96.64	
64	1552.78	2	SLE R	-66479.50	1281.34	-18.41	0.00	78.54	6.07	90.07	
65	1612.50	2	SLE R	-62061.10	1098.86	-15.79	0.00	78.54	5.61	83.40	
66	1672.22	2	SLE R	-57652.80	911.21	-13.09	0.00	78.54	5.16	76.71	
67	1731.94	2	SLE R	-53253.90	727.32	-10.45	0.00	78.54	4.71	70.05	
68	1791.67	2	SLE R	-48863.70	554.29	-7.97	0.00	78.54	4.26	63.48	
69	1851.39	2	SLE R	-44481.50	397.79	-5.72	0.00	78.54	3.82	57.03	
70	1911.11	2	SLE R	-40106.50	262.38	-3.77	0.00	78.54	3.40	50.75	
71	1970.83	2	SLE R	-35738.10	151.81	-2.18	0.00	78.54	2.98	44.64	
72	2030.56	2	SLE R	-31375.50	69.30	-1.00	0.00	78.54	2.59	38.74	
73	2090.28	2	SLE R	-27018.10	17.78	-0.26	0.00	78.54	2.21	33.07	
74	2150.00	2	SLE R	-22665.00	0.00	0.00	0.00	78.54	1.84	27.63	
75	0.00	4	SLE Q	-183491.00	-39539.10	568.19	15.71	62.83	35.89	506.86	
76	59.72	4	SLE Q	-182261.00	-41105.40	590.70	21.99	56.55	36.82	519.15	
77	119.44	4	SLE Q	-177468.00	-40693.50	584.78	21.99	56.55	36.29	511.38	
78	179.17	4	SLE Q	-172584.00	-38830.00	558.00	21.99	56.55	34.80	490.78	
79	238.89	4	SLE Q	-167729.00	-35961.00	516.77	15.71	62.83	32.69	461.80	
80	298.61	4	SLE Q	-162902.00	-32456.00	466.40	15.71	62.83	30.25	428.37	
81	358.33	4	SLE Q	-158100.00	-28613.30	411.18	9.42	69.11	27.71	393.61	
82	418.06	4	SLE Q	-153325.00	-24667.30	354.48	0.00	78.54	25.23	359.53	
83	477.78	4	SLE Q	-148575.00	-20795.80	298.84	0.00	78.54	22.84	326.65	
84	537.50	4	SLE Q	-143849.00	-17127.70	246.13	0.00	78.54	20.56	295.22	
85	597.22	4	SLE Q	-139146.00	-13751.10	197.61	0.00	78.54	18.43	265.86	
86	656.94	4	SLE Q	-134466.00	-10720.00	154.05	0.00	78.54	16.48	238.95	
87	716.67	4	SLE Q	-129808.00	-8061.53	115.85	0.00	78.54	14.72	214.67	
88	776.39	4	SLE Q	-125171.00	-5781.41	83.08	0.00	78.54	13.17	193.06	
89	836.11	4	SLE Q	-120555.00	-3869.56	55.61	0.00	78.54	11.80	174.06	
90	895.83	4	SLE Q	-115958.00	-2304.45	33.12	0.00	78.54	10.62	157.50	
91	955.56	4	SLE Q	-111380.00	-1056.93	15.19	0.00	78.54	9.60	143.19	
92	1015.28	4	SLE Q	-106820.00	-93.31	1.34	0.00	78.54	8.73	130.89	
93	1075.00	4	SLE Q	-102278.00	622.18	-8.94	0.00	78.54	8.64	129.08	
94	1134.72	4	SLE Q	-97752.70	1125.48	-16.17	0.00	78.54	8.53	127.11	
95	1194.44	4	SLE Q	-93243.10	1451.29	-20.86	0.00	78.54	8.33	123.90	
96	1254.17	4	SLE Q	-88748.70	1632.08	-23.45	0.00	78.54	8.06	119.69	
97	1313.89	4	SLE Q	-84268.90	1697.43	-24.39	0.00	78.54	7.73	114.69	
98	1373.61	4	SLE Q	-79802.70	1673.69	-24.05	0.00	78.54	7.35	109.08	
99	1433.33	4	SLE Q	-75349.60	1583.85	-22.76	0.00	78.54	6.94	103.02	
100	1493.06	4	SLE Q	-70908.80	1447.56	-20.80	0.00	78.54	6.51	96.64	
101	1552.78	4	SLE Q	-66479.50	1281.34	-18.41	0.00	78.54	6.07	90.07	
102	1612.50	4	SLE Q	-62061.10	1098.86	-15.79	0.00	78.54	5.61	83.40	
103	1672.22	4	SLE Q	-57652.80	911.21	-13.09	0.00	78.54	5.16	76.71	
104	1731.94	4	SLE Q	-53253.90	727.32	-10.45	0.00	78.54	4.71	70.05	
105	1791.67	4	SLE Q	-48863.70	554.29	-7.97	0.00	78.54	4.26	63.48	
106	1851.39	4	SLE Q	-44481.50	397.79	-5.72	0.00	78.54	3.82	57.03	
107	1911.11	4	SLE Q	-40106.50	262.38	-3.77	0.00	78.54	3.40	50.75	
108	1970.83	4	SLE Q	-35738.10	151.81	-2.18	0.00	78.54	2.98	44.64	
109	2030.56	4	SLE Q	-31375.50	69.30	-1.00	0.00	78.54	2.59	38.74	
110	2090.28	4	SLE Q	-27018.10	17.78	-0.26	0.00	78.54	2.21	33.07	
111	2150.00	4	SLE Q	-22665.00	0.00	0.00	0.00	78.54	1.84	27.63	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	A_{C} $_{eff}$ <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-183491.00	568.19	-39539.10	46.00	136.36	0.50	20.00	214.94	3.14	193.11	67.75	0.02	0.01
76	59.72	4	SLE Q	-182261.00	590.70	-41105.40	46.00	136.36	0.50	20.00	244.11	3.14	238.94	86.32	0.03	0.01
77	119.44	4	SLE Q	-177468.00	584.78	-40693.50	46.00	136.36	0.50	20.00	173.63	6.28	256.44	91.35	0.03	0.01
78	179.17	4	SLE Q	-172584.00	558.00	-38830.00	46.00	136.36	0.50	20.00	242.53	3.14	236.45	80.73	0.02	0.01
79	238.89	4	SLE Q	-167729.00	516.77	-35961.00	46.00	136.36	0.50	20.00	211.84	3.14	188.24	60.11	0.02	0.01
112	0.00	3	SLE F	-183491.00	568.19	-39539.10	46.00	136.36	0.50	20.00	214.94	3.14	193.11	67.75	0.02	0.01
113	59.72	3	SLE F	-182261.00	590.70	-41105.40	46.00	136.36	0.50	20.00	244.11	3.14	238.94	86.32	0.03	0.01
114	119.44	3	SLE F	-177468.00	584.78	-40693.50	46.00	136.36	0.50	20.00	173.63	6.28	256.44	91.35	0.03	0.01
115	179.17	3	SLE F	-172584.00	558.00	-38830.00	46.00	136.36	0.50	20.00	242.53	3.14	236.45	80.73	0.02	0.01
116	238.89	3	SLE F	-167729.00	516.77	-35961.00	46.00	136.36	0.50	20.00	211.84	3.14	188.24	60.11	0.02	0.01

Verifiche principali

Caso	Tipo
2	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
46	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.),C.Q.Per. - Wk Max
77	C.Q.Per. - Sf max (max traz.)
83	C.Q.Per. - Sc max (min. compr.)
113	C.Freq - Wk Max

Palo n. 28

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 28 (-139)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	206632.00	6448.49	1134.77	20652.20	51209.10
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	206632.00	6448.49	1134.77	20652.20	51209.10
2	2	SLE R	RVN	153061.00	4776.66	840.57	15297.90	37932.60
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	153061.00	4776.66	840.57	15297.90	37932.60
3	3	SLE F	RVN	153061.00	4776.66	840.57	15297.90	37932.60
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	153061.00	4776.66	840.57	15297.90	37932.60
4	4	SLE Q	RVN	153061.00	4776.66	840.57	15297.90	37932.60
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	153061.00	4776.66	840.57	15297.90	37932.60

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-206632.00	-6448.49	-1134.77	-20652.20	-51209.10
2	2	SLE R	1	-153061.00	-4776.66	-840.57	-15297.90	-37932.60
3	3	SLE F	1	-153061.00	-4776.66	-840.57	-15297.90	-37932.60
4	4	SLE Q	1	-153061.00	-4776.66	-840.57	-15297.90	-37932.60

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-206632.00	20431.80	-50662.50	-206632.00	84374.70	-209858.00	2-3	248.12	4.141
2	59.72	1	SLU	-205402.00	21276.20	-52756.20	-205402.00	84225.40	-209481.00	2-3	248.12	3.969
3	119.44	1	SLU	-200609.00	21088.00	-52289.60	-200609.00	83642.90	-208010.00	2-3	248.12	3.976
4	179.17	1	SLU	-195170.00	20141.00	-49941.40	-195170.00	82980.30	-206337.00	2-3	248.12	4.130
5	238.89	1	SLU	-189657.00	18667.40	-46287.50	-189657.00	82304.70	-204633.00	2-3	248.12	4.419
6	298.61	1	SLU	-184175.00	16859.60	-41804.90	-184175.00	81547.50	-202939.00	2-3	248.12	4.852
7	358.33	1	SLU	-178723.00	14873.10	-36879.10	-178723.00	82812.40	-200347.00	2-3	247.50	5.452
8	418.06	1	SLU	-173300.00	12830.00	-31813.20	-173300.00	81959.10	-198652.00	2-3	247.50	6.265
9	477.78	1	SLU	-167905.00	10823.30	-26837.30	-167905.00	81226.10	-196849.00	2-3	247.50	7.359
10	537.50	1	SLU	-162538.00	8920.29	-22118.70	-162538.00	80491.80	-195044.00	2-3	247.50	8.847
11	597.22	1	SLU	-157197.00	7167.20	-17771.70	-157197.00	79758.40	-193243.00	2-3	247.50	10.910
12	656.94	1	SLU	-151882.00	5592.46	-13867.00	-151882.00	79022.30	-191436.00	2-3	247.50	13.851
13	716.67	1	SLU	-146591.00	4210.40	-10440.10	-2571250.00	78287.30	-189633.00	2-3	247.50	17.540
14	776.39	1	SLU	-141325.00	3024.29	-7499.01	-2571250.00	77557.80	-187820.00	2-3	247.50	18.194
15	836.11	1	SLU	-136081.00	2029.11	-5031.36	-2571250.00	76846.00	-185992.00	2-3	247.50	18.895
16	895.83	1	SLU	-130860.00	1213.85	-3009.85	-2571250.00	76134.50	-184163.00	2-3	247.50	19.649
17	955.56	1	SLU	-125660.00	563.50	-1397.26	-2571250.00	73509.10	-183101.00	2-3	248.12	20.462
18	1015.28	1	SLU	-120481.00	60.68	-150.47	-2571250.00	72794.20	-181270.00	2-3	248.12	21.341
19	1075.00	1	SLU	-115321.00	-313.12	776.42	-2571250.00	-72191.10	179514.00	2-3	68.12	22.296
20	1134.72	1	SLU	-110180.00	-576.53	1429.56	-2571250.00	-71486.00	177756.00	2-3	68.12	23.337
21	1194.44	1	SLU	-105058.00	-747.53	1853.58	-2571250.00	-70781.50	175998.00	2-3	68.12	24.475
22	1254.17	1	SLU	-99951.80	-842.98	2090.25	-2571250.00	-69912.90	174258.00	2-3	68.12	25.725
23	1313.89	1	SLU	-94862.30	-878.23	2177.65	-2571250.00	-70859.50	171725.00	2-3	67.50	27.105
24	1373.61	1	SLU	-89788.40	-866.98	2149.76	-2571250.00	-70031.10	169919.00	2-3	67.50	28.637
25	1433.33	1	SLU	-84729.00	-821.18	2036.19	-2571250.00	-69268.30	168053.00	2-3	67.50	30.347
26	1493.06	1	SLU	-79683.50	-751.06	1862.32	-2571250.00	-68505.40	166186.00	2-3	67.50	32.268
27	1552.78	1	SLU	-74651.00	-665.22	1649.48	-2571250.00	-67740.50	164310.00	2-3	67.50	34.444
28	1612.50	1	SLU	-69630.70	-570.78	1415.30	-2571250.00	-66975.80	162435.00	2-3	67.50	36.927
29	1672.22	1	SLU	-64621.80	-473.53	1174.16	-2571250.00	-66209.50	160552.00	2-3	67.50	39.789
30	1731.94	1	SLU	-59623.30	-378.12	937.59	-2571250.00	-65443.10	158668.00	2-3	67.50	43.125
31	1791.67	1	SLU	-54634.60	-288.28	714.82	-2571250.00	-64675.80	156778.00	2-3	67.50	47.063
32	1851.39	1	SLU	-49654.90	-206.96	513.18	-2571250.00	-63908.10	154884.00	2-3	67.50	51.782
33	1911.11	1	SLU	-44683.20	-136.56	338.60	-2571250.00	-63139.80	152985.00	2-3	67.50	57.544
34	1970.83	1	SLU	-39718.80	-79.03	195.97	-2571250.00	-62371.20	151081.00	2-3	67.50	64.736
35	2030.56	1	SLU	-34760.90	-36.09	89.49	-2571250.00	-61602.20	149173.00	2-3	67.50	73.969
36	2090.28	1	SLU	-29808.70	-9.26	22.97	-2571250.00	-60832.60	147258.00	2-3	67.50	86.258
37	2150.00	1	SLU	-24861.30	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	6448.49	1134.77	0.85	11.31	6547.58	1.00	32294.70	361266.00	32294.70	4.932
2	59.72	1	SLU	1229.89	216.43	0.85	11.31	1248.78	1.00	32294.70	361090.00	32294.70	25.861
3	119.44	1	SLU	-2688.31	-473.07	0.85	11.31	2729.62	1.00	32294.70	360403.00	32294.70	11.831
4	179.17	1	SLU	-5491.90	-966.43	0.85	11.31	5576.29	1.00	32294.70	359624.00	32294.70	5.791
5	238.89	1	SLU	-7361.35	-1295.41	0.85	11.31	7474.46	1.00	32294.70	358834.00	32294.70	4.321
6	298.61	1	SLU	-8466.30	-1489.85	0.85	11.31	8596.39	1.00	32294.70	358049.00	32294.70	3.757
7	358.33	1	SLU	-8961.82	-1577.05	0.85	11.31	9099.53	1.00	32294.70	357268.00	32294.70	3.549
8	418.06	1	SLU	-8986.28	-1581.36	0.85	11.31	9124.36	1.00	32294.70	356491.00	32294.70	3.539
9	477.78	1	SLU	-8660.33	-1524.00	0.85	11.31	8793.40	1.00	32294.70	355719.00	32294.70	3.673
10	537.50	1	SLU	-8086.85	-1423.08	0.85	11.31	8211.10	1.00	32294.70	354950.00	32294.70	3.933
11	597.22	1	SLU	-7351.62	-1293.70	0.85	11.31	7464.58	1.00	32294.70	354185.00	32294.70	4.326
12	656.94	1	SLU	-6524.46	-1148.14	0.85	11.31	6624.72	1.00	32294.70	353424.00	32294.70	4.875
13	716.67	1	SLU	-5660.65	-996.13	0.85	11.31	5747.63	1.00	32294.70	352666.00	32294.70	5.619
14	776.39	1	SLU	-4802.56	-845.13	0.85	11.31	4876.35	1.00	32294.70	351911.00	32294.70	6.623
15	836.11	1	SLU	-3981.40	-700.62	0.85	11.31	4042.57	1.00	32294.70	351160.00	32294.70	7.989
16	895.83	1	SLU	-3218.88	-566.44	0.85	11.31	3268.34	1.00	32294.70	350412.00	32294.70	9.881
17	955.56	1	SLU	-2528.86	-445.01	0.85	11.31	2567.71	1.00	32294.70	349668.00	32294.70	12.577
18	1015.28	1	SLU	-1918.81	-337.66	0.85	11.31	1948.29	1.00	32294.70	348926.00	32294.70	16.576
19	1075.00	1	SLU	-1391.23	-244.82	0.85	11.31	1412.61	1.00	32294.70	348187.00	32294.70	22.862
20	1134.72	1	SLU	-944.82	-166.26	0.85	11.31	959.34	1.00	32294.70	347450.00	32294.70	33.664
21	1194.44	1	SLU	-575.52	-101.28	0.85	11.31	584.37	1.00	32294.70	346716.00	32294.70	55.264
22	1254.17	1	SLU	-277.43	-48.82	0.85	11.31	281.69	1.00	32294.70	345985.00	32294.70	>100
23	1313.89	1	SLU	-43.48	-7.65	0.85	11.31	44.15	1.00	32294.70	345256.00	32294.70	>100
24	1373.61	1	SLU	133.92	23.57	0.85	11.31	135.97	1.00	32294.70	344529.00	32294.70	>100
25	1433.33	1	SLU	262.46	46.19	0.85	11.31	266.49	1.00	32294.70	343805.00	32294.70	>100
26	1493.06	1	SLU	349.57	61.51	0.85	11.31	354.94	1.00	32294.70	343082.00	32294.70	90.987
27	1552.78	1	SLU	402.14	70.77	0.85	11.31	408.32	1.00	32294.70	342361.00	32294.70	79.091
28	1612.50	1	SLU	426.41	75.04	0.85	11.31	432.96	1.00	32294.70	341642.00	32294.70	74.591
29	1672.22	1	SLU	427.77	75.28	0.85	11.31	434.35	1.00	32294.70	340924.00	32294.70	74.353
30	1731.94	1	SLU	410.82	72.29	0.85	11.31	417.13	1.00	32294.70	340209.00	32294.70	77.421
31	1791.67	1	SLU	379.27	66.74	0.85	11.31	385.10	1.00	32294.70	339494.00	32294.70	83.860
32	1851.39	1	SLU	336.06	59.14	0.85	11.31	341.23	1.00	32294.70	338781.00	32294.70	94.643
33	1911.11	1	SLU	283.35	49.86	0.85	11.31	287.71	1.00	32294.70	338068.00	32294.70	>100
34	1970.83	1	SLU	222.65	39.18	0.85	11.31	226.07	1.00	32294.70	337357.00	32294.70	>100
35	2030.56	1	SLU	154.91	27.26	0.85	11.31	157.28	1.00	32294.70	336647.00	32294.70	>100
36	2090.28	1	SLU	80.62	14.19	0.85	11.31	81.86	1.00	32294.70	335938.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-153061.00	-37527.70	15134.60	25.13	53.41	35.03	493.45	
39	59.72	2	SLE R	-151857.00	-39078.70	15760.10	25.13	53.41	36.28	509.94	
40	119.44	2	SLE R	-147786.00	-38733.00	15620.70	25.13	53.41	35.91	504.22	
41	179.17	2	SLE R	-143739.00	-36993.70	14919.20	25.13	53.41	34.35	482.72	
42	238.89	2	SLE R	-139715.00	-34287.10	13827.70	25.13	53.41	32.01	450.77	
43	298.61	2	SLE R	-135715.00	-30966.60	12488.60	25.13	53.41	29.26	413.30	
44	358.33	2	SLE R	-131736.00	-27317.90	11017.10	18.85	59.69	26.41	374.33	
45	418.06	2	SLE R	-127779.00	-23565.30	9503.71	12.57	65.97	23.66	336.72	
46	477.78	2	SLE R	-123843.00	-19879.50	8017.23	0.00	78.54	21.15	302.07	
47	537.50	2	SLE R	-119926.00	-16384.20	6607.62	0.00	78.54	18.87	270.58	
48	597.22	2	SLE R	-116030.00	-13164.30	5309.04	0.00	78.54	16.76	241.39	
49	656.94	2	SLE R	-112152.00	-10271.90	4142.56	0.00	78.54	14.84	214.71	
50	716.67	2	SLE R	-108293.00	-7733.39	3118.81	0.00	78.54	13.11	190.73	
51	776.39	2	SLE R	-104451.00	-5554.82	2240.22	0.00	78.54	11.58	169.51	
52	836.11	2	SLE R	-100627.00	-3726.94	1503.04	0.00	78.54	10.25	150.98	
53	895.83	2	SLE R	-96818.60	-2229.52	899.15	0.00	78.54	9.11	134.97	
54	955.56	2	SLE R	-93026.20	-1035.01	417.41	0.00	78.54	8.14	121.28	
55	1015.28	2	SLE R	-89249.00	-111.46	44.95	0.00	78.54	7.32	109.66	
56	1075.00	2	SLE R	-85486.40	575.13	-231.94	0.00	78.54	7.27	108.56	
57	1134.72	2	SLE R	-81737.70	1058.94	-427.06	0.00	78.54	7.23	107.64	
58	1194.44	2	SLE R	-78002.30	1373.02	-553.73	0.00	78.54	7.10	105.45	
59	1254.17	2	SLE R	-74279.70	1548.33	-624.43	0.00	78.54	6.90	102.23	
60	1313.89	2	SLE R	-70569.20	1613.08	-650.54	0.00	78.54	6.63	98.20	
61	1373.61	2	SLE R	-66870.20	1592.41	-642.21	0.00	78.54	6.32	93.53	
62	1433.33	2	SLE R	-63182.10	1508.29	-608.28	0.00	78.54	5.98	88.40	
63	1493.06	2	SLE R	-59504.40	1379.49	-556.34	0.00	78.54	5.60	82.95	
64	1552.78	2	SLE R	-55836.30	1221.83	-492.76	0.00	78.54	5.22	77.29	
65	1612.50	2	SLE R	-52177.30	1048.37	-422.80	0.00	78.54	4.82	71.52	
66	1672.22	2	SLE R	-48526.90	869.75	-350.76	0.00	78.54	4.43	65.72	
67	1731.94	2	SLE R	-44884.40	694.51	-280.09	0.00	78.54	4.04	59.96	
68	1791.67	2	SLE R	-41249.20	529.49	-213.54	0.00	78.54	3.65	54.28	
69	1851.39	2	SLE R	-37620.70	380.13	-153.31	0.00	78.54	3.27	48.73	
70	1911.11	2	SLE R	-33998.40	250.82	-101.15	0.00	78.54	2.90	43.34	
71	1970.83	2	SLE R	-30381.60	145.16	-58.54	0.00	78.54	2.55	38.14	
72	2030.56	2	SLE R	-26769.70	66.29	-26.73	0.00	78.54	2.21	33.14	
73	2090.28	2	SLE R	-23162.30	17.01	-6.86	0.00	78.54	1.89	28.37	
74	2150.00	2	SLE R	-19558.60	0.00	0.00	0.00	78.54	1.59	23.85	
75	0.00	4	SLE Q	-153061.00	-37527.70	15134.60	25.13	53.41	35.03	493.45	
76	59.72	4	SLE Q	-151857.00	-39078.70	15760.10	25.13	53.41	36.28	509.94	
77	119.44	4	SLE Q	-147786.00	-38733.00	15620.70	25.13	53.41	35.91	504.22	
78	179.17	4	SLE Q	-143739.00	-36993.70	14919.20	25.13	53.41	34.35	482.72	
79	238.89	4	SLE Q	-139715.00	-34287.10	13827.70	25.13	53.41	32.01	450.77	
80	298.61	4	SLE Q	-135715.00	-30966.60	12488.60	25.13	53.41	29.26	413.30	
81	358.33	4	SLE Q	-131736.00	-27317.90	11017.10	18.85	59.69	26.41	374.33	
82	418.06	4	SLE Q	-127779.00	-23565.30	9503.71	12.57	65.97	23.66	336.72	
83	477.78	4	SLE Q	-123843.00	-19879.50	8017.23	0.00	78.54	21.15	302.07	
84	537.50	4	SLE Q	-119926.00	-16384.20	6607.62	0.00	78.54	18.87	270.58	
85	597.22	4	SLE Q	-116030.00	-13164.30	5309.04	0.00	78.54	16.76	241.39	
86	656.94	4	SLE Q	-112152.00	-10271.90	4142.56	0.00	78.54	14.84	214.71	
87	716.67	4	SLE Q	-108293.00	-7733.39	3118.81	0.00	78.54	13.11	190.73	
88	776.39	4	SLE Q	-104451.00	-5554.82	2240.22	0.00	78.54	11.58	169.51	
89	836.11	4	SLE Q	-100627.00	-3726.94	1503.04	0.00	78.54	10.25	150.98	
90	895.83	4	SLE Q	-96818.60	-2229.52	899.15	0.00	78.54	9.11	134.97	
91	955.56	4	SLE Q	-93026.20	-1035.01	417.41	0.00	78.54	8.14	121.28	
92	1015.28	4	SLE Q	-89249.00	-111.46	44.95	0.00	78.54	7.32	109.66	
93	1075.00	4	SLE Q	-85486.40	575.13	-231.94	0.00	78.54	7.27	108.56	
94	1134.72	4	SLE Q	-81737.70	1058.94	-427.06	0.00	78.54	7.23	107.64	

95	1194.44	4	SLE Q	-78002.30	1373.02	-553.73	0.00	78.54	7.10	105.45	
96	1254.17	4	SLE Q	-74279.70	1548.33	-624.43	0.00	78.54	6.90	102.23	
97	1313.89	4	SLE Q	-70569.20	1613.08	-650.54	0.00	78.54	6.63	98.20	
98	1373.61	4	SLE Q	-66870.20	1592.41	-642.21	0.00	78.54	6.32	93.53	
99	1433.33	4	SLE Q	-63182.10	1508.29	-608.28	0.00	78.54	5.98	88.40	
100	1493.06	4	SLE Q	-59504.40	1379.49	-556.34	0.00	78.54	5.60	82.95	
101	1552.78	4	SLE Q	-55836.30	1221.83	-492.76	0.00	78.54	5.22	77.29	
102	1612.50	4	SLE Q	-52177.30	1048.37	-422.80	0.00	78.54	4.82	71.52	
103	1672.22	4	SLE Q	-48526.90	869.75	-350.76	0.00	78.54	4.43	65.72	
104	1731.94	4	SLE Q	-44884.40	694.51	-280.09	0.00	78.54	4.04	59.96	
105	1791.67	4	SLE Q	-41249.20	529.49	-213.54	0.00	78.54	3.65	54.28	
106	1851.39	4	SLE Q	-37620.70	380.13	-153.31	0.00	78.54	3.27	48.73	
107	1911.11	4	SLE Q	-33998.40	250.82	-101.15	0.00	78.54	2.90	43.34	
108	1970.83	4	SLE Q	-30381.60	145.16	-58.54	0.00	78.54	2.55	38.14	
109	2030.56	4	SLE Q	-26769.70	66.29	-26.73	0.00	78.54	2.21	33.14	
110	2090.28	4	SLE Q	-23162.30	17.01	-6.86	0.00	78.54	1.89	28.37	
111	2150.00	4	SLE Q	-19558.60	0.00	0.00	0.00	78.54	1.59	23.85	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	A_C eff <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-153061.00	15134.60	-37527.70	46.00	136.36	0.50	20.00	160.71	12.57	431.74	143.70	0.04	0.01
76	59.72	4	SLE Q	-151857.00	15760.10	-39078.70	46.00	136.36	0.50	20.00	170.76	12.57	494.87	171.55	0.05	0.01
77	119.44	4	SLE Q	-147786.00	15620.70	-38733.00	46.00	136.36	0.50	20.00	174.64	12.57	519.24	178.61	0.05	0.02
78	179.17	4	SLE Q	-143739.00	14919.20	-36993.70	46.00	136.36	0.50	20.00	170.78	12.57	495.01	162.45	0.05	0.01
79	238.89	4	SLE Q	-139715.00	13827.70	-34287.10	46.00	136.36	0.50	20.00	160.90	12.57	432.91	131.64	0.04	0.01
80	298.61	4	SLE Q	-135715.00	12488.60	-30966.60	46.00	136.36	0.50	20.00	200.92	6.28	342.18	94.68	0.03	0.01
81	358.33	4	SLE Q	-131736.00	11017.10	-27317.90	46.00	136.36	0.50	20.00	166.68	6.28	234.62	58.11	0.02	0.00
112	0.00	3	SLE F	-153061.00	15134.60	-37527.70	46.00	136.36	0.50	20.00	160.71	12.57	431.74	143.70	0.04	0.01
113	59.72	3	SLE F	-151857.00	15760.10	-39078.70	46.00	136.36	0.50	20.00	170.76	12.57	494.87	171.55	0.05	0.01
114	119.44	3	SLE F	-147786.00	15620.70	-38733.00	46.00	136.36	0.50	20.00	174.64	12.57	519.24	178.61	0.05	0.02
115	179.17	3	SLE F	-143739.00	14919.20	-36993.70	46.00	136.36	0.50	20.00	170.78	12.57	495.01	162.45	0.05	0.01
116	238.89	3	SLE F	-139715.00	13827.70	-34287.10	46.00	136.36	0.50	20.00	160.90	12.57	432.91	131.64	0.04	0.01
117	298.61	3	SLE F	-135715.00	12488.60	-30966.60	46.00	136.36	0.50	20.00	200.92	6.28	342.18	94.68	0.03	0.01
118	358.33	3	SLE F	-131736.00	11017.10	-27317.90	46.00	136.36	0.50	20.00	166.68	6.28	234.62	58.11	0.02	0.00

Verifiche principali

Caso	Tipo
2	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)
47	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sf max (max traz.),C.Q.Per. - Wk Max
84	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 29

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 29 (-84)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	161013.00	6795.32	1143.95	36073.40	41608.80
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	161013.00	6795.32	1143.95	36073.40	41608.80
2	2	SLE R	RVN	119269.00	5033.57	847.37	26721.00	30821.30
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	119269.00	5033.57	847.37	26721.00	30821.30
3	3	SLE F	RVN	119269.00	5033.57	847.37	26721.00	30821.30
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	119269.00	5033.57	847.37	26721.00	30821.30
4	4	SLE Q	RVN	119269.00	5033.57	847.37	26721.00	30821.30
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	119269.00	5033.57	847.37	26721.00	30821.30

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-161013.00	-6795.32	-1143.95	-36073.40	-41608.80
2	2	SLE R	1	-119269.00	-5033.57	-847.37	-26721.00	-30821.30
3	3	SLE F	1	-119269.00	-5033.57	-847.37	-26721.00	-30821.30
4	4	SLE Q	1	-119269.00	-5033.57	-847.37	-26721.00	-30821.30

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-161013.00	35681.40	-41156.70	-161013.00	138396.00	-158176.00	2-3	228.75	3.858
2	59.72	1	SLU	-159783.00	37277.70	-42997.90	-159783.00	138099.00	-157853.00	2-3	228.75	3.686
3	119.44	1	SLU	-155493.00	37034.50	-42717.40	-155493.00	137062.00	-156726.00	2-3	228.75	3.683
4	179.17	1	SLU	-151229.00	35436.20	-40873.90	-151229.00	136024.00	-155600.00	2-3	228.75	3.820
5	238.89	1	SLU	-146989.00	32893.90	-37941.40	-146989.00	134992.00	-154480.00	2-3	228.75	4.085
6	298.61	1	SLU	-142774.00	29748.60	-34313.50	-142774.00	133959.00	-153362.00	2-3	228.75	4.484
7	358.33	1	SLU	-138581.00	26276.50	-30308.60	-138581.00	132930.00	-152248.00	2-3	228.75	5.039
8	418.06	1	SLU	-134412.00	22694.80	-26177.30	-134412.00	131903.00	-151138.00	2-3	228.75	5.790
9	477.78	1	SLU	-130264.00	19169.00	-22110.50	-130264.00	130877.00	-150030.00	2-3	228.75	6.804
10	537.50	1	SLU	-126137.00	15819.70	-18247.20	-126137.00	129856.00	-148926.00	2-3	228.75	8.182
11	597.22	1	SLU	-122031.00	12729.60	-14682.90	-122031.00	128894.00	-147726.00	2-3	228.75	10.089
12	656.94	1	SLU	-117945.00	9950.16	-11477.00	-117945.00	127955.00	-146497.00	2-3	228.75	12.805
13	716.67	1	SLU	-113879.00	7507.77	-8659.82	-113879.00	127018.00	-145268.00	2-3	228.75	16.837
14	776.39	1	SLU	-109830.00	5409.10	-6239.12	-109830.00	126084.00	-144040.00	2-3	228.75	23.183
15	836.11	1	SLU	-105800.00	3646.03	-4205.51	-2571250.00	125152.00	-142815.00	2-3	228.75	24.303
16	895.83	1	SLU	-101787.00	2199.75	-2537.30	-2571250.00	124222.00	-141587.00	2-3	228.75	25.261
17	955.56	1	SLU	-97790.70	1044.26	-1204.50	-2571250.00	123294.00	-140364.00	2-3	228.75	26.293
18	1015.28	1	SLU	-93810.20	149.23	-172.13	-2571250.00	122369.00	-139137.00	2-3	228.75	27.409
19	1075.00	1	SLU	-89845.00	-517.73	597.18	-2571250.00	-120840.00	138225.00	2-3	48.75	28.619
20	1134.72	1	SLU	-85894.50	-989.29	1141.10	-2571250.00	-119787.00	137089.00	2-3	48.75	29.935
21	1194.44	1	SLU	-81958.00	-1297.09	1496.12	-2571250.00	-118738.00	135955.00	2-3	48.75	31.373
22	1254.17	1	SLU	-78034.90	-1470.79	1696.48	-2571250.00	-117689.00	134823.00	2-3	48.75	32.950
23	1313.89	1	SLU	-74124.50	-1537.49	1773.41	-2571250.00	-116639.00	133691.00	2-3	48.75	34.688
24	1373.61	1	SLU	-70226.20	-1521.36	1754.82	-2571250.00	-115593.00	132561.00	2-3	48.75	36.614
25	1433.33	1	SLU	-66339.40	-1443.55	1665.06	-2571250.00	-114543.00	131431.00	2-3	48.75	38.759
26	1493.06	1	SLU	-62463.40	-1322.16	1525.05	-2571250.00	-113496.00	130302.00	2-3	48.75	41.164
27	1552.78	1	SLU	-58597.60	-1172.44	1352.35	-2571250.00	-112449.00	129174.00	2-3	48.75	43.880
28	1612.50	1	SLU	-54741.30	-1007.02	1161.55	-2571250.00	-111401.00	128046.00	2-3	48.75	46.971
29	1672.22	1	SLU	-50894.00	-836.20	964.51	-2571250.00	-110354.00	126919.00	2-3	48.75	50.522
30	1731.94	1	SLU	-47055.00	-668.27	770.82	-2571250.00	-109345.00	125733.00	2-3	48.75	54.644
31	1791.67	1	SLU	-43223.60	-509.87	588.11	-2571250.00	-108386.00	124471.00	2-3	48.75	59.487
32	1851.39	1	SLU	-39399.30	-366.30	422.51	-2571250.00	-107427.00	123208.00	2-3	48.75	65.261
33	1911.11	1	SLU	-35581.50	-241.85	278.96	-2571250.00	-106470.00	121939.00	2-3	48.75	72.264
34	1970.83	1	SLU	-31769.40	-140.06	161.55	-2571250.00	-105513.00	120671.00	2-3	48.75	80.935
35	2030.56	1	SLU	-27962.50	-64.00	73.82	-2571250.00	-104557.00	119396.00	2-3	48.75	91.953
36	2090.28	1	SLU	-24160.20	-16.43	18.95	-2571250.00	-103602.00	118120.00	2-3	48.75	>100
37	2150.00	1	SLU	-20361.80	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	6795.32	1143.95	0.85	11.31	6890.93	1.00	32294.70	354731.00	32294.70	4.687
2	59.72	1	SLU	1486.32	250.21	0.85	11.31	1507.24	1.00	32294.70	354555.00	32294.70	21.426
3	119.44	1	SLU	-2508.74	-422.33	0.85	11.31	2544.04	1.00	32294.70	353941.00	32294.70	12.694

4	179.17	1	SLU	-5376.22	-905.05	0.85	11.31	5451.87	1.00	32294.70	353330.00	32294.70	5.924
5	238.89	1	SLU	-7297.50	-1228.49	0.85	11.31	7400.18	1.00	32294.70	352723.00	32294.70	4.364
6	298.61	1	SLU	-8443.34	-1421.39	0.85	11.31	8562.14	1.00	32294.70	352119.00	32294.70	3.772
7	358.33	1	SLU	-8970.07	-1510.06	0.85	11.31	9096.29	1.00	32294.70	351518.00	32294.70	3.550
8	418.06	1	SLU	-9017.37	-1518.02	0.85	11.31	9144.25	1.00	32294.70	350921.00	32294.70	3.532
9	477.78	1	SLU	-8707.16	-1465.80	0.85	11.31	8829.68	1.00	32294.70	350327.00	32294.70	3.658
10	537.50	1	SLU	-8143.57	-1370.92	0.85	11.31	8258.15	1.00	32294.70	349736.00	32294.70	3.911
11	597.22	1	SLU	-7413.50	-1248.02	0.85	11.31	7517.82	1.00	32294.70	349148.00	32294.70	4.296
12	656.94	1	SLU	-6587.80	-1109.02	0.85	11.31	6680.49	1.00	32294.70	348563.00	32294.70	4.834
13	716.67	1	SLU	-5722.63	-963.37	0.85	11.31	5803.15	1.00	32294.70	347980.00	32294.70	5.565
14	776.39	1	SLU	-4861.15	-818.35	0.85	11.31	4929.55	1.00	32294.70	347400.00	32294.70	6.551
15	836.11	1	SLU	-4035.22	-679.30	0.85	11.31	4092.00	1.00	32294.70	346823.00	32294.70	7.892
16	895.83	1	SLU	-3267.08	-549.99	0.85	11.31	3313.05	1.00	32294.70	346248.00	32294.70	9.748
17	955.56	1	SLU	-2571.02	-432.82	0.85	11.31	2607.20	1.00	32294.70	345676.00	32294.70	12.387
18	1015.28	1	SLU	-1954.86	-329.09	0.85	11.31	1982.36	1.00	32294.70	345105.00	32294.70	16.291
19	1075.00	1	SLU	-1421.33	-239.27	0.85	11.31	1441.33	1.00	32294.70	344537.00	32294.70	22.406
20	1134.72	1	SLU	-969.32	-163.18	0.85	11.31	982.95	1.00	32294.70	343972.00	32294.70	32.855
21	1194.44	1	SLU	-594.88	-100.14	0.85	11.31	603.25	1.00	32294.70	343408.00	32294.70	53.534
22	1254.17	1	SLU	-292.19	-49.19	0.85	11.31	296.31	1.00	32294.70	342846.00	32294.70	>100
23	1313.89	1	SLU	-54.22	-9.13	0.85	11.31	54.99	1.00	32294.70	342286.00	32294.70	>100
24	1373.61	1	SLU	126.62	21.32	0.85	11.31	128.41	1.00	32294.70	341727.00	32294.70	>100
25	1433.33	1	SLU	258.05	43.44	0.85	11.31	261.69	1.00	32294.70	341171.00	32294.70	>100
26	1493.06	1	SLU	347.52	58.50	0.85	11.31	352.41	1.00	32294.70	340615.00	32294.70	91.639
27	1552.78	1	SLU	401.97	67.67	0.85	11.31	407.63	1.00	32294.70	340062.00	32294.70	79.226
28	1612.50	1	SLU	427.66	71.99	0.85	11.31	433.68	1.00	32294.70	339509.00	32294.70	74.467
29	1672.22	1	SLU	430.05	72.40	0.85	11.31	436.11	1.00	32294.70	338958.00	32294.70	74.053
30	1731.94	1	SLU	413.77	69.66	0.85	11.31	419.59	1.00	32294.70	338408.00	32294.70	76.967
31	1791.67	1	SLU	382.58	64.40	0.85	11.31	387.96	1.00	32294.70	337859.00	32294.70	83.243
32	1851.39	1	SLU	339.43	57.14	0.85	11.31	344.20	1.00	32294.70	337312.00	32294.70	93.825
33	1911.11	1	SLU	286.51	48.23	0.85	11.31	290.55	1.00	32294.70	336765.00	32294.70	>100
34	1970.83	1	SLU	225.37	37.94	0.85	11.31	228.54	1.00	32294.70	336219.00	32294.70	>100
35	2030.56	1	SLU	156.94	26.42	0.85	11.31	159.15	1.00	32294.70	335673.00	32294.70	>100
36	2090.28	1	SLU	81.75	13.76	0.85	11.31	82.90	1.00	32294.70	335129.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-119269.00	-30486.40	26430.70	31.42	47.12	34.62	480.89	
39	59.72	2	SLE R	-118531.00	-31850.30	27613.10	34.56	43.98	36.31	502.84	
40	119.44	2	SLE R	-115388.00	-31642.50	27433.00	34.56	43.98	36.14	499.92	
41	179.17	2	SLE R	-112263.00	-30276.90	26249.10	34.56	43.98	34.53	478.05	
42	238.89	2	SLE R	-109156.00	-28104.80	24365.90	31.42	47.12	31.93	443.34	
43	298.61	2	SLE R	-106068.00	-25417.40	22036.00	28.27	50.27	28.80	401.37	
44	358.33	2	SLE R	-102996.00	-22450.80	19464.10	28.27	50.27	25.49	356.97	
45	418.06	2	SLE R	-99941.60	-19390.60	16811.00	21.99	56.55	22.30	313.95	
46	477.78	2	SLE R	-96903.30	-16378.10	14199.30	18.85	59.69	19.42	274.85	
47	537.50	2	SLE R	-93880.80	-13516.40	11718.30	9.42	69.11	16.92	240.81	
48	597.22	2	SLE R	-90873.60	-10876.20	9429.32	0.00	78.54	14.81	211.75	
49	656.94	2	SLE R	-87881.20	-8501.48	7370.49	0.00	78.54	12.95	186.06	
50	716.67	2	SLE R	-84903.20	-6414.69	5561.31	0.00	78.54	11.28	163.06	
51	776.39	2	SLE R	-81939.10	-4621.57	4006.74	0.00	78.54	9.81	142.80	
52	836.11	2	SLE R	-78988.30	-3115.19	2700.76	0.00	78.54	8.55	125.22	
53	895.83	2	SLE R	-76050.40	-1879.48	1629.44	0.00	78.54	7.46	110.17	
54	955.56	2	SLE R	-73124.90	-892.22	773.53	0.00	78.54	6.55	97.44	
55	1015.28	2	SLE R	-70211.30	-127.50	110.54	0.00	78.54	5.79	86.79	
56	1075.00	2	SLE R	-67309.20	442.35	-383.51	0.00	78.54	5.77	86.18	
57	1134.72	2	SLE R	-64418.00	845.26	-732.81	0.00	78.54	5.81	86.41	
58	1194.44	2	SLE R	-61537.40	1108.24	-960.80	0.00	78.54	5.76	85.35	
59	1254.17	2	SLE R	-58666.80	1256.65	-1089.47	0.00	78.54	5.63	83.23	
60	1313.89	2	SLE R	-55805.80	1313.64	-1138.88	0.00	78.54	5.43	80.27	
61	1373.61	2	SLE R	-52953.90	1299.86	-1126.94	0.00	78.54	5.19	76.66	
62	1433.33	2	SLE R	-50110.60	1233.38	-1069.30	0.00	78.54	4.91	72.58	
63	1493.06	2	SLE R	-47275.60	1129.66	-979.38	0.00	78.54	4.61	68.16	
64	1552.78	2	SLE R	-44448.20	1001.74	-868.48	0.00	78.54	4.30	63.52	
65	1612.50	2	SLE R	-41628.10	860.41	-745.94	0.00	78.54	3.97	58.76	
66	1672.22	2	SLE R	-38814.70	714.46	-619.41	0.00	78.54	3.64	53.98	
67	1731.94	2	SLE R	-36007.70	570.98	-495.02	0.00	78.54	3.32	49.22	
68	1791.67	2	SLE R	-33206.60	435.64	-377.68	0.00	78.54	3.00	44.54	
69	1851.39	2	SLE R	-30410.90	312.97	-271.33	0.00	78.54	2.69	39.99	
70	1911.11	2	SLE R	-27620.10	206.64	-179.15	0.00	78.54	2.39	35.60	
71	1970.83	2	SLE R	-24833.90	119.67	-103.75	0.00	78.54	2.10	31.39	
72	2030.56	2	SLE R	-22051.70	54.68	-47.40	0.00	78.54	1.83	27.40	
73	2090.28	2	SLE R	-19273.10	14.04	-12.17	0.00	78.54	1.58	23.63	
74	2150.00	2	SLE R	-16497.70	0.00	0.00	0.00	78.54	1.34	20.11	
75	0.00	4	SLE Q	-119269.00	-30486.40	26430.70	31.42	47.12	34.62	480.89	
76	59.72	4	SLE Q	-118531.00	-31850.30	27613.10	34.56	43.98	36.31	502.84	
77	119.44	4	SLE Q	-115388.00	-31642.50	27433.00	34.56	43.98	36.14	499.92	
78	179.17	4	SLE Q	-112263.00	-30276.90	26249.10	34.56	43.98	34.53	478.05	
79	238.89	4	SLE Q	-109156.00	-28104.80	24365.90	31.42	47.12	31.93	443.34	
80	298.61	4	SLE Q	-106068.00	-25417.40	22036.00	28.27	50.27	28.80	401.37	
81	358.33	4	SLE Q	-102996.00	-22450.80	19464.10	28.27	50.27	25.49	356.97	
82	418.06	4	SLE Q	-99941.60	-19390.60	16811.00	21.99	56.55	22.30	313.95	
83	477.78	4	SLE Q	-96903.30	-16378.10	14199.30	18.85	59.69	19.42	274.85	
84	537.50	4	SLE Q	-93880.80	-13516.40	11718.30	9.42	69.11	16.92	240.81	
85	597.22	4	SLE Q	-90873.60	-10876.20	9429.32	0.00	78.54	14.81	211.75	
86	656.94	4	SLE Q	-87881.20	-8501.48	7370.49	0.00	78.54	12.95	186.06	
87	716.67	4	SLE Q	-84903.20	-6414.69	5561.31	0.00	78.54	11.28	163.06	
88	776.39	4	SLE Q	-81939.10	-4621.57	4006.74	0.00	78.54	9.81	142.80	
89	836.11	4	SLE Q	-78988.30	-3115.19	2700.76	0.00	78.54	8.55	125.22	
90	895.83	4	SLE Q	-76050.40	-1879.48	1629.44	0.00	78.54	7.46	110.17	
91	955.56	4	SLE Q	-73124.90	-892.22	773.53	0.00	78.54	6.55	97.44	
92	1015.28	4	SLE Q	-70211.30	-127.50	110.54	0.00	78.54	5.79	86.79	
93	1075.00	4	SLE Q	-67309.20	442.35	-383.51	0.00	78.54	5.77	86.18	
94	1134.72	4	SLE Q	-64418.00	845.26	-732.81	0.00	78.54	5.81	86.41	
95	1194.44	4	SLE Q	-61537.40	1108.24	-960.80	0.00	78.54	5.76	85.35	
96	1254.17	4	SLE Q	-58666.80	1256.65	-1089.47	0.00	78.54	5.63	83.23	
97	1313.89	4	SLE Q	-55805.80	1313.64	-1138.88	0.00	78.54	5.43	80.27	
98	1373.61	4	SLE Q	-52953.90	1299.86	-1126.94	0.00	78.54	5.19	76.66	
99	1433.33	4	SLE Q	-50110.60	1233.38	-1069.30	0.00	78.54	4.91	72.58	
100	1493.06	4	SLE Q	-47275.60	1129.66	-979.38	0.00	78.54	4.61	68.16	
101	1552.78	4	SLE Q	-44448.20	1001.74	-868.48	0.00	78.54	4.30	63.52	
102	1612.50	4	SLE Q	-41628.10	860.41	-745.94	0.00	78.54	3.97	58.76	
103	1672.22	4	SLE Q	-38814.70	714.46	-619.41	0.00	78.54	3.64	53.98	
104	1731.94	4	SLE Q	-36007.70	570.98	-495.02	0.00	78.54	3.32	49.22	
105	1791.67	4	SLE Q	-33206.60	435.64	-377.68	0.00	78.54	3.00	44.54	
106	1851.39	4	SLE Q	-30410.90	312.97	-271.33	0.00	78.54	2.69	39.99	
107	1911.11	4	SLE Q	-27620.10	206.64	-179.15	0.00	78.54	2.39	35.60	
108	1970.83	4	SLE Q	-24833.90	119.67	-103.75	0.00	78.54	2.10	31.39	
109	2030.56	4	SLE Q	-22051.70	54.68	-47.40	0.00	78.54	1.83	27.40	
110	2090.28	4	SLE Q	-19273.10	14.04	-12.17	0.00	78.54	1.58	23.63	
111	2150.00	4	SLE Q	-16497.70	0.00	0.00	0.00	78.54	1.34	20.11	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	A_{C} $_{eff}$ <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-119269.00	26430.70	-30486.40	46.00	136.36	0.50	20.00	189.48	15.71	765.62	267.83	0.08	0.03
76	59.72	4	SLE Q	-118531.00	27613.10	-31850.30	46.00	136.36	0.50	20.00	196.12	15.71	817.77	310.79	0.09	0.03
77	119.44	4	SLE Q	-115388.00	27433.00	-31642.50	46.00	136.36	0.50	20.00	198.62	15.71	837.36	321.75	0.09	0.03
78	179.17	4	SLE Q	-112263.00	26249.10	-30276.90	46.00	136.36	0.50	20.00	196.58	15.71	821.38	297.66	0.09	0.03
79	238.89	4	SLE Q	-109156.00	24365.90	-28104.80	46.00	136.36	0.50	20.00	190.51	15.71	773.72	250.78	0.07	0.02
80	298.61	4	SLE Q	-106068.00	22036.00	-25417.40	46.00	136.36	0.50	20.00	178.72	15.71	681.08	193.37	0.06	0.02
81	358.33	4	SLE Q	-102996.00	19464.10	-22450.80	46.00	136.36	0.50	20.00	179.64	12.57	550.63	135.69	0.04	0.01
82	418.06	4	SLE Q	-99941.60	16811.00	-19390.60	46.00	136.36	0.50	20.00	176.60	9.42	398.66	84.76	0.02	0.01
83	477.78	4	SLE Q	-96903.30	14199.30	-16378.10	46.00	136.36	0.50	20.00	167.70	6.28	237.83	43.85	0.01	0.00
112	0.00	3	SLE F	-119269.00	26430.70	-30486.40	46.00	136.36	0.50	20.00	189.48	15.71	765.62	267.83	0.08	0.03
113	59.72	3	SLE F	-118531.00	27613.10	-31850.30	46.00	136.36	0.50	20.00	196.12	15.71	817.77	310.79	0.09	0.03
114	119.44	3	SLE F	-115388.00	27433.00	-31642.50	46.00	136.36	0.50	20.00	198.62	15.71	837.36	321.75	0.09	0.03
115	179.17	3	SLE F	-112263.00	26249.10	-30276.90	46.00	136.36	0.50	20.00	196.58	15.71	821.38	297.66	0.09	0.03
116	238.89	3	SLE F	-109156.00	24365.90	-28104.80	46.00	136.36	0.50	20.00	190.51	15.71	773.72	250.78	0.07	0.02
117	298.61	3	SLE F	-106068.00	22036.00	-25417.40	46.00	136.36	0.50	20.00	178.72	15.71	681.08	193.37	0.06	0.02
118	358.33	3	SLE F	-102996.00	19464.10	-22450.80	46.00	136.36	0.50	20.00	179.64	12.57	550.63	135.69	0.04	0.01
119	418.06	3	SLE F	-99941.60	16811.00	-19390.60	46.00	136.36	0.50	20.00	176.60	9.42	398.66	84.76	0.02	0.01
120	477.78	3	SLE F	-96903.30	14199.30	-16378.10	46.00	136.36	0.50	20.00	167.70	6.28	237.83	43.85	0.01	0.00

Verifiche principali

Caso	Tipo
3	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sc min (max compr.),C.Rare - Sf min (max compr.)
40	C.Rare - Sf max (max traz.)

49	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sf max (max traz.),C.Q.Per. - Wk Max
86	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 30

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 30 (-45)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	117052.00	7094.32	1090.02	44287.70	29193.00
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	117052.00	7094.32	1090.02	44287.70	29193.00
2	2	SLE R	RVN	86705.10	5255.06	807.42	32805.70	21624.40
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	86705.10	5255.06	807.42	32805.70	21624.40
3	3	SLE F	RVN	86705.10	5255.06	807.42	32805.70	21624.40
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	86705.10	5255.06	807.42	32805.70	21624.40
4	4	SLE Q	RVN	86705.10	5255.06	807.42	32805.70	21624.40
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	86705.10	5255.06	807.42	32805.70	21624.40

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-117052.00	-7094.32	-1090.02	-44287.70	-29193.00
2	2	SLE R	1	-86705.10	-5255.06	-807.42	-32805.70	-21624.40
3	3	SLE F	1	-86705.10	-5255.06	-807.42	-32805.70	-21624.40
4	4	SLE Q	1	-86705.10	-5255.06	-807.42	-32805.70	-21624.40

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-117052.00	43793.40	-28867.20	-117052.00	161188.00	-108222.00	2-3	213.75	3.701
2	59.72	1	SLU	-116345.00	45984.40	-30311.40	-116345.00	160969.00	-108082.00	2-3	213.75	3.520
3	119.44	1	SLU	-113262.00	45849.10	-30222.20	-113262.00	160042.00	-107375.00	2-3	213.75	3.510
4	179.17	1	SLU	-110198.00	43993.40	-28999.00	-110198.00	159124.00	-106658.00	2-3	213.75	3.636
5	238.89	1	SLU	-107152.00	40932.50	-26981.30	-107152.00	158208.00	-105940.00	2-3	213.75	3.884
6	298.61	1	SLU	-104123.00	37094.70	-24451.60	-104123.00	157297.00	-105223.00	2-3	213.75	4.260
7	358.33	1	SLU	-101111.00	32827.60	-21638.90	-101111.00	156389.00	-104511.00	2-3	213.75	4.784
8	418.06	1	SLU	-98115.50	28405.40	-18723.90	-98115.50	155485.00	-103799.00	2-3	213.75	5.495
9	477.78	1	SLU	-95136.10	24037.40	-15844.70	-95136.10	154583.00	-103087.00	2-3	213.75	6.454
10	537.50	1	SLU	-92172.20	19877.00	-13102.30	-92172.20	153686.00	-102379.00	2-3	213.75	7.757
11	597.22	1	SLU	-89223.40	16029.90	-10566.40	-89223.40	152791.00	-101672.00	2-3	213.75	9.559
12	656.94	1	SLU	-86289.10	12562.60	-8280.87	-86289.10	151888.00	-100973.00	2-3	213.75	12.122
13	716.67	1	SLU	-83368.90	9510.03	-6268.70	-83368.90	150909.00	-100340.00	2-3	213.75	15.910
14	776.39	1	SLU	-80462.30	6882.19	-4536.52	-80462.30	149934.00	-99708.10	2-3	213.75	21.845
15	836.11	1	SLU	-77568.80	4670.39	-3078.57	-77568.80	148957.00	-99076.10	2-3	213.75	31.982
16	895.83	1	SLU	-74688.00	2852.32	-1880.16	-2571250.00	147985.00	-98446.40	2-3	213.75	34.426
17	955.56	1	SLU	-71819.40	1396.46	-920.50	-2571250.00	147015.00	-97818.50	2-3	213.75	35.802
18	1015.28	1	SLU	-68962.40	265.67	-175.12	-2571250.00	146044.00	-97189.60	2-3	213.75	37.285
19	1075.00	1	SLU	-66116.80	-579.92	382.27	-2571250.00	-144608.00	97060.50	2-3	33.75	38.889
20	1134.72	1	SLU	-63281.90	-1180.73	778.30	-2571250.00	-143660.00	96452.80	2-3	33.75	40.632
21	1194.44	1	SLU	-60457.30	-1575.97	1038.83	-2571250.00	-142712.00	95845.20	2-3	33.75	42.530
22	1254.17	1	SLU	-57642.60	-1802.55	1188.18	-2571250.00	-142873.00	93530.90	2-3	33.12	44.607
23	1313.89	1	SLU	-54837.40	-1894.21	1248.60	-2571250.00	-141928.00	92928.90	2-3	33.12	46.889
24	1373.61	1	SLU	-52041.00	-1881.16	1240.00	-2571250.00	-140985.00	92327.90	2-3	33.12	49.408
25	1433.33	1	SLU	-49253.20	-1789.80	1179.78	-2571250.00	-140042.00	91726.80	2-3	33.12	52.205
26	1493.06	1	SLU	-46473.40	-1642.85	1082.91	-2571250.00	-139101.00	91126.90	2-3	33.12	55.327
27	1552.78	1	SLU	-43701.10	-1459.45	962.02	-2571250.00	-138162.00	90528.20	2-3	33.12	58.837
28	1612.50	1	SLU	-40936.00	-1255.48	827.57	-2571250.00	-137223.00	89929.60	2-3	33.12	62.811
29	1672.22	1	SLU	-38177.60	-1043.94	688.13	-2571250.00	-136285.00	89331.30	2-3	33.12	67.350
30	1731.94	1	SLU	-35425.40	-835.33	550.62	-2571250.00	-135348.00	88733.90	2-3	33.12	72.582
31	1791.67	1	SLU	-32679.00	-638.05	420.58	-2571250.00	-133421.00	89524.40	2-3	33.75	78.682
32	1851.39	1	SLU	-29937.90	-458.87	302.47	-2571250.00	-132524.00	88810.20	2-3	33.75	85.886
33	1911.11	1	SLU	-27201.70	-303.26	199.90	-2571250.00	-131628.00	88097.90	2-3	33.75	94.525
34	1970.83	1	SLU	-24470.00	-175.79	115.87	-2571250.00	-130733.00	87387.20	2-3	33.75	>100
35	2030.56	1	SLU	-21742.20	-80.39	52.99	-2571250.00	-129838.00	86669.10	2-3	33.75	>100
36	2090.28	1	SLU	-19018.00	-20.66	13.62	-2571250.00	-128943.00	85952.10	2-3	33.75	>100
37	2150.00	1	SLU	-16296.90	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7094.32	1090.02	0.85	11.31	7177.58	1.00	32294.70	348435.00	32294.70	4.499
2	59.72	1	SLU	1822.20	279.98	0.85	11.31	1843.58	1.00	32294.70	348333.00	32294.70	17.517
3	119.44	1	SLU	-2158.38	-331.63	0.85	11.31	2183.70	1.00	32294.70	347892.00	32294.70	14.789
4	179.17	1	SLU	-5028.52	-772.62	0.85	11.31	5087.53	1.00	32294.70	347453.00	32294.70	6.348
5	238.89	1	SLU	-6965.09	-1070.17	0.85	11.31	7046.82	1.00	32294.70	347016.00	32294.70	4.583
6	298.61	1	SLU	-8134.99	-1249.92	0.85	11.31	8230.45	1.00	32294.70	346583.00	32294.70	3.924
7	358.33	1	SLU	-8691.38	-1335.41	0.85	11.31	8793.38	1.00	32294.70	346151.00	32294.70	3.673
8	418.06	1	SLU	-8771.35	-1347.69	0.85	11.31	8874.28	1.00	32294.70	345722.00	32294.70	3.639
9	477.78	1	SLU	-8494.80	-1305.20	0.85	11.31	8594.48	1.00	32294.70	345295.00	32294.70	3.758
10	537.50	1	SLU	-7964.30	-1223.69	0.85	11.31	8057.76	1.00	32294.70	344871.00	32294.70	4.008
11	597.22	1	SLU	-7265.65	-1116.35	0.85	11.31	7350.92	1.00	32294.70	344448.00	32294.70	4.393
12	656.94	1	SLU	-6468.91	-993.93	0.85	11.31	6544.83	1.00	32294.70	344028.00	32294.70	4.934
13	716.67	1	SLU	-5629.78	-865.00	0.85	11.31	5695.85	1.00	32294.70	343610.00	32294.70	5.670
14	776.39	1	SLU	-4791.18	-736.15	0.85	11.31	4847.41	1.00	32294.70	343193.00	32294.70	6.662
15	836.11	1	SLU	-3984.90	-612.27	0.85	11.31	4031.67	1.00	32294.70	342779.00	32294.70	8.010
16	895.83	1	SLU	-3233.28	-496.78	0.85	11.31	3271.22	1.00	32294.70	342366.00	32294.70	9.872
17	955.56	1	SLU	-2550.76	-391.92	0.85	11.31	2580.70	1.00	32294.70	341955.00	32294.70	12.514
18	1015.28	1	SLU	-1945.43	-298.91	0.85	11.31	1968.26	1.00	32294.70	341546.00	32294.70	16.408
19	1075.00	1	SLU	-1420.30	-218.22	0.85	11.31	1436.96	1.00	32294.70	341139.00	32294.70	22.474
20	1134.72	1	SLU	-974.56	-149.74	0.85	11.31	985.99	1.00	32294.70	340733.00	32294.70	32.754
21	1194.44	1	SLU	-604.58	-92.89	0.85	11.31	611.68	1.00	32294.70	340328.00	32294.70	52.797
22	1254.17	1	SLU	-304.83	-46.84	0.85	11.31	308.41	1.00	32294.70	339925.00	32294.70	>100
23	1313.89	1	SLU	-68.55	-10.53	0.85	11.31	69.36	1.00	32294.70	339523.00	32294.70	>100
24	1373.61	1	SLU	111.59	17.15	0.85	11.31	112.90	1.00	32294.70	339122.00	32294.70	>100
25	1433.33	1	SLU	243.08	37.35	0.85	11.31	245.94	1.00	32294.70	338723.00	32294.70	>100
26	1493.06	1	SLU	333.18	51.19	0.85	11.31	337.09	1.00	32294.70	338325.00	32294.70	95.803
27	1552.78	1	SLU	388.67	59.72	0.85	11.31	393.23	1.00	32294.70	337928.00	32294.70	82.127
28	1612.50	1	SLU	415.66	63.87	0.85	11.31	420.54	1.00	32294.70	337532.00	32294.70	76.793
29	1672.22	1	SLU	419.52	64.46	0.85	11.31	424.44	1.00	32294.70	337137.00	32294.70	76.088
30	1731.94	1	SLU	404.76	62.19	0.85	11.31	409.51	1.00	32294.70	336742.00	32294.70	78.861
31	1791.67	1	SLU	375.11	57.63	0.85	11.31	379.51	1.00	32294.70	336349.00	32294.70	85.096
32	1851.39	1	SLU	333.45	51.23	0.85	11.31	337.36	1.00	32294.70	335956.00	32294.70	95.727
33	1911.11	1	SLU	281.95	43.32	0.85	11.31	285.26	1.00	32294.70	335564.00	32294.70	>100
34	1970.83	1	SLU	222.12	34.13	0.85	11.31	224.72	1.00	32294.70	335173.00	32294.70	>100
35	2030.56	1	SLU	154.90	23.80	0.85	11.31	156.71	1.00	32294.70	334782.00	32294.70	>100
36	2090.28	1	SLU	80.79	12.41	0.85	11.31	81.74	1.00	32294.70	334392.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_c <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-86705.10	-21383.10	32439.50	40.84	37.70	34.60	470.13	
39	59.72	2	SLE R	-86417.40	-22452.90	34062.50	40.84	37.70	36.64	496.10	
40	119.44	2	SLE R	-84167.50	-22386.80	33962.30	40.84	37.70	36.67	510.94	
41	179.17	2	SLE R	-81931.30	-21480.70	32587.70	40.84	37.70	35.11	480.17	

42	238.89	2	SLE R	-79708.40	-19986.20	30320.30	40.84	37.70	32.43	440.11	
43	298.61	2	SLE R	-77498.60	-18112.30	27477.50	34.56	43.98	29.06	396.29	
44	358.33	2	SLE R	-75301.40	-16028.80	24316.70	34.56	43.98	25.38	348.20	
45	418.06	2	SLE R	-73116.50	-13869.60	21041.00	34.56	43.98	21.70	299.89	
46	477.78	2	SLE R	-70943.50	-11736.80	17805.50	28.27	50.27	18.30	254.84	
47	537.50	2	SLE R	-68782.20	-9705.39	14723.70	21.99	56.55	15.35	215.50	
48	597.22	2	SLE R	-66632.00	-7826.95	11874.00	15.71	62.83	12.94	182.94	
49	656.94	2	SLE R	-64492.70	-6133.97	9305.64	0.00	78.54	11.01	156.72	
50	716.67	2	SLE R	-62363.90	-4643.48	7044.47	0.00	78.54	9.43	135.08	
51	776.39	2	SLE R	-60245.30	-3360.38	5097.92	0.00	78.54	8.05	116.18	
52	836.11	2	SLE R	-58136.50	-2280.42	3459.55	0.00	78.54	6.87	99.88	
53	895.83	2	SLE R	-56037.20	-1392.71	2112.83	0.00	78.54	5.86	86.03	
54	955.56	2	SLE R	-53947.10	-681.85	1034.41	0.00	78.54	5.03	74.44	
55	1015.28	2	SLE R	-51865.80	-129.72	196.79	0.00	78.54	4.34	64.89	
56	1075.00	2	SLE R	-49792.90	283.16	-429.57	0.00	78.54	4.31	64.33	
57	1134.72	2	SLE R	-47728.10	576.52	-874.61	0.00	78.54	4.42	65.56	
58	1194.44	2	SLE R	-45671.20	769.50	-1167.39	0.00	78.54	4.44	65.53	
59	1254.17	2	SLE R	-43621.60	880.13	-1335.22	0.00	78.54	4.37	64.44	
60	1313.89	2	SLE R	-41579.20	924.89	-1403.12	0.00	78.54	4.25	62.52	
61	1373.61	2	SLE R	-39543.60	918.52	-1393.45	0.00	78.54	4.08	59.96	
62	1433.33	2	SLE R	-37514.40	873.91	-1325.78	0.00	78.54	3.87	56.92	
63	1493.06	2	SLE R	-35491.40	802.16	-1216.93	0.00	78.54	3.64	53.53	
64	1552.78	2	SLE R	-33474.10	712.61	-1081.07	0.00	78.54	3.39	49.93	
65	1612.50	2	SLE R	-31462.40	613.02	-929.99	0.00	78.54	3.13	46.20	
66	1672.22	2	SLE R	-29455.70	509.73	-773.29	0.00	78.54	2.87	42.43	
67	1731.94	2	SLE R	-27453.80	407.87	-618.76	0.00	78.54	2.61	38.69	
68	1791.67	2	SLE R	-25456.50	311.54	-472.63	0.00	78.54	2.36	35.02	
69	1851.39	2	SLE R	-23463.20	224.05	-339.90	0.00	78.54	2.12	31.47	
70	1911.11	2	SLE R	-21473.90	148.07	-224.64	0.00	78.54	1.88	28.08	
71	1970.83	2	SLE R	-19488.00	85.83	-130.21	0.00	78.54	1.66	24.86	
72	2030.56	2	SLE R	-17505.30	39.25	-59.55	0.00	78.54	1.46	21.85	
73	2090.28	2	SLE R	-15525.40	10.09	-15.30	0.00	78.54	1.27	19.06	
74	2150.00	2	SLE R	-13548.10	0.00	0.00	0.00	78.54	1.10	16.52	
75	0.00	4	SLE Q	-86705.10	-21383.10	32439.50	40.84	37.70	34.60	470.13	
76	59.72	4	SLE Q	-86417.40	-22452.90	34062.50	40.84	37.70	36.64	496.10	
77	119.44	4	SLE Q	-84167.50	-22386.80	33962.30	40.84	37.70	36.67	510.94	
78	179.17	4	SLE Q	-81931.30	-21480.70	32587.70	40.84	37.70	35.11	480.17	
79	238.89	4	SLE Q	-79708.40	-19986.20	30320.30	40.84	37.70	32.43	440.11	
80	298.61	4	SLE Q	-77498.60	-18112.30	27477.50	34.56	43.98	29.06	396.29	
81	358.33	4	SLE Q	-75301.40	-16028.80	24316.70	34.56	43.98	25.38	348.20	
82	418.06	4	SLE Q	-73116.50	-13869.60	21041.00	34.56	43.98	21.70	299.89	
83	477.78	4	SLE Q	-70943.50	-11736.80	17805.50	28.27	50.27	18.30	254.84	
84	537.50	4	SLE Q	-68782.20	-9705.39	14723.70	21.99	56.55	15.35	215.50	
85	597.22	4	SLE Q	-66632.00	-7826.95	11874.00	15.71	62.83	12.94	182.94	
86	656.94	4	SLE Q	-64492.70	-6133.97	9305.64	0.00	78.54	11.01	156.72	
87	716.67	4	SLE Q	-62363.90	-4643.48	7044.47	0.00	78.54	9.43	135.08	
88	776.39	4	SLE Q	-60245.30	-3360.38	5097.92	0.00	78.54	8.05	116.18	
89	836.11	4	SLE Q	-58136.50	-2280.42	3459.55	0.00	78.54	6.87	99.88	
90	895.83	4	SLE Q	-56037.20	-1392.71	2112.83	0.00	78.54	5.86	86.03	
91	955.56	4	SLE Q	-53947.10	-681.85	1034.41	0.00	78.54	5.03	74.44	
92	1015.28	4	SLE Q	-51865.80	-129.72	196.79	0.00	78.54	4.34	64.89	
93	1075.00	4	SLE Q	-49792.90	283.16	-429.57	0.00	78.54	4.31	64.33	
94	1134.72	4	SLE Q	-47728.10	576.52	-874.61	0.00	78.54	4.42	65.56	
95	1194.44	4	SLE Q	-45671.20	769.50	-1167.39	0.00	78.54	4.44	65.53	
96	1254.17	4	SLE Q	-43621.60	880.13	-1335.22	0.00	78.54	4.37	64.44	
97	1313.89	4	SLE Q	-41579.20	924.89	-1403.12	0.00	78.54	4.25	62.52	
98	1373.61	4	SLE Q	-39543.60	918.52	-1393.45	0.00	78.54	4.08	59.96	
99	1433.33	4	SLE Q	-37514.40	873.91	-1325.78	0.00	78.54	3.87	56.92	
100	1493.06	4	SLE Q	-35491.40	802.16	-1216.93	0.00	78.54	3.64	53.53	
101	1552.78	4	SLE Q	-33474.10	712.61	-1081.07	0.00	78.54	3.39	49.93	
102	1612.50	4	SLE Q	-31462.40	613.02	-929.99	0.00	78.54	3.13	46.20	
103	1672.22	4	SLE Q	-29455.70	509.73	-773.29	0.00	78.54	2.87	42.43	
104	1731.94	4	SLE Q	-27453.80	407.87	-618.76	0.00	78.54	2.61	38.69	
105	1791.67	4	SLE Q	-25456.50	311.54	-472.63	0.00	78.54	2.36	35.02	
106	1851.39	4	SLE Q	-23463.20	224.05	-339.90	0.00	78.54	2.12	31.47	
107	1911.11	4	SLE Q	-21473.90	148.07	-224.64	0.00	78.54	1.88	28.08	
108	1970.83	4	SLE Q	-19488.00	85.83	-130.21	0.00	78.54	1.66	24.86	
109	2030.56	4	SLE Q	-17505.30	39.25	-59.55	0.00	78.54	1.46	21.85	
110	2090.28	4	SLE Q	-15525.40	10.09	-15.30	0.00	78.54	1.27	19.06	
111	2150.00	4	SLE Q	-13548.10	0.00	0.00	0.00	78.54	1.10	16.52	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_S <cmq>	$A_{C\&}$nbsp;eff <cmq>	σ_S <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-86705.10	32439.50	-21383.10	46.00	136.36	0.50	20.00	218.17	15.71	990.92	435.59	0.13	0.05
76	59.72	4	SLE Q	-86417.40	34062.50	-22452.90	46.00	136.36	0.50	20.00	200.37	18.85	1021.36	495.28	0.14	0.05
77	119.44	4	SLE Q	-84167.50	33962.30	-22386.80	46.00	136.36	0.50	20.00	201.72	18.85	1034.08	510.94	0.15	0.05
78	179.17	4	SLE Q	-81931.30	32587.70	-21480.70	46.00	136.36	0.50	20.00	200.90	18.85	1026.34	480.17	0.14	0.05
79	238.89	4	SLE Q	-79708.40	30320.30	-19986.20	46.00	136.36	0.50	20.00	219.44	15.71	1000.93	417.81	0.12	0.05
80	298.61	4	SLE Q	-77498.60	27477.50	-18112.30	46.00	136.36	0.50	20.00	213.75	15.71	956.23	338.01	0.10	0.04
81	358.33	4	SLE Q	-75301.40	24316.70	-16028.80	46.00	136.36	0.50	20.00	204.98	15.71	887.35	253.34	0.07	0.03
82	418.06	4	SLE Q	-73116.50	21041.00	-13869.60	46.00	136.36	0.50	20.00	191.46	15.71	781.13	174.22	0.05	0.02
83	477.78	4	SLE Q	-70943.50	17805.50	-11736.80	46.00	136.36	0.50	20.00	187.45	12.57	599.74	108.06	0.03	0.01
84	537.50	4	SLE Q	-68782.20	14723.70	-9705.39	46.00	136.36	0.50	20.00	174.44	9.42	388.47	58.06	0.02	0.01
85	597.22	4	SLE Q	-66632.00	11874.00	-7826.95	46.00	136.36	0.50	20.00	210.01	3.14	185.38	23.22	0.01	0.00
112	0.00	3	SLE F	-86705.10	32439.50	-21383.10	46.00	136.36	0.50	20.00	218.17	15.71	990.92	435.59	0.13	0.05
113	59.72	3	SLE F	-86417.40	34062.50	-22452.90	46.00	136.36	0.50	20.00	200.37	18.85	1021.36	495.28	0.14	0.05
114	119.44	3	SLE F	-84167.50	33962.30	-22386.80	46.00	136.36	0.50	20.00	201.72	18.85	1034.08	510.94	0.15	0.05
115	179.17	3	SLE F	-81931.30	32587.70	-21480.70	46.00	136.36	0.50	20.00	200.90	18.85	1026.34	480.17	0.14	0.05
116	238.89	3	SLE F	-79708.40	30320.30	-19986.20	46.00	136.36	0.50	20.00	219.44	15.71	1000.93	417.81	0.12	0.05
117	298.61	3	SLE F	-77498.60	27477.50	-18112.30	46.00	136.36	0.50	20.00	213.75	15.71	956.23	338.01	0.10	0.04
118	358.33	3	SLE F	-75301.40	24316.70	-16028.80	46.00	136.36	0.50	20.00	204.98	15.71	887.35	253.34	0.07	0.03
119	418.06	3	SLE F	-73116.50	21041.00	-13869.60	46.00	136.36	0.50	20.00	191.46	15.71	781.13	174.22	0.05	0.02
120	477.78	3	SLE F	-70943.50	17805.50	-11736.80	46.00	136.36	0.50	20.00	187.45	12.57	599.74	108.06	0.03	0.01
121	537.50	3	SLE F	-68782.20	14723.70	-9705.39	46.00	136.36	0.50	20.00	174.44	9.42	388.47	58.06	0.02	0.01
122	597.22	3	SLE F	-66632.00	11874.00	-7826.95	46.00	136.36	0.50	20.00	210.01	3.14	185.38	23.22	0.01	0.00

Verifiche principali

Caso	Tipo
3	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
39	C.Rare - Sf min (max compr.)
40	C.Rare - Sc min (max compr.),C.Rare - Sf max (max traz.)
50	C.Rare - Sc max (min. compr.)
76	C.Q.Per. - Sf min (max compr.)
77	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf max (max traz.),C.Q.Per. - Wk Max
87	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 31

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 31 (-28)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	75796.60	7376.75	907.60	46133.80	16556.40
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	75796.60	7376.75	907.60	46133.80	16556.40
2	2	SLE R	RVN	56145.60	5464.26	672.29	34173.10	12264.00
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	56145.60	5464.26	672.29	34173.10	12264.00
3	3	SLE F	RVN	56145.60	5464.26	672.29	34173.10	12264.00
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	56145.60	5464.26	672.29	34173.10	12264.00
4	4	SLE Q	RVN	56145.60	5464.26	672.29	34173.10	12264.00

	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	56145.60	5464.26	672.29	34173.10	12264.00

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-75796.60	-7376.75	-907.60	-46133.80	-16556.40
2	2	SLE R	1	-56145.60	-5464.26	-672.29	-34173.10	-12264.00
3	3	SLE F	1	-56145.60	-5464.26	-672.29	-34173.10	-12264.00
4	4	SLE Q	1	-56145.60	-5464.26	-672.29	-34173.10	-12264.00

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-75796.60	45596.90	-16363.70	-75796.60	167659.00	-60363.50	2-3	200.00	3.678
2	59.72	1	SLU	-75659.40	48265.50	-17321.50	-75659.40	167607.00	-60345.50	2-3	200.00	3.474
3	119.44	1	SLU	-73708.90	48397.20	-17368.70	-73708.90	166866.00	-60089.30	2-3	200.00	3.449
4	179.17	1	SLU	-71770.40	46641.90	-16738.80	-71770.40	166128.00	-59834.40	2-3	200.00	3.563
5	238.89	1	SLU	-69843.60	43554.10	-15630.60	-69843.60	165390.00	-59580.70	2-3	200.00	3.799
6	298.61	1	SLU	-67928.20	39596.00	-14210.10	-67928.20	164656.00	-59328.30	2-3	200.00	4.160
7	358.33	1	SLU	-66023.90	35143.80	-12612.40	-66023.90	163926.00	-59077.10	2-3	200.00	4.667
8	418.06	1	SLU	-64130.30	30495.60	-10944.20	-64130.30	163201.00	-58827.20	2-3	200.00	5.354
9	477.78	1	SLU	-62247.20	25880.00	-9287.78	-62247.20	162476.00	-58578.50	2-3	200.00	6.281
10	537.50	1	SLU	-60374.30	21465.30	-7703.44	-60374.30	161753.00	-58330.90	2-3	200.00	7.540
11	597.22	1	SLU	-58511.20	17368.80	-6233.27	-58511.20	161034.00	-58084.40	2-3	200.00	9.277
12	656.94	1	SLU	-56657.70	13665.20	-4904.14	-56657.70	160318.00	-57838.90	2-3	200.00	11.739
13	716.67	1	SLU	-54813.40	10395.10	-3730.59	-54813.40	159606.00	-57594.40	2-3	200.00	15.364
14	776.39	1	SLU	-52978.10	7572.13	-2717.47	-52978.10	158893.00	-57351.10	2-3	200.00	20.998
15	836.11	1	SLU	-51151.40	5189.22	-1862.30	-51151.40	158182.00	-57108.70	2-3	200.00	30.504
16	895.83	1	SLU	-49333.00	3224.46	-1157.19	-49333.00	157475.00	-56867.20	2-3	200.00	48.873
17	955.56	1	SLU	-47522.70	1645.71	-590.61	-2571250.00	156771.00	-56626.60	2-3	200.00	54.106
18	1015.28	1	SLU	-45720.10	414.45	-148.74	-2571250.00	156069.00	-56386.80	2-3	200.00	56.239
19	1075.00	1	SLU	-43925.00	-511.08	183.42	-2571250.00	-155130.00	57054.50	2-3	20.00	58.537
20	1134.72	1	SLU	-42137.10	-1173.44	421.12	-2571250.00	-154453.00	56751.10	2-3	20.00	61.021
21	1194.44	1	SLU	-40356.10	-1614.15	579.28	-2571250.00	-153778.00	56448.20	2-3	20.00	63.714
22	1254.17	1	SLU	-38581.60	-1872.42	671.97	-2571250.00	-153104.00	56146.80	2-3	20.00	66.644
23	1313.89	1	SLU	-36813.40	-1984.24	712.10	-2571250.00	-152433.00	55846.80	2-3	20.00	69.845
24	1373.61	1	SLU	-35051.30	-1981.88	711.25	-2571250.00	-151763.00	55548.00	2-3	20.00	73.357
25	1433.33	1	SLU	-33294.80	-1893.69	679.60	-2571250.00	-151095.00	55247.60	2-3	20.00	77.227
26	1493.06	1	SLU	-31543.80	-1744.08	625.91	-2571250.00	-150427.00	54946.30	2-3	20.00	81.514
27	1552.78	1	SLU	-29797.90	-1553.72	557.60	-2571250.00	-149761.00	54646.20	2-3	20.00	86.290
28	1612.50	1	SLU	-28056.90	-1339.79	480.82	-2571250.00	-149097.00	54347.30	2-3	20.00	91.644
29	1672.22	1	SLU	-26320.50	-1116.39	400.65	-2571250.00	-148433.00	54049.40	2-3	20.00	97.690
30	1731.94	1	SLU	-24588.40	-894.99	321.19	-2571250.00	-147771.00	53751.40	2-3	20.00	>100
31	1791.67	1	SLU	-22860.20	-684.81	245.76	-2571250.00	-147109.00	53450.40	2-3	20.00	>100
32	1851.39	1	SLU	-21135.80	-493.28	177.03	-2571250.00	-146448.00	53150.30	2-3	20.00	>100
33	1911.11	1	SLU	-19414.90	-326.49	117.17	-2571250.00	-145788.00	52851.20	2-3	20.00	>100
34	1970.83	1	SLU	-17697.10	-189.51	68.01	-2571250.00	-145129.00	52553.10	2-3	20.00	>100
35	2030.56	1	SLU	-15982.20	-86.78	31.14	-2571250.00	-144470.00	52255.50	2-3	20.00	>100
36	2090.28	1	SLU	-14269.90	-22.33	8.01	-2571250.00	-143812.00	51954.80	2-3	20.00	>100
37	2150.00	1	SLU	-12560.00	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7376.75	907.60	0.85	11.31	7432.37	1.00	32294.70	342525.00	32294.70	4.345
2	59.72	1	SLU	2266.79	278.89	0.85	11.31	2283.88	1.00	32294.70	342505.00	32294.70	14.140
3	119.44	1	SLU	-1610.51	-198.15	0.85	11.31	1622.66	1.00	32294.70	342226.00	32294.70	19.902
4	179.17	1	SLU	-4425.03	-544.43	0.85	11.31	4458.39	1.00	32294.70	341948.00	32294.70	7.244
5	238.89	1	SLU	-6343.43	-780.46	0.85	11.31	6391.26	1.00	32294.70	341672.00	32294.70	5.053
6	298.61	1	SLU	-7523.66	-925.67	0.85	11.31	7580.39	1.00	32294.70	341398.00	32294.70	4.260
7	358.33	1	SLU	-8111.12	-997.95	0.85	11.31	8172.28	1.00	32294.70	341125.00	32294.70	3.952
8	418.06	1	SLU	-8236.35	-1013.36	0.85	11.31	8298.45	1.00	32294.70	340854.00	32294.70	3.892
9	477.78	1	SLU	-8013.85	-985.98	0.85	11.31	8074.28	1.00	32294.70	340584.00	32294.70	4.000
10	537.50	1	SLU	-7541.87	-927.91	0.85	11.31	7598.74	1.00	32294.70	340316.00	32294.70	4.250
11	597.22	1	SLU	-6902.81	-849.28	0.85	11.31	6954.86	1.00	32294.70	340049.00	32294.70	4.643
12	656.94	1	SLU	-6164.18	-758.41	0.85	11.31	6210.66	1.00	32294.70	339784.00	32294.70	5.200
13	716.67	1	SLU	-5379.83	-661.91	0.85	11.31	5420.40	1.00	32294.70	339520.00	32294.70	5.958
14	776.39	1	SLU	-4591.45	-564.91	0.85	11.31	4626.07	1.00	32294.70	339257.00	32294.70	6.981
15	836.11	1	SLU	-3830.10	-471.24	0.85	11.31	3858.98	1.00	32294.70	338995.00	32294.70	8.369
16	895.83	1	SLU	-3117.75	-383.59	0.85	11.31	3141.26	1.00	32294.70	338735.00	32294.70	10.281
17	955.56	1	SLU	-2468.83	-303.75	0.85	11.31	2487.45	1.00	32294.70	338475.00	32294.70	12.983
18	1015.28	1	SLU	-1891.58	-232.73	0.85	11.31	1905.85	1.00	32294.70	338217.00	32294.70	16.945
19	1075.00	1	SLU	-1389.39	-170.94	0.85	11.31	1399.87	1.00	32294.70	337960.00	32294.70	23.070
20	1134.72	1	SLU	-961.90	-118.35	0.85	11.31	969.15	1.00	32294.70	337704.00	32294.70	33.323
21	1194.44	1	SLU	-605.99	-74.56	0.85	11.31	610.55	1.00	32294.70	337449.00	32294.70	52.894
22	1254.17	1	SLU	-316.66	-38.96	0.85	11.31	319.05	1.00	32294.70	337194.00	32294.70	>100
23	1313.89	1	SLU	-87.71	-10.79	0.85	11.31	88.37	1.00	32294.70	336941.00	32294.70	>100
24	1373.61	1	SLU	87.69	10.79	0.85	11.31	88.36	1.00	32294.70	336689.00	32294.70	>100
25	1433.33	1	SLU	216.55	26.64	0.85	11.31	218.18	1.00	32294.70	336437.00	32294.70	>100
26	1493.06	1	SLU	305.69	37.61	0.85	11.31	308.00	1.00	32294.70	336186.00	32294.70	>100
27	1552.78	1	SLU	361.52	44.48	0.85	11.31	364.24	1.00	32294.70	335936.00	32294.70	88.663
28	1612.50	1	SLU	389.82	47.96	0.85	11.31	392.76	1.00	32294.70	335687.00	32294.70	82.225
29	1672.22	1	SLU	395.70	48.68	0.85	11.31	398.68	1.00	32294.70	335438.00	32294.70	81.004
30	1731.94	1	SLU	383.45	47.18	0.85	11.31	386.34	1.00	32294.70	335190.00	32294.70	83.591
31	1791.67	1	SLU	356.61	43.88	0.85	11.31	359.30	1.00	32294.70	334943.00	32294.70	89.882
32	1851.39	1	SLU	317.96	39.12	0.85	11.31	320.36	1.00	32294.70	334696.00	32294.70	>100
33	1911.11	1	SLU	269.56	33.17	0.85	11.31	271.59	1.00	32294.70	334449.00	32294.70	>100
34	1970.83	1	SLU	212.85	26.19	0.85	11.31	214.46	1.00	32294.70	334203.00	32294.70	>100
35	2030.56	1	SLU	148.75	18.30	0.85	11.31	149.87	1.00	32294.70	333957.00	32294.70	>100
36	2090.28	1	SLU	77.73	9.56	0.85	11.31	78.32	1.00	32294.70	333712.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-56145.60	-12121.30	33775.50	43.98	34.56	33.75	628.69	
39	59.72	2	SLE R	-56279.70	-12830.70	35752.30	43.98	34.56	35.97	700.38	
40	119.44	2	SLE R	-54868.50	-12865.70	35849.80	43.98	34.56	36.19	719.98	
41	179.17	2	SLE R	-53466.30	-12399.10	34549.60	43.98	34.56	34.83	687.20	
42	238.89	2	SLE R	-52072.80	-11578.20	32262.30	43.98	34.56	32.36	617.65	
43	298.61	2	SLE R	-50687.80	-10526.00	29330.30	40.84	37.70	29.16	525.11	
44	358.33	2	SLE R	-49311.00	-9342.48	26032.50	40.84	37.70	25.54	421.38	
45	418.06	2	SLE R	-47942.30	-8106.83	22589.40	40.84	37.70	21.77	316.58	
46	477.78	2	SLE R	-46581.40	-6879.83	19170.40	37.70	40.84	18.08	246.21	
47	537.50	2	SLE R	-45228.10	-5706.25	15900.20	34.56	43.98	14.66	201.79	
48	597.22	2	SLE R	-43882.20	-4617.24	12865.80	28.27	50.27	11.73	163.12	
49	656.94	2	SLE R	-42543.50	-3632.70	10122.40	21.99	56.55	9.39	131.93	
50	716.67	2	SLE R	-41211.70	-2763.40	7700.10	15.71	62.83	7.63	108.22	
51	776.39	2	SLE R	-39886.60	-2012.94	5608.98	0.00	78.54	6.33	90.39	
52	836.11	2	SLE R	-38568.10	-1379.48	3843.86	0.00	78.54	5.25	75.64	
53	895.83	2	SLE R	-37255.80	-857.18	2388.49	0.00	78.54	4.34	63.21	
54	955.56	2	SLE R	-35949.60	-437.49	1219.05	0.00	78.54	3.59	52.91	
55	1015.28	2	SLE R	-34649.20	-110.17	307.00	0.00	78.54	2.99	44.53	
56	1075.00	2	SLE R	-33354.60	135.86	-378.58	0.00	78.54	2.92	43.50	
57	1134.72	2	SLE R	-32065.30	311.94	-869.22	0.00	78.54	3.08	45.59	
58	1194.44	2	SLE R	-30781.30	429.10	-1195.67	0.00	78.54	3.16	46.47	
59	1254.17	2	SLE R	-29502.30	497.76	-1386.98	0.00	78.54	3.16	46.34	
60	1313.89	2	SLE R	-28228.20	527.48	-1469.80	0.00	78.54	3.10	45.40	
61	1373.61	2	SLE R	-26958.60	526.85	-1468.06	0.00	78.54	3.00	43.84	
62	1433.33	2	SLE R	-25693.40	503.41	-1402.73	0.00	78.54	2.86	41.81	
63	1493.06	2	SLE R	-24432.50	463.64	-1291.91	0.00	78.54	2.70	39.45	
64	1552.78	2	SLE R	-23175.50	413.03	-1150.90	0.00	78.54	2.52	36.86	
65	1612.50	2	SLE R	-21922.30	356.16	-992.43	0.00	78.54	2.33	34.15	
66	1672.22	2	SLE R	-20672.60	296.78	-826.96	0.00	78.54	2.13	31.39	
67	1731.94	2	SLE R	-19426.40	237.92	-662.96	0.00	78.54	1.94	28.64	
68	1791.67	2	SLE R	-18183.30	182.05	-507.26	0.00	78.54	1.76	25.96	
69	1851.39	2	SLE R	-16943.20	131.13	-365.39	0.00	78.54	1.58	23.39	
70	1911.11	2	SLE R	-15705.80	86.79	-241.84	0.00	78.54	1.41	20.96	
71	1970.83	2	SLE R	-14471.00	50.38	-140.38	0.00	78.54	1.25	18.69	
72	2030.56	2	SLE R	-13238.60	23.07	-64.28	0.00	78.54	1.11	16.62	
73	2090.28	2	SLE R	-12008.30	5.94	-16.54	0.00	78.54	0.99	14.76	
74	2150.00	2	SLE R	-10780.00	0.00	0.00	0.00	78.54	0.88	13.14	
75	0.00	4	SLE Q	-56145.60	-12121.30	33775.50	43.98	34.56	33.75	628.69	
76	59.72	4	SLE Q	-56279.70	-12830.70	35752.30	43.98	34.56	35.97	700.38	
77	119.44	4	SLE Q	-54868.50	-12865.70	35849.80	43.98	34.56	36.19	719.98	
78	179.17	4	SLE Q	-53466.30	-12399.10	34549.60	43.98	34.56	34.83	687.20	

79	238.89	4	SLE Q	-52072.80	-11578.20	32262.30	43.98	34.56	32.36	617.65	
80	298.61	4	SLE Q	-50687.80	-10526.00	29330.30	40.84	37.70	29.16	525.11	
81	358.33	4	SLE Q	-49311.00	-9342.48	26032.50	40.84	37.70	25.54	421.38	
82	418.06	4	SLE Q	-47942.30	-8106.83	22589.40	40.84	37.70	21.77	316.58	
83	477.78	4	SLE Q	-46581.40	-6879.83	19170.40	37.70	40.84	18.08	246.21	
84	537.50	4	SLE Q	-45228.10	-5706.25	15900.20	34.56	43.98	14.66	201.79	
85	597.22	4	SLE Q	-43882.20	-4617.24	12865.80	28.27	50.27	11.73	163.12	
86	656.94	4	SLE Q	-42543.50	-3632.70	10122.40	21.99	56.55	9.39	131.93	
87	716.67	4	SLE Q	-41211.70	-2763.40	7700.10	15.71	62.83	7.63	108.22	
88	776.39	4	SLE Q	-39886.60	-2012.94	5608.98	0.00	78.54	6.33	90.39	
89	836.11	4	SLE Q	-38568.10	-1379.48	3843.86	0.00	78.54	5.25	75.64	
90	895.83	4	SLE Q	-37255.80	-857.18	2388.49	0.00	78.54	4.34	63.21	
91	955.56	4	SLE Q	-35949.60	-437.49	1219.05	0.00	78.54	3.59	52.91	
92	1015.28	4	SLE Q	-34649.20	-110.17	307.00	0.00	78.54	2.99	44.53	
93	1075.00	4	SLE Q	-33354.60	135.86	-378.58	0.00	78.54	2.92	43.50	
94	1134.72	4	SLE Q	-32065.30	311.94	-869.22	0.00	78.54	3.08	45.59	
95	1194.44	4	SLE Q	-30781.30	429.10	-1195.67	0.00	78.54	3.16	46.47	
96	1254.17	4	SLE Q	-29502.30	497.76	-1386.98	0.00	78.54	3.16	46.34	
97	1313.89	4	SLE Q	-28228.20	527.48	-1469.80	0.00	78.54	3.10	45.40	
98	1373.61	4	SLE Q	-26958.60	526.85	-1468.06	0.00	78.54	3.00	43.84	
99	1433.33	4	SLE Q	-25693.40	503.41	-1402.73	0.00	78.54	2.86	41.81	
100	1493.06	4	SLE Q	-24432.50	463.64	-1291.91	0.00	78.54	2.70	39.45	
101	1552.78	4	SLE Q	-23175.50	413.03	-1150.90	0.00	78.54	2.52	36.86	
102	1612.50	4	SLE Q	-21922.30	356.16	-992.43	0.00	78.54	2.33	34.15	
103	1672.22	4	SLE Q	-20672.60	296.78	-826.96	0.00	78.54	2.13	31.39	
104	1731.94	4	SLE Q	-19426.40	237.92	-662.96	0.00	78.54	1.94	28.64	
105	1791.67	4	SLE Q	-18183.30	182.05	-507.26	0.00	78.54	1.76	25.96	
106	1851.39	4	SLE Q	-16943.20	131.13	-365.39	0.00	78.54	1.58	23.39	
107	1911.11	4	SLE Q	-15705.80	86.79	-241.84	0.00	78.54	1.41	20.96	
108	1970.83	4	SLE Q	-14471.00	50.38	-140.38	0.00	78.54	1.25	18.69	
109	2030.56	4	SLE Q	-13238.60	23.07	-64.28	0.00	78.54	1.11	16.62	
110	2090.28	4	SLE Q	-12008.30	5.94	-16.54	0.00	78.54	0.99	14.76	
111	2150.00	4	SLE Q	-10780.00	0.00	0.00	0.00	78.54	0.88	13.14	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_S <cmq>	A_{C} eff <cmq>	σ_S <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-56145.60	33775.50	-12121.30	46.00	136.36	0.50	20.00	196.39	21.99	1147.79	628.69	0.18	0.06
76	59.72	4	SLE Q	-56279.70	35752.30	-12830.70	46.00	136.36	0.50	20.00	197.88	21.99	1164.23	700.38	0.20	0.07
77	119.44	4	SLE Q	-54868.50	35849.80	-12865.70	46.00	136.36	0.50	20.00	198.60	21.99	1172.13	719.98	0.21	0.07
78	179.17	4	SLE Q	-53466.30	34549.60	-12399.10	46.00	136.36	0.50	20.00	198.32	21.99	1169.07	687.20	0.20	0.07
79	238.89	4	SLE Q	-52072.80	32262.30	-11578.20	46.00	136.36	0.50	20.00	197.21	21.99	1156.87	617.65	0.18	0.06
80	298.61	4	SLE Q	-50687.80	29330.30	-10526.00	46.00	136.36	0.50	20.00	195.23	21.99	1135.10	525.11	0.15	0.05
81	358.33	4	SLE Q	-49311.00	26032.50	-9342.48	46.00	136.36	0.50	20.00	192.18	21.99	1101.55	421.38	0.12	0.04
82	418.06	4	SLE Q	-47942.30	22589.40	-8106.83	46.00	136.36	0.50	20.00	203.52	18.85	1051.02	316.58	0.09	0.03
83	477.78	4	SLE Q	-46581.40	19170.40	-6879.83	46.00	136.36	0.50	20.00	216.05	15.71	974.30	219.48	0.06	0.02
84	537.50	4	SLE Q	-45228.10	15900.20	-5706.25	46.00	136.36	0.50	20.00	201.17	15.71	857.39	137.43	0.04	0.01
85	597.22	4	SLE Q	-43882.20	12865.80	-4617.24	46.00	136.36	0.50	20.00	174.51	15.71	648.01	75.39	0.02	0.01
86	656.94	4	SLE Q	-42543.50	10122.40	-3632.70	46.00	136.36	0.50	20.00	170.33	9.42	369.14	33.87	0.01	0.00
112	0.00	3	SLE F	-56145.60	33775.50	-12121.30	46.00	136.36	0.50	20.00	196.39	21.99	1147.79	628.69	0.18	0.06
113	59.72	3	SLE F	-56279.70	35752.30	-12830.70	46.00	136.36	0.50	20.00	197.88	21.99	1164.23	700.38	0.20	0.07
114	119.44	3	SLE F	-54868.50	35849.80	-12865.70	46.00	136.36	0.50	20.00	198.60	21.99	1172.13	719.98	0.21	0.07
115	179.17	3	SLE F	-53466.30	34549.60	-12399.10	46.00	136.36	0.50	20.00	198.32	21.99	1169.07	687.20	0.20	0.07
116	238.89	3	SLE F	-52072.80	32262.30	-11578.20	46.00	136.36	0.50	20.00	197.21	21.99	1156.87	617.65	0.18	0.06
117	298.61	3	SLE F	-50687.80	29330.30	-10526.00	46.00	136.36	0.50	20.00	195.23	21.99	1135.10	525.11	0.15	0.05
118	358.33	3	SLE F	-49311.00	26032.50	-9342.48	46.00	136.36	0.50	20.00	192.18	21.99	1101.55	421.38	0.12	0.04
119	418.06	3	SLE F	-47942.30	22589.40	-8106.83	46.00	136.36	0.50	20.00	203.52	18.85	1051.02	316.58	0.09	0.03
120	477.78	3	SLE F	-46581.40	19170.40	-6879.83	46.00	136.36	0.50	20.00	216.05	15.71	974.30	219.48	0.06	0.02
121	537.50	3	SLE F	-45228.10	15900.20	-5706.25	46.00	136.36	0.50	20.00	201.17	15.71	857.39	137.43	0.04	0.01
122	597.22	3	SLE F	-43882.20	12865.80	-4617.24	46.00	136.36	0.50	20.00	174.51	15.71	648.01	75.39	0.02	0.01
123	656.94	3	SLE F	-42543.50	10122.40	-3632.70	46.00	136.36	0.50	20.00	170.33	9.42	369.14	33.87	0.01	0.00

Verifiche principali

Caso	Tipo
3	SLU N cost - min. sic.
8	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
40	C.Rare - Sc min (max compr.),C.Rare - Sf max (max traz.),C.Rare - Sf min (max compr.)
51	C.Rare - Sc max (min. compr.)
77	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf max (max traz.),C.Q.Per. - Sf min (max compr.),C.Q.Per. - Wk Max
88	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 32

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 32 (-16)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	42291.80	7602.11	719.41	43493.70	7315.00
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	42291.80	7602.11	719.41	43493.70	7315.00
2	2	SLE R	RVN	31327.20	5631.19	532.90	32217.50	5418.52
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	31327.20	5631.19	532.90	32217.50	5418.52
3	3	SLE F	RVN	31327.20	5631.19	532.90	32217.50	5418.52
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	31327.20	5631.19	532.90	32217.50	5418.52
4	4	SLE Q	RVN	31327.20	5631.19	532.90	32217.50	5418.52
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	31327.20	5631.19	532.90	32217.50	5418.52

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-42291.80	-7602.11	-719.41	-43493.70	-7315.00
2	2	SLE R	1	-31327.20	-5631.19	-532.90	-32217.50	-5418.52
3	3	SLE F	1	-31327.20	-5631.19	-532.90	-32217.50	-5418.52
4	4	SLE Q	1	-31327.20	-5631.19	-532.90	-32217.50	-5418.52

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-42291.80	42960.30	-7225.29	-42291.80	162282.00	-28311.90	2-3	190.00	3.781
2	59.72	1	SLU	-42617.10	45956.00	-7729.13	-42617.10	162410.00	-28336.10	2-3	190.00	3.538
3	119.44	1	SLU	-41586.20	46418.60	-7806.94	-41586.20	162003.00	-28259.40	2-3	190.00	3.494
4	179.17	1	SLU	-40562.00	44984.60	-7565.76	-40562.00	161598.00	-28183.10	2-3	190.00	3.596
5	238.89	1	SLU	-39544.40	42198.50	-7097.18	-39544.40	161195.00	-28107.40	2-3	190.00	3.824
6	298.61	1	SLU	-38533.30	38516.20	-6477.86	-38533.30	160780.00	-28065.90	2-3	190.00	4.179
7	358.33	1	SLU	-37528.50	34309.90	-5770.42	-37528.50	160365.00	-28029.80	2-3	190.00	4.679
8	418.06	1	SLU	-36529.80	29876.00	-5024.70	-36529.80	159952.00	-27993.80	2-3	190.00	5.360
9	477.78	1	SLU	-35537.10	25443.00	-4279.15	-35537.10	159542.00	-27957.90	2-3	190.00	6.278
10	537.50	1	SLU	-34550.20	21180.50	-3562.26	-34550.20	159134.00	-27922.00	2-3	190.00	7.522
11	597.22	1	SLU	-33568.90	17207.80	-2894.10	-33568.90	158727.00	-27887.70	2-3	190.00	9.236
12	656.94	1	SLU	-32593.10	13602.20	-2287.69	-32593.10	158322.00	-27854.50	2-3	190.00	11.655
13	716.67	1	SLU	-31622.60	10407.20	-1750.34	-31622.60	157918.00	-27821.30	2-3	190.00	15.194
14	776.39	1	SLU	-30657.20	7639.38	-1284.83	-30657.20	157517.00	-27788.20	2-3	190.00	20.648
15	836.11	1	SLU	-29696.90	5294.82	-890.51	-29696.90	157118.00	-27755.00	2-3	190.00	29.716
16	895.83	1	SLU	-28741.40	3354.46	-564.17	-28741.40	156720.00	-27721.80	2-3	190.00	46.788
17	955.56	1	SLU	-27790.60	1788.80	-300.85	-27790.60	156325.00	-27688.60	2-3	190.00	87.522
18	1015.28	1	SLU	-26844.30	561.75	-94.48	-2571250.00	156168.00	-25901.30	2-3	189.38	95.784
19	1075.00	1	SLU	-25902.40	-366.32	61.61	-2571250.00	-155311.00	27464.80	2-3	10.00	99.267

20	1134.72	1	SLU	-24964.80	-1036.11	174.26	-2571250.00	-154925.00	27393.00	2-3		10.00	>100
21	1194.44	1	SLU	-24031.20	-1487.61	250.19	-24031.20	-154541.00	27321.40	2-3		10.00	>100
22	1254.17	1	SLU	-23101.50	-1758.73	295.79	-23101.50	-154159.00	27250.20	2-3		10.00	87.779
23	1313.89	1	SLU	-22175.60	-1884.42	316.93	-22175.60	-153778.00	27179.20	2-3		10.00	81.722
24	1373.61	1	SLU	-21253.30	-1896.17	318.91	-21253.30	-153398.00	27108.60	2-3		10.00	81.015
25	1433.33	1	SLU	-20334.50	-1821.69	306.38	-20334.50	-153020.00	27038.20	2-3		10.00	84.119
26	1493.06	1	SLU	-19419.00	-1684.96	283.38	-19419.00	-152642.00	26968.00	2-3		10.00	90.720
27	1552.78	1	SLU	-18506.70	-1506.33	253.34	-18506.70	-152266.00	26897.90	2-3		10.00	>100
28	1612.50	1	SLU	-17597.40	-1302.82	219.12	-17597.40	-151890.00	26827.50	2-3		10.00	>100
29	1672.22	1	SLU	-16690.90	-1088.44	183.06	-16690.90	-151515.00	26757.40	2-3		10.00	>100
30	1731.94	1	SLU	-15787.20	-874.63	147.10	-2571250.00	-151141.00	26683.40	2-3		10.00	>100
31	1791.67	1	SLU	-14886.10	-670.66	112.80	-2571250.00	-150767.00	26607.70	2-3		10.00	>100
32	1851.39	1	SLU	-13987.40	-484.04	81.41	-2571250.00	-150394.00	26532.30	2-3		10.00	>100
33	1911.11	1	SLU	-13090.90	-320.95	53.98	-2571250.00	-150021.00	26457.10	2-3		10.00	>100
34	1970.83	1	SLU	-12196.60	-186.62	31.39	-2571250.00	-149650.00	26382.10	2-3		10.00	>100
35	2030.56	1	SLU	-11304.30	-85.59	14.40	-2571250.00	-149279.00	26307.40	2-3		10.00	>100
36	2090.28	1	SLU	-10413.90	-22.05	3.71	-2571250.00	-148909.00	26232.70	2-3		10.00	>100
37	2150.00	1	SLU	-9525.11	0.00	0.00	-2571250.00						>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7602.11	719.41	0.85	11.31	7636.07	1.00	32294.70	337726.00	32294.70	4.229
2	59.72	1	SLU	2730.78	258.42	0.85	11.31	2742.98	1.00	32294.70	337773.00	32294.70	11.774
3	119.44	1	SLU	-987.27	-93.43	0.85	11.31	991.68	1.00	32294.70	337625.00	32294.70	32.566
4	179.17	1	SLU	-3707.51	-350.85	0.85	11.31	3724.08	1.00	32294.70	337478.00	32294.70	8.672
5	238.89	1	SLU	-5583.46	-528.38	0.85	11.31	5608.40	1.00	32294.70	337332.00	32294.70	5.758
6	298.61	1	SLU	-6761.28	-639.84	0.85	11.31	6791.49	1.00	32294.70	337188.00	32294.70	4.755
7	358.33	1	SLU	-7376.15	-698.03	0.85	11.31	7409.10	1.00	32294.70	337044.00	32294.70	4.359
8	418.06	1	SLU	-7549.84	-714.46	0.85	11.31	7583.57	1.00	32294.70	336901.00	32294.70	4.259
9	477.78	1	SLU	-7389.59	-699.30	0.85	11.31	7422.60	1.00	32294.70	336758.00	32294.70	4.351
10	537.50	1	SLU	-6987.69	-661.26	0.85	11.31	7018.90	1.00	32294.70	336617.00	32294.70	4.601
11	597.22	1	SLU	-6421.84	-607.72	0.85	11.31	6450.53	1.00	32294.70	336476.00	32294.70	5.007
12	656.94	1	SLU	-5755.94	-544.70	0.85	11.31	5781.65	1.00	32294.70	336337.00	32294.70	5.586
13	716.67	1	SLU	-5041.19	-477.06	0.85	11.31	5063.71	1.00	32294.70	336198.00	32294.70	6.378
14	776.39	1	SLU	-4317.44	-408.57	0.85	11.31	4336.73	1.00	32294.70	336059.00	32294.70	7.447
15	836.11	1	SLU	-3614.55	-342.06	0.85	11.31	3630.69	1.00	32294.70	335922.00	32294.70	8.895
16	895.83	1	SLU	-2953.86	-279.53	0.85	11.31	2967.06	1.00	32294.70	335785.00	32294.70	10.884
17	955.56	1	SLU	-2349.58	-222.35	0.85	11.31	2360.08	1.00	32294.70	335649.00	32294.70	13.684
18	1015.28	1	SLU	-1810.07	-171.29	0.85	11.31	1818.16	1.00	32294.70	335513.00	32294.70	17.762
19	1075.00	1	SLU	-1339.06	-126.72	0.85	11.31	1345.04	1.00	32294.70	335378.00	32294.70	24.010
20	1134.72	1	SLU	-936.68	-88.64	0.85	11.31	940.87	1.00	32294.70	335244.00	32294.70	34.324
21	1194.44	1	SLU	-600.45	-56.82	0.85	11.31	603.13	1.00	32294.70	335110.00	32294.70	53.545
22	1254.17	1	SLU	-326.01	-30.85	0.85	11.31	327.46	1.00	32294.70	334977.00	32294.70	98.621
23	1313.89	1	SLU	-107.82	-10.20	0.85	11.31	108.30	1.00	32294.70	334845.00	32294.70	>100
24	1373.61	1	SLU	60.30	5.71	0.85	11.31	60.57	1.00	32294.70	334712.00	32294.70	>100
25	1433.33	1	SLU	184.75	17.48	0.85	11.31	185.57	1.00	32294.70	334581.00	32294.70	>100
26	1493.06	1	SLU	271.79	25.72	0.85	11.31	273.00	1.00	32294.70	334450.00	32294.70	>100
27	1552.78	1	SLU	327.33	30.98	0.85	11.31	328.80	1.00	32294.70	334319.00	32294.70	98.221
28	1612.50	1	SLU	356.76	33.76	0.85	11.31	358.35	1.00	32294.70	334189.00	32294.70	90.120
29	1672.22	1	SLU	364.79	34.52	0.85	11.31	366.42	1.00	32294.70	334059.00	32294.70	88.135
30	1731.94	1	SLU	355.45	33.64	0.85	11.31	357.04	1.00	32294.70	333929.00	32294.70	90.451
31	1791.67	1	SLU	332.04	31.42	0.85	11.31	333.53	1.00	32294.70	333800.00	32294.70	96.828
32	1851.39	1	SLU	297.16	28.12	0.85	11.31	298.49	1.00	32294.70	333672.00	32294.70	>100
33	1911.11	1	SLU	252.74	23.92	0.85	11.31	253.87	1.00	32294.70	333543.00	32294.70	>100
34	1970.83	1	SLU	200.15	18.94	0.85	11.31	201.04	1.00	32294.70	333415.00	32294.70	>100
35	2030.56	1	SLU	140.23	13.27	0.85	11.31	140.86	1.00	32294.70	333287.00	32294.70	>100
36	2090.28	1	SLU	73.45	6.95	0.85	11.31	73.78	1.00	32294.70	333160.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_C <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-31327.20	-5352.07	31822.40	47.12	31.42	31.25	791.29	
39	59.72	2	SLE R	-31803.90	-5725.28	34041.50	47.12	31.42	33.52	868.46	
40	119.44	2	SLE R	-31073.90	-5782.92	34384.20	50.27	28.27	33.91	890.83	
41	179.17	2	SLE R	-30349.00	-5604.27	33321.90	50.27	28.27	32.85	860.25	
42	238.89	2	SLE R	-29629.00	-5257.17	31258.20	47.12	31.42	30.76	791.95	
43	298.61	2	SLE R	-28913.80	-4798.41	28530.50	47.12	31.42	27.97	698.86	
44	358.33	2	SLE R	-28203.40	-4274.39	25414.70	43.98	34.56	24.77	591.67	
45	418.06	2	SLE R	-27497.50	-3722.00	22130.30	43.98	34.56	21.39	479.09	
46	477.78	2	SLE R	-26796.20	-3169.74	18846.70	43.98	34.56	17.98	368.14	
47	537.50	2	SLE R	-26099.20	-2638.71	15689.30	43.98	34.56	14.69	264.59	
48	597.22	2	SLE R	-25406.40	-2143.77	12746.50	40.84	37.70	11.63	173.46	
49	656.94	2	SLE R	-24717.90	-1694.58	10075.70	37.70	40.84	8.91	123.38	
50	716.67	2	SLE R	-24033.30	-1296.55	7709.02	31.42	47.12	6.66	93.45	
51	776.39	2	SLE R	-23352.70	-951.73	5658.80	21.99	56.55	5.00	71.04	
52	836.11	2	SLE R	-22675.90	-659.64	3922.09	6.28	72.26	3.88	55.69	
53	895.83	2	SLE R	-22002.70	-417.90	2484.78	0.00	78.54	3.08	44.56	
54	955.56	2	SLE R	-21333.20	-222.85	1325.04	0.00	78.54	2.42	35.47	
55	1015.28	2	SLE R	-20667.20	-69.98	416.11	0.00	78.54	1.90	28.17	
56	1075.00	2	SLE R	-20004.50	45.64	-271.35	0.00	78.54	1.77	26.32	
57	1134.72	2	SLE R	-19345.10	129.08	-767.49	0.00	78.54	1.97	29.04	
58	1194.44	2	SLE R	-18688.80	185.33	-1101.93	0.00	78.54	2.09	30.61	
59	1254.17	2	SLE R	-18035.60	219.11	-1302.76	0.00	78.54	2.14	31.24	
60	1313.89	2	SLE R	-17385.30	234.76	-1395.87	0.00	78.54	2.14	31.11	
61	1373.61	2	SLE R	-16737.90	236.23	-1404.57	0.00	78.54	2.09	30.38	
62	1433.33	2	SLE R	-16093.20	226.95	-1349.40	0.00	78.54	2.01	29.20	
63	1493.06	2	SLE R	-15451.10	209.91	-1248.12	0.00	78.54	1.90	27.70	
64	1552.78	2	SLE R	-14811.60	187.66	-1115.80	0.00	78.54	1.78	25.98	
65	1612.50	2	SLE R	-14174.40	162.31	-965.05	0.00	78.54	1.65	24.13	
66	1672.22	2	SLE R	-13539.60	135.60	-806.25	0.00	78.54	1.52	22.23	
67	1731.94	2	SLE R	-12907.00	108.96	-647.88	0.00	78.54	1.39	20.34	
68	1791.67	2	SLE R	-12276.50	83.55	-496.79	0.00	78.54	1.26	18.50	
69	1851.39	2	SLE R	-11648.00	60.30	-358.55	0.00	78.54	1.13	16.75	
70	1911.11	2	SLE R	-11021.40	39.98	-237.74	0.00	78.54	1.02	15.13	
71	1970.83	2	SLE R	-10396.60	23.25	-138.24	0.00	78.54	0.92	13.66	
72	2030.56	2	SLE R	-9773.48	10.66	-63.40	0.00	78.54	0.83	12.37	
73	2090.28	2	SLE R	-9151.96	2.75	-16.34	0.00	78.54	0.75	11.27	
74	2150.00	2	SLE R	-8531.94	0.00	0.00	0.00	78.54	0.69	10.40	
75	0.00	4	SLE Q	-31327.20	-5352.07	31822.40	47.12	31.42	31.25	791.29	
76	59.72	4	SLE Q	-31803.90	-5725.28	34041.50	47.12	31.42	33.52	868.46	
77	119.44	4	SLE Q	-31073.90	-5782.92	34384.20	50.27	28.27	33.91	890.83	
78	179.17	4	SLE Q	-30349.00	-5604.27	33321.90	50.27	28.27	32.85	860.25	
79	238.89	4	SLE Q	-29629.00	-5257.17	31258.20	47.12	31.42	30.76	791.95	
80	298.61	4	SLE Q	-28913.80	-4798.41	28530.50	47.12	31.42	27.97	698.86	
81	358.33	4	SLE Q	-28203.40	-4274.39	25414.70	43.98	34.56	24.77	591.67	
82	418.06	4	SLE Q	-27497.50	-3722.00	22130.30	43.98	34.56	21.39	479.09	
83	477.78	4	SLE Q	-26796.20	-3169.74	18846.70	43.98	34.56	17.98	368.14	
84	537.50	4	SLE Q	-26099.20	-2638.71	15689.30	43.98	34.56	14.69	264.59	
85	597.22	4	SLE Q	-25406.40	-2143.77	12746.50	40.84	37.70	11.63	173.46	
86	656.94	4	SLE Q	-24717.90	-1694.58	10075.70	37.70	40.84	8.91	123.38	
87	716.67	4	SLE Q	-24033.30	-1296.55	7709.02	31.42	47.12	6.66	93.45	
88	776.39	4	SLE Q	-23352.70	-951.73	5658.80	21.99	56.55	5.00	71.04	
89	836.11	4	SLE Q	-22675.90	-659.64	3922.09	6.28	72.26	3.88	55.69	
90	895.83	4	SLE Q	-22002.70	-417.90	2484.78	0.00	78.54	3.08	44.56	
91	955.56	4	SLE Q	-21333.20	-222.85	1325.04	0.00	78.54	2.42	35.47	
92	1015.28	4	SLE Q	-20667.20	-69.98	416.11	0.00	78.54	1.90	28.17	
93	1075.00	4	SLE Q	-20004.50	45.64	-271.35	0.00	78.54	1.77	26.32	
94	1134.72	4	SLE Q	-19345.10	129.08	-767.49	0.00	78.54	1.97	29.04	
95	1194.44	4	SLE Q	-18688.80	185.33	-1101.93	0.00	78.54	2.09	30.61	
96	1254.17	4	SLE Q	-18035.60	219.11	-1302.76	0.00	78.54	2.14	31.24	
97	1313.89	4	SLE Q	-17385.30	234.76	-1395.87	0.00	78.54	2.14	31.11	
98	1373.61	4	SLE Q	-16737.90	236.23	-1404.57	0.00	78.54	2.09	30.38	
99	1433.33	4	SLE Q	-16093.20	226.95	-1349.40	0.00	78.54	2.01	29.20	
100	1493.06	4	SLE Q	-15451.10	209.91	-1248.12	0.00	78.54	1.90	27.70	
101	1552.78	4	SLE Q	-14811.60	187.66	-1115.80	0.00	78.54	1.78	25.98	
102	1612.50	4	SLE Q	-14174.40	162.31	-965.05	0.00	78.54	1.65	24.13	
103	1672.22	4	SLE Q	-13539.60	135.60	-806.25	0.00	78.54	1.52	22.23	
104	1731.94	4	SLE Q	-12907.00	108.96	-647.88	0.00	78.54	1.39	20.34	
105	1791.67	4	SLE Q	-12276.50	83.55	-496.79	0.00	78.54	1.26	18.50	
106	1851.39	4	SLE Q	-11648.00	60.30	-358.55	0.00	78.54	1.13	16.75	
107	1911.11	4	SLE Q	-11021.40	39.98	-237.74	0.00	78.54	1.02	15.13	
108	1970.83	4	SLE Q	-10396.60	23.25	-138.24	0.00	78.54	0.92	13.66	
109	2030.56	4	SLE Q	-9773.48	10.66	-63.40	0.00	78.54	0.83	12.37	
110	2090.28	4	SLE Q	-9151.96	2.75	-16.34	0.00	78.54	0.75	11.27	
111	2150.00	4	SLE Q	-8531.94	0.00	0.00	0.00	78.54	0.69	10.40	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_S <cmq>	A_{C} $_{eff}$ <cmq>	σ_S <daN/cmq>	ε_{sm}	Wk <mm>

75	0.00	4	SLE Q	-31327.20	31822.40	-5352.07	46.00	136.36	0.50	20.00	207.43	21.99	1269.21	791.29	0.23	0.08
76	59.72	4	SLE Q	-31803.90	34041.50	-5725.28	46.00	136.36	0.50	20.00	193.57	25.13	1276.42	868.46	0.25	0.08
77	119.44	4	SLE Q	-31073.90	34384.20	-5782.92	46.00	136.36	0.50	20.00	193.92	25.13	1280.73	890.83	0.26	0.09
78	179.17	4	SLE Q	-30349.00	33321.90	-5604.27	46.00	136.36	0.50	20.00	193.84	25.13	1279.74	860.25	0.25	0.08
79	238.89	4	SLE Q	-29629.00	31258.20	-5257.17	46.00	136.36	0.50	20.00	193.42	25.13	1274.48	791.95	0.23	0.08
80	298.61	4	SLE Q	-28913.80	28530.50	-4798.41	46.00	136.36	0.50	20.00	207.04	21.99	1264.95	698.86	0.20	0.07
81	358.33	4	SLE Q	-28203.40	25414.70	-4274.39	46.00	136.36	0.50	20.00	205.71	21.99	1250.35	591.67	0.17	0.06
82	418.06	4	SLE Q	-27497.50	22130.30	-3722.00	46.00	136.36	0.50	20.00	203.77	21.99	1229.00	479.09	0.14	0.05
83	477.78	4	SLE Q	-26796.20	18846.70	-3169.74	46.00	136.36	0.50	20.00	219.09	18.85	1197.77	368.14	0.11	0.04
84	537.50	4	SLE Q	-26099.20	15689.30	-2638.71	46.00	136.36	0.50	20.00	214.12	18.85	1150.96	264.59	0.08	0.03
85	597.22	4	SLE Q	-25406.40	12746.50	-2143.77	46.00	136.36	0.50	20.00	206.37	18.85	1077.91	173.46	0.05	0.02
86	656.94	4	SLE Q	-24717.90	10075.70	-1694.58	46.00	136.36	0.50	20.00	193.72	18.85	958.66	99.62	0.03	0.01
87	716.67	4	SLE Q	-24033.30	7709.02	-1296.55	46.00	136.36	0.50	20.00	209.28	12.57	736.91	47.27	0.01	0.00
88	776.39	4	SLE Q	-23352.70	5658.80	-951.73	46.00	136.36	0.50	20.00	169.14	9.42	363.51	16.28	0.00	0.00
112	0.00	3	SLE F	-31327.20	31822.40	-5352.07	46.00	136.36	0.50	20.00	207.43	21.99	1269.21	791.29	0.23	0.08
113	59.72	3	SLE F	-31803.90	34041.50	-5725.28	46.00	136.36	0.50	20.00	193.57	25.13	1276.42	868.46	0.25	0.08
114	119.44	3	SLE F	-31073.90	34384.20	-5782.92	46.00	136.36	0.50	20.00	193.92	25.13	1280.73	890.83	0.26	0.09
115	179.17	3	SLE F	-30349.00	33321.90	-5604.27	46.00	136.36	0.50	20.00	193.84	25.13	1279.74	860.25	0.25	0.08
116	238.89	3	SLE F	-29629.00	31258.20	-5257.17	46.00	136.36	0.50	20.00	193.42	25.13	1274.48	791.95	0.23	0.08
117	298.61	3	SLE F	-28913.80	28530.50	-4798.41	46.00	136.36	0.50	20.00	207.04	21.99	1264.95	698.86	0.20	0.07
118	358.33	3	SLE F	-28203.40	25414.70	-4274.39	46.00	136.36	0.50	20.00	205.71	21.99	1250.35	591.67	0.17	0.06
119	418.06	3	SLE F	-27497.50	22130.30	-3722.00	46.00	136.36	0.50	20.00	203.77	21.99	1229.00	479.09	0.14	0.05
120	477.78	3	SLE F	-26796.20	18846.70	-3169.74	46.00	136.36	0.50	20.00	219.09	18.85	1197.77	368.14	0.11	0.04
121	537.50	3	SLE F	-26099.20	15689.30	-2638.71	46.00	136.36	0.50	20.00	214.12	18.85	1150.96	264.59	0.08	0.03
122	597.22	3	SLE F	-25406.40	12746.50	-2143.77	46.00	136.36	0.50	20.00	206.37	18.85	1077.91	173.46	0.05	0.02
123	656.94	3	SLE F	-24717.90	10075.70	-1694.58	46.00	136.36	0.50	20.00	193.72	18.85	958.66	99.62	0.03	0.01
124	716.67	3	SLE F	-24033.30	7709.02	-1296.55	46.00	136.36	0.50	20.00	209.28	12.57	736.91	47.27	0.01	0.00
125	776.39	3	SLE F	-23352.70	5658.80	-951.73	46.00	136.36	0.50	20.00	169.14	9.42	363.51	16.28	0.00	0.00

Verifiche principali

Caso	Tipo
1	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
3	SLU N cost - min. sic.
40	C.Rare - Sc min (max compr.),C.Rare - Sf max (max traz.),C.Rare - Sf min (max compr.)
53	C.Rare - Sc max (min. compr.)
77	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf max (max traz.),C.Q.Per. - Sf min (max compr.),C.Q.Per. - Wk Max
90	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Palo n. 33

Palo singolo

Caratteristiche del palo e dei materiali utilizzati

Dp <m>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1.20	6.00	C30/37	307.10	20.59	204.73	13.73	B450C	4300.00	3739.13

Le sollecitazioni nei pali vengono calcolate oltre che per l'effetto delle reazioni vincolari anche considerando i seguenti effetti

Azioni ed effetti comuni

Az	N <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
PP	0.00	0.00	0.00	
SVR	0.00			

Azioni ed effetti - Plinto/Palo n. 33 (-8)

Caso	CC	TCC	Az	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	RVN	18512.80	7740.04	426.01	39347.50	2158.76
	1	SLU	TAG				0.00	0.00
	1	SLU	ECC				0.00	0.00
	1	SLU	TOT	18512.80	7740.04	426.01	39347.50	2158.76
2	2	SLE R	RVN	13713.20	5733.36	315.56	29146.30	1599.08
	2	SLE R	TAG				0.00	0.00
	2	SLE R	ECC				0.00	0.00
	2	SLE R	TOT	13713.20	5733.36	315.56	29146.30	1599.08
3	3	SLE F	RVN	13713.20	5733.36	315.56	29146.30	1599.08
	3	SLE F	TAG				0.00	0.00
	3	SLE F	ECC				0.00	0.00
	3	SLE F	TOT	13713.20	5733.36	315.56	29146.30	1599.08
4	4	SLE Q	RVN	13713.20	5733.36	315.56	29146.30	1599.08
	4	SLE Q	TAG				0.00	0.00
	4	SLE Q	ECC				0.00	0.00
	4	SLE Q	TOT	13713.20	5733.36	315.56	29146.30	1599.08

Sollecitazioni nei pali

Caso	CC	TCC	Palo	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>
1	1	SLU	1	-18512.80	-7740.04	-426.01	-39347.50	-2158.76
2	2	SLE R	1	-13713.20	-5733.36	-315.56	-29146.30	-1599.08
3	3	SLE F	1	-13713.20	-5733.36	-315.56	-29146.30	-1599.08
4	4	SLE Q	1	-13713.20	-5733.36	-315.56	-29146.30	-1599.08

Da 0 a -21.5

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1	0.00	1	SLU	-18512.80	38837.90	-2130.81	-18512.80	154339.00	-8388.41	2-3	183.12	3.974
2	59.72	1	SLU	-19166.40	42023.90	-2305.61	-19166.40	154618.00	-8408.70	2-3	183.12	3.679
3	119.44	1	SLU	-18788.10	42778.40	-2347.00	-18788.10	154455.00	-8396.83	2-3	183.12	3.610
4	179.17	1	SLU	-18412.80	41700.10	-2287.84	-18412.80	154297.00	-8385.35	2-3	183.12	3.700
5	238.89	1	SLU	-18040.60	39303.60	-2156.36	-18040.60	154143.00	-8374.24	2-3	183.12	3.922
6	298.61	1	SLU	-17671.30	36021.10	-1976.27	-17671.30	153984.00	-8362.69	2-3	183.12	4.275
7	358.33	1	SLU	-17304.90	32206.90	-1767.00	-17304.90	153829.00	-8351.31	2-3	183.12	4.776
8	418.06	1	SLU	-16941.30	28144.40	-1544.12	-16941.30	153675.00	-8339.99	2-3	183.12	5.460
9	477.78	1	SLU	-16580.40	24053.20	-1319.66	-16580.40	153523.00	-8328.75	2-3	183.12	6.382
10	537.50	1	SLU	-16222.30	20097.50	-1102.63	-16222.30	153371.00	-8317.60	2-3	183.12	7.631
11	597.22	1	SLU	-15866.80	16393.70	-899.42	-15866.80	153221.00	-8306.54	2-3	183.12	9.346
12	656.94	1	SLU	-15514.00	13018.70	-714.26	-15514.00	153071.00	-8295.56	2-3	183.12	11.757
13	716.67	1	SLU	-15163.60	10017.10	-549.58	-15163.60	152923.00	-8284.67	2-3	183.12	15.266
14	776.39	1	SLU	-14815.70	7407.71	-406.42	-14815.70	152776.00	-8273.86	2-3	183.12	20.623
15	836.11	1	SLU	-14470.20	5189.43	-284.71	-14470.20	152630.00	-8263.13	2-3	183.12	29.410
16	895.83	1	SLU	-14127.10	3346.69	-183.61	-14127.10	152484.00	-8252.47	2-3	183.12	45.561
17	955.56	1	SLU	-13786.30	1853.65	-101.70	-13786.30	152340.00	-8241.89	2-3	183.12	82.180
18	1015.28	1	SLU	-13447.80	677.85	-37.19	-2571250.00	152197.00	-8231.38	2-3	183.12	>100
19	1075.00	1	SLU	-13111.40	-216.80	11.89	-2571250.00	-152233.00	8408.13	2-3	3.12	>100
20	1134.72	1	SLU	-12777.20	-867.73	47.61	-12777.20	-152089.00	8399.79	2-3	3.12	>100
21	1194.44	1	SLU	-12445.10	-1311.90	71.98	-12445.10	-151945.00	8391.50	2-3	3.12	>100
22	1254.17	1	SLU	-12115.00	-1584.59	86.94	-12115.00	-151801.00	8383.27	2-3	3.12	95.801
23	1313.89	1	SLU	-11786.90	-1718.42	94.28	-11786.90	-151659.00	8375.08	2-3	3.12	88.257
24	1373.61	1	SLU	-11460.70	-1742.89	95.62	-11460.70	-151518.00	8366.95	2-3	3.12	86.936
25	1433.33	1	SLU	-11136.30	-1684.11	92.40	-11136.30	-151377.00	8358.86	2-3	3.12	89.887
26	1493.06	1	SLU	-10813.80	-1564.69	85.85	-10813.80	-151237.00	8350.81	2-3	3.12	96.658
27	1552.78	1	SLU	-10493.10	-1403.93	77.03	-10493.10	-151098.00	8342.82	2-3	3.12	>100
28	1612.50	1	SLU	-10174.00	-1218.01	66.83	-10174.00	-150960.00	8334.86	2-3	3.12	>100
29	1672.22	1	SLU	-9856.64	-1020.33	55.98	-9856.64	-150822.00	8326.95	2-3	3.12	>100
30	1731.94	1	SLU	-9540.87	-821.87	45.09	-9540.87	-150685.00	8319.08	2-3	3.12	>100
31	1791.67	1	SLU	-9226.65	-631.57	34.65	-9226.65	-150549.00	8311.24	2-3	3.12	>100
32	1851.39	1	SLU	-8913.95	-456.73	25.06	-2571250.00	-150413.00	8303.45	2-3	3.12	>100
33	1911.11	1	SLU	-8602.69	-303.40	16.65	-2571250.00	-150278.00	8295.69	2-3	3.12	>100
34	1970.83	1	SLU	-8292.84	-176.71	9.70	-2571250.00	-150144.00	8287.97	2-3	3.12	>100
35	2030.56	1	SLU	-7984.34	-81.18	4.45	-2571250.00	-150010.00	8280.29	2-3	3.12	>100
36	2090.28	1	SLU	-7677.15	-20.95	1.15	-2571250.00	-149876.00	8272.63	2-3	3.12	>100
37	2150.00	1	SLU	-7371.20	0.00	0.00	-2571250.00					>100

Stato limite ultimo - Verifiche a taglio

Caso	X <cm>	CC	TCC	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	1	SLU	7740.04	426.01	0.85	11.31	7751.76	1.00	32294.70	334320.00	32294.70	4.166
2	59.72	1	SLU	3120.05	171.73	0.85	11.31	3124.77	1.00	32294.70	334413.00	32294.70	10.335
3	119.44	1	SLU	-426.47	-23.47	0.85	11.31	427.11	1.00	32294.70	334359.00	32294.70	75.612
4	179.17	1	SLU	-3040.94	-167.37	0.85	11.31	3045.54	1.00	32294.70	334306.00	32294.70	10.604
5	238.89	1	SLU	-4863.93	-267.71	0.85	11.31	4871.30	1.00	32294.70	334252.00	32294.70	6.630
6	298.61	1	SLU	-6030.03	-331.89	0.85	11.31	6039.16	1.00	32294.70	334199.00	32294.70	5.348
7	358.33	1	SLU	-6664.20	-366.79	0.85	11.31	6674.28	1.00	32294.70	334147.00	32294.70	4.839
8	418.06	1	SLU	-6879.46	-378.64	0.85	11.31	6889.88	1.00	32294.70	334095.00	32294.70	4.687
9	477.78	1	SLU	-6775.71	-372.93	0.85	11.31	6785.97	1.00	32294.70	334043.00	32294.70	4.759
10	537.50	1	SLU	-6439.24	-354.41	0.85	11.31	6448.98	1.00	32294.70	333992.00	32294.70	5.008
11	597.22	1	SLU	-5942.93	-327.10	0.85	11.31	5951.92	1.00	32294.70	333941.00	32294.70	5.426

12	656.94	1	SLU	-5346.96	-294.29	0.85	11.31	5355.06	1.00	32294.70	333890.00	32294.70	6.031
13	716.67	1	SLU	-4699.78	-258.67	0.85	11.31	4706.89	1.00	32294.70	333840.00	32294.70	6.861
14	776.39	1	SLU	-4039.23	-222.32	0.85	11.31	4045.35	1.00	32294.70	333790.00	32294.70	7.983
15	836.11	1	SLU	-3393.92	-186.80	0.85	11.31	3399.06	1.00	32294.70	333741.00	32294.70	9.501
16	895.83	1	SLU	-2784.43	-153.25	0.85	11.31	2788.65	1.00	32294.70	333692.00	32294.70	11.581
17	955.56	1	SLU	-2224.67	-122.44	0.85	11.31	2228.04	1.00	32294.70	333643.00	32294.70	14.495
18	1015.28	1	SLU	-1723.03	-94.83	0.85	11.31	1725.64	1.00	32294.70	333594.00	32294.70	18.715
19	1075.00	1	SLU	-1283.51	-70.64	0.85	11.31	1285.45	1.00	32294.70	333546.00	32294.70	25.123
20	1134.72	1	SLU	-906.69	-49.90	0.85	11.31	908.07	1.00	32294.70	333498.00	32294.70	35.564
21	1194.44	1	SLU	-590.65	-32.51	0.85	11.31	591.54	1.00	32294.70	333451.00	32294.70	54.594
22	1254.17	1	SLU	-331.64	-18.25	0.85	11.31	332.14	1.00	32294.70	333403.00	32294.70	97.231
23	1313.89	1	SLU	-124.77	-6.87	0.85	11.31	124.96	1.00	32294.70	333356.00	32294.70	>100
24	1373.61	1	SLU	35.52	1.96	0.85	11.31	35.57	1.00	32294.70	333310.00	32294.70	>100
25	1433.33	1	SLU	155.03	8.53	0.85	11.31	155.27	1.00	32294.70	333263.00	32294.70	>100
26	1493.06	1	SLU	239.50	13.18	0.85	11.31	239.86	1.00	32294.70	333217.00	32294.70	>100
27	1552.78	1	SLU	294.35	16.20	0.85	11.31	294.79	1.00	32294.70	333171.00	32294.70	>100
28	1612.50	1	SLU	324.53	17.86	0.85	11.31	325.02	1.00	32294.70	333125.00	32294.70	99.362
29	1672.22	1	SLU	334.41	18.41	0.85	11.31	334.92	1.00	32294.70	333080.00	32294.70	96.426
30	1731.94	1	SLU	327.73	18.04	0.85	11.31	328.22	1.00	32294.70	333035.00	32294.70	98.393
31	1791.67	1	SLU	307.54	16.93	0.85	11.31	308.01	1.00	32294.70	332990.00	32294.70	>100
32	1851.39	1	SLU	276.28	15.21	0.85	11.31	276.70	1.00	32294.70	332945.00	32294.70	>100
33	1911.11	1	SLU	235.76	12.98	0.85	11.31	236.12	1.00	32294.70	332900.00	32294.70	>100
34	1970.83	1	SLU	187.24	10.31	0.85	11.31	187.53	1.00	32294.70	332856.00	32294.70	>100
35	2030.56	1	SLU	131.53	7.24	0.85	11.31	131.73	1.00	32294.70	332812.00	32294.70	>100
36	2090.28	1	SLU	69.06	3.80	0.85	11.31	69.17	1.00	32294.70	332768.00	32294.70	>100

Verifiche stato limite d'esercizio

Caso	X <cm>	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ_c <daN/cmq>	σ_f <daN/cmq>	Sic.
38	0.00	2	SLE R	-13713.20	-1578.37	28768.80	47.12	31.42	28.94	900.54	
39	59.72	2	SLE R	-14433.00	-1707.86	31128.80	50.27	28.27	31.32	980.05	
40	119.44	2	SLE R	-14186.40	-1738.52	31687.70	50.27	28.27	31.90	1004.68	
41	179.17	2	SLE R	-13942.20	-1694.70	30889.00	50.27	28.27	31.09	977.78	
42	238.89	2	SLE R	-13700.20	-1597.30	29113.80	50.27	28.27	29.29	913.80	
43	298.61	2	SLE R	-13460.40	-1463.90	26682.30	47.12	31.42	26.81	824.94	
44	358.33	2	SLE R	-13222.90	-1308.89	23857.00	47.12	31.42	23.93	721.19	
45	418.06	2	SLE R	-12987.50	-1143.79	20847.70	47.12	31.42	20.86	610.61	
46	477.78	2	SLE R	-12754.20	-977.52	17817.20	47.12	31.42	17.75	499.44	
47	537.50	2	SLE R	-12523.00	-816.76	14887.00	47.12	31.42	14.74	392.47	
48	597.22	2	SLE R	-12293.80	-666.24	12143.50	47.12	31.42	11.91	293.20	
49	656.94	2	SLE R	-12066.70	-529.08	9643.50	47.12	31.42	9.30	204.26	
50	716.67	2	SLE R	-11841.50	-407.10	7420.11	40.84	37.70	6.97	127.91	
51	776.39	2	SLE R	-11618.20	-301.05	5487.19	40.84	37.70	4.94	66.91	
52	836.11	2	SLE R	-11396.90	-210.90	3844.02	34.56	43.98	3.31	45.77	
53	895.83	2	SLE R	-11177.40	-136.01	2479.03	18.85	59.69	2.23	31.49	
54	955.56	2	SLE R	-10959.70	-75.33	1373.07	0.00	78.54	1.60	22.98	
55	1015.28	2	SLE R	-10743.80	-27.55	502.11	0.00	78.54	1.13	16.61	
56	1075.00	2	SLE R	-10529.70	8.81	-160.59	0.00	78.54	0.94	13.97	
57	1134.72	2	SLE R	-10317.30	35.26	-642.76	0.00	78.54	1.17	17.11	
58	1194.44	2	SLE R	-10106.50	53.32	-971.78	0.00	78.54	1.32	19.17	
59	1254.17	2	SLE R	-9897.44	64.40	-1173.77	0.00	78.54	1.41	20.34	
60	1313.89	2	SLE R	-9689.97	69.84	-1272.90	0.00	78.54	1.45	20.79	
61	1373.61	2	SLE R	-9484.08	70.83	-1291.03	0.00	78.54	1.44	20.66	
62	1433.33	2	SLE R	-9279.74	68.44	-1247.49	0.00	78.54	1.40	20.11	
63	1493.06	2	SLE R	-9076.91	63.59	-1159.03	0.00	78.54	1.34	19.24	
64	1552.78	2	SLE R	-8875.57	57.06	-1039.95	0.00	78.54	1.26	18.15	
65	1612.50	2	SLE R	-8675.67	49.50	-902.23	0.00	78.54	1.17	16.94	
66	1672.22	2	SLE R	-8477.19	41.47	-755.80	0.00	78.54	1.08	15.66	
67	1731.94	2	SLE R	-8280.09	33.40	-608.79	0.00	78.54	0.99	14.39	
68	1791.67	2	SLE R	-8084.34	25.67	-467.83	0.00	78.54	0.90	13.15	
69	1851.39	2	SLE R	-7889.92	18.56	-338.32	0.00	78.54	0.82	12.00	
70	1911.11	2	SLE R	-7696.78	12.33	-224.74	0.00	78.54	0.74	10.97	
71	1970.83	2	SLE R	-7504.89	7.18	-130.90	0.00	78.54	0.68	10.07	
72	2030.56	2	SLE R	-7314.23	3.30	-60.13	0.00	78.54	0.63	9.34	
73	2090.28	2	SLE R	-7124.76	0.85	-15.52	0.00	78.54	0.59	8.80	
74	2150.00	2	SLE R	-6936.45	0.00	0.00	0.00	78.54	0.56	8.46	
75	0.00	4	SLE Q	-13713.20	-1578.37	28768.80	47.12	31.42	28.94	900.54	
76	59.72	4	SLE Q	-14433.00	-1707.86	31128.80	50.27	28.27	31.32	980.05	
77	119.44	4	SLE Q	-14186.40	-1738.52	31687.70	50.27	28.27	31.90	1004.68	
78	179.17	4	SLE Q	-13942.20	-1694.70	30889.00	50.27	28.27	31.09	977.78	
79	238.89	4	SLE Q	-13700.20	-1597.30	29113.80	50.27	28.27	29.29	913.80	
80	298.61	4	SLE Q	-13460.40	-1463.90	26682.30	47.12	31.42	26.81	824.94	
81	358.33	4	SLE Q	-13222.90	-1308.89	23857.00	47.12	31.42	23.93	721.19	
82	418.06	4	SLE Q	-12987.50	-1143.79	20847.70	47.12	31.42	20.86	610.61	
83	477.78	4	SLE Q	-12754.20	-977.52	17817.20	47.12	31.42	17.75	499.44	
84	537.50	4	SLE Q	-12523.00	-816.76	14887.00	47.12	31.42	14.74	392.47	
85	597.22	4	SLE Q	-12293.80	-666.24	12143.50	47.12	31.42	11.91	293.20	
86	656.94	4	SLE Q	-12066.70	-529.08	9643.50	47.12	31.42	9.30	204.26	
87	716.67	4	SLE Q	-11841.50	-407.10	7420.11	40.84	37.70	6.97	127.91	
88	776.39	4	SLE Q	-11618.20	-301.05	5487.19	40.84	37.70	4.94	66.91	
89	836.11	4	SLE Q	-11396.90	-210.90	3844.02	34.56	43.98	3.31	45.77	
90	895.83	4	SLE Q	-11177.40	-136.01	2479.03	18.85	59.69	2.23	31.49	
91	955.56	4	SLE Q	-10959.70	-75.33	1373.07	0.00	78.54	1.60	22.98	
92	1015.28	4	SLE Q	-10743.80	-27.55	502.11	0.00	78.54	1.13	16.61	
93	1075.00	4	SLE Q	-10529.70	8.81	-160.59	0.00	78.54	0.94	13.97	
94	1134.72	4	SLE Q	-10317.30	35.26	-642.76	0.00	78.54	1.17	17.11	
95	1194.44	4	SLE Q	-10106.50	53.32	-971.78	0.00	78.54	1.32	19.17	
96	1254.17	4	SLE Q	-9897.44	64.40	-1173.77	0.00	78.54	1.41	20.34	
97	1313.89	4	SLE Q	-9689.97	69.84	-1272.90	0.00	78.54	1.45	20.79	
98	1373.61	4	SLE Q	-9484.08	70.83	-1291.03	0.00	78.54	1.44	20.66	
99	1433.33	4	SLE Q	-9279.74	68.44	-1247.49	0.00	78.54	1.40	20.11	
100	1493.06	4	SLE Q	-9076.91	63.59	-1159.03	0.00	78.54	1.34	19.24	
101	1552.78	4	SLE Q	-8875.57	57.06	-1039.95	0.00	78.54	1.26	18.15	
102	1612.50	4	SLE Q	-8675.67	49.50	-902.23	0.00	78.54	1.17	16.94	
103	1672.22	4	SLE Q	-8477.19	41.47	-755.80	0.00	78.54	1.08	15.66	
104	1731.94	4	SLE Q	-8280.09	33.40	-608.79	0.00	78.54	0.99	14.39	
105	1791.67	4	SLE Q	-8084.34	25.67	-467.83	0.00	78.54	0.90	13.15	
106	1851.39	4	SLE Q	-7889.92	18.56	-338.32	0.00	78.54	0.82	12.00	
107	1911.11	4	SLE Q	-7696.78	12.33	-224.74	0.00	78.54	0.74	10.97	
108	1970.83	4	SLE Q	-7504.89	7.18	-130.90	0.00	78.54	0.68	10.07	
109	2030.56	4	SLE Q	-7314.23	3.30	-60.13	0.00	78.54	0.63	9.34	
110	2090.28	4	SLE Q	-7124.76	0.85	-15.52	0.00	78.54	0.59	8.80	
111	2150.00	4	SLE Q	-6936.45	0.00	0.00	0.00	78.54	0.56	8.46	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	X <cm>	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K_2	Φ_{eq}	Δ_{sm} <mm>	A_s <cmq>	A_{c} $_{eff}$ <cmq>	σ_s <daN/cmq>	ε_{sm}	Wk <mm>
75	0.00	4	SLE Q	-13713.20	28768.80	-1578.37	46.00	136.36	0.50	20.00	212.35	21.99	1323.33	900.54	0.26	0.09
76	59.72	4	SLE Q	-14433.00	31128.80	-1707.86	46.00	136.36	0.50	20.00	212.50	21.99	1324.95	980.05	0.29	0.10
77	119.44	4	SLE Q	-14186.40	31687.70	-1738.52	46.00	136.36	0.50	20.00	212.68	21.99	1326.92	1004.68	0.29	0.11
78	179.17	4	SLE Q	-13942.20	30889.00	-1694.70	46.00	136.36	0.50	20.00	212.64	21.99	1326.47	977.78	0.28	0.10
79	238.89	4	SLE Q	-13700.20	29113.80	-1597.30	46.00	136.36	0.50	20.00	212.42	21.99	1324.09	913.80	0.27	0.10
80	298.61	4	SLE Q	-13460.40	26682.30	-1463.90	46.00	136.36	0.50	20.00	212.03	21.99	1319.83	824.94	0.24	0.09
81	358.33	4	SLE Q	-13222.90	23857.00	-1308.89	46.00	136.36	0.50	20.00	211.45	21.99	1313.47	721.19	0.21	0.08
82	418.06	4	SLE Q	-12987.50	20847.70	-1143.79	46.00	136.36	0.50	20.00	210.64	21.99	1304.47	610.61	0.18	0.06
83	477.78	4	SLE Q	-12754.20	17817.20	-977.52	46.00	136.36	0.50	20.00	209.49	21.99	1291.91	499.44	0.15	0.05
84	537.50	4	SLE Q	-12523.00	14887.00	-816.76	46.00	136.36	0.50	20.00	207.88	21.99	1274.19	392.47	0.11	0.04
85	597.22	4	SLE Q	-12293.80	12143.50	-666.24	46.00	136.36	0.50	20.00	205.54	21.99	1248.42	293.20	0.09	0.03
86	656.94	4	SLE Q	-12066.70	9643.50	-529.08	46.00	136.36	0.50	20.00	201.97	21.99	1209.19	204.26	0.06	0.02
87	716.67	4	SLE Q	-11841.50	7420.11	-407.10	46.00	136.36	0.50	20.00	196.07	21.99	1144.32	127.91	0.04	0.01
88	776.39	4	SLE Q	-11618.20	5487.19	-301.05	46.00	136.36	0.50	20.00	222.30	15.71	1023.37	66.91	0.02	0.01
89	836.11	4	SLE Q	-11396.90	3844.02	-210.90	46.00	136.36	0.50	20.00	188.65	15.71	759.10	25.50	0.01	0.00
90	895.83	4	SLE Q	-11177.40	2479.03	-136.01	46.00	136.36	0.50	20.00	235.83	3.14	225.93	4.89	0.00	0.00
112	0.00	3	SLE F	-13713.20	28768.80	-1578.37	46.00	136.36	0.50	20.00	212.35	21.99	1323.33	900.54	0.26	0.09
113	59.72	3	SLE F	-14433.00	31128.80	-1707.86	46.00	136.36	0.50	20.00	212.50	21.99	1324.95	980.05	0.29	0.10
114	119.44	3	SLE F	-14186.40	31687.70	-1738.52	46.00	136.36	0.50	20.00	212.68	21.99	1326.92	1004.68	0.29	0.11
115	179.17	3	SLE F	-13942.20	30889.00	-1694.70	46.00	136.36	0.50	20.00	212.64	21.99	1326.47	977.78	0.28	0.10
116	238.89	3	SLE F	-13700.20	29113.80	-1597.30	46.00	136.36	0.50	20.00	212.42	21.99	1324.09	913.80	0.27	0.10
117	298.61	3	SLE F	-13460.40	26682.30	-1463.90	46.00	136.36	0.50	20.00	212.03	21.99	1319.83	824.94	0.24	0.09
118	358.33	3	SLE F	-13222.90	23857.00	-1308.89	46.00	136.36	0.50	20.00	211.45	21.99	1313.47	721.19	0.21	0.08
119	418.06	3	SLE F	-12987.50	20847.70	-1143.79	46.00	136.36	0.50	20.00	210.64	21.99	1304.47	610.61	0.18	0.06
120	477.78	3	SLE F	-12754.20	17817.20	-977.52	46.00	136.36	0.50	20.00	209.49	21.99	1291.91	499.44	0.15	0.05
121	537.50	3	SLE F	-12523.00	14887.00	-816.76	46.00	136.36	0.50	20.00	207.88	21.99	1274.19	392.47	0.11	0.04
122	597.22	3	SLE F	-12293.80	12143.50	-666.24	46.00	136.36	0.50	20.00	205.54	21.99	1248.42	293.20	0.09	0.03
123	656.94	3	SLE F	-12066.70	9643.50	-529.08	46.00	136.36	0.50	20.00	201.97	21.99	1209.19	204.26	0.06	0.02
124	716.67	3	SLE F	-11841.50	7420.11	-407.10	46.00	136.36	0.50	20.00	196.07	21.99	1144.32	127.91	0.04	0.01
125	776.39	3	SLE F	-11618.20	5487.19	-301.05	46.00	136.36	0.50	20.00	222.30	15.71	1023.37	66.91	0.02	0.01
126	836.11	3	SLE F	-11396.90	3844.02	-210.90	46.00	136.36	0.50	20.00	188.65	15.71	759.10	25.50	0.01	0.00
127	895.83	3	SLE F	-11177.40	2479.03	-136.01	46.00	136.36	0.50	20.00	235.83	3.14	225.93	4.89	0.00	0.00

Verifiche principali

Caso	Tipo
1	SLU Taglio - min. sic. c.a.,SLU Taglio - min. sic. acciaio
3	SLU N cost - min. sic.
40	C.Rare - Sc min (max compr.),C.Rare - Sf max (max traz.),C.Rare - Sf min (max compr.)
61	C.Rare - Sc max (min. compr.)
77	C.Q.Per. - Sc min (max compr.),C.Q.Per. - Sf max (max traz.),C.Q.Per. - Sf min (max compr.),C.Q.Per. - Wk Max
98	C.Q.Per. - Sc max (min. compr.)
114	C.Freq - Wk Max

Verifiche sezioni aste

Simbologia

Δ_{sm} = Distanza media tra le fessure
Φ_{eq} = Diametro equivalente delle barre
α = Angolo asse neutro a rottura
ε_{sm} = Deformazione unitaria media dell'armatura (*1000)
σ_{s} = Tensione nell'acciaio nella sezione fessurata
$A_{c\ eff}$ = Area di calcestruzzo efficace
A_{s} = Area complessiva dei ferri nell'area di calcestruzzo efficace
Asw = Area armatura trasversale
B = Base
CC = Numero della combinazione delle condizioni di carico elementari
Caso = Caso di verifica
Cf = Copriferro
Cls = Tipo di calcestruzzo
Fcd = Resistenza di calcolo a compressione del calcestruzzo
Fck = Resistenza caratteristica cilindrica a compressione del calcestruzzo
Fctd = Resistenza di calcolo a trazione del calcestruzzo
Fctk = Resistenza caratteristica a trazione del calcestruzzo
Fyd = Resistenza di calcolo dell'acciaio
Fyk = Tensione caratteristica di snervamento dell'acciaio
H = Altezza
K_{2} = Coefficiente per distribuzione deformazioni
M'ydy = Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Y
M'ydz = Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Z
MRdy = Momento resistente allo stato limite ultimo intorno all'asse Y
MRdz = Momento resistente allo stato limite ultimo intorno all'asse Z
My = Momento flettente intorno all'asse Y
Mz = Momento flettente intorno all'asse Z
N = Sforzo normale
Nu = Sforzo normale ultimo
Rott. = Tipo di rottura
  1-2 = Rott. acciaio: $\varepsilon_{Y}=\varepsilon_{Yd}$, $\varepsilon_{C}<\varepsilon_{Cu}$
  2-3 = Rott. cls: $\varepsilon_{Y}<\varepsilon_{Yd}$, $\varepsilon_{C}=\varepsilon_{Cu}$
  3-4 = Rott. cls: $\varepsilon_{C0}<\varepsilon_{C}<\varepsilon_{Cu}$
Sez. = Numero della sezione
Sic. = Sicurezza
TCC = Tipo di combinazione di carico
  SLU = Stato limite ultimo
  SLE R = Stato limite d'esercizio, combinazione rara
  SLE F = Stato limite d'esercizio, combinazione frequente
  SLE Q = Stato limite d'esercizio, combinazione quasi permanente
Tipo = Tipo di verifica effettuata
Tp = Tipo di acciaio
Ty = Taglio in dir. Y
Tz = Taglio in dir. Z
VRcd = Taglio ultimo lato calcestruzzo
VRsd = Taglio ultimo lato armatura
Vrdu = Taglio ultimo resistente
Vsdu = Taglio agente nella direzione del momento ultimo
Wk = Ampiezza caratteristica delle fessure
bw = Larghezza membratura resistente al taglio
c = Ricoprimento dell'armatura
ctgθ = Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo
s = Distanza massima tra le barre

SEZIONE 1

Sezione: Rettangolare - Dati geometrici della sezione

Base <m>	=	2.91
Altezza <m>	=	1.50

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1	R	291.00	150.00	3.00	C40/50	415.00	25.17	235.17	16.78	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1		SLU	0.00	1228470.00	0.00	0.00	1263710.00	-0.04	1-2	180.00	1.029

Stato limite ultimo - Verifiche a taglio

Caso	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	0.00	2.91	40.21	0.00	2.50	520445.00	1560990.00	520445.00	---

Verifiche principali

Caso	Tipo
1	SLU N cost - min. sic.

SEZIONE 2

Sezione: Rettangolare - Dati geometrici della sezione

Base <m>	=	1.91
Altezza <m>	=	2.60

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
2	R	191.00	260.00	3.00	C40/50	415.00	25.17	235.17	16.78	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1		SLU	0.00	2704220.00	0.00	0.00	2801040.00	-28.54	1-2	178.75	1.036

Stato limite ultimo - Verifiche a taglio

Caso	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	0.00	1.77	20.11	0.00	2.50	462126.00	1684140.00	462126.00	---

Verifiche principali

Caso	Tipo
1	SLU N cost - min. sic.

SEZIONE 3

Sezione: Rettangolare - Dati geometrici della sezione

Base <m>	=	0.77
Altezza <m>	=	3.50

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
3	R	77.00	350.00	3.00	C40/50	415.00	25.17	235.17	16.78	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1		SLU	0.00	1789210.00	0.00	0.00	1850040.00	0.00	1-2	180.00	1.034

Stato limite ultimo - Verifiche a taglio

Caso	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	0.00	0.77	40.21	0.00	2.18	1071450.00	1071450.00	1071450.00	---

Verifiche principali

Caso	Tipo
1	SLU N cost - min. sic.

SEZIONE 4

Sezione: Rettangolare - Dati geometrici della sezione

Base <m>	=	1.00
Altezza <m>	=	1.50

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
4	R	100.00	150.00	3.00	C40/50	415.00	25.17	235.17	16.78	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1		SLU	0.00	327977.00	0.00	0.00	334433.00	-0.00	1-2	180.00	1.020

Stato limite ultimo - Verifiche a taglio

Caso	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	0.00	1.00	40.21	0.00	2.50	520445.00	536423.00	520445.00	---

Verifiche principali

Caso	Tipo
1	SLU N cost - min. sic.

SEZIONE 5

Sezione: Rettangolare - Dati geometrici della sezione

Base <m>	=	1.00
Altezza <m>	=	2.60

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
5	R	100.00	260.00	3.00	C40/50	415.00	25.17	235.17	16.78	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1		SLU	0.00	1526030.00	0.00	0.00	1578300.00	-6.83	1-2	179.40	1.034

Stato limite ultimo - Verifiche a taglio

Caso	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	0.00	1.00	40.21	0.00	2.50	913471.00	941569.00	913471.00	---

Verifiche principali

Caso	Tipo
1	SLU N cost - min. sic.

SEZIONE 6

Sezione: Rettangolare - Dati geometrici della sezione

Base <m>	=	1.00
Altezza <m>	=	3.50

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
6	R	100.00	350.00	3.00	C40/50	415.00	25.17	235.17	16.78	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Caso	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	α <grad>	Sic.
1		SLU	0.00	2563460.00	0.00	0.00	2801010.00	13.98	1-2	180.75	1.093

Stato limite ultimo - Verifiche a taglio

Caso	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	0.00	0.00	1.00	20.11	0.00	2.50	616467.00	1270900.00	616467.00	---

Verifiche principali

Caso	Tipo
1	SLU N cost - min. sic.

Computo armature, cls e acciaio nelle sezioni

Sezione	ø16 <daN>	ø20 <daN>	ø30 <daN>	Peso <daN>	Vol. <mc>	ρ <daN/mc>
Sezione 1 (SEZIONE RADIALE N.1 291X150) - Soll. man.	109.13	--	355.13	464.25	4.37	106.36
Sezione 2 (SEZIONE RADIALE N.2 191X260) - Soll. man.	122.81	--	455.00	577.81	4.97	116.35
Sezione 3 (SEZIONE RADIALE N.3 77X350) - Soll. man.	127.22	--	221.95	349.18	2.69	129.56
Sezione 4 (SEZIONE CONCENTRICA N.4 100X150) - Soll. man.	68.93	93.71	--	162.65	1.50	108.43
Sezione 5 (SEZIONE CONCENTRICA N.5 100X260) - Soll. man.	103.66	--	255.25	358.90	2.60	138.04
Sezione 6 (SEZIONE CONCENTRICA N.6 100X350) - Soll. man.	132.06	--	344.03	476.09	3.50	136.03
Peso totale ferri	663.81	93.71	1631.36	2388.88	19.63	121.72

Computo armature, cls e acciaio nei plinti/pali

Plinto/Palo	ø12 <daN>	ø20 <daN>	Peso <daN>	Vol. <mc>	ρ <daN/mc>
Palo 1	335.99	1368.71	1704.70	24.32	70.11
Palo 2	335.99	1368.71	1704.70	24.32	70.11
Palo 3	335.99	1368.71	1704.70	24.32	70.11
Palo 4	335.99	1368.71	1704.70	24.32	70.11
Palo 5	335.99	1368.71	1704.70	24.32	70.11
Palo 6	335.99	1368.71	1704.70	24.32	70.11
Palo 7	335.99	1368.71	1704.70	24.32	70.11
Palo 8	335.99	1368.71	1704.70	24.32	70.11
Palo 9	335.99	1368.71	1704.70	24.32	70.11
Palo 10	335.99	1368.71	1704.70	24.32	70.11
Palo 11	335.99	1368.71	1704.70	24.32	70.11
Palo 12	335.99	1368.71	1704.70	24.32	70.11
Palo 13	335.99	1368.71	1704.70	24.32	70.11
Palo 14	335.99	1368.71	1704.70	24.32	70.11
Palo 15	335.99	1368.71	1704.70	24.32	70.11
Palo 16	335.99	1368.71	1704.70	24.32	70.11
Palo 17	335.99	1368.71	1704.70	24.32	70.11
Palo 18	335.99	1368.71	1704.70	24.32	70.11
Palo 19	335.99	1368.71	1704.70	24.32	70.11
Palo 20	335.99	1368.71	1704.70	24.32	70.11
Palo 21	335.99	1368.71	1704.70	24.32	70.11
Palo 22	335.99	1368.71	1704.70	24.32	70.11
Palo 23	335.99	1368.71	1704.70	24.32	70.11
Palo 24	335.99	1368.71	1704.70	24.32	70.11
Palo 25	335.99	1368.71	1704.70	24.32	70.11
Palo 26	335.99	1368.71	1704.70	24.32	70.11
Palo 27	335.99	1368.71	1704.70	24.32	70.11
Palo 28	335.99	1368.71	1704.70	24.32	70.11
Palo 29	335.99	1368.71	1704.70	24.32	70.11
Palo 30	335.99	1368.71	1704.70	24.32	70.11
Palo 31	335.99	1368.71	1704.70	24.32	70.11
Palo 32	335.99	1368.71	1704.70	24.32	70.11
Palo 33	335.99	1368.71	1704.70	24.32	70.11
Peso totale ferri	11087.70	45167.50	56255.20	802.42	70.11

Criteri di analisi geotecnica e progetto delle fondazioni

Caratterizzazione

Specifici	1
Informazioni preliminari	
Coefficiente di uniformità	No
-Pari a	0.00
Definizione della composizione granulometrica, per terreni incoerenti	No
-Sabbia fine uniforme	x
-Sabbia fine ben gradata - sabbia media uniforme	
-Sabbia media ben gradata - sabbia grossa uniforme	
-Sabbia e ghiaia - ghiaia media	
Definizione indici compressibilità edometrica, per terreni coesivi	No
-Indice di compressione (Cc)	0.00
-Indice di ricompressione (Cr)	0.00

-Considera incremento preconsolidazione costante	No
-Pari a	0.00
Correggi NSPT se la misura è sottofalda	No
Densità relativa	
Correlata con prove SPT	
-Terzaghi e Peck (1948)	Si
-Gibbs e Holtz (1957)	No
-Meyerhof (1957)	No
-Schultze e Menzenbach (1961)	No
-Bazaara (1967)	No
-Marcuson e Bieganousky (1977)	No
-Skempton (1986)	No
Correlata con prove CPT	
-Schmertmann (1976)	Si
-Jamiolkowski et al. (1985)	No
-Baldi et al. (1986)	No
Elaborazione dei risultati	
-Valore medio	x
-Valore minore	
Angolo d'attrito	
Correlato con prove SPT	
-Terzaghi e Peck (1948)	Si
-Schmertmann (1975)	No
-Wolff (1989)	No
-Hatanaka e Uchida (1996)	No
-Road Bridge Specification	No
-Owasaki e Iwasaki	No
-Japanese National Railway	No
-Peck-Hanson e Thornburn	No
-De Mello	No
Correlato con prove CPT	
-Robertson e Campanella (1983)	Si
-Durgunoglu e Mitchell	No
-Caquot	No
Correlata con proprietà indice	
-In funzione della densità relativa, per terreni incoerenti	No
-In funzione dell'indice di plasticità, per terreni coesivi	No
Elaborazione dei risultati	
-Valore medio	x
-Valore minore	
Coesione non drenata	
Correlata con prove SPT	
-Hara et al. (1971)	Si
-Stroud (1974)	No
Correlata con prove CPT	
-Mayne e Kemper (1988)	Si
-Lunne e Eide	No
Correlata con proprietà indice	
-Bjerrum e Simons (1960)	No
-Skempton (1953)	No
-Calcolata da $\sigma'v_0$ con moltiplicatore pari a	No
Pari a	0.00
Elaborazione dei risultati	
-Valore medio	x
-Valore minore	
Caratteristiche litostatiche	
Grado di sovraconsolidazione	
-Correlato con prove SPT	
-Mayne e Kemper (1988)	No
-Correlato con prove CPT	
-Mayne e Kemper (1988)	No
-Elaborazione dei risultati	
-Valore medio	x
-Valore minore	
Coefficiente di spinta a riposo	
-Calcolo di k_0 (NC)	
-Jaky (1936)	x
-Brooker e Ireland (1965)	
-Alpan (1967)	
-Massarsch (1979)	
-Correlato con Dr	
-Calcolato dal coefficiente di Poisson	
-Calcolo di α	
-Pari a	
-Kulhawy (1989)	x
-Alpan (1967) per terreni coesivi	
-Alpan (1967) per terreni incoerenti	
-Correlato con Dr	
Parametri elastici	
Correlati con prove GFS	
Correlati con prove SPT	
-Stroud e Butler (1975)	
-Stroud (1989)	x
-Schmertmann (1978)	
-Farrent	
-Menzenbach e Malcev	
-D'Appolonia	
-Schulze e Menzenbach	
-Crespellani e Vannucchi	
-Ohsaki e Iwasaki, per sabbie	
-Ohsaki e Iwasaki, per sabbie con fini	
Correlati con prove CPT	
-Schmertmann (1977)	
-Robertson e Campanella (1983)	
-Kulhawy e Mayne (1990)	
-Rix e Stokoe (1992)	
-Mayne e Rix (1993)	
Fattore correttivo	1.00

Fondazioni profonde

Generali	
Generali	
Calcolo capacità portante per carichi verticali	Secondo formule statiche
Considera capacità portante	Entrambe
Condizioni di calcolo per terreni coesivi	Sia drenate che non drenate
Calcolo della profondità critica	No
Effettua calcolo elasto-plastico per cedimenti	Si
Effettua calcolo elasto-plastico per spostamenti orizzontali	Si
Rapporto di elasticità trazione/compressione pari a	1.00
Fattori di correlazione	1.70
Considera fattori di correlazione anche per carichi orizzontali	No
Considera peso del palo	No
Divisore del raggio del palo per lunghezza conci	1.00
Max numero conci palo	50.00
Attrito laterale limite da prove in sito	
Correlato con prove CPT	No
Correlato con prove SPT	No
Fattore di riduzione attrito laterale per pali trivellati	No
Pressione limite alla base da prove in sito	
Correlata con prove CPT	No
Correlata con prove SPT	No
Fattore di riduzione pressione limite alla base per pali trivellati	No
Spostamenti orizzontali	
Spostamenti orizzontali	Risposta elastica in funzione della stratigrafia

Specifici	1
Attrito laterale limite	
Calcolo dell'attrito laterale limite	Si
-Condizioni non drenate	

-Calcolo di α	
-Pari a	
-A.G.I. (1984)	x
-A.P.I. (1984)	
-Viggiani (1999)	
-Olson e Dennis (1982)	
-Stas e Kulhavy (1984)	
-Skempton (1986)	
-Reese e O'Neill (1989)	
-Metodo di Bustamente e Doix (1985) per micropali	No
-Iniezioni ripetute	x
-Unica iniezione	
-Condizioni drenate	
-Calcolo di β	
-Pari a	0.25
-Reese e O'Neill (1989)	
-Calcolato	
-Calcolo di k	
-Pari a	
-Dal rapporto con k_0 pari a	0.00
-Fleming (1985)	
-Calcolo di δ	
-Pari a <grad>	
-Dal rapporto con ϕ' pari a	0.00
-Calcolo di a' dal rapporto con c'	1.00
Calcolo dell'attrito laterale limite per trazione	
-Considera i risultati del calcolo per l'attrito laterale limite percompressione con un fattore di riduzione pari a	0.66
-Sowa (1970)	No
-Bowles (1991)	No
Considera l'effetto dell'attrito negativo	No
-Coefficiente di Lambe	
Pressione limite alla base	
Calcolo della pressione limite alla base del palo	Si
-Terzaghi (1943)	x
-Meyerhof (1963)	
-Hansen (1970)	
-Vesic (1975)	
-Berezantzev (1961)	
-Berezantzev (1965)	
-Stagg e Zienkiewicz (1968)	
-Relazione generale, coefficienti di capacità portante	
-In condizioni drenate	
-N_q	
-N_c	
-In condizioni non drenate	
-N_c	
-Fattore di riduzione per terreni coesivi sovraconsolidati	No
Cedimenti	
Risposta elastica laterale	
-Calcolata dalla rigidezza dello strato	x
-Coefficiente di influenza	4.00
-Pari a <daN/mq>	
Risposta elastica alla base	
-Calcolata dalla rigidezza dello strato	x
-Pari a <daN/mq>	
Spostamenti orizzontali	
Risposta elastica	
-Vesic (1961)	
-Broms (1964)	
-Glick (1948)	
-Chen (1978)	
-Pari a <daN/mq>	
-Dal modulo elastico	x
-Coefficiente effetto tridimensionale	2.00
Resistenza limite	
-Calcolata dai parametri plastici	x
-Coefficiente effetto tridimensionale resistenza per attrito	3.00
-Coefficiente effetto tridimensionale resistenza per coesione	4.00
-Pari a <daN/mq>	

Geotecnica

Elenco unità geotecniche

1 Strato detritico di natura calcarea:
Classificazione: Incoerente

Pesi:
- Peso specifico del terreno naturale: γ = 1920.00 daN/mc
- Peso specifico del terreno saturo: γ_{sat} = 1890.00 daN/mc

Parametri plastici:
- Angolo di attrito efficace: ϕ' = 26.00 grad
- Coesione efficace: c' = 1900.00 daN/mq

Caratteristiche litostatiche:
- Grado di sovraconsolidazione: OCR = 1.00
- Coeff. di spinta a riposo: κ_0 = 0.66

Parametri elastici:
- Modulo elastico normale: E = 2610000.00 daN/mq
- Modulo elastico tangenziale: G = 1087500.00 daN/mq
- Esponente del parametro tensionale: k_j = 0.00
- Coeff. di Poisson: ν = 0.20
- Modulo edometrico: E_{ed} = 2900000.00 daN/mq
- Modulo elastico non drenato: E_u = 0.00 daN/mq

Elenco colonne stratigrafiche

Colonna stratigrafica numero 1
Posizione: X=0.00 <m> Y=0.00 <m> Z=0.00 <m>
Falda non presente

Simbologia
ϕ' = Angolo di attrito efficace
γ = Peso specifico del terreno naturale
γ_{sat} = Peso specifico del terreno saturo
κ_0 = Coeff. di spinta a riposo
Class. = Classificazione
Inc. = Incoerente
Crit. = Criterio di progetto
D_r = Densità relativa
I_p = Indice di plasticità
OCR = Grado di sovraconsolidazione
St. = Strato
Unità geotecnica = Unità geotecnica
c_u = Coesione non drenata
c' = Coesione efficace
z = Profondità della superficie superiore dello strato

St.	z <m>	Unità geotecnica	Class.	γ <daN/mc>	γ_{sat} <daN/mc>	D_r	I_p	ϕ' <grad>	c' <daN/mq>	c_u <daN/mq>	OCR	κ_0	Crit.
1	0.00	1 Strato detritico di natura calcarea	Inc.	1920.00	1890.00			26.00	1900.00		1.00	0.66	1

Simbologia
ν = Coeff. di Poisson
Crit. = Criterio di progetto
E = Modulo elastico normale
E_{ed} = Modulo edometrico
E_u = Modulo elastico non drenato
G = Modulo elastico tangenziale
St. = Strato
k_j = Esponente del parametro tensionale
z = Profondità della superficie superiore dello strato

St.	z <m>	E <daN/mq>	G <daN/mq>	k_j	ν	E_{ed} <daN/mq>	E_u <daN/mq>	Crit.
1	0.00	2610000.00	1087500.00	0.00	0.20	2900000.00	0.00	1

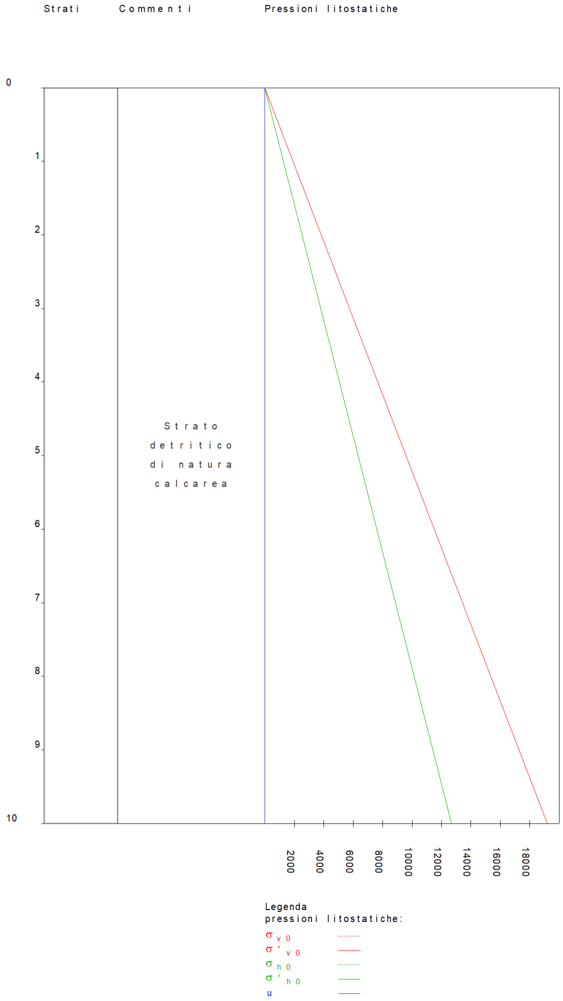


Figura numero 1: Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1

Le verifiche degli elementi di fondazione sono state effettuate utilizzando l'approccio 2.

Coefficienti parziali per le azioni, per verifiche in condizioni statiche:
Permanenti strutturali, sicurezza a favore γ_A = 1.00;
Permanenti strutturali, sicurezza a sfavore γ_A = 1.30;
Permanenti non strutturali, sicurezza a favore γ_A = 0.00;
Permanenti non strutturali, sicurezza a sfavore γ_A = 1.50;
Variabili, sicurezza a favore γ_A = 0.00;
Variabili, sicurezza a sfavore γ_A = 1.50.

I coefficienti parziali per le azioni sono posti pari all'unità per le verifiche in condizioni sismiche.

Tali coefficienti sono comunque desumibili dalla tabella delle combinazioni delle CCE (Parametri di calcolo).

Coefficienti parziali per i parametri geotecnici:
Tangente dell'angolo di attrito γ_M = 1.00;
Coesione efficace γ_M = 1.00;
Coesione non drenata γ_M = 1.00;

Coefficienti parziali per la resistenza delle fondazioni superficiali:
Capacità portante γ_R = 2.30;
Scorrimento γ_R = 1.10;
Coefficienti parziali per la resistenza delle fondazioni profonde:
Per pali infissi:
Resistenza alla base $\gamma_{R,b}$ = 1.15;
Resistenza laterale in compressione $\gamma_{R,s}$ = 1.15;
Resistenza laterale in trazione $\gamma_{R,t}$ = 1.25;
Per pali trivellati e micropali:
Resistenza alla base $\gamma_{R,b}$ = 1.35;
Resistenza laterale in compressione $\gamma_{R,s}$ = 1.15;
Resistenza laterale in trazione $\gamma_{R,t}$ = 1.25;
Per pali ad elica continua:
Resistenza alla base $\gamma_{R,b}$ = 1.30;
Resistenza laterale in compressione $\gamma_{R,s}$ = 1.15;
Resistenza laterale in trazione $\gamma_{R,t}$ = 1.25;
Fattore di correlazione per la determinazione della resistenza caratteristica desumibile dai criteri di progetto.

Tabelle riassuntive verifiche geotecniche

Elem.	Sic.
Palo n. 1	4.36
Palo n. 10	12.98
Palo n. 11	8.38
Palo n. 12	97.18
Palo n. 13	90.41
Palo n. 14	31.13
Palo n. 15	14.04
Palo n. 16	7.95
Palo n. 17	5.24
Palo n. 18	3.84
Palo n. 19	3.00
Palo n. 2	2.68
Palo n. 20	2.50
Palo n. 21	2.20
Palo n. 22	2.02
Palo n. 23	1.94
Palo n. 24	1.93
Palo n. 25	2.01
Palo n. 26	2.19
Palo n. 27	2.48
Palo n. 28	2.98
Palo n. 29	3.82
Palo n. 3	1.97
Palo n. 30	5.25
Palo n. 31	8.11
Palo n. 32	14.54
Palo n. 33	33.21
Palo n. 4	1.70
Palo n. 5	1.70
Palo n. 6	1.96
Palo n. 7	2.66
Palo n. 8	4.38
Palo n. 9	8.53

Fondazioni profonde

Simbologia
σ_h = Pressione limite per carichi orizzontali
τ_s = Attrito laterale limite per compressione
CC = Numero della combinazione delle condizioni di carico elementari
Caso = Caso di verifica
Ced = Cedimento calcolato
D = Profondità della testa del palo
Dp = Diametro pali
Lp = Lunghezza pali
M = Momento flettente
N = Sforzo normale
QP_{lim} = Resistenza di progetto alla base del palo
QS_{lim} = Resistenza laterale di progetto per compressione
Sic.O = Sicurezza a rottura orizzontale
Sic.V = Sicurezza a rottura verticale
Sps = Spostamento
T = Taglio in testa
Wp = Peso del palo
Zp = Profondità del tratto di integrazione
k_h = Risposta elastica per carichi orizzontali
k_p = Risposta elastica alla base del palo
k_s = Risposta elastica laterale per compressione
q_p = Pressione limite alla base del palo

Verifiche capacità portante e cedimenti

Palo n. 1

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-140985.00	0.38	4.36	7215.34	56256.40	0.20	>1
2	2	-104433.00	0.28	--	5344.69	41671.40	0.15	--
3	3	-104433.00	0.28	--	5344.69	41671.40	0.15	--
4	4	-104433.00	0.28	--	5344.69	41671.40	0.15	--

Palo n. 2

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-229635.00	0.63	2.68	6733.80	55868.00	0.20	>1
2	2	-170100.00	0.46	--	4988.00	41383.70	0.15	--
3	3	-170100.00	0.46	--	4988.00	41383.70	0.15	--
4	4	-170100.00	0.46	--	4988.00	41383.70	0.15	--

Palo n. 3

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-311581.00	0.89	1.97	6219.88	45510.90	0.17	>1
2	2	-230800.00	0.63	--	4607.32	33711.80	0.12	--
3	3	-230800.00	0.63	--	4607.32	33711.80	0.12	--
4	4	-230800.00	0.63	--	4607.32	33711.80	0.12	--

Palo n. 4

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-361205.00	1.06	1.70	5885.45	30242.60	0.13	>1
2	2	-267559.00	0.74	--	4359.59	22401.90	0.09	--
3	3	-267559.00	0.74	--	4359.59	22401.90	0.09	--
4	4	-267559.00	0.74	--	4359.59	22401.90	0.09	--

Palo n. 5

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-361932.00	1.06	1.70	5904.11	29886.70	0.13	>1
2	2	-268098.00	0.75	--	4373.42	22138.30	0.09	--
3	3	-268098.00	0.75	--	4373.42	22138.30	0.09	--
4	4	-268098.00	0.75	--	4373.42	22138.30	0.09	--

Palo n. 6

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-313420.00	0.89	1.96	6234.21	44859.10	0.17	>1
2	2	-232163.00	0.64	--	4617.93	33228.90	0.12	--
3	3	-232163.00	0.64	--	4617.93	33228.90	0.12	--
4	4	-232163.00	0.64	--	4617.93	33228.90	0.12	--

Palo n. 7

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-230820.00	0.63	2.66	6712.31	56379.70	0.20	>1
2	2	-170978.00	0.46	--	4972.08	41762.80	0.15	--
3	3	-170978.00	0.46	--	4972.08	41762.80	0.15	--
4	4	-170978.00	0.46	--	4972.08	41762.80	0.15	--

Palo n. 8

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-140336.00	0.38	4.38	7161.62	56972.90	0.20	>1
2	2	-103953.00	0.28	--	5304.90	42202.20	0.15	--
3	3	-103953.00	0.28	--	5304.90	42202.20	0.15	--
4	4	-103953.00	0.28	--	5304.90	42202.20	0.15	--

Palo n. 9

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-72030.50	0.19	8.53	7474.72	48799.20	0.19	>1
2	2	-53355.90	0.14	--	5536.83	36147.50	0.14	--
3	3	-53355.90	0.14	--	5536.83	36147.50	0.14	--
4	4	-53355.90	0.14	--	5536.83	36147.50	0.14	--

Palo n. 10

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-47373.90	0.13	12.98	7606.52	43478.40	0.18	>1
2	2	-35091.80	0.09	--	5634.46	32206.20	0.13	--
3	3	-35091.80	0.09	--	5634.46	32206.20	0.13	--
4	4	-35091.80	0.09	--	5634.46	32206.20	0.13	--

Palo n. 11

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-73396.10	0.20	8.38	7503.56	48789.60	0.19	>1
2	2	-54367.50	0.15	--	5558.19	36140.40	0.14	--
3	3	-54367.50	0.15	--	5558.19	36140.40	0.14	--
4	4	-54367.50	0.15	--	5558.19	36140.40	0.14	--

Palo n. 12

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-6326.08	0.02	97.18	7846.70	36501.80	0.16	>1
2	2	-4685.99	0.01	--	5812.37	27038.40	0.12	--
3	3	-4685.99	0.01	--	5812.37	27038.40	0.12	--
4	4	-4685.99	0.01	--	5812.37	27038.40	0.12	--

Palo n. 13

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-6799.50	0.02	90.41	7808.85	36576.70	0.16	>1
2	2	-5036.67	0.01	--	5784.34	27093.90	0.12	--
3	3	-5036.67	0.01	--	5784.34	27093.90	0.12	--
4	4	-5036.67	0.01	--	5784.34	27093.90	0.12	--

Palo n. 14

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-19749.60	0.05	31.13	7782.47	39484.20	0.17	>1
2	2	-14629.30	0.04	--	5764.79	29247.50	0.12	--
3	3	-14629.30	0.04	--	5764.79	29247.50	0.12	--
4	4	-14629.30	0.04	--	5764.79	29247.50	0.12	--

Palo n. 15

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-43794.90	0.12	14.04	7612.30	43984.90	0.18	>1
2	2	-32440.70	0.09	--	5638.74	32581.40	0.13	--
3	3	-32440.70	0.09	--	5638.74	32581.40	0.13	--
4	4	-32440.70	0.09	--	5638.74	32581.40	0.13	--

Palo n. 16

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>

Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-77295.90	0.21	7.95	7452.02	48595.40	0.19	>1
2	2	-57256.20	0.15	--	5520.01	35996.60	0.14	--
3	3	-57256.20	0.15	--	5520.01	35996.60	0.14	--
4	4	-57256.20	0.15	--	5520.01	35996.60	0.14	--

Palo n. 17

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-117290.00	0.32	5.24	7178.35	52347.70	0.19	>1
2	2	-86881.70	0.24	--	5317.30	38776.10	0.14	--
3	3	-86881.70	0.24	--	5317.30	38776.10	0.14	--
4	4	-86881.70	0.24	--	5317.30	38776.10	0.14	--

Palo n. 18

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-160249.00	0.43	3.84	6896.42	54556.60	0.19	>1
2	2	-118703.00	0.32	--	5108.46	40412.30	0.14	--
3	3	-118703.00	0.32	--	5108.46	40412.30	0.14	--
4	4	-118703.00	0.32	--	5108.46	40412.30	0.14	--

Palo n. 19

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-205015.00	0.56	3.00	6543.31	54997.60	0.19	>1
2	2	-151863.00	0.41	--	4846.90	40739.00	0.14	--
3	3	-151863.00	0.41	--	4846.90	40739.00	0.14	--
4	4	-151863.00	0.41	--	4846.90	40739.00	0.14	--

Palo n. 20

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-245829.00	0.68	2.50	6210.44	53879.40	0.19	>1
2	2	-182096.00	0.49	--	4600.33	39910.70	0.14	--
3	3	-182096.00	0.49	--	4600.33	39910.70	0.14	--
4	4	-182096.00	0.49	--	4600.33	39910.70	0.14	--

Palo n. 21

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>

k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-279714.00	0.78	2.20	5899.00	51860.60	0.18	>1
2	2	-207195.00	0.56	--	4369.63	38415.30	0.13	--
3	3	-207195.00	0.56	--	4369.63	38415.30	0.13	--
4	4	-207195.00	0.56	--	4369.63	38415.30	0.13	--

Palo n. 22

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-304602.00	0.86	2.02	5679.15	49349.00	0.17	>1
2	2	-225631.00	0.62	--	4206.77	36554.80	0.13	--
3	3	-225631.00	0.62	--	4206.77	36554.80	0.13	--
4	4	-225631.00	0.62	--	4206.77	36554.80	0.13	--

Palo n. 23

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-317570.00	0.91	1.94	5544.30	47986.60	0.17	>1
2	2	-235237.00	0.65	--	4106.89	35545.60	0.12	--
3	3	-235237.00	0.65	--	4106.89	35545.60	0.12	--
4	4	-235237.00	0.65	--	4106.89	35545.60	0.12	--

Palo n. 24

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-317954.00	0.91	1.93	5549.94	47917.00	0.17	>1
2	2	-235522.00	0.65	--	4111.07	35494.10	0.12	--
3	3	-235522.00	0.65	--	4111.07	35494.10	0.12	--
4	4	-235522.00	0.65	--	4111.07	35494.10	0.12	--

Palo n. 25

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-305679.00	0.87	2.01	5670.62	49191.30	0.17	>1
2	2	-226429.00	0.62	--	4200.46	36438.00	0.13	--
3	3	-226429.00	0.62	--	4200.46	36438.00	0.13	--
4	4	-226429.00	0.62	--	4200.46	36438.00	0.13	--

Palo n. 26

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-281350.00	0.79	2.19	5904.70	51693.50	0.18	>1
2	2	-208407.00	0.57	--	4373.85	38291.50	0.13	--
3	3	-208407.00	0.57	--	4373.85	38291.50	0.13	--
4	4	-208407.00	0.57	--	4373.85	38291.50	0.13	--

Palo n. 27

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-247713.00	0.68	2.48	6219.88	53954.10	0.19	>1
2	2	-183491.00	0.50	--	4607.32	39966.00	0.14	--
3	3	-183491.00	0.50	--	4607.32	39966.00	0.14	--
4	4	-183491.00	0.50	--	4607.32	39966.00	0.14	--

Palo n. 28

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-206632.00	0.56	2.98	6547.58	55216.70	0.19	>1
2	2	-153061.00	0.41	--	4850.06	40901.20	0.14	--
3	3	-153061.00	0.41	--	4850.06	40901.20	0.14	--
4	4	-153061.00	0.41	--	4850.06	40901.20	0.14	--

Palo n. 29

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-161013.00	0.44	3.82	6890.93	55068.90	0.20	>1
2	2	-119269.00	0.32	--	5104.40	40791.80	0.14	--
3	3	-119269.00	0.32	--	5104.40	40791.80	0.14	--
4	4	-119269.00	0.32	--	5104.40	40791.80	0.14	--

Palo n. 30

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-117052.00	0.32	5.25	7177.58	53043.70	0.19	>1
2	2	-86705.10	0.23	--	5316.72	39291.60	0.14	--
3	3	-86705.10	0.23	--	5316.72	39291.60	0.14	--
4	4	-86705.10	0.23	--	5316.72	39291.60	0.14	--

Palo n. 31

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-75796.60	0.21	8.11	7432.37	49014.70	0.19	>1
2	2	-56145.60	0.15	--	5505.46	36307.20	0.14	--
3	3	-56145.60	0.15	--	5505.46	36307.20	0.14	--
4	4	-56145.60	0.15	--	5505.46	36307.20	0.14	--

Palo n. 32

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-42291.80	0.11	14.54	7636.07	44104.50	0.18	>1
2	2	-31327.20	0.08	--	5656.35	32670.00	0.13	--
3	3	-31327.20	0.08	--	5656.35	32670.00	0.13	--
4	4	-31327.20	0.08	--	5656.35	32670.00	0.13	--

Palo n. 33

Tipo palo=Trivellato
Rotazione testa libera
Coefficiente di efficienza=1.00
Dp=1.20 <m> Lp=21.50 <m> Wp=60789.80 <daN> D=0.00 <m>
Colonna stratigrafica numero 1 COLONNA STRATIGRAFICA 1
Verifiche in condizioni drenate

Zp <m>	τ_s <daN/cmq>	k_s <daN/cmc>	σ_h <daN/cmq>	k_h <daN/cmc>
0.00	0.19	0.45	2.43	4.35
21.50	1.22	0.45	34.15	4.35

QS_{lim}=572235.00 <daN>
q_p=65.35 <daN/cmq>
QP_{lim}=739098.00 <daN>
k_p=2.88 <daN/cmc>

Verifiche in condizioni drenate

Caso	CC	N <daN>	Ced <cm>	Sic.V	T <daN>	M <daNm>	Sps <cm>	Sic.O
1	1	-18512.80	0.05	33.21	7751.76	39406.60	0.17	>1
2	2	-13713.20	0.04	--	5742.04	29190.10	0.12	--
3	3	-13713.20	0.04	--	5742.04	29190.10	0.12	--
4	4	-13713.20	0.04	--	5742.04	29190.10	0.12	--