

## Sommario

Risultati del calcolo.....	2
Parametri di calcolo.....	2
Figura numero 1: Spettro allo SLO.....	5
Figura numero 2: Spettro allo SLD.....	7
Figura numero 3: Spettro allo SLV.....	9
Spostamenti relativi massimi allo stato limite di operatività.....	28

## Risultati del calcolo

### Parametri di calcolo

La modellazione della struttura e la rielaborazione dei risultati del calcolo sono stati effettuati con: ModeSt ver. 7.19, prodotto da Tecnisoft s.a.s. - Prato

La struttura è stata calcolata utilizzando come solutore agli elementi finiti: Xfinest ver. 8.1, prodotto da Ce.A.S. S.r.l. - Milano

Tipo di normativa: stati limite D.M. 08  
Tipo di calcolo: analisi sismica dinamica  
Schematizzazione piani rigidi: metodo Master-Slave  
Modalità di recupero masse secondarie: trasferire all'impalcato più vicino con modifica XY baricentro

### Generazione combinazioni

- Lineari: si  
- 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  
- Minimo carico da considerare: 0.00 <kg/m>  
- Recupero carichi zone rigide: taglio e momento flettente  
- Modalità di combinazione momento torcente: disaccoppiare le azioni

### Opzioni del solutore

- Tipo di elemento bidimensionale: ISOSHELL  
- Trascura deformabilità a taglio delle aste: No  
- Analisi dinamica con metodo di Lanczos: No  
- Check sequenza di Sturm: Si  
- Soluzione matrice con metodo ver. 5.1: No  
- Analisi non lineare con Newton modificato: No  
- Usa formulazione secante per Buckling: No  
- Trascura Buckling torsionale: No

### Dati struttura

- Zona sismica: zona 2  
- Sito di costruzione: scandicci LON. 11.18240 LAT. 43.75800  
Contenuto tra ID reticolo: 20058 20057 20280 20279

### Simbologia

TCC = Tipo di combinazione di carico  
SLU = Stato limite ultimo  
SLU S = Stato limite ultimo (azione sismica)  
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  
SLD = Stato limite di danno  
SLV = Stato limite di salvaguardia della vita  
SLC = Stato limite di prevenzione del collasso  
SLO = Stato limite di operatività  
Ag = Accelerazione orizzontale massima al sito  
FO = Valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale  
TC\* = Periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale

TCC	Ag	FO	TC*
SLO	0.5163	2.59	0.26
SLD	0.6103	2.63	0.28
SLV	1.4446	2.39	0.30

- Tipo di opera: Opera ordinaria  
- Vita nominale  $V_N$ : 50.00  
- Classe d'uso: classe III  
- SL Esercizio: SLO-Pvr 81.00, SLD-Pvr 63.00  
- SL Ultimi: SLV-Pvr 10.00, SLC-Pvr no  
- Classe di duttilità: classe B  
- Quota di riferimento: -3.45 <m>  
- Altezza della struttura: 18.74 <m>  
- Numero piani edificio: 8

## Relazione di calcolo

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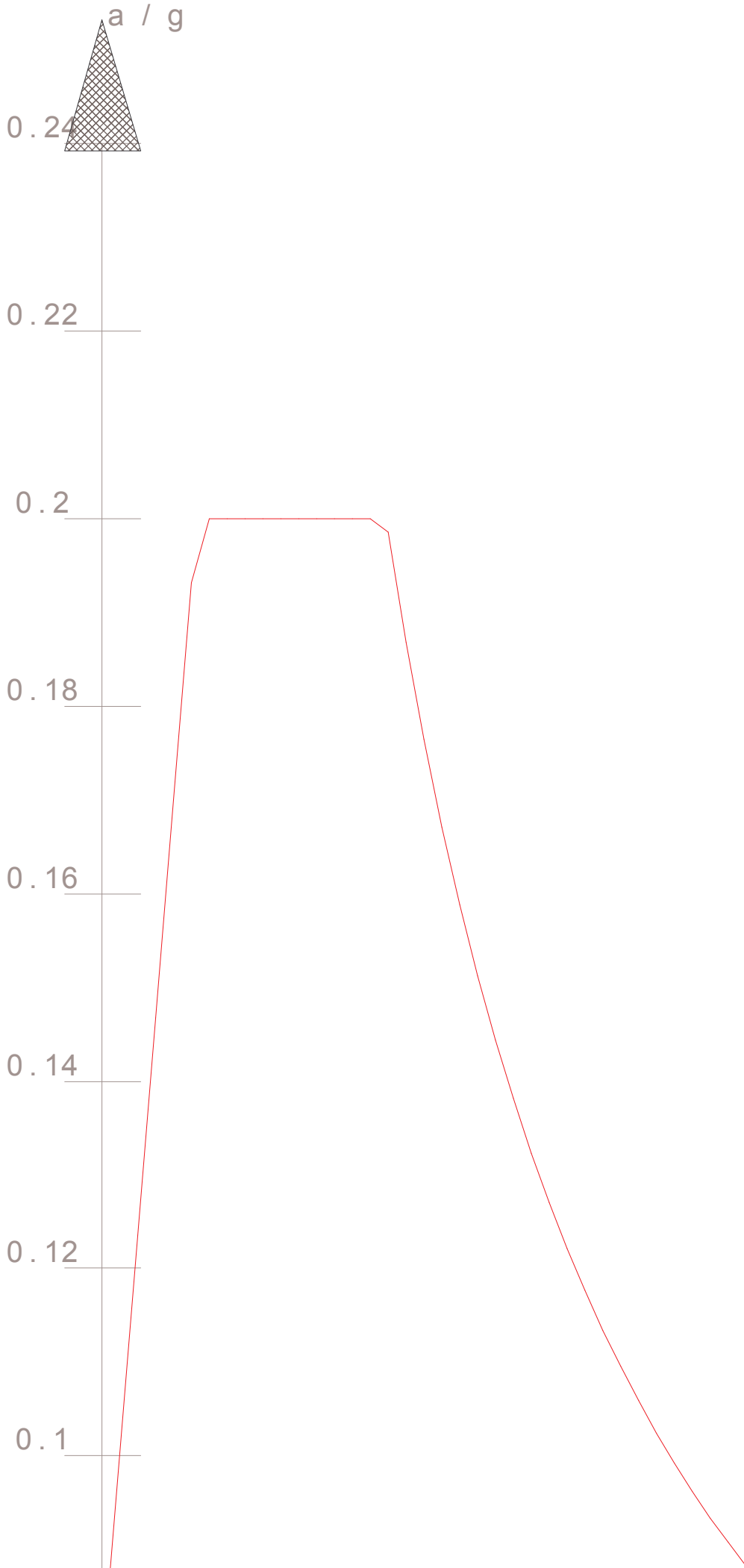
- Coefficiente  $\theta$ : 0
- Edificio regolare in altezza: no
- Edificio regolare in pianta: no
- Forze orizzontali convenzionali per stati limite non sismici: no

### Dati di calcolo

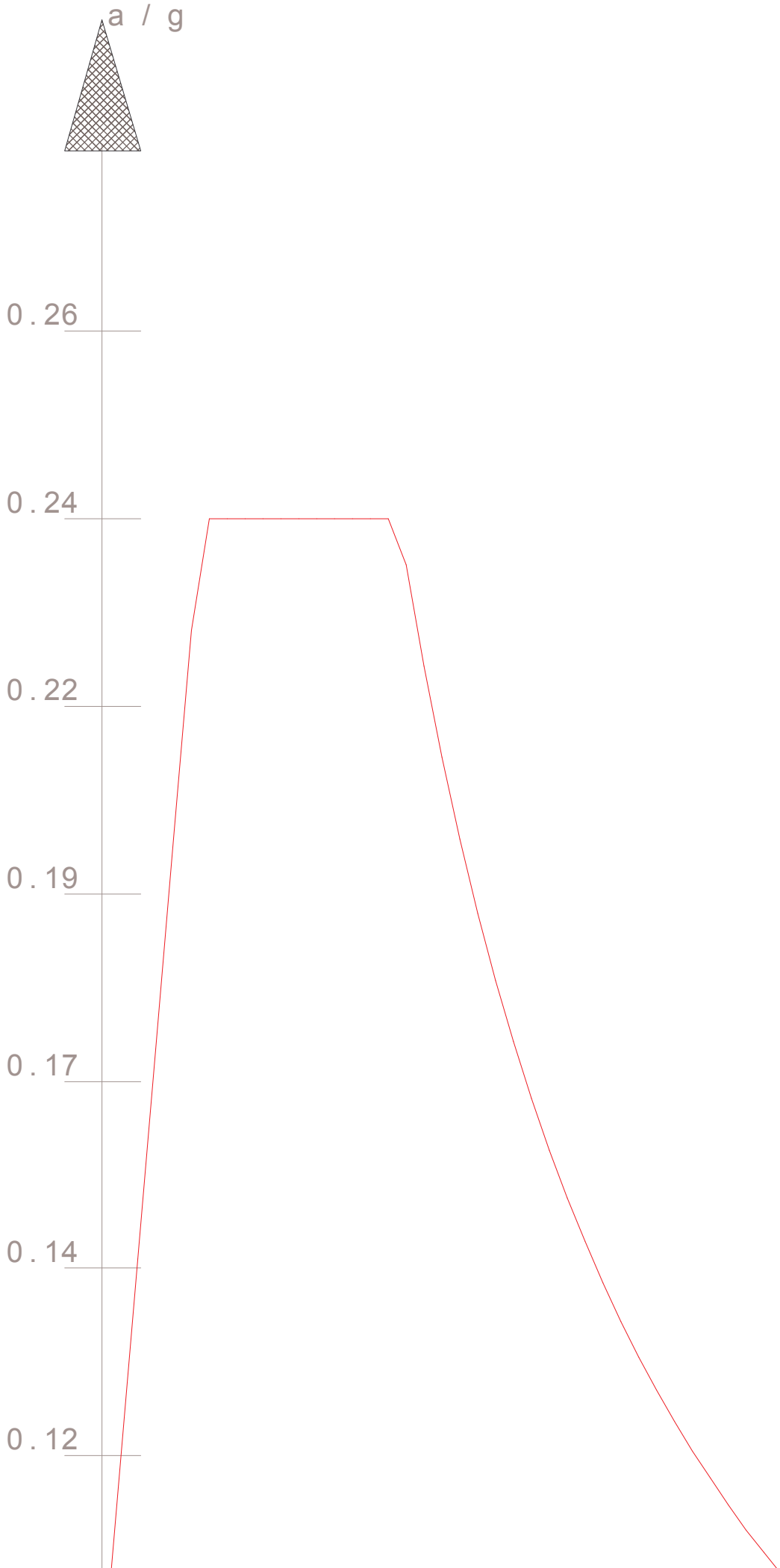
- Categoria del suolo di fondazione: C
- Tipologia edificio: c.a. o prefabbricato a telaio a più piani e più campate

Coeff. $C_1$	0.075
Periodo $T_1$	0.7668
Coeff. $\lambda$ SLO	0.85
Coeff. $\lambda$ SLD	0.85
Coeff. $\lambda$ SLV	0.85
Rapporto di sovrarresistenza ( $\alpha_0/\alpha_1$ )	1.15
Valore di riferimento del fattore di struttura ( $q_0$ )	3.45
Fattore riduttivo ( $K_w$ )	1.00
Fattore di struttura ( $q$ )	1.00

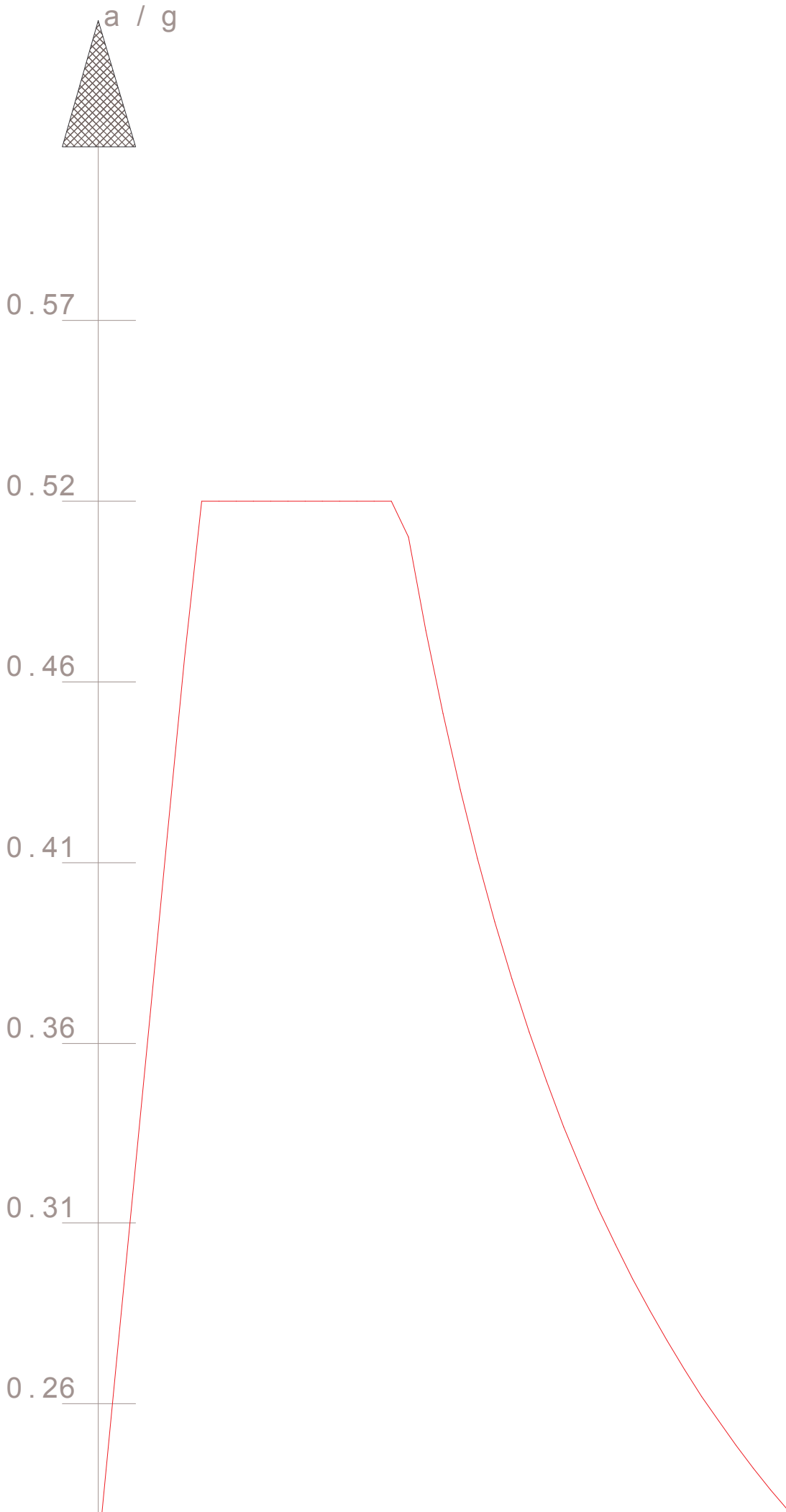
- Categoria topografica: T1 - Superficie pianeggiante, pendii e rilievi isolati con inclinazione media  $i \leq 15^\circ$
- Coeff. amplificazione topografica: 1.00
- Modi da calcolare: 210
- Modi da considerare: con singola massa superiore a 1.00%
- Smorzamento spettro: 5.00



**Figura numero 1: Spettro allo SLO**



**Figura numero 2: Spettro allo SLD**





**Figura numero 3: Spettro allo SLV**

- Angolo di ingresso del sisma: 0.00 <grad>

**Dati di piano**

**Simbologia**

Imp. = Numero dell'impalcato  
 Lx = Dimensione del piano in dir. X  
 Ly = Dimensione del piano in dir. Y  
 Ex = Eccentricità in dir. X  
 Ey = Eccentricità in dir. Y  
 Ea = Eccentricità complessiva

Imp.	Lx <m>	Ly <m>	Ex <m>	Ey <m>	Ea <m>
1	22.12	49.20	1.11	2.46	2.70
2	9.60	13.35	0.48	0.67	0.82
3	21.55	6.00	1.08	0.30	1.12
4	21.55	6.00	1.08	0.30	1.12
5	26.70	49.20	1.34	2.46	2.80
6	21.55	6.00	1.08	0.30	1.12
7	21.55	6.00	1.08	0.30	1.12
8	24.00	36.00	1.20	1.80	2.16

**Condizioni di carico elementari**

**Simbologia**

CCE = Numero della condizione di carico elementare  
 Comm. = Commento  
 s = Coeff. di riduzione  
 Mx = Moltiplicatore della massa in dir. X  
 My = Moltiplicatore della massa in dir. Y  
 Mz = Moltiplicatore della massa in dir. Z  
 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

CCE	Comm.	s	Mx	My	Mz	Jpx	Jpy	Jpz
1	peso proprio e qps	1.00	1.00	1.00	1.00	0.00	0.00	1.00
2	qpn	1.00	1.00	1.00	1.00	0.00	0.00	1.00
3	tamponamenti	1.00	1.00	1.00	1.00	0.00	0.00	1.00
4	perm. interrato	1.00	0.00	0.00	0.00	0.00	0.00	0.00
5	spinta terra	1.00	0.00	0.00	0.00	0.00	0.00	0.00
6	spinta accidentale	1.00	0.00	0.00	0.00	0.00	0.00	0.00
7	accidentale interrato	1.00	1.00	1.00	0.00	0.00	0.00	1.00
8	acc. affollamento	1.00	1.00	1.00	1.00	0.00	0.00	1.00
9	acc. coperture	1.00	1.00	1.00	1.00	0.00	0.00	1.00
10	Momento torcente - SLO	--	--	--	--	--	--	--
11	Sisma dir. X - SLO	--	--	--	--	--	--	--
12	Sisma dir. Y - SLO	--	--	--	--	--	--	--
13	Sisma dir. Z - SLO	--	--	--	--	--	--	--
14	Momento torcente - SLD	--	--	--	--	--	--	--
15	Sisma dir. X - SLD	--	--	--	--	--	--	--
16	Sisma dir. Y - SLD	--	--	--	--	--	--	--
17	Sisma dir. Z - SLD	--	--	--	--	--	--	--
18	Momento torcente - SLV	--	--	--	--	--	--	--
19	Sisma dir. X - SLV	--	--	--	--	--	--	--
20	Sisma dir. Y - SLV	--	--	--	--	--	--	--
21	Sisma dir. Z - SLV	--	--	--	--	--	--	--

**Elenco tipi cce definiti**

**Simbologia**

Tipo CCE = Tipo condizione di carico elementare  
 Comm. = Commento  
 Tipo = Tipologia  
     G = Permanente  
     Q = Variabile  
     I = Da ignorare  
     A = Azione eccezionale  
     P = Precompressione  
 Durata = Durata del carico  
     N = Non definita  
     P = Permanente

## Relazione di calcolo

L = Lunga  
M = Media  
B = Breve  
I = Istantanea

$\gamma_{min.}$  = Coeff.  $\gamma_{min.}$   
 $\gamma_{max}$  = Coeff.  $\gamma_{max}$   
 $\Psi_0$  = Coeff.  $\Psi_0$   
 $\Psi_1$  = Coeff.  $\Psi_1$   
 $\Psi_2$  = Coeff.  $\Psi_2$   
 $\Psi_{0,s}$  = Coeff.  $\Psi_0$  sismico (D.M. 96)

Tipo CCE	Comm.	Tipo	Durata	$\gamma_{min.}$	$\gamma_{max}$	$\Psi_0$	$\Psi_1$	$\Psi_2$	$\Psi_{0,s}$
1	CARICHI ECCEZIONALI	A	N	1.40	1.40				
2	PRECOMPRESSIONE	P	N	0.90	1.20				
3	DA IGNORARE	I	N						
4	PERMANENTI	G	N	1.00	1.40				
5	VARIABILI ABITAZIONI, UFFICI	Q	N	0.00	1.50	0.70	0.50	0.20	0.70
6	VARIABILI AUTORIMESSE	Q	N	0.00	1.50	0.70	0.70	0.60	0.70
7	MAGAZZINI, ARCHIVI, SCALE	Q	N	0.00	1.50	0.70	0.60	0.30	0.70
8	VARIABILI PER NEVE	Q	N	0.00	1.50	0.70	0.20	0.00	0.70
9	VARIABILI UFFICI APERTI AL PUBBLICO, NEGOZI, SCUOLE	Q	N	0.00	1.50	0.70	0.60	0.30	0.70
10	VARIABILI PER VENTO, VARIAZIONE TERMICA	Q	N	0.00	1.50	0.70	0.20	0.00	0.00
11	D.M. 08 Permanenti non strutturali	G	N	0.00	1.50				
12	D.M. 08 Permanenti strutturali	G	N	1.00	1.30				
13	D.M. 08 Variabili Categoria A Ambienti ad uso residenziale	Q	N	0.00	1.50	0.70	0.50	0.30	0.00
14	D.M. 08 Variabili Categoria B Uffici	Q	N	0.00	1.50	0.70	0.50	0.30	0.00
15	D.M. 08 Variabili Categoria C Ambienti suscettibili di affollamento	Q	N	0.00	1.50	0.70	0.70	0.60	0.00
16	D.M. 08 Variabili Categoria D Ambienti ad uso commerciale	Q	N	0.00	1.50	0.70	0.70	0.60	0.00
17	D.M. 08 Variabili Categoria E Biblioteche, archivi, magazzini e ambienti ad uso industriale	Q	N	0.00	1.50	1.00	0.90	0.80	0.00
18	D.M. 08 Variabili Categoria F Rimesse e parcheggi (per autoveicoli di peso $\leq 30$ kN)	Q	N	0.00	1.50	0.70	0.70	0.60	0.00
19	D.M. 08 Variabili Categoria G Rimesse e parcheggi (per autoveicoli di peso $> 30$ kN)	Q	N	0.00	1.50	0.70	0.50	0.30	0.00
20	D.M. 08 Variabili Neve (a quota $\leq 1000$ m s.l.m.)	Q	N	0.00	1.50	0.50	0.20	0.00	0.00
21	D.M. 08 Variabili Neve (a quota $> 1000$ m s.l.m.)	Q	N	0.00	1.50	0.70	0.50	0.20	0.00
22	D.M. 08 Variabili Variazioni termiche	Q	N	0.00	1.50	0.60	0.50	0.00	0.00
23	D.M. 08 Variabili Vento	Q	N	0.00	1.50	0.60	0.20	0.00	0.00
24	D.M. 96 Permanenti	G	N	1.00	1.40				

## Ambienti di carico

### Simbologia

N Numero  
Comm. Commento  
1 peso proprio e qps  
2 qpn  
3 tamponamenti  
4 perm. interrato  
5 spinta terra  
6 spinta accidentale  
7 accidentale interrato  
8 acc. affollamento  
9 acc. coperture  
F azioni orizzontali convenzionali  
SLU Stato limite ultimo  
SLR Stato limite per combinazioni rare  
SLF Stato limite per combinazioni frequenti  
SLQ Stato limite per combinazioni quasi permanenti o di danno

N	Comm.	1	2	3	4	5	6	7	8	9	S	SLU	SLR	SLF	SLQ
1	Calcolo sismico	si	si	si	si	si	si	si	si	si	si	si	no	no	no
2	Calcolo statico	si	si	si	si	si	si	si	si	si	no	si	si	si	si

## 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  
SLU S = Stato limite ultimo (azione sismica)  
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  
SLD = Stato limite di danno  
SLV = Stato limite di salvaguardia della vita  
SLC = Stato limite di prevenzione del collasso  
SLO = Stato limite di operatività

CC	Comm.	TCC	1	2	3	4	5	6	7	8	9	S
1 Amb.	1 (SLU S)	SLU S	1	1	1	1	1	$\Psi_2$	$\Psi_2$	$\Psi_2$	$\Psi_2$	1
2 Amb.	2 (SLU)	SLU	$\gamma_{max}$	$\gamma_{max}$	$\gamma_{max}$	$\gamma_{max}$	$\gamma_{max}$	$\gamma_{max}$	$\gamma_{max}$	$\gamma_{max}$	$\gamma_{max}$	-----
3 Amb.	2 (SLE R)	SLE R	1	1	1	1	1	1	1	1	1	-----
4 Amb.	2 (SLE F)	SLE F	1	1	1	1	1	$\Psi_1$	$\Psi_1$	$\Psi_1$	$\Psi_1$	-----
5 Amb.	2 (SLE Q)	SLE Q	1	1	1	1	1	$\Psi_2$	$\Psi_2$	$\Psi_2$	$\Psi_2$	-----

**Combinazioni delle cce**

**Simbologia**

CC = Numero della combinazione delle condizioni di carico elementari  
 Comm. = Commento  
 TCC = Tipo di combinazione di carico  
     SLU = Stato limite ultimo  
     SLU S = Stato limite ultimo (azione sismica)  
     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  
     SLD = Stato limite di danno  
     SLV = Stato limite di salvaguardia della vita  
     SLC = Stato limite di prevenzione del collasso  
     SLO = Stato limite di operatività  
 An. = Tipo di analisi  
     L = Lineare  
     NL = Non lineare  
 Bk = Buckling  
     S = Si  
     N = No

CC	Comm.	TCC	An.	Bk	1	2	3	4	5	6	7	8	9	Mt	±S X	±S Y	±S Z
1	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	1.00	0.30	0.30
2	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	1.00	0.30	0.30
3	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	1.00	0.30	0.30
4	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	1.00	-0.30	-0.30
5	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	1.00	-0.30	-0.30
6	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	1.00	-0.30	-0.30
7	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	0.30	1.00	0.30
8	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	0.30	1.00	0.30
9	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	0.30	1.00	0.30
10	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	-0.30	1.00	-0.30
11	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	-0.30	1.00	-0.30
12	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	-0.30	1.00	-0.30
13	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	1.00	0.30	0.30
14	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	1.00	0.30	0.30
15	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	1.00	0.30	0.30
16	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	1.00	-0.30	-0.30
17	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	1.00	-0.30	-0.30
18	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	1.00	-0.30	-0.30
19	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	0.30	1.00	0.30
20	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	0.30	1.00	0.30
21	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	0.30	1.00	0.30
22	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	-0.30	1.00	-0.30
23	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	-0.30	1.00	-0.30
24	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	-0.30	1.00	-0.30
25	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	1.00	0.30	0.30
26	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	1.00	0.30	0.30
27	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	1.00	0.30	0.30
28	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	1.00	-0.30	-0.30
29	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	1.00	-0.30	-0.30
30	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	1.00	-0.30	-0.30
31	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	0.30	1.00	0.30
32	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	0.30	1.00	0.30
33	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	0.30	1.00	0.30
34	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	-0.30	1.00	-0.30
35	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	-0.30	1.00	-0.30
36	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	1.00	-0.30	1.00	-0.30
37	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	1.00	0.30	0.30
38	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	1.00	0.30	0.30
39	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	1.00	0.30	0.30
40	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	1.00	-0.30	-0.30
41	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	1.00	-0.30	-0.30
42	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	1.00	-0.30	-0.30
43	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	0.30	1.00	0.30
44	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	0.30	1.00	0.30
45	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	0.30	1.00	0.30
46	sismica	SLV	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	-0.30	1.00	-0.30
47	sismica	SLD	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	-0.30	1.00	-0.30
48	sismica	SLO	L	N	1.00	1.00	1.00	1.00	0.60	0.15	0.60	0.60	0.00	-1.00	-0.30	1.00	-0.30
49	statica terra	SLU	L	N	1.30	1.50	1.50	1.30	1.05	1.50	0.70	1.50	1.50	0.00	0.00	0.00	0.00
50	statica int.	SLU	L	N	1.30	1.50	1.50	1.30	1.50	0.17	1.50	1.50	1.50	0.00	0.00	0.00	0.00
51	statica int.	SLE R L	N	N	1.00	1.00	1.00	1.00	0.70	1.00	0.70	1.00	1.00	0.00	0.00	0.00	0.00
52	statica affoll.	SLE R L	N	N	1.00	1.00	1.00	1.00	1.00	0.17	1.00	1.00	1.00	0.00	0.00	0.00	0.00
53	statica int.	SLE F L	N	N	1.00	1.00	1.00	1.00	0.60	0.70	0.60	0.60	0.00	0.00	0.00	0.00	0.00
54	statica affoll.	SLE F L	N	N	1.00	1.00	1.00	1.00	0.70	0.60	0.70	0.60	0.00	0.00	0.00	0.00	0.00
55	statica	SLE Q L	N	N	1.00	1.00	1.00	1.00	0.60	0.60	0.60	0.60	0.00	0.00	0.00	0.00	0.00

Relazione di calcolo

**Elenco baricentri e masse impalcati**

**Simbologia**

Imp. = Numero dell'impalcato  
 X = Coordinata X  
 Y = Coordinata Y  
 Z = Coordinata Z  
 Mo = Massa orizzontale  
 Jpz = Momento d'inerzia polare intorno all'asse Z

Imp.	X	Y	Z	Mo	Jpz	Imp.	X	Y	Z	Mo	Jpz
	<m>	<m>	<m>	<KG>	<KG*mq>		<m>	<m>	<m>	<KG>	<KG*mq>
1	11.87	24.61	-0.30	157647.00	44398500.00	2	12.28	30.34	3.32	33069.60	11395900.00
3	11.28	3.30	3.60	13860.20	520944.00	4	11.28	46.70	3.60	13860.20	520935.00
5	11.29	24.98	7.35	170566.00	45924700.00	6	10.13	3.00	11.10	22392.10	948829.00
7	10.13	47.00	11.10	22392.10	948763.00	8	10.66	25.00	14.68	85264.90	22948600.00

**Totali masse impalcati**

Mo  
 <KG> 519052.00  
 Jpz  
 <KG\*mq> 127607000.00

**Elenco masse nodi**

**Simbologia**

Nodo = Numero del nodo  
 Mz = Massa in dir. Z

Nodo	Mz	Nodo	Mz	Nodo	Mz	Nodo	Mz	Nodo	Mz	Nodo	Mz	Nodo	Mz
	<KG>		<KG>		<KG>		<KG>		<KG>		<KG>		<KG>
-3640	5.22	-3639	5.22	-3638	7.77	-3637	2.55	-3636	7.77	-3635	2.55	-3634	3.82
-3633	3.82	-3632	7.84	-3631	11.66	-3630	7.84	-3629	11.66	-3628	7.84	-3627	7.84
-3626	11.66	-3625	3.82	-3624	11.66	-3623	3.82	-3622	7.84	-3621	7.84	-3620	11.66
-3619	3.82	-3618	11.66	-3617	3.82	-3616	7.84	-3615	7.84	-3614	11.66	-3613	3.82
-3612	11.66	-3611	3.82	-3610	7.84	-3609	11.66	-3608	3.82	-3607	24.35	-3606	10.11
-3603	17.26	-3602	6.93	-3601	17.67	-3600	20.14	-3599	18.90	-3598	24.35	-3597	10.66
-3596	268.95	-3595	15.86	-3594	18.04	-3593	25.68	-3592	25.68	-3591	31.08	-3590	24.66
-3589	28.77	-3588	27.12	-3587	27.53	-3586	22.19	-3585	27.53	-3584	15.04	-3583	17.11
-3582	32.87	-3581	151.88	-3580	27.94	-3579	262.34	-3578	32.87	-3577	223.84	-3576	29.48
-3575	255.11	-3574	4.31	-3573	16.06	-3572	23.51	-3571	23.51	-3570	23.51	-3569	23.51
-3568	23.51	-3567	15.67	-3566	11.75	-3565	19.59	-3564	23.51	-3563	23.51	-3562	16.06
-3561	11.75	-3560	18.10	-3559	20.77	-3558	17.55	-3557	14.50	-3556	15.28	-3555	16.46
-3554	17.04	-3553	17.63	-3552	17.63	-3551	17.63	-3550	4.31	-3549	16.06	-3548	23.51
-3547	23.51	-3546	23.51	-3545	23.51	-3544	23.51	-3543	15.67	-3542	7.84	-3541	7.84
-3540	7.84	-3539	15.67	-3538	16.06	-3537	11.75	-3536	12.77	-3535	10.38	-3534	12.50
-3533	14.50	-3532	15.87	-3531	4.31	-3530	16.06	-3529	23.51	-3528	23.51	-3527	23.51
-3526	23.51	-3525	23.51	-3524	15.67	-3523	6.53	-3522	6.53	-3521	7.84	-3520	15.67
-3519	16.06	-3518	11.75	-3517	18.10	-3516	20.77	-3515	17.55	-3514	14.50	-3513	15.87
-3512	17.63	-3511	17.63	-3510	17.63	-3509	17.04	-3508	16.46	-3507	4.31	-3506	16.06
-3505	23.51	-3504	23.51	-3503	23.51	-3502	23.51	-3501	23.51	-3500	15.67	-3499	11.75
-3498	19.59	-3497	23.51	-3496	23.51	-3495	16.06	-3494	11.75	-3493	18.10	-3492	20.77
-3491	17.55	-3490	14.50	-3489	15.28	-3488	23.90	-3487	34.98	-3486	95.68	-3485	34.98
-3484	91.36	-3483	34.98	-3482	79.71	-3481	17.49	-3480	29.15	-3479	91.36	-3478	34.98
-3477	79.19	-3476	17.49	-3475	26.93	-3474	87.28	-3473	26.12	-3472	21.57	-3471	26.66
-3470	32.33	-3469	33.48	-3468	34.63	-3467	34.63	-3466	34.63	-3465	23.90	-3464	34.98
-3463	34.98	-3462	96.01	-3461	34.98	-3460	11.66	-3459	11.66	-3458	72.69	-3457	23.32
-3456	17.49	-3455	19.00	-3454	71.84	-3453	18.60	-3452	21.57	-3451	27.81	-3450	646.05
-3449	646.05	-3448	641.40	-3447	136.28	-3446	193.03	-3445	122.91	-3444	185.65	-3443	279.10
-3442	172.28	-3441	185.65	-3440	279.10	-3439	172.28	-3438	185.65	-3437	279.10	-3436	172.28
-3435	185.65	-3434	279.10	-3433	172.28	-3432	185.65	-3431	279.10	-3430	172.28	-3429	646.05
-3428	646.05	-3427	641.40	-3426	136.28	-3425	193.03	-3424	122.91	-3423	23.90	-3422	34.98
-3421	34.98	-3420	96.01	-3419	34.98	-3418	9.72	-3417	9.72	-3416	72.69	-3415	23.32
-3414	17.49	-3413	26.93	-3412	87.28	-3411	26.12	-3410	21.57	-3409	27.81	-3408	34.63
-3407	34.63	-3406	34.63	-3405	33.48	-3404	32.33	-3403	23.90	-3402	34.98	-3401	95.68
-3400	34.98	-3399	91.36	-3398	34.98	-3397	79.71	-3396	17.49	-3395	29.15	-3394	91.36
-3393	34.98	-3392	79.19	-3391	17.49	-3390	26.93	-3389	87.28	-3388	26.12	-3387	21.57
-3386	26.66	-3385	7.29	-3384	27.19	-3383	39.79	-3382	39.79	-3381	39.79	-3380	39.79
-3379	39.79	-3378	26.52	-3377	19.89	-3376	33.16	-3375	39.79	-3374	39.79	-3373	27.19
-3372	19.89	-3371	30.64	-3370	35.15	-3369	29.71	-3368	24.54	-3367	25.86	-3366	27.85
-3365	28.85	-3364	29.84	-3363	29.84	-3362	29.84	-3361	7.29	-3360	27.19	-3359	39.79
-3358	39.79	-3357	39.79	-3356	39.79	-3355	39.79	-3354	26.52	-3353	8.54	-3352	3.82
-3351	3.82	-3350	21.80	-3349	27.19	-3348	19.89	-3347	21.62	-3346	17.57	-3345	21.15
-3344	24.54	-3343	26.86	-3342	7.29	-3341	27.19	-3340	39.79	-3339	39.79	-3338	39.79
-3337	39.79	-3336	39.79	-3335	26.52	-3334	7.91	-3333	3.19	-3332	3.82	-3331	21.80
-3330	27.19	-3329	19.89	-3328	30.64	-3327	35.15	-3326	29.71	-3325	24.54	-3324	26.86
-3323	29.84	-3322	29.84	-3321	29.84	-3320	28.85	-3319	27.85	-3318	7.29	-3317	27.19
-3316	39.79	-3315	39.79	-3314	39.79	-3313	39.79	-3312	39.79	-3311	26.52	-3310	19.89
-3309	33.16	-3308	39.79	-3307	39.79	-3306	27.19	-3305	19.89	-3304	30.64	-3303	35.15

Relazione di calcolo

-3302	29.71	-3301	24.54	-3300	25.86	-3299	10.38	-3298	38.70	-3297	56.64	-3296	56.64
-3295	56.64	-3294	56.64	-3293	56.64	-3292	37.76	-3291	28.32	-3290	47.20	-3289	56.64
-3288	56.64	-3287	38.70	-3286	28.32	-3285	43.61	-3284	50.03	-3283	42.29	-3282	34.93
-3281	36.82	-3280	39.65	-3279	41.06	-3278	42.48	-3277	42.48	-3276	42.48	-3275	10.38
-3274	38.70	-3273	56.64	-3272	56.64	-3271	56.64	-3270	56.64	-3269	56.64	-3268	37.76
-3267	9.44	-3266	28.32	-3265	38.70	-3264	28.32	-3263	30.77	-3262	25.02	-3261	30.11
-3260	34.93	-3259	38.23	-3258	10.38	-3257	38.70	-3256	56.64	-3255	56.64	-3254	56.64
-3253	56.64	-3252	56.64	-3251	37.76	-3250	9.44	-3249	28.32	-3248	38.70	-3247	28.32
-3246	43.61	-3245	50.03	-3244	42.29	-3243	34.93	-3242	38.23	-3241	42.48	-3240	42.48
-3239	42.48	-3238	41.06	-3237	39.65	-3236	10.38	-3235	38.70	-3234	56.64	-3233	56.64
-3232	56.64	-3231	56.64	-3230	56.64	-3229	37.76	-3228	28.32	-3227	47.20	-3226	56.64
-3225	56.64	-3224	38.70	-3223	28.32	-3222	43.61	-3221	50.03	-3220	42.29	-3219	34.93
-3218	36.82	-3217	10.38	-3216	38.70	-3215	56.64	-3214	56.64	-3213	56.64	-3212	56.64
-3211	56.64	-3210	37.76	-3209	28.32	-3208	47.20	-3207	56.64	-3206	56.64	-3205	38.70
-3204	28.32	-3203	43.61	-3202	50.03	-3201	42.29	-3200	34.93	-3199	36.82	-3198	39.65
-3197	41.06	-3196	42.48	-3195	42.48	-3194	42.48	-3193	10.38	-3192	38.70	-3191	56.64
-3190	56.64	-3189	56.64	-3188	56.64	-3187	56.64	-3186	37.76	-3185	9.44	-3184	28.32
-3183	38.70	-3182	28.32	-3181	30.77	-3180	25.02	-3179	30.11	-3178	34.93	-3177	38.23
-3176	10.38	-3175	38.70	-3174	56.64	-3173	56.64	-3172	56.64	-3171	56.64	-3170	56.64
-3169	37.76	-3168	9.44	-3167	28.32	-3166	38.70	-3165	28.32	-3164	43.61	-3163	50.03
-3162	42.29	-3161	34.93	-3160	38.23	-3159	42.48	-3158	42.48	-3157	42.48	-3156	41.06
-3155	39.65	-3154	10.38	-3153	38.70	-3152	56.64	-3151	56.64	-3150	56.64	-3149	56.64
-3148	56.64	-3147	37.76	-3146	28.32	-3145	47.20	-3144	56.64	-3143	56.64	-3142	38.70
-3141	28.32	-3140	43.61	-3139	50.03	-3138	42.29	-3137	34.93	-3136	36.82	-3135	12.57
-3134	46.84	-3133	68.55	-3132	68.55	-3131	68.55	-3130	68.55	-3129	68.55	-3128	45.70
-3127	34.28	-3126	57.13	-3125	68.55	-3124	68.55	-3123	46.84	-3122	34.28	-3121	52.79
-3120	60.55	-3119	51.19	-3118	42.27	-3117	44.56	-3116	47.99	-3115	49.70	-3114	51.41
-3113	51.41	-3112	51.41	-3111	12.57	-3110	46.84	-3109	68.55	-3108	68.55	-3107	68.55
-3106	68.55	-3105	68.55	-3104	45.70	-3103	11.43	-3102	34.28	-3101	46.84	-3100	34.28
-3099	37.25	-3098	30.28	-3097	36.45	-3096	42.27	-3095	46.27	-3094	12.57	-3093	46.84
-3092	68.55	-3091	68.55	-3090	68.55	-3089	68.55	-3088	68.55	-3087	45.70	-3086	11.43
-3085	34.28	-3084	46.84	-3083	34.28	-3082	52.79	-3081	60.55	-3080	51.19	-3079	42.27
-3078	46.27	-3077	51.41	-3076	51.41	-3075	51.41	-3074	49.70	-3073	47.99	-3072	12.57
-3071	46.84	-3070	68.55	-3069	68.55	-3068	68.55	-3067	68.55	-3066	68.55	-3065	45.70
-3064	34.28	-3063	57.13	-3062	68.55	-3061	68.55	-3060	46.84	-3059	34.28	-3058	52.79
-3057	60.55	-3056	51.19	-3055	42.27	-3054	44.56	-3053	229.87	-3052	336.39	-3051	336.39
-3050	336.39	-3049	336.39	-3048	336.39	-3047	224.26	-3046	168.20	-3045	280.33	-3044	336.39
-3043	336.39	-3042	229.87	-3041	168.20	-3040	259.02	-3039	297.15	-3038	251.17	-3037	207.44
-3036	100.92	-3025	358.31	-3024	593.27	-3023	593.27	-3022	593.27	-3021	593.27	-3020	593.27
-3019	395.51	-3018	296.64	-3017	494.39	-3016	593.27	-3015	593.27	-3014	405.40	-3013	296.64
-3012	322.35	-3011	262.03	-3010	234.08	-3009	207.44	-3008	100.92	-3003	358.31	-3002	593.27
-3001	593.27	-3000	593.27	-2999	593.27	-2998	593.27	-2997	395.51	-2996	296.64	-2995	494.39
-2994	593.27	-2993	593.27	-2992	405.40	-2991	296.64	-2990	456.82	-2989	524.06	-2988	361.63
-2987	207.44	-2986	100.92	-2975	229.87	-2974	336.39	-2973	336.39	-2972	336.39	-2971	336.39
-2970	336.39	-2969	224.26	-2968	168.20	-2967	280.33	-2966	336.39	-2965	336.39	-2964	229.87
-2963	168.20	-2962	259.02	-2961	297.15	-2960	251.17	-2959	207.44	-2958	100.92	-2957	2.80
-2956	57.40	-2955	15.29	-2954	28.19	-2953	41.09	-2952	41.09	-2951	41.09	-2950	41.78
-2949	20.55	-2948	34.24	-2947	41.09	-2946	41.09	-2945	28.08	-2944	20.55	-2943	31.64
-2942	36.30	-2941	30.68	-2940	25.34	-2939	26.71	-2938	28.77	-2937	28.77	-2936	29.79
-2935	29.79	-2934	30.82	-2933	30.82	-2932	30.82	-2931	30.82	-2930	30.82	-2929	30.82
-2928	2.80	-2927	57.40	-2926	15.29	-2925	28.19	-2924	41.09	-2923	41.09	-2922	41.09
-2921	42.81	-2920	20.55	-2919	34.24	-2918	41.09	-2917	41.09	-2916	28.08	-2915	12.38
-2914	8.31	-2913	12.30	-2912	21.85	-2911	25.34	-2910	27.74	-2909	2.80	-2908	57.40
-2907	15.29	-2906	28.19	-2905	41.09	-2904	41.09	-2903	41.09	-2902	42.81	-2901	20.55
-2900	34.24	-2899	41.09	-2898	41.09	-2897	28.08	-2896	12.38	-2895	11.77	-2894	24.60
-2893	30.68	-2892	25.34	-2891	27.74	-2890	30.82	-2889	30.82	-2888	30.82	-2887	30.82
-2886	30.82	-2885	30.82	-2884	29.79	-2883	29.79	-2882	28.77	-2881	28.77	-2880	2.80
-2879	57.40	-2878	15.29	-2877	28.19	-2876	41.09	-2875	41.09	-2874	41.09	-2873	41.78
-2872	20.55	-2871	34.24	-2870	41.09	-2869	41.09	-2868	28.08	-2867	20.55	-2866	31.64
-2865	36.30	-2864	30.68	-2863	25.34	-2862	26.71	-2859	25.80	-2858	51.61	-2857	51.61
-2856	51.61	-2855	52.47	-2854	25.80	-2853	43.00	-2852	51.61	-2851	51.61	-2850	35.26
-2849	25.80	-2848	39.74	-2847	45.58	-2846	38.53	-2845	31.82	-2844	33.54	-2843	36.12
-2842	36.12	-2841	37.41	-2840	37.41	-2839	38.70	-2838	38.70	-2837	38.70	-2836	38.70
-2835	38.70	-2834	38.70	-2831	25.80	-2830	51.61	-2829	51.61	-2828	51.61	-2827	53.76
-2826	25.80	-2825	43.00	-2824	51.61	-2823	51.61	-2822	35.26	-2821	9.46	-2820	11.10
-2819	27.44	-2818	31.82	-2817	34.83	-2814	25.80	-2813	51.61	-2812	51.61	-2811	51.61
-2810	53.76	-2809	25.80	-2808	43.00	-2807	51.61	-2806	51.61	-2805	35.26	-2804	9.46
-2803	22.19	-2802	38.53	-2801	31.82	-2800	34.83	-2799	38.70	-2798	38.70	-2797	38.70
-2796	38.70	-2795	38.70	-2794	38.70	-2793	37.41	-2792	37.41	-2791	36.12	-2790	36.12
-2787	25.80	-2786	51.61	-2785	51.61	-2784	51.61	-2783	52.47	-2782	25.80	-2781	43.00
-2780	51.61	-2779	51.61	-2778	35.26	-2777	25.80	-2776	39.74	-2775	45.58	-2774	38.53
-2773	31.82	-2772	33.54	-2769	32.01	-2768	64.03	-2767	64.03	-2766	64.03	-2765	65.10
-2764	32.01	-2763	53.36	-2762	64.03	-2761	64.03	-2760	43.75	-2759	32.01	-2758	49.30
-2757	56.56	-2756	47.81	-2755	39.48	-2754	41.62	-2753	44.82	-2752	44.82	-2751	46.42
-2750	46.42	-2749	48.02	-2748	48.02	-2747	48.02	-2746	48.02	-2745	48.02	-2744	48.02
-2741	32.01	-2740	64.03	-2739	64.03	-2738	64.03	-2737	66.70	-2736	32.01	-2735	53.36
-2734	64.03	-2733	64.03	-2732	43.75	-2731	11.74	-2730	13.77	-2729	34.04	-2728	39.48
-2727	43.22	-2724	32.01	-2723	64.03	-2722	64.03	-2721	64.03	-2720	66.70	-2719	32.01
-2718	53.36	-2717	64.03	-2716	64.03	-2715	43.75	-2714	11.74	-2713	27.53	-2712	47.81
-2711	39.48	-2710	43.22	-2709	48.02	-2708	48.02	-2707	48.02	-2706	48.02	-2705	48.02
-2704	48.02	-2703	46.42	-2702	46.42	-2701	44.82	-2700	44.82	-2697	32.01	-2696	64.03
-2695	64.03	-2694	64.03	-2693	65.10	-2692	32.01	-2691	53.36	-2690	64.03	-2689	64.03

Relazione di calcolo

-2688	43.75	-2687	32.01	-2686	49.30	-2685	56.56	-2684	47.81	-2683	39.48	-2682	41.62
-2679	38.23	-2678	76.45	-2677	76.45	-2676	76.45	-2675	77.73	-2674	38.23	-2673	63.71
-2672	76.45	-2671	76.45	-2670	52.24	-2669	38.23	-2668	58.87	-2667	67.53	-2666	57.08
-2665	47.15	-2664	49.69	-2663	53.52	-2662	53.52	-2661	55.43	-2660	55.43	-2659	57.34
-2658	57.34	-2657	57.34	-2656	57.34	-2655	57.34	-2654	57.34	-2653	38.23	-2652	76.45
-2649	76.45	-2648	76.45	-2647	79.64	-2646	38.23	-2645	63.71	-2644	76.45	-2643	76.45
-2642	52.24	-2641	14.02	-2640	16.44	-2639	40.65	-2638	47.15	-2637	51.61	-2636	38.23
-2633	76.45	-2632	76.45	-2631	76.45	-2630	79.64	-2629	38.23	-2628	63.71	-2627	76.45
-2626	76.45	-2625	52.24	-2624	14.02	-2623	32.87	-2622	57.08	-2621	47.15	-2620	51.61
-2619	57.34	-2618	57.34	-2617	57.34	-2616	57.34	-2615	57.34	-2614	57.34	-2613	55.43
-2612	55.43	-2611	53.52	-2610	53.52	-2607	38.23	-2606	76.45	-2605	76.45	-2604	76.45
-2603	77.73	-2602	38.23	-2601	63.71	-2600	76.45	-2599	76.45	-2598	52.24	-2597	38.23
-2596	58.87	-2595	67.53	-2594	57.08	-2593	47.15	-2592	49.69	-2591	256.13	-2590	306.12
-2589	306.12	-2588	306.12	-2587	306.12	-2586	306.12	-2585	211.93	-2584	176.61	-2583	294.34
-2582	353.21	-2581	353.21	-2580	241.36	-2579	176.61	-2578	271.97	-2577	312.00	-2576	151.88
-2563	473.47	-2562	793.18	-2561	306.12	-2560	306.12	-2559	306.12	-2558	950.03	-2557	176.61
-2556	294.34	-2555	353.21	-2554	353.21	-2553	675.43	-2552	519.82	-2551	536.30	-2550	249.28
-2547	1065.22	-2546	664.30	-2545	664.30	-2544	664.30	-2543	664.30	-2542	664.30	-2541	664.30
-2540	664.30	-2539	664.30	-2538	664.30	-2537	664.30	-2536	664.30	-2535	664.30	-2534	1065.22
-2533	473.47	-2532	793.18	-2531	306.12	-2530	306.12	-2529	306.12	-2528	950.02	-2527	176.60
-2526	294.34	-2525	353.21	-2524	353.21	-2523	775.85	-2522	440.05	-2521	547.81	-2520	440.98
-2507	256.13	-2506	306.12	-2505	306.12	-2504	306.12	-2503	306.12	-2502	306.12	-2501	211.93
-2500	176.60	-2499	294.34	-2498	353.21	-2497	353.21	-2496	241.36	-2495	176.60	-2494	271.97
-2493	312.00	-2492	151.88	-2489	8.58	-2488	32.00	-2487	46.83	-2486	46.83	-2485	46.83
-2484	46.83	-2483	46.83	-2482	47.61	-2481	23.41	-2480	39.02	-2479	46.83	-2478	46.83
-2477	32.00	-2476	23.41	-2475	36.06	-2474	41.36	-2473	34.96	-2472	28.88	-2471	30.44
-2470	32.78	-2469	32.78	-2468	33.95	-2467	33.95	-2466	35.12	-2465	35.12	-2464	35.12
-2463	35.12	-2462	35.12	-2461	35.12	-2460	8.58	-2459	32.00	-2458	46.83	-2457	46.83
-2456	46.83	-2455	31.06	-2454	31.06	-2453	48.78	-2452	23.41	-2451	39.02	-2450	46.83
-2449	46.83	-2448	32.00	-2447	8.58	-2446	10.07	-2445	24.90	-2444	28.88	-2443	31.61
-2442	8.58	-2441	32.00	-2440	46.83	-2439	46.83	-2438	46.83	-2437	31.06	-2436	31.06
-2435	48.78	-2434	23.41	-2433	39.02	-2432	46.83	-2431	46.83	-2430	32.00	-2429	8.58
-2428	20.14	-2427	34.96	-2426	28.88	-2425	31.61	-2424	35.12	-2423	35.12	-2422	35.12
-2421	35.12	-2420	35.12	-2419	35.12	-2418	33.95	-2417	33.95	-2416	32.78	-2415	32.78
-2414	8.58	-2413	32.00	-2412	46.83	-2411	46.83	-2410	46.83	-2409	46.83	-2408	46.83
-2407	47.61	-2406	23.41	-2405	39.02	-2404	46.83	-2403	46.83	-2402	32.00	-2401	23.41
-2400	36.06	-2399	41.36	-2398	34.96	-2397	28.88	-2396	30.44	-2395	11.56	-2394	43.10
-2393	63.07	-2392	63.07	-2391	63.07	-2390	63.07	-2389	63.07	-2388	64.12	-2387	31.54
-2386	52.56	-2385	63.07	-2384	63.07	-2383	43.10	-2382	31.54	-2381	48.57	-2380	55.71
-2379	47.09	-2378	38.90	-2377	41.00	-2376	44.15	-2375	44.15	-2374	45.73	-2373	45.73
-2372	47.31	-2371	47.31	-2370	47.31	-2369	47.31	-2368	47.31	-2367	47.31	-2366	11.56
-2365	43.10	-2364	63.07	-2363	63.07	-2362	63.07	-2361	31.54	-2360	31.54	-2359	65.70
-2358	31.54	-2357	52.56	-2356	63.07	-2355	63.07	-2354	43.10	-2353	11.56	-2352	13.56
-2351	33.53	-2350	38.90	-2349	42.57	-2348	11.56	-2347	43.10	-2346	63.07	-2345	63.07
-2344	63.07	-2343	31.54	-2342	31.54	-2341	65.70	-2340	31.54	-2339	52.56	-2338	63.07
-2337	63.07	-2336	43.10	-2335	11.56	-2334	27.12	-2333	47.09	-2332	38.90	-2331	42.57
-2330	47.31	-2329	47.31	-2328	47.31	-2327	47.31	-2326	47.31	-2325	47.31	-2324	45.73
-2323	45.73	-2322	44.15	-2321	44.15	-2320	11.56	-2319	43.10	-2318	63.07	-2317	63.07
-2316	63.07	-2315	63.07	-2314	63.07	-2313	64.12	-2312	31.54	-2311	52.56	-2310	63.07
-2309	63.07	-2308	43.10	-2307	31.54	-2306	48.57	-2305	55.71	-2304	47.09	-2303	38.90
-2302	41.00	-2301	11.74	-2300	43.75	-2299	64.03	-2298	64.03	-2297	64.03	-2296	64.03
-2295	64.03	-2294	65.10	-2293	32.01	-2292	53.36	-2291	64.03	-2290	64.03	-2289	43.75
-2288	32.01	-2287	49.30	-2286	56.56	-2285	47.81	-2284	39.48	-2283	41.62	-2282	44.82
-2281	44.82	-2280	46.42	-2279	46.42	-2278	48.02	-2277	48.02	-2276	48.02	-2275	48.02
-2274	48.02	-2273	48.02	-2272	11.74	-2271	43.75	-2270	64.03	-2269	64.03	-2268	64.03
-2267	32.01	-2266	32.01	-2265	66.70	-2264	32.01	-2263	53.36	-2262	64.03	-2261	64.03
-2260	43.75	-2259	11.74	-2258	13.77	-2257	34.04	-2256	39.48	-2255	43.22	-2254	11.74
-2253	43.75	-2252	64.03	-2251	64.03	-2250	64.03	-2249	32.01	-2248	32.01	-2247	66.70
-2246	32.01	-2245	53.36	-2244	64.03	-2243	64.03	-2242	43.75	-2241	11.74	-2240	27.53
-2239	47.81	-2238	39.48	-2237	43.22	-2236	48.02	-2235	48.02	-2234	48.02	-2233	48.02
-2232	48.02	-2231	48.02	-2230	46.42	-2229	46.42	-2228	44.82	-2227	44.82	-2226	11.74
-2225	43.75	-2224	64.03	-2223	64.03	-2222	64.03	-2221	64.03	-2220	64.03	-2219	65.10
-2218	32.01	-2217	53.36	-2216	64.03	-2215	64.03	-2214	43.75	-2213	32.01	-2212	49.30
-2211	56.56	-2210	47.81	-2209	39.48	-2208	41.62	-2207	11.91	-2206	44.41	-2205	64.98
-2204	64.98	-2203	64.98	-2202	64.98	-2201	64.98	-2200	66.07	-2199	32.49	-2198	54.15
-2197	64.98	-2196	64.98	-2195	44.41	-2194	32.49	-2193	50.04	-2192	57.40	-2191	48.52
-2190	40.07	-2189	42.24	-2188	45.49	-2187	45.49	-2186	47.11	-2185	47.11	-2184	48.74
-2183	48.74	-2182	48.74	-2181	48.74	-2180	48.74	-2179	48.74	-2178	11.91	-2177	44.41
-2176	64.98	-2175	64.98	-2174	64.98	-2173	32.49	-2172	32.49	-2171	67.69	-2170	32.49
-2169	54.15	-2168	64.98	-2167	64.98	-2166	44.41	-2165	11.91	-2164	13.97	-2163	34.55
-2162	40.07	-2161	43.86	-2160	11.91	-2159	44.41	-2158	64.98	-2157	64.98	-2156	64.98
-2155	32.49	-2154	32.49	-2153	67.69	-2152	32.49	-2151	54.15	-2150	64.98	-2149	64.98
-2148	44.41	-2147	11.91	-2146	27.94	-2145	48.52	-2144	40.07	-2143	43.86	-2142	48.74
-2141	48.74	-2140	48.74	-2139	48.74	-2138	48.74	-2137	48.74	-2136	47.11	-2135	47.11
-2134	45.49	-2133	45.49	-2132	11.91	-2131	44.41	-2130	64.98	-2129	64.98	-2128	64.98
-2127	64.98	-2126	64.98	-2125	66.07	-2124	32.49	-2123	54.15	-2122	64.98	-2121	64.98
-2120	44.41	-2119	32.49	-2118	50.04	-2117	57.40	-2116	48.52	-2115	40.07	-2114	42.24
-2113	209.18	-2112	306.12	-2111	306.12	-2110	306.12	-2109	306.12	-2108	306.12	-2107	211.93
-2106	176.61	-2105	294.34	-2104	353.21	-2103	353.21	-2102	241.36	-2101	176.61	-2100	271.97
-2099	312.00	-2098	151.88	-2085	337.62	-2084	563.00	-2083	563.00	-2082	563.00	-2081	563.00
-2080	563.00	-2079	383.18	-2078	305.05	-2077	508.41	-2076	610.09	-2075	610.09	-2074	416.90
-2073	605.17	-2072	624.49	-2071	131.17	-2064	337.62	-2063	563.00	-2062	563.00	-2061	563.00

Relazione di calcolo

-2060	563.00	-2059	563.00	-2058	383.18	-2057	305.05	-2056	508.41	-2055	610.09	-2054	610.09
-2053	416.90	-2052	605.17	-2051	755.66	-2050	262.34	-2037	209.18	-2036	306.12	-2035	306.12
-2034	306.12	-2033	306.12	-2032	306.12	-2031	211.93	-2030	176.60	-2029	294.34	-2028	353.21
-2027	353.21	-2026	241.36	-2025	176.60	-2024	271.97	-2023	312.00	-2022	151.88	-2018	344.93
-2017	344.93	-2015	8.06	-2014	30.04	-2013	43.96	-2012	43.96	-2011	43.96	-2010	43.96
-2009	43.96	-2008	44.69	-2007	21.98	-2006	36.63	-2005	43.96	-2004	43.96	-2003	30.04
-2002	21.98	-2001	33.85	-2000	38.83	-1999	32.82	-1998	27.11	-1997	28.57	-1996	30.77
-1995	30.77	-1994	31.87	-1993	31.87	-1992	32.97	-1991	32.97	-1990	32.97	-1989	32.97
-1988	32.97	-1987	32.97	-1986	8.06	-1985	30.04	-1984	43.96	-1983	43.96	-1982	43.96
-1981	43.96	-1980	43.96	-1979	45.79	-1978	21.98	-1977	36.63	-1976	43.96	-1975	43.96
-1974	30.04	-1973	8.06	-1972	9.45	-1971	23.37	-1970	27.11	-1969	29.67	-1968	8.06
-1967	30.04	-1966	43.96	-1965	43.96	-1964	43.96	-1963	43.96	-1962	43.96	-1961	45.79
-1960	21.98	-1959	36.63	-1958	43.96	-1957	43.96	-1956	30.04	-1955	8.06	-1954	18.90
-1953	32.82	-1952	27.11	-1951	29.67	-1950	32.97	-1949	32.97	-1948	32.97	-1947	32.97
-1946	32.97	-1945	32.97	-1944	31.87	-1943	31.87	-1942	30.77	-1941	30.77	-1940	8.06
-1939	30.04	-1938	43.96	-1937	43.96	-1936	43.96	-1935	43.96	-1934	43.96	-1933	44.69
-1932	21.98	-1931	36.63	-1930	43.96	-1929	43.96	-1928	30.04	-1927	21.98	-1926	33.85
-1925	38.83	-1924	32.82	-1923	27.11	-1922	28.57	-1921	10.51	-1920	39.18	-1919	57.34
-1918	57.34	-1917	57.34	-1916	57.34	-1915	57.34	-1914	58.30	-1913	28.67	-1912	47.78
-1911	57.34	-1910	57.34	-1909	39.18	-1908	28.67	-1907	44.15	-1906	50.65	-1905	42.81
-1904	35.36	-1903	37.27	-1902	40.14	-1901	40.14	-1900	41.57	-1899	41.57	-1898	43.00
-1897	43.00	-1896	43.00	-1895	43.00	-1894	43.00	-1893	43.00	-1892	10.51	-1891	39.18
-1890	57.34	-1889	57.34	-1888	57.34	-1887	57.34	-1886	57.34	-1885	59.73	-1884	28.67
-1883	47.78	-1882	57.34	-1881	57.34	-1880	39.18	-1879	10.51	-1878	12.33	-1877	30.49
-1876	35.36	-1875	38.70	-1874	10.51	-1873	39.18	-1872	57.34	-1871	57.34	-1870	57.34
-1869	57.34	-1868	57.34	-1867	59.73	-1866	28.67	-1865	47.78	-1864	57.34	-1863	57.34
-1862	39.18	-1861	10.51	-1860	24.66	-1859	42.81	-1858	35.36	-1857	38.70	-1856	43.00
-1855	43.00	-1854	43.00	-1853	43.00	-1852	43.00	-1851	43.00	-1850	41.57	-1849	41.57
-1848	40.14	-1847	40.14	-1846	10.51	-1845	39.18	-1844	57.34	-1843	57.34	-1842	57.34
-1841	57.34	-1840	57.34	-1839	58.30	-1838	28.67	-1837	47.78	-1836	57.34	-1835	57.34
-1834	39.18	-1833	28.67	-1832	44.15	-1831	50.65	-1830	42.81	-1829	35.36	-1828	37.27
-1827	12.26	-1826	45.71	-1825	66.90	-1824	66.90	-1823	66.90	-1822	66.90	-1821	66.90
-1820	68.01	-1819	33.45	-1818	55.75	-1817	66.90	-1816	66.90	-1815	45.71	-1814	33.45
-1813	51.51	-1812	59.09	-1811	49.95	-1810	41.25	-1809	43.48	-1808	46.83	-1807	46.83
-1806	48.50	-1805	48.50	-1804	50.17	-1803	50.17	-1802	50.17	-1801	50.17	-1800	50.17
-1799	50.17	-1798	12.26	-1797	45.71	-1796	66.90	-1795	66.90	-1794	66.90	-1793	66.90
-1792	66.90	-1791	69.68	-1790	33.45	-1789	55.75	-1788	66.90	-1787	66.90	-1786	45.71
-1785	12.26	-1784	14.38	-1783	35.57	-1782	41.25	-1781	45.15	-1780	12.26	-1779	45.71
-1778	66.90	-1777	66.90	-1776	66.90	-1775	66.90	-1774	66.90	-1773	69.68	-1772	33.45
-1771	55.75	-1770	66.90	-1769	66.90	-1768	45.71	-1767	12.26	-1766	28.77	-1765	49.95
-1764	41.25	-1763	45.15	-1762	50.17	-1761	50.17	-1760	50.17	-1759	50.17	-1758	50.17
-1757	50.17	-1756	48.50	-1755	48.50	-1754	46.83	-1753	46.83	-1752	12.29	-1751	45.73
-1750	66.90	-1749	66.90	-1748	66.90	-1747	66.90	-1746	66.90	-1745	68.01	-1744	33.45
-1743	55.75	-1742	66.90	-1741	66.90	-1740	45.71	-1739	33.45	-1738	51.51	-1737	59.09
-1736	49.95	-1735	41.25	-1734	43.48	-1733	14.02	-1732	52.24	-1731	76.45	-1730	76.45
-1729	76.45	-1728	76.45	-1727	76.45	-1726	77.73	-1725	38.23	-1724	63.71	-1723	76.45
-1722	76.45	-1721	52.24	-1720	38.23	-1719	58.87	-1718	67.53	-1717	57.08	-1716	47.15
-1715	49.69	-1714	53.52	-1713	53.52	-1712	55.43	-1711	55.43	-1710	57.34	-1709	57.34
-1708	57.34	-1707	57.34	-1706	57.34	-1705	57.34	-1704	14.02	-1703	52.24	-1702	76.45
-1701	76.45	-1700	76.45	-1699	76.45	-1698	76.45	-1697	79.64	-1696	38.23	-1695	63.71
-1694	76.45	-1693	76.45	-1692	52.24	-1691	14.02	-1690	16.44	-1689	40.65	-1688	47.15
-1687	51.61	-1686	14.02	-1685	52.24	-1684	76.45	-1683	76.45	-1682	76.45	-1681	76.45
-1680	76.45	-1679	79.64	-1678	38.23	-1677	63.71	-1676	76.45	-1675	76.45	-1674	52.24
-1673	14.02	-1672	32.87	-1671	57.08	-1670	47.15	-1669	51.61	-1668	57.34	-1667	57.34
-1666	57.34	-1665	57.34	-1664	57.34	-1663	57.34	-1662	55.43	-1661	55.43	-1660	53.52
-1659	53.52	-1658	14.14	-1657	52.37	-1656	76.45	-1655	76.45	-1654	76.45	-1653	76.45
-1652	76.45	-1651	77.73	-1650	38.23	-1649	63.71	-1648	76.45	-1647	76.45	-1646	52.24
-1645	38.23	-1644	58.87	-1643	67.53	-1642	57.08	-1641	47.15	-1640	49.69	-1639	114.23
-1638	114.28	-1637	209.18	-1636	306.12	-1635	306.12	-1634	306.12	-1633	306.12	-1632	306.12
-1631	211.93	-1630	176.61	-1629	294.34	-1628	353.21	-1627	353.21	-1626	241.36	-1625	176.61
-1624	271.97	-1623	312.00	-1622	151.88	-1621	146.03	-1620	176.76	-1620	382.41	-1620	473.47
-1600	542.15	-1599	473.47	-1598	473.47	-1597	473.47	-1596	392.18	-1595	260.28	-1594	433.81
-1593	520.57	-1592	520.57	-1591	359.38	-1590	176.61	-1589	308.36	-1588	272.45	-1587	75.94
-1584	68.68	-1582	46.83	-1581	72.11	-1580	82.73	-1579	69.93	-1578	57.75	-1577	257.49
-1576	257.49	-1575	257.49	-1574	257.49	-1573	257.49	-1572	257.49	-1571	257.49	-1570	257.49
-1569	257.49	-1568	257.49	-1567	257.49	-1566	257.49	-1565	257.49	-1564	257.49	-1563	257.49
-1562	257.49	-1561	257.49	-1560	257.49	-1559	257.49	-1558	257.49	-1557	550.08	-1556	550.08
-1555	550.08	-1554	550.08	-1553	275.04	-1552	458.40	-1551	550.08	-1550	550.08	-1549	348.78
-1548	257.49	-1547	348.78	-1546	257.49	-1545	348.78	-1544	257.49	-1543	348.78	-1542	257.49
-1541	68.68	-1540	68.68	-1539	174.06	-1538	176.76	-1537	382.41	-1536	473.47	-1535	507.81
-1534	473.47	-1533	473.47	-1532	473.47	-1531	392.18	-1530	260.28	-1529	433.81	-1528	520.57
-1527	520.57	-1526	359.38	-1525	176.60	-1524	271.97	-1523	312.00	-1522	151.88	-1520	120.54
-1504	141.24	-1503	114.28	-1502	210.20	-1501	306.12	-1500	306.12	-1499	306.12	-1498	306.12
-1497	306.12	-1496	211.93	-1495	176.60	-1494	294.34	-1493	353.21	-1492	353.21	-1491	241.36
-1490	176.60	-1489	271.97	-1488	312.00	-1487	151.88	-1484	15.39	-1483	30.50	-1482	55.97
-1481	81.71	-1480	81.71	-1479	81.71	-1478	81.71	-1477	81.71	-1476	73.54	-1475	40.85
-1474	68.09	-1473	81.71	-1472	81.71	-1471	55.83	-1470	40.85	-1469	62.92	-1468	72.18
-1467	80.07	-1466	50.39	-1465	43.58	-1464	38.13	-1463	38.13	-1462	38.13	-1461	39.49
-1460	39.49	-1459	39.49	-1458	40.85	-1457	40.85	-1456	40.85	-1455	40.85	-1454	40.85
-1453	40.85	-1452	40.85	-1451	40.85	-1450	40.85	-1449	15.39	-1448	30.50	-1447	55.97
-1446	81.71	-1445	81.71	-1444	60.92	-1443	40.14	-1442	60.92	-1441	74.90	-1440	40.85
-1439	68.09	-1438	81.71	-1437	81.71	-1436	55.83	-1435	40.85	-1434	25.87	-1433	8.63



Relazione di calcolo

-1432	54.93	-1431	50.39	-1430	74.90	-1429	59.92	-1428	136.63	-1427	40.85	-1426	62.92
-1425	72.18	-1424	61.01	-1423	50.39	-1422	143.44	-1421	65.37	-1420	65.37	-1419	65.37
-1418	65.37	-1417	154.34	-1416	65.37	-1415	65.37	-1414	65.37	-1413	65.37	-1412	154.34
-1411	65.37	-1410	65.37	-1409	65.37	-1408	65.37	-1407	154.34	-1406	65.37	-1405	65.37
-1404	65.37	-1403	65.37	-1402	154.34	-1401	65.37	-1400	65.37	-1399	65.37	-1398	65.37
-1397	129.83	-1396	81.71	-1395	203.36	-1394	81.71	-1393	81.71	-1392	81.71	-1391	143.44
-1390	40.85	-1389	68.09	-1388	81.71	-1387	81.71	-1386	195.19	-1385	65.37	-1384	65.37
-1383	65.37	-1382	65.37	-1381	65.37	-1380	65.37	-1379	65.37	-1378	65.37	-1377	151.62
-1376	151.62	-1375	59.92	-1374	59.92	-1373	15.39	-1372	30.50	-1371	55.97	-1370	81.71
-1369	111.67	-1368	81.71	-1367	81.71	-1366	81.71	-1365	67.97	-1364	20.07	-1363	33.45
-1362	60.92	-1361	81.71	-1360	85.79	-1359	40.85	-1358	62.92	-1357	72.18	-1356	81.44
-1355	50.39	-1354	44.94	-1353	40.85	-1352	40.85	-1351	40.85	-1350	40.85	-1349	40.85
-1348	40.85	-1347	40.85	-1346	40.85	-1345	40.85	-1344	39.49	-1343	39.49	-1342	39.49
-1341	38.13	-1340	38.13	-1339	38.13	-1338	15.25	-1337	30.50	-1336	56.11	-1335	81.71
-1334	81.71	-1333	81.71	-1332	81.71	-1331	81.71	-1330	73.54	-1329	40.85	-1328	68.09
-1327	81.71	-1326	81.71	-1325	55.83	-1324	40.85	-1323	62.92	-1322	72.18	-1321	80.07
-1320	50.39	-1319	43.58	-1318	17.01	-1317	33.98	-1316	62.48	-1315	91.03	-1314	91.03
-1313	91.03	-1312	91.03	-1311	91.03	-1310	81.92	-1309	45.51	-1308	75.86	-1307	91.03
-1306	91.03	-1305	62.20	-1304	45.51	-1303	70.09	-1302	80.41	-1301	89.21	-1300	56.13
-1299	48.55	-1298	42.48	-1297	42.48	-1296	42.48	-1295	44.00	-1294	44.00	-1293	44.00
-1292	45.51	-1291	45.51	-1290	45.51	-1289	45.51	-1288	45.51	-1287	45.51	-1286	45.51
-1285	45.51	-1284	45.51	-1283	17.01	-1282	33.98	-1281	62.48	-1280	91.03	-1279	91.03
-1278	45.51	-1277	45.51	-1276	83.44	-1275	45.51	-1274	75.86	-1273	91.03	-1272	91.03
-1271	62.20	-1270	45.51	-1269	28.82	-1268	51.58	-1267	56.13	-1266	83.44	-1265	66.75
-1264	152.22	-1263	45.51	-1262	70.09	-1261	80.41	-1260	67.97	-1259	56.13	-1258	159.80
-1257	72.82	-1256	72.82	-1255	72.82	-1254	72.82	-1253	171.94	-1252	72.82	-1251	72.82
-1250	72.82	-1249	72.82	-1248	171.94	-1247	72.82	-1246	72.82	-1245	72.82	-1244	72.82
-1243	171.94	-1242	72.82	-1241	72.82	-1240	72.82	-1239	72.82	-1238	171.94	-1237	72.82
-1236	72.82	-1235	72.82	-1234	72.82	-1233	144.63	-1232	91.03	-1231	226.55	-1230	91.03
-1229	91.03	-1228	91.03	-1227	159.80	-1226	45.51	-1225	75.86	-1224	91.03	-1223	91.03
-1222	217.45	-1221	72.82	-1220	72.82	-1219	72.82	-1218	72.82	-1217	72.82	-1216	72.82
-1215	72.82	-1214	72.82	-1213	168.90	-1212	168.90	-1211	66.75	-1210	66.75	-1209	17.01
-1208	33.98	-1207	62.48	-1206	91.03	-1205	124.40	-1204	91.03	-1203	91.03	-1202	91.03
-1201	68.27	-1200	45.51	-1199	91.03	-1198	95.58	-1197	45.51	-1196	70.09	-1195	80.41
-1194	90.72	-1193	56.13	-1192	50.06	-1191	45.51	-1190	45.51	-1189	45.51	-1188	45.51
-1187	45.51	-1186	45.51	-1185	45.51	-1184	45.51	-1183	45.51	-1182	44.00	-1181	44.00
-1180	44.00	-1179	42.48	-1178	42.48	-1177	42.48	-1176	16.99	-1175	33.98	-1174	62.50
-1173	91.03	-1172	91.03	-1171	91.03	-1170	91.03	-1169	91.03	-1168	81.92	-1167	45.51
-1166	75.86	-1165	91.03	-1164	91.03	-1163	62.20	-1162	45.51	-1161	70.09	-1160	80.41
-1159	89.21	-1158	56.13	-1157	48.55	-1156	18.46	-1155	36.93	-1154	67.92	-1153	98.91
-1152	98.91	-1151	98.91	-1150	98.91	-1149	98.91	-1148	89.02	-1147	49.46	-1146	82.43
-1145	98.91	-1144	98.91	-1143	67.59	-1142	49.46	-1141	76.16	-1140	87.37	-1139	96.93
-1138	60.99	-1137	52.75	-1136	46.16	-1135	46.16	-1134	46.16	-1133	47.81	-1132	47.81
-1131	47.81	-1130	49.46	-1129	49.46	-1128	49.46	-1127	49.46	-1126	49.46	-1125	49.46
-1124	49.46	-1123	49.46	-1122	49.46	-1121	18.46	-1120	36.93	-1119	67.92	-1118	98.91
-1117	98.91	-1116	49.46	-1115	49.46	-1114	90.67	-1113	49.46	-1112	82.43	-1111	98.91
-1110	98.91	-1109	67.59	-1108	49.46	-1107	31.32	-1106	56.05	-1105	60.99	-1104	90.67
-1103	72.53	-1102	165.40	-1101	49.46	-1100	76.16	-1099	87.37	-1098	73.85	-1097	60.99
-1096	173.64	-1095	79.13	-1094	79.13	-1093	79.13	-1092	79.13	-1091	186.83	-1090	79.13
-1089	79.13	-1088	79.13	-1087	79.13	-1086	186.83	-1085	79.13	-1084	79.13	-1083	79.13
-1082	79.13	-1081	186.83	-1080	79.13	-1079	79.13	-1078	79.13	-1077	79.13	-1076	186.83
-1075	79.13	-1074	79.13	-1073	79.13	-1072	79.13	-1071	157.16	-1070	98.91	-1069	246.18
-1068	98.91	-1067	98.91	-1066	98.91	-1065	173.64	-1064	49.46	-1063	82.43	-1062	98.91
-1061	98.91	-1060	236.29	-1059	79.13	-1058	79.13	-1057	79.13	-1056	79.13	-1055	79.13
-1054	79.13	-1053	79.13	-1052	79.13	-1051	183.53	-1050	183.53	-1049	72.53	-1048	72.53
-1047	18.46	-1046	36.93	-1045	67.92	-1044	98.91	-1043	135.18	-1042	98.91	-1041	98.91
-1040	98.91	-1039	74.18	-1038	49.46	-1037	98.91	-1036	103.86	-1035	49.46	-1034	76.16
-1033	87.37	-1032	98.58	-1031	60.99	-1030	54.40	-1029	49.46	-1028	49.46	-1027	49.46
-1026	49.46	-1025	49.46	-1024	49.46	-1023	49.46	-1022	49.46	-1021	49.46	-1020	47.81
-1019	47.81	-1018	47.81	-1017	46.16	-1016	46.16	-1015	46.16	-1014	18.46	-1013	36.93
-1012	67.92	-1011	98.91	-1010	98.91	-1009	98.91	-1008	98.91	-1007	98.91	-1006	89.02
-1005	49.46	-1004	82.43	-1003	98.91	-1002	98.91	-1001	67.59	-1000	49.46	-999	76.16
-998	87.37	-997	96.93	-996	60.99	-995	52.75	101	836.66	102	1375.93	103	3398.41
104	1796.11	105	1477.38	107	1044.86	108	766.93	109	2686.75	110	1716.13	111	1548.04
113	1044.86	114	1592.05	115	4673.30	116	3666.81	117	1976.05	119	1044.86	120	1592.05
121	4673.30	122	3666.81	123	1976.05	125	1044.86	126	1592.05	127	4633.26	128	3626.76
129	1976.05	131	1044.86	132	1592.05	133	4633.26	134	3626.76	135	1976.05	137	476.57
138	1278.42	139	3358.36	140	2640.93	141	1477.38	142	267.84	143	375.76	144	375.76
145	375.76	146	375.76	147	375.76	148	267.84	227	1875.54	228	1875.54	233	2806.29
234	2806.29	239	1545.51	240	1545.51	241	298.62	242	298.62	243	555.96	244	555.96
245	302.06	246	302.06	301	140.22	302	140.22	404	140.22	405	140.22	501	745.53
502	2877.41	503	3174.97	504	2464.23	505	1700.85	506	804.89	507	1913.26	508	4476.63
509	4476.63	510	3470.13	511	2482.90	512	1520.29	513	1913.26	514	4476.63	515	4476.63
516	3470.13	517	2482.90	518	1520.29	519	1913.26	520	4476.63	521	4476.63	522	3470.13
523	2482.90	524	1520.29	525	1913.26	526	4476.63	527	4440.66	528	3434.16	529	2482.90
530	1520.29	531	1913.26	532	4476.63	533	4440.66	534	3434.16	535	2482.91	536	1520.29
537	745.53	538	2877.41	539	3139.00	540	2428.26	541	1700.85	542	804.89	543	140.22
544	477.17	545	140.22	546	59.35	547	110.27	548	110.27	549	110.27	550	110.27
551	110.27	552	110.27	553	110.27	554	110.27	555	110.27	556	110.27	557	110.27
558	110.27	559	110.27	560	110.27	561	110.27	562	110.27	563	110.27	564	59.35
565	477.17	566	140.22	567	140.22	601	145.77	602	145.77	704	145.77	705	145.77
801	435.17	805	714.19	806	433.51	807	730.91	811	1288.37	812	824.21	813	730.92



Relazione di calcolo

817	1288.37	818	824.21	819	730.91	823	1288.37	824	824.21	825	730.91	829	1288.37
830	824.21	831	730.92	835	1288.37	836	824.21	837	435.17	841	714.19	842	433.51
843	118.38	844	83.84	845	84.35	846	100.33	847	118.38	848	20.06	849	649.65
850	646.05	851	646.05	852	20.06	853	1215.58	854	1222.40	855	1215.58	856	1215.58
857	1215.58	858	1215.58	859	20.06	860	1215.58	861	1222.40	862	1215.58	863	1215.58
864	1215.58	865	1215.58	866	20.06	867	1215.58	868	1222.40	869	1215.58	870	1215.58
871	1215.58	872	1215.58	873	20.06	874	1215.58	875	1222.40	876	1215.58	877	1215.58
878	1215.58	879	1215.58	880	20.06	881	1215.58	882	1222.40	883	1215.58	884	1215.58
885	1215.58	886	1215.58	887	20.06	888	649.65	889	646.05	890	646.05	891	83.84
892	84.35	893	100.33	894	118.38	895	118.38						

**Totali masse nodi**

**Mz**

**<KG>**

500936.00

**Elenco forze sismiche di impalcato allo SLO**

**Simbologia**

Imp. = Numero dell'impalcato

cx = Coeff. c in dir. X

cy = Coeff. c in dir. Y

Mz = Momento intorno all'asse Z

Imp.	cx	cy	Mz <kgm>
1	0.10	0.10	158520.00
2	0.05	0.05	71467.00
3	0.02	0.02	31192.20
4	0.02	0.02	31192.20
5	0.37	0.37	588036.00
6	0.07	0.07	104003.00
7	0.07	0.07	104003.00
8	0.31	0.31	493330.00

**Totali forze sismiche**

**Mz**

**<kgm>**

1581740.00

**Elenco forze sismiche di impalcato allo SLD**

Imp.	cx	cy	Mz <kgm>
1	0.10	0.10	198014.00
2	0.05	0.05	89272.50
3	0.02	0.02	38963.50
4	0.02	0.02	38963.50
5	0.37	0.37	734541.00
6	0.07	0.07	129914.00
7	0.07	0.07	129914.00
8	0.31	0.31	616239.00

**Totali forze sismiche**

**Mz**

**<kgm>**

1975820.00

**Elenco forze sismiche di impalcato allo SLV**

Imp.	cx	cy	Mz <kgm>
1	0.10	0.10	451623.00
2	0.05	0.05	203609.00
3	0.02	0.02	88866.40
4	0.02	0.02	88866.40
5	0.37	0.37	1675310.00
6	0.07	0.07	296304.00
7	0.07	0.07	296304.00
8	0.31	0.31	1405490.00

**Totali forze sismiche**

**Mz**

**<kgm>**

4506380.00

**Elenco modi di vibrare, masse partecipanti e coefficienti di partecipazione**

Relazione di calcolo

**Simbologia**

Modo = Numero del modo di vibrare  
 C = \* indica che il modo è stato considerato  
 Per. = Periodo  
 Diff. = Minima differenza percentuale dagli altri periodi  
 $\Phi_x$  = Coefficiente di partecipazione in dir. X  
 $\Phi_y$  = Coefficiente di partecipazione in dir. Y  
 $\Phi_z$  = Coefficiente di partecipazione in dir. Z  
 %Mx = Percentuale massa partecipante in dir. X  
 %My = Percentuale massa partecipante in dir. Y  
 %Mz = Percentuale massa partecipante in dir. Z  
 %Jpz = Percentuale momento d'inerzia polare partecipante intorno all'asse Z

Modo	C	Per.	Diff.	$\Phi_x$	$\Phi_y$	$\Phi_z$	%Mx	%My	%Mz	%Jpz	
1	*	0.75	2.92	-2.37	357.33	0.60	0.00	24.60	0.00	0.01	
2	*	0.72	2.92	70.43	-7.25	0.63	0.96	0.01	0.00	7.89	
3	*	0.50	1.45	2.31	-0.12	108.38	0.00	0.00	2.34	0.00	
4		0.49	1.45	3.56	0.96	0.23	0.00	0.00	0.00	0.00	
5		0.48	1.76	-1.71	-0.92	27.97	0.00	0.00	0.16	0.00	
6		0.47	1.27	-5.30	-1.02	0.95	0.01	0.00	0.00	0.00	
7		0.47	1.27	-2.20	-0.92	8.03	0.00	0.00	0.01	0.00	
8		0.33	0.04	45.89	-2.09	-40.81	0.41	0.00	0.33	0.01	
9		0.33	0.04	-0.87	2.50	-0.97	0.00	0.00	0.00	0.01	
10	*	0.30	7.57	545.17	-10.37	-9.63	57.26	0.02	0.02	0.86	
11	*	0.26	0.54	-19.92	6.43	110.58	0.08	0.01	2.44	0.00	
12		0.26	0.54	-6.71	-15.56	1.71	0.01	0.05	0.00	0.04	
13		0.26	0.73	10.84	48.94	-30.98	0.02	0.46	0.19	0.13	
14	*	0.26	0.15	0.30	-83.70	-2.14	0.00	1.35	0.00	0.30	
15	*	0.26	0.15	33.64	410.61	4.58	0.22	32.48	0.00	7.66	
16	*	0.26	0.45	7.22	110.93	11.53	0.01	2.37	0.03	0.51	
17	*	0.22	8.54	-4.43	183.93	0.19	0.00	6.52	0.00	24.87	
18		0.21	0.79	-13.10	-4.95	57.83	0.03	0.00	0.67	0.57	
19		0.20	0.79	-59.88	48.69	42.31	0.69	0.46	0.36	0.01	
20	*	0.20	1.26	40.06	-107.86	13.08	0.31	2.24	0.03	3.40	
21		0.20	0.59	-27.04	-11.23	62.06	0.14	0.02	0.77	0.00	
22		0.19	0.45	-60.60	-22.22	-25.20	0.71	0.10	0.13	0.02	
23		0.19	0.45	-21.69	-0.35	-9.45	0.09	0.00	0.02	0.09	
24		0.19	0.90	-1.54	-0.19	16.45	0.00	0.00	0.05	0.00	
25		0.19	0.74	3.13	-0.91	3.44	0.00	0.00	0.00	0.05	
26		0.19	0.34	3.95	0.38	-7.07	0.00	0.00	0.01	0.00	
27		0.19	0.34	-1.32	-3.22	-2.40	0.00	0.00	0.00	0.02	
28	*	0.17	3.47	-8.60	-1.32	-213.77	0.01	0.00	9.12	0.00	
29		0.17	0.24	6.35	1.15	9.97	0.01	0.00	0.02	0.06	
30		0.17	0.18	0.40	-0.05	-0.03	0.00	0.00	0.00	0.00	
31		0.17	0.18	0.08	-0.16	-0.42	0.00	0.00	0.00	0.00	
32		0.17	0.23	-2.11	-0.12	-4.33	0.00	0.00	0.00	0.00	
33		0.17	0.15	1.15	0.30	-1.06	0.00	0.00	0.00	0.00	
34		0.17	0.11	-0.37	0.19	5.64	0.00	0.00	0.01	0.00	
35		0.17	0.11	-0.28	1.44	0.09	0.00	0.00	0.00	0.00	
36	*	0.16	4.42	-5.24	-2.97	-91.45	0.01	0.00	1.67	0.03	
37		0.15	1.93	4.14	-2.83	-35.72	0.00	0.00	0.25	0.06	
38		0.15	0.06	0.15	-0.24	-7.34	0.00	0.00	0.01	0.00	
39		0.15	0.02	-4.77	-0.35	9.37	0.00	0.00	0.02	0.00	
40		0.15	0.02	1.52	-0.29	-1.14	0.00	0.00	0.00	0.00	
41		0.15	0.07	1.18	0.37	1.86	0.00	0.00	0.00	0.00	
42		0.15	0.33	-2.18	1.10	12.53	0.00	0.00	0.03	0.02	
43		0.14	2.98	-9.10	1.87	49.41	0.02	0.00	0.49	0.01	
44	*	0.13	2.08	-184.32	5.04	36.24	6.55	0.00	0.26	0.01	
45		0.13	0.36	62.40	-1.48	15.77	0.75	0.00	0.05	0.00	
46		0.13	0.36	19.73	-0.03	4.49	0.08	0.00	0.00	0.00	
47		0.13	0.96	30.20	-0.59	7.92	0.18	0.00	0.01	0.00	
48		0.13	1.07	5.23	-0.01	3.03	0.01	0.00	0.00	0.00	
49	*	0.12	3.57	72.06	-0.41	44.88	1.00	0.00	0.40	0.00	
50	*	0.12	2.28	-71.15	-0.30	-208.50	0.98	0.00	8.68	0.00	
51	*	0.11	2.28	1.34	-7.77	109.31	0.00	0.01	2.39	0.14	
52	*	0.11	1.23	21.80	-3.84	0.98	0.09	0.00	0.00	1.30	
53		0.11	0.19	8.11	-0.62	24.24	0.01	0.00	0.12	0.02	
54		0.11	0.19	5.49	-0.27	10.76	0.01	0.00	0.02	0.04	
55	*	0.11	2.96	-0.34	-0.94	155.82	0.00	0.00	4.85	0.00	
56		0.10	0.44	0.75	-4.99	-7.14	0.00	0.00	0.01	0.00	
57	*	0.10	0.44	3.67	3.67	15.63	168.47	0.00	0.05	5.67	0.00
58	*	0.10	0.81	11.20	-4.47	-78.26	0.02	0.00	1.22	0.05	
59		0.10	0.33	25.37	5.68	14.70	0.12	0.01	0.04	0.02	
60	*	0.10	0.33	-12.26	1.01	179.44	0.03	0.00	6.43	0.07	
61	*	0.10	0.15	-2.79	-1.93	154.59	0.00	0.00	4.77	0.00	
62	*	0.10	0.15	-1.11	-10.20	358.19	0.00	0.02	25.61	0.00	
63	*	0.10	1.69	20.08	2.81	82.48	0.08	0.00	1.36	0.14	
64	*	0.09	0.75	9.84	-7.59	184.18	0.02	0.01	6.77	0.00	
65	*	0.09	0.75	-0.86	-0.09	-152.91	0.00	0.00	4.67	0.00	
66		0.09	1.49	1.17	0.71	-7.78	0.00	0.00	0.01	0.00	

Relazione di calcolo

67	*	0.09	1.17	10.34	-1.70	82.29	0.02	0.00	1.35	0.02
68		0.09	1.17	14.79	0.09	-2.79	0.04	0.00	0.00	0.02
69		0.09	0.95	-57.33	-2.64	45.39	0.63	0.00	0.41	0.10
70		0.09	0.95	29.50	-10.32	8.17	0.17	0.02	0.01	0.47
71		0.08	1.54	-3.56	-0.63	18.25	0.00	0.00	0.07	0.00
72	*	0.08	1.54	0.19	-0.53	-87.14	0.00	0.00	1.52	0.00
73		0.08	2.27	-7.51	0.83	-11.67	0.01	0.00	0.03	0.00
74		0.08	2.27	4.58	-0.80	28.66	0.00	0.00	0.16	0.06
75		0.07	2.09	26.51	-2.25	45.62	0.14	0.00	0.42	0.00
76		0.07	1.56	-30.21	1.53	28.23	0.18	0.00	0.16	0.22
77		0.07	1.56	20.73	-1.50	-56.70	0.08	0.00	0.64	0.01
78		0.07	0.29	-4.30	-0.84	7.94	0.00	0.00	0.01	0.00
79		0.07	0.29	3.03	2.48	-46.40	0.00	0.00	0.43	0.00
80		0.07	0.92	-26.56	-1.00	-6.04	0.14	0.00	0.01	0.09
81		0.07	0.92	16.54	-2.09	-18.89	0.05	0.00	0.07	0.00
82		0.06	1.40	3.50	-1.61	2.23	0.00	0.00	0.00	0.00
83		0.06	0.47	24.97	-10.26	2.36	0.12	0.02	0.00	0.00
84		0.06	0.47	18.95	-10.58	7.52	0.07	0.02	0.01	0.08
85		0.06	0.65	-2.57	1.02	-8.48	0.00	0.00	0.01	0.01
86		0.06	0.65	-16.65	-0.75	-2.64	0.05	0.00	0.00	0.08
87		0.06	2.98	-8.43	2.81	-4.17	0.01	0.00	0.00	0.00
88		0.06	2.98	-7.47	4.91	3.04	0.01	0.00	0.00	0.04
89		0.06	1.27	7.75	-5.17	-12.72	0.01	0.01	0.03	0.05
90		0.06	1.27	1.71	-7.83	18.38	0.00	0.01	0.07	0.06
91		0.06	2.05	-3.99	-3.99	-5.34	-1.44	0.00	0.00	0.01
92		0.05	1.12	26.01	-4.13	5.10	0.13	0.00	0.01	0.02
93		0.05	0.12	1.02	-0.09	16.47	0.00	0.00	0.05	0.00
94		0.05	0.12	-5.87	0.12	9.60	0.01	0.00	0.02	0.02
95		0.05	0.14	-5.33	-0.55	-7.89	0.01	0.00	0.01	0.01
96		0.05	0.14	-10.52	1.30	-24.62	0.02	0.00	0.12	0.02
97		0.05	0.55	-1.31	-0.14	-2.13	0.00	0.00	0.00	0.00
98		0.05	0.62	-2.04	8.30	2.50	0.00	0.01	0.00	0.01
99		0.05	1.07	-8.98	5.57	-0.46	0.02	0.01	0.00	0.00
100		0.05	0.54	-12.70	10.62	-7.31	0.03	0.02	0.01	0.03
101		0.05	0.54	-1.94	-4.06	-2.14	0.00	0.00	0.00	0.00
102	*	0.05	0.95	2.74	-132.44	1.55	0.00	3.38	0.00	0.18
103		0.05	0.95	0.87	17.21	5.84	0.00	0.06	0.01	0.00
104		0.05	0.54	-1.04	-5.21	-2.79	0.00	0.01	0.00	0.00
105		0.05	0.54	-26.11	28.85	6.88	0.13	0.16	0.01	0.16
106		0.05	3.56	6.80	-5.59	8.40	0.01	0.01	0.01	0.01
107		0.04	0.51	-57.93	-19.72	9.13	0.65	0.07	0.02	0.43
108		0.04	0.01	5.30	2.18	-1.62	0.01	0.00	0.00	0.00
109		0.04	0.01	-1.74	-0.34	-0.06	0.00	0.00	0.00	0.00
110		0.04	0.17	-9.68	-3.42	5.10	0.02	0.00	0.01	0.01
111		0.04	0.23	6.04	3.52	-3.62	0.01	0.00	0.00	0.01
112		0.04	0.49	-1.98	-0.95	12.21	0.00	0.00	0.03	0.00
113		0.04	0.75	-28.47	-2.30	-2.04	0.16	0.00	0.00	0.05
114		0.04	0.75	-37.62	-7.19	3.59	0.27	0.01	0.00	0.34
115		0.04	0.48	16.71	9.10	6.70	0.05	0.02	0.01	0.10
116		0.04	0.14	-0.30	0.14	1.09	0.00	0.00	0.00	0.00
117		0.04	0.05	-0.48	-0.39	2.19	0.00	0.00	0.00	0.00
118		0.04	0.05	-0.40	0.43	0.35	0.00	0.00	0.00	0.00
119		0.04	0.40	-4.99	1.31	-22.08	0.00	0.00	0.10	0.01
120		0.04	0.40	-25.18	3.36	7.17	0.12	0.00	0.01	0.13
121		0.04	1.25	4.13	4.97	-13.39	0.00	0.00	0.04	0.00
122		0.04	1.25	-30.84	-21.33	-2.14	0.18	0.09	0.00	0.30
123		0.04	1.72	6.99	-8.27	1.66	0.01	0.01	0.00	0.00
124		0.04	0.86	4.53	-3.00	6.87	0.00	0.00	0.01	0.01
125	*	0.04	0.17	116.80	-32.62	-4.61	2.63	0.20	0.00	2.60
126		0.04	0.17	-10.00	1.63	0.38	0.02	0.00	0.00	0.01
127		0.04	0.11	-6.15	2.75	-0.96	0.01	0.00	0.00	0.01
128		0.04	0.11	9.98	-3.15	1.13	0.02	0.00	0.00	0.02
129	*	0.04	0.22	-61.41	-78.36	12.64	0.73	1.18	0.03	0.23
130		0.04	0.22	-10.80	10.03	-5.40	0.02	0.02	0.01	0.00
131		0.04	0.59	24.86	41.30	0.60	0.12	0.33	0.00	0.07
132	*	0.03	1.56	53.68	102.45	1.29	0.56	2.02	0.00	0.62
133		0.03	1.56	-4.33	4.21	0.44	0.00	0.00	0.00	0.01
134		0.03	0.29	-16.92	29.79	-1.89	0.06	0.17	0.00	0.14
135		0.03	0.27	-0.03	-0.44	22.45	0.00	0.00	0.10	0.00
136		0.03	0.04	-2.94	4.79	-0.79	0.00	0.00	0.00	0.01
137	*	0.03	0.04	60.08	-91.76	1.36	0.70	1.62	0.00	2.51
138		0.03	0.36	-0.54	0.69	-19.01	0.00	0.00	0.07	0.00
139		0.03	0.08	1.65	-1.50	-5.35	0.00	0.00	0.01	0.00
140		0.03	0.08	-35.15	35.26	-6.00	0.24	0.24	0.01	0.43
141		0.03	2.24	2.60	-27.83	3.02	0.00	0.15	0.00	0.00
142		0.03	0.63	-6.19	3.08	0.23	0.01	0.00	0.00	0.01
143		0.03	0.10	10.10	24.24	0.01	0.02	0.11	0.00	0.00
144		0.03	0.10	-13.55	-5.30	2.73	0.04	0.01	0.00	0.02
145		0.03	0.39	13.65	-0.08	-13.76	0.04	0.00	0.04	0.00
146		0.03	0.39	1.18	-16.91	2.11	0.00	0.06	0.00	0.05
147	*	0.03	0.47	36.43	86.34	-18.21	0.26	1.44	0.07	1.61
148		0.03	0.47	-22.14	-22.13	11.32	0.09	0.09	0.03	0.06

Relazione di calcolo

149 *	0.03	0.87	66.57	-90.38	-0.43	0.85	1.57	0.00	1.18
150 *	0.03	0.58	72.78	22.09	-16.23	1.02	0.09	0.05	0.01
151	0.03	0.58	18.51	47.38	-12.57	0.07	0.43	0.03	0.23
152 *	0.03	0.28	-83.71	68.07	-19.51	1.35	0.89	0.08	0.00
153	0.03	0.28	-15.94	11.35	13.92	0.05	0.02	0.04	0.00
154	0.03	0.17	1.05	0.91	1.33	0.00	0.00	0.00	0.01
155 *	0.03	0.17	-17.48	57.26	-15.02	0.06	0.63	0.05	1.72
156	0.03	0.55	-2.78	-4.50	-11.70	0.00	0.00	0.03	0.02
157	0.03	0.55	0.19	0.34	3.48	0.00	0.00	0.00	0.00
158 *	0.03	0.43	17.09	-78.20	5.89	0.06	1.18	0.01	0.03
159	0.03	0.17	5.48	-17.32	-0.72	0.01	0.06	0.00	0.00
160	0.03	0.16	-2.70	11.13	-0.81	0.00	0.02	0.00	0.00
161 *	0.03	0.03	29.22	154.99	37.44	0.16	4.63	0.28	0.01
162	0.03	0.03	-5.47	1.08	-2.34	0.01	0.00	0.00	0.00
163	0.03	0.27	2.52	-1.72	1.50	0.00	0.00	0.00	0.00
164	0.03	0.52	61.75	3.23	1.14	0.73	0.00	0.00	0.01
165	0.03	0.52	-9.61	-14.01	-8.61	0.02	0.04	0.01	0.00
166 *	0.03	0.70	-108.84	-11.63	8.23	2.28	0.03	0.01	0.29
167	0.03	0.82	-50.15	35.65	-1.48	0.48	0.24	0.00	0.00
168	0.03	0.99	21.67	48.77	-5.30	0.09	0.46	0.01	0.00
169 *	0.03	1.46	90.62	21.24	0.43	1.58	0.09	0.00	0.46
170 *	0.02	1.68	-84.09	-18.80	-2.41	1.36	0.07	0.00	0.34
171 *	0.02	0.33	24.50	27.57	-0.82	0.12	0.15	0.00	1.08
172	0.02	0.02	1.57	1.48	1.43	0.00	0.00	0.00	0.00
173	0.02	0.02	1.70	1.17	0.32	0.00	0.00	0.00	0.00
174	0.02	0.02	0.50	-0.15	-0.34	0.00	0.00	0.00	0.00
175	0.02	0.02	0.55	0.74	0.27	0.00	0.00	0.00	0.00
176	0.02	0.36	-17.08	-14.30	1.74	0.06	0.04	0.00	0.05
177	0.02	0.95	8.10	1.15	1.99	0.01	0.00	0.00	0.02
178 *	0.02	0.95	-56.16	132.85	2.03	0.61	3.40	0.00	0.22
179	0.02	0.59	-4.94	11.47	-5.40	0.00	0.03	0.01	0.01
180	0.02	0.56	10.33	-13.85	-3.48	0.02	0.04	0.00	0.04
181	0.02	0.56	-66.14	52.75	2.71	0.84	0.54	0.00	0.56
182	0.02	0.21	-5.80	-6.70	-9.39	0.01	0.01	0.02	0.00
183	0.02	0.21	-3.55	-2.89	0.03	0.00	0.00	0.00	0.00
184	0.02	0.25	-3.47	-2.56	-2.27	0.00	0.00	0.00	0.00
185	0.02	0.25	-2.34	-1.44	0.05	0.00	0.00	0.00	0.00
186 *	0.02	0.74	-121.92	-65.06	-5.11	2.86	0.82	0.01	0.81
187	0.02	0.01	5.18	1.33	-9.40	0.01	0.00	0.02	0.00
188	0.02	0.01	-8.43	-4.40	4.31	0.01	0.00	0.00	0.01
189	0.02	0.31	-5.78	-7.13	2.88	0.01	0.01	0.00	0.02
190	0.02	0.02	-1.12	-1.01	-2.79	0.00	0.00	0.00	0.00
191	0.02	0.02	2.47	2.11	0.65	0.00	0.00	0.00	0.00
192	0.02	0.02	-4.65	-1.44	9.28	0.00	0.00	0.02	0.00
193	0.02	1.43	-45.98	-12.38	-0.18	0.41	0.03	0.00	0.06
194	0.02	1.43	-8.94	-13.40	0.93	0.02	0.03	0.00	0.96
195	0.02	0.50	-23.46	-1.38	-4.56	0.11	0.00	0.00	0.04
196 *	0.02	0.50	-6.29	63.06	-0.91	0.01	0.77	0.00	5.74
197	0.02	0.80	22.56	-17.15	1.54	0.10	0.06	0.00	0.25
198 *	0.02	0.80	60.51	-21.47	-0.64	0.71	0.09	0.00	3.20
199	0.02	2.04	18.65	5.15	-2.33	0.07	0.01	0.00	1.00
200	0.02	0.76	14.42	5.66	-0.13	0.04	0.01	0.00	0.00
201	0.02	0.23	-17.58	-8.32	0.39	0.06	0.01	0.00	0.01
202 *	0.02	0.23	-82.48	-7.87	2.01	1.31	0.01	0.00	0.06
203	0.02	0.07	-0.81	-0.51	-2.92	0.00	0.00	0.00	0.00
204	0.02	0.07	-1.33	-1.03	0.76	0.00	0.00	0.00	0.00
205	0.02	0.08	1.54	1.08	0.52	0.00	0.00	0.00	0.00
206	0.02	0.08	-2.04	-2.03	0.57	0.00	0.00	0.00	0.01
207	0.02	0.10	-19.57	-20.72	5.65	0.07	0.08	0.01	0.73
208	0.02	0.18	-1.94	0.40	-1.70	0.00	0.00	0.00	0.01
209	0.02	0.18	8.44	11.34	0.60	0.01	0.02	0.00	0.06
210	0.02	0.59	-0.04	0.03	2.12	0.00	0.00	0.00	0.00

Tot.cons.

86.85 93.96 92.19 70.20

**Elenco coefficienti di risposta**

**Simbologia**

Modo = Numero del modo di vibrare  
 Sx = Coefficiente di risposta (moltiplicato per 100) in dir. X  
 Sy = Coefficiente di risposta (moltiplicato per 100) in dir. Y  
 Sz = Coefficiente di risposta (moltiplicato per 100) in dir. Z

Stato limite di operatività

Modo	Sx	Sy	Sz
1	11.41	11.41	0.83
2	11.74	11.74	0.85
3	17.11	17.11	1.24
4	17.36	17.36	1.26
5	17.68	17.68	1.28

Relazione di calcolo

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6 17.99 17.99 1.30  
7 18.22 18.22 1.32  
8 20.09 20.09 1.88  
9 20.09 20.09 1.88  
10 20.09 20.09 2.02  
11 20.09 20.09 2.34  
12 20.09 20.09 2.35  
13 20.09 20.09 2.37  
14 20.09 20.09 2.39  
15 20.09 20.09 2.39  
16 20.09 20.09 2.40  
17 20.09 20.09 2.76  
18 20.09 20.09 3.00  
19 20.09 20.09 3.02  
20 20.09 20.09 3.06  
21 20.09 20.09 3.15  
22 20.09 20.09 3.16  
23 20.09 20.09 3.18  
24 20.09 20.09 3.22  
25 20.09 20.09 3.25  
26 20.09 20.09 3.27  
27 20.09 20.09 3.28  
28 20.09 20.09 3.54  
29 20.09 20.09 3.66  
30 20.09 20.09 3.67  
31 20.09 20.09 3.67  
32 20.09 20.09 3.68  
33 20.09 20.09 3.69  
34 20.09 20.09 3.70  
35 20.09 20.09 3.70  
36 20.09 20.09 3.87  
37 20.09 20.09 4.09  
38 20.09 20.09 4.11  
39 20.09 20.09 4.11  
40 20.09 20.09 4.11  
41 20.09 20.09 4.11  
42 20.09 20.09 4.11  
43 20.09 20.09 4.11  
44 19.29 19.29 4.11  
45 19.06 19.06 4.11  
46 19.01 19.01 4.11  
47 18.91 18.91 4.11  
48 18.79 18.79 4.11  
49 18.28 18.28 4.11  
50 17.91 17.91 4.11  
51 17.69 17.69 4.11  
52 17.37 17.37 4.11  
53 17.25 17.25 4.11  
54 17.23 17.23 4.11  
55 16.96 16.96 4.11  
56 16.68 16.68 4.11  
57 16.65 16.65 4.11  
58 16.57 16.57 4.11  
59 16.50 16.50 4.11  
60 16.47 16.47 4.11  
61 16.34 16.34 4.11  
62 16.33 16.33 4.11  
63 16.15 16.15 4.11  
64 16.01 16.01 4.11  
65 15.95 15.95 4.11  
66 15.78 15.78 4.11  
67 15.66 15.66 4.11  
68 15.57 15.57 4.11  
69 15.25 15.25 4.11  
70 15.18 15.18 4.11  
71 15.05 15.05 4.11  
72 14.94 14.94 4.11  
73 14.56 14.56 4.11  
74 14.40 14.40 4.11  
75 14.09 14.09 4.11  
76 13.96 13.96 4.11  
77 13.87 13.87 4.11  
78 13.76 13.76 4.11  
79 13.74 13.74 4.11  
80 13.63 13.63 4.11  
81 13.58 13.58 4.11  
82 13.43 13.43 4.11  
83 13.35 13.35 4.11  
84 13.32 13.32 4.11  
85 13.29 13.29 4.11  
86 13.25 13.25 4.11  
87 13.07 13.07 4.11

## Relazione di calcolo

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88 12.92 12.92 4.11  
89 12.76 12.76 4.11  
90 12.70 12.70 4.11  
91 12.60 12.60 4.11  
92 12.45 12.45 4.11  
93 12.40 12.40 4.11  
94 12.39 12.39 4.11  
95 12.38 12.38 4.11  
96 12.37 12.37 4.11  
97 12.35 12.35 4.11  
98 12.32 12.32 4.11  
99 12.27 12.27 4.11  
100 12.19 12.19 4.11  
101 12.17 12.17 4.11  
102 11.99 11.99 4.04  
103 11.95 11.95 4.01  
104 11.89 11.89 3.98  
105 11.87 11.87 3.96  
106 11.73 11.73 3.88  
107 11.55 11.55 3.78  
108 11.53 11.53 3.77  
109 11.53 11.53 3.77  
110 11.53 11.53 3.77  
111 11.52 11.52 3.76  
112 11.50 11.50 3.75  
113 11.42 11.42 3.71  
114 11.40 11.40 3.69  
115 11.31 11.31 3.64  
116 11.29 11.29 3.63  
117 11.29 11.29 3.63  
118 11.29 11.29 3.63  
119 11.27 11.27 3.62  
120 11.25 11.25 3.61  
121 11.16 11.16 3.56  
122 11.12 11.12 3.53  
123 11.06 11.06 3.50  
124 10.98 10.98 3.45  
125 10.95 10.95 3.44  
126 10.95 10.95 3.43  
127 10.93 10.93 3.42  
128 10.93 10.93 3.42  
129 10.86 10.86 3.38  
130 10.85 10.85 3.38  
131 10.83 10.83 3.37  
132 10.76 10.76 3.32  
133 10.71 10.71 3.30  
134 10.62 10.62 3.24  
135 10.61 10.61 3.24  
136 10.60 10.60 3.24  
137 10.60 10.60 3.23  
138 10.57 10.57 3.22  
139 10.56 10.56 3.21  
140 10.56 10.56 3.21  
141 10.50 10.50 3.17  
142 10.44 10.44 3.14  
143 10.42 10.42 3.13  
144 10.42 10.42 3.13  
145 10.40 10.40 3.12  
146 10.39 10.39 3.11  
147 10.37 10.37 3.10  
148 10.36 10.36 3.09  
149 10.33 10.33 3.08  
150 10.31 10.31 3.06  
151 10.29 10.29 3.05  
152 10.25 10.25 3.03  
153 10.24 10.24 3.03  
154 10.23 10.23 3.02  
155 10.23 10.23 3.02  
156 10.21 10.21 3.01  
157 10.20 10.20 3.00  
158 10.18 10.18 2.99  
159 10.17 10.17 2.98  
160 10.17 10.17 2.98  
161 10.16 10.16 2.98  
162 10.16 10.16 2.98  
163 10.16 10.16 2.98  
164 10.08 10.08 2.93  
165 10.07 10.07 2.93  
166 10.05 10.05 2.92  
167 10.04 10.04 2.91  
168 10.01 10.01 2.89  
169 9.98 9.98 2.87

Relazione di calcolo

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170	9.92	9.92	2.84
171	9.89	9.89	2.82
172	9.88	9.88	2.82
173	9.88	9.88	2.82
174	9.88	9.88	2.82
175	9.88	9.88	2.82
176	9.87	9.87	2.81
177	9.84	9.84	2.79
178	9.82	9.82	2.78
179	9.77	9.77	2.75
180	9.76	9.76	2.75
181	9.74	9.74	2.74
182	9.61	9.61	2.66
183	9.61	9.61	2.66
184	9.61	9.61	2.66
185	9.60	9.60	2.66
186	9.59	9.59	2.65
187	9.56	9.56	2.63
188	9.56	9.56	2.63
189	9.55	9.55	2.63
190	9.54	9.54	2.62
191	9.54	9.54	2.62
192	9.54	9.54	2.62
193	9.51	9.51	2.60
194	9.49	9.49	2.59
195	9.45	9.45	2.57
196	9.45	9.45	2.57
197	9.39	9.39	2.54
198	9.38	9.38	2.53
199	9.35	9.35	2.51
200	9.32	9.32	2.49
201	9.31	9.31	2.48
202	9.30	9.30	2.48
203	9.28	9.28	2.47
204	9.28	9.28	2.47
205	9.28	9.28	2.47
206	9.28	9.28	2.47
207	9.28	9.28	2.47
208	9.23	9.23	2.44
209	9.23	9.23	2.44
210	9.22	9.22	2.44

Stato limite di danno

Modo	Sx	Sy	Sz
1	14.25	14.25	1.07
2	14.66	14.66	1.11
3	21.37	21.37	1.61
4	21.68	21.68	1.63
5	22.08	22.08	1.67
6	22.47	22.47	1.69
7	22.76	22.76	1.72
8	24.04	24.04	2.44
9	24.04	24.04	2.44
10	24.04	24.04	2.63
11	24.04	24.04	3.04
12	24.04	24.04	3.06
13	24.04	24.04	3.08
14	24.04	24.04	3.10
15	24.04	24.04	3.11
16	24.04	24.04	3.12
17	24.04	24.04	3.59
18	24.04	24.04	3.90
19	24.04	24.04	3.93
20	24.04	24.04	3.98
21	24.04	24.04	4.09
22	24.04	24.04	4.12
23	24.04	24.04	4.13
24	24.04	24.04	4.19
25	24.04	24.04	4.22
26	24.04	24.04	4.26
27	24.04	24.04	4.27
28	24.04	24.04	4.60
29	24.04	24.04	4.76
30	24.04	24.04	4.77
31	24.04	24.04	4.78
32	24.04	24.04	4.79
33	24.04	24.04	4.80
34	24.04	24.04	4.81
35	24.04	24.04	4.81
36	24.04	24.04	5.03
37	24.04	24.04	5.32
38	24.04	24.04	5.34

Relazione di calcolo

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39 24.04 24.04 5.34  
40 24.04 24.04 5.34  
41 24.04 24.04 5.34  
42 23.99 23.99 5.34  
43 23.56 23.56 5.34  
44 22.47 22.47 5.34  
45 22.20 22.20 5.34  
46 22.16 22.16 5.34  
47 22.03 22.03 5.34  
48 21.90 21.90 5.34  
49 21.31 21.31 5.34  
50 20.89 20.89 5.34  
51 20.63 20.63 5.34  
52 20.26 20.26 5.34  
53 20.12 20.12 5.34  
54 20.10 20.10 5.34  
55 19.78 19.78 5.34  
56 19.47 19.47 5.34  
57 19.42 19.42 5.34  
58 19.34 19.34 5.34  
59 19.26 19.26 5.34  
60 19.22 19.22 5.34  
61 19.07 19.07 5.34  
62 19.06 19.06 5.34  
63 18.86 18.86 5.34  
64 18.70 18.70 5.34  
65 18.62 18.62 5.34  
66 18.42 18.42 5.34  
67 18.29 18.29 5.34  
68 18.18 18.18 5.34  
69 17.82 17.82 5.34  
70 17.74 17.74 5.34  
71 17.58 17.58 5.34  
72 17.45 17.45 5.34  
73 17.01 17.01 5.34  
74 16.84 16.84 5.34  
75 16.48 16.48 5.34  
76 16.33 16.33 5.34  
77 16.22 16.22 5.34  
78 16.10 16.10 5.34  
79 16.08 16.08 5.34  
80 15.95 15.95 5.34  
81 15.88 15.88 5.34  
82 15.71 15.71 5.34  
83 15.62 15.62 5.34  
84 15.59 15.59 5.34  
85 15.55 15.55 5.34  
86 15.51 15.51 5.34  
87 15.30 15.30 5.34  
88 15.13 15.13 5.34  
89 14.94 14.94 5.34  
90 14.87 14.87 5.34  
91 14.75 14.75 5.34  
92 14.59 14.59 5.34  
93 14.52 14.52 5.34  
94 14.52 14.52 5.34  
95 14.50 14.50 5.34  
96 14.49 14.49 5.34  
97 14.47 14.47 5.34  
98 14.43 14.43 5.34  
99 14.38 14.38 5.34  
100 14.29 14.29 5.34  
101 14.26 14.26 5.34  
102 14.06 14.06 5.25  
103 14.01 14.01 5.22  
104 13.94 13.94 5.17  
105 13.91 13.91 5.15  
106 13.75 13.75 5.05  
107 13.55 13.55 4.92  
108 13.53 13.53 4.90  
109 13.52 13.52 4.90  
110 13.52 13.52 4.90  
111 13.51 13.51 4.89  
112 13.49 13.49 4.88  
113 13.40 13.40 4.82  
114 13.37 13.37 4.80  
115 13.27 13.27 4.73  
116 13.25 13.25 4.72  
117 13.24 13.24 4.72  
118 13.24 13.24 4.71  
119 13.22 13.22 4.70  
120 13.20 13.20 4.69



## Relazione di calcolo

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121 13.10 13.10 4.62  
122 13.05 13.05 4.59  
123 12.98 12.98 4.55  
124 12.89 12.89 4.48  
125 12.86 12.86 4.46  
126 12.85 12.85 4.46  
127 12.83 12.83 4.45  
128 12.83 12.83 4.44  
129 12.74 12.74 4.39  
130 12.74 12.74 4.38  
131 12.72 12.72 4.37  
132 12.63 12.63 4.31  
133 12.58 12.58 4.28  
134 12.47 12.47 4.21  
135 12.46 12.46 4.20  
136 12.45 12.45 4.20  
137 12.45 12.45 4.20  
138 12.42 12.42 4.18  
139 12.41 12.41 4.17  
140 12.40 12.40 4.17  
141 12.33 12.33 4.12  
142 12.26 12.26 4.07  
143 12.24 12.24 4.06  
144 12.24 12.24 4.06  
145 12.22 12.22 4.05  
146 12.21 12.21 4.04  
147 12.18 12.18 4.02  
148 12.17 12.17 4.01  
149 12.14 12.14 3.99  
150 12.11 12.11 3.97  
151 12.09 12.09 3.96  
152 12.04 12.04 3.93  
153 12.04 12.04 3.92  
154 12.02 12.02 3.92  
155 12.02 12.02 3.91  
156 12.00 12.00 3.90  
157 11.98 11.98 3.89  
158 11.97 11.97 3.88  
159 11.95 11.95 3.87  
160 11.95 11.95 3.87  
161 11.94 11.94 3.86  
162 11.94 11.94 3.86  
163 11.94 11.94 3.86  
164 11.85 11.85 3.80  
165 11.84 11.84 3.79  
166 11.82 11.82 3.78  
167 11.80 11.80 3.77  
168 11.77 11.77 3.75  
169 11.73 11.73 3.73  
170 11.67 11.67 3.68  
171 11.63 11.63 3.66  
172 11.62 11.62 3.65  
173 11.62 11.62 3.65  
174 11.62 11.62 3.65  
175 11.62 11.62 3.65  
176 11.61 11.61 3.64  
177 11.57 11.57 3.62  
178 11.55 11.55 3.60  
179 11.49 11.49 3.57  
180 11.48 11.48 3.56  
181 11.46 11.46 3.55  
182 11.31 11.31 3.45  
183 11.31 11.31 3.45  
184 11.30 11.30 3.44  
185 11.30 11.30 3.44  
186 11.28 11.28 3.43  
187 11.25 11.25 3.41  
188 11.25 11.25 3.41  
189 11.24 11.24 3.40  
190 11.23 11.23 3.40  
191 11.23 11.23 3.40  
192 11.23 11.23 3.40  
193 11.19 11.19 3.37  
194 11.16 11.16 3.35  
195 11.13 11.13 3.33  
196 11.12 11.12 3.32  
197 11.06 11.06 3.28  
198 11.04 11.04 3.27  
199 11.01 11.01 3.25  
200 10.97 10.97 3.22  
201 10.96 10.96 3.22  
202 10.95 10.95 3.21

Relazione di calcolo

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203	10.93	10.93	3.20
204	10.93	10.93	3.20
205	10.93	10.93	3.20
206	10.93	10.93	3.20
207	10.92	10.92	3.19
208	10.87	10.87	3.16
209	10.87	10.87	3.16
210	10.86	10.86	3.15

Stato limite di salvaguardia della vita

Modo	Sx	Sy	Sz
1	32.50	32.50	2.89
2	33.45	33.45	2.89
3	48.75	48.75	3.56
4	49.45	49.45	3.61
5	50.37	50.37	3.68
6	51.26	51.26	3.74
7	51.52	51.52	3.79
8	51.52	51.52	5.40
9	51.52	51.52	5.40
10	51.52	51.52	5.81
11	51.52	51.52	6.72
12	51.52	51.52	6.75
13	51.52	51.52	6.81
14	51.52	51.52	6.86
15	51.52	51.52	6.87
16	51.52	51.52	6.90
17	51.52	51.52	7.94
18	51.52	51.52	8.62
19	51.52	51.52	8.68
20	51.52	51.52	8.79
21	51.52	51.52	9.04
22	51.52	51.52	9.09
23	51.52	51.52	9.13
24	51.52	51.52	9.25
25	51.52	51.52	9.33
26	51.52	51.52	9.40
27	51.52	51.52	9.43
28	51.52	51.52	10.16
29	51.52	51.52	10.51
30	51.52	51.52	10.54
31	51.52	51.52	10.55
32	51.52	51.52	10.58
33	51.52	51.52	10.60
34	51.52	51.52	10.62
35	51.52	51.52	10.63
36	51.52	51.52	11.10
37	50.31	50.31	11.76
38	49.77	49.77	11.80
39	49.75	49.75	11.80
40	49.74	49.74	11.80
41	49.72	49.72	11.80
42	49.63	49.63	11.80
43	48.82	48.82	11.80
44	46.76	46.76	11.80
45	46.25	46.25	11.80
46	46.16	46.16	11.80
47	45.93	45.93	11.80
48	45.67	45.67	11.80
49	44.55	44.55	11.80
50	43.76	43.76	11.80
51	43.26	43.26	11.80
52	42.56	42.56	11.80
53	42.31	42.31	11.80
54	42.27	42.27	11.80
55	41.67	41.67	11.80
56	41.08	41.08	11.80
57	40.99	40.99	11.80
58	40.83	40.83	11.80
59	40.67	40.67	11.80
60	40.61	40.61	11.80
61	40.33	40.33	11.80
62	40.30	40.30	11.80
63	39.92	39.92	11.80
64	39.61	39.61	11.80
65	39.48	39.48	11.80
66	39.10	39.10	11.80
67	38.84	38.84	11.80
68	38.64	38.64	11.80
69	37.95	37.95	11.80
70	37.80	37.80	11.80
71	37.50	37.50	11.80

## Relazione di calcolo

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72	37.26	37.26	11.80
73	36.43	36.43	11.80
74	36.10	36.10	11.80
75	35.42	35.42	11.80
76	35.13	35.13	11.80
77	34.92	34.92	11.80
78	34.70	34.70	11.80
79	34.66	34.66	11.80
80	34.41	34.41	11.80
81	34.29	34.29	11.80
82	33.97	33.97	11.80
83	33.79	33.79	11.80
84	33.74	33.74	11.80
85	33.66	33.66	11.80
86	33.58	33.58	11.80
87	33.20	33.20	11.80
88	32.86	32.86	11.80
89	32.51	32.51	11.80
90	32.37	32.37	11.80
91	32.15	32.15	11.80
92	31.84	31.84	11.80
93	31.72	31.72	11.80
94	31.71	31.71	11.80
95	31.68	31.68	11.80
96	31.67	31.67	11.80
97	31.61	31.61	11.80
98	31.55	31.55	11.80
99	31.44	31.44	11.80
100	31.28	31.28	11.80
101	31.22	31.22	11.80
102	30.84	30.84	11.68
103	30.75	30.75	11.64
104	30.61	30.61	11.57
105	30.56	30.56	11.55
106	30.25	30.25	11.41
107	29.88	29.88	11.23
108	29.83	29.83	11.22
109	29.83	29.83	11.21
110	29.82	29.82	11.21
111	29.80	29.80	11.20
112	29.76	29.76	11.18
113	29.59	29.59	11.10
114	29.53	29.53	11.08
115	29.35	29.35	10.99
116	29.31	29.31	10.97
117	29.30	29.30	10.97
118	29.29	29.29	10.97
119	29.26	29.26	10.95
120	29.23	29.23	10.94
121	29.02	29.02	10.84
122	28.93	28.93	10.80
123	28.81	28.81	10.74
124	28.63	28.63	10.66
125	28.57	28.57	10.63
126	28.56	28.56	10.63
127	28.52	28.52	10.61
128	28.52	28.52	10.61
129	28.36	28.36	10.54
130	28.34	28.34	10.53
131	28.30	28.30	10.51
132	28.14	28.14	10.44
133	28.04	28.04	10.39
134	27.84	27.84	10.30
135	27.82	27.82	10.29
136	27.81	27.81	10.28
137	27.81	27.81	10.28
138	27.74	27.74	10.25
139	27.72	27.72	10.24
140	27.71	27.71	10.24
141	27.58	27.58	10.18
142	27.44	27.44	10.11
143	27.40	27.40	10.10
144	27.39	27.39	10.09
145	27.36	27.36	10.08
146	27.34	27.34	10.07
147	27.29	27.29	10.05
148	27.27	27.27	10.03
149	27.22	27.22	10.01
150	27.16	27.16	9.98
151	27.13	27.13	9.97
152	27.03	27.03	9.93
153	27.01	27.01	9.92

Relazione di calcolo

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154	26.99	26.99	9.91
155	26.98	26.98	9.90
156	26.95	26.95	9.89
157	26.92	26.92	9.87
158	26.88	26.88	9.86
159	26.86	26.86	9.85
160	26.85	26.85	9.84
161	26.84	26.84	9.84
162	26.84	26.84	9.84
163	26.83	26.83	9.83
164	26.67	26.67	9.76
165	26.64	26.64	9.75
166	26.61	26.61	9.73
167	26.57	26.57	9.71
168	26.52	26.52	9.69
169	26.45	26.45	9.66
170	26.32	26.32	9.60
171	26.24	26.24	9.56
172	26.23	26.23	9.56
173	26.23	26.23	9.56
174	26.22	26.22	9.55
175	26.22	26.22	9.55
176	26.20	26.20	9.55
177	26.13	26.13	9.51
178	26.09	26.09	9.49
179	25.98	25.98	9.44
180	25.96	25.96	9.43
181	25.93	25.93	9.42
182	25.65	25.65	9.29
183	25.64	25.64	9.29
184	25.63	25.63	9.28
185	25.62	25.62	9.28
186	25.59	25.59	9.26
187	25.53	25.53	9.23
188	25.53	25.53	9.23
189	25.52	25.52	9.23
190	25.49	25.49	9.22
191	25.49	25.49	9.22
192	25.49	25.49	9.22
193	25.42	25.42	9.19
194	25.37	25.37	9.16
195	25.30	25.30	9.13
196	25.28	25.28	9.12
197	25.17	25.17	9.07
198	25.14	25.14	9.06
199	25.07	25.07	9.02
200	25.00	25.00	8.99
201	24.97	24.97	8.98
202	24.96	24.96	8.97
203	24.92	24.92	8.96
204	24.92	24.92	8.95
205	24.92	24.92	8.95
206	24.91	24.91	8.95
207	24.91	24.91	8.95
208	24.81	24.81	8.91
209	24.81	24.81	8.90
210	24.79	24.79	8.89

**Spostamenti relativi massimi allo stato limite di operatività**

**Simbologia**

- N1 = Nodol
- N2 = Nodo2
- h = Altezza teorica
- $\delta$  = Spostamento relativo tra i due nodi
- $\delta/h$  = Rapporto (moltiplicato per 1000) tra lo spostamento relativo e l'altezza
- CC = Numero della combinazione delle condizioni di carico elementari

N1	N2	h	$\delta$	$\delta/h$	CC	N1	N2	h	$\delta$	$\delta/h$	CC	N1	N2	h	$\delta$	$\delta/h$	CC
		<m>	<cm>					<m>	<cm>					<m>	<cm>		
1	101	3.15	0.08	0.25	15	101	501	7.65	0.26	0.34	21	501	801	7.33	1.77	2.41	9
2	-1050	0.86	0.02	0.25	15	-1050	-1212	0.86	0.02	0.25	15	-1212	-1376	0.72	0.02	0.26	15
-1376	102	0.70	0.02	0.24	3	102	502	7.65	0.27	0.35	21	3	103	3.15	0.08	0.26	15
103	503	7.65	0.29	0.37	21	4	-1051	0.86	0.02	0.22	3	-1051	-1213	0.86	0.02	0.24	15
-1213	-1377	0.72	0.02	0.29	15	-1377	104	0.70	0.02	0.33	15	104	504	7.65	0.30	0.40	21
5	105	3.15	0.09	0.27	15	105	505	7.65	0.32	0.42	21	505	805	7.33	1.72	2.35	21
506	806	7.33	1.72	2.35	21	7	107	3.15	0.08	0.25	15	107	507	7.65	0.27	0.35	9
507	807	7.33	1.76	2.41	9	8	-1060	0.86	0.02	0.23	15	-1060	-1222	0.86	0.02	0.25	15
-1222	-1386	0.72	0.02	0.25	15	-1386	108	0.70	0.02	0.26	15	108	508	7.65	0.26	0.34	21
9	-1065	0.86	0.02	0.25	15	-1065	-1227	0.86	0.02	0.25	15	-1227	-1391	0.72	0.02	0.25	15

Relazione di calcolo

-1391	109	0.70	0.02	0.25	15	109	509	7.65	0.28	0.36	21	10	-1069	0.86	0.02	0.27	15
-1069	-1231	0.86	0.02	0.26	15	-1231	-1395	0.72	0.02	0.26	15	-1395	110	0.70	0.02	0.25	15
110	510	7.65	0.30	0.39	21	11	-1071	0.86	0.02	0.27	15	-1071	-1233	0.86	0.02	0.27	15
-1233	-1397	0.72	0.02	0.27	15	-1397	111	0.70	0.02	0.25	15	111	511	7.65	0.33	0.43	21
511	811	7.33	1.71	2.34	21	512	812	7.33	1.73	2.36	21	13	113	3.15	0.08	0.25	15
113	513	7.65	0.26	0.35	9	513	813	7.33	1.76	2.40	9	14	-1076	0.86	0.03	0.30	15
-1076	-1238	0.86	0.02	0.26	15	-1238	-1402	0.72	0.02	0.28	3	-1402	114	0.70	0.02	0.34	3
114	514	7.65	0.25	0.33	21	15	115	3.15	0.08	0.25	15	115	515	7.65	0.27	0.35	21
16	116	3.15	0.08	0.26	15	116	516	7.65	0.29	0.38	21	17	117	3.15	0.08	0.27	15
117	517	7.65	0.32	0.42	21	517	817	7.33	1.71	2.33	21	518	818	7.33	1.72	2.34	21
19	119	3.15	0.08	0.25	3	119	519	7.65	0.26	0.34	9	519	819	7.33	1.76	2.40	9
20	-1081	0.86	0.03	0.31	3	-1081	-1243	0.86	0.02	0.26	3	-1243	-1407	0.72	0.02	0.29	15
-1407	120	0.70	0.02	0.35	15	120	520	7.65	0.25	0.32	9	21	121	3.15	0.08	0.25	3
121	521	7.65	0.26	0.34	21	22	122	3.15	0.08	0.26	15	122	522	7.65	0.28	0.37	21
23	123	3.15	0.08	0.27	15	123	523	7.65	0.31	0.41	21	523	823	7.33	1.70	2.32	21
524	824	7.33	1.71	2.34	21	25	125	3.15	0.08	0.26	3	125	525	7.65	0.26	0.34	9
525	825	7.33	1.76	2.40	9	26	-1086	0.86	0.03	0.31	3	-1086	-1248	0.86	0.02	0.27	3
-1248	-1412	0.72	0.02	0.31	15	-1412	126	0.70	0.03	0.37	15	126	526	7.65	0.25	0.33	9
27	127	3.15	0.08	0.27	3	127	227	3.62	0.45	1.24	21	227	527	4.03	0.22	0.54	21
28	128	3.15	0.08	0.27	3	128	228	3.62	0.49	1.35	21	228	528	4.03	0.23	0.58	21
29	129	3.15	0.09	0.27	3	129	529	7.65	0.31	0.41	21	529	829	7.33	1.70	2.32	21
530	830	7.33	1.71	2.34	21	31	131	3.15	0.09	0.28	3	131	531	7.65	0.27	0.36	3
531	831	7.33	1.77	2.41	9	32	-1091	0.86	0.03	0.33	3	-1091	-1253	0.86	0.02	0.29	3
-1253	-1417	0.72	0.02	0.34	15	-1417	132	0.70	0.03	0.40	15	132	532	7.65	0.26	0.34	9
33	133	3.15	0.09	0.28	3	133	233	3.62	0.44	1.23	9	233	533	4.03	0.20	0.51	21
34	134	3.15	0.09	0.29	3	134	234	3.62	0.45	1.24	21	234	534	4.03	0.18	0.45	9
35	135	3.15	0.09	0.29	3	135	535	7.65	0.32	0.42	21	535	835	7.33	1.70	2.32	21
536	836	7.33	1.71	2.34	21	37	-1096	0.86	0.02	0.28	3	-1096	-1258	0.86	0.03	0.29	3
-1258	-1422	0.72	0.02	0.30	3	-1422	137	0.70	0.02	0.30	3	137	537	7.65	0.27	0.35	3
537	837	7.33	1.77	2.42	9	38	-1102	0.86	0.03	0.31	3	-1102	-1264	0.86	0.03	0.29	3
-1264	-1428	0.72	0.02	0.29	3	-1428	138	0.70	0.02	0.30	15	138	538	7.65	0.27	0.35	9
39	139	3.15	0.09	0.30	3	139	239	3.62	0.48	1.32	9	239	539	4.03	0.23	0.57	21
40	140	3.15	0.09	0.30	3	140	240	3.62	0.44	1.22	21	240	540	4.03	0.18	0.45	15
41	141	3.15	0.09	0.30	3	141	541	7.65	0.30	0.40	21	541	841	7.33	1.70	2.33	21
-2507	-2879	3.35	0.12	0.37	21	542	842	7.33	1.71	2.33	21	544	-2908	3.35	0.12	0.36	21
565	-2927	3.35	0.12	0.35	3	-2591	-2956	3.35	0.11	0.32	9						