



COMUNE DI
ALESSANDRIA DELLA ROCCA

"LAVORI DI COMPLETAMENTO DEGLI IMPIANTI
SPORTIVI IN ZONA DI ESPANSIONE NEL
COMUNE DI ALESSANDRIA DELLA ROCCA"

PROGETTO DEFINITIVO-ESECUTIVO

RELAZIONE GENERALE FONDAZIONI PADIGLIONE

RTP

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TAV. S 01

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IL RUP

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DESCRIZIONE GENERALE DELL'OPERA

La presente relazione tratta il progetto della struttura di fondazione di un palazzetto dello sport in legno lamellare da realizzare nel comune di Alessandria della Rocca (AG).

Il progettista delle strutture in elevazione ha fornito la tabella delle reazioni vincolari massime scaricate dalla sovrastruttura in corrispondenza di ciascun punto di appoggio. Tali reazioni si riportano nella tabelle successiva unitamente all'assonometria della struttura in elevazione e del relativo modello di calcolo.

DEFINIZIONE DELLE COMBINAZIONI

LEGENDA TABELLA COMBINAZIONI DI CARICO

Il programma combina i diversi tipi di casi di carico (CDC) secondo le regole previste dalla normativa vigente.

Le combinazioni previste sono destinate al controllo di sicurezza della struttura ed alla verifica degli spostamenti e delle sollecitazioni.

La prima tabella delle combinazioni riportata di seguito comprende le seguenti informazioni: Numero, Tipo, Sigla identificativa. Una seconda tabella riporta il peso nella combinazione assunto per ogni caso di carico.

Ai fini delle verifiche degli stati limite si definiscono le seguenti combinazioni delle azioni:

Combinazione fondamentale SLU

$$\gamma G_1 \cdot G_1 + \gamma G_2 \cdot G_2 + \gamma P \cdot P + \gamma Q_1 \cdot Q_{k1} + \gamma Q_2 \cdot \psi_{02} \cdot Q_{k2} + \gamma Q_3 \cdot \psi_{03} \cdot Q_{k3} + \dots$$

Combinazione caratteristica (rara) SLE

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

Combinazione frequente SLE

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

Combinazione quasi permanente SLE

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

Combinazione sismica, impiegata per gli stati limite ultimi e di esercizio connessi all'azione sismica E

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

Combinazione eccezionale, impiegata per gli stati limite connessi alle azioni eccezionali

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

Dove:

Destinazione d'uso/azione	ψ_0	ψ_1	ψ_2
Categoria A residenziali	0,70	0,50	0,30
Categoria B uffici	0,70	0,50	0,30
Categoria C ambienti suscettibili di affollamento	0,70	0,70	0,60
Categoria D ambienti ad uso commerciale	0,70	0,70	0,60
Categoria E biblioteche, archivi, magazzini,...	1,00	0,90	0,80
Categoria F Rimesse e parcheggi (autoveicoli $\leq 30\text{kN}$)	0,70	0,70	0,60
Categoria G Rimesse e parcheggi (autoveicoli $> 30\text{kN}$)	0,70	0,50	0,30
Categoria H Coperture	0,00	0,00	0,00
Vento	0,60	0,20	0,00
Neve a quota ≤ 1000 m	0,50	0,20	0,00
Neve a quota > 1000 m	0,70	0,50	0,20
Variazioni Termiche	0,60	0,50	0,00

Nelle verifiche possono essere adottati in alternativa due diversi approcci progettuali:

- per l'approccio 1 si considerano due diverse combinazioni di gruppi di coefficienti di sicurezza parziali per le azioni, per i materiali e per la resistenza globale (combinazione 1 con coefficienti A1 e combinazione 2 con coefficienti A2),

- per l'approccio 2 si definisce un'unica combinazione per le azioni, per la resistenza dei materiali e per la resistenza globale (con coefficienti A1).

NTC 2018 Tabella 2.6.I

		Coefficiente	EQU	A1	A2
		γ_f			
Carichi permanenti	Favorevoli	γ_{G1}	0,9	1,0	1,0
	Sfavorevoli		1,1	1,3	1,0
Carichi permanenti non strutturali	Favorevoli	γ_{G2}	0,8	0,8	0,8
	Sfavorevoli		1,5	1,5	1,3
(Non compiutamente)					

definiti)					
Carichi variabili	Favorevoli	γQ_i	0,0	0,0	0,0
	Sfavorevoli		1,5	1,5	1,3

Cmb	Tipo	Sigla Id	effetto P-delta
1	SLU	Comb. SLU A1 1	
2	SLU	Comb. SLU A1 2	
3	SLU	Comb. SLU A1 3	
4	SLU	Comb. SLU A1 4	
5	SLU	Comb. SLU A1 5	
6	SLU	Comb. SLU A1 6	
7	SLU	Comb. SLU A1 7	
8	SLU	Comb. SLU A1 8	
9	SLU	Comb. SLU A1 9	
10	SLU	Comb. SLU A1 10	
11	SLE(r)	Comb. SLE(rara) 11	
12	SLE(r)	Comb. SLE(rara) 12	
13	SLE(r)	Comb. SLE(rara) 13	
14	SLE(r)	Comb. SLE(rara) 14	
15	SLE(r)	Comb. SLE(rara) 15	
16	SLU	Comb. SLU A1 (SLV sism.) 16	
17	SLU	Comb. SLU A1 (SLV sism.) 17	
18	SLU	Comb. SLU A1 (SLV sism.) 18	
19	SLU	Comb. SLU A1 (SLV sism.) 19	
20	SLU	Comb. SLU A1 (SLV sism.) 20	
21	SLU	Comb. SLU A1 (SLV sism.) 21	
22	SLU	Comb. SLU A1 (SLV sism.) 22	
23	SLU	Comb. SLU A1 (SLV sism.) 23	
24	SLU	Comb. SLU A1 (SLV sism.) 24	
25	SLU	Comb. SLU A1 (SLV sism.) 25	
26	SLU	Comb. SLU A1 (SLV sism.) 26	
27	SLU	Comb. SLU A1 (SLV sism.) 27	
28	SLU	Comb. SLU A1 (SLV sism.) 28	
29	SLU	Comb. SLU A1 (SLV sism.) 29	
30	SLU	Comb. SLU A1 (SLV sism.) 30	
31	SLU	Comb. SLU A1 (SLV sism.) 31	
32	SLU	Comb. SLU A1 (SLV sism.) 32	
33	SLU	Comb. SLU A1 (SLV sism.) 33	
34	SLU	Comb. SLU A1 (SLV sism.) 34	
35	SLU	Comb. SLU A1 (SLV sism.) 35	
36	SLU	Comb. SLU A1 (SLV sism.) 36	
37	SLU	Comb. SLU A1 (SLV sism.) 37	
38	SLU	Comb. SLU A1 (SLV sism.) 38	
39	SLU	Comb. SLU A1 (SLV sism.) 39	
40	SLU	Comb. SLU A1 (SLV sism.) 40	
41	SLU	Comb. SLU A1 (SLV sism.) 41	
42	SLU	Comb. SLU A1 (SLV sism.) 42	
43	SLU	Comb. SLU A1 (SLV sism.) 43	
44	SLU	Comb. SLU A1 (SLV sism.) 44	
45	SLU	Comb. SLU A1 (SLV sism.) 45	
46	SLU	Comb. SLU A1 (SLV sism.) 46	
47	SLU	Comb. SLU A1 (SLV sism.) 47	
48	SLD(sis)	Comb. SLE (SLD Danno sism.) 48	
49	SLD(sis)	Comb. SLE (SLD Danno sism.) 49	
50	SLD(sis)	Comb. SLE (SLD Danno sism.) 50	
51	SLD(sis)	Comb. SLE (SLD Danno sism.) 51	
52	SLD(sis)	Comb. SLE (SLD Danno sism.) 52	
53	SLD(sis)	Comb. SLE (SLD Danno sism.) 53	
54	SLD(sis)	Comb. SLE (SLD Danno sism.) 54	
55	SLD(sis)	Comb. SLE (SLD Danno sism.) 55	
56	SLD(sis)	Comb. SLE (SLD Danno sism.) 56	

Cmb	Tipo	Sigla Id	effetto P-delta
57	SLD(sis)	Comb. SLE (SLD Danno sism.) 57	
58	SLD(sis)	Comb. SLE (SLD Danno sism.) 58	
59	SLD(sis)	Comb. SLE (SLD Danno sism.) 59	
60	SLD(sis)	Comb. SLE (SLD Danno sism.) 60	
61	SLD(sis)	Comb. SLE (SLD Danno sism.) 61	
62	SLD(sis)	Comb. SLE (SLD Danno sism.) 62	
63	SLD(sis)	Comb. SLE (SLD Danno sism.) 63	
64	SLD(sis)	Comb. SLE (SLD Danno sism.) 64	
65	SLD(sis)	Comb. SLE (SLD Danno sism.) 65	
66	SLD(sis)	Comb. SLE (SLD Danno sism.) 66	
67	SLD(sis)	Comb. SLE (SLD Danno sism.) 67	
68	SLD(sis)	Comb. SLE (SLD Danno sism.) 68	
69	SLD(sis)	Comb. SLE (SLD Danno sism.) 69	
70	SLD(sis)	Comb. SLE (SLD Danno sism.) 70	
71	SLD(sis)	Comb. SLE (SLD Danno sism.) 71	
72	SLD(sis)	Comb. SLE (SLD Danno sism.) 72	
73	SLD(sis)	Comb. SLE (SLD Danno sism.) 73	
74	SLD(sis)	Comb. SLE (SLD Danno sism.) 74	
75	SLD(sis)	Comb. SLE (SLD Danno sism.) 75	
76	SLD(sis)	Comb. SLE (SLD Danno sism.) 76	
77	SLD(sis)	Comb. SLE (SLD Danno sism.) 77	
78	SLD(sis)	Comb. SLE (SLD Danno sism.) 78	
79	SLD(sis)	Comb. SLE (SLD Danno sism.) 79	

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
1	1.30	1.30	1.50	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
2	1.00	1.00	0.80	0.80	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
3	1.30	1.30	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.50
	0.0	0.0	0.0											
4	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.50
	0.0	0.0	0.0											
5	1.30	1.30	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.50	0.0	0.0											
6	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.50	0.0	0.0											
7	1.30	1.30	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	1.50	0.0											
8	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	1.50	0.0											
9	1.30	1.30	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	1.50											
10	1.00	1.00	0.80	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	1.50											
11	1.00	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
12	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0											
13	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.00	0.0	0.0											
14	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	1.00	0.0											
15	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	1.00											
16	1.00	1.00	1.00	1.00	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
17	1.00	1.00	1.00	1.00	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
18	1.00	1.00	1.00	1.00	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
19	1.00	1.00	1.00	1.00	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
20	1.00	1.00	1.00	1.00	0.0	-1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
21	1.00	1.00	1.00	1.00	0.0	-1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
22	1.00	1.00	1.00	1.00	0.0	1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
23	1.00	1.00	1.00	1.00	0.0	1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
24	1.00	1.00	1.00	1.00	0.0	0.0	-1.00	-0.30	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
25	1.00	1.00	1.00	1.00	0.0	0.0	-1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
26	1.00	1.00	1.00	1.00	0.0	0.0	1.00	-0.30	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
27	1.00	1.00	1.00	1.00	0.0	0.0	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
28	1.00	1.00	1.00	1.00	0.0	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
29	1.00	1.00	1.00	1.00	0.0	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
30	1.00	1.00	1.00	1.00	0.0	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
31	1.00	1.00	1.00	1.00	0.0	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
32	1.00	1.00	1.00	1.00	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
33	1.00	1.00	1.00	1.00	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
34	1.00	1.00	1.00	1.00	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
35	1.00	1.00	1.00	1.00	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
36	1.00	1.00	1.00	1.00	0.0	0.0	-0.30	-1.00	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
37	1.00	1.00	1.00	1.00	0.0	0.0	-0.30	1.00	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
38	1.00	1.00	1.00	1.00	0.0	0.0	0.30	-1.00	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
39	1.00	1.00	1.00	1.00	0.0	0.0	0.30	1.00	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
40	1.00	1.00	1.00	1.00	0.0	-0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
41	1.00	1.00	1.00	1.00	0.0	-0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
42	1.00	1.00	1.00	1.00	0.0	0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
43	1.00	1.00	1.00	1.00	0.0	0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
44	1.00	1.00	1.00	1.00	0.0	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
45	1.00	1.00	1.00	1.00	0.0	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
46	1.00	1.00	1.00	1.00	0.0	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
47	1.00	1.00	1.00	1.00	0.0	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0											
48	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	0.0	0.0
	0.0	0.0	0.0											
49	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	0.0	0.0
	0.0	0.0	0.0											
50	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	0.0	0.0
	0.0	0.0	0.0											
51	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.30	0.0	0.0
	0.0	0.0	0.0											
52	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	-0.30	0.0
	0.0	0.0	0.0											
53	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.30	0.0
	0.0	0.0	0.0											
54	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	-0.30	0.0

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
	0.0	0.0	0.0											
55	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.30	0.0
	0.0	0.0	0.0											
56	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	-0.30	0.0	0.0
	0.0	0.0	0.0											
57	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.30	0.0	0.0
	0.0	0.0	0.0											
58	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	1.00	-0.30	0.0	0.0
	0.0	0.0	0.0											
59	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.30	0.0	0.0
	0.0	0.0	0.0											
60	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	0.0
	0.0	0.0	0.0											
61	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	0.0
	0.0	0.0	0.0											
62	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	0.0
	0.0	0.0	0.0											
63	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.30	0.0
	0.0	0.0	0.0											
64	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	0.0	0.0
	0.0	0.0	0.0											
65	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	0.0	0.0
	0.0	0.0	0.0											
66	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	0.0	0.0
	0.0	0.0	0.0											
67	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.30	0.0	1.00	0.0	0.0
	0.0	0.0	0.0											
68	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	-1.00	0.0	0.0
	0.0	0.0	0.0											
69	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	1.00	0.0	0.0
	0.0	0.0	0.0											
70	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.30	-1.00	0.0	0.0
	0.0	0.0	0.0											
71	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.30	1.00	0.0	0.0
	0.0	0.0	0.0											
72	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	-1.00	0.0
	0.0	0.0	0.0											
73	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	1.00	0.0
	0.0	0.0	0.0											
74	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	-1.00	0.0
	0.0	0.0	0.0											
75	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	1.00	0.0
	0.0	0.0	0.0											
76	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	0.0
	0.0	0.0	0.0											
77	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	0.0
	0.0	0.0	0.0											
78	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	0.0
	0.0	0.0	0.0											
79	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	1.00	0.0
	0.0	0.0	0.0											

RISULTATI NODALI
LEGENDA RISULTATI NODALI

Il controllo dei risultati delle analisi condotte, per quanto concerne i nodi strutturali, è possibile in relazione alle tabelle sottoriportate.

Una prima tabella riporta infatti per ogni nodo e per ogni combinazione (o caso di carico) gli spostamenti nodali.

Una seconda tabella riporta per ogni nodo a cui sia associato un vincolo rigido e/o elastico o una fondazione speciale e per ogni combinazione (o caso di carico) i valori delle azioni esercitate dalla struttura sui vincoli (reazioni vincolari cambiate di segno).

Una terza tabella, infine riassume per ogni nodo le sei combinazioni in cui si attingono i valori minimi e massimi della reazione Fz, della reazione Mx e della reazione My.

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
		kN	kN	kN	kN m	kN m	kN m
2	1	-109.61	-0.16	-217.61	6.62e-03	0.0	0.10
2	2	-89.70	-0.13	-176.58	5.43e-03	0.0	0.08
2	3	-105.56	-0.16	-161.13	6.61e-03	0.0	0.10
2	4	-85.66	-0.13	-120.12	5.13e-03	0.0	0.07
2	5	-82.30	-0.12	-150.34	4.83e-03	0.0	0.07
2	6	-62.39	-0.09	-109.33	3.63e-03	0.0	0.05
2	7	-76.16	-0.94	-158.33	0.01	0.0	0.18
2	8	-56.20	-0.87	-117.14	9.76e-03	0.0	0.14
2	9	-66.57	1.51	-138.09	-0.05	0.0	-0.66
2	10	-46.67	1.50	-97.09	-0.05	0.0	-0.66
2	11	-79.09	-0.11	-157.60	4.76e-03	0.0	0.07
2	12	-76.39	-0.12	-119.95	4.86e-03	0.0	0.07
2	13	-60.88	-0.09	-112.75	3.58e-03	0.0	0.05
2	14	-56.81	-0.65	-118.13	9.33e-03	0.0	0.13
2	15	-50.40	1.01	-104.58	-0.03	0.0	-0.44
2	16	-26.32	0.48	-89.77	-0.02	0.0	-0.22
2	17	-38.03	-1.34	-113.73	0.05	0.0	0.75
2	18	-73.81	1.19	-119.66	-0.05	0.0	-0.67
2	19	-83.12	-0.69	-138.05	0.02	0.0	0.34
2	20	-26.24	0.43	-90.54	-0.01	0.0	-0.18
2	21	-37.97	-1.29	-112.57	0.05	0.0	0.72
2	22	-73.73	1.14	-120.44	-0.04	0.0	-0.63
2	23	-83.06	-0.64	-136.88	0.02	0.0	0.31
2	24	-30.17	1.16	-88.77	-0.05	0.0	-0.65
2	25	-40.15	-0.66	-107.98	0.02	0.0	0.32
2	26	-69.97	0.52	-120.67	-0.02	0.0	-0.24
2	27	-81.01	-1.37	-143.81	0.05	0.0	0.77
2	28	-30.09	1.10	-89.54	-0.04	0.0	-0.61
2	29	-40.09	-0.61	-106.81	0.02	0.0	0.29
2	30	-69.89	0.47	-121.44	-0.01	0.0	-0.20
2	31	-80.94	-1.32	-142.64	0.05	0.0	0.73
2	32	-33.26	2.62	-82.73	-0.10	0.0	-1.39

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
2	33	-68.28	-3.02	-153.04	0.11	0.0	1.62
2	34	-47.51	2.84	-91.69	-0.11	0.0	-1.52
2	35	-81.80	-2.82	-160.32	0.10	0.0	1.49
2	36	-34.42	2.83	-82.43	-0.11	0.0	-1.52
2	37	-68.91	-2.82	-151.30	0.10	0.0	1.49
2	38	-46.36	2.64	-91.99	-0.10	0.0	-1.40
2	39	-81.17	-3.03	-162.06	0.11	0.0	1.62
2	40	-33.01	2.45	-85.30	-0.09	0.0	-1.27
2	41	-68.06	-2.85	-149.14	0.10	0.0	1.50
2	42	-47.25	2.67	-94.27	-0.10	0.0	-1.40
2	43	-81.58	-2.65	-156.42	0.10	0.0	1.38
2	44	-34.16	2.66	-85.00	-0.10	0.0	-1.40
2	45	-68.69	-2.64	-147.40	0.10	0.0	1.37
2	46	-46.10	2.46	-94.56	-0.09	0.0	-1.28
2	47	-80.95	-2.85	-158.16	0.10	0.0	1.50
2	48	-45.16	0.26	-104.31	-8.61e-03	0.0	-0.12
2	49	-50.08	-0.65	-114.44	0.03	0.0	0.36
2	50	-59.76	0.48	-113.78	-0.02	0.0	-0.27
2	51	-63.94	-0.44	-122.15	0.02	0.0	0.23
2	52	-45.12	0.23	-104.63	-7.51e-03	0.0	-0.11
2	53	-50.05	-0.62	-113.95	0.02	0.0	0.35
2	54	-59.73	0.46	-114.10	-0.02	0.0	-0.25
2	55	-63.91	-0.42	-121.65	0.02	0.0	0.22
2	56	-46.39	0.47	-104.13	-0.02	0.0	-0.26
2	57	-50.76	-0.43	-112.76	0.02	0.0	0.23
2	58	-58.53	0.27	-113.95	-9.01e-03	0.0	-0.13
2	59	-63.26	-0.65	-123.85	0.03	0.0	0.37
2	60	-46.35	0.45	-104.45	-0.02	0.0	-0.24
2	61	-50.73	-0.41	-112.26	0.01	0.0	0.21
2	62	-58.49	0.24	-114.27	-7.91e-03	0.0	-0.11
2	63	-63.24	-0.63	-123.36	0.02	0.0	0.35
2	64	-46.16	1.14	-100.19	-0.04	0.0	-0.60
2	65	-61.06	-1.38	-130.19	0.05	0.0	0.75
2	66	-50.54	1.21	-103.02	-0.04	0.0	-0.65
2	67	-65.22	-1.32	-132.50	0.05	0.0	0.71
2	68	-46.52	1.20	-100.13	-0.04	0.0	-0.64
2	69	-61.26	-1.32	-129.68	0.05	0.0	0.70
2	70	-50.17	1.14	-103.09	-0.04	0.0	-0.61
2	71	-65.02	-1.39	-133.01	0.05	0.0	0.75
2	72	-46.05	1.07	-101.28	-0.04	0.0	-0.55
2	73	-60.97	-1.31	-128.53	0.05	0.0	0.69
2	74	-50.43	1.13	-104.12	-0.04	0.0	-0.59
2	75	-65.12	-1.25	-130.85	0.05	0.0	0.66
2	76	-46.41	1.13	-101.22	-0.04	0.0	-0.59
2	77	-61.17	-1.25	-128.02	0.05	0.0	0.65
2	78	-50.06	1.07	-104.18	-0.04	0.0	-0.55
2	79	-64.92	-1.31	-131.36	0.05	0.0	0.70
4	1	1.06	3.23e-04	-6.84	1.83e-06	0.0	4.46e-03
4	2	0.87	2.66e-04	-4.73	1.52e-06	0.0	3.68e-03
4	3	0.81	3.07e-04	-6.84	1.53e-06	0.0	3.72e-03
4	4	0.63	2.40e-04	-4.73	1.15e-06	0.0	2.80e-03
4	5	0.73	2.33e-04	-6.84	1.24e-06	0.0	3.02e-03
4	6	0.55	1.75e-04	-4.73	0.0	0.0	2.23e-03
4	7	0.69	-4.67	-6.84	-2.02e-05	0.0	-0.05
4	8	0.51	-4.67	-4.73	-2.08e-05	0.0	-0.05
4	9	0.62	2.34	-6.84	3.59e-06	0.0	8.74e-03
4	10	0.43	2.34	-4.73	3.54e-06	0.0	8.61e-03
4	11	0.76	2.31e-04	-5.03	1.31e-06	0.0	3.20e-03
4	12	0.60	2.25e-04	-5.03	1.13e-06	0.0	2.75e-03
4	13	0.54	1.72e-04	-5.03	0.0	0.0	2.24e-03
4	14	0.52	-3.12	-5.03	-1.33e-05	0.0	-0.03
4	15	0.47	1.56	-5.03	2.41e-06	0.0	5.85e-03
4	16	1.02	0.07	-5.05	0.0	0.0	-2.39e-04
4	17	0.82	-0.04	-5.05	1.12e-05	0.0	0.03
4	18	0.18	0.04	-5.01	-1.00e-05	0.0	-0.02
4	19	-0.02	-0.07	-5.01	2.31e-06	0.0	5.60e-03
4	20	0.96	0.08	-5.05	0.0	0.0	1.75e-03
4	21	0.89	-0.05	-5.05	1.04e-05	0.0	0.03

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
4	22	0.12	0.05	-5.01	-9.23e-06	0.0	-0.02
4	23	0.05	-0.08	-5.01	1.49e-06	0.0	3.63e-03
4	24	0.88	0.05	-5.05	-9.66e-06	0.0	-0.02
4	25	0.68	-0.07	-5.05	1.78e-06	0.0	4.33e-03
4	26	0.33	0.07	-5.01	0.0	0.0	-1.19e-03
4	27	0.12	-0.05	-5.01	1.17e-05	0.0	0.03
4	28	0.81	0.06	-5.05	-8.84e-06	0.0	-0.02
4	29	0.74	-0.08	-5.05	0.0	0.0	2.36e-03
4	30	0.26	0.08	-5.01	0.0	0.0	8.13e-04
4	31	0.19	-0.06	-5.01	1.09e-05	0.0	0.03
4	32	0.97	0.20	-5.04	-1.57e-05	0.0	-0.04
4	33	0.30	-0.19	-5.04	1.99e-05	0.0	0.05
4	34	0.72	0.19	-5.03	-1.87e-05	0.0	-0.05
4	35	0.05	-0.20	-5.03	1.72e-05	0.0	0.04
4	36	0.92	0.19	-5.04	-1.86e-05	0.0	-0.05
4	37	0.26	-0.19	-5.04	1.71e-05	0.0	0.04
4	38	0.76	0.19	-5.03	-1.58e-05	0.0	-0.04
4	39	0.09	-0.19	-5.03	2.00e-05	0.0	0.05
4	40	0.75	0.23	-5.04	-1.30e-05	0.0	-0.03
4	41	0.51	-0.22	-5.04	1.72e-05	0.0	0.04
4	42	0.50	0.22	-5.03	-1.60e-05	0.0	-0.04
4	43	0.26	-0.23	-5.03	1.45e-05	0.0	0.04
4	44	0.71	0.22	-5.04	-1.58e-05	0.0	-0.04
4	45	0.47	-0.23	-5.04	1.44e-05	0.0	0.03
4	46	0.54	0.23	-5.03	-1.31e-05	0.0	-0.03
4	47	0.30	-0.22	-5.03	1.73e-05	0.0	0.04
4	48	0.71	0.03	-5.04	0.0	0.0	-1.25e-03
4	49	0.62	-0.02	-5.04	5.26e-06	0.0	0.01
4	50	0.38	0.02	-5.02	-3.64e-06	0.0	-8.85e-03
4	51	0.30	-0.03	-5.02	2.43e-06	0.0	5.90e-03
4	52	0.68	0.04	-5.04	0.0	0.0	-3.79e-04
4	53	0.65	-0.02	-5.04	4.91e-06	0.0	0.01
4	54	0.35	0.02	-5.02	-3.29e-06	0.0	-8.00e-03
4	55	0.32	-0.04	-5.02	2.08e-06	0.0	5.05e-03
4	56	0.66	0.02	-5.04	-3.53e-06	0.0	-8.57e-03
4	57	0.57	-0.03	-5.04	2.28e-06	0.0	5.55e-03
4	58	0.43	0.03	-5.02	0.0	0.0	-1.50e-03
4	59	0.34	-0.02	-5.02	5.41e-06	0.0	0.01
4	60	0.63	0.03	-5.04	-3.18e-06	0.0	-7.72e-03
4	61	0.60	-0.03	-5.04	1.93e-06	0.0	4.69e-03
4	62	0.40	0.03	-5.02	0.0	0.0	-6.30e-04
4	63	0.37	-0.03	-5.02	5.07e-06	0.0	0.01
4	64	0.69	0.09	-5.03	-6.76e-06	0.0	-0.02
4	65	0.41	-0.08	-5.03	9.28e-06	0.0	0.02
4	66	0.60	0.08	-5.03	-7.69e-06	0.0	-0.02
4	67	0.31	-0.09	-5.03	8.44e-06	0.0	0.02
4	68	0.68	0.08	-5.03	-7.66e-06	0.0	-0.02
4	69	0.40	-0.08	-5.03	8.39e-06	0.0	0.02
4	70	0.61	0.08	-5.03	-6.80e-06	0.0	-0.02
4	71	0.33	-0.08	-5.03	9.32e-06	0.0	0.02
4	72	0.60	0.10	-5.03	-5.60e-06	0.0	-0.01
4	73	0.50	-0.10	-5.03	8.13e-06	0.0	0.02
4	74	0.50	0.10	-5.03	-6.53e-06	0.0	-0.02
4	75	0.40	-0.10	-5.03	7.29e-06	0.0	0.02
4	76	0.59	0.10	-5.03	-6.50e-06	0.0	-0.02
4	77	0.49	-0.10	-5.03	7.25e-06	0.0	0.02
4	78	0.52	0.10	-5.03	-5.64e-06	0.0	-0.01
4	79	0.42	-0.10	-5.03	8.18e-06	0.0	0.02
6	1	-0.17	1.65e-04	-10.44	0.0	0.0	1.51e-03
6	2	-0.14	1.38e-04	-7.26	0.0	0.0	1.25e-03
6	3	-0.23	7.90e-05	-10.44	0.0	0.0	9.82e-04
6	4	-0.20	5.31e-05	-7.26	0.0	0.0	6.86e-04
6	5	-0.09	8.44e-05	-10.44	0.0	0.0	9.55e-04
6	6	-0.06	5.75e-05	-7.26	0.0	0.0	6.94e-04
6	7	-0.11	-12.45	-10.44	-1.86e-05	0.0	-0.05
6	8	-0.08	-12.45	-7.26	-1.88e-05	0.0	-0.05
6	9	-0.10	6.22	-10.44	7.73e-06	0.0	0.02
6	10	-0.07	6.22	-7.26	7.70e-06	0.0	0.02

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
6	11	-0.12	1.17e-04	-7.70	0.0	0.0	1.08e-03
6	12	-0.16	5.95e-05	-7.70	0.0	0.0	7.39e-04
6	13	-0.07	6.36e-05	-7.70	0.0	0.0	7.10e-04
6	14	-0.08	-8.30	-7.70	-1.23e-05	0.0	-0.03
6	15	-0.08	4.15	-7.70	5.16e-06	0.0	0.01
6	16	0.41	0.14	-7.71	1.65e-06	0.0	4.02e-03
6	17	0.36	-0.10	-7.71	4.73e-06	0.0	0.01
6	18	-0.52	0.10	-7.68	-4.44e-06	0.0	-0.01
6	19	-0.56	-0.14	-7.68	0.0	0.0	-1.94e-03
6	20	0.42	0.16	-7.71	2.05e-06	0.0	4.98e-03
6	21	0.34	-0.12	-7.71	4.33e-06	0.0	0.01
6	22	-0.51	0.12	-7.68	-4.05e-06	0.0	-9.84e-03
6	23	-0.58	-0.16	-7.68	-1.19e-06	0.0	-2.90e-03
6	24	0.26	0.10	-7.71	-4.30e-06	0.0	-0.01
6	25	0.21	-0.14	-7.71	-1.21e-06	0.0	-2.95e-03
6	26	-0.37	0.14	-7.68	1.52e-06	0.0	3.68e-03
6	27	-0.42	-0.10	-7.68	5.14e-06	0.0	0.01
6	28	0.27	0.12	-7.71	-3.91e-06	0.0	-9.50e-03
6	29	0.20	-0.16	-7.71	-1.61e-06	0.0	-3.91e-03
6	30	-0.36	0.16	-7.68	1.91e-06	0.0	4.65e-03
6	31	-0.43	-0.12	-7.68	4.75e-06	0.0	0.01
6	32	0.13	0.41	-7.70	-3.93e-06	0.0	-9.55e-03
6	33	-0.02	-0.40	-7.70	6.19e-06	0.0	0.02
6	34	-0.14	0.40	-7.69	-5.75e-06	0.0	-0.01
6	35	-0.30	-0.41	-7.69	4.53e-06	0.0	0.01
6	36	0.09	0.40	-7.70	-5.71e-06	0.0	-0.01
6	37	-0.07	-0.41	-7.70	4.40e-06	0.0	0.01
6	38	-0.10	0.41	-7.69	-3.97e-06	0.0	-9.65e-03
6	39	-0.25	-0.40	-7.69	6.31e-06	0.0	0.02
6	40	0.18	0.47	-7.70	-2.61e-06	0.0	-6.36e-03
6	41	-0.06	-0.46	-7.70	4.88e-06	0.0	0.01
6	42	-0.10	0.46	-7.69	-4.44e-06	0.0	-0.01
6	43	-0.34	-0.47	-7.69	3.22e-06	0.0	7.83e-03
6	44	0.13	0.46	-7.70	-4.40e-06	0.0	-0.01
6	45	-0.11	-0.47	-7.70	3.10e-06	0.0	7.53e-03
6	46	-0.05	0.47	-7.69	-2.66e-06	0.0	-6.46e-03
6	47	-0.30	-0.46	-7.69	5.00e-06	0.0	0.01
6	48	0.08	0.06	-7.70	0.0	0.0	1.01e-03
6	49	0.06	-0.04	-7.70	2.00e-06	0.0	4.87e-03
6	50	-0.22	0.04	-7.69	-1.50e-06	0.0	-3.65e-03
6	51	-0.24	-0.06	-7.69	0.0	0.0	6.00e-04
6	52	0.08	0.07	-7.70	0.0	0.0	1.43e-03
6	53	0.05	-0.05	-7.70	1.83e-06	0.0	4.46e-03
6	54	-0.22	0.05	-7.69	-1.33e-06	0.0	-3.24e-03
6	55	-0.25	-0.07	-7.69	0.0	0.0	1.85e-04
6	56	0.03	0.04	-7.70	-1.46e-06	0.0	-3.55e-03
6	57	0.01	-0.06	-7.70	0.0	0.0	3.12e-04
6	58	-0.17	0.06	-7.69	0.0	0.0	9.26e-04
6	59	-0.19	-0.04	-7.69	2.12e-06	0.0	5.16e-03
6	60	0.04	0.05	-7.70	-1.29e-06	0.0	-3.14e-03
6	61	4.80e-03	-0.07	-7.70	0.0	0.0	-1.03e-04
6	62	-0.17	0.07	-7.69	0.0	0.0	1.34e-03
6	63	-0.20	-0.05	-7.69	1.95e-06	0.0	4.75e-03
6	64	-3.68e-03	0.18	-7.70	-1.72e-06	0.0	-4.18e-03
6	65	-0.07	-0.17	-7.70	2.83e-06	0.0	6.87e-03
6	66	-0.09	0.17	-7.69	-2.29e-06	0.0	-5.57e-03
6	67	-0.16	-0.18	-7.69	2.31e-06	0.0	5.61e-03
6	68	-0.02	0.17	-7.70	-2.28e-06	0.0	-5.54e-03
6	69	-0.08	-0.18	-7.70	2.27e-06	0.0	5.52e-03
6	70	-0.08	0.18	-7.69	-1.73e-06	0.0	-4.21e-03
6	71	-0.14	-0.17	-7.69	2.86e-06	0.0	6.96e-03
6	72	0.02	0.20	-7.70	-1.16e-06	0.0	-2.83e-03
6	73	-0.09	-0.20	-7.70	2.27e-06	0.0	5.52e-03
6	74	-0.07	0.20	-7.69	-1.74e-06	0.0	-4.22e-03
6	75	-0.18	-0.20	-7.69	1.75e-06	0.0	4.26e-03
6	76	8.67e-04	0.20	-7.70	-1.72e-06	0.0	-4.19e-03
6	77	-0.10	-0.20	-7.70	1.71e-06	0.0	4.17e-03
6	78	-0.06	0.20	-7.69	-1.18e-06	0.0	-2.86e-03

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
6	79	-0.16	-0.20	-7.69	2.31e-06	0.0	5.61e-03
8	1	-7.24e-03	2.84e-04	-11.31	0.0	0.0	3.85e-04
8	2	-5.56e-03	2.35e-04	-7.82	0.0	0.0	3.21e-04
8	3	-0.06	2.14e-04	-11.31	0.0	0.0	1.08e-04
8	4	-0.06	1.58e-04	-7.82	0.0	0.0	3.12e-05
8	5	0.01	1.71e-04	-11.31	0.0	0.0	2.69e-04
8	6	0.01	1.22e-04	-7.82	0.0	0.0	2.01e-04
8	7	-5.67e-03	-15.73	-11.31	-9.87e-06	0.0	-0.02
8	8	-3.99e-03	-15.73	-7.82	-9.91e-06	0.0	-0.02
8	9	-5.36e-03	7.86	-11.31	4.62e-06	0.0	0.01
8	10	-3.69e-03	7.86	-7.82	4.61e-06	0.0	0.01
8	11	-5.24e-03	2.03e-04	-8.32	0.0	0.0	2.74e-04
8	12	-0.04	1.59e-04	-8.32	0.0	0.0	9.18e-05
8	13	7.94e-03	1.28e-04	-8.32	0.0	0.0	1.98e-04
8	14	-4.19e-03	-10.49	-8.32	-6.57e-06	0.0	-0.02
8	15	-3.99e-03	5.24	-8.32	3.08e-06	0.0	7.52e-03
8	16	0.41	0.17	-8.33	2.72e-06	0.0	6.64e-03
8	17	0.35	-0.16	-8.33	2.26e-06	0.0	5.50e-03
8	18	-0.36	0.16	-8.30	-2.33e-06	0.0	-5.68e-03
8	19	-0.42	-0.17	-8.30	-2.35e-06	0.0	-5.72e-03
8	20	0.35	0.18	-8.33	2.09e-06	0.0	5.10e-03
8	21	0.41	-0.17	-8.33	2.89e-06	0.0	7.04e-03
8	22	-0.42	0.17	-8.30	-2.96e-06	0.0	-7.23e-03
8	23	-0.35	-0.18	-8.30	-1.72e-06	0.0	-4.19e-03
8	24	0.28	0.15	-8.33	-2.28e-06	0.0	-5.56e-03
8	25	0.21	-0.17	-8.33	-2.76e-06	0.0	-6.72e-03
8	26	-0.22	0.17	-8.30	2.67e-06	0.0	6.52e-03
8	27	-0.28	-0.15	-8.30	2.67e-06	0.0	6.50e-03
8	28	0.21	0.16	-8.33	-2.91e-06	0.0	-7.10e-03
8	29	0.28	-0.18	-8.33	-2.13e-06	0.0	-5.19e-03
8	30	-0.28	0.18	-8.30	2.04e-06	0.0	4.98e-03
8	31	-0.22	-0.16	-8.30	3.30e-06	0.0	8.04e-03
8	32	0.21	0.54	-8.32	1.35e-06	0.0	3.29e-03
8	33	8.15e-03	-0.54	-8.32	0.0	0.0	6.13e-04
8	34	-0.02	0.54	-8.31	0.0	0.0	-4.14e-04
8	35	-0.22	-0.54	-8.31	-1.13e-06	0.0	-2.75e-03
8	36	0.17	0.54	-8.32	0.0	0.0	-3.76e-04
8	37	-0.03	-0.54	-8.32	-1.25e-06	0.0	-3.05e-03
8	38	0.02	0.54	-8.31	1.33e-06	0.0	3.25e-03
8	39	-0.18	-0.53	-8.31	0.0	0.0	9.14e-04
8	40	7.67e-03	0.58	-8.32	0.0	0.0	-1.85e-03
8	41	0.21	-0.57	-8.32	2.36e-06	0.0	5.74e-03
8	42	-0.22	0.57	-8.31	-2.28e-06	0.0	-5.55e-03
8	43	-0.02	-0.57	-8.31	0.0	0.0	2.38e-03
8	44	-0.03	0.57	-8.32	-2.26e-06	0.0	-5.51e-03
8	45	0.17	-0.58	-8.32	0.0	0.0	2.08e-03
8	46	-0.18	0.58	-8.31	0.0	0.0	-1.89e-03
8	47	0.02	-0.57	-8.31	2.48e-06	0.0	6.04e-03
8	48	0.14	0.07	-8.32	0.0	0.0	2.19e-03
8	49	0.11	-0.07	-8.32	0.0	0.0	1.91e-03
8	50	-0.12	0.07	-8.31	0.0	0.0	-1.71e-03
8	51	-0.15	-0.07	-8.31	0.0	0.0	-1.67e-03
8	52	0.11	0.08	-8.32	0.0	0.0	1.54e-03
8	53	0.14	-0.07	-8.32	1.05e-06	0.0	2.56e-03
8	54	-0.15	0.07	-8.31	0.0	0.0	-2.35e-03
8	55	-0.12	-0.08	-8.31	0.0	0.0	-1.02e-03
8	56	0.09	0.07	-8.32	0.0	0.0	-1.67e-03
8	57	0.07	-0.07	-8.32	0.0	0.0	-1.95e-03
8	58	-0.08	0.07	-8.31	0.0	0.0	2.16e-03
8	59	-0.10	-0.07	-8.31	0.0	0.0	2.20e-03
8	60	0.07	0.07	-8.32	0.0	0.0	-2.32e-03
8	61	0.09	-0.08	-8.32	0.0	0.0	-1.31e-03
8	62	-0.10	0.08	-8.31	0.0	0.0	1.51e-03
8	63	-0.08	-0.07	-8.31	1.17e-06	0.0	2.85e-03
8	64	0.08	0.23	-8.32	0.0	0.0	1.23e-03
8	65	-8.74e-03	-0.23	-8.32	0.0	0.0	2.47e-04
8	66	2.30e-04	0.23	-8.31	0.0	0.0	6.89e-05
8	67	-0.09	-0.23	-8.31	0.0	0.0	-8.13e-04

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
8	68	0.06	0.23	-8.32	0.0	0.0	8.02e-05
8	69	-0.02	-0.23	-8.32	0.0	0.0	-9.02e-04
8	70	0.01	0.23	-8.31	0.0	0.0	1.22e-03
8	71	-0.07	-0.23	-8.31	0.0	0.0	3.36e-04
8	72	-9.01e-03	0.24	-8.32	0.0	0.0	-9.51e-04
8	73	0.08	-0.24	-8.32	0.0	0.0	2.42e-03
8	74	-0.09	0.24	-8.31	0.0	0.0	-2.11e-03
8	75	9.30e-04	-0.24	-8.31	0.0	0.0	1.36e-03
8	76	-0.02	0.24	-8.32	0.0	0.0	-2.10e-03
8	77	0.07	-0.24	-8.32	0.0	0.0	1.27e-03
8	78	-0.07	0.24	-8.31	0.0	0.0	-9.62e-04
8	79	0.01	-0.24	-8.31	1.03e-06	0.0	2.51e-03
10	1	2.90e-04	2.85e-04	-11.30	0.0	0.0	-3.67e-04
10	2	6.93e-04	2.37e-04	-7.81	0.0	0.0	-3.05e-04
10	3	-0.06	1.86e-04	-11.30	0.0	0.0	-3.82e-04
10	4	-0.06	1.30e-04	-7.81	0.0	0.0	-3.19e-04
10	5	0.02	1.82e-04	-11.30	0.0	0.0	-1.45e-04
10	6	0.02	1.33e-04	-7.81	0.0	0.0	-8.78e-05
10	7	-9.53e-04	-15.74	-11.30	-4.26e-06	0.0	-0.01
10	8	-5.59e-04	-15.74	-7.81	-4.22e-06	0.0	-0.01
10	9	-1.18e-03	7.87	-11.30	2.45e-06	0.0	5.96e-03
10	10	-7.88e-04	7.87	-7.81	2.46e-06	0.0	5.98e-03
10	11	1.64e-04	2.04e-04	-8.31	0.0	0.0	-2.63e-04
10	12	-0.04	1.41e-04	-8.31	0.0	0.0	-2.77e-04
10	13	0.01	1.35e-04	-8.31	0.0	0.0	-1.15e-04
10	14	-6.64e-04	-10.49	-8.31	-2.85e-06	0.0	-6.94e-03
10	15	-8.16e-04	5.25	-8.31	1.63e-06	0.0	3.97e-03
10	16	0.42	0.17	-8.33	2.95e-06	0.0	7.19e-03
10	17	0.35	-0.18	-8.33	1.75e-06	0.0	4.27e-03
10	18	-0.36	0.18	-8.30	-2.12e-06	0.0	-5.15e-03
10	19	-0.42	-0.17	-8.30	-2.86e-06	0.0	-6.97e-03
10	20	0.42	0.16	-8.33	3.20e-06	0.0	7.79e-03
10	21	0.35	-0.17	-8.33	1.51e-06	0.0	3.67e-03
10	22	-0.36	0.17	-8.30	-1.87e-06	0.0	-4.56e-03
10	23	-0.42	-0.15	-8.30	-3.11e-06	0.0	-7.57e-03
10	24	0.28	0.18	-8.33	-2.07e-06	0.0	-5.03e-03
10	25	0.22	-0.16	-8.33	-3.28e-06	0.0	-7.97e-03
10	26	-0.22	0.16	-8.30	2.90e-06	0.0	7.06e-03
10	27	-0.28	-0.18	-8.30	2.17e-06	0.0	5.27e-03
10	28	0.28	0.17	-8.33	-1.82e-06	0.0	-4.43e-03
10	29	0.22	-0.15	-8.33	-3.52e-06	0.0	-8.57e-03
10	30	-0.22	0.15	-8.30	3.15e-06	0.0	7.67e-03
10	31	-0.28	-0.17	-8.30	1.92e-06	0.0	4.67e-03
10	32	0.22	0.57	-8.32	2.21e-06	0.0	5.37e-03
10	33	0.01	-0.57	-8.32	0.0	0.0	-2.17e-03
10	34	-0.01	0.57	-8.31	0.0	0.0	1.67e-03
10	35	-0.22	-0.57	-8.31	-2.28e-06	0.0	-5.54e-03
10	36	0.18	0.57	-8.32	0.0	0.0	1.71e-03
10	37	-0.03	-0.57	-8.32	-2.40e-06	0.0	-5.84e-03
10	38	0.03	0.57	-8.31	2.19e-06	0.0	5.33e-03
10	39	-0.18	-0.57	-8.31	0.0	0.0	-1.87e-03
10	40	0.22	0.53	-8.32	3.03e-06	0.0	7.37e-03
10	41	9.77e-03	-0.54	-8.32	-1.71e-06	0.0	-4.17e-03
10	42	-0.01	0.54	-8.31	1.51e-06	0.0	3.66e-03
10	43	-0.22	-0.53	-8.31	-3.10e-06	0.0	-7.54e-03
10	44	0.18	0.54	-8.32	1.52e-06	0.0	3.70e-03
10	45	-0.03	-0.53	-8.32	-3.22e-06	0.0	-7.84e-03
10	46	0.03	0.53	-8.31	3.01e-06	0.0	7.33e-03
10	47	-0.18	-0.54	-8.31	-1.59e-06	0.0	-3.87e-03
10	48	0.14	0.07	-8.32	0.0	0.0	2.34e-03
10	49	0.12	-0.08	-8.32	0.0	0.0	1.06e-03
10	50	-0.12	0.08	-8.30	0.0	0.0	-1.55e-03
10	51	-0.14	-0.07	-8.30	-1.04e-06	0.0	-2.52e-03
10	52	0.14	0.07	-8.32	1.07e-06	0.0	2.60e-03
10	53	0.12	-0.07	-8.32	0.0	0.0	8.01e-04
10	54	-0.12	0.07	-8.30	0.0	0.0	-1.29e-03
10	55	-0.14	-0.07	-8.30	-1.14e-06	0.0	-2.78e-03
10	56	0.10	0.08	-8.32	0.0	0.0	-1.53e-03

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
10	57	0.07	-0.07	-8.32	-1.16e-06	0.0	-2.81e-03
10	58	-0.07	0.07	-8.30	0.0	0.0	2.31e-03
10	59	-0.10	-0.08	-8.30	0.0	0.0	1.35e-03
10	60	0.10	0.07	-8.32	0.0	0.0	-1.26e-03
10	61	0.07	-0.06	-8.32	-1.26e-06	0.0	-3.07e-03
10	62	-0.07	0.07	-8.30	1.06e-06	0.0	2.57e-03
10	63	-0.10	-0.07	-8.30	0.0	0.0	1.09e-03
10	64	0.08	0.24	-8.31	0.0	0.0	2.04e-03
10	65	-5.67e-03	-0.24	-8.31	0.0	0.0	-1.26e-03
10	66	4.06e-03	0.24	-8.31	0.0	0.0	8.81e-04
10	67	-0.08	-0.24	-8.31	0.0	0.0	-2.33e-03
10	68	0.07	0.24	-8.31	0.0	0.0	8.92e-04
10	69	-0.02	-0.24	-8.31	0.0	0.0	-2.42e-03
10	70	0.02	0.24	-8.31	0.0	0.0	2.03e-03
10	71	-0.07	-0.24	-8.31	0.0	0.0	-1.18e-03
10	72	0.08	0.23	-8.31	1.19e-06	0.0	2.89e-03
10	73	-6.17e-03	-0.23	-8.31	0.0	0.0	-2.11e-03
10	74	4.70e-03	0.23	-8.31	0.0	0.0	1.73e-03
10	75	-0.08	-0.23	-8.31	-1.31e-06	0.0	-3.18e-03
10	76	0.07	0.23	-8.31	0.0	0.0	1.74e-03
10	77	-0.02	-0.23	-8.31	-1.34e-06	0.0	-3.27e-03
10	78	0.02	0.23	-8.31	1.18e-06	0.0	2.88e-03
10	79	-0.07	-0.23	-8.31	0.0	0.0	-2.03e-03
12	1	0.17	1.65e-04	-10.57	0.0	0.0	-1.49e-03
12	2	0.14	1.37e-04	-7.33	0.0	0.0	-1.24e-03
12	3	-4.51e-03	9.32e-05	-10.57	0.0	0.0	-1.09e-03
12	4	-0.03	6.75e-05	-7.33	0.0	0.0	-8.07e-04
12	5	0.16	7.88e-05	-10.57	0.0	0.0	-8.88e-04
12	6	0.13	5.21e-05	-7.33	0.0	0.0	-6.38e-04
12	7	0.11	-12.43	-10.57	1.33e-05	0.0	0.03
12	8	0.08	-12.43	-7.33	1.35e-05	0.0	0.03
12	9	0.09	6.22	-10.57	-5.06e-06	0.0	-0.01
12	10	0.07	6.22	-7.33	-5.03e-06	0.0	-0.01
12	11	0.12	1.17e-04	-7.78	0.0	0.0	-1.07e-03
12	12	5.56e-03	6.91e-05	-7.78	0.0	0.0	-8.13e-04
12	13	0.11	5.99e-05	-7.78	0.0	0.0	-6.65e-04
12	14	0.08	-8.29	-7.78	8.80e-06	0.0	0.02
12	15	0.07	4.15	-7.78	-3.38e-06	0.0	-8.18e-03
12	16	0.57	0.12	-7.77	4.10e-06	0.0	9.92e-03
12	17	0.50	-0.16	-7.77	1.18e-06	0.0	2.85e-03
12	18	-0.35	0.16	-7.80	-2.03e-06	0.0	-4.90e-03
12	19	-0.42	-0.12	-7.80	-4.38e-06	0.0	-0.01
12	20	0.56	0.10	-7.77	4.51e-06	0.0	0.01
12	21	0.51	-0.14	-7.77	0.0	0.0	1.85e-03
12	22	-0.36	0.14	-7.80	-1.62e-06	0.0	-3.91e-03
12	23	-0.41	-0.10	-7.80	-4.79e-06	0.0	-0.01
12	24	0.42	0.16	-7.77	-1.89e-06	0.0	-4.57e-03
12	25	0.35	-0.12	-7.77	-4.80e-06	0.0	-0.01
12	26	-0.20	0.12	-7.80	3.96e-06	0.0	9.58e-03
12	27	-0.27	-0.16	-7.80	1.59e-06	0.0	3.86e-03
12	28	0.41	0.14	-7.77	-1.48e-06	0.0	-3.57e-03
12	29	0.36	-0.10	-7.77	-5.21e-06	0.0	-0.01
12	30	-0.21	0.10	-7.80	4.37e-06	0.0	0.01
12	31	-0.26	-0.14	-7.80	1.19e-06	0.0	2.87e-03
12	32	0.33	0.46	-7.78	4.56e-06	0.0	0.01
12	33	0.10	-0.47	-7.78	-3.32e-06	0.0	-8.04e-03
12	34	0.06	0.47	-7.79	2.72e-06	0.0	6.59e-03
12	35	-0.18	-0.46	-7.79	-4.99e-06	0.0	-0.01
12	36	0.29	0.47	-7.78	2.77e-06	0.0	6.69e-03
12	37	0.05	-0.46	-7.78	-5.12e-06	0.0	-0.01
12	38	0.10	0.46	-7.79	4.52e-06	0.0	0.01
12	39	-0.13	-0.47	-7.79	-3.20e-06	0.0	-7.73e-03
12	40	0.30	0.40	-7.78	5.93e-06	0.0	0.01
12	41	0.13	-0.41	-7.78	-4.69e-06	0.0	-0.01
12	42	0.02	0.41	-7.79	4.09e-06	0.0	9.89e-03
12	43	-0.14	-0.40	-7.79	-6.35e-06	0.0	-0.02
12	44	0.25	0.41	-7.78	4.13e-06	0.0	1.00e-02
12	45	0.09	-0.40	-7.78	-6.48e-06	0.0	-0.02

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
12	46	0.07	0.40	-7.79	5.89e-06	0.0	0.01
12	47	-0.10	-0.41	-7.79	-4.56e-06	0.0	-0.01
12	48	0.24	0.05	-7.78	1.36e-06	0.0	3.28e-03
12	49	0.21	-0.07	-7.78	0.0	0.0	-1.97e-04
12	50	-0.06	0.07	-7.79	0.0	0.0	-1.39e-03
12	51	-0.09	-0.05	-7.79	-1.85e-06	0.0	-4.47e-03
12	52	0.24	0.04	-7.78	1.53e-06	0.0	3.71e-03
12	53	0.22	-0.06	-7.78	0.0	0.0	-6.27e-04
12	54	-0.06	0.06	-7.79	0.0	0.0	-9.59e-04
12	55	-0.08	-0.04	-7.79	-2.02e-06	0.0	-4.90e-03
12	56	0.19	0.07	-7.78	0.0	0.0	-1.30e-03
12	57	0.16	-0.05	-7.78	-1.97e-06	0.0	-4.77e-03
12	58	-9.69e-03	0.05	-7.79	1.32e-06	0.0	3.18e-03
12	59	-0.04	-0.07	-7.79	0.0	0.0	9.02e-05
12	60	0.19	0.06	-7.78	0.0	0.0	-8.71e-04
12	61	0.17	-0.04	-7.78	-2.15e-06	0.0	-5.19e-03
12	62	-0.01	0.04	-7.79	1.49e-06	0.0	3.61e-03
12	63	-0.03	-0.06	-7.79	0.0	0.0	-3.40e-04
12	64	0.17	0.20	-7.78	1.79e-06	0.0	4.32e-03
12	65	0.07	-0.20	-7.78	-1.79e-06	0.0	-4.34e-03
12	66	0.08	0.20	-7.79	1.21e-06	0.0	2.93e-03
12	67	-0.02	-0.20	-7.79	-2.32e-06	0.0	-5.60e-03
12	68	0.16	0.20	-7.78	1.23e-06	0.0	2.96e-03
12	69	0.06	-0.20	-7.78	-2.35e-06	0.0	-5.69e-03
12	70	0.10	0.20	-7.79	1.77e-06	0.0	4.29e-03
12	71	-2.34e-03	-0.20	-7.79	-1.76e-06	0.0	-4.25e-03
12	72	0.16	0.17	-7.78	2.37e-06	0.0	5.73e-03
12	73	0.09	-0.18	-7.78	-2.37e-06	0.0	-5.73e-03
12	74	0.07	0.18	-7.79	1.79e-06	0.0	4.34e-03
12	75	-1.89e-03	-0.17	-7.79	-2.89e-06	0.0	-7.00e-03
12	76	0.14	0.18	-7.78	1.81e-06	0.0	4.37e-03
12	77	0.07	-0.17	-7.78	-2.93e-06	0.0	-7.09e-03
12	78	0.08	0.17	-7.79	2.35e-06	0.0	5.70e-03
12	79	0.01	-0.18	-7.79	-2.33e-06	0.0	-5.64e-03
14	1	-1.05	3.24e-04	-6.84	0.0	0.0	-4.44e-03
14	2	-0.87	2.66e-04	-4.74	0.0	0.0	-3.66e-03
14	3	-0.58	2.02e-04	-6.84	0.0	0.0	-3.00e-03
14	4	-0.40	1.36e-04	-4.74	0.0	0.0	-2.10e-03
14	5	-0.80	2.67e-04	-6.84	0.0	0.0	-3.22e-03
14	6	-0.62	2.10e-04	-4.74	0.0	0.0	-2.44e-03
14	7	-0.69	-4.67	-6.84	-4.18e-06	0.0	0.05
14	8	-0.50	-4.67	-4.74	-4.32e-06	0.0	0.05
14	9	-0.61	2.33	-6.84	0.0	0.0	-6.75e-03
14	10	-0.43	2.33	-4.74	0.0	0.0	-6.63e-03
14	11	-0.76	2.32e-04	-5.03	0.0	0.0	-3.19e-03
14	12	-0.44	1.55e-04	-5.03	0.0	0.0	-2.28e-03
14	13	-0.59	1.95e-04	-5.03	0.0	0.0	-2.37e-03
14	14	-0.51	-3.11	-5.03	-2.74e-06	0.0	0.03
14	15	-0.46	1.55	-5.03	0.0	0.0	-4.52e-03
14	16	-0.05	0.05	-5.05	-2.08e-06	0.0	0.02
14	17	-0.12	-0.08	-5.05	0.0	0.0	-3.65e-03
14	18	-0.88	0.08	-5.01	0.0	0.0	-1.69e-03
14	19	-0.96	-0.05	-5.01	2.35e-06	0.0	-0.03
14	20	0.02	0.04	-5.05	-2.27e-06	0.0	0.02
14	21	-0.18	-0.07	-5.05	0.0	0.0	-5.62e-03
14	22	-0.82	0.07	-5.01	0.0	0.0	2.89e-04
14	23	-1.02	-0.04	-5.01	2.53e-06	0.0	-0.03
14	24	-0.19	0.08	-5.05	0.0	0.0	-7.58e-04
14	25	-0.26	-0.06	-5.05	2.47e-06	0.0	-0.03
14	26	-0.74	0.06	-5.01	-2.00e-06	0.0	0.02
14	27	-0.81	-0.08	-5.01	0.0	0.0	-2.38e-03
14	28	-0.12	0.07	-5.05	0.0	0.0	1.24e-03
14	29	-0.32	-0.05	-5.05	2.65e-06	0.0	-0.03
14	30	-0.68	0.05	-5.01	-2.18e-06	0.0	0.02
14	31	-0.88	-0.07	-5.01	0.0	0.0	-4.34e-03
14	32	-0.25	0.22	-5.04	-3.61e-06	0.0	0.04
14	33	-0.50	-0.23	-5.04	3.28e-06	0.0	-0.04
14	34	-0.50	0.23	-5.03	-2.94e-06	0.0	0.03

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
14	35	-0.75	-0.22	-5.03	3.88e-06	0.0	-0.04
14	36	-0.30	0.23	-5.04	-2.96e-06	0.0	0.03
14	37	-0.55	-0.22	-5.04	3.92e-06	0.0	-0.04
14	38	-0.46	0.22	-5.03	-3.58e-06	0.0	0.04
14	39	-0.71	-0.23	-5.03	3.25e-06	0.0	-0.03
14	40	-0.05	0.19	-5.04	-4.22e-06	0.0	0.05
14	41	-0.71	-0.20	-5.04	3.89e-06	0.0	-0.04
14	42	-0.30	0.20	-5.03	-3.55e-06	0.0	0.04
14	43	-0.96	-0.19	-5.03	4.49e-06	0.0	-0.05
14	44	-0.09	0.19	-5.04	-3.58e-06	0.0	0.04
14	45	-0.75	-0.19	-5.04	4.53e-06	0.0	-0.05
14	46	-0.26	0.19	-5.03	-4.20e-06	0.0	0.05
14	47	-0.92	-0.19	-5.03	3.85e-06	0.0	-0.04
14	48	-0.32	0.02	-5.04	0.0	0.0	8.03e-03
14	49	-0.35	-0.04	-5.04	0.0	0.0	-5.04e-03
14	50	-0.64	0.04	-5.02	0.0	0.0	4.10e-04
14	51	-0.68	-0.02	-5.02	1.11e-06	0.0	-0.01
14	52	-0.30	0.02	-5.04	0.0	0.0	8.87e-03
14	53	-0.38	-0.03	-5.04	0.0	0.0	-5.90e-03
14	54	-0.62	0.03	-5.02	0.0	0.0	1.28e-03
14	55	-0.70	-0.02	-5.02	1.18e-06	0.0	-0.01
14	56	-0.37	0.03	-5.04	0.0	0.0	6.61e-04
14	57	-0.40	-0.02	-5.04	1.14e-06	0.0	-0.01
14	58	-0.60	0.02	-5.02	0.0	0.0	7.75e-03
14	59	-0.63	-0.03	-5.02	0.0	0.0	-4.69e-03
14	60	-0.34	0.03	-5.04	0.0	0.0	1.53e-03
14	61	-0.43	-0.02	-5.04	1.22e-06	0.0	-0.01
14	62	-0.57	0.02	-5.02	0.0	0.0	8.59e-03
14	63	-0.65	-0.03	-5.02	0.0	0.0	-5.54e-03
14	64	-0.40	0.10	-5.04	-1.48e-06	0.0	0.02
14	65	-0.50	-0.10	-5.04	1.65e-06	0.0	-0.02
14	66	-0.50	0.10	-5.03	-1.27e-06	0.0	0.01
14	67	-0.60	-0.10	-5.03	1.84e-06	0.0	-0.02
14	68	-0.41	0.10	-5.04	-1.28e-06	0.0	0.01
14	69	-0.52	-0.10	-5.04	1.85e-06	0.0	-0.02
14	70	-0.48	0.10	-5.03	-1.47e-06	0.0	0.02
14	71	-0.59	-0.10	-5.03	1.64e-06	0.0	-0.02
14	72	-0.31	0.08	-5.04	-1.74e-06	0.0	0.02
14	73	-0.59	-0.09	-5.04	1.90e-06	0.0	-0.02
14	74	-0.41	0.09	-5.03	-1.53e-06	0.0	0.02
14	75	-0.69	-0.08	-5.03	2.09e-06	0.0	-0.02
14	76	-0.33	0.08	-5.04	-1.54e-06	0.0	0.02
14	77	-0.61	-0.08	-5.04	2.10e-06	0.0	-0.02
14	78	-0.39	0.08	-5.03	-1.73e-06	0.0	0.02
14	79	-0.67	-0.08	-5.03	1.89e-06	0.0	-0.02
16	1	109.58	-0.16	-217.54	6.60e-03	0.0	-0.09
16	2	89.69	-0.13	-176.56	5.40e-03	0.0	-0.08
16	3	51.69	-0.11	-140.82	4.61e-03	0.0	-0.07
16	4	31.79	-0.07	-99.82	3.16e-03	0.0	-0.05
16	5	100.22	-0.13	-157.04	5.44e-03	0.0	-0.08
16	6	80.33	-0.10	-116.05	4.26e-03	0.0	-0.06
16	7	76.14	-0.94	-158.28	0.01	0.0	-0.18
16	8	56.18	-0.87	-117.12	9.75e-03	0.0	-0.14
16	9	66.55	1.51	-138.04	-0.05	0.0	0.66
16	10	46.66	1.50	-97.07	-0.05	0.0	0.66
16	11	79.07	-0.11	-157.55	4.75e-03	0.0	-0.07
16	12	40.48	-0.08	-106.41	3.54e-03	0.0	-0.05
16	13	72.83	-0.10	-117.22	3.98e-03	0.0	-0.06
16	14	56.79	-0.65	-118.09	9.31e-03	0.0	-0.13
16	15	50.38	1.01	-104.55	-0.03	0.0	0.44
16	16	73.72	1.14	-120.41	-0.04	0.0	0.64
16	17	83.04	-0.64	-136.85	0.02	0.0	-0.31
16	18	26.23	0.43	-90.50	-0.01	0.0	0.18
16	19	37.95	-1.29	-112.52	0.05	0.0	-0.72
16	20	73.79	1.19	-119.64	-0.05	0.0	0.67
16	21	83.10	-0.69	-138.02	0.02	0.0	-0.34
16	22	26.30	0.48	-89.73	-0.02	0.0	0.22
16	23	38.01	-1.34	-113.69	0.05	0.0	-0.75

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
16	24	69.87	0.47	-121.41	-0.01	0.0	0.21
16	25	80.92	-1.32	-142.60	0.05	0.0	-0.73
16	26	30.07	1.11	-89.50	-0.04	0.0	0.61
16	27	40.07	-0.61	-106.77	0.02	0.0	-0.29
16	28	69.95	0.52	-120.64	-0.02	0.0	0.24
16	29	80.99	-1.37	-143.77	0.05	0.0	-0.77
16	30	30.15	1.16	-88.73	-0.05	0.0	0.65
16	31	40.13	-0.66	-107.94	0.02	0.0	-0.32
16	32	47.23	2.67	-94.23	-0.10	0.0	1.40
16	33	81.56	-2.65	-156.39	0.10	0.0	-1.37
16	34	32.99	2.45	-85.26	-0.09	0.0	1.27
16	35	68.04	-2.85	-149.10	0.10	0.0	-1.50
16	36	46.08	2.46	-94.53	-0.09	0.0	1.28
16	37	80.93	-2.85	-158.12	0.10	0.0	-1.50
16	38	34.14	2.66	-84.96	-0.10	0.0	1.40
16	39	68.67	-2.64	-147.36	0.10	0.0	-1.37
16	40	47.49	2.84	-91.66	-0.11	0.0	1.52
16	41	81.78	-2.82	-160.28	0.10	0.0	-1.49
16	42	33.25	2.63	-82.69	-0.10	0.0	1.39
16	43	68.26	-3.02	-153.00	0.11	0.0	-1.62
16	44	46.34	2.64	-91.96	-0.10	0.0	1.40
16	45	81.15	-3.03	-162.02	0.11	0.0	-1.62
16	46	34.40	2.83	-82.39	-0.11	0.0	1.52
16	47	68.89	-2.81	-151.26	0.10	0.0	-1.49
16	48	59.71	0.46	-114.07	-0.02	0.0	0.25
16	49	63.89	-0.42	-121.62	0.01	0.0	-0.22
16	50	45.10	0.23	-104.59	-7.53e-03	0.0	0.11
16	51	50.03	-0.62	-113.91	0.02	0.0	-0.35
16	52	59.74	0.48	-113.75	-0.02	0.0	0.27
16	53	63.92	-0.44	-122.12	0.02	0.0	-0.23
16	54	45.14	0.26	-104.27	-8.63e-03	0.0	0.12
16	55	50.06	-0.65	-114.39	0.03	0.0	-0.36
16	56	58.48	0.24	-114.24	-7.93e-03	0.0	0.11
16	57	63.22	-0.63	-123.33	0.02	0.0	-0.35
16	58	46.33	0.45	-104.42	-0.02	0.0	0.24
16	59	50.71	-0.41	-112.22	0.01	0.0	-0.21
16	60	58.51	0.27	-113.92	-9.03e-03	0.0	0.13
16	61	63.24	-0.65	-123.81	0.03	0.0	-0.37
16	62	46.37	0.47	-104.09	-0.02	0.0	0.26
16	63	50.74	-0.43	-112.72	0.02	0.0	-0.23
16	64	50.41	1.13	-104.08	-0.04	0.0	0.60
16	65	65.11	-1.25	-130.81	0.05	0.0	-0.66
16	66	46.03	1.07	-101.25	-0.04	0.0	0.55
16	67	60.95	-1.31	-128.50	0.05	0.0	-0.69
16	68	50.05	1.07	-104.14	-0.04	0.0	0.55
16	69	64.91	-1.31	-131.32	0.05	0.0	-0.70
16	70	46.39	1.13	-101.19	-0.04	0.0	0.59
16	71	61.15	-1.25	-127.99	0.05	0.0	-0.65
16	72	50.52	1.21	-102.99	-0.04	0.0	0.65
16	73	65.20	-1.32	-132.46	0.05	0.0	-0.71
16	74	46.14	1.14	-100.16	-0.04	0.0	0.60
16	75	61.05	-1.38	-130.15	0.05	0.0	-0.74
16	76	50.16	1.14	-103.05	-0.04	0.0	0.61
16	77	65.00	-1.39	-132.97	0.05	0.0	-0.75
16	78	46.50	1.20	-100.09	-0.04	0.0	0.64
16	79	61.24	-1.32	-129.64	0.05	0.0	-0.70
67	1	-121.63	-0.12	-252.29	5.46e-03	0.0	0.08
67	2	-99.39	-0.10	-204.35	4.49e-03	0.0	0.06
67	3	-124.56	-0.13	-163.81	5.58e-03	0.0	0.08
67	4	-102.33	-0.10	-115.92	4.31e-03	0.0	0.06
67	5	-95.92	-0.09	-164.26	3.92e-03	0.0	0.06
67	6	-73.68	-0.07	-116.34	2.94e-03	0.0	0.04
67	7	-85.02	-0.68	-194.43	0.03	0.0	0.39
67	8	-62.71	-0.61	-146.12	0.02	0.0	0.35
67	9	-65.86	62.89	-114.07	-0.06	0.0	-0.79
67	10	-43.46	63.78	-65.36	-0.05	0.0	-0.78
67	11	-87.80	-0.09	-182.86	3.92e-03	0.0	0.06
67	12	-89.75	-0.10	-123.87	4.12e-03	0.0	0.06

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
67	13	-70.65	-0.07	-124.17	2.90e-03	0.0	0.04
67	14	-63.41	-0.47	-144.39	0.02	0.0	0.27
67	15	-50.67	41.66	-90.95	-0.04	0.0	-0.53
67	16	-32.16	20.40	-85.56	-0.02	0.0	-0.23
67	17	-48.01	-1.26	-150.71	0.05	0.0	0.73
67	18	-71.19	49.65	-108.07	-0.05	0.0	-0.69
67	19	-87.82	-0.65	-175.27	0.02	0.0	0.33
67	20	-32.61	17.82	-88.52	-0.01	0.0	-0.19
67	21	-47.71	-1.21	-148.18	0.05	0.0	0.70
67	22	-71.64	47.07	-111.03	-0.05	0.0	-0.65
67	23	-87.52	-0.60	-172.71	0.02	0.0	0.29
67	24	-29.69	50.92	-71.08	-0.05	0.0	-0.67
67	25	-47.17	-0.62	-140.74	0.02	0.0	0.31
67	26	-73.66	19.12	-122.57	-0.02	0.0	-0.25
67	27	-88.68	-1.29	-185.26	0.05	0.0	0.75
67	28	-30.14	48.35	-74.03	-0.04	0.0	-0.63
67	29	-46.87	-0.57	-138.20	0.02	0.0	0.27
67	30	-74.10	16.58	-125.49	-0.01	0.0	-0.21
67	31	-88.37	-1.24	-182.72	0.05	0.0	0.72
67	32	-24.15	117.95	-7.97	-0.10	0.0	-1.41
67	33	-78.74	-2.85	-230.71	0.11	0.0	1.58
67	34	-35.86	126.72	-14.72	-0.11	0.0	-1.55
67	35	-90.69	-2.67	-238.09	0.10	0.0	1.46
67	36	-23.41	127.11	-3.63	-0.11	0.0	-1.54
67	37	-78.49	-2.66	-227.73	0.10	0.0	1.45
67	38	-36.60	117.57	-19.07	-0.10	0.0	-1.42
67	39	-90.94	-2.86	-241.07	0.11	0.0	1.59
67	40	-25.65	109.35	-17.83	-0.09	0.0	-1.29
67	41	-77.73	-2.68	-222.23	0.10	0.0	1.46
67	42	-37.35	118.12	-24.58	-0.10	0.0	-1.43
67	43	-89.67	-2.50	-229.62	0.09	0.0	1.34
67	44	-24.90	118.51	-13.48	-0.10	0.0	-1.42
67	45	-77.47	-2.49	-219.25	0.09	0.0	1.33
67	46	-38.10	108.96	-28.92	-0.09	0.0	-1.30
67	47	-89.92	-2.69	-232.60	0.10	0.0	1.47
67	48	-50.96	9.02	-113.84	-9.29e-03	0.0	-0.13
67	49	-57.60	-0.60	-141.02	0.02	0.0	0.35
67	50	-63.07	18.04	-121.91	-0.02	0.0	-0.28
67	51	-69.92	-0.41	-149.57	0.02	0.0	0.22
67	52	-51.13	8.01	-115.02	-8.18e-03	0.0	-0.12
67	53	-57.47	-0.58	-139.95	0.02	0.0	0.33
67	54	-63.25	16.96	-123.15	-0.02	0.0	-0.26
67	55	-69.79	-0.39	-148.46	0.01	0.0	0.21
67	56	-50.31	18.40	-110.02	-0.02	0.0	-0.27
67	57	-57.41	-0.40	-138.43	0.01	0.0	0.22
67	58	-63.71	8.73	-125.65	-9.68e-03	0.0	-0.14
67	59	-70.11	-0.61	-152.21	0.02	0.0	0.36
67	60	-50.49	17.32	-111.26	-0.02	0.0	-0.26
67	61	-57.28	-0.38	-137.32	0.01	0.0	0.20
67	62	-63.88	7.72	-126.83	-8.57e-03	0.0	-0.12
67	63	-69.99	-0.59	-151.14	0.02	0.0	0.34
67	64	-46.02	49.14	-80.46	-0.04	0.0	-0.62
67	65	-69.06	-1.30	-174.41	0.05	0.0	0.72
67	66	-49.64	51.90	-82.84	-0.05	0.0	-0.66
67	67	-72.76	-1.24	-176.99	0.05	0.0	0.69
67	68	-45.81	52.01	-79.27	-0.05	0.0	-0.66
67	69	-69.00	-1.24	-173.64	0.05	0.0	0.68
67	70	-49.85	49.03	-84.04	-0.04	0.0	-0.62
67	71	-72.81	-1.30	-177.76	0.05	0.0	0.73
67	72	-46.65	45.49	-84.65	-0.04	0.0	-0.57
67	73	-68.63	-1.23	-170.81	0.05	0.0	0.67
67	74	-50.27	48.25	-87.02	-0.04	0.0	-0.61
67	75	-72.33	-1.18	-173.39	0.04	0.0	0.64
67	76	-46.44	48.36	-83.45	-0.04	0.0	-0.61
67	77	-68.57	-1.17	-170.04	0.04	0.0	0.63
67	78	-50.48	45.38	-88.22	-0.04	0.0	-0.57
67	79	-72.38	-1.24	-174.16	0.05	0.0	0.68
69	1	121.61	-0.12	-252.20	5.44e-03	0.0	-0.08

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
69	2	99.39	-0.10	-204.34	4.46e-03	0.0	-0.06
69	3	54.72	-0.08	-177.26	3.97e-03	0.0	-0.06
69	4	32.49	-0.06	-129.39	2.73e-03	0.0	-0.04
69	5	119.17	-0.10	-159.68	4.40e-03	0.0	-0.06
69	6	96.95	-0.08	-111.79	3.44e-03	0.0	-0.05
69	7	85.00	-0.68	-194.36	0.03	0.0	-0.39
69	8	62.70	-0.61	-146.08	0.02	0.0	-0.35
69	9	65.84	62.92	-113.99	-0.06	0.0	0.79
69	10	43.45	63.80	-65.31	-0.05	0.0	0.78
69	11	87.78	-0.09	-182.80	3.91e-03	0.0	-0.06
69	12	43.19	-0.07	-132.83	3.05e-03	0.0	-0.04
69	13	86.16	-0.08	-121.12	3.23e-03	0.0	-0.05
69	14	63.40	-0.47	-144.35	0.02	0.0	-0.27
69	15	50.65	41.69	-90.90	-0.04	0.0	0.53
69	16	71.62	47.09	-110.96	-0.05	0.0	0.65
69	17	87.51	-0.60	-172.65	0.02	0.0	-0.29
69	18	32.60	17.84	-88.48	-0.01	0.0	0.19
69	19	47.70	-1.21	-148.15	0.05	0.0	-0.70
69	20	71.18	49.67	-108.00	-0.05	0.0	0.69
69	21	87.81	-0.65	-175.21	0.02	0.0	-0.33
69	22	32.15	20.42	-85.53	-0.02	0.0	0.23
69	23	48.00	-1.26	-150.68	0.05	0.0	-0.73
69	24	74.09	16.60	-125.44	-0.01	0.0	0.21
69	25	88.36	-1.24	-182.67	0.05	0.0	-0.72
69	26	30.12	48.37	-73.98	-0.04	0.0	0.63
69	27	46.86	-0.57	-138.15	0.02	0.0	-0.27
69	28	73.65	19.14	-122.52	-0.02	0.0	0.25
69	29	88.67	-1.29	-185.21	0.05	0.0	-0.75
69	30	29.68	50.95	-71.03	-0.05	0.0	0.67
69	31	47.16	-0.62	-140.70	0.02	0.0	-0.31
69	32	37.34	118.15	-24.52	-0.10	0.0	1.43
69	33	89.66	-2.50	-229.57	0.09	0.0	-1.34
69	34	25.63	109.37	-17.78	-0.09	0.0	1.29
69	35	77.72	-2.68	-222.19	0.10	0.0	-1.46
69	36	38.08	108.99	-28.87	-0.09	0.0	1.30
69	37	89.91	-2.69	-232.55	0.10	0.0	-1.47
69	38	24.89	118.53	-13.43	-0.10	0.0	1.42
69	39	77.46	-2.49	-219.21	0.09	0.0	-1.33
69	40	35.85	126.75	-14.67	-0.11	0.0	1.55
69	41	90.68	-2.66	-238.04	0.10	0.0	-1.46
69	42	24.14	117.97	-7.93	-0.10	0.0	1.41
69	43	78.73	-2.85	-230.67	0.11	0.0	-1.58
69	44	36.59	117.59	-19.02	-0.10	0.0	1.42
69	45	90.93	-2.86	-241.03	0.11	0.0	-1.59
69	46	23.40	127.13	-3.58	-0.11	0.0	1.54
69	47	78.48	-2.66	-227.68	0.10	0.0	-1.45
69	48	63.24	16.98	-123.09	-0.02	0.0	0.26
69	49	69.78	-0.39	-148.40	0.01	0.0	-0.20
69	50	51.12	8.03	-114.98	-8.20e-03	0.0	0.12
69	51	57.46	-0.58	-139.92	0.02	0.0	-0.33
69	52	63.05	18.06	-121.85	-0.02	0.0	0.28
69	53	69.91	-0.41	-149.51	0.02	0.0	-0.22
69	54	50.95	9.04	-113.80	-9.31e-03	0.0	0.13
69	55	57.59	-0.60	-140.99	0.02	0.0	-0.35
69	56	63.87	7.74	-126.78	-8.59e-03	0.0	0.12
69	57	69.98	-0.59	-151.09	0.02	0.0	-0.34
69	58	50.48	17.34	-111.21	-0.02	0.0	0.26
69	59	57.27	-0.38	-137.28	0.01	0.0	-0.20
69	60	63.69	8.76	-125.60	-9.70e-03	0.0	0.14
69	61	70.10	-0.61	-152.16	0.02	0.0	-0.35
69	62	50.30	18.43	-109.97	-0.02	0.0	0.27
69	63	57.40	-0.40	-138.39	0.01	0.0	-0.21
69	64	50.26	48.27	-86.97	-0.04	0.0	0.61
69	65	72.32	-1.17	-173.35	0.04	0.0	-0.64
69	66	46.64	45.52	-84.60	-0.04	0.0	0.57
69	67	68.62	-1.23	-170.77	0.05	0.0	-0.67
69	68	50.47	45.40	-88.17	-0.04	0.0	0.57
69	69	72.37	-1.23	-174.12	0.05	0.0	-0.68

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
69	70	46.43	48.39	-83.40	-0.04	0.0	0.61
69	71	68.56	-1.17	-170.00	0.04	0.0	-0.63
69	72	49.63	51.92	-82.78	-0.05	0.0	0.66
69	73	72.75	-1.24	-176.94	0.05	0.0	-0.69
69	74	46.01	49.17	-80.42	-0.04	0.0	0.62
69	75	69.05	-1.30	-174.36	0.05	0.0	-0.72
69	76	49.84	49.05	-83.99	-0.04	0.0	0.62
69	77	72.80	-1.30	-177.71	0.05	0.0	-0.73
69	78	45.80	52.04	-79.22	-0.05	0.0	0.66
69	79	68.99	-1.24	-173.59	0.05	0.0	-0.68
104	1	-127.06	-0.26	-264.62	3.44e-03	0.0	0.05
104	2	-103.82	-0.18	-214.39	2.84e-03	0.0	0.04
104	3	-129.86	-0.09	-176.74	3.83e-03	0.0	0.06
104	4	-106.61	-0.07	-126.45	2.93e-03	0.0	0.04
104	5	-100.21	-0.20	-174.46	2.38e-03	0.0	0.03
104	6	-76.96	-0.15	-124.20	1.77e-03	0.0	0.03
104	7	-80.49	-24.05	-163.12	0.03	0.0	0.38
104	8	-57.35	-23.45	-113.33	0.02	0.0	0.34
104	9	-90.00	1.42	-225.24	-0.06	0.0	-0.80
104	10	-66.86	1.39	-175.63	-0.05	0.0	-0.78
104	11	-91.70	-0.19	-191.76	2.47e-03	0.0	0.04
104	12	-93.57	-0.06	-133.18	2.84e-03	0.0	0.04
104	13	-73.80	-0.14	-131.65	1.77e-03	0.0	0.03
104	14	-60.63	-16.20	-123.96	0.02	0.0	0.26
104	15	-66.96	0.95	-165.32	-0.04	0.0	-0.54
104	16	-43.29	0.51	-140.50	-0.02	0.0	-0.24
104	17	-33.84	-54.20	-82.41	0.05	0.0	0.74
104	18	-89.00	1.19	-180.90	-0.05	0.0	-0.69
104	19	-81.41	-22.64	-129.41	0.02	0.0	0.32
104	20	-42.98	0.46	-139.12	-0.01	0.0	-0.20
104	21	-34.29	-51.66	-84.18	0.05	0.0	0.70
104	22	-88.69	1.14	-179.52	-0.05	0.0	-0.65
104	23	-81.87	-20.08	-131.20	0.02	0.0	0.29
104	24	-48.75	1.16	-151.02	-0.05	0.0	-0.67
104	25	-41.10	-23.68	-97.94	0.02	0.0	0.30
104	26	-83.53	0.55	-170.36	-0.02	0.0	-0.26
104	27	-74.14	-53.17	-113.86	0.05	0.0	0.76
104	28	-48.44	1.11	-149.64	-0.04	0.0	-0.63
104	29	-41.55	-21.14	-99.71	0.02	0.0	0.26
104	30	-83.23	0.50	-169.01	-0.02	0.0	-0.22
104	31	-74.59	-50.63	-115.63	0.05	0.0	0.72
104	32	-66.81	2.57	-212.55	-0.10	0.0	-1.40
104	33	-38.05	-129.08	-27.83	0.11	0.0	1.61
104	34	-80.53	2.78	-224.68	-0.11	0.0	-1.53
104	35	-52.32	-119.61	-41.93	0.10	0.0	1.49
104	36	-68.45	2.77	-215.70	-0.11	0.0	-1.53
104	37	-40.23	-119.92	-32.49	0.10	0.0	1.48
104	38	-78.89	2.58	-221.52	-0.10	0.0	-1.40
104	39	-50.14	-128.77	-37.26	0.11	0.0	1.62
104	40	-65.79	2.41	-207.96	-0.09	0.0	-1.28
104	41	-39.55	-120.61	-33.73	0.10	0.0	1.49
104	42	-79.51	2.61	-220.08	-0.10	0.0	-1.41
104	43	-53.83	-111.14	-47.83	0.09	0.0	1.37
104	44	-67.43	2.60	-211.11	-0.10	0.0	-1.41
104	45	-41.74	-111.45	-38.39	0.09	0.0	1.36
104	46	-77.87	2.42	-216.93	-0.09	0.0	-1.29
104	47	-51.64	-120.29	-43.16	0.10	0.0	1.50
104	48	-57.25	0.29	-140.21	-0.01	0.0	-0.15
104	49	-53.36	-22.11	-116.16	0.02	0.0	0.34
104	50	-71.32	0.51	-152.64	-0.02	0.0	-0.29
104	51	-68.05	-12.16	-130.82	0.01	0.0	0.21
104	52	-57.13	0.27	-139.68	-9.08e-03	0.0	-0.13
104	53	-53.55	-21.04	-116.90	0.02	0.0	0.33
104	54	-71.19	0.49	-152.06	-0.02	0.0	-0.27
104	55	-68.25	-11.04	-131.62	0.01	0.0	0.19
104	56	-58.89	0.50	-142.88	-0.02	0.0	-0.28
104	57	-55.59	-12.52	-120.56	0.01	0.0	0.20
104	58	-69.69	0.30	-150.01	-0.01	0.0	-0.15

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
104	59	-65.80	-21.81	-126.36	0.02	0.0	0.35
104	60	-58.76	0.48	-142.31	-0.02	0.0	-0.27
104	61	-55.79	-11.40	-121.35	0.01	0.0	0.19
104	62	-69.57	0.28	-149.49	-9.45e-03	0.0	-0.14
104	63	-65.99	-20.75	-127.10	0.02	0.0	0.33
104	64	-65.36	1.14	-169.09	-0.04	0.0	-0.62
104	65	-53.21	-55.16	-91.10	0.05	0.0	0.73
104	66	-69.59	1.21	-172.85	-0.05	0.0	-0.66
104	67	-57.61	-52.20	-95.47	0.05	0.0	0.69
104	68	-65.86	1.20	-169.93	-0.05	0.0	-0.66
104	69	-53.88	-52.29	-92.41	0.05	0.0	0.69
104	70	-69.09	1.15	-172.01	-0.04	0.0	-0.62
104	71	-56.95	-55.06	-94.16	0.05	0.0	0.73
104	72	-64.93	1.07	-167.14	-0.04	0.0	-0.57
104	73	-53.85	-51.56	-93.60	0.05	0.0	0.68
104	74	-69.16	1.14	-170.90	-0.04	0.0	-0.61
104	75	-58.25	-48.61	-97.97	0.04	0.0	0.64
104	76	-65.43	1.13	-167.98	-0.04	0.0	-0.61
104	77	-54.52	-48.70	-94.91	0.04	0.0	0.64
104	78	-68.66	1.08	-170.06	-0.04	0.0	-0.57
104	79	-57.59	-51.47	-96.66	0.05	0.0	0.68
106	1	127.07	-0.20	-264.66	3.42e-03	0.0	-0.05
106	2	103.82	-0.19	-214.37	2.81e-03	0.0	-0.04
106	3	57.46	-0.06	-183.49	2.84e-03	0.0	-0.04
106	4	34.21	-0.04	-133.21	1.97e-03	0.0	-0.03
106	5	124.35	-0.15	-172.25	2.66e-03	0.0	-0.04
106	6	101.10	-0.12	-121.98	2.06e-03	0.0	-0.03
106	7	80.50	-24.01	-163.13	0.03	0.0	-0.38
106	8	57.35	-23.43	-113.34	0.02	0.0	-0.34
106	9	90.00	1.42	-225.26	-0.06	0.0	0.80
106	10	66.87	1.39	-175.64	-0.05	0.0	0.79
106	11	91.71	-0.15	-191.79	2.45e-03	0.0	-0.04
106	12	45.31	-0.05	-137.68	2.19e-03	0.0	-0.03
106	13	89.90	-0.11	-130.18	1.95e-03	0.0	-0.03
106	14	60.64	-16.18	-123.97	0.02	0.0	-0.26
106	15	66.97	0.95	-165.33	-0.04	0.0	0.54
106	16	88.70	1.14	-179.53	-0.05	0.0	0.65
106	17	81.87	-20.06	-131.21	0.02	0.0	-0.29
106	18	42.99	0.46	-139.13	-0.01	0.0	0.20
106	19	34.30	-51.64	-84.19	0.05	0.0	-0.70
106	20	89.00	1.19	-180.91	-0.05	0.0	0.69
106	21	81.41	-22.62	-129.42	0.02	0.0	-0.32
106	22	43.29	0.51	-140.51	-0.02	0.0	0.24
106	23	33.85	-54.18	-82.43	0.05	0.0	-0.74
106	24	83.23	0.50	-169.01	-0.02	0.0	0.22
106	25	74.60	-50.60	-115.64	0.05	0.0	-0.72
106	26	48.45	1.11	-149.66	-0.04	0.0	0.63
106	27	41.56	-21.12	-99.73	0.02	0.0	-0.26
106	28	83.54	0.55	-170.36	-0.02	0.0	0.26
106	29	74.15	-53.14	-113.87	0.05	0.0	-0.76
106	30	48.75	1.16	-151.03	-0.05	0.0	0.67
106	31	41.11	-23.66	-97.96	0.02	0.0	-0.30
106	32	79.51	2.61	-220.09	-0.10	0.0	1.41
106	33	53.83	-111.12	-47.84	0.09	0.0	-1.37
106	34	65.80	2.41	-207.97	-0.09	0.0	1.28
106	35	39.56	-120.58	-33.74	0.10	0.0	-1.49
106	36	77.88	2.42	-216.94	-0.09	0.0	1.29
106	37	51.65	-120.27	-43.17	0.10	0.0	-1.50
106	38	67.44	2.60	-211.12	-0.10	0.0	1.41
106	39	41.74	-111.43	-38.41	0.09	0.0	-1.36
106	40	80.53	2.78	-224.69	-0.11	0.0	1.53
106	41	52.33	-119.59	-41.94	0.10	0.0	-1.49
106	42	66.82	2.57	-212.56	-0.10	0.0	1.40
106	43	38.06	-129.05	-27.84	0.11	0.0	-1.61
106	44	78.89	2.58	-221.53	-0.10	0.0	1.40
106	45	50.14	-128.74	-37.27	0.11	0.0	-1.62
106	46	68.45	2.77	-215.71	-0.11	0.0	1.53
106	47	40.24	-119.90	-32.51	0.10	0.0	-1.48

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
106	48	71.19	0.49	-152.07	-0.02	0.0	0.27
106	49	68.25	-11.01	-131.63	0.01	0.0	-0.19
106	50	57.14	0.27	-139.69	-9.10e-03	0.0	0.13
106	51	53.55	-21.02	-116.91	0.02	0.0	-0.33
106	52	71.32	0.51	-152.65	-0.02	0.0	0.29
106	53	68.05	-12.14	-130.84	0.01	0.0	-0.21
106	54	57.26	0.30	-140.22	-0.01	0.0	0.15
106	55	53.36	-22.08	-116.17	0.02	0.0	-0.34
106	56	69.57	0.28	-149.49	-9.47e-03	0.0	0.14
106	57	66.00	-20.72	-127.11	0.02	0.0	-0.33
106	58	58.77	0.48	-142.32	-0.02	0.0	0.27
106	59	55.80	-11.38	-121.37	0.01	0.0	-0.19
106	60	69.69	0.30	-150.02	-0.01	0.0	0.15
106	61	65.81	-21.79	-126.37	0.02	0.0	-0.35
106	62	58.90	0.50	-142.90	-0.02	0.0	0.28
106	63	55.60	-12.50	-120.58	0.01	0.0	-0.20
106	64	69.16	1.14	-170.91	-0.04	0.0	0.61
106	65	58.26	-48.58	-97.98	0.04	0.0	-0.64
106	66	64.94	1.07	-167.15	-0.04	0.0	0.57
106	67	53.86	-51.54	-93.61	0.05	0.0	-0.68
106	68	68.67	1.08	-170.07	-0.04	0.0	0.57
106	69	57.59	-51.45	-96.68	0.05	0.0	-0.68
106	70	65.43	1.13	-167.99	-0.04	0.0	0.61
106	71	54.52	-48.67	-94.92	0.04	0.0	-0.64
106	72	69.59	1.21	-172.86	-0.05	0.0	0.66
106	73	57.62	-52.18	-95.48	0.05	0.0	-0.69
106	74	65.37	1.14	-169.10	-0.04	0.0	0.62
106	75	53.22	-55.13	-91.11	0.05	0.0	-0.73
106	76	69.10	1.15	-172.02	-0.04	0.0	0.62
106	77	56.95	-55.04	-94.18	0.05	0.0	-0.73
106	78	65.87	1.21	-169.94	-0.05	0.0	0.66
106	79	53.89	-52.27	-92.42	0.05	0.0	-0.69
141	1	-129.46	-0.02	-268.49	1.33e-03	0.0	0.02
141	2	-105.79	-0.02	-217.58	1.10e-03	0.0	0.02
141	3	-131.94	-0.05	-180.11	2.15e-03	0.0	0.03
141	4	-108.26	-0.04	-129.20	1.63e-03	0.0	0.02
141	5	-101.90	-0.02	-177.04	8.70e-04	0.0	0.01
141	6	-78.23	-0.01	-126.13	6.34e-04	0.0	9.11e-03
141	7	-85.84	-0.64	-185.31	0.03	0.0	0.36
141	8	-62.18	-0.59	-134.43	0.02	0.0	0.33
141	9	-87.36	1.52	-192.21	-0.06	0.0	-0.85
141	10	-63.73	1.48	-141.44	-0.06	0.0	-0.83
141	11	-93.42	-0.02	-194.48	9.45e-04	0.0	0.01
141	12	-95.07	-0.04	-135.56	1.61e-03	0.0	0.02
141	13	-75.05	-0.01	-133.52	6.51e-04	0.0	9.37e-03
141	14	-64.34	-0.44	-139.02	0.02	0.0	0.25
141	15	-65.34	1.02	-143.59	-0.04	0.0	-0.57
141	16	-44.23	0.56	-130.69	-0.02	0.0	-0.26
141	17	-44.32	-1.27	-129.71	0.05	0.0	0.73
141	18	-86.47	1.27	-154.92	-0.05	0.0	-0.73
141	19	-85.14	-0.63	-150.02	0.02	0.0	0.31
141	20	-44.15	0.51	-130.60	-0.02	0.0	-0.23
141	21	-44.29	-1.22	-129.47	0.05	0.0	0.69
141	22	-86.39	1.22	-154.82	-0.05	0.0	-0.69
141	23	-85.10	-0.58	-149.78	0.02	0.0	0.27
141	24	-46.46	1.24	-134.25	-0.05	0.0	-0.71
141	25	-45.22	-0.60	-129.33	0.02	0.0	0.29
141	26	-84.25	0.59	-151.35	-0.02	0.0	-0.28
141	27	-84.24	-1.30	-150.40	0.05	0.0	0.75
141	28	-46.38	1.19	-134.15	-0.05	0.0	-0.67
141	29	-45.18	-0.55	-129.09	0.02	0.0	0.25
141	30	-84.17	0.54	-151.26	-0.02	0.0	-0.25
141	31	-84.20	-1.25	-150.16	0.05	0.0	0.72
141	32	-61.76	2.74	-148.66	-0.10	0.0	-1.47
141	33	-59.67	-2.95	-138.77	0.11	0.0	1.62
141	34	-74.43	2.95	-155.93	-0.11	0.0	-1.61
141	35	-71.92	-2.76	-144.85	0.10	0.0	1.49
141	36	-62.42	2.94	-149.73	-0.11	0.0	-1.60

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
141	37	-59.94	-2.75	-138.65	0.10	0.0	1.49
141	38	-73.76	2.75	-154.86	-0.10	0.0	-1.47
141	39	-71.65	-2.96	-144.97	0.11	0.0	1.63
141	40	-61.49	2.56	-148.34	-0.09	0.0	-1.34
141	41	-59.56	-2.78	-137.97	0.10	0.0	1.50
141	42	-74.16	2.78	-155.61	-0.10	0.0	-1.48
141	43	-71.81	-2.59	-144.06	0.10	0.0	1.37
141	44	-62.16	2.77	-149.41	-0.10	0.0	-1.48
141	45	-59.83	-2.58	-137.85	0.09	0.0	1.36
141	46	-73.50	2.57	-154.54	-0.09	0.0	-1.35
141	47	-71.54	-2.79	-144.17	0.10	0.0	1.50
141	48	-58.13	0.33	-136.50	-0.01	0.0	-0.16
141	49	-58.13	-0.58	-136.02	0.02	0.0	0.33
141	50	-71.23	0.55	-144.44	-0.02	0.0	-0.31
141	51	-70.80	-0.38	-142.77	0.01	0.0	0.20
141	52	-58.10	0.31	-136.47	-0.01	0.0	-0.15
141	53	-58.12	-0.56	-135.92	0.02	0.0	0.32
141	54	-71.20	0.53	-144.40	-0.02	0.0	-0.29
141	55	-70.79	-0.35	-142.67	0.01	0.0	0.18
141	56	-58.83	0.54	-137.56	-0.02	0.0	-0.30
141	57	-58.42	-0.37	-135.87	0.01	0.0	0.19
141	58	-70.54	0.34	-143.40	-0.01	0.0	-0.17
141	59	-70.51	-0.59	-142.91	0.02	0.0	0.34
141	60	-58.79	0.52	-137.52	-0.02	0.0	-0.29
141	61	-58.41	-0.34	-135.78	0.01	0.0	0.18
141	62	-70.51	0.31	-143.37	-0.01	0.0	-0.15
141	63	-70.50	-0.57	-142.81	0.02	0.0	0.32
141	64	-63.88	1.23	-143.29	-0.05	0.0	-0.66
141	65	-63.02	-1.32	-139.20	0.05	0.0	0.72
141	66	-67.81	1.29	-145.68	-0.05	0.0	-0.70
141	67	-66.82	-1.26	-141.22	0.05	0.0	0.68
141	68	-64.08	1.29	-143.62	-0.05	0.0	-0.70
141	69	-63.10	-1.26	-139.16	0.05	0.0	0.68
141	70	-67.60	1.23	-145.36	-0.05	0.0	-0.66
141	71	-66.73	-1.32	-141.27	0.05	0.0	0.73
141	72	-63.76	1.15	-143.16	-0.04	0.0	-0.61
141	73	-62.97	-1.25	-138.86	0.05	0.0	0.67
141	74	-67.69	1.22	-145.54	-0.05	0.0	-0.65
141	75	-66.77	-1.19	-140.88	0.04	0.0	0.63
141	76	-63.97	1.22	-143.48	-0.05	0.0	-0.65
141	77	-63.06	-1.18	-138.82	0.04	0.0	0.63
141	78	-67.48	1.15	-145.22	-0.04	0.0	-0.61
141	79	-66.69	-1.25	-140.93	0.05	0.0	0.67
143	1	129.47	-0.02	-268.50	1.30e-03	0.0	-0.02
143	2	105.79	-0.02	-217.58	1.07e-03	0.0	-0.02
143	3	58.55	-0.04	-184.68	1.65e-03	0.0	-0.02
143	4	34.87	-0.03	-133.76	1.16e-03	0.0	-0.02
143	5	126.38	-0.02	-175.53	9.78e-04	0.0	-0.01
143	6	102.70	-0.01	-124.62	7.61e-04	0.0	-0.01
143	7	85.85	-0.64	-185.32	0.03	0.0	-0.36
143	8	62.19	-0.59	-134.43	0.02	0.0	-0.33
143	9	87.37	1.52	-192.22	-0.06	0.0	0.85
143	10	63.74	1.49	-141.44	-0.06	0.0	0.83
143	11	93.43	-0.02	-194.49	9.29e-04	0.0	-0.01
143	12	46.15	-0.03	-138.61	1.28e-03	0.0	-0.02
143	13	91.37	-0.01	-132.51	7.22e-04	0.0	-0.01
143	14	64.34	-0.44	-139.03	0.02	0.0	-0.25
143	15	65.35	1.02	-143.60	-0.04	0.0	0.57
143	16	86.40	1.22	-154.83	-0.05	0.0	0.69
143	17	85.11	-0.58	-149.79	0.02	0.0	-0.27
143	18	44.16	0.51	-130.61	-0.02	0.0	0.23
143	19	44.29	-1.22	-129.48	0.05	0.0	-0.69
143	20	86.48	1.27	-154.92	-0.05	0.0	0.73
143	21	85.14	-0.63	-150.02	0.02	0.0	-0.31
143	22	44.24	0.56	-130.70	-0.02	0.0	0.26
143	23	44.33	-1.27	-129.72	0.05	0.0	-0.73
143	24	84.18	0.54	-151.26	-0.02	0.0	0.25
143	25	84.21	-1.25	-150.16	0.05	0.0	-0.72

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
143	26	46.38	1.19	-134.17	-0.05	0.0	0.67
143	27	45.19	-0.55	-129.10	0.02	0.0	-0.25
143	28	84.26	0.59	-151.35	-0.02	0.0	0.28
143	29	84.24	-1.30	-150.39	0.05	0.0	-0.75
143	30	46.46	1.24	-134.27	-0.05	0.0	0.71
143	31	45.22	-0.60	-129.34	0.02	0.0	-0.29
143	32	74.17	2.78	-155.62	-0.10	0.0	1.48
143	33	71.81	-2.59	-144.06	0.10	0.0	-1.37
143	34	61.50	2.56	-148.35	-0.09	0.0	1.34
143	35	59.57	-2.78	-137.97	0.10	0.0	-1.50
143	36	73.50	2.57	-154.54	-0.09	0.0	1.35
143	37	71.54	-2.79	-144.17	0.10	0.0	-1.50
143	38	62.17	2.77	-149.42	-0.10	0.0	1.48
143	39	59.84	-2.58	-137.86	0.09	0.0	-1.36
143	40	74.44	2.95	-155.94	-0.11	0.0	1.61
143	41	71.92	-2.76	-144.86	0.10	0.0	-1.49
143	42	61.77	2.74	-148.67	-0.10	0.0	1.47
143	43	59.68	-2.95	-138.77	0.11	0.0	-1.62
143	44	73.77	2.75	-154.87	-0.10	0.0	1.47
143	45	71.65	-2.96	-144.97	0.11	0.0	-1.62
143	46	62.43	2.94	-149.74	-0.11	0.0	1.60
143	47	59.95	-2.75	-138.66	0.10	0.0	-1.49
143	48	71.21	0.53	-144.41	-0.02	0.0	0.30
143	49	70.80	-0.35	-142.68	0.01	0.0	-0.18
143	50	58.11	0.31	-136.48	-0.01	0.0	0.15
143	51	58.13	-0.56	-135.93	0.02	0.0	-0.32
143	52	71.24	0.55	-144.45	-0.02	0.0	0.31
143	53	70.81	-0.38	-142.77	0.01	0.0	-0.20
143	54	58.14	0.33	-136.51	-0.01	0.0	0.17
143	55	58.14	-0.58	-136.03	0.02	0.0	-0.33
143	56	70.52	0.31	-143.37	-0.01	0.0	0.15
143	57	70.51	-0.57	-142.81	0.02	0.0	-0.32
143	58	58.80	0.52	-137.53	-0.02	0.0	0.29
143	59	58.42	-0.34	-135.79	0.01	0.0	-0.18
143	60	70.55	0.34	-143.40	-0.01	0.0	0.17
143	61	70.52	-0.59	-142.91	0.02	0.0	-0.34
143	62	58.84	0.54	-137.57	-0.02	0.0	0.30
143	63	58.43	-0.37	-135.89	0.01	0.0	-0.19
143	64	67.70	1.22	-145.55	-0.05	0.0	0.65
143	65	66.78	-1.19	-140.89	0.04	0.0	-0.63
143	66	63.77	1.15	-143.17	-0.04	0.0	0.61
143	67	62.98	-1.25	-138.87	0.05	0.0	-0.67
143	68	67.49	1.16	-145.23	-0.04	0.0	0.61
143	69	66.69	-1.25	-140.93	0.05	0.0	-0.67
143	70	63.98	1.22	-143.49	-0.05	0.0	0.65
143	71	63.06	-1.18	-138.82	0.04	0.0	-0.63
143	72	67.81	1.29	-145.69	-0.05	0.0	0.70
143	73	66.82	-1.26	-141.23	0.05	0.0	-0.68
143	74	63.88	1.23	-143.30	-0.05	0.0	0.66
143	75	63.03	-1.32	-139.21	0.05	0.0	-0.72
143	76	67.60	1.23	-145.36	-0.05	0.0	0.66
143	77	66.74	-1.32	-141.27	0.05	0.0	-0.73
143	78	64.09	1.29	-143.63	-0.05	0.0	0.70
143	79	63.11	-1.26	-139.16	0.05	0.0	-0.68
178	1	-130.18	0.02	-269.68	-7.81e-04	0.0	-0.01
178	2	-106.38	0.02	-218.56	-6.37e-04	0.0	-9.17e-03
178	3	-132.55	-0.01	-181.15	5.56e-04	0.0	8.00e-03
178	4	-108.74	-9.91e-03	-130.02	4.04e-04	0.0	5.81e-03
178	5	-102.40	0.02	-177.83	-5.88e-04	0.0	-8.46e-03
178	6	-78.59	0.01	-126.70	-4.57e-04	0.0	-6.58e-03
178	7	-86.14	-0.61	-186.10	0.02	0.0	0.34
178	8	-62.35	-0.57	-135.02	0.02	0.0	0.32
178	9	-86.88	1.54	-187.66	-0.06	0.0	-0.86
178	10	-63.09	1.50	-136.58	-0.06	0.0	-0.84
178	11	-93.94	0.01	-195.33	-5.67e-04	0.0	-8.15e-03
178	12	-95.51	-0.01	-136.31	4.39e-04	0.0	6.31e-03
178	13	-75.41	0.01	-134.09	-4.29e-04	0.0	-6.17e-03
178	14	-64.57	-0.42	-139.59	0.02	0.0	0.24

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
178	15	-65.06	1.04	-140.63	-0.04	0.0	-0.58
178	16	-44.88	0.58	-129.77	-0.02	0.0	-0.28
178	17	-45.26	-1.26	-130.60	0.05	0.0	0.72
178	18	-85.20	1.29	-151.33	-0.05	0.0	-0.74
178	19	-84.82	-0.61	-150.50	0.02	0.0	0.30
178	20	-44.85	0.53	-129.70	-0.02	0.0	-0.24
178	21	-45.23	-1.21	-130.53	0.05	0.0	0.68
178	22	-85.16	1.24	-151.26	-0.05	0.0	-0.70
178	23	-84.79	-0.56	-150.43	0.02	0.0	0.26
178	24	-45.26	1.26	-130.60	-0.05	0.0	-0.72
178	25	-44.88	-0.58	-129.77	0.02	0.0	0.28
178	26	-84.82	0.61	-150.50	-0.02	0.0	-0.30
178	27	-85.20	-1.29	-151.33	0.05	0.0	0.74
178	28	-45.23	1.20	-130.53	-0.05	0.0	-0.68
178	29	-44.85	-0.53	-129.70	0.02	0.0	0.24
178	30	-84.79	0.56	-150.43	-0.02	0.0	-0.26
178	31	-85.16	-1.24	-151.26	0.05	0.0	0.70
178	32	-60.07	2.75	-139.78	-0.10	0.0	-1.48
178	33	-60.19	-2.95	-140.03	0.11	0.0	1.61
178	34	-72.17	2.96	-146.25	-0.11	0.0	-1.62
178	35	-72.05	-2.76	-145.99	0.10	0.0	1.49
178	36	-60.19	2.95	-140.03	-0.11	0.0	-1.61
178	37	-60.07	-2.75	-139.78	0.10	0.0	1.48
178	38	-72.05	2.76	-145.99	-0.10	0.0	-1.49
178	39	-72.17	-2.96	-146.25	0.11	0.0	1.62
178	40	-59.97	2.57	-139.54	-0.09	0.0	-1.36
178	41	-60.08	-2.78	-139.79	0.10	0.0	1.49
178	42	-72.06	2.79	-146.01	-0.10	0.0	-1.50
178	43	-71.95	-2.58	-145.76	0.09	0.0	1.36
178	44	-60.08	2.78	-139.79	-0.10	0.0	-1.49
178	45	-59.97	-2.57	-139.54	0.09	0.0	1.36
178	46	-71.95	2.58	-145.76	-0.09	0.0	-1.36
178	47	-72.06	-2.79	-146.01	0.10	0.0	1.50
178	48	-58.52	0.35	-136.34	-0.01	0.0	-0.18
178	49	-58.63	-0.56	-136.59	0.02	0.0	0.32
178	50	-71.04	0.57	-143.58	-0.02	0.0	-0.32
178	51	-70.93	-0.36	-143.34	0.01	0.0	0.18
178	52	-58.51	0.32	-136.31	-0.01	0.0	-0.16
178	53	-58.62	-0.54	-136.56	0.02	0.0	0.30
178	54	-71.02	0.55	-143.55	-0.02	0.0	-0.31
178	55	-70.91	-0.33	-143.31	0.01	0.0	0.17
178	56	-58.63	0.56	-136.59	-0.02	0.0	-0.32
178	57	-58.52	-0.35	-136.34	0.01	0.0	0.18
178	58	-70.93	0.36	-143.34	-0.01	0.0	-0.18
178	59	-71.04	-0.57	-143.58	0.02	0.0	0.32
178	60	-58.62	0.54	-136.56	-0.02	0.0	-0.30
178	61	-58.51	-0.33	-136.31	0.01	0.0	0.16
178	62	-70.91	0.33	-143.31	-0.01	0.0	-0.17
178	63	-71.02	-0.55	-143.55	0.02	0.0	0.31
178	64	-63.35	1.24	-139.90	-0.05	0.0	-0.67
178	65	-63.39	-1.31	-139.98	0.05	0.0	0.71
178	66	-67.11	1.31	-142.08	-0.05	0.0	-0.71
178	67	-67.08	-1.24	-142.00	0.05	0.0	0.67
178	68	-63.39	1.30	-139.98	-0.05	0.0	-0.71
178	69	-63.35	-1.24	-139.90	0.05	0.0	0.67
178	70	-67.08	1.24	-142.00	-0.05	0.0	-0.67
178	71	-67.11	-1.31	-142.08	0.05	0.0	0.72
178	72	-63.31	1.17	-139.80	-0.04	0.0	-0.62
178	73	-63.34	-1.23	-139.88	0.05	0.0	0.66
178	74	-67.07	1.23	-141.98	-0.05	0.0	-0.66
178	75	-67.03	-1.17	-141.90	0.04	0.0	0.62
178	76	-63.34	1.23	-139.88	-0.05	0.0	-0.66
178	77	-63.31	-1.17	-139.80	0.04	0.0	0.62
178	78	-67.03	1.17	-141.90	-0.04	0.0	-0.62
178	79	-67.07	-1.24	-141.98	0.05	0.0	0.66
180	1	130.20	0.02	-269.70	-8.09e-04	0.0	0.01
180	2	106.38	0.02	-218.56	-6.68e-04	0.0	9.61e-03
180	3	58.90	-0.01	-185.18	4.62e-04	0.0	-6.65e-03

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
180	4	35.09	-8.52e-03	-134.04	3.39e-04	0.0	-4.88e-03
180	5	126.96	0.02	-176.50	-6.19e-04	0.0	8.91e-03
180	6	103.15	0.01	-125.37	-4.68e-04	0.0	6.74e-03
180	7	86.15	-0.61	-186.11	0.02	0.0	-0.34
180	8	62.36	-0.57	-135.03	0.02	0.0	-0.32
180	9	86.89	1.54	-187.68	-0.06	0.0	0.86
180	10	63.10	1.50	-136.59	-0.06	0.0	0.84
180	11	93.94	0.02	-195.34	-5.84e-04	0.0	8.40e-03
180	12	46.41	-9.57e-03	-139.00	3.83e-04	0.0	-5.52e-03
180	13	91.79	0.01	-133.21	-4.51e-04	0.0	6.49e-03
180	14	64.57	-0.42	-139.60	0.02	0.0	-0.24
180	15	65.07	1.04	-140.64	-0.04	0.0	0.58
180	16	85.17	1.24	-151.26	-0.05	0.0	0.70
180	17	84.80	-0.56	-150.44	0.02	0.0	-0.26
180	18	44.86	0.53	-129.72	-0.02	0.0	0.24
180	19	45.24	-1.20	-130.54	0.05	0.0	-0.68
180	20	85.20	1.29	-151.34	-0.05	0.0	0.74
180	21	84.83	-0.61	-150.51	0.02	0.0	-0.30
180	22	44.89	0.58	-129.79	-0.02	0.0	0.28
180	23	45.27	-1.26	-130.62	0.05	0.0	-0.72
180	24	84.80	0.56	-150.44	-0.02	0.0	0.26
180	25	85.17	-1.24	-151.26	0.05	0.0	-0.70
180	26	45.24	1.21	-130.55	-0.05	0.0	0.68
180	27	44.86	-0.53	-129.72	0.02	0.0	-0.24
180	28	84.83	0.61	-150.51	-0.02	0.0	0.30
180	29	85.20	-1.29	-151.33	0.05	0.0	-0.74
180	30	45.27	1.26	-130.62	-0.05	0.0	0.72
180	31	44.89	-0.58	-129.79	0.02	0.0	-0.28
180	32	72.07	2.79	-146.02	-0.10	0.0	1.50
180	33	71.95	-2.58	-145.76	0.09	0.0	-1.36
180	34	59.97	2.57	-139.55	-0.09	0.0	1.36
180	35	60.09	-2.78	-139.80	0.10	0.0	-1.49
180	36	71.95	2.58	-145.77	-0.09	0.0	1.36
180	37	72.07	-2.79	-146.01	0.10	0.0	-1.50
180	38	60.09	2.78	-139.80	-0.10	0.0	1.49
180	39	59.97	-2.57	-139.55	0.09	0.0	-1.36
180	40	72.18	2.96	-146.26	-0.11	0.0	1.62
180	41	72.06	-2.76	-146.00	0.10	0.0	-1.49
180	42	60.08	2.75	-139.79	-0.10	0.0	1.48
180	43	60.20	-2.95	-140.04	0.11	0.0	-1.61
180	44	72.06	2.76	-146.00	-0.10	0.0	1.49
180	45	72.18	-2.96	-146.25	0.11	0.0	-1.62
180	46	60.20	2.95	-140.04	-0.11	0.0	1.61
180	47	60.08	-2.75	-139.79	0.10	0.0	-1.48
180	48	71.03	0.55	-143.56	-0.02	0.0	0.31
180	49	70.92	-0.33	-143.32	0.01	0.0	-0.17
180	50	58.51	0.33	-136.33	-0.01	0.0	0.16
180	51	58.63	-0.54	-136.57	0.02	0.0	-0.30
180	52	71.05	0.57	-143.59	-0.02	0.0	0.32
180	53	70.93	-0.36	-143.34	0.01	0.0	-0.18
180	54	58.53	0.35	-136.35	-0.01	0.0	0.18
180	55	58.64	-0.56	-136.60	0.02	0.0	-0.32
180	56	70.92	0.33	-143.32	-0.01	0.0	0.17
180	57	71.03	-0.55	-143.56	0.02	0.0	-0.31
180	58	58.63	0.54	-136.57	-0.02	0.0	0.30
180	59	58.51	-0.33	-136.33	0.01	0.0	-0.16
180	60	70.93	0.36	-143.34	-0.01	0.0	0.18
180	61	71.05	-0.57	-143.59	0.02	0.0	-0.32
180	62	58.64	0.56	-136.60	-0.02	0.0	0.32
180	63	58.53	-0.35	-136.35	0.01	0.0	-0.18
180	64	67.07	1.23	-141.99	-0.05	0.0	0.66
180	65	67.04	-1.17	-141.91	0.04	0.0	-0.62
180	66	63.32	1.17	-139.82	-0.04	0.0	0.62
180	67	63.35	-1.23	-139.89	0.05	0.0	-0.66
180	68	67.04	1.17	-141.91	-0.04	0.0	0.62
180	69	67.07	-1.23	-141.99	0.05	0.0	-0.66
180	70	63.35	1.23	-139.89	-0.05	0.0	0.66
180	71	63.32	-1.17	-139.81	0.04	0.0	-0.62

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
180	72	67.12	1.31	-142.09	-0.05	0.0	0.72
180	73	67.08	-1.24	-142.01	0.05	0.0	-0.67
180	74	63.36	1.24	-139.92	-0.05	0.0	0.67
180	75	63.40	-1.31	-139.99	0.05	0.0	-0.71
180	76	67.08	1.24	-142.01	-0.05	0.0	0.67
180	77	67.12	-1.31	-142.09	0.05	0.0	-0.72
180	78	63.40	1.31	-139.99	-0.05	0.0	0.71
180	79	63.36	-1.24	-139.91	0.05	0.0	-0.67
215	1	-129.54	0.07	-268.62	-2.88e-03	0.0	-0.04
215	2	-105.83	0.05	-217.65	-2.38e-03	0.0	-0.03
215	3	-132.02	0.02	-180.24	-1.04e-03	0.0	-0.01
215	4	-108.31	0.02	-129.27	-8.22e-04	0.0	-0.01
215	5	-101.98	0.05	-177.17	-2.04e-03	0.0	-0.03
215	6	-78.27	0.03	-126.20	-1.55e-03	0.0	-0.02
215	7	-86.05	-0.59	-187.08	0.02	0.0	0.33
215	8	-62.38	-0.55	-136.25	0.02	0.0	0.31
215	9	-86.79	1.56	-186.55	-0.06	0.0	-0.88
215	10	-63.10	1.51	-135.61	-0.06	0.0	-0.85
215	11	-93.48	0.05	-194.57	-2.08e-03	0.0	-0.03
215	12	-95.13	0.01	-135.65	-7.31e-04	0.0	-0.01
215	13	-75.10	0.03	-133.60	-1.51e-03	0.0	-0.02
215	14	-64.47	-0.40	-140.17	0.02	0.0	0.22
215	15	-64.97	1.05	-139.85	-0.04	0.0	-0.59
215	16	-45.27	0.60	-129.41	-0.02	0.0	-0.29
215	17	-46.51	-1.24	-134.33	0.05	0.0	0.71
215	18	-84.29	1.30	-150.48	-0.05	0.0	-0.75
215	19	-84.30	-0.59	-151.44	0.02	0.0	0.28
215	20	-45.23	0.55	-129.17	-0.02	0.0	-0.25
215	21	-46.43	-1.19	-134.24	0.05	0.0	0.67
215	22	-84.26	1.25	-150.24	-0.05	0.0	-0.71
215	23	-84.22	-0.54	-151.34	0.02	0.0	0.25
215	24	-44.37	1.27	-129.80	-0.05	0.0	-0.73
215	25	-44.29	-0.56	-130.77	0.02	0.0	0.26
215	26	-85.19	0.63	-150.10	-0.02	0.0	-0.31
215	27	-86.53	-1.27	-155.00	0.05	0.0	0.73
215	28	-44.34	1.22	-129.56	-0.05	0.0	-0.69
215	29	-44.21	-0.51	-130.68	0.02	0.0	0.23
215	30	-85.16	0.58	-149.87	-0.02	0.0	-0.27
215	31	-86.45	-1.22	-154.90	0.05	0.0	0.69
215	32	-59.99	2.75	-138.73	-0.10	0.0	-1.49
215	33	-62.48	-2.94	-149.81	0.11	0.0	1.60
215	34	-71.70	2.96	-145.05	-0.11	0.0	-1.62
215	35	-73.81	-2.75	-154.94	0.10	0.0	1.47
215	36	-59.72	2.95	-138.85	-0.11	0.0	-1.62
215	37	-61.81	-2.74	-148.74	0.10	0.0	1.47
215	38	-71.97	2.76	-144.94	-0.10	0.0	-1.49
215	39	-74.48	-2.95	-156.02	0.11	0.0	1.61
215	40	-59.88	2.58	-137.93	-0.09	0.0	-1.36
215	41	-62.21	-2.77	-149.49	0.10	0.0	1.48
215	42	-71.59	2.79	-144.25	-0.10	0.0	-1.50
215	43	-73.55	-2.57	-154.62	0.09	0.0	1.35
215	44	-59.61	2.78	-138.05	-0.10	0.0	-1.50
215	45	-61.54	-2.56	-148.42	0.09	0.0	1.35
215	46	-71.86	2.59	-144.14	-0.10	0.0	-1.37
215	47	-74.21	-2.78	-155.69	0.10	0.0	1.48
215	48	-58.47	0.37	-135.96	-0.01	0.0	-0.19
215	49	-58.88	-0.54	-137.64	0.02	0.0	0.30
215	50	-70.56	0.59	-142.99	-0.02	0.0	-0.34
215	51	-70.60	-0.34	-143.48	0.01	0.0	0.17
215	52	-58.46	0.34	-135.86	-0.01	0.0	-0.18
215	53	-58.85	-0.52	-137.60	0.02	0.0	0.29
215	54	-70.55	0.57	-142.89	-0.02	0.0	-0.32
215	55	-70.56	-0.31	-143.45	0.01	0.0	0.15
215	56	-58.19	0.58	-136.10	-0.02	0.0	-0.33
215	57	-58.19	-0.33	-136.59	0.01	0.0	0.17
215	58	-70.85	0.38	-142.85	-0.01	0.0	-0.20
215	59	-71.28	-0.55	-144.53	0.02	0.0	0.31
215	60	-58.17	0.56	-136.00	-0.02	0.0	-0.32

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
215	61	-58.16	-0.31	-136.56	0.01	0.0	0.15
215	62	-70.84	0.35	-142.76	-0.01	0.0	-0.18
215	63	-71.25	-0.53	-144.49	0.02	0.0	0.30
215	64	-63.16	1.26	-139.24	-0.05	0.0	-0.68
215	65	-64.14	-1.29	-143.70	0.05	0.0	0.70
215	66	-66.78	1.32	-141.35	-0.05	0.0	-0.73
215	67	-67.65	-1.23	-145.44	0.05	0.0	0.66
215	68	-63.07	1.32	-139.28	-0.05	0.0	-0.72
215	69	-63.93	-1.23	-143.38	0.05	0.0	0.66
215	70	-66.87	1.26	-141.31	-0.05	0.0	-0.68
215	71	-67.86	-1.29	-145.76	0.05	0.0	0.70
215	72	-63.11	1.18	-138.90	-0.04	0.0	-0.63
215	73	-64.02	-1.22	-143.56	0.05	0.0	0.65
215	74	-66.74	1.25	-141.01	-0.05	0.0	-0.67
215	75	-67.54	-1.16	-145.30	0.04	0.0	0.61
215	76	-63.02	1.25	-138.95	-0.05	0.0	-0.67
215	77	-63.81	-1.15	-143.24	0.04	0.0	0.61
215	78	-66.82	1.19	-140.97	-0.04	0.0	-0.63
215	79	-67.74	-1.22	-145.63	0.05	0.0	0.65
217	1	129.55	0.07	-268.63	-2.91e-03	0.0	0.04
217	2	105.84	0.05	-217.66	-2.41e-03	0.0	0.03
217	3	58.63	0.01	-184.80	-7.20e-04	0.0	0.01
217	4	34.91	8.57e-03	-133.83	-4.76e-04	0.0	6.85e-03
217	5	126.46	0.05	-175.66	-2.21e-03	0.0	0.03
217	6	102.75	0.04	-124.69	-1.70e-03	0.0	0.02
217	7	86.06	-0.58	-187.09	0.02	0.0	-0.33
217	8	62.39	-0.55	-136.26	0.02	0.0	-0.31
217	9	86.80	1.56	-186.56	-0.06	0.0	0.88
217	10	63.10	1.51	-135.61	-0.06	0.0	0.85
217	11	93.48	0.05	-194.58	-2.10e-03	0.0	0.03
217	12	46.20	9.33e-03	-138.69	-5.13e-04	0.0	7.37e-03
217	13	91.42	0.04	-132.60	-1.62e-03	0.0	0.02
217	14	64.47	-0.40	-140.18	0.02	0.0	-0.22
217	15	64.98	1.05	-139.86	-0.04	0.0	0.59
217	16	84.26	1.25	-150.24	-0.05	0.0	0.72
217	17	84.23	-0.54	-151.34	0.02	0.0	-0.25
217	18	45.24	0.55	-129.19	-0.02	0.0	0.25
217	19	46.44	-1.19	-134.25	0.05	0.0	-0.67
217	20	84.30	1.30	-150.48	-0.05	0.0	0.75
217	21	84.31	-0.59	-151.43	0.02	0.0	-0.28
217	22	45.28	0.60	-129.43	-0.02	0.0	0.29
217	23	46.52	-1.24	-134.35	0.05	0.0	-0.71
217	24	85.16	0.58	-149.88	-0.02	0.0	0.27
217	25	86.45	-1.22	-154.91	0.05	0.0	-0.69
217	26	44.35	1.22	-129.57	-0.05	0.0	0.69
217	27	44.21	-0.51	-130.69	0.02	0.0	-0.23
217	28	85.20	0.63	-150.11	-0.02	0.0	0.31
217	29	86.53	-1.27	-155.01	0.05	0.0	-0.73
217	30	44.38	1.27	-129.81	-0.05	0.0	0.73
217	31	44.29	-0.56	-130.78	0.02	0.0	-0.26
217	32	71.60	2.79	-144.26	-0.10	0.0	1.50
217	33	73.55	-2.57	-154.62	0.09	0.0	-1.35
217	34	59.89	2.58	-137.95	-0.09	0.0	1.36
217	35	62.22	-2.77	-149.50	0.10	0.0	-1.48
217	36	71.87	2.59	-144.15	-0.10	0.0	1.37
217	37	74.22	-2.78	-155.70	0.10	0.0	-1.48
217	38	59.62	2.78	-138.06	-0.10	0.0	1.50
217	39	61.55	-2.56	-148.43	0.09	0.0	-1.34
217	40	71.71	2.96	-145.06	-0.11	0.0	1.62
217	41	73.82	-2.75	-154.95	0.10	0.0	-1.47
217	42	60.00	2.75	-138.75	-0.10	0.0	1.49
217	43	62.48	-2.94	-149.82	0.11	0.0	-1.60
217	44	71.98	2.76	-144.95	-0.10	0.0	1.49
217	45	74.49	-2.95	-156.02	0.11	0.0	-1.61
217	46	59.73	2.95	-138.86	-0.11	0.0	1.62
217	47	61.82	-2.74	-148.75	0.10	0.0	-1.47
217	48	70.56	0.57	-142.90	-0.02	0.0	0.32
217	49	70.57	-0.31	-143.46	0.01	0.0	-0.15

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
217	50	58.47	0.34	-135.88	-0.01	0.0	0.18
217	51	58.85	-0.52	-137.62	0.02	0.0	-0.29
217	52	70.57	0.59	-143.00	-0.02	0.0	0.34
217	53	70.60	-0.34	-143.49	0.01	0.0	-0.17
217	54	58.48	0.37	-135.97	-0.01	0.0	0.19
217	55	58.89	-0.54	-137.65	0.02	0.0	-0.30
217	56	70.85	0.35	-142.76	-0.01	0.0	0.18
217	57	71.26	-0.53	-144.49	0.02	0.0	-0.30
217	58	58.18	0.56	-136.01	-0.02	0.0	0.32
217	59	58.16	-0.31	-136.57	0.01	0.0	-0.15
217	60	70.86	0.38	-142.86	-0.01	0.0	0.20
217	61	71.29	-0.55	-144.53	0.02	0.0	-0.31
217	62	58.19	0.58	-136.11	-0.02	0.0	0.33
217	63	58.19	-0.33	-136.60	0.01	0.0	-0.17
217	64	66.75	1.25	-141.02	-0.05	0.0	0.67
217	65	67.54	-1.15	-145.31	0.04	0.0	-0.61
217	66	63.12	1.18	-138.91	-0.04	0.0	0.63
217	67	64.03	-1.22	-143.57	0.05	0.0	-0.65
217	68	66.83	1.19	-140.98	-0.04	0.0	0.63
217	69	67.75	-1.22	-145.63	0.05	0.0	-0.65
217	70	63.03	1.25	-138.96	-0.05	0.0	0.67
217	71	63.82	-1.15	-143.25	0.04	0.0	-0.61
217	72	66.79	1.32	-141.36	-0.05	0.0	0.73
217	73	67.66	-1.23	-145.45	0.05	0.0	-0.66
217	74	63.16	1.26	-139.25	-0.05	0.0	0.68
217	75	64.14	-1.29	-143.71	0.05	0.0	-0.70
217	76	66.88	1.26	-141.32	-0.05	0.0	0.68
217	77	67.86	-1.29	-145.77	0.05	0.0	-0.70
217	78	63.08	1.32	-139.30	-0.05	0.0	0.72
217	79	63.93	-1.23	-143.38	0.05	0.0	-0.66
252	1	-127.26	0.11	-265.07	-5.00e-03	0.0	-0.07
252	2	-103.93	0.09	-214.67	-4.12e-03	0.0	-0.06
252	3	-130.00	0.18	-176.89	-2.71e-03	0.0	-0.04
252	4	-106.68	0.14	-126.50	-2.12e-03	0.0	-0.03
252	5	-100.40	0.08	-174.87	-3.56e-03	0.0	-0.05
252	6	-77.07	0.06	-124.46	-2.68e-03	0.0	-0.04
252	7	-85.95	-0.53	-195.67	0.02	0.0	0.30
252	8	-62.74	-0.51	-145.93	0.02	0.0	0.28
252	9	-74.20	67.34	-127.49	-0.06	0.0	-0.89
252	10	-50.98	66.77	-77.57	-0.06	0.0	-0.85
252	11	-91.84	0.08	-192.07	-3.60e-03	0.0	-0.05
252	12	-93.67	0.13	-133.27	-1.96e-03	0.0	-0.03
252	13	-73.93	0.06	-131.93	-2.63e-03	0.0	-0.04
252	14	-64.27	-0.36	-145.61	0.01	0.0	0.20
252	15	-56.44	45.07	-100.20	-0.04	0.0	-0.60
252	16	-41.21	23.64	-98.14	-0.02	0.0	-0.30
252	17	-48.86	-1.16	-151.19	0.05	0.0	0.67
252	18	-74.25	53.13	-114.07	-0.05	0.0	-0.76
252	19	-83.64	-0.55	-170.54	0.02	0.0	0.26
252	20	-41.67	21.10	-99.91	-0.02	0.0	-0.26
252	21	-48.55	-1.11	-149.82	0.04	0.0	0.63
252	22	-74.70	50.59	-115.84	-0.05	0.0	-0.72
252	23	-83.34	-0.50	-169.19	0.02	0.0	0.23
252	24	-33.95	54.16	-82.62	-0.05	0.0	-0.74
252	25	-43.40	-0.51	-140.68	0.02	0.0	0.24
252	26	-81.52	22.61	-129.61	-0.02	0.0	-0.32
252	27	-89.11	-1.19	-181.07	0.05	0.0	0.69
252	28	-34.40	51.63	-84.38	-0.05	0.0	-0.70
252	29	-43.09	-0.46	-139.30	0.01	0.0	0.20
252	30	-81.98	20.04	-131.40	-0.02	0.0	-0.28
252	31	-88.80	-1.14	-179.69	0.05	0.0	0.65
252	32	-40.34	119.88	-32.69	-0.10	0.0	-1.48
252	33	-68.56	-2.77	-215.88	0.11	0.0	1.53
252	34	-50.25	128.73	-37.46	-0.11	0.0	-1.62
252	35	-79.00	-2.58	-221.70	0.10	0.0	1.40
252	36	-38.16	129.04	-28.03	-0.11	0.0	-1.61
252	37	-66.92	-2.57	-212.73	0.10	0.0	1.40
252	38	-52.43	119.57	-42.13	-0.10	0.0	-1.49

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
252	39	-80.63	-2.78	-224.85	0.11	0.0	1.53
252	40	-41.85	111.41	-38.59	-0.09	0.0	-1.36
252	41	-67.54	-2.60	-211.29	0.10	0.0	1.41
252	42	-51.76	120.26	-43.37	-0.10	0.0	-1.50
252	43	-77.98	-2.42	-217.11	0.09	0.0	1.29
252	44	-39.67	120.57	-33.93	-0.10	0.0	-1.49
252	45	-65.90	-2.41	-208.14	0.09	0.0	1.28
252	46	-53.94	111.10	-48.03	-0.09	0.0	-1.37
252	47	-79.62	-2.61	-220.26	0.10	0.0	1.42
252	48	-55.70	12.49	-120.76	-0.01	0.0	-0.20
252	49	-59.00	-0.50	-143.06	0.02	0.0	0.28
252	50	-65.91	21.78	-126.56	-0.02	0.0	-0.35
252	51	-69.80	-0.30	-150.19	0.01	0.0	0.15
252	52	-55.90	11.36	-121.55	-0.01	0.0	-0.19
252	53	-58.87	-0.48	-142.48	0.02	0.0	0.27
252	54	-66.10	20.71	-127.30	-0.02	0.0	-0.33
252	55	-69.68	-0.28	-149.66	9.51e-03	0.0	0.14
252	56	-53.47	22.07	-116.36	-0.02	0.0	-0.34
252	57	-57.36	-0.30	-140.38	0.01	0.0	0.15
252	58	-68.16	12.13	-131.03	-0.01	0.0	-0.21
252	59	-71.43	-0.51	-152.81	0.02	0.0	0.29
252	60	-53.66	21.00	-117.10	-0.02	0.0	-0.33
252	61	-57.24	-0.27	-139.85	9.13e-03	0.0	0.13
252	62	-68.36	11.00	-131.82	-0.01	0.0	-0.19
252	63	-71.30	-0.49	-152.23	0.02	0.0	0.27
252	64	-53.99	52.25	-92.61	-0.05	0.0	-0.69
252	65	-65.97	-1.21	-170.11	0.05	0.0	0.66
252	66	-57.06	55.03	-94.37	-0.05	0.0	-0.73
252	67	-69.20	-1.15	-172.19	0.04	0.0	0.62
252	68	-53.33	55.12	-91.30	-0.05	0.0	-0.73
252	69	-65.47	-1.14	-169.26	0.04	0.0	0.62
252	70	-57.73	52.16	-95.68	-0.05	0.0	-0.69
252	71	-69.70	-1.21	-173.03	0.05	0.0	0.66
252	72	-54.63	48.66	-95.11	-0.04	0.0	-0.64
252	73	-65.54	-1.14	-168.15	0.04	0.0	0.61
252	74	-57.70	51.43	-96.87	-0.05	0.0	-0.68
252	75	-68.77	-1.08	-170.24	0.04	0.0	0.57
252	76	-53.97	51.53	-93.80	-0.05	0.0	-0.68
252	77	-65.04	-1.07	-167.31	0.04	0.0	0.57
252	78	-58.36	48.57	-98.18	-0.04	0.0	-0.64
252	79	-69.26	-1.14	-171.08	0.04	0.0	0.61
254	1	127.26	0.11	-265.06	-5.03e-03	0.0	0.07
254	2	103.93	0.09	-214.65	-4.15e-03	0.0	0.06
254	3	57.60	0.14	-183.67	-1.90e-03	0.0	0.03
254	4	34.28	0.09	-133.29	-1.28e-03	0.0	0.02
254	5	124.54	0.09	-172.61	-3.89e-03	0.0	0.06
254	6	101.21	0.07	-122.20	-3.00e-03	0.0	0.04
254	7	85.95	-0.53	-195.65	0.02	0.0	-0.30
254	8	62.74	-0.51	-145.92	0.02	0.0	-0.28
254	9	74.20	67.38	-127.46	-0.06	0.0	0.89
254	10	50.98	66.79	-77.56	-0.06	0.0	0.85
254	11	91.84	0.08	-192.06	-3.61e-03	0.0	0.05
254	12	45.40	0.12	-137.78	-1.41e-03	0.0	0.02
254	13	90.03	0.06	-130.43	-2.85e-03	0.0	0.04
254	14	64.27	-0.36	-145.60	0.01	0.0	-0.20
254	15	56.44	45.10	-100.19	-0.04	0.0	0.60
254	16	74.71	50.61	-115.81	-0.05	0.0	0.72
254	17	83.34	-0.50	-169.16	0.02	0.0	-0.23
254	18	41.67	21.13	-99.90	-0.02	0.0	0.26
254	19	48.55	-1.11	-149.81	0.04	0.0	-0.63
254	20	74.25	53.16	-114.04	-0.05	0.0	0.76
254	21	83.64	-0.55	-170.52	0.02	0.0	-0.26
254	22	41.22	23.67	-98.14	-0.02	0.0	0.30
254	23	48.86	-1.16	-151.19	0.05	0.0	-0.67
254	24	81.98	20.07	-131.39	-0.02	0.0	0.28
254	25	88.80	-1.14	-179.68	0.05	0.0	-0.65
254	26	34.40	51.65	-84.36	-0.05	0.0	0.70
254	27	43.09	-0.46	-139.29	0.01	0.0	-0.20

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
254	28	81.52	22.63	-129.60	-0.02	0.0	0.32
254	29	89.11	-1.19	-181.06	0.05	0.0	-0.69
254	30	33.95	54.19	-82.60	-0.05	0.0	0.74
254	31	43.40	-0.51	-140.66	0.02	0.0	-0.24
254	32	51.76	120.28	-43.35	-0.10	0.0	1.50
254	33	77.98	-2.42	-217.09	0.09	0.0	-1.29
254	34	41.85	111.44	-38.58	-0.09	0.0	1.36
254	35	67.54	-2.60	-211.28	0.10	0.0	-1.41
254	36	53.94	111.13	-48.02	-0.09	0.0	1.37
254	37	79.62	-2.61	-220.25	0.10	0.0	-1.41
254	38	39.67	120.59	-33.91	-0.10	0.0	1.49
254	39	65.90	-2.41	-208.12	0.09	0.0	-1.28
254	40	50.25	128.75	-37.44	-0.11	0.0	1.62
254	41	79.00	-2.58	-221.69	0.10	0.0	-1.40
254	42	40.35	119.91	-32.68	-0.10	0.0	1.48
254	43	68.56	-2.77	-215.87	0.11	0.0	-1.53
254	44	52.44	119.60	-42.12	-0.10	0.0	1.49
254	45	80.64	-2.78	-224.84	0.11	0.0	-1.53
254	46	38.16	129.07	-28.01	-0.11	0.0	1.61
254	47	66.92	-2.57	-212.72	0.10	0.0	-1.40
254	48	66.11	20.73	-127.28	-0.02	0.0	0.33
254	49	69.68	-0.28	-149.65	9.48e-03	0.0	-0.14
254	50	55.91	11.39	-121.54	-0.01	0.0	0.19
254	51	58.87	-0.48	-142.48	0.02	0.0	-0.27
254	52	65.91	21.80	-126.54	-0.02	0.0	0.35
254	53	69.80	-0.30	-150.17	0.01	0.0	-0.15
254	54	55.70	12.51	-120.75	-0.01	0.0	0.20
254	55	59.00	-0.50	-143.05	0.02	0.0	-0.28
254	56	68.36	11.03	-131.81	-0.01	0.0	0.19
254	57	71.30	-0.49	-152.22	0.02	0.0	-0.27
254	58	53.66	21.03	-117.09	-0.02	0.0	0.33
254	59	57.24	-0.27	-139.84	9.10e-03	0.0	-0.13
254	60	68.16	12.15	-131.01	-0.01	0.0	0.21
254	61	71.43	-0.51	-152.80	0.02	0.0	-0.29
254	62	53.47	22.10	-116.34	-0.02	0.0	0.34
254	63	57.36	-0.29	-140.37	0.01	0.0	-0.15
254	64	57.70	51.46	-96.85	-0.05	0.0	0.68
254	65	68.77	-1.08	-170.22	0.04	0.0	-0.57
254	66	54.63	48.69	-95.10	-0.04	0.0	0.64
254	67	65.54	-1.13	-168.14	0.04	0.0	-0.61
254	68	58.36	48.59	-98.16	-0.04	0.0	0.64
254	69	69.27	-1.14	-171.07	0.04	0.0	-0.61
254	70	53.97	51.55	-93.79	-0.05	0.0	0.68
254	71	65.04	-1.07	-167.30	0.04	0.0	-0.57
254	72	57.06	55.05	-94.35	-0.05	0.0	0.73
254	73	69.20	-1.15	-172.17	0.04	0.0	-0.62
254	74	53.99	52.28	-92.60	-0.05	0.0	0.69
254	75	65.97	-1.20	-170.10	0.05	0.0	-0.66
254	76	57.73	52.19	-95.66	-0.05	0.0	0.69
254	77	69.70	-1.21	-173.02	0.05	0.0	-0.66
254	78	53.33	55.15	-91.29	-0.05	0.0	0.73
254	79	65.48	-1.14	-169.25	0.04	0.0	-0.62
289	1	-121.85	0.12	-252.54	-7.01e-03	0.0	-0.10
289	2	-99.50	0.10	-204.45	-5.76e-03	0.0	-0.08
289	3	-124.84	0.10	-164.34	-4.44e-03	0.0	-0.06
289	4	-102.48	0.08	-116.23	-3.49e-03	0.0	-0.05
289	5	-96.15	0.09	-164.54	-5.08e-03	0.0	-0.07
289	6	-73.80	0.07	-116.46	-3.85e-03	0.0	-0.06
289	7	-76.51	-18.70	-157.26	0.02	0.0	0.28
289	8	-54.00	-19.58	-108.35	0.02	0.0	0.28
289	9	-93.08	1.55	-230.20	-0.06	0.0	-0.88
289	10	-70.65	1.48	-181.68	-0.06	0.0	-0.84
289	11	-87.94	0.09	-183.02	-5.05e-03	0.0	-0.07
289	12	-89.93	0.08	-124.23	-3.22e-03	0.0	-0.05
289	13	-70.81	0.07	-124.36	-3.76e-03	0.0	-0.05
289	14	-57.77	-12.21	-119.74	0.01	0.0	0.19
289	15	-68.78	1.05	-168.25	-0.04	0.0	-0.60
289	16	-47.34	0.62	-141.00	-0.02	0.0	-0.31

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
289	17	-29.86	-50.93	-71.35	0.05	0.0	0.67
289	18	-88.84	1.29	-185.51	-0.05	0.0	-0.75
289	19	-73.83	-19.13	-122.85	0.02	0.0	0.25
289	20	-47.03	0.57	-138.46	-0.02	0.0	-0.27
289	21	-30.30	-48.36	-74.30	0.04	0.0	0.63
289	22	-88.54	1.24	-182.97	-0.05	0.0	-0.72
289	23	-74.27	-16.59	-125.77	0.01	0.0	0.22
289	24	-48.18	1.26	-150.97	-0.05	0.0	-0.73
289	25	-32.33	-20.41	-85.84	0.02	0.0	0.23
289	26	-87.99	0.65	-175.53	-0.02	0.0	-0.33
289	27	-71.36	-49.66	-108.35	0.05	0.0	0.69
289	28	-47.88	1.21	-148.43	-0.05	0.0	-0.70
289	29	-32.78	-17.83	-88.79	0.01	0.0	0.19
289	30	-87.68	0.60	-172.97	-0.02	0.0	-0.29
289	31	-71.80	-47.08	-111.30	0.05	0.0	0.65
289	32	-78.65	2.66	-227.98	-0.10	0.0	-1.45
289	33	-23.58	-127.12	-3.91	0.11	0.0	1.54
289	34	-91.10	2.86	-241.33	-0.11	0.0	-1.58
289	35	-36.77	-117.58	-19.35	0.10	0.0	1.42
289	36	-78.90	2.85	-230.96	-0.11	0.0	-1.58
289	37	-24.32	-117.96	-8.25	0.10	0.0	1.41
289	38	-90.85	2.66	-238.35	-0.10	0.0	-1.46
289	39	-36.03	-126.74	-15.00	0.11	0.0	1.55
289	40	-77.64	2.49	-219.51	-0.09	0.0	-1.33
289	41	-25.07	-118.52	-13.76	0.10	0.0	1.42
289	42	-90.09	2.69	-232.86	-0.10	0.0	-1.47
289	43	-38.27	-108.97	-29.20	0.09	0.0	1.30
289	44	-77.89	2.68	-222.49	-0.10	0.0	-1.46
289	45	-25.81	-109.36	-18.10	0.09	0.0	1.29
289	46	-89.84	2.50	-229.87	-0.09	0.0	-1.34
289	47	-37.52	-118.13	-24.85	0.10	0.0	1.43
289	48	-57.58	0.40	-138.69	-0.01	0.0	-0.21
289	49	-50.48	-18.41	-110.30	0.02	0.0	0.27
289	50	-70.28	0.61	-152.47	-0.02	0.0	-0.35
289	51	-63.87	-8.74	-125.93	9.75e-03	0.0	0.14
289	52	-57.44	0.38	-137.58	-0.01	0.0	-0.20
289	53	-50.66	-17.33	-111.54	0.02	0.0	0.26
289	54	-70.16	0.59	-151.40	-0.02	0.0	-0.34
289	55	-64.05	-7.73	-127.11	8.64e-03	0.0	0.12
289	56	-57.76	0.60	-141.28	-0.02	0.0	-0.35
289	57	-51.13	-9.03	-114.11	9.35e-03	0.0	0.13
289	58	-70.09	0.41	-149.82	-0.02	0.0	-0.22
289	59	-63.24	-18.05	-122.18	0.02	0.0	0.28
289	60	-57.64	0.58	-140.21	-0.02	0.0	-0.33
289	61	-51.30	-8.02	-115.29	8.24e-03	0.0	0.12
289	62	-69.95	0.39	-148.71	-0.01	0.0	-0.20
289	63	-63.42	-16.97	-123.43	0.02	0.0	0.26
289	64	-69.17	1.24	-173.89	-0.05	0.0	-0.68
289	65	-45.98	-52.02	-79.54	0.05	0.0	0.66
289	66	-72.98	1.30	-178.01	-0.05	0.0	-0.73
289	67	-50.02	-49.04	-84.31	0.04	0.0	0.62
289	68	-69.22	1.30	-174.66	-0.05	0.0	-0.72
289	69	-46.19	-49.15	-80.74	0.04	0.0	0.62
289	70	-72.92	1.24	-177.25	-0.05	0.0	-0.69
289	71	-49.81	-51.91	-83.11	0.05	0.0	0.66
289	72	-68.74	1.17	-170.30	-0.04	0.0	-0.63
289	73	-46.61	-48.37	-83.72	0.04	0.0	0.61
289	74	-72.55	1.23	-174.42	-0.05	0.0	-0.68
289	75	-50.65	-45.39	-88.49	0.04	0.0	0.57
289	76	-68.80	1.23	-171.07	-0.05	0.0	-0.67
289	77	-46.82	-45.50	-84.92	0.04	0.0	0.57
289	78	-72.49	1.17	-173.65	-0.04	0.0	-0.64
289	79	-50.44	-48.26	-87.30	0.04	0.0	0.61
291	1	121.87	0.16	-252.58	-7.04e-03	0.0	0.10
291	2	99.51	0.13	-204.49	-5.79e-03	0.0	0.08
291	3	55.00	0.07	-177.81	-3.02e-03	0.0	0.04
291	4	32.64	0.05	-129.69	-2.04e-03	0.0	0.03
291	5	119.44	0.13	-160.08	-5.62e-03	0.0	0.08

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
291	6	97.09	0.10	-111.99	-4.36e-03	0.0	0.06
291	7	76.53	-18.65	-157.30	0.02	0.0	-0.28
291	8	54.00	-19.55	-108.38	0.02	0.0	-0.28
291	9	93.09	1.55	-230.23	-0.06	0.0	0.88
291	10	70.65	1.48	-181.70	-0.06	0.0	0.84
291	11	87.95	0.11	-183.05	-5.06e-03	0.0	0.07
291	12	43.38	0.05	-133.22	-2.27e-03	0.0	0.03
291	13	86.33	0.10	-121.38	-4.11e-03	0.0	0.06
291	14	57.77	-12.18	-119.76	0.01	0.0	-0.19
291	15	68.79	1.05	-168.28	-0.04	0.0	0.60
291	16	88.54	1.24	-183.00	-0.05	0.0	0.72
291	17	74.28	-16.56	-125.79	0.01	0.0	-0.21
291	18	47.04	0.57	-138.48	-0.02	0.0	0.27
291	19	30.31	-48.33	-74.33	0.04	0.0	-0.63
291	20	88.85	1.29	-185.54	-0.05	0.0	0.75
291	21	73.84	-19.10	-122.87	0.02	0.0	-0.25
291	22	47.34	0.62	-141.03	-0.02	0.0	0.31
291	23	29.87	-50.90	-71.38	0.05	0.0	-0.67
291	24	87.69	0.60	-172.98	-0.02	0.0	0.29
291	25	71.81	-47.05	-111.32	0.05	0.0	-0.65
291	26	47.89	1.21	-148.47	-0.05	0.0	0.70
291	27	32.79	-17.80	-88.84	0.01	0.0	-0.19
291	28	88.00	0.65	-175.54	-0.02	0.0	0.33
291	29	71.37	-49.63	-108.36	0.05	0.0	-0.69
291	30	48.19	1.26	-151.01	-0.05	0.0	0.73
291	31	32.34	-20.38	-85.88	0.02	0.0	-0.23
291	32	90.10	2.69	-232.88	-0.10	0.0	1.47
291	33	38.27	-108.95	-29.23	0.09	0.0	-1.30
291	34	77.65	2.49	-219.53	-0.09	0.0	1.33
291	35	25.08	-118.49	-13.79	0.10	0.0	-1.42
291	36	89.85	2.50	-229.89	-0.09	0.0	1.34
291	37	37.53	-118.10	-24.88	0.10	0.0	-1.43
291	38	77.90	2.68	-222.52	-0.10	0.0	1.46
291	39	25.82	-109.33	-18.14	0.09	0.0	-1.29
291	40	91.11	2.86	-241.35	-0.11	0.0	1.58
291	41	36.78	-117.55	-19.38	0.10	0.0	-1.42
291	42	78.66	2.66	-228.01	-0.10	0.0	1.45
291	43	23.59	-127.09	-3.94	0.11	0.0	-1.54
291	44	90.86	2.66	-238.37	-0.10	0.0	1.46
291	45	36.04	-126.71	-15.03	0.11	0.0	-1.55
291	46	78.91	2.85	-230.99	-0.11	0.0	1.58
291	47	24.33	-117.93	-8.29	0.10	0.0	-1.41
291	48	70.16	0.59	-151.42	-0.02	0.0	0.34
291	49	64.06	-7.70	-127.14	8.61e-03	0.0	-0.12
291	50	57.45	0.38	-137.60	-0.01	0.0	0.20
291	51	50.67	-17.30	-111.57	0.02	0.0	-0.26
291	52	70.29	0.61	-152.49	-0.02	0.0	0.35
291	53	63.88	-8.72	-125.96	9.72e-03	0.0	-0.14
291	54	57.59	0.40	-138.72	-0.01	0.0	0.21
291	55	50.49	-18.39	-110.33	0.02	0.0	-0.27
291	56	69.96	0.39	-148.73	-0.01	0.0	0.20
291	57	63.43	-16.94	-123.44	0.02	0.0	-0.26
291	58	57.64	0.58	-140.25	-0.02	0.0	0.33
291	59	51.31	-7.99	-115.33	8.21e-03	0.0	-0.12
291	60	70.09	0.41	-149.84	-0.02	0.0	0.22
291	61	63.24	-18.02	-122.20	0.02	0.0	-0.28
291	62	57.77	0.60	-141.32	-0.02	0.0	0.35
291	63	51.14	-9.01	-114.15	9.32e-03	0.0	-0.13
291	64	72.56	1.23	-174.44	-0.05	0.0	0.68
291	65	50.66	-45.36	-88.52	0.04	0.0	-0.57
291	66	68.75	1.17	-170.32	-0.04	0.0	0.63
291	67	46.62	-48.34	-83.75	0.04	0.0	-0.61
291	68	72.50	1.17	-173.67	-0.04	0.0	0.64
291	69	50.45	-48.23	-87.32	0.04	0.0	-0.61
291	70	68.80	1.23	-171.10	-0.05	0.0	0.67
291	71	46.83	-45.48	-84.96	0.04	0.0	-0.57
291	72	72.99	1.30	-178.04	-0.05	0.0	0.73
291	73	50.03	-49.01	-84.34	0.04	0.0	-0.62

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
291	74	69.18	1.24	-173.92	-0.05	0.0	0.68
291	75	45.99	-51.99	-79.57	0.05	0.0	-0.66
291	76	72.93	1.24	-177.27	-0.05	0.0	0.69
291	77	49.82	-51.88	-83.14	0.05	0.0	-0.66
291	78	69.23	1.30	-174.69	-0.05	0.0	0.72
291	79	46.20	-49.13	-80.77	0.04	0.0	-0.62
328	1	-110.02	0.20	-218.33	-8.14e-03	0.0	-0.12
328	2	-89.92	0.16	-176.98	-6.68e-03	0.0	-0.10
328	3	-105.97	0.14	-161.85	-5.49e-03	0.0	-0.08
328	4	-85.88	0.11	-120.50	-4.32e-03	0.0	-0.06
328	5	-82.70	0.15	-151.07	-5.97e-03	0.0	-0.09
328	6	-62.61	0.11	-109.71	-4.52e-03	0.0	-0.07
328	7	-71.20	-0.38	-147.17	0.03	0.0	0.38
328	8	-51.11	-0.37	-105.84	0.03	0.0	0.38
328	9	-82.57	1.86	-172.97	-0.05	0.0	-0.69
328	10	-62.43	1.78	-131.47	-0.04	0.0	-0.65
328	11	-79.36	0.14	-158.08	-5.87e-03	0.0	-0.08
328	12	-76.67	0.10	-120.42	-3.98e-03	0.0	-0.06
328	13	-61.15	0.11	-113.24	-4.41e-03	0.0	-0.06
328	14	-53.49	-0.26	-110.64	0.02	0.0	0.26
328	15	-61.09	1.26	-127.89	-0.03	0.0	-0.47
328	16	-40.42	0.66	-108.45	-0.02	0.0	-0.32
328	17	-30.43	-1.16	-89.24	0.05	0.0	0.65
328	18	-81.27	1.37	-144.28	-0.05	0.0	-0.77
328	19	-70.24	-0.52	-121.15	0.02	0.0	0.24
328	20	-40.35	0.61	-107.28	-0.02	0.0	-0.29
328	21	-30.36	-1.11	-90.01	0.04	0.0	0.61
328	22	-81.20	1.32	-143.11	-0.05	0.0	-0.73
328	23	-70.16	-0.47	-121.92	0.01	0.0	0.21
328	24	-38.30	1.34	-114.20	-0.05	0.0	-0.75
328	25	-26.59	-0.48	-90.24	0.02	0.0	0.22
328	26	-83.39	0.69	-138.52	-0.02	0.0	-0.34
328	27	-74.08	-1.19	-120.14	0.05	0.0	0.67
328	28	-38.23	1.29	-113.04	-0.05	0.0	-0.71
328	29	-26.51	-0.43	-91.02	0.01	0.0	0.18
328	30	-83.32	0.64	-137.35	-0.02	0.0	-0.30
328	31	-74.00	-1.14	-120.91	0.04	0.0	0.64
328	32	-69.18	2.81	-151.77	-0.10	0.0	-1.49
328	33	-34.69	-2.83	-82.90	0.11	0.0	1.52
328	34	-81.44	3.03	-162.53	-0.11	0.0	-1.62
328	35	-46.63	-2.64	-92.47	0.10	0.0	1.40
328	36	-68.55	3.02	-153.51	-0.11	0.0	-1.62
328	37	-33.53	-2.63	-83.20	0.10	0.0	1.39
328	38	-82.07	2.82	-160.79	-0.10	0.0	-1.49
328	39	-47.78	-2.84	-92.17	0.11	0.0	1.53
328	40	-68.96	2.64	-147.87	-0.10	0.0	-1.37
328	41	-34.43	-2.66	-85.47	0.10	0.0	1.40
328	42	-81.22	2.85	-158.63	-0.10	0.0	-1.50
328	43	-46.37	-2.47	-95.04	0.09	0.0	1.28
328	44	-68.33	2.84	-149.61	-0.10	0.0	-1.50
328	45	-33.27	-2.45	-85.77	0.09	0.0	1.27
328	46	-81.85	2.65	-156.89	-0.10	0.0	-1.37
328	47	-47.52	-2.67	-94.74	0.10	0.0	1.41
328	48	-51.03	0.43	-113.23	-0.02	0.0	-0.23
328	49	-46.65	-0.47	-104.61	0.02	0.0	0.26
328	50	-63.53	0.65	-124.32	-0.03	0.0	-0.37
328	51	-58.80	-0.27	-114.43	9.07e-03	0.0	0.13
328	52	-51.00	0.41	-112.72	-0.01	0.0	-0.21
328	53	-46.62	-0.45	-104.93	0.02	0.0	0.24
328	54	-63.50	0.63	-123.83	-0.02	0.0	-0.35
328	55	-58.76	-0.24	-114.75	7.97e-03	0.0	0.11
328	56	-50.34	0.65	-114.90	-0.03	0.0	-0.36
328	57	-45.42	-0.26	-104.78	8.67e-03	0.0	0.12
328	58	-64.21	0.44	-122.62	-0.02	0.0	-0.23
328	59	-60.03	-0.48	-114.25	0.02	0.0	0.27
328	60	-50.32	0.62	-114.42	-0.02	0.0	-0.35
328	61	-45.39	-0.24	-105.10	7.57e-03	0.0	0.11
328	62	-64.18	0.42	-122.12	-0.01	0.0	-0.21

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
328	63	-59.99	-0.46	-114.57	0.02	0.0	0.25
328	64	-61.53	1.32	-130.14	-0.05	0.0	-0.70
328	65	-46.79	-1.21	-100.60	0.04	0.0	0.64
328	66	-65.28	1.39	-133.48	-0.05	0.0	-0.75
328	67	-50.44	-1.14	-103.56	0.04	0.0	0.61
328	68	-61.33	1.38	-130.66	-0.05	0.0	-0.74
328	69	-46.43	-1.14	-100.67	0.04	0.0	0.60
328	70	-65.48	1.32	-132.97	-0.05	0.0	-0.71
328	71	-50.81	-1.21	-103.50	0.04	0.0	0.65
328	72	-61.44	1.25	-128.49	-0.05	0.0	-0.65
328	73	-46.68	-1.13	-101.70	0.04	0.0	0.59
328	74	-65.19	1.31	-131.83	-0.05	0.0	-0.70
328	75	-50.33	-1.07	-104.65	0.04	0.0	0.56
328	76	-61.24	1.31	-129.00	-0.05	0.0	-0.69
328	77	-46.32	-1.07	-101.76	0.04	0.0	0.55
328	78	-65.39	1.25	-131.31	-0.05	0.0	-0.66
328	79	-50.70	-1.14	-104.59	0.04	0.0	0.60
330	1	1.06	-3.69e-04	-6.38	-2.09e-06	0.0	-5.07e-03
330	2	0.87	-3.05e-04	-4.49	-1.73e-06	0.0	-4.20e-03
330	3	0.82	-2.64e-04	-6.38	-1.28e-06	0.0	-3.12e-03
330	4	0.63	-2.10e-04	-4.49	0.0	0.0	-2.39e-03
330	5	0.74	-2.67e-04	-6.38	-1.42e-06	0.0	-3.45e-03
330	6	0.55	-2.03e-04	-4.49	-1.07e-06	0.0	-2.59e-03
330	7	0.66	2.34	-6.38	1.57e-05	0.0	0.04
330	8	0.47	2.34	-4.49	1.57e-05	0.0	0.04
330	9	0.73	4.67	-6.38	1.42e-05	0.0	0.03
330	10	0.55	4.67	-4.49	1.48e-05	0.0	0.04
330	11	0.76	-2.65e-04	-4.73	-1.50e-06	0.0	-3.64e-03
330	12	0.60	-1.92e-04	-4.73	0.0	0.0	-2.30e-03
330	13	0.55	-1.97e-04	-4.73	-1.05e-06	0.0	-2.56e-03
330	14	0.49	1.56	-4.73	1.05e-05	0.0	0.03
330	15	0.54	3.11	-4.73	9.27e-06	0.0	0.02
330	16	0.88	0.07	-4.75	-1.75e-06	0.0	-4.25e-03
330	17	0.68	-0.05	-4.75	9.69e-06	0.0	0.02
330	18	0.33	0.05	-4.71	-1.17e-05	0.0	-0.03
330	19	0.13	-0.07	-4.71	0.0	0.0	1.27e-03
330	20	0.82	0.08	-4.75	0.0	0.0	-2.28e-03
330	21	0.74	-0.06	-4.75	8.87e-06	0.0	0.02
330	22	0.26	0.06	-4.71	-1.09e-05	0.0	-0.03
330	23	0.19	-0.08	-4.71	0.0	0.0	-7.34e-04
330	24	1.03	0.04	-4.75	-1.12e-05	0.0	-0.03
330	25	0.82	-0.07	-4.75	0.0	0.0	3.19e-04
330	26	0.18	0.07	-4.71	-2.27e-06	0.0	-5.52e-03
330	27	-0.01	-0.04	-4.71	1.01e-05	0.0	0.02
330	28	0.96	0.05	-4.75	-1.04e-05	0.0	-0.03
330	29	0.89	-0.08	-4.75	0.0	0.0	-1.67e-03
330	30	0.12	0.08	-4.71	-1.46e-06	0.0	-3.55e-03
330	31	0.05	-0.05	-4.71	9.26e-06	0.0	0.02
330	32	0.92	0.19	-4.73	-1.70e-05	0.0	-0.04
330	33	0.26	-0.19	-4.73	1.86e-05	0.0	0.05
330	34	0.76	0.19	-4.72	-2.00e-05	0.0	-0.05
330	35	0.10	-0.19	-4.72	1.59e-05	0.0	0.04
330	36	0.97	0.19	-4.73	-1.99e-05	0.0	-0.05
330	37	0.30	-0.20	-4.73	1.57e-05	0.0	0.04
330	38	0.71	0.20	-4.72	-1.72e-05	0.0	-0.04
330	39	0.05	-0.19	-4.72	1.87e-05	0.0	0.05
330	40	0.72	0.23	-4.73	-1.43e-05	0.0	-0.03
330	41	0.47	-0.22	-4.73	1.59e-05	0.0	0.04
330	42	0.55	0.22	-4.72	-1.73e-05	0.0	-0.04
330	43	0.30	-0.23	-4.72	1.31e-05	0.0	0.03
330	44	0.76	0.22	-4.73	-1.72e-05	0.0	-0.04
330	45	0.51	-0.23	-4.73	1.30e-05	0.0	0.03
330	46	0.51	0.23	-4.72	-1.45e-05	0.0	-0.04
330	47	0.26	-0.22	-4.72	1.60e-05	0.0	0.04
330	48	0.66	0.03	-4.74	-2.25e-06	0.0	-5.47e-03
330	49	0.57	-0.02	-4.74	3.56e-06	0.0	8.65e-03
330	50	0.43	0.02	-4.72	-5.38e-06	0.0	-0.01
330	51	0.35	-0.03	-4.72	0.0	0.0	1.58e-03

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
330	52	0.63	0.03	-4.74	-1.90e-06	0.0	-4.62e-03
330	53	0.60	-0.03	-4.74	3.21e-06	0.0	7.80e-03
330	54	0.41	0.03	-4.72	-5.04e-06	0.0	-0.01
330	55	0.37	-0.03	-4.72	0.0	0.0	7.09e-04
330	56	0.71	0.02	-4.74	-5.23e-06	0.0	-0.01
330	57	0.62	-0.03	-4.74	0.0	0.0	1.33e-03
330	58	0.38	0.03	-4.72	-2.40e-06	0.0	-5.82e-03
330	59	0.30	-0.02	-4.72	3.67e-06	0.0	8.93e-03
330	60	0.68	0.02	-4.74	-4.88e-06	0.0	-0.01
330	61	0.65	-0.04	-4.74	0.0	0.0	4.58e-04
330	62	0.36	0.04	-4.72	-2.04e-06	0.0	-4.97e-03
330	63	0.33	-0.02	-4.72	3.32e-06	0.0	8.08e-03
330	64	0.68	0.08	-4.73	-8.36e-06	0.0	-0.02
330	65	0.40	-0.08	-4.73	7.69e-06	0.0	0.02
330	66	0.61	0.08	-4.73	-9.29e-06	0.0	-0.02
330	67	0.33	-0.08	-4.73	6.83e-06	0.0	0.02
330	68	0.70	0.08	-4.73	-9.24e-06	0.0	-0.02
330	69	0.41	-0.09	-4.73	6.79e-06	0.0	0.02
330	70	0.60	0.09	-4.73	-8.40e-06	0.0	-0.02
330	71	0.32	-0.08	-4.73	7.73e-06	0.0	0.02
330	72	0.59	0.10	-4.73	-7.21e-06	0.0	-0.02
330	73	0.49	-0.10	-4.73	6.53e-06	0.0	0.02
330	74	0.52	0.10	-4.73	-8.15e-06	0.0	-0.02
330	75	0.42	-0.10	-4.73	5.67e-06	0.0	0.01
330	76	0.61	0.10	-4.73	-8.10e-06	0.0	-0.02
330	77	0.50	-0.10	-4.73	5.64e-06	0.0	0.01
330	78	0.51	0.10	-4.73	-7.26e-06	0.0	-0.02
330	79	0.40	-0.10	-4.73	6.57e-06	0.0	0.02
332	1	-0.17	-1.52e-04	-10.23	0.0	0.0	-1.64e-03
332	2	-0.14	-1.29e-04	-7.14	0.0	0.0	-1.37e-03
332	3	-0.23	-7.42e-05	-10.23	0.0	0.0	-7.70e-04
332	4	-0.20	-5.09e-05	-7.14	0.0	0.0	-5.43e-04
332	5	-0.09	-7.27e-05	-10.23	0.0	0.0	-1.04e-03
332	6	-0.06	-5.04e-05	-7.14	0.0	0.0	-7.73e-04
332	7	-0.11	6.22	-10.23	1.07e-05	0.0	0.03
332	8	-0.08	6.22	-7.14	1.08e-05	0.0	0.03
332	9	-0.12	12.45	-10.23	1.70e-05	0.0	0.04
332	10	-0.09	12.45	-7.14	1.72e-05	0.0	0.04
332	11	-0.12	-1.08e-04	-7.55	0.0	0.0	-1.17e-03
332	12	-0.16	-5.70e-05	-7.55	0.0	0.0	-5.85e-04
332	13	-0.07	-5.55e-05	-7.55	0.0	0.0	-7.72e-04
332	14	-0.08	4.15	-7.55	7.16e-06	0.0	0.02
332	15	-0.09	8.30	-7.55	1.13e-05	0.0	0.03
332	16	0.26	0.14	-7.57	1.23e-06	0.0	3.00e-03
332	17	0.21	-0.10	-7.57	4.32e-06	0.0	0.01
332	18	-0.37	0.10	-7.54	-5.12e-06	0.0	-0.01
332	19	-0.42	-0.14	-7.54	-1.50e-06	0.0	-3.64e-03
332	20	0.27	0.16	-7.57	1.63e-06	0.0	3.95e-03
332	21	0.20	-0.12	-7.57	3.93e-06	0.0	9.55e-03
332	22	-0.36	0.12	-7.54	-4.73e-06	0.0	-0.01
332	23	-0.43	-0.16	-7.54	-1.89e-06	0.0	-4.60e-03
332	24	0.40	0.10	-7.57	-4.71e-06	0.0	-0.01
332	25	0.36	-0.14	-7.57	-1.63e-06	0.0	-3.98e-03
332	26	-0.52	0.14	-7.54	0.0	0.0	1.99e-03
332	27	-0.57	-0.10	-7.54	4.46e-06	0.0	0.01
332	28	0.41	0.12	-7.57	-4.31e-06	0.0	-0.01
332	29	0.35	-0.16	-7.57	-2.03e-06	0.0	-4.93e-03
332	30	-0.51	0.16	-7.54	1.21e-06	0.0	2.94e-03
332	31	-0.58	-0.12	-7.54	4.07e-06	0.0	9.89e-03
332	32	0.09	0.41	-7.56	-4.38e-06	0.0	-0.01
332	33	-0.07	-0.40	-7.56	5.73e-06	0.0	0.01
332	34	-0.09	0.40	-7.55	-6.29e-06	0.0	-0.02
332	35	-0.26	-0.41	-7.55	3.99e-06	0.0	9.69e-03
332	36	0.14	0.40	-7.56	-6.17e-06	0.0	-0.01
332	37	-0.03	-0.41	-7.56	3.95e-06	0.0	9.59e-03
332	38	-0.14	0.41	-7.55	-4.51e-06	0.0	-0.01
332	39	-0.30	-0.40	-7.55	5.77e-06	0.0	0.01
332	40	0.13	0.47	-7.56	-3.08e-06	0.0	-7.48e-03

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
332	41	-0.10	-0.46	-7.56	4.42e-06	0.0	0.01
332	42	-0.06	0.46	-7.55	-4.98e-06	0.0	-0.01
332	43	-0.29	-0.47	-7.55	2.68e-06	0.0	6.51e-03
332	44	0.17	0.46	-7.56	-4.86e-06	0.0	-0.01
332	45	-0.06	-0.47	-7.56	2.63e-06	0.0	6.41e-03
332	46	-0.10	0.47	-7.55	-3.20e-06	0.0	-7.79e-03
332	47	-0.34	-0.46	-7.55	4.46e-06	0.0	0.01
332	48	0.03	0.06	-7.56	0.0	0.0	-2.65e-04
332	49	9.87e-03	-0.04	-7.56	1.48e-06	0.0	3.60e-03
332	50	-0.17	0.04	-7.54	-2.10e-06	0.0	-5.11e-03
332	51	-0.19	-0.06	-7.54	0.0	0.0	-8.79e-04
332	52	0.03	0.07	-7.56	0.0	0.0	1.50e-04
332	53	5.56e-03	-0.05	-7.56	1.31e-06	0.0	3.19e-03
332	54	-0.17	0.05	-7.54	-1.94e-06	0.0	-4.71e-03
332	55	-0.20	-0.07	-7.54	0.0	0.0	-1.30e-03
332	56	0.08	0.04	-7.56	-1.98e-06	0.0	-4.82e-03
332	57	0.06	-0.06	-7.56	0.0	0.0	-9.67e-04
332	58	-0.22	0.06	-7.54	0.0	0.0	-5.53e-04
332	59	-0.24	-0.04	-7.54	1.52e-06	0.0	3.70e-03
332	60	0.08	0.05	-7.56	-1.81e-06	0.0	-4.41e-03
332	61	0.05	-0.07	-7.56	0.0	0.0	-1.38e-03
332	62	-0.22	0.07	-7.54	0.0	0.0	-1.38e-04
332	63	-0.25	-0.05	-7.54	1.35e-06	0.0	3.29e-03
332	64	-0.02	0.18	-7.55	-2.25e-06	0.0	-5.47e-03
332	65	-0.09	-0.17	-7.55	2.30e-06	0.0	5.59e-03
332	66	-0.08	0.17	-7.55	-2.84e-06	0.0	-6.92e-03
332	67	-0.15	-0.18	-7.55	1.75e-06	0.0	4.26e-03
332	68	-2.36e-03	0.17	-7.55	-2.81e-06	0.0	-6.83e-03
332	69	-0.07	-0.18	-7.55	1.74e-06	0.0	4.23e-03
332	70	-0.09	0.18	-7.55	-2.29e-06	0.0	-5.56e-03
332	71	-0.16	-0.17	-7.55	2.31e-06	0.0	5.62e-03
332	72	-2.00e-03	0.20	-7.55	-1.70e-06	0.0	-4.12e-03
332	73	-0.10	-0.20	-7.55	1.74e-06	0.0	4.24e-03
332	74	-0.06	0.20	-7.55	-2.29e-06	0.0	-5.57e-03
332	75	-0.16	-0.20	-7.55	1.20e-06	0.0	2.91e-03
332	76	0.01	0.20	-7.55	-2.25e-06	0.0	-5.48e-03
332	77	-0.09	-0.20	-7.55	1.18e-06	0.0	2.88e-03
332	78	-0.08	0.20	-7.55	-1.73e-06	0.0	-4.21e-03
332	79	-0.18	-0.20	-7.55	1.75e-06	0.0	4.27e-03
334	1	-7.05e-03	-3.15e-04	-10.80	0.0	0.0	-3.96e-04
334	2	-5.47e-03	-2.64e-04	-7.54	0.0	0.0	-3.33e-04
334	3	-0.06	-1.79e-04	-10.80	0.0	0.0	-2.62e-05
334	4	-0.06	-1.35e-04	-7.54	0.0	0.0	2.34e-05
334	5	0.01	-1.93e-04	-10.80	0.0	0.0	-2.70e-04
334	6	0.01	-1.41e-04	-7.54	0.0	0.0	-2.11e-04
334	7	-5.33e-03	7.87	-10.80	5.25e-06	0.0	0.01
334	8	-3.74e-03	7.87	-7.54	5.26e-06	0.0	0.01
334	9	-5.65e-03	15.73	-10.80	9.54e-06	0.0	0.02
334	10	-4.06e-03	15.73	-7.54	9.58e-06	0.0	0.02
334	11	-5.11e-03	-2.26e-04	-7.98	0.0	0.0	-2.85e-04
334	12	-0.04	-1.32e-04	-7.98	0.0	0.0	-3.62e-05
334	13	8.06e-03	-1.44e-04	-7.98	0.0	0.0	-2.00e-04
334	14	-3.96e-03	5.24	-7.98	3.50e-06	0.0	8.53e-03
334	15	-4.18e-03	10.49	-7.98	6.35e-06	0.0	0.02
334	16	0.21	0.17	-7.99	2.77e-06	0.0	6.75e-03
334	17	0.28	-0.15	-7.99	2.29e-06	0.0	5.59e-03
334	18	-0.28	0.15	-7.96	-2.66e-06	0.0	-6.47e-03
334	19	-0.22	-0.17	-7.96	-2.66e-06	0.0	-6.49e-03
334	20	0.28	0.18	-7.99	2.14e-06	0.0	5.21e-03
334	21	0.21	-0.16	-7.99	2.92e-06	0.0	7.12e-03
334	22	-0.22	0.16	-7.96	-3.29e-06	0.0	-8.01e-03
334	23	-0.28	-0.18	-7.96	-2.03e-06	0.0	-4.96e-03
334	24	0.35	0.16	-7.99	-2.25e-06	0.0	-5.48e-03
334	25	0.41	-0.17	-7.99	-2.71e-06	0.0	-6.62e-03
334	26	-0.42	0.17	-7.96	2.36e-06	0.0	5.75e-03
334	27	-0.36	-0.16	-7.96	2.34e-06	0.0	5.71e-03
334	28	0.41	0.17	-7.99	-2.88e-06	0.0	-7.01e-03
334	29	0.35	-0.18	-7.99	-2.08e-06	0.0	-5.08e-03

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
334	30	-0.35	0.18	-7.96	1.73e-06	0.0	4.21e-03
334	31	-0.42	-0.17	-7.96	2.97e-06	0.0	7.25e-03
334	32	-0.03	0.54	-7.98	1.26e-06	0.0	3.08e-03
334	33	0.17	-0.54	-7.98	0.0	0.0	4.00e-04
334	34	-0.18	0.53	-7.97	0.0	0.0	-8.91e-04
334	35	0.02	-0.54	-7.97	-1.32e-06	0.0	-3.22e-03
334	36	8.27e-03	0.54	-7.98	0.0	0.0	-5.90e-04
334	37	0.21	-0.54	-7.98	-1.34e-06	0.0	-3.26e-03
334	38	-0.22	0.54	-7.97	1.14e-06	0.0	2.78e-03
334	39	-0.02	-0.54	-7.97	0.0	0.0	4.38e-04
334	40	0.17	0.58	-7.98	0.0	0.0	-2.05e-03
334	41	-0.03	-0.57	-7.98	2.27e-06	0.0	5.53e-03
334	42	0.02	0.57	-7.97	-2.47e-06	0.0	-6.02e-03
334	43	-0.18	-0.58	-7.97	0.0	0.0	1.91e-03
334	44	0.21	0.57	-7.98	-2.35e-06	0.0	-5.72e-03
334	45	7.79e-03	-0.58	-7.98	0.0	0.0	1.87e-03
334	46	-0.02	0.57	-7.97	0.0	0.0	-2.35e-03
334	47	-0.22	-0.57	-7.97	2.29e-06	0.0	5.57e-03
334	48	0.07	0.07	-7.98	0.0	0.0	1.98e-03
334	49	0.09	-0.07	-7.98	0.0	0.0	1.70e-03
334	50	-0.10	0.07	-7.97	0.0	0.0	-2.18e-03
334	51	-0.08	-0.07	-7.97	0.0	0.0	-2.13e-03
334	52	0.09	0.08	-7.98	0.0	0.0	1.33e-03
334	53	0.07	-0.07	-7.98	0.0	0.0	2.35e-03
334	54	-0.08	0.07	-7.97	-1.16e-06	0.0	-2.83e-03
334	55	-0.10	-0.08	-7.97	0.0	0.0	-1.49e-03
334	56	0.11	0.07	-7.98	0.0	0.0	-1.89e-03
334	57	0.14	-0.07	-7.98	0.0	0.0	-2.16e-03
334	58	-0.15	0.07	-7.97	0.0	0.0	1.69e-03
334	59	-0.12	-0.07	-7.97	0.0	0.0	1.73e-03
334	60	0.14	0.07	-7.98	-1.04e-06	0.0	-2.54e-03
334	61	0.11	-0.08	-7.98	0.0	0.0	-1.52e-03
334	62	-0.12	0.08	-7.97	0.0	0.0	1.04e-03
334	63	-0.15	-0.07	-7.97	0.0	0.0	2.38e-03
334	64	-0.02	0.23	-7.98	0.0	0.0	9.26e-04
334	65	0.07	-0.23	-7.98	0.0	0.0	-5.68e-05
334	66	-0.07	0.23	-7.97	0.0	0.0	-3.13e-04
334	67	0.01	-0.23	-7.97	0.0	0.0	-1.19e-03
334	68	-8.62e-03	0.23	-7.98	0.0	0.0	-2.24e-04
334	69	0.08	-0.23	-7.98	0.0	0.0	-1.20e-03
334	70	-0.09	0.23	-7.97	0.0	0.0	8.37e-04
334	71	3.51e-04	-0.23	-7.97	0.0	0.0	-4.54e-05
334	72	0.07	0.24	-7.98	0.0	0.0	-1.25e-03
334	73	-0.02	-0.24	-7.98	0.0	0.0	2.12e-03
334	74	0.01	0.24	-7.97	-1.02e-06	0.0	-2.49e-03
334	75	-0.07	-0.24	-7.97	0.0	0.0	9.86e-04
334	76	0.08	0.24	-7.98	0.0	0.0	-2.40e-03
334	77	-8.89e-03	-0.24	-7.98	0.0	0.0	9.74e-04
334	78	1.05e-03	0.24	-7.97	0.0	0.0	-1.34e-03
334	79	-0.09	-0.24	-7.97	0.0	0.0	2.13e-03
336	1	4.77e-04	-3.16e-04	-10.79	0.0	0.0	4.07e-04
336	2	7.80e-04	-2.64e-04	-7.54	0.0	0.0	3.44e-04
336	3	-0.06	-1.53e-04	-10.79	0.0	0.0	3.80e-04
336	4	-0.06	-1.08e-04	-7.54	0.0	0.0	3.18e-04
336	5	0.02	-2.03e-04	-10.79	0.0	0.0	1.76e-04
336	6	0.02	-1.51e-04	-7.54	0.0	0.0	1.09e-04
336	7	-8.95e-04	7.87	-10.79	1.83e-06	0.0	4.45e-03
336	8	-5.85e-04	7.87	-7.54	1.82e-06	0.0	4.43e-03
336	9	-6.42e-04	15.74	-10.79	4.60e-06	0.0	0.01
336	10	-3.32e-04	15.74	-7.54	4.56e-06	0.0	0.01
336	11	2.90e-04	-2.27e-04	-7.97	0.0	0.0	2.91e-04
336	12	-0.04	-1.15e-04	-7.97	0.0	0.0	2.69e-04
336	13	0.01	-1.51e-04	-7.97	0.0	0.0	1.38e-04
336	14	-6.25e-04	5.25	-7.97	1.22e-06	0.0	2.98e-03
336	15	-4.56e-04	10.49	-7.97	3.08e-06	0.0	7.50e-03
336	16	0.28	0.16	-7.99	3.28e-06	0.0	7.97e-03
336	17	0.22	-0.18	-7.99	2.07e-06	0.0	5.03e-03
336	18	-0.22	0.18	-7.96	-2.16e-06	0.0	-5.27e-03

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
336	19	-0.28	-0.16	-7.96	-2.90e-06	0.0	-7.06e-03
336	20	0.28	0.15	-7.99	3.52e-06	0.0	8.57e-03
336	21	0.22	-0.17	-7.99	1.82e-06	0.0	4.43e-03
336	22	-0.22	0.17	-7.96	-1.92e-06	0.0	-4.67e-03
336	23	-0.28	-0.15	-7.96	-3.15e-06	0.0	-7.67e-03
336	24	0.42	0.18	-7.99	-1.75e-06	0.0	-4.27e-03
336	25	0.35	-0.17	-7.99	-2.95e-06	0.0	-7.19e-03
336	26	-0.35	0.17	-7.96	2.86e-06	0.0	6.97e-03
336	27	-0.42	-0.18	-7.96	2.12e-06	0.0	5.16e-03
336	28	0.42	0.17	-7.99	-1.51e-06	0.0	-3.66e-03
336	29	0.36	-0.16	-7.99	-3.20e-06	0.0	-7.79e-03
336	30	-0.35	0.15	-7.96	3.11e-06	0.0	7.57e-03
336	31	-0.42	-0.17	-7.96	1.87e-06	0.0	4.56e-03
336	32	0.18	0.57	-7.98	2.40e-06	0.0	5.84e-03
336	33	-0.03	-0.57	-7.98	0.0	0.0	-1.71e-03
336	34	0.03	0.57	-7.97	0.0	0.0	1.87e-03
336	35	-0.18	-0.57	-7.97	-2.19e-06	0.0	-5.33e-03
336	36	0.22	0.57	-7.98	0.0	0.0	2.17e-03
336	37	9.22e-03	-0.57	-7.98	-2.21e-06	0.0	-5.37e-03
336	38	-0.01	0.57	-7.97	2.28e-06	0.0	5.54e-03
336	39	-0.22	-0.57	-7.97	0.0	0.0	-1.67e-03
336	40	0.18	0.53	-7.98	3.22e-06	0.0	7.84e-03
336	41	-0.03	-0.54	-7.98	-1.52e-06	0.0	-3.70e-03
336	42	0.03	0.54	-7.97	1.59e-06	0.0	3.87e-03
336	43	-0.18	-0.53	-7.97	-3.01e-06	0.0	-7.33e-03
336	44	0.22	0.54	-7.98	1.71e-06	0.0	4.17e-03
336	45	0.01	-0.53	-7.98	-3.03e-06	0.0	-7.37e-03
336	46	-0.01	0.53	-7.97	3.10e-06	0.0	7.54e-03
336	47	-0.22	-0.54	-7.97	-1.51e-06	0.0	-3.66e-03
336	48	0.10	0.07	-7.98	1.16e-06	0.0	2.81e-03
336	49	0.07	-0.08	-7.98	0.0	0.0	1.53e-03
336	50	-0.07	0.08	-7.96	0.0	0.0	-1.35e-03
336	51	-0.10	-0.07	-7.96	0.0	0.0	-2.31e-03
336	52	0.10	0.06	-7.98	1.26e-06	0.0	3.07e-03
336	53	0.07	-0.07	-7.98	0.0	0.0	1.27e-03
336	54	-0.07	0.07	-7.96	0.0	0.0	-1.09e-03
336	55	-0.10	-0.07	-7.96	-1.06e-06	0.0	-2.57e-03
336	56	0.14	0.08	-7.98	0.0	0.0	-1.06e-03
336	57	0.12	-0.07	-7.98	0.0	0.0	-2.34e-03
336	58	-0.12	0.07	-7.96	1.04e-06	0.0	2.52e-03
336	59	-0.14	-0.08	-7.96	0.0	0.0	1.56e-03
336	60	0.14	0.07	-7.98	0.0	0.0	-7.99e-04
336	61	0.12	-0.07	-7.98	-1.07e-06	0.0	-2.60e-03
336	62	-0.12	0.07	-7.96	1.14e-06	0.0	2.78e-03
336	63	-0.14	-0.07	-7.96	0.0	0.0	1.29e-03
336	64	0.07	0.24	-7.97	0.0	0.0	2.42e-03
336	65	-0.02	-0.24	-7.97	0.0	0.0	-8.91e-04
336	66	0.02	0.24	-7.97	0.0	0.0	1.18e-03
336	67	-0.07	-0.24	-7.97	0.0	0.0	-2.03e-03
336	68	0.08	0.24	-7.97	0.0	0.0	1.27e-03
336	69	-6.40e-03	-0.24	-7.97	0.0	0.0	-2.04e-03
336	70	5.35e-03	0.24	-7.97	0.0	0.0	2.33e-03
336	71	-0.08	-0.24	-7.97	0.0	0.0	-8.80e-04
336	72	0.07	0.23	-7.97	1.34e-06	0.0	3.27e-03
336	73	-0.02	-0.23	-7.97	0.0	0.0	-1.74e-03
336	74	0.02	0.23	-7.97	0.0	0.0	2.03e-03
336	75	-0.07	-0.23	-7.97	-1.18e-06	0.0	-2.88e-03
336	76	0.08	0.23	-7.97	0.0	0.0	2.12e-03
336	77	-4.90e-03	-0.23	-7.97	-1.19e-06	0.0	-2.89e-03
336	78	3.97e-03	0.23	-7.97	1.31e-06	0.0	3.18e-03
336	79	-0.08	-0.23	-7.97	0.0	0.0	-1.73e-03
338	1	0.17	-1.52e-04	-10.23	0.0	0.0	1.65e-03
338	2	0.14	-1.30e-04	-7.15	0.0	0.0	1.38e-03
338	3	-3.86e-03	-9.14e-05	-10.23	0.0	0.0	9.68e-04
338	4	-0.03	-6.75e-05	-7.14	0.0	0.0	7.26e-04
338	5	0.16	-6.80e-05	-10.23	0.0	0.0	1.00e-03
338	6	0.13	-4.52e-05	-7.15	0.0	0.0	7.29e-04
338	7	0.10	6.22	-10.23	-8.09e-06	0.0	-0.02

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
338	8	0.07	6.22	-7.14	-8.12e-06	0.0	-0.02
338	9	0.11	12.43	-10.23	-1.17e-05	0.0	-0.03
338	10	0.08	12.43	-7.15	-1.19e-05	0.0	-0.03
338	11	0.12	-1.09e-04	-7.55	0.0	0.0	1.18e-03
338	12	6.01e-03	-6.82e-05	-7.55	0.0	0.0	7.13e-04
338	13	0.11	-5.24e-05	-7.55	0.0	0.0	7.50e-04
338	14	0.08	4.14	-7.55	-5.39e-06	0.0	-0.01
338	15	0.08	8.29	-7.55	-7.75e-06	0.0	-0.02
338	16	0.43	0.12	-7.54	4.79e-06	0.0	0.01
338	17	0.35	-0.16	-7.54	1.88e-06	0.0	4.55e-03
338	18	-0.20	0.16	-7.57	-1.60e-06	0.0	-3.88e-03
338	19	-0.27	-0.12	-7.57	-3.97e-06	0.0	-9.60e-03
338	20	0.41	0.10	-7.54	5.20e-06	0.0	0.01
338	21	0.37	-0.14	-7.54	1.47e-06	0.0	3.55e-03
338	22	-0.21	0.14	-7.57	-1.19e-06	0.0	-2.89e-03
338	23	-0.26	-0.10	-7.57	-4.38e-06	0.0	-0.01
338	24	0.57	0.16	-7.54	-1.19e-06	0.0	-2.87e-03
338	25	0.50	-0.12	-7.54	-4.11e-06	0.0	-9.94e-03
338	26	-0.34	0.12	-7.57	4.37e-06	0.0	0.01
338	27	-0.42	-0.16	-7.57	2.02e-06	0.0	4.88e-03
338	28	0.56	0.14	-7.54	0.0	0.0	-1.87e-03
338	29	0.52	-0.10	-7.54	-4.52e-06	0.0	-0.01
338	30	-0.36	0.10	-7.57	4.78e-06	0.0	0.01
338	31	-0.41	-0.14	-7.57	1.61e-06	0.0	3.89e-03
338	32	0.29	0.46	-7.55	5.11e-06	0.0	0.01
338	33	0.05	-0.47	-7.55	-2.77e-06	0.0	-6.71e-03
338	34	0.11	0.47	-7.56	3.19e-06	0.0	7.71e-03
338	35	-0.14	-0.46	-7.56	-4.53e-06	0.0	-0.01
338	36	0.34	0.47	-7.55	3.32e-06	0.0	8.02e-03
338	37	0.09	-0.46	-7.55	-4.57e-06	0.0	-0.01
338	38	0.06	0.46	-7.56	4.98e-06	0.0	0.01
338	39	-0.18	-0.47	-7.56	-2.73e-06	0.0	-6.61e-03
338	40	0.25	0.40	-7.55	6.47e-06	0.0	0.02
338	41	0.09	-0.41	-7.55	-4.14e-06	0.0	-0.01
338	42	0.06	0.41	-7.56	4.55e-06	0.0	0.01
338	43	-0.09	-0.40	-7.56	-5.90e-06	0.0	-0.01
338	44	0.29	0.41	-7.55	4.68e-06	0.0	0.01
338	45	0.14	-0.40	-7.55	-5.94e-06	0.0	-0.01
338	46	0.02	0.40	-7.56	6.34e-06	0.0	0.02
338	47	-0.14	-0.41	-7.56	-4.10e-06	0.0	-9.92e-03
338	48	0.19	0.05	-7.55	1.96e-06	0.0	4.75e-03
338	49	0.16	-0.07	-7.55	0.0	0.0	1.28e-03
338	50	-7.96e-03	0.07	-7.56	0.0	0.0	-1.10e-04
338	51	-0.04	-0.05	-7.56	-1.32e-06	0.0	-3.20e-03
338	52	0.19	0.04	-7.55	2.14e-06	0.0	5.17e-03
338	53	0.17	-0.06	-7.55	0.0	0.0	8.51e-04
338	54	-0.01	0.06	-7.56	0.0	0.0	3.20e-04
338	55	-0.03	-0.04	-7.56	-1.50e-06	0.0	-3.63e-03
338	56	0.24	0.07	-7.55	0.0	0.0	1.78e-04
338	57	0.21	-0.05	-7.55	-1.36e-06	0.0	-3.30e-03
338	58	-0.06	0.05	-7.56	1.84e-06	0.0	4.45e-03
338	59	-0.09	-0.07	-7.56	0.0	0.0	1.37e-03
338	60	0.24	0.06	-7.55	0.0	0.0	6.08e-04
338	61	0.22	-0.04	-7.55	-1.54e-06	0.0	-3.73e-03
338	62	-0.06	0.04	-7.56	2.02e-06	0.0	4.88e-03
338	63	-0.08	-0.06	-7.56	0.0	0.0	9.39e-04
338	64	0.16	0.20	-7.55	2.35e-06	0.0	5.67e-03
338	65	0.06	-0.20	-7.55	-1.23e-06	0.0	-2.98e-03
338	66	0.10	0.20	-7.56	1.75e-06	0.0	4.23e-03
338	67	-4.22e-03	-0.20	-7.56	-1.78e-06	0.0	-4.31e-03
338	68	0.17	0.20	-7.55	1.78e-06	0.0	4.32e-03
338	69	0.07	-0.20	-7.55	-1.80e-06	0.0	-4.34e-03
338	70	0.08	0.20	-7.56	2.31e-06	0.0	5.58e-03
338	71	-0.02	-0.20	-7.56	-1.22e-06	0.0	-2.95e-03
338	72	0.14	0.17	-7.55	2.92e-06	0.0	7.07e-03
338	73	0.08	-0.18	-7.55	-1.81e-06	0.0	-4.39e-03
338	74	0.08	0.18	-7.56	2.33e-06	0.0	5.62e-03
338	75	0.01	-0.17	-7.56	-2.36e-06	0.0	-5.72e-03

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
338	76	0.15	0.18	-7.55	2.36e-06	0.0	5.71e-03
338	77	0.09	-0.17	-7.55	-2.38e-06	0.0	-5.75e-03
338	78	0.07	0.17	-7.56	2.89e-06	0.0	6.98e-03
338	79	3.78e-04	-0.18	-7.56	-1.80e-06	0.0	-4.36e-03
340	1	-1.06	-3.72e-04	-6.39	0.0	0.0	5.09e-03
340	2	-0.87	-3.08e-04	-4.49	0.0	0.0	4.22e-03
340	3	-0.59	-1.67e-04	-6.39	0.0	0.0	2.54e-03
340	4	-0.40	-1.11e-04	-4.49	0.0	0.0	1.79e-03
340	5	-0.81	-3.03e-04	-6.39	0.0	0.0	3.69e-03
340	6	-0.62	-2.38e-04	-4.49	0.0	0.0	2.82e-03
340	7	-0.65	2.33	-6.39	3.35e-06	0.0	-0.04
340	8	-0.47	2.33	-4.49	3.36e-06	0.0	-0.04
340	9	-0.73	4.67	-6.39	2.83e-06	0.0	-0.03
340	10	-0.54	4.67	-4.49	2.97e-06	0.0	-0.03
340	11	-0.76	-2.68e-04	-4.73	0.0	0.0	3.65e-03
340	12	-0.45	-1.27e-04	-4.73	0.0	0.0	1.90e-03
340	13	-0.59	-2.21e-04	-4.73	0.0	0.0	2.72e-03
340	14	-0.49	1.56	-4.73	2.23e-06	0.0	-0.02
340	15	-0.54	3.11	-4.73	1.84e-06	0.0	-0.02
340	16	-0.19	0.06	-4.75	-2.46e-06	0.0	0.03
340	17	-0.26	-0.08	-4.75	0.0	0.0	7.15e-04
340	18	-0.74	0.08	-4.71	0.0	0.0	2.34e-03
340	19	-0.81	-0.06	-4.71	2.00e-06	0.0	-0.02
340	20	-0.13	0.05	-4.75	-2.64e-06	0.0	0.03
340	21	-0.33	-0.07	-4.75	0.0	0.0	-1.28e-03
340	22	-0.68	0.07	-4.71	0.0	0.0	4.30e-03
340	23	-0.88	-0.05	-4.71	2.19e-06	0.0	-0.02
340	24	-0.05	0.08	-4.75	0.0	0.0	3.60e-03
340	25	-0.12	-0.05	-4.75	2.09e-06	0.0	-0.02
340	26	-0.89	0.05	-4.71	-2.34e-06	0.0	0.03
340	27	-0.95	-0.08	-4.71	0.0	0.0	1.65e-03
340	28	0.02	0.07	-4.75	0.0	0.0	5.57e-03
340	29	-0.19	-0.04	-4.75	2.27e-06	0.0	-0.02
340	30	-0.82	0.04	-4.71	-2.53e-06	0.0	0.03
340	31	-1.02	-0.07	-4.71	0.0	0.0	-3.33e-04
340	32	-0.31	0.22	-4.74	-3.92e-06	0.0	0.04
340	33	-0.54	-0.23	-4.74	2.97e-06	0.0	-0.03
340	34	-0.47	0.23	-4.73	-3.24e-06	0.0	0.03
340	35	-0.71	-0.22	-4.73	3.59e-06	0.0	-0.04
340	36	-0.26	0.23	-4.74	-3.28e-06	0.0	0.04
340	37	-0.50	-0.22	-4.74	3.61e-06	0.0	-0.04
340	38	-0.51	0.22	-4.73	-3.88e-06	0.0	0.04
340	39	-0.75	-0.23	-4.73	2.94e-06	0.0	-0.03
340	40	-0.09	0.19	-4.74	-4.52e-06	0.0	0.05
340	41	-0.76	-0.19	-4.74	3.58e-06	0.0	-0.04
340	42	-0.26	0.19	-4.73	-3.85e-06	0.0	0.04
340	43	-0.92	-0.19	-4.73	4.20e-06	0.0	-0.05
340	44	-0.05	0.20	-4.74	-3.88e-06	0.0	0.04
340	45	-0.72	-0.19	-4.74	4.23e-06	0.0	-0.05
340	46	-0.30	0.19	-4.73	-4.49e-06	0.0	0.05
340	47	-0.97	-0.20	-4.73	3.56e-06	0.0	-0.04
340	48	-0.37	0.02	-4.74	-1.14e-06	0.0	0.01
340	49	-0.40	-0.03	-4.74	0.0	0.0	-7.04e-04
340	50	-0.60	0.03	-4.72	0.0	0.0	4.65e-03
340	51	-0.63	-0.02	-4.72	0.0	0.0	-7.79e-03
340	52	-0.35	0.02	-4.74	-1.22e-06	0.0	0.01
340	53	-0.43	-0.03	-4.74	0.0	0.0	-1.57e-03
340	54	-0.57	0.03	-4.72	0.0	0.0	5.50e-03
340	55	-0.66	-0.02	-4.72	0.0	0.0	-8.64e-03
340	56	-0.32	0.04	-4.74	0.0	0.0	5.00e-03
340	57	-0.35	-0.02	-4.74	0.0	0.0	-8.07e-03
340	58	-0.65	0.02	-4.72	-1.10e-06	0.0	0.01
340	59	-0.68	-0.04	-4.72	0.0	0.0	-4.53e-04
340	60	-0.30	0.03	-4.74	0.0	0.0	5.85e-03
340	61	-0.38	-0.02	-4.74	0.0	0.0	-8.91e-03
340	62	-0.62	0.02	-4.72	-1.18e-06	0.0	0.01
340	63	-0.70	-0.03	-4.72	0.0	0.0	-1.32e-03
340	64	-0.42	0.10	-4.73	-1.84e-06	0.0	0.02

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
340	65	-0.52	-0.10	-4.73	1.28e-06	0.0	-0.01
340	66	-0.49	0.10	-4.73	-1.63e-06	0.0	0.02
340	67	-0.59	-0.10	-4.73	1.48e-06	0.0	-0.02
340	68	-0.40	0.10	-4.73	-1.64e-06	0.0	0.02
340	69	-0.50	-0.10	-4.73	1.48e-06	0.0	-0.02
340	70	-0.50	0.10	-4.73	-1.83e-06	0.0	0.02
340	71	-0.60	-0.10	-4.73	1.27e-06	0.0	-0.01
340	72	-0.33	0.08	-4.73	-2.10e-06	0.0	0.02
340	73	-0.61	-0.08	-4.73	1.54e-06	0.0	-0.02
340	74	-0.40	0.08	-4.73	-1.89e-06	0.0	0.02
340	75	-0.68	-0.08	-4.73	1.74e-06	0.0	-0.02
340	76	-0.31	0.09	-4.73	-1.90e-06	0.0	0.02
340	77	-0.60	-0.08	-4.73	1.74e-06	0.0	-0.02
340	78	-0.41	0.08	-4.73	-2.09e-06	0.0	0.02
340	79	-0.69	-0.09	-4.73	1.53e-06	0.0	-0.02
342	1	110.02	0.20	-218.34	-8.17e-03	0.0	0.12
342	2	89.92	0.16	-176.99	-6.71e-03	0.0	0.10
342	3	52.10	0.09	-141.56	-3.67e-03	0.0	0.05
342	4	32.01	0.06	-100.21	-2.47e-03	0.0	0.04
342	5	100.66	0.16	-157.83	-6.64e-03	0.0	0.10
342	6	80.56	0.13	-116.48	-5.17e-03	0.0	0.07
342	7	71.20	-0.38	-147.18	0.03	0.0	-0.38
342	8	51.12	-0.37	-105.85	0.03	0.0	-0.38
342	9	82.58	1.86	-172.98	-0.05	0.0	0.69
342	10	62.43	1.78	-131.48	-0.04	0.0	0.65
342	11	79.37	0.14	-158.09	-5.88e-03	0.0	0.08
342	12	40.76	0.07	-106.90	-2.77e-03	0.0	0.04
342	13	73.12	0.12	-117.75	-4.86e-03	0.0	0.07
342	14	53.49	-0.26	-110.64	0.02	0.0	-0.25
342	15	61.09	1.26	-127.89	-0.03	0.0	0.47
342	16	81.21	1.32	-143.12	-0.05	0.0	0.73
342	17	70.16	-0.47	-121.92	0.01	0.0	-0.21
342	18	40.36	0.61	-107.29	-0.02	0.0	0.29
342	19	30.36	-1.11	-90.01	0.04	0.0	-0.61
342	20	81.28	1.37	-144.28	-0.05	0.0	0.77
342	21	70.24	-0.52	-121.15	0.02	0.0	-0.24
342	22	40.42	0.66	-108.45	-0.02	0.0	0.32
342	23	30.44	-1.16	-89.24	0.05	0.0	-0.65
342	24	83.33	0.64	-137.36	-0.02	0.0	0.31
342	25	74.01	-1.14	-120.92	0.04	0.0	-0.64
342	26	38.24	1.29	-113.04	-0.05	0.0	0.72
342	27	26.51	-0.43	-91.01	0.01	0.0	-0.18
342	28	83.39	0.69	-138.53	-0.02	0.0	0.34
342	29	74.08	-1.19	-120.15	0.05	0.0	-0.67
342	30	38.30	1.34	-114.20	-0.05	0.0	0.75
342	31	26.59	-0.48	-90.24	0.02	0.0	-0.22
342	32	81.22	2.85	-158.64	-0.10	0.0	1.50
342	33	46.37	-2.46	-95.04	0.09	0.0	-1.28
342	34	68.96	2.64	-147.88	-0.10	0.0	1.37
342	35	34.43	-2.66	-85.47	0.10	0.0	-1.40
342	36	81.85	2.65	-156.90	-0.10	0.0	1.37
342	37	47.52	-2.67	-94.75	0.10	0.0	-1.41
342	38	68.33	2.85	-149.61	-0.10	0.0	1.50
342	39	33.28	-2.45	-85.77	0.09	0.0	-1.27
342	40	81.44	3.03	-162.53	-0.11	0.0	1.62
342	41	46.63	-2.64	-92.47	0.10	0.0	-1.40
342	42	69.18	2.81	-151.77	-0.10	0.0	1.49
342	43	34.69	-2.83	-82.91	0.11	0.0	-1.52
342	44	82.07	2.82	-160.80	-0.10	0.0	1.49
342	45	47.78	-2.84	-92.18	0.11	0.0	-1.52
342	46	68.55	3.02	-153.51	-0.11	0.0	1.62
342	47	33.54	-2.63	-83.20	0.10	0.0	-1.39
342	48	63.51	0.63	-123.84	-0.02	0.0	0.35
342	49	58.76	-0.24	-114.75	7.94e-03	0.0	-0.11
342	50	51.00	0.41	-112.73	-0.01	0.0	0.21
342	51	46.62	-0.45	-104.93	0.02	0.0	-0.24
342	52	63.53	0.65	-124.33	-0.03	0.0	0.37
342	53	58.80	-0.27	-114.43	9.04e-03	0.0	-0.13

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
342	54	51.03	0.43	-113.23	-0.02	0.0	0.23
342	55	46.66	-0.47	-104.61	0.02	0.0	-0.26
342	56	64.18	0.42	-122.13	-0.01	0.0	0.22
342	57	60.00	-0.46	-114.58	0.02	0.0	-0.25
342	58	50.32	0.62	-114.42	-0.02	0.0	0.35
342	59	45.39	-0.23	-105.10	7.54e-03	0.0	-0.11
342	60	64.21	0.44	-122.64	-0.02	0.0	0.23
342	61	60.03	-0.48	-114.26	0.02	0.0	-0.27
342	62	50.34	0.65	-114.91	-0.03	0.0	0.36
342	63	45.42	-0.26	-104.78	8.64e-03	0.0	-0.12
342	64	65.19	1.31	-131.83	-0.05	0.0	0.70
342	65	50.34	-1.07	-104.66	0.04	0.0	-0.56
342	66	61.44	1.25	-128.50	-0.05	0.0	0.65
342	67	46.68	-1.13	-101.70	0.04	0.0	-0.59
342	68	65.39	1.25	-131.32	-0.05	0.0	0.66
342	69	50.70	-1.13	-104.60	0.04	0.0	-0.60
342	70	61.24	1.31	-129.01	-0.05	0.0	0.69
342	71	46.32	-1.07	-101.76	0.04	0.0	-0.55
342	72	65.29	1.39	-133.48	-0.05	0.0	0.75
342	73	50.45	-1.14	-103.57	0.04	0.0	-0.61
342	74	61.53	1.32	-130.15	-0.05	0.0	0.70
342	75	46.79	-1.20	-100.61	0.04	0.0	-0.64
342	76	65.49	1.32	-132.97	-0.05	0.0	0.71
342	77	50.81	-1.21	-103.50	0.04	0.0	-0.65
342	78	61.33	1.38	-130.66	-0.05	0.0	0.74
342	79	46.43	-1.14	-100.67	0.04	0.0	-0.60
Nodo		Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
		-132.55	-129.08	-269.70	-0.11	0.0	-1.62
		130.20	129.07	-3.58	0.11	0.0	1.63

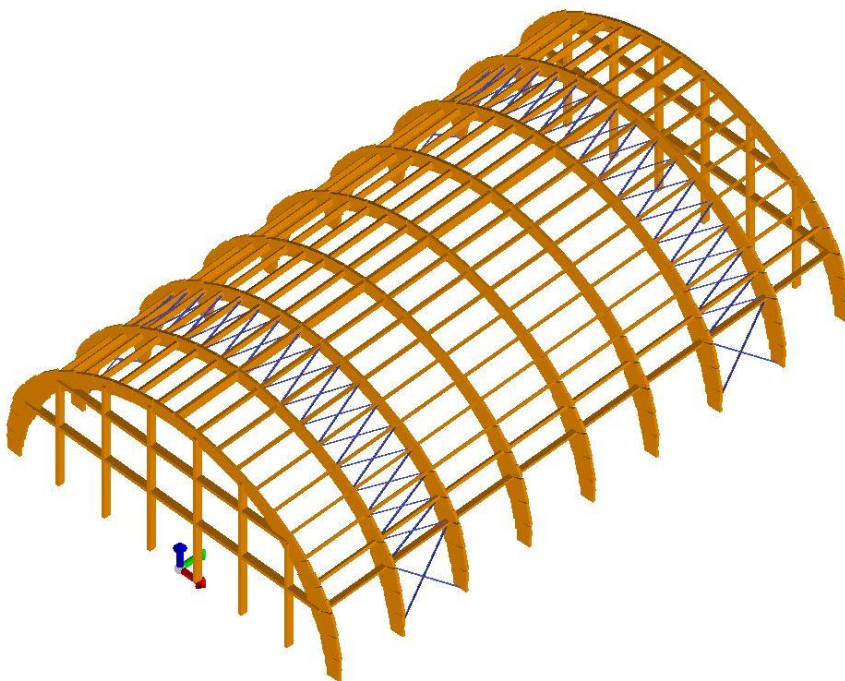
Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
		kN	kN	kN	kN m	kN m	kN m
2	1	-109.61	-0.16	-217.61	6.62e-03	0.0	0.10
	36	-34.42	2.83	-82.43	-0.11	0.0	-1.52
	34	-47.51	2.84	-91.69	-0.11	0.0	-1.52
	39	-81.17	-3.03	-162.06	0.11	0.0	1.62
	16	-26.32	0.48	-89.77	-0.02	0.0	-0.22
	19	-83.12	-0.69	-138.05	0.02	0.0	0.34
4	1	1.06	3.23e-04	-6.84	1.83e-06	0.0	4.46e-03
	10	0.43	2.34	-4.73	3.54e-06	0.0	8.61e-03
	8	0.51	-4.67	-4.73	-2.08e-05	0.0	-0.05
	39	0.09	-0.19	-5.03	2.00e-05	0.0	0.05
	1	1.06	3.23e-04	-6.84	1.83e-06	0.0	4.46e-03
	1	1.06	3.23e-04	-6.84	1.83e-06	0.0	4.46e-03
6	1	-0.17	1.65e-04	-10.44	0.0	0.0	1.51e-03
	10	-0.07	6.22	-7.26	7.70e-06	0.0	0.02
	8	-0.08	-12.45	-7.26	-1.88e-05	0.0	-0.05
	9	-0.10	6.22	-10.44	7.73e-06	0.0	0.02
	8	-0.08	-12.45	-7.26	-1.88e-05	0.0	-0.05
	9	-0.10	6.22	-10.44	7.73e-06	0.0	0.02
8	9	-5.36e-03	7.86	-11.31	4.62e-06	0.0	0.01
	4	-0.06	1.58e-04	-7.82	0.0	0.0	3.12e-05
	8	-3.99e-03	-15.73	-7.82	-9.91e-06	0.0	-0.02
	9	-5.36e-03	7.86	-11.31	4.62e-06	0.0	0.01
	1	-7.24e-03	2.84e-04	-11.31	0.0	0.0	3.85e-04
	1	-7.24e-03	2.84e-04	-11.31	0.0	0.0	3.85e-04
10	5	0.02	1.82e-04	-11.30	0.0	0.0	-1.45e-04
	4	-0.06	1.30e-04	-7.81	0.0	0.0	-3.19e-04
	7	-9.53e-04	-15.74	-11.30	-4.26e-06	0.0	-0.01
	20	0.42	0.16	-8.33	3.20e-06	0.0	7.79e-03
	7	-9.53e-04	-15.74	-11.30	-4.26e-06	0.0	-0.01
	20	0.42	0.16	-8.33	3.20e-06	0.0	7.79e-03
12	1	0.17	1.65e-04	-10.57	0.0	0.0	-1.49e-03
	4	-0.03	6.75e-05	-7.33	0.0	0.0	-8.07e-04
	45	0.09	-0.40	-7.78	-6.48e-06	0.0	-0.02

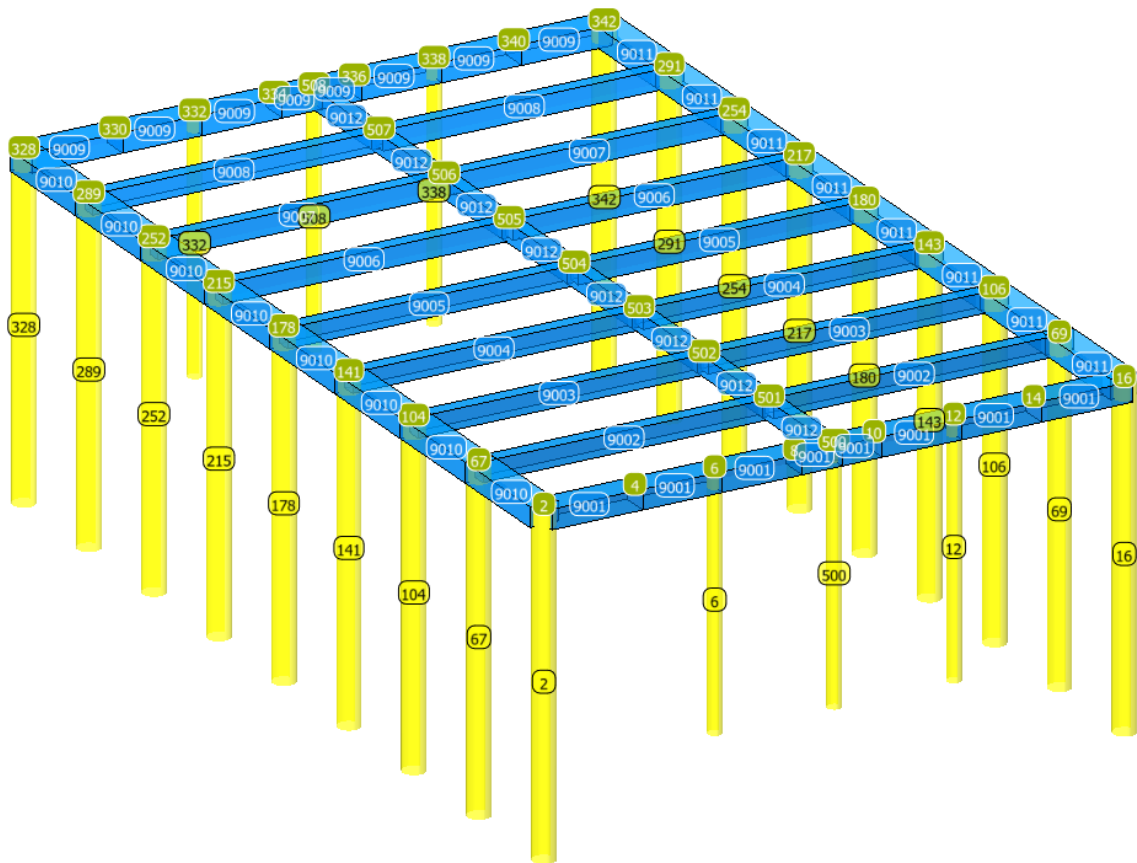
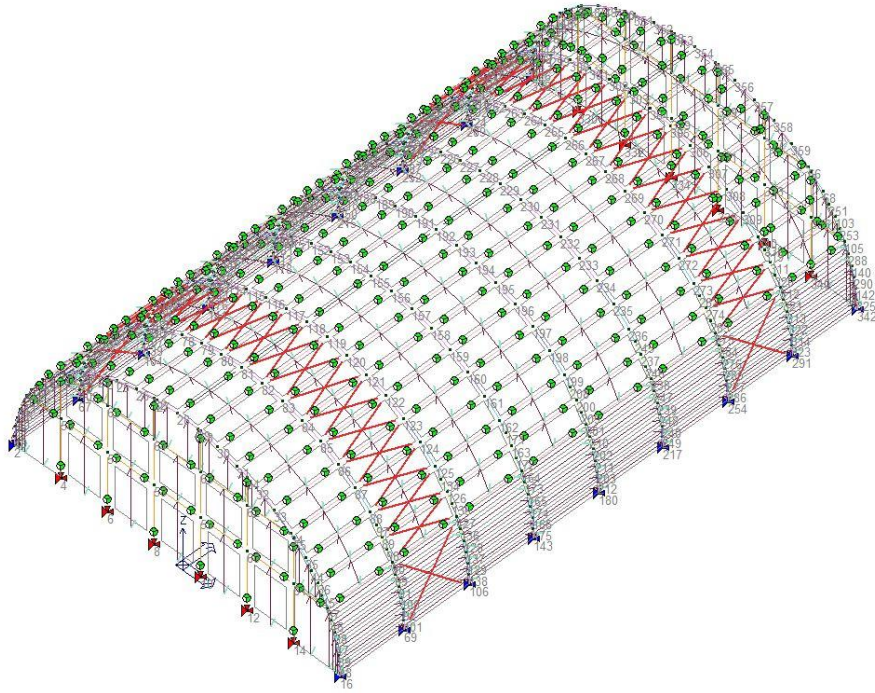
Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
	8	0.08	-12.43	-7.33	1.35e-05	0.0	0.03
	22	-0.36	0.14	-7.80	-1.62e-06	0.0	-3.91e-03
	21	0.51	-0.14	-7.77	0.0	0.0	1.85e-03
14	3	-0.58	2.02e-04	-6.84	0.0	0.0	-3.00e-03
	2	-0.87	2.66e-04	-4.74	0.0	0.0	-3.66e-03
	8	-0.50	-4.67	-4.74	-4.32e-06	0.0	0.05
	45	-0.75	-0.19	-5.04	4.53e-06	0.0	-0.05
	1	-1.05	3.24e-04	-6.84	0.0	0.0	-4.44e-03
	1	-1.05	3.24e-04	-6.84	0.0	0.0	-4.44e-03
16	1	109.58	-0.16	-217.54	6.60e-03	0.0	-0.09
	46	34.40	2.83	-82.39	-0.11	0.0	1.52
	40	47.49	2.84	-91.66	-0.11	0.0	1.52
	45	81.15	-3.03	-162.02	0.11	0.0	-1.62
	1	109.58	-0.16	-217.54	6.60e-03	0.0	-0.09
	1	109.58	-0.16	-217.54	6.60e-03	0.0	-0.09
67	1	-121.63	-0.12	-252.29	5.46e-03	0.0	0.08
	36	-23.41	127.11	-3.63	-0.11	0.0	-1.54
	34	-35.86	126.72	-14.72	-0.11	0.0	-1.55
	39	-90.94	-2.86	-241.07	0.11	0.0	1.59
	23	-87.52	-0.60	-172.71	0.02	0.0	0.29
	20	-32.61	17.82	-88.52	-0.01	0.0	-0.19
69	1	121.61	-0.12	-252.20	5.44e-03	0.0	-0.08
	46	23.40	127.13	-3.58	-0.11	0.0	1.54
	40	35.85	126.75	-14.67	-0.11	0.0	1.55
	45	90.93	-2.86	-241.03	0.11	0.0	-1.59
	1	121.61	-0.12	-252.20	5.44e-03	0.0	-0.08
	1	121.61	-0.12	-252.20	5.44e-03	0.0	-0.08
104	1	-127.06	-0.26	-264.62	3.44e-03	0.0	0.05
	33	-38.05	-129.08	-27.83	0.11	0.0	1.61
	34	-80.53	2.78	-224.68	-0.11	0.0	-1.53
	39	-50.14	-128.77	-37.26	0.11	0.0	1.62
	23	-81.87	-20.08	-131.20	0.02	0.0	0.29
	20	-42.98	0.46	-139.12	-0.01	0.0	-0.20
106	1	127.07	-0.20	-264.66	3.42e-03	0.0	-0.05
	43	38.06	-129.05	-27.84	0.11	0.0	-1.61
	40	80.53	2.78	-224.69	-0.11	0.0	1.53
	45	50.14	-128.74	-37.27	0.11	0.0	-1.62
	1	127.07	-0.20	-264.66	3.42e-03	0.0	-0.05
	1	127.07	-0.20	-264.66	3.42e-03	0.0	-0.05
141	1	-129.46	-0.02	-268.49	1.33e-03	0.0	0.02
	6	-78.23	-0.01	-126.13	6.34e-04	0.0	9.11e-03
	34	-74.43	2.95	-155.93	-0.11	0.0	-1.61
	39	-71.65	-2.96	-144.97	0.11	0.0	1.63
	25	-45.22	-0.60	-129.33	0.02	0.0	0.29
	26	-84.25	0.59	-151.35	-0.02	0.0	-0.28
143	1	129.47	-0.02	-268.50	1.30e-03	0.0	-0.02
	6	102.70	-0.01	-124.62	7.61e-04	0.0	-0.01
	40	74.44	2.95	-155.94	-0.11	0.0	1.61
	45	71.65	-2.96	-144.97	0.11	0.0	-1.62
	1	129.47	-0.02	-268.50	1.30e-03	0.0	-0.02
	1	129.47	-0.02	-268.50	1.30e-03	0.0	-0.02
178	1	-130.18	0.02	-269.68	-7.81e-04	0.0	-0.01
	6	-78.59	0.01	-126.70	-4.57e-04	0.0	-6.58e-03
	34	-72.17	2.96	-146.25	-0.11	0.0	-1.62
	39	-72.17	-2.96	-146.25	0.11	0.0	1.62
	27	-85.20	-1.29	-151.33	0.05	0.0	0.74
	24	-45.26	1.26	-130.60	-0.05	0.0	-0.72
180	1	130.20	0.02	-269.70	-8.09e-04	0.0	0.01
	6	103.15	0.01	-125.37	-4.68e-04	0.0	6.74e-03
	40	72.18	2.96	-146.26	-0.11	0.0	1.62
	45	72.18	-2.96	-146.25	0.11	0.0	-1.62
	1	130.20	0.02	-269.70	-8.09e-04	0.0	0.01
	1	130.20	0.02	-269.70	-8.09e-04	0.0	0.01
215	1	-129.54	0.07	-268.62	-2.88e-03	0.0	-0.04
	6	-78.27	0.03	-126.20	-1.55e-03	0.0	-0.02
	34	-71.70	2.96	-145.05	-0.11	0.0	-1.62
	39	-74.48	-2.95	-156.02	0.11	0.0	1.61
	27	-86.53	-1.27	-155.00	0.05	0.0	0.73

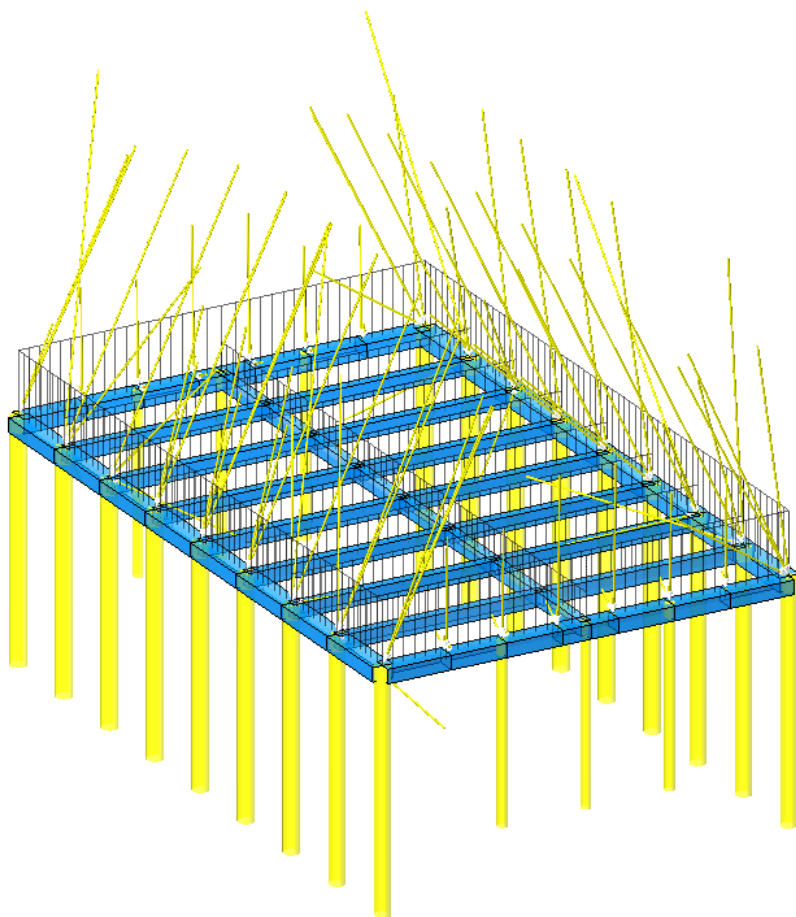
Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
	24	-44.37	1.27	-129.80	-0.05	0.0	-0.73
217	1	129.55	0.07	-268.63	-2.91e-03	0.0	0.04
	6	102.75	0.04	-124.69	-1.70e-03	0.0	0.02
	40	71.71	2.96	-145.06	-0.11	0.0	1.62
	45	74.49	-2.95	-156.02	0.11	0.0	-1.61
	1	129.55	0.07	-268.63	-2.91e-03	0.0	0.04
	1	129.55	0.07	-268.63	-2.91e-03	0.0	0.04
252	1	-127.26	0.11	-265.07	-5.00e-03	0.0	-0.07
	36	-38.16	129.04	-28.03	-0.11	0.0	-1.61
	34	-50.25	128.73	-37.46	-0.11	0.0	-1.62
	39	-80.63	-2.78	-224.85	0.11	0.0	1.53
	23	-83.34	-0.50	-169.19	0.02	0.0	0.23
	20	-41.67	21.10	-99.91	-0.02	0.0	-0.26
254	1	127.26	0.11	-265.06	-5.03e-03	0.0	0.07
	46	38.16	129.07	-28.01	-0.11	0.0	1.61
	40	50.25	128.75	-37.44	-0.11	0.0	1.62
	45	80.64	-2.78	-224.84	0.11	0.0	-1.53
	1	127.26	0.11	-265.06	-5.03e-03	0.0	0.07
	1	127.26	0.11	-265.06	-5.03e-03	0.0	0.07
289	1	-121.85	0.12	-252.54	-7.01e-03	0.0	-0.10
	33	-23.58	-127.12	-3.91	0.11	0.0	1.54
	34	-91.10	2.86	-241.33	-0.11	0.0	-1.58
	39	-36.03	-126.74	-15.00	0.11	0.0	1.55
	24	-48.18	1.26	-150.97	-0.05	0.0	-0.73
	27	-71.36	-49.66	-108.35	0.05	0.0	0.69
291	1	121.87	0.16	-252.58	-7.04e-03	0.0	0.10
	43	23.59	-127.09	-3.94	0.11	0.0	-1.54
	40	91.11	2.86	-241.35	-0.11	0.0	1.58
	45	36.04	-126.71	-15.03	0.11	0.0	-1.55
	1	121.87	0.16	-252.58	-7.04e-03	0.0	0.10
	1	121.87	0.16	-252.58	-7.04e-03	0.0	0.10
328	1	-110.02	0.20	-218.33	-8.14e-03	0.0	-0.12
	33	-34.69	-2.83	-82.90	0.11	0.0	1.52
	34	-81.44	3.03	-162.53	-0.11	0.0	-1.62
	39	-47.78	-2.84	-92.17	0.11	0.0	1.53
	30	-83.32	0.64	-137.35	-0.02	0.0	-0.30
	24	-38.30	1.34	-114.20	-0.05	0.0	-0.75
330	1	1.06	-3.69e-04	-6.38	-2.09e-06	0.0	-5.07e-03
	8	0.47	2.34	-4.49	1.57e-05	0.0	0.04
	34	0.76	0.19	-4.72	-2.00e-05	0.0	-0.05
	39	0.05	-0.19	-4.72	1.87e-05	0.0	0.05
	1	1.06	-3.69e-04	-6.38	-2.09e-06	0.0	-5.07e-03
	1	1.06	-3.69e-04	-6.38	-2.09e-06	0.0	-5.07e-03
332	1	-0.17	-1.52e-04	-10.23	0.0	0.0	-1.64e-03
	8	-0.08	6.22	-7.14	1.08e-05	0.0	0.03
	34	-0.09	0.40	-7.55	-6.29e-06	0.0	-0.02
	10	-0.09	12.45	-7.14	1.72e-05	0.0	0.04
	34	-0.09	0.40	-7.55	-6.29e-06	0.0	-0.02
	10	-0.09	12.45	-7.14	1.72e-05	0.0	0.04
334	5	0.01	-1.93e-04	-10.80	0.0	0.0	-2.70e-04
	4	-0.06	-1.35e-04	-7.54	0.0	0.0	2.34e-05
	22	-0.22	0.16	-7.96	-3.29e-06	0.0	-8.01e-03
	10	-4.06e-03	15.73	-7.54	9.58e-06	0.0	0.02
	1	-7.05e-03	-3.15e-04	-10.80	0.0	0.0	-3.96e-04
	1	-7.05e-03	-3.15e-04	-10.80	0.0	0.0	-3.96e-04
336	5	0.02	-2.03e-04	-10.79	0.0	0.0	1.76e-04
	4	-0.06	-1.08e-04	-7.54	0.0	0.0	3.18e-04
	29	0.36	-0.16	-7.99	-3.20e-06	0.0	-7.79e-03
	9	-6.42e-04	15.74	-10.79	4.60e-06	0.0	0.01
	29	0.36	-0.16	-7.99	-3.20e-06	0.0	-7.79e-03
	9	-6.42e-04	15.74	-10.79	4.60e-06	0.0	0.01
338	1	0.17	-1.52e-04	-10.23	0.0	0.0	1.65e-03
	4	-0.03	-6.75e-05	-7.14	0.0	0.0	7.26e-04
	10	0.08	12.43	-7.15	-1.19e-05	0.0	-0.03
	40	0.25	0.40	-7.55	6.47e-06	0.0	0.02
	28	0.56	0.14	-7.54	0.0	0.0	-1.87e-03
	31	-0.41	-0.14	-7.57	1.61e-06	0.0	3.89e-03
340	3	-0.59	-1.67e-04	-6.39	0.0	0.0	2.54e-03

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
	2	-0.87	-3.08e-04	-4.49	0.0	0.0	4.22e-03
	40	-0.09	0.19	-4.74	-4.52e-06	0.0	0.05
	45	-0.72	-0.19	-4.74	4.23e-06	0.0	-0.05
	1	-1.06	-3.72e-04	-6.39	0.0	0.0	5.09e-03
	1	-1.06	-3.72e-04	-6.39	0.0	0.0	5.09e-03
342	1	110.02	0.20	-218.34	-8.17e-03	0.0	0.12
	43	34.69	-2.83	-82.91	0.11	0.0	-1.52
	40	81.44	3.03	-162.53	-0.11	0.0	1.62
	45	47.78	-2.84	-92.18	0.11	0.0	-1.52
	1	110.02	0.20	-218.34	-8.17e-03	0.0	0.12
	1	110.02	0.20	-218.34	-8.17e-03	0.0	0.12

Le fondazioni sono state verificate per la "Combinazione 1" corrispondente alla combinazione fondamentale per la struttura in elevazione, e per le combinazioni "MAX" e "MIN" riportanti rispettivamente il valore massimo e minimo delle azioni derivati dal calcolo della struttura in elevazione. Agli SLE le fondazioni sono state verificate per la combinazione rara sfruttando le reazioni della struttura in elevazione correlate alle combinazioni dalla 11 alla 15.







NORMATIVA DI RIFERIMENTO

Nel seguente elenco sono riportate le norme di riferimento secondo le quali sono state condotte le fasi di calcolo e verifica degli elementi strutturali:

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"

Legge 2 febbraio 1974 n. 64 (G. U. 21 marzo 1974 n. 76)

"Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche"

D.M. 17.01.2018 (Aggiornamento "Norme tecniche per le costruzioni")

Nel seguito denominate NT (norme tecniche)

Il calcolo delle sollecitazioni e la loro combinazione è stato eseguito seguendo le indicazioni delle NT secondo l'APPROCCIO 2

VITA NOMINALE, CLASSI D'USO E PERIODO DI RIFERIMENTO

Per queste informazioni fare riferimento agli elaborati della struttura in elevazione, da cui sono state ricavate le forze agenti sulle fondazioni in esame.

MATERIALI IMPIEGATI E RESISTENZE DI CALCOLO

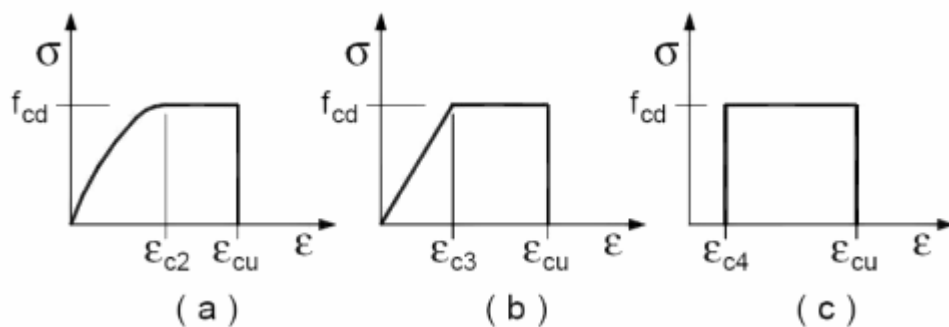
Per la realizzazione dell'opera in oggetto saranno impiegati i seguenti materiali, di cui si riportano nell'ordine le proprietà meccaniche adottate nel calcolo elastico e le resistenze di calcolo per le verifiche di sicurezza:

Materiali

Materiale: C25/30		
Peso specifico	kg/mc	2500
Modulo di Young E	kg/cmq	3E05
Modulo di Poisson ν		0.13
Coefficiente di dilatazione termica λ	1/°C	1e-05

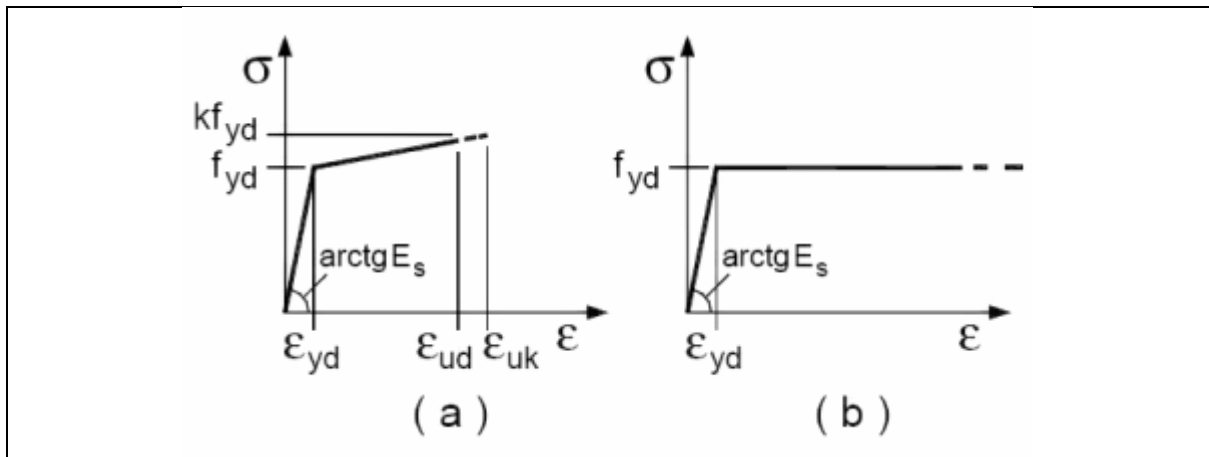
Parti in calcestruzzo armato		
Classe calcestruzzo		Cls C25/30
Resistenza cubica R_{ck}	kg/cmq	300
Resistenza di calcolo f_{cd}	kg/cmq	141
Resistenza a trazione di calcolo f_{ctd}	kg/cmq	12
Resistenza cilindrica f_{ck}	kg/cmq	249
Resistenza a trazione media f_{ctm}	kg/cmq	26
Classe acciaio		
Resistenza allo snervamento f_{yk}	kg/cmq	≥ 4500
Resistenza alla rottura f_{tk}	kg/cmq	≥ 5400

I diagrammi costitutivi del calcestruzzo e dell'acciaio per calcestruzzo sono stati adottati in conformità alle indicazioni riportate al punto 4.1.2.1.2.2 delle NT; in particolare per le verifiche delle sezioni in calcestruzzo armato è stato adottato il modello di calcestruzzo riportato in a) della figura seguente



Diagrammi di calcolo tensione/deformazione del calcestruzzo.

ed il modello di acciaio riportato in a) o b) della figura seguente



Diagrammi di calcolo tensione/deformazione dell'acciaio per calcestruzzo.

La resistenza di calcolo è data da f_{yk} / γ_f . Il coefficiente di sicurezza è γ_f .

Tutti i materiali impiegati dovranno essere comunque verificati con opportune prove di laboratorio secondo le prescrizioni della vigente Normativa. Riguardo ai coefficienti di sicurezza parziali, alle deformazioni del calcestruzzo e dell'acciaio per modello incrudente si faccia riferimento ai criteri di verifica nella sezione "Verifica Elementi Strutturali"

TERRENO DI FONDAZIONE

Le fondazioni del fabbricato in oggetto sono costituite da un insieme di:

La struttura di fondazione è posta ad una profondità media di m. dal piano campagna e di dimensioni planimetriche massime pari a m. x

I valori delle tensioni sul piano di posa e le sollecitazioni negli elementi di fondazione, sono riportati nell'allegato 'Calcoli Strutturali'. Dalla Relazione Geologica redatta dal geologo risulta che nell'area in oggetto, si ha un terreno di tipo con la seguente stratigrafia:

Strato n°		1	2	3
Spessore	cm	80	480	2000
Peso spec.	kg/mc	1750	1800	1900
Peso spec. Sat.	kg/mc	1750	1800	1900
Angolo attrito	°	15	20	20
Addensato		No	No	No
OCR		--	--	--
coesione	kg/cm ²	0.00	0.05	0.25
cu	kg/cm ²	0.00	0.40	1.20
Modulo edometrico	kg/cm ²	2E02	2E02	2E02
Coeff. Poisson		0.3	0.3	0.3

Descrizione		Strato 1	Strato 2	Strato 3
-------------	--	----------	----------	----------

Per la determinazione del carico limite del complesso terreno-fondazione, pertanto, si sono assunti i parametri fisico-meccanici precedentemente indicati. Per maggiori dettagli riguardo i parametri che caratterizzano il terreno si rimanda alla relazione geologica e a quella geotecnica.

ANALISI DEI CARICHI

La valutazione dei carichi e dei sovraccarichi è stata effettuata in accordo con le disposizioni contenute nel **D.M. 17.01.2018 (Aggiornamento "Norme tecniche per le costruzioni")**

I carichi adottati sono i seguenti:

I carichi relativi ai pesi propri vengono valutati in automatico in funzione della geometria degli elementi ed al loro peso specifico i tamponamenti vengono valutati per metro lineare di trave su cui insistono maggiori dettagli ad essi relativi sono riportati nel tabulato di calcolo alla sezione dei carichi relativi alle aste, nodi ed shell.

VALUTAZIONE DELL'AZIONE SISMICA

L'azione sismica è stata valutata in conformità alle indicazioni riportate al capitolo 3.2 delle NT.

La valutazione degli spettri di risposta per un dato Stato Limite avviene attraverso le seguenti fasi:

- definizione della Vita Nominale e della Classe d'Uso della struttura, in base ai quali si determina il Periodo di Riferimento dell'azione sismica.
- Determinazione attraverso latitudine e longitudine dei parametri sismici di base a_g , F_0 e T^*_c per lo Stato Limite di interesse; l'individuazione è stata effettuata interpolando tra i 4 punti più vicini al punto di riferimento dell'edificio secondo quanto disposto dall'allegato alle NTC "Pericolosità Sismica", dove:

a_g accelerazione orizzontale massima al sito;

F_0 valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale.

T^*_c periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale

- Determinazione dei coefficienti di amplificazione stratigrafica e topografica.
- Calcolo del periodo T_c corrispondente all'inizio del tratto a velocità costante dello Spettro.

I dati così calcolati sono stati utilizzati per determinare gli Spettri di Progetto nelle verifiche agli Stati Limite considerati, per ogni direzione dell'azione sismica.

Oltre alla determinazione dei parametri sismici del sito si è considerata la tipologia di terreno, la posizione topografica e la tipologia strutturale (classe di duttilità, regolarità, ecc..) che ha condotto alla determinazione dei seguenti spettri di risposta:

ELEMENTI DI FONDAZIONE.

Il calcolo della struttura di fondazione è condotto considerando le azioni che la struttura sovrastante le trasmette amplificate per un γ_{Rd} pari a 1,1 in CD "B" e 1,3 in CD "A", e comunque non maggiori di quelle derivanti da una analisi elastica della struttura in elevazione eseguita con un fattore di comportamento $q=1$ e non maggiori delle resistenze degli elementi sovrastanti la fondazione. Le precedenti limitazioni comprendo anche il caso di struttura calcolata con spettro elastico o con $q=1$.

METODO DI ANALISI E CRITERI DI VERIFICA.

Il calcolo delle azioni sismiche è stato eseguito secondo l'analisi statica, considerando il comportamento della struttura in regime elastico lineare. Le forze sismiche equivalenti sono applicate nei nodi del modello, ai vari impalcati, e vengono generate attraverso i carichi agenti sulle membrature che collegano i nodi.

La forza da applicare a ciascun nodo dotato di massa è data dalla formula seguente

$$F_i = \frac{F_h z_i W_i}{\sum_j z_j W_j}$$

dove:

$$F_h = \frac{S_d(T_1) W \lambda}{g}$$

T_1 è il periodo fondamentale della struttura (cfr. tabella "Periodi Fondamentali Analisi Statica")

F_i è la forza da applicare alla massa i -esima;

W_i e W_j sono i pesi, rispettivamente, della massa i e della massa j ;

z_i e z_j sono le quote, rispetto al piano di fondazione delle masse i e j ;

$S_d(T_1)$ è l'ordinata dello spettro di risposta di progetto in termini di accelerazione;

W è il peso complessivo della costruzione;

λ è un coefficiente pari a 0,85 se la costruzione ha almeno tre orizzontamenti e se $T_1 < 2T_C$, pari a 1,0 in tutti gli altri casi;

g è l'accelerazione di gravità

Le sollecitazioni derivanti da tali azioni sono state calcolate per varie posizioni dei baricentri delle masse e composte secondo combinazioni di posizioni prestabilite, come riportato in seguito, il risultato di tali combinazioni sono state composte poi con quelle derivanti da carichi non sismici secondo le varie combinazioni di carico probabilistiche. Per tener conto della eccentricità accidentale delle masse si sono considerate varie posizioni delle masse ad ogni impalcato modificando la posizione del baricentro di una distanza, rispetto alla posizione originaria, come percentuale della dimensione della struttura nella direzione considerata. Le azioni risultanti dai calcoli per le varie posizioni delle masse, in fase di verifica vengono combinati al fine di ottenere le azioni più sfavorevoli; di seguito vengono riportate sia le posizioni che le combinazioni delle masse, le due tabelle vanno lette nel seguente modo:

la prima indica la percentuale delle dimensioni della struttura secondo cui viene spostato il baricentro ad ogni impalcato la percentuale è assegnata nelle due direzioni ortogonali secondo cui agisce il sisma, per ognuna di tali posizioni è eseguito un calcolo statico della struttura; la seconda tabella è usata in fase di verifica per la valutazione dell'azione sismica nel seguente modo l'effetto del sisma in una direzione è combinato con quello ortogonale di un'altra posizione con i fattori specificati nelle due colonne:

Di seguito si riportano i periodi usati nell'analisi statica per la determinazione delle azioni statiche equivalenti:

[begin_modi_vibrare]

AZIONI SULLA STRUTTURA

I calcoli e le verifiche sono condotti con il metodo semiprobabilistico degli stati limite secondo le indicazioni del **D.M. 17.01.2018**. I carichi agenti sui solai, derivanti dall'analisi dei carichi, vengono assegnati alle aste in modo automatico in relazione all'influenza delle diverse aree di carico. I carichi dovuti ai tamponamenti, sia sulle travi di fondazione che su quelle di piano, sono schematizzati come carichi lineari agenti esclusivamente sulle aste. In presenza di platee il tamponamento è inserito considerando delle speciali aste (aste a sezione nulla) che hanno la sola funzione di riportare il carico su di esse agente nei nodi degli elementi della platea ad esse collegati. Su tutti gli elementi strutturali è inoltre possibile applicare direttamente ulteriori azioni concentrate e/o distribuite. Le azioni introdotte direttamente sono combinate con le altre (carichi permanenti, accidentali e sisma) mediante le combinazioni di carico di seguito descritte; da esse si ottengono i valori probabilistici da impiegare successivamente nelle verifiche.

I solai, oltre a generare le condizioni di carico per carichi fissi e variabili, generano anche altre condizioni di carico che derivano dal carico accidentale moltiplicati per i coefficienti ψ_0 , ψ_1 e ψ_2 da utilizzare per le varie combinazioni di carico e per la determinazione delle masse sismiche.

Le azioni sono state assegnate su aste e piastre, definendo le seguenti condizioni di carico

Descrizione	Tipo
Peso Proprio	Automatica
QP Solai	Automatica
QFissi Solai	Automatica
QV Solai	Automatica
QV SolaiPsi0	Automatica
QV SolaiPsi1	Automatica
QV SolaiPsi2	Automatica
MASSIME REAZIONI VINCOLARI	Utente
MIN	Utente
MAX	Utente
1	Utente

In fase di combinazione delle condizioni di carico si è agito su coefficienti moltiplicatori delle condizioni per definirne l'esatto contributo sia in termini di carico che di massa, e sono stati infine definiti gli scenari di calcolo come gruppi omogenei di combinazioni di carico. DI seguito vengono riportate le combinazioni di carico usate per lo Stato Limite Ultimo e per lo Stato Limite di Esercizio. Le verifiche sono riportate nel fascicolo dei calcoli.

Le tabelle riportano nell'ordine:

- il nome della combinazione di carico
- il tipo di analisi svolta: STR=Strutturale, Statica STR=Sismica statica Strutturale, Modale STR=Sismica modale strutturale, SLE Rara=Stato Limite Esercizio combinazione rara, SLE Freq=Stato Limite Esercizio combinazione frequente, SLE Q.Perm=Stato Limite Esercizio combinazione quasi Permanente, GEO=Geotecnica, Statica GEO=Sismica Statica Geotecnica, Modale GEO=Sismica modale Geotecnica, STR+GEO=Strutturale+Geotecnica, Statica STR+GEO=Sismica Statica Strutturale+Geotecnica, Modale STR+GEO=Sismica modale Strutturale+Geotecnica. I termini "**Strutturale**", "**Geotecnica**" e "**Strutturale+Geotecnica**" indicano che la combinazione è usata dal programma per la determinazione delle verifiche di resistenza degli elementi strutturali, delle sole verifiche geotecniche, sia per le verifiche strutturali che geotecniche.
- lo spettro usato, se sismica
- il fattore amplificativo del sisma
- l'angolo di ingresso del sisma, se trattasi di analisi sismica
- il nome della condizione di carico e per ogni condizione di carico
- il fattore di combinazione per i carichi verticali
- se la condizione (con il suo coefficiente di peso) è inclusa nella combinazione (colonna Attiva)
- se la condizione partecipa alla formazione della massa (colonna Massa)
- il fattore con cui partecipa alla formazione della massa (se non è esclusa dalla formazione della massa)
-

Scenario di calcolo

Scenario : Scenario di calcolo per N.T. 2018 0

Combinazione	Tipo	Spettro	F.Sisma	α	K mod	Cond.Carico	Fatt. cv.	Attiva	Massa	Fattore m.
1)	SLE				1.0					

Combinazione	Tipo	Spettro	F.Sisma	α	K mod	Cond.Carico	Fatt. cv.	Attiva	Massa	Fattore m.
Combinazione 11	Rara				0					
						Peso Proprio	1	Si	No	1
						QP Solai	1	No	No	1
						QFissi Solai	1	No	No	1
						QV Solai	1	No	No	1
						QV SolaiPsi0	1	No	No	1
						QV SolaiPsi1	1	No	No	1
						QV SolaiPsi2	1	No	No	1
						MASSIME REAZIONI VINCOLARI	1	No	No	1
						MIN	1	No	No	1
						MAX	1	No	No	1
						1	1	No	No	1
						Comb11	1	Si	No	1
						Comb12	1	No	No	1
						Comb13	1	No	No	1
Comb14	1	No	No	1						
Comb15	1	No	No	1						
2) Combinazione 12	SLE Rara				1.00					
						Peso Proprio	1	Si	No	1
						QP Solai	1	No	No	1
						QFissi Solai	1	No	No	1
						QV Solai	1	No	No	1
						QV SolaiPsi0	1	No	No	1
						QV SolaiPsi1	1	No	No	1
						QV SolaiPsi2	1	No	No	1
						MASSIME REAZIONI VINCOLARI	1	No	No	1
						MIN	1	No	No	1
						MAX	1	No	No	1
						1	1	No	No	1
						Comb11	1	No	No	1
						Comb12	1	Si	No	1
						Comb13	1	No	No	1
Comb14	1	No	No	1						
Comb15	1	No	No	1						
3) Combinazione 13	SLE Rara				1.00					
						Peso Proprio	1	Si	No	1
						QP Solai	1	No	No	1
						QFissi Solai	1	No	No	1
						QV Solai	1	No	No	1
						QV SolaiPsi0	1	No	No	1
						QV SolaiPsi1	1	No	No	1
						QV SolaiPsi2	1	No	No	1
						MASSIME REAZIONI VINCOLARI	1	No	No	1
						MIN	1	No	No	1
						MAX	1	No	No	1

Combinazione	Tipo	Spettro	F.Sisma	α	K mod	Cond.Carico	Fatt. cv.	Attiva	Massa	Fattore m.
						1	1	No	No	1
						Comb11	1	No	No	1
						Comb12	1	No	No	1
						Comb13	1	Si	No	1
						Comb14	1	No	No	1
						Comb15	1	No	No	1
4) Combinazione 14	SLE Rara				1.0 0					
						Peso Proprio	1	Si	No	1
						QP Solai	1	No	No	1
						QFissi Solai	1	No	No	1
						QV Solai	1	No	No	1
						QV SolaiPsi0	1	No	No	1
						QV SolaiPsi1	1	No	No	1
						QV SolaiPsi2	1	No	No	1
						MASSIME REAZIONI VINCOLARI	1	No	No	1
						MIN	1	No	No	1
						MAX	1	No	No	1
						1	1	No	No	1
						Comb11	1	No	No	1
						Comb12	1	No	No	1
						Comb13	1	No	No	1
						Comb14	1	Si	No	1
						Comb15	1	No	No	1
5) Combinazione 15	SLE Rara				1.0 0					
						Peso Proprio	1	Si	No	1
						QP Solai	1	No	No	1
						QFissi Solai	1	No	No	1
						QV Solai	1	No	No	1
						QV SolaiPsi0	1	No	No	1
						QV SolaiPsi1	1	No	No	1
						QV SolaiPsi2	1	No	No	1
						MASSIME REAZIONI VINCOLARI	1	No	No	1
						MIN	1	No	No	1
						MAX	1	No	No	1
						1	1	No	No	1
						Comb11	1	No	No	1
						Comb12	1	No	No	1
						Comb13	1	No	No	1
						Comb14	1	No	No	1
						Comb15	1	Si	No	1
6) 1	STR+GE O				1.0 0					
						Peso Proprio	1.3	Si	No	1
						QP Solai	1	No	No	1
						QFissi Solai	1	No	No	1
						QV Solai	1	No	No	1
						QV SolaiPsi0	1	No	No	1

Combinazione	Tipo	Spettro	F.Sisma	α	K mod	Cond.Carico	Fatt. cv.	Attiva	Massa	Fattore m.
						QV SolaiPsi1	1	No	No	1
						QV SolaiPsi2	1	No	No	1
						MASSIME REAZIONI VINCOLARI	1	No	No	1
						MIN	1	No	No	1
						MAX	1	No	No	1
						1	1	Si	No	1
						Comb11	1	No	No	1
						Comb12	1	No	No	1
						Comb13	1	No	No	1
						Comb14	1	No	No	1
						Comb15	1	No	No	1
7) MIN	STR+GE O				1.0 0					
						Peso Proprio	1.3	Si	No	1
						QP Solai	1	No	No	1
						QFissi Solai	1	No	No	1
						QV Solai	1	No	No	1
						QV SolaiPsi0	1	No	No	1
						QV SolaiPsi1	1	No	No	1
						QV SolaiPsi2	1	No	No	1
						MASSIME REAZIONI VINCOLARI	1	No	No	1
						MIN	1	Si	No	1
						MAX	1	No	No	1
						1	1	No	No	1
						Comb11	1	No	No	1
						Comb12	1	No	No	1
						Comb13	1	No	No	1
						Comb14	1	No	No	1
						Comb15	1	No	No	1
8) MAX	STR+GE O				1.0 0					
						Peso Proprio	1.3	Si	No	1
						QP Solai	1	No	No	1
						QFissi Solai	1	No	No	1
						QV Solai	1	No	No	1
						QV SolaiPsi0	1	No	No	1
						QV SolaiPsi1	1	No	No	1
						QV SolaiPsi2	1	No	No	1
						MASSIME REAZIONI VINCOLARI	1	No	No	1
						MIN	1	No	No	1
						MAX	1	Si	No	1
						1	1	No	No	1
						Comb11	1	No	No	1
						Comb12	1	No	No	1
						Comb13	1	No	No	1
						Comb14	1	No	No	1
						Comb15	1	No	No	1
9) Statica	STR+GE O				1.0 0					

Combinazione	Tipo	Spettro	F. Sisma	α	K mod	Cond. Carico	Fatt. cv.	Attiva	Massa	Fattore m.
						Peso Proprio	1.3	Si	No	1
						QP Solai	1	No	No	1
						QFissi Solai	1	No	No	1
						QV Solai	1	No	No	1
						QV SolaiPsi0	1	No	No	1
						QV SolaiPsi1	1	No	No	1
						QV SolaiPsi2	1	No	No	1
						MASSIME REAZIONI VINCOLARI	1	Si	No	1
						MIN	1	No	No	1
						MAX	1	No	No	1
						1	1	No	No	1
						Comb11	1	No	No	1
						Comb12	1	No	No	1
						Comb13	1	No	No	1
						Comb14	1	No	No	1
						Comb15	1	No	No	1

CODICE DI CALCOLO IMPIEGATO

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Sigla:	IperSpaceBIM 2.1.0
Licenza n.	Concesso in licenza a BARRESI GAETANO codice utente C05064

Il modello di calcolo assunto è di tipo spaziale e l'analisi condotta è una Analisi Elastica Lineare, esso è fondamentalmente definito dalla posizione dei nodi collegati da elementi di tipo Beam o elementi di tipo shell a comportamento sia flessionale che membranale, l'elemento finito shell utilizzato è anche in grado di esprimere una rigidezza rotazionale in direzione ortogonale al piano dello shell.

L'analisi sismica utilizzata è l'analisi lineare statica con forze sismiche equivalenti. Il modello è stato analizzato sia per le combinazioni dei carichi verticali sia per le combinazioni di carico verticale e sisma. Un particolare chiarimento richiede la definizione delle masse nell'analisi sismica. Pur avendo considerato il modello con impalcati rigidi non si rende necessario calcolare il modello con la metodologia del MASTER-SLAVE, in quanto gli impalcati rigidi sono stati modellati con elementi di tipo shell a comportamento membranale in corrispondenza dei campi di solaio. Per ottenere tale modellazione il programma inserisce in automatico elementi di tipo shell a comportamento membranale in corrispondenza del campo di solaio intercluso tra una maglia di travi, la loro rigidezza membranale è sufficientemente alta da rendere il campo di solaio rigido nel proprio piano, ma tale da non mal condizionare la matrice di rigidezza della struttura. Qualora una maglia di travi non è collegata da solaio lo shell non viene inserito rendendo tale campo libero di deformarsi con il solo vincolo dato dalle travi della maglia. La loro rigidezza flessionale è

trascurabile rispetto a quella degli elementi che contornano il campo, per cui lo shell impone un vincolo orizzontale solo nel piano dell'impalcato tra i nodi collegati, quindi non è necessario definire preventivamente definire il centro di massa e momento d'inerzia delle masse, questo perché le masse sono trasferite direttamente nei nodi del modello (modello Lumped Mass) dal codice di calcolo, il metodo per calcolare le masse nei nodi può essere quello per aree di influenza, ma questa richiederebbe l'intervento diretto dell'operatore; il codice di calcolo utilizza una metodologia leggermente più raffinata per tener conto del fatto che su un elemento il carico portato non è uniforme, quindi il codice di calcolo considera i carichi presenti sull'asta che sono stati indicati come quelli che contribuiscono alla formazione della massa (tipicamente $G + \psi_2 \cdot Q$) e calcola le reazioni di incastro perfetto verticali, tali reazioni divise per l'accelerazione di gravità g danno il contributo dell'elemento alla massa del nodo, sommando i contributi di tutti gli elementi che convergono nel nodo si ottiene la massa complessiva nel nodo; per gli elementi shell invece si utilizza il metodo delle aree di influenza ossia in ognuno dei 3 oppure 4 nodi che definiscono lo shell si assegna $\frac{1}{3}$ oppure $\frac{1}{4}$ del peso dello shell e $\frac{1}{3}$ oppure $\frac{1}{4}$ dell'eventuale carico variabile ridotto, sommando su tutti gli shell che convergono nel nodo si ottiene la massa da assegnare al nodo.

VERIFICA DEGLI ELEMENTI STRUTTURALI

La verifiche di resistenza degli elementi è condotta considerando le sollecitazioni di calcolo ed imponendo che le resistenze siano superiori alle azioni. Gli elementi sono verificati e/o progettati applicando la gerarchia delle resistenze in particolare la gerarchia flessione-taglio per la verifica/progetto dell'elemento e la gerarchia pilastro-trave per la determinazione delle resistenze del pilastro. Le verifiche sono condotte secondo i seguenti criteri di verifica validi sia per lo SLU che per lo SLD, i criteri di verifica sono una raccolta di parametri che vengono usati in fase di verifica secondo le esigenze strutturali, ognuno di essi contiene i dati per tutti gli elementi, è sottinteso che nella verifica di un elemento (es. trave) non sono presi in considerazione i dati relativi agli altri elementi (ad es. se si verifica una trave non sono presi in considerazione i dati relativi a pilastri e shell, così come se si esegue una verifica agli SLU non sono presi in considerazione i dati relativi agli SLE). Ognuno di essi è identificato da un nome a scelta dell'operatore, per cui nei tabulati di verifica il nome del criterio ne identifica i parametri usati. Riguardo alle verifiche agli SLU le resistenze sono determinate in base a quanto specificato dalla norma attraverso il modello plastico-incrudente o elastico-perfettamente plastico, la verifica consiste nel verificare che assegnate le sollecitazioni di verifica le deformazioni massime nel calcestruzzo e nell'acciaio siano inferiori a quelle ultime cio' equivale ad affermare che nello spazio tridimensionale N, My, Mz il punto rappresentativo delle sollecitazioni è interno al dominio di resistenza della sezione.

Le verifiche agli SLE riguardano le verifiche di:

- deformabilità degli impalcati con $\delta \leq 0.005 \cdot h$
- fessurazione
- tensioni in esercizio

Criteri di verifica

Criterio di verifica: CLS Pali		
Generici		
Resistenza caratteristica R_{ck}	kg/cmq	300
Tensione caratteristica snervamento acciaio f_{yk}	kg/cmq	4500
Deformazione unitaria ϵ_{c0}		0.002
Deformazione ultima ϵ_{cu}		0.0035
ϵ_{fu} (solo incrudimento)		0.0019
Modulo elastico E acciaio	kg/cmq	2E06
Copriferro di calcolo	cm	5.3
Copriferro di disegno	cm	3.0
Coefficiente di sicurezza γ_{Cl}		1.5
Coefficiente di sicurezza γ_{Acc}		1.15
Riduzione f_{cd} calcestruzzo		0.85
Usa staffe minime di normativa in assenza di sisma		Si
Usa staffe minime di normativa in presenza di sisma		Si
Generici N.T.		
Inclinazione bielle compresse $\cotg(\theta)$		1.00
Modello acciaio		Incrudente
Incrudimento E_y/E_0		0.000

Elemento esistente		No
Generici D.M. 96 T.A.		
Tensione ammissibile σ_c	kg/cmq	97.5
Tensione ammissibile σ_c in trazione	kg/cmq	21.8
Tensione ammissibile σ_c acciaio	kg/cmq	2600.0
Tensione tangenziale ammissibile τ_{c0}	kg/cmq	6.0
Tensione tangenziale massima τ_{c1}	kg/cmq	18.3
Coefficiente di omogeneizzazione n		15
Coefficiente di omogeneizzazione n in trazione		0.5
Sezione interamente reagente		No
Fessurazioni		
Verifica a decompressione		No
Verifica formazione fessure		No
Verifica aperture fessure		Si
Classe di esposizione		XC2
Tipo armatura		Poco sensibile
Combinazione Rara		Si
W ammissibile Combinazione Rara	mm	0.300
Combinazione QP		No
Combinazione Freq.		No
Valore caratteristico apertura fessure $w_k(*w_m)$		1
fc efficace	kg/cmq	25.99
Coefficiente di breve o lunga durata kt		0.40
Coefficiente di aderenza k1		0.80
Tensioni ammissibili di esercizio		
Verifica Combinazione Rara		Si
Tensione ammissibile σ_{Cls}	kg/cmq	149
Tensione ammissibile $\sigma_{Acciaio}$	kg/cmq	3600
Verifica Combinazione QP		No
Verifica Combinazione Freq.		No
Coefficienti di omogeneizzazione		
Acciaio - Cls compresso		15
Cls tesoro - Cls compresso		0.5
Armatura pali		
Diametro ferri palo	mm	22
Percentuale minima armatura superiore palo	%	1
Per una lunghezza di		10 \emptyset
Percentuale minima armatura fusto palo		1
Massima percentuale armatura rispetto al Cls	%	6
Incremento angolo di attrito strato alla punta per carico limite punta dei pali battuti	°	0
Pali singoli		
Vincola pali in testa in direzione X		No
Vincola pali in testa in direzione Y		No
Verifica plinti/pali		
Copriferro verifiche	cm	5.3
Step armatura di verifica	cmq	0.50
Resistenza a taglio per elementi non armati		No
Verifica a pressoflessione deviata		Si
Verifica D.M. 96 plinti/pali		
Coefficiente di sicurezza per carico limite verticale γ_V		3.000
Coefficiente di sicurezza per carico limite orizzontale γ_H		1.700
Coefficiente di gruppo per carico limite verticale η_V		1.000
Coefficiente di gruppo per carico limite orizzontale η_H		1.000
Verifica N.T. plinti/pali		
Tecnologia pali		Trivellati
Coefficiente parziale sicurezza alla base γ_b		1.350
Coefficiente parziale sicurezza laterale in compressione γ_s		1.150
Coefficiente parziale sicurezza laterale in trazione γ_{st}		1.250
Coefficiente parziale sicurezza per carico limite orizzontale γ_T		1.300
Coefficiente di gruppo per carico limite verticale η_V		1.000
Coefficiente di gruppo per carico limite orizzontale η_H		1.000
Parametri meccanici del terreno		Valori medi
Numero di verticali indagate		5
Coefficiente di correlazione in funzione delle verticali ξ_3		1.500
Coefficiente di correlazione in funzione delle verticali ξ_4		1.340
Stampa plinti/pali		
Stampa verifiche per tutte le combinazioni di carico		Si
Stampa verifiche fusto pali		Si
Stampa verifiche per tutti i pali		Si

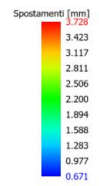
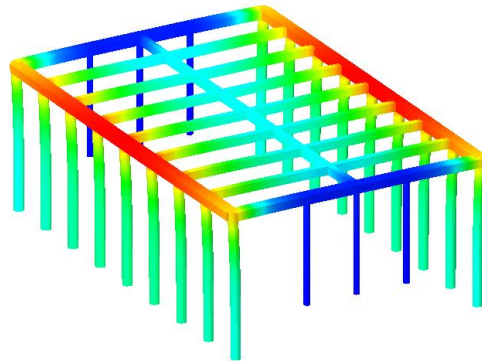
Criterio di verifica: CLS TraviFondazione		
Generici		
Resistenza caratteristica Rck	kg/cmq	300
Tensione caratteristica snervamento acciaio fyk	kg/cmq	4500
Deformazione unitaria ϵ_{c0}		0.002
Deformazione ultima ϵ_{cu}		0.0035
ϵ_{fu} (solo incrudimento)		0.0019
Modulo elastico E acciaio	kg/cmq	2E06
Copriferro di calcolo	cm	4.1
Copriferro di disegno	cm	2.5
Coefficiente di sicurezza γ_{Cl}		1.5
Coefficiente di sicurezza γ_{Acc}		1.15
Riduzione fcd calcestruzzo		0.85
Usa staffe minime di normativa in assenza di sisma		Si
Usa staffe minime di normativa in presenza di sisma		Si
Generici N.T.		
Inclinazione bielle compresse $\cotg(\theta)$		1.00
Modello acciaio		Incrudente
Incrudimento Ey/E0		0.000
Elemento esistente		No
Generici D.M. 96 T.A.		
Tensione ammissibile σ_c	kg/cmq	97.5
Tensione ammissibile σ_c in trazione	kg/cmq	21.8
Tensione ammissibile σ_c acciaio	kg/cmq	2600.0
Tensione tangenziale ammissibile τ_{c0}	kg/cmq	6.0
Tensione tangenziale massima τ_{c1}	kg/cmq	18.3
Coefficiente di omogeneizzazione n		15
Coefficiente di omogeneizzazione n in trazione		0.5
Sezione interamente reagente		No
Fessurazioni		
Verifica a decompressione		No
Verifica formazione fessure		No
Verifica aperture fessure		Si
Classe di esposizione		XC2
Tipo armatura		Poco sensibile
Combinazione Rara		Si
W ammissibile Combinazione Rara	mm	0.300
Combinazione QP		No
Combinazione Freq.		No
Valore caratteristico apertura fessure $w_k(*w_m)$		1
fc efficace	kg/cmq	25.99
Coefficiente di breve o lunga durata kt		0.40
Coefficiente di aderenza k1		0.80
Tensioni ammissibili di esercizio		
Verifica Combinazione Rara		Si
Tensione ammissibile σ_{Cl}	kg/cmq	149
Tensione ammissibile $\sigma_{Acciaio}$	kg/cmq	3600
Verifica Combinazione QP		No
Verifica Combinazione Freq.		No
Coefficienti di omogeneizzazione		
Acciaio - Cls compresso		15
Cls tesoro - Cls compresso		0.5
Armatura travi		
Numero di bracci delle staffe		6
Numero minimo di ferri superiori		6
Numero minimo di ferri inferiori		6
Numero minimo di ferri di parete		1
Numero reggistaffe superiori		0
Numero reggistaffe intermedi		0
Numero reggistaffe inferiori		0
Diametro ferri superiori	mm	16
Diametro ferri inferiori	mm	16
Diametro staffe	mm	8
Percentuale armatura rispetto alla base per verifica a taglio	%	100.00
Minima percentuale armatura compressa rispetto alla tesa	%	50.00
Minima percentuale armatura rispetto al Cls	%	0.20
Massima percentuale armatura rispetto al Cls	%	1.55
Calcolo travi		
Traslazione momento		Si

Verifica travi		
Verifica a torsione		No
Verifica a pressoflessione retta		No
Trave a spessore		No
Verifica N.T. travi		
Trave tozza		No
Gerarchia Flessione-Taglio		Si
Escludi dalla gerarchia trave-pilastro		No
Verifica a taglio travi		
Coefficiente di sovrarresistenza γ_{Rd}		1.2
Includi effetto spinotto nel taglio		Si
Includi effetto della pressoflessione nel taglio		Si
Verifica a taglio N.T. travi		
Coefficiente di sovrarresistenza γ_{Rd} (CDA)		1.2
Coefficiente di sovrarresistenza γ_{Rd} (CDB)		1.1
Verifica Duttilita' N.T. 2018		
Verifica di duttilita'		NO
Fattore confinamento minimo		1.000
Calcolo Fattore confinamento		NO
Verifica a taglio D.M. 96 T.A. travi		
Percentuale taglio alle staffe	%	60
Percentuale taglio ferri parete	%	40
Considera la resistenza a taglio VRDns		NO
Stampa travi		
Stampa informazioni relative all'asse neutro		Si

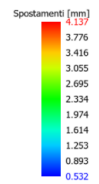
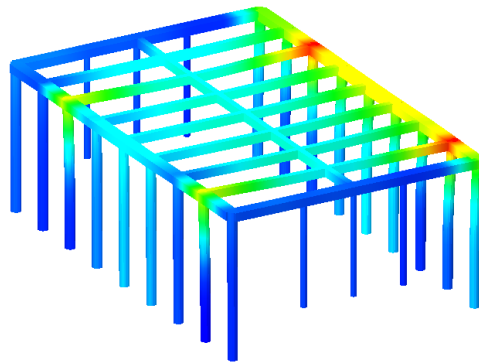
VALIDAZIONE DEL CALCOLO-INFORMAZIONI SULL'ELABORAZIONE

Di seguito si riportano alcuni dati significativi del calcolo in base ai quali si ritiene che il codice di calcolo è affidabile ed i risultati accettati dal progettista.

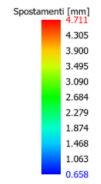
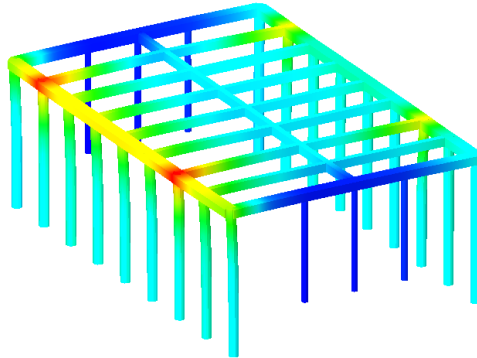
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Combinazione corrente: Scenario Scenario di calcolo per N.T. 2018 0 - C.1



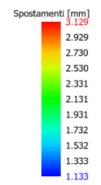
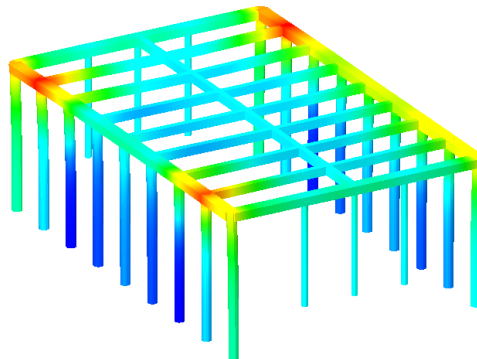
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Combinazione corrente: Scenario Scenario di calcolo per N.T. 2018 0 - C.2



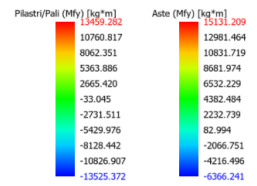
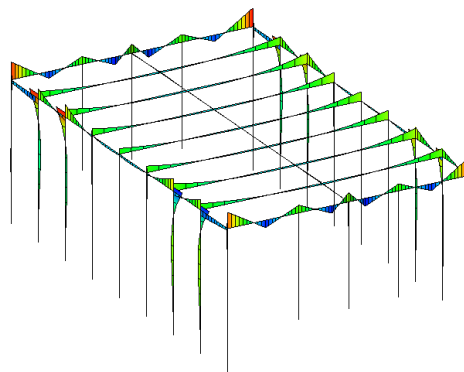
Tipo diagramma: Deformata
 Combinazione corrente: Scenario Scenario di calcolo per N.T. 2018 0 - C 3



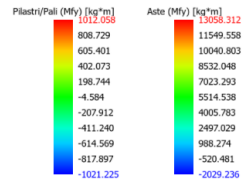
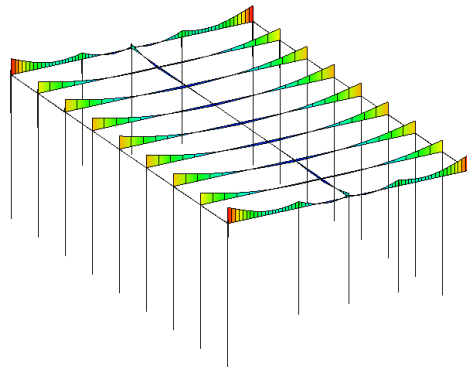
Tipo diagramma: Deformata
 Combinazione corrente: Scenario Scenario di calcolo per N.T. 2018 0 - C 4



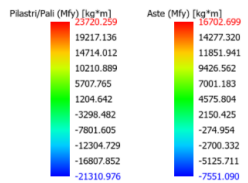
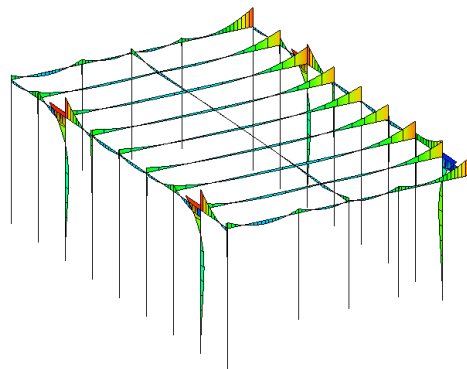
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 Combinazione corrente: Scenario Scenario di calcolo per N.T. 2018 0 - C 4
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 Sollecitazione Muri: S1
 Sollecitazione Setti: Momento f1.Z



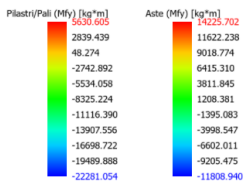
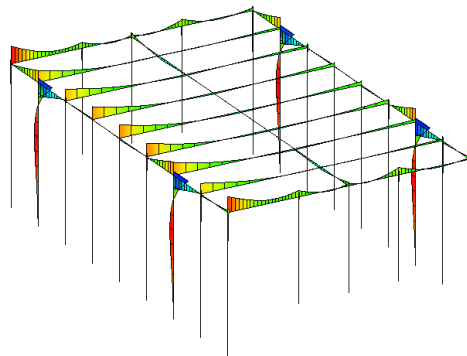
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 Sollecitazione aste: Momento fl.Y - pilastri/pali: Momento fl.Y
 Sollecitazione Muri: S I
 Sollecitazione Setti: Momento fl.Z



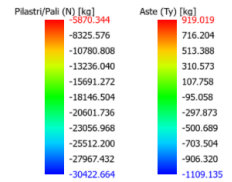
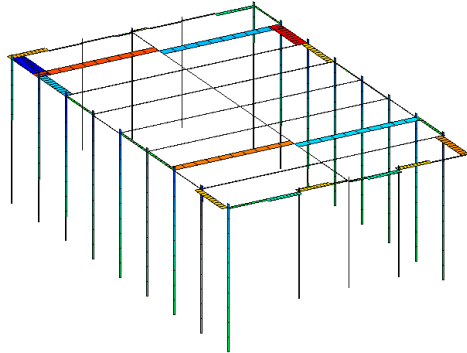
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 Combinazione corrente: Scenario Scenario di calcolo per N.T. 2018 0 - C 2
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 Sollecitazione Muri: S I
 Sollecitazione Setti: Momento fl.Z



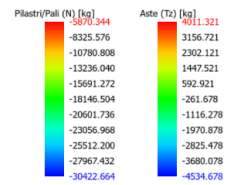
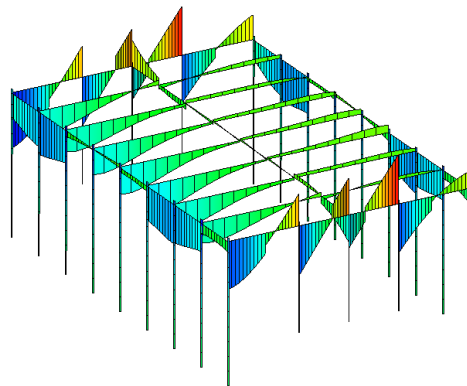
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 Combinazione corrente: Scenario Scenario di calcolo per N.T. 2018 0 - C 3
 Sollecitazione aste: Momento fl.Y - pilastri/pali: Momento fl.Y
 Sollecitazione Muri: S I
 Sollecitazione Setti: Momento fl.Z



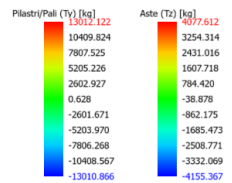
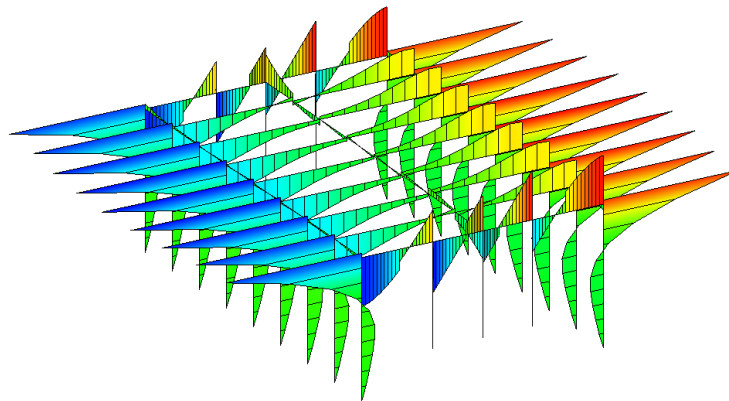
Tipo diagramma: Sollecitazioni
 Combinazione corrente : Scenario Scenario di calcolo per N.T. 2018 0 - C 3
 Sollecitazione aste : Taglio Ty - pilastri/pali: Sforzo Normale
 Sollecitazione Muri: S1
 Sollecitazione Setti: Momento fl.Z



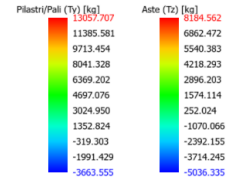
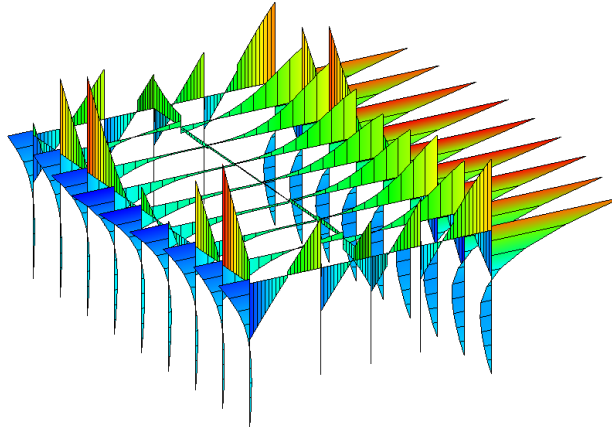
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 Sollecitazione Muri: S1
 Sollecitazione Setti: Momento fl.Z



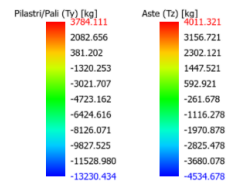
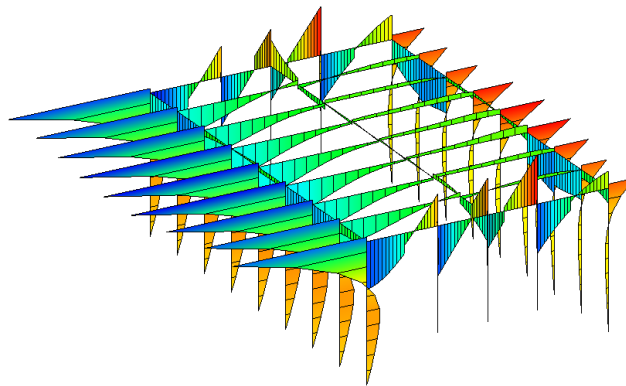
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 Sollecitazione aste : Taglio Tz - pilastri/pali: Taglio Ty
 Sollecitazione Muri: S1
 Sollecitazione Setti: Momento fl.Z



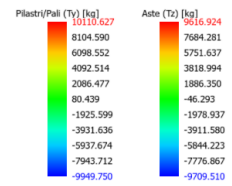
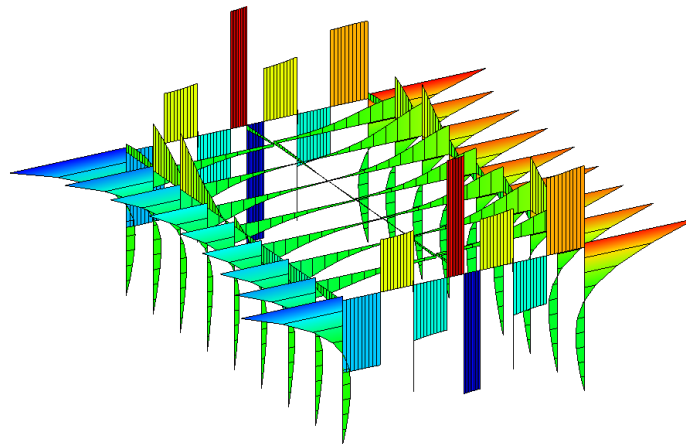
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 Combinazione corrente: Scenario Scenario di calcolo per N.T. 2018 0 - C 2
 Sollecitazione aste: Taglio Tz - pilastri/pali: Taglio Ty
 Sollecitazione Muri: S1
 Sollecitazione Setti: Momento fl.Z



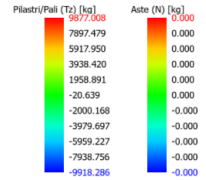
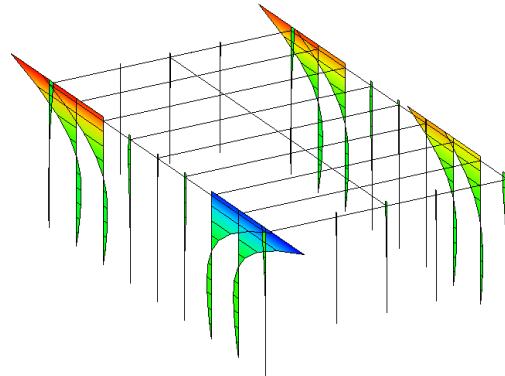
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 Combinazione corrente: Scenario Scenario di calcolo per N.T. 2018 0 - C 3
 Sollecitazione aste: Taglio Tz - pilastri/pali: Taglio Ty
 Sollecitazione Muri: S1
 Sollecitazione Setti: Momento fl.Z



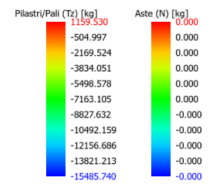
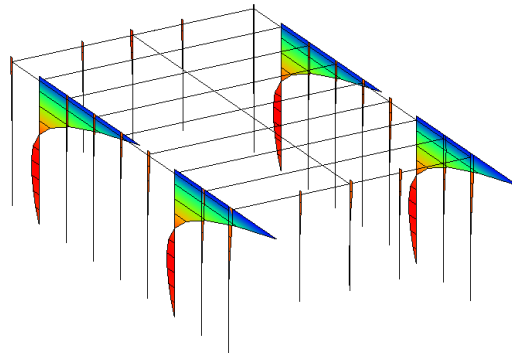
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 Sollecitazione Muri: S1
 Sollecitazione Setti: Momento fl.Z



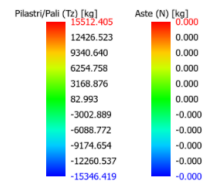
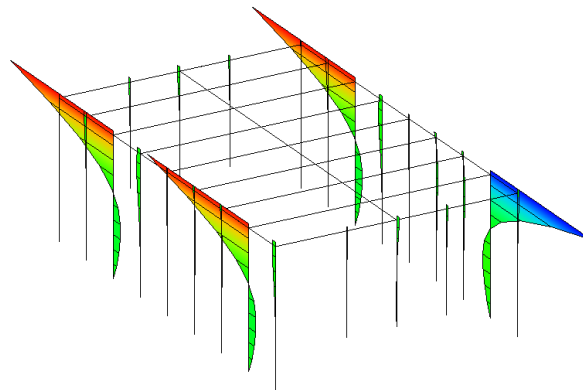
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 Sollecitazione aste : Sforzo Normale - pilastri/pali: Taglio Tz
 Sollecitazione Muri : S I
 Sollecitazione Setti: Momento fl.Z



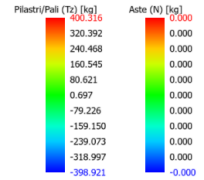
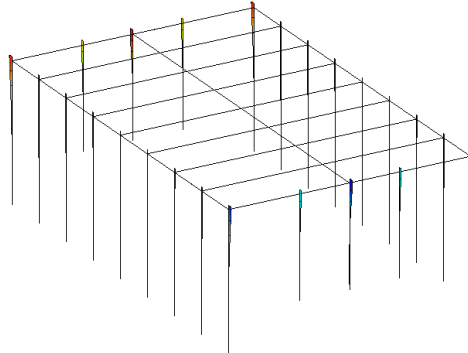
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 Combinazione corrente : Scenario Scenario di calcolo per N.T. 2018 0 - C 3
 Sollecitazione aste : Sforzo Normale - pilastri/pali: Taglio Tz
 Sollecitazione Muri : S I
 Sollecitazione Setti: Momento fl.Z



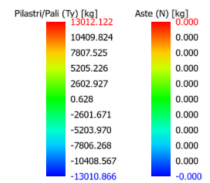
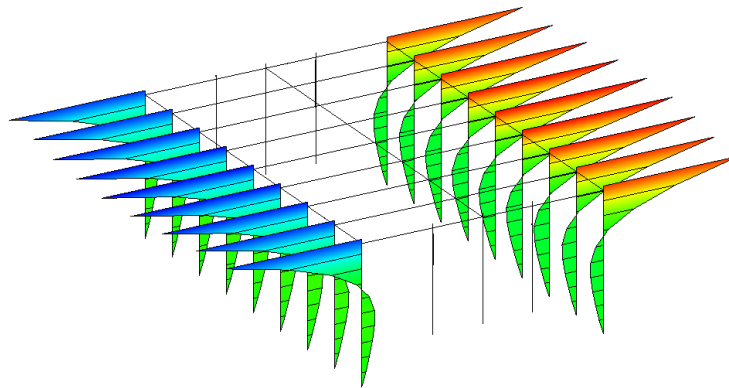
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 Sollecitazione Muri : S I
 Sollecitazione Setti: Momento fl.Z



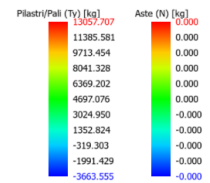
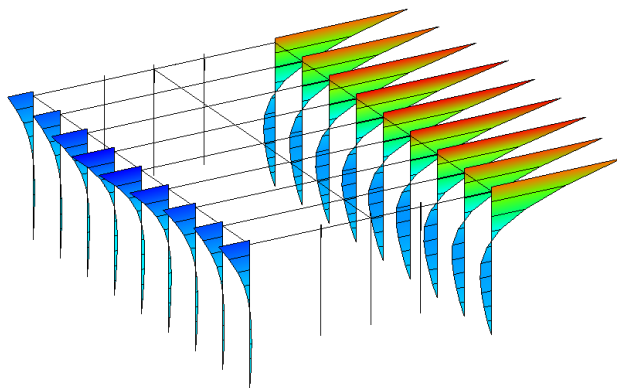
Tipo diagramma: Sollecitazioni
 Combinazione corrente : Scenario Scenario di calcolo per N.T. 2018 0 - C 1
 Sollecitazione aste: Sforzo Normale - pilastri/pali: Taglio Tz
 Sollecitazione Muri: S I
 Sollecitazione Setti: Momento fl.Z



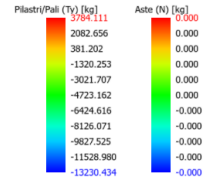
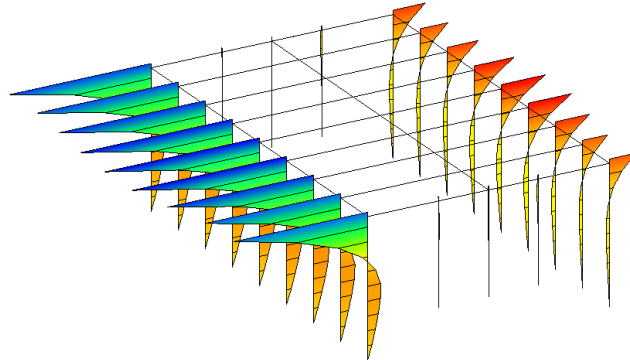
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 Combinazione corrente : Scenario Scenario di calcolo per N.T. 2018 0 - C 1
 Sollecitazione aste: Sforzo Normale - pilastri/pali: Taglio Ty
 Sollecitazione Muri: S I
 Sollecitazione Setti: Momento fl.Z



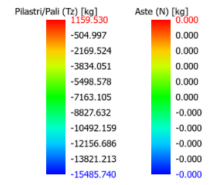
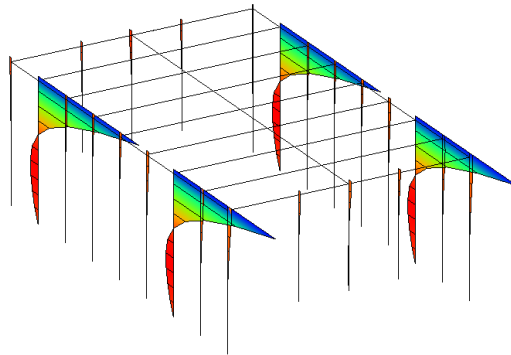
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 Combinazione corrente : Scenario Scenario di calcolo per N.T. 2018 0 - C 2
 Sollecitazione aste: Sforzo Normale - pilastri/pali: Taglio Ty
 Sollecitazione Muri: S I
 Sollecitazione Setti: Momento fl.Z



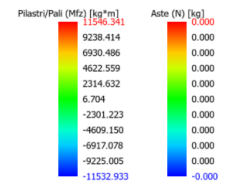
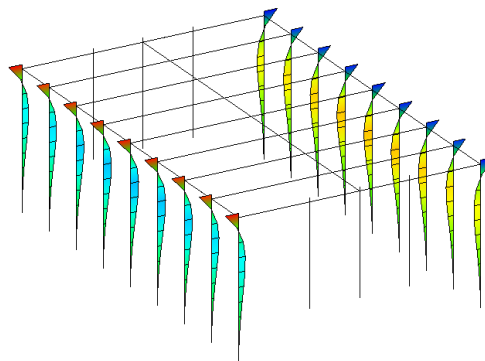
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 Combinazione corrente : Scenario Scenario di calcolo per N.T. 2018 0 - C 3
 Sollecitazione aste : Sforzo Normale - pilastri/pali: Taglio Ty
 Sollecitazione Muri : S I
 Sollecitazione Setti: Momento fl.Z



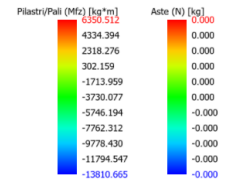
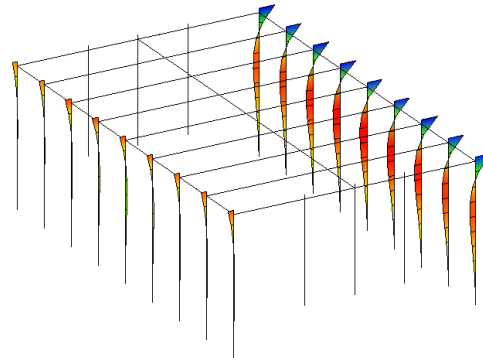
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 Combinazione corrente : Scenario Scenario di calcolo per N.T. 2018 0 - C 3
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 Sollecitazione Muri : S I
 Sollecitazione Setti: Momento fl.Z



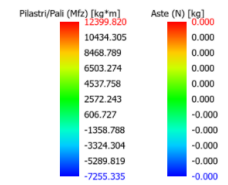
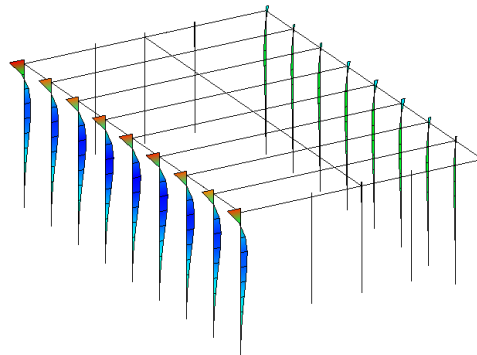
Tipo diagramma: Sollecitazioni
 Combinazione corrente : Scenario Scenario di calcolo per N.T. 2018 0 - C 1
 Sollecitazione aste : Sforzo Normale - pilastri/pali: Momento fl.Z
 Sollecitazione Muri : S I
 Sollecitazione Setti: Momento fl.Z



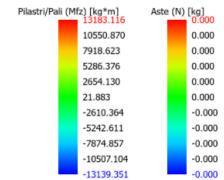
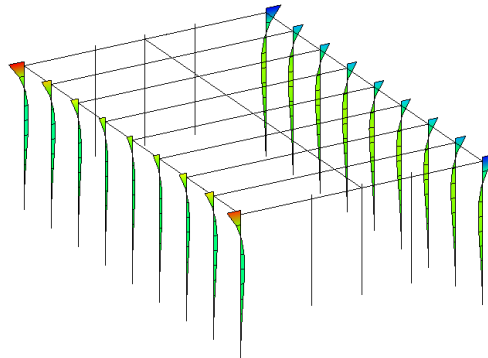
Tipo diagramma: Sollecitazioni
 Combinazione corrente: Scenario Scenario di calcolo per N.T. 2018 0 - C 2
 Sollecitazione aste: Sforzo Normale - pilastri/pali: Momento f1.Z
 Sollecitazione Muri: S1
 Sollecitazione Setti: Momento f1.Z



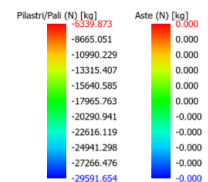
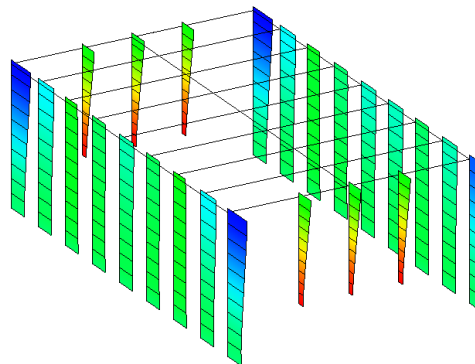
Tipo diagramma: Sollecitazioni
 Combinazione corrente: Scenario Scenario di calcolo per N.T. 2018 0 - C 3
 Sollecitazione aste: Sforzo Normale - pilastri/pali: Momento f1.Z
 Sollecitazione Muri: S1
 Sollecitazione Setti: Momento f1.Z



Tipo diagramma: Sollecitazioni
 Combinazione corrente: Scenario Scenario di calcolo per N.T. 2018 0 - C 4
 Sollecitazione aste: Sforzo Normale - pilastri/pali: Momento f.l.Z
 Sollecitazione Muri: S.I
 Sollecitazione Setti: Momento f.l.Z



Tipo diagramma: Sollecitazioni
 Combinazione corrente: Scenario Scenario di calcolo per N.T. 2018 0 - C 4
 Sollecitazione aste: Sforzo Normale - pilastri/pali: Sforzo Normale
 Sollecitazione Muri: S.I
 Sollecitazione Setti: Momento f.l.Z



INFORMAZIONI ELABORAZIONE

Il calcolo automatico è stato eseguito su un elaboratore con le seguenti caratteristiche:

Tipo: Intel Pentium

Capacità di memoria: 8173 MB

Unità di memoria di massa: Disco C 744.69 GB

Unità periferiche:

Sistema operativo e sua versione: Microsoft Windows NT 6.2 (Build: 9200)

La valutazione sulla correttezza dei dati in ingresso e sulla accuratezza dei risultati è stata effettuata sia mediante le visualizzazioni grafiche del post processore sia mediante il controllo dei tabulati numerici. La verifica che la soluzione ottenuta non sia viziata da errori di tipo numerico, legati all'algoritmo risolutivo ed alle caratteristiche dell'elaboratore, è stata effettuata considerando che il numero di cifre significative utilizzate nei procedimenti numerici è 16, e che all'interno della matrice di rigidezza il rapporto tra il pivot massimo e minimo è: 1.838202e+02. Tale valore è accettabile quando risulta minore di 10

elevato al numero di cifre significative. Nel caso dell'elaborazione in oggetto si ha:

$$\text{Max/Min}=1.838202\text{e}+02 < 1.000000\text{e}+16$$

Si riporta la tabella relativa alle statistiche sulla matrice di rigidità

Risultati Analisi Statica - Statistiche matrice di rigidità	
Scenario di calcolo : Scenario di calcolo per N.T. 2018 0	

Minimo della diag.	3.578433e+06
Massimo della diag.	6.577882e+08
Rapporto Max/Min	1.838202e+02
Media della diag.	1.443141e+08
Densità	3.177570e+01

I risultati delle elaborazioni sono stati sottoposti a controlli che ne comprovano l'attendibilità. Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali e adottati, anche in fase di primo proporzionamento della struttura. Inoltre, sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni.

In base a quanto detto, si può asserire che l'elaborazione è corretta ed idonea al caso specifico, pertanto i risultati di calcolo sono da ritenersi validi ed accettabili.

Pertanto i risultati si ritengono accettabili per quanto riguarda la correttezza del calcolo automatico.

Il Progettista