

Comune di Fiorano
Provincia di Modena

2 – RELAZIONE DI CALCOLO

OGGETTO: Progetto di traliccio di supporto antenne

COMMITTENTE: Bondi Antonella, Bondi Loretta, Bondi Luisa, Bondi Paola.

8048 - OTTOBRE 2018

Il Progettista Strutturale

Il Direttore dei Lavori Strutturali

INDICE

GENERALITA'	pag. 3
Condizioni del sito	pag. 4
Azioni di calcolo	pag. 5
 VERIFICA DELLA STRUTTURA	 pag.8
Archivio sezioni	pag.9
Coordinate dei nodi	pag.12
Aste spaziali	pag.16
Condizioni di Carico	pag.23
Carichi su aste	pag.24
Nodi vincolati	pag.39
Combinazioni casi di carico	pag.41
Verifica delle aste	pag.42
Reazioni vincolari	pag.73
Rappresentazioni grafiche	pag.77
Giudizio di accettabilità dei risultati	pag.83

GENERALITA'

CONDIZIONI DEL SITO

PROVINCIA	: MODENA
COMUNE	: FIORANO
ALTEZZA S.L.M.	: 115 m
DISTANZA MARE	: > 30 km
GHIACCIO	: COME DA NORMA
VENTO	: COME DA NORMA
SISMA	: COME DA NORMA : Lat. 44.534073 , Long. 10.802073

AZIONI DI CALCOLO

1) PESO PROPRIO STRUTTURA

I pesi propri sono calcolati in automatico dal software in base ai materiali, profili e sezioni utilizzate.

2) SOVRACCARICO PERMANENTE

(vedasi 1-Documento di Sintesi)

3) SOVRACCARICO ACCIDENTALE VENTO +X

(vedasi 1-Documento di Sintesi)

4) SOVRACCARICO ACCIDENTALE VENTO +Y

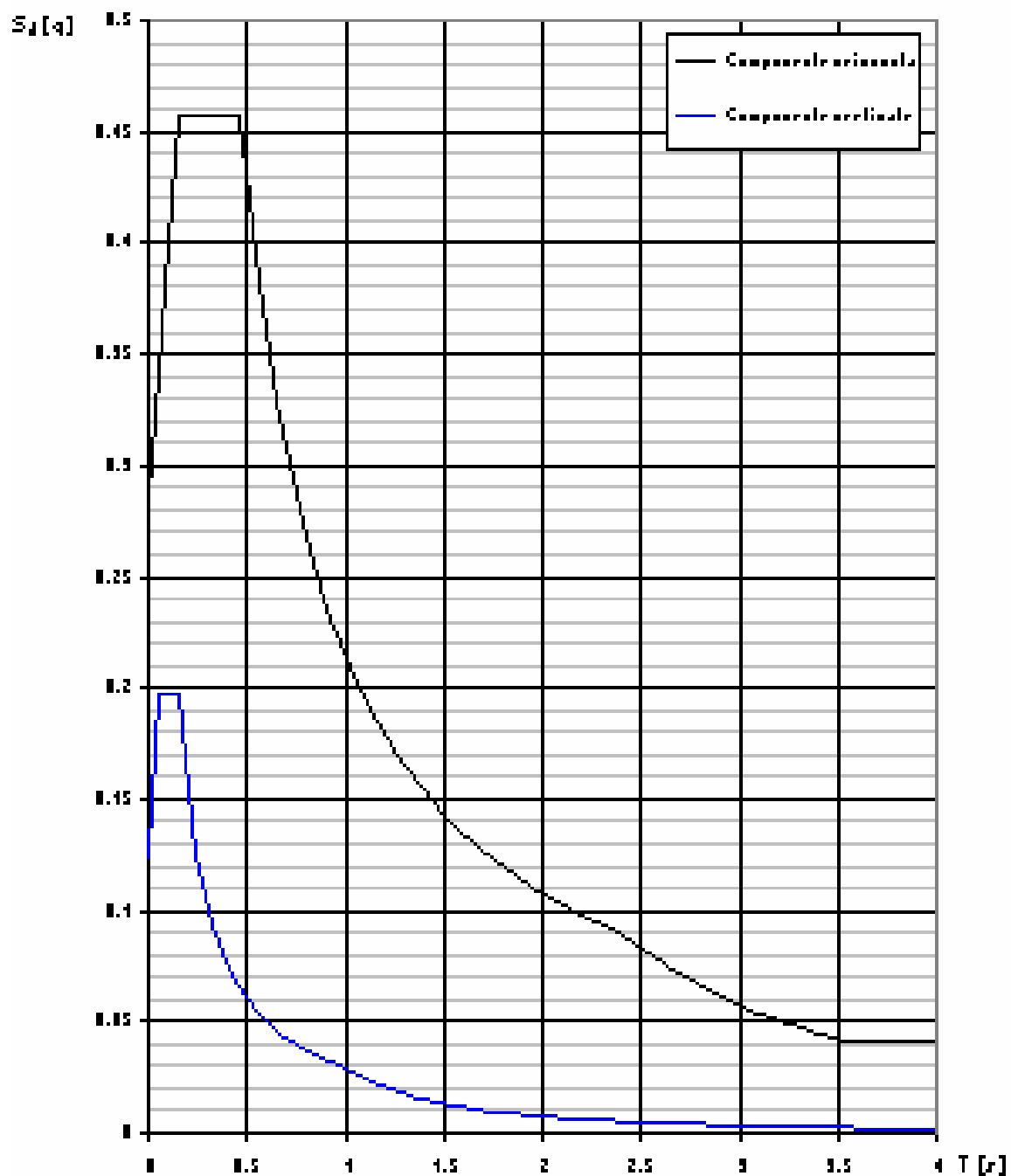
(vedasi 1- Documento di Sintesi)

5) SOVRACCARICO ACCIDENTALE GHIACCIO

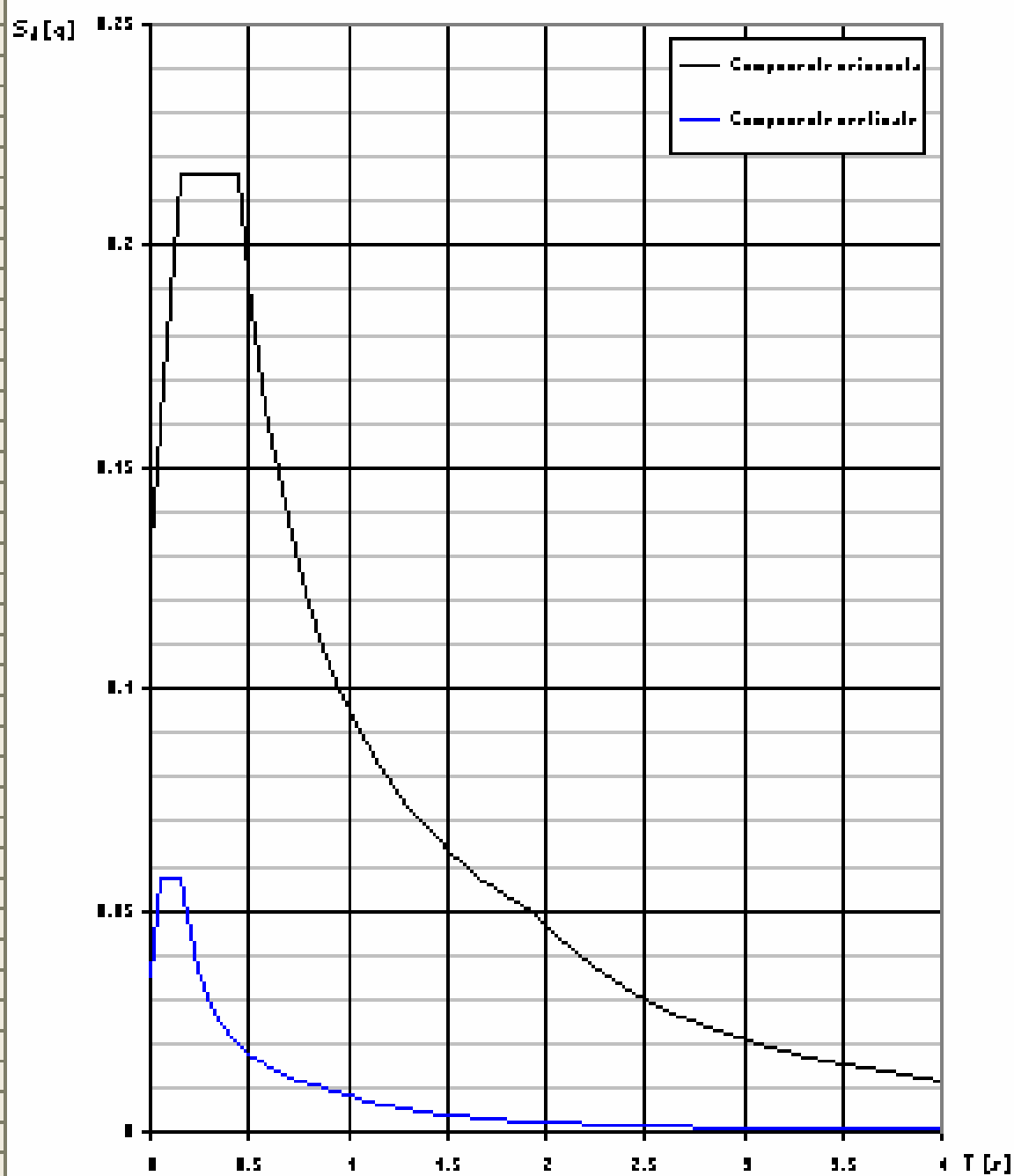
(vedasi 1- Documento di Sintesi)

6) SISMA:

Spettri di risposta (componenti orizz. e vert.) per lo SLV



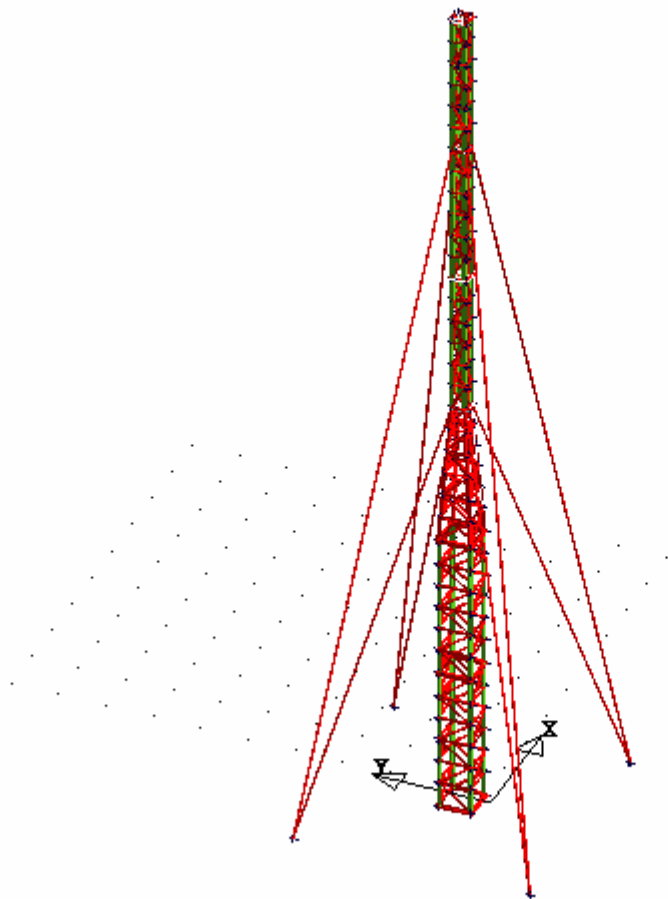
Spettri di risposta (componenti orizz. e vert.) per la SLD



VERIFICA STRUTTURA

Si procede alla verifica della struttura che è stata eseguita con il programma di calcolo agli elementi finiti CDS.

Il modello della struttura è riportato di seguito, ed è costituito da aste individuate da opportuna numerazione.



ARCHIVIO SEZIONI

Si riporta appresso la spiegazione delle sigle usate nella tabella caratteristiche statiche dei profili e caratteristiche materiali.

Sez.	: Numero d'archivio della sezione
U	: Perimetro bagnato per metro di sezione
P	: Peso per unità di lunghezza
A	: Area della sezione
A_x	: Area a taglio in direzione X
A_y	: Area a taglio in direzione Y
J_x	: Momento d'inerzia rispetto all'asse X
J_y	: Momento d'inerzia rispetto all'asse Y
J_t	: Momento d'inerzia torsionale
W_x	: Modulo di resistenza a flessione, asse X
W_y	: Modulo di resistenza a flessione, asse Y
W_t	: Modulo di resistenza a torsione
i_x	: Raggio d'inerzia relativo all'asse X
i_y	: Raggio d'inerzia relativo all'asse Y
sver	: Coefficiente per verifica a svergolamento ($h/(b \cdot t)$)
E	: Modulo di elasticità normale
G	: Modulo di elasticità tangenziale
S_{amm}	: Tensione ammissibile
lambda	: Valore massimo della snellezza
fe	: Tipo di acciaio (1 = Fe360; 2 = Fe430; 3 = Fe510)
Caric. estra	: Coefficiente per carico estradossato per la verifica allo svergolamento
E.lim.	: Eccentricità limite per evitare la verifica allo svergolamento
Coeff. 'ni'	: Coefficiente “ni”
ver.	: -1 = non esegue verifica; 0 = verifica solo aste tese; 1 = verifica completa
gamma	: peso specifico del materiale
W_x Plast.	: Modulo di resistenza plastica in direzione X

Wy Plast. : Modulo di resistenza plastica in direzione Y
Wt Plast. : Modulo di resistenza plastica torsionale
Ax Plast. : Area a taglio plastica direzione X
Ay Plast. : Area a taglio plastica direzione Y
Iw : Costante di ingobbamento (momento di inerzia settoriale)
Num.Rit.Tors : Numero di ritegni torsionali

ARCHIVIO SEZIONI IN ACCIAIO / LEGNO / PREFABBRICATE

ANGOLARI A LATI DISUGUALI							
Sez. N.ro	Descrizione	l mm	l1 mm	s mm	r mm	r1 mm	Mat. N.ro
319	ANG50*5	50.0	50.0	5.0	7.0	3.5	1
1076	L 21x21x3	21.0	21.0	3.0	3.0	3.0	1

ARCHIVIO SEZIONI IN ACCIAIO / LEGNO / PREFABBRICATE

TUBI A SEZIONE TONDA					TUBI A SEZIONE TONDA				
Sez. N.ro	Descrizione	d mm	s mm	Mat. N.ro	Sez. N.ro	Descrizione	d mm	s mm	Mat. N.ro
889	TONDO14	14.0	7.0	201					

ARCHIVIO SEZIONI IN ACCIAIO / LEGNO / PREFABBRICATE

PIATTI UNI					PIATTI UNI				
Sez. N.ro	Descrizione	b mm	s mm	Mat/Tip N.ro	Sez. N.ro	Descrizione	b mm	s mm	Mat/Tip N.ro
1078	Piatto 120x16	120.0	16.0	1	1079	Piatto 120x8	120.0	8.0	1

ARCHIVIO SEZIONI IN ACCIAIO / LEGNO / PREFABBRICATE

ANGOLARI A LATI DISUGUALI ACCOPPIATI AD ALI ESTERNE								
Sez. N.ro	Descrizione	l mm	l1 mm	s mm	r mm	r1 mm	d mm	Mat. N.ro
1077	2 L 50x5	50.0	50.0	5.0	5.0	5.0	0.0	1

ARCHIVIO SEZIONI IN ACCIAIO / LEGNO / PREFABBRICATE

CARATTERISTICHE STATICHE DEI PROFILI

Sez. N.ro	U m2/m	P kg/m	A cmq	Ax cmq	Ay cmq	Jx cm4	Jy cm4	Jt cm4	Wx cm3	Wy cm3	Wt cm3	ix cm	iy cm	sver 1/cm
319	0.19	3.8	4.80	1.94	1.76	17.2	4.5	0.4	4.86	2.29	0.73	1.89	0.97	0.00
889	0.04	1.2	1.54	1.15	1.15	0.2	0.2	0.4	0.27	0.27	0.54	0.35	0.35	0.00
1076	0.08	0.9	1.15	0.42	0.35	0.7	0.2	0.0	0.44	0.20	0.10	0.76	0.39	0.00
1077	0.29	7.4	9.39	3.01	3.46	21.2	39.5	0.7	5.87	7.90	1.42	1.50	2.05	0.00
1078	0.27	15.1	19.20	12.80	12.80	4.1	230.4	14.8	5.12	38.40	9.26	0.46	3.46	0.00
1079	0.26	7.5	9.60	6.40	6.40	0.5	115.2	2.0	1.28	19.20	2.56	0.23	3.46	0.00

ARCHIVIO SEZIONI IN ACCIAIO / LEGNO / PREFABBRICATE

DATI PER VERIFICHE EUROCODICE

Sez. N.ro	Descrizione	Wx Plastico cm3	Wy Plastico cm3	Wt Plastico cm3	Ax Plastico cm2	Ay Plastico cm2	Iw cm6
319	ANG50*5	4.86	2.29	1.19	2.40	2.40	0.0
889	TONDO14	0.46	0.46	0.54	0.98	0.98	0.0
1076	L 21x21x3	0.44	0.20	0.17	0.57	0.57	0.0
1077	2 L 50x5	12.23	13.12	2.38	5.00	4.39	0.0

ARCHIVIO SEZIONI IN ACCIAIO / LEGNO / PREFABBRICATE

DATI PER VERIFICHE EUROCODICE

Sez. N.ro	Descrizione	Wx Plastico cm3	Wy Plastico cm3	Wt Plastico cm3	Ax Plastico cm2	Ay Plastico cm2	Iw cm6
1078	Piatto 120x16	7.68	57.60	15.36	19.20	19.20	0.0
1079	Piatto 120x8	1.92	28.80	3.84	9.60	9.60	0.0

ARCHIVIO SEZIONI IN ACCIAIO

CARATTERISTICHE MATERIALE

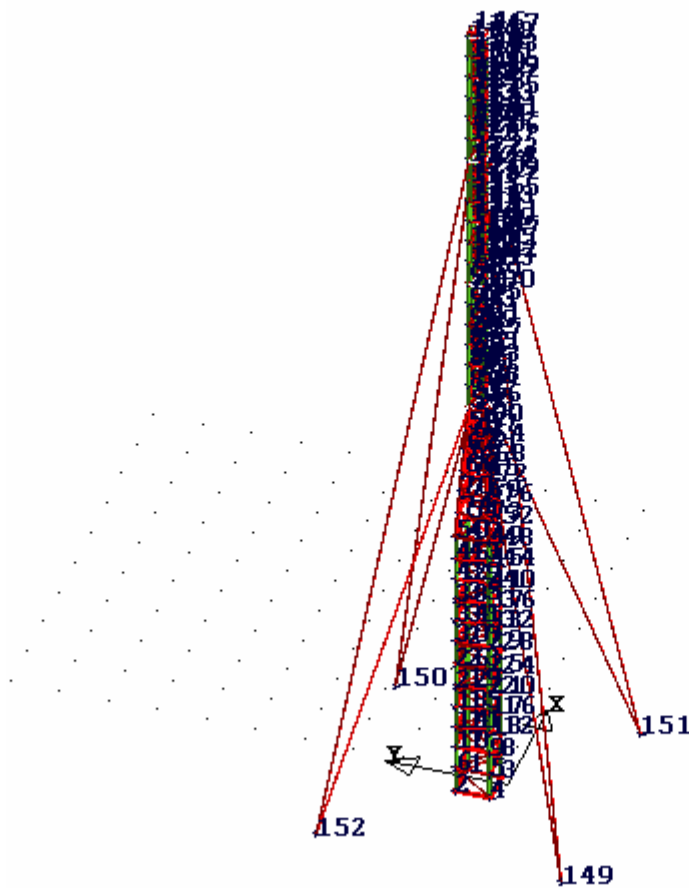
Mat. N.ro	E kg/cmq	G kg/cmq	lambda max	Tipo Acciaio	Verifica	Gamma kg/mc	Lung/ SpLim	Tipo Profilat.
1	2100000	850000	200.0	S275	Completa	7850	500	a Caldo

CARATTERISTICHE MATERIALI GENERICI

GENERALI						COMPORTAMENTO A TRAZIONE				COMPORTAMENTO A COMPRESSIONE			
Mat. N.ro	G kg/cmq	lambda max	verifi ca	Gamma kg/cmc	Lung/ SpLim	E kg/cmq	fy kg/cmq	fu kg/cmq	EpsU %	E kg/cmq	fy kg/cmq	fu kg/cmq	EpsU %
201	850000	2000.0	0	7850	2500	2100000	10500.00	15700.00	12	2100000	10500.00	15700.00	12

COORDINATE DEI NODI

Coord.X : Coordinata X del punto nel sistema di riferimento globale
Coord.Y : Coordinata Y del punto nel sistema di riferimento globale
Coord.Z : Coordinata Z del punto nel sistema di riferimento globale
Filo : Numero del filo per individuare le travate in c.a.
Piano Sism. : Numero del piano rigido di appartenenza del nodo
Peso : Peso sismico del nodo;



COORDINATE DEI NODI

IDENT.	POSIZIONE NODO			ATTRIBUTI		PESO SISMICO		
Nodo3d N.ro	Coord.X (m)	Coord.Y (m)	Coord.Z (m)	Filo N.ro	Piano Sism.	Dir. X (t)	Dir. Y (t)	Dir. Z (t)
1	0.00	0.70	0.00	1	0	0.00	0.00	0.00
2	-0.70	0.70	0.00	2	0	0.00	0.00	0.00
3	0.00	0.00	0.00	3	0	0.00	0.00	0.00
4	-0.70	0.00	0.00	4	0	0.00	0.00	0.00
5	-0.70	0.00	0.56	4	0	0.00	0.00	0.00
6	-0.70	0.70	0.56	2	0	0.00	0.00	0.00
7	0.00	0.70	0.56	1	0	0.00	0.00	0.00
8	0.00	0.00	0.56	3	0	0.00	0.00	0.00
9	-0.70	0.00	1.06	4	0	0.00	0.00	0.00
10	-0.70	0.70	1.06	2	0	0.00	0.00	0.00
11	0.00	0.70	1.06	1	0	0.00	0.00	0.00
12	0.00	0.00	1.06	3	0	0.00	0.00	0.00
13	-0.70	0.00	1.56	4	0	0.00	0.00	0.00
14	-0.70	0.70	1.56	2	0	0.00	0.00	0.00
15	0.00	0.70	1.56	1	0	0.00	0.00	0.00
16	0.00	0.00	1.56	3	0	0.00	0.00	0.00
17	-0.70	0.00	2.06	4	0	0.00	0.00	0.00
18	-0.70	0.70	2.06	2	0	0.00	0.00	0.00
19	0.00	0.70	2.06	1	0	0.00	0.00	0.00
20	0.00	0.00	2.06	3	0	0.00	0.00	0.00
21	-0.70	0.00	2.56	4	0	0.00	0.00	0.00
22	-0.70	0.70	2.56	2	0	0.00	0.00	0.00
23	0.00	0.70	2.56	1	0	0.00	0.00	0.00
24	0.00	0.00	2.56	3	0	0.00	0.00	0.00
25	-0.70	0.00	3.10	4	0	0.01	0.01	0.01
26	-0.70	0.70	3.10	2	0	0.01	0.01	0.01
27	0.00	0.70	3.10	1	0	0.01	0.01	0.01
28	0.00	0.00	3.10	3	0	0.01	0.01	0.01
29	-0.70	0.00	3.66	4	0	0.00	0.00	0.00
30	-0.70	0.70	3.66	2	0	0.00	0.00	0.00
31	0.00	0.70	3.66	1	0	0.00	0.00	0.00
32	0.00	0.00	3.66	3	0	0.00	0.00	0.00
33	-0.70	0.00	4.16	4	0	0.02	0.02	0.02
34	-0.70	0.70	4.16	2	0	0.02	0.02	0.02
35	0.00	0.70	4.16	1	0	0.00	0.00	0.00
36	0.00	0.00	4.16	3	0	0.00	0.00	0.00
37	-0.70	0.00	4.66	4	0	0.00	0.00	0.00
38	-0.70	0.70	4.66	2	0	0.00	0.00	0.00
39	0.00	0.70	4.66	1	0	0.00	0.00	0.00
40	0.00	0.00	4.66	3	0	0.00	0.00	0.00
41	-0.70	0.00	5.16	4	0	0.02	0.02	0.02
42	-0.70	0.70	5.16	2	0	0.02	0.02	0.02
43	0.00	0.70	5.16	1	0	0.00	0.00	0.00
44	0.00	0.00	5.16	3	0	0.00	0.00	0.00
45	-0.70	0.00	5.66	4	0	0.00	0.00	0.00
46	-0.70	0.70	5.66	2	0	0.00	0.00	0.00
47	0.00	0.70	5.66	1	0	0.00	0.00	0.00
48	0.00	0.00	5.66	3	0	0.00	0.00	0.00
49	-0.70	0.00	6.20	4	0	0.01	0.01	0.01
50	-0.70	0.70	6.20	2	0	0.01	0.01	0.01
51	0.00	0.70	6.20	1	0	0.01	0.01	0.01
52	0.00	0.00	6.20	3	0	0.01	0.01	0.01
53	-0.49	0.21	9.26	5	0	0.01	0.01	0.01
54	-0.49	0.49	9.26	6	0	0.01	0.01	0.01
55	-0.21	0.49	9.26	7	0	0.01	0.01	0.01
56	-0.21	0.21	9.26	8	0	0.01	0.01	0.01
57	-0.53	0.17	8.76	9	0	0.00	0.00	0.00
58	-0.53	0.53	8.76	10	0	0.00	0.00	0.00
59	-0.17	0.53	8.76	11	0	0.00	0.00	0.00

COORDINATE DEI NODI

IDENT.	POSIZIONE NODO			ATTRIBUTI		PESO SISMICO		
Nodo3d N.ro	Coord.X (m)	Coord.Y (m)	Coord.Z (m)	Filo N.ro	Piano Sism.	Dir. X (t)	Dir. Y (t)	Dir. Z (t)
60	-0.17	0.17	8.76	12	0	0.00	0.00	0.00
61	-0.56	0.14	8.26	13	0	0.00	0.00	0.00
62	-0.56	0.56	8.26	14	0	0.00	0.00	0.00
63	-0.14	0.56	8.26	15	0	0.00	0.00	0.00
64	-0.14	0.14	8.26	16	0	0.00	0.00	0.00
65	-0.59	0.11	7.76	17	0	0.00	0.00	0.00
66	-0.59	0.59	7.76	18	0	0.00	0.00	0.00
67	-0.11	0.59	7.76	19	0	0.00	0.00	0.00
68	-0.11	0.11	7.76	20	0	0.00	0.00	0.00
69	-0.63	0.07	7.26	21	0	0.00	0.00	0.00
70	-0.63	0.63	7.26	22	0	0.00	0.00	0.00
71	-0.07	0.63	7.26	23	0	0.00	0.00	0.00
72	-0.07	0.07	7.26	24	0	0.00	0.00	0.00
73	-0.66	0.04	6.76	25	0	0.00	0.00	0.00
74	-0.66	0.66	6.76	26	0	0.00	0.00	0.00
75	-0.04	0.66	6.76	27	0	0.00	0.00	0.00
76	-0.04	0.04	6.76	28	0	0.00	0.00	0.00
77	-0.21	0.49	9.78	7	0	0.00	0.00	0.00
78	-0.21	0.21	9.78	8	0	0.00	0.00	0.00
79	-0.49	0.21	9.78	5	0	0.00	0.00	0.00
80	-0.49	0.49	9.78	6	0	0.00	0.00	0.00
81	-0.49	0.21	10.28	5	0	0.00	0.00	0.00
82	-0.49	0.49	10.28	6	0	0.00	0.00	0.00
83	-0.21	0.21	10.28	8	0	0.00	0.00	0.00
84	-0.21	0.49	10.28	7	0	0.00	0.00	0.00
85	-0.49	0.21	10.78	5	0	0.00	0.00	0.00
86	-0.49	0.49	10.78	6	0	0.00	0.00	0.00
87	-0.21	0.21	10.78	8	0	0.00	0.00	0.00
88	-0.21	0.49	10.78	7	0	0.00	0.00	0.00
89	-0.49	0.21	11.28	5	0	0.00	0.00	0.00
90	-0.49	0.49	11.28	6	0	0.00	0.00	0.00
91	-0.21	0.21	11.28	8	0	0.00	0.00	0.00
92	-0.21	0.49	11.28	7	0	0.00	0.00	0.00
93	-0.49	0.21	11.78	5	0	0.06	0.06	0.06
94	-0.49	0.49	11.78	6	0	0.00	0.00	0.00
95	-0.21	0.21	11.78	8	0	0.00	0.00	0.00
96	-0.21	0.49	11.78	7	0	0.00	0.00	0.00
97	-0.49	0.49	12.27	6	0	0.02	0.02	0.02
98	-0.21	0.49	12.27	7	0	0.01	0.01	0.01
99	-0.21	0.21	12.27	8	0	0.01	0.01	0.01
100	-0.49	0.21	12.27	5	0	0.02	0.02	0.02
101	-0.21	0.49	12.79	7	0	0.00	0.00	0.00
102	-0.21	0.21	12.79	8	0	0.00	0.00	0.00
103	-0.49	0.21	12.79	5	0	0.00	0.00	0.00
104	-0.49	0.49	12.79	6	0	0.00	0.00	0.00
105	-0.49	0.21	13.29	5	0	0.07	0.07	0.07
106	-0.49	0.49	13.29	6	0	0.02	0.02	0.02
107	-0.21	0.21	13.29	8	0	0.00	0.00	0.00
108	-0.21	0.49	13.29	7	0	0.00	0.00	0.00
109	-0.49	0.21	13.79	5	0	0.00	0.00	0.00
110	-0.49	0.49	13.79	6	0	0.00	0.00	0.00
111	-0.21	0.21	13.79	8	0	0.00	0.00	0.00
112	-0.21	0.49	13.79	7	0	0.00	0.00	0.00
113	-0.49	0.21	14.29	5	0	0.02	0.02	0.02
114	-0.49	0.49	14.29	6	0	0.02	0.02	0.02
115	-0.21	0.21	14.29	8	0	0.00	0.00	0.00
116	-0.21	0.49	14.29	7	0	0.00	0.00	0.00
117	-0.49	0.21	14.79	5	0	0.06	0.06	0.06
118	-0.49	0.49	14.79	6	0	0.00	0.00	0.00
119	-0.21	0.21	14.79	8	0	0.00	0.00	0.00

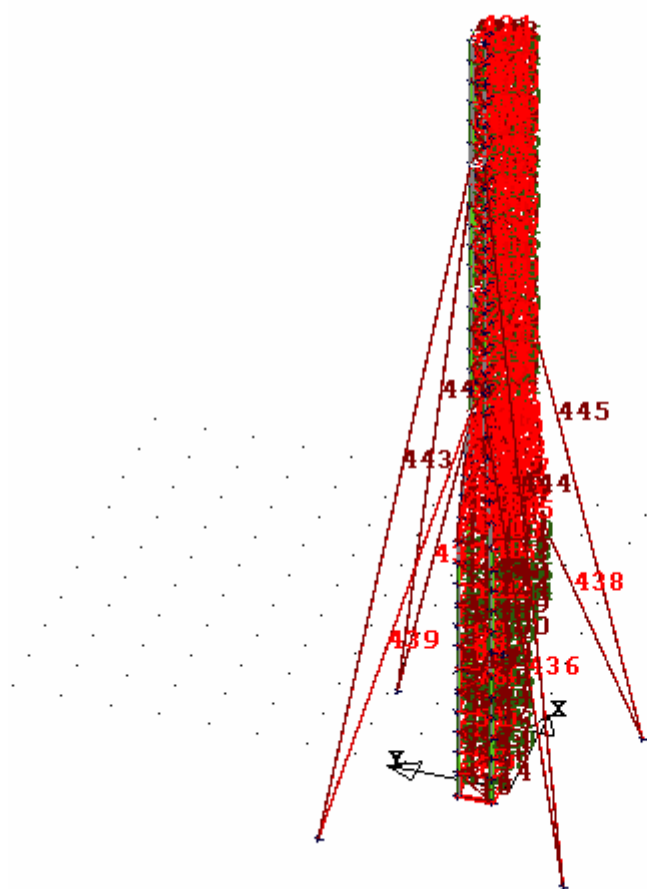
COORDINATE DEI NODI

IDENT.	POSIZIONE NODO			ATTRIBUTI		PESO SISMICO		
Nodo3d N.ro	Coord.X (m)	Coord.Y (m)	Coord.Z (m)	Filo N.ro	Piano Sism.	Dir. X (t)	Dir. Y (t)	Dir. Z (t)
120	-0.21	0.49	14.79	7	0	0.00	0.00	0.00
121	-0.49	0.49	15.29	6	0	0.02	0.02	0.02
122	-0.21	0.49	15.29	7	0	0.02	0.02	0.02
123	-0.21	0.21	15.29	8	0	0.02	0.02	0.02
124	-0.49	0.21	15.29	5	0	0.02	0.02	0.02
125	-0.21	0.49	15.81	7	0	0.00	0.00	0.00
126	-0.21	0.21	15.81	8	0	0.00	0.00	0.00
127	-0.49	0.21	15.81	5	0	0.00	0.00	0.00
128	-0.49	0.49	15.81	6	0	0.00	0.00	0.00
129	-0.49	0.21	16.31	5	0	0.01	0.01	0.01
130	-0.49	0.49	16.31	6	0	0.00	0.00	0.00
131	-0.21	0.21	16.31	8	0	0.00	0.00	0.00
132	-0.21	0.49	16.31	7	0	0.00	0.00	0.00
133	-0.49	0.21	16.81	5	0	0.00	0.00	0.00
134	-0.49	0.49	16.81	6	0	0.00	0.00	0.00
135	-0.21	0.21	16.81	8	0	0.00	0.00	0.00
136	-0.21	0.49	16.81	7	0	0.00	0.00	0.00
137	-0.49	0.21	17.31	5	0	0.01	0.01	0.01
138	-0.49	0.49	17.31	6	0	0.00	0.00	0.00
139	-0.21	0.21	17.31	8	0	0.00	0.00	0.00
140	-0.21	0.49	17.31	7	0	0.00	0.00	0.00
141	-0.49	0.21	17.81	5	0	0.00	0.00	0.00
142	-0.49	0.49	17.81	6	0	0.00	0.00	0.00
143	-0.21	0.21	17.81	8	0	0.00	0.00	0.00
144	-0.21	0.49	17.81	7	0	0.00	0.00	0.00
145	-0.49	0.49	18.31	6	0	0.00	0.00	0.00
146	-0.21	0.49	18.31	7	0	0.00	0.00	0.00
147	-0.21	0.21	18.31	8	0	0.00	0.00	0.00
148	-0.49	0.21	18.31	5	0	0.01	0.01	0.01
149	-2.85	-2.15	0.00	29	0	0.00	0.00	0.00
150	2.15	2.85	0.00	30	0	0.00	0.00	0.00
151	2.15	-2.15	0.00	31	0	0.00	0.00	0.00
152	-2.85	2.85	0.00	32	0	0.00	0.00	0.00
153	-0.49	0.35	17.31	33	0	0.00	0.00	0.00
154	-0.49	0.35	16.31	33	0	0.00	0.00	0.00

ASTE SPAZIALI

Si riporta appresso la spiegazione delle sigle usate nella tabella dati di asta spaziale.

Asta3d	: <i>Numero dell'asta spaziale</i>
Filo in.	: <i>Numero del filo del nodo iniziale</i>
Filo fin.	: <i>Numero del filo del nodo finale</i>
Q. iniz.	: <i>Quota del nodo iniziale</i>
Q. fin.	: <i>Quota del nodo finale</i>
Nod3d iniz.	: <i>Numero del nodo iniziale</i>
Nod3d fin.	: <i>Numero del nodo finale</i>
Cr. Pr.	: <i>Numero del criterio di progetto per la verifica</i>
Sez. N.ro	: <i>Numero in archivio della sezione</i>
Magr.	: <i>Dimensione del magrone per sezioni di fondazione</i>
Rot.	: <i>Angolo di rotazione della sezione</i>



DATI ASTE SPAZIALI																			
IDENTIFICAZIONE								GEOMETRIA				SCOST.INIZIALI			SCOST. FINALI			Cri Geo	Tipo Elemento ai fini sism.
Asta3d N.ro	Filo in.	Filo fin.	Q.iniz (m)	Q.fin. (m)	Nod3d iniz.	Nod3d fin.	Cr. Pr.	Sez. N.ro	Sigla Sezione	Magr. (cm)	Rot. Grd	dx (cm)	dy (cm)	dz (cm)	dx (cm)	dy (cm)	dz (cm)		
1	4	2	0.00	0.00	4	2	1	319	ANG50*5	0	90	0	-5	0	0	5	0	NoGerarchia	Acciaio
2	1	3	0.00	0.00	1	3	1	319	ANG50*5	0	90	0	5	0	0	-5	0	NoGerarchia	Acciaio
3	4	3	0.00	0.00	4	3	1	319	ANG50*5	0	0	0	0	0	0	0	0	NoGerarchia	Acciaio
4	4	4	0.56	0.00	5	4	3	319	ANG50*5	0	0	2	2	0	2	2	0	Pilastr	
5	1	2	0.00	0.00	1	2	1	319	ANG50*5	0	0	0	0	0	0	0	0	NoGerarchia	Acciaio
6	2	2	0.56	0.00	6	2	3	319	ANG50*5	0	270	2	-2	0	2	-2	0	Pilastr	
7	1	1	0.56	0.00	7	1	3	319	ANG50*5	0	180	-2	-2	0	-2	-2	0	Pilastr	
8	3	3	0.56	0.00	8	3	3	319	ANG50*5	0	90	-2	2	0	-2	2	0	Pilastr	
9	4	3	0.56	0.56	5	8	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio	
10	3	1	0.56	0.56	8	7	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio	
11	1	2	0.56	0.56	7	6	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio	
12	2	4	0.56	0.56	6	5	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio	
13	1	3	0.00	0.56	1	8	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio	
14	3	4	0.00	0.56	3	5	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio	
15	2	1	0.00	0.56	2	7	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio	
16	4	2	0.00	0.56	4	6	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio	
17	4	4	1.06	0.56	9	5	3	319	ANG50*5	0	0	2	2	0	2	2	0	Pilastr	
18	2	2	1.06	0.56	10	6	3	319	ANG50*5	0	270	2	-2	0	2	-2	0	Pilastr	
19	1	1	1.06	0.56	11	7	3	319	ANG50*5	0	180	-2	-2	0	-2	-2	0	Pilastr	
20	3	3	1.06	0.56	12	8	3	319	ANG50*5	0	90	-2	2	0	-2	2	0	Pilastr	
21	4	2	1.06	1.06	9	10	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio	
22	2	1	1.06	1.06	10	11	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio	
23	1	3	1.06	1.06	11	12	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio	
24	3	4	1.06	1.06	12	9	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio	
25	3	1	0.56	1.06	8	11	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio	
26	1	2	0.56	1.06	7	10	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio	
27	2	4	0.56	1.06	6	9	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio	
28	4	3	0.56	1.06	5	12	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio	
29	4	4	1.56	1.06	13	9	3	319	ANG50*5	0	0	2	2	0	2	2	0	Pilastr	
30	2	2	1.56	1.06	14	10	3	319	ANG50*5	0	270	2	-2	0	2	-2	0	Pilastr	
31	1	1	1.56	1.06	15	11	3	319	ANG50*5	0	180	-2	-2	0	-2	-2	0	Pilastr	
32	3	3	1.56	1.06	16	12	3	319	ANG50*5	0	90	-2	2	0	-2	2	0	Pilastr	
33	4	2	1.56	1.56	13	14	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio	

DATI ASTE SPAZIALI																			
IDENTIFICAZIONE								GEOMETRIA				SCOST.INIZIALI			SCOST. FINALI				
Asta3d N.ro	Filo in.	Filo fin.	Q.iniz (m)	Q.fin. (m)	Nod3d iniz.	Nod3d fin.	Cr. Pr.	Sez. N.ro	Sigla Sezione	Magr. (cm)	Rot. Grd	dx (cm)	dy (cm)	dz (cm)	dx (cm)	dy (cm)	dz (cm)	Cri Geo	Tipo Elemento ai fini sism.
34	2	1	1.56	1.56	14	15	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
35	1	3	1.56	1.56	15	16	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
36	3	4	1.56	1.56	16	13	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
37	3	4	1.06	1.56	12	13	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
38	4	2	1.06	1.56	9	14	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
39	2	1	1.06	1.56	10	15	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
40	1	3	1.06	1.56	11	16	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
41	4	4	2.06	1.56	17	13	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
42	2	2	2.06	1.56	18	14	3	319	ANG50*5	0	270	2	-2	0	2	-2	0		Pilastr
43	1	1	2.06	1.56	19	15	3	319	ANG50*5	0	180	-2	-2	0	-2	-2	0		Pilastr
44	3	3	2.06	1.56	20	16	3	319	ANG50*5	0	90	-2	2	0	-2	2	0		Pilastr
45	4	2	2.06	2.06	17	18	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
46	2	1	2.06	2.06	18	19	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
47	1	3	2.06	2.06	19	20	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
48	3	4	2.06	2.06	20	17	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
49	3	1	1.56	2.06	16	19	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
50	1	2	1.56	2.06	15	18	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
51	2	4	1.56	2.06	14	17	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
52	4	3	1.56	2.06	13	20	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
53	4	4	2.56	2.06	21	17	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
54	2	2	2.56	2.06	22	18	3	319	ANG50*5	0	270	2	-2	0	2	-2	0		Pilastr
55	1	1	2.56	2.06	23	19	3	319	ANG50*5	0	180	-2	-2	0	-2	-2	0		Pilastr
56	3	3	2.56	2.06	24	20	3	319	ANG50*5	0	90	-2	2	0	-2	2	0		Pilastr
57	4	2	2.56	2.56	21	22	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
58	2	1	2.56	2.56	22	23	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
59	1	3	2.56	2.56	23	24	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
60	3	4	2.56	2.56	24	21	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
61	3	4	2.06	2.56	20	21	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
62	4	2	2.06	2.56	17	22	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
63	2	1	2.06	2.56	18	23	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
64	1	3	2.06	2.56	19	24	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
65	4	4	3.10	2.56	25	21	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
66	2	2	3.10	2.56	26	22	3	319	ANG50*5	0	270	2	-2	0	2	-2	0		Pilastr
67	1	1	3.10	2.56	27	23	3	319	ANG50*5	0	180	-2	-2	0	-2	-2	0		Pilastr
68	3	3	3.10	2.56	28	24	3	319	ANG50*5	0	90	-2	2	0	-2	2	0		Pilastr
69	4	3	3.10	3.10	25	28	1	1077	2 L 50x5	0	90	0	0	0	0	0	0		Trave telaio
70	3	1	3.10	3.10	28	27	1	1077	2 L 50x5	0	90	0	0	0	0	0	0		Trave telaio
71	1	2	3.10	3.10	27	26	1	1077	2 L 50x5	0	90	0	0	0	0	0	0		Trave telaio
72	2	4	3.10	3.10	26	25	1	1077	2 L 50x5	0	90	0	0	0	0	0	0		Trave telaio
73	4	3	2.56	3.10	21	28	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
74	3	1	2.56	3.10	24	27	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
75	19	15	7.76	8.26	67	63	1	319	ANG50*5	0	230	0	0	0	0	0	0	NoGerarchia Acciaio	
76	2	4	2.56	3.10	22	25	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
77	4	4	3.66	3.10	29	25	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
78	2	2	3.66	3.10	30	26	3	319	ANG50*5	0	270	2	-2	0	2	-2	0		Pilastr
79	1	1	3.66	3.10	31	27	3	319	ANG50*5	0	180	-2	-2	0	-2	-2	0		Pilastr
80	3	3	3.66	3.10	32	28	3	319	ANG50*5	0	90	-2	2	0	-2	2	0		Pilastr
81	4	3	3.66	3.66	29	32	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
82	3	1	3.66	3.66	32	31	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
83	1	2	3.66	3.66	31	30	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
84	2	4	3.66	3.66	30	29	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
85	4	3	3.66	3.10	29	28	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
86	3	1	3.66	3.10	32	27	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
87	1	2	3.66	3.10	31	26	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
88	2	4	3.66	3.10	30	25	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
89	4	4	4.16	3.66	33	29	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
90	2	2	4.16	3.66	34	30	3	319	ANG50*5	0	270	2	-2	0	2	-2	0		Pilastr
91	1	1	4.16	3.66	35	31	3	319	ANG50*5	0	180	-2	-2	0	-2	-2	0		Pilastr
92	3	3	4.16	3.66	36	32	3	319	ANG50*5	0	90	-2	2	0	-2	2	0		Pilastr
93	4	2	4.16	4.16	33	34	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
94	2	1	4.16	4.16	34	35	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
95	1	3	4.16	4.16	35	36	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
96	3	4	4.16	4.16	36	33	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
97	3	1	3.66	4.16	32	35	1	1076	L 21x21x3	0	90	0	0	0	0	0			

DATI ASTE SPAZIALI																			
IDENTIFICAZIONE								GEOMETRIA				SCOST.INIZIALI			SCOST. FINALI				
Asta3d N.ro	Filo in.	Filo fin.	Q.iniz (m)	Q.fin. (m)	Nod3d iniz.	Nod3d fin.	Cr. Pr.	Sez. N.ro	Sigla Sezione	Magr. (cm)	Rot. Grd	dx (cm)	dy (cm)	dz (cm)	dx (cm)	dy (cm)	dz (cm)	Cri Geo	Tipo Elemento ai fini sism.
118	2	1	5.16	5.16	42	43	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
119	1	3	5.16	5.16	43	44	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
120	3	4	5.16	5.16	44	41	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
121	3	1	4.66	5.16	40	43	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
122	1	2	4.66	5.16	39	42	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
123	2	4	4.66	5.16	38	41	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
124	4	3	4.66	5.16	37	44	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
125	4	4	5.66	5.16	45	41	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
126	2	2	5.66	5.16	46	42	3	319	ANG50*5	0	270	2	-2	0	2	-2	0		Pilastr
127	1	1	5.66	5.16	47	43	3	319	ANG50*5	0	180	-2	-2	0	-2	-2	0		Pilastr
128	3	3	5.66	5.16	48	44	3	319	ANG50*5	0	90	-2	2	0	-2	2	0		Pilastr
129	4	2	5.66	5.66	45	46	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
130	2	1	5.66	5.66	46	47	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
131	1	3	5.66	5.66	47	48	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
132	3	4	5.66	5.66	48	45	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
133	3	4	5.16	5.66	44	45	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
134	4	2	5.16	5.66	41	46	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
135	2	1	5.16	5.66	42	47	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
136	1	3	5.16	5.66	43	48	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
137	4	4	6.20	5.66	49	45	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
138	2	2	6.20	5.66	50	46	3	319	ANG50*5	0	270	2	-2	0	2	-2	0		Pilastr
139	1	1	6.20	5.66	51	47	3	319	ANG50*5	0	180	-2	-2	0	-2	-2	0		Pilastr
140	3	3	6.20	5.66	52	48	3	319	ANG50*5	0	90	-2	2	0	-2	2	0		Pilastr
141	4	3	6.20	6.20	49	52	1	1077	2 L 50x5	0	90	0	0	0	0	0	0		Trave telaio
142	3	1	6.20	6.20	52	51	1	1077	2 L 50x5	0	90	0	0	0	0	0	0		Trave telaio
143	1	2	6.20	6.20	51	50	1	1077	2 L 50x5	0	90	0	0	0	0	0	0		Trave telaio
144	2	4	6.20	6.20	50	49	1	1077	2 L 50x5	0	90	0	0	0	0	0	0		Trave telaio
145	4	3	5.66	6.20	45	52	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
146	3	1	5.66	6.20	48	51	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
147	1	2	5.66	6.20	47	50	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
148	2	4	5.66	6.20	46	49	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
149	5	6	9.26	9.26	53	54	1	1078	Piatto 120x16	0	0	0	0	0	0	0	0		Trave telaio
150	6	7	9.26	9.26	54	55	1	1078	Piatto 120x16	0	0	0	0	0	0	0	0		Trave telaio
151	7	8	9.26	9.26	55	56	1	1078	Piatto 120x16	0	0	0	0	0	0	0	0		Trave telaio
152	8	5	9.26	9.26	56	53	1	1078	Piatto 120x16	0	0	0	0	0	0	0	0		Trave telaio
153	9	10	8.76	8.76	57	58	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
154	10	11	8.76	8.76	58	59	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
155	11	12	8.76	8.76	59	60	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
156	12	9	8.76	8.76	60	57	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
157	13	14	8.26	8.26	61	62	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
158	14	15	8.26	8.26	62	63	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
159	15	16	8.26	8.26	63	64	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
160	16	13	8.26	8.26	64	61	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
161	17	18	7.76	7.76	65	66	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
162	18	19	7.76	7.76	66	67	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
163	19	20	7.76	7.76	67	68	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
164	20	17	7.76	7.76	68	65	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
165	21	22	7.26	7.26	69	70	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
166	22	23	7.26	7.26	70	71	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
167	23	24	7.26	7.26	71	72	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
168	24	21	7.26	7.26	72	69	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
169	25	26	6.76	6.76	73	74	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
170	26	27	6.76	6.76	74	75	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
171	27	28	6.76	6.76	75	76	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
172	28	25	6.76	6.76	76	73	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
173	3	27	6.20	6.76	52	75	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
174	27	24	6.76	7.26	75	72	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
175	24	19	7.26	7.76	72	67	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
176	19	16	7.76	8.26	67	64	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
177	16	11	8.26	8.76	64	59	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
178	11	8	8.76	9.26	59	56	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
179	4	28	6.20	6.76	49	76	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
180	28	21	6.76	7.26	76	69	1	1076	L 21x21x3	0	0	0	0</						

DATI ASTE SPAZIALI																			
IDENTIFICAZIONE								GEOMETRIA				SCOST.INIZIALI			SCOST. FINALI				
Asta3d N.ro	Filo in.	Filo fin.	Q.iniz (m)	Q.fin. (m)	Nod3d iniz.	Nod3d fin.	Cr. Pr.	Sez. N.ro	Sigla Sezione	Magr. (cm)	Rot. Grd	dx (cm)	dy (cm)	dz (cm)	dx (cm)	dy (cm)	dz (cm)	Cri Geo	Tipo Elemento ai fini sism.
202	11	7	8.76	9.26	59	55	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
203	4	25	6.20	6.76	49	73	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
204	25	21	6.76	7.26	73	69	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
205	21	17	7.26	7.76	69	65	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
206	17	13	7.76	8.26	65	61	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
207	13	9	8.26	8.76	61	57	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
208	9	5	8.76	9.26	57	53	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
209	2	26	6.20	6.76	50	74	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
210	26	22	6.76	7.26	74	70	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
211	22	18	7.26	7.76	70	66	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
212	18	14	7.76	8.26	66	62	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
213	14	10	8.26	8.76	62	58	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
214	10	6	8.76	9.26	58	54	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
215	3	28	6.20	6.76	52	76	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
216	28	24	6.76	7.26	76	72	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
217	24	20	7.26	7.76	72	68	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
218	20	16	7.76	8.26	68	64	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
219	16	12	8.26	8.76	64	60	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
220	12	8	8.76	9.26	60	56	1	319	ANG50*5	0	230	2	2	0	2	2	0		Pilastr
221	8	8	9.78	9.26	78	56	3	319	ANG50*5	0	90	2	2	0	2	2	0		Pilastr
222	5	5	9.78	9.26	79	53	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
223	6	6	9.78	9.26	80	54	3	319	ANG50*5	0	270	2	2	0	2	2	0		Pilastr
224	5	8	9.78	9.78	79	78	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
225	8	7	9.78	9.78	78	77	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
226	7	6	9.78	9.78	77	80	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
227	6	5	9.78	9.78	80	79	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
228	5	8	9.26	9.78	53	78	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
229	8	7	9.26	9.78	56	77	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
230	7	6	9.26	9.78	55	80	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
231	6	5	9.26	9.78	54	79	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
232	5	5	10.28	9.78	81	79	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
233	6	6	10.28	9.78	82	80	3	319	ANG50*5	0	270	2	2	0	2	2	0		Pilastr
234	8	8	10.28	9.78	83	78	3	319	ANG50*5	0	90	2	2	0	2	2	0		Pilastr
235	7	7	10.28	9.78	84	77	3	319	ANG50*5	0	180	2	2	0	2	2	0		Pilastr
236	5	8	10.28	10.28	81	83	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
237	8	7	10.28	10.28	83	84	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
238	7	6	10.28	10.28	84	82	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
239	6	5	10.28	10.28	82	81	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
240	7	8	9.78	10.28	77	83	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
241	8	5	9.78	10.28	78	81	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
242	5	6	9.78	10.28	79	82	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
243	6	7	9.78	10.28	80	84	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
244	5	5	10.78	10.28	85	81	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
245	6	6	10.78	10.28	86	82	3	319	ANG50*5	0	270	2	2	0	2	2	0		Pilastr
246	8	8	10.78	10.28	87	83	3	319	ANG50*5	0	90	2	2	0	2	2	0		Pilastr
247	7	7	10.78	10.28	88	84	3	319	ANG50*5	0	180	2	2	0	2	2	0		Pilastr
248	5	8	10.78	10.78	85	87	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
249	8	7	10.78	10.78	87	88	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
250	7	6	10.78	10.78	88	86	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
251	6	5	10.78	10.78	86	85	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
252	8	7	10.28	10.78	83	88	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
253	7	6	10.28	10.78	84	86	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
254	6	5	10.28	10.78	82	85	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
255	5	8	10.28	10.78	81	87	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
256	5	5	11.28	10.78	89	85	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
257	6	6	11.28	10.78	90	86	3	319	ANG50*5	0	270	2	2	0	2	2	0		Pilastr
258	8	8	11.28	10.78	91	87	3	319	ANG50*5	0	90	2	2	0	2	2	0		Pilastr
259	7	7	11.28	10.78	92	88	3	319	ANG50*5	0	180	2	2	0	2	2	0		Pilastr
260	5	8	11.28	11.28	89	91	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
261	8	7	11.28	11.28	91	92	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
262	7	6	11.28	11.28	92	90	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
263	6	5	11.28	11.28	90	89	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
264	7	8	10.78	11.28	88	91	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
265	8																		

DATI ASTE SPAZIALI																			
IDENTIFICAZIONE								GEOMETRIA				SCOST.INIZIALI			SCOST. FINALI				
Asta3d N.ro	Filo in.	Filo fin.	Q.iniz (m)	Q.fin. (m)	Nod3d iniz.	Nod3d fin.	Cr. Pr.	Sez. N.ro	Sigla Sezione	Magr. (cm)	Rot. Grd	dx (cm)	dy (cm)	dz (cm)	dx (cm)	dy (cm)	dz (cm)	Cri Geo	Tipo Elemento ai fini sism.
286	6	7	12.27	12.27	97	98	1	1078	Piatto 120x16	0	0	0	0	0	0	0	0		Trave telaio
287	7	8	12.27	12.27	98	99	1	1078	Piatto 120x16	0	0	0	0	0	0	0	0		Trave telaio
288	7	8	11.78	12.27	96	99	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
289	6	7	11.78	12.27	94	98	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
290	5	6	11.78	12.27	93	97	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
291	8	5	11.78	12.27	95	100	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
292	7	7	12.79	12.27	101	98	3	319	ANG50*5	0	180	2	2	0	2	2	0		Pilastr
293	8	8	12.79	12.27	102	99	3	319	ANG50*5	0	90	2	2	0	2	2	0		Pilastr
294	5	5	12.79	12.27	103	100	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
295	6	6	12.79	12.27	104	97	3	319	ANG50*5	0	270	2	2	0	2	2	0		Pilastr
296	5	8	12.79	12.79	103	102	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
297	8	7	12.79	12.79	102	101	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
298	7	6	12.79	12.79	101	104	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
299	6	5	12.79	12.79	104	103	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
300	5	8	12.27	12.79	100	102	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
301	8	7	12.27	12.79	99	101	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
302	7	6	12.27	12.79	98	104	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
303	6	5	12.27	12.79	97	103	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
304	5	5	13.29	12.79	105	103	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
305	6	6	13.29	12.79	106	104	3	319	ANG50*5	0	270	2	2	0	2	2	0		Pilastr
306	8	8	13.29	12.79	107	102	3	319	ANG50*5	0	90	2	2	0	2	2	0		Pilastr
307	7	7	13.29	12.79	108	101	3	319	ANG50*5	0	180	2	2	0	2	2	0		Pilastr
308	5	8	13.29	13.29	105	107	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
309	8	7	13.29	13.29	107	108	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
310	7	6	13.29	13.29	108	106	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
311	6	5	13.29	13.29	106	105	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
312	7	8	12.79	13.29	101	107	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
313	8	5	12.79	13.29	102	105	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
314	5	6	12.79	13.29	103	106	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
315	6	7	12.79	13.29	104	108	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
316	5	5	13.79	13.29	109	105	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
317	6	6	13.79	13.29	110	106	3	319	ANG50*5	0	270	2	2	0	2	2	0		Pilastr
318	8	8	13.79	13.29	111	107	3	319	ANG50*5	0	90	2	2	0	2	2	0		Pilastr
319	7	7	13.79	13.29	112	108	3	319	ANG50*5	0	180	2	2	0	2	2	0		Pilastr
320	5	8	13.79	13.79	109	111	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
321	8	7	13.79	13.79	111	112	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
322	7	6	13.79	13.79	112	110	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
323	6	5	13.79	13.79	110	109	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
324	8	7	13.29	13.79	107	112	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
325	7	6	13.29	13.79	108	110	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
326	6	5	13.29	13.79	106	109	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
327	5	8	13.29	13.79	105	111	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
328	5	5	14.29	13.79	113	109	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
329	6	6	14.29	13.79	114	110	3	319	ANG50*5	0	270	2	2	0	2	2	0		Pilastr
330	8	8	14.29	13.79	115	111	3	319	ANG50*5	0	90	2	2	0	2	2	0		Pilastr
331	7	7	14.29	13.79	116	112	3	319	ANG50*5	0	180	2	2	0	2	2	0		Pilastr
332	5	8	14.29	14.29	113	115	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
333	8	7	14.29	14.29	115	116	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
334	7	6	14.29	14.29	116	114	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
335	6	5	14.29	14.29	114	113	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
336	7	8	13.79	14.29	112	115	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
337	8	5	13.79	14.29	111	113	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
338	5	6	13.79	14.29	109	114	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
339	6	7	13.79	14.29	110	116	1	1076	L 21x21x3	0	0	0	0	0	0	0	0		Trave telaio
340	5	5	14.79	14.29	117	113	3	319	ANG50*5	0	0	2	2	0	2	2	0		Pilastr
341	6	6	14.79	14.29	118	114	3	319	ANG50*5	0	270	2	2	0	2	2	0		Pilastr
342	8	8	14.79	14.29	119	115	3	319	ANG50*5	0	90	2	2	0	2	2	0		Pilastr
343	7	7	14.79	14.29	120	116	3	319	ANG50*5	0	180	2	2	0	2	2	0		Pilastr
344	5	8	14.79	14.79	117	119	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
345	8	7	14.79	14.79	119	120	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
346	7	6	14.79	14.79	120	118	1	1076	L 21x21x3	0	90	0	0	0	0	0	0		Trave telaio
347	6	5	14.79	14.79	118	117	1	1076	L 21x21x3	0	90								

DATI ASTE SPAZIALI																		
IDENTIFICAZIONE								GEOMETRIA				SCOST.INIZIALI			SCOST. FINALI			
Asta3d N.ro	Filo in.	Filo fin.	Q.iniz (m)	Q.fin. (m)	Nod3d iniz.	Nod3d fin.	Cr. Pr.	Sez. N.ro	Sigla Sezione	Magr. (cm)	Rot. Grd	dx (cm)	dy (cm)	dz (cm)	dx (cm)	dy (cm)	dz (cm)	Cri Geo
Tipo Elemento ai fini sism.																		
370	7	6	15.81	15.81	125	128	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
371	6	5	15.81	15.81	128	127	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
372	5	8	15.29	15.81	124	126	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
373	8	7	15.29	15.81	123	125	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
374	7	6	15.29	15.81	122	128	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
375	6	5	15.29	15.81	121	127	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
376	5	5	16.31	15.81	129	127	3	319	ANG50*5	0	0	2	2	0	2	2	0	Pilastr
377	6	6	16.31	15.81	130	128	3	319	ANG50*5	0	270	2	2	0	2	2	0	Pilastr
378	8	8	16.31	15.81	131	126	3	319	ANG50*5	0	90	2	2	0	2	2	0	Pilastr
379	7	7	16.31	15.81	132	125	3	319	ANG50*5	0	180	2	2	0	2	2	0	Pilastr
380	5	8	16.31	16.31	129	131	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
381	8	7	16.31	16.31	131	132	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
382	7	6	16.31	16.31	132	130	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
383	6	33	16.31	16.31	130	154	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
384	7	8	15.81	16.31	125	131	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
385	8	5	15.81	16.31	126	129	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
386	5	6	15.81	16.31	127	130	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
387	6	7	15.81	16.31	128	132	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
388	5	5	16.81	16.31	133	129	3	319	ANG50*5	0	0	2	2	0	2	2	0	Pilastr
389	6	6	16.81	16.31	134	130	3	319	ANG50*5	0	270	2	2	0	2	2	0	Pilastr
390	8	8	16.81	16.31	135	131	3	319	ANG50*5	0	90	2	2	0	2	2	0	Pilastr
391	7	7	16.81	16.31	136	132	3	319	ANG50*5	0	180	2	2	0	2	2	0	Pilastr
392	5	8	16.81	16.81	133	135	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
393	8	7	16.81	16.81	135	136	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
394	7	6	16.81	16.81	136	134	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
395	6	5	16.81	16.81	134	133	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
396	8	7	16.31	16.81	131	136	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
397	7	6	16.31	16.81	132	134	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
398	6	5	16.31	16.81	130	133	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
399	5	8	16.31	16.81	129	135	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
400	5	5	17.31	16.81	137	133	3	319	ANG50*5	0	0	2	2	0	2	2	0	Pilastr
401	6	6	17.31	16.81	138	134	3	319	ANG50*5	0	270	2	2	0	2	2	0	Pilastr
402	8	8	17.31	16.81	139	135	3	319	ANG50*5	0	90	2	2	0	2	2	0	Pilastr
403	7	7	17.31	16.81	140	136	3	319	ANG50*5	0	180	2	2	0	2	2	0	Pilastr
404	5	8	17.31	17.31	137	139	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
405	8	7	17.31	17.31	139	140	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
406	7	6	17.31	17.31	140	138	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
407	6	33	17.31	17.31	138	153	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
408	7	8	16.81	17.31	136	139	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
409	8	5	16.81	17.31	135	137	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
410	5	6	16.81	17.31	133	138	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
411	6	7	16.81	17.31	134	140	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
412	5	5	17.81	17.31	141	137	3	319	ANG50*5	0	0	2	2	0	2	2	0	Pilastr
413	6	6	17.81	17.31	142	138	3	319	ANG50*5	0	270	2	2	0	2	2	0	Pilastr
414	8	8	17.81	17.31	143	139	3	319	ANG50*5	0	90	2	2	0	2	2	0	Pilastr
415	7	7	17.81	17.31	144	140	3	319	ANG50*5	0	180	2	2	0	2	2	0	Pilastr
416	5	8	17.81	17.81	141	143	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
417	8	7	17.81	17.81	143	144	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
418	7	6	17.81	17.81	144	142	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
419	6	5	17.81	17.81	142	141	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
420	8	7	17.31	17.81	139	144	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
421	7	6	17.31	17.81	140	142	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
422	6	5	17.31	17.81	138	141	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
423	5	8	17.31	17.81	137	143	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
424	6	6	18.31	17.81	145	142	3	319	ANG50*5	0	270	2	2	0	2	2	0	Pilastr
425	7	7	18.31	17.81	146	144	3	319	ANG50*5	0	180	2	2	0	2	2	0	Pilastr
426	8	8	18.31	17.81	147	143	3	319	ANG50*5	0	90	2	2	0	2	2	0	Pilastr
427	5	5	18.31	17.81	148	141	3	319	ANG50*5	0	0	2	2	0	2	2	0	Pilastr
428	8	5	18.31	18.31	147	148	1	1079	Piatto 120x8	0	0	0	0	0	0	0	0	Trave telaio
429	5	6	18.31	18.31	148	145	1	1079	Piatto 120x8	0	0	0	0	0	0	0	0	Trave telaio
430	6	7	18.31	18.31	145	146	1	1079	Piatto 120x8	0	0	0	0	0	0	0	0	Trave telaio
431	7	8	18.31	18.31	146	147	1	1079	Piatto 120x8	0	0	0	0	0	0	0	0	Trave telaio
432	7	8	17.81	18.31	144	147	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
433	6	7	17.81	18.31	142	146	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
434	5	6	17.81	18.31	141	145	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
435	8	5	17.81	18.31	143	148	1	1076	L 21x21x3	0	0	0	0	0	0	0	0	Trave telaio
436	29	5	0.00	9.26	149	53	1	889	TONDO14	0	0	0	0	0	0	0	0	NoGerarchia Acciaio
437	30	7	0.00	9.26	150	55	1	889	TONDO14	0	0	0	0	0	0	0	0	NoGerarchia Acciaio
438	31	8	0.00	9.26	151	56	1	889	TONDO14	0	0	0	0	0	0	0	0	NoGerarchia Acciaio
439	32	6	0.00	9.26	152	54	1	889	TONDO14	0	0	0	0	0	0	0	0	NoGerarchia Acciaio
440	1	2	3.10	2.56	27	22	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	Trave telaio
441	33	5	17.31	17.31	153	137	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	NoGerarchia Acciaio
442	33	5	16.31	16.31	154	129	1	1076	L 21x21x3	0	90	0	0	0	0	0	0	NoGerarchia Acciaio
443	6	32	15.29	0.00	121	152	1	889	TONDO14	0	0	0	0	0	0	0	0	NoGerarchia Acciaio
444	5	29	15.29	0.00	124	149	1	889	TONDO14	0	0	0	0	0	0	0	0	NoGerarchia Acciaio
445	8	31	15.29	0.00	123	151	1	889	TONDO14	0	0	0	0	0	0	0	0	NoGerarchia Acciaio
446	7	30	15.29	0.00	122	150	1	889	TONDO14	0	0	0	0	0	0	0	0	NoGerarchia Acciaio

CONDIZIONI DI CARICO

Le azione sulla struttura vengono applicate attraverso determinate condizioni di carico elementari elencate qui di seguito:

- 1) Peso Proprio Struttura: i pesi propri sono calcolati in automatico dal software in base ai materiali, profili e sezioni utilizzate.
- 2) Sovraccarico Permanente Peso Antenne: (indicato nelle tabelle con il N°2)
- 3) Sovraccarico Accidentale Vento +X: (indicato nelle tabelle con il N°3)
- 4) Sovraccarico Accidentale Vento +Y: (indicato nelle tabelle con il N°4)
- 5) Sovraccarico Accidentale Ghiaccio: (indicato nelle tabelle con il N°5)

CARICHI ASTE

- Asta3d : Numero dell'asta spaziale
- Dt : Delta termico costante
- ALI.SISMICA : Coefficiente di riduzione del sovraccarico per la condizione in stampa ai fini del calcolo della massa sismica
- Riferimento : Sistema di riferimento dei carichi (0 globale ; 1 locale)
- Qx : Carico distribuito in direzione X sul nodo iniziale
- Qy : Carico distribuito in direzione Y sul nodo iniziale
- Qz : Carico distribuito in direzione Z sul nodo iniziale
- Qx : Carico distribuito in direzione X sul nodo finale
- Qy : Carico distribuito in direzione Y sul nodo finale
- Qz : Carico distribuito in direzione Z sul nodo finale
- Mt : Momento torcente distribuito

CARICHI DISTRIBUITI ASTE									
CONDIZIONE DI CARICO N.ro: 3					ALIQUOTA SISMICA: 0				
IDENT.		NODO INIZIALE			NODO FINALE				
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t
4	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00
6	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00
12	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00
16	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00
17	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00
18	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00
21	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00
27	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00
29	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00
30	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00
33	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00
38	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00
41	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00
42	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00
45	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00
51	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00
53	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00
54	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00
57	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00
62	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00
65	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00
66	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00
72	0	0.018	0.000	0.000	0.018	0.000	0.000	0.000	0.00
76	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00
77	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00
78	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00
84	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00

CARICHI DISTRIBUITI ASTE

CONDIZIONE DI CARICO N.ro: 3										ALIQUOTA SISMICA: 0	
IDENT.		NODO INIZIALE			NODO FINALE						
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t		
88	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
89	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
90	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
93	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
99	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
101	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
102	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
105	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
110	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
113	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
114	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
117	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
123	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
125	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
126	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
129	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
134	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
137	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
138	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
144	0	0.019	0.000	0.000	0.019	0.000	0.000	0.000	0.00		
148	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
149	0	0.022	0.000	0.000	0.022	0.000	0.000	0.000	0.00		
153	0	0.005	0.000	0.000	0.005	0.000	0.000	0.000	0.00		
157	0	0.005	0.000	0.000	0.005	0.000	0.000	0.000	0.00		
161	0	0.005	0.000	0.000	0.005	0.000	0.000	0.000	0.00		
165	0	0.005	0.000	0.000	0.005	0.000	0.000	0.000	0.00		
169	0	0.005	0.000	0.000	0.005	0.000	0.000	0.000	0.00		
191	0	0.005	0.000	0.000	0.005	0.000	0.000	0.000	0.00		
192	0	0.005	0.000	0.000	0.005	0.000	0.000	0.000	0.00		
193	0	0.005	0.000	0.000	0.005	0.000	0.000	0.000	0.00		
194	0	0.005	0.000	0.000	0.005	0.000	0.000	0.000	0.00		
195	0	0.005	0.000	0.000	0.005	0.000	0.000	0.000	0.00		
196	0	0.005	0.000	0.000	0.005	0.000	0.000	0.000	0.00		
203	0	0.011	0.000	0.000	0.011	0.000	0.000	0.000	0.00		
204	0	0.011	0.000	0.000	0.011	0.000	0.000	0.000	0.00		
205	0	0.011	0.000	0.000	0.011	0.000	0.000	0.000	0.00		
206	0	0.011	0.000	0.000	0.011	0.000	0.000	0.000	0.00		
207	0	0.011	0.000	0.000	0.011	0.000	0.000	0.000	0.00		
208	0	0.011	0.000	0.000	0.011	0.000	0.000	0.000	0.00		
209	0	0.011	0.000	0.000	0.011	0.000	0.000	0.000	0.00		
210	0	0.011	0.000	0.000	0.011	0.000	0.000	0.000	0.00		
211	0	0.011	0.000	0.000	0.011	0.000	0.000	0.000	0.00		
212	0	0.011	0.000	0.000	0.011	0.000	0.000	0.000	0.00		
213	0	0.011	0.000	0.000	0.011	0.000	0.000	0.000	0.00		
214	0	0.011	0.000	0.000	0.011	0.000	0.000	0.000	0.00		
222	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00		
223	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00		
227	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
231	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
232	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00		
233	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00		
239	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
242	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
244	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00		
245	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00		
251	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
254	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
256	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00		
257	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00		

CARICHI DISTRIBUITI ASTE

CONDIZIONE DI CARICO N.ro: 3										ALIQUOTA SISMICA: 0	
IDENT.		NODO INIZIALE			NODO FINALE						
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t		
263	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
266	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
268	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00		
269	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00		
275	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
278	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
280	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00		
283	0	0.009	0.000	0.000	0.009	0.000	0.000	0.000	0.00		
285	0	0.019	0.000	0.000	0.019	0.000	0.000	0.000	0.00		
290	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
294	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
295	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
299	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
303	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
304	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
305	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
311	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
314	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
315	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
316	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
317	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
323	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
326	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
328	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
329	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
335	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
338	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
340	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
341	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
347	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
350	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
352	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
355	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
357	0	0.020	0.000	0.000	0.020	0.000	0.000	0.000	0.00		
362	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
366	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
367	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
371	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
375	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
376	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
377	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
383	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
386	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
388	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
389	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
395	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
398	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
400	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
401	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
407	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
410	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
412	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
413	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
419	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
422	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		
424	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
427	0	0.010	0.000	0.000	0.010	0.000	0.000	0.000	0.00		
429	0	0.021	0.000	0.000	0.021	0.000	0.000	0.000	0.00		
434	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00		

CARICHI DISTRIBUITI ASTE

CONDIZIONE DI CARICO N.ro: 3 ALIQUOTA SISMICA: 0									
IDENT.		NODO INIZIALE			NODO FINALE				
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t
441	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00
442	0	0.004	0.000	0.000	0.004	0.000	0.000	0.000	0.00

CARICHI DISTRIBUITI ASTE

CONDIZIONE DI CARICO N.ro: 4 ALIQUOTA SISMICA: 0									
IDENT.		NODO INIZIALE			NODO FINALE				
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t
4	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00
8	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00
9	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
14	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
17	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00
20	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00
24	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
28	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
29	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00
32	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00
36	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
37	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
41	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00
44	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00
48	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
52	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
53	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00
56	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00
60	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
61	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
65	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00
68	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00
69	0	0.000	0.018	0.000	0.000	0.018	0.000	0.000	0.00
73	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
77	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
80	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
81	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
85	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
89	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
92	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
96	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
100	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
101	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
104	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
108	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
109	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
113	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
116	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
120	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
124	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
125	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
128	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
132	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
133	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
137	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
140	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
141	0	0.000	0.019	0.000	0.000	0.019	0.000	0.000	0.00
145	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
152	0	0.000	0.022	0.000	0.000	0.022	0.000	0.000	0.00

CARICHI DISTRIBUITI ASTE

CONDIZIONE DI CARICO N.ro: 4										ALIQUOTA SISMICA: 0	
IDENT.		NODO INIZIALE			NODO FINALE						
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t		
156	0	0.000	0.005	0.000	0.000	0.005	0.000	0.000	0.00		
160	0	0.000	0.005	0.000	0.000	0.005	0.000	0.000	0.00		
164	0	0.000	0.005	0.000	0.000	0.005	0.000	0.000	0.00		
168	0	0.000	0.005	0.000	0.000	0.005	0.000	0.000	0.00		
172	0	0.000	0.005	0.000	0.000	0.005	0.000	0.000	0.00		
179	0	0.000	0.005	0.000	0.000	0.005	0.000	0.000	0.00		
180	0	0.000	0.005	0.000	0.000	0.005	0.000	0.000	0.00		
181	0	0.000	0.005	0.000	0.000	0.005	0.000	0.000	0.00		
182	0	0.000	0.005	0.000	0.000	0.005	0.000	0.000	0.00		
183	0	0.000	0.005	0.000	0.000	0.005	0.000	0.000	0.00		
184	0	0.000	0.005	0.000	0.000	0.005	0.000	0.000	0.00		
203	0	0.000	0.011	0.000	0.000	0.011	0.000	0.000	0.00		
204	0	0.000	0.011	0.000	0.000	0.011	0.000	0.000	0.00		
205	0	0.000	0.011	0.000	0.000	0.011	0.000	0.000	0.00		
206	0	0.000	0.011	0.000	0.000	0.011	0.000	0.000	0.00		
207	0	0.000	0.011	0.000	0.000	0.011	0.000	0.000	0.00		
208	0	0.000	0.011	0.000	0.000	0.011	0.000	0.000	0.00		
215	0	0.000	0.011	0.000	0.000	0.011	0.000	0.000	0.00		
216	0	0.000	0.011	0.000	0.000	0.011	0.000	0.000	0.00		
217	0	0.000	0.011	0.000	0.000	0.011	0.000	0.000	0.00		
218	0	0.000	0.011	0.000	0.000	0.011	0.000	0.000	0.00		
219	0	0.000	0.011	0.000	0.000	0.011	0.000	0.000	0.00		
220	0	0.000	0.011	0.000	0.000	0.011	0.000	0.000	0.00		
221	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00		
222	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00		
224	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
228	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
232	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00		
234	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00		
236	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
241	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
244	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00		
246	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00		
248	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
255	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
256	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00		
258	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00		
260	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
265	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
268	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00		
270	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00		
272	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
279	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
282	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00		
283	0	0.000	0.009	0.000	0.000	0.009	0.000	0.000	0.00		
284	0	0.000	0.019	0.000	0.000	0.019	0.000	0.000	0.00		
291	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
293	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00		
294	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00		
296	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
300	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
304	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00		
306	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00		
308	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
313	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
316	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00		
318	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00		
320	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		
327	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00		

CARICHI DISTRIBUITI ASTE

CONDIZIONE DI CARICO N.ro: 4 ALIQUOTA SISMICA: 0									
IDENT.		NODO INIZIALE			NODO FINALE				
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t
328	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
330	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
332	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
337	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
340	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
342	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
344	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
351	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
354	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
355	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
356	0	0.000	0.020	0.000	0.000	0.020	0.000	0.000	0.00
363	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
365	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
366	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
368	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
372	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
376	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
378	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
380	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
385	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
388	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
390	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
392	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
399	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
400	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
402	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
404	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
409	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
412	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
414	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
416	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
423	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00
426	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
427	0	0.000	0.010	0.000	0.000	0.010	0.000	0.000	0.00
428	0	0.000	0.021	0.000	0.000	0.021	0.000	0.000	0.00
435	0	0.000	0.004	0.000	0.000	0.004	0.000	0.000	0.00

CARICHI DISTRIBUITI ASTE

CONDIZIONE DI CARICO N.ro: 5 ALIQUOTA SISMICA: 0									
IDENT.		NODO INIZIALE			NODO FINALE				
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t
1	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00
2	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00
3	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00
4	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00
5	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00
6	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00
7	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00
8	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00
9	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
10	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
11	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
12	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
13	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
14	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
15	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00

CARICHI DISTRIBUITI ASTE

CONDIZIONE DI CARICO N.ro: 5										ALIQUOTA SISMICA: 0	
IDENT.		NODO INIZIALE			NODO FINALE						
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t		
16	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
17	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
18	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
19	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
20	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
21	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
22	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
23	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
24	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
25	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
26	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
27	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
28	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
29	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
30	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
31	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
32	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
33	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
34	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
35	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
36	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
37	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
38	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
39	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
40	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
41	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
42	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
43	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
44	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
45	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
46	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
47	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
48	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
49	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
50	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
51	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
52	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
53	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
54	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
55	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
56	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
57	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
58	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
59	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
60	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
61	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
62	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
63	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
64	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
65	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
66	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
67	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
68	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
69	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
70	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
71	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
72	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
73	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
74	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		

CARICHI DISTRIBUITI ASTE

CONDIZIONE DI CARICO N.ro: 5										ALIQUOTA SISMICA: 0	
IDENT.		NODO INIZIALE			NODO FINALE						
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t		
75	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
76	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
77	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
78	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
79	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
80	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
81	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
82	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
83	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
84	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
85	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
86	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
87	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
88	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
89	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
90	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
91	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
92	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
93	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
94	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
95	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
96	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
97	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
98	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
99	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
100	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
101	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
102	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
103	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
104	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
105	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
106	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
107	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
108	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
109	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
110	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
111	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
112	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
113	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
114	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
115	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
116	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
117	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
118	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
119	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
120	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
121	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
122	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
123	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
124	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
125	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
126	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
127	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
128	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
129	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
130	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
131	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
132	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
133	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		

CONDIZIONE DI CARICO N.ro: 5					ALIQUOTA SISMICA: 0				
IDENT.		NODO INIZIALE			NODO FINALE				
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t
134	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
135	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
136	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
137	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00
138	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00
139	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00
140	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00
141	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00
142	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00
143	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00
144	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00
145	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
146	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
147	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
148	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
149	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00
150	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00
151	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00
152	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00
153	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
154	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
155	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
156	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
157	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
158	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
159	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
160	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
161	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
162	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
163	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
164	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
165	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
166	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
167	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
168	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
169	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
170	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
171	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
172	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
173	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
174									

CARICHI DISTRIBUITI ASTE

CONDIZIONE DI CARICO N.ro: 5										ALIQUOTA SISMICA: 0	
IDENT.		NODO INIZIALE			NODO FINALE						
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t		
193	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
194	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
195	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
196	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
197	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
198	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
199	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
200	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
201	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
202	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
203	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
204	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
205	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
206	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
207	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
208	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
209	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
210	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
211	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
212	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
213	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
214	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
215	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
216	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
217	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
218	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
219	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
220	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
221	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
222	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
223	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
224	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
226	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
227	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
228	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
229	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
230	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
231	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
232	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
233	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
234	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
235	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
236	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
238	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
239	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
240	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
241	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
242	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
243	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
244	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
245	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
246	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
247	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
248	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
249	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
250	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
251	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
252	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
253	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		

CARICHI DISTRIBUITI ASTE

CONDIZIONE DI CARICO N.ro: 5										ALIQUOTA SISMICA: 0	
IDENT.		NODO INIZIALE			NODO FINALE						
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t		
254	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
255	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
256	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
257	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
258	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
259	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
260	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
261	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
262	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
263	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
264	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
265	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
266	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
267	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
268	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
269	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
270	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
271	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
272	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
273	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
274	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
275	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
276	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
277	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
278	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
279	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
280	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
281	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
282	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
283	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
284	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
285	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
286	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
287	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
288	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
289	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
290	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
291	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
292	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
293	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
294	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
295	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
296	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
297	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
298	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
299	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
300	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
301	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
302	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
303	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
304	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
305	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
306	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
307	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
308	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
309	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
310	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
311	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
312	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		

CARICHI DISTRIBUITI ASTE

CONDIZIONE DI CARICO N.ro: 5										ALIQUOTA SISMICA: 0	
IDENT.		NODO INIZIALE			NODO FINALE						
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t		
313	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
314	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
315	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
316	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
317	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
318	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
319	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
320	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
321	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
322	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
323	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
324	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
325	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
326	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
327	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
328	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
329	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
330	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
331	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
332	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
333	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
334	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
335	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
336	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
337	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
338	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
339	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
340	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
341	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
342	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
343	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
344	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
345	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
346	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
347	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
348	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
349	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
350	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
351	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
352	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
353	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
354	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
355	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
356	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
357	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
358	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
359	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
360	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
361	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
362	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
363	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
364	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
365	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
366	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
367	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
368	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
369	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
370	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
371	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		

CARICHI DISTRIBUITI ASTE

CONDIZIONE DI CARICO N.ro: 5										ALIQUOTA SISMICA: 0	
IDENT.		NODO INIZIALE			NODO FINALE						
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t		
372	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
373	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
374	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
375	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
376	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
377	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
378	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
379	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
380	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
381	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
382	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
384	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
385	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
386	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
387	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
388	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
389	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
390	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
391	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
392	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
393	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
394	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
395	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
396	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
397	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
398	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
399	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
400	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
401	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
402	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
403	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
404	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
405	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
406	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
408	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
409	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
410	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
411	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
412	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
413	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
414	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
415	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
416	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
417	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
418	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
419	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
420	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
421	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
422	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
423	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		
424	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
425	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
426	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
427	0	0.000	0.000	-0.004	0.000	0.000	-0.004	0.000	0.00		
428	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
429	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
430	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
431	0	0.000	0.000	-0.005	0.000	0.000	-0.005	0.000	0.00		
432	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00		

CARICHI DISTRIBUITI ASTE

CONDIZIONE DI CARICO N.ro: 5 ALIQUOTA SISMICA: 0									
IDENT.		NODO INIZIALE			NODO FINALE				
Asta3d N.ro	Riferi mento	Qx t/ml	Qy t/ml	Qz t/ml	Qx t/ml	Qy t/ml	Qz t/ml	Mt t*m/ml	Pretens t
433	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
434	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
435	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
436	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
437	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
438	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
439	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
440	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
443	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
444	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
445	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00
446	0	0.000	0.000	-0.002	0.000	0.000	-0.002	0.000	0.00

CARICHI TERMICI/DISTRIBUITI/CONCENTRATI

CONDIZIONE DI CARICO N.ro: 2 ALIQUOTA SISMICA:100						
IDENTI	FORZE CONCENTRATE			MOMENTI CONCENTRATI		
Nodo3d N.ro	Fx (t)	Fy (t)	Fz (t)	Mx t*m	My t*m	Mz t*m
33	0.0000	0.0000	-0.0210	0.0000	0.0000	0.0000
34	0.0000	0.0000	-0.0210	0.0000	0.0000	0.0000
41	0.0000	0.0000	-0.0210	0.0000	0.0000	0.0000
42	0.0000	0.0000	-0.0210	0.0000	0.0000	0.0000
93	0.0000	0.0000	-0.0550	0.0319	0.0000	0.0000
97	0.0000	0.0000	-0.0130	0.0000	0.0000	0.0000
100	0.0000	0.0000	-0.0130	0.0000	0.0000	0.0000
105	0.0000	0.0000	-0.0680	0.0319	0.0000	0.0000
106	0.0000	0.0000	-0.0130	0.0000	0.0000	0.0000
113	0.0000	0.0000	-0.0130	0.0000	0.0000	0.0000
114	0.0000	0.0000	-0.0130	0.0000	0.0000	0.0000
117	0.0000	0.0000	-0.0550	0.0319	0.0000	0.0000
129	0.0000	0.0050	-0.0110	0.0030	0.0000	0.0000
137	0.0000	0.0000	-0.0110	0.0030	0.0000	0.0000
141	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
148	0.0000	-0.0050	-0.0110	0.0030	0.0000	0.0000
153	0.0000	0.0000	-0.0035	0.0000	0.0000	0.0000
154	0.0000	0.0000	-0.0035	0.0000	0.0000	0.0000

CARICHI TERMICI/DISTRIBUITI/CONCENTRATI

CONDIZIONE DI CARICO N.ro: 3 ALIQUOTA SISMICA:0						
IDENTI	FORZE CONCENTRATE			MOMENTI CONCENTRATI		
Nodo3d N.ro	Fx (t)	Fy (t)	Fz (t)	Mx t*m	My t*m	Mz t*m
33	0.0650	0.0000	0.0000	0.0000	0.0000	0.0000
34	0.0650	0.0000	0.0000	0.0000	0.0000	0.0000
41	0.0650	0.0000	0.0000	0.0000	0.0000	0.0000
42	0.0650	0.0000	0.0000	0.0000	0.0000	0.0000
93	0.0300	0.0000	0.0000	0.0000	0.0000	0.0174
97	0.0700	0.0000	0.0000	0.0000	0.0000	0.0000
100	0.0700	0.0000	0.0000	0.0000	0.0000	0.0000
105	0.1000	0.0000	0.0000	0.0000	0.0000	0.0174
106	0.0700	0.0000	0.0000	0.0000	0.0000	0.0000
113	0.0700	0.0000	0.0000	0.0000	0.0000	0.0000
114	0.0700	0.0000	0.0000	0.0000	0.0000	0.0000
117	0.0300	0.0000	0.0000	0.0000	0.0000	0.0174
129	0.0210	0.0000	0.0000	0.0000	0.0000	0.0155

CARICHI TERMICI/DISTRIBUITI/CONCENTRATI

CONDIZIONE DI CARICO N.ro: 3				ALIQUOTA SISMICA:0		
IDENTI	FORZE CONCENTRATE			MOMENTI CONCENTRATI		
Nodo3d N.ro	Fx (t)	Fy (t)	Fz (t)	Mx t*m	My t*m	Mz t*m
137	0.0210	0.0000	0.0000	0.0000	0.0000	0.0155
141	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
148	0.0210	0.0000	0.0000	0.0000	0.0000	0.0155
153	0.0350	0.0000	0.0000	0.0000	0.0000	0.0000
154	0.0350	0.0000	0.0000	0.0000	0.0000	0.0000

CARICHI TERMICI/DISTRIBUITI/CONCENTRATI

CONDIZIONE DI CARICO N.ro: 4				ALIQUOTA SISMICA:0		
IDENTI	FORZE CONCENTRATE			MOMENTI CONCENTRATI		
Nodo3d N.ro	Fx (t)	Fy (t)	Fz (t)	Mx t*m	My t*m	Mz t*m
33	0.0000	0.0650	0.0000	0.0000	0.0000	0.0080
34	0.0000	0.0650	0.0000	0.0000	0.0000	0.0080
41	0.0000	0.0650	0.0000	0.0000	0.0000	0.0080
42	0.0000	0.0650	0.0000	0.0000	0.0000	0.0080
93	0.0000	0.1300	0.0000	0.0000	0.0000	0.0000
97	0.0000	0.0310	0.0000	0.0000	0.0000	0.0135
100	0.0000	0.0310	0.0000	0.0000	0.0000	0.0135
105	0.0000	0.1610	0.0000	0.0000	0.0000	0.0135
106	0.0000	0.0310	0.0000	0.0000	0.0000	0.0135
113	0.0000	0.0310	0.0000	0.0000	0.0000	0.0135
114	0.0000	0.0310	0.0000	0.0000	0.0000	0.0135
117	0.0000	0.1300	0.0000	0.0000	0.0000	0.0000

CARICHI TERMICI/DISTRIBUITI/CONCENTRATI

CONDIZIONE DI CARICO N.ro: 5				ALIQUOTA SISMICA:0		
IDENTI	FORZE CONCENTRATE			MOMENTI CONCENTRATI		
Nodo3d N.ro	Fx (t)	Fy (t)	Fz (t)	Mx t*m	My t*m	Mz t*m
33	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
34	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
41	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
42	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
93	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
97	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
100	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
105	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
106	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
113	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
114	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
117	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
129	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
137	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
148	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
153	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000
154	0.0000	0.0000	-0.0250	0.0000	0.0000	0.0000

NODI VINCOLATI

Si riporta appresso la spiegazione delle sigle usate nella tabella vincoli nodali esterni e interni:

- **Nodo3d** : Numero del nodo spaziale
- **Codice** : Codice esplicito per la determinazione del vincolo:

I = incastro

C = cerniera completa

W = *Winkler*

E = esplicito

P = plinto

U = Vincolo unilatero

- **Tx**: Rigidezza traslante in direzione X sul sist. di rif. locale (-1 spostamento impedito)
- **Ty**: Rigidezza traslante in direzione Y sul sist. di rif. locale (-1 spostamento impedito)
- **Tz**: Rigidezza traslante in direzione Z sul sist. di rif. locale (-1 spostamento impedito)
- **Rx**: Rigidezza rotazionale in direzione X sul sist. di rif. locale (-1 spostamento impedito)
- **Ry**: Rigidezza rot. in direzione Y sul sist. di rif. locale (-1 spostamento impedito)
- **Rz**: Rigidezza rotazionale in direzione Z sul sist. di rif. locale (-1 spostamento impedito)

SCOSTAMENTO PER I VINCOLI ELASTICI

- **Tr. X**: Scostamento in direzione X globale del sistema di riferimento locale del vincolo
- **Tr. Y**: Scostamento in direzione Y globale del sistema di riferimento locale del vincolo
- **Tr. Z**: Scostamento in direzione Z globale del sistema di riferimento locale del vincolo
- **Azim**: Angolo formato fra la proiezione dell'asse Z locale sul piano XY e l'asse X globale
- **CoZe** : Angolo formato fra l'asse Z locale e l'asse Z globale (complemento allo zenit)
- **Ass.** : Rotazione attorno dell'asse Z locale del sistema di riferimento locale

VINCOLI E CEDIMENTI NODALI																			
IDENTIFIC.		RIGIDEZZE TRASLANTI			RIGIDEZZE ROTAZIONALI			SCOSTAMENTI						VERSO SPOSTAMENTI UNILATERI					
Nodo3d N.ro	Cod ice	Tx t/m	Ty t/m	Tz t/m	Rx t*m	Ry t*m	Rz t*m	Tr.X cm	Tr.Y cm	Tr.Z cm	Azim Grd	CoZe Grd	Ass. Grd	Tr.X	Tr.Y	Tr.Z	RotX	RotY	RotZ
1	I	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0						
2	I	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0						
3	I	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0						
4	I	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0						
149	C	-1	-1	-1	0	0	0	0	0	0	0	0	0						
150	C	-1	-1	-1	0	0	0	0	0	0	0	0	0						
151	C	-1	-1	-1	0	0	0	0	0	0	0	0	0						
152	C	-1	-1	-1	0	0	0	0	0	0	0	0	0						

VINCOLI INTERNI ASTE																
	VINCOLO NODO INIZIALE							VINCOLO NODO FINALE								
IDENT.	RIGIDEZZE TRASLANTI				RIGIDEZZE ROTAZIONALI			RIGIDEZZE TRASLANTI				RIGIDEZZE ROTAZIONALI			COEFFICIENTI BETA	
Asta3d N.ro	Cod ice	Tx t/m	Ty t/m	Tz t/m	Rx t*m	Ry t*m	Rz t*m	Cod ice	Tx t/m	Ty t/m	Tz t/m	Rx t*m	Ry t*m	Rz t*m	Beta X	Beta Y
436	E	INCASTR	INCASTR	INCASTR	LIBERO	LIBERO	LIBERO	C	INCASTR	INCASTR	INCASTR	LIBERO	LIBERO	LIBERO	1.00	1.00
437	E	INCASTR	INCASTR	INCASTR	LIBERO	LIBERO	LIBERO	C	INCASTR	INCASTR	INCASTR	LIBERO	LIBERO	LIBERO	1.00	1.00
438	E	INCASTR	INCASTR	INCASTR	LIBERO	LIBERO	LIBERO	C	INCASTR	INCASTR	INCASTR	LIBERO	LIBERO	LIBERO	1.00	1.00
439	E	INCASTR	INCASTR	INCASTR	LIBERO	LIBERO	LIBERO	C	INCASTR	INCASTR	INCASTR	LIBERO	LIBERO	LIBERO	1.00	1.00

COMBINAZIONI E PERCORSI DI CARICO

Nella tabella seguente sono riportate le combinazioni di carico delle diverse condizioni di carico definite nel capitolo precedente.

COMBINAZIONI CARICHI A1 - S.L.V. / S.L.D.															
DESCRIZIONI	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PESO PROPRIO	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Permanenti	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00
VENTO +X	0.00	0.00	0.90	0.90	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VENTO +Y	0.00	0.00	0.00	0.00	0.00	0.90	0.90	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ghiaccio	0.75	1.50	0.75	1.50	0.75	0.75	1.50	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sisma direz. grd 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	-1.00	-1.00	0.30	0.30	-0.30
Sisma direz. grd 90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	-0.30	0.30	-0.30	1.00	-1.00	1.00

COMBINAZIONI CARICHI A1 - S.L.V. / S.L.D.	
DESCRIZIONI	16
PESO PROPRIO	1.00
Permanenti	1.00
VENTO +X	0.00
VENTO +Y	0.00
Ghiaccio	0.00
Sisma direz. grd 0	-0.30
Sisma direz. grd 90	-1.00

COMBINAZIONI RARE - S.L.E.									
DESCRIZIONI	1	2	3	4	5	6	7	8	
PESO PROPRIO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Permanenti	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
VENTO +X	0.00	0.00	0.60	0.60	1.00	0.00	0.00	0.00	
VENTO +Y	0.00	0.00	0.00	0.00	0.00	0.60	0.60	1.00	
Ghiaccio	0.50	1.00	0.50	1.00	0.50	0.50	1.00	0.50	
Sisma direz. grd 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sisma direz. grd 90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

COMBINAZIONI FREQUENTI - S.L.E.				
DESCRIZIONI	1	2	3	4
PESO PROPRIO	1.00	1.00	1.00	1.00
Permanenti	1.00	1.00	1.00	1.00
VENTO +X	0.00	0.00	0.20	0.00
VENTO +Y	0.00	0.00	0.00	0.20
Ghiaccio	0.00	0.20	0.00	0.00
Sisma direz. grd 0	0.00	0.00	0.00	0.00
Sisma direz. grd 90	0.00	0.00	0.00	0.00

COMBINAZIONI PERMANENTI - S.L.E.	
DESCRIZIONI	1
PESO PROPRIO	1.00
Permanenti	1.00
VENTO +X	0.00
VENTO +Y	0.00
Ghiaccio	0.00
Sisma direz. grd 0	0.00
Sisma direz. grd 90	0.00

VERIFICA ASTE IN ACCIAIO

Si riporta appresso la spiegazione delle sigle usate nelle tabelle di verifica aste in acciaio:

Fili N.ro	: Sulla prima riga numero del filo del nodo iniziale, sulla terza quello del nodo finale
Quota	: Sulla prima riga quota del nodo iniziale, sulla terza quota del nodo finale
Tratto	: Se una trave è suddivisa in più tratti sulla prima riga è riportato il numero del tratto, sulla terza il numero di suddivisioni della trave
Cmb N.r	: Numero della combinazione e di seguito le caratteristiche per la quale si è avuta la condizione più gravosa (rapporto di verifica massimo)
N Sd	: Sforzo normale di calcolo
MxSd	: Momento flettente di calcolo asse vettore X locale
MySd	: Momento flettente di calcolo asse vettore Y locale
VxSd	: Taglio di calcolo in direzione dell'asse X locale
VySd	: Taglio di calcolo in direzione dell'asse Y locale
T Sd	: Torsione di calcolo
N Rd	: Sforzo normale resistente ridotto per presenza dell'azione tagliante
MxV.Rd	: Momento flettente resistente con asse vettore X locale ridotto per presenza di azione tagliante. Per le sezioni di classe 3 è sempre il momento limite elastico, per quelle di classe 1 e 2 è il momento plastico. Se inoltre la tipologia della sezione è doppio T, tubo tondo, tubo rettangolare e piatto, il momento è ridotto dall'eventuale presenza dello sforzo normale
MyV.Rd	: Momento flettente resistente con asse vettore Y locale ridotto per presenza di azione tagliante. Vale quanto riportato per il dato precedente
VxplRd	: Taglio resistente plastico in direzione dell'asse X locale
VyplRd	: Taglio resistente plastico in direzione dell'asse Y locale
T Rd	: Torsione resistente
fy rid	: Resistenza di calcolo del materiale ridotta per presenza dell'azione tagliante
Rap %	: Rapporto di verifica moltiplicato per 100. Sezione verificata per valori minori o

uguali a 100. La formula utilizzata in verifica è la n.ro 6.41 di EC3. Tale formula nel caso di sezione a doppio T coincide con la formula del DM 2008 n.ro 4.2.39.

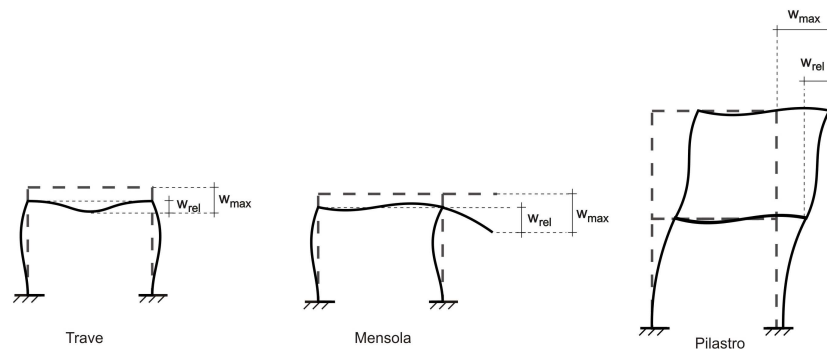
- Sez.N** : Numero di archivio della sezione
- Ac** : Coefficiente di amplificazione dei carichi statici. Sostituisce il dato 'Sez.N.' se l'incremento dei carichi statici è maggiore di 1
- Qn** : Carico distribuito normale all'asse della trave in kg/m, incluso il peso proprio
- Asta** : Numerazione dell'asta

L'ultima riga delle quattro relative a ciascuna asta, si riferisce ai valori utili ad effettuare le verifiche di instabilità:

- $\underline{l}$** : Lunghezza della trave
- $\beta \cdot l$** : Lunghezza libera di inflessione
- clas.** : Classe di verifica della trave
- ϵ** : $(235/f_y)^{(1/2)}$
- Lmd** : Snellezza λ
- R%pf** : Rapporto di verifica per l'instabilità alla presso-flessione moltiplicato per 100 determinato dalla formula [C4.2.32]. Sezione verificata per valori minori o uguali a 100
- R%ft** : Rapporto di verifica per l'instabilità flessio-torsionale moltiplicato per 100 [C4.2.36]
- Wmax** : Spostamento massimo
- Wrel** : Spostamento relativo, depurato dalla traslazione rigida dei nodi
- Wlim** : Spostamento limite

Gli spostamenti Wmax e Wrel, essendo legati alle verifiche di esercizio, sono calcolati combinando i canali di carico con i coefficienti delle matrici SLE.

Per una più agevole comprensione del significato dei dati Wmax e Wrel, si può fare riferimento alla figura seguente:



Quindi ai fini della verifica è sufficiente che risulti $W_{rel} \leq W_{lim}$, essendo del tutto normale che l'asta possa risultare verificata anche con $W_{max} > W_{lim}$.

Se:

Rap % : 111 La sezione non verifica per taglio elevato

Rap % : 444 Sezione non verificata in automatico perché di classe 4

Le verifiche agli stati limite ultimi ed agli stati limite di esercizio sono state condotte per tutte le più gravose condizioni di carico che possono agire sulla struttura: tali condizioni sono state compilate in rispetto del D.M. 17/01/2018.

Per quanto riguarda le verifiche delle aste in acciaio ci si è attenuti all' Eurocodice 3 e al suddetto D.M., così come indicato nelle specifiche di stampa relative alle verifiche effettuate.

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.

VERIFICHE ASTE IN ACCIAIO 3D

DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 319	4	0.00	7	0	0	0	0	-3	-3	0	12577	127	60	2940	2666	11	2619	1
ANG50*5	qn= 5	7	0	0	0	0	0	0	0	0	12577	127	60	2940	2666	11	2619	0
Asta: 1	2	0.00	7	0	0	0	0	3	3	0	12577	127	60	2940	2666	11	2619	1
Instab.:l=	80.0	$\beta^* =$	56.0	0	0	0	0	cl= 3	$\epsilon =$ 0.92	lmd=	0	Rpf= 0	Rft= 0	Wmax/rel/lim= 0.0		0.0	1.6	mm
Sez.N. 319	1	0.00	7	0	0	0	0	-3	-3	0	12577	127	60	2940	2666	11	2619	1
ANG50*5	qn= 5	7	0	0	0	0	0	0	0	0	12577	127	60	2940	2666	11	2619	0
Asta: 2	3	0.00	7	0	0	0	0	3	3	0	12577	127	60	2940	2666	11	2619	1
Instab.:l=	80.0	$\beta^* =$	56.0	0	0	0	0	cl= 3	$\epsilon =$ 0.92	lmd=	0	Rpf= 0	Rft= 0	Wmax/rel/lim= 0.0		0.0	1.6	mm
Sez.N. 319	4	0.00	7	0	0	0	0	-3	3	0	12577	127	60	2940	2666	11	2619	1
ANG50*5	qn= -5	7	0	0	0	0	0	0	0	0	12577	127	60	2940	2666	11	2619	0
Asta: 3	3	0.00	7	0	0	0	0	3	-3	0	12577	127	60	2940	2666	11	2619	1
Instab.:l=	70.0	$\beta^* =$	49.0	0	0	0	0	cl= 3	$\epsilon =$ 0.92	lmd=	0	Rpf= 0	Rft= 0	Wmax/rel/lim= 0.0		0.0	1.4	mm
Sez.N. 319	4	0.56	5	1424	10	0	0	-4	-20	0	12576	127	60	2940	2666	11	2619	20
ANG50*5	qn= 0	5	1422	5	1	1	1	-7	-17	0	12576	127	60	2940	2666	11	2619	17
Asta: 4	4	0.00	8	1191	11	-2	7	30	30	0	12575	127	60	2940	2666	11	2619	22
Instab.:l=	56.0	$\beta^* =$	39.2	-503	0	0	0	cl= 3	$\epsilon =$ 0.92	lmd=	40	Rpf= 5	Rft= 0	Wmax/rel/lim= 0.2		0.2	1.1	mm
Sez.N. 319	1	0.00	7	0	0	0	0	-3	3	0	12577	127	60	2940	2666	11	2619	1
ANG50*5	qn= -5	7	0	0	0	0	0	0	0	0	12577	127	60	2940	2666	11	2619	0
Asta: 5	2	0.00	7	0	0	0	0	3	-3	0	12577	127	60	2940	2666	11	2619	1
Instab.:l=	70.0	$\beta^* =$	49.0	0	0	0	0	cl= 3	$\epsilon =$ 0.92	lmd=	0	Rpf= 0	Rft= 0	Wmax/rel/lim= 0.0		0.0	1.4	mm

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 319 ANG50*5 Asta: 6 Instab.:l=	2 qn= 0 2 56.0	0.56 0 0.00 β*I=	8 8 8 39.2	-2297 -2299 -2301 -2301	-9 -5 -1 6	2 -1 -3 1	9 9 9 cl= 3	14 14 14 ε= 0.92	0 0 0 lmd= 40	12576 12576 12576 Rpf= 27	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 0.2	2666 2666 2666 0.2	11 11 11 0.2	2619 2619 2619 1.1	28 24 25 mm	
Sez.N. 319 ANG50*5 Asta: 7 Instab.:l=	1 qn= 0 1 56.0	0.56 0 0.00 β*I=	5 5 8 39.2	-2006 -2008 -1962 -1962	-4 -4 -9 4	1 0 0 1	4 4 3 cl= 3	3 3 -21 ε= 0.92	0 0 0 lmd= 40	12577 12577 12576 Rpf= 22	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 0.2	2666 2666 2666 0.2	11 11 11 0.2	2619 2619 2619 1.1	21 19 23 mm	
Sez.N. 319 ANG50*5 Asta: 8 Instab.:l=	3 qn= 0 3 56.0	0.56 0 0.00 β*I=	5 5 5 39.2	-1758 -1760 -1762 -1762	6 -2 -10 4	1 1 2 1	-2 -2 -2 cl= 3	-30 -30 -30 ε= 0.92	0 0 0 lmd= 40	12576 12576 12576 Rpf= 21	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 0.2	2666 2666 2666 0.2	11 11 11 0.2	2619 2619 2619 1.1	20 18 25 mm	
Sez.N. 1076 L 21x21x3 Asta: 9 Instab.:l=	4 qn= 2 3 70.0	0.56 2 0.56 β*I=	5 5 5 49.0	-34 -34 -34 -34	0 0 0 0	0 0 0 0	0 0 1 cl= 3	0 0 1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 9	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.3	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.4	5 5 9 mm	
Sez.N. 1076 L 21x21x3 Asta: 10 Instab.:l=	3 qn= 2 1 70.0	0.56 2 0.56 β*I=	2 8 8 49.0	3 -25 -25 -25	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	-1 0 1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 7	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.2	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.4	3 3 7 mm	
Sez.N. 1076 L 21x21x3 Asta: 11 Instab.:l=	1 qn= 2 2 70.0	0.56 2 0.56 β*I=	4 5 5 49.0	10 13 13 -3	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	-1 0 1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 1	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.2	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.4	5 4 4 mm	
Sez.N. 1076 L 21x21x3 Asta: 12 Instab.:l=	2 qn= 2 4 70.0	0.56 2 0.56 β*I=	8 5 8 49.0	26 -18 26 -18	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	-1 0 0 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 5	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.3	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.4	9 5 5 mm	
Sez.N. 1076 L 21x21x3 Asta: 13 Instab.:l=	1 qn= -2 3 89.6	0.00 -2 0.56 β*I=	8 8 8 62.8	-291 -290 -289 -291	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	0 0 -1 ε= 0.92	0 0 0 lmd= 162	3012 3012 3012 Rpf= 45	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.2	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.8	12 12 11 mm	
Sez.N. 1076 L 21x21x3 Asta: 14 Instab.:l=	3 qn= -2 4 89.6	0.00 -2 0.56 β*I=	5 5 5 62.8	-504 -504 -503 -504	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	1 0 -1 ε= 0.92	0 0 0 lmd= 162	3012 3012 3012 Rpf= 77	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.2	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.8	20 19 18 mm	
Sez.N. 1076 L 21x21x3 Asta: 15 Instab.:l=	2 qn= -2 1 89.6	0.00 -2 0.56 β*I=	5 5 5 62.8	188 188 189 -68	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	1 0 -1 ε= 0.92	0 0 0 lmd= 162	3012 3012 3012 Rpf= 10	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.2	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.8	10 7 10 mm	
Sez.N. 1076 L 21x21x3 Asta: 16 Instab.:l=	4 qn= -2 2 89.6	0.00 -2 0.56 β*I=	8 8 8 62.8	440 441 442 -118	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	1 0 -1 ε= 0.92	0 0 0 lmd= 162	3012 3012 3012 Rpf= 24	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.2	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.8	18 16 20 mm	
Sez.N. 319 ANG50*5 Asta: 17 Instab.:l=	4 qn= 0 4 50.0	1.06 0 0.56 β*I=	8 8 8 35.0	1290 1288 1286 -500	9 3 -3 0	0 0 0 0	-3 0 2 cl= 3	-27 -24 -22 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 5	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 0.5	2666 2666 2666 0.5	11 11 11 0.3	2619 2619 2619 1.0	18 13 13 mm	
Sez.N. 319 ANG50*5 Asta: 18 Instab.:l=	2 qn= 0 2 50.0	1.06 0 0.56 β*I=	8 8 8 35.0	-1748 -1750 -1752 -1752	2 2 2 2	-1 0 1 0	-4 -4 -4 cl= 3	0 0 0 ε= 0.92	0 0 0 lmd= 36	12577 12577 12577 Rpf= 18	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 0.5	2666 2666 2666 0.5	11 11 11 0.3	2619 2619 2619 1.0	18 16 17 mm	
Sez.N. 319 ANG50*5 Asta: 19 Instab.:l=	1 qn= 0 1 50.0	1.06 0 0.56 β*I=	8 8 8 35.0	-1867 -1869 -1871 -1871	-7 -1 4 3	-1 0 1 0	-4 -4 -4 cl= 3	21 21 21 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 19	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 0.4	2666 2666 2666 0.4	11 11 11 0.2	2619 2619 2619 1.0	21 16 20 mm	
Sez.N. 319 ANG50*5 Asta: 20 Instab.:l=	3 qn= 0 3 50.0	1.06 0 0.56 β*I=	5 5 5 35.0	-1948 -1949 -1951 -1951	-9 -4 2 5	-1 0 1 0	-4 -4 -4 cl= 3	21 21 21 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 21	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 0.5	2666 2666 2666 0.5	11 11 11 0.3	2619 2619 2619 1.0	24 18 18 mm	
Sez.N. 1076 L 21x21x3 Asta: 21 Instab.:l=	4 qn= -2 2 70.0	1.06 -2 1.06 β*I=	2 5 8 49.0	2 -15 -5 -15	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	1 0 -1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 6	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.6	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.4	3 6 6 mm	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																			
VERIFICHE ASTE IN ACCIAIO 3D																			
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid kg/cmq	Rap %	
Sez.N. 1076 L 21x21x3 Asta: 22 Instab.:l=	2 qn= 1 70.0	1.06 -2 1.06 β*I=	2 7 7 49.0	3 14 14 -3	0 0 0 -3	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	1 0 -1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 4	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.5	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.4	3 2 5 mm	
Sez.N. 1076 L 21x21x3 Asta: 23 Instab.:l=	1 qn= 3 70.0	1.06 -2 1.06 β*I=	7 8 8 49.0	0 -3 -3 -3	0 0 0 -3	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	1 -1 -1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 6	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.5	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.4	5 5 5 mm	
Sez.N. 1076 L 21x21x3 Asta: 24 Instab.:l=	3 qn= 4 70.0	1.06 -2 1.06 β*I=	5 5 5 49.0	-3 -3 -3 -3	0 0 0 -3	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	1 -1 -1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 6	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.6	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.4	7 6 6 mm	
Sez.N. 1076 L 21x21x3 Asta: 25 Instab.:l=	3 qn= 1 86.0	0.56 2 1.06 β*I=	8 8 8 60.2	294 294 295 -60	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	-1 0 1 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 9	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.4	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.7	11 11 15 mm	
Sez.N. 1076 L 21x21x3 Asta: 26 Instab.:l=	1 qn= 2 86.0	0.56 2 1.06 β*I=	5 5 5 60.2	-204 -203 -202 -204	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	-1 0 1 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 31	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.5	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.7	11 9 8 mm	
Sez.N. 1076 L 21x21x3 Asta: 27 Instab.:l=	2 qn= 4 86.0	0.56 2 1.06 β*I=	8 8 8 60.2	-455 -454 -454 -455	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	-1 0 0 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 67	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.5	537 537 537 0.2	1 1 1 0.2	2619 2619 2619 1.7	22 17 16 mm	
Sez.N. 1076 L 21x21x3 Asta: 28 Instab.:l=	4 qn= 3 86.0	0.56 2 1.06 β*I=	5 5 5 60.2	505 506 507 -44	0 0 0 0	0 0 0 0	0 0 0 0	0 0 1 cl= 3	0 0 1 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 10	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.5	537 537 537 0.2	1 1 1 0.2	2619 2619 2619 1.7	18 19 24 mm	
Sez.N. 319 ANG50*5 Asta: 29 Instab.:l=	4 qn= 4 50.0	1.56 0 1.06 β*I=	5 5 5 35.0	1004 1003 1001 -496	9 5 1 0	0 0 1 0	0 0 1 0	2 0 -3 cl= 3	-18 -16 -13 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 5	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 0.9	2666 2666 2666 0.4	11 11 11 0.4	2619 2619 2619 1.0	15 12 10 mm	
Sez.N. 319 ANG50*5 Asta: 30 Instab.:l=	2 qn= 2 50.0	1.56 0 1.06 β*I=	8 8 8 35.0	-1831 -1833 -1835 -1835	-8 -4 0 5	1 0 -1 0	0 0 4 0	4 4 4 cl= 3	15 15 15 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 20	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 0.8	2666 2666 2666 0.4	11 11 11 0.4	2619 2619 2619 1.0	22 18 17 mm	
Sez.N. 319 ANG50*5 Asta: 31 Instab.:l=	1 qn= 1 50.0	1.56 0 1.06 β*I=	5 5 5 35.0	-1575 -1576 -1578 -1578	-4 -1 2 2	1 0 -1 0	0 0 3 0	3 3 3 cl= 3	14 14 14 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 16	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 0.6	2666 2666 2666 0.3	11 11 11 0.3	2619 2619 2619 1.0	17 13 16 mm	
Sez.N. 319 ANG50*5 Asta: 32 Instab.:l=	3 qn= 3 50.0	1.56 0 1.06 β*I=	5 5 5 35.0	-1360 -1362 -1364 -1364	3 3 3 3	1 0 0 0	0 0 2 0	2 2 2 cl= 3	-1 -1 -1 ε= 0.92	0 0 0 lmd= 36	12577 12577 12577 Rpf= 15	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 0.8	2666 2666 2666 0.3	11 11 11 0.3	2619 2619 2619 1.0	15 14 13 mm	
Sez.N. 1076 L 21x21x3 Asta: 33 Instab.:l=	4 qn= 2 70.0	1.56 -2 1.56 β*I=	8 5 8 49.0	-2 -11 -2 -2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 1 cl= 3	1 0 -1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 5	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.9	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.4	4 5 7 mm	
Sez.N. 1076 L 21x21x3 Asta: 34 Instab.:l=	2 qn= 1 70.0	1.56 -2 1.56 β*I=	5 5 4 49.0	-2 -2 0 -2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 1 cl= 3	1 1 -1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 5	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.9	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.4	4 4 4 mm	
Sez.N. 1076 L 21x21x3 Asta: 35 Instab.:l=	1 qn= 3 70.0	1.56 -2 1.56 β*I=	7 8 8 49.0	-2 -5 -5 -5	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	1 0 -1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 5	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.9	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.4	5 3 3 mm	
Sez.N. 1076 L 21x21x3 Asta: 36 Instab.:l=	3 qn= 4 70.0	1.56 -2 1.56 β*I=	5 8 5 49.0	-5 -11 -5 -11	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	1 0 -1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 5	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.9	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.4	6 5 3 mm	
Sez.N. 1076 L 21x21x3 Asta: 37 Instab.:l=	3 qn= 4 86.0	1.06 -2 1.56 β*I=	5 5 5 60.2	-489 -487 -487 -489	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	1 0 0 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 72	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 0.8	537 537 537 0.2	1 1 1 0.2	2619 2619 2619 1.7	23 19 17 mm	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 1076 L 21x21x3 Asta: 38 Instab.:l=	4 qn= 2 86.0	1.06 -2 1.56 β*l=	8 8 8 60.2	427 427 428 -133	0 0 0 0	0 0 0 0	0 0 0 0	0 0 1 3	0 0 -1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 155	5 5 5 Rpf=	640 640 640 22	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	15 16 20 0.7
Sez.N. 1076 L 21x21x3 Asta: 39 Instab.:l=	2 qn= 1 86.0	1.06 -2 1.56 β*l=	5 5 5 60.2	177 177 178 -68	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 1 3	1 0 -1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 155	5 5 5 Rpf=	640 640 640 10	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	8 7 10 0.7
Sez.N. 1076 L 21x21x3 Asta: 40 Instab.:l=	1 qn= 3 86.0	1.06 -2 1.56 β*l=	8 8 8 60.2	-278 -277 -277 -278	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 0 3	1 0 -1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 155	5 5 5 Rpf=	640 640 640 41	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	14 11 11 0.8
Sez.N. 319 ANG50*5 Asta: 41 Instab.:l=	4 qn= 4 50.0	2.06 0 1.56 β*l=	8 8 8 35.0	867 865 863 -493	8 3 0 0	0 0 0 0	0 0 0 0	-2 0 3 3	-18 -15 -13 ε=	0 0 0 0.92	12576 12576 12576 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 5	2666 2666 2666 Rft=	11 11 11 0	2619 2619 2619 Wmax/rel/lim=	13 10 8 1.3
Sez.N. 319 ANG50*5 Asta: 42 Instab.:l=	2 qn= 2 50.0	2.06 0 1.56 β*l=	8 8 8 35.0	-1329 -1331 -1333 -1333	2 2 2 2	-1 0 0 0	-2 0 -2 0	1 1 1 3	0 0 1 ε=	0 0 0 0.92	12577 12577 12577 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 14	2666 2666 2666 Rft=	11 11 11 0	2619 2619 2619 Wmax/rel/lim=	13 13 13 1.2
Sez.N. 319 ANG50*5 Asta: 43 Instab.:l=	1 qn= 1 50.0	2.06 0 1.56 β*l=	8 8 8 35.0	-1433 -1434 -1436 -1436	-5 -2 2 2	-1 0 1 0	-3 -3 -3 3	13 13 13 ε=	0 0 0 0.92	0 0 0 lmd=	12576 12576 12576 36	127 127 127 Rpf=	60 60 60 15	2940 2940 2940 Rft=	2666 2666 2666 0	11 11 11 0.3	2619 2619 2619 Wmax/rel/lim=	16 13 14 1.0
Sez.N. 319 ANG50*5 Asta: 44 Instab.:l=	3 qn= 3 50.0	2.06 0 1.56 β*l=	5 5 5 35.0	-1534 -1536 -1538 -1538	-7 -4 -1 5	-1 0 1 0	-4 -4 -4 3	12 12 12 ε=	0 0 0 0.92	0 0 0 lmd=	12576 12576 12576 36	127 127 127 Rpf=	60 60 60 18	2940 2940 2940 Rft=	2666 2666 2666 0	11 11 11 0.4	2619 2619 2619 Wmax/rel/lim=	20 16 15 1.2
Sez.N. 1076 L 21x21x3 Asta: 45 Instab.:l=	4 qn= 2 70.0	2.06 -2 2.06 β*l=	2 5 8 49.0	3 -6 -4 -4	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 1 3	1 0 -1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 126	5 5 5 Rpf=	640 640 640 5	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	3 5 6 1.3
Sez.N. 1076 L 21x21x3 Asta: 46 Instab.:l=	2 qn= 1 70.0	2.06 -2 2.06 β*l=	2 5 4 49.0	1 -6 -3 -3	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 1 3	1 0 -1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 126	5 5 5 Rpf=	640 640 640 4	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	3 2 5 1.3
Sez.N. 1076 L 21x21x3 Asta: 47 Instab.:l=	1 qn= 3 70.0	2.06 -2 2.06 β*l=	7 8 8 49.0	-1 -3 -3 -3	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 0 3	1 -1 -1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 126	5 5 5 Rpf=	640 640 640 6	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	5 5 6 1.3
Sez.N. 1076 L 21x21x3 Asta: 48 Instab.:l=	3 qn= 4 70.0	2.06 -2 2.06 β*l=	5 8 5 49.0	-3 -9 -3 -3	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 0 3	1 0 -1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 126	5 5 5 Rpf=	640 640 640 6	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	7 5 5 1.3
Sez.N. 1076 L 21x21x3 Asta: 49 Instab.:l=	3 qn= 1 86.0	1.56 2 2.06 β*l=	8 8 8 60.2	258 259 260 -59	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 1 3	-1 0 1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 155	5 5 5 Rpf=	640 640 640 9	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	10 10 13 0.9
Sez.N. 1076 L 21x21x3 Asta: 50 Instab.:l=	1 qn= 2 86.0	1.56 2 2.06 β*l=	5 5 5 60.2	-170 -169 -168 -170	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 1 3	-1 0 1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 155	5 5 5 Rpf=	640 640 640 26	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	10 7 7 1.2
Sez.N. 1076 L 21x21x3 Asta: 51 Instab.:l=	2 qn= 4 86.0	1.56 2 2.06 β*l=	8 8 8 60.2	-419 -418 -418 -419	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 0 3	-1 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 155	5 5 5 Rpf=	640 640 640 62	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	20 16 15 1.2
Sez.N. 1076 L 21x21x3 Asta: 52 Instab.:l=	4 qn= 3 86.0	1.56 2 2.06 β*l=	5 5 5 60.2	469 470 471 -51	0 0 0 0	0 0 0 0	0 0 0 0	0 0 1 3	0 0 1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 155	5 5 5 Rpf=	640 640 640 11	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	17 18 22 1.1
Sez.N. 319 ANG50*5 Asta: 53 Instab.:l=	4 qn= 4 50.0	2.56 0 2.06 β*l=	5 5 5 35.0	636 634 632 -488	8 4 1 0	1 0 0 0	3 1 -1 3	-16 -14 -12 ε=	0 0 0 0.92	0 0 0 lmd=	12576 12576 12576 36	127 127 127 Rpf=	60 60 60 5	2940 2940 2940 Rft=	2666 2666 2666 0	11 11 11 0.5	2619 2619 2619 Wmax/rel/lim=	13 9 6 1.7

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 319 ANG50*5 Asta: 54 Instab.:l=	2 qn= 2 50.0	2.56 0 2.06 β*I=	8 8 8 35.0	-1413 -1415 -1417 -1417	-5 -3 0 3	0 0 -1 0	2 2 2 cl= 3	9 9 9 ε= 0.92	0 0 0 lmd= 36	12577 12577 12577 Rpf= 16	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 1.7	2666 2666 2666 1.7	11 11 11 0.5	2619 2619 2619 1.0	15 14 13 mm	
Sez.N. 319 ANG50*5 Asta: 55 Instab.:l=	1 qn= 1 50.0	2.56 0 2.06 β*I=	5 5 5 35.0	-1177 -1178 -1180 -1180	-4 -1 3 2	0 0 -1 0	1 1 1 cl= 3	13 13 13 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 12	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 1.4	2666 2666 2666 1.4	11 11 11 0.4	2619 2619 2619 1.0	13 10 12 mm	
Sez.N. 319 ANG50*5 Asta: 56 Instab.:l=	3 qn= 3 50.0	2.56 0 2.06 β*I=	5 5 5 35.0	-982 -984 -986 -986	2 3 3 3	1 0 0 1	3 3 3 cl= 3	3 3 3 ε= 0.92	0 0 0 lmd= 36	12577 12577 12577 Rpf= 12	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 1.7	2666 2666 2666 1.7	11 11 11 0.4	2619 2619 2619 1.0	11 11 11 mm	
Sez.N. 1076 L 21x21x3 Asta: 57 Instab.:l=	4 qn= 2 70.0	2.56 2 2.56 β*I=	8 5 8 49.0	-15 -4 -15 -15	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	1 0 2 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 7	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 1.7	537 537 537 1.7	1 1 1 0.2	2619 2619 2619 1.4	6 6 8 mm	
Sez.N. 1076 L 21x21x3 Asta: 58 Instab.:l=	2 qn= 1 70.0	2.56 -2 2.56 β*I=	5 5 5 49.0	-111 -111 -111 -111	0 0 0 0	0 0 0 0	0 0 1 cl= 3	1 1 0 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 15	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 1.7	537 537 537 1.7	1 1 1 0.1	2619 2619 2619 1.4	8 7 8 mm	
Sez.N. 1076 L 21x21x3 Asta: 59 Instab.:l=	1 qn= 3 70.0	2.56 -2 2.56 β*I=	7 8 8 49.0	9 10 10 0	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	1 -1 -1 ε= 0.92	0 0 0 lmd= 0	3012 3012 3012 Rpf= 0	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 1.7	537 537 537 1.7	1 1 1 0.1	2619 2619 2619 1.4	5 3 4 mm	
Sez.N. 1076 L 21x21x3 Asta: 60 Instab.:l=	3 qn= 4 70.0	2.56 -2 2.56 β*I=	5 8 5 49.0	9 -10 9 -10	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	1 0 -1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 5	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 1.7	537 537 537 1.7	1 1 1 0.1	2619 2619 2619 1.4	7 5 4 mm	
Sez.N. 1076 L 21x21x3 Asta: 61 Instab.:l=	3 qn= 4 86.0	2.06 -2 2.56 β*I=	5 5 5 60.2	-465 -464 -463 -465	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	1 0 0 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 69	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 1.7	537 537 537 1.7	1 1 1 0.1	2619 2619 2619 1.7	22 18 17 mm	
Sez.N. 1076 L 21x21x3 Asta: 62 Instab.:l=	4 qn= 2 86.0	2.06 -2 2.56 β*I=	8 8 8 60.2	401 402 403 -141	0 0 0 0	0 0 0 0	0 0 1 cl= 3	0 0 -1 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 23	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 1.4	537 537 537 1.4	1 1 1 0.2	2619 2619 2619 1.7	14 15 20 mm	
Sez.N. 1076 L 21x21x3 Asta: 63 Instab.:l=	2 qn= 1 86.0	2.06 -2 2.56 β*I=	5 5 5 60.2	154 155 156 -66	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	1 0 -1 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 10	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 1.4	537 537 537 1.4	1 1 1 0.1	2619 2619 2619 1.7	7 6 9 mm	
Sez.N. 1076 L 21x21x3 Asta: 64 Instab.:l=	1 qn= 3 86.0	2.06 -2 2.56 β*I=	8 8 8 60.2	-253 -252 -251 -253	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	1 0 -1 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 37	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 1.7	537 537 537 1.7	1 1 1 0.1	2619 2619 2619 1.7	13 10 10 mm	
Sez.N. 319 ANG50*5 Asta: 65 Instab.:l=	4 qn= 4 54.0	3.10 0 2.56 β*I=	8 8 8 37.8	481 479 477 -219	3 2 1 2	1 0 -1 1	1 3 6 cl= 3	-6 -3 -1 ε= 0.92	0 0 0 lmd= 38	12576 12576 12576 Rpf= 5	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 2.2	2666 2666 2666 2.2	11 11 11 0.5	2619 2619 2619 1.1	8 6 6 mm	
Sez.N. 319 ANG50*5 Asta: 66 Instab.:l=	2 qn= 2 54.0	3.10 0 2.56 β*I=	8 8 8 37.8	-969 -971 -973 -973	0 2 3 2	2 1 -1 1	5 5 5 cl= 3	5 5 5 ε= 0.92	0 0 0 lmd= 38	12577 12577 12577 Rpf= 12	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 2.2	2666 2666 2666 2.2	11 11 11 0.5	2619 2619 2619 1.1	11 10 11 mm	
Sez.N. 319 ANG50*5 Asta: 67 Instab.:l=	1 qn= 1 54.0	3.10 0 2.56 β*I=	5 8 5 37.8	-1079 -1082 -1083 -1083	3 0 -3 1	0 0 0 0	0 -1 0 cl= 3	-10 -6 -10 ε= 0.92	0 0 0 lmd= 38	12576 12577 12576 Rpf= 10	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 1.8	2666 2666 2666 1.8	11 11 11 0.4	2619 2619 2619 1.1	11 9 11 mm	
Sez.N. 319 ANG50*5 Asta: 68 Instab.:l=	3 qn= 3 54.0	3.10 0 2.56 β*I=	5 5 5 37.8	-1160 -1162 -1164 -1164	-2 -2 -2 2	-3 -1 1 1	-7 -7 -7 cl= 3	0 0 0 ε= 0.92	0 0 0 lmd= 38	12577 12577 12577 Rpf= 14	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 2.2	2666 2666 2666 2.2	11 11 11 0.5	2619 2619 2619 1.1	15 12 13 mm	
Sez.N. 1077 2 L 50x5 Asta: 69 Instab.:l=	4 qn= 3 70.0	3.10 12 3.10 β*I=	8 6 5 49.0	11 7 -18 -18	-6 -3 -1 1	5 3 -10 7	1 0 23 cl= 3	9 7 -4 ε= 0.92	0 0 0 lmd= 32	24598 24598 24598 Rpf= 4	154 154 154 Rft= 0	207 207 207 Wmax/rel/lim=	4550 4550 4550 2.2	5232 5232 5232 2.2	21 21 21 0.0	2619 2619 2619 1.4	6 3 5 mm	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 1077 2 L 50x5 Asta: 70 Instab.:l=	3 qn= 1 70.0	3.10 12 3.10 β*l=	8 5 8 49.0	-35 11 -35 -35	8 0 -7 3	3 0 -6 5	3 -4 -6 5	8 0 17 3	-21 2 -21 ε=	0 0 0 0.92	24598 24598 24598 lmd=	154 154 154 32	207 207 207 Rpf=	4550 4550 4550 4	5232 5232 5232 Rft=	21 21 21 0	2619 2619 2619 Wmax/rel/lim=	6 2 7 2.2
Sez.N. 1077 2 L 50x5 Asta: 71 Instab.:l=	1 qn= 2 70.0	3.10 12 3.10 β*l=	8 5 8 49.0	-31 -107 -31 -31	-7 0 6 3	-5 -1 1 4	-14 -14 -5 4	19 0 19 3	0 0 0 ε=	0 0 0 0.92	24598 24598 24598 lmd=	154 154 154 32	207 207 207 Rpf=	4550 4550 4550 4	5232 5232 5232 Rft=	21 21 21 0	2619 2619 2619 Wmax/rel/lim=	7 1 5 2.2
Sez.N. 1077 2 L 50x5 Asta: 72 Instab.:l=	2 qn= 4 70.0	3.10 12 3.10 β*l=	8 8 8 49.0	-20 -20 -20 -20	6 0 -6 3	-5 3 9 7	-24 -19 -15 4	-17 -17 -17 3	0 0 0 ε=	0 0 0 0.92	24598 24598 24598 lmd=	154 154 154 32	207 207 207 Rpf=	4550 4550 4550 5	5232 5232 5232 Rft=	21 21 21 0	2619 2619 2619 Wmax/rel/lim=	7 2 8 2.2
Sez.N. 1076 L 21x21x3 Asta: 73 Instab.:l=	4 qn= 3 88.4	2.56 2 3.10 β*l=	5 5 5 61.9	437 437 439 -59	0 0 0 0	0 0 0 0	0 0 1 0	-1 0 1 3	0 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 159	5 5 5 Rpf=	640 640 640 14	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	17 17 18 1.9
Sez.N. 1076 L 21x21x3 Asta: 74 Instab.:l=	3 qn= 1 88.4	2.56 2 3.10 β*l=	8 8 8 61.9	217 217 218 -60	0 0 0 0	0 0 0 0	0 0 1 0	-1 0 0 3	0 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 159	5 5 5 Rpf=	640 640 640 9	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	10 9 10 1.8
Sez.N. 319 ANG50*5 Asta: 75 Instab.:l=	19 qn= 15 50.2	7.76 -1 8.26 β*l=	5 5 5 35.1	-480 -478 -477 -480	-4 1 6 4	14 -3 -20 15	68 68 68 3	19 19 19 ε=	0 0 0 0.92	0 0 0 lmd=	12572 12572 12572 36	127 127 127 Rpf=	60 60 60 Rft=	2940 2940 2940 0	2666 2666 2666 Wmax/rel/lim=	11 11 11 0.1	2618 2618 2618 1.0	31 9 41 mm
Sez.N. 1076 L 21x21x3 Asta: 76 Instab.:l=	2 qn= 4 88.4	2.56 2 3.10 β*l=	8 8 8 61.9	-389 -388 -388 -389	0 0 0 0	0 0 0 0	0 0 1 0	-1 0 0 3	0 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 159	5 5 5 Rpf=	640 640 640 59	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	19 14 15 2.2
Sez.N. 319 ANG50*5 Asta: 77 Instab.:l=	4 qn= 4 56.0	3.66 0 3.10 β*l=	5 5 5 39.2	294 292 290 -97	7 4 1 3	0 1 2 1	-1 -4 -7 3	-13 -10 -7 ε=	0 0 0 0.92	0 0 0 lmd=	12576 12576 12577 40	127 127 127 Rpf=	60 60 60 Rft=	2940 2940 2940 0	2666 2666 2666 Wmax/rel/lim=	11 11 11 0.6	2619 2619 2619 1.1	8 7 7 mm
Sez.N. 319 ANG50*5 Asta: 78 Instab.:l=	2 qn= 2 56.0	3.66 0 3.10 β*l=	8 8 8 39.2	-954 -956 -958 -958	-6 -4 -2 4	0 -1 -2 1	4 4 4 3	6 6 6 ε=	0 0 0 0.92	0 0 0 lmd=	12577 12577 12577 40	127 127 127 Rpf=	60 60 60 Rft=	2940 2940 2940 0	2666 2666 2666 Wmax/rel/lim=	11 11 11 0.6	2619 2619 2619 1.1	13 12 13 mm
Sez.N. 319 ANG50*5 Asta: 79 Instab.:l=	1 qn= 1 56.0	3.66 0 3.10 β*l=	5 8 5 39.2	-773 -773 -777 -777	-2 0 1 1	1 0 -1 0	2 1 2 0	4 0 4 3	0 0 0 ε=	0 0 0 0.92	12577 12577 12577 lmd=	127 127 127 40	60 60 60 Rpf=	2940 2940 2940 8	2666 2666 2666 Rft=	11 11 11 0	2619 2619 2619 Wmax/rel/lim=	8 7 8 2.2
Sez.N. 319 ANG50*5 Asta: 80 Instab.:l=	3 qn= 3 56.0	3.66 0 3.10 β*l=	5 5 5 39.2	-598 -600 -602 -602	3 1 0 2	0 1 2 1	-3 -3 -3 3	-6 -6 -6 ε=	0 0 0 0.92	0 0 0 lmd=	12577 12577 12577 40	127 127 127 Rpf=	60 60 60 Rft=	2940 2940 2940 0	2666 2666 2666 Wmax/rel/lim=	11 11 11 0.5	2619 2619 2619 1.1	7 7 8 mm
Sez.N. 1076 L 21x21x3 Asta: 81 Instab.:l=	4 qn= 3 70.0	3.66 2 3.66 β*l=	8 8 8 49.0	-3 -3 -3 -3	0 0 1 0	0 0 0 0	0 0 -1 3	-1 0 4 ε=	0 0 0 0.92	0 0 0 lmd=	3012 3012 3012 126	12 12 12 Rpf=	5 5 5 Rft=	640 640 640 0	537 537 537 Wmax/rel/lim=	1 1 1 0.1	2619 2619 2619 1.4	7 7 9 mm
Sez.N. 1076 L 21x21x3 Asta: 82 Instab.:l=	3 qn= 1 70.0	3.66 2 3.66 β*l=	8 8 8 49.0	-2 -2 -2 -2	0 0 0 0	0 0 0 0	0 0 1 3	-2 -2 -1 ε=	0 0 0 0.92	0 0 0 lmd=	3012 3012 3012 126	12 12 12 Rpf=	5 5 5 Rft=	640 640 640 0	537 537 537 Wmax/rel/lim=	1 1 1 0.0	2619 2619 2619 1.4	7 6 10 mm
Sez.N. 1076 L 21x21x3 Asta: 83 Instab.:l=	1 qn= 2 70.0	3.66 2 3.66 β*l=	4 5 7 49.0	-4 -7 5 -7	0 0 0 0	0 0 0 0	-1 0 1 3	-1 1 1 ε=	0 0 0 0.92	0 0 0 lmd=	3012 3012 3012 126	12 12 12 Rpf=	5 5 5 Rft=	640 640 640 0	537 537 537 Wmax/rel/lim=	1 1 1 0.1	2619 2619 2619 1.4	4 3 4 mm
Sez.N. 1076 L 21x21x3 Asta: 84 Instab.:l=	2 qn= 4 70.0	3.66 2 3.66 β*l=	8 5 2 49.0	-2 -10 1 -2	1 0 0 0	0 0 0 0	-1 0 1 3	-1 0 1 ε=	0 0 0 0.92	0 0 0 lmd=	3012 3012 3012 126	12 12 12 Rpf=	5 5 5 Rft=	640 640 640 0	537 537 537 Wmax/rel/lim=	1 1 1 0.1	2619 2619 2619 1.4	9 5 4 mm
Sez.N. 1076 L 21x21x3 Asta: 85 Instab.:l=	4 qn= 3 89.6	3.66 2 3.10 β*l=	5 5 5 62.8	-417 -418 -419 -419	0 0 0 0	0 0 0 0	0 0 1 3	-1 0 1 ε=	0 0 0 0.92	0 0 0 lmd=	3012 3012 3012 162	12 12 12 Rpf=	5 5 5 Rft=	640 640 640 0	537 537 537 Wmax/rel/lim=	1 1 1 0.1	2619 2619 2619 1.8	14 16 18 mm

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 1076 L 21x21x3 Asta: 86 Instab.:l=	3 qn= 1 89.6	3.66 2 3.10 β*l=	5 5 5 62.8	-175 -175 -176 -176	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 1 3	0 0 1 ε= 0.92	0 0 1 lmd= 162	3012 3012 3012 Rpf= 29	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 2.7	537 537 537 0.1	1 1 1 0.1	2619 2619 2619 1.8	7 8 10 mm
Sez.N. 1076 L 21x21x3 Asta: 87 Instab.:l=	1 qn= 2 89.6	3.66 2 3.10 β*l=	5 5 4 62.8	111 110 68 -65	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 1 3	-1 0 1 ε= 0.92	0 0 1 lmd= 162	3012 3012 3012 Rpf= 10	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 2.3	537 537 537 2.3	1 1 1 0.1	2619 2619 2619 1.8	7 5 7 mm
Sez.N. 1076 L 21x21x3 Asta: 88 Instab.:l=	2 qn= 4 89.6	3.66 2 3.10 β*l=	8 8 8 62.8	414 412 412 -145	0 0 0 0	0 0 0 0	0 0 0 0	-1 1 1 3	-1 0 0 ε= 0.92	0 0 0 lmd= 162	3012 3012 3012 Rpf= 28	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 2.3	537 537 537 2.3	1 1 1 0.1	2619 2619 2619 1.8	20 17 17 mm
Sez.N. 319 ANG50*5 Asta: 89 Instab.:l=	4 qn= 4 50.0	4.16 0 3.66 β*l=	4 4 4 35.0	-376 -377 -382 -382	-3 -3 -2 3	-1 -1 0 1	0 -1 -4 1	0 -1 3 3	0 0 3 ε= 0.92	0 0 3 lmd= 36	12577 12577 12577 Rpf= 6	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 3.4	2666 2666 2666 3.4	11 11 11 0.6	2619 2619 2619 1.0	6 6 5 mm
Sez.N. 319 ANG50*5 Asta: 90 Instab.:l=	2 qn= 2 50.0	4.16 0 3.66 β*l=	8 8 8 35.0	-459 -461 -463 -463	3 4 4 4	0 0 -1 0	0 2 2 0	2 2 3 3	3 3 0 ε= 0.92	0 0 3 lmd= 36	12569 12569 12569 Rpf= 7	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 3.4	2666 2666 2666 3.4	11 11 11 0.6	2617 2617 2617 1.0	6 7 8 mm
Sez.N. 319 ANG50*5 Asta: 91 Instab.:l=	1 qn= 1 50.0	4.16 0 3.66 β*l=	8 8 8 35.0	-737 -739 -741 -741	-3 -1 1 1	0 0 0 0	-1 -1 -1 0	8 8 8 3	0 0 8 ε= 0.92	0 0 8 lmd= 36	12577 12577 12577 Rpf= 8	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 2.7	2666 2666 2666 2.7	11 11 11 0.4	2619 2619 2619 1.0	8 7 7 mm
Sez.N. 319 ANG50*5 Asta: 92 Instab.:l=	3 qn= 3 50.0	4.16 0 3.66 β*l=	5 5 5 35.0	-790 -792 -794 -794	-4 -3 -2 3	-1 0 0 0	-2 -2 -2 0	4 4 4 3	0 0 4 ε= 0.92	0 0 4 lmd= 36	12577 12577 12577 Rpf= 10	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 3.2	2666 2666 2666 3.2	11 11 11 0.5	2619 2619 2619 1.0	10 9 8 mm
Sez.N. 1076 L 21x21x3 Asta: 93 Instab.:l=	4 qn= 2 70.0	4.16 -2 4.16 β*l=	8 5 8 49.0	68 1 68 -4	-5 0 5 0	1 0 -2 0	4 0 5 0	14 0 13 3	0 0 0 ε= 0.92	0 0 0 lmd= 126	3011 3012 3011 Rpf= 1	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.2	537 537 537 3.2	1 1 1 0.3	2618 2619 2618 1.4	73 5 71 mm
Sez.N. 1076 L 21x21x3 Asta: 94 Instab.:l=	2 qn= 1 70.0	4.16 -2 4.16 β*l=	8 8 8 49.0	9 9 9 0	-4 -1 2 0	1 0 -1 0	1 2 3 0	8 7 7 3	0 0 7 ε= 0.92	0 0 0 lmd= 0	3012 3012 3012 Rpf= 0	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.6	537 537 537 3.6	1 1 1 0.5	2619 2619 2619 1.4	49 13 25 mm
Sez.N. 1076 L 21x21x3 Asta: 95 Instab.:l=	1 qn= 3 70.0	4.16 -2 4.16 β*l=	8 6 8 49.0	-15 -8 -15 -15	1 -1 -2 1	0 0 0 0	-2 0 0 0	-3 -3 -4 3	0 0 0 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 18	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.2	537 537 537 3.2	1 1 1 0.1	2619 2619 2619 1.4	17 12 21 mm
Sez.N. 1076 L 21x21x3 Asta: 96 Instab.:l=	3 qn= 4 70.0	4.16 -2 4.16 β*l=	8 8 8 49.0	-27 -27 -27 -27	-1 1 4 3	0 0 -1 1	0 2 1 1	9 7 5 3	0 0 0 ε= 0.92	0 0 0 lmd= 126	3011 3012 3012 Rpf= 39	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.7	537 537 537 3.7	1 1 1 0.6	2619 2619 2619 1.4	22 20 49 mm
Sez.N. 1076 L 21x21x3 Asta: 97 Instab.:l=	3 qn= 1 86.0	3.66 2 4.16 β*l=	8 8 8 60.2	135 135 136 -56	0 0 0 0	0 0 0 0	0 0 1 0	-2 -1 0 3	0 0 0 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 8	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 2.7	537 537 537 2.7	1 1 1 0.1	2619 2619 2619 1.7	9 7 12 mm
Sez.N. 1076 L 21x21x3 Asta: 98 Instab.:l=	1 qn= 2 86.0	3.66 2 4.16 β*l=	8 6 8 60.2	-30 -20 -29 -30	-1 1 2 2	0 0 1 0	-2 0 0 0	3 3 4 3	0 0 4 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 27	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.5	537 537 537 3.5	1 1 1 0.5	2619 2619 2619 1.7	17 18 31 mm
Sez.N. 1076 L 21x21x3 Asta: 99 Instab.:l=	2 qn= 4 86.0	3.66 2 4.16 β*l=	8 7 8 60.2	-393 -238 -392 -393	-1 1 2 2	0 0 1 0	-2 0 -1 0	3 3 4 3	0 0 4 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 82	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.2	537 537 537 3.2	1 1 1 0.5	2619 2619 2619 1.7	28 23 44 mm
Sez.N. 1076 L 21x21x3 Asta: 100 Instab.:l=	4 qn= 3 86.0	3.66 2 4.16 β*l=	5 5 5 60.2	389 390 391 -53	0 0 0 0	0 0 0 0	0 0 1 0	0 0 1 3	0 0 1 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 8	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.0	537 537 537 3.0	1 1 1 0.3	2619 2619 2619 1.7	14 15 19 mm
Sez.N. 319 ANG50*5 Asta: 101 Instab.:l=	4 qn= 4 50.0	4.66 0 4.16 β*l=	8 8 8 35.0	-278 -280 -281 -281	0 -3 -5 4	-3 1 4 3	-16 -14 -11 3	-13 -10 -8 3	0 0 0 ε= 0.92	0 0 0 lmd= 36	12567 12568 12568 Rpf= 11	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 3.8	2666 2666 2666 3.8	11 11 11 0.4	2617 2617 2617 1.0	7 6 13 mm

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 319 ANG50*5 Asta: 102 Instab.:l=	2 qn= 2 50.0	4.66 0 4.16 β*l=	8 8 8 35.0	-444 -446 -447 -447	-3 -1 1 2	-3 1 5 2	-3 1 5 2	-16 -16 -16 cl= 3	9 9 9 ε= 0.92	0 0 0 lmd= 36	12566 12566 12566 Rpf= 8	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 3.8	2666 2666 2666 3.8	11 11 11 0.4	2617 2617 2617 1.0	11 6 13 mm
Sez.N. 319 ANG50*5 Asta: 103 Instab.:l=	1 qn= 1 50.0	4.66 0 4.16 β*l=	7 7 8 35.0	-596 -598 -598 -601	0 0 1 0	0 0 0 0	0 0 0 0	1 1 0 cl= 3	2 2 4 ε= 0.92	0 0 0 lmd= 36	12577 12577 12576 Rpf= 6	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 3.1	2666 2666 2666 3.1	11 11 11 0.4	2619 2619 2619 1.0	6 5 6 mm
Sez.N. 319 ANG50*5 Asta: 104 Instab.:l=	3 qn= 3 50.0	4.66 0 4.16 β*l=	4 5 5 35.0	-465 -400 -402 -402	1 3 4 3	0 0 0 0	0 0 0 0	1 1 1 cl= 3	2 5 5 ε= 0.92	0 0 0 lmd= 36	12577 12577 12577 Rpf= 6	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 3.7	2666 2666 2666 3.7	11 11 11 0.5	2619 2619 2619 1.0	5 6 7 mm
Sez.N. 1076 L 21x21x3 Asta: 105 Instab.:l=	4 qn= 2 70.0	4.66 -2 4.66 β*l=	8 8 7 49.0	-34 -34 -19 -34	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	1 1 -1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 8	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.7	537 537 537 3.7	1 1 1 0.1	2619 2619 2619 1.4	6 5 5 mm
Sez.N. 1076 L 21x21x3 Asta: 106 Instab.:l=	2 qn= 1 70.0	4.66 -2 4.66 β*l=	4 5 7 49.0	-9 -17 1 -17	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	1 1 -1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 6	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.8	537 537 537 3.8	1 1 1 0.1	2619 2619 2619 1.4	5 4 4 mm
Sez.N. 1076 L 21x21x3 Asta: 107 Instab.:l=	1 qn= 3 70.0	4.66 -2 4.66 β*l=	8 6 8 49.0	6 4 6 -1	1 0 -1 0	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	-2 -2 -3 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 1	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.7	537 537 537 3.7	1 1 1 0.1	2619 2619 2619 1.4	16 4 11 mm
Sez.N. 1076 L 21x21x3 Asta: 108 Instab.:l=	3 qn= 4 70.0	4.66 -2 4.66 β*l=	8 8 8 49.0	0 0 0 0	-1 1 1 0	0 0 0 0	0 0 0 0	1 0 0 cl= 3	5 1 0 ε= 0.92	0 0 0 lmd= 0	3012 3012 3012 Rpf= 0	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.8	537 537 537 3.8	1 1 1 0.2	2619 2619 2619 1.4	13 12 12 mm
Sez.N. 1076 L 21x21x3 Asta: 109 Instab.:l=	3 qn= 4 86.0	4.16 -2 4.66 β*l=	5 5 5 60.2	-271 -270 -269 -271	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	1 0 -1 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 41	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.8	537 537 537 3.8	1 1 1 0.3	2619 2619 2619 1.7	14 11 10 mm
Sez.N. 1076 L 21x21x3 Asta: 110 Instab.:l=	4 qn= 2 86.0	4.16 -2 4.66 β*l=	8 6 8 60.2	200 121 201 -150	-2 -1 1 0	1 0 0 0	1 0 2 0	1 0 3 cl= 3	4 3 3 ε= 0.92	0 0 0 lmd= 155	3011 3012 3012 Rpf= 25	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.3	537 537 537 3.3	1 1 1 0.5	2619 2619 2619 1.7	38 22 22 mm
Sez.N. 1076 L 21x21x3 Asta: 111 Instab.:l=	2 qn= 1 86.0	4.16 -2 4.66 β*l=	8 6 8 60.2	44 28 45 -61	-2 -1 1 0	1 0 0 0	0 0 2 0	0 0 3 cl= 3	4 3 3 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 9	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.8	537 537 537 3.8	1 1 1 0.5	2619 2619 2619 1.7	33 18 16 mm
Sez.N. 1076 L 21x21x3 Asta: 112 Instab.:l=	1 qn= 3 86.0	4.16 -2 4.66 β*l=	8 5 8 60.2	-107 -161 -105 -162	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	0 0 -2 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 25	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.7	537 537 537 3.7	1 1 1 0.1	2619 2619 2619 1.7	11 7 8 mm
Sez.N. 319 ANG50*5 Asta: 113 Instab.:l=	4 qn= 4 50.0	5.16 0 4.66 β*l=	5 4 8 35.0	-234 -359 -236 -237	-4 -2 1 4	-1 0 -2 1	-1 0 6 1	-1 -3 6 cl= 3	3 4 6 ε= 0.92	0 0 0 lmd= 36	12577 12577 12570 Rpf= 6	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 4.3	2666 2666 2666 4.3	11 11 11 0.5	2619 2619 2618 1.0	6 5 6 mm
Sez.N. 319 ANG50*5 Asta: 114 Instab.:l=	2 qn= 2 50.0	5.16 0 4.66 β*l=	8 8 8 35.0	-247 -249 -251 -251	3 2 1 2	1 -1 -3 1	6 6 6 1	-3 -3 -3 cl= 3	-3 -3 -3 ε= 0.92	0 0 0 lmd= 36	12568 12568 12568 Rpf= 6	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 4.3	2666 2666 2666 4.3	11 11 11 0.5	2617 2617 2617 1.0	5 5 7 mm
Sez.N. 319 ANG50*5 Asta: 115 Instab.:l=	1 qn= 1 50.0	5.16 0 4.66 β*l=	8 4 5 35.0	-539 -524 -495 -526	-2 -1 -1 1	0 0 0 0	0 -1 -1 0	0 -1 0 cl= 3	5 -1 0 ε= 0.92	0 0 0 lmd= 36	12576 12577 12577 Rpf= 5	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 3.6	2666 2666 2666 3.6	11 11 11 0.4	2619 2619 2619 1.0	6 5 5 mm
Sez.N. 319 ANG50*5 Asta: 116 Instab.:l=	3 qn= 3 50.0	5.16 0 4.66 β*l=	5 5 5 35.0	-576 -578 -580 -580	-1 -2 -2 2	-1 -2 0 0	-2 -2 -2 0	-2 -2 -2 cl= 3	-2 -2 -2 ε= 0.92	0 0 0 lmd= 36	12577 12577 12577 Rpf= 7	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 4.1	2666 2666 2666 4.1	11 11 11 0.5	2619 2619 2619 1.0	7 6 7 mm
Sez.N. 1076 L 21x21x3 Asta: 117 Instab.:l=	4 qn= 2 70.0	5.16 -2 5.16 β*l=	8 8 8 49.0	67 67 67 -5	-5 0 5 0	1 0 -1 0	3 4 5 0	15 14 13 cl= 3	0 0 0 ε= 0.92	0 0 0 lmd= 126	3011 3011 3011 Rpf= 1	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.2	537 537 537 4.2	1 1 1 0.3	2618 2618 2618 1.4	72 5 70 mm

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 1076 L 21x21x3 Asta: 118 Instab.:l=	2 qn= 1 70.0	5.16 -2 5.16 β*I=	8 8 8 49.0	7 7 7 -1	-4 -1 2 0	1 0 -1 0	2 2 3 0	2 2 3 cl= 3	8 7 7 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 1	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.5	537 537 537	1 1 1 0.5	2619 2619 2619 1.4	48 13 26 mm
Sez.N. 1076 L 21x21x3 Asta: 119 Instab.:l=	1 qn= 3 70.0	5.16 -2 5.16 β*I=	8 6 8 49.0	-15 -8 -15 -15	1 -1 -2 1	0 0 0 0	-2 0 0 cl= 3	-3 -3 -4 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 17	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.2	537 537 537	1 1 1 0.1	2619 2619 2619 1.4	17 11 21 mm	
Sez.N. 1076 L 21x21x3 Asta: 120 Instab.:l=	3 qn= 4 70.0	5.16 -2 5.16 β*I=	8 8 8 49.0	-26 -26 -26 -26	-1 1 3 3	0 0 -1 1	3 2 1 cl= 3	9 7 5 ε= 0.92	0 0 0 lmd= 126	3011 3012 3012 Rpf= 38	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.6	537 537 537	1 1 1 0.6	2619 2619 2619 1.4	22 20 48 mm	
Sez.N. 1076 L 21x21x3 Asta: 121 Instab.:l=	3 qn= 1 86.0	4.66 2 5.16 β*I=	8 5 8 60.2	75 159 77 -54	0 0 0 0	0 0 0 0	0 0 1 cl= 3	-2 0 0 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 8	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 3.7	537 537 537	1 1 1 0.1	2619 2619 2619 1.7	7 7 10 mm	
Sez.N. 1076 L 21x21x3 Asta: 122 Instab.:l=	1 qn= 2 86.0	4.66 2 5.16 β*I=	8 6 8 60.2	-45 -28 -43 -45	-1 1 2 2	0 0 1 0	0 0 0 cl= 3	-2 3 4 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 28	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.4	537 537 537	1 1 1 0.5	2619 2619 2619 1.7	15 18 30 mm	
Sez.N. 1076 L 21x21x3 Asta: 123 Instab.:l=	2 qn= 4 86.0	4.66 2 5.16 β*I=	8 6 8 60.2	-130 -79 -128 -130	-1 1 2 2	0 0 1 0	0 0 0 cl= 3	-2 3 4 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 40	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.2	537 537 537	1 1 1 0.5	2619 2619 2619 1.7	18 20 33 mm	
Sez.N. 1076 L 21x21x3 Asta: 124 Instab.:l=	4 qn= 3 86.0	4.66 2 5.16 β*I=	5 5 5 60.2	229 230 231 -33	0 0 0 0	0 0 0 0	0 0 1 cl= 3	-1 0 1 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 10	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.0	537 537 537	1 1 1 0.3	2619 2619 2619 1.7	9 10 12 mm	
Sez.N. 319 ANG50*5 Asta: 125 Instab.:l=	4 qn= 4 50.0	5.66 0 5.16 β*I=	8 8 8 35.0	-209 -211 -213 -213	0 -2 -2 2	-2 2 5 3	-16 -13 -11 cl= 3	-7 -4 -1 ε= 0.92	0 0 0 lmd= 36	12567 12567 12567 Rpf= 9	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 4.6	2666 2666 2666	11 11 11 0.4	2617 2617 2617 1.0	6 6 11 mm	
Sez.N. 319 ANG50*5 Asta: 126 Instab.:l=	2 qn= 2 50.0	5.66 0 5.16 β*I=	8 8 8 35.0	-253 -255 -257 -257	1 1 1 1	-2 2 5 2	-15 -15 -15 cl= 3	-1 -1 -1 ε= 0.92	0 0 0 lmd= 36	12566 12566 12566 Rpf= 7	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 4.6	2666 2666 2666	11 11 11 0.3	2617 2617 2617 1.0	7 5 11 mm	
Sez.N. 319 ANG50*5 Asta: 127 Instab.:l=	1 qn= 1 50.0	5.66 0 5.16 β*I=	4 4 5 35.0	-393 -396 -299 -398	1 1 3 1	0 0 0 0	1 1 0 cl= 3	1 1 2 ε= 0.92	0 0 0 lmd= 36	12577 12577 12577 Rpf= 5	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 4.0	2666 2666 2666	11 11 11 0.4	2619 2619 2619 1.0	5 4 5 mm	
Sez.N. 319 ANG50*5 Asta: 128 Instab.:l=	3 qn= 3 50.0	5.66 0 5.16 β*I=	4 5 5 35.0	-433 -370 -372 -372	2 2 2 2	0 0 0 0	1 1 1 cl= 3	-1 0 0 ε= 0.92	0 0 0 lmd= 36	12577 12577 12577 Rpf= 5	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 4.6	2666 2666 2666	11 11 11 0.4	2619 2619 2619 1.0	5 5 5 mm	
Sez.N. 1076 L 21x21x3 Asta: 129 Instab.:l=	4 qn= 2 70.0	5.66 -2 5.66 β*I=	8 5 2 49.0	-26 1 0 -26	-1 0 0 0	0 0 0 0	-1 0 1 cl= 3	2 1 -1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 8	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.6	537 537 537	1 1 1 0.1	2619 2619 2619 1.4	8 4 3 mm	
Sez.N. 1076 L 21x21x3 Asta: 130 Instab.:l=	2 qn= 1 70.0	5.66 -2 5.66 β*I=	5 5 7 49.0	-5 -5 -7 -5	0 0 0 0	0 0 0 0	0 0 1 cl= 3	-1 1 -1 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 5	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.7	537 537 537	1 1 1 0.1	2619 2619 2619 1.4	6 3 4 mm	
Sez.N. 1076 L 21x21x3 Asta: 131 Instab.:l=	1 qn= 3 70.0	5.66 -2 5.66 β*I=	8 7 8 49.0	6 4 6 -4	1 0 -1 0	0 0 0 0	-1 -1 0 cl= 3	-1 0 -2 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 1	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.6	537 537 537	1 1 1 0.0	2619 2619 2619 1.4	10 6 7 mm	
Sez.N. 1076 L 21x21x3 Asta: 132 Instab.:l=	3 qn= 4 70.0	5.66 -2 5.66 β*I=	8 8 8 49.0	-4 -4 -4 -4	-1 1 1 1	0 0 0 0	1 0 0 cl= 3	4 0 0 ε= 0.92	0 0 0 lmd= 126	3012 3012 3012 Rpf= 8	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.6	537 537 537	1 1 1 0.1	2619 2619 2619 1.4	10 7 7 mm	
Sez.N. 1076 L 21x21x3 Asta: 133 Instab.:l=	3 qn= 4 86.0	5.16 -2 5.66 β*I=	5 8 4 60.2	-113 55 -70 -113	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	1 0 -1 ε= 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 18	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.6	537 537 537	1 1 1 0.3	2619 2619 2619 1.7	8 9 6 mm	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 1076 L 21x21x3 Asta: 134 Instab.:l=	4 qn= 2 86.0	5.16 -2 5.66 β*l=	8 6 8 60.2	-57 -33 -56 -57	-2 -1 1 2	1 0 0 0	0 0 0 0	0 0 2 3	5 3 3 0.92	0 0 0 lmd= 155	3011 3012 3012 Rpf= 32	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.2	537 537 537	1 1 1 0.5	2619 2619 2619 1.7	34 19 18 mm
Sez.N. 1076 L 21x21x3 Asta: 135 Instab.:l=	2 qn= 1 86.0	5.16 -2 5.66 β*l=	8 6 8 60.2	66 41 68 -191	-2 -1 1 0	1 0 0 0	0 0 0 0	0 0 2 3	5 3 3 0.92	0 0 0 lmd= 155	3012 3012 3012 Rpf= 29	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.7	537 537 537	1 1 1 0.5	2619 2619 2619 1.7	34 19 19 mm
Sez.N. 1076 L 21x21x3 Asta: 136 Instab.:l=	1 qn= 3 86.0	5.16 -2 5.66 β*l=	5 5 5 60.2	-164 -163 -162 -164	0 0 0 0	0 0 0 0	0 0 1 0	-1 0 0 0.92	1 0 0 lmd= 155	0 0 0 Rpf= 25	3012 3012 3012 Rft= 0	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.6	537 537 537	1 1 1 0.1	2619 2619 2619 1.7	10 7 7 mm
Sez.N. 319 ANG50*5 Asta: 137 Instab.:l=	4 qn= 4 54.0	6.20 0 5.66 β*l=	2 4 8 37.8	-299 -239 -148 -148	-1 -1 1 1	0 0 -1 1	-1 -1 -1 1	2 0 6 3	0 0 2 0.92	0 0 0 lmd= 38	12577 12577 12576 Rpf= 4	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 5.0	2666 2666 2666	11 11 11 0.5	2619 2619 2619 1.1	3 3 4 mm
Sez.N. 319 ANG50*5 Asta: 138 Instab.:l=	2 qn= 2 54.0	6.20 0 5.66 β*l=	7 8 8 37.8	-379 -343 -345 -345	-3 -2 -1 2	-1 -1 -1 1	0 2 2 1	4 4 4 0.92	0 0 0 lmd= 38	0 0 0 Rpf= 6	12577 12577 12577 Rft= 0	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 5.0	2666 2666 2666	11 11 11 0.4	2619 2619 2619 1.1	6 6 6 mm
Sez.N. 319 ANG50*5 Asta: 139 Instab.:l=	1 qn= 1 54.0	6.20 0 5.66 β*l=	5 5 5 37.8	-528 -530 -532 -532	3 0 -4 2	-1 0 0 1	-3 -3 -3 1	-12 -12 -12 0.92	0 0 0 lmd= 38	0 0 0 Rpf= 7	12576 12576 12576 Rft= 0	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 4.5	2666 2666 2666	11 11 11 0.5	2619 2619 2619 1.1	9 5 8 mm
Sez.N. 319 ANG50*5 Asta: 140 Instab.:l=	3 qn= 3 54.0	6.20 0 5.66 β*l=	5 5 5 37.8	-546 -548 -550 -550	-3 -2 -2 3	0 0 0 0	0 0 0 0	2 2 2 0.92	0 0 0 lmd= 38	0 0 0 Rpf= 7	12577 12577 12577 Rft= 0	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 5.1	2666 2666 2666	11 11 11 0.5	2619 2619 2619 1.1	7 7 6 mm
Sez.N. 1077 2 L 50x5 Asta: 141 Instab.:l=	4 qn= 3 70.0	6.20 12 6.20 β*l=	8 6 5 49.0	15 14 -49 -49	-8 -4 1 0	-1 0 -13 9	-4 0 28 3	13 8 1 0.92	0 0 0 lmd= 32	0 0 0 Rpf= 5	24598 24598 24598 Rft= 0	154 154 154 Rft= 0	207 207 207 Wmax/rel/lim=	4550 4550 4550 5.0	5232 5232 5232	21 21 21 0.0	2619 2619 2619 1.4	5 3 7 mm
Sez.N. 1077 2 L 50x5 Asta: 142 Instab.:l=	3 qn= 1 70.0	6.20 12 6.20 β*l=	8 4 8 49.0	35 -46 35 -98	9 1 -8 1	-1 2 -1 2	-5 0 4 0.92	-25 -4 -25 lmd= 32	0 0 0 Rpf= 2	0 0 0 Rft= 0	24598 24598 24598 Rft= 0	154 154 154 Rft= 0	207 207 207 Wmax/rel/lim=	4550 4550 4550 5.1	5232 5232 5232	21 21 21 0.0	2619 2619 2619 1.4	7 2 6 mm
Sez.N. 1077 2 L 50x5 Asta: 143 Instab.:l=	1 qn= 2 70.0	6.20 12 6.20 β*l=	8 8 8 49.0	56 56 56 -201	-8 2 8 1	0 1 0 4	-6 0 4 0.92	24 24 24 lmd= 32	0 0 0 Rpf= 4	0 0 0 Rft= 0	24598 24598 24598 Rft= 0	154 154 154 Rft= 0	207 207 207 Wmax/rel/lim=	4550 4550 4550 5.1	5232 5232 5232	21 21 21 0.0	2619 2619 2619 1.4	6 2 6 mm
Sez.N. 1077 2 L 50x5 Asta: 144 Instab.:l=	2 qn= 4 70.0	6.20 12 6.20 β*l=	8 5 8 49.0	-72 -120 -72 -72	8 -2 -7 3	-5 -2 -1 4	-11 4 -2 0.92	-21 1 -21 lmd= 32	0 0 0 Rpf= 4	0 0 0 Rft= 0	24598 24598 24598 Rft= 0	154 154 154 Rft= 0	207 207 207 Wmax/rel/lim=	4550 4550 4550 5.1	5232 5232 5232	21 21 21 0.0	2619 2619 2619 1.4	8 2 5 mm
Sez.N. 1076 L 21x21x3 Asta: 145 Instab.:l=	4 qn= 3 88.4	5.66 2 6.20 β*l=	4 8 8 61.9	61 -41 -40 -41	0 0 1 1	0 0 0 0	-1 0 -1 0.92	-1 0 3 lmd= 159	0 0 0 Rpf= 14	0 0 0 Rft= 0	3012 3012 3012 Rft= 0	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.7	537 537 537	1 1 1 0.1	2619 2619 2619 1.8	6 6 12 mm
Sez.N. 1076 L 21x21x3 Asta: 146 Instab.:l=	3 qn= 1 88.4	5.66 2 6.20 β*l=	5 5 5 61.9	148 149 150 -52	0 0 0 0	0 0 0 0	-1 0 1 0.92	-1 0 1 lmd= 159	0 0 0 Rpf= 8	0 0 0 Rft= 0	3012 3012 3012 Rft= 0	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 4.6	537 537 537	1 1 1 0.1	2619 2619 2619 1.8	7 7 8 mm
Sez.N. 1076 L 21x21x3 Asta: 147 Instab.:l=	1 qn= 2 88.4	5.66 2 6.20 β*l=	5 5 5 61.9	212 212 213 -52	0 0 0 0	0 0 0 0	-1 0 1 0.92	-1 0 1 lmd= 159	0 0 0 Rpf= 10	0 0 0 Rft= 0	3012 3012 3012 Rft= 0	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 5.0	537 537 537	1 1 1 0.1	2619 2619 2619 1.8	9 9 10 mm
Sez.N. 1076 L 21x21x3 Asta: 148 Instab.:l=	2 qn= 4 88.4	5.66 2 6.20 β*l=	5 5 5 61.9	153 154 155 -61	0 0 1 0	0 0 0 0	1 0 -1 0.92	-2 0 3 lmd= 159	0 0 0 Rpf= 9	0 0 0 Rft= 0	3012 3012 3012 Rft= 0	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 5.1	537 537 537	1 1 1 0.1	2619 2619 2619 1.8	9 9 13 mm
Sez.N. 1078 Piatto 120 Asta: 149 Instab.:l=	5 qn= 6 28.3	9.26 -20 9.26 β*l=	8 8 8 19.8	238 238 238 -48	-1 -3 -5 1	5 2 0 0	19 19 19 0	-9 -12 -16 0.92	0 0 0 lmd= 42	0 0 0 Rpf= 1	50286 50286 50286 Rft= 0	201 201 201 Rft= 0	1509 1509 1509 Wmax/rel/lim=	29033 29033 29033 7.9	29033 29033 29033	232 232 232 0.0	2619 2619 2619 0.6	1 2 2 mm

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 1078 Piatto 120 Asta: 150 Instab.:l=	6 qn= 7 28.3	9.26 -20 9.26 β*I=	5 5 8 19.8	251 251 -314 -314	-2 -3 -6 4	3 3 -3 3	3 3 -1 3	3 3 -1 1	-4 -7 -28 ε= 0.92	8 8 -1 lmd= 42	50286 50286 50286 Rpf= 3	201 201 201 Rft= 0	1509 1509 1508 Wmax/rel/lim=	29033 29033 29033 7.6	29033 29033 29033	232 232 232 0.0	2619 2619 2619 0.6	1 2 3 mm
Sez.N. 1078 Piatto 120 Asta: 151 Instab.:l=	7 qn= 8 28.3	9.26 -20 9.26 β*I=	5 5 5 19.8	-384 -384 -384 -384	-23 -1 20 17	0 -3 -7 4	23 23 23 cl= 1	158 155 151 ε= 0.92	2 2 2 lmd= 42	50286 50286 50286 Rpf= 10	201 201 201 Rft= 0	1508 1508 1508 Wmax/rel/lim=	29033 29033 29033 7.9	29033 29033 29033	232 232 232 0.0	2619 2619 2619 0.6	12 1 11 mm	
Sez.N. 1078 Piatto 120 Asta: 152 Instab.:l=	8 qn= 5 28.3	9.26 -20 9.26 β*I=	5 8 5 19.8	-248 257 -248 -248	-17 1 15 13	-2 1 1 1	-10 -21 -10 cl= 1	116 -32 110 ε= 0.92	3 2 3 lmd= 42	50286 50286 50286 Rpf= 7	201 201 201 Rft= 0	1509 1509 1509 Wmax/rel/lim=	29033 29033 29033 7.6	29033 29033 29033	232 232 232 0.0	2619 2619 2619 0.6	9 1 7 mm	
Sez.N. 1076 L 21x21x3 Asta: 153 Instab.:l=	9 qn= 10 35.1	8.76 -2 8.76 β*I=	5 5 5 24.6	-30 -30 -30 -30	-1 0 0 1	-1 0 1 1	-5 -6 -6 cl= 3	4 3 2 ε= 0.92	0 0 0 lmd= 63	3012 3012 3012 Rpf= 21	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 7.3	537 537 537	1 1 1 0.0	2619 2619 2619 0.7	26 2 23 mm	
Sez.N. 1076 L 21x21x3 Asta: 154 Instab.:l=	10 qn= 11 35.1	8.76 -2 8.76 β*I=	5 5 5 24.6	-18 -18 -18 -18	-2 0 3 2	-1 0 1 1	-7 -7 -7 cl= 3	16 15 15 ε= 0.92	0 0 0 lmd= 63	3010 3010 3010 Rpf= 38	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 7.1	537 537 537	1 1 1 0.1	2618 2618 2618 0.7	43 5 50 mm	
Sez.N. 1076 L 21x21x3 Asta: 155 Instab.:l=	11 qn= 12 35.1	8.76 -2 8.76 β*I=	5 5 8 24.6	43 43 -4 -4	1 1 -1 1	0 0 0 0	0 0 1 cl= 3	-1 -1 -5 ε= 0.92	0 0 0 lmd= 63	3012 3012 3012 Rpf= 7	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 7.3	537 537 537	1 1 1 0.0	2619 2619 2619 0.7	7 7 9 mm	
Sez.N. 1076 L 21x21x3 Asta: 156 Instab.:l=	12 qn= 9 35.1	8.76 -2 8.76 β*I=	5 5 5 24.6	-23 -23 -23 -23	0 -1 -1 1	0 0 0 0	1 1 1 cl= 3	-5 -5 -6 ε= 0.92	0 0 0 lmd= 63	3011 3011 3011 Rpf= 14	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 7.1	537 537 537	1 1 1 0.0	2619 2619 2619 0.7	8 6 17 mm	
Sez.N. 1076 L 21x21x3 Asta: 157 Instab.:l=	13 qn= 14 41.9	8.26 -2 8.26 β*I=	5 5 5 29.3	-22 -22 -22 -22	0 0 0 0	0 0 0 0	1 0 -1 cl= 3	0 0 -3 ε= 0.92	0 0 0 lmd= 75	3012 3012 3012 Rpf= 4	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 6.8	537 537 537	1 1 1 0.0	2619 2619 2619 0.8	3 3 3 mm	
Sez.N. 1076 L 21x21x3 Asta: 158 Instab.:l=	14 qn= 15 41.9	8.26 -2 8.26 β*I=	5 5 5 29.3	-39 -39 -39 -39	0 0 0 0	0 0 0 0	1 1 1 cl= 3	1 0 0 ε= 0.92	0 0 0 lmd= 75	3012 3012 3012 Rpf= 10	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 6.7	537 537 537	1 1 1 0.0	2619 2619 2619 0.8	8 9 11 mm	
Sez.N. 1076 L 21x21x3 Asta: 159 Instab.:l=	15 qn= 16 41.9	8.26 -2 8.26 β*I=	5 5 5 29.3	60 60 60 -11	-2 0 1 0	-1 0 1 0	-4 -3 -3 cl= 3	6 5 5 ε= 0.92	0 0 0 lmd= 75	3012 3012 3012 Rpf= 5	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 6.8	537 537 537	1 1 1 0.1	2619 2619 2619 0.8	29 6 20 mm	
Sez.N. 1076 L 21x21x3 Asta: 160 Instab.:l=	16 qn= 13 41.9	8.26 -2 8.26 β*I=	8 3 8 29.3	-11 16 -11 -11	-1 0 0 0	0 0 0 0	1 0 0 cl= 3	4 0 1 ε= 0.92	0 0 0 lmd= 75	3012 3012 3012 Rpf= 6	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 6.7	537 537 537	1 1 1 0.0	2619 2619 2619 0.8	8 3 5 mm	
Sez.N. 1076 L 21x21x3 Asta: 161 Instab.:l=	17 qn= 18 48.7	7.76 -2 7.76 β*I=	5 5 5 34.1	-12 -12 -12 -12	0 0 0 0	0 0 0 0	-1 -2 -3 cl= 3	1 0 -2 ε= 0.92	0 0 0 lmd= 88	3012 3012 3012 Rpf= 9	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 6.3	537 537 537	1 1 1 0.0	2619 2619 2619 1.0	8 4 12 mm	
Sez.N. 1076 L 21x21x3 Asta: 162 Instab.:l=	18 qn= 19 48.7	7.76 -2 7.76 β*I=	5 8 8 34.1	-27 1 1 -27	0 0 0 0	0 0 0 0	-1 1 1 cl= 3	2 0 0 ε= 0.92	0 0 0 lmd= 88	3012 3012 3012 Rpf= 7	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 6.3	537 537 537	1 1 1 0.0	2619 2619 2619 1.0	8 4 5 mm	
Sez.N. 1076 L 21x21x3 Asta: 163 Instab.:l=	19 qn= 20 48.7	7.76 -2 7.76 β*I=	5 8 8 34.1	21 -20 -20 -20	0 -1 -1 0	0 0 0 0	-1 0 0 cl= 3	1 -2 -2 ε= 0.92	0 0 0 lmd= 88	3012 3012 3012 Rpf= 6	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 6.3	537 537 537	1 1 1 0.0	2619 2619 2619 1.0	10 7 7 mm	
Sez.N. 1076 L 21x21x3 Asta: 164 Instab.:l=	20 qn= 17 48.7	7.76 -2 7.76 β*I=	8 8 5 34.1	0 0 -12 -12	0 0 0 0	0 0 0 0	1 0 1 cl= 3	2 0 -2 ε= 0.92	0 0 0 lmd= 88	3012 3012 3012 Rpf= 5	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 6.2	537 537 537	1 1 1 0.0	2619 2619 2619 1.0	2 2 7 mm	
Sez.N. 1076 L 21x21x3 Asta: 165 Instab.:l=	21 qn= 22 55.5	7.26 -2 7.26 β*I=	7 5 5 38.9	-6 -4 -4 -4	0 0 0 0	0 0 0 0	-1 0 -1 cl= 3	1 0 -3 ε= 0.92	0 0 0 lmd= 100	3012 3012 3012 Rpf= 3	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 5.9	537 537 537	1 1 1 0.1	2619 2619 2619 1.1	2 4 3 mm	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 1076 L 21x21x3 Asta: 166 Instab.:l=	22 qn= 23 55.5	7.26 -2 7.26 β*l=	5 5 5 38.9	-22 -22 -22 -22	-1 0 0 1	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	3 1 1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 100	5 5 5 Rpf= 9	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.9	2619 2619 2619 0.1	9 8 8 1.1 mm
Sez.N. 1076 L 21x21x3 Asta: 167 Instab.:l=	23 qn= 24 55.5	7.26 -2 7.26 β*l=	5 5 8 38.9	11 11 -7 -7	1 0 0 0	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	-1 -2 -2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 100	5 5 5 Rpf= 5	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.9	2619 2619 2619 0.1	11 4 5 1.1 mm
Sez.N. 1076 L 21x21x3 Asta: 168 Instab.:l=	24 qn= 21 55.5	7.26 -2 7.26 β*l=	8 8 8 38.9	-3 -3 -3 -3	-1 0 0 0	0 0 0 0	0 0 0 0	1 0 0 cl= 3	4 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 100	5 5 5 Rpf= 7	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.9	2619 2619 2619 0.0	9 4 4 1.1 mm
Sez.N. 1076 L 21x21x3 Asta: 169 Instab.:l=	25 qn= 26 61.7	6.76 -2 6.76 β*l=	8 5 5 43.2	-1 2 2 0	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 -2 cl= 3	1 2 2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 0	5 5 5 Rpf= 0	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.5	2619 2619 2619 0.1	4 3 7 1.2 mm
Sez.N. 1076 L 21x21x3 Asta: 170 Instab.:l=	26 qn= 27 62.4	6.76 -2 6.76 β*l=	5 5 8 43.7	38 38 8 -8	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	2 1 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 112	5 5 5 Rpf= 2	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.5	2619 2619 2619 0.0	8 3 6 1.2 mm
Sez.N. 1076 L 21x21x3 Asta: 171 Instab.:l=	27 qn= 28 62.4	6.76 -2 6.76 β*l=	5 8 8 43.6	14 -21 -21 -21	0 0 -1 1	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	1 -2 -2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 112	5 5 5 Rpf= 7	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.5	2619 2619 2619 0.1	7 3 6 1.2 mm
Sez.N. 1076 L 21x21x3 Asta: 172 Instab.:l=	28 qn= 25 62.4	6.76 -2 6.76 β*l=	8 8 5 43.6	2 2 -4 -4	0 0 0 0	0 0 0 0	0 0 0 0	1 0 1 cl= 3	2 0 -2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 112	5 5 5 Rpf= 4	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.5	2619 2619 2619 0.1	3 4 5 1.2 mm
Sez.N. 1076 L 21x21x3 Asta: 173 Instab.:l=	3 qn= 27 86.8	6.20 2 6.76 β*l=	5 5 5 60.8	174 175 176 -98	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 1 cl= 3	-1 0 1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 157	5 5 5 Rpf= 16	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.1	2619 2619 2619 0.1	8 7 11 1.7 mm
Sez.N. 1076 L 21x21x3 Asta: 174 Instab.:l=	27 qn= 24 77.4	6.76 -2 7.26 β*l=	5 5 5 54.2	-209 -208 -208 -209	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	1 1 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 139	5 5 5 Rpf= 28	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.8	2619 2619 2619 0.1	14 10 10 1.5 mm
Sez.N. 1076 L 21x21x3 Asta: 175 Instab.:l=	24 qn= 19 72.3	7.26 2 7.76 β*l=	5 5 5 50.6	213 213 215 -176	0 0 0 0	0 0 0 0	0 0 0 0	0 0 1 cl= 3	-1 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 130	5 5 5 Rpf= 21	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.9	2619 2619 2619 0.0	10 10 13 1.4 mm
Sez.N. 1076 L 21x21x3 Asta: 176 Instab.:l=	19 qn= 16 67.5	7.76 -1 8.26 β*l=	5 5 5 47.3	-411 -411 -410 -411	-1 0 1 0	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	2 1 1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 122	5 5 5 Rpf= 44	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 6.7	2619 2619 2619 0.0	23 14 20 1.4 mm
Sez.N. 1076 L 21x21x3 Asta: 177 Instab.:l=	16 qn= 11 63.2	8.26 1 8.76 β*l=	5 5 5 44.2	374 375 376 -328	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	0 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 114	5 5 5 Rpf= 29	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 6.8	2619 2619 2619 0.2	16 18 20 1.3 mm
Sez.N. 1076 L 21x21x3 Asta: 178 Instab.:l=	11 qn= 8 59.1	8.76 -1 9.26 β*l=	5 5 5 41.4	-536 -535 -535 -536	1 1 1 1	0 0 0 0	0 0 0 0	0 0 0 cl= 3	-1 -1 -1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 106	5 5 5 Rpf= 55	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 7.9	2619 2619 2619 0.2	32 30 27 1.2 mm
Sez.N. 1076 L 21x21x3 Asta: 179 Instab.:l=	4 qn= 28 86.8	6.20 2 6.76 β*l=	8 8 8 60.8	6 6 7 -33	0 0 0 0	0 0 0 0	0 0 0 0	1 0 -1 cl= 3	-3 0 3 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 157	5 5 5 Rpf= 5	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.1	2619 2619 2619 0.1	7 5 6 1.7 mm
Sez.N. 1076 L 21x21x3 Asta: 180 Instab.:l=	28 qn= 21 77.4	6.76 -2 7.26 β*l=	8 8 8 54.2	-8 -7 -7 -41	0 0 0 0	0 0 0 0	0 0 0 0	1 0 -1 cl= 3	3 0 -2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 139	5 5 5 Rpf= 7	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.8	2619 2619 2619 0.1	6 4 5 1.5 mm
Sez.N. 1076 L 21x21x3 Asta: 181 Instab.:l=	21 qn= 20 72.3	7.26 2 7.76 β*l=	11 8 8 50.6	-51 8 9 -51	0 0 0 0	0 0 0 0	0 0 0 0	0 0 -1 cl= 3	0 1 3 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 130	5 5 5 Rpf= 6	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.9	2619 2619 2619 0.1	3 4 7 1.4 mm

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 1076 L 21x21x3 Asta: 182 Instab.:l=	20 qn= 13 67.5	7.76 -1 8.26 β*l=	8 10 11 47.3	-1 -77 65 -78	0 0 0 0	0 0 0 0	0 0 0 0	1 0 0 cl= 3	2 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 122	5 5 5 Rpf= 8	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 6.6	2619 2619 2619 0.0	4 4 4 1.4 mm
Sez.N. 1076 L 21x21x3 Asta: 183 Instab.:l=	13 qn= 12 63.2	8.26 1 8.76 β*l=	8 5 5 44.2	22 -25 -25 -82	0 1 1 0	0 0 0 0	0 0 0 0	1 0 0 cl= 3	-1 1 2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 114	5 5 5 Rpf= 8	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 6.8	2619 2619 2619 0.1	5 8 8 1.3 mm
Sez.N. 1076 L 21x21x3 Asta: 184 Instab.:l=	12 qn= 5 59.1	8.76 -1 9.26 β*l=	5 10 8 41.4	-31 -124 35 -124	1 0 0 0	0 0 0 0	0 0 0 0	-1 0 -1 cl= 3	0 0 -2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 106	5 5 5 Rpf= 10	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 7.6	2619 2619 2619 0.1	8 6 6 1.2 mm
Sez.N. 1076 L 21x21x3 Asta: 185 Instab.:l=	1 qn= 26 86.8	6.20 2 6.76 β*l=	5 5 5 60.8	294 294 296 -88	0 0 0 0	0 0 0 0	0 0 0 0	-1 -1 1 cl= 3	0 0 1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 157	5 5 5 Rpf= 13	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.4	2619 2619 2619 0.1	12 11 15 1.7 mm
Sez.N. 1076 L 21x21x3 Asta: 186 Instab.:l=	26 qn= 23 77.3	6.76 -2 7.26 β*l=	5 5 5 54.1	-402 -401 -401 -402	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	0 -1 -1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 139	5 5 5 Rpf= 50	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.5	2619 2619 2619 0.1	19 17 17 1.5 mm
Sez.N. 1076 L 21x21x3 Asta: 187 Instab.:l=	23 qn= 18 72.3	7.26 2 7.76 β*l=	5 5 5 50.6	463 463 464 -125	0 0 1 0	0 0 0 0	0 0 0 0	0 1 1 cl= 3	1 0 2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 130	5 5 5 Rpf= 14	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 6.2	2619 2619 2619 0.1	20 19 23 1.4 mm
Sez.N. 1076 L 21x21x3 Asta: 188 Instab.:l=	18 qn= 15 67.5	7.76 -1 8.26 β*l=	5 5 5 47.3	-539 -538 -538 -539	0 0 0 0	0 0 0 0	0 0 0 0	0 1 1 cl= 3	1 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 122	5 5 5 Rpf= 58	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 6.3	2619 2619 2619 0.2	18 27 27 1.4 mm
Sez.N. 1076 L 21x21x3 Asta: 189 Instab.:l=	15 qn= 10 63.2	8.26 1 8.76 β*l=	5 5 5 44.2	813 814 815 -207	1 1 0 0	0 0 0 0	0 0 0 0	0 -2 -2 cl= 3	0 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 114	5 5 5 Rpf= 19	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 7.1	2619 2619 2619 0.2	40 35 30 1.3 mm
Sez.N. 1076 L 21x21x3 Asta: 190 Instab.:l=	10 qn= 7 59.1	8.76 -1 9.26 β*l=	5 5 5 41.4	-1025 -1025 -1024 -1025	1 0 0 0	0 0 0 0	0 0 0 0	0 -1 0 cl= 3	-1 0 -1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 106	5 5 5 Rpf= 91	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 7.4	2619 2619 2619 0.2	43 42 42 1.2 mm
Sez.N. 1076 L 21x21x3 Asta: 191 Instab.:l=	2 qn= 25 86.8	6.20 2 6.76 β*l=	5 5 5 60.8	162 163 164 -67	1 0 0 0	0 0 0 0	0 0 0 0	2 0 -1 cl= 3	-3 0 3 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 157	5 5 5 Rpf= 10	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.5	2619 2619 2619 0.1	14 9 11 1.7 mm
Sez.N. 1076 L 21x21x3 Asta: 192 Instab.:l=	25 qn= 22 77.4	6.76 2 7.26 β*l=	5 5 5 54.2	-194 -194 -193 -194	0 0 0 0	0 0 0 0	0 0 2 0	-3 0 2 cl= 3	1 0 -2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 139	5 5 5 Rpf= 29	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 5.5	2619 2619 2619 0.2	14 12 13 1.5 mm
Sez.N. 1076 L 21x21x3 Asta: 193 Instab.:l=	22 qn= 17 72.3	7.26 2 7.76 β*l=	5 5 5 50.6	238 238 239 -94	0 0 0 0	0 0 0 0	0 0 0 0	1 0 -1 cl= 3	-2 0 2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 130	5 5 5 Rpf= 10	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 6.3	2619 2619 2619 0.1	15 11 11 1.4 mm
Sez.N. 1076 L 21x21x3 Asta: 194 Instab.:l=	17 qn= 14 67.5	7.76 -1 8.26 β*l=	8 5 5 47.3	-226 -266 -265 -266	0 0 0 0	0 0 0 0	0 0 0 0	0 0 -1 cl= 3	1 0 -2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 122	5 5 5 Rpf= 27	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 6.3	2619 2619 2619 0.1	12 12 12 1.4 mm
Sez.N. 1076 L 21x21x3 Asta: 195 Instab.:l=	14 qn= 9 63.2	8.26 1 8.76 β*l=	5 5 5 44.2	423 424 424 -155	0 0 0 0	0 0 0 0	0 0 0 0	2 0 0 cl= 3	-2 1 2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 114	5 5 5 Rpf= 14	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 7.3	2619 2619 2619 0.1	22 19 20 1.3 mm
Sez.N. 1076 L 21x21x3 Asta: 196 Instab.:l=	9 qn= 6 59.1	8.76 -1 9.26 β*l=	5 8 8 41.4	-438 -402 -401 -438	0 -1 0 0	0 0 0 0	0 0 0 0	1 0 1 cl= 3	2 1 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 106	5 5 5 Rpf= 37	640 640 640 Rft= 0	537 537 537 Wmax/rel/lim=	1 1 1 7.3	2619 2619 2619 0.1	19 18 19 1.2 mm
Sez.N. 319 ANG50*5 Asta: 197 Instab.:l=	7 qn= 7 51.8	9.78 0 9.26 β*l=	5 5 8 36.3	-2443 -2445 -2150 -2447	8 6 -1 7	-3 -1 6 1	-7 -7 -13 0	-7 -7 -10 cl= 3	0 0 0 ε=	0 0 0 0.92	12575 12575 12576 lmd=	127 127 127 37	60 60 60 Rpf= 29	2940 2940 2940 Rft= 0	2666 2666 2666 Wmax/rel/lim=	11 11 11 8.5	2619 2619 2619 1.1	30 26 28 1.0 mm

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid kg/cmq	Rap %
Sez.N. 319 ANG50*5 Asta: 198 Instab.:l=	1 qn= 27 56.3	6.20 0 6.76 β*I=	5 5 5 39.4	-626 -624 -622 -626	5 0 -5 4	0 -1 -2 1	3 3 3 cl= 3	-18 -18 -18 ε= 0.92	0 0 0 lmd= 40	12576 12576 12576 Rpf= 11	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 4.9	2666 2666 2666 0.0	11 11 11 0.0	2619 2619 2619 1.1	9 7 12 mm	
Sez.N. 319 ANG50*5 Asta: 199 Instab.:l=	27 qn= 23 50.2	6.76 0 7.26 β*I=	8 5 5 35.2	-509 -370 -368 -372	-2 4 10 7	-1 2 3 2	-3 -3 -3 cl= 3	7 21 21 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 12	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 5.4	2666 2666 2666 0.0	11 11 11 0.0	2619 2619 2619 1.0	7 9 15 mm	
Sez.N. 319 ANG50*5 Asta: 200 Instab.:l=	23 qn= 19 50.2	7.26 -1 7.76 β*I=	5 5 5 35.2	-949 -947 -945 -949	5 1 -3 4	-2 -3 -4 4	5 5 4 cl= 3	-16 -16 -16 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 19	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 5.8	2666 2666 2666 0.1	11 11 11 0.1	2619 2619 2619 1.0	15 14 18 mm	
Sez.N. 319 ANG50*5 Asta: 201 Instab.:l=	15 qn= 11 50.2	8.26 -1 8.76 β*I=	5 5 5 35.2	-1519 -1517 -1515 -1519	4 2 -1 3	9 7 5 9	8 8 7 cl= 3	-9 -9 -9 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 31	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 6.8	2666 2666 2666 0.2	11 11 11 0.2	2619 2619 2619 1.0	30 25 22 mm	
Sez.N. 319 ANG50*5 Asta: 202 Instab.:l=	11 qn= 7 50.0	8.76 -1 9.26 β*I=	8 5 5 35.0	-1294 -777 -776 -779	-4 -8 -19 15	6 -7 -9 9	28 5 5 cl= 3	31 -44 -44 ε= 0.92	0 0 0 lmd= 36	12576 12571 12571 Rpf= 33	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 7.4	2666 2666 2666 0.2	11 11 11 0.2	2619 2618 2618 1.0	23 25 36 mm	
Sez.N. 319 ANG50*5 Asta: 203 Instab.:l=	4 qn= 25 56.3	6.20 -1 6.76 β*I=	5 2 5 39.4	-50 -307 -47 -50	4 -1 -1 3	2 0 -2 2	12 0 4 cl= 3	-11 -3 -5 ε= 0.92	0 0 0 lmd= 40	12577 12577 12577 Rpf= 6	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 5.5	2666 2666 2666 0.0	11 11 11 0.0	2619 2619 2619 1.1	7 3 5 mm	
Sez.N. 319 ANG50*5 Asta: 204 Instab.:l=	25 qn= 21 50.2	6.76 -1 7.26 β*I=	5 5 5 35.2	190 192 193 -296	-1 0 1 0	2 1 1 1	4 1 -2 cl= 3	0 3 6 ε= 0.92	0 0 0 lmd= 36	12577 12577 12577 Rpf= 4	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 5.9	2666 2666 2666 0.0	11 11 11 0.0	2619 2619 2619 1.0	5 4 4 mm	
Sez.N. 319 ANG50*5 Asta: 205 Instab.:l=	21 qn= 17 50.2	7.26 -1 7.76 β*I=	2 5 5 35.2	-305 163 165 -257	1 1 2 1	0 -2 -4 1	0 9 6 cl= 3	-3 2 4 ε= 0.92	0 0 0 lmd= 36	12577 12576 12577 Rpf= 5	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 6.3	2666 2666 2666 0.0	11 11 11 0.0	2619 2619 2619 1.0	3 5 9 mm	
Sez.N. 319 ANG50*5 Asta: 206 Instab.:l=	17 qn= 13 50.2	7.76 -1 8.26 β*I=	5 5 5 35.1	533 536 536 -375	1 0 0 1	3 2 2 1	6 0 0 cl= 3	-5 0 0 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 6	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 6.7	2666 2666 2666 0.0	11 11 11 0.0	2619 2619 2619 1.0	11 7 7 mm	
Sez.N. 319 ANG50*5 Asta: 207 Instab.:l=	13 qn= 9 50.2	8.26 -1 8.76 β*I=	5 5 5 35.2	537 539 540 -306	0 3 7 2	2 -3 -8 2	23 20 17 cl= 3	10 13 16 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 7	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 7.2	2666 2666 2666 0.1	11 11 11 0.1	2619 2619 2619 1.0	8 12 23 mm	
Sez.N. 319 ANG50*5 Asta: 208 Instab.:l=	9 qn= 5 50.0	8.76 -1 9.26 β*I=	5 5 5 35.0	1258 1260 1262 -536	6 -2 -8 3	5 5 6 2	2 -2 -5 cl= 3	-31 -29 -26 ε= 0.92	0 0 0 lmd= 36	12572 12572 12572 Rpf= 10	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 7.8	2666 2666 2666 0.1	11 11 11 0.1	2618 2618 2618 1.0	23 20 27 mm	
Sez.N. 319 ANG50*5 Asta: 209 Instab.:l=	2 qn= 26 56.4	6.20 -1 6.76 β*I=	8 8 7 39.4	-421 -419 -406 -421	4 1 -2 3	1 0 0 1	3 2 2 cl= 3	-11 -11 -11 ε= 0.92	0 0 0 lmd= 40	12576 12576 12577 Rpf= 8	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 5.4	2666 2666 2666 0.0	11 11 11 0.0	2619 2619 2619 1.1	8 5 5 mm	
Sez.N. 319 ANG50*5 Asta: 210 Instab.:l=	26 qn= 22 50.2	6.76 -1 7.26 β*I=	5 5 5 35.1	340 341 343 -406	-5 -5 -4 2	0 0 1 0	2 0 -4 cl= 3	5 3 -1 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 5	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 5.8	2666 2666 2666 0.0	11 11 11 0.0	2619 2619 2619 1.0	7 7 7 mm	
Sez.N. 319 ANG50*5 Asta: 211 Instab.:l=	22 qn= 18 50.2	7.26 -1 7.76 β*I=	8 8 5 35.2	-596 -594 62 -596	3 1 7 3	0 0 2 0	0 0 -6 cl= 3	-11 -11 6 ε= 0.92	0 0 0 lmd= 36	12576 12576 12577 Rpf= 8	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 6.2	2666 2666 2666 0.0	11 11 11 0.0	2619 2619 2619 1.0	8 5 9 mm	
Sez.N. 319 ANG50*5 Asta: 212 Instab.:l=	18 qn= 14 50.2	7.76 -1 8.26 β*I=	5 5 5 35.1	789 791 792 -611	-7 -7 -8 2	0 0 0 1	3 0 -2 cl= 3	2 -2 -5 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 8	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 6.6	2666 2666 2666 0.0	11 11 11 0.0	2619 2619 2619 1.0	12 13 13 mm	
Sez.N. 319 ANG50*5 Asta: 213 Instab.:l=	14 qn= 10 50.2	8.26 -1 8.76 β*I=	8 5 5 35.2	-1019 263 265 -1019	6 11 18 5	0 1 2 1	-3 -3 -5 cl= 3	-18 30 27 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 14	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 7.0	2666 2666 2666 0.1	11 11 11 0.1	2619 2619 2619 1.0	13 12 19 mm	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 319 ANG50*5 Asta: 214 Instab.:l=	10 qn= 6 50.0	8.76 -1 9.26 β*I=	5 5 5 35.0	1789 1790 1792 -1076	-11 -15 -21 8	-2 1 4 6	-9 -12 -15 cl= 3	-16 -19 -22 ε= 0.92	0 0 0 lmd= 36	12573 12573 12573 Rpf= 25	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 7.5	2666 2666 2666 0.1	11 11 11 1.0	2618 2618 2618 mm	26	
Sez.N. 319 ANG50*5 Asta: 215 Instab.:l=	3 qn= 28 56.3	6.20 -1 6.76 β*I=	5 5 5 39.4	-575 -573 -571 -575	-1 -1 -2 2	2 0 -1 1	4 4 4 cl= 3	-2 -2 -2 ε= 0.92	0 0 0 lmd= 40	12577 12577 12577 Rpf= 8	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 5.5	2666 2666 2666 0.0	11 11 11 1.1	2619 2619 2619 mm	8	
Sez.N. 319 ANG50*5 Asta: 216 Instab.:l=	28 qn= 24 50.2	6.76 -1 7.26 β*I=	5 5 5 35.2	-520 -519 -517 -520	-1 2 5 4	-1 0 1 1	-3 -3 -3 cl= 3	11 11 11 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 8	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 5.9	2666 2666 2666 0.0	11 11 11 1.0	2619 2619 2619 mm	6	
Sez.N. 319 ANG50*5 Asta: 217 Instab.:l=	24 qn= 20 50.2	7.26 -1 7.76 β*I=	5 5 5 35.2	-796 -794 -792 -796	-1 -1 -2 2	0 0 -1 0	1 1 1 cl= 3	-3 -3 -3 ε= 0.92	0 0 0 lmd= 36	12577 12577 12577 Rpf= 9	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 6.3	2666 2666 2666 0.0	11 11 11 1.0	2619 2619 2619 mm	7	
Sez.N. 319 ANG50*5 Asta: 218 Instab.:l=	20 qn= 16 50.2	7.76 -1 8.26 β*I=	5 5 5 35.1	-760 -758 -756 -760	-1 5 11 8	0 0 1 1	-4 -4 -4 cl= 3	24 24 24 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 15	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 6.7	2666 2666 2666 0.0	11 11 11 1.0	2619 2619 2619 mm	8	
Sez.N. 319 ANG50*5 Asta: 219 Instab.:l=	16 qn= 12 50.2	8.26 -1 8.76 β*I=	5 5 5 35.2	-1361 -1359 -1358 -1361	-1 -3 -5 4	1 0 -1 1	4 4 3 cl= 3	-8 -8 -8 ε= 0.92	0 0 0 lmd= 36	12575 12575 12575 Rpf= 16	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 7.2	2666 2666 2666 0.0	11 11 11 1.0	2619 2619 2619 mm	13	
Sez.N. 319 ANG50*5 Asta: 220 Instab.:l=	12 qn= 8 50.0	8.76 -1 9.26 β*I=	5 5 5 35.0	-1352 -1350 -1348 -1352	-4 10 25 19	0 -2 -4 3	7 7 7 cl= 3	59 59 59 ε= 0.92	0 0 0 lmd= 36	12570 12570 12570 Rpf= 31	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 7.9	2666 2666 2666 0.1	11 11 11 1.0	2618 2618 2618 mm	14	
Sez.N. 319 ANG50*5 Asta: 221 Instab.:l=	8 qn= 8 51.8	9.78 0 9.26 β*I=	5 5 5 36.3	-3222 -3224 -3225 -3225	-10 -7 -3 8	-25 -5 16 10	-78 -78 -78 cl= 3	14 14 14 ε= 0.92	0 0 0 lmd= 37	12564 12564 12564 Rpf= 51	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 9.4	2666 2666 2666 1.5	11 11 11 1.0	2616 2616 2616 mm	75	
Sez.N. 319 ANG50*5 Asta: 222 Instab.:l=	5 qn= 5 51.8	9.78 0 9.26 β*I=	8 8 8 36.3	1807 1805 1803 -543	17 14 11 4	3 -2 -8 1	18 21 23 cl= 3	-14 -12 -9 ε= 0.92	0 0 0 lmd= 37	12576 12576 12576 Rpf= 9	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 9.4	2666 2666 2666 1.5	11 11 11 1.0	2619 2619 2619 mm	32	
Sez.N. 319 ANG50*5 Asta: 223 Instab.:l=	6 qn= 6 51.8	9.78 0 9.26 β*I=	8 8 5 36.3	-1823 -1825 1617 -1827	2 -4 8 5	-3 -2 -4 2	-6 -6 14 cl= 3	-22 -22 7 ε= 0.92	0 0 0 lmd= 37	12576 12576 12575 Rpf= 24	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 8.7	2666 2666 2666 1.2	11 11 11 1.0	2619 2619 2619 mm	21	
Sez.N. 1076 L 21x21x3 Asta: 224 Instab.:l=	5 qn= 8 28.3	9.78 2 9.78 β*I=	5 5 5 19.8	75 75 75 -17	0 0 0 1	0 0 0 0	0 0 0 cl= 3	-2 -2 -2 ε= 0.92	0 0 0 lmd= 51	3012 3012 3012 Rpf= 7	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 8.7	537 537 537 0.1	1 1 1 0.6	2619 2619 2619 mm	8	
Sez.N. 1076 L 21x21x3 Asta: 225 Instab.:l=	8 qn= 7 28.3	9.78 1 9.78 β*I=	5 5 8 19.8	84 84 54 -12	1 0 0 0	0 0 0 0	-1 -1 3 cl= 3	-3 -2 1 ε= 0.92	0 0 0 lmd= 51	3012 3012 3012 Rpf= 3	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 9.5	537 537 537 0.1	1 1 1 0.6	2619 2619 2619 mm	18	
Sez.N. 1076 L 21x21x3 Asta: 226 Instab.:l=	7 qn= 6 28.3	9.78 2 9.78 β*I=	5 8 10 19.8	14 37 2 -4	0 0 0 0	1 0 0 0	3 2 3 cl= 3	1 3 3 ε= 0.92	0 0 0 lmd= 51	3012 3012 3012 Rpf= 7	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 8.8	537 537 537 0.0	1 1 1 0.6	2619 2619 2619 mm	12	
Sez.N. 1076 L 21x21x3 Asta: 227 Instab.:l=	6 qn= 5 28.3	9.78 2 9.78 β*I=	8 5 8 19.8	7 -33 7 -33	2 0 -2 1	-1 0 1 1	-6 6 -5 cl= 3	-13 7 -12 ε= 0.92	0 0 0 lmd= 51	3011 3011 3011 Rpf= 20	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 9.4	537 537 537 0.0	1 1 1 0.6	2618 2618 2618 mm	29	
Sez.N. 1076 L 21x21x3 Asta: 228 Instab.:l=	5 qn= 8 59.1	9.26 1 9.78 β*I=	5 5 5 41.3	1079 1079 1080 -258	2 0 -2 0	0 0 0 0	-1 -1 0 cl= 3	-7 -6 -6 ε= 0.92	0 0 0 lmd= 106	3011 3011 3011 Rpf= 22	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 8.7	537 537 537 0.1	1 1 1 1.2	2618 2618 2618 mm	54	
Sez.N. 1076 L 21x21x3 Asta: 229 Instab.:l=	8 qn= 7 59.1	9.26 1 9.78 β*I=	8 8 5 41.3	634 635 521 -162	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	-1 -1 1 ε= 0.92	0 0 0 lmd= 106	3012 3012 3012 Rpf= 14	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 8.0	537 537 537 0.1	1 1 1 1.2	2619 2619 2619 mm	28	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 1076 L 21x21x3 Asta: 230 Instab.:l=	7 qn= 6 59.1	9.26 1 9.78 β*I=	8 11 11 41.3	-78 -156 -156 -156	0 0 0 0	0 0 0 0	0 0 0 0	-1 0 0 3	-2 -1 -1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 106	5 5 5 Rpf=	640 640 640 15	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	11 8 9 8.7
Sez.N. 1076 L 21x21x3 Asta: 231 Instab.:l=	6 qn= 5 59.1	9.26 1 9.78 β*I=	5 5 5 41.3	706 707 707 -649	1 1 1 0	0 0 0 0	2 0 0 0	-1 0 0 3	-1 1 2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 106	5 5 5 Rpf=	640 640 640 53	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	38 32 32 9.5
Sez.N. 319 ANG50*5 Asta: 232 Instab.:l=	5 qn= 5 50.0	10.28 0 9.78 β*I=	5 5 5 35.0	2094 2093 2091 -711	30 17 3 5	-1 0 2 0	-5 -7 -10 0	-57 -54 -52 3	0 0 0 ε=	12568 12568 12569 0.92	127 127 127 lmd=	60 60 60 36	2940 2940 2940 Rpf=	2666 2666 2666 11	2666 2666 2666 Rft=	11 11 11 0	2617 2617 2617 Wmax/rel/lim=	43 30 23 11.1
Sez.N. 319 ANG50*5 Asta: 233 Instab.:l=	6 qn= 6 50.0	10.28 0 9.78 β*I=	8 5 5 35.0	-1768 1613 1611 -1772	-4 3 6 3	12 -4 4 5	36 -31 -29 3	9 12 15 ε=	0 0 0 0.92	12576 12570 12570 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 25	2666 2666 2666 Rft=	11 11 11 0	2619 2618 2618 Wmax/rel/lim=	37 21 25 10.1	
Sez.N. 319 ANG50*5 Asta: 234 Instab.:l=	8 qn= 8 50.0	10.28 0 9.78 β*I=	8 5 5 35.0	1305 -1187 -1189 -1189	5 -2 -10 4	11 12 15 13	27 -10 -10 3	-17 -29 -29 ε=	0 0 0 0.92	12576 12575 12575 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 35	2666 2666 2666 Rft=	11 11 11 0	2619 2619 2619 Wmax/rel/lim=	33 32 42 11.2	
Sez.N. 319 ANG50*5 Asta: 235 Instab.:l=	7 qn= 7 50.0	10.28 0 9.78 β*I=	5 5 5 35.0	-1392 -1394 -1396 -1396	-3 -9 -14 10	0 -1 -2 1	3 3 3 3	-20 -20 -20 ε=	0 0 0 0.92	12573 12573 12573 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 21	2666 2666 2666 Rft=	11 11 11 0	2618 2618 2618 Wmax/rel/lim=	14 19 24 9.9	
Sez.N. 1076 L 21x21x3 Asta: 236 Instab.:l=	5 qn= 8 28.3	10.28 2 10.28 β*I=	5 8 5 19.8	-17 -14 -17 -17	-4 0 4 3	2 0 -2 2	16 4 16 2	26 10 27 ε=	0 0 0 0.92	3006 3011 3005 lmd=	12 12 12 51	5 5 5 Rpf=	640 640 640 61	537 537 537 Rft=	1 1 1 0	2614 2618 2613 Wmax/rel/lim=	71 5 81 10.1	
Sez.N. 1076 L 21x21x3 Asta: 237 Instab.:l=	8 qn= 7 28.3	10.28 1 10.28 β*I=	5 5 5 19.8	18 18 18 -18	-2 0 2 1	2 0 -1 1	10 10 10 3	12 12 13 ε=	0 0 0 0.92	3009 3009 3009 lmd=	12 12 12 51	5 5 5 Rpf=	640 640 640 32	537 537 537 Rft=	1 1 1 0	2617 2617 2617 Wmax/rel/lim=	50 8 36 11.2	
Sez.N. 1076 L 21x21x3 Asta: 238 Instab.:l=	7 qn= 6 28.3	10.28 2 10.28 β*I=	5 8 8 19.8	-13 29 29 -13	0 0 1 0	0 0 0 0	-2 2 2 3	-2 1 1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 51	5 5 5 Rpf=	640 640 640 9	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	6 7 13 10.1	
Sez.N. 1076 L 21x21x3 Asta: 239 Instab.:l=	6 qn= 5 28.3	10.28 2 10.28 β*I=	5 5 5 19.8	-40 -40 -40 -40	0 -1 -1 1	0 0 0 0	0 -1 -1 3	-4 -3 -2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 51	5 5 5 Rpf=	640 640 640 11	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	7 9 9 11.2	
Sez.N. 1076 L 21x21x3 Asta: 240 Instab.:l=	7 qn= 8 57.4	9.78 -1 10.28 β*I=	5 5 5 40.2	-682 -681 -681 -682	0 1 2 2	0 0 0 0	-1 -1 -1 3	5 4 4 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 73	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	31 35 47 11.2	
Sez.N. 1076 L 21x21x3 Asta: 241 Instab.:l=	8 qn= 5 57.4	9.78 -1 10.28 β*I=	5 5 5 40.2	-1246 -1246 -1245 -1246	1 1 0 1	0 0 0 0	1 1 1 3	-1 -1 -1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 107	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	56 50 45 10.1	
Sez.N. 1076 L 21x21x3 Asta: 242 Instab.:l=	5 qn= 6 57.4	9.78 -1 10.28 β*I=	8 8 8 40.2	628 629 629 -462	0 0 1 0	0 0 0 0	0 0 1 3	3 2 2 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 40	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	25 25 33 9.5	
Sez.N. 1076 L 21x21x3 Asta: 243 Instab.:l=	6 qn= 7 57.4	9.78 -1 10.28 β*I=	11 11 5 40.2	123 123 7 -119	0 0 0 0	0 0 0 0	0 0 0 3	0 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 12	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	9 9 8 9.9	
Sez.N. 319 ANG50*5 Asta: 244 Instab.:l=	5 qn= 5 50.0	10.78 0 10.28 β*I=	8 5 5 35.0	586 -54 -56 -56	13 -13 -13 13	1 1 1 1	1 -2 -3 3	-31 0 2 ε=	0 0 0 0.92	12576 12575 12574 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 13	2666 2666 2666 Rft=	11 11 11 0	2619 2619 2619 Wmax/rel/lim=	15 12 13 13.0	
Sez.N. 319 ANG50*5 Asta: 245 Instab.:l=	6 qn= 6 50.0	10.78 0 10.28 β*I=	5 8 8 35.0	705 -679 -681 -681	2 -2 -5 2	-1 -4 -9 5	-18 20 20 3	-7 -13 -13 ε=	0 0 0 0.92	12575 12576 12576 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 17	2666 2666 2666 Rft=	11 11 11 0	2619 2619 2619 Wmax/rel/lim=	9 14 25 11.5	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 319 ANG50*5 Asta: 246 Instab.:l=	8 qn= 0 8 50.0	10.78 0 10.28 β*I=	5 5 5 35.0	-2211 -2212 -2214 -2214	-8 -2 3 3	-21 -12 -4 14	-34 -34 -34 cl= 3	22 22 22 ε= 0.92	0 0 0 lmd= 36	12565 12565 12565 Rpf= 46	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 13.1	2666 2666 2666 13.1	11 11 11 1.9	2617 2617 2617 1.0	58 40 26 mm	
Sez.N. 319 ANG50*5 Asta: 247 Instab.:l=	7 qn= 0 7 50.0	10.78 0 10.28 β*I=	5 8 5 35.0	-1383 -1053 -1387 -1387	12 6 -6 5	-2 1 1 1	-7 -5 -7 cl= 3	-36 -16 -36 ε= 0.92	0 0 0 lmd= 36	12571 12576 12571 Rpf= 17	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 11.3	2666 2666 2666 11.3	11 11 11 1.5	2618 2619 2618 1.0	24 14 18 mm	
Sez.N. 1076 L 21x21x3 Asta: 248 Instab.:l=	5 qn= 2 8 28.3	10.78 2 10.78 β*I=	8 5 5 19.8	-3 9 9 -3	-1 0 -1 1	0 0 1 0	-1 -2 -2 cl= 3	0 -4 -4 ε= 0.92	0 0 0 lmd= 51	3012 3012 3012 Rpf= 10	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 11.5	537 537 537 11.5	1 1 1 0.1	2619 2619 2619 0.6	9 9 18 mm	
Sez.N. 1076 L 21x21x3 Asta: 249 Instab.:l=	8 qn= 2 7 28.3	10.78 2 10.78 β*I=	5 5 8 19.8	42 42 3 -10	1 0 0 0	0 0 0 0	-1 -1 3 cl= 3	-3 -3 0 ε= 0.92	0 0 0 lmd= 51	3012 3012 3012 Rpf= 3	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 13.1	537 537 537 13.1	1 1 1 0.1	2619 2619 2619 0.6	19 12 9 mm	
Sez.N. 1076 L 21x21x3 Asta: 250 Instab.:l=	7 qn= 2 6 28.3	10.78 2 10.78 β*I=	5 8 5 19.8	-7 17 -7 -7	-1 0 1 0	0 0 -1 0	3 0 4 cl= 3	3 5 4 ε= 0.92	0 0 0 lmd= 51	3011 3012 3011 Rpf= 12	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 11.5	537 537 537 11.5	1 1 1 0.0	2619 2619 2619 0.6	14 4 15 mm	
Sez.N. 1076 L 21x21x3 Asta: 251 Instab.:l=	6 qn= 2 5 28.3	10.78 2 10.78 β*I=	8 1 8 19.8	-5 6 -5 -5	2 0 -2 1	-1 0 1 1	-5 0 -5 cl= 3	-13 -2 -12 ε= 0.92	0 0 0 lmd= 51	3011 3012 3011 Rpf= 23	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 13.1	537 537 537 13.1	1 1 1 0.0	2618 2619 2618 0.6	30 3 28 mm	
Sez.N. 1076 L 21x21x3 Asta: 252 Instab.:l=	8 qn= 1 7 57.4	10.28 1 10.78 β*I=	5 5 8 40.2	516 517 659 -168	1 1 0 0	1 0 0 0	2 2 1 cl= 3	-1 -1 -1 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 16	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 11.3	537 537 537 11.3	1 1 1 0.3	2619 2619 2619 1.1	40 28 27 mm	
Sez.N. 1076 L 21x21x3 Asta: 253 Instab.:l=	7 qn= 1 6 57.4	10.28 1 10.78 β*I=	5 5 10 40.2	24 25 137 -140	0 1 1 0	0 0 0 0	0 0 0 cl= 3	0 1 1 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 14	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 11.5	537 537 537 11.5	1 1 1 0.2	2619 2619 2619 1.1	8 9 10 mm	
Sez.N. 1076 L 21x21x3 Asta: 254 Instab.:l=	6 qn= 1 5 57.4	10.28 1 10.78 β*I=	8 8 5 40.2	-617 -617 592 -617	0 0 1 0	0 0 0 0	0 0 -1 cl= 3	0 0 2 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 49	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 13.2	537 537 537 13.2	1 1 1 0.1	2619 2619 2619 1.1	26 26 27 mm	
Sez.N. 1076 L 21x21x3 Asta: 255 Instab.:l=	5 qn= 1 8 57.4	10.28 1 10.78 β*I=	5 5 5 40.2	1193 1193 1194 -286	1 0 -2 0	0 0 0 0	0 0 0 cl= 3	-6 -6 -6 ε= 0.92	0 0 0 lmd= 103	3011 3011 3011 Rpf= 24	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 11.9	537 537 537 11.9	1 1 1 0.2	2618 2618 2618 1.1	53 47 62 mm	
Sez.N. 319 ANG50*5 Asta: 256 Instab.:l=	5 qn= 0 5 50.0	11.28 0 10.78 β*I=	5 5 5 35.0	925 923 921 -499	26 16 7 7	-4 -1 2 2	-11 -14 -16 cl= 3	-40 -38 -36 ε= 0.92	0 0 0 lmd= 36	12568 12569 12569 Rpf= 13	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 15.0	2666 2666 2666 15.0	11 11 11 2.0	2617 2617 2617 1.0	35 22 17 mm	
Sez.N. 319 ANG50*5 Asta: 257 Instab.:l=	6 qn= 0 6 50.0	11.28 0 10.78 β*I=	5 5 5 35.0	754 752 750 -609	3 3 3 1	-9 -4 1 5	-22 -19 -17 cl= 3	-4 -1 1 ε= 0.92	0 0 0 lmd= 36	12572 12572 12573 Rpf= 15	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 13.0	2666 2666 2666 13.0	11 11 11 1.5	2618 2618 2618 1.0	24 14 9 mm	
Sez.N. 319 ANG50*5 Asta: 258 Instab.:l=	8 qn= 0 8 50.0	11.28 0 10.78 β*I=	8 5 5 35.0	257 -150 -152 -152	1 -2 -7 3	10 13 19 14	20 -23 -23 cl= 3	-8 -20 -20 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 27	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 15.1	2666 2666 2666 15.1	11 11 11 2.0	2619 2619 2619 1.0	19 24 38 mm	
Sez.N. 319 ANG50*5 Asta: 259 Instab.:l=	7 qn= 0 7 50.0	11.28 0 10.78 β*I=	5 5 8 35.0	-371 -372 86 -374	-1 -5 -14 6	0 0 0 1	1 1 0 cl= 3	-16 -16 -30 ε= 0.92	0 0 0 lmd= 36	12573 12573 12576 Rpf= 9	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 12.8	2666 2666 2666 12.8	11 11 11 1.5	2618 2618 2619 1.0	4 8 12 mm	
Sez.N. 1076 L 21x21x3 Asta: 260 Instab.:l=	5 qn= 2 8 28.3	11.28 2 11.28 β*I=	5 5 5 19.8	-21 -21 -21 -21	-5 0 4 3	2 0 -2 2	14 14 14 cl= 3	30 31 31 ε= 0.92	0 0 0 lmd= 51	3005 3005 3004 Rpf= 63	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 13.0	537 537 537 13.0	1 1 1 0.1	2613 2613 2613 0.6	70 9 80 mm	
Sez.N. 1076 L 21x21x3 Asta: 261 Instab.:l=	8 qn= 2 7 28.3	11.28 2 11.28 β*I=	5 5 5 19.8	12 12 12 -1	-1 0 1 1	2 0 -1 1	11 11 11 cl= 3	8 8 8 ε= 0.92	0 0 0 lmd= 51	3010 3010 3010 Rpf= 27	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 15.1	537 537 537 15.1	1 1 1 0.1	2617 2617 2617 0.6	46 8 35 mm	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																			
VERIFICHE ASTE IN ACCIAIO 3D																			
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid kg/cmq	Rap %	
Sez.N. 1076 L 21x21x3 Asta: 262 Instab.:l=	7 qn= 2 6 28.3	11.28 2 11.28 β*I=	5 3 8 19.8	-19 -12 -1 -19	0 0 1 0	0 0 0 0	0 0 0 0	-2 -1 1 3	-2 0 4 ε= 0.92	0 0 0 lmd= 51	3012 3012 3012 Rpf= 10	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 13.0	1 1 1 0.0	2619 2619 2619 0.6	6 5 12 mm	
Sez.N. 1076 L 21x21x3 Asta: 263 Instab.:l=	6 qn= 2 5 28.3	11.28 2 11.28 β*I=	5 8 5 19.8	-63 -80 -63 -80	1 0 -1 1	0 0 0 0	0 0 0 0	-1 -1 -1 3	-9 -6 -8 ε= 0.92	0 0 0 lmd= 51	3011 3012 3011 Rpf= 15	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 15.1	1 1 1 0.0	2618 2619 2618 0.6	13 8 17 mm	
Sez.N. 1076 L 21x21x3 Asta: 264 Instab.:l=	7 qn= -1 8 57.4	10.78 -1 11.28 β*I=	5 5 5 40.2	-647 -646 -645 -647	0 1 2 2	0 0 0 0	0 0 0 0	-1 -1 -1 3	4 4 4 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 69	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 15.2	1 1 1 0.2	2619 2619 2619 1.1	30 33 44 mm	
Sez.N. 1076 L 21x21x3 Asta: 265 Instab.:l=	8 qn= -1 5 57.4	10.78 -1 11.28 β*I=	5 5 5 40.2	-1175 -1174 -1174 -1175	1 0 0 1	1 0 0 0	1 0 0 0	1 2 2 3	0 -1 -1 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 106	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 13.4	1 1 1 0.2	2619 2619 2619 1.1	56 47 46 mm	
Sez.N. 1076 L 21x21x3 Asta: 266 Instab.:l=	5 qn= -1 6 57.4	10.78 -1 11.28 β*I=	8 8 8 40.2	621 621 622 -509	0 0 1 0	0 0 0 0	0 0 0 0	0 0 0 3	2 2 2 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 44	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 13.2	1 1 1 0.1	2619 2619 2619 1.1	24 25 29 mm	
Sez.N. 1076 L 21x21x3 Asta: 267 Instab.:l=	6 qn= -1 7 57.4	10.78 -1 11.28 β*I=	11 5 5 40.2	123 -28 -27 -123	0 0 1 0	0 0 0 0	0 0 0 0	0 0 0 3	0 1 1 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 13	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 12.8	1 1 1 0.2	2619 2619 2619 1.1	11 8 9 mm	
Sez.N. 319 ANG50*5 Asta: 268 Instab.:l=	5 qn= 0 5 50.0	11.78 0 11.28 β*I=	5 5 5 35.0	-1150 -1152 -1154 -1154	-28 -22 -15 28	11 4 -2 8	29 26 24 3	22 25 27 ε= 0.92	-1 -1 -1 lmd= 36	12541 12541 12540 Rpf= 46	127 127 127 Rft= 0	60 60 60 0	2940 2940 2940 Wmax/rel/lim=	2666 2666 2666 16.9	11 11 11 2.0	2612 2612 2612 1.0	50 33 25 mm		
Sez.N. 319 ANG50*5 Asta: 269 Instab.:l=	6 qn= 0 6 50.0	11.78 0 11.28 β*I=	8 5 5 35.0	350 -216 -218 -218	3 0 4 3	3 4 10 7	24 -25 -23 3	-3 18 20 ε= 0.92	0 0 0 lmd= 36	12575 12576 12576 Rpf= 17	127 127 127 Rft= 0	60 60 60 0	2940 2940 2940 Wmax/rel/lim=	2666 2666 2666 14.3	11 11 11 1.5	2619 2619 2619 1.0	11 8 22 mm		
Sez.N. 319 ANG50*5 Asta: 270 Instab.:l=	8 qn= 0 8 50.0	11.78 0 11.28 β*I=	5 5 8 35.0	-1187 -1189 -829 -1190	1 1 1 1	-16 -12 -9 13	-17 -17 15 3	1 1 7 ε= 0.92	0 0 0 lmd= 36	12572 12572 12575 Rpf= 32	127 127 127 Rft= 0	60 60 60 0	2940 2940 2940 Wmax/rel/lim=	2666 2666 2666 17.1	11 11 11 2.0	2618 2618 2619 1.0	37 30 23 mm		
Sez.N. 319 ANG50*5 Asta: 271 Instab.:l=	7 qn= 0 7 50.0	11.78 0 11.28 β*I=	5 5 5 35.0	-433 -435 -437 -437	11 5 -2 6	-2 0 2 1	-7 -7 -7 3	-26 -26 -26 ε= 0.92	0 0 0 lmd= 36	12571 12571 12571 Rpf= 10	127 127 127 Rft= 0	60 60 60 0	2940 2940 2940 Wmax/rel/lim=	2666 2666 2666 14.3	11 11 11 1.5	2618 2618 2618 1.0	15 7 8 mm		
Sez.N. 1076 L 21x21x3 Asta: 272 Instab.:l=	5 qn= 2 8 28.3	11.78 2 11.78 β*I=	5 5 5 19.8	-151 -151 -151 -151	-12 -4 3 9	-3 -1 1 2	-13 -13 -13 3	55 55 55 ε= 0.92	0 0 0 lmd= 51	2993 2993 2993 Rpf= 122	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 14.3	1 1 1 0.3	2603 2602 2602 0.6	159 56 57 mm		
Sez.N. 1076 L 21x21x3 Asta: 273 Instab.:l=	8 qn= 2 7 28.3	11.78 2 11.78 β*I=	5 5 8 19.8	-64 -64 -34 -64	3 1 0 2	0 0 0 0	2 2 3 3	-11 -11 2 ε= 0.92	0 0 0 lmd= 51	3011 3011 3012 Rpf= 26	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 17.2	1 1 1 0.1	2618 2618 2619 0.6	34 15 11 mm		
Sez.N. 1076 L 21x21x3 Asta: 274 Instab.:l=	7 qn= 2 6 28.3	11.78 2 11.78 β*I=	5 5 5 19.8	15 15 15 -6	0 -1 -2 0	0 0 -1 0	5 6 6 3	-5 -5 -4 ε= 0.92	0 0 0 lmd= 51	3011 3011 3011 Rpf= 11	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 14.3	1 1 1 0.1	2619 2619 2619 0.6	13 16 37 mm		
Sez.N. 1076 L 21x21x3 Asta: 275 Instab.:l=	6 qn= 2 5 28.3	11.78 2 11.78 β*I=	5 5 5 19.8	33 33 33 -8	-5 5 14 2	0 1 1 1	-3 -3 -3 3	66 67 68 ε= 0.92	0 0 0 lmd= 51	2984 2983 2983 Rpf= 43	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 17.2	1 1 1 0.3	2595 2594 2594 0.6	52 56 148 mm		
Sez.N. 1076 L 21x21x3 Asta: 276 Instab.:l=	8 qn= 1 7 57.4	11.28 1 11.78 β*I=	5 5 5 40.2	572 573 573 -189	1 1 1 0	1 0 0 0	2 2 2 3	-1 -1 0 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 18	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 15.3	1 1 1 0.3	2619 2619 2619 1.1	44 33 27 mm		
Sez.N. 1076 L 21x21x3 Asta: 277 Instab.:l=	7 qn= 1 6 57.4	11.28 1 11.78 β*I=	5 10 10 40.2	69 142 142 -130	1 0 0 0	0 0 0 0	1 0 0 3	-2 1 1 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 13	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 14.3	1 1 1 0.1	2619 2619 2619 1.1	14 8 9 mm		

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																			
VERIFICHE ASTE IN ACCIAIO 3D																			
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %	
Sez.N. 1076 L 21x21x3 Asta: 278 Instab.:l=	6 qn= 5 57.4	11.28 1 11.78 β*l=	5 5 5 40.2	612 613 614 -464	-1 2 5 1	0 0 1 0	-1 -2 -3 0	9 10 12 ε=	0 0 0 0.92	lmd= 103	3009 3008 3008 Rpf= 52	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 17.3	537 537 537 17.3	1 1 1 0.4	2616 2616 2616 1.1	35 36 74 mm	
Sez.N. 1076 L 21x21x3 Asta: 279 Instab.:l=	5 qn= 8 57.4	11.28 1 11.78 β*l=	5 5 5 40.2	1175 1176 1177 -287	1 -1 0 0	0 0 0 0	-1 0 0 0	-5 -5 -5 ε=	0 0 0 0.92	lmd= 103	3012 3012 3012 Rpf= 26	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 15.5	537 537 537 15.5	1 1 1 0.2	2619 2619 2619 1.1	47 47 60 mm	
Sez.N. 319 ANG50*5 Asta: 280 Instab.:l=	6 qn= 6 49.8	12.27 0 11.78 β*l=	5 8 8 34.8	-183 425 423 -187	-1 2 2 1	-6 2 2 5	-14 0 0 0	-2 0 0 ε=	0 0 0 0.92	lmd= 35	12570 12577 12577 Rpf= 10	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 15.5	2666 2666 2666 15.5	11 11 11 1.4	2618 2619 2619 1.0	12 9 8 mm	
Sez.N. 319 ANG50*5 Asta: 281 Instab.:l=	7 qn= 7 49.8	12.27 0 11.78 β*l=	8 8 8 34.8	980 978 976 -180	6 -1 0 2	-4 -2 0 1	-8 -8 -8 0	-27 -27 -27 ε=	0 0 0 0.92	lmd= 35	12575 12575 12575 Rpf= 4	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 15.6	2666 2666 2666 15.6	11 11 11 1.4	2619 2619 2619 1.0	18 11 14 mm	
Sez.N. 319 ANG50*5 Asta: 282 Instab.:l=	8 qn= 8 49.8	12.27 0 11.78 β*l=	5 5 5 34.8	590 588 586 -714	3 1 0 6	-8 6 19 2	-54 -54 -54 0	-6 -6 -6 ε=	0 0 0 0.92	lmd= 35	12567 12567 12567 Rpf= 14	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 18.9	2666 2666 2666 18.9	11 11 11 1.8	2617 2617 2617 1.0	20 15 37 mm	
Sez.N. 319 ANG50*5 Asta: 283 Instab.:l=	5 qn= 5 49.8	12.27 0 11.78 β*l=	7 5 2 34.8	-807 24 -386 -812	-3 14 18 8	7 -5 -17 12	45 9 47 0	27 50 47 ε=	0 0 0 0.92	lmd= 35	12574 12558 12573 Rpf= 35	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 18.9	2666 2666 2666 18.9	11 11 11 1.9	2618 2615 2618 1.0	20 20 45 mm	
Sez.N. 1078 Piatto 120 Asta: 284 Instab.:l=	8 qn= 5 28.3	12.27 -20 12.27 β*l=	5 8 5 19.8	-19 -42 -19 -19	-20 -2 18 15	-1 3 -1 1	9 81 9 0	136 27 129 ε=	3 0 3 0.92	lmd= 42	50286 50286 50286 Rpf= 7	201 201 201 Rft= 0	1509 1509 1509 Wmax/rel/lim=	29033 29033 29033 15.6	29033 29033 29033 15.6	232 232 232 0.0	2619 2619 2619 0.6	10 1 9 mm	
Sez.N. 1078 Piatto 120 Asta: 285 Instab.:l=	5 qn= 6 28.3	12.27 -20 12.27 β*l=	5 15 5 19.8	81 44 81 0	6 2 -5 0	-1 0 2 0	-7 -4 -15 0	-36 0 -43 ε=	2 0 2 0.92	lmd= 0	50286 50286 50286 Rpf= 0	201 134 201 Rft= 0	1509 1006 1509 Wmax/rel/lim=	29033 19356 29033 19.0	29033 19356 29033 19.0	232 140 232 0.0	2619 2619 2619 0.6	3 1 3 mm	
Sez.N. 1078 Piatto 120 Asta: 286 Instab.:l=	6 qn= 7 28.3	12.27 -20 12.27 β*l=	5 8 5 19.8	-128 19 -128 -128	6 -2 -4 4	1 5 -2 1	14 85 14 0	-30 0 -37 ε=	0 2 0 0.92	lmd= 42	50286 50286 50286 Rpf= 3	201 201 201 Rft= 0	1509 1509 1509 Wmax/rel/lim=	29033 29033 29033 15.6	29033 29033 29033 15.6	232 232 232 0.0	2619 2619 2619 0.6	3 1 2 mm	
Sez.N. 1078 Piatto 120 Asta: 287 Instab.:l=	7 qn= 8 28.3	12.27 -20 12.27 β*l=	5 5 5 19.8	5 5 5 -3	-9 2 13 3	-2 0 2 1	-14 -14 -14 0	78 75 71 ε=	4 4 4 0.92	lmd= 42	50286 50286 50286 Rpf= 2	201 201 201 Rft= 0	1509 1509 1509 Wmax/rel/lim=	29033 29033 29033 19.0	29033 29033 29033 19.0	232 232 232 0.0	2619 2619 2619 0.6	4 1 6 mm	
Sez.N. 1076 L 21x21x3 Asta: 288 Instab.:l=	7 qn= 8 57.2	11.78 -1 12.27 β*l=	8 5 5 40.1	-512 -459 -459 -460	0 0 1 1	0 0 0 0	0 0 0 0	0 1 1 ε=	0 0 0 0.92	lmd= 103	3012 3012 3012 Rpf= 40	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 19.1	537 537 537 19.1	1 1 1 0.1	2619 2619 2619 1.1	20 20 21 mm	
Sez.N. 1076 L 21x21x3 Asta: 289 Instab.:l=	6 qn= 7 57.2	11.78 -1 12.27 β*l=	5 5 8 40.1	-11 -10 -28 -11	1 1 0 1	-1 0 0 0	-1 -1 0 0	-2 -2 -1 ε=	0 0 0 0.92	lmd= 103	3012 3012 3012 Rpf= 16	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 15.6	537 537 537 15.6	1 1 1 0.2	2619 2619 2619 1.1	20 8 6 mm	
Sez.N. 1076 L 21x21x3 Asta: 290 Instab.:l=	5 qn= 6 57.2	11.78 -1 12.27 β*l=	5 5 5 40.1	-592 -590 -590 -592	-4 1 1 3	0 0 0 0	2 0 0 0	10 7 7 ε=	0 0 0 0.92	lmd= 103	3010 3010 3010 Rpf= 71	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 17.3	537 537 537 17.3	1 1 1 0.2	2617 2618 2618 1.1	55 33 35 mm	
Sez.N. 1076 L 21x21x3 Asta: 291 Instab.:l=	8 qn= 5 57.2	11.78 -1 12.27 β*l=	5 5 5 40.1	-823 -822 -822 -823	1 0 -1 1	0 0 0 0	1 1 1 0	-3 -4 -4 ε=	0 0 0 0.92	lmd= 103	3011 3011 3011 Rpf= 72	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 16.8	537 537 537 16.8	1 1 1 0.1	2619 2619 2619 1.1	44 32 36 mm	
Sez.N. 319 ANG50*5 Asta: 292 Instab.:l=	7 qn= 7 51.8	12.79 0 12.27 β*l=	8 8 5 36.3	919 917 335 -164	9 5 3 2	-1 0 5 1	-5 -5 -11 0	-16 -16 -9 ε=	0 0 0 0.92	lmd= 37	12576 12576 12575 Rpf= 4	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 16.7	2666 2666 2666 16.7	11 11 11 1.3	2619 2619 2619 1.0	16 11 13 mm	
Sez.N. 319 ANG50*5 Asta: 293 Instab.:l=	8 qn= 8 51.8	12.79 0 12.27 β*l=	5 8 8 36.3	-165 -1366 -1367 -1367	4 -2 -6 5	-14 -2 -1 3	-37 -5 -7 0	-15 -17 -14 ε=	0 0 0 0.92	lmd= 37	12572 12576 12576 Rpf= 21	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 20.8	2666 2666 2666 20.8	11 11 11 1.8	2618 2619 2619 1.0	29 17 17 mm	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxpRd Kg	VypRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 319 ANG50*5 Asta: 294 Instab.:l=	5 qn= 5 51.8	12.79 0 12.27 β*l=		5 5 5 36.3	-1434 -1435 -1437 -1437	-4 -10 -14 12	-7 0 8 6	-27 -30 -32 cl= 3	-21 -19 -16 ε= 0.92	0 0 0 lmd= 37	12572 12572 12571 Rpf= 32	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 20.7	2666 2666 2666 20.7	11 11 11 1.8	2618 2618 2618 1.0	27 19 36 mm
Sez.N. 319 ANG50*5 Asta: 295 Instab.:l=	6 qn= 6 51.8	12.79 0 12.27 β*l=		8 5 5 36.3	916 -1006 -1008 -1008	-3 -2 -2 2	4 6 6 6	18 -4 -2 cl= 3	7 0 2 ε= 0.92	0 0 0 lmd= 37	12576 12576 12576 Rpf= 21	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 16.6	2666 2666 2666 16.6	11 11 11 1.4	2619 2619 2619 1.0	17 19 20 mm
Sez.N. 1076 L 21x21x3 Asta: 296 Instab.:l=	5 qn= 8 28.3	12.79 2 12.79 β*l=		8 8 8 19.8	29 29 29 -19	-2 -1 1 1	-1 0 0 0	-3 -4 -4 cl= 3	9 10 11 ε= 0.92	0 0 0 lmd= 51	3011 3011 3011 Rpf= 13	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 16.7	537 537 537 16.7	1 1 1 0.0	2618 2618 2618 0.6	29 8 17 mm
Sez.N. 1076 L 21x21x3 Asta: 297 Instab.:l=	8 qn= 7 28.3	12.79 2 12.79 β*l=		8 5 8 19.8	-40 -2 -40 -40	1 0 -1 1	0 0 0 0	3 1 3 cl= 3	-9 -5 -9 ε= 0.92	0 0 0 lmd= 51	3011 3012 3011 Rpf= 16	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 20.9	537 537 537 20.9	1 1 1 0.0	2619 2619 2619 0.6	21 6 19 mm
Sez.N. 1076 L 21x21x3 Asta: 298 Instab.:l=	7 qn= 6 28.3	12.79 2 12.79 β*l=		5 5 5 19.8	16 16 16 -5	-1 0 1 1	1 0 -1 0	6 6 6 cl= 3	8 8 8 ε= 0.92	0 0 0 lmd= 51	3011 3011 3011 Rpf= 15	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 16.7	537 537 537 16.7	1 1 1 0.0	2618 2618 2618 0.6	25 5 28 mm
Sez.N. 1076 L 21x21x3 Asta: 299 Instab.:l=	6 qn= 5 28.3	12.79 2 12.79 β*l=		5 5 5 19.8	-5 -5 -5 -5	-1 0 2 1	1 0 -1 1	6 6 5 cl= 3	9 9 10 ε= 0.92	0 0 0 lmd= 51	3011 3011 3011 Rpf= 27	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 20.8	537 537 537 20.8	1 1 1 0.1	2618 2618 2618 0.6	29 8 25 mm
Sez.N. 1076 L 21x21x3 Asta: 300 Instab.:l=	5 qn= 8 59.1	12.27 2 12.79 β*l=		5 5 5 41.3	713 714 715 -196	1 0 -1 0	0 0 0 0	-1 0 0 cl= 3	-3 -3 -2 ε= 0.92	0 0 0 lmd= 106	3012 3012 3012 Rpf= 17	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 18.8	537 537 537 18.8	1 1 1 0.1	2619 2619 2619 1.2	31 28 36 mm
Sez.N. 1076 L 21x21x3 Asta: 301 Instab.:l=	8 qn= 7 59.1	12.27 1 12.79 β*l=		5 5 5 41.3	482 483 484 -135	0 0 1 0	0 0 0 0	0 0 0 cl= 3	1 1 1 ε= 0.92	0 0 0 lmd= 106	3012 3012 3012 Rpf= 12	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 19.2	537 537 537 19.2	1 1 1 0.2	2619 2619 2619 1.2	21 23 24 mm
Sez.N. 1076 L 21x21x3 Asta: 302 Instab.:l=	7 qn= 6 59.1	12.27 1 12.79 β*l=		5 5 5 41.3	270 271 272 -125	0 1 1 0	0 0 0 0	0 0 0 cl= 3	1 1 2 ε= 0.92	0 0 0 lmd= 106	3012 3012 3012 Rpf= 12	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 16.6	537 537 537 16.6	1 1 1 0.1	2619 2619 2619 1.2	11 15 19 mm
Sez.N. 1076 L 21x21x3 Asta: 303 Instab.:l=	6 qn= 5 59.1	12.27 1 12.79 β*l=		5 5 5 41.3	411 411 412 -359	1 0 0 0	0 0 0 0	1 0 -2 cl= 3	-2 -2 0 ε= 0.92	0 0 0 lmd= 106	3012 3012 3012 Rpf= 30	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 21.0	537 537 537 21.0	1 1 1 0.1	2619 2619 2619 1.2	22 19 21 mm
Sez.N. 319 ANG50*5 Asta: 304 Instab.:l=	5 qn= 5 50.0	13.29 0 12.79 β*l=		8 8 8 35.0	-1579 -1580 -1582 -1582	-18 -13 -7 17	16 5 -6 12	41 44 47 cl= 3	20 23 25 ε= 0.92	0 0 0 lmd= 36	12568 12568 12568 Rpf= 47	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 22.2	2666 2666 2666 22.2	11 11 11 1.5	2617 2617 2617 1.0	53 31 29 mm
Sez.N. 319 ANG50*5 Asta: 305 Instab.:l=	6 qn= 6 50.0	13.29 0 12.79 β*l=		8 5 8 35.0	1044 -488 1040 -490	16 -2 -5 2	-2 -6 2 7	-7 -9 -7 cl= 3	-43 0 -43 ε= 0.92	0 0 0 lmd= 36	12564 12576 12564 Rpf= 17	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 17.7	2666 2666 2666 17.7	11 11 11 1.2	2616 2619 2616 1.0	24 15 16 mm
Sez.N. 319 ANG50*5 Asta: 306 Instab.:l=	8 qn= 8 50.0	13.29 0 12.79 β*l=		5 5 5 35.0	1102 1100 1098 -1192	6 4 2 2	3 6 10 1	-14 -14 -14 cl= 3	-8 -8 -8 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 14	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 22.4	2666 2666 2666 22.4	11 11 11 1.6	2619 2619 2619 1.0	18 23 27 mm
Sez.N. 319 ANG50*5 Asta: 307 Instab.:l=	7 qn= 7 50.0	13.29 0 12.79 β*l=		8 5 5 35.0	1242 1160 1158 -226	-2 -4 -8 2	-1 0 1 0	-1 -3 -3 cl= 3	10 -16 -16 ε= 0.92	0 0 0 lmd= 36	12576 12573 12573 Rpf= 4	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 17.6	2666 2666 2666 17.6	11 11 11 1.2	2619 2618 2618 1.0	13 13 17 mm
Sez.N. 1076 L 21x21x3 Asta: 308 Instab.:l=	5 qn= 8 28.3	13.29 2 13.29 β*l=		5 5 5 19.8	-34 -34 -34 -34	-14 -4 6 10	-2 -1 -1 1	-4 -4 -4 cl= 3	68 69 69 ε= 0.92	0 0 0 lmd= 51	2978 2978 2978 Rpf= 118	11 11 11 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 17.8	537 537 537 17.8	1 1 1 0.3	2590 2590 2589 0.6	154 58 60 mm
Sez.N. 1076 L 21x21x3 Asta: 309 Instab.:l=	8 qn= 7 28.3	13.29 2 13.29 β*l=		8 5 8 19.8	47 -28 47 -28	4 1 -3 1	1 0 -1 1	8 11 8 cl= 3	-25 -1 -25 ε= 0.92	0 0 0 lmd= 51	3009 3011 3009 Rpf= 39	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 22.5	537 537 537 22.5	1 1 1 0.1	2616 2618 2616 0.6	54 18 53 mm

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 1076 L 21x21x3 Asta: 310 Instab.:l=	7 qn= 6 28.3	13.29 2 13.29 β*l=	8 8 8 19.8	-1 -1 -1 -1	-4 2 8 6	-1 1 2 2	-12 12 -12 2	42 42 43 3	0 0 0 ε=	0 0 0 0.92	3002 3002 3002 lmd=	12 12 12 51	5 5 5 Rpf=	640 640 640 86	537 537 537 Rft=	1 1 1 0	2611 2611 2610 Wmax/rel/lim=	53 31 115 0.6
Sez.N. 1076 L 21x21x3 Asta: 311 Instab.:l=	6 qn= 5 28.3	13.29 2 13.29 β*l=	8 5 5 19.8	-202 110 110 -202	-10 5 12 8	-2 1 2 2	-15 -11 -12 2	76 55 56 3	0 0 0 ε=	0 0 0 0.92	2980 2994 2994 lmd=	12 12 12 51	5 5 5 Rpf=	640 640 640 117	537 537 537 Rft=	1 1 1 0	2591 2603 2603 Wmax/rel/lim=	142 57 157 0.6
Sez.N. 1076 L 21x21x3 Asta: 312 Instab.:l=	7 qn= 8 57.4	12.79 -1 13.29 β*l=	5 5 5 40.2	-465 -464 -464 -465	1 1 0 1	0 0 0 0	-1 -1 -1 3	0 -1 -1 ε=	0 0 0 0.92	0 0 0 lmd=	3012 3012 3012 103	12 12 12 Rpf=	5 5 5 45	640 640 640 Rft=	537 537 537 0	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	28 20 24 1.1
Sez.N. 1076 L 21x21x3 Asta: 313 Instab.:l=	8 qn= 5 57.4	12.79 -1 13.29 β*l=	5 5 5 40.2	-722 -721 -720 -722	-2 1 5 3	1 0 -1 1	3 3 3 3	12 11 11 ε=	0 0 0 0.92	0 0 0 lmd=	3008 3008 3008 103	12 12 12 Rpf=	5 5 5 108	640 640 640 Rft=	537 537 537 0	1 1 1 0	2616 2616 2616 Wmax/rel/lim=	54 40 86 1.1
Sez.N. 1076 L 21x21x3 Asta: 314 Instab.:l=	5 qn= 6 57.4	12.79 -1 13.29 β*l=	5 5 5 40.2	-586 -585 -584 -586	1 0 -1 1	0 0 0 0	1 0 -1 3	-2 -4 -5 ε=	0 0 0 0.92	0 0 0 lmd=	3012 3012 3012 103	12 12 12 Rpf=	5 5 5 52	640 640 640 Rft=	537 537 537 0	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	26 23 33 1.1
Sez.N. 1076 L 21x21x3 Asta: 315 Instab.:l=	6 qn= 7 57.4	12.79 -1 13.29 β*l=	5 5 5 40.2	-312 -314 -315 -315	0 1 0 1	-1 0 0 1	-4 -1 2 3	3 0 -3 ε=	0 0 0 0.92	0 0 0 lmd=	3012 3012 3012 103	12 12 12 Rpf=	5 5 5 40	640 640 640 Rft=	537 537 537 0	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	26 18 19 1.1
Sez.N. 319 ANG50*5 Asta: 316 Instab.:l=	5 qn= 5 50.0	13.79 0 13.29 β*l=	8 5 2 35.0	-1528 -1404 -296 -1084	-11 -3 17 12	0 -4 -15 7	11 12 39 3	52 21 41 ε=	0 0 0 0.92	0 0 0 lmd=	12563 12564 12574 36	127 127 127 Rpf=	60 60 60 31	2940 2940 2940 Rft=	2666 2666 2666 0	11 11 11 0	2616 2616 2619 Wmax/rel/lim=	22 20 40 1.0
Sez.N. 319 ANG50*5 Asta: 317 Instab.:l=	6 qn= 6 50.0	13.79 0 13.29 β*l=	5 5 8 35.0	-1305 -1307 1170 -1309	-4 -3 18 4	5 7 3 9	-11 -9 -5 3	3 6 55 ε=	0 0 0 0.92	0 0 0 lmd=	12574 12574 12563 36	127 127 127 Rpf=	60 60 60 30	2940 2940 2940 Rft=	2666 2666 2666 0	11 11 11 0	2618 2619 2616 Wmax/rel/lim=	22 25 29 1.0
Sez.N. 319 ANG50*5 Asta: 318 Instab.:l=	8 qn= 8 50.0	13.79 0 13.29 β*l=	5 5 5 35.0	371 370 368 -1266	1 2 3 5	-6 -7 -8 1	5 5 5 3	4 4 4 ε=	0 0 0 0.92	0 0 0 lmd=	12570 12570 12570 36	127 127 127 Rpf=	60 60 60 17	2940 2940 2940 Rft=	2666 2666 2666 0	11 11 11 0	2618 2618 2618 Wmax/rel/lim=	13 16 19 1.0
Sez.N. 319 ANG50*5 Asta: 319 Instab.:l=	7 qn= 7 50.0	13.79 0 13.29 β*l=	8 8 5 35.0	1152 1150 503 -146	4 3 13 2	-1 -1 1 0	1 1 -2 3	-1 -1 13 ε=	0 0 0 0.92	0 0 0 lmd=	12576 12576 12576 36	127 127 127 Rpf=	60 60 60 3	2940 2940 2940 Rft=	2666 2666 2666 0	11 11 11 0	2619 2619 2619 Wmax/rel/lim=	13 13 15 1.0
Sez.N. 1076 L 21x21x3 Asta: 320 Instab.:l=	5 qn= 8 28.3	13.79 2 13.79 β*l=	8 14 8 19.8	40 -2 40 -13	-1 1 1 1	0 0 0 0	-2 0 -3 3	7 -3 9 ε=	0 0 0 0.92	0 0 0 lmd=	3012 3012 3011 51	12 12 12 Rpf=	5 5 5 10	640 640 640 Rft=	537 537 537 0	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	18 6 18 0.6
Sez.N. 1076 L 21x21x3 Asta: 321 Instab.:l=	8 qn= 7 28.3	13.79 2 13.79 β*l=	8 4 8 19.8	-42 -3 -42 -42	2 0 -2 1	0 0 0 0	3 0 3 3	-13 -2 -13 ε=	0 0 0 0.92	0 0 0 lmd=	3011 3012 3011 51	12 12 12 Rpf=	5 5 5 20	640 640 640 Rft=	537 537 537 0	1 1 1 0	2618 2619 2618 Wmax/rel/lim=	26 4 25 0.6
Sez.N. 1076 L 21x21x3 Asta: 322 Instab.:l=	7 qn= 6 28.3	13.79 2 13.79 β*l=	5 8 5 19.8	14 1 14 -6	-2 0 2 0	1 0 -1 0	7 -4 8 3	13 17 13 ε=	0 0 0 0.92	0 0 0 lmd=	3010 3010 3010 51	12 12 12 Rpf=	5 5 5 8	640 640 640 Rft=	537 537 537 0	1 1 1 0	2617 2618 2617 Wmax/rel/lim=	33 4 40 0.6
Sez.N. 1076 L 21x21x3 Asta: 323 Instab.:l=	6 qn= 5 28.3	13.79 2 13.79 β*l=	5 8 5 19.8	25 52 25 0	-1 0 1 0	1 0 -1 0	8 2 7 3	7 -3 8 ε=	0 0 0 0.92	0 0 0 lmd=	3011 3012 3011 0	12 12 12 Rpf=	5 5 5 0	640 640 640 Rft=	537 537 537 0	1 1 1 0	2618 2619 2618 Wmax/rel/lim=	34 6 28 0.6
Sez.N. 1076 L 21x21x3 Asta: 324 Instab.:l=	8 qn= 7 57.4	13.29 1 13.79 β*l=	5 5 5 40.2	425 426 426 -122	1 1 0 0	1 0 0 0	2 2 2 3	-2 -2 -2 ε=	0 0 0 0.92	0 0 0 lmd=	3012 3012 3012 103	12 12 12 Rpf=	5 5 5 14	640 640 640 Rft=	537 537 537 0	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	40 26 19 1.1
Sez.N. 1076 L 21x21x3 Asta: 325 Instab.:l=	7 qn= 6 57.4	13.29 1 13.79 β*l=	5 5 5 40.2	457 458 459 -101	0 1 1 0	0 0 0 0	0 0 1 3	2 2 2 ε=	0 0 0 0.92	0 0 0 lmd=	3012 3012 3012 103	12 12 12 Rpf=	5 5 5 9	640 640 640 Rft=	537 537 537 0	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	18 23 30 1.1

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid kg/cmq	Rap %
Sez.N. 1076 L 21x21x3 Asta: 326 Instab.:l=	6 qn= 5 57.4	13.29 1 13.79 β*I=	5 5 5 40.2	368 368 369 -68	1 1 0 0	0 0 0 0	0 0 0 0	1 0 -2 3	-4 -3 -1 ε=	0 0 0 0.92	3011 3011 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 8	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	25 20 18 24.1
Sez.N. 1076 L 21x21x3 Asta: 327 Instab.:l=	5 qn= 8 57.4	13.29 1 13.79 β*I=	5 5 5 40.2	385 386 386 -87	-2 -1 1 1	0 0 0 0	-2 -1 0 0	4 5 5 3	0 0 0 ε=	0 0 0 0.92	3011 3011 3011 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 23	537 537 537 Rft=	1 1 1 0	2618 2618 2618 Wmax/rel/lim=	38 20 25 21.3
Sez.N. 319 ANG50*5 Asta: 328 Instab.:l=	5 qn= 5 50.0	14.29 0 13.79 β*I=	8 8 8 35.0	-1412 -1414 -1416 -1416	3 -3 -8 6	-3 -1 1 2	-10 -7 -5 3	-25 -23 -20 ε=	0 0 0 0.92	12563 12564 12565 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 21	2666 2666 2666 Rft=	11 11 11 0	2616 2616 2617 Wmax/rel/lim=	19 15 19 25.1	
Sez.N. 319 ANG50*5 Asta: 329 Instab.:l=	6 qn= 6 50.0	14.29 0 13.79 β*I=	8 5 8 35.0	1176 -463 1172 -465	14 -1 -11 4	-5 -5 2 7	-14 11 -14 3	-51 -16 -51 ε=	0 0 0 0.92	12564 12574 12564 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 19	2666 2666 2666 Rft=	11 11 11 0	2616 2618 2616 Wmax/rel/lim=	28 14 22 18.9	
Sez.N. 319 ANG50*5 Asta: 330 Instab.:l=	8 qn= 8 50.0	14.29 0 13.79 β*I=	8 5 5 35.0	-1230 1004 1002 -1233	-3 1 1 3	-3 5 7 3	-2 -7 -7 3	1 0 0 ε=	0 0 0 0.92	12576 12576 12576 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 17	2666 2666 2666 Rft=	11 11 11 0	2619 2619 2619 Wmax/rel/lim=	17 18 21 25.1	
Sez.N. 319 ANG50*5 Asta: 331 Instab.:l=	7 qn= 7 50.0	14.29 0 13.79 β*I=	5 5 5 35.0	1196 1194 1192 -212	-6 -6 -7 1	0 1 2 0	-4 -4 -4 3	-1 -1 -1 ε=	0 0 0 0.92	12576 12576 12576 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 3	2666 2666 2666 Rft=	11 11 11 0	2619 2619 2619 Wmax/rel/lim=	15 16 17 18.8	
Sez.N. 1076 L 21x21x3 Asta: 332 Instab.:l=	5 qn= 8 28.3	14.29 2 14.29 β*I=	8 8 8 19.8	-10 -10 -10 -10	-9 -3 4 7	-3 -1 2 2	-16 -17 -17 3	44 45 46 ε=	0 0 0 0.92	3000 2999 2999 lmd=	12 12 12 51	5 5 5 Rpf=	640 640 640 100	537 537 537 Rft=	1 1 1 0	2609 2608 2608 Wmax/rel/lim=	134 36 65 19.0	
Sez.N. 1076 L 21x21x3 Asta: 333 Instab.:l=	8 qn= 7 28.3	14.29 2 14.29 β*I=	8 9 8 19.8	56 0 56 -11	4 0 -4 1	1 0 -1 1	5 3 5 3	-30 0 -30 ε=	0 0 0 0.92	3006 3012 3007 lmd=	12 12 12 51	5 5 5 Rpf=	640 640 640 27	537 537 537 Rft=	1 1 1 0	2614 2619 2614 Wmax/rel/lim=	52 9 52 25.2	
Sez.N. 1076 L 21x21x3 Asta: 334 Instab.:l=	7 qn= 6 28.3	14.29 2 14.29 β*I=	8 8 8 19.8	10 10 10 -129	-4 2 8 0	-1 1 2 0	-13 -12 -12 3	43 43 43 ε=	0 0 0 0.92	3001 3001 3001 lmd=	12 12 12 51	5 5 5 Rpf=	640 640 640 10	537 537 537 Rft=	1 1 1 0	2610 2610 2610 Wmax/rel/lim=	56 31 116 19.0	
Sez.N. 1076 L 21x21x3 Asta: 335 Instab.:l=	6 qn= 5 28.3	14.29 2 14.29 β*I=	8 8 8 19.8	-85 -85 -85 -85	-10 0 10 8	-3 0 3 2	-23 -23 -23 3	69 69 70 ε=	0 0 0 0.92	2984 2984 2984 lmd=	12 12 12 51	5 5 5 Rpf=	640 640 640 116	537 537 537 Rft=	1 1 1 0	2595 2595 2594 Wmax/rel/lim=	146 7 154 25.2	
Sez.N. 1076 L 21x21x3 Asta: 336 Instab.:l=	7 qn= 8 57.4	13.79 -1 14.29 β*I=	5 5 5 40.2	-378 -377 -376 -378	0 1 1 1	0 0 0 0	-1 0 0 3	1 1 1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 37	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	20 19 21 25.3	
Sez.N. 1076 L 21x21x3 Asta: 337 Instab.:l=	8 qn= 5 57.4	13.79 -1 14.29 β*I=	8 5 8 40.2	-71 -337 -70 -338	-1 0 2 0	0 0 -1 0	3 1 1 3	7 -1 4 ε=	0 0 0 0.92	3011 3012 3011 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 31	537 537 537 Rft=	1 1 1 0	2618 2619 2618 Wmax/rel/lim=	20 13 27 22.2	
Sez.N. 1076 L 21x21x3 Asta: 338 Instab.:l=	5 qn= 6 57.4	13.79 -1 14.29 β*I=	5 5 5 40.2	-374 -374 -373 -374	1 0 -1 1	0 0 0 0	1 0 -1 3	-1 -2 -4 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 35	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	19 18 22 24.1	
Sez.N. 1076 L 21x21x3 Asta: 339 Instab.:l=	6 qn= 7 57.4	13.79 -1 14.29 β*I=	5 5 5 40.2	-500 -499 -498 -500	0 0 0 0	-1 0 0 0	-1 -1 -1 3	0 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 49	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	31 25 21 18.8	
Sez.N. 319 ANG50*5 Asta: 340 Instab.:l=	5 qn= 5 50.0	14.79 0 14.29 β*I=	8 8 8 35.0	-1289 -1291 -1293 -1293	-29 -11 7 22	10 8 4 10	10 13 15 3	71 73 76 ε=	0 0 0 0.92	12547 12546 12545 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 45	2666 2666 2666 Rft=	11 11 11 0	2613 2613 2612 Wmax/rel/lim=	51 32 23 26.2	
Sez.N. 319 ANG50*5 Asta: 341 Instab.:l=	6 qn= 6 50.0	14.79 0 14.29 β*I=	5 5 8 35.0	-1070 -1072 1045 -1074	-7 -2 16 5	6 7 5 8	-7 -4 -8 3	17 20 33 ε=	0 0 0 0.92	12576 12576 12563 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 27	2666 2666 2666 Rft=	11 11 11 0	2619 2619 2616 Wmax/rel/lim=	24 22 29 19.4	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 319 ANG50*5 Asta: 342 Instab.:l=	8 qn= 0 8 50.0	14.79 0 14.29 β*l=	5 5 8 35.0	306 305 -835 -835	8 4 -6 5	-2 -5 3 3	11 11 -11 3	-15 -15 -17 ε=	0 0 0 0.92	12575 12575 12576 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 15	2666 2666 2666 0	Wmax/rel/lim= 26.2	11 11 11 1.1	2619 2619 2619 1.0	13 14 17 mm
Sez.N. 319 ANG50*5 Asta: 343 Instab.:l=	7 qn= 0 7 50.0	14.79 0 14.29 β*l=	8 5 5 35.0	1092 126 124 -143	3 12 15 2	0 1 2 0	2 -4 -4 cl=	-5 14 14 ε=	0 0 0 0.92	12576 12574 12574 lmd=	127 127 127 36	60 60 60 Rpf=	2940 2940 2940 3	2666 2666 2666 0	Wmax/rel/lim= 19.3	11 11 11 0.7	2619 2618 2618 1.0	12 12 16 mm
Sez.N. 1076 L 21x21x3 Asta: 344 Instab.:l=	5 qn= 2 8 28.3	14.79 0 14.79 β*l=	5 5 5 19.8	-159 -159 -159 -159	-12 -4 4 9	-3 -1 1 2	-15 -15 -15 cl=	56 56 56 ε=	0 0 0 0.92	2990 2990 2990 lmd=	12 12 12 51	5 5 5 Rpf=	640 640 640 126	537 537 537 0	Wmax/rel/lim= 19.1	1 1 1 0.3	2600 2600 2600 0.6	164 55 64 mm
Sez.N. 1076 L 21x21x3 Asta: 345 Instab.:l=	8 qn= 2 7 28.3	14.79 0 14.79 β*l=	5 5 8 19.8	-92 -92 -50 -92	2 1 0 1	1 0 0 0	3 3 1 cl=	-8 -8 -10 ε=	0 0 0 0.92	3011 3011 3011 lmd=	12 12 12 51	5 5 5 Rpf=	640 640 640 24	537 537 537 0	Wmax/rel/lim= 26.4	1 1 1 0.0	2618 2618 2619 0.6	31 12 15 mm
Sez.N. 1076 L 21x21x3 Asta: 346 Instab.:l=	7 qn= 2 6 28.3	14.79 0 14.79 β*l=	5 5 5 19.8	-25 -25 -25 -25	-2 -1 0 2	1 0 -2 2	12 12 13 cl=	8 9 9 ε=	0 0 0 0.92	3010 3010 3010 lmd=	12 12 12 51	5 5 5 Rpf=	640 640 640 47	537 537 537 0	Wmax/rel/lim= 19.1	1 1 1 0.1	2618 2618 2618 0.6	45 18 43 mm
Sez.N. 1076 L 21x21x3 Asta: 347 Instab.:l=	6 qn= 2 5 28.3	14.79 0 14.79 β*l=	5 5 5 19.8	53 53 53 -21	-5 4 14 3	1 1 1 2	0 -1 -1 cl=	67 68 69 ε=	0 0 0 0.92	2981 2981 2980 lmd=	12 12 12 51	5 5 5 Rpf=	640 640 640 61	537 537 537 0	Wmax/rel/lim= 26.4	1 1 1 0.3	2593 2592 2591 0.6	65 60 147 mm
Sez.N. 1076 L 21x21x3 Asta: 348 Instab.:l=	8 qn= 1 7 57.4	14.29 0 14.79 β*l=	5 5 5 40.2	433 434 435 -299	1 1 1 0	1 0 0 0	1 1 1 cl=	-1 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 24	537 537 537 0	Wmax/rel/lim= 25.3	1 1 1 0.2	2619 2619 2619 1.1	30 25 19 mm
Sez.N. 1076 L 21x21x3 Asta: 349 Instab.:l=	7 qn= 1 6 57.4	14.29 0 14.79 β*l=	5 5 5 40.2	744 745 745 -108	1 1 1 0	0 0 0 0	1 1 1 cl=	0 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 9	537 537 537 0	Wmax/rel/lim= 19.1	1 1 1 0.1	2619 2619 2619 1.1	36 32 37 mm
Sez.N. 1076 L 21x21x3 Asta: 350 Instab.:l=	6 qn= 1 5 57.4	14.29 0 14.79 β*l=	8 5 5 40.2	131 386 387 -55	-2 1 5 0	0 0 1 0	-1 -2 -3 cl=	8 10 11 ε=	0 0 0 0.92	3010 3008 3008 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 14	537 537 537 0	Wmax/rel/lim= 26.6	1 1 1 0.3	2618 2616 2616 1.1	32 26 68 mm
Sez.N. 1076 L 21x21x3 Asta: 351 Instab.:l=	5 qn= 1 8 57.4	14.29 0 14.79 β*l=	8 8 8 40.2	-150 -149 -149 -150	-3 -1 2 2	-1 0 1 1	-2 -3 -4 cl=	6 8 9 ε=	0 0 0 0.92	3011 3011 3010 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 41	537 537 537 0	Wmax/rel/lim= 23.4	1 1 1 0.3	2618 2618 2618 1.1	45 16 32 mm
Sez.N. 319 ANG50*5 Asta: 352 Instab.:l=	6 qn= 0 6 49.8	15.29 0 14.79 β*l=	8 8 5 34.8	907 905 82 -35	-13 -6 -4 6	-9 -2 -13 0	-29 -29 35 cl=	28 28 -7 ε=	0 0 0 0.92	12576 12576 12566 lmd=	127 127 127 35	60 60 60 Rpf=	2940 2940 2940 5	2666 2666 2666 0	Wmax/rel/lim= 20.1	11 11 11 0.7	2619 2619 2617 1.0	33 16 25 mm
Sez.N. 319 ANG50*5 Asta: 353 Instab.:l=	7 qn= 0 7 49.8	15.29 0 14.79 β*l=	5 5 8 34.8	736 734 573 -176	-25 -13 15 1	-7 -2 -1 0	-18 -18 8 cl=	45 45 71 ε=	0 0 0 0.92	12573 12573 12572 lmd=	127 127 127 35	60 60 60 Rpf=	2940 2940 2940 3	2666 2666 2666 0	Wmax/rel/lim= 19.9	11 11 11 0.7	2618 2618 2618 1.0	37 20 18 mm
Sez.N. 319 ANG50*5 Asta: 354 Instab.:l=	8 qn= 0 8 49.8	15.29 0 14.79 β*l=	5 8 8 34.8	413 -941 -943 -943	-18 -5 2 6	7 -2 -2 2	15 0 -4 cl=	51 20 24 ε=	0 0 0 0.92	12568 12576 12576 lmd=	127 127 127 35	60 60 60 Rpf=	2940 2940 2940 17	2666 2666 2666 0	Wmax/rel/lim= 27.1	11 11 11 0.9	2617 2619 2619 1.0	29 15 12 mm
Sez.N. 319 ANG50*5 Asta: 355 Instab.:l=	5 qn= 0 5 49.8	15.29 0 14.79 β*l=	8 5 8 34.8	-611 -294 -615 -615	-12 7 18 13	8 -5 -17 13	48 14 53 cl=	58 71 63 ε=	0 0 0 0.92	12572 12549 12571 lmd=	127 127 127 35	60 60 60 Rpf=	2940 2940 2940 38	2666 2666 2666 0	Wmax/rel/lim= 27.2	11 11 11 1.1	2618 2613 2618 1.0	27 15 48 mm
Sez.N. 1078 Piatto 120 Asta: 356 Instab.:l=	8 qn= -20 5 28.3	15.29 -20 15.29 β*l=	5 5 8 19.8	-145 -145 114 -145	-16 -5 -8 12	-2 -1 0 2	-8 -8 4 cl=	80 77 -59 ε=	5 5 -1 0.92	50286 50286 50286 lmd=	201 201 201 42	1509 1509 1509 Rpf=	29033 29033 29033 6	29033 29033 29033 0	Wmax/rel/lim= 19.3	232 232 232 0.0	2619 2619 2619 0.6	8 3 4 mm
Sez.N. 1078 Piatto 120 Asta: 357 Instab.:l=	5 qn= -20 6 28.3	15.29 -20 15.29 β*l=	12 8 8 19.8	6 171 171 -2	3 -4 -8 2	1 1 2 1	10 -8 -8 cl=	-13 -28 -32 ε=	0 -4 -4 0.92	50285 50286 50286 lmd=	134 201 201 42	1006 1509 1509 Rpf=	19356 29033 29033 1	19356 29033 29033 0	Wmax/rel/lim= 27.3	140 232 232 0.0	2619 2619 2619 0.6	2 2 4 mm

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 1078 Piatto 120 Asta: 358 Instab.:l=	6 qn= 7 28.3	15.29 -20 15.29 β*I=	8 5 5 19.8	-161 146 146 -161	4 -4 -5 3	2 1 0 2	22 7 7 cl= 1	-21 -8 -11 ε= 0.92	-1 3 3 lmd= 42	50286 50286 50286 Rpf= 2	201 201 201 Rft= 0	1509 1509 1509 Wmax/rel/lim=	29033 29033 29033 19.3	29033 29033 29033 0.0	232 232 232 0.6	2619 2619 2619 mm	2 2 3	
Sez.N. 1078 Piatto 120 Asta: 359 Instab.:l=	7 qn= 8 28.3	15.29 -20 15.29 β*I=	5 8 5 19.8	-168 -86 -168 -168	-15 -4 17 13	0 -1 -1 1	3 -21 3 cl= 1	116 -18 110 ε= 0.92	3 -3 3 lmd= 42	50286 50286 50286 Rpf= 7	201 201 201 Rft= 0	1509 1509 1509 Wmax/rel/lim=	29033 29033 29033 27.3	29033 29033 29033 0.0	232 232 232 0.6	2619 2619 2619 mm	7 2 9	
Sez.N. 1076 L 21x21x3 Asta: 360 Instab.:l=	7 qn= 8 57.2	14.79 -1 15.29 β*I=	5 5 5 40.1	-278 -278 -277 -278	0 1 1 1	0 0 0 0	0 0 0 cl= 3	2 2 1 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 30	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 27.4	537 537 537 0.2	1 1 1 1.1	2619 2619 2619 mm	12 17 22	
Sez.N. 1076 L 21x21x3 Asta: 361 Instab.:l=	6 qn= 7 57.2	14.79 -1 15.29 β*I=	5 5 5 40.1	-616 -616 -615 -616	2 0 -1 1	-1 0 0 1	-2 -1 -1 cl= 3	-4 -4 -5 ε= 0.92	0 0 0 lmd= 103	3012 3011 3011 Rpf= 68	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 19.3	537 537 537 0.3	1 1 1 1.1	2619 2619 2619 mm	48 30 29	
Sez.N. 1076 L 21x21x3 Asta: 362 Instab.:l=	5 qn= 6 57.2	14.79 -1 15.29 β*I=	5 5 5 40.1	-427 -426 -426 -427	-4 2 2 3	0 0 0 0	2 0 0 cl= 3	11 8 8 ε= 0.92	0 0 0 lmd= 103	3010 3010 3010 Rpf= 60	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 26.6	537 537 537 0.2	1 1 1 1.1	2617 2618 2618 mm	52 31 31	
Sez.N. 1076 L 21x21x3 Asta: 363 Instab.:l=	8 qn= 5 57.2	14.79 -1 15.29 β*I=	5 5 5 40.1	64 64 66 -81	1 1 -1 0	0 0 0 0	0 0 1 cl= 3	-3 -3 -3 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 9	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 24.1	537 537 537 0.1	1 1 1 1.1	2619 2619 2619 mm	14 13 10	
Sez.N. 319 ANG50*5 Asta: 364 Instab.:l=	7 qn= 7 51.9	15.81 0 15.29 β*I=	5 5 5 36.3	-824 -826 -828 -828	2 6 11 7	-2 0 3 1	-9 -9 -9 cl= 3	18 18 18 ε= 0.92	0 0 0 lmd= 37	12575 12575 12575 Rpf= 15	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 21.0	2666 2666 2666 1.0	11 11 11 1.0	2619 2619 2619 mm	11 12 20	
Sez.N. 319 ANG50*5 Asta: 365 Instab.:l=	8 qn= 8 51.9	15.81 0 15.29 β*I=	5 5 8 36.3	-1320 -1322 78 -1324	-7 -2 11 3	-9 -4 6 5	-19 -19 -17 cl= 3	17 17 28 ε= 0.92	0 0 0 lmd= 37	12576 12576 12576 Rpf= 23	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 28.4	2666 2666 2666 1.3	11 11 11 1.0	2619 2619 2619 mm	31 20 19	
Sez.N. 319 ANG50*5 Asta: 366 Instab.:l=	5 qn= 5 51.9	15.81 0 15.29 β*I=	5 8 5 36.3	283 246 279 -14	-11 8 20 10	-1 0 6 0	-12 3 -17 cl= 3	56 28 62 ε= 0.92	0 0 0 lmd= 37	12572 12576 12571 Rpf= 9	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 28.5	2666 2666 2666 1.3	11 11 11 1.0	2618 2619 2618 mm	13 9 28	
Sez.N. 319 ANG50*5 Asta: 367 Instab.:l=	6 qn= 6 51.9	15.81 0 15.29 β*I=	8 5 5 36.3	-367 602 600 -370	-2 7 15 1	-2 0 -2 2	-13 7 10 cl= 3	9 30 33 ε= 0.92	0 0 0 lmd= 37	12577 12575 12574 Rpf= 8	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 21.1	2666 2666 2666 1.1	11 11 11 1.0	2619 2619 2619 mm	7 11 21	
Sez.N. 1076 L 21x21x3 Asta: 368 Instab.:l=	5 qn= 8 28.3	15.81 2 15.81 β*I=	5 5 5 19.8	50 50 50 -2	0 0 -1 0	0 0 0 0	0 0 1 cl= 3	-3 -2 -2 ε= 0.92	0 0 0 lmd= 51	3012 3012 3012 Rpf= 2	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 19.6	537 537 537 0.0	1 1 1 0.6	2619 2619 2619 mm	5 7 9	
Sez.N. 1076 L 21x21x3 Asta: 369 Instab.:l=	8 qn= 7 28.3	15.81 2 15.81 β*I=	5 5 5 19.8	32 32 32 -1	1 0 0 0	0 0 0 0	-1 -1 0 cl= 3	-2 -2 -1 ε= 0.92	0 0 0 lmd= 51	3012 3012 3012 Rpf= 1	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 28.6	537 537 537 0.0	1 1 1 0.6	2619 2619 2619 mm	11 6 3	
Sez.N. 1076 L 21x21x3 Asta: 370 Instab.:l=	7 qn= 6 28.3	15.81 -2 15.81 β*I=	5 2 5 19.8	31 25 31 0	1 0 0 0	0 0 0 0	0 0 1 cl= 3	-3 2 -4 ε= 0.92	0 0 0 lmd= 0	3012 3012 3012 Rpf= 0	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 19.6	537 537 537 0.0	1 1 1 0.6	2619 2619 2619 mm	9 4 6	
Sez.N. 1076 L 21x21x3 Asta: 371 Instab.:l=	6 qn= 5 28.3	15.81 2 15.81 β*I=	5 8 5 19.8	4 27 4 0	-1 0 1 0	0 0 0 0	2 -2 1 cl= 3	6 2 8 ε= 0.92	0 0 0 lmd= 0	3012 3012 3011 Rpf= 0	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 28.6	537 537 537 0.0	1 1 1 0.6	2619 2619 2619 mm	12 3 12	
Sez.N. 1076 L 21x21x3 Asta: 372 Instab.:l=	5 qn= 8 59.1	15.29 1 15.81 β*I=	5 4 5 41.3	537 327 539 -76	2 -1 -1 0	0 0 0 0	-1 0 0 cl= 3	-5 -3 -5 ε= 0.92	0 0 0 lmd= 106	3012 3012 3012 Rpf= 7	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 25.6	537 537 537 0.0	1 1 1 1.2	2619 2619 2619 mm	34 20 32	
Sez.N. 1076 L 21x21x3 Asta: 373 Instab.:l=	8 qn= 7 59.1	15.29 1 15.81 β*I=	5 5 5 41.3	241 242 243 -60	0 0 0 0	0 0 0 0	0 0 0 cl= 3	0 0 1 ε= 0.92	0 0 0 lmd= 106	3012 3012 3012 Rpf= 5	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 27.5	537 537 537 0.1	1 1 1 1.2	2619 2619 2619 mm	12 12 11	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 1076 L 21x21x3 Asta: 374 Instab.:l=	7 qn= 6 59.1	15.29 -1 15.81 β*l=	4 4 5 41.3	-5 -2 -6 -7	0 0 1 0	0 0 0 0	0 0 0 0	-1 0 0 cl= 3	1 1 1 ε= 0.92	0 0 0 lmd= 106	3012 3012 3012 Rpf= 7	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 19.5	537 537 537 19.5	1 1 1 0.1	2619 2619 2619 1.2	6 4 5 mm
Sez.N. 1076 L 21x21x3 Asta: 375 Instab.:l=	6 qn= 5 59.1	15.29 2 15.81 β*l=	5 5 5 41.3	317 319 320 -141	1 0 0 0	0 0 0 0	1 0 -1 0	1 -1 1 cl= 3	-3 -1 1 ε= 0.92	0 0 0 lmd= 106	3012 3012 3012 Rpf= 16	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 28.9	537 537 537 28.9	1 1 1 0.1	2619 2619 2619 1.2	22 14 15 mm
Sez.N. 319 ANG50*5 Asta: 376 Instab.:l=	5 qn= 5 50.0	16.31 0 15.81 β*l=	5 5 5 35.0	775 773 771 -138	9 5 -1 3	-1 -1 0 1	2 0 -3 1	-22 -20 -16 cl= 3	-1 -1 -1 ε= 0.92	12555 12555 12556 lmd= 36	127 127 127 Rpf= 5	60 60 60 Rft= 0	2940 2940 2940 Wmax/rel/lim=	2666 2666 2666 29.8	2666 2666 2666 29.8	11 11 11 1.3	2614 2615 2615 1.0	14 11 7 mm
Sez.N. 319 ANG50*5 Asta: 377 Instab.:l=	6 qn= 6 50.0	16.31 0 15.81 β*l=	5 5 5 35.0	603 601 600 -326	-1 0 1 1	-5 -1 2 1	-18 -15 -12 cl= 3	2 4 7 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 5	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 22.2	2666 2666 2666 22.2	2666 2666 2666 22.2	11 11 11 1.1	2619 2619 2619 1.0	15 7 9 mm
Sez.N. 319 ANG50*5 Asta: 378 Instab.:l=	8 qn= 8 50.0	16.31 0 15.81 β*l=	5 5 5 35.0	-335 -337 -339 -339	6 5 9 3	1 5 -7 6	-15 -15 -15 cl= 3	-25 -25 -25 ε= 0.92	0 0 0 lmd= 36	12575 12575 12575 Rpf= 15	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 29.8	2666 2666 2666 29.8	2666 2666 2666 29.8	11 11 11 1.4	2619 2619 2619 1.0	9 12 23 mm
Sez.N. 319 ANG50*5 Asta: 379 Instab.:l=	7 qn= 7 50.0	16.31 0 15.81 β*l=	5 5 5 35.0	-372 -374 -375 -375	0 -4 -1 1	0 -1 -1 1	1 1 1 cl= 3	-14 -14 -14 ε= 0.92	0 0 0 lmd= 36	12575 12575 12575 Rpf= 8	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 22.0	2666 2666 2666 22.0	2666 2666 2666 22.0	11 11 11 1.1	2619 2619 2619 1.0	4 7 10 mm
Sez.N. 1076 L 21x21x3 Asta: 380 Instab.:l=	5 qn= 8 28.3	16.31 2 16.31 β*l=	5 5 5 19.8	-43 -43 -43 -43	-11 -3 4 8	-2 -1 0 1	-7 -7 -7 cl= 3	53 54 54 ε= 0.92	0 0 0 lmd= 51	2995 2995 2995 Rpf= 99	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 20.0	537 537 537 20.0	537 537 537 20.0	1 1 1 0.3	2605 2605 2604 0.6	132 48 40 mm
Sez.N. 1076 L 21x21x3 Asta: 381 Instab.:l=	8 qn= 7 28.3	16.31 2 16.31 β*l=	5 5 5 19.8	-4 -4 -4 -4	1 1 0 1	1 0 -1 1	5 6 6 cl= 3	-4 -3 -3 ε= 0.92	0 0 0 lmd= 51	3012 3011 3011 Rpf= 24	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 30.0	537 537 537 30.0	537 537 537 30.0	1 1 1 0.1	2619 2619 2619 0.6	32 12 12 mm
Sez.N. 1076 L 21x21x3 Asta: 382 Instab.:l=	7 qn= 6 28.3	16.31 -2 16.31 β*l=	5 5 5 19.8	5 5 5 -5	0 0 -1 0	0 0 0 0	-2 -2 -2 cl= 3	-2 -2 -2 ε= 0.92	0 0 0 lmd= 51	3012 3012 3012 Rpf= 2	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 20.0	537 537 537 20.0	537 537 537 20.0	1 1 1 0.0	2619 2619 2619 0.6	3 7 13 mm
Sez.N. 1076 L 21x21x3 Asta: 383 Instab.:l=	6 qn= 33 14.1	16.31 1 16.31 β*l=	2 5 7 9.9	-8 44 -18 -8	1 0 -1 1	-1 0 1 0	-14 -4 -15 cl= 3	-15 19 -14 ε= 0.92	0 0 0 lmd= 25	3011 3010 3011 Rpf= 16	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 25.9	537 537 537 25.9	537 537 537 25.9	1 1 1 0.0	2618 2617 2618 0.3	28 8 30 mm
Sez.N. 1076 L 21x21x3 Asta: 384 Instab.:l=	7 qn= 8 57.4	15.81 -1 16.31 β*l=	5 5 5 40.2	-274 -273 -272 -274	0 0 0 0	0 0 0 0	-1 -1 -1 cl= 3	0 0 0 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 26	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 30.0	537 537 537 30.0	537 537 537 30.0	1 1 1 0.1	2619 2619 2619 1.1	17 14 15 mm
Sez.N. 1076 L 21x21x3 Asta: 385 Instab.:l=	8 qn= 5 57.4	15.81 -1 16.31 β*l=	5 5 5 40.2	-582 -582 -581 -582	-1 1 2 2	1 0 -1 1	2 2 3 cl= 3	5 5 5 ε= 0.92	0 0 0 lmd= 103	3010 3010 3010 Rpf= 72	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 26.5	537 537 537 26.5	537 537 537 26.5	1 1 1 0.2	2617 2617 2617 1.1	35 28 55 mm
Sez.N. 1076 L 21x21x3 Asta: 386 Instab.:l=	5 qn= 6 57.4	15.81 -1 16.31 β*l=	5 5 5 40.2	-229 -229 -228 -229	0 0 -1 1	0 0 0 0	1 0 -1 cl= 3	0 -2 -3 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 22	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 28.9	537 537 537 28.9	537 537 537 28.9	1 1 1 0.0	2619 2619 2619 1.1	11 10 16 mm
Sez.N. 1076 L 21x21x3 Asta: 387 Instab.:l=	6 qn= 7 57.4	15.81 -1 16.31 β*l=	8 5 5 40.2	-47 -2 -1 -3	0 0 0 0	0 0 0 0	0 0 0 cl= 3	0 0 0 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 5	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 20.0	537 537 537 20.0	537 537 537 20.0	1 1 1 0.1	2619 2619 2619 1.1	3 3 5 mm
Sez.N. 319 ANG50*5 Asta: 388 Instab.:l=	5 qn= 5 50.0	16.81 0 16.31 β*l=	5 5 5 35.0	-31 -33 -35 -35	-4 -4 -4 4	-3 1 6 5	-16 -19 -21 cl= 3	-2 0 3 ε= 0.92	0 0 0 lmd= 36	12566 12566 12565 Rpf= 11	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 31.2	2666 2666 2666 31.2	2666 2666 2666 31.2	11 11 11 1.4	2617 2617 2617 1.0	9 5 13 mm
Sez.N. 319 ANG50*5 Asta: 389 Instab.:l=	6 qn= 6 50.0	16.81 0 16.31 β*l=	5 5 5 35.0	246 244 242 -154	3 0 -1 0	0 1 2 1	-8 -5 -3 cl= 3	-10 -8 -5 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 2	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 23.4	2666 2666 2666 23.4	2666 2666 2666 23.4	11 11 11 1.2	2619 2619 2619 1.0	4 5 7 mm

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 319 ANG50*5 Asta: 390 Instab.:l=	8 qn= 0 8 50.0	16.81 0 16.31 β*l=	5 5 5 35.0	-666 -668 -670 -670	-4 0 3 2	-6 -4 -3 5	-6 -6 -6 cl= 3	14 14 14 ε= 0.92	0 0 0 lmd= 36	12574 12574 12574 Rpf= 15	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 31.0	2666 2666 2666 1.3	11 11 11 1.0	2619 2619 2619 mm		18
Sez.N. 319 ANG50*5 Asta: 391 Instab.:l=	7 qn= 0 7 50.0	16.81 0 16.31 β*l=	5 5 5 35.0	-361 -363 -365 -365	4 2 -1 2	0 0 0 0	-1 -1 -1 cl= 3	-10 -10 -10 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 5	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 23.1	2666 2666 2666 1.1	11 11 11 1.0	2619 2619 2619 mm		7
Sez.N. 1076 L 21x21x3 Asta: 392 Instab.:l=	5 qn= 2 8 28.3	16.81 2 16.81 β*l=	5 5 5 19.8	1 1 1 -2	0 -1 0 0	0 -1 0 0	0 0 0 cl= 3	-2 -2 -2 ε= 0.92	0 0 0 lmd= 51	3012 3012 3012 Rpf= 2	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 20.3	537 537 537 0.0	1 1 1 0.6	2619 2619 2619 mm		4
Sez.N. 1076 L 21x21x3 Asta: 393 Instab.:l=	8 qn= 2 7 28.3	16.81 2 16.81 β*l=	5 5 5 19.8	8 8 8 -10	1 1 0 0	0 0 0 0	0 0 0 cl= 3	-4 -3 -3 ε= 0.92	0 0 0 lmd= 51	3012 3012 3012 Rpf= 1	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 31.3	537 537 537 0.0	1 1 1 0.6	2619 2619 2619 mm		10
Sez.N. 1076 L 21x21x3 Asta: 394 Instab.:l=	7 qn= -2 6 28.3	16.81 -2 16.81 β*l=	5 5 5 19.8	1 1 1 -3	0 0 -1 0	0 0 0 0	1 1 1 cl= 3	-3 -3 -3 ε= 0.92	0 0 0 lmd= 51	3012 3012 3012 Rpf= 1	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 20.3	537 537 537 0.0	1 1 1 0.6	2619 2619 2619 mm		4
Sez.N. 1076 L 21x21x3 Asta: 395 Instab.:l=	6 qn= 2 5 28.3	16.81 2 16.81 β*l=	5 5 5 19.8	-12 -12 -12 -12	0 0 1 1	0 0 0 0	2 2 1 cl= 3	5 6 7 ε= 0.92	0 0 0 lmd= 51	3012 3012 3012 Rpf= 13	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 31.3	537 537 537 0.0	1 1 1 0.6	2619 2619 2619 mm		10
Sez.N. 1076 L 21x21x3 Asta: 396 Instab.:l=	8 qn= 1 7 57.4	16.31 1 16.81 β*l=	5 5 5 40.2	149 150 150 -53	1 0 0 0	0 0 0 0	1 1 1 cl= 3	-1 -1 -1 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 4	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 30.1	537 537 537 0.2	1 1 1 1.1	2619 2619 2619 mm		20
Sez.N. 1076 L 21x21x3 Asta: 397 Instab.:l=	7 qn= -1 6 57.4	16.31 -1 16.81 β*l=	7 5 5 40.2	13 -5 -4 -5	0 0 0 0	0 0 0 0	0 0 0 cl= 3	0 0 0 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 3	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 21.0	537 537 537 0.0	1 1 1 1.1	2619 2619 2619 mm		2
Sez.N. 1076 L 21x21x3 Asta: 398 Instab.:l=	6 qn= 1 5 57.4	16.31 1 16.81 β*l=	5 5 5 40.2	177 177 178 -71	1 0 0 0	0 0 0 0	1 0 -1 cl= 3	-2 0 1 ε= 0.92	0 0 0 lmd= 103	3012 3012 3012 Rpf= 6	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 31.6	537 537 537 0.1	1 1 1 1.1	2619 2619 2619 mm		13
Sez.N. 1076 L 21x21x3 Asta: 399 Instab.:l=	5 qn= 1 8 57.4	16.31 1 16.81 β*l=	5 5 5 40.2	392 392 393 -66	-2 -1 0 0	-1 0 0 0	-2 -2 -2 cl= 3	4 4 4 ε= 0.92	0 0 0 lmd= 103	3011 3011 3011 Rpf= 6	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 27.7	537 537 537 0.2	1 1 1 1.1	2618 2618 2618 mm		44
Sez.N. 319 ANG50*5 Asta: 400 Instab.:l=	5 qn= 0 5 50.0	17.31 0 16.81 β*l=	2 5 5 35.0	-160 297 296 -129	-2 2 3 2	1 -1 -2 1	3 3 1 cl= 3	4 1 4 ε= 0.92	0 -1 -1 lmd= 36	12577 12562 12562 Rpf= 4	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 32.5	2666 2666 2666 1.3	11 11 11 1.0	2619 2616 2616 mm		5
Sez.N. 319 ANG50*5 Asta: 401 Instab.:l=	6 qn= 0 6 50.0	17.31 0 16.81 β*l=	5 5 5 35.0	271 269 267 -111	-2 0 3 0	-4 -1 0 0	-11 -8 -5 cl= 3	6 9 11 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 2	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 24.6	2666 2666 2666 1.2	11 11 11 1.0	2619 2619 2619 mm		9
Sez.N. 319 ANG50*5 Asta: 402 Instab.:l=	8 qn= 0 8 50.0	17.31 0 16.81 β*l=	5 5 5 35.0	-17 -19 -21 -21	5 0 -4 2	0 3 7 4	-14 -14 -14 cl= 3	-18 -18 -18 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 8	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 32.4	2666 2666 2666 1.3	11 11 11 1.0	2619 2619 2619 mm		4
Sez.N. 319 ANG50*5 Asta: 403 Instab.:l=	7 qn= 0 7 50.0	17.31 0 16.81 β*l=	5 5 5 35.0	-72 -74 -75 -75	0 -1 -2 1	0 0 0 0	-1 -1 -1 cl= 3	-3 -3 -3 ε= 0.92	0 0 0 lmd= 36	12576 12576 12576 Rpf= 2	127 127 127 Rft= 0	60 60 60 Wmax/rel/lim=	2940 2940 2940 24.2	2666 2666 2666 1.2	11 11 11 1.0	2619 2619 2619 mm		2
Sez.N. 1076 L 21x21x3 Asta: 404 Instab.:l=	5 qn= 2 8 28.3	17.31 2 17.31 β*l=	5 5 5 19.8	-37 -37 -37 -37	-10 -3 4 8	-2 -1 0 2	-10 -9 -9 cl= 3	49 49 50 ε= 0.92	0 0 0 lmd= 51	2998 2998 2998 Rpf= 100	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 20.7	537 537 537 0.3	1 1 1 0.6	2607 2607 2607 mm		133
Sez.N. 1076 L 21x21x3 Asta: 405 Instab.:l=	8 qn= 2 7 28.3	17.31 2 17.31 β*l=	5 5 5 19.8	-2 -2 -2 -2	2 1 0 1	1 0 0 1	5 5 5 cl= 3	-6 -6 -5 ε= 0.92	0 0 0 lmd= 51	3012 3012 3012 Rpf= 23	12 12 12 Rft= 0	5 5 5 Wmax/rel/lim=	640 640 640 32.6	537 537 537 0.1	1 1 1 0.6	2619 2619 2619 mm		31

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 1076 L 21x21x3 Asta: 406 Instab.:l=	7 qn= 6	17.31 -2 17.31	5 5 5	10 10 10	0 0 -1	0 0 0	0 0 0	-1 -1 -1	-2 -2 -2	0 0 0	3012 3012 3012	12 12 12	5 5 5	640 640 640	537 537 537	1 1 1	2619 2619 2619	2 7 12
	28.3	β*l=	19.8	-1	0	0	0	cl= 3	ε= 0.92	lmd= 51	Rpf= 1	Rft= 0	Wmax/rel/lim=	20.7	0.0	0.6	mm	
Sez.N. 1076 L 21x21x3 Asta: 407 Instab.:l=	6 qn= 33	17.31 1 17.31	2 5 7	2 68 -5	1 0 -1	-1 0 1	-1 0 1	-14 -4 -15	-15 19 -14	0 0 0	3011 3010 3011	12 12 12	5 5 5	640 640 640	537 537 537	1 1 1	2618 2617 2618	28 8 29
	14.1	β*l=	9.9	-5	0	0	0	cl= 3	ε= 0.92	lmd= 25	Rpf= 12	Rft= 0	Wmax/rel/lim=	28.4	0.0	0.3	mm	
Sez.N. 1076 L 21x21x3 Asta: 408 Instab.:l=	7 qn= 8	16.81 -1 17.31	5 5 5	-182 -182 -181	0 0 0	0 0 0	0 0 0	-1 -1 0	0 0 0	0 0 0	3012 3012 3012	12 12 12	5 5 5	640 640 640	537 537 537	1 1 1	2619 2619 2619	11 10 9
	57.4	β*l=	40.2	-182	0	0	0	cl= 3	ε= 0.92	lmd= 103	Rpf= 16	Rft= 0	Wmax/rel/lim=	32.7	0.0	1.1	mm	
Sez.N. 1076 L 21x21x3 Asta: 409 Instab.:l=	8 qn= 5	16.81 -1 17.31	5 5 5	-343 -343 -342	-1 1 2	0 0 -1	0 0 1	2 2 2	5 5 5	0 0 0	3010 3010 3010	12 12 12	5 5 5	640 640 640	537 537 537	1 1 1	2617 2617 2617	26 21 45
	57.4	β*l=	40.2	-343	2	1	1	cl= 3	ε= 0.92	lmd= 103	Rpf= 52	Rft= 0	Wmax/rel/lim=	28.9	0.2	1.1	mm	
Sez.N. 1076 L 21x21x3 Asta: 410 Instab.:l=	5 qn= 6	16.81 -1 17.31	5 5 5	-189 -188 -187	0 0 -1	0 0 0	0 0 0	1 0 -1	0 -1 -3	0 0 0	3012 3012 3012	12 12 12	5 5 5	640 640 640	537 537 537	1 1 1	2619 2619 2619	7 8 14
	57.4	β*l=	40.2	-189	0	0	0	cl= 3	ε= 0.92	lmd= 103	Rpf= 19	Rft= 0	Wmax/rel/lim=	31.6	0.0	1.1	mm	
Sez.N. 1076 L 21x21x3 Asta: 411 Instab.:l=	6 qn= 7	16.81 -1 17.31	5 5 5	-29 -28 -28	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	3012 3012 3012	12 12 12	5 5 5	640 640 640	537 537 537	1 1 1	2619 2619 2619	4 5 5
	57.4	β*l=	40.2	-29	0	0	0	cl= 3	ε= 0.92	lmd= 103	Rpf= 6	Rft= 0	Wmax/rel/lim=	21.7	0.1	1.1	mm	
Sez.N. 319 ANG50*5 Asta: 412 Instab.:l=	5 qn= 5	17.81 0 17.31	5 5 5	-101 -103 -104	-2 -2 -2	-3 2 6	-3 2 4	-15 -18 -20	-3 0 2	0 0 0	12564 12563 12563	127 127 127	60 60 60	2940 2940 2940	2666 2666 2666	11 11 11	2616 2616 2616	7 6 12
	50.0	β*l=	35.0	-104	2	4	4	cl= 3	ε= 0.92	lmd= 36	Rpf= 10	Rft= 0	Wmax/rel/lim=	33.9	1.4	1.0	mm	
Sez.N. 319 ANG50*5 Asta: 413 Instab.:l=	6 qn= 6	17.81 0 17.31	7 5 5	-31 29 27	0 0 -2	1 1 2	1 1 2	3 -4 -1	-2 -6 -3	0 0 0	12577 12576 12576	127 127 127	60 60 60	2940 2940 2940	2666 2666 2666	11 11 11	2619 2619 2619	1 3 5
	50.0	β*l=	35.0	-36	0	0	0	cl= 3	ε= 0.92	lmd= 36	Rpf= 1	Rft= 0	Wmax/rel/lim=	25.8	1.2	1.0	mm	
Sez.N. 319 ANG50*5 Asta: 414 Instab.:l=	8 qn= 8	17.81 0 17.31	5 5 5	-212 -214 -216	-2 0 2	-3 -3 -3	1 1 1	1 1 1	7 7 7	0 0 0	12575 12575 12575	127 127 127	60 60 60	2940 2940 2940	2666 2666 2666	11 11 11	2619 2619 2619	7 6 8
	50.0	β*l=	35.0	-216	1	3	3	cl= 3	ε= 0.92	lmd= 36	Rpf= 7	Rft= 0	Wmax/rel/lim=	33.6	1.3	1.0	mm	
Sez.N. 319 ANG50*5 Asta: 415 Instab.:l=	7 qn= 7	17.81 0 17.31	5 5 5	-113 -115 -117	2 1 0	0 0 0	0 0 0	0 0 0	-4 -4 -4	0 0 0	12577 12577 12577	127 127 127	60 60 60	2940 2940 2940	2666 2666 2666	11 11 11	2619 2619 2619	3 2 1
	50.0	β*l=	35.0	-117	1	0	0	cl= 3	ε= 0.92	lmd= 36	Rpf= 2	Rft= 0	Wmax/rel/lim=	25.4	1.2	1.0	mm	
Sez.N. 1076 L 21x21x3 Asta: 416 Instab.:l=	5 qn= 8	17.81 2 17.81	5 5 5	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	-1 0 0	0 0 0	3012 3012 3012	12 12 12	5 5 5	640 640 640	537 537 537	1 1 1	2619 2619 2619	3 4 4
	28.3	β*l=	19.8	-2	0	0	0	cl= 3	ε= 0.92	lmd= 51	Rpf= 2	Rft= 0	Wmax/rel/lim=	21.0	0.0	0.6	mm	
Sez.N. 1076 L 21x21x3 Asta: 417 Instab.:l=	8 qn= 7	17.81 2 17.81	5 5 5	-4 -4 -4	1 0 0	0 0 0	0 0 0	0 0 0	-2 -1 -1	0 0 0	3012 3012 3012	12 12 12	5 5 5	640 640 640	537 537 537	1 1 1	2619 2619 2619	5 4 1
	28.3	β*l=	19.8	-4	0	0	0	cl= 3	ε= 0.92	lmd= 51	Rpf= 4	Rft= 0	Wmax/rel/lim=	33.9	0.0	0.6	mm	
Sez.N. 1076 L 21x21x3 Asta: 418 Instab.:l=	7 qn= 6	17.81 -2 17.81	5 5 5	-1 -1 -1	0 0 -1	0 0 0	0 0 0	1 1 1	-2 -2 -3	0 0 0	3012 3012 3012	12 12 12	5 5 5	640 640 640	537 537 537	1 1 1	2619 2619 2619	4 3 7
	28.3	β*l=	19.8	-1	0	0	0	cl= 3	ε= 0.92	lmd= 51	Rpf= 1	Rft= 0	Wmax/rel/lim=	21.0	0.0	0.6	mm	
Sez.N. 1076 L 21x21x3 Asta: 419 Instab.:l=	6 qn= 5	17.81 2 17.81	5 5 5	-4 -4 -4	0 0 1	0 0 0	0 0 0	2 2 1	3 4 5	0 0 0	3012 3012 3012	12 12 12	5 5 5	640 640 640	537 537 537	1 1 1	2619 2619 2619	7 2 10
	28.3	β*l=	19.8	-4	1	0	0	cl= 3	ε= 0.92	lmd= 51	Rpf= 9	Rft= 0	Wmax/rel/lim=	33.9	0.0	0.6	mm	
Sez.N. 1076 L 21x21x3 Asta: 420 Instab.:l=	8 qn= 7	17.31 1 17.81	5 5 5	83 84 85	1 0 0	0 0 0	0 0 0	1 1 1	-2 -1 -1	0 0 0	3012 3012 3012	12 12 12	5 5 5	640 640 640	537 537 537	1 1 1	2619 2619 2619	15 8 7
	57.4	β*l=	40.2	-37	0	0	0	cl= 3	ε= 0.92	lmd= 103	Rpf= 3	Rft= 0	Wmax/rel/lim=	32.7	0.1	1.1	mm	
Sez.N. 1076 L 21x21x3 Asta: 421 Instab.:l=	7 qn= 6	17.31 -1 17.81	7 5 5	12 25 25	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	3012 3012 3012	12 12 12	5 5 5	640 640 640	537 537 537	1 1 1	2619 2619 2619	2 1 3
	57.4	β*l=	40.2	-9	0	0	0	cl= 3	ε= 0.92	lmd= 103	Rpf= 1	Rft= 0	Wmax/rel/lim=	23.1	0.0	1.1	mm	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 1076 L 21x21x3 Asta: 422 Instab.:l=	6 qn= 5 57.4	17.31 1 17.81 β*l=	5 5 5 40.2	81 82 82 -24	0 0 0 0	0 0 0 0	0 0 0 0	1 0 -1 3	-2 0 1 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 3	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	9 5 8 1.1
Sez.N. 1076 L 21x21x3 Asta: 423 Instab.:l=	5 qn= 8 57.4	17.31 1 17.81 β*l=	5 5 5 40.2	169 170 171 -31	-2 -1 1 0	-1 0 1 0	-2 -2 -2 0	-2 -2 -2 cl=	5 6 6 3	0 0 0 ε=	3011 3011 3011 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 4	537 537 537 Rft=	1 1 1 0	2618 2618 2618 Wmax/rel/lim=	41 15 20 1.1
Sez.N. 319 ANG50*5 Asta: 424 Instab.:l=	6 qn= 6 49.7	18.31 0 17.81 β*l=	5 5 5 34.8	102 101 98 -2	0 0 1 0	-2 -2 -1 0	-5 -5 0 0	0 0 0 cl=	0 0 5 ε=	0 0 0 0.92	12576 12576 12576 lmd=	127 127 127 35	60 60 60 Rpf=	2940 2940 2940 0	2666 2666 2666 Rft=	11 11 11 0	2619 2619 2619 Wmax/rel/lim=	4 4 3 1.0
Sez.N. 319 ANG50*5 Asta: 425 Instab.:l=	7 qn= 7 49.7	18.31 0 17.81 β*l=	5 5 5 34.8	35 33 31 -7	0 -1 0 0	0 -1 0 0	-1 -1 -1 0	-1 -1 -1 cl=	-1 -1 -1 ε=	0 0 0 0.92	12577 12577 12577 lmd=	127 127 127 35	60 60 60 Rpf=	2940 2940 2940 0	2666 2666 2666 Rft=	11 11 11 0	2619 2619 2619 Wmax/rel/lim=	1 1 1 1.0
Sez.N. 319 ANG50*5 Asta: 426 Instab.:l=	8 qn= 8 49.7	18.31 0 17.81 β*l=	5 5 5 34.8	65 63 61 -26	0 0 -1 0	0 2 4 0	-7 -7 -7 0	-3 -3 -3 cl=	0 0 -3 ε=	0 0 0 0.92	12576 12576 12576 lmd=	127 127 127 35	60 60 60 Rpf=	2940 2940 2940 1	2666 2666 2666 Rft=	11 11 11 0	2619 2619 2619 Wmax/rel/lim=	1 4 7 1.0
Sez.N. 319 ANG50*5 Asta: 427 Instab.:l=	5 qn= 5 49.7	18.31 0 17.81 β*l=	7 8 5 34.8	-55 -37 82 -60	-4 -2 2 3	2 1 -2 2	4 6 6 2	7 8 9 cl=	0 0 0 ε=	0 0 0 0.92	12577 12577 12576 lmd=	127 127 127 35	60 60 60 Rpf=	2940 2940 2940 6	2666 2666 2666 Rft=	11 11 11 0	2619 2619 2619 Wmax/rel/lim=	7 4 6 1.0
Sez.N. 1079 Piatto 120 Asta: 428 Instab.:l=	8 qn= 5 28.3	18.31 -13 18.31 β*l=	5 5 5 19.8	-19 -19 -19 -19	-1 0 1 1	3 -4 -12 6	51 51 51 cl=	7 5 3 1	0 0 0 ε=	0 0 0 0.92	25143 25143 25143 lmd=	50 50 50 86	754 754 754 Rpf=	14517 14517 14517 2	14517 14517 14517 Rft=	58 58 58 0	2619 2619 2619 Wmax/rel/lim=	2 1 3 0.6
Sez.N. 1079 Piatto 120 Asta: 429 Instab.:l=	5 qn= 6 28.3	18.31 -13 18.31 β*l=	5 5 5 19.8	69 69 69 -1	0 0 0 0	11 4 -2 0	51 47 43 cl=	3 1 -1 1	0 0 0 ε=	0 0 0 0.92	25143 25143 25143 lmd=	50 50 50 86	754 754 754 Rpf=	14517 14517 14517 1	14517 14517 14517 Rft=	58 58 58 0	2619 2619 2619 Wmax/rel/lim=	2 1 0 0.6
Sez.N. 1079 Piatto 120 Asta: 430 Instab.:l=	6 qn= 7 28.3	18.31 -13 18.31 β*l=	5 5 5 19.8	37 37 37 0	0 0 0 0	-2 -1 0 0	-5 -5 -5 cl=	1 0 -2 1	0 0 0 ε=	0 0 0 0.92	25143 25143 25143 lmd=	50 50 50 0	754 754 754 Rpf=	14517 14517 14517 0	14517 14517 14517 Rft=	58 58 58 0	2619 2619 2619 Wmax/rel/lim=	0 0 0 0.6
Sez.N. 1079 Piatto 120 Asta: 431 Instab.:l=	7 qn= 8 28.3	18.31 -13 18.31 β*l=	5 3 5 19.8	-7 -5 -7 -7	0 0 0 0	-1 1 3 2	-12 -6 -12 cl=	5 0 1 1	0 0 0 ε=	0 0 0 0.92	25143 25143 25143 lmd=	50 50 50 86	754 754 754 Rpf=	14517 14517 14517 1	14517 14517 14517 Rft=	58 58 58 0	2619 2619 2619 Wmax/rel/lim=	1 1 1 0.6
Sez.N. 1076 L 21x21x3 Asta: 432 Instab.:l=	7 qn= 8 57.2	17.81 -1 18.31 β*l=	5 5 5 40.1	-84 -83 -82 -84	0 0 0 0	0 0 0 0	0 0 0 cl=	1 1 1 3	0 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 8	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	5 4 6 1.1
Sez.N. 1076 L 21x21x3 Asta: 433 Instab.:l=	6 qn= 7 57.2	17.81 -1 18.31 β*l=	5 5 5 40.1	-51 -51 -50 -51	0 0 0 0	0 0 0 0	0 0 0 cl=	0 0 0 3	0 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 6	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	4 3 2 1.1
Sez.N. 1076 L 21x21x3 Asta: 434 Instab.:l=	5 qn= 6 57.2	17.81 -1 18.31 β*l=	5 5 5 40.1	-121 -121 -120 -121	0 0 0 0	0 0 0 0	1 0 -1 cl=	1 0 -2 3	0 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 12	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	5 6 8 1.1
Sez.N. 1076 L 21x21x3 Asta: 435 Instab.:l=	8 qn= 5 57.2	17.81 -1 18.31 β*l=	5 5 5 40.1	-141 -141 -139 -141	0 0 0 0	0 0 0 0	0 0 0 cl=	0 0 0 3	0 0 0 ε=	0 0 0 0.92	3012 3012 3012 lmd=	12 12 12 103	5 5 5 Rpf=	640 640 640 13	537 537 537 Rft=	1 1 1 0	2619 2619 2619 Wmax/rel/lim=	7 7 8 1.1
Sez.N. 889 TONDO14 Asta: 436 Instab.:l=	29 qn= 5 984.1	0.00 -1 9.26 β*l=	5 4 5 984.1	894 492 918 0	0 16 0 0	0 0 0 0	0 0 0 cl=	4 0 -4 3	0 0 0 ε=	0 0 0 0.47	15390 15390 15390 lmd=	27 27 27 0	27 27 27 Rpf=	6663 6663 6663 0	6663 6663 6663 Rft=	31 31 31 0	10000 10000 10000 Wmax/rel/lim=	6 61 6 3.9
Sez.N. 889 TONDO14 Asta: 437 Instab.:l=	30 qn= 7 984.1	0.00 -1 9.26 β*l=	16 16 16 984.1	98 103 109 0	0 5 0 0	0 0 0 0	0 0 0 cl=	2 0 -2 3	0 0 0 ε=	0 0 0 0.47	15390 15390 15390 lmd=	27 27 27 0	27 27 27 Rpf=	6663 6663 6663 0	6663 6663 6663 Rft=	31 31 31 0	10000 10000 10000 Wmax/rel/lim=	1 19 1 3.9

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ACCIAIO + VERIFICA S.L.E.																		
VERIFICHE ASTE IN ACCIAIO 3D																		
DATI DI ASTA	Fili N.ro	Quota (m)	Tra tto	Cmb N.r	N Sd (kg)	MxSd (kg*m)	MySd (kg*m)	VxSd (kg)	VySd (kg)	T Sd (kg*m)	N Rd kg	MxV.Rd kg*m	MyV.Rd kg*m	VxplRd Kg	VyplRd Kg	T Rd kg*m	fy rid Kg/cmq	Rap %
Sez.N. 889 TONDO14 Asta: 438 Instab.:l=	31 qn= 8 984.1	0.00 -1 9.26 β*l=	8 7 8 984.1	890 483 915 0	0 16 0 0	0 0 0 0	0 0 0 0	0 0 -4 0.47	4 0 -4 lmd=	0 0 0 0	15390 15390 15390 Rpf= 0	27 27 27 Rft= 0	27 27 27 0	6663 6663 6663 Wmax/rel/lim=	6663 6663 6663 2840.3	31 31 31 2838.8	10000 10000 10000 3.9	6 61 6 mm
Sez.N. 889 TONDO14 Asta: 439 Instab.:l=	32 qn= 6 984.1	0.00 -1 9.26 β*l=	5 4 5 984.1	850 444 875 0	0 16 0 0	0 0 0 0	0 0 0 0	0 0 -4 0.47	4 0 -4 lmd=	0 0 0 0	15390 15390 15390 Rpf= 0	27 27 27 Rft= 0	27 27 27 0	6663 6663 6663 Wmax/rel/lim=	6663 6663 6663 2840.2	31 31 31 2838.8	10000 10000 10000 3.9	6 61 6 mm
Sez.N. 1076 L 21x21x3 Asta: 440 Instab.:l=	1 qn= 2 88.4	3.10 2 2.56 β*l=	5 5 4 61.9	123 122 73 -67	0 0 0 0	0 0 0 0	0 0 1 0	-1 0 1 0.92	0 0 1 lmd=	0 0 0 159	3012 3012 3012 Rpf= 10	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 1.8	1 1 1 0.1	2619 2619 2619 1.8	7 5 7 mm
Sez.N. 1076 L 21x21x3 Asta: 441 Instab.:l=	33 qn= 5 14.1	17.31 1 17.31 β*l=	7 5 5 9.9	-5 68 68 -5	-1 6 12 1	1 2 4 0	16 -24 -25 0	16 74 75 0.92	0 0 0 lmd=	0 0 0 25	3011 2982 2982 Rpf= 13	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 32.6	1 1 1 0.1	2618 2593 2593 0.3	29 92 71 mm
Sez.N. 1076 L 21x21x3 Asta: 442 Instab.:l=	33 qn= 5 14.1	16.31 1 16.31 β*l=	7 5 5 9.9	-18 44 44 -8	-1 6 12 0	1 2 4 1	15 -24 -25 0	16 74 75 0.92	0 0 0 lmd=	0 0 0 25	3010 2983 2983 Rpf= 21	12 12 12 Rft= 0	5 5 5 0	640 640 640 Wmax/rel/lim=	537 537 537 30.0	1 1 1 0.1	2618 2594 2594 0.3	30 91 69 mm
Sez.N. 889 TONDO14 Asta: 443 Instab.:l=	6 qn= 32 1565.0	15.29 -1 0.00 β*l=	4 4 5 1095.5	673 638 1141 0	-25 14 0 0	0 0 0 0	0 0 0 0	8 0 -3 0.47	0 0 0 lmd=	0 0 0 0	15390 15390 15390 Rpf= 0	27 27 27 Rft= 0	27 27 27 0	6663 6663 6663 Wmax/rel/lim=	6663 6663 6663 4754.2	31 31 31 4750.4	10000 10000 10000 6.3	97 56 7 mm
Sez.N. 889 TONDO14 Asta: 444 Instab.:l=	5 qn= 29 1565.0	15.29 -1 0.00 β*l=	4 4 5 1095.5	569 533 1045 0	-25 14 0 0	0 0 0 0	0 0 0 0	8 0 -3 0.47	0 0 0 lmd=	0 0 0 0	15390 15390 15390 Rpf= 0	27 27 27 Rft= 0	27 27 27 0	6663 6663 6663 Wmax/rel/lim=	6663 6663 6663 4755.4	31 31 31 4752.2	10000 10000 10000 6.3	96 56 7 mm
Sez.N. 889 TONDO14 Asta: 445 Instab.:l=	8 qn= 31 1565.0	15.29 -1 0.00 β*l=	7 7 8 1095.5	481 446 842 0	-25 14 0 0	0 0 0 0	0 0 0 0	8 0 -3 0.47	0 0 0 lmd=	0 0 0 0	15390 15390 15390 Rpf= 0	27 27 27 Rft= 0	27 27 27 0	6663 6663 6663 Wmax/rel/lim=	6663 6663 6663 4754.8	31 31 31 4751.4	10000 10000 10000 6.3	96 55 5 mm
Sez.N. 889 TONDO14 Asta: 446 Instab.:l=	7 qn= 30 1565.0	15.29 -1 0.00 β*l=	2 2 16 1095.5	7 -28 292 -51	-25 14 0 19	0 0 0 0	0 0 0 0	8 0 -2 0.47	0 0 0 lmd=	0 0 0 0	15390 15390 15390 Rpf= 8621	27 27 27 Rft= 0	27 27 27 0	6663 6663 6663 Wmax/rel/lim=	6663 6663 6663 4750.2	31 31 31 4751.2	10000 10000 10000 6.3	93 52 2 mm

REAZIONI VINCOLARI

Per ogni nodo si riportano i valori delle sollecitazioni nelle tre direzioni in termini di sforzi normali, momenti, tagli.

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	-0.002	-0.005	0.442	-0.007	0.006	0.000
2	-0.002	-0.001	0.438	-0.006	-0.007	0.000
3	-0.006	0.002	0.373	0.005	0.006	0.000
4	0.001	-0.004	0.353	0.006	-0.005	0.000
149	0.036	0.036	0.229			
150	-0.027	-0.027	0.141			
151	-0.032	0.032	0.196			
152	0.032	-0.032	0.175			

REAZIONI VINCOLARI COMBINAZIONE 2- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	-0.002	-0.006	0.607	-0.010	0.009	0.000
2	-0.003	-0.002	0.602	-0.009	-0.010	0.000
3	-0.008	0.002	0.538	0.008	0.009	0.000
4	0.002	-0.003	0.511	0.009	-0.008	0.000
149	0.050	0.050	0.310			
150	-0.039	-0.039	0.207			
151	-0.044	0.044	0.264			
152	0.045	-0.045	0.253			

REAZIONI VINCOLARI COMBINAZIONE 3- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	-0.001	-0.090	1.460	-0.021	0.019	0.000
2	-0.098	0.006	-0.574	0.004	0.003	0.000
3	-0.251	0.013	1.399	0.014	0.013	0.000
4	0.001	0.063	-0.663	-0.011	0.009	0.000
149	-0.212	-0.212	-1.024			
150	-0.274	-0.274	1.387			
151	-0.277	0.277	1.437			
152	-0.216	0.216	-1.077			

REAZIONI VINCOLARI COMBINAZIONE 4- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	-0.002	-0.091	1.625	-0.023	0.021	0.000
2	-0.099	0.006	-0.410	0.002	0.001	0.000
3	-0.254	0.013	1.564	0.017	0.016	0.000
4	0.001	0.064	-0.505	-0.009	0.006	0.000
149	-0.198	-0.198	-0.942			

REAZIONI VINCOLARI COMBINAZIONE 4- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
150	-0.285	-0.285	1.453			
151	-0.289	0.289	1.506			
152	-0.202	0.202	-0.999			

REAZIONI VINCOLARI COMBINAZIONE 5- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	-0.001	-0.147	2.139	-0.030	0.027	0.000
2	-0.162	0.012	-1.248	0.011	0.010	0.000
3	-0.415	0.020	2.083	0.020	0.018	0.000
4	0.001	0.108	-1.340	-0.023	0.018	0.001
149	-0.377	-0.377	-1.859			
150	-0.438	-0.438	2.217			
151	-0.441	0.441	2.265			
152	-0.381	0.381	-1.912			

REAZIONI VINCOLARI COMBINAZIONE 6- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	-0.011	-0.146	1.467	-0.017	0.016	0.000
2	-0.028	0.002	1.546	-0.022	-0.025	0.000
3	0.039	-0.001	-0.670	-0.008	-0.009	0.000
4	-0.010	-0.224	-0.735	-0.002	0.005	0.000
149	-0.189	-0.189	-0.880			
150	-0.253	-0.253	1.251			
151	0.195	-0.195	-0.916			
152	0.257	-0.257	1.282			

REAZIONI VINCOLARI COMBINAZIONE 7- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	-0.011	-0.146	1.632	-0.020	0.019	0.000
2	-0.029	0.001	1.710	-0.024	-0.028	0.000
3	0.037	0.000	-0.506	-0.005	-0.006	0.000
4	-0.009	-0.223	-0.577	0.000	0.003	0.000
149	-0.176	-0.176	-0.799			
150	-0.265	-0.265	1.318			
151	0.183	-0.183	-0.848			
152	0.271	-0.271	1.361			

REAZIONI VINCOLARI COMBINAZIONE 8- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	-0.017	-0.239	2.151	-0.024	0.023	0.000
2	-0.045	0.003	2.285	-0.032	-0.037	0.000
3	0.069	-0.003	-1.366	-0.017	-0.019	0.001
4	-0.017	-0.370	-1.460	-0.008	0.012	0.000
149	-0.340	-0.340	-1.619			
150	-0.404	-0.404	1.992			
151	0.346	-0.346	-1.658			
152	0.408	-0.408	2.021			

REAZIONI VINCOLARI COMBINAZIONE 9- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	-0.002	-0.042	0.358	-0.002	0.005	0.000
2	0.043	-0.001	0.083	-0.001	-0.001	0.000
3	-0.042	0.002	0.268	0.003	0.003	0.000
4	0.001	0.050	-0.015	0.000	0.000	0.000
149	-0.049	-0.049	-0.239			
150	-0.076	-0.076	0.398			
151	-0.068	0.068	0.373			
152	-0.041	0.041	-0.215			

REAZIONI VINCOLARI COMBINAZIONE 10- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	-0.001	-0.055	0.263	-0.001	0.004	0.000
2	0.056	-0.002	0.007	0.000	0.000	0.000
3	-0.050	0.002	0.341	0.004	0.004	0.000
4	0.002	0.030	0.083	0.001	-0.001	0.000
149	-0.009	-0.009	-0.029			
150	-0.037	-0.037	0.189			
151	-0.094	0.094	0.512			
152	-0.067	0.067	-0.353			

REAZIONI VINCOLARI COMBINAZIONE 11- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	0.000	0.049	0.134	-0.005	0.002	0.000
2	-0.057	0.001	0.387	-0.006	-0.007	0.000
3	0.045	-0.001	-0.034	0.000	0.001	0.000
4	-0.001	-0.035	0.207	0.004	-0.004	0.000
149	0.042	0.042	0.240			
150	0.014	0.014	-0.076			
151	0.065	-0.065	-0.330			
152	0.094	-0.094	0.495			

REAZIONI VINCOLARI COMBINAZIONE 12- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	0.000	0.036	0.039	-0.004	0.001	0.000
2	-0.045	0.000	0.311	-0.004	-0.005	0.000
3	0.037	-0.001	0.039	0.001	0.002	0.000
4	-0.001	-0.055	0.305	0.005	-0.005	0.000
149	0.081	0.081	0.450			
150	0.053	0.053	-0.285			
151	0.039	-0.039	-0.190			
152	0.068	-0.068	0.357			

REAZIONI VINCOLARI COMBINAZIONE 13- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	-0.002	0.004	0.390	-0.005	0.005	0.000
2	-0.006	0.000	0.278	-0.004	-0.005	0.000
3	-0.001	0.002	0.078	0.001	0.001	0.000

REAZIONI VINCOLARI COMBINAZIONE 13- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
4	-0.001	0.044	-0.052	0.000	0.000	0.000
149	-0.063	-0.063	-0.317			
150	-0.090	-0.090	0.476			
151	0.009	-0.009	-0.035			
152	0.036	-0.036	0.194			

REAZIONI VINCOLARI COMBINAZIONE 14- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	0.000	-0.038	0.074	-0.001	0.001	0.000
2	0.035	-0.002	0.026	0.000	0.000	0.000
3	-0.030	0.001	0.320	0.004	0.005	0.000
4	0.002	-0.023	0.275	0.004	-0.003	0.000
149	0.068	0.068	0.384			
150	0.040	0.040	-0.221			
151	-0.078	0.078	0.429			
152	-0.050	0.050	-0.265			

REAZIONI VINCOLARI COMBINAZIONE 15- S.L.V.

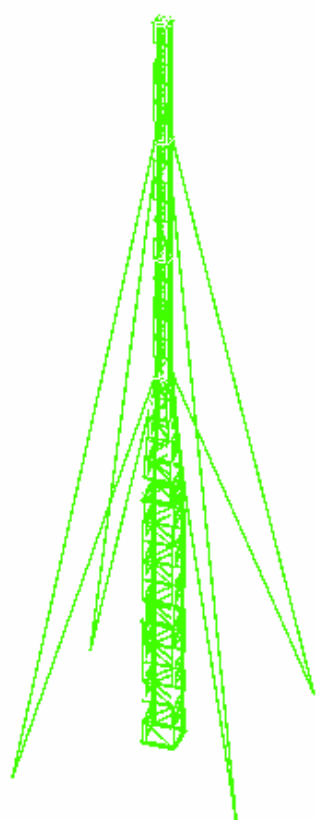
Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	-0.001	0.032	0.323	-0.006	0.004	0.000
2	-0.037	0.001	0.369	-0.005	-0.006	0.000
3	0.025	0.001	-0.013	0.000	0.000	0.000
4	-0.001	0.018	0.015	0.002	-0.001	0.000
149	-0.036	-0.036	-0.173			
150	-0.063	-0.063	0.334			
151	0.049	-0.049	-0.246			
152	0.077	-0.077	0.407			

REAZIONI VINCOLARI COMBINAZIONE 16- S.L.V.

Nodo 3D	Fx (t)	Fy (t)	Fz (t)	Mx (t*m)	My (t*m)	Mz (t*m)
1	0.000	-0.011	0.007	-0.002	0.001	0.000
2	0.005	-0.001	0.117	-0.002	-0.002	0.000
3	-0.004	0.000	0.229	0.003	0.004	0.000
4	0.001	-0.049	0.342	0.005	-0.005	0.000
149	0.095	0.095	0.528			
150	0.067	0.067	-0.363			
151	-0.038	0.038	0.218			
152	-0.010	0.010	-0.052			

RAPPRESENTAZIONI GRAFICHE

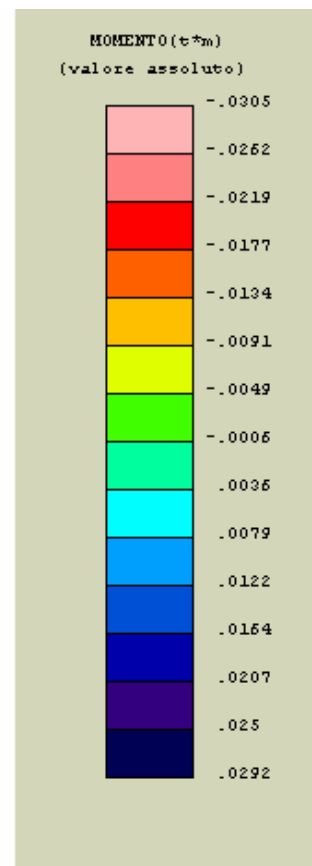
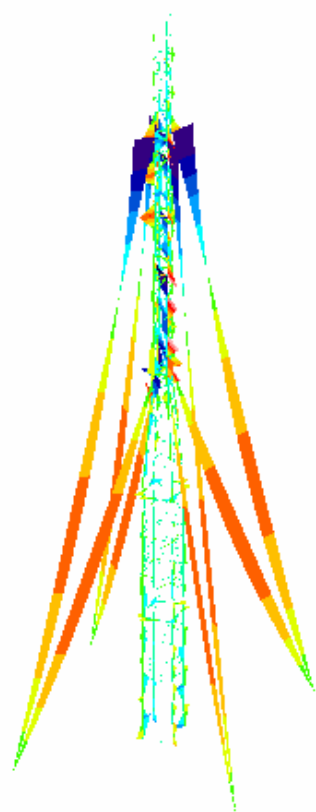
RAPPRESENTAZIONI GRAFICHE OUTPUT STRUTTURA



Verifica	Verifica
Non verifica	Non verifica
Ver. non eseg.	Ver. non eseg.

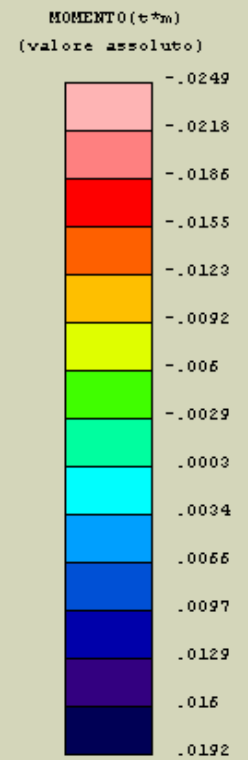
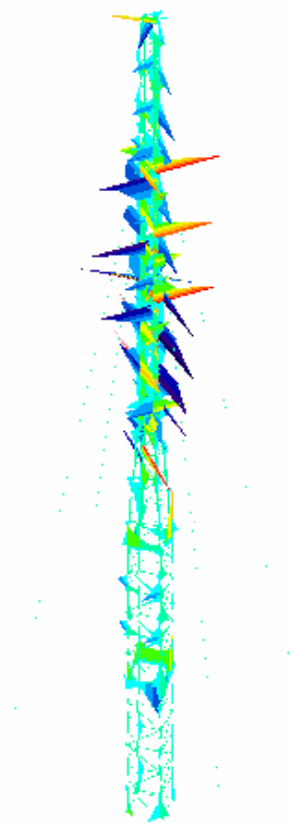
VERIFICA ASTE IN ACCIAIO GENERALIZZATA

RAPPRESENTAZIONI GRAFICHE OUTPUT STRUTTURA



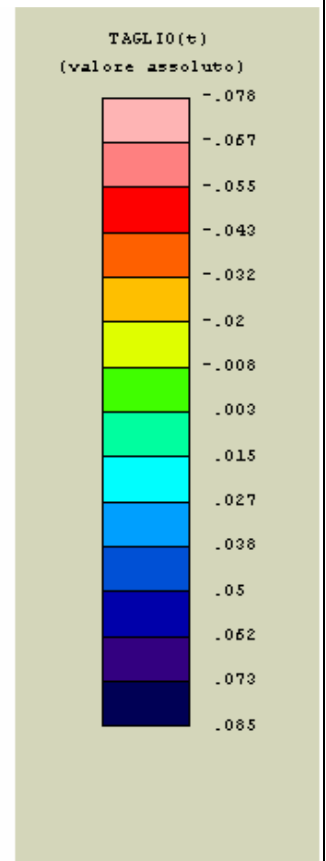
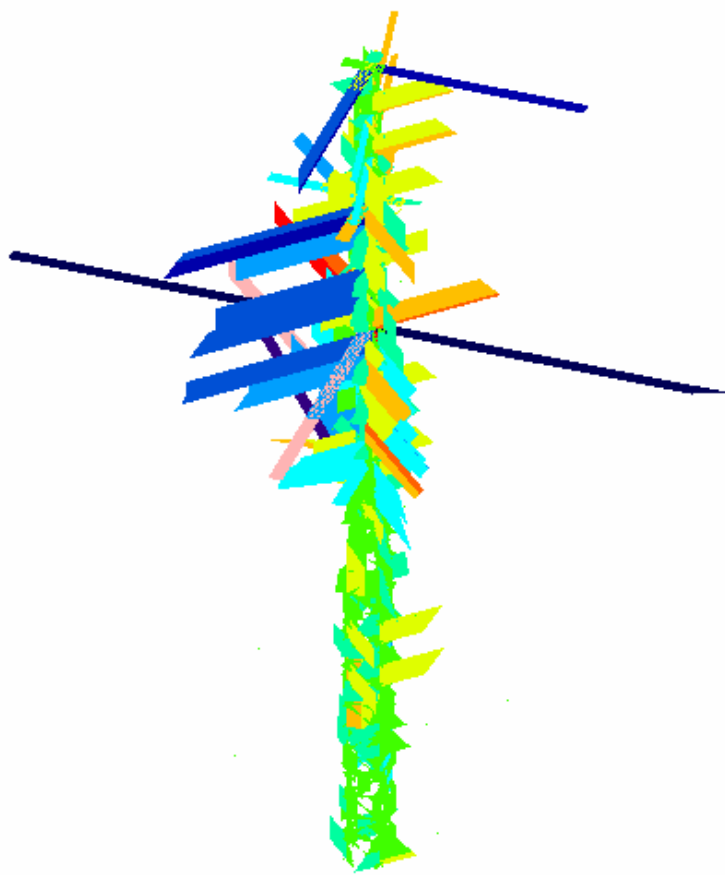
MOMENTO COMBINAZIONE INVILUPPO Mx

RAPPRESENTAZIONI GRAFICHE OUTPUT STRUTTURA



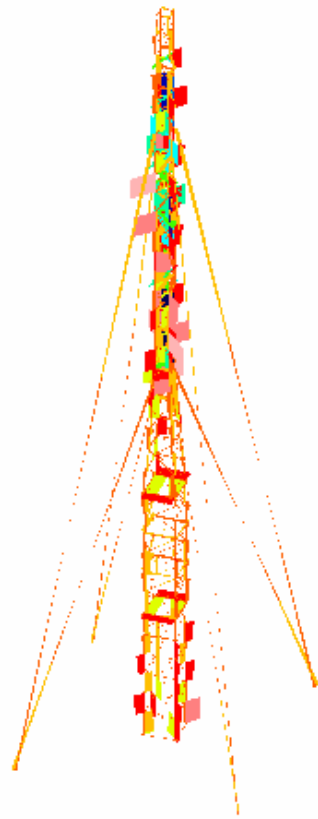
MOMENTO COMBINAZIONE INVILUPPO M_y

RAPPRESENTAZIONI GRAFICHE OUTPUT STRUTTURA

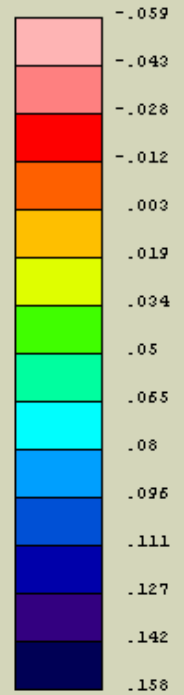


TAGLIO COMBINAZIONE INVILUPPO Tx

RAPPRESENTAZIONI GRAFICHE OUTPUT STRUTTURA

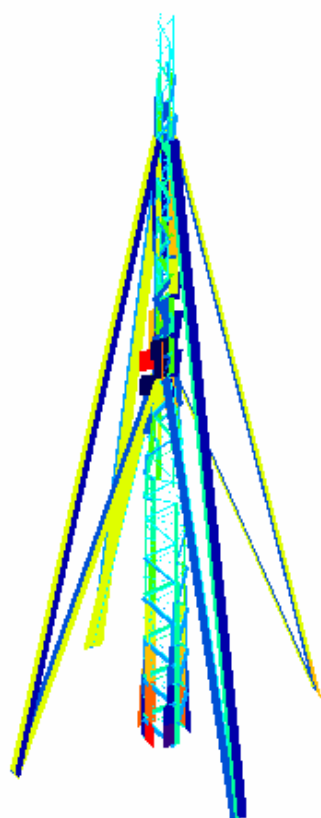


T&GLI0(t)
(valore assoluto)

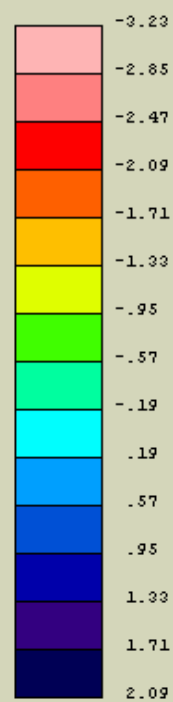


TAGLIO COMBINAZIONE INVILUPPO Ty

RAPPRESENTAZIONI GRAFICHE OUTPUT STRUTTURA



SFORZO NORMALE(t)
(valore assoluto)



SFORZO NORMALE COMBINAZIONE INVILUPPO

GIUDIZIO DI ACCETTABILITA' DEI RISULTATI

Si considera la condizione di carico N°3 data dal vento +X e si calcola lo sforzo normale che si genera in un montante alla base dell' ultimo tronco:

$$10.36 \text{ kg/m} \times 3 \text{ m} \times 2 = 62.16 \text{ kg} \text{ (Montanti Verticali)}$$

$$4.35 \text{ kg/m} \times (3 \text{ m} \sqrt{2} / 6) \times 6 = 18.45 \text{ kg} \text{ (Controventi Inclinati)}$$

$$4.35 \text{ kg/m} \times 0.4 \text{ m} \times 6 = 10.44 \text{ kg} \text{ (Correnti Orizzontali)}$$

$$R = (62.16 + 18.45 + 10.44) \times 2 = 182.1 \text{ kg} \text{ (Su due facce)}$$

$$\text{Centro di spinta } 300 / 2 = 150 \text{ cm}$$

$$M = 182.1 \text{ kg} \times 150 \text{ cm} = 27315 \text{ kgcm}$$

$$N = 27315 \text{ kgcm} / (40 \text{ cm} \times 2) = 341 \text{ kg}$$

Per tale sforzo normale il programma di calcolo fornisce un valore pari a 350 kg ed essendo la differenza contenuta entro il 15% il risultato si ritiene accettabile.