

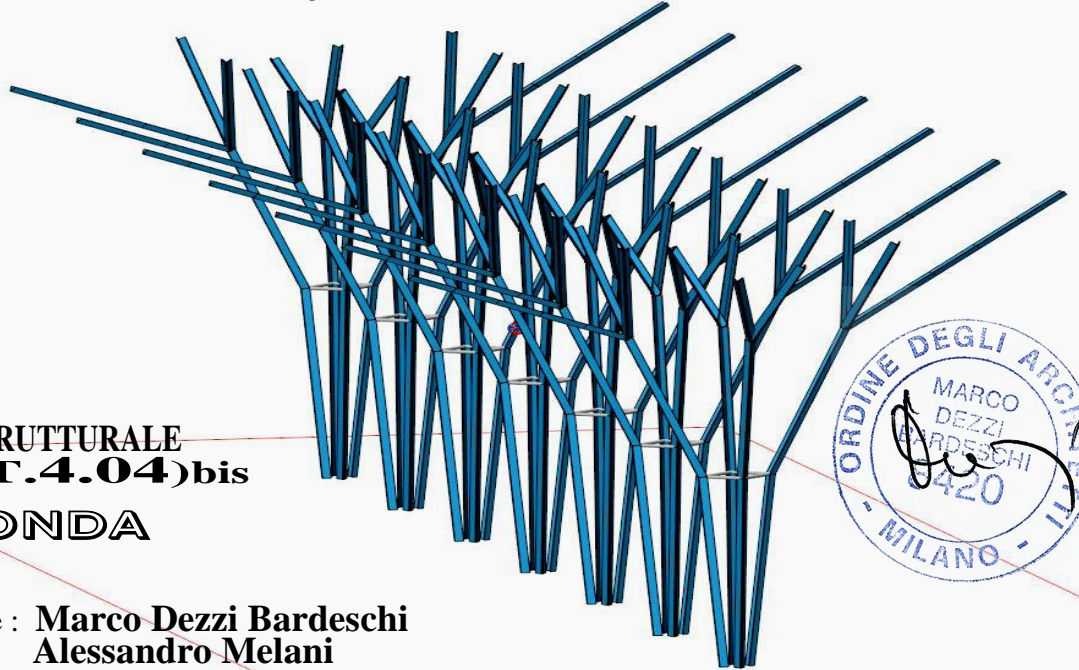


COMUNE DI CROTONE

MINISTERO PER I BENI E LE ATTIVITA' CULTURALI
Direzione Generale per i beni Culturali e Paesaggistici della Calabria
Sovrintendenza per i beni archeologici della Calabria

OGGETTO: Analisi statica dei telai in carpenteria d' acciaio che sostengono la copertura del grande atrio centrale del museo. Le strutture reticolari simulano con notevole ricchezza formale una serie di "alberature" disposte in filare. Questo elemento, costituisce l' aspetto più caratterizzante per una costruzione praticamente ipogea, La mancanza di prospetti esterni riversa la vita dell' edificio verso l'atrio interno dal quale giunge anche la luce naturale. Le alberature sono inserite entro l' atrio stesso

Il R.U.P.: **Elisabetta Antonia Dominijanni** STRUTTURA: Vincenzo Felice Maria Dragonetti



(5)- PROGETTO STRUTTURALE
ELABORATO: (ST.4.04)bis
PARTE SECONDA



Progettista e coordinatore : **Marco Dezzi Bardeschi**
Il Tecnico strutturista: **Alessandro Melani**

VERIFICA DELLE MEMBRATURE IN ACCIAIO. TABULATI NUMERICI (Codice di elaborazione: "MODEST, vers. 8.2).

Le verifiche delle alberature vengono effettuate considerando incastri perfetti al piede e presenza di ritegni sismici ai bordi della chioma. Il tutto in condizioni statiche ed in condizioni sismiche. I principali parametri di riferimento utilizzati nella calcolazione vengono riportati sulla "Relazione Descrittiva modello strutturale e sulle ipotesi di calcolo assunte" (C.2) Tutti i carichi e le azioni sismiche vengono combinati assieme in **VENTOTTO Condizioni di carico** successive (Vedi relazione di cui sopra) Le direzioni di applicazione delle azioni sismiche orizzontali si intendono coincidenti con gli assi principali di riferimento dell' alberatura.

La struttura in C.A., del tipo completamente intelaiato, viene considerata tipologicamente come: "A **pendolo inverso**" ai sensi della normativa sismica vigente (D.M. 14/01/2008)

L' intero modello comprende **2498** elementi bidimensionali che compongono le **14** "lastre-chioma" di copertura . La maglia del reticolo che connette tutti questi elementi, comprende **1645** nodi. Le aste reali dei telai di supporto sono complessivamente. **372**

Un così alto numero di elementi bidimensionali derivano dalla scelta di operare una "meshiatura" in maglie di piccola dimensione dei continui (Lastre di copertura) ed ottenere di conseguenza una modellazione più aderente alla realtà. In conseguenza a tutte le condizioni esistenti, la modellazione prevede orizzontamenti deformabili nel proprio piano,.

Le masse sismiche presenti, risultano suddivise e distribuite su tutti i **1645** nodi corrispondenti nel modello, a quote variabili fra **+7,00 e +17,20** mt.

L'analisi sismica, del tipo dinamico, risulta estesa ai primi - **Centocinquanta** - modi caratteristici di vibrazione (necessari per eccitare una percentuale delle masse presenti maggiore dell' **85%**)

La verifica delle sezioni resistenti in C.A. viene effettuata secondo la procedura cosiddetta "Agli stati limite" Vengono prese in esame le seguenti condizioni: **SLU, SLU(S), SLE(R), SLE(F), SLE(Q), SLD, SLV, SLC, SLO**



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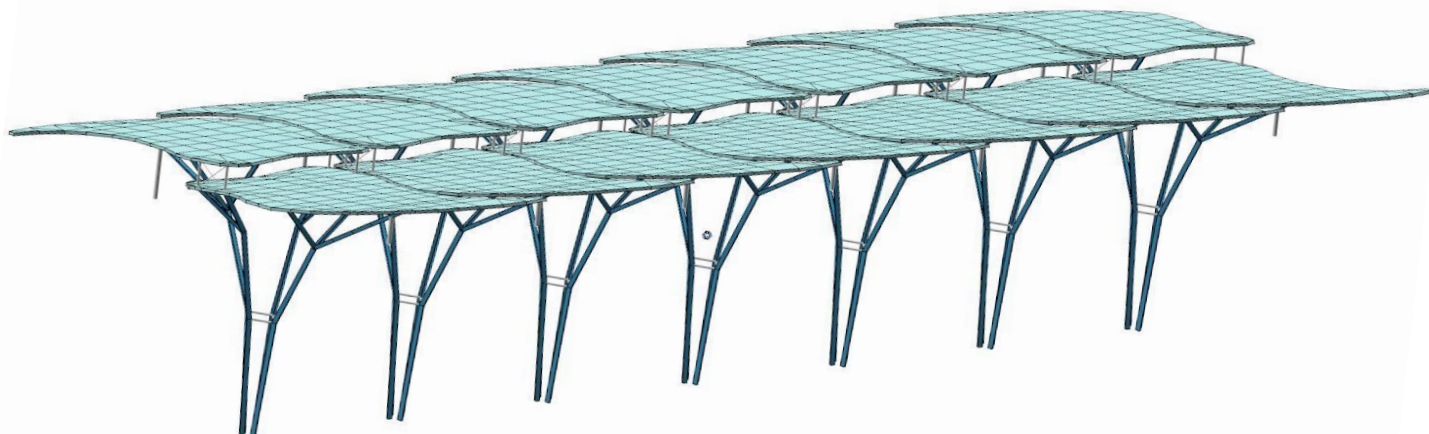
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CALCOLO DELLE MEMBRATURE IN ACCIAIO E DELLE LASTRE IN C.A. TABULATI NUMERICI (Codice di elaborazione: "MODEST, vers. 8.2).

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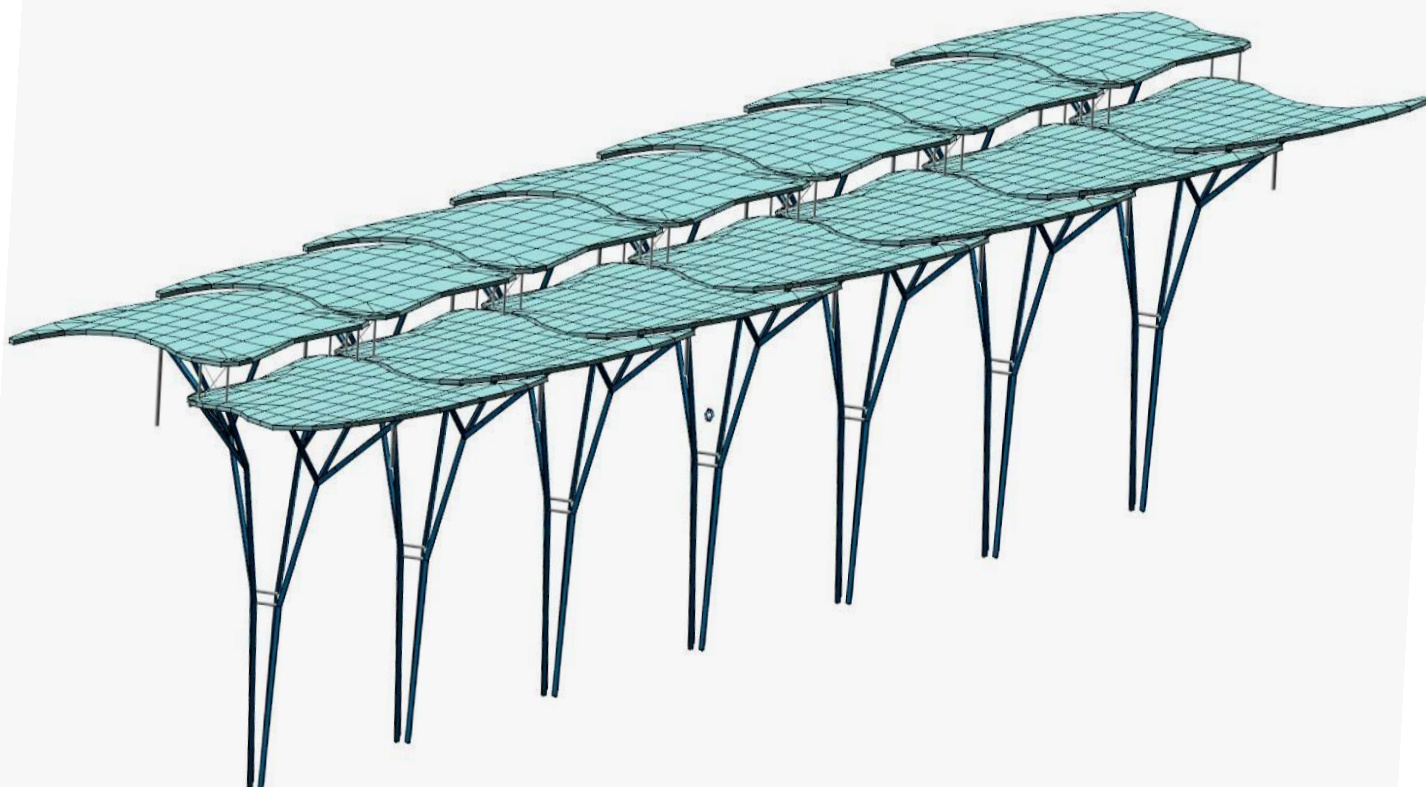
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Criteri di progetto utilizzati

Sezioni generiche

Generali

Stampe

Tipo di relazione Estesa

10

Specifici

Materiali

Calcestruzzo

-Tipo di calcestruzzo	C28/35
-Rck calcestruzzo <daN/cm ² >	350.00
-Modulo elastico <daN/cm ² >	325881.00
-Resistenza caratteristica cilindrica (Fck) <daN/cm ² >	290.50
-Resistenza caratteristica a trazione (Fctk) <daN/cm ² >	19.84
-Riduci Fcd per tutte le verifiche secondo il D.M. 08	Si
- γ_c per stati limite ultimi	
-Automatico	x
-Pari a	
- σ amm. calcestruzzo <daN/cm ² >	110.00
- τ_{c0} <daN/cm ² >	6.70
- τ_{c1} <daN/cm ² >	19.70

Acciaio	
-D.M. 92/96	
-Tipo di acciaio (Fe B 22+44 k)	44
-Modulo elastico <daN/cm ² >	2.06E+006
-Tensione caratteristica di snervamento (Fyk) <daN/cm ² >	4300.00
-Sigma amm. acciaio <daN/cm ² >	2600.00
-Sigma amm. reti e tralicci <daN/cm ² >	2600.00
-D.M. 08	
-Tipo di acciaio (B450A+B450C)	B450C
-Modulo elastico <daN/cm ² >	2.06E+006
-Tensione caratteristica di snervamento (Fyk) <daN/cm ² >	4500.00
-γ _s per stati limite ultimi	
-Automatico	x
-Pari a	
Coeff. di omogeneizzazione	15.00

Materiali per edifici esistenti

-Considera come elemento nuovo	No
-Calcestruzzo	
-Livello di conoscenza	LC2
-Fattore di confidenza	1.20
-Tipo di calcestruzzo	C25/30
-Rck calcestruzzo	300.00
-Modulo elastico	314472.00
-Resistenza media (Fcm) <daN/cm ² >	249.00
-Resistenza media a trazione (Fctm) <daN/cm ² >	17.91
-Resistenza caratteristica cilindrica (Fck)	249.00
-Resistenza caratteristica a trazione (Fctk)	17.91
-Acciaio	
-Livello di conoscenza	LC2
-Fattore di confidenza	1.20
-Tipo di acciaio	44
-Modulo elastico	2060000.00
-Tensione media di snervamento (Fym)	4300.00
-Tensione caratteristica di snervamento (Fyk) <daN/cm ² >	4300.00
-Allungamento (Agt) <%>	4.00
-Coeff. di omogeneizzazione	15.00

Parametri per analisi pushover

Numero fibre	200.00
Fattore di confinamento nucleo interno	1.00
Fattore di incrudimento acciaio <%>	0.10

Posizione barre e normativa

Copriferro reale al bordo staffa <cm>	2.50
Diametro staffa teorica <mm>	8.00
Distanza fra ferri su più strati <cm>	1.00
Verifica con barre in posizione teorica	Si
-Copriferro <cm>	3.00
Normativa di riferimento	No
-Relativa alle travi	
-Relativa ai pilastri	
-Relativa solo al controllo sulle tensioni	
Verifiche secondo Circ. 65 del 10/04/97	No

Verifiche e sollecitazioni

Passo di verifica <m>	0.50
Integrare lo scorrimento lungo il tratto	Si
-Lunghezza del tratto <m>	1.00
Verifiche a pressoflessione	Si
Verifiche a flessione/pressoflessione retta	No
-Considera My	
-Considera Mz	
Verifiche di stabilità in direzione Z locale	No
-Coeff. ω _b	
Integrare lo scorrimento lungo il tratto	No
-Coeff. β	
Tipo verifica di stabilità	
-Per N*ω-M e per N-c*M (standard)	Si
-Per N*ω-c*M (doppia)	No
-Per N*ω (sforzo normale e momento nullo)	No
-Per c*M (momento e sforzo normale nullo)	No

Verifiche a taglio

Modalità di calcolo Vrdu	
-Considera Vrdu minimo	x
-Considera Vrdu calcolato in corrispondenza di bw minimo	

- Considera Vrdu in corrispondenza di bw medio
- Considera Vrdu in corrispondenza di bw massimo
- Considera sempre Af Staffe non proiettata in direzione del taglio No

Dati per progettazione agli stati limite

- Gruppo di esigenza
- Ambiente poco aggressivo x
- Ambiente moderatamente aggressivo
- Ambiente molto aggressivo
- Usa dominio N-M per flessioni rette No
- Ricerca della sicurezza con sforzo normale costante
- Ricerca della sicurezza con eccentricità costante
- Controllo rapporto X/D No
- Barre da considerare tese per verifiche a taglio
- Solo le barre con deformazione percentuale rispetto alla barra più tesa non inferiore al <%> 30.00
- Tutte le barre in trazione

Dati per verifiche di resistenza al fuoco

- Tempo di verifica (REI) <minuti> 120.00
- Dimensione MESH <cm> 2.00
- Passo di calcolo <secondi> 10.00
- Temperatura ambiente <C°> 20.00
- Coeff. di convezione a temperatura ambiente <W/mq K> 9.00
- Tipo di aggregati SILICEI
- Massa volumica a secco <daN/mc> 2300.00
- Umidità iniziale 3.00
- Fattore di interpolazione conducibilità 0.50

Aste in acciaio

Generali

Verifica aste in acciaio

- Numero punti interni per controllo Sigma 10.00
- Numero CC da considerare di tipo I 99.00
- Sigma max amm. senza verifiche di stabilità <%> 2.00
- Trascura sisma per verifiche di deformazione alle T.A. No

Stampe

- Verifiche da riportare in relazione Tutte

1

Specifici

Verifiche di resistenza e deformabilità

- Tipo di acciaio CNR 10011 e altre normative FE510
- Tipo di acciaio D.M. 08 per profilati a sezione aperta S355
- UNI EN
- 10025-2
- S355H
- UNI EN
- 10210-1
- Considera come elemento esistente No
- Livello di conoscenza LC1
- Fattore di confidenza 1.35
- Considera prescrizioni D.M. 08 relative ai ponti No
- Rapporto fra area effettiva e area nominale 1.00
- Rapporto fra area netta e area nominale 1.00
- Coeff. di forma intorno all'asse Y 1.00
- Coeff. di forma intorno all'asse Z 1.00
- Valutare la τ per torsione nei punti di spigolo Si
- Massimo valore del rapporto tra la luce e la freccia (totale) 500.00
- Massimo valore del rapporto tra la luce e la freccia (solo accidentali) 400.00

Verifiche ai sensi D.M. 08

- Fai sempre verifiche in campo elastico Si
- Usa prescrizioni EC3 quando più dettagliate Si
- Effettua verifiche previste nel capitolo 7 No
- Verifiche di stabilità laterale per flessione
- Parametri statici di calcolo
- Utilizza classificazione e parametri minimi x
- Riclassifica e rivaluta parametri con sollecitazioni di verifica
- Coeff.
- Valuta in base ai momenti dell'asta x
- Utilizza valore imposto

-Fattore correttivo di distribuzione K_c	0.94
-Snellezza di riferimento $\lambda_{LT,0}$	0.40
-Coeff. β	0.75
Verifiche di stabilità laterale per pressoflessione	
-Considera come molto deformabile a torsione	No
-Fattore correttivo di distribuzione α_{mY}	0.95
-Fattore correttivo di distribuzione α_{mZ}	0.95
-Fattore correttivo di distribuzione α_{mLT}	0.95

Verifiche di stabilità asta

Riduzione lunghezza libera d'inflessione	
-Distanza fra i nodi dell'asta	x
-Distanza ridotta delle zone rigide moltiplicate per il valore	
Verifiche di stabilità globale in dir. Y locale	Si
-Coeff. β intorno all'asse Y	1.00
Verifiche di stabilità globale in dir. Z locale	Si
-Coeff. β intorno all'asse Z	1.00
Tipo di accoppiamento aste composte	
-Separate	
-Calastrellate	
-Imbottite	
-Automatico	x
Calcolo momento medio usando valori assoluti	Si
Interasse calastrelli o imbottiture	
-Distanza pari a <m>	
-Interasse da normativa moltiplicato per il valore	0.80
-Aste rigidamente collegate	
Aste laminate	Si
Verifiche di stabilità laterale	Si
-Coeff. per calcolo interasse ritegni torsionali	1.00
Eseguire anche le verifiche al punto 7.3.2	Si
Carichi sull'estradosso	Si
Numero irrigidimenti orizzontali anima	
Interasse irrigidimenti verticali anima	0.00
-Numero di suddivisioni	
-Distanza non inferiore a <cm>	
-Pari alla lunghezza dell'asta	x
Modalità di calcolo $\sigma_{cr,id}$	
-Normativa	
-Massonet	x
-Ballio	

Verifiche di stabilità membratura

Massimo numero aste costituenti unica membratura	1.00
Sforzo normale di verifica	
-Massimo valore fra tutte le aste	x
-Media aritmetica dei valori di tutte le aste	
-Media pesata di tutte le aste	
Contributo eventuali sforzi di trazione	No
Verifica nei piani principali	Si
Incremento snellezza	Si
Verifiche di stabilità globale in dir. Y locale	Si
-Coeff. β calcolato in funzione dello sforzo normale	
-Coeff. β	1.00
Verifiche di stabilità globale in dir. Z locale	Si
-Coeff. β calcolato in funzione dello sforzo normale	
-Coeff. β	1.00

Verifiche aste in acciaio

Simbologia

Sez.	= Numero della sezione
Cod.	= Codice
Tipo	= Tipologia
	2C = Doppia C lato labbri
	2Cdx = Doppia C lato costola
	2I = Doppia I
	2L = Doppia L lato labbri
	2Ldx = Doppia L lato costole
	C = C
	Cdx = C destra
	Cir. = Circolare
	Cir.c = Circolare cava
	I = I
	L = L
	Ldx = L destra
	Om. = Omega
	Pg = Pi greco

		Pr	=	Poligono regolare
		Prc	=	Poligono regolare cavo
		Pc	=	Per coordinate
		Ia	=	Inerzie assegnate
		R	=	Rettangolare
		Rc	=	Rettangolare cava
		T	=	T
		U	=	U
		Ur	=	U rovescia
		V	=	V
		Vr	=	V rovescia
		Z	=	Z
		Zdx	=	Z destra
		Ts	=	T stondata
		Ls	=	L stondata
		Cs	=	C stondata
		Is	=	I stondata
		Dis.	=	Disegnata
D	<cm>		=	Distanza
Area	<cmq>		=	Area
Anet	<cmq>		=	Area netta per compressione
Aeff	<cmq>		=	Area effettiva per trazione
Jy	<cm4>		=	Momento d'inerzia rispetto all'asse Y
Jz	<cm4>		=	Momento d'inerzia rispetto all'asse Z
Iy	<cm>		=	Raggio giratorio d'inerzia rispetto all'asse Y
Iz	<cm>		=	Raggio giratorio d'inerzia rispetto all'asse Z
Wymin	<cmq>		=	Modulo di resistenza minimo rispetto all'asse Y
Wzmin	<cmq>		=	Modulo di resistenza minimo rispetto all'asse Z
Wy,plas	<cmq>		=	Modulo di resistenza plastico intorno all'asse y
Wz,plas	<cmq>		=	Modulo di resistenza plastico intorno all'asse z
Atag,y	<cmq>		=	Area resistente a taglio in direz y
Atag,z	<cmq>		=	Area resistente a taglio in direz y
J0	<cm6>		=	Costante di ingobbamento
CC			=	Numero della combinazione delle condizioni di carico elementari
N,Ed	<daN>		=	Forza assiale di calcolo
My,Ed	<daNm>		=	Momento flettente di calcolo intorno all'asse Y
Mz,Ed	<daNm>		=	Momento flettente di calcolo intorno all'asse Z
Nc,Rd	<daN>		=	Resistenza a compressione
My,c,Rd	<daNm>		=	Resistenza di calcolo a flessione intorno all'asse Y
Mz,c,Rd	<daNm>		=	Resistenza di calcolo a flessione intorno all'asse Z
L			=	lunghezza dell'asta
$\alpha_{My}, \alpha_{Mz}, \alpha_{LT}$			=	Coefficienti correttivi per il momento flettente
L _{cr}	<m>		=	Lunghezza di libera inflessione laterale fra ritegni torsionali
α_{imp}			=	Coefficiente di imperfezione
k _c			=	Coeff. di correzione momento flettente per stabilit� laterale membrature inflesse
ψ			=	Coeff. di correzione momento critico per stabilit� laterale membrature inflesse
M _{cr}	<daNm>		=	Momento critico per instabilit� flesso torsionale
λ_{LT}			=	Coefficiente di imperfezione per stabilit� laterale membrature inflesse
$\lambda_{LT,0}$			=	Coefficiente di imperfezione di confronto per stabilit� laterale membrature inflesse
β_{LT}			=	Coefficiente per calcolo Φ_{LT}
Φ_{LT}			=	Coefficiente Φ per stabilit� laterale membrature inflesse
f			=	Fattore di modifica per il coefficiente di riduzione
χ_{LT}			=	Coefficiente di riduzione per stabilit� laterale membrature inflesse
λ_y			=	Snellezza per inflessione intorno all'asse y(c)
N _{cr,y}	<daN>		=	Sforzo normale critico euleriano per inflessione intorno all'asse y(c)
λ^*_y			=	Snellezza adimensionale per inflessione intorno all'asse y(c)
Curva			=	Curva di instabilit� adottata
Φ_y			=	Coefficiente Φ per inflessione intorno all'asse y(c)
χ_y			=	Coefficiente χ di riduzione per instabilit� intorno all'asse y(c)
λ_z			=	Snellezza per inflessione intorno all'asse z(e)
N _{cr,z}	<daN>		=	Sforzo normale critico euleriano per inflessione intorno all'asse z(e)
λ^*_z			=	Snellezza adimensionale per inflessione intorno all'asse z(e)
Φ_z			=	Coefficiente Φ per inflessione intorno all'asse z(e)
χ_z			=	Coefficiente χ di riduzione per instabilit� intorno all'asse z(e)
K _{yy} , K _{yz} , K _{zy} , K _{zz}			=	Coefficienti di interazione
X1	<m>		=	Coordinata progressiva (dal nodo iniziale dell'asta) in cui viene effettuato il progetto/verifica
N	<daN>		=	Sforzo normale
Tz	<daN>		=	Taglio in dir. Z
My	<daNm>		=	Momento flettente intorno all'asse Y
Ty	<daN>		=	Taglio in dir. Y
Mz	<daNm>		=	Momento flettente intorno all'asse Z
σ_N	<daN/cmq>		=	Tensione normale per sforzo normale
σ_M	<daN/cmq>		=	Tensione normale per momento flettente
τ	<daN/cmq>		=	Tensione tangenziale per taglio e/o torsione
Mx	<daNm>		=	Momento torcente intorno all'asse X
λ			=	Snellezza per inflessione
N _{cr}	<daN>		=	Sforzo normale critico euleriano
λ^*			=	Snellezza adimensionale
Φ			=	Coefficiente Φ
χ_{min}			=	Coefficiente χ di riduzione per instabilit�
N _b ,Rd	<daN>		=	Resistenza all'instabilit�
M,Ed	<daNm>		=	Momento flettente di calcolo
M	<daNm>		=	Momento agente
My,b,Rd	<daNm>		=	Resistenza di calcolo a flessione ridotta per stabilit� laterale membrature inflesse
T	<daN>		=	Taglio agente
f _{z,L}	<cm>		=	Freccia in direzione Z locale
f _{z,G}	<cm>		=	Freccia in direzione Z globale

Caratteristiche profilati utilizzati

Sez.	Cod.	Tipo	D	Area	Anet	Aeff	Jy	Jz	Iy	Iz	Wymin	Wzmin
			<cm>	<cmq>	<cmq>	<cmq>	<cm4>	<cm4>	<cm>	<cm>	<cmq>	<cmq>
2 Cir.c	D=120/6	Cir.c	--	21.49	21.49	21.49	350.05	350.05	4.04	4.04	58.34	58.34
4 Cir.	D=4	Cir.	--	12.57	12.57	12.57	12.57	12.57	1.00	1.00	6.28	6.28
6 Is	175x250x18x12x0x0x10000	Is	--	85.09	85.09	85.09	4349.74	2318.00	7.15	5.22	497.11	185.44
8 Is	146x215x13x10x0x0x10000	Is	--	58.07	58.07	58.07	2134.48	1213.37	6.06	4.57	292.39	112.87

Caratteristiche profilati utilizzati

Sez.	Cod.	Wy,plas <cmc>	Wz,plas <cmc>	Atag,y <cmq>	Atag,z <cmq>	J0 <cm6>
2 Cir.c	D=120/6	76.14	76.14	13.68	13.68	
4 Cir.	D=4	10.41	10.41	8.00	8.00	
6 Is	175x250x18x12x0x0x10000	573.19	321.21	57.91	27.25	207570.00
8 Is	146x215x13x10x0x0x10000	333.99	194.62	41.69	16.37	76591.70

Asta n. 1 (7 8) Is 175x250x18x12x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-6827.64 My,Ed=-37.47 Mz,Ed=3461.35
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=700.73
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.01$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.71$ $M_{cr}=39722.80$ $\lambda_{LT}=0.67$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.71$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.91$
 $\lambda_y=98.01$ Ncr,y=183603.00 $\lambda^*_y=1.28$ Curva b: $\Phi_y=1.51$ $\chi_y=0.44$
 $\lambda_z=134.26$ Ncr,z=97842.80 $\lambda^*_z=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
Kyy, Kyz, Kzy, Kzz = 0.98, 1.01, 0.78, 1.01
Verifica YY: 0.05 + 0.00 + 0.56 = 0.61
Verifica ZZ: 0.10 + 0.00 + 0.56 = 0.65
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/96680) $f_{z,l}=0.00$ (L/386720)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.04$ (L/16891) $f_{z,l}=0.01$ (L/66797)
 - Verifica in termini tensionali (4.2.5) - CC 25 Xl=7.01 - Classe 3
Sollecitazioni: N=-6219.78 Tz=-5.15 My=-1.41 Ty=860.68 Mz=3461.35
Tensioni: $\sigma_N=-73.09$ $\sigma_M=-1866.85$ $\tau=0.00$ $\sigma_{max}=-1939.94$
Tensioni: $\sigma_N=-73.09$ $\sigma_M=134.62$ $\tau=16.43$ $\tau_{max}=16.43$
Tensioni: $\sigma_N=-73.09$ $\sigma_M=-1866.85$ $\tau=0.00$ $\sigma_{ID,max}=1939.94$

Asta n. 2 (1 2) Is 175x250x18x12x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-19167.50 My,Ed=-514.38 Mz,Ed=-1799.67
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=702.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.02$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.58$ $M_{cr}=36520.40$ $\lambda_{LT}=0.70$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.73$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.90$
 $\lambda_y=98.21$ Ncr,y=182868.00 $\lambda^*_y=1.29$ Curva b: $\Phi_y=1.51$ $\chi_y=0.43$
 $\lambda_z=134.53$ Ncr,z=97451.20 $\lambda^*_z=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
Kyy, Kyz, Kzy, Kzz = 1.04, 1.11, 0.83, 1.11
Verifica YY: 0.15 + 0.04 + 0.32 = 0.51
Verifica ZZ: 0.27 + 0.03 + 0.32 = 0.62
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,l}=0.02$ (L/35227) $f_{z,g}=0.01$ (L/76692)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.11$ (L/6218) $f_{z,g}=0.05$ (L/13100)
 - Verifica in termini tensionali (4.2.5) - CC 25 Xl=7.02 - Classe 3
Sollecitazioni: N=-18559.60 Tz=-85.99 My=89.39 Ty=-487.33 Mz=-1799.67 Mx=6.87
Tensioni: $\sigma_N=-218.11$ $\sigma_M=-988.47$ $\tau=6.89$ $\sigma_{max}=-1206.58$
Tensioni: $\sigma_N=-218.11$ $\sigma_M=-84.29$ $\tau=25.95$ $\tau_{max}=25.95$
Tensioni: $\sigma_N=-218.11$ $\sigma_M=-988.47$ $\tau=6.89$ $\sigma_{ID,max}=1206.64$

Asta n. 4 (3 4) Is 175x250x18x12x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-19824.60 My,Ed=-257.43 Mz,Ed=-2027.39
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=702.06
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.02$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.56$ $M_{cr}=36040.40$ $\lambda_{LT}=0.70$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.73$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.90$
 $\lambda_y=98.19$ Ncr,y=182908.00 $\lambda^*_y=1.29$ Curva b: $\Phi_y=1.51$ $\chi_y=0.43$
 $\lambda_z=134.51$ Ncr,z=97472.40 $\lambda^*_z=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
Kyy, Kyz, Kzy, Kzz = 1.04, 1.11, 0.83, 1.11
Verifica YY: 0.16 + 0.02 + 0.36 = 0.54
Verifica ZZ: 0.28 + 0.01 + 0.36 = 0.66
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,l}=0.01$ (L/73616)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.06$ (L/12670)
- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=7.02$ - Classe 3
Sollecitazioni: $N=-19216.80$ $T_z=-43.86$ $M_y=50.47$ $T_y=-548.83$ $M_z=-2027.39$ $M_x=3.00$
Tensioni: $\sigma_N=-225.84$ $\sigma_M=-1103.44$ $\tau=3.00$ $\sigma_{max}=-1329.28$
Tensioni: $\sigma_N=-225.84$ $\sigma_M=-86.86$ $\tau=15.02$ $\tau_{max}=15.02$
Tensioni: $\sigma_N=-225.84$ $\sigma_M=-1103.44$ $\tau=3.00$ $\sigma_{ID,max}=1329.29$

Asta n. 5 (-11 -4) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/25614)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.07$ (L/4647)
- Verifica a compressione (4.2.10) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-13011.20$
 $N,Ed=-13011.20$ $Nc,Rd=-72651.60$ $N,Ed/Nc,Rd=0.18$
- Verifica di stabilità (4.2.4.1.3.1) - CC 25
Sollecitazioni: $N=-13011.20$ $L=320.00$
 $\lambda=79.28$ $Ncr=70851.00$ $\lambda^*=1.04$
Curva a: $\Phi=1.13$ $\chi_{,min}=0.64$ $N,Ed=-13011.20$ $Nb,Rd=46443.40$ $N,Ed/Nb,Rd=0.28$

Asta n. 6 (-9 -8) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/22671)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.04$ (L/4122)
- Verifica a compressione (4.2.10) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-14781.80$
 $N,Ed=-14781.80$ $Nc,Rd=-72651.60$ $N,Ed/Nc,Rd=0.20$
- Verifica di stabilità (4.2.4.1.3.1) - CC 25
Sollecitazioni: $N=-14781.80$ $L=160.00$
 $\lambda=39.64$ $Ncr=283404.00$ $\lambda^*=0.52$
Curva a: $\Phi=0.67$ $\chi_{,min}=0.92$ $N,Ed=-14781.80$ $Nb,Rd=66718.00$ $N,Ed/Nb,Rd=0.22$

Asta n. 7 (17 76) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.00$ (L/33764)
- Verifica a compressione (4.2.10) - CC 9 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-2172.05$
 $N,Ed=-2172.05$ $Nc,Rd=-72651.60$ $N,Ed/Nc,Rd=0.03$

Asta n. 8 (18 72) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/120586)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/22213)
- Verifica a compressione (4.2.10) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-2739.31$
 $N,Ed=-2739.31$ $Nc,Rd=-72651.60$ $N,Ed/Nc,Rd=0.04$

Asta n. 9 (72 17) Cir. D=4 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 9 - Classe 3
Sollecitazioni: $N,Ed=-1838.41$ $M,Ed=4.05$
Resistenze: $Nc,Rd=42486.30$ $M,c,Rd=212.43$ $L=259.36$
 $\lambda=259.36$ $Ncr=3872.04$ $\lambda^*=3.39$ Curva c: $\Phi=7.04$ $\chi_{,min}=0.08$
 $\chi_{,min}=0.08$
Verifica: $0.57 + 0.04 = 0.61$
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/226627)
- Verifica Freccia massima carichi totali - CC 26

$f_{z,L}=0.14$ (L/1814) $f_{z,G}=0.09$ (L/2877)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.30 - Classe 3
Sollecitazioni: N=-1828.70 M=5.39
Tensioni: $\sigma_N=-145.52$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{max}=-231.38$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-145.52$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{ID,max}=231.38$

Asta n. 10 (76 18) Cir. D=4 Crit. 1

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 25 - Classe 3
 $L_{cr}=2.10$ Curva d: $\alpha-imp=0.76$ $k_c=0.94$ $\psi=1.75$ $M,cr=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ $f=0.00$ $\chi_{LT}=1.00$
CC 25 $M_y,Ed=-5.68$ $M_y,b,Rd=212.43$ $M_y,Ed/M_y,b,Rd=0.03$

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.08$ (L/2765) $f_{z,G}=0.06$ (L/3371)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.05 - Classe 3
Sollecitazioni: N=2195.28 M=4.37
Tensioni: $\sigma_N=174.69$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{max}=244.20$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=174.69$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{ID,max}=244.20$

Asta n. 11 (14 63) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.00$ (L/120586)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.01$ (L/24117)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.61 - Classe 3
Sollecitazioni: N=5627.62
Tensioni: $\sigma_N=261.89$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{max}=261.89$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=261.89$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{ID,max}=261.89$

Asta n. 12 (15 64) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-6504.46 M,Ed=0.00
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=161.00
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=39.89$ $N_{cr}=279894.00$ $\lambda^*=0.52$
Curva a: $\Phi=0.67$ $\chi_{,min}=0.92$
Kyy, Kyz, Kzy, Kzz = 0.98, ----, ----, ----
Verifica: 0.09 = 0.09

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.00$ (L/93789)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.01$ (L/16551)

- Verifica a compressione (4.2.10) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-6504.46
N,Ed=-6504.46 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.09

Asta n. 13 (14 64) Cir. D=4 Crit. 1

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 19 - Classe 3
 $L_{cr}=2.59$ Curva d: $\alpha-imp=0.76$ $k_c=0.94$ $\psi=1.75$ $M,cr=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ $f=0.00$ $\chi_{LT}=1.00$
CC 19 $M_y,Ed=-5.39$ $M_y,b,Rd=212.43$ $M_y,Ed/M_y,b,Rd=0.03$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 - Classe 3
Sollecitazioni: N,Ed=-3511.22 M,Ed=4.05
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=259.36
 $\lambda=259.36$ $N_{cr}=3872.04$ $\lambda^*=3.39$ Curva c: $\Phi=7.04$ $\chi_{,min}=0.08$
 $\chi_{,min}=0.08$
Verifica: 1.09 + 0.20 = 1.30

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.14$ (L/1816) $f_{z,G}=0.10$ (L/2724)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.30 - Classe 3
Sollecitazioni: N=-5181.39 M=5.39
Tensioni: $\sigma_N=-412.32$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{max}=-498.18$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-412.32$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{ID,max}=498.18$

Asta n. 14 (15 63) Cir. D=4 Crit. 1

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 25 - Classe 3
L_{cr}=2.10 Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ M,cr=0.00 $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ $f=0.00$ $\chi_{LT}=1.00$
CC 25 $M_y,Ed=-5.68$ $M_y,b,Rd=212.43$ $M_y,Ed/M_y,b,Rd=0.03$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 23 - Classe 3
Sollecitazioni: N,Ed=-1867.25 M,Ed=3.28
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=209.96
 $\lambda=209.96$ Ncr=5908.50 $\lambda^*=2.75$ Curva c: $\Phi=4.90$ $\chi_{,min}=0.11$
 $\chi_{,min}=0.11$
Verifica: $0.39 + 0.02 = 0.42$
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.08$ (L/2765) $f_{z,G}=0.06$ (L/3522)
- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.05 - Classe 3
Sollecitazioni: N=7488.33 M=4.37
Tensioni: $\sigma_N=595.90$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{max}=665.41$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=595.90$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{ID,max}=665.41$

Asta n. 15 (8 4) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2362.31 M,Ed=2.86
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=102.22
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, ----, ----$
 $\lambda=25.33$ Ncr=694405.00 $\lambda^*=0.33$
Curva a: $\Phi=0.57$ $\chi_{,min}=0.97$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: $0.03 + 0.00 = 0.03$
- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.51 - Classe 3
Sollecitazioni: N=-2362.31 M=2.86
Tensioni: $\sigma_N=-109.93$ $\sigma_M=-4.91$ $\tau=0.00$ $\sigma_{max}=-114.84$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-109.93$ $\sigma_M=-4.91$ $\tau=0.00$ $\sigma_{ID,max}=114.84$

Asta n. 16 (4 6) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2803.79 M,Ed=4.01
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=120.97
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, ----, ----$
 $\lambda=29.97$ Ncr=495807.00 $\lambda^*=0.39$
Curva a: $\Phi=0.60$ $\chi_{,min}=0.95$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: $0.04 + 0.00 = 0.04$
- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.60 - Classe 3
Sollecitazioni: N=-2803.79 M=4.01
Tensioni: $\sigma_N=-130.48$ $\sigma_M=-6.88$ $\tau=0.00$ $\sigma_{max}=-137.35$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-130.48$ $\sigma_M=-6.88$ $\tau=0.00$ $\sigma_{ID,max}=137.35$

Asta n. 17 (6 2) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2377.55 M,Ed=2.89
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=102.73
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, ----, ----$
 $\lambda=25.45$ Ncr=687496.00 $\lambda^*=0.33$
Curva a: $\Phi=0.57$ $\chi_{,min}=0.97$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: $0.03 + 0.00 = 0.03$
- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.51 - Classe 3

Sollecitazioni: N=-2377.55 M=2.89
Tensioni: $\sigma_N=-110.64$ $\sigma_M=-4.96$ $\tau=0.00$ $\sigma_{max}=-115.60$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-110.64$ $\sigma_M=-4.96$ $\tau=0.00$ $\sigma_{ID,max}=115.60$

Asta n. 18 (2 8) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-2710.76 M,Ed=3.97
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=120.28
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=29.80$ Ncr=501461.00 $\lambda^*=0.39$
Curva a: $\Phi=0.60$ $\chi_{min}=0.96$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.04 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.60 - Classe 3

Sollecitazioni: N=-2710.76 M=3.97
Tensioni: $\sigma_N=-126.15$ $\sigma_M=-6.80$ $\tau=0.00$ $\sigma_{max}=-132.95$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-126.15$ $\sigma_M=-6.80$ $\tau=0.00$ $\sigma_{ID,max}=132.95$

Asta n. 101 (8 16) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3

Sollecitazioni: N,Ed=-5971.14 My,Ed=372.24 Mz,Ed=-4472.91
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=526.58
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.27$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.50$ M,cr=49048.90 $\lambda_{LT}=0.60$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.67$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.94$
 $\lambda_y=73.65$ Ncr,y=325125.00 $\lambda^*_y=0.96$ Curva b: $\Phi_y=1.09$ $\chi_y=0.62$
 $\lambda_z=100.89$ Ncr,z=173260.00 $\lambda^*_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 0.97, 0.98, 0.77, 0.98
Verifica YY: 0.02 + 0.02 + 0.70 = 0.74
Verifica ZZ: 0.02 + 0.02 + 0.70 = 0.74

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,g}=0.01$ (L/48863) $f_{z,L}=0.01$ (L/70789)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,g}=0.07$ (L/7401) $f_{z,L}=0.04$ (L/12492)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=5.27 - Classe 3

Sollecitazioni: N=-5623.79 Tz=-85.86 My=372.24 Ty=-1385.91 Mz=-4472.91 Mx=-6.56
Tensioni: $\sigma_N=-66.09$ $\sigma_M=-2486.94$ $\tau=6.58$ $\sigma_{max}=-2553.03$
Tensioni: $\sigma_N=-66.09$ $\sigma_M=-113.64$ $\tau=35.21$ $\tau_{max}=35.21$
Tensioni: $\sigma_N=-66.09$ $\sigma_M=-2486.94$ $\tau=6.58$ $\sigma_{ID,max}=2553.05$

Asta n. 102 (2 19) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-19378.60 My,Ed=-182.39 Mz,Ed=-1800.72
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=553.99
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.54$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.42$ M,cr=43508.90 $\lambda_{LT}=0.64$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.69$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.93$
 $\lambda_y=77.48$ Ncr,y=293755.00 $\lambda^*_y=1.01$ Curva b: $\Phi_y=1.15$ $\chi_y=0.59$
 $\lambda_z=106.14$ Ncr,z=156543.00 $\lambda^*_z=1.39$ Curva c: $\Phi_z=1.76$ $\chi_z=0.35$
Kyy, Kyz, Kzy, Kzz = 1.02, 1.06, 0.81, 1.06
Verifica YY: 0.11 + 0.01 + 0.30 = 0.43
Verifica ZZ: 0.19 + 0.01 + 0.30 = 0.50

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,g}=0.02$ (L/36765) $f_{z,L}=0.00$ (L/165970)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,g}=0.09$ (L/6447) $f_{z,L}=0.02$ (L/27927)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=5.54 - Classe 3

Sollecitazioni: N=-18927.10 Tz=44.59 My=-182.39 Ty=561.49 Mz=1769.37 Mx=-9.03
Tensioni: $\sigma_N=-222.43$ $\sigma_M=-990.84$ $\tau=9.05$ $\sigma_{max}=-1213.27$
Tensioni: $\sigma_N=-222.43$ $\sigma_M=98.11$ $\tau=31.59$ $\tau_{max}=31.59$
Tensioni: $\sigma_N=-222.43$ $\sigma_M=-990.84$ $\tau=9.05$ $\sigma_{ID,max}=1213.37$

Asta n. 103 (6 13) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-6948.24 My,Ed=112.59 Mz,Ed=-4840.37
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=526.43
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.26$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.49$ $M_{cr}=48777.90$ $\lambda_{LT}=0.60$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.67$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.94$
 $\lambda_y=73.63$ Ncr,y=325318.00 $\lambda'_y=0.96$ Curva b: $\Phi_y=1.09$ $\chi_y=0.62$
 $\lambda_z=100.86$ Ncr,z=173363.00 $\lambda'_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 0.97, 0.99, 0.78, 0.99
Verifica YY: 0.04 + 0.01 + 0.76 = 0.81
Verifica ZZ: 0.06 + 0.01 + 0.76 = 0.83

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/39712) $f_{z,L}=0.00$ (L/250907)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/6153) $f_{z,L}=0.01$ (L/36556)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=5.26 - Classe 3
Sollecitazioni: N=-6496.69 Tz=-27.13 My=112.59 Ty=-1619.68 Mz=-4840.37 Mx=4.26
Tensioni: $\sigma_N=-76.35$ $\sigma_M=-2632.86$ $\tau=4.27$ $\sigma_{max}=-2709.21$
Tensioni: $\sigma_N=-76.35$ $\sigma_M=-206.09$ $\tau=35.19$ $\tau_{max}=35.19$
Tensioni: $\sigma_N=-76.35$ $\sigma_M=-2632.86$ $\tau=4.27$ $\sigma_{ID,max}=2709.22$

Asta n. 104 (4 9) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-20045.50 My,Ed=72.17 Mz,Ed=-2027.81
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=553.99
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.54$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.38$ $M_{cr}=42311.20$ $\lambda_{LT}=0.65$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.70$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.92$
 $\lambda_y=77.48$ Ncr,y=293755.00 $\lambda'_y=1.01$ Curva b: $\Phi_y=1.15$ $\chi_y=0.59$
 $\lambda_z=106.14$ Ncr,z=156543.00 $\lambda'_z=1.39$ Curva c: $\Phi_z=1.76$ $\chi_z=0.35$
Kyy, Kyz, Kzy, Kzz = 1.02, 1.06, 0.81, 1.06
Verifica YY: 0.12 + 0.00 + 0.34 = 0.47
Verifica ZZ: 0.20 + 0.00 + 0.34 = 0.54

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.02$ (L/34170) $f_{z,L}=0.00$ (L/176029)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/6069) $f_{z,L}=0.02$ (L/34372)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-20045.50 Tz=-7.79 My=29.00 Ty=806.47 Mz=-2027.81 Mx=-3.35
Tensioni: $\sigma_N=-235.57$ $\sigma_M=-1099.35$ $\tau=3.36$ $\sigma_{max}=-1334.92$
Tensioni: $\sigma_N=-235.57$ $\sigma_M=-74.06$ $\tau=18.78$ $\tau_{max}=18.78$
Tensioni: $\sigma_N=-235.57$ $\sigma_M=-1099.35$ $\tau=3.36$ $\sigma_{ID,max}=1334.94$

Asta n. 105 (-4 37) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-11458.00 M,Ed=0.12
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=78.22
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=19.38$ Ncr=1185880.00 $\lambda'=0.25$
Curva a: $\Phi=0.54$ $\chi_{min}=0.99$
Kyy, Kyz, Kzy, Kzz = 0.97, ----, ----, ----
Verifica: 0.16 + 0.00 = 0.16

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/29291)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/5291)

- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-11458.00
N,Ed=-11458.00 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.16

Asta n. 106 (-8 126) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-11719.80 M,Ed=0.29

Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=66.17
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda = 16.39$ Ncr=1657040.00 $\lambda^* = 0.21$
Curva a: $\Phi = 0.52$ $\chi_{\min} = 1.00$
Kyy, Kyz, Kzy, Kzz = 0.97, ----, ----, ----
Verifica: $0.16 + 0.00 = 0.16$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g} = 0.00$ (L/28909)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g} = 0.01$ (L/5506)
- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-11719.80 T=1.76
N,Ed=-11719.80 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.16

Asta n. 211 (16 18) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3127.14 My,Ed=1131.67 Mz,Ed=-1883.23
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=379.60
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 3.80$ Curva b: $\alpha\text{-imp} = 0.34$ $k_c = 0.94$ $\psi = 1.75$ M,cr=39930.60 $\lambda_{LT} = 0.51$
 $\lambda_{LT,0} = 0.40$ $\beta_{LT} = 0.75$ $\Phi_{LT} = 0.62$ $\beta_{LT} = 0.75$ $f = 0.98$ $\chi_{LT} = 0.98$
 $\lambda_y = 62.61$ Ncr,y=307021.00 $\lambda^*_y = 0.82$ Curva b: $\Phi_y = 0.94$ $\chi_y = 0.71$
 $\lambda_z = 83.04$ Ncr,z=174529.00 $\lambda^*_z = 1.09$ Curva c: $\Phi_z = 1.31$ $\chi_z = 0.49$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: $0.02 + 0.11 + 0.48 = 0.61$
Verifica ZZ: $0.02 + 0.09 + 0.48 = 0.58$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g} = 0.05$ (L/7057) $f_{z,L} = 0.03$ (L/12247)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g} = 0.30$ (L/1265) $f_{z,L} = 0.18$ (L/2166)
- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3127.14 T₂=298.13 M_y=1131.67 T_y=565.78 M_z=-1883.23
Tensioni: $\sigma_N = -53.85$ $\sigma_M = -2055.51$ $\tau = 0.00$ $\sigma_{\max} = -2109.36$
Tensioni: $\sigma_N = -53.85$ $\sigma_M = -409.85$ $\tau = 21.56$ $\tau_{\max} = 21.56$
Tensioni: $\sigma_N = -53.85$ $\sigma_M = -2055.51$ $\tau = 0.00$ $\sigma_{TD,\max} = 2109.36$

Asta n. 212 (16 17) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-3059.04 My,Ed=-1060.67 Mz,Ed=-2296.02
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=334.12
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 3.34$ Curva b: $\alpha\text{-imp} = 0.34$ $k_c = 0.94$ $\psi = 1.75$ M,cr=47739.80 $\lambda_{LT} = 0.47$
 $\lambda_{LT,0} = 0.40$ $\beta_{LT} = 0.75$ $\Phi_{LT} = 0.59$ $\beta_{LT} = 0.75$ $f = 0.98$ $\chi_{LT} = 1.00$
 $\lambda_y = 55.11$ Ncr,y=396295.00 $\lambda^*_y = 0.72$ Curva b: $\Phi_y = 0.85$ $\chi_y = 0.77$
 $\lambda_z = 73.09$ Ncr,z=225278.00 $\lambda^*_z = 0.96$ Curva c: $\Phi_z = 1.14$ $\chi_z = 0.57$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: $0.02 + 0.10 + 0.58 = 0.70$
Verifica ZZ: $0.02 + 0.08 + 0.58 = 0.68$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g} = 0.05$ (L/6776) $f_{z,L} = 0.02$ (L/14845)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g} = 0.28$ (L/1201) $f_{z,L} = 0.13$ (L/2634)
- Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-3059.04 T₂=-317.46 M_y=-1060.67 T_y=734.45 M_z=-2296.02
Tensioni: $\sigma_N = -52.68$ $\sigma_M = -2396.95$ $\tau = 0.00$ $\sigma_{\max} = -2449.63$
Tensioni: $\sigma_N = -52.68$ $\sigma_M = 166.58$ $\tau = 25.49$ $\tau_{\max} = 25.49$
Tensioni: $\sigma_N = -52.68$ $\sigma_M = -2396.95$ $\tau = 0.00$ $\sigma_{TD,\max} = 2449.63$

Asta n. 212 (19 21) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-11140.30 My,Ed=604.44 Mz,Ed=220.54
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=437.01
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 4.37$ Curva b: $\alpha\text{-imp} = 0.34$ $k_c = 0.94$ $\psi = 1.75$ M,cr=33075.30 $\lambda_{LT} = 0.56$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=72.08$ Ncr,y=231652.00 $\lambda_y^*=0.94$ Curva b: $\Phi_y=1.07$ $\chi_y=0.63$
 $\lambda_z=95.60$ Ncr,z=131685.00 $\lambda_z^*=1.25$ Curva c: $\Phi_z=1.54$ $\chi_z=0.41$
Kyy, Kyz, Kzy, Kzz = 1.00, 1.03, 0.80, 1.03
Verifica YY: 0.09 + 0.06 + 0.06 = 0.21
Verifica ZZ: 0.14 + 0.05 + 0.06 = 0.25

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.02$ (L/21614) $f_{z,G}=0.01$ (L/37254)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.12$ (L/3496) $f_{z,G}=0.08$ (L/5636)

- Verifica in termini tensionali (4.2.5) - CC 9 X1=0.00 - Classe 3
Sollecitazioni: N=-8930.45 Tz=121.72 My=531.91 Ty=63.85 Mz=284.34
Tensioni: $\sigma_N=-153.80$ $\sigma_M=-433.83$ $\tau=0.00$ $\sigma_{max}=-587.63$
Tensioni: $\sigma_N=-153.80$ $\sigma_M=15.23$ $\tau=7.33$ $\tau_{max}=7.33$
Tensioni: $\sigma_N=-153.80$ $\sigma_M=-433.83$ $\tau=0.00$ $\sigma_{ID,max}=587.63$

Asta n. 213 (13 14) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3154.92 My,Ed=1042.29 Mz,Ed=-2037.92
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=352.04
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.52$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=44330.50 $\lambda_{LT}=0.48$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.60$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=58.06$ Ncr,y=356964.00 $\lambda_y^*=0.76$ Curva b: $\Phi_y=0.88$ $\chi_y=0.75$
 $\lambda_z=77.01$ Ncr,z=202920.00 $\lambda_z^*=1.01$ Curva c: $\Phi_z=1.21$ $\chi_z=0.54$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: 0.02 + 0.10 + 0.52 = 0.63
Verifica ZZ: 0.02 + 0.08 + 0.52 = 0.61

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.05$ (L/6476) $f_{z,L}=0.02$ (L/14197)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.31$ (L/1152) $f_{z,L}=0.14$ (L/2554)

- Verifica in termini tensionali (4.2.5) - CC 25 X1=0.00 - Classe 3
Sollecitazioni: N=-3154.92 Tz=296.07 My=1042.29 Ty=648.55 Mz=-2037.92
Tensioni: $\sigma_N=-54.33$ $\sigma_M=-2161.99$ $\tau=0.00$ $\sigma_{max}=-2216.33$
Tensioni: $\sigma_N=-54.33$ $\sigma_M=-393.74$ $\tau=23.06$ $\tau_{max}=23.06$
Tensioni: $\sigma_N=-54.33$ $\sigma_M=-2161.99$ $\tau=0.00$ $\sigma_{ID,max}=2216.33$

Asta n. 214 (9 11) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-7599.58 My,Ed=-858.04 Mz,Ed=-251.54
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=448.31
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.48$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=31994.10 $\lambda_{LT}=0.57$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.65$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=73.94$ Ncr,y=220115.00 $\lambda_y^*=0.97$ Curva b: $\Phi_y=1.10$ $\chi_y=0.62$
 $\lambda_z=98.07$ Ncr,z=125127.00 $\lambda_z^*=1.28$ Curva c: $\Phi_z=1.59$ $\chi_z=0.40$
Kyy, Kyz, Kzy, Kzz = 0.98, 1.01, 0.79, 1.01
Verifica YY: 0.06 + 0.09 + 0.07 = 0.22
Verifica ZZ: 0.10 + 0.07 + 0.07 = 0.24

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.03$ (L/12879) $f_{z,G}=0.00$ (L/130580)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.21$ (L/2149) $f_{z,G}=0.02$ (L/21175)

- Verifica in termini tensionali (4.2.5) - CC 9 X1=0.00 - Classe 3
Sollecitazioni: N=-7599.58 Tz=-191.39 My=-858.04 Ty=118.80 Mz=-251.54
Tensioni: $\sigma_N=-130.88$ $\sigma_M=-516.30$ $\tau=0.00$ $\sigma_{max}=-647.18$
Tensioni: $\sigma_N=-130.88$ $\sigma_M=-13.47$ $\tau=11.54$ $\tau_{max}=11.54$
Tensioni: $\sigma_N=-130.88$ $\sigma_M=-516.30$ $\tau=0.00$ $\sigma_{ID,max}=647.18$

Asta n. 222 (19 20) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-9184.28 My,Ed=-670.49 Mz,Ed=-171.95
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=458.65

$\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=4.59$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=31066.50$ $\lambda_{LT}=0.58$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.66$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.95$
 $\lambda_y=75.65$ Ncr,y=210307.00 $\lambda'_y=0.99$ Curva b: $\Phi_y=1.12$ $\chi_y=0.60$
 $\lambda_z=100.33$ Ncr,z=119551.00 $\lambda'_z=1.31$ Curva c: $\Phi_z=1.63$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 0.99, 1.02, 0.80, 1.02
Verifica YY: 0.08 + 0.07 + 0.05 = 0.19
Verifica ZZ: 0.12 + 0.06 + 0.05 = 0.22

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.02$ (L/18373) $f_{z,G}=0.00$ (L/123314)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.15$ (L/3011) $f_{z,G}=0.02$ (L/22578)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-7442.59 $T_z=-130.26$ $M_y=-597.45$ $T_y=118.84$ $M_z=-257.50$
Tensioni: $\sigma_N=-128.17$ $\sigma_M=-432.46$ $\tau=0.00$ $\sigma_{max}=-560.64$
Tensioni: $\sigma_N=-128.17$ $\sigma_M=-13.79$ $\tau=7.86$ $\tau_{max}=7.86$
Tensioni: $\sigma_N=-128.17$ $\sigma_M=-432.46$ $\tau=0.00$ $\sigma_{ID,max}=560.64$

Asta n. 223 (13 15) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3604.54 $M_y, Ed=-1180.87$ $M_z, Ed=-2479.09$
Resistenze: Nc,Rd=196322.00 $M_y, c, Rd=9885.72$ $M_z, c, Rd=3816.13$ L=363.03

$\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=3.63$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=42465.80$ $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=59.88$ Ncr,y=335675.00 $\lambda'_y=0.78$ Curva b: $\Phi_y=0.91$ $\chi_y=0.73$
 $\lambda_z=79.42$ Ncr,z=190818.00 $\lambda'_z=1.04$ Curva c: $\Phi_z=1.25$ $\chi_z=0.52$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: 0.02 + 0.12 + 0.63 = 0.77
Verifica ZZ: 0.02 + 0.09 + 0.63 = 0.74

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.06$ (L/5994) $f_{z,L}=0.03$ (L/12230)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.34$ (L/1063) $f_{z,L}=0.17$ (L/2162)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3604.54 $T_z=-325.28$ $M_y=-1180.87$ $T_y=744.32$ $M_z=-2479.09$
Tensioni: $\sigma_N=-62.08$ $\sigma_M=-2600.25$ $\tau=0.00$ $\sigma_{max}=-2662.33$
Tensioni: $\sigma_N=-62.08$ $\sigma_M=189.59$ $\tau=25.96$ $\tau_{max}=25.96$
Tensioni: $\sigma_N=-62.08$ $\sigma_M=-2600.25$ $\tau=0.00$ $\sigma_{ID,max}=2662.33$

Asta n. 224 (9 10) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-11178.80 $M_y, Ed=633.69$ $M_z, Ed=234.45$
Resistenze: Nc,Rd=196322.00 $M_y, c, Rd=9885.72$ $M_z, c, Rd=3816.13$ L=426.15

$\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=4.26$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=34185.30$ $\lambda_{LT}=0.55$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=70.29$ Ncr,y=243609.00 $\lambda'_y=0.92$ Curva b: $\Phi_y=1.05$ $\chi_y=0.65$
 $\lambda_z=93.22$ Ncr,z=138482.00 $\lambda'_z=1.22$ Curva c: $\Phi_z=1.49$ $\chi_z=0.42$
Kyy, Kyz, Kzy, Kzz = 1.00, 1.03, 0.80, 1.03
Verifica YY: 0.09 + 0.07 + 0.06 = 0.22
Verifica ZZ: 0.13 + 0.05 + 0.06 = 0.25

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.02$ (L/21691) $f_{z,G}=0.01$ (L/35747)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.12$ (L/3418) $f_{z,G}=0.08$ (L/5429)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-9679.36 $T_z=182.14$ $M_y=776.19$ $T_y=46.42$ $M_z=232.30$
Tensioni: $\sigma_N=-166.69$ $\sigma_M=-471.27$ $\tau=0.00$ $\sigma_{max}=-637.96$
Tensioni: $\sigma_N=-166.69$ $\sigma_M=12.44$ $\tau=10.96$ $\tau_{max}=10.96$
Tensioni: $\sigma_N=-166.69$ $\sigma_M=-471.27$ $\tau=0.00$ $\sigma_{ID,max}=637.96$

Asta n. 232 (-4 22) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-4389.86 My,Ed=-87.21 Mz,Ed=-703.10
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M,cr=248865.00$ $\lambda_{LT}=0.20$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.48$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda^*_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda^*_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.01 + 0.18 = 0.21
Verifica ZZ: 0.02 + 0.01 + 0.18 = 0.21

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/41796)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/6928) $f_{z,L}=0.00$ (L/76216)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-4389.86 $T_z=-70.57$ $M_y=-87.21$ $T_y=602.22$ $M_z=-703.10$
Tensioni: $\sigma_N=-75.60$ $\sigma_M=-652.75$ $\tau=0.00$ $\sigma_{max}=-728.35$
Tensioni: $\sigma_N=-75.60$ $\sigma_M=-13.86$ $\tau=16.30$ $\tau_{max}=16.30$
Tensioni: $\sigma_N=-75.60$ $\sigma_M=-652.75$ $\tau=0.00$ $\sigma_{ID,max}=728.35$

Asta n. 232 (-3 -4) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3014.06 My,Ed=-87.21 Mz,Ed=-703.10
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.14$ $M,cr=161582.00$ $\lambda_{LT}=0.25$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda^*_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda^*_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.01 + 0.18 = 0.20
Verifica ZZ: 0.02 + 0.01 + 0.18 = 0.20

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/30849)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/5398) $f_{z,L}=0.00$ (L/49833)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.24 - Classe 3
Sollecitazioni: N=-2983.25 $T_z=18.23$ $M_y=-87.21$ $T_y=-415.05$ $M_z=-703.10$
Tensioni: $\sigma_N=-51.38$ $\sigma_M=-652.75$ $\tau=0.00$ $\sigma_{max}=-704.12$
Tensioni: $\sigma_N=-51.38$ $\sigma_M=-13.86$ $\tau=10.99$ $\tau_{max}=10.99$
Tensioni: $\sigma_N=-51.38$ $\sigma_M=-652.75$ $\tau=0.00$ $\sigma_{ID,max}=704.12$

Asta n. 232 (-2 -3) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 - Classe 3
Sollecitazioni: N,Ed=-2360.79 My,Ed=-296.67 Mz,Ed=-167.38
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.10$ $M,cr=156811.00$ $\lambda_{LT}=0.26$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda^*_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda^*_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.01 + 0.03 + 0.04 = 0.08
Verifica ZZ: 0.01 + 0.02 + 0.04 = 0.08

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.00$ (L/71982) $f_{z,g}=0.00$ (L/80980)

- Verifica in termini tensionali (4.2.5) - CC 1 Xl=1.24 - Classe 3
Sollecitazioni: N=-2337.09 $T_z=51.88$ $M_y=-296.67$ $T_y=-256.15$ $M_z=-167.38$
Tensioni: $\sigma_N=-40.25$ $\sigma_M=-249.75$ $\tau=0.00$ $\sigma_{max}=-290.00$
Tensioni: $\sigma_N=-40.25$ $\sigma_M=72.03$ $\tau=7.28$ $\tau_{max}=7.28$
Tensioni: $\sigma_N=-40.25$ $\sigma_M=-249.75$ $\tau=0.00$ $\sigma_{ID,max}=290.00$

Asta n. 232 (-1 -2) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3075.69 My,Ed=-42.16 Mz,Ed=466.16
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.33$ $M,cr=188566.00$ $\lambda_{LT}=0.23$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda^*_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda^*_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.00 + 0.12 = 0.14
Verifica ZZ: 0.02 + 0.00 + 0.12 = 0.14

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/49833)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/7279) $f_{z,L}=0.00$ (L/117789)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3075.69 Tz=18.23 My=-19.64 Ty=-215.79 Mz=466.16
Tensioni: $\sigma_N=-52.97$ $\sigma_M=-419.71$ $\tau=0.00$ $\sigma_{max}=-472.68$
Tensioni: $\sigma_N=-52.97$ $\sigma_M=30.33$ $\tau=5.77$ $\tau_{max}=5.77$
Tensioni: $\sigma_N=-52.97$ $\sigma_M=-419.71$ $\tau=0.00$ $\sigma_{ID,max}=472.68$

Asta n. 232 (19 -1) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3106.50 My,Ed=-19.64 Mz,Ed=691.76
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.60$ $M,cr=227877.00$ $\lambda_{LT}=0.21$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda^*_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda^*_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.00 + 0.17 = 0.19
Verifica ZZ: 0.02 + 0.00 + 0.17 = 0.19

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/21594)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.03$ (L/4074)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3106.50 Tz=18.23 My=2.88 Ty=-149.36 Mz=691.76
Tensioni: $\sigma_N=-53.50$ $\sigma_M=-613.86$ $\tau=0.00$ $\sigma_{max}=-667.36$
Tensioni: $\sigma_N=-53.50$ $\sigma_M=36.27$ $\tau=4.05$ $\tau_{max}=4.05$
Tensioni: $\sigma_N=-53.50$ $\sigma_M=-613.86$ $\tau=0.00$ $\sigma_{ID,max}=667.36$

Asta n. 234 (9 -5) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3657.03 My,Ed=334.69 Mz,Ed=655.49
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.56$ $M,cr=165553.00$ $\lambda_{LT}=0.25$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda^*_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda^*_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.03 + 0.16 = 0.21
Verifica ZZ: 0.02 + 0.03 + 0.16 = 0.21

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/21741) $f_{z,L}=0.00$ (L/89523)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.04$ (L/4102) $f_{z,L}=0.01$ (L/16019)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3657.03 Tz=186.79 My=334.69 Ty=-96.53 Mz=655.49
Tensioni: $\sigma_N=-62.98$ $\sigma_M=-695.20$ $\tau=0.00$ $\sigma_{max}=-758.18$
Tensioni: $\sigma_N=-62.98$ $\sigma_M=35.11$ $\tau=11.25$ $\tau_{max}=11.25$
Tensioni: $\sigma_N=-62.98$ $\sigma_M=-695.20$ $\tau=0.00$ $\sigma_{ID,max}=758.18$

Asta n. 234 (-5 -6) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
 Sollecitazioni: N,Ed=-3602.39 My,Ed=-207.53 Mz,Ed=467.18
 Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.46$ $M_{cr}=154432.00$ $\lambda_{LT}=0.26$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
 Verifica YY: $0.02 + 0.02 + 0.12 = 0.16$
 Verifica ZZ: $0.02 + 0.02 + 0.12 = 0.15$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/50729)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/6917) $f_{z,L}=0.00$ (L/44761)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
 Sollecitazioni: N=-3602.39 T_z=186.79 M_y=63.58 T_y=-162.95 M_z=467.18
 Tensioni: $\sigma_N=-62.04$ $\sigma_M=-435.65$ $\tau=0.00$ $\sigma_{max}=-497.69$
 Tensioni: $\sigma_N=-62.04$ $\sigma_M=25.03$ $\tau=11.27$ $\tau_{max}=11.27$
 Tensioni: $\sigma_N=-62.04$ $\sigma_M=-435.65$ $\tau=0.00$ $\sigma_{ID,max}=497.69$

Asta n. 234 (-6 -7) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
 Sollecitazioni: N,Ed=-3547.76 My,Ed=-478.64 Mz,Ed=-198.65
 Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.35$ $M_{cr}=143263.00$ $\lambda_{LT}=0.27$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
 Verifica YY: $0.02 + 0.05 + 0.05 = 0.11$
 Verifica ZZ: $0.02 + 0.04 + 0.05 = 0.10$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/50729)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.02$ (L/9632) $f_{z,g}=0.00$ (L/69176)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.45 - Classe 3
 Sollecitazioni: N=-3493.12 T_z=186.79 M_y=-478.64 T_y=-295.80 M_z=-198.65
 Tensioni: $\sigma_N=-60.16$ $\sigma_M=-339.69$ $\tau=0.00$ $\sigma_{max}=-399.85$
 Tensioni: $\sigma_N=-60.16$ $\sigma_M=120.04$ $\tau=12.49$ $\tau_{max}=12.49$
 Tensioni: $\sigma_N=-60.16$ $\sigma_M=-339.69$ $\tau=0.00$ $\sigma_{ID,max}=399.85$

Asta n. 234 (-7 -8) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
 Sollecitazioni: N,Ed=-3493.12 My,Ed=-749.75 Mz,Ed=-676.17
 Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.20$ $M_{cr}=127444.00$ $\lambda_{LT}=0.29$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
 Verifica YY: $0.02 + 0.07 + 0.17 = 0.26$
 Verifica ZZ: $0.02 + 0.06 + 0.17 = 0.24$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/29267) $f_{z,g}=0.00$ (L/33819)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.03$ (L/5435) $f_{z,g}=0.02$ (L/5898)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.45 - Classe 3
 Sollecitazioni: N=-3438.49 T_z=186.79 M_y=-749.75 T_y=-362.22 M_z=-676.17
 Tensioni: $\sigma_N=-59.22$ $\sigma_M=-855.48$ $\tau=0.00$ $\sigma_{max}=-914.70$

Tensioni: $\sigma_N=-59.22$ $\sigma_M=168.47$ $\tau=13.65$ $\tau_{max}=13.65$
Tensioni: $\sigma_N=-59.22$ $\sigma_M=-855.48$ $\tau=0.00$ $\sigma_{ID,max}=914.70$

Asta n. 234 (-8 12) Is 146x215x13x10x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7704.59 My,Ed=-749.75 Mz,Ed=-676.17
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=185554.00 $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda^*_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda^*_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.96, 0.77, 0.96
Verifica YY: 0.04 + 0.07 + 0.17 = 0.28
Verifica ZZ: 0.04 + 0.06 + 0.17 = 0.27
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/43482) $f_{z,G}=0.00$ (L/47559)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.02$ (L/7686) $f_{z,L}=0.02$ (L/8095)
 - Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-7704.59 Tz=-516.57 My=-749.75 Ty=499.09 Mz=-676.17
Tensioni: $\sigma_N=-132.69$ $\sigma_M=-855.48$ $\tau=0.00$ $\sigma_{max}=-988.17$
Tensioni: $\sigma_N=-132.69$ $\sigma_M=-36.22$ $\tau=31.20$ $\tau_{max}=31.20$
Tensioni: $\sigma_N=-132.69$ $\sigma_M=-855.48$ $\tau=0.00$ $\sigma_{ID,max}=988.17$

Asta n. 1001 (1850 1851) Is 175x250x18x12x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7421.36 My,Ed=-140.08 Mz,Ed=3603.62
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=700.73
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.01$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.66$ M,cr=38445.30 $\lambda_{LT}=0.68$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.72$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.91$
 $\lambda_y=98.01$ Ncr,y=183603.00 $\lambda^*_y=1.28$ Curva b: $\Phi_y=1.51$ $\chi_y=0.44$
 $\lambda_z=134.26$ Ncr,z=97842.80 $\lambda^*_z=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
Kyy, Kyz, Kzy, Kzz = 0.98, 1.01, 0.79, 1.01
Verifica YY: 0.06 + 0.01 + 0.58 = 0.65
Verifica ZZ: 0.11 + 0.01 + 0.58 = 0.69
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.01$ (L/87472) $f_{z,L}=0.01$ (L/118511)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.05$ (L/15149) $f_{z,L}=0.03$ (L/20075)
 - Verifica in termini tensionali (4.2.5) - CC 25 Xl=7.01 - Classe 3
Sollecitazioni: N=-6813.50 Tz=-21.83 My=12.90 Ty=878.14 Mz=3603.62
Tensioni: $\sigma_N=-80.07$ $\sigma_M=-1945.88$ $\tau=0.00$ $\sigma_{max}=-2025.95$
Tensioni: $\sigma_N=-80.07$ $\sigma_M=137.84$ $\tau=16.77$ $\tau_{max}=16.77$
Tensioni: $\sigma_N=-80.07$ $\sigma_M=-1945.88$ $\tau=0.00$ $\sigma_{ID,max}=2025.95$

Asta n. 1002 (1844 1845) Is 175x250x18x12x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-18023.60 My,Ed=-450.34 Mz,Ed=2525.11
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=702.14
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.02$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.55$ M,cr=35932.60 $\lambda_{LT}=0.70$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.74$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.90$
 $\lambda_y=98.21$ Ncr,y=182868.00 $\lambda^*_y=1.29$ Curva b: $\Phi_y=1.51$ $\chi_y=0.43$
 $\lambda_z=134.53$ Ncr,z=97451.20 $\lambda^*_z=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
Kyy, Kyz, Kzy, Kzz = 1.03, 1.10, 0.83, 1.10
Verifica YY: 0.14 + 0.03 + 0.44 = 0.62
Verifica ZZ: 0.26 + 0.02 + 0.44 = 0.72
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.01$ (L/57519) $f_{z,G}=0.01$ (L/71828)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.07$ (L/10169) $f_{z,G}=0.06$ (L/12322)

- Verifica in termini tensionali (4.2.5) - CC 9 X1=0.00 - Classe 3
Sollecitazioni: N=-18023.60 T_z=-73.44 M_y=-450.34 T_y=-664.89 M_z=2525.11 M_x=6.78
Tensioni: σ_N =-211.81 σ_M =-1452.28 τ =6.80 σ_{max} =-1664.09
Tensioni: σ_N =-211.81 σ_M =170.67 τ =26.75 τ_{max} =26.75
Tensioni: σ_N =-211.81 σ_M =-1452.28 τ =6.80 $\sigma_{ID,max}$ =1664.13

Asta n. 1004 (1846 1847) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-20217.10 My,Ed=-437.97 Mz,Ed=-1901.97
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=702.06
 α_{my} , α_{mz} , α_{LT} = 0.95, 0.95, 0.95
L_{cr}=7.02 Curva b: α -imp=0.34 K_c=0.94 ψ =1.58 M_{cr}=36636.50 λ_{LT} =0.69
 $\lambda_{LT,0}$ =0.40 β_{LT} =0.75 Φ_{LT} =0.73 β_{LT} =0.75 f=0.97 χ_{LT} =0.90
 λ_y =98.19 Ncr,y=182908.00 λ^*_y =1.29 Curva b: Φ_y =1.51 χ_y =0.43
 λ_z =134.51 Ncr,z=97472.40 λ^*_z =1.76 Curva c: Φ_z =2.43 χ_z =0.24
K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.04, 1.11, 0.83, 1.11
Verifica YY: 0.16 + 0.03 + 0.34 = 0.53
Verifica ZZ: 0.29 + 0.02 + 0.34 = 0.65

- Verifica Freccia massima per soli carichi accidentali - CC 26
f_{z,L}=0.02 (L/41357) f_{z,G}=0.01 (L/72528)

- Verifica Freccia massima carichi totali - CC 26
f_{z,L}=0.10 (L/7245) f_{z,G}=0.06 (L/12445)

- Verifica in termini tensionali (4.2.5) - CC 9 X1=0.00 - Classe 3
Sollecitazioni: N=-14828.30 T_z=-97.83 M_y=-613.96 T_y=-571.33 M_z=2226.21 M_x=7.69
Tensioni: σ_N =-174.26 σ_M =-1324.01 τ =7.71 σ_{max} =-1498.27
Tensioni: σ_N =-174.26 σ_M =185.45 τ =29.27 τ_{max} =29.27
Tensioni: σ_N =-174.26 σ_M =-1324.01 τ =7.71 $\sigma_{ID,max}$ =1498.33

Asta n. 1005 (-872 -828) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
f_{z,G}=0.01 (L/25228)

- Verifica Freccia massima carichi totali - CC 26
f_{z,G}=0.07 (L/4571)

- Verifica a compressione (4.2.10) - CC 25 X1=0.00 - Classe 3
Sollecitazioni: N=-13257.00
N,Ed=-13257.00 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.18

- Verifica di stabilità (4.2.4.1.3.1) - CC 25
Sollecitazioni: N=-13257.00 L=320.00
 λ =79.28 Ncr=70851.00 λ^* =1.04
Curva a: Φ =1.13 χ ,min=0.64 N,Ed=-13257.00 Nb,Rd=46443.40 N,Ed/Nb,Rd=0.29

Asta n. 1006 (-873 -831) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
f_{z,G}=0.01 (L/24672)

- Verifica Freccia massima carichi totali - CC 26
f_{z,G}=0.04 (L/4485)

- Verifica a compressione (4.2.10) - CC 25 X1=0.00 - Classe 3
Sollecitazioni: N=-13606.70
N,Ed=-13606.70 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.19

- Verifica di stabilità (4.2.4.1.3.1) - CC 25
Sollecitazioni: N=-13606.70 L=160.00
 λ =39.64 Ncr=283404.00 λ^* =0.52
Curva a: Φ =0.67 χ ,min=0.92 N,Ed=-13606.70 Nb,Rd=66718.00 N,Ed/Nb,Rd=0.20

Asta n. 1007 (1859 1978) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima carichi totali - CC 26
f_{z,G}=0.01 (L/25578)

- Verifica in termini tensionali (4.2.5) - CC 9 X1=1.61 - Classe 3
Sollecitazioni: N=4722.85
Tensioni: σ_N =219.79 σ_M =0.00 τ =0.00 σ_{max} =219.79
Tensioni: σ_N =0.00 σ_M =0.00 τ =0.00 τ_{max} =0.00
Tensioni: σ_N =219.79 σ_M =0.00 τ =0.00 $\sigma_{ID,max}$ =219.79

Asta n. 1008 (1860 1979) Cir.c D=120/6 Crit. 1

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- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/52756)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/9175)
 - Verifica a compressione (4.2.10) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-8352.27
N,Ed=-8352.27 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.11

Asta n. 1009 (1979 1859) Cir. D=4 Crit. 1

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- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 23 - Classe 3
 $L_{cr}=2.59$ Curva d: $\alpha\text{-imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{,cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ $f=0.00$ $\chi_{LT}=1.00$
CC 23 $M_{y,Ed}=-5.39$ $M_{y,b,Rd}=212.43$ $M_{y,Ed}/M_{y,b,Rd}=0.03$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 17 - Classe 3
Sollecitazioni: N,Ed=-3430.60 M,Ed=4.05
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=259.36
 $\lambda=259.36$ Ncr=3872.04 $\lambda^*=3.39$ Curva c: $\Phi=7.04$ $\chi_{,min}=0.08$
 $\chi_{,min}=0.08$
Verifica: $1.07 + 0.17 = 1.23$
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/118240)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.14$ (L/1814) $f_{z,g}=0.09$ (L/2991)
 - Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.30 - Classe 3
Sollecitazioni: N=-6535.00 M=5.39
Tensioni: $\sigma_N=-520.04$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{max}=-605.90$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-520.04$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{ID,max}=605.90$

Asta n. 1010 (1978 1860) Cir. D=4 Crit. 1

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- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 25 - Classe 3
 $L_{cr}=2.10$ Curva d: $\alpha\text{-imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{,cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ $f=0.00$ $\chi_{LT}=1.00$
CC 25 $M_{y,Ed}=-5.68$ $M_{y,b,Rd}=212.43$ $M_{y,Ed}/M_{y,b,Rd}=0.03$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 23 - Classe 3
Sollecitazioni: N,Ed=-838.62 M,Ed=3.28
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=209.96
 $\lambda=209.96$ Ncr=5908.50 $\lambda^*=2.75$ Curva c: $\Phi=4.90$ $\chi_{,min}=0.11$
 $\chi_{,min}=0.11$
Verifica: $0.18 + 0.02 = 0.19$
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/146769)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.08$ (L/2765) $f_{z,g}=0.07$ (L/3223)
 - Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.05 - Classe 3
Sollecitazioni: N=8800.39 M=4.37
Tensioni: $\sigma_N=700.31$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{max}=769.82$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=700.31$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{ID,max}=769.82$

Asta n. 1011 (1856 1976) Cir.c D=120/6 Crit. 1

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- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/140684)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/23447)
 - Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.61 - Classe 3
Sollecitazioni: N=5257.42
Tensioni: $\sigma_N=244.66$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{max}=244.66$

Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=244.66$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{ID,max}=244.66$

Asta n. 1012 (1857 1977) Cir.c D=120/6 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-5706.90 M,Ed=0.00
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=161.00
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=39.89$ Ncr=279894.00 $\lambda^*=0.52$
Curva a: $\Phi=0.67$ $\chi_{,min}=0.92$
Kyy, Kyz, Kzy, Kzz = 0.98, ----, ----, ----
Verifica: 0.08 = 0.08
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/93789)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/15631)
 - Verifica a compressione (4.2.10) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-5706.90
N,Ed=-5706.90 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.08

Asta n. 1013 (1856 1977) Cir. D=4 Crit. 1

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- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 23 - Classe 3
 $L_{cr}=2.59$ Curva d: $\alpha\text{-imp}=0.76$ $k_c=0.94$ $\psi=1.75$ M,cr=0.00 $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ f=0.00 $\chi_{LT}=1.00$
CC 23 My,Ed=-5.39 My,b,Rd=212.43 My,Ed/My,b,Rd=0.03
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 13 - Classe 3
Sollecitazioni: N,Ed=-3765.27 M,Ed=4.05
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=259.36
 $\lambda=259.36$ Ncr=3872.04 $\lambda^*=3.39$ Curva c: $\Phi=7.04$ $\chi_{,min}=0.08$
 $\chi_{,min}=0.08$
Verifica: 1.17 + 0.69 = 1.86
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/151085)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.14$ (L/1810) $f_{z,g}=0.10$ (L/2648)
 - Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.29 - Classe 3
Sollecitazioni: N=-4529.64 M=5.39
Tensioni: $\sigma_N=-360.46$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{max}=-446.32$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-360.46$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{ID,max}=446.32$

Asta n. 1014 (1857 1976) Cir. D=4 Crit. 1

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- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 25 - Classe 3
 $L_{cr}=2.10$ Curva d: $\alpha\text{-imp}=0.76$ $k_c=0.94$ $\psi=1.75$ M,cr=0.00 $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ f=0.00 $\chi_{LT}=1.00$
CC 25 My,Ed=-5.68 My,b,Rd=212.43 My,Ed/My,b,Rd=0.03
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 23 - Classe 3
Sollecitazioni: N,Ed=-368.17 M,Ed=3.28
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=209.96
 $\lambda=209.96$ Ncr=5908.50 $\lambda^*=2.75$ Curva c: $\Phi=4.90$ $\chi_{,min}=0.11$
 $\chi_{,min}=0.11$
Verifica: 0.08 + 0.02 = 0.09
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/157252)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.08$ (L/2772) $f_{z,g}=0.06$ (L/3675)
 - Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.05 - Classe 3
Sollecitazioni: N=6685.35 M=4.37
Tensioni: $\sigma_N=532.00$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{max}=601.51$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=532.00$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{ID,max}=601.51$

Asta n. 1015 (1851 1847) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2528.72 M,Ed=2.86
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=102.22
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=25.33$ Ncr=694405.00 $\lambda^*=0.33$
Curva a: $\Phi=0.57$ $\chi_{,min}=0.97$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.03 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.51 - Classe 3
Sollecitazioni: N=-2528.72 M=2.86
Tensioni: $\sigma_N=-117.68$ $\sigma_M=-4.91$ $\tau=0.00$ $\sigma_{max}=-122.59$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-117.68$ $\sigma_M=-4.91$ $\tau=0.00$ $\sigma_{ID,max}=122.59$

Asta n. 1016 (1847 1849) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2888.47 M,Ed=4.01
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=120.97
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=29.97$ Ncr=495807.00 $\lambda^*=0.39$
Curva a: $\Phi=0.60$ $\chi_{,min}=0.95$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.04 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.60 - Classe 3
Sollecitazioni: N=-2888.47 M=4.01
Tensioni: $\sigma_N=-134.42$ $\sigma_M=-6.88$ $\tau=0.00$ $\sigma_{max}=-141.29$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-134.42$ $\sigma_M=-6.88$ $\tau=0.00$ $\sigma_{ID,max}=141.29$

Asta n. 1017 (1849 1845) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2488.40 M,Ed=2.89
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=102.73
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=25.45$ Ncr=687495.00 $\lambda^*=0.33$
Curva a: $\Phi=0.57$ $\chi_{,min}=0.97$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.03 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.51 - Classe 3
Sollecitazioni: N=-2488.40 M=2.89
Tensioni: $\sigma_N=-115.80$ $\sigma_M=-4.96$ $\tau=0.00$ $\sigma_{max}=-120.76$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-115.80$ $\sigma_M=-4.96$ $\tau=0.00$ $\sigma_{ID,max}=120.76$

Asta n. 1018 (1845 1851) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2909.50 M,Ed=3.97
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=120.28
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=29.80$ Ncr=501462.00 $\lambda^*=0.39$
Curva a: $\Phi=0.60$ $\chi_{,min}=0.96$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.04 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.60 - Classe 3
Sollecitazioni: N=-2909.50 M=3.97
Tensioni: $\sigma_N=-135.40$ $\sigma_M=-6.80$ $\tau=0.00$ $\sigma_{max}=-142.20$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-135.40$ $\sigma_M=-6.80$ $\tau=0.00$ $\sigma_{ID,max}=142.20$

Asta n. 1101 (1851 1858) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7163.00 My,Ed=382.80 Mz,Ed=-4983.76
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=526.58
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.27$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.72$ M,cr=56147.20 $\lambda_{LT}=0.56$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.65$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=73.65$ Ncr,y=325125.00 $\lambda'_y=0.96$ Curva b: $\Phi_y=1.09$ $\chi_y=0.62$
 $\lambda_z=100.89$ Ncr,z=173260.00 $\lambda'_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 0.97, 0.99, 0.78, 0.99
Verifica YY: 0.04 + 0.02 + 0.78 = 0.85
Verifica ZZ: 0.07 + 0.02 + 0.78 = 0.87

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/38080) $f_{z,L}=0.01$ (L/51603)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/5886) $f_{z,L}=0.06$ (L/9141)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=5.27 - Classe 3
Sollecitazioni: N=-6711.46 Tz=-70.26 My=382.80 Ty=-1666.81 Mz=-4983.76 Mx=-1.45
Tensioni: $\sigma_N=-78.87$ $\sigma_M=-2764.54$ $\tau=1.45$ $\sigma_{max}=-2843.42$
Tensioni: $\sigma_N=-78.87$ $\sigma_M=255.24$ $\tau=33.34$ $\tau_{max}=33.34$
Tensioni: $\sigma_N=-78.87$ $\sigma_M=-2764.54$ $\tau=1.45$ $\sigma_{ID,max}=2843.42$

Asta n. 1102 (1845 1861) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-18310.40 My,Ed=-397.58 Mz,Ed=-2273.71
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=553.99
 α_{my} , α_{mz} , $\alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.54$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.59$ $M_{cr}=48872.90$ $\lambda_{LT}=0.60$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.67$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.94$
 $\lambda_y=77.48$ Ncr,y=293755.00 $\lambda'_y=1.01$ Curva b: $\Phi_y=1.15$ $\chi_y=0.59$
 $\lambda_z=106.14$ Ncr,z=156543.00 $\lambda'_z=1.39$ Curva c: $\Phi_z=1.76$ $\chi_z=0.35$
Kyy, Kyz, Kzy, Kzz = 1.01, 1.05, 0.81, 1.05
Verifica YY: 0.11 + 0.03 + 0.38 = 0.52
Verifica ZZ: 0.18 + 0.02 + 0.38 = 0.58

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.02$ (L/33577) $f_{z,L}=0.00$ (L/138308)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/5909) $f_{z,L}=0.02$ (L/25477)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-18310.40 Tz=82.28 My=63.48 Ty=737.71 Mz=-2273.71 Mx=-8.81
Tensioni: $\sigma_N=-215.18$ $\sigma_M=-1238.89$ $\tau=8.83$ $\sigma_{max}=-1454.07$
Tensioni: $\sigma_N=-215.18$ $\sigma_M=-98.52$ $\tau=33.31$ $\tau_{max}=33.31$
Tensioni: $\sigma_N=-215.18$ $\sigma_M=-1238.89$ $\tau=8.83$ $\sigma_{ID,max}=1454.15$

Asta n. 1103 (1849 1855) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7115.35 My,Ed=108.44 Mz,Ed=-4941.81
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=526.43
 α_{my} , α_{mz} , $\alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.26$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.14$ $M_{cr}=37333.00$ $\lambda_{LT}=0.69$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.73$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.90$
 $\lambda_y=73.63$ Ncr,y=325318.00 $\lambda'_y=0.96$ Curva b: $\Phi_y=1.09$ $\chi_y=0.62$
 $\lambda_z=100.86$ Ncr,z=173363.00 $\lambda'_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 0.97, 0.99, 0.78, 0.99
Verifica YY: 0.04 + 0.01 + 0.78 = 0.82
Verifica ZZ: 0.07 + 0.01 + 0.78 = 0.85

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/40291) $f_{z,L}=0.00$ (L/367998)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/6140) $f_{z,L}=0.01$ (L/57499)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=5.26 - Classe 3
Sollecitazioni: N=-6663.80 Tz=-35.75 My=108.44 Ty=-1670.30 Mz=-4941.81 Mx=7.32
Tensioni: $\sigma_N=-78.31$ $\sigma_M=-2686.73$ $\tau=7.34$ $\sigma_{max}=-2765.04$
Tensioni: $\sigma_N=-78.31$ $\sigma_M=-209.36$ $\tau=39.96$ $\tau_{max}=39.96$
Tensioni: $\sigma_N=-78.31$ $\sigma_M=-2686.73$ $\tau=7.34$ $\sigma_{ID,max}=2765.07$

Asta n. 1104 (1847 1852) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-20482.30 My,Ed=-88.91 Mz,Ed=-1902.65
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=553.99

$\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=5.54$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.23$ $M, cr=37682.30$ $\lambda_{LT}=0.68$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.72$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.90$

$\lambda_y=77.48$ $N_{cr,y}=293755.00$ $\lambda^*_y=1.01$ Curva b: $\Phi_y=1.15$ $\chi_y=0.59$

$\lambda_z=106.14$ $N_{cr,z}=156543.00$ $\lambda^*_z=1.39$ Curva c: $\Phi_z=1.76$ $\chi_z=0.35$

$K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.02, 1.06, 0.82, 1.06$

Verifica YY: $0.12 + 0.01 + 0.32 = 0.45$

Verifica ZZ: $0.20 + 0.00 + 0.32 = 0.53$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.02$ (L/35420)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/6273) $f_{z,L}=0.01$ (L/82985)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-20482.30$ $T_z=25.73$ $M_y=53.61$ $T_y=759.57$ $M_z=-1902.65$ $M_x=-7.29$
Tensioni: $\sigma_N=-240.71$ $\sigma_M=-1036.80$ $\tau=7.31$ $\sigma_{max}=-1277.51$
Tensioni: $\sigma_N=-240.71$ $\sigma_M=-82.52$ $\tau=27.76$ $\tau_{max}=27.76$
Tensioni: $\sigma_N=-240.71$ $\sigma_M=-1036.80$ $\tau=7.31$ $\sigma_{ID,max}=1277.57$

Asta n. 1105 (-828 1980) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N, Ed=-11664.80$ $M, Ed=0.12$
Resistenze: $N_c, Rd=72651.60$ $M, c, Rd=1972.49$ $L=78.22$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=19.38$ $N_{cr}=1185880.00$ $\lambda^*=0.25$
Curva a: $\Phi=0.54$ $\chi_{min}=0.99$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.97, \text{----}, \text{----}, \text{----}$
Verifica: $0.16 + 0.00 = 0.16$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/29291)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/5257)

- Verifica a compressione (4.2.10) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-11664.80$
 $N, Ed=-11664.80$ $N_c, Rd=-72651.60$ $N, Ed/N_c, Rd=0.16$

Asta n. 1106 (-831 1981) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N, Ed=-10735.20$ $M, Ed=0.29$
Resistenze: $N_c, Rd=72651.60$ $M, c, Rd=1972.49$ $L=66.17$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=16.39$ $N_{cr}=1657040.00$ $\lambda^*=0.21$
Curva a: $\Phi=0.52$ $\chi_{min}=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.97, \text{----}, \text{----}, \text{----}$
Verifica: $0.15 + 0.00 = 0.15$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/31537)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/6086)

- Verifica a compressione (4.2.10) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-10735.20$ $T=1.76$
 $N, Ed=-10735.20$ $N_c, Rd=-72651.60$ $N, Ed/N_c, Rd=0.15$

Asta n. 1211 (1858 1860) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N, Ed=-3392.90$ $M_y, Ed=1285.96$ $M_z, Ed=-2061.88$
Resistenze: $N_c, Rd=196322.00$ $M_y, c, Rd=9885.72$ $M_z, c, Rd=3816.13$ $L=379.60$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.80$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=39930.60$ $\lambda_{LT}=0.51$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.62$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.98$
 $\lambda_y=62.61$ $N_{cr,y}=307021.00$ $\lambda^*_y=0.82$ Curva b: $\Phi_y=0.94$ $\chi_y=0.71$
 $\lambda_z=83.04$ $N_{cr,z}=174529.00$ $\lambda^*_z=1.09$ Curva c: $\Phi_z=1.31$ $\chi_z=0.49$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.97, 0.77, 0.97$
Verifica YY: $0.02 + 0.13 + 0.52 = 0.67$
Verifica ZZ: $0.02 + 0.10 + 0.52 = 0.64$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.06$ (L/6389) $f_{z,l}=0.04$ (L/10699)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.33$ (L/1146) $f_{z,l}=0.20$ (L/1909)
- Verifica in termini tensionali (4.2.5) - CC 25 $X_l=0.00$ - Classe 3
Sollecitazioni: $N=-3392.90$ $T_z=338.77$ $M_y=1285.96$ $T_y=612.84$ $M_z=-2061.88$
Tensioni: $\sigma_N=-58.43$ $\sigma_M=-2266.55$ $\tau=0.00$ $\sigma_{max}=-2324.98$
Tensioni: $\sigma_N=-58.43$ $\sigma_M=-461.54$ $\tau=23.96$ $\tau_{max}=23.96$
Tensioni: $\sigma_N=-58.43$ $\sigma_M=-2266.55$ $\tau=0.00$ $\sigma_{ID,max}=2324.98$

Asta n. 1212 (1858 1859) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3586.33$ $M_y,Ed=-1188.71$ $M_z,Ed=-2537.28$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=334.12$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.34$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ $M,cr=47739.80$ $\lambda_{LT}=0.47$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.59$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=55.11$ $N_{cr,y}=396295.00$ $\lambda_y^*=0.72$ Curva b: $\Phi_y=0.85$ $\chi_y=0.77$
 $\lambda_z=73.09$ $N_{cr,z}=225278.00$ $\lambda_z^*=0.96$ Curva c: $\Phi_z=1.14$ $\chi_z=0.57$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.97, 0.77, 0.97$
Verifica YY: $0.02 + 0.12 + 0.64 = 0.78$
Verifica ZZ: $0.02 + 0.09 + 0.64 = 0.75$
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.06$ (L/5848) $f_{z,l}=0.03$ (L/13170)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.32$ (L/1033) $f_{z,l}=0.14$ (L/2346)
- Verifica in termini tensionali (4.2.5) - CC 25 $X_l=0.00$ - Classe 3
Sollecitazioni: $N=-3586.33$ $T_z=-355.78$ $M_y=-1188.71$ $T_y=820.84$ $M_z=-2537.28$
Tensioni: $\sigma_N=-61.76$ $\sigma_M=-2654.49$ $\tau=0.00$ $\sigma_{max}=-2716.25$
Tensioni: $\sigma_N=-61.76$ $\sigma_M=188.62$ $\tau=28.53$ $\tau_{max}=28.53$
Tensioni: $\sigma_N=-61.76$ $\sigma_M=-2654.49$ $\tau=0.00$ $\sigma_{ID,max}=2716.25$

Asta n. 1212 (1861 1863) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-11906.00$ $M_y,Ed=675.45$ $M_z,Ed=240.88$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=437.01$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.37$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ $M,cr=33075.30$ $\lambda_{LT}=0.56$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=72.08$ $N_{cr,y}=231652.00$ $\lambda_y^*=0.94$ Curva b: $\Phi_y=1.07$ $\chi_y=0.63$
 $\lambda_z=95.60$ $N_{cr,z}=131685.00$ $\lambda_z^*=1.25$ Curva c: $\Phi_z=1.54$ $\chi_z=0.41$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.00, 1.03, 0.80, 1.03$
Verifica YY: $0.10 + 0.07 + 0.07 = 0.23$
Verifica ZZ: $0.15 + 0.06 + 0.07 = 0.27$
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,l}=0.02$ (L/19093) $f_{z,g}=0.01$ (L/34453)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.14$ (L/3125) $f_{z,g}=0.08$ (L/5273)
- Verifica in termini tensionali (4.2.5) - CC 25 $X_l=0.00$ - Classe 3
Sollecitazioni: $N=-11906.00$ $T_z=154.56$ $M_y=675.45$ $T_y=16.05$ $M_z=237.04$
Tensioni: $\sigma_N=-205.04$ $\sigma_M=-441.01$ $\tau=0.00$ $\sigma_{max}=-646.05$
Tensioni: $\sigma_N=-205.04$ $\sigma_M=12.70$ $\tau=9.30$ $\tau_{max}=9.30$
Tensioni: $\sigma_N=-205.04$ $\sigma_M=-441.01$ $\tau=0.00$ $\sigma_{ID,max}=646.05$

Asta n. 1213 (1855 1856) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3224.36$ $M_y,Ed=1069.82$ $M_z,Ed=-2090.17$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=352.04$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.52$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ $M,cr=44330.50$ $\lambda_{LT}=0.48$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.60$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=58.06$ $N_{cr,y}=356964.00$ $\lambda_y^*=0.76$ Curva b: $\Phi_y=0.88$ $\chi_y=0.75$
 $\lambda_z=77.01$ $N_{cr,z}=202920.00$ $\lambda_z^*=1.01$ Curva c: $\Phi_z=1.21$ $\chi_z=0.54$

Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: 0.02 + 0.10 + 0.53 = 0.65
Verifica ZZ: 0.02 + 0.08 + 0.53 = 0.63

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.06$ (L/6299) $f_{z,l}=0.03$ (L/13929)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.31$ (L/1122) $f_{z,l}=0.14$ (L/2489)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3224.36 Tz=303.89 My=1069.82 Ty=663.39 Mz=-2090.17
Tensioni: $\sigma_N=-55.53$ $\sigma_M=-2217.70$ $\tau=0.00$ $\sigma_{max}=-2273.22$
Tensioni: $\sigma_N=-55.53$ $\sigma_M=-404.05$ $\tau=23.62$ $\tau_{max}=23.62$
Tensioni: $\sigma_N=-55.53$ $\sigma_M=-2217.70$ $\tau=0.00$ $\sigma_{ID,max}=2273.22$

Asta n. 1214 (1852 1854) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-9055.43 My,Ed=-901.03 Mz,Ed=-181.03
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=448.31
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.48$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=31994.10$ $\lambda_{LT}=0.57$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.65$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=73.94$ Ncr,y=220115.00 $\lambda^*_y=0.97$ Curva b: $\Phi_y=1.10$ $\chi_y=0.62$
 $\lambda_z=98.07$ Ncr,z=125127.00 $\lambda^*_z=1.28$ Curva c: $\Phi_z=1.59$ $\chi_z=0.40$
Kyy, Kyz, Kzy, Kzz = 0.99, 1.02, 0.79, 1.02
Verifica YY: 0.07 + 0.09 + 0.05 = 0.22
Verifica ZZ: 0.12 + 0.08 + 0.05 = 0.24

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,l}=0.03$ (L/13745) $f_{z,g}=0.00$ (L/127051)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.20$ (L/2291) $f_{z,g}=0.02$ (L/23043)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-9055.43 Tz=-200.98 My=-901.03 Ty=121.88 Mz=-181.03
Tensioni: $\sigma_N=-155.95$ $\sigma_M=-468.55$ $\tau=0.00$ $\sigma_{max}=-624.49$
Tensioni: $\sigma_N=-155.95$ $\sigma_M=-9.70$ $\tau=12.11$ $\tau_{max}=12.11$
Tensioni: $\sigma_N=-155.95$ $\sigma_M=-468.55$ $\tau=0.00$ $\sigma_{ID,max}=624.49$

Asta n. 1222 (1861 1862) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-9798.01 My,Ed=-734.43 Mz,Ed=-172.78
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=458.65
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.59$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=31066.50$ $\lambda_{LT}=0.58$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.66$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.95$
 $\lambda_y=75.65$ Ncr,y=210307.00 $\lambda^*_y=0.99$ Curva b: $\Phi_y=1.12$ $\chi_y=0.60$
 $\lambda_z=100.33$ Ncr,z=119551.00 $\lambda^*_z=1.31$ Curva c: $\Phi_z=1.63$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 1.00, 1.02, 0.80, 1.02
Verifica YY: 0.08 + 0.08 + 0.05 = 0.21
Verifica ZZ: 0.13 + 0.06 + 0.05 = 0.24

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,l}=0.03$ (L/16727) $f_{z,g}=0.00$ (L/117299)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.17$ (L/2750) $f_{z,g}=0.02$ (L/21279)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-9798.01 Tz=-160.13 My=-734.43 Ty=119.17 Mz=-172.78
Tensioni: $\sigma_N=-168.74$ $\sigma_M=-404.25$ $\tau=0.00$ $\sigma_{max}=-572.99$
Tensioni: $\sigma_N=-168.74$ $\sigma_M=-9.26$ $\tau=9.66$ $\tau_{max}=9.66$
Tensioni: $\sigma_N=-168.74$ $\sigma_M=-404.25$ $\tau=0.00$ $\sigma_{ID,max}=572.99$

Asta n. 1223 (1855 1857) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3713.44 My,Ed=-1208.89 Mz,Ed=-2518.51
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=363.03
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.63$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=42465.80$ $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$

$\lambda_y=59.88$ Ncr, $y=335675.00$ $\lambda_y^*=0.78$ Curva b: $\Phi_y=0.91$ $\chi_y=0.73$
 $\lambda_z=79.42$ Ncr, $z=190818.00$ $\lambda_z^*=1.04$ Curva c: $\Phi_z=1.25$ $\chi_z=0.52$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: $0.02 + 0.12 + 0.64 = 0.78$
Verifica ZZ: $0.02 + 0.10 + 0.64 = 0.75$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.06$ (L/5901) $f_{z,l}=0.03$ (L/11919)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.35$ (L/1046) $f_{z,l}=0.17$ (L/2113)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3713.44 T_z=-333.00 M_y=-1208.89 T_y=755.17 M_z=-2518.51
Tensioni: $\sigma_N=-63.95$ $\sigma_M=-2644.75$ $\tau=0.00$ $\sigma_{max}=-2708.70$
Tensioni: $\sigma_N=-63.95$ $\sigma_M=195.13$ $\tau=26.44$ $\tau_{max}=26.44$
Tensioni: $\sigma_N=-63.95$ $\sigma_M=-2644.75$ $\tau=0.00$ $\sigma_{ID,max}=2708.70$

Asta n. 1224 (1852 1853) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-11258.10 M_y,Ed=556.27 M_z,Ed=262.60
Resistenze: Nc,Rd=196322.00 M_y,c,Rd=9885.72 M_z,c,Rd=3816.13 L=426.15
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
L_{cr}=4.26 Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ M_{cr}=34185.30 $\lambda_{LT}=0.55$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=70.29$ Ncr, $y=243609.00$ $\lambda_y^*=0.92$ Curva b: $\Phi_y=1.05$ $\chi_y=0.65$
 $\lambda_z=93.22$ Ncr, $z=138482.00$ $\lambda_z^*=1.22$ Curva c: $\Phi_z=1.49$ $\chi_z=0.42$
Kyy, Kyz, Kzy, Kzz = 1.00, 1.03, 0.80, 1.03
Verifica YY: $0.09 + 0.06 + 0.07 = 0.22$
Verifica ZZ: $0.14 + 0.05 + 0.07 = 0.25$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,l}=0.02$ (L/24963) $f_{z,g}=0.01$ (L/33099)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.11$ (L/3892) $f_{z,g}=0.08$ (L/5072)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-11258.10 T_z=130.53 M_y=556.27 T_y=8.96 M_z=261.38
Tensioni: $\sigma_N=-193.88$ $\sigma_M=-421.82$ $\tau=0.00$ $\sigma_{max}=-615.70$
Tensioni: $\sigma_N=-193.88$ $\sigma_M=14.00$ $\tau=7.86$ $\tau_{max}=7.86$
Tensioni: $\sigma_N=-193.88$ $\sigma_M=-421.82$ $\tau=0.00$ $\sigma_{ID,max}=615.70$

Asta n. 1232 (-828 1864) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-4579.06 M_y,Ed=-87.91 M_z,Ed=-721.64
Resistenze: Nc,Rd=196322.00 M_y,c,Rd=9885.72 M_z,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
L_{cr}=1.24 Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ M_{cr}=248865.00 $\lambda_{LT}=0.20$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.48$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr, $y=2897440.00$ $\lambda_y^*=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr, $z=1647080.00$ $\lambda_z^*=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: $0.02 + 0.01 + 0.18 = 0.21$
Verifica ZZ: $0.02 + 0.01 + 0.18 = 0.21$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/41796)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/6748) $f_{z,l}=0.00$ (L/71982)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-4579.06 T_z=-71.14 M_y=-87.91 T_y=617.22 M_z=-721.64
Tensioni: $\sigma_N=-78.86$ $\sigma_M=-669.41$ $\tau=0.00$ $\sigma_{max}=-748.27$
Tensioni: $\sigma_N=-78.86$ $\sigma_M=-14.66$ $\tau=16.69$ $\tau_{max}=16.69$
Tensioni: $\sigma_N=-78.86$ $\sigma_M=-669.41$ $\tau=0.00$ $\sigma_{ID,max}=748.27$

Asta n. 1232 (-827 -828) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3172.68 M_y,Ed=-87.91 M_z,Ed=-721.64
Resistenze: Nc,Rd=196322.00 M_y,c,Rd=9885.72 M_z,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.14$ $M_{cr}=162662.00$ $\lambda_{LT}=0.25$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.01 + 0.18 = 0.20
Verifica ZZ: 0.02 + 0.01 + 0.18 = 0.20

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/30132)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/5266) $f_{z,L}=0.00$ (L/53986)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=1.24$ - Classe 3
Sollecitazioni: $N=-3141.86$ $T_2=19.26$ $M_y=-87.91$ $T_y=-429.60$ $M_z=-721.64$
Tensioni: $\sigma_N=-54.11$ $\sigma_M=-669.41$ $\tau=0.00$ $\sigma_{max}=-723.52$
Tensioni: $\sigma_N=-54.11$ $\sigma_M=-14.66$ $\tau=11.37$ $\tau_{max}=11.37$
Tensioni: $\sigma_N=-54.11$ $\sigma_M=-669.41$ $\tau=0.00$ $\sigma_{ID,max}=723.52$

Asta n. 1232 (-826 -827) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 - Classe 3
Sollecitazioni: $N,Ed=-2477.98$ $M_y,Ed=-304.83$ $M_z,Ed=-167.05$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=123.57$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.11$ $M_{cr}=157437.00$ $\lambda_{LT}=0.26$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.01 + 0.03 + 0.04 = 0.08
Verifica ZZ: 0.01 + 0.02 + 0.04 = 0.08

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.00$ (L/64784) $f_{z,g}=0.00$ (L/86378)

- Verifica in termini tensionali (4.2.5) - CC 1 $X1=1.24$ - Classe 3
Sollecitazioni: $N=-2454.28$ $T_2=56.04$ $M_y=-304.83$ $T_y=-268.19$ $M_z=-167.05$
Tensioni: $\sigma_N=-42.27$ $\sigma_M=-252.26$ $\tau=0.00$ $\sigma_{max}=-294.52$
Tensioni: $\sigma_N=-42.27$ $\sigma_M=74.28$ $\tau=7.65$ $\tau_{max}=7.65$
Tensioni: $\sigma_N=-42.27$ $\sigma_M=-252.26$ $\tau=0.00$ $\sigma_{ID,max}=294.52$

Asta n. 1232 (-825 -826) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3234.30$ $M_y,Ed=-40.31$ $M_z,Ed=501.55$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=123.57$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.37$ $M_{cr}=194871.00$ $\lambda_{LT}=0.23$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.00 + 0.13 = 0.15
Verifica ZZ: 0.02 + 0.00 + 0.13 = 0.14

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/46274)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/6748)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-3234.30$ $T_2=19.26$ $M_y=-16.51$ $T_y=-230.34$ $M_z=501.55$
Tensioni: $\sigma_N=-55.70$ $\sigma_M=-450.00$ $\tau=0.00$ $\sigma_{max}=-505.70$
Tensioni: $\sigma_N=-55.70$ $\sigma_M=31.37$ $\tau=6.16$ $\tau_{max}=6.16$
Tensioni: $\sigma_N=-55.70$ $\sigma_M=-450.00$ $\tau=0.00$ $\sigma_{ID,max}=505.70$

Asta n. 1232 (1861 -825) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3265.12$ $M_y,Ed=-16.51$ $M_z,Ed=745.13$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=123.57$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $K_c=0.94$ $\psi=1.34$ $M_{cr}=191218.00$ $\lambda_{LT}=0.23$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.00 + 0.19 = 0.20
Verifica ZZ: 0.02 + 0.00 + 0.19 = 0.20

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/20566)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.03$ (L/3766)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-3265.12$ $T_z=19.26$ $M_y=7.29$ $T_y=-163.91$ $M_z=745.13$
Tensioni: $\sigma_N=-56.23$ $\sigma_M=-662.65$ $\tau=0.00$ $\sigma_{max}=-718.88$
Tensioni: $\sigma_N=-56.23$ $\sigma_M=37.93$ $\tau=4.44$ $\tau_{max}=4.44$
Tensioni: $\sigma_N=-56.23$ $\sigma_M=-662.65$ $\tau=0.00$ $\sigma_{ID,max}=718.88$

Asta n. 1234 (1852 -824) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3921.26$ $M_y,Ed=266.31$ $M_z,Ed=615.13$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=145.14$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $K_c=0.94$ $\psi=1.65$ $M_{cr}=174974.00$ $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.03 + 0.15 = 0.20
Verifica ZZ: 0.02 + 0.02 + 0.15 = 0.19

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/23058) $f_{z,L}=0.00$ (L/108706)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.03$ (L/4373) $f_{z,L}=0.01$ (L/21137)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-3921.26$ $T_z=165.54$ $M_y=266.31$ $T_y=-86.36$ $M_z=615.13$
Tensioni: $\sigma_N=-67.53$ $\sigma_M=-636.06$ $\tau=0.00$ $\sigma_{max}=-703.59$
Tensioni: $\sigma_N=-67.53$ $\sigma_M=32.95$ $\tau=9.97$ $\tau_{max}=9.97$
Tensioni: $\sigma_N=-67.53$ $\sigma_M=-636.06$ $\tau=0.00$ $\sigma_{ID,max}=703.59$

Asta n. 1234 (-824 -829) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3866.62$ $M_y,Ed=-214.24$ $M_z,Ed=441.59$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=145.14$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $K_c=0.94$ $\psi=1.63$ $M_{cr}=172494.00$ $\lambda_{LT}=0.25$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.02 + 0.11 = 0.15
Verifica ZZ: 0.02 + 0.02 + 0.11 = 0.15

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/52479)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/7212) $f_{z,L}=0.00$ (L/36235)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-3866.62$ $T_z=165.54$ $M_y=26.04$ $T_y=-152.78$ $M_z=441.59$
Tensioni: $\sigma_N=-66.59$ $\sigma_M=-400.14$ $\tau=0.00$ $\sigma_{max}=-466.73$
Tensioni: $\sigma_N=-66.59$ $\sigma_M=23.66$ $\tau=10.00$ $\tau_{max}=10.00$
Tensioni: $\sigma_N=-66.59$ $\sigma_M=-400.14$ $\tau=0.00$ $\sigma_{ID,max}=466.73$

Asta n. 1234 (-829 -830) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-3811.99 My,Ed=-454.51 Mz,Ed=-194.70
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.32$ M,cr=140144.00 $\lambda_{LT}=0.27$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.04 + 0.05 = 0.11
Verifica ZZ: 0.02 + 0.04 + 0.05 = 0.10

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/54353)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.01$ (L/9882) $f_{z,G}=0.00$ (L/76094)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.45 - Classe 3
Sollecitazioni: N=-3757.35 T₂=165.54 M_y=-454.51 T_y=-285.62 M_z=-194.70
Tensioni: $\sigma_N=-64.71$ $\sigma_M=-327.94$ $\tau=0.00$ $\sigma_{max}=-392.65$
Tensioni: $\sigma_N=-64.71$ $\sigma_M=113.66$ $\tau=11.47$ $\tau_{max}=11.47$
Tensioni: $\sigma_N=-64.71$ $\sigma_M=-327.94$ $\tau=0.00$ $\sigma_{ID,max}=392.65$

Asta n. 1234 (-830 -831) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3757.35 My,Ed=-694.77 Mz,Ed=-657.46
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.19$ M,cr=126336.00 $\lambda_{LT}=0.29$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.07 + 0.16 = 0.25
Verifica ZZ: 0.02 + 0.05 + 0.16 = 0.24

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/31706) $f_{z,G}=0.00$ (L/33819)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.02$ (L/5853) $f_{z,G}=0.02$ (L/6039)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.45 - Classe 3
Sollecitazioni: N=-3702.71 T₂=165.54 M_y=-694.77 T_y=-352.05 M_z=-657.46
Tensioni: $\sigma_N=-63.77$ $\sigma_M=-820.10$ $\tau=0.00$ $\sigma_{max}=-883.87$
Tensioni: $\sigma_N=-63.77$ $\sigma_M=154.47$ $\tau=12.69$ $\tau_{max}=12.69$
Tensioni: $\sigma_N=-63.77$ $\sigma_M=-820.10$ $\tau=0.00$ $\sigma_{ID,max}=883.87$

Asta n. 1234 (-831 1865) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7650.79 My,Ed=-694.78 Mz,Ed=-657.46
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=185555.00 $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.96, 0.77, 0.96
Verifica YY: 0.04 + 0.07 + 0.17 = 0.27
Verifica ZZ: 0.04 + 0.05 + 0.17 = 0.26

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/47559) $f_{z,G}=0.00$ (L/50729)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.02$ (L/7926) $f_{z,L}=0.02$ (L/8746)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-7650.79 T₂=-478.70 M_y=-694.78 T_y=486.19 M_z=-657.46
Tensioni: $\sigma_N=-131.76$ $\sigma_M=-820.10$ $\tau=0.00$ $\sigma_{max}=-951.86$
Tensioni: $\sigma_N=-131.76$ $\sigma_M=-35.22$ $\tau=28.92$ $\tau_{max}=28.92$
Tensioni: $\sigma_N=-131.76$ $\sigma_M=-820.10$ $\tau=0.00$ $\sigma_{ID,max}=951.86$

Asta n. 2001 (1872 1873) Is 175x250x18x12x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-5190.74 My,Ed=-3564.30 Mz,Ed=2731.53
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=700.73
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.01$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.46$ $M_{cr}=33864.60$ $\lambda_{LT}=0.72$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.75$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.88$
 $\lambda_y=98.01$ Ncr,y=183603.00 $\lambda_y^*=1.28$ Curva b: $\Phi_y=1.51$ $\chi_y=0.44$
 $\lambda_z=134.26$ Ncr,z=97842.80 $\lambda_z^*=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
Kyy, Kyz, Kzy, Kzz = 0.97, 0.99, 0.78, 0.99
Verifica YY: 0.04 + 0.23 + 0.43 = 0.71
Verifica ZZ: 0.07 + 0.19 + 0.43 = 0.69
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/89606) $f_{z,l}=0.01$ (L/114807)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.05$ (L/15436) $f_{z,l}=0.03$ (L/20130)
 - Verifica in termini tensionali (4.2.5) - CC 25 Xl=7.01 - Classe 3
Sollecitazioni: N=-6703.87 Tz=-19.30 My=4.25 Ty=866.74 Mz=3551.76
Tensioni: $\sigma_N=-78.78$ $\sigma_M=-1916.17$ $\tau=0.00$ $\sigma_{max}=-1994.96$
Tensioni: $\sigma_N=-78.78$ $\sigma_M=137.22$ $\tau=16.55$ $\tau_{max}=16.55$
Tensioni: $\sigma_N=-78.78$ $\sigma_M=-1916.17$ $\tau=0.00$ $\sigma_{ID,max}=1994.96$

Asta n. 2002 (1866 1867) Is 175x250x18x12x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-18501.60 My,Ed=-498.06 Mz,Ed=3265.72
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=702.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.02$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.57$ $M_{cr}=36266.80$ $\lambda_{LT}=0.70$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.73$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.90$
 $\lambda_y=98.21$ Ncr,y=182868.00 $\lambda_y^*=1.29$ Curva b: $\Phi_y=1.51$ $\chi_y=0.43$
 $\lambda_z=134.53$ Ncr,z=97451.20 $\lambda_z^*=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
Kyy, Kyz, Kzy, Kzz = 1.03, 1.10, 0.83, 1.10
Verifica YY: 0.15 + 0.03 + 0.57 = 0.76
Verifica ZZ: 0.26 + 0.03 + 0.57 = 0.86
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,l}=0.01$ (L/52588) $f_{z,g}=0.01$ (L/73258)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.08$ (L/9319) $f_{z,g}=0.06$ (L/12499)
 - Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-18501.60 Tz=-77.12 My=-498.06 Ty=-824.55 Mz=3265.72 Mx=6.30
Tensioni: $\sigma_N=-217.43$ $\sigma_M=-1861.26$ $\tau=6.32$ $\sigma_{max}=-2078.69$
Tensioni: $\sigma_N=-217.43$ $\sigma_M=207.12$ $\tau=27.18$ $\tau_{max}=27.18$
Tensioni: $\sigma_N=-217.43$ $\sigma_M=-1861.26$ $\tau=6.32$ $\sigma_{ID,max}=2078.72$

Asta n. 2004 (1868 1869) Is 175x250x18x12x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-17803.60 My,Ed=-595.53 Mz,Ed=3217.03
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=702.06
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.02$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.62$ $M_{cr}=37497.70$ $\lambda_{LT}=0.69$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.73$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.90$
 $\lambda_y=98.19$ Ncr,y=182908.00 $\lambda_y^*=1.29$ Curva b: $\Phi_y=1.51$ $\chi_y=0.43$
 $\lambda_z=134.51$ Ncr,z=97472.40 $\lambda_z^*=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
Kyy, Kyz, Kzy, Kzz = 1.03, 1.09, 0.82, 1.09
Verifica YY: 0.14 + 0.04 + 0.56 = 0.74
Verifica ZZ: 0.25 + 0.03 + 0.56 = 0.85
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,l}=0.02$ (L/44888) $f_{z,g}=0.01$ (L/73986)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.09$ (L/7765) $f_{z,g}=0.06$ (L/12638)
 - Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-17803.60 Tz=-91.94 My=-595.53 Ty=-810.09 Mz=3217.03 Mx=6.75
Tensioni: $\sigma_N=-209.23$ $\sigma_M=-1854.61$ $\tau=6.76$ $\sigma_{max}=-2063.84$

Tensioni: $\sigma_N=-209.23$ $\sigma_M=220.95$ $\tau=28.56$ $\tau_{max}=28.56$
Tensioni: $\sigma_N=-209.23$ $\sigma_M=-1854.61$ $\tau=6.76$ $\sigma_{ID,max}=2063.87$

Asta n. 2005 (-874 -836) Cir.c D=120/6 Crit. 1

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- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/25040)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.07$ (L/4552)
 - Verifica a compressione (4.2.10) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-13281.10$
 $N,Ed=-13281.10$ $Nc,Rd=-72651.60$ $N,Ed/Nc,Rd=0.18$
 - Verifica di stabilità (4.2.4.1.3.1) - CC 25
Sollecitazioni: $N=-13281.10$ $L=320.00$
 $\lambda=79.28$ $Ncr=70851.00$ $\lambda^*=1.04$
Curva a: $\Phi=1.13$ $\chi_{,min}=0.64$ $N,Ed=-13281.10$ $Nb,Rd=46443.40$ $N,Ed/Nb,Rd=0.29$

Asta n. 2006 (-875 -839) Cir.c D=120/6 Crit. 1

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- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/24314)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.04$ (L/4450)
 - Verifica a compressione (4.2.10) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-13704.40$
 $N,Ed=-13704.40$ $Nc,Rd=-72651.60$ $N,Ed/Nc,Rd=0.19$
 - Verifica di stabilità (4.2.4.1.3.1) - CC 25
Sollecitazioni: $N=-13704.40$ $L=160.00$
 $\lambda=39.64$ $Ncr=283404.00$ $\lambda^*=0.52$
Curva a: $\Phi=0.67$ $\chi_{,min}=0.92$ $N,Ed=-13704.40$ $Nb,Rd=66718.00$ $N,Ed/Nb,Rd=0.21$

Asta n. 2007 (1881 1984) Cir.c D=120/6 Crit. 1

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- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/140684)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/28136)
 - Verifica in termini tensionali (4.2.5) - CC 9 $X_1=1.61$ - Classe 3
Sollecitazioni: $N=3107.93$
Tensioni: $\sigma_N=144.63$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{max}=144.63$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=144.63$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{ID,max}=144.63$

Asta n. 2008 (1882 1985) Cir.c D=120/6 Crit. 1

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- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/52756)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/9702)
 - Verifica a compressione (4.2.10) - CC 9 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-7138.08$
 $N,Ed=-7138.08$ $Nc,Rd=-72651.60$ $N,Ed/Nc,Rd=0.10$

Asta n. 2009 (1985 1881) Cir. D=4 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 - Classe 3
Sollecitazioni: $N,Ed=-3358.16$ $M,Ed=4.05$
Resistenze: $Nc,Rd=42486.30$ $M,c,Rd=212.43$ $L=259.36$
 $\lambda=259.36$ $Ncr=3872.04$ $\lambda^*=3.39$ Curva c: $\Phi=7.04$ $\chi_{,min}=0.08$
 $\chi_{,min}=0.08$
Verifica: $1.04 + 0.14 = 1.19$
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/118240)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.14$ (L/1811) $f_{z,g}=0.09$ (L/2978)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.29 - Classe 3
Sollecitazioni: N=-5228.54 M=5.39
Tensioni: $\sigma_N=-416.07$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{max}=-501.93$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-416.07$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{ID,max}=501.93$

Asta n. 2010 (1984 1882) Cir. D=4 Crit. 1

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 25 - Classe 3
 $L_{cr}=2.10$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ $f=0.00$ $\chi_{LT}=1.00$
CC 25 $M_y, Ed=-5.68$ $M_y, b, Rd=212.43$ $M_y, Ed/M_y, b, Rd=0.03$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 23 - Classe 3
Sollecitazioni: N, Ed=-469.48 M, Ed=3.28
Resistenze: Nc, Rd=42486.30 M, c, Rd=212.43 L=209.96
 $\lambda=209.96$ Ncr=5908.50 $\lambda^*=2.75$ Curva c: $\Phi=4.90$ $\chi_{min}=0.11$
 $\chi_{min}=0.11$
Verifica: $0.10 + 0.02 = 0.12$
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/183461)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.08$ (L/2762) $f_{z,g}=0.06$ (L/3256)
- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.05 - Classe 3
Sollecitazioni: N=6747.00 M=4.37
Tensioni: $\sigma_N=536.91$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{max}=606.41$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=536.91$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{ID,max}=606.41$

Asta n. 2011 (1878 1982) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/140684)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/23447)
- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.61 - Classe 3
Sollecitazioni: N=4002.19
Tensioni: $\sigma_N=186.25$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{max}=186.25$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=186.25$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{ID,max}=186.25$

Asta n. 2012 (1879 1983) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N, Ed=-3993.95 M, Ed=0.00
Resistenze: Nc, Rd=72651.60 M, c, Rd=1972.49 L=161.00
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=39.89$ Ncr=279894.00 $\lambda^*=0.52$
Curva a: $\Phi=0.67$ $\chi_{min}=0.92$
Kyy, Kyz, Kzy, Kzz = 0.97, ----, ----, ----
Verifica: $0.05 = 0.05$
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/84410)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/15073)
- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3993.95
N, Ed=-3993.95 Nc, Rd=-72651.60 N, Ed/Nc, Rd=0.05

Asta n. 2013 (1878 1983) Cir. D=4 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 - Classe 3
Sollecitazioni: N, Ed=-2565.39 M, Ed=4.05
Resistenze: Nc, Rd=42486.30 M, c, Rd=212.43 L=259.36
 $\lambda=259.36$ Ncr=3872.04 $\lambda^*=3.39$ Curva c: $\Phi=7.04$ $\chi_{min}=0.08$
 $\chi_{min}=0.08$
Verifica: $0.80 + 0.06 = 0.85$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/135976)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.14$ (L/1810) $f_{z,g}=0.10$ (L/2627)
- Verifica in termini tensionali (4.2.5) - CC 1 $X_1=1.29$ - Classe 3
Sollecitazioni: $N=-2555.72$ $M=5.39$
Tensioni: $\sigma_N=-203.38$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{max}=-289.24$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-203.38$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{ID,max}=289.24$

Asta n. 2014 (1879 1982) Cir. D=4 Crit. 1

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 25 - Classe 3
 $L_{cr}=2.10$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ $f=0.00$ $\chi_{LT}=1.00$
CC 25 $M_y,Ed=-5.68$ $M_y,b,Rd=212.43$ $M_y,Ed/M_y,b,Rd=0.03$
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/137595)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.08$ (L/2765) $f_{z,g}=0.06$ (L/3706)
- Verifica in termini tensionali (4.2.5) - CC 9 $X_1=1.05$ - Classe 3
Sollecitazioni: $N=3865.88$ $M=4.37$
Tensioni: $\sigma_N=307.64$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{max}=377.14$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=307.64$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{ID,max}=377.14$

Asta n. 2015 (1873 1869) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-2493.25$ $M,Ed=2.86$
Resistenze: $N_c,Rd=72651.60$ $M,c,Rd=1972.49$ $L=102.22$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=25.33$ $N_{cr}=694405.00$ $\lambda'=0.33$
Curva a: $\Phi=0.57$ $\chi_{min}=0.97$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, \text{----}, \text{----}, \text{----}$
Verifica: $0.03 + 0.00 = 0.04$
- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=0.51$ - Classe 3
Sollecitazioni: $N=-2493.25$ $M=2.86$
Tensioni: $\sigma_N=-116.03$ $\sigma_M=-4.91$ $\tau=0.00$ $\sigma_{max}=-120.94$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-116.03$ $\sigma_M=-4.91$ $\tau=0.00$ $\sigma_{ID,max}=120.94$

Asta n. 2016 (1869 1871) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-2848.85$ $M,Ed=4.01$
Resistenze: $N_c,Rd=72651.60$ $M,c,Rd=1972.49$ $L=120.97$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=29.97$ $N_{cr}=495807.00$ $\lambda'=0.39$
Curva a: $\Phi=0.60$ $\chi_{min}=0.95$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, \text{----}, \text{----}, \text{----}$
Verifica: $0.04 + 0.00 = 0.04$
- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=0.60$ - Classe 3
Sollecitazioni: $N=-2848.85$ $M=4.01$
Tensioni: $\sigma_N=-132.58$ $\sigma_M=-6.88$ $\tau=0.00$ $\sigma_{max}=-139.45$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-132.58$ $\sigma_M=-6.88$ $\tau=0.00$ $\sigma_{ID,max}=139.45$

Asta n. 2017 (1871 1867) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-2447.50$ $M,Ed=2.89$
Resistenze: $N_c,Rd=72651.60$ $M,c,Rd=1972.49$ $L=102.73$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=25.45$ $N_{cr}=687495.00$ $\lambda'=0.33$
Curva a: $\Phi=0.57$ $\chi_{min}=0.97$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, \text{----}, \text{----}, \text{----}$

Verifica: $0.03 + 0.00 = 0.04$

- Verifica in termini tensionali (4.2.5) - CC 25 $Xl=0.51$ - Classe 3
Sollecitazioni: $N=-2447.50$ $M=2.89$
Tensioni: $\sigma_N=-113.90$ $\sigma_M=-4.96$ $\tau=0.00$ $\sigma_{max}=-118.86$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-113.90$ $\sigma_M=-4.96$ $\tau=0.00$ $\sigma_{ID,max}=118.86$

Asta n. 2018 (1867 1873) Cir.c $D=120/6$ Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-2858.62$ $M,Ed=3.97$
Resistenze: $Nc,Rd=72651.60$ $M,c,Rd=1972.49$ $L=120.28$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=29.80$ $Ncr=501462.00$ $\lambda^*=0.39$
Curva a: $\Phi=0.60$ $\chi_{,min}=0.96$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, \text{----}, \text{----}, \text{----}$
Verifica: $0.04 + 0.00 = 0.04$

- Verifica in termini tensionali (4.2.5) - CC 25 $Xl=0.60$ - Classe 3
Sollecitazioni: $N=-2858.62$ $M=3.97$
Tensioni: $\sigma_N=-133.03$ $\sigma_M=-6.80$ $\tau=0.00$ $\sigma_{max}=-139.83$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-133.03$ $\sigma_M=-6.80$ $\tau=0.00$ $\sigma_{ID,max}=139.83$

Asta n. 2101 (1873 1880) Is $175 \times 250 \times 18 \times 12 \times 0 \times 0 \times 10000$ Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-7047.04$ $M_y,Ed=396.01$ $M_z,Ed=-4885.96$
Resistenze: $Nc,Rd=287692.00$ $M_y,c,Rd=16807.20$ $M_z,c,Rd=6269.63$ $L=526.58$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.27$ Curva b: $\alpha\text{-imp}=0.34$ $K_c=0.94$ $\psi=1.74$ $M_{,cr}=56924.60$ $\lambda_{LT}=0.56$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=73.65$ $Ncr,y=325125.00$ $\lambda^*_y=0.96$ Curva b: $\Phi_y=1.09$ $\chi_y=0.62$
 $\lambda_z=100.89$ $Ncr,z=173260.00$ $\lambda^*_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.97, 0.99, 0.78, 0.99$
Verifica YY: $0.04 + 0.02 + 0.77 = 0.83$
Verifica ZZ: $0.06 + 0.02 + 0.77 = 0.85$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/39160) $f_{z,L}=0.01$ (L/52090)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/6067) $f_{z,L}=0.06$ (L/9051)

- Verifica in termini tensionali (4.2.5) - CC 25 $Xl=5.27$ - Classe 3
Sollecitazioni: $N=-6595.49$ $T_z=-74.41$ $M_y=396.01$ $T_y=-1638.39$ $M_z=-4885.96$
Tensioni: $\sigma_N=-77.51$ $\sigma_M=-2714.46$ $\tau=0.00$ $\sigma_{max}=-2791.97$
Tensioni: $\sigma_N=-77.51$ $\sigma_M=-253.57$ $\tau=31.36$ $\tau_{max}=31.36$
Tensioni: $\sigma_N=-77.51$ $\sigma_M=-2714.46$ $\tau=0.00$ $\sigma_{ID,max}=2791.97$

Asta n. 2102 (1867 1883) Is $175 \times 250 \times 18 \times 12 \times 0 \times 0 \times 10000$ Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: $N,Ed=-18793.20$ $M_y,Ed=-380.80$ $M_z,Ed=-2653.48$
Resistenze: $Nc,Rd=287692.00$ $M_y,c,Rd=16807.20$ $M_z,c,Rd=6269.63$ $L=553.99$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.54$ Curva b: $\alpha\text{-imp}=0.34$ $K_c=0.94$ $\psi=1.59$ $M_{,cr}=48907.50$ $\lambda_{LT}=0.60$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.67$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.94$
 $\lambda_y=77.48$ $Ncr,y=293755.00$ $\lambda^*_y=1.01$ Curva b: $\Phi_y=1.15$ $\chi_y=0.59$
 $\lambda_z=106.14$ $Ncr,z=156543.00$ $\lambda^*_z=1.39$ Curva c: $\Phi_z=1.76$ $\chi_z=0.35$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.01, 1.06, 0.81, 1.06$
Verifica YY: $0.11 + 0.02 + 0.45 = 0.58$
Verifica ZZ: $0.18 + 0.02 + 0.45 = 0.65$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.02$ (L/33577) $f_{z,L}=0.00$ (L/161359)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/5909) $f_{z,L}=0.02$ (L/29943)

- Verifica in termini tensionali (4.2.5) - CC 9 $Xl=0.00$ - Classe 3
Sollecitazioni: $N=-18793.20$ $T_z=78.97$ $M_y=60.35$ $T_y=778.41$ $M_z=-2653.48$ $M_x=-8.17$
Tensioni: $\sigma_N=-220.86$ $\sigma_M=-1443.05$ $\tau=8.19$ $\sigma_{max}=-1663.91$
Tensioni: $\sigma_N=-220.86$ $\sigma_M=-112.76$ $\tau=31.76$ $\tau_{max}=31.76$

Tensioni: $\sigma_N=-220.86$ $\sigma_M=-1443.05$ $\tau=8.19$ $\sigma_{ID,max}=1663.97$

Asta n. 2103 (1871 1877) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-7037.17 My,Ed=97.18 Mz,Ed=-4891.25
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=526.43

$\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=5.26$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.13$ M,cr=37158.80 $\lambda_{LT}=0.69$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.73$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.90$

$\lambda_y=73.63$ Ncr,y=325318.00 $\lambda^*_y=0.96$ Curva b: $\Phi_y=1.09$ $\chi_y=0.62$

$\lambda_z=100.86$ Ncr,z=173363.00 $\lambda^*_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$

Kyy, Kyz, Kzy, Kzz = 0.97, 0.99, 0.78, 0.99

Verifica YY: $0.04 + 0.01 + 0.77 = 0.82$

Verifica ZZ: $0.06 + 0.00 + 0.77 = 0.84$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,g}=0.01$ (L/39999)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,g}=0.09$ (L/6160) $f_{z,l}=0.01$ (L/62726)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=5.26 - Classe 3

Sollecitazioni: N=-6585.62 Tz=-32.20 My=97.18 Ty=-1648.33 Mz=-4891.25 Mx=6.79

Tensioni: $\sigma_N=-77.39$ $\sigma_M=-2657.20$ $\tau=6.81$ $\sigma_{max}=-2734.59$

Tensioni: $\sigma_N=-77.39$ $\sigma_M=-205.58$ $\tau=38.57$ $\tau_{max}=38.57$

Tensioni: $\sigma_N=-77.39$ $\sigma_M=-2657.20$ $\tau=6.81$ $\sigma_{ID,max}=2734.62$

Asta n. 2104 (1869 1874) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3

Sollecitazioni: N,Ed=-18064.80 My,Ed=-276.58 Mz,Ed=-2597.32
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=553.99

$\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=5.54$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.54$ M,cr=47430.70 $\lambda_{LT}=0.61$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.68$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.94$

$\lambda_y=77.48$ Ncr,y=293755.00 $\lambda^*_y=1.01$ Curva b: $\Phi_y=1.15$ $\chi_y=0.59$

$\lambda_z=106.14$ Ncr,z=156543.00 $\lambda^*_z=1.39$ Curva c: $\Phi_z=1.76$ $\chi_z=0.35$

Kyy, Kyz, Kzy, Kzz = 1.01, 1.05, 0.81, 1.05

Verifica YY: $0.11 + 0.02 + 0.44 = 0.56$

Verifica ZZ: $0.18 + 0.01 + 0.44 = 0.63$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,g}=0.02$ (L/36765)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,g}=0.09$ (L/6483) $f_{z,l}=0.01$ (L/58089)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3

Sollecitazioni: N=-18064.80 Tz=58.68 My=57.97 Ty=756.24 Mz=-2597.32 Mx=-8.42

Tensioni: $\sigma_N=-212.30$ $\sigma_M=-1412.29$ $\tau=8.44$ $\sigma_{max}=-1624.59$

Tensioni: $\sigma_N=-212.30$ $\sigma_M=-110.19$ $\tau=31.72$ $\tau_{max}=31.72$

Tensioni: $\sigma_N=-212.30$ $\sigma_M=-1412.29$ $\tau=8.44$ $\sigma_{ID,max}=1624.65$

Asta n. 2105 (-836 1986) Cir.c D=120/6 Crit.1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-11687.60 M,Ed=0.12
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=78.22

$\alpha_y, \alpha_z, \alpha_{LT} = 0.95, \text{----}, \text{----}$

$\lambda=19.38$ Ncr=1185880.00 $\lambda^*=0.25$

Curva a: $\Phi=0.54$ $\chi_{min}=0.99$

Kyy, Kyz, Kzy, Kzz = 0.97, ----, ----, ----

Verifica: $0.16 + 0.00 = 0.16$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,g}=0.00$ (L/27338)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,g}=0.02$ (L/5126)

- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3

Sollecitazioni: N=-11687.60
N,Ed=-11687.60 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.16

Asta n. 2106 (-839 1987) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-10826.70 M,Ed=0.29
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=66.17
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=16.39$ Ncr=1657040.00 $\lambda^*=0.21$
Curva a: $\Phi=0.52$ $\chi_{\min}=1.00$
Kyy, Kyz, Kzy, Kzz = 0.97, ----, ----, ----
Verifica: 0.15 + 0.00 = 0.15

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/31537)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/5981)

- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-10826.70 T=1.76
N,Ed=-10826.70 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.15

Asta n. 2211 (1880 1882) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3311.94 My,Ed=1262.78 Mz,Ed=-2001.13
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=379.60
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.80$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=39930.60 $\lambda_{LT}=0.51$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.62$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.98$
 $\lambda_y=62.61$ Ncr,y=307021.00 $\lambda^*_y=0.82$ Curva b: $\Phi_y=0.94$ $\chi_y=0.71$
 $\lambda_z=83.04$ Ncr,z=174529.00 $\lambda^*_z=1.09$ Curva c: $\Phi_z=1.31$ $\chi_z=0.49$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: 0.02 + 0.13 + 0.51 = 0.65
Verifica ZZ: 0.02 + 0.10 + 0.51 = 0.63

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.06$ (L/6611) $f_{z,L}=0.03$ (L/10935)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.32$ (L/1184) $f_{z,L}=0.20$ (L/1945)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3311.94 Tz=332.66 My=1262.78 Ty=596.84 Mz=-2001.13
Tensioni: $\sigma_N=-57.04$ $\sigma_M=-2204.81$ $\tau=0.00$ $\sigma_{\max}=-2261.84$
Tensioni: $\sigma_N=-57.04$ $\sigma_M=-451.96$ $\tau=23.44$ $\tau_{\max}=23.44$
Tensioni: $\sigma_N=-57.04$ $\sigma_M=-2204.81$ $\tau=0.00$ $\sigma_{ID,\max}=2261.84$

Asta n. 2212 (1880 1881) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3546.39 My,Ed=-1161.13 Mz,Ed=-2509.04
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=334.12
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.34$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=47739.80 $\lambda_{LT}=0.47$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.59$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=55.11$ Ncr,y=396295.00 $\lambda^*_y=0.72$ Curva b: $\Phi_y=0.85$ $\chi_y=0.77$
 $\lambda_z=73.09$ Ncr,z=225278.00 $\lambda^*_z=0.96$ Curva c: $\Phi_z=1.14$ $\chi_z=0.57$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: 0.02 + 0.11 + 0.64 = 0.77
Verifica ZZ: 0.02 + 0.09 + 0.64 = 0.74

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.06$ (L/5917) $f_{z,L}=0.02$ (L/13429)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.32$ (L/1045) $f_{z,L}=0.14$ (L/2397)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3546.39 Tz=-347.52 My=-1161.13 Ty=812.38 Mz=-2509.04
Tensioni: $\sigma_N=-61.07$ $\sigma_M=-2620.03$ $\tau=0.00$ $\sigma_{\max}=-2681.10$
Tensioni: $\sigma_N=-61.07$ $\sigma_M=182.60$ $\tau=28.08$ $\tau_{\max}=28.08$
Tensioni: $\sigma_N=-61.07$ $\sigma_M=-2620.03$ $\tau=0.00$ $\sigma_{ID,\max}=2681.10$

Asta n. 2212 (1883 1885) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-11748.90 My,Ed=680.80 Mz,Ed=234.28

Resistenze: $N_c, R_d=196322.00$ My, $c, R_d=9885.72$ Mz, $c, R_d=3816.13$ L=437.01
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.37$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=33075.30$ $\lambda_{LT}=0.56$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=72.08$ $N_{cr,y}=231652.00$ $\lambda'_y=0.94$ Curva b: $\Phi_y=1.07$ $\chi_y=0.63$
 $\lambda_z=95.60$ $N_{cr,z}=131685.00$ $\lambda'_z=1.25$ Curva c: $\Phi_z=1.54$ $\chi_z=0.41$
Kyy, Kyz, Kzy, Kzz = 1.00, 1.03, 0.80, 1.03
Verifica YY: $0.09 + 0.07 + 0.06 = 0.23$
Verifica ZZ: $0.15 + 0.06 + 0.06 = 0.27$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.02$ (L/19093) $f_{z,G}=0.01$ (L/34979)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.14$ (L/3110) $f_{z,G}=0.08$ (L/5353)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-11748.90$ $T_z=155.79$ $M_y=680.80$ $T_y=17.81$ $M_z=229.35$
Tensioni: $\sigma_N=-202.33$ $\sigma_M=-436.03$ $\tau=0.00$ $\sigma_{max}=-638.36$
Tensioni: $\sigma_N=-202.33$ $\sigma_M=12.29$ $\tau=9.38$ $\tau_{max}=9.38$
Tensioni: $\sigma_N=-202.33$ $\sigma_M=-436.03$ $\tau=0.00$ $\sigma_{ID,max}=638.36$

Asta n. 2213 (1877 1878) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N, Ed=-3197.92$ My, $Ed=1059.83$ Mz, $Ed=-2077.08$
Resistenze: $N_c, R_d=196322.00$ My, $c, R_d=9885.72$ Mz, $c, R_d=3816.13$ L=352.04
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.52$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=44330.50$ $\lambda_{LT}=0.48$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.60$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=58.06$ $N_{cr,y}=356964.00$ $\lambda'_y=0.76$ Curva b: $\Phi_y=0.88$ $\chi_y=0.75$
 $\lambda_z=77.01$ $N_{cr,z}=202920.00$ $\lambda'_z=1.01$ Curva c: $\Phi_z=1.21$ $\chi_z=0.54$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: $0.02 + 0.10 + 0.53 = 0.65$
Verifica ZZ: $0.02 + 0.08 + 0.53 = 0.63$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.06$ (L/6353) $f_{z,L}=0.03$ (L/13982)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.31$ (L/1130) $f_{z,L}=0.14$ (L/2514)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-3197.92$ $T_z=301.05$ $M_y=1059.83$ $T_y=659.68$ $M_z=-2077.08$
Tensioni: $\sigma_N=-55.07$ $\sigma_M=-2202.69$ $\tau=0.00$ $\sigma_{max}=-2257.76$
Tensioni: $\sigma_N=-55.07$ $\sigma_M=-400.62$ $\tau=23.45$ $\tau_{max}=23.45$
Tensioni: $\sigma_N=-55.07$ $\sigma_M=-2202.69$ $\tau=0.00$ $\sigma_{ID,max}=2257.76$

Asta n. 2214 (1874 1876) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N, Ed=-8889.56$ My, $Ed=-876.50$ Mz, $Ed=-186.53$
Resistenze: $N_c, R_d=196322.00$ My, $c, R_d=9885.72$ Mz, $c, R_d=3816.13$ L=448.31
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.48$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=31994.10$ $\lambda_{LT}=0.57$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.65$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=73.94$ $N_{cr,y}=220115.00$ $\lambda'_y=0.97$ Curva b: $\Phi_y=1.10$ $\chi_y=0.62$
 $\lambda_z=98.07$ $N_{cr,z}=125127.00$ $\lambda'_z=1.28$ Curva c: $\Phi_z=1.59$ $\chi_z=0.40$
Kyy, Kyz, Kzy, Kzz = 0.99, 1.02, 0.79, 1.02
Verifica YY: $0.07 + 0.09 + 0.05 = 0.21$
Verifica ZZ: $0.11 + 0.07 + 0.05 = 0.24$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.03$ (L/14138) $f_{z,G}=0.00$ (L/134311)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.19$ (L/2356) $f_{z,G}=0.02$ (L/23504)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-8889.56$ $T_z=-195.51$ $M_y=-876.50$ $T_y=123.11$ $M_z=-186.53$
Tensioni: $\sigma_N=-153.09$ $\sigma_M=-465.02$ $\tau=0.00$ $\sigma_{max}=-618.12$
Tensioni: $\sigma_N=-153.09$ $\sigma_M=-9.99$ $\tau=11.78$ $\tau_{max}=11.78$
Tensioni: $\sigma_N=-153.09$ $\sigma_M=-465.02$ $\tau=0.00$ $\sigma_{ID,max}=618.12$

Asta n. 2222 (1883 1884) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-9657.34 My,Ed=-734.33 Mz,Ed=-164.30
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=458.65
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.59$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=31066.50$ $\lambda_{LT}=0.58$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.66$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.95$
 $\lambda_y=75.65$ Ncr,y=210307.00 $\lambda'_y=0.99$ Curva b: $\Phi_y=1.12$ $\chi_y=0.60$
 $\lambda_z=100.33$ Ncr,z=119551.00 $\lambda'_z=1.31$ Curva c: $\Phi_z=1.63$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 1.00, 1.02, 0.80, 1.02
Verifica YY: 0.08 + 0.08 + 0.04 = 0.20
Verifica ZZ: 0.13 + 0.06 + 0.04 = 0.23

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.03$ (L/16703) $f_{z,G}=0.00$ (L/114506)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.17$ (L/2755) $f_{z,G}=0.02$ (L/21469)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-9657.34 Tz=-160.11 My=-734.33 Ty=117.33 Mz=-164.30
Tensioni: $\sigma_N=-166.31$ $\sigma_M=-396.71$ $\tau=0.00$ $\sigma_{max}=-563.02$
Tensioni: $\sigma_N=-166.31$ $\sigma_M=-8.80$ $\tau=9.66$ $\tau_{max}=9.66$
Tensioni: $\sigma_N=-166.31$ $\sigma_M=-396.71$ $\tau=0.00$ $\sigma_{ID,max}=563.02$

Asta n. 2223 (1877 1879) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3657.46 My,Ed=-1201.20 Mz,Ed=-2482.30
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=363.03
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.63$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=42465.80$ $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=59.88$ Ncr,y=335675.00 $\lambda'_y=0.78$ Curva b: $\Phi_y=0.91$ $\chi_y=0.73$
 $\lambda_z=79.42$ Ncr,z=190818.00 $\lambda'_z=1.04$ Curva c: $\Phi_z=1.25$ $\chi_z=0.52$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: 0.02 + 0.12 + 0.63 = 0.77
Verifica ZZ: 0.02 + 0.09 + 0.63 = 0.74

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.06$ (L/5985) $f_{z,L}=0.03$ (L/11989)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.34$ (L/1062) $f_{z,L}=0.17$ (L/2126)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3657.46 Tz=-330.88 My=-1201.20 Ty=745.20 Mz=-2482.30
Tensioni: $\sigma_N=-62.99$ $\sigma_M=-2610.05$ $\tau=0.00$ $\sigma_{max}=-2673.04$
Tensioni: $\sigma_N=-62.99$ $\sigma_M=194.97$ $\tau=26.17$ $\tau_{max}=26.17$
Tensioni: $\sigma_N=-62.99$ $\sigma_M=-2610.05$ $\tau=0.00$ $\sigma_{ID,max}=2673.04$

Asta n. 2224 (1874 1875) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-11046.50 My,Ed=522.92 Mz,Ed=258.63
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=426.15
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.26$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=34185.30$ $\lambda_{LT}=0.55$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=70.29$ Ncr,y=243609.00 $\lambda'_y=0.92$ Curva b: $\Phi_y=1.05$ $\chi_y=0.65$
 $\lambda_z=93.22$ Ncr,z=138482.00 $\lambda'_z=1.22$ Curva c: $\Phi_z=1.49$ $\chi_z=0.42$
Kyy, Kyz, Kzy, Kzz = 1.00, 1.03, 0.80, 1.03
Verifica YY: 0.09 + 0.05 + 0.07 = 0.21
Verifica ZZ: 0.13 + 0.04 + 0.07 = 0.25

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.02$ (L/26285) $f_{z,G}=0.01$ (L/33597)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.10$ (L/4137) $f_{z,G}=0.08$ (L/5124)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-11046.50 Tz=122.71 My=522.92 Ty=9.96 Mz=257.12
Tensioni: $\sigma_N=-190.24$ $\sigma_M=-406.64$ $\tau=0.00$ $\sigma_{max}=-596.88$
Tensioni: $\sigma_N=-190.24$ $\sigma_M=13.77$ $\tau=7.39$ $\tau_{max}=7.39$

Tensioni: $\sigma_N=-190.24$ $\sigma_M=-406.64$ $\tau=0.00$ $\sigma_{ID,max}=596.88$

Asta n. 2232 (-836 1886) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-4516.80 My,Ed=-87.24 Mz,Ed=-722.05
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=248865.00 $\lambda_{LT}=0.20$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.48$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.01 + 0.18 = 0.21
Verifica ZZ: 0.02 + 0.01 + 0.18 = 0.21

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,g}=0.00$ (L/43189)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,g}=0.02$ (L/6819) $f_{z,L}=0.00$ (L/71982)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3

Sollecitazioni: N=-4516.80 $T_z=-70.60$ $M_y=-87.24$ $T_y=617.56$ $M_z=-722.05$
Tensioni: $\sigma_N=-77.79$ $\sigma_M=-669.55$ $\tau=0.00$ $\sigma_{max}=-747.33$
Tensioni: $\sigma_N=-77.79$ $\sigma_M=-14.86$ $\tau=16.70$ $\tau_{max}=16.70$
Tensioni: $\sigma_N=-77.79$ $\sigma_M=-669.55$ $\tau=0.00$ $\sigma_{ID,max}=747.33$

Asta n. 2232 (-835 -836) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-3108.30 My,Ed=-87.24 Mz,Ed=-722.05
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.15$ M,cr=163740.00 $\lambda_{LT}=0.25$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.01 + 0.18 = 0.20
Verifica ZZ: 0.02 + 0.01 + 0.18 = 0.20

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,g}=0.00$ (L/30132)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,g}=0.02$ (L/5332) $f_{z,L}=0.00$ (L/46274)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.24 - Classe 3

Sollecitazioni: N=-3077.49 $T_z=19.98$ $M_y=-87.24$ $T_y=-429.80$ $M_z=-722.05$
Tensioni: $\sigma_N=-53.00$ $\sigma_M=-669.55$ $\tau=0.00$ $\sigma_{max}=-722.55$
Tensioni: $\sigma_N=-53.00$ $\sigma_M=-14.86$ $\tau=11.38$ $\tau_{max}=11.38$
Tensioni: $\sigma_N=-53.00$ $\sigma_M=-669.55$ $\tau=0.00$ $\sigma_{ID,max}=722.55$

Asta n. 2232 (-834 -835) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 - Classe 3

Sollecitazioni: N,Ed=-2433.56 My,Ed=-257.23 Mz,Ed=-172.02
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.10$ M,cr=156771.00 $\lambda_{LT}=0.26$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.01 + 0.02 + 0.04 = 0.08
Verifica ZZ: 0.01 + 0.02 + 0.04 = 0.08

- Verifica Freccia massima carichi totali - CC 26

$f_{z,L}=0.00$ (L/64784) $f_{z,g}=0.00$ (L/92548)

- Verifica in termini tensionali (4.2.5) - CC 1 Xl=1.24 - Classe 3

Sollecitazioni: N=-2409.86 $T_z=48.51$ $M_y=-257.23$ $T_y=-267.77$ $M_z=-172.02$
Tensioni: $\sigma_N=-41.50$ $\sigma_M=-240.38$ $\tau=0.00$ $\sigma_{max}=-281.88$
Tensioni: $\sigma_N=-41.50$ $\sigma_M=61.01$ $\tau=7.50$ $\tau_{max}=7.50$

Tensioni: $\sigma_N=-41.50$ $\sigma_M=-240.38$ $\tau=0.00$ $\sigma_{ID,max}=281.88$

Asta n. 2232 (-833 -834) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-3169.93 My,Ed=-37.85 Mz,Ed=501.87
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57

α_{my} , α_{mz} , $\alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=1.24$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.42$ M,cr=202110.00 $\lambda_{LT}=0.23$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$

$\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$

$\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$

Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95

Verifica YY: $0.02 + 0.00 + 0.13 = 0.15$

Verifica ZZ: $0.02 + 0.00 + 0.13 = 0.14$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,g}=0.00$ (L/44678)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,g}=0.02$ (L/6678)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3

Sollecitazioni: N=-3169.93 T₂=19.98 M_y=-13.16 T_y=-230.54 M_z=501.87

Tensioni: $\sigma_N=-54.59$ $\sigma_M=-449.14$ $\tau=0.00$ $\sigma_{max}=-503.73$

Tensioni: $\sigma_N=-54.59$ $\sigma_M=30.48$ $\tau=6.17$ $\tau_{max}=6.17$

Tensioni: $\sigma_N=-54.59$ $\sigma_M=-449.14$ $\tau=0.00$ $\sigma_{ID,max}=503.73$

Asta n. 2232 (1883 -833) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-3200.74 My,Ed=-13.16 Mz,Ed=745.70
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57

α_{my} , α_{mz} , $\alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=1.24$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.06$ M,cr=150772.00 $\lambda_{LT}=0.26$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$

$\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$

$\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$

Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95

Verifica YY: $0.02 + 0.00 + 0.19 = 0.20$

Verifica ZZ: $0.02 + 0.00 + 0.19 = 0.20$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,g}=0.01$ (L/20245)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,g}=0.03$ (L/3777)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3

Sollecitazioni: N=-3200.74 T₂=19.98 M_y=11.53 T_y=-164.11 M_z=745.70

Tensioni: $\sigma_N=-55.12$ $\sigma_M=-664.61$ $\tau=0.00$ $\sigma_{max}=-719.73$

Tensioni: $\sigma_N=-55.12$ $\sigma_M=36.80$ $\tau=4.45$ $\tau_{max}=4.45$

Tensioni: $\sigma_N=-55.12$ $\sigma_M=-664.61$ $\tau=0.00$ $\sigma_{ID,max}=719.73$

Asta n. 2234 (1874 -832) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-3886.90 My,Ed=264.83 Mz,Ed=598.14
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14

α_{my} , α_{mz} , $\alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=1.45$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.66$ M,cr=176022.00 $\lambda_{LT}=0.24$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$

$\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$

$\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$

Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96

Verifica YY: $0.02 + 0.03 + 0.15 = 0.20$

Verifica ZZ: $0.02 + 0.02 + 0.15 = 0.19$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,g}=0.01$ (L/23779) $f_{z,L}=0.00$ (L/126824)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,g}=0.03$ (L/4489) $f_{z,L}=0.01$ (L/22380)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3

Sollecitazioni: N=-3886.90 T₂=166.44 M_y=264.83 T_y=-82.68 M_z=598.14

Tensioni: $\sigma_N=-66.94$ $\sigma_M=-620.50$ $\tau=0.00$ $\sigma_{max}=-687.44$
Tensioni: $\sigma_N=-66.94$ $\sigma_M=32.04$ $\tau=10.03$ $\tau_{max}=10.03$
Tensioni: $\sigma_N=-66.94$ $\sigma_M=-620.50$ $\tau=0.00$ $\sigma_{ID,max}=687.44$

Asta n. 2234 (-832 -837) Is 146x215x13x10x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3832.27 My,Ed=-218.31 Mz,Ed=429.93
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha-imp=0.34$ $K_c=0.94$ $\psi=1.64$ $M_{cr}=174054.00$ $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.02 + 0.11 = 0.15
Verifica ZZ: 0.02 + 0.02 + 0.11 = 0.14
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/54353)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/7387) $f_{z,L}=0.00$ (L/33084)
 - Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3832.27 Tz=166.44 My=23.26 Ty=-149.10 Mz=429.93
Tensioni: $\sigma_N=-66.00$ $\sigma_M=-388.86$ $\tau=0.00$ $\sigma_{max}=-454.86$
Tensioni: $\sigma_N=-66.00$ $\sigma_M=23.03$ $\tau=10.05$ $\tau_{max}=10.05$
Tensioni: $\sigma_N=-66.00$ $\sigma_M=-388.86$ $\tau=0.00$ $\sigma_{ID,max}=454.86$

Asta n. 2234 (-837 -838) Is 146x215x13x10x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3777.63 My,Ed=-459.88 Mz,Ed=-195.70
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha-imp=0.34$ $K_c=0.94$ $\psi=1.32$ $M_{cr}=139872.00$ $\lambda_{LT}=0.27$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.04 + 0.05 = 0.11
Verifica ZZ: 0.02 + 0.04 + 0.05 = 0.10
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/54353)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.01$ (L/9882) $f_{z,g}=0.00$ (L/76094)
 - Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.45 - Classe 3
Sollecitazioni: N=-3723.00 Tz=166.44 My=-459.88 Ty=-281.95 Mz=-195.70
Tensioni: $\sigma_N=-64.12$ $\sigma_M=-330.66$ $\tau=0.00$ $\sigma_{max}=-394.78$
Tensioni: $\sigma_N=-64.12$ $\sigma_M=115.07$ $\tau=11.44$ $\tau_{max}=11.44$
Tensioni: $\sigma_N=-64.12$ $\sigma_M=-330.66$ $\tau=0.00$ $\sigma_{ID,max}=394.78$

Asta n. 2234 (-838 -839) Is 146x215x13x10x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3723.00 My,Ed=-701.45 Mz,Ed=-653.12
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha-imp=0.34$ $K_c=0.94$ $\psi=1.19$ $M_{cr}=126236.00$ $\lambda_{LT}=0.29$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.07 + 0.16 = 0.25
Verifica ZZ: 0.02 + 0.05 + 0.16 = 0.24
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/31706) $f_{z,g}=0.00$ (L/36235)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.03$ (L/5764) $f_{z,g}=0.02$ (L/6112)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.45 - Classe 3
 Sollecitazioni: N=-3668.36 T_z=166.44 M_y=-701.45 T_y=-348.37 M_z=-653.12
 Tensioni: σ_N=-63.17 σ_M=-818.54 τ=0.00 σ_{max}=-881.71
 Tensioni: σ_N=-63.17 σ_M=156.52 τ=12.65 τ_{max}=12.65
 Tensioni: σ_N=-63.17 σ_M=-818.54 τ=0.00 σ_{ID,max}=881.71

Asta n. 2234 (-839 1887) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
 Sollecitazioni: N,Ed=-7638.74 M_y,Ed=-701.45 M_z,Ed=-653.12
 Resistenze: N_c,R_d=196322.00 M_y,c,R_d=9885.72 M_z,c,R_d=3816.13 L=145.14
 α_{my}, α_{mz}, α_{LT} = 0.95, 0.95, 0.95
 L_{cr}=1.45 Curva b: α-imp=0.34 k_c=0.94 ψ=1.75 M,cr=185554.00 λ_{LT}=0.24
 λ_{LT,0}=0.40 β_{LT}=0.75 Φ_{LT}=0.49 β_{LT}=0.75 f=0.99 χ_{LT}=1.00
 λ_y=23.94 Ncr,y=2100110.00 λ_y^{*}=0.31 Curva b: Φ_y=0.57 χ_y=0.96
 λ_z=31.75 Ncr,z=1193830.00 λ_z^{*}=0.42 Curva c: Φ_z=0.64 χ_z=0.89
 K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.96, 0.77, 0.96
 Verifica YY: 0.04 + 0.07 + 0.16 = 0.27
 Verifica ZZ: 0.04 + 0.05 + 0.16 = 0.26

- Verifica Freccia massima per soli carichi accidentali - CC 26
 f_{z,L}=0.00 (L/44761) f_{z,G}=0.00 (L/50729)

- Verifica Freccia massima carichi totali - CC 26
 f_{z,G}=0.02 (L/8009) f_{z,L}=0.02 (L/8549)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
 Sollecitazioni: N=-7638.74 T_z=-483.29 M_y=-701.45 T_y=483.21 M_z=-653.12
 Tensioni: σ_N=-131.55 σ_M=-818.54 τ=0.00 σ_{max}=-950.09
 Tensioni: σ_N=-131.55 σ_M=-34.99 τ=29.20 τ_{max}=29.20
 Tensioni: σ_N=-131.55 σ_M=-818.54 τ=0.00 σ_{ID,max}=950.09

Asta n. 3001 (1894 1895) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
 Sollecitazioni: N,Ed=-5415.91 M_y,Ed=-4122.03 M_z,Ed=2800.89
 Resistenze: N_c,R_d=287692.00 M_y,c,R_d=16807.20 M_z,c,R_d=6269.63 L=700.73
 α_{my}, α_{mz}, α_{LT} = 0.95, 0.95, 0.95
 L_{cr}=7.01 Curva b: α-imp=0.34 k_c=0.94 ψ=1.46 M,cr=33849.90 λ_{LT}=0.72
 λ_{LT,0}=0.40 β_{LT}=0.75 Φ_{LT}=0.75 β_{LT}=0.75 f=0.97 χ_{LT}=0.88
 λ_y=98.01 Ncr,y=183603.00 λ_y^{*}=1.28 Curva b: Φ_y=1.51 χ_y=0.44
 λ_z=134.26 Ncr,z=97842.80 λ_z^{*}=1.76 Curva c: Φ_z=2.43 χ_z=0.24
 K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.97, 0.99, 0.78, 0.99
 Verifica YY: 0.04 + 0.27 + 0.44 = 0.76
 Verifica ZZ: 0.08 + 0.22 + 0.44 = 0.74

- Verifica Freccia massima per soli carichi accidentali - CC 26
 f_{z,G}=0.01 (L/89606) f_{z,L}=0.01 (L/116630)

- Verifica Freccia massima carichi totali - CC 26
 f_{z,G}=0.05 (L/15403) f_{z,L}=0.03 (L/20297)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
 Sollecitazioni: N=-5415.91 T_z=-767.44 M_y=-4122.03 T_y=715.00 M_z=-2134.64 M_x=-58.78
 Tensioni: σ_N=-63.65 σ_M=-1980.31 τ=58.91 σ_{max}=-2043.96
 Tensioni: σ_N=-63.65 σ_M=-747.66 τ=208.62 τ_{max}=208.62
 Tensioni: σ_N=-63.65 σ_M=-1980.31 τ=58.91 σ_{ID,max}=2046.51

Asta n. 3002 (1888 1889) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
 Sollecitazioni: N,Ed=-19741.50 M_y,Ed=-628.58 M_z,Ed=3651.13
 Resistenze: N_c,R_d=287692.00 M_y,c,R_d=16807.20 M_z,c,R_d=6269.63 L=702.14
 α_{my}, α_{mz}, α_{LT} = 0.95, 0.95, 0.95
 L_{cr}=7.02 Curva b: α-imp=0.34 k_c=0.94 ψ=1.61 M,cr=37347.70 λ_{LT}=0.69
 λ_{LT,0}=0.40 β_{LT}=0.75 Φ_{LT}=0.73 β_{LT}=0.75 f=0.97 χ_{LT}=0.90
 λ_y=98.21 Ncr,y=182868.00 λ_y^{*}=1.29 Curva b: Φ_y=1.51 χ_y=0.43
 λ_z=134.53 Ncr,z=97451.20 λ_z^{*}=1.76 Curva c: Φ_z=2.43 χ_z=0.24
 K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.04, 1.11, 0.83, 1.11
 Verifica YY: 0.16 + 0.04 + 0.65 = 0.85
 Verifica ZZ: 0.28 + 0.03 + 0.65 = 0.96

- Verifica Freccia massima per soli carichi accidentali - CC 26
 f_{z,L}=0.01 (L/54135) f_{z,G}=0.01 (L/73258)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,L}=0.07$ (L/9439) $f_{z,G}=0.06$ (L/12457)

- Verifica in termini tensionali (4.2.5) - CC 9 $X1=0.00$ - Classe 3

Sollecitazioni: $N=-19741.50$ $T_z=-94.49$ $M_y=-628.58$ $T_y=-917.16$ $M_z=3651.13$ $M_x=5.56$

Tensioni: $\sigma_N=-232.00$ $\sigma_M=-2095.35$ $\tau=5.57$ $\sigma_{max}=-2327.35$

Tensioni: $\sigma_N=-232.00$ $\sigma_M=243.13$ $\tau=26.85$ $\tau_{max}=26.85$

Tensioni: $\sigma_N=-232.00$ $\sigma_M=-2095.35$ $\tau=5.57$ $\sigma_{ID,max}=2327.37$

Asta n. 3004 (5 6) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: $N,Ed=-7221.88$ $M_y,Ed=-241.62$ $M_z,Ed=3498.60$

Resistenze: $N_c,Rd=287692.00$ $M_y,c,Rd=16807.20$ $M_z,c,Rd=6269.63$ $L=700.78$

$\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=7.01$ Curva b: $\alpha-imp=0.34$ $K_c=0.94$ $\psi=1.62$ $M_{cr}=37658.90$ $\lambda_{LT}=0.68$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.72$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.90$

$\lambda_y=98.02$ $N_{cr,y}=183579.00$ $\lambda_y^*=1.28$ Curva b: $\Phi_y=1.51$ $\chi_y=0.44$

$\lambda_z=134.27$ $N_{cr,z}=97829.90$ $\lambda_z^*=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$

$K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.98, 1.01, 0.79, 1.01$

Verifica YY: $0.06 + 0.02 + 0.56 = 0.64$

Verifica ZZ: $0.10 + 0.01 + 0.56 = 0.68$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,L}=0.01$ (L/57407) $f_{z,G}=0.01$ (L/89068)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,L}=0.07$ (L/9543) $f_{z,G}=0.05$ (L/15229)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=7.01$ - Classe 3

Sollecitazioni: $N=-6614.02$ $T_z=-30.12$ $M_y=-30.54$ $T_y=850.95$ $M_z=3498.60$

Tensioni: $\sigma_N=-77.73$ $\sigma_M=-1892.80$ $\tau=0.00$ $\sigma_{max}=-1970.52$

Tensioni: $\sigma_N=-77.73$ $\sigma_M=140.76$ $\tau=16.27$ $\tau_{max}=16.27$

Tensioni: $\sigma_N=-77.73$ $\sigma_M=-1892.80$ $\tau=0.00$ $\sigma_{ID,max}=1970.52$

Asta n. 3004 (1890 1891) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3

Sollecitazioni: $N,Ed=-18168.10$ $M_y,Ed=-782.56$ $M_z,Ed=3493.19$

Resistenze: $N_c,Rd=287692.00$ $M_y,c,Rd=16807.20$ $M_z,c,Rd=6269.63$ $L=702.06$

$\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=7.02$ Curva b: $\alpha-imp=0.34$ $K_c=0.94$ $\psi=1.66$ $M_{cr}=38473.30$ $\lambda_{LT}=0.68$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.72$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.91$

$\lambda_y=98.19$ $N_{cr,y}=182908.00$ $\lambda_y^*=1.29$ Curva b: $\Phi_y=1.51$ $\chi_y=0.43$

$\lambda_z=134.51$ $N_{cr,z}=97472.40$ $\lambda_z^*=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$

$K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.03, 1.10, 0.83, 1.10$

Verifica YY: $0.15 + 0.05 + 0.61 = 0.81$

Verifica ZZ: $0.26 + 0.04 + 0.61 = 0.91$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,L}=0.02$ (L/43819) $f_{z,G}=0.01$ (L/73986)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,L}=0.09$ (L/7668) $f_{z,G}=0.06$ (L/12605)

- Verifica in termini tensionali (4.2.5) - CC 9 $X1=0.00$ - Classe 3

Sollecitazioni: $N=-18168.10$ $T_z=-119.10$ $M_y=-782.56$ $T_y=-868.00$ $M_z=3493.19$ $M_x=7.29$

Tensioni: $\sigma_N=-213.51$ $\sigma_M=-2041.15$ $\tau=7.31$ $\sigma_{max}=-2254.66$

Tensioni: $\sigma_N=-213.51$ $\sigma_M=261.83$ $\tau=31.31$ $\tau_{max}=31.31$

Tensioni: $\sigma_N=-213.51$ $\sigma_M=-2041.15$ $\tau=7.31$ $\sigma_{ID,max}=2254.70$

Asta n. 3005 (-876 -844) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,G}=0.01$ (L/25040)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,G}=0.07$ (L/4546)

- Verifica a compressione (4.2.10) - CC 25 $X1=0.00$ - Classe 3

Sollecitazioni: $N=-13309.90$

$N,Ed=-13309.90$ $N_c,Rd=-72651.60$ $N,Ed/N_c,Rd=0.18$

- Verifica di stabilità (4.2.4.1.3.1) - CC 25

Sollecitazioni: $N=-13309.90$ $L=320.00$

$\lambda=79.28$ Ncr=70851.00 $\lambda^*=1.04$

Curva a: $\Phi=1.13$ $\chi_{,min}=0.64$ N,Ed=-13309.90 Nb,Rd=46443.40 N,Ed/Nb,Rd=0.29

Asta n. 3006 (-877 -847) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/24314)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.04$ (L/4462)

- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-13678.70
N,Ed=-13678.70 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.19

- Verifica di stabilità (4.2.4.1.3.1) - CC 25
Sollecitazioni: N=-13678.70 L=160.00
 $\lambda=39.64$ Ncr=283404.00 $\lambda^*=0.52$
Curva a: $\Phi=0.67$ $\chi_{,min}=0.92$ N,Ed=-13678.70 Nb,Rd=66718.00 N,Ed/Nb,Rd=0.21

Asta n. 3007 (1903 1990) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/140684)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/29107)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.61 - Classe 3
Sollecitazioni: N=2089.72
Tensioni: $\sigma_N=97.25$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{max}=97.25$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=97.25$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{ID,max}=97.25$

Asta n. 3008 (1904 1991) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/52756)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/9815)

- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-6178.15
N,Ed=-6178.15 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.09

Asta n. 3009 (1991 1903) Cir. D=4 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-3295.47 M,Ed=4.05
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=259.36
 $\lambda=259.36$ Ncr=3872.04 $\lambda^*=3.39$ Curva c: $\Phi=7.04$ $\chi_{,min}=0.08$
 $\chi_{,min}=0.08$
Verifica: $1.02 + 0.13 = 1.15$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/135976)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.14$ (L/1810) $f_{z,g}=0.09$ (L/2965)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.29 - Classe 3
Sollecitazioni: N=-3285.70 M=5.39
Tensioni: $\sigma_N=-261.47$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{max}=-347.32$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-261.47$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{ID,max}=347.32$

Asta n. 3010 (1990 1904) Cir. D=4 Crit. 1

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 25 - Classe 3
 $L_{cr}=2.10$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ M,cr=0.00 $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ $f=0.00$ $\chi_{LT}=1.00$
CC 25 My,Ed=-5.68 My,b,Rd=212.43 My,Ed/My,b,Rd=0.03

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/183461)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.08$ (L/2758) $f_{z,g}=0.06$ (L/3256)
- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.05 - Classe 3
Sollecitazioni: N=3903.82 M=4.37
Tensioni: $\sigma_N=310.66$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{max}=380.16$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=310.66$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{ID,max}=380.16$

Asta n. 3011 (1900 1988) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/120586)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/22813)
- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.61 - Classe 3
Sollecitazioni: N=2666.03
Tensioni: $\sigma_N=124.07$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{max}=124.07$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=124.07$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{ID,max}=124.07$

Asta n. 3012 (1901 1989) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-4298.44 M,Ed=0.00
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=161.00
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=39.89$ Ncr=279894.00 $\lambda^*=0.52$
Curva a: $\Phi=0.67$ $\chi_{,min}=0.92$
Kyy, Kyz, Kzy, Kzz = 0.97, ----, ----, ----
Verifica: 0.06 = 0.06
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/93789)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/15347)
- Verifica a compressione (4.2.10) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-4298.44
N,Ed=-4298.44 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.06

Asta n. 3013 (1900 1989) Cir. D=4 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-3461.10 M,Ed=4.05
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=259.36
 $\lambda=259.36$ Ncr=3872.04 $\lambda^*=3.39$ Curva c: $\Phi=7.04$ $\chi_{,min}=0.08$
 $\chi_{,min}=0.08$
Verifica: 1.08 + 0.18 = 1.26
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/135976)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.14$ (L/1815) $f_{z,g}=0.10$ (L/2625)
- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.30 - Classe 3
Sollecitazioni: N=-3451.39 M=5.39
Tensioni: $\sigma_N=-274.65$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{max}=-360.51$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-274.65$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{ID,max}=360.51$

Asta n. 3014 (1901 1988) Cir. D=4 Crit. 1

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 25 - Classe 3
 $L_{cr}=2.10$ Curva d: $\alpha\text{-imp}=0.76$ $k_c=0.94$ $\psi=1.75$ M,cr=0.00 $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ f=0.00 $\chi_{LT}=1.00$
CC 25 My,Ed=-5.68 My,b,Rd=212.43 My,Ed/My,b,Rd=0.03
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/110076)
- Verifica Freccia massima carichi totali - CC 26

$f_{z,L}=0.08$ (L/2769) $f_{z,G}=0.06$ (L/3725)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.05 - Classe 3
Sollecitazioni: N=4385.51 M=4.37
Tensioni: $\sigma_N=348.99$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{max}=418.49$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=348.99$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{ID,max}=418.49$

Asta n. 3015 (1895 1891) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2502.19 M,Ed=2.86
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=102.22
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=25.33$ Ncr=694405.00 $\lambda^*=0.33$
Curva a: $\Phi=0.57$ $\chi_{,min}=0.97$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.03 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.51 - Classe 3
Sollecitazioni: N=-2502.19 M=2.86
Tensioni: $\sigma_N=-116.44$ $\sigma_M=-4.91$ $\tau=0.00$ $\sigma_{max}=-121.35$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-116.44$ $\sigma_M=-4.91$ $\tau=0.00$ $\sigma_{ID,max}=121.35$

Asta n. 3016 (1891 1893) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2856.52 M,Ed=4.01
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=120.97
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=29.97$ Ncr=495807.00 $\lambda^*=0.39$
Curva a: $\Phi=0.60$ $\chi_{,min}=0.95$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.04 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.60 - Classe 3
Sollecitazioni: N=-2856.52 M=4.01
Tensioni: $\sigma_N=-132.93$ $\sigma_M=-6.88$ $\tau=0.00$ $\sigma_{max}=-139.81$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-132.93$ $\sigma_M=-6.88$ $\tau=0.00$ $\sigma_{ID,max}=139.81$

Asta n. 3017 (1893 1889) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2453.59 M,Ed=2.89
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=102.73
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=25.45$ Ncr=687495.00 $\lambda^*=0.33$
Curva a: $\Phi=0.57$ $\chi_{,min}=0.97$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.03 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.51 - Classe 3
Sollecitazioni: N=-2453.59 M=2.89
Tensioni: $\sigma_N=-114.18$ $\sigma_M=-4.96$ $\tau=0.00$ $\sigma_{max}=-119.14$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-114.18$ $\sigma_M=-4.96$ $\tau=0.00$ $\sigma_{ID,max}=119.14$

Asta n. 3018 (1889 1895) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2863.89 M,Ed=3.97
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=120.28
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=29.80$ Ncr=501462.00 $\lambda^*=0.39$
Curva a: $\Phi=0.60$ $\chi_{,min}=0.96$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.04 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.60 - Classe 3
Sollecitazioni: N=-2863.89 M=3.97
Tensioni: $\sigma_N=-133.28$ $\sigma_M=-6.80$ $\tau=0.00$ $\sigma_{max}=-140.07$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-133.28$ $\sigma_M=-6.80$ $\tau=0.00$ $\sigma_{ID,max}=140.07$

Asta n. 3101 (1895 1902) Is 175x250x18x12x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7066.43 My,Ed=405.49 Mz,Ed=-4901.65
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=526.58
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.27$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=57274.10$ $\lambda_{LT}=0.56$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=73.65$ Ncr,y=325125.00 $\lambda'_y=0.96$ Curva b: $\Phi_y=1.09$ $\chi_y=0.62$
 $\lambda_z=100.89$ Ncr,z=173260.00 $\lambda'_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 0.97, 0.99, 0.78, 0.99
Verifica YY: 0.04 + 0.02 + 0.77 = 0.84
Verifica ZZ: 0.06 + 0.02 + 0.77 = 0.86
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/38884) $f_{z,L}=0.01$ (L/50657)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/6034) $f_{z,L}=0.06$ (L/8905)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=5.27 - Classe 3
Sollecitazioni: N=-6614.88 Tz=-76.97 My=405.49 Ty=-1642.79 Mz=-4901.65
Tensioni: $\sigma_N=-77.74$ $\sigma_M=-2724.83$ $\tau=0.00$ $\sigma_{max}=-2802.56$
Tensioni: $\sigma_N=-77.74$ $\sigma_M=-255.71$ $\tau=31.44$ $\tau_{max}=31.44$
Tensioni: $\sigma_N=-77.74$ $\sigma_M=-2724.83$ $\tau=0.00$ $\sigma_{ID,max}=2802.56$

Asta n. 3102 (1889 1905) Is 175x250x18x12x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-20078.80 My,Ed=-462.65 Mz,Ed=-2918.25
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=553.99
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.54$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.64$ $M_{cr}=50305.20$ $\lambda_{LT}=0.59$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.66$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.95$
 $\lambda_y=77.48$ Ncr,y=293755.00 $\lambda'_y=1.01$ Curva b: $\Phi_y=1.15$ $\chi_y=0.59$
 $\lambda_z=106.14$ Ncr,z=156543.00 $\lambda'_z=1.39$ Curva c: $\Phi_z=1.76$ $\chi_z=0.35$
Kyy, Kyz, Kzy, Kzz = 1.02, 1.06, 0.81, 1.06
Verifica YY: 0.12 + 0.03 + 0.49 = 0.64
Verifica ZZ: 0.20 + 0.02 + 0.49 = 0.72
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.02$ (L/32818) $f_{z,L}=0.00$ (L/161359)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.10$ (L/5826) $f_{z,L}=0.02$ (L/29044)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-20078.80 Tz=92.04 My=51.61 Ty=839.40 Mz=-2918.25 Mx=-7.31
Tensioni: $\sigma_N=-235.97$ $\sigma_M=-1584.08$ $\tau=7.33$ $\sigma_{max}=-1820.04$
Tensioni: $\sigma_N=-235.97$ $\sigma_M=-121.63$ $\tau=30.37$ $\tau_{max}=30.37$
Tensioni: $\sigma_N=-235.97$ $\sigma_M=-1584.08$ $\tau=7.33$ $\sigma_{ID,max}=1820.09$

Asta n. 3103 (1893 1899) Is 175x250x18x12x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7051.48 My,Ed=97.24 Mz,Ed=-4901.64
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=526.43
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.26$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.13$ $M_{cr}=37115.80$ $\lambda_{LT}=0.69$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.73$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.90$
 $\lambda_y=73.63$ Ncr,y=325318.00 $\lambda'_y=0.96$ Curva b: $\Phi_y=1.09$ $\chi_y=0.62$
 $\lambda_z=100.86$ Ncr,z=173363.00 $\lambda'_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 0.97, 0.99, 0.78, 0.99
Verifica YY: 0.04 + 0.01 + 0.77 = 0.82
Verifica ZZ: 0.06 + 0.00 + 0.77 = 0.84
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/39999)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/6160) $f_{z,L}=0.01$ (L/71687)
 - Verifica in termini tensionali (4.2.5) - CC 25 Xl=5.26 - Classe 3
Sollecitazioni: N=-6599.93 Tz=-32.26 My=97.24 Ty=-1652.35 Mz=-4901.64 Mx=6.81
Tensioni: $\sigma_N=-77.56$ $\sigma_M=-2662.82$ $\tau=6.83$ $\sigma_{max}=-2740.38$

Tensioni: $\sigma_N=-77.56$ $\sigma_M=-206.00$ $\tau=38.67$ $\tau_{max}=38.67$
Tensioni: $\sigma_N=-77.56$ $\sigma_M=-2662.82$ $\tau=6.83$ $\sigma_{ID,max}=2740.40$

Asta n. 3104 (1891 1896) Is 175x250x18x12x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-18441.50 My,Ed=-406.24 Mz,Ed=-2727.69
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=553.99
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.54$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.60$ $M_{cr}=49292.10$ $\lambda_{LT}=0.60$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.67$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.94$
 $\lambda_y=77.48$ Ncr,y=293755.00 $\lambda'_y=1.01$ Curva b: $\Phi_y=1.15$ $\chi_y=0.59$
 $\lambda_z=106.14$ Ncr,z=156543.00 $\lambda'_z=1.39$ Curva c: $\Phi_z=1.76$ $\chi_z=0.35$
Kyy, Kyz, Kzy, Kzz = 1.01, 1.05, 0.81, 1.05
Verifica YY: 0.11 + 0.03 + 0.46 = 0.59
Verifica ZZ: 0.18 + 0.02 + 0.46 = 0.66
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/36999) $f_{z,l}=0.00$ (L/363059)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/6497) $f_{z,l}=0.01$ (L/53786)
 - Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-18441.50 Tz=79.78 My=59.08 Ty=766.17 Mz=-2727.69 Mx=-9.15
Tensioni: $\sigma_N=-216.72$ $\sigma_M=-1482.82$ $\tau=9.17$ $\sigma_{max}=-1699.54$
Tensioni: $\sigma_N=-216.72$ $\sigma_M=-115.44$ $\tau=34.43$ $\tau_{max}=34.43$
Tensioni: $\sigma_N=-216.72$ $\sigma_M=-1482.82$ $\tau=9.17$ $\sigma_{ID,max}=1699.62$

Asta n. 3105 (-844 1992) Cir.c D=120/6 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-11712.50 M,Ed=0.12
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=78.22
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, ----, ----$
 $\lambda=19.38$ Ncr=1185880.00 $\lambda^*=0.25$
Curva a: $\Phi=0.54$ $\chi_{min}=0.99$
Kyy, Kyz, Kzy, Kzz = 0.97, ----, ----, ----
Verifica: 0.16 + 0.00 = 0.16
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/28281)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/5158)
 - Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-11712.50
N,Ed=-11712.50 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.16

Asta n. 3106 (-847 1993) Cir.c D=120/6 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-10805.20 M,Ed=0.29
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=66.17
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, ----, ----$
 $\lambda=16.39$ Ncr=1657040.00 $\lambda^*=0.21$
Curva a: $\Phi=0.52$ $\chi_{min}=1.00$
Kyy, Kyz, Kzy, Kzz = 0.97, ----, ----, ----
Verifica: 0.15 + 0.00 = 0.15
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/31537)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/5981)
 - Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-10805.20 T=1.76
N,Ed=-10805.20 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.15

Asta n. 3211 (1902 1904) Is 146x215x13x10x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3312.13 My,Ed=1267.98 Mz,Ed=-1999.49
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=379.60

$\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=3.80$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=39930.60$ $\lambda_{LT}=0.51$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.62$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.98$
 $\lambda_y=62.61$ Ncr, $y=307021.00$ $\lambda'_y=0.82$ Curva b: $\Phi_y=0.94$ $\chi_y=0.71$
 $\lambda_z=83.04$ Ncr, $z=174529.00$ $\lambda'_z=1.09$ Curva c: $\Phi_z=1.31$ $\chi_z=0.49$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.97, 0.77, 0.97$
Verifica YY: $0.02 + 0.13 + 0.51 = 0.65$
Verifica ZZ: $0.02 + 0.10 + 0.51 = 0.63$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.06$ (L/6589) $f_{z,L}=0.04$ (L/10816)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.32$ (L/1184) $f_{z,L}=0.20$ (L/1934)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-3312.13$ $T_z=334.03$ $M_y=1267.98$ $T_y=596.41$ $M_z=-1999.49$
Tensioni: $\sigma_N=-57.04$ $\sigma_M=-2205.13$ $\tau=0.00$ $\sigma_{max}=-2262.17$
Tensioni: $\sigma_N=-57.04$ $\sigma_M=-453.29$ $\tau=23.49$ $\tau_{max}=23.49$
Tensioni: $\sigma_N=-57.04$ $\sigma_M=-2205.13$ $\tau=0.00$ $\sigma_{ID,max}=2262.17$

Asta n. 3212 (1902 1903) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N, Ed=-3566.19$ $M_y, Ed=-1163.44$ $M_z, Ed=-2525.46$
Resistenze: $N_c, Rd=196322.00$ $M_y, c, Rd=9885.72$ $M_z, c, Rd=3816.13$ $L=334.12$

$\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=3.34$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=47739.80$ $\lambda_{LT}=0.47$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.59$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=55.11$ Ncr, $y=396295.00$ $\lambda'_y=0.72$ Curva b: $\Phi_y=0.85$ $\chi_y=0.77$
 $\lambda_z=73.09$ Ncr, $z=225278.00$ $\lambda'_z=0.96$ Curva c: $\Phi_z=1.14$ $\chi_z=0.57$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.97, 0.77, 0.97$
Verifica YY: $0.02 + 0.11 + 0.64 = 0.77$
Verifica ZZ: $0.02 + 0.09 + 0.64 = 0.75$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.06$ (L/5878) $f_{z,L}=0.02$ (L/13474)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.32$ (L/1038) $f_{z,L}=0.14$ (L/2397)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-3566.19$ $T_z=-348.21$ $M_y=-1163.44$ $T_y=817.30$ $M_z=-2525.46$
Tensioni: $\sigma_N=-61.42$ $\sigma_M=-2635.37$ $\tau=0.00$ $\sigma_{max}=-2696.79$
Tensioni: $\sigma_N=-61.42$ $\sigma_M=182.35$ $\tau=28.20$ $\tau_{max}=28.20$
Tensioni: $\sigma_N=-61.42$ $\sigma_M=-2635.37$ $\tau=0.00$ $\sigma_{ID,max}=2696.79$

Asta n. 3212 (1905 1907) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N, Ed=-11786.60$ $M_y, Ed=686.47$ $M_z, Ed=239.57$
Resistenze: $N_c, Rd=196322.00$ $M_y, c, Rd=9885.72$ $M_z, c, Rd=3816.13$ $L=437.01$

$\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=4.37$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=33075.30$ $\lambda_{LT}=0.56$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=72.08$ Ncr, $y=231653.00$ $\lambda'_y=0.94$ Curva b: $\Phi_y=1.07$ $\chi_y=0.63$
 $\lambda_z=95.60$ Ncr, $z=131685.00$ $\lambda'_z=1.25$ Curva c: $\Phi_z=1.54$ $\chi_z=0.41$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.00, 1.03, 0.80, 1.03$
Verifica YY: $0.09 + 0.07 + 0.06 = 0.23$
Verifica ZZ: $0.15 + 0.06 + 0.06 = 0.27$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.02$ (L/19093) $f_{z,g}=0.01$ (L/34714)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.14$ (L/3085) $f_{z,g}=0.08$ (L/5309)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-11786.60$ $T_z=157.09$ $M_y=686.47$ $T_y=16.43$ $M_z=235.37$
Tensioni: $\sigma_N=-202.98$ $\sigma_M=-443.31$ $\tau=0.00$ $\sigma_{max}=-646.29$
Tensioni: $\sigma_N=-202.98$ $\sigma_M=12.61$ $\tau=9.45$ $\tau_{max}=9.45$
Tensioni: $\sigma_N=-202.98$ $\sigma_M=-443.31$ $\tau=0.00$ $\sigma_{ID,max}=646.29$

Asta n. 3213 (1899 1900) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3205.09 My,Ed=1062.15 Mz,Ed=-2081.57
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=352.04
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.52$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M,cr=44330.50$ $\lambda_{LT}=0.48$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.60$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=58.06$ Ncr,y=356964.00 $\lambda'_y=0.76$ Curva b: $\Phi_y=0.88$ $\chi_y=0.75$
 $\lambda_z=77.01$ Ncr,z=202920.00 $\lambda'_z=1.01$ Curva c: $\Phi_z=1.21$ $\chi_z=0.54$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: 0.02 + 0.10 + 0.53 = 0.65
Verifica ZZ: 0.02 + 0.08 + 0.53 = 0.63
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.06$ (L/6320) $f_{z,L}=0.02$ (L/14197)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.31$ (L/1127) $f_{z,L}=0.14$ (L/2500)
- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3205.09 Tz=301.71 My=1062.15 Ty=660.95 Mz=-2081.57
Tensioni: $\sigma_N=-55.20$ $\sigma_M=-2207.46$ $\tau=0.00$ $\sigma_{max}=-2262.65$
Tensioni: $\sigma_N=-55.20$ $\sigma_M=-401.50$ $\tau=23.50$ $\tau_{max}=23.50$
Tensioni: $\sigma_N=-55.20$ $\sigma_M=-2207.46$ $\tau=0.00$ $\sigma_{ID,max}=2262.65$

Asta n. 3214 (1896 1898) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-8910.68 My,Ed=-874.85 Mz,Ed=-188.24
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=448.31
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.48$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M,cr=31994.20$ $\lambda_{LT}=0.57$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.65$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=73.94$ Ncr,y=220115.00 $\lambda'_y=0.97$ Curva b: $\Phi_y=1.10$ $\chi_y=0.62$
 $\lambda_z=98.07$ Ncr,z=125127.00 $\lambda'_z=1.28$ Curva c: $\Phi_z=1.59$ $\chi_z=0.40$
Kyy, Kyz, Kzy, Kzz = 0.99, 1.02, 0.79, 1.02
Verifica YY: 0.07 + 0.09 + 0.05 = 0.22
Verifica ZZ: 0.11 + 0.07 + 0.05 = 0.24
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.03$ (L/14180) $f_{z,g}=0.00$ (L/130580)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.19$ (L/2362) $f_{z,g}=0.02$ (L/23741)
- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-8910.68 Tz=-195.14 My=-874.85 Ty=123.49 Mz=-188.24
Tensioni: $\sigma_N=-153.46$ $\sigma_M=-465.98$ $\tau=0.00$ $\sigma_{max}=-619.43$
Tensioni: $\sigma_N=-153.46$ $\sigma_M=-10.08$ $\tau=11.76$ $\tau_{max}=11.76$
Tensioni: $\sigma_N=-153.46$ $\sigma_M=-465.98$ $\tau=0.00$ $\sigma_{ID,max}=619.43$

Asta n. 3222 (1905 1906) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-9704.72 My,Ed=-560.95 Mz,Ed=-264.06
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=458.65
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.59$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M,cr=31066.50$ $\lambda_{LT}=0.58$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.66$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.95$
 $\lambda_y=75.65$ Ncr,y=210307.00 $\lambda'_y=0.99$ Curva b: $\Phi_y=1.12$ $\chi_y=0.60$
 $\lambda_z=100.33$ Ncr,z=119551.00 $\lambda'_z=1.31$ Curva c: $\Phi_z=1.63$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 1.00, 1.02, 0.80, 1.02
Verifica YY: 0.08 + 0.06 + 0.07 = 0.21
Verifica ZZ: 0.13 + 0.05 + 0.07 = 0.25
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.03$ (L/16757) $f_{z,g}=0.00$ (L/111843)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.17$ (L/2733) $f_{z,g}=0.02$ (L/21279)
- Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-9704.72 Tz=-122.30 My=-560.95 Ty=120.27 Mz=-264.06
Tensioni: $\sigma_N=-167.13$ $\sigma_M=-425.80$ $\tau=0.00$ $\sigma_{max}=-592.92$
Tensioni: $\sigma_N=-167.13$ $\sigma_M=-14.15$ $\tau=7.39$ $\tau_{max}=7.39$
Tensioni: $\sigma_N=-167.13$ $\sigma_M=-425.80$ $\tau=0.00$ $\sigma_{ID,max}=592.92$

Asta n. 3223 (1899 1901) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3665.41 My,Ed=-1203.86 Mz,Ed=-2487.37
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=363.03
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.63$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=42465.80$ $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=59.88$ Ncr,y=335675.00 $\lambda'_y=0.78$ Curva b: $\Phi_y=0.91$ $\chi_y=0.73$
 $\lambda_z=79.42$ Ncr,z=190818.00 $\lambda'_z=1.04$ Curva c: $\Phi_z=1.25$ $\chi_z=0.52$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: 0.02 + 0.12 + 0.63 = 0.77
Verifica ZZ: 0.02 + 0.09 + 0.63 = 0.75

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.06$ (L/5975) $f_{z,L}=0.03$ (L/11877)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.34$ (L/1060) $f_{z,L}=0.17$ (L/2119)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3665.41 Tz=-331.61 My=-1203.86 Ty=746.59 Mz=-2487.37
Tensioni: $\sigma_N=-63.12$ $\sigma_M=-2615.45$ $\tau=0.00$ $\sigma_{max}=-2678.57$
Tensioni: $\sigma_N=-63.12$ $\sigma_M=195.43$ $\tau=26.22$ $\tau_{max}=26.22$
Tensioni: $\sigma_N=-63.12$ $\sigma_M=-2615.45$ $\tau=0.00$ $\sigma_{ID,max}=2678.57$

Asta n. 3224 (1896 1897) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-11067.90 My,Ed=520.42 Mz,Ed=259.59
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=426.15
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.26$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=34185.30$ $\lambda_{LT}=0.55$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=70.29$ Ncr,y=243609.00 $\lambda'_y=0.92$ Curva b: $\Phi_y=1.05$ $\chi_y=0.65$
 $\lambda_z=93.22$ Ncr,z=138482.00 $\lambda'_z=1.22$ Curva c: $\Phi_z=1.49$ $\chi_z=0.42$
Kyy, Kyz, Kzy, Kzz = 1.00, 1.03, 0.80, 1.03
Verifica YY: 0.09 + 0.05 + 0.07 = 0.21
Verifica ZZ: 0.13 + 0.04 + 0.07 = 0.25

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.02$ (L/26598) $f_{z,g}=0.01$ (L/33346)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.10$ (L/4145) $f_{z,g}=0.08$ (L/5106)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-11067.90 Tz=122.12 My=520.42 Ty=9.71 Mz=258.17
Tensioni: $\sigma_N=-190.60$ $\sigma_M=-406.71$ $\tau=0.00$ $\sigma_{max}=-597.32$
Tensioni: $\sigma_N=-190.60$ $\sigma_M=13.83$ $\tau=7.35$ $\tau_{max}=7.35$
Tensioni: $\sigma_N=-190.60$ $\sigma_M=-406.71$ $\tau=0.00$ $\sigma_{ID,max}=597.32$

Asta n. 3232 (-844 1908) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-4522.71 My,Ed=-87.73 Mz,Ed=-723.61
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=248865.00$ $\lambda_{LT}=0.20$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.48$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.01 + 0.18 = 0.21
Verifica ZZ: 0.02 + 0.01 + 0.18 = 0.21

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/40490)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/6678) $f_{z,L}=0.00$ (L/80980)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-4522.71 Tz=-71.00 My=-87.73 Ty=618.82 Mz=-723.61
Tensioni: $\sigma_N=-77.89$ $\sigma_M=-671.10$ $\tau=0.00$ $\sigma_{max}=-748.99$

Tensioni: $\sigma_N=-77.89$ $\sigma_M=-14.81$ $\tau=16.73$ $\tau_{max}=16.73$
Tensioni: $\sigma_N=-77.89$ $\sigma_M=-671.10$ $\tau=0.00$ $\sigma_{ID,max}=748.99$

Asta n. 3232 (-843 -844) Is 146x215x13x10x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3110.91 My,Ed=-87.73 Mz,Ed=-723.61
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.15$ $M_{cr}=163343.00$ $\lambda_{LT}=0.25$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.01 + 0.18 = 0.21
Verifica ZZ: 0.02 + 0.01 + 0.18 = 0.20
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/30849) $f_{z,l}=0.00$ (L/107973)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/5310) $f_{z,l}=0.00$ (L/40490)
 - Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.24 - Classe 3
Sollecitazioni: N=-3080.10 Tz=19.78 My=-87.73 Ty=-431.28 Mz=-723.61
Tensioni: $\sigma_N=-53.04$ $\sigma_M=-671.10$ $\tau=0.00$ $\sigma_{max}=-724.14$
Tensioni: $\sigma_N=-53.04$ $\sigma_M=-14.81$ $\tau=11.42$ $\tau_{max}=11.42$
Tensioni: $\sigma_N=-53.04$ $\sigma_M=-671.10$ $\tau=0.00$ $\sigma_{ID,max}=724.14$

Asta n. 3232 (-842 -843) Is 146x215x13x10x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-3002.58 My,Ed=-138.25 Mz,Ed=-210.79
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.05$ $M_{cr}=149445.00$ $\lambda_{LT}=0.26$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.01 + 0.05 = 0.08
Verifica ZZ: 0.02 + 0.01 + 0.05 = 0.08
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.00$ (L/64784) $f_{z,g}=0.00$ (L/86378)
 - Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.24 - Classe 3
Sollecitazioni: N=-2978.88 Tz=36.40 My=-138.25 Ty=-278.91 Mz=-210.79
Tensioni: $\sigma_N=-51.30$ $\sigma_M=-234.03$ $\tau=0.00$ $\sigma_{max}=-285.33$
Tensioni: $\sigma_N=-51.30$ $\sigma_M=26.45$ $\tau=7.60$ $\tau_{max}=7.60$
Tensioni: $\sigma_N=-51.30$ $\sigma_M=-234.03$ $\tau=0.00$ $\sigma_{ID,max}=285.33$

Asta n. 3232 (-841 -842) Is 146x215x13x10x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3172.54 My,Ed=-38.86 Mz,Ed=505.78
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.40$ $M_{cr}=199322.00$ $\lambda_{LT}=0.23$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.00 + 0.13 = 0.15
Verifica ZZ: 0.02 + 0.00 + 0.13 = 0.15
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/44678)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/6610) $f_{z,l}=0.00$ (L/107973)
 - Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3172.54 Tz=19.78 My=-14.42 Ty=-232.01 Mz=505.78
Tensioni: $\sigma_N=-54.64$ $\sigma_M=-453.03$ $\tau=0.00$ $\sigma_{max}=-507.67$

Tensioni: $\sigma_N=-54.64$ $\sigma_M=31.03$ $\tau=6.20$ $\tau_{max}=6.20$
Tensioni: $\sigma_N=-54.64$ $\sigma_M=-453.03$ $\tau=0.00$ $\sigma_{ID,max}=507.67$

Asta n. 3232 (1905 -841) Is 146x215x13x10x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3203.35 My,Ed=-14.42 Mz,Ed=751.42
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.17$ M,cr=165763.00 $\lambda_{LT}=0.25$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda^*_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda^*_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.00 + 0.19 = 0.21
Verifica ZZ: 0.02 + 0.00 + 0.19 = 0.21
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/20245)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.03$ (L/3755)
 - Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3203.35 Tz=19.78 My=10.01 Ty=-165.59 Mz=751.42
Tensioni: $\sigma_N=-55.17$ $\sigma_M=-669.16$ $\tau=0.00$ $\sigma_{max}=-724.33$
Tensioni: $\sigma_N=-55.17$ $\sigma_M=37.52$ $\tau=4.49$ $\tau_{max}=4.49$
Tensioni: $\sigma_N=-55.17$ $\sigma_M=-669.16$ $\tau=0.00$ $\sigma_{ID,max}=724.33$

Asta n. 3234 (1896 -840) Is 146x215x13x10x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3903.06 My,Ed=262.94 Mz,Ed=597.02
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.66$ M,cr=176412.00 $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda^*_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda^*_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.03 + 0.15 = 0.19
Verifica ZZ: 0.02 + 0.02 + 0.15 = 0.19
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/23779) $f_{z,L}=0.00$ (L/95118)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.03$ (L/4502) $f_{z,L}=0.01$ (L/21137)
 - Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3903.06 Tz=165.92 My=262.94 Ty=-82.42 Mz=597.02
Tensioni: $\sigma_N=-67.22$ $\sigma_M=-618.87$ $\tau=0.00$ $\sigma_{max}=-686.08$
Tensioni: $\sigma_N=-67.22$ $\sigma_M=31.98$ $\tau=10.00$ $\tau_{max}=10.00$
Tensioni: $\sigma_N=-67.22$ $\sigma_M=-618.87$ $\tau=0.00$ $\sigma_{ID,max}=686.08$

Asta n. 3234 (-840 -845) Is 146x215x13x10x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3848.43 My,Ed=-218.69 Mz,Ed=429.20
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.65$ M,cr=174616.00 $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda^*_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda^*_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.02 + 0.11 = 0.15
Verifica ZZ: 0.02 + 0.02 + 0.11 = 0.14
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/54353)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/7460) $f_{z,L}=0.00$ (L/31706)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3848.43 T_z=165.92 M_y=22.13 T_y=-148.84 M_z=429.20
Tensioni: σ_N =-66.28 σ_M =-387.82 τ =0.00 σ_{max} =-454.10
Tensioni: σ_N =-66.28 σ_M =22.99 τ =10.02 τ_{max} =10.02
Tensioni: σ_N =-66.28 σ_M =-387.82 τ =0.00 $\sigma_{ID,max}$ =454.10

Asta n. 3234 (-845 -846) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3793.79 M_y,Ed=-459.51 M_z,Ed=-195.66
Resistenze: N_c,Rd=196322.00 M_{y,c},Rd=9885.72 M_{z,c},Rd=3816.13 I=145.14
 α_{my} , α_{mz} , α_{LT} = 0.95, 0.95, 0.95
L_{cr}=1.45 Curva b: α -imp=0.34 K_c=0.94 ψ =1.32 M_{cr}=139774.00 λ_{LT} =0.27
 $\lambda_{LT,0}$ =0.40 β_{LT} =0.75 Φ_{LT} =0.51 β_{LT} =0.75 f=0.99 χ_{LT} =1.00
 λ_y =23.94 N_{cr,y}=2100110.00 λ'_y =0.31 Curva b: Φ_y =0.57 χ_y =0.96
 λ_z =31.75 N_{cr,z}=1193830.00 λ'_z =0.42 Curva c: Φ_z =0.64 χ_z =0.89
K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.04 + 0.05 = 0.11
Verifica ZZ: 0.02 + 0.04 + 0.05 = 0.10

- Verifica Freccia massima per soli carichi accidentali - CC 26
f_{z,l}=0.00 (L/54353)

- Verifica Freccia massima carichi totali - CC 26
f_{z,l}=0.01 (L/10012) f_{z,g}=0.00 (L/80099)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.45 - Classe 3
Sollecitazioni: N=-3739.16 T_z=165.92 M_y=-459.51 T_y=-281.69 M_z=-195.66
Tensioni: σ_N =-64.39 σ_M =-330.51 τ =0.00 σ_{max} =-394.90
Tensioni: σ_N =-64.39 σ_M =114.97 τ =11.41 τ_{max} =11.41
Tensioni: σ_N =-64.39 σ_M =-330.51 τ =0.00 $\sigma_{ID,max}$ =394.90

Asta n. 3234 (-846 -847) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3739.16 M_y,Ed=-700.33 M_z,Ed=-652.70
Resistenze: N_c,Rd=196322.00 M_{y,c},Rd=9885.72 M_{z,c},Rd=3816.13 I=145.14
 α_{my} , α_{mz} , α_{LT} = 0.95, 0.95, 0.95
L_{cr}=1.45 Curva b: α -imp=0.34 K_c=0.94 ψ =1.19 M_{cr}=126200.00 λ_{LT} =0.29
 $\lambda_{LT,0}$ =0.40 β_{LT} =0.75 Φ_{LT} =0.51 β_{LT} =0.75 f=0.99 χ_{LT} =1.00
 λ_y =23.94 N_{cr,y}=2100110.00 λ'_y =0.31 Curva b: Φ_y =0.57 χ_y =0.96
 λ_z =31.75 N_{cr,z}=1193830.00 λ'_z =0.42 Curva c: Φ_z =0.64 χ_z =0.89
K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.07 + 0.16 = 0.25
Verifica ZZ: 0.02 + 0.05 + 0.16 = 0.24

- Verifica Freccia massima per soli carichi accidentali - CC 26
f_{z,l}=0.00 (L/31706) f_{z,g}=0.00 (L/34588)

- Verifica Freccia massima carichi totali - CC 26
f_{z,l}=0.03 (L/5764) f_{z,g}=0.02 (L/6087)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.45 - Classe 3
Sollecitazioni: N=-3684.52 T_z=165.92 M_y=-700.33 T_y=-348.11 M_z=-652.70
Tensioni: σ_N =-63.45 σ_M =-817.79 τ =0.00 σ_{max} =-881.24
Tensioni: σ_N =-63.45 σ_M =156.24 τ =12.62 τ_{max} =12.62
Tensioni: σ_N =-63.45 σ_M =-817.79 τ =0.00 $\sigma_{ID,max}$ =881.24

Asta n. 3234 (-847 1909) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7647.92 M_y,Ed=-700.33 M_z,Ed=-652.70
Resistenze: N_c,Rd=196322.00 M_{y,c},Rd=9885.72 M_{z,c},Rd=3816.13 I=145.14
 α_{my} , α_{mz} , α_{LT} = 0.95, 0.95, 0.95
L_{cr}=1.45 Curva b: α -imp=0.34 K_c=0.94 ψ =1.75 M_{cr}=185554.00 λ_{LT} =0.24
 $\lambda_{LT,0}$ =0.40 β_{LT} =0.75 Φ_{LT} =0.49 β_{LT} =0.75 f=0.99 χ_{LT} =1.00
 λ_y =23.94 N_{cr,y}=2100110.00 λ'_y =0.31 Curva b: Φ_y =0.57 χ_y =0.96
 λ_z =31.75 N_{cr,z}=1193830.00 λ'_z =0.42 Curva c: Φ_z =0.64 χ_z =0.89
K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.96, 0.77, 0.96
Verifica YY: 0.04 + 0.07 + 0.16 = 0.27
Verifica ZZ: 0.04 + 0.05 + 0.16 = 0.26

- Verifica Freccia massima per soli carichi accidentali - CC 26
f_{z,l}=0.00 (L/47559) f_{z,g}=0.00 (L/54353)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/8095) $f_{z,l}=0.02$ (L/8647)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-7647.92$ $T_2=-482.52$ $M_y=-700.33$ $T_y=482.92$ $M_z=-652.70$
Tensioni: $\sigma_N=-131.71$ $\sigma_M=-817.79$ $\tau=0.00$ $\sigma_{max}=-949.50$
Tensioni: $\sigma_N=-131.71$ $\sigma_M=-34.97$ $\tau=29.15$ $\tau_{max}=29.15$
Tensioni: $\sigma_N=-131.71$ $\sigma_M=-817.79$ $\tau=0.00$ $\sigma_{ID,max}=949.50$

Asta n. 4001 (1916 1917) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: $N,Ed=-5325.53$ $M_y,Ed=-3673.98$ $M_z,Ed=2646.72$
Resistenze: $N_c,Rd=287692.00$ $M_y,c,Rd=16807.20$ $M_z,c,Rd=6269.63$ $L=700.73$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.01$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.46$ $M,cr=33815.00$ $\lambda_{LT}=0.72$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.75$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.88$
 $\lambda_y=98.01$ $N_{cr,y}=183603.00$ $\lambda_y^*=1.28$ Curva b: $\Phi_y=1.51$ $\chi_y=0.44$
 $\lambda_z=134.26$ $N_{cr,z}=97842.80$ $\lambda_z^*=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.97, 0.99, 0.78, 0.99$
Verifica YY: $0.04 + 0.24 + 0.42 = 0.70$
Verifica ZZ: $0.08 + 0.19 + 0.42 = 0.69$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/90155) $f_{z,l}=0.01$ (L/120454)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.05$ (L/15387) $f_{z,l}=0.03$ (L/21174)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=7.01$ - Classe 3
Sollecitazioni: $N=-6728.65$ $T_2=-15.90$ $M_y=-3.81$ $T_y=870.13$ $M_z=3565.64$
Tensioni: $\sigma_N=-79.08$ $\sigma_M=-1923.57$ $\tau=0.00$ $\sigma_{max}=-2002.64$
Tensioni: $\sigma_N=-79.08$ $\sigma_M=139.06$ $\tau=16.61$ $\tau_{max}=16.61$
Tensioni: $\sigma_N=-79.08$ $\sigma_M=-1923.57$ $\tau=0.00$ $\sigma_{ID,max}=2002.64$

Asta n. 4002 (1910 1911) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: $N,Ed=-18493.60$ $M_y,Ed=-756.38$ $M_z,Ed=3290.47$
Resistenze: $N_c,Rd=287692.00$ $M_y,c,Rd=16807.20$ $M_z,c,Rd=6269.63$ $L=702.14$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.02$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.65$ $M,cr=38168.70$ $\lambda_{LT}=0.68$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.72$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.91$
 $\lambda_y=98.21$ $N_{cr,y}=182868.00$ $\lambda_y^*=1.29$ Curva b: $\Phi_y=1.51$ $\chi_y=0.43$
 $\lambda_z=134.53$ $N_{cr,z}=97451.20$ $\lambda_z^*=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.03, 1.10, 0.83, 1.10$
Verifica YY: $0.15 + 0.05 + 0.58 = 0.78$
Verifica ZZ: $0.26 + 0.04 + 0.58 = 0.88$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,l}=0.01$ (L/51128) $f_{z,g}=0.01$ (L/72536)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.08$ (L/9203) $f_{z,g}=0.06$ (L/12405)

- Verifica in termini tensionali (4.2.5) - CC 9 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-18493.60$ $T_2=-115.46$ $M_y=-756.38$ $T_y=-830.26$ $M_z=3290.47$ $M_x=6.99$
Tensioni: $\sigma_N=-217.34$ $\sigma_M=-1926.57$ $\tau=7.00$ $\sigma_{max}=-2143.90$
Tensioni: $\sigma_N=-217.34$ $\sigma_M=249.74$ $\tau=30.02$ $\tau_{max}=30.02$
Tensioni: $\sigma_N=-217.34$ $\sigma_M=-1926.57$ $\tau=7.00$ $\sigma_{ID,max}=2143.94$

Asta n. 4004 (1848 1849) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-7377.04$ $M_y,Ed=-117.82$ $M_z,Ed=3663.67$
Resistenze: $N_c,Rd=287692.00$ $M_y,c,Rd=16807.20$ $M_z,c,Rd=6269.63$ $L=700.78$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.01$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.17$ $M,cr=27277.40$ $\lambda_{LT}=0.80$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.81$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.84$
 $\lambda_y=98.02$ $N_{cr,y}=183579.00$ $\lambda_y^*=1.28$ Curva b: $\Phi_y=1.51$ $\chi_y=0.44$
 $\lambda_z=134.27$ $N_{cr,z}=97829.90$ $\lambda_z^*=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.98, 1.01, 0.79, 1.01$
Verifica YY: $0.06 + 0.01 + 0.59 = 0.66$
Verifica ZZ: $0.11 + 0.01 + 0.59 = 0.70$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,l}=0.01$ (L/79871)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.05$ (L/13360) $f_{z,g}=0.05$ (L/14905)
- Verifica in termini tensionali (4.2.5) - CC 25 $X_l=7.01$ - Classe 3
Sollecitazioni: $N=-6769.18$ $T_z=-5.39$ $M_y=-80.08$ $T_y=897.56$ $M_z=3663.67$ $M_x=-1.42$
Tensioni: $\sigma_N=-79.55$ $\sigma_M=-1991.77$ $\tau=1.42$ $\sigma_{max}=-2071.33$
Tensioni: $\sigma_N=-79.55$ $\sigma_M=155.16$ $\tau=18.55$ $\tau_{max}=18.55$
Tensioni: $\sigma_N=-79.55$ $\sigma_M=-1991.77$ $\tau=1.42$ $\sigma_{ID,max}=2071.33$

Asta n. 4004 (1912 1913) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: $N,Ed=-18208.20$ $M_y,Ed=-871.09$ $M_z,Ed=3265.32$
Resistenze: $N_c,Rd=287692.00$ $M_y,c,Rd=16807.20$ $M_z,c,Rd=6269.63$ $L=702.06$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.02$ Curva b: $\alpha_{-imp}=0.34$ $K_c=0.94$ $\psi=1.67$ $M_{cr}=38641.90$ $\lambda_{LT}=0.68$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.72$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.91$
 $\lambda_y=98.19$ $N_{cr,y}=182908.00$ $\lambda^*_y=1.29$ Curva b: $\Phi_y=1.51$ $\chi_y=0.43$
 $\lambda_z=134.51$ $N_{cr,z}=97472.40$ $\lambda^*_z=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.03, 1.10, 0.83, 1.10$
Verifica YY: $0.15 + 0.06 + 0.57 = 0.78$
Verifica ZZ: $0.26 + 0.05 + 0.57 = 0.88$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,l}=0.02$ (L/42800) $f_{z,g}=0.01$ (L/73250)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.09$ (L/7765) $f_{z,g}=0.06$ (L/12584)
- Verifica in termini tensionali (4.2.5) - CC 9 $X_l=0.00$ - Classe 3
Sollecitazioni: $N=-18208.20$ $T_z=-133.03$ $M_y=-871.09$ $T_y=-821.99$ $M_z=3265.32$ $M_x=8.05$
Tensioni: $\sigma_N=-213.98$ $\sigma_M=-1936.08$ $\tau=8.07$ $\sigma_{max}=-2150.06$
Tensioni: $\sigma_N=-213.98$ $\sigma_M=267.27$ $\tau=33.31$ $\tau_{max}=33.31$
Tensioni: $\sigma_N=-213.98$ $\sigma_M=-1936.08$ $\tau=8.07$ $\sigma_{ID,max}=2150.11$

Asta n. 4005 (-878 -852) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/25040)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.07$ (L/4540)
- Verifica a compressione (4.2.10) - CC 25 $X_l=0.00$ - Classe 3
Sollecitazioni: $N=-13336.50$
 $N,Ed=-13336.50$ $N_c,Rd=-72651.60$ $N,Ed/N_c,Rd=0.18$
- Verifica di stabilità (4.2.4.1.3.1) - CC 25
Sollecitazioni: $N=-13336.50$ $L=320.00$
 $\lambda=79.28$ $N_{cr}=70851.00$ $\lambda^*=1.04$
Curva a: $\Phi=1.13$ $\chi_{,min}=0.64$ $N,Ed=-13336.50$ $N_b,Rd=46443.40$ $N,Ed/N_b,Rd=0.29$

Asta n. 4006 (-879 -855) Cir.c D=120/6 Crit.1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/24314)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.04$ (L/4462)
- Verifica a compressione (4.2.10) - CC 25 $X_l=0.00$ - Classe 3
Sollecitazioni: $N=-13689.30$
 $N,Ed=-13689.30$ $N_c,Rd=-72651.60$ $N,Ed/N_c,Rd=0.19$
- Verifica di stabilità (4.2.4.1.3.1) - CC 25
Sollecitazioni: $N=-13689.30$ $L=160.00$
 $\lambda=39.64$ $N_{cr}=283404.00$ $\lambda^*=0.52$
Curva a: $\Phi=0.67$ $\chi_{,min}=0.92$ $N,Ed=-13689.30$ $N_b,Rd=66718.00$ $N,Ed/N_b,Rd=0.21$

Asta n. 4007 (1925 1996) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/29107)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.61 - Classe 3
Sollecitazioni: N=3742.65
Tensioni: $\sigma_N=174.17$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{max}=174.17$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=174.17$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{ID,max}=174.17$

Asta n. 4008 (1926 1997) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/52756)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/9815)

- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-6148.29
N,Ed=-6148.29 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.08

Asta n. 4009 (1997 1925) Cir. D=4 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-2596.85 M,Ed=4.05
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=259.36
 $\lambda=259.36$ Ncr=3872.04 $\lambda^*=3.39$ Curva c: $\Phi=7.04$ $\chi_{,min}=0.08$
 $\chi_{,min}=0.08$
Verifica: $0.81 + 0.06 = 0.87$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/123615)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.14$ (L/1814) $f_{z,g}=0.09$ (L/2959)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.30 - Classe 3
Sollecitazioni: N=-2587.14 M=5.39
Tensioni: $\sigma_N=-205.88$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{max}=-291.74$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-205.88$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{ID,max}=291.74$

Asta n. 4010 (1996 1926) Cir. D=4 Crit. 1

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 25 - Classe 3
 $L_{cr}=2.10$ Curva d: $\alpha\text{-imp}=0.76$ $k_c=0.94$ $\psi=1.75$ M,cr=0.00 $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ $f=0.00$ $\chi_{LT}=1.00$
CC 25 My,Ed=-5.68 My,b,Rd=212.43 My,Ed/My,b,Rd=0.03

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/183461)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.08$ (L/2765) $f_{z,g}=0.06$ (L/3261)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.05 - Classe 3
Sollecitazioni: N=3301.84 M=4.37
Tensioni: $\sigma_N=262.75$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{max}=332.26$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=262.75$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{ID,max}=332.26$

Asta n. 4011 (1922 1994) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/120586)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/22213)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.61 - Classe 3
Sollecitazioni: N=3515.28
Tensioni: $\sigma_N=163.59$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{max}=163.59$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=163.59$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{ID,max}=163.59$

Asta n. 4012 (1923 1995) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-6152.45 M,Ed=0.00

Resistenze: $N_c, R_d=72651.60$ $M, c, R_d=1972.49$ $L=161.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=39.89$ $N_{cr}=279894.00$ $\lambda^*=0.52$
Curva a: $\Phi=0.67$ $\chi, \text{min}=0.92$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.98, \text{----}, \text{----}, \text{----}$
Verifica: $0.08 = 0.08$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/84410)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/14808)
- Verifica a compressione (4.2.10) - CC 9 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-6152.45$
 $N, Ed=-6152.45$ $N_c, R_d=-72651.60$ $N, Ed/N_c, R_d=0.08$

Asta n. 4013 (1922 1995) Cir. D=4 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 - Classe 3
Sollecitazioni: $N, Ed=-3505.01$ $M, Ed=4.05$
Resistenze: $N_c, R_d=42486.30$ $M, c, R_d=212.43$ $L=259.36$
 $\lambda=259.36$ $N_{cr}=3872.04$ $\lambda^*=3.39$ Curva c: $\Phi=7.04$ $\chi, \text{min}=0.08$
 $\chi, \text{min}=0.08$
Verifica: $1.09 + 0.20 = 1.29$
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/123615)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.14$ (L/1814) $f_{z,g}=0.10$ (L/2619)
- Verifica in termini tensionali (4.2.5) - CC 9 $X_1=1.30$ - Classe 3
Sollecitazioni: $N=-5496.98$ $M=5.39$
Tensioni: $\sigma_N=-437.44$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{\text{max}}=-523.30$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{\text{max}}=0.00$
Tensioni: $\sigma_N=-437.44$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{ID, \text{max}}=523.30$

Asta n. 4014 (1923 1994) Cir. D=4 Crit. 1

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 25 - Classe 3
 $L_{cr}=2.10$ Curva d: $\alpha\text{-imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M, cr=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ $f=0.00$ $\chi_{LT}=1.00$
CC 25 $M_y, Ed=-5.68$ $M_y, b, R_d=212.43$ $M_y, Ed/M_y, b, R_d=0.03$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 23 - Classe 3
Sollecitazioni: $N, Ed=-69.11$ $M, Ed=3.28$
Resistenze: $N_c, R_d=42486.30$ $M, c, R_d=212.43$ $L=209.96$
 $\lambda=209.96$ $N_{cr}=5908.50$ $\lambda^*=2.75$ Curva c: $\Phi=4.90$ $\chi, \text{min}=0.11$
 $\chi, \text{min}=0.11$
Verifica: $0.00 + 0.02 = 0.02$
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/122307)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.08$ (L/2769) $f_{z,g}=0.06$ (L/3731)
- Verifica in termini tensionali (4.2.5) - CC 9 $X_1=1.05$ - Classe 3
Sollecitazioni: $N=7466.93$ $M=4.37$
Tensioni: $\sigma_N=594.20$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{\text{max}}=663.71$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{\text{max}}=0.00$
Tensioni: $\sigma_N=594.20$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{ID, \text{max}}=663.71$

Asta n. 4015 (1917 1913) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N, Ed=-2508.01$ $M, Ed=2.86$
Resistenze: $N_c, R_d=72651.60$ $M, c, R_d=1972.49$ $L=102.22$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=25.33$ $N_{cr}=694405.00$ $\lambda^*=0.33$
Curva a: $\Phi=0.57$ $\chi, \text{min}=0.97$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, \text{----}, \text{----}, \text{----}$
Verifica: $0.03 + 0.00 = 0.04$
- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=0.51$ - Classe 3

Sollecitazioni: N=-2508.01 M=2.86
Tensioni: $\sigma_N=-116.71$ $\sigma_M=-4.91$ $\tau=0.00$ $\sigma_{max}=-121.62$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-116.71$ $\sigma_M=-4.91$ $\tau=0.00$ $\sigma_{ID,max}=121.62$

Asta n. 4016 (1913 1915) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-2861.87 M,Ed=4.01
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=120.97
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=29.97$ Ncr=495806.00 $\lambda^*=0.39$
Curva a: $\Phi=0.60$ $\chi_{min}=0.95$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.04 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.60 - Classe 3

Sollecitazioni: N=-2861.87 M=4.01
Tensioni: $\sigma_N=-133.18$ $\sigma_M=-6.88$ $\tau=0.00$ $\sigma_{max}=-140.06$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-133.18$ $\sigma_M=-6.88$ $\tau=0.00$ $\sigma_{ID,max}=140.06$

Asta n. 4017 (1915 1911) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-2457.06 M,Ed=2.89
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=102.73
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=25.45$ Ncr=687497.00 $\lambda^*=0.33$
Curva a: $\Phi=0.57$ $\chi_{min}=0.97$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.03 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.51 - Classe 3

Sollecitazioni: N=-2457.06 M=2.89
Tensioni: $\sigma_N=-114.34$ $\sigma_M=-4.96$ $\tau=0.00$ $\sigma_{max}=-119.30$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-114.34$ $\sigma_M=-4.96$ $\tau=0.00$ $\sigma_{ID,max}=119.30$

Asta n. 4018 (1911 1917) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-2866.29 M,Ed=3.97
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=120.28
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=29.80$ Ncr=501459.00 $\lambda^*=0.39$
Curva a: $\Phi=0.60$ $\chi_{min}=0.96$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.04 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.60 - Classe 3

Sollecitazioni: N=-2866.29 M=3.97
Tensioni: $\sigma_N=-133.39$ $\sigma_M=-6.80$ $\tau=0.00$ $\sigma_{max}=-140.19$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-133.39$ $\sigma_M=-6.80$ $\tau=0.00$ $\sigma_{ID,max}=140.19$

Asta n. 4101 (1917 1924) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-7073.29 My,Ed=407.48 Mz,Ed=-4905.92
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=526.58
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
L_{cr}=5.27 Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.74$ M_{cr}=56963.10 $\lambda_{LT}=0.56$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=73.65$ Ncr,y=325125.00 $\lambda^*_y=0.96$ Curva b: $\Phi_y=1.09$ $\chi_y=0.62$
 $\lambda_z=100.89$ Ncr,z=173260.00 $\lambda^*_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 0.97, 0.99, 0.78, 0.99
Verifica YY: 0.04 + 0.02 + 0.77 = 0.84
Verifica ZZ: 0.06 + 0.02 + 0.77 = 0.86

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,c}=0.01$ (L/38884) $f_{z,L}=0.01$ (L/52586)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,c}=0.09$ (L/6047) $f_{z,L}=0.06$ (L/8905)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=5.27 - Classe 3
Sollecitazioni: N=-6621.74 T_z=-78.11 M_y=407.48 T_y=-1644.82 M_z=-4905.92
Tensioni: σ_N=-77.82 σ_M=-2727.53 τ=0.00 σ_{max}=-2805.35
Tensioni: σ_N=-77.82 σ_M=-256.20 τ=31.49 τ_{max}=31.49
Tensioni: σ_N=-77.82 σ_M=-2727.53 τ=0.00 σ_{ID,max}=2805.35

Asta n. 4102 (1911 1927) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-18781.20 M_y,Ed=-476.62 M_z,Ed=-2668.47
Resistenze: N_c,R_d=287692.00 M_y,c,R_d=16807.20 M_z,c,R_d=6269.63 L=553.99
α_{my}, α_{mz}, α_{LT} = 0.95, 0.95, 0.95
L_{cr}=5.54 Curva b: α-imp=0.34 k_c=0.94 ψ=1.62 M,cr=49893.20 λ_{LT}=0.59
λ_{LT,0}=0.40 β_{LT}=0.75 Φ_{LT}=0.67 β_{LT}=0.75 f=0.97 χ_{LT}=0.95
λ_y=77.48 N_{cr},y=293755.00 λ_y^{*}=1.01 Curva b: Φ_y=1.15 χ_y=0.59
λ_z=106.14 N_{cr},z=156543.00 λ_z^{*}=1.39 Curva c: Φ_z=1.76 χ_z=0.35
K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.01, 1.06, 0.81, 1.06
Verifica YY: 0.11 + 0.03 + 0.45 = 0.59
Verifica ZZ: 0.18 + 0.02 + 0.45 = 0.66

- Verifica Freccia massima per soli carichi accidentali - CC 26
f_{z,g}=0.02 (L/33194) f_{z,L}=0.00 (L/161359)

- Verifica Freccia massima carichi totali - CC 26
f_{z,g}=0.10 (L/5826) f_{z,L}=0.02 (L/29637)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-18781.20 T_z=92.39 M_y=59.69 T_y=781.81 M_z=-2668.47 M_x=-9.20
Tensioni: σ_N=-220.72 σ_M=-1451.01 τ=9.22 σ_{max}=-1671.72
Tensioni: σ_N=-220.72 σ_M=-113.24 τ=35.05 τ_{max}=35.05
Tensioni: σ_N=-220.72 σ_M=-1451.01 τ=9.22 σ_{ID,max}=1671.80

Asta n. 4103 (1915 1921) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7064.46 M_y,Ed=102.41 M_z,Ed=-4911.54
Resistenze: N_c,R_d=287692.00 M_y,c,R_d=16807.20 M_z,c,R_d=6269.63 L=526.43
α_{my}, α_{mz}, α_{LT} = 0.95, 0.95, 0.95
L_{cr}=5.26 Curva b: α-imp=0.34 k_c=0.94 ψ=1.16 M,cr=38107.20 λ_{LT}=0.68
λ_{LT,0}=0.40 β_{LT}=0.75 Φ_{LT}=0.72 β_{LT}=0.75 f=0.97 χ_{LT}=0.91
λ_y=73.63 N_{cr},y=325318.00 λ_y^{*}=0.96 Curva b: Φ_y=1.09 χ_y=0.62
λ_z=100.86 N_{cr},z=173363.00 λ_z^{*}=1.32 Curva c: Φ_z=1.65 χ_z=0.38
K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.97, 0.99, 0.78, 0.99
Verifica YY: 0.04 + 0.01 + 0.77 = 0.82
Verifica ZZ: 0.06 + 0.01 + 0.77 = 0.84

- Verifica Freccia massima per soli carichi accidentali - CC 26
f_{z,g}=0.01 (L/40291)

- Verifica Freccia massima carichi totali - CC 26
f_{z,g}=0.09 (L/6153) f_{z,L}=0.01 (L/68147)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=5.26 - Classe 3
Sollecitazioni: N=-6612.91 T_z=-33.02 M_y=102.41 T_y=-1655.24 M_z=-4911.54 M_x=6.77
Tensioni: σ_N=-77.71 σ_M=-2669.19 τ=6.79 σ_{max}=-2746.91
Tensioni: σ_N=-77.71 σ_M=-207.21 τ=38.65 τ_{max}=38.65
Tensioni: σ_N=-77.71 σ_M=-2669.19 τ=6.79 σ_{ID,max}=2746.93

Asta n. 4104 (1913 1918) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-18487.60 M_y,Ed=-488.38 M_z,Ed=-2632.77
Resistenze: N_c,R_d=287692.00 M_y,c,R_d=16807.20 M_z,c,R_d=6269.63 L=553.99
α_{my}, α_{mz}, α_{LT} = 0.95, 0.95, 0.95
L_{cr}=5.54 Curva b: α-imp=0.34 k_c=0.94 ψ=1.61 M,cr=49575.70 λ_{LT}=0.60
λ_{LT,0}=0.40 β_{LT}=0.75 Φ_{LT}=0.67 β_{LT}=0.75 f=0.97 χ_{LT}=0.94
λ_y=77.48 N_{cr},y=293755.00 λ_y^{*}=1.01 Curva b: Φ_y=1.15 χ_y=0.59
λ_z=106.14 N_{cr},z=156543.00 λ_z^{*}=1.39 Curva c: Φ_z=1.76 χ_z=0.35
K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.01, 1.05, 0.81, 1.05
Verifica YY: 0.11 + 0.03 + 0.44 = 0.58
Verifica ZZ: 0.18 + 0.02 + 0.44 = 0.65

- Verifica Freccia massima per soli carichi accidentali - CC 26
f_{z,g}=0.02 (L/36305) f_{z,L}=0.00 (L/484079)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/6440) $f_{z,L}=0.01$ (L/55855)
- Verifica in termini tensionali (4.2.5) - CC 9 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-18487.60$ $T_z=93.15$ $M_y=66.36$ $T_y=766.30$ $M_z=-2632.77$ $M_x=-10.42$
Tensioni: $\sigma_N=-217.26$ $\sigma_M=-1433.09$ $\tau=10.45$ $\sigma_{max}=-1650.36$
Tensioni: $\sigma_N=-217.26$ $\sigma_M=-112.92$ $\tau=38.47$ $\tau_{max}=38.47$
Tensioni: $\sigma_N=-217.26$ $\sigma_M=-1433.09$ $\tau=10.45$ $\sigma_{ID,max}=1650.46$

Asta n. 4105 (-852 1998) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-11738.80$ $M,Ed=0.12$
Resistenze: $N_c,Rd=72651.60$ $M,c,Rd=1972.49$ $L=78.22$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=19.38$ $N_{cr}=1185880.00$ $\lambda^*=0.25$
Curva a: $\Phi=0.54$ $\chi_{min}=0.99$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.97, \text{----}, \text{----}, \text{----}$
Verifica: $0.16 + 0.00 = 0.16$
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/28281)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/5190)
- Verifica a compressione (4.2.10) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-11738.80$
 $N,Ed=-11738.80$ $N_c,Rd=-72651.60$ $N,Ed/N_c,Rd=0.16$

Asta n. 4106 (-855 1999) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-10812.80$ $M,Ed=0.29$
Resistenze: $N_c,Rd=72651.60$ $M,c,Rd=1972.49$ $L=66.17$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=16.39$ $N_{cr}=1657040.00$ $\lambda^*=0.21$
Curva a: $\Phi=0.52$ $\chi_{min}=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.97, \text{----}, \text{----}, \text{----}$
Verifica: $0.15 + 0.00 = 0.15$
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/31537)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/5981)
- Verifica a compressione (4.2.10) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-10812.80$ $T=1.76$
 $N,Ed=-10812.80$ $N_c,Rd=-72651.60$ $N,Ed/N_c,Rd=0.15$

Asta n. 4211 (1924 1926) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3312.47$ $M_y,Ed=1269.47$ $M_z,Ed=-1999.99$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=379.60$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.80$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M,cr=39930.60$ $\lambda_{LT}=0.51$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.62$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.98$
 $\lambda_y=62.61$ $N_{cr,y}=307021.00$ $\lambda_y^*=0.82$ Curva b: $\Phi_y=0.94$ $\chi_y=0.71$
 $\lambda_z=83.04$ $N_{cr,z}=174529.00$ $\lambda_z^*=1.09$ Curva c: $\Phi_z=1.31$ $\chi_z=0.49$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.97, 0.77, 0.97$
Verifica YY: $0.02 + 0.13 + 0.51 = 0.65$
Verifica ZZ: $0.02 + 0.10 + 0.51 = 0.63$
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.06$ (L/6611) $f_{z,L}=0.04$ (L/10757)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.32$ (L/1184) $f_{z,L}=0.20$ (L/1930)
- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-3312.47$ $T_z=334.43$ $M_y=1269.47$ $T_y=596.54$ $M_z=-1999.99$
Tensioni: $\sigma_N=-57.05$ $\sigma_M=-2206.08$ $\tau=0.00$ $\sigma_{max}=-2263.13$
Tensioni: $\sigma_N=-57.05$ $\sigma_M=-453.73$ $\tau=23.51$ $\tau_{max}=23.51$

Tensioni: $\sigma_N=-57.05$ $\sigma_M=-2206.08$ $\tau=0.00$ $\sigma_{ID,max}=2263.13$

Asta n. 4212 (1924 1925) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-3573.13 My,Ed=-1164.00 Mz,Ed=-2528.98

Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=334.12

$\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=3.34$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=47739.80 $\lambda_{LT}=0.47$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.59$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$

$\lambda_y=55.11$ Ncr,y=396295.00 $\lambda^*_y=0.72$ Curva b: $\Phi_y=0.85$ $\chi_y=0.77$

$\lambda_z=73.09$ Ncr,z=225278.00 $\lambda^*_z=0.96$ Curva c: $\Phi_z=1.14$ $\chi_z=0.57$

Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97

Verifica YY: $0.02 + 0.11 + 0.64 = 0.77$

Verifica ZZ: $0.02 + 0.09 + 0.64 = 0.75$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,g}=0.06$ (L/5868) $f_{z,L}=0.02$ (L/13739)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,g}=0.32$ (L/1036) $f_{z,L}=0.14$ (L/2406)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3

Sollecitazioni: N=-3573.13 Tz=-348.38 My=-1164.00 Ty=818.35 Mz=-2528.98

Tensioni: $\sigma_N=-61.53$ $\sigma_M=-2638.68$ $\tau=0.00$ $\sigma_{max}=-2700.21$

Tensioni: $\sigma_N=-61.53$ $\sigma_M=182.32$ $\tau=28.23$ $\tau_{max}=28.23$

Tensioni: $\sigma_N=-61.53$ $\sigma_M=-2638.68$ $\tau=0.00$ $\sigma_{ID,max}=2700.21$

Asta n. 4212 (1927 1929) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-11786.40 My,Ed=684.20 Mz,Ed=238.98

Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=437.01

$\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=4.37$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=33075.30 $\lambda_{LT}=0.56$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$

$\lambda_y=72.08$ Ncr,y=231653.00 $\lambda^*_y=0.94$ Curva b: $\Phi_y=1.07$ $\chi_y=0.63$

$\lambda_z=95.60$ Ncr,z=131685.00 $\lambda^*_z=1.25$ Curva c: $\Phi_z=1.54$ $\chi_z=0.41$

Kyy, Kyz, Kzy, Kzz = 1.00, 1.03, 0.80, 1.03

Verifica YY: $0.09 + 0.07 + 0.06 = 0.23$

Verifica ZZ: $0.15 + 0.06 + 0.06 = 0.27$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,L}=0.02$ (L/19013) $f_{z,g}=0.01$ (L/34453)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,L}=0.14$ (L/3085) $f_{z,g}=0.08$ (L/5315)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3

Sollecitazioni: N=-11786.40 Tz=156.57 My=684.20 Ty=16.58 Mz=234.71

Tensioni: $\sigma_N=-202.98$ $\sigma_M=-441.94$ $\tau=0.00$ $\sigma_{max}=-644.92$

Tensioni: $\sigma_N=-202.98$ $\sigma_M=12.57$ $\tau=9.42$ $\tau_{max}=9.42$

Tensioni: $\sigma_N=-202.98$ $\sigma_M=-441.94$ $\tau=0.00$ $\sigma_{ID,max}=644.92$

Asta n. 4213 (1921 1922) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-3207.24 My,Ed=1063.37 Mz,Ed=-2081.35

Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=352.04

$\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=3.52$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=44330.50 $\lambda_{LT}=0.48$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.60$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$

$\lambda_y=58.06$ Ncr,y=356964.00 $\lambda^*_y=0.76$ Curva b: $\Phi_y=0.88$ $\chi_y=0.75$

$\lambda_z=77.01$ Ncr,z=202920.00 $\lambda^*_z=1.01$ Curva c: $\Phi_z=1.21$ $\chi_z=0.54$

Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97

Verifica YY: $0.02 + 0.10 + 0.53 = 0.65$

Verifica ZZ: $0.02 + 0.08 + 0.53 = 0.63$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,g}=0.06$ (L/6320) $f_{z,L}=0.03$ (L/13982)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,g}=0.31$ (L/1128) $f_{z,L}=0.14$ (L/2497)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3

Sollecitazioni: N=-3207.24 Tz=302.06 My=1063.37 Ty=660.89 Mz=-2081.35

Tensioni: $\sigma_N=-55.23$ $\sigma_M=-2207.68$ $\tau=0.00$ $\sigma_{max}=-2262.92$
Tensioni: $\sigma_N=-55.23$ $\sigma_M=-401.82$ $\tau=23.51$ $\tau_{max}=23.51$
Tensioni: $\sigma_N=-55.23$ $\sigma_M=-2207.68$ $\tau=0.00$ $\sigma_{ID,max}=2262.92$

Asta n. 4214 (1918 1920) Is 146x215x13x10x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-8942.63 My,Ed=-879.43 Mz,Ed=-191.12
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=448.31
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.48$ Curva b: $\alpha-imp=0.34$ $K_c=0.94$ $\psi=1.75$ $M_{cr}=31994.10$ $\lambda_{LT}=0.57$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.65$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=73.94$ Ncr,y=220115.00 $\lambda_y^*=0.97$ Curva b: $\Phi_y=1.10$ $\chi_y=0.62$
 $\lambda_z=98.07$ Ncr,z=125127.00 $\lambda_z^*=1.28$ Curva c: $\Phi_z=1.59$ $\chi_z=0.40$
Kyy, Kyz, Kzy, Kzz = 0.99, 1.02, 0.79, 1.02
Verifica YY: 0.07 + 0.09 + 0.05 = 0.22
Verifica ZZ: 0.12 + 0.07 + 0.05 = 0.24
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.03$ (L/14027) $f_{z,G}=0.00$ (L/127051)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.19$ (L/2348) $f_{z,G}=0.02$ (L/23387)
 - Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-8942.63 Tz=-196.16 My=-879.43 Ty=124.13 Mz=-191.12
Tensioni: $\sigma_N=-154.01$ $\sigma_M=-470.10$ $\tau=0.00$ $\sigma_{max}=-624.10$
Tensioni: $\sigma_N=-154.01$ $\sigma_M=-10.24$ $\tau=11.82$ $\tau_{max}=11.82$
Tensioni: $\sigma_N=-154.01$ $\sigma_M=-470.10$ $\tau=0.00$ $\sigma_{ID,max}=624.10$

Asta n. 4222 (1927 1928) Is 146x215x13x10x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-9056.90 My,Ed=-552.62 Mz,Ed=-269.49
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=458.65
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.59$ Curva b: $\alpha-imp=0.34$ $K_c=0.94$ $\psi=1.75$ $M_{cr}=31066.50$ $\lambda_{LT}=0.58$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.66$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.95$
 $\lambda_y=75.65$ Ncr,y=210307.00 $\lambda_y^*=0.99$ Curva b: $\Phi_y=1.12$ $\chi_y=0.60$
 $\lambda_z=100.33$ Ncr,z=119551.00 $\lambda_z^*=1.31$ Curva c: $\Phi_z=1.63$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 0.99, 1.02, 0.79, 1.02
Verifica YY: 0.08 + 0.06 + 0.07 = 0.21
Verifica ZZ: 0.12 + 0.05 + 0.07 = 0.24
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.03$ (L/16470) $f_{z,G}=0.00$ (L/126559)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.17$ (L/2725) $f_{z,G}=0.02$ (L/21566)
 - Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-9056.90 Tz=-120.49 My=-552.62 Ty=121.45 Mz=-269.49
Tensioni: $\sigma_N=-155.97$ $\sigma_M=-427.75$ $\tau=0.00$ $\sigma_{max}=-583.73$
Tensioni: $\sigma_N=-155.97$ $\sigma_M=-14.44$ $\tau=7.28$ $\tau_{max}=7.28$
Tensioni: $\sigma_N=-155.97$ $\sigma_M=-427.75$ $\tau=0.00$ $\sigma_{ID,max}=583.73$

Asta n. 4223 (1921 1923) Is 146x215x13x10x0x0x10000 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3676.55 My,Ed=-1203.95 Mz,Ed=-2498.00
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=363.03
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.63$ Curva b: $\alpha-imp=0.34$ $K_c=0.94$ $\psi=1.75$ $M_{cr}=42465.80$ $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=59.88$ Ncr,y=335675.00 $\lambda_y^*=0.78$ Curva b: $\Phi_y=0.91$ $\chi_y=0.73$
 $\lambda_z=79.42$ Ncr,z=190818.00 $\lambda_z^*=1.04$ Curva c: $\Phi_z=1.25$ $\chi_z=0.52$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: 0.02 + 0.12 + 0.64 = 0.77
Verifica ZZ: 0.02 + 0.09 + 0.64 = 0.75
 - Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.06$ (L/5938) $f_{z,L}=0.03$ (L/12008)
 - Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.34$ (L/1055) $f_{z,L}=0.17$ (L/2121)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
 Sollecitazioni: N=-3676.55 T_z=-331.64 M_y=-1203.95 T_y=749.52 M_z=-2498.00
 Tensioni: σ_N=-63.32 σ_M=-2624.90 τ=0.00 σ_{max}=-2688.21
 Tensioni: σ_N=-63.32 σ_M=194.88 τ=26.28 τ_{max}=26.28
 Tensioni: σ_N=-63.32 σ_M=-2624.90 τ=0.00 σ_{ID,max}=2688.21

Asta n. 4224 (1918 1919) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
 Sollecitazioni: N,Ed=-11101.80 M_y,Ed=523.12 M_z,Ed=263.63
 Resistenze: N_c,R_d=196322.00 M_y,c,R_d=9885.72 M_z,c,R_d=3816.13 L=426.15
 α_{my}, α_{mz}, α_{LT} = 0.95, 0.95, 0.95
 L_{cr}=4.26 Curva b: α-imp=0.34 k_c=0.94 ψ=1.75 M,cr=34185.30 λ_{LT}=0.55
 λ_{LT,0}=0.40 β_{LT}=0.75 Φ_{LT}=0.64 β_{LT}=0.75 f=0.97 χ_{LT}=0.96
 λ_y=70.29 Ncr,y=243609.00 λ_y^{*}=0.92 Curva b: Φ_y=1.05 χ_y=0.65
 λ_z=93.22 Ncr,z=138482.00 λ_z^{*}=1.22 Curva c: Φ_z=1.49 χ_z=0.42
 K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.00, 1.03, 0.80, 1.03
 Verifica YY: 0.09 + 0.05 + 0.07 = 0.21
 Verifica ZZ: 0.13 + 0.04 + 0.07 = 0.25

- Verifica Freccia massima per soli carichi accidentali - CC 26
 f_{z,L}=0.02 (L/25979) f_{z,G}=0.01 (L/32856)

- Verifica Freccia massima carichi totali - CC 26
 f_{z,L}=0.10 (L/4129) f_{z,G}=0.08 (L/5066)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
 Sollecitazioni: N=-11101.80 T_z=122.76 M_y=523.12 T_y=8.70 M_z=262.48
 Tensioni: σ_N=-191.19 σ_M=-411.46 τ=0.00 σ_{max}=-602.65
 Tensioni: σ_N=-191.19 σ_M=14.06 τ=7.39 τ_{max}=7.39
 Tensioni: σ_N=-191.19 σ_M=-411.46 τ=0.00 σ_{ID,max}=602.65

Asta n. 4232 (-852 1930) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
 Sollecitazioni: N,Ed=-4529.17 M_y,Ed=-87.95 M_z,Ed=-723.47
 Resistenze: N_c,R_d=196322.00 M_y,c,R_d=9885.72 M_z,c,R_d=3816.13 L=123.57
 α_{my}, α_{mz}, α_{LT} = 0.95, 0.95, 0.95
 L_{cr}=1.24 Curva b: α-imp=0.34 k_c=0.94 ψ=1.75 M,cr=248865.00 λ_{LT}=0.20
 λ_{LT,0}=0.40 β_{LT}=0.75 Φ_{LT}=0.48 β_{LT}=0.75 f=0.99 χ_{LT}=1.00
 λ_y=20.38 Ncr,y=2897440.00 λ_y^{*}=0.27 Curva b: Φ_y=0.55 χ_y=0.98
 λ_z=27.03 Ncr,z=1647080.00 λ_z^{*}=0.35 Curva c: Φ_z=0.60 χ_z=0.92
 K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.96, 0.76, 0.96
 Verifica YY: 0.02 + 0.01 + 0.18 = 0.21
 Verifica ZZ: 0.02 + 0.01 + 0.18 = 0.21

- Verifica Freccia massima per soli carichi accidentali - CC 26
 f_{z,G}=0.00 (L/41796)

- Verifica Freccia massima carichi totali - CC 26
 f_{z,G}=0.02 (L/6713) f_{z,L}=0.00 (L/80980)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
 Sollecitazioni: N=-4529.17 T_z=-71.18 M_y=-87.95 T_y=618.71 M_z=-723.47
 Tensioni: σ_N=-78.00 σ_M=-671.05 τ=0.00 σ_{max}=-749.05
 Tensioni: σ_N=-78.00 σ_M=-14.74 τ=16.73 τ_{max}=16.73
 Tensioni: σ_N=-78.00 σ_M=-671.05 τ=0.00 σ_{ID,max}=749.05

Asta n. 4232 (-851 -852) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
 Sollecitazioni: N,Ed=-3115.42 M_y,Ed=-87.95 M_z,Ed=-723.47
 Resistenze: N_c,R_d=196322.00 M_y,c,R_d=9885.72 M_z,c,R_d=3816.13 L=123.57
 α_{my}, α_{mz}, α_{LT} = 0.95, 0.95, 0.95
 L_{cr}=1.24 Curva b: α-imp=0.34 k_c=0.94 ψ=1.15 M,cr=163309.00 λ_{LT}=0.25
 λ_{LT,0}=0.40 β_{LT}=0.75 Φ_{LT}=0.50 β_{LT}=0.75 f=0.99 χ_{LT}=1.00
 λ_y=20.38 Ncr,y=2897440.00 λ_y^{*}=0.27 Curva b: Φ_y=0.55 χ_y=0.98
 λ_z=27.03 Ncr,z=1647080.00 λ_z^{*}=0.35 Curva c: Φ_z=0.60 χ_z=0.92
 K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95
 Verifica YY: 0.02 + 0.01 + 0.18 = 0.21
 Verifica ZZ: 0.02 + 0.01 + 0.18 = 0.20

- Verifica Freccia massima per soli carichi accidentali - CC 26
 f_{z,G}=0.00 (L/29447)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/5288) $f_{z,l}=0.00$ (L/46274)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_l=1.24$ - Classe 3
Sollecitazioni: $N=-3084.60$ $T_z=19.80$ $M_y=-87.95$ $T_y=-430.97$ $M_z=-723.47$
Tensioni: $\sigma_N=-53.12$ $\sigma_M=-671.05$ $\tau=0.00$ $\sigma_{max}=-724.17$
Tensioni: $\sigma_N=-53.12$ $\sigma_M=-14.74$ $\tau=11.41$ $\tau_{max}=11.41$
Tensioni: $\sigma_N=-53.12$ $\sigma_M=-671.05$ $\tau=0.00$ $\sigma_{ID,max}=724.17$

Asta n. 4232 (-850 -851) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3146.23$ $M_y,Ed=-63.49$ $M_z,Ed=-231.98$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=123.57$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.22$ $M,cr=173201.00$ $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ $N_{cr,y}=2897440.00$ $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ $N_{cr,z}=1647080.00$ $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.02 + 0.01 + 0.06 = 0.08$
Verifica ZZ: $0.02 + 0.00 + 0.06 = 0.08$

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.00$ (L/53986) $f_{z,g}=0.00$ (L/86378)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_l=1.24$ - Classe 3
Sollecitazioni: $N=-3115.42$ $T_z=19.80$ $M_y=-63.49$ $T_y=-364.55$ $M_z=-231.98$
Tensioni: $\sigma_N=-53.65$ $\sigma_M=-227.24$ $\tau=0.00$ $\sigma_{max}=-280.89$
Tensioni: $\sigma_N=-53.65$ $\sigma_M=4.91$ $\tau=9.67$ $\tau_{max}=9.67$
Tensioni: $\sigma_N=-53.65$ $\sigma_M=-227.24$ $\tau=0.00$ $\sigma_{ID,max}=280.89$

Asta n. 4232 (-849 -850) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3177.04$ $M_y,Ed=-39.03$ $M_z,Ed=504.79$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=123.57$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.40$ $M,cr=199088.00$ $\lambda_{LT}=0.23$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ $N_{cr,y}=2897440.00$ $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ $N_{cr,z}=1647080.00$ $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.02 + 0.00 + 0.13 = 0.15$
Verifica ZZ: $0.02 + 0.00 + 0.13 = 0.15$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/44678)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/6644) $f_{z,l}=0.00$ (L/107973)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_l=0.00$ - Classe 3
Sollecitazioni: $N=-3177.04$ $T_z=19.80$ $M_y=-14.56$ $T_y=-231.70$ $M_z=504.79$
Tensioni: $\sigma_N=-54.71$ $\sigma_M=-452.20$ $\tau=0.00$ $\sigma_{max}=-506.92$
Tensioni: $\sigma_N=-54.71$ $\sigma_M=31.02$ $\tau=6.20$ $\tau_{max}=6.20$
Tensioni: $\sigma_N=-54.71$ $\sigma_M=-452.20$ $\tau=0.00$ $\sigma_{ID,max}=506.92$

Asta n. 4232 (1927 -849) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3207.86$ $M_y,Ed=-14.56$ $M_z,Ed=750.06$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=123.57$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.17$ $M,cr=167065.00$ $\lambda_{LT}=0.25$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ $N_{cr,y}=2897440.00$ $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ $N_{cr,z}=1647080.00$ $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.02 + 0.00 + 0.19 = 0.21$
Verifica ZZ: $0.02 + 0.00 + 0.19 = 0.20$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/20566)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.03$ (L/3788)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-3207.86$ $T_z=19.80$ $M_y=9.90$ $T_y=-165.28$ $M_z=750.06$
Tensioni: $\sigma_N=-55.24$ $\sigma_M=-667.91$ $\tau=0.00$ $\sigma_{max}=-723.15$
Tensioni: $\sigma_N=-55.24$ $\sigma_M=37.48$ $\tau=4.48$ $\tau_{max}=4.48$
Tensioni: $\sigma_N=-55.24$ $\sigma_M=-667.91$ $\tau=0.00$ $\sigma_{ID,max}=723.15$

Asta n. 4234 (1918 -848) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3909.88$ $M_y,Ed=261.29$ $M_z,Ed=599.97$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=145.14$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha-imp=0.34$ $K_c=0.94$ $\psi=1.67$ $M_{cr}=176946.00$ $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ $N_{cr,y}=2100110.00$ $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ $N_{cr,z}=1193830.00$ $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.96, 0.76, 0.96$
Verifica YY: $0.02 + 0.03 + 0.15 = 0.20$
Verifica ZZ: $0.02 + 0.02 + 0.15 = 0.19$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/23413) $f_{z,L}=0.00$ (L/126824)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.03$ (L/4476) $f_{z,L}=0.01$ (L/22380)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-3909.88$ $T_z=165.79$ $M_y=261.29$ $T_y=-83.10$ $M_z=599.97$
Tensioni: $\sigma_N=-67.33$ $\sigma_M=-620.92$ $\tau=0.00$ $\sigma_{max}=-688.25$
Tensioni: $\sigma_N=-67.33$ $\sigma_M=32.14$ $\tau=9.99$ $\tau_{max}=9.99$
Tensioni: $\sigma_N=-67.33$ $\sigma_M=-620.92$ $\tau=0.00$ $\sigma_{ID,max}=688.25$

Asta n. 4234 (-848 -853) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3855.24$ $M_y,Ed=-219.95$ $M_z,Ed=431.17$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=145.14$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha-imp=0.34$ $K_c=0.94$ $\psi=1.65$ $M_{cr}=175372.00$ $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ $N_{cr,y}=2100110.00$ $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ $N_{cr,z}=1193830.00$ $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.96, 0.76, 0.96$
Verifica YY: $0.02 + 0.02 + 0.11 = 0.15$
Verifica ZZ: $0.02 + 0.02 + 0.11 = 0.14$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/50729) $f_{z,L}=0.00$ (L/126824)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/7387) $f_{z,L}=0.00$ (L/31706)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-3855.24$ $T_z=165.79$ $M_y=20.67$ $T_y=-149.52$ $M_z=431.17$
Tensioni: $\sigma_N=-66.39$ $\sigma_M=-389.07$ $\tau=0.00$ $\sigma_{max}=-455.46$
Tensioni: $\sigma_N=-66.39$ $\sigma_M=23.10$ $\tau=10.01$ $\tau_{max}=10.01$
Tensioni: $\sigma_N=-66.39$ $\sigma_M=-389.07$ $\tau=0.00$ $\sigma_{ID,max}=455.46$

Asta n. 4234 (-853 -854) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3800.61$ $M_y,Ed=-460.57$ $M_z,Ed=-195.66$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=145.14$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha-imp=0.34$ $K_c=0.94$ $\psi=1.32$ $M_{cr}=139641.00$ $\lambda_{LT}=0.27$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ $N_{cr,y}=2100110.00$ $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ $N_{cr,z}=1193830.00$ $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.96, 0.76, 0.96$
Verifica YY: $0.02 + 0.04 + 0.05 = 0.11$
Verifica ZZ: $0.02 + 0.04 + 0.05 = 0.10$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/47559)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.01$ (L/10012) $f_{z,G}=0.00$ (L/80099)
- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=1.45$ - Classe 3
Sollecitazioni: $N=-3745.97$ $T_2=165.79$ $M_y=-460.57$ $T_y=-282.36$ $M_z=-195.66$
Tensioni: $\sigma_N=-64.51$ $\sigma_M=-330.87$ $\tau=0.00$ $\sigma_{max}=-395.38$
Tensioni: $\sigma_N=-64.51$ $\sigma_M=115.26$ $\tau=11.42$ $\tau_{max}=11.42$
Tensioni: $\sigma_N=-64.51$ $\sigma_M=-330.87$ $\tau=0.00$ $\sigma_{ID,max}=395.38$

Asta n. 4234 (-854 -855) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3745.97$ $M_y,Ed=-701.18$ $M_z,Ed=-653.69$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=145.14$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.19$ $M,cr=126150.00$ $\lambda_{LT}=0.29$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ $N_{cr,y}=2100110.00$ $\lambda^*_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ $N_{cr,z}=1193830.00$ $\lambda^*_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.96, 0.76, 0.96$
Verifica YY: $0.02 + 0.07 + 0.16 = 0.25$
Verifica ZZ: $0.02 + 0.05 + 0.16 = 0.24$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/31706) $f_{z,G}=0.00$ (L/35392)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.03$ (L/5764) $f_{z,G}=0.02$ (L/6112)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=1.45$ - Classe 3
Sollecitazioni: $N=-3691.34$ $T_2=165.79$ $M_y=-701.18$ $T_y=-348.79$ $M_z=-653.69$
Tensioni: $\sigma_N=-63.57$ $\sigma_M=-818.95$ $\tau=0.00$ $\sigma_{max}=-882.52$
Tensioni: $\sigma_N=-63.57$ $\sigma_M=156.42$ $\tau=12.63$ $\tau_{max}=12.63$
Tensioni: $\sigma_N=-63.57$ $\sigma_M=-818.95$ $\tau=0.00$ $\sigma_{ID,max}=882.52$

Asta n. 4234 (-855 1931) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-7658.15$ $M_y,Ed=-701.19$ $M_z,Ed=-653.69$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=145.14$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ $M,cr=185555.00$ $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ $N_{cr,y}=2100110.00$ $\lambda^*_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ $N_{cr,z}=1193830.00$ $\lambda^*_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.96, 0.77, 0.96$
Verifica YY: $0.04 + 0.07 + 0.16 = 0.27$
Verifica ZZ: $0.04 + 0.05 + 0.16 = 0.26$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/42274) $f_{z,G}=0.00$ (L/50729)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.02$ (L/8095) $f_{z,L}=0.02$ (L/8271)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-7658.15$ $T_2=-483.11$ $M_y=-701.19$ $T_y=483.60$ $M_z=-653.69$
Tensioni: $\sigma_N=-131.88$ $\sigma_M=-818.95$ $\tau=0.00$ $\sigma_{max}=-950.84$
Tensioni: $\sigma_N=-131.88$ $\sigma_M=-35.02$ $\tau=29.19$ $\tau_{max}=29.19$
Tensioni: $\sigma_N=-131.88$ $\sigma_M=-818.95$ $\tau=0.00$ $\sigma_{ID,max}=950.84$

Asta n. 5001 (1938 1939) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: $N,Ed=-5759.17$ $M_y,Ed=-2391.39$ $M_z,Ed=2973.83$
Resistenze: $N_c,Rd=287692.00$ $M_y,c,Rd=16807.20$ $M_z,c,Rd=6269.63$ $L=700.73$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.01$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.45$ $M,cr=33726.70$ $\lambda_{LT}=0.72$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.75$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.88$
 $\lambda_y=98.01$ $N_{cr,y}=183603.00$ $\lambda^*_y=1.28$ Curva b: $\Phi_y=1.51$ $\chi_y=0.44$
 $\lambda_z=134.26$ $N_{cr,z}=97842.80$ $\lambda^*_z=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$

Kyy, Kyz, Kzy, Kzz = 0.98, 1.00, 0.78, 1.00
Verifica YY: 0.05 + 0.16 + 0.47 = 0.68
Verifica ZZ: 0.08 + 0.13 + 0.47 = 0.68

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/89606) $f_{z,l}=0.01$ (L/131208)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.05$ (L/15452) $f_{z,l}=0.03$ (L/23856)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=7.01 - Classe 3
Sollecitazioni: N=-6699.59 Tz=-12.49 My=-8.95 Ty=863.11 Mz=3539.92
Tensioni: $\sigma_N=-78.73$ $\sigma_M=-1910.73$ $\tau=0.00$ $\sigma_{max}=-1989.47$
Tensioni: $\sigma_N=-78.73$ $\sigma_M=138.89$ $\tau=16.48$ $\tau_{max}=16.48$
Tensioni: $\sigma_N=-78.73$ $\sigma_M=-1910.73$ $\tau=0.00$ $\sigma_{ID,max}=1989.47$

Asta n. 5002 (1932 1933) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-18325.70 My,Ed=-621.05 Mz,Ed=2625.73
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=702.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.02$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.61$ $M_{cr}=37235.00$ $\lambda_{LT}=0.69$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.73$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.90$
 $\lambda_y=98.21$ Ncr,y=182868.00 $\lambda_y^*=1.29$ Curva b: $\Phi_y=1.51$ $\chi_y=0.43$
 $\lambda_z=134.53$ Ncr,z=97451.20 $\lambda_z^*=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
Kyy, Kyz, Kzy, Kzz = 1.03, 1.10, 0.83, 1.10
Verifica YY: 0.15 + 0.04 + 0.46 = 0.65
Verifica ZZ: 0.26 + 0.03 + 0.46 = 0.76

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,l}=0.01$ (L/55776) $f_{z,g}=0.01$ (L/73624)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.07$ (L/9536) $f_{z,g}=0.06$ (L/12542)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-18325.70 Tz=-98.66 My=-621.05 Ty=-693.33 Mz=2625.73 Mx=7.52
Tensioni: $\sigma_N=-215.36$ $\sigma_M=-1540.88$ $\tau=7.53$ $\sigma_{max}=-1756.24$
Tensioni: $\sigma_N=-215.36$ $\sigma_M=202.11$ $\tau=29.75$ $\tau_{max}=29.75$
Tensioni: $\sigma_N=-215.36$ $\sigma_M=-1540.88$ $\tau=7.53$ $\sigma_{ID,max}=1756.29$

Asta n. 5004 (1870 1871) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-5176.94 My,Ed=-3545.12 Mz,Ed=2659.72
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=700.78
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.01$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.44$ $M_{cr}=33396.30$ $\lambda_{LT}=0.73$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.75$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.88$
 $\lambda_y=98.02$ Ncr,y=183579.00 $\lambda_y^*=1.28$ Curva b: $\Phi_y=1.51$ $\chi_y=0.44$
 $\lambda_z=134.27$ Ncr,z=97829.90 $\lambda_z^*=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
Kyy, Kyz, Kzy, Kzz = 0.97, 0.99, 0.78, 0.99
Verifica YY: 0.04 + 0.23 + 0.42 = 0.69
Verifica ZZ: 0.07 + 0.19 + 0.42 = 0.68

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,l}=0.01$ (L/78172)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.05$ (L/13098) $f_{z,g}=0.05$ (L/15042)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=7.01 - Classe 3
Sollecitazioni: N=-6696.13 Tz=-8.05 My=-72.64 Ty=879.70 Mz=3598.56 Mx=-1.14
Tensioni: $\sigma_N=-78.69$ $\sigma_M=-1955.17$ $\tau=1.14$ $\sigma_{max}=-2033.86$
Tensioni: $\sigma_N=-78.69$ $\sigma_M=151.44$ $\tau=17.93$ $\tau_{max}=17.93$
Tensioni: $\sigma_N=-78.69$ $\sigma_M=-1955.17$ $\tau=1.14$ $\sigma_{ID,max}=2033.86$

Asta n. 5004 (1934 1935) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-14915.70 My,Ed=-745.02 Mz,Ed=2275.39
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=702.06
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.02$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.65$ $M_{cr}=38110.60$ $\lambda_{LT}=0.68$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.72$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.91$

$\lambda_y=98.19$ Ncr, $y=182908.00$ $\lambda_y^*=1.29$ Curva b: $\Phi_y=1.51$ $\chi_y=0.43$
 $\lambda_z=134.51$ Ncr, $z=97472.40$ $\lambda_z^*=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
Kyy, Kyz, Kzy, Kzz = 1.02, 1.07, 0.81, 1.07
Verifica YY: $0.12 + 0.05 + 0.39 = 0.56$
Verifica ZZ: $0.21 + 0.04 + 0.39 = 0.64$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.02$ (L/44888) $f_{z,G}=0.01$ (L/73986)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.09$ (L/7668) $f_{z,G}=0.06$ (L/12638)
- Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-14915.70 Tz=-116.43 My=-745.02 Ty=-580.47 Mz=2275.39 Mx=8.08
Tensioni: $\sigma_N=-175.29$ $\sigma_M=-1376.89$ $\tau=8.09$ $\sigma_{max}=-1552.18$
Tensioni: $\sigma_N=-175.29$ $\sigma_M=208.50$ $\tau=30.99$ $\tau_{max}=30.99$
Tensioni: $\sigma_N=-175.29$ $\sigma_M=-1376.89$ $\tau=8.09$ $\sigma_{ID,max}=1552.25$

Asta n. 5005 (-880 -860) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.01$ (L/25420)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.07$ (L/4609)
- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-13131.90
N,Ed=-13131.90 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.18
- Verifica di stabilità (4.2.4.1.3.1) - CC 25
Sollecitazioni: N=-13131.90 L=320.00
 $\lambda=79.28$ Ncr=70851.00 $\lambda^*=1.04$
Curva a: $\Phi=1.13$ $\chi_{,min}=0.64$ N,Ed=-13131.90 Nb,Rd=46443.40 N,Ed/Nb,Rd=0.28

Asta n. 5006 (-881 -863) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.01$ (L/24672)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.04$ (L/4497)
- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-13606.30
N,Ed=-13606.30 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.19
- Verifica di stabilità (4.2.4.1.3.1) - CC 25
Sollecitazioni: N=-13606.30 L=160.00
 $\lambda=39.64$ Ncr=283404.00 $\lambda^*=0.52$
Curva a: $\Phi=0.67$ $\chi_{,min}=0.92$ N,Ed=-13606.30 Nb,Rd=66718.00 N,Ed/Nb,Rd=0.20

Asta n. 5007 (1947 2002) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.01$ (L/30146)
- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.61 - Classe 3
Sollecitazioni: N=5061.72
Tensioni: $\sigma_N=235.56$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{max}=235.56$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=235.56$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{ID,max}=235.56$

Asta n. 5008 (1948 2003) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.00$ (L/52756)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.02$ (L/10048)
- Verifica a compressione (4.2.10) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-7477.80
N,Ed=-7477.80 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.10

Asta n. 5009 (2003 1947) Cir. D=4 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 15 - Classe 3
Sollecitazioni: N,Ed=-3835.95 M,Ed=4.05
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=259.36
 $\lambda=259.36$ Ncr=3872.04 $\lambda^*=3.39$ Curva c: $\Phi=7.04$ $\chi_{\min}=0.08$
 $\chi_{\min}=0.08$
Verifica: $1.19 + 2.04 = 3.24$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/143133)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.14$ (L/1815) $f_{z,g}=0.09$ (L/2943)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.30 - Classe 3
Sollecitazioni: N=-4593.83 M=5.39
Tensioni: $\sigma_N=-365.57$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{\max}=-451.43$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{\max}=0.00$
Tensioni: $\sigma_N=-365.57$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{ID,\max}=451.43$

Asta n. 5010 (2002 1948) Cir. D=4 Crit. 1

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 25 - Classe 3
 $L_{cr}=2.10$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ M,cr=0.00 $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ $f=0.00$ $\chi_{LT}=1.00$
CC 25 $M_y,Ed=-5.68$ $M_y,b,Rd=212.43$ $M_y,Ed/M_y,b,Rd=0.03$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 23 - Classe 3
Sollecitazioni: N,Ed=-807.13 M,Ed=3.28
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=209.96
 $\lambda=209.96$ Ncr=5908.50 $\lambda^*=2.75$ Curva c: $\Phi=4.90$ $\chi_{\min}=0.11$
 $\chi_{\min}=0.11$
Verifica: $0.17 + 0.02 = 0.19$

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.08$ (L/2772) $f_{z,g}=0.06$ (L/3305)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.05 - Classe 3
Sollecitazioni: N=6222.77 M=4.37
Tensioni: $\sigma_N=495.19$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{\max}=564.70$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{\max}=0.00$
Tensioni: $\sigma_N=495.19$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{ID,\max}=564.70$

Asta n. 5011 (1944 2000) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/120586)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/20587)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.61 - Classe 3
Sollecitazioni: N=4975.41
Tensioni: $\sigma_N=231.54$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{\max}=231.54$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{\max}=0.00$
Tensioni: $\sigma_N=231.54$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{ID,\max}=231.54$

Asta n. 5012 (1945 2001) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-7494.50 M,Ed=0.00
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=161.00
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=39.89$ Ncr=279894.00 $\lambda^*=0.52$
Curva a: $\Phi=0.67$ $\chi_{\min}=0.92$
Kyy, Kyz, Kzy, Kzz = 0.98, ----, ----, ----
Verifica: $0.10 = 0.10$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/84410)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/13837)

- Verifica a compressione (4.2.10) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-7494.50
N,Ed=-7494.50 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.10

Asta n. 5013 (1944 2001) Cir. D=4 Crit. 1

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- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 23 - Classe 3
L_{cr}=2.59 Curva d: α -imp=0.76 K_c=0.94 ψ =1.75 M,cr=0.00 λ_{LT} =0.00
 $\lambda_{LT,0}$ =0.00 β_{LT} =0.00 Φ_{LT} =0.00 β_{LT} =0.00 f=0.00 χ_{LT} =1.00
CC 23 My,Ed=-5.39 My,b,Rd=212.43 My,Ed/My,b,Rd=0.03
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 17 - Classe 3
Sollecitazioni: N,Ed=-3432.32 M,Ed=4.05
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=259.36
 λ =259.36 Ncr=3872.04 λ^* =3.39 Curva c: Φ =7.04 χ ,min=0.08
 χ ,min=0.08
Verifica: 1.07 + 0.17 = 1.24
 - Verifica Freccia massima per soli carichi accidentali - CC 26
f_{z,g}=0.00 (L/113313)
 - Verifica Freccia massima carichi totali - CC 26
f_{z,l}=0.14 (L/1814) f_{z,g}=0.10 (L/2602)
 - Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.30 - Classe 3
Sollecitazioni: N=-6710.73 M=5.39
Tensioni: σ_N =-534.02 σ_M =-85.86 τ =0.00 σ_{max} =-619.88
Tensioni: σ_N =0.00 σ_M =0.00 τ =0.00 τ_{max} =0.00
Tensioni: σ_N =-534.02 σ_M =-85.86 τ =0.00 $\sigma_{ID,max}$ =619.88

Asta n. 5014 (1945 2000) Cir. D=4 Crit. 1

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- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 25 - Classe 3
L_{cr}=2.10 Curva d: α -imp=0.76 K_c=0.94 ψ =1.75 M,cr=0.00 λ_{LT} =0.00
 $\lambda_{LT,0}$ =0.00 β_{LT} =0.00 Φ_{LT} =0.00 β_{LT} =0.00 f=0.00 χ_{LT} =1.00
CC 25 My,Ed=-5.68 My,b,Rd=212.43 My,Ed/My,b,Rd=0.03
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 23 - Classe 3
Sollecitazioni: N,Ed=-454.29 M,Ed=3.28
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=209.96
 λ =209.96 Ncr=5908.50 λ^* =2.75 Curva c: Φ =4.90 χ ,min=0.11
 χ ,min=0.11
Verifica: 0.10 + 0.02 = 0.11
 - Verifica Freccia massima per soli carichi accidentali - CC 26
f_{z,g}=0.00 (L/110076)
 - Verifica Freccia massima carichi totali - CC 26
f_{z,l}=0.08 (L/2772) f_{z,g}=0.06 (L/3776)
 - Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.05 - Classe 3
Sollecitazioni: N=9332.68 M=4.37
Tensioni: σ_N =742.67 σ_M =69.51 τ =0.00 σ_{max} =812.18
Tensioni: σ_N =0.00 σ_M =0.00 τ =0.00 τ_{max} =0.00
Tensioni: σ_N =742.67 σ_M =69.51 τ =0.00 $\sigma_{ID,max}$ =812.18

Asta n. 5015 (1939 1935) Cir.c D=120/6 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2495.74 M,Ed=2.86
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=102.22
 $\alpha_y, \alpha_z, \alpha_{LT}$ = 0.95, ----, ----
 λ =25.33 Ncr=694405.00 λ^* =0.33
Curva a: Φ =0.57 χ ,min=0.97
K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, ----, ----, ----
Verifica: 0.03 + 0.00 = 0.04
 - Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.51 - Classe 3
Sollecitazioni: N=-2495.74 M=2.86
Tensioni: σ_N =-116.14 σ_M =-4.91 τ =0.00 σ_{max} =-121.05
Tensioni: σ_N =0.00 σ_M =0.00 τ =0.00 τ_{max} =0.00
Tensioni: σ_N =-116.14 σ_M =-4.91 τ =0.00 $\sigma_{ID,max}$ =121.05

Asta n. 5016 (1935 1937) Cir.c D=120/6 Crit. 1

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2850.76 M,Ed=4.01
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=120.97
 $\alpha_y, \alpha_z, \alpha_{LT}$ = 0.95, ----, ----

$\lambda=29.97$ Ncr=495806.00 $\lambda^*=0.39$
Curva a: $\Phi=0.60$ $\chi_{\min}=0.95$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.04 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.60 - Classe 3
Sollecitazioni: N=-2850.76 M=4.01
Tensioni: $\sigma_N=-132.66$ $\sigma_M=-6.88$ $\tau=0.00$ $\sigma_{\max}=-139.54$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{\max}=0.00$
Tensioni: $\sigma_N=-132.66$ $\sigma_M=-6.88$ $\tau=0.00$ $\sigma_{ID,\max}=139.54$

Asta n. 5017 (1937 1933) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2447.89 M,Ed=2.89
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=102.73
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, ----, ----$
 $\lambda=25.45$ Ncr=687497.00 $\lambda^*=0.33$
Curva a: $\Phi=0.57$ $\chi_{\min}=0.97$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.03 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.51 - Classe 3
Sollecitazioni: N=-2447.89 M=2.89
Tensioni: $\sigma_N=-113.92$ $\sigma_M=-4.96$ $\tau=0.00$ $\sigma_{\max}=-118.87$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{\max}=0.00$
Tensioni: $\sigma_N=-113.92$ $\sigma_M=-4.96$ $\tau=0.00$ $\sigma_{ID,\max}=118.87$

Asta n. 5018 (1933 1939) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2847.03 M,Ed=3.97
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=120.28
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, ----, ----$
 $\lambda=29.80$ Ncr=501459.00 $\lambda^*=0.39$
Curva a: $\Phi=0.60$ $\chi_{\min}=0.96$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.04 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.60 - Classe 3
Sollecitazioni: N=-2847.03 M=3.97
Tensioni: $\sigma_N=-132.49$ $\sigma_M=-6.80$ $\tau=0.00$ $\sigma_{\max}=-139.29$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{\max}=0.00$
Tensioni: $\sigma_N=-132.49$ $\sigma_M=-6.80$ $\tau=0.00$ $\sigma_{ID,\max}=139.29$

Asta n. 5101 (1939 1946) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7042.14 My,Ed=402.95 Mz,Ed=-4884.81
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=526.58
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.27$ Curva b: $\alpha_{\text{imp}}=0.34$ $K_c=0.94$ $\psi=1.73$ $M_{cr}=56525.10$ $\lambda_{LT}=0.56$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=73.65$ Ncr,y=325125.00 $\lambda_y^*=0.96$ Curva b: $\Phi_y=1.09$ $\chi_y=0.62$
 $\lambda_z=100.89$ Ncr,z=173260.00 $\lambda_z^*=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 0.97, 0.99, 0.78, 0.99
Verifica YY: 0.04 + 0.02 + 0.77 = 0.83
Verifica ZZ: 0.06 + 0.02 + 0.77 = 0.85

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/38884) $f_{z,L}=0.01$ (L/52090)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/6054) $f_{z,L}=0.06$ (L/9141)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=5.27 - Classe 3
Sollecitazioni: N=-6590.59 Tz=-78.23 My=402.95 Ty=-1635.92 Mz=-4884.81
Tensioni: $\sigma_N=-77.45$ $\sigma_M=-2715.23$ $\tau=0.00$ $\sigma_{\max}=-2792.69$
Tensioni: $\sigma_N=-77.45$ $\sigma_M=-254.65$ $\tau=31.32$ $\tau_{\max}=31.32$
Tensioni: $\sigma_N=-77.45$ $\sigma_M=-2715.23$ $\tau=0.00$ $\sigma_{ID,\max}=2792.69$

Asta n. 5102 (1933 1949) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-18615.30 My,Ed=-322.66 Mz,Ed=-2372.71

Resistenze: $N_c, R_d=287692.00$ $M_y, c, R_d=16807.20$ $M_z, c, R_d=6269.63$ $L=553.99$
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.54$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.54$ $M, cr=47484.50$ $\lambda_{LT}=0.61$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.68$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.94$
 $\lambda_y=77.48$ $N_{cr,y}=293755.00$ $\lambda'_y=1.01$ Curva b: $\Phi_y=1.15$ $\chi_y=0.59$
 $\lambda_z=106.14$ $N_{cr,z}=156543.00$ $\lambda'_z=1.39$ Curva c: $\Phi_z=1.76$ $\chi_z=0.35$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.01, 1.05, 0.81, 1.05$
Verifica YY: $0.11 + 0.02 + 0.40 = 0.53$
Verifica ZZ: $0.18 + 0.02 + 0.40 = 0.60$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.02$ (L/33384) $f_{z,L}=0.00$ (L/132021)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.09$ (L/5933) $f_{z,L}=0.02$ (L/23423)

- Verifica in termini tensionali (4.2.5) - CC 9 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-18615.30$ $T_z=65.98$ $M_y=67.02$ $T_y=770.98$ $M_z=-2372.71$ $M_x=-9.82$
Tensioni: $\sigma_N=-218.77$ $\sigma_M=-1292.99$ $\tau=9.84$ $\sigma_{max}=-1511.75$
Tensioni: $\sigma_N=-218.77$ $\sigma_M=-102.93$ $\tau=36.00$ $\tau_{max}=36.00$
Tensioni: $\sigma_N=-218.77$ $\sigma_M=-1292.99$ $\tau=9.84$ $\sigma_{ID,max}=1511.85$

Asta n. 5103 (1937 1943) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N, Ed=-7042.14$ $M_y, Ed=116.10$ $M_z, Ed=-4891.02$
Resistenze: $N_c, R_d=287692.00$ $M_y, c, R_d=16807.20$ $M_z, c, R_d=6269.63$ $L=526.43$
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.26$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.22$ $M, cr=39967.10$ $\lambda_{LT}=0.66$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.71$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.91$
 $\lambda_y=73.63$ $N_{cr,y}=325318.00$ $\lambda'_y=0.96$ Curva b: $\Phi_y=1.09$ $\chi_y=0.62$
 $\lambda_z=100.86$ $N_{cr,z}=173363.00$ $\lambda'_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.97, 0.99, 0.78, 0.99$
Verifica YY: $0.04 + 0.01 + 0.77 = 0.82$
Verifica ZZ: $0.06 + 0.01 + 0.77 = 0.84$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.01$ (L/39712) $f_{z,L}=0.00$ (L/501815)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.09$ (L/6174) $f_{z,L}=0.01$ (L/51588)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=5.26$ - Classe 3
Sollecitazioni: $N=-6590.59$ $T_z=-35.53$ $M_y=116.10$ $T_y=-1648.68$ $M_z=-4891.02$ $M_x=6.80$
Tensioni: $\sigma_N=-77.45$ $\sigma_M=-2660.88$ $\tau=6.82$ $\sigma_{max}=-2738.33$
Tensioni: $\sigma_N=-77.45$ $\sigma_M=-208.63$ $\tau=38.65$ $\tau_{max}=38.65$
Tensioni: $\sigma_N=-77.45$ $\sigma_M=-2660.88$ $\tau=6.82$ $\sigma_{ID,max}=2738.36$

Asta n. 5104 (1935 1940) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N, Ed=-20197.20$ $M_y, Ed=-103.11$ $M_z, Ed=-1870.63$
Resistenze: $N_c, R_d=287692.00$ $M_y, c, R_d=16807.20$ $M_z, c, R_d=6269.63$ $L=553.99$
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.54$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.30$ $M, cr=39854.40$ $\lambda_{LT}=0.67$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.71$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.91$
 $\lambda_y=77.48$ $N_{cr,y}=293755.00$ $\lambda'_y=1.01$ Curva b: $\Phi_y=1.15$ $\chi_y=0.59$
 $\lambda_z=106.14$ $N_{cr,z}=156543.00$ $\lambda'_z=1.39$ Curva c: $\Phi_z=1.76$ $\chi_z=0.35$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.02, 1.06, 0.81, 1.06$
Verifica YY: $0.12 + 0.01 + 0.32 = 0.44$
Verifica ZZ: $0.20 + 0.01 + 0.32 = 0.52$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.02$ (L/35857) $f_{z,L}=0.00$ (L/363059)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.09$ (L/6447) $f_{z,L}=0.01$ (L/69154)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-20197.20$ $T_z=28.00$ $M_y=52.02$ $T_y=744.26$ $M_z=-1870.63$ $M_x=-7.04$
Tensioni: $\sigma_N=-237.36$ $\sigma_M=-1019.22$ $\tau=7.06$ $\sigma_{max}=-1256.57$
Tensioni: $\sigma_N=-237.36$ $\sigma_M=-81.02$ $\tau=27.00$ $\tau_{max}=27.00$
Tensioni: $\sigma_N=-237.36$ $\sigma_M=-1019.22$ $\tau=7.06$ $\sigma_{ID,max}=1256.63$

Asta n. 5105 (-860 2004) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-11549.50 M,Ed=0.12
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=78.22
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda = 19.38$ Ncr=1185880.00 $\lambda^* = 0.25$
Curva a: $\Phi = 0.54$ $\chi_{\min} = 0.99$
Kyy, Kyz, Kzy, Kzz = 0.97, ----, ----, ----
Verifica: 0.16 + 0.00 = 0.16

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g} = 0.00$ (L/27338)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g} = 0.01$ (L/5257)

- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-11549.50
N,Ed=-11549.50 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.16

Asta n. 5106 (-863 2005) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-10739.30 M,Ed=0.29
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=66.17
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda = 16.39$ Ncr=1657040.00 $\lambda^* = 0.21$
Curva a: $\Phi = 0.52$ $\chi_{\min} = 1.00$
Kyy, Kyz, Kzy, Kzz = 0.97, ----, ----, ----
Verifica: 0.15 + 0.00 = 0.15

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g} = 0.00$ (L/31537)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g} = 0.01$ (L/6086)

- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-10739.30 T=1.76
N,Ed=-10739.30 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.15

Asta n. 5211 (1946 1948) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3296.87 My,Ed=1263.87 Mz,Ed=-1994.86
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=379.60
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 3.80$ Curva b: $\alpha\text{-imp} = 0.34$ $k_c = 0.94$ $\psi = 1.75$ M,cr=39930.60 $\lambda_{LT} = 0.51$
 $\lambda_{LT,0} = 0.40$ $\beta_{LT} = 0.75$ $\Phi_{LT} = 0.62$ $\beta_{LT} = 0.75$ $f = 0.98$ $\chi_{LT} = 0.98$
 $\lambda_y = 62.61$ Ncr,y=307021.00 $\lambda^*_y = 0.82$ Curva b: $\Phi_y = 0.94$ $\chi_y = 0.71$
 $\lambda_z = 83.04$ Ncr,z=174529.00 $\lambda^*_z = 1.09$ Curva c: $\Phi_z = 1.31$ $\chi_z = 0.49$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: 0.02 + 0.13 + 0.51 = 0.65
Verifica ZZ: 0.02 + 0.10 + 0.51 = 0.62

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g} = 0.06$ (L/6622) $f_{z,L} = 0.03$ (L/10995)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g} = 0.32$ (L/1187) $f_{z,L} = 0.20$ (L/1945)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3296.87 Tz=332.95 My=1263.87 Ty=595.19 Mz=-1994.86
Tensioni: $\sigma_N = -56.78$ $\sigma_M = -2199.62$ $\tau = 0.00$ $\sigma_{\max} = -2256.40$
Tensioni: $\sigma_N = -56.78$ $\sigma_M = -451.92$ $\tau = 23.42$ $\tau_{\max} = 23.42$
Tensioni: $\sigma_N = -56.78$ $\sigma_M = -2199.62$ $\tau = 0.00$ $\sigma_{ID,\max} = 2256.40$

Asta n. 5212 (1946 1947) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3555.81 My,Ed=-1159.06 Mz,Ed=-2514.56
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=334.12
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 3.34$ Curva b: $\alpha\text{-imp} = 0.34$ $k_c = 0.94$ $\psi = 1.75$ M,cr=47739.80 $\lambda_{LT} = 0.47$
 $\lambda_{LT,0} = 0.40$ $\beta_{LT} = 0.75$ $\Phi_{LT} = 0.59$ $\beta_{LT} = 0.75$ $f = 0.98$ $\chi_{LT} = 1.00$
 $\lambda_y = 55.11$ Ncr,y=396295.00 $\lambda^*_y = 0.72$ Curva b: $\Phi_y = 0.85$ $\chi_y = 0.77$

$\lambda_z=73.09$ Ncr, z=225278.00 $\lambda'_z=0.96$ Curva c: $\Phi_z=1.14$ $\chi_z=0.57$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: 0.02 + 0.11 + 0.64 = 0.77
Verifica ZZ: 0.02 + 0.09 + 0.64 = 0.75

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.06$ (L/5878) $f_{z,L}=0.02$ (L/13371)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.32$ (L/1042) $f_{z,L}=0.14$ (L/2399)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3555.81 T_z=-346.90 M_y=-1159.06 T_y=814.03 M_z=-2514.56
Tensioni: $\sigma_N=-61.24$ $\sigma_M=-2624.22$ $\tau=0.00$ $\sigma_{max}=-2685.45$
Tensioni: $\sigma_N=-61.24$ $\sigma_M=181.74$ $\tau=28.09$ $\tau_{max}=28.09$
Tensioni: $\sigma_N=-61.24$ $\sigma_M=-2624.22$ $\tau=0.00$ $\sigma_{ID,max}=2685.45$

Asta n. 5212 (1949 1951) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-11653.00 M_y,Ed=657.96 M_z,Ed=241.88
Resistenze: Nc,Rd=196322.00 M_y,c,Rd=9885.72 M_z,c,Rd=3816.13 L=437.01
 α_{my} , α_{mz} , $\alpha_{LT} = 0.95, 0.95, 0.95$
L_{cr}=4.37 Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M_{cr}=33075.30 $\lambda_{LT}=0.56$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=72.08$ Ncr, y=231653.00 $\lambda'_y=0.94$ Curva b: $\Phi_y=1.07$ $\chi_y=0.63$
 $\lambda_z=95.60$ Ncr, z=131685.00 $\lambda'_z=1.25$ Curva c: $\Phi_z=1.54$ $\chi_z=0.41$
Kyy, Kyz, Kzy, Kzz = 1.00, 1.03, 0.80, 1.03
Verifica YY: 0.09 + 0.07 + 0.07 = 0.23
Verifica ZZ: 0.14 + 0.06 + 0.07 = 0.27

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.02$ (L/19751) $f_{z,g}=0.01$ (L/34453)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.14$ (L/3217) $f_{z,g}=0.08$ (L/5285)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-11653.00 T_z=150.56 M_y=657.96 T_y=15.83 M_z=237.99
Tensioni: $\sigma_N=-200.68$ $\sigma_M=-435.88$ $\tau=0.00$ $\sigma_{max}=-636.56$
Tensioni: $\sigma_N=-200.68$ $\sigma_M=12.75$ $\tau=9.06$ $\tau_{max}=9.06$
Tensioni: $\sigma_N=-200.68$ $\sigma_M=-435.88$ $\tau=0.00$ $\sigma_{ID,max}=636.56$

Asta n. 5213 (1943 1944) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3183.15 M_y,Ed=1056.35 M_z,Ed=-2060.58
Resistenze: Nc,Rd=196322.00 M_y,c,Rd=9885.72 M_z,c,Rd=3816.13 L=352.04
 α_{my} , α_{mz} , $\alpha_{LT} = 0.95, 0.95, 0.95$
L_{cr}=3.52 Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M_{cr}=44330.50 $\lambda_{LT}=0.48$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.60$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=58.06$ Ncr, y=356964.00 $\lambda'_y=0.76$ Curva b: $\Phi_y=0.88$ $\chi_y=0.75$
 $\lambda_z=77.01$ Ncr, z=202920.00 $\lambda'_z=1.01$ Curva c: $\Phi_z=1.21$ $\chi_z=0.54$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: 0.02 + 0.10 + 0.52 = 0.64
Verifica ZZ: 0.02 + 0.08 + 0.52 = 0.62

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.05$ (L/6442) $f_{z,L}=0.02$ (L/14089)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.31$ (L/1141) $f_{z,L}=0.14$ (L/2521)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3183.15 T_z=300.07 M_y=1056.35 T_y=654.99 M_z=-2060.58
Tensioni: $\sigma_N=-54.82$ $\sigma_M=-2186.88$ $\tau=0.00$ $\sigma_{max}=-2241.70$
Tensioni: $\sigma_N=-54.82$ $\sigma_M=-398.79$ $\tau=23.32$ $\tau_{max}=23.32$
Tensioni: $\sigma_N=-54.82$ $\sigma_M=-2186.88$ $\tau=0.00$ $\sigma_{ID,max}=2241.70$

Asta n. 5214 (1940 1942) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-8918.77 M_y,Ed=-879.10 M_z,Ed=-186.03
Resistenze: Nc,Rd=196322.00 M_y,c,Rd=9885.72 M_z,c,Rd=3816.13 L=448.31
 α_{my} , α_{mz} , $\alpha_{LT} = 0.95, 0.95, 0.95$
L_{cr}=4.48 Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M_{cr}=31994.10 $\lambda_{LT}=0.57$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.65$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=73.94$ Ncr,y=220115.00 $\lambda'_y=0.97$ Curva b: $\Phi_y=1.10$ $\chi_y=0.62$
 $\lambda_z=98.07$ Ncr,z=125127.00 $\lambda'_z=1.28$ Curva c: $\Phi_z=1.59$ $\chi_z=0.40$
Kyy, Kyz, Kzy, Kzz = 0.99, 1.02, 0.79, 1.02
Verifica YY: 0.07 + 0.09 + 0.05 = 0.22
Verifica ZZ: 0.11 + 0.07 + 0.05 = 0.24

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.03$ (L/14177) $f_{z,G}=0.00$ (L/138261)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.19$ (L/2349) $f_{z,G}=0.02$ (L/23741)

- Verifica in termini tensionali (4.2.5) - CC 25 X1=0.00 - Classe 3
Sollecitazioni: N=-8918.77 Tz=-196.09 My=-879.10 Ty=123.00 Mz=-186.03
Tensioni: $\sigma_N=-153.59$ $\sigma_M=-465.47$ $\tau=0.00$ $\sigma_{max}=-619.07$
Tensioni: $\sigma_N=-153.59$ $\sigma_M=-9.97$ $\tau=11.82$ $\tau_{max}=11.82$
Tensioni: $\sigma_N=-153.59$ $\sigma_M=-465.47$ $\tau=0.00$ $\sigma_{ID,max}=619.07$

Asta n. 5222 (1949 1950) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-9602.56 My,Ed=-721.72 Mz,Ed=-178.36
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=458.65
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.59$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=31066.50 $\lambda_{LT}=0.58$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.66$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.95$
 $\lambda_y=75.65$ Ncr,y=210307.00 $\lambda'_y=0.99$ Curva b: $\Phi_y=1.12$ $\chi_y=0.60$
 $\lambda_z=100.33$ Ncr,z=119551.00 $\lambda'_z=1.31$ Curva c: $\Phi_z=1.63$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 1.00, 1.02, 0.80, 1.02
Verifica YY: 0.08 + 0.08 + 0.05 = 0.21
Verifica ZZ: 0.13 + 0.06 + 0.05 = 0.24

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.03$ (L/16993) $f_{z,G}=0.00$ (L/123314)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.16$ (L/2799) $f_{z,G}=0.02$ (L/22060)

- Verifica in termini tensionali (4.2.5) - CC 25 X1=0.00 - Classe 3
Sollecitazioni: N=-9602.56 Tz=-157.36 My=-721.72 Ty=120.39 Mz=-178.36
Tensioni: $\sigma_N=-165.37$ $\sigma_M=-404.85$ $\tau=0.00$ $\sigma_{max}=-570.22$
Tensioni: $\sigma_N=-165.37$ $\sigma_M=-9.55$ $\tau=9.49$ $\tau_{max}=9.49$
Tensioni: $\sigma_N=-165.37$ $\sigma_M=-404.85$ $\tau=0.00$ $\sigma_{ID,max}=570.22$

Asta n. 5223 (1943 1945) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3676.60 My,Ed=-1191.96 Mz,Ed=-2503.13
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=363.03
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.63$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=42465.80 $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=59.88$ Ncr,y=335675.00 $\lambda'_y=0.78$ Curva b: $\Phi_y=0.91$ $\chi_y=0.73$
 $\lambda_z=79.42$ Ncr,z=190818.00 $\lambda'_z=1.04$ Curva c: $\Phi_z=1.25$ $\chi_z=0.52$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: 0.02 + 0.12 + 0.64 = 0.77
Verifica ZZ: 0.02 + 0.09 + 0.64 = 0.75

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.06$ (L/5947) $f_{z,L}=0.03$ (L/12084)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.34$ (L/1054) $f_{z,L}=0.17$ (L/2143)

- Verifica in termini tensionali (4.2.5) - CC 25 X1=0.00 - Classe 3
Sollecitazioni: N=-3676.60 Tz=-328.33 My=-1191.96 Ty=750.94 Mz=-2503.13
Tensioni: $\sigma_N=-63.32$ $\sigma_M=-2625.34$ $\tau=0.00$ $\sigma_{max}=-2688.66$
Tensioni: $\sigma_N=-63.32$ $\sigma_M=191.33$ $\tau=26.19$ $\tau_{max}=26.19$
Tensioni: $\sigma_N=-63.32$ $\sigma_M=-2625.34$ $\tau=0.00$ $\sigma_{ID,max}=2688.66$

Asta n. 5224 (1940 1941) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-11080.30 My,Ed=528.77 Mz,Ed=259.58
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=426.15

$\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=4.26$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=34185.30$ $\lambda_{LT}=0.55$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=70.29$ Ncr,y=243609.00 $\lambda'_y=0.92$ Curva b: $\Phi_y=1.05$ $\chi_y=0.65$
 $\lambda_z=93.22$ Ncr,z=138482.00 $\lambda'_z=1.22$ Curva c: $\Phi_z=1.49$ $\chi_z=0.42$
Kyy, Kyz, Kzy, Kzz = 1.00, 1.03, 0.80, 1.03
Verifica YY: $0.09 + 0.06 + 0.07 = 0.21$
Verifica ZZ: $0.13 + 0.04 + 0.07 = 0.25$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.02$ (L/26285) $f_{z,G}=0.01$ (L/33852)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.10$ (L/4084) $f_{z,G}=0.08$ (L/5124)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-11080.30$ $T_x=124.08$ $M_y=528.77$ $T_y=9.71$ $M_z=258.15$
Tensioni: $\sigma_N=-190.82$ $\sigma_M=-409.56$ $\tau=0.00$ $\sigma_{max}=-600.37$
Tensioni: $\sigma_N=-190.82$ $\sigma_M=13.83$ $\tau=7.47$ $\tau_{max}=7.47$
Tensioni: $\sigma_N=-190.82$ $\sigma_M=-409.56$ $\tau=0.00$ $\sigma_{ID,max}=600.37$

Asta n. 5232 (-860 1952) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N, Ed=-4505.19$ $M_y, Ed=-87.84$ $M_z, Ed=-718.05$
Resistenze: $N_c, Rd=196322.00$ $M_y, c, Rd=9885.72$ $M_z, c, Rd=3816.13$ $L=123.57$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=248865.00$ $\lambda_{LT}=0.20$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.48$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: $0.02 + 0.01 + 0.18 = 0.21$
Verifica ZZ: $0.02 + 0.01 + 0.18 = 0.21$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.00$ (L/43189)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.02$ (L/6819) $f_{z,L}=0.00$ (L/53986)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-4505.19$ $T_x=-71.09$ $M_y=-87.84$ $T_y=614.32$ $M_z=-718.05$
Tensioni: $\sigma_N=-77.59$ $\sigma_M=-666.21$ $\tau=0.00$ $\sigma_{max}=-743.80$
Tensioni: $\sigma_N=-77.59$ $\sigma_M=-14.48$ $\tau=16.62$ $\tau_{max}=16.62$
Tensioni: $\sigma_N=-77.59$ $\sigma_M=-666.21$ $\tau=0.00$ $\sigma_{ID,max}=743.80$

Asta n. 5232 (-859 -860) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N, Ed=-3110.87$ $M_y, Ed=-87.84$ $M_z, Ed=-718.05$
Resistenze: $N_c, Rd=196322.00$ $M_y, c, Rd=9885.72$ $M_z, c, Rd=3816.13$ $L=123.57$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.14$ $M, cr=161654.00$ $\lambda_{LT}=0.25$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: $0.02 + 0.01 + 0.18 = 0.20$
Verifica ZZ: $0.02 + 0.01 + 0.18 = 0.20$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.00$ (L/31601)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.02$ (L/5376) $f_{z,L}=0.00$ (L/46274)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=1.24$ - Classe 3
Sollecitazioni: $N=-3080.06$ $T_x=18.42$ $M_y=-87.84$ $T_y=-426.77$ $M_z=-718.05$
Tensioni: $\sigma_N=-53.04$ $\sigma_M=-666.21$ $\tau=0.00$ $\sigma_{max}=-719.26$
Tensioni: $\sigma_N=-53.04$ $\sigma_M=-14.48$ $\tau=11.29$ $\tau_{max}=11.29$
Tensioni: $\sigma_N=-53.04$ $\sigma_M=-666.21$ $\tau=0.00$ $\sigma_{ID,max}=719.26$

Asta n. 5232 (-858 -859) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3141.68 My,Ed=-65.08 Mz,Ed=-231.75
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.19$ M,cr=169806.00 $\lambda_{LT}=0.25$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.01 + 0.06 = 0.08
Verifica ZZ: 0.02 + 0.01 + 0.06 = 0.08

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.00$ (L/53986) $f_{z,G}=0.00$ (L/92548)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.24 - Classe 3
Sollecitazioni: N=-3110.87 Tz=18.42 My=-65.08 Ty=-360.35 Mz=-231.75
Tensioni: $\sigma_N=-53.57$ $\sigma_M=-227.58$ $\tau=0.00$ $\sigma_{max}=-281.15$
Tensioni: $\sigma_N=-53.57$ $\sigma_M=5.35$ $\tau=9.55$ $\tau_{max}=9.55$
Tensioni: $\sigma_N=-53.57$ $\sigma_M=-227.58$ $\tau=0.00$ $\sigma_{ID,max}=281.15$

Asta n. 5232 (-857 -858) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3172.50 My,Ed=-42.32 Mz,Ed=494.63
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.33$ M,cr=188962.00 $\lambda_{LT}=0.23$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.00 + 0.12 = 0.14
Verifica ZZ: 0.02 + 0.00 + 0.12 = 0.14

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.00$ (L/46274)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.02$ (L/6819) $f_{z,L}=0.00$ (L/107973)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3172.50 Tz=18.42 My=-19.56 Ty=-227.50 Mz=494.63
Tensioni: $\sigma_N=-54.64$ $\sigma_M=-444.91$ $\tau=0.00$ $\sigma_{max}=-499.55$
Tensioni: $\sigma_N=-54.64$ $\sigma_M=31.84$ $\tau=6.08$ $\tau_{max}=6.08$
Tensioni: $\sigma_N=-54.64$ $\sigma_M=-444.91$ $\tau=0.00$ $\sigma_{ID,max}=499.55$

Asta n. 5232 (1949 -857) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3203.31 My,Ed=-19.56 Mz,Ed=734.71
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.59$ M,cr=225594.00 $\lambda_{LT}=0.21$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.00 + 0.18 = 0.20
Verifica ZZ: 0.02 + 0.00 + 0.18 = 0.20

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.01$ (L/20566)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.03$ (L/3822) $f_{z,L}=0.00$ (L/107973)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3203.31 Tz=18.42 My=3.20 Ty=-161.08 Mz=734.71
Tensioni: $\sigma_N=-55.17$ $\sigma_M=-652.02$ $\tau=0.00$ $\sigma_{max}=-707.18$
Tensioni: $\sigma_N=-55.17$ $\sigma_M=38.48$ $\tau=4.36$ $\tau_{max}=4.36$
Tensioni: $\sigma_N=-55.17$ $\sigma_M=-652.02$ $\tau=0.00$ $\sigma_{ID,max}=707.18$

Asta n. 5234 (1940 -856) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3889.25 My,Ed=262.66 Mz,Ed=601.88
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.66$ $M,cr=176029.00$ $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda^*_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda^*_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.03 + 0.15 = 0.20
Verifica ZZ: 0.02 + 0.02 + 0.15 = 0.19
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/24157) $f_{z,L}=0.00$ (L/95118)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.03$ (L/4476) $f_{z,L}=0.01$ (L/21137)
- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3889.25 Tz=165.09 My=262.66 Ty=-83.74 Mz=601.88
Tensioni: $\sigma_N=-66.98$ $\sigma_M=-623.07$ $\tau=0.00$ $\sigma_{max}=-690.05$
Tensioni: $\sigma_N=-66.98$ $\sigma_M=32.24$ $\tau=9.95$ $\tau_{max}=9.95$
Tensioni: $\sigma_N=-66.98$ $\sigma_M=-623.07$ $\tau=0.00$ $\sigma_{ID,max}=690.05$

Asta n. 5234 (-856 -861) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3834.61 My,Ed=-216.56 Mz,Ed=432.14
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.64$ $M,cr=174065.00$ $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda^*_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda^*_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.02 + 0.11 = 0.15
Verifica ZZ: 0.02 + 0.02 + 0.11 = 0.14
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/50729) $f_{z,L}=0.00$ (L/95118)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/7316) $f_{z,L}=0.00$ (L/31706)
- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-3834.61 Tz=165.09 My=23.05 Ty=-150.16 Mz=432.14
Tensioni: $\sigma_N=-66.04$ $\sigma_M=-390.74$ $\tau=0.00$ $\sigma_{max}=-456.78$
Tensioni: $\sigma_N=-66.04$ $\sigma_M=23.15$ $\tau=9.97$ $\tau_{max}=9.97$
Tensioni: $\sigma_N=-66.04$ $\sigma_M=-390.74$ $\tau=0.00$ $\sigma_{ID,max}=456.78$

Asta n. 5234 (-861 -862) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3779.98 My,Ed=-456.17 Mz,Ed=-196.55
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.32$ $M,cr=139870.00$ $\lambda_{LT}=0.27$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda^*_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda^*_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.04 + 0.05 = 0.11
Verifica ZZ: 0.02 + 0.04 + 0.05 = 0.10
- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/54353)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.01$ (L/9755) $f_{z,g}=0.00$ (L/80099)
- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.45 - Classe 3
Sollecitazioni: N=-3725.34 Tz=165.09 My=-456.17 Ty=-283.01 Mz=-196.55
Tensioni: $\sigma_N=-64.16$ $\sigma_M=-330.15$ $\tau=0.00$ $\sigma_{max}=-394.31$
Tensioni: $\sigma_N=-64.16$ $\sigma_M=114.01$ $\tau=11.40$ $\tau_{max}=11.40$
Tensioni: $\sigma_N=-64.16$ $\sigma_M=-330.15$ $\tau=0.00$ $\sigma_{ID,max}=394.31$

Asta n. 5234 (-862 -863) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3725.34 My,Ed=-695.79 Mz,Ed=-655.51
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.19$ $M_{cr}=126235.00$ $\lambda_{LT}=0.29$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.07 + 0.16 = 0.25
Verifica ZZ: 0.02 + 0.05 + 0.16 = 0.24

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/31706) $f_{z,G}=0.00$ (L/33819)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.03$ (L/5764) $f_{z,G}=0.02$ (L/6015)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.45 - Classe 3
Sollecitazioni: N=-3670.71 T₂=165.09 M_y=-695.79 T_y=-349.43 M_z=-655.51
Tensioni: $\sigma_N=-63.22$ $\sigma_M=-818.72$ $\tau=0.00$ $\sigma_{max}=-881.93$
Tensioni: $\sigma_N=-63.22$ $\sigma_M=154.85$ $\tau=12.62$ $\tau_{max}=12.62$
Tensioni: $\sigma_N=-63.22$ $\sigma_M=-818.72$ $\tau=0.00$ $\sigma_{ID,max}=881.93$

Asta n. 5234 (-863 1953) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7616.75 My,Ed=-695.79 Mz,Ed=-655.51
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=185555.00$ $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.96, 0.77, 0.96
Verifica YY: 0.04 + 0.07 + 0.16 = 0.27
Verifica ZZ: 0.04 + 0.05 + 0.16 = 0.26

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/47559) $f_{z,G}=0.00$ (L/50729)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.02$ (L/8009) $f_{z,L}=0.02$ (L/8647)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-7616.75 T₂=-479.39 M_y=-695.79 T_y=484.85 M_z=-655.51
Tensioni: $\sigma_N=-131.17$ $\sigma_M=-818.72$ $\tau=0.00$ $\sigma_{max}=-949.89$
Tensioni: $\sigma_N=-131.17$ $\sigma_M=-35.12$ $\tau=28.97$ $\tau_{max}=28.97$
Tensioni: $\sigma_N=-131.17$ $\sigma_M=-818.72$ $\tau=0.00$ $\sigma_{ID,max}=949.89$

Asta n. 6001 (1960 1961) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7400.32 My,Ed=-66.00 Mz,Ed=3619.68
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=700.73
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.01$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.23$ $M_{cr}=28516.30$ $\lambda_{LT}=0.79$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.80$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.85$
 $\lambda_y=98.01$ Ncr,y=183603.00 $\lambda'_y=1.28$ Curva b: $\Phi_y=1.51$ $\chi_y=0.44$
 $\lambda_z=134.26$ Ncr,z=97842.80 $\lambda'_z=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
Kyy, Kyz, Kzy, Kzz = 0.98, 1.01, 0.79, 1.01
Verifica YY: 0.06 + 0.00 + 0.58 = 0.65
Verifica ZZ: 0.11 + 0.00 + 0.58 = 0.69

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.01$ (L/88526) $f_{z,L}=0.00$ (L/293907)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.05$ (L/15212) $f_{z,L}=0.01$ (L/72749)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=7.01 - Classe 3
Sollecitazioni: N=-6792.46 T₂=15.07 M_y=-66.00 T_y=884.70 M_z=3619.68 M_x=-3.61
Tensioni: $\sigma_N=-79.82$ $\sigma_M=-1965.22$ $\tau=3.62$ $\sigma_{max}=-2045.05$

Tensioni: $\sigma_N=-79.82$ $\sigma_M=151.19$ $\tau=20.60$ $\tau_{max}=20.60$
Tensioni: $\sigma_N=-79.82$ $\sigma_M=-1965.22$ $\tau=3.62$ $\sigma_{ID,max}=2045.06$

Asta n. 6002 (1954 1955) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-19862.00 My,Ed=-360.74 Mz,Ed=-1766.72
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=702.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=7.02$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.55$ M,cr=35798.20 $\lambda_{LT}=0.70$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.74$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.89$

$\lambda_y=98.21$ Ncr,y=182868.00 $\lambda^*_y=1.29$ Curva b: $\Phi_y=1.51$ $\chi_y=0.43$

$\lambda_z=134.53$ Ncr,z=97451.20 $\lambda^*_z=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$

Kyy, Kyz, Kzy, Kzz = 1.04, 1.11, 0.83, 1.11

Verifica YY: $0.16 + 0.02 + 0.31 = 0.50$

Verifica ZZ: $0.28 + 0.02 + 0.31 = 0.62$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,L}=0.01$ (L/51128) $f_{z,G}=0.01$ (L/73994)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,L}=0.08$ (L/9067) $f_{z,G}=0.06$ (L/12553)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=7.02 - Classe 3

Sollecitazioni: N=-19254.20 Tz=-62.02 My=74.71 Ty=-476.67 Mz=-1766.72 Mx=5.21

Tensioni: $\sigma_N=-226.28$ $\sigma_M=-967.75$ $\tau=5.22$ $\sigma_{max}=-1194.02$

Tensioni: $\sigma_N=-226.28$ $\sigma_M=-80.64$ $\tau=20.40$ $\tau_{max}=20.40$

Tensioni: $\sigma_N=-226.28$ $\sigma_M=-967.75$ $\tau=5.22$ $\sigma_{ID,max}=1194.06$

Asta n. 6004 (1892 1893) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3

Sollecitazioni: N,Ed=-5228.71 My,Ed=-4075.46 Mz,Ed=2595.61
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=700.78
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=7.01$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.44$ M,cr=33466.60 $\lambda_{LT}=0.73$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.75$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.88$

$\lambda_y=98.02$ Ncr,y=183579.00 $\lambda^*_y=1.28$ Curva b: $\Phi_y=1.51$ $\chi_y=0.44$

$\lambda_z=134.27$ Ncr,z=97829.90 $\lambda^*_z=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$

Kyy, Kyz, Kzy, Kzz = 0.97, 0.99, 0.78, 0.99

Verifica YY: $0.04 + 0.27 + 0.41 = 0.72$

Verifica ZZ: $0.07 + 0.21 + 0.41 = 0.70$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,L}=0.01$ (L/74981) $f_{z,G}=0.01$ (L/86449)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,L}=0.05$ (L/12868) $f_{z,G}=0.05$ (L/15011)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=7.01 - Classe 3

Sollecitazioni: N=-6709.53 Tz=-8.47 My=-72.89 Ty=882.55 Mz=3609.32 Mx=-1.15

Tensioni: $\sigma_N=-78.85$ $\sigma_M=-1961.02$ $\tau=1.15$ $\sigma_{max}=-2039.87$

Tensioni: $\sigma_N=-78.85$ $\sigma_M=151.89$ $\tau=17.99$ $\tau_{max}=17.99$

Tensioni: $\sigma_N=-78.85$ $\sigma_M=-1961.02$ $\tau=1.15$ $\sigma_{ID,max}=2039.87$

Asta n. 6004 (1956 1957) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-20838.90 My,Ed=-379.43 Mz,Ed=-2090.78
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=702.06
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=7.02$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.55$ M,cr=35968.50 $\lambda_{LT}=0.70$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.74$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.90$

$\lambda_y=98.19$ Ncr,y=182908.00 $\lambda^*_y=1.29$ Curva b: $\Phi_y=1.51$ $\chi_y=0.43$

$\lambda_z=134.51$ Ncr,z=97472.40 $\lambda^*_z=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$

Kyy, Kyz, Kzy, Kzz = 1.05, 1.12, 0.84, 1.12

Verifica YY: $0.17 + 0.03 + 0.37 = 0.57$

Verifica ZZ: $0.30 + 0.02 + 0.37 = 0.69$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,L}=0.01$ (L/48431) $f_{z,G}=0.01$ (L/70446)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,L}=0.08$ (L/8640) $f_{z,G}=0.06$ (L/12137)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=7.02 - Classe 3
Sollecitazioni: N=-20231.00 T_z=-64.82 M_y=75.66 T_y=-566.74 M_z=-2090.78 M_x=6.01
Tensioni: σ_N =-237.76 σ_M =-1142.69 τ =6.03 σ_{max} =-1380.45
Tensioni: σ_N =-237.76 σ_M =-93.38 τ =23.51 τ_{max} =23.51
Tensioni: σ_N =-237.76 σ_M =-1142.69 τ =6.03 $\sigma_{ID,max}$ =1380.49

Asta n. 6005 (-882 -868) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}$ =0.01 (L/25040)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}$ =0.07 (L/4540)

- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-13337.00
N,Ed=-13337.00 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.18

- Verifica di stabilità (4.2.4.1.3.1) - CC 25
Sollecitazioni: N=-13337.00 L=320.00
 λ =79.28 Ncr=70851.00 λ^* =1.04
Curva a: Φ =1.13 χ ,min=0.64 N,Ed=-13337.00 Nb,Rd=46443.40 N,Ed/Nb,Rd=0.29

Asta n. 6006 (-883 -871) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}$ =0.01 (L/24314)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}$ =0.04 (L/4438)

- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-13804.70
N,Ed=-13804.70 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.19

- Verifica di stabilità (4.2.4.1.3.1) - CC 25
Sollecitazioni: N=-13804.70 L=160.00
 λ =39.64 Ncr=283404.00 λ^* =0.52
Curva a: Φ =0.67 χ ,min=0.92 N,Ed=-13804.70 Nb,Rd=66718.00 N,Ed/Nb,Rd=0.21

Asta n. 6007 (1969 2008) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}$ =0.01 (L/28136)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.61 - Classe 3
Sollecitazioni: N=5609.35
Tensioni: σ_N =261.04 σ_M =0.00 τ =0.00 σ_{max} =261.04
Tensioni: σ_N =0.00 σ_M =0.00 τ =0.00 τ_{max} =0.00
Tensioni: σ_N =261.04 σ_M =0.00 τ =0.00 $\sigma_{ID,max}$ =261.04

Asta n. 6008 (1970 2009) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}$ =0.00 (L/56273)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}$ =0.02 (L/10048)

- Verifica a compressione (4.2.10) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-8421.42
N,Ed=-8421.42 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.12

Asta n. 6009 (2009 1969) Cir. D=4 Crit. 1

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 23 - Classe 3
L_{cr}=2.59 Curva d: α -imp=0.76 k_c=0.94 ψ =1.75 M_{cr}=0.00 λ_{LT} =0.00
 $\lambda_{LT,0}$ =0.00 β_{LT} =0.00 Φ_{LT} =0.00 β_{LT} =0.00 f=0.00 χ_{LT} =1.00
CC 23 M_{y,Ed}=-5.39 M_{y,b,Rd}=212.43 M_{y,Ed/M_{y,b,Rd}}=0.03

- Verifica di stabilità aste presso-inflesse (4.2.4.1.3.3.1) - CC 1 - Classe 3
Sollecitazioni: N,Ed=-3663.23 M,Ed=4.05
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=259.36
 λ =259.36 Ncr=3872.04 λ^* =3.39 Curva c: Φ =7.04 χ ,min=0.08
 χ ,min=0.08
Verifica: 1.14 + 0.35 = 1.49

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.14$ (L/1814) $f_{z,G}=0.09$ (L/2877)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.30 - Classe 3
Sollecitazioni: N=-5607.05 M=5.39
Tensioni: $\sigma_N=-446.19$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{max}=-532.05$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-446.19$ $\sigma_M=-85.86$ $\tau=0.00$ $\sigma_{ID,max}=532.05$

Asta n. 6010 (2008 1970) Cir. D=4 Crit. 1

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 25 - Classe 3
 $L_{cr}=2.10$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ M,cr=0.00 $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.00$ $\beta_{LT}=0.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=0.00$ $f=0.00$ $\chi_{LT}=1.00$
CC 25 My,Ed=-5.68 My,b,Rd=212.43 My,Ed/My,b,Rd=0.03

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 23 - Classe 3
Sollecitazioni: N,Ed=-2230.33 M,Ed=3.28
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=209.96
 $\lambda=209.96$ Ncr=5908.50 $\lambda^*=2.75$ Curva c: $\Phi=4.90$ $\chi_{min}=0.11$
 $\chi_{min}=0.11$
Verifica: $0.47 + 0.02 = 0.49$

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.08$ (L/2769) $f_{z,G}=0.06$ (L/3407)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.05 - Classe 3
Sollecitazioni: N=7755.51 M=4.37
Tensioni: $\sigma_N=617.16$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{max}=686.67$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=617.16$ $\sigma_M=69.51$ $\tau=0.00$ $\sigma_{ID,max}=686.67$

Asta n. 6011 (1966 2006) Cir.c D=120/6 Crit. 1

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.01$ (L/31263)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=1.61 - Classe 3
Sollecitazioni: N=2348.03
Tensioni: $\sigma_N=109.27$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{max}=109.27$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=109.27$ $\sigma_M=0.00$ $\tau=0.00$ $\sigma_{ID,max}=109.27$

Asta n. 6012 (1967 2007) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-4619.93 M,Ed=0.00
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=161.00
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=39.89$ Ncr=279894.00 $\lambda^*=0.52$
Curva a: $\Phi=0.67$ $\chi_{min}=0.92$
Kyy, Kyz, Kzy, Kzz = 0.97, ----, ----, ----
Verifica: $0.06 = 0.06$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.00$ (L/70342)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.01$ (L/13189)

- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-4619.93
N,Ed=-4619.93 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.06

Asta n. 6013 (1966 2007) Cir. D=4 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2816.03 M,Ed=5.26
Resistenze: Nc,Rd=42486.30 M,c,Rd=212.43 L=259.36
 $\lambda=259.36$ Ncr=3872.04 $\lambda^*=3.39$ Curva c: $\Phi=7.04$ $\chi_{min}=0.08$
 $\chi_{min}=0.08$
Verifica: $0.88 + 0.09 = 0.97$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.00$ (L/90651)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.14$ (L/1815) $f_{z,g}=0.10$ (L/2565)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_l=1.30$ - Classe 3
Sollecitazioni: $N=-2803.40$ $M=7.01$
Tensioni: $\sigma_N=-223.09$ $\sigma_M=-111.62$ $\tau=0.00$ $\sigma_{max}=-334.70$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-223.09$ $\sigma_M=-111.62$ $\tau=0.00$ $\sigma_{ID,max}=334.70$

Asta n. 6014 (1967 2006) Cir. D=4 Crit. 1

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/100069)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,l}=0.08$ (L/2769) $f_{z,g}=0.05$ (L/3822)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_l=1.05$ - Classe 3
Sollecitazioni: $N=3466.35$ $M=5.68$
Tensioni: $\sigma_N=275.84$ $\sigma_M=90.36$ $\tau=0.00$ $\sigma_{max}=366.20$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=275.84$ $\sigma_M=90.36$ $\tau=0.00$ $\sigma_{ID,max}=366.20$

Asta n. 6015 (1961 1957) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-2571.54$ $M,Ed=2.86$
Resistenze: $N_c,R_d=72651.60$ $M,c,R_d=1972.49$ $L=102.22$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=25.33$ $N_{cr}=694405.00$ $\lambda'=0.33$
Curva a: $\Phi=0.57$ $\chi_{,min}=0.97$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, \text{----}, \text{----}, \text{----}$
Verifica: $0.04 + 0.00 = 0.04$

- Verifica in termini tensionali (4.2.5) - CC 25 $X_l=0.51$ - Classe 3
Sollecitazioni: $N=-2571.54$ $M=2.86$
Tensioni: $\sigma_N=-119.67$ $\sigma_M=-4.91$ $\tau=0.00$ $\sigma_{max}=-124.58$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-119.67$ $\sigma_M=-4.91$ $\tau=0.00$ $\sigma_{ID,max}=124.58$

Asta n. 6016 (1957 1959) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-2916.06$ $M,Ed=4.01$
Resistenze: $N_c,R_d=72651.60$ $M,c,R_d=1972.49$ $L=120.97$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=29.97$ $N_{cr}=495806.00$ $\lambda'=0.39$
Curva a: $\Phi=0.60$ $\chi_{,min}=0.95$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, \text{----}, \text{----}, \text{----}$
Verifica: $0.04 + 0.00 = 0.04$

- Verifica in termini tensionali (4.2.5) - CC 25 $X_l=0.60$ - Classe 3
Sollecitazioni: $N=-2916.06$ $M=4.01$
Tensioni: $\sigma_N=-135.70$ $\sigma_M=-6.88$ $\tau=0.00$ $\sigma_{max}=-142.58$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-135.70$ $\sigma_M=-6.88$ $\tau=0.00$ $\sigma_{ID,max}=142.58$

Asta n. 6017 (1959 1955) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-2482.13$ $M,Ed=2.89$
Resistenze: $N_c,R_d=72651.60$ $M,c,R_d=1972.49$ $L=102.73$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda=25.45$ $N_{cr}=687497.00$ $\lambda'=0.33$
Curva a: $\Phi=0.57$ $\chi_{,min}=0.97$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, \text{----}, \text{----}, \text{----}$
Verifica: $0.03 + 0.00 = 0.04$

- Verifica in termini tensionali (4.2.5) - CC 25 $X_l=0.51$ - Classe 3
Sollecitazioni: $N=-2482.13$ $M=2.89$
Tensioni: $\sigma_N=-115.51$ $\sigma_M=-4.96$ $\tau=0.00$ $\sigma_{max}=-120.47$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-115.51$ $\sigma_M=-4.96$ $\tau=0.00$ $\sigma_{ID,max}=120.47$

Asta n. 6018 (1955 1961) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-2879.60 M,Ed=3.97
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=120.28
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda = 29.80$ Ncr=501459.00 $\lambda^* = 0.39$
Curva a: $\Phi = 0.60$ $\chi_{\min} = 0.96$
Kyy, Kyz, Kzy, Kzz = 0.96, ----, ----, ----
Verifica: 0.04 + 0.00 = 0.04

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.60 - Classe 3
Sollecitazioni: N=-2879.60 M=3.97
Tensioni: $\sigma_N = -134.01$ $\sigma_M = -6.80$ $\tau = 0.00$ $\sigma_{\max} = -140.80$
Tensioni: $\sigma_N = 0.00$ $\sigma_M = 0.00$ $\tau = 0.00$ $\tau_{\max} = 0.00$
Tensioni: $\sigma_N = -134.01$ $\sigma_M = -6.80$ $\tau = 0.00$ $\sigma_{ID, \max} = 140.80$

Asta n. 6101 (1961 1968) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7141.58 My,Ed=418.99 Mz,Ed=-4953.12
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=526.58
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 5.27$ Curva b: $\alpha\text{-imp} = 0.34$ $k_c = 0.94$ $\psi = 1.59$ M,cr=52117.30 $\lambda_{LT} = 0.58$
 $\lambda_{LT,0} = 0.40$ $\beta_{LT} = 0.75$ $\Phi_{LT} = 0.66$ $\beta_{LT} = 0.75$ $f = 0.97$ $\chi_{LT} = 0.95$
 $\lambda_y = 73.65$ Ncr,y=325125.00 $\lambda^*_y = 0.96$ Curva b: $\Phi_y = 1.09$ $\chi_y = 0.62$
 $\lambda_z = 100.89$ Ncr,z=173260.00 $\lambda^*_z = 1.32$ Curva c: $\Phi_z = 1.65$ $\chi_z = 0.38$
Kyy, Kyz, Kzy, Kzz = 0.97, 0.99, 0.78, 0.99
Verifica YY: 0.04 + 0.03 + 0.78 = 0.85
Verifica ZZ: 0.07 + 0.02 + 0.78 = 0.87

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g} = 0.01$ (L/38884) $f_{z,L} = 0.01$ (L/55773)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g} = 0.09$ (L/6008) $f_{z,L} = 0.05$ (L/9807)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=5.27 - Classe 3
Sollecitazioni: N=-6690.03 Tz=-92.10 My=418.99 Ty=-1664.04 Mz=-4953.12 Mx=3.82
Tensioni: $\sigma_N = -78.62$ $\sigma_M = -2755.30$ $\tau = 3.83$ $\sigma_{\max} = -2833.92$
Tensioni: $\sigma_N = -78.62$ $\sigma_M = -259.88$ $\tau = 35.71$ $\tau_{\max} = 35.71$
Tensioni: $\sigma_N = -78.62$ $\sigma_M = -2755.30$ $\tau = 3.83$ $\sigma_{ID, \max} = 2833.93$

Asta n. 6102 (1955 1971) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-20120.40 My,Ed=-209.42 Mz,Ed=-1767.57
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=553.99
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 5.54$ Curva b: $\alpha\text{-imp} = 0.34$ $k_c = 0.94$ $\psi = 1.51$ M,cr=46544.50 $\lambda_{LT} = 0.62$
 $\lambda_{LT,0} = 0.40$ $\beta_{LT} = 0.75$ $\Phi_{LT} = 0.68$ $\beta_{LT} = 0.75$ $f = 0.97$ $\chi_{LT} = 0.94$
 $\lambda_y = 77.48$ Ncr,y=293755.00 $\lambda^*_y = 1.01$ Curva b: $\Phi_y = 1.15$ $\chi_y = 0.59$
 $\lambda_z = 106.14$ Ncr,z=156543.00 $\lambda^*_z = 1.39$ Curva c: $\Phi_z = 1.76$ $\chi_z = 0.35$
Kyy, Kyz, Kzy, Kzz = 1.02, 1.06, 0.81, 1.06
Verifica YY: 0.12 + 0.01 + 0.30 = 0.43
Verifica ZZ: 0.20 + 0.01 + 0.30 = 0.51

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g} = 0.02$ (L/35857) $f_{z,L} = 0.00$ (L/145223)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g} = 0.09$ (L/6273) $f_{z,L} = 0.03$ (L/21675)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=5.54 - Classe 3
Sollecitazioni: N=-19668.80 Tz=46.92 My=-209.42 Ty=552.98 Mz=1755.39 Mx=-6.82
Tensioni: $\sigma_N = -231.15$ $\sigma_M = -988.74$ $\tau = 6.83$ $\sigma_{\max} = -1219.89$
Tensioni: $\sigma_N = -231.15$ $\sigma_M = 101.93$ $\tau = 25.16$ $\tau_{\max} = 25.16$
Tensioni: $\sigma_N = -231.15$ $\sigma_M = -988.74$ $\tau = 6.83$ $\sigma_{ID, \max} = 1219.94$

Asta n. 6103 (1959 1965) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-6878.02 My,Ed=195.29 Mz,Ed=-5332.61
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=526.43
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 5.26$ Curva b: $\alpha\text{-imp} = 0.34$ $k_c = 0.94$ $\psi = 1.09$ M,cr=35749.80 $\lambda_{LT} = 0.70$

$\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.74$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.89$
 $\lambda_y=73.63$ Ncr,y=325318.00 $\lambda'_y=0.96$ Curva b: $\Phi_y=1.09$ $\chi_y=0.62$
 $\lambda_z=100.86$ Ncr,z=173363.00 $\lambda'_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
Kyy, Kyz, Kzy, Kzz = 0.97, 0.99, 0.78, 0.99
Verifica YY: 0.02 + 0.01 + 0.84 = 0.88
Verifica ZZ: 0.02 + 0.01 + 0.84 = 0.87

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/39428) $f_{z,L}=0.00$ (L/250907)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/6072) $f_{z,L}=0.02$ (L/33454)

- Verifica in termini tensionali (4.2.5) - CC 9 Xl=5.26 - Classe 3
Sollecitazioni: N=-6530.68 Tz=-43.84 My=195.29 Ty=-1607.26 Mz=-5332.61 Mx=10.42
Tensioni: $\sigma_N=-76.75$ $\sigma_M=-2914.94$ $\tau=10.44$ $\sigma_{max}=-2991.69$
Tensioni: $\sigma_N=-76.75$ $\sigma_M=-238.54$ $\tau=45.82$ $\tau_{max}=45.82$
Tensioni: $\sigma_N=-76.75$ $\sigma_M=-2914.94$ $\tau=10.44$ $\sigma_{ID,max}=2991.74$

Asta n. 6104 (1957 1962) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-21113.50 My,Ed=-210.99 Mz,Ed=-2091.51
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=553.99
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=5.54$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.50$ $M_{cr}=46181.10$ $\lambda_{LT}=0.62$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.68$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.94$
 $\lambda_y=77.48$ Ncr,y=293755.00 $\lambda'_y=1.01$ Curva b: $\Phi_y=1.15$ $\chi_y=0.59$
 $\lambda_z=106.14$ Ncr,z=156543.00 $\lambda'_z=1.39$ Curva c: $\Phi_z=1.76$ $\chi_z=0.35$
Kyy, Kyz, Kzy, Kzz = 1.02, 1.07, 0.82, 1.07
Verifica YY: 0.12 + 0.01 + 0.36 = 0.49
Verifica ZZ: 0.21 + 0.01 + 0.36 = 0.58

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.02$ (L/33005) $f_{z,L}=0.00$ (L/111710)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.09$ (L/5891) $f_{z,L}=0.02$ (L/22342)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-21113.50 Tz=47.77 My=53.64 Ty=827.97 Mz=-2091.51 Mx=-7.13
Tensioni: $\sigma_N=-248.13$ $\sigma_M=-1138.66$ $\tau=7.14$ $\sigma_{max}=-1386.78$
Tensioni: $\sigma_N=-248.13$ $\sigma_M=-89.86$ $\tau=28.60$ $\tau_{max}=28.60$
Tensioni: $\sigma_N=-248.13$ $\sigma_M=-1138.66$ $\tau=7.14$ $\sigma_{ID,max}=1386.84$

Asta n. 6105 (-868 2010) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-11725.60 M,Ed=0.12
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=78.22
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, ----, ----$
 $\lambda=19.38$ Ncr=1185880.00 $\lambda'=0.25$
Curva a: $\Phi=0.54$ $\chi_{min}=0.99$
Kyy, Kyz, Kzy, Kzz = 0.97, ----, ----, ----
Verifica: 0.16 + 0.00 = 0.16

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/27338)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/5126)

- Verifica a compressione (4.2.10) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-11725.60
N,Ed=-11725.60 Nc,Rd=-72651.60 N,Ed/Nc,Rd=0.16

Asta n. 6106 (-871 2011) Cir.c D=120/6 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-10868.10 M,Ed=0.29
Resistenze: Nc,Rd=72651.60 M,c,Rd=1972.49 L=66.17
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, ----, ----$
 $\lambda=16.39$ Ncr=1657040.00 $\lambda'=0.21$
Curva a: $\Phi=0.52$ $\chi_{min}=1.00$
Kyy, Kyz, Kzy, Kzz = 0.97, ----, ----, ----
Verifica: 0.15 + 0.00 = 0.15

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/31537)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.01$ (L/6086)
- Verifica a compressione (4.2.10) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-10868.10$ $T=1.76$
 $N,Ed=-10868.10$ $Nc,Rd=-72651.60$ $N,Ed/Nc,Rd=0.15$

Asta n. 6211 (1968 1970) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3314.22$ $M_y,Ed=1285.98$ $M_z,Ed=-2018.23$
Resistenze: $Nc,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=379.60$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.80$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=39930.60$ $\lambda_{LT}=0.51$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.62$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.98$
 $\lambda_y=62.61$ $N_{cr,y}=307021.00$ $\lambda^*_y=0.82$ Curva b: $\Phi_y=0.94$ $\chi_y=0.71$
 $\lambda_z=83.04$ $N_{cr,z}=174529.00$ $\lambda^*_z=1.09$ Curva c: $\Phi_z=1.31$ $\chi_z=0.49$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.97, 0.77, 0.97$
Verifica YY: $0.02 + 0.13 + 0.51 = 0.66$
Verifica ZZ: $0.02 + 0.10 + 0.51 = 0.63$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.06$ (L/6546) $f_{z,L}=0.04$ (L/10586)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.32$ (L/1172) $f_{z,L}=0.20$ (L/1906)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-3314.22$ $T_z=338.78$ $M_y=1285.98$ $T_y=601.35$ $M_z=-2018.23$
Tensioni: $\sigma_N=-57.08$ $\sigma_M=-2227.89$ $\tau=0.00$ $\sigma_{max}=-2284.97$
Tensioni: $\sigma_N=-57.08$ $\sigma_M=-459.21$ $\tau=23.76$ $\tau_{max}=23.76$
Tensioni: $\sigma_N=-57.08$ $\sigma_M=-2227.89$ $\tau=0.00$ $\sigma_{ID,max}=2284.97$

Asta n. 6212 (1968 1969) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3643.71$ $M_y,Ed=-1171.15$ $M_z,Ed=-2554.41$
Resistenze: $Nc,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=334.12$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.34$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=47739.80$ $\lambda_{LT}=0.47$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.59$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=55.11$ $N_{cr,y}=396295.00$ $\lambda^*_y=0.72$ Curva b: $\Phi_y=0.85$ $\chi_y=0.77$
 $\lambda_z=73.09$ $N_{cr,z}=225278.00$ $\lambda^*_z=0.96$ Curva c: $\Phi_z=1.14$ $\chi_z=0.57$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.97, 0.77, 0.97$
Verifica YY: $0.02 + 0.11 + 0.65 = 0.78$
Verifica ZZ: $0.02 + 0.09 + 0.65 = 0.76$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.06$ (L/5771) $f_{z,L}=0.03$ (L/13321)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.33$ (L/1025) $f_{z,L}=0.14$ (L/2381)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-3643.71$ $T_z=-350.52$ $M_y=-1171.15$ $T_y=825.96$ $M_z=-2554.41$
Tensioni: $\sigma_N=-62.75$ $\sigma_M=-2663.66$ $\tau=0.00$ $\sigma_{max}=-2726.41$
Tensioni: $\sigma_N=-62.75$ $\sigma_M=182.91$ $\tau=28.45$ $\tau_{max}=28.45$
Tensioni: $\sigma_N=-62.75$ $\sigma_M=-2663.66$ $\tau=0.00$ $\sigma_{ID,max}=2726.41$

Asta n. 6212 (1971 1973) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-11554.50$ $M_y,Ed=580.15$ $M_z,Ed=224.29$
Resistenze: $Nc,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=437.01$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.37$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=33075.30$ $\lambda_{LT}=0.56$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=72.08$ $N_{cr,y}=231653.00$ $\lambda^*_y=0.94$ Curva b: $\Phi_y=1.07$ $\chi_y=0.63$
 $\lambda_z=95.60$ $N_{cr,z}=131685.00$ $\lambda^*_z=1.25$ Curva c: $\Phi_z=1.54$ $\chi_z=0.41$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.00, 1.03, 0.80, 1.03$
Verifica YY: $0.09 + 0.06 + 0.06 = 0.21$
Verifica ZZ: $0.14 + 0.05 + 0.06 = 0.25$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.02$ (L/22684) $f_{z,G}=0.01$ (L/35521)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.12$ (L/3648) $f_{z,G}=0.08$ (L/5520)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-11554.50$ $T_z=132.76$ $M_y=580.15$ $T_y=20.45$ $M_z=217.81$
Tensioni: $\sigma_N=-198.99$ $\sigma_M=-391.39$ $\tau=0.00$ $\sigma_{max}=-590.37$
Tensioni: $\sigma_N=-198.99$ $\sigma_M=11.67$ $\tau=7.99$ $\tau_{max}=7.99$
Tensioni: $\sigma_N=-198.99$ $\sigma_M=-391.39$ $\tau=0.00$ $\sigma_{ID,max}=590.37$

Asta n. 6213 (1965 1966) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: $N,Ed=-3174.24$ $M_y,Ed=1139.18$ $M_z,Ed=-2177.86$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=352.04$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.52$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ $M,cr=44330.50$ $\lambda_{LT}=0.48$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.60$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=58.06$ $N_{cr,y}=356964.00$ $\lambda_y^*=0.76$ Curva b: $\Phi_y=0.88$ $\chi_y=0.75$
 $\lambda_z=77.01$ $N_{cr,z}=202920.00$ $\lambda_z^*=1.01$ Curva c: $\Phi_z=1.21$ $\chi_z=0.54$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.97, 0.77, 0.97$
Verifica YY: $0.02 + 0.11 + 0.55 = 0.68$
Verifica ZZ: $0.02 + 0.09 + 0.55 = 0.66$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.06$ (L/6320) $f_{z,L}=0.03$ (L/13877)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.31$ (L/1129) $f_{z,L}=0.14$ (L/2484)

- Verifica in termini tensionali (4.2.5) - CC 9 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-3174.24$ $T_z=323.59$ $M_y=1139.18$ $T_y=672.23$ $M_z=-2177.86$
Tensioni: $\sigma_N=-54.67$ $\sigma_M=-2319.11$ $\tau=0.00$ $\sigma_{max}=-2373.78$
Tensioni: $\sigma_N=-54.67$ $\sigma_M=-427.69$ $\tau=24.49$ $\tau_{max}=24.49$
Tensioni: $\sigma_N=-54.67$ $\sigma_M=-2319.11$ $\tau=0.00$ $\sigma_{ID,max}=2373.78$

Asta n. 6214 (1962 1964) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: $N,Ed=-8425.83$ $M_y,Ed=-829.06$ $M_z,Ed=-354.68$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=448.31$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.48$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ $M,cr=31994.10$ $\lambda_{LT}=0.57$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.65$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=73.94$ $N_{cr,y}=220115.00$ $\lambda_y^*=0.97$ Curva b: $\Phi_y=1.10$ $\chi_y=0.62$
 $\lambda_z=98.07$ $N_{cr,z}=125127.00$ $\lambda_z^*=1.28$ Curva c: $\Phi_z=1.59$ $\chi_z=0.40$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.99, 1.01, 0.79, 1.01$
Verifica YY: $0.07 + 0.09 + 0.09 = 0.25$
Verifica ZZ: $0.11 + 0.07 + 0.09 = 0.27$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.04$ (L/12548) $f_{z,G}=0.00$ (L/95936)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.21$ (L/2098) $f_{z,G}=0.02$ (L/22174)

- Verifica in termini tensionali (4.2.5) - CC 9 $X_1=0.00$ - Classe 3
Sollecitazioni: $N=-8425.83$ $T_z=-184.93$ $M_y=-829.06$ $T_y=141.81$ $M_z=-354.68$
Tensioni: $\sigma_N=-145.10$ $\sigma_M=-597.78$ $\tau=0.00$ $\sigma_{max}=-742.88$
Tensioni: $\sigma_N=-145.10$ $\sigma_M=-19.00$ $\tau=11.15$ $\tau_{max}=11.15$
Tensioni: $\sigma_N=-145.10$ $\sigma_M=-597.78$ $\tau=0.00$ $\sigma_{ID,max}=742.88$

Asta n. 6222 (1971 1972) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-9534.94$ $M_y,Ed=-653.02$ $M_z,Ed=-184.00$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=458.65$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.59$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ $M,cr=31066.50$ $\lambda_{LT}=0.58$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.66$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.95$
 $\lambda_y=75.65$ $N_{cr,y}=210307.00$ $\lambda_y^*=0.99$ Curva b: $\Phi_y=1.12$ $\chi_y=0.60$
 $\lambda_z=100.33$ $N_{cr,z}=119551.00$ $\lambda_z^*=1.31$ Curva c: $\Phi_z=1.63$ $\chi_z=0.38$

Kyy, Kyz, Kzy, Kzz = 1.00, 1.02, 0.80, 1.02
Verifica YY: 0.08 + 0.07 + 0.05 = 0.20
Verifica ZZ: 0.13 + 0.06 + 0.05 = 0.23

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.02$ (L/18640) $f_{z,G}=0.00$ (L/123314)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.15$ (L/3080) $f_{z,G}=0.02$ (L/21860)
- Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-7975.47 Tz=-130.73 My=-599.59 Ty=115.65 Mz=-242.86
Tensioni: $\sigma_N=-137.35$ $\sigma_M=-420.23$ $\tau=0.00$ $\sigma_{max}=-557.58$
Tensioni: $\sigma_N=-137.35$ $\sigma_M=-13.01$ $\tau=7.89$ $\tau_{max}=7.89$
Tensioni: $\sigma_N=-137.35$ $\sigma_M=-420.23$ $\tau=0.00$ $\sigma_{ID,max}=557.58$

Asta n. 6223 (1965 1967) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-3599.23 My,Ed=-1279.87 Mz,Ed=-2811.08
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=363.03
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=3.63$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=42465.80$ $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=59.88$ Ncr,y=335675.00 $\lambda^*_y=0.78$ Curva b: $\Phi_y=0.91$ $\chi_y=0.73$
 $\lambda_z=79.42$ Ncr,z=190818.00 $\lambda^*_z=1.04$ Curva c: $\Phi_z=1.25$ $\chi_z=0.52$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.97, 0.77, 0.97
Verifica YY: 0.02 + 0.13 + 0.71 = 0.86
Verifica ZZ: 0.02 + 0.10 + 0.71 = 0.83

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.06$ (L/5758) $f_{z,L}=0.03$ (L/11933)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.36$ (L/1022) $f_{z,L}=0.17$ (L/2115)
- Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-3599.23 Tz=-352.55 My=-1279.87 Ty=821.58 Mz=-2811.08
Tensioni: $\sigma_N=-61.98$ $\sigma_M=-2928.23$ $\tau=0.00$ $\sigma_{max}=-2990.22$
Tensioni: $\sigma_N=-61.98$ $\sigma_M=198.84$ $\tau=28.43$ $\tau_{max}=28.43$
Tensioni: $\sigma_N=-61.98$ $\sigma_M=-2928.23$ $\tau=0.00$ $\sigma_{ID,max}=2990.22$

Asta n. 6224 (1962 1963) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-10131.20 My,Ed=552.58 Mz,Ed=447.87
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=426.15
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=4.26$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=34185.30$ $\lambda_{LT}=0.55$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.64$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=70.29$ Ncr,y=243609.00 $\lambda^*_y=0.92$ Curva b: $\Phi_y=1.05$ $\chi_y=0.65$
 $\lambda_z=93.22$ Ncr,z=138482.00 $\lambda^*_z=1.22$ Curva c: $\Phi_z=1.49$ $\chi_z=0.42$
Kyy, Kyz, Kzy, Kzz = 0.99, 1.02, 0.79, 1.02
Verifica YY: 0.08 + 0.06 + 0.12 = 0.26
Verifica ZZ: 0.12 + 0.05 + 0.12 = 0.29

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.02$ (L/23033) $f_{z,G}=0.02$ (L/27754)
- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.12$ (L/3580) $f_{z,G}=0.10$ (L/4346)
- Verifica in termini tensionali (4.2.5) - CC 9 Xl=0.00 - Classe 3
Sollecitazioni: N=-10131.20 Tz=129.67 My=552.58 Ty=67.03 Mz=447.87
Tensioni: $\sigma_N=-174.47$ $\sigma_M=-585.78$ $\tau=0.00$ $\sigma_{max}=-760.25$
Tensioni: $\sigma_N=-174.47$ $\sigma_M=23.99$ $\tau=7.81$ $\tau_{max}=7.81$
Tensioni: $\sigma_N=-174.47$ $\sigma_M=-585.78$ $\tau=0.00$ $\sigma_{ID,max}=760.25$

Asta n. 6232 (-868 1974) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-4609.86 My,Ed=-90.26 Mz,Ed=-744.32
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=248865.00$ $\lambda_{LT}=0.20$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.48$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$

$\lambda_y=20.38$ Ncr, $y=2897440.00$ $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr, $z=1647080.00$ $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: 0.02 + 0.01 + 0.19 = 0.22
Verifica ZZ: 0.02 + 0.01 + 0.19 = 0.22

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/40490)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/6577) $f_{z,L}=0.00$ (L/64784)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=0.00$ - Classe 3
Sollecitazioni: N=-4609.86 $T_2=-73.04$ $M_y=-90.26$ $T_y=635.58$ $M_z=-744.32$
Tensioni: $\sigma_N=-79.39$ $\sigma_M=-690.31$ $\tau=0.00$ $\sigma_{max}=-769.70$
Tensioni: $\sigma_N=-79.39$ $\sigma_M=-15.23$ $\tau=17.19$ $\tau_{max}=17.19$
Tensioni: $\sigma_N=-79.39$ $\sigma_M=-690.31$ $\tau=0.00$ $\sigma_{ID,max}=769.70$

Asta n. 6232 (-867 -868) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3191.27 My,Ed=-90.26 Mz,Ed=-744.32
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.13$ $M_{cr}=160375.00$ $\lambda_{LT}=0.25$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr, $y=2897440.00$ $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr, $z=1647080.00$ $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.02 + 0.01 + 0.19 = 0.21
Verifica ZZ: 0.02 + 0.01 + 0.19 = 0.21

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/28792)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/5041) $f_{z,L}=0.00$ (L/53986)

- Verifica in termini tensionali (4.2.5) - CC 25 $X_1=1.24$ - Classe 3
Sollecitazioni: N=-3160.45 $T_2=17.83$ $M_y=-90.26$ $T_y=-426.85$ $M_z=-744.32$
Tensioni: $\sigma_N=-54.43$ $\sigma_M=-690.31$ $\tau=0.00$ $\sigma_{max}=-744.74$
Tensioni: $\sigma_N=-54.43$ $\sigma_M=-15.23$ $\tau=11.29$ $\tau_{max}=11.29$
Tensioni: $\sigma_N=-54.43$ $\sigma_M=-690.31$ $\tau=0.00$ $\sigma_{ID,max}=744.74$

Asta n. 6232 (-866 -867) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-2811.48 My,Ed=-174.69 Mz,Ed=-232.31
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.10$ $M_{cr}=155869.00$ $\lambda_{LT}=0.26$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr, $y=2897440.00$ $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr, $z=1647080.00$ $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: 0.01 + 0.02 + 0.06 = 0.09
Verifica ZZ: 0.01 + 0.01 + 0.06 = 0.09

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/107973)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.00$ (L/47988) $f_{z,L}=0.00$ (L/64784)

- Verifica in termini tensionali (4.2.5) - CC 9 $X_1=1.24$ - Classe 3
Sollecitazioni: N=-2787.78 $T_2=33.58$ $M_y=-174.69$ $T_y=-292.86$ $M_z=-232.31$
Tensioni: $\sigma_N=-48.01$ $\sigma_M=-265.56$ $\tau=0.00$ $\sigma_{max}=-313.57$
Tensioni: $\sigma_N=-48.01$ $\sigma_M=35.25$ $\tau=7.92$ $\tau_{max}=7.92$
Tensioni: $\sigma_N=-48.01$ $\sigma_M=-265.56$ $\tau=0.00$ $\sigma_{ID,max}=313.57$

Asta n. 6232 (-865 -866) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-3252.90 My,Ed=-46.19 Mz,Ed=468.66
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=123.57
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$

$L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $K_c=0.94$ $\psi=1.28$ $M_{cr}=182448.00$ $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: $0.02 + 0.00 + 0.12 = 0.14$
Verifica ZZ: $0.02 + 0.00 + 0.12 = 0.14$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.00$ (L/47988)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.02$ (L/7279)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-3252.90$ $T_z=17.83$ $M_y=-24.15$ $T_y=-227.58$ $M_z=468.66$
Tensioni: $\sigma_N=-56.02$ $\sigma_M=-423.48$ $\tau=0.00$ $\sigma_{max}=-479.50$
Tensioni: $\sigma_N=-56.02$ $\sigma_M=31.70$ $\tau=6.07$ $\tau_{max}=6.07$
Tensioni: $\sigma_N=-56.02$ $\sigma_M=-423.48$ $\tau=0.00$ $\sigma_{ID,max}=479.50$

Asta n. 6232 (1971 -865) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3283.71$ $M_y,Ed=-24.15$ $M_z,Ed=708.84$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=123.57$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.24$ Curva b: $\alpha\text{-imp}=0.34$ $K_c=0.94$ $\psi=1.66$ $M_{cr}=236094.00$ $\lambda_{LT}=0.21$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.48$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=20.38$ Ncr,y=2897440.00 $\lambda'_y=0.27$ Curva b: $\Phi_y=0.55$ $\chi_y=0.98$
 $\lambda_z=27.03$ Ncr,z=1647080.00 $\lambda'_z=0.35$ Curva c: $\Phi_z=0.60$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.95, 0.76, 0.95
Verifica YY: $0.02 + 0.00 + 0.18 = 0.20$
Verifica ZZ: $0.02 + 0.00 + 0.18 = 0.20$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/21594)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.03$ (L/3999)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-3283.71$ $T_z=17.83$ $M_y=-2.12$ $T_y=-161.16$ $M_z=708.84$
Tensioni: $\sigma_N=-56.55$ $\sigma_M=-628.73$ $\tau=0.00$ $\sigma_{max}=-685.28$
Tensioni: $\sigma_N=-56.55$ $\sigma_M=38.55$ $\tau=4.35$ $\tau_{max}=4.35$
Tensioni: $\sigma_N=-56.55$ $\sigma_M=-628.73$ $\tau=0.00$ $\sigma_{ID,max}=685.28$

Asta n. 6234 (1962 -864) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: $N,Ed=-3928.44$ $M_y,Ed=239.74$ $M_z,Ed=674.37$
Resistenze: $N_c,Rd=196322.00$ $M_y,c,Rd=9885.72$ $M_z,c,Rd=3816.13$ $L=145.14$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $K_c=0.94$ $\psi=1.74$ $M_{cr}=184412.00$ $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.95, 0.96, 0.76, 0.96
Verifica YY: $0.02 + 0.02 + 0.17 = 0.21$
Verifica ZZ: $0.02 + 0.02 + 0.17 = 0.21$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,g}=0.01$ (L/21435) $f_{z,L}=0.00$ (L/126824)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,g}=0.04$ (L/4026) $f_{z,L}=0.01$ (L/25364)

- Verifica in termini tensionali (4.2.5) - CC 25 $X1=0.00$ - Classe 3
Sollecitazioni: $N=-3928.44$ $T_z=163.48$ $M_y=239.74$ $T_y=-101.23$ $M_z=674.37$
Tensioni: $\sigma_N=-67.65$ $\sigma_M=-679.46$ $\tau=0.00$ $\sigma_{max}=-747.12$
Tensioni: $\sigma_N=-67.65$ $\sigma_M=36.13$ $\tau=9.85$ $\tau_{max}=9.85$
Tensioni: $\sigma_N=-67.65$ $\sigma_M=-679.46$ $\tau=0.00$ $\sigma_{ID,max}=747.12$

Asta n. 6234 (-864 -869) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-3873.80 My,Ed=-234.81 Mz,Ed=479.24
 Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.74$ M,cr=184388.00 $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.96, 0.76, 0.96$
 Verifica YY: $0.02 + 0.02 + 0.12 = 0.16$
 Verifica ZZ: $0.02 + 0.02 + 0.12 = 0.16$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,G}=0.00$ (L/49093)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.02$ (L/6734) $f_{z,L}=0.00$ (L/29267)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
 Sollecitazioni: N=-3873.80 T_z=163.48 M_y=2.47 T_y=-167.65 M_z=479.24
 Tensioni: $\sigma_N=-66.71$ $\sigma_M=-425.44$ $\tau=0.00$ $\sigma_{max}=-492.15$
 Tensioni: $\sigma_N=-66.71$ $\sigma_M=25.67$ $\tau=9.88$ $\tau_{max}=9.88$
 Tensioni: $\sigma_N=-66.71$ $\sigma_M=-425.44$ $\tau=0.00$ $\sigma_{ID,max}=492.15$

Asta n. 6234 (-869 -870) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
 Sollecitazioni: N,Ed=-3819.17 My,Ed=-472.08 Mz,Ed=-200.23
 Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.30$ M,cr=138049.00 $\lambda_{LT}=0.27$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.96, 0.76, 0.96$
 Verifica YY: $0.02 + 0.05 + 0.05 = 0.12$
 Verifica ZZ: $0.02 + 0.04 + 0.05 = 0.11$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/47559)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.02$ (L/9511) $f_{z,G}=0.00$ (L/60875)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.45 - Classe 3
 Sollecitazioni: N=-3764.53 T_z=163.48 M_y=-472.08 T_y=-300.50 M_z=-200.23
 Tensioni: $\sigma_N=-64.83$ $\sigma_M=-338.85$ $\tau=0.00$ $\sigma_{max}=-403.68$
 Tensioni: $\sigma_N=-64.83$ $\sigma_M=118.16$ $\tau=11.65$ $\tau_{max}=11.65$
 Tensioni: $\sigma_N=-64.83$ $\sigma_M=-338.85$ $\tau=0.00$ $\sigma_{ID,max}=403.68$

Asta n. 6234 (-870 -871) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
 Sollecitazioni: N,Ed=-3764.53 My,Ed=-709.35 Mz,Ed=-684.57
 Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_y, \alpha_z, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.18$ M,cr=125550.00 $\lambda_{LT}=0.29$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda'_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda'_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.96, 0.76, 0.96$
 Verifica YY: $0.02 + 0.07 + 0.17 = 0.26$
 Verifica ZZ: $0.02 + 0.05 + 0.17 = 0.25$

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/29267) $f_{z,G}=0.00$ (L/33819)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.03$ (L/5514) $f_{z,G}=0.02$ (L/5808)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=1.45 - Classe 3
 Sollecitazioni: N=-3709.90 T_z=163.48 M_y=-709.35 T_y=-366.92 M_z=-684.57
 Tensioni: $\sigma_N=-63.89$ $\sigma_M=-849.11$ $\tau=0.00$ $\sigma_{max}=-913.00$
 Tensioni: $\sigma_N=-63.89$ $\sigma_M=156.99$ $\tau=12.90$ $\tau_{max}=12.90$
 Tensioni: $\sigma_N=-63.89$ $\sigma_M=-849.11$ $\tau=0.00$ $\sigma_{ID,max}=913.00$

Asta n. 6234 (-871 1975) Is 146x215x13x10x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7725.94 My,Ed=-709.35 Mz,Ed=-684.57
Resistenze: Nc,Rd=196322.00 My,c,Rd=9885.72 Mz,c,Rd=3816.13 L=145.14
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=1.45$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=185554.00$ $\lambda_{LT}=0.24$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.94$ Ncr,y=2100110.00 $\lambda^*_y=0.31$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=31.75$ Ncr,z=1193830.00 $\lambda^*_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
Kyy, Kyz, Kzy, Kzz = 0.96, 0.96, 0.77, 0.96
Verifica YY: 0.04 + 0.07 + 0.17 = 0.28
Verifica ZZ: 0.04 + 0.05 + 0.17 = 0.27

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.00$ (L/42274) $f_{z,G}=0.00$ (L/47559)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,G}=0.02$ (L/7534) $f_{z,L}=0.02$ (L/8454)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=0.00 - Classe 3
Sollecitazioni: N=-7725.94 Tz=-488.74 My=-709.35 Ty=504.88 Mz=-684.57
Tensioni: $\sigma_N=-133.05$ $\sigma_M=-849.11$ $\tau=0.00$ $\sigma_{max}=-982.16$
Tensioni: $\sigma_N=-133.05$ $\sigma_M=-36.67$ $\tau=29.54$ $\tau_{max}=29.54$
Tensioni: $\sigma_N=-133.05$ $\sigma_M=-849.11$ $\tau=0.00$ $\sigma_{ID,max}=982.16$

Asta n. 7004 (1914 1915) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 9 - Classe 3
Sollecitazioni: N,Ed=-5146.79 My,Ed=-3638.56 Mz,Ed=2623.42
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=700.78
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.01$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.44$ $M_{cr}=33525.40$ $\lambda_{LT}=0.73$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.75$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.88$
 $\lambda_y=98.02$ Ncr,y=183579.00 $\lambda^*_y=1.28$ Curva b: $\Phi_y=1.51$ $\chi_y=0.44$
 $\lambda_z=134.27$ Ncr,z=97829.90 $\lambda^*_z=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
Kyy, Kyz, Kzy, Kzz = 0.97, 0.99, 0.78, 0.99
Verifica YY: 0.04 + 0.24 + 0.41 = 0.69
Verifica ZZ: 0.07 + 0.19 + 0.41 = 0.68

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.01$ (L/69322) $f_{z,G}=0.01$ (L/86449)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.06$ (L/12006) $f_{z,G}=0.05$ (L/14965)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=7.01 - Classe 3
Sollecitazioni: N=-6721.86 Tz=-10.15 My=-71.73 Ty=883.71 Mz=3614.56 Mx=-1.06
Tensioni: $\sigma_N=-79.00$ $\sigma_M=-1963.61$ $\tau=1.06$ $\sigma_{max}=-2042.61$
Tensioni: $\sigma_N=-79.00$ $\sigma_M=151.91$ $\tau=17.93$ $\tau_{max}=17.93$
Tensioni: $\sigma_N=-79.00$ $\sigma_M=-1963.61$ $\tau=1.06$ $\sigma_{ID,max}=2042.61$

Asta n. 8004 (1936 1937) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3
Sollecitazioni: N,Ed=-7308.83 My,Ed=-158.44 Mz,Ed=3600.56
Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=700.78
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.01$ Curva b: $\alpha\text{-imp}=0.34$ $k_c=0.94$ $\psi=1.34$ $M_{cr}=31074.10$ $\lambda_{LT}=0.75$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.77$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.87$
 $\lambda_y=98.02$ Ncr,y=183579.00 $\lambda^*_y=1.28$ Curva b: $\Phi_y=1.51$ $\chi_y=0.44$
 $\lambda_z=134.27$ Ncr,z=97829.90 $\lambda^*_z=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
Kyy, Kyz, Kzy, Kzz = 0.98, 1.01, 0.79, 1.01
Verifica YY: 0.06 + 0.01 + 0.58 = 0.65
Verifica ZZ: 0.10 + 0.01 + 0.58 = 0.69

- Verifica Freccia massima per soli carichi accidentali - CC 26
 $f_{z,L}=0.01$ (L/65608) $f_{z,G}=0.01$ (L/88002)

- Verifica Freccia massima carichi totali - CC 26
 $f_{z,L}=0.06$ (L/11270) $f_{z,G}=0.05$ (L/15073)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=7.01 - Classe 3
Sollecitazioni: N=-6700.98 Tz=-12.44 My=-71.26 Ty=880.32 Mz=3600.56
Tensioni: $\sigma_N=-78.75$ $\sigma_M=-1955.97$ $\tau=0.00$ $\sigma_{max}=-2034.72$

Tensioni: $\sigma_N=-78.75$ $\sigma_M=151.29$ $\tau=16.81$ $\tau_{max}=16.81$
 Tensioni: $\sigma_N=-78.75$ $\sigma_M=-1955.97$ $\tau=0.00$ $\sigma_{ID,max}=2034.72$

Asta n. 9004 (1958 1959) Is 175x250x18x12x0x0x10000 Crit. 1

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 25 - Classe 3

Sollecitazioni: N,Ed=-7417.40 My,Ed=-251.08 Mz,Ed=3675.92
 Resistenze: Nc,Rd=287692.00 My,c,Rd=16807.20 Mz,c,Rd=6269.63 L=700.78
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr}=7.01$ Curva b: $\alpha-imp=0.34$ $k_c=0.94$ $\psi=1.57$ $M_{cr}=36565.50$ $\lambda_{LT}=0.69$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.73$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.90$
 $\lambda_y=98.02$ Ncr,y=183579.00 $\lambda_y^*=1.28$ Curva b: $\Phi_y=1.51$ $\chi_y=0.44$
 $\lambda_z=134.27$ Ncr,z=97829.90 $\lambda_z^*=1.76$ Curva c: $\Phi_z=2.43$ $\chi_z=0.24$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.98, 1.01, 0.79, 1.01$
 Verifica YY: $0.06 + 0.02 + 0.59 = 0.67$
 Verifica ZZ: $0.11 + 0.01 + 0.59 = 0.71$

- Verifica Freccia massima per soli carichi accidentali - CC 26

$f_{z,L}=0.01$ (L/51385) $f_{z,G}=0.01$ (L/85943)

- Verifica Freccia massima carichi totali - CC 26

$f_{z,L}=0.08$ (L/8706) $f_{z,G}=0.05$ (L/14844)

- Verifica in termini tensionali (4.2.5) - CC 25 Xl=7.01 - Classe 3

Sollecitazioni: N=-6809.55 $T_z=-29.54$ $M_y=-44.06$ $T_y=899.68$ $M_z=3675.92$
 Tensioni: $\sigma_N=-80.03$ $\sigma_M=-1991.14$ $\tau=0.00$ $\sigma_{max}=-2071.16$
 Tensioni: $\sigma_N=-80.03$ $\sigma_M=149.83$ $\tau=17.20$ $\tau_{max}=17.20$
 Tensioni: $\sigma_N=-80.03$ $\sigma_M=-1991.14$ $\tau=0.00$ $\sigma_{ID,max}=2071.16$

Sintesi

Tipo di normativa: stati limite D.M. 08
 Tipo di calcolo: analisi sismica dinamica

Dati generali della struttura

- Zona sismica: zona 2
 - Sito di costruzione: crotone LON. 17.13210 LAT. 39.08140
 Contenuto tra ID reticolo: 40794 40793 40572 40571

Pericolosità sismica di base

Simbologia

TCC = Tipo di combinazione di carico
 SLU = Stato limite ultimo
 SLU S = Stato limite ultimo (azione sismica)
 SLE R = Stato limite d'esercizio, combinazione rara
 SLE F = Stato limite d'esercizio, combinazione frequente
 SLE Q = Stato limite d'esercizio, combinazione quasi permanente
 SLD = Stato limite di danno
 SLV = Stato limite di salvaguardia della vita
 SLC = Stato limite di prevenzione del collasso
 SLO = Stato limite di operatività
 SLU I = Stato limite di resistenza al fuoco
 T_R = Periodo di ritorno
 Ag = Accelerazione orizzontale massima al sito
 FO = Valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale
 FV = Valore massimo del fattore di amplificazione dello spettro in accelerazione verticale
 TC* = Periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale
 S_s = Coefficiente di amplificazione stratigrafica
 C_c = Coefficiente funzione della categoria del suolo
 S = Coefficiente di amplificazione stratigrafica e topografica
 TC = Periodo corrispondente all'inizio del tratto dello spettro a velocità costante
 TB = Periodo corrispondente all'inizio del tratto dello spettro ad accelerazione costante
 TD = Periodo corrispondente all'inizio del tratto dello spettro a spostamento costante

TCC	T_R	Ag	FO	FV	TC*	S_s	C_c	S	TC	TB	TD
SLD	75	0.0654	2.40	0.83	0.32	1.50	1.53	1.50	0.49	0.16	1.86
SLV	712	0.1793	2.43	1.39	0.38	1.44	1.45	1.44	0.55	0.18	2.32

- Tipo di opera: Opera ordinaria
 - Vita nominale V_N : 50.00
 - Classe d'uso: Classe III
 - Coefficiente d'uso CU: 1.50
 - Periodo di riferimento VR: 75.00

Dati di progetto

- Categoria del suolo di fondazione: C
- Tipologia edificio: c.a. a pendolo inverso

Coeff. C_1	0.05
Periodo T_1	0.42285
Coeff. λ SLD	1.00
Coeff. λ SLV	1.00
Rapporto di sovrarresistenza (α_u/α_1)	--
Valore di riferimento del fattore di struttura (q_0)	1.50
Fattore riduttivo (K_w)	1.00
Fattore riduttivo regolarità in altezza (KR)	1.00
Fattore di struttura (q)	1.50

- Categoria topografica: T1 - Superficie pianeggiante, pendii e rilievi isolati con inclinazione media $i \leq 15^\circ$
- Coeff. amplificazione topografica S_T : 1.00
- Quota di riferimento: 0.00 <m>
- Altezza della struttura: 17.23 <m>
- Numero piani edificio: 0
- Coefficiente θ : 0.00
- Edificio regolare in altezza: si
- Edificio regolare in pianta: si
- Classe di duttilità: Classe B
- Fattore di struttura per sisma verticale (qv): 1.50
- Smorzamento spettro: 5.00
- Coefficiente θ : 0.00

Spettro SLD Z.TXT :

0.0000	0.2215
0.0500	0.5313
0.1000	0.5313
0.1500	0.5313
0.2000	0.3985
0.2500	0.3188
0.3000	0.2656
0.3500	0.2277
0.4000	0.1992
0.4500	0.1771
0.5000	0.1594
0.5500	0.1449
0.6000	0.1328
0.6500	0.1226
0.7000	0.1138
0.7500	0.1063
0.8000	0.0996
0.8500	0.0938
0.9000	0.0885
0.9500	0.0839
1.0000	0.0797
1.0500	0.0723
1.1000	0.0659
1.1500	0.0603
1.2000	0.0553
1.2500	0.0510
1.3000	0.0472
1.3500	0.0437
1.4000	0.0407
1.4500	0.0379
1.5000	0.0354
1.5500	0.0332
1.6000	0.0311
1.6500	0.0293
1.7000	0.0276
1.7500	0.0260
1.8000	0.0246
1.8500	0.0233
1.9000	0.0221
1.9500	0.0210
2.0000	0.0199
2.0500	0.0190
2.1000	0.0181
2.1500	0.0172
2.2000	0.0165
2.2500	0.0157
2.3000	0.0151

2.3500	0.0144
2.4000	0.0138
2.4500	0.0133
2.5000	0.0128
2.5500	0.0123
2.6000	0.0118
2.6500	0.0113
2.7000	0.0109
2.7500	0.0105
2.8000	0.0102
2.8500	0.0098
2.9000	0.0095
2.9500	0.0092
3.0000	0.0089
3.0500	0.0086
3.1000	0.0083
3.1500	0.0080
3.2000	0.0078
3.2500	0.0075
3.3000	0.0073
3.3500	0.0071
3.4000	0.0069
3.4500	0.0067
3.5000	0.0065
3.5500	0.0063
3.6000	0.0061
3.6500	0.0060
3.7000	0.0058
3.7500	0.0057
3.8000	0.0055
3.8500	0.0054
3.9000	0.0052
3.9500	0.0051
4.0000	0.0050

Spettro SLD.TXT :

0.0000	0.9624
0.0500	1.3733
0.1000	1.7842
0.1500	2.1952
0.1638	2.3082
0.2000	2.3082
0.2500	2.3082
0.3000	2.3082
0.3500	2.3082
0.4000	2.3082
0.4500	2.3082
0.4913	2.3082
0.5000	2.2679
0.5500	2.0617
0.6000	1.8899
0.6500	1.7446
0.7000	1.6199
0.7500	1.5119
0.8000	1.4174
0.8500	1.3341
0.9000	1.2600
0.9500	1.1936
1.0000	1.1340
1.0500	1.0800
1.1000	1.0309
1.1500	0.9861
1.2000	0.9450
1.2500	0.9072
1.3000	0.8723
1.3500	0.8400
1.4000	0.8100
1.4500	0.7820
1.5000	0.7560
1.5500	0.7316
1.6000	0.7087
1.6500	0.6872
1.7000	0.6670
1.7500	0.6480
1.8000	0.6300
1.8500	0.6130
1.8616	0.6091
1.9000	0.5848

1.9500	0.5552
2.0000	0.5278
2.0500	0.5023
2.1000	0.4787
2.1500	0.4567
2.2000	0.4362
2.2500	0.4170
2.3000	0.3991
2.3500	0.3823
2.4000	0.3665
2.4500	0.3517
2.5000	0.3378
2.5500	0.3246
2.6000	0.3123
2.6500	0.3006
2.7000	0.2896
2.7500	0.2791
2.8000	0.2693
2.8500	0.2599
2.9000	0.2510
2.9500	0.2426
3.0000	0.2346
3.0500	0.2269
3.1000	0.2197
3.1500	0.2127
3.2000	0.2062
3.2500	0.1999
3.3000	0.1938
3.3500	0.1881
3.4000	0.1826
3.4500	0.1774
3.5000	0.1723
3.5500	0.1675
3.6000	0.1629
3.6500	0.1585
3.7000	0.1542
3.7500	0.1501
3.8000	0.1462
3.8500	0.1424
3.9000	0.1388
3.9500	0.1353
4.0000	0.1319

Spettro SLV Z.TXT :

0.0000	1.0051
0.0500	1.6271
0.1000	1.6271
0.1500	1.6271
0.2000	1.2203
0.2500	0.9763
0.3000	0.8135
0.3500	0.6973
0.4000	0.6102
0.4500	0.5424
0.5000	0.4881
0.5500	0.4438
0.6000	0.4068
0.6500	0.3755
0.7000	0.3517
0.7500	0.3517
0.8000	0.3517
0.8500	0.3517
0.9000	0.3517
0.9500	0.3517
1.0000	0.3517
1.0500	0.3517
1.1000	0.3517
1.1500	0.3517
1.2000	0.3517
1.2500	0.3517
1.3000	0.3517
1.3500	0.3517
1.4000	0.3517
1.4500	0.3517
1.5000	0.3517
1.5500	0.3517
1.6000	0.3517
1.6500	0.3517

1.7000	0.3517
1.7500	0.3517
1.8000	0.3517
1.8500	0.3517
1.9000	0.3517
1.9500	0.3517
2.0000	0.3517
2.0500	0.3517
2.1000	0.3517
2.1500	0.3517
2.2000	0.3517
2.2500	0.3517
2.3000	0.3517
2.3500	0.3517
2.4000	0.3517
2.4500	0.3517
2.5000	0.3517
2.5500	0.3517
2.6000	0.3517
2.6500	0.3517
2.7000	0.3517
2.7500	0.3517
2.8000	0.3517
2.8500	0.3517
2.9000	0.3517
2.9500	0.3517
3.0000	0.3517
3.0500	0.3517
3.1000	0.3517
3.1500	0.3517
3.2000	0.3517
3.2500	0.3517
3.3000	0.3517
3.3500	0.3517
3.4000	0.3517
3.4500	0.3517
3.5000	0.3517
3.5500	0.3517
3.6000	0.3517
3.6500	0.3517
3.7000	0.3517
3.7500	0.3517
3.8000	0.3517
3.8500	0.3517
3.9000	0.3517
3.9500	0.3517
4.0000	0.3517

Spettro SLV.TXT :

0.0000	2.5303
0.0500	2.9603
0.1000	3.3904
0.1500	3.8205
0.1820	4.0959
0.2000	4.0959
0.2500	4.0959
0.3000	4.0959
0.3500	4.0959
0.4000	4.0959
0.4500	4.0959
0.5000	4.0959
0.5461	4.0959
0.5500	4.0665
0.6000	3.7276
0.6500	3.4409
0.7000	3.1951
0.7500	2.9821
0.8000	2.7957
0.8500	2.6312
0.9000	2.4851
0.9500	2.3543
1.0000	2.2366
1.0500	2.1301
1.1000	2.0332
1.1500	1.9448
1.2000	1.8638
1.2500	1.7892
1.3000	1.7204

1.3500	1.6567
1.4000	1.5975
1.4500	1.5425
1.5000	1.4910
1.5500	1.4429
1.6000	1.3978
1.6500	1.3555
1.7000	1.3156
1.7500	1.2780
1.8000	1.2425
1.8500	1.2090
1.9000	1.1771
1.9500	1.1470
2.0000	1.1183
2.0500	1.0910
2.1000	1.0650
2.1500	1.0403
2.2000	1.0166
2.2500	0.9940
2.3000	0.9724
2.3170	0.9653
2.3500	0.9384
2.4000	0.8997
2.4500	0.8633
2.5000	0.8292
2.5500	0.7970
2.6000	0.7666
2.6500	0.7379
2.7000	0.7109
2.7500	0.6853
2.8000	0.6610
2.8500	0.6380
2.9000	0.6162
2.9500	0.5955
3.0000	0.5758
3.0500	0.5571
3.1000	0.5393
3.1500	0.5223
3.2000	0.5061
3.2500	0.4906
3.3000	0.4759
3.3500	0.4618
3.4000	0.4483
3.4500	0.4354
3.5000	0.4230
3.5500	0.4112
3.6000	0.3999
3.6500	0.3890
3.7000	0.3785
3.7500	0.3685
3.8000	0.3589
3.8500	0.3517
3.9000	0.3517
3.9500	0.3517
4.0000	0.3517

Condizioni di carico elementari

Simbologia

CCE = Numero della condizione di carico elementare
 Comm. = Commento
 Mx = Moltiplicatore della massa in dir. X
 My = Moltiplicatore della massa in dir. Y
 Mz = Moltiplicatore della massa in dir. Z
 Jpx = Moltiplicatore del momento d'inerzia intorno all'asse X
 Jpy = Moltiplicatore del momento d'inerzia intorno all'asse Y
 Jpz = Moltiplicatore del momento d'inerzia intorno all'asse Z
 Tipo CCE = Tipo di CCE per calcolo agli stati limite
 Sicurezza = Contributo alla sicurezza
 F = a favore
 S = a sfavore
 A = ambigua
 Variabilità = Tipo di variabilità
 B = di base
 I = indipendente
 A = ambigua

CCE Comm. Mx My Mz Jpx Jpy Jpz Tipo CCE Sicurezza Variabilità

1 permanenti	1.00	1.00	1.00	0.00	0.00	1.00	1 S	--
2 neve	1.00	1.00	0.00	0.00	0.00	1.00	11 S	B

Elenco tipi cce definiti

Simbologia

Tipo CCE = Tipo condizione di carico elementare

Comm. = Commento

Tipo = Tipologia

G = Permanente

Q = Variabile

I = Da ignorare

A = Azione eccezionale

P = Precompressione

Durata = Durata del carico

N = Non definita

P = Permanente

L = Lunga

M = Media

B = Breve

I = Istantanea

γ min. = Coeff. γ min.

γ max = Coeff. γ max

Ψ_0 = Coeff. Ψ_0

Ψ_1 = Coeff. Ψ_1

Ψ_2 = Coeff. Ψ_2

$\Psi_{0,s}$ = Coeff. Ψ_0 sismico (D.M. 96)

Tipo CCE	Comm.	Tipo	Durata	γ min.	γ max	Ψ_0	Ψ_1	Ψ_2	$\Psi_{0,s}$
1	D.M. 08 Permanenti strutturali	G	N	1.00	1.30				
2	D.M. 08 Permanenti non strutturali	G	N	0.00	1.50				
3	D.M. 08 Variabili Categoria A Ambienti ad uso residenziale	Q	N	0.00	1.50	0.70	0.50	0.30	0.00
4	D.M. 08 Variabili Categoria B Uffici	Q	N	0.00	1.50	0.70	0.50	0.30	0.00
5	D.M. 08 Variabili Categoria C Ambienti suscettibili di affollamento	Q	N	0.00	1.50	0.70	0.70	0.60	0.00
6	D.M. 08 Variabili Categoria D Ambienti ad uso commerciale	Q	N	0.00	1.50	0.70	0.70	0.60	0.00
7	D.M. 08 Variabili Categoria E Biblioteche, archivi, magazzini e ambienti ad uso industriale	Q	N	0.00	1.50	1.00	0.90	0.80	0.00
8	D.M. 08 Variabili Categoria F Rimesse e parcheggi (per autoveicoli di peso <= 30 kN)	Q	N	0.00	1.50	0.70	0.70	0.60	0.00
9	D.M. 08 Variabili Categoria G Rimesse e parcheggi (per autoveicoli di peso > 30 kN)	Q	N	0.00	1.50	0.70	0.50	0.30	0.00
10	D.M. 08 Variabili Vento	Q	N	0.00	1.50	0.60	0.20	0.00	0.00
11	D.M. 08 Variabili Neve (a quota <= 1000 m s.l.m.)	Q	N	0.00	1.50	0.50	0.20	0.00	0.00
12	D.M. 08 Variabili Neve (a quota > 1000 m s.l.m.)	Q	N	0.00	1.50	0.70	0.50	0.20	0.00
13	D.M. 08 Variabili Variazioni termiche	Q	N	0.00	1.50	0.60	0.50	0.00	0.00
14	D.M. 96 Permanenti	G	N	1.00	1.40				
15	D.M. 96 Variabili Abitazioni	Q	P	0.00	1.50	0.70	0.50	0.20	0.70
16	D.M. 96 Variabili Uffici, negozi, scuole, ecc.	Q	N	0.00	1.50	0.70	0.60	0.30	0.70
17	D.M. 96 Variabili Autorimesse	Q	N	0.00	1.50	0.70	0.70	0.60	0.70
18	D.M. 96 Variabili Vento	Q	N	0.00	1.50	0.70	0.20	0.00	0.00

Elenco masse nodi

Simbologia

Nodo = Numero del nodo

Mo = Massa orizzontale

Mz = Massa in dir. Z

Nodo	Mo	Mz	Nodo	Mo	Mz	Nodo	Mo	Mz	Nodo	Mo	Mz	Nodo	Mo	Mz
<kg>	<kg>	<kg>	<kg>	<kg>	<kg>	<kg>	<kg>	<kg>	<kg>	<kg>	<kg>	<kg>	<kg>	<kg>
-1421	61.69	61.69	-1420	61.69	61.69	-1419	61.69	61.69	-1418	61.69	61.69	-1417	61.69	61.69
-1416	61.69	61.69	-1415	89.58	89.58	-1414	89.58	89.58	-1413	89.58	89.58	-1412	89.58	89.58
-1411	89.58	89.58	-1410	89.58	89.58	-1409	145.82	145.82	-1408	145.82	145.82	-1407	145.82	145.82
-1406	145.82	145.82	-1405	145.82	145.82	-1404	145.82	145.82	-1403	234.55	234.55	-1402	234.55	234.55
-1401	234.55	234.55	-1400	234.55	234.55	-1399	234.55	234.55	-1398	234.55	234.55	-1397	6.60	6.60
-1396	6.60	6.60	-1395	6.60	6.60	-1394	6.60	6.60	-1393	6.60	6.60	-1392	6.60	6.60
-1391	59.32	59.32	-1390	164.87	164.87	-1389	59.32	59.32	-1388	164.87	164.87	-1387	59.32	59.32
-1386	164.87	164.87	-1385	59.32	59.32	-1384	164.87	164.87	-1383	59.32	59.32	-1382	164.87	164.87
-1381	59.32	59.32	-1380	164.87	164.87	-1379	106.40	106.40	-1378	212.79	212.79	-1377	106.40	106.40
-1376	212.79	212.79	-1375	106.40	106.40	-1374	212.79	212.79	-1373	106.40	106.40	-1372	212.79	212.79
-1371	106.40	106.40	-1370	212.79	212.79	-1369	106.40	106.40	-1368	212.79	212.79	-1367	263.16	263.16
-1366	263.16	263.16	-1365	263.16	263.16	-1364	263.16	263.16	-1363	263.16	263.16	-1362	263.16	263.16
-1361	144.74	144.74	-1360	274.72	274.72	-1359	289.48	289.48	-1358	274.72	274.72	-1357	289.48	289.48
-1356	274.72	274.72	-1355	289.48	289.48	-1354	274.72	274.72	-1353	289.48	289.48	-1352	274.72	274.72
-1351	289.48	289.48	-1350	274.72	274.72	-1349	289.48	289.48	-1348	9.33	9.33	-1347	9.33	9.33
-1346	9.33	9.33	-1345	9.33	9.33	-1344	9.33	9.33	-1343	9.33	9.33	-1342	7.33	7.33
-1341	7.33	7.33	-1340	7.33	7.33	-1339	7.33	7.33	-1338	7.33	7.33	-1337	7.33	7.33
-1336	14.65	14.65	-1335	16.65	16.65	-1334	14.65	14.65	-1333	16.65	16.65	-1332	14.65	14.65
-1331	16.65	16.65	-1330	14.65	14.65	-1329	16.65	16.65	-1328	14.65	14.65	-1327	16.65	16.65
-1326	14.65	14.65	-1325	16.65	16.65	-1324	126.40	126.40	-1323	296.94	296.94	-1322	296.94	296.94
-1321	296.94	296.94	-1320	296.94	296.94	-1319	296.94	296.94	-1318	296.94	296.94	-1317	391.40	391.40

-1316 391.40 391.40	-1315 391.40 391.40	-1314 391.40 391.40	-1313 391.39 391.39	-1312 391.39 391.39
-1311 318.60 318.60	-1310 384.39 384.39	-1309 396.50 396.50	-1308 318.60 318.60	-1307 384.39 384.39
-1306 396.50 396.50	-1305 318.60 318.60	-1304 384.39 384.39	-1303 396.50 396.50	-1302 318.60 318.60
-1301 384.39 384.39	-1300 396.50 396.50	-1299 318.60 318.60	-1298 384.39 384.39	-1297 396.50 396.50
-1296 318.60 318.60	-1295 384.39 384.39	-1294 396.50 396.50	-1293 407.05 407.05	-1292 407.05 407.05
-1291 407.05 407.05	-1290 407.05 407.05	-1289 407.05 407.05	-1288 407.05 407.05	-1287 430.22 430.22
-1286 430.22 430.22	-1285 430.22 430.22	-1284 430.22 430.22	-1283 430.21 430.21	-1282 430.21 430.21
-1281 522.60 522.60	-1280 522.60 522.60	-1279 522.60 522.60	-1278 522.60 522.60	-1277 522.60 522.60
-1276 522.60 522.60	-1275 191.28 191.28	-1274 63.09 63.09	-1273 191.28 191.28	-1272 63.09 63.09
-1271 191.28 191.28	-1270 63.09 63.09	-1269 191.28 191.28	-1268 63.09 63.09	-1267 191.28 191.28
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2055 137.36 137.36	2056 171.02 171.02	2057 85.58 85.58	2058 152.11 152.11	2059 193.06 193.06
2060 100.77 100.77	2061 47.39 47.39	2062 44.11 44.11	2063 44.77 44.77	2064 263.53 263.53
2065 98.90 98.90	2066 240.12 240.12	2067 26.63 26.63	2068 23.57 23.57	2069 30.85 30.85
2070 218.76 218.76	2071 44.79 44.79	2072 169.83 169.83	2073 72.91 72.91	2074 125.12 125.12
2075 117.28 117.28	2076 68.96 68.96	2077 137.36 137.36	2078 171.02 171.02	2079 85.58 85.58
2080 152.11 152.11	2081 193.06 193.06	2082 100.77 100.77	2083 47.39 47.39	2084 44.11 44.11
2085 44.77 44.77	2086 263.53 263.53	2087 98.90 98.90	2088 240.12 240.12	2089 26.63 26.63
2090 23.57 23.57	2091 30.85 30.85	2092 218.76 218.76	2093 44.79 44.79	2094 169.83 169.83
2095 72.91 72.91	2096 125.12 125.12	2097 117.28 117.28	2098 68.96 68.96	2099 137.36 137.36
2100 171.02 171.02	2101 85.58 85.58	2102 152.11 152.11	2103 193.06 193.06	2104 100.77 100.77
2105 47.39 47.39	2106 44.11 44.11	2107 44.77 44.77	2108 263.53 263.53	2109 98.90 98.90
2110 240.12 240.12	2111 26.63 26.63	2112 23.57 23.57	2113 30.85 30.85	2114 218.76 218.76
2115 44.79 44.79	2116 169.83 169.83	2117 72.91 72.91	2118 125.12 125.12	2119 117.28 117.28
2120 68.96 68.96	2121 137.36 137.36	2122 225.97 225.97	2123 225.97 225.97	2124 225.97 225.97
2125 225.97 225.97	2126 225.97 225.97	2127 225.97 225.97	2128 218.09 218.09	2129 352.59 352.59
2130 218.09 218.09	2131 352.59 352.59	2132 218.09 218.09	2133 352.59 352.59	2134 218.09 218.09
2135 352.59 352.59	2136 218.09 218.09	2137 352.59 352.59	2138 218.09 218.09	2139 352.59 352.59
2140 443.69 443.69	2141 443.69 443.69	2142 443.68 443.68	2143 443.69 443.69	2144 443.68 443.68
2145 443.69 443.69	2146 467.71 467.71	2147 455.93 455.93	2148 467.71 467.71	2149 455.93 455.93
2150 467.71 467.71	2151 455.93 455.93	2152 467.71 467.71	2153 455.93 455.93	2154 467.71 467.71
2155 455.93 455.93	2156 467.71 467.71	2157 455.93 455.93	2158 29.81 29.81	2159 87.95 87.95
2160 29.81 29.81	2161 87.95 87.95	2162 29.81 29.81	2163 87.95 87.95	2164 29.81 29.81
2165 87.95 87.95	2166 29.81 29.81	2167 87.95 87.95	2168 29.81 29.81	2169 87.95 87.95
2170 384.44 384.44	2171 550.57 550.57	2172 384.44 384.44	2173 550.57 550.57	2174 384.44 384.44
2175 550.57 550.57	2176 384.44 384.44	2177 550.57 550.57	2178 384.44 384.44	2179 550.57 550.57
2180 384.44 384.44	2181 550.57 550.57	2182 221.54 221.54	2183 221.54 221.54	2184 221.54 221.54
2185 221.54 221.54	2186 221.54 221.54	2187 221.54 221.54	2188 336.61 336.61	2189 336.61 336.61
2190 336.61 336.61	2191 336.61 336.61	2192 336.61 336.61	2193 336.61 336.61	2194 308.32 308.32
2195 308.32 308.32	2196 308.32 308.32	2197 308.32 308.32	2198 308.32 308.32	2199 308.32 308.32
2200 226.58 226.58	2201 226.58 226.58	2202 226.58 226.58	2203 226.58 226.58	2204 226.58 226.58
2205 226.58 226.58	2206 310.12 310.12	2207 310.12 310.12	2208 310.12 310.12	2209 310.12 310.12
2210 310.12 310.12	2211 310.12 310.12	2212 244.89 244.89	2213 244.89 244.89	2214 244.89 244.89
2215 244.89 244.89	2216 244.89 244.89	2217 244.89 244.89	2218 307.21 307.21	2219 307.21 307.21
2220 307.21 307.21	2221 307.21 307.21	2222 307.21 307.21	2223 307.21 307.21	2224 330.51 330.51
2225 330.51 330.51	2226 330.51 330.51	2227 330.51 330.51	2228 330.51 330.51	2229 330.51 330.51
2230 69.41 69.41	2231 69.41 69.41	2232 69.41 69.41	2233 69.41 69.41	2234 69.41 69.41
2235 69.41 69.41	2236 106.87 106.87	2237 106.87 106.87	2238 106.87 106.87	2239 106.87 106.87
2240 106.87 106.87	2241 106.87 106.87	2242 158.05 158.05	2243 158.05 158.05	2244 158.05 158.05
2245 158.05 158.05	2246 158.05 158.05	2247 158.05 158.05	2248 252.35 252.35	2249 252.35 252.35
2250 252.35 252.35	2251 252.35 252.35	2252 252.35 252.35	2253 252.35 252.35	2254 312.56 312.56
2255 312.56 312.56	2256 312.56 312.56	2257 312.56 312.56	2258 312.56 312.56	2259 312.56 312.56
2260 321.17 321.17	2261 321.17 321.17	2262 321.17 321.17	2263 321.17 321.17	2264 321.17 321.17
2265 321.17 321.17	2266 221.88 221.88	2267 221.88 221.88	2268 221.88 221.88	2269 221.88 221.88
2270 221.88 221.88	2271 221.88 221.88	2272 198.32 198.32	2273 198.32 198.32	2274 198.32 198.32
2275 198.32 198.32	2276 198.32 198.32	2277 198.32 198.32	2278 88.94 88.94	2279 88.94 88.94
2280 88.94 88.94	2281 88.94 88.94	2282 88.94 88.94	2283 88.94 88.94	2284 416.45 416.45
2285 416.45 416.45	2286 416.45 416.45	2287 416.45 416.45	2288 416.45 416.45	2289 416.45 416.45
2290 383.05 383.05	2291 383.05 383.05	2292 383.05 383.05	2293 383.05 383.05	2294 383.05 383.05
2295 383.05 383.05	2296 26.63 26.63	2297 334.88 334.88	2298 321.02 321.02	2299 334.88 334.88
2300 321.02 321.02	2301 334.88 334.88	2302 321.02 321.02	2303 334.88 334.88	2304 321.02 321.02
2305 334.88 334.88	2306 321.02 321.02	2307 334.88 334.88	2308 321.02 321.02	2309 87.91 87.91
2310 87.91 87.91	2311 87.91 87.91	2312 87.91 87.91	2313 87.91 87.91	2314 87.91 87.91
2315 333.04 333.04	2316 97.55 97.55	2317 333.04 333.04	2318 97.55 97.55	2319 333.04 333.04
2320 97.55 97.55	2321 333.04 333.04	2322 97.55 97.55	2323 333.04 333.04	2324 97.55 97.55
2325 333.04 333.04	2326 97.55 97.55	2327 71.45 71.45	2328 71.45 71.45	2329 71.45 71.45

2330	71.45	71.45	2331	71.45	71.45	2332	71.45	71.45	2333	263.53	263.53	2334	0.00	100.77
2335	140.89	140.89	2336	140.89	140.89	2337	140.89	140.89	2338	140.89	140.89	2339	140.89	140.89
2340	140.89	140.89	2341	89.61	89.61	2342	89.61	89.61	2343	89.61	89.61	2344	89.61	89.61
2345	89.61	89.61	2346	89.61	89.61	2347	78.19	78.19	2348	210.35	210.35	2349	78.19	78.19
2350	210.35	210.35	2351	78.19	78.19	2352	210.35	210.35	2353	78.19	78.19	2354	210.35	210.35
2355	78.19	78.19	2356	210.35	210.35	2357	78.19	78.19	2358	210.35	210.35	2359	310.18	310.18
2360	495.13	495.13	2361	310.18	310.18	2362	495.13	495.13	2363	310.18	310.18	2364	495.13	495.13
2365	310.18	310.18	2366	495.13	495.13	2367	310.18	310.18	2368	495.13	495.13	2369	310.18	310.18
2370	495.13	495.13	2371	449.91	449.91	2372	449.91	449.91	2373	449.91	449.91	2374	449.91	449.91
2375	449.91	449.91	2376	449.91	449.91	2377	283.83	283.83	2378	283.83	283.83	2379	283.83	283.83
2380	283.83	283.83	2381	283.83	283.83	2382	283.83	283.83	2383	289.63	289.63	2384	289.63	289.63
2385	289.63	289.63	2386	289.63	289.63	2387	289.63	289.63	2388	289.63	289.63	2389	261.98	261.98
2390	261.98	261.98	2391	261.98	261.98	2392	261.98	261.98	2393	261.98	261.98	2394	261.98	261.98
2395	324.85	324.85	2396	324.85	324.85	2397	324.85	324.85	2398	324.85	324.85	2399	324.85	324.85
2400	324.85	324.85	2401	193.06	193.06	2402	7.99	7.99	2403	7.99	7.99	2404	7.99	7.99
2405	7.99	7.99	2406	7.99	7.99	2407	0.00	7.99	2408	137.36	137.36	2409	214.93	214.93
2410	214.93	214.93	2411	214.93	214.93	2412	214.93	214.93	2413	214.93	214.93	2414	214.93	214.93
2415	28.56	28.56	2416	82.43	82.43	2417	28.56	28.56	2418	82.43	82.43	2419	28.56	28.56
2420	82.43	82.43	2421	28.56	28.56	2422	82.43	82.43	2423	28.56	28.56	2424	82.43	82.43
2425	28.56	28.56	2426	82.43	82.43	2427	117.28	117.28	2428	0.00	72.91	2429	44.79	44.79
2430	30.85	30.85	2431	104.97	104.97	2432	71.82	71.82	2433	153.67	153.67	2434	104.97	104.97
2435	71.82	71.82	2436	153.67	153.67	2437	104.97	104.97	2438	71.82	71.82	2439	153.67	153.67
2440	104.97	104.97	2441	71.82	71.82	2442	153.67	153.67	2443	104.97	104.97	2444	71.82	71.82
2445	153.67	153.67	2446	104.97	104.97	2447	71.82	71.82	2448	153.67	153.67	2449	23.75	23.75
2450	23.75	23.75	2451	23.75	23.75	2452	23.75	23.75	2453	23.75	23.75	2454	23.75	23.75
2455	321.65	321.65	2456	188.81	188.81	2457	321.65	321.65	2458	188.81	188.81	2459	321.65	321.65
2460	188.81	188.81	2461	321.65	321.65	2462	188.81	188.81	2463	321.65	321.65	2464	188.81	188.81
2465	321.65	321.65	2466	188.81	188.81	2467	176.61	176.61	2468	330.82	330.82	2469	176.61	176.61
2470	330.82	330.82	2471	176.61	176.61	2472	330.82	330.82	2473	176.61	176.61	2474	330.82	330.82
2475	176.61	176.61	2476	330.82	330.82	2477	176.61	176.61	2478	330.82	330.82	2479	179.64	179.64
2480	179.64	179.64	2481	179.64	179.64	2482	179.64	179.64	2483	179.64	179.64	2484	179.64	179.64
2485	98.88	98.88	2486	98.88	98.88	2487	98.88	98.88	2488	98.88	98.88	2489	98.88	98.88
2490	98.88	98.88	2491	75.54	75.54	2492	171.24	171.24	2493	75.54	75.54	2494	171.24	171.24
2495	75.54	75.54	2496	171.24	171.24	2497	75.54	75.54	2498	171.24	171.24	2499	75.54	75.54
2500	171.24	171.24	2501	75.54	75.54	2502	171.24	171.24	2503	305.06	305.06	2504	305.06	305.06
2505	305.06	305.06	2506	305.06	305.06	2507	305.06	305.06	2508	305.06	305.06	2509	12.73	12.73
2510	12.73	12.73	2511	12.73	12.73	2512	12.73	12.73	2513	12.73	12.73	2514	12.73	12.73
2515	2.96	2.96	2516	2.96	2.96	2517	2.96	2.96	2518	2.96	2.96	2519	2.96	2.96
2520	2.96	2.96	2521	11.06	11.06	2522	11.06	11.06	2523	11.06	11.06	2524	11.06	11.06
2525	11.06	11.06	2526	11.06	11.06	2527	329.74	329.74	2528	329.74	329.74	2529	329.74	329.74
2530	329.74	329.74	2531	329.74	329.74	2532	329.74	329.74	2533	323.38	323.38	2534	323.38	323.38
2535	323.38	323.38	2536	323.38	323.38	2537	323.38	323.38	2538	323.38	323.38	2539	186.71	186.71
2540	186.71	186.71	2541	186.71	186.71	2542	186.71	186.71	2543	186.71	186.71	2544	186.71	186.71
2545	143.54	143.54	2546	143.54	143.54	2547	143.54	143.54	2548	143.54	143.54	2549	143.54	143.54
2550	143.54	143.54	2551	96.73	96.73	2552	96.73	96.73	2553	96.73	96.73	2554	96.73	96.73
2555	96.73	96.73	2556	96.73	96.73	2557	27.58	27.58	2558	27.58	27.58	2559	27.58	27.58
2560	27.58	27.58	2561	27.58	27.58	2562	27.58	27.58	2563	4.19	4.19	2564	4.19	4.19
2565	4.19	4.19	2566	4.19	4.19	2567	4.19	4.19	2568	4.19	4.19	2569	72.17	72.17
2570	114.03	114.03	2571	23.76	23.76	2572	72.17	72.17	2573	114.03	114.03	2574	23.76	23.76
2575	72.17	72.17	2576	114.03	114.03	2577	23.76	23.76	2578	72.17	72.17	2579	114.03	114.03
2580	23.76	23.76	2581	72.17	72.17	2582	114.03	114.03	2583	23.76	23.76	2584	72.17	72.17
2585	114.03	114.03	2586	23.76	23.76	2587	170.54	170.54	2588	170.54	170.54	2589	170.54	170.54
2590	170.54	170.54	2591	170.54	170.54	2592	170.54	170.54	2593	271.23	271.23	2594	271.23	271.23
2595	271.23	271.23	2596	271.23	271.23	2597	271.23	271.23	2598	271.23	271.23	2599	216.46	216.46
2600	216.46	216.46	2601	216.46	216.46	2602	216.46	216.46	2603	216.46	216.46	2604	216.47	216.47
2605	430.08	430.08	2606	430.08	430.08	2607	430.08	430.08	2608	430.08	430.08	2609	430.08	430.08
2610	430.08	430.08	2611	49.15	49.15	2612	49.15	49.15	2613	49.15	49.15	2614	49.15	49.15
2615	49.15	49.15	2616	49.15	49.15	2617	106.44	106.44	2618	106.44	106.44	2619	106.44	106.44
2620	106.44	106.44	2621	106.44	106.44	2622	106.44	106.44	2623	28.05	28.05	2624	28.05	28.05
2625	28.05	28.05	2626	28.05	28.05	2627	28.05	28.05	2628	28.05	28.05	2629	44.11	44.11
2630	85.58	85.58	2631	93.93	93.93	2632	93.93	93.93	2633	93.93	93.93	2634	93.93	93.93
2635	93.93	93.93	2636	93.93	93.93	2637	113.51	113.51	2638	113.51	113.51	2639	113.51	113.51
2640	113.51	113.51	2641	113.51	113.51	2642	113.51	113.51						

Totali masse nodi

Mo	Mz
<kg>	<kg>
357584.00	357950.00

Elenco modi di vibrare, masse partecipanti e coefficienti di partecipazione

Simbologia

Modo = Numero del modo di vibrare
 C = * indica che il modo è stato considerato
 Per. = Periodo
 Diff. = Minima differenza percentuale dagli altri periodi

Φ_x = Coefficiente di partecipazione in dir. X
 Φ_y = Coefficiente di partecipazione in dir. Y
 Φ_z = Coefficiente di partecipazione in dir. Z
 $\%M_x$ = Percentuale massa partecipante in dir. X
 $\%M_y$ = Percentuale massa partecipante in dir. Y
 $\%M_z$ = Percentuale massa partecipante in dir. Z
 $\%J_{pz}$ = Percentuale momento d'inertzia polare partecipante intorno all'asse Z

Modo	C	Per.	Diff.	Φ_x	Φ_y	Φ_z	$\%M_x$	$\%M_y$	$\%M_z$	$\%J_{pz}$
1 *	0.88	75.35	-0.21	158.26	0.57	0.00	70.04	0.00	0.00	0.00
2 *	0.50	29.54	1.54	0.69	0.54	0.01	0.00	0.00	0.00	0.00
3 *	0.39	6.14	1.15	32.96	0.94	0.00	3.04	0.00	0.00	0.00
4 *	0.37	6.14	-4.12	4.30	-0.55	0.05	0.05	0.00	0.00	0.00
5 *	0.34	2.42	-0.66	24.59	-1.70	0.00	1.69	0.01	0.00	0.00
6 *	0.33	2.07	0.05	3.66	2.57	0.00	0.04	0.02	0.00	0.00
7 *	0.33	1.28	1.70	0.66	1.67	0.01	0.00	0.01	0.00	0.00
8 *	0.32	1.28	0.57	0.42	3.23	0.00	0.00	0.03	0.00	0.00
9 *	0.31	2.17	1.10	-1.76	3.52	0.00	0.01	0.03	0.00	0.00
10 *	0.30	2.17	-1.37	7.72	-1.81	0.01	0.17	0.01	0.00	0.00
11 *	0.30	0.84	0.28	6.63	-1.49	0.00	0.12	0.01	0.00	0.00
12 *	0.29	0.84	-0.17	4.11	1.84	0.00	0.05	0.01	0.00	0.00
13 *	0.29	0.82	-1.01	1.86	-0.65	0.00	0.01	0.00	0.00	0.00
14 *	0.29	0.03	-2.25	-1.85	0.54	0.01	0.01	0.00	0.00	0.00
15 *	0.29	0.03	0.46	2.31	-1.72	0.00	0.01	0.01	0.00	0.00
16 *	0.29	0.46	0.54	1.66	-1.00	0.00	0.01	0.00	0.00	0.00
17 *	0.28	0.02	-0.79	-0.65	3.67	0.00	0.00	0.04	0.00	0.00
18 *	0.28	0.02	-0.27	-2.26	3.48	0.00	0.01	0.03	0.00	0.00
19 *	0.28	0.06	-1.21	3.14	-9.10	0.00	0.03	0.23	0.00	0.00
20 *	0.28	0.04	-0.07	1.98	-3.07	0.00	0.01	0.03	0.00	0.00
21 *	0.28	0.04	-0.37	-0.66	3.25	0.00	0.00	0.03	0.00	0.00
22 *	0.28	0.35	-1.07	1.12	-1.49	0.00	0.00	0.01	0.00	0.00
23 *	0.28	0.36	0.37	2.55	4.21	0.00	0.02	0.05	0.00	0.00
24 *	0.28	0.27	1.69	0.80	3.11	0.01	0.00	0.03	0.00	0.00
25 *	0.28	0.27	1.17	-4.20	-9.25	0.00	0.05	0.24	0.00	0.00
26 *	0.27	1.30	-0.07	-7.46	4.24	0.00	0.16	0.05	0.00	0.00
27 *	0.26	4.84	5.80	-0.50	2.85	0.09	0.00	0.02	0.00	0.00
28 *	0.25	1.34	3.92	6.24	6.16	0.04	0.11	0.11	0.00	0.00
29 *	0.24	1.34	-3.08	2.98	0.92	0.03	0.02	0.00	0.00	0.00
30 *	0.24	0.45	-0.33	5.37	4.28	0.00	0.08	0.05	0.00	0.00
31 *	0.24	0.45	7.26	-0.27	2.29	0.15	0.00	0.01	0.00	0.00
32 *	0.23	2.89	-0.18	-3.32	-3.79	0.00	0.03	0.04	0.00	0.00
33 *	0.23	1.91	-15.43	-0.52	0.52	0.67	0.00	0.00	0.00	0.00
34 *	0.22	1.91	-1.88	3.84	123.95	0.01	0.04	42.92	0.00	0.00
35 *	0.21	2.48	24.81	4.74	2.85	1.72	0.06	0.02	0.00	0.00
36 *	0.21	1.85	1.83	-3.10	6.56	0.01	0.03	0.12	0.00	0.00
37 *	0.20	0.72	12.79	-0.78	1.45	0.46	0.00	0.01	0.00	0.00
38 *	0.20	0.72	12.28	-6.44	4.62	0.42	0.12	0.06	0.00	0.00
39 *	0.20	1.15	-0.28	4.72	-1.19	0.00	0.06	0.00	0.00	0.00
40 *	0.20	1.62	-6.37	-0.67	-1.08	0.11	0.00	0.00	0.00	0.00
41 *	0.19	1.99	1.89	-8.54	-6.54	0.01	0.20	0.12	0.00	0.00
42 *	0.18	0.07	14.40	4.51	-4.61	0.58	0.06	0.06	0.00	0.00
43 *	0.18	0.07	9.39	-0.69	2.07	0.25	0.00	0.01	0.00	0.00
44 *	0.17	2.74	7.33	6.69	-17.19	0.15	0.13	0.83	0.00	0.00
45 *	0.17	2.59	1.77	-7.15	6.06	0.01	0.14	0.10	0.00	0.00
46 *	0.16	0.19	-7.79	-17.64	3.23	0.17	0.87	0.03	0.00	0.00
47 *	0.16	0.19	22.82	-4.02	4.76	1.46	0.05	0.06	0.00	0.00
48 *	0.15	0.99	-20.57	8.06	-0.10	1.18	0.18	0.00	0.00	0.00
49 *	0.15	0.97	-19.31	-4.19	2.99	1.04	0.05	0.03	0.00	0.00
50 *	0.15	0.97	-17.45	3.63	-8.20	0.85	0.04	0.19	0.00	0.00
51 *	0.14	4.69	-0.90	9.15	-8.89	0.00	0.23	0.22	0.00	0.00
52 *	0.14	4.69	-7.71	2.81	0.99	0.17	0.02	0.00	0.00	0.00
53 *	0.13	2.72	8.60	12.46	-6.74	0.21	0.43	0.13	0.00	0.00
54 *	0.13	0.92	0.79	7.04	-0.67	0.00	0.14	0.00	0.00	0.00
55 *	0.12	0.36	1.61	1.43	9.45	0.01	0.01	0.25	0.00	0.00
56 *	0.12	0.36	0.20	10.58	-4.30	0.00	0.31	0.05	0.00	0.00
57 *	0.12	0.43	1.96	8.12	-5.00	0.01	0.18	0.07	0.00	0.00
58 *	0.12	0.32	-0.13	9.78	-2.19	0.00	0.27	0.01	0.00	0.00
59 *	0.12	0.32	-3.62	1.04	-0.33	0.04	0.00	0.00	0.00	0.00
60 *	0.12	3.15	-2.72	-5.27	-4.05	0.02	0.08	0.05	0.00	0.00
61 *	0.12	2.61	4.09	4.02	4.00	0.05	0.05	0.04	0.00	0.00
62 *	0.11	1.85	1.66	6.73	-2.16	0.01	0.13	0.01	0.00	0.00
63 *	0.11	1.33	-3.37	-9.51	2.34	0.03	0.25	0.02	0.00	0.00
64 *	0.11	1.33	6.66	-3.47	-7.52	0.12	0.03	0.16	0.00	0.00
65 *	0.10	1.59	0.79	-3.05	6.83	0.00	0.03	0.13	0.00	0.00
66 *	0.10	1.59	1.78	-9.61	-0.62	0.01	0.26	0.00	0.00	0.00
67 *	0.10	0.96	7.26	-0.95	5.80	0.15	0.00	0.09	0.00	0.00
68 *	0.10	0.96	-0.69	4.05	13.03	0.00	0.05	0.47	0.00	0.00

69 *	0.10	1.07	-0.75	-4.90	-17.12	0.00	0.07	0.82	0.00	
70 *	0.10	1.18	10.67	-0.83	20.19	0.32	0.00	1.14	0.00	
71 *	0.09	0.28	-2.78	4.21	-9.26	0.02	0.05	0.24	0.00	
72 *	0.09	0.28	0.55	-9.64	5.79	0.00	0.26	0.09	0.00	
73 *	0.09	0.16	-3.41	-1.87	1.86	0.03	0.01	0.01	0.00	
74 *	0.09	0.16	-1.79	3.27	1.71	0.01	0.03	0.01	0.00	
75 *	0.09	0.37	-4.64	-5.92	8.58	0.06	0.10	0.21	0.00	
76 *	0.09	0.21	1.69	-1.20	9.63	0.01	0.00	0.26	0.00	
77 *	0.09	0.18	0.16	-0.84	-22.30	0.00	0.00	1.39	0.00	
78 *	0.09	0.18	3.20	1.08	0.13	0.03	0.00	0.00	0.00	
79 *	0.09	0.43	-0.02	0.55	0.71	0.00	0.00	0.00	0.00	
80 *	0.09	0.44	0.44	-0.14	-4.62	2.11	0.00	0.06	0.01	0.00
81 *	0.09	0.44	-6.20	-4.34	2.94	0.11	0.05	0.02	0.00	
82 *	0.09	0.09	-3.47	-7.07	5.19	0.03	0.14	0.08	0.00	
83 *	0.09	0.09	1.15	1.54	-6.35	0.00	0.01	0.11	0.00	
84 *	0.09	0.64	4.30	0.30	-9.58	0.05	0.00	0.26	0.00	
85 *	0.09	0.64	-3.90	2.92	6.72	0.04	0.02	0.13	0.00	
86 *	0.09	1.06	3.07	7.88	-0.40	0.03	0.17	0.00	0.00	
87 *	0.09	1.06	0.83	-7.28	-1.11	0.00	0.15	0.00	0.00	
88 *	0.08	1.97	-1.81	-1.76	3.26	0.01	0.01	0.03	0.00	
89 *	0.08	0.03	-16.54	2.46	-6.46	0.76	0.02	0.12	0.00	
90 *	0.08	0.03	4.88	3.93	5.04	0.07	0.04	0.07	0.00	
91 *	0.08	0.28	-7.46	-0.58	-4.54	0.16	0.00	0.06	0.00	
92 *	0.08	0.05	7.34	1.44	0.79	0.15	0.01	0.00	0.00	
93 *	0.08	0.05	1.38	0.80	0.09	0.01	0.00	0.00	0.00	
94 *	0.08	0.28	-15.26	-0.36	-3.44	0.65	0.00	0.03	0.00	
95 *	0.08	0.41	5.56	-0.65	0.87	0.09	0.00	0.00	0.00	
96 *	0.08	0.43	-0.70	-0.91	-7.95	0.00	0.00	0.18	0.00	
97 *	0.08	0.43	-7.62	0.59	-2.12	0.16	0.00	0.01	0.00	
98 *	0.08	1.05	-3.25	0.39	9.10	0.03	0.00	0.23	0.00	
99 *	0.08	1.11	28.76	6.75	-22.17	2.31	0.13	1.37	0.00	
100 *	0.08	0.82	12.78	5.69	-39.45	0.46	0.09	4.35	0.00	
101 *	0.08	0.82	1.97	1.81	-9.11	0.01	0.01	0.23	0.00	
102 *	0.07	1.38	9.75	-14.49	-24.42	0.27	0.59	1.67	0.00	
103 *	0.07	1.80	0.84	-1.12	-4.78	0.00	0.00	0.06	0.00	
104 *	0.07	1.98	19.86	1.89	-6.83	1.10	0.01	0.13	0.00	
105 *	0.07	0.63	27.28	13.32	-5.07	2.08	0.50	0.07	0.00	
106 *	0.07	0.63	-18.33	1.91	-10.87	0.94	0.01	0.33	0.00	
107 *	0.07	0.10	33.85	2.88	4.50	3.20	0.02	0.06	0.00	
108 *	0.07	0.10	-10.88	-0.84	-4.83	0.33	0.00	0.07	0.00	
109 *	0.07	0.20	-40.48	0.74	-24.33	4.58	0.00	1.65	0.00	
110 *	0.07	0.20	8.44	3.19	7.11	0.20	0.03	0.14	0.00	
111 *	0.07	0.43	26.00	-2.37	7.04	1.89	0.02	0.14	0.00	
112 *	0.07	0.43	-5.44	0.94	-6.24	0.08	0.00	0.11	0.00	
113 *	0.07	0.67	3.22	-4.53	5.83	0.03	0.06	0.09	0.00	
114 *	0.07	1.80	-40.06	-2.26	-6.58	4.49	0.01	0.12	0.00	
115 *	0.06	0.92	-37.58	-4.02	21.71	3.95	0.05	1.32	0.00	
116 *	0.06	0.29	-1.39	1.18	-30.29	0.01	0.00	2.56	0.00	
117 *	0.06	0.29	-7.00	0.12	-37.32	0.14	0.00	3.89	0.00	
118 *	0.06	0.34	-2.59	2.27	-2.04	0.02	0.01	0.01	0.00	
119 *	0.06	0.34	0.51	2.20	-15.13	0.00	0.01	0.64	0.00	
120 *	0.06	0.23	-1.99	-3.68	-16.73	0.01	0.04	0.78	0.00	
121 *	0.06	0.23	0.57	2.84	-24.01	0.00	0.02	1.61	0.00	
122 *	0.06	0.29	23.02	-3.95	7.40	1.48	0.04	0.15	0.00	
123 *	0.06	0.29	-2.73	7.04	-13.07	0.02	0.14	0.48	0.00	
124 *	0.06	1.10	-8.56	9.64	-13.78	0.21	0.26	0.53	0.00	
125 *	0.06	0.71	-2.60	12.72	18.31	0.02	0.45	0.94	0.00	
126 *	0.06	0.71	-1.83	4.25	-5.86	0.01	0.05	0.10	0.00	
127 *	0.06	0.40	-4.30	5.12	-8.80	0.05	0.07	0.22	0.00	
128 *	0.06	0.40	-7.24	7.74	-8.85	0.15	0.17	0.22	0.00	
129 *	0.06	0.49	-12.07	10.02	-1.50	0.41	0.28	0.01	0.00	
130 *	0.06	0.49	-15.55	8.24	-6.28	0.68	0.19	0.11	0.00	
131 *	0.06	0.69	4.14	-0.17	-5.94	0.05	0.00	0.10	0.00	
132 *	0.06	0.51	2.68	2.63	13.30	0.02	0.02	0.49	0.00	
133 *	0.06	0.51	-2.14	5.33	10.74	0.01	0.08	0.32	0.00	
134 *	0.06	0.70	6.78	-3.70	-0.55	0.13	0.04	0.00	0.00	
135 *	0.05	0.47	-7.04	-2.32	0.94	0.14	0.02	0.00	0.00	
136 *	0.05	0.15	7.29	-3.73	-1.08	0.15	0.04	0.00	0.00	
137 *	0.05	0.15	2.88	-10.38	-7.49	0.02	0.30	0.16	0.00	
138 *	0.05	1.25	0.59	-4.93	-2.26	0.00	0.07	0.01	0.00	
139 *	0.05	0.52	8.47	-8.71	-2.63	0.20	0.21	0.02	0.00	
140 *	0.05	0.52	-4.06	-2.64	3.08	0.05	0.02	0.03	0.00	
141 *	0.05	0.62	2.06	0.69	0.40	0.01	0.00	0.00	0.00	
142 *	0.05	0.27	0.51	5.08	2.78	0.00	0.07	0.02	0.00	
143 *	0.05	0.27	1.78	2.79	1.72	0.01	0.02	0.01	0.00	
144 *	0.05	0.70	8.04	-0.37	-5.77	0.18	0.00	0.09	0.00	
145 *	0.05	0.42	-1.69	-1.65	-5.62	0.01	0.01	0.09	0.00	
146 *	0.05	0.33	-3.30	-0.16	-15.31	0.03	0.00	0.65	0.00	
147 *	0.05	0.33	2.75	-2.40	6.85	0.02	0.02	0.13	0.00	

148 * 0.05	0.13	0.27	-1.00	-0.48	0.00	0.00	0.00	0.00
149 * 0.05	0.13	0.55	-1.65	-3.78	0.00	0.01	0.04	0.00
150 * 0.05	0.16	3.53	-1.00	-2.49	0.03	0.00	0.02	0.00

Tot.cons. 43.37 85.69 79.24 0.00

Materiali

Cemento armato

Elenco dei criteri di progetto e delle loro principali caratteristiche meccaniche utilizzate:
Sezioni generiche: 10 Nessun controllo di normativa

Calcestruzzo

Tipo di calcestruzzo: C28/35
Rck calcestruzzo <daN/cm²>: 350.00
Resistenza caratteristica cilindrica (Fck) <daN/cm²>: 290.50
Resistenza caratteristica a trazione (Fctk) <daN/cm²>: 19.84
 α_{cc} : 0.85
 γ_c : 1.50
Resistenza di progetto cilindrica (Fcd) <daN/cm²>: 164.62
Resistenza di progetto a trazione (Fctd) <daN/cm²>: 13.23

Acciaio

Tipo di acciaio: B450C
Tensione caratteristica di snervamento (Fyk) <daN/cm²>: 4500.00
 γ_s : 1.15
Tensione di progetto di snervamento (Fyd) <daN/cm²>: 3913.04

Acciaio

Elenco dei criteri di progetto e delle loro principali caratteristiche meccaniche utilizzate:
"Aste in acciaio: 1 "

Tipo di acciaio: S355 UNI EN 10025-2

Elenco dei criteri di progetto e delle loro principali caratteristiche meccaniche utilizzate:
"Aste in acciaio: 1 "

Tipo di acciaio: S355H UNI EN 10210-1
"Nodi in acciaio: 1 Piastre di fondazione"
"Piastre di fondazione"
Classe bulloni: 4.6
Classe Saldature: SECONDA

Spostamento relativo tra i due nodi

Max = 0.00