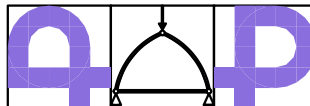




COMUNE DI BORGO SAN LORENZO (FI)
SERVIZIO TECNICO

Piazza Dante n.2
50032 - Borgo San Lorenzo (FI)



ING. ANDREA PAGLIAZZI
INGEGNERE CIVIL

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50127 Firen:
Tel. 328826404

COMUNE DI BORGO SAN LORENZO (FI)
PROGETTO DI MIGLIORAMENTO SISMICO DELLA SCUOLA PRIMARIA
"DON MINZONI" SITUATA IN VIA DON MINZONI, LOC. CAPOLUOGO
CON RIFACIMENTO DELL'ATRIO DI INGRESSO
PROGETTAZIONE ESECUTIVA

COMMITTENTE

COMUNE DI
BORGO SAN LORENZO

Servizio Tecnico
Piazza Dante n.2
50032 - Borgo San Lorenzo (FI)

ELABORATO

STRUTTURALE

A9 - FASCICOLO DEI CALCOLI

- Allegato 3 Ed. esist.: Verifiche c.a. - Combinazione SLV: Sisma 30X+100Y

IL TECNICO INCARICATO

Ing. Andrea Pagliazzi

Via di Novoli, 97/D
50127 Firenze
Tel. 3288264047
e-mail: a.pagliazzi@gmail.com

TIMBRO



COLLABORAZIONE
AL PROGETTO
ARCHITETTONICO

Arch. Paola Guidotti
Arch. Andrea Sighieri
Dott.ssa Sandra Gualtieri

FILE	REVIS. N°	DATA	TAV. REL.	SCALA
BSL_ST_675_4	0	FEBBRAIO 2018		-



Rev.	Data	Descrizione / Motivo della revisione	Redatto	Controllato / Approvato
0	Febbraio 2018	Progetto esecutivo	Dott. Ing. Andrea PAGLIAZZI	Dott. Ing. Andrea PAGLIAZZI

E' fatto obbligo alla ditta esecutrice dei lavori verificare le quote riportate nella presente documentazione, confrontarle con quelle del progetto architettonico e del progetto della ditta prefabbricatrice. Eventuali difformità dovranno essere comunicate alla D.L. che provvederà alle eventuali revisioni o chiarimenti.

PROPRIETA' RISERVATA. VIETATA LA RIPRODUZIONE E LA DIFFUSIONE

Verifiche C.A.

Report

SMARTcem

Combinazione SLV: Sisma 30%X+100%Y

"2 - Rettangolare b=27 h=40 pilastri"

Sezione

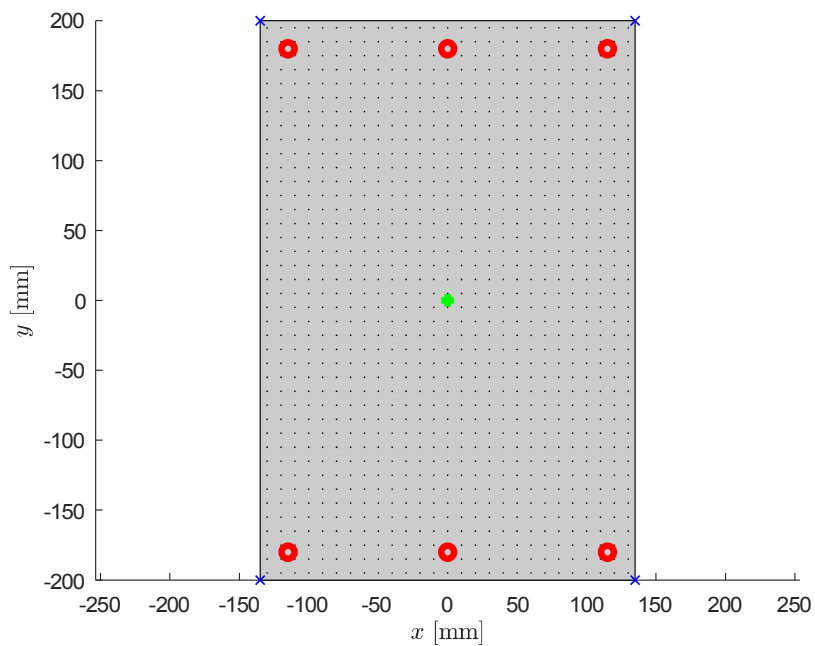


Tabella 1.1. Materiali

Res.Cls 1	Rcm	[MPa]	13
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.00

Tabella 2.2. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-200	200
Largh. anima	bw	[mm]	400	270
Altezza utile	d	[mm]	240	370
Area staffe	As	[mm2]	57	57
Passo staffe	s	[mm]	180	180
Area f.pieg.	Asfp	[mm2]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 3.3. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	20	20	153.94
2	135	20	153.94
3	250	20	153.94
4	20	380	153.94
5	135	380	153.94
6	250	380	153.94

Verifica SLV (peggiorativa per M)

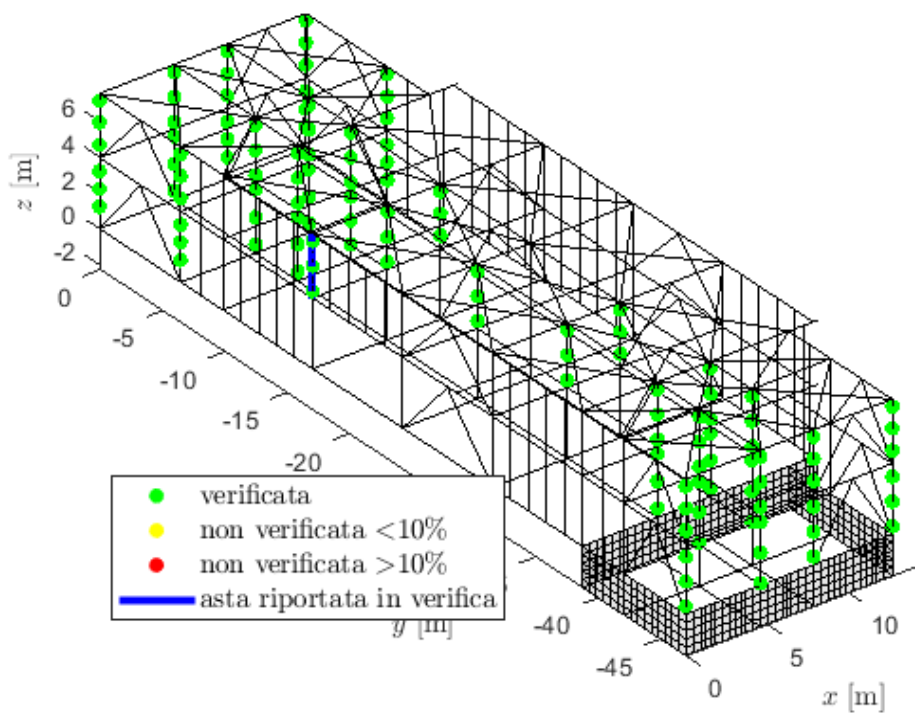


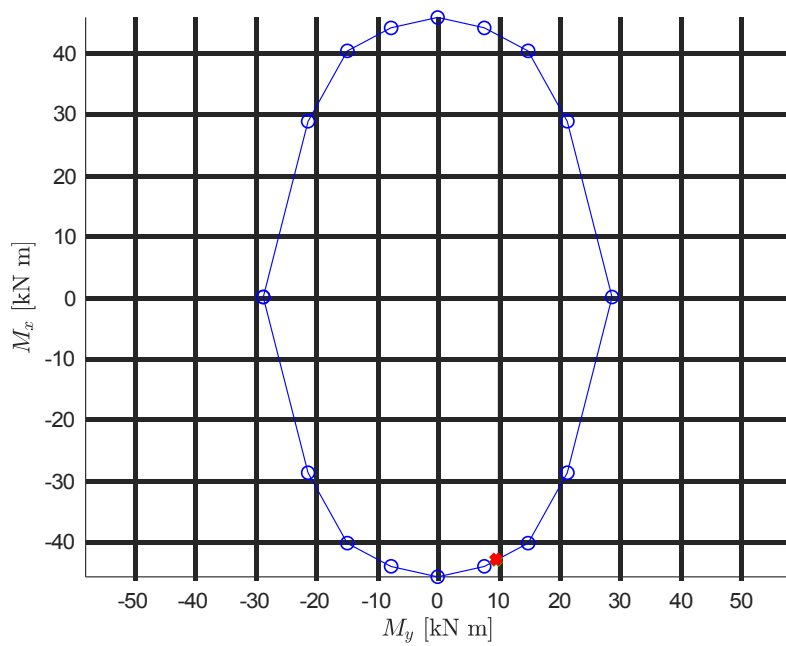
Tabella 4.4. Elemento più sollecitato

Elemento	[n°]	588
Ascissa	[m]	0.40

Tabella 5.5. Sollecitazioni SLV

		min	max
N	[kN]	-81.3	-68.5

M _x	[kNm]	-42.9	-12.0
M _y	[kNm]	7.0	9.6
V _x	[kN]	5.1	7.1
V _y	[kN]	-30.3	-6.7



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.997$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

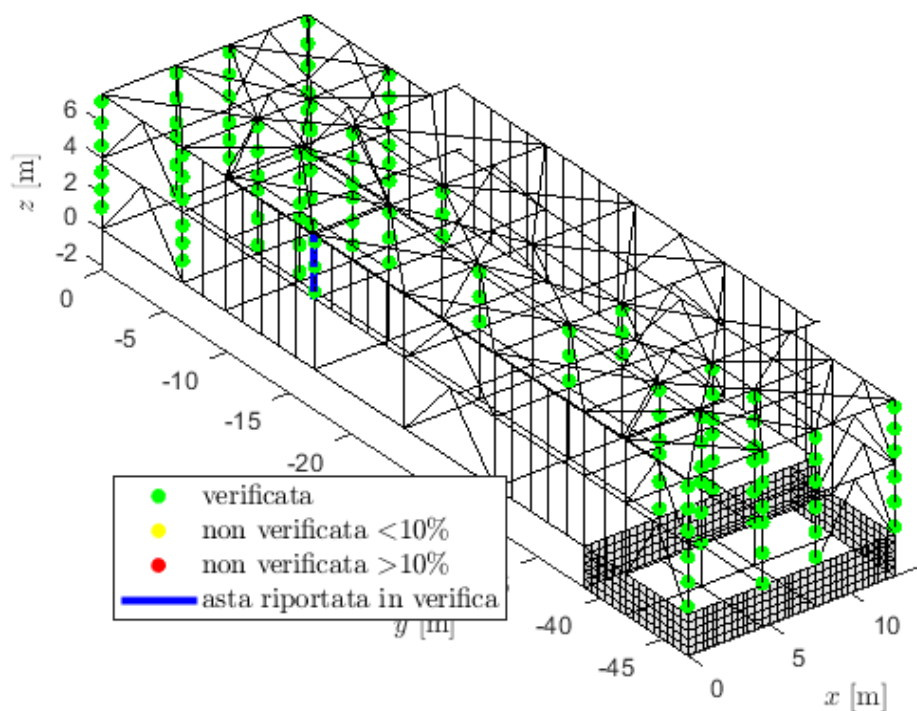
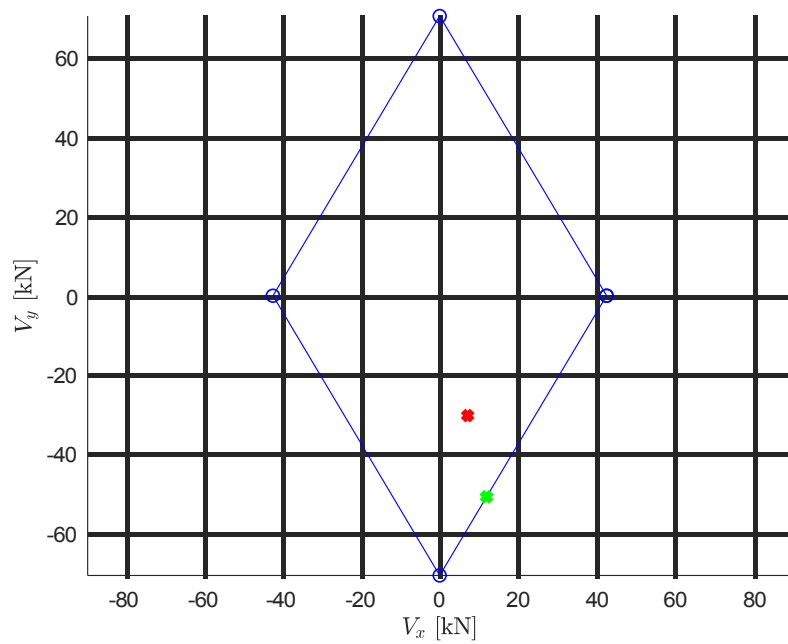


Tabella 6.6. Elemento più sollecitato

Elemento	[n°]	588
Ascissa	[m]	3.20

Tabella 7.7. Sollecitazioni SLV

		min	max
N	[kN]	-73.9	-61.1
M _x	[kNm]	6.6	42.0
M _y	[kNm]	-10.4	-7.1
V _x	[kN]	5.1	7.1
V _y	[kN]	-30.3	-6.7



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.596$$

SLU a taglio verificati

"3 - Rettangolare b=27 h=50 pilastri"

Sezione

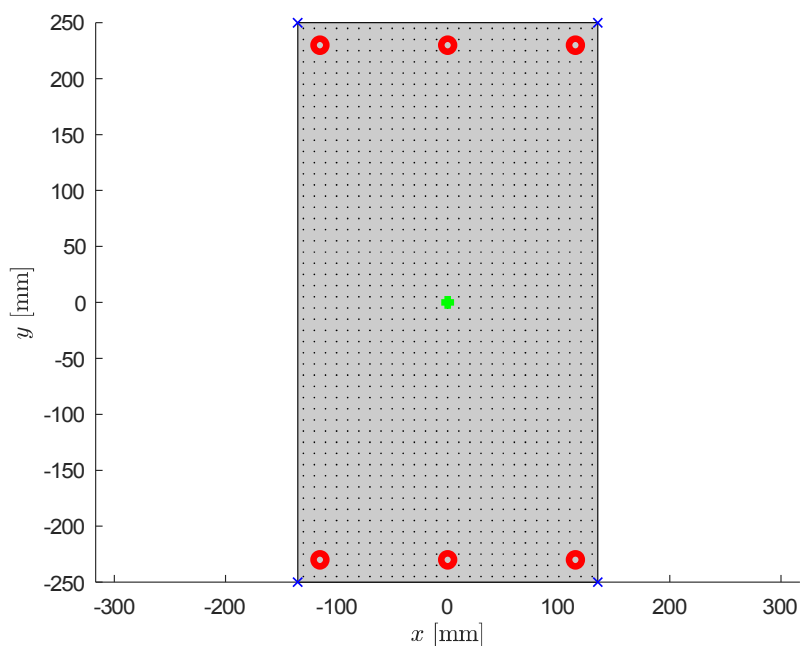


Tabella 8.8. Materiali

Res.Cls 1	Rcm	[MPa]	13
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.00

Tabella 9.9. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-250	250
Largh. anima	bw	[mm]	500	270
Altezza utile	d	[mm]	240	470
Area staffe	As	[mm2]	57	57
Passo staffe	s	[mm]	180	180
Area f.pieg.	Asfp	[mm2]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 10.10. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	20	20	201.06
2	135	20	201.06
3	250	20	201.06
4	20	480	201.06
5	135	480	201.06
6	250	480	201.06

Verifica SLV (peggiorativa per M)

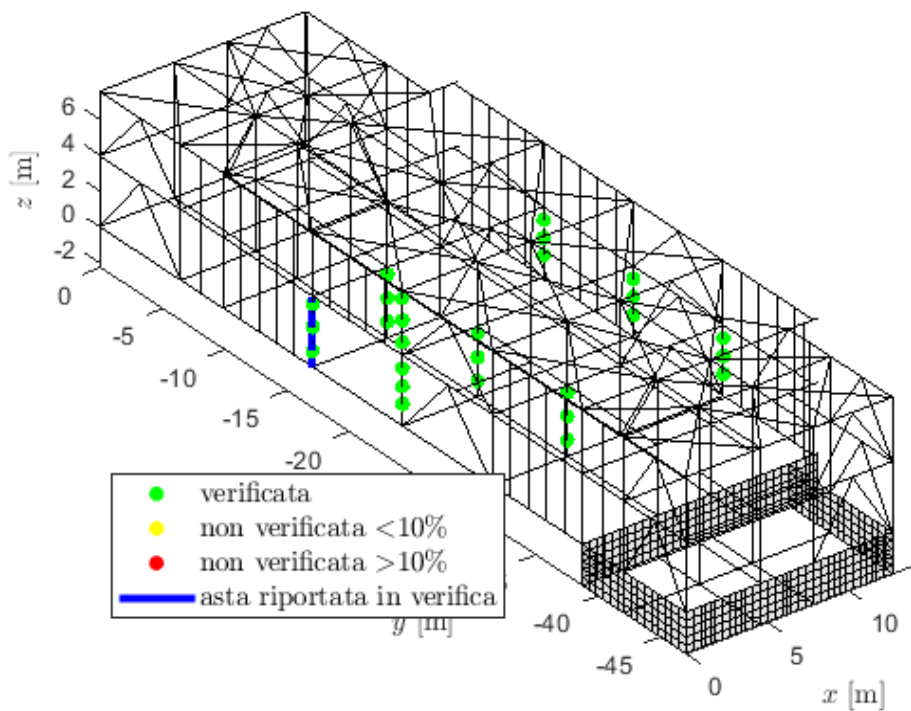


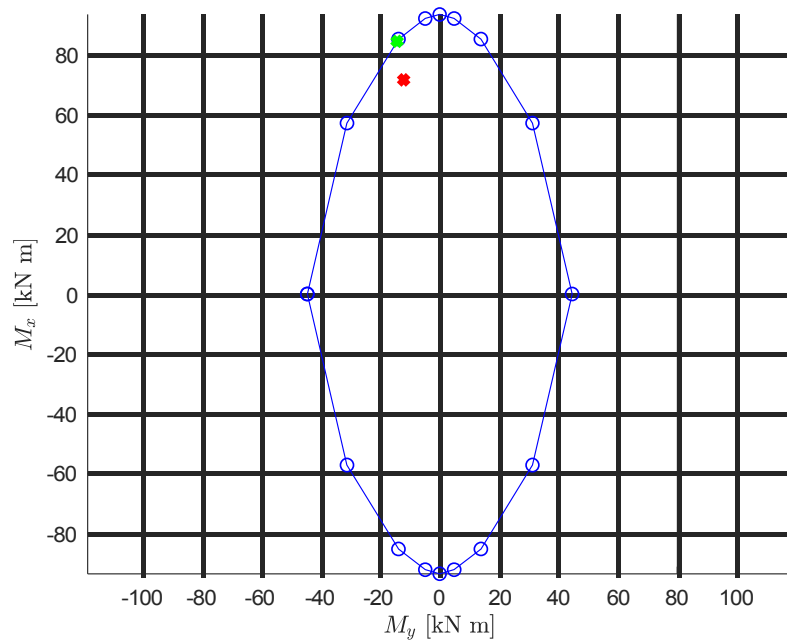
Tabella 11.11. Elemento più sollecitato

Elemento	[n°]	366
Ascissa	[m]	3.55

Tabella 12.12. Sollecitazioni SLV

		min	max
N	[kN]	-263.4	-190.3

M _x	[kNm]	-4.0	71.6
M _y	[kNm]	-12.2	-2.4
V _x	[kN]	0.3	8.8
V _y	[kN]	-52.0	13.3



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.848$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

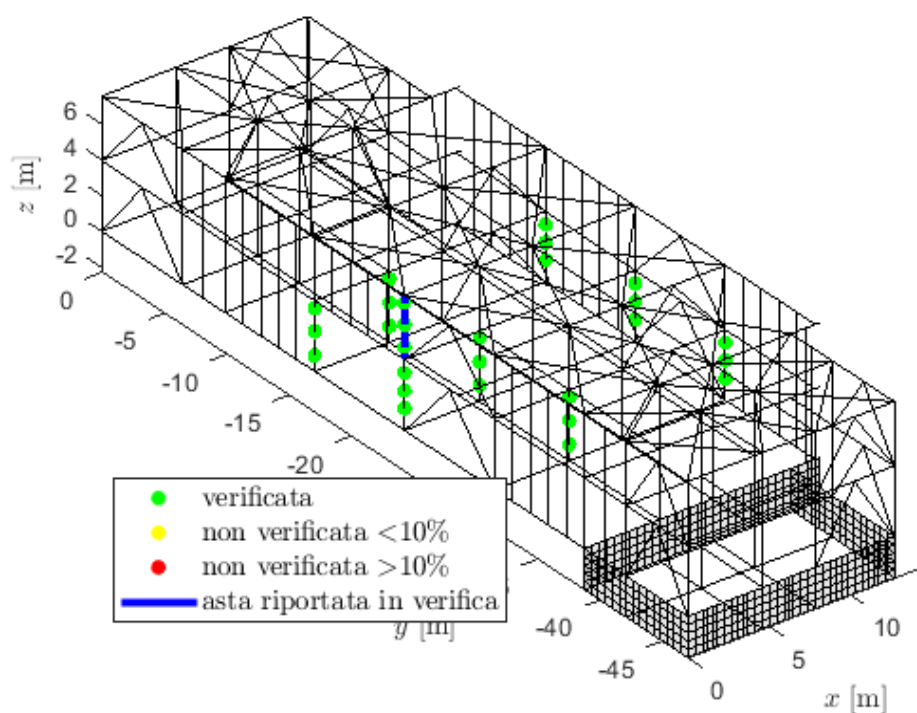
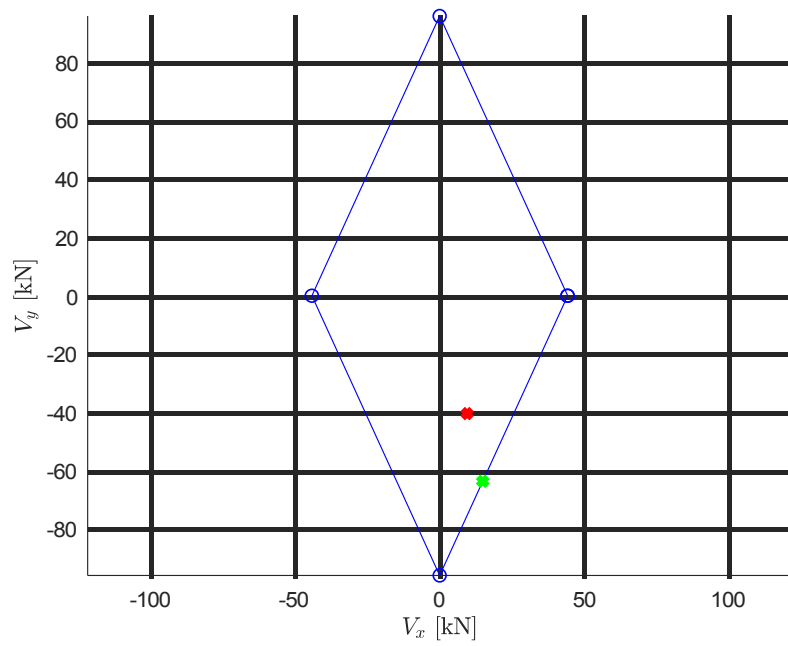


Tabella 13.13. Elemento più sollecitato

Elemento	[n°]	763
Ascissa	[m]	3.20

Tabella 14.14. Sollecitazioni SLV

		min	max
N	[kN]	-79.6	-51.6
M _x	[kNm]	-2.4	53.5
M _y	[kNm]	-7.9	-4.8
V _x	[kN]	6.7	9.4
V _y	[kN]	-40.4	0.9



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.635$$

SLU a taglio verificati

"50x27 rinforzata"

Sezione

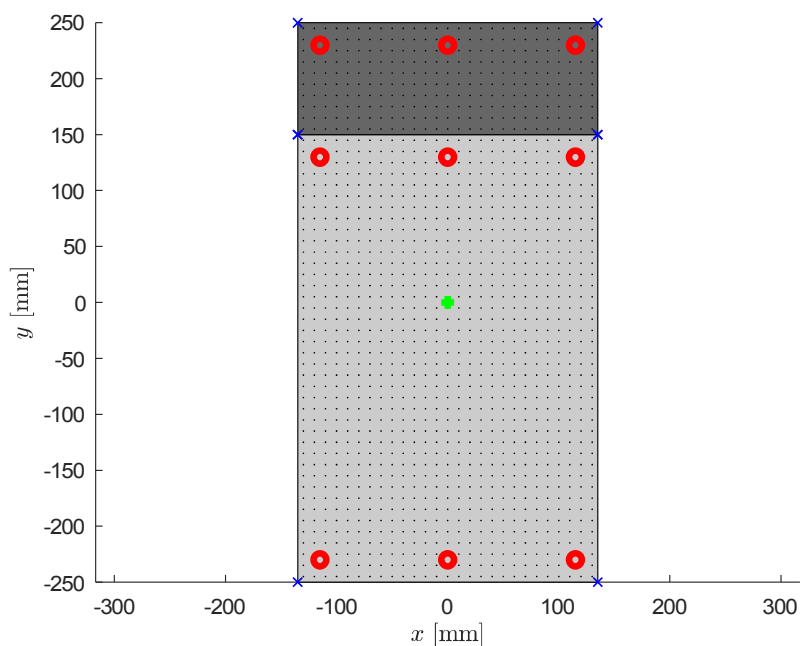


Tabella 15.15. Materiali

Res.Cls 1	Rcm	[MPa]	13
Res. Cls 2	Rcm	[MPa]	21
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.00

Tabella 16.16. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-250	150
Rett. 2 (Cls 2)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	150	250
Largh. anima	bw	[mm]	500	270
Altezza utile	d	[mm]	240	470
Area staffe	As	[mm2]	57	57

]		
Passo staffe	s	[mm]	180	180
Area f.pieg.	Asfp	[mm ²]	0	0
]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 17.17. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	20	20	201.06
2	135	20	201.06
3	250	20	201.06
4	20	380	201.06
5	135	380	201.06
6	250	380	201.06
7	20	480	375.90
8	135	480	375.90
9	250	480	375.90

Verifica SLV (peggiorativa per M)

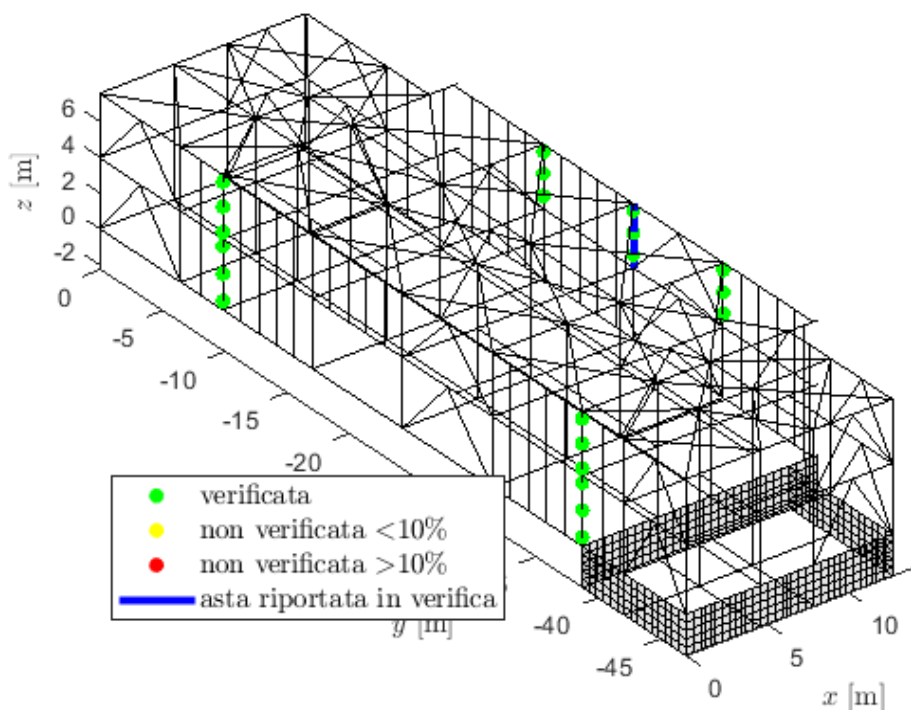
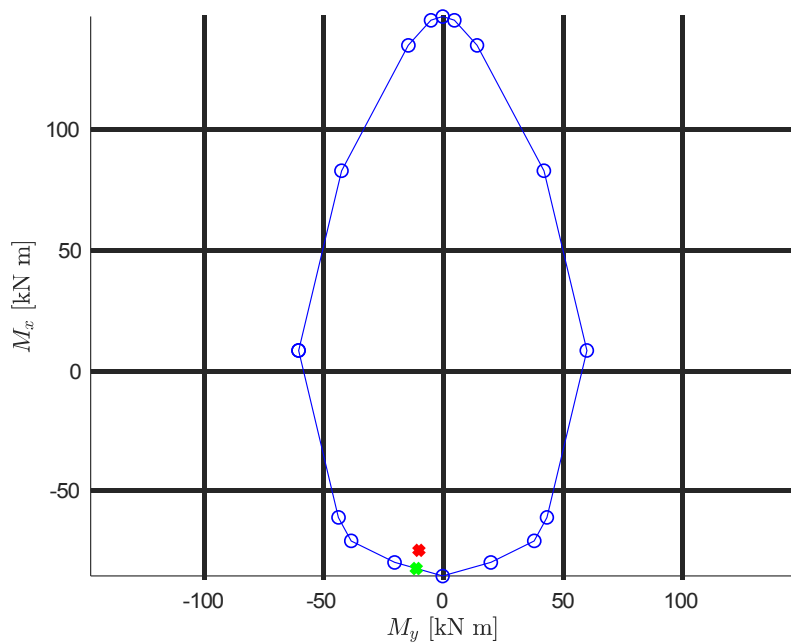


Tabella 18.18. Elemento più sollecitato

Elemento	[n°]	579
Ascissa	[m]	3.20

Tabella 19.19. Sollecitazioni SLV

		min	max
N	[kN]	-96.5	-76.2
M _x	[kNm]	-74.9	-24.4
M _y	[kNm]	-10.0	-6.9
V _x	[kN]	5.4	7.4
V _y	[kN]	22.6	59.2



$$\max(|\text{MED}|/|\text{MRd}(\text{NEd})|) = 0.909$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

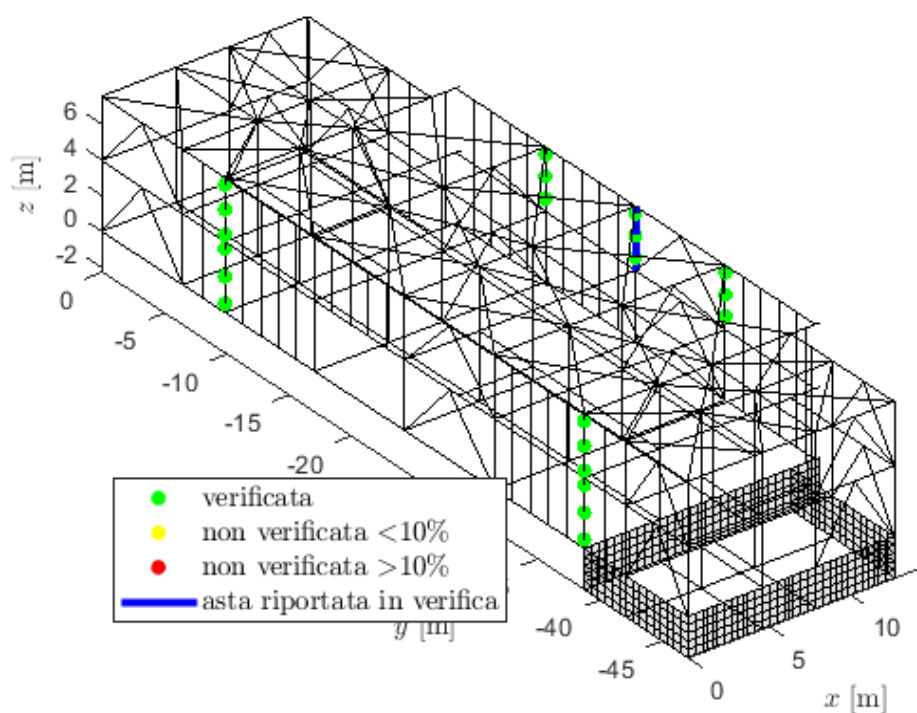
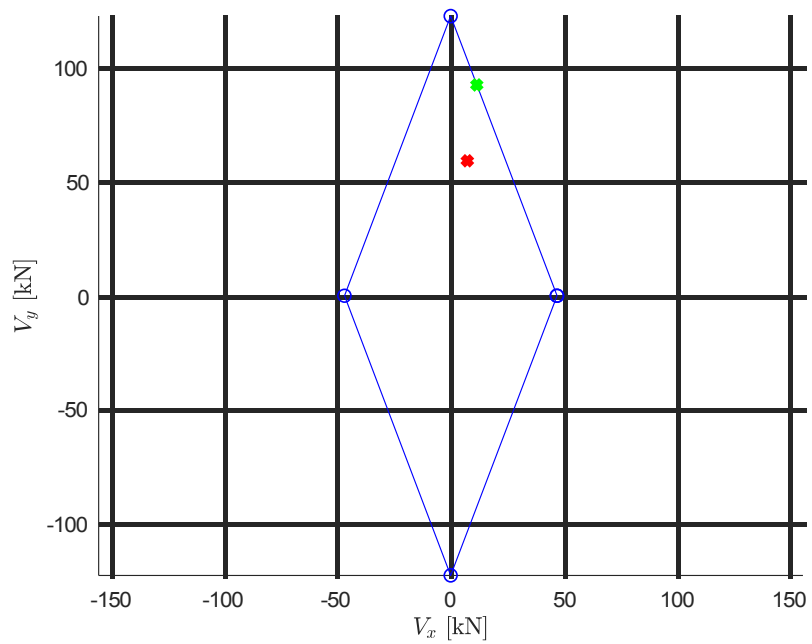


Tabella 20.20. Elemento più sollecitato

Elemento	[n°]	579
Ascissa	[m]	3.20

Tabella 21.21. Sollecitazioni SLV

		min	max
N	[kN]	-96.5	-76.2
M _x	[kNm]	-74.9	-24.4
M _y	[kNm]	-10.0	-6.9
V _x	[kN]	5.4	7.4
V _y	[kN]	22.6	59.2



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.640$$

SLU a taglio verificati

"Rettangolare b=27 h=60 pilastri"

Sezione

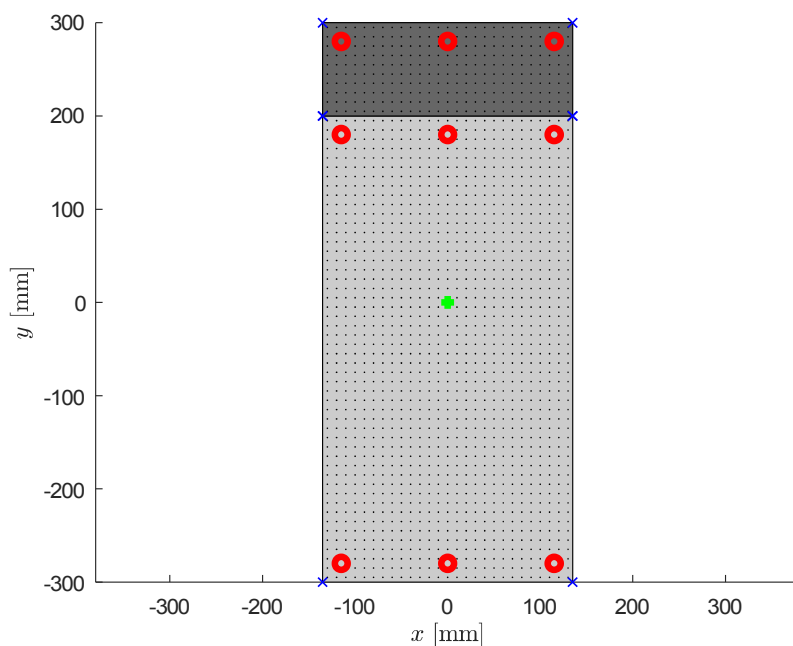


Tabella 22.22. Materiali

Res. Cls 1	Rcm	[MPa]	13
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.00

Tabella 23.23. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-300	200
Rett. 2 (Cls 2)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	200	300
Largh. anima	bw	[mm]	500	270
Altezza utile	d	[mm]	240	470
Area staffe	As	[mm ²]	57	57

]		
Passo staffe	s	[mm]	180	180
Area f.pieg.	Asfp	[mm ²]	0	0
]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 24.24. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	20	20	201.06
2	135	20	201.06
3	250	20	201.06
4	20	480	201.06
5	135	480	201.06
6	250	480	201.06
7	20	580	375.90
8	135	580	375.90
9	250	580	375.90

Verifica SLV (peggiorativa per M)

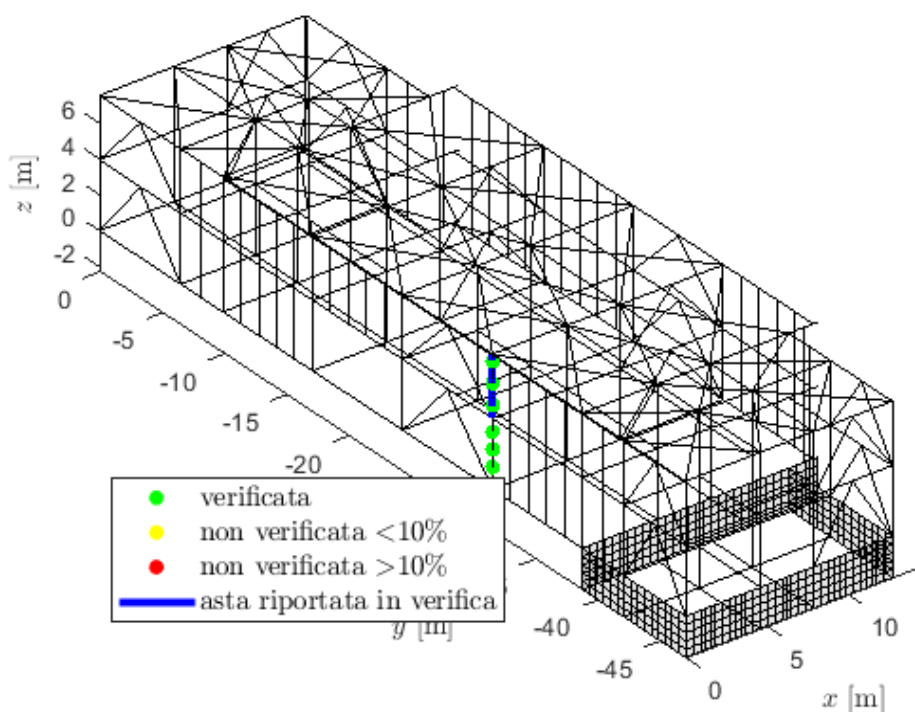
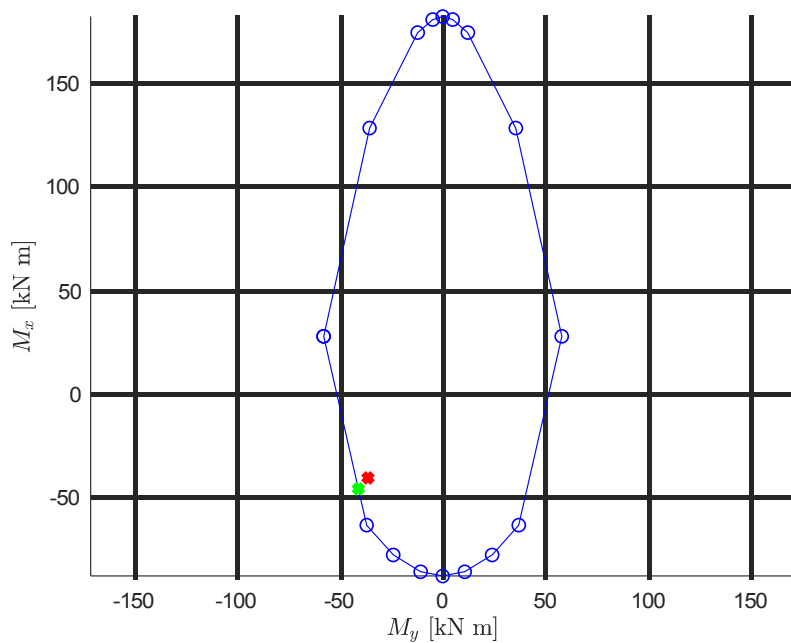


Tabella 25.25. Elemento più sollecitato

Elemento	[n°]	564
Ascissa	[m]	0.73

Tabella 26.26. Sollecitazioni SLV

		min	max
N	[kN]	-81.9	-56.1
M _x	[kNm]	-40.8	1.6
M _y	[kNm]	-36.4	-29.9
V _x	[kN]	-22.7	-18.5
V _y	[kN]	-41.6	-0.4



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.886$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

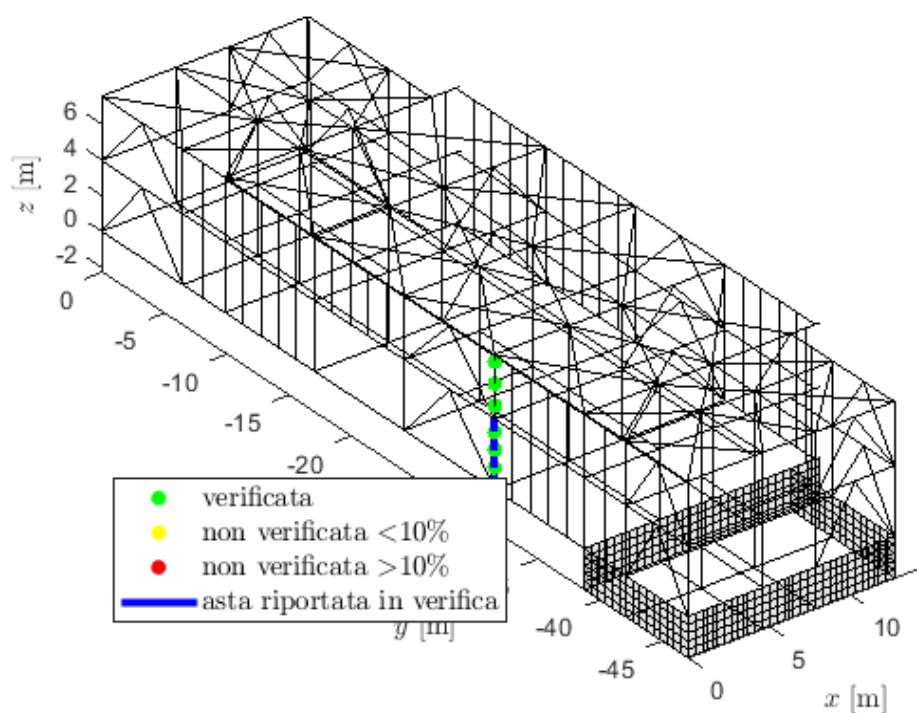
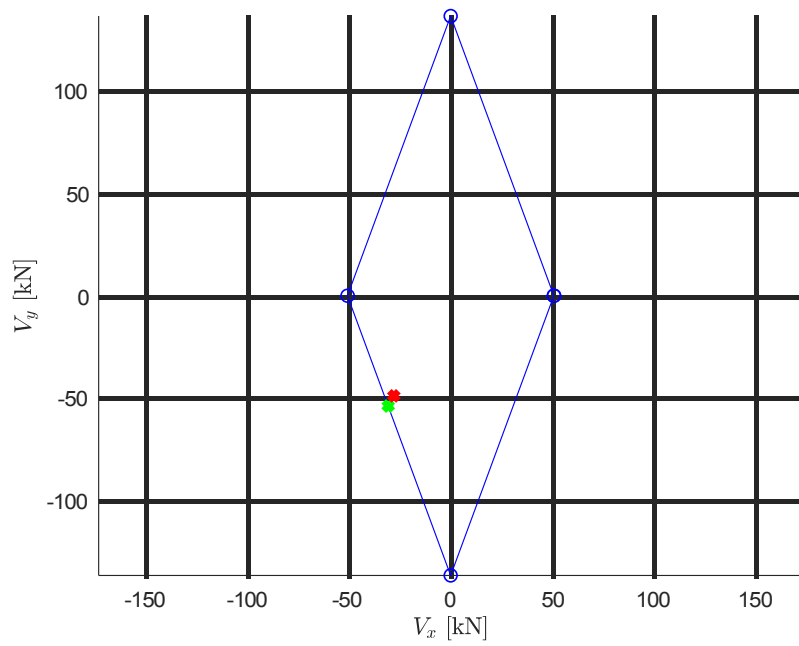


Tabella 27.27. Elemento più sollecitato

Elemento	[n°]	350
Ascissa	[m]	3.22

Tabella 28.28. Sollecitazioni SLV

		min	max
N	[kN]	-254.5	-156.0
M _x	[kNm]	-22.5	43.8
M _y	[kNm]	29.4	38.5
V _x	[kN]	-28.0	-18.7
V _y	[kN]	-49.0	33.0



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.909$$

SLU a taglio verificati

"4 - Rettangolare b=40 h=27 pilastri"

Sezione

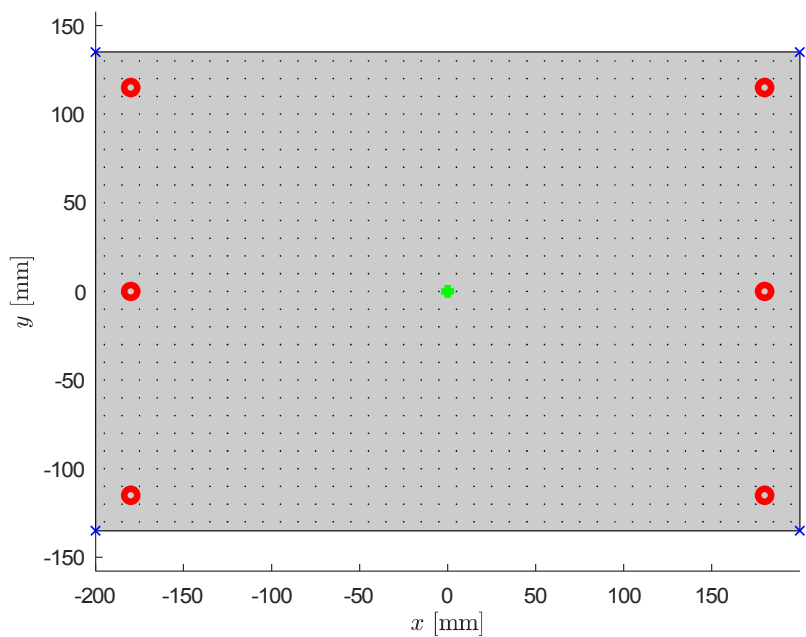


Tabella 29.29. Materiali

Res. Cls 1	Rcm	[MPa]	13
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.00

Tabella 30.30. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-200	200
Dimensione	max	[mm]	-135	135
Largh. anima	bw	[mm]	270	400
Altezza utile	d	[mm]	370	240
Area staffe	As	[mm ²]	57	57
Passo staffe	s	[mm]	180	180
Area f.pieg.	Asfp	[mm ²]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 31.31. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	20	20	153.94
2	20	135	153.94
3	380	20	153.94
4	20	250	153.94
5	380	135	153.94
6	380	250	153.94

Verifica SLV (peggiorativa per M)

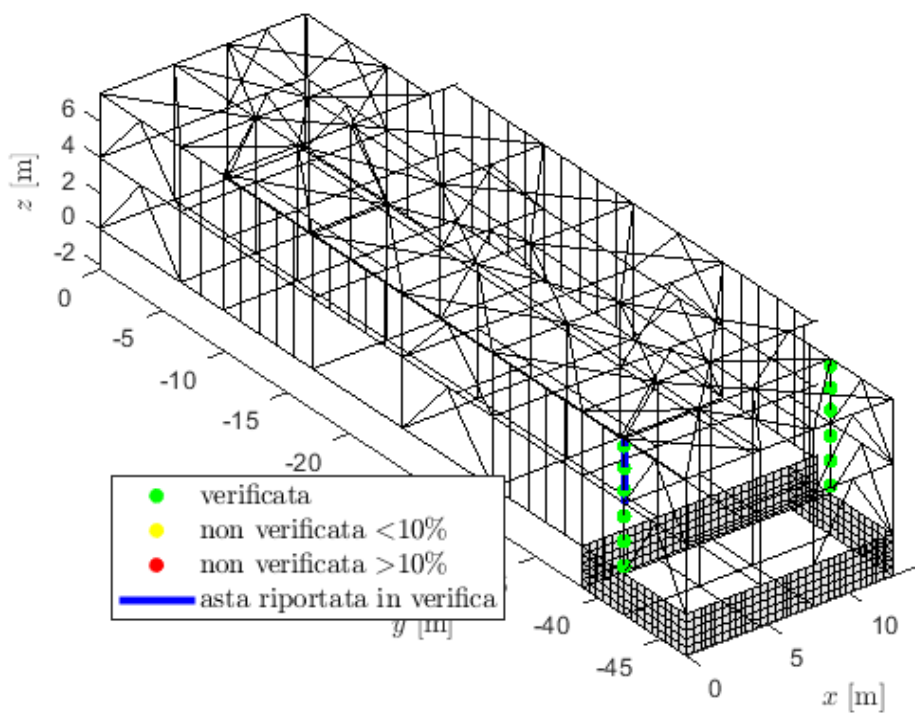


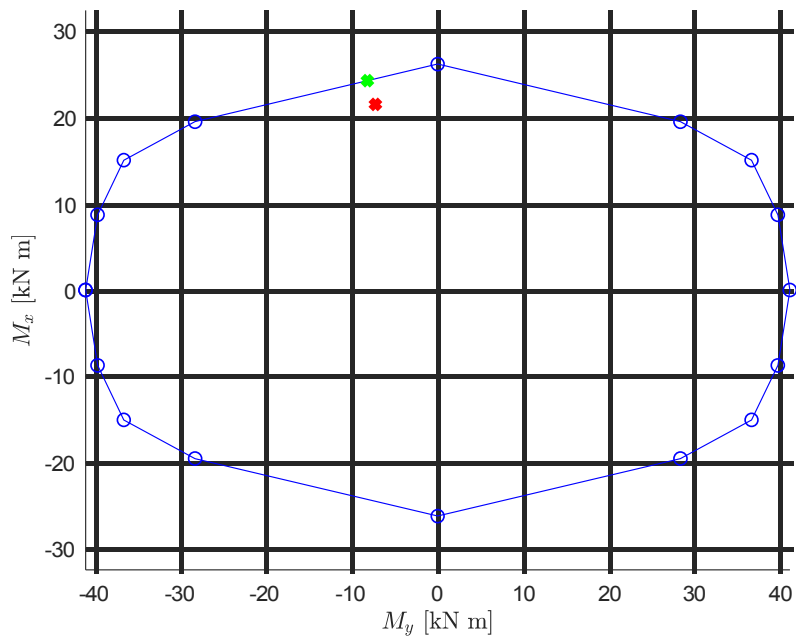
Tabella 32.32. Elemento più sollecitato

Elemento	[n°]	547
Ascissa	[m]	3.20

Tabella 33.33. Sollecitazioni SLV

		min	max
N	[kN]	-51.6	-41.6

M _x	[kNm]	2.4	21.5
M _y	[kNm]	-7.3	-3.9
V _x	[kN]	3.6	5.7
V _y	[kN]	-17.0	-2.1



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.887$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

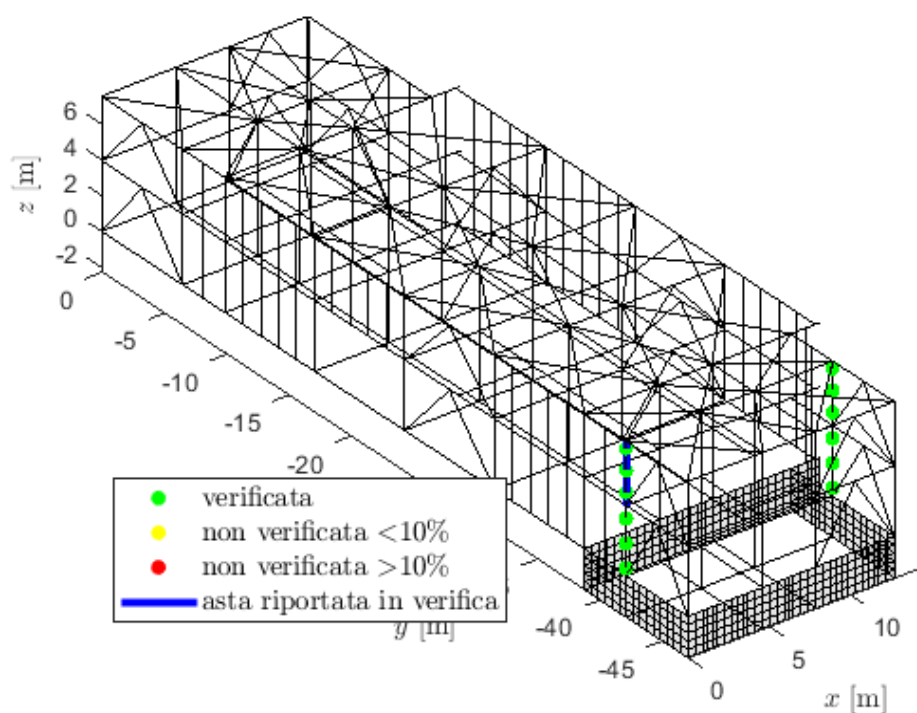
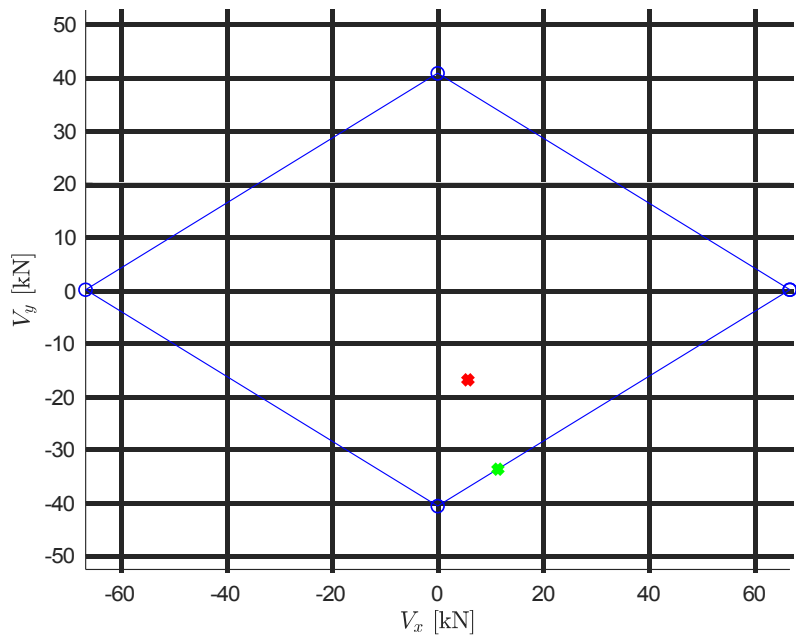


Tabella 34.34. Elemento più sollecitato

Elemento	[n°]	547
Ascissa	[m]	3.20

Tabella 35.35. Sollecitazioni SLV

		min	max
N	[kN]	-51.6	-41.6
M _x	[kNm]	2.4	21.5
M _y	[kNm]	-7.3	-3.9
V _x	[kN]	3.6	5.7
V _y	[kN]	-17.0	-2.1



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.503$$

SLU a taglio verificati

"2 - 50x27 calastrellata"

Sezione

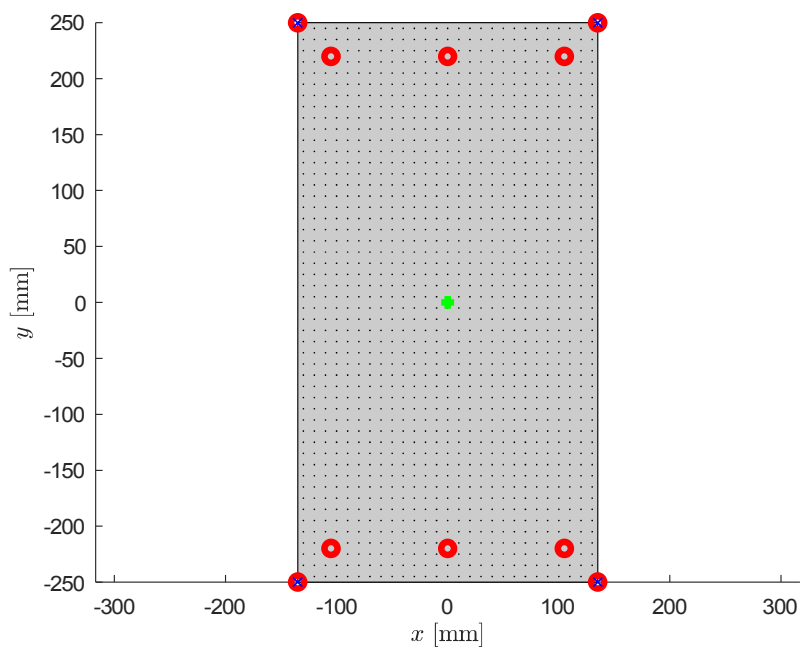


Tabella 36.36. Materiali

Res. Cls 1	Rcm	[MPa]	17
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	138
Fattore di confidenza	FC	-	1.00

Tabella 37.37. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-250	250
Largh. anima	bw	[mm]	500	270
Altezza utile	d	[mm]	270	500
Area staffe	As	[mm ²]	2000	2000
Passo staffe	s	[mm]	350	350
Area f.pieg.	Asfp	[mm ²]	0	0

Passo f.pieg.	sfp	[mm]	300	200
---------------	-----	------	-----	-----

Tabella 38.38. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	201.06
2	135	30	201.06
3	240	30	201.06
4	30	470	201.06
5	135	470	201.06
6	240	470	201.06
7	0	0	1135.87
8	270	0	1135.87
9	0	500	1135.87
10	270	500	1135.87

Verifica SLV (peggiorativa per M)

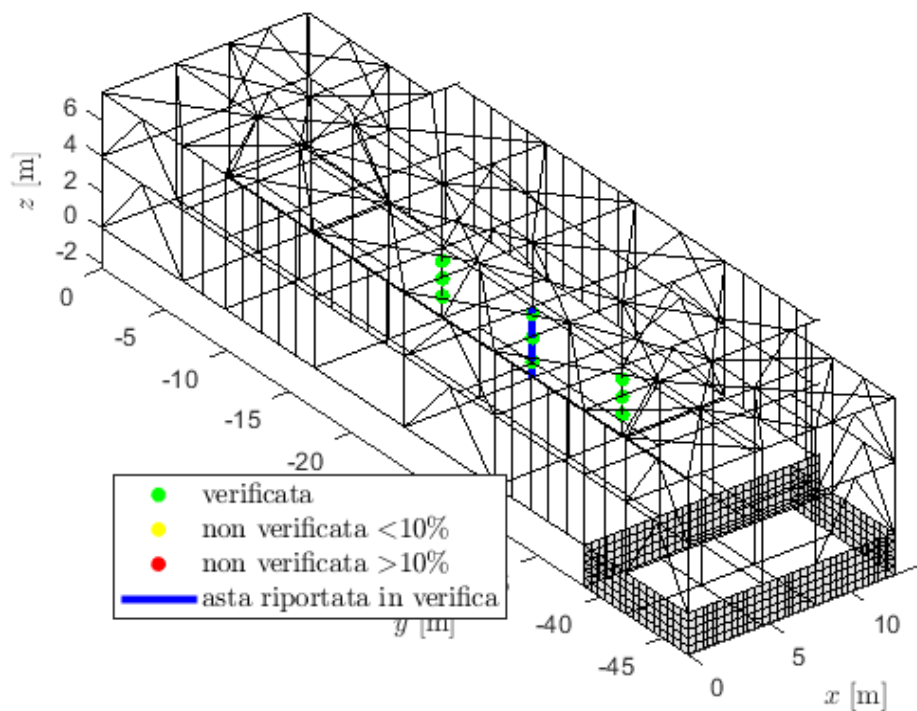
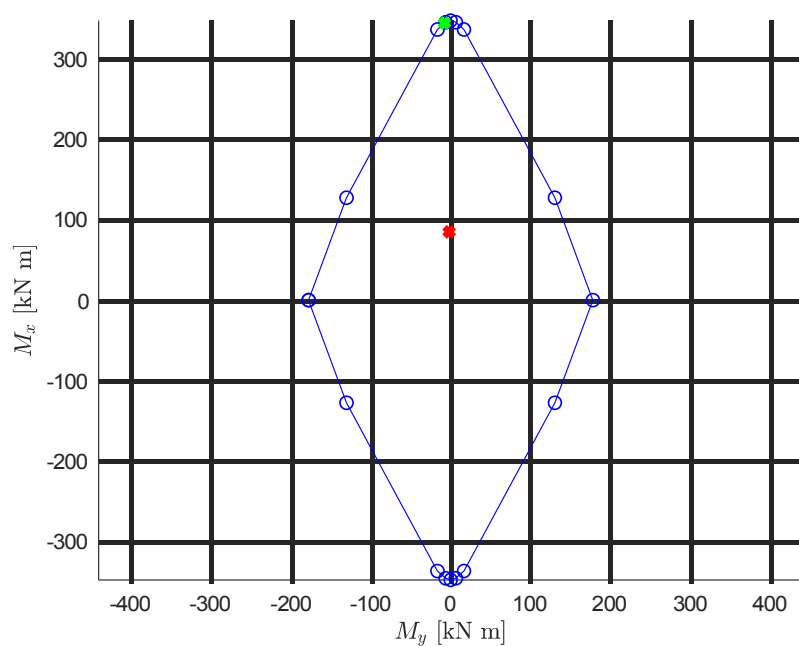


Tabella 39.39. Elemento più sollecitato

Element o	[n°]	863
Ascissa	[m]	3.55

Tabella 40.40. Sollecitazioni SLV

		min	max
N	[kN]	-416.6	-398.4
M _x	[kNm]	14.5	85.0
M _y	[kNm]	-1.9	0.6
V _x	[kN]	-1.2	2.4
V _y	[kN]	-61.8	2.2



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.247$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

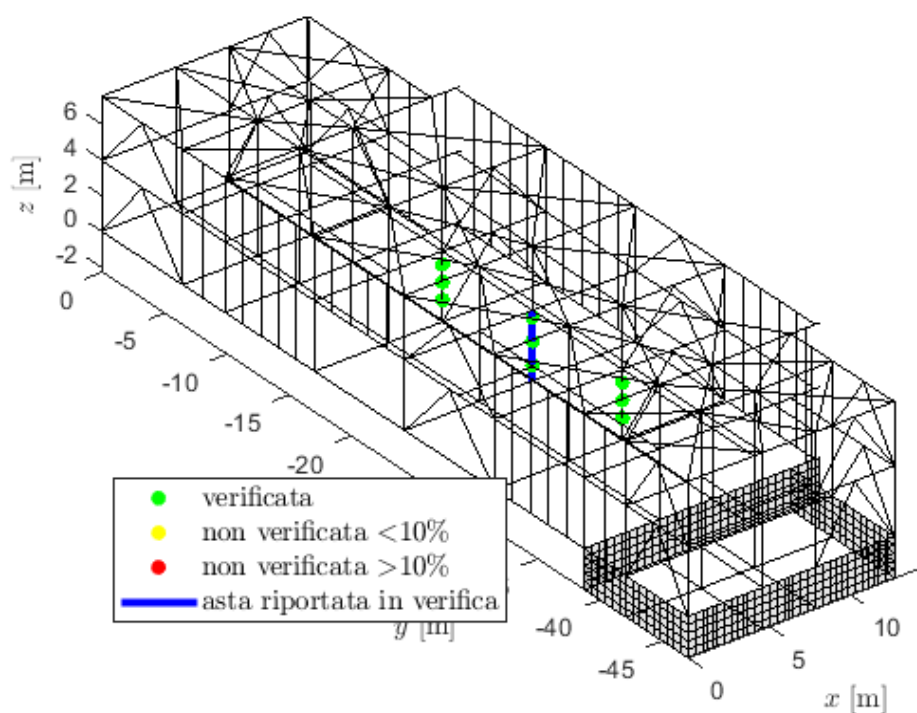
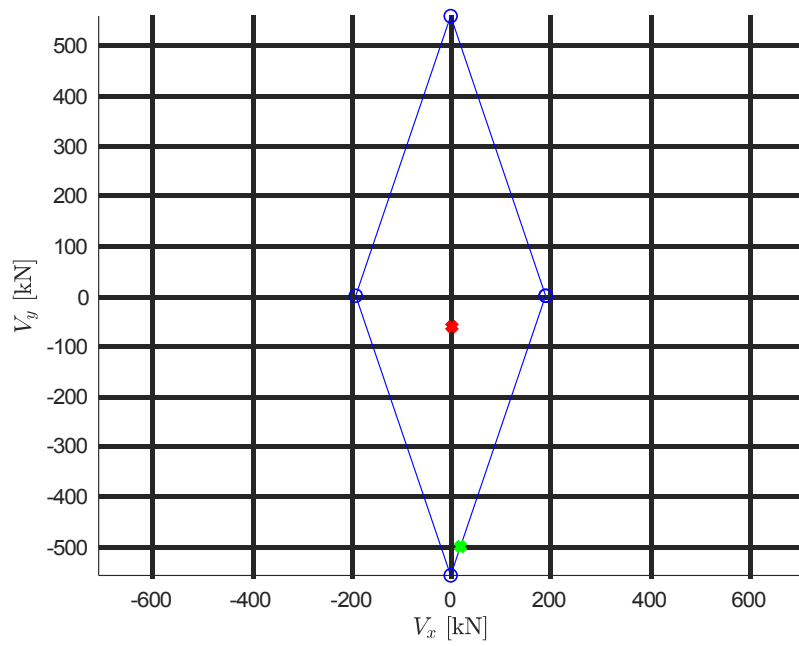


Tabella 41.41. Elemento più sollecitato

Elemento	[n°]	863
Ascissa	[m]	3.55

Tabella 42.42. Sollecitazioni SLV

		min	max
N	[kN]	-416.6	-398.4
M _x	[kNm]	14.5	85.0
M _y	[kNm]	-1.9	0.6
V _x	[kN]	-1.2	2.4
V _y	[kN]	-61.8	2.2



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.123$$

SLU a taglio verificati

"2 - 40x27 calastrellata"

Sezione

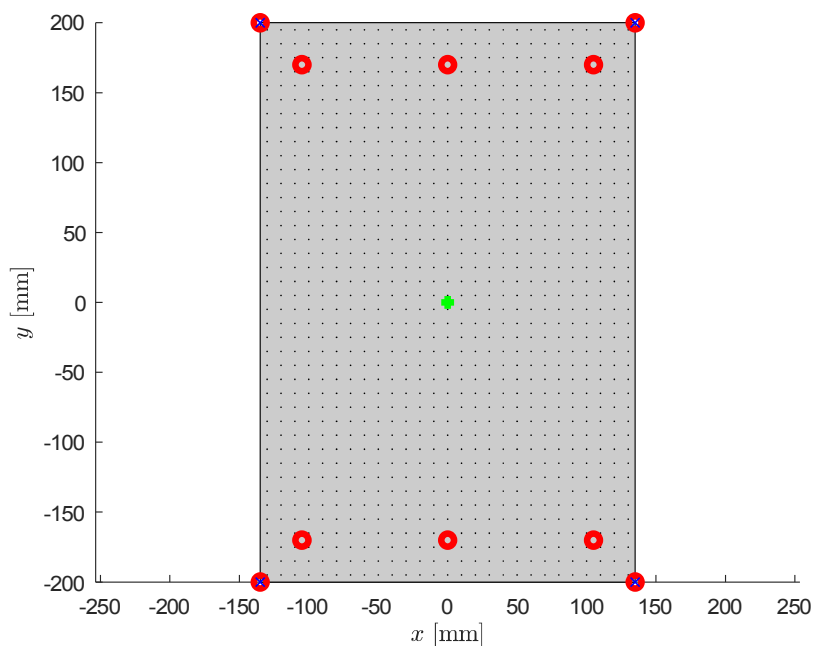


Tabella 43.43. Materiali

Res. Cls 1	Rcm	[MPa]	17
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	138
Fattore di confidenza	FC	-	1.00

Tabella 44.44. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-200	200
Largh. anima	bw	[mm]	500	270
Altezza utile	d	[mm]	270	500
Area staffe	As	[mm ²]	2000	2000
Passo staffe	s	[mm]	350	350
Area f.pieg.	Asfp	[mm ²]	0	0

Passo f.pieg.	sfp	[mm]	300	200
---------------	-----	------	-----	-----

Tabella 45.45. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	201.06
2	135	30	201.06
3	240	30	201.06
4	30	370	201.06
5	135	370	201.06
6	240	370	201.06
7	0	0	1135.87
8	270	0	1135.87
9	0	400	1135.87
10	270	400	1135.87

Verifica SLV (peggiorativa per M)

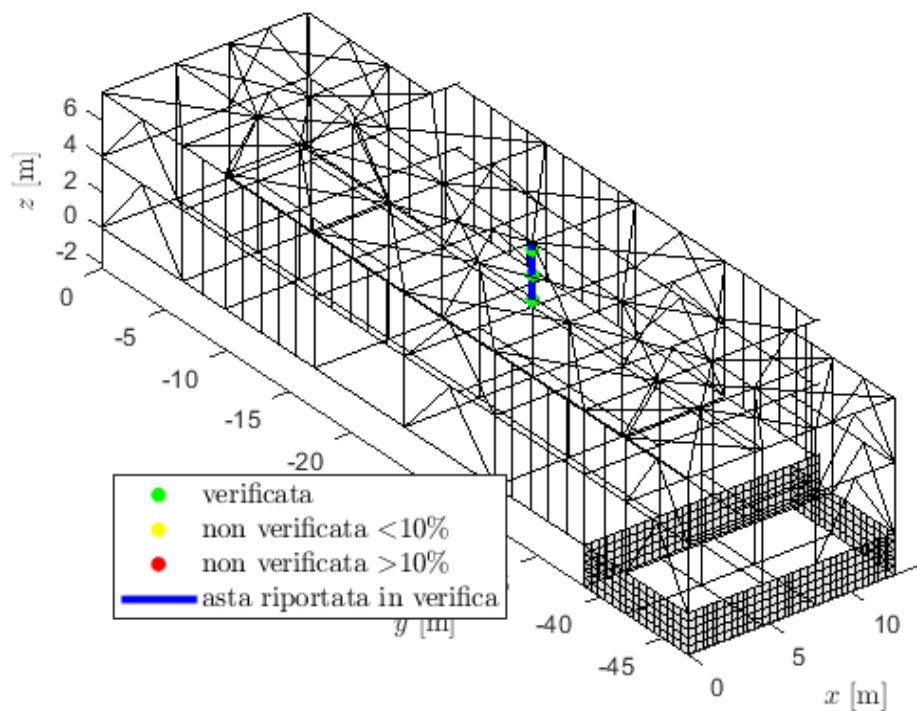
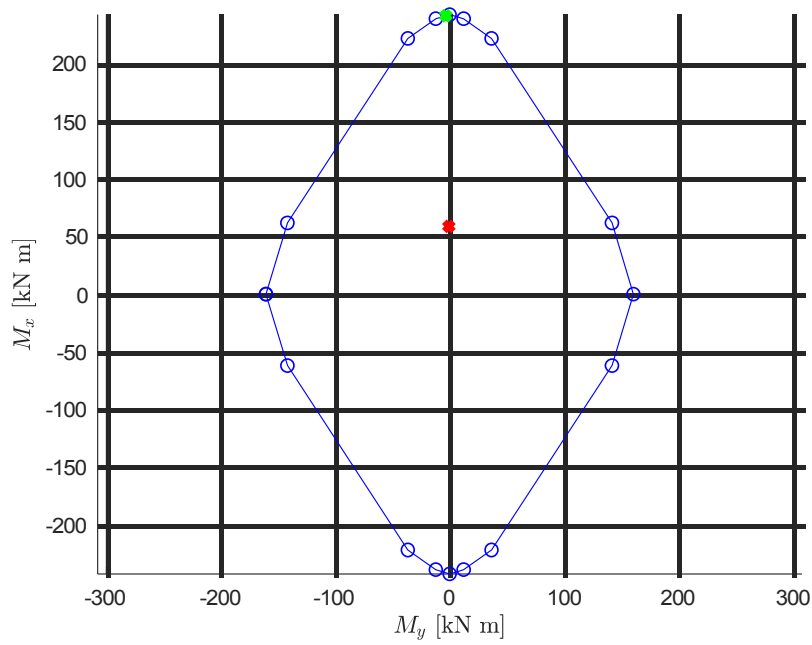


Tabella 46.46. Elemento più sollecitato

Element o	[n°]	578
Ascissa	[m]	3.20

Tabella 47.47. Sollecitazioni SLV

		min	max
N	[kN]	-120.1	-112.8
M _x	[kNm]	1.1	58.9
M _y	[kNm]	-0.8	0.3
V _x	[kN]	-0.3	0.7
V _y	[kN]	-41.5	-4.4



$$\max(|\text{MED}|/|\text{MRd}(\text{NEd})|) = 0.244$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

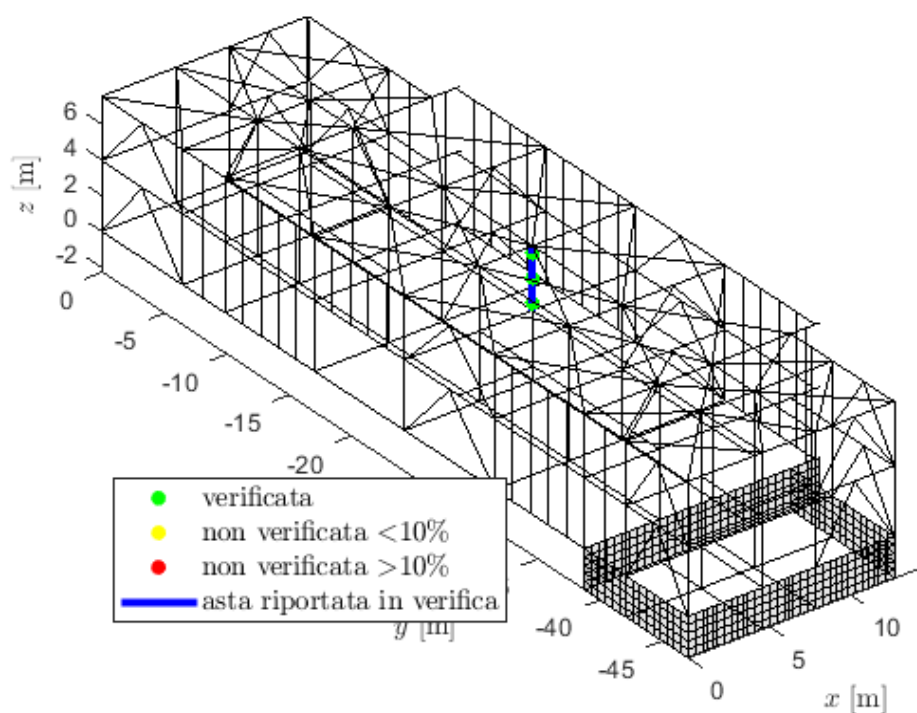
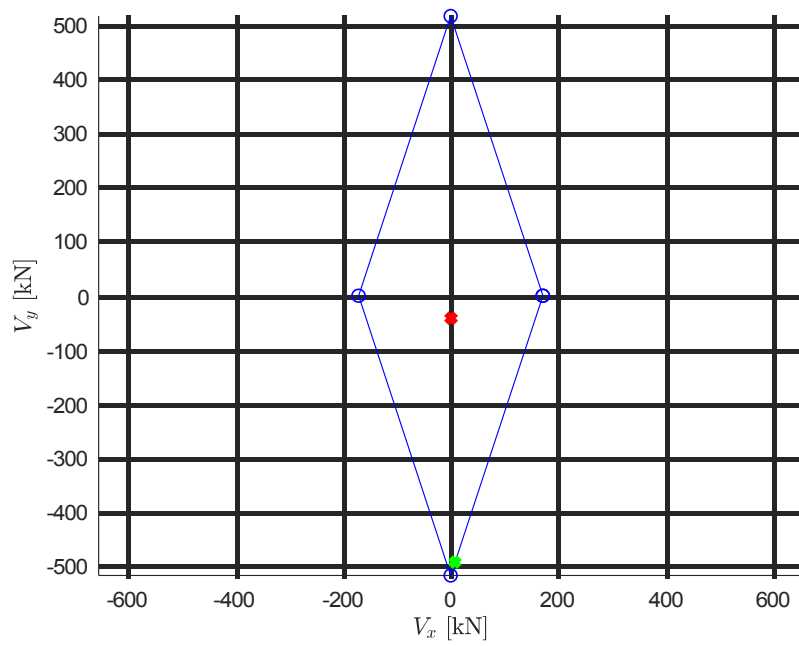


Tabella 48.48. Elemento più sollecitato

Elemento	[n°]	578
Ascissa	[m]	3.20

Tabella 49.49. Sollecitazioni SLV

		min	max
N	[kN]	-120.1	-112.8
M _x	[kNm]	1.1	58.9
M _y	[kNm]	-0.8	0.3
V _x	[kN]	-0.3	0.7
V _y	[kN]	-41.5	-4.4



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.084$$

SLU a taglio verificati

"27- Rettangolare b=39 h=52"

Sezione

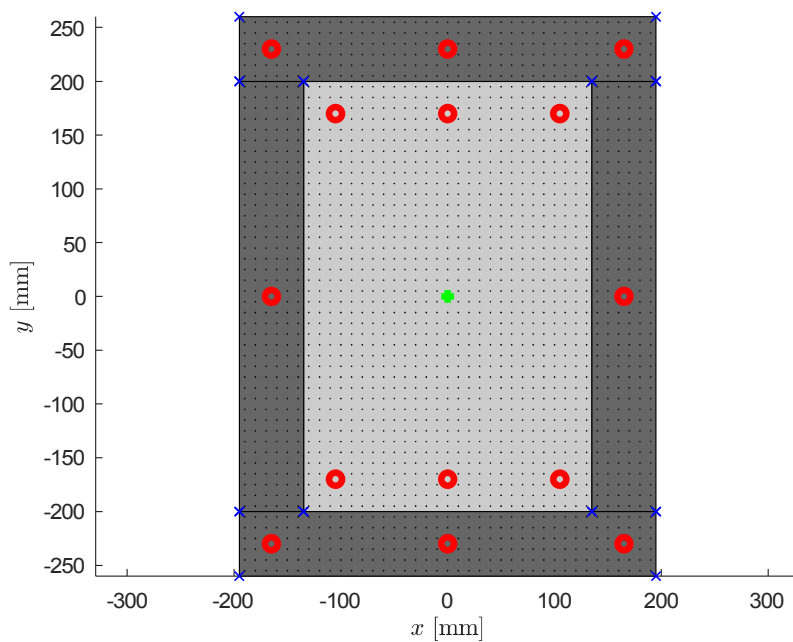


Tabella 50.50. Materiali

Res. Cls 1	Rcm	[MPa]	13
Res. Cls 2	Rcm	[MPa]	38
Res. barre longitudinali	fykl	[MPa]	430
Res. staffe	fyks	[MPa]	430
Fattore di confidenza	FC	-	1.00

Tabella 51.51. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-200	200
Rett. 2 (Cls 2)				
Dimensione	min	[mm]	-195	-135

Dimensione	max	[mm]	- 200	200
Rett. 3 (Cls 2)				
Dimensione	min	[mm]	135	195
Dimensione	max	[mm]	- 200	200
Rett. 4 (Cls 2)				
Dimensione	min	[mm]	- 195	195
Dimensione	max	[mm]	- 260	-200
Rett. 5 (Cls 2)				
Dimensione	min	[mm]	- 195	195
Dimensione	max	[mm]	200	260
Largh. anima	bw	[mm]	520	390
Altezza utile	d	[mm]	360	490
Area staffe	As	[mm ²]	101	101
Passo staffe	s	[mm]	100	100
Area f.pieg.	Asfp	[mm ²]	0	0
Passo f.pieg.	sfp	[mm]	300	200

Tabella 52.52. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	30	30	82.34
2	135	30	82.34
3	240	30	82.34
4	30	370	82.34
5	135	370	82.34
6	240	370	82.34
7	-30	-30	153.94
8	-30	200	153.94
9	-30	430	153.94
10	135	-30	153.94
11	135	430	153.94
12	300	-30	153.94
13	300	200	153.94
14	300	430	153.94

Verifica SLV (peggiorativa per M)

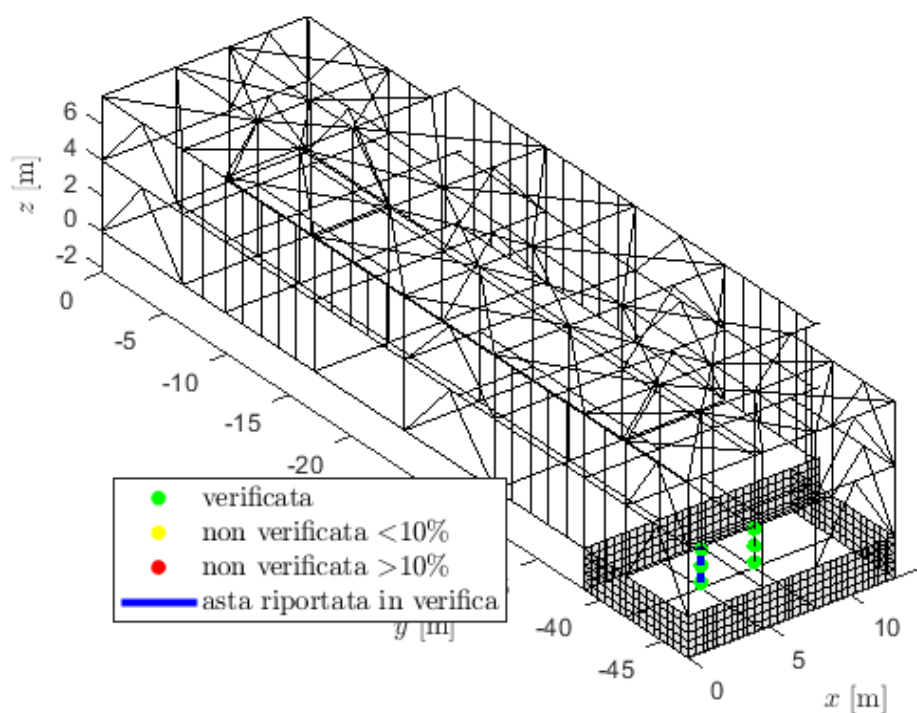
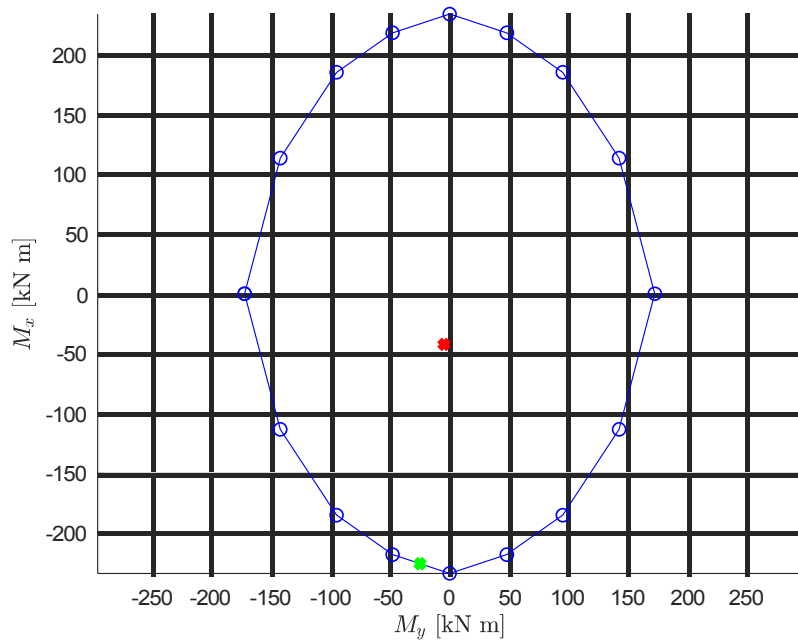


Tabella 53.53. Elemento più sollecitato

Elemento	[n°]	101
Ascissa	[m]	2.18

Tabella 54.54. Sollecitazioni SLV

		min	max
N	[kN]	-428.3	-422.4
M _x	[kNm]	-42.2	-16.5
M _y	[kNm]	-4.7	-0.8
V _x	[kN]	2.4	5.4
V _y	[kN]	12.0	30.3



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.187$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

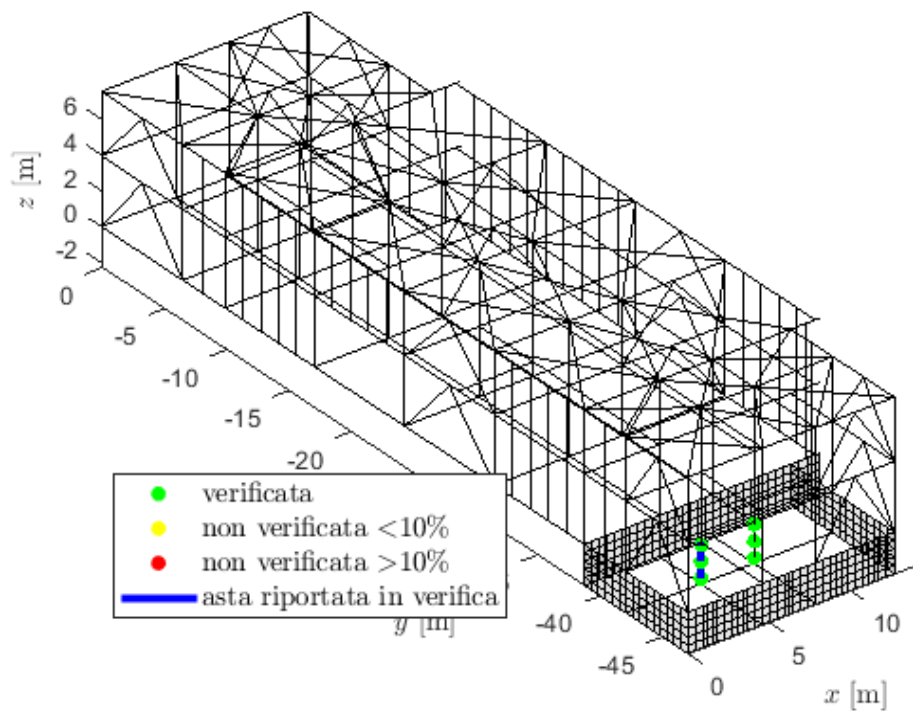
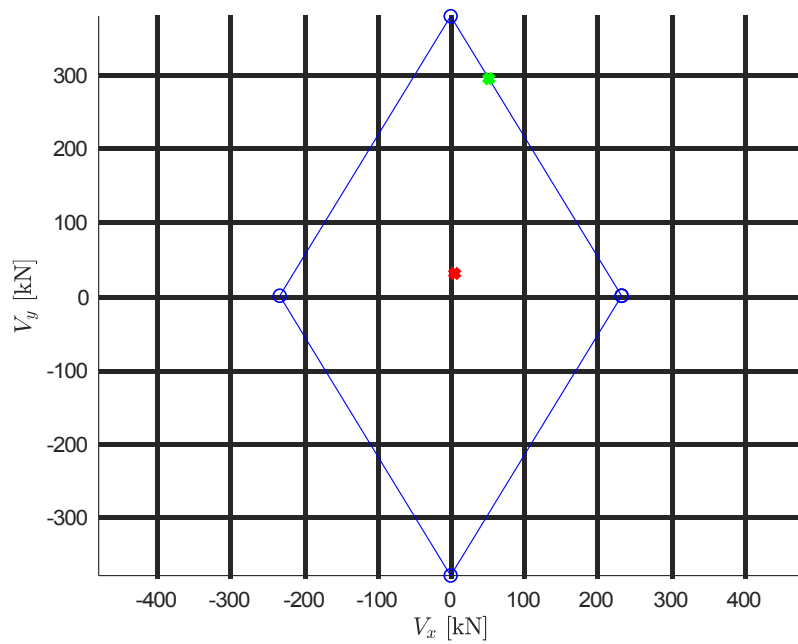


Tabella 55.55. Elemento più sollecitato

Elemento	[n°]	101
Ascissa	[m]	2.18

Tabella 56.56. Sollecitazioni SLV

		min	max
N	[kN]	-428.3	-422.4
M _x	[kNm]	-42.2	-16.5
M _y	[kNm]	-4.7	-0.8
V _x	[kN]	2.4	5.4
V _y	[kN]	12.0	30.3



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.103$$

SLU a taglio verificati

“setto”

Sezione

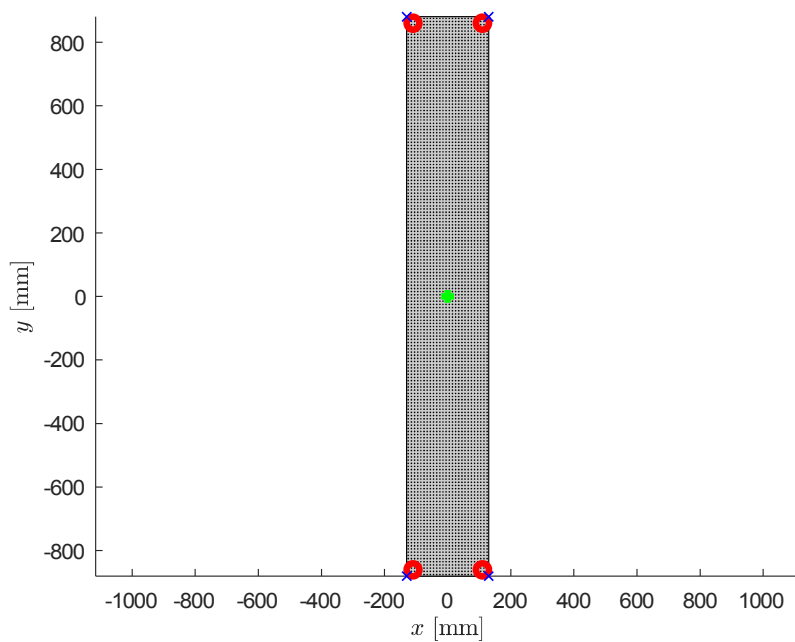


Tabella 57.57. Materiali

Res.Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.00

Tabella 58.58. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-130	130
Dimensione	max	[mm]	-880	880
Largh. anima	bw	[mm]	260	1760
Altezza utile	d	[mm]	230	1730
Area staffe	As	[mm ²]	57	57
Passo staffe	s	[mm]	300	300
Area f.pieg.	Asfp	[mm ²]	0	0
Passo f.pieg.	sfp	[mm]	1	1

Tabella 59.59. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	20	20	153.94
2	240	1740	153.94
3	20	1740	153.94
4	240	20	153.94

Verifica SLV (peggiorativa per M)

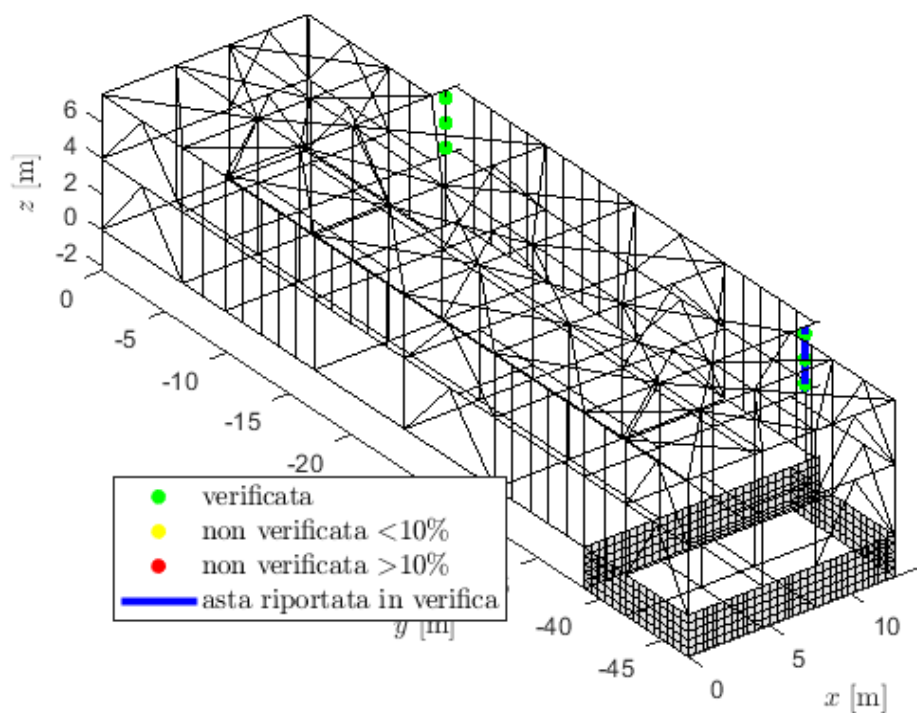


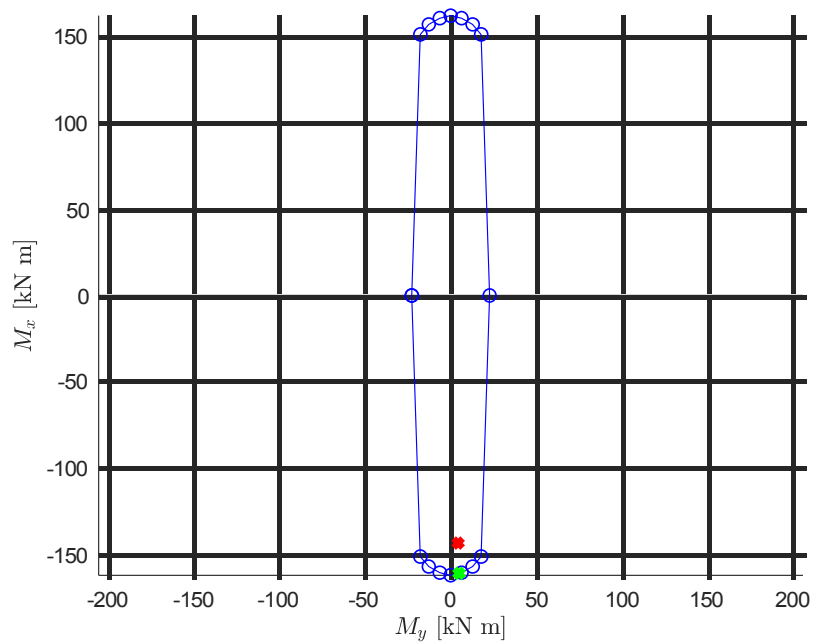
Tabella 60.60. Elemento più sollecitato

Elemento	[n°]	697
Ascissa	[m]	0.40

Tabella 61.61. Sollecitazioni SLV

		min	max
N	[kN]	-108.5	-65.2
M _x	[kNm]	-143.4	-12.7
M _y	[kNm]	-2.2	4.3
V _x	[kN]	-1.2	2.1

V_y	[kN]	-64.9	-13.5
-------	------	-------	-------



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.892$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

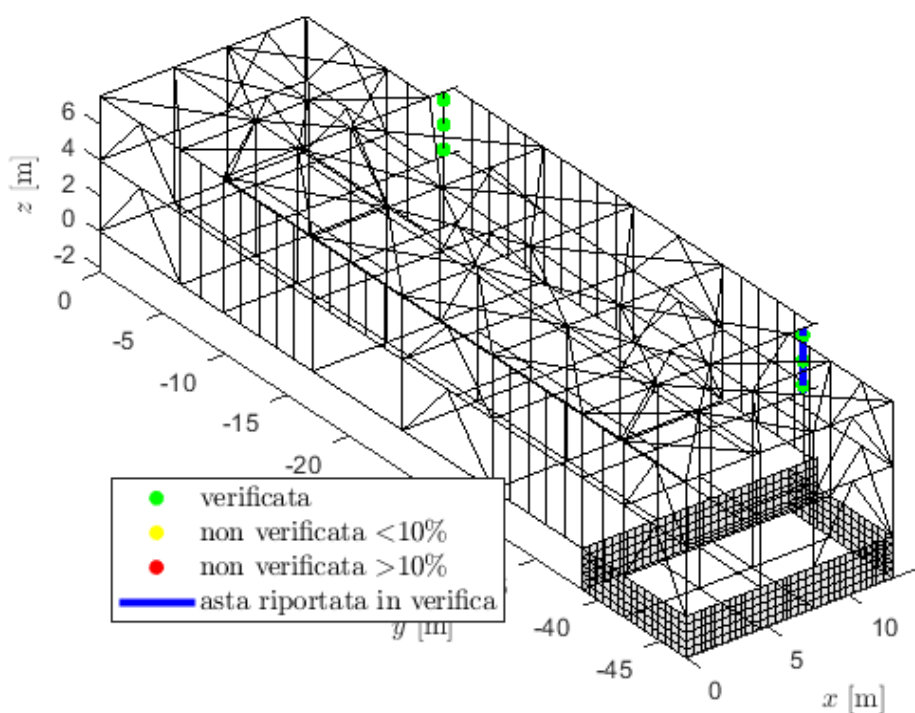
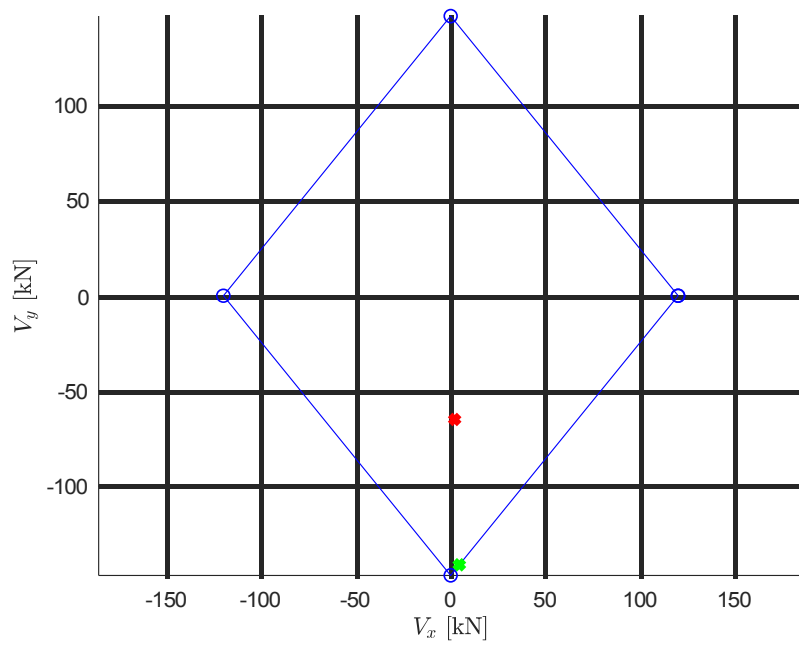


Tabella 62.62. Elemento più sollecitato

Elemento	[n°]	697
Ascissa	[m]	1.80

Tabella 63.63. Sollecitazioni SLV

		min	max
N	[kN]	-124.2	-80.9
M _x	[kNm]	-95.5	46.2
M _y	[kNm]	-2.0	3.0
V _x	[kN]	-1.2	2.1
V _y	[kN]	-64.9	-13.5



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.460$$

SLU a taglio verificati

"setto incamiciato"

Sezione

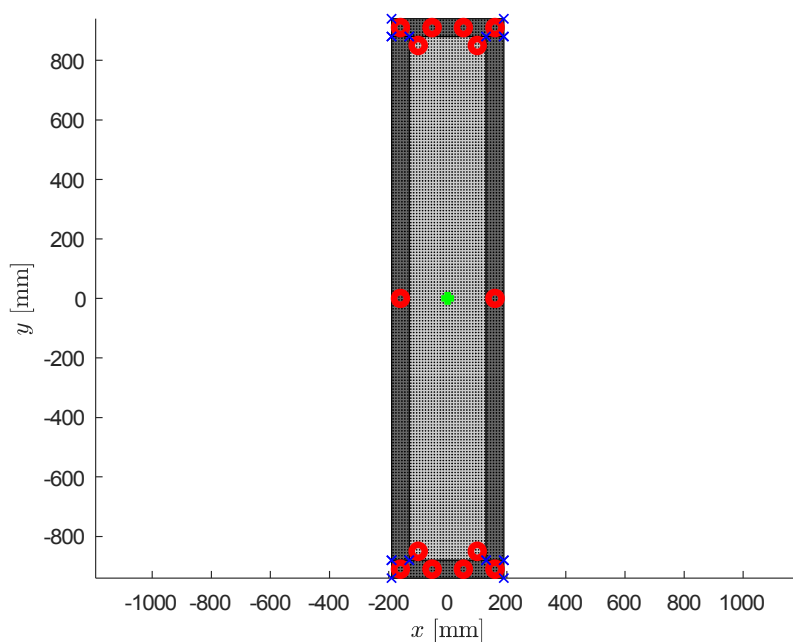


Tabella 64.64. Materiali

Res.Cls 1	Rcm	[MPa	12
]	
Res. Cls 2	Rcm	[MPa	38
]	
Res. barre longitudinali	fykl	[MPa	230
]	
Res. staffe	fyks	[MPa	430
]	
Fattore di confidenza	FC	-	1.00

Tabella 65.65. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-130	130
Dimensione	max	[mm]	-880	880
Rett. 2 (Cls 2)				
Dimensione	min	[mm]	-190	-130
Dimensione	max	[mm]	-880	880
Rett. 3 (Cls 2)				
Dimensione	min	[mm]	130	190
Dimensione	max	[mm]	-880	880
Rett. 4 (Cls 2)				

Dimensione	min	[mm]	-190	190
Dimensione	max	[mm]	-940	-880
Rett. 5 (Cls 2)				
Dimensione	min	[mm]	-190	190
Dimensione	max	[mm]	880	940
Largh. anima	bw	[mm]	260	1760
Altezza utile	d	[mm]	230	1730
Area staffe	As	[mm ²]	101	101
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm ²]	0	0
Passo f.pieg.	sfp	[mm]	1	1

Tabella 66.66. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	30	30	153.94
2	230	1730	153.94
3	30	1730	153.94
4	230	30	153.94
5	-30	-30	475.75
6	77	-30	475.75
7	183	-30	475.75
8	290	-30	475.75
9	-30	1790	475.75
10	77	1790	475.75
11	183	1790	475.75
12	290	1790	475.75
13	-30	880	475.75
14	290	880	475.75

Verifica SLV (peggiorativa per M)

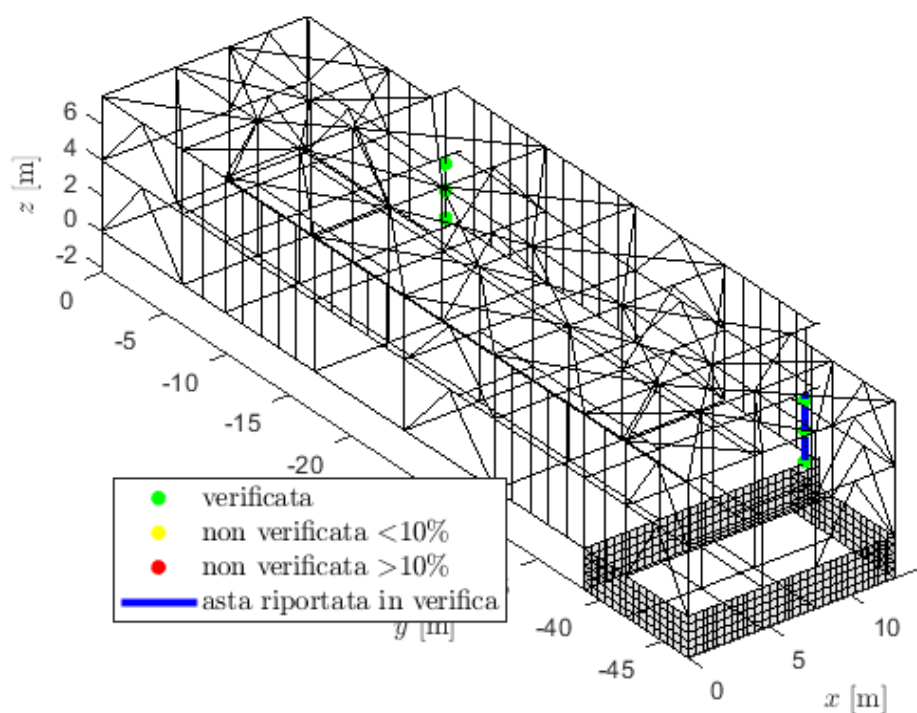
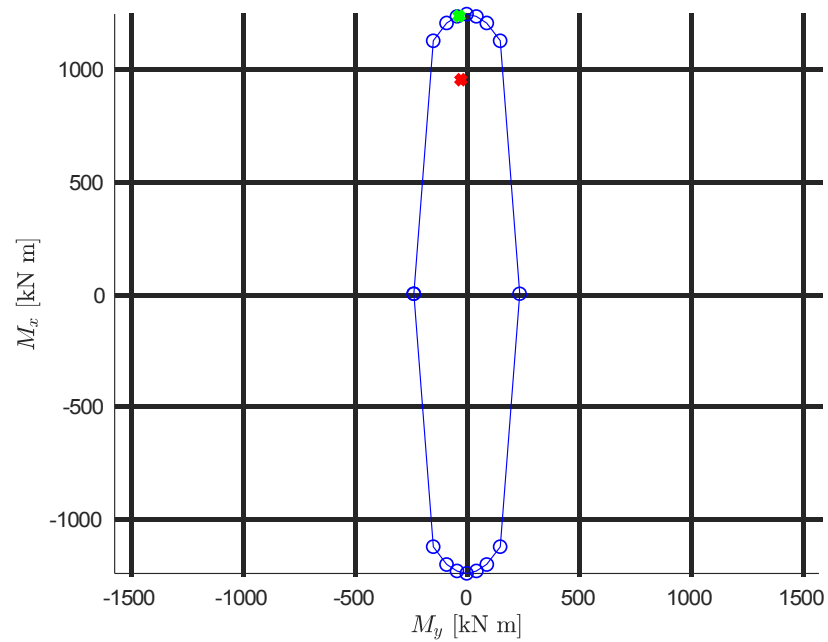


Tabella 67.67. Elemento più sollecitato

Elemento	[n°]	698
Ascissa	[m]	3.83

Tabella 68.68. Sollecitazioni SLV

		min	max
N	[kN]	-432.3	-297.2
M _x	[kNm]	-872.4	950.0
M _y	[kNm]	-26.4	14.3
V _x	[kN]	-5.1	8.9
V _y	[kN]	-327.4	230.8



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.770$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

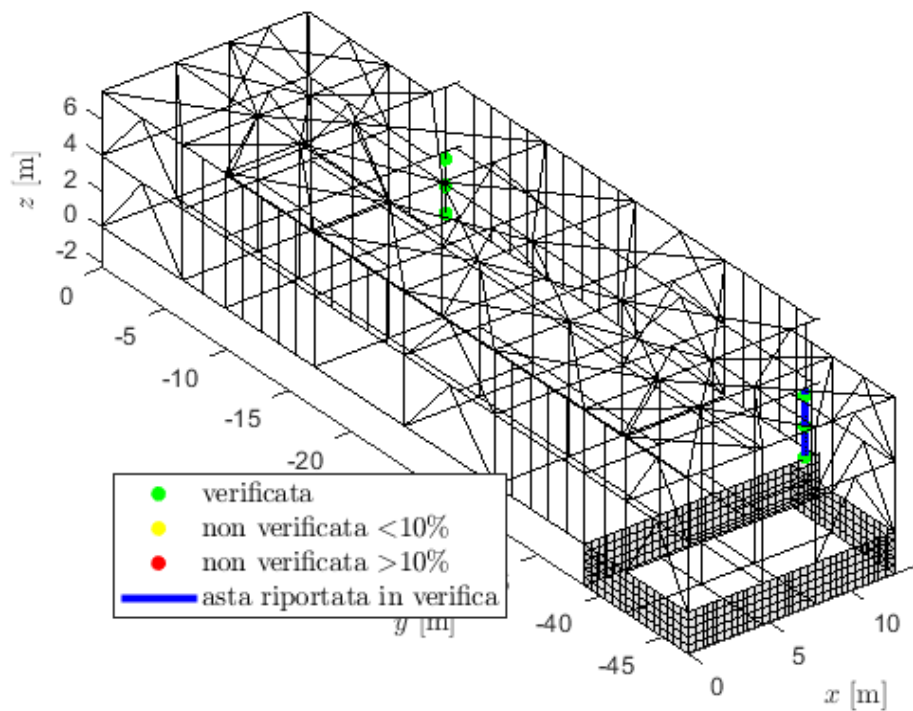
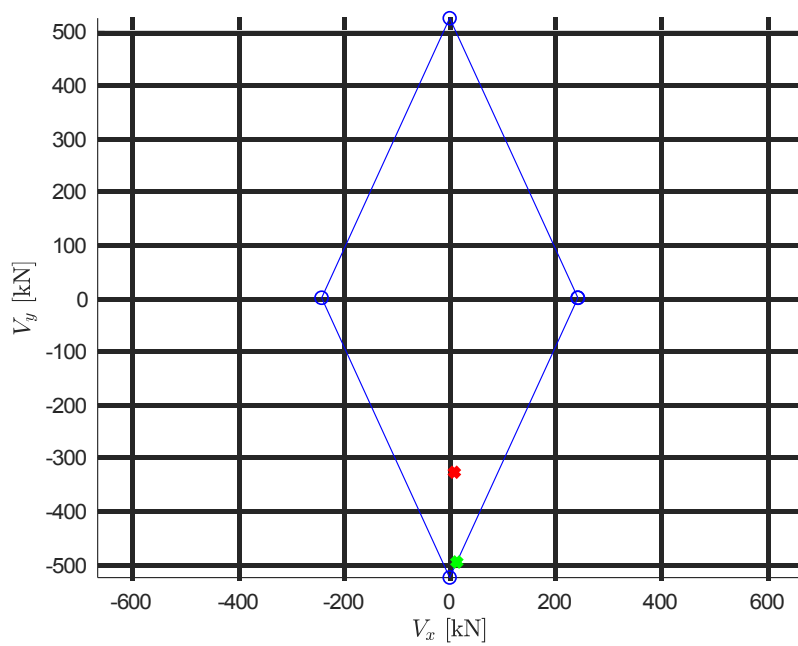


Tabella 69.69. Elemento più sollecitato

Elemento	[n°]	698
Ascissa	[m]	0.40

Tabella 70.70. Sollecitazioni SLV

		min	max
N	[kN]	-372.2	-237.1
M _x	[kNm]	-204.3	-40.8
M _y	[kNm]	-3.6	4.6
V _x	[kN]	-5.1	8.9
V _y	[kN]	-327.4	230.8



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.660$$

SLU a taglio verificati

"20- Rettangolare b=60 h=60 fondazione"

Sezione

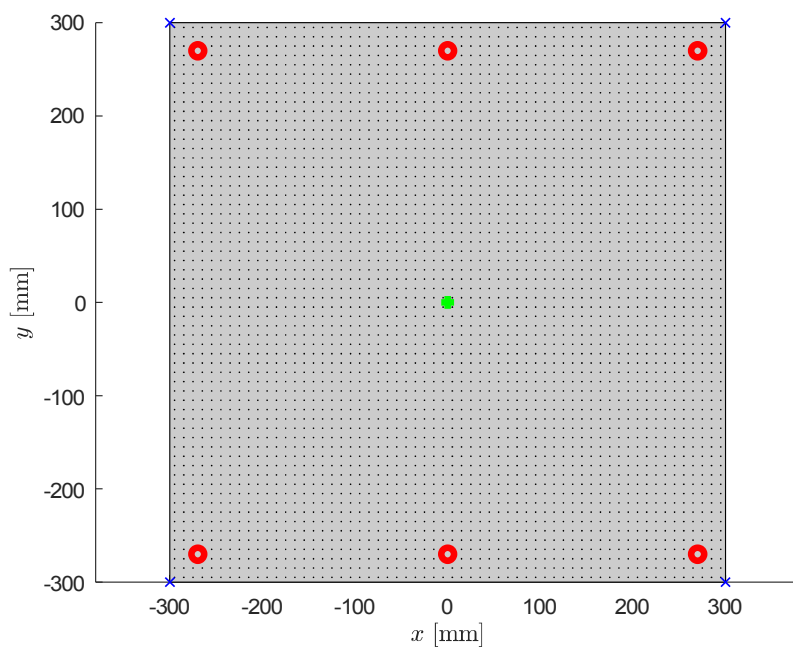


Tabella 71.71. Materiali

Res.Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.35

Tabella 72.72. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-300	300
Dimensione	max	[mm]	-300	300
Largh. anima	bw	[mm]	600	600
Altezza utile	d	[mm]	570	570
Area staffe	As	[mm2]	101	101
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm2]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 73.73. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	254.47
2	300	30	254.47
3	570	30	254.47
4	30	570	254.47
5	300	570	254.47
6	570	570	254.47

Verifica SLV (peggiorativa per M)

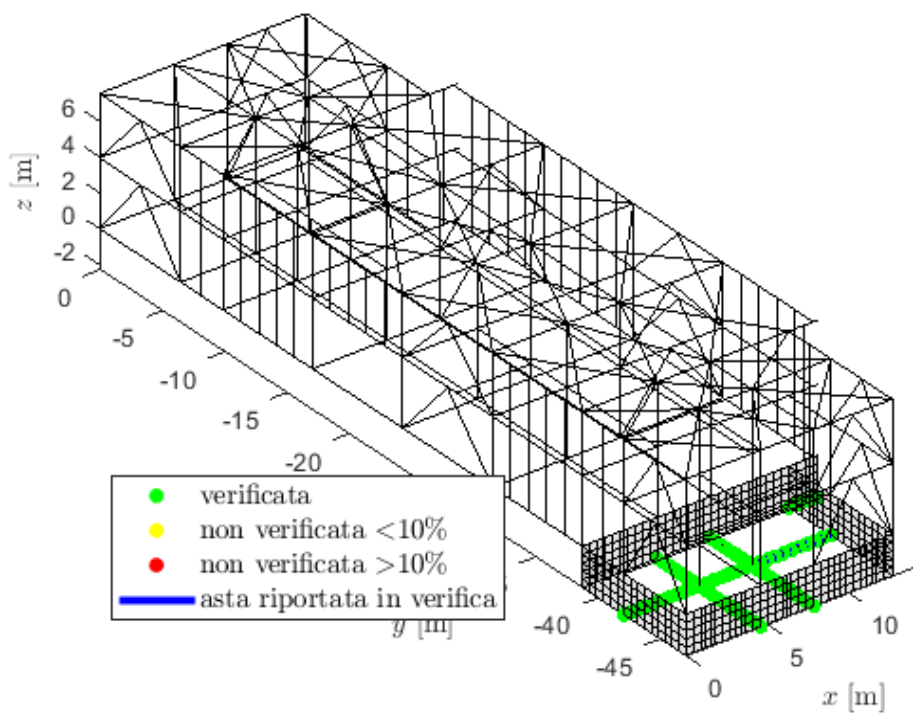


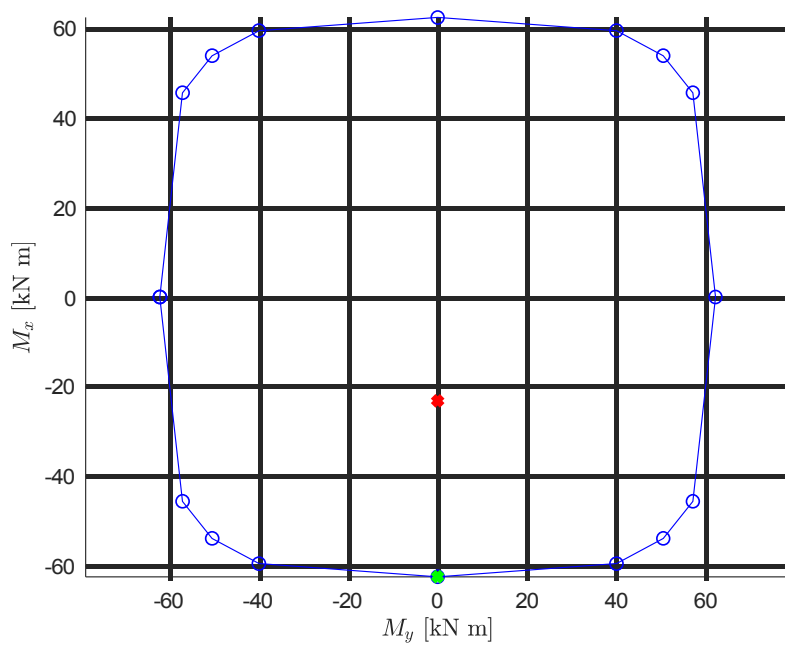
Tabella 74.74. Elemento più sollecitato

Elemento	[n°]	367
Ascissa	[m]	4.84

Tabella 75.75. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0

M _x	[kNm]	-23.1	-18.5
M _y	[kNm]	0.0	0.0
V _x	[kN]	-0.0	-0.0
V _y	[kN]	21.2	23.5



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.371$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

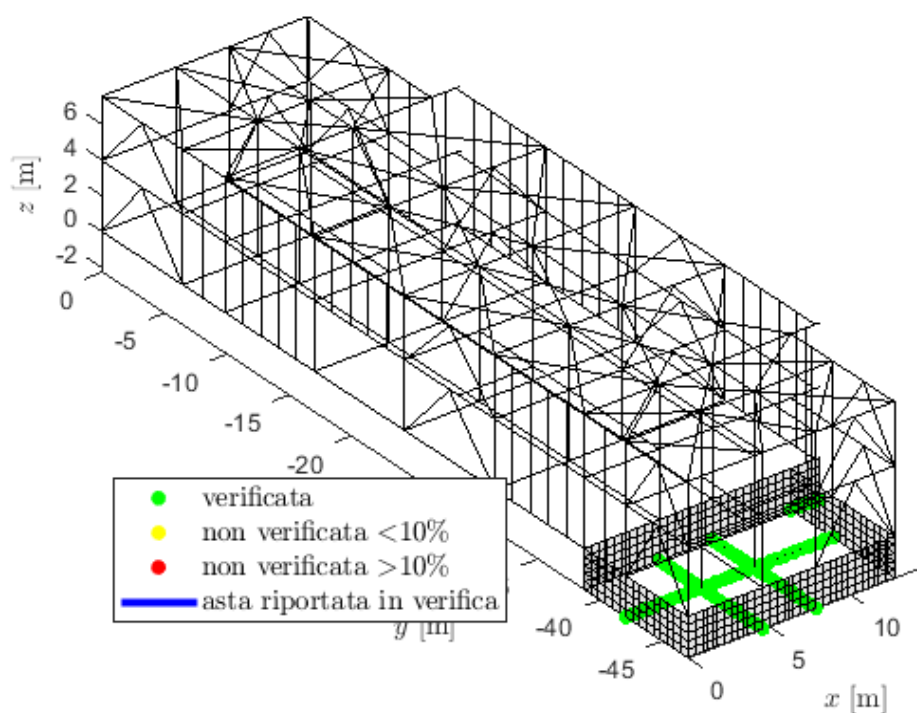
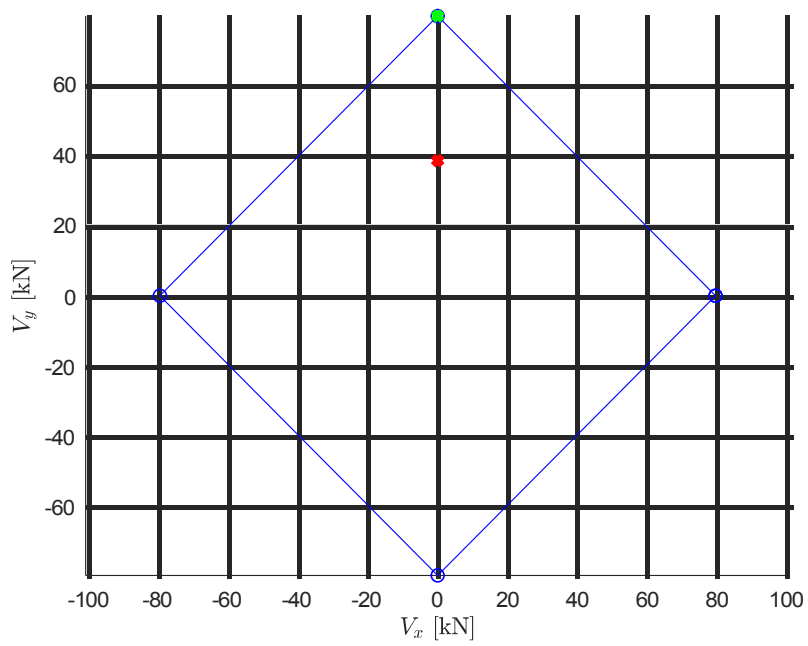


Tabella 76.76. Elemento più sollecitato

Elemento	[n°]	769
Ascissa	[m]	0.50

Tabella 77.77. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
Mx	[kNm]	-3.2	0.4
My	[kNm]	-0.0	0.0
Vx	[kN]	-0.0	0.2
Vy	[kN]	-1.3	38.5



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.483$$

SLU a taglio verificati

"21- Rettangolare b=75 h=60 fondazione"

Sezione

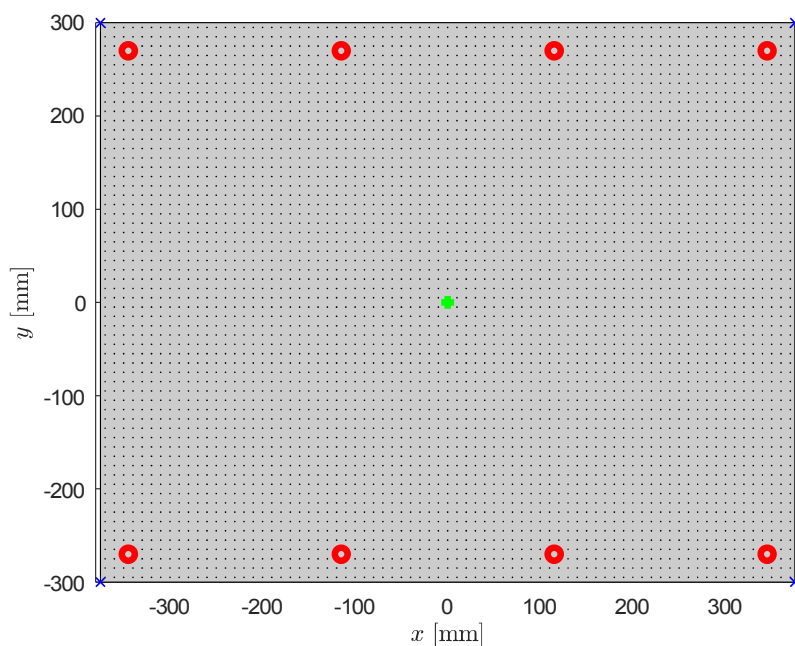


Tabella 78.78. Materiali

Res.Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.35

Tabella 79.79. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-375	375
Dimensione	max	[mm]	-300	300
Largh. anima	bw	[mm]	750	600
Altezza utile	d	[mm]	570	720
Area staffe	As	[mm2]	101	101
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm2]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 80.80. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	201.06
2	260	30	201.06
3	490	30	201.06
4	720	30	201.06
5	30	570	201.06
6	260	570	201.06
7	490	570	201.06
8	720	570	201.06

Verifica SLV (peggiorativa per M)

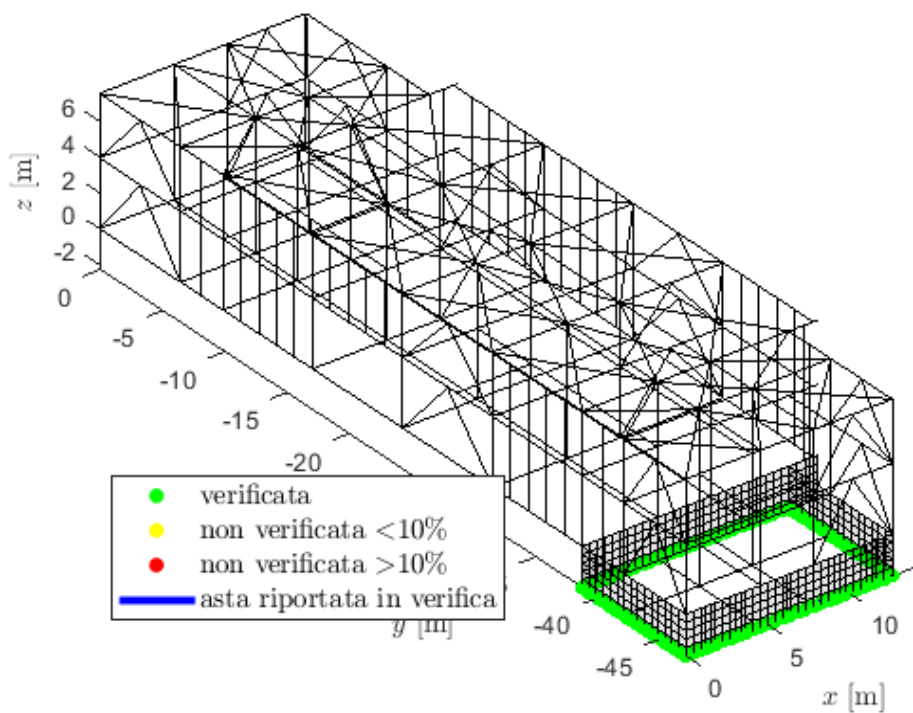
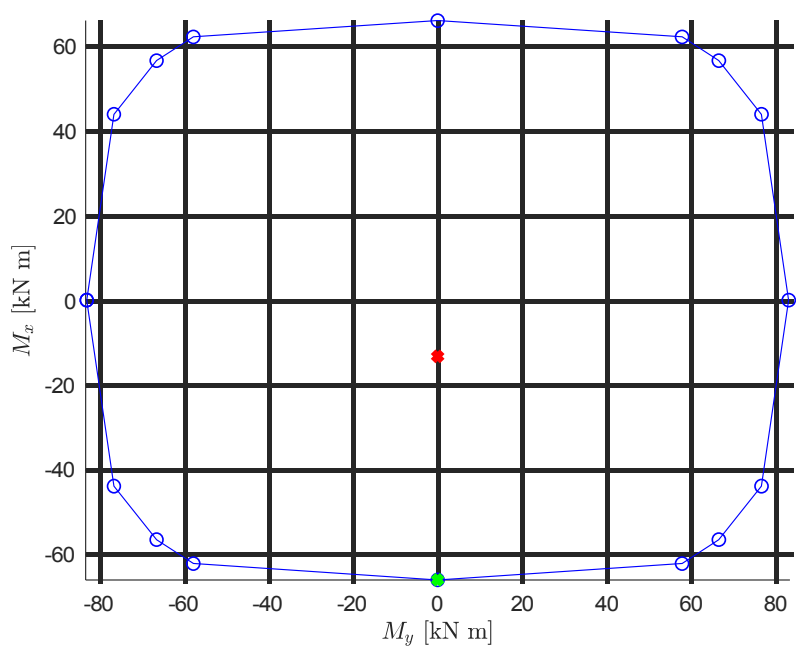


Tabella 81.81. Elemento più sollecitato

Elemento	[n°]	726
Ascissa	[m]	0.48

Tabella 82.82. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
M _x	[kNm]	-13.3	-10.9
M _y	[kNm]	-0.0	-0.0
V _x	[kN]	-0.0	-0.0
V _y	[kN]	27.2	30.1



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.201$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

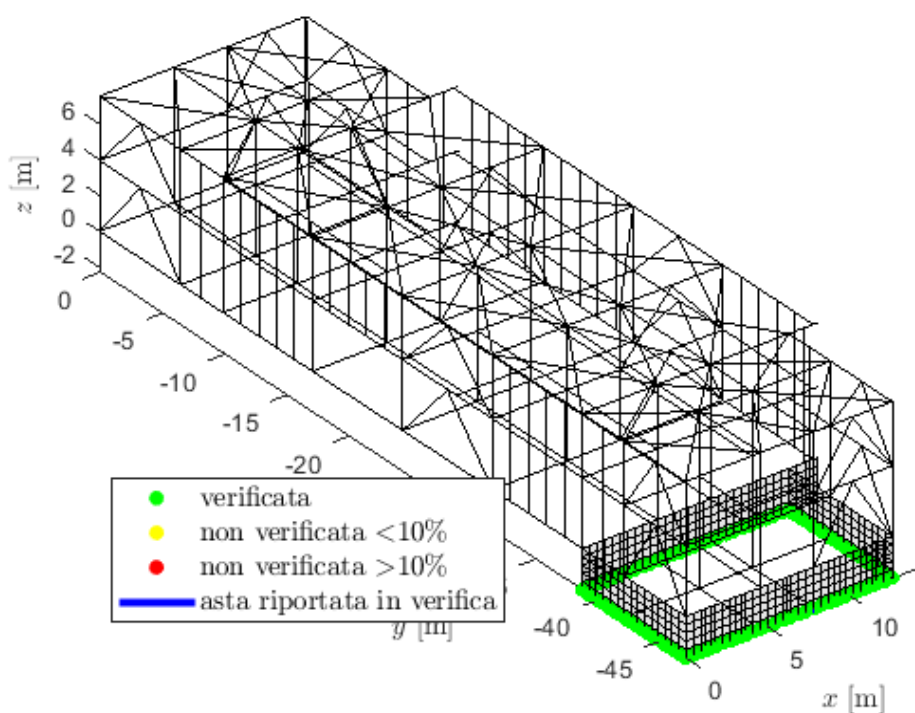
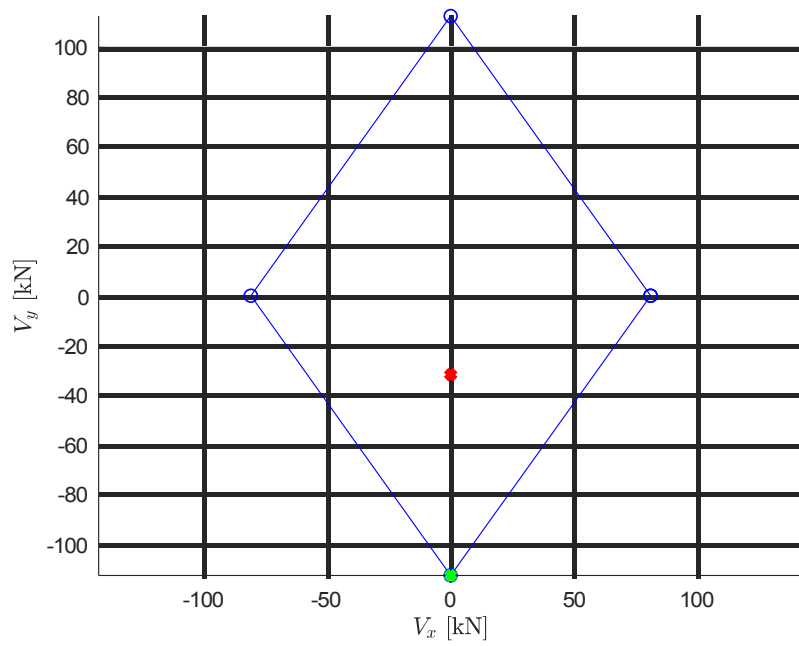


Tabella 83.83. Elemento più sollecitato

Elemento	[n°]	727
Ascissa	[m]	0.00

Tabella 84.84. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
M _x	[kNm]	-12.5	-11.4
M _y	[kNm]	-0.0	-0.0
V _x	[kN]	0.0	0.0
V _y	[kN]	-31.8	-28.7



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.282$$

SLU a taglio verificati

"1 - Rettangolare b=60 h=100 fondazione"

Sezione

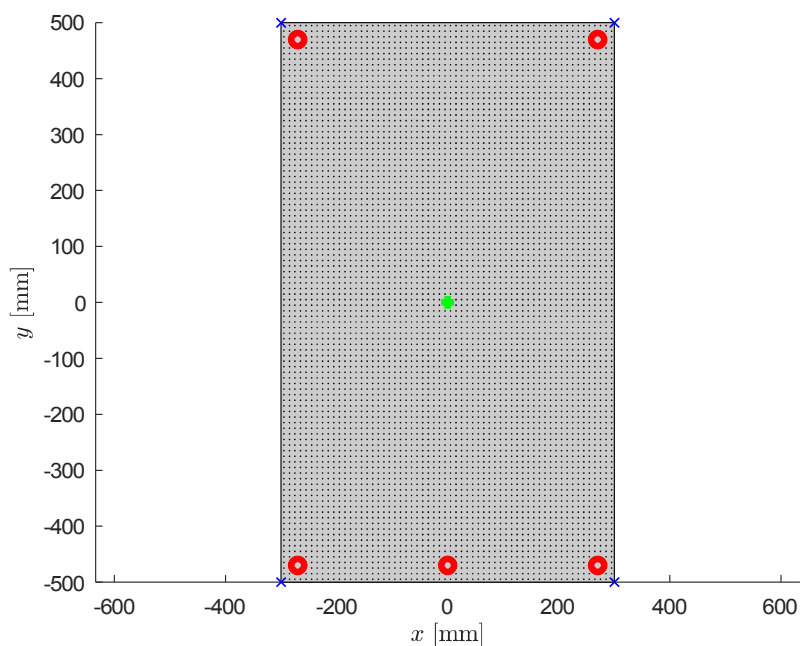


Tabella 85.85. Materiali

Res. Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.35

Tabella 86.86. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-300	300
Dimensione	max	[mm]	-500	500
Largh. anima	bw	[mm]	1000	600
Altezza utile	d	[mm]	570	970
Area staffe	As	[mm ²]	101	101
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm ²]	0	0

Passo f.pieg.	sfp	[mm]	300	200
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Tabella 87.87. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	30	30	254.47
2	570	30	254.47
3	30	970	254.47
4	300	30	254.47
5	570	970	254.47

Verifica SLV (peggiorativa per M)

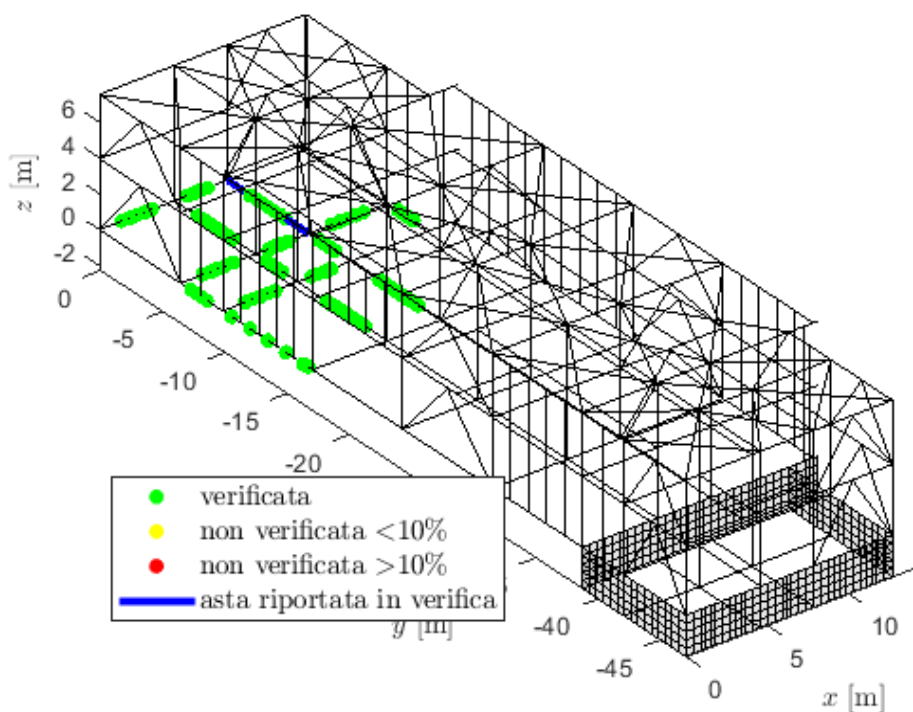


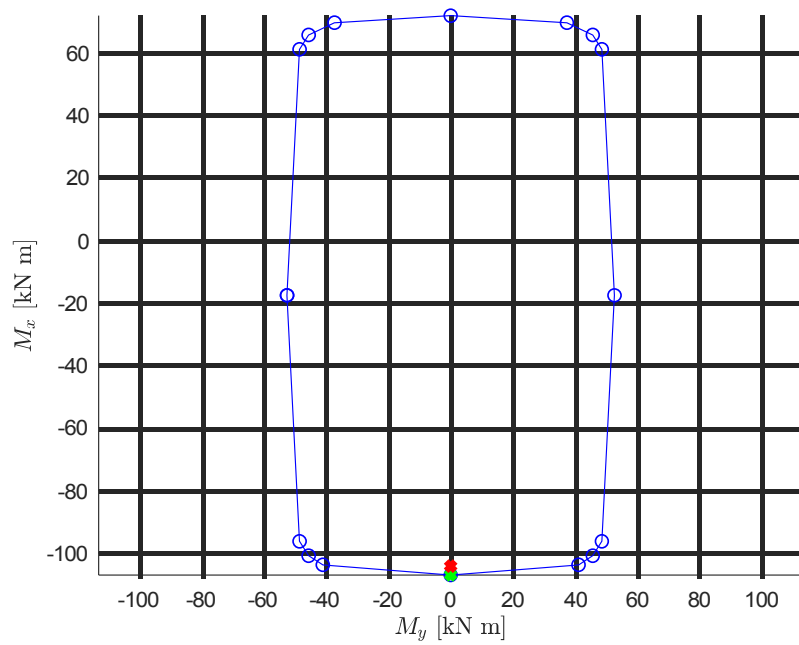
Tabella 88.88. Elemento più sollecitato

Elemento	[n°]	280
Ascissa	[m]	2.79

Tabella 89.89. Sollecitazioni SLV

		min	max
N	[kN]	-1.0	1.1
M _x	[kNm]	-104.2	-80.1

M _y	[kNm]	-3.3	3.4
V _x	[kN]	-1.8	1.7
V _y	[kN]	16.4	25.7



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.974$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

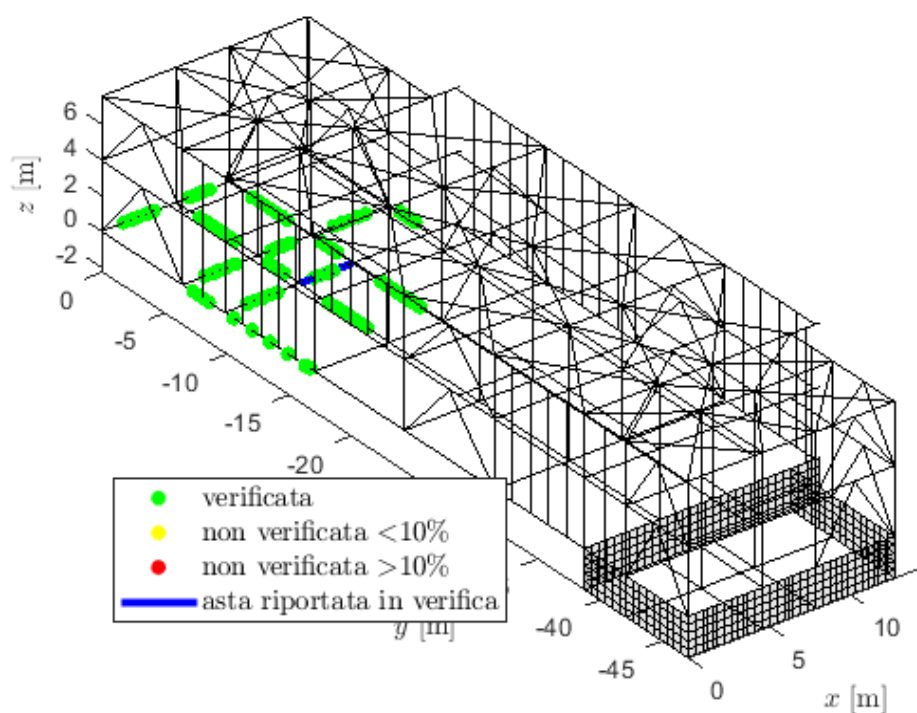
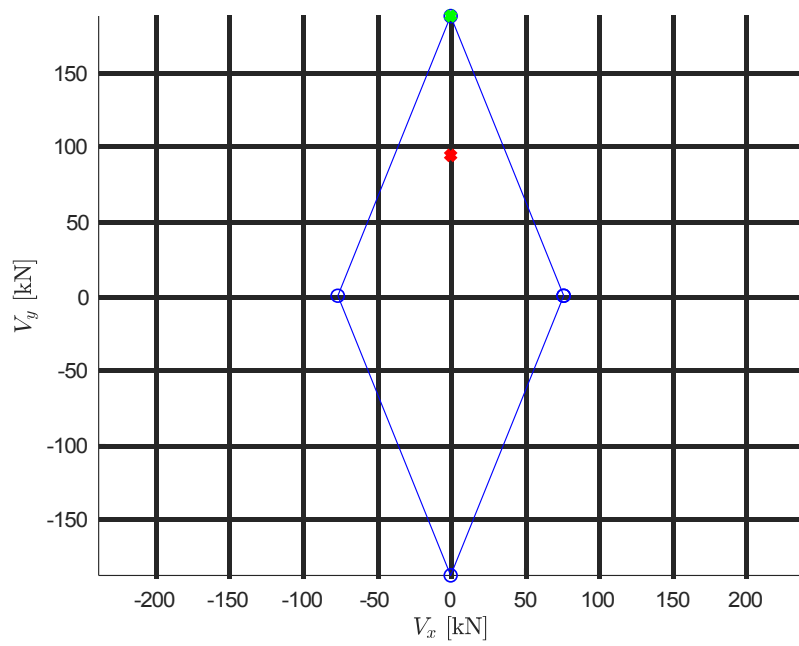


Tabella 90.90. Elemento più sollecitato

Elemento	[n°]	313
Ascissa	[m]	0.82

Tabella 91.91. Sollecitazioni SLV

		min	max
N	[kN]	-2.3	2.4
Mx	[kNm]	-15.8	19.2
My	[kNm]	-0.2	0.2
Vx	[kN]	-1.3	1.5
Vy	[kN]	11.1	94.3



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.502$$

SLU a taglio verificati

"1 - Rettangolare b=60 h=100 fondazione"

Sezione

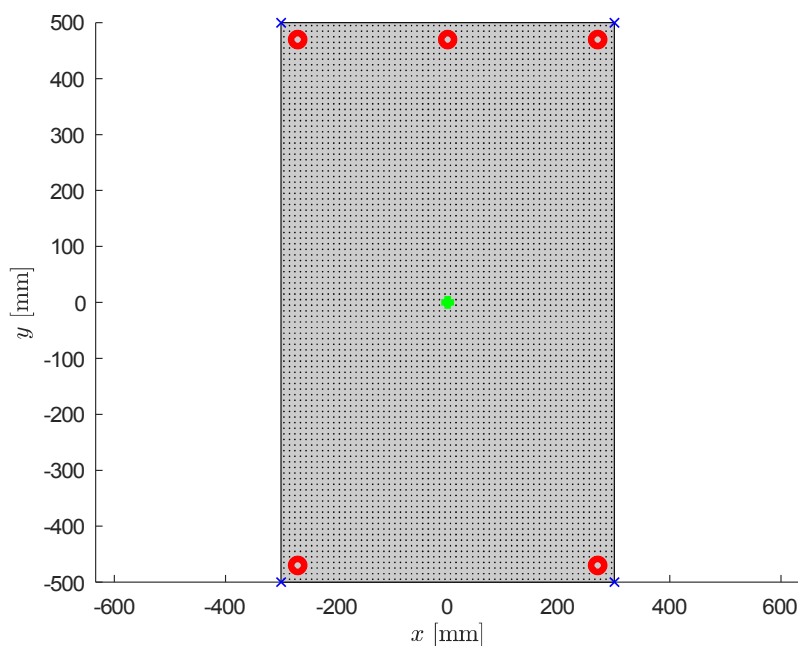


Tabella 92.92. Materiali

Res. Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.35

Tabella 93.93. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-300	300
Dimensione	max	[mm]	-500	500
Largh. anima	bw	[mm]	1000	600
Altezza utile	d	[mm]	570	970
Area staffe	As	[mm ²]	101	101
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm ²]	0	0

Passo f.pieg.	sfp	[mm]	300	200
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Tabella 94.94. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	254.47
2	570	30	254.47
3	30	970	254.47
4	300	970	254.47
5	570	970	254.47

Verifica SLV (peggiorativa per M)

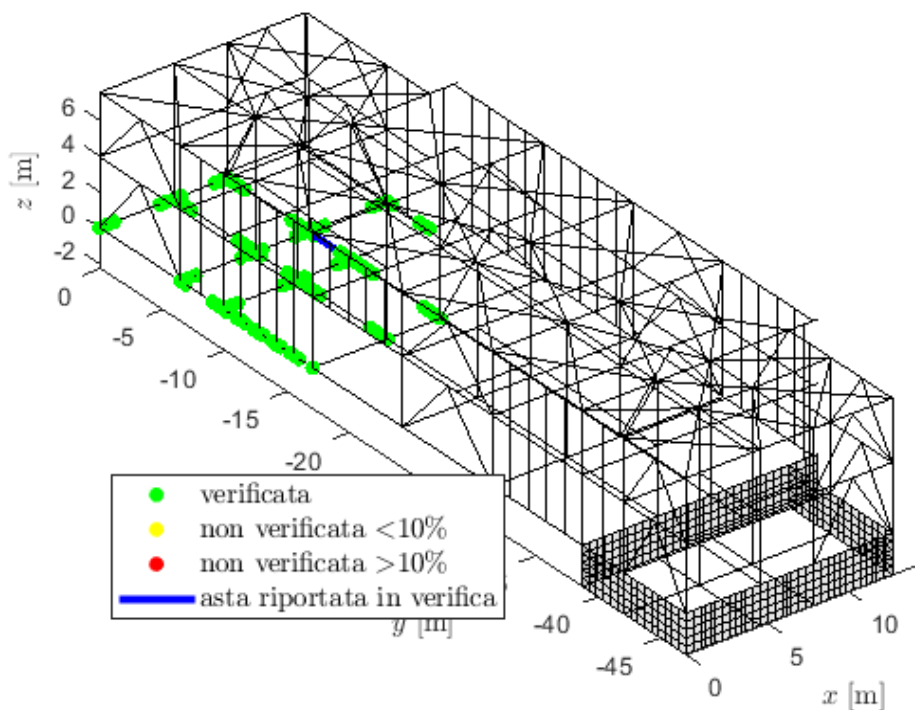


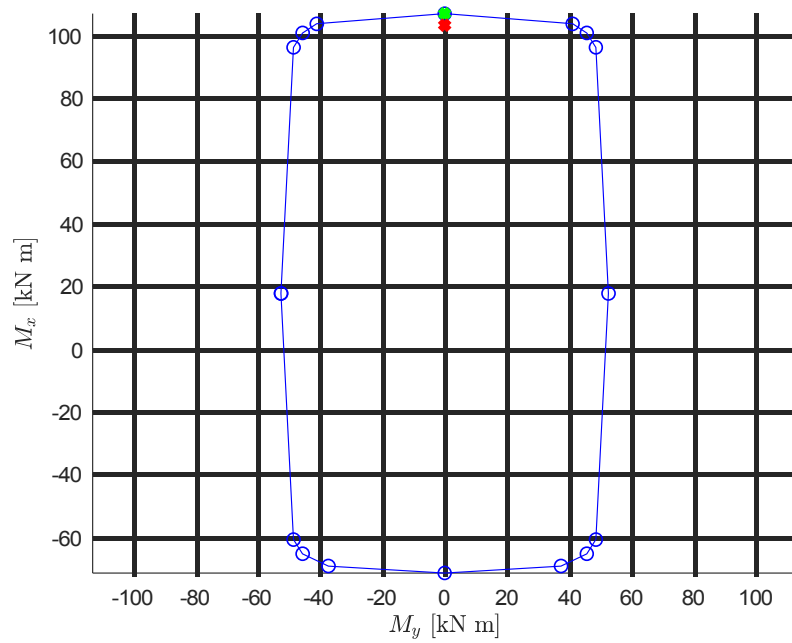
Tabella 95.95. Elemento più sollecitato

Elemento	[n°]	282
Ascissa	[m]	2.96

Tabella 96.96. Sollecitazioni SLV

		min	max
N	[kN]	-1.6	1.4
M _x	[kNm]	47.3	103.3

M _y	[kNm]	-0.7	0.7
V _x	[kN]	-2.4	2.5
V _y	[kN]	-83.2	-36.4



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.966$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

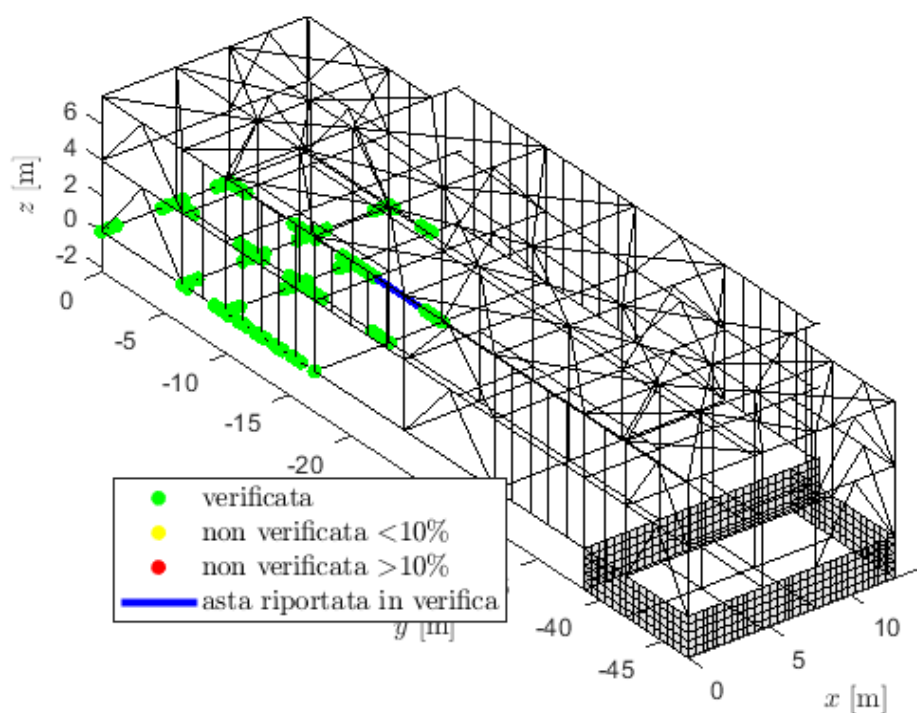
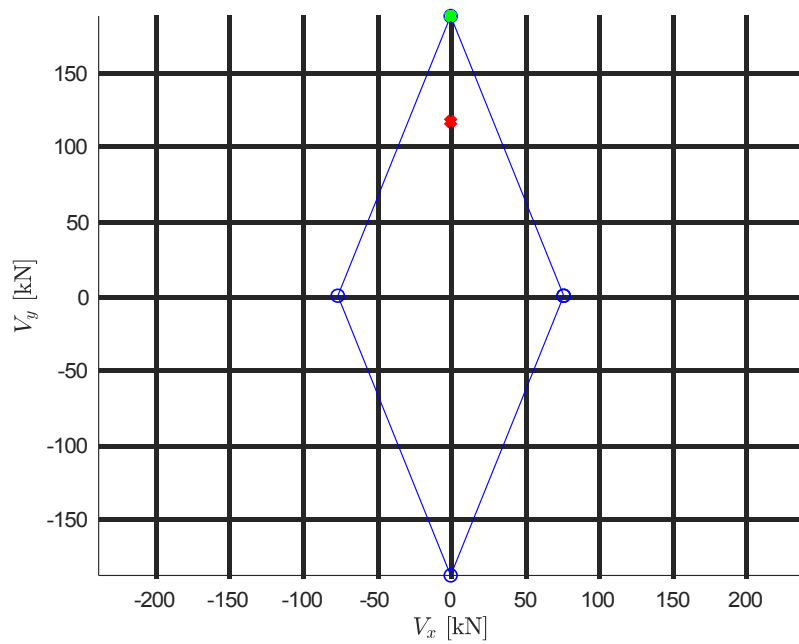


Tabella 97.97. Elemento più sollecitato

Elemento	[n°]	284
Ascissa	[m]	0.90

Tabella 98.98. Sollecitazioni SLV

		min	max
N	[kN]	-3.4	3.9
Mx	[kNm]	-5.9	40.8
My	[kNm]	-2.6	2.4
Vx	[kN]	-5.9	5.5
Vy	[kN]	76.9	117.0



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.623$$

SLU a taglio verificati

"1 - Rettangolare b=60 h=100 fondazione (5+2/2+4)"

Sezione

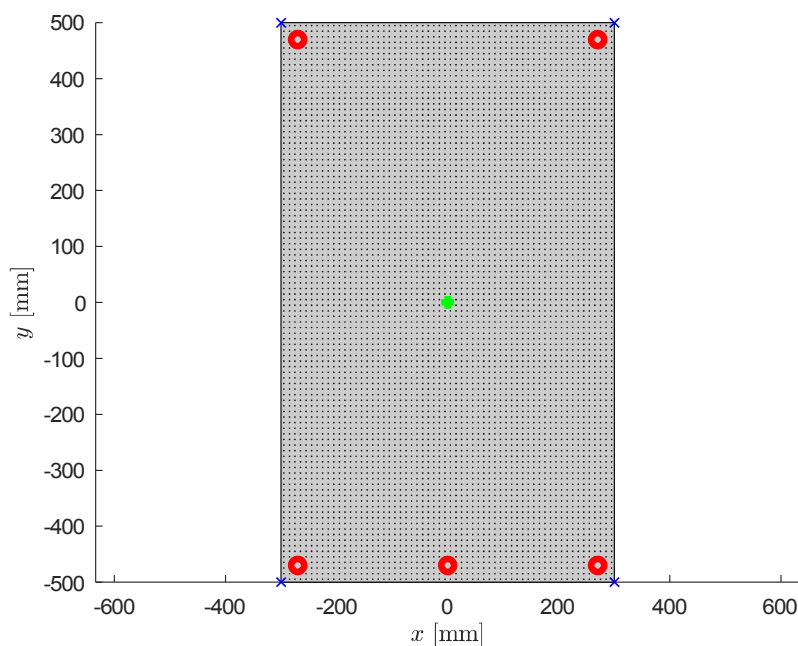


Tabella 99.99. Materiali

Res. Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.35

Tabella 100.100. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-300	300
Dimensione	max	[mm]	-500	500
Largh. anima	bw	[mm]	1000	600
Altezza utile	d	[mm]	570	970
Area staffe	As	[mm ²]	101	101
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm ²]	0	0

Passo f.pieg.	sfp	[mm]	300	200
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Tabella 101.101. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	30	30	254.47
2	570	30	254.47
3	30	970	254.47
4	300	30	763.41
5	570	970	254.47

Verifica SLV (peggiorativa per M)

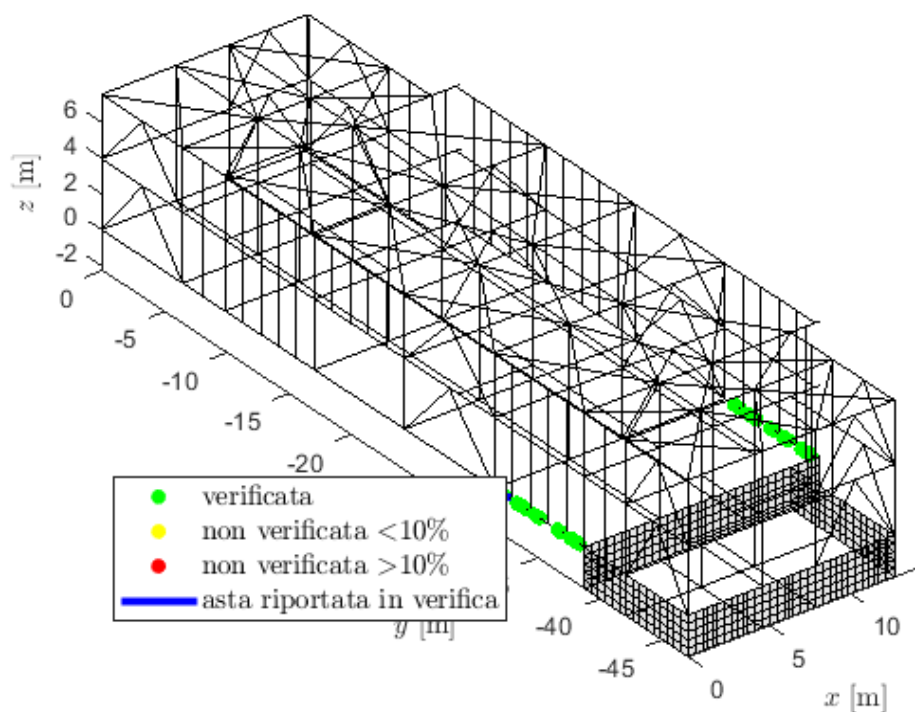


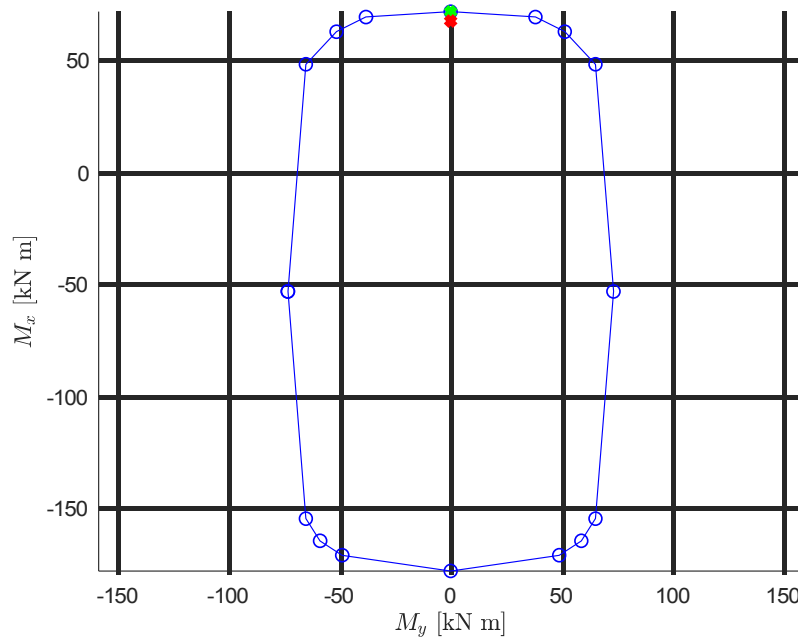
Tabella 102.102. Elemento più sollecitato

Elemento	[n°]	398
Ascissa	[m]	0.72

Tabella 103.103. Sollecitazioni SLV

		min	max
N	[kN]	-0.4	0.5
Mx	[kNm]	-2.8	67.7

My	[kNm]	-0.2	0.2
Vx	[kN]	-0.7	0.6
Vy	[kN]	54.0	103.9



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.942$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

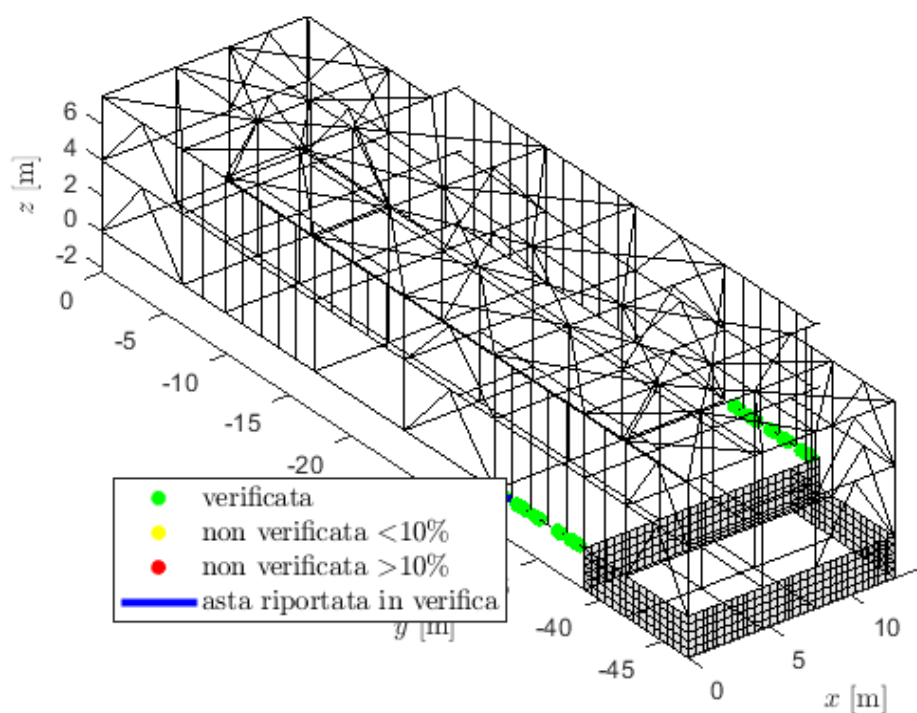
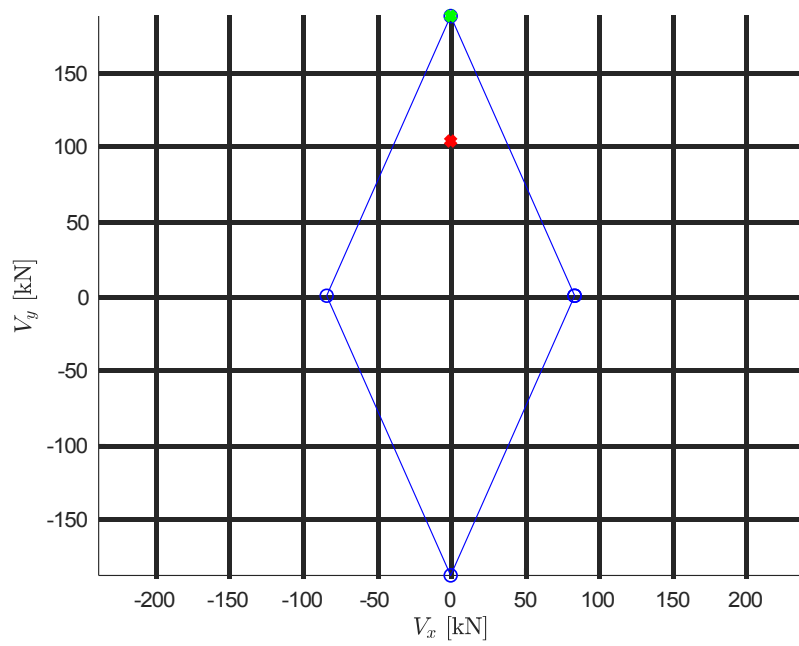


Tabella 104.104. Elemento più sollecitato

Elemento	[n°]	398
Ascissa	[m]	0.72

Tabella 105.105. Sollecitazioni SLV

		min	max
N	[kN]	-0.4	0.5
Mx	[kNm]	-2.8	67.7
My	[kNm]	-0.2	0.2
Vx	[kN]	-0.7	0.6
Vy	[kN]	54.0	103.9



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.553$$

SLU a taglio verificati

"1 - Rettangolare b=60 h=100 fondazione (5+2/2+4)"

Sezione

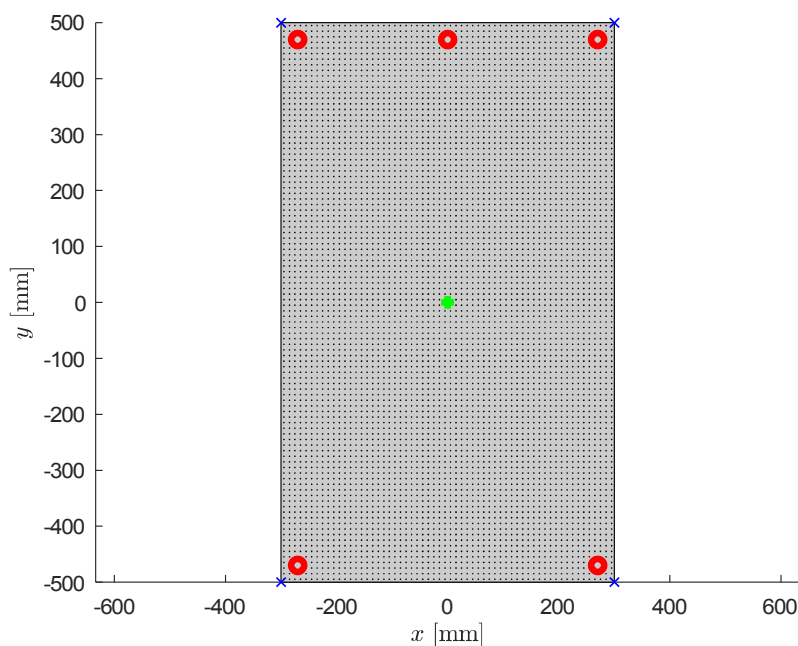


Tabella 106.106. Materiali

Res. Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.35

Tabella 107.107. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-300	300
Dimensione	max	[mm]	-500	500
Largh. anima	bw	[mm]	1000	600
Altezza utile	d	[mm]	570	970
Area staffe	As	[mm ²]	101	101
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm ²]	0	0

Passo f.pieg.	sfp	[mm]	300	200
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Tabella 108.108. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	254.47
2	570	30	254.47
3	30	970	254.47
4	300	970	508.94
5	570	970	254.47

Verifica SLV (peggiorativa per M)

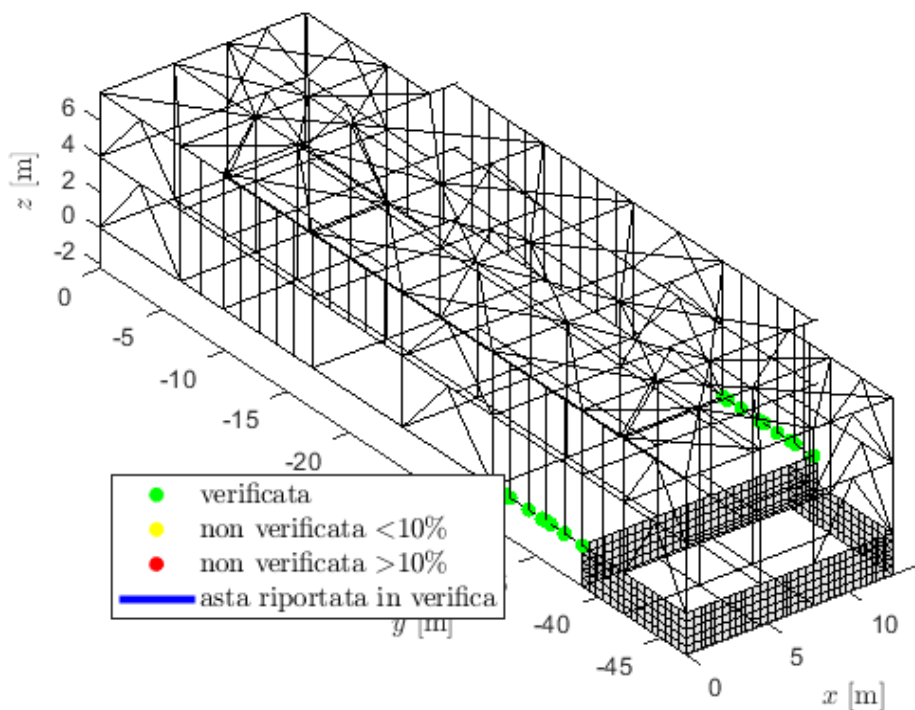


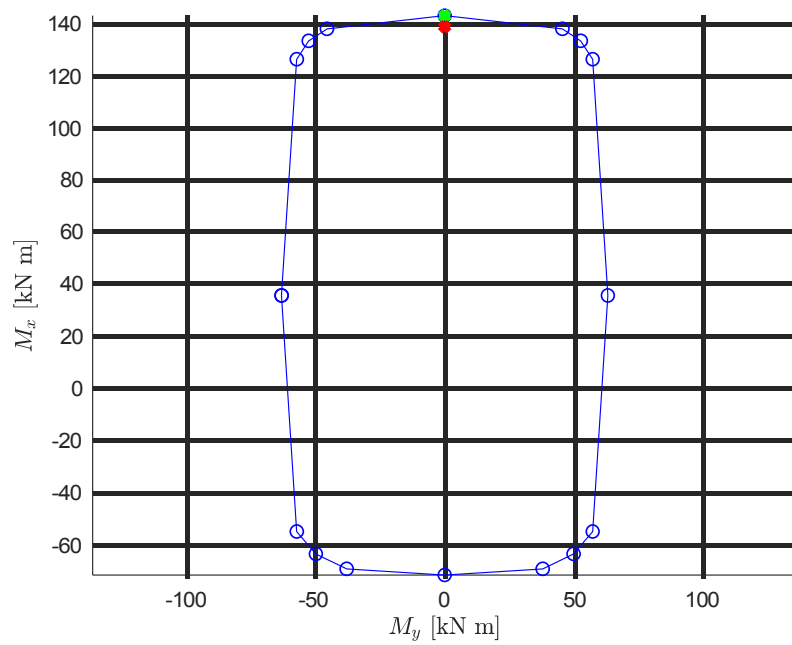
Tabella 109.109. Elemento più sollecitato

Elemento	[n°]	398
Ascissa	[m]	0.00

Tabella 110.110. Sollecitazioni SLV

		min	max
N	[kN]	-0.4	0.5
Mx	[kNm]	32.5	138.5

M_y	[kNm]	-0.2	0.2
V_x	[kN]	-0.7	0.6
V_y	[kN]	43.4	93.3



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.970$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

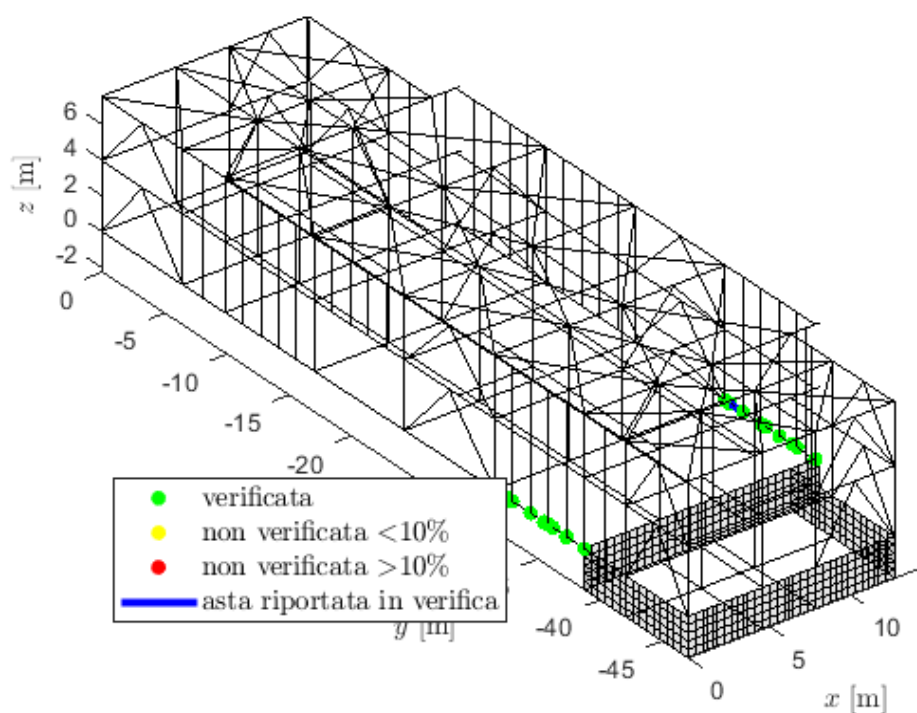
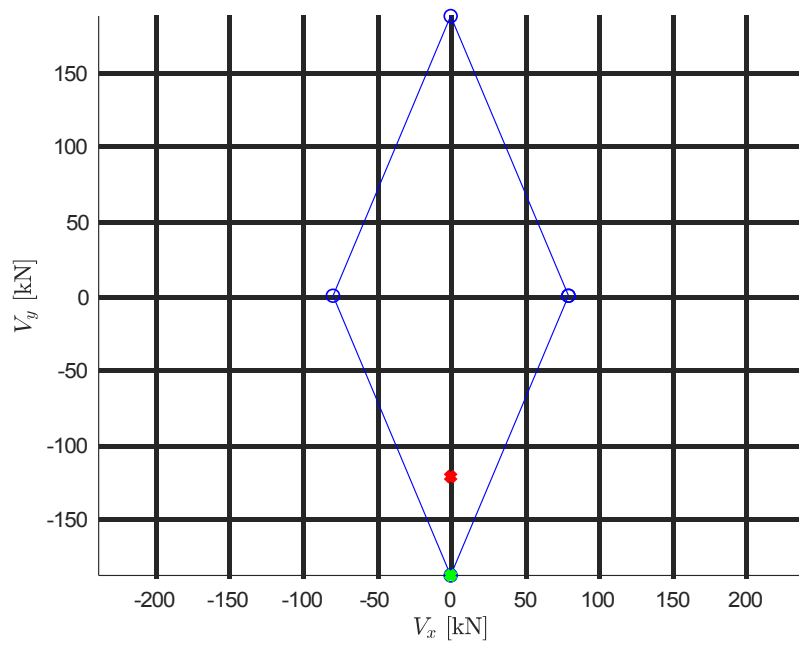


Tabella 111.111. Elemento più sollecitato

Elemento	[n°]	407
Ascissa	[m]	1.08

Tabella 112.112. Sollecitazioni SLV

		min	max
N	[kN]	-0.4	0.4
M _x	[kNm]	16.3	151.5
M _y	[kNm]	-0.0	0.0
V _x	[kN]	-0.7	0.6
V _y	[kN]	-121.5	-45.3



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.647$$

SLU a taglio verificati

Verifica SLV (peggiorativa per V)

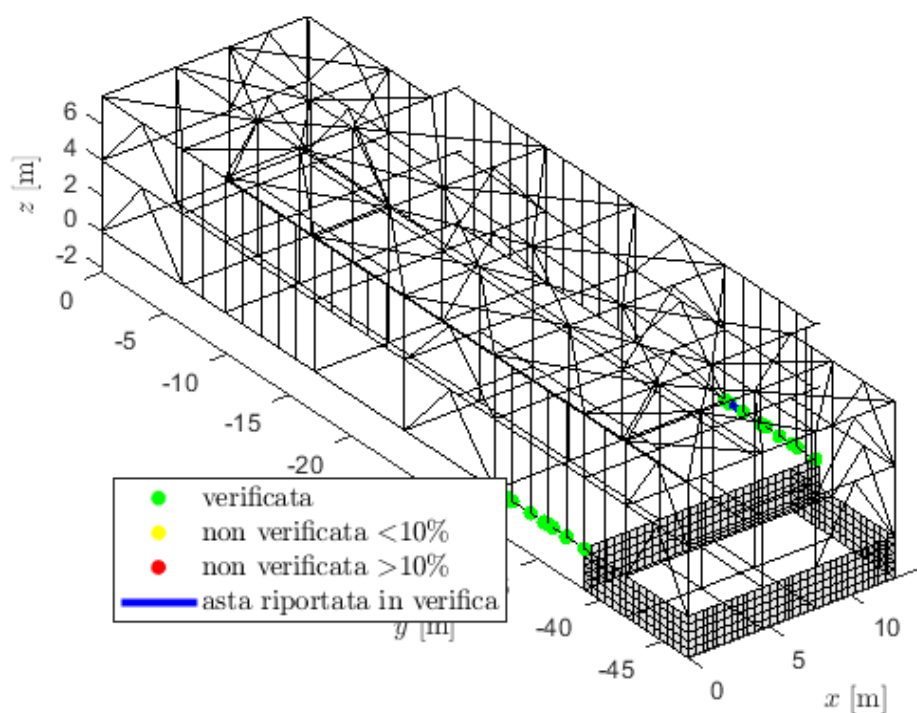
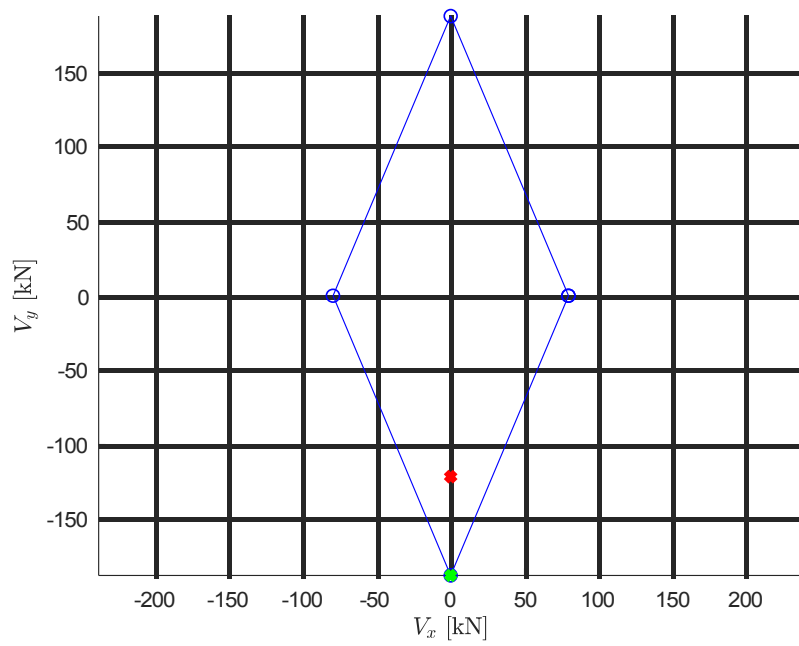


Tabella 113.113. Elemento più sollecitato

Elemento	[n°]	407
Ascissa	[m]	1.08

Tabella 114.114. Sollecitazioni SLV

		min	max
N	[kN]	-0.4	0.4
M _x	[kNm]	16.3	151.5
M _y	[kNm]	-0.0	0.0
V _x	[kN]	-0.7	0.6
V _y	[kN]	-121.5	-45.3



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.647$$

SLU a taglio verificati

"1 - Rettangolare b=60 h=100 fondazione (5+2/2+3)"

Sezione

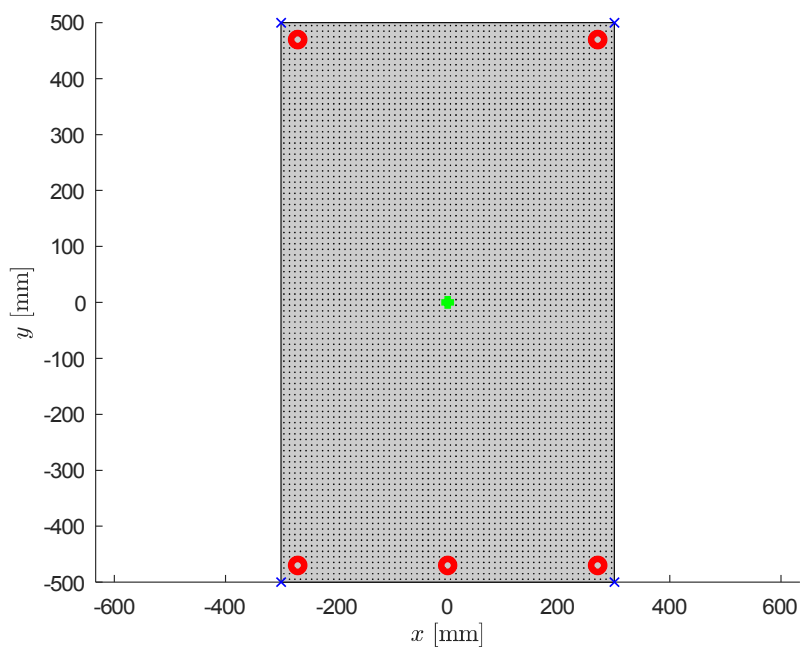


Tabella 115.115. Materiali

Res. Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.35

Tabella 116.116. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-300	300
Dimensione	max	[mm]	-500	500
Largh. anima	bw	[mm]	1000	600
Altezza utile	d	[mm]	570	970
Area staffe	As	[mm ²]	101	101
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm ²]	0	0

Passo f.pieg.	sfp	[mm]	300	200
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Tabella 117.117. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	254.47
2	570	30	254.47
3	30	970	254.47
4	300	30	763.41
5	570	970	254.47

Verifica SLV (peggiorativa per M)

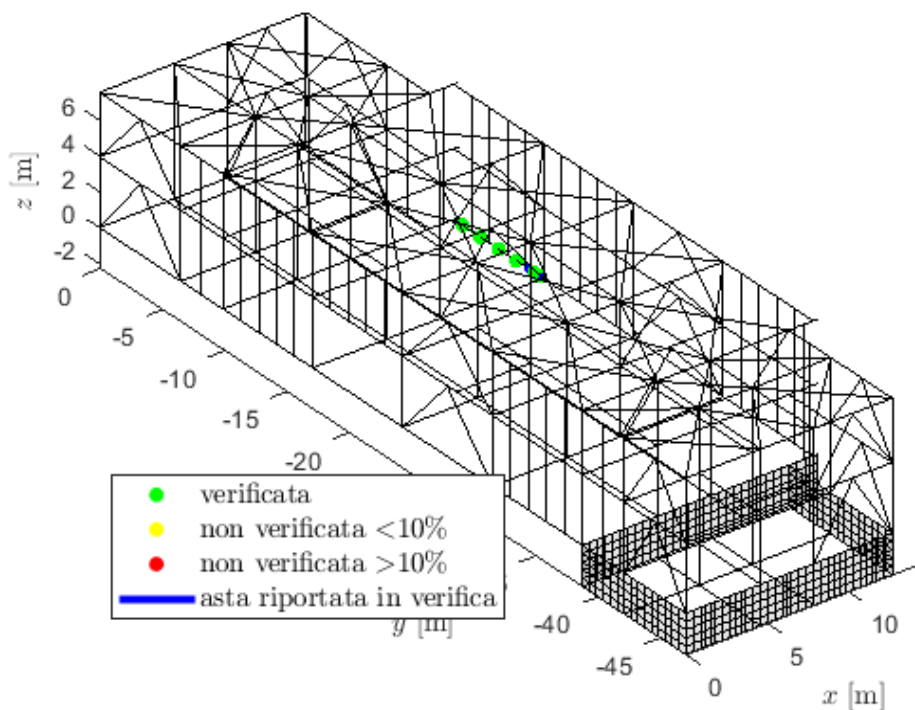


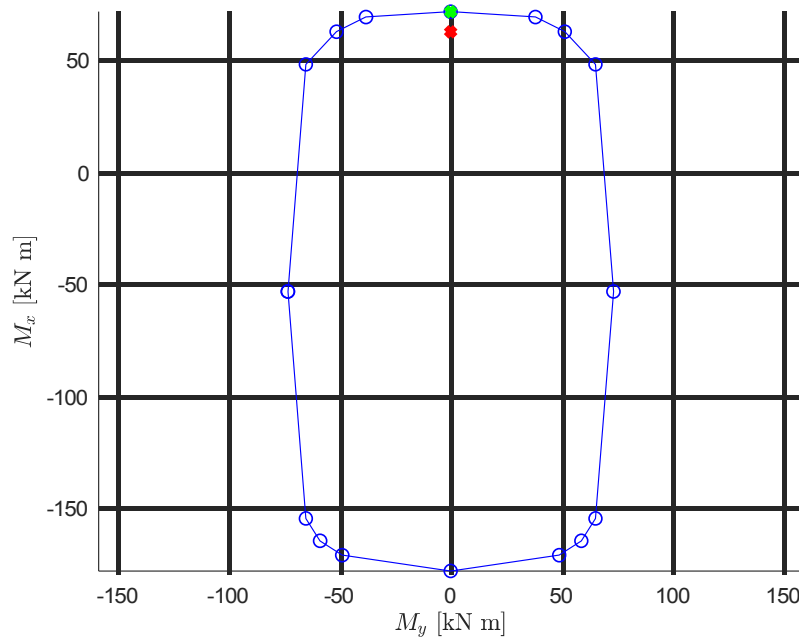
Tabella 118.118. Elemento più sollecitato

Elemento	[n°]	418
Ascissa	[m]	0.72

Tabella 119.119. Sollecitazioni SLV

		min	max
N	[kN]	-0.4	0.4
M _x	[kNm]	0.1	62.9

M _y	[kNm]	-0.2	0.2
V _x	[kN]	-0.7	0.6
V _y	[kN]	-66.1	-18.1



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.874$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

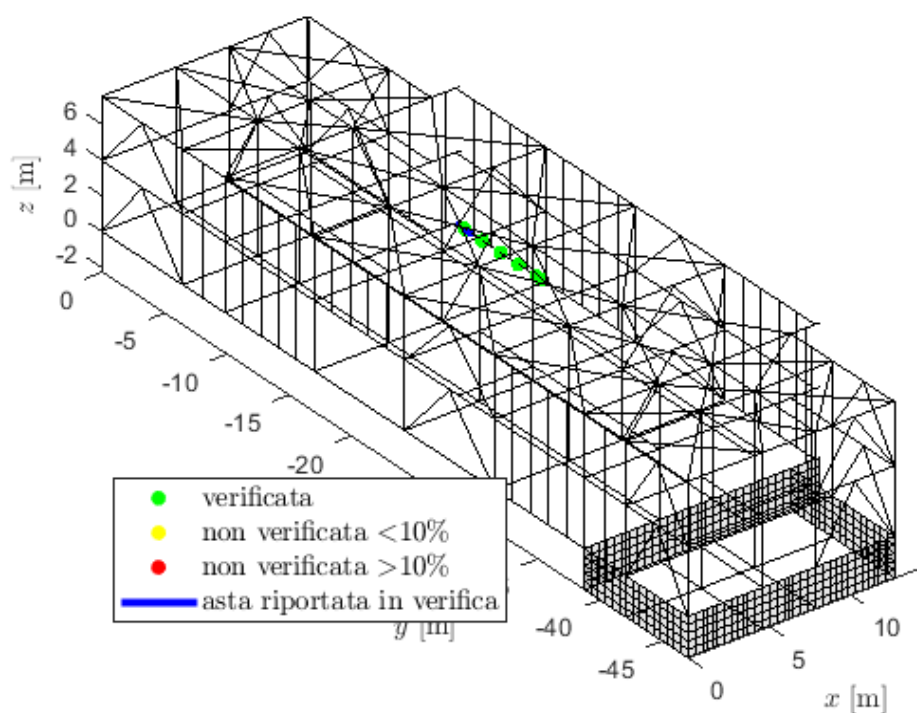
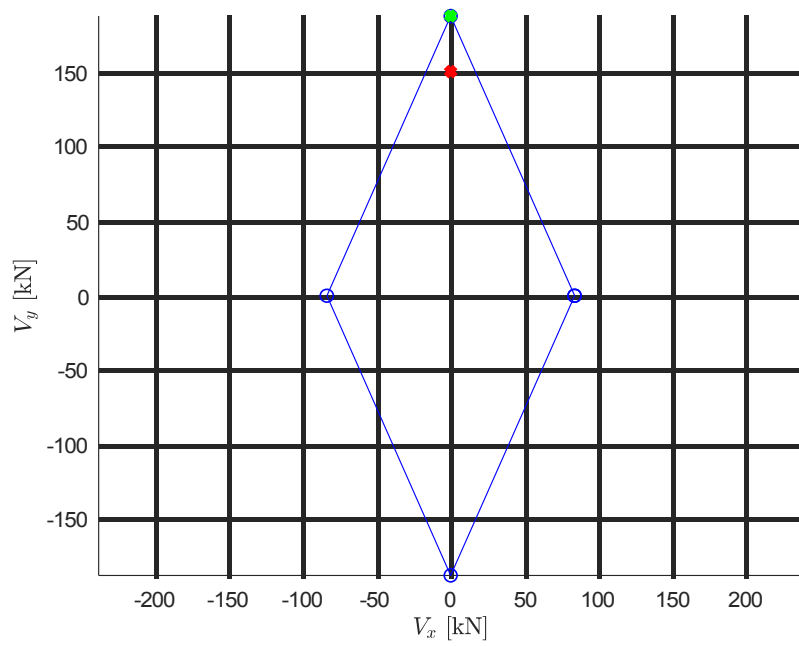


Tabella 120.120. Elemento più sollecitato

Elemento	[n°]	412
Ascissa	[m]	0.72

Tabella 121.121. Sollecitazioni SLV

		min	max
N	[kN]	-0.4	0.4
Mx	[kNm]	12.3	74.3
My	[kNm]	-0.2	0.3
Vx	[kN]	-0.7	0.7
Vy	[kN]	52.0	150.6



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.801$$

SLU a taglio verificati

"1 - Rettangolare b=60 h=100 fondazione (5+2/2+3)"

Sezione

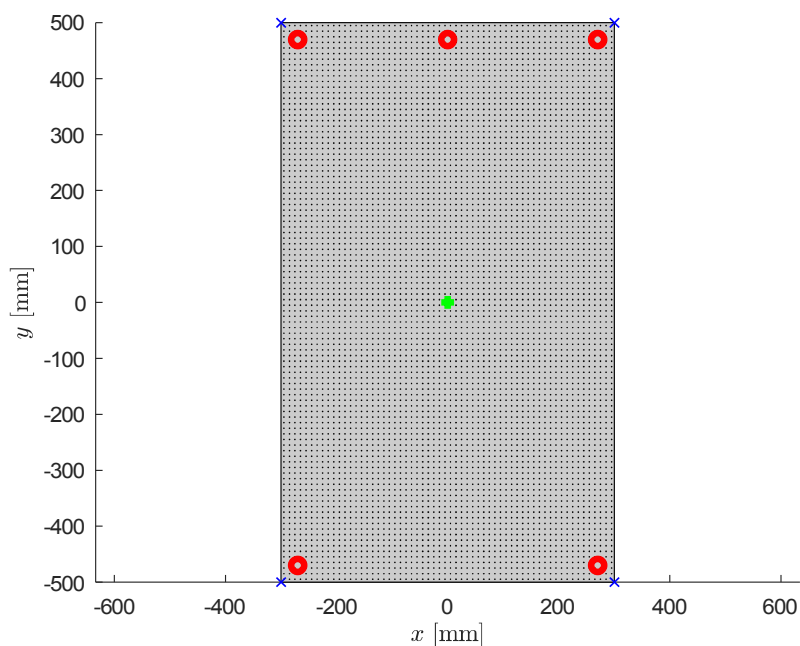


Tabella 122.122. Materiali

Res.Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.35

Tabella 123.123. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-300	300
Dimensione	max	[mm]	-500	500
Largh. anima	bw	[mm]	1000	600
Altezza utile	d	[mm]	570	970
Area staffe	As	[mm ²]	101	101
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm ²]	0	0

Passo f.pieg.	sfp	[mm]	300	200
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Tabella 124.124. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	30	30	254.47
2	570	30	254.47
3	30	970	254.47
4	300	970	254.47
5	570	970	254.47

Verifica SLV (peggiorativa per M)

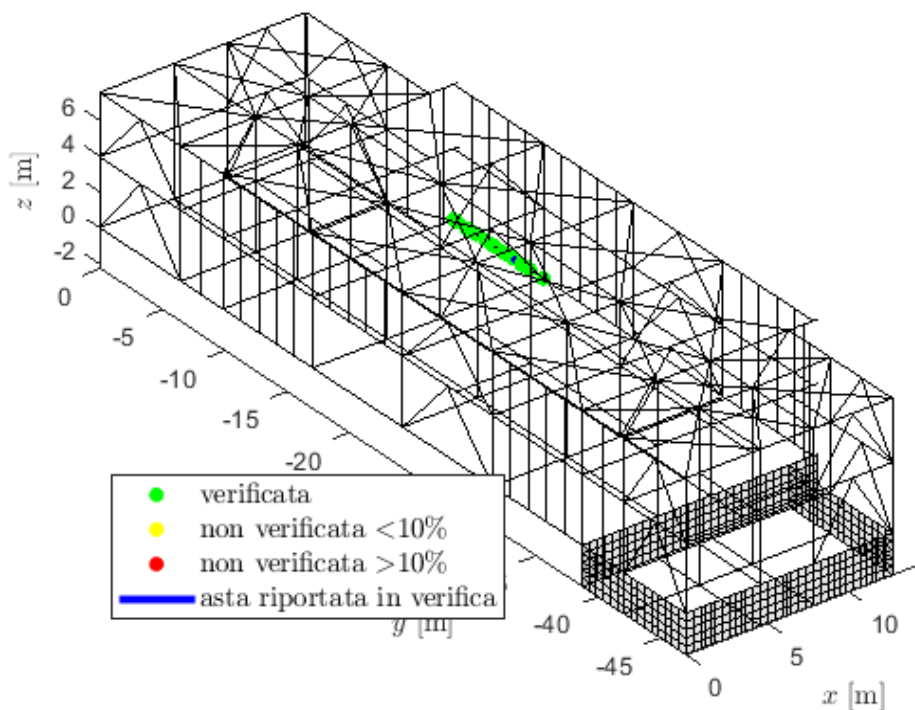


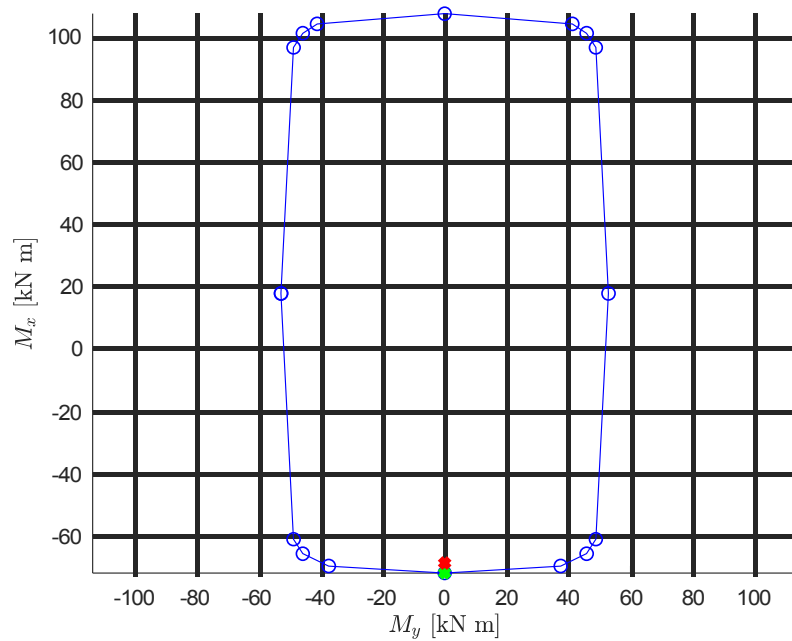
Tabella 125.125. Elemento più sollecitato

Elemento	[n°]	417
Ascissa	[m]	0.36

Tabella 126.126. Sollecitazioni SLV

		min	max
N	[kN]	-0.4	0.4
M _x	[kNm]	-68.8	-19.7

M _y	[kNm]	-0.0	0.0
V _x	[kN]	-0.7	0.6
V _y	[kN]	-34.2	-10.3



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.956$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

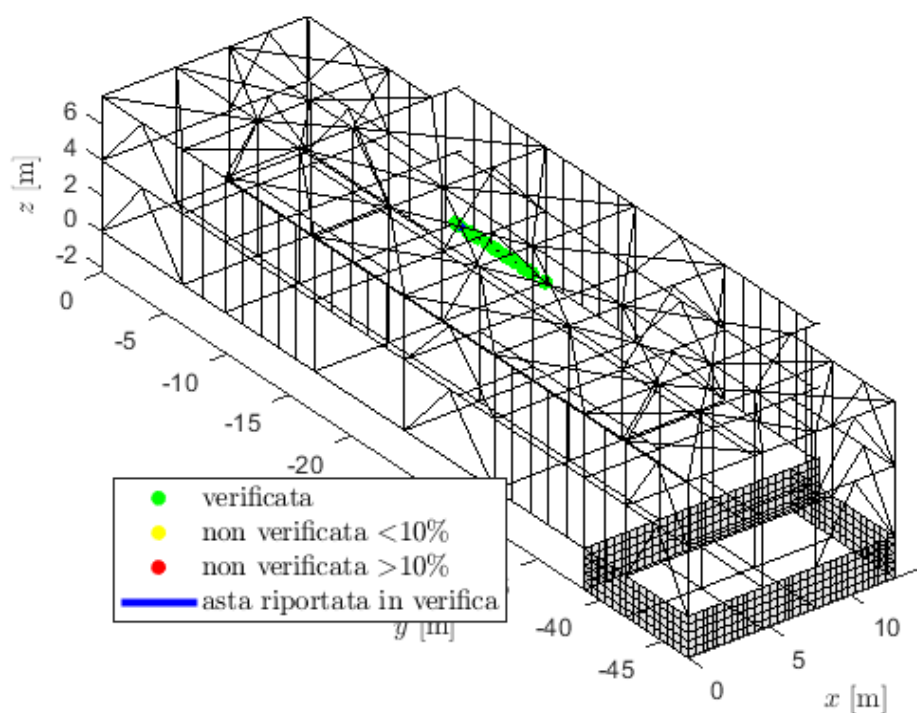
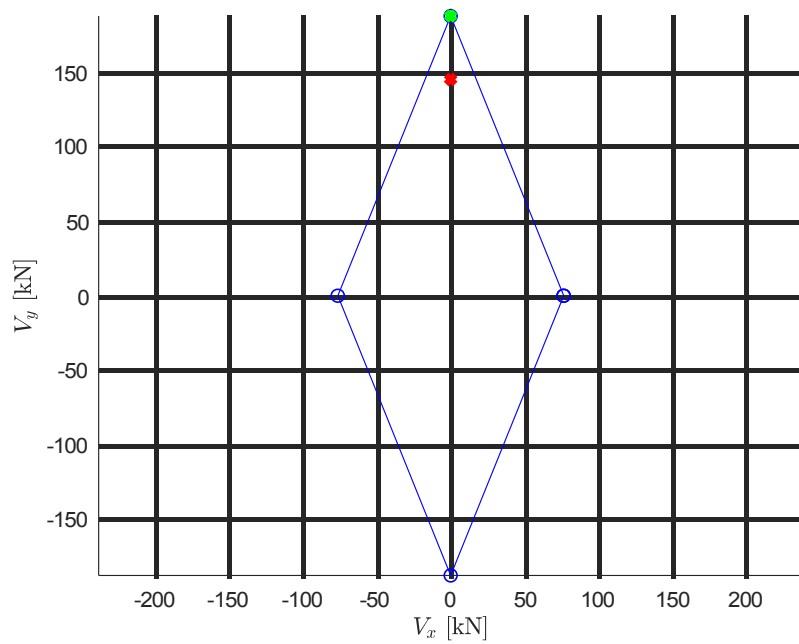


Tabella 127.127. Elemento più sollecitato

Elemento	[n°]	412
Ascissa	[m]	0.36

Tabella 128.128. Sollecitazioni SLV

		min	max
N	[kN]	-0.4	0.4
Mx	[kNm]	30.5	127.4
My	[kNm]	-0.0	0.0
Vx	[kN]	-0.7	0.7
Vy	[kN]	46.7	145.3



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.773$$

SLU a taglio verificati

"1 - Rettangolare b=60 h=100 fondazione (5+2/3+5)"

Sezione

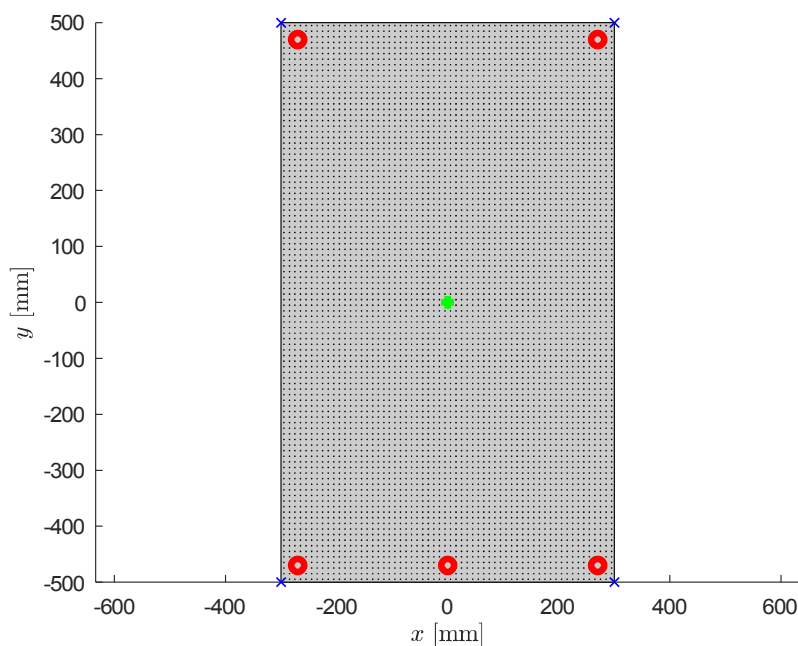


Tabella 129.129. Materiali

Res. Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.35

Tabella 130.130. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-300	300
Dimensione	max	[mm]	-500	500
Largh. anima	bw	[mm]	1000	600
Altezza utile	d	[mm]	570	970
Area staffe	As	[mm ²]	101	101
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm ²]	0	0

Passo f.pieg.	sfp	[mm]	300	200
---------------	-----	------	-----	-----

Tabella 131.131. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	254.47
2	570	30	254.47
3	30	970	254.47
4	300	30	763.41
5	570	970	254.47

Verifica SLV (peggiorativa per M)

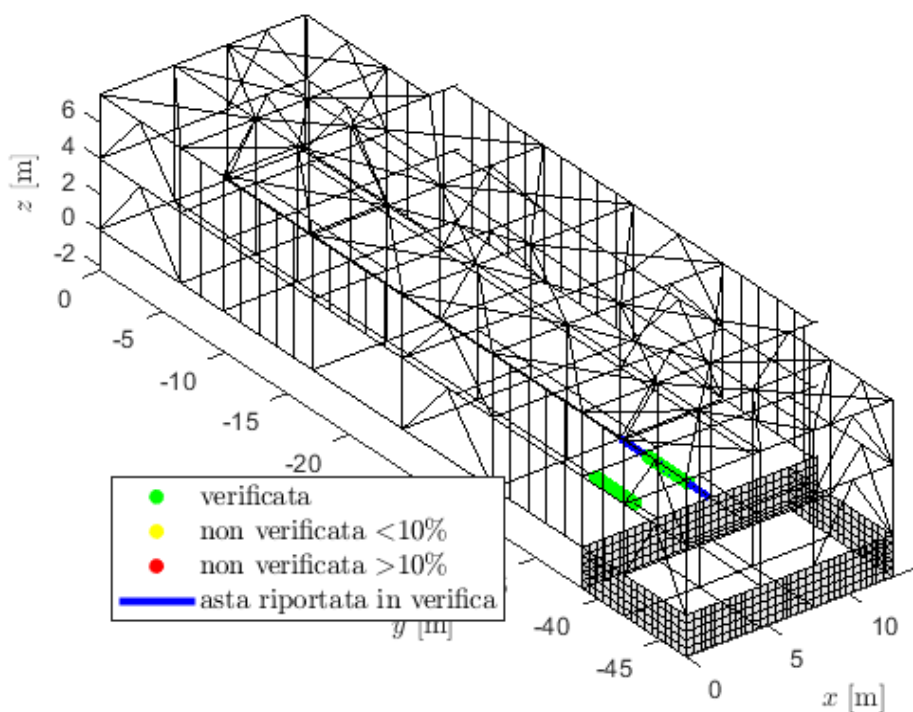


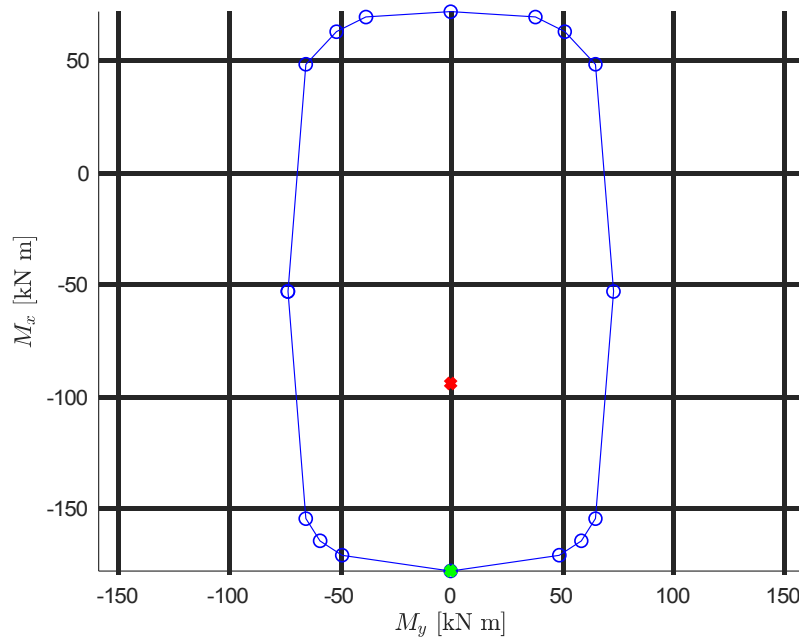
Tabella 132.132. Elemento più sollecitato

Elemento	[n°]	303
Ascissa	[m]	3.60

Tabella 133.133. Sollecitazioni SLV

		min	max
N	[kN]	-0.5	0.6
M _x	[kNm]	-94.3	-91.7

M _y	[kNm]	-3.7	4.0
V _x	[kN]	-0.8	0.7
V _y	[kN]	26.3	32.9



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.529$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

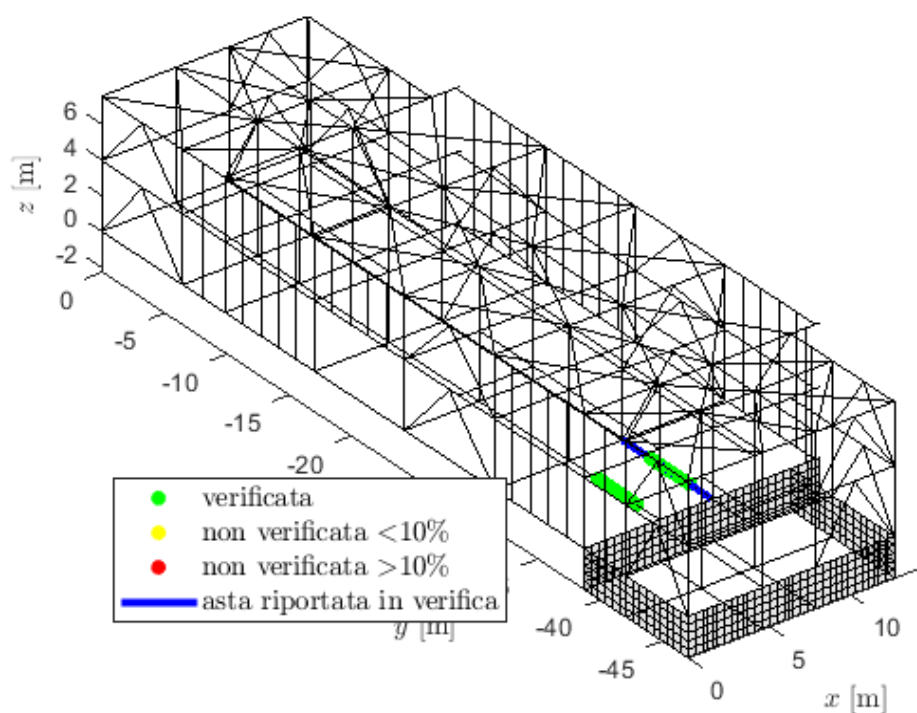
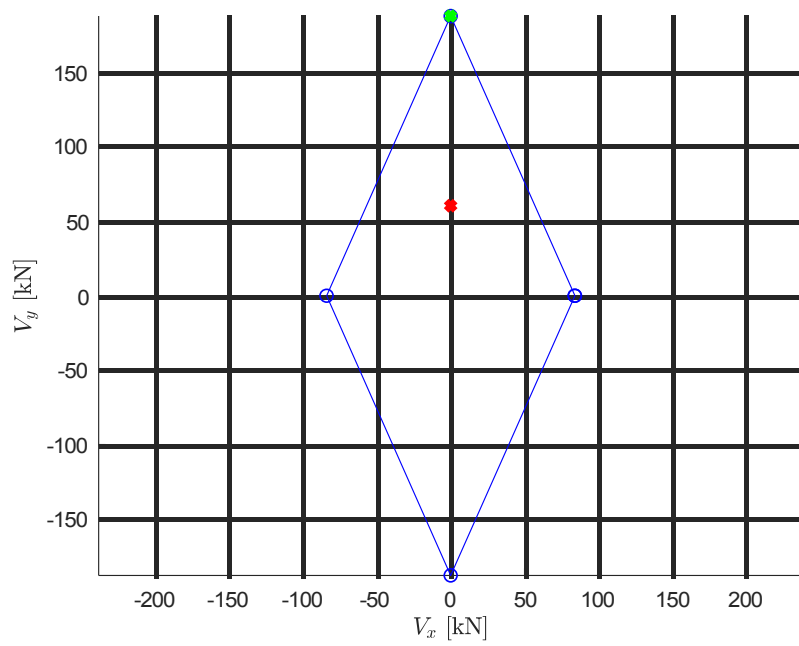


Tabella 134.134. Elemento più sollecitato

Elemento	[n°]	303
Ascissa	[m]	2.70

Tabella 135.135. Sollecitazioni SLV

		min	max
N	[kN]	-1.5	1.7
M _x	[kNm]	-74.6	-69.8
M _y	[kNm]	-3.0	3.3
V _x	[kN]	-2.5	2.2
V _y	[kN]	50.2	60.4



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.321$$

SLU a taglio verificati

"1 - Rettangolare b=60 h=100 fondazione (5+2/3+5)"

Sezione

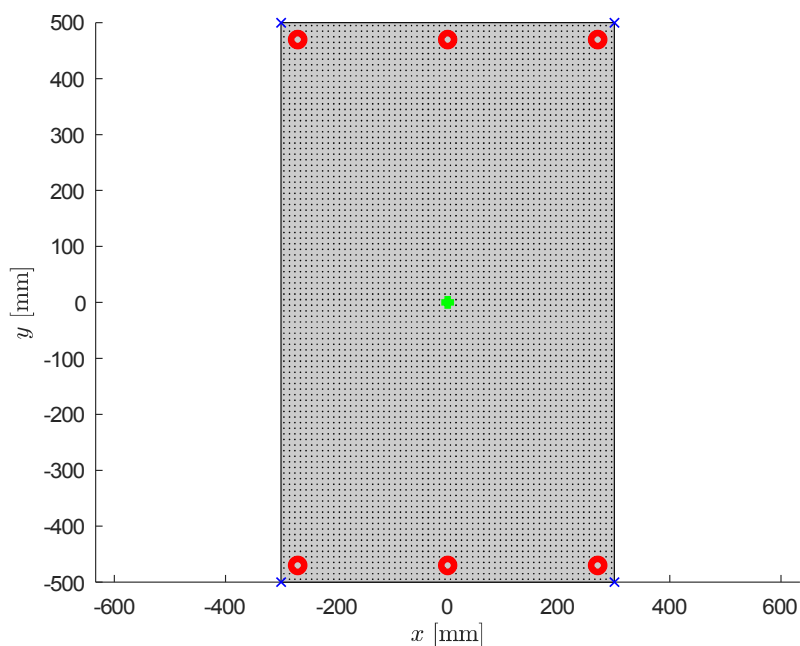


Tabella 136.136. Materiali

Res. Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.35

Tabella 137.137. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-300	300
Dimensione	max	[mm]	-500	500
Largh. anima	bw	[mm]	1000	600
Altezza utile	d	[mm]	570	970
Area staffe	As	[mm ²]	101	101
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm ²]	0	0

Passo f.pieg.	sfp	[mm]	300	200
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Tabella 138.138. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	254.47
2	570	30	254.47
3	30	970	254.47
4	300	970	763.41
5	300	30	254.47
6	570	970	254.47

Verifica SLV (peggiorativa per M)

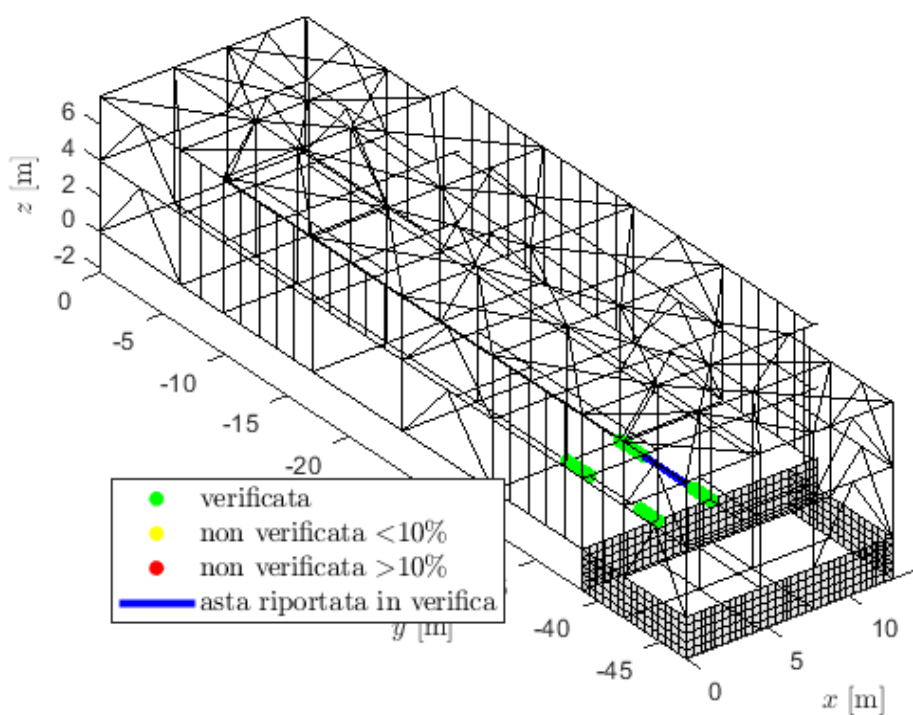


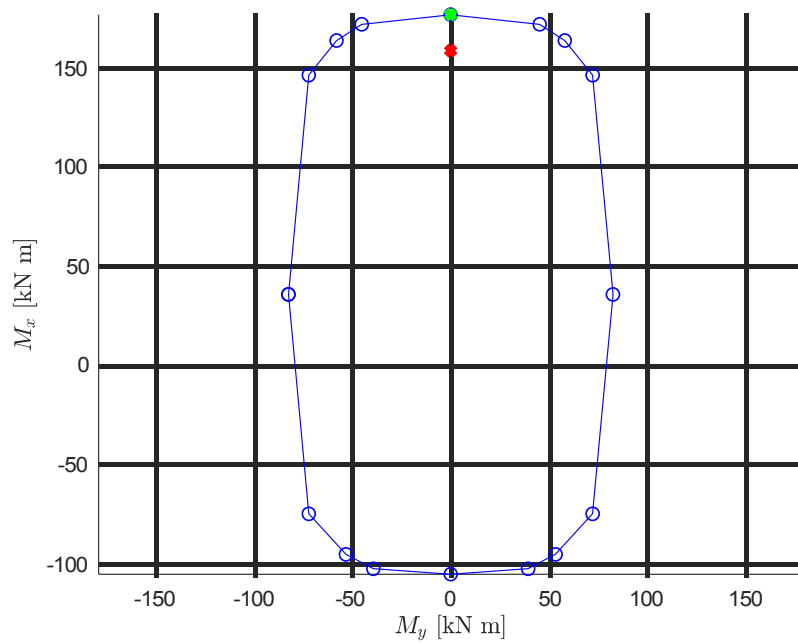
Tabella 139.139. Elemento più sollecitato

Elemento	[n°]	303
Ascissa	[m]	0.00

Tabella 140.140. Sollecitazioni SLV

		min	max
N	[kN]	-3.4	3.9
M	[kNm]	114.2	158.5

x			
M	[kNm]	-7.7	7.0
y			
Vx	[kN]	-5.7	5.2
Vy	[kN]	90.1	110.1



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.897$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

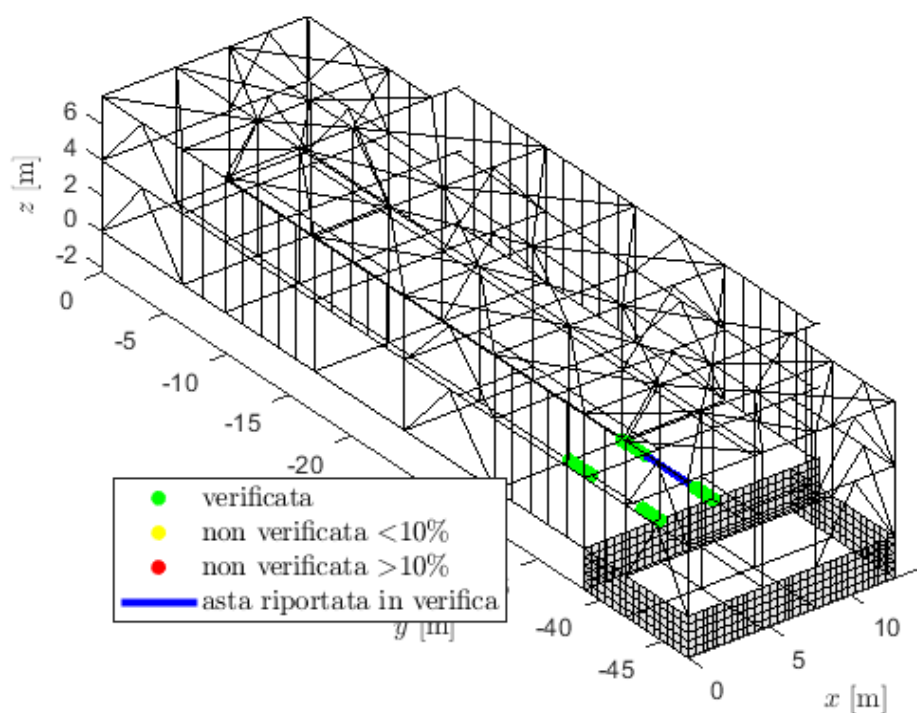
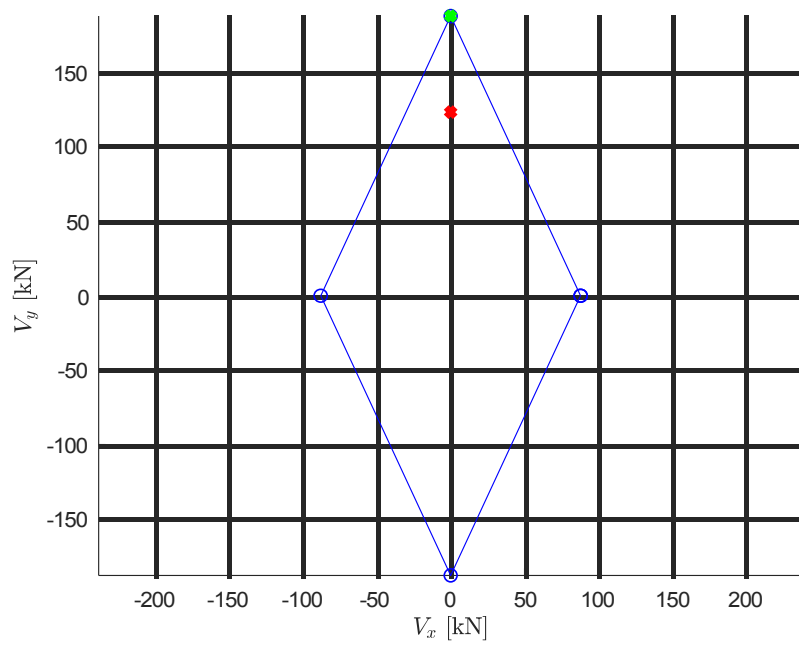


Tabella 141.141. Elemento più sollecitato

Elemento	[n°]	303
Ascissa	[m]	0.90

Tabella 142.142. Sollecitazioni SLV

		min	max
N	[kN]	-3.4	3.9
M _x	[kNm]	27.0	53.5
M _y	[kNm]	-2.6	2.4
V _x	[kN]	-5.7	5.2
V _y	[kN]	103.4	123.3



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.656$$

SLU a taglio verificati

"Fondazione rinforzata"

Sezione

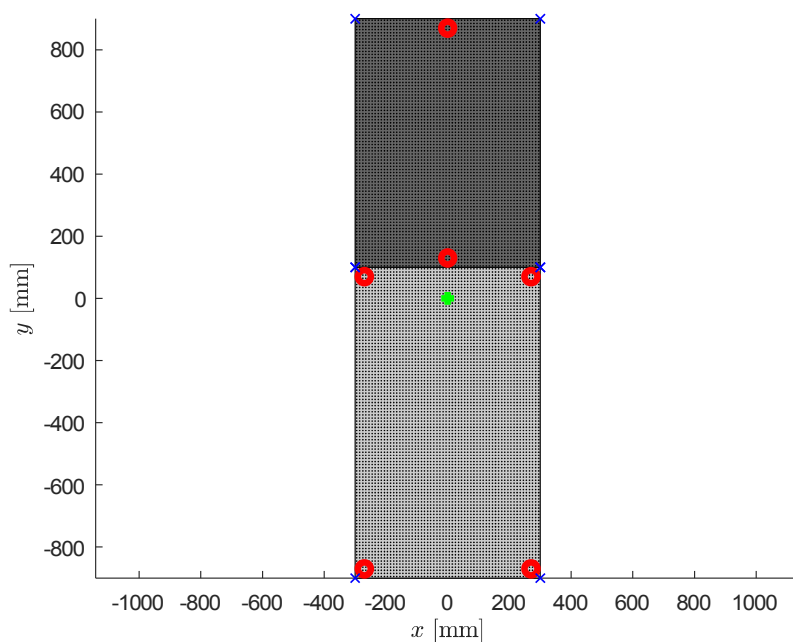


Tabella 143.143. Materiali

Res.Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	21
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	430
Fattore di confidenza	FC	-	1.35

Tabella 144.144. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-300	300
Dimensione	max	[mm]	-900	100
Rett. 2 (Cls 2)				
Dimensione	min	[mm]	-300	300
Dimensione	max	[mm]	100	900
Largh. anima	bw	[mm]	600	1800
Altezza utile	d	[mm]	570	1770
Area staffe	As	[mm ²]	101	101

Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm2]	0	0
Passo f.pieg.	sfp	[mm]	1	1

Tabella 145.145. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	254.47
2	570	30	254.47
3	30	970	254.47
4	570	970	254.47
5	300	1030	2936.71
6	300	1770	2936.71

Verifica SLV (peggiorativa per M)

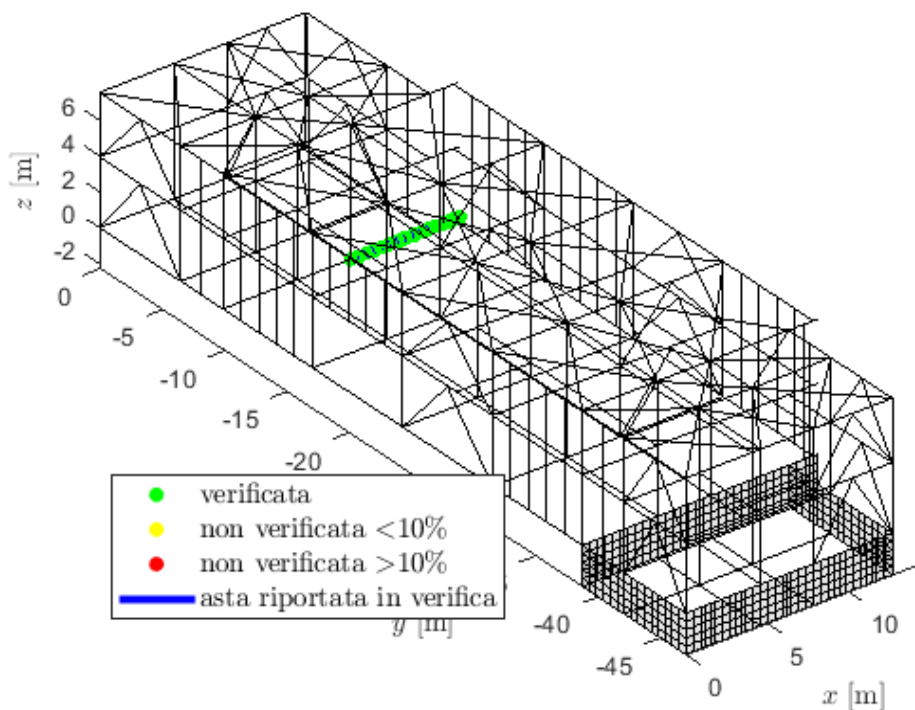


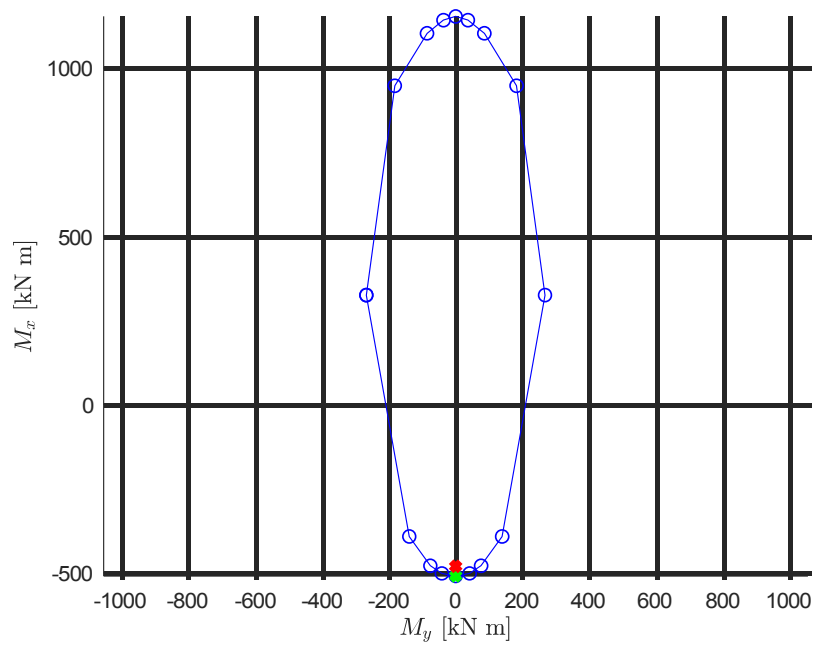
Tabella 146.146. Elemento più sollecitato

Elemento	[n°]	529
Ascissa	[m]	4.84

Tabella 147.147. Sollecitazioni SLV

		min	max
--	--	-----	-----

N	[kN]	-6.9	6.5
M _x	[kNm]	-481.6	520.4
M _y	[kNm]	-3.5	3.8
V _x	[kN]	-4.0	3.6
V _y	[kN]	-135.3	48.1



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.944$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

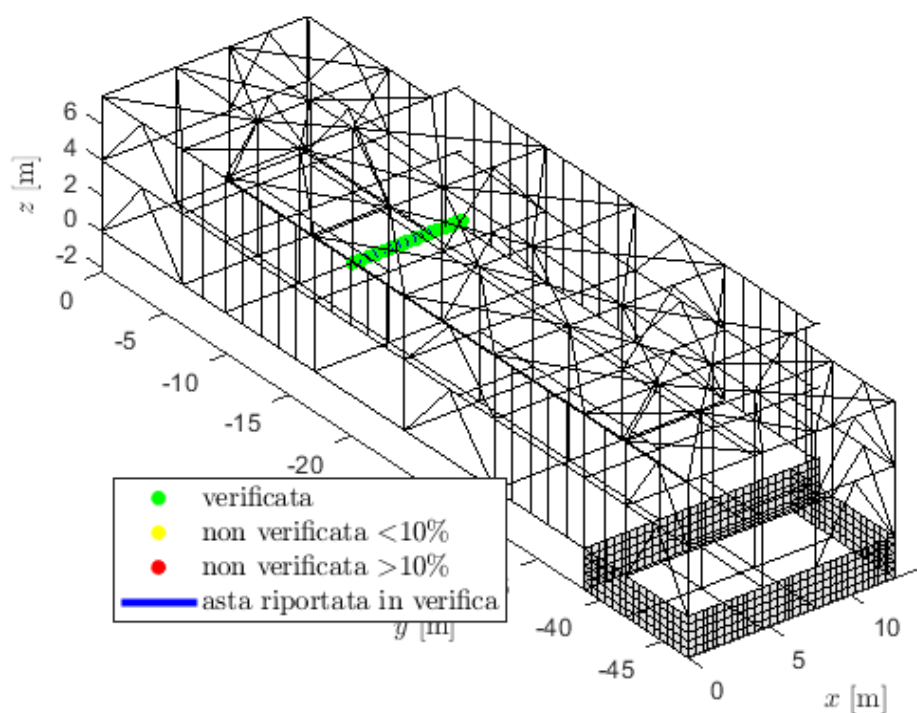
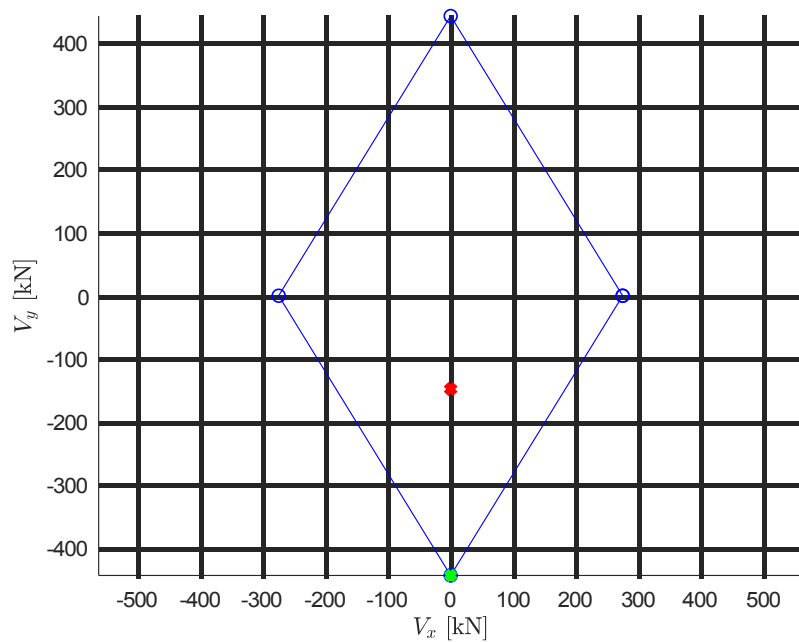


Tabella 148.148. Elemento più sollecitato

Elemento	[n°]	529
Ascissa	[m]	4.36

Tabella 149.149. Sollecitazioni SLV

		min	max
N	[kN]	-6.9	6.5
M _x	[kNm]	-461.5	451.9
M _y	[kNm]	-1.7	1.9
V _x	[kN]	-4.0	3.6
V _y	[kN]	-148.1	35.3



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.334$$

SLU a taglio verificati

"fondazione rialzata"

Sezione

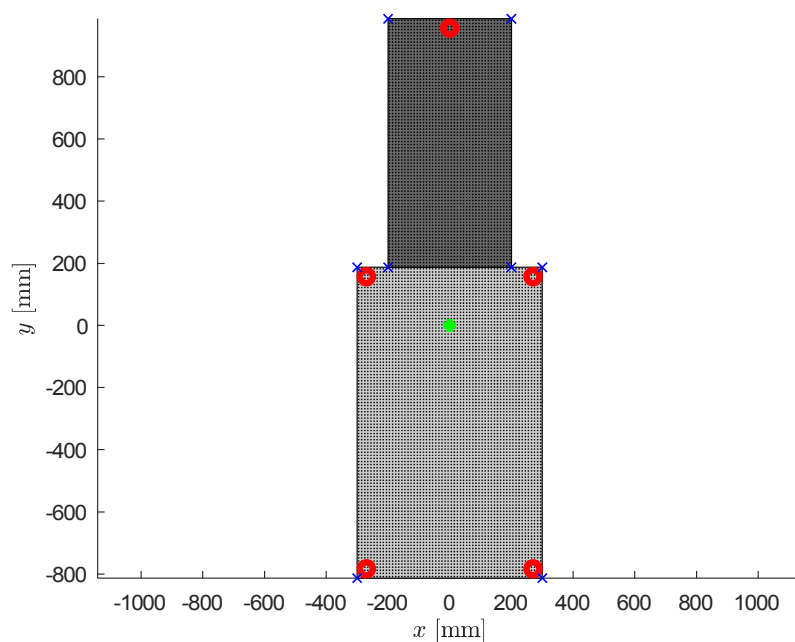


Tabella 150.150. Materiali

Res.Cls 1	Rcm	[MPa]	12
Res.Cls 2	Rcm	[MPa]	21
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	430
Fattore di confidenza	FC	-	1.35

Tabella 151.151. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-300	300
Dimensione	max	[mm]	-813	187
Rett. 2 (Cls 2)				
Dimensione	min	[mm]	-200	200
Dimensione	max	[mm]	187	987
Largh. anima	bw	[mm]	400	1800
Altezza utile	d	[mm]	570	1770
Area staffe	As	[mm ²]	101	101

Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm2]	0	0
Passo f.pieg.	sfp	[mm]	1	1

Tabella 152.152. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	254.47
2	570	30	254.47
3	30	970	254.47
4	570	970	254.47
5	300	1770	3524.05

Verifica SLV (peggiorativa per M)

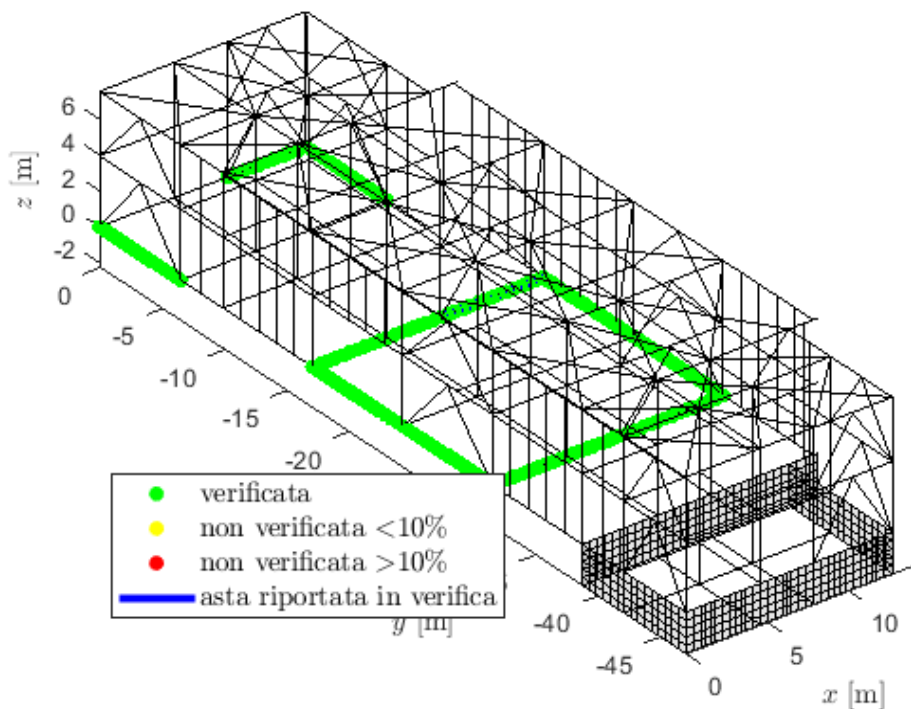


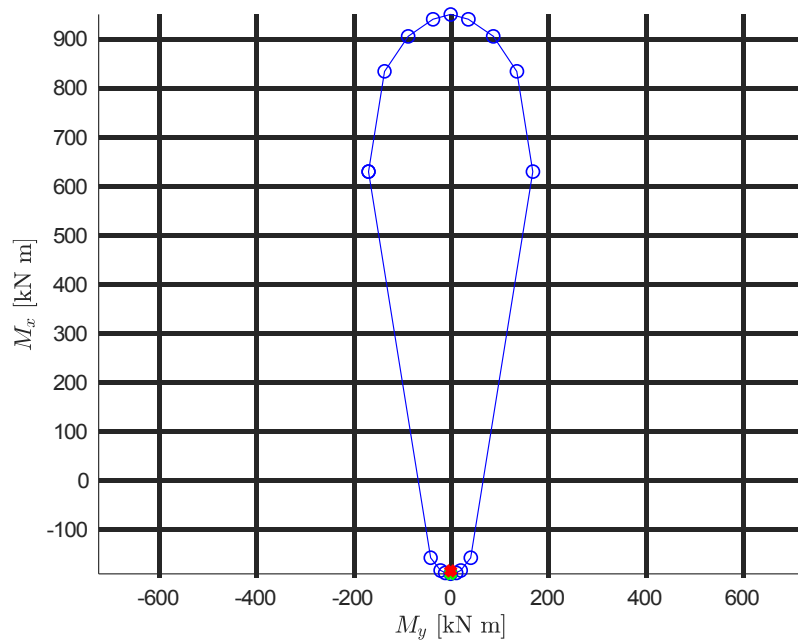
Tabella 153.153. Elemento più sollecitato

Elemento	[n°]	321
Ascissa	[m]	3.17

Tabella 154.154. Sollecitazioni SLV

		min	max
N	[kN]	-0.0	0.0

M _x	[kNm]	-187.2	-52.3
M _y	[kNm]	-2.3	2.2
V _x	[kN]	-0.1	0.1
V _y	[kN]	1.8	33.5



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.970$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

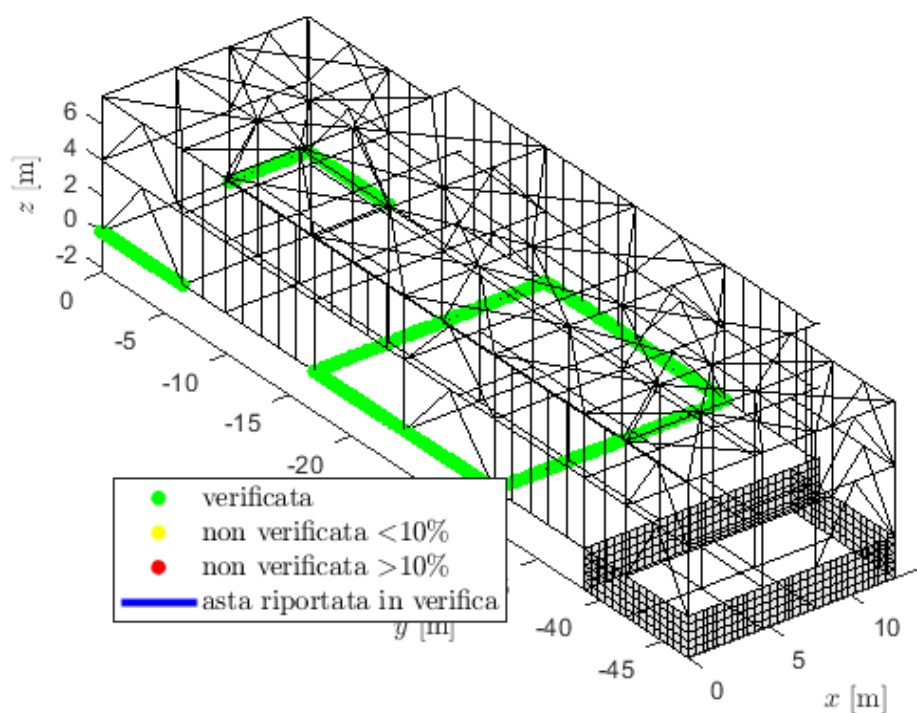
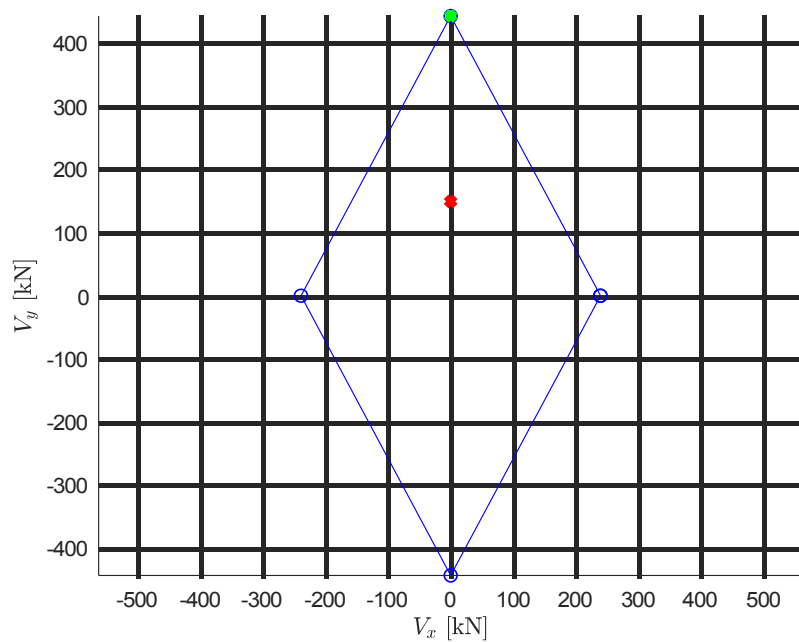


Tabella 155.155. Elemento più sollecitato

Elemento	[n°]	27
Ascissa	[m]	0.90

Tabella 156.156. Sollecitazioni SLV

		min	max
N	[kN]	-5.8	5.3
M _x	[kNm]	-21.6	64.9
M _y	[kNm]	-3.6	4.0
V _x	[kN]	-7.9	8.8
V _y	[kN]	63.2	149.6



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.337$$

SLU a taglio verificati

"fondazione rialzata 27"

Sezione

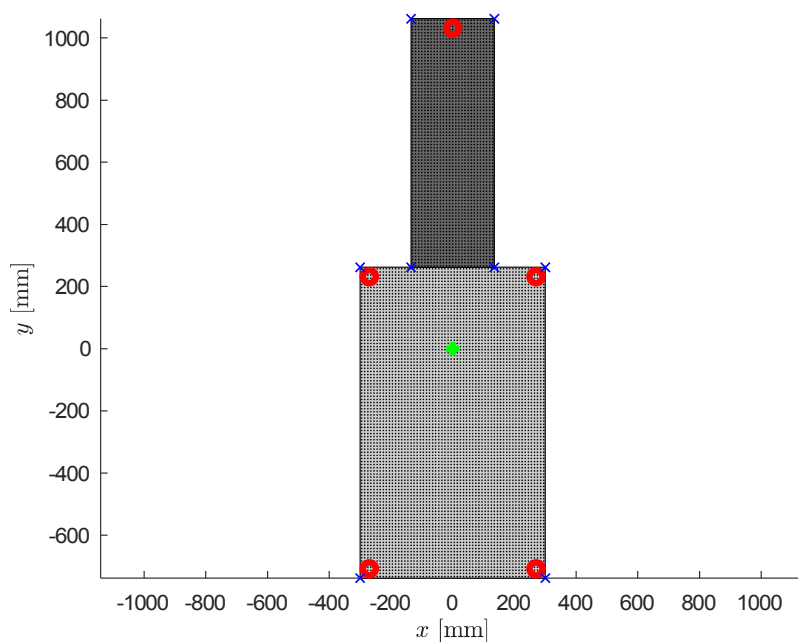


Tabella 157.157. Materiali

Res.Cls 1	Rcm	[MPa]	12
Res.Cls 2	Rcm	[MPa]	21
Res. barre longitudinali	fykl	[MPa]	230
Res. staffe	fyks	[MPa]	430
Fattore di confidenza	FC	-	1.35

Tabella 158.158. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-300	300
Dimensione	max	[mm]	-738	262
Rett. 2 (Cls 2)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	262	1062
Largh. anima	bw	[mm]	400	1800
Altezza utile	d	[mm]	570	1770
Area staffe	As	[mm ²]	101	101

Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm ²]	0	0
Passo f.pieg.	sfp	[mm]	1	1

Tabella 159.159. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	30	30	254.47
2	570	30	254.47
3	30	970	254.47
4	570	970	254.47
5	300	1770	2349.36

Verifica SLV (peggiorativa per M)

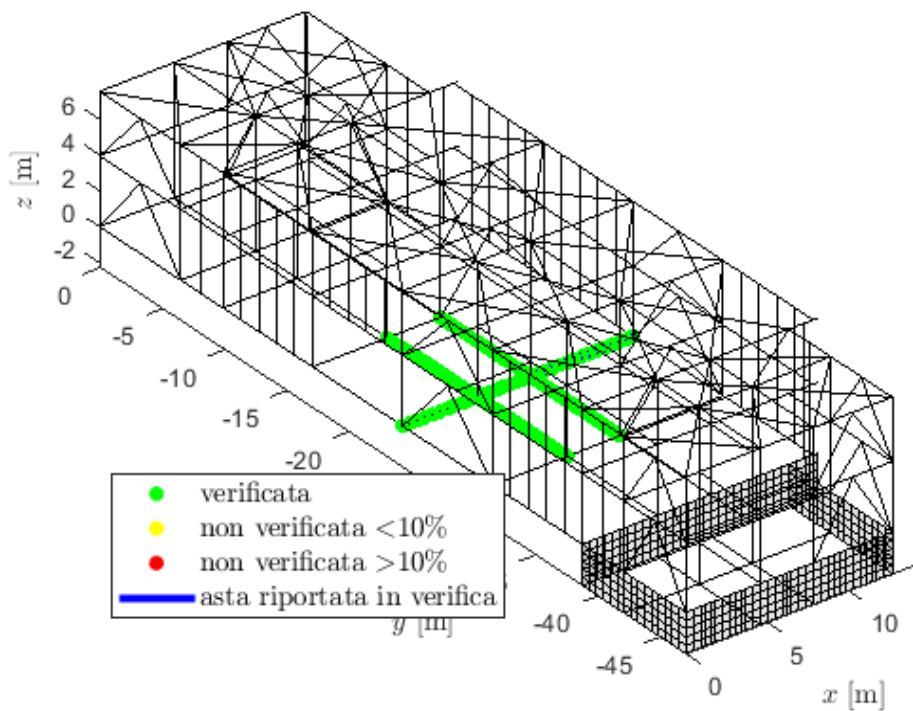


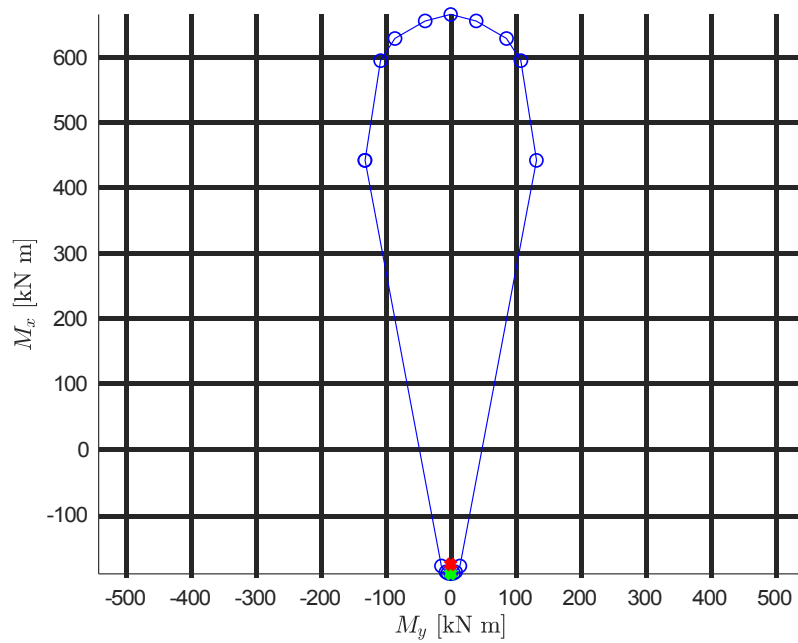
Tabella 160.160. Elemento più sollecitato

Elemento	[n°]	331
Ascissa	[m]	4.52

Tabella 161.161. Sollecitazioni SLV

		min	max
N	[kN]	-2.3	2.0

M _x	[kNm]	-176.1	-71.8
M _y	[kNm]	-1.1	1.0
V _x	[kN]	-1.1	1.0
V _y	[kN]	-12.5	16.7



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.925$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

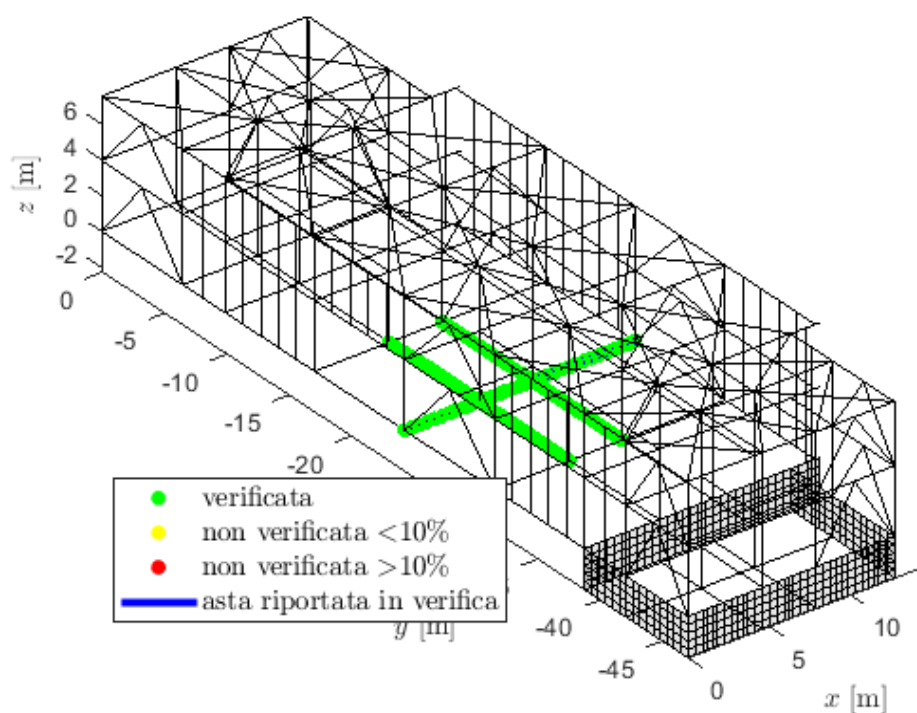
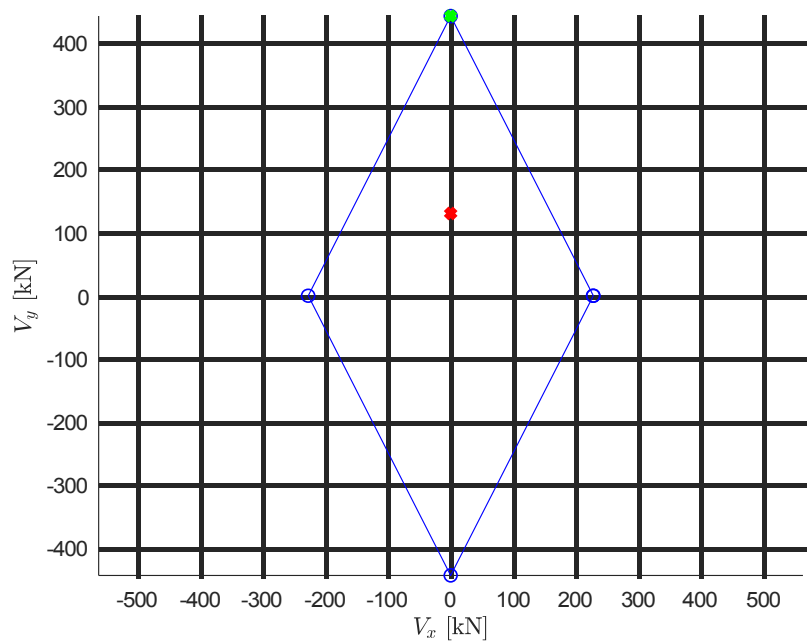


Tabella 162.162. Elemento più sollecitato

Elemento	[n°]	331
Ascissa	[m]	0.90

Tabella 163.163. Sollecitazioni SLV

		min	max
N	[kN]	-6.1	6.9
M _x	[kNm]	-26.0	21.5
M _y	[kNm]	-0.9	1.0
V _x	[kN]	-3.4	3.7
V _y	[kN]	88.3	130.5



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.294$$

SLU a taglio verificati

"6 - Rettangolare b=27 h=80 travi p1"

Sezione

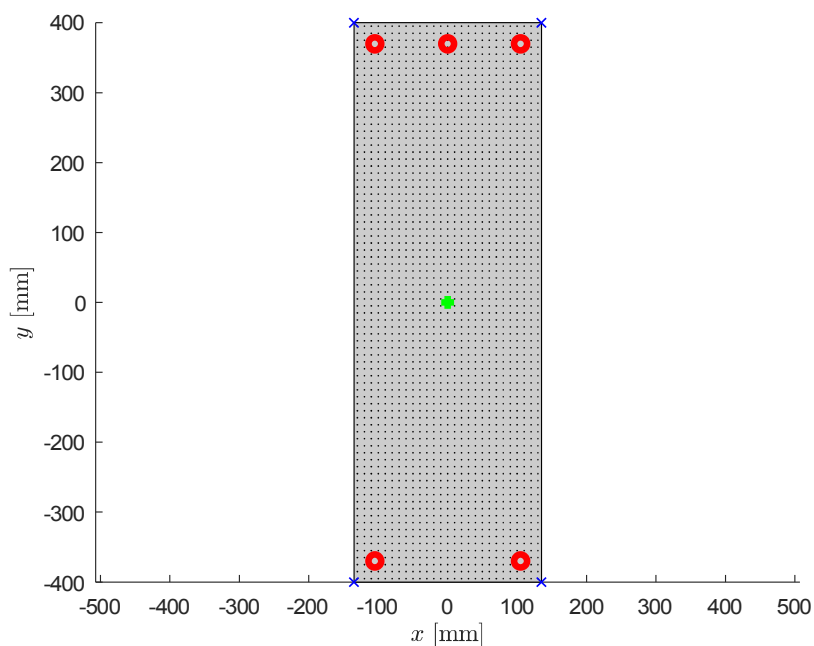


Tabella 164.164. Materiali

Res.Cls 1	Rcm	[MPa]	13
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	440
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.00

Tabella 165.165. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-400	400
Largh. anima	bw	[mm]	800	270
Altezza utile	d	[mm]	240	770
Area staffe	As	[mm2]	101	101
Passo staffe	s	[mm]	300	300
Area f.pieg.	Asfp	[mm2]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 166.166. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	153.94
2	240	30	153.94
3	135	770	153.94
4	30	770	153.94
5	240	770	153.94

Verifica SLV (peggiorativa per M)

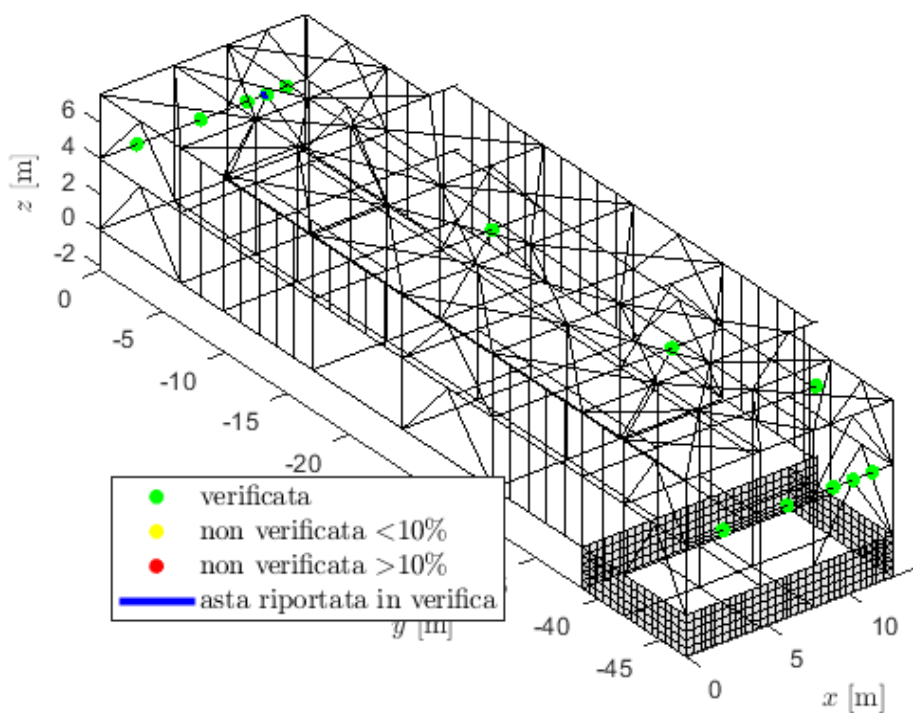


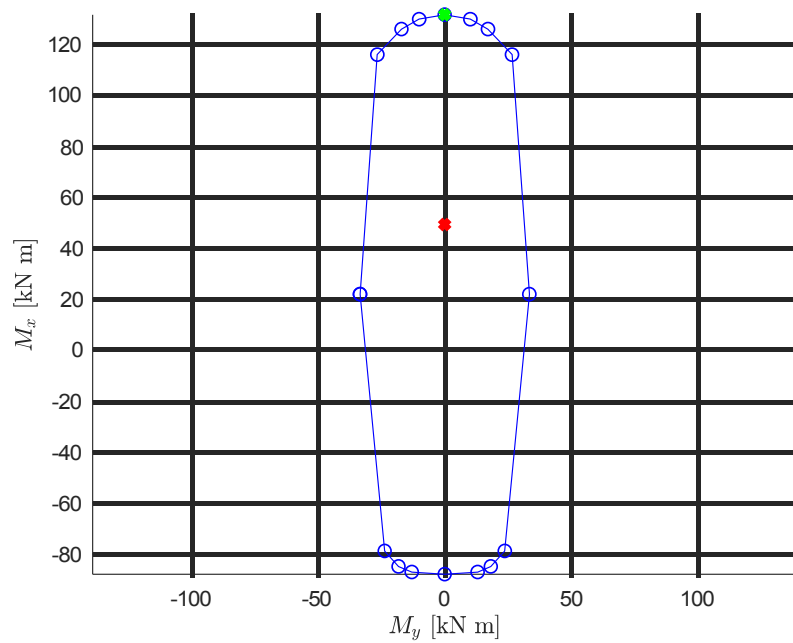
Tabella 167.167. Elemento più sollecitato

Elemento	[n°]	301
Ascissa	[m]	0.30

Tabella 168.168. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
Mx	[kNm]	39.5	49.2

]		
My	[kNm	-0.0	0.0
]		
Vx	[kN]	-0.0	0.0
Vy	[kN]	-15.3	2.2



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.374$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

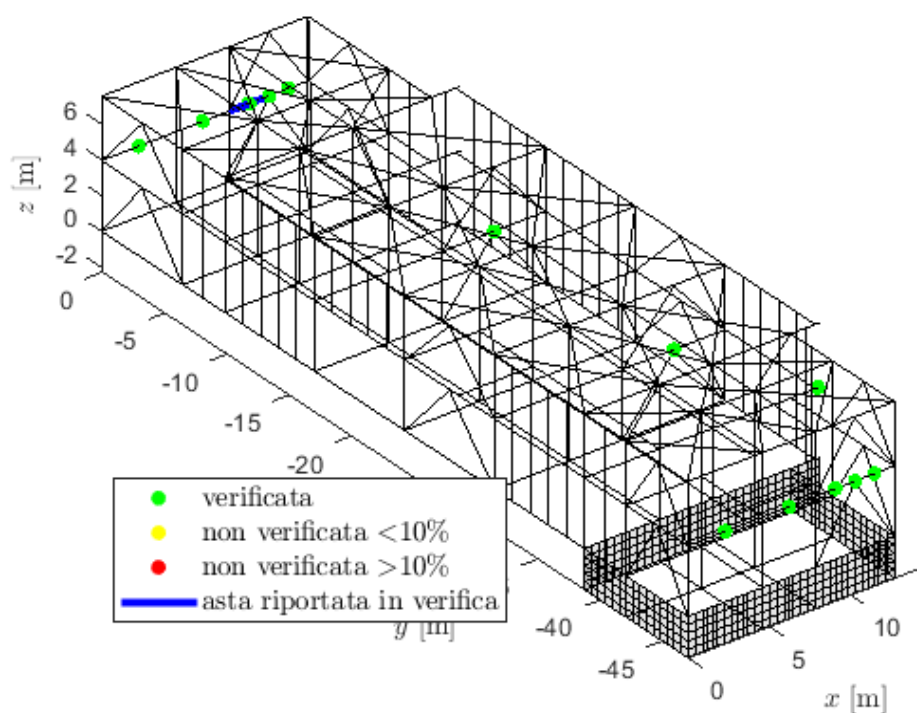
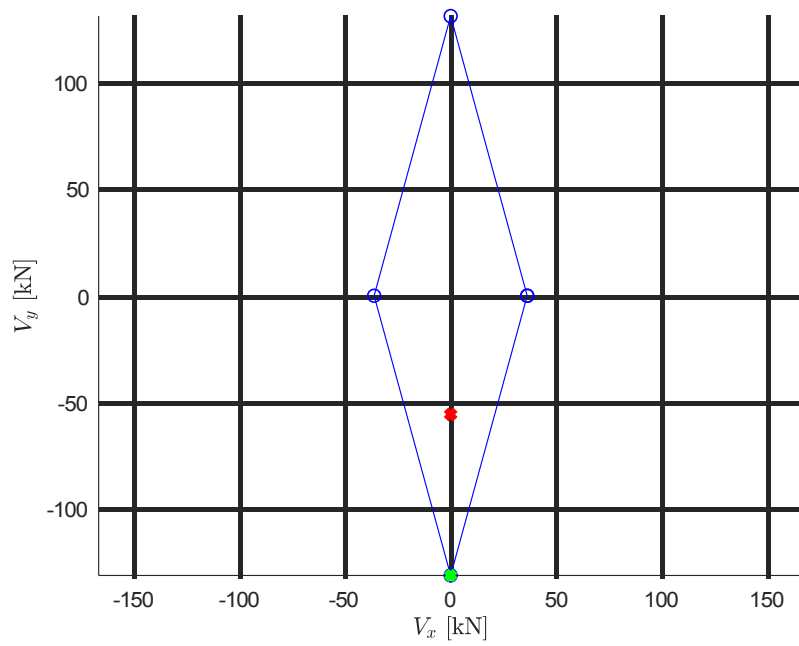


Tabella 169.169. Elemento più sollecitato

Elemento	[n°]	536
Ascissa	[m]	1.22

Tabella 170.170. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
M _x	[kNm]	6.1	18.1
M _y	[kNm]	-0.0	0.0
V _x	[kN]	-0.0	0.0
V _y	[kN]	-55.7	-38.6



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.424$$

SLU a taglio verificati

"6 - Rettangolare b=27 h=80 travi p1"

Sezione

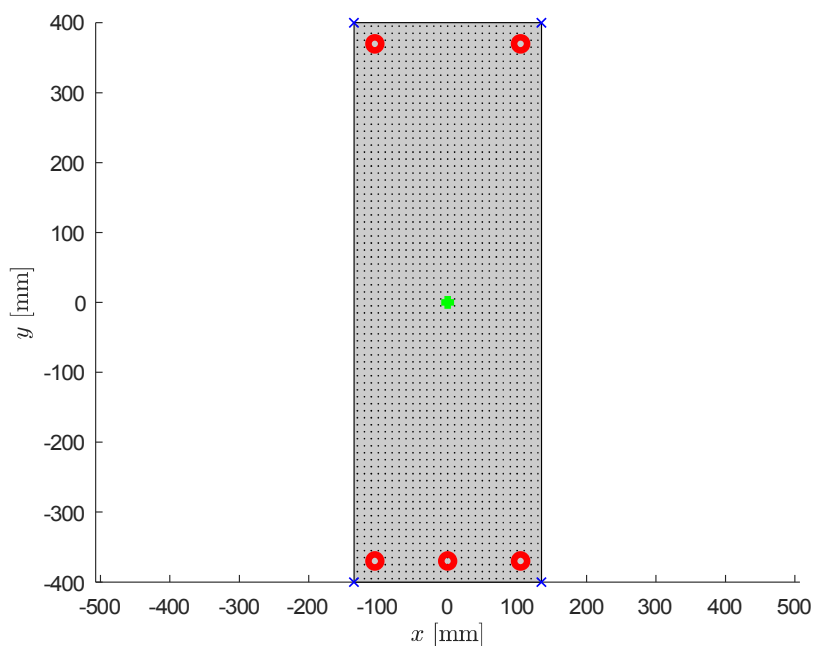


Tabella 171.171. Materiali

Res.Cls 1	Rcm	[MPa]	13
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	440
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.00

Tabella 172.172. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-400	400
Largh. anima	bw	[mm]	800	270
Altezza utile	d	[mm]	240	770
Area staffe	As	[mm2]	101	101
Passo staffe	s	[mm]	300	300
Area f.pieg.	Asfp	[mm2]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 173.173. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	153.94
2	240	30	153.94
3	30	770	153.94
4	135	30	153.94
5	240	770	153.94

Verifica SLV (peggiorativa per M)

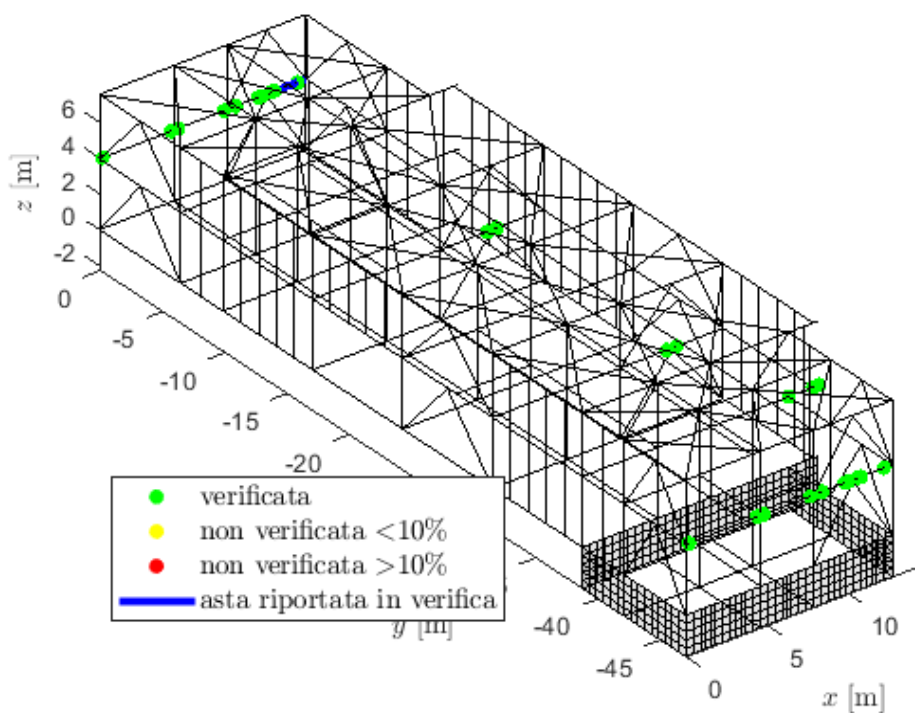


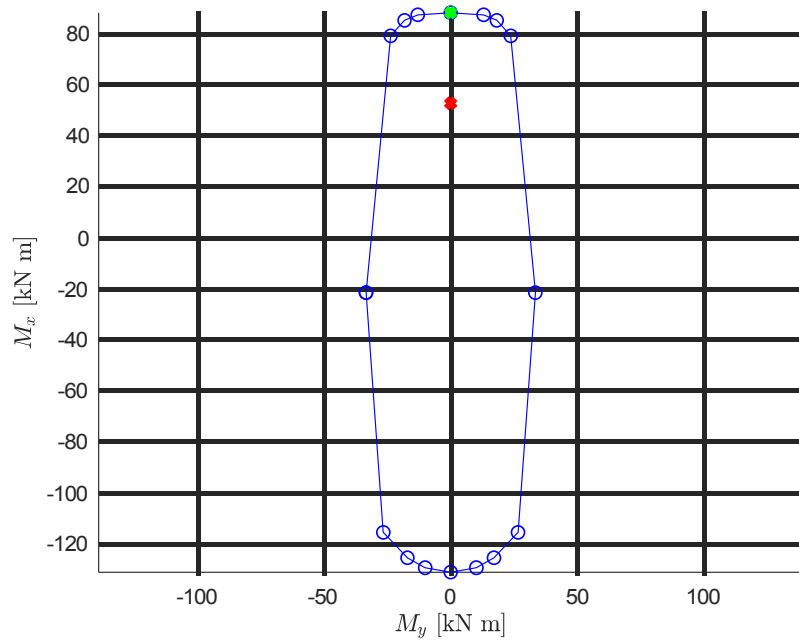
Tabella 174.174. Elemento più sollecitato

Elemento	[n°]	538
Ascissa	[m]	0.20

Tabella 175.175. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
Mx	[kNm]	34.6	52.5

]		
M_y	[kNm	-0.0	0.0
]		
V_x	[kN]	-0.0	0.0
V_y	[kN]	1.3	19.1



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.596$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

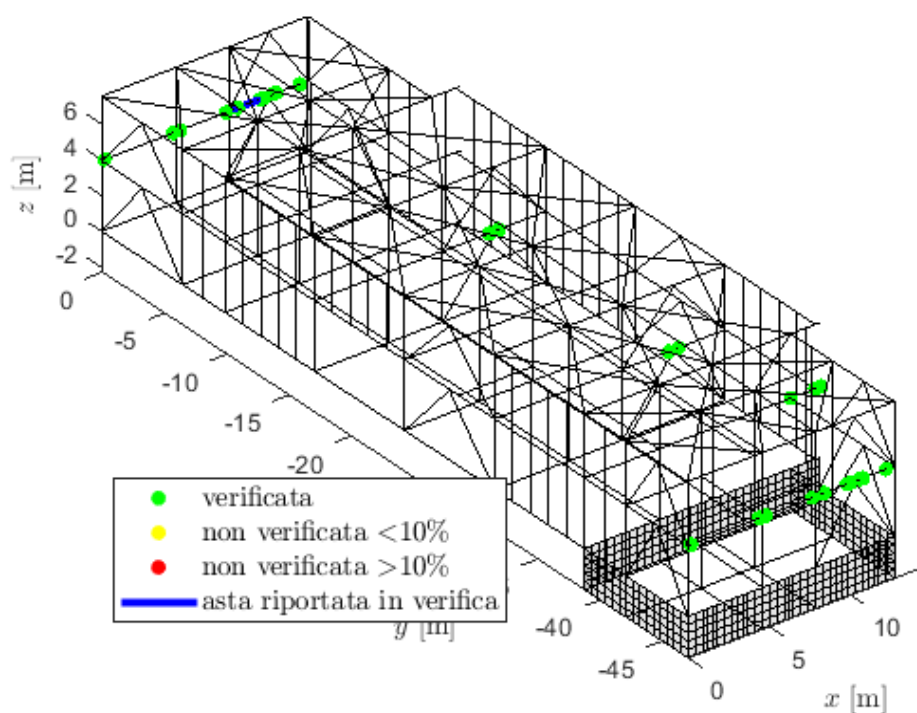
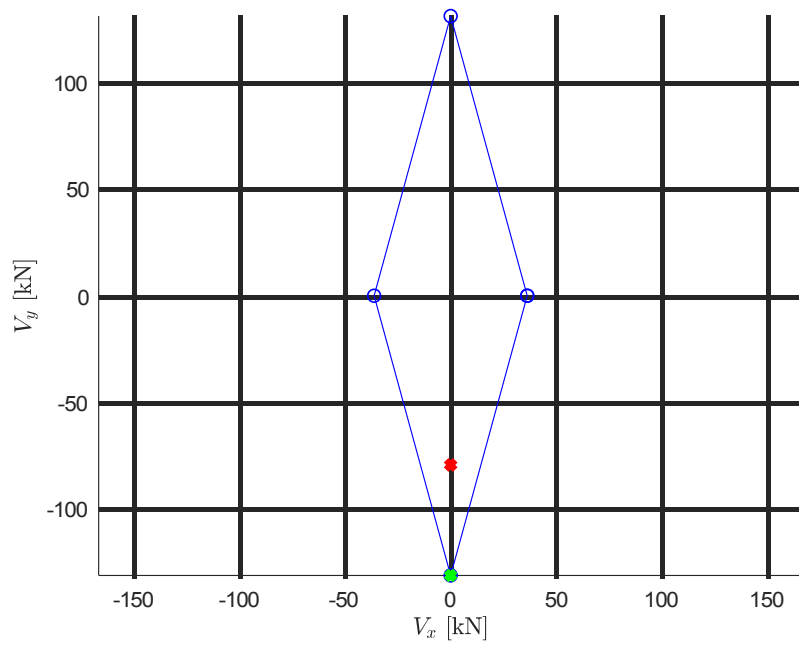


Tabella 176.176. Elemento più sollecitato

Elemento	[n°]	536
Ascissa	[m]	0.51

Tabella 177.177. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
M _x	[kNm]	-41.5	-17.6
M _y	[kNm]	-0.0	0.0
V _x	[kN]	-0.0	0.0
V _y	[kN]	-79.5	-62.4



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.605$$

SLU a taglio verificati

"6 - Rettangolare b=27 h=80 travi p1 (6+2)"

Sezione

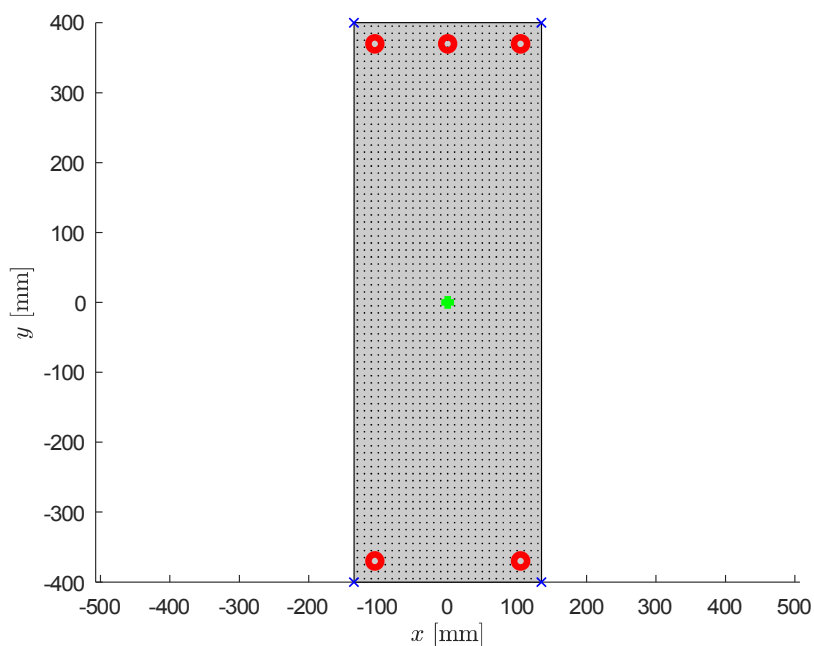


Tabella 178.178. Materiali

Res.Cls 1	Rcm	[MPa]	13
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	440
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.00

Tabella 179.179. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-400	400
Largh. anima	bw	[mm]	800	270
Altezza utile	d	[mm]	240	770
Area staffe	As	[mm2]	101	101
Passo staffe	s	[mm]	300	300
Area f.pieg.	Asfp	[mm2]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 180.180. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	30	30	153.94
2	240	30	153.94
3	135	770	307.88
4	30	770	307.88
5	240	770	307.88

Verifica SLV (peggiorativa per M)

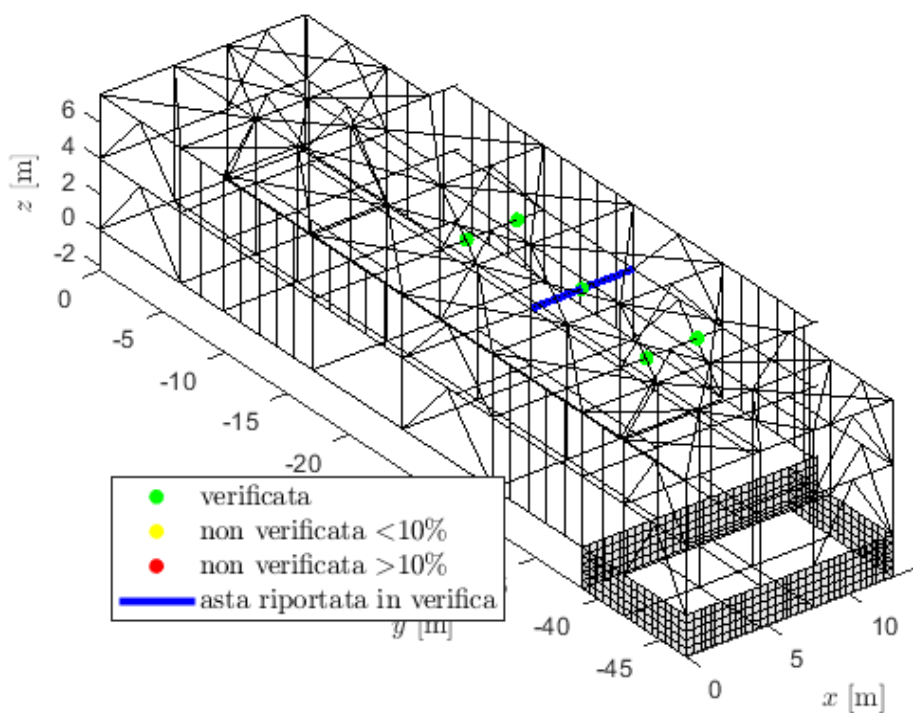


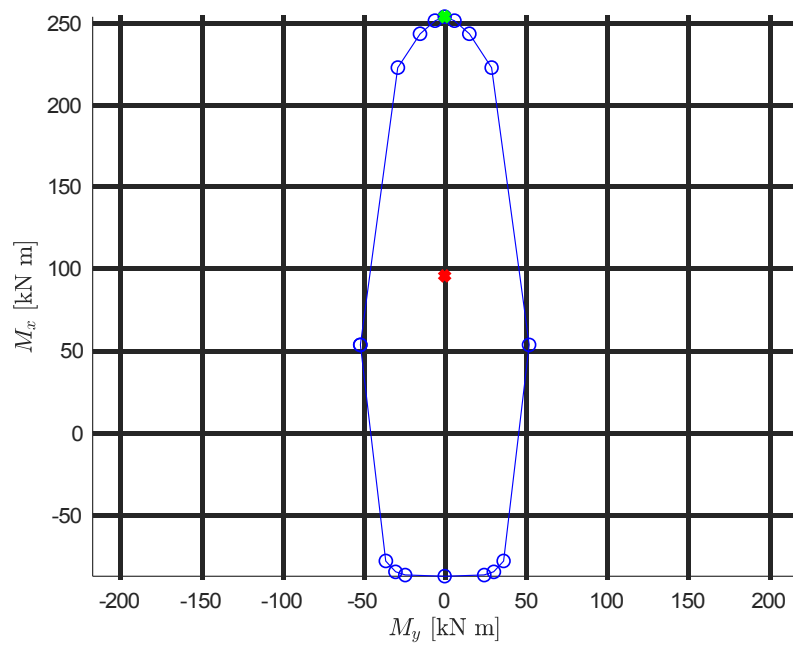
Tabella 181.181. Elemento più sollecitato

Elemento	[n°]	39
Ascissa	[m]	3.17

Tabella 182.182. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
Mx	[kNm]	91.7	95.5

]		
M_y	[kNm	-0.0	0.0
]		
V_x	[kN]	-0.0	0.0
V_y	[kN]	-21.4	18.8



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.376$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

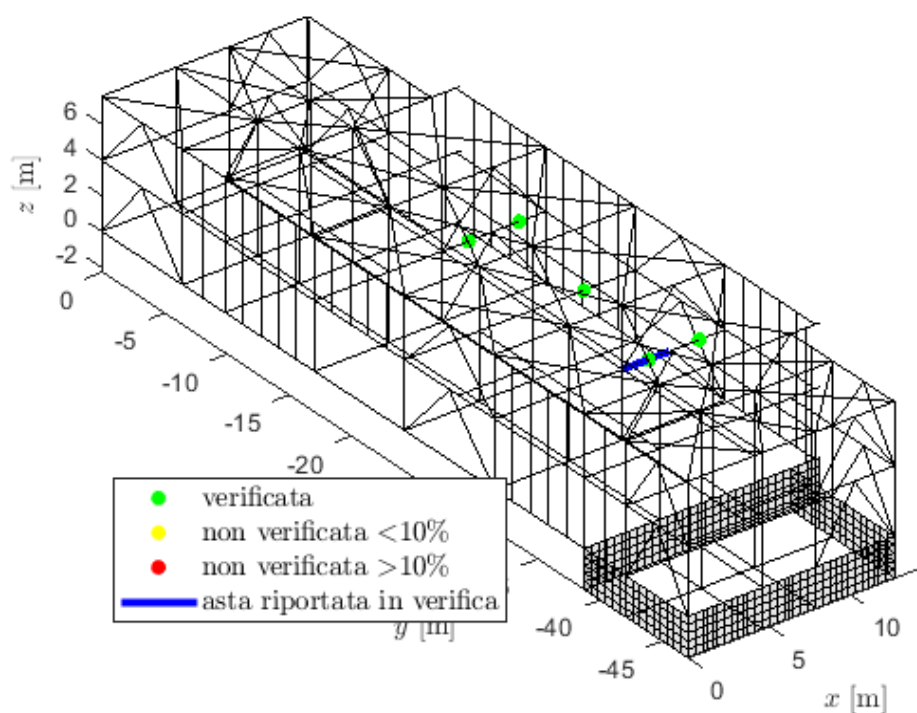
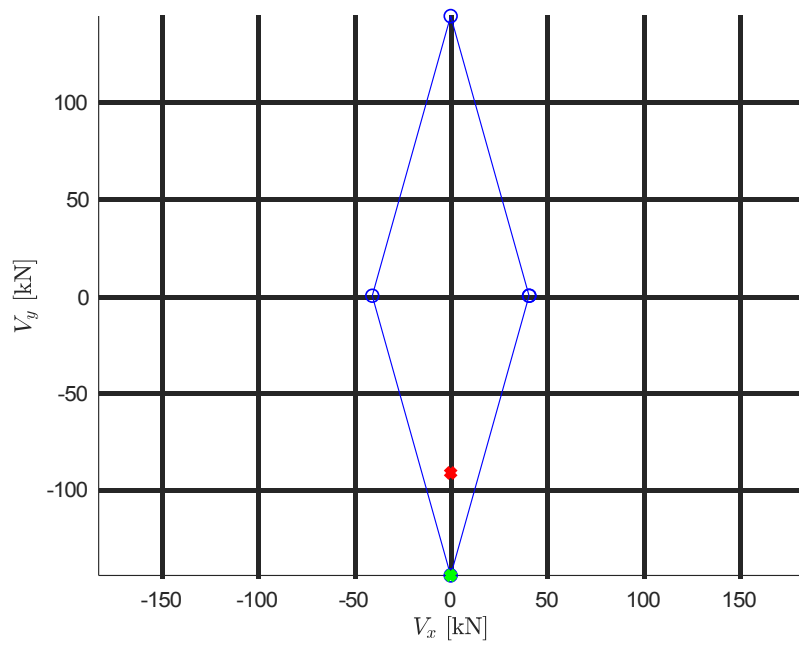


Tabella 183.183. Elemento più sollecitato

Elemento	[n°]	242
Ascissa	[m]	1.61

Tabella 184.184. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
M _x	[kNm]	19.9	69.8
M _y	[kNm]	-0.0	0.0
V _x	[kN]	-0.0	0.0
V _y	[kN]	-91.4	-59.3



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.634$$

SLU a taglio verificati

"6 - Rettangolare b=27 h=80 travi p1 (6+2)"

Sezione

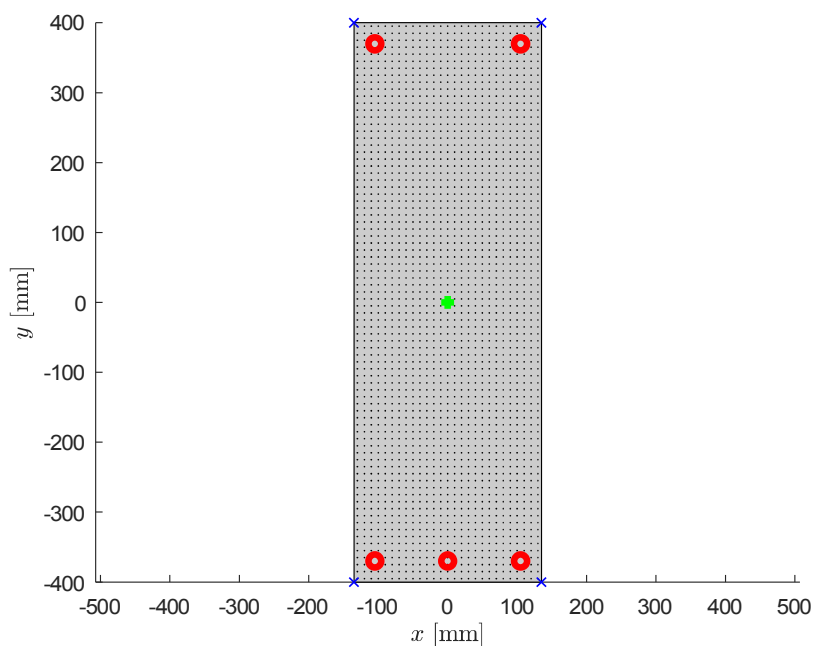


Tabella 185.185. Materiali

Res.Cls 1	Rcm	[MPa]	13
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	440
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.00

Tabella 186.186. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-400	400
Largh. anima	bw	[mm]	800	270
Altezza utile	d	[mm]	240	770
Area staffe	As	[mm2]	101	101
Passo staffe	s	[mm]	300	300
Area f.pieg.	Asfp	[mm2]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 187.187. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	307.88
2	240	30	307.88
3	135	30	307.88
4	30	770	153.94
5	240	770	153.94

Verifica SLV (peggiorativa per M)

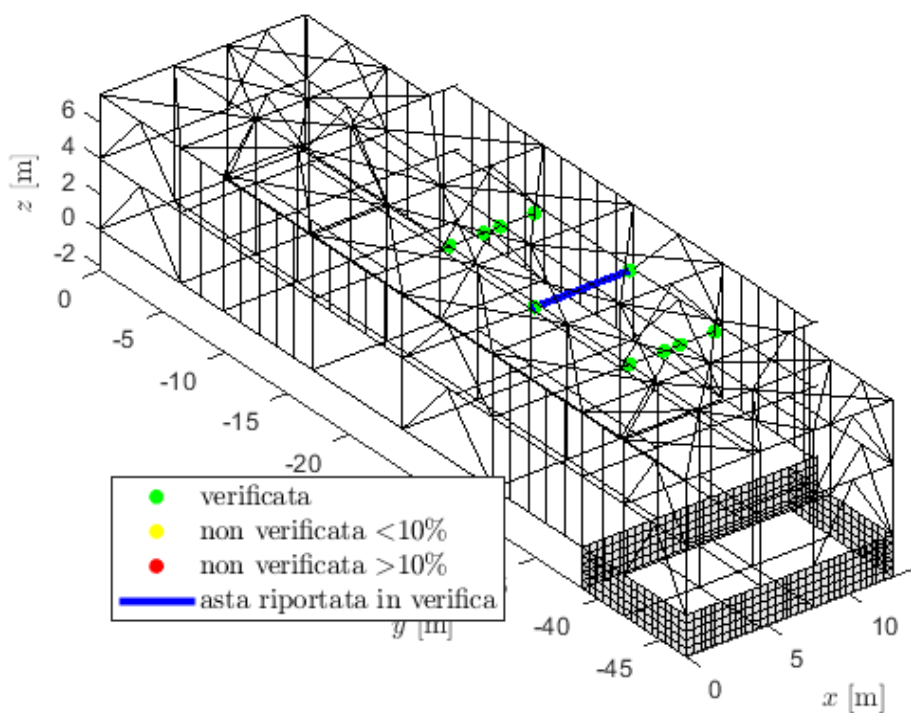


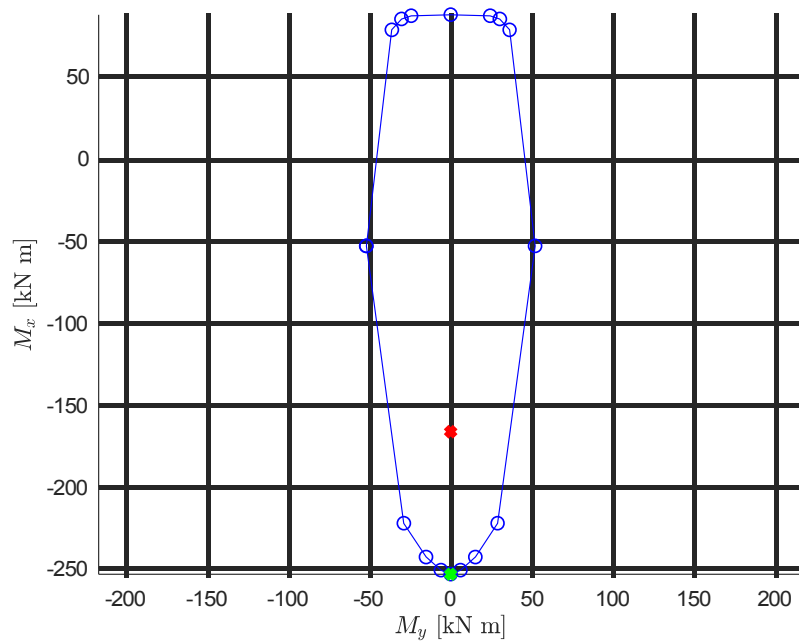
Tabella 188.188. Elemento più sollecitato

Element o	[n°]	39
Ascissa	[m]	0.25

Tabella 189.189. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
M	[kNm]	-166.8	-53.4

x			
M	[kNm]	-0.0	0.0
y			
Vx	[kN]	-0.0	0.0
Vy	[kN]	-158.5	-118.4



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.657$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

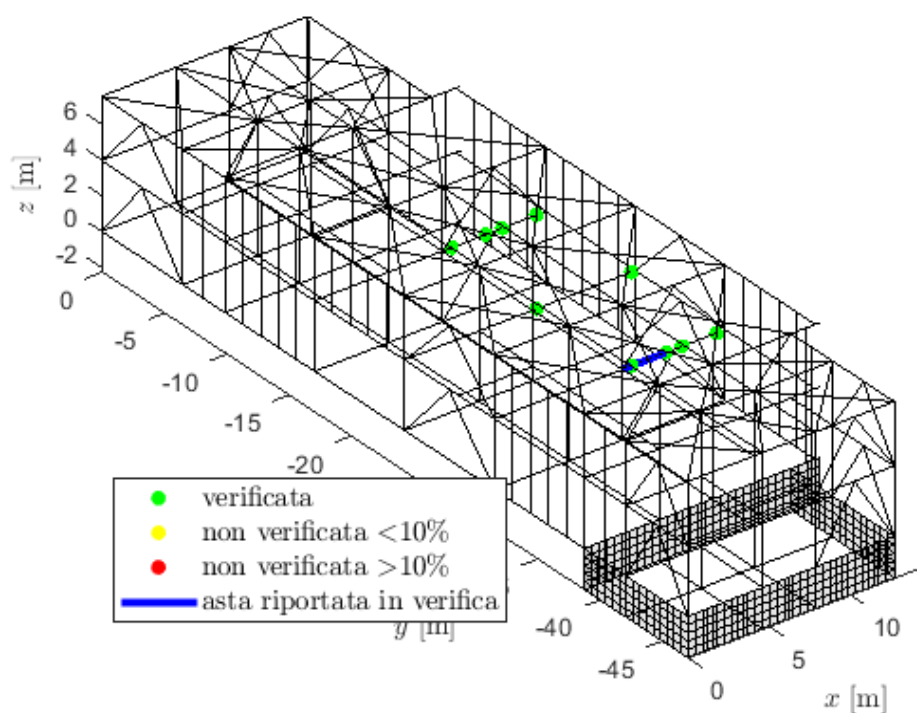
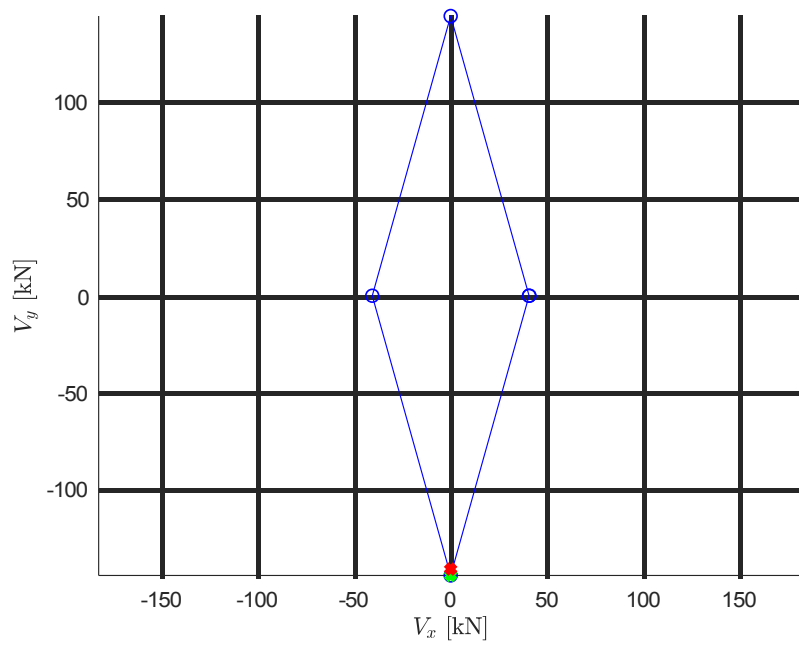


Tabella 190.190. Elemento più sollecitato

Elemento	[n°]	242
Ascissa	[m]	0.56

Tabella 191.191. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
M _x	[kNm]	-102.3	-18.9
M _y	[kNm]	-0.0	0.0
V _x	[kN]	-0.0	0.0
V _y	[kN]	-140.9	-108.8



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.977$$

SLU a taglio verificati

"6 - Rettangolare b=27 h=80 travi p1 (4+2)"

Sezione

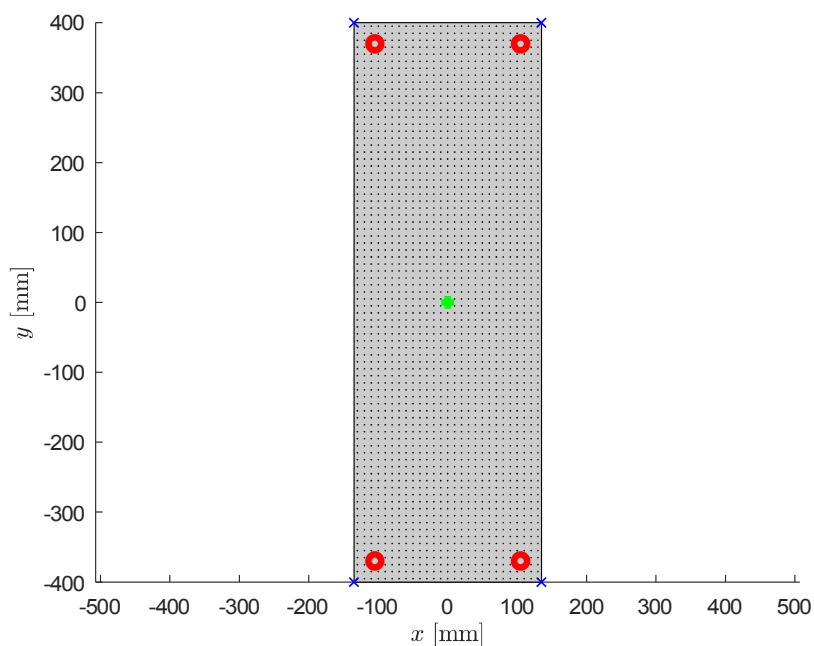


Tabella 192.192. Materiali

Res.Cls 1	Rcm	[MPa]	13
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	440
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.00

Tabella 193.193. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-400	400
Largh. anima	bw	[mm]	800	270
Altezza utile	d	[mm]	240	770
Area staffe	As	[mm2]	101	101
Passo staffe	s	[mm]	300	300
Area f.pieg.	Asfp	[mm2]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 194.194. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	153.94
2	240	30	153.94
3	30	770	307.88
4	240	770	307.88

Verifica SLV (peggiorativa per M)

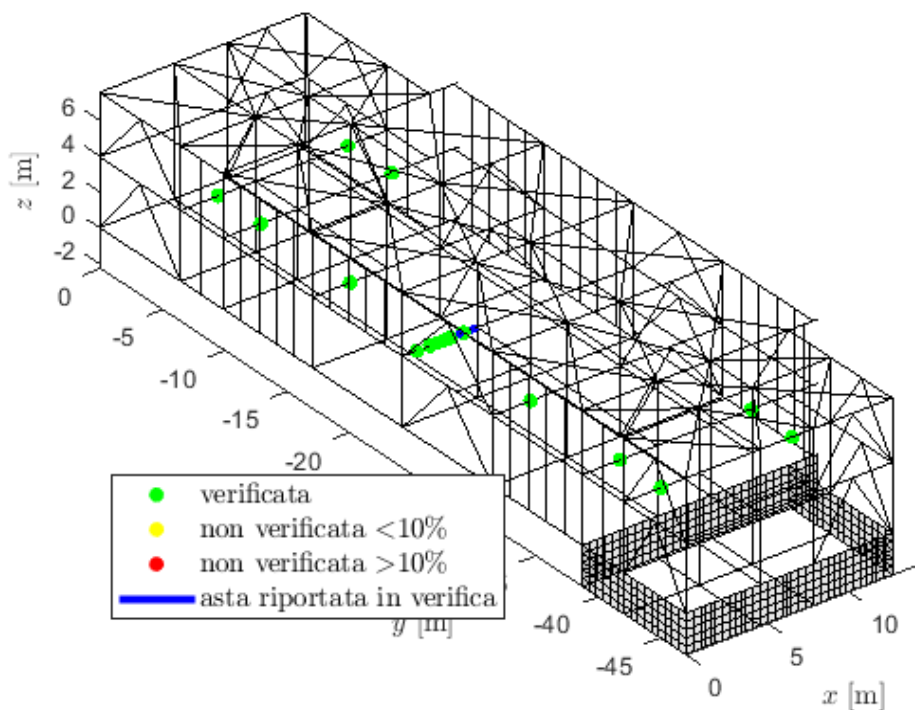


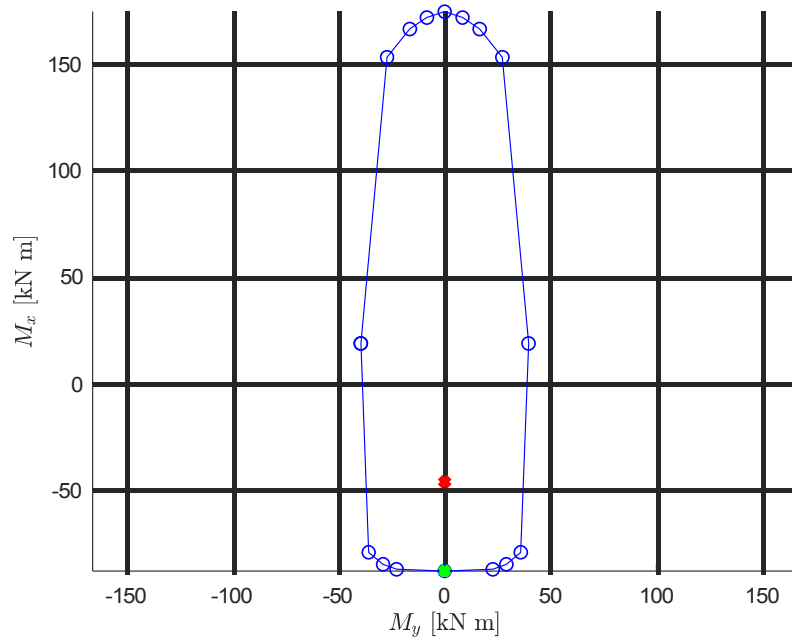
Tabella 195.195. Elemento più sollecitato

Elemento	[n°]	478
Ascissa	[m]	0.61

Tabella 196.196. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
Mx	[kNm]	-46.2	37.9
]		

My	[kNm]	-0.0	0.0
Vx	[kN]	-0.0	0.0
Vy	[kN]	7.7	69.3



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.524$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

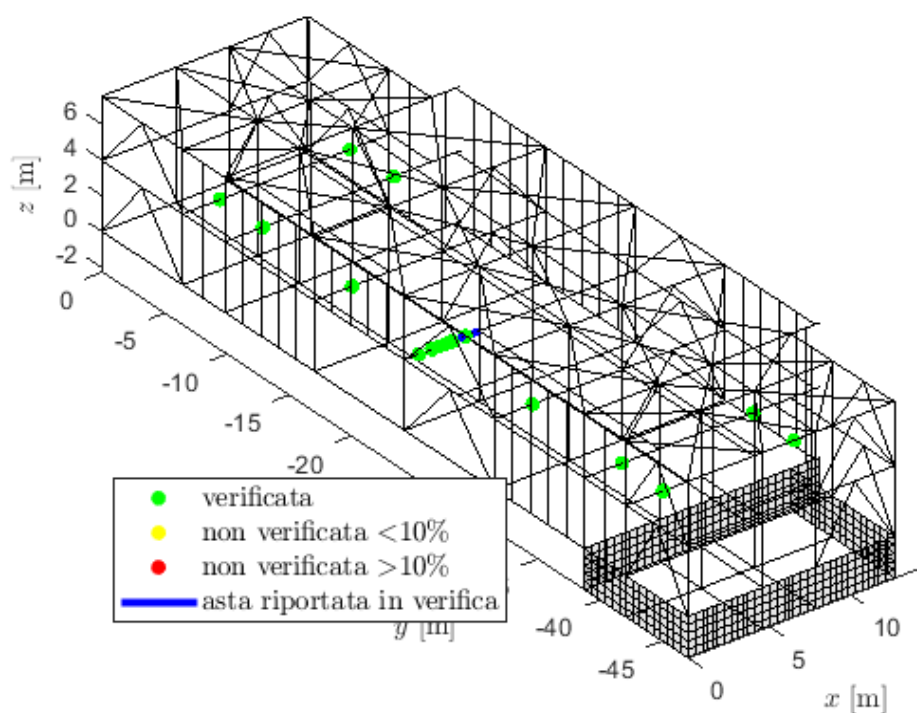
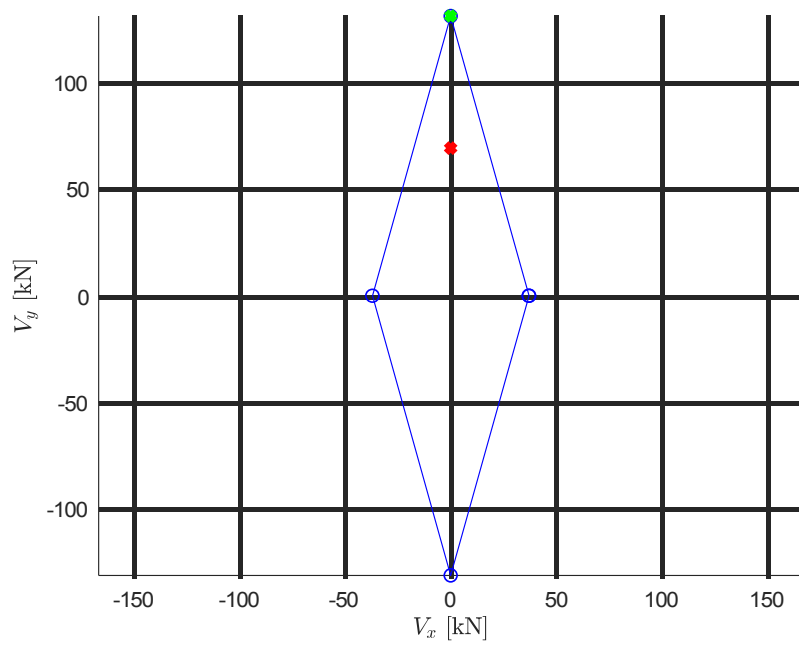


Tabella 197.197. Elemento più sollecitato

Elemento	[n°]	478
Ascissa	[m]	0.61

Tabella 198.198. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
Mx	[kNm]	-46.2	37.9
My	[kNm]	-0.0	0.0
Vx	[kN]	-0.0	0.0
Vy	[kN]	7.7	69.3



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.528$$

SLU a taglio verificati

"6 - Rettangolare b=27 h=80 travi p1 (4+2)"

Sezione

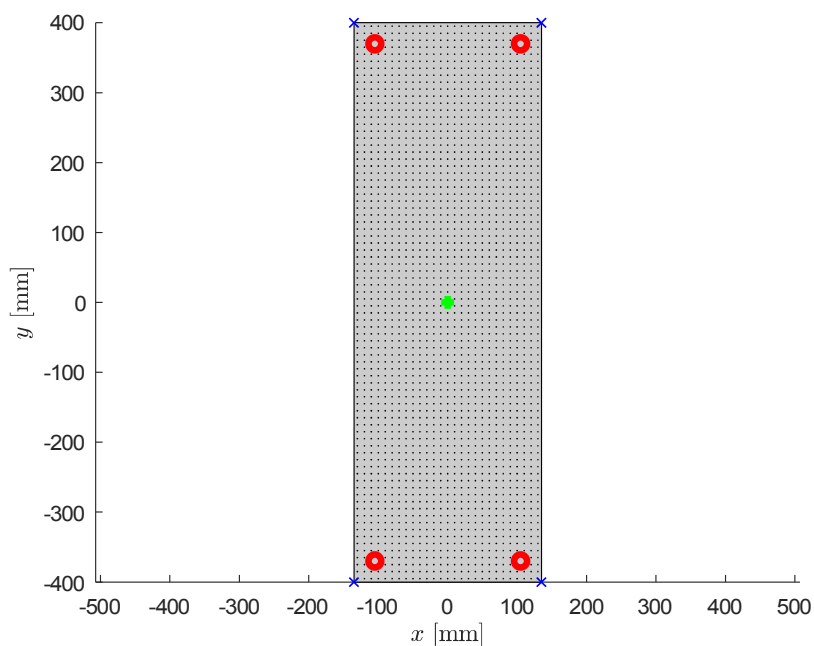


Tabella 199.199. Materiali

Res.Cls 1	Rcm	[MPa]	13
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	440
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.00

Tabella 200.200. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-400	400
Largh. anima	bw	[mm]	800	270
Altezza utile	d	[mm]	240	770
Area staffe	As	[mm2]	101	101
Passo staffe	s	[mm]	300	300
Area f.pieg.	Asfp	[mm2]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 201.201. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	30	30	307.88
2	240	30	307.88
3	30	770	153.94
4	240	770	153.94

Verifica SLV (peggiorativa per M)

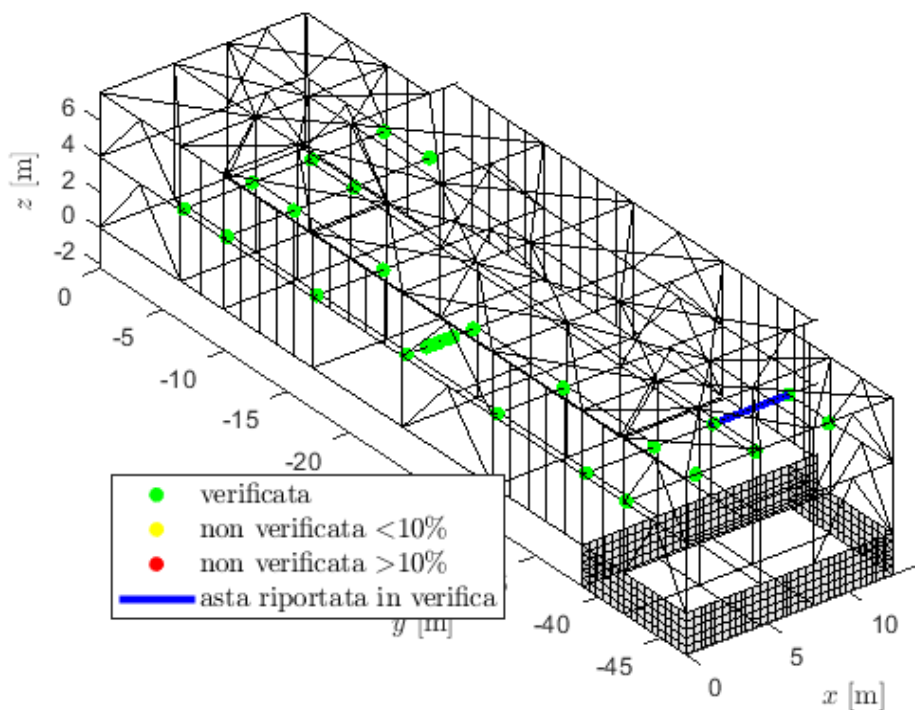


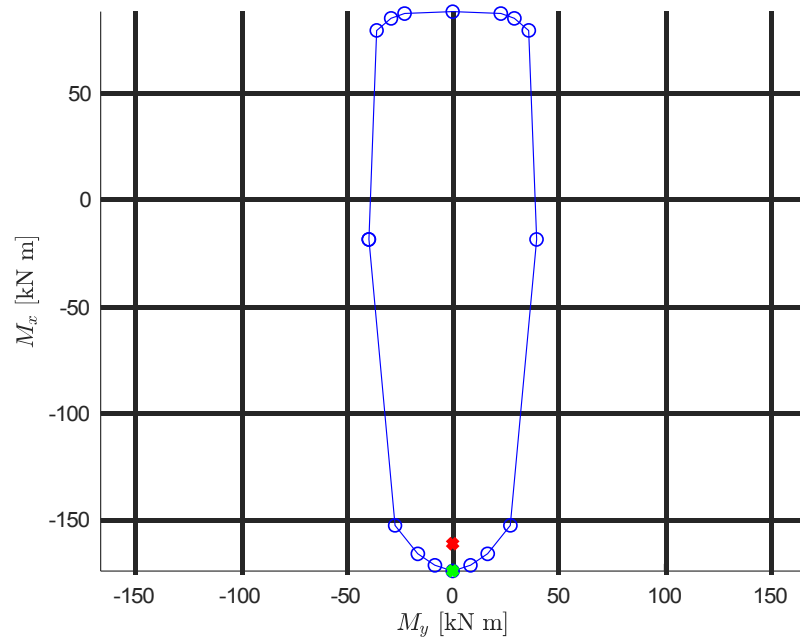
Tabella 202.202. Elemento più sollecitato

Elemento	[n°]	569
Ascissa	[m]	4.84

Tabella 203.203. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
M _x	[kNm]	-161.4	-11.6

M _y	[kNm]	-0.0	0.0
V _x	[kN]	-0.0	0.0
V _y	[kN]	75.0	129.5



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.926$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

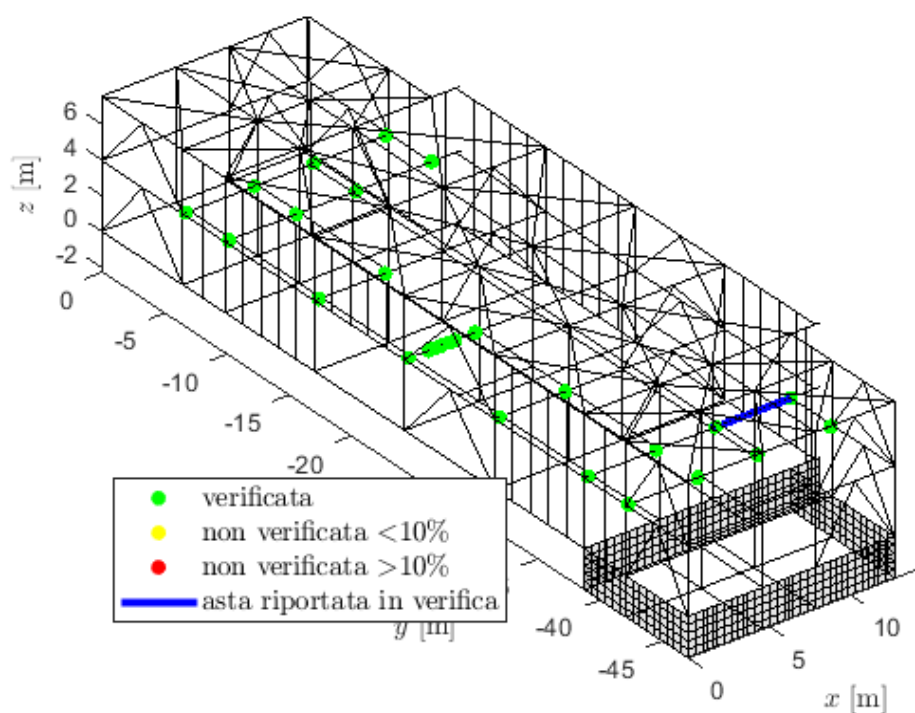
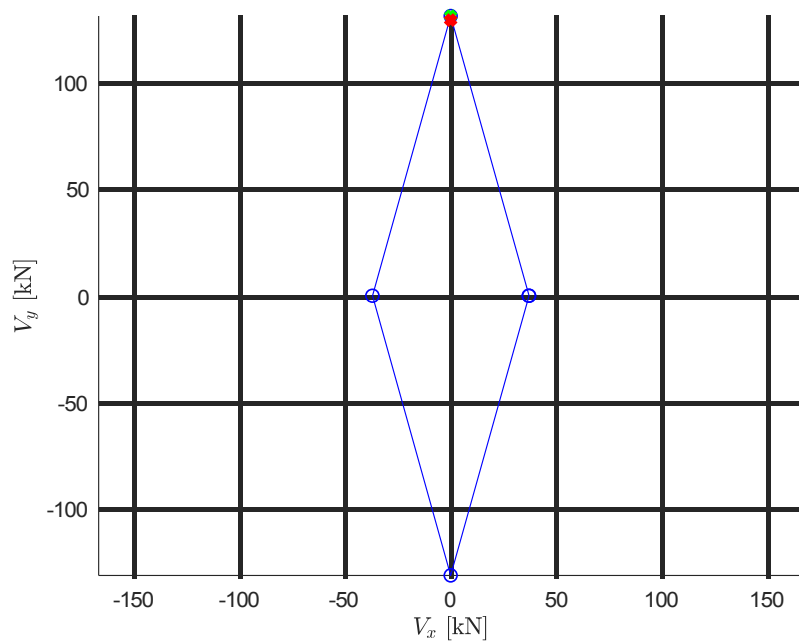


Tabella 204.204. Elemento più sollecitato

Elemento	[n°]	569
Ascissa	[m]	4.84

Tabella 205.205. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
M _x	[kNm]	-161.4	-11.6
M _y	[kNm]	-0.0	0.0
V _x	[kN]	-0.0	0.0
V _y	[kN]	75.0	129.5



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.986$$

SLU a taglio verificati

"24- Rettangolare b=90 h=24 travi spessore p1"

Sezione

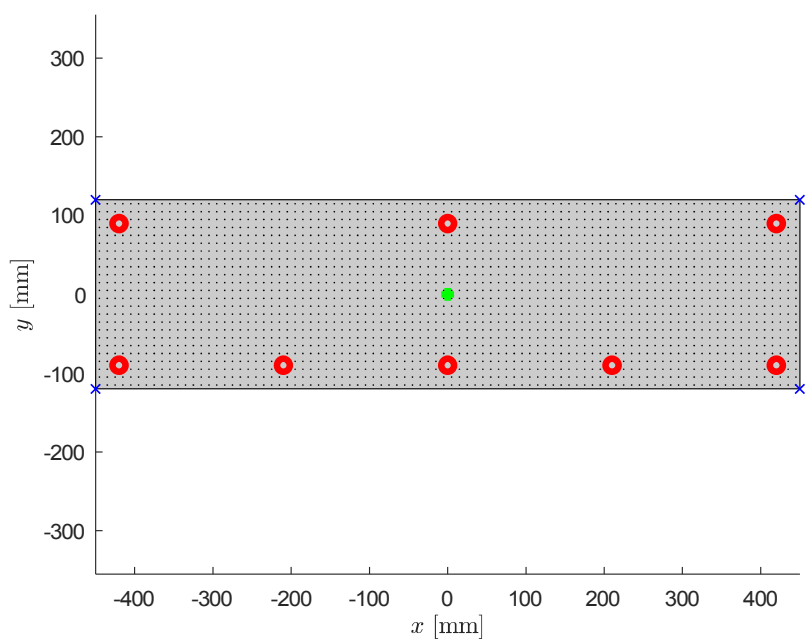


Tabella 206.206. Materiali

Res.Cls 1	Rcm	[MPa]	13
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	440
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.00

Tabella 207.207. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-450	450
Dimensione	max	[mm]	-120	120
Largh. anima	bw	[mm]	240	900
Altezza utile	d	[mm]	870	210
Area staffe	As	[mm2]	57	57
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm2]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 208.208. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	201.06
2	240	30	201.06
3	450	30	201.06
4	660	30	201.06
5	870	30	201.06
6	30	210	201.06
7	450	210	201.06
8	870	210	201.06

Verifica SLV (peggiorativa per M)

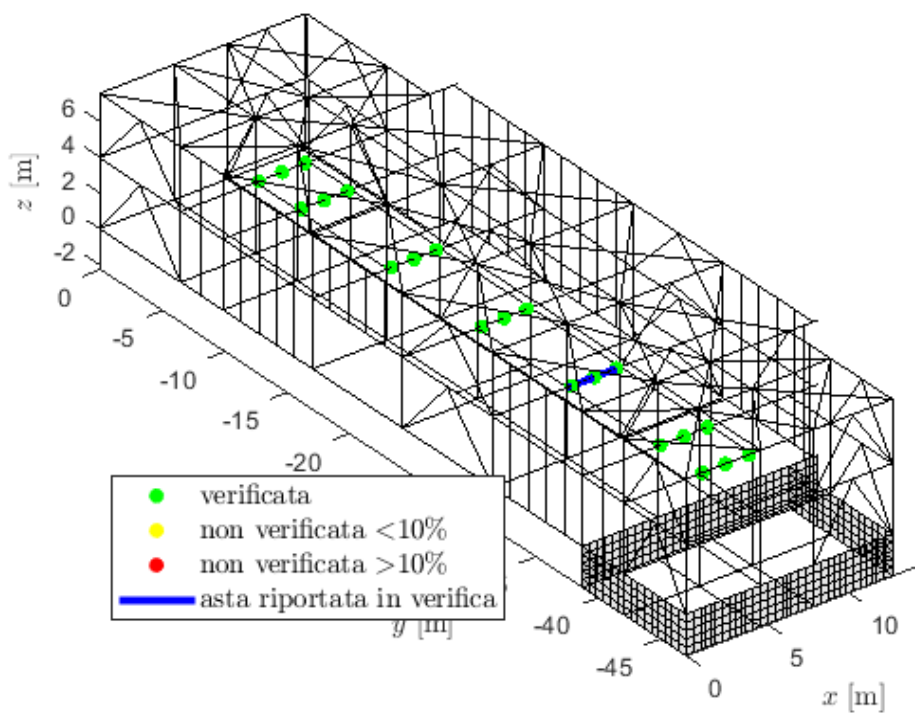
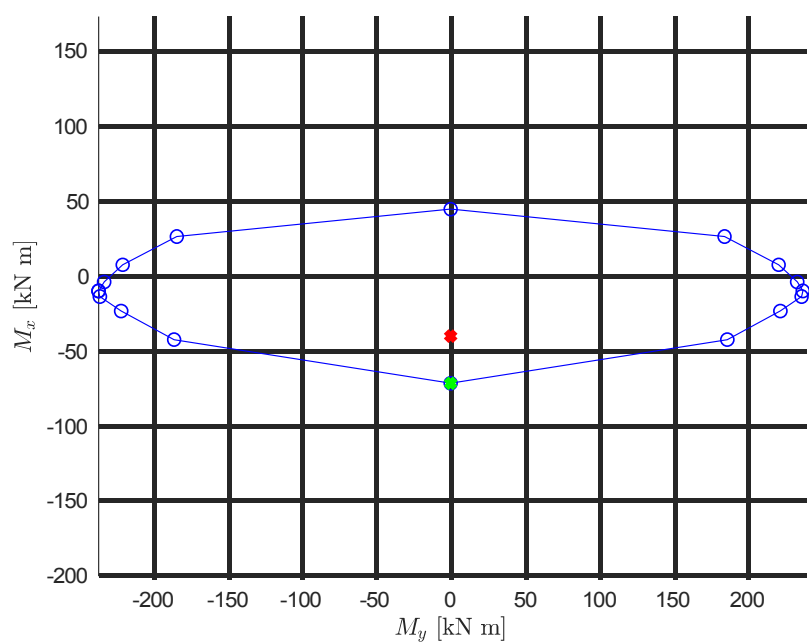


Tabella 209.209. Elemento più sollecitato

Elemento	[n°]	865
Ascissa	[m]	3.02

Tabella 210.210. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
M _x	[kNm]	-40.4	-15.7
M _y	[kNm]	-0.0	0.0
V _x	[kN]	-0.0	0.0
V _y	[kN]	41.9	59.0



$$\max(|\text{MED}|/|\text{MRd}(\text{NEd})|) = 0.562$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

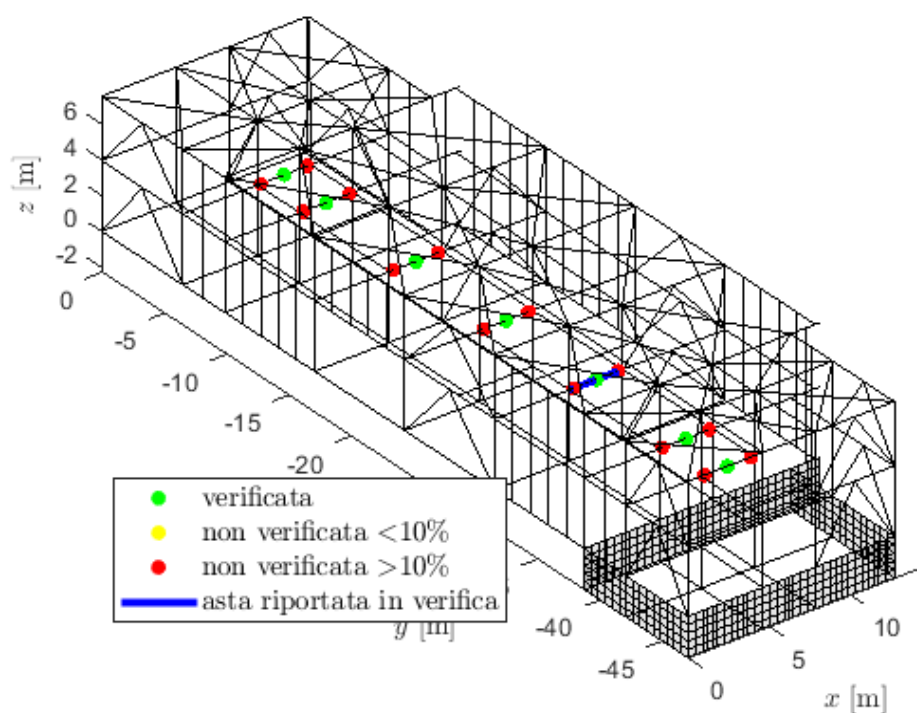
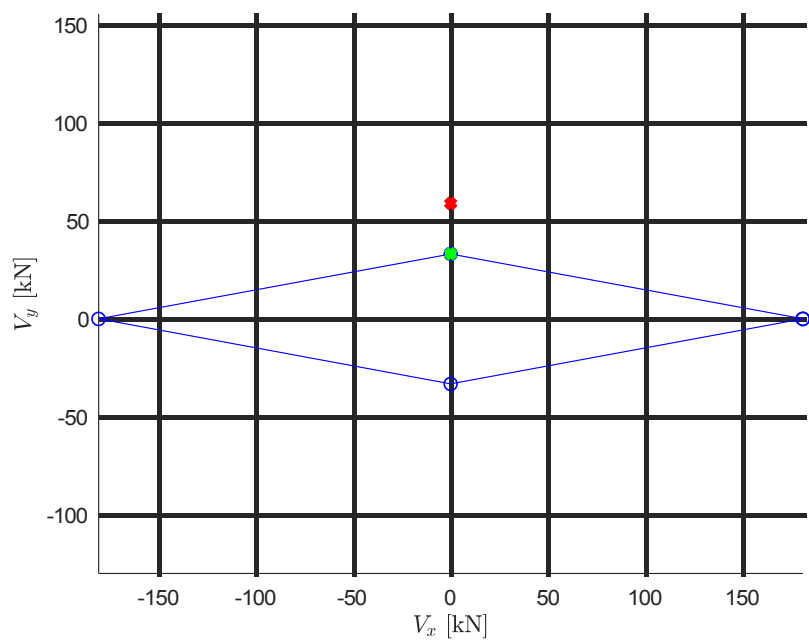


Tabella 211.211. Elemento più sollecitato

Elemento	[n°]	865
Ascissa	[m]	3.02

Tabella 212.212. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
M _x	[kNm]	-40.4	-15.7
M _y	[kNm]	-0.0	0.0
V _x	[kN]	-0.0	0.0
V _y	[kN]	41.9	59.0



$$\max(|V_{Ed}|/|V_{Rd}|) = 1.774$$

SLU a taglio NON verificati

N.B: La presente non verifica è stata risolta con l'intervento di inserimento di profili metallici UPN160 accoppiati all'intradosso delle travi suddette (vedi Relazione di calcolo A8).

"7 - Rettangolare b=26 h=24 travi p1"

Sezione

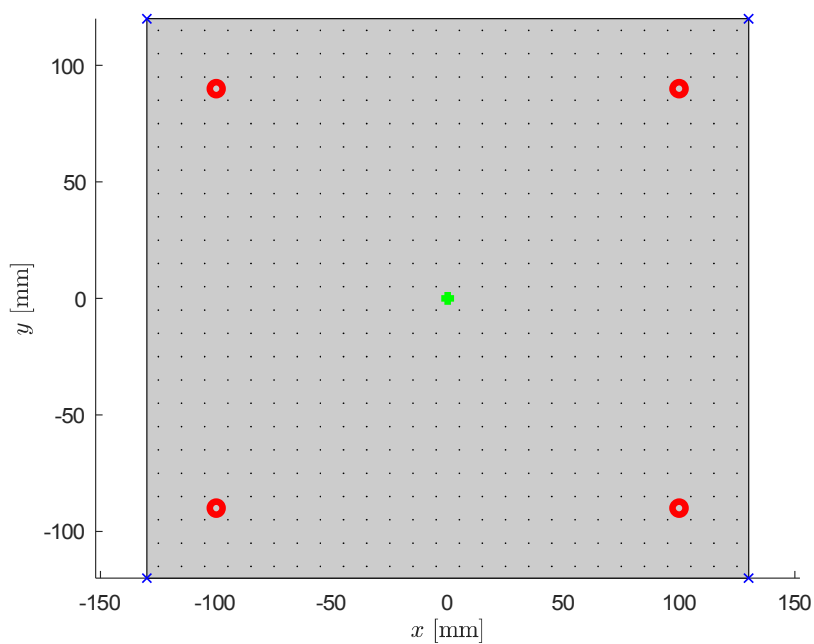


Tabella 213.213. Materiali

Res.Cls 1	Rcm	[MPa]	13
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	440
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.00

Tabella 214.214. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-130	130
Dimensione	max	[mm]	-120	120
Largh. anima	bw	[mm]	240	260
Altezza utile	d	[mm]	230	210
Area staffe	As	[mm2]	57	57
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm2]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 215.215. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm2]
1	30	30	153.94
2	230	30	153.94
3	30	210	153.94
4	230	210	153.94

Verifica SLV (peggiorativa per M)

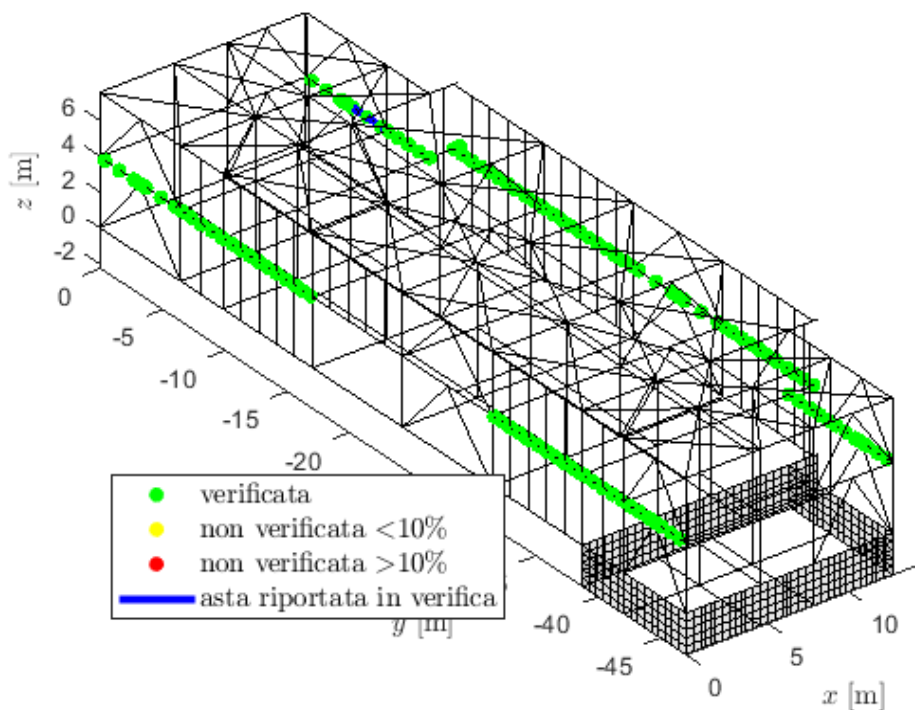


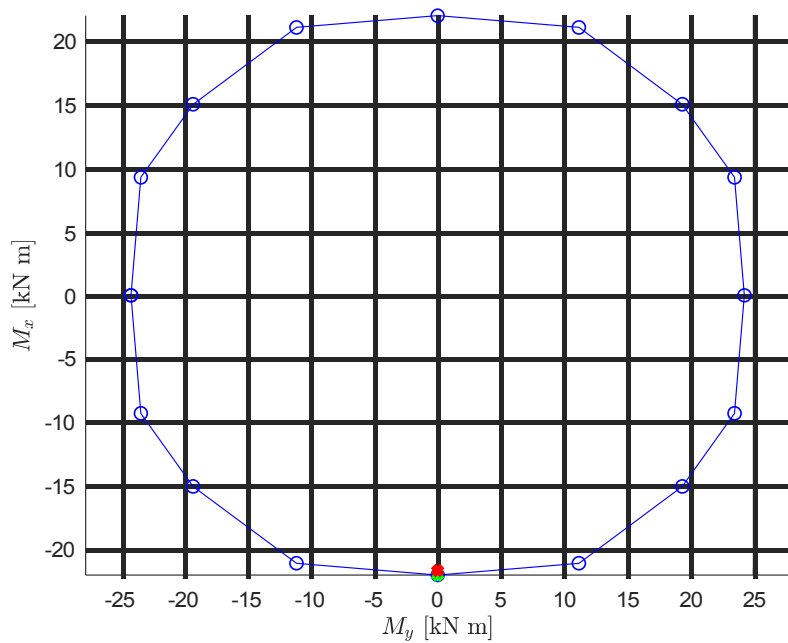
Tabella 216.216. Elemento più sollecitato

Elemento	[n°]	65
Ascissa	[m]	0.45

Tabella 217.217. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
M _x	[kNm]	-21.6	-12.8

M _y	[kNm]	-0.0	0.0
V _x	[kN]	-0.0	0.0
V _y	[kN]	-28.0	-19.4



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.984$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

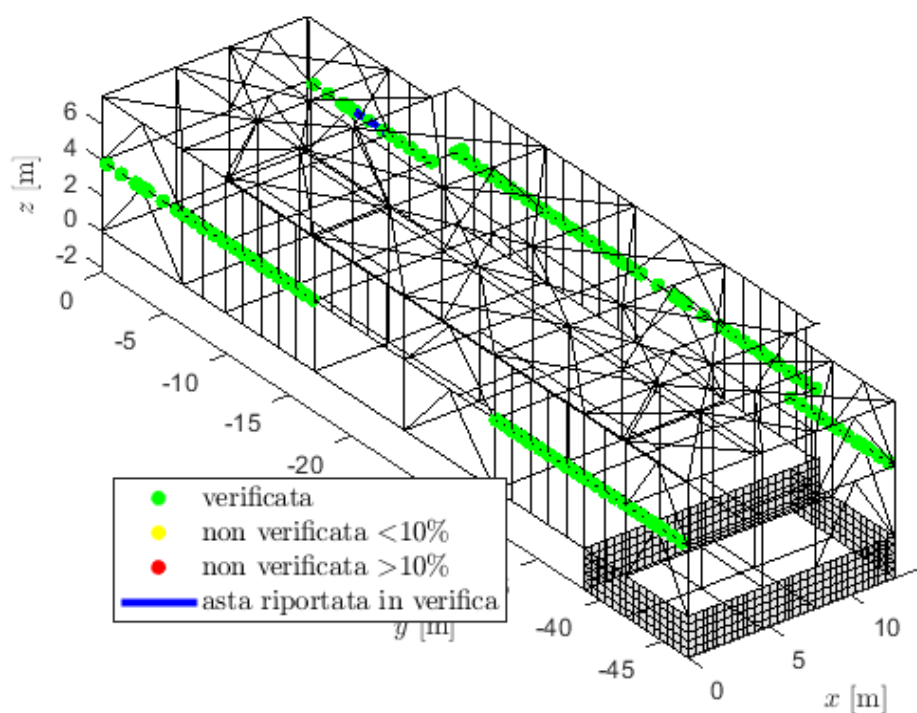
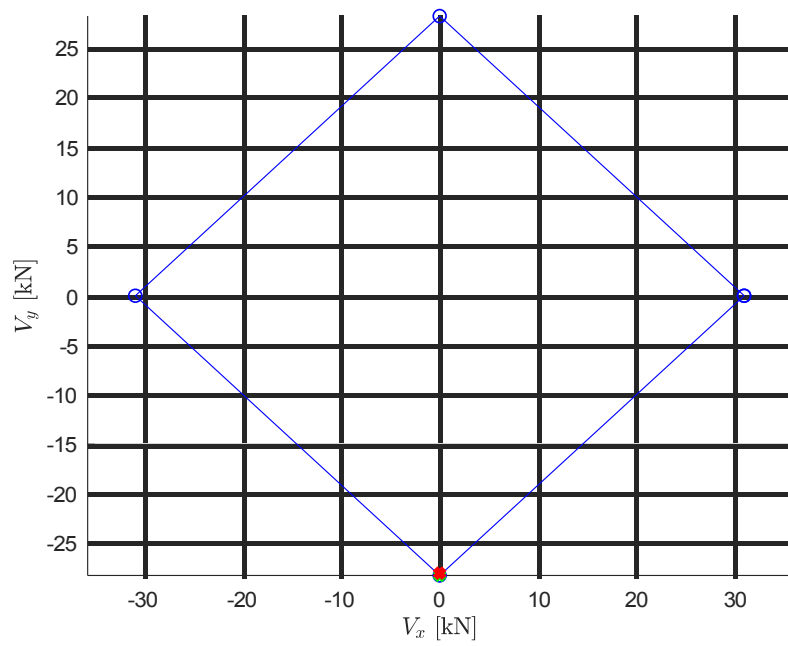


Tabella 218.218. Elemento più sollecitato

Elemento	[n°]	65
Ascissa	[m]	0.45

Tabella 219.219. Sollecitazioni SLV

		min	max
N	[kN]	0.0	0.0
M _x	[kNm]	-21.6	-12.8
M _y	[kNm]	-0.0	0.0
V _x	[kN]	-0.0	0.0
V _y	[kN]	-28.0	-19.4



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.993$$

SLU a taglio verificati

"12 - Rettangolare b=27 h=80 travi p2"

Sezione

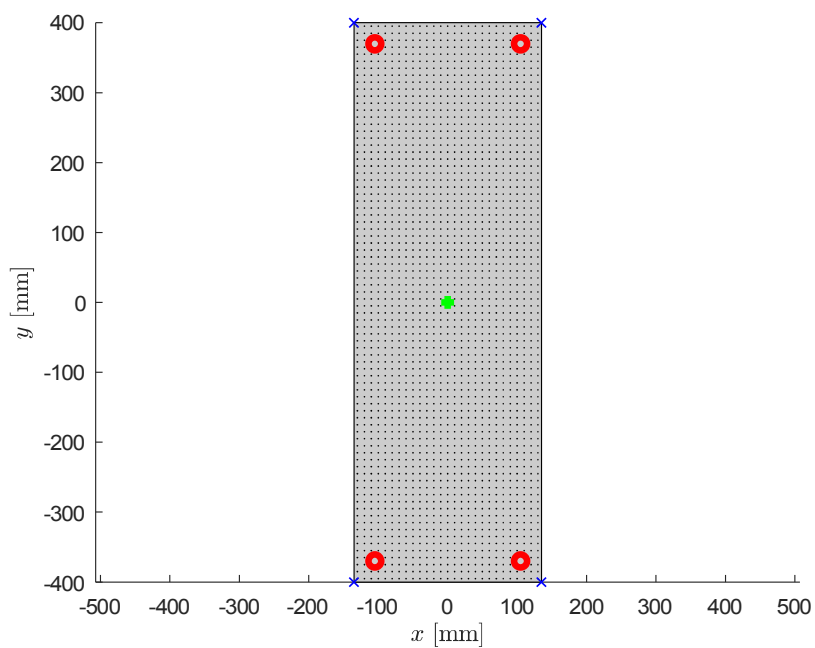


Tabella 220.220. Materiali

Res.Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	440
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.20

Tabella 221.221. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-400	400
Largh. anima	bw	[mm]	800	270
Altezza utile	d	[mm]	240	770
Area staffe	As	[mm2]	101	101
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm2]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 222.222. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	30	30	113.10
2	240	30	113.10
3	30	770	226.19
4	240	770	226.19

Verifica SLV (peggiorativa per M)

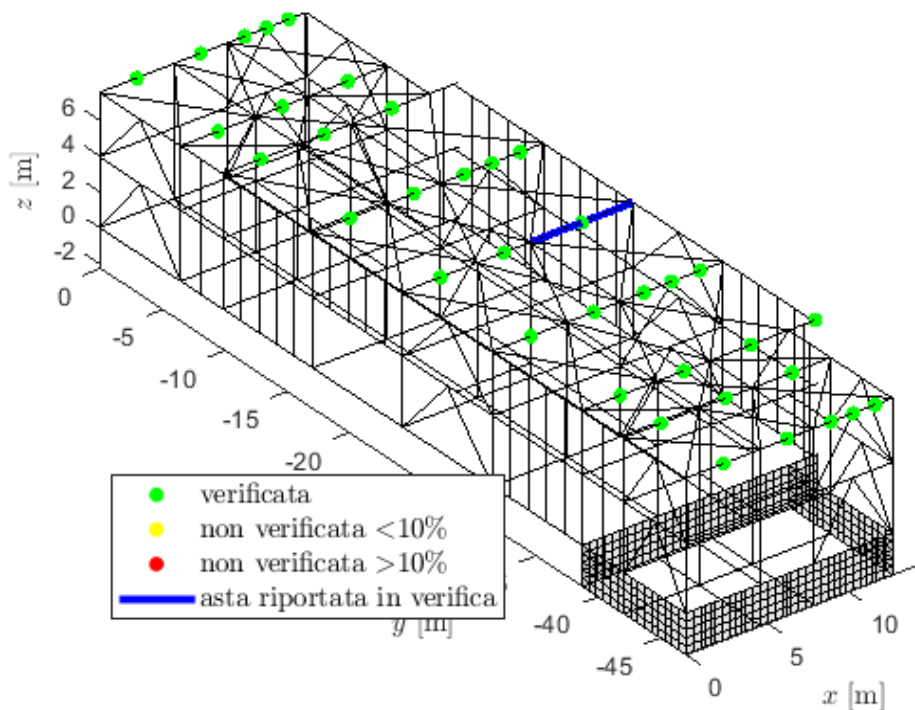


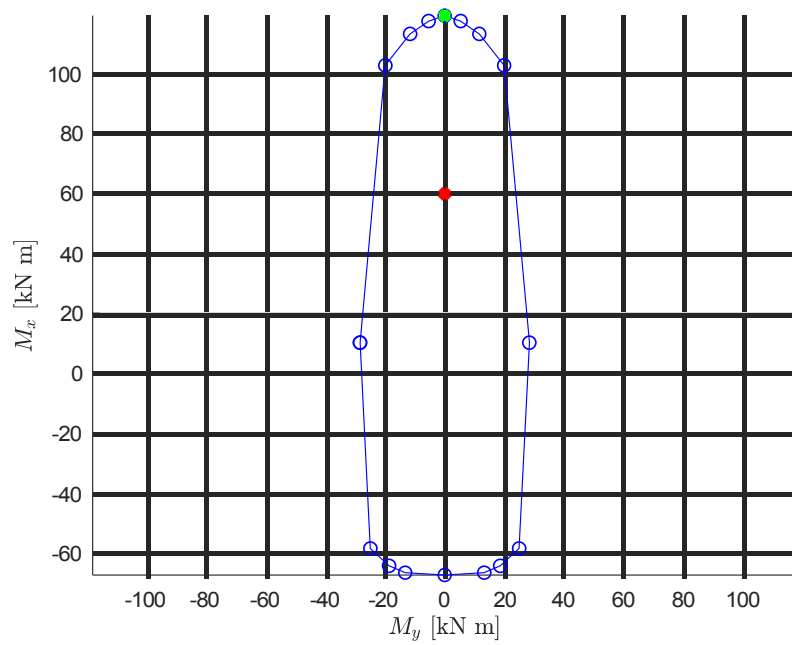
Tabella 223.223. Elemento più sollecitato

Elemento	[n°]	35
Ascissa	[m]	3.19

Tabella 224.224. Sollecitazioni SLV

		min	max
N	[kN]	-44.0	-35.9
M _x	[kNm]	46.4	59.8

M _y	[kNm]	-1.1	2.1
V _x	[kN]	-1.8	2.5
V _y	[kN]	-5.7	10.4



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.502$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

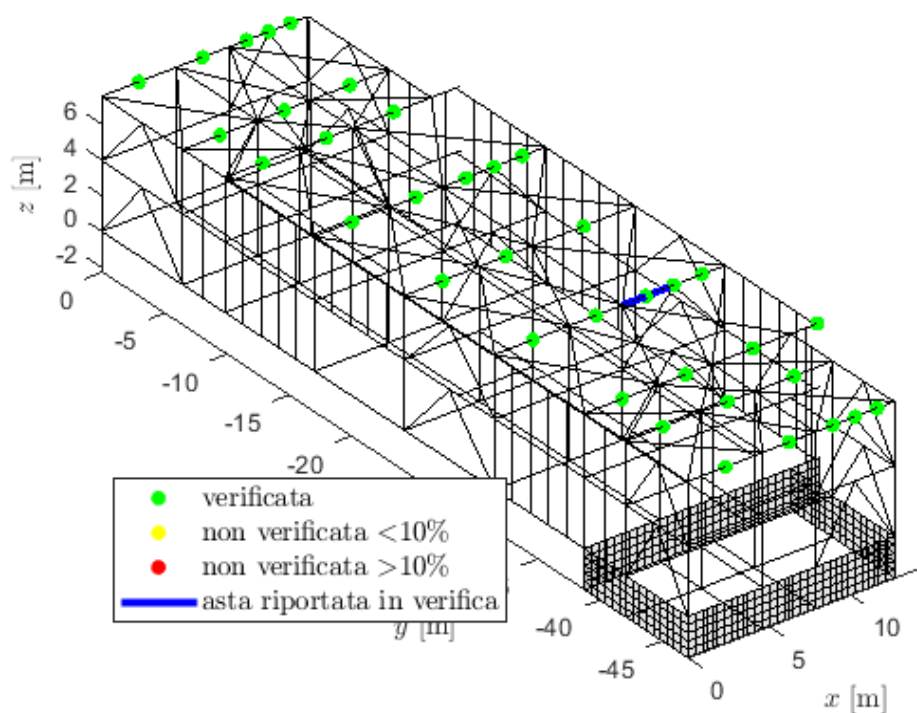
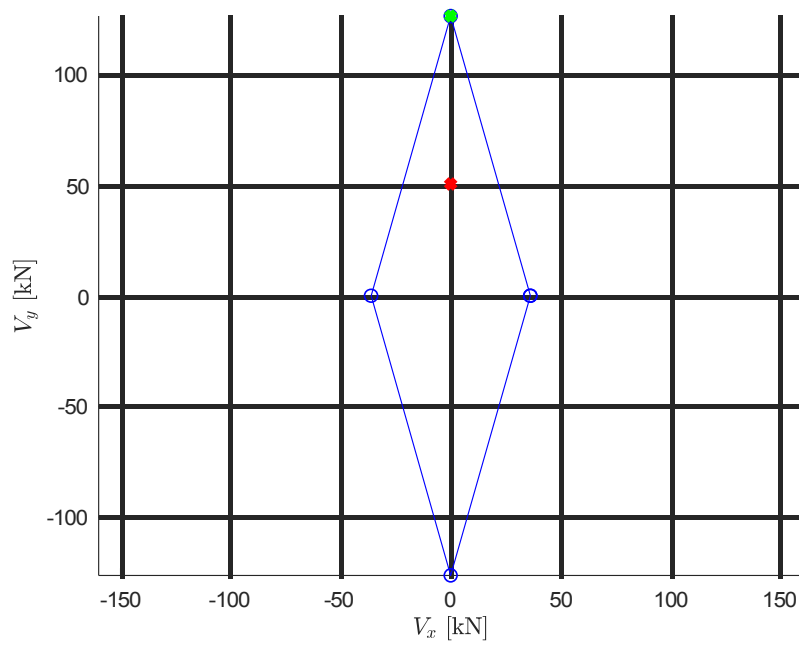


Tabella 225.225. Elemento più sollecitato

Elemento	[n°]	240
Ascissa	[m]	1.43

Tabella 226.226. Sollecitazioni SLV

		min	max
N	[kN]	-75.8	3.2
Mx	[kNm]	16.6	27.5
My	[kNm]	-5.2	5.0
Vx	[kN]	-4.0	4.0
Vy	[kN]	38.3	50.4



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.400$$

SLU a taglio verificati

12271111227."12 - Rettangolare b=27 h=80 travi p2"

2222228.2. Sezione

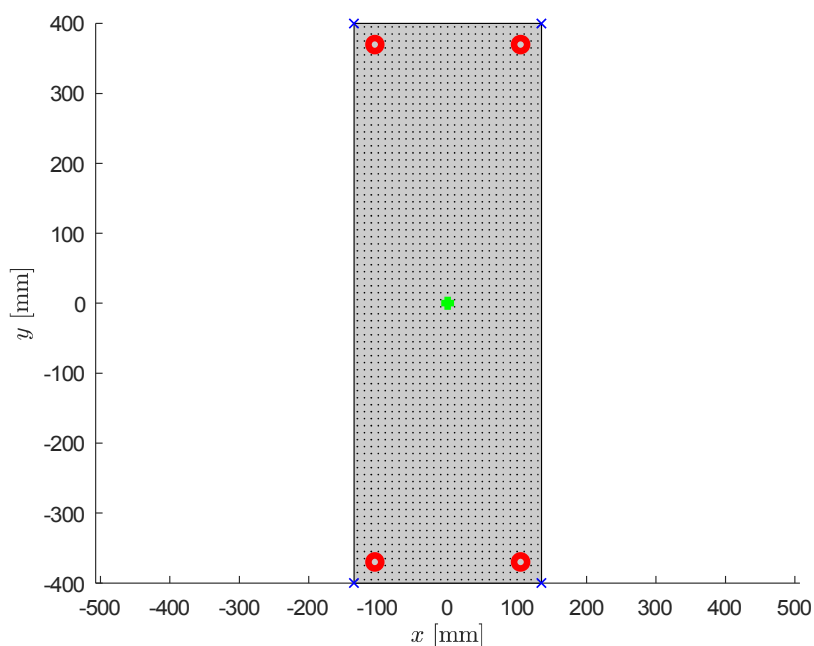


Tabella 229.228. Materiali

Res. Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	440
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.20

Tabella 230.229. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-135	135
Dimensione	max	[mm]	-400	400
Largh. anima	bw	[mm]	800	270
Altezza utile	d	[mm]	240	770
Area staffe	As	[mm2]	101	101

Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm ²]	0	0
Passo f.pieg.	sfp	[mm]	300	200

Tabella 231.230. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	30	30	226.19
2	240	30	226.19
3	30	770	113.10
4	240	770	113.10

3333232.3. Verifica SLV (peggiorativa per M)

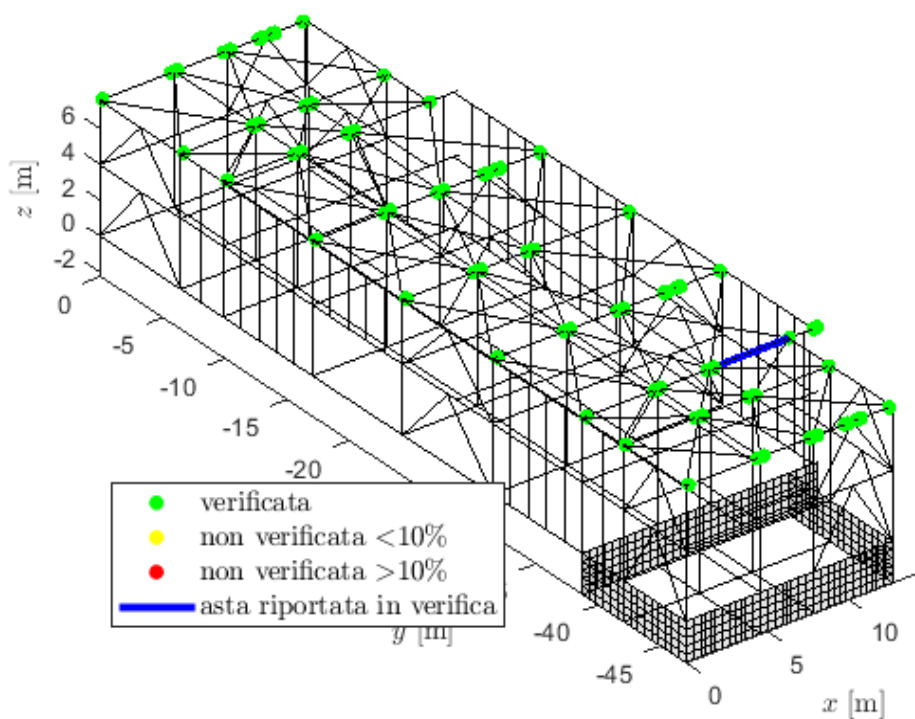


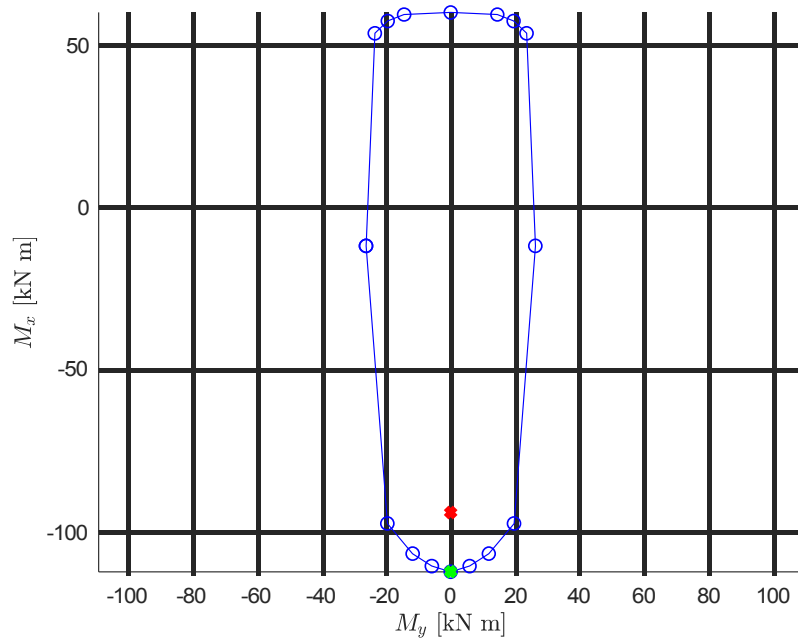
Tabella 233.231. Elemento più sollecitato

Elemento	[n°]	696
Ascissa	[m]	0.00

Tabella 234.232. Sollecitazioni SLV

		min	max
N	[kN]	-50.7	-15.7

M _x	[kNm]	-94.3	9.0
M _y	[kNm]	-8.6	9.6
V _x	[kN]	-3.1	3.3
V _y	[kN]	-69.8	-36.7



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.838$$

SLU a flessione verificati

4444235.4. Verifica SLV (peggiorativa per V)

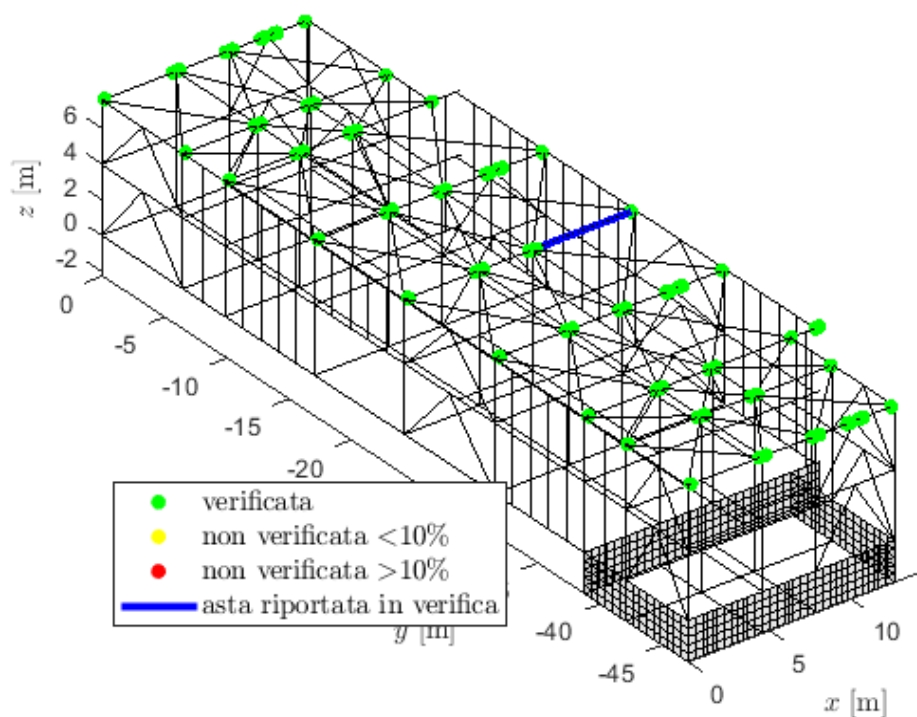
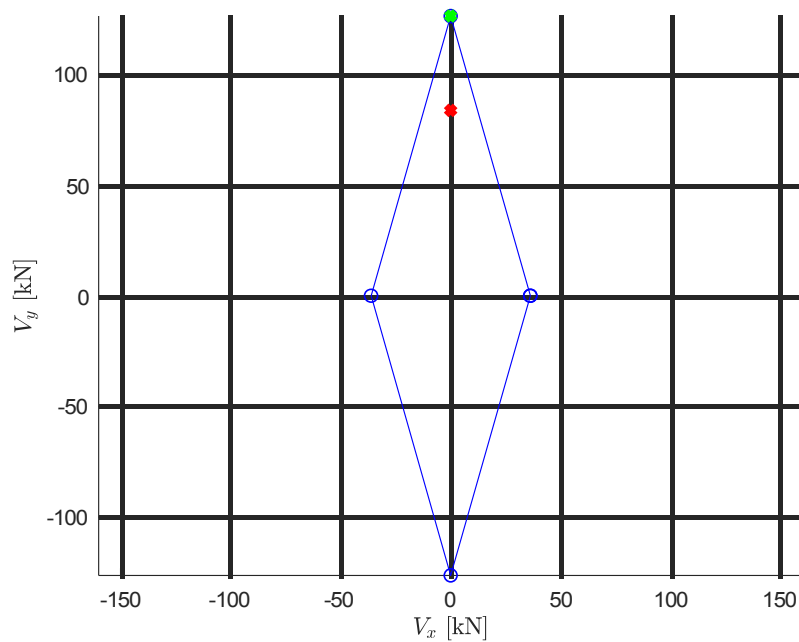


Tabella 236.233. Elemento più sollecitato

Elemento	[n°]	35
Ascissa	[m]	6.13

Tabella 237.234. Sollecitazioni SLV

		min	max
N	[kN]	-44.0	-35.9
M _x	[kNm]	-78.5	-44.6
M _y	[kNm]	-6.2	5.5
V _x	[kN]	-1.8	2.5
V _y	[kN]	67.6	83.7



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.663$$

SLU a taglio verificati

"13 - Rettangolare b=26 h=40 travi p2"

Sezione

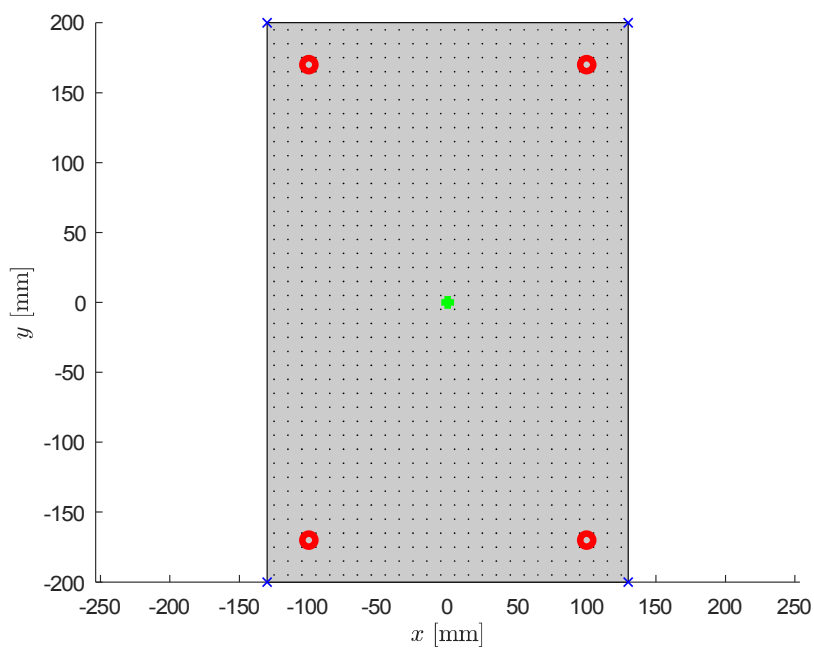


Tabella 238.235. Materiali

Res.Cls 1	Rcm	[MPa]	12
Res. Cls 2	Rcm	[MPa]	0
Res. barre longitudinali	fykl	[MPa]	440
Res. staffe	fyks	[MPa]	230
Fattore di confidenza	FC	-	1.20

Tabella 239.236. Geometria della sezione

			x	y
Rett. 1 (Cls 1)				
Dimensione	min	[mm]	-130	130
Dimensione	max	[mm]	-200	200
Largh. anima	bw	[mm]	400	260
Altezza utile	d	[mm]	230	370
Area staffe	As	[mm2]	101	101
Passo staffe	s	[mm]	250	250
Area f.pieg.	Asfp	[mm2]	0	0

]		
Passo f.pieg.	sfp	[mm]	300	200

Tabella 240.237. Armature

	x	y	A
Barra n°	[mm]	[mm]	[mm ²]
1	30	30	153.94
2	230	30	153.94
3	30	370	153.94
4	230	370	153.94

Verifica SLV (peggiorativa per M)

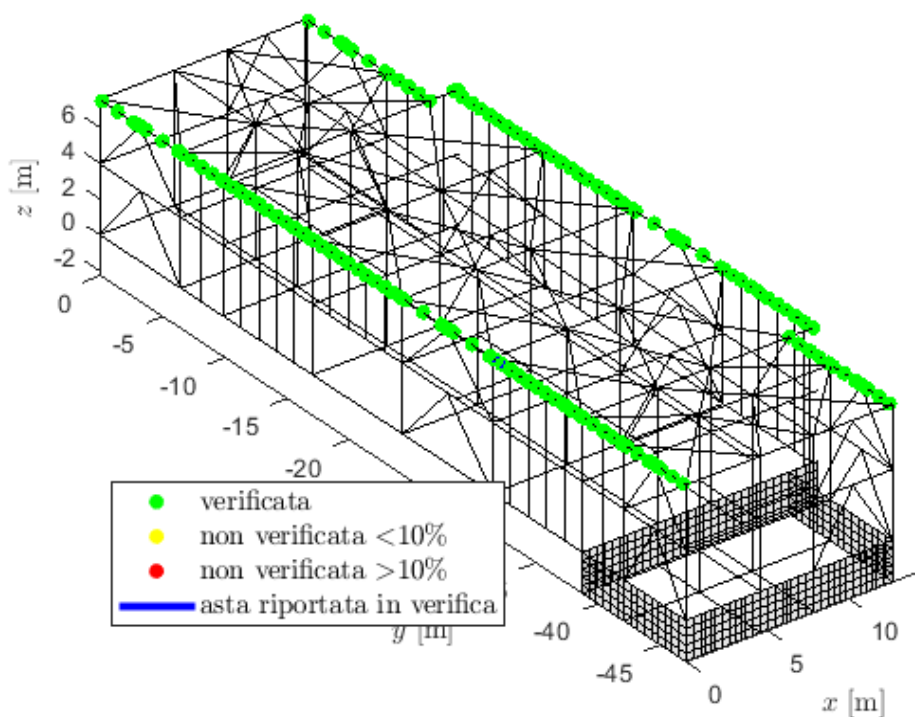


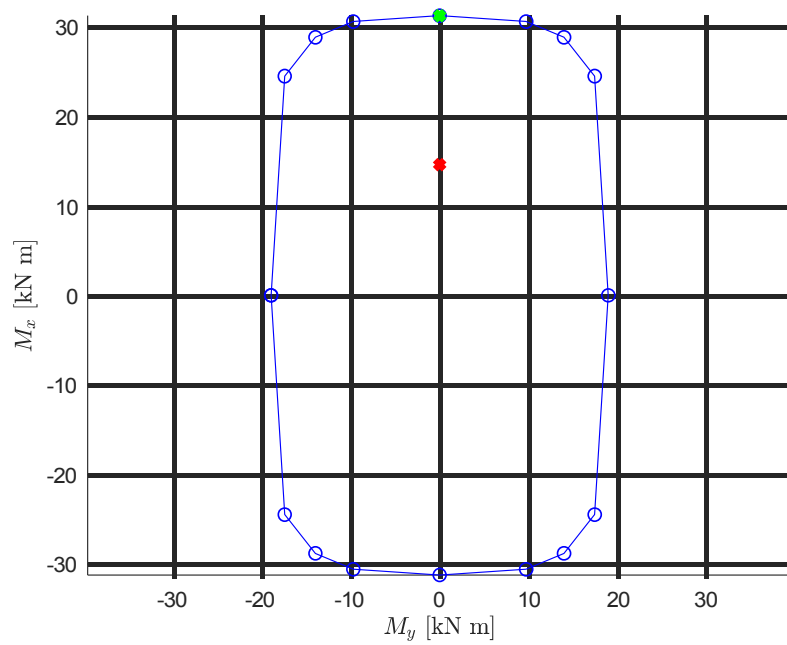
Tabella 241.238. Elemento più sollecitato

Elemento	[n°]	651
Ascissa	[m]	1.31

Tabella 242.239. Sollecitazioni SLV

		min	max
N	[kN]	-4.1	16.2
Mx	[kNm]	9.8	14.6
]		

M_y	[kNm]	-9.8	8.7
V_x	[kN]	-3.0	3.6
V_y	[kN]	-12.9	-8.7



$$\max(|M_{Ed}|/|M_{Rd}(N_{Ed})|) = 0.468$$

SLU a flessione verificati

Verifica SLV (peggiorativa per V)

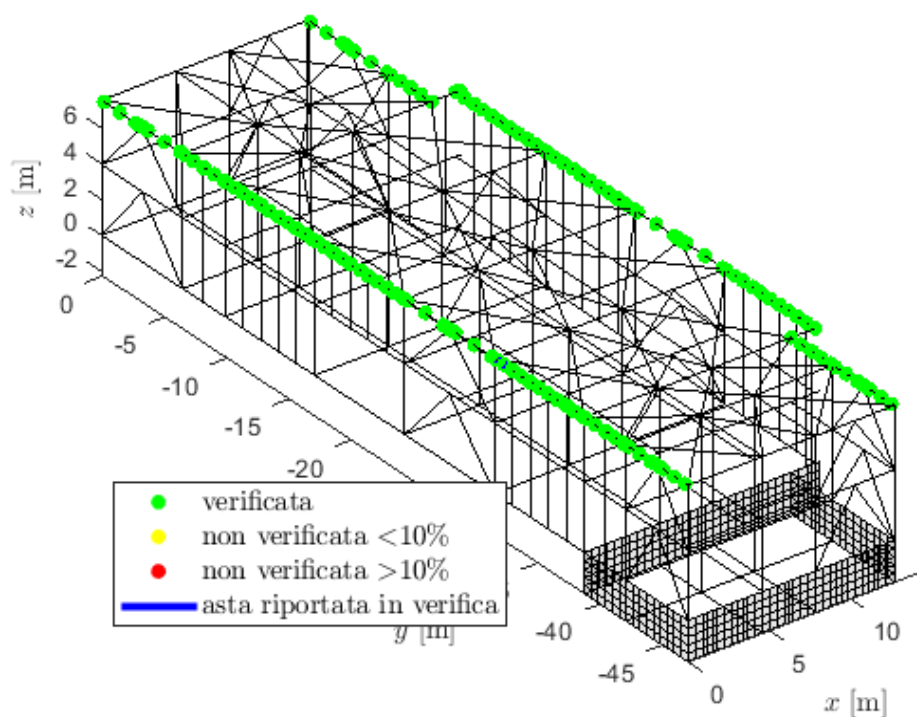
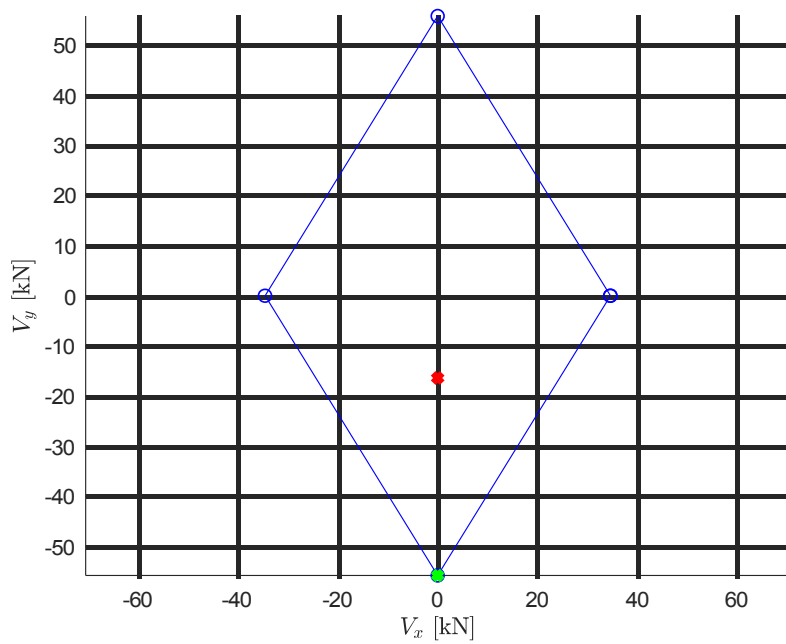


Tabella 243.240. Elemento più sollecitato

Elemento	[n°]	651
Ascissa	[m]	0.06

Tabella 244.241. Sollecitazioni SLV

		min	max
N	[kN]	-4.1	16.2
M _x	[kNm]	-4.0	-2.9
M _y	[kNm]	-5.8	5.3
V _x	[kN]	-3.0	3.6
V _y	[kN]	-16.4	-12.2



$$\max(|V_{Ed}|/|V_{Rd}|) = 0.294$$

SLU a taglio verificati