

---

**STRUCTURAL ANALYSIS REPORT FOR  
GARAGE WITH MEZZANINE (TECHNICAL FLOOR) AND  
TERRACE.**

**KALVISKIAI, LITHUANIA, EUROPE**

**Project name: GARAGE  
Project code: NP5\_641-01**

**PREPARED BY:  
NP5**

**03 AUG 2023**

---

Table of content

1	Design Criteria	3
1.1	Design Codes and References	3
1.2	Code Criteria	3
1.3	Materials	3
1.4	Structural Loads	3
1.5	Live load	6
2	Structural analysis	17
2.1	Building description	17
2.2	General Scheme	19
2.3	Applied loads	23
2.4	Steel structure check	45
2.4.1	Truss check	45
2.4.2	Walls check	107
2.4.3	Connections check	234
2.4.4	Support reactions	247,

03 AUG 2023

## 1 DESIGN CRITERIA:

### 1.1 DESIGN CODES & REFERENCES

- LST EN 1990:2004/A1:2006/AC:2010 Eurocode - Basis of structural design
- LST EN 1090-2:2008+A1:2011 Eurocode - Execution of steel structures and aluminium structures - Part 2: Technical requirements for steel structures
- LST EN 1991-1-1:2004/AC:2009 Eurocode 1 - General actions – Densities, self-weight, imposed loads for buildings
- LST EN 1991-1-3:2004/AC:2009 Eurocode 1 - General actions - Snow loads
- LST EN 1991-1-4:2005/AC:2010 Eurocode 1 - General actions - Wind actions
- LST EN 1993-1-1:2005/AC:2009 Eurocode 3 - Design of steel structures - Part 1-1: General rules and rules for buildings
- LST EN 1993-1-3:2007/AC:2010 Eurocode 3 - Design of steel structures - Part 1-3: General rules - Supplementary rules for cold-formed members and sheeting
- STR 2.05.04:2003 - "Poveikiai ir apkrovos"

Calculation performed by SCIA Engineer software

### 1.2 CODE CRITERIA

Category of building (EN 1991-1-1):	<b>F (Garage)</b>
Basic wind velocity ( $V_b$ ):	<b>32 m/s</b>
Terrain category for wind:	<b>I</b>
Snow Load (according to initial data):	<b>1.2 kPa</b>
Partial reliability coefficient for permanent effects	$\gamma_{Gj,sup} = 1.35$
Partial reliability coefficient for variable effects	$\gamma_Q = 1.5$

### 1.3 MATERIALS

Cold-Formed Steel Grade S350GD+z

Steel EC3

Name	$\rho$ [kg/m <sup>3</sup> ]	$E_{mod}$ [MPa]	$\mu$	Lower limit [mm]	Upper limit [mm]	$F_y$ [MPa]	$F_u$ [MPa]	Colour
		$G_{mod}$ [MPa]	$\alpha$ [m/mK]					
S350GD+Z	7850.0	2.1000e+05	0.3	0.0	100.0	350.0	420.0	■
		8.0769e+04	0.00					

### 1.4 STRUCTURAL LOADS

#### **DEAD LOADS**

Roof load from engineering equipment	0.15 kPa
Self weight of the garage gate	0.20 kPa
Self weight of doors	0.40 kPa

Self weight of windows

0.35 kPa

**Wall - SD1 - external wall**

<b>Materials</b>	<b>Thick., mm</b>	<b>Load, kPa</b>	
1. "Sandwich" panel with polyisocyanurate (PIR) filler EXTERIOR SIDE	100	0.15	
2. LGS framing wall	100	LGS fram. self weight	
3. Gypsum board 12.5 mm INTERIOR SIDE	12,5	0.125	
	212.5	<b>0.275</b>	Sum

**Wall between garages**

<b>Materials</b>	<b>Thick., mm</b>	<b>Load, kPa</b>	
1. Gypsum board 12.5 mm INTERIOR SIDE	12.5	0.125	
2. LGS framing	100	LGS fram. self weight	
3. Ruukki firewall (every 17 garage wall)	200 - 230	0.402	
	312.5 - 342.5	<b>0.527</b>	Sum

**Wall near terrace**

<b>Materials</b>	<b>Thick., mm</b>	<b>Load, kPa</b>	
1. FINISH (Wood paneling, profiled tin) EXTERIOR SIDE	-	0.2	
2. PIR panel (with polyisocyanurate filler)	100	0.15	
3. LGS framing	100	LGS fram. self weight	
	200	<b>0.35</b>	Sum



**Load non-bearing wall - SD2**

<b>Materials</b>	<b>Thick., mm</b>	<b>Load, kPa</b>	
1. Gypsum board 12.5 mm - INTERIOR SIDE	12.5	0.125	
2. LGS framing	100	0.06	
3. Gypsum board 12.5 mm INTERIOR SIDE	12.5	0.125	
	125	<b>0.31</b>	Sum

**Floor Dead Loads****Mezzanine floor - GD1**

<b>Materials</b>	<b>Thick., mm</b>	<b>Load, kPa</b>	
1. DURELIS POPULAIR MDP	22	0.1562	
2. LGS framing truss	250	LGS fram. self weight	
3. PIR panel (with polyisocyanurate filler)	100	0.15	
4. FINISH (Wood panelling, profiled tin) EXTERIOR SIDE	-	0.2	
4. FINISH (Gypsum board 12.5 mm) INTERIOR SIDE	12.5	0.125	
	372	<b>0.51</b>	Sum

**Roof Dead Loads****Roof - STD1**

<b>Materials</b>	<b>Thick., mm</b>	<b>Load, kPa</b>	
1. "Sandwich" panel with polyisocyanurate (PIR) filler	160	0.15	
2. LGS framing truss, 250-300 mm	250 - 300	LGS fram. self weight	
	410 - 460	<b>0.15</b>	Sum

---

## **1.5 LIVE LOAD**

<b>Roof Live Load (H category)</b>	<b>0.4 kPa</b>
<b>Floor live load (imposed load)</b>	<b>1.50 kPa</b>
<b>Stairs live load</b>	<b>2.5 kN/m<sup>2</sup></b>

**Load combinations according LST EN 1990:2002:**

$\gamma_G = 1.35$  (for *permanent* action)

$\gamma_Q = 1.5$  (for *variable* action)

G – dead load

Q1 – live load

Q2 – snow load

Q3 – wind load

1)  $1,35 \cdot G + 1,5 \cdot Q1 + 0,7 \cdot 1,5 \cdot Q2 + 0,6 \cdot 1,5 \cdot Q3;$

2)  $1,35 \cdot G + 1,5 \cdot Q2 + 0,7 \cdot 1,5 \cdot Q1 + 0,6 \cdot 1,5 \cdot Q3;$

3)  $1,35 \cdot G + 1,5 \cdot Q3 + 0,7 \cdot 1,5 \cdot Q1 + 0,7 \cdot 1,5 \cdot Q2;$

4)  $1,0 \cdot G + 1,5 \cdot Q1 + 0,7 \cdot 1,5 \cdot Q2 + 0,6 \cdot 1,5 \cdot Q3;$

5)  $1,0 \cdot G + 1,5 \cdot Q2 + 0,7 \cdot 1,5 \cdot Q1 + 0,6 \cdot 1,5 \cdot Q3;$

6)  $1,0 \cdot G + 1,5 \cdot Q3 + 0,7 \cdot 1,5 \cdot Q1 + 0,7 \cdot 1,5 \cdot Q2;$

7)  $G + Q1 + 0,7 \cdot Q2 + 0,6 \cdot Q3;$

8)  $G + Q2 + 0,7 \cdot Q1 + 0,6 \cdot Q3;$

9)  $G + Q3 + 0,7 \cdot Q1 + 0,7 \cdot Q2;$

10)  $G + 0,7 \cdot Q1 + 0,2 \cdot Q2 + 0 \cdot Q3;$

11)  $G + 0,5 \cdot Q2 + 0,6 \cdot Q1 + 0 \cdot Q3;$

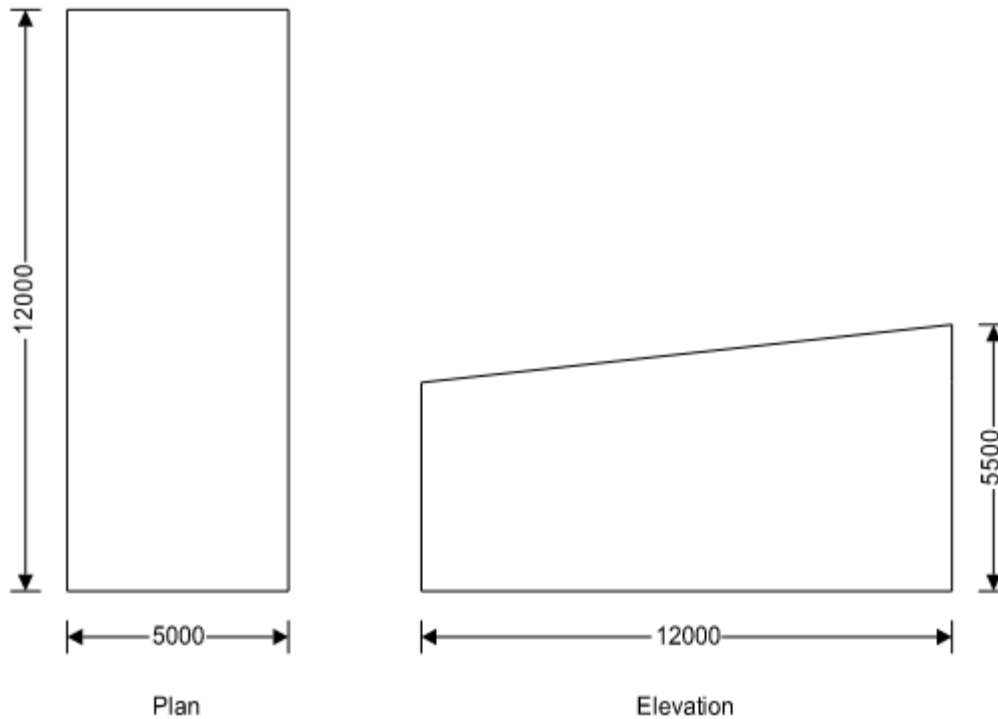
12)  $G + 0,2 \cdot Q3 + 0,6 \cdot Q1 + 0,2 \cdot Q2;$

13)  $G + 0,6 \cdot Q1 + 0,2 \cdot Q2 + 0 \cdot Q3;$

## WIND LOADS

In accordance with EN1991-1-3:2005+A1:2010 and the recommended values

Tedds calculation version 3.0.22



### **Building data**

Type of roof	Monopitch
Length of building	L = <b>5000</b> mm
Width of building	W = <b>12000</b> mm
Height to low eaves	H = <b>4309</b> mm
Pitch of roof	$\alpha = 5.7$ deg
Total height	h = <b>5500</b> mm

### **Basic values**

Fundamental basic wind velocity	$v_{b,0} = 32.0$ m/s
Season factor	$C_{season} = 1.00$
Direction factor	$C_{dir} = 1.00$
Shape parameter K	<b>K = 0.2</b>
Exponent n	<b>n = 0.5</b>
Air density	$\rho = 1.250$ kg/m <sup>3</sup>

Probability factor	$C_{prob} = [(1 - K * \ln(-\ln(1-p)))/(1 - K * \ln(-\ln(0.98)))]^2 = 1.00$
Basic wind velocity (Exp. 4.1)	$V_b = C_{dir} * C_{season} * V_{b,0} * C_{prob} = 32.0 \text{ m/s}$
Reference mean velocity pressure	$q_b = 0.5 * \rho * V_b^2 = 0.640 \text{ kN/m}^2$

### Orography

Orography factor not significant	$C_o = 1.0$
Terrain category	I
Displacement height (sheltering effect excluded)	$h_{dis} = 0 \text{ mm}$

The velocity pressure for the windward face of the building with a 0 degree wind is to be considered as 1 part as the height h is less than b (cl.7.2.2)

The velocity pressure for the windward face of the building with a 90 degree wind is to be considered as 1 part as the height h is less than b (cl.7.2.2)

The velocity pressure for the windward face of the building with a 180 degree wind is to be considered as 2 parts as the height h is greater than b but less than 2b (cl.7.2.2)

### Peak velocity pressure - windward wall - Wind 0 deg and roof

Reference height (at which q is sought)	$z = 4309 \text{ mm}$
Displacement height (sheltering effects excluded)	$h_{dis} = 0 \text{ mm}$
Roughness length (Table 4.1)	$z_0 = 10 \text{ mm}$
Roughness length (Category II)	$z_{0,II} = 50 \text{ mm}$
Minimum height (Table 4.1)	$z_{min} = 1000 \text{ mm}$
Maximum height	$z_{max} = 200000 \text{ mm}$
Terrain factor	$k_r = 0.19 * (z_0 / z_{0,II})^{0.07} = 0.170$
Roughness factor	$C_r = k_r * \ln(z / z_0) = 1.03$
Mean wind	$V_m = C_r * C_o * V_b = 33.0 \text{ m/s}$
Turbulence factor	$k_t = 1.0$
Turbulence intensity	$I_v = k_t / (C_o * \ln(z / z_0)) = 0.165$
Peak velocity pressure	$q_p = (1 + 7 * I_v) * 0.5 * \rho * V_m^2 = 1.46 \text{ kN/m}^2$

### Structural factor

Structural factor	$C_s C_d = 1.000$
-------------------	-------------------

### Peak velocity pressure - windward wall - Wind 90 deg and roof

Reference height (at which q is sought)	$z = 5500 \text{ mm}$
Displacement height (sheltering effects excluded)	$h_{dis} = 0 \text{ mm}$
Terrain factor	$k_r = 0.19 * (z_0 / z_{0,II})^{0.07} = 0.170$
Roughness factor	$C_r = k_r * \ln(z / z_0) = 1.07$
Mean wind	$V_m = C_r * C_o * V_b = 34.3 \text{ m/s}$
Turbulence factor	$k_t = 1.0$
Turbulence intensity	$I_v = k_t / (C_o * \ln(z / z_0)) = 0.158$
Peak velocity pressure	$q_p = (1 + 7 * I_v) * 0.5 * \rho * V_m^2 = 1.55 \text{ kN/m}^2$

**Peak velocity pressure - windward wall (lower part) - Wind 180 deg**

Reference height (at which q is sought)	$z = 5000\text{mm}$
Displacement height (sheltering effects excluded)	$h_{dis} = 0\text{ mm}$
Terrain factor	$k_r = 0.19 * (z_0 / z_{0,B})^{0.07} = 0.170$
Roughness factor	$c_r = k_r * \ln(z / z_0) = 1.05$
Mean wind	$v_m = c_r * c_o * v_b = 33.8\text{ m/s}$
Turbulence factor	$k_t = 1.0$
Turbulence intensity	$I_v = k_t / (c_o * \ln(z / z_0)) = 0.161$
Peak velocity pressure	$q_p = (1 + 7 * I_v) * 0.5 * \rho * v_m^2 = 1.51\text{ kN/m}^2$

**Peak velocity pressure - windward wall (upper part) - Wind 180 deg and roof**

Reference height (at which q is sought)	$z = 5500\text{mm}$
Displacement height (sheltering effects excluded)	$h_{dis} = 0\text{ mm}$
Terrain factor	$k_r = 0.19 * (z_0 / z_{0,B})^{0.07} = 0.170$
Roughness factor	$c_r = k_r * \ln(z / z_0) = 1.07$
Mean wind	$v_m = c_r * c_o * v_b = 34.3\text{ m/s}$
Turbulence factor	$k_t = 1.0$
Turbulence intensity	$I_v = k_t / (c_o * \ln(z / z_0)) = 0.158$
Peak velocity pressure	$q_p = (1 + 7 * I_v) * 0.5 * \rho * v_m^2 = 1.55\text{ kN/m}^2$

**Peak velocity pressure for internal pressure**

Peak velocity pressure – internal (as roof press.)	$q_{p,i} = 1.55\text{ kN/m}^2$
--	--------------------------------

**Pressures and forces**

Net pressure	$p = C_{sCd} * q_p * C_{pe} - q_{p,i} * C_{pi}$
Net force	$F_w = p_w * A_{ref}$

**Roof load case 1 - Wind 0,  $c_{pi}$  0.20,  $-c_{pe}$** 

Zone	Ext pressure coefficient $C_{pe}$	Peak velocity pressure $q_{p,i}$ (kN/m <sup>2</sup> )	Net pressure $p$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force $F_w$ (kN)
F (-ve)	-1.65	1.55	-2.86	1.26	-3.59
G (-ve)	-1.17	1.55	-2.13	1.26	-2.67
H (-ve)	-0.58	1.55	-1.21	57.78	-69.80

Total vertical net force  $F_{w,v} = -75.70\text{ kN}$

Total horizontal net force  $F_{w,h} = -7.51\text{ kN}$

**Walls load case 1 - Wind 0,  $c_{pi}$  0.20,  $-c_{pe}$**

Zone	Ext pressure coefficient $c_{pe}$	Peak velocity pressure $q_p$ , (kN/m <sup>2</sup> )	Net pressure $p$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force $F_w$ (kN)
A	-1.20	1.55	-2.17	4.36	-9.45
B	-0.80	1.55	-1.55	18.43	-28.54
C	-0.50	1.55	-1.08	36.07	-39.11
D	0.73	1.46	0.75	21.55	16.25
E	-0.36	1.46	-0.83	27.50	-22.81

**Overall loading**

Equiv leeward net force for overall section

$$F_l = F_{w,wE} = \mathbf{-22.8 \text{ kN}}$$

Net windward force for overall section

$$F_w = F_{w,wD} = \mathbf{16.2 \text{ kN}}$$

Lack of correlation (cl.7.2.2(3) – Note)

$$f_{corr} = \mathbf{0.85}$$
 as  $h/W$  is 0.458

Overall loading overall section

$$F_{w,D} = f_{corr} * (F_w - F_l) + F_{w,h} = \mathbf{25.7 \text{ kN}}$$

**Roof load case 2 - Wind 0,  $c_{pi}$  -0.3,  $+c_{pe}$**

Zone	Ext pressure coefficient $c_{pe}$	Peak velocity pressure $q_p$ , (kN/m <sup>2</sup> )	Net pressure $p$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force $F_w$ (kN)
F (+ve)	0.01	1.55	0.49	1.26	0.61
G (+ve)	0.01	1.55	0.49	1.26	0.61
H (+ve)	0.01	1.55	0.49	57.78	28.05

Total vertical net force

$$F_{w,v} = \mathbf{29.13 \text{ kN}}$$

Total horizontal net force

$$F_{w,h} = \mathbf{2.89 \text{ kN}}$$

**Walls load case 2 - Wind 0,  $c_{pi}$  -0.3,  $+c_{pe}$**

Zone	Ext pressure coefficient $c_{pe}$	Peak velocity pressure $q_p$ , (kN/m <sup>2</sup> )	Net pressure $p$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force $F_w$ (kN)
A	-1.20	1.55	-1.39	4.36	-6.08
B	-0.80	1.55	-0.77	18.43	-14.27
C	-0.50	1.55	-0.31	36.07	-11.17
D	0.73	1.46	1.53	21.55	32.93
E	-0.36	1.46	-0.06	27.50	-1.51

### Overall loading

Equiv leeward net force for overall section  $F_l = F_{w,wE} = -1.5$  kN  
Net windward force for overall section  $F_w = F_{w,wD} = 32.9$  kN  
Lack of correlation (cl.7.2.2(3) – Note)  $f_{corr} = 0.85$  as  $h/W$  is 0.458  
Overall loading overall section  $F_{w,D} = f_{corr} * (F_w - F_l) + F_{w,h} = 32.2$  kN

### Roof load case 3 - Wind 90, $c_{pi}$ 0.20, $-c_{pe}$

Zone	Ext pressure coefficient $c_{pe}$	Peak velocity pressure $q_p$ , (kN/m <sup>2</sup> )	Net pressure $p$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force $F_w$ (kN)
FU (-ve)	-2.12	1.55	-3.59	3.04	-10.93
FL (-ve)	-2.07	1.55	-3.51	3.04	-10.67
G (-ve)	-1.81	1.55	-3.11	7.19	-22.33
H (-ve)	-0.61	1.55	-1.26	47.03	-59.25

Total vertical net force  $F_{w,v} = -102.68$  kN

Total horizontal net force  $F_{w,h} = 0.00$  kN

### Walls load case 3 - Wind 90, $c_{pi}$ 0.20, $-c_{pe}$

Zone	Ext pressure coefficient $c_{pe}$	Peak velocity pressure $q_p$ , (kN/m <sup>2</sup> )	Net pressure $p$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force $F_w$ (kN)
A <sub>U</sub>	-1.20	1.55	-2.17	12.10	-26.24
B <sub>U</sub>	-0.80	1.55	-1.55	15.40	-23.85
A <sub>L</sub>	-1.20	1.46	-2.06	9.48	-19.57
B <sub>L</sub>	-0.80	1.46	-1.48	12.06	-17.85
D	0.80	1.55	0.93	58.86	54.70
E	-0.51	1.55	-1.09	58.86	-64.27

### Overall loading

Equiv leeward net force for overall section  $F_l = F_{w,wE} = -64.3$  kN  
Net windward force for overall section  $F_w = F_{w,wD} = 54.7$  kN  
Lack of correlation (cl.7.2.2(3) – Note)  $f_{corr} = 0.85$  as  $h/L$  is 1.100  
Overall loading overall section  $F_{w,D} = f_{corr} * (F_w - F_l) + F_{w,h} = 101.6$  kN

**Roof load case 4 - Wind 90,  $c_{pi}$  -0.30, -  $c_{pe}$** 

Zone	Ext pressure coefficient $C_{pe}$	Peak velocity pressure $q_p$ , (kN/m <sup>2</sup> )	Net pressure $p$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force $F_w$ (kN)
FU (-ve)	-2.12	1.55	-2.82	3.04	-8.57
FL (-ve)	-2.07	1.55	-2.74	3.04	-8.32
G (-ve)	-1.81	1.55	-2.33	7.19	-16.77
H (-ve)	-0.61	1.55	-0.49	47.03	-22.83

Total vertical net force  $F_{w,v} = -56.21$  kNTotal horizontal net force  $F_{w,h} = 0.00$  kN**Walls load case 4 - Wind 90,  $c_{pi}$  -0.30, -  $c_{pe}$** 

Zone	Ext pressure coefficient $C_{pe}$	Peak velocity pressure $q_p$ , (kN/m <sup>2</sup> )	Net pressure $p$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force $F_w$ (kN)
A <sub>U</sub>	-1.20	1.55	-1.39	12.10	-16.87
B <sub>U</sub>	-0.80	1.55	-0.77	15.40	-11.93
A <sub>L</sub>	-1.20	1.46	-1.29	9.48	-12.22
B <sub>L</sub>	-0.80	1.46	-0.70	12.06	-8.50
D	0.80	1.55	1.70	58.86	100.28
E	-0.51	1.55	-0.32	58.86	-18.69

**Overall loading**Equiv leeward net force for overall section  $F_i = F_{w,wE} = -18.7$  kNNet windward force for overall section  $F_w = F_{w,wD} = 100.3$  kNLack of correlation (cl.7.2.2(3) – Note)  $f_{corr} = 0.85$  as  $h/L$  is 1.100Overall loading overall section  $F_{w,D} = f_{corr} * (F_w - F_i) + F_{w,h} = 101.6$  kN**Roof load case 5 - Wind 180,  $c_{pi}$  0.20, -  $c_{pe}$** 

Zone	Ext pressure coefficient $C_{pe}$	Peak velocity pressure $q_p$ , (kN/m <sup>2</sup> )	Net pressure $p$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force $F_w$ (kN)
F (-ve)	-2.31	1.55	-3.89	1.26	-4.89
G (-ve)	-1.30	1.55	-2.32	1.26	-2.92
H (-ve)	-0.81	1.55	-1.56	57.78	-90.10

Total vertical net force  $F_{w,v} = -97.43$  kNTotal horizontal net force  $F_{w,h} = -9.67$  kN



**Walls load case 5 - Wind 180,  $c_{pi}$  0.20, -  $c_{pe}$**

Zone	Ext pressure coefficient $c_{pe}$	Peak velocity pressure $q_p$ , (kN/m <sup>2</sup> )	Net pressure $p$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force $F_w$ (kN)
A	-1.20	1.55	-2.17	5.45	-11.82
B	-0.80	1.55	-1.55	22.40	-34.69
C	-0.50	1.55	-1.08	35.38	-38.36
D <sub>b</sub>	0.73	1.51	0.79	25.00	19.81
D <sub>u</sub>	0.73	1.55	0.82	2.50	2.05
E	-0.36	1.55	-0.86	21.55	-18.54

**Overall loading**

Equiv leeward net force for upper section	$F_l = F_{w,wE} / A_{ref,wE} * A_{ref,wu} = -2.2$ kN
Net windward force for upper section	$F_w = F_{w,wu} = 2.0$ kN
Lack of correlation (cl.7.2.2(3) – Note)	$f_{corr} = 0.85$ as $h/L$ is 1.100
Overall loading upper section	$F_{w,u} = f_{corr} * (F_w - F_l) - F_{w,h} = 13.3$ kN
Equiv leeward net force for bottom section	$F_l = F_{w,wE} / A_{ref,wE} * A_{ref,wb} = -21.5$ kN
Net windward force for bottom section	$F_w = F_{w,wb} = 19.8$ kN
Lack of correlation (cl.7.2.2(3) – Note)	$f_{corr} = 0.85$ as $h/L$ is 1.100
Overall loading bottom section	$F_{w,b} = f_{corr} * (F_w - F_l) = 35.3$ kN

**Roof load case 6 - Wind 180,  $c_{pi}$  -0.30, -  $c_{pe}$**

Zone	Ext pressure coefficient $c_{pe}$	Peak velocity pressure $q_p$ , (kN/m <sup>2</sup> )	Net pressure $p$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force $F_w$ (kN)
F (-ve)	-2.31	1.55	-3.12	1.26	-3.92
G (-ve)	-1.30	1.55	-1.55	1.26	-1.95
H (-ve)	-0.81	1.55	-0.78	57.78	-45.35

Total vertical net force	$F_{w,v} = -50.96$ kN
Total horizontal net force	$F_{w,h} = -5.06$ kN

**Walls load case 6 - Wind 180,  $c_{pi}$  -0.30, -  $c_{pe}$**

Zone	Ext pressure coefficient $c_{pe}$	Peak velocity pressure $q_p$ , (kN/m <sup>2</sup> )	Net pressure $p$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force $F_w$ (kN)
A	-1.20	1.55	-1.39	5.45	-7.60
B	-0.80	1.55	-0.77	22.40	-17.35
C	-0.50	1.55	-0.31	35.38	-10.96
D <sub>b</sub>	0.73	1.51	1.57	25.00	39.17
D <sub>u</sub>	0.73	1.55	1.59	2.50	3.98
E	-0.36	1.55	-0.09	21.55	-1.85

**Overall loading**

Equip leeward net force for upper section

$$F_l = F_{w,WE} / A_{ref,WE} * A_{ref,WU} = -0.2 \text{ kN}$$

Net windward force for upper section

$$F_w = F_{w,WU} = 4.0 \text{ kN}$$

Lack of correlation (cl.7.2.2(3) – Note)

$$f_{corr} = 0.85 \text{ as } h/L \text{ is } 1.100$$

Overall loading upper section

$$F_{w,U} = f_{corr} * (F_w - F_l) - F_{w,h} = 8.6 \text{ kN}$$

Equip leeward net force for bottom section

$$F_l = F_{w,WE} / A_{ref,WE} * A_{ref,Wb} = -2.2 \text{ kN}$$

Net windward force for bottom section

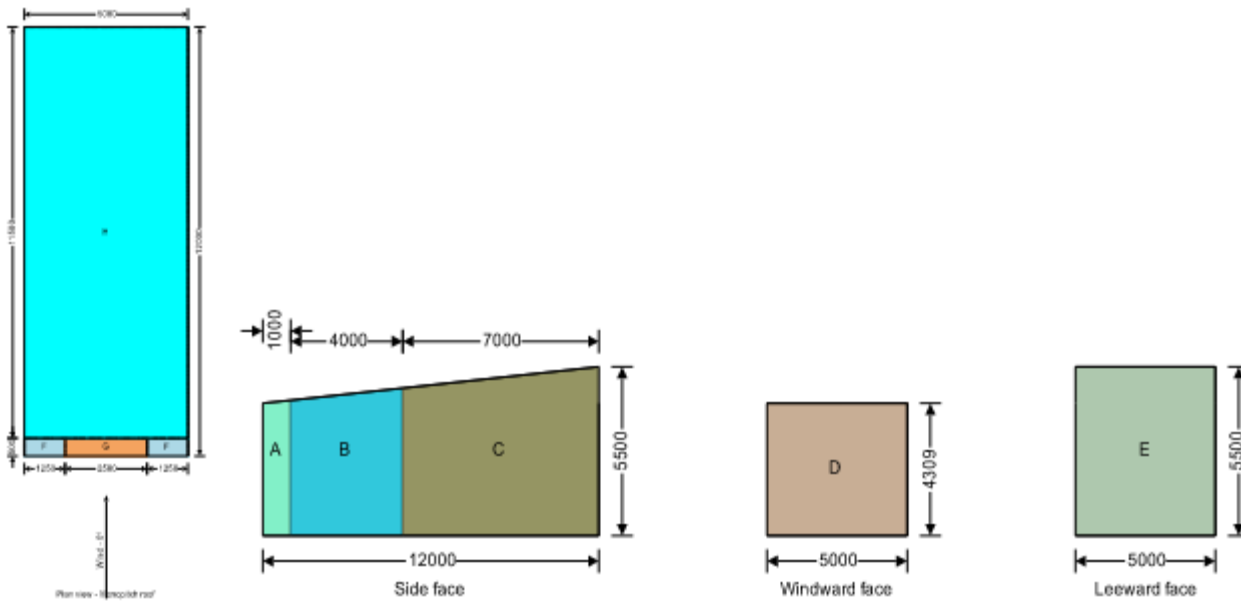
$$F_w = F_{w,Wb} = 39.2 \text{ kN}$$

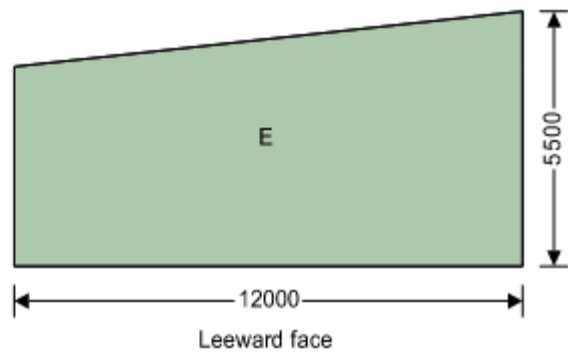
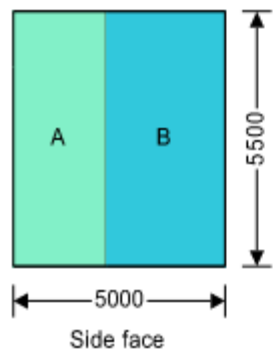
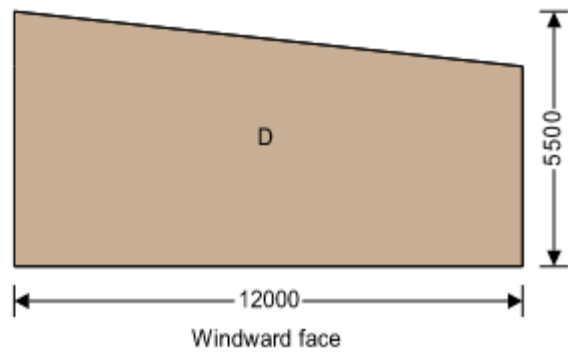
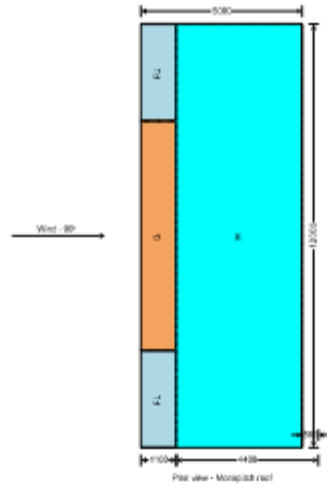
Lack of correlation (cl.7.2.2(3) – Note)

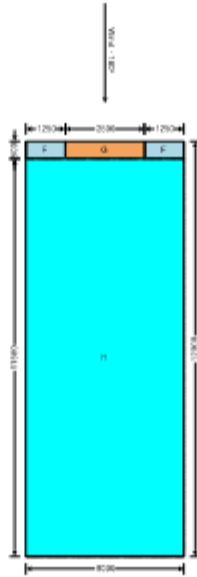
$$f_{corr} = 0.85 \text{ as } h/L \text{ is } 1.100$$

Overall loading bottom section

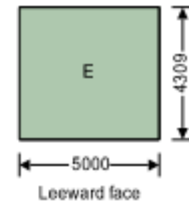
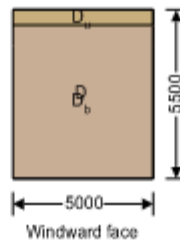
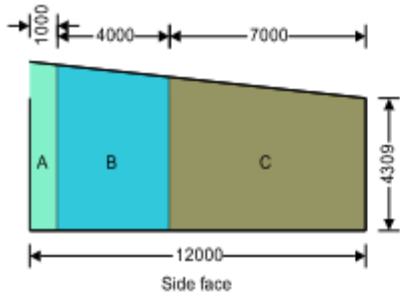
$$F_{w,b} = f_{corr} * (F_w - F_l) = 35.3 \text{ kN}$$







Plan view - Molepolder wall



---

## **2. STRUCTURAL ANALYSIS**

### **2.1 BUILDING DESCRIPTION**

The structure of the garage frame is 5000 mm in width and 12000 mm in length. It consists of roof trusses 300 mm wide, mezzanine trusses 250 & 350 mm wide, terrace truss 300 mm wide, trusses spacing 600 mm. Wall frame stud spacing is 600mm.

All steel members are the cold-formed C section 100 x 50 x 15 x 1.2 mm. Foundation - screw piles, step from 0.925 m to 1.65 m.

The design of the structure is based on the requirements of the LST EN 1990:2004/A1:2006/AC:2010 Eurocode Part 1-3 and reference codes.

The analytical model is presented as a spatial model.

Structural analysis is done in SCIA Engineer 20.0 software. This software allows automatic determination of the load combination that causes highest forces in structural members for further analysis and cross section selection. Governing load cases are shown in the sections "CHECKING STEEL ELEMENTS".

To determine the design forces from dynamic loads (earthquake), two types of calculations are used: Modal Mode and Response Spectrum Method

#### *Modal Mode:*

This approach allows the modal analysis of the structure, setting the first n values and eigenvectors of the structure.

The available analysis methods: subspace iteration, Lanczos method and the basis reduction method.

Iterations will be completed if the following condition is met: where:

$$\frac{|\omega_i^k - \omega_i^{k-1}|}{|\omega_i^k|} < tolerance$$

$i = 1, 2, \dots, n$  vibration modes,  $k$  - number of iterations.

Upper limit is the period value (pulsation, frequency), which describes that in the range, (0, upper limit) the following values and eigenvectors will be set. Sturm check, which allows finding the skipped pulsations, is possible.

---

*Response Spectrum Method:*

Seismic analysis is based on the response spectrum method. All data is defined the same way as in modal analysis. Additionally, parameters required by a specific national code to establish the response spectrum shape must be specified. Calculations and results are the same as those for spectral analysis.

In addition to results obtained from modal analysis, for each eigenform the seismic analysis provides the following values:

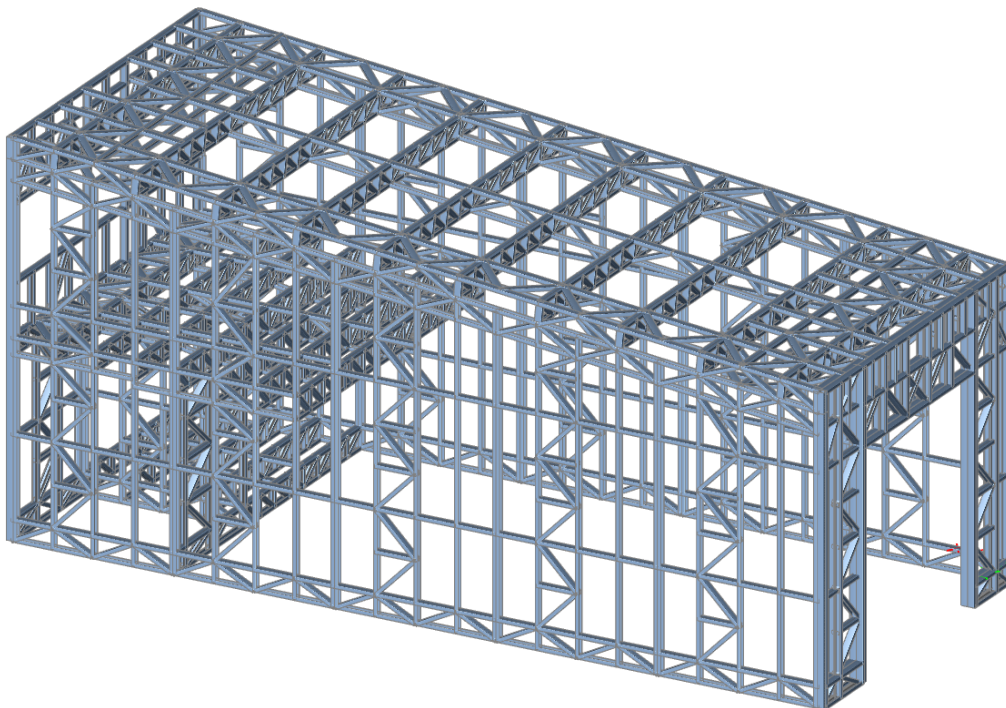
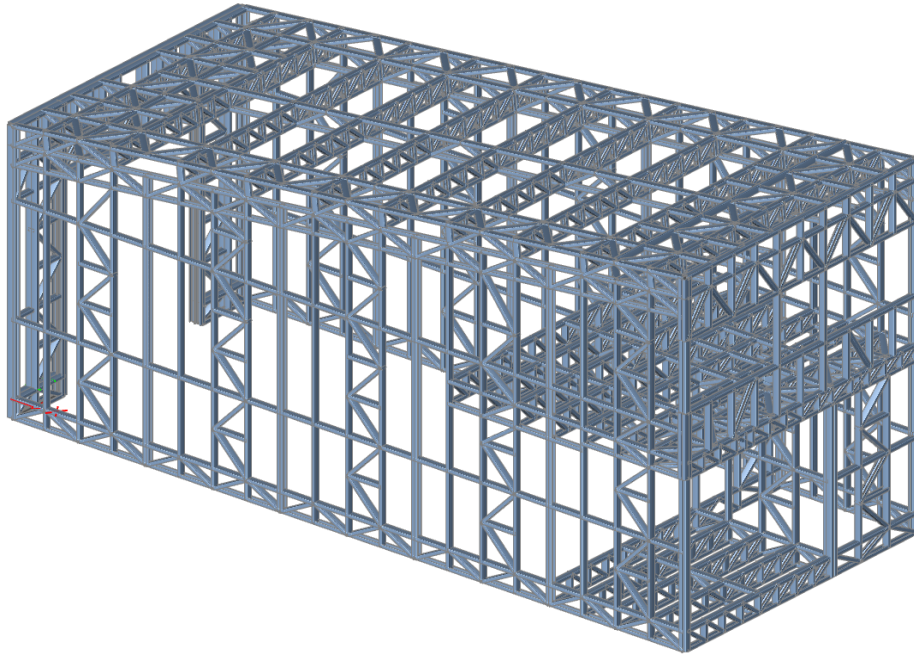
- Seismic excitation multiplier (value of the accelerating excitation spectrum).
- Seismic participation factors calculated as those for the modal analysis. However, vector D describing excitation direction is user defined. Coefficients are specified for each dynamic degree of freedom according to the method selected in Job Preferences. (Maximum or Distinct).
- Seismic mode coefficients as a product of the seismic excitation factor and the respective seismic participation factor for each dynamic degree of freedom.
- Displacements, internal forces and reactions for each form of vibration or quadratic combination calculated with the SRSS or CQC method.
- Pseudostatic forces, which are the external loads generated according to the seismic analysis assumptions.

For seismic analysis, the same quadratic combination methods as those for spectral analysis are available.

---

## **2.2 GENERAL SCHEME**

### **General views**

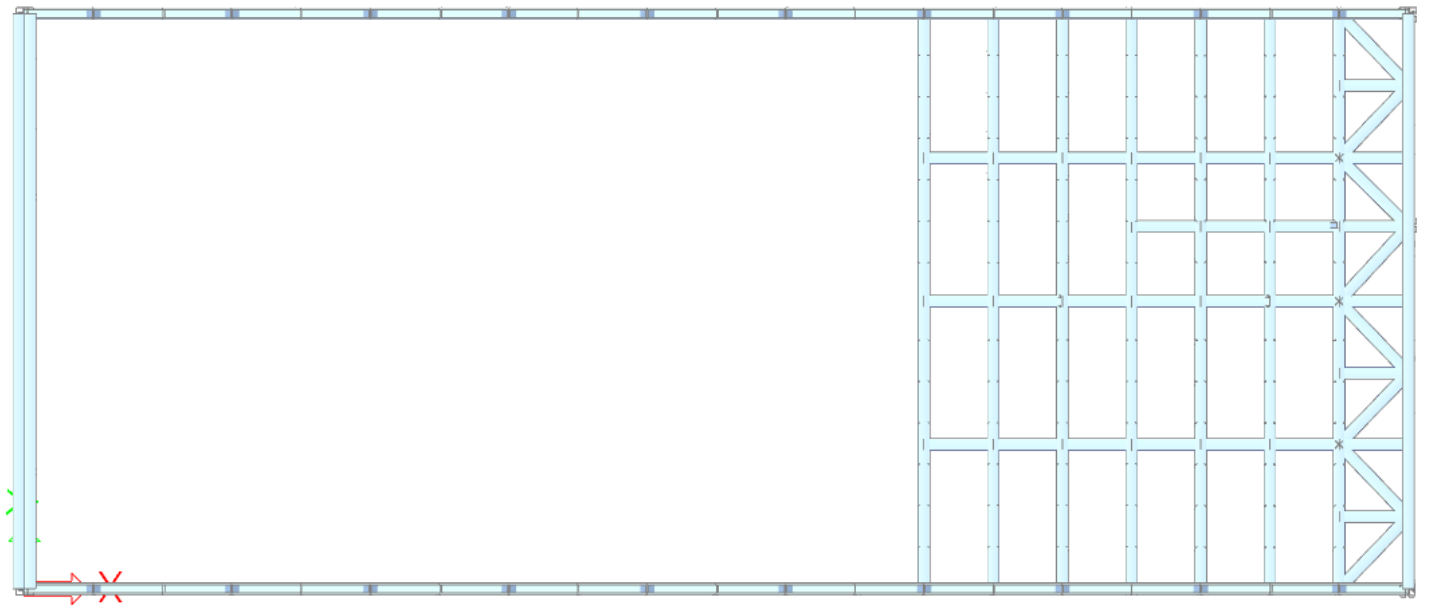


---

**First floor level**



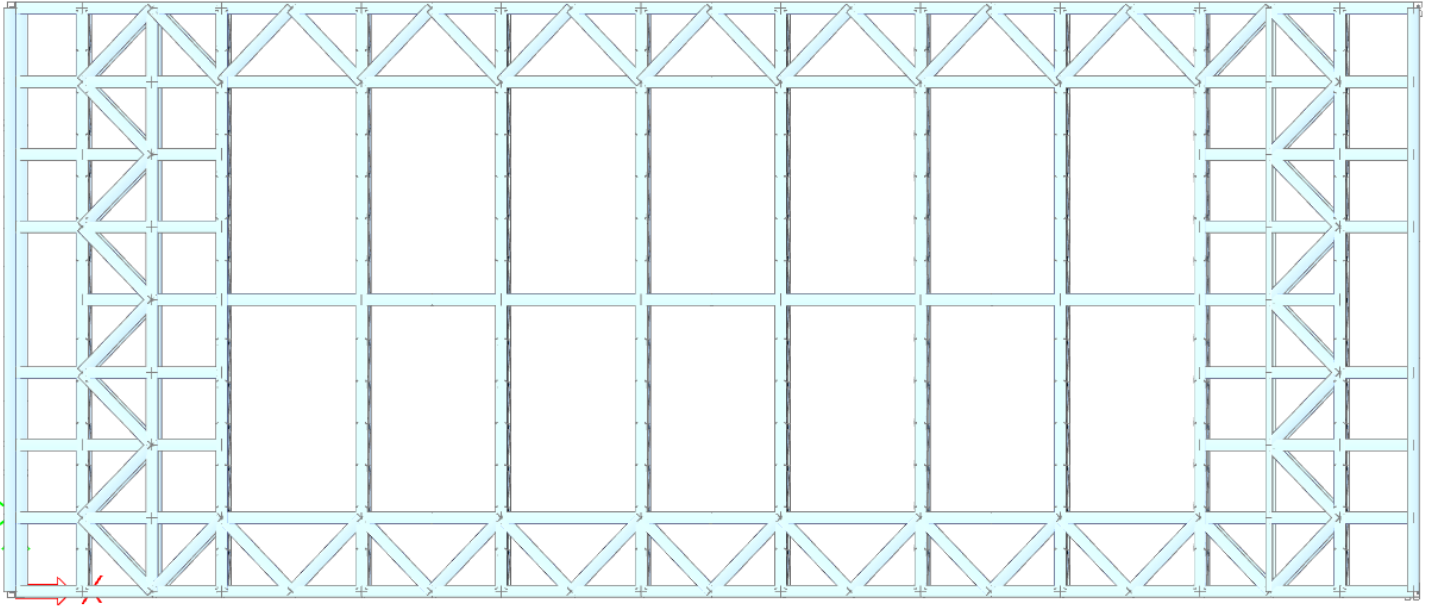
**Mezzanine level view**



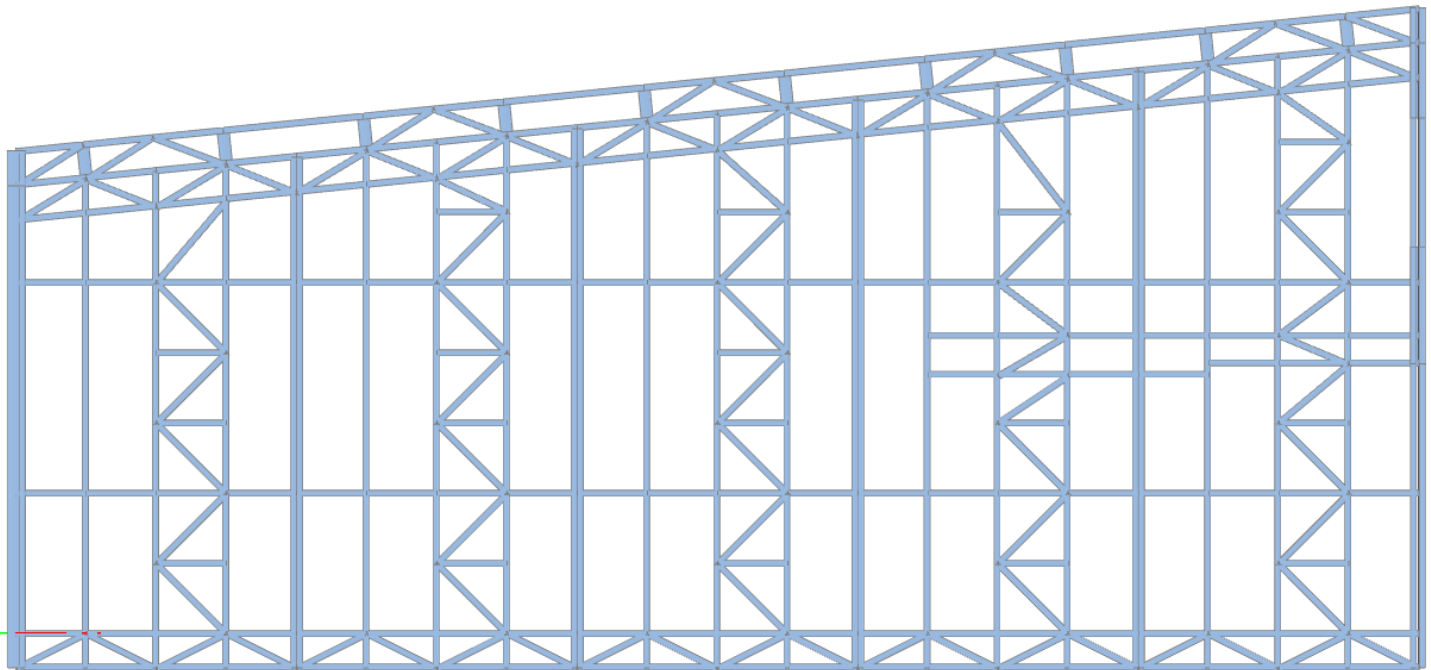


---

**Roof plan view**

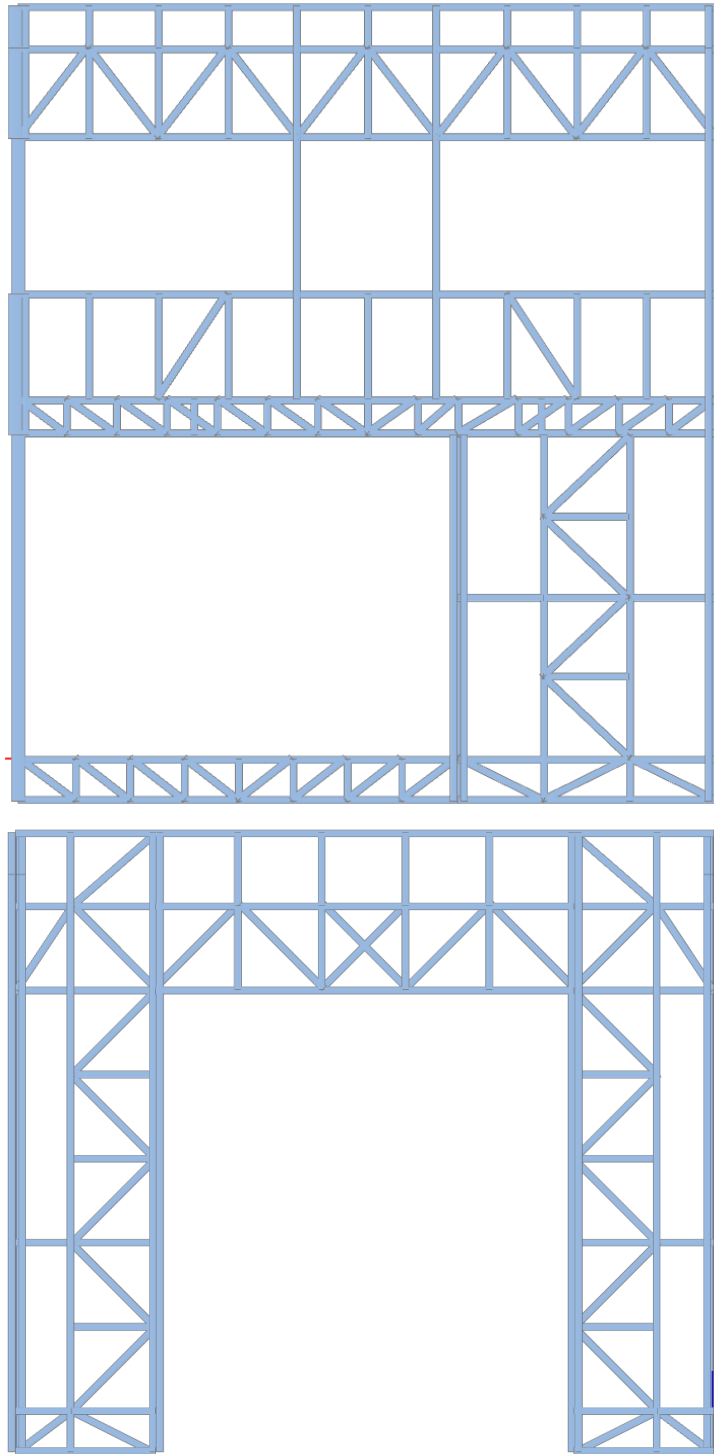


**Side wall view**



---

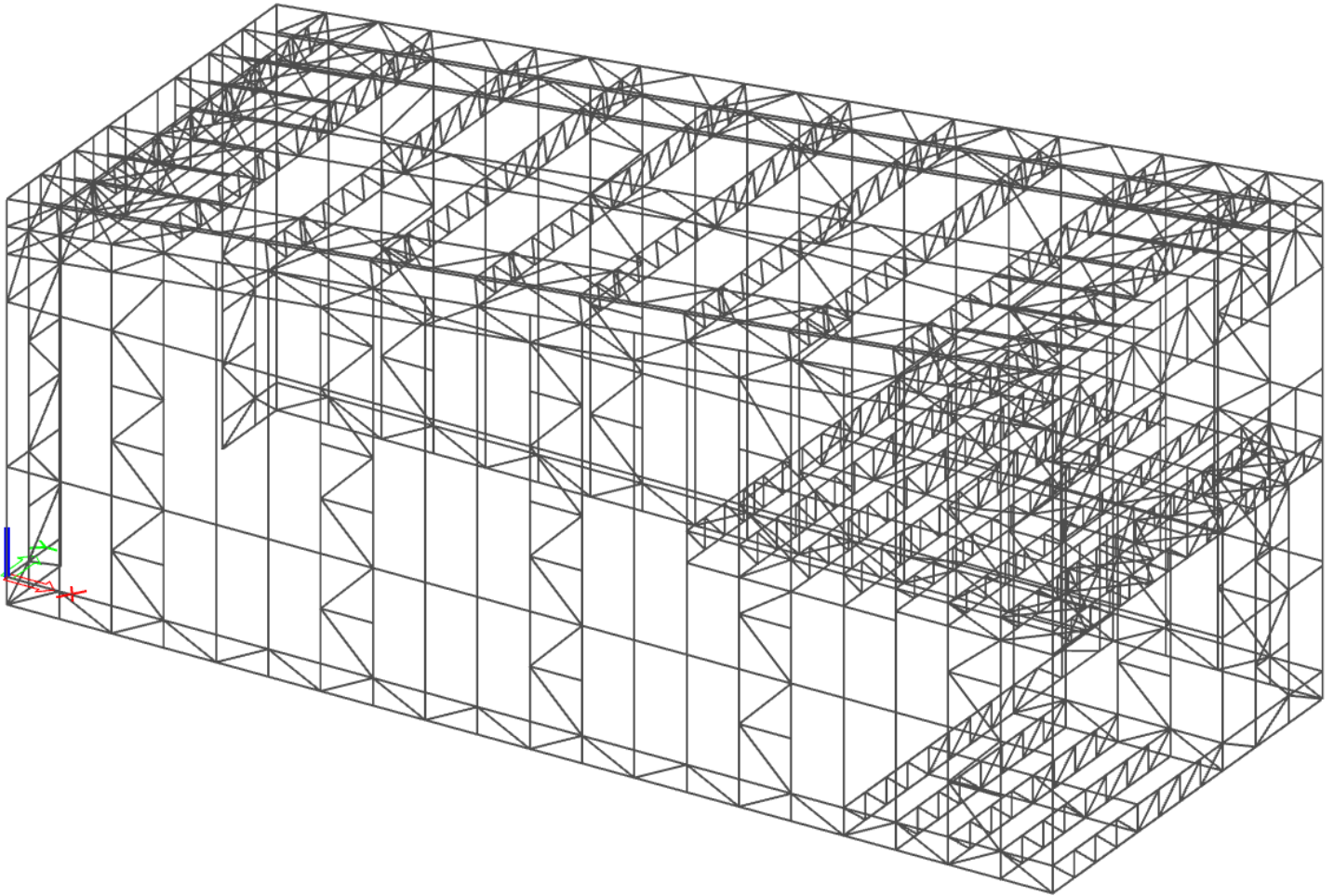
**End wall view**



---

### **2.3. APPLIED LOADS**

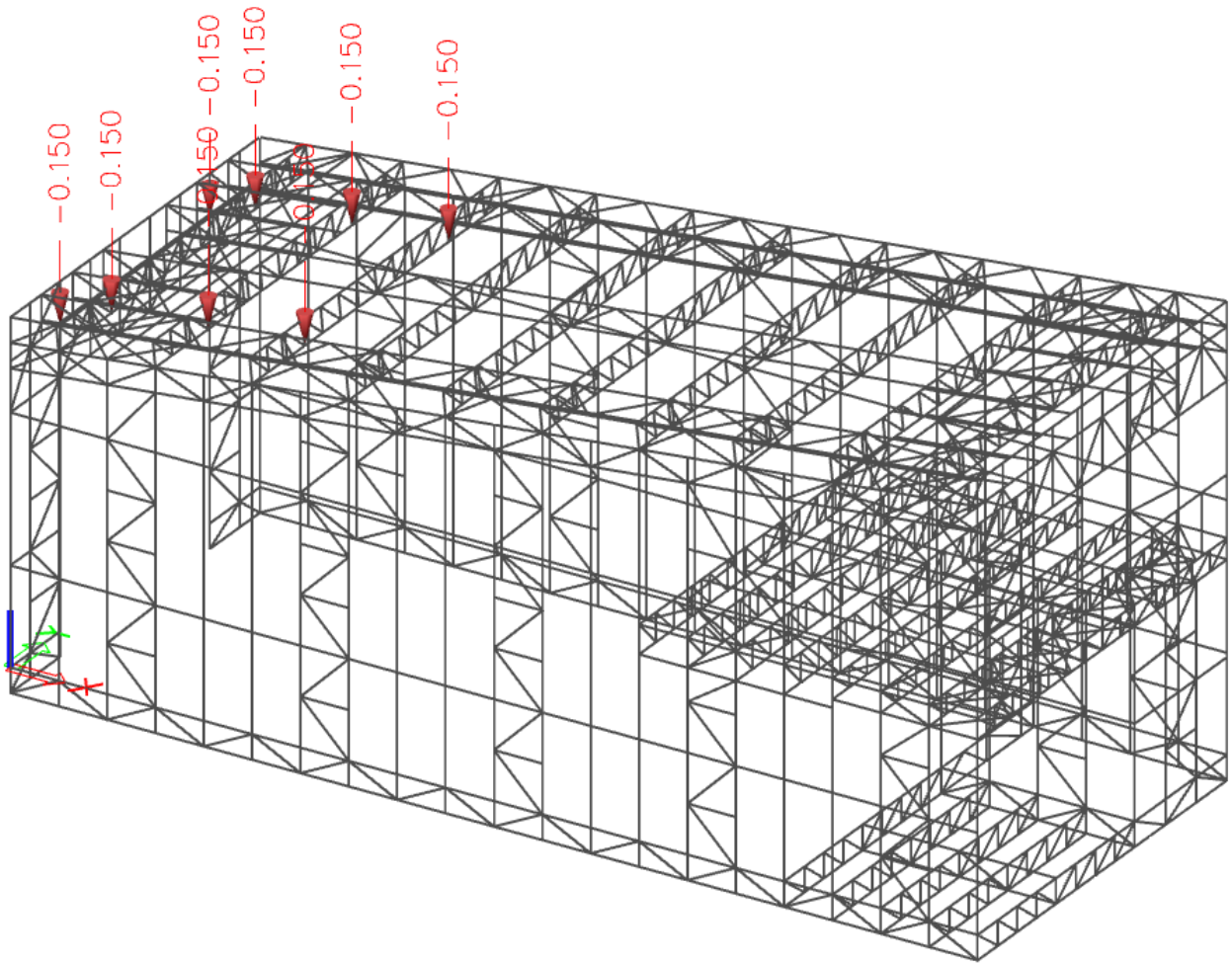
analytical model:





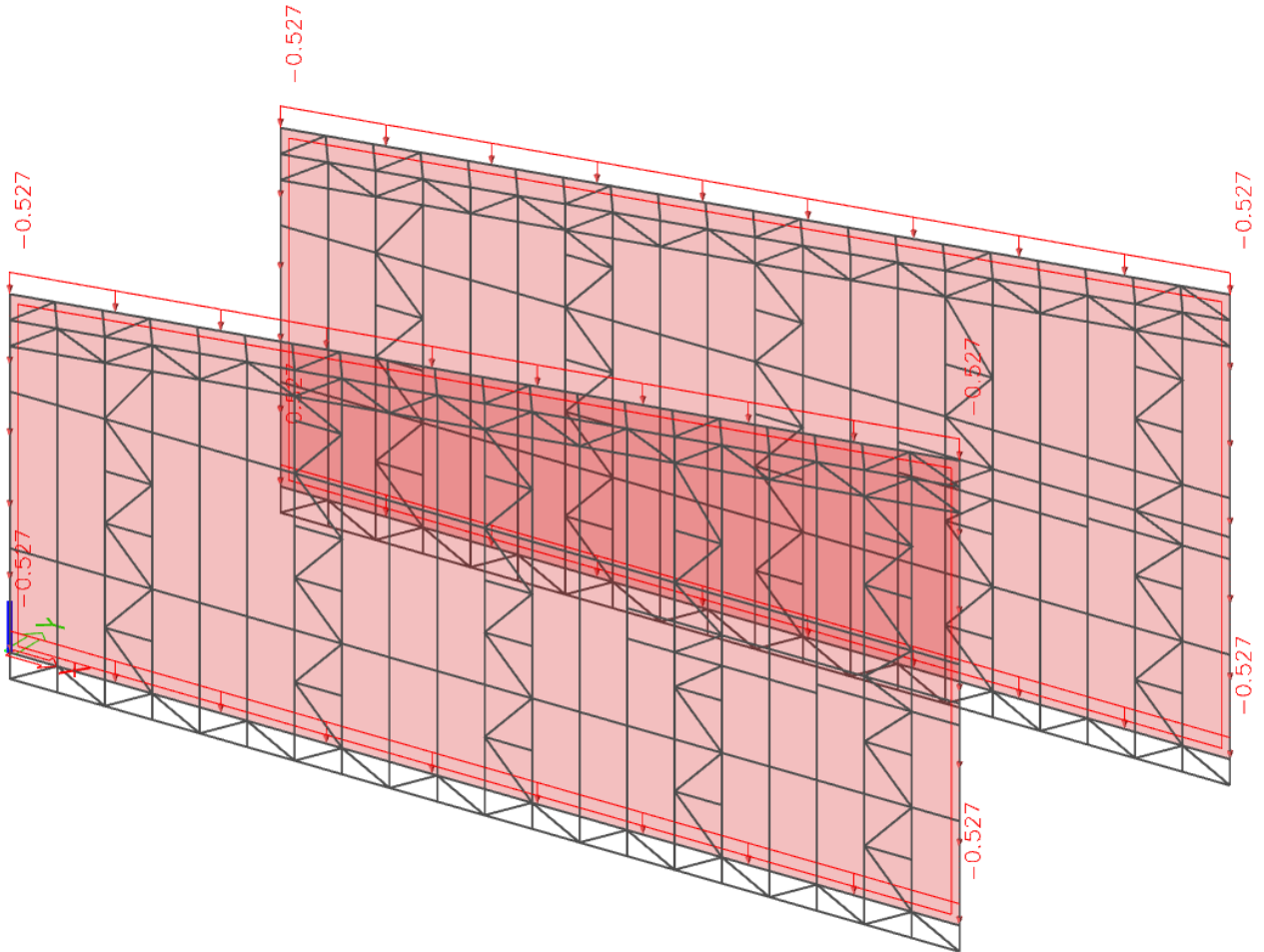
---

**Point load from an open garage door**



---

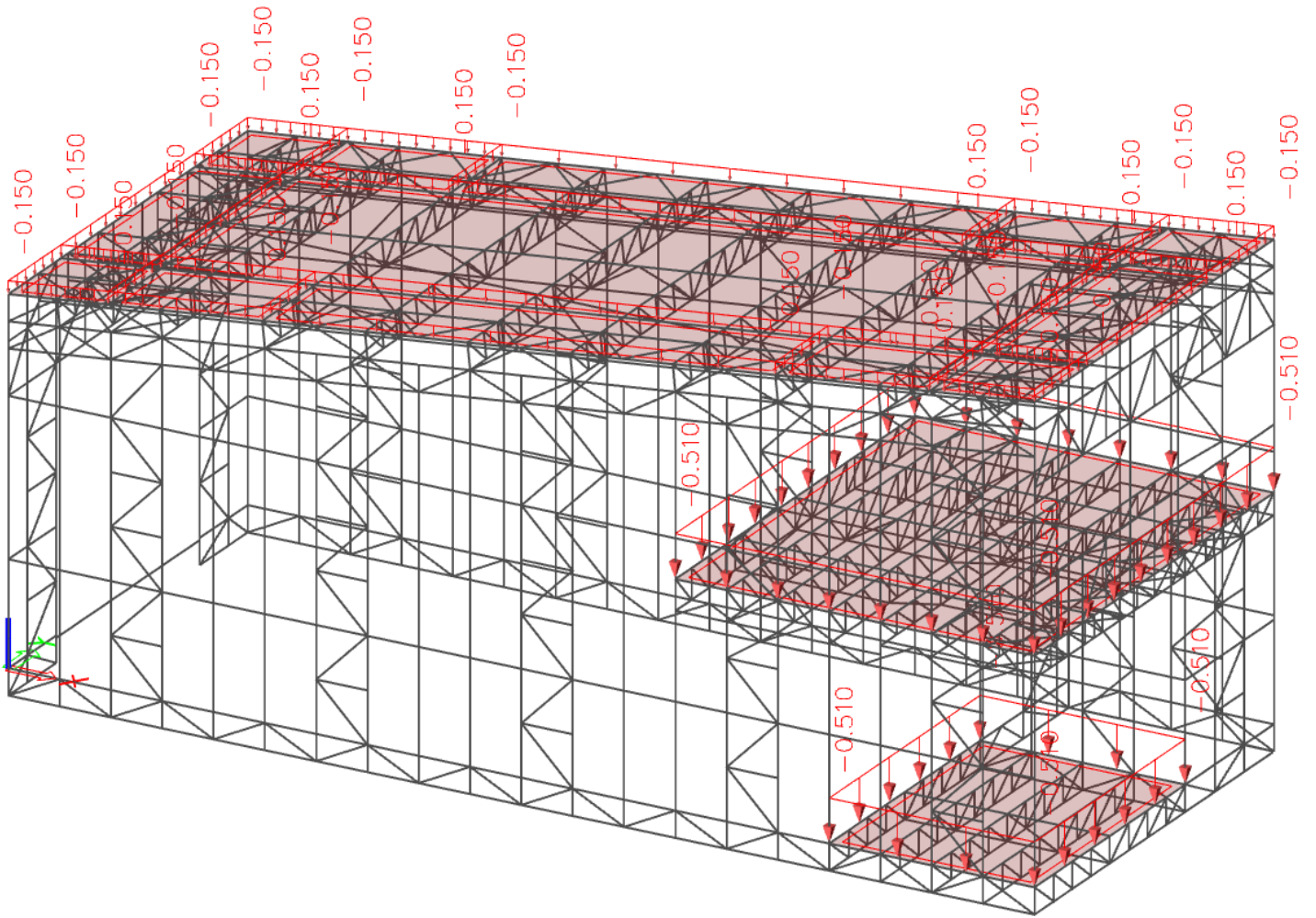
## Side walls dead loads







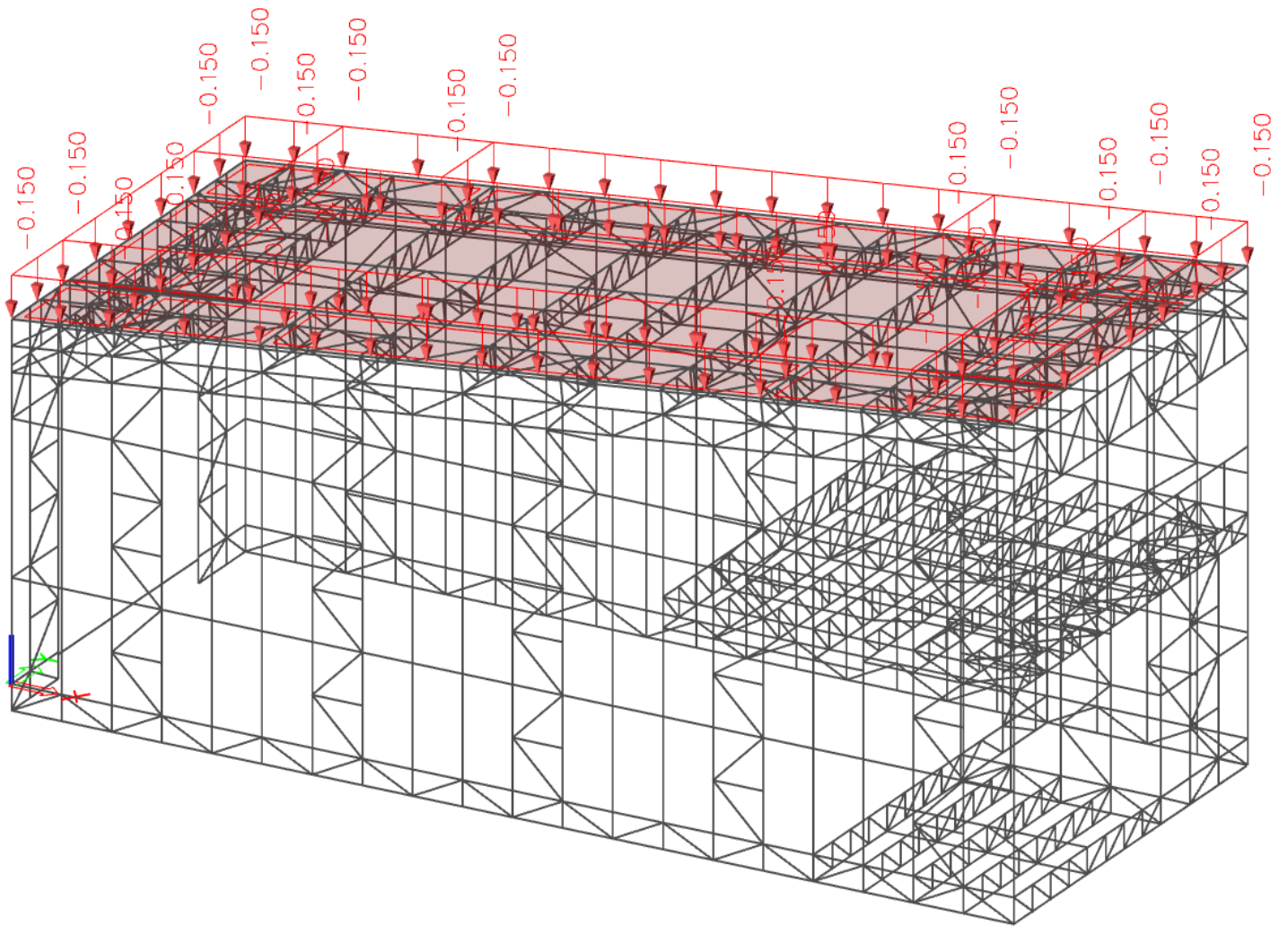
### 3. G2 - Roof & Floors dead loads.





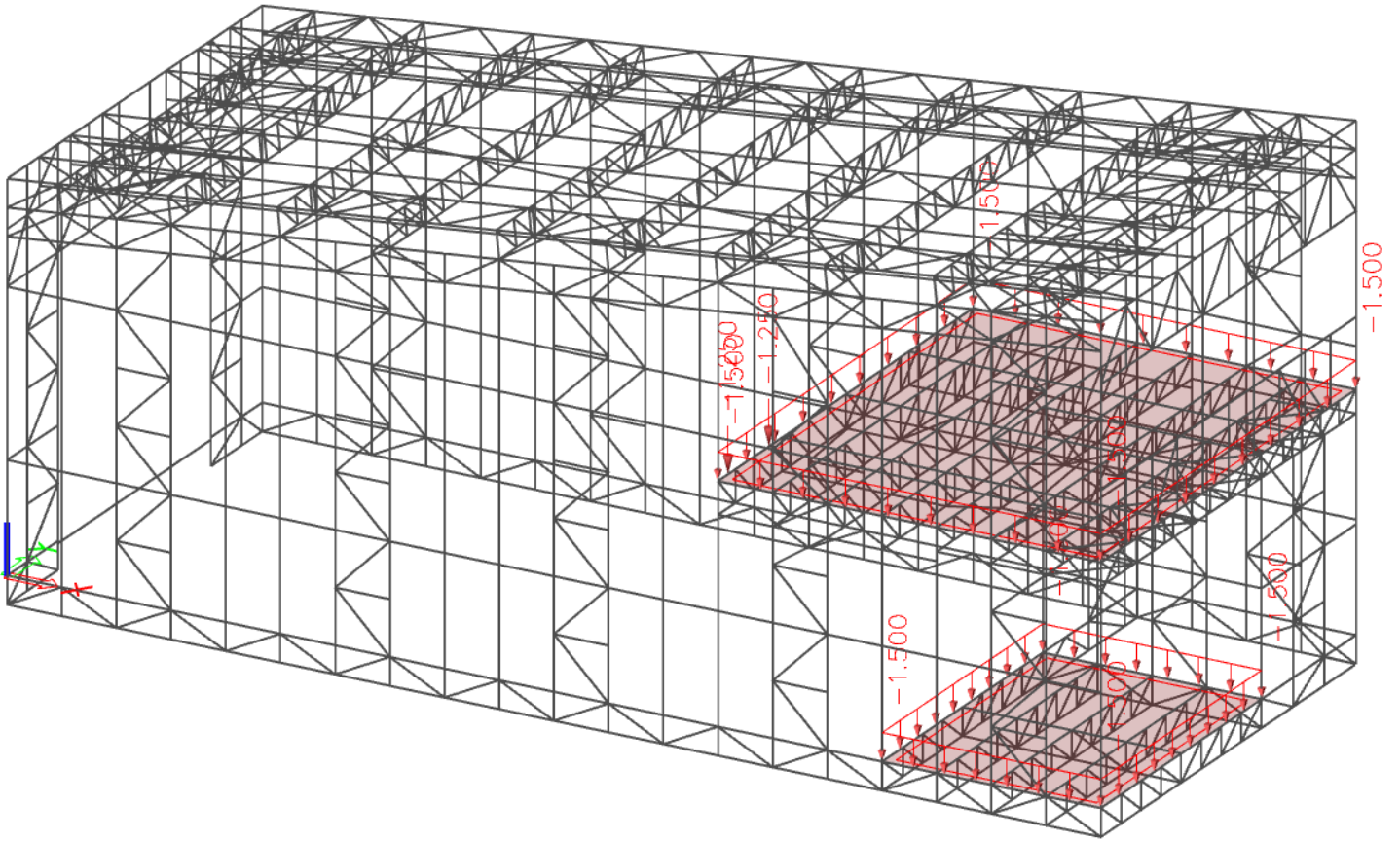
---

#### 4. G3 - Roof Engineering Equipment



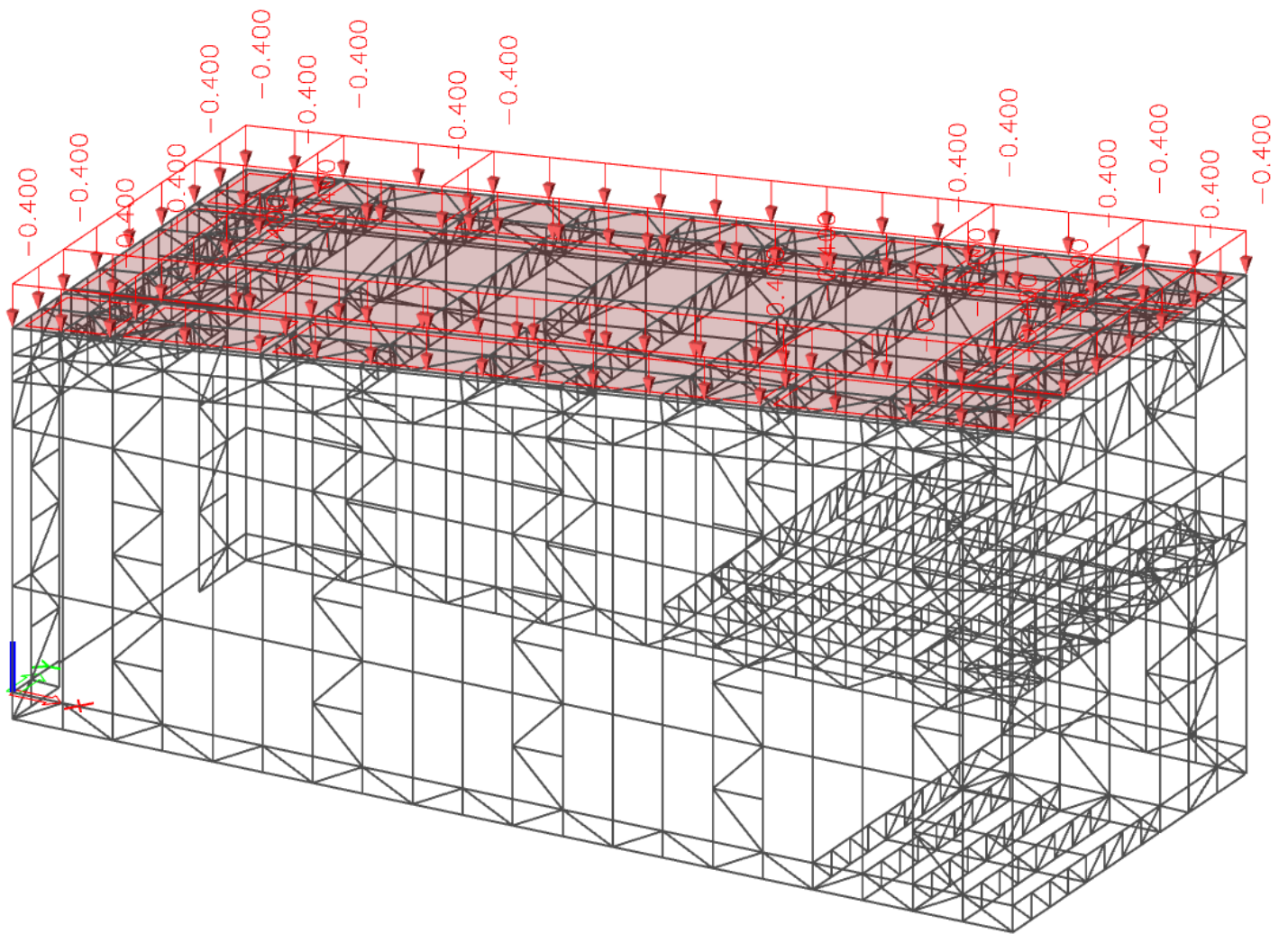
---

5. Q1 - Live load floor

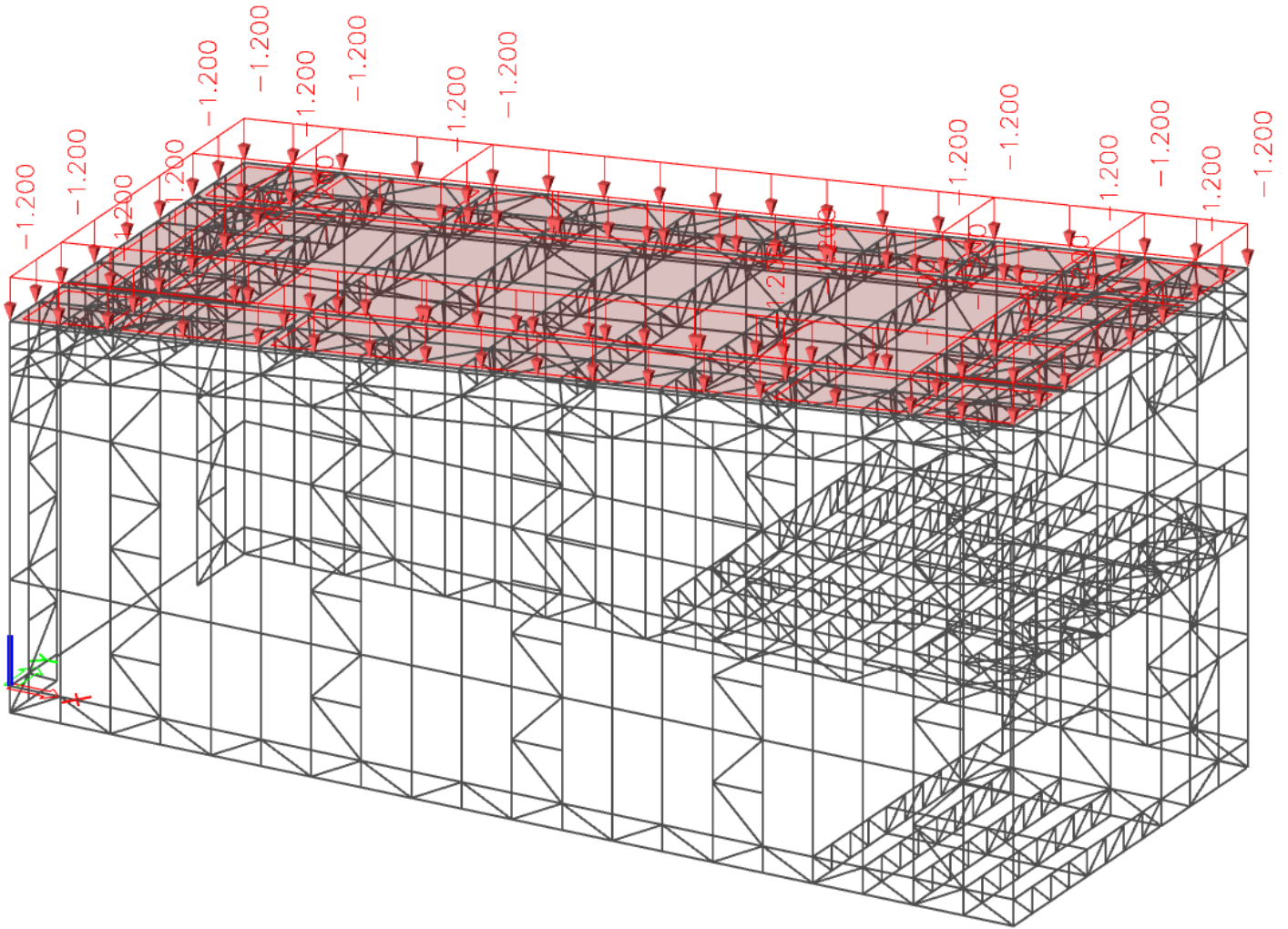


---

## 6. Q2 - Live load roof



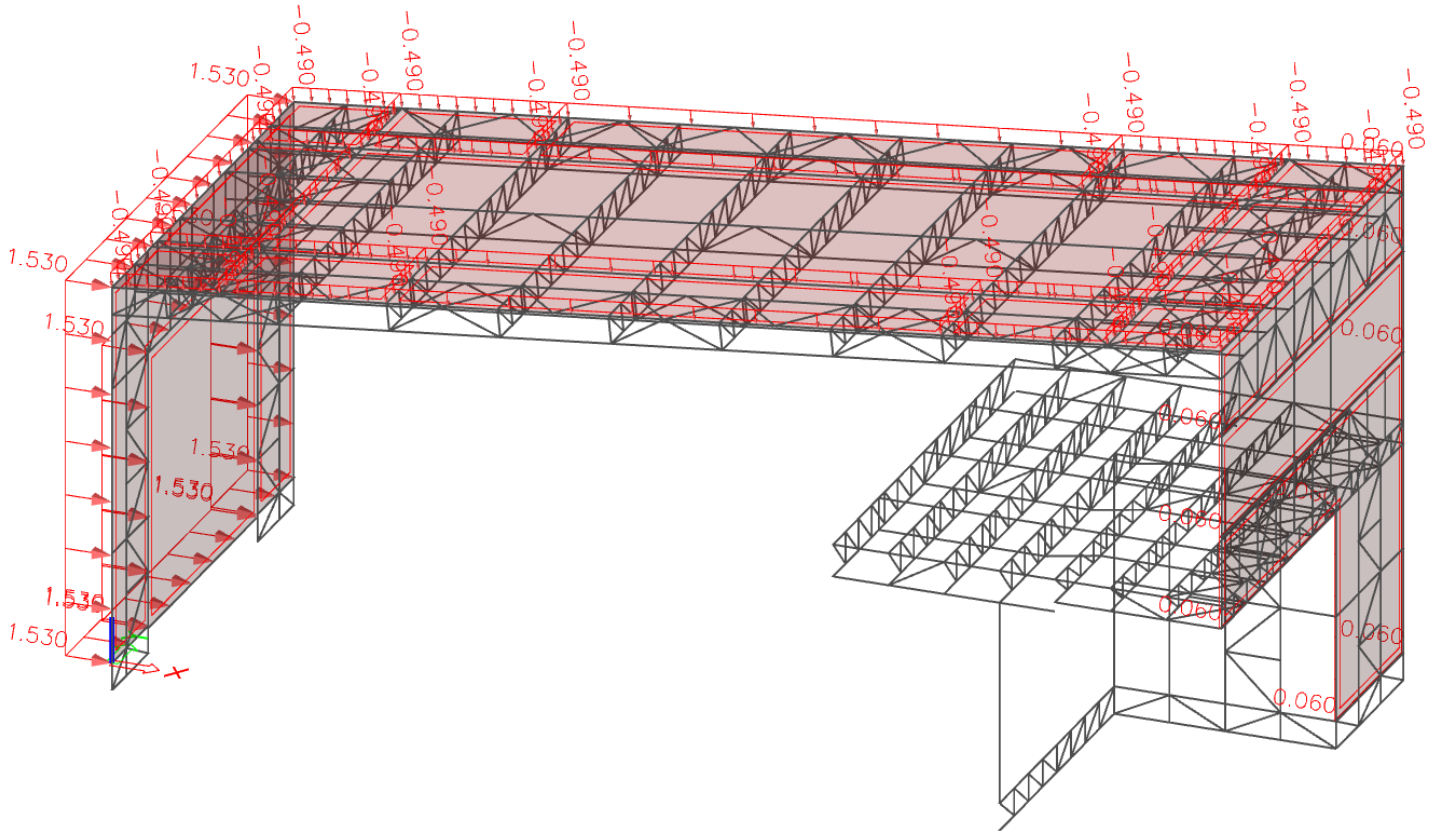
## 7. Q3 - Snow load



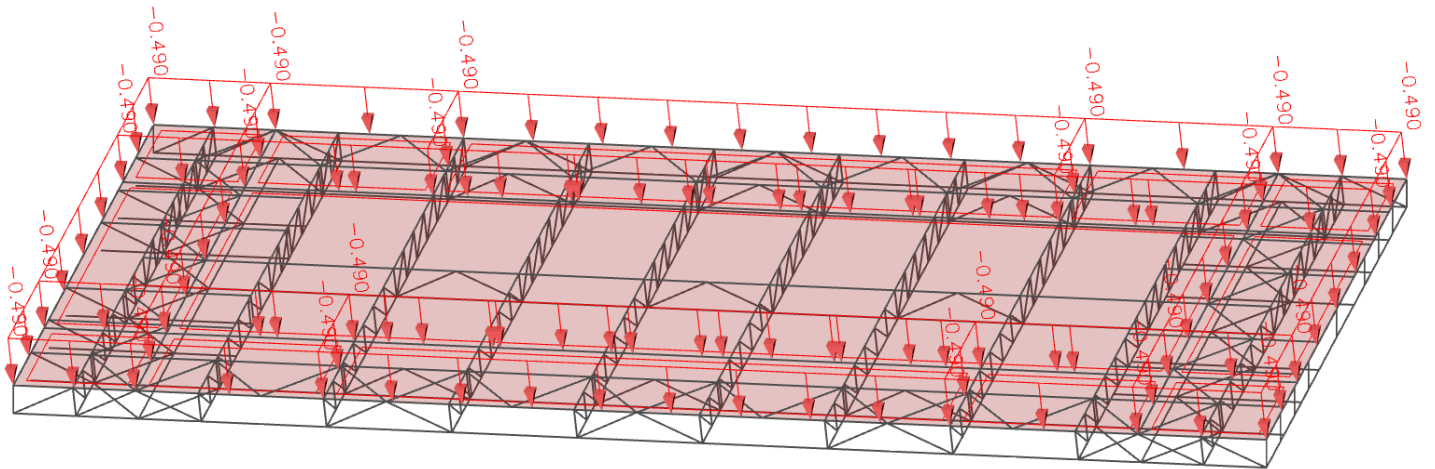




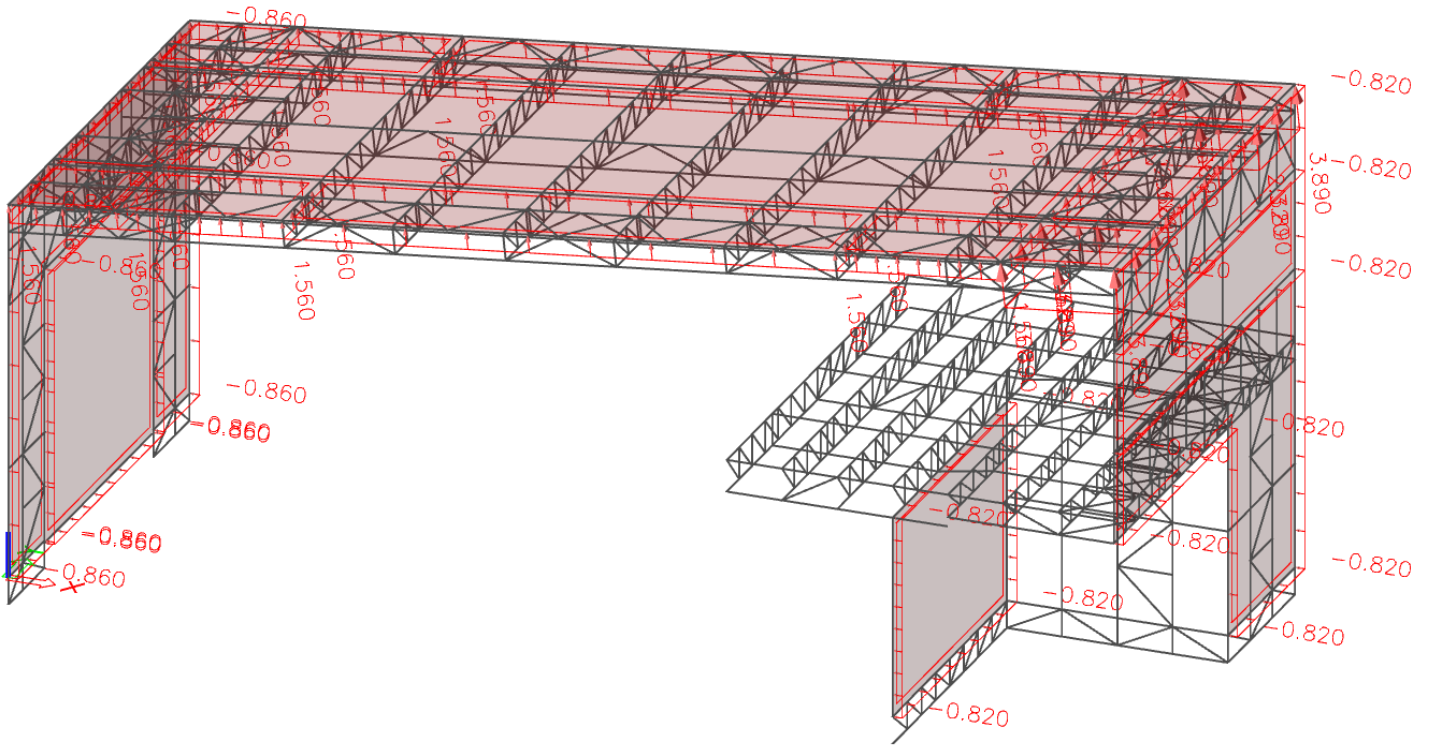
### 9. Q5- Wind X+ (P -0.3)



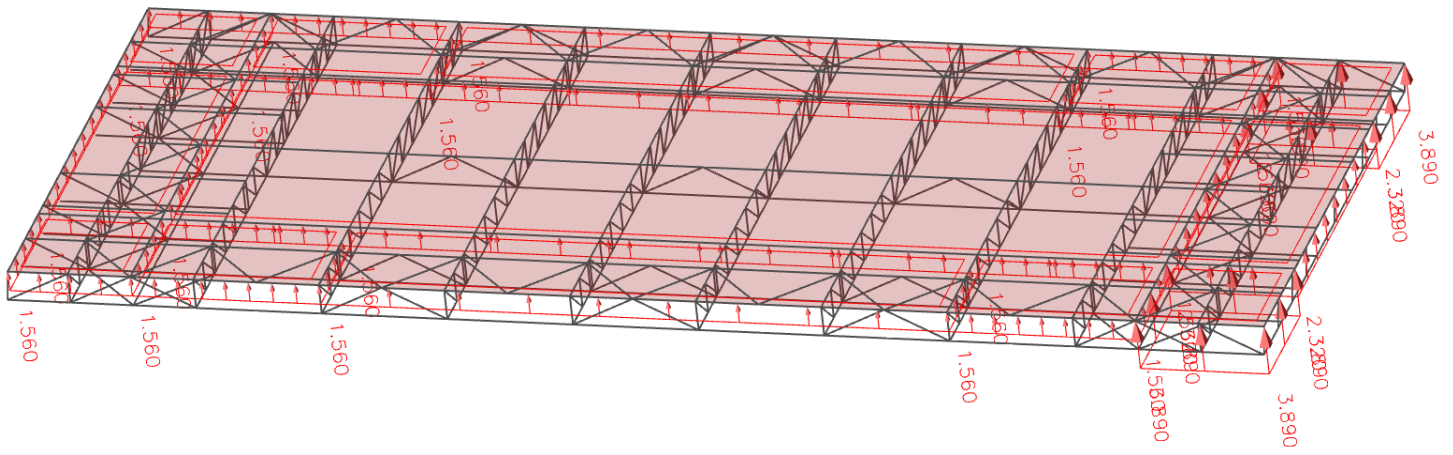
### Roof wind load



10. Q6 - Wind X- (N 0.2)

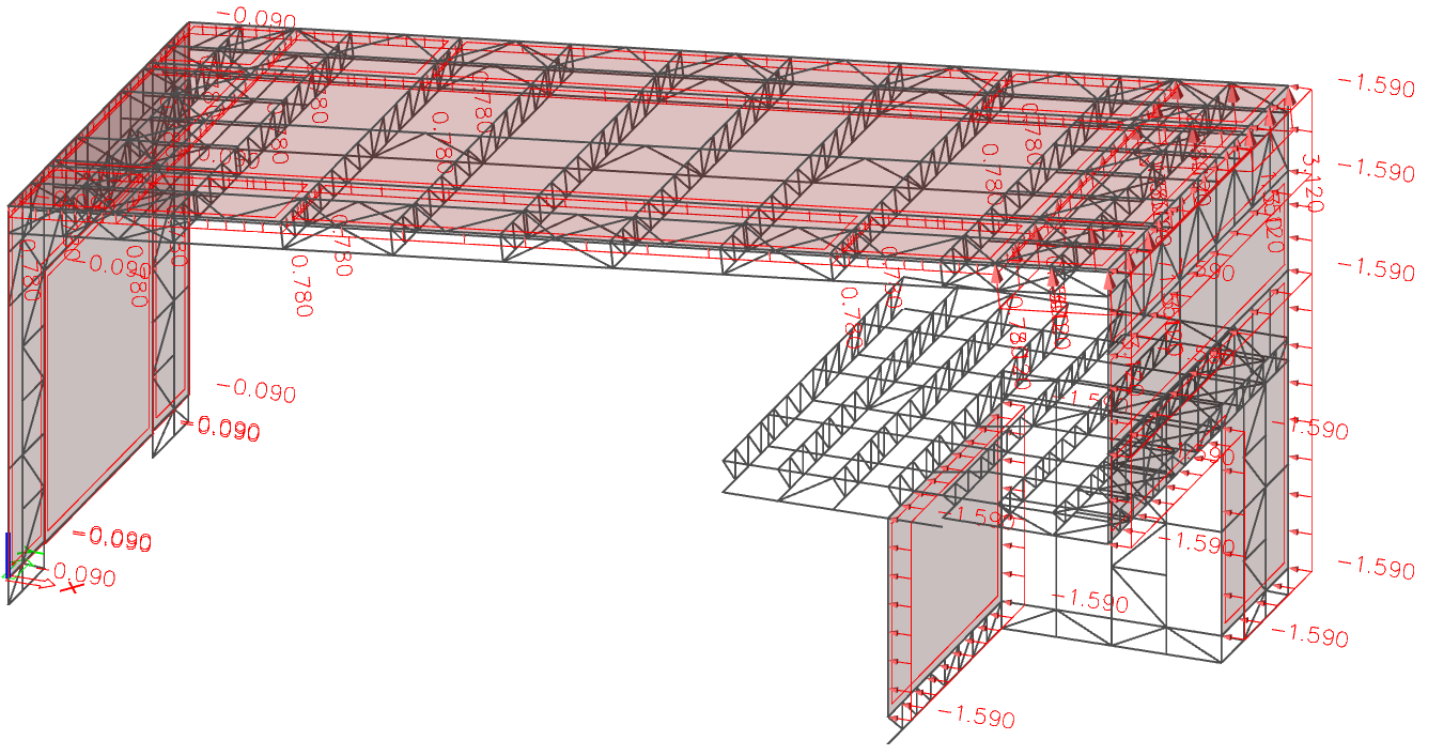


Roof wind load

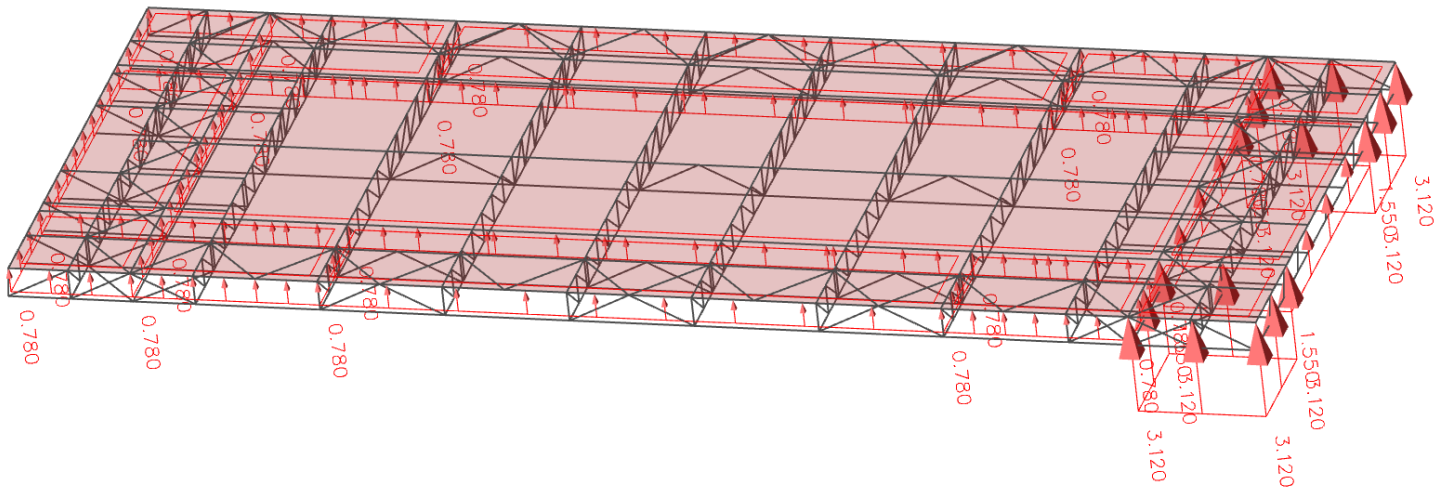




### 11. Q7 - Wind X- (N -0.3)

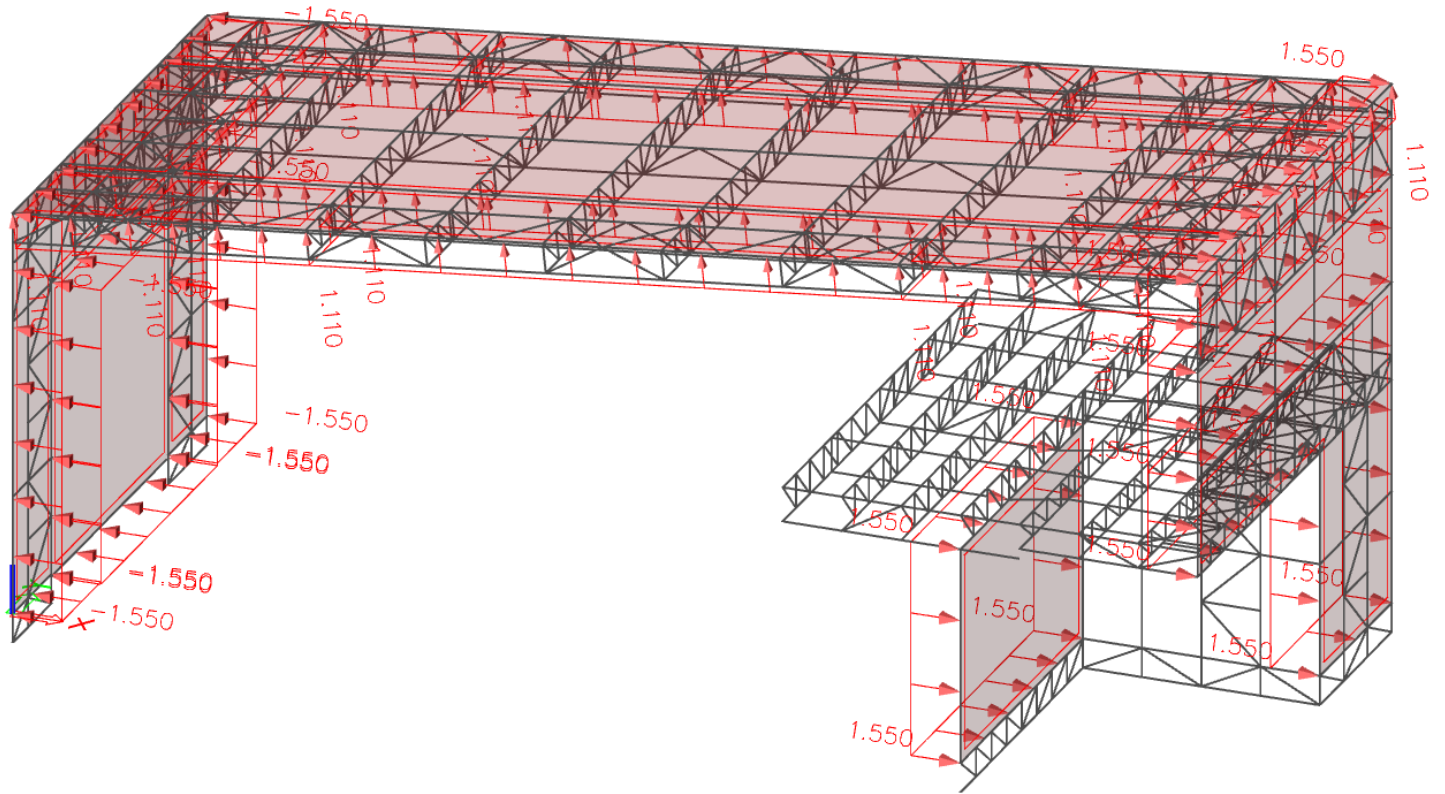


### Roof wind load

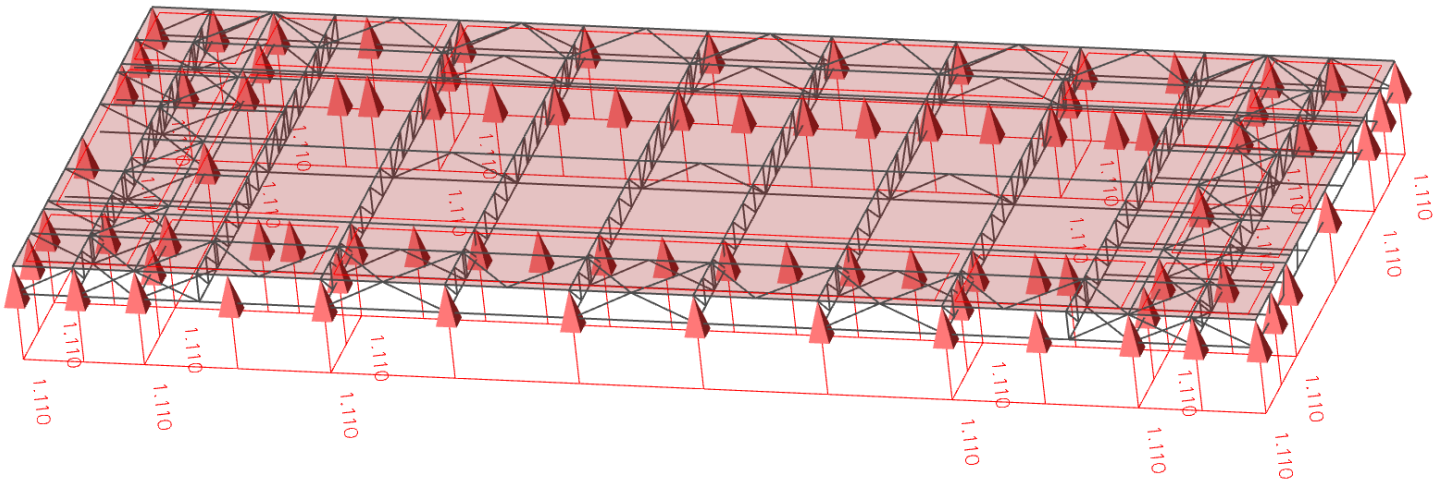




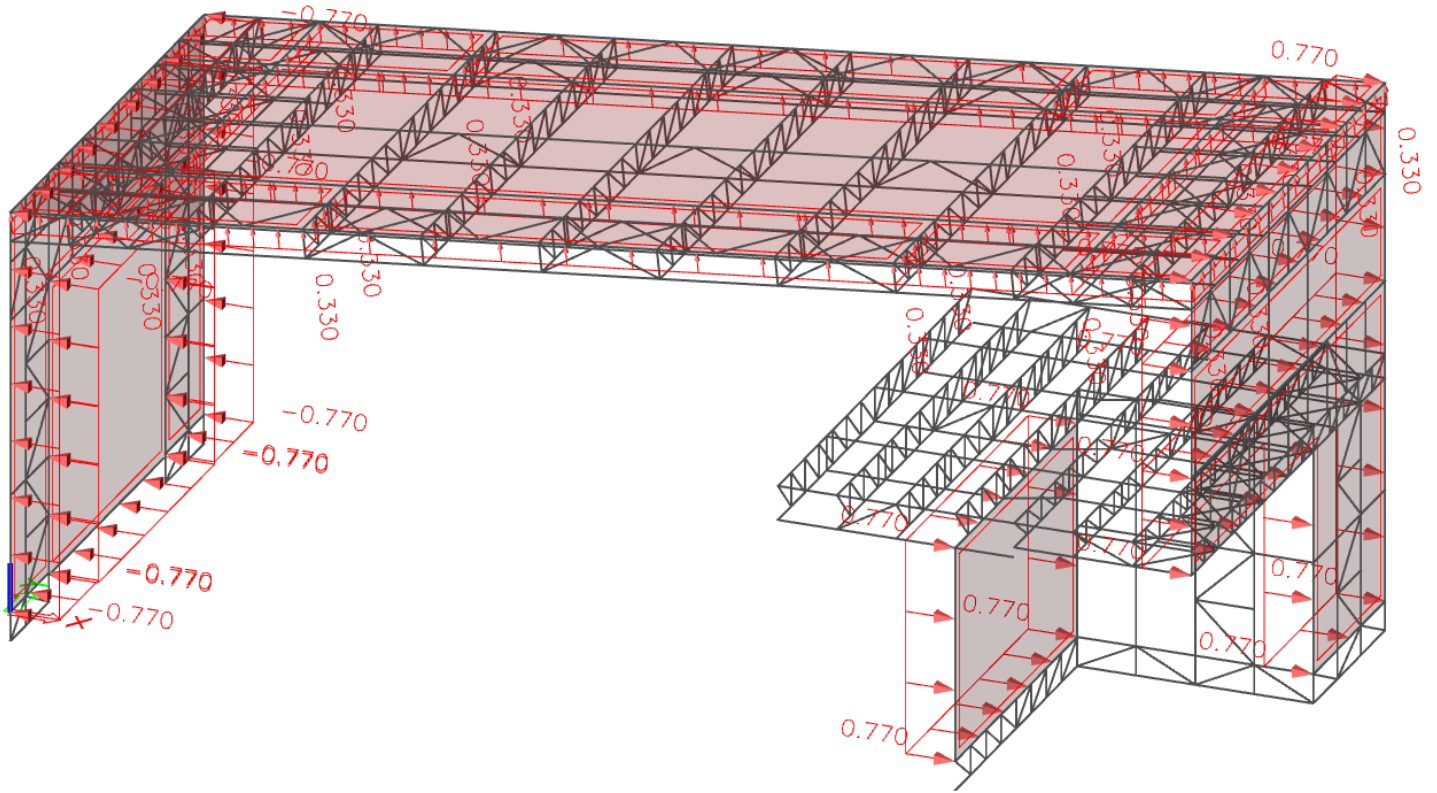
12. Q8 - Wind Y+ (N 0.2)



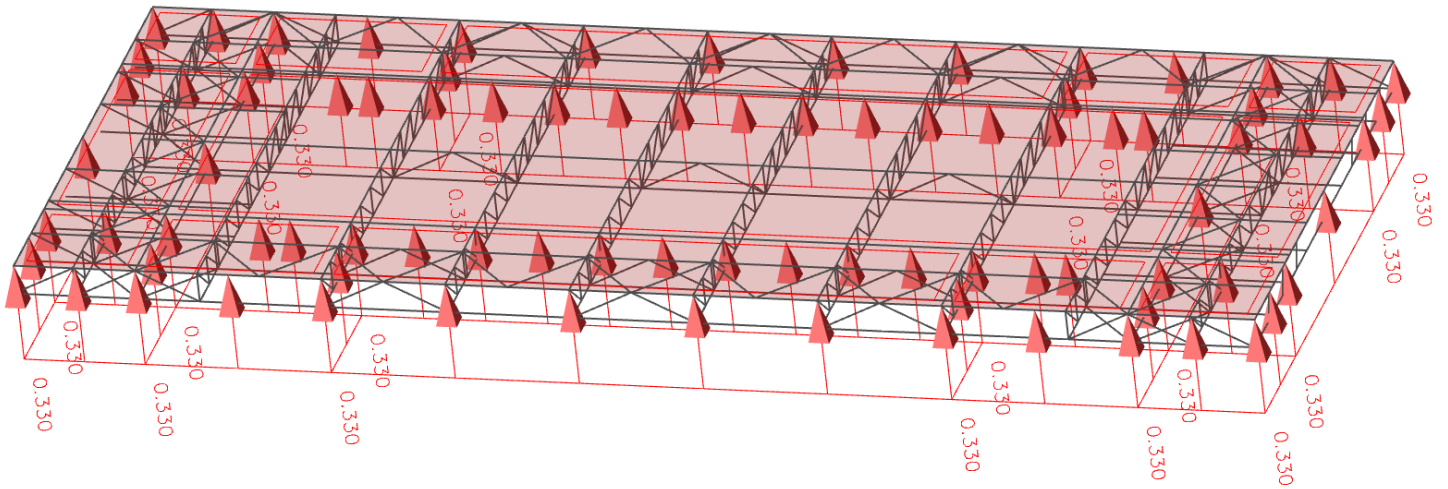
Roof wind load



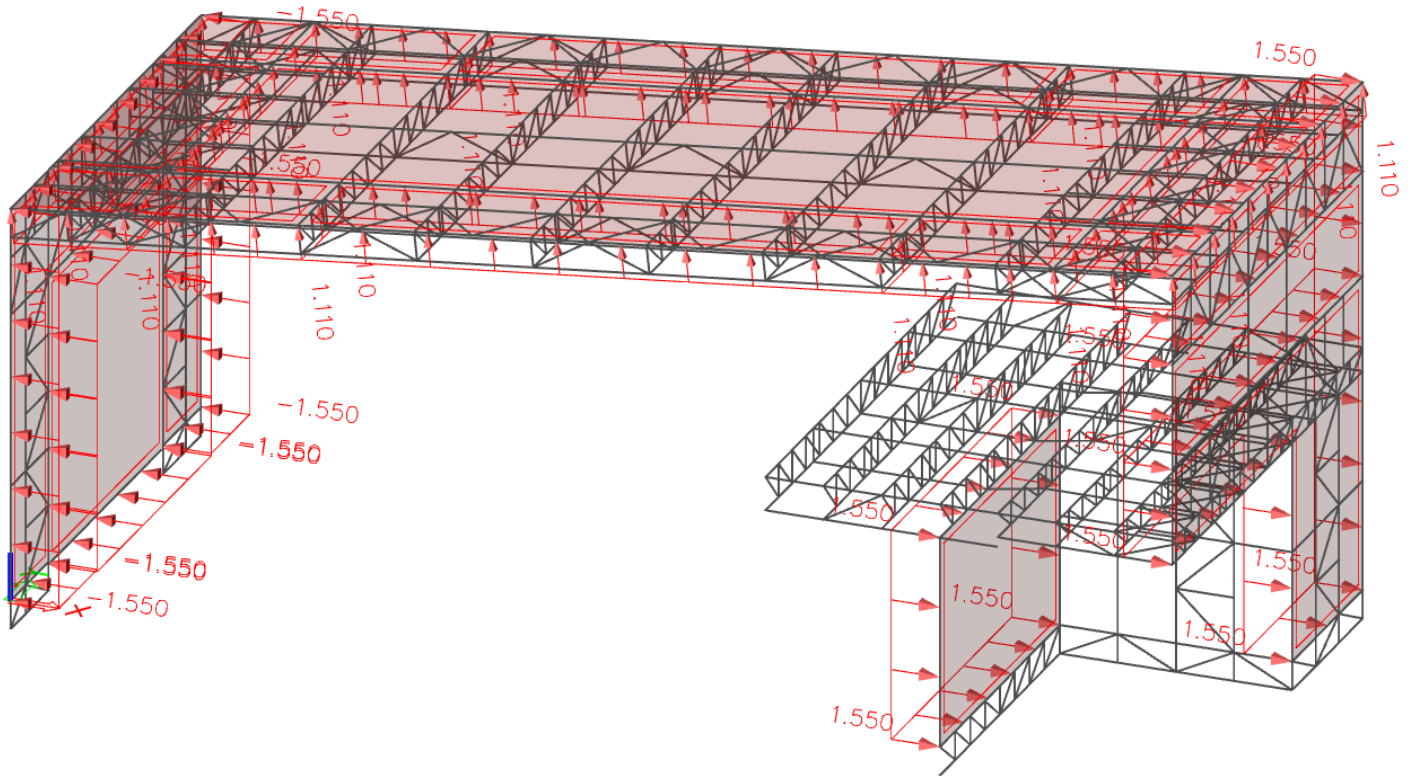
13. Q9 - Wind Y+ (N -0.3)



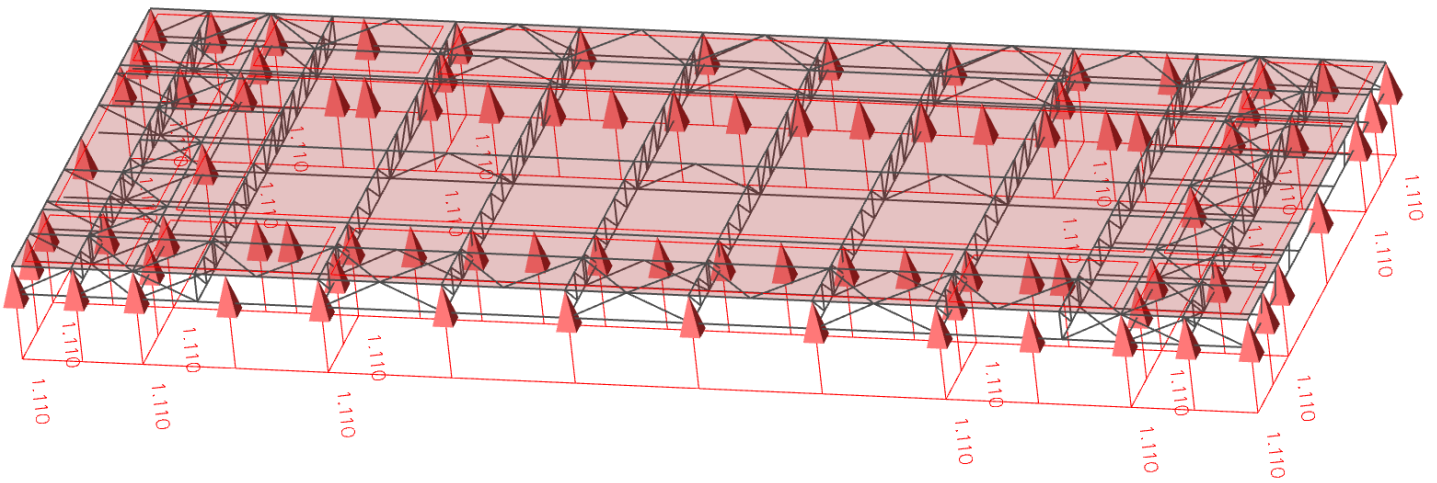
Roof wind load



14. Q10 - Wind Y- (N 0.2)

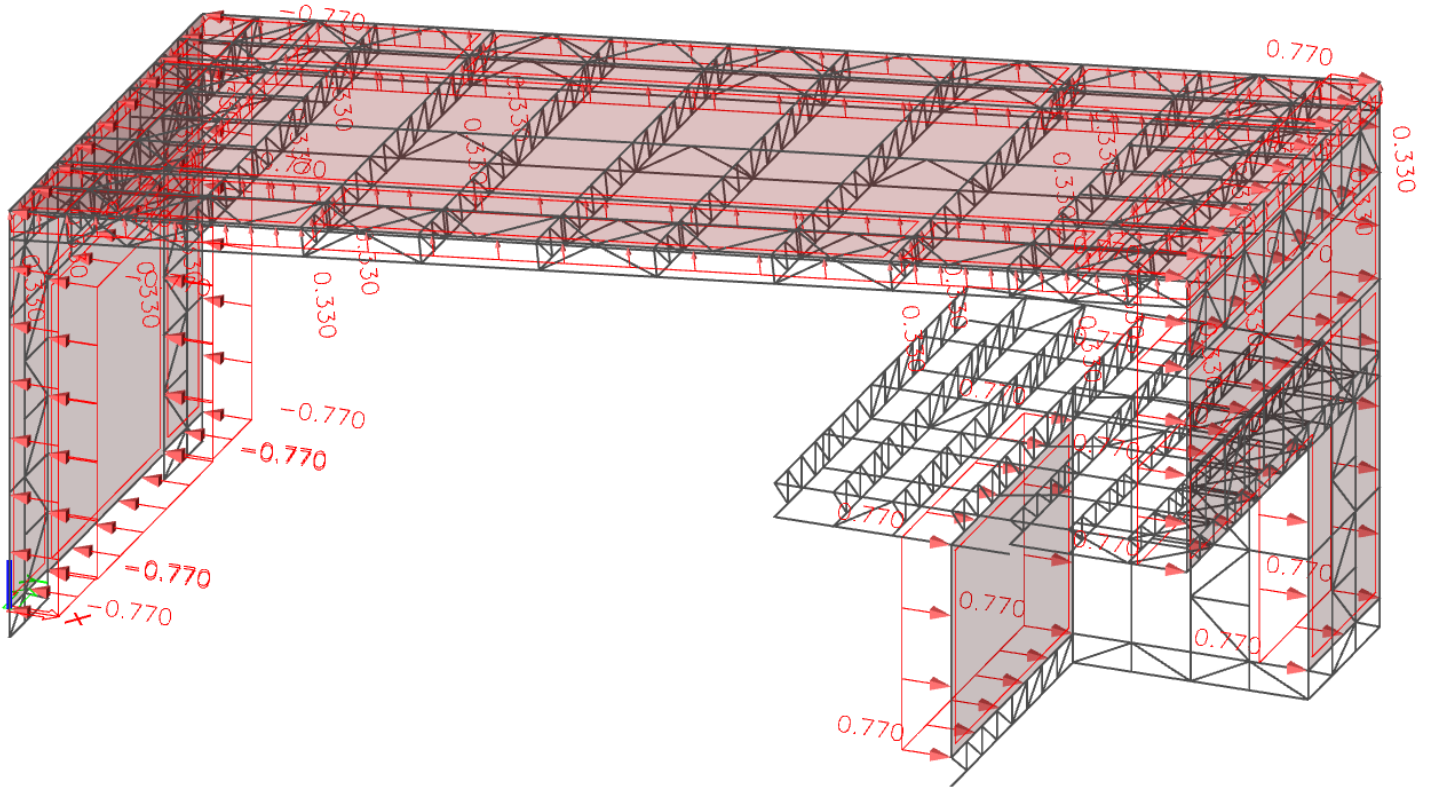


Roof wind load

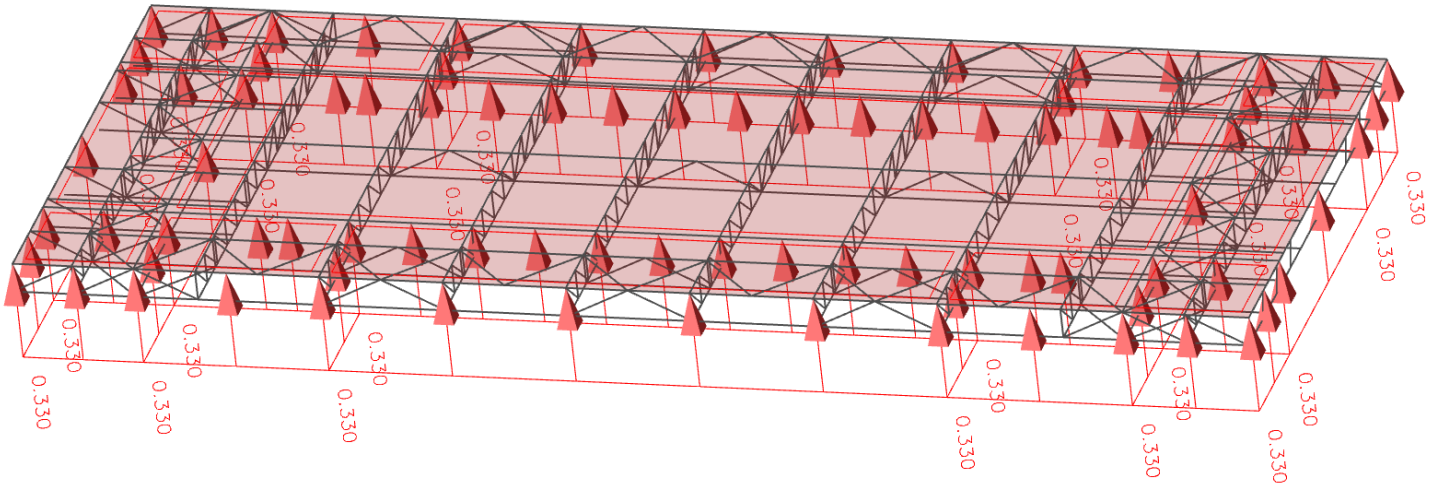




15. Q11 - Wind Y- (N -0.3)



Roof wind load



## Load cases table

Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
G	Self wieght	Permanent Self weight	Dead Load	-Z		
G1	Self wieght walls	Permanent Standard	Dead Load			
G2	Self wieght Roof & Floors	Permanent Standard	Dead Load			
G3	Roof Engineering Equipment	Permanent Standard	Dead Load			
Q1	Live load floor	Variable Standard	Live Load - floor		Short	None
Q2	Live load roof	Variable Standard	Live Load - roof		Short	None
Q3	Snow load	Variable Standard	Snow Load		Short	None
Q4	Wind X+(N 0.2)	Variable Standard	Wind Load		Short	None
Q5	Wind X+(P -0.3)	Variable Standard	Wind Load		Short	None
Q6	Wind X-(N 0.2)	Variable Standard	Wind Load		Short	None
Q7	Wind X-(N -0.3)	Variable Standard	Wind Load		Short	None
Q8	Wind Y+(N 0.2)	Variable Standard	Wind Load		Short	None
Q9	Wind Y+(N -0.3)	Variable Standard	Wind Load		Short	None
Q10	Wind Y-(N 0.2)	Variable Standard	Wind Load		Short	None
Q11	Wind Y-(N -0.3)	Variable Standard	Wind Load		Short	None

## Load groups table

Name	Load	Relation	Type
Dead Load	Permanent		
Live Load - floor	Variable	Standard	Cat A : Domestic
Live Load - roof	Variable	Standard	Cat H : Roofs
Snow Load	Variable	Standard	Snow
Wind Load	Variable	Exclusive	Wind

## Load combinations

Name	Description	Type	Load cases	Coeff. [-]
ULS-Set B (auto)		EN-ULS (STR/GEO) Set B	G - Self wieght	1.00
			G1 - Self wieght walls	1.00
			G2 - Self wieght Roof & Floors	1.00
			G3 - Roof Engineering Equipment	1.00
			Q1 - Live load floor	1.00
			Q2 - Live load roof	1.00
			Q3 - Snow load	1.00
			Q4 - Wind X+(N 0.2)	1.00
			Q5 - Wind X+(P -0.3)	1.00
			Q6 - Wind X-(N 0.2)	1.00
			Q7 - Wind X-(N -0.3)	1.00
			Q8 - Wind Y+(N 0.2)	1.00
SLS-Char (auto)		EN-SLS Characteristic	G - Self wieght	1.00
			G1 - Self wieght walls	1.00
			Q1 - Live load floor	1.00
			Q3 - Snow load	1.00
			Q4 - Wind X+(N 0.2)	1.00
			Q2 - Live load roof	1.00
			Q5 - Wind X+(P -0.3)	1.00
			Q6 - Wind X-(N 0.2)	1.00
			Q7 - Wind X-(N -0.3)	1.00
			G3 - Roof Engineering Equipment	1.00
			G2 - Self wieght Roof & Floors	1.00
			Q8 - Wind Y+(N 0.2)	1.00
Q9 - Wind Y+(N -0.3)	1.00			
Q10 - Wind Y-(N 0.2)	1.00			
Q11 - Wind Y-(N -0.3)	1.00			
SLS-G+G1+Q1+G2+G3		Linear - serviceability	G - Self wieght	1.00
			G1 - Self wieght walls	1.00
			G2 - Self wieght Roof & Floors	1.00
			G3 - Roof Engineering Equipment	1.00
			Q1 - Live load floor	1.00
			Q2 - Live load roof	1.00
			Q3 - Snow load	1.00

## Calculation protocol

### Linear calculation

Number of 2D elements	0
Number of 1D elements	16314
Number of mesh nodes	14491
Number of equations	86946
Bending theory	Mindlin
Load cases	G, G1, Q1, Q3, Q4, Q2, Q5, Q6, Q7, G3, G2, Q8, Q9, Q10, Q11
Start of calculation	11.07.2023 12:31
End of calculation	11.07.2023 12:32

### Sum of loads and reactions

Load case	Value	X [kN]	Y [kN]	Z [kN]
G	loads	0.000	0.000	-33.969
	reaction in nodes	0.000	0.000	33.969
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000
G1	loads	0.000	0.000	-77.775
	reaction in nodes	0.000	0.000	77.775
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000
Q1	loads	0.000	0.000	-42.840
	reaction in nodes	0.000	0.000	42.840
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000
Q3	loads	0.000	0.000	-72.371
	reaction in nodes	0.000	0.000	72.371
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000
Q4	loads	23.535	0.000	79.860
	reaction in nodes	-23.535	0.000	-79.860
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000
Q2	loads	0.000	0.000	-24.124
	reaction in nodes	0.000	0.000	24.124
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000
Q5	loads	35.789	0.000	-29.400
	reaction in nodes	-35.789	0.000	29.400
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000
Q6	loads	-49.839	0.000	102.524
	reaction in nodes	49.839	0.000	-102.524
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000

Load case	Value	X [kN]	Y [kN]	Z [kN]
Q7	loads	-49.484	0.000	55.785
	reaction in nodes	49.484	0.000	-55.785
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000
G3	loads	0.000	0.000	-9.046
	reaction in nodes	0.000	0.000	9.046
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000
G2	loads	0.000	0.000	-23.612
	reaction in nodes	0.000	0.000	23.612
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000
Q8	loads	2.080	0.000	66.600
	reaction in nodes	-2.080	0.000	-66.600
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000
Q9	loads	2.384	0.000	19.800
	reaction in nodes	-2.384	0.000	-19.800
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000
Q10	loads	2.080	0.000	66.600
	reaction in nodes	-2.080	0.000	-66.600
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000
Q11	loads	2.384	0.000	19.800
	reaction in nodes	-2.384	0.000	-19.800
	reaction on lines	0.000	0.000	0.000
	contact 1D	0.000	0.000	0.000
	contact 2D	0.000	0.000	0.000

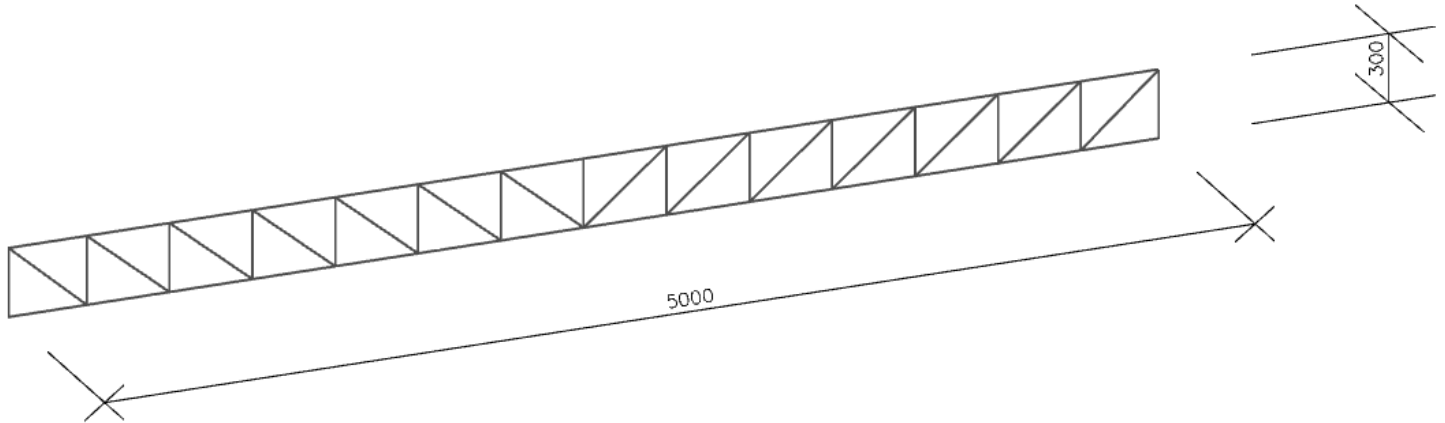


## 2.4 STEEL STRUCTURE CHECK

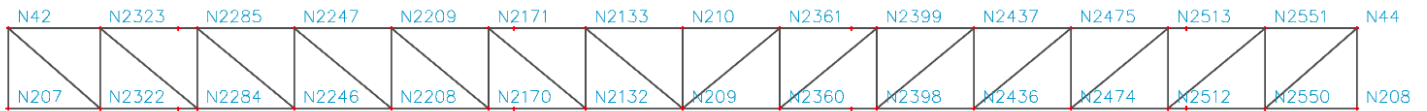
### 2.4.1 TRUSS CHECK

#### 2.4.1.1 ROOF TRUSS CHECK

Type roof truss. Truss spacing 1200 mm.



#### Node coordinates

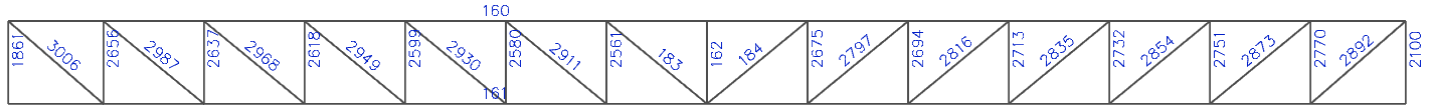


Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N42	2.970	0.000	4.422
N44	2.970	5.000	4.422
N207	3.000	0.000	4.125
N208	3.000	5.000	4.125
N209	3.000	2.500	4.125
N210	2.970	2.500	4.422
N1117	2.970	4.367	4.422
N1118	3.000	4.367	4.125
N1151	2.970	0.630	4.422
N1152	3.000	0.630	4.125
N1185	2.970	3.125	4.422
N1186	3.000	3.125	4.125
N1195	2.970	1.875	4.422

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1196	3.000	1.875	4.125
N2132	3.000	2.140	4.125
N2133	2.970	2.140	4.422
N2170	3.000	1.780	4.125
N2171	2.970	1.780	4.422
N2208	3.000	1.420	4.125
N2209	2.970	1.420	4.422
N2246	3.000	1.060	4.125
N2247	2.970	1.060	4.422
N2284	3.000	0.700	4.125
N2285	2.970	0.700	4.422
N2322	3.000	0.340	4.125
N2323	2.970	0.340	4.422

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2360	3.000	2.860	4.125
N2361	2.970	2.860	4.422
N2398	3.000	3.220	4.125
N2399	2.970	3.220	4.422
N2436	3.000	3.580	4.125
N2437	2.970	3.580	4.422
N2474	3.000	3.940	4.125
N2475	2.970	3.940	4.422
N2512	3.000	4.300	4.125
N2513	2.970	4.300	4.422
N2550	3.000	4.660	4.125
N2551	2.970	4.660	4.422

## Members number



Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
160	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	5.000	N42	N44	truss chord (95)
161	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	5.000	N207	N208	truss chord (95)
162	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N209	N210	truss diagonal (90)
183	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.468	N209	N2133	truss diagonal (90)
184	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.468	N209	N2361	truss diagonal (90)
1861	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N207	N42	truss diagonal (90)
2100	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N208	N44	truss diagonal (90)
2561	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N2132	N2133	truss diagonal (90)
2580	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N2170	N2171	truss diagonal (90)
2599	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N2208	N2209	truss diagonal (90)
2618	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N2246	N2247	truss diagonal (90)
2637	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N2284	N2285	truss diagonal (90)
2656	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N2322	N2323	truss diagonal (90)
2675	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N2360	N2361	truss diagonal (90)
2694	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N2398	N2399	truss diagonal (90)
2713	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N2436	N2437	truss diagonal (90)
2732	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N2474	N2475	truss diagonal (90)
2751	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N2512	N2513	truss diagonal (90)
2770	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.298	N2550	N2551	truss diagonal (90)
2797	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.468	N2360	N2399	truss diagonal (90)
2816	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.468	N2398	N2437	truss diagonal (90)
2835	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.468	N2436	N2475	truss diagonal (90)
2854	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.468	N2474	N2513	truss diagonal (90)
2873	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.468	N2512	N2551	truss diagonal (90)
2892	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.452	N2550	N44	truss diagonal (90)
2911	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.468	N2132	N2171	truss diagonal (90)
2930	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.468	N2170	N2209	truss diagonal (90)
2949	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.468	N2208	N2247	truss diagonal (90)
2968	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.468	N2246	N2285	truss diagonal (90)
2987	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.468	N2284	N2323	truss diagonal (90)
3006	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.452	N2322	N42	truss diagonal (90)

## Cross-Section properties

C100*50*15*1.2		
Type	Cold formed C section	
Detailed	100.0; 50.0; 1.2; 3.0; 15.0	
Formcode	114 - Cold formed C section	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	2.6269e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	1.1804e-04	1.3126e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	4.4038e-01	4.4038e-01
C <sub>y,UCS</sub> [mm], C <sub>z,UCS</sub> [mm]	17.2	50.0
α [deg]	0.00	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	4.2561e-07	9.3751e-08
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	40.3	18.9
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	8.5121e-06	2.8580e-06
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	9.7956e-06	4.2419e-06
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	3.43e+03	3.43e+03
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	1.48e+03	1.48e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	-41.5	0.0
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	1.2972e-10	2.2102e-10
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	0.0	121.2
Picture		

## Floor truss member hinges

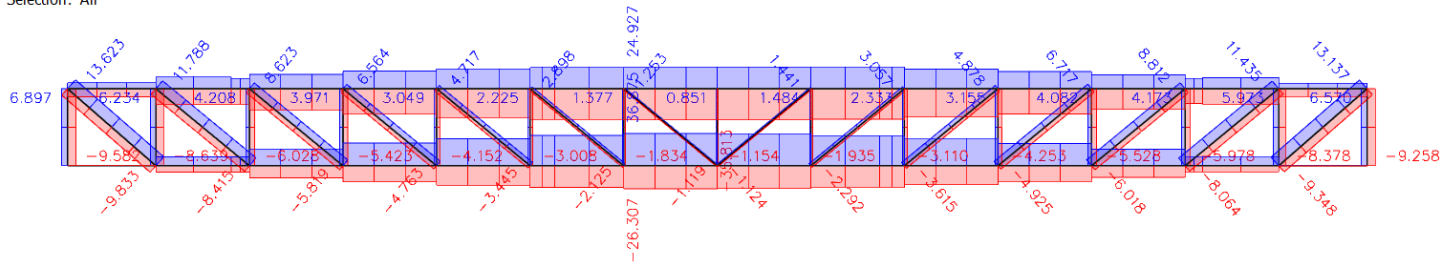
Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H101	160	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H102	161	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H103	162	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H124	183	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H125	184	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H999	1861	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H1023	2100	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H1342	2561	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1361	2580	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1380	2599	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1399	2618	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1418	2637	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1437	2656	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1456	2675	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1475	2694	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1494	2713	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1513	2732	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1532	2751	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1551	2770	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1578	2797	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1597	2816	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1616	2835	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1635	2854	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1654	2873	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1673	2892	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1692	2911	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1711	2930	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1730	2949	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1749	2968	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1768	2987	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1787	3006	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid

## Maximum forces in elements

### Axial force diagram N, kH.

#### 1D internal forces

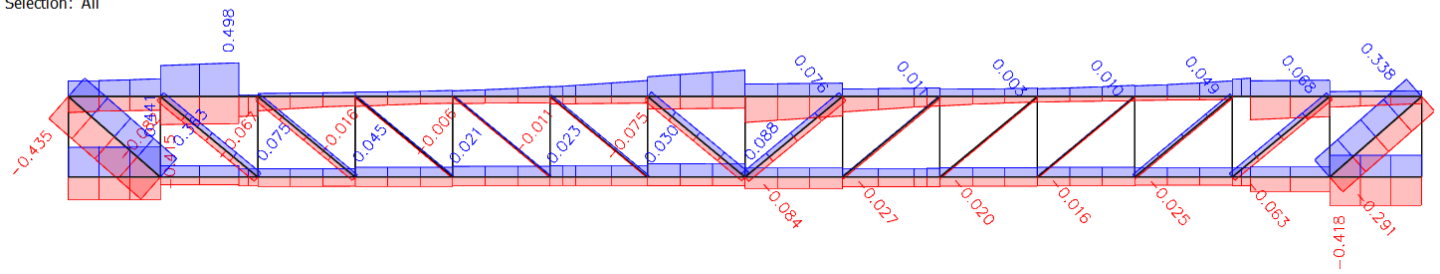
Values: N  
 Linear calculation  
 Combination: ULS-Set B (auto)  
 Coordinate system: Member  
 Extreme 1D: Member  
 Selection: All



### Shear force diagram Vy, kH.

#### 1D internal forces

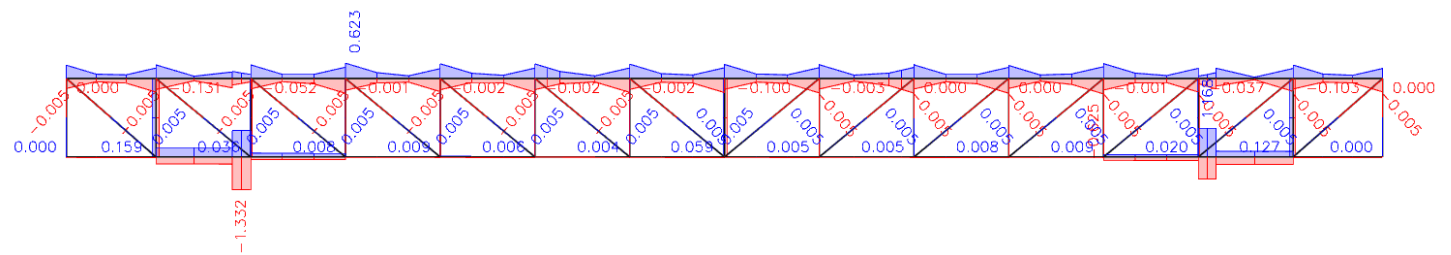
Values: Vy  
 Linear calculation  
 Combination: ULS-Set B (auto)  
 Coordinate system: Member  
 Extreme 1D: Member  
 Selection: All



### Shear force diagram Vz, kH.

#### 1D internal forces

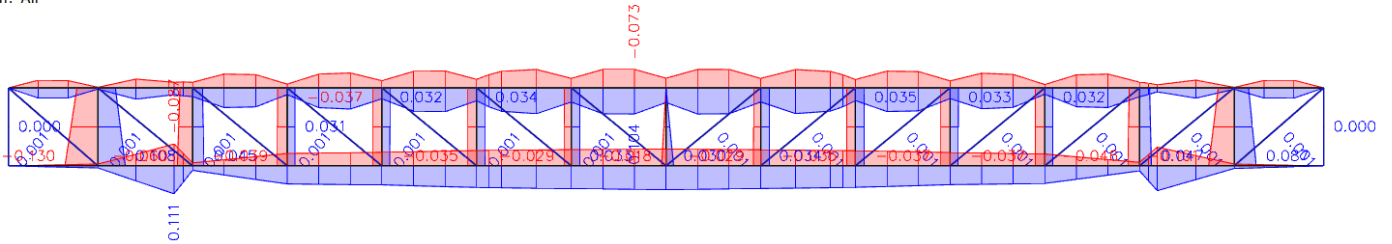
Values: Vz  
 Linear calculation  
 Combination: ULS-Set B (auto)  
 Coordinate system: Member  
 Extreme 1D: Member  
 Selection: All



## Diagram of bending moments $M_y$ , kNm.

### 1D internal forces

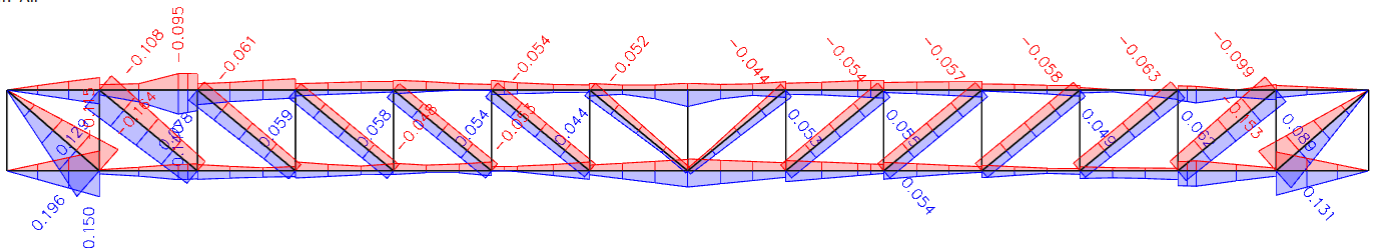
Values:  $M_y$   
 Linear calculation  
 Combination: ULS-Set B (auto)  
 Coordinate system: Member  
 Extreme 1D: Member  
 Selection: All



## Diagram of bending moments $M_z$ , kNm.

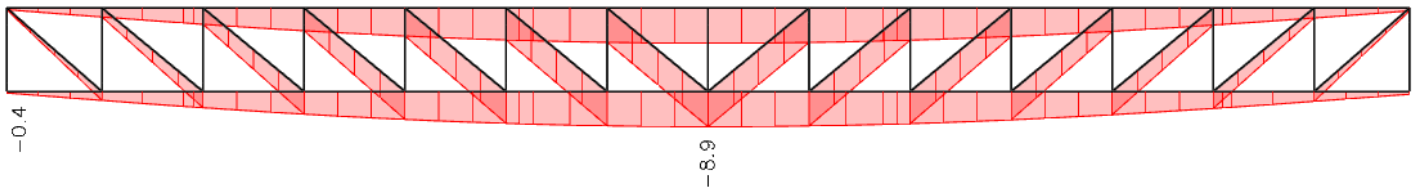
### 1D internal forces

Values:  $M_z$   
 Linear calculation  
 Combination: ULS-Set B (auto)  
 Coordinate system: Member  
 Extreme 1D: Member  
 Selection: All



## Deformation check

SLS comb. - G+G1+Q1+G2+G3



The maximum deflection is 8.9 mm.

According to EC-EN 1990 - due to the esthetics-psychological deflection limits -  $L/300$ .

$5000 / 300 = 16.66$  mm       $8.9$  mm <  $16.66$  mm    Deformation is OK!

## Internal forces

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
160	2.500+	ULS-Set B (auto)/1	<b>-35.813</b>	-0.176	0.570	0.000	0.058	0.061
160	0.340+	ULS-Set B (auto)/2	-15.755	<b>-0.415</b>	0.453	0.000	0.000	0.028
160	3.940-	ULS-Set B (auto)/1	-28.776	0.127	<b>-0.625</b>	0.000	0.025	0.011
160	1.060+	ULS-Set B (auto)/3	-29.144	-0.103	<b>0.623</b>	0.000	0.027	-0.030
160	4.300+	ULS-Set B (auto)/4	-12.480	0.119	-0.130	<b>0.000</b>	0.029	-0.011
160	0.630+	ULS-Set B (auto)/2	-14.150	-0.061	0.137	<b>0.000</b>	0.027	-0.086
160	2.380-	ULS-Set B (auto)/5	<b>24.927</b>	0.034	0.145	0.000	<b>-0.073</b>	-0.025
160	2.380-	ULS-Set B (auto)/1	-35.813	0.163	-0.186	0.000	<b>0.104</b>	0.039
160	0.630-	ULS-Set B (auto)/6	-10.458	-0.400	-0.129	0.000	0.023	<b>-0.095</b>
160	0.630-	ULS-Set B (auto)/7	7.913	<b>0.498</b>	0.127	0.000	-0.018	<b>0.140</b>
161	2.140+	ULS-Set B (auto)/5	<b>-26.307</b>	-0.095	-0.002	0.000	-0.064	-0.031
161	2.140+	ULS-Set B (auto)/1	<b>36.875</b>	0.124	0.015	0.000	0.090	0.009
161	4.660+	ULS-Set B (auto)/2	-0.004	<b>-0.418</b>	-0.018	0.000	0.008	0.142
161	0.700-	ULS-Set B (auto)/1	10.273	-0.103	<b>-1.332</b>	0.000	0.018	0.044
161	4.300+	ULS-Set B (auto)/3	9.904	0.095	<b>1.168</b>	0.000	0.020	0.076
161	4.660+	ULS-Set B (auto)/8	0.047	0.108	0.000	<b>0.000</b>	0.001	-0.037
161	0.000	ULS-Set B (auto)/8	-0.003	-0.116	0.012	<b>0.000</b>	0.000	0.000
161	0.630-	ULS-Set B (auto)/5	-7.417	-0.105	-0.285	0.000	<b>-0.087</b>	-0.023
161	0.630-	ULS-Set B (auto)/1	10.273	0.145	0.351	0.000	<b>0.111</b>	0.051
161	0.340-	ULS-Set B (auto)/5	-0.029	-0.339	-0.017	0.000	-0.005	<b>-0.115</b>
161	0.340-	ULS-Set B (auto)/2	0.015	<b>0.441</b>	0.010	0.000	0.005	<b>0.150</b>
162	0.298	ULS-Set B (auto)/5	<b>0.851</b>	<b>0.000</b>	0.056	0.000	0.000	<b>0.000</b>
162	0.298	ULS-Set B (auto)/9	-0.610	0.000	<b>-0.100</b>	0.000	0.000	0.000
162	0.000	ULS-Set B (auto)/8	-0.071	0.000	0.020	<b>0.000</b>	-0.006	0.000
162	0.000	ULS-Set B (auto)/10	0.672	0.000	0.017	<b>0.000</b>	-0.005	0.000
162	0.000	ULS-Set B (auto)/11	0.376	0.000	<b>0.059</b>	0.000	<b>-0.018</b>	0.000
162	0.000	ULS-Set B (auto)/9	-0.618	0.000	-0.100	0.000	<b>0.030</b>	0.000
162	0.000	ULS-Set B (auto)/1	<b>-1.154</b>	0.000	-0.096	0.000	0.029	<b>0.000</b>
183	0.468	ULS-Set B (auto)/12	-0.893	<b>-0.075</b>	-0.005	0.000	0.000	-0.052
183	0.000	ULS-Set B (auto)/13	1.026	<b>0.088</b>	0.004	0.000	0.000	-0.007
183	0.468	ULS-Set B (auto)/14	<b>1.253</b>	0.079	<b>-0.005</b>	0.000	0.000	0.021
183	0.000	ULS-Set B (auto)/5	-0.800	-0.041	0.004	<b>0.000</b>	0.000	0.015
183	0.000	ULS-Set B (auto)/14	1.245	0.080	<b>0.005</b>	<b>0.000</b>	0.000	-0.016
183	0.000	ULS-Set B (auto)/15	<b>-1.119</b>	-0.066	0.004	0.000	<b>0.000</b>	-0.008
183	0.234-	ULS-Set B	1.249	0.080	0.000	0.000	<b>0.001</b>	0.003

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/14						
183	0.468	ULS-Set B (auto)/16	-0.896	-0.075	-0.005	0.000	0.000	<b>-0.052</b>
183	0.468	ULS-Set B (auto)/10	0.382	0.086	-0.004	0.000	0.000	<b>0.044</b>
184	0.000	ULS-Set B (auto)/10	0.437	<b>-0.084</b>	0.004	0.000	0.000	-0.005
184	0.468	ULS-Set B (auto)/2	<b>1.441</b>	-0.072	<b>-0.005</b>	0.000	0.000	-0.018
184	0.000	ULS-Set B (auto)/2	1.433	-0.074	<b>0.005</b>	<b>0.000</b>	0.000	0.016
184	0.000	ULS-Set B (auto)/5	-0.972	0.033	0.004	<b>0.000</b>	0.000	-0.012
184	0.000	ULS-Set B (auto)/17	<b>-1.124</b>	0.066	0.004	0.000	<b>0.000</b>	0.008
184	0.234-	ULS-Set B (auto)/2	1.437	-0.073	0.000	0.000	<b>0.001</b>	-0.001
184	0.468	ULS-Set B (auto)/10	0.443	-0.083	-0.004	0.000	0.000	<b>-0.044</b>
184	0.468	ULS-Set B (auto)/16	-0.867	<b>0.076</b>	-0.005	0.000	0.000	<b>0.053</b>
1861	0.298	ULS-Set B (auto)/5	<b>6.897</b>	<b>0.000</b>	0.000	0.000	<b>0.000</b>	<b>0.000</b>
1861	0.298	ULS-Set B (auto)/1	-9.574	0.000	<b>0.000</b>	0.000	0.000	0.000
1861	0.000	ULS-Set B (auto)/12	1.362	0.000	<b>0.000</b>	<b>0.000</b>	0.000	0.000
1861	0.000	ULS-Set B (auto)/18	3.363	0.000	0.000	<b>0.000</b>	0.000	0.000
1861	0.149-	ULS-Set B (auto)/1	-9.578	0.000	0.000	0.000	<b>0.000</b>	0.000
1861	0.000	ULS-Set B (auto)/1	<b>-9.582</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2100	0.298	ULS-Set B (auto)/19	<b>6.570</b>	<b>0.000</b>	0.000	0.000	<b>0.000</b>	<b>0.000</b>
2100	0.298	ULS-Set B (auto)/3	-9.250	0.000	<b>0.000</b>	0.000	0.000	0.000
2100	0.000	ULS-Set B (auto)/18	3.486	0.000	0.000	<b>0.000</b>	0.000	0.000
2100	0.000	ULS-Set B (auto)/12	1.408	0.000	<b>0.000</b>	<b>0.000</b>	0.000	0.000
2100	0.149-	ULS-Set B (auto)/3	-9.254	0.000	0.000	0.000	<b>0.000</b>	0.000
2100	0.000	ULS-Set B (auto)/3	<b>-9.258</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2561	0.298	ULS-Set B (auto)/19	<b>1.377</b>	<b>0.000</b>	0.000	0.000	0.003	<b>0.000</b>
2561	0.298	ULS-Set B (auto)/20	1.233	0.000	<b>-0.002</b>	0.000	0.026	0.000
2561	0.000	ULS-Set B (auto)/21	-0.185	0.000	<b>0.004</b>	0.000	-0.021	0.000
2561	0.000	ULS-Set B (auto)/10	0.390	0.000	0.003	<b>0.000</b>	<b>-0.029</b>	0.000
2561	0.000	ULS-Set B (auto)/16	0.713	0.000	-0.001	<b>0.000</b>	<b>0.033</b>	0.000
2561	0.000	ULS-Set B (auto)/3	<b>-1.834</b>	0.000	0.004	0.000	0.002	<b>0.000</b>
2580	0.298	ULS-Set B (auto)/19	<b>2.225</b>	<b>0.000</b>	0.003	0.000	0.006	<b>0.000</b>
2580	0.298	ULS-Set B (auto)/6	-1.721	0.000	<b>-0.002</b>	0.000	-0.028	0.000
2580	0.000	ULS-Set B (auto)/22	-0.710	0.000	<b>0.006</b>	0.000	0.013	0.000
2580	0.000	ULS-Set B (auto)/16	0.850	0.000	0.003	<b>0.000</b>	0.034	0.000
2580	0.000	ULS-Set B (auto)/10	0.993	0.000	0.000	<b>0.000</b>	<b>-0.035</b>	0.000
2580	0.298	ULS-Set B (auto)/12	0.856	0.000	0.002	0.000	<b>0.034</b>	0.000
2580	0.000	ULS-Set B (auto)/3	<b>-3.008</b>	0.000	0.003	0.000	-0.007	<b>0.000</b>
2599	0.298	ULS-Set B (auto)/19	<b>3.049</b>	<b>0.000</b>	0.003	0.000	0.007	<b>0.000</b>
2599	0.298	ULS-Set B (auto)/13	-2.064	0.000	<b>-0.002</b>	0.000	-0.032	0.000
2599	0.000	ULS-Set B	-1.084	0.000	<b>0.009</b>	0.000	0.007	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/22									(auto)/18						
2599	0.000	ULS-Set B (auto)/10	1.604	0.000	0.000	<b>0.000</b>	-0.037	0.000	2694	0.000	ULS-Set B (auto)/10	0.954	0.000	0.001	0.000	<b>-0.035</b>	0.000
2599	0.000	ULS-Set B (auto)/16	0.956	0.000	0.005	<b>0.000</b>	0.031	0.000	2694	0.298	ULS-Set B (auto)/16	0.840	0.000	0.002	0.000	<b>0.035</b>	0.000
2599	0.298	ULS-Set B (auto)/18	1.612	0.000	-0.001	0.000	<b>-0.037</b>	0.000	2694	0.000	ULS-Set B (auto)/1	<b>-3.110</b>	0.000	0.004	0.000	-0.005	<b>0.000</b>
2599	0.298	ULS-Set B (auto)/12	0.962	0.000	0.004	0.000	<b>0.032</b>	0.000	2713	0.298	ULS-Set B (auto)/5	<b>3.155</b>	<b>0.000</b>	0.002	0.000	0.006	<b>0.000</b>
2599	0.000	ULS-Set B (auto)/3	<b>-4.152</b>	0.000	0.005	0.000	-0.015	<b>0.000</b>	2713	0.298	ULS-Set B (auto)/27	-2.164	0.000	<b>0.000</b>	0.000	-0.030	0.000
2618	0.298	ULS-Set B (auto)/19	<b>3.971</b>	<b>0.000</b>	0.000	0.000	0.010	<b>0.000</b>	2713	0.000	ULS-Set B (auto)/28	-1.061	0.000	<b>0.008</b>	0.000	0.009	0.000
2618	0.298	ULS-Set B (auto)/18	2.274	0.000	<b>-0.001</b>	0.000	-0.038	0.000	2713	0.000	ULS-Set B (auto)/12	0.939	0.000	0.005	<b>0.000</b>	0.031	0.000
2618	0.000	ULS-Set B (auto)/23	-2.961	0.000	<b>0.008</b>	0.000	-0.004	0.000	2713	0.000	ULS-Set B (auto)/18	1.564	0.000	0.001	<b>0.000</b>	-0.037	0.000
2618	0.000	ULS-Set B (auto)/10	2.266	0.000	0.000	<b>0.000</b>	-0.038	0.000	2713	0.000	ULS-Set B (auto)/10	1.565	0.000	0.001	0.000	<b>-0.037</b>	0.000
2618	0.000	ULS-Set B (auto)/16	1.097	0.000	0.004	<b>0.000</b>	0.030	0.000	2713	0.298	ULS-Set B (auto)/16	0.946	0.000	0.004	0.000	<b>0.033</b>	0.000
2618	0.000	ULS-Set B (auto)/24	0.583	0.000	0.003	0.000	<b>-0.039</b>	0.000	2713	0.000	ULS-Set B (auto)/1	<b>-4.253</b>	0.000	0.007	0.000	-0.012	<b>0.000</b>
2618	0.149-	ULS-Set B (auto)/25	2.784	0.000	0.000	0.000	<b>0.031</b>	0.000	2732	0.298	ULS-Set B (auto)/5	<b>4.082</b>	0.000	<b>-0.001</b>	0.000	0.008	0.000
2618	0.000	ULS-Set B (auto)/3	<b>-5.423</b>	0.000	0.008	0.000	-0.023	<b>0.000</b>	2732	0.000	ULS-Set B (auto)/12	1.080	0.000	0.004	<b>0.000</b>	0.030	0.000
2637	0.298	ULS-Set B (auto)/5	<b>4.208</b>	<b>0.000</b>	-0.051	0.000	0.030	<b>0.000</b>	2732	0.000	ULS-Set B (auto)/18	2.224	<b>0.000</b>	0.000	<b>0.000</b>	-0.037	<b>0.000</b>
2637	0.298	ULS-Set B (auto)/7	2.415	0.000	<b>-0.052</b>	0.000	0.029	0.000	2732	0.000	ULS-Set B (auto)/29	0.528	0.000	0.004	0.000	<b>-0.037</b>	0.000
2637	0.000	ULS-Set B (auto)/6	-3.289	0.000	<b>0.036</b>	0.000	-0.059	0.000	2732	0.298	ULS-Set B (auto)/16	1.087	0.000	0.003	0.000	<b>0.032</b>	0.000
2637	0.000	ULS-Set B (auto)/14	-5.082	0.000	0.034	<b>0.000</b>	-0.059	0.000	2732	0.000	ULS-Set B (auto)/1	<b>-5.528</b>	0.000	<b>0.009</b>	0.000	-0.019	<b>0.000</b>
2637	0.000	ULS-Set B (auto)/15	3.016	0.000	-0.020	<b>0.000</b>	0.045	0.000	2751	0.298	ULS-Set B (auto)/5	<b>4.173</b>	<b>0.000</b>	-0.033	0.000	0.022	<b>0.000</b>
2637	0.000	ULS-Set B (auto)/2	-5.083	0.000	0.034	0.000	<b>-0.060</b>	0.000	2751	0.298	ULS-Set B (auto)/30	2.094	0.000	<b>-0.037</b>	0.000	0.023	0.000
2637	0.000	ULS-Set B (auto)/17	3.017	0.000	-0.020	0.000	<b>0.045</b>	0.000	2751	0.000	ULS-Set B (auto)/17	2.999	0.000	-0.020	<b>0.000</b>	0.045	0.000
2637	0.000	ULS-Set B (auto)/1	<b>-6.028</b>	0.000	0.020	0.000	-0.037	<b>0.000</b>	2751	0.000	ULS-Set B (auto)/2	-5.038	0.000	0.016	<b>0.000</b>	-0.044	0.000
2656	0.298	ULS-Set B (auto)/5	<b>6.234</b>	0.000	<b>-0.131</b>	0.000	0.069	0.000	2751	0.000	ULS-Set B (auto)/27	-2.957	0.000	<b>0.020</b>	0.000	<b>-0.046</b>	0.000
2656	0.000	ULS-Set B (auto)/2	-7.371	0.000	<b>0.159</b>	<b>0.000</b>	<b>-0.130</b>	0.000	2751	0.000	ULS-Set B (auto)/16	0.918	0.000	-0.023	0.000	<b>0.047</b>	0.000
2656	0.000	ULS-Set B (auto)/5	6.228	<b>0.000</b>	-0.131	<b>0.000</b>	<b>0.108</b>	<b>0.000</b>	2751	0.000	ULS-Set B (auto)/1	<b>-5.978</b>	0.000	0.005	0.000	-0.023	<b>0.000</b>
2656	0.000	ULS-Set B (auto)/1	<b>-8.639</b>	0.000	0.117	0.000	-0.090	<b>0.000</b>	2770	0.298	ULS-Set B (auto)/19	<b>5.973</b>	0.000	<b>-0.103</b>	0.000	0.052	0.000
2675	0.298	ULS-Set B (auto)/5	<b>1.484</b>	<b>0.000</b>	-0.003	0.000	0.003	<b>0.000</b>	2770	0.000	ULS-Set B (auto)/14	-7.069	<b>0.000</b>	<b>0.127</b>	0.000	-0.100	<b>0.000</b>
2675	0.298	ULS-Set B (auto)/26	1.415	0.000	<b>-0.003</b>	0.000	0.004	0.000	2770	0.000	ULS-Set B (auto)/17	4.249	0.000	-0.101	<b>0.000</b>	0.086	0.000
2675	0.000	ULS-Set B (auto)/2	-1.819	0.000	<b>0.005</b>	0.000	-0.013	0.000	2770	0.000	ULS-Set B (auto)/2	-7.067	0.000	0.127	<b>0.000</b>	-0.100	0.000
2675	0.000	ULS-Set B (auto)/12	0.696	0.000	0.000	<b>0.000</b>	0.034	0.000	2770	0.000	ULS-Set B (auto)/31	-6.660	0.000	0.127	0.000	<b>-0.101</b>	0.000
2675	0.000	ULS-Set B (auto)/18	0.350	0.000	0.004	<b>0.000</b>	-0.029	0.000	2770	0.000	ULS-Set B (auto)/20	3.842	0.000	-0.101	0.000	<b>0.087</b>	0.000
2675	0.000	ULS-Set B (auto)/10	0.351	0.000	0.004	0.000	<b>-0.029</b>	0.000	2770	0.000	ULS-Set B (auto)/3	<b>-8.378</b>	0.000	0.090	0.000	-0.065	<b>0.000</b>
2675	0.000	ULS-Set B (auto)/16	0.695	0.000	0.000	0.000	<b>0.034</b>	0.000	2797	0.000	ULS-Set B (auto)/14	2.880	<b>-0.027</b>	0.005	0.000	0.000	-0.021
2675	0.000	ULS-Set B (auto)/1	<b>-1.935</b>	0.000	0.005	0.000	0.004	<b>0.000</b>	2797	0.468	ULS-Set B (auto)/15	-2.017	<b>0.011</b>	-0.004	0.000	0.000	0.045
2694	0.298	ULS-Set B (auto)/5	<b>2.333</b>	<b>0.000</b>	0.001	0.000	0.006	<b>0.000</b>	2797	0.468	ULS-Set B (auto)/1	<b>3.057</b>	-0.024	<b>-0.005</b>	0.000	0.000	-0.005
2694	0.298	ULS-Set B (auto)/27	-1.706	0.000	<b>0.000</b>	0.000	-0.028	0.000	2797	0.000	ULS-Set B (auto)/13	1.952	-0.021	0.004	<b>0.000</b>	0.000	-0.034
2694	0.000	ULS-Set B (auto)/28	-0.686	0.000	<b>0.005</b>	0.000	0.015	0.000	2797	0.000	ULS-Set B (auto)/32	-1.363	0.000	<b>0.005</b>	<b>0.000</b>	0.000	0.018
2694	0.000	ULS-Set B (auto)/12	0.833	0.000	0.003	<b>0.000</b>	0.034	0.000	2797	0.000	ULS-Set B (auto)/5	<b>-2.292</b>	0.007	0.004	0.000	<b>0.000</b>	0.005
2694	0.000	ULS-Set B	0.952	0.000	0.001	<b>0.000</b>	-0.035	0.000	2797	0.234-	ULS-Set B	3.053	-0.025	0.000	0.000	<b>0.001</b>	0.000



Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
2797	0.468	(auto)/1							2892	0.452	(auto)/31						
		ULS-Set B (auto)/10	-0.496	-0.018	-0.004	0.000	0.000	<b>-0.054</b>			ULS-Set B (auto)/3	<b>13.137</b>	0.220	<b>-0.005</b>	0.000	0.000	0.000
2797	0.468	ULS-Set B (auto)/16	-1.085	0.005	-0.005	0.000	0.000	<b>0.055</b>	2892	0.000	ULS-Set B (auto)/5	-9.345	-0.277	0.003	<b>0.000</b>	0.000	0.125
2816	0.000	ULS-Set B (auto)/3	4.867	<b>-0.020</b>	0.005	0.000	0.000	-0.007	2892	0.000	ULS-Set B (auto)/2	11.108	0.336	<b>0.005</b>	<b>0.000</b>	0.000	-0.152
2816	0.468	ULS-Set B (auto)/19	-3.607	<b>0.003</b>	-0.004	0.000	0.000	0.009	2892	0.000	ULS-Set B (auto)/19	<b>-9.348</b>	-0.277	0.003	0.000	<b>0.000</b>	0.125
2816	0.468	ULS-Set B (auto)/1	<b>4.878</b>	-0.019	<b>-0.005</b>	0.000	0.000	-0.016	2892	0.226-	ULS-Set B (auto)/3	13.133	0.219	0.000	0.000	<b>0.001</b>	-0.050
2816	0.000	ULS-Set B (auto)/13	2.685	-0.008	0.004	<b>0.000</b>	0.000	-0.043	2892	0.000	ULS-Set B (auto)/31	10.469	0.337	0.003	0.000	0.000	<b>-0.153</b>
2816	0.000	ULS-Set B (auto)/32	-2.001	-0.005	<b>0.005</b>	<b>0.000</b>	0.000	0.017	2911	0.468	ULS-Set B (auto)/17	-2.011	<b>-0.011</b>	-0.004	0.000	0.000	-0.045
2816	0.000	ULS-Set B (auto)/5	<b>-3.615</b>	0.002	0.004	0.000	<b>0.000</b>	0.008	2911	0.000	ULS-Set B (auto)/2	2.692	<b>0.030</b>	<b>0.005</b>	0.000	0.000	0.023
2816	0.234-	ULS-Set B (auto)/1	4.873	-0.019	0.000	0.000	<b>0.001</b>	-0.012	2911	0.468	ULS-Set B (auto)/3	<b>2.898</b>	0.027	<b>-0.005</b>	0.000	0.000	0.010
2816	0.468	ULS-Set B (auto)/10	-1.468	-0.005	-0.004	0.000	0.000	<b>-0.057</b>	2911	0.000	ULS-Set B (auto)/28	0.536	0.008	0.005	<b>0.000</b>	0.000	-0.027
2816	0.000	ULS-Set B (auto)/16	-1.275	-0.006	0.005	0.000	0.000	<b>0.054</b>	2911	0.000	ULS-Set B (auto)/27	1.797	0.023	0.004	<b>0.000</b>	0.000	0.035
2835	0.000	ULS-Set B (auto)/3	6.707	<b>-0.016</b>	<b>0.005</b>	0.000	0.000	-0.019	2911	0.000	ULS-Set B (auto)/19	<b>-2.125</b>	-0.010	0.004	0.000	<b>0.000</b>	-0.005
2835	0.468	ULS-Set B (auto)/19	-4.917	<b>0.010</b>	-0.004	0.000	0.000	0.013	2911	0.234-	ULS-Set B (auto)/3	2.894	0.028	0.000	0.000	<b>0.001</b>	0.003
2835	0.468	ULS-Set B (auto)/1	<b>6.717</b>	-0.014	<b>-0.005</b>	0.000	0.000	-0.026	2911	0.468	ULS-Set B (auto)/12	-1.110	-0.005	-0.005	0.000	0.000	<b>-0.054</b>
2835	0.000	ULS-Set B (auto)/6	3.724	-0.009	0.005	<b>0.000</b>	0.000	-0.046	2911	0.468	ULS-Set B (auto)/18	-0.560	0.020	-0.004	0.000	0.000	<b>0.054</b>
2835	0.000	ULS-Set B (auto)/7	-2.912	0.004	0.004	<b>0.000</b>	0.000	0.012	2930	0.468	ULS-Set B (auto)/5	-3.436	<b>-0.006</b>	-0.004	0.000	0.000	-0.010
2835	0.000	ULS-Set B (auto)/5	<b>-4.925</b>	0.009	0.004	0.000	<b>0.000</b>	0.008	2930	0.000	ULS-Set B (auto)/1	4.705	<b>0.023</b>	<b>0.005</b>	0.000	0.000	0.011
2835	0.234-	ULS-Set B (auto)/1	6.713	-0.015	0.000	0.000	<b>0.001</b>	-0.023	2930	0.468	ULS-Set B (auto)/3	<b>4.717</b>	0.021	<b>-0.005</b>	0.000	0.000	0.021
2835	0.468	ULS-Set B (auto)/10	-2.427	-0.001	-0.004	0.000	0.000	<b>-0.058</b>	2930	0.000	ULS-Set B (auto)/9	1.459	0.015	0.005	<b>0.000</b>	0.000	-0.043
2835	0.468	ULS-Set B (auto)/16	-1.437	0.001	-0.005	0.000	0.000	<b>0.049</b>	2930	0.000	ULS-Set B (auto)/10	-1.536	0.007	0.004	<b>0.000</b>	0.000	0.054
2854	0.000	ULS-Set B (auto)/27	4.373	<b>-0.025</b>	0.004	0.000	0.000	-0.051	2930	0.000	ULS-Set B (auto)/19	<b>-3.445</b>	-0.005	0.004	0.000	<b>0.000</b>	-0.008
2854	0.468	ULS-Set B (auto)/30	-2.951	<b>0.049</b>	-0.005	0.000	0.000	0.036	2930	0.234-	ULS-Set B (auto)/3	4.713	0.022	0.000	0.000	<b>0.001</b>	0.016
2854	0.468	ULS-Set B (auto)/1	<b>8.812</b>	-0.008	<b>-0.005</b>	0.000	0.000	-0.034	2930	0.000	ULS-Set B (auto)/16	-1.304	0.006	0.005	0.000	0.000	<b>-0.053</b>
2854	0.000	ULS-Set B (auto)/33	4.275	0.009	<b>0.005</b>	<b>0.000</b>	0.000	-0.034	2930	0.468	ULS-Set B (auto)/18	-1.533	0.007	-0.004	0.000	0.000	<b>0.058</b>
2854	0.000	ULS-Set B (auto)/5	<b>-6.018</b>	0.045	0.004	<b>0.000</b>	<b>0.000</b>	0.013	2949	0.468	ULS-Set B (auto)/5	-4.754	<b>-0.016</b>	-0.004	<b>0.000</b>	0.000	-0.016
2854	0.234-	ULS-Set B (auto)/1	8.808	-0.009	0.000	0.000	<b>0.001</b>	-0.032	2949	0.468	ULS-Set B (auto)/3	<b>6.564</b>	0.020	<b>-0.005</b>	0.000	0.000	0.033
2854	0.468	ULS-Set B (auto)/27	4.379	-0.024	-0.004	0.000	0.000	<b>-0.063</b>	2949	0.000	ULS-Set B (auto)/1	6.552	<b>0.021</b>	<b>0.005</b>	<b>0.000</b>	0.000	0.023
2854	0.468	ULS-Set B (auto)/16	-1.331	0.031	-0.005	0.000	0.000	<b>0.062</b>	2949	0.000	ULS-Set B (auto)/19	<b>-4.763</b>	-0.015	0.004	0.000	<b>0.000</b>	-0.009
2873	0.000	ULS-Set B (auto)/2	9.743	<b>-0.063</b>	<b>0.005</b>	0.000	0.000	-0.069	2949	0.234-	ULS-Set B (auto)/3	6.560	0.020	0.000	0.000	<b>0.001</b>	0.028
2873	0.468	ULS-Set B (auto)/5	-8.056	<b>0.068</b>	-0.004	<b>0.000</b>	0.000	0.081	2949	0.000	ULS-Set B (auto)/16	-1.473	0.001	0.005	0.000	0.000	<b>-0.048</b>
2873	0.468	ULS-Set B (auto)/3	<b>11.435</b>	-0.051	<b>-0.005</b>	0.000	0.000	-0.061	2949	0.468	ULS-Set B (auto)/24	-0.495	0.009	-0.004	0.000	0.000	<b>0.059</b>
2873	0.000	ULS-Set B (auto)/1	11.424	-0.052	0.005	<b>0.000</b>	0.000	-0.037	2968	0.468	ULS-Set B (auto)/26	-5.372	<b>-0.067</b>	-0.005	0.000	0.000	-0.047
2873	0.000	ULS-Set B (auto)/19	<b>-8.064</b>	0.067	0.004	0.000	<b>0.000</b>	0.050	2968	0.000	ULS-Set B (auto)/2	7.205	<b>0.045</b>	<b>0.005</b>	0.000	0.000	0.057
2873	0.234-	ULS-Set B (auto)/3	11.431	-0.051	0.000	0.000	<b>0.001</b>	-0.049	2968	0.468	ULS-Set B (auto)/3	<b>8.623</b>	0.026	<b>-0.005</b>	0.000	0.000	0.049
2873	0.468	ULS-Set B (auto)/31	9.184	-0.059	-0.004	0.000	0.000	<b>-0.099</b>	2968	0.000	ULS-Set B (auto)/6	4.621	0.045	0.005	<b>0.000</b>	0.000	0.055
2873	0.468	ULS-Set B (auto)/20	-5.240	0.037	-0.005	0.000	0.000	<b>0.089</b>	2968	0.000	ULS-Set B (auto)/7	-3.231	-0.066	0.004	<b>0.000</b>	0.000	-0.014
2892	0.000	ULS-Set B (auto)/20	-6.024	<b>-0.291</b>	0.005	0.000	0.000	<b>0.131</b>	2968	0.000	ULS-Set B (auto)/19	<b>-5.819</b>	-0.065	0.004	0.000	<b>0.000</b>	-0.016
2892	0.452	ULS-Set B	10.475	<b>0.338</b>	-0.003	0.000	0.000	0.000	2968	0.234-	ULS-Set B	8.619	0.027	0.000	0.000	<b>0.001</b>	0.043

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
2968	0.468	(auto)/3						
2968	0.468	ULS-Set B (auto)/25	-3.943	-0.029	-0.005	0.000	0.000	<b>-0.061</b>
2968	0.468	ULS-Set B (auto)/4	6.776	0.044	-0.004	0.000	0.000	<b>0.078</b>
2987	0.000	ULS-Set B (auto)/2	10.152	<b>0.075</b>	<b>0.005</b>	0.000	0.000	0.094
2987	0.468	ULS-Set B (auto)/1	<b>11.788</b>	0.061	<b>-0.005</b>	0.000	0.000	0.087
2987	0.000	ULS-Set B (auto)/15	-5.820	-0.038	0.004	<b>0.000</b>	0.000	-0.070
2987	0.000	ULS-Set B (auto)/8	0.629	-0.039	0.005	<b>0.000</b>	0.000	-0.032
2987	0.000	ULS-Set B (auto)/5	<b>-8.415</b>	-0.081	0.004	0.000	<b>0.000</b>	-0.070
2987	0.234	ULS-Set B (auto)/1	11.784	0.061	0.000	0.000	<b>0.001</b>	0.073
2987	0.468	ULS-Set B (auto)/5	-8.409	<b>-0.082</b>	-0.004	0.000	0.000	<b>-0.108</b>
2987	0.468	ULS-Set B (auto)/2	10.160	0.074	-0.005	0.000	0.000	<b>0.129</b>
3006	0.452	ULS-Set B (auto)/2	11.680	<b>-0.435</b>	-0.005	0.000	<b>0.000</b>	0.000
3006	0.452	ULS-Set B (auto)/1	<b>13.623</b>	-0.304	<b>-0.005</b>	0.000	0.000	0.000
3006	0.000	ULS-Set B (auto)/2	11.672	-0.434	<b>0.005</b>	<b>0.000</b>	0.000	<b>0.196</b>
3006	0.226	ULS-Set B (auto)/1	13.619	-0.303	0.000	0.000	<b>0.001</b>	0.069
3006	0.000	ULS-Set B (auto)/5	<b>-9.833</b>	<b>0.363</b>	0.003	<b>0.000</b>	0.000	<b>-0.164</b>

Name	Combination key
ULS-Set B (auto)/1	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/2	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/3	1.35*G + 1.35*G1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/4	G + G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/5	G + G1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/6	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/7	G + G1 + 0.75*Q3 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/8	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/9	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8
ULS-Set B (auto)/10	G + G1 + 1.50*Q4 + G3 + G2
ULS-Set B (auto)/11	G + G1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/12	1.35*G + 1.35*G1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/13	G + G1 + 1.05*Q1 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/14	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/15	G + G1 + 1.05*Q1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/16	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/17	G + G1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/18	G + G1 + 1.05*Q1 + 1.50*Q4 + G3 + G2
ULS-Set B (auto)/19	G + G1 + 1.05*Q1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/20	1.35*G + 1.35*G1 + 1.05*Q1 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/21	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q4 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/22	1.35*G + 1.35*G1 + 1.50*Q3 + 0.90*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/23	1.35*G + 1.35*G1 + 1.50*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/24	G + G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q4 + G3 + G2
ULS-Set B (auto)/25	1.35*G + 1.35*G1 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/26	1.35*G + 1.35*G1 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/27	G + G1 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/28	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/29	G + G1 + 0.75*Q3 + 1.50*Q4 + G3 + G2
ULS-Set B (auto)/30	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q6 +

Name	Combination key
	1.35*G3 + 1.35*G2
ULS-Set B (auto)/31	G + G1 + 0.75*Q3 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/32	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/33	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q4 + 1.35*G3 + 1.35*G2

## Member 160 check

### EN 1993-1-3 Cold Formed Code Check

National annex: Standard EN

Member 160	2.620 / 5.000 m	Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	ULS-Set B (auto)	0.93 -
------------	-----------------	---	----------	------------------	--------

Combination key	
ULS-Set B (auto) / 1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2	

Partial safety factors	
$\gamma_{M0}$ for resistance of cross-sections	1.00
$\gamma_{M1}$ for resistance to instability	1.00
$\gamma_{M2}$ for resistance of net sections	1.25

Material		
Yield strength $f_y$	350.0	MPa
Average yield strength $f_{y,a}$	360.7	MPa
k	7	
n	4	
Ultimate strength $f_u$	420.0	MPa
Fabrication	cold formed	

....:SECTION CHECK:....

The critical check is on position 2.620 m

Internal forces		Calculated	Additional moments	Total	Unit
Normal force	$N_{Ed}$	-35.813		-35.813	kN
Shear force	$V_{y,Ed}$	-0.186		-0.186	kN
Shear force	$V_{z,Ed}$	-0.144		-0.144	kN
Torsion	$T_{Ed}$	0.000		0.000	kNm
Bending moment	$M_{y,Ed}$	0.042	0.000	0.042	kNm
Bending moment	$M_{z,Ed}$	-0.104	-0.071	-0.174	kNm

### Effective section N-

#### Effective width calculation

According to EN 1993-1-3 article 5.5.2, 5.5.3 & EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\lambda_{p,red}$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	3.500e+05	3.500e+05	1.00	0.50	0.68	0.58	1.00	13.3		
3	I	46.7	3.500e+05	3.500e+05	1.00	4.00	0.84	0.72	0.96	45.0	20.6	22.5
5	I	96.7	3.500e+05	3.500e+05	1.00	4.00	1.73		0.50	48.8	24.4	24.4
7	I	46.7	3.500e+05	3.500e+05	1.00	4.00	0.84	0.72	0.96	45.0	20.6	22.5
9	UO	13.3	3.500e+05	3.500e+05	1.00	0.50	0.68	0.58	1.00	13.3		

### Stiffener calculation

According to EN 1993-1-3 article 5.5.3

Id	$A_s$ [m <sup>2</sup> ]	$I_s$ [m <sup>4</sup> ]	$b_1$ [mm]	$b_2$ [mm]	$h_w$ [mm]	$k_f$ [-]	K [kN/m <sup>2</sup> ]	$\sigma_{cr}$ [kN/m <sup>2</sup> ]	$\lambda_d$ [-]	$\chi_d$ [-]	$A_{s,red}$ [m <sup>2</sup> ]
1	4.3697e-05	8.3901e-10	41.2	41.2	98.8	1.00	3.109e+02	3.387e+05	1.02	0.74	3.2121e-05
9	4.3697e-05	8.3901e-10	41.2	41.2	98.8	1.00	3.109e+02	3.387e+05	1.02	0.74	3.2121e-05

**Effective section My+****Effective width calculation**

According to EN 1993-1-3 article 5.5.2, 5.5.3 &amp; EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_\sigma$ [-]	$\lambda_{p,red}$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	-2.244e+05	-3.132e+05								
3	I	46.7	-3.074e+05	-3.200e+05								
5	I	96.7	3.433e+05	-3.001e+05	-0.87	20.79	0.76		1.00	51.6	20.6	31.0
7	I	46.7	3.500e+05	3.375e+05	0.96	4.07	0.83	0.74	0.95	44.6	20.6	22.5
9	UO	13.3	3.302e+05	2.414e+05	0.73	0.50	0.68	0.60	1.00	13.3		

**Stiffener calculation**

According to EN 1993-1-3 article 5.5.3

Id	$A_s$ [m <sup>2</sup> ]	$I_s$ [m <sup>4</sup> ]	$b_1$ [mm]	$b_2$ [mm]	$h_w$ [mm]	$k_r$ [-]	$K$ [kN/m <sup>2</sup> ]	$\sigma_{cr}$ [kN/m <sup>2</sup> ]	$\lambda_t$ [-]	$\chi_t$ [-]	$A_{s,red}$ [m <sup>2</sup> ]
9	4.3659e-05	8.3870e-10	41.2	31.2	98.8	0.00	4.203e+02	3.941e+05	0.94	0.79	3.4433e-05

**Effective section Mz-****Effective width calculation**

According to EN 1993-1-3 article 5.5.2, 5.5.3 &amp; EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_\sigma$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	-3.500e+05	-3.500e+05							
3	I	46.7	2.566e+05	-3.366e+05	-1.31	31.95	0.30	1.00	20.2	8.1	12.1
5	I	96.7	2.700e+05	2.700e+05	1.00	4.00	1.73	0.50	48.8	24.4	24.4
7	I	46.7	2.566e+05	-3.366e+05	-1.31	31.95	0.30	1.00	20.2	8.1	12.1
9	UO	13.3	-3.500e+05	-3.500e+05							

**Effective properties**

Effective area	$A_{eff}$	1.7410e-04	m <sup>2</sup>			
Effective second moment of area	$I_{eff,y}$	3.9441e-07	m <sup>4</sup>	$I_{eff,z}$	7.3516e-08	m <sup>4</sup>
Effective section modulus	$W_{eff,y}$	7.4448e-06	m <sup>3</sup>	$W_{eff,z}$	2.6118e-06	m <sup>3</sup>
Shift of the centroid	$e_{N,y}$	0.0	mm	$e_{N,z}$	2.0	mm

**Compression check**

According to EN 1993-1-3 article 6.1.3 and formula (6.2)

Effective section area	$A_{eff}$	1.7410e-04	m <sup>2</sup>
Compression resistance	$N_{c,Rd}$	60.935	kN
Unity check		0.59	-

**Bending moment check for M<sub>y</sub>**

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,y}$	7.4448e-06	m <sup>3</sup>
Bending moment resistance	$M_{c,y,Rd}$	2.606	kNm
Unity check		0.02	-

**Bending moment check for M<sub>z</sub>**

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,z}$	2.6118e-06	m <sup>3</sup>
Bending moment resistance	$M_{c,z,Rd}$	0.914	kNm
Unity check		0.19	-

### Biaxial bending moment check

According to EN 1993-1-3 article 6.1.4 and formula (6.7)

Bending moment resistance	$M_{c,y,Rd}$	2.606	kNm
Bending moment resistance	$M_{c,z,Rd}$	0.914	kNm

Unity check (6.7) = 0.02 + 0.19 = 0.21 -

### Shear Force $V_y$

According to article EN 1993-1-3: 6.1.5 and formula (6.8).

No stiffening at the support.

Element ID	$I_c$ [mm]	$\alpha$ [deg]	$s_w$ [mm]	$\lambda_w$ [-]	$f_{bv}$ [MPa]	$V_{b,Rd,y,i}$ [kN]
3	48.8	0.00	46.7	0.55	203.0	11.888
5	98.8	90.00	96.7	1.14	147.6	0.000
7	48.8	0.00	46.7	0.55	203.0	11.888

Shear verification		
$V_{b,Rd,y}$	23.775	kN
Unity check	0.01	-

### Shear Force $V_z$

According to article EN 1993-1-3: 6.1.5 and formula (6.8).

No stiffening at the support.

Element ID	$I_c$ [mm]	$\alpha$ [deg]	$s_w$ [mm]	$\lambda_w$ [-]	$f_{bv}$ [MPa]	$V_{b,Rd,z,i}$ [kN]
3	48.8	0.00	46.7	0.55	203.0	0.000
5	98.8	90.00	96.7	1.14	147.6	17.500
7	48.8	0.00	46.7	0.55	203.0	0.000

Shear verification		
$V_{b,Rd,z}$	17.500	kN
Unity check	0.01	-

### Torsional Moment Check

According to article EN 1993-1-3: 6.1.6 and formula (6.11a), (6.11b), (6.11c).

Elastic verification		
Critical Fibre	32	
$\sigma_N$	205.7	MPa
$\sigma_{My}$	5.1	MPa
$\sigma_{Mz}$	51.8	MPa
$\tau_{Vy}$	1.4	MPa
$\tau_{Vz}$	1.0	MPa
$\tau_t$	0.0	MPa
Direct Stress Check	0.75	-
Shear Stress Check	0.01	-
Composed Stress Check	0.68	-

### Combined Compression and Bending Check

According to article EN 1993-1-3: 6.1.9 and formula (6.25), (6.26).

$e_{Nz}$	2.0	mm
$\Delta M_{b,Ed}$	-0.071	kNm
$N_{c,Rd}$	60.935	kN
$M_{cy,Rd,ten}$	2.909	kNm
$M_{cz,Rd,ten}$	0.914	kNm
$M_{cy,Rd,com}$	2.627	kNm
$M_{cz,Rd,com}$	1.177	kNm

Unity check (6.25) 0.59 + 0.02 + 0.15 = 0.75 -

Unity check (6.26) 0.01 + 0.19 - 0.59 = 0.00 -

The member satisfies the section check.

....:STABILITY CHECK:....

**Flexural Buckling Strength**

According to article EN 1993-1-3: 6.2.2

According to article EN 1993-1-1: 6.3.1 and formula (6.46)

Buckling parameters	yy	zz	
Sway type	sway	sway	
System Length L	1.867	0.360	m
Buckling factor k	1.00	1.00	
Buckling length $L_{cr}$	1.867	0.360	m
Critical Euler load $N_{cr}$	252.934	1499.305	kN
Slenderness	46.40	19.06	
Relative slenderness $\lambda_{rel}$	0.49	0.20	
Limit slenderness $\lambda_{rel,0}$	0.20	0.20	
Buckling curve	c	c	
Imperfection $\alpha$	0.49	0.49	
Reduction factor $\chi$	0.85	1.00	
Buckling resistance $N_{b,Rd}$	51.679	60.885	kN

Flexural Buckling verification		
$A_{eff}$	1.7410e-04	m <sup>2</sup>
Buckling resistance $N_{b,Rd}$	51.679	kN
Unity check	0.69	-

**Torsional (-Flexural) Buckling check**

According to article EN 1993-1-3: 6.2.3

According to article EN 1993-1-1: 6.3.1 and formula (6.46)

Torsional Buckling length	0.360	m
$N_{cr,T}$	958.161	kN
$N_{cr,TF}$	221.819	kN
Relative slenderness $\lambda_{rel,T}$	0.52	
Limit slenderness $\lambda_{rel,0}$	0.20	
Buckling curve	c	
Imperfection $\alpha$	0.49	
$A_{eff}$	1.7410e-04	m <sup>2</sup>
Reduction factor $\chi$	0.83	
Buckling resistance $N_{b,Rd}$	50.540	kN
Unity check	0.71	-

**Lateral Torsional Buckling Check**

According to article EN 1993-1-3: 6.2.4

According to article EN 1993-1-1: 6.3.2 and formula (6.55)

LTB Parameters		
Method for LTB Curve	art. 6.3.2.2	
$W_{eff,y}$	7.4448e-06	m <sup>3</sup>
Elastic critical moment $M_{cr}$	121.153	kNm
Relative slenderness $\lambda_{rel,LT}$	0.15	
Limit slenderness $\lambda_{rel,LT,0}$	0.20	

M <sub>cr</sub> Parameters		
LTB length	0.360	m
k	1.00	
k <sub>w</sub>	1.00	
C <sub>1</sub>	1.66	
C <sub>2</sub>	0.04	
C <sub>3</sub>	1.00	

The slenderness or bending moment is such that Lateral Torsional Buckling effects may be ignored according to EN 1993-1-1 article 6.3.2.2(4)

#### Bending and Axial Compression Check

According to article EN 1993-1-3: 6.2.5(1)

According to article EN 1993-1-1: 6.3.3 and formula (6.61), (6.62).

Interaction Method 1

Interaction method 1 parameters		
k <sub>yy</sub>	1.01	
k <sub>yz</sub>	1.00	
k <sub>zy</sub>	1.03	
k <sub>zz</sub>	1.03	
ΔM <sub>y,Ed</sub>	0.000	kNm
ΔM <sub>z,Ed</sub>	-0.071	kNm
A	1.7410e-04	m <sup>2</sup>
W <sub>y</sub>	7.4448e-06	m <sup>3</sup>
W <sub>z</sub>	2.6118e-06	m <sup>3</sup>
N <sub>Rk</sub>	60.935	kN
M <sub>y,Rk</sub>	2.606	kNm
M <sub>z,Rk</sub>	0.914	kNm
M <sub>y,Ed</sub>	0.061	kNm
M <sub>z,Ed</sub>	-0.104	kNm
Interaction Method 1		
M <sub>cr,0</sub>	72.906	kNm
reduced slenderness 0	0.19	
ψ <sub>y</sub>	0.55	
ψ <sub>z</sub>	0.96	
C <sub>my,0</sub>	0.87	
C <sub>mz,0</sub>	1.00	
C <sub>my</sub>	0.89	
C <sub>mz</sub>	1.00	
C <sub>mLT</sub>	1.00	
μ <sub>y</sub>	0.98	
μ <sub>z</sub>	1.00	
α <sub>LT</sub>	1.00	

Unity check  $0.69 + 0.02 + 0.19 = 0.91$  -

Unity check  $0.71 + 0.02 + 0.20 = 0.93$  -

The member satisfies the stability check.

## All truss member check

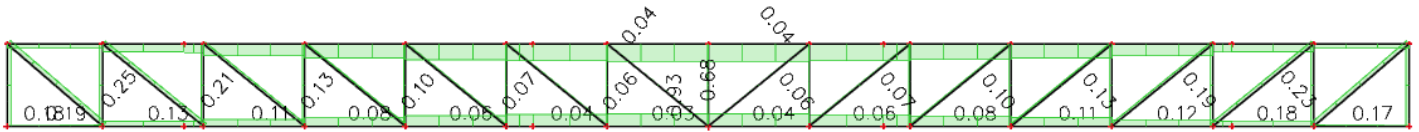
Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>stab</sub> [-]	Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>stab</sub> [-]
160	2.380	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.93</b>	0.75	0.93				50.0; 1.2; 3.0; 15.0)				
161	2.500	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.68</b>	0.56	0.68	2694	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.06</b>	0.06	0.06
162	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.03</b>	0.03	0.03	2713	0.000	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.08</b>	0.08	0.08
183	0.468	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.04</b>	0.04	0.04	2732	0.000	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.11</b>	0.11	0.11
184	0.468	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.04</b>	0.04	0.04	2751	0.000	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.12</b>	0.12	0.12
1861	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.18</b>	0.17	0.18	2770	0.000	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.18</b>	0.18	0.18
2100	0.000	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.17</b>	0.17	0.17	2797	0.000	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.06</b>	0.05	0.06
2561	0.000	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.04</b>	0.04	0.04	2816	0.000	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.07</b>	0.07	0.07
2580	0.000	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.06</b>	0.06	0.06	2835	0.000	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.10</b>	0.09	0.10
2599	0.000	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.08</b>	0.08	0.08	2854	0.000	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.13</b>	0.11	0.13
2618	0.000	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.11</b>	0.11	0.11	2873	0.000	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.19</b>	0.16	0.19
2637	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.13</b>	0.12	0.13	2892	0.000	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.23</b>	0.22	0.23
2656	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.19</b>	0.19	0.19	2911	0.000	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.06</b>	0.05	0.06
2675	0.000	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0;	S350GD+Z	<b>0.04</b>	0.04	0.04	2930	0.000	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.07</b>	0.07	0.07
								2949	0.000	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.10</b>	0.09	0.10
								2968	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0;	S350GD+Z	<b>0.13</b>	0.11	0.13



Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
			15.0)				
2987	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.21</b>	0.18	0.21
3006	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.25</b>	0.24	0.25

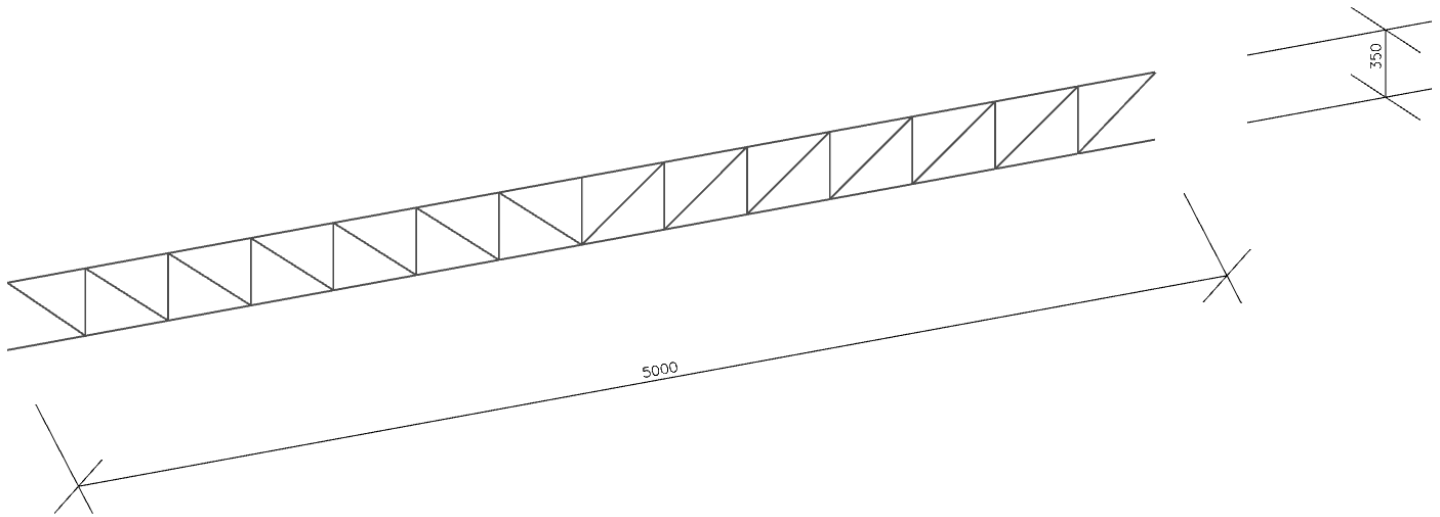
Name	Combination key
ULS-Set B (auto)/1	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/2	G + G1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/3	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/4	1.35*G + 1.35*G1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/5	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/6	G + G1 + 1.05*Q1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/7	G + G1 + 1.05*Q1 + 1.50*Q6 + G3 + G2

## Unity check

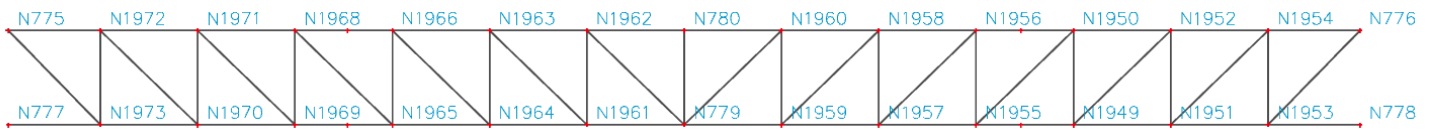


### 2.4.1.2 FLOOR TRUSS 350mm HIGH CHECK

Type floor truss. Truss spacing 600 mm.



#### Node coordinates

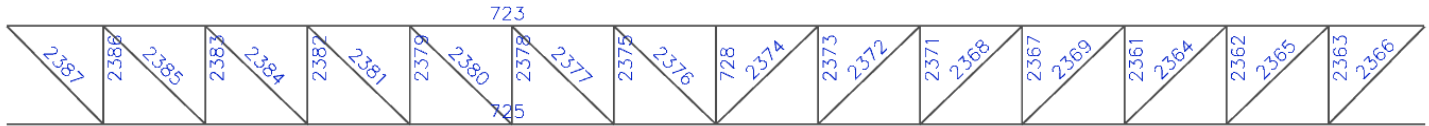


Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N775	8.400	0.000	2.550
N776	8.400	5.000	2.550
N777	8.400	0.000	2.200
N778	8.400	5.000	2.200
N779	8.400	2.500	2.200
N780	8.400	2.500	2.550
N1949	8.400	3.940	2.200
N1950	8.400	3.940	2.550
N1951	8.400	4.300	2.200
N1952	8.400	4.300	2.550

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1953	8.400	4.660	2.200
N1954	8.400	4.660	2.550
N1955	8.400	3.580	2.200
N1956	8.400	3.580	2.550
N1957	8.400	3.220	2.200
N1958	8.400	3.220	2.550
N1959	8.400	2.860	2.200
N1960	8.400	2.860	2.550
N1961	8.400	2.140	2.200
N1962	8.400	2.140	2.550

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1963	8.400	1.780	2.550
N1964	8.400	1.780	2.200
N1965	8.400	1.420	2.200
N1966	8.400	1.420	2.550
N1968	8.400	1.060	2.550
N1969	8.400	1.060	2.200
N1970	8.400	0.700	2.200
N1971	8.400	0.700	2.550
N1972	8.400	0.340	2.550
N1973	8.400	0.340	2.200

## Members number



Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
723	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	5.000	N775	N776	truss chord (95)
725	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	5.000	N777	N778	truss chord (95)
728	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.350	N779	N780	truss diagonal (90)
2361	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.350	N1949	N1950	truss diagonal (90)
2362	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.350	N1951	N1952	truss diagonal (90)
2363	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.350	N1953	N1954	truss diagonal (90)
2364	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.502	N1949	N1952	truss diagonal (90)
2365	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.502	N1951	N1954	truss diagonal (90)
2366	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.488	N1953	N776	truss diagonal (90)
2367	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.350	N1955	N1956	truss diagonal (90)
2368	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.502	N1957	N1956	truss diagonal (90)
2369	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.502	N1955	N1950	truss diagonal (90)
2371	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.350	N1957	N1958	truss diagonal (90)
2372	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.502	N1959	N1958	truss diagonal (90)
2373	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.350	N1959	N1960	truss diagonal (90)
2374	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.502	N779	N1960	truss diagonal (90)
2375	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.350	N1961	N1962	truss diagonal (90)
2376	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.502	N779	N1962	truss diagonal (90)
2377	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.502	N1961	N1963	truss diagonal (90)
2378	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.350	N1964	N1963	truss diagonal (90)
2379	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.350	N1965	N1966	truss diagonal (90)
2380	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.502	N1964	N1966	truss diagonal (90)
2381	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.502	N1965	N1968	truss diagonal (90)
2382	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.350	N1969	N1968	truss diagonal (90)
2383	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.350	N1970	N1971	truss diagonal (90)
2384	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.502	N1969	N1971	truss diagonal (90)
2385	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.502	N1970	N1972	truss diagonal (90)
2386	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.350	N1973	N1972	truss diagonal (90)
2387	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.488	N1973	N775	truss diagonal (90)

## Cross-Section properties

C100*50*15*1.2		
Type	Cold formed C section	
Detailed	100.0; 50.0; 1.2; 3.0; 15.0	
Formcode	114 - Cold formed C section	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	2.6269e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	1.1804e-04	1.3126e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	4.4038e-01	4.4038e-01
C <sub>y,UCS</sub> [mm], C <sub>z,UCS</sub> [mm]	17.2	50.0
α [deg]	0.00	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	4.2561e-07	9.3751e-08
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	40.3	18.9
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	8.5121e-06	2.8580e-06
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	9.7956e-06	4.2419e-06
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	3.43e+03	3.43e+03
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	1.48e+03	1.48e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	-41.5	0.0
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	1.2972e-10	2.2102e-10
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	0.0	121.2
Picture		

## Floor truss member hinges

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H647	723	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H649	725	Both	Free	Rigid	Rigid	Rigid	Free	Free
H652	728	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1142	2361	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1143	2362	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1144	2363	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1145	2364	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1146	2365	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1147	2366	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1148	2367	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1149	2368	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1150	2369	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1152	2371	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1153	2372	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1154	2373	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1155	2374	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1156	2375	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1157	2376	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1158	2377	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1159	2378	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1160	2379	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1161	2380	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1162	2381	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1163	2382	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1164	2383	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1165	2384	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1166	2385	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1167	2386	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1168	2387	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid

## Maximum forces in elements

### Axial force diagram N, kH.

#### 1D internal forces

Values: **N**

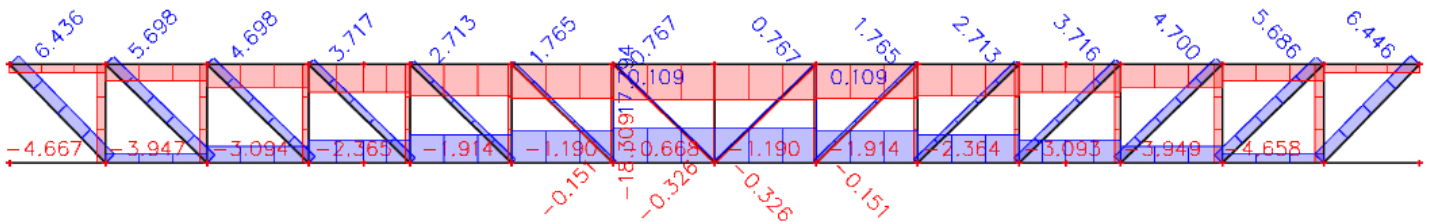
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Member

Selection: All



### Shear force diagram Vy, kH.

#### 1D internal forces

Values: **V<sub>y</sub>**

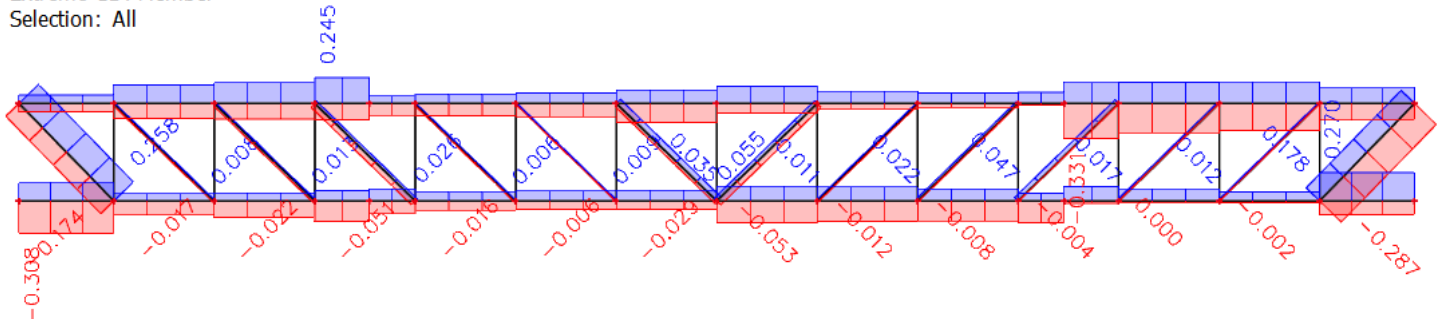
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Member

Selection: All



### Shear force diagram Vz, kH.

#### 1D internal forces

Values: **V<sub>z</sub>**

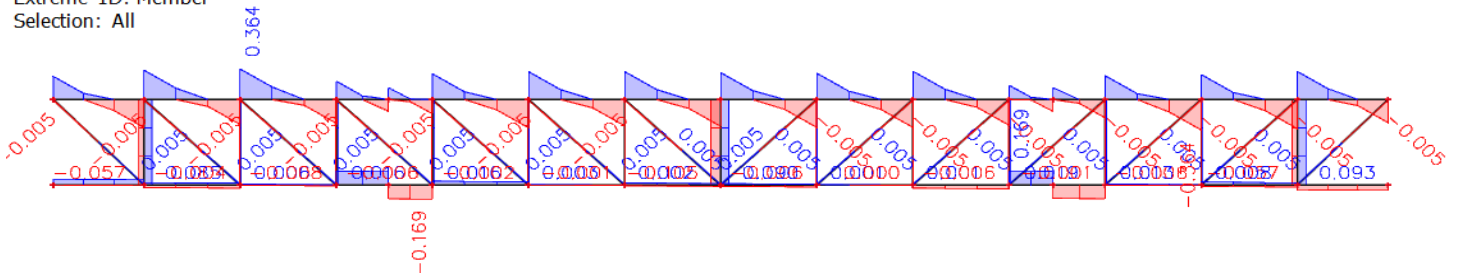
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Member

Selection: All



## Diagram of bending moments My, kNm.

### 1D internal forces

Values:  $M_y$

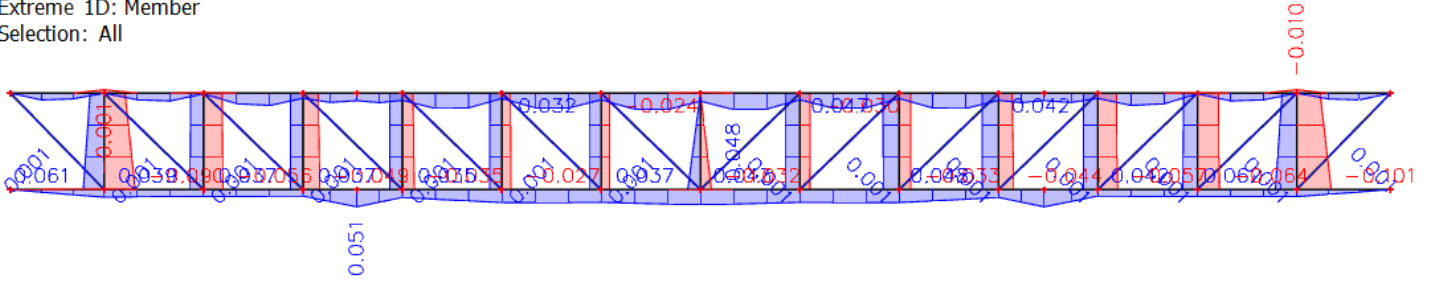
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Member

Selection: All



## Diagram of bending moments Mz, kNm.

### 1D internal forces

Values:  $M_z$

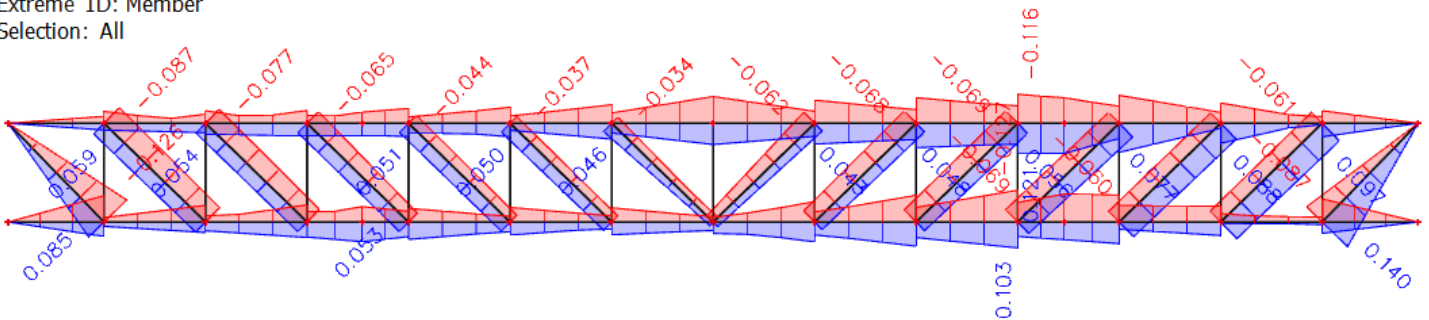
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

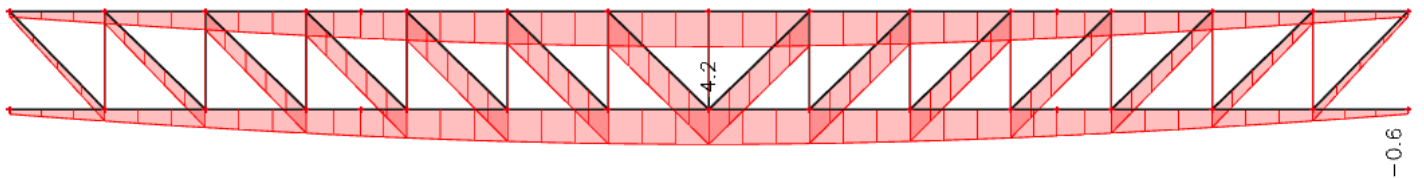
Extreme 1D: Member

Selection: All



## Deformation check

### SLS comb. - G+G1+Q1+G2+G3



The maximum deflection is 4.2 mm.

According to EC-EN 1990 - due to the esthetics-psychological deflection limits -  $L/300$ .

$5000 / 300 = 16.66 \text{ mm}$        $4.2 \text{ mm} < 16.66 \text{ mm}$       Deformation is OK!

Limits due to vibration from using and deflections -  $f_u = \frac{g(p + p_1 + q)}{30n^2(bp + p_1 + q)}$

$F_u = 9.53 \text{ mm}$        $4.2 \text{ mm} < 9.53 \text{ mm}$       Deformation is OK!

## Internal forces

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
723	4.660+	ULS-Set B (auto)/1	<b>-0.620</b>	-0.152	0.062	0.000	-0.002	0.052
723	3.745+	ULS-Set B (auto)/2	-9.635	<b>-0.331</b>	0.094	0.000	0.016	0.118
723	1.060+	ULS-Set B (auto)/3	-8.534	<b>0.245</b>	0.161	0.000	0.007	-0.002
723	4.300-	ULS-Set B (auto)/4	-11.876	0.106	<b>-0.364</b>	0.000	0.000	-0.036
723	0.700+	ULS-Set B (auto)/4	-11.875	-0.084	<b>0.364</b>	0.000	0.000	0.001
723	0.000	ULS-Set B (auto)/3	-2.768	0.080	0.194	<b>0.000</b>	0.000	0.000
723	4.660+	ULS-Set B (auto)/3	-2.761	-0.153	0.238	<b>0.000</b>	-0.007	0.052
723	4.660+	ULS-Set B (auto)/5	-4.142	-0.069	0.334	0.000	<b>-0.010</b>	0.024
723	2.620-	ULS-Set B (auto)/6	<b>-18.309</b>	0.151	0.096	0.000	<b>0.048</b>	-0.068
723	3.580+	ULS-Set B (auto)/7	-11.961	0.095	0.114	0.000	0.018	<b>-0.116</b>
723	3.580+	ULS-Set B (auto)/8	-1.689	-0.014	0.048	0.000	0.001	<b>0.121</b>
725	2.140+	ULS-Set B (auto)/6	<b>17.794</b>	0.082	0.024	0.000	0.038	-0.039
725	0.000	ULS-Set B (auto)/9	0.000	<b>-0.308</b>	0.019	0.000	0.000	0.000
725	4.660+	ULS-Set B (auto)/2	<b>0.000</b>	<b>0.270</b>	-0.024	0.000	0.010	-0.092
725	1.420-	ULS-Set B (auto)/6	11.928	0.082	<b>-0.169</b>	0.000	0.023	-0.012
725	3.580+	ULS-Set B (auto)/6	11.929	-0.208	<b>0.169</b>	0.000	0.023	-0.062
725	0.340+	ULS-Set B (auto)/9	2.785	-0.135	0.028	<b>0.000</b>	0.005	-0.017
725	4.300+	ULS-Set B (auto)/2	3.103	0.077	-0.009	<b>0.000</b>	0.015	-0.022
725	0.340+	ULS-Set B (auto)/8	0.626	-0.103	0.017	0.000	<b>-0.001</b>	-0.007
725	1.255-	ULS-Set B (auto)/6	11.928	0.028	0.159	0.000	<b>0.051</b>	-0.025
725	3.580-	ULS-Set B (auto)/7	11.987	-0.191	-0.040	0.000	0.019	<b>-0.127</b>
725	3.580-	ULS-Set B (auto)/8	1.685	0.115	-0.008	0.000	0.003	<b>0.103</b>
728	0.350	ULS-Set B (auto)/10	<b>-0.112</b>	<b>0.000</b>	-0.088	0.000	0.000	<b>0.000</b>
728	0.000	ULS-Set B (auto)/7	-0.500	0.000	<b>-0.105</b>	0.000	<b>0.037</b>	0.000
728	0.000	ULS-Set B (auto)/11	-0.152	0.000	0.064	<b>0.000</b>	-0.022	0.000
728	0.000	ULS-Set B (auto)/12	-0.511	0.000	0.007	<b>0.000</b>	-0.002	0.000
728	0.000	ULS-Set B (auto)/8	-0.152	0.000	<b>0.090</b>	0.000	<b>-0.032</b>	0.000
728	0.000	ULS-Set B (auto)/13	<b>-0.668</b>	0.000	0.027	0.000	-0.009	<b>0.000</b>
2361	0.350	ULS-Set B (auto)/8	<b>-0.308</b>	<b>0.000</b>	0.007	0.000	-0.053	<b>0.000</b>
2361	0.000	ULS-Set B (auto)/14	-0.746	0.000	<b>-0.001</b>	0.000	0.018	0.000
2361	0.000	ULS-Set B (auto)/5	-2.766	0.000	<b>0.013</b>	0.000	-0.032	0.000
2361	0.000	ULS-Set B (auto)/15	-2.007	0.000	0.012	<b>0.000</b>	-0.050	0.000
2361	0.000	ULS-Set B (auto)/10	-0.871	0.000	0.000	<b>0.000</b>	0.041	0.000
2361	0.000	ULS-Set B (auto)/3	-1.764	0.000	0.011	0.000	<b>-0.057</b>	0.000
2361	0.350	ULS-Set B	-2.542	0.000	0.006	0.000	<b>0.042</b>	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/7						
2361	0.000	ULS-Set B (auto)/6	<b>-3.093</b>	0.000	0.009	0.000	0.025	<b>0.000</b>
2362	0.350	ULS-Set B (auto)/8	<b>-0.475</b>	<b>0.000</b>	0.008	0.000	-0.058	<b>0.000</b>
2362	0.000	ULS-Set B (auto)/16	-1.354	0.000	<b>-0.006</b>	0.000	<b>0.042</b>	0.000
2362	0.000	ULS-Set B (auto)/2	-2.652	0.000	0.008	<b>0.000</b>	-0.064	0.000
2362	0.000	ULS-Set B (auto)/10	-1.059	0.000	-0.006	<b>0.000</b>	0.042	0.000
2362	0.000	ULS-Set B (auto)/3	-2.357	0.000	<b>0.008</b>	0.000	<b>-0.064</b>	0.000
2362	0.000	ULS-Set B (auto)/6	<b>-3.949</b>	0.000	-0.003	0.000	0.021	<b>0.000</b>
2363	0.350	ULS-Set B (auto)/8	<b>-0.618</b>	<b>0.000</b>	0.086	0.000	-0.063	<b>0.000</b>
2363	0.000	ULS-Set B (auto)/16	-1.572	0.000	<b>-0.057</b>	0.000	<b>0.062</b>	0.000
2363	0.000	ULS-Set B (auto)/2	-3.193	0.000	0.093	<b>0.000</b>	-0.100	0.000
2363	0.000	ULS-Set B (auto)/10	-1.221	0.000	-0.056	<b>0.000</b>	0.062	0.000
2363	0.000	ULS-Set B (auto)/3	-2.842	0.000	<b>0.093</b>	0.000	<b>-0.101</b>	0.000
2363	0.000	ULS-Set B (auto)/6	<b>-4.658</b>	0.000	-0.025	0.000	0.028	<b>0.000</b>
2364	0.000	ULS-Set B (auto)/14	1.148	<b>0.000</b>	0.004	0.000	0.000	-0.026
2364	0.000	ULS-Set B (auto)/17	4.213	<b>0.017</b>	<b>0.005</b>	0.000	0.000	0.041
2364	0.502	ULS-Set B (auto)/6	<b>4.700</b>	0.014	<b>-0.005</b>	0.000	0.000	-0.029
2364	0.000	ULS-Set B (auto)/7	3.871	0.010	0.005	<b>0.000</b>	0.000	-0.058
2364	0.000	ULS-Set B (auto)/8	<b>0.503</b>	0.006	0.004	<b>0.000</b>	<b>0.000</b>	0.080
2364	0.201-	ULS-Set B (auto)/6	4.694	0.014	0.001	0.000	<b>0.001</b>	-0.033
2364	0.000	ULS-Set B (auto)/16	1.682	0.004	0.005	0.000	0.000	<b>-0.060</b>
2364	0.502	ULS-Set B (auto)/3	2.699	0.012	-0.004	0.000	0.000	<b>0.088</b>
2365	0.000	ULS-Set B (auto)/14	1.340	<b>-0.002</b>	0.004	0.000	0.000	-0.027
2365	0.000	ULS-Set B (auto)/18	3.841	<b>0.012</b>	<b>0.005</b>	0.000	0.000	0.081
2365	0.502	ULS-Set B (auto)/6	<b>5.686</b>	0.005	<b>-0.005</b>	0.000	0.000	-0.028
2365	0.000	ULS-Set B (auto)/7	4.650	0.002	0.005	<b>0.000</b>	0.000	-0.055
2365	0.000	ULS-Set B (auto)/8	<b>0.698</b>	0.008	0.004	<b>0.000</b>	<b>0.000</b>	0.087
2365	0.201-	ULS-Set B (auto)/6	5.681	0.005	0.001	0.000	<b>0.001</b>	-0.029
2365	0.502	ULS-Set B (auto)/16	1.994	-0.001	-0.005	0.000	0.000	<b>-0.061</b>
2365	0.502	ULS-Set B (auto)/3	3.371	0.010	-0.004	0.000	0.000	<b>0.097</b>
2366	0.000	ULS-Set B (auto)/3	3.969	<b>-0.287</b>	0.003	0.000	0.000	<b>0.140</b>
2366	0.488	ULS-Set B (auto)/6	<b>6.446</b>	0.080	<b>-0.005</b>	0.000	0.000	0.000
2366	0.000	ULS-Set B (auto)/10	1.666	0.177	0.003	<b>0.000</b>	0.000	-0.086
2366	0.000	ULS-Set B (auto)/2	4.449	-0.286	<b>0.005</b>	<b>0.000</b>	0.000	0.140
2366	0.000	ULS-Set B (auto)/8	<b>0.883</b>	-0.266	0.003	0.000	<b>0.000</b>	0.130
2366	0.244-	ULS-Set B (auto)/6	6.441	0.080	0.000	0.000	<b>0.001</b>	-0.020
2366	0.000	ULS-Set B (auto)/16	2.146	<b>0.178</b>	0.005	0.000	0.000	<b>-0.087</b>
2367	0.350	ULS-Set B (auto)/8	<b>-0.147</b>	<b>0.000</b>	0.014	0.000	-0.039	<b>0.000</b>
2367	0.000	ULS-Set B	-0.693	0.000	<b>-0.006</b>	0.000	0.038	0.000



Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/19						
2367	0.000	ULS-Set B (auto)/20	-1.434	0.000	<b>0.019</b>	0.000	-0.034	0.000
2367	0.000	ULS-Set B (auto)/11	-0.165	0.000	0.012	<b>0.000</b>	-0.039	0.000
2367	0.000	ULS-Set B (auto)/8	-0.154	0.000	0.014	0.000	<b>-0.044</b>	0.000
2367	0.000	ULS-Set B (auto)/7	-1.973	0.000	0.000	<b>0.000</b>	<b>0.048</b>	0.000
2367	0.000	ULS-Set B (auto)/6	<b>-2.364</b>	0.000	0.005	0.000	0.038	<b>0.000</b>
2368	0.000	ULS-Set B (auto)/19	0.863	<b>-0.008</b>	0.004	0.000	0.000	-0.047
2368	0.000	ULS-Set B (auto)/20	1.484	<b>0.022</b>	<b>0.005</b>	0.000	0.000	0.028
2368	0.502	ULS-Set B (auto)/6	<b>2.713</b>	0.004	<b>-0.005</b>	0.000	0.000	-0.057
2368	0.000	ULS-Set B (auto)/8	<b>0.049</b>	0.017	0.004	0.000	<b>0.000</b>	0.048
2368	0.201-	ULS-Set B (auto)/6	2.707	0.004	0.001	0.000	<b>0.001</b>	-0.058
2368	0.502	ULS-Set B (auto)/7	2.307	-0.002	-0.005	<b>0.000</b>	0.000	<b>-0.069</b>
2368	0.502	ULS-Set B (auto)/8	0.056	0.017	-0.004	<b>0.000</b>	0.000	<b>0.056</b>
2369	0.000	ULS-Set B (auto)/19	1.094	<b>-0.004</b>	0.004	0.000	0.000	-0.054
2369	0.000	ULS-Set B (auto)/5	3.217	<b>0.047</b>	<b>0.005</b>	0.000	0.000	0.016
2369	0.502	ULS-Set B (auto)/6	<b>3.716</b>	0.029	<b>-0.005</b>	0.000	0.000	-0.040
2369	0.000	ULS-Set B (auto)/8	<b>0.278</b>	0.027	0.004	0.000	<b>0.000</b>	0.063
2369	0.201-	ULS-Set B (auto)/6	3.711	0.029	0.001	0.000	<b>0.001</b>	-0.049
2369	0.000	ULS-Set B (auto)/7	3.094	0.017	0.005	<b>0.000</b>	0.000	<b>-0.069</b>
2369	0.502	ULS-Set B (auto)/8	0.285	0.027	-0.004	<b>0.000</b>	0.000	<b>0.077</b>
2371	0.350	ULS-Set B (auto)/8	<b>-0.021</b>	<b>0.000</b>	0.000	0.000	-0.033	<b>0.000</b>
2371	0.000	ULS-Set B (auto)/14	-0.485	0.000	<b>0.000</b>	0.000	0.015	0.000
2371	0.000	ULS-Set B (auto)/11	-0.039	0.000	0.000	<b>0.000</b>	-0.029	0.000
2371	0.000	ULS-Set B (auto)/21	-1.796	0.000	0.001	<b>0.000</b>	0.025	0.000
2371	0.000	ULS-Set B (auto)/8	-0.028	0.000	0.000	0.000	<b>-0.033</b>	0.000
2371	0.350	ULS-Set B (auto)/7	-1.615	0.000	0.001	0.000	<b>0.047</b>	0.000
2371	0.000	ULS-Set B (auto)/6	<b>-1.914</b>	0.000	<b>0.001</b>	0.000	0.041	<b>0.000</b>
2372	0.000	ULS-Set B (auto)/7	1.557	<b>-0.012</b>	<b>0.005</b>	<b>0.000</b>	0.000	-0.062
2372	0.502	ULS-Set B (auto)/6	<b>1.765</b>	-0.010	<b>-0.005</b>	0.000	0.000	-0.060
2372	0.000	ULS-Set B (auto)/8	<b>-0.151</b>	0.011	0.004	0.000	<b>0.000</b>	0.042
2372	0.201-	ULS-Set B (auto)/6	1.760	-0.010	0.001	0.000	<b>0.001</b>	-0.057
2372	0.502	ULS-Set B (auto)/7	1.566	-0.012	-0.005	0.000	0.000	<b>-0.068</b>
2372	0.502	ULS-Set B (auto)/8	-0.144	<b>0.011</b>	-0.004	<b>0.000</b>	0.000	<b>0.048</b>
2373	0.000	ULS-Set B (auto)/12	-0.864	0.000	<b>-0.006</b>	0.000	0.019	0.000
2373	0.000	ULS-Set B (auto)/19	-0.442	<b>0.000</b>	<b>0.001</b>	0.000	0.030	<b>0.000</b>
2373	0.000	ULS-Set B (auto)/11	0.091	0.000	0.001	<b>0.000</b>	-0.026	0.000
2373	0.000	ULS-Set B (auto)/21	-1.078	0.000	-0.005	<b>0.000</b>	0.024	0.000
2373	0.350	ULS-Set B (auto)/8	<b>0.109</b>	0.000	-0.001	0.000	<b>-0.030</b>	0.000
2373	0.000	ULS-Set B	-1.050	0.000	0.000	0.000	<b>0.043</b>	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/7						
2373	0.000	ULS-Set B (auto)/6	<b>-1.190</b>	0.000	-0.002	0.000	0.038	<b>0.000</b>
2374	0.000	ULS-Set B (auto)/7	0.757	<b>-0.053</b>	<b>0.005</b>	0.000	0.000	-0.035
2374	0.000	ULS-Set B (auto)/8	<b>-0.326</b>	0.035	0.004	0.000	<b>0.000</b>	0.025
2374	0.201-	ULS-Set B (auto)/7	0.761	-0.053	0.001	<b>0.000</b>	<b>0.001</b>	-0.046
2374	0.502	ULS-Set B (auto)/7	<b>0.767</b>	-0.053	<b>-0.005</b>	0.000	0.000	<b>-0.062</b>
2374	0.502	ULS-Set B (auto)/8	-0.318	<b>0.035</b>	-0.004	<b>0.000</b>	0.000	<b>0.043</b>
2375	0.000	ULS-Set B (auto)/11	0.091	0.000	<b>-0.001</b>	0.000	-0.012	0.000
2375	0.000	ULS-Set B (auto)/12	-0.864	<b>0.000</b>	<b>0.002</b>	0.000	-0.009	<b>0.000</b>
2375	0.350	ULS-Set B (auto)/8	<b>0.109</b>	0.000	0.000	<b>0.000</b>	<b>-0.024</b>	0.000
2375	0.350	ULS-Set B (auto)/7	-1.040	0.000	0.001	<b>0.000</b>	<b>0.032</b>	0.000
2375	0.000	ULS-Set B (auto)/6	<b>-1.190</b>	0.000	0.001	0.000	0.025	<b>0.000</b>
2376	0.502	ULS-Set B (auto)/7	<b>0.767</b>	0.055	<b>-0.005</b>	0.000	0.000	<b>0.046</b>
2376	0.000	ULS-Set B (auto)/7	0.757	0.055	<b>0.005</b>	<b>0.000</b>	0.000	0.018
2376	0.000	ULS-Set B (auto)/8	<b>-0.326</b>	<b>-0.029</b>	0.004	<b>0.000</b>	<b>0.000</b>	-0.020
2376	0.201-	ULS-Set B (auto)/7	0.761	<b>0.055</b>	0.001	0.000	<b>0.001</b>	0.029
2376	0.502	ULS-Set B (auto)/8	-0.318	-0.029	-0.004	0.000	0.000	<b>-0.034</b>
2377	0.502	ULS-Set B (auto)/6	<b>1.765</b>	0.007	<b>-0.005</b>	0.000	0.000	0.039
2377	0.000	ULS-Set B (auto)/7	1.557	0.009	<b>0.005</b>	<b>0.000</b>	0.000	0.045
2377	0.000	ULS-Set B (auto)/8	<b>-0.151</b>	<b>-0.006</b>	0.004	<b>0.000</b>	<b>0.000</b>	-0.034
2377	0.201-	ULS-Set B (auto)/6	1.760	0.007	0.001	0.000	<b>0.001</b>	0.037
2377	0.502	ULS-Set B (auto)/8	-0.144	-0.006	-0.004	0.000	0.000	<b>-0.037</b>
2377	0.502	ULS-Set B (auto)/7	1.566	<b>0.009</b>	-0.005	0.000	0.000	<b>0.050</b>
2378	0.350	ULS-Set B (auto)/8	<b>-0.021</b>	<b>0.000</b>	0.003	<b>0.000</b>	-0.026	<b>0.000</b>
2378	0.000	ULS-Set B (auto)/22	-1.418	0.000	<b>-0.002</b>	0.000	-0.009	0.000
2378	0.000	ULS-Set B (auto)/23	-0.049	0.000	<b>0.003</b>	0.000	-0.014	0.000
2378	0.000	ULS-Set B (auto)/7	-1.625	0.000	-0.001	<b>0.000</b>	<b>0.035</b>	0.000
2378	0.000	ULS-Set B (auto)/8	-0.028	0.000	0.003	0.000	<b>-0.027</b>	0.000
2378	0.000	ULS-Set B (auto)/6	<b>-1.914</b>	0.000	-0.001	0.000	0.027	<b>0.000</b>
2379	0.350	ULS-Set B (auto)/8	<b>-0.147</b>	<b>0.000</b>	0.011	<b>0.000</b>	-0.031	<b>0.000</b>
2379	0.000	ULS-Set B (auto)/24	-0.510	0.000	<b>-0.006</b>	0.000	-0.010	0.000
2379	0.000	ULS-Set B (auto)/18	-1.444	0.000	<b>0.016</b>	0.000	-0.019	0.000
2379	0.000	ULS-Set B (auto)/7	-1.973	0.000	-0.002	<b>0.000</b>	<b>0.037</b>	0.000
2379	0.000	ULS-Set B (auto)/8	-0.154	0.000	0.011	0.000	<b>-0.035</b>	0.000
2379	0.000	ULS-Set B (auto)/6	<b>-2.365</b>	0.000	0.001	0.000	0.027	<b>0.000</b>
2380	0.000	ULS-Set B (auto)/18	1.500	<b>-0.016</b>	<b>0.005</b>	0.000	0.000	-0.012
2380	0.502	ULS-Set B (auto)/6	<b>2.713</b>	-0.001	<b>-0.005</b>	0.000	0.000	0.039
2380	0.000	ULS-Set B (auto)/24	0.585	<b>0.006</b>	0.004	<b>0.000</b>	0.000	-0.021
2380	0.000	ULS-Set B	<b>0.049</b>	-0.011	0.004	0.000	<b>0.000</b>	-0.038

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/8						
2380	0.201-	ULS-Set B (auto)/6	2.707	-0.001	0.001	0.000	<b>0.001</b>	0.039
2380	0.502	ULS-Set B (auto)/8	0.056	-0.011	-0.004	0.000	0.000	<b>-0.044</b>
2380	0.502	ULS-Set B (auto)/7	2.307	0.002	-0.005	<b>0.000</b>	0.000	<b>0.051</b>
2381	0.000	ULS-Set B (auto)/18	2.293	<b>-0.051</b>	<b>0.005</b>	0.000	0.000	-0.028
2381	0.502	ULS-Set B (auto)/6	<b>3.717</b>	-0.007	<b>-0.005</b>	0.000	0.000	0.035
2381	0.000	ULS-Set B (auto)/7	3.094	-0.001	0.005	<b>0.000</b>	0.000	<b>0.053</b>
2381	0.000	ULS-Set B (auto)/24	0.816	<b>0.026</b>	0.004	<b>0.000</b>	0.000	-0.015
2381	0.000	ULS-Set B (auto)/8	<b>0.277</b>	-0.030	0.004	0.000	<b>0.000</b>	-0.050
2381	0.201-	ULS-Set B (auto)/6	3.711	-0.007	0.001	0.000	<b>0.001</b>	0.037
2381	0.502	ULS-Set B (auto)/8	0.284	-0.030	-0.004	0.000	0.000	<b>-0.065</b>
2382	0.350	ULS-Set B (auto)/8	<b>-0.307</b>	<b>0.000</b>	0.010	0.000	-0.045	<b>0.000</b>
2382	0.000	ULS-Set B (auto)/24	-0.676	0.000	<b>-0.008</b>	0.000	0.002	0.000
2382	0.000	ULS-Set B (auto)/18	-2.016	0.000	<b>0.016</b>	0.000	-0.043	0.000
2382	0.000	ULS-Set B (auto)/16	-1.104	0.000	-0.002	<b>0.000</b>	<b>0.037</b>	0.000
2382	0.000	ULS-Set B (auto)/9	-1.774	0.000	0.016	<b>0.000</b>	-0.045	0.000
2382	0.000	ULS-Set B (auto)/3	-1.763	0.000	0.011	0.000	<b>-0.049</b>	0.000
2382	0.000	ULS-Set B (auto)/6	<b>-3.094</b>	0.000	0.001	0.000	0.024	<b>0.000</b>
2383	0.350	ULS-Set B (auto)/8	<b>-0.478</b>	<b>0.000</b>	0.005	0.000	-0.053	<b>0.000</b>
2383	0.000	ULS-Set B (auto)/16	-1.352	0.000	<b>-0.004</b>	<b>0.000</b>	<b>0.039</b>	0.000
2383	0.000	ULS-Set B (auto)/9	-2.371	0.000	0.005	<b>0.000</b>	-0.055	0.000
2383	0.000	ULS-Set B (auto)/3	-2.360	0.000	<b>0.006</b>	0.000	<b>-0.056</b>	0.000
2383	0.000	ULS-Set B (auto)/6	<b>-3.947</b>	0.000	-0.002	0.000	0.024	<b>0.000</b>
2384	0.000	ULS-Set B (auto)/18	3.077	<b>-0.022</b>	<b>0.005</b>	0.000	0.000	-0.062
2384	0.502	ULS-Set B (auto)/6	<b>4.698</b>	-0.002	<b>-0.005</b>	0.000	0.000	0.034
2384	0.000	ULS-Set B (auto)/7	3.869	0.000	0.005	<b>0.000</b>	0.000	0.053
2384	0.000	ULS-Set B (auto)/24	1.034	<b>0.013</b>	0.004	<b>0.000</b>	0.000	0.003
2384	0.000	ULS-Set B (auto)/8	<b>0.505</b>	-0.012	0.004	0.000	<b>0.000</b>	-0.070
2384	0.201-	ULS-Set B (auto)/6	4.692	-0.002	0.001	0.000	<b>0.001</b>	0.034
2384	0.502	ULS-Set B (auto)/3	2.701	-0.015	-0.004	0.000	0.000	<b>-0.077</b>
2384	0.502	ULS-Set B (auto)/16	1.690	0.002	-0.005	0.000	0.000	<b>0.054</b>
2385	0.000	ULS-Set B (auto)/25	3.397	<b>-0.017</b>	0.004	0.000	0.000	-0.077
2385	0.000	ULS-Set B (auto)/26	1.695	<b>0.008</b>	<b>0.005</b>	0.000	0.000	0.011
2385	0.502	ULS-Set B (auto)/6	<b>5.698</b>	0.002	<b>-0.005</b>	0.000	0.000	0.036
2385	0.000	ULS-Set B (auto)/7	4.664	0.005	0.005	<b>0.000</b>	0.000	0.055
2385	0.000	ULS-Set B (auto)/24	1.262	0.008	0.004	<b>0.000</b>	0.000	0.009
2385	0.000	ULS-Set B (auto)/8	<b>0.684</b>	-0.012	0.004	0.000	<b>0.000</b>	-0.078
2385	0.201-	ULS-Set B (auto)/6	5.692	0.002	0.001	0.000	<b>0.001</b>	0.035
2385	0.502	ULS-Set B	3.360	-0.013	-0.004	0.000	0.000	<b>-0.087</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/3						
2385	0.502	ULS-Set B (auto)/16	2.006	0.006	-0.005	0.000	0.000	<b>0.059</b>
2386	0.350	ULS-Set B (auto)/8	<b>-0.608</b>	<b>0.000</b>	0.082	0.000	-0.059	<b>0.000</b>
2386	0.000	ULS-Set B (auto)/16	-1.580	0.000	<b>-0.057</b>	<b>0.000</b>	<b>0.061</b>	0.000
2386	0.000	ULS-Set B (auto)/9	-2.846	0.000	<b>0.085</b>	<b>0.000</b>	<b>-0.090</b>	0.000
2386	0.000	ULS-Set B (auto)/6	<b>-4.667</b>	0.000	-0.034	0.000	0.037	<b>0.000</b>
2387	0.000	ULS-Set B (auto)/16	2.135	<b>-0.174</b>	<b>0.005</b>	<b>0.000</b>	0.000	<b>0.085</b>
2387	0.488	ULS-Set B (auto)/6	<b>6.436</b>	-0.105	<b>-0.005</b>	0.000	0.000	0.000
2387	0.000	ULS-Set B (auto)/3	3.979	0.257	0.003	<b>0.000</b>	0.000	-0.125
2387	0.000	ULS-Set B (auto)/8	<b>0.895</b>	0.251	0.003	0.000	<b>0.000</b>	-0.122
2387	0.244-	ULS-Set B (auto)/6	6.431	-0.105	0.000	0.000	<b>0.001</b>	0.026
2387	0.000	ULS-Set B (auto)/9	3.993	<b>0.258</b>	0.003	0.000	0.000	<b>-0.126</b>

Name	Combination key
ULS-Set B (auto)/1	$G + G1 + 0.75*Q3 + 1.50*Q6 + G3 + G2$
ULS-Set B (auto)/2	$1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q6 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/3	$G + G1 + 1.05*Q1 + 1.50*Q6 + G3 + G2$
ULS-Set B (auto)/4	$1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q5 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/5	$1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q6 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/6	$1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/7	$1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/8	$G + G1 + 1.50*Q6 + G3 + G2$
ULS-Set B (auto)/9	$G + G1 + 1.05*Q1 + 1.50*Q7 + G3 + G2$
ULS-Set B (auto)/10	$G + G1 + 0.75*Q3 + 1.50*Q5 + G3 + G2$
ULS-Set B (auto)/11	$G + G1 + 1.50*Q7 + G3 + G2$
ULS-Set B (auto)/12	$1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8$
ULS-Set B (auto)/13	$1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q6 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/14	$G + G1 + 1.50*Q4 + G3 + G2$
ULS-Set B (auto)/15	$1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q7 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/16	$1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/17	$1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/18	$1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/19	$G + G1 + 1.50*Q5 + G3 + G2$
ULS-Set B (auto)/20	$1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q6 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/21	$1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8$
ULS-Set B (auto)/22	$1.35*G + 1.35*G1 + 1.05*Q1 + 1.35*G3 + 1.35*G2 + 1.50*Q8$
ULS-Set B (auto)/23	$G + G1 + 0.75*Q3 + 1.50*Q7 + G3 + G2$
ULS-Set B (auto)/24	$G + G1 + G3 + G2 + 1.50*Q8$
ULS-Set B (auto)/25	$G + G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + G3 + G2$
ULS-Set B (auto)/26	$1.35*G + 1.35*G1 + 1.35*G3 + 1.35*G2 + 1.50*Q8$

## Member 723 check

### EN 1993-1-3 Cold Formed Code Check

National annex: Standard EN

Member 723	2.620 / 5.000 m	Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	ULS-Set B (auto)	0.46 -
------------	-----------------	---	----------	------------------	--------

<b>Combination key</b>	
ULS-Set B (auto) / 1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2	

<b>Partial safety factors</b>	
$\gamma_{M0}$ for resistance of cross-sections	1.00
$\gamma_{M1}$ for resistance to instability	1.00
$\gamma_{M2}$ for resistance of net sections	1.25

<b>Material</b>		
Yield strength $f_y$	350.0	MPa
Average yield strength $f_{y,a}$	360.7	MPa
k	7	
n	4	
Ultimate strength $f_u$	420.0	MPa
Fabrication	cold formed	

....:SECTION CHECK:....

The critical check is on position 2.620 m

Internal forces		Calculated	Additional moments	Total	Unit
Normal force	$N_{Ed}$	-18.309		-18.309	kN
Shear force	$V_{y,Ed}$	-0.096		-0.096	kN
Shear force	$V_{z,Ed}$	0.151		0.151	kN
Torsion	$T_{Ed}$	0.000		0.000	kNm
Bending moment	$M_{y,Ed}$	-0.068	0.000	-0.068	kNm
Bending moment	$M_{z,Ed}$	-0.048	-0.036	-0.084	kNm

### Effective section N-

#### Effective width calculation

According to EN 1993-1-3 article 5.5.2, 5.5.3 & EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\lambda_{p,red}$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	3.500e+05	3.500e+05	1.00	0.50	0.68	0.58	1.00	13.3		
3	I	46.7	3.500e+05	3.500e+05	1.00	4.00	0.84	0.72	0.96	45.0	20.6	22.5
5	I	96.7	3.500e+05	3.500e+05	1.00	4.00	1.73		0.50	48.8	24.4	24.4
7	I	46.7	3.500e+05	3.500e+05	1.00	4.00	0.84	0.72	0.96	45.0	20.6	22.5
9	UO	13.3	3.500e+05	3.500e+05	1.00	0.50	0.68	0.58	1.00	13.3		

### Stiffener calculation

According to EN 1993-1-3 article 5.5.3

Id	$A_s$ [m <sup>2</sup> ]	$I_s$ [m <sup>4</sup> ]	$b_1$ [mm]	$b_2$ [mm]	$h_w$ [mm]	$k_r$ [-]	$K$ [kN/m <sup>2</sup> ]	$\sigma_{cr}$ [kN/m <sup>2</sup> ]	$\lambda_{st}$ [-]	$\chi_{st}$ [-]	$A_{s,red}$ [m <sup>2</sup> ]
1	4.3697e-05	8.3901e-10	41.2	41.2	98.8	1.00	3.109e+02	3.387e+05	1.02	0.74	3.2121e-05
9	4.3697e-05	8.3901e-10	41.2	41.2	98.8	1.00	3.109e+02	3.387e+05	1.02	0.74	3.2121e-05

**Effective section My-  
Effective width calculation**

According to EN 1993-1-3 article 5.5.2, 5.5.3 & EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\lambda_{p,red}$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	3.302e+05	2.414e+05	0.73	0.50	0.68	0.60	1.00	13.3		
3	I	46.7	3.500e+05	3.375e+05	0.96	4.07	0.83	0.74	0.95	44.6	20.6	22.5
5	I	96.7	3.433e+05	-3.001e+05	-0.87	20.79	0.76		1.00	51.6	20.6	31.0
7	I	46.7	-3.074e+05	-3.200e+05								
9	UO	13.3	-2.244e+05	-3.132e+05								

**Stiffener calculation**

According to EN 1993-1-3 article 5.5.3

Id	$A_s$ [m <sup>2</sup> ]	$I_s$ [m <sup>4</sup> ]	$b_1$ [mm]	$b_2$ [mm]	$h_w$ [mm]	$k_r$ [-]	$K$ [kN/m <sup>2</sup> ]	$\sigma_{cr}$ [kN/m <sup>2</sup> ]	$\lambda_d$ [-]	$\chi_d$ [-]	$A_{s,red}$ [m <sup>2</sup> ]
1	4.3659e-05	8.3870e-10	41.2	31.2	98.8	0.00	4.203e+02	3.941e+05	0.94	0.79	3.4433e-05

**Effective section Mz-**

**Effective width calculation**

According to EN 1993-1-3 article 5.5.2, 5.5.3 & EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	-3.500e+05	-3.500e+05							
3	I	46.7	2.566e+05	-3.366e+05	-1.31	31.95	0.30	1.00	20.2	8.1	12.1
5	I	96.7	2.700e+05	2.700e+05	1.00	4.00	1.73	0.50	48.8	24.4	24.4
7	I	46.7	2.566e+05	-3.366e+05	-1.31	31.95	0.30	1.00	20.2	8.1	12.1
9	UO	13.3	-3.500e+05	-3.500e+05							

Effective properties						
Effective area	$A_{eff}$	1.7410e-04	m <sup>2</sup>			
Effective second moment of area	$I_{eff,y}$	3.9441e-07	m <sup>4</sup>	$I_{eff,z}$	7.3516e-08	m <sup>4</sup>
Effective section modulus	$W_{eff,y}$	7.4448e-06	m <sup>3</sup>	$W_{eff,z}$	2.6118e-06	m <sup>3</sup>
Shift of the centroid	$e_{N,y}$	0.0	mm	$e_{N,z}$	2.0	mm

**Compression check**

According to EN 1993-1-3 article 6.1.3 and formula (6.2)

Effective section area	$A_{eff}$	1.7410e-04	m <sup>2</sup>
Compression resistance	$N_{c,Rd}$	60.935	kN
Unity check		0.30	-

**Bending moment check for M<sub>y</sub>**

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,y}$	7.4448e-06	m <sup>3</sup>
Bending moment resistance	$M_{c,y,Rd}$	2.606	kNm
Unity check		0.03	-

**Bending moment check for M<sub>z</sub>**

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,z}$	2.6118e-06	m <sup>3</sup>
Bending moment resistance	$M_{c,z,Rd}$	0.914	kNm
Unity check		0.09	-

### Biaxial bending moment check

According to EN 1993-1-3 article 6.1.4 and formula (6.7)

Bending moment resistance	$M_{c,y,Rd}$	2.606	kNm
Bending moment resistance	$M_{c,z,Rd}$	0.914	kNm

Unity check (6.7) = 0.03 + 0.09 = 0.12 -

### Shear Force $V_z$

According to article EN 1993-1-3: 6.1.5 and formula (6.8).

No stiffening at the support.

Element ID	$l_c$ [mm]	$\alpha$ [deg]	$s_w$ [mm]	$\lambda_w$ [-]	$f_{bv}$ [MPa]	$V_{b,Rd,z,i}$ [kN]
3	48.8	0.00	46.7	0.55	203.0	0.000
5	98.8	90.00	96.7	1.14	147.6	17.500
7	48.8	0.00	46.7	0.55	203.0	0.000

### Shear verification

$V_{b,Rd,z}$	17.500	kN
Unity check	0.01	-

### Torsional Moment Check

According to article EN 1993-1-3: 6.1.6 and formula (6.11a), (6.11b), (6.11c).

### Elastic verification

Critical Fibre	34	
$\sigma_N$	105.2	MPa
$\sigma_{My}$	8.3	MPa
$\sigma_{Mz}$	25.0	MPa
$T_{Vy}$	0.7	MPa
$T_{Vz}$	1.1	MPa
$T_t$	0.0	MPa
Direct Stress Check	0.40	-
Shear Stress Check	0.01	-
Composed Stress Check	0.36	-

### Combined Compression and Bending Check

According to article EN 1993-1-3: 6.1.9 and formula (6.25), (6.26).

$e_{Nz}$	2.0	mm
$\Delta M_{z,Ed}$	-0.036	kNm
$N_{c,Rd}$	60.935	kN
$M_{cy,Rd,ten}$	2.909	kNm
$M_{cz,Rd,ten}$	0.914	kNm
$M_{cy,Rd,com}$	2.627	kNm
$M_{cz,Rd,com}$	1.177	kNm

Unity check (6.25)  $0.30 + 0.03 + 0.07 = 0.40$  -

Unity check (6.26)  $0.02 + 0.09 - 0.30 = 0.00$  -

The member satisfies the section check.

.....**STABILITY CHECK**.....

**Flexural Buckling Strength**

According to article EN 1993-1-3: 6.2.2

According to article EN 1993-1-1: 6.3.1 and formula (6.46)

Buckling parameters	yy	zz	
Sway type	sway	sway	
System Length L	1.245	0.360	m
Buckling factor k	1.00	1.00	
Buckling length $L_{cr}$	1.245	0.360	m
Critical Euler load $N_{cr}$	569.101	1499.305	kN
Slenderness	30.93	19.06	
Relative slenderness $\lambda_{rel}$	0.33	0.20	
Limit slenderness $\lambda_{rel,0}$	0.20	0.20	

The slenderness or compression force is such that Flexural Buckling effects may be ignored according to EN 1993-1-1 article 6.3.1.2(4)

**Torsional (-Flexural) Buckling check**

According to article EN 1993-1-3: 6.2.3

According to article EN 1993-1-1: 6.3.1 and formula (6.46)

Torsional Buckling length	0.360	m
$N_{\sigma,T}$	958.161	kN
$N_{\sigma,TF}$	418.241	kN
Relative slenderness $\lambda_{rel,T}$	0.38	
Limit slenderness $\lambda_{rel,0}$	0.20	
Buckling curve	c	
Imperfection $\alpha$	0.49	
$A_{eff}$	1.7410e-04	m <sup>2</sup>
Reduction factor $\chi$	0.91	
Buckling resistance $N_{b,Rd}$	55.266	kN
Unity check	0.33	-

**Lateral Torsional Buckling Check**

According to article EN 1993-1-3: 6.2.4

According to article EN 1993-1-1: 6.3.2 and formula (6.55)

LTB Parameters		
Method for LTB Curve	art. 6.3.2.2	
$W_{eff,y}$	7.4448e-06	m <sup>3</sup>
Elastic critical moment $M_{cr}$	104.015	kNm
Relative slenderness $\lambda_{rel,LT}$	0.16	
Limit slenderness $\lambda_{rel,LT,0}$	0.20	

$M_{cr}$ Parameters		
LTB length	0.360	m
k	1.00	
$k_w$	1.00	
$C_1$	1.43	
$C_2$	0.00	
$C_3$	1.00	

The slenderness or bending moment is such that Lateral Torsional Buckling effects may be ignored according to EN 1993-1-1 article 6.3.2.2(4)

**Bending and Axial Compression Check**

According to article EN 1993-1-3: 6.2.5(1)

According to article EN 1993-1-1: 6.3.3 and formula (6.61), (6.62).

Interaction Method 1



Interaction method 1 parameters		
$k_{yy}$	1.03	
$k_{yz}$	1.01	
$k_{zy}$	1.03	
$k_{zz}$	1.01	
$\Delta M_{y,Ed}$	0.000	kNm
$\Delta M_{z,Ed}$	-0.036	kNm
A	1.7410e-04	m <sup>2</sup>
$W_y$	7.4448e-06	m <sup>3</sup>
$W_z$	2.6118e-06	m <sup>3</sup>
$N_{Rk}$	60.935	kN
$M_{y,Rk}$	2.606	kNm
$M_{z,Rk}$	0.914	kNm
$M_{y,Ed}$	-0.086	kNm
$M_{z,Ed}$	-0.048	kNm
Interaction Method 1		
$M_{cr,0}$	72.906	kNm
reduced slenderness 0	0.19	
$\Psi_y$	0.75	

Interaction method 1 parameters		
$\psi_z$	0.83	
$C_{my,0}$	0.99	
$C_{mz,0}$	1.00	
$C_{my}$	0.99	
$C_{mz}$	1.00	
$C_{mLT}$	1.00	
$\mu_y$	1.00	
$\mu_z$	1.00	
$\bar{a}_{LT}$	1.00	

Unity check  $0.32 + 0.03 + 0.09 = 0.45$  -

Unity check  $0.33 + 0.03 + 0.09 = 0.46$  -

The member satisfies the stability check.

## All truss member check

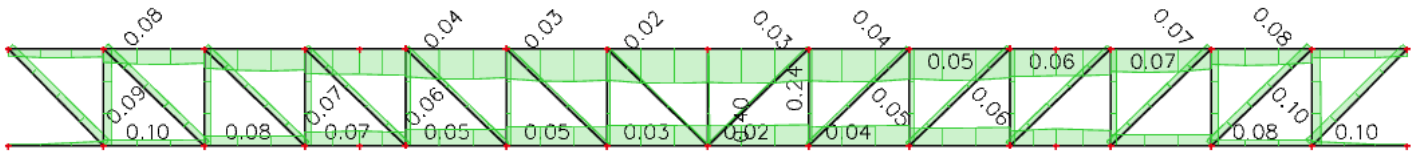
Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
723	2.620	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.46	<b>0.40</b>	0.46
725	2.860	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.24	<b>0.24</b>	0.00
728	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.02
2361	0.350	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.07</b>	0.07
2362	0.000	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.08	<b>0.08</b>	0.08
2363	0.000	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.11	<b>0.10</b>	0.11
2364	0.502	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.07</b>	0.00
2365	0.502	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.08	<b>0.08</b>	0.00
2366	0.000	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.10	<b>0.10</b>	0.00
2367	0.350	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.06	<b>0.06</b>	0.06
2368	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.05	<b>0.05</b>	0.00
2369	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.06	<b>0.06</b>	0.00
2371	0.350	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.05	<b>0.05</b>	0.05
2372	0.502	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0;	S350GD+Z	0.04	<b>0.04</b>	0.01

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
			50.0; 1.2; 3.0; 15.0)				
2373	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
2374	0.502	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.01
2375	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.03
2376	0.502	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.01
2377	0.502	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.00
2378	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.05	<b>0.05</b>	0.05
2379	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.06	<b>0.05</b>	0.06
2380	0.502	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.00
2381	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.06	<b>0.06</b>	0.00
2382	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.07</b>	0.07
2383	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.08	<b>0.08</b>	0.08
2384	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.07</b>	0.00
2385	0.502	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.08	<b>0.08</b>	0.00
2386	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.10	<b>0.10</b>	0.10
2387	0.000	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0;	S350GD+Z	0.09	<b>0.09</b>	0.00

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
			15.0)				

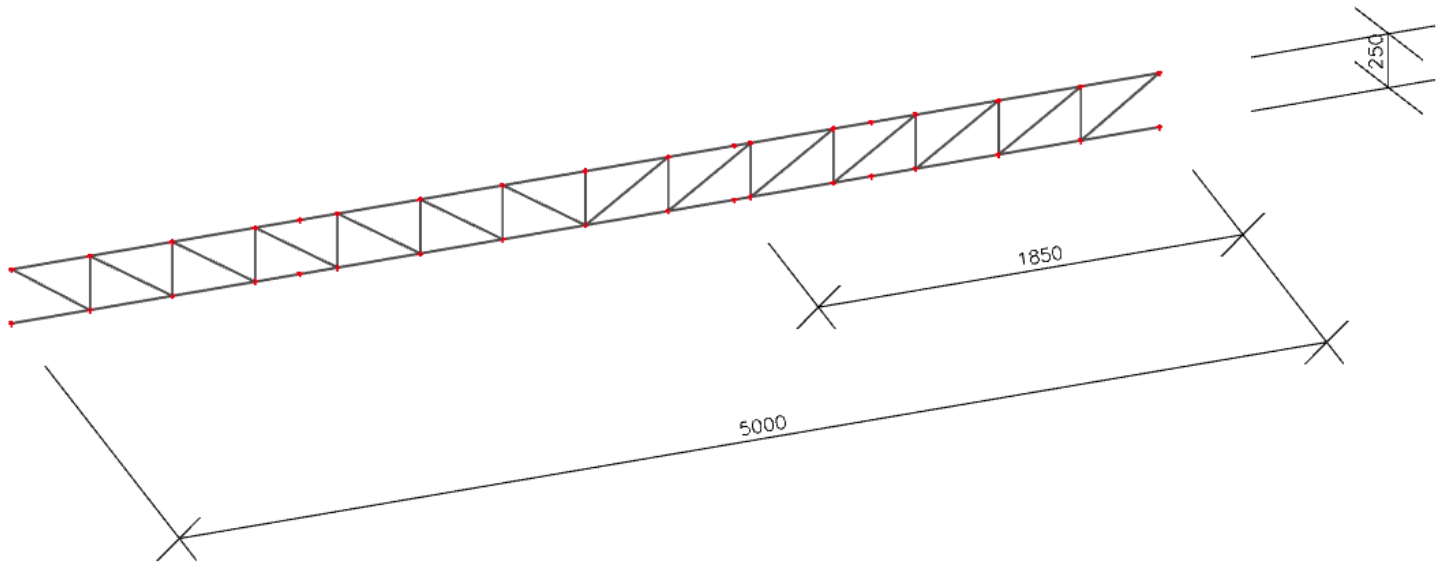
Name	Combination key
ULS-Set B (auto)/1	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/2	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/3	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/4	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q7 + 1.35*G3 + 1.35*G2

### Unity check



### 2.4.1.3 FLOOR TRUSS 250mm HIGH CHECK

Type floor truss. Truss spacing 600 mm.



#### Node coordinates

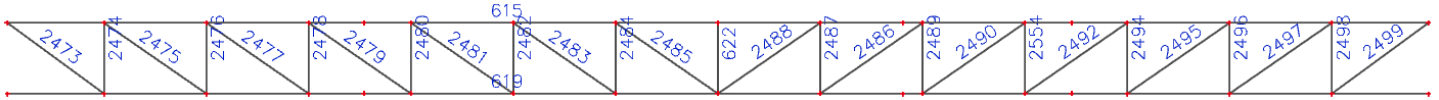


Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N661	10.800	0.000	2.550
N662	10.800	5.000	2.550
N663	10.800	0.000	2.300
N664	10.800	5.000	2.300
N665	10.800	2.500	2.300
N666	10.800	2.500	2.550
N2052	10.800	0.340	2.300
N2053	10.800	0.340	2.550
N2054	10.800	0.700	2.300
N2055	10.800	0.700	2.550

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2056	10.800	1.060	2.300
N2057	10.800	1.060	2.550
N2058	10.800	1.420	2.300
N2059	10.800	1.420	2.550
N2060	10.800	1.780	2.300
N2061	10.800	1.780	2.550
N2062	10.800	2.140	2.300
N2063	10.800	2.140	2.550
N2064	10.800	2.860	2.300
N2065	10.800	3.220	2.550

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2066	10.800	2.860	2.550
N2067	10.800	3.220	2.300
N2068	10.800	3.580	2.550
N2069	10.800	3.580	2.300
N2070	10.800	3.940	2.550
N2071	10.800	3.940	2.300
N2072	10.800	4.300	2.550
N2073	10.800	4.300	2.300
N2074	10.800	4.660	2.550
N2075	10.800	4.660	2.300

## Members number



Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
615	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	5.000	N661	N662	truss chord (95)
619	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	5.000	N663	N664	truss chord (95)
622	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N665	N666	truss diagonal (90)
2473	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.422	N2052	N661	truss diagonal (90)
2474	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2052	N2053	truss diagonal (90)
2475	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2054	N2053	truss diagonal (90)
2476	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2054	N2055	truss diagonal (90)
2477	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2056	N2055	truss diagonal (90)
2478	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2056	N2057	truss diagonal (90)
2479	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2058	N2057	truss diagonal (90)
2480	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2058	N2059	truss diagonal (90)
2481	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2060	N2059	truss diagonal (90)
2482	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2060	N2061	truss diagonal (90)
2483	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2062	N2061	truss diagonal (90)
2484	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2062	N2063	truss diagonal (90)
2485	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N665	N2063	truss diagonal (90)
2486	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2064	N2065	truss diagonal (90)
2487	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2064	N2066	truss diagonal (90)
2488	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N665	N2066	truss diagonal (90)
2489	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2067	N2065	truss diagonal (90)
2490	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2067	N2068	truss diagonal (90)
2492	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2069	N2070	truss diagonal (90)
2494	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2071	N2070	truss diagonal (90)
2495	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2071	N2072	truss diagonal (90)
2496	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2073	N2072	truss diagonal (90)
2497	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2073	N2074	truss diagonal (90)
2498	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2075	N2074	truss diagonal (90)
2499	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.422	N2075	N662	truss diagonal (90)
2554	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2069	N2068	truss diagonal (90)

## Cross-Section properties

C100*50*15*1.2		
Type	Cold formed C section	
Detailed	100.0; 50.0; 1.2; 3.0; 15.0	
Formcode	114 - Cold formed C section	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	2.6269e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	1.1804e-04	1.3126e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	4.4038e-01	4.4038e-01
C <sub>y,UCS</sub> [mm], C <sub>z,UCS</sub> [mm]	17.2	50.0
α [deg]	0.00	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	4.2561e-07	9.3751e-08
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	40.3	18.9
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	8.5121e-06	2.8580e-06
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	9.7956e-06	4.2419e-06
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	3.43e+03	3.43e+03
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	1.48e+03	1.48e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	-41.5	0.0
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	1.2972e-10	2.2102e-10
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	0.0	121.2
Picture		

## Floor truss member hinges

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H550	622	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H699	619	Both	Free	Rigid	Rigid	Rigid	Free	Free
H704	615	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H1254	2473	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1255	2474	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1256	2475	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1257	2476	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1258	2477	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1259	2478	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1260	2479	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1261	2480	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1262	2481	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1263	2482	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1264	2483	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1265	2484	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1266	2485	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1267	2486	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1268	2487	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1269	2488	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1270	2489	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1271	2490	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1273	2492	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1275	2494	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1276	2495	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1277	2496	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1278	2497	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1279	2498	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1280	2499	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1335	2554	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free





## Diagram of bending moments $M_y$ , kNm.

### 1D internal forces

Values:  $M_y$

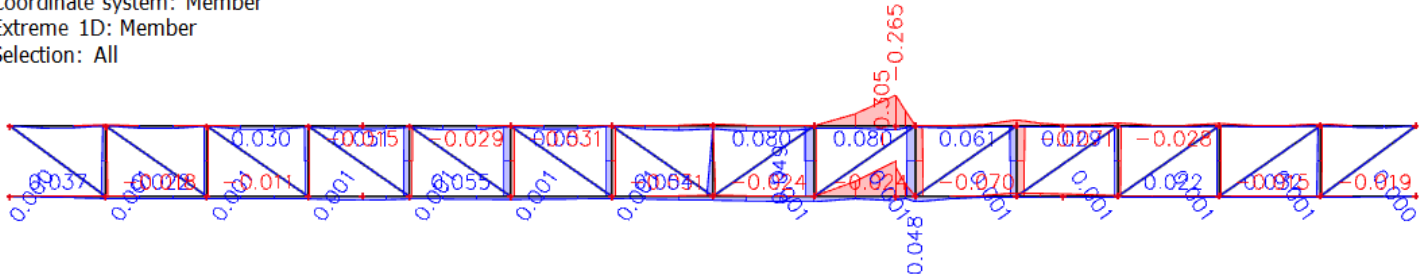
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Member

Selection: All



## Diagram of bending moments $M_z$ , kNm.

### 1D internal forces

Values:  $M_z$

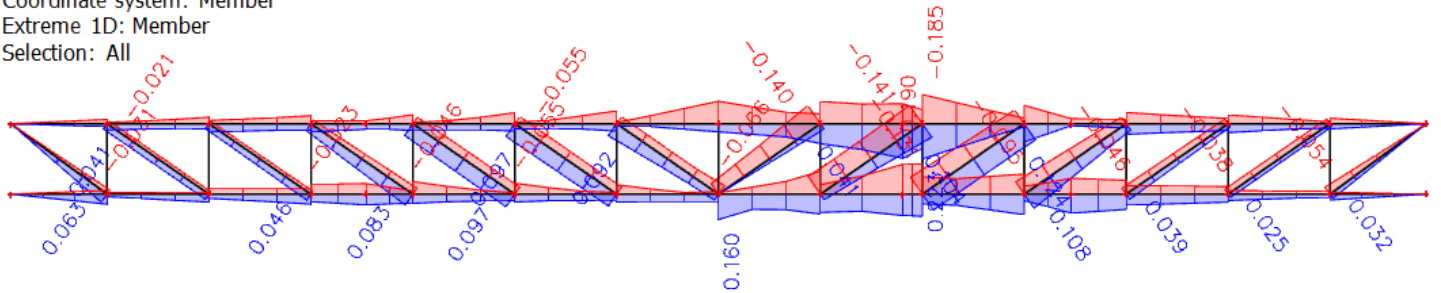
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

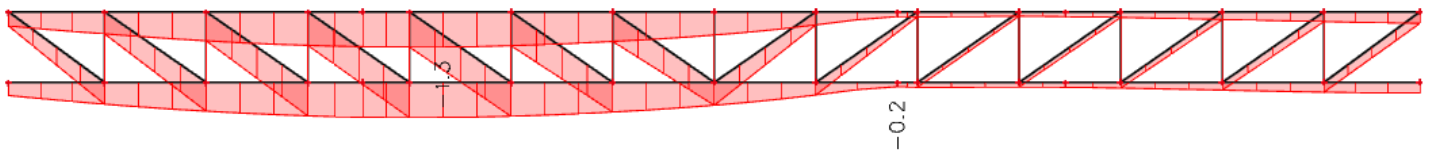
Extreme 1D: Member

Selection: All



## Deformation check

### SLS comb. - G+G1+Q1+G2+G3



The maximum deflection is 1.3 mm.

According to EC-EN 1990 - due to the esthetics-psychological deflection limits -  $L/300$ .

$3150 / 300 = 10.5 \text{ mm}$        $1.3 \text{ mm} < 10.5 \text{ mm}$       Deformation is OK!

Limits due to vibration from using and deflections -

$F_u = 7.66 \text{ mm}$

$1.3 \text{ mm} < 7.66 \text{ mm}$       Deformation is OK!

$$f_u = \frac{g(p + p_1 + q)}{30n^2(bp + p_1 + q)}$$

## Internal forces

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
615	1.060+	ULS-Set B (auto)/1	<b>-8.546</b>	-0.036	0.278	0.000	0.009	0.006
615	3.220+	ULS-Set B (auto)/2	<b>11.671</b>	0.258	0.155	0.000	0.009	-0.126
615	3.150+	ULS-Set B (auto)/3	-0.421	<b>-0.879</b>	1.403	0.000	-0.090	0.218
615	3.150+	ULS-Set B (auto)/4	2.938	<b>0.541</b>	1.731	0.000	-0.116	-0.126
615	3.150+	ULS-Set B (auto)/2	4.699	0.175	<b>3.980</b>	0.000	-0.265	-0.038
615	2.860+	ULS-Set B (auto)/5	4.018	0.334	-0.578	<b>0.000</b>	0.018	-0.032
615	3.580+	ULS-Set B (auto)/6	-1.095	-0.602	0.233	<b>0.000</b>	-0.011	0.105
615	3.150-	ULS-Set B (auto)/2	4.699	0.250	<b>-1.251</b>	0.000	<b>-0.265</b>	-0.038
615	2.740-	ULS-Set B (auto)/2	-4.622	0.396	-0.107	0.000	<b>0.049</b>	-0.043
615	3.220+	ULS-Set B (auto)/7	11.173	0.425	0.096	0.000	0.009	<b>-0.185</b>
615	3.220+	ULS-Set B (auto)/8	-3.410	-0.577	0.081	0.000	0.000	<b>0.223</b>
619	1.420+	ULS-Set B (auto)/1	<b>8.516</b>	0.204	0.017	0.000	0.023	-0.055
619	2.860+	ULS-Set B (auto)/5	-9.651	<b>-0.722</b>	-1.023	0.000	0.041	0.049
619	3.150+	ULS-Set B (auto)/9	-7.237	<b>0.637</b>	2.783	0.000	-0.164	-0.149
619	3.150+	ULS-Set B (auto)/2	-11.629	0.128	<b>4.292</b>	0.000	-0.252	-0.181
619	3.150+	ULS-Set B (auto)/8	3.408	0.288	-0.475	<b>0.000</b>	0.035	0.121
619	3.150-	ULS-Set B (auto)/2	<b>-11.699</b>	-0.601	<b>-1.218</b>	0.000	<b>-0.305</b>	-0.181
619	3.220-	ULS-Set B (auto)/1	-11.117	0.136	4.193	0.000	<b>0.048</b>	-0.165
619	3.220-	ULS-Set B (auto)/7	-11.136	-0.038	3.873	<b>0.000</b>	0.041	<b>-0.190</b>
619	2.500+	ULS-Set B (auto)/10	-3.549	-0.557	0.047	0.000	0.015	<b>0.160</b>
622	0.250	ULS-Set B (auto)/8	<b>1.577</b>	<b>0.000</b>	<b>0.097</b>	0.000	0.000	<b>0.000</b>
622	0.000	ULS-Set B (auto)/7	-4.727	0.000	<b>-0.215</b>	0.000	<b>0.054</b>	0.000
622	0.000	ULS-Set B (auto)/11	-2.621	0.000	-0.141	<b>0.000</b>	0.035	0.000
622	0.000	ULS-Set B (auto)/10	-2.484	0.000	-0.021	<b>0.000</b>	0.005	0.000
622	0.000	ULS-Set B (auto)/8	1.572	0.000	0.097	0.000	<b>-0.024</b>	0.000
622	0.000	ULS-Set B (auto)/2	<b>-4.779</b>	0.000	-0.197	0.000	0.049	<b>0.000</b>
2473	0.000	ULS-Set B (auto)/5	4.002	<b>-0.149</b>	0.005	0.000	0.000	<b>0.063</b>
2473	0.422	ULS-Set B (auto)/1	<b>4.244</b>	-0.138	<b>-0.005</b>	0.000	0.000	0.000
2473	0.000	ULS-Set B (auto)/2	4.202	-0.144	<b>0.005</b>	<b>0.000</b>	0.000	0.061
2473	0.000	ULS-Set B (auto)/12	<b>0.636</b>	-0.079	0.003	0.000	<b>0.000</b>	0.033
2473	0.211-	ULS-Set B (auto)/1	4.241	-0.138	0.000	0.000	<b>0.000</b>	0.029
2473	0.000	ULS-Set B (auto)/13	0.888	<b>0.074</b>	0.003	<b>0.000</b>	0.000	<b>-0.031</b>
2474	0.250	ULS-Set B (auto)/12	<b>-0.400</b>	<b>0.000</b>	-0.030	0.000	0.012	<b>0.000</b>
2474	0.000	ULS-Set B (auto)/5	-2.413	0.000	<b>-0.054</b>	0.000	<b>0.037</b>	0.000
2474	0.000	ULS-Set B (auto)/10	-1.838	0.000	-0.052	<b>0.000</b>	0.036	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/10						
2474	0.000	ULS-Set B (auto)/13	-0.490	0.000	<b>0.026</b>	<b>0.000</b>	<b>-0.018</b>	0.000
2474	0.000	ULS-Set B (auto)/1	<b>-2.541</b>	0.000	-0.049	0.000	0.035	<b>0.000</b>
2475	0.000	ULS-Set B (auto)/4	0.816	<b>-0.003</b>	0.004	0.000	0.000	0.022
2475	0.438	ULS-Set B (auto)/1	<b>3.243</b>	0.003	<b>-0.005</b>	0.000	0.000	0.039
2475	0.000	ULS-Set B (auto)/14	0.609	-0.003	0.004	<b>0.000</b>	0.000	-0.018
2475	0.000	ULS-Set B (auto)/9	2.289	<b>0.013</b>	<b>0.005</b>	<b>0.000</b>	0.000	0.032
2475	0.000	ULS-Set B (auto)/12	<b>0.471</b>	0.010	0.004	0.000	<b>0.000</b>	0.017
2475	0.219-	ULS-Set B (auto)/1	3.239	0.003	0.000	0.000	<b>0.001</b>	0.038
2475	0.438	ULS-Set B (auto)/13	0.631	-0.003	-0.004	0.000	0.000	<b>-0.021</b>
2475	0.438	ULS-Set B (auto)/5	3.018	0.011	-0.005	0.000	0.000	<b>0.041</b>
2476	0.250	ULS-Set B (auto)/12	<b>-0.235</b>	<b>0.000</b>	0.002	0.000	0.010	<b>0.000</b>
2476	0.000	ULS-Set B (auto)/7	-1.469	0.000	<b>-0.003</b>	0.000	0.022	0.000
2476	0.000	ULS-Set B (auto)/8	-0.320	0.000	<b>0.002</b>	0.000	-0.010	0.000
2476	0.000	ULS-Set B (auto)/10	-1.271	0.000	0.001	<b>0.000</b>	0.019	0.000
2476	0.000	ULS-Set B (auto)/13	-0.370	0.000	0.001	<b>0.000</b>	<b>-0.011</b>	0.000
2476	0.000	ULS-Set B (auto)/2	-1.817	0.000	-0.002	0.000	<b>0.022</b>	0.000
2476	0.000	ULS-Set B (auto)/1	<b>-1.835</b>	0.000	-0.002	0.000	0.022	<b>0.000</b>
2477	0.000	ULS-Set B (auto)/7	1.686	<b>-0.020</b>	0.005	0.000	0.000	<b>0.046</b>
2477	0.000	ULS-Set B (auto)/15	0.233	<b>0.016</b>	0.004	0.000	0.000	0.010
2477	0.438	ULS-Set B (auto)/1	<b>2.080</b>	-0.014	<b>-0.005</b>	0.000	0.000	0.037
2477	0.000	ULS-Set B (auto)/4	0.548	-0.018	0.004	<b>0.000</b>	0.000	0.028
2477	0.000	ULS-Set B (auto)/9	1.371	0.013	<b>0.005</b>	<b>0.000</b>	0.000	0.027
2477	0.000	ULS-Set B (auto)/12	<b>0.204</b>	0.015	0.004	0.000	<b>0.000</b>	0.011
2477	0.219-	ULS-Set B (auto)/1	2.076	-0.014	0.000	0.000	<b>0.001</b>	0.040
2477	0.000	ULS-Set B (auto)/8	0.337	0.014	0.004	0.000	0.000	<b>-0.023</b>
2478	0.250	ULS-Set B (auto)/12	<b>-0.091</b>	<b>0.000</b>	-0.010	0.000	0.004	<b>0.000</b>
2478	0.000	ULS-Set B (auto)/15	-0.111	0.000	<b>-0.011</b>	0.000	0.006	0.000
2478	0.000	ULS-Set B (auto)/10	-0.704	0.000	-0.008	<b>0.000</b>	0.016	0.000
2478	0.000	ULS-Set B (auto)/13	-0.210	0.000	-0.003	<b>0.000</b>	-0.012	0.000
2478	0.250	ULS-Set B (auto)/8	-0.156	0.000	-0.010	0.000	<b>-0.015</b>	0.000
2478	0.250	ULS-Set B (auto)/7	-0.888	0.000	<b>0.016</b>	0.000	<b>0.030</b>	0.000
2478	0.000	ULS-Set B (auto)/1	<b>-1.100</b>	0.000	0.012	0.000	0.025	<b>0.000</b>
2479	0.000	ULS-Set B (auto)/7	0.755	<b>-0.069</b>	0.005	0.000	0.000	<b>0.083</b>
2479	0.000	ULS-Set B (auto)/15	-0.027	<b>0.046</b>	0.004	0.000	0.000	-0.015
2479	0.438	ULS-Set B (auto)/1	<b>0.896</b>	-0.052	<b>-0.005</b>	0.000	0.000	0.048
2479	0.000	ULS-Set B (auto)/4	0.292	-0.058	0.004	<b>0.000</b>	0.000	0.060
2479	0.000	ULS-Set B (auto)/9	0.437	0.035	<b>0.005</b>	<b>0.000</b>	0.000	0.008
2479	0.000	ULS-Set B (auto)/10	<b>-0.054</b>	0.044	0.004	0.000	<b>0.000</b>	-0.012

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/12						
2479	0.219	ULS-Set B (auto)/1	0.893	-0.052	0.000	0.000	<b>0.001</b>	0.060
2479	0.000	ULS-Set B (auto)/8	0.066	0.043	0.004	0.000	0.000	<b>-0.046</b>
2480	0.250	ULS-Set B (auto)/12	<b>0.064</b>	<b>0.000</b>	-0.010	0.000	-0.009	<b>0.000</b>
2480	0.000	ULS-Set B (auto)/15	0.043	0.000	<b>-0.010</b>	0.000	-0.009	0.000
2480	0.250	ULS-Set B (auto)/8	-0.003	0.000	-0.010	<b>0.000</b>	<b>-0.029</b>	0.000
2480	0.250	ULS-Set B (auto)/7	-0.337	0.000	<b>0.016</b>	<b>0.000</b>	<b>0.051</b>	0.000
2480	0.000	ULS-Set B (auto)/1	<b>-0.405</b>	0.000	0.012	0.000	0.040	<b>0.000</b>
2481	0.438	ULS-Set B (auto)/11	<b>0.046</b>	-0.013	-0.004	0.000	0.000	0.062
2481	0.000	ULS-Set B (auto)/7	-0.208	<b>-0.016</b>	0.005	0.000	0.000	<b>0.097</b>
2481	0.000	ULS-Set B (auto)/15	-0.297	<b>0.013</b>	0.004	0.000	0.000	-0.025
2481	0.438	ULS-Set B (auto)/5	-0.547	0.004	<b>-0.005</b>	0.000	0.000	0.030
2481	0.000	ULS-Set B (auto)/14	-0.136	0.002	0.004	<b>0.000</b>	0.000	-0.026
2481	0.000	ULS-Set B (auto)/9	-0.517	0.010	<b>0.005</b>	<b>0.000</b>	0.000	0.000
2481	0.000	ULS-Set B (auto)/5	<b>-0.554</b>	0.004	0.005	0.000	<b>0.000</b>	0.029
2481	0.219	ULS-Set B (auto)/5	-0.550	0.004	0.000	0.000	<b>0.001</b>	0.030
2481	0.000	ULS-Set B (auto)/8	-0.195	0.010	0.004	0.000	0.000	<b>-0.055</b>
2482	0.250	ULS-Set B (auto)/10	<b>0.311</b>	<b>0.000</b>	-0.002	0.000	0.002	<b>0.000</b>
2482	0.000	ULS-Set B (auto)/9	0.289	0.000	<b>-0.002</b>	0.000	0.000	0.000
2482	0.000	ULS-Set B (auto)/4	-0.010	0.000	<b>0.000</b>	0.000	0.041	0.000
2482	0.000	ULS-Set B (auto)/7	0.104	0.000	0.000	<b>0.000</b>	<b>0.055</b>	0.000
2482	0.250	ULS-Set B (auto)/8	0.128	0.000	-0.001	<b>0.000</b>	<b>-0.031</b>	0.000
2482	0.000	ULS-Set B (auto)/11	<b>-0.026</b>	0.000	0.000	0.000	0.039	<b>0.000</b>
2483	0.438	ULS-Set B (auto)/11	<b>-0.134</b>	0.005	-0.004	0.000	0.000	0.068
2483	0.000	ULS-Set B (auto)/13	-0.368	<b>-0.004</b>	0.004	<b>0.000</b>	0.000	-0.028
2483	0.000	ULS-Set B (auto)/9	-1.374	0.017	<b>0.005</b>	<b>0.000</b>	0.000	-0.008
2483	0.000	ULS-Set B (auto)/5	<b>-1.640</b>	0.019	0.005	0.000	<b>0.000</b>	0.020
2483	0.219	ULS-Set B (auto)/5	-1.637	<b>0.019</b>	0.000	0.000	<b>0.001</b>	0.024
2483	0.438	ULS-Set B (auto)/8	-0.459	-0.001	-0.004	0.000	0.000	<b>-0.055</b>
2483	0.438	ULS-Set B (auto)/7	-1.007	0.014	<b>-0.005</b>	0.000	0.000	<b>0.097</b>
2484	0.250	ULS-Set B (auto)/5	<b>0.988</b>	<b>0.000</b>	<b>0.005</b>	0.000	0.013	<b>0.000</b>
2484	0.000	ULS-Set B (auto)/8	0.235	0.000	0.001	<b>0.000</b>	<b>-0.031</b>	0.000
2484	0.250	ULS-Set B (auto)/7	0.667	0.000	0.003	<b>0.000</b>	<b>0.053</b>	0.000
2484	0.000	ULS-Set B (auto)/11	<b>0.136</b>	0.000	<b>0.000</b>	0.000	0.038	<b>0.000</b>
2485	0.438	ULS-Set B (auto)/13	<b>-0.476</b>	<b>-0.023</b>	-0.004	0.000	0.000	-0.028
2485	0.000	ULS-Set B (auto)/16	-2.163	0.055	<b>0.005</b>	<b>0.000</b>	0.000	-0.026
2485	0.000	ULS-Set B (auto)/15	-0.776	0.063	0.004	<b>0.000</b>	0.000	-0.056
2485	0.000	ULS-Set B (auto)/5	<b>-3.017</b>	0.156	0.005	0.000	<b>0.000</b>	-0.046
2485	0.219	ULS-Set B	-3.013	<b>0.156</b>	0.000	0.000	<b>0.001</b>	-0.012

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/5						
2485	0.000	ULS-Set B (auto)/9	-2.421	0.137	0.005	0.000	0.000	<b>-0.066</b>
2485	0.438	ULS-Set B (auto)/7	-2.283	0.130	<b>-0.005</b>	0.000	0.000	<b>0.092</b>
2486	0.000	ULS-Set B (auto)/4	4.042	<b>-0.086</b>	0.004	<b>0.000</b>	0.000	-0.067
2486	0.438	ULS-Set B (auto)/2	<b>8.491</b>	0.034	<b>-0.005</b>	0.000	0.000	-0.122
2486	0.000	ULS-Set B (auto)/3	2.341	<b>0.208</b>	<b>0.005</b>	<b>0.000</b>	0.000	-0.023
2486	0.000	ULS-Set B (auto)/8	<b>-1.532</b>	0.151	0.004	0.000	<b>0.000</b>	0.038
2486	0.219	ULS-Set B (auto)/2	8.488	0.034	0.000	0.000	<b>0.001</b>	-0.129
2486	0.438	ULS-Set B (auto)/7	7.921	-0.029	-0.005	0.000	0.000	<b>-0.141</b>
2486	0.438	ULS-Set B (auto)/8	-1.527	0.151	-0.004	0.000	0.000	<b>0.104</b>
2487	0.250	ULS-Set B (auto)/8	<b>0.986</b>	<b>0.000</b>	0.004	0.000	-0.021	<b>0.000</b>
2487	0.000	ULS-Set B (auto)/11	-2.681	0.000	<b>0.000</b>	<b>0.000</b>	0.036	0.000
2487	0.000	ULS-Set B (auto)/5	-4.957	0.000	<b>0.010</b>	<b>0.000</b>	0.073	0.000
2487	0.000	ULS-Set B (auto)/13	0.606	0.000	0.002	0.000	<b>-0.024</b>	0.000
2487	0.250	ULS-Set B (auto)/2	-6.069	0.000	0.007	0.000	<b>0.080</b>	0.000
2487	0.000	ULS-Set B (auto)/2	<b>-6.076</b>	0.000	0.007	0.000	0.078	<b>0.000</b>
2488	0.000	ULS-Set B (auto)/7	10.582	<b>-0.162</b>	<b>0.005</b>	0.000	0.000	-0.059
2488	0.000	ULS-Set B (auto)/9	6.690	-0.092	0.005	<b>0.000</b>	0.000	-0.072
2488	0.000	ULS-Set B (auto)/4	5.411	-0.107	0.004	<b>0.000</b>	0.000	-0.020
2488	0.000	ULS-Set B (auto)/8	<b>-2.060</b>	<b>0.096</b>	0.004	0.000	<b>0.000</b>	-0.006
2488	0.219	ULS-Set B (auto)/2	11.348	-0.153	0.000	0.000	<b>0.001</b>	-0.106
2488	0.438	ULS-Set B (auto)/2	<b>11.352</b>	-0.153	<b>-0.005</b>	0.000	0.000	<b>-0.140</b>
2488	0.438	ULS-Set B (auto)/13	-1.326	0.092	-0.004	0.000	0.000	<b>0.041</b>
2489	0.250	ULS-Set B (auto)/8	<b>0.281</b>	<b>0.000</b>	0.042	0.000	-0.059	<b>0.000</b>
2489	0.000	ULS-Set B (auto)/4	-0.591	0.000	<b>-0.017</b>	0.000	0.064	0.000
2489	0.000	ULS-Set B (auto)/9	-0.603	0.000	<b>0.105</b>	0.000	-0.002	0.000
2489	0.000	ULS-Set B (auto)/15	-0.089	0.000	0.067	<b>0.000</b>	-0.013	0.000
2489	0.000	ULS-Set B (auto)/8	0.276	0.000	0.042	0.000	<b>-0.070</b>	0.000
2489	0.250	ULS-Set B (auto)/7	-1.098	0.000	0.022	<b>0.000</b>	<b>0.080</b>	0.000
2489	0.000	ULS-Set B (auto)/2	<b>-1.155</b>	0.000	0.049	0.000	0.057	<b>0.000</b>
2490	0.438	ULS-Set B (auto)/8	<b>0.403</b>	-0.003	-0.004	0.000	0.000	0.121
2490	0.438	ULS-Set B (auto)/2	-5.853	0.080	<b>-0.005</b>	0.000	0.000	-0.065
2490	0.000	ULS-Set B (auto)/13	0.223	<b>-0.028</b>	0.004	<b>0.000</b>	0.000	0.095
2490	0.000	ULS-Set B (auto)/10	-4.175	<b>0.115</b>	<b>0.005</b>	<b>0.000</b>	0.000	-0.001
2490	0.000	ULS-Set B (auto)/2	<b>-5.860</b>	0.080	0.005	0.000	<b>0.000</b>	-0.101
2490	0.219	ULS-Set B (auto)/2	-5.856	0.080	0.000	0.000	<b>0.001</b>	-0.083
2490	0.000	ULS-Set B (auto)/7	-5.181	0.064	0.005	0.000	0.000	<b>-0.131</b>
2490	0.438	ULS-Set B (auto)/6	-1.985	0.034	-0.004	0.000	0.000	<b>0.124</b>
2492	0.438	ULS-Set B	<b>0.568</b>	-0.133	-0.004	<b>0.000</b>	0.000	0.049

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
2492	0.000	(auto)/8						
2492	0.000	ULS-Set B (auto)/6	-0.861	<b>-0.143</b>	0.004	0.000	0.000	<b>0.108</b>
2492	0.438	ULS-Set B (auto)/2	-3.716	0.054	<b>-0.005</b>	0.000	0.000	-0.037
2492	0.000	ULS-Set B (auto)/2	<b>-3.723</b>	0.054	<b>0.005</b>	0.000	<b>0.000</b>	-0.061
2492	0.219	ULS-Set B (auto)/2	-3.719	0.054	0.000	0.000	<b>0.001</b>	-0.049
2492	0.000	ULS-Set B (auto)/17	-1.958	<b>0.108</b>	0.005	<b>0.000</b>	0.000	<b>-0.095</b>
2494	0.250	ULS-Set B (auto)/2	<b>1.504</b>	<b>0.000</b>	0.000	0.000	0.021	<b>0.000</b>
2494	0.000	ULS-Set B (auto)/9	0.937	0.000	<b>-0.032</b>	<b>0.000</b>	-0.001	0.000
2494	0.000	ULS-Set B (auto)/4	0.811	0.000	<b>0.018</b>	0.000	0.022	0.000
2494	0.000	ULS-Set B (auto)/14	-0.302	0.000	-0.009	<b>0.000</b>	-0.015	0.000
2494	0.250	ULS-Set B (auto)/8	-0.436	0.000	-0.022	0.000	<b>-0.028</b>	0.000
2494	0.250	ULS-Set B (auto)/7	1.444	0.000	0.010	0.000	<b>0.029</b>	0.000
2494	0.000	ULS-Set B (auto)/8	<b>-0.441</b>	0.000	-0.022	0.000	-0.022	<b>0.000</b>
2495	0.438	ULS-Set B (auto)/8	<b>0.856</b>	-0.034	-0.004	0.000	0.000	0.024
2495	0.438	ULS-Set B (auto)/2	-2.718	0.011	<b>-0.005</b>	0.000	0.000	-0.032
2495	0.000	ULS-Set B (auto)/6	-0.065	<b>-0.039</b>	0.004	<b>0.000</b>	0.000	0.033
2495	0.000	ULS-Set B (auto)/17	-1.701	<b>0.028</b>	<b>0.005</b>	<b>0.000</b>	0.000	-0.040
2495	0.000	ULS-Set B (auto)/2	<b>-2.724</b>	0.011	0.005	0.000	<b>0.000</b>	-0.037
2495	0.219	ULS-Set B (auto)/2	-2.721	0.011	0.000	0.000	<b>0.001</b>	-0.035
2495	0.000	ULS-Set B (auto)/7	-2.617	0.024	0.005	0.000	0.000	<b>-0.046</b>
2495	0.000	ULS-Set B (auto)/8	0.851	-0.034	0.004	0.000	0.000	<b>0.039</b>
2496	0.250	ULS-Set B (auto)/7	<b>0.995</b>	<b>0.000</b>	-0.004	0.000	0.021	<b>0.000</b>
2496	0.000	ULS-Set B (auto)/7	0.988	0.000	<b>-0.004</b>	0.000	<b>0.022</b>	0.000
2496	0.000	ULS-Set B (auto)/13	-0.536	0.000	0.002	<b>0.000</b>	-0.012	0.000
2496	0.000	ULS-Set B (auto)/9	0.456	0.000	0.002	<b>0.000</b>	0.006	0.000
2496	0.000	ULS-Set B (auto)/8	<b>-0.613</b>	0.000	<b>0.004</b>	0.000	<b>-0.015</b>	<b>0.000</b>
2497	0.438	ULS-Set B (auto)/8	<b>1.063</b>	-0.008	-0.004	0.000	<b>0.000</b>	0.022
2497	0.438	ULS-Set B (auto)/7	-1.647	0.002	<b>-0.005</b>	0.000	0.000	-0.037
2497	0.000	ULS-Set B (auto)/9	-0.741	<b>-0.012</b>	<b>0.005</b>	<b>0.000</b>	0.000	-0.010
2497	0.000	ULS-Set B (auto)/4	-1.199	<b>0.006</b>	0.004	<b>0.000</b>	0.000	-0.027
2497	0.219	ULS-Set B (auto)/7	-1.651	0.002	0.000	0.000	<b>0.001</b>	-0.037
2497	0.000	ULS-Set B (auto)/7	<b>-1.654</b>	0.002	0.005	0.000	0.000	<b>-0.038</b>
2497	0.000	ULS-Set B (auto)/8	1.058	-0.008	0.004	0.000	0.000	<b>0.025</b>
2498	0.250	ULS-Set B (auto)/17	<b>0.585</b>	<b>0.000</b>	-0.032	0.000	0.015	<b>0.000</b>
2498	0.000	ULS-Set B (auto)/7	0.405	0.000	<b>-0.045</b>	0.000	<b>0.032</b>	0.000
2498	0.000	ULS-Set B (auto)/13	-0.663	0.000	0.023	<b>0.000</b>	-0.016	0.000
2498	0.000	ULS-Set B (auto)/18	-0.001	0.000	-0.037	<b>0.000</b>	0.026	0.000
2498	0.000	ULS-Set B (auto)/8	-0.737	0.000	<b>0.026</b>	0.000	<b>-0.019</b>	0.000
2498	0.000	ULS-Set B (auto)/8	<b>-0.911</b>	0.000	0.013	0.000	-0.010	<b>0.000</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/6						
2499	0.422	ULS-Set B (auto)/6	<b>1.567</b>	-0.041	-0.003	0.000	0.000	0.000
2499	0.000	ULS-Set B (auto)/8	1.290	<b>-0.076</b>	0.003	<b>0.000</b>	0.000	<b>0.032</b>
2499	0.422	ULS-Set B (auto)/17	-1.019	0.094	<b>-0.005</b>	0.000	0.000	0.000
2499	0.000	ULS-Set B (auto)/17	<b>-1.026</b>	0.094	<b>0.005</b>	0.000	<b>0.000</b>	-0.040
2499	0.211	ULS-Set B (auto)/17	-1.022	0.094	0.000	0.000	<b>0.000</b>	-0.020
2499	0.000	ULS-Set B (auto)/7	-0.754	<b>0.129</b>	0.005	<b>0.000</b>	0.000	<b>-0.054</b>
2554	0.250	ULS-Set B (auto)/2	<b>2.425</b>	<b>0.000</b>	0.011	0.000	0.037	<b>0.000</b>
2554	0.250	ULS-Set B (auto)/6	0.625	0.000	<b>-0.036</b>	<b>0.000</b>	<b>-0.071</b>	0.000
2554	0.250	ULS-Set B (auto)/17	1.266	0.000	<b>0.025</b>	<b>0.000</b>	<b>0.061</b>	0.000
2554	0.000	ULS-Set B (auto)/8	<b>-0.311</b>	0.000	-0.033	0.000	-0.061	<b>0.000</b>

Name	Combination key
ULS-Set B (auto)/1	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/2	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/3	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/4	G + G1 + 0.75*Q3 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/5	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8
ULS-Set B (auto)/6	G + G1 + 1.05*Q1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/7	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/8	G + G1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/9	1.35*G + 1.35*G1 + 1.05*Q1 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/10	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/11	G + G1 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/12	G + G1 + 0.75*Q3 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/13	G + G1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/14	G + G1 + 0.75*Q3 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/15	G + G1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/16	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/17	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/18	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q4 + 1.35*G3 + 1.35*G2

## Member 619 check

### EN 1993-1-3 Cold Formed Code Check

National annex: Standard EN

Member 619	3.150 / 5.000 m	Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	ULS-Set B (auto)	0.54 -
------------	-----------------	---	----------	------------------	--------

Combination key	
ULS-Set B (auto) / 1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2	

Partial safety factors	
$\gamma_{M0}$ for resistance of cross-sections	1.00
$\gamma_{M1}$ for resistance to instability	1.00
$\gamma_{M2}$ for resistance of net sections	1.25

Material		
Yield strength $f_y$	350.0	MPa
Average yield strength $f_{y,a}$	360.7	MPa
k	7	
n	4	
Ultimate strength $f_u$	420.0	MPa
Fabrication	cold formed	

....SECTION CHECK:....

The critical check is on position 3.150 m

Internal forces		Calculated	Additional moments	Total	Unit
Normal force	$N_{Ed}$	-11.699		-11.699	kN
Shear force	$V_{y,Ed}$	-1.218		-1.218	kN
Shear force	$V_{z,Ed}$	0.601		0.601	kN
Torsion	$T_{Ed}$	0.000		0.000	kNm
Bending moment	$M_{y,Ed}$	0.181	0.000	0.181	kNm
Bending moment	$M_{z,Ed}$	-0.305	-0.023	-0.328	kNm

### Effective section N-

#### Effective width calculation

According to EN 1993-1-3 article 5.5.2, 5.5.3 & EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\lambda_{p,red}$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	3.500e+05	3.500e+05	1.00	0.50	0.68	0.58	1.00	13.3		
3	I	46.7	3.500e+05	3.500e+05	1.00	4.00	0.84	0.72	0.96	45.0	20.6	22.5
5	I	96.7	3.500e+05	3.500e+05	1.00	4.00	1.73		0.50	48.8	24.4	24.4
7	I	46.7	3.500e+05	3.500e+05	1.00	4.00	0.84	0.72	0.96	45.0	20.6	22.5
9	UO	13.3	3.500e+05	3.500e+05	1.00	0.50	0.68	0.58	1.00	13.3		

### Stiffener calculation

According to EN 1993-1-3 article 5.5.3

Id	$A_s$ [m <sup>2</sup> ]	$I_s$ [m <sup>4</sup> ]	$b_1$ [mm]	$b_2$ [mm]	$h_w$ [mm]	$k_r$ [-]	$K$ [kN/m <sup>2</sup> ]	$\sigma_{cr}$ [kN/m <sup>2</sup> ]	$\lambda_d$ [-]	$\chi_d$ [-]	$A_{s,red}$ [m <sup>2</sup> ]
1	4.3697e-05	8.3901e-10	41.2	41.2	98.8	1.00	3.109e+02	3.387e+05	1.02	0.74	3.2121e-05
9	4.3697e-05	8.3901e-10	41.2	41.2	98.8	1.00	3.109e+02	3.387e+05	1.02	0.74	3.2121e-05

**Effective section My+****Effective width calculation**

According to EN 1993-1-3 article 5.5.2, 5.5.3 &amp; EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\lambda_{p,red}$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	-2.244e+05	-3.132e+05								
3	I	46.7	-3.074e+05	-3.200e+05								
5	I	96.7	3.433e+05	-3.001e+05	-0.87	20.79	0.76		1.00	51.6	20.6	31.0
7	I	46.7	3.500e+05	3.375e+05	0.96	4.07	0.83	0.74	0.95	44.6	20.6	22.5
9	UO	13.3	3.302e+05	2.414e+05	0.73	0.50	0.68	0.60	1.00	13.3		

**Stiffener calculation**

According to EN 1993-1-3 article 5.5.3

Id	$A_s$ [m <sup>2</sup> ]	$I_s$ [m <sup>4</sup> ]	$b_1$ [mm]	$b_2$ [mm]	$h_w$ [mm]	$k_f$ [-]	$K$ [kN/m <sup>2</sup> ]	$\sigma_{cr}$ [kN/m <sup>2</sup> ]	$\lambda_d$ [-]	$\chi_d$ [-]	$A_{s,red}$ [m <sup>2</sup> ]
9	4.3659e-05	8.3870e-10	41.2	31.2	98.8	0.00	4.203e+02	3.941e+05	0.94	0.79	3.4433e-05

**Effective section Mz-****Effective width calculation**

According to EN 1993-1-3 article 5.5.2, 5.5.3 &amp; EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	-3.500e+05	-3.500e+05							
3	I	46.7	2.566e+05	-3.366e+05	-1.31	31.95	0.30	1.00	20.2	8.1	12.1
5	I	96.7	2.700e+05	2.700e+05	1.00	4.00	1.73	0.50	48.8	24.4	24.4
7	I	46.7	2.566e+05	-3.366e+05	-1.31	31.95	0.30	1.00	20.2	8.1	12.1
9	UO	13.3	-3.500e+05	-3.500e+05							

**Effective properties**

Effective area	$A_{eff}$	1.7410e-04	m <sup>2</sup>			
Effective second moment of area	$I_{eff,y}$	3.9441e-07	m <sup>4</sup>	$I_{eff,z}$	7.3516e-08	m <sup>4</sup>
Effective section modulus	$W_{eff,y}$	7.4448e-06	m <sup>3</sup>	$W_{eff,z}$	2.6118e-06	m <sup>3</sup>
Shift of the centroid	$e_{N,y}$	0.0	mm	$e_{N,z}$	2.0	mm

**Compression check**

According to EN 1993-1-3 article 6.1.3 and formula (6.2)

Effective section area	$A_{eff}$	1.7410e-04	m <sup>2</sup>
Compression resistance	$N_{c,Rd}$	60.935	kN
Unity check		0.19	-

**Bending moment check for My**

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,y}$	7.4448e-06	m <sup>3</sup>
Bending moment resistance	$M_{c,y,Rd}$	2.606	kNm
Unity check		0.07	-

**Bending moment check for Mz**

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,z}$	2.6118e-06	m <sup>3</sup>
Bending moment resistance	$M_{c,z,Rd}$	0.914	kNm
Unity check		0.36	-



### Biaxial bending moment check

According to EN 1993-1-3 article 6.1.4 and formula (6.7)

Bending moment resistance	$M_{C,y,Rd}$	2.606	kNm
Bending moment resistance	$M_{C,z,Rd}$	0.914	kNm

Unity check (6.7) = 0.07 + 0.36 = 0.43 -

### Shear Force $V_y$

According to article EN 1993-1-3: 6.1.5 and formula (6.8).

Stiffening at the support.

Element ID	$I_c$ [mm]	$\alpha$ [deg]	$s_w$ [mm]	$\lambda_w$ [-]	$f_{bv}$ [MPa]	$V_{b,Rd,y,i}$ [kN]
3	48.8	0.00	46.7	0.55	203.0	11.888
5	98.8	90.00	96.7	1.14	147.6	0.000
7	48.8	0.00	46.7	0.55	203.0	11.888

Shear verification		
$V_{b,Rd,y}$	23.775	kN
Unity check	0.05	-

### Shear Force $V_z$

According to article EN 1993-1-3: 6.1.5 and formula (6.8).

Stiffening at the support.

Element ID	$I_c$ [mm]	$\alpha$ [deg]	$s_w$ [mm]	$\lambda_w$ [-]	$f_{bv}$ [MPa]	$V_{b,Rd,z,i}$ [kN]
3	48.8	0.00	46.7	0.55	203.0	0.000
5	98.8	90.00	96.7	1.14	147.6	17.500
7	48.8	0.00	46.7	0.55	203.0	0.000

Shear verification		
$V_{b,Rd,z}$	17.500	kN
Unity check	0.03	-

### Torsional Moment Check

According to article EN 1993-1-3: 6.1.6 and formula (6.11a), (6.11b), (6.11c).

Elastic verification		
Critical Fibre	32	
$\sigma_N$	67.2	MPa
$\sigma_{My}$	22.1	MPa
$\sigma_{Mz}$	97.4	MPa
$\tau_{Vy}$	9.5	MPa
$\tau_{Vz}$	4.3	MPa
$\tau_t$	0.1	MPa
Direct Stress Check	0.53	-
Shear Stress Check	0.07	-
Composed Stress Check	0.49	-

Note: The Local Transverse Forces Check has been ignored due to user input.

### Combined Compression and Bending Check

According to article EN 1993-1-3: 6.1.9 and formula (6.25), (6.26).

$E_{Nz}$	2.0	mm
$\Delta M_{z,Ed}$	-0.023	kNm
$N_{c,Rd}$	60.935	kN
$M_{cy,Rd,ten}$	2.909	kNm
$M_{cz,Rd,ten}$	0.914	kNm
$M_{cy,Rd,com}$	2.627	kNm
$M_{cz,Rd,com}$	1.177	kNm

Unity check (6.25)  $0.19 + 0.07 + 0.28 = 0.54$  -

Unity check (6.26)  $0.06 + 0.36 - 0.19 = 0.23$  -

The member satisfies the section check.

#### ....:STABILITY CHECK:....

##### Flexural Buckling Strength

According to article EN 1993-1-3: 6.2.2

According to article EN 1993-1-1: 6.3.1 and formula (6.46)

Buckling parameters	yy	zz	
Sway type	sway	sway	
System Length L	0.650	0.290	m
Buckling factor k	1.00	1.00	
Buckling length $L_{cr}$	0.650	0.290	m
Critical Euler load $N_{cr}$	2087.860	2310.463	kN
Slenderness	16.15	15.35	
Relative slenderness $\lambda_{rel}$	0.17	0.16	
Limit slenderness $\lambda_{rel,0}$	0.20	0.20	

The slenderness or compression force is such that Flexural Buckling effects may be ignored according to EN 1993-1-1 article 6.3.1.2(4)

##### Torsional (-Flexural) Buckling check

According to article EN 1993-1-3: 6.2.3

According to article EN 1993-1-1: 6.3.1 and formula (6.46)

Torsional Buckling length	0.290	m
$N_{cr,T}$	1475.016	kN
$N_{cr,TF}$	1020.582	kN
Relative slenderness $\lambda_{rel,T}$	0.24	
Limit slenderness $\lambda_{rel,0}$	0.20	

The slenderness or compression force is such that Torsional (-Flexural) Buckling effects may be ignored according to EN 1993-1-1 article 6.3.1.2(4)

##### Lateral Torsional Buckling Check

According to article EN 1993-1-3: 6.2.4

According to article EN 1993-1-1: 6.3.2 and formula (6.55)

LTB Parameters		
Method for LTB Curve	art. 6.3.2.2	
$W_{eff,y}$	7.4448e-06	m <sup>3</sup>
Elastic critical moment $M_{cr}$	194.699	kNm
Relative slenderness $\lambda_{rel,LT}$	0.12	
Limit slenderness $\lambda_{rel,LT,0}$	0.20	

$M_{cr}$ Parameters		
LTB length	0.290	m
k	1.00	
$k_w$	1.00	
$C_1$	1.73	
$C_2$	0.00	
$C_3$	1.00	

The slenderness or bending moment is such that Lateral Torsional Buckling effects may be ignored according to EN 1993-1-1 article 6.3.2.2(4)

### Bending and Axial Compression Check

According to article EN 1993-1-3: 6.2.5(1)

According to article EN 1993-1-1: 6.3.3 and formula (6.61), (6.62).

Interaction Method 1

Interaction method 1 parameters		
$k_{yy}$	1.01	
$k_{yz}$	0.76	
$k_{zy}$	1.01	
$k_{zz}$	0.76	
$\Delta M_{y,Ed}$	0.000	kNm
$\Delta M_{z,Ed}$	-0.023	kNm
A	1.7410e-04	m <sup>2</sup>
$W_y$	7.4448e-06	m <sup>3</sup>
$W_z$	2.6118e-06	m <sup>3</sup>
$N_{Rk}$	60.935	kN
$M_{y,Rk}$	2.606	kNm

Interaction method 1 parameters		
$M_{z,Rk}$	0.914	kNm
$M_{y,Ed}$	0.181	kNm
$M_{z,Ed}$	-0.305	kNm
Interaction Method 1		
$M_{cr,0}$	112.292	kNm
reduced slenderness $\lambda$	0.15	
$\psi_y$	-0.46	
$\psi_z$	-0.16	
$C_{my,0}$	1.00	
$C_{mz,0}$	0.76	
$C_{my}$	1.00	
$C_{mz}$	0.76	
$C_{mLT}$	1.00	
$\mu_y$	1.00	
$\mu_z$	1.00	
$a_{LT}$	1.00	

Unity check  $0.19 + 0.07 + 0.27 = 0.53$  -

Unity check  $0.20 + 0.07 + 0.27 = 0.54$  -

The member satisfies the stability check.

## All truss member check

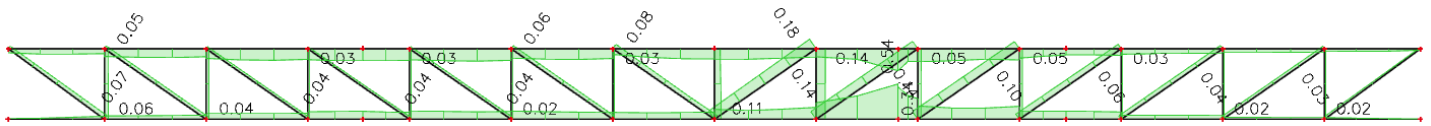
Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
615	3.150+	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.34	<b>0.34</b>	0.28
619	3.150-	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.54	<b>0.54</b>	0.54
622	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.11	<b>0.11</b>	0.11
2473	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.07</b>	0.00
2474	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.06	<b>0.06</b>	0.06
2475	0.438	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.05	<b>0.05</b>	0.00
2476	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
2477	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.00
2478	0.250	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.03
2479	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.02
2480	0.250	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.03
2481	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
2482	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.02
2483	0.438	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0;	S350GD+Z	0.06	<b>0.06</b>	0.06

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
			50.0; 1.2; 3.0; 15.0)				
2484	0.250	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.01
2485	0.438	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.08	<b>0.08</b>	0.08
2486	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.14	<b>0.14</b>	0.00
2487	0.250	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.14	<b>0.14</b>	0.14
2488	0.438	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.18	<b>0.18</b>	0.00
2489	0.250	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.05	<b>0.05</b>	0.05
2490	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.15	<b>0.14</b>	0.15
2492	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.10	<b>0.10</b>	0.10
2494	0.250	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.00
2495	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.06</b>	0.07
2496	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.00
2497	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.05	<b>0.04</b>	0.05
2498	0.000	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.02
2499	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.03
2554	0.250	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0;	S350GD+Z	0.05	<b>0.05</b>	0.00

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
			15.0)				

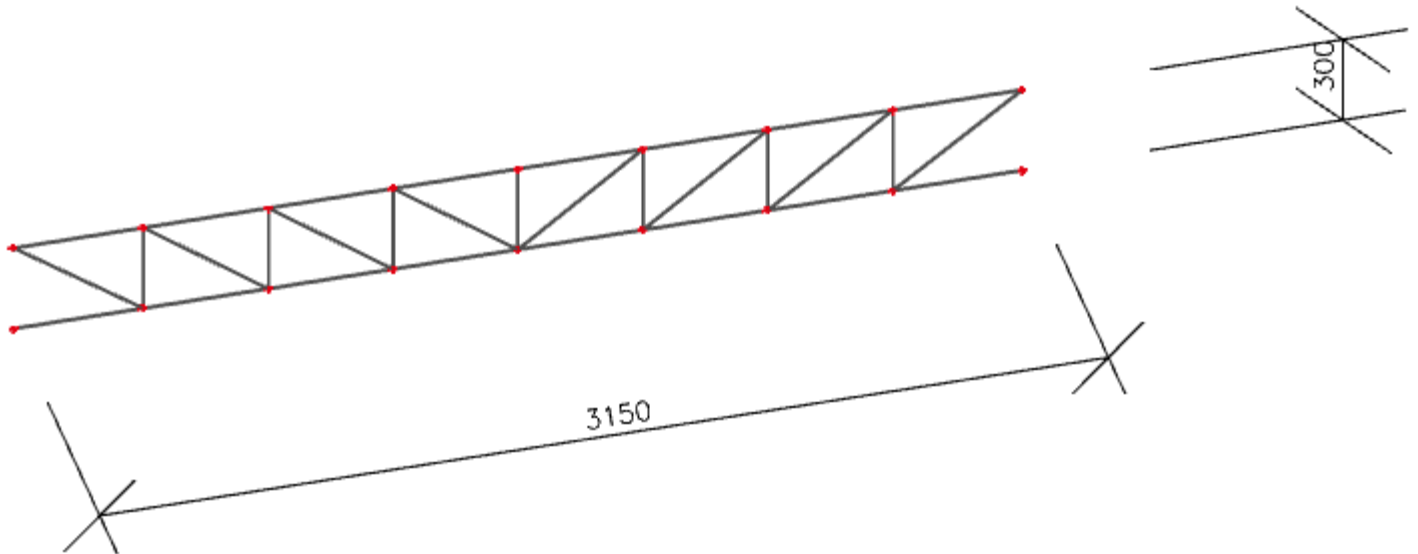
Name	Combination key
ULS-Set B (auto)/1	$1.35 \cdot G + 1.35 \cdot G1 + 1.50 \cdot Q1 + 0.75 \cdot Q3 + 0.90 \cdot Q5 + 1.35 \cdot G3 + 1.35 \cdot G2$
ULS-Set B (auto)/2	$1.35 \cdot G + 1.35 \cdot G1 + 1.05 \cdot Q1 + 0.75 \cdot Q3 + 1.50 \cdot Q5 + 1.35 \cdot G3 + 1.35 \cdot G2$
ULS-Set B (auto)/3	$G + G1 + 1.50 \cdot Q6 + G3 + G2$

## Unity check

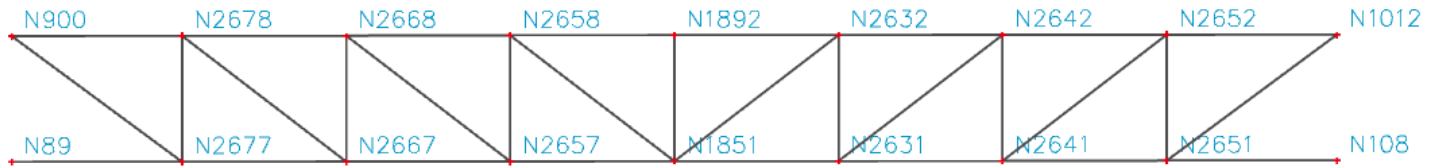


### 2.4.1.4 TERRACE TRUSS CHECK

Type floor truss. Truss spacing 600 mm.



#### Node coordinates

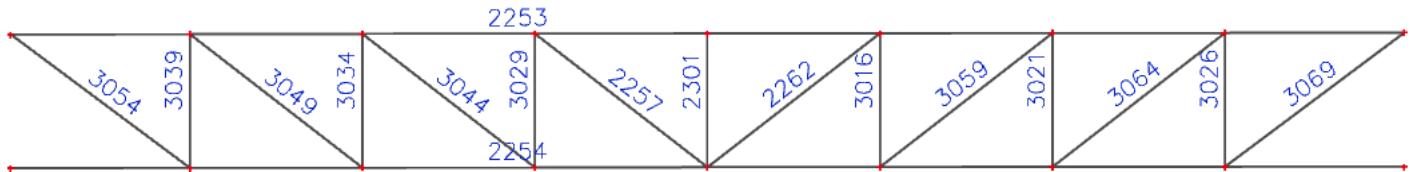


Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N89	10.200	0.000	-0.300
N108	10.200	3.150	-0.300
N900	10.200	0.000	0.000
N1012	10.200	3.150	0.000
N1851	10.200	1.575	-0.300
N1892	10.200	1.575	0.000

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2631	10.200	1.965	-0.300
N2632	10.200	1.965	0.000
N2641	10.200	2.355	-0.300
N2642	10.200	2.355	0.000
N2651	10.200	2.745	-0.300
N2652	10.200	2.745	0.000

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2657	10.200	1.185	-0.300
N2658	10.200	1.185	0.000
N2667	10.200	0.795	-0.300
N2668	10.200	0.795	0.000
N2677	10.200	0.405	-0.300
N2678	10.200	0.405	0.000

## Members number



Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
2253	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	3.150	N900	N1012	truss chord (95)
2254	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	3.150	N89	N108	truss chord (95)
2257	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.492	N1851	N2658	truss diagonal (90)
2262	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.492	N1851	N2632	truss diagonal (90)
2301	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.300	N1851	N1892	truss diagonal (90)
3016	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.300	N2631	N2632	truss diagonal (90)
3021	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.300	N2641	N2642	truss diagonal (90)
3026	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.300	N2651	N2652	truss diagonal (90)
3029	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.300	N2657	N2658	truss diagonal (90)
3034	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.300	N2667	N2668	truss diagonal (90)
3039	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.300	N2677	N2678	truss diagonal (90)
3044	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.492	N2657	N2668	truss diagonal (90)
3049	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.492	N2667	N2678	truss diagonal (90)
3054	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.504	N2677	N900	truss diagonal (90)
3059	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.492	N2631	N2642	truss diagonal (90)
3064	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.492	N2641	N2652	truss diagonal (90)
3069	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.504	N2651	N1012	truss diagonal (90)

## Terrace truss member hinges

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H1091	2301	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1797	3016	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1802	3021	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1807	3026	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1810	3029	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1815	3034	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1820	3039	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1825	2253	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H1830	2254	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

## Cross-Section properties

C100*50*15*1.2		
Type	Cold formed C section	
Detailed	100.0; 50.0; 1.2; 3.0; 15.0	
Formcode	114 - Cold formed C section	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	2.6269e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	1.1804e-04	1.3126e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	4.4038e-01	4.4038e-01
C <sub>y,UCS</sub> [mm], C <sub>z,UCS</sub> [mm]	17.2	50.0
α [deg]	0.00	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	4.2561e-07	9.3751e-08
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	40.3	18.9
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	8.5121e-06	2.8580e-06
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	9.7956e-06	4.2419e-06
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	3.43e+03	3.43e+03
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	1.48e+03	1.48e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	-41.5	0.0
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	1.2972e-10	2.2102e-10
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	0.0	121.2
Picture		



## Maximum forces in elements

### Axial force diagram N, kH.

#### 1D internal forces

Values: **N**

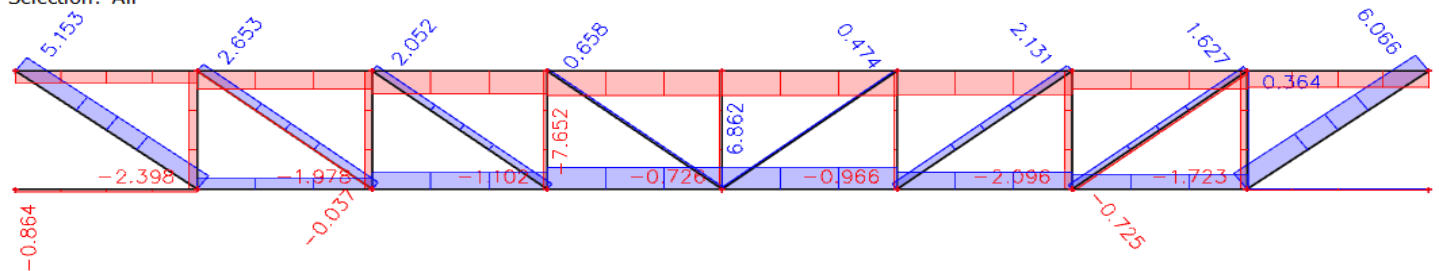
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Member

Selection: All



### Shear force diagram Vv, kH.

#### 1D internal forces

Values: **V<sub>y</sub>**

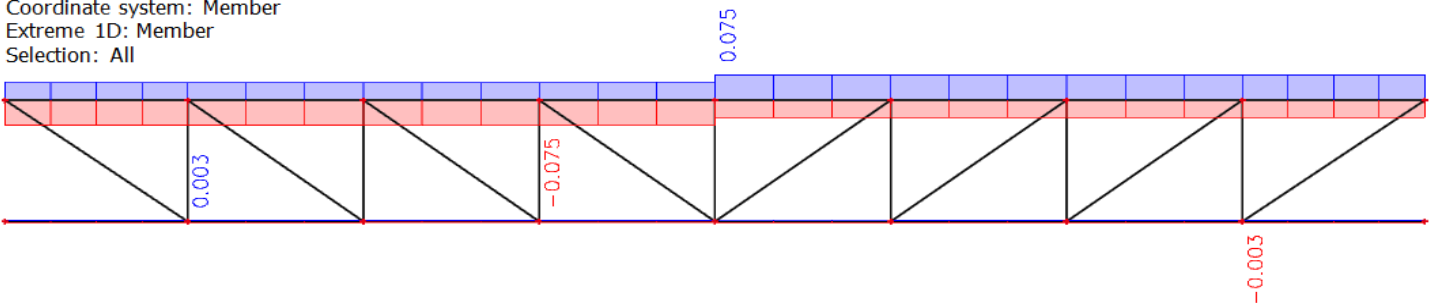
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Member

Selection: All



### Shear force diagram Vz, kH.

#### 1D internal forces

Values: **V<sub>z</sub>**

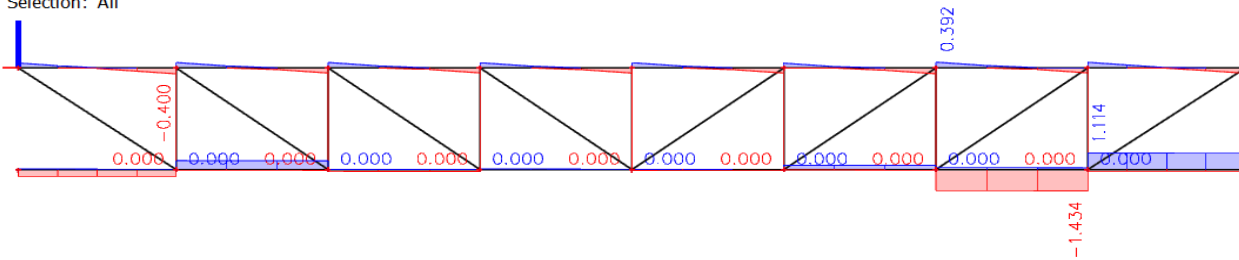
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Member

Selection: All



### Diagram of bending moments My, kNm.

**1D internal forces**

Values: **M<sub>y</sub>**

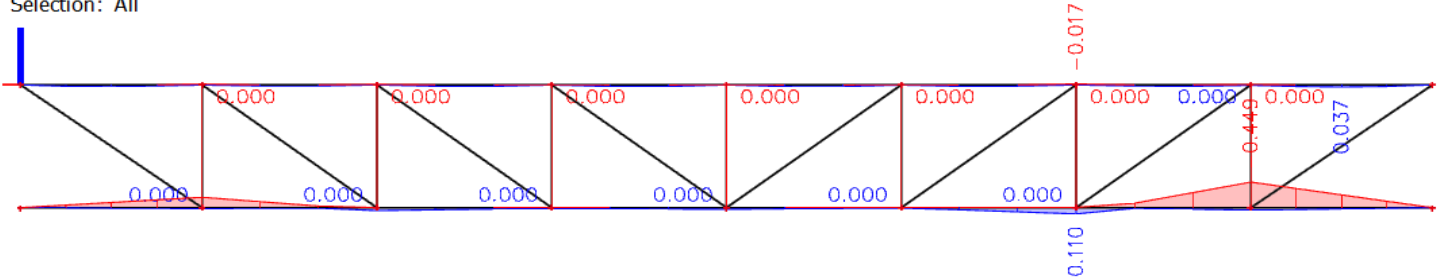
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Member

Selection: All



### Diagram of bending moments Mz, kNm.

**1D internal forces**

Values: **M<sub>z</sub>**

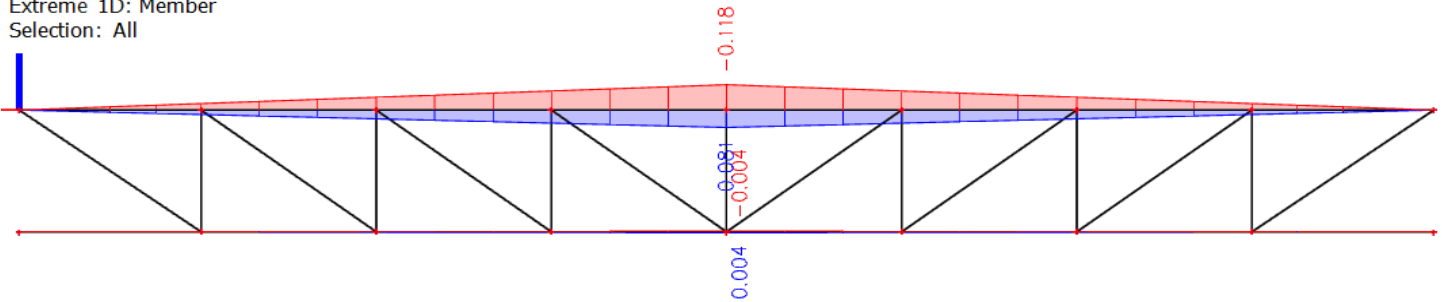
Linear calculation

Combination: ULS-Set B (auto)

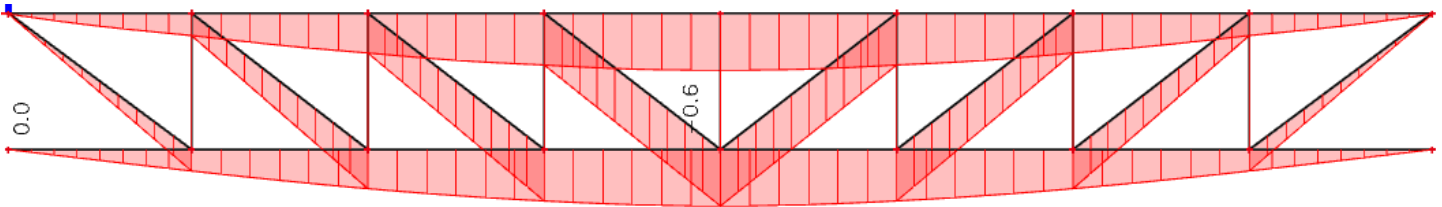
Coordinate system: Member

Extreme 1D: Member

Selection: All



### Deformation check, SLS comb. - G+G1+Q1+G2+G3



The maximum deflection is 0.6 mm.

According to EC-EN 1990 - due to the esthetics-psychological deflection limits - L/300.

3150 / 300 = 10.5 mm      0.6 mm < 10.5 mm      Deformation is OK!

Limits due to vibration from using and deflections -

Fu = 7.66 mm

0.6 mm < 7.66 mm      Deformation is OK!

$$f_w = \frac{g(p + p_1 + q)}{30n^2(bp + p_1 + q)}$$

## Internal forces

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	
2253	1.185+	ULS-Set B (auto)/1	-7.652	-0.056	0.353	0.000	-0.003	-0.066			(auto)/3							
2253	0.000	ULS-Set B (auto)/2	-0.565	0.051	0.062	0.000	0.000	0.000	3016	0.000	ULS-Set B (auto)/7	-0.211	0.000	0.000	0.000	0.000	0.000	0.000
2253	1.575+	ULS-Set B (auto)/3	-6.158	0.075	0.277	0.000	-0.001	-0.118	3016	0.000	ULS-Set B (auto)/2	-0.212	0.000	0.000	0.000	0.000	0.000	0.000
2253	0.405-	ULS-Set B (auto)/4	-3.404	-0.039	-0.400	0.000	-0.015	-0.016	3016	0.000	ULS-Set B (auto)/11	-0.692	0.000	0.000	0.000	0.000	0.000	0.000
2253	2.355+	ULS-Set B (auto)/5	-5.631	0.055	0.392	0.000	-0.017	-0.044	3016	0.300	ULS-Set B (auto)/3	-0.686	0.000	0.000	0.000	0.000	0.000	0.000
2253	2.745+	ULS-Set B (auto)/3	-4.479	0.075	0.270	0.000	0.004	-0.030	3016	0.000	ULS-Set B (auto)/20	-0.966	0.000	0.000	0.000	0.000	0.000	0.000
2253	0.000	ULS-Set B (auto)/3	-2.843	-0.075	0.253	0.000	0.000	0.000	3021	0.300	ULS-Set B (auto)/21	-0.317	0.000	0.000	0.000	0.000	0.000	0.000
2253	2.355-	ULS-Set B (auto)/6	-7.230	0.039	-0.394	0.000	-0.017	-0.031	3021	0.000	ULS-Set B (auto)/3	-1.724	0.000	0.000	0.000	0.000	0.000	0.000
2253	2.947-	ULS-Set B (auto)/5	-5.071	0.055	0.001	0.000	0.037	-0.011	3021	0.000	ULS-Set B (auto)/7	-0.414	0.000	0.000	0.000	0.000	0.000	0.000
2253	1.575-	ULS-Set B (auto)/3	-6.158	-0.075	-0.267	0.000	-0.001	-0.118	3021	0.300	ULS-Set B (auto)/3	-1.715	0.000	0.000	0.000	0.000	0.000	0.000
2253	1.575-	ULS-Set B (auto)/7	-1.324	0.051	-0.065	0.000	0.000	0.081	3021	0.000	ULS-Set B (auto)/6	-2.096	0.000	0.000	0.000	0.000	0.000	0.000
2254	0.000	ULS-Set B (auto)/8	-0.864	0.000	-0.389	0.000	0.000	0.000	3026	0.300	ULS-Set B (auto)/14	0.364	0.000	0.000	0.000	0.000	0.000	0.000
2254	1.575+	ULS-Set B (auto)/1	6.862	0.001	-0.068	0.000	0.028	-0.002	3026	0.000	ULS-Set B (auto)/19	0.351	0.000	0.000	0.000	0.000	0.000	0.000
2254	2.745+	ULS-Set B (auto)/9	-0.353	-0.003	0.573	0.000	-0.230	0.001	3026	0.000	ULS-Set B (auto)/9	-1.251	0.000	0.000	0.000	0.000	0.000	0.000
2254	0.405+	ULS-Set B (auto)/10	2.459	0.003	0.305	0.000	-0.086	0.001	3026	0.000	ULS-Set B (auto)/2	-0.374	0.000	0.000	0.000	0.000	0.000	0.000
2254	2.745+	ULS-Set B (auto)/11	-0.152	0.003	1.114	0.000	-0.449	-0.001	3026	0.000	ULS-Set B (auto)/3	-0.533	0.000	0.000	0.000	0.000	0.000	0.000
2254	0.000	ULS-Set B (auto)/12	-0.226	0.003	-0.237	0.000	0.000	0.000	3026	0.300	ULS-Set B (auto)/13	-0.428	0.000	0.000	0.000	0.000	0.000	0.000
2254	0.000	ULS-Set B (auto)/13	-0.585	-0.003	-0.061	0.000	0.000	0.000	3026	0.000	ULS-Set B (auto)/12	-1.723	0.000	0.000	0.000	0.000	0.000	0.000
2254	2.745-	ULS-Set B (auto)/11	4.007	0.002	-1.434	0.000	-0.449	-0.001	3029	0.300	ULS-Set B (auto)/20	-0.192	0.000	0.000	0.000	0.000	0.000	0.000
2254	2.355+	ULS-Set B (auto)/5	4.617	0.001	-1.393	0.000	0.110	-0.001	3029	0.000	ULS-Set B (auto)/16	-0.866	0.000	0.000	0.000	0.000	0.000	0.000
2254	1.575+	ULS-Set B (auto)/14	1.519	0.002	-0.038	0.000	0.008	-0.004	3029	0.000	ULS-Set B (auto)/3	-0.204	0.000	0.000	0.000	0.000	0.000	0.000
2254	1.575+	ULS-Set B (auto)/10	5.291	-0.003	-0.036	0.000	0.020	0.004	3029	0.300	ULS-Set B (auto)/7	-0.857	0.000	0.000	0.000	0.000	0.000	0.000
2257	0.492	ULS-Set B (auto)/15	0.658	0.000	0.000	0.000	0.000	0.000	3029	0.000	ULS-Set B (auto)/3	-1.102	0.000	0.000	0.000	0.000	0.000	0.000
2257	0.000	ULS-Set B (auto)/16	0.120	0.000	0.000	0.000	0.000	0.000	3034	0.300	ULS-Set B (auto)/15	-0.365	0.000	0.000	0.000	0.000	0.000	0.000
2262	0.492	ULS-Set B (auto)/17	0.474	0.000	0.000	0.000	0.000	0.000	3034	0.000	ULS-Set B (auto)/22	-1.498	0.000	0.000	0.000	0.000	0.000	0.000
2262	0.000	ULS-Set B (auto)/14	0.052	0.000	0.000	0.000	0.000	0.000	3034	0.000	ULS-Set B (auto)/3	-0.429	0.000	0.000	0.000	0.000	0.000	0.000
2301	0.300	ULS-Set B (auto)/18	-0.136	0.000	0.000	0.000	0.000	0.000	3034	0.300	ULS-Set B (auto)/7	-1.490	0.000	0.000	0.000	0.000	0.000	0.000
2301	0.000	ULS-Set B (auto)/3	-0.569	0.000	0.000	0.000	0.000	0.000	3034	0.000	ULS-Set B (auto)/3	-1.978	0.000	0.000	0.000	0.000	0.000	0.000
2301	0.000	ULS-Set B (auto)/7	-0.149	0.000	0.000	0.000	0.000	0.000	3039	0.300	ULS-Set B (auto)/8	-0.092	0.000	0.000	0.000	0.000	0.000	0.000
2301	0.000	ULS-Set B (auto)/19	-0.150	0.000	0.000	0.000	0.000	0.000	3039	0.000	ULS-Set B (auto)/23	-1.894	0.000	0.000	0.000	0.000	0.000	0.000
2301	0.000	ULS-Set B (auto)/9	-0.567	0.000	0.000	0.000	0.000	0.000	3039	0.000	ULS-Set B (auto)/3	-0.296	0.000	0.000	0.000	0.000	0.000	0.000
2301	0.300	ULS-Set B (auto)/3	-0.560	0.000	0.000	0.000	0.000	0.000	3039	0.300	ULS-Set B (auto)/7	-2.345	0.000	0.000	0.000	0.000	0.000	0.000
2301	0.000	ULS-Set B (auto)/5	-0.726	0.000	0.000	0.000	0.000	0.000	3039	0.000	ULS-Set B (auto)/1	-0.592	0.000	0.000	0.000	0.000	0.000	0.000
3016	0.300	ULS-Set B (auto)/14	-0.134	0.000	0.000	0.000	0.000	0.000	3039	0.000	ULS-Set B (auto)/22	-2.398	0.000	0.000	0.000	0.000	0.000	0.000
3016	0.000	ULS-Set B	-0.694	0.000	0.000	0.000	0.000	0.000	3044	0.492	ULS-Set B (auto)/4	2.052	0.000	0.000	0.000	0.000	0.000	0.000
									3044	0.000	ULS-Set B (auto)/8	0.392	0.000	0.000	0.000	0.000	0.000	0.000
									3049	0.492	ULS-Set B (auto)/22	2.653	0.000	0.000	0.000	0.000	0.000	0.000
									3049	0.000	ULS-Set B (auto)/4	-0.037	0.000	0.000	0.000	0.000	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/23						
3054	0.504	ULS-Set B (auto)/8	<b>5.153</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3054	0.000	ULS-Set B (auto)/22	<b>0.875</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
3059	0.492	ULS-Set B (auto)/6	<b>2.131</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3059	0.000	ULS-Set B (auto)/21	<b>0.325</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
3064	0.492	ULS-Set B (auto)/20	<b>1.627</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3064	0.000	ULS-Set B (auto)/14	<b>-0.725</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
3069	0.504	ULS-Set B (auto)/5	<b>6.066</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3069	0.000	ULS-Set B (auto)/21	<b>0.725</b>	0.000	0.000	0.000	0.000	<b>0.000</b>

Name	Combination key
ULS-Set B (auto)/1	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/2	G + G1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/3	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/4	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/5	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/6	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/7	G + G1 + 0.75*Q3 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/8	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/9	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/10	1.35*G + 1.35*G1 + 1.05*Q1 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/11	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/12	1.35*G + 1.35*G1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/13	G + G1 + 1.05*Q1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/14	G + G1 + 0.75*Q3 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/15	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q4 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/16	G + G1 + 1.50*Q3 + G3 + G2 + 0.90*Q8
ULS-Set B (auto)/17	1.35*G + 1.35*G1 + 1.50*Q1 + 1.35*G3 + 1.35*G2 + 0.90*Q8
ULS-Set B (auto)/18	G + G1 + 1.50*Q4 + G3 + G2
ULS-Set B (auto)/19	G + G1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/20	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/21	G + G1 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/22	G + G1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/23	G + G1 + 1.50*Q3 + 0.90*Q5 + G3 + G2

## Member 2254 check

### EN 1993-1-3 Cold Formed Code Check

National annex: Standard EN

Member 2254	2.745 / 3.150 m	Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	ULS-Set B (auto)	0.54 -
-------------	-----------------	---	----------	------------------	--------

#### Combination key

ULS-Set B (auto) / 1.35\*G + 1.35\*G1 + 1.05\*Q1 + 0.75\*Q3 + 1.50\*Q7 + 1.35\*G3 + 1.35\*G2

#### Partial safety factors

$\gamma_{M0}$ for resistance of cross-sections	1.00
$\gamma_{M1}$ for resistance to instability	1.00
$\gamma_{M2}$ for resistance of net sections	1.25

#### Material

Yield strength $f_y$	350.0	MPa
Average yield strength $f_{y,a}$	360.7	MPa
k	7	
n	4	
Ultimate strength $f_u$	420.0	MPa
Fabrication	cold formed	

....SECTION CHECK:....

The critical check is on position 2.745 m

Internal forces		Calculated	Unit
Normal force	$N_{Ed}$	4.007	kN
Shear force	$V_{y,Ed}$	-1.434	kN
Shear force	$V_{z,Ed}$	-0.002	kN
Torsion	$T_{Ed}$	0.000	kNm
Bending moment	$M_{y,Ed}$	0.001	kNm
Bending moment	$M_{z,Ed}$	-0.449	kNm

#### Effective section $M_y+$

##### Effective width calculation

According to EN 1993-1-3 article 5.5.2, 5.5.3 & EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\lambda_{p,red}$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	-2.244e+05	-3.132e+05								
3	I	46.7	-3.074e+05	-3.200e+05								
5	I	96.7	3.433e+05	-3.001e+05	-0.87	20.79	0.76		1.00	51.6	20.6	31.0
7	I	46.7	3.500e+05	3.375e+05	0.96	4.07	0.83	0.74	0.95	44.6	20.6	22.5
9	UO	13.3	3.302e+05	2.414e+05	0.73	0.50	0.68	0.60	1.00	13.3		

#### Stiffener calculation

According to EN 1993-1-3 article 5.5.3

Id	$A_s$ [m <sup>2</sup> ]	$I_s$ [m <sup>4</sup> ]	$b_1$ [mm]	$b_2$ [mm]	$h_w$ [mm]	$k_f$ [-]	$K$ [kN/m <sup>2</sup> ]	$\sigma_{cr}$ [kN/m <sup>2</sup> ]	$\lambda_d$ [-]	$\chi_d$ [-]	$A_{s,red}$ [m <sup>2</sup> ]
9	4.3659e-05	8.3870e-10	41.2	31.2	98.8	0.00	4.203e+02	3.941e+05	0.94	0.79	3.4433e-05

**Effective section Mz-****Effective width calculation**

According to EN 1993-1-3 article 5.5.2, 5.5.3 &amp; EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	-3.500e+05	-3.500e+05							
3	I	46.7	2.566e+05	-3.366e+05	-1.31	31.95	0.30	1.00	20.2	8.1	12.1
5	I	96.7	2.700e+05	2.700e+05	1.00	4.00	1.73	0.50	48.8	24.4	24.4
7	I	46.7	2.566e+05	-3.366e+05	-1.31	31.95	0.30	1.00	20.2	8.1	12.1
9	UO	13.3	-3.500e+05	-3.500e+05							

Effective properties						
Effective area	$A_{eff}$	1.7410e-04	m <sup>2</sup>			
Effective second moment of area	$I_{eff,y}$	3.9441e-07	m <sup>4</sup>	$I_{eff,z}$	7.3516e-08	m <sup>4</sup>
Effective section modulus	$W_{eff,y}$	7.4448e-06	m <sup>3</sup>	$W_{eff,z}$	2.6118e-06	m <sup>3</sup>
Shift of the centroid	$e_{N,y}$	0.0	mm	$e_{N,z}$	2.0	mm

**Tension check**

According to EN 1993-1-3 article 6.1.2 and formula (6.1)

Gross section area	$A_G$	2.6269e-04	m <sup>2</sup>
Net section resistance	$F_{t,Rd}$	88.262	kN
Tension resistance	$N_{t,Rd}$	88.262	kN
Unity check		0.05	-

**Bending moment check for M<sub>y</sub>**

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,y}$	7.4448e-06	m <sup>3</sup>
Bending moment resistance	$M_{c,y,Rd}$	2.606	kNm
Unity check		0.00	-

**Bending moment check for M<sub>z</sub>**

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,z}$	2.6118e-06	m <sup>3</sup>
Bending moment resistance	$M_{c,z,Rd}$	0.914	kNm
Unity check		0.49	-

**Biaxial bending moment check**

According to EN 1993-1-3 article 6.1.4 and formula (6.7)

Bending moment resistance	$M_{c,y,Rd}$	2.606	kNm
Bending moment resistance	$M_{c,z,Rd}$	0.914	kNm

Unity check (6.7) = 0.00 + 0.49 = 0.49 -

**Shear Force V<sub>y</sub>**

According to article EN 1993-1-3: 6.1.5 and formula (6.8).

No stiffening at the support.

Element ID	$l_c$ [mm]	$\alpha$ [deg]	$s_w$ [mm]	$\lambda_w$ [-]	$f_{bv}$ [MPa]	$V_{b,Rd,y,i}$ [kN]
3	48.8	0.00	46.7	0.55	203.0	11.888
5	98.8	90.00	96.7	1.14	147.6	0.000
7	48.8	0.00	46.7	0.55	203.0	11.888

Shear verification		
$V_{b,Rd,y}$	23.775	kN
Unity check	0.06	-

### Torsional Moment Check

According to article EN 1993-1-3: 6.1.6 and formula (6.11a), (6.11b), (6.11c).

Elastic verification		
Critical Fibre	6	
$\sigma_H$	-15.3	MPa
$\sigma_{My}$	-0.1	MPa
$\sigma_{Mz}$	-171.9	MPa
$T_{Vy}$	5.0	MPa
$T_{Vz}$	0.0	MPa
$T_t$	0.3	MPa
Direct Stress Check	0.53	-
Shear Stress Check	0.03	-
Composed Stress Check	0.49	-

### Combined Tension and Bending Check

According to article EN 1993-1-3: 6.1.8 and formula (6.23), (6.24).

$N_{t,Rd}$	88.262	kN
$M_{cy,Rd,ten}$	2.909	kNm
$M_{cz,Rd,ten}$	0.914	kNm
$M_{cy,Rd,com}$	2.627	kNm
$M_{cz,Rd,com}$	1.178	kNm

Unity check (6.23)  $0.05 + 0.00 + 0.49 = 0.54$  -

Unity check (6.24)  $0.00 + 0.38 - 0.05 = 0.34$  -

The member satisfies the section check.

### ...:STABILITY CHECK:...:

### Lateral Torsional Buckling Check

According to article EN 1993-1-3: 6.2.4

According to article EN 1993-1-1: 6.3.2 and formula (6.55)

LTB Parameters		
Method for LTB Curve	art. 6.3.2.2	
$W_{eff,y}$	7.4448e-06	m <sup>3</sup>
Elastic critical moment $M_{cr}$	80.875	kNm
Relative slenderness $\lambda_{rel,LT}$	0.18	
Limit slenderness $\lambda_{rel,LT,0}$	0.20	

$M_{cr}$ Parameters		
LTB length	0.390	m
k	1.00	
$k_w$	1.00	
$C_1$	1.30	
$C_2$	0.00	
$C_3$	1.00	

The slenderness or bending moment is such that Lateral Torsional Buckling effects may be ignored according to EN 1993-1-1 article 6.3.2.2(4)

### Bending and Axial Tension Check

According to article EN 1993-1-3: 6.3.

$N_{t,Rd}$	88.262	kN
$M_{b,y,Rd}$	2.627	kNm
$M_{c,z,Rd,com}$	1.178	kNm

Unity check:  $0.00+0.38-0.05 = 0.34$  -

The member satisfies the stability check.

## All truss member check

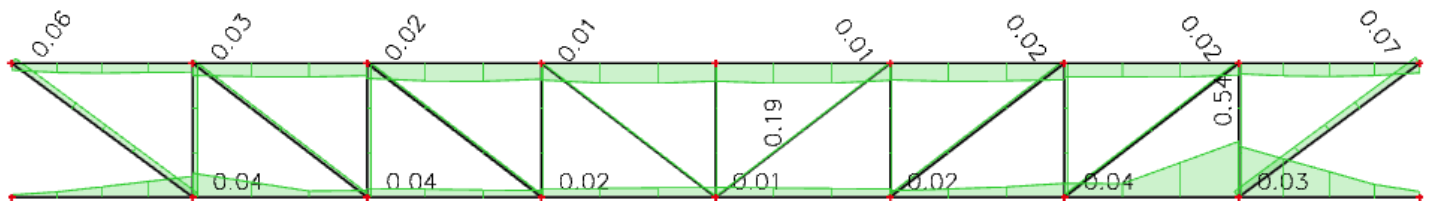
Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
2253	1.705-	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.22	<b>0.19</b>	0.22
2254	2.745-	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.54	<b>0.54</b>	0.34
2257	0.492	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.01	<b>0.01</b>	0.00
2262	0.492	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.01	<b>0.01</b>	0.00
2301	0.000	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.01	<b>0.01</b>	0.01
3016	0.000	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.02
3021	0.000	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
3026	0.000	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.03
3029	0.000	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.02
3034	0.000	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
3039	0.000	ULS-Set B (auto)/9	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
3044	0.492	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.00
3049	0.492	ULS-Set B (auto)/9	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.00
3054	0.504	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0;	S350GD+Z	0.06	<b>0.06</b>	0.00



Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
			50.0; 1.2; 3.0; 15.0)				
3059	0.492	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.00
3064	0.492	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.00
3069	0.504	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.07</b>	0.00

Name	Combination key
ULS-Set B (auto)/1	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/2	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/3	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q4 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/4	1.35*G + 1.35*G1 + 1.50*Q1 + 1.35*G3 + 1.35*G2 + 0.90*Q8
ULS-Set B (auto)/5	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/6	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/7	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/8	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/9	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q6 + 1.35*G3 + 1.35*G2

## Unity check

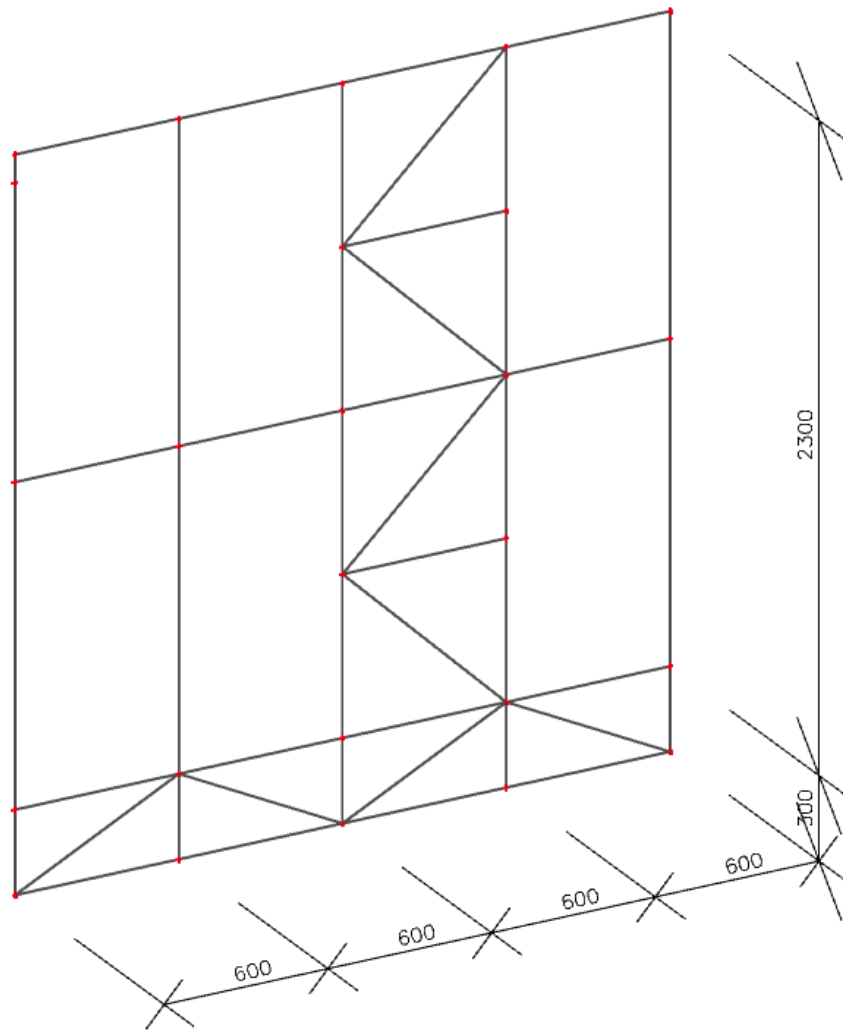


---

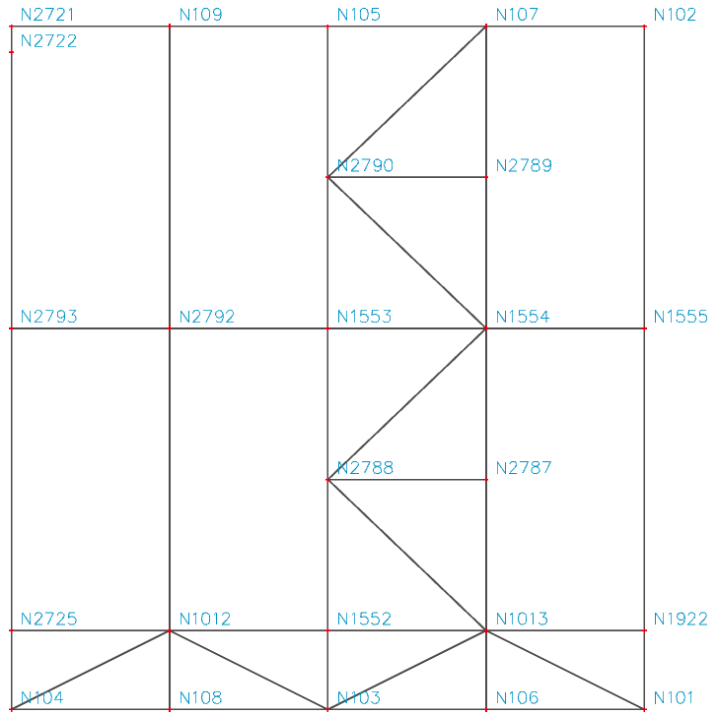
## **2.4.2 WALLS CHECK**

### **2.4.2.1 WALL NEAR TERRACE CHECK**

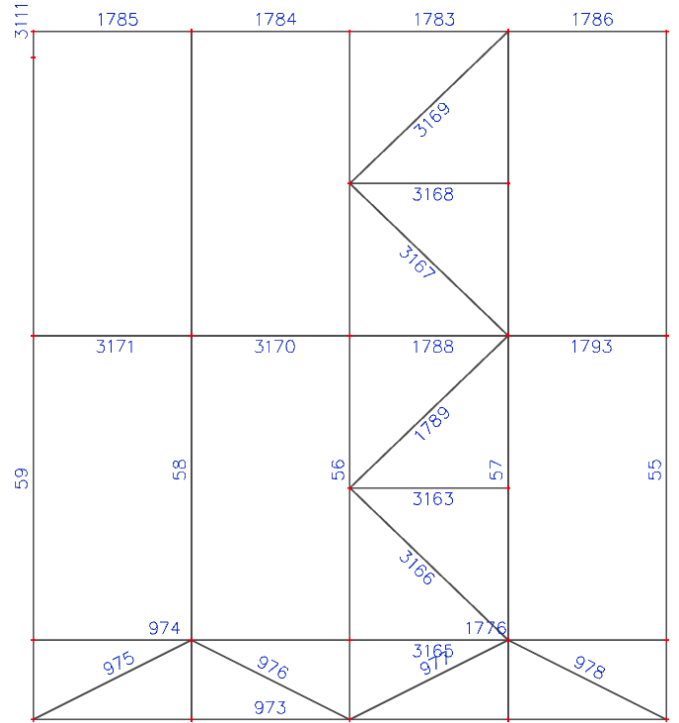
Wall frame



### Node number



### Members number



### Node coordinate

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N101	12.000	3.150	-0.300
N102	12.000	3.150	2.300
N103	10.800	3.150	-0.300
N104	9.600	3.150	-0.300
N105	10.800	3.150	2.300
N106	11.400	3.150	-0.300
N107	11.400	3.150	2.300
N108	10.200	3.150	-0.300
N109	10.200	3.150	2.300

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1012	10.200	3.150	0.000
N1013	11.400	3.150	0.000
N1552	10.800	3.150	0.000
N1553	10.800	3.150	1.150
N1554	11.400	3.150	1.150
N1555	12.000	3.150	1.150
N1922	12.000	3.150	0.000
N2721	9.600	3.150	2.300
N2722	9.600	3.150	2.200

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2725	9.600	3.150	0.000
N2787	11.400	3.150	0.575
N2788	10.800	3.150	0.575
N2789	11.400	3.150	1.725
N2790	10.800	3.150	1.725
N2792	10.200	3.150	1.150
N2793	9.600	3.150	1.150

## Members cross-sections

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
55	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	2.600	N101	N102	beam (80)
56	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.600	N103	N105	column (100)
57	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.600	N106	N107	column (100)
58	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.600	N108	N109	column (100)
59	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.500	N104	N2722	column (100)
973	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.400	N104	N101	beam (80)
974	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	1.200	N2725	N1552	beam (80)
975	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N1012	N104	beam (80)
976	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N1012	N103	beam (80)
977	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N1013	N103	beam (80)
978	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N1013	N101	beam (80)
1776	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	1.200	N1552	N1922	beam (80)
1783	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N107	N105	beam (80)
1784	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N105	N109	beam (80)
1785	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N109	N2721	beam (80)
1786	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N102	N107	beam (80)
1788	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N1553	N1554	beam (80)
1789	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.831	N2788	N1554	beam (80)
1793	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N1554	N1555	beam (80)
3111	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.100	N2722	N2721	column (100)
3163	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N2788	N2787	beam (80)
3165	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N1552	N1013	beam (80)
3166	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.831	N2788	N1013	beam (80)
3167	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.831	N2790	N1554	beam (80)
3168	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N2790	N2789	beam (80)
3169	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.831	N2790	N107	beam (80)
3170	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N2792	N1553	beam (80)
3171	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N2793	N2792	beam (80)

## Cross-Section properties

C100*50*15*1.2		
Type	Cold formed C section	
Detailed	100.0; 50.0; 1.2; 3.0; 15.0	
Formcode	114 - Cold formed C section	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	2.6269e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	1.1804e-04	1.3126e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	4.4038e-01	4.4038e-01
C <sub>y,LCS</sub> [mm], C <sub>z,LCS</sub> [mm]	17.2	50.0
α [deg]	0.00	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	4.2561e-07	9.3751e-08
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	40.3	18.9
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	8.5121e-06	2.8580e-06
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	9.7956e-06	4.2419e-06
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	3.43e+03	3.43e+03
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	1.48e+03	1.48e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	-41.5	0.0
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	1.2972e-10	2.2102e-10
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	0.0	121.2
Picture		

3°C100*50*15*1.2		
Type	C100*50*15*1.2	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	7.6646e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	3.2219e-04	3.7977e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	1.1687e+00	1.1687e+00
C <sub>y,LCS</sub> [mm], C <sub>z,LCS</sub> [mm]	280.8	70.5
I <sub>y,LCS</sub> [m <sup>4</sup> ], I <sub>z,LCS</sub> [m <sup>4</sup> ]	1.3092e-06	1.6666e-06
I <sub>z,LCS</sub> [m <sup>4</sup> ]	-4.2792e-08	
α [deg]	83.27	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	1.6716e-06	1.3041e-06
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	46.7	41.2
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	2.0127e-05	1.7440e-05
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	2.9299e-05	2.8496e-05
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	1.03e+04	1.03e+04
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	9.97e+03	9.97e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	-24.6	-45.1
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	5.1683e-10	4.0845e-09
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	105.4	52.7
Picture		

---

## Wall member hinges

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H904	973	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H905	974	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H945	59	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H946	56	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H983	1776	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H986	58	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H987	57	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H988	55	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H991	1793	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H992	1788	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H993	1789	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2190	3111	Begin	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H2238	3163	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2240	3165	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2241	3166	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2242	3167	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2243	3168	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2244	3169	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2247	3170	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2248	3171	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

**Maximum forces in elements**

**Axial force diagram N, kH.**

**1D internal forces**

Values: **N**

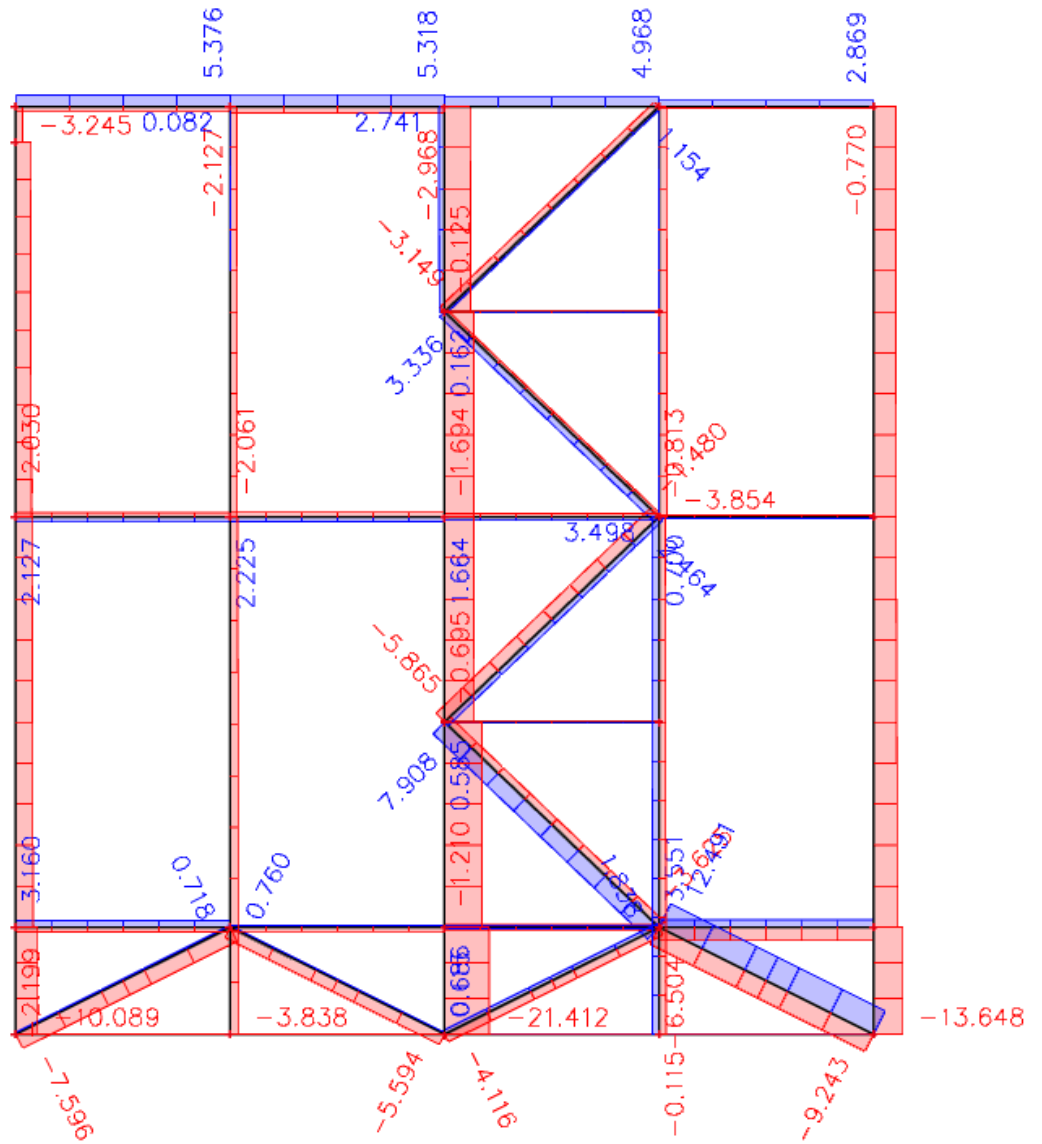
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Member

Selection: All



Shear force diagram  $V_y$ , kH.

**1D internal forces**

Values:  $V_y$

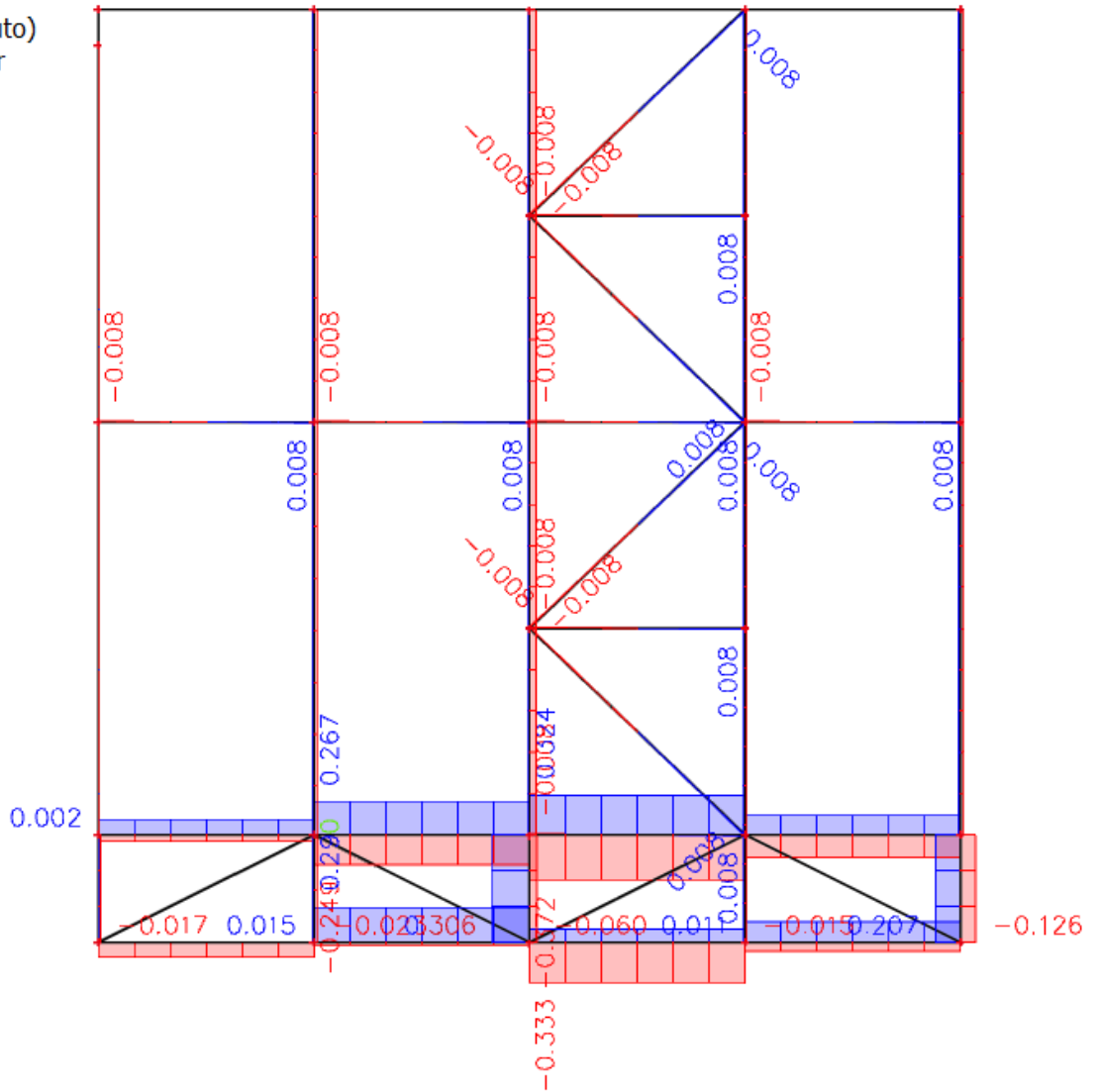
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Member

Selection: All





Shear force diagram  $V_z$ , kH.

**1D internal forces**

Values:  $V_z$

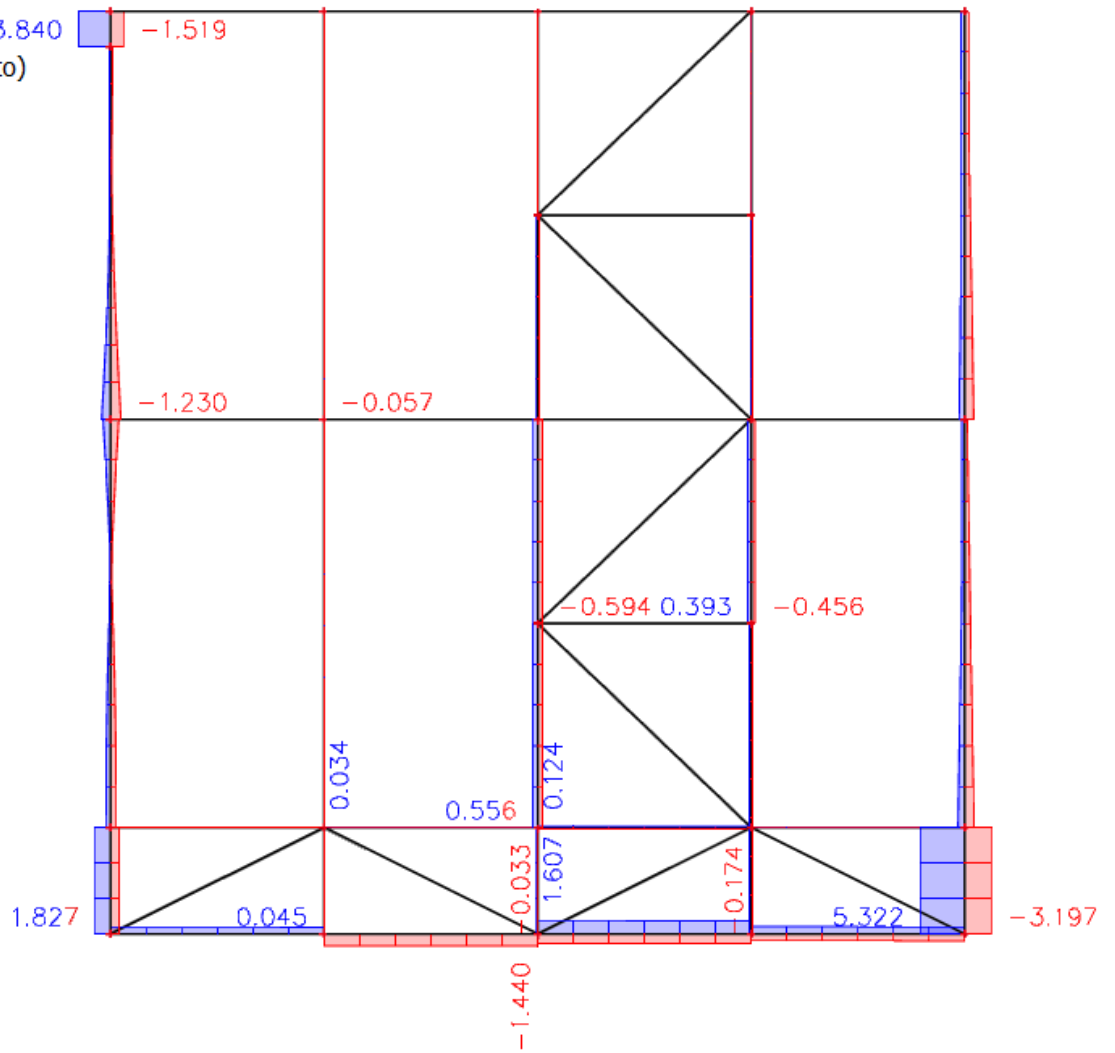
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Member

Selection: All

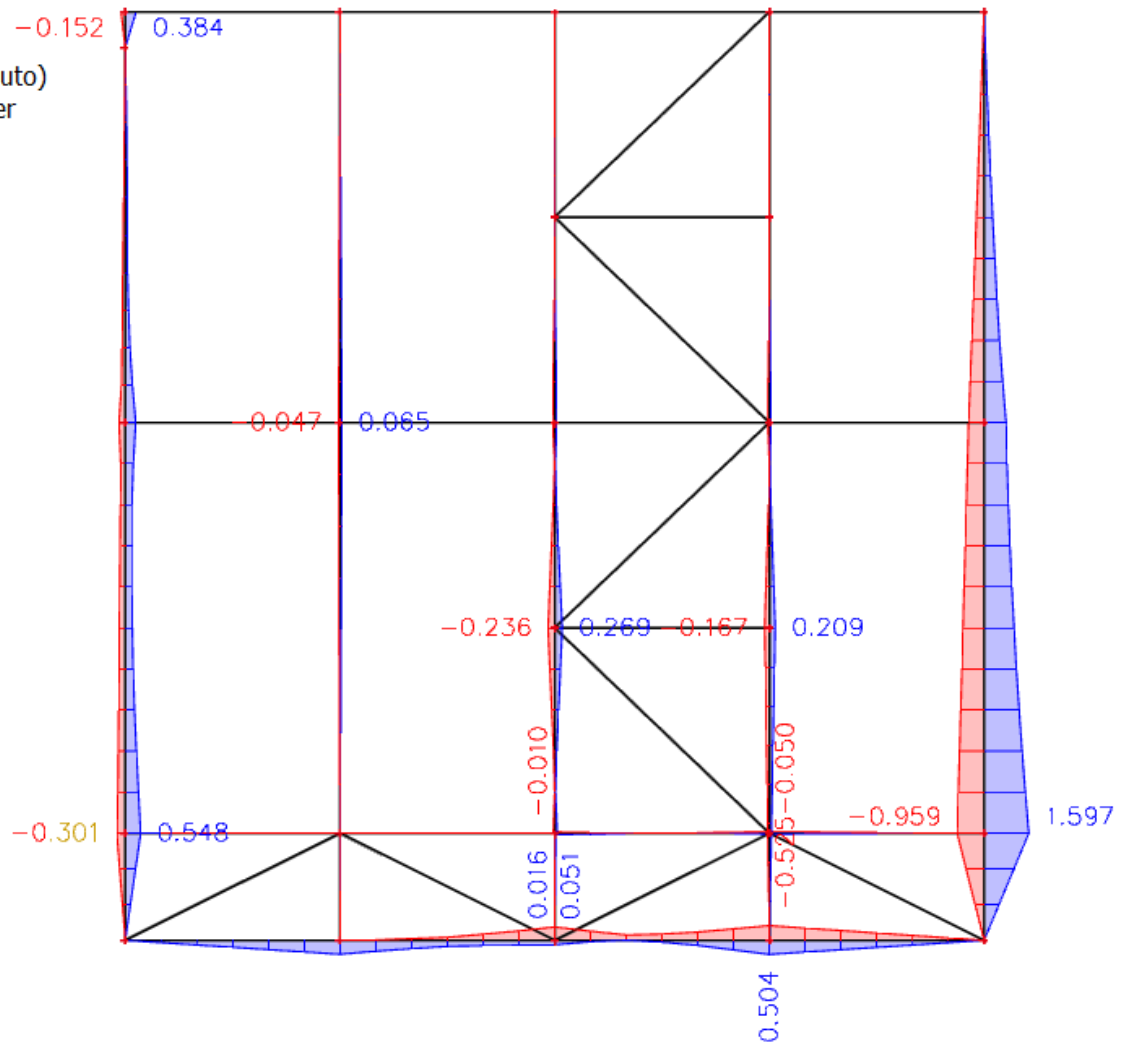


---

**Diagram of bending moments  $M_y$ , kNm.**

**1D internal forces**

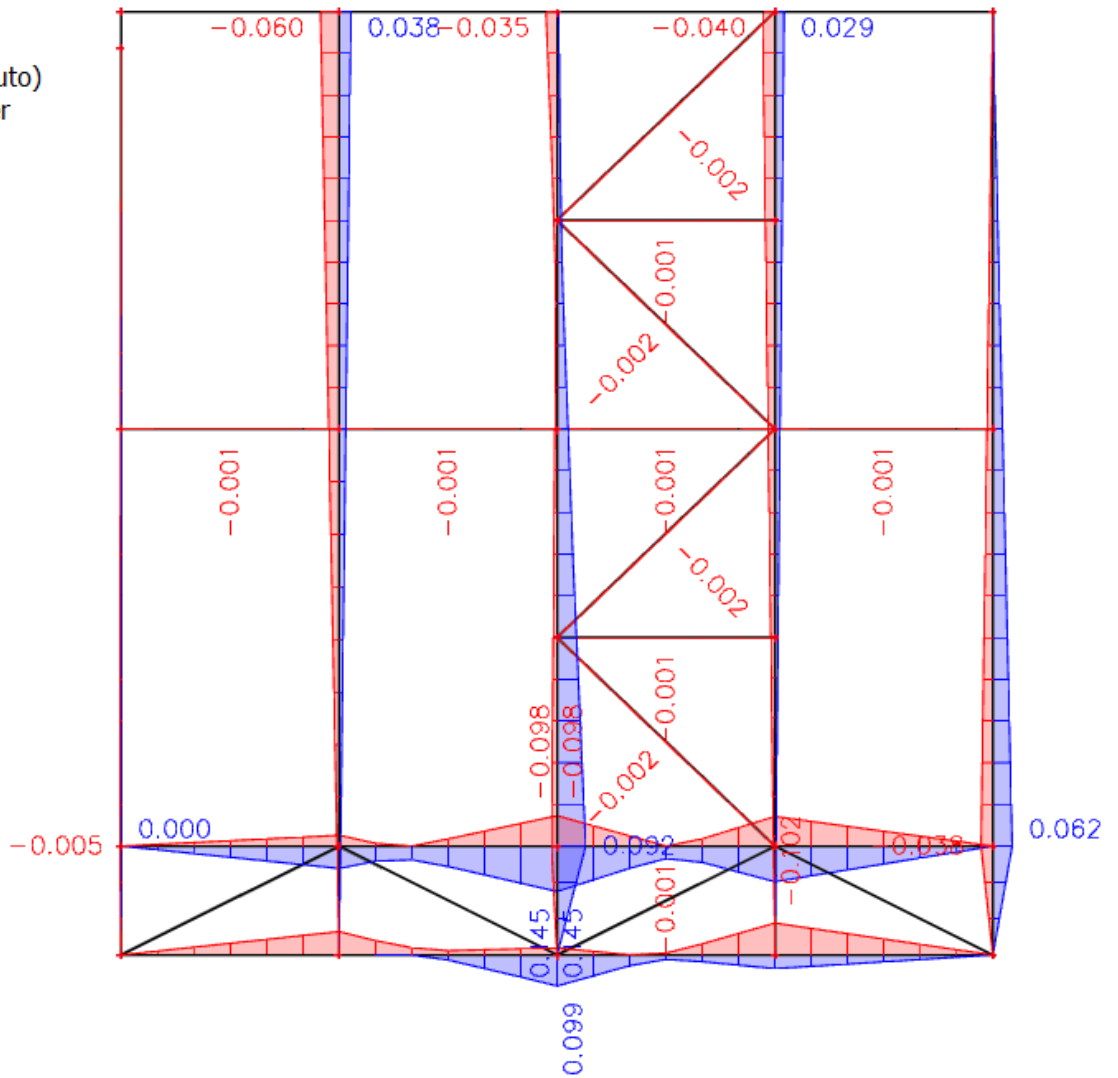
Values:  $M_y$   
Linear calculation  
Combination: ULS-Set B (auto)  
Coordinate system: Member  
Extreme 1D: Member  
Selection: All



**Diagram of bending moments  $M_z$ , kNm.**

**1D internal forces**

Values:  $M_z$   
 Linear calculation  
 Combination: ULS-Set B (auto)  
 Coordinate system: Member  
 Extreme 1D: Member  
 Selection: All



## Internal forces

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
55	0.000	ULS-Set B (auto)/1	<b>-13.648</b>	<b>0.207</b>	-2.312	0.000	0.000	0.000
55	2.600	ULS-Set B (auto)/2	<b>-0.832</b>	0.014	-0.456	0.000	0.000	0.000
55	0.000	ULS-Set B (auto)/3	-12.920	0.203	<b>-3.197</b>	0.000	0.000	0.000
55	0.300+	ULS-Set B (auto)/4	-7.195	-0.026	0.798	<b>0.000</b>	-0.755	0.059
55	0.300+	ULS-Set B (auto)/3	-10.864	-0.027	0.368	0.000	<b>-0.959</b>	0.061
55	0.300+	ULS-Set B (auto)/5	-2.968	0.016	-1.128	<b>0.000</b>	<b>1.597</b>	-0.038
55	0.300-	ULS-Set B (auto)/5	-3.699	<b>-0.126</b>	<b>5.322</b>	0.000	1.597	<b>-0.038</b>
55	0.300+	ULS-Set B (auto)/1	-11.087	-0.027	0.265	0.000	-0.694	<b>0.062</b>
56	0.000	ULS-Set B (auto)/6	<b>-21.412</b>	0.302	0.062	0.000	0.000	0.000
56	2.600	ULS-Set B (auto)/5	<b>2.741</b>	-0.018	-0.027	0.000	0.000	0.001
56	0.000	ULS-Set B (auto)/7	-1.667	<b>-0.060</b>	0.030	0.000	0.000	0.000
56	0.875+	ULS-Set B (auto)/5	-0.806	-0.018	<b>-0.594</b>	0.000	<b>0.269</b>	0.032
56	0.300+	ULS-Set B (auto)/5	-9.492	-0.018	<b>0.556</b>	0.000	-0.051	0.043
56	0.000	ULS-Set B (auto)/8	-18.739	0.278	-0.002	<b>0.000</b>	0.000	0.000
56	0.000	ULS-Set B (auto)/9	-3.242	-0.043	0.038	<b>0.000</b>	0.000	0.000
56	0.875-	ULS-Set B (auto)/3	-9.591	-0.037	-0.570	0.000	<b>-0.236</b>	0.034
56	2.600	ULS-Set B (auto)/10	-12.011	-0.047	0.030	0.000	0.000	<b>-0.035</b>
56	0.300-	ULS-Set B (auto)/11	-21.317	<b>0.306</b>	0.058	0.000	0.017	<b>0.092</b>
57	1.450+	ULS-Set B (auto)/6	<b>-3.854</b>	0.002	-0.012	0.000	0.000	0.003
57	1.450-	ULS-Set B (auto)/5	<b>3.498</b>	0.011	-0.456	0.000	-0.054	0.016
57	0.875+	ULS-Set B (auto)/5	3.392	0.011	<b>-0.456</b>	0.000	<b>0.209</b>	0.009
57	0.875+	ULS-Set B (auto)/3	-3.260	-0.005	<b>0.393</b>	0.000	<b>-0.167</b>	-0.004
57	1.450+	ULS-Set B (auto)/12	-0.288	-0.012	-0.088	<b>0.000</b>	0.041	-0.017
57	1.450+	ULS-Set B (auto)/8	-3.157	0.008	0.073	<b>0.000</b>	-0.039	0.012
57	2.600	ULS-Set B (auto)/13	-1.495	<b>-0.015</b>	0.026	0.000	0.000	<b>-0.040</b>
57	2.600	ULS-Set B (auto)/14	-1.435	<b>0.011</b>	-0.015	0.000	0.000	<b>0.029</b>
58	0.000	ULS-Set B (auto)/6	<b>-3.838</b>	-0.013	0.021	0.000	0.000	0.000
58	2.600	ULS-Set B (auto)/15	<b>0.082</b>	0.012	0.036	0.000	0.000	0.031
58	1.450+	ULS-Set B (auto)/5	-1.544	-0.019	<b>-0.057</b>	0.000	<b>0.065</b>	-0.027
58	0.000	ULS-Set B (auto)/5	-1.776	-0.019	<b>0.045</b>	<b>0.000</b>	0.000	0.000
58	0.000	ULS-Set B (auto)/4	-2.616	0.002	-0.015	<b>0.000</b>	0.000	0.000
58	1.450-	ULS-Set B (auto)/3	-1.858	0.011	-0.033	0.000	<b>-0.047</b>	0.016
58	2.600	ULS-Set B (auto)/16	-2.725	<b>-0.023</b>	-0.053	0.000	0.000	<b>-0.060</b>
58	2.600	ULS-Set B (auto)/17	-0.132	<b>0.015</b>	0.039	0.000	0.000	<b>0.038</b>
59	0.000	ULS-Set B (auto)/18	<b>-10.089</b>	-0.014	-0.713	0.000	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
59	2.500	ULS-Set B (auto)/19	<b>-1.522</b>	0.002	0.133	0.000	0.000	0.000
59	0.300+	ULS-Set B (auto)/20	-6.582	<b>0.002</b>	0.081	0.000	-0.201	-0.005
59	1.450+	ULS-Set B (auto)/5	-2.732	0.000	<b>-1.230</b>	0.000	0.372	0.000
59	0.300-	ULS-Set B (auto)/4	-8.806	-0.012	-1.003	<b>0.000</b>	<b>-0.301</b>	-0.004
59	0.300-	ULS-Set B (auto)/5	-3.645	-0.001	<b>1.827</b>	<b>0.000</b>	<b>0.548</b>	0.000
59	0.300-	ULS-Set B (auto)/20	-8.446	<b>-0.017</b>	-0.672	0.000	-0.201	<b>-0.005</b>
59	0.300+	ULS-Set B (auto)/2	-3.597	0.000	-0.414	0.000	0.449	<b>0.000</b>
973	1.200+	ULS-Set B (auto)/5	<b>0.115</b>	0.111	-1.139	0.000	0.162	-0.023
973	1.200+	ULS-Set B (auto)/4	-0.061	<b>-0.333</b>	1.318	0.000	-0.415	0.098
973	1.200-	ULS-Set B (auto)/18	0.006	<b>0.290</b>	<b>-1.440</b>	0.000	-0.453	0.099
973	1.200+	ULS-Set B (auto)/3	-0.096	-0.195	<b>1.607</b>	0.000	-0.456	0.062
973	0.600+	ULS-Set B (auto)/21	-0.020	0.109	-0.845	<b>0.000</b>	0.470	-0.044
973	1.200+	ULS-Set B (auto)/11	0.042	-0.140	0.179	<b>0.000</b>	-0.224	0.054
973	1.800+	ULS-Set B (auto)/5	<b>-0.115</b>	-0.073	0.880	0.000	<b>-0.525</b>	0.044
973	1.800-	ULS-Set B (auto)/3	-0.096	-0.195	1.591	0.000	<b>0.504</b>	-0.055
973	1.800+	ULS-Set B (auto)/4	0.061	0.170	-0.611	0.000	0.371	<b>-0.102</b>
973	1.200+	ULS-Set B (auto)/18	-0.055	-0.325	1.347	0.000	-0.453	<b>0.099</b>
974	0.000	ULS-Set B (auto)/4	<b>-2.199</b>	0.119	0.020	0.000	0.000	0.000
974	0.000	ULS-Set B (auto)/5	<b>3.160</b>	-0.058	0.004	0.000	0.000	0.000
974	0.600+	ULS-Set B (auto)/12	0.751	<b>-0.249</b>	-0.011	0.000	0.003	0.055
974	0.600+	ULS-Set B (auto)/8	-1.974	<b>0.267</b>	0.024	0.000	0.004	-0.018
974	1.200	ULS-Set B (auto)/22	0.630	-0.236	<b>-0.033</b>	0.000	-0.009	-0.074
974	0.600+	ULS-Set B (auto)/23	-1.853	0.255	<b>0.034</b>	0.000	-0.001	-0.031
974	0.000	ULS-Set B (auto)/6	1.699	0.018	0.017	<b>0.000</b>	0.000	0.000
974	1.200	ULS-Set B (auto)/24	0.723	-0.246	-0.028	<b>0.000</b>	<b>-0.010</b>	-0.097
974	1.200	ULS-Set B (auto)/25	-1.946	0.265	0.013	0.000	<b>0.016</b>	0.145
974	1.200	ULS-Set B (auto)/7	0.753	-0.248	-0.027	0.000	-0.010	<b>-0.098</b>
974	1.200	ULS-Set B (auto)/21	-1.976	0.267	0.012	0.000	0.015	<b>0.145</b>
975	0.671	ULS-Set B (auto)/21	<b>-7.596</b>	0.000	0.000	0.000	0.000	0.000
975	0.000	ULS-Set B (auto)/7	<b>0.718</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
976	0.671	ULS-Set B (auto)/18	<b>-5.594</b>	0.000	0.000	0.000	0.000	0.000
976	0.000	ULS-Set B (auto)/5	<b>0.760</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
977	0.671	ULS-Set B (auto)/18	<b>-4.116</b>	0.000	0.000	0.000	0.000	0.000
977	0.000	ULS-Set B (auto)/5	<b>1.838</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
978	0.671	ULS-Set B (auto)/4	<b>-9.243</b>	0.000	0.000	0.000	0.000	0.000
978	0.000	ULS-Set B (auto)/5	<b>12.491</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1776	0.600+	ULS-Set B (auto)/3	<b>3.551</b>	-0.051	-0.031	0.000	0.023	0.030
1776	0.000	ULS-Set B (auto)/3	-1.162	<b>-0.372</b>	-0.135	0.000	0.041	<b>0.145</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
1776	0.600-	(auto)/21	-1.210	-0.358	<b>-0.174</b>	0.000	-0.050	-0.095
1776	0.000	ULS-Set B (auto)/5	0.539	0.310	<b>0.124</b>	0.000	-0.039	-0.072
1776	0.600+	ULS-Set B (auto)/24	2.881	-0.161	-0.036	<b>0.000</b>	0.025	0.096
1776	0.600+	ULS-Set B (auto)/6	-3.190	0.051	0.045	<b>0.000</b>	-0.022	-0.030
1776	0.600+	ULS-Set B (auto)/5	<b>-6.504</b>	0.158	0.089	0.000	<b>-0.050</b>	-0.095
1776	0.000	ULS-Set B (auto)/5	-1.210	-0.358	-0.162	0.000	<b>0.051</b>	0.120
1776	0.000	ULS-Set B (auto)/7	0.490	<b>0.324</b>	0.097	0.000	-0.028	<b>-0.098</b>
1783	0.000	ULS-Set B (auto)/4	<b>4.968</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1783	0.000	ULS-Set B (auto)/5	<b>0.041</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
1784	0.000	ULS-Set B (auto)/5	<b>5.318</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1784	0.000	ULS-Set B (auto)/4	<b>-2.968</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
1785	0.000	ULS-Set B (auto)/21	<b>5.376</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1785	0.000	ULS-Set B (auto)/19	<b>-2.127</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
1786	0.000	ULS-Set B (auto)/4	<b>2.869</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1786	0.000	ULS-Set B (auto)/5	<b>-0.770</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
1788	0.600	ULS-Set B (auto)/25	<b>1.664</b>	<b>0.008</b>	<b>0.000</b>	0.000	<b>0.000</b>	<b>0.000</b>
1788	0.000	ULS-Set B (auto)/1	0.533	<b>-0.008</b>	0.000	<b>0.000</b>	0.000	0.000
1788	0.000	ULS-Set B (auto)/24	<b>-1.694</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>	0.000
1788	0.300-	ULS-Set B (auto)/25	1.664	0.000	0.000	0.000	0.000	<b>-0.001</b>
1789	0.831	ULS-Set B (auto)/7	<b>2.464</b>	0.006	<b>0.000</b>	0.000	<b>0.000</b>	<b>0.000</b>
1789	0.831	ULS-Set B (auto)/21	-5.849	<b>0.008</b>	0.000	0.000	0.000	0.000
1789	0.000	ULS-Set B (auto)/24	2.426	-0.006	0.000	<b>0.000</b>	0.000	0.000
1789	0.000	ULS-Set B (auto)/25	-5.839	<b>-0.008</b>	0.000	<b>0.000</b>	0.000	0.000
1789	0.000	ULS-Set B (auto)/21	<b>-5.865</b>	-0.008	0.000	0.000	<b>0.000</b>	0.000
1789	0.416-	ULS-Set B (auto)/21	-5.857	0.000	0.000	0.000	0.000	<b>-0.002</b>
1793	0.600	ULS-Set B (auto)/12	<b>0.700</b>	<b>0.008</b>	<b>0.000</b>	0.000	<b>0.000</b>	<b>0.000</b>
1793	0.000	ULS-Set B (auto)/5	-0.813	-0.006	0.000	<b>0.000</b>	0.000	0.000
1793	0.000	ULS-Set B (auto)/4	0.699	<b>-0.008</b>	0.000	<b>0.000</b>	0.000	0.000
1793	0.000	ULS-Set B (auto)/8	<b>-0.813</b>	-0.006	0.000	0.000	<b>0.000</b>	0.000
1793	0.300-	ULS-Set B (auto)/12	0.700	0.000	0.000	0.000	0.000	<b>-0.001</b>
3111	0.000	ULS-Set B (auto)/2	-1.133	0.000	3.080	<b>0.000</b>	0.000	0.000
3111	0.000	ULS-Set B (auto)/1	-2.954	<b>0.000</b>	-0.518	<b>0.000</b>	0.000	<b>0.000</b>
3111	0.100	ULS-Set B (auto)/19	<b>-0.703</b>	0.000	<b>-1.519</b>	0.000	<b>-0.152</b>	0.000
3111	0.100	ULS-Set B (auto)/21	-2.595	0.000	<b>3.840</b>	0.000	<b>0.384</b>	0.000
3111	0.000	ULS-Set B (auto)/26	<b>-3.245</b>	0.000	-0.292	0.000	0.000	<b>0.000</b>
3163	0.600	ULS-Set B (auto)/3	<b>0.585</b>	<b>0.008</b>	<b>0.000</b>	0.000	<b>0.000</b>	<b>0.000</b>
3163	0.000	ULS-Set B (auto)/24	0.291	-0.006	0.000	<b>0.000</b>	0.000	0.000
3163	0.000	ULS-Set B	-0.208	<b>-0.008</b>	0.000	<b>0.000</b>	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
3163	0.000	(auto)/6	<b>-0.695</b>	-0.006	0.000	0.000	<b>0.000</b>	0.000
3163	0.300-	ULS-Set B (auto)/5	0.585	0.000	0.000	0.000	0.000	<b>-0.001</b>
3165	0.600	ULS-Set B (auto)/3	<b>0.686</b>	<b>0.008</b>	<b>0.000</b>	0.000	<b>0.000</b>	<b>0.000</b>
3165	0.000	ULS-Set B (auto)/3	0.464	-0.006	0.000	<b>0.000</b>	0.000	0.000
3165	0.000	ULS-Set B (auto)/24	-0.614	<b>-0.008</b>	0.000	<b>0.000</b>	0.000	0.000
3165	0.000	ULS-Set B (auto)/6	<b>-1.210</b>	-0.006	0.000	0.000	<b>0.000</b>	0.000
3165	0.300-	ULS-Set B (auto)/5	0.686	0.000	0.000	0.000	0.000	<b>-0.001</b>
3166	0.831	ULS-Set B (auto)/7	<b>-3.625</b>	0.006	0.000	0.000	0.000	0.000
3166	0.000	ULS-Set B (auto)/21	<b>7.908</b>	<b>-0.008</b>	0.000	0.000	0.000	0.000
3166	0.831	ULS-Set B (auto)/21	7.892	<b>0.008</b>	<b>0.000</b>	0.000	<b>0.000</b>	<b>0.000</b>
3166	0.000	ULS-Set B (auto)/24	-3.513	-0.006	0.000	<b>0.000</b>	0.000	0.000
3166	0.000	ULS-Set B (auto)/25	7.807	-0.008	0.000	<b>0.000</b>	0.000	0.000
3166	0.416-	ULS-Set B (auto)/21	7.900	0.000	0.000	0.000	0.000	<b>-0.002</b>
3167	0.831	ULS-Set B (auto)/19	<b>-1.480</b>	0.006	0.000	0.000	0.000	0.000
3167	0.000	ULS-Set B (auto)/27	<b>3.336</b>	<b>-0.008</b>	0.000	0.000	0.000	0.000
3167	0.831	ULS-Set B (auto)/27	3.320	<b>0.008</b>	<b>0.000</b>	0.000	<b>0.000</b>	<b>0.000</b>
3167	0.000	ULS-Set B (auto)/24	0.489	-0.006	0.000	<b>0.000</b>	0.000	0.000
3167	0.000	ULS-Set B (auto)/25	3.007	-0.008	0.000	<b>0.000</b>	0.000	0.000
3167	0.416-	ULS-Set B (auto)/27	3.328	0.000	0.000	0.000	0.000	<b>-0.002</b>
3168	0.600	ULS-Set B (auto)/3	<b>0.162</b>	<b>0.008</b>	<b>0.000</b>	0.000	<b>0.000</b>	<b>0.000</b>
3168	0.000	ULS-Set B (auto)/24	0.087	-0.006	0.000	<b>0.000</b>	0.000	0.000
3168	0.000	ULS-Set B (auto)/25	-0.061	<b>-0.008</b>	0.000	<b>0.000</b>	0.000	0.000
3168	0.000	ULS-Set B (auto)/5	<b>-0.125</b>	-0.006	0.000	0.000	<b>0.000</b>	0.000
3168	0.300-	ULS-Set B (auto)/3	0.162	0.000	0.000	0.000	0.000	<b>-0.001</b>
3169	0.831	ULS-Set B (auto)/19	<b>1.154</b>	0.006	<b>0.000</b>	0.000	<b>0.000</b>	<b>0.000</b>
3169	0.831	ULS-Set B (auto)/27	-3.133	<b>0.008</b>	0.000	0.000	0.000	0.000
3169	0.000	ULS-Set B (auto)/24	-0.762	-0.006	0.000	<b>0.000</b>	0.000	0.000
3169	0.000	ULS-Set B (auto)/25	-2.766	<b>-0.008</b>	0.000	<b>0.000</b>	0.000	0.000
3169	0.000	ULS-Set B (auto)/27	<b>-3.149</b>	-0.008	0.000	0.000	<b>0.000</b>	0.000
3169	0.416-	ULS-Set B (auto)/27	-3.141	0.000	0.000	0.000	0.000	<b>-0.002</b>
3170	0.000	ULS-Set B (auto)/8	<b>2.225</b>	-0.006	<b>0.000</b>	0.000	<b>0.000</b>	<b>0.000</b>
3170	0.600	ULS-Set B (auto)/12	<b>-2.061</b>	<b>0.008</b>	0.000	0.000	0.000	0.000
3170	0.000	ULS-Set B (auto)/3	-0.108	<b>-0.008</b>	0.000	<b>0.000</b>	0.000	0.000
3170	0.000	ULS-Set B (auto)/2	1.218	-0.006	0.000	<b>0.000</b>	0.000	0.000
3170	0.300-	ULS-Set B (auto)/12	-2.061	0.000	0.000	0.000	0.000	<b>-0.001</b>
3171	0.000	ULS-Set B (auto)/8	<b>2.127</b>	-0.006	<b>0.000</b>	0.000	<b>0.000</b>	<b>0.000</b>
3171	0.600	ULS-Set B (auto)/12	<b>-2.030</b>	<b>0.008</b>	0.000	0.000	0.000	0.000
3171	0.000	ULS-Set B	1.124	-0.006	0.000	<b>0.000</b>	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
3171	0.000	(auto)/16 ULS-Set B (auto)/17	-0.039	<b>-0.008</b>	0.000	<b>0.000</b>	0.000	0.000
3171	0.300	ULS-Set B (auto)/12	-2.030	0.000	0.000	0.000	0.000	<b>-0.001</b>

Name	Combination key
ULS-Set B (auto)/1	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/2	G + G1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/3	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/4	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/5	G + G1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/6	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/7	G + G1 + 0.75*Q3 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/8	G + G1 + 1.05*Q1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/9	1.35*G + 1.35*G1 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/10	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/11	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/12	1.35*G + 1.35*G1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/13	1.35*G + 1.35*G1 + 1.05*Q1 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/14	G + G1 + 0.75*Q3 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/15	G + G1 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/16	G + G1 + 1.05*Q1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/17	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/18	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8
ULS-Set B (auto)/19	G + G1 + 0.75*Q3 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/20	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/21	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/22	G + G1 + 1.05*Q1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/23	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/24	G + G1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/25	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/26	1.35*G + 1.35*G1 + 1.50*Q1 + 1.35*G3 + 1.35*G2 + 0.90*Q8
ULS-Set B (auto)/27	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q6 + 1.35*G3 + 1.35*G2

## Member 973 check

### EN 1993-1-3 Cold Formed Code Check

National annex: Standard EN

Member 973	1.800 / 2.400 m	Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	ULS-Set B (auto)	0.63 -
------------	-----------------	---	----------	------------------	--------

<b>Combination key</b>
ULS-Set B (auto) / 1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2

<b>Partial safety factors</b>	
$\gamma_{M0}$ for resistance of cross-sections	1.00
$\gamma_{M1}$ for resistance to instability	1.00
$\gamma_{M2}$ for resistance of net sections	1.25

<b>Material</b>		
Yield strength $f_y$	350.0	MPa
Average yield strength $f_{y,a}$	360.7	MPa
k	7	
n	4	
Ultimate strength $f_u$	420.0	MPa
Fabrication	cold formed	

....:SECTION CHECK:....

The critical check is on position 1.800 m

Internal forces		Calculated	Unit
Normal force	$N_{Ed}$	-0.096	kN
Shear force	$V_{y,Ed}$	1.591	kN
Shear force	$V_{z,Ed}$	0.195	kN
Torsion	$T_{Ed}$	0.000	kNm
Bending moment	$M_{y,Ed}$	0.055	kNm
Bending moment	$M_{z,Ed}$	0.504	kNm

**Note:** The shift of the neutral axis  $e_{N,z}$  leads to a favourable result in the check and is therefore neglected.

### Effective section N-

#### Effective width calculation

According to EN 1993-1-3 article 5.5.2, 5.5.3 & EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\lambda_{p,red}$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	3.500e+05	3.500e+05	1.00	0.50	0.68	0.58	1.00	13.3		
3	I	46.7	3.500e+05	3.500e+05	1.00	4.00	0.84	0.72	0.96	45.0	20.6	22.5
5	I	96.7	3.500e+05	3.500e+05	1.00	4.00	1.73		0.50	48.8	24.4	24.4
7	I	46.7	3.500e+05	3.500e+05	1.00	4.00	0.84	0.72	0.96	45.0	20.6	22.5
9	UO	13.3	3.500e+05	3.500e+05	1.00	0.50	0.68	0.58	1.00	13.3		

### Stiffener calculation

According to EN 1993-1-3 article 5.5.3

Id	$A_s$ [m <sup>2</sup> ]	$I_s$ [m <sup>4</sup> ]	$b_1$ [mm]	$b_2$ [mm]	$h_w$ [mm]	$k_f$ [-]	$K$ [kN/m <sup>2</sup> ]	$\sigma_{cr}$ [kN/m <sup>2</sup> ]	$\lambda_d$ [-]	$\chi_d$ [-]	$A_{s,red}$ [m <sup>2</sup> ]
1	4.3697e-05	8.3901e-10	41.2	41.2	98.8	1.00	3.109e+02	3.387e+05	1.02	0.74	3.2121e-05
9	4.3697e-05	8.3901e-10	41.2	41.2	98.8	1.00	3.109e+02	3.387e+05	1.02	0.74	3.2121e-05

**Effective section My+****Effective width calculation**

According to EN 1993-1-3 article 5.5.2, 5.5.3 &amp; EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\lambda_{p,red}$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	-2.244e+05	-3.132e+05								
3	I	46.7	-3.074e+05	-3.200e+05								
5	I	96.7	3.433e+05	-3.001e+05	-0.87	20.79	0.76		1.00	51.6	20.6	31.0
7	I	46.7	3.500e+05	3.375e+05	0.96	4.07	0.83	0.74	0.95	44.6	20.6	22.5
9	UO	13.3	3.302e+05	2.414e+05	0.73	0.50	0.68	0.60	1.00	13.3		

**Stiffener calculation**

According to EN 1993-1-3 article 5.5.3

Id	$A_s$ [m <sup>2</sup> ]	$I_s$ [m <sup>4</sup> ]	$b_1$ [mm]	$b_2$ [mm]	$h_w$ [mm]	$k_r$ [-]	$K$ [kN/m <sup>2</sup> ]	$\sigma_{cr}$ [kN/m <sup>2</sup> ]	$\lambda_d$ [-]	$\chi_d$ [-]	$A_{s,red}$ [m <sup>2</sup> ]
9	4.3659e-05	8.3870e-10	41.2	31.2	98.8	0.00	4.203e+02	3.941e+05	0.94	0.79	3.4433e-05

**Effective section Mz+****Effective width calculation**

According to EN 1993-1-3 article 5.5.2, 5.5.3 &amp; EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\lambda_{p,red}$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	3.500e+05	3.500e+05	1.00	0.50	0.68	0.60	1.00	13.3		
3	I	46.7	3.391e+05	-1.443e+05	-0.43	12.26	0.48	0.42	1.00	32.8	13.1	19.7
5	I	96.7	-1.552e+05	-1.552e+05								
7	I	46.7	3.391e+05	-1.443e+05	-0.43	12.26	0.48	0.42	1.00	32.8	13.1	19.7
9	UO	13.3	3.500e+05	3.500e+05	1.00	0.50	0.68	0.60	1.00	13.3		

**Stiffener calculation**

According to EN 1993-1-3 article 5.5.3

Id	$A_s$ [m <sup>2</sup> ]	$I_s$ [m <sup>4</sup> ]	$b_1$ [mm]	$b_2$ [mm]	$h_w$ [mm]	$k_r$ [-]	$K$ [kN/m <sup>2</sup> ]	$\sigma_{cr}$ [kN/m <sup>2</sup> ]	$\lambda_d$ [-]	$\chi_d$ [-]	$A_{s,red}$ [m <sup>2</sup> ]
1	3.2403e-05	7.1229e-10	45.1	45.1	98.8	1.00	2.541e+02	3.805e+05	0.96	0.78	2.5164e-05
9	3.2403e-05	7.1229e-10	45.1	45.1	98.8	1.00	2.541e+02	3.805e+05	0.96	0.78	2.5164e-05

Effective properties						
Effective area	$A_{eff}$	1.7410e-04	m <sup>2</sup>			
Effective second moment of area	$I_{eff,y}$	3.9441e-07	m <sup>4</sup>	$I_{eff,z}$	8.1093e-08	m <sup>4</sup>
Effective section modulus	$W_{eff,y}$	7.4448e-06	m <sup>3</sup>	$W_{eff,z}$	2.3533e-06	m <sup>3</sup>
Shift of the centroid	$e_{N,y}$	0.0	mm	$e_{N,z}$	2.0	mm

**Compression check**

According to EN 1993-1-3 article 6.1.3 and formula (6.2)

Effective section area	$A_{eff}$	1.7410e-04	m <sup>2</sup>
Compression resistance	$N_{c,Rd}$	60.935	kN
Unity check		0.00	-

**Bending moment check for My**

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,y}$	7.4448e-06	m <sup>3</sup>
Bending moment resistance	$M_{c,y,Rd}$	2.606	kNm
Unity check		0.02	-



**Bending moment check for  $M_z$** 

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,z}$	2.3533e-06	$m^3$
Bending moment resistance	$M_{c,z,Rd}$	0.824	kNm
Unity check		0.61	-

**Biaxial bending moment check**

According to EN 1993-1-3 article 6.1.4 and formula (6.7)

Bending moment resistance	$M_{c,y,Rd}$	2.606	kNm
Bending moment resistance	$M_{c,z,Rd}$	0.824	kNm

Unity check (6.7) = 0.02 + 0.61 = 0.63 -

**Shear Force  $V_y$** 

According to article EN 1993-1-3: 6.1.5 and formula (6.8).

Stiffening at the support.

Element ID	$I_c$ [mm]	$\alpha$ [deg]	$s_w$ [mm]	$\lambda_w$ [-]	$f_{bv}$ [MPa]	$V_{b,Rd,y,i}$ [kN]
3	48.8	0.00	46.7	0.55	203.0	11.888
5	98.8	90.00	96.7	1.14	147.6	0.000
7	48.8	0.00	46.7	0.55	203.0	11.888

Shear verification		
$V_{b,Rd,y}$	23.775	kN
Unity check	0.07	-

**Shear Force  $V_z$** 

According to article EN 1993-1-3: 6.1.5 and formula (6.8).

Stiffening at the support.

Element ID	$I_c$ [mm]	$\alpha$ [deg]	$s_w$ [mm]	$\lambda_w$ [-]	$f_{bv}$ [MPa]	$V_{b,Rd,z,i}$ [kN]
3	48.8	0.00	46.7	0.55	203.0	0.000
5	98.8	90.00	96.7	1.14	147.6	17.500
7	48.8	0.00	46.7	0.55	203.0	0.000

Shear verification		
$V_{b,Rd,z}$	17.500	kN
Unity check	0.01	-

**Torsional Moment Check**

According to article EN 1993-1-3: 6.1.6 and formula (6.11a), (6.11b), (6.11c).

Elastic verification		
Critical Fibre	26	
$\sigma_N$	0.5	MPa
$\sigma_{My}$	6.7	MPa
$\sigma_{Mz}$	214.1	MPa
$T_{Vy}$	5.6	MPa
$T_{Vz}$	0.2	MPa
$T_t$	0.1	MPa
Direct Stress Check	0.63	-
Shear Stress Check	0.03	-
Composed Stress Check	0.58	-

Note: The Local Transverse Forces Check has been ignored due to user input.

### Combined Compression and Bending Check

According to article EN 1993-1-3: 6.1.9 and formula (6.25), (6.26).

$N_{c,Rd}$	60.935	kN
$M_{cy,Rd,ten}$	2.909	kNm
$M_{cz,Rd,ten}$	1.826	kNm
$M_{cy,Rd,com}$	2.627	kNm
$M_{cz,Rd,com}$	0.824	kNm

Unity check (6.25)  $0.00 + 0.02 + 0.61 = 0.63$  -

Unity check (6.26)  $0.02 + 0.28 - 0.00 = 0.29$  -

The member satisfies the section check.

### .....STABILITY CHECK:....

#### Flexural Buckling Strength

According to article EN 1993-1-3: 6.2.2

According to article EN 1993-1-1: 6.3.1 and formula (6.46)

Buckling parameters	yy	zz	
Sway type	sway	non-sway	
System Length L	0.600	0.600	m
Buckling factor k	1.21	0.70	
Buckling length $L_{cr}$	0.729	0.422	m
Critical Euler load $N_{cr}$	1660.348	1090.937	kN
Slenderness	18.11	22.34	
Relative slenderness $\lambda_{rel}$	0.19	0.24	
Limit slenderness $\lambda_{rel,0}$	0.20	0.20	

The slenderness or compression force is such that Flexural Buckling effects may be ignored according to EN 1993-1-1 article 6.3.1.2(4)

#### Torsional (-Flexural) Buckling check

According to article EN 1993-1-3: 6.2.3

According to article EN 1993-1-1: 6.3.1 and formula (6.46)

Torsional Buckling length	0.600	m
$N_{cr,T}$	346.750	kN
$N_{cr,TF}$	312.913	kN
Relative slenderness $\lambda_{rel,T}$	0.44	
Limit slenderness $\lambda_{rel,0}$	0.20	

The slenderness or compression force is such that Torsional (-Flexural) Buckling effects may be ignored according to EN 1993-1-1 article 6.3.1.2(4)

#### Lateral Torsional Buckling Check

According to article EN 1993-1-3: 6.2.4

According to article EN 1993-1-1: 6.3.2 and formula (6.55)

LTB Parameters		
Method for LTB Curve	art. 6.3.2.2	
$W_{eff,y}$	7.4448e-06	m <sup>3</sup>
Elastic critical moment $M_{cr}$	68.419	kNm
Relative slenderness $\lambda_{rel,LT}$	0.20	
Limit slenderness $\lambda_{rel,LT,0}$	0.20	

M <sub>cr</sub> Parameters		
LTB length	0.600	m
k	1.00	
k <sub>w</sub>	1.00	
C <sub>1</sub>	2.60	
C <sub>2</sub>	0.00	
C <sub>3</sub>	0.00	

The slenderness or bending moment is such that Lateral Torsional Buckling effects may be ignored according to EN 1993-1-1 article 6.3.2.2(4)

### Bending and Axial Compression Check

According to article EN 1993-1-3: 6.2.5(1)

According to article EN 1993-1-1: 6.3.3 and formula (6.61), (6.62).

Interaction Method 1

Interaction method 1 parameters		
K <sub>yy</sub>	0.92	
K <sub>yz</sub>	0.60	
K <sub>zy</sub>	0.92	
K <sub>zz</sub>	0.60	
ΔM <sub>y,Ed</sub>	0.000	kNm
ΔM <sub>z,Ed</sub>	0.000	kNm
A	1.7410e-04	m <sup>2</sup>
W <sub>y</sub>	7.4448e-06	m <sup>3</sup>
W <sub>z</sub>	2.3533e-06	m <sup>3</sup>
N <sub>Rk</sub>	60.935	kN
M <sub>y,Rk</sub>	2.606	kNm
M <sub>z,Rk</sub>	0.824	kNm
M <sub>y,Ed</sub>	-0.062	kNm
M <sub>z,Ed</sub>	0.504	kNm
Interaction Method 1		
M <sub>cr,0</sub>	26.315	kNm
reduced slenderness 0	0.31	
ψ <sub>y</sub>	-0.89	
ψ <sub>z</sub>	-0.90	
C <sub>my,0</sub>	0.60	
C <sub>mz,0</sub>	0.60	
C <sub>my</sub>	0.92	
C <sub>mz</sub>	0.60	
C <sub>mLT</sub>	1.00	
μ <sub>y</sub>	1.00	
μ <sub>z</sub>	1.00	
α <sub>LT</sub>	1.00	

Unity check  $0.00 + 0.02 + 0.37 = 0.39$  -

Unity check  $0.00 + 0.02 + 0.37 = 0.39$  -

The member satisfies the stability check.

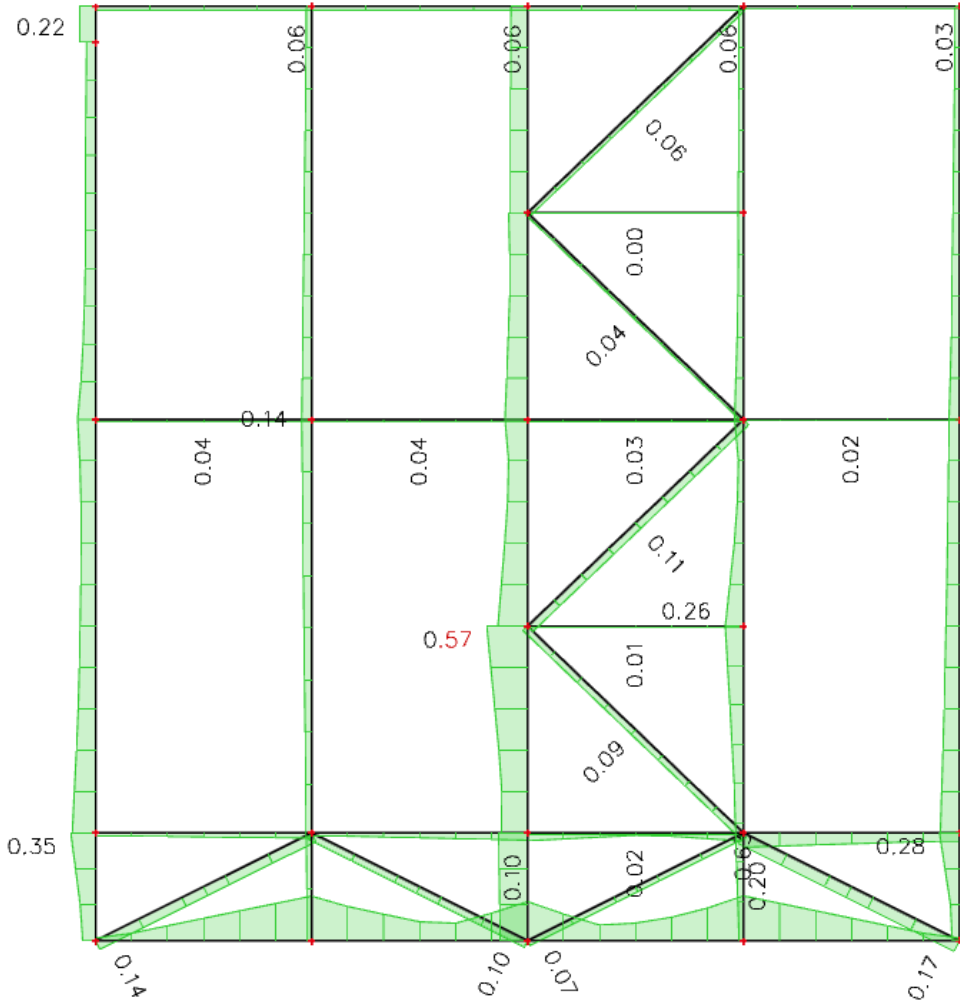
## All member type frame check

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
55	0.300-	ULS-Set B (auto)/1	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.28	<b>0.28</b>	0.26
56	0.875-	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.62	<b>0.57</b>	0.62
57	0.875+	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.26	<b>0.26</b>	0.22
58	1.450-	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.19	<b>0.14</b>	0.19
59	0.300-	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.35	<b>0.35</b>	0.33
973	1.800-	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.63	<b>0.63</b>	0.39
974	1.200	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.11	<b>0.10</b>	0.11
975	0.671	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.16	<b>0.14</b>	0.16
976	0.671	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.12	<b>0.10</b>	0.12
977	0.671	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.09	<b>0.07</b>	0.09
978	0.671	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.20	<b>0.17</b>	0.20
1776	0.600+	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.23	<b>0.20</b>	0.23
1783	0.000	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.06	<b>0.06</b>	0.00
1784	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.06	<b>0.06</b>	0.00
1785	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.06	<b>0.06</b>	0.00
1786	0.000	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.00
1788	0.300-	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.03</b>	0.04
1789	0.416-	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C	S350GD+Z	0.14	<b>0.11</b>	0.14

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
			section (100.0; 50.0; 1.2; 3.0; 15.0)				
1793	0.300-	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.02
3111	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.22	<b>0.22</b>	0.19
3163	0.300-	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.01</b>	0.02
3165	0.300-	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.02</b>	0.03
3166	0.416-	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.09	<b>0.09</b>	0.00
3167	0.416-	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.00
3168	0.300-	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
3169	0.416-	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.06</b>	0.07
3170	0.300-	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
3171	0.300-	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04

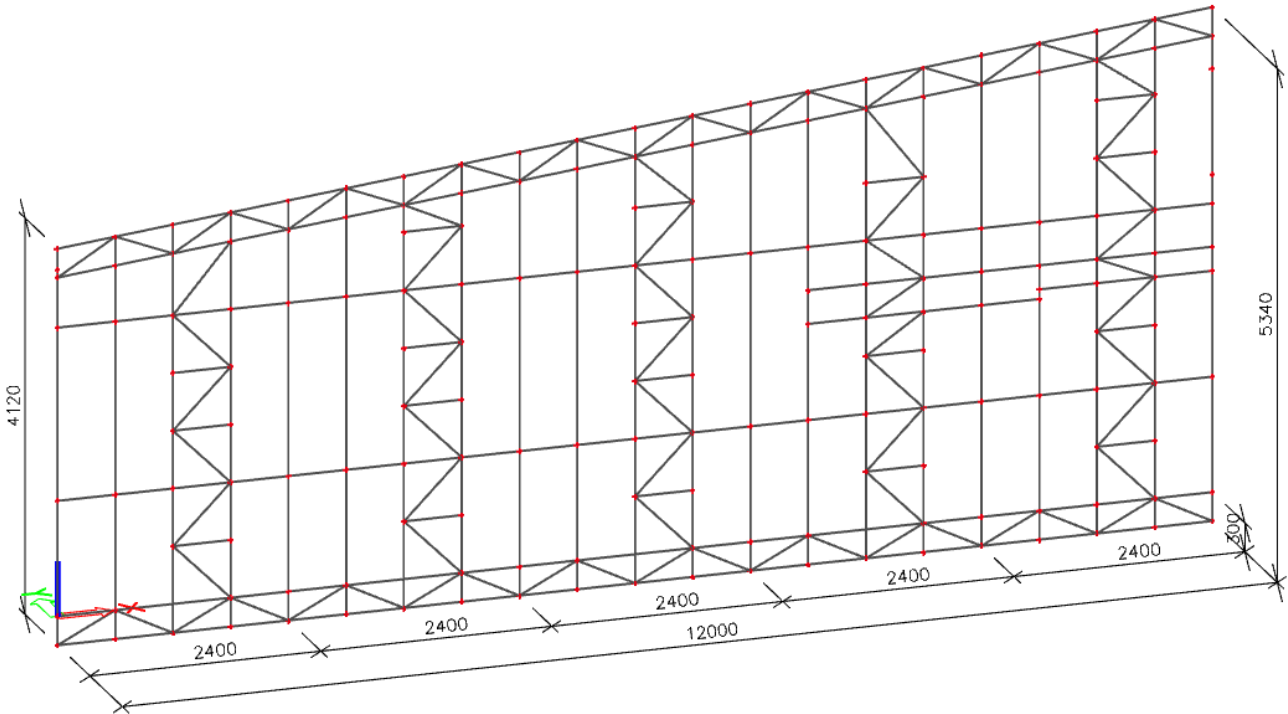
Name	Combination key
ULS-Set B (auto)/1	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/2	G + G1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/3	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/4	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8
ULS-Set B (auto)/5	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/6	G + G1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/7	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/8	1.35*G + 1.35*G1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8

# Unity check

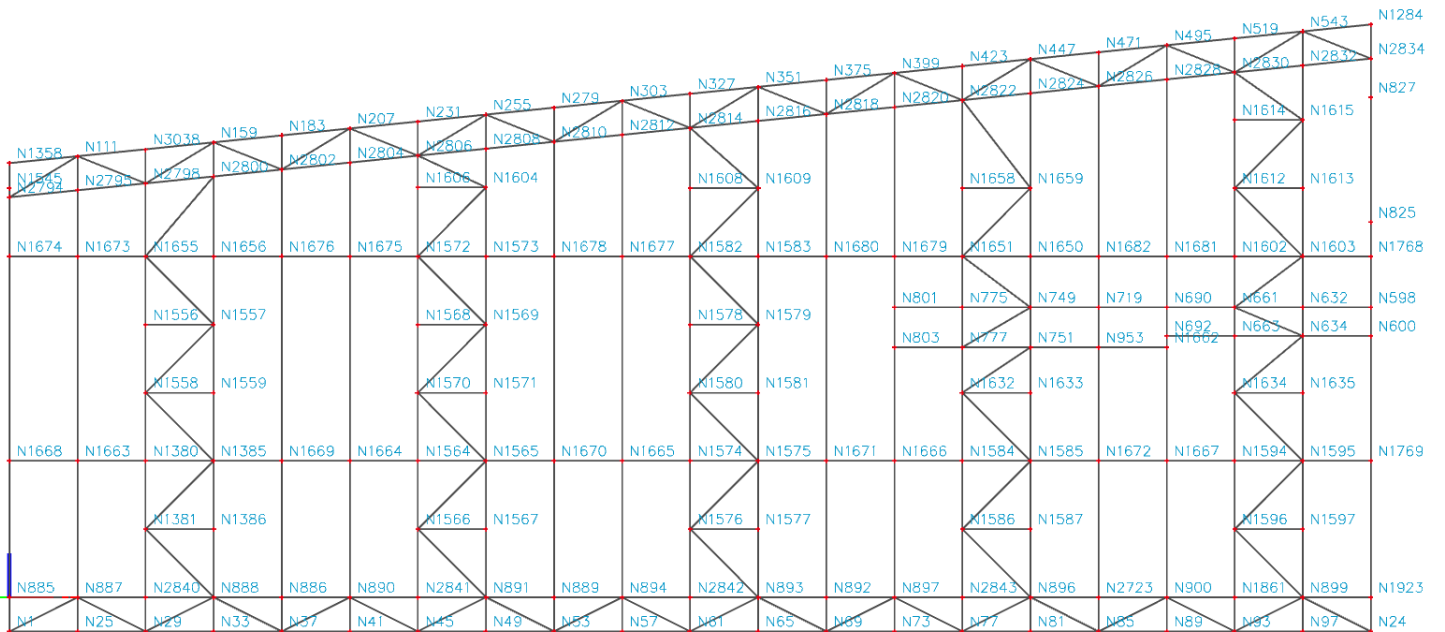


## 2.4.2.2 SIDE WALL CHECK

Wall frame



Node number



## Node coordinate

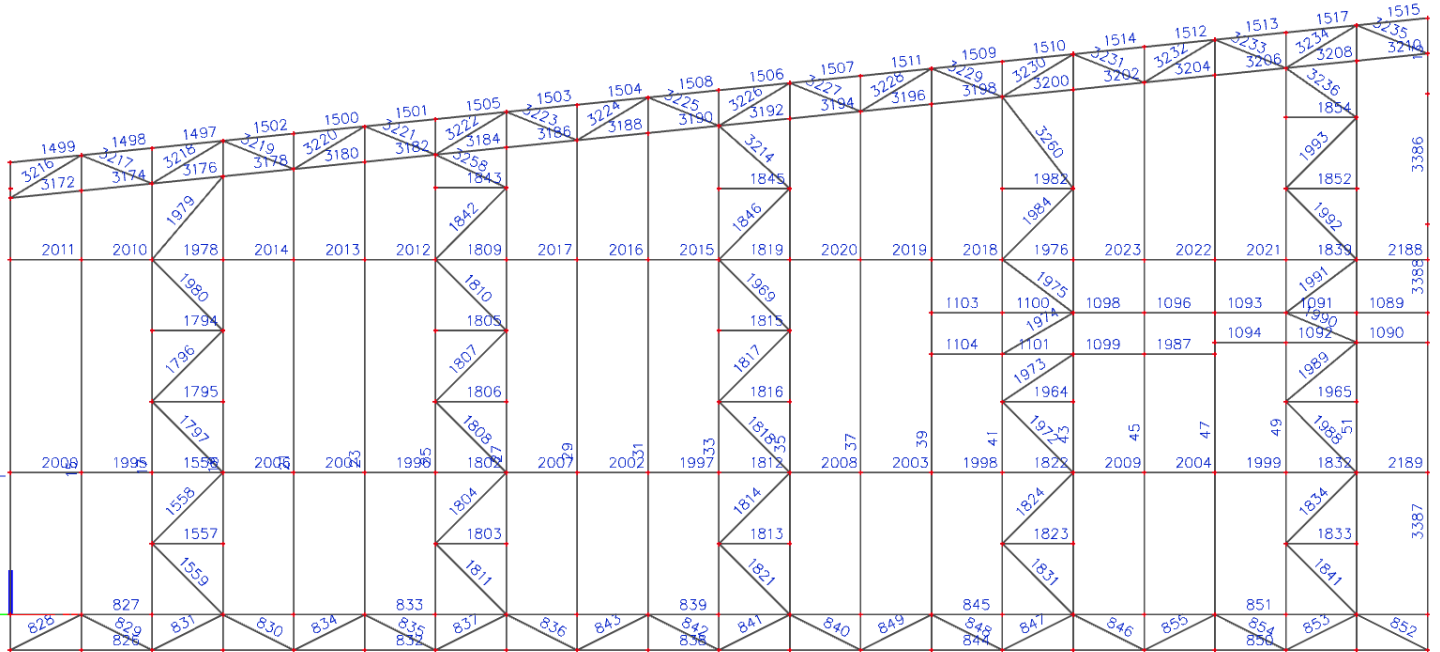
Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1	0.000	0.000	-0.300
N24	12.000	0.000	-0.300
N25	0.600	0.000	-0.300
N29	1.200	0.000	-0.300
N33	1.800	0.000	-0.300
N37	2.400	0.000	-0.300
N41	3.000	0.000	-0.300
N45	3.600	0.000	-0.300
N49	4.200	0.000	-0.300
N53	4.800	0.000	-0.300
N57	5.400	0.000	-0.300
N61	6.000	0.000	-0.300
N65	6.600	0.000	-0.300
N69	7.200	0.000	-0.300
N73	7.800	0.000	-0.300
N77	8.400	0.000	-0.300
N81	9.000	0.000	-0.300
N85	9.600	0.000	-0.300
N89	10.200	0.000	-0.300
N93	10.800	0.000	-0.300
N97	11.400	0.000	-0.300
N111	0.600	0.000	3.881
N159	1.800	0.000	4.003
N183	2.400	0.000	4.064
N207	3.000	0.000	4.125
N231	3.600	0.000	4.186
N255	4.200	0.000	4.247
N279	4.800	0.000	4.308
N303	5.400	0.000	4.369
N327	6.000	0.000	4.430
N351	6.600	0.000	4.491
N375	7.200	0.000	4.552
N399	7.800	0.000	4.613
N423	8.400	0.000	4.674
N447	9.000	0.000	4.735
N471	9.600	0.000	4.796
N495	10.200	0.000	4.857
N519	10.800	0.000	4.918
N543	11.400	0.000	4.979
N598	12.000	0.000	2.550
N600	12.000	0.000	2.300
N632	11.400	0.000	2.550
N634	11.400	0.000	2.300
N661	10.800	0.000	2.550
N663	10.800	0.000	2.300
N690	10.200	0.000	2.550
N692	10.200	0.000	2.300
N719	9.600	0.000	2.550
N749	9.000	0.000	2.550
N751	9.000	0.000	2.200
N775	8.400	0.000	2.550
N777	8.400	0.000	2.200
N801	7.800	0.000	2.550
N803	7.800	0.000	2.200
N825	12.000	0.000	3.300
N827	12.000	0.000	4.400
N885	0.000	0.000	0.000
N886	2.400	0.000	0.000
N887	0.600	0.000	0.000
N888	1.800	0.000	0.000
N889	4.800	0.000	0.000

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N890	3.000	0.000	0.000
N891	4.200	0.000	0.000
N892	7.200	0.000	0.000
N893	6.600	0.000	0.000
N894	5.400	0.000	0.000
N896	9.000	0.000	0.000
N897	7.800	0.000	0.000
N899	11.400	0.000	0.000
N900	10.200	0.000	0.000
N953	9.600	0.000	2.200
N1284	12.000	0.000	5.040
N1358	0.000	0.000	3.820
N1380	1.200	0.000	1.200
N1381	1.200	0.000	0.600
N1385	1.800	0.000	1.200
N1386	1.800	0.000	0.600
N1545	0.000	0.000	3.600
N1556	1.200	0.000	2.400
N1557	1.800	0.000	2.400
N1558	1.200	0.000	1.800
N1559	1.800	0.000	1.800
N1564	3.600	0.000	1.200
N1565	4.200	0.000	1.200
N1566	3.600	0.000	0.600
N1567	4.200	0.000	0.600
N1568	3.600	0.000	2.400
N1569	4.200	0.000	2.400
N1570	3.600	0.000	1.800
N1571	4.200	0.000	1.800
N1572	3.600	0.000	3.000
N1573	4.200	0.000	3.000
N1574	6.000	0.000	1.200
N1575	6.600	0.000	1.200
N1576	6.000	0.000	0.600
N1577	6.600	0.000	0.600
N1578	6.000	0.000	2.400
N1579	6.600	0.000	2.400
N1580	6.000	0.000	1.800
N1581	6.600	0.000	1.800
N1582	6.000	0.000	3.000
N1583	6.600	0.000	3.000
N1584	8.400	0.000	1.200
N1585	9.000	0.000	1.200
N1586	8.400	0.000	0.600
N1587	9.000	0.000	0.600
N1594	10.800	0.000	1.200
N1595	11.400	0.000	1.200
N1596	10.800	0.000	0.600
N1597	11.400	0.000	0.600
N1602	10.800	0.000	3.000
N1603	11.400	0.000	3.000
N1604	4.200	0.000	3.607
N1606	3.600	0.000	3.607
N1608	6.000	0.000	3.600
N1609	6.600	0.000	3.600
N1612	10.800	0.000	3.600
N1613	11.400	0.000	3.600
N1614	10.800	0.000	4.200
N1615	11.400	0.000	4.200
N1632	8.400	0.000	1.800
N1633	9.000	0.000	1.800

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1634	10.800	0.000	1.800
N1635	11.400	0.000	1.800
N1650	9.000	0.000	3.000
N1651	8.400	0.000	3.000
N1655	1.200	0.000	3.000
N1656	1.800	0.000	3.000
N1658	8.400	0.000	3.600
N1659	9.000	0.000	3.600
N1662	10.200	0.000	2.200
N1663	0.600	0.000	1.200
N1664	3.000	0.000	1.200
N1665	5.400	0.000	1.200
N1666	7.800	0.000	1.200
N1667	10.200	0.000	1.200
N1668	0.000	0.000	1.200
N1669	2.400	0.000	1.200
N1670	4.800	0.000	1.200
N1671	7.200	0.000	1.200
N1672	9.600	0.000	1.200
N1673	0.600	0.000	3.000
N1674	0.000	0.000	3.000
N1675	3.000	0.000	3.000
N1676	2.400	0.000	3.000
N1677	5.400	0.000	3.000
N1678	4.800	0.000	3.000
N1679	7.800	0.000	3.000
N1680	7.200	0.000	3.000
N1681	10.200	0.000	3.000
N1682	9.600	0.000	3.000
N1768	12.000	0.000	3.000
N1769	12.000	0.000	1.200
N1861	10.800	0.000	0.000
N1923	12.000	0.000	0.000
N2723	9.600	0.000	0.000
N2794	0.000	0.000	3.520
N2795	0.600	0.000	3.581
N2798	1.200	0.000	3.642
N2800	1.800	0.000	3.703
N2802	2.400	0.000	3.764
N2804	3.000	0.000	3.825
N2806	3.600	0.000	3.886
N2808	4.200	0.000	3.947
N2810	4.800	0.000	4.008
N2812	5.400	0.000	4.069
N2814	6.000	0.000	4.130
N2816	6.600	0.000	4.191
N2818	7.200	0.000	4.252
N2820	7.800	0.000	4.313
N2822	8.400	0.000	4.374
N2824	9.000	0.000	4.435
N2826	9.600	0.000	4.496
N2828	10.200	0.000	4.557
N2830	10.800	0.000	4.618
N2832	11.400	0.000	4.679
N2834	12.000	0.000	4.740
N2840	1.200	0.000	0.000
N2841	3.600	0.000	0.000
N2842	6.000	0.000	0.000
N2843	8.400	0.000	0.000
N3038	1.200	0.000	3.942



## Members number



## Members cross-sections

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
1	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	4.120	N1	N1358	column (100)
13	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.640	N827	N1284	wall bracing (0)
15	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	4.181	N25	N111	column (100)
17	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	4.242	N29	N3038	column (100)
19	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	4.303	N33	N159	column (100)
21	2*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	4.364	N37	N183	column (100)
23	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	4.425	N41	N207	column (100)
25	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	4.486	N45	N231	column (100)
27	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	4.547	N49	N255	column (100)
29	2*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	4.608	N53	N279	column (100)
31	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	4.669	N57	N303	column (100)
33	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	4.730	N61	N327	column (100)
35	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	4.791	N65	N351	column (100)
37	2*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	4.852	N69	N375	column (100)
39	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	4.913	N73	N399	column (100)
41	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	4.974	N77	N423	column (100)
43	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	5.035	N81	N447	column (100)
45	2*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	5.096	N85	N471	column (100)
47	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	5.157	N89	N495	column (100)
49	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	5.218	N93	N519	column (100)
51	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	5.279	N97	N543	column (100)
826	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.400	N1	N37	wall bracing (0)
827	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.400	N885	N886	wall bracing (0)
828	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N887	N1	wall bracing (0)
829	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N887	N29	wall bracing (0)
830	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N888	N37	wall bracing (0)
831	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N888	N29	wall bracing (0)
832	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.400	N37	N53	wall bracing (0)
833	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.400	N886	N889	wall bracing (0)
834	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N890	N37	wall bracing (0)
835	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N890	N45	wall bracing (0)
836	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N891	N53	wall bracing (0)
837	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N891	N45	wall bracing (0)
838	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.400	N53	N69	wall bracing (0)
839	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.400	N889	N892	wall bracing (0)
840	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N893	N69	wall bracing (0)
841	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N893	N61	wall bracing (0)
842	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N894	N61	wall bracing (0)
843	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N894	N53	wall bracing (0)
844	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.400	N69	N85	wall bracing (0)
845	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.400	N892	N2723	wall bracing (0)
846	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N896	N85	wall bracing (0)
847	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N896	N77	wall bracing (0)
848	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N897	N77	wall bracing (0)
849	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N897	N69	wall bracing (0)
850	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.400	N85	N24	wall bracing (0)
851	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.400	N2723	N1923	wall bracing (0)
852	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N899	N24	wall bracing (0)
853	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N899	N93	wall bracing (0)
854	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N900	N93	wall bracing (0)
855	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N900	N85	wall bracing (0)
1089	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N598	N632	wall bracing (0)
1090	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N600	N634	wall bracing (0)
1091	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N632	N661	wall bracing (0)
1092	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N634	N663	wall bracing (0)
1093	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N661	N690	wall bracing (0)
1094	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N663	N692	wall bracing (0)
1096	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N690	N719	wall bracing (0)
1098	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N719	N749	wall bracing (0)
1099	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N953	N751	wall bracing (0)
1100	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N749	N775	wall bracing (0)
1101	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N751	N777	wall bracing (0)
1103	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N775	N801	wall bracing (0)
1104	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N777	N803	wall bracing (0)
1497	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.603	N3038	N159	wall bracing (0)
1498	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.603	N111	N3038	wall bracing (0)
1499	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.603	N1358	N111	wall bracing (0)
1500	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.603	N183	N207	wall bracing (0)
1501	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.603	N207	N231	wall bracing (0)
1502	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.603	N159	N183	wall bracing (0)
1503	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.603	N255	N279	wall bracing (0)
1504	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.603	N279	N303	wall bracing (0)
1505	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.603	N231	N255	wall bracing (0)
1506	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.603	N327	N351	wall bracing (0)
1507	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.603	N351	N375	wall bracing (0)





## Cross-Section properties

C100*50*15*1.2		
Type	Cold formed C section	
Detailed	100.0; 50.0; 1.2; 3.0; 15.0	
Formcode	114 - Cold formed C section	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	2.6269e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	1.1804e-04	1.3126e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	4.4038e-01	4.4038e-01
C <sub>y,LCS</sub> [mm], C <sub>z,LCS</sub> [mm]	17.2	50.0
α [deg]	0.00	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	4.2561e-07	9.3751e-08
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	40.3	18.9
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	8.5121e-06	2.8580e-06
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	9.7956e-06	4.2419e-06
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	3.43e+03	3.43e+03
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	1.48e+03	1.48e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	-41.5	0.0
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	1.2972e-10	2.2102e-10
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	0.0	121.2
Picture		

3°C100*50*15*1.2		
Type	C100*50*15*1.2	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	7.6646e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	3.2219e-04	3.7977e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	1.1687e+00	1.1687e+00
C <sub>y,LCS</sub> [mm], C <sub>z,LCS</sub> [mm]	280.8	70.5
I <sub>y,LCS</sub> [m <sup>4</sup> ], I <sub>z,LCS</sub> [m <sup>4</sup> ]	1.3092e-06	1.6666e-06
I <sub>z,LCS</sub> [m <sup>4</sup> ]	-4.2792e-08	
α [deg]	83.27	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	1.6716e-06	1.3041e-06
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	46.7	41.2
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	2.0127e-05	1.7440e-05
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	2.9299e-05	2.8496e-05
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	1.03e+04	1.03e+04
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	9.97e+03	9.97e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	-24.6	-45.1
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	5.1683e-10	4.0845e-09
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	105.4	52.7
Picture		

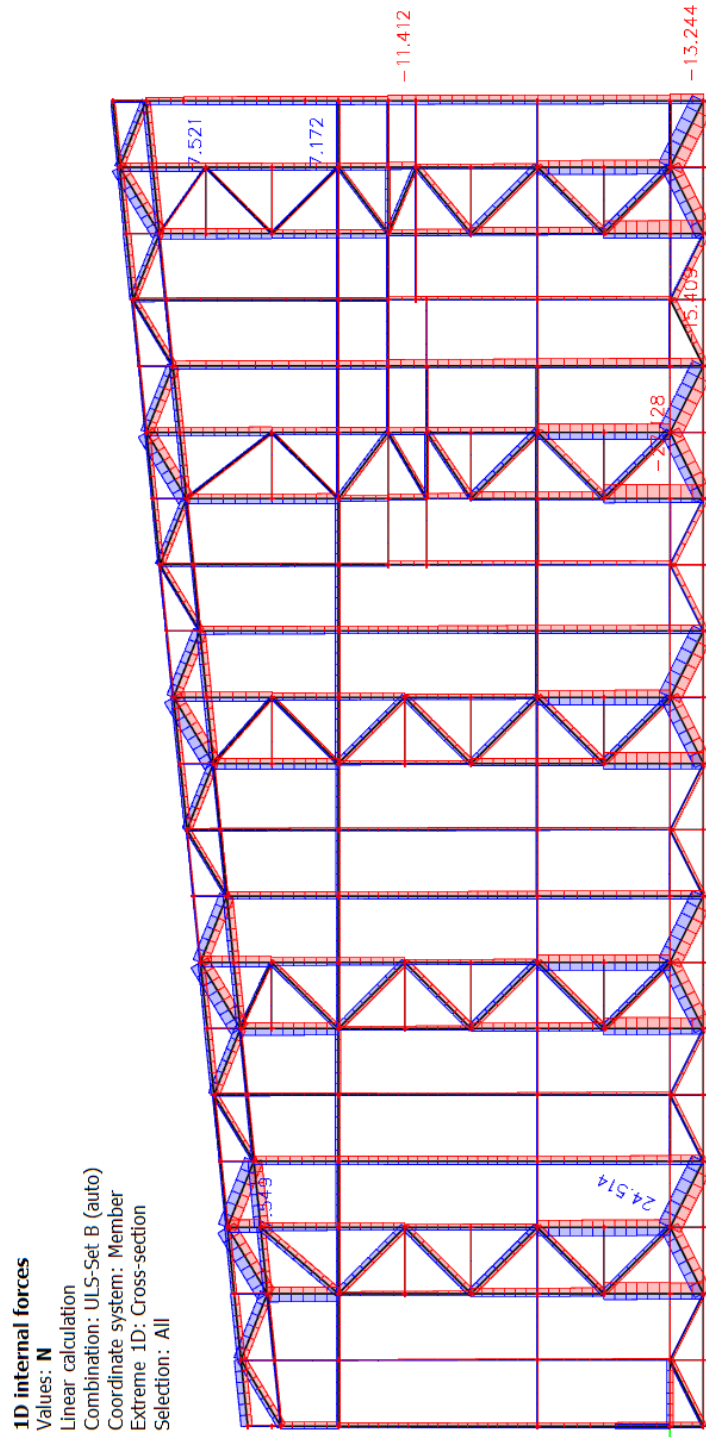
2*C100*50*15*1.2		
Type	C100*50*15*1.2	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	5.1097e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	2.3335e-04	2.5148e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	6.7356e-01	6.7356e-01
c <sub>y,UCS</sub> [mm], c <sub>z,UCS</sub> [mm]	108.7	68.0
α [deg]	0.00	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	8.3202e-07	3.0774e-07
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	40.4	24.5
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	1.6640e-05	6.1548e-06
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	1.9066e-05	8.3237e-06
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	6.67e+03	6.67e+03
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	2.91e+03	2.91e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	0.0	
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	5.4484e-10	8.2262e-10
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	0.0	
Picture		



Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H2503	3202	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2505	3231	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2507	3200	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2513	3198	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2515	3229	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2517	3196	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2523	3194	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2525	3227	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2529	3192	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2533	3190	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2535	3225	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2539	3188	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2543	3186	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2545	3223	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2549	3184	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2553	3182	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2555	3221	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2557	3180	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2563	3178	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2565	3219	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2567	3176	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2573	3174	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2575	3217	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2577	3172	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2579	1499	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H2582	829	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2584	828	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2586	830	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2588	831	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2589	1982	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2590	1984	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2592	3260	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2596	834	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2598	835	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2600	837	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2602	836	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2604	843	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2606	842	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2608	841	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2610	840	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2612	849	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2614	848	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2616	847	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2618	846	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2620	855	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2622	854	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2624	853	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2626	852	Both	Rigid	Rigid	Rigid	Rigid	Free	Free



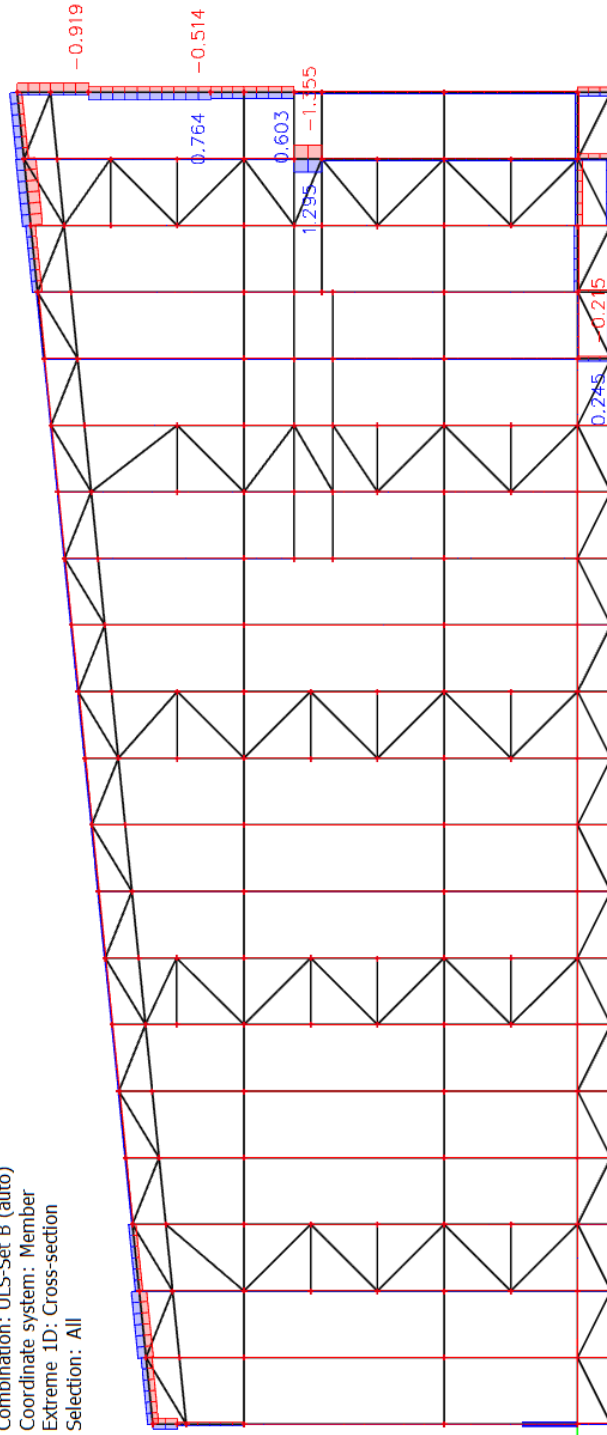
**Maximum forces in elements**  
**Axial force diagram N, kH.**



## Shear force diagram $V_y$ , kH.

### 1D internal forces

Values:  $V_y$   
Linear calculation  
Combination: ULS-Set B (auto)  
Coordinate system: Member  
Extreme 1D: Cross-section  
Selection: All



Shear force diagram Vz, kH.

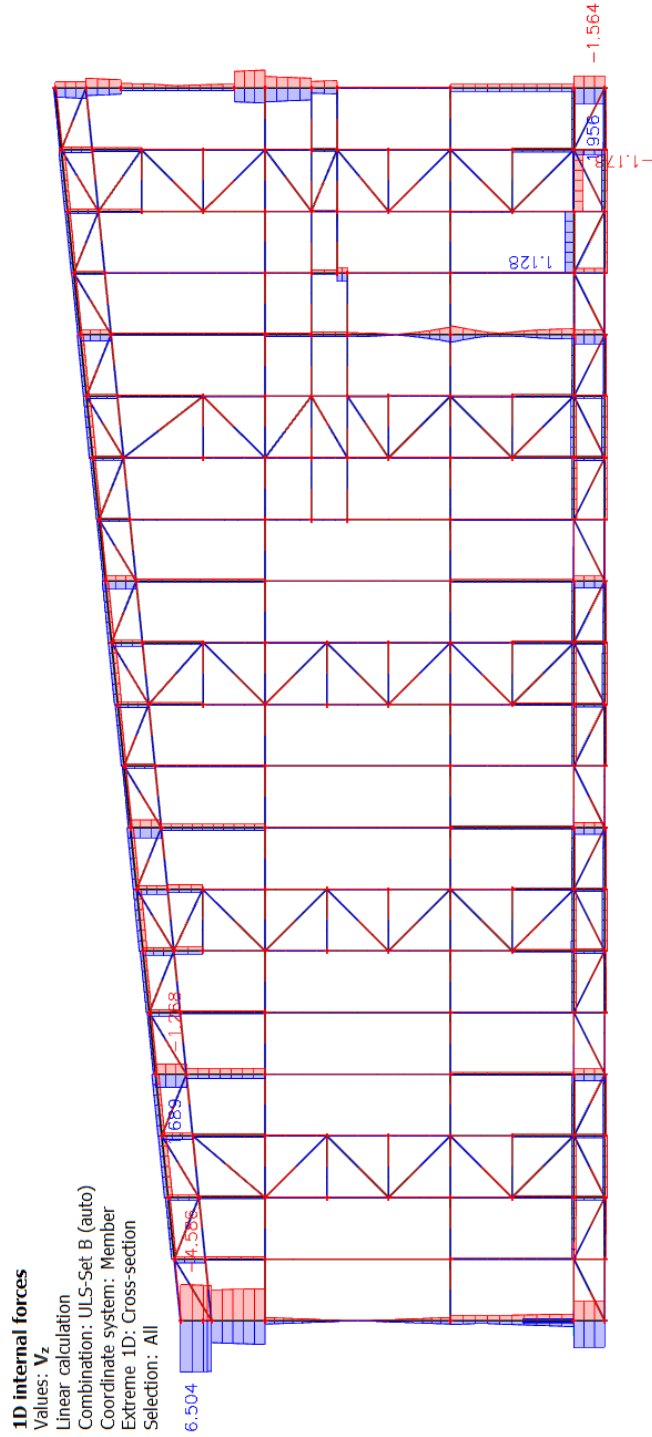
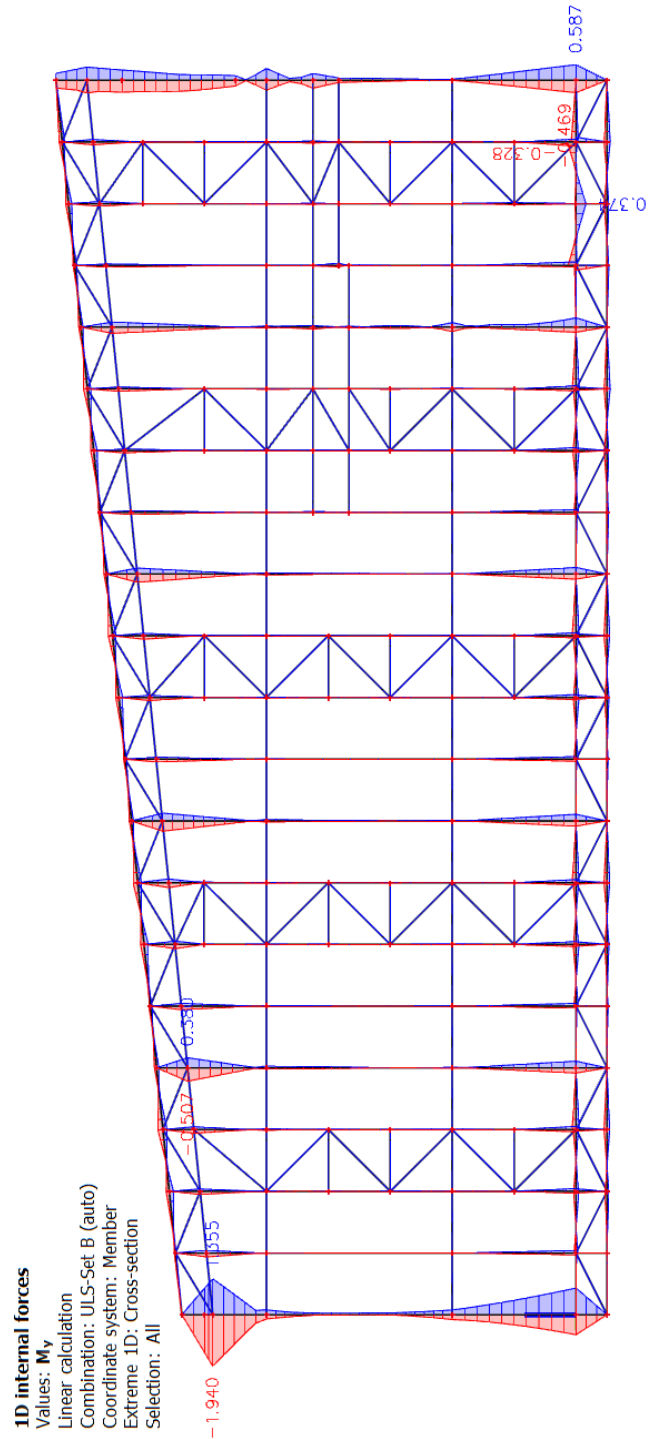
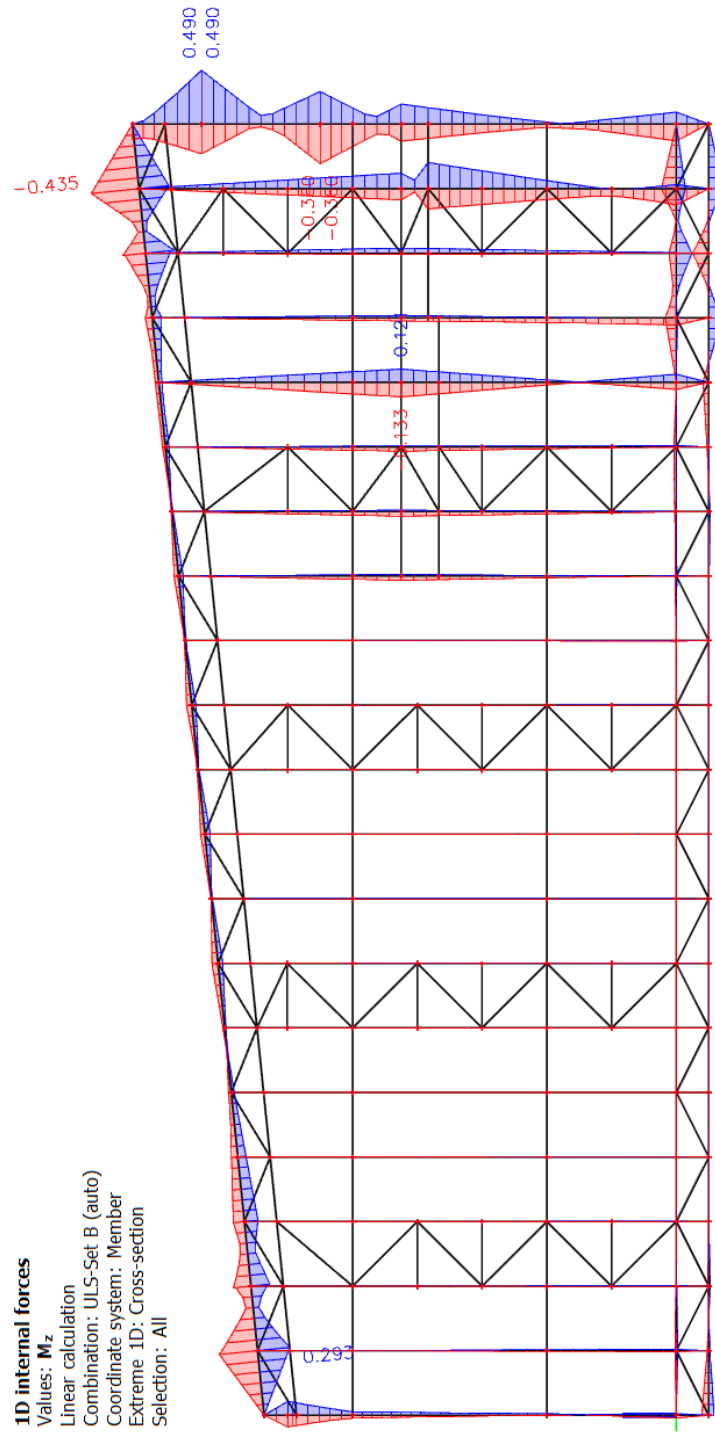


Diagram of bending moments  $M_y$ , kNm.



## Diagram of bending moments $M_z$ , kNm.



## Internal forces

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
1	3.300+	ULS-Set B (auto)/1	<b>-8.099</b>	-0.099	-4.050	0.000	0.133	-0.025
1	3.820-	ULS-Set B (auto)/2	<b>5.160</b>	0.162	2.784	0.000	1.353	0.111
1	3.900+	ULS-Set B (auto)/3	0.984	<b>-0.577</b>	-4.463	0.000	0.993	<b>0.127</b>
1	4.120	ULS-Set B (auto)/4	1.480	-0.562	<b>-4.586</b>	0.000	0.000	0.000
1	4.120	ULS-Set B (auto)/5	-2.496	0.387	<b>6.504</b>	0.000	0.000	0.000
1	3.820+	ULS-Set B (auto)/6	-2.188	-0.119	6.399	<b>0.000</b>	-1.931	-0.079
1	0.000	ULS-Set B (auto)/4	2.236	-0.078	-2.520	<b>0.000</b>	0.000	0.000
1	3.820+	ULS-Set B (auto)/5	-2.581	-0.098	6.427	0.000	<b>-1.940</b>	-0.077
1	3.820+	ULS-Set B (auto)/4	1.365	0.160	-4.448	0.000	<b>1.355</b>	0.111
1	3.900+	ULS-Set B (auto)/7	-0.148	<b>0.487</b>	0.785	0.000	-0.184	<b>-0.107</b>
13	0.000	ULS-Set B (auto)/4	<b>-6.260</b>	-0.860	0.323	0.000	0.386	0.477
13	0.340-	ULS-Set B (auto)/5	<b>6.602</b>	<b>0.297</b>	0.203	0.000	-0.399	-0.169
13	0.000	ULS-Set B (auto)/8	-5.428	<b>-0.919</b>	0.301	0.000	0.299	<b>0.490</b>
13	0.340+	ULS-Set B (auto)/9	0.792	-0.252	<b>1.316</b>	0.000	-0.486	0.027
13	0.000	ULS-Set B (auto)/10	1.276	-0.474	-1.012	<b>0.000</b>	-0.074	0.216
13	0.340+	ULS-Set B (auto)/11	1.174	-0.069	-0.492	<b>0.000</b>	-0.026	-0.103
13	0.340-	ULS-Set B (auto)/9	2.106	-0.252	<b>-1.238</b>	0.000	<b>-0.486</b>	0.027
13	0.340-	ULS-Set B (auto)/4	-6.129	-0.860	0.315	0.000	<b>0.494</b>	0.185
13	0.000	ULS-Set B (auto)/5	6.504	0.297	0.098	0.000	-0.450	<b>-0.270</b>
15	0.300+	ULS-Set B (auto)/6	<b>-2.338</b>	0.002	-0.081	0.000	0.091	-0.009
15	4.181	ULS-Set B (auto)/12	<b>1.645</b>	-0.001	-0.157	0.000	0.000	0.000
15	0.000	ULS-Set B (auto)/5	0.148	<b>-0.030</b>	0.003	0.000	0.000	0.000
15	0.000	ULS-Set B (auto)/4	-0.168	<b>0.039</b>	0.007	0.000	0.000	0.000
15	3.881+	ULS-Set B (auto)/4	0.737	-0.003	<b>-0.341</b>	<b>0.000</b>	<b>0.102</b>	0.001
15	3.881+	ULS-Set B (auto)/5	-0.407	0.002	<b>0.487</b>	0.000	<b>-0.146</b>	-0.001
15	0.000	ULS-Set B (auto)/13	-0.136	0.037	0.009	<b>0.000</b>	0.000	0.000
15	0.300+	ULS-Set B (auto)/5	-1.730	0.002	-0.085	0.000	0.096	<b>-0.009</b>
15	0.300+	ULS-Set B (auto)/4	-0.891	-0.003	0.068	0.000	-0.075	<b>0.012</b>
17	0.300+	ULS-Set B (auto)/6	<b>-21.557</b>	0.000	-0.179	0.000	0.103	0.002
17	4.242	ULS-Set B (auto)/4	-0.923	0.000	<b>-0.291</b>	0.000	0.000	0.000
17	3.942+	ULS-Set B (auto)/5	0.620	0.000	<b>0.406</b>	0.000	-0.122	0.000
17	0.000	ULS-Set B (auto)/5	-19.412	0.004	0.318	<b>0.000</b>	0.000	0.000
17	3.942+	ULS-Set B (auto)/3	-1.127	0.001	-0.273	<b>0.000</b>	0.082	0.000
17	3.942-	ULS-Set B (auto)/5	<b>16.386</b>	0.000	-0.213	0.000	<b>-0.122</b>	0.000
17	0.300+	ULS-Set B	-20.022	0.000	-0.173	0.000	<b>0.104</b>	0.001

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
17	0.300-	ULS-Set B (auto)/14	11.051	<b>-0.007</b>	-0.219	0.000	-0.066	<b>-0.002</b>
17	0.300-	ULS-Set B (auto)/15	-3.076	<b>0.007</b>	-0.005	0.000	-0.002	<b>0.002</b>
19	4.003+	ULS-Set B (auto)/11	<b>-15.032</b>	0.000	0.378	0.000	-0.114	0.000
19	1.500-	ULS-Set B (auto)/5	<b>16.152</b>	-0.001	0.035	0.000	0.018	0.002
19	0.000	ULS-Set B (auto)/5	0.498	<b>0.011</b>	0.254	0.000	0.000	0.000
19	4.003+	ULS-Set B (auto)/4	7.599	0.001	<b>-0.356</b>	0.000	0.107	0.000
19	4.003+	ULS-Set B (auto)/5	-12.659	-0.001	<b>0.467</b>	0.000	<b>-0.140</b>	0.000
19	4.003+	ULS-Set B (auto)/16	8.718	0.000	-0.124	<b>0.000</b>	0.037	0.000
19	0.300+	ULS-Set B (auto)/4	-14.940	0.001	0.131	<b>0.000</b>	-0.085	-0.004
19	0.300-	ULS-Set B (auto)/4	-0.436	<b>-0.014</b>	-0.195	0.000	-0.058	<b>-0.004</b>
19	0.300+	ULS-Set B (auto)/5	15.742	-0.001	-0.200	0.000	<b>0.117</b>	<b>0.003</b>
21	0.000	ULS-Set B (auto)/4	<b>-11.098</b>	0.003	-0.658	0.000	0.000	0.000
21	4.064+	ULS-Set B (auto)/4	-1.067	0.000	<b>-1.268</b>	0.000	<b>0.380</b>	0.000
21	4.064+	ULS-Set B (auto)/5	0.672	0.000	<b>1.689</b>	0.000	-0.507	0.000
21	4.064+	ULS-Set B (auto)/12	-0.380	0.000	-0.483	<b>0.000</b>	0.145	0.000
21	4.064-	ULS-Set B (auto)/5	<b>7.549</b>	0.000	-0.751	<b>0.000</b>	<b>-0.507</b>	0.000
21	0.300-	ULS-Set B (auto)/9	0.845	<b>-0.003</b>	0.021	0.000	0.006	<b>-0.001</b>
21	0.300-	ULS-Set B (auto)/4	-11.083	<b>0.003</b>	-0.658	0.000	-0.198	<b>0.001</b>
23	0.300+	ULS-Set B (auto)/17	<b>-5.170</b>	0.000	0.054	0.000	-0.056	0.000
23	4.425	ULS-Set B (auto)/18	<b>2.413</b>	0.000	-0.127	0.000	0.000	0.000
23	0.000	ULS-Set B (auto)/19	-0.143	<b>-0.001</b>	0.000	0.000	0.000	0.000
23	0.000	ULS-Set B (auto)/9	0.024	<b>0.001</b>	0.000	0.000	0.000	0.000
23	4.125+	ULS-Set B (auto)/4	-2.225	0.000	<b>-0.345</b>	0.000	<b>0.103</b>	0.000
23	4.125+	ULS-Set B (auto)/5	1.384	0.000	<b>0.454</b>	0.000	<b>-0.136</b>	0.000
23	0.000	ULS-Set B (auto)/13	-0.177	0.000	-0.013	<b>0.000</b>	0.000	0.000
23	4.125+	ULS-Set B (auto)/20	0.230	0.000	0.039	<b>0.000</b>	-0.012	0.000
23	0.300+	ULS-Set B (auto)/19	-3.379	0.000	0.033	0.000	-0.033	<b>0.000</b>
23	0.300+	ULS-Set B (auto)/9	0.335	0.000	-0.001	0.000	0.002	<b>0.000</b>
25	0.300+	ULS-Set B (auto)/11	<b>-21.937</b>	0.000	-0.186	0.000	0.101	0.000
25	0.000	ULS-Set B (auto)/21	-20.879	<b>-0.001</b>	0.312	0.000	0.000	0.000
25	0.000	ULS-Set B (auto)/13	10.510	<b>0.001</b>	-0.219	0.000	0.000	0.000
25	4.186+	ULS-Set B (auto)/5	0.771	0.000	<b>0.534</b>	0.000	-0.160	0.000
25	3.300+	ULS-Set B (auto)/16	-3.191	0.000	-0.024	<b>0.000</b>	0.012	0.000
25	4.186+	ULS-Set B (auto)/10	-0.138	0.000	0.067	<b>0.000</b>	-0.020	0.000
25	4.186-	ULS-Set B (auto)/5	<b>13.241</b>	0.000	<b>-0.560</b>	0.000	<b>-0.160</b>	0.000
25	4.186-	ULS-Set B (auto)/4	-11.620	0.000	0.403	0.000	<b>0.121</b>	0.000
25	0.300+	ULS-Set B (auto)/21	-21.405	0.000	-0.185	0.000	0.106	<b>0.000</b>
25	0.300+	ULS-Set B	11.062	0.000	0.122	0.000	-0.076	<b>0.000</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
27	0.300+	(auto)/13							35	0.000	(auto)/5	0.108	-0.003	0.110	0.000	0.000	0.000
27	1.500-	ULS-Set B (auto)/4	-14.655	0.000	0.130	0.000	-0.084	0.001	35	0.000	ULS-Set B (auto)/28	-0.131	0.003	-0.086	0.000	0.000	0.000
27	0.000	ULS-Set B (auto)/5	15.450	0.000	0.032	0.000	0.016	0.000	35	4.491+	ULS-Set B (auto)/22	6.921	0.000	-0.306	0.000	0.092	0.000
27	0.000	ULS-Set B (auto)/9	0.025	-0.002	0.006	0.000	0.000	0.000	35	4.491+	ULS-Set B (auto)/24	-10.409	0.000	0.432	0.000	-0.130	0.000
27	0.000	ULS-Set B (auto)/4	-0.468	0.002	-0.202	0.000	0.000	0.000	35	4.491+	ULS-Set B (auto)/25	-10.350	0.000	0.364	0.000	-0.109	0.000
27	4.247+	ULS-Set B (auto)/5	-11.604	0.000	0.620	0.000	-0.186	0.000	35	4.491+	ULS-Set B (auto)/29	5.359	0.000	-0.118	0.000	0.036	0.000
27	4.247+	ULS-Set B (auto)/4	8.079	0.000	-0.463	0.000	0.139	0.000	35	0.300+	ULS-Set B (auto)/30	14.546	0.000	-0.202	0.000	0.118	0.000
27	4.247-	ULS-Set B (auto)/5	-11.740	0.000	-0.604	0.000	-0.186	0.000	35	0.300+	ULS-Set B (auto)/5	2.531	0.000	-0.124	0.000	0.062	-0.001
27	0.300+	ULS-Set B (auto)/9	0.963	0.000	0.003	0.000	0.000	-0.001	35	0.300+	ULS-Set B (auto)/28	-4.005	0.000	0.078	0.000	-0.042	0.001
29	0.000	ULS-Set B (auto)/8	-10.435	0.000	-0.464	0.000	0.000	0.000	35	0.300+	ULS-Set B (auto)/22	6.138	-0.001	-0.270	0.000	-0.301	0.000
29	4.308+	ULS-Set B (auto)/4	-0.980	0.000	-0.979	0.000	0.294	0.000	37	0.000	ULS-Set B (auto)/5	-11.580	-0.021	-0.460	0.000	0.000	0.000
29	4.308+	ULS-Set B (auto)/5	0.579	0.000	1.289	0.000	-0.387	0.000	37	4.552+	ULS-Set B (auto)/8	-0.931	0.001	-0.750	0.000	0.225	0.000
29	4.308+	ULS-Set B (auto)/3	-0.864	0.000	-0.934	0.000	0.280	0.000	37	4.552+	ULS-Set B (auto)/24	0.458	0.000	1.039	0.000	-0.312	0.000
29	4.308-	ULS-Set B (auto)/5	6.602	0.000	-0.436	0.000	-0.387	0.000	37	4.552+	ULS-Set B (auto)/25	0.502	-0.001	1.003	0.000	-0.301	0.000
29	0.300-	ULS-Set B (auto)/22	-0.748	-0.001	-0.277	0.000	-0.083	0.000	37	4.552+	ULS-Set B (auto)/5	-0.974	0.001	-0.714	0.000	0.214	0.000
29	0.300-	ULS-Set B (auto)/23	-7.503	0.001	-0.147	0.000	-0.044	0.000	37	0.300-	ULS-Set B (auto)/4	4.792	0.008	0.828	0.000	0.248	0.002
31	0.300+	ULS-Set B (auto)/17	-5.059	0.000	0.053	0.000	-0.055	0.000	37	0.300+	ULS-Set B (auto)/5	-11.355	0.001	0.129	0.000	-0.138	-0.006
31	4.669	ULS-Set B (auto)/18	2.440	0.000	-0.091	0.000	0.000	0.000	37	0.300+	ULS-Set B (auto)/8	4.591	-0.001	-0.225	0.000	0.248	0.002
31	0.000	ULS-Set B (auto)/18	-0.023	-0.002	-0.010	0.000	0.000	0.000	39	4.913	ULS-Set B (auto)/18	3.377	0.002	-0.062	0.000	0.000	0.000
31	0.000	ULS-Set B (auto)/6	0.123	0.002	0.029	0.000	0.000	0.000	39	0.300+	ULS-Set B (auto)/8	-8.373	-0.016	0.058	0.000	-0.058	0.002
31	4.369+	ULS-Set B (auto)/4	-1.956	0.000	-0.264	0.000	0.079	0.000	39	2.850+	ULS-Set B (auto)/8	-2.846	0.019	-0.033	0.000	0.007	-0.039
31	0.300+	ULS-Set B (auto)/5	0.025	0.000	-0.094	0.000	0.101	0.000	39	4.613+	ULS-Set B (auto)/24	-1.955	0.012	-0.206	0.000	0.062	-0.003
31	1.500+	ULS-Set B (auto)/4	-3.268	0.000	-0.013	0.000	0.011	0.000	39	4.613+	ULS-Set B (auto)/25	3.013	-0.002	0.288	0.000	-0.086	0.001
31	4.369+	ULS-Set B (auto)/5	1.487	0.000	0.350	0.000	-0.105	0.000	39	4.613+	ULS-Set B (auto)/20	0.697	0.007	0.046	0.000	-0.014	-0.002
31	0.300+	ULS-Set B (auto)/18	0.850	0.000	0.033	0.000	-0.035	-0.001	39	4.613+	ULS-Set B (auto)/29	0.838	-0.003	0.237	0.000	-0.071	0.001
31	0.300+	ULS-Set B (auto)/6	-1.874	0.000	-0.088	0.000	0.095	0.000	39	0.300+	ULS-Set B (auto)/5	-0.252	0.007	-0.091	0.000	0.100	-0.003
33	0.300+	ULS-Set B (auto)/11	-22.026	0.000	-0.194	0.000	0.104	0.000	39	2.850-	ULS-Set B (auto)/8	-7.134	-0.016	0.039	0.000	0.007	-0.039
33	4.430-	ULS-Set B (auto)/5	11.433	0.000	-0.232	0.000	-0.115	0.000	39	2.850-	ULS-Set B (auto)/5	0.626	0.007	-0.002	0.000	-0.003	0.015
33	0.000	ULS-Set B (auto)/4	8.483	-0.001	-0.229	0.000	0.000	0.000	41	0.300+	ULS-Set B (auto)/8	-1.958	-0.016	0.052	0.000	-0.048	-0.004
33	0.000	ULS-Set B (auto)/9	0.173	0.001	-0.005	0.000	0.000	0.000	41	0.300+	ULS-Set B (auto)/31	-27.128	-0.007	-0.226	0.000	0.113	-0.003
33	4.430+	ULS-Set B (auto)/24	-1.004	0.000	-0.281	0.000	0.084	0.000	41	0.000	ULS-Set B (auto)/25	-23.076	-0.004	0.322	0.000	0.000	0.000
33	4.430+	ULS-Set B (auto)/25	0.686	0.000	0.386	0.000	-0.116	0.000	41	4.674+	ULS-Set B (auto)/10	-0.150	0.005	0.066	0.000	-0.020	-0.001
33	4.430+	ULS-Set B (auto)/26	-0.910	0.000	-0.278	0.000	0.083	0.000	41	4.674+	ULS-Set B (auto)/32	0.314	0.002	0.233	0.000	-0.070	-0.001
33	4.430+	ULS-Set B (auto)/27	0.592	0.000	0.383	0.000	-0.115	0.000	41	4.674-	ULS-Set B (auto)/5	10.380	-0.006	-0.124	0.000	-0.087	0.002
33	0.300+	ULS-Set B (auto)/5	-19.726	0.000	-0.189	0.000	0.111	0.000	41	0.300+	ULS-Set B (auto)/29	-22.350	0.001	-0.217	0.000	0.116	-0.001
33	0.300+	ULS-Set B (auto)/4	9.131	0.000	0.121	0.000	-0.080	0.000	41	2.850+	ULS-Set B (auto)/8	-5.490	0.021	-0.006	0.000	0.004	-0.044
33	0.300+	ULS-Set B (auto)/9	0.197	0.000	0.023	0.000	-0.008	0.000	41	2.850-	ULS-Set B (auto)/5	3.555	0.005	0.064	0.000	0.003	0.013
35	0.300+	ULS-Set B (auto)/4	-14.398	0.000	0.127	0.000	-0.082	0.000	43	0.300+	ULS-Set B	-17.062	-0.014	0.099	0.000	-0.074	0.000
35	1.500-	ULS-Set B	14.956	0.000	0.028	0.000	0.013	0.000									

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/4						
43	1.500-	ULS-Set B (auto)/5	<b>13.969</b>	0.000	0.039	0.000	0.017	0.008
43	1.500+	ULS-Set B (auto)/8	-9.606	<b>-0.016</b>	-0.062	0.000	0.017	-0.018
43	4.735+	ULS-Set B (auto)/4	6.546	0.016	<b>-0.245</b>	0.000	0.074	-0.005
43	4.735+	ULS-Set B (auto)/5	-8.910	-0.004	<b>0.306</b>	0.000	<b>-0.092</b>	0.001
43	2.500+	ULS-Set B (auto)/33	-8.352	-0.012	-0.044	<b>0.000</b>	0.003	-0.016
43	2.850+	ULS-Set B (auto)/32	-9.004	0.004	-0.022	<b>0.000</b>	-0.013	-0.009
43	0.300+	ULS-Set B (auto)/25	11.594	-0.006	-0.223	0.000	<b>0.122</b>	0.012
43	2.850+	ULS-Set B (auto)/8	-0.985	0.018	-0.020	0.000	0.010	<b>-0.040</b>
43	0.300-	ULS-Set B (auto)/27	0.389	<b>0.041</b>	0.242	0.000	0.072	<b>0.012</b>
45	0.000	ULS-Set B (auto)/8	<b>-15.409</b>	<b>0.245</b>	-0.470	0.000	0.000	0.000
45	0.000	ULS-Set B (auto)/5	3.239	<b>-0.215</b>	1.016	0.000	0.000	0.000
45	1.500-	ULS-Set B (auto)/9	-0.575	0.015	<b>-1.122</b>	0.000	-0.167	0.004
45	4.796+	ULS-Set B (auto)/20	-0.337	0.007	0.171	<b>0.000</b>	-0.051	-0.002
45	2.850+	ULS-Set B (auto)/34	1.786	-0.033	0.215	<b>0.000</b>	-0.074	0.074
45	4.796-	ULS-Set B (auto)/5	<b>6.360</b>	-0.054	-0.184	0.000	<b>-0.234</b>	0.016
45	0.300-	ULS-Set B (auto)/29	0.564	-0.143	<b>1.167</b>	0.000	<b>0.350</b>	-0.043
45	2.850-	ULS-Set B (auto)/8	-12.985	-0.081	0.156	0.000	0.031	<b>-0.133</b>
45	2.850-	ULS-Set B (auto)/5	4.680	0.073	-0.253	0.000	-0.055	<b>0.121</b>
47	0.300+	ULS-Set B (auto)/8	<b>-7.055</b>	0.007	0.010	0.000	-0.013	-0.046
47	5.157	ULS-Set B (auto)/25	<b>4.072</b>	-0.008	0.219	0.000	0.000	0.000
47	0.300+	ULS-Set B (auto)/35	-2.775	<b>0.025</b>	-0.094	0.000	0.096	-0.058
47	2.500+	ULS-Set B (auto)/29	0.253	0.007	<b>-0.715</b>	0.000	0.020	0.009
47	2.500+	ULS-Set B (auto)/20	-3.109	0.017	<b>1.082</b>	0.000	-0.020	-0.010
47	4.857+	ULS-Set B (auto)/20	-0.113	0.002	0.051	<b>0.000</b>	-0.015	-0.001
47	2.850+	ULS-Set B (auto)/29	1.566	-0.005	0.039	<b>0.000</b>	-0.014	0.012
47	0.300-	ULS-Set B (auto)/36	-0.319	-0.205	-0.589	0.000	<b>-0.177</b>	-0.062
47	0.300+	ULS-Set B (auto)/37	-2.271	0.019	-0.133	0.000	<b>0.134</b>	-0.042
47	0.300-	ULS-Set B (auto)/38	-0.189	<b>-0.220</b>	-0.546	0.000	-0.164	<b>-0.066</b>
47	2.850-	ULS-Set B (auto)/5	1.540	0.011	0.014	0.000	-0.013	<b>0.021</b>
49	0.000	ULS-Set B (auto)/31	<b>-25.043</b>	0.015	0.032	0.000	0.000	0.000
49	2.850+	ULS-Set B (auto)/27	7.701	<b>-0.020</b>	-0.020	0.000	-0.010	0.047
49	4.918+	ULS-Set B (auto)/4	-1.111	-0.002	<b>-0.275</b>	0.000	<b>0.082</b>	0.001
49	4.918+	ULS-Set B (auto)/5	0.415	-0.013	<b>0.324</b>	0.000	-0.097	0.004
49	2.100+	ULS-Set B (auto)/29	3.948	0.011	-0.002	<b>0.000</b>	-0.004	0.023
49	2.100+	ULS-Set B (auto)/20	-8.467	0.004	0.032	<b>0.000</b>	-0.002	0.009
49	4.918-	ULS-Set B (auto)/5	<b>10.665</b>	-0.013	-0.231	0.000	<b>-0.097</b>	0.004
49	2.850+	ULS-Set B (auto)/39	-5.956	0.005	0.041	0.000	-0.005	<b>-0.011</b>
49	2.850-	ULS-Set B	0.907	<b>0.017</b>	-0.042	0.000	-0.010	<b>0.047</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/27						
51	1.500-	ULS-Set B (auto)/5	<b>14.297</b>	0.081	0.036	0.000	0.017	0.034
51	2.600+	ULS-Set B (auto)/11	-9.022	<b>-1.355</b>	-0.215	0.000	0.010	0.237
51	2.600+	ULS-Set B (auto)/40	3.682	<b>1.295</b>	0.166	0.000	-0.002	-0.183
51	4.979+	ULS-Set B (auto)/4	7.857	0.024	<b>-0.312</b>	0.000	0.094	-0.007
51	2.600+	ULS-Set B (auto)/32	-8.454	-1.303	-0.206	<b>0.000</b>	0.009	0.230
51	2.600+	ULS-Set B (auto)/10	3.114	1.242	0.158	<b>0.000</b>	0.000	-0.176
51	0.300+	ULS-Set B (auto)/4	<b>-14.155</b>	0.044	0.290	0.000	<b>-0.161</b>	-0.075
51	0.300-	ULS-Set B (auto)/31	0.313	-0.494	<b>0.603</b>	0.000	<b>0.181</b>	-0.148
51	2.600+	ULS-Set B (auto)/9	4.574	1.272	0.187	0.000	-0.006	<b>-0.185</b>
51	2.600+	ULS-Set B (auto)/31	-9.914	-1.332	-0.235	0.000	0.014	<b>0.239</b>
826	0.000	ULS-Set B (auto)/5	0.001	<b>-0.063</b>	-0.005	0.000	0.000	<b>0.048</b>
826	1.800-	ULS-Set B (auto)/5	<b>0.127</b>	0.014	<b>-0.306</b>	<b>0.000</b>	-0.111	-0.001
826	1.200+	ULS-Set B (auto)/4	-0.097	-0.019	<b>0.299</b>	0.000	-0.073	0.013
826	1.200+	ULS-Set B (auto)/8	-0.067	-0.013	0.239	<b>0.000</b>	-0.060	0.009
826	1.800+	ULS-Set B (auto)/5	<b>-0.127</b>	0.003	0.192	0.000	<b>-0.111</b>	-0.001
826	1.800-	ULS-Set B (auto)/4	-0.097	-0.019	0.283	0.000	<b>0.101</b>	0.001
826	0.000	ULS-Set B (auto)/4	0.004	<b>0.083</b>	0.039	0.000	0.000	<b>-0.064</b>
827	1.800-	ULS-Set B (auto)/5	0.514	-0.009	<b>-0.340</b>	0.000	-0.105	-0.002
827	1.200+	ULS-Set B (auto)/4	-0.707	0.011	<b>0.316</b>	0.000	-0.090	-0.004
827	1.800+	ULS-Set B (auto)/4	-0.331	-0.004	-0.192	<b>0.000</b>	<b>0.120</b>	0.002
827	1.800+	ULS-Set B (auto)/5	0.398	0.003	0.249	<b>0.000</b>	<b>-0.146</b>	-0.002
827	0.600-	ULS-Set B (auto)/4	<b>-5.932</b>	<b>-0.024</b>	-0.026	0.000	-0.011	<b>-0.015</b>
827	0.600-	ULS-Set B (auto)/5	<b>5.948</b>	<b>0.019</b>	0.032	0.000	0.023	<b>0.012</b>
828	0.671	ULS-Set B (auto)/6	<b>-6.289</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
828	0.000	ULS-Set B (auto)/14	<b>3.073</b>	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
828	0.335-	ULS-Set B (auto)/6	-6.285	0.000	0.000	<b>0.000</b>	<b>0.001</b>	0.000
828	0.000	ULS-Set B (auto)/6	-6.281	0.000	<b>0.008</b>	0.000	0.000	<b>0.000</b>
829	0.671	ULS-Set B (auto)/4	<b>-3.729</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
829	0.000	ULS-Set B (auto)/5	<b>0.942</b>	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
829	0.335-	ULS-Set B (auto)/4	-3.725	0.000	0.000	<b>0.000</b>	<b>0.001</b>	0.000
829	0.000	ULS-Set B (auto)/4	-3.721	0.000	<b>0.008</b>	0.000	0.000	<b>0.000</b>
830	0.671	ULS-Set B (auto)/4	<b>-21.786</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
830	0.000	ULS-Set B (auto)/8	-16.490	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
830	0.000	ULS-Set B (auto)/5	<b>24.514</b>	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
830	0.335-	ULS-Set B (auto)/4	-21.781	0.000	0.000	0.000	<b>0.001</b>	0.000
831	0.671	ULS-Set B (auto)/4	<b>-17.207</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
831	0.000	ULS-Set B (auto)/8	-13.506	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
831	0.000	ULS-Set B	<b>18.650</b>	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>



Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
831	0.335-	(auto)/5	-17.203	0.000	0.000	0.000	<b>0.001</b>	0.000
832	1.800+	ULS-Set B (auto)/4	0.101	<b>-0.002</b>	-0.164	0.000	<b>0.103</b>	0.001
832	0.600+	ULS-Set B (auto)/4	0.005	<b>0.002</b>	-0.192	0.000	0.036	-0.001
832	1.800-	ULS-Set B (auto)/5	<b>0.130</b>	0.000	<b>-0.314</b>	0.000	-0.111	0.000
832	1.200+	ULS-Set B (auto)/4	-0.101	0.001	<b>0.321</b>	0.000	-0.085	0.000
832	0.000	ULS-Set B (auto)/8	-0.001	0.000	0.074	<b>0.000</b>	0.000	-0.001
832	0.000	ULS-Set B (auto)/5	0.013	-0.001	-0.020	<b>0.000</b>	0.000	0.001
832	1.800+	ULS-Set B (auto)/5	<b>-0.130</b>	0.001	0.191	0.000	<b>-0.111</b>	0.000
832	0.000	ULS-Set B (auto)/3	-0.006	0.001	0.054	0.000	0.000	<b>-0.001</b>
832	0.000	ULS-Set B (auto)/7	0.001	-0.001	0.015	0.000	0.000	<b>0.001</b>
833	0.000	ULS-Set B (auto)/4	<b>-1.173</b>	0.000	0.015	0.000	0.000	0.000
833	0.000	ULS-Set B (auto)/5	<b>1.461</b>	0.000	0.031	0.000	0.000	0.000
833	1.800+	ULS-Set B (auto)/15	-0.021	<b>-0.002</b>	-0.006	0.000	0.008	<b>0.001</b>
833	1.800-	ULS-Set B (auto)/5	-0.495	0.000	<b>-0.342</b>	0.000	-0.104	0.001
833	1.200+	ULS-Set B (auto)/4	0.329	0.000	<b>0.329</b>	0.000	-0.096	-0.001
833	0.600+	ULS-Set B (auto)/20	0.161	0.001	-0.035	<b>0.000</b>	0.011	0.000
833	1.800+	ULS-Set B (auto)/11	0.294	-0.001	0.205	<b>0.000</b>	-0.118	0.000
833	1.800+	ULS-Set B (auto)/5	0.245	-0.001	0.246	0.000	<b>-0.144</b>	0.001
833	1.800+	ULS-Set B (auto)/4	-0.139	0.002	-0.191	0.000	<b>0.119</b>	-0.001
833	1.800+	ULS-Set B (auto)/14	-0.161	<b>0.002</b>	-0.175	0.000	0.109	<b>-0.001</b>
834	0.000	ULS-Set B (auto)/18	<b>1.688</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
834	0.671	ULS-Set B (auto)/41	<b>-6.163</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
834	0.000	ULS-Set B (auto)/8	-4.513	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
834	0.000	ULS-Set B (auto)/5	-2.027	0.000	0.006	<b>0.000</b>	0.000	0.000
834	0.335-	ULS-Set B (auto)/41	-6.159	0.000	0.000	0.000	<b>0.001</b>	0.000
835	0.000	ULS-Set B (auto)/5	<b>0.864</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
835	0.671	ULS-Set B (auto)/8	<b>-5.949</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
835	0.000	ULS-Set B (auto)/9	0.293	0.000	0.006	<b>0.000</b>	0.000	0.000
835	0.000	ULS-Set B (auto)/24	-4.928	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
835	0.335-	ULS-Set B (auto)/8	-5.945	0.000	0.000	0.000	<b>0.001</b>	0.000
836	0.000	ULS-Set B (auto)/5	<b>23.811</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
836	0.671	ULS-Set B (auto)/4	<b>-21.188</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
836	0.000	ULS-Set B (auto)/22	-7.534	0.000	0.006	<b>0.000</b>	0.000	0.000
836	0.000	ULS-Set B (auto)/21	21.046	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
836	0.335-	ULS-Set B (auto)/4	-21.184	0.000	0.000	0.000	<b>0.001</b>	0.000
837	0.000	ULS-Set B (auto)/5	<b>18.521</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
837	0.671	ULS-Set B (auto)/4	<b>-17.394</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
837	0.000	ULS-Set B	-4.612	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/42						
837	0.000	ULS-Set B (auto)/22	-5.471	0.000	0.006	<b>0.000</b>	0.000	0.000
837	0.335-	ULS-Set B (auto)/4	-17.390	0.000	0.000	0.000	<b>0.001</b>	0.000
838	1.200+	ULS-Set B (auto)/8	-0.070	<b>-0.004</b>	0.268	<b>0.000</b>	-0.074	0.001
838	0.600+	ULS-Set B (auto)/4	0.007	<b>0.002</b>	-0.188	0.000	0.035	0.000
838	1.800-	ULS-Set B (auto)/5	<b>0.128</b>	0.001	<b>-0.310</b>	0.000	<b>-0.109</b>	0.000
838	1.200+	ULS-Set B (auto)/4	-0.099	-0.004	<b>0.317</b>	0.000	-0.083	0.001
838	1.200+	ULS-Set B (auto)/22	-0.043	0.001	0.095	<b>0.000</b>	-0.021	0.000
838	1.800-	ULS-Set B (auto)/4	-0.099	-0.004	0.301	0.000	<b>0.102</b>	-0.001
838	2.400	ULS-Set B (auto)/36	0.067	-0.003	-0.132	0.000	0.000	<b>-0.003</b>
838	2.400	ULS-Set B (auto)/5	<b>-0.128</b>	0.002	0.176	0.000	0.000	<b>0.001</b>
839	0.600+	ULS-Set B (auto)/29	<b>-1.127</b>	0.001	0.280	0.000	-0.067	0.000
839	0.000	ULS-Set B (auto)/5	<b>1.307</b>	-0.001	0.030	0.000	0.000	0.000
839	1.800+	ULS-Set B (auto)/28	0.179	<b>-0.002</b>	0.097	<b>0.000</b>	-0.053	<b>0.001</b>
839	0.000	ULS-Set B (auto)/4	-0.977	<b>0.002</b>	0.015	0.000	0.000	0.000
839	1.800-	ULS-Set B (auto)/5	-0.574	0.001	<b>-0.336</b>	0.000	-0.102	0.000
839	1.200+	ULS-Set B (auto)/4	0.380	-0.001	<b>0.324</b>	0.000	-0.094	0.001
839	1.800+	ULS-Set B (auto)/5	0.249	0.000	0.244	0.000	<b>-0.143</b>	0.000
839	1.800+	ULS-Set B (auto)/4	-0.164	-0.001	-0.188	0.000	<b>0.117</b>	0.001
839	1.800+	ULS-Set B (auto)/22	-0.150	0.002	-0.070	<b>0.000</b>	0.046	<b>-0.001</b>
840	0.671	ULS-Set B (auto)/4	<b>-20.995</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
840	0.000	ULS-Set B (auto)/5	<b>23.622</b>	0.000	0.006	<b>0.000</b>	0.000	0.000
840	0.000	ULS-Set B (auto)/8	-16.295	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
840	0.335-	ULS-Set B (auto)/4	-20.991	0.000	0.000	0.000	<b>0.001</b>	0.000
841	0.671	ULS-Set B (auto)/4	<b>-17.210</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
841	0.000	ULS-Set B (auto)/8	-13.810	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
841	0.000	ULS-Set B (auto)/5	<b>18.166</b>	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
841	0.335-	ULS-Set B (auto)/4	-17.206	0.000	0.000	0.000	<b>0.001</b>	0.000
842	0.671	ULS-Set B (auto)/8	<b>-5.780</b>	0.000	<b>-0.008</b>	0.000	<b>0.000</b>	0.000
842	0.000	ULS-Set B (auto)/5	<b>0.864</b>	0.000	0.006	<b>0.000</b>	0.000	0.000
842	0.335-	ULS-Set B (auto)/8	-5.776	<b>0.000</b>	0.000	<b>0.000</b>	<b>0.001</b>	<b>0.000</b>
842	0.000	ULS-Set B (auto)/8	-5.772	0.000	<b>0.008</b>	0.000	0.000	<b>0.000</b>
843	0.000	ULS-Set B (auto)/18	<b>1.602</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
843	0.671	ULS-Set B (auto)/41	<b>-5.975</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
843	0.000	ULS-Set B (auto)/4	-2.704	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
843	0.000	ULS-Set B (auto)/5	-1.942	0.000	0.006	<b>0.000</b>	0.000	0.000
843	0.335-	ULS-Set B (auto)/41	-5.971	0.000	0.000	0.000	<b>0.001</b>	0.000
844	1.800+	ULS-Set B (auto)/35	-0.066	<b>-0.070</b>	0.060	0.000	-0.031	-0.010
844	0.600+	ULS-Set B	-0.001	<b>0.014</b>	-0.146	0.000	0.036	0.003

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
844	1.800-	(auto)/38						
844	1.800-	ULS-Set B (auto)/5	<b>0.126</b>	0.003	<b>-0.298</b>	0.000	-0.106	0.002
844	1.200+	ULS-Set B (auto)/4	-0.097	-0.040	<b>0.379</b>	0.000	-0.105	0.009
844	0.000	ULS-Set B (auto)/5	0.011	-0.006	-0.017	<b>0.000</b>	0.000	0.001
844	0.000	ULS-Set B (auto)/8	-0.001	0.013	0.107	<b>0.000</b>	0.000	-0.003
844	1.800+	ULS-Set B (auto)/5	<b>-0.126</b>	-0.025	0.182	0.000	<b>-0.106</b>	0.002
844	1.800-	ULS-Set B (auto)/4	-0.097	-0.040	0.363	0.000	<b>0.118</b>	-0.015
844	2.400	ULS-Set B (auto)/43	-0.062	-0.070	0.032	0.000	0.000	<b>-0.053</b>
844	1.200+	ULS-Set B (auto)/38	-0.036	-0.043	0.193	0.000	-0.056	<b>0.011</b>
845	0.600+	ULS-Set B (auto)/44	<b>-1.416</b>	-0.012	0.242	0.000	-0.054	-0.002
845	0.000	ULS-Set B (auto)/8	-0.673	<b>-0.024</b>	0.055	<b>0.000</b>	0.000	0.000
845	1.200-	ULS-Set B (auto)/4	0.667	0.000	<b>-0.373</b>	0.000	-0.122	-0.012
845	1.200+	ULS-Set B (auto)/4	0.358	0.003	<b>0.375</b>	0.000	-0.111	-0.012
845	1.800+	ULS-Set B (auto)/31	-0.345	0.037	0.195	<b>0.000</b>	-0.112	-0.022
845	1.800+	ULS-Set B (auto)/5	-0.138	0.015	0.242	0.000	<b>-0.142</b>	-0.009
845	1.800+	ULS-Set B (auto)/4	0.017	0.018	-0.201	0.000	<b>0.125</b>	-0.011
845	1.800+	ULS-Set B (auto)/45	-0.131	<b>0.038</b>	0.091	0.000	-0.050	<b>-0.023</b>
845	0.600-	ULS-Set B (auto)/5	<b>1.302</b>	0.009	0.019	0.000	0.015	<b>0.005</b>
846	0.000	ULS-Set B (auto)/5	<b>23.298</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
846	0.671	ULS-Set B (auto)/4	<b>-23.315</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
846	0.000	ULS-Set B (auto)/32	19.997	0.000	0.006	<b>0.000</b>	0.000	0.000
846	0.000	ULS-Set B (auto)/46	-7.043	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
846	0.335-	ULS-Set B (auto)/4	-23.311	0.000	0.000	0.000	<b>0.001</b>	0.000
847	0.000	ULS-Set B (auto)/5	<b>17.170</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
847	0.671	ULS-Set B (auto)/4	<b>-19.729</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
847	0.000	ULS-Set B (auto)/18	-8.275	0.000	0.006	<b>0.000</b>	0.000	0.000
847	0.000	ULS-Set B (auto)/41	3.463	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
847	0.335-	ULS-Set B (auto)/4	-19.724	0.000	0.000	0.000	<b>0.001</b>	0.000
848	0.000	ULS-Set B (auto)/5	<b>0.654</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
848	0.671	ULS-Set B (auto)/8	<b>-9.264</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
848	0.000	ULS-Set B (auto)/28	-7.418	0.000	0.008	<b>0.000</b>	0.000	0.000
848	0.000	ULS-Set B (auto)/16	-1.382	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
848	0.335-	ULS-Set B (auto)/8	-9.260	0.000	0.000	0.000	<b>0.001</b>	0.000
849	0.671	ULS-Set B (auto)/28	<b>-9.121</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
849	0.000	ULS-Set B (auto)/22	<b>0.635</b>	0.000	0.006	<b>0.000</b>	0.000	0.000
849	0.000	ULS-Set B (auto)/8	-7.983	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
849	0.335-	ULS-Set B (auto)/28	-9.117	0.000	0.000	0.000	<b>0.001</b>	0.000
850	1.800+	ULS-Set B (auto)/31	<b>-0.298</b>	-0.128	0.119	0.000	-0.066	0.077
850	1.200+	ULS-Set B (auto)/31	<b>0.298</b>	0.286	-0.137	0.000	0.021	-0.095

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
850	1.200-	(auto)/31						
850	1.200-	ULS-Set B (auto)/4	0.260	-0.329	<b>-0.313</b>	0.000	-0.115	-0.103
850	0.000	ULS-Set B (auto)/10	-0.132	0.216	0.071	<b>0.000</b>	0.000	-0.038
850	1.200+	ULS-Set B (auto)/4	0.130	0.317	<b>0.401</b>	0.000	<b>-0.115</b>	-0.103
850	1.800-	ULS-Set B (auto)/4	0.130	0.317	0.385	0.000	<b>0.121</b>	0.087
850	1.200-	ULS-Set B (auto)/46	0.216	<b>-0.438</b>	-0.192	0.000	-0.061	<b>-0.145</b>
850	1.800-	ULS-Set B (auto)/46	0.177	<b>0.470</b>	0.176	<b>0.000</b>	0.050	<b>0.137</b>
851	1.800+	ULS-Set B (auto)/5	<b>-2.457</b>	-0.051	0.258	0.000	-0.151	0.030
851	0.000	ULS-Set B (auto)/44	<b>2.134</b>	-0.057	-0.040	0.000	0.000	0.000
851	1.200+	ULS-Set B (auto)/10	-0.027	<b>-0.461</b>	-0.424	0.000	0.139	<b>0.141</b>
851	0.600+	ULS-Set B (auto)/10	0.014	<b>0.392</b>	0.420	0.000	-0.109	-0.094
851	0.600+	ULS-Set B (auto)/43	-1.037	0.158	<b>1.128</b>	0.000	-0.298	-0.069
851	1.800+	ULS-Set B (auto)/10	0.463	0.226	0.010	<b>0.000</b>	-0.001	-0.136
851	0.000	ULS-Set B (auto)/35	1.032	-0.130	-0.059	<b>0.000</b>	0.000	0.000
851	1.800-	ULS-Set B (auto)/43	-0.990	-0.034	<b>-1.178</b>	0.000	<b>-0.328</b>	0.005
851	1.200-	ULS-Set B (auto)/43	-1.037	0.158	1.111	0.000	<b>0.374</b>	0.026
851	1.800-	ULS-Set B (auto)/10	-0.027	-0.461	-0.441	0.000	-0.121	<b>-0.136</b>
852	0.000	ULS-Set B (auto)/5	<b>24.305</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
852	0.671	ULS-Set B (auto)/4	<b>-24.108</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
852	0.000	ULS-Set B (auto)/10	-7.810	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
852	0.000	ULS-Set B (auto)/32	21.801	0.000	0.006	<b>0.000</b>	0.000	0.000
852	0.335-	ULS-Set B (auto)/4	-24.104	0.000	0.000	0.000	<b>0.001</b>	0.000
853	0.000	ULS-Set B (auto)/5	<b>16.207</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
853	0.671	ULS-Set B (auto)/4	<b>-19.464</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
853	0.000	ULS-Set B (auto)/32	13.406	0.000	0.006	<b>0.000</b>	0.000	0.000
853	0.000	ULS-Set B (auto)/10	-6.409	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
853	0.335-	ULS-Set B (auto)/4	-19.460	0.000	0.000	0.000	<b>0.001</b>	0.000
854	0.000	ULS-Set B (auto)/5	<b>1.157</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
854	0.671	ULS-Set B (auto)/8	<b>-11.745</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
854	0.000	ULS-Set B (auto)/37	-4.537	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
854	0.000	ULS-Set B (auto)/7	-3.766	0.000	0.006	<b>0.000</b>	0.000	0.000
854	0.335-	ULS-Set B (auto)/8	-11.741	0.000	0.000	0.000	<b>0.001</b>	0.000
855	0.000	ULS-Set B (auto)/22	<b>-0.318</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
855	0.671	ULS-Set B (auto)/28	<b>-10.890</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
855	0.000	ULS-Set B (auto)/32	-5.404	0.000	0.006	<b>0.000</b>	0.000	0.000
855	0.000	ULS-Set B (auto)/38	-7.303	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
855	0.335-	ULS-Set B (auto)/28	-10.886	0.000	0.000	0.000	<b>0.001</b>	0.000
1089	0.000	ULS-Set B (auto)/44	<b>2.149</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
1089	0.600	ULS-Set B (auto)/44	-1.823	0.000	<b>-0.008</b>	0.000	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
1089	0.000	(auto)/15						
1089	0.000	ULS-Set B (auto)/11	2.090	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1089	0.000	ULS-Set B (auto)/40	-1.764	0.000	0.006	<b>0.000</b>	0.000	0.000
1089	0.300-	ULS-Set B (auto)/15	<b>-1.823</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1090	0.600	ULS-Set B (auto)/10	1.208	0.000	<b>-0.008</b>	0.000	0.000	0.000
1090	0.000	ULS-Set B (auto)/11	-1.181	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1090	0.000	ULS-Set B (auto)/40	1.190	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1090	0.300-	ULS-Set B (auto)/10	<b>1.208</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1090	0.000	ULS-Set B (auto)/32	<b>-1.198</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1091	0.600	ULS-Set B (auto)/15	4.751	0.000	<b>-0.008</b>	0.000	0.000	0.000
1091	0.000	ULS-Set B (auto)/40	4.604	0.000	0.006	<b>0.000</b>	0.000	0.000
1091	0.000	ULS-Set B (auto)/11	-3.705	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1091	0.300-	ULS-Set B (auto)/15	<b>4.751</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1091	0.000	ULS-Set B (auto)/44	<b>-3.852</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1092	0.600	ULS-Set B (auto)/20	1.082	0.000	<b>-0.008</b>	0.000	0.000	0.000
1092	0.000	ULS-Set B (auto)/40	1.043	0.000	0.006	<b>0.000</b>	0.000	0.000
1092	0.000	ULS-Set B (auto)/11	-0.771	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1092	0.300-	ULS-Set B (auto)/20	<b>1.082</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1092	0.000	ULS-Set B (auto)/29	<b>-0.810</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1093	0.000	ULS-Set B (auto)/40	<b>3.321</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
1093	0.600	ULS-Set B (auto)/11	-2.146	0.000	<b>-0.008</b>	0.000	0.000	0.000
1093	0.000	ULS-Set B (auto)/9	3.252	0.000	0.006	<b>0.000</b>	0.000	0.000
1093	0.000	ULS-Set B (auto)/45	-1.208	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1093	0.300-	ULS-Set B (auto)/11	<b>-2.146</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1094	0.600	ULS-Set B (auto)/20	1.261	0.000	<b>-0.008</b>	0.000	0.000	0.000
1094	0.000	ULS-Set B (auto)/22	0.411	0.000	0.006	<b>0.000</b>	0.000	0.000
1094	0.000	ULS-Set B (auto)/36	0.152	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1094	0.300-	ULS-Set B (auto)/20	<b>1.261</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1094	0.000	ULS-Set B (auto)/29	<b>-0.872</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1096	0.000	ULS-Set B (auto)/40	<b>3.696</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
1096	0.600	ULS-Set B (auto)/11	-2.454	0.000	<b>-0.008</b>	0.000	0.000	0.000
1096	0.000	ULS-Set B (auto)/47	-0.413	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1096	0.000	ULS-Set B (auto)/48	-0.548	0.000	0.006	<b>0.000</b>	0.000	0.000
1096	0.300-	ULS-Set B (auto)/11	<b>-2.454</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1098	0.000	ULS-Set B (auto)/40	<b>3.472</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
1098	0.600	ULS-Set B (auto)/11	-1.860	0.000	<b>-0.008</b>	0.000	0.000	0.000
1098	0.000	ULS-Set B (auto)/22	0.783	0.000	0.006	<b>0.000</b>	0.000	0.000
1098	0.000	ULS-Set B (auto)/8	-0.935	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1098	0.300-	ULS-Set B	<b>-1.860</b>	0.000	0.000	0.000	<b>0.001</b>	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
1099	0.600	(auto)/11						
1099	0.600	ULS-Set B (auto)/20	2.079	0.000	<b>-0.008</b>	0.000	0.000	0.000
1099	0.000	ULS-Set B (auto)/25	-0.982	0.000	0.006	<b>0.000</b>	0.000	0.000
1099	0.000	ULS-Set B (auto)/24	0.434	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1099	0.300-	ULS-Set B (auto)/20	<b>2.079</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1099	0.000	ULS-Set B (auto)/29	<b>-1.949</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1100	0.600	ULS-Set B (auto)/8	0.260	0.000	<b>-0.008</b>	0.000	0.000	0.000
1100	0.000	ULS-Set B (auto)/13	0.159	0.000	0.006	<b>0.000</b>	0.000	0.000
1100	0.000	ULS-Set B (auto)/49	0.045	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1100	0.300-	ULS-Set B (auto)/8	<b>0.260</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1100	0.000	ULS-Set B (auto)/5	<b>-0.127</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1101	0.600	ULS-Set B (auto)/27	4.402	0.000	<b>-0.008</b>	0.000	0.000	0.000
1101	0.000	ULS-Set B (auto)/13	-2.739	0.000	0.006	<b>0.000</b>	0.000	0.000
1101	0.000	ULS-Set B (auto)/21	4.395	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1101	0.300-	ULS-Set B (auto)/27	<b>4.402</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1101	0.000	ULS-Set B (auto)/26	<b>-2.747</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1103	0.600	ULS-Set B (auto)/4	0.184	0.000	<b>-0.008</b>	0.000	0.000	0.000
1103	0.000	ULS-Set B (auto)/8	0.175	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1103	0.000	ULS-Set B (auto)/9	0.011	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1103	0.300-	ULS-Set B (auto)/4	<b>0.184</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1103	0.000	ULS-Set B (auto)/5	<b>-0.139</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1104	0.000	ULS-Set B (auto)/29	<b>0.207</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
1104	0.600	ULS-Set B (auto)/4	-0.194	0.000	<b>-0.008</b>	0.000	0.000	0.000
1104	0.000	ULS-Set B (auto)/39	-0.142	0.000	0.006	<b>0.000</b>	0.000	0.000
1104	0.000	ULS-Set B (auto)/1	0.175	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1104	0.300-	ULS-Set B (auto)/4	<b>-0.194</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1497	0.000	ULS-Set B (auto)/5	<b>-5.086</b>	-0.194	-0.568	0.000	<b>0.155</b>	0.016
1497	0.603	ULS-Set B (auto)/23	<b>5.094</b>	0.370	0.120	0.000	0.052	0.064
1497	0.000	ULS-Set B (auto)/18	-3.804	<b>-0.335</b>	0.113	0.000	-0.036	<b>0.173</b>
1497	0.000	ULS-Set B (auto)/50	4.300	<b>0.374</b>	0.135	0.000	-0.023	-0.145
1497	0.000	ULS-Set B (auto)/4	2.639	0.211	<b>0.453</b>	0.000	-0.114	-0.003
1497	0.000	ULS-Set B (auto)/12	-3.521	-0.308	0.128	<b>0.000</b>	-0.039	0.163
1497	0.000	ULS-Set B (auto)/39	3.949	0.330	0.331	<b>0.000</b>	-0.079	-0.083
1497	0.603	ULS-Set B (auto)/5	-5.085	-0.194	<b>-0.580</b>	0.000	<b>-0.191</b>	-0.101
1497	0.000	ULS-Set B (auto)/51	5.037	0.371	0.131	0.000	-0.023	<b>-0.160</b>
1498	0.000	ULS-Set B (auto)/11	<b>-8.163</b>	-0.237	0.301	0.000	-0.048	0.099
1498	0.603	ULS-Set B (auto)/18	<b>6.928</b>	0.656	-0.086	0.000	-0.036	0.153
1498	0.000	ULS-Set B (auto)/15	-2.985	<b>-0.717</b>	-0.003	0.000	0.007	0.293
1498	0.000	ULS-Set B	5.534	<b>0.776</b>	-0.220	0.000	0.031	-0.347

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/14									(auto)/5						
1498	0.000	ULS-Set B (auto)/5	-5.966	-0.453	<b>0.346</b>	0.000	-0.050	0.233	1502	0.000	ULS-Set B (auto)/4	0.483	-0.082	-0.392	0.000	<b>0.154</b>	<b>0.124</b>
1498	0.000	ULS-Set B (auto)/52	-0.263	0.322	-0.161	<b>0.000</b>	0.021	-0.192	1503	0.000	ULS-Set B (auto)/18	<b>-0.595</b>	0.078	-0.032	0.000	0.027	-0.046
1498	0.000	ULS-Set B (auto)/1	-6.297	-0.460	0.342	<b>0.000</b>	-0.049	0.233	1503	0.603	ULS-Set B (auto)/51	<b>1.797</b>	-0.014	-0.172	0.000	-0.051	0.002
1498	0.603	ULS-Set B (auto)/4	3.590	0.700	<b>-0.251</b>	0.000	<b>-0.114</b>	0.083	1503	0.000	ULS-Set B (auto)/1	-0.112	<b>-0.063</b>	0.413	0.000	-0.171	0.037
1498	0.603	ULS-Set B (auto)/5	-5.965	-0.453	0.333	0.000	<b>0.155</b>	-0.040	1503	0.603	ULS-Set B (auto)/4	0.654	0.087	<b>-0.378</b>	0.000	-0.081	-0.003
1498	0.000	ULS-Set B (auto)/3	5.203	0.768	-0.223	0.000	0.032	<b>-0.348</b>	1503	0.000	ULS-Set B (auto)/10	0.891	-0.057	0.054	<b>0.000</b>	-0.019	0.043
1498	0.000	ULS-Set B (auto)/7	-2.654	-0.709	0.000	0.000	0.006	<b>0.293</b>	1503	0.000	ULS-Set B (auto)/26	0.507	0.087	-0.345	<b>0.000</b>	0.136	-0.055
1499	0.000	ULS-Set B (auto)/4	<b>-9.173</b>	-0.562	<b>0.062</b>	0.000	0.000	0.000	1503	0.000	ULS-Set B (auto)/5	-0.282	-0.063	<b>0.428</b>	0.000	<b>-0.175</b>	0.037
1499	0.603	ULS-Set B (auto)/1	12.772	0.386	<b>-0.089</b>	0.000	-0.049	0.233	1503	0.000	ULS-Set B (auto)/4	0.653	0.087	-0.362	0.000	<b>0.142</b>	-0.055
1499	0.000	ULS-Set B (auto)/39	-6.534	-0.314	0.040	<b>0.000</b>	0.000	0.000	1503	0.000	ULS-Set B (auto)/2	0.483	<b>0.087</b>	-0.347	0.000	0.138	<b>-0.055</b>
1499	0.000	ULS-Set B (auto)/27	12.675	0.382	-0.072	<b>0.000</b>	0.000	0.000	1503	0.000	ULS-Set B (auto)/55	0.916	-0.057	0.056	0.000	-0.020	<b>0.043</b>
1499	0.603	ULS-Set B (auto)/5	<b>12.834</b>	0.387	-0.088	0.000	<b>-0.050</b>	0.233	1504	0.000	ULS-Set B (auto)/14	<b>-0.969</b>	0.085	0.168	0.000	-0.058	-0.002
1499	0.603	ULS-Set B (auto)/4	-9.172	-0.562	0.046	0.000	<b>0.032</b>	-0.339	1504	0.603	ULS-Set B (auto)/56	<b>1.823</b>	-0.034	-0.005	0.000	0.004	-0.022
1499	0.603	ULS-Set B (auto)/3	-8.420	<b>-0.577</b>	0.045	0.000	0.032	<b>-0.348</b>	1504	0.603	ULS-Set B (auto)/25	1.051	-0.062	<b>-0.234</b>	0.000	-0.059	-0.039
1499	0.603	ULS-Set B (auto)/7	1.770	<b>0.487</b>	0.005	0.000	0.006	<b>0.293</b>	1504	0.000	ULS-Set B (auto)/17	0.611	0.055	<b>0.246</b>	0.000	-0.081	-0.002
1500	0.000	ULS-Set B (auto)/18	<b>-2.327</b>	0.043	-0.016	0.000	0.005	-0.003	1504	0.000	ULS-Set B (auto)/27	1.199	-0.063	-0.205	<b>0.000</b>	0.074	-0.001
1500	0.603	ULS-Set B (auto)/53	<b>3.010</b>	-0.031	0.108	0.000	0.030	-0.006	1504	0.000	ULS-Set B (auto)/26	-0.512	0.087	0.223	<b>0.000</b>	-0.075	-0.003
1500	0.000	ULS-Set B (auto)/8	0.888	<b>-0.085</b>	<b>0.267</b>	0.000	-0.087	0.072	1504	0.000	ULS-Set B (auto)/8	0.581	0.055	0.245	0.000	<b>-0.081</b>	-0.002
1500	0.603	ULS-Set B (auto)/5	1.549	<b>0.072</b>	<b>-0.251</b>	0.000	-0.062	-0.014	1504	0.000	ULS-Set B (auto)/5	1.080	-0.063	-0.222	0.000	<b>0.079</b>	-0.001
1500	0.000	ULS-Set B (auto)/12	-2.086	0.038	0.002	<b>0.000</b>	-0.001	0.001	1504	0.603	ULS-Set B (auto)/1	1.231	<b>-0.063</b>	-0.222	0.000	-0.055	<b>-0.039</b>
1500	0.000	ULS-Set B (auto)/39	0.650	-0.079	0.248	<b>0.000</b>	-0.081	0.069	1504	0.603	ULS-Set B (auto)/2	-0.541	<b>0.087</b>	0.210	0.000	0.055	<b>0.050</b>
1500	0.000	ULS-Set B (auto)/4	-0.858	-0.082	0.263	0.000	<b>-0.088</b>	<b>0.075</b>	1505	0.000	ULS-Set B (auto)/5	<b>-7.764</b>	0.042	-0.544	0.000	<b>0.156</b>	0.011
1500	0.000	ULS-Set B (auto)/5	1.548	0.072	-0.239	0.000	<b>0.086</b>	<b>-0.058</b>	1505	0.603	ULS-Set B (auto)/4	<b>4.958</b>	-0.067	0.442	0.000	0.142	-0.055
1501	0.000	ULS-Set B (auto)/5	<b>-8.394</b>	0.042	<b>0.369</b>	0.000	-0.062	-0.014	1505	0.000	ULS-Set B (auto)/26	4.856	<b>-0.067</b>	0.438	0.000	-0.124	-0.015
1501	0.000	ULS-Set B (auto)/26	5.326	<b>-0.067</b>	-0.302	0.000	0.062	0.025	1505	0.000	ULS-Set B (auto)/10	0.253	<b>0.056</b>	-0.057	0.000	0.021	0.010
1501	0.000	ULS-Set B (auto)/12	2.182	-0.058	-0.035	<b>0.000</b>	-0.004	0.023	1505	0.000	ULS-Set B (auto)/4	4.956	-0.067	<b>0.458</b>	0.000	-0.129	-0.015
1501	0.000	ULS-Set B (auto)/7	0.349	0.050	0.029	<b>0.000</b>	-0.003	-0.020	1505	0.000	ULS-Set B (auto)/12	2.007	-0.058	0.110	<b>0.000</b>	-0.030	-0.012
1501	0.603	ULS-Set B (auto)/4	<b>5.442</b>	-0.067	<b>-0.331</b>	0.000	<b>-0.129</b>	-0.015	1505	0.000	ULS-Set B (auto)/7	0.414	0.050	-0.025	<b>0.000</b>	0.011	0.011
1501	0.603	ULS-Set B (auto)/5	-8.393	0.042	0.356	0.000	<b>0.156</b>	0.011	1505	0.603	ULS-Set B (auto)/5	-7.763	0.042	<b>-0.556</b>	0.000	<b>-0.175</b>	0.036
1501	0.000	ULS-Set B (auto)/10	0.173	<b>0.056</b>	0.068	0.000	-0.016	<b>-0.024</b>	1505	0.603	ULS-Set B (auto)/2	4.897	-0.067	0.430	0.000	0.138	<b>-0.055</b>
1501	0.000	ULS-Set B (auto)/54	2.358	-0.063	-0.074	0.000	0.008	<b>0.028</b>	1505	0.603	ULS-Set B (auto)/55	0.214	0.056	-0.077	0.000	-0.020	<b>0.043</b>
1502	0.000	ULS-Set B (auto)/22	<b>-1.873</b>	0.044	-0.029	0.000	0.027	-0.029	1506	0.000	ULS-Set B (auto)/5	<b>-6.836</b>	<b>0.063</b>	-0.500	<b>0.000</b>	<b>0.144</b>	-0.001
1502	0.603	ULS-Set B (auto)/42	<b>3.079</b>	-0.031	-0.132	0.000	-0.041	0.013	1506	0.603	ULS-Set B (auto)/4	<b>4.362</b>	-0.073	0.405	0.000	0.132	-0.039
1502	0.000	ULS-Set B (auto)/8	1.829	<b>-0.085</b>	-0.343	0.000	0.124	0.123	1506	0.000	ULS-Set B (auto)/4	4.361	-0.073	<b>0.422</b>	<b>0.000</b>	-0.117	0.005
1502	0.603	ULS-Set B (auto)/4	0.485	-0.082	<b>-0.409</b>	0.000	-0.088	0.075	1506	0.603	ULS-Set B (auto)/5	-6.835	0.063	<b>-0.512</b>	0.000	<b>-0.162</b>	<b>0.037</b>
1502	0.000	ULS-Set B (auto)/12	-1.595	0.038	-0.048	<b>0.000</b>	0.034	-0.022	1506	0.603	ULS-Set B (auto)/30	2.358	<b>-0.080</b>	0.125	0.000	0.041	<b>-0.047</b>
1502	0.000	ULS-Set B (auto)/39	1.551	-0.079	-0.323	<b>0.000</b>	0.118	0.116	1507	0.000	ULS-Set B (auto)/22	<b>-0.384</b>	0.072	-0.025	0.000	0.021	-0.046
1502	0.000	ULS-Set B (auto)/4	-0.221	<b>0.072</b>	<b>0.465</b>	0.000	<b>-0.191</b>	<b>-0.101</b>	1507	0.603	ULS-Set B (auto)/22	<b>2.276</b>	0.011	-0.126	0.000	-0.048	0.005

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/42						
1507	0.000	ULS-Set B (auto)/29	-0.028	<b>-0.065</b>	0.303	0.000	-0.129	0.037
1507	0.603	ULS-Set B (auto)/4	1.029	0.051	<b>-0.373</b>	0.000	-0.088	-0.008
1507	0.000	ULS-Set B (auto)/8	1.687	0.032	-0.318	<b>0.000</b>	0.108	-0.025
1507	0.000	ULS-Set B (auto)/5	0.050	-0.057	<b>0.394</b>	<b>0.000</b>	<b>-0.161</b>	<b>0.037</b>
1507	0.000	ULS-Set B (auto)/4	1.027	0.051	-0.356	0.000	<b>0.132</b>	-0.039
1507	0.000	ULS-Set B (auto)/30	0.634	<b>0.074</b>	-0.109	0.000	0.041	<b>-0.047</b>
1508	0.000	ULS-Set B (auto)/5	<b>-7.308</b>	0.063	0.341	0.000	-0.058	-0.039
1508	0.000	ULS-Set B (auto)/30	2.496	<b>-0.080</b>	-0.073	0.000	0.010	0.049
1508	0.603	ULS-Set B (auto)/24	4.583	-0.072	<b>-0.300</b>	0.000	-0.117	0.005
1508	0.000	ULS-Set B (auto)/25	-7.176	0.063	<b>0.341</b>	0.000	-0.059	-0.039
1508	0.603	ULS-Set B (auto)/4	<b>4.715</b>	-0.073	-0.300	<b>0.000</b>	<b>-0.117</b>	0.005
1508	0.603	ULS-Set B (auto)/5	-7.307	<b>0.063</b>	0.329	<b>0.000</b>	<b>0.144</b>	-0.001
1508	0.000	ULS-Set B (auto)/1	-7.297	0.063	0.332	0.000	-0.055	<b>-0.039</b>
1508	0.000	ULS-Set B (auto)/2	4.703	-0.073	-0.274	0.000	0.055	<b>0.050</b>
1509	0.000	ULS-Set B (auto)/27	<b>-7.430</b>	0.046	0.280	<b>0.000</b>	-0.039	-0.031
1509	0.603	ULS-Set B (auto)/26	<b>3.755</b>	-0.036	-0.269	0.000	-0.105	0.001
1509	0.000	ULS-Set B (auto)/30	1.320	<b>-0.060</b>	-0.093	0.000	0.025	0.042
1509	0.000	ULS-Set B (auto)/29	-6.446	<b>0.062</b>	0.238	0.000	-0.038	-0.041
1509	0.000	ULS-Set B (auto)/5	-6.825	0.051	<b>0.315</b>	0.000	-0.055	-0.032
1509	0.000	ULS-Set B (auto)/39	2.247	-0.026	-0.234	<b>0.000</b>	0.058	0.014
1509	0.603	ULS-Set B (auto)/4	3.151	-0.041	<b>-0.308</b>	0.000	<b>-0.112</b>	-0.001
1509	0.603	ULS-Set B (auto)/5	-6.824	0.051	0.303	0.000	<b>0.131</b>	-0.001
1509	0.000	ULS-Set B (auto)/32	-6.365	0.060	0.189	0.000	-0.022	<b>-0.042</b>
1509	0.000	ULS-Set B (auto)/12	1.240	-0.058	-0.044	0.000	0.009	<b>0.042</b>
1510	0.000	ULS-Set B (auto)/27	<b>-7.069</b>	0.048	-0.422	<b>0.000</b>	0.125	-0.003
1510	0.603	ULS-Set B (auto)/26	<b>3.478</b>	-0.024	0.370	<b>0.000</b>	0.122	-0.014
1510	0.000	ULS-Set B (auto)/4	2.863	-0.022	<b>0.413</b>	0.000	-0.112	-0.001
1510	0.603	ULS-Set B (auto)/5	-6.454	0.045	<b>-0.465</b>	0.000	<b>-0.145</b>	0.026
1510	0.603	ULS-Set B (auto)/4	2.865	-0.022	0.397	0.000	<b>0.132</b>	-0.014
1510	0.603	ULS-Set B (auto)/16	1.652	<b>-0.056</b>	0.058	0.000	0.021	<b>-0.026</b>
1510	0.603	ULS-Set B (auto)/33	-6.587	<b>0.066</b>	-0.291	0.000	-0.087	<b>0.033</b>
1511	0.000	ULS-Set B (auto)/13	<b>-0.746</b>	0.050	0.164	0.000	-0.057	-0.007
1511	0.603	ULS-Set B (auto)/42	<b>2.344</b>	0.012	0.146	0.000	0.045	0.012
1511	0.000	ULS-Set B (auto)/29	0.835	<b>-0.065</b>	-0.140	0.000	0.051	-0.002
1511	0.000	ULS-Set B (auto)/30	0.373	<b>0.074</b>	0.097	0.000	-0.029	-0.003
1511	0.603	ULS-Set B (auto)/5	1.121	-0.057	<b>-0.217</b>	0.000	-0.055	-0.032
1511	0.000	ULS-Set B (auto)/22	-0.619	0.072	-0.007	<b>0.000</b>	0.002	-0.002
1511	0.000	ULS-Set B	1.149	0.034	<b>0.278</b>	0.000	<b>-0.089</b>	-0.006

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/8						
1511	0.603	ULS-Set B (auto)/8	1.151	0.034	0.261	<b>0.000</b>	<b>0.074</b>	0.015
1511	0.603	ULS-Set B (auto)/32	1.226	-0.065	-0.099	0.000	-0.022	<b>-0.042</b>
1511	0.603	ULS-Set B (auto)/12	-0.015	0.074	0.027	0.000	0.009	<b>0.042</b>
1512	0.000	ULS-Set B (auto)/13	<b>-0.667</b>	0.062	0.177	0.000	-0.058	-0.001
1512	0.603	ULS-Set B (auto)/20	<b>3.131</b>	0.009	0.054	0.000	0.016	-0.006
1512	0.603	ULS-Set B (auto)/5	0.584	<b>-0.101</b>	<b>-0.240</b>	0.000	-0.066	-0.063
1512	0.000	ULS-Set B (auto)/57	2.239	0.048	0.125	<b>0.000</b>	-0.037	0.007
1512	0.000	ULS-Set B (auto)/37	0.499	-0.061	-0.105	<b>0.000</b>	0.036	0.014
1512	0.000	ULS-Set B (auto)/8	1.229	0.108	<b>0.301</b>	0.000	<b>-0.095</b>	0.020
1512	0.603	ULS-Set B (auto)/8	1.230	<b>0.108</b>	0.284	0.000	<b>0.082</b>	0.085
1512	0.603	ULS-Set B (auto)/25	1.042	-0.101	-0.215	0.000	-0.060	<b>-0.063</b>
1512	0.603	ULS-Set B (auto)/17	0.773	0.107	0.259	0.000	0.075	<b>0.085</b>
1513	0.000	ULS-Set B (auto)/25	<b>-8.761</b>	0.482	0.305	0.000	-0.060	-0.063
1513	0.603	ULS-Set B (auto)/24	<b>5.887</b>	-0.392	-0.294	0.000	-0.103	-0.169
1513	0.000	ULS-Set B (auto)/5	-8.662	<b>0.483</b>	<b>0.320</b>	0.000	-0.066	-0.063
1513	0.000	ULS-Set B (auto)/58	-3.827	-0.065	-0.002	<b>0.000</b>	0.023	0.041
1513	0.000	ULS-Set B (auto)/16	2.643	0.068	-0.007	<b>0.000</b>	-0.005	-0.033
1513	0.603	ULS-Set B (auto)/4	5.788	-0.393	<b>-0.310</b>	0.000	<b>-0.106</b>	-0.169
1513	0.603	ULS-Set B (auto)/8	4.316	<b>-0.451</b>	-0.296	0.000	-0.092	<b>-0.187</b>
1513	0.603	ULS-Set B (auto)/5	-8.661	0.483	0.308	0.000	<b>0.123</b>	<b>0.228</b>
1514	0.000	ULS-Set B (auto)/29	<b>-0.806</b>	-0.032	0.273	0.000	-0.110	0.032
1514	0.603	ULS-Set B (auto)/20	<b>2.968</b>	0.002	-0.030	0.000	-0.021	-0.011
1514	0.000	ULS-Set B (auto)/25	0.212	<b>-0.049</b>	0.347	0.000	-0.139	0.027
1514	0.000	ULS-Set B (auto)/17	1.268	<b>0.050</b>	-0.309	0.000	0.106	-0.010
1514	0.603	ULS-Set B (auto)/4	1.074	0.038	<b>-0.380</b>	0.000	-0.092	0.009
1514	0.000	ULS-Set B (auto)/59	0.598	0.015	0.030	<b>0.000</b>	-0.028	0.019
1514	0.000	ULS-Set B (auto)/10	2.544	-0.013	0.044	<b>0.000</b>	-0.024	-0.013
1514	0.000	ULS-Set B (auto)/5	-0.264	-0.048	<b>0.372</b>	0.000	<b>-0.145</b>	0.026
1514	0.000	ULS-Set B (auto)/4	1.072	0.038	-0.364	0.000	<b>0.132</b>	-0.014
1514	0.603	ULS-Set B (auto)/18	0.663	-0.012	-0.053	0.000	-0.006	<b>-0.031</b>
1514	0.000	ULS-Set B (auto)/33	0.093	-0.018	0.190	0.000	-0.087	<b>0.033</b>
1515	0.603	ULS-Set B (auto)/4	<b>3.887</b>	<b>-0.450</b>	<b>-0.164</b>	0.000	0.000	0.000
1515	0.000	ULS-Set B (auto)/4	3.885	-0.450	-0.147	<b>0.000</b>	<b>0.094</b>	<b>0.271</b>
1515	0.000	ULS-Set B (auto)/9	-1.987	-0.034	0.051	<b>0.000</b>	-0.027	0.021
1515	0.000	ULS-Set B (auto)/5	<b>-3.862</b>	<b>0.721</b>	<b>0.196</b>	0.000	<b>-0.115</b>	<b>-0.435</b>
1517	0.000	ULS-Set B (auto)/25	<b>-7.057</b>	-1.146	-0.379	0.000	0.121	0.259
1517	0.603	ULS-Set B (auto)/24	<b>4.870</b>	0.757	0.313	0.000	0.090	0.269
1517	0.000	ULS-Set B	-7.025	<b>-1.152</b>	-0.389	0.000	<b>0.123</b>	0.260

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
1517	0.000	(auto)/5						
1517	0.000	ULS-Set B (auto)/8	3.275	<b>0.789</b>	0.289	0.000	-0.092	-0.206
1517	0.000	ULS-Set B (auto)/4	4.836	0.763	<b>0.340</b>	0.000	-0.106	-0.189
1517	0.000	ULS-Set B (auto)/16	0.393	0.073	0.059	<b>0.000</b>	-0.014	0.007
1517	0.000	ULS-Set B (auto)/60	0.559	0.503	0.135	<b>0.000</b>	-0.044	-0.140
1517	0.603	ULS-Set B (auto)/5	-7.024	-1.152	<b>-0.401</b>	0.000	<b>-0.115</b>	<b>-0.435</b>
1517	0.603	ULS-Set B (auto)/4	4.838	0.763	0.324	0.000	0.094	<b>0.271</b>
1556	0.600	ULS-Set B (auto)/20	<b>0.925</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
1556	0.000	ULS-Set B (auto)/4	-0.110	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1556	0.000	ULS-Set B (auto)/5	-0.331	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1556	0.300-	ULS-Set B (auto)/20	0.925	0.000	0.000	0.000	<b>0.001</b>	0.000
1556	0.000	ULS-Set B (auto)/29	<b>-0.644</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1557	0.600	ULS-Set B (auto)/6	<b>0.252</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
1557	0.000	ULS-Set B (auto)/4	-0.128	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1557	0.000	ULS-Set B (auto)/5	0.235	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1557	0.300-	ULS-Set B (auto)/6	0.252	0.000	0.000	0.000	<b>0.001</b>	0.000
1557	0.000	ULS-Set B (auto)/14	<b>-0.145</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1558	0.849	ULS-Set B (auto)/48	<b>-7.247</b>	0.000	-0.006	0.000	0.000	0.000
1558	0.849	ULS-Set B (auto)/3	5.116	0.000	<b>-0.008</b>	0.000	0.000	0.000
1558	0.000	ULS-Set B (auto)/3	<b>5.133</b>	<b>0.000</b>	<b>0.008</b>	0.000	<b>0.000</b>	<b>0.000</b>
1558	0.000	ULS-Set B (auto)/13	4.931	0.000	0.006	<b>0.000</b>	0.000	0.000
1558	0.000	ULS-Set B (auto)/6	-7.201	0.000	0.008	<b>0.000</b>	0.000	0.000
1558	0.424-	ULS-Set B (auto)/3	5.124	0.000	0.000	0.000	<b>0.002</b>	0.000
1559	0.849	ULS-Set B (auto)/5	<b>6.617</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
1559	0.849	ULS-Set B (auto)/4	-4.789	0.000	<b>-0.008</b>	0.000	0.000	0.000
1559	0.000	ULS-Set B (auto)/9	-0.285	0.000	0.006	<b>0.000</b>	0.000	0.000
1559	0.424-	ULS-Set B (auto)/4	-4.797	0.000	0.000	<b>0.000</b>	<b>0.002</b>	0.000
1559	0.000	ULS-Set B (auto)/4	<b>-4.805</b>	0.000	<b>0.008</b>	0.000	0.000	<b>0.000</b>
1794	0.600	ULS-Set B (auto)/17	<b>0.092</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
1794	0.000	ULS-Set B (auto)/4	0.089	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1794	0.000	ULS-Set B (auto)/5	-0.068	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1794	0.300-	ULS-Set B (auto)/17	0.092	0.000	0.000	0.000	<b>0.001</b>	0.000
1794	0.000	ULS-Set B (auto)/25	<b>-0.068</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1795	0.600	ULS-Set B (auto)/8	<b>0.090</b>	0.000	<b>-0.008</b>	0.000	<b>0.000</b>	0.000
1795	0.000	ULS-Set B (auto)/4	0.076	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1795	0.300-	ULS-Set B (auto)/8	0.090	<b>0.000</b>	0.000	0.000	<b>0.001</b>	<b>0.000</b>
1795	0.000	ULS-Set B (auto)/5	<b>-0.031</b>	0.000	0.006	<b>0.000</b>	0.000	<b>0.000</b>
1796	0.849	ULS-Set B (auto)/48	<b>-8.706</b>	0.000	-0.006	0.000	0.000	0.000
1796	0.849	ULS-Set B	6.048	0.000	<b>-0.008</b>	0.000	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
1796		(auto)/3						
1796	0.000	ULS-Set B (auto)/3	<b>6.065</b>	<b>0.000</b>	<b>0.008</b>	0.000	<b>0.000</b>	<b>0.000</b>
1796	0.000	ULS-Set B (auto)/13	5.940	0.000	0.006	<b>0.000</b>	0.000	0.000
1796	0.000	ULS-Set B (auto)/1	-8.596	0.000	0.008	<b>0.000</b>	0.000	0.000
1796	0.424-	ULS-Set B (auto)/3	6.057	0.000	0.000	0.000	<b>0.002</b>	0.000
1797	0.849	ULS-Set B (auto)/48	<b>8.700</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
1797	0.849	ULS-Set B (auto)/3	-6.182	0.000	<b>-0.008</b>	0.000	0.000	0.000
1797	0.000	ULS-Set B (auto)/57	0.205	0.000	0.006	<b>0.000</b>	0.000	0.000
1797	0.000	ULS-Set B (auto)/16	-3.323	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1797	0.424-	ULS-Set B (auto)/3	-6.191	0.000	0.000	0.000	<b>0.002</b>	0.000
1797	0.000	ULS-Set B (auto)/3	<b>-6.199</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
1802	0.600	ULS-Set B (auto)/20	1.525	0.000	<b>-0.008</b>	0.000	0.000	0.000
1802	0.000	ULS-Set B (auto)/10	1.410	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1802	0.000	ULS-Set B (auto)/32	-0.051	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1802	0.300-	ULS-Set B (auto)/20	<b>1.525</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1802	0.000	ULS-Set B (auto)/13	<b>-0.725</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1803	0.600	ULS-Set B (auto)/11	0.257	0.000	<b>-0.008</b>	0.000	0.000	0.000
1803	0.000	ULS-Set B (auto)/10	0.002	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1803	0.000	ULS-Set B (auto)/32	0.251	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1803	0.300-	ULS-Set B (auto)/11	<b>0.257</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1803	0.000	ULS-Set B (auto)/14	<b>-0.142</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1804	0.849	ULS-Set B (auto)/32	<b>-7.781</b>	0.000	-0.006	0.000	0.000	0.000
1804	0.849	ULS-Set B (auto)/3	5.334	0.000	<b>-0.008</b>	0.000	0.000	0.000
1804	0.000	ULS-Set B (auto)/3	<b>5.350</b>	<b>0.000</b>	<b>0.008</b>	0.000	<b>0.000</b>	<b>0.000</b>
1804	0.000	ULS-Set B (auto)/5	-7.717	0.000	0.006	<b>0.000</b>	0.000	0.000
1804	0.000	ULS-Set B (auto)/17	3.126	0.000	0.008	<b>0.000</b>	0.000	0.000
1804	0.424-	ULS-Set B (auto)/3	5.342	0.000	0.000	0.000	<b>0.002</b>	0.000
1805	0.600	ULS-Set B (auto)/41	0.088	0.000	<b>-0.008</b>	0.000	0.000	0.000
1805	0.000	ULS-Set B (auto)/10	-0.020	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1805	0.000	ULS-Set B (auto)/32	0.060	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1805	0.300-	ULS-Set B (auto)/41	<b>0.088</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1805	0.000	ULS-Set B (auto)/18	<b>-0.043</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1806	0.600	ULS-Set B (auto)/17	0.085	0.000	<b>-0.008</b>	0.000	0.000	0.000
1806	0.000	ULS-Set B (auto)/10	-0.011	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1806	0.000	ULS-Set B (auto)/32	0.050	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1806	0.300-	ULS-Set B (auto)/17	<b>0.085</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1806	0.000	ULS-Set B (auto)/18	<b>-0.032</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1807	0.849	ULS-Set B (auto)/5	<b>-8.057</b>	0.000	-0.006	<b>0.000</b>	0.000	0.000
1807	0.849	ULS-Set B	5.740	0.000	<b>-0.008</b>	0.000	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/4									(auto)/4						
1807	0.000	ULS-Set B (auto)/4	<b>5.756</b>	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	1814	0.000	ULS-Set B (auto)/5	-8.039	0.000	0.006	<b>0.000</b>	0.000	0.000
1807	0.424	ULS-Set B (auto)/4	5.748	0.000	0.000	0.000	<b>0.002</b>	0.000	1814	0.000	ULS-Set B (auto)/17	3.178	0.000	0.008	<b>0.000</b>	0.000	0.000
1808	0.849	ULS-Set B (auto)/5	<b>8.062</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>	1814	0.424	ULS-Set B (auto)/4	5.410	0.000	0.000	0.000	<b>0.002</b>	0.000
1808	0.849	ULS-Set B (auto)/4	-5.910	0.000	<b>-0.008</b>	0.000	0.000	0.000	1815	0.600	ULS-Set B (auto)/41	0.095	0.000	<b>-0.008</b>	0.000	0.000	0.000
1808	0.000	ULS-Set B (auto)/22	-2.836	0.000	0.006	<b>0.000</b>	0.000	0.000	1815	0.000	ULS-Set B (auto)/20	-0.003	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1808	0.000	ULS-Set B (auto)/50	-0.541	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1815	0.000	ULS-Set B (auto)/22	-0.044	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1808	0.424	ULS-Set B (auto)/4	-5.919	0.000	0.000	0.000	<b>0.002</b>	0.000	1815	0.300	ULS-Set B (auto)/41	<b>0.095</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1808	0.000	ULS-Set B (auto)/4	<b>-5.927</b>	0.000	0.008	0.000	0.000	<b>0.000</b>	1815	0.000	ULS-Set B (auto)/18	<b>-0.046</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1809	0.600	ULS-Set B (auto)/21	4.387	0.000	<b>-0.008</b>	0.000	0.000	0.000	1816	0.600	ULS-Set B (auto)/17	0.088	0.000	<b>-0.008</b>	0.000	0.000	0.000
1809	0.000	ULS-Set B (auto)/10	3.530	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1816	0.000	ULS-Set B (auto)/10	-0.018	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1809	0.000	ULS-Set B (auto)/26	-3.643	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	1816	0.000	ULS-Set B (auto)/54	-0.009	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1809	0.300	ULS-Set B (auto)/21	<b>4.387</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	1816	0.300	ULS-Set B (auto)/17	<b>0.088</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1809	0.000	ULS-Set B (auto)/13	<b>-3.813</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	1816	0.000	ULS-Set B (auto)/18	<b>-0.032</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1810	0.849	ULS-Set B (auto)/5	<b>8.076</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>	1817	0.849	ULS-Set B (auto)/5	<b>-7.418</b>	0.000	-0.006	<b>0.000</b>	0.000	0.000
1810	0.849	ULS-Set B (auto)/4	-5.910	0.000	<b>-0.008</b>	0.000	0.000	0.000	1817	0.849	ULS-Set B (auto)/4	5.190	0.000	<b>-0.008</b>	0.000	0.000	0.000
1810	0.000	ULS-Set B (auto)/16	-2.893	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1817	0.000	ULS-Set B (auto)/4	<b>5.207</b>	<b>0.000</b>	<b>0.008</b>	0.000	<b>0.000</b>	<b>0.000</b>
1810	0.000	ULS-Set B (auto)/57	-0.007	0.000	0.006	<b>0.000</b>	0.000	0.000	1817	0.000	ULS-Set B (auto)/17	3.241	0.000	0.008	<b>0.000</b>	0.000	0.000
1810	0.424	ULS-Set B (auto)/4	-5.918	0.000	0.000	0.000	<b>0.002</b>	0.000	1817	0.424	ULS-Set B (auto)/4	5.198	0.000	0.000	0.000	<b>0.002</b>	0.000
1810	0.000	ULS-Set B (auto)/4	<b>-5.927</b>	0.000	0.008	0.000	0.000	<b>0.000</b>	1818	0.849	ULS-Set B (auto)/5	<b>7.424</b>	<b>0.000</b>	-0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1811	0.849	ULS-Set B (auto)/29	<b>7.113</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>	1818	0.849	ULS-Set B (auto)/4	-5.373	0.000	<b>-0.008</b>	0.000	0.000	0.000
1811	0.849	ULS-Set B (auto)/4	-4.982	0.000	<b>-0.008</b>	0.000	0.000	0.000	1818	0.000	ULS-Set B (auto)/17	-3.486	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1811	0.000	ULS-Set B (auto)/22	-2.865	0.000	0.006	<b>0.000</b>	0.000	0.000	1818	0.424	ULS-Set B (auto)/4	-5.382	0.000	0.000	0.000	<b>0.002</b>	0.000
1811	0.000	ULS-Set B (auto)/50	-0.264	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1818	0.000	ULS-Set B (auto)/4	<b>-5.390</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
1811	0.424	ULS-Set B (auto)/4	-4.991	0.000	0.000	0.000	<b>0.002</b>	0.000	1819	0.600	ULS-Set B (auto)/20	5.619	0.000	<b>-0.008</b>	0.000	0.000	0.000
1811	0.000	ULS-Set B (auto)/4	<b>-4.999</b>	0.000	0.008	0.000	0.000	<b>0.000</b>	1819	0.000	ULS-Set B (auto)/20	5.619	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1812	0.600	ULS-Set B (auto)/20	2.419	0.000	<b>-0.008</b>	0.000	0.000	0.000	1819	0.000	ULS-Set B (auto)/22	-0.173	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1812	0.000	ULS-Set B (auto)/55	2.182	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1819	0.300	ULS-Set B (auto)/20	<b>5.619</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1812	0.000	ULS-Set B (auto)/26	-0.748	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	1819	0.000	ULS-Set B (auto)/13	<b>-3.053</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1812	0.300	ULS-Set B (auto)/20	<b>2.419</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	1821	0.849	ULS-Set B (auto)/29	<b>7.757</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
1812	0.000	ULS-Set B (auto)/13	<b>-0.826</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	1821	0.849	ULS-Set B (auto)/4	-5.088	0.000	<b>-0.008</b>	0.000	0.000	0.000
1813	0.600	ULS-Set B (auto)/11	0.257	0.000	<b>-0.008</b>	0.000	0.000	0.000	1821	0.000	ULS-Set B (auto)/22	-2.978	0.000	0.006	<b>0.000</b>	0.000	0.000
1813	0.000	ULS-Set B (auto)/55	-0.004	0.000	0.008	<b>0.000</b>	0.000	0.000	1821	0.000	ULS-Set B (auto)/8	-3.325	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1813	0.000	ULS-Set B (auto)/31	0.253	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	1821	0.424	ULS-Set B (auto)/4	-5.096	0.000	0.000	0.000	<b>0.002</b>	0.000
1813	0.300	ULS-Set B (auto)/11	<b>0.257</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	1821	0.000	ULS-Set B (auto)/4	<b>-5.105</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
1813	0.000	ULS-Set B (auto)/14	<b>-0.134</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	1822	0.600	ULS-Set B (auto)/20	3.653	0.000	<b>-0.008</b>	0.000	0.000	0.000
1814	0.849	ULS-Set B (auto)/29	<b>-8.423</b>	0.000	-0.006	0.000	0.000	0.000	1822	0.000	ULS-Set B (auto)/4	-0.071	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1814	0.849	ULS-Set B (auto)/4	5.402	0.000	<b>-0.008</b>	0.000	0.000	0.000	1822	0.000	ULS-Set B (auto)/5	-0.364	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1814	0.000	ULS-Set B	<b>5.419</b>	<b>0.000</b>	<b>0.008</b>	0.000	<b>0.000</b>	<b>0.000</b>	1822	0.300	ULS-Set B	<b>3.653</b>	0.000	0.000	0.000	<b>0.001</b>	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
1822	0.000	(auto)/20							1841	0.000	(auto)/37						
		ULS-Set B (auto)/29	<b>-1.880</b>	0.000	0.006	0.000	0.000	<b>0.000</b>			ULS-Set B (auto)/32	8.443	0.000	0.006	<b>0.000</b>	0.000	0.000
1823	0.600	ULS-Set B (auto)/31	0.326	0.000	<b>-0.008</b>	0.000	0.000	0.000	1841	0.000	ULS-Set B (auto)/10	-1.150	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1823	0.000	ULS-Set B (auto)/36	0.013	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1841	0.424-	ULS-Set B (auto)/37	8.985	0.000	0.000	0.000	<b>0.002</b>	0.000
1823	0.000	ULS-Set B (auto)/5	0.250	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	1841	0.000	ULS-Set B (auto)/26	<b>-4.552</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1823	0.300-	ULS-Set B (auto)/31	<b>0.326</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	1842	0.853	ULS-Set B (auto)/25	<b>-6.042</b>	0.000	-0.006	0.000	0.000	0.000
1823	0.000	ULS-Set B (auto)/13	<b>-0.110</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	1842	0.853	ULS-Set B (auto)/24	4.900	0.000	<b>-0.008</b>	0.000	0.000	0.000
1824	0.000	ULS-Set B (auto)/26	<b>4.927</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>	1842	0.000	ULS-Set B (auto)/9	-2.308	0.000	0.006	<b>0.000</b>	0.000	0.000
1824	0.849	ULS-Set B (auto)/37	<b>-9.448</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000	1842	0.000	ULS-Set B (auto)/37	<b>4.916</b>	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1824	0.000	ULS-Set B (auto)/33	-9.421	0.000	0.006	<b>0.000</b>	0.000	0.000	1842	0.427-	ULS-Set B (auto)/24	4.908	0.000	0.000	0.000	<b>0.002</b>	0.000
1824	0.000	ULS-Set B (auto)/55	1.890	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1843	0.000	ULS-Set B (auto)/48	<b>0.576</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
1824	0.424-	ULS-Set B (auto)/37	-9.440	0.000	0.000	0.000	<b>0.002</b>	0.000	1843	0.600	ULS-Set B (auto)/3	-0.396	0.000	<b>-0.008</b>	0.000	0.000	0.000
1831	0.849	ULS-Set B (auto)/44	<b>8.583</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>	1843	0.000	ULS-Set B (auto)/10	0.047	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1831	0.849	ULS-Set B (auto)/24	-4.676	0.000	<b>-0.008</b>	0.000	0.000	0.000	1843	0.000	ULS-Set B (auto)/26	-0.388	0.000	0.006	<b>0.000</b>	0.000	0.000
1831	0.000	ULS-Set B (auto)/31	8.516	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1843	0.300-	ULS-Set B (auto)/3	<b>-0.396</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1831	0.000	ULS-Set B (auto)/9	-1.778	0.000	0.006	<b>0.000</b>	0.000	0.000	1845	0.600	ULS-Set B (auto)/6	0.283	0.000	<b>-0.008</b>	0.000	0.000	0.000
1831	0.424-	ULS-Set B (auto)/24	-4.684	0.000	0.000	0.000	<b>0.002</b>	0.000	1845	0.000	ULS-Set B (auto)/20	0.030	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1831	0.000	ULS-Set B (auto)/24	<b>-4.692</b>	0.000	0.008	0.000	0.000	<b>0.000</b>	1845	0.000	ULS-Set B (auto)/22	-0.107	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1832	0.600	ULS-Set B (auto)/20	0.821	0.000	<b>-0.008</b>	0.000	0.000	0.000	1845	0.300-	ULS-Set B (auto)/6	<b>0.283</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1832	0.000	ULS-Set B (auto)/32	-0.262	0.000	0.006	<b>0.000</b>	0.000	0.000	1845	0.000	ULS-Set B (auto)/14	<b>-0.179</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1832	0.000	ULS-Set B (auto)/10	0.816	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	1846	0.849	ULS-Set B (auto)/25	<b>-4.422</b>	0.000	-0.006	<b>0.000</b>	0.000	0.000
1832	0.300-	ULS-Set B (auto)/20	<b>0.821</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	1846	0.849	ULS-Set B (auto)/24	3.538	0.000	<b>-0.008</b>	0.000	0.000	0.000
1832	0.000	ULS-Set B (auto)/29	<b>-0.267</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	1846	0.000	ULS-Set B (auto)/24	<b>3.555</b>	<b>0.000</b>	<b>0.008</b>	0.000	<b>0.000</b>	<b>0.000</b>
1833	0.000	ULS-Set B (auto)/48	<b>0.227</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>	1846	0.000	ULS-Set B (auto)/61	1.018	0.000	0.008	<b>0.000</b>	0.000	0.000
1833	0.600	ULS-Set B (auto)/3	-0.318	0.000	<b>-0.008</b>	0.000	0.000	0.000	1846	0.424-	ULS-Set B (auto)/24	3.547	0.000	0.000	0.000	<b>0.002</b>	0.000
1833	0.000	ULS-Set B (auto)/32	0.213	0.000	0.006	<b>0.000</b>	0.000	0.000	1852	0.600	ULS-Set B (auto)/11	0.078	0.000	<b>-0.008</b>	0.000	0.000	0.000
1833	0.000	ULS-Set B (auto)/10	-0.126	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1852	0.000	ULS-Set B (auto)/62	-0.015	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1833	0.300-	ULS-Set B (auto)/3	<b>-0.318</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	1852	0.000	ULS-Set B (auto)/29	0.066	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1834	0.000	ULS-Set B (auto)/26	<b>4.699</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>	1852	0.300-	ULS-Set B (auto)/11	<b>0.078</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1834	0.849	ULS-Set B (auto)/37	<b>-9.047</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000	1852	0.000	ULS-Set B (auto)/18	<b>-0.044</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1834	0.000	ULS-Set B (auto)/32	-8.642	0.000	0.006	<b>0.000</b>	0.000	0.000	1854	0.000	ULS-Set B (auto)/5	<b>0.241</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
1834	0.000	ULS-Set B (auto)/10	1.289	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1854	0.600	ULS-Set B (auto)/4	-0.191	0.000	<b>-0.008</b>	0.000	0.000	0.000
1834	0.424-	ULS-Set B (auto)/37	-9.039	0.000	0.000	0.000	<b>0.002</b>	0.000	1854	0.000	ULS-Set B (auto)/36	-0.122	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1839	0.600	ULS-Set B (auto)/20	3.339	0.000	<b>-0.008</b>	0.000	0.000	0.000	1854	0.000	ULS-Set B (auto)/9	0.077	0.000	0.006	<b>0.000</b>	0.000	0.000
1839	0.000	ULS-Set B (auto)/10	3.195	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1854	0.300-	ULS-Set B (auto)/4	<b>-0.191</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1839	0.000	ULS-Set B (auto)/32	-0.894	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	1964	0.600	ULS-Set B (auto)/28	0.154	0.000	<b>-0.008</b>	0.000	0.000	0.000
1839	0.300-	ULS-Set B (auto)/20	<b>3.339</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	1964	0.000	ULS-Set B (auto)/24	0.054	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1839	0.000	ULS-Set B (auto)/13	<b>-1.110</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	1964	0.000	ULS-Set B (auto)/25	0.092	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1841	0.849	ULS-Set B	<b>8.993</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000	1964	0.300-	ULS-Set B	<b>0.154</b>	0.000	0.000	0.000	<b>0.001</b>	0.000



Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
1964	0.000	(auto)/28 ULS-Set B (auto)/22	<b>-0.024</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	1978	0.600	(auto)/29 ULS-Set B (auto)/21	<b>4.567</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
1965	0.600	ULS-Set B (auto)/28	0.123	0.000	<b>-0.008</b>	0.000	0.000	0.000	1978	0.000	ULS-Set B (auto)/4	-3.180	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1965	0.000	ULS-Set B (auto)/40	-0.016	0.000	0.006	<b>0.000</b>	0.000	0.000	1978	0.000	ULS-Set B (auto)/5	4.247	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1965	0.000	ULS-Set B (auto)/11	0.104	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	1978	0.300-	ULS-Set B (auto)/21	4.567	0.000	0.000	0.000	<b>0.001</b>	0.000
1965	0.300-	ULS-Set B (auto)/28	<b>0.123</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	1978	0.000	ULS-Set B (auto)/13	<b>-3.500</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1965	0.000	ULS-Set B (auto)/9	<b>-0.033</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	1979	0.000	ULS-Set B (auto)/14	<b>6.406</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
1969	0.849	ULS-Set B (auto)/5	<b>7.399</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>	1979	0.924	ULS-Set B (auto)/6	<b>-9.395</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
1969	0.849	ULS-Set B (auto)/4	-5.346	0.000	<b>-0.008</b>	0.000	0.000	0.000	1979	0.000	ULS-Set B (auto)/12	3.886	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1969	0.000	ULS-Set B (auto)/18	-2.674	0.000	0.006	<b>0.000</b>	0.000	0.000	1979	0.000	ULS-Set B (auto)/7	-1.646	0.000	0.006	<b>0.000</b>	0.000	0.000
1969	0.000	ULS-Set B (auto)/17	-3.465	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1979	0.411-	ULS-Set B (auto)/6	-9.385	0.000	0.001	0.000	<b>0.002</b>	0.000
1969	0.424-	ULS-Set B (auto)/4	-5.354	0.000	0.000	0.000	<b>0.002</b>	0.000	1980	0.849	ULS-Set B (auto)/48	<b>8.939</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
1969	0.000	ULS-Set B (auto)/4	<b>-5.362</b>	0.000	0.008	0.000	0.000	<b>0.000</b>	1980	0.849	ULS-Set B (auto)/3	-6.322	0.000	<b>-0.008</b>	0.000	0.000	0.000
1972	0.849	ULS-Set B (auto)/29	<b>8.995</b>	<b>0.000</b>	-0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	1980	0.000	ULS-Set B (auto)/57	0.246	0.000	0.006	<b>0.000</b>	0.000	0.000
1972	0.849	ULS-Set B (auto)/4	-5.161	0.000	<b>-0.008</b>	0.000	0.000	0.000	1980	0.000	ULS-Set B (auto)/12	-3.472	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1972	0.000	ULS-Set B (auto)/20	-3.109	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1980	0.424-	ULS-Set B (auto)/3	-6.330	0.000	0.000	0.000	<b>0.002</b>	0.000
1972	0.424-	ULS-Set B (auto)/4	-5.169	0.000	0.000	0.000	<b>0.002</b>	0.000	1980	0.000	ULS-Set B (auto)/3	<b>-6.339</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
1972	0.000	ULS-Set B (auto)/4	<b>-5.177</b>	0.000	0.008	0.000	0.000	<b>0.000</b>	1982	0.600	ULS-Set B (auto)/21	0.185	0.000	<b>-0.008</b>	0.000	0.000	0.000
1973	0.721	ULS-Set B (auto)/29	<b>-7.716</b>	0.000	-0.006	0.000	0.000	0.000	1982	0.000	ULS-Set B (auto)/29	0.147	0.000	0.006	<b>0.000</b>	0.000	0.000
1973	0.721	ULS-Set B (auto)/4	4.073	0.000	<b>-0.008</b>	0.000	0.000	0.000	1982	0.000	ULS-Set B (auto)/62	-0.023	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1973	0.000	ULS-Set B (auto)/4	<b>4.084</b>	<b>0.000</b>	<b>0.008</b>	0.000	<b>0.000</b>	<b>0.000</b>	1982	0.300-	ULS-Set B (auto)/21	<b>0.185</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1973	0.000	ULS-Set B (auto)/31	-7.532	0.000	0.008	<b>0.000</b>	0.000	0.000	1982	0.000	ULS-Set B (auto)/13	<b>-0.122</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1973	0.000	ULS-Set B (auto)/9	2.313	0.000	0.006	<b>0.000</b>	0.000	0.000	1984	0.849	ULS-Set B (auto)/4	<b>2.665</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
1973	0.309-	ULS-Set B (auto)/4	4.079	0.000	0.001	0.000	<b>0.001</b>	0.000	1984	0.000	ULS-Set B (auto)/20	-2.007	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1974	0.695	ULS-Set B (auto)/13	<b>3.002</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>	1984	0.000	ULS-Set B (auto)/29	-1.443	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1974	0.695	ULS-Set B (auto)/21	-4.845	0.000	<b>-0.008</b>	0.000	0.000	0.000	1984	0.424-	ULS-Set B (auto)/4	2.657	0.000	0.000	0.000	<b>0.002</b>	0.000
1974	0.000	ULS-Set B (auto)/31	-4.612	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1984	0.000	ULS-Set B (auto)/5	<b>-2.756</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1974	0.000	ULS-Set B (auto)/9	-0.217	0.000	0.006	<b>0.000</b>	0.000	0.000	1987	0.600	ULS-Set B (auto)/20	1.109	0.000	<b>-0.008</b>	0.000	0.000	0.000
1974	0.347-	ULS-Set B (auto)/21	-4.850	0.000	0.000	0.000	<b>0.001</b>	0.000	1987	0.000	ULS-Set B (auto)/4	0.189	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1974	0.000	ULS-Set B (auto)/21	<b>-4.855</b>	0.000	0.008	0.000	0.000	<b>0.000</b>	1987	0.000	ULS-Set B (auto)/5	-0.324	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1975	0.000	ULS-Set B (auto)/25	<b>5.746</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>	1987	0.300-	ULS-Set B (auto)/20	<b>1.109</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1975	0.750	ULS-Set B (auto)/24	<b>-5.373</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000	1987	0.000	ULS-Set B (auto)/29	<b>-0.757</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1975	0.000	ULS-Set B (auto)/9	4.637	0.000	0.006	<b>0.000</b>	0.000	0.000	1988	0.849	ULS-Set B (auto)/44	<b>9.523</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
1975	0.000	ULS-Set B (auto)/31	2.756	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	1988	0.849	ULS-Set B (auto)/24	-5.154	0.000	<b>-0.008</b>	0.000	0.000	0.000
1975	0.321-	ULS-Set B (auto)/24	-5.366	0.000	0.001	0.000	<b>0.002</b>	0.000	1988	0.000	ULS-Set B (auto)/29	9.475	0.000	0.006	<b>0.000</b>	0.000	0.000
1976	0.600	ULS-Set B (auto)/20	3.427	0.000	<b>-0.008</b>	0.000	0.000	0.000	1988	0.000	ULS-Set B (auto)/20	-2.631	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1976	0.000	ULS-Set B (auto)/62	0.694	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	1988	0.424-	ULS-Set B (auto)/24	-5.163	0.000	0.000	0.000	<b>0.002</b>	0.000
1976	0.300-	ULS-Set B (auto)/20	<b>3.427</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	1988	0.000	ULS-Set B (auto)/24	<b>-5.171</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
1976	0.000	ULS-Set B	<b>-1.409</b>	0.000	0.006	<b>0.000</b>	0.000	<b>0.000</b>	1989	0.781	ULS-Set B	<b>-8.938</b>	0.000	-0.006	0.000	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
1989	0.781	(auto)/44						
		ULS-Set B (auto)/24	4.567	0.000	<b>-0.008</b>	0.000	0.000	0.000
1989	0.000	ULS-Set B (auto)/24	<b>4.580</b>	<b>0.000</b>	<b>0.008</b>	0.000	<b>0.000</b>	<b>0.000</b>
1989	0.000	ULS-Set B (auto)/9	2.333	0.000	0.006	<b>0.000</b>	0.000	0.000
1989	0.000	ULS-Set B (auto)/31	-8.840	0.000	0.008	<b>0.000</b>	0.000	0.000
1989	0.335-	ULS-Set B (auto)/24	4.574	0.000	0.001	0.000	<b>0.002</b>	0.000
1990	0.650	ULS-Set B (auto)/25	<b>5.494</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
1990	0.650	ULS-Set B (auto)/24	-3.892	0.000	<b>-0.008</b>	0.000	0.000	0.000
1990	0.000	ULS-Set B (auto)/40	0.529	0.000	0.006	<b>0.000</b>	0.000	0.000
1990	0.000	ULS-Set B (auto)/11	4.563	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1990	0.325-	ULS-Set B (auto)/24	-3.896	0.000	0.000	0.000	<b>0.001</b>	0.000
1990	0.000	ULS-Set B (auto)/24	<b>-3.899</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
1991	0.000	ULS-Set B (auto)/2	<b>3.794</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
1991	0.750	ULS-Set B (auto)/1	<b>-4.594</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
1991	0.000	ULS-Set B (auto)/63	-2.004	0.000	0.006	<b>0.000</b>	0.000	0.000
1991	0.000	ULS-Set B (auto)/34	-3.283	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1991	0.321-	ULS-Set B (auto)/1	-4.587	0.000	0.001	0.000	<b>0.002</b>	0.000
1992	0.849	ULS-Set B (auto)/9	<b>2.927</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
1992	0.849	ULS-Set B (auto)/4	-2.354	0.000	<b>-0.008</b>	0.000	0.000	0.000
1992	0.000	ULS-Set B (auto)/10	2.730	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1992	0.000	ULS-Set B (auto)/32	-0.882	0.000	0.006	<b>0.000</b>	0.000	0.000
1992	0.424-	ULS-Set B (auto)/4	-2.362	0.000	0.000	0.000	<b>0.002</b>	0.000
1992	0.000	ULS-Set B (auto)/4	<b>-2.371</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
1993	0.849	ULS-Set B (auto)/9	<b>-2.836</b>	0.000	-0.006	0.000	0.000	0.000
1993	0.849	ULS-Set B (auto)/4	2.347	0.000	<b>-0.008</b>	0.000	0.000	0.000
1993	0.000	ULS-Set B (auto)/4	<b>2.363</b>	<b>0.000</b>	<b>0.008</b>	0.000	<b>0.000</b>	<b>0.000</b>
1993	0.000	ULS-Set B (auto)/36	1.710	0.000	0.008	<b>0.000</b>	0.000	0.000
1993	0.000	ULS-Set B (auto)/29	0.526	0.000	0.006	<b>0.000</b>	0.000	0.000
1993	0.424-	ULS-Set B (auto)/4	2.355	0.000	0.000	0.000	<b>0.002</b>	0.000
1995	0.600	ULS-Set B (auto)/29	<b>-0.718</b>	0.000	-0.006	0.000	0.000	0.000
1995	0.600	ULS-Set B (auto)/20	0.903	0.000	<b>-0.008</b>	0.000	0.000	0.000
1995	0.000	ULS-Set B (auto)/20	<b>0.903</b>	<b>0.000</b>	<b>0.008</b>	0.000	<b>0.000</b>	<b>0.000</b>
1995	0.000	ULS-Set B (auto)/4	-0.137	0.000	0.008	<b>0.000</b>	0.000	0.000
1995	0.000	ULS-Set B (auto)/5	-0.383	0.000	0.006	<b>0.000</b>	0.000	0.000
1995	0.300-	ULS-Set B (auto)/20	0.903	0.000	0.000	0.000	<b>0.001</b>	0.000
1996	0.600	ULS-Set B (auto)/20	1.510	0.000	<b>-0.008</b>	0.000	<b>0.000</b>	0.000
1996	0.000	ULS-Set B (auto)/20	1.510	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1996	0.300-	ULS-Set B (auto)/20	<b>1.510</b>	<b>0.000</b>	0.000	0.000	<b>0.001</b>	<b>0.000</b>
1996	0.000	ULS-Set B (auto)/20	<b>-0.726</b>	0.000	0.006	<b>0.000</b>	0.000	<b>0.000</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/13						
1997	0.600	ULS-Set B (auto)/20	2.417	0.000	<b>-0.008</b>	0.000	0.000	0.000
1997	0.000	ULS-Set B (auto)/55	2.198	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1997	0.000	ULS-Set B (auto)/54	0.035	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1997	0.300-	ULS-Set B (auto)/20	<b>2.417</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1997	0.000	ULS-Set B (auto)/13	<b>-0.838</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1998	0.600	ULS-Set B (auto)/20	3.643	0.000	<b>-0.008</b>	0.000	0.000	0.000
1998	0.000	ULS-Set B (auto)/22	0.443	0.000	0.006	<b>0.000</b>	0.000	0.000
1998	0.000	ULS-Set B (auto)/45	-0.616	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1998	0.300-	ULS-Set B (auto)/20	<b>3.643</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1998	0.000	ULS-Set B (auto)/29	<b>-1.982</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
1999	0.600	ULS-Set B (auto)/10	0.787	0.000	<b>-0.008</b>	0.000	0.000	0.000
1999	0.000	ULS-Set B (auto)/45	0.077	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
1999	0.000	ULS-Set B (auto)/9	0.631	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1999	0.300-	ULS-Set B (auto)/10	<b>0.787</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
1999	0.000	ULS-Set B (auto)/32	<b>-0.258</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2000	0.600	ULS-Set B (auto)/20	0.899	0.000	<b>-0.008</b>	0.000	0.000	0.000
2000	0.000	ULS-Set B (auto)/40	0.845	0.000	0.006	<b>0.000</b>	0.000	0.000
2000	0.000	ULS-Set B (auto)/24	-0.228	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2000	0.300-	ULS-Set B (auto)/20	<b>0.899</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2000	0.000	ULS-Set B (auto)/29	<b>-0.631</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2001	0.600	ULS-Set B (auto)/20	1.505	0.000	<b>-0.008</b>	0.000	0.000	0.000
2001	0.000	ULS-Set B (auto)/42	1.106	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2001	0.000	ULS-Set B (auto)/29	-0.138	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2001	0.300-	ULS-Set B (auto)/20	<b>1.505</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2001	0.000	ULS-Set B (auto)/13	<b>-0.807</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2002	0.600	ULS-Set B (auto)/20	2.409	0.000	<b>-0.008</b>	0.000	0.000	0.000
2002	0.000	ULS-Set B (auto)/3	-0.722	0.000	0.008	<b>0.000</b>	0.000	0.000
2002	0.000	ULS-Set B (auto)/1	0.457	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2002	0.300-	ULS-Set B (auto)/20	<b>2.409</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2002	0.000	ULS-Set B (auto)/13	<b>-0.916</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2003	0.600	ULS-Set B (auto)/20	3.643	0.000	<b>-0.008</b>	0.000	0.000	0.000
2003	0.000	ULS-Set B (auto)/5	-0.312	0.000	0.006	<b>0.000</b>	0.000	0.000
2003	0.000	ULS-Set B (auto)/8	0.056	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2003	0.300-	ULS-Set B (auto)/20	<b>3.643</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2003	0.000	ULS-Set B (auto)/29	<b>-1.904</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2004	0.600	ULS-Set B (auto)/10	0.761	0.000	<b>-0.008</b>	0.000	0.000	0.000
2004	0.000	ULS-Set B (auto)/24	-0.194	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2004	0.000	ULS-Set B (auto)/24	0.345	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/25						
2004	0.300-	ULS-Set B (auto)/10	<b>0.761</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2004	0.000	ULS-Set B (auto)/26	<b>-0.215</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2006	0.600	ULS-Set B (auto)/20	1.496	0.000	<b>-0.008</b>	0.000	0.000	0.000
2006	0.000	ULS-Set B (auto)/8	-0.332	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2006	0.000	ULS-Set B (auto)/5	0.745	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2006	0.300-	ULS-Set B (auto)/20	<b>1.496</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2006	0.000	ULS-Set B (auto)/13	<b>-1.011</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2007	0.600	ULS-Set B (auto)/20	2.396	0.000	<b>-0.008</b>	0.000	0.000	0.000
2007	0.000	ULS-Set B (auto)/3	-0.930	0.000	0.008	<b>0.000</b>	0.000	0.000
2007	0.000	ULS-Set B (auto)/1	0.718	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2007	0.300-	ULS-Set B (auto)/20	<b>2.396</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2007	0.000	ULS-Set B (auto)/13	<b>-1.113</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2008	0.600	ULS-Set B (auto)/20	3.629	0.000	<b>-0.008</b>	0.000	0.000	0.000
2008	0.000	ULS-Set B (auto)/22	0.338	0.000	0.006	<b>0.000</b>	0.000	0.000
2008	0.000	ULS-Set B (auto)/31	-1.329	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2008	0.300-	ULS-Set B (auto)/20	<b>3.629</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2008	0.000	ULS-Set B (auto)/29	<b>-1.673</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2009	0.600	ULS-Set B (auto)/10	2.781	0.000	<b>-0.008</b>	0.000	0.000	0.000
2009	0.000	ULS-Set B (auto)/25	-0.514	0.000	0.006	<b>0.000</b>	0.000	0.000
2009	0.000	ULS-Set B (auto)/24	-0.413	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2009	0.300-	ULS-Set B (auto)/10	<b>2.781</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2009	0.000	ULS-Set B (auto)/32	<b>-2.012</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2010	0.600	ULS-Set B (auto)/4	<b>-3.628</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
2010	0.000	ULS-Set B (auto)/5	<b>4.545</b>	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2010	0.300-	ULS-Set B (auto)/4	-3.628	0.000	0.000	<b>0.000</b>	<b>0.001</b>	0.000
2010	0.000	ULS-Set B (auto)/4	-3.628	0.000	<b>0.008</b>	0.000	0.000	<b>0.000</b>
2011	0.000	ULS-Set B (auto)/5	<b>4.259</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
2011	0.600	ULS-Set B (auto)/4	-3.425	0.000	<b>-0.008</b>	0.000	0.000	0.000
2011	0.000	ULS-Set B (auto)/15	1.355	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2011	0.000	ULS-Set B (auto)/18	-1.599	0.000	0.006	<b>0.000</b>	0.000	0.000
2011	0.300-	ULS-Set B (auto)/4	<b>-3.425</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2012	0.600	ULS-Set B (auto)/21	5.815	0.000	<b>-0.008</b>	0.000	0.000	0.000
2012	0.000	ULS-Set B (auto)/10	2.148	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2012	0.000	ULS-Set B (auto)/26	-4.280	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2012	0.300-	ULS-Set B (auto)/21	<b>5.815</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2012	0.000	ULS-Set B (auto)/13	<b>-4.459</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2013	0.600	ULS-Set B (auto)/21	5.626	0.000	<b>-0.008</b>	0.000	0.000	0.000
2013	0.000	ULS-Set B (auto)/21	1.709	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/42						
2013	0.000	ULS-Set B (auto)/5	5.386	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2013	0.300-	ULS-Set B (auto)/21	<b>5.626</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2013	0.000	ULS-Set B (auto)/13	<b>-4.314</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2014	0.600	ULS-Set B (auto)/21	4.873	0.000	<b>-0.008</b>	0.000	0.000	0.000
2014	0.000	ULS-Set B (auto)/8	-1.689	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2014	0.000	ULS-Set B (auto)/5	4.586	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2014	0.300-	ULS-Set B (auto)/21	<b>4.873</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2014	0.000	ULS-Set B (auto)/13	<b>-3.749</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2015	0.600	ULS-Set B (auto)/21	4.881	0.000	<b>-0.008</b>	0.000	0.000	0.000
2015	0.000	ULS-Set B (auto)/21	4.881	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2015	0.000	ULS-Set B (auto)/22	-1.439	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2015	0.300-	ULS-Set B (auto)/21	<b>4.881</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2015	0.000	ULS-Set B (auto)/13	<b>-4.243</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2016	0.600	ULS-Set B (auto)/21	4.763	0.000	<b>-0.008</b>	0.000	0.000	0.000
2016	0.000	ULS-Set B (auto)/4	-3.881	0.000	0.008	<b>0.000</b>	0.000	0.000
2016	0.000	ULS-Set B (auto)/1	4.523	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2016	0.300-	ULS-Set B (auto)/21	<b>4.763</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2016	0.000	ULS-Set B (auto)/13	<b>-4.152</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2017	0.600	ULS-Set B (auto)/21	4.314	0.000	<b>-0.008</b>	0.000	0.000	0.000
2017	0.000	ULS-Set B (auto)/3	-3.663	0.000	0.008	<b>0.000</b>	0.000	0.000
2017	0.000	ULS-Set B (auto)/1	4.053	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2017	0.300-	ULS-Set B (auto)/21	<b>4.314</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2017	0.000	ULS-Set B (auto)/13	<b>-3.810</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2018	0.600	ULS-Set B (auto)/20	5.731	0.000	<b>-0.008</b>	0.000	0.000	0.000
2018	0.000	ULS-Set B (auto)/36	-1.396	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2018	0.000	ULS-Set B (auto)/9	5.307	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2018	0.300-	ULS-Set B (auto)/20	<b>5.731</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2018	0.000	ULS-Set B (auto)/13	<b>-3.325</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2019	0.600	ULS-Set B (auto)/20	5.800	0.000	<b>-0.008</b>	0.000	0.000	0.000
2019	0.000	ULS-Set B (auto)/8	-1.363	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2019	0.000	ULS-Set B (auto)/5	2.567	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2019	0.300-	ULS-Set B (auto)/20	<b>5.800</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2019	0.000	ULS-Set B (auto)/13	<b>-3.265</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2020	0.600	ULS-Set B (auto)/20	5.698	0.000	<b>-0.008</b>	0.000	0.000	0.000
2020	0.000	ULS-Set B (auto)/4	-2.600	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2020	0.000	ULS-Set B (auto)/29	-0.429	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2020	0.300-	ULS-Set B (auto)/20	<b>5.698</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
2020	0.000	ULS-Set B (auto)/20	<b>-3.045</b>	0.000	0.006	0.000	0.000	<b>0.000</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/13									(auto)/4						
2021	0.600	ULS-Set B (auto)/20	3.412	0.000	<b>-0.008</b>	0.000	0.000	0.000	3176	0.000	ULS-Set B (auto)/5	<b>-8.982</b>	0.000	0.006	<b>0.000</b>	0.000	<b>0.000</b>
2021	0.000	ULS-Set B (auto)/9	3.157	0.000	0.006	<b>0.000</b>	0.000	0.000	3178	0.603	ULS-Set B (auto)/4	<b>11.837</b>	0.000	<b>-0.008</b>	0.000	<b>0.000</b>	0.000
2021	0.000	ULS-Set B (auto)/45	-0.281	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	3178	0.000	ULS-Set B (auto)/8	9.056	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2021	0.300-	ULS-Set B (auto)/20	<b>3.412</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	3178	0.302-	ULS-Set B (auto)/4	11.836	<b>0.000</b>	0.000	0.000	<b>0.001</b>	<b>0.000</b>
2021	0.000	ULS-Set B (auto)/13	<b>-1.166</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	3178	0.000	ULS-Set B (auto)/5	<b>-15.486</b>	0.000	0.006	<b>0.000</b>	0.000	<b>0.000</b>
2022	0.600	ULS-Set B (auto)/20	3.377	0.000	<b>-0.008</b>	0.000	0.000	0.000	3180	0.603	ULS-Set B (auto)/6	<b>3.394</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
2022	0.000	ULS-Set B (auto)/27	0.499	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	3180	0.000	ULS-Set B (auto)/8	-0.180	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2022	0.000	ULS-Set B (auto)/39	-0.322	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	3180	0.000	ULS-Set B (auto)/5	2.757	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2022	0.300-	ULS-Set B (auto)/20	<b>3.377</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	3180	0.302-	ULS-Set B (auto)/6	3.393	0.000	0.000	0.000	<b>0.001</b>	0.000
2022	0.000	ULS-Set B (auto)/29	<b>-1.126</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	3180	0.000	ULS-Set B (auto)/14	<b>-2.415</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2023	0.600	ULS-Set B (auto)/20	3.409	0.000	<b>-0.008</b>	0.000	0.000	0.000	3182	0.603	ULS-Set B (auto)/6	<b>2.781</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
2023	0.000	ULS-Set B (auto)/24	-0.606	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	3182	0.000	ULS-Set B (auto)/10	0.763	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2023	0.000	ULS-Set B (auto)/25	0.063	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	3182	0.000	ULS-Set B (auto)/26	-1.355	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2023	0.300-	ULS-Set B (auto)/20	<b>3.409</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	3182	0.302-	ULS-Set B (auto)/6	2.780	0.000	0.000	0.000	<b>0.001</b>	0.000
2023	0.000	ULS-Set B (auto)/29	<b>-1.482</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	3182	0.000	ULS-Set B (auto)/14	<b>-1.955</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2188	0.600	ULS-Set B (auto)/20	3.380	0.000	<b>-0.008</b>	0.000	0.000	0.000	3184	0.603	ULS-Set B (auto)/4	<b>6.919</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
2188	0.000	ULS-Set B (auto)/34	-4.010	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	3184	0.000	ULS-Set B (auto)/40	0.020	0.000	0.006	<b>0.000</b>	0.000	0.000
2188	0.000	ULS-Set B (auto)/63	3.371	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	3184	0.000	ULS-Set B (auto)/24	6.873	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2188	0.300-	ULS-Set B (auto)/20	<b>3.380</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	3184	0.302-	ULS-Set B (auto)/4	6.918	0.000	0.000	0.000	<b>0.001</b>	0.000
2188	0.000	ULS-Set B (auto)/29	<b>-4.019</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	3184	0.000	ULS-Set B (auto)/5	<b>-9.912</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
2189	0.000	ULS-Set B (auto)/5	<b>0.415</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>	3186	0.603	ULS-Set B (auto)/4	<b>7.815</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
2189	0.600	ULS-Set B (auto)/4	-0.412	0.000	<b>-0.008</b>	0.000	0.000	0.000	3186	0.000	ULS-Set B (auto)/12	2.814	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2189	0.000	ULS-Set B (auto)/9	0.000	0.000	0.006	<b>0.000</b>	0.000	0.000	3186	0.000	ULS-Set B (auto)/32	-9.655	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2189	0.000	ULS-Set B (auto)/31	0.286	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	3186	0.302-	ULS-Set B (auto)/4	7.814	0.000	0.000	0.000	<b>0.001</b>	0.000
2189	0.300-	ULS-Set B (auto)/4	<b>-0.412</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	3186	0.000	ULS-Set B (auto)/5	<b>-11.143</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
3172	0.603	ULS-Set B (auto)/3	<b>1.326</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000	3188	0.603	ULS-Set B (auto)/6	<b>3.124</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3172	0.000	ULS-Set B (auto)/51	0.430	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	3188	0.000	ULS-Set B (auto)/4	-2.472	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3172	0.000	ULS-Set B (auto)/18	0.675	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	3188	0.000	ULS-Set B (auto)/5	2.880	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3172	0.302-	ULS-Set B (auto)/3	1.325	0.000	0.000	0.000	<b>0.001</b>	0.000	3188	0.302-	ULS-Set B (auto)/6	3.123	0.000	0.000	0.000	<b>0.001</b>	0.000
3172	0.000	ULS-Set B (auto)/32	<b>-2.453</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	3188	0.000	ULS-Set B (auto)/14	<b>-2.714</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
3174	0.603	ULS-Set B (auto)/3	<b>1.855</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000	3190	0.603	ULS-Set B (auto)/6	<b>2.683</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3174	0.000	ULS-Set B (auto)/2	1.663	0.000	0.006	<b>0.000</b>	0.000	0.000	3190	0.000	ULS-Set B (auto)/3	-2.376	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3174	0.000	ULS-Set B (auto)/1	-2.639	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	3190	0.000	ULS-Set B (auto)/7	1.446	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3174	0.302-	ULS-Set B (auto)/3	1.854	0.000	0.000	0.000	<b>0.001</b>	0.000	3190	0.302-	ULS-Set B (auto)/6	2.682	0.000	0.000	0.000	<b>0.001</b>	0.000
3174	0.000	ULS-Set B (auto)/32	<b>-3.126</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	3190	0.000	ULS-Set B (auto)/14	<b>-2.385</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
3176	0.603	ULS-Set B (auto)/4	<b>7.448</b>	0.000	<b>-0.008</b>	0.000	<b>0.000</b>	0.000	3192	0.603	ULS-Set B (auto)/24	<b>6.115</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3176	0.000	ULS-Set B (auto)/4	7.446	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	3192	0.000	ULS-Set B (auto)/21	-9.240	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3176	0.302-	ULS-Set B	7.447	<b>0.000</b>	0.000	0.000	<b>0.001</b>	<b>0.000</b>	3192	0.000	ULS-Set B	2.104	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/22						
3192	0.302-	ULS-Set B (auto)/24	6.114	0.000	0.000	0.000	<b>0.001</b>	0.000
3192	0.000	ULS-Set B (auto)/25	<b>-9.597</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
3194	0.603	ULS-Set B (auto)/24	<b>6.588</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3194	0.000	ULS-Set B (auto)/8	3.979	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3194	0.000	ULS-Set B (auto)/5	-9.771	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3194	0.302-	ULS-Set B (auto)/24	6.588	0.000	0.000	0.000	<b>0.001</b>	0.000
3194	0.000	ULS-Set B (auto)/25	<b>-10.284</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
3196	0.603	ULS-Set B (auto)/21	<b>3.689</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3196	0.000	ULS-Set B (auto)/8	-0.034	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3196	0.000	ULS-Set B (auto)/5	2.604	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3196	0.302-	ULS-Set B (auto)/21	3.688	0.000	0.000	0.000	<b>0.001</b>	0.000
3196	0.000	ULS-Set B (auto)/13	<b>-2.286</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
3198	0.603	ULS-Set B (auto)/21	<b>3.338</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3198	0.000	ULS-Set B (auto)/36	0.285	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3198	0.000	ULS-Set B (auto)/9	2.070	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3198	0.302-	ULS-Set B (auto)/21	3.338	0.000	0.000	0.000	<b>0.001</b>	0.000
3198	0.000	ULS-Set B (auto)/13	<b>-2.042</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
3200	0.603	ULS-Set B (auto)/4	<b>6.425</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3200	0.000	ULS-Set B (auto)/29	-6.470	0.000	0.006	<b>0.000</b>	0.000	0.000
3200	0.000	ULS-Set B (auto)/62	2.384	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3200	0.302-	ULS-Set B (auto)/4	6.424	0.000	0.000	0.000	<b>0.001</b>	0.000
3200	0.000	ULS-Set B (auto)/5	<b>-7.649</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
3202	0.603	ULS-Set B (auto)/4	<b>6.771</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3202	0.000	ULS-Set B (auto)/24	6.430	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3202	0.000	ULS-Set B (auto)/25	-7.746	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3202	0.302-	ULS-Set B (auto)/4	6.770	0.000	0.000	0.000	<b>0.001</b>	0.000
3202	0.000	ULS-Set B (auto)/5	<b>-8.085</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
3204	0.603	ULS-Set B (auto)/42	<b>3.164</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3204	0.000	ULS-Set B (auto)/25	0.493	0.000	0.006	<b>0.000</b>	0.000	0.000
3204	0.000	ULS-Set B (auto)/24	0.043	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3204	0.302-	ULS-Set B (auto)/42	3.163	0.000	0.000	0.000	<b>0.001</b>	0.000
3204	0.000	ULS-Set B (auto)/13	<b>-0.856</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
3206	0.603	ULS-Set B (auto)/42	<b>3.150</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3206	0.000	ULS-Set B (auto)/9	1.760	0.000	0.006	<b>0.000</b>	0.000	0.000
3206	0.000	ULS-Set B (auto)/45	1.201	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3206	0.302-	ULS-Set B (auto)/42	3.150	0.000	0.000	0.000	<b>0.001</b>	0.000
3206	0.000	ULS-Set B (auto)/13	<b>-0.653</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
3208	0.603	ULS-Set B	<b>6.113</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/4						
3208	0.000	ULS-Set B (auto)/4	6.111	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3208	0.000	ULS-Set B (auto)/9	-0.485	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3208	0.302-	ULS-Set B (auto)/4	6.112	0.000	0.000	0.000	<b>0.001</b>	0.000
3208	0.000	ULS-Set B (auto)/5	<b>-7.638</b>	0.000	0.006	0.000	0.000	<b>0.000</b>
3210	0.603	ULS-Set B (auto)/4	<b>6.643</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3210	0.000	ULS-Set B (auto)/8	5.610	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3210	0.302-	ULS-Set B (auto)/4	6.643	0.000	0.000	0.000	<b>0.001</b>	0.000
3210	0.000	ULS-Set B (auto)/5	<b>-8.266</b>	0.000	0.006	<b>0.000</b>	0.000	<b>0.000</b>
3214	0.801	ULS-Set B (auto)/25	<b>3.404</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
3214	0.801	ULS-Set B (auto)/24	-2.885	0.000	<b>-0.008</b>	0.000	0.000	0.000
3214	0.000	ULS-Set B (auto)/12	-0.441	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3214	0.000	ULS-Set B (auto)/32	1.770	0.000	0.006	<b>0.000</b>	0.000	0.000
3214	0.400-	ULS-Set B (auto)/24	-2.892	0.000	0.000	0.000	<b>0.002</b>	0.000
3214	0.000	ULS-Set B (auto)/24	<b>-2.900</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
3216	0.000	ULS-Set B (auto)/2	<b>7.126</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
3216	0.700	ULS-Set B (auto)/1	<b>-9.892</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3216	0.000	ULS-Set B (auto)/5	-9.792	0.000	0.006	<b>0.000</b>	0.000	0.000
3216	0.000	ULS-Set B (auto)/8	4.369	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3216	0.300-	ULS-Set B (auto)/1	-9.886	0.000	0.001	0.000	<b>0.001</b>	0.000
3217	0.646	ULS-Set B (auto)/48	<b>14.291</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
3217	0.646	ULS-Set B (auto)/3	-9.859	0.000	<b>-0.008</b>	0.000	0.000	0.000
3217	0.000	ULS-Set B (auto)/4	-9.626	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3217	0.000	ULS-Set B (auto)/5	14.047	0.000	0.006	<b>0.000</b>	0.000	0.000
3217	0.323-	ULS-Set B (auto)/3	-9.862	0.000	0.000	0.000	<b>0.001</b>	0.000
3217	0.000	ULS-Set B (auto)/3	<b>-9.865</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
3218	0.000	ULS-Set B (auto)/5	<b>21.778</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
3218	0.700	ULS-Set B (auto)/4	<b>-16.528</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3218	0.000	ULS-Set B (auto)/18	-4.721	0.000	0.006	<b>0.000</b>	0.000	0.000
3218	0.000	ULS-Set B (auto)/17	-12.074	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3218	0.300-	ULS-Set B (auto)/4	-16.522	0.000	0.001	0.000	<b>0.001</b>	0.000
3219	0.646	ULS-Set B (auto)/5	<b>18.782</b>	<b>0.000</b>	-0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3219	0.646	ULS-Set B (auto)/4	-16.990	0.000	<b>-0.008</b>	0.000	0.000	0.000
3219	0.000	ULS-Set B (auto)/8	-14.094	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3219	0.323-	ULS-Set B (auto)/4	-16.993	0.000	0.000	0.000	<b>0.001</b>	0.000
3219	0.000	ULS-Set B (auto)/4	<b>-16.997</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
3220	0.000	ULS-Set B (auto)/18	<b>3.559</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
3220	0.700	ULS-Set B (auto)/11	<b>-7.266</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3220	0.000	ULS-Set B	-3.665	0.000	0.006	<b>0.000</b>	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
3220	0.000	(auto)/5						
		ULS-Set B (auto)/17	-3.124	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3220	0.300-	ULS-Set B (auto)/11	-7.260	0.000	0.001	0.000	<b>0.001</b>	0.000
3221	0.646	ULS-Set B (auto)/5	<b>11.163</b>	<b>0.000</b>	-0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3221	0.646	ULS-Set B (auto)/4	-10.389	0.000	<b>-0.008</b>	0.000	0.000	0.000
3221	0.000	ULS-Set B (auto)/8	-8.822	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3221	0.323-	ULS-Set B (auto)/4	-10.393	0.000	0.000	0.000	<b>0.001</b>	0.000
3221	0.000	ULS-Set B (auto)/4	<b>-10.396</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
3222	0.700	ULS-Set B (auto)/4	<b>-16.834</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3222	0.000	ULS-Set B (auto)/5	<b>21.299</b>	0.000	0.006	<b>0.000</b>	0.000	0.000
3222	0.000	ULS-Set B (auto)/8	-12.670	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3222	0.300-	ULS-Set B (auto)/4	-16.829	0.000	0.001	0.000	<b>0.001</b>	0.000
3223	0.646	ULS-Set B (auto)/5	<b>15.140</b>	<b>0.000</b>	-0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3223	0.646	ULS-Set B (auto)/4	-13.854	0.000	<b>-0.008</b>	0.000	0.000	0.000
3223	0.000	ULS-Set B (auto)/8	-12.157	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3223	0.323-	ULS-Set B (auto)/4	-13.858	0.000	0.000	0.000	<b>0.001</b>	0.000
3223	0.000	ULS-Set B (auto)/4	<b>-13.861</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
3224	0.000	ULS-Set B (auto)/18	<b>3.659</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
3224	0.700	ULS-Set B (auto)/41	<b>-6.701</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3224	0.000	ULS-Set B (auto)/25	-1.806	0.000	0.006	<b>0.000</b>	0.000	0.000
3224	0.000	ULS-Set B (auto)/17	-4.189	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3224	0.300-	ULS-Set B (auto)/41	-6.695	0.000	0.001	0.000	<b>0.001</b>	0.000
3225	0.646	ULS-Set B (auto)/5	<b>9.740</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
3225	0.646	ULS-Set B (auto)/4	-8.998	0.000	<b>-0.008</b>	0.000	0.000	0.000
3225	0.000	ULS-Set B (auto)/17	-7.837	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3225	0.000	ULS-Set B (auto)/25	9.615	0.000	0.006	<b>0.000</b>	0.000	0.000
3225	0.323-	ULS-Set B (auto)/4	-9.002	0.000	0.000	0.000	<b>0.001</b>	0.000
3225	0.000	ULS-Set B (auto)/4	<b>-9.005</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
3226	0.700	ULS-Set B (auto)/24	<b>-15.988</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3226	0.000	ULS-Set B (auto)/25	<b>20.523</b>	0.000	0.006	<b>0.000</b>	0.000	0.000
3226	0.000	ULS-Set B (auto)/17	-12.265	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3226	0.300-	ULS-Set B (auto)/24	-15.982	0.000	0.001	0.000	<b>0.001</b>	0.000
3227	0.646	ULS-Set B (auto)/5	<b>13.549</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
3227	0.646	ULS-Set B (auto)/4	-13.001	0.000	<b>-0.008</b>	0.000	0.000	0.000
3227	0.000	ULS-Set B (auto)/17	-11.373	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3227	0.000	ULS-Set B (auto)/25	13.427	0.000	0.006	<b>0.000</b>	0.000	0.000
3227	0.323-	ULS-Set B (auto)/4	-13.004	0.000	0.000	0.000	<b>0.001</b>	0.000
3227	0.000	ULS-Set B (auto)/4	<b>-13.007</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
3228	0.000	ULS-Set B	<b>2.711</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/22						
3228	0.700	ULS-Set B (auto)/28	<b>-8.395</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3228	0.000	ULS-Set B (auto)/25	-2.912	0.000	0.006	<b>0.000</b>	0.000	0.000
3228	0.000	ULS-Set B (auto)/17	-5.335	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3228	0.300-	ULS-Set B (auto)/28	-8.389	0.000	0.001	0.000	<b>0.001</b>	0.000
3229	0.646	ULS-Set B (auto)/5	<b>8.774</b>	<b>0.000</b>	-0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3229	0.646	ULS-Set B (auto)/4	-8.226	0.000	<b>-0.008</b>	0.000	0.000	0.000
3229	0.000	ULS-Set B (auto)/8	-7.444	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3229	0.323-	ULS-Set B (auto)/4	-8.229	0.000	0.000	0.000	<b>0.001</b>	0.000
3229	0.000	ULS-Set B (auto)/4	<b>-8.233</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
3230	0.000	ULS-Set B (auto)/25	<b>18.681</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
3230	0.700	ULS-Set B (auto)/24	<b>-15.241</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3230	0.000	ULS-Set B (auto)/22	-2.537	0.000	0.006	<b>0.000</b>	0.000	0.000
3230	0.000	ULS-Set B (auto)/8	-11.877	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3230	0.300-	ULS-Set B (auto)/24	-15.235	0.000	0.001	0.000	<b>0.001</b>	0.000
3231	0.646	ULS-Set B (auto)/5	<b>11.454</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
3231	0.646	ULS-Set B (auto)/4	-12.939	0.000	<b>-0.008</b>	0.000	0.000	0.000
3231	0.000	ULS-Set B (auto)/17	-10.602	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3231	0.000	ULS-Set B (auto)/25	10.392	0.000	0.006	<b>0.000</b>	0.000	0.000
3231	0.323-	ULS-Set B (auto)/4	-12.942	0.000	0.000	0.000	<b>0.001</b>	0.000
3231	0.000	ULS-Set B (auto)/4	<b>-12.945</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
3232	0.000	ULS-Set B (auto)/22	<b>2.972</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
3232	0.700	ULS-Set B (auto)/64	<b>-8.287</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3232	0.000	ULS-Set B (auto)/5	1.596	0.000	0.006	<b>0.000</b>	0.000	0.000
3232	0.000	ULS-Set B (auto)/8	-7.984	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3232	0.300-	ULS-Set B (auto)/64	-8.281	0.000	0.001	0.000	<b>0.001</b>	0.000
3233	0.646	ULS-Set B (auto)/5	<b>7.750</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
3233	0.646	ULS-Set B (auto)/4	-7.911	0.000	<b>-0.008</b>	0.000	0.000	0.000
3233	0.000	ULS-Set B (auto)/17	-7.251	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3233	0.000	ULS-Set B (auto)/25	7.580	0.000	0.006	<b>0.000</b>	0.000	0.000
3233	0.323-	ULS-Set B (auto)/4	-7.914	0.000	0.000	0.000	<b>0.001</b>	0.000
3233	0.000	ULS-Set B (auto)/4	<b>-7.918</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
3234	0.000	ULS-Set B (auto)/5	<b>16.278</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
3234	0.700	ULS-Set B (auto)/4	<b>-13.130</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3234	0.000	ULS-Set B (auto)/25	16.049	0.000	0.006	<b>0.000</b>	0.000	0.000
3234	0.000	ULS-Set B (auto)/17	-10.288	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3234	0.300-	ULS-Set B (auto)/4	-13.125	0.000	0.001	0.000	<b>0.001</b>	0.000
3235	0.646	ULS-Set B (auto)/5	<b>8.959</b>	<b>0.000</b>	-0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3235	0.646	ULS-Set B	-8.292	0.000	<b>-0.008</b>	0.000	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
3235	0.000	(auto)/4						
3235	0.000	ULS-Set B (auto)/8	-6.936	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3235	0.323-	ULS-Set B (auto)/4	-8.296	0.000	0.000	0.000	<b>0.001</b>	0.000
3235	0.000	ULS-Set B (auto)/4	<b>-8.299</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
3236	0.731	ULS-Set B (auto)/9	<b>2.294</b>	<b>0.000</b>	-0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3236	0.731	ULS-Set B (auto)/4	-1.491	0.000	<b>-0.008</b>	0.000	0.000	0.000
3236	0.000	ULS-Set B (auto)/36	-1.115	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3236	0.313-	ULS-Set B (auto)/4	-1.498	0.000	0.001	0.000	<b>0.001</b>	0.000
3236	0.000	ULS-Set B (auto)/4	<b>-1.503</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
3258	0.662	ULS-Set B (auto)/25	<b>3.342</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
3258	0.662	ULS-Set B (auto)/24	-2.895	0.000	<b>-0.008</b>	0.000	0.000	0.000
3258	0.000	ULS-Set B (auto)/12	-0.909	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3258	0.000	ULS-Set B (auto)/48	3.227	0.000	0.006	<b>0.000</b>	0.000	0.000
3258	0.331-	ULS-Set B (auto)/24	-2.898	0.000	0.000	0.000	<b>0.001</b>	0.000
3258	0.000	ULS-Set B (auto)/24	<b>-2.902</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
3260	0.000	ULS-Set B (auto)/5	<b>2.605</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
3260	0.979	ULS-Set B (auto)/4	<b>-2.693</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3260	0.000	ULS-Set B (auto)/9	2.464	0.000	0.006	<b>0.000</b>	0.000	0.000
3260	0.000	ULS-Set B (auto)/31	0.882	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3260	0.435-	ULS-Set B (auto)/4	-2.681	0.000	0.001	0.000	<b>0.002</b>	0.000
3386	1.100	ULS-Set B (auto)/9	1.373	0.251	<b>-0.599</b>	0.000	-0.098	0.113
3386	0.000	ULS-Set B (auto)/10	-0.260	0.405	0.127	<b>0.000</b>	0.174	-0.229
3386	0.000	ULS-Set B (auto)/32	4.030	-0.360	-0.458	<b>0.000</b>	-0.217	0.253
3386	1.100	ULS-Set B (auto)/5	<b>7.521</b>	<b>-0.514</b>	-0.105	0.000	<b>-0.450</b>	-0.270
3386	1.100	ULS-Set B (auto)/4	-8.283	0.761	0.300	0.000	<b>0.386</b>	0.477
3386	0.000	ULS-Set B (auto)/4	<b>-8.719</b>	0.761	<b>0.327</b>	0.000	0.042	<b>-0.360</b>
3386	1.100	ULS-Set B (auto)/8	-7.540	<b>0.764</b>	0.244	0.000	0.299	<b>0.490</b>
3387	2.600	ULS-Set B (auto)/5	<b>6.484</b>	-0.055	-0.056	0.000	-0.039	-0.062
3387	0.000	ULS-Set B (auto)/20	-5.724	<b>-0.509</b>	-0.388	0.000	0.000	0.000
3387	0.000	ULS-Set B (auto)/29	3.800	<b>0.363</b>	1.883	<b>0.000</b>	0.000	0.000
3387	0.000	ULS-Set B (auto)/4	<b>-13.244</b>	-0.271	<b>-1.564</b>	0.000	0.000	0.000
3387	0.300+	ULS-Set B (auto)/4	-12.081	0.043	0.405	0.000	<b>-0.469</b>	-0.081
3387	0.300-	ULS-Set B (auto)/5	5.978	0.213	<b>1.956</b>	0.000	<b>0.587</b>	0.064
3387	0.300+	ULS-Set B (auto)/20	-4.613	0.131	0.123	0.000	-0.116	<b>-0.153</b>
3387	2.600	ULS-Set B (auto)/20	-3.992	0.131	0.049	<b>0.000</b>	0.085	<b>0.150</b>
3388	0.000	ULS-Set B (auto)/4	<b>-11.412</b>	0.043	-0.029	0.000	0.009	0.017
3388	1.000	ULS-Set B (auto)/5	<b>7.172</b>	0.497	-1.309	0.000	-0.130	0.296
3388	0.700+	ULS-Set B (auto)/29	4.868	0.603	<b>-2.281</b>	0.000	<b>0.443</b>	0.116
3388	0.700+	ULS-Set B	-1.376	<b>-0.608</b>	<b>1.904</b>	0.000	<b>-0.374</b>	-0.091

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
3388	0.250+	(auto)/20						
3388	0.250+	ULS-Set B (auto)/10	-0.621	-0.549	-1.224	<b>0.000</b>	0.240	0.182
3388	0.000	ULS-Set B (auto)/20	-3.949	0.131	0.643	<b>0.000</b>	0.085	0.150
3388	1.000	ULS-Set B (auto)/4	-8.747	-0.517	0.388	0.000	0.042	<b>-0.360</b>
3388	1.000	ULS-Set B (auto)/29	4.954	<b>0.603</b>	-2.102	0.000	-0.214	<b>0.297</b>

Name	Combination key
ULS-Set B (auto)/1	1.35*G + 1.35*G1 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/2	G + G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/3	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/4	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/5	G + G1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/6	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/7	G + G1 + 0.75*Q3 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/8	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/9	G + G1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/10	1.35*G + 1.35*G1 + 1.05*Q1 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/11	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/12	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q4 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/13	G + G1 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/14	G + G1 + 1.05*Q1 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/15	1.35*G + 1.35*G1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/16	1.35*G + 1.35*G1 + 1.50*Q4 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/17	1.35*G + 1.35*G1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/18	G + G1 + 1.05*Q1 + 1.50*Q4 + G3 + G2
ULS-Set B (auto)/19	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q4 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/20	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/21	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/22	G + G1 + 1.50*Q4 + G3 + G2
ULS-Set B (auto)/23	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q9
ULS-Set B (auto)/24	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/25	G + G1 + 1.05*Q1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/26	G + G1 + 0.75*Q3 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/27	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/28	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/29	G + G1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/30	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q4 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/31	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/32	G + G1 + 0.75*Q3 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/33	G + G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/34	1.35*G + 1.35*G1 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/35	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/36	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/37	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/38	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q4 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/39	G + G1 + 1.50*Q3 + 0.90*Q5 + G3 + G2
ULS-Set B (auto)/40	G + G1 + 1.05*Q1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/41	1.35*G + 1.35*G1 + 1.50*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/42	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8

Name	Combination key
ULS-Set B (auto)/43	$1.35^*G + 1.35^*G1 + 1.50^*Q1 + 0.90^*Q7 + 1.35^*G3 + 1.35^*G2$
ULS-Set B (auto)/44	$G + G1 + 1.05^*Q1 + 1.50^*Q7 + G3 + G2$
ULS-Set B (auto)/45	$1.35^*G + 1.35^*G1 + 1.50^*Q1 + 0.75^*Q3 + 0.90^*Q7 + 1.35^*G3 + 1.35^*G2$
ULS-Set B (auto)/46	$1.35^*G + 1.35^*G1 + 1.50^*Q1 + 1.35^*G3 + 1.35^*G2 + 0.90^*Q8$
ULS-Set B (auto)/47	$1.35^*G + 1.35^*G1 + 1.50^*Q1 + 0.90^*Q5 + 1.35^*G3 + 1.35^*G2$
ULS-Set B (auto)/48	$G + G1 + 0.75^*Q3 + 1.50^*Q6 + G3 + G2$
ULS-Set B (auto)/49	$1.35^*G + 1.35^*G1 + 1.50^*Q1 + 0.75^*Q3 + 0.90^*Q6 + 1.35^*G3 + 1.35^*G2$
ULS-Set B (auto)/50	$1.35^*G + 1.35^*G1 + 1.50^*Q3 + 1.35^*G3 + 1.35^*G2$
ULS-Set B (auto)/51	$1.35^*G + 1.35^*G1 + 1.50^*Q3 + 1.35^*G3 + 1.35^*G2 + 0.90^*Q9$
ULS-Set B (auto)/52	$G + G1 + 1.05^*Q1 + 1.50^*Q3 + 0.90^*Q5 + G3 + G2$
ULS-Set B (auto)/53	$1.35^*G + 1.35^*G1 + 1.50^*Q3 + 1.35^*G3 + 1.35^*G2 + 0.90^*Q8$
ULS-Set B (auto)/54	$G + G1 + 0.75^*Q3 + 1.50^*Q4 + G3 + G2$
ULS-Set B (auto)/55	$1.35^*G + 1.35^*G1 + 1.35^*G3 + 1.35^*G2 + 1.50^*Q8$
ULS-Set B (auto)/56	$1.35^*G + 1.35^*G1 + 1.50^*Q3 + 0.90^*Q6 + 1.35^*G3 + 1.35^*G2$
ULS-Set B (auto)/57	$G + G1 + 1.50^*Q3 + G3 + G2 + 0.90^*Q8$
ULS-Set B (auto)/58	$G + G1 + 1.05^*Q1 + 1.50^*Q3 + 0.90^*Q7 + G3 + G2$
ULS-Set B (auto)/59	$G + G1 + 1.50^*Q3 + 0.90^*Q7 + G3 + G2$
ULS-Set B (auto)/60	$G + G1 + 1.05^*Q1 + 1.50^*Q3 + G3 + G2$
ULS-Set B (auto)/61	$1.35^*G + 1.35^*G1 + 0.75^*Q3 + 1.50^*Q4 + 1.35^*G3 + 1.35^*G2$
ULS-Set B (auto)/62	$1.35^*G + 1.35^*G1 + 1.50^*Q1 + 0.75^*Q3 + 0.90^*Q4 + 1.35^*G3 + 1.35^*G2$
ULS-Set B (auto)/63	$G + G1 + 1.05^*Q1 + 0.75^*Q3 + G3 + G2 + 1.50^*Q8$
ULS-Set B (auto)/64	$1.35^*G + 1.35^*G1 + 1.05^*Q1 + 1.50^*Q3 + 1.35^*G3 + 1.35^*G2$



## Member 33 check

### EN 1993-1-3 Cold Formed Code Check

National annex: Standard EN

Member 33	0.300 / 4.730 m	Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	ULS-Set B (auto)	0.97 -
-----------	-----------------	---	----------	------------------	--------

Combination key
ULS-Set B (auto) / 1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2

Partial safety factors	
$\gamma_{M0}$ for resistance of cross-sections	1.00
$\gamma_{M1}$ for resistance to instability	1.00
$\gamma_{M2}$ for resistance of net sections	1.25

Material		
Yield strength $f_y$	350.0	MPa
Average yield strength $f_{y,a}$	360.7	MPa
k	7	
n	4	
Ultimate strength $f_u$	420.0	MPa
Fabrication	cold formed	

....:SECTION CHECK:....

The critical check is on position 0.300 m

Internal forces		Calculated	Unit
Normal force	$N_{Ed}$	-22.026	kN
Shear force	$V_{y,Ed}$	-0.194	kN
Shear force	$V_{z,Ed}$	0.000	kN
Torsion	$T_{Ed}$	0.000	kNm
Bending moment	$M_{y,Ed}$	0.000	kNm
Bending moment	$M_{z,Ed}$	0.104	kNm

**Note:** The shift of the neutral axis  $e_{N,z}$  leads to a favourable result in the check and is therefore neglected.

### Effective section N-

#### Effective width calculation

According to EN 1993-1-3 article 5.5.2, 5.5.3 & EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\lambda_{p,red}$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	3.500e+05	3.500e+05	1.00	0.50	0.68	0.58	1.00	13.3		
3	I	46.7	3.500e+05	3.500e+05	1.00	4.00	0.84	0.72	0.96	45.0	20.6	22.5
5	I	96.7	3.500e+05	3.500e+05	1.00	4.00	1.73		0.50	48.8	24.4	24.4
7	I	46.7	3.500e+05	3.500e+05	1.00	4.00	0.84	0.72	0.96	45.0	20.6	22.5
9	UO	13.3	3.500e+05	3.500e+05	1.00	0.50	0.68	0.58	1.00	13.3		

### Stiffener calculation

According to EN 1993-1-3 article 5.5.3

Id	$A_s$ [m <sup>2</sup> ]	$I_s$ [m <sup>4</sup> ]	$b_1$ [mm]	$b_2$ [mm]	$h_w$ [mm]	$k_r$ [-]	$K$ [kN/m <sup>2</sup> ]	$\sigma_{cr}$ [kN/m <sup>2</sup> ]	$\lambda_d$ [-]	$\chi_d$ [-]	$A_{s,red}$ [m <sup>2</sup> ]
1	4.3697e-05	8.3901e-10	41.2	41.2	98.8	1.00	3.109e+02	3.387e+05	1.02	0.74	3.2121e-05
9	4.3697e-05	8.3901e-10	41.2	41.2	98.8	1.00	3.109e+02	3.387e+05	1.02	0.74	3.2121e-05

**Effective section My+****Effective width calculation**

According to EN 1993-1-3 article 5.5.2, 5.5.3 &amp; EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\lambda_{p,red}$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	-2.244e+05	-3.132e+05								
3	I	46.7	-3.074e+05	-3.200e+05								
5	I	96.7	3.433e+05	-3.001e+05	-0.87	20.79	0.76		1.00	51.6	20.6	31.0
7	I	46.7	3.500e+05	3.375e+05	0.96	4.07	0.83	0.74	0.95	44.6	20.6	22.5
9	UO	13.3	3.302e+05	2.414e+05	0.73	0.50	0.68	0.60	1.00	13.3		

**Stiffener calculation**

According to EN 1993-1-3 article 5.5.3

Id	$A_s$ [m <sup>2</sup> ]	$I_s$ [m <sup>4</sup> ]	$b_1$ [mm]	$b_2$ [mm]	$h_w$ [mm]	$k_r$ [-]	$K$ [kN/m <sup>2</sup> ]	$\sigma_{cr}$ [kN/m <sup>2</sup> ]	$\lambda_d$ [-]	$\chi_d$ [-]	$A_{s,red}$ [m <sup>2</sup> ]
9	4.3659e-05	8.3870e-10	41.2	31.2	98.8	0.00	4.203e+02	3.941e+05	0.94	0.79	3.4433e-05

**Effective section Mz+****Effective width calculation**

According to EN 1993-1-3 article 5.5.2, 5.5.3 &amp; EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\lambda_{p,red}$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	UO	13.3	3.500e+05	3.500e+05	1.00	0.50	0.68	0.60	1.00	13.3		
3	I	46.7	3.391e+05	-1.443e+05	-0.43	12.26	0.48	0.42	1.00	32.8	13.1	19.7
5	I	96.7	-1.552e+05	-1.552e+05								
7	I	46.7	3.391e+05	-1.443e+05	-0.43	12.26	0.48	0.42	1.00	32.8	13.1	19.7
9	UO	13.3	3.500e+05	3.500e+05	1.00	0.50	0.68	0.60	1.00	13.3		

**Stiffener calculation**

According to EN 1993-1-3 article 5.5.3

Id	$A_s$ [m <sup>2</sup> ]	$I_s$ [m <sup>4</sup> ]	$b_1$ [mm]	$b_2$ [mm]	$h_w$ [mm]	$k_r$ [-]	$K$ [kN/m <sup>2</sup> ]	$\sigma_{cr}$ [kN/m <sup>2</sup> ]	$\lambda_d$ [-]	$\chi_d$ [-]	$A_{s,red}$ [m <sup>2</sup> ]
1	3.2403e-05	7.1229e-10	45.1	45.1	98.8	1.00	2.541e+02	3.805e+05	0.96	0.78	2.5164e-05
9	3.2403e-05	7.1229e-10	45.1	45.1	98.8	1.00	2.541e+02	3.805e+05	0.96	0.78	2.5164e-05

Effective properties						
Effective area	$A_{eff}$	1.7410e-04	m <sup>2</sup>			
Effective second moment of area	$I_{eff,y}$	3.9441e-07	m <sup>4</sup>	$I_{eff,z}$	8.1093e-08	m <sup>4</sup>
Effective section modulus	$W_{eff,y}$	7.4448e-06	m <sup>3</sup>	$W_{eff,z}$	2.3533e-06	m <sup>3</sup>
Shift of the centroid	$e_{N,y}$	0.0	mm	$e_{N,z}$	2.0	mm

**Compression check**

According to EN 1993-1-3 article 6.1.3 and formula (6.2)

Effective section area	$A_{eff}$	1.7410e-04	m <sup>2</sup>
Compression resistance	$N_{c,Rd}$	60.935	kN
Unity check		0.36	-

**Bending moment check for M<sub>y</sub>**

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,y}$	7.4448e-06	m <sup>3</sup>
Bending moment resistance	$M_{c,y,Rd}$	2.606	kNm
Unity check		0.00	-

**Bending moment check for  $M_z$** 

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,z}$	2.3533e-06	m <sup>3</sup>
Bending moment resistance	$M_{c,z,Rd}$	0.824	kNm
Unity check		0.13	-

**Biaxial bending moment check**

According to EN 1993-1-3 article 6.1.4 and formula (6.7)

Bending moment resistance	$M_{c,y,Rd}$	2.606	kNm
Bending moment resistance	$M_{c,z,Rd}$	0.824	kNm

Unity check (6.7) = 0.00 + 0.13 = 0.13 -

**Shear Force  $V_y$** 

According to article EN 1993-1-3: 6.1.5 and formula (6.8).

No stiffening at the support.

Element ID	$I_c$ [mm]	$\alpha$ [deg]	$s_w$ [mm]	$\lambda_w$ [-]	$f_{bv}$ [MPa]	$V_{b,Rd,y,i}$ [kN]
3	48.8	0.00	46.7	0.55	203.0	11.888
5	98.8	90.00	96.7	1.14	147.6	0.000
7	48.8	0.00	46.7	0.55	203.0	11.888

**Shear verification**

$V_{b,Rd,y}$	23.775	kN
Unity check	0.01	-

**Torsional Moment Check**

According to article EN 1993-1-3: 6.1.6 and formula (6.11a), (6.11b), (6.11c).

**Elastic verification**

Critical Fibre	26	
$\sigma_N$	126.5	MPa
$\sigma_{My}$	0.0	MPa
$\sigma_{Mz}$	44.4	MPa
$\tau_{Vy}$	0.7	MPa
$\tau_{Vz}$	0.0	MPa
$\tau_t$	0.0	MPa
Direct Stress Check	0.49	-
Shear Stress Check	0.00	-
Composed Stress Check	0.44	-

**Combined Compression and Bending Check**

According to article EN 1993-1-3: 6.1.9 and formula (6.25), (6.26).

$N_{c,Rd}$	60.935	kN
$M_{c,z,Rd,ten}$	1.826	kNm
$M_{c,z,Rd,com}$	0.824	kNm

Unity check (6.25) 0.36 + 0.00 + 0.13 = 0.49 -

Unity check (6.26) 0.00 + 0.06 - 0.36 = 0.00 -

The member satisfies the section check.

....:STABILITY CHECK:....

**Flexural Buckling Strength**

According to article EN 1993-1-3: 6.2.2

According to article EN 1993-1-1: 6.3.1 and formula (6.46)

Buckling parameters	yy	zz	
Sway type	sway	sway	
System Length L	4.730	0.600	m
Buckling factor k	1.00	0.10	
Buckling length $L_{cr}$	4.730	0.060	m
Critical Euler load $N_{cr}$	39.428	53974.974	kN
Slenderness	117.51	3.18	
Relative slenderness $\lambda_{rel}$	1.24	0.03	
Limit slenderness $\lambda_{rel,0}$	0.20	0.20	
Buckling curve	c	c	
Imperfection $\alpha$	0.49	0.49	
Reduction factor $\chi$	0.41	1.00	
Buckling resistance $N_{b,Rd}$	25.208	60.935	kN

Flexural Buckling verification		
$A_{eff}$	1.7410e-04	m <sup>2</sup>
Buckling resistance $N_{b,Rd}$	25.208	kN
Unity check	0.87	-

**Torsional (-Flexural) Buckling check**

According to article EN 1993-1-3: 6.2.3

According to article EN 1993-1-1: 6.3.1 and formula (6.46)

Torsional Buckling length	0.060	m
$N_{\sigma,T}$	34394.702	kN
$N_{\sigma,TF}$	39.407	kN
Relative slenderness $\lambda_{rel,T}$	1.24	
Limit slenderness $\lambda_{rel,0}$	0.20	
Buckling curve	c	
Imperfection $\alpha$	0.49	
$A_{eff}$	1.7410e-04	m <sup>2</sup>
Reduction factor $\chi$	0.41	
Buckling resistance $N_{b,Rd}$	25.199	kN
Unity check	0.87	-

### Bending and Axial Compression Check

According to article EN 1993-1-3: 6.2.5(1)

According to article EN 1993-1-1: 6.3.3 and formula (6.61), (6.62).

Interaction Method 1

Interaction method 1 parameters		
$k_{yy}$	1.17	
$k_{yz}$	0.44	
$k_{zy}$	2.04	
$k_{zz}$	0.77	
$\Delta M_{y,Ed}$	0.000	kNm
$\Delta M_{z,Ed}$	0.000	kNm
A	1.7410e-04	m <sup>2</sup>
$W_y$	7.4448e-06	m <sup>3</sup>
$W_z$	2.3533e-06	m <sup>3</sup>
$N_{Rk}$	60.935	kN
$M_{y,Rk}$	2.606	kNm
$M_{z,Rk}$	0.824	kNm
$M_{y,Ed}$	0.000	kNm
$M_{z,Ed}$	0.104	kNm
Interaction Method 1		
$M_{cr,0}$	40.052	kNm
reduced slenderness 0	0.26	
$\psi_y$	1.00	
$\psi_z$	-0.11	
$C_{my,0}$	0.90	
$C_{mz,0}$	0.77	
$C_{my}$	0.90	
$C_{mz}$	0.77	
$C_{mLT}$	1.00	

Interaction method 1 parameters		
$\mu_y$	0.57	
$\mu_z$	1.00	
$a_{LT}$	1.00	

Unity check  $0.87 + 0.00 + 0.06 = 0.93$  -

Unity check  $0.87 + 0.00 + 0.10 = 0.97$  -

The member satisfies the stability check.

## All member type frame check

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]	Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
1	3.820-	ULS-Set B (auto)/1	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	<b>0.34</b>	0.34	0.32	51	3.300+	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.57</b>	0.19	0.57
13	0.000	ULS-Set B (auto)/2	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	<b>0.17</b>	0.16	0.17	826	1.800-	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.15</b>	0.13	0.15
15	0.300+	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.19</b>	0.15	0.19	827	1.800+	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.18</b>	0.18	0.17
17	0.300+	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.88</b>	0.48	0.88	828	0.671	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.14</b>	0.11	0.14
19	4.003+	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.66</b>	0.37	0.66	829	0.671	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.08</b>	0.07	0.08
21	3.300+	ULS-Set B (auto)/2	2*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	<b>0.28</b>	0.08	0.28	830	0.671	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.47</b>	0.39	0.47
23	0.300+	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.28</b>	0.14	0.28	831	0.671	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.37</b>	0.31	0.37
25	0.300+	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.91</b>	0.48	0.91	832	1.800-	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.13</b>	0.13	0.13
27	4.020-	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.66</b>	0.27	0.66	833	1.800+	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.18</b>	0.18	0.17
29	0.100-	ULS-Set B (auto)/2	2*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	<b>0.25</b>	0.09	0.25	834	0.671	ULS-Set B (auto)/9	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.13</b>	0.11	0.13
31	0.300+	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.29</b>	0.14	0.29	835	0.671	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.13</b>	0.11	0.13
33	0.300+	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.97</b>	0.49	0.97	836	0.671	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.46</b>	0.38	0.46
35	0.300+	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.68</b>	0.33	0.68	837	0.671	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.38</b>	0.31	0.38
37	0.100-	ULS-Set B (auto)/2	2*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	<b>0.29</b>	0.10	0.29	838	1.800-	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.13</b>	0.13	0.13
39	0.300+	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.32</b>	0.20	0.32	839	1.800+	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.17</b>	0.17	0.17
41	0.300+	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.74</b>	0.58	0.74	840	0.671	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.45</b>	0.38	0.45
43	0.300+	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.51</b>	0.37	0.51	841	0.671	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.37</b>	0.31	0.37
45	0.100-	ULS-Set B (auto)/2	2*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	<b>0.22</b>	0.13	0.22	842	0.671	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.13</b>	0.10	0.13
47	3.300+	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.37</b>	0.09	0.37	843	0.671	ULS-Set B (auto)/9	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.13</b>	0.11	0.13
49	0.800-	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.69</b>	0.44	0.69								

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]	Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
844	1.800-	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.16</b>	0.15	0.16	1098	0.300-	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.04</b>	0.03	0.04
845	1.800+	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.18</b>	0.18	0.18	1099	0.000	ULS-Set B (auto)/16	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.04</b>	0.04	0.04
846	0.671	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.50</b>	0.42	0.50	1100	0.300-	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00
847	0.671	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.43</b>	0.36	0.43	1101	0.000	ULS-Set B (auto)/17	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.06</b>	0.05	0.06
848	0.671	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.20</b>	0.17	0.20	1103	0.300-	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00
849	0.671	ULS-Set B (auto)/10	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.20</b>	0.16	0.20	1104	0.300-	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.01</b>	0.00	0.01
850	1.800+	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.18</b>	0.18	0.18	1497	0.603	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.29</b>	0.29	0.26
851	1.200-	ULS-Set B (auto)/11	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.46</b>	0.42	0.46	1498	0.201-	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.41</b>	0.20	0.41
852	0.671	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.52</b>	0.44	0.52	1499	0.201-	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.33</b>	0.21	0.33
853	0.671	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.42</b>	0.35	0.42	1500	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.14</b>	0.13	0.14
854	0.671	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.25</b>	0.21	0.25	1501	0.201-	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.35</b>	0.15	0.35
855	0.671	ULS-Set B (auto)/10	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.24</b>	0.20	0.24	1502	0.000	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.25</b>	0.25	0.19
1089	0.300-	ULS-Set B (auto)/12	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.04</b>	0.03	0.04	1503	0.000	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.21</b>	0.21	0.15
1090	0.000	ULS-Set B (auto)/13	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.02</b>	0.02	0.02	1504	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.11</b>	0.09	0.11
1091	0.300-	ULS-Set B (auto)/14	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.08</b>	0.07	0.08	1505	0.000	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.32</b>	0.32	0.27
1092	0.300-	ULS-Set B (auto)/15	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.02</b>	0.01	0.02	1506	0.000	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.29</b>	0.29	0.25
1093	0.300-	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.05</b>	0.04	0.05	1507	0.000	ULS-Set B (auto)/18	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.19</b>	0.19	0.15
1094	0.300-	ULS-Set B (auto)/15	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.02</b>	0.02	0.02	1508	0.201-	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.32</b>	0.14	0.32
1096	0.300-	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.05</b>	0.05	0.05	1509	0.201-	ULS-Set B (auto)/18	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.30</b>	0.15	0.30

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]	Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
1510	0.302-	ULS-Set B (auto)/19	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.28</b>	0.13	0.28	1806	0.300-	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00
1511	0.000	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.11</b>	0.11	0.06	1807	0.849	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.19</b>	0.15	0.19
1512	0.603	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.13</b>	0.13	0.12	1808	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.14</b>	0.11	0.14
1513	0.302-	ULS-Set B (auto)/18	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.38</b>	0.21	0.38	1809	0.300-	ULS-Set B (auto)/24	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.08</b>	0.07	0.08
1514	0.000	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.17</b>	0.17	0.12	1810	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.14</b>	0.11	0.14
1515	0.000	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.36</b>	0.33	0.36	1811	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.12</b>	0.09	0.12
1517	0.000	ULS-Set B (auto)/20	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.41</b>	0.35	0.41	1812	0.300-	ULS-Set B (auto)/23	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.03</b>	0.03	0.00
1556	0.300-	ULS-Set B (auto)/16	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.01</b>	0.01	0.01	1813	0.300-	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00
1557	0.300-	ULS-Set B (auto)/21	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00	1814	0.849	ULS-Set B (auto)/16	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.20</b>	0.15	0.20
1558	0.849	ULS-Set B (auto)/22	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.17</b>	0.13	0.17	1815	0.300-	ULS-Set B (auto)/9	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00
1559	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.11</b>	0.09	0.11	1816	0.300-	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00
1794	0.300-	ULS-Set B (auto)/20	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00	1817	0.849	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.17</b>	0.13	0.17
1795	0.300-	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00	1818	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.13</b>	0.10	0.13
1796	0.849	ULS-Set B (auto)/22	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.20</b>	0.16	0.20	1819	0.300-	ULS-Set B (auto)/23	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.07</b>	0.07	0.00
1797	0.000	ULS-Set B (auto)/21	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.15</b>	0.11	0.15	1821	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.12</b>	0.09	0.12
1802	0.300-	ULS-Set B (auto)/23	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.02</b>	0.02	0.00	1822	0.300-	ULS-Set B (auto)/23	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.04</b>	0.04	0.00
1803	0.300-	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00	1823	0.300-	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.01</b>	0.01	0.00
1804	0.849	ULS-Set B (auto)/13	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.18</b>	0.14	0.18	1824	0.849	ULS-Set B (auto)/25	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.22</b>	0.17	0.22
1805	0.300-	ULS-Set B (auto)/9	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00	1831	0.000	ULS-Set B (auto)/26	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.11</b>	0.08	0.11



Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
1832	0.300-	ULS-Set B (auto)/23	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.01</b>	0.01	0.00
1833	0.300-	ULS-Set B (auto)/21	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.01</b>	0.01	0.01
1834	0.849	ULS-Set B (auto)/25	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.21</b>	0.16	0.21
1839	0.300-	ULS-Set B (auto)/23	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.04</b>	0.04	0.00
1841	0.000	ULS-Set B (auto)/17	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.11</b>	0.08	0.11
1842	0.853	ULS-Set B (auto)/18	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.14</b>	0.11	0.14
1843	0.300-	ULS-Set B (auto)/21	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.01</b>	0.01	0.01
1845	0.300-	ULS-Set B (auto)/21	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.01</b>	0.00	0.01
1846	0.849	ULS-Set B (auto)/18	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.10</b>	0.08	0.10
1852	0.300-	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00
1854	0.300-	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.01</b>	0.00	0.01
1964	0.300-	ULS-Set B (auto)/10	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00
1965	0.300-	ULS-Set B (auto)/10	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00
1969	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.13</b>	0.10	0.13
1972	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.12</b>	0.09	0.12
1973	0.721	ULS-Set B (auto)/16	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.17</b>	0.14	0.17
1974	0.000	ULS-Set B (auto)/19	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.11</b>	0.09	0.11
1975	0.750	ULS-Set B (auto)/26	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.12</b>	0.10	0.12
1976	0.300-	ULS-Set B (auto)/23	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.04</b>	0.04	0.00

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
1978	0.300-	ULS-Set B (auto)/24	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.07</b>	0.06	0.07
1979	0.924	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.23</b>	0.17	0.23
1980	0.000	ULS-Set B (auto)/21	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.15</b>	0.11	0.15
1982	0.300-	ULS-Set B (auto)/27	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.00</b>	0.00	0.00
1984	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.07</b>	0.05	0.07
1987	0.300-	ULS-Set B (auto)/15	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.02</b>	0.01	0.02
1988	0.000	ULS-Set B (auto)/26	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.12</b>	0.09	0.12
1989	0.781	ULS-Set B (auto)/25	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.20</b>	0.16	0.20
1990	0.000	ULS-Set B (auto)/26	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.08</b>	0.07	0.08
1991	0.750	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.10</b>	0.08	0.10
1992	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.06</b>	0.04	0.06
1993	0.849	ULS-Set B (auto)/28	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.07</b>	0.05	0.07
1995	0.300-	ULS-Set B (auto)/16	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.02</b>	0.01	0.02
1996	0.300-	ULS-Set B (auto)/23	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.02</b>	0.02	0.00
1997	0.300-	ULS-Set B (auto)/23	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.03</b>	0.03	0.00
1998	0.300-	ULS-Set B (auto)/23	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.04</b>	0.04	0.00
1999	0.300-	ULS-Set B (auto)/29	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.01</b>	0.01	0.00
2000	0.300-	ULS-Set B (auto)/16	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.01</b>	0.01	0.01
2001	0.300-	ULS-Set B (auto)/23	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.02</b>	0.02	0.00



Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
3202	0.000	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.17</b>	0.15	0.17
3204	0.302-	ULS-Set B (auto)/31	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.04</b>	0.04	0.00
3206	0.302-	ULS-Set B (auto)/31	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.04</b>	0.04	0.00
3208	0.000	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.16</b>	0.14	0.16
3210	0.000	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.17</b>	0.15	0.17
3214	0.000	ULS-Set B (auto)/26	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.07</b>	0.05	0.07
3216	0.700	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.22</b>	0.18	0.22
3217	0.000	ULS-Set B (auto)/21	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.21</b>	0.18	0.21
3218	0.700	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.36</b>	0.30	0.36
3219	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.36</b>	0.31	0.36
3220	0.700	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.16</b>	0.13	0.16
3221	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.22</b>	0.19	0.22
3222	0.700	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.37</b>	0.30	0.37
3223	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.30</b>	0.25	0.30
3224	0.700	ULS-Set B (auto)/9	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.15</b>	0.12	0.15
3225	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.19</b>	0.16	0.19
3226	0.700	ULS-Set B (auto)/26	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.35</b>	0.29	0.35
3227	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.28</b>	0.24	0.28
3228	0.700	ULS-Set B (auto)/10	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.18</b>	0.15	0.18

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
3229	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.18</b>	0.15	0.18
3230	0.700	ULS-Set B (auto)/26	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.33</b>	0.28	0.33
3231	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.28</b>	0.23	0.28
3232	0.700	ULS-Set B (auto)/32	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.18</b>	0.15	0.18
3233	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.17</b>	0.14	0.17
3234	0.700	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.29</b>	0.24	0.29
3235	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.18</b>	0.15	0.18
3236	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.03</b>	0.03	0.03
3258	0.000	ULS-Set B (auto)/26	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.06</b>	0.05	0.06
3260	0.979	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	<b>0.07</b>	0.05	0.07
3386	1.100	ULS-Set B (auto)/2	2 C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	<b>0.24</b>	0.24	0.23
3387	0.300+	ULS-Set B (auto)/2	2 C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	<b>0.26</b>	0.23	0.26
3388	0.362-	ULS-Set B (auto)/2	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	<b>0.12</b>	0.05	0.12

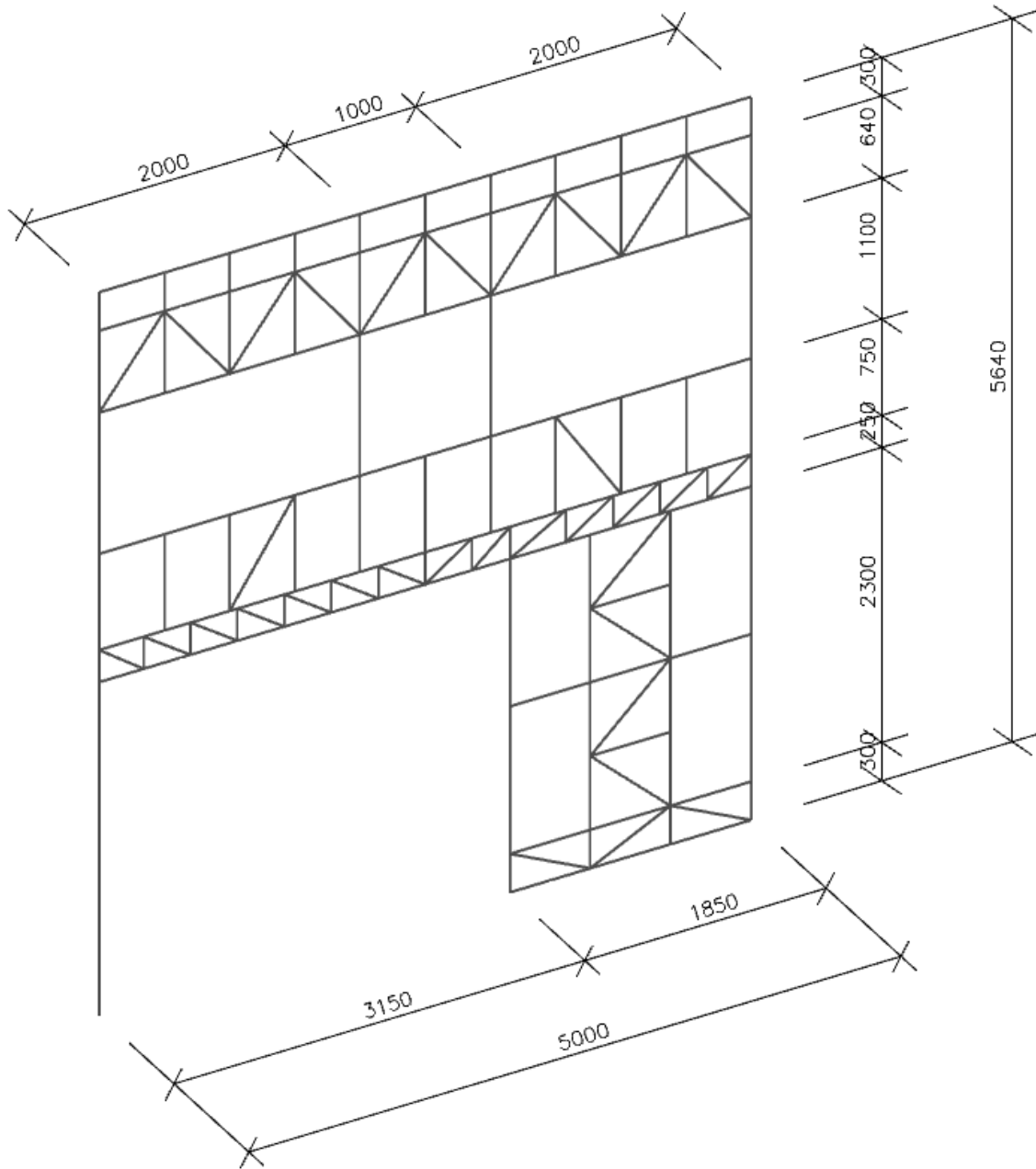
Name	Combination key
ULS-Set B (auto)/1	1.35*G + 1.35*G1 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/2	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/3	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/4	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/5	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/6	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/7	1.35*G + 1.35*G1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/8	G + G1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/9	1.35*G + 1.35*G1 + 1.50*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/10	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/11	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/12	1.35*G + 1.35*G1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/13	G + G1 + 0.75*Q3 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/14	G + G1 + 1.05*Q1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/15	1.35*G + 1.35*G1 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/16	G + G1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/17	G + G1 + 0.75*Q3 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/18	G + G1 + 1.05*Q1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/19	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q6 +

Name	Combination key
	$1.35*G3 + 1.35*G2$
ULS-Set B (auto)/20	$1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q6 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/21	$1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q5 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/22	$G + G1 + 0.75*Q3 + 1.50*Q6 + G3 + G2$
ULS-Set B (auto)/23	$1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8$
ULS-Set B (auto)/24	$G + G1 + 1.50*Q5 + G3 + G2$
ULS-Set B (auto)/25	$1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q7 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/26	$1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/27	$1.35*G + 1.35*G1 + 1.50*Q5 + 1.35*G3 + 1.35*G2$
ULS-Set B (auto)/28	$G + G1 + G3 + G2 + 1.50*Q8$
ULS-Set B (auto)/29	$1.35*G + 1.35*G1 + 1.05*Q1 + 1.35*G3 + 1.35*G2 + 1.50*Q8$
ULS-Set B (auto)/30	$G + G1 + 1.05*Q1 + 1.50*Q5 + G3 + G2$
ULS-Set B (auto)/31	$1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8$
ULS-Set B (auto)/32	$1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 1.35*G3 + 1.35*G2$

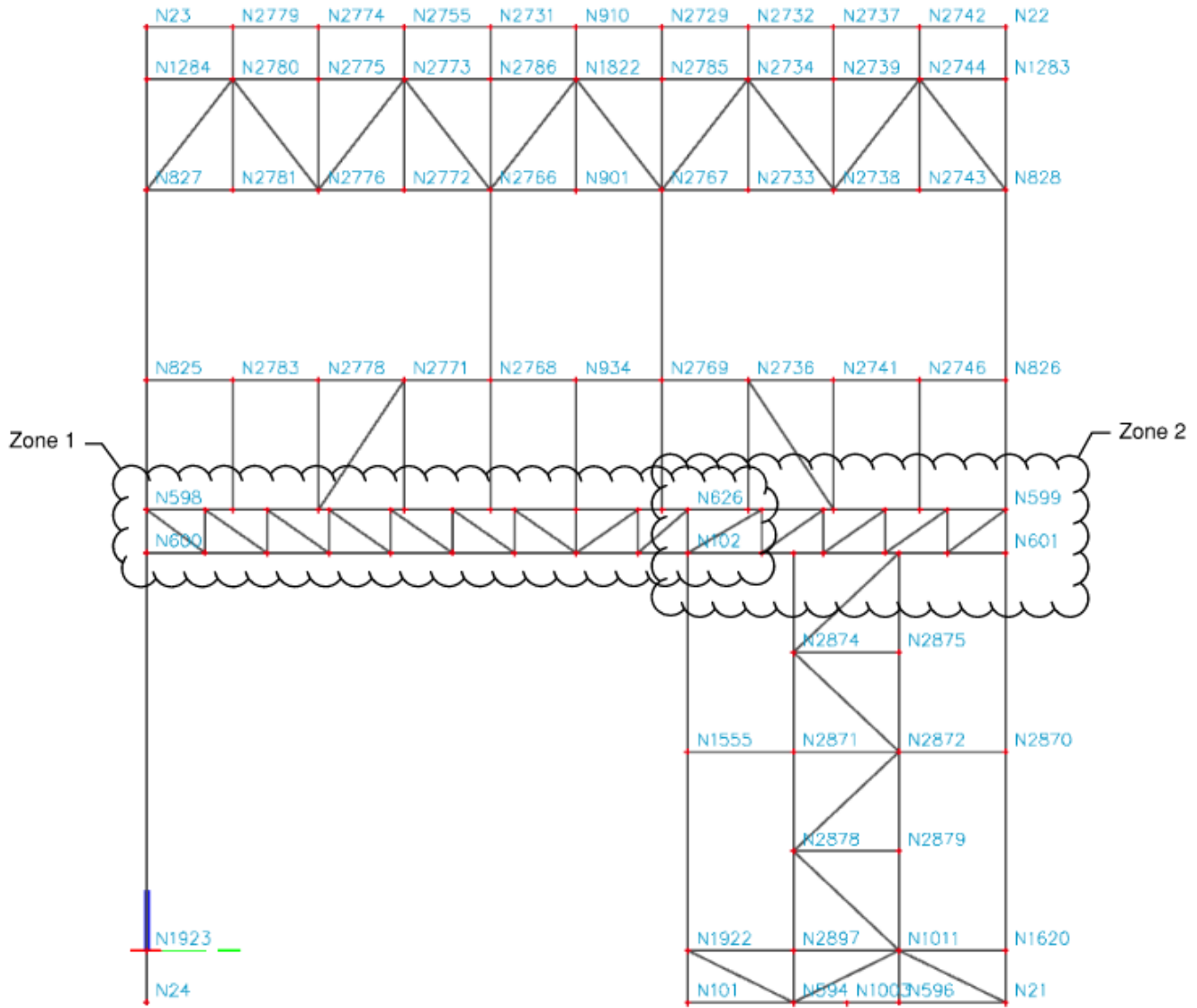
## Unity check

### 2.4.2.3 FRONT WALL CHECK

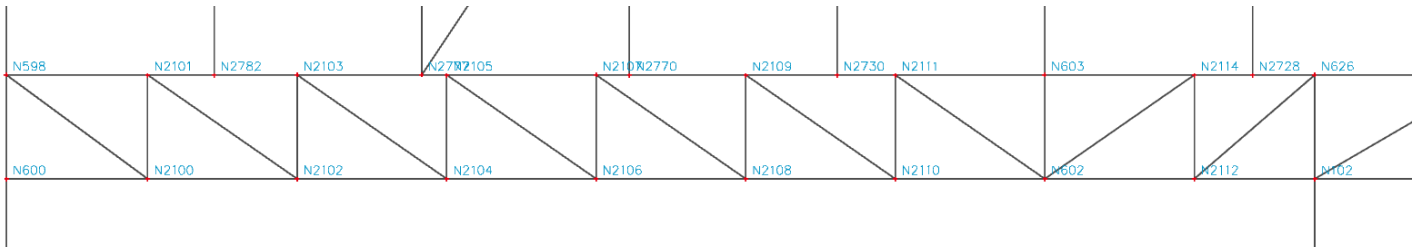
Wall frame



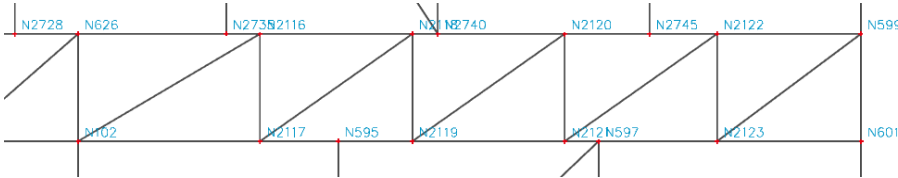
**Node number**



**Zone 1**



## Zone 2



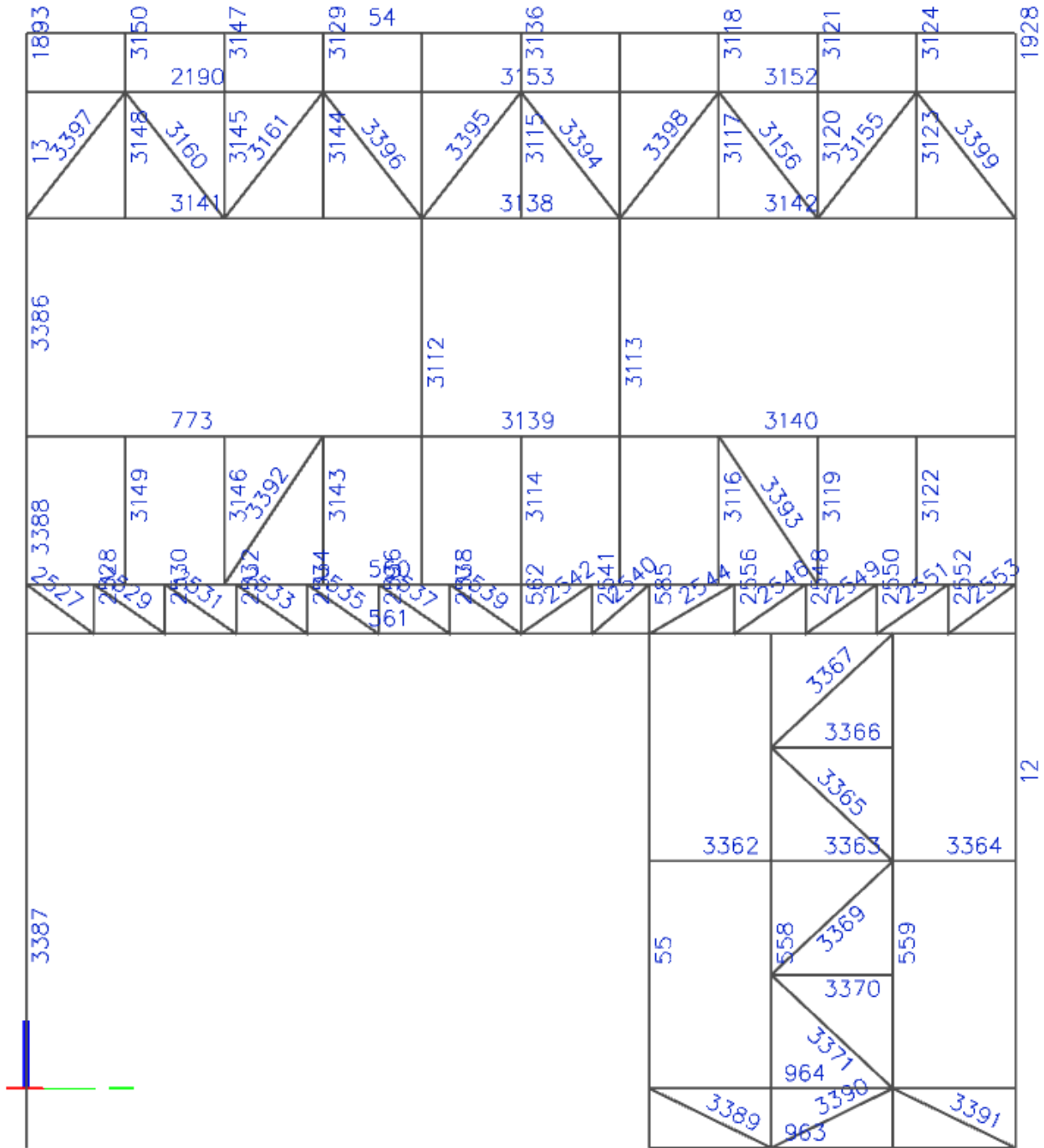
## Node coordinate

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N21	12.000	5.000	-0.300
N22	12.000	5.000	5.340
N23	12.000	0.000	5.340
N24	12.000	0.000	-0.300
N101	12.000	3.150	-0.300
N102	12.000	3.150	2.300
N594	12.000	3.765	-0.300
N595	12.000	3.765	2.300
N596	12.000	4.380	-0.300
N597	12.000	4.380	2.300
N598	12.000	0.000	2.550
N599	12.000	5.000	2.550
N600	12.000	0.000	2.300
N601	12.000	5.000	2.300
N602	12.000	2.500	2.300
N603	12.000	2.500	2.550
N626	12.000	3.150	2.550
N825	12.000	0.000	3.300
N826	12.000	5.000	3.300
N827	12.000	0.000	4.400
N828	12.000	5.000	4.400
N901	12.000	2.500	4.400
N910	12.000	2.500	5.340
N934	12.000	2.500	3.300
N1003	12.000	4.075	-0.300
N1011	12.000	4.380	0.000
N1283	12.000	5.000	5.040
N1284	12.000	0.000	5.040
N1555	12.000	3.150	1.150
N1620	12.000	5.000	0.000
N1822	12.000	2.500	5.040
N1922	12.000	3.150	0.000
N1923	12.000	0.000	0.000
N2100	12.000	0.340	2.300
N2101	12.000	0.340	2.550

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2102	12.000	0.700	2.300
N2103	12.000	0.700	2.550
N2104	12.000	1.060	2.300
N2105	12.000	1.060	2.550
N2106	12.000	1.420	2.300
N2107	12.000	1.420	2.550
N2108	12.000	1.780	2.300
N2109	12.000	1.780	2.550
N2110	12.000	2.140	2.300
N2111	12.000	2.140	2.550
N2112	12.000	2.860	2.300
N2114	12.000	2.860	2.550
N2116	12.000	3.580	2.550
N2117	12.000	3.580	2.300
N2118	12.000	3.940	2.550
N2119	12.000	3.940	2.300
N2120	12.000	4.300	2.550
N2121	12.000	4.300	2.300
N2122	12.000	4.660	2.550
N2123	12.000	4.660	2.300
N2728	12.000	3.000	2.550
N2729	12.000	3.000	5.340
N2730	12.000	2.000	2.550
N2731	12.000	2.000	5.340
N2732	12.000	3.500	5.340
N2733	12.000	3.500	4.400
N2734	12.000	3.500	5.040
N2735	12.000	3.500	2.550
N2736	12.000	3.500	3.300
N2737	12.000	4.000	5.340
N2738	12.000	4.000	4.400
N2739	12.000	4.000	5.040
N2740	12.000	4.000	2.550
N2741	12.000	4.000	3.300
N2742	12.000	4.500	5.340

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2743	12.000	4.500	4.400
N2744	12.000	4.500	5.040
N2745	12.000	4.500	2.550
N2746	12.000	4.500	3.300
N2755	12.000	1.500	5.340
N2766	12.000	2.000	4.400
N2767	12.000	3.000	4.400
N2768	12.000	2.000	3.300
N2769	12.000	3.000	3.300
N2770	12.000	1.500	2.550
N2771	12.000	1.500	3.300
N2772	12.000	1.500	4.400
N2773	12.000	1.500	5.040
N2774	12.000	1.000	5.340
N2775	12.000	1.000	5.040
N2776	12.000	1.000	4.400
N2777	12.000	1.000	2.550
N2778	12.000	1.000	3.300
N2779	12.000	0.500	5.340
N2780	12.000	0.500	5.040
N2781	12.000	0.500	4.400
N2782	12.000	0.500	2.550
N2783	12.000	0.500	3.300
N2785	12.000	3.000	5.040
N2786	12.000	2.000	5.040
N2870	12.000	5.000	1.150
N2871	12.000	3.765	1.150
N2872	12.000	4.380	1.150
N2874	12.000	3.765	1.725
N2875	12.000	4.380	1.725
N2878	12.000	3.765	0.575
N2879	12.000	4.380	0.575
N2897	12.000	3.765	0.000

Members number




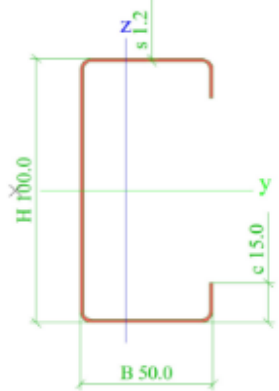



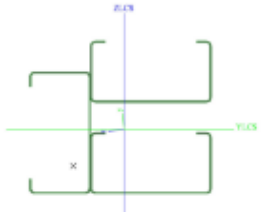
## Members cross-sections

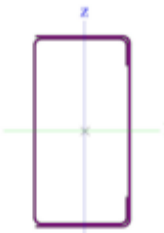
Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
12	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	5.340	N21	N1283	column (100)
13	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.640	N827	N1284	column (100)
54	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	5.000	N23	N22	beam (80)
55	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	2.600	N101	N102	column (100)
558	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.600	N594	N595	column (100)
559	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.600	N596	N597	column (100)
560	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	5.000	N598	N599	truss chord (95)
561	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	5.000	N600	N601	truss chord (95)
562	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N602	N603	truss diagonal (90)
585	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N102	N626	truss diagonal (90)
773	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.000	N825	N2768	beam (80)
963	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	1.850	N101	N21	beam (80)
964	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	1.850	N1922	N1620	beam (80)
1893	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.300	N1284	N23	column (100)
1928	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.300	N1283	N22	column (100)
2190	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.000	N1284	N2786	truss chord (95)
2527	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.422	N2100	N598	truss diagonal (90)
2528	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2100	N2101	truss diagonal (90)
2529	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2102	N2101	truss diagonal (90)
2530	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2102	N2103	truss diagonal (90)
2531	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2104	N2103	truss diagonal (90)
2532	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2104	N2105	truss diagonal (90)
2533	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2106	N2105	truss diagonal (90)
2534	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2106	N2107	truss diagonal (90)
2535	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2108	N2107	truss diagonal (90)
2536	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2108	N2109	truss diagonal (90)
2537	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2110	N2109	truss diagonal (90)
2538	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2110	N2111	truss diagonal (90)
2539	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N602	N2111	truss diagonal (90)
2540	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.383	N2112	N626	truss diagonal (90)
2541	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2112	N2114	truss diagonal (90)
2542	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N602	N2114	truss diagonal (90)
2544	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.497	N102	N2116	truss diagonal (90)
2546	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2117	N2118	truss diagonal (90)
2548	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2119	N2118	truss diagonal (90)
2549	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2119	N2120	truss diagonal (90)
2550	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2121	N2120	truss diagonal (90)
2551	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.438	N2121	N2122	truss diagonal (90)
2552	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2123	N2122	truss diagonal (90)
2553	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.422	N2123	N599	truss diagonal (90)
2556	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.250	N2117	N2116	truss diagonal (90)
3112	Box-C100*50*15*1.2 -	S350GD+Z	2.790	N2730	N2731	column (100)
3113	Box-C100*50*15*1.2 -	S350GD+Z	2.790	N2728	N2729	column (100)
3114	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.750	N603	N934	column (100)
3115	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.640	N901	N1822	truss diagonal (90)
3116	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.750	N2735	N2736	column (100)
3117	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.640	N2733	N2734	truss diagonal (90)
3118	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.300	N2734	N2732	column (100)
3119	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.750	N2740	N2741	column (100)
3120	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.640	N2738	N2739	truss diagonal (90)
3121	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.300	N2739	N2737	column (100)
3122	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.750	N2745	N2746	column (100)
3123	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.640	N2743	N2744	truss diagonal (90)
3124	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.300	N2744	N2742	column (100)
3129	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.300	N2773	N2755	column (100)
3136	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.300	N1822	N910	column (100)
3138	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	1.000	N2767	N2766	truss chord (95)
3139	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	1.000	N2768	N2769	beam (80)
3140	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.000	N2769	N826	beam (80)
3141	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.000	N827	N2766	truss chord (95)
3142	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.000	N2767	N828	truss chord (95)
3143	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.750	N2770	N2771	column (100)
3144	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.640	N2772	N2773	truss diagonal (90)
3145	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.640	N2776	N2775	truss diagonal (90)
3146	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.750	N2777	N2778	column (100)
3147	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.300	N2775	N2774	column (100)
3148	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.640	N2781	N2780	truss diagonal (90)
3149	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.750	N2782	N2783	column (100)
3150	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.300	N2780	N2779	column (100)
3152	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	2.000	N2785	N1283	truss chord (95)
3153	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	1.000	N2786	N2785	truss chord (95)
3155	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.812	N2738	N2744	truss diagonal (90)
3156	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.812	N2738	N2734	truss diagonal (90)
3160	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.812	N2776	N2780	truss diagonal (90)
3161	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.812	N2776	N2773	truss diagonal (90)

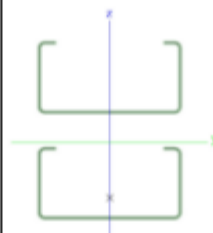
Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
3362	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.615	N1555	N2871	wall bracing (0)
3363	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.615	N2871	N2872	wall bracing (0)
3364	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.620	N2872	N2870	wall bracing (0)
3365	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.842	N2872	N2874	wall bracing (0)
3366	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.615	N2874	N2875	wall bracing (0)
3367	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.842	N2874	N597	wall bracing (0)
3369	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.842	N2872	N2878	wall bracing (0)
3370	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.615	N2878	N2879	wall bracing (0)
3371	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.842	N2878	N1011	wall bracing (0)
3386	2 C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	1.100	N825	N827	column (100)
3387	2 C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	2.600	N24	N600	column (100)
3388	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	1.000	N600	N825	column (100)
3389	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.684	N1922	N594	wall bracing (0)
3390	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.684	N594	N1011	wall bracing (0)
3391	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.689	N1011	N21	wall bracing (0)
3392	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.901	N2777	N2771	wall bracing (0)
3393	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.901	N2740	N2736	wall bracing (0)
3394	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.812	N2767	N1822	truss diagonal (90)
3395	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.812	N2766	N1822	truss diagonal (90)
3396	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.812	N2766	N2773	truss diagonal (90)
3397	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.812	N827	N2780	truss diagonal (90)
3398	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.812	N2767	N2734	truss diagonal (90)
3399	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.812	N828	N2744	truss diagonal (90)

## Cross-Section properties

C100*50*15*1.2		
Type	Cold formed C section	
Detailed	100.0; 50.0; 1.2; 3.0; 15.0	
Formcode	114 - Cold formed C section	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour		
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	2.6269e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	1.1804e-04	1.3126e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	4.4038e-01	4.4038e-01
c <sub>y,UCS</sub> [mm], c <sub>z,UCS</sub> [mm]	17.2	50.0
α [deg]	0.00	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	4.2561e-07	9.3751e-08
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	40.3	18.9
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	8.5121e-06	2.8580e-06
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	9.7956e-06	4.2419e-06
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	3.43e+03	3.43e+03
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	1.48e+03	1.48e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	-41.5	0.0
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	1.2972e-10	2.2102e-10
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	0.0	121.2
Picture		

3*C100*50*15*1.2		
Type	C100*50*15*1.2	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour		
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	7.6646e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	3.2219e-04	3.7977e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	1.1687e+00	1.1687e+00
c <sub>y,UCS</sub> [mm], c <sub>z,UCS</sub> [mm]	136.6	70.5
I <sub>y,UCS</sub> [m <sup>4</sup> ], I <sub>z,UCS</sub> [m <sup>4</sup> ]	1.3092e-06	1.6666e-06
I <sub>yz,UCS</sub> [m <sup>4</sup> ]	4.2792e-08	
α [deg]	96.73	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	1.6716e-06	1.3041e-06
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	46.7	41.2
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	2.0127e-05	1.7440e-05
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	2.9299e-05	2.8496e-05
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	1.03e+04	1.03e+04
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	9.97e+03	9.97e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	-24.6	45.1
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	5.1683e-10	4.0845e-09
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	-105.4	52.7
Picture		

Box-C100*50*15*1.2		
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	4.9891e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	2.4362e-04	2.5534e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>B</sub> [m <sup>2</sup> /m]	3.1196e-01	6.2697e-01
C <sub>y,UCS</sub> [mm], C <sub>z,UCS</sub> [mm]	11.7	50.3
α [deg]	0.00	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	8.2296e-07	2.0870e-07
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	40.6	20.5
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	1.6073e-05	7.6898e-06
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	1.8674e-05	9.3781e-06
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	6.54e+03	6.54e+03
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	3.28e+03	3.28e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	0.1	0.0
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	4.8762e-07	1.0395e-10
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	0.0	-2.5
Picture		

2 C100*50*15*1.2		
Type	C100*50*15*1.2	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	5.1097e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	2.5210e-04	2.2738e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>B</sub> [m <sup>2</sup> /m]	8.5676e-01	8.5676e-01
C <sub>y,UCS</sub> [mm], C <sub>z,UCS</sub> [mm]	158.7	71.8
α [deg]	0.00	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	8.9070e-07	8.3202e-07
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	41.8	40.4
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	1.2508e-05	1.6640e-05
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	1.9161e-05	1.9066e-05
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	6.71e+03	6.71e+03
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	6.67e+03	6.67e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	0.0	-38.9
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	2.3412e-10	1.5204e-09
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	86.1	0.0
Picture		

## Wall member hinges

Name	Member	Position	ux	uy	uz	fix	fy	fz
H497	562	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H517	585	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H697	561	Both	Free	Rigid	Rigid	Rigid	Free	Free
H702	560	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H707	773	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H900	963	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H901	558	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H902	559	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H903	964	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H988	55	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H1308	2527	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1309	2528	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1310	2529	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1311	2530	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1312	2531	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1313	2532	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1314	2533	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1315	2534	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1316	2535	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1317	2536	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1318	2537	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1319	2538	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1320	2539	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1321	2540	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1322	2541	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1323	2542	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1325	2544	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1327	2546	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1329	2548	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1330	2549	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1331	2550	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1332	2551	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1333	2552	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H1334	2553	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1337	2556	Both	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H2191	3114	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2192	3115	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H2193	3116	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2194	3117	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H2195	3118	End	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H2196	3119	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2197	3120	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H2198	3121	End	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H2199	3122	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2200	3123	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H2201	3124	End	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H2206	3129	End	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H2213	3136	End	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H2215	3138	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2216	3139	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2217	3140	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2218	3141	Both	Free	Rigid	Rigid	Rigid	Free	Free
H2219	3142	Both	Free	Rigid	Rigid	Rigid	Free	Free
H2220	3143	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2221	3144	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H2222	3145	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H2223	3146	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2224	3147	End	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H2225	3148	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H2226	3149	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2227	3150	End	Rigid	Rigid	Rigid	Rigid	Rigid	Free
H2230	3155	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2231	3156	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2235	3160	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2236	3161	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2245	3113	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2246	3112	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2627	2190	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2628	3153	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2629	3152	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2727	3362	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2728	3363	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2729	3364	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2730	3365	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2731	3366	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2732	3367	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

Name	Member	Position	ux	uy	uz	fix	fy	fz
H2733	3369	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2734	3370	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2735	3371	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2748	3390	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H2749	3389	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H2750	3391	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H2751	3393	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H2752	3392	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H2753	3394	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2754	3395	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2755	3396	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2756	3397	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2757	3398	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2758	3399	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

## Maximum forces in elements

### Axial force diagram N, kH.

#### 1D internal forces

Values: **N**

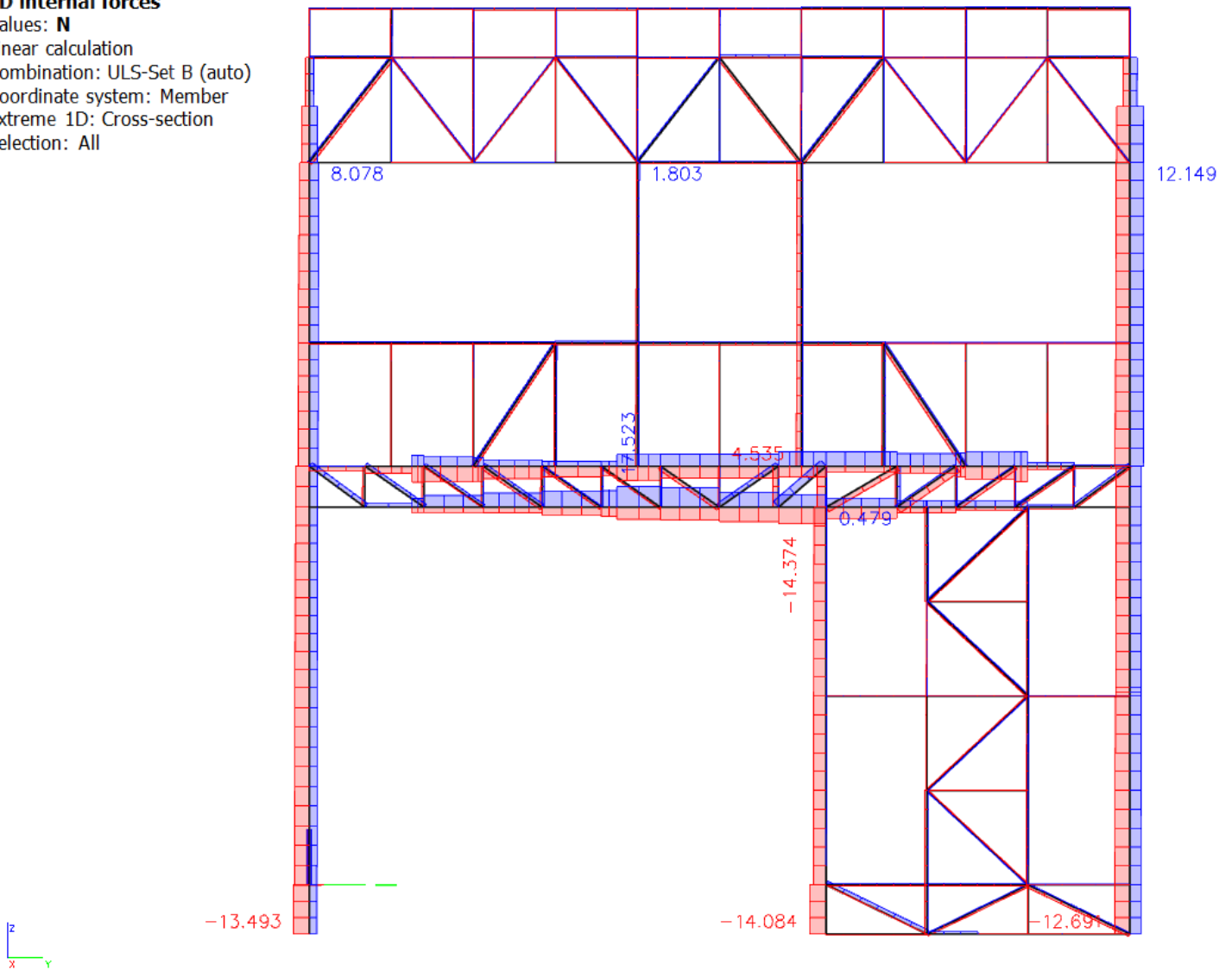
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Cross-section

Selection: All



## Shear force diagram $V_y$ , kH.

### 1D internal forces

Values:  $V_y$

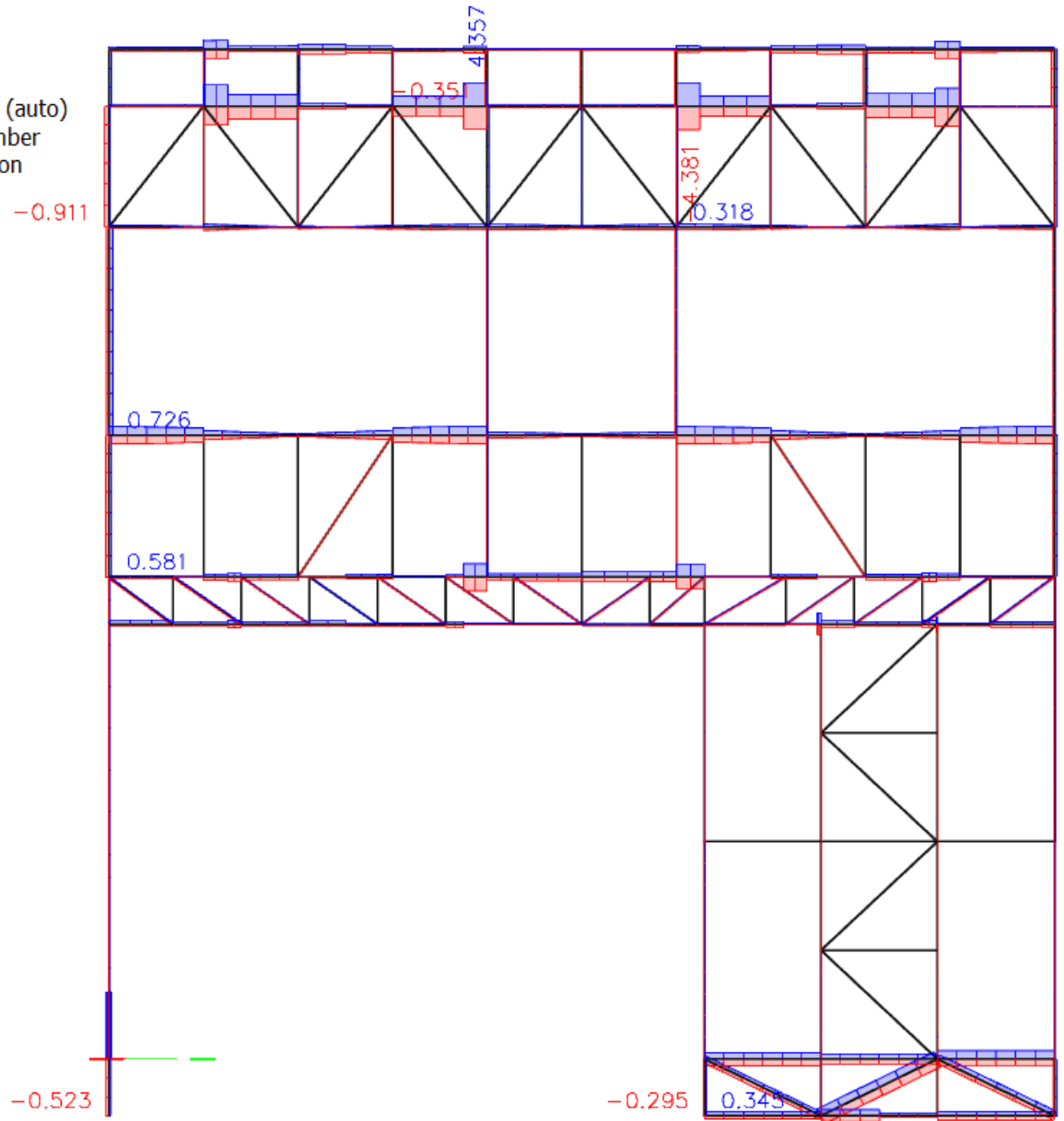
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Cross-section

Selection: All



## Shear force diagram $V_z$ , kH.

### 1D internal forces

Values:  $V_z$

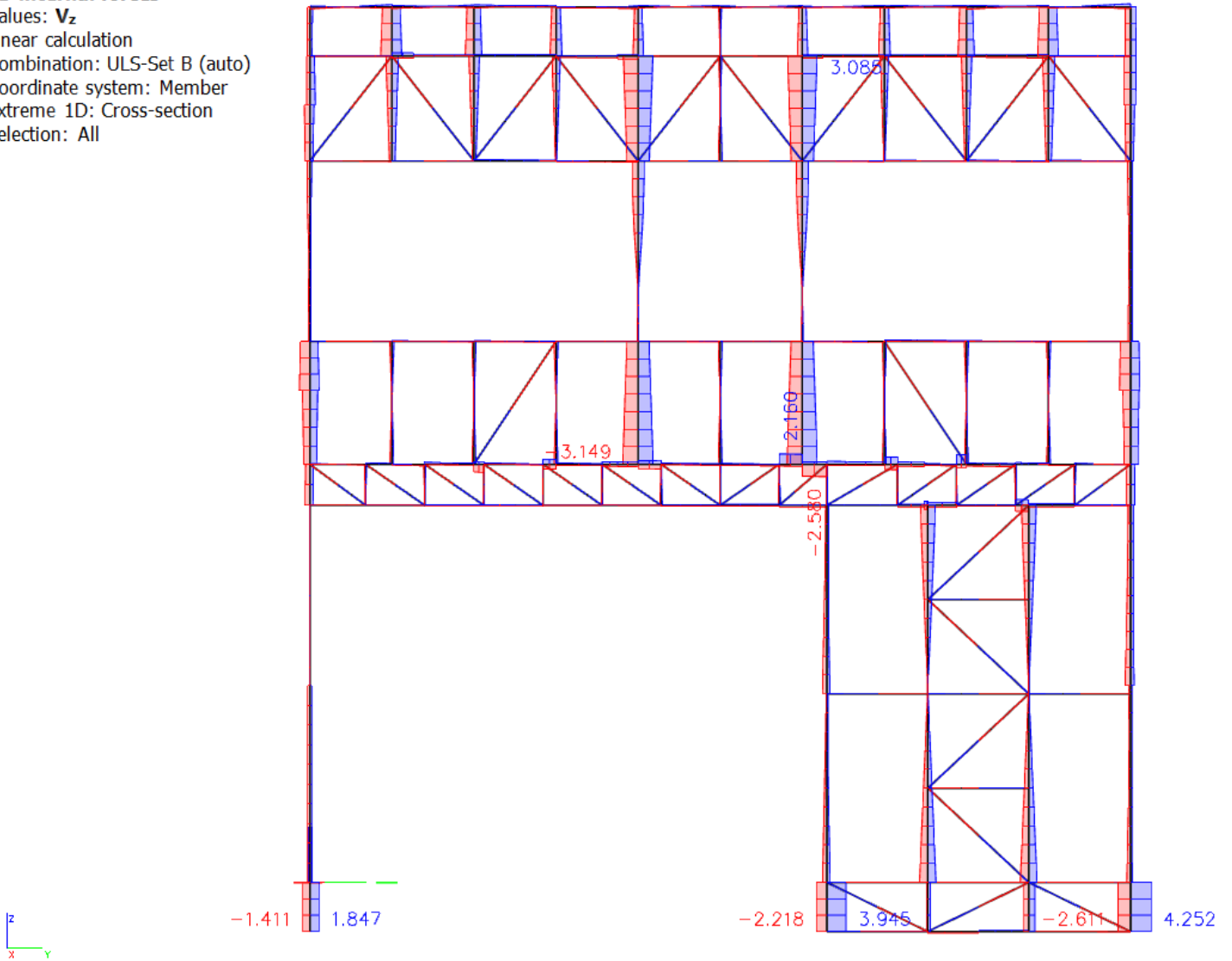
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Cross-section

Selection: All





## Diagram of bending moments $M_y$ , kNm.

### 1D internal forces

Values:  $M_y$

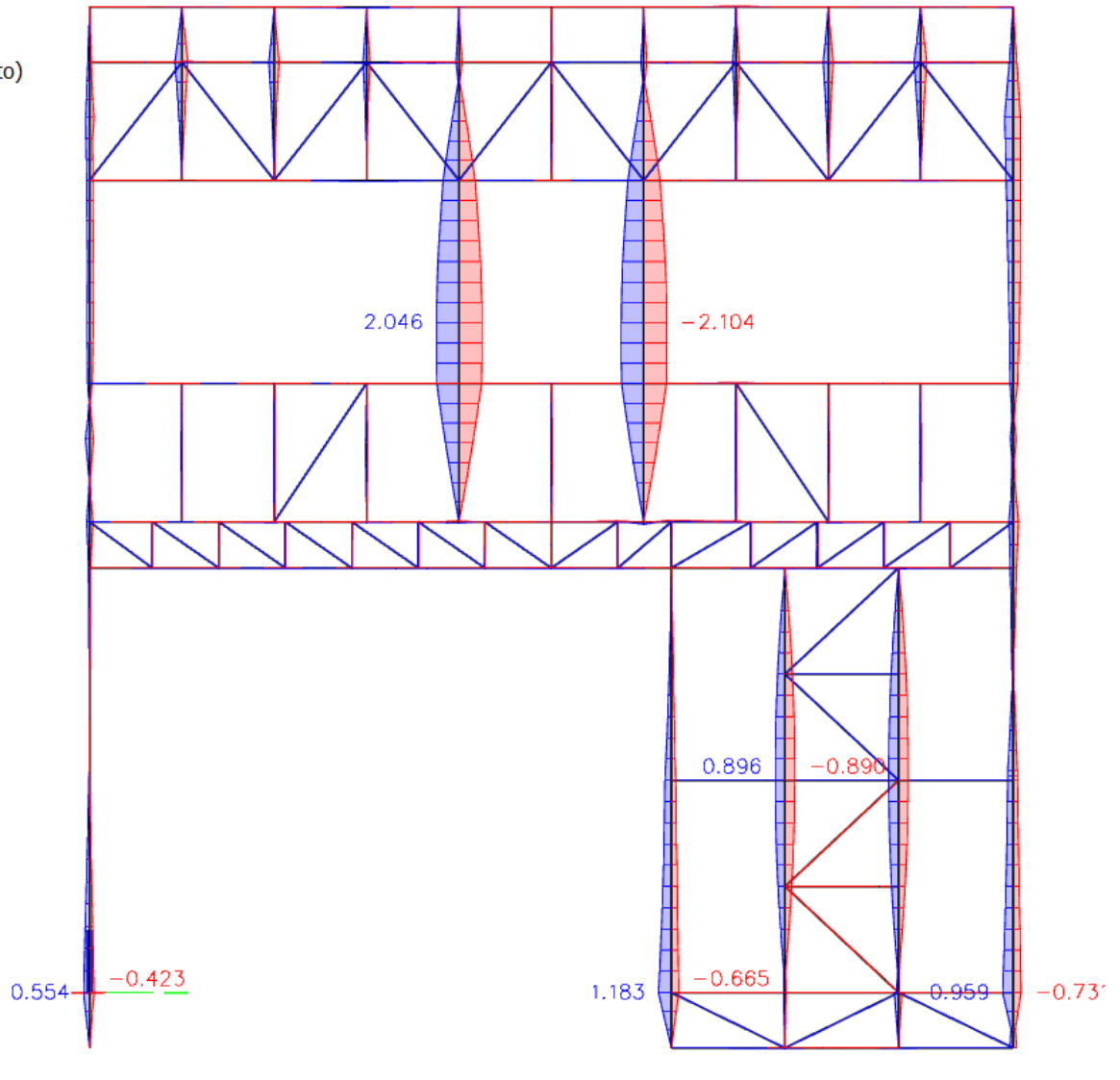
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Cross-section

Selection: All



## Diagram of bending moments $M_z$ , kNm.

### 1D internal forces

Values:  $M_z$

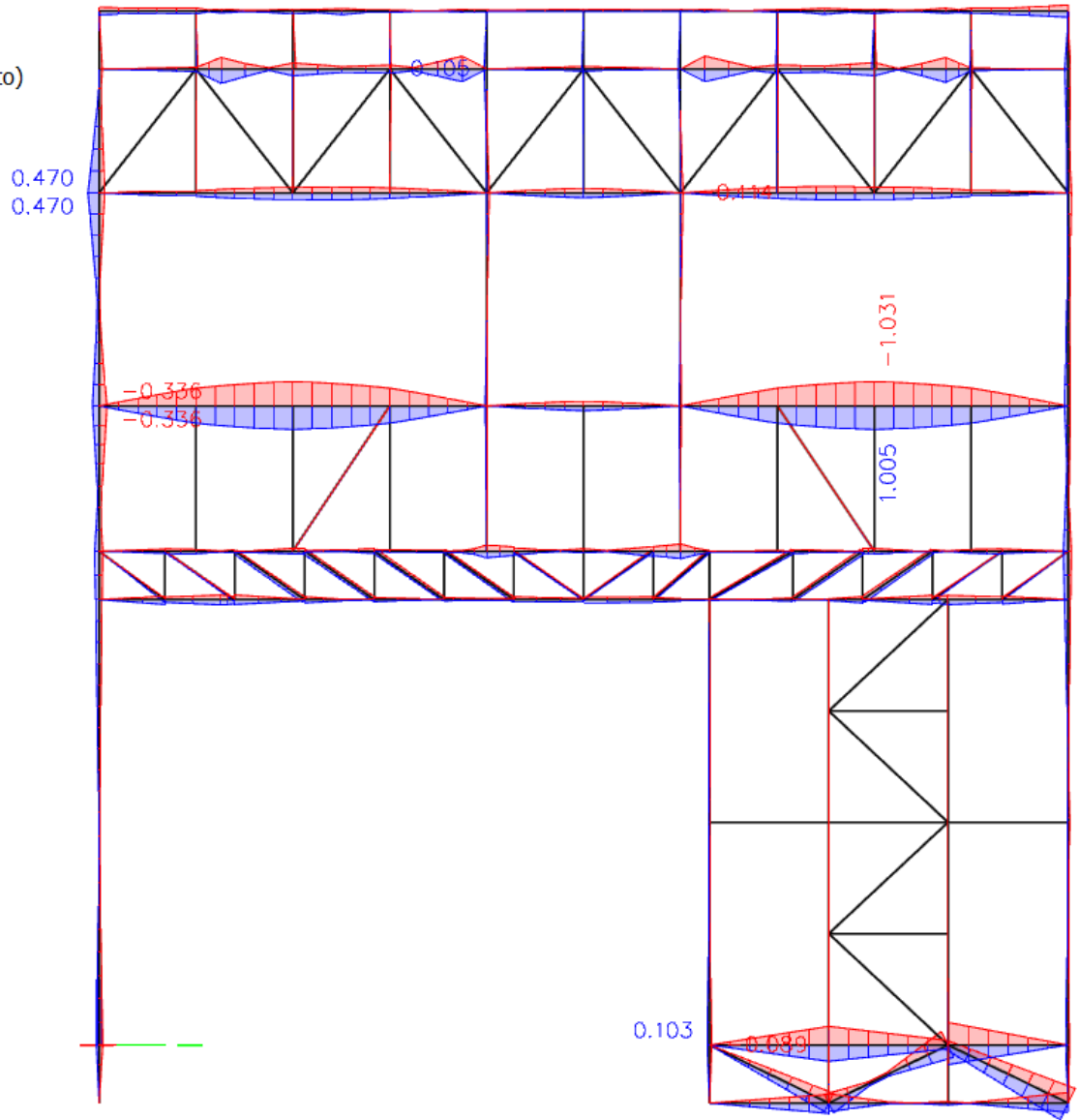
Linear calculation

Combination: ULS-Set B (auto)

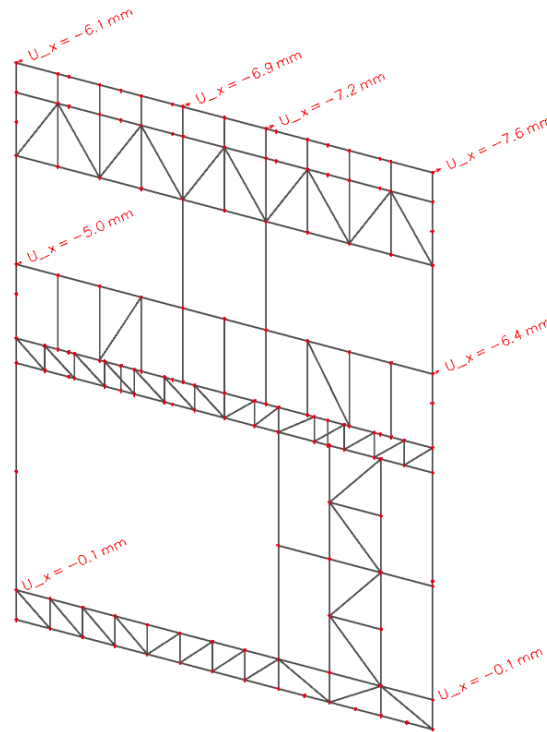
Coordinate system: Member

Extreme 1D: Cross-section

Selection: All



**Deformation check**  
**Load cases Wind X- (N -0.3)**  
**Horizontal limit displacements**



17.4 lentelė

**Karkasinių pastatų horizontalieji ribiniai poslinkiai, ribojami konstrukciniais reikalavimais (kad būtų išlaikytas karkaso užpildymo sienomis, pertvaromis, langų ir durų elementais vientisumas)**

Pastatai, sienos ir pertvaros	Sienų ir pertvarų tvirtinimas prie pastato karkaso	Ribiniai poslinkiai, $u_{lim}$
1. Daugiaaukščiai pastatai	bet koks	$h/500$
2. Daugiaaukščių pastatų vienas aukštas:	paslankusis	$h_s/300$
a) sienos ir pertvaros iš plytų, gipsobetono, gelžbetonio panelių	standus	$h_s/500$
b) sienos su natūralaus akmens, keraminių blokų, stiklo (vitražo) apdaila	-"-	$h_s/700$
3. Vienaaukščiai pastatai (su save laikantiomis sienomis), kai aukštis $h_s$ , m:	paslankusis	
$h_s \leq 6$		$h_s/150$
$h_s = 15$		$h_s/200$
$h_s \geq 30$		$h_s/300$

The maximum deflection is 7.6 mm. According to STR 2.05.04:2003 - "Poveikiai ir apkrovos" - deflection limits -  $H_s/150$ .

$5340 / 150 = 35.6$  mm       $7.6$  mm <  $35.6$  mm      Deformation is OK!

## Internal forces

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
12	4.700-	ULS-Set B (auto)/1	<b>12.149</b>	-0.009	-0.136	0.000	-0.686	-0.012			(auto)/16						
12	2.850+	ULS-Set B (auto)/2	7.421	<b>-0.387</b>	1.478	0.000	-0.474	0.200	55	0.300+	ULS-Set B (auto)/4	-10.742	0.083	0.251	0.000	<b>-0.665</b>	-0.056
12	2.850+	ULS-Set B (auto)/3	-0.263	<b>0.386</b>	-1.310	0.000	0.357	-0.134	55	0.300-	ULS-Set B (auto)/5	-1.495	0.132	<b>3.945</b>	<b>0.000</b>	<b>1.183</b>	0.040
12	0.000	ULS-Set B (auto)/4	<b>-12.691</b>	-0.180	<b>-2.611</b>	0.000	0.053	0.000	55	0.300-	ULS-Set B (auto)/17	-11.152	<b>-0.295</b>	-2.056	0.000	-0.617	<b>-0.089</b>
12	0.000	ULS-Set B (auto)/5	6.994	0.329	<b>4.252</b>	0.000	-0.345	0.000	55	0.300+	ULS-Set B (auto)/13	-1.513	-0.111	-0.599	0.000	0.955	<b>0.103</b>
12	4.700+	ULS-Set B (auto)/6	7.325	0.007	0.587	<b>0.000</b>	-0.507	-0.077	558	0.300+	ULS-Set B (auto)/4	<b>-2.052</b>	0.034	0.094	0.000	-0.070	-0.015
12	5.040+	ULS-Set B (auto)/7	0.846	0.117	0.949	<b>0.000</b>	-0.363	0.009	558	2.600	ULS-Set B (auto)/17	<b>1.280</b>	-0.007	-0.030	0.000	0.000	0.000
12	0.300-	ULS-Set B (auto)/4	-12.667	-0.180	-2.611	0.000	<b>-0.731</b>	-0.054	558	0.300+	ULS-Set B (auto)/13	0.575	<b>-0.021</b>	-0.917	0.000	0.115	0.010
12	0.300-	ULS-Set B (auto)/1	9.377	0.356	3.873	0.000	<b>0.959</b>	0.107	558	0.300+	ULS-Set B (auto)/5	0.483	-0.011	<b>-1.748</b>	0.000	0.154	0.006
12	4.700+	ULS-Set B (auto)/8	-4.818	0.368	0.144	0.000	0.209	<b>-0.141</b>	558	0.300+	ULS-Set B (auto)/16	-0.807	0.007	<b>1.679</b>	0.000	-0.094	-0.003
12	2.850+	ULS-Set B (auto)/9	7.724	-0.378	1.493	0.000	-0.484	<b>0.203</b>	558	0.000	ULS-Set B (auto)/5	0.432	0.025	0.514	<b>0.000</b>	0.000	0.000
13	0.000	ULS-Set B (auto)/4	<b>-6.600</b>	-0.853	0.241	0.000	0.275	0.458	558	0.000	ULS-Set B (auto)/16	-0.832	0.018	-0.313	<b>0.000</b>	0.000	0.000
13	0.340-	ULS-Set B (auto)/1	<b>7.175</b>	<b>0.324</b>	0.221	0.000	-0.259	-0.135	558	1.450+	ULS-Set B (auto)/18	-0.264	0.005	-0.057	0.000	<b>-0.890</b>	0.000
13	0.000	ULS-Set B (auto)/10	-5.554	<b>-0.911</b>	0.187	0.000	0.203	<b>0.470</b>	558	1.450+	ULS-Set B (auto)/11	-0.118	-0.010	0.031	0.000	<b>0.896</b>	0.001
13	0.340+	ULS-Set B (auto)/3	0.815	-0.415	<b>1.143</b>	0.000	-0.394	0.033	558	0.300+	ULS-Set B (auto)/17	-1.877	0.038	0.092	0.000	-0.065	<b>-0.016</b>
13	0.340+	ULS-Set B (auto)/7	0.959	-0.389	1.098	<b>0.000</b>	-0.395	0.022	558	0.300-	ULS-Set B (auto)/19	0.280	<b>0.041</b>	0.376	0.000	0.113	<b>0.012</b>
13	0.000	ULS-Set B (auto)/6	3.987	-0.011	0.644	<b>0.000</b>	-0.233	-0.065	559	0.300+	ULS-Set B (auto)/19	<b>-1.453</b>	-0.018	-0.932	0.000	0.139	0.010
13	0.340-	ULS-Set B (auto)/11	2.241	-0.307	<b>-1.142</b>	0.000	<b>-0.414</b>	0.011	559	2.600	ULS-Set B (auto)/1	<b>0.633</b>	0.002	0.758	0.000	0.000	0.000
13	0.340-	ULS-Set B (auto)/4	-6.469	-0.853	0.233	0.000	<b>0.356</b>	0.168	559	0.300+	ULS-Set B (auto)/13	-1.277	<b>-0.019</b>	-0.933	0.000	0.142	<b>0.010</b>
13	0.000	ULS-Set B (auto)/1	7.078	0.324	0.117	0.000	-0.316	<b>-0.245</b>	559	0.000	ULS-Set B (auto)/19	-0.201	<b>0.023</b>	0.816	0.000	0.000	0.000
54	1.500+	ULS-Set B (auto)/12	<b>-1.713</b>	0.159	-0.034	0.000	0.072	-0.021	559	0.300+	ULS-Set B (auto)/5	-1.126	-0.015	<b>-1.772</b>	0.000	0.189	0.008
54	0.500+	ULS-Set B (auto)/6	-0.373	<b>-1.640</b>	-0.124	0.000	0.013	0.135	559	0.300+	ULS-Set B (auto)/16	-0.791	-0.001	<b>1.697</b>	0.000	-0.116	0.002
54	0.630-	ULS-Set B (auto)/7	-0.124	<b>1.631</b>	-0.160	0.000	-0.031	0.080	559	0.000	ULS-Set B (auto)/16	-0.225	0.011	-0.980	<b>0.000</b>	0.000	0.000
54	4.000+	ULS-Set B (auto)/13	1.192	-0.483	<b>-0.512</b>	0.000	0.031	0.085	559	0.000	ULS-Set B (auto)/5	-0.147	0.014	1.277	<b>0.000</b>	0.000	0.000
54	4.000+	ULS-Set B (auto)/3	-0.130	0.481	-0.081	<b>0.000</b>	0.014	-0.082	559	1.450+	ULS-Set B (auto)/18	-0.036	-0.001	-0.074	0.000	<b>-0.879</b>	0.001
54	0.500+	ULS-Set B (auto)/3	-0.326	1.536	-0.154	<b>0.000</b>	-0.004	-0.112	559	1.450-	ULS-Set B (auto)/11	-0.345	-0.002	0.042	0.000	<b>0.892</b>	-0.001
54	3.500-	ULS-Set B (auto)/10	-0.927	-0.189	-0.296	0.000	<b>-0.063</b>	-0.041	559	0.300+	ULS-Set B (auto)/17	-0.156	0.016	0.098	0.000	-0.078	<b>-0.007</b>
54	1.500-	ULS-Set B (auto)/14	-1.121	-0.374	0.194	0.000	<b>0.086</b>	-0.022	560	0.627+	ULS-Set B (auto)/18	<b>-13.725</b>	-0.819	-0.295	0.000	-0.003	0.009
54	5.000	ULS-Set B (auto)/1	<b>1.365</b>	-0.432	<b>0.622</b>	0.000	0.071	<b>-0.251</b>	560	4.300+	ULS-Set B (auto)/16	<b>12.372</b>	-0.825	0.197	0.000	0.003	0.072
54	5.000	ULS-Set B (auto)/10	-1.445	0.374	-0.383	0.000	-0.053	<b>0.269</b>	560	1.875+	ULS-Set B (auto)/18	-12.099	<b>-2.616</b>	-0.271	0.000	0.003	0.072
55	0.000	ULS-Set B (auto)/15	<b>-14.084</b>	-0.060	-1.608	0.000	0.000	0.000	560	1.875+	ULS-Set B (auto)/11	9.958	<b>2.460</b>	0.174	0.000	0.010	-0.030
55	2.600	ULS-Set B (auto)/1	<b>0.479</b>	0.015	-0.266	0.000	0.000	0.000	560	2.860+	ULS-Set B (auto)/10	1.096	0.232	<b>2.160</b>	0.000	-0.078	-0.011
55	0.000	ULS-Set B (auto)/13	-2.967	<b>0.345</b>	3.182	0.000	0.000	0.000	560	3.940+	ULS-Set B (auto)/7	10.658	-0.103	-0.577	<b>-0.002</b>	-0.001	0.137
55	0.000	ULS-Set B (auto)/4	-13.773	-0.187	<b>-2.218</b>	0.000	0.000	0.000	560	1.000+	ULS-Set B (auto)/20	4.838	-0.093	0.224	<b>0.002</b>	-0.002	0.117
55	0.000	ULS-Set B (auto)/4	-10.291	0.183	-1.996	<b>0.000</b>	0.000	0.000	560	3.150-	ULS-Set B (auto)/10	1.076	0.171	<b>-2.580</b>	0.000	<b>-0.161</b>	0.046
									560	3.000+	ULS-Set B (auto)/10	1.076	0.171	-2.474	0.000	<b>0.218</b>	0.020
									560	3.000+	ULS-Set B (auto)/21	-9.274	2.324	0.062	0.000	-0.001	<b>-0.312</b>
									560	3.000+	ULS-Set B (auto)/20	12.291	-2.168	-1.537	0.000	0.125	<b>0.327</b>
									561	2.860+	ULS-Set B (auto)/16	<b>-14.374</b>	0.170	-0.118	0.000	-0.008	-0.067

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
561	1.875+	(auto)/18							963	0.925-	(auto)/4						
		ULS-Set B (auto)/16	<b>17.523</b>	0.183	-0.001	0.000	0.026	0.009			ULS-Set B (auto)/4	1.797	-0.023	<b>-0.311</b>	0.000	<b>-0.057</b>	0.032
561	3.745+	ULS-Set B (auto)/21	-4.497	<b>-2.036</b>	-0.701	0.000	-0.033	0.012	963	0.615+	ULS-Set B (auto)/4	1.797	-0.023	-0.302	0.000	<b>0.039</b>	0.039
561	3.745+	ULS-Set B (auto)/20	5.631	<b>2.073</b>	-0.028	0.000	0.002	-0.005	963	1.850	ULS-Set B (auto)/5	0.004	-0.859	-0.035	<b>0.000</b>	0.000	<b>-0.451</b>
561	4.380-	ULS-Set B (auto)/4	-0.526	-0.036	<b>-1.309</b>	0.000	-0.073	0.031	963	0.615-	ULS-Set B (auto)/5	-0.391	0.713	0.000	<b>0.000</b>	0.004	<b>0.438</b>
561	4.300+	ULS-Set B (auto)/1	-0.649	-0.259	<b>1.206</b>	0.000	-0.025	-0.058	964	0.000	ULS-Set B (auto)/13	<b>0.865</b>	-0.745	-0.008	0.000	0.000	0.000
561	4.375+	ULS-Set B (auto)/2	0.537	-1.354	0.825	<b>0.000</b>	0.043	-0.141	964	1.230+	ULS-Set B (auto)/16	0.022	<b>-1.348</b>	0.006	0.000	0.002	<b>0.836</b>
561	0.000	ULS-Set B (auto)/16	0.000	0.610	0.035	<b>0.000</b>	0.000	0.000	964	1.850	ULS-Set B (auto)/25	0.502	0.902	<b>-0.030</b>	0.000	0.000	0.000
561	3.150+	ULS-Set B (auto)/15	-3.230	-0.041	0.184	0.000	<b>-0.074</b>	0.004	964	0.615+	ULS-Set B (auto)/19	0.674	0.552	<b>0.041</b>	0.000	-0.010	-0.455
561	4.380+	ULS-Set B (auto)/1	1.896	0.093	-0.318	0.000	<b>0.071</b>	-0.081	964	0.000	ULS-Set B (auto)/5	0.289	-1.289	-0.003	<b>0.000</b>	0.000	0.000
561	0.700+	ULS-Set B (auto)/21	-4.117	0.521	0.071	0.000	-0.004	<b>-0.195</b>	964	0.615+	ULS-Set B (auto)/13	0.804	0.556	0.039	0.000	<b>-0.010</b>	-0.458
561	0.627-	ULS-Set B (auto)/20	2.772	0.367	0.045	0.000	0.024	<b>0.226</b>	964	0.615-	ULS-Set B (auto)/17	<b>-1.055</b>	0.181	0.022	0.000	<b>0.018</b>	0.111
562	0.250	ULS-Set B (auto)/21	<b>0.136</b>	<b>0.000</b>	<b>0.107</b>	0.000	0.000	<b>0.000</b>	964	1.230+	ULS-Set B (auto)/5	0.475	<b>1.545</b>	-0.012	<b>0.000</b>	0.012	<b>-0.958</b>
562	0.000	ULS-Set B (auto)/5	0.048	0.000	<b>-0.107</b>	<b>0.000</b>	0.000	0.000	1893	0.000	ULS-Set B (auto)/26	<b>-0.299</b>	0.320	-0.462	0.000	0.139	-0.099
562	0.000	ULS-Set B (auto)/4	-0.220	0.000	0.004	<b>0.000</b>	0.000	0.000	1893	0.300	ULS-Set B (auto)/13	<b>0.443</b>	0.136	0.555	0.000	0.000	-0.011
562	0.125-	ULS-Set B (auto)/21	0.121	0.000	0.000	0.000	<b>-0.007</b>	0.000	1893	0.000	ULS-Set B (auto)/5	0.241	<b>0.070</b>	0.194	0.000	-0.085	-0.036
562	0.125-	ULS-Set B (auto)/20	-0.824	0.000	0.000	0.000	<b>0.007</b>	0.000	1893	0.300	ULS-Set B (auto)/4	-0.099	0.264	<b>-0.544</b>	0.000	0.000	-0.009
562	0.000	ULS-Set B (auto)/20	<b>-0.844</b>	0.000	0.105	0.000	0.000	<b>0.000</b>	1893	0.300	ULS-Set B (auto)/1	0.424	0.096	<b>0.586</b>	0.000	0.000	-0.010
585	0.250	ULS-Set B (auto)/1	<b>0.644</b>	<b>0.000</b>	0.088	0.000	0.008	<b>0.000</b>	1893	0.000	ULS-Set B (auto)/7	0.050	0.350	0.394	<b>0.000</b>	-0.092	-0.095
585	0.250	ULS-Set B (auto)/11	-2.830	0.000	<b>-0.187</b>	<b>0.000</b>	<b>-0.043</b>	0.000	1893	0.000	ULS-Set B (auto)/6	0.133	0.194	0.083	<b>0.000</b>	-0.052	-0.072
585	0.250	ULS-Set B (auto)/18	-2.799	0.000	<b>0.220</b>	<b>0.000</b>	<b>0.054</b>	0.000	1893	0.000	ULS-Set B (auto)/1	0.334	0.096	0.494	0.000	<b>-0.162</b>	-0.038
585	0.000	ULS-Set B (auto)/10	<b>-7.608</b>	0.000	0.061	0.000	0.026	<b>0.000</b>	1893	0.000	ULS-Set B (auto)/4	-0.220	0.264	-0.537	0.000	<b>0.162</b>	-0.088
773	1.500+	ULS-Set B (auto)/5	<b>-1.511</b>	1.312	0.050	0.000	-0.008	-0.755	1893	0.000	ULS-Set B (auto)/27	-0.183	<b>0.485</b>	-0.001	0.000	0.016	<b>-0.139</b>
773	1.500+	ULS-Set B (auto)/16	<b>1.553</b>	-1.278	-0.010	0.000	0.028	0.736	1893	0.300	ULS-Set B (auto)/22	0.115	0.401	0.222	0.000	0.000	<b>0.013</b>
773	0.000	ULS-Set B (auto)/2	-0.744	<b>-1.612</b>	0.025	0.000	0.000	0.000	1928	0.000	ULS-Set B (auto)/10	<b>-0.578</b>	-0.526	-0.998	0.000	0.300	0.133
773	2.000	ULS-Set B (auto)/2	-1.478	<b>1.610</b>	-0.017	0.000	0.000	0.000	1928	0.000	ULS-Set B (auto)/4	-0.570	<b>-0.577</b>	-1.141	0.000	<b>0.343</b>	<b>0.144</b>
773	1.500-	ULS-Set B (auto)/4	1.203	-0.033	<b>-0.180</b>	0.000	-0.016	0.028	1928	0.300	ULS-Set B (auto)/4	-0.448	-0.577	<b>-1.148</b>	0.000	0.000	-0.029
773	1.000+	ULS-Set B (auto)/22	0.865	-0.216	<b>0.151</b>	0.000	-0.013	1.004	1928	0.300	ULS-Set B (auto)/1	<b>0.694</b>	<b>0.541</b>	<b>1.203</b>	0.000	0.000	0.046
773	1.500+	ULS-Set B (auto)/23	-1.501	1.312	0.042	<b>0.000</b>	-0.004	-0.755	1928	0.000	ULS-Set B (auto)/6	0.303	0.380	0.479	<b>0.000</b>	-0.171	-0.073
773	1.500+	ULS-Set B (auto)/24	1.544	-1.279	-0.001	<b>0.000</b>	0.024	0.736	1928	0.000	ULS-Set B (auto)/7	-0.001	-0.192	0.437	<b>0.000</b>	-0.105	0.044
773	1.500+	ULS-Set B (auto)/17	0.061	-0.049	0.087	0.000	<b>-0.020</b>	0.028	1928	0.000	ULS-Set B (auto)/1	0.603	0.541	1.110	0.000	<b>-0.347</b>	<b>-0.116</b>
773	1.000-	ULS-Set B (auto)/4	1.203	0.008	0.003	0.000	<b>0.038</b>	0.039	2190	0.000	ULS-Set B (auto)/1	<b>-0.623</b>	0.169	0.019	0.000	0.000	0.000
773	1.000-	ULS-Set B (auto)/2	-0.744	-0.219	-0.024	0.000	0.023	<b>-1.030</b>	2190	0.000	ULS-Set B (auto)/10	<b>1.661</b>	-0.056	-0.054	0.000	0.000	0.000
773	1.000-	ULS-Set B (auto)/3	0.858	0.214	-0.113	0.000	-0.014	<b>1.004</b>	2190	1.875+	ULS-Set B (auto)/5	-0.046	<b>-4.352</b>	0.372	0.000	-0.046	0.544
963	0.000	ULS-Set B (auto)/15	<b>-1.011</b>	-0.092	0.064	0.000	0.000	0.000	2190	2.000	ULS-Set B (auto)/16	0.269	<b>4.357</b>	<b>-0.603</b>	0.000	0.000	0.000
963	0.615+	ULS-Set B (auto)/15	<b>2.007</b>	-0.011	-0.280	0.000	0.034	0.026	2190	0.500+	ULS-Set B (auto)/2	0.371	3.871	-0.380	<b>0.000</b>	0.002	0.096
963	0.615+	ULS-Set B (auto)/11	0.793	<b>-1.133</b>	-0.125	0.000	0.013	0.364	2190	0.000	ULS-Set B (auto)/11	0.282	-0.094	-0.033	<b>0.000</b>	0.000	0.000
963	0.615+	ULS-Set B (auto)/18	1.638	<b>1.145</b>	-0.151	0.000	0.012	-0.396	2190	0.500+	ULS-Set B (auto)/16	-0.254	-3.384	<b>0.667</b>	0.000	<b>-0.091</b>	-0.047
963	0.925+	ULS-Set B	0.003	-0.185	<b>0.257</b>	0.000	-0.057	0.032	2190	1.500+	ULS-Set B	0.836	-0.042	-0.190	0.000	<b>0.102</b>	-0.008

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
2190	1.875-	(auto)/10							2533	0.438	(auto)/16						
		ULS-Set B (auto)/16	0.269	-1.931	0.048	0.000	0.075	<b>-0.545</b>			ULS-Set B (auto)/11	<b>2.661</b>	0.007	-0.004	0.000	0.000	-0.091
2190	0.630-	ULS-Set B (auto)/21	0.344	3.880	-0.466	0.000	-0.036	<b>0.614</b>	2533	0.000	ULS-Set B (auto)/29	0.137	<b>0.005</b>	0.004	0.000	0.000	-0.041
2527	0.000	ULS-Set B (auto)/16	3.648	<b>-0.259</b>	<b>0.005</b>	<b>0.000</b>	<b>0.000</b>	<b>0.109</b>	2533	0.000	ULS-Set B (auto)/30	-0.181	0.017	0.004	<b>0.000</b>	0.000	-0.051
2527	0.422	ULS-Set B (auto)/14	<b>3.908</b>	-0.243	<b>-0.005</b>	0.000	0.000	0.000	2533	0.000	ULS-Set B (auto)/18	<b>-2.603</b>	0.086	<b>0.005</b>	0.000	<b>0.000</b>	0.082
2527	0.211-	ULS-Set B (auto)/14	3.904	-0.243	0.000	0.000	<b>0.000</b>	0.051	2533	0.219-	ULS-Set B (auto)/18	-2.600	<b>0.086</b>	0.000	0.000	<b>0.001</b>	0.100
2527	0.000	ULS-Set B (auto)/5	<b>0.665</b>	<b>0.113</b>	0.003	<b>0.000</b>	0.000	<b>-0.048</b>	2533	0.000	ULS-Set B (auto)/20	2.172	0.031	0.005	0.000	0.000	<b>-0.106</b>
2528	0.250	ULS-Set B (auto)/16	-2.083	0.000	<b>-0.262</b>	0.000	0.032	0.000	2533	0.438	ULS-Set B (auto)/6	-2.279	0.073	<b>-0.005</b>	<b>0.000</b>	0.000	<b>0.124</b>
2528	0.250	ULS-Set B (auto)/5	<b>-0.348</b>	<b>0.000</b>	<b>0.213</b>	<b>0.000</b>	-0.009	<b>0.000</b>	2534	0.250	ULS-Set B (auto)/18	<b>1.568</b>	<b>0.000</b>	0.066	0.000	0.045	<b>0.000</b>
2528	0.000	ULS-Set B (auto)/5	-0.383	0.000	-0.044	0.000	<b>-0.028</b>	0.000	2534	0.250	ULS-Set B (auto)/16	-1.144	0.000	<b>-0.105</b>	<b>0.000</b>	<b>-0.069</b>	0.000
2528	0.000	ULS-Set B (auto)/16	-2.130	0.000	-0.012	<b>0.000</b>	<b>0.065</b>	0.000	2534	0.250	ULS-Set B (auto)/5	1.195	0.000	<b>0.077</b>	<b>0.000</b>	<b>0.055</b>	0.000
2528	0.000	ULS-Set B (auto)/15	<b>-2.293</b>	0.000	-0.075	0.000	0.047	<b>0.000</b>	2534	0.000	ULS-Set B (auto)/11	<b>-1.539</b>	0.000	0.055	0.000	-0.053	<b>0.000</b>
2529	0.438	ULS-Set B (auto)/27	<b>3.078</b>	0.120	<b>-0.005</b>	0.000	0.000	0.050	2535	0.438	ULS-Set B (auto)/3	<b>0.905</b>	-0.034	-0.004	0.000	0.000	-0.104
2529	0.000	ULS-Set B (auto)/21	0.513	<b>-0.187</b>	0.004	<b>0.000</b>	0.000	0.068	2535	0.000	ULS-Set B (auto)/7	0.278	<b>-0.046</b>	0.004	0.000	0.000	-0.097
2529	0.000	ULS-Set B (auto)/20	2.704	<b>0.189</b>	<b>0.005</b>	<b>0.000</b>	0.000	-0.028	2535	0.000	ULS-Set B (auto)/6	-1.492	<b>0.044</b>	<b>0.005</b>	0.000	0.000	0.073
2529	0.000	ULS-Set B (auto)/5	<b>0.291</b>	-0.184	0.004	0.000	<b>0.000</b>	0.065	2535	0.000	ULS-Set B (auto)/15	-0.723	-0.014	0.005	<b>0.000</b>	0.000	-0.031
2529	0.219-	ULS-Set B (auto)/27	3.074	0.120	0.000	0.000	<b>0.001</b>	0.024	2535	0.000	ULS-Set B (auto)/11	0.713	-0.035	0.004	<b>0.000</b>	0.000	-0.088
2529	0.000	ULS-Set B (auto)/11	1.674	0.158	0.004	0.000	0.000	<b>-0.036</b>	2535	0.000	ULS-Set B (auto)/2	<b>-2.115</b>	0.032	0.005	0.000	<b>0.000</b>	0.065
2529	0.000	ULS-Set B (auto)/18	1.543	-0.156	0.005	0.000	0.000	<b>0.076</b>	2535	0.219-	ULS-Set B (auto)/2	-2.111	0.032	0.000	0.000	<b>0.001</b>	0.072
2530	0.250	ULS-Set B (auto)/5	<b>-0.027</b>	<b>0.000</b>	0.235	0.000	0.061	<b>0.000</b>	2535	0.438	ULS-Set B (auto)/16	0.407	-0.043	<b>-0.005</b>	0.000	0.000	<b>-0.121</b>
2530	0.250	ULS-Set B (auto)/7	-1.287	0.000	<b>-0.225</b>	0.000	-0.041	0.000	2535	0.438	ULS-Set B (auto)/5	-1.610	0.042	-0.004	0.000	0.000	<b>0.096</b>
2530	0.250	ULS-Set B (auto)/6	-0.422	0.000	<b>0.237</b>	0.000	0.066	0.000	2536	0.250	ULS-Set B (auto)/3	-0.452	0.000	<b>-0.134</b>	0.000	-0.050	0.000
2530	0.000	ULS-Set B (auto)/28	-1.191	0.000	-0.025	<b>0.000</b>	0.033	0.000	2536	0.250	ULS-Set B (auto)/2	<b>1.289</b>	<b>0.000</b>	<b>0.169</b>	0.000	0.045	<b>0.000</b>
2530	0.000	ULS-Set B (auto)/29	-0.734	0.000	0.031	<b>0.000</b>	-0.011	0.000	2536	0.000	ULS-Set B (auto)/16	-0.197	0.000	0.145	<b>0.000</b>	<b>-0.058</b>	0.000
2530	0.250	ULS-Set B (auto)/11	-0.992	0.000	-0.218	0.000	<b>-0.041</b>	0.000	2536	0.250	ULS-Set B (auto)/5	0.986	0.000	0.151	<b>0.000</b>	<b>0.047</b>	0.000
2530	0.250	ULS-Set B (auto)/18	-0.718	0.000	0.230	0.000	<b>0.066</b>	0.000	2536	0.000	ULS-Set B (auto)/3	<b>-0.487</b>	0.000	0.126	0.000	-0.051	<b>0.000</b>
2530	0.000	ULS-Set B (auto)/14	<b>-1.770</b>	0.000	0.018	0.000	-0.002	<b>0.000</b>	2537	0.438	ULS-Set B (auto)/3	<b>-0.254</b>	<b>0.003</b>	-0.004	0.000	0.000	-0.088
2531	0.438	ULS-Set B (auto)/16	<b>2.483</b>	0.080	<b>-0.005</b>	0.000	0.000	-0.063	2537	0.000	ULS-Set B (auto)/21	-1.018	-0.030	0.004	<b>0.000</b>	0.000	0.095
2531	0.000	ULS-Set B (auto)/14	2.133	0.058	<b>0.005</b>	<b>0.000</b>	0.000	-0.053	2537	0.000	ULS-Set B (auto)/20	-0.901	-0.035	<b>0.005</b>	<b>0.000</b>	0.000	-0.076
2531	0.000	ULS-Set B (auto)/5	<b>-0.711</b>	<b>-0.069</b>	0.004	<b>0.000</b>	<b>0.000</b>	0.137	2537	0.000	ULS-Set B (auto)/31	<b>-1.669</b>	-0.076	0.005	0.000	<b>0.000</b>	0.075
2531	0.219-	ULS-Set B (auto)/16	2.480	<b>0.080</b>	0.000	0.000	<b>0.001</b>	-0.080	2537	0.219-	ULS-Set B (auto)/31	-1.666	<b>-0.076</b>	0.000	0.000	<b>0.001</b>	0.058
2531	0.000	ULS-Set B (auto)/7	2.032	0.078	0.004	0.000	0.000	<b>-0.105</b>	2537	0.438	ULS-Set B (auto)/16	-0.866	-0.034	<b>-0.005</b>	0.000	0.000	<b>-0.092</b>
2531	0.000	ULS-Set B (auto)/6	-0.266	-0.066	0.005	0.000	0.000	<b>0.144</b>	2537	0.000	ULS-Set B (auto)/2	-1.660	-0.068	0.005	0.000	0.000	<b>0.108</b>
2532	0.250	ULS-Set B (auto)/5	<b>0.305</b>	<b>0.000</b>	0.040	0.000	0.069	<b>0.000</b>	2538	0.250	ULS-Set B (auto)/2	<b>1.186</b>	<b>0.000</b>	0.017	0.000	0.032	<b>0.000</b>
2532	0.000	ULS-Set B (auto)/18	-0.090	0.000	<b>-0.129</b>	<b>0.000</b>	0.081	0.000	2538	0.000	ULS-Set B (auto)/5	0.791	0.000	<b>-0.252</b>	0.000	0.055	0.000
2532	0.000	ULS-Set B (auto)/11	-0.890	0.000	<b>0.102</b>	<b>0.000</b>	-0.058	0.000	2538	0.000	ULS-Set B (auto)/16	0.329	0.000	<b>0.258</b>	0.000	-0.044	0.000
2532	0.000	ULS-Set B (auto)/7	-0.995	0.000	0.097	0.000	<b>-0.060</b>	0.000	2538	0.000	ULS-Set B (auto)/20	0.356	0.000	0.257	<b>0.000</b>	-0.043	0.000
2532	0.000	ULS-Set B (auto)/6	0.016	0.000	-0.124	0.000	<b>0.082</b>	0.000	2538	0.000	ULS-Set B (auto)/21	0.764	0.000	-0.252	<b>0.000</b>	0.054	0.000
2532	0.000	ULS-Set B (auto)/6	<b>-1.261</b>	0.000	0.094	0.000	-0.056	<b>0.000</b>	2538	0.000	ULS-Set B (auto)/21	1.139	0.000	-0.241	0.000	<b>0.062</b>	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
2538	0.000	(auto)/2							2546	0.438	(auto)/11						
		ULS-Set B (auto)/3	<b>-0.019</b>	0.000	0.247	0.000	<b>-0.051</b>	<b>0.000</b>			ULS-Set B (auto)/11	<b>1.749</b>	0.067	-0.004	0.000	0.000	0.125
2539	0.438	ULS-Set B (auto)/1	<b>-0.194</b>	<b>-0.022</b>	-0.004	0.000	0.000	0.022	2546	0.000	ULS-Set B (auto)/5	-4.542	<b>-0.070</b>	0.004	0.000	0.000	-0.086
2539	0.000	ULS-Set B (auto)/15	-2.901	<b>0.136</b>	<b>0.005</b>	0.000	0.000	-0.033	2546	0.000	ULS-Set B (auto)/16	0.560	<b>0.089</b>	<b>0.005</b>	0.000	0.000	0.090
2539	0.000	ULS-Set B (auto)/6	-1.807	0.020	0.005	<b>0.000</b>	0.000	0.031	2546	0.000	ULS-Set B (auto)/18	<b>-5.725</b>	-0.048	0.005	0.000	<b>0.000</b>	-0.093
2539	0.000	ULS-Set B (auto)/7	-0.469	0.029	0.004	<b>0.000</b>	0.000	-0.030	2546	0.219-	ULS-Set B (auto)/18	-5.722	-0.048	0.000	0.000	<b>0.001</b>	-0.103
2539	0.000	ULS-Set B (auto)/10	<b>-3.127</b>	0.121	0.005	0.000	<b>0.000</b>	-0.034	2546	0.438	ULS-Set B (auto)/6	-5.048	-0.061	<b>-0.005</b>	<b>0.000</b>	0.000	<b>-0.119</b>
2539	0.219-	ULS-Set B (auto)/10	-3.124	0.121	0.000	0.000	<b>0.001</b>	-0.008	2546	0.438	ULS-Set B (auto)/7	1.078	0.081	-0.004	<b>0.000</b>	0.000	<b>0.131</b>
2539	0.000	ULS-Set B (auto)/4	-2.935	0.135	0.005	0.000	0.000	<b>-0.038</b>	2548	0.250	ULS-Set B (auto)/18	<b>1.102</b>	<b>0.000</b>	0.083	0.000	0.066	<b>0.000</b>
2539	0.438	ULS-Set B (auto)/2	-1.717	0.060	<b>-0.005</b>	0.000	0.000	<b>0.057</b>	2548	0.000	ULS-Set B (auto)/5	0.689	0.000	<b>-0.180</b>	0.000	0.076	0.000
2540	0.000	ULS-Set B (auto)/21	1.378	<b>-0.053</b>	0.003	<b>0.000</b>	0.000	-0.041	2548	0.000	ULS-Set B (auto)/16	0.003	0.000	<b>0.178</b>	0.000	-0.083	0.000
2540	0.383	ULS-Set B (auto)/10	<b>6.649</b>	0.023	<b>-0.004</b>	0.000	0.000	-0.063	2548	0.000	ULS-Set B (auto)/7	-0.126	0.000	0.177	<b>0.000</b>	-0.084	0.000
2540	0.000	ULS-Set B (auto)/20	4.053	<b>0.066</b>	<b>0.004</b>	<b>0.000</b>	0.000	0.018	2548	0.000	ULS-Set B (auto)/6	0.817	0.000	-0.178	<b>0.000</b>	0.077	0.000
2540	0.000	ULS-Set B (auto)/1	<b>0.020</b>	-0.029	0.003	0.000	<b>0.000</b>	-0.001	2548	0.000	ULS-Set B (auto)/20	-0.021	0.000	0.178	0.000	<b>-0.084</b>	0.000
2540	0.128-	ULS-Set B (auto)/10	6.644	0.023	0.001	0.000	<b>0.000</b>	-0.069	2548	0.000	ULS-Set B (auto)/21	0.712	0.000	-0.179	0.000	<b>0.077</b>	0.000
2540	0.383	ULS-Set B (auto)/18	3.257	-0.040	-0.004	0.000	0.000	<b>-0.083</b>	2548	0.000	ULS-Set B (auto)/11	<b>-0.363</b>	0.000	0.175	0.000	-0.080	<b>0.000</b>
2540	0.383	ULS-Set B (auto)/11	2.185	0.053	-0.003	0.000	0.000	<b>0.065</b>	2549	0.438	ULS-Set B (auto)/3	<b>1.075</b>	-0.080	-0.004	0.000	0.000	0.104
2541	0.250	ULS-Set B (auto)/1	<b>0.145</b>	<b>0.000</b>	-0.002	0.000	-0.017	<b>0.000</b>	2549	0.000	ULS-Set B (auto)/7	0.582	<b>-0.086</b>	0.004	0.000	0.000	0.148
2541	0.000	ULS-Set B (auto)/18	-2.085	0.000	<b>-0.258</b>	0.000	0.044	0.000	2549	0.000	ULS-Set B (auto)/6	-2.672	<b>0.072</b>	<b>0.005</b>	0.000	0.000	-0.135
2541	0.000	ULS-Set B (auto)/5	-0.279	0.000	-0.253	<b>0.000</b>	0.024	0.000	2549	0.438	ULS-Set B (auto)/2	-3.153	0.066	<b>-0.005</b>	0.000	0.000	-0.097
2541	0.000	ULS-Set B (auto)/16	-3.556	0.000	0.240	<b>0.000</b>	-0.010	0.000	2549	0.000	ULS-Set B (auto)/20	0.463	-0.086	0.005	<b>0.000</b>	0.000	<b>0.148</b>
2541	0.000	ULS-Set B (auto)/11	-1.750	0.000	<b>0.244</b>	0.000	<b>-0.029</b>	0.000	2549	0.000	ULS-Set B (auto)/2	<b>-3.160</b>	0.066	0.005	0.000	<b>0.000</b>	-0.126
2541	0.000	ULS-Set B (auto)/4	-4.428	0.000	0.002	0.000	<b>0.051</b>	0.000	2549	0.219-	ULS-Set B (auto)/2	-3.157	0.066	0.000	0.000	<b>0.001</b>	-0.111
2541	0.000	ULS-Set B (auto)/10	<b>-4.717</b>	0.000	-0.003	0.000	0.047	<b>0.000</b>	2549	0.000	ULS-Set B (auto)/21	-2.553	0.072	0.004	<b>0.000</b>	0.000	<b>-0.135</b>
2542	0.000	ULS-Set B (auto)/15	3.684	<b>-0.118</b>	<b>0.005</b>	0.000	0.000	-0.033	2550	0.250	ULS-Set B (auto)/23	<b>0.909</b>	<b>0.000</b>	0.228	0.000	0.056	<b>0.000</b>
2542	0.000	ULS-Set B (auto)/11	1.949	<b>0.050</b>	0.004	0.000	0.000	-0.027	2550	0.000	ULS-Set B (auto)/3	-0.574	0.000	0.041	<b>0.000</b>	-0.036	0.000
2542	0.438	ULS-Set B (auto)/10	<b>3.693</b>	-0.102	<b>-0.005</b>	0.000	0.000	-0.079	2550	0.000	ULS-Set B (auto)/2	0.841	0.000	-0.060	<b>0.000</b>	0.036	0.000
2542	0.000	ULS-Set B (auto)/16	3.432	-0.003	0.005	<b>0.000</b>	0.000	-0.037	2550	0.250	ULS-Set B (auto)/20	-0.439	0.000	<b>-0.248</b>	0.000	<b>-0.063</b>	0.000
2542	0.000	ULS-Set B (auto)/1	<b>0.311</b>	-0.006	0.004	0.000	<b>0.000</b>	0.032	2550	0.250	ULS-Set B (auto)/21	0.796	0.000	<b>0.237</b>	0.000	<b>0.059</b>	0.000
2542	0.219-	ULS-Set B (auto)/10	3.690	-0.102	0.000	0.000	<b>0.001</b>	-0.057	2550	0.000	ULS-Set B (auto)/24	<b>-0.604</b>	0.000	0.040	0.000	-0.036	<b>0.000</b>
2542	0.438	ULS-Set B (auto)/4	3.532	-0.114	-0.005	0.000	0.000	<b>-0.088</b>	2551	0.438	ULS-Set B (auto)/1	<b>1.456</b>	0.071	-0.004	0.000	0.000	-0.001
2542	0.000	ULS-Set B (auto)/5	0.333	-0.047	0.004	<b>0.000</b>	0.000	<b>0.038</b>	2551	0.438	ULS-Set B (auto)/4	-1.979	-0.030	<b>-0.005</b>	0.000	0.000	-0.012
2544	0.497	ULS-Set B (auto)/1	<b>-0.178</b>	-0.056	-0.004	0.000	0.000	-0.035	2551	0.000	ULS-Set B (auto)/20	0.279	<b>-0.209</b>	<b>0.005</b>	<b>0.000</b>	0.000	0.066
2544	0.000	ULS-Set B (auto)/5	-0.997	<b>-0.092</b>	0.004	0.000	0.000	-0.047	2551	0.000	ULS-Set B (auto)/21	0.688	<b>0.163</b>	0.004	<b>0.000</b>	0.000	-0.065
2544	0.000	ULS-Set B (auto)/16	-1.891	<b>0.113</b>	<b>0.006</b>	0.000	0.000	0.038	2551	0.000	ULS-Set B (auto)/4	<b>-1.986</b>	-0.030	0.005	0.000	<b>0.000</b>	0.002
2544	0.000	ULS-Set B (auto)/4	<b>-4.529</b>	0.059	0.006	0.000	<b>0.000</b>	-0.056	2551	0.219-	ULS-Set B (auto)/4	-1.983	-0.030	0.000	0.000	<b>0.001</b>	-0.005
2544	0.249-	ULS-Set B (auto)/4	-4.525	0.059	0.000	0.000	<b>0.001</b>	-0.041	2551	0.000	ULS-Set B (auto)/6	0.575	0.162	0.005	0.000	0.000	<b>-0.066</b>
2544	0.497	ULS-Set B (auto)/18	-2.598	-0.068	<b>-0.006</b>	<b>0.000</b>	0.000	<b>-0.100</b>	2551	0.000	ULS-Set B (auto)/7	0.392	-0.207	0.004	0.000	0.000	<b>0.066</b>
2544	0.497	ULS-Set B	-0.278	0.089	-0.004	<b>0.000</b>	0.000	<b>0.102</b>	2552	0.250	ULS-Set B	<b>0.640</b>	<b>0.000</b>	-0.029	0.000	0.006	<b>0.000</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/32						
2552	0.250	ULS-Set B (auto)/20	-0.585	0.000	<b>-0.277</b>	0.000	0.015	0.000
2552	0.250	ULS-Set B (auto)/21	-0.550	0.000	<b>0.245</b>	<b>0.000</b>	-0.004	0.000
2552	0.125-	ULS-Set B (auto)/21	-0.571	0.000	0.080	0.000	<b>-0.024</b>	0.000
2552	0.000	ULS-Set B (auto)/20	-0.648	0.000	0.076	<b>0.000</b>	<b>0.042</b>	0.000
2552	0.000	ULS-Set B (auto)/25	<b>-1.030</b>	0.000	-0.070	0.000	-0.006	<b>0.000</b>
2553	0.422	ULS-Set B (auto)/1	<b>2.356</b>	-0.028	-0.003	0.000	0.000	0.000
2553	0.000	ULS-Set B (auto)/21	1.492	<b>-0.089</b>	0.003	<b>0.000</b>	0.000	<b>0.037</b>
2553	0.422	ULS-Set B (auto)/4	-1.645	0.051	<b>-0.005</b>	0.000	0.000	0.000
2553	0.000	ULS-Set B (auto)/4	<b>-1.652</b>	0.051	<b>0.005</b>	0.000	<b>0.000</b>	-0.021
2553	0.211-	ULS-Set B (auto)/4	-1.649	0.051	0.000	0.000	<b>0.000</b>	-0.011
2553	0.000	ULS-Set B (auto)/20	1.003	<b>0.169</b>	0.005	<b>0.000</b>	0.000	<b>-0.071</b>
2556	0.250	ULS-Set B (auto)/18	<b>3.005</b>	<b>0.000</b>	0.104	<b>0.000</b>	0.050	<b>0.000</b>
2556	0.000	ULS-Set B (auto)/21	2.408	0.000	<b>-0.175</b>	0.000	0.051	0.000
2556	0.000	ULS-Set B (auto)/20	-0.574	0.000	<b>0.175</b>	0.000	-0.053	0.000
2556	0.000	ULS-Set B (auto)/18	2.955	0.000	-0.174	0.000	<b>0.053</b>	0.000
2556	0.000	ULS-Set B (auto)/11	<b>-1.120</b>	0.000	0.173	<b>0.000</b>	<b>-0.055</b>	<b>0.000</b>
3112	0.000	ULS-Set B (auto)/26	<b>-1.349</b>	-0.016	0.053	0.003	0.000	0.000
3112	1.850-	ULS-Set B (auto)/13	<b>1.803</b>	-0.147	0.668	-0.003	-0.723	-0.096
3112	2.490+	ULS-Set B (auto)/12	-0.666	<b>-0.351</b>	0.158	0.000	-0.047	<b>0.105</b>
3112	1.850+	ULS-Set B (auto)/18	0.014	<b>0.312</b>	2.295	0.002	-1.466	-0.108
3112	0.000	ULS-Set B (auto)/18	0.681	0.088	<b>-3.149</b>	0.002	0.000	0.000
3112	0.000	ULS-Set B (auto)/11	-0.299	0.009	<b>3.077</b>	-0.010	0.000	0.000
3112	1.850+	ULS-Set B (auto)/20	-0.719	0.224	-2.294	<b>-0.010</b>	1.436	-0.062
3112	1.850+	ULS-Set B (auto)/33	-0.757	0.053	-0.054	<b>0.004</b>	0.046	0.008
3112	0.970-	ULS-Set B (auto)/18	0.975	-0.158	-0.062	0.002	<b>-2.092</b>	0.031
3112	1.080-	ULS-Set B (auto)/11	-0.092	-0.039	-0.074	-0.010	<b>2.046</b>	-0.006
3112	1.850-	ULS-Set B (auto)/34	1.480	-0.163	0.658	-0.003	-0.741	<b>-0.111</b>
3113	0.000	ULS-Set B (auto)/10	<b>-4.535</b>	-0.020	0.060	-0.002	0.000	0.000
3113	1.850-	ULS-Set B (auto)/1	<b>1.326</b>	-0.135	0.654	-0.003	-0.749	-0.088
3113	2.490+	ULS-Set B (auto)/35	0.022	<b>-0.305</b>	-0.229	-0.003	0.052	<b>0.091</b>
3113	0.000	ULS-Set B (auto)/18	-1.058	0.071	<b>-3.144</b>	-0.008	0.000	0.000
3113	2.490-	ULS-Set B (auto)/23	0.531	0.258	<b>3.085</b>	-0.008	0.258	0.070
3113	1.850+	ULS-Set B (auto)/18	0.215	0.303	2.314	<b>-0.008</b>	-1.488	-0.107
3113	1.850+	ULS-Set B (auto)/11	-0.321	0.127	-2.297	<b>0.008</b>	1.437	-0.039
3113	1.080-	ULS-Set B (auto)/18	-0.844	-0.145	0.071	-0.008	<b>-2.104</b>	0.005
3113	0.970-	ULS-Set B (auto)/11	-1.456	-0.054	0.064	0.008	<b>2.044</b>	0.009
3113	1.850+	ULS-Set B (auto)/34	0.201	<b>0.318</b>	1.174	-0.004	-0.767	<b>-0.114</b>
3114	0.750	ULS-Set B	-0.239	0.000	<b>-0.432</b>	0.000	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/24						
3114	0.750	ULS-Set B (auto)/23	<b>0.054</b>	<b>0.000</b>	<b>0.443</b>	0.000	0.000	<b>0.000</b>
3114	0.000	ULS-Set B (auto)/19	-0.181	0.000	-0.213	<b>0.000</b>	0.000	0.000
3114	0.000	ULS-Set B (auto)/33	-0.219	0.000	0.016	<b>0.000</b>	0.000	0.000
3114	0.429-	ULS-Set B (auto)/23	0.004	0.000	0.060	0.000	<b>-0.081</b>	0.000
3114	0.429-	ULS-Set B (auto)/24	-0.307	0.000	-0.059	0.000	<b>0.079</b>	0.000
3114	0.000	ULS-Set B (auto)/24	<b>-0.392</b>	0.000	0.403	0.000	0.000	<b>0.000</b>
3115	0.640	ULS-Set B (auto)/36	<b>0.245</b>	0.011	-0.153	0.000	0.029	0.007
3115	0.000	ULS-Set B (auto)/29	0.081	<b>0.007</b>	0.246	0.000	0.000	0.000
3115	0.000	ULS-Set B (auto)/18	0.105	0.020	<b>-0.428</b>	0.000	0.000	0.000
3115	0.000	ULS-Set B (auto)/11	0.081	0.011	<b>0.438</b>	0.000	0.000	0.000
3115	0.000	ULS-Set B (auto)/4	0.105	0.021	0.003	<b>0.000</b>	0.000	0.000
3115	0.427-	ULS-Set B (auto)/5	0.146	0.008	0.089	<b>0.000</b>	-0.071	0.004
3115	0.320-	ULS-Set B (auto)/18	0.173	0.020	-0.047	0.000	<b>-0.076</b>	0.006
3115	0.427-	ULS-Set B (auto)/11	0.148	0.011	-0.058	0.000	<b>0.081</b>	0.005
3115	0.000	ULS-Set B (auto)/37	<b>0.077</b>	0.020	-0.008	0.000	0.000	<b>0.000</b>
3115	0.640	ULS-Set B (auto)/38	0.241	<b>0.026</b>	-0.012	0.000	-0.008	<b>0.016</b>
3116	0.750	ULS-Set B (auto)/16	-1.301	0.000	<b>-0.432</b>	0.000	0.000	0.000
3116	0.750	ULS-Set B (auto)/5	<b>1.884</b>	<b>0.000</b>	<b>0.443</b>	<b>0.000</b>	0.000	<b>0.000</b>
3116	0.429-	ULS-Set B (auto)/5	1.833	0.000	0.060	0.000	<b>-0.081</b>	0.000
3116	0.429-	ULS-Set B (auto)/16	-1.370	0.000	-0.058	<b>0.000</b>	<b>0.079</b>	0.000
3116	0.000	ULS-Set B (auto)/16	<b>-1.455</b>	0.000	0.402	0.000	0.000	<b>0.000</b>
3117	0.000	ULS-Set B (auto)/1	<b>0.018</b>	0.044	0.045	0.000	0.000	0.000
3117	0.000	ULS-Set B (auto)/18	0.133	0.028	0.104	<b>0.000</b>	0.000	0.000
3117	0.000	ULS-Set B (auto)/11	0.130	-0.010	-0.116	<b>0.000</b>	0.000	0.000
3117	0.640	ULS-Set B (auto)/7	0.258	-0.014	<b>-0.861</b>	0.000	<b>-0.313</b>	-0.009
3117	0.640	ULS-Set B (auto)/6	0.242	0.032	<b>0.868</b>	0.000	<b>0.311</b>	0.020
3117	0.640	ULS-Set B (auto)/4	<b>0.441</b>	<b>-0.048</b>	-0.012	0.000	0.001	<b>-0.031</b>
3117	0.640	ULS-Set B (auto)/1	0.118	<b>0.044</b>	0.439	0.000	0.155	<b>0.028</b>
3118	0.000	ULS-Set B (auto)/10	<b>-0.693</b>	0.120	0.001	0.000	0.001	-0.036
3118	0.300	ULS-Set B (auto)/1	<b>0.534</b>	-0.221	-0.424	0.000	0.000	0.000
3118	0.000	ULS-Set B (auto)/13	0.459	<b>-0.231</b>	-0.607	0.000	0.154	<b>0.069</b>
3118	0.000	ULS-Set B (auto)/6	0.006	-0.132	<b>-1.216</b>	0.000	<b>0.311</b>	0.040
3118	0.000	ULS-Set B (auto)/18	-0.021	-0.142	-1.214	<b>0.000</b>	0.311	0.042
3118	0.000	ULS-Set B (auto)/11	0.223	-0.086	1.216	<b>0.000</b>	-0.312	0.026
3118	0.000	ULS-Set B (auto)/7	0.196	-0.096	<b>1.218</b>	0.000	<b>-0.313</b>	0.029
3118	0.000	ULS-Set B (auto)/17	-0.580	<b>0.156</b>	0.000	0.000	0.002	<b>-0.047</b>
3119	0.750	ULS-Set B (auto)/22	-0.257	0.000	<b>-0.430</b>	0.000	0.000	0.000
3119	0.750	ULS-Set B	<b>0.142</b>	<b>0.000</b>	<b>0.441</b>	0.000	0.000	<b>0.000</b>



Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/39									(auto)/1						
3119	0.000	ULS-Set B (auto)/11	-0.351	0.000	0.383	<b>0.000</b>	0.000	0.000	3124	0.000	ULS-Set B (auto)/5	0.226	-0.089	<b>-2.224</b>	0.000	<b>0.614</b>	0.027
3119	0.000	ULS-Set B (auto)/18	-0.025	0.000	-0.393	<b>0.000</b>	0.000	0.000	3124	0.000	ULS-Set B (auto)/2	0.217	-0.078	-2.214	<b>0.000</b>	0.610	0.023
3119	0.429-	ULS-Set B (auto)/39	0.092	0.000	0.058	0.000	<b>-0.080</b>	0.000	3124	0.000	ULS-Set B (auto)/3	0.221	-0.066	2.016	<b>0.000</b>	-0.553	0.020
3119	0.429-	ULS-Set B (auto)/22	-0.325	0.000	-0.056	0.000	<b>0.078</b>	0.000	3124	0.000	ULS-Set B (auto)/16	0.212	-0.054	<b>2.026</b>	0.000	<b>-0.556</b>	0.016
3119	0.000	ULS-Set B (auto)/22	<b>-0.407</b>	0.000	0.383	0.000	0.000	<b>0.000</b>	3124	0.000	ULS-Set B (auto)/4	-0.107	<b>0.150</b>	0.172	0.000	-0.050	<b>-0.045</b>
3120	0.000	ULS-Set B (auto)/26	<b>-0.679</b>	-0.012	0.001	0.000	0.000	0.000	3129	0.000	ULS-Set B (auto)/40	<b>-0.199</b>	0.084	0.031	0.000	-0.008	-0.025
3120	0.000	ULS-Set B (auto)/18	0.313	0.007	0.358	<b>0.000</b>	0.000	0.000	3129	0.300	ULS-Set B (auto)/19	<b>0.622</b>	0.069	-0.460	0.000	0.000	0.000
3120	0.000	ULS-Set B (auto)/11	0.086	0.008	-0.313	<b>0.000</b>	0.000	0.000	3129	0.000	ULS-Set B (auto)/5	0.240	<b>-0.013</b>	<b>-1.248</b>	0.000	<b>0.321</b>	<b>0.004</b>
3120	0.640	ULS-Set B (auto)/7	0.206	0.008	<b>-1.059</b>	0.000	<b>-0.440</b>	0.005	3129	0.000	ULS-Set B (auto)/7	0.505	0.151	1.215	<b>0.000</b>	-0.312	-0.045
3120	0.640	ULS-Set B (auto)/6	0.430	0.007	<b>1.123</b>	0.000	<b>0.474</b>	0.004	3129	0.000	ULS-Set B (auto)/6	0.157	0.008	-1.243	<b>0.000</b>	0.319	-0.002
3120	0.640	ULS-Set B (auto)/17	-0.460	<b>-0.014</b>	-0.049	0.000	-0.022	<b>-0.009</b>	3129	0.000	ULS-Set B (auto)/16	0.423	<b>0.173</b>	<b>1.219</b>	0.000	<b>-0.314</b>	<b>-0.052</b>
3120	0.640	ULS-Set B (auto)/13	<b>0.838</b>	<b>0.016</b>	0.585	0.000	0.248	<b>0.010</b>	3136	0.000	ULS-Set B (auto)/26	<b>-0.441</b>	-0.183	0.042	0.000	-0.011	0.055
3121	0.000	ULS-Set B (auto)/26	<b>-0.546</b>	0.261	0.020	0.000	-0.005	-0.078	3136	0.300	ULS-Set B (auto)/13	<b>0.516</b>	-0.111	0.096	0.000	0.000	<b>0.000</b>
3121	0.300	ULS-Set B (auto)/13	<b>0.799</b>	-0.346	-0.736	0.000	0.000	0.000	3136	0.000	ULS-Set B (auto)/38	-0.227	<b>-0.240</b>	0.027	0.000	-0.008	<b>0.072</b>
3121	0.000	ULS-Set B (auto)/1	0.737	<b>-0.354</b>	-0.925	0.000	0.250	<b>0.106</b>	3136	0.300	ULS-Set B (auto)/11	0.213	-0.104	<b>-0.315</b>	0.000	0.000	0.000
3121	0.000	ULS-Set B (auto)/6	0.271	-0.237	<b>-1.760</b>	0.000	<b>0.474</b>	0.071	3136	0.300	ULS-Set B (auto)/18	0.202	-0.179	<b>0.279</b>	0.000	0.000	0.000
3121	0.000	ULS-Set B (auto)/5	0.464	-0.293	-1.739	<b>0.000</b>	0.468	0.088	3136	0.000	ULS-Set B (auto)/4	-0.344	-0.206	0.031	<b>0.000</b>	-0.007	0.062
3121	0.000	ULS-Set B (auto)/16	0.148	0.050	1.619	<b>0.000</b>	-0.433	-0.015	3136	0.000	ULS-Set B (auto)/1	0.462	<b>-0.064</b>	-0.090	<b>0.000</b>	-0.001	0.019
3121	0.000	ULS-Set B (auto)/7	0.341	-0.006	<b>1.639</b>	0.000	<b>-0.440</b>	0.002	3136	0.100-	ULS-Set B (auto)/18	0.159	-0.179	0.041	0.000	<b>-0.032</b>	0.036
3121	0.000	ULS-Set B (auto)/4	-0.435	<b>0.308</b>	0.085	0.000	-0.024	<b>-0.092</b>	3136	0.000	ULS-Set B (auto)/11	0.166	-0.104	0.033	0.000	<b>0.042</b>	0.031
3122	0.750	ULS-Set B (auto)/7	<b>0.013</b>	0.000	<b>-0.431</b>	0.000	0.000	0.000	3138	0.500+	ULS-Set B (auto)/26	<b>-0.528</b>	-0.004	0.052	0.000	-0.003	0.000
3122	0.750	ULS-Set B (auto)/6	-0.198	<b>0.000</b>	<b>0.442</b>	0.000	0.000	<b>0.000</b>	3138	0.000	ULS-Set B (auto)/13	<b>0.664</b>	0.253	0.014	0.000	0.000	0.000
3122	0.000	ULS-Set B (auto)/11	-0.101	0.000	0.393	<b>0.000</b>	0.000	0.000	3138	1.000	ULS-Set B (auto)/18	0.386	<b>-0.512</b>	-0.020	0.000	0.000	0.000
3122	0.000	ULS-Set B (auto)/18	-0.349	0.000	-0.403	<b>0.000</b>	0.000	0.000	3138	0.000	ULS-Set B (auto)/18	0.405	<b>0.512</b>	0.020	0.000	0.000	0.000
3122	0.429-	ULS-Set B (auto)/6	-0.267	0.000	0.059	0.000	<b>-0.081</b>	0.000	3138	0.500+	ULS-Set B (auto)/36	-0.074	0.122	<b>0.054</b>	0.000	-0.004	-0.113
3122	0.429-	ULS-Set B (auto)/7	-0.038	0.000	-0.057	0.000	<b>0.078</b>	0.000	3138	0.000	ULS-Set B (auto)/41	-0.313	-0.017	0.015	<b>0.000</b>	0.000	0.000
3122	0.000	ULS-Set B (auto)/6	<b>-0.350</b>	0.000	-0.403	0.000	0.000	<b>0.000</b>	3138	0.000	ULS-Set B (auto)/16	-0.120	-0.506	0.019	<b>0.000</b>	0.000	0.000
3123	0.000	ULS-Set B (auto)/32	<b>-0.095</b>	-0.053	-0.060	0.000	0.000	0.000	3138	0.500-	ULS-Set B (auto)/36	-0.062	-0.122	<b>-0.054</b>	0.000	<b>-0.004</b>	-0.113
3123	0.640	ULS-Set B (auto)/25	<b>0.474</b>	0.064	0.737	0.000	0.346	0.041	3138	0.800-	ULS-Set B (auto)/10	-0.468	0.001	-0.006	0.000	<b>0.003</b>	0.000
3123	0.000	ULS-Set B (auto)/18	0.268	0.048	0.563	<b>0.000</b>	0.000	0.000	3138	0.500+	ULS-Set B (auto)/11	-0.038	0.219	0.040	0.000	-0.003	<b>-0.206</b>
3123	0.000	ULS-Set B (auto)/11	0.106	-0.006	-0.482	<b>0.000</b>	0.000	0.000	3138	0.500+	ULS-Set B (auto)/18	0.386	-0.214	0.053	0.000	-0.003	<b>0.206</b>
3123	0.640	ULS-Set B (auto)/16	0.234	-0.018	<b>-1.240</b>	0.000	<b>-0.556</b>	-0.012	3139	0.000	ULS-Set B (auto)/2	-1.722	<b>-0.520</b>	0.083	0.000	0.000	0.000
3123	0.640	ULS-Set B (auto)/5	0.377	0.060	<b>1.340</b>	0.000	<b>0.614</b>	0.039	3139	1.000	ULS-Set B (auto)/21	-1.686	<b>0.520</b>	-0.070	0.000	0.000	0.000
3123	0.640	ULS-Set B (auto)/4	0.058	<b>-0.057</b>	-0.092	0.000	-0.050	<b>-0.037</b>	3139	0.500+	ULS-Set B (auto)/24	<b>1.476</b>	-0.216	<b>0.119</b>	0.000	-0.037	0.205
3123	0.640	ULS-Set B (auto)/1	0.422	<b>0.068</b>	0.740	0.000	0.348	<b>0.044</b>	3139	0.000	ULS-Set B (auto)/33	0.108	0.020	0.001	<b>0.000</b>	0.000	0.000
3124	0.000	ULS-Set B (auto)/8	<b>-0.273</b>	0.066	0.062	0.000	-0.018	-0.020	3139	0.000	ULS-Set B (auto)/19	-1.026	-0.268	0.059	<b>0.000</b>	0.000	0.000
3124	0.300	ULS-Set B (auto)/19	<b>0.496</b>	-0.143	-1.057	0.000	0.000	0.000	3139	0.500-	ULS-Set B (auto)/24	1.476	0.216	<b>-0.119</b>	0.000	<b>-0.037</b>	0.205
3124	0.000	ULS-Set B	0.441	<b>-0.155</b>	-1.252	0.000	0.348	<b>0.046</b>	3139	0.500-	ULS-Set B	<b>-1.728</b>	-0.222	0.027	0.000	<b>0.031</b>	-0.210

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/23									(auto)/9						
3139	0.500-	ULS-Set B (auto)/2	-1.722	-0.222	0.011	0.000	0.028	<b>-0.210</b>	3143	0.000	ULS-Set B (auto)/16	-0.817	0.000	0.382	<b>0.000</b>	0.000	0.000
3139	0.500+	ULS-Set B (auto)/20	1.435	-0.216	0.109	0.000	-0.031	<b>0.205</b>	3143	0.000	ULS-Set B (auto)/5	0.498	0.000	-0.392	<b>0.000</b>	0.000	0.000
3140	0.000	ULS-Set B (auto)/2	<b>-1.940</b>	-1.612	-0.090	0.000	0.000	0.000	3143	0.429-	ULS-Set B (auto)/9	0.683	0.000	0.057	0.000	<b>-0.080</b>	0.000
3140	0.000	ULS-Set B (auto)/3	<b>1.391</b>	1.571	0.021	0.000	0.000	0.000	3143	0.429-	ULS-Set B (auto)/11	-1.161	0.000	-0.056	0.000	<b>0.078</b>	0.000
3140	0.000	ULS-Set B (auto)/23	-1.932	<b>-1.612</b>	-0.080	0.000	0.000	0.000	3143	0.000	ULS-Set B (auto)/11	<b>-1.222</b>	0.000	0.382	0.000	0.000	<b>0.000</b>
3140	2.000	ULS-Set B (auto)/23	-0.445	<b>1.613</b>	-0.021	0.000	0.000	0.000	3144	0.000	ULS-Set B (auto)/10	<b>-0.251</b>	-0.087	-0.007	0.000	0.000	0.000
3140	0.500+	ULS-Set B (auto)/18	-0.388	-0.874	<b>0.267</b>	0.000	-0.063	-0.756	3144	0.640	ULS-Set B (auto)/25	<b>0.146</b>	-0.027	0.457	0.000	0.167	-0.018
3140	0.000	ULS-Set B (auto)/16	1.351	1.571	-0.002	<b>0.000</b>	0.000	0.000	3144	0.000	ULS-Set B (auto)/1	0.039	<b>-0.014</b>	0.065	0.000	0.000	<b>0.000</b>
3140	0.000	ULS-Set B (auto)/5	-1.900	-1.612	-0.068	<b>0.000</b>	0.000	0.000	3144	0.000	ULS-Set B (auto)/7	-0.129	-0.044	-0.116	<b>0.000</b>	0.000	0.000
3140	0.500-	ULS-Set B (auto)/18	-1.908	-1.314	<b>-0.173</b>	0.000	<b>-0.063</b>	-0.756	3144	0.000	ULS-Set B (auto)/6	-0.041	-0.042	0.117	<b>0.000</b>	0.000	0.000
3140	1.000-	ULS-Set B (auto)/18	-0.388	-0.221	0.124	0.000	<b>0.034</b>	-1.031	3144	0.640	ULS-Set B (auto)/16	-0.052	-0.063	<b>-0.862</b>	0.000	<b>-0.313</b>	-0.040
3140	1.000+	ULS-Set B (auto)/23	-0.445	0.220	-0.013	0.000	0.033	<b>-1.031</b>	3144	0.640	ULS-Set B (auto)/5	0.119	-0.022	<b>0.883</b>	0.000	<b>0.321</b>	-0.014
3140	1.000+	ULS-Set B (auto)/24	0.601	-0.214	0.137	0.000	-0.024	<b>1.005</b>	3144	0.640	ULS-Set B (auto)/15	-0.114	<b>-0.088</b>	-0.024	0.000	-0.010	<b>-0.056</b>
3141	0.500+	ULS-Set B (auto)/15	<b>-0.053</b>	0.013	0.118	0.000	-0.040	-0.024	3145	0.000	ULS-Set B (auto)/10	<b>-0.852</b>	-0.019	-0.024	0.000	0.000	0.000
3141	1.000+	ULS-Set B (auto)/15	<b>0.088</b>	0.031	0.272	0.000	-0.016	-0.021	3145	0.640	ULS-Set B (auto)/1	<b>0.617</b>	0.000	0.621	0.000	0.271	0.000
3141	0.500+	ULS-Set B (auto)/23	-0.030	<b>-0.591</b>	0.058	0.000	-0.014	-0.086	3145	0.000	ULS-Set B (auto)/11	-0.043	-0.015	-0.307	<b>0.000</b>	0.000	0.000
3141	0.500+	ULS-Set B (auto)/24	-0.022	<b>0.583</b>	0.092	0.000	-0.024	0.137	3145	0.000	ULS-Set B (auto)/18	0.004	-0.005	0.381	<b>0.000</b>	0.000	0.000
3141	2.000	ULS-Set B (auto)/10	0.000	0.014	<b>-0.194</b>	0.000	0.000	0.000	3145	0.640	ULS-Set B (auto)/20	-0.054	-0.022	<b>-1.055</b>	0.000	<b>-0.437</b>	-0.014
3141	1.000+	ULS-Set B (auto)/10	0.087	0.029	<b>0.273</b>	0.000	-0.017	-0.019	3145	0.640	ULS-Set B (auto)/21	0.252	0.002	<b>1.148</b>	0.000	<b>0.490</b>	0.001
3141	1.000-	ULS-Set B (auto)/6	-0.027	0.070	-0.076	<b>0.000</b>	-0.014	-0.217	3145	0.640	ULS-Set B (auto)/16	-0.221	<b>-0.022</b>	-1.047	0.000	-0.432	<b>-0.014</b>
3141	1.000-	ULS-Set B (auto)/7	-0.026	-0.061	-0.022	<b>0.000</b>	-0.011	0.269	3145	0.640	ULS-Set B (auto)/5	0.419	<b>0.003</b>	1.140	0.000	0.485	<b>0.002</b>
3141	0.500-	ULS-Set B (auto)/4	0.000	-0.072	-0.128	0.000	<b>-0.041</b>	-0.032	3146	0.750	ULS-Set B (auto)/32	<b>0.059</b>	<b>0.000</b>	-0.017	0.000	0.000	<b>0.000</b>
3141	1.500+	ULS-Set B (auto)/10	0.000	0.021	-0.121	0.000	<b>0.084</b>	-0.008	3146	0.750	ULS-Set B (auto)/22	-0.284	0.000	<b>-0.430</b>	0.000	0.000	0.000
3141	1.200-	ULS-Set B (auto)/2	0.052	-0.048	0.127	0.000	0.016	<b>-0.257</b>	3146	0.750	ULS-Set B (auto)/9	-0.052	0.000	<b>0.441</b>	0.000	0.000	0.000
3141	1.200-	ULS-Set B (auto)/3	0.033	-0.010	0.110	0.000	0.016	<b>0.295</b>	3146	0.000	ULS-Set B (auto)/6	-0.181	0.000	-0.393	<b>0.000</b>	0.000	0.000
3142	1.500-	ULS-Set B (auto)/24	0.017	<b>-0.580</b>	-0.059	0.000	0.003	0.140	3146	0.000	ULS-Set B (auto)/7	-0.365	0.000	0.383	<b>0.000</b>	0.000	0.000
3142	1.500-	ULS-Set B (auto)/23	-0.059	<b>0.597</b>	-0.147	0.000	-0.047	-0.110	3146	0.429-	ULS-Set B (auto)/9	-0.121	0.000	0.058	0.000	<b>-0.080</b>	0.000
3142	1.500-	ULS-Set B (auto)/19	-0.062	0.315	<b>-0.181</b>	0.000	-0.055	-0.038	3146	0.429-	ULS-Set B (auto)/22	-0.353	0.000	-0.056	0.000	<b>0.078</b>	0.000
3142	1.000+	ULS-Set B (auto)/17	0.056	-0.009	<b>0.176</b>	0.000	-0.007	0.001	3146	0.000	ULS-Set B (auto)/22	<b>-0.434</b>	0.000	0.383	0.000	0.000	<b>0.000</b>
3142	1.000+	ULS-Set B (auto)/7	0.007	0.065	0.046	<b>0.000</b>	-0.001	0.267	3147	0.000	ULS-Set B (auto)/10	<b>-0.653</b>	0.397	0.073	0.000	-0.021	-0.119
3142	1.000+	ULS-Set B (auto)/6	-0.049	-0.065	-0.002	<b>0.000</b>	-0.002	-0.242	3147	0.300	ULS-Set B (auto)/1	<b>0.631</b>	<b>0.067</b>	-0.812	0.000	0.000	<b>0.000</b>
3142	1.500-	ULS-Set B (auto)/1	<b>-0.068</b>	0.315	-0.170	0.000	<b>-0.058</b>	-0.036	3147	0.000	ULS-Set B (auto)/21	0.149	0.100	<b>-1.813</b>	0.000	<b>0.490</b>	-0.030
3142	1.500-	ULS-Set B (auto)/4	<b>0.057</b>	-0.033	0.033	0.000	<b>0.046</b>	-0.011	3147	0.000	ULS-Set B (auto)/3	0.069	0.186	1.606	<b>0.000</b>	-0.430	-0.056
3142	0.800-	ULS-Set B (auto)/2	0.032	0.029	-0.014	0.000	0.008	<b>-0.279</b>	3147	0.000	ULS-Set B (auto)/2	0.228	0.227	-1.789	<b>0.000</b>	0.483	-0.068
3142	0.800-	ULS-Set B (auto)/3	-0.015	0.010	0.015	0.000	-0.001	<b>0.295</b>	3147	0.000	ULS-Set B (auto)/20	0.148	0.313	<b>1.631</b>	0.000	<b>-0.437</b>	-0.094
3143	0.750	ULS-Set B (auto)/4	<b>1.428</b>	<b>0.000</b>	-0.017	0.000	0.000	<b>0.000</b>	3147	0.000	ULS-Set B (auto)/15	-0.496	<b>0.415</b>	0.092	0.000	-0.026	<b>-0.124</b>
3143	0.750	ULS-Set B (auto)/11	-1.111	0.000	<b>-0.429</b>	0.000	0.000	0.000	3148	0.000	ULS-Set B (auto)/21	<b>0.092</b>	-0.019	0.608	0.000	0.000	0.000
3143	0.750	ULS-Set B	0.751	0.000	<b>0.440</b>	0.000	0.000	0.000	3148	0.640	ULS-Set B	<b>0.389</b>	-0.051	-0.110	0.000	-0.061	-0.033

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
3148	0.000	(auto)/42							3153	0.500+	(auto)/5						
3148	0.000	ULS-Set B (auto)/1	0.096	<b>-0.014</b>	0.388	0.000	0.000	<b>0.000</b>	3153	0.500+	ULS-Set B (auto)/16	1.151	-0.183	-0.039	0.000	0.023	<b>0.091</b>
3148	0.000	ULS-Set B (auto)/11	0.143	-0.014	-0.488	<b>0.000</b>	0.000	0.000	3155	0.812	ULS-Set B (auto)/26	<b>0.476</b>	0.000	<b>-0.007</b>	0.000	0.000	0.000
3148	0.000	ULS-Set B (auto)/18	0.165	-0.038	0.603	<b>0.000</b>	0.000	0.000	3155	0.000	ULS-Set B (auto)/21	-0.122	0.000	0.005	<b>0.000</b>	0.000	0.000
3148	0.640	ULS-Set B (auto)/16	0.351	-0.034	<b>-1.247</b>	0.000	<b>-0.560</b>	-0.022	3155	0.000	ULS-Set B (auto)/20	0.029	<b>0.000</b>	<b>0.007</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3148	0.640	ULS-Set B (auto)/5	0.193	-0.018	<b>1.382</b>	0.000	<b>0.640</b>	-0.012	3155	0.406-	ULS-Set B (auto)/26	0.467	0.000	0.000	0.000	<b>0.001</b>	0.000
3148	0.640	ULS-Set B (auto)/15	0.380	<b>-0.053</b>	-0.083	0.000	-0.048	<b>-0.034</b>	3155	0.000	ULS-Set B (auto)/13	<b>-0.359</b>	0.000	0.005	0.000	0.000	<b>0.000</b>
3149	0.750	ULS-Set B (auto)/11	<b>0.015</b>	0.000	<b>-0.431</b>	0.000	0.000	0.000	3156	0.812	ULS-Set B (auto)/26	<b>0.641</b>	0.000	<b>-0.007</b>	0.000	0.000	0.000
3149	0.750	ULS-Set B (auto)/9	-0.167	<b>0.000</b>	<b>0.442</b>	0.000	0.000	<b>0.000</b>	3156	0.000	ULS-Set B (auto)/4	0.570	0.000	<b>0.007</b>	<b>0.000</b>	0.000	0.000
3149	0.000	ULS-Set B (auto)/18	-0.328	0.000	-0.400	<b>0.000</b>	0.000	0.000	3156	0.000	ULS-Set B (auto)/11	0.007	<b>0.000</b>	0.005	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3149	0.429-	ULS-Set B (auto)/9	-0.235	0.000	0.058	0.000	<b>-0.080</b>	0.000	3156	0.406-	ULS-Set B (auto)/26	0.633	0.000	0.000	0.000	<b>0.001</b>	0.000
3149	0.429-	ULS-Set B (auto)/11	-0.036	0.000	-0.057	<b>0.000</b>	<b>0.078</b>	0.000	3156	0.000	ULS-Set B (auto)/13	<b>-0.558</b>	0.000	0.005	0.000	0.000	<b>0.000</b>
3149	0.000	ULS-Set B (auto)/4	<b>-0.342</b>	0.000	0.015	0.000	0.000	<b>0.000</b>	3160	0.812	ULS-Set B (auto)/10	<b>0.882</b>	0.000	<b>-0.007</b>	0.000	0.000	0.000
3150	0.000	ULS-Set B (auto)/10	<b>-0.647</b>	0.254	0.184	0.000	-0.054	-0.076	3160	0.000	ULS-Set B (auto)/20	0.383	0.000	<b>0.007</b>	<b>0.000</b>	0.000	0.000
3150	0.300	ULS-Set B (auto)/1	<b>0.836</b>	0.003	-1.156	0.000	0.000	0.000	3160	0.000	ULS-Set B (auto)/21	0.055	<b>0.000</b>	0.005	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3150	0.000	ULS-Set B (auto)/5	0.514	<b>-0.019</b>	<b>-2.313</b>	0.000	<b>0.640</b>	<b>0.006</b>	3160	0.406-	ULS-Set B (auto)/10	0.874	0.000	0.000	0.000	<b>0.001</b>	0.000
3150	0.000	ULS-Set B (auto)/3	0.145	0.187	2.031	<b>0.000</b>	-0.557	-0.056	3160	0.000	ULS-Set B (auto)/1	<b>-0.211</b>	0.000	0.005	0.000	0.000	<b>0.000</b>
3150	0.000	ULS-Set B (auto)/2	0.426	0.071	-2.302	<b>0.000</b>	0.637	-0.021	3161	0.812	ULS-Set B (auto)/10	<b>0.631</b>	0.000	<b>-0.007</b>	0.000	0.000	0.000
3150	0.000	ULS-Set B (auto)/16	0.057	<b>0.277</b>	<b>2.042</b>	0.000	<b>-0.560</b>	<b>-0.083</b>	3161	0.000	ULS-Set B (auto)/7	0.104	0.000	0.005	<b>0.000</b>	0.000	0.000
3152	1.500+	ULS-Set B (auto)/13	<b>-0.753</b>	-0.090	0.096	0.000	-0.045	0.045	3161	0.000	ULS-Set B (auto)/6	0.079	<b>0.000</b>	<b>0.007</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3152	0.000	ULS-Set B (auto)/10	<b>1.626</b>	-0.204	-0.073	0.000	0.000	0.000	3161	0.406-	ULS-Set B (auto)/10	0.622	0.000	0.000	0.000	<b>0.001</b>	0.000
3152	0.000	ULS-Set B (auto)/5	-0.395	<b>4.348</b>	-0.396	0.000	0.000	0.000	3161	0.000	ULS-Set B (auto)/1	<b>-0.255</b>	0.000	0.005	0.000	0.000	<b>0.000</b>
3152	1.500-	ULS-Set B (auto)/11	-0.233	3.311	<b>-0.467</b>	0.000	-0.037	-0.044	3362	0.000	ULS-Set B (auto)/7	<b>0.138</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
3152	0.000	ULS-Set B (auto)/11	0.140	-4.289	<b>0.392</b>	0.000	0.000	0.000	3362	0.615	ULS-Set B (auto)/17	-0.157	0.000	<b>-0.008</b>	0.000	0.000	0.000
3152	1.500+	ULS-Set B (auto)/11	-0.016	0.088	0.021	<b>0.000</b>	-0.008	-0.044	3362	0.000	ULS-Set B (auto)/5	0.015	0.000	0.006	<b>0.000</b>	0.000	0.000
3152	1.000+	ULS-Set B (auto)/2	0.006	2.254	-0.277	<b>0.000</b>	0.047	-0.270	3362	0.000	ULS-Set B (auto)/16	0.114	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3152	0.500+	ULS-Set B (auto)/4	-0.083	-0.004	0.232	0.000	<b>-0.065</b>	-0.013	3362	0.308-	ULS-Set B (auto)/17	<b>-0.157</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
3152	0.500+	ULS-Set B (auto)/1	0.198	0.107	-0.228	0.000	<b>0.063</b>	-0.072	3363	0.615	ULS-Set B (auto)/17	-0.127	0.000	<b>-0.008</b>	0.000	0.000	0.000
3152	0.125-	ULS-Set B (auto)/16	0.668	<b>-4.381</b>	0.360	0.000	0.045	<b>-0.548</b>	3363	0.000	ULS-Set B (auto)/6	-0.001	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3152	1.367+	ULS-Set B (auto)/21	-0.034	-3.695	0.318	0.000	-0.056	<b>0.569</b>	3363	0.000	ULS-Set B (auto)/7	<b>0.126</b>	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3153	0.000	ULS-Set B (auto)/13	<b>-0.765</b>	-0.142	-0.020	0.000	0.000	0.000	3363	0.307-	ULS-Set B (auto)/17	<b>-0.127</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
3153	0.500+	ULS-Set B (auto)/10	<b>1.989</b>	-0.035	-0.045	0.000	0.026	0.017	3364	0.000	ULS-Set B (auto)/3	<b>0.144</b>	<b>0.000</b>	0.006	0.000	<b>0.000</b>	<b>0.000</b>
3153	0.500+	ULS-Set B (auto)/5	-0.013	<b>0.220</b>	-0.013	0.000	0.009	-0.110	3364	0.620	ULS-Set B (auto)/2	-0.350	0.000	<b>-0.008</b>	0.000	0.000	0.000
3153	0.000	ULS-Set B (auto)/1	-0.624	-0.143	<b>-0.009</b>	0.000	0.000	0.000	3364	0.000	ULS-Set B (auto)/44	0.080	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
3153	0.500+	ULS-Set B (auto)/21	0.238	0.210	-0.017	<b>0.000</b>	0.011	-0.105	3364	0.000	ULS-Set B (auto)/23	-0.343	0.000	0.006	<b>0.000</b>	0.000	0.000
3153	0.000	ULS-Set B (auto)/18	-0.385	-0.207	-0.034	<b>0.000</b>	0.000	0.000	3364	0.310-	ULS-Set B (auto)/2	<b>-0.350</b>	0.000	0.000	0.000	<b>0.001</b>	0.000
3153	0.500-	ULS-Set B (auto)/43	-0.050	0.071	<b>-0.064</b>	0.000	<b>-0.029</b>	0.035	3365	0.842	ULS-Set B (auto)/17	<b>1.071</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000
3153	0.500+	ULS-Set B (auto)/38	1.699	-0.019	-0.048	0.000	<b>0.027</b>	0.010	3365	0.000	ULS-Set B (auto)/3	0.094	0.000	0.006	<b>0.000</b>	0.000	0.000
3153	0.500-	ULS-Set B	-0.393	<b>-0.220</b>	-0.021	0.000	-0.008	<b>-0.110</b>	3365	0.000	ULS-Set B	-1.053	<b>0.000</b>	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/2									(auto)/10						
3365	0.421-	ULS-Set B (auto)/17	1.063	0.000	0.000	0.000	<b>0.002</b>	0.000	3387	2.600	ULS-Set B (auto)/1	<b>7.005</b>	-0.052	-0.053	0.000	-0.041	-0.061
3365	0.000	ULS-Set B (auto)/13	<b>-1.245</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	3387	0.000	ULS-Set B (auto)/16	-5.622	<b>-0.523</b>	-0.473	<b>0.000</b>	0.000	0.000
3366	0.615	ULS-Set B (auto)/4	0.012	0.000	<b>-0.008</b>	0.000	0.000	0.000	3387	0.000	ULS-Set B (auto)/4	<b>-13.493</b>	-0.249	<b>-1.411</b>	0.000	0.000	0.000
3366	0.000	ULS-Set B (auto)/17	0.011	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	3387	0.300+	ULS-Set B (auto)/4	-12.348	0.039	0.372	0.000	<b>-0.423</b>	-0.075
3366	0.000	ULS-Set B (auto)/7	0.004	<b>0.000</b>	0.006	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	3387	0.300-	ULS-Set B (auto)/5	4.285	<b>0.357</b>	<b>1.847</b>	<b>0.000</b>	<b>0.554</b>	0.107
3366	0.307-	ULS-Set B (auto)/4	<b>0.012</b>	0.000	0.000	0.000	<b>0.001</b>	0.000	3387	0.300+	ULS-Set B (auto)/16	-4.500	0.135	0.145	0.000	-0.142	<b>-0.157</b>
3366	0.000	ULS-Set B (auto)/1	<b>-0.006</b>	0.000	0.006	0.000	0.000	<b>0.000</b>	3387	2.600	ULS-Set B (auto)/20	-2.884	0.135	0.057	0.000	0.090	<b>0.154</b>
3367	0.842	ULS-Set B (auto)/13	<b>1.262</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>	3388	0.000	ULS-Set B (auto)/4	<b>-11.679</b>	0.039	-0.018	0.000	0.011	0.015
3367	0.842	ULS-Set B (auto)/17	-1.098	0.000	<b>-0.008</b>	0.000	0.000	0.000	3388	1.000	ULS-Set B (auto)/1	<b>7.729</b>	0.460	-1.156	0.000	-0.164	0.271
3367	0.000	ULS-Set B (auto)/3	-0.088	0.000	0.006	<b>0.000</b>	0.000	0.000	3388	0.700+	ULS-Set B (auto)/5	5.387	<b>0.581</b>	<b>-2.162</b>	0.000	<b>0.377</b>	0.104
3367	0.000	ULS-Set B (auto)/2	1.031	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000	3388	0.700+	ULS-Set B (auto)/16	-1.277	<b>-0.617</b>	<b>1.914</b>	0.000	-0.369	-0.090
3367	0.421-	ULS-Set B (auto)/17	-1.106	0.000	0.000	0.000	<b>0.002</b>	0.000	3388	0.250+	ULS-Set B (auto)/20	-0.590	-0.564	-1.259	<b>0.000</b>	0.249	0.188
3367	0.000	ULS-Set B (auto)/17	<b>-1.114</b>	0.000	0.008	0.000	0.000	<b>0.000</b>	3388	0.000	ULS-Set B (auto)/16	-3.836	0.135	0.681	<b>0.000</b>	0.088	0.154
3369	0.842	ULS-Set B (auto)/4	<b>-0.877</b>	0.000	<b>0.008</b>	0.000	0.000	0.000	3388	0.700-	ULS-Set B (auto)/16	-1.285	-0.617	-1.493	0.000	<b>-0.369</b>	-0.090
3369	0.000	ULS-Set B (auto)/1	<b>0.773</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>	3388	1.000	ULS-Set B (auto)/4	-9.036	-0.481	0.268	0.000	0.062	<b>-0.336</b>
3369	0.000	ULS-Set B (auto)/18	0.459	0.000	<b>-0.008</b>	<b>0.000</b>	0.000	0.000	3388	1.000	ULS-Set B (auto)/5	5.473	0.581	-1.983	0.000	-0.245	<b>0.279</b>
3369	0.000	ULS-Set B (auto)/11	0.046	0.000	-0.006	<b>0.000</b>	0.000	0.000	3389	0.684	ULS-Set B (auto)/1	<b>-0.233</b>	-0.397	-0.006	0.000	0.000	-0.272
3369	0.421-	ULS-Set B (auto)/4	-0.869	0.000	0.000	0.000	<b>-0.002</b>	0.000	3389	0.000	ULS-Set B (auto)/4	<b>3.443</b>	0.098	<b>0.008</b>	0.000	<b>0.000</b>	0.000
3370	0.615	ULS-Set B (auto)/17	<b>0.023</b>	<b>0.000</b>	<b>0.008</b>	0.000	<b>0.000</b>	<b>0.000</b>	3389	0.342-	ULS-Set B (auto)/4	3.439	0.098	0.000	0.000	<b>0.001</b>	0.033
3370	0.000	ULS-Set B (auto)/6	-0.014	0.000	<b>-0.008</b>	<b>0.000</b>	0.000	0.000	3389	0.684	ULS-Set B (auto)/5	0.066	<b>-0.681</b>	-0.006	<b>0.000</b>	0.000	<b>-0.466</b>
3370	0.000	ULS-Set B (auto)/7	-0.001	0.000	-0.006	<b>0.000</b>	0.000	0.000	3389	0.684	ULS-Set B (auto)/16	2.085	<b>0.598</b>	<b>-0.008</b>	<b>0.000</b>	0.000	<b>0.409</b>
3370	0.307-	ULS-Set B (auto)/17	0.023	0.000	0.000	0.000	<b>-0.001</b>	0.000	3390	0.684	ULS-Set B (auto)/33	<b>0.736</b>	0.204	-0.006	0.000	0.000	0.078
3370	0.000	ULS-Set B (auto)/13	<b>-0.022</b>	0.000	-0.006	0.000	0.000	<b>0.000</b>	3390	0.000	ULS-Set B (auto)/19	<b>-1.720</b>	-0.922	<b>0.008</b>	0.000	<b>0.000</b>	0.267
3371	0.842	ULS-Set B (auto)/1	<b>-0.714</b>	0.000	0.006	0.000	0.000	0.000	3390	0.342-	ULS-Set B (auto)/19	-1.715	-0.922	0.000	0.000	<b>0.001</b>	-0.049
3371	0.000	ULS-Set B (auto)/4	<b>0.778</b>	0.000	<b>-0.008</b>	0.000	0.000	0.000	3390	0.684	ULS-Set B (auto)/5	-1.197	<b>-1.624</b>	-0.006	<b>0.000</b>	0.000	<b>-0.645</b>
3371	0.842	ULS-Set B (auto)/4	0.762	<b>0.000</b>	<b>0.008</b>	0.000	<b>0.000</b>	<b>0.000</b>	3390	0.684	ULS-Set B (auto)/16	-0.658	<b>1.440</b>	<b>-0.008</b>	<b>0.000</b>	0.000	<b>0.576</b>
3371	0.000	ULS-Set B (auto)/5	-0.573	0.000	-0.006	<b>0.000</b>	0.000	0.000	3391	0.000	ULS-Set B (auto)/32	<b>0.863</b>	-0.114	0.006	0.000	0.000	-0.039
3371	0.000	ULS-Set B (auto)/16	0.120	0.000	-0.008	<b>0.000</b>	0.000	0.000	3391	0.689	ULS-Set B (auto)/25	<b>-2.317</b>	0.492	<b>-0.008</b>	0.000	0.000	0.463
3371	0.421-	ULS-Set B (auto)/4	0.770	0.000	0.000	0.000	<b>-0.002</b>	0.000	3391	0.000	ULS-Set B (auto)/25	-2.309	0.492	<b>0.008</b>	0.000	<b>0.000</b>	0.124
3386	1.100	ULS-Set B (auto)/1	<b>8.078</b>	<b>-0.469</b>	0.047	0.000	-0.316	-0.245	3391	0.344-	ULS-Set B (auto)/25	-2.313	0.492	0.000	0.000	<b>0.001</b>	0.294
3386	1.100	ULS-Set B (auto)/11	1.429	0.259	<b>-0.565</b>	0.000	-0.059	0.115	3391	0.689	ULS-Set B (auto)/16	-0.558	<b>-0.751</b>	-0.008	<b>0.000</b>	0.000	<b>-0.687</b>
3386	1.100	ULS-Set B (auto)/18	3.719	-0.182	<b>0.381</b>	0.000	-0.220	-0.026	3391	0.689	ULS-Set B (auto)/5	-1.949	<b>0.852</b>	-0.006	<b>0.000</b>	0.000	<b>0.791</b>
3386	0.000	ULS-Set B (auto)/20	-0.228	0.411	0.157	<b>0.000</b>	0.177	-0.235	3392	0.901	ULS-Set B (auto)/11	<b>1.403</b>	0.003	-0.005	0.000	0.000	0.000
3386	0.000	ULS-Set B (auto)/21	4.616	-0.333	-0.360	<b>0.000</b>	-0.242	0.239	3392	0.000	ULS-Set B (auto)/21	-1.122	<b>-0.003</b>	0.005	0.000	0.000	<b>0.003</b>
3386	0.550-	ULS-Set B (auto)/5	5.644	-0.423	-0.010	0.000	<b>-0.383</b>	0.046	3392	0.901	ULS-Set B (auto)/4	-2.031	0.000	<b>-0.007</b>	0.000	0.000	0.000
3386	1.100	ULS-Set B (auto)/4	-8.572	0.722	0.180	0.000	<b>0.275</b>	0.458	3392	0.000	ULS-Set B (auto)/24	0.957	0.003	<b>0.007</b>	<b>0.000</b>	0.000	-0.003
3386	0.000	ULS-Set B (auto)/4	<b>-9.008</b>	0.722	0.207	0.000	0.062	<b>-0.336</b>	3392	0.000	ULS-Set B (auto)/23	-1.102	-0.003	0.005	<b>0.000</b>	0.000	0.002
3386	1.100	ULS-Set B	-7.614	<b>0.726</b>	0.138	0.000	0.203	<b>0.470</b>	3392	0.000	ULS-Set B	<b>-2.051</b>	0.000	0.007	0.000	<b>0.000</b>	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
3392	0.401-	(auto)/4 ULS-Set B (auto)/4	-2.042	0.000	0.001	0.000	<b>0.002</b>	0.000
3392	0.000	ULS-Set B (auto)/20	0.976	<b>0.003</b>	0.007	0.000	0.000	<b>-0.003</b>
3393	0.901	ULS-Set B (auto)/11	<b>1.474</b>	-0.003	-0.005	0.000	0.000	0.000
3393	0.000	ULS-Set B (auto)/7	1.446	<b>-0.003</b>	0.005	0.000	0.000	<b>0.003</b>
3393	0.901	ULS-Set B (auto)/18	-2.729	0.003	<b>-0.007</b>	0.000	0.000	0.000
3393	0.000	ULS-Set B (auto)/5	-2.676	0.003	0.005	<b>0.000</b>	0.000	-0.002
3393	0.000	ULS-Set B (auto)/16	1.385	-0.003	<b>0.007</b>	<b>0.000</b>	0.000	0.003
3393	0.000	ULS-Set B (auto)/18	<b>-2.750</b>	0.003	0.007	0.000	<b>0.000</b>	-0.002
3393	0.401-	ULS-Set B (auto)/18	-2.741	0.003	0.001	0.000	<b>0.002</b>	-0.001
3393	0.000	ULS-Set B (auto)/6	-2.736	<b>0.003</b>	0.007	0.000	0.000	<b>-0.002</b>
3394	0.812	ULS-Set B (auto)/1	<b>-0.119</b>	<b>0.000</b>	-0.005	0.000	<b>0.000</b>	<b>0.000</b>
3394	0.812	ULS-Set B (auto)/10	-2.013	0.000	<b>-0.007</b>	0.000	0.000	0.000
3394	0.000	ULS-Set B (auto)/7	-0.990	0.000	0.005	<b>0.000</b>	0.000	0.000
3394	0.000	ULS-Set B (auto)/6	-0.862	0.000	<b>0.007</b>	<b>0.000</b>	0.000	0.000
3394	0.406-	ULS-Set B (auto)/10	-2.022	0.000	0.000	0.000	<b>0.001</b>	0.000
3394	0.000	ULS-Set B (auto)/10	<b>-2.031</b>	0.000	0.007	0.000	0.000	<b>0.000</b>
3395	0.812	ULS-Set B (auto)/14	<b>1.291</b>	0.000	<b>-0.007</b>	0.000	0.000	0.000
3395	0.000	ULS-Set B (auto)/18	0.969	0.000	<b>0.007</b>	<b>0.000</b>	0.000	0.000
3395	0.000	ULS-Set B (auto)/11	0.618	<b>0.000</b>	0.005	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3395	0.406-	ULS-Set B (auto)/14	1.283	0.000	0.000	0.000	<b>0.001</b>	0.000
3395	0.000	ULS-Set B (auto)/5	<b>0.427</b>	0.000	0.005	0.000	0.000	<b>0.000</b>
3396	0.812	ULS-Set B (auto)/19	<b>1.210</b>	0.000	<b>-0.007</b>	0.000	0.000	0.000
3396	0.000	ULS-Set B (auto)/21	0.523	0.000	0.005	<b>0.000</b>	0.000	0.000
3396	0.000	ULS-Set B (auto)/20	0.598	<b>0.000</b>	<b>0.007</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
3396	0.406-	ULS-Set B (auto)/19	1.201	0.000	0.000	0.000	<b>0.001</b>	0.000
3396	0.000	ULS-Set B (auto)/40	<b>-0.352</b>	0.000	0.005	0.000	0.000	<b>0.000</b>
3397	0.812	ULS-Set B (auto)/1	<b>1.294</b>	<b>0.000</b>	-0.005	0.000	<b>0.000</b>	<b>0.000</b>
3397	0.812	ULS-Set B (auto)/10	-2.651	0.000	<b>-0.007</b>	0.000	0.000	0.000
3397	0.000	ULS-Set B (auto)/18	0.135	0.000	<b>0.007</b>	<b>0.000</b>	0.000	0.000
3397	0.000	ULS-Set B (auto)/11	-0.926	0.000	0.005	<b>0.000</b>	0.000	0.000
3397	0.406-	ULS-Set B (auto)/10	-2.660	0.000	0.000	0.000	<b>0.001</b>	0.000
3397	0.000	ULS-Set B (auto)/10	<b>-2.668</b>	0.000	0.007	0.000	0.000	<b>0.000</b>
3398	0.812	ULS-Set B (auto)/1	<b>1.435</b>	<b>0.000</b>	-0.005	0.000	<b>0.000</b>	<b>0.000</b>
3398	0.812	ULS-Set B (auto)/10	-2.479	0.000	<b>-0.007</b>	0.000	0.000	0.000
3398	0.000	ULS-Set B (auto)/7	-0.528	0.000	0.005	<b>0.000</b>	0.000	0.000
3398	0.000	ULS-Set B (auto)/17	-2.301	0.000	<b>0.007</b>	<b>0.000</b>	0.000	0.000
3398	0.406-	ULS-Set B (auto)/10	-2.488	0.000	0.000	0.000	<b>0.001</b>	0.000
3398	0.000	ULS-Set B	<b>-2.496</b>	0.000	0.007	0.000	0.000	<b>0.000</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
3399	0.812	(auto)/10 ULS-Set B (auto)/23	<b>0.319</b>	<b>0.000</b>	-0.005	0.000	<b>0.000</b>	<b>0.000</b>
3399	0.812	ULS-Set B (auto)/45	-0.880	0.000	<b>-0.007</b>	0.000	0.000	0.000
3399	0.000	ULS-Set B (auto)/11	-0.486	0.000	0.005	<b>0.000</b>	0.000	0.000
3399	0.000	ULS-Set B (auto)/18	0.013	0.000	<b>0.007</b>	<b>0.000</b>	0.000	0.000
3399	0.406	ULS-Set B (auto)/45	-0.889	0.000	0.000	0.000	<b>0.001</b>	0.000
3399	0.000	ULS-Set B (auto)/45	<b>-0.897</b>	0.000	0.007	0.000	0.000	<b>0.000</b>

Name	Combination key
ULS-Set B (auto)/1	G + G1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/2	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/3	G + G1 + 0.75*Q3 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/4	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/5	G + G1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/6	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/7	G + G1 + 1.05*Q1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/8	1.35*G + 1.35*G1 + 1.50*Q3 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/9	1.35*G + 1.35*G1 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/10	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/11	G + G1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/12	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/13	G + G1 + 1.05*Q1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/14	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8
ULS-Set B (auto)/15	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/16	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/17	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/18	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/19	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/20	1.35*G + 1.35*G1 + 1.05*Q1 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/21	G + G1 + 0.75*Q3 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/22	1.35*G + 1.35*G1 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/23	G + G1 + 1.05*Q1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/24	1.35*G + 1.35*G1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/25	1.35*G + 1.35*G1 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/26	1.35*G + 1.35*G1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/27	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8
ULS-Set B (auto)/28	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/29	G + G1 + 1.50*Q4 + G3 + G2
ULS-Set B (auto)/30	G + G1 + 1.05*Q1 + 1.50*Q4 + G3 + G2
ULS-Set B (auto)/31	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/32	G + G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/33	G + G1 + 0.75*Q3 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/34	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/35	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/36	1.35*G + 1.35*G1 + 1.50*Q4 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/37	G + G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q5 + G3 + G2
ULS-Set B (auto)/38	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/39	G + G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/40	G + G1 + 1.50*Q3 + 0.90*Q5 + G3 + G2
ULS-Set B (auto)/41	G + G1 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/42	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q5 + 1.35*G3 +

Name	Combination key
ULS-Set B (auto)/43	1.35*G2 1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q9
ULS-Set B (auto)/44	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q4 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/45	1.35*G + 1.35*G1 + 1.50*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8

## Member 3112 check

### EN 1993-1-3 Cold Formed Code Check

National annex: Standard EN

Member 3112	0.750 / 2.790 m	S350GD+Z	ULS-Set B (auto)	0.40 -
-------------	-----------------	----------	------------------	--------

<b>Combination key</b>	
ULS-Set B (auto) / 1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q7 + 1.35*G3 + 1.35*G2	

<b>Partial safety factors</b>	
$\gamma_{M0}$ for resistance of cross-sections	1.00
$\gamma_{M1}$ for resistance to instability	1.00
$\gamma_{M2}$ for resistance of net sections	1.25

<b>Material</b>		
Yield strength $f_y$	350.0	MPa
Ultimate strength $f_u$	420.0	MPa
Fabrication	cold formed	

...:SECTION CHECK:...:

The critical check is on position 0.750 m

Internal forces		Calculated	Unit
Normal force	$N_{Ed}$	1.242	kN
Shear force	$V_{y,Ed}$	-0.156	kN
Shear force	$V_{z,Ed}$	-0.169	kN
Torsion	$T_{Ed}$	0.002	kNm
Bending moment	$M_{y,Ed}$	-2.056	kNm
Bending moment	$M_{z,Ed}$	0.066	kNm

### Effective section $M_y$ -

#### Effective width calculation

According to EN 1993-1-3 article 5.5.2, 5.5.3 & EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	I	14.4	3.417e+05	2.421e+05	0.71	4.66	0.12	1.00	14.4	6.7	7.7
2	I	0.6	3.417e+05	3.417e+05	1.00	4.00	0.01	1.00	0.6	0.3	0.3
3	I	98.8	3.417e+05	-3.417e+05	-1.00	23.90	0.72	1.00	49.4	19.8	29.6
4	I	0.6	-3.417e+05	-3.417e+05							
5	I	14.4	-2.421e+05	-3.417e+05							
6	I	1.2	-3.500e+05	-3.500e+05							
7	I	1.2	-3.417e+05	-3.500e+05							
8	I	1.2	3.500e+05	3.500e+05	1.00	4.00	0.02	1.00	1.2	0.6	0.6
9	I	1.2	3.500e+05	3.417e+05	0.98	4.05	0.02	1.00	1.2	0.6	0.6
13	I	48.2	3.458e+05	3.458e+05	1.00	4.00	0.43	1.00	48.2	24.1	24.1
17	I	48.2	-3.458e+05	-3.458e+05							
21	I	70.0	2.421e+05	-2.421e+05	-1.00	23.90	0.51	1.00	35.0	14.0	21.0

**Effective section Mz+****Effective width calculation**

According to EN 1993-1-3 article 5.5.2, 5.5.3 &amp; EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_\sigma$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	I	14.4	3.329e+05	3.329e+05	1.00	4.00	0.13	1.00	14.4	7.2	7.2
2	I	0.6	-3.417e+05	-3.500e+05							
3	I	98.8	-3.500e+05	-3.500e+05							
4	I	0.6	-3.417e+05	-3.500e+05							
5	I	14.4	3.329e+05	3.329e+05	1.00	4.00	0.13	1.00	14.4	7.2	7.2
6	I	1.2	3.412e+05	3.246e+05	0.95	4.10	0.02	1.00	1.2	0.6	0.6
7	I	1.2	3.412e+05	3.412e+05	1.00	4.00	0.02	1.00	1.2	0.6	0.6
8	I	1.2	3.412e+05	3.246e+05	0.95	4.10	0.02	1.00	1.2	0.6	0.6
9	I	1.2	3.412e+05	3.412e+05	1.00	4.00	0.02	1.00	1.2	0.6	0.6
13	I	48.2	3.246e+05	-3.417e+05	-1.05	25.19	0.17	1.00	23.5	9.4	14.1
17	I	48.2	3.246e+05	-3.417e+05	-1.05	25.19	0.17	1.00	23.5	9.4	14.1
21	I	70.0	3.412e+05	3.412e+05	1.00	4.00	1.25	0.66	46.0	23.0	23.0

Effective properties						
Effective area	$A_{eff}$	4.2234e-04	m <sup>2</sup>			
Effective second moment of area	$I_{eff,y}$	8.5326e-07	m <sup>4</sup>	$I_{eff,z}$	1.9942e-07	m <sup>4</sup>
Effective section modulus	$W_{eff,y}$	1.6665e-05	m <sup>3</sup>	$W_{eff,z}$	7.6947e-06	m <sup>3</sup>
Shift of the centroid	$e_{N,y}$	0.0	mm	$e_{N,z}$	2.2	mm

**Tension check**

According to EN 1993-1-3 article 6.1.2 and formula (6.1)

Gross section area	$A_g$	4.9891e-04	m <sup>2</sup>
Net section resistance	$F_{t,Rd}$	167.633	kN
Tension resistance	$N_{t,Rd}$	167.633	kN
Unity check		0.01	-

**Bending moment check for M<sub>y</sub>**

According to EN 1993-1-3 article 6.1.4 and formula (6.6)

Elastic section modulus	$W_{el,y}$	1.6073e-05	m <sup>3</sup>
Bending moment resistance	$M_{c,y,Rd}$	5.626	kNm
Unity check		0.37	-

**Bending moment check for M<sub>z</sub>**

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,z}$	7.6947e-06	m <sup>3</sup>
Bending moment resistance	$M_{c,z,Rd}$	2.693	kNm
Unity check		0.02	-

**Biaxial bending moment check**

According to EN 1993-1-3 article 6.1.4 and formula (6.7)

Bending moment resistance	$M_{c,y,Rd}$	5.626	kNm
Bending moment resistance	$M_{c,z,Rd}$	2.693	kNm

Unity check (6.7) = 0.37 + 0.02 = 0.39 -



### Torsional Moment Check

According to article EN 1993-1-3: 6.1.6 and formula (6.11a), (6.11b), (6.11c).

Elastic verification		
Critical Fibre	52	
$\sigma_N$	-2.5	MPa
$\sigma_{My}$	123.4	MPa
$\sigma_{Mz}$	7.0	MPa
$\tau_{Vy}$	0.6	MPa
$\tau_{Vz}$	0.0	MPa
$\tau_t$	0.1	MPa
Direct Stress Check	0.37	-
Shear Stress Check	0.00	-
Composed Stress Check	0.33	-

Note: The Local Transverse Forces Check has been ignored due to user input.

### Combined Tension and Bending Check

According to article EN 1993-1-3: 6.1.8 and formula (6.23), (6.24).

$N_{t,Rd}$	167.633	kN
$M_{cy,Rd,ten}$	5.626	kNm
$M_{cz,Rd,ten}$	2.711	kNm
$M_{cy,Rd,com}$	5.626	kNm
$M_{cz,Rd,com}$	2.743	kNm

Unity check (6.23)  $0.01 + 0.37 + 0.02 = 0.40$  -

Unity check (6.24)  $0.37 + 0.02 - 0.01 = 0.38$  -

The member satisfies the section check.

....:STABILITY CHECK:....

### Lateral Torsional Buckling Check

According to article EN 1993-1-3: 6.2.4

According to article EN 1993-1-1: 6.3.2 and formula (6.55)

LTB Parameters		
Method for LTB Curve	art. 6.3.2.2	
$W_{eff,y}$	1.6665e-05	m <sup>3</sup>
Elastic critical moment $M_{cr}$	126.342	kNm
Relative slenderness $\lambda_{rel,LT}$	0.21	
Limit slenderness $\lambda_{rel,LT,0}$	0.20	

$M_{cr}$ Parameters		
LTB length	1.100	m
k	1.00	
$k_w$	1.00	
$C_1$	1.06	
$C_2$	0.05	
$C_3$	1.00	

The slenderness or bending moment is such that Lateral Torsional Buckling effects may be ignored according to EN 1993-1-1 article 6.3.2.2(4)

### Bending and Axial Tension Check

According to article EN 1993-1-3: 6.3.

$N_{t,Rd}$	167.633	kN
$M_{b,y,Rd}$	5.626	kNm
$M_{c,z,Rd,com}$	2.743	kNm

Unity check:  $0.37+0.02-0.01 = 0.38$  -

The member satisfies the stability check.

## All member type frame check

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
12	0.300-	ULS-Set B (auto)/1	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.17	<b>0.17</b>	0.17
13	0.000	ULS-Set B (auto)/1	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.15	<b>0.14</b>	0.15
54	5.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.19	<b>0.19</b>	0.19
55	0.300-	ULS-Set B (auto)/3	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.22	<b>0.22</b>	0.20
558	1.450-	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.35	<b>0.35</b>	0.35
559	1.450-	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.37	<b>0.35</b>	0.37
560	3.000+	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.42	<b>0.42</b>	0.12
561	3.150-	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.33	<b>0.30</b>	0.33
562	0.125-	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.02
585	0.250	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.16	<b>0.15</b>	0.16
773	1.000-	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.44	<b>0.43</b>	0.44
963	0.615-	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.19	<b>0.19</b>	0.17
964	1.230+	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.38	<b>0.38</b>	0.37
1893	0.000	ULS-Set B (auto)/2	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.04	<b>0.04</b>	0.04
1928	0.000	ULS-Set B (auto)/1	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.07	<b>0.07</b>	0.06
2190	0.630+	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.29	<b>0.29</b>	0.29
2527	0.000	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.08	<b>0.08</b>	0.00
2528	0.000	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.06</b>	0.07
2529	0.438	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.05	<b>0.05</b>	0.00
2530	0.250	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.05	<b>0.04</b>	0.05

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
			section (100.0; 50.0; 1.2; 3.0; 15.0)				
2531	0.000	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.06</b>	0.07
2532	0.000	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
2533	0.438	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.09	<b>0.09</b>	0.09
2534	0.250	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.05	<b>0.05</b>	0.05
2535	0.438	ULS-Set B (auto)/9	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.07</b>	0.07
2536	0.250	ULS-Set B (auto)/10	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.00
2537	0.000	ULS-Set B (auto)/10	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.07</b>	0.07
2538	0.000	ULS-Set B (auto)/10	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.01
2539	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.07</b>	0.07
2540	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.10	<b>0.10</b>	0.00
2541	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.11	<b>0.10</b>	0.11
2542	0.438	ULS-Set B (auto)/11	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.07</b>	0.00
2544	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.11	<b>0.10</b>	0.11
2546	0.438	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.15	<b>0.15</b>	0.15
2548	0.000	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
2549	0.000	ULS-Set B (auto)/10	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.11	<b>0.11</b>	0.11
2550	0.250	ULS-Set B (auto)/12	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.03
2551	0.438	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
2552	0.000	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.03

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
			section (100.0; 50.0; 1.2; 3.0; 15.0)				
2553	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
2556	0.000	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.05	<b>0.05</b>	0.00
3112	0.750+	ULS-Set B (auto)/10	Box	S350GD+Z	0.40	<b>0.40</b>	0.38
3113	0.750+	ULS-Set B (auto)/3	Box	S350GD+Z	0.41	<b>0.39</b>	0.41
3114	0.321-	ULS-Set B (auto)/12	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
3115	0.427-	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
3116	0.321-	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.06	<b>0.06</b>	0.06
3117	0.640	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.15	<b>0.15</b>	0.15
3118	0.000	ULS-Set B (auto)/9	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.18	<b>0.18</b>	0.18
3119	0.321-	ULS-Set B (auto)/13	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
3120	0.640	ULS-Set B (auto)/14	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.19	<b>0.19</b>	0.18
3121	0.000	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.29	<b>0.29</b>	0.28
3122	0.321-	ULS-Set B (auto)/15	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
3123	0.640	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.28	<b>0.28</b>	0.28
3124	0.000	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.27	<b>0.27</b>	0.26
3129	0.000	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.18	<b>0.18</b>	0.16
3136	0.000	ULS-Set B (auto)/16	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.10	<b>0.10</b>	0.08
3138	0.500+	ULS-Set B (auto)/12	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.09	<b>0.08</b>	0.09
3139	0.500-	ULS-Set B (auto)/9	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.15	<b>0.14</b>	0.15
3140	1.000+	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.44	<b>0.43</b>	0.44

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
			section (100.0; 50.0; 1.2; 3.0; 15.0)				
3141	1.500-	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.17	<b>0.17</b>	0.17
3142	0.700-	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.12	<b>0.12</b>	0.12
3143	0.321-	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.06	<b>0.05</b>	0.06
3144	0.640	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.16	<b>0.16</b>	0.16
3145	0.640	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.19	<b>0.19</b>	0.19
3146	0.321-	ULS-Set B (auto)/13	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
3147	0.000	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.27	<b>0.27</b>	0.25
3148	0.640	ULS-Set B (auto)/10	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.27	<b>0.27</b>	0.26
3149	0.321-	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
3150	0.000	ULS-Set B (auto)/5	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.31	<b>0.31</b>	0.28
3152	1.367-	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.29	<b>0.29</b>	0.29
3153	0.500-	ULS-Set B (auto)/10	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.07</b>	0.07
3155	0.406-	ULS-Set B (auto)/17	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.01	<b>0.01</b>	0.01
3156	0.406-	ULS-Set B (auto)/17	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.01	<b>0.01</b>	0.01
3160	0.406-	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.01	<b>0.01</b>	0.00
3161	0.406-	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.01	<b>0.01</b>	0.00
3362	0.308-	ULS-Set B (auto)/18	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
3363	0.307-	ULS-Set B (auto)/18	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
3364	0.310-	ULS-Set B (auto)/10	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.01	<b>0.01</b>	0.01

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
			section (100.0; 50.0; 1.2; 3.0; 15.0)				
3365	0.421-	ULS-Set B (auto)/17	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.02</b>	0.03
3366	0.307-	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
3367	0.421-	ULS-Set B (auto)/18	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.02</b>	0.03
3369	0.421-	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.02
3370	0.307-	ULS-Set B (auto)/19	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
3371	0.421-	ULS-Set B (auto)/20	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.01</b>	0.02
3386	1.100	ULS-Set B (auto)/1	2 C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.21	<b>0.21</b>	0.20
3387	0.300-	ULS-Set B (auto)/1	2 C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.23	<b>0.23</b>	0.22
3388	1.000	ULS-Set B (auto)/6	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.10	<b>0.10</b>	0.05
3389	0.684	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.18	<b>0.18</b>	0.18
3390	0.684	ULS-Set B (auto)/10	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.27	<b>0.27</b>	0.25
3391	0.689	ULS-Set B (auto)/21	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.34	<b>0.34</b>	0.33
3392	0.000	ULS-Set B (auto)/1	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.05	<b>0.04</b>	0.05
3393	0.000	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.06	<b>0.05</b>	0.06
3394	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04
3395	0.406-	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.00
3396	0.406-	ULS-Set B (auto)/19	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.01	<b>0.01</b>	0.00
3397	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.06	<b>0.05</b>	0.06
3398	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.06	<b>0.05</b>	0.06
3399	0.406-	ULS-Set B (auto)/22	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.02

Name	Combination key
ULS-Set B (auto)/1	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/2	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/3	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/4	1.35*G + 1.35*G1 + 1.05*Q1 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/5	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/6	G + G1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/7	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8
ULS-Set B (auto)/8	G + G1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/9	G + G1 + 1.05*Q1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/10	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/11	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/12	1.35*G + 1.35*G1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/13	1.35*G + 1.35*G1 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/14	G + G1 + 0.75*Q3 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/15	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/16	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/17	G + G1 + 1.05*Q1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/18	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/19	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/20	G + G1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/21	1.35*G + 1.35*G1 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/22	1.35*G + 1.35*G1 + 1.50*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8

## Unity check

### EC-EN 1993 Steel check ULS

Values:  $UC_{sec}$

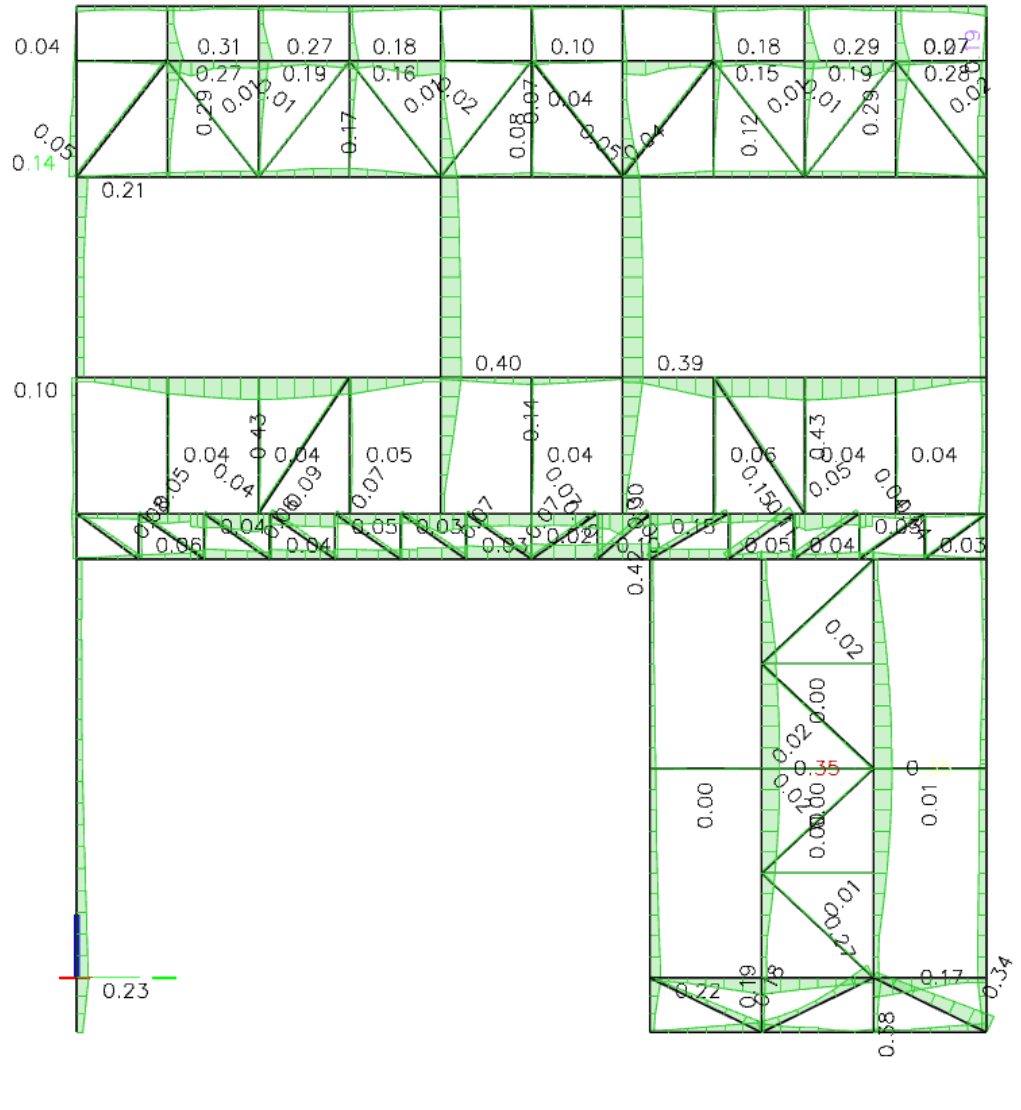
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Principal

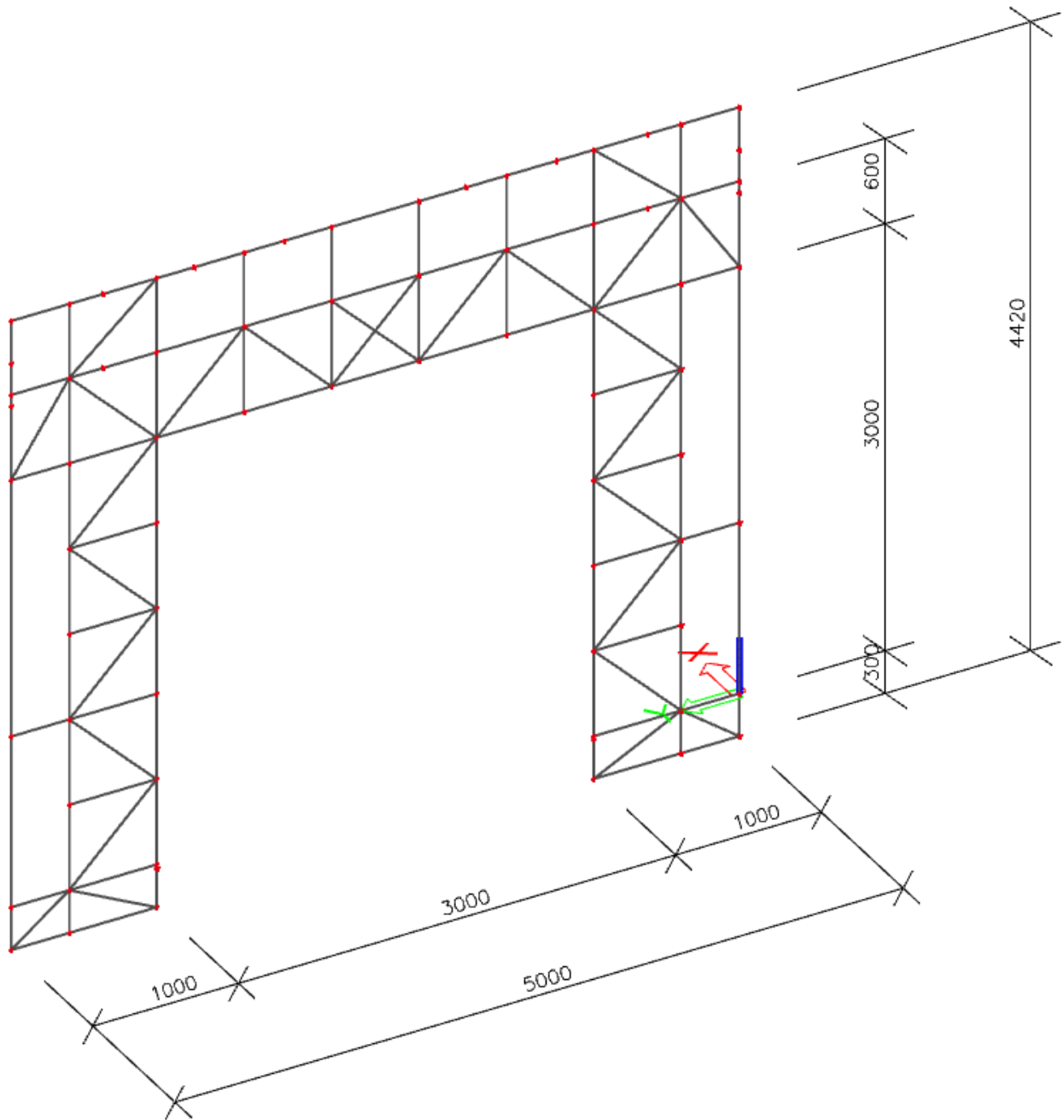
Extreme 1D: Member

Selection: All

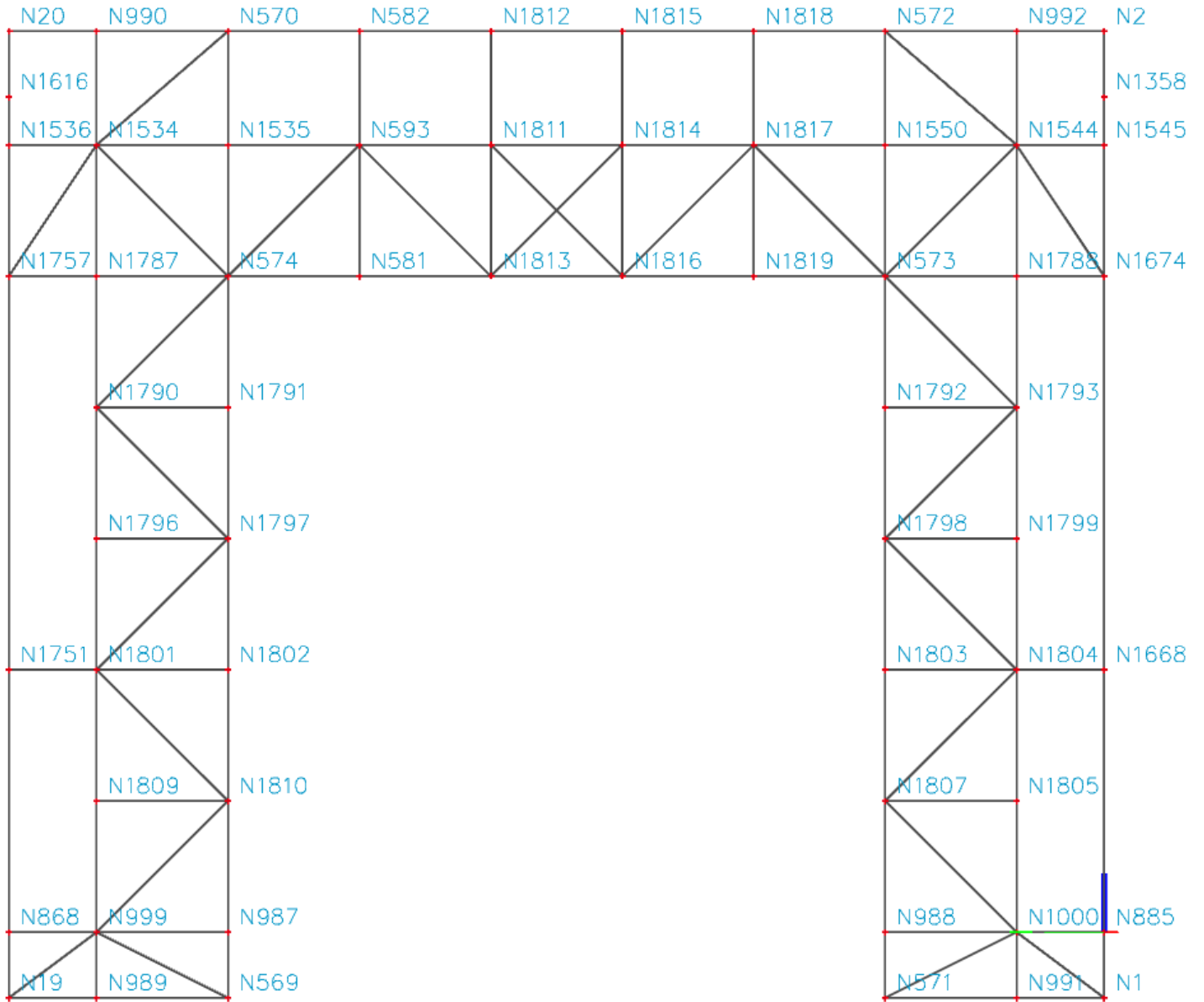


### 2.4.2.4 REAR WALL CHECK

Wall frame



**Node number**



## Node coordinate

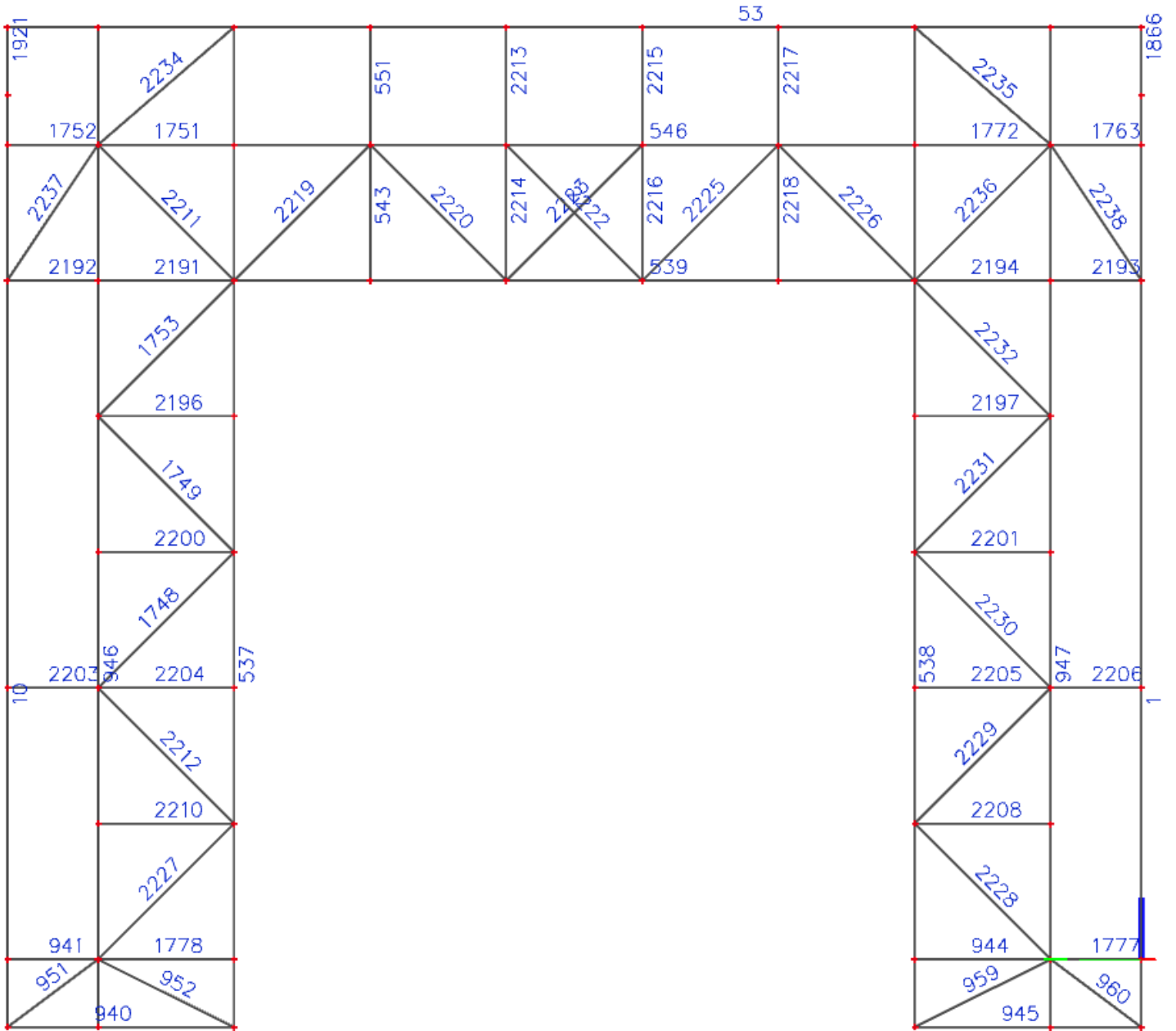
Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1	0.000	0.000	-0.300
N2	0.000	0.000	4.120
N19	0.000	5.000	-0.300
N20	0.000	5.000	4.120
N569	0.000	4.000	-0.300
N570	0.000	4.000	4.120
N571	0.000	1.000	-0.300
N572	0.000	1.000	4.120
N573	0.000	1.000	3.000
N574	0.000	4.000	3.000
N581	0.000	3.400	3.000
N582	0.000	3.400	4.120
N593	0.000	3.400	3.600
N868	0.000	5.000	0.000
N885	0.000	0.000	0.000
N987	0.000	4.000	0.000
N988	0.000	1.000	0.000
N989	0.000	4.600	-0.300
N990	0.000	4.600	4.120
N991	0.000	0.400	-0.300
N992	0.000	0.400	4.120

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N999	0.000	4.600	0.000
N1000	0.000	0.400	0.000
N1358	0.000	0.000	3.820
N1534	0.000	4.600	3.600
N1535	0.000	4.000	3.600
N1536	0.000	5.000	3.600
N1544	0.000	0.400	3.600
N1545	0.000	0.000	3.600
N1550	0.000	1.000	3.600
N1616	0.000	5.000	3.820
N1668	0.000	0.000	1.200
N1674	0.000	0.000	3.000
N1751	0.000	5.000	1.200
N1757	0.000	5.000	3.000
N1787	0.000	4.600	3.000
N1788	0.000	0.400	3.000
N1790	0.000	4.600	2.400
N1791	0.000	4.000	2.400
N1792	0.000	1.000	2.400
N1793	0.000	0.400	2.400
N1796	0.000	4.600	1.800

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1797	0.000	4.000	1.800
N1798	0.000	1.000	1.800
N1799	0.000	0.400	1.800
N1801	0.000	4.600	1.200
N1802	0.000	4.000	1.200
N1803	0.000	1.000	1.200
N1804	0.000	0.400	1.200
N1805	0.000	0.400	0.600
N1807	0.000	1.000	0.600
N1809	0.000	4.600	0.600
N1810	0.000	4.000	0.600
N1811	0.000	2.800	3.600
N1812	0.000	2.800	4.120
N1813	0.000	2.800	3.000
N1814	0.000	2.200	3.600
N1815	0.000	2.200	4.120
N1816	0.000	2.200	3.000
N1817	0.000	1.600	3.600
N1818	0.000	1.600	4.120
N1819	0.000	1.600	3.000



**Members number**



## Members cross-sections

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
1	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	4.120	N1	N1358	column (100)
10	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	4.120	N19	N1616	column (100)
53	2xC100*50*15*1.2 - General cross-section	S350GD+Z	5.000	N2	N20	beam (80)
537	4xC100*50*15*1.2G -	S350GD+Z	4.420	N569	N570	column (100)
538	4xC100*50*15*1.2G -	S350GD+Z	4.420	N571	N572	column (100)
539	2xC100*50*15*1.2 - General cross-section	S350GD+Z	3.000	N573	N574	truss chord (95)
543	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.600	N581	N593	column (100)
546	2xC100*50*15*1.2 - General cross-section	S350GD+Z	3.000	N1550	N1535	truss chord (95)
551	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.520	N593	N582	column (100)
940	2xC100*50*15*1.2 - General cross-section	S350GD+Z	1.000	N19	N569	wall bracing (0)
941	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.400	N868	N999	wall bracing (0)
944	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.600	N988	N1000	wall bracing (0)
945	2xC100*50*15*1.2 - General cross-section	S350GD+Z	1.000	N571	N1	wall bracing (0)
946	2xC100*50*15*1.2 - General cross-section	S350GD+Z	4.420	N989	N990	column (100)
947	2xC100*50*15*1.2 - General cross-section	S350GD+Z	4.420	N991	N992	column (100)
951	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.500	N19	N999	wall bracing (0)
952	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N569	N999	wall bracing (0)
959	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.671	N571	N1000	wall bracing (0)
960	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.500	N1000	N1	wall bracing (0)
1748	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N1801	N1797	wall bracing (0)
1749	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N1797	N1790	wall bracing (0)
1751	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N1534	N1535	wall bracing (0)
1752	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.400	N1536	N1534	wall bracing (0)
1753	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N1790	N574	wall bracing (0)
1763	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.400	N1544	N1545	wall bracing (0)
1772	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N1550	N1544	wall bracing (0)
1777	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.400	N1000	N885	wall bracing (0)
1778	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.600	N999	N987	wall bracing (0)
1866	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.300	N1358	N2	column (100)
1921	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.300	N1616	N20	column (100)
2191	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N1787	N574	wall bracing (0)
2192	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.400	N1757	N1787	wall bracing (0)
2193	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.400	N1788	N1674	wall bracing (0)
2194	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N573	N1788	wall bracing (0)
2196	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N1790	N1791	wall bracing (0)
2197	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N1792	N1793	wall bracing (0)
2200	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N1796	N1797	wall bracing (0)
2201	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N1798	N1799	wall bracing (0)
2203	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.400	N1751	N1801	wall bracing (0)
2204	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N1801	N1802	wall bracing (0)
2205	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N1803	N1804	wall bracing (0)
2206	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.400	N1804	N1668	wall bracing (0)
2208	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N1807	N1805	wall bracing (0)
2210	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.600	N1809	N1810	wall bracing (0)
2211	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N574	N1534	wall bracing (0)
2212	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N1810	N1801	wall bracing (0)
2213	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.520	N1811	N1812	column (100)
2214	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.600	N1813	N1811	column (100)
2215	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.520	N1814	N1815	column (100)
2216	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.600	N1816	N1814	column (100)
2217	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.520	N1817	N1818	column (100)
2218	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.600	N1819	N1817	column (100)
2219	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N574	N593	wall bracing (0)
2220	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.849	N1813	N593	wall bracing (0)
2222	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N1816	N1811	wall bracing (0)
2223	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N1813	N1814	wall bracing (0)
2225	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N1816	N1817	wall bracing (0)
2226	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N573	N1817	wall bracing (0)
2227	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N999	N1810	wall bracing (0)
2228	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N1000	N1807	wall bracing (0)
2229	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N1807	N1804	wall bracing (0)
2230	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N1804	N1798	wall bracing (0)
2231	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N1798	N1793	wall bracing (0)
2232	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N1793	N573	wall bracing (0)
2234	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.794	N1534	N570	wall bracing (0)
2235	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.794	N1544	N572	wall bracing (0)
2236	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.849	N573	N1544	wall bracing (0)
2237	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.721	N1757	N1534	wall bracing (0)
2238	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.721	N1674	N1544	wall bracing (0)

## Cross-Section properties

C100*50*15*1.2		
Type	Cold formed C section	
Detailed	100.0; 50.0; 1.2; 3.0; 15.0	
Formcode	114 - Cold formed C section	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	2.6269e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	1.1804e-04	1.3126e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	4.4038e-01	4.4038e-01
C <sub>y,UCS</sub> [mm], C <sub>z,UCS</sub> [mm]	17.2	50.0
α [deg]	0.00	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	4.2561e-07	9.3751e-08
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	40.3	18.9
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	8.5121e-06	2.8580e-06
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	9.7956e-06	4.2419e-06
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	3.43e+03	3.43e+03
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	1.48e+03	1.48e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	-41.5	0.0
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	1.2972e-10	2.2102e-10
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	0.0	121.2
Picture		

2xC100*50*15*1.2		
Type	General cross-section	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	5.2537e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	2.3609e-04	2.8234e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	7.9756e-01	7.9756e-01
C <sub>y,UCS</sub> [mm], C <sub>z,UCS</sub> [mm]	1.8	0.3
α [deg]	0.00	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	2.1646e-06	1.8750e-07
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	64.2	18.9
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	2.1646e-05	5.7161e-06
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	2.6269e-05	8.4837e-06
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	9.19e+03	9.19e+03
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	2.97e+03	2.97e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	-36.7	0.0
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	4.2808e-10	9.7164e-10
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	0.0	111.7
Picture		

3*C100*50*15*1. 2		
Type	C100*50*15*1.2	
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	7.6646e-04	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	3.2219e-04	3.7977e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	1.1687e+00	1.1687e+00
C <sub>y,UCS</sub> [mm], C <sub>z,UCS</sub> [mm]	280.8	70.5
I <sub>y,LCS</sub> [m <sup>4</sup> ], I <sub>z,LCS</sub> [m <sup>4</sup> ]	1.3092e-06	1.6666e-06
I <sub>y2,LCS</sub> [m <sup>4</sup> ]	-4.2792e-08	
α [deg]	83.27	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	1.6716e-06	1.3041e-06
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	46.7	41.2
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	2.0127e-05	1.7440e-05
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	2.9299e-05	2.8496e-05
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	1.03e+04	1.03e+04
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	9.97e+03	9.97e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	-24.6	-45.1
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	5.1683e-10	4.0845e-09
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	105.4	52.7
Picture		

4xC100*50*15*1.2G		
Shape type	Thin-walled	
Item material	S350GD+Z	
Fabrication	cold formed	
Colour	■	
Flexural buckling y-y, Flexural buckling z-z	c	c
A [m <sup>2</sup> ]	1.0507e-03	
A <sub>y</sub> [m <sup>2</sup> ], A <sub>z</sub> [m <sup>2</sup> ]	4.9910e-04	5.6467e-04
A <sub>L</sub> [m <sup>2</sup> /m], A <sub>D</sub> [m <sup>2</sup> /m]	9.0712e-01	1.5087e+00
C <sub>y,UCS</sub> [mm], C <sub>z,UCS</sub> [mm]	76.8	100.3
α [deg]	0.00	
I <sub>y</sub> [m <sup>4</sup> ], I <sub>z</sub> [m <sup>4</sup> ]	4.3293e-06	1.0317e-06
i <sub>y</sub> [mm], i <sub>z</sub> [mm]	64.2	31.3
W <sub>el,y</sub> [m <sup>3</sup> ], W <sub>el,z</sub> [m <sup>3</sup> ]	4.3293e-05	1.7849e-05
W <sub>pl,y</sub> [m <sup>3</sup> ], W <sub>pl,z</sub> [m <sup>3</sup> ]	5.2537e-05	2.6269e-05
M <sub>pl,y,+</sub> [Nm], M <sub>pl,y,-</sub> [Nm]	1.84e+04	1.84e+04
M <sub>pl,z,+</sub> [Nm], M <sub>pl,z,-</sub> [Nm]	9.19e+03	9.19e+03
d <sub>y</sub> [mm], d <sub>z</sub> [mm]	-53.7	0.0
I <sub>t</sub> [m <sup>4</sup> ], I <sub>w</sub> [m <sup>6</sup> ]	6.2498e-08	4.1970e-09
β <sub>y</sub> [mm], β <sub>z</sub> [mm]	0.0	121.4
Picture		

## Wall member hinges

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H479	539	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H480	546	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H482	543	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H487	551	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H870	941	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H872	944	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H888	940	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H890	945	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H977	537	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H978	946	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H979	538	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H980	947	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H981	1	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H982	10	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H984	1777	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H985	1778	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H1004	1866	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H1018	1921	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H1039	2213	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H1040	2214	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H1041	2215	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H1042	2216	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H1043	2217	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H1044	2218	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H1045	2219	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H1046	2220	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H1048	2222	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H1049	2223	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1051	2225	Both	Rigid	Rigid	Rigid	Rigid	Free	Rigid
H1052	2226	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

## Maximum forces in elements

### Axial force diagram N, kH.

#### 1D internal forces

Values: **N**

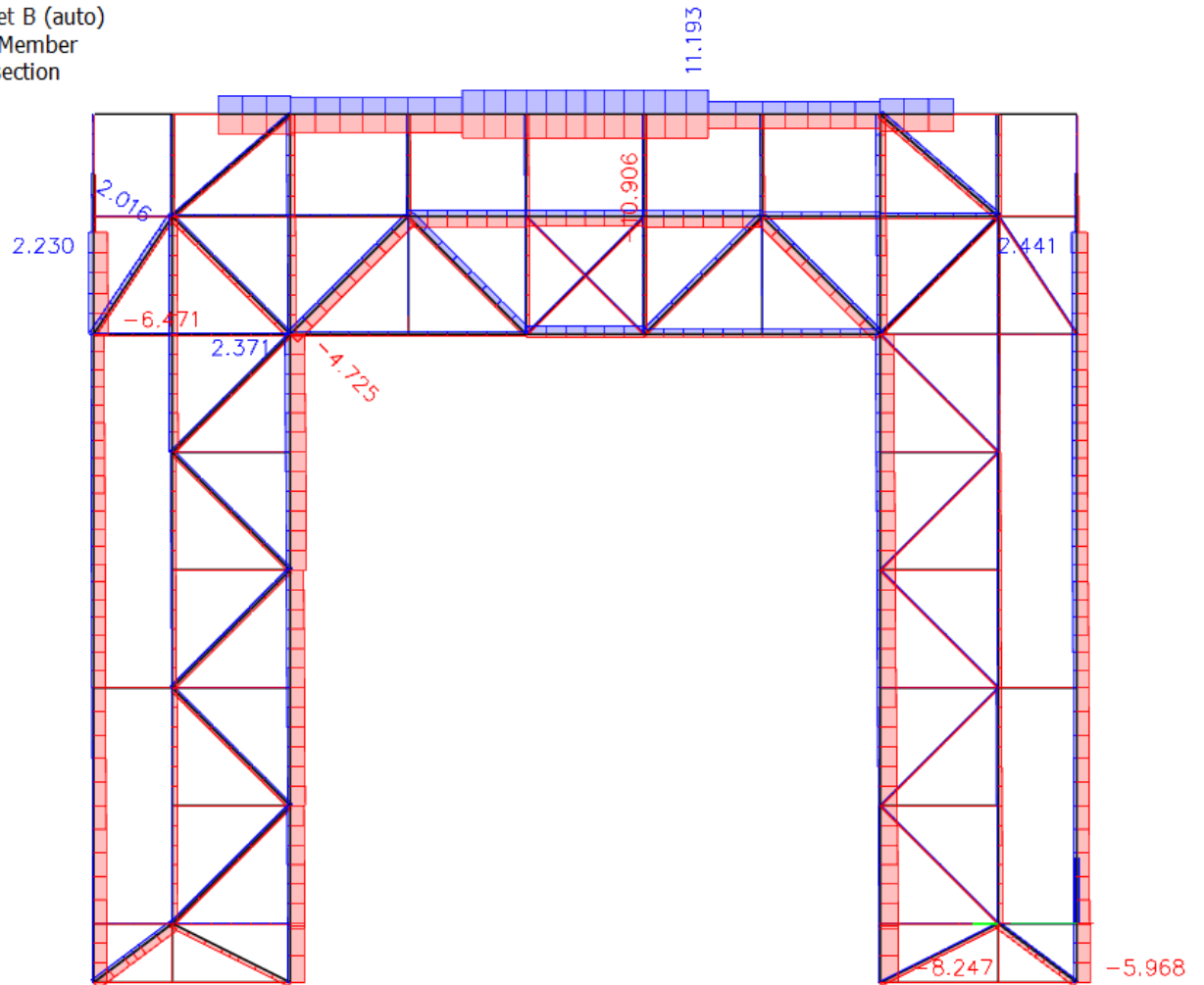
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Cross-section

Selection: All



## Shear force diagram $V_y$ , kH.

### 1D internal forces

Values:  $V_y$

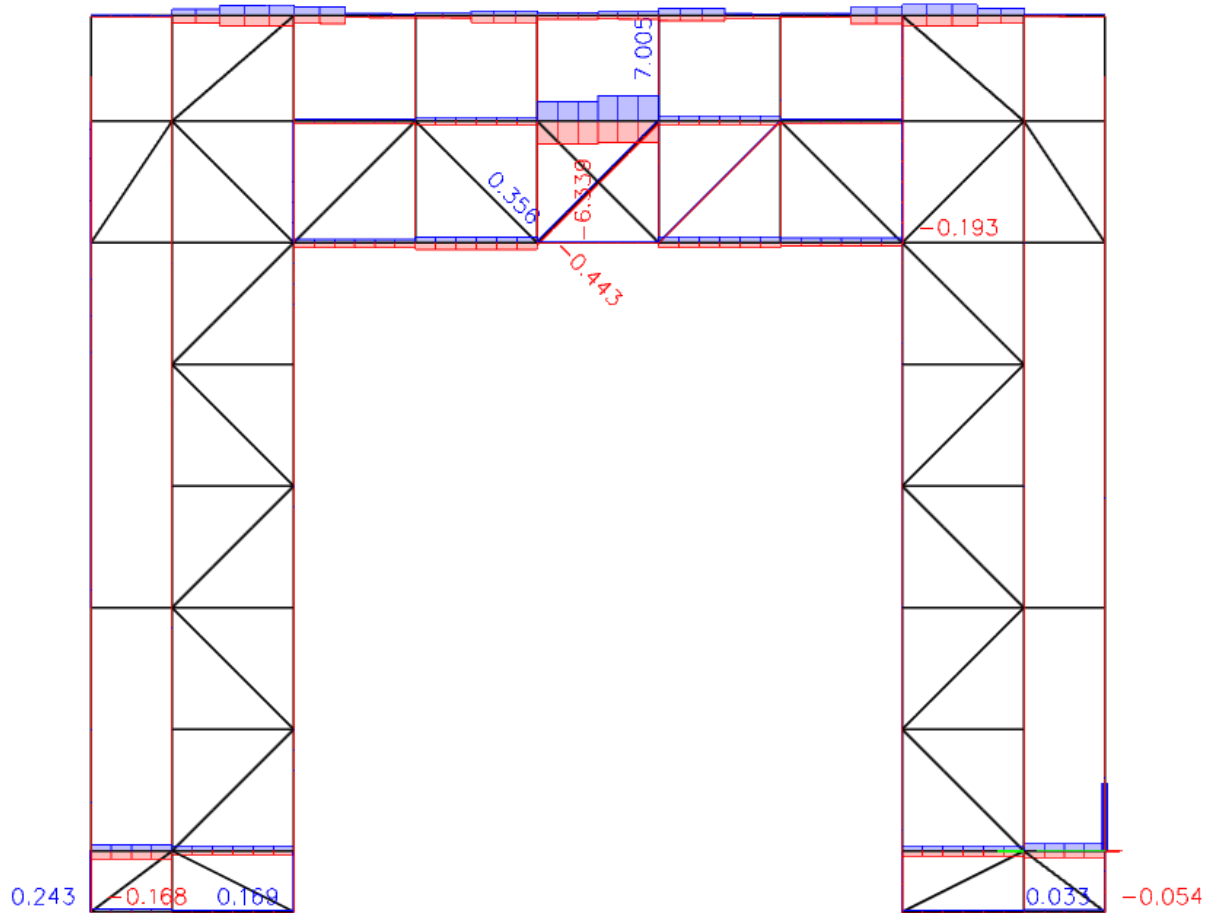
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Cross-section

Selection: All



## Shear force diagram $V_z$ , kH.

### 1D internal forces

Values:  $V_z$

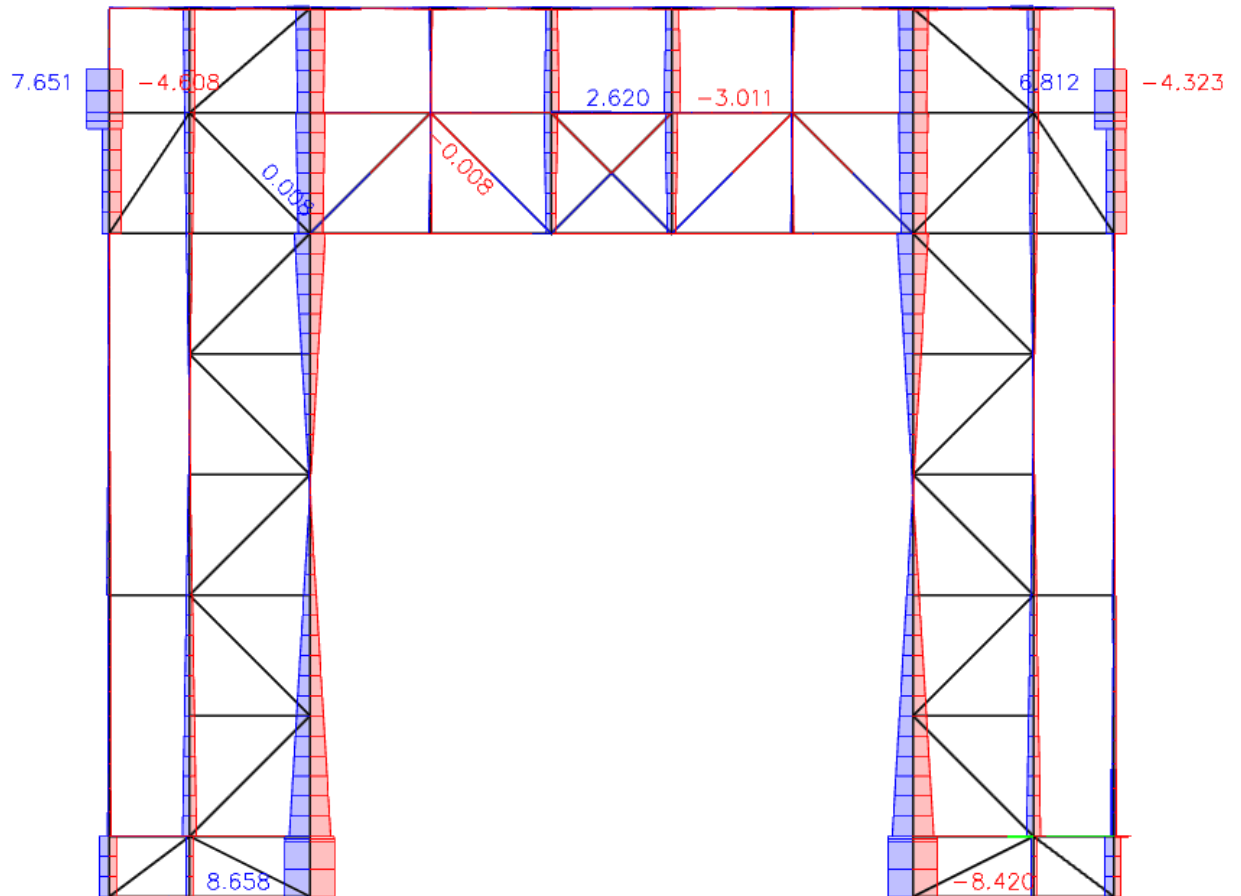
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Cross-section

Selection: All





---

## Diagram of bending moments $M_y$ , kNm.

### 1D internal forces

Values:  $M_y$

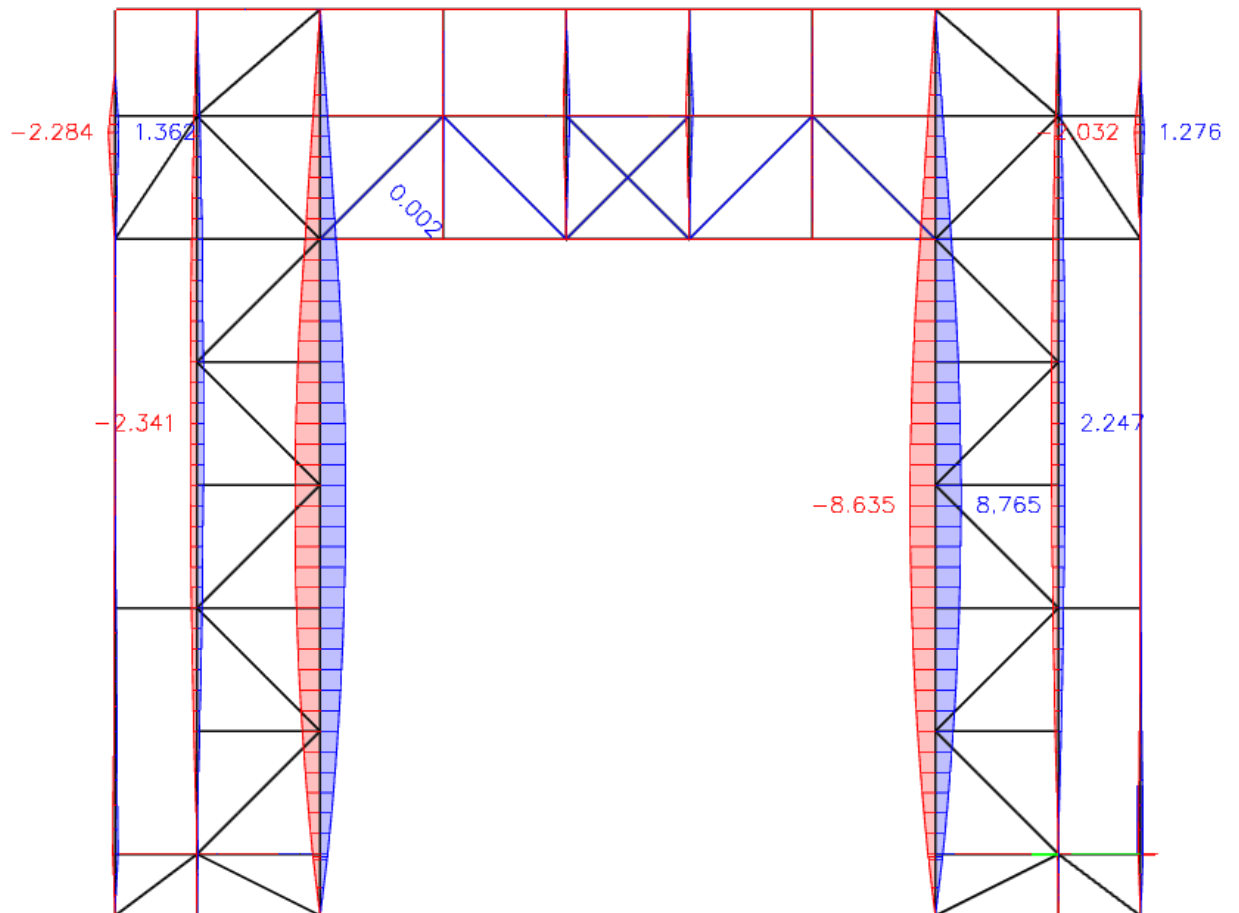
Linear calculation

Combination: ULS-Set B (auto)

Coordinate system: Member

Extreme 1D: Cross-section

Selection: All



## Diagram of bending moments $M_z$ , kNm.

### 1D internal forces

Values:  $M_z$

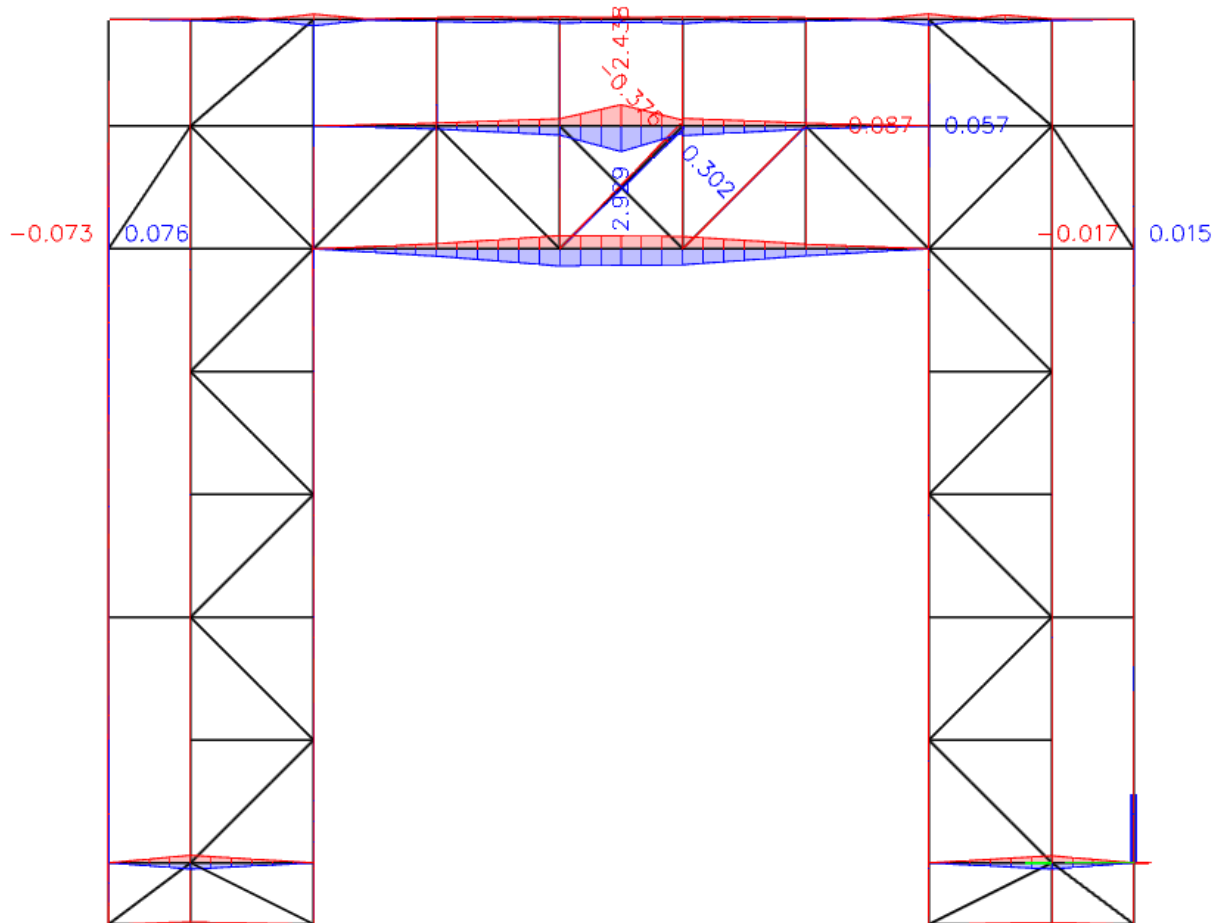
Linear calculation

Combination: ULS-Set B (auto)

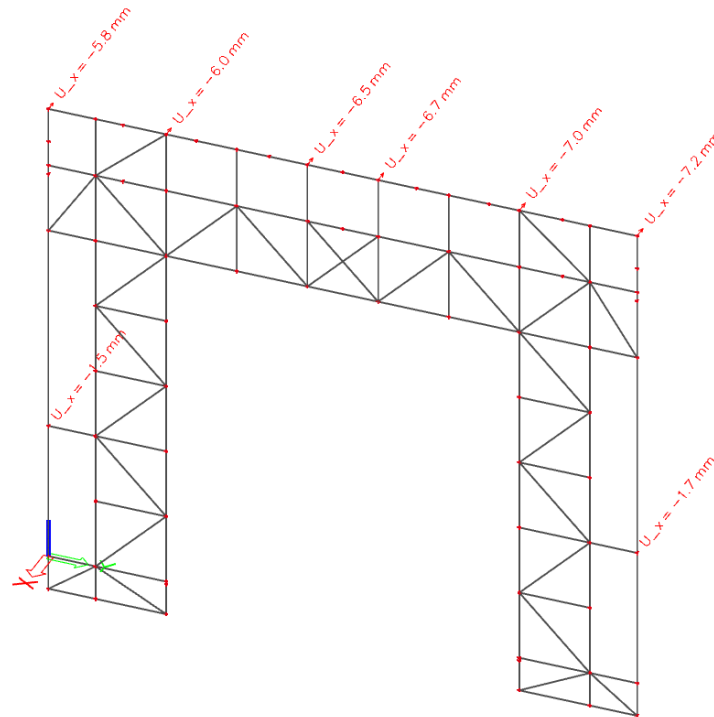
Coordinate system: Member

Extreme 1D: Cross-section

Selection: All



**Deformation check**  
**Load cases Wind X- (N -0.3)**  
**Horizontal limit displacements**



17.4 lentelė

**Karkasinių pastatų horizontalieji ribiniai poslinkiai, ribojami konstrukciniais reikalavimais (kad būtų išlaikytas karkaso užpildymo sienomis, pertvaromis, langų ir durų elementais vientisumas)**

Pastatai, sienos ir pertvaros	Sienų ir pertvarų tvirtinimas prie pastato karkaso	Ribiniai poslinkiai, $u_{lim}$
1. Daugiaaukščiai pastatai	bet koks	$h/500$
2. Daugiaaukščių pastatų vienas aukštas:	paslankusis	$h_s/300$
a) sienos ir pertvaros iš plytų, gipsobetono, gelžbetonio panelių	standus	$h_s/500$
b) sienos su natūralaus akmens, keraminių blokų, stiklo (vitražo) apdaila	“-“	$h_s/700$
3. Vienaaukščiai pastatai (su save laikančiomis sienomis), kai aukštis $h_e$ , m:	paslankusis	
$h_s \leq 6$		$h_s/150$
$h_s = 15$		$h_s/200$
$h_s \geq 30$		$h_s/300$

The maximum deflection is 7.2 mm. According to STR 2.05.04:2003 - "Poveikiai ir apkrovos" - deflection limits -  $H_s/150$ .

$4120 / 150 = 27.4 \text{ mm}$        $7.2 \text{ mm} < 27.4 \text{ mm}$       Deformation is OK!

## Internal forces

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
1	0.000	ULS-Set B (auto)/1	<b>-5.968</b>	-0.032	3.080	0.000	0.000	0.000	(auto)/8								
1	0.000	ULS-Set B (auto)/2	-4.348	<b>-0.054</b>	1.660	0.000	0.000	0.000	537	0.000	ULS-Set B (auto)/17	-0.403	-0.005	<b>-8.399</b>	0.000	0.000	0.000
1	0.000	ULS-Set B (auto)/3	0.785	<b>0.033</b>	-1.255	0.000	0.000	0.000	537	0.000	ULS-Set B (auto)/9	-5.308	<b>0.169</b>	<b>8.658</b>	0.001	0.000	0.000
1	4.120	ULS-Set B (auto)/4	-0.575	0.000	<b>-4.323</b>	0.000	0.000	0.000	537	3.300+	ULS-Set B (auto)/8	1.173	-0.067	2.684	<b>-0.001</b>	-3.316	<b>0.051</b>
1	4.120	ULS-Set B (auto)/1	0.611	0.000	<b>6.812</b>	0.000	0.000	0.000	537	0.000	ULS-Set B (auto)/14	-6.174	0.147	5.214	<b>0.001</b>	0.000	0.000
1	3.820+	ULS-Set B (auto)/2	0.096	-0.002	4.448	<b>0.000</b>	-1.335	0.000	537	2.000-	ULS-Set B (auto)/17	0.874	-0.002	-0.015	0.000	<b>-8.591</b>	0.002
1	3.820+	ULS-Set B (auto)/3	-0.152	0.020	-2.899	<b>0.000</b>	0.880	-0.002	537	2.000-	ULS-Set B (auto)/9	-5.574	0.060	0.106	0.001	<b>8.745</b>	0.003
1	3.820-	ULS-Set B (auto)/1	-4.885	0.022	-4.021	0.000	<b>-2.032</b>	-0.002	537	3.300-	ULS-Set B (auto)/9	-6.378	-0.083	-5.264	0.001	5.392	<b>-0.070</b>
1	3.820-	ULS-Set B (auto)/4	<b>2.441</b>	-0.020	2.542	0.000	<b>1.276</b>	0.001	538	0.000	ULS-Set B (auto)/14	<b>-8.247</b>	0.025	5.155	0.000	0.000	0.000
1	3.300+	ULS-Set B (auto)/5	-4.628	0.028	-3.910	0.000	0.091	<b>-0.017</b>	538	3.300-	ULS-Set B (auto)/3	<b>2.102</b>	-0.041	-2.606	0.001	2.558	-0.029
1	3.300+	ULS-Set B (auto)/6	1.852	-0.026	2.536	0.000	-0.105	<b>0.015</b>	538	3.900+	ULS-Set B (auto)/18	1.753	<b>0.167</b>	2.865	0.000	-1.574	-0.087
10	3.300+	ULS-Set B (auto)/7	<b>-6.471</b>	-0.086	-4.077	0.000	-0.132	0.052	538	0.000	ULS-Set B (auto)/19	-1.569	0.010	<b>-8.420</b>	0.000	0.000	0.000
10	0.000	ULS-Set B (auto)/8	-4.855	<b>-0.168</b>	3.351	0.000	0.000	0.000	538	0.000	ULS-Set B (auto)/16	-7.019	0.050	<b>8.585</b>	0.000	0.000	0.000
10	0.000	ULS-Set B (auto)/9	-0.922	<b>0.243</b>	-2.544	0.000	0.000	0.000	538	0.000	ULS-Set B (auto)/20	-2.472	-0.093	-0.854	<b>-0.001</b>	0.000	0.000
10	4.120	ULS-Set B (auto)/4	-0.685	0.000	<b>-4.608</b>	0.000	0.000	0.000	538	3.300+	ULS-Set B (auto)/21	0.372	0.095	-2.017	<b>0.001</b>	2.566	-0.029
10	4.120	ULS-Set B (auto)/1	0.745	0.000	<b>7.651</b>	0.000	0.000	0.000	538	2.000-	ULS-Set B (auto)/17	0.808	0.002	-0.038	0.000	<b>-8.635</b>	-0.001
10	3.820+	ULS-Set B (auto)/10	-0.227	0.029	-3.251	<b>0.000</b>	0.986	-0.002	538	2.000-	ULS-Set B (auto)/9	-6.752	-0.067	0.131	0.000	<b>8.765</b>	-0.003
10	3.820+	ULS-Set B (auto)/11	-0.339	0.041	1.066	<b>0.000</b>	-0.320	-0.003	538	3.900-	ULS-Set B (auto)/18	1.528	<b>-0.193</b>	3.131	0.000	-1.574	<b>-0.087</b>
10	3.820-	ULS-Set B (auto)/1	-6.235	-0.112	-4.120	0.000	<b>-2.284</b>	0.009	538	3.900+	ULS-Set B (auto)/22	-2.387	-0.110	-4.633	0.000	2.560	<b>0.057</b>
10	3.820-	ULS-Set B (auto)/4	<b>2.230</b>	0.107	2.227	0.000	<b>1.362</b>	-0.009	539	1.200+	ULS-Set B (auto)/8	<b>-1.506</b>	0.077	0.014	0.000	-0.006	0.479
10	3.300+	ULS-Set B (auto)/9	1.249	0.122	2.090	0.000	0.193	<b>-0.073</b>	539	1.200+	ULS-Set B (auto)/14	<b>3.832</b>	-0.112	0.007	0.000	0.010	-0.774
10	3.300+	ULS-Set B (auto)/8	-5.587	-0.127	-3.878	0.000	-0.158	<b>0.076</b>	539	1.800+	ULS-Set B (auto)/15	0.205	<b>-1.892</b>	0.023	0.000	-0.003	<b>1.973</b>
53	2.200+	ULS-Set B (auto)/9	<b>-10.906</b>	1.112	0.514	0.000	-0.039	-0.384	539	0.600+	ULS-Set B (auto)/15	0.385	<b>1.721</b>	0.006	0.000	0.002	0.792
53	1.875+	ULS-Set B (auto)/8	<b>11.193</b>	-0.137	-0.027	0.000	-0.023	0.135	539	3.000	ULS-Set B (auto)/14	1.417	0.485	<b>-0.034</b>	0.000	0.000	0.000
53	4.368-	ULS-Set B (auto)/12	-8.498	<b>-2.781</b>	0.271	0.000	0.078	-0.326	539	1.800+	ULS-Set B (auto)/23	1.039	-0.603	<b>0.027</b>	0.000	0.001	0.673
53	0.400+	ULS-Set B (auto)/9	0.024	-2.153	<b>0.799</b>	0.000	-0.065	-0.044	539	0.000	ULS-Set B (auto)/24	-0.506	-0.405	0.008	<b>0.000</b>	0.000	0.000
53	1.000-	ULS-Set B (auto)/13	-6.736	1.909	<b>-0.737</b>	<b>0.000</b>	-0.091	0.337	539	1.800+	ULS-Set B (auto)/24	0.060	0.238	0.013	<b>0.000</b>	-0.002	-0.392
53	3.125+	ULS-Set B (auto)/14	-7.142	0.729	-0.085	<b>0.000</b>	0.047	-0.248	539	1.200+	ULS-Set B (auto)/25	-1.142	0.244	0.017	0.000	<b>-0.007</b>	1.795
53	4.000-	ULS-Set B (auto)/9	-8.238	2.406	-0.666	0.000	<b>-0.108</b>	0.700	539	1.000-	ULS-Set B (auto)/13	2.230	-0.854	0.002	0.000	<b>0.011</b>	-0.609
53	0.630+	ULS-Set B (auto)/9	-7.678	<b>3.093</b>	-0.250	0.000	<b>0.086</b>	-0.540	539	1.800-	ULS-Set B (auto)/26	2.748	-0.197	-0.019	0.000	0.004	<b>-1.519</b>
53	1.000+	ULS-Set B (auto)/15	3.115	2.270	-0.250	0.000	0.032	<b>-0.655</b>	543	0.000	ULS-Set B (auto)/27	<b>-0.001</b>	-0.009	0.426	0.000	0.000	0.000
53	4.000-	ULS-Set B (auto)/16	-7.058	2.431	-0.510	0.000	-0.088	<b>0.706</b>	543	0.600	ULS-Set B (auto)/28	<b>0.214</b>	0.006	-0.171	0.000	0.019	0.004
537	2.100+	ULS-Set B (auto)/13	<b>-7.397</b>	-0.059	-0.177	0.001	5.257	0.013	543	0.000	ULS-Set B (auto)/17	0.027	0.004	<b>-0.527</b>	0.000	0.000	0.000
537	3.300-	ULS-Set B (auto)/5	<b>2.371</b>	0.079	2.892	-0.001	-3.311	0.050	543	0.000	ULS-Set B (auto)/9	0.010	-0.009	<b>0.651</b>	0.000	0.000	0.000
537	0.000	ULS-Set B (auto)/5	-2.518	<b>-0.117</b>	-5.137	-0.001	0.000	0.000	543	0.000	ULS-Set B (auto)/10	0.042	0.007	0.228	<b>0.000</b>	0.000	0.000
									543	0.500-	ULS-Set B (auto)/15	0.164	0.001	0.201	<b>0.000</b>	-0.074	0.000
									543	0.600	ULS-Set B (auto)/8	0.157	0.006	0.003	0.000	<b>-0.138</b>	0.004
									543	0.500-	ULS-Set B (auto)/9	0.148	-0.009	-0.038	0.000	<b>0.153</b>	-0.004
									543	0.600	ULS-Set B (auto)/9	0.171	<b>-0.010</b>	-0.065	0.000	0.110	<b>-0.006</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
543	0.600	(auto)/13 ULS-Set B (auto)/3	0.165	<b>0.007</b>	-0.176	0.000	0.016	<b>0.004</b>	944	0.600	(auto)/7 ULS-Set B (auto)/16	<b>0.089</b>	<b>-1.349</b>	-0.013	<b>0.000</b>	0.002	<b>-0.810</b>
546	0.600+	ULS-Set B (auto)/9	<b>-4.895</b>	-0.890	0.013	0.000	0.000	-0.340	944	0.600	ULS-Set B (auto)/19	0.019	<b>1.184</b>	-0.012	<b>0.000</b>	0.000	<b>0.711</b>
546	0.600+	ULS-Set B (auto)/8	<b>2.952</b>	0.240	0.040	0.000	-0.011	0.167	945	0.600+	ULS-Set B (auto)/9	<b>-0.009</b>	-0.602	-0.003	0.000	0.006	0.211
546	1.500+	ULS-Set B (auto)/15	0.664	<b>-6.339</b>	0.410	0.000	-0.073	2.924	945	0.600+	ULS-Set B (auto)/8	<b>0.007</b>	0.579	-0.014	<b>0.000</b>	0.009	-0.202
546	1.200+	ULS-Set B (auto)/15	0.671	<b>7.005</b>	-0.414	0.000	0.051	0.822	945	0.600+	ULS-Set B (auto)/16	-0.008	<b>-0.610</b>	0.002	0.000	0.004	<b>0.214</b>
546	1.800-	ULS-Set B (auto)/9	-4.544	5.344	<b>-0.493</b>	0.000	-0.055	-0.822	945	1.000	ULS-Set B (auto)/7	0.003	0.399	<b>-0.050</b>	0.000	0.000	0.020
546	1.500+	ULS-Set B (auto)/17	1.836	-6.280	<b>0.434</b>	0.000	-0.079	2.915	945	0.000	ULS-Set B (auto)/7	-0.002	-0.231	<b>0.043</b>	0.000	0.000	-0.001
546	2.400+	ULS-Set B (auto)/15	0.845	-0.546	0.014	<b>0.000</b>	0.001	0.328	945	0.600+	ULS-Set B (auto)/3	-0.001	-0.353	0.026	0.000	<b>-0.007</b>	0.124
546	0.000	ULS-Set B (auto)/15	0.561	0.524	0.016	<b>0.000</b>	0.000	0.000	945	0.600+	ULS-Set B (auto)/7	0.003	0.399	-0.028	0.000	<b>0.016</b>	-0.139
546	1.500-	ULS-Set B (auto)/25	1.834	6.955	-0.432	0.000	<b>-0.079</b>	2.921	945	0.600+	ULS-Set B (auto)/30	0.006	<b>0.587</b>	-0.019	0.000	0.011	<b>-0.205</b>
546	1.500+	ULS-Set B (auto)/9	-4.544	5.344	-0.476	0.000	<b>0.091</b>	-2.425	946	2.700+	ULS-Set B (auto)/1	<b>-2.697</b>	<b>0.032</b>	0.151	0.000	-1.160	-0.005
546	1.500-	ULS-Set B (auto)/12	-4.159	-5.910	0.337	0.000	0.070	<b>-2.438</b>	946	3.900-	ULS-Set B (auto)/4	<b>1.587</b>	0.021	-1.643	0.000	0.953	0.001
546	1.500-	ULS-Set B (auto)/29	1.489	6.979	-0.430	0.000	-0.078	<b>2.929</b>	946	0.300+	ULS-Set B (auto)/9	-2.488	<b>-0.029</b>	2.427	0.000	-0.355	<b>0.018</b>
551	0.520	ULS-Set B (auto)/10	<b>1.027</b>	0.005	-0.205	0.000	0.000	0.000	946	0.300+	ULS-Set B (auto)/19	-0.554	0.000	<b>-2.411</b>	0.000	0.164	0.001
551	0.000	ULS-Set B (auto)/14	<b>-1.098</b>	<b>-0.059</b>	0.003	0.000	0.110	<b>0.030</b>	946	0.300+	ULS-Set B (auto)/16	-2.159	-0.027	<b>2.427</b>	0.000	-0.355	0.017
551	0.520	ULS-Set B (auto)/9	-0.710	-0.056	<b>-0.632</b>	0.000	0.000	0.000	946	0.000	ULS-Set B (auto)/16	-0.061	-0.009	-1.184	<b>-0.001</b>	0.000	0.000
551	0.520	ULS-Set B (auto)/17	0.376	-0.003	<b>0.487</b>	0.000	0.000	0.000	946	0.000	ULS-Set B (auto)/19	0.007	0.002	0.546	<b>0.000</b>	0.000	0.000
551	0.000	ULS-Set B (auto)/26	-0.444	-0.039	0.118	<b>0.000</b>	0.125	0.020	946	2.400-	ULS-Set B (auto)/29	-0.384	0.000	0.032	0.000	<b>-2.341</b>	0.001
551	0.000	ULS-Set B (auto)/15	-0.141	-0.021	-0.272	<b>0.000</b>	-0.047	0.011	946	2.400-	ULS-Set B (auto)/12	-0.156	-0.006	0.015	0.000	<b>2.216</b>	0.000
551	0.104-	ULS-Set B (auto)/9	-0.825	-0.056	-0.059	0.000	<b>0.144</b>	0.024	946	0.300+	ULS-Set B (auto)/8	0.248	0.026	-1.398	0.000	0.341	<b>-0.014</b>
551	0.000	ULS-Set B (auto)/8	0.624	<b>0.016</b>	0.063	0.000	<b>-0.138</b>	<b>-0.008</b>	947	0.300+	ULS-Set B (auto)/7	<b>-1.959</b>	0.010	-0.184	0.000	0.189	-0.008
940	0.000	ULS-Set B (auto)/8	<b>0.006</b>	-0.714	-0.011	<b>0.000</b>	0.000	0.033	947	4.420	ULS-Set B (auto)/10	<b>0.982</b>	-0.004	-0.991	0.000	0.000	0.000
940	1.000	ULS-Set B (auto)/9	0.004	-0.438	<b>-0.057</b>	0.000	0.000	-0.001	947	3.900+	ULS-Set B (auto)/8	0.741	<b>0.026</b>	0.905	0.000	-0.526	-0.013
940	0.000	ULS-Set B (auto)/9	-0.006	0.744	<b>0.072</b>	<b>0.000</b>	0.000	-0.035	947	0.300+	ULS-Set B (auto)/19	-0.348	-0.003	<b>-2.411</b>	0.000	0.165	0.001
940	0.400+	ULS-Set B (auto)/8	-0.004	0.421	0.025	0.000	<b>-0.008</b>	-0.252	947	0.300+	ULS-Set B (auto)/16	-0.572	-0.009	<b>2.411</b>	0.000	-0.289	0.003
940	0.400-	ULS-Set B (auto)/9	<b>-0.006</b>	0.744	0.050	0.000	<b>0.024</b>	0.263	947	0.000	ULS-Set B (auto)/19	0.016	-0.001	0.551	<b>-0.001</b>	0.000	0.000
940	0.400-	ULS-Set B (auto)/30	0.005	<b>-0.715</b>	-0.019	0.000	-0.004	<b>-0.253</b>	947	0.000	ULS-Set B (auto)/16	0.012	0.013	-0.964	<b>0.001</b>	0.000	0.000
940	0.400-	ULS-Set B (auto)/16	-0.006	<b>0.745</b>	0.042	0.000	0.021	<b>0.263</b>	947	2.400-	ULS-Set B (auto)/29	-0.323	0.001	0.032	0.000	<b>-2.339</b>	-0.001
941	0.000	ULS-Set B (auto)/9	<b>0.298</b>	-2.166	<b>0.099</b>	0.001	0.000	0.000	947	2.400-	ULS-Set B (auto)/12	-0.198	0.012	-0.001	0.000	<b>2.247</b>	0.001
941	0.400	ULS-Set B (auto)/8	<b>-0.191</b>	1.521	<b>-0.060</b>	0.000	<b>-0.021</b>	0.608	947	3.900-	ULS-Set B (auto)/8	-0.577	<b>-0.025</b>	0.905	0.000	-0.526	<b>-0.013</b>
941	0.400	ULS-Set B (auto)/9	0.298	-2.166	0.077	0.001	<b>0.035</b>	-0.867	947	3.900+	ULS-Set B (auto)/9	-1.300	-0.024	-1.659	0.000	0.960	<b>0.012</b>
941	0.400	ULS-Set B (auto)/16	0.269	<b>-2.167</b>	0.067	<b>0.001</b>	0.031	<b>-0.867</b>	951	0.500	ULS-Set B (auto)/8	<b>1.479</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
941	0.400	ULS-Set B (auto)/19	0.037	<b>1.775</b>	-0.004	<b>-0.001</b>	0.001	<b>0.710</b>	951	0.000	ULS-Set B (auto)/9	<b>-3.736</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
944	0.000	ULS-Set B (auto)/20	<b>-0.122</b>	0.326	0.026	0.000	0.000	0.000	952	0.671	ULS-Set B (auto)/8	<b>-0.001</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
944	0.600	ULS-Set B (auto)/21	0.086	-0.699	<b>-0.023</b>	0.000	-0.004	-0.419	952	0.000	ULS-Set B (auto)/14	<b>-1.992</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
944	0.000	ULS-Set B (auto)/7	-0.119	0.325	<b>0.032</b>	0.000	0.000	0.000	959	0.671	ULS-Set B (auto)/3	<b>0.380</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
944	0.600	ULS-Set B (auto)/3	0.084	-0.698	-0.020	0.000	<b>-0.005</b>	-0.419	959	0.000	ULS-Set B (auto)/7	<b>-1.608</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
944	0.600	ULS-Set B	-0.119	0.325	-0.001	0.000	<b>0.009</b>	0.195	960	0.500	ULS-Set B	<b>-2.123</b>	0.000	0.000	0.000	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/7						
960	0.000	ULS-Set B (auto)/3	<b>0.901</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1748	0.849	ULS-Set B (auto)/8	<b>1.184</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1748	0.000	ULS-Set B (auto)/9	<b>-1.271</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
1749	0.849	ULS-Set B (auto)/9	<b>1.089</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1749	0.000	ULS-Set B (auto)/8	<b>-1.242</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
1751	0.232+	ULS-Set B (auto)/10	<b>-0.192</b>	0.000	0.000	0.000	0.000	0.000
1751	0.000	ULS-Set B (auto)/31	<b>1.088</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1752	0.000	ULS-Set B (auto)/9	<b>0.122</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1752	0.000	ULS-Set B (auto)/8	<b>-0.127</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
1753	0.849	ULS-Set B (auto)/8	<b>1.055</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1753	0.000	ULS-Set B (auto)/9	<b>-1.027</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
1763	0.000	ULS-Set B (auto)/6	<b>0.026</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1763	0.000	ULS-Set B (auto)/5	<b>-0.028</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
1772	0.370+	ULS-Set B (auto)/22	<b>-0.874</b>	0.000	0.000	0.000	0.000	0.000
1772	0.370+	ULS-Set B (auto)/18	<b>1.616</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
1777	0.000	ULS-Set B (auto)/2	<b>0.084</b>	-0.302	-0.025	0.000	0.015	0.121
1777	0.000	ULS-Set B (auto)/19	0.011	<b>-1.778</b>	0.011	<b>0.001</b>	-0.001	<b>0.711</b>
1777	0.400	ULS-Set B (auto)/7	0.074	-0.488	<b>-0.050</b>	0.000	0.000	0.000
1777	0.000	ULS-Set B (auto)/3	<b>-0.048</b>	1.048	<b>0.033</b>	0.000	<b>-0.010</b>	-0.419
1777	0.000	ULS-Set B (auto)/7	0.074	-0.488	-0.028	0.000	<b>0.016</b>	0.195
1777	0.000	ULS-Set B (auto)/16	0.046	<b>2.026</b>	0.004	<b>-0.001</b>	0.003	<b>-0.810</b>
1778	0.000	ULS-Set B (auto)/9	<b>-0.225</b>	1.443	-0.007	0.000	<b>0.014</b>	-0.866
1778	0.600	ULS-Set B (auto)/9	-0.225	1.443	<b>-0.039</b>	0.000	0.000	0.000
1778	0.000	ULS-Set B (auto)/18	0.160	-1.007	<b>0.021</b>	0.000	-0.003	0.604
1778	0.000	ULS-Set B (auto)/19	-0.011	<b>-1.183</b>	0.010	<b>0.000</b>	0.001	<b>0.710</b>
1778	0.000	ULS-Set B (auto)/8	<b>0.176</b>	-1.013	0.019	0.000	<b>-0.004</b>	0.608
1778	0.000	ULS-Set B (auto)/16	-0.205	<b>1.444</b>	-0.003	<b>0.000</b>	0.012	<b>-0.866</b>
1866	0.300	ULS-Set B (auto)/3	<b>0.357</b>	<b>0.000</b>	-0.034	<b>0.000</b>	0.000	<b>0.000</b>
1866	0.000	ULS-Set B (auto)/32	-0.046	0.000	<b>-0.070</b>	0.000	0.000	0.000
1866	0.300	ULS-Set B (auto)/32	0.073	0.000	<b>0.070</b>	0.000	0.000	0.000
1866	0.000	ULS-Set B (auto)/2	-0.252	0.000	-0.002	<b>0.000</b>	0.000	0.000
1866	0.100-	ULS-Set B (auto)/32	-0.009	0.000	-0.023	0.000	<b>-0.005</b>	0.000
1866	0.200-	ULS-Set B (auto)/33	-0.076	0.000	-0.023	0.000	<b>0.005</b>	0.000
1866	0.000	ULS-Set B (auto)/13	<b>-0.288</b>	0.000	0.041	0.000	0.000	<b>0.000</b>
1921	0.300	ULS-Set B (auto)/10	<b>0.311</b>	<b>0.000</b>	-0.034	<b>0.000</b>	0.000	<b>0.000</b>
1921	0.000	ULS-Set B (auto)/32	-0.049	0.000	<b>-0.070</b>	0.000	0.000	0.000
1921	0.300	ULS-Set B (auto)/32	0.069	0.000	<b>0.070</b>	0.000	0.000	0.000
1921	0.000	ULS-Set B	-0.310	0.000	0.000	<b>0.000</b>	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
		(auto)/11						
1921	0.100-	ULS-Set B (auto)/32	-0.012	0.000	-0.023	0.000	<b>-0.005</b>	0.000
1921	0.200-	ULS-Set B (auto)/33	-0.157	0.000	-0.023	0.000	<b>0.005</b>	0.000
1921	0.000	ULS-Set B (auto)/14	<b>-0.353</b>	0.000	0.041	0.000	0.000	<b>0.000</b>
2191	0.000	ULS-Set B (auto)/4	<b>0.482</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2191	0.000	ULS-Set B (auto)/7	<b>-0.927</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2192	0.000	ULS-Set B (auto)/4	<b>0.522</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2192	0.000	ULS-Set B (auto)/7	<b>-0.983</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2193	0.000	ULS-Set B (auto)/17	<b>0.064</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2193	0.000	ULS-Set B (auto)/34	<b>-0.295</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2194	0.000	ULS-Set B (auto)/17	<b>0.055</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2194	0.000	ULS-Set B (auto)/35	<b>-0.299</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2196	0.000	ULS-Set B (auto)/7	<b>0.109</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2196	0.000	ULS-Set B (auto)/3	<b>-0.059</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2197	0.000	ULS-Set B (auto)/9	<b>0.135</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2197	0.000	ULS-Set B (auto)/8	<b>-0.072</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2200	0.000	ULS-Set B (auto)/2	<b>0.036</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2200	0.000	ULS-Set B (auto)/3	<b>-0.014</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2201	0.000	ULS-Set B (auto)/14	<b>0.033</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2201	0.000	ULS-Set B (auto)/10	<b>-0.006</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2203	0.000	ULS-Set B (auto)/3	<b>0.009</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2203	0.000	ULS-Set B (auto)/7	<b>-0.047</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2204	0.000	ULS-Set B (auto)/13	<b>0.148</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2204	0.000	ULS-Set B (auto)/3	<b>-0.034</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2205	0.000	ULS-Set B (auto)/13	<b>0.146</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2205	0.000	ULS-Set B (auto)/3	<b>-0.027</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2206	0.000	ULS-Set B (auto)/10	<b>0.004</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2206	0.000	ULS-Set B (auto)/34	<b>-0.033</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2208	0.000	ULS-Set B (auto)/9	<b>0.023</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2208	0.000	ULS-Set B (auto)/8	<b>-0.011</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2210	0.000	ULS-Set B (auto)/18	<b>0.032</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2210	0.000	ULS-Set B (auto)/22	<b>-0.019</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2211	0.849	ULS-Set B (auto)/8	<b>1.068</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2211	0.000	ULS-Set B (auto)/9	<b>-1.830</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2212	0.849	ULS-Set B (auto)/9	<b>1.037</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2212	0.000	ULS-Set B (auto)/8	<b>-1.271</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2213	0.000	ULS-Set B (auto)/13	<b>-1.217</b>	-0.065	1.393	0.000	-0.641	0.034
2213	0.520	ULS-Set B (auto)/3	<b>0.815</b>	-0.025	0.990	0.000	0.000	0.000
2213	0.000	ULS-Set B	-1.074	<b>-0.083</b>	2.353	0.000	-1.084	<b>0.043</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
2213	0.000	(auto)/9	0.070	0.026	<b>-2.701</b>	0.000	<b>1.263</b>	-0.013
2213	0.000	ULS-Set B (auto)/15	-0.981	-0.077	2.364	<b>0.000</b>	-1.090	0.040
2213	0.000	ULS-Set B (auto)/12	0.376	0.031	-2.694	<b>0.000</b>	1.259	-0.016
2213	0.000	ULS-Set B (auto)/29	-0.675	-0.071	<b>2.372</b>	0.000	<b>-1.094</b>	0.037
2213	0.000	ULS-Set B (auto)/26	0.606	<b>0.038</b>	-1.113	0.000	0.500	<b>-0.020</b>
2214	0.000	ULS-Set B (auto)/8	<b>-1.565</b>	-0.030	-1.402	<b>0.000</b>	0.000	0.000
2214	0.600	ULS-Set B (auto)/9	<b>0.715</b>	0.031	2.464	0.000	1.253	0.019
2214	0.000	ULS-Set B (auto)/17	0.554	0.010	0.606	<b>0.000</b>	0.000	0.000
2214	0.000	ULS-Set B (auto)/8	-1.035	-0.028	<b>-2.193</b>	0.000	<b>-1.094</b>	-0.017
2214	0.600	ULS-Set B (auto)/26	0.344	0.029	<b>2.480</b>	0.000	<b>1.263</b>	0.018
2214	0.600	ULS-Set B (auto)/15	-1.402	<b>-0.030</b>	-2.180	0.000	-1.086	<b>-0.018</b>
2214	0.600	ULS-Set B (auto)/6	0.711	<b>0.031</b>	2.467	0.000	1.255	<b>0.019</b>
2215	0.000	ULS-Set B (auto)/25	0.050	-0.040	<b>-3.011</b>	0.000	<b>1.424</b>	0.021
2215	0.000	ULS-Set B (auto)/13	<b>-1.172</b>	0.010	1.533	0.000	-0.713	-0.005
2215	0.520	ULS-Set B (auto)/3	<b>0.812</b>	-0.008	1.128	0.000	0.000	0.000
2215	0.000	ULS-Set B (auto)/15	0.439	<b>-0.042</b>	-2.992	<b>0.000</b>	1.415	<b>0.022</b>
2215	0.000	ULS-Set B (auto)/25	-1.024	0.014	2.601	<b>0.000</b>	-1.213	-0.007
2215	0.000	ULS-Set B (auto)/6	-0.636	0.012	<b>2.620</b>	0.000	<b>-1.223</b>	-0.006
2215	0.000	ULS-Set B (auto)/26	-0.260	<b>0.045</b>	0.224	0.000	-0.125	<b>-0.023</b>
2216	0.000	ULS-Set B (auto)/7	<b>-1.182</b>	0.029	-0.737	0.000	0.000	0.000
2216	0.000	ULS-Set B (auto)/13	<b>0.688</b>	-0.033	2.291	0.000	1.150	-0.020
2216	0.600	ULS-Set B (auto)/25	-0.352	-0.012	0.932	<b>0.000</b>	0.000	0.000
2216	0.000	ULS-Set B (auto)/36	0.371	0.010	-0.709	<b>0.000</b>	0.000	0.000
2216	0.000	ULS-Set B (auto)/3	-0.701	0.036	<b>-2.052</b>	0.000	<b>-1.009</b>	0.021
2216	0.600	ULS-Set B (auto)/26	0.392	-0.029	<b>2.305</b>	0.000	<b>1.158</b>	-0.017
2216	0.600	ULS-Set B (auto)/15	0.683	<b>-0.033</b>	2.288	0.000	1.148	<b>-0.020</b>
2216	0.600	ULS-Set B (auto)/17	-0.992	<b>0.039</b>	-2.034	0.000	-0.999	<b>0.024</b>
2217	0.000	ULS-Set B (auto)/9	<b>-1.134</b>	0.011	0.032	0.000	0.095	-0.006
2217	0.000	ULS-Set B (auto)/14	<b>1.032</b>	-0.032	-0.190	0.000	0.000	0.000
2217	0.520	ULS-Set B (auto)/10	0.924	<b>-0.033</b>	0.159	0.000	0.009	<b>0.017</b>
2217	0.000	ULS-Set B (auto)/3	-0.745	-0.002	<b>-0.588</b>	0.000	0.000	0.000
2217	0.520	ULS-Set B (auto)/9	0.749	0.037	<b>0.450</b>	0.000	0.000	0.000
2217	0.520	ULS-Set B (auto)/8	-0.148	0.008	-0.331	<b>0.000</b>	-0.017	-0.004
2217	0.000	ULS-Set B (auto)/15	-0.469	-0.010	0.161	<b>0.000</b>	0.102	0.005
2217	0.000	ULS-Set B (auto)/26	0.642	0.037	0.048	0.000	<b>-0.130</b>	-0.019
2217	0.104-	ULS-Set B (auto)/8	-0.861	-0.002	-0.015	0.000	<b>0.125</b>	0.001
2217	0.000	ULS-Set B (auto)/9	-0.166	<b>0.051</b>	0.139	0.000	-0.083	<b>-0.027</b>
2218	0.000	ULS-Set B (auto)/7	<b>0.012</b>	-0.002	-0.408	0.000	0.000	0.000

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
2218	0.600	(auto)/37	<b>0.209</b>	-0.003	-0.232	0.000	-0.018	-0.002
2218	0.000	ULS-Set B (auto)/28	0.028	<b>-0.014</b>	<b>-0.441</b>	0.000	0.000	0.000
2218	0.000	ULS-Set B (auto)/8	0.034	0.021	<b>0.593</b>	0.000	0.000	0.000
2218	0.400-	ULS-Set B (auto)/9	0.131	0.000	0.158	<b>0.000</b>	-0.049	0.000
2218	0.400-	ULS-Set B (auto)/15	0.152	0.015	-0.273	<b>0.000</b>	0.084	0.009
2218	0.600	ULS-Set B (auto)/26	0.145	0.021	0.042	0.000	<b>0.127</b>	0.008
2218	0.600	ULS-Set B (auto)/9	0.151	-0.014	0.023	0.000	<b>-0.126</b>	<b>-0.009</b>
2218	0.600	ULS-Set B (auto)/8	0.196	<b>0.021</b>	-0.085	0.000	0.098	<b>0.013</b>
2219	0.849	ULS-Set B (auto)/14	<b>1.733</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
2219	0.849	ULS-Set B (auto)/8	-4.709	0.000	<b>-0.008</b>	0.000	0.000	0.000
2219	0.000	ULS-Set B (auto)/14	-0.370	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2219	0.000	ULS-Set B (auto)/15	1.314	0.000	0.006	<b>0.000</b>	0.000	0.000
2219	0.424-	ULS-Set B (auto)/10	-4.717	0.000	0.000	0.000	<b>0.002</b>	0.000
2219	0.000	ULS-Set B (auto)/14	<b>-4.725</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
2220	0.849	ULS-Set B (auto)/9	<b>2.937</b>	0.000	<b>-0.016</b>	0.000	0.000	0.000
2220	0.000	ULS-Set B (auto)/15	-0.278	0.000	<b>0.016</b>	<b>0.000</b>	0.000	0.000
2220	0.000	ULS-Set B (auto)/26	2.157	<b>0.000</b>	0.012	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2220	0.424-	ULS-Set B (auto)/9	2.920	0.000	0.000	0.000	<b>0.003</b>	0.000
2220	0.000	ULS-Set B (auto)/8	<b>-1.152</b>	0.000	0.012	0.000	0.000	<b>0.000</b>
2222	0.849	ULS-Set B (auto)/25	<b>0.271</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
2222	0.849	ULS-Set B (auto)/13	-0.236	0.000	<b>-0.008</b>	0.000	0.000	0.000
2222	0.000	ULS-Set B (auto)/29	0.246	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2222	0.000	ULS-Set B (auto)/12	-0.229	0.000	0.006	<b>0.000</b>	0.000	0.000
2222	0.424-	ULS-Set B (auto)/13	-0.244	0.000	0.000	0.000	<b>0.002</b>	0.000
2222	0.000	ULS-Set B (auto)/13	<b>-0.252</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
2223	0.849	ULS-Set B (auto)/8	<b>0.428</b>	-0.139	-0.006	0.000	0.000	-0.118
2223	0.000	ULS-Set B (auto)/26	-0.461	0.356	0.006	<b>0.000</b>	0.000	0.000
2223	0.000	ULS-Set B (auto)/15	0.093	-0.443	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2223	0.000	ULS-Set B (auto)/9	<b>-0.596</b>	0.353	0.008	0.000	<b>0.000</b>	0.000
2223	0.424-	ULS-Set B (auto)/9	-0.588	0.353	0.000	0.000	<b>0.002</b>	0.150
2223	0.849	ULS-Set B (auto)/29	0.201	<b>-0.443</b>	<b>-0.008</b>	0.000	0.000	<b>-0.376</b>
2223	0.849	ULS-Set B (auto)/12	-0.540	<b>0.356</b>	-0.006	0.000	0.000	<b>0.302</b>
2225	0.849	ULS-Set B (auto)/13	<b>1.979</b>	0.004	<b>-0.008</b>	0.000	0.000	0.004
2225	0.000	ULS-Set B (auto)/12	1.723	-0.021	0.006	<b>0.000</b>	0.000	0.000
2225	0.000	ULS-Set B (auto)/29	-0.810	0.037	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2225	0.000	ULS-Set B (auto)/25	<b>-0.998</b>	0.035	0.006	0.000	<b>0.000</b>	0.000
2225	0.424-	ULS-Set B (auto)/13	1.971	0.004	0.000	0.000	<b>0.002</b>	0.002
2225	0.849	ULS-Set B (auto)/13	-0.635	<b>-0.050</b>	-0.006	0.000	0.000	<b>-0.042</b>

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
2225	0.849	(auto)/3	-0.405	<b>0.046</b>	-0.008	0.000	0.000	<b>0.039</b>
2226	0.849	ULS-Set B (auto)/38	<b>1.714</b>	<b>0.000</b>	-0.006	0.000	<b>0.000</b>	<b>0.000</b>
2226	0.849	ULS-Set B (auto)/3	-3.916	0.000	<b>-0.008</b>	0.000	0.000	0.000
2226	0.000	ULS-Set B (auto)/10	1.687	0.000	0.006	<b>0.000</b>	0.000	0.000
2226	0.000	ULS-Set B (auto)/15	-0.173	0.000	<b>0.008</b>	<b>0.000</b>	0.000	0.000
2226	0.424	ULS-Set B (auto)/13	-3.924	0.000	0.000	0.000	<b>0.002</b>	0.000
2226	0.000	ULS-Set B (auto)/13	<b>-3.932</b>	0.000	0.008	0.000	0.000	<b>0.000</b>
2227	0.849	ULS-Set B (auto)/8	<b>1.138</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2227	0.000	ULS-Set B (auto)/9	<b>-1.032</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2228	0.849	ULS-Set B (auto)/21	<b>0.370</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2228	0.000	ULS-Set B (auto)/39	<b>-0.106</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2229	0.849	ULS-Set B (auto)/20	<b>0.100</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2229	0.000	ULS-Set B (auto)/21	<b>-0.418</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2230	0.849	ULS-Set B (auto)/21	<b>0.424</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2230	0.000	ULS-Set B (auto)/20	<b>-0.254</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2231	0.849	ULS-Set B (auto)/20	<b>0.148</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2231	0.000	ULS-Set B (auto)/21	<b>-0.407</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2232	0.849	ULS-Set B (auto)/29	<b>0.354</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2232	0.000	ULS-Set B (auto)/39	<b>-0.149</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2234	0.794	ULS-Set B (auto)/12	<b>0.870</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2234	0.000	ULS-Set B (auto)/29	<b>-1.081</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2235	0.794	ULS-Set B (auto)/9	<b>1.587</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2235	0.000	ULS-Set B (auto)/8	<b>-1.725</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2236	0.849	ULS-Set B (auto)/3	<b>0.768</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2236	0.000	ULS-Set B (auto)/2	<b>-0.828</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2237	0.721	ULS-Set B (auto)/7	<b>2.016</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2237	0.000	ULS-Set B (auto)/4	<b>-1.213</b>	0.000	0.000	0.000	0.000	<b>0.000</b>
2238	0.721	ULS-Set B (auto)/35	<b>0.565</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
2238	0.000	ULS-Set B (auto)/26	<b>-0.080</b>	0.000	0.000	0.000	0.000	<b>0.000</b>

Name	Combination key
ULS-Set B (auto)/1	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/2	1.35*G + 1.35*G1 + 1.50*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/3	G + G1 + 1.05*Q1 + 1.50*Q4 + G3 + G2
ULS-Set B (auto)/4	G + G1 + 1.05*Q1 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/5	G + G1 + 1.05*Q1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/6	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/7	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/8	G + G1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/9	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/10	G + G1 + 1.50*Q4 + G3 + G2
ULS-Set B (auto)/11	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 1.35*G3 +

Name	Combination key
ULS-Set B (auto)/12	1.35*G2
ULS-Set B (auto)/13	G + G1 + 0.75*Q3 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/14	1.35*G + 1.35*G1 + 1.50*Q3 + 0.90*Q5 + 1.35*G2
ULS-Set B (auto)/15	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/16	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/17	G + G1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/18	1.35*G + 1.35*G1 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/19	G + G1 + 0.75*Q3 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/20	G + G1 + 0.75*Q3 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/21	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q4 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/22	G + G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/23	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q9
ULS-Set B (auto)/24	G + G1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/25	G + G1 + 1.05*Q1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/26	G + G1 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/27	G + G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q5 + G3 + G2
ULS-Set B (auto)/28	1.35*G + 1.35*G1 + 1.50*Q4 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/29	1.35*G + 1.35*G1 + 1.05*Q1 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/30	G + G1 + 0.75*Q3 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/31	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/32	1.35*G + 1.35*G1 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/33	1.35*G + 1.35*G1 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/34	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/35	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/36	1.35*G + 1.35*G1 + 1.50*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8
ULS-Set B (auto)/37	G + G1 + 1.05*Q1 + 0.75*Q3 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/38	1.35*G + 1.35*G1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/39	G + G1 + 1.50*Q3 + 0.90*Q7 + G3 + G2



## Member 537 check

### EN 1993-1-3 Cold Formed Code Check

National annex: Standard EN

Member 537	2.100 / 4.420 m	S350GD+Z	ULS-Set B (auto)	0.69 -
------------	-----------------	----------	------------------	--------

Combination key	
ULS-Set B (auto) / 1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2	

Partial safety factors	
$\gamma_{M0}$ for resistance of cross-sections	1.00
$\gamma_{M1}$ for resistance to instability	1.00
$\gamma_{M2}$ for resistance of net sections	1.25

Material		
Yield strength $f_y$	350.0	MPa
Ultimate strength $f_u$	420.0	MPa
Fabrication	cold formed	

....SECTION CHECK:....

The critical check is on position 2.100 m

Internal forces		Calculated	Additional moments	Total	Unit
Normal force	$N_{Ed}$	-7.137		-7.137	kN
Shear force	$V_{y,Ed}$	0.050		0.050	kN
Shear force	$V_{z,Ed}$	0.307		0.307	kN
Torsion	$T_{Ed}$	0.001		0.001	kNm
Bending moment	$M_{y,Ed}$	-8.735	0.000	-8.735	kNm
Bending moment	$M_{z,Ed}$	-0.009	-0.034	-0.044	kNm

### Effective section N-

#### Effective width calculation

According to EN 1993-1-3 article 5.5.2, 5.5.3 & EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	I	14.4	3.500e+05	3.500e+05	1.00	4.00	0.13	1.00	14.4	7.2	7.2
2	I	48.8	3.500e+05	3.500e+05	1.00	4.00	0.87	0.86	41.8	20.9	20.9
3	I	98.8	3.500e+05	3.500e+05	1.00	4.00	1.77	0.49	48.9	24.5	24.5
4	I	48.8	3.500e+05	3.500e+05	1.00	4.00	0.44	1.00	48.8	24.4	24.4
5	I	14.4	3.500e+05	3.500e+05	1.00	4.00	0.13	1.00	14.4	7.2	7.2
6	UO	14.4	3.500e+05	3.500e+05	1.00	0.43	0.79	0.97	13.9		
7	I	48.8	3.500e+05	3.500e+05	1.00	4.00	0.87	0.86	41.8	20.9	20.9
8	I	70.0	3.500e+05	3.500e+05	1.00	4.00	1.25	0.66	46.0	23.0	23.0
9	I	48.8	3.500e+05	3.500e+05	1.00	4.00	0.44	1.00	48.8	24.4	24.4
10	UO	14.4	3.500e+05	3.500e+05	1.00	0.43	0.79	0.97	13.9		
11	I	14.4	3.500e+05	3.500e+05	1.00	4.00	0.13	1.00	14.4	7.2	7.2
12	I	98.8	3.500e+05	3.500e+05	1.00	4.00	1.77	0.49	48.9	24.5	24.5
13	I	48.8	3.500e+05	3.500e+05	1.00	4.00	0.87	0.86	41.8	20.9	20.9
14	I	14.4	3.500e+05	3.500e+05	1.00	4.00	0.13	1.00	14.4	7.2	7.2
15	UO	14.4	3.500e+05	3.500e+05	1.00	0.43	0.79	0.97	13.9		
16	I	70.0	3.500e+05	3.500e+05	1.00	4.00	1.25	0.66	46.0	23.0	23.0
17	I	48.8	3.500e+05	3.500e+05	1.00	4.00	0.87	0.86	41.8	20.9	20.9
18	UO	14.4	3.500e+05	3.500e+05	1.00	0.43	0.79	0.97	13.9		

**Effective section My-****Effective width calculation**

According to EN 1993-1-3 article 5.5.2, 5.5.3 &amp; EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	I	14.4	3.460e+05	2.981e+05	0.86	4.29	0.12	1.00	14.4	7.0	7.4
2	I	48.8	3.460e+05	3.421e+05	0.99	4.02	0.87	0.86	41.9	20.9	21.0
3	I	98.8	3.421e+05	1.330e+04	0.04	7.53	1.29	0.68	66.7	26.9	39.8
4	I	48.8	1.522e+04	1.130e+04	0.74	4.58	0.41	1.00	48.8	22.9	25.9
5	I	14.4	6.519e+04	1.727e+04	0.26	6.24	0.10	1.00	14.4	6.1	8.3
6	UO	14.4	3.500e+05	3.021e+05	0.86	0.48	0.74	1.00	14.4		
7	I	48.8	3.500e+05	3.461e+05	0.99	4.02	0.87	0.86	41.9	20.9	21.0
8	I	70.0	2.982e+05	6.523e+04	0.22	6.46	0.99	0.83	58.2	24.4	33.9
9	I	48.8	1.925e+04	1.532e+04	0.80	4.44	0.41	1.00	48.8	23.2	25.6
10	UO	14.4	6.916e+04	2.124e+04	0.31	0.51	0.72	1.00	14.4		
11	I	14.4	1.328e+04	-3.464e+04	-2.61	77.89	0.03	1.00	4.0	1.6	2.4
12	I	98.8	9.303e+03	-3.195e+05	-34.34	7467.53	0.04	1.00	2.8	1.1	1.7
13	I	48.8	-3.155e+05	-3.195e+05							
14	I	14.4	-2.676e+05	-3.155e+05							

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
15	UO	14.4	1.725e+04	-3.067e+04	-1.78	23.80	0.11	1.00	14.4		
16	I	70.0	-3.459e+04	-2.675e+05							
17	I	48.8	-3.115e+05	-3.154e+05							
18	UO	14.4	-2.636e+05	-3.115e+05							

**Effective section Mz-****Effective width calculation**

According to EN 1993-1-3 article 5.5.2, 5.5.3 &amp; EN 1993-1-5 article 4.4

Id	Type	$b_p$ [mm]	$\sigma_1$ [kN/m <sup>2</sup> ]	$\sigma_2$ [kN/m <sup>2</sup> ]	$\psi$ [-]	$k_\sigma$ [-]	$\lambda_p$ [-]	$\rho$ [-]	$b_e$ [mm]	$b_{e1}$ [mm]	$b_{e2}$ [mm]
1	I	14.4	-1.604e+04	-1.604e+04							
2	I	48.8	3.179e+05	-1.198e+04	-0.04	8.06	0.62	1.00	47.0	18.8	28.2
3	I	98.8	3.179e+05	3.179e+05	1.00	4.00	1.77	0.49	48.9	24.5	24.5
4	I	48.8	3.179e+05	-1.198e+04	-0.04	8.06	0.31	1.00	47.0	18.8	28.2
5	I	14.4	-1.604e+04	-1.604e+04							
6	UO	14.4	-3.500e+05	-3.500e+05							
7	I	48.8	-2.009e+04	-3.500e+05							
8	I	70.0	-2.009e+04	-2.009e+04							
9	I	48.8	-2.009e+04	-3.500e+05							
10	UO	14.4	-3.500e+05	-3.500e+05							
11	I	14.4	-1.604e+04	-1.604e+04							
12	I	98.8	3.179e+05	3.179e+05	1.00	4.00	1.77	0.49	48.9	24.5	24.5
13	I	48.8	3.179e+05	-1.198e+04	-0.04	8.06	0.62	1.00	47.0	18.8	28.2
14	I	14.4	-1.604e+04	-1.604e+04							
15	UO	14.4	-3.500e+05	-3.500e+05							
16	I	70.0	-2.009e+04	-2.009e+04							
17	I	48.8	-2.009e+04	-3.500e+05							
18	UO	14.4	-3.500e+05	-3.500e+05							

Effective properties						
Effective area	$A_{eff}$	8.6903e-04	m <sup>2</sup>			
Effective second moment of area	$I_{eff,y}$	4.1324e-06	m <sup>4</sup>	$I_{eff,z}$	8.3622e-07	m <sup>4</sup>
Effective section modulus	$W_{eff,y}$	3.9027e-05	m <sup>3</sup>	$W_{eff,z}$	1.5967e-05	m <sup>3</sup>
Shift of the centroid	$e_{N,y}$	0.0	mm	$e_{N,z}$	4.8	mm

#### Compression check

According to EN 1993-1-3 article 6.1.3 and formula (6.2)

Effective section area	$A_{eff}$	8.6903e-04	m <sup>2</sup>
Compression resistance	$N_{c,Rd}$	304.161	kN
Unity check		0.02	-

#### Bending moment check for $M_y$

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,y}$	3.9027e-05	m <sup>3</sup>
Bending moment resistance	$M_{c,y,Rd}$	13.659	kNm
Unity check		0.64	-

#### Bending moment check for $M_z$

According to EN 1993-1-3 article 6.1.4 and formula (6.4)

Effective section modulus	$W_{eff,z}$	1.5967e-05	m <sup>3</sup>
Bending moment resistance	$M_{c,z,Rd}$	5.588	kNm
Unity check		0.01	-

#### Biaxial bending moment check

According to EN 1993-1-3 article 6.1.4 and formula (6.7)

Bending moment resistance	$M_{c,y,Rd}$	13.659	kNm
Bending moment resistance	$M_{c,z,Rd}$	5.588	kNm

Unity check (6.7) = 0.64 + 0.01 = 0.65 -

#### Torsional Moment Check

According to article EN 1993-1-3: 6.1.6 and formula (6.11a), (6.11b), (6.11c).

Elastic verification		
Critical Fibre	2	
$\sigma_N$	8.2	MPa
$\sigma_{M_y}$	221.0	MPa
$\sigma_{M_z}$	2.3	MPa
$\tau_{V_y}$	0.1	MPa
$\tau_{V_z}$	0.6	MPa
$\tau_t$	0.0	MPa
Direct Stress Check	0.66	-
Shear Stress Check	0.00	-
Composed Stress Check	0.60	-

### Combined Compression and Bending Check

According to article EN 1993-1-3: 6.1.9 and formula (6.25), (6.26).

$eN_z$	4.8	mm
$\Delta M_{z,Ed}$	-0.034	kNm
$N_{c,Rd}$	304.161	kN
$M_{cy,Rd,ten}$	15.150	kNm
$M_{cz,Rd,ten}$	5.588	kNm
$M_{cy,Rd,com}$	13.836	kNm
$M_{cz,Rd,com}$	6.145	kNm

Unity check (6.25)  $0.02 + 0.63 + 0.01 = 0.66$  -

Unity check (6.26)  $0.58 + 0.01 - 0.02 = 0.56$  -

The member satisfies the section check.

### ...:STABILITY CHECK:...:

#### Flexural Buckling Strength

According to article EN 1993-1-3: 6.2.2

According to article EN 1993-1-1: 6.3.1 and formula (6.46)

Buckling parameters	yy	zz	
Sway type	sway	sway	
System Length L	4.420	0.600	m
Buckling factor k	1.00	1.00	
Buckling length $L_{cr}$	4.420	0.600	m
Critical Euler load $N_{cr}$	459.294	5939.881	kN
Slenderness	68.86	19.15	
Relative slenderness $\lambda_{rel}$	0.81	0.23	
Limit slenderness $\lambda_{rel,0}$	0.20	0.20	

The slenderness or compression force is such that Flexural Buckling effects may be ignored according to EN 1993-1-1 article 6.3.1.2(4)

#### Torsional (-Flexural) Buckling check

According to article EN 1993-1-3: 6.2.3

According to article EN 1993-1-1: 6.3.1 and formula (6.46)

Torsional Buckling length	0.600	m
$N_{cr,T}$	3656.349	kN
$N_{cr,TF}$	437.776	kN
Relative slenderness $\lambda_{rel,T}$	0.83	
Limit slenderness $\lambda_{rel,0}$	0.20	

The slenderness or compression force is such that Torsional (-Flexural) Buckling effects may be ignored according to EN 1993-1-1 article 6.3.1.2(4)

#### Lateral Torsional Buckling Check

According to article EN 1993-1-3: 6.2.4

According to article EN 1993-1-1: 6.3.2 and formula (6.55)

LTB Parameters		
Method for LTB Curve	art. 6.3.2.2	
$W_{eff,y}$	3.9027e-05	m <sup>3</sup>
Elastic critical moment $M_{cr}$	436.463	kNm
Relative slenderness $\lambda_{rel,LT}$	0.18	
Limit slenderness $\lambda_{rel,LT,0}$	0.20	

M <sub>cr</sub> Parameters		
LTB length	0.600	m
k	1.00	
k <sub>w</sub>	1.00	
C <sub>1</sub>	1.05	
C <sub>2</sub>	0.01	
C <sub>3</sub>	1.00	

The slenderness or bending moment is such that Lateral Torsional Buckling effects may be ignored according to EN 1993-1-1 article 6.3.2.2(4)

#### Bending and Axial Compression Check

According to article EN 1993-1-3: 6.2.5(1)

According to article EN 1993-1-1: 6.3.3 and formula (6.61), (6.62).

Interaction Method 1

Interaction method 1 parameters		
k <sub>yy</sub>	1.01	
k <sub>yz</sub>	0.69	
k <sub>zy</sub>	1.02	
k <sub>zz</sub>	0.69	
ΔM <sub>y,Ed</sub>	0.000	kNm
ΔM <sub>z,Ed</sub>	-0.034	kNm
A	8.6903e-04	m <sup>2</sup>
W <sub>y</sub>	3.9027e-05	m <sup>3</sup>
W <sub>z</sub>	1.8231e-05	m <sup>3</sup>
N <sub>Rk</sub>	304.161	kN
M <sub>y,Rk</sub>	13.659	kNm
M <sub>z,Rk</sub>	6.381	kNm

Interaction method 1 parameters		
M <sub>y,Ed</sub>	-8.745	kNm
M <sub>z,Ed</sub>	0.020	kNm
Interaction Method 1		
M <sub>cr,0</sub>	416.547	kNm
reduced slenderness 0	0.18	
ψ <sub>y</sub>	1.00	
ψ <sub>z</sub>	-0.47	
C <sub>my,0</sub>	1.00	
C <sub>mz,0</sub>	0.69	
C <sub>my</sub>	1.00	
C <sub>mz</sub>	0.69	
C <sub>mLT</sub>	1.00	
μ <sub>y</sub>	0.99	
μ <sub>z</sub>	1.00	
α <sub>LT</sub>	0.99	

Unity check  $0.04 + 0.65 + 0.00 = 0.68$  -

Unity check  $0.04 + 0.65 + 0.00 = 0.69$  -

The member satisfies the stability check.

## All member type frame check

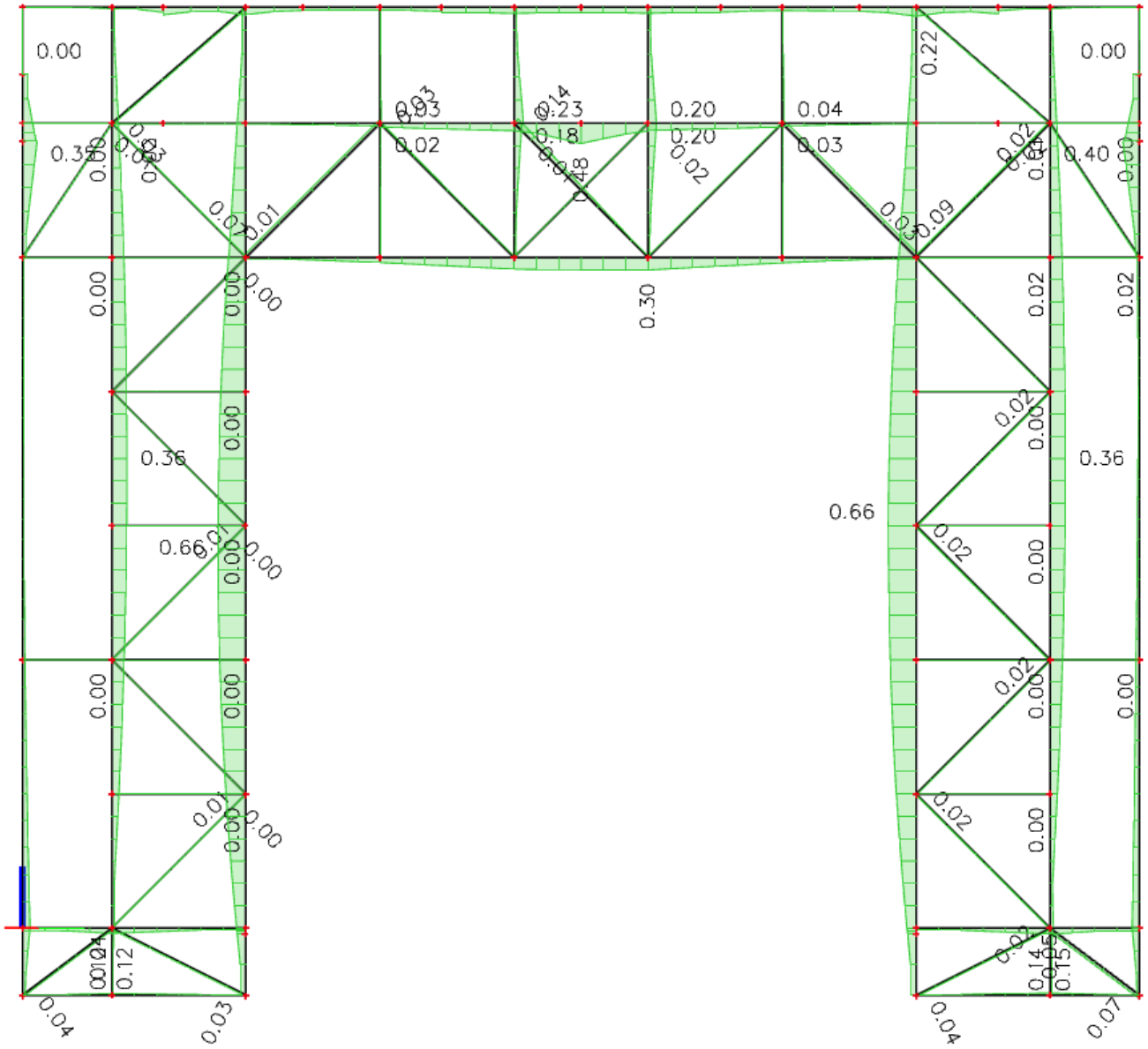
Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]	Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
1	3.820-	ULS-Set B (auto)/1	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.35	<b>0.35</b>	0.33	1752	0.000	ULS-Set B (auto)/8	3.0; 15.0) C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
10	3.820-	ULS-Set B (auto)/1	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.40	<b>0.40</b>	0.38	1753	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.02
53	4.000+	ULS-Set B (auto)/2	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.23	<b>0.22</b>	0.23	1763	0.000	ULS-Set B (auto)/10	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
537	2.100+	ULS-Set B (auto)/2	4xC100*50*15*1.2G	S350GD+Z	0.69	<b>0.66</b>	0.69	1772	0.370+	ULS-Set B (auto)/11	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.00
538	2.000-	ULS-Set B (auto)/2	4xC100*50*15*1.2G	S350GD+Z	0.69	<b>0.66</b>	0.69	1777	0.000	ULS-Set B (auto)/2	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.12	<b>0.12</b>	0.12
539	1.800-	ULS-Set B (auto)/3	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.31	<b>0.30</b>	0.31	1778	0.000	ULS-Set B (auto)/2	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.14	<b>0.14</b>	0.14
543	0.500-	ULS-Set B (auto)/2	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.03	<b>0.03</b>	0.02	1866	0.100-	ULS-Set B (auto)/12	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.00	<b>0.00</b>	0.00
546	1.500-	ULS-Set B (auto)/4	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.48	<b>0.48</b>	0.47	1921	0.100-	ULS-Set B (auto)/6	3*C100*50*15*1.2 - C100*50*15*1.2	S350GD+Z	0.00	<b>0.00</b>	0.00
551	0.000	ULS-Set B (auto)/2	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.04	<b>0.04</b>	0.04	2191	0.000	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.02
940	0.400-	ULS-Set B (auto)/2	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.05	<b>0.05</b>	0.05	2192	0.000	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.02
941	0.400	ULS-Set B (auto)/2	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.15	<b>0.15</b>	0.14	2193	0.000	ULS-Set B (auto)/13	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
944	0.600	ULS-Set B (auto)/2	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.12	<b>0.12</b>	0.12	2194	0.000	ULS-Set B (auto)/14	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
945	0.600+	ULS-Set B (auto)/1	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.04	<b>0.04</b>	0.04	2196	0.000	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
946	2.400-	ULS-Set B (auto)/5	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.36	<b>0.36</b>	0.36	2197	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
947	2.400-	ULS-Set B (auto)/5	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.36	<b>0.36</b>	0.36	2200	0.000	ULS-Set B (auto)/15	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
951	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.07	<b>0.07</b>	0.07	2201	0.000	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
952	0.000	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04	2203	0.000	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
959	0.000	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.03	2204	0.000	ULS-Set B (auto)/12	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
960	0.500	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.04</b>	0.04	2205	0.000	ULS-Set B (auto)/12	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
1748	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.02</b>	0.03	2206	0.000	ULS-Set B (auto)/13	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
1749	0.000	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.02</b>	0.03	2208	0.000	ULS-Set B	C100*50*15*1.2 -	S350GD+Z	0.00	<b>0.00</b>	0.00
1751	0.000	ULS-Set B (auto)/9	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.01	<b>0.01</b>	0.00								

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
		(auto)/2	Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)				
2210	0.000	ULS-Set B (auto)/11	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
2211	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.03</b>	0.04
2212	0.000	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.02</b>	0.03
2213	0.000	ULS-Set B (auto)/3	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.20	<b>0.20</b>	0.19
2214	0.600	ULS-Set B (auto)/5	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.20	<b>0.20</b>	0.20
2215	0.000	ULS-Set B (auto)/5	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.23	<b>0.23</b>	0.22
2216	0.600	ULS-Set B (auto)/5	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.18	<b>0.18</b>	0.18
2217	0.000	ULS-Set B (auto)/8	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.03	<b>0.03</b>	0.02
2218	0.500-	ULS-Set B (auto)/2	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.02	<b>0.02</b>	0.02
2219	0.000	ULS-Set B (auto)/6	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.11	<b>0.09</b>	0.11
2220	0.424-	ULS-Set B (auto)/2	2xC100*50*15*1.2 - General cross-section	S350GD+Z	0.02	<b>0.02</b>	0.00
2222	0.424-	ULS-Set B (auto)/12	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.01	<b>0.01</b>	0.01
2223	0.849	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.14	<b>0.14</b>	0.14
2225	0.849	ULS-Set B (auto)/3	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.03	<b>0.03</b>	0.03
2226	0.000	ULS-Set B (auto)/12	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.09	<b>0.07</b>	0.09
2227	0.000	ULS-Set B (auto)/2	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.02
2228	0.849	ULS-Set B (auto)/16	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
2229	0.000	ULS-Set B (auto)/16	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.01	<b>0.01</b>	0.00
2230	0.849	ULS-Set B (auto)/16	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
2231	0.000	ULS-Set B (auto)/16	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.01	<b>0.01</b>	0.00

Name	dx [m]	Case	Cross-section	Material	UC <sub>Overall</sub> [-]	UC <sub>Sec</sub> [-]	UC <sub>Stab</sub> [-]
2232	0.849	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.00	<b>0.00</b>	0.00
2234	0.000	ULS-Set B (auto)/4	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.02
2235	0.000	ULS-Set B (auto)/8	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.04	<b>0.03</b>	0.04
2236	0.000	ULS-Set B (auto)/15	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.01</b>	0.02
2237	0.721	ULS-Set B (auto)/7	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.02	<b>0.02</b>	0.00
2238	0.721	ULS-Set B (auto)/14	C100*50*15*1.2 - Cold formed C section (100.0; 50.0; 1.2; 3.0; 15.0)	S350GD+Z	0.01	<b>0.01</b>	0.00

Name	Combination key
ULS-Set B (auto)/1	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/2	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/3	G + G1 + 1.05*Q1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/4	1.35*G + 1.35*G1 + 1.05*Q1 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/5	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/6	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/7	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/8	G + G1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/9	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/10	G + G1 + 1.05*Q1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/11	1.35*G + 1.35*G1 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/12	1.35*G + 1.35*G1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/13	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/14	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/15	1.35*G + 1.35*G1 + 1.50*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/16	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q4 + 1.35*G3 + 1.35*G2

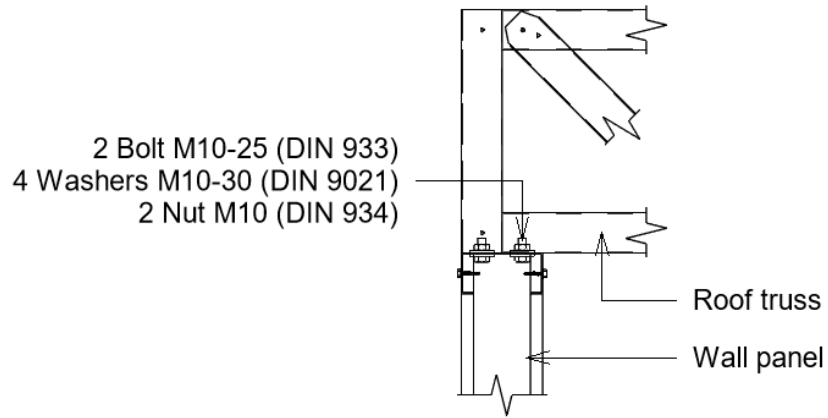
Unity check





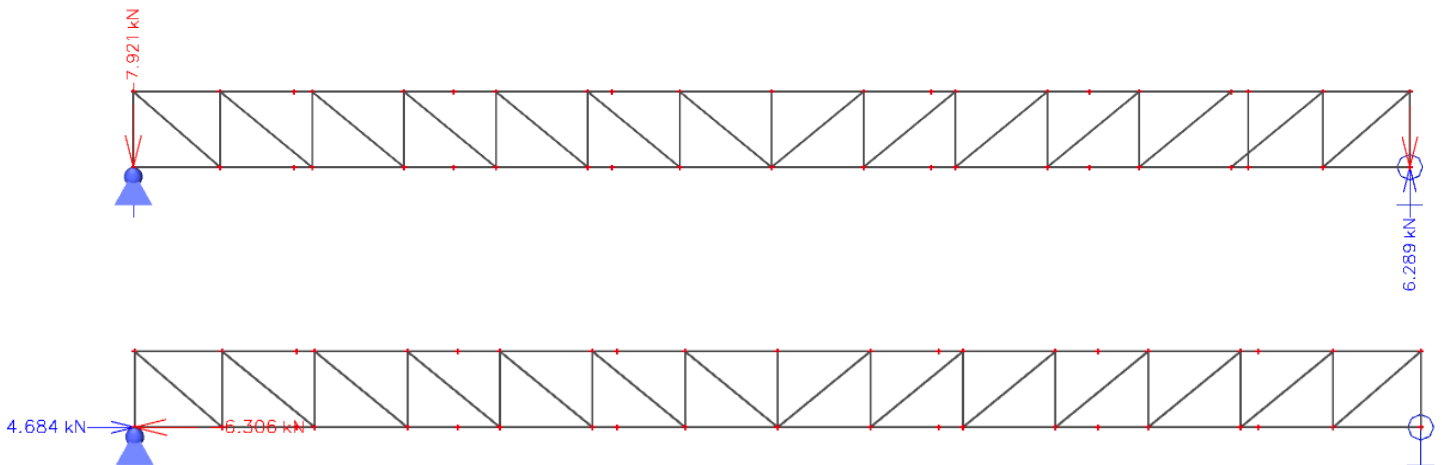
## 2.4.3 CONNECTIONS CHECK

### 2.4.3.1 ROOF TRUSS TO WALL PANEL CONNECTION CHECK



Roof truss to wall panel connection sketch

### Maximum support reactions



$F_t = 7.92 \text{ kH}$  - Tensile load

$F_s = 6.30 \text{ kH}$  - Shear load

**Bolts**    **M 10**

**Washers**

2    PC

2    PC

$r =$     2

$A_s =$     58    mm<sup>2</sup>

$d =$     10    mm

$d_o =$     11    mm

$e_1 =$     25    mm

$e_2 =$     25    mm

$p_1 =$     50    mm

$p_2 =$     0    mm

$f_{yb} =$     0.3    kN/mm<sup>2</sup>

$f_{ub} =$     0.5    kN/mm<sup>2</sup>

$t =$     1.2    mm

**Steel**    **S350GD**

$f_y =$     0.35    kN/mm<sup>2</sup>

$f_u =$     0.42    kN/mm<sup>2</sup>

$\gamma_{m2} =$     1.25

– DIN 933    5.6 – Strength grades

– DIN 9021

– Number of bolts at the cross-section

– Total number of bolts in the connection

– [number of bolts at the cross-section] / [total number of bolts in the connection]

– Tensile stress area of the bolt

– The nominal diameter of the fastener;

– The nominal diameter of the hole

– The end distance from the centre of the fastener to the adjacent end of the connected part, in the direction of load transfer, see figure 8.1

– The distance from the centre of the fastener to the adjacent end of the connected part, in the direction perpendicular to the direction of load transfer, see figure 8.1

– The spacing centre-to-centre of fasteners in the direction of load transfer, see figure 8.1

– The spacing centre-to-centre of fasteners in the direction perpendicular to the direction of load transfer, see figure 8.1

– Ultimate strength

– Ultimate tensile strength of the bolt

– The thickness of the thinner connected part or sheet

– Is yield strength

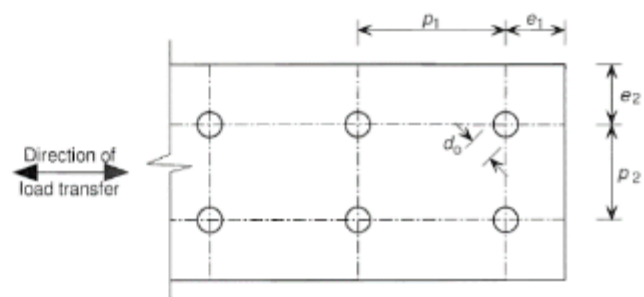
– Is ultimate tensile strength

– Safety factor

### Connection load forces

$F_t =$     7.92    kN - Tensile load

$F_s =$     6.3    kN - Shear load



---

**Bolts loaded in shear:**

Figure 8.1: End distance, edge distance and spacings for fasteners and spot weld:

**Bearing resistance**

$$F_{b,Rd} = 2,5 \alpha_b k_t f_u d t / \gamma_{M2} = \underline{8.27 \text{ kH}} > F_s = 3.15 \text{ kH} \quad \text{Satisfies the check}$$

Shear load per bolt

$$\alpha_b = \min(1 \text{ or } e_1/3d) = 0.83$$

$$k_t = (0,8 t + 1.5)/2.5 = 0.98 \quad \text{for } 0.75 \text{ mm } t < 1.25 \text{ mm}$$

**Shear resistance check (EN 1993-1-3 tab 8.4)**

$$F_{v,Rd} = 0.6 f_{ub} A_s / \gamma_{M2} = 13.9 \text{ kH} > F_s = 3.15 \text{ kH} \quad \text{Satisfies the check}$$

Shear load per bolt

**Tension resistance check (EN 1993-1-3 tab 8.4)**

$$F_{t,Rd} = 0.9 f_{ub} A_s / \gamma_{M2} = 20.9 \text{ kH} > F_t = 3.96 \text{ kH} \quad \text{Satisfies the check}$$

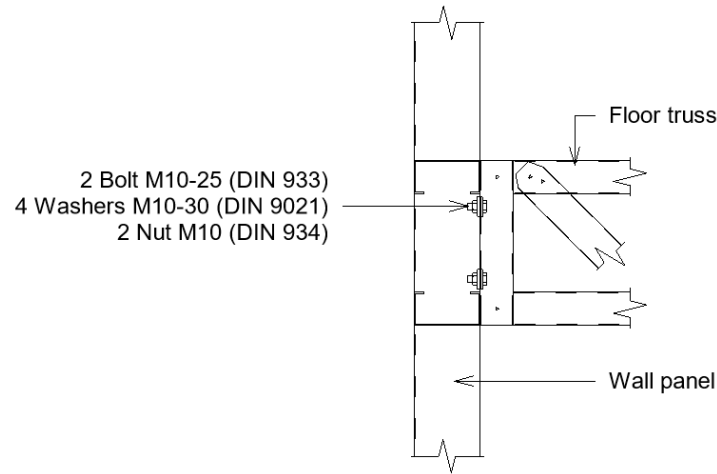
Tension load per bolt

**Punching resistance check (EN 1993-1-8 tab 3.4)**

$$B_{p,Rd} = 0.5 \pi d_m t f_u / \gamma_{M2} = 19 \text{ kH} > F_t = 3.96 \text{ kH} \quad \text{Satisfies the check}$$

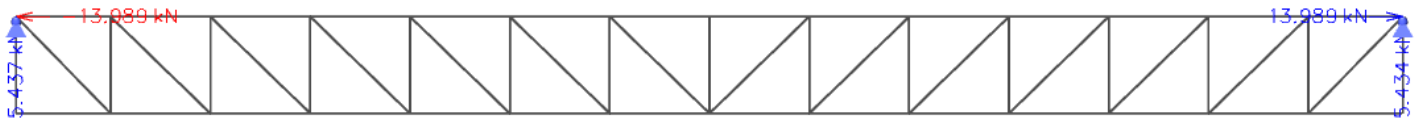
$d_m = 30 \text{ mm}$  – The mean of the across points and across flats dimensions of the bolt head or the nut, whichever is smaller

### 2.4.3.2 FLOOR TRUSS TO WALL PANEL CONNECTION CHECK



Floor truss to wall panel connection sketch

#### Maximum support reactions



$F_t = 14 \text{ kH}$  - Tensile load

$F_s = 5 \text{ kH}$  - Shear load

<b>Bolts</b>	<b>M 10</b>	- DIN 933	5.6 – Strength grades
<b>Washers</b>		- DIN 9021	
	<u>2</u> PC	- Number of bolts at the cross-section	
	<u>2</u> PC	- Total number of bolts in the connection	
$r =$	<u>1</u>	- [number of bolts at the cross-section] / [total number of bolts in the connection]	
$A_s =$	58 mm <sup>2</sup>	- Tensile stress area of the bolt	
$d =$	10 mm	- The nominal diameter of the fastener;	
$d_0 =$	11 mm	- The nominal diameter of the hole	
$e_1 =$	<u>50</u> mm	- The end distance from the centre of the fastener to the adjacent end of the connected part, in the direction of load transfer, see figure 8.1	
$e_2 =$	<u>50</u> mm	- The distance from the centre of the fastener to the adjacent of the connected part, in the direction perpendicular to the direction of load transfer, see figure 8.1	

- $p_1 = 110 \text{ mm}$  – The spacing centre-to-centre of fasteners in the direction of load transfer, see figure 8.1  
 $p_2 = 0 \text{ mm}$  – The spacing centre-to-centre of fasteners in the direction perpendicular to the direction of load transfer, see figure 8.1  
 $f_{yb} = 0.3 \text{ kH/mm}^2$  – Ultimate strength  
 $f_{ub} = 0.5 \text{ kH/mm}^2$  – Ultimate tensile strength of the bolt  
 $t = 1.2 \text{ mm}$  – The thickness of the thinner connected part or sheet

**Steel S350GD**

- $f_y = 0.35 \text{ kH/mm}^2$  – Is yield strength  
 $f_u = 0.42 \text{ kH/mm}^2$  – Is ultimate tensile strength

- $Y_{m2} = 1.25$  – Safety factor

**Connection load forces**

- $F_t = 14 \text{ kH}$  - Tensile load  
 $F_s = 5.5 \text{ kH}$  - Shear load

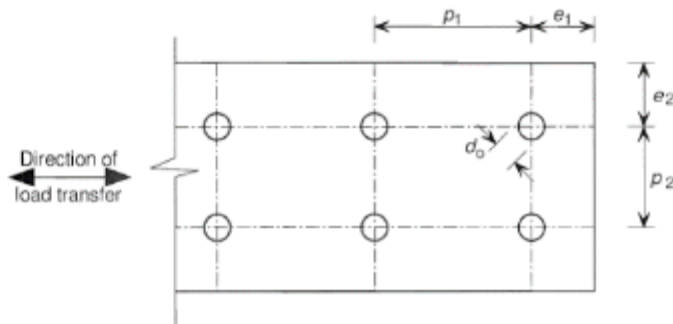


Figure 8.1: End distance, edge distance and spacings for fasteners and spot weld:

**Bolts loaded in shear:**

**Bearing resistance**

$$F_{b,Rd} = 2,5 \alpha_b k t f_u d t / Y_{m2} = \underline{9.92 \text{ kH}} > F_s = 2.75 \text{ kH} \quad \text{Satisfies the check}$$

Shear load per bolt

$$\alpha_b = \min(1 \text{ or } e_1/3d) = 1$$

$$k t = (0,8 t + 1.5)/2.5 = 0.98 \quad \text{for } 0.75 \text{ mm } t < 1.25 \text{ mm}$$

**Shear resistance check (EN 1993-1-3 tab 8.4)**

$$F_{v,Rd} = 0.6 f_{ub} A_s / \gamma M_2 = 13.9 \text{ kH} > F_s = 2.75 \text{ kH} \quad \text{Satisfies the check}$$

Shear load per bolt

**Tension resistance check (EN 1993-1-3 tab 8.4)**

$$F_{t,Rd} = 0.9 f_{ub} A_s / \gamma M_2 = 20.9 \text{ kH} > F_t = 7 \text{ kH} \quad \text{Satisfies the check}$$

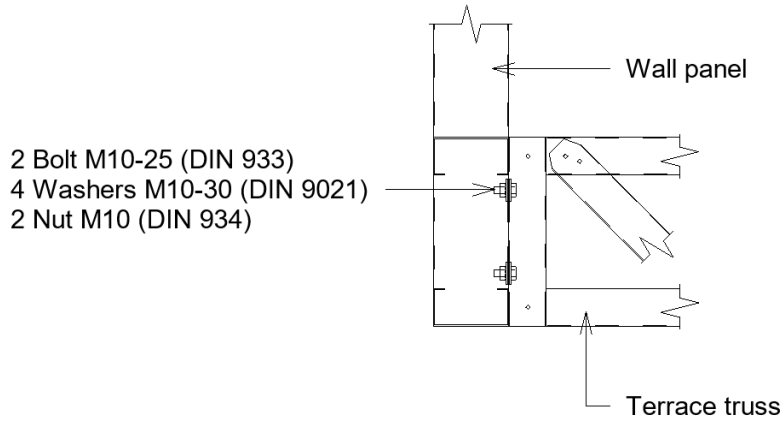
Tension load per bolt

**Punching resistance check (EN 1993-1-8 tab 3.4)**

$$F_{p,Rd} = 0.5 \pi d_m t f_u / Y_{m2} = 19 \text{ kH} > F_t = 7 \text{ kH} \quad \text{Satisfies the check}$$

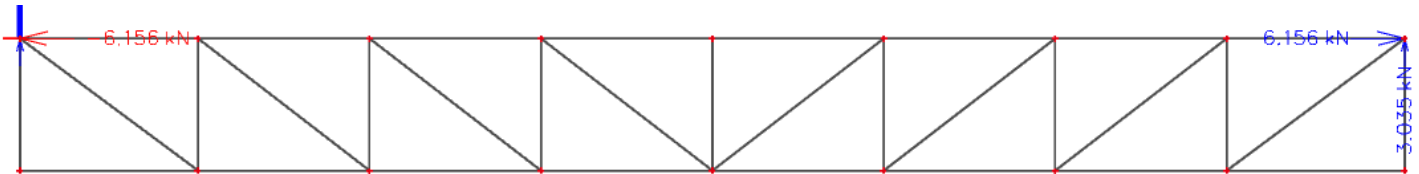
- $d_m = 30 \text{ mm}$  – The mean of the across points and across flats dimensions of the bolt head or the nut, whichever is smaller

### 2.4.3.3 TERRACE TRUSS TO WALL PANEL CONNECTION CHECK



Terrace truss to wall panel connection sketch

#### Maximum support reactions



$F_t = 6.2 \text{ kN}$  - Tensile load

$F_s = 3.1 \text{ kN}$  - Shear load

<b>Bolts</b>	<b>M 10</b>	- DIN 933	5.6 - Strength grades
<b>Washers</b>		- DIN 9021	
	<u>2</u> PC	- Number of bolts at the cross-section	
	<u>2</u> PC	- Total number of bolts in the connection	
$r =$	<u>1</u>	- [number of bolts at the cross-section] / [total number of bolts in the connection]	
$A_s =$	<u>58</u> mm <sup>2</sup>	- Tensile stress area of the bolt	
$d =$	<u>10</u> mm	- The nominal diameter of the fastener;	
$d_0 =$	<u>11</u> mm	- The nominal diameter of the hole	
$e_1 =$	<u>50</u> mm	- The end distance from the centre of the fastener to the adjacent end of the connected part, in the direction of load transfer, see figure 8.1	
$e_2 =$	<u>50</u> mm	- The distance from the centre of the fastener to the adjacent of the connected part, in the direction perpendicular to the direction of load transfer, see figure 8.1	

- $p_1 = 110 \text{ mm}$  – The spacing centre-to-centre of fasteners in the direction of load transfer, see figure 8.1
- $p_2 = 0 \text{ mm}$  – The spacing centre-to-centre of fasteners in the direction perpendicular to the direction of load transfer, see figure 8.1
- $f_{yb} = 0.3 \text{ kH/mm}^2$  – Ultimate strength
- $f_{ub} = 0.5 \text{ kH/mm}^2$  – Ultimate tensile strength of the bolt
- $t = 1.2 \text{ mm}$  – The thickness of the thinner connected part or sheet

Steel S350GD

- $f_y = 0.35 \text{ kH/mm}^2$  – Is yield strength
- $f_u = 0.42 \text{ kH/mm}^2$  – Is ultimate tensile strength

- $\gamma_{m2} = 1.25$  – Safety factor

#### Connection load forces

- $F_t = 6.2 \text{ kH}$  - Tensile load
- $F_s = 3.1 \text{ kH}$  - Shear load

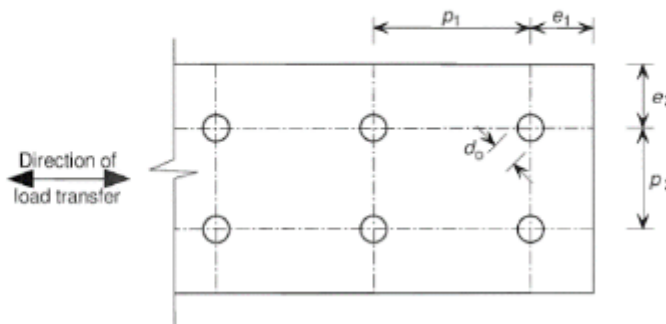


Figure 8.1: End distance, edge distance and spacings for fasteners and spot welds

#### Bolts loaded in shear:

##### Bearing resistance

$$F_{b,Rd} = 2,5 \alpha_b k t f_u d t / \gamma_{m2} = \underline{9.92 \text{ kH}} > F_s = 1.55 \text{ kH} \quad \text{Satisfies the check}$$

Shear load per bolt

$$\alpha_b = \min(1 \text{ or } e_1/3d) = 1$$

$$k t = (0,8 t + 1.5)/2.5 = 0.98 \quad \text{for } 0.75 \text{ mm } t < 1.25 \text{ mm}$$

##### Shear resistance check (EN 1993-1-3 tab 8.4)

$$F_{v,Rd} = 0.6 f_{ub} A_s / \gamma_{M2} = 13.9 \text{ kH} > F_s = 1.55 \text{ kH} \quad \text{Satisfies the check}$$

Shear load per bolt

##### Tension resistance check (EN 1993-1-3 tab 8.4)

$$F_{t,Rd} = 0.9 f_{ub} A_s / \gamma_{M2} = 20.9 \text{ kH} > F_t = 3.1 \text{ kH} \quad \text{Satisfies the check}$$

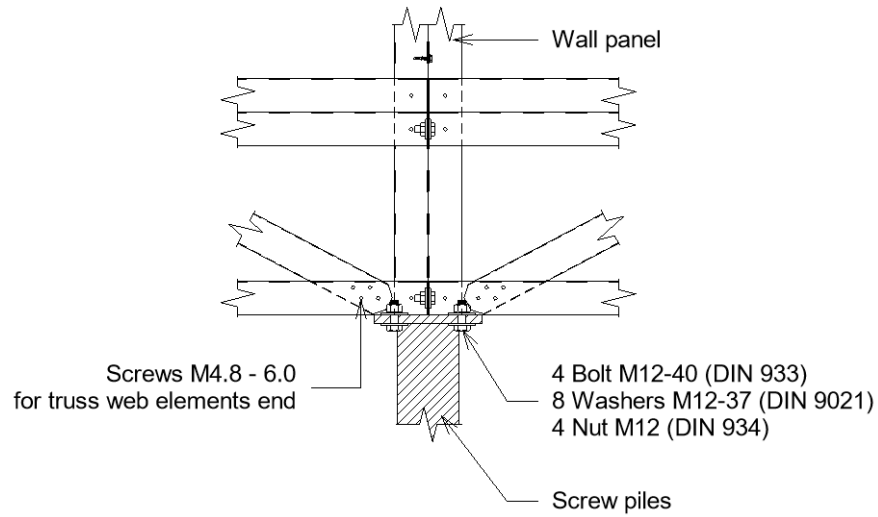
Tension load per bolt

##### Punching resistance check (EN 1993-1-8 tab 3.4)

$$B_{p,Rd} = 0.5 \pi d_m t f_u / \gamma_{m2} = 19 \text{ kH} > F_t = 3.1 \text{ kH} \quad \text{Satisfies the check}$$

$d_m = 30 \text{ mm}$  – The mean of the across points and across flats dimensions of the bolt head or the nut, whichever is smaller

### 2.4.3.4 WALL PANEL TO SCREW PILE CONNECTION DETAIL



Wall panel to screw pile connection sketch

### Maximum support reactions

Name	Case	R <sub>x</sub> [kN]	R <sub>y</sub> [kN]	R <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	e <sub>x</sub> [mm]	e <sub>y</sub> [mm]
B20/N85	ULS-Set B (auto)/26	<b>23.145</b>	0.479	-4.954	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0
B20/N85	ULS-Set B (auto)/28	-6.283	<b>0.680</b>	27.586	0.000	0.000	0.000	0.0	0.0
B20/N85	ULS-Set B (auto)/4	21.912	<b>0.133</b>	<b>-12.729</b>	0.000	0.000	0.000	0.0	0.0
B20/N85	ULS-Set B (auto)/1	-12.218	0.574	<b>29.605</b>	0.000	0.000	0.000	0.0	0.0
B22/N24	ULS-Set B (auto)/4	<b>19.642</b>	0.352	<b>-16.999</b>	0.000	0.000	0.000	0.0	0.0
B22/N24	ULS-Set B (auto)/1	<b>-20.125</b>	0.696	<b>24.269</b>	0.000	0.000	<b>0.000</b>	0.0	0.0

For R<sub>z</sub> reactions values Compression are given with (+), Tension with (-).

### Design forces

Shear load - 23.2 kN

Tensile load - 17 kN



**Bolts**    **M 12**

**Washers**

2    PC

2    PC

$r =$     2

$A_s =$     84.3    mm<sup>2</sup>

$d =$     12    mm

$d_o =$     13    mm

$e_1 =$     50    mm

$e_2 =$     50    mm

$p_1 =$     0    mm

$p_2 =$     0    mm

$f_{yb} =$     0.3    kN/mm<sup>2</sup>

$f_{ub} =$     0.5    kN/mm<sup>2</sup>

$t =$     1.2    mm

**Steel**    **S350GD**

$f_y =$     0.35    kN/mm<sup>2</sup>

$f_u =$     0.42    kN/mm<sup>2</sup>

$\gamma_{m2} =$     1.25

**Connection load forces**

$F_t =$     17    kN - Tensile load

$F_s =$     23.2    kN - Shear load

- DIN 933    5.6 - Strength grades

- DIN 9021

- Number of bolts at the cross-section

- Total number of bolts in the connection

- [number of bolts at the cross-section] / [total number of bolts in the connection]

- Tensile stress area of the bolt

- The nominal diameter of the fastener;

- The nominal diameter of the hole

- The end distance from the centre of the fastener to the adjacent end of the connected part, in the direction of load transfer, see figure 8.1

- The distance from the centre of the fastener to the adjacent of the connected part, in the direction perpendicular to the direction of load transfer, see figure 8.1

- The spacing centre-to-centre of fasteners in the direction of load transfer, see figure 8.1

- The spacing centre-to-centre of fasteners in the direction perpendicular to the direction of load transfer, see figure 8.1

- Ultimate strength

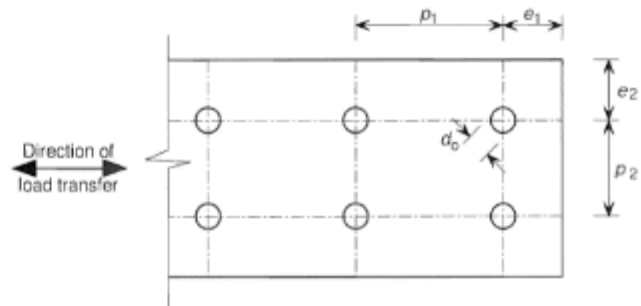
- Ultimate tensile strength of the bolt

- The thickness of the thinner connected part or sheet

- Is yield strength

- Is ultimate tensile strength

- Safety factor



**Bolts loaded in shear:**

Figure 8.1: End distance, edge distance and spacings for fasteners and spot weld:

---

### **Bearing resistance**

$$F_{b,Rd} = 2,5 \alpha_b k_t f_u d t / \gamma_{M2} = \underline{11.9 \text{ kH}} > F_s = 11.6 \text{ kH} \quad \text{Satisfies the check}$$

Shear load per bolt

$$\alpha_b = \min(1 \text{ or } e_1/3d) = 1$$
$$k_t = (0,8 t + 1.5)/2.5 = 0.98 \quad \text{for } 0.75 \text{ mm } t < 1.25 \text{ mm}$$

---

### **Shear resistance check (EN 1993-1-3 tab 8.4)**

$$F_{v,Rd} = 0.6 f_{ub} A_s / \gamma_{M2} = 20.2 \text{ kH} > F_s = 11.6 \text{ kH} \quad \text{Satisfies the check}$$

Shear load per bolt

---

### **Tension resistance check (EN 1993-1-3 tab 8.4)**

$$F_{t,Rd} = 0.9 f_{ub} A_s / \gamma_{M2} = 30.3 \text{ kH} > F_t = 8.5 \text{ kH} \quad \text{Satisfies the check}$$

Tension load per bolt

---

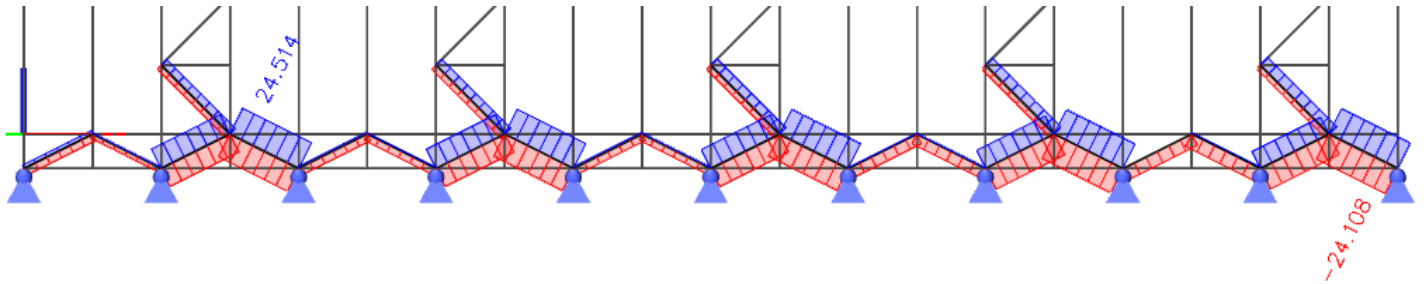
### **Punching resistance check (EN 1993-1-8 tab 3.4)**

$$B_{p,Rd} = 0.5 \pi d_m t f_u / \gamma_{M2} = 23.4 \text{ kH} > F_t = 8.5 \text{ kH} \quad \text{Satisfies the check}$$

$d_m = 37 \text{ mm}$  – The mean of the across points and across flats dimensions of the bolt head or the nut, whichever is smaller

## TRUSS WEB ELEMENT SCREW CONNECTIONS


### Maximum internal forces

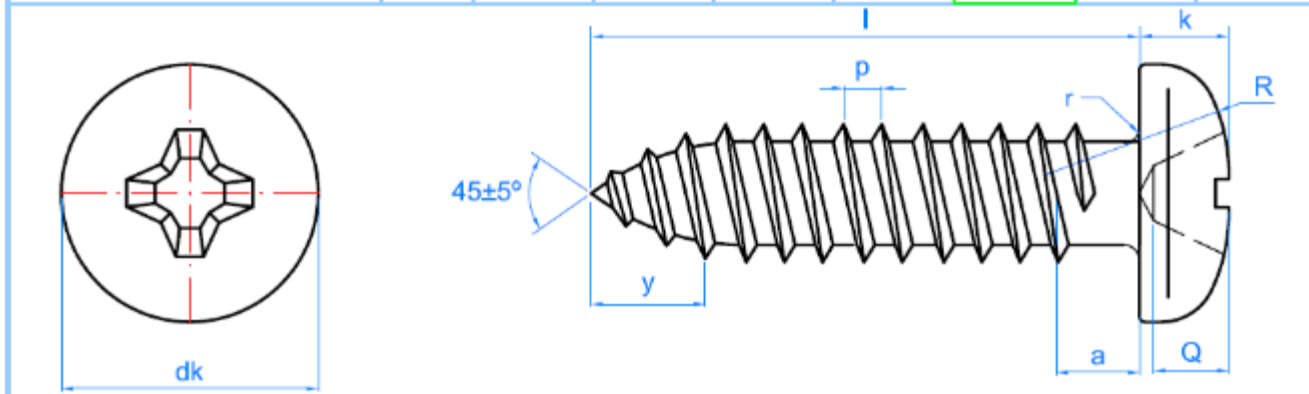


### Design forces

Screw shear load - 22.35 kN

### Screw technical data sheet

Code T81		ST 2.9	ST 3.5	ST 3.9	ST 4.2	ST 4.8	ST 5.5	ST 6.3
$d_k$ : head diameter	[mm]	5.45	6.7	7.3	8.0	9.4	10.6	12.3
$k$ : head thickness	[mm]	2.2	2.6	2.8	3.05	3.55	3.95	4.55
Ph bit no.		1	2	2	2	2	3	3
$R$ : head radius	[mm]	4.4	5.4	5.8	6.2	7.2	8.2	9.5
$D$ : exterior thread diameter	[mm]	2.90	3.53	3.90	4.22	4.80	5.46	6.25
$d$ : interior thread diameter	[mm]	2.18	2.64	2.92	3.10	3.58	4.17	4.88
$p$ : thread	[mm]	1.1	1.3	1.3	1.4	1.6	1.8	1.8
$y$ : point length $\leq$	[mm]	2.6	3.2	3.5	3.7	4.3	5	6
$l$ : lengths	[mm]	6.5 -- 25	6.5 -- 32	9.5 -- 50	9.5 -- 90	9.5 -- 120	13-- 120	16-- 120
$l_G$ : maximum thread length	[mm]	--	--	--	--	90	90	90
Installation bit point code (Ph)		PUPHC01 PUPHL01	PUPHC02 PUPHL02	PUPHC02 PUPHL02	PUPHC02 PUPHL02	PUPHC02 PUPHL02	PUPHC03 PUPHL03	PUPHC03 PUPHL03



**SCREW RESISTANCE CHARACTERISTICS**

SIZE	TENSION [kN]	SHEAR [kN]
ST 2.9	2.62	1.31
ST 3.5	3.81	1.91
ST 3.9	4.64	2.32
ST 4.2	5.26	2.63
ST 4.8	7.11	3.56
ST 5.5	9.63	4.82
ST 6.3	13.36	6.68

- Screw  $\phi$**  4.8
- $d = 3.58$  mm – Interior thread diamete
  - $\frac{10}{10}$  PC – Number of screw at the cross-section
  - $\frac{10}{10}$  PC – Total number of screw in the connection
  - $F_{v, Rk} 3.56$  kH – Shear resistance characteristics
  - $F_{t, Rd} 7.11$  kH – Tension resistance characteristics
  - $d_w = 9.1$  mm – The diameter of the washer or the head of the fastener;
  - $s = 1.6$  mm – The thread pitch
  - $e_1 = 12.5$  mm – The end distance from the centre of the fastener to the adjacent end of the connected part, in the direction of load transfer, see figure 8.1
  - $e_2 = 12.5$  mm – The distance from the centre of the fastener to the adjacent of the connected part, in the direction perpendicular to the direction of load transfer, see figure 8.1
  - $p_1 = 25$  mm – The spacing centre-to-centre of fasteners in the direction of load transfer, see figure 8.1
  - $p_2 = 25$  mm – The spacing centre-to-centre of fasteners in the direction perpendicular to the direction of load transfer, see figure 8.1
- Steel S350GD**
- $t = 1.2$  mm – The thickness of the thinner connected part or sheet
  - $f_y = 0.35$  kH/mm<sup>2</sup> – Is yield strength
  - $f_u = 0.42$  kH/mm<sup>2</sup> – Is ultimate tensile strength
  - $t_{sup} = 1.2$  mm – The thickness of the supporting member into which a screw or a pin is fixed.

$Y_{m2} = 1.25$  – Safety factor

**Screw load forces**

$F_t = 0$  kH - Tensile load

$F_s = 24.5$  kH - Shear load

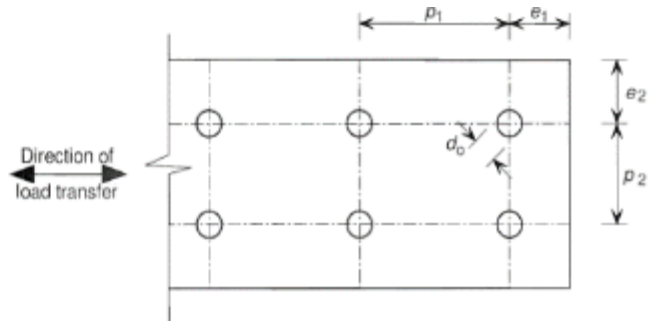


Figure 8.1: End distance, edge distance and spacings for fasteners and spot weld

**Screws loaded in shear (EN 1993-1-3 tab 8.2)**

**Bearing resistance**

$F_{b,Rd} = \alpha f_u d t / Y_{m2} = 2.67$  kH >  $F_t = 2.45$  kH **Satisfies the check**  
 Shear load per screw

In which  $\alpha$  is given by the following:

- if  $t = t_1$   $\alpha = 3.2vt/d$  but  $\alpha \leq 2.1$   $\alpha = 1.85$
- if  $t_1 \geq 2.5t$  and  $t < 1.0$  mm  $\alpha = 3.2vt/d$  but  $\alpha \leq 2.1$
- if  $t_1 \geq 2.5t$  and  $t \geq 1.0$  mm  $\alpha = 2.1$
- if  $t < t_1 < 2.5t$  obtain  $\alpha$  by linear interpolation.

**Net-sections resistance:**

$F_{n,Rd} = A_{net} f_u / Y_{m2} = 8.14$  kH >  $F_t = 2.45$  kH **Satisfies the check**  
 Shear load per screw

$A_{net} = (p_2 - d) t = 24.2$  mm<sup>2</sup> – The net cross-sectional area of the connected part

**Shear resistance:**

$F_{v,Rd} = F_{v,Rk} / Y_{m2} = 2.85$  kH >  $F_t = 2.45$  kH **Satisfies the check**  
 Shear load per screw

**Conditions**

$F_{v,Rd} \geq 1.2 \sum F_{b,Rd}$  2.85 kH < 32.1 kH

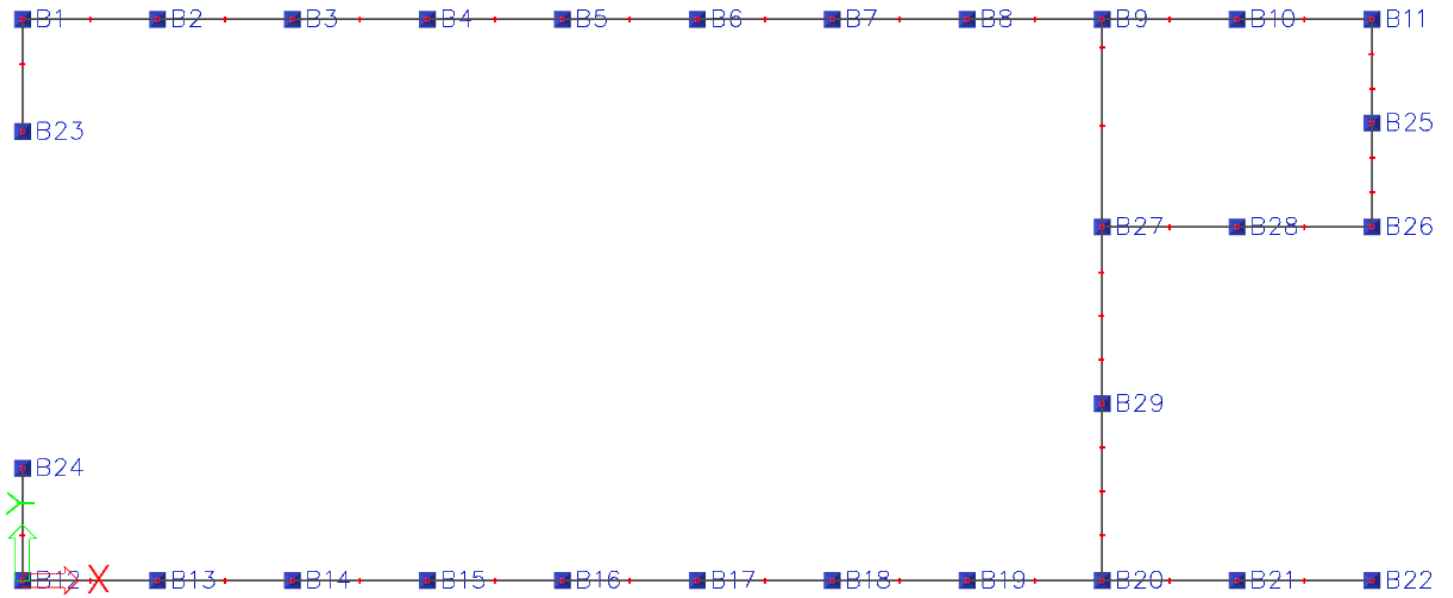
or

$\sum F_{v,Rd} \geq 1.2 F_{n,Rd}$  28.5 kH > 9.77 kH **Satisfies the check**

---

## 2.4.4.SUPPORT REACTIONS

### Main column base name



For Rz reactions values Compression are given with (+), Tension with (-).

Support forces shown for one garage.

## Main column supports reaction table

Name	Case	R <sub>x</sub> [kN]	R <sub>y</sub> [kN]	R <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	e <sub>x</sub> [mm]	e <sub>y</sub> [mm]	Name	Case	R <sub>x</sub> [kN]	R <sub>y</sub> [kN]	R <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	e <sub>x</sub> [mm]	e <sub>y</sub> [mm]
B1/N19	ULS-Set B (auto)/1	<b>1.452</b>	<b>-3.659</b>	1.456	0.000	0.000	0.000	0.0	0.0	B7/N71	ULS-Set B (auto)/1	-4.281	<b>0.017</b>	<b>21.339</b>	0.000	0.000	0.000	0.0	0.0
B1/N19	ULS-Set B (auto)/2	0.526	0.012	<b>-0.992</b>	0.000	0.000	0.000	0.0	0.0	B7/N71	ULS-Set B (auto)/12	<b>-4.371</b>	0.014	16.332	0.000	0.000	<b>0.000</b>	0.0	0.0
B1/N19	ULS-Set B (auto)/3	-1.468	-0.634	<b>8.166</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0	B8/N79	ULS-Set B (auto)/10	<b>1.113</b>	<b>-0.028</b>	2.448	0.000	0.000	0.000	0.0	0.0
B1/N19	ULS-Set B (auto)/4	<b>-1.771</b>	<b>1.417</b>	6.594	0.000	0.000	<b>0.000</b>	0.0	0.0	B8/N79	ULS-Set B (auto)/13	-2.154	<b>0.053</b>	19.069	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0
B2/N31	ULS-Set B (auto)/5	<b>1.249</b>	-0.056	1.086	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0	B8/N79	ULS-Set B (auto)/14	0.872	-0.018	<b>-2.501</b>	0.000	0.000	0.000	0.0	0.0
B2/N31	ULS-Set B (auto)/4	0.520	<b>-0.065</b>	7.692	0.000	0.000	0.000	0.0	0.0	B8/N79	ULS-Set B (auto)/15	<b>-2.317</b>	0.050	<b>22.326</b>	0.000	0.000	<b>0.000</b>	0.0	0.0
B2/N31	ULS-Set B (auto)/1	-1.177	<b>0.083</b>	2.446	0.000	0.000	0.000	0.0	0.0	B9/N87	ULS-Set B (auto)/16	-1.725	<b>-0.057</b>	1.907	0.000	0.000	0.000	0.0	0.0
B2/N31	ULS-Set B (auto)/2	-0.158	0.029	<b>-4.382</b>	0.000	0.000	0.000	0.0	0.0	B9/N87	ULS-Set B (auto)/15	<b>8.755</b>	<b>0.175</b>	-0.071	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0
B2/N31	ULS-Set B (auto)/3	-0.299	-0.028	<b>12.585</b>	0.000	0.000	0.000	0.0	0.0	B9/N87	ULS-Set B (auto)/4	7.670	0.080	<b>-11.322</b>	0.000	0.000	0.000	0.0	0.0
B2/N31	ULS-Set B (auto)/6	<b>-1.192</b>	0.082	2.602	0.000	0.000	<b>0.000</b>	0.0	0.0	B9/N87	ULS-Set B (auto)/1	-3.854	0.069	<b>22.673</b>	0.000	0.000	0.000	0.0	0.0
B3/N39	ULS-Set B (auto)/7	<b>6.593</b>	0.015	-12.462	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0	B9/N87	ULS-Set B (auto)/10	<b>-4.219</b>	0.015	15.363	0.000	0.000	<b>0.000</b>	0.0	0.0
B3/N39	ULS-Set B (auto)/1	-4.750	<b>-0.021</b>	<b>21.239</b>	0.000	0.000	0.000	0.0	0.0	B10/N95	ULS-Set B (auto)/17	<b>1.047</b>	<b>-0.441</b>	13.004	0.000	0.000	0.000	0.0	0.0
B3/N39	ULS-Set B (auto)/4	6.565	<b>0.016</b>	<b>-15.264</b>	0.000	0.000	0.000	0.0	0.0	B10/N95	ULS-Set B (auto)/14	-0.505	0.214	<b>-3.765</b>	0.000	0.000	0.000	0.0	0.0
B3/N39	ULS-Set B (auto)/8	<b>-4.777</b>	-0.020	18.437	0.000	0.000	<b>0.000</b>	0.0	0.0	B10/N95	ULS-Set B (auto)/15	0.938	-0.418	<b>17.307</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0
B4/N47	ULS-Set B (auto)/8	<b>1.232</b>	0.005	0.723	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0	B10/N95	ULS-Set B (auto)/11	<b>-0.944</b>	<b>0.369</b>	4.785	0.000	0.000	<b>0.000</b>	0.0	0.0
B4/N47	ULS-Set B (auto)/4	-1.867	<b>-0.004</b>	8.261	0.000	0.000	0.000	0.0	0.0	B11/N21	ULS-Set B (auto)/15	<b>6.302</b>	-1.138	-8.307	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0
B4/N47	ULS-Set B (auto)/1	1.204	<b>0.005</b>	3.300	0.000	0.000	0.000	0.0	0.0	B11/N21	ULS-Set B (auto)/18	5.470	<b>-1.778</b>	-11.691	0.000	0.000	0.000	0.0	0.0
B4/N47	ULS-Set B (auto)/2	0.953	0.002	<b>-5.147</b>	0.000	0.000	0.000	0.0	0.0	B11/N21	ULS-Set B (auto)/19	-2.931	<b>0.768</b>	14.253	0.000	0.000	0.000	0.0	0.0
B4/N47	ULS-Set B (auto)/3	-1.992	-0.002	<b>15.105</b>	0.000	0.000	0.000	0.0	0.0	B11/N21	ULS-Set B (auto)/4	5.426	-1.633	<b>-13.186</b>	0.000	0.000	0.000	0.0	0.0
B4/N47	ULS-Set B (auto)/9	<b>-1.996</b>	-0.002	13.572	0.000	0.000	<b>0.000</b>	0.0	0.0	B11/N21	ULS-Set B (auto)/1	-2.887	0.623	<b>15.747</b>	0.000	0.000	0.000	0.0	0.0
B5/N55	ULS-Set B (auto)/3	<b>6.858</b>	0.000	-4.512	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0	B11/N21	ULS-Set B (auto)/10	<b>-2.993</b>	0.441	12.765	0.000	0.000	<b>0.000</b>	0.0	0.0
B5/N55	ULS-Set B (auto)/10	-4.226	<b>0.000</b>	14.818	0.000	0.000	0.000	0.0	0.0	B12/N1	ULS-Set B (auto)/20	<b>2.358</b>	0.769	3.997	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0
B5/N55	ULS-Set B (auto)/11	-0.884	<b>0.001</b>	4.883	0.000	0.000	0.000	0.0	0.0	B12/N1	ULS-Set B (auto)/2	-0.005	<b>-0.923</b>	-2.397	0.000	0.000	0.000	0.0	0.0
B5/N55	ULS-Set B (auto)/4	6.560	0.000	<b>-13.628</b>	0.000	0.000	0.000	0.0	0.0	B12/N1	ULS-Set B (auto)/21	1.876	<b>2.024</b>	8.039	0.000	0.000	0.000	0.0	0.0
B5/N55	ULS-Set B (auto)/1	-4.291	0.000	<b>19.860</b>	0.000	0.000	0.000	0.0	0.0	B12/N1	ULS-Set B (auto)/12	0.779	0.698	<b>-3.387</b>	0.000	0.000	0.000	0.0	0.0
B5/N55	ULS-Set B (auto)/12	<b>-4.386</b>	0.000	15.020	0.000	0.000	<b>0.000</b>	0.0	0.0	B12/N1	ULS-Set B (auto)/22	1.548	1.282	<b>11.446</b>	0.000	0.000	0.000	0.0	0.0
B6/N63	ULS-Set B (auto)/8	<b>1.336</b>	-0.003	1.230	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0	B12/N1	ULS-Set B (auto)/14	<b>-0.009</b>	-0.883	-2.277	0.000	0.000	<b>0.000</b>	0.0	0.0
B6/N63	ULS-Set B (auto)/1	1.319	<b>-0.004</b>	3.748	0.000	0.000	0.000	0.0	0.0	B13/N29	ULS-Set B (auto)/1	<b>12.384</b>	<b>-0.069</b>	0.392	0.000	0.000	0.000	0.0	0.0
B6/N63	ULS-Set B (auto)/4	-2.068	<b>0.004</b>	8.120	0.000	0.000	0.000	0.0	0.0	B13/N29	ULS-Set B (auto)/16	-0.928	<b>0.054</b>	1.652	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0
B6/N63	ULS-Set B (auto)/2	1.056	-0.001	<b>-4.780</b>	0.000	0.000	0.000	0.0	0.0	B13/N29	ULS-Set B (auto)/2	4.199	-0.025	<b>-4.751</b>	0.000	0.000	0.000	0.0	0.0
B6/N63	ULS-Set B (auto)/3	-2.233	0.002	<b>15.074</b>	0.000	0.000	0.000	0.0	0.0	B13/N29	ULS-Set B (auto)/3	-13.151	0.020	<b>14.469</b>	0.000	0.000	0.000	0.0	0.0
B6/N63	ULS-Set B (auto)/9	<b>-2.239</b>	0.002	13.515	0.000	0.000	<b>0.000</b>	0.0	0.0	B13/N29	ULS-Set B (auto)/4	<b>-16.285</b>	0.052	10.253	0.000	0.000	<b>0.000</b>	0.0	0.0
B7/N71	ULS-Set B (auto)/3	<b>7.517</b>	-0.009	-3.749	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0	B14/N37	ULS-Set B (auto)/23	0.304	<b>-0.008</b>	1.676	0.000	0.000	0.000	0.0	0.0
B7/N71	ULS-Set B (auto)/4	6.959	<b>-0.016</b>	<b>-12.660</b>	0.000	0.000	0.000	0.0	0.0	B14/N37	ULS-Set B (auto)/8	-16.227	<b>0.009</b>	19.406	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0
										B14/N37	ULS-Set B (auto)/4	<b>22.763</b>	-0.006	<b>-16.615</b>	0.000	0.000	0.000	0.0	0.0
										B14/N37	ULS-Set B (auto)/1	<b>-16.244</b>	0.009	<b>22.341</b>	0.000	0.000	<b>0.000</b>	0.0	0.0
										B15/N45	ULS-Set B (auto)/1	<b>11.470</b>	0.000	1.530	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	0.0	0.0
										B15/N45	ULS-Set B (auto)/24	-8.401	<b>-0.001</b>	15.355	0.000	0.000	0.000	0.0	0.0





Name	Case	R <sub>x</sub> [kN]	R <sub>y</sub> [kN]	R <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]	e <sub>x</sub> [mm]	e <sub>y</sub> [mm]
B29/N1015	ULS-Set B (auto)/35	<b>-3.619</b>	-1.484	2.009	0.000	0.000	<b>0.000</b>	0.0	0.0

Name	Combination key
ULS-Set B (auto)/1	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/2	G + G1 + 1.05*Q1 + 1.50*Q4 + G3 + G2
ULS-Set B (auto)/3	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/4	G + G1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/5	G + G1 + 1.05*Q1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/6	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/7	G + G1 + 0.75*Q3 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/8	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/9	G + G1 + 0.75*Q3 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/10	G + G1 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/11	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/12	G + G1 + 1.05*Q1 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/13	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/14	G + G1 + 1.50*Q4 + G3 + G2
ULS-Set B (auto)/15	1.35*G + 1.35*G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/16	G + G1 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/17	G + G1 + 1.50*Q7 + G3 + G2
ULS-Set B (auto)/18	1.35*G + 1.35*G1 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/19	G + G1 + 1.05*Q1 + 0.75*Q3 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/20	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8
ULS-Set B (auto)/21	1.35*G + 1.35*G1 + 1.50*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/22	1.35*G + 1.35*G1 + 0.75*Q3 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/23	G + G1 + 0.75*Q3 + G3 + G2 + 1.50*Q8
ULS-Set B (auto)/24	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/25	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/26	1.35*G + 1.35*G1 + 1.05*Q1 + 1.50*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/27	G + G1 + 0.75*Q3 + 1.50*Q5 + G3 + G2
ULS-Set B (auto)/28	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q5 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/29	G + G1 + 1.05*Q1 + 1.50*Q6 + G3 + G2
ULS-Set B (auto)/30	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/31	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q7 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/32	1.35*G + 1.35*G1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 1.50*Q8
ULS-Set B (auto)/33	1.35*G + 1.35*G1 + 1.50*Q1 + 0.75*Q3 + 1.35*G3 + 1.35*G2 + 0.90*Q8
ULS-Set B (auto)/34	1.35*G + 1.35*G1 + 1.50*Q1 + 0.90*Q6 + 1.35*G3 + 1.35*G2
ULS-Set B (auto)/35	1.35*G + 1.35*G1 + 1.05*Q1 + 1.35*G3 + 1.35*G2 + 1.50*Q8