Project 1971 Ontwerp tribune constructie te Neer

Opdrachtgever Strukton Civiel

Prefab Leverancier Haitsma Beton B.V.
Pinksterblomstrjitte 2
9288 AG Kootstertille

Rapport 1971-KB01

Onderdeel Grandstand concept design

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Constructeur	CEng Daniel Pozo
Projectleider	Ing. W. Rooijakkers WR
Controleur	Ing. W. Rooijakkers

Snijders Ingenieursgroep B.V. Nijverheidslaan 155 5506 EC Veldhoven tel 040 2085250
info@snijders-ig.nl www.snijders-ig.nl KvKnr. 17083763 BTWnr. 8028.52.646.B01 IBAN NL63INGB0003812829

Inhoudsopgave

1 Introduction

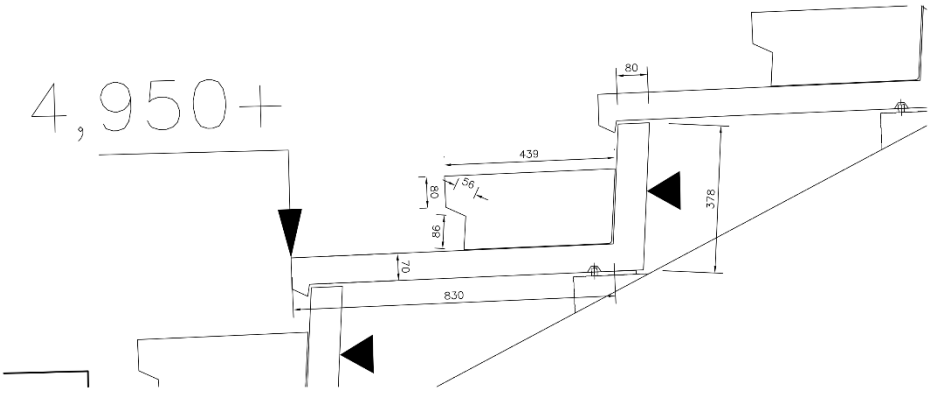
1.1 Scope

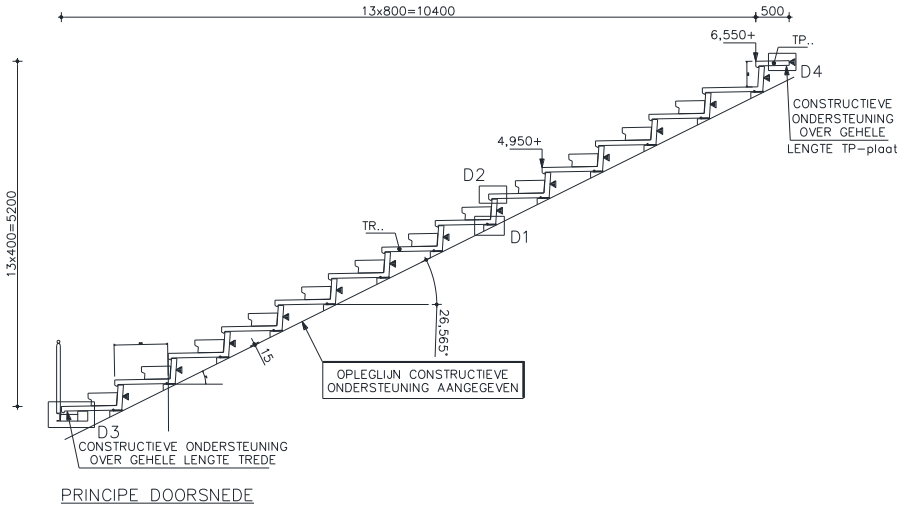
The scope of this document is to provide a concept design and bill of material estimation for a new grandstand located in Limburg, the municipality of Leudal, on the River Maas about 8km north of Roermond.

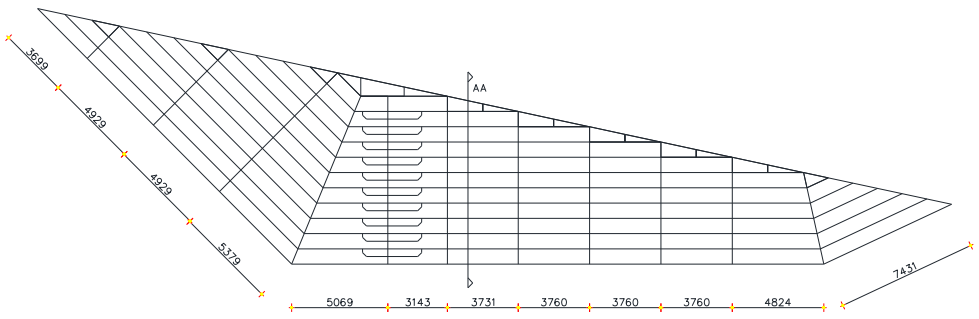
The concept design of the grandstand is based on the following documents:

1.1.1 Haitsma´s typical design

The Haitsma´s typical section it was considered as a primary approach.
The calculation shown that 80mm of thickness is enough to support the design load under the worst scenario considered: span of 5.7m.

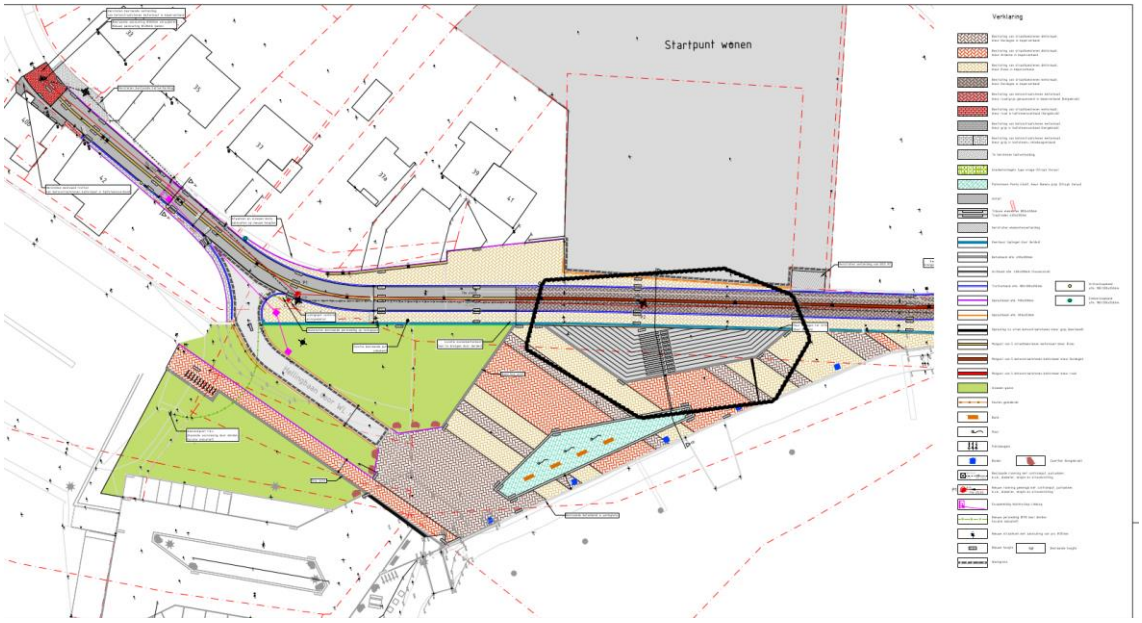


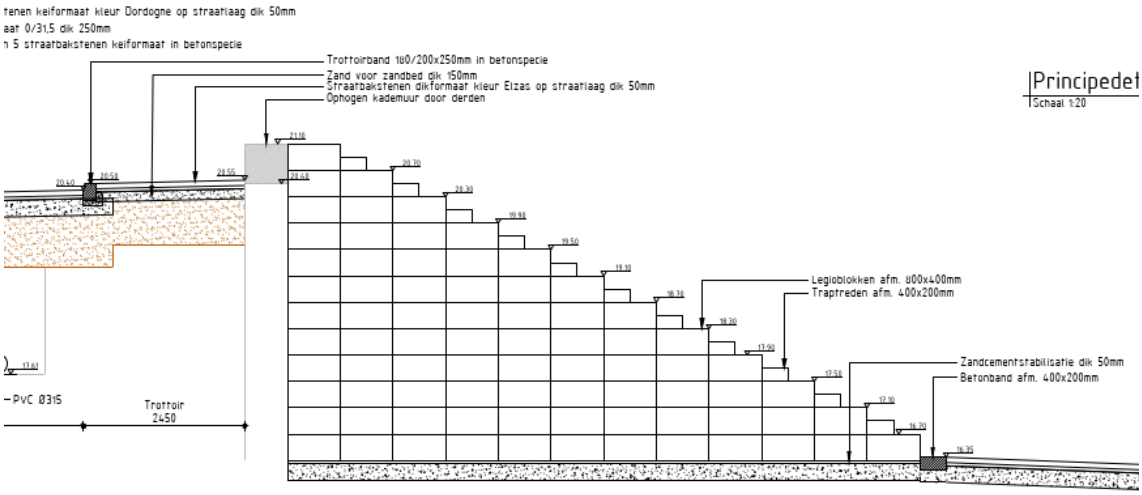




See annex A.3 for additional information

1.1.2 Kragten´s drawing





Please note: 1st grandstand element at the bottom is removed.

See annex A.4 for additional information

1.1.3 Geotechnical report

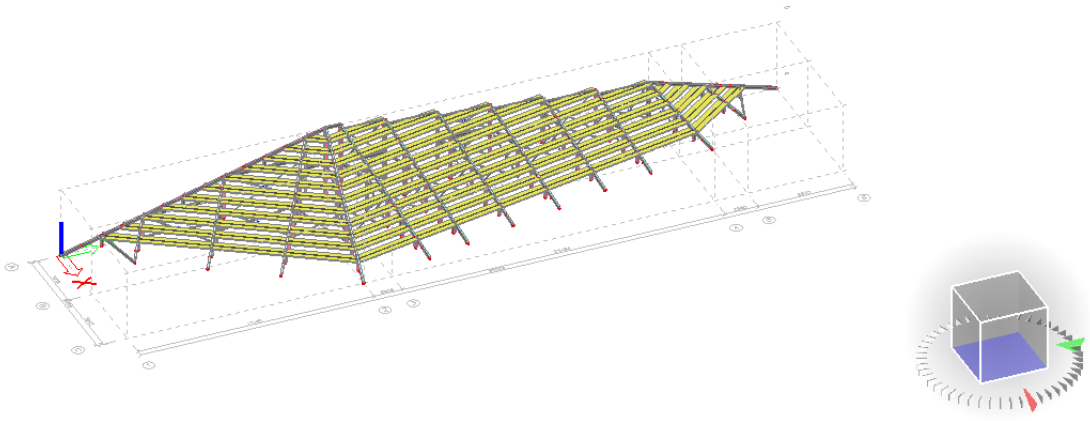
Soil parameters and foundation recommendations report:

- *Memo funderingsadvies tribune ROG13, datum 7-7-2020, versie 1.0*

1.2 Geometry and design data

The grandstand concept design is based on the information provided by the above documents. According to them, the following assumptions have been applied. All these assumptions should be approved previously to start the construction of the structure.

- The geometry of the grandstand follows the indications of Haitsma´s sketches:

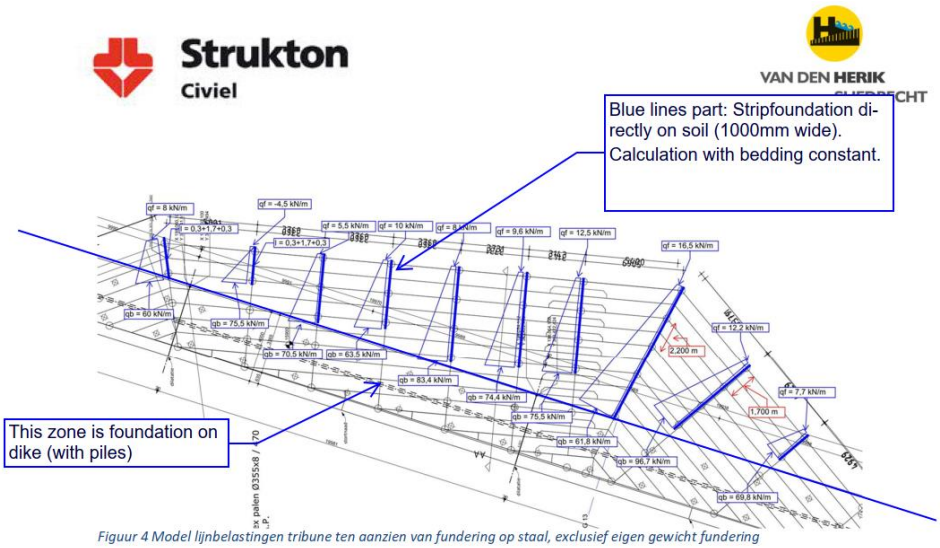


- To simplify the construction, the grandstand is designed as a pinned connection structure.
- Firstly, the loads are applied to the “L-Shape” concrete seats, these elements are simple supported by the steel structure via mechanical anchors. The seats are incorporated into the model calculation as dummy elements (massless elements), they have no influence into the structure behaviour, but they are used to transfer the load to the main structure.
- In turn, the load from the seats is transfer to 12 main beams. These beams run from the retaining wall to the ground level supported by steel columns.
- Lateral stability is provided by steel bracing at both right angles.

Revision C:

- Following the foundation report recommendations, the influence that the differential settlement have on the behaviour of the steel structure is analysed. To carry on this, two analyses have developed:
    - Short-term analysis: For columns located over the retaining wall foundation, a rigid support is considered, in other hand, for columns located outside the retaining wall foundations, the bedding constant is applied.

      Based on the following distribution of load, four different bedding constants are considered in the analysis (see table 6 for bedding stiffness).



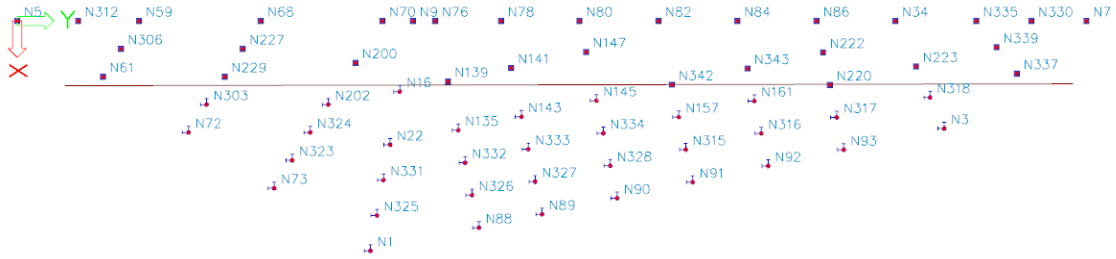
Figuur 4 Model lijnbelastingen tribune ten aanzien van fundering op staal, exclusief eigen gewicht fundering

Tabel 6 Resultaten zettingsberekening voor T = 1 dag dagen (korte duur belasting)

2. Korte duur	Lijnlast 1	Lijnlast 2	Lijnlast 3	Lijnlast 4
Belasting [kN/m²]	72	51	31	10
Zetting [mm]	6	5	4	2
Bedding [kN/m³]	12000	10267	7667	5000

- Long-term analysis: As previously indicated, for columns located over the retaining wall foundation, a rigid support is considered but, in this case a displacement is imposed to the columns located outside the retaining wall foundations.

  Taking into account that the bedding stiffness varies according to the applied load consequently the settlement also varies (see table 5 below). To reflect the real soil behaviour in the structure, and based on the above distribution of load, the following settlement are applied:



Support	Settlement [mm]
Sn61/N324	15
Sn68/N331	15
Sn62/N325	15
Sn60/N323	15
Sn69/N332	15
Sn70/N333	15
Sn71/N334	15
Sn63/N326	15
Sn18/N22	15
Sn65/N328	15
Sn10/N202	15
Sn64/N327	15
Sn13/N1	15
Sn34/N135	15
Sn37/N143	10
Sn55/N316	10
Sn58/N315	10
Sn41/N161	10
Sn40/N157	10
Sn38/N145	10
Sn17/N16	10
Sn54/N303	10
Sn78/N73	10
Sn28/N88	10
Sn56/N317	10
Sn59/N318	10
Sn29/N89	5
Sn30/N90	5
Sn32/N92	5
Sn77/N72	5
Sn31/N91	5
Sn14/N3	5
Sn33/N93	5

Tabel 5 Resultaten zettingsberekening voor T = 10000 dagen (lange duur belasting)

1. Lange duur	Lijnlast 1	Lijnlast 2	Lijnlast 3	Lijnlast 4
Belasting [kN/m²]	36	26	15	5
Zetting [mm]	15	14	10	5
Bedding [kN/m³]	2400	1833	1533	1000

By inspection, the **ULS** worst-case scenario is found for the **long-term analysis**, in other hand the **SLS** worst-case scenario is found for the **short-term analysis**

See annex A.1 for additional information

1.3 Version

Version	Data	Type
0	3-2-2020	Draft report.
A	10-3-2020	Final report.
B	14-05-2020	1st level of steps removed
C	20-07-2020	Soil parameters included.

2 Loads and combination of actions

2.1 Design loads

The grandstand structure is designed to withstand the following actions:

- Self-weight
- Dead load
- Live load
- Wind load
- Snow load
- Differential settlement

Due to the high number of uncertainties, a series of assumptions have been considered in the load application.

- 5kN/m^2 vertical live load is considered.
- 10% of vertical live load is applied horizontally.
- 0,53kN/m² main wind pressure is considered.
- 1,20kN/m² of snow pressure is considered.
- Although the seats have a width of 800mm, for load application purposes, a 1000mm is considered.
- In order to simplified the calculations and to increase conservatism, wind load and horizontal live load are combined in a single load case.
- Horizontal load due to a car accident has not been considered.
- The load due to high water has no influence on the structure. Due to the rise in the water level and the openness of the structure, there is no direct load on the structure. This is therefore not normative of previous taxes.

2.2 Load cases

Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
G1	Eigen gewicht	Permanent	LG1	-Z		
		Self-weight				
G2	Dead	Permanent	LG1			
		Standard				
Q1	Live	Variable	Variable-C		Long	None
	Standard	Static				
Q2	Horizontal_ Load	Variable	Wind			None
	Static wind	Static				
Q3	Horizontal_ Load_+Y	Variable	Wind			None
	Static wind	Static				
Q4	Horizontal_ Load_-Y	Variable	Wind			None
	Static wind	Static				
Q5	Horizontal_ Load_-X	Variable	Wind			None
	Static wind	Static				
Q6	Uplift	Variable	Wind			None
	Static wind	Static				
Q7	Snow	Variable	Snow			None
	Snow	Static				
Q8	Long-term settlement	Permanent	Settlement			
		Standard				

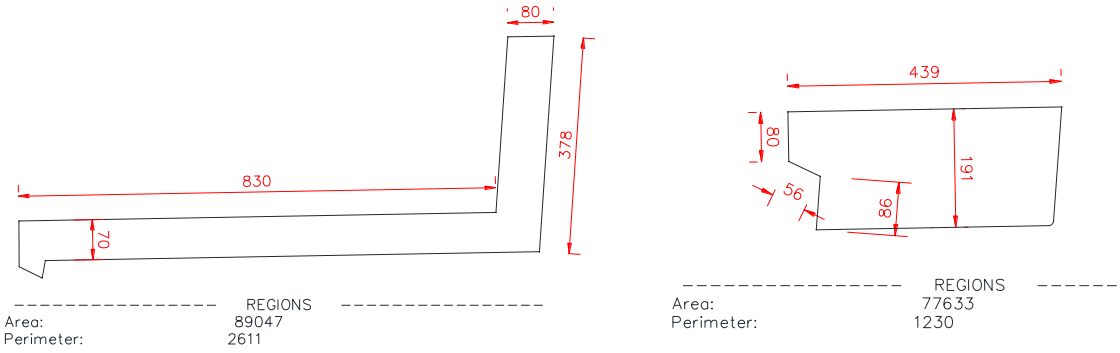
2.3 Self weight

The self-weight of the materials is:

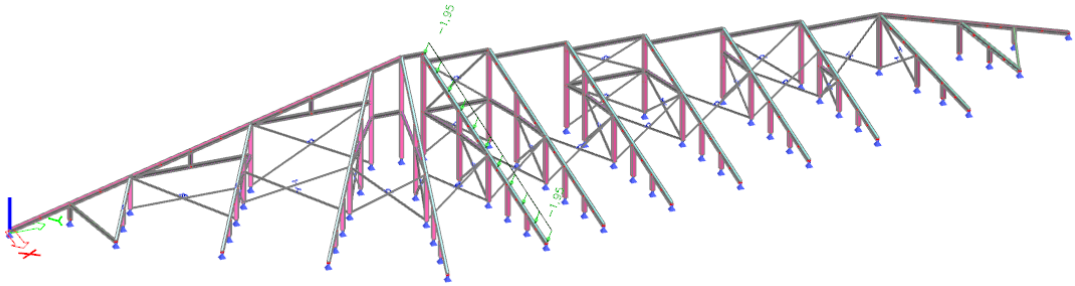
- Density of steel structures: 78.5 kN/m^3
- Density of concrete elements: 25kN/m^3

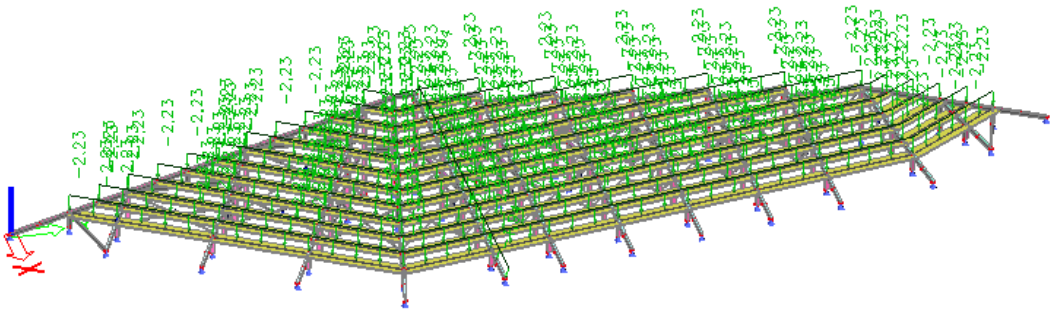
2.4 Dead Load

The concrete steps and “L-shape” seats are considered into the design of the steel structure as a distributed lineal load.



- Seat self-weight = 25kN/m^3 x 89047mm^2 = 2.23kN/m
- Steps self-weight = 25kN/m^3 x 77633 mm^2 = 1.94kN/m

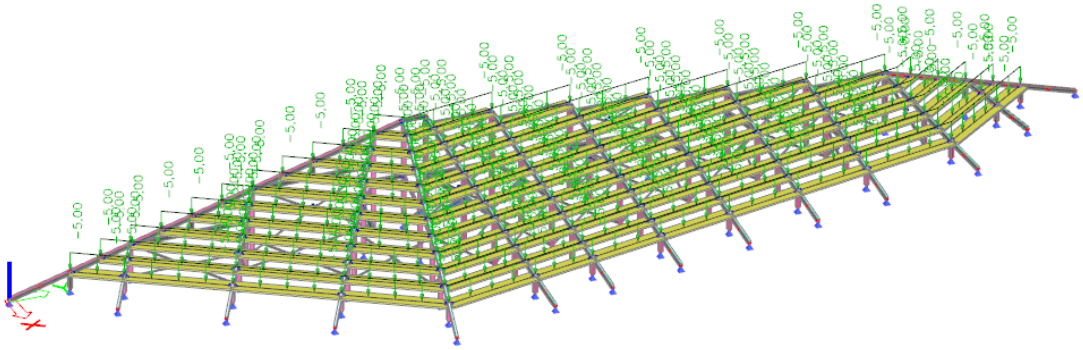




2.5 Live Load

The grandstand is considered a structure Category C, according to Table 6.1-Categories of use, EN 1991-1-1.

According this category, 5kN/m^2 is applied.



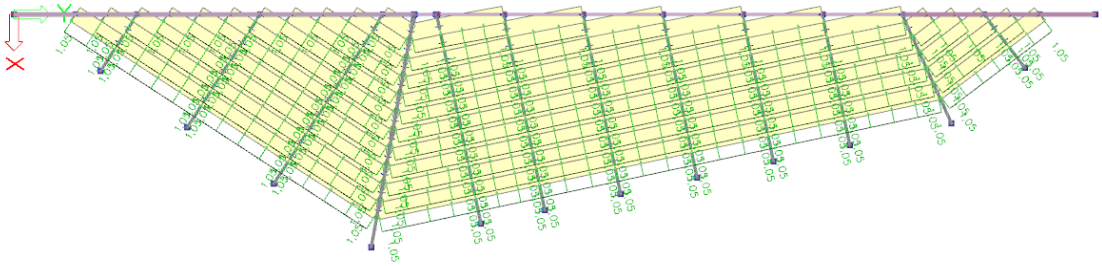
Conservative a load of 5 kN/m^1 is applied. In this case 0,83*5 = 4,15 kN/m^1 should be enough. This is for later optimization.

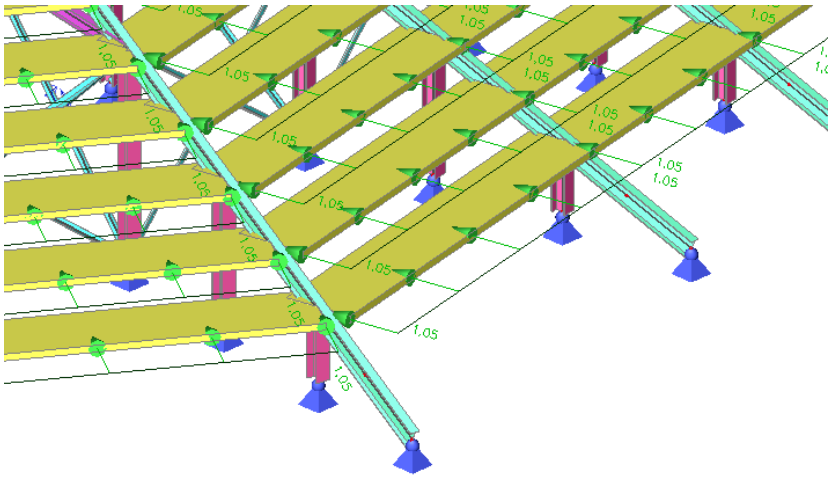
2.6 Horizontal load_+/-X direction

As mentioned before, wind load and 10% live load are combined into a single load case as follow:

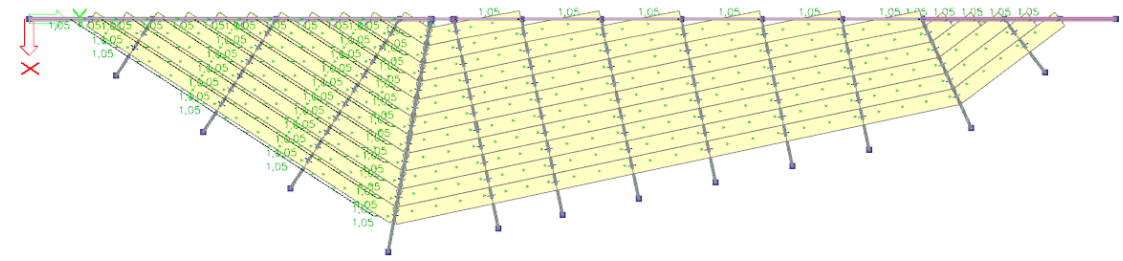
Berekening

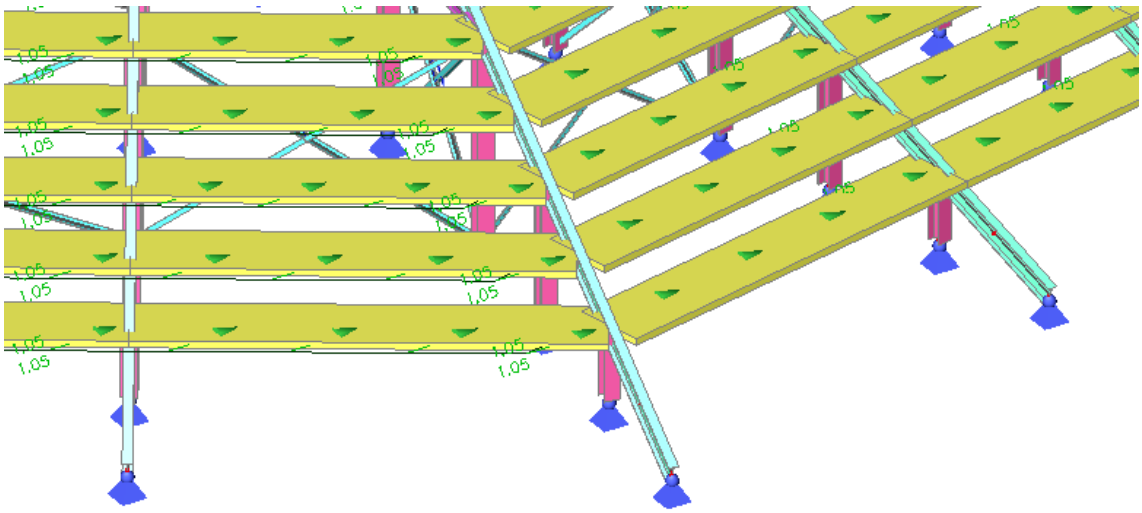
Aref	=	1m * 0,4m	=	0,40	m²
Fh,live	=	10% * 5	=	0,50	kN/m^1
Fh,wind	=	1_{cscd} *$2,4_{cf}$ * $0,54_{qp}$ * $0,4_{Aref}$	=	0,52	kN/m^1
Ftotal	=	0,5 + 0,52	=	1,02	kN/m^1





2.7 Horizontal load_+/-Y direction

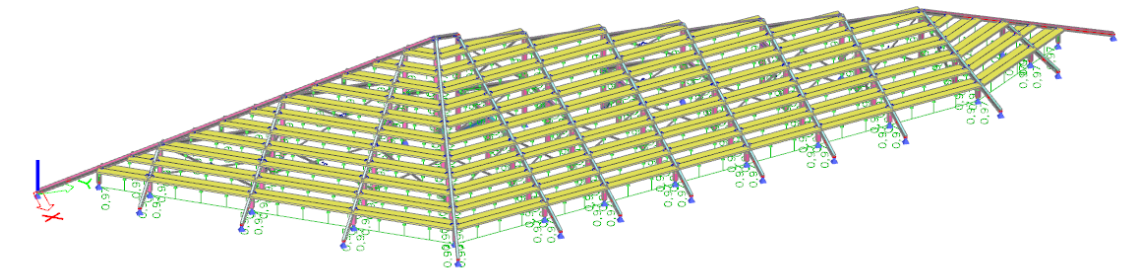


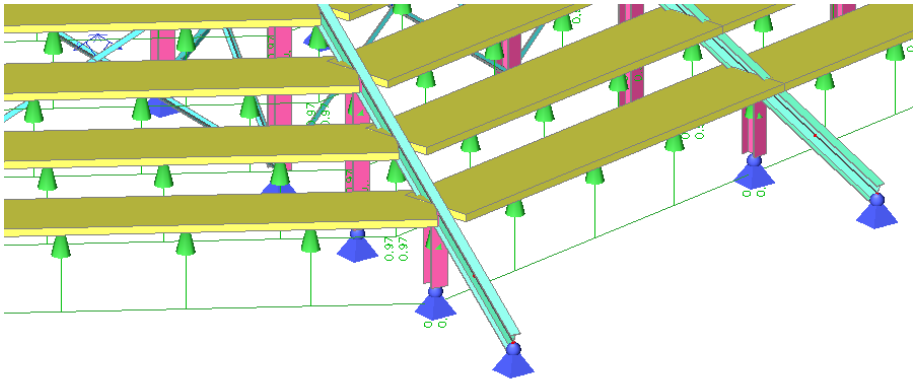


2.8 Uplift wind force

Due to the existence of openings on the grandstand, uplift wind forces could be developed. This situation is considered into the calculation as follow.
Note for the calculation of the c_{net} factor, the seats are considered to be similar to an opened canopy structure with 0º of slope.

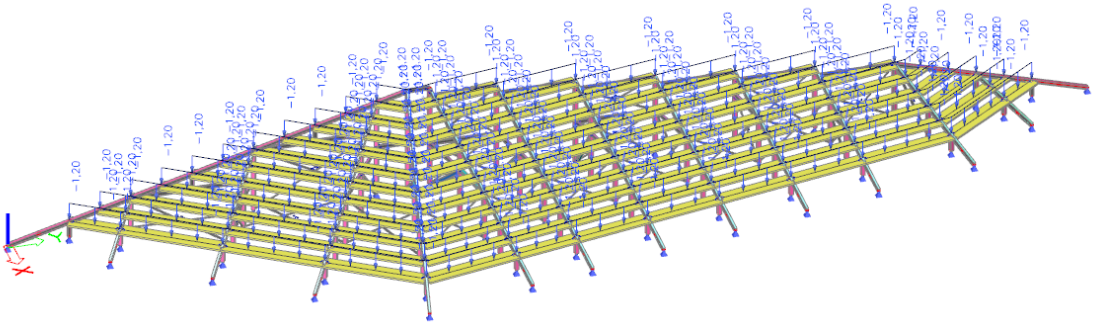
Fw = cscd x c_{pnet} x qp x Aref = 1 x 1.8 x 0.54kN/m² x 1m = 0.972 kN/m¹

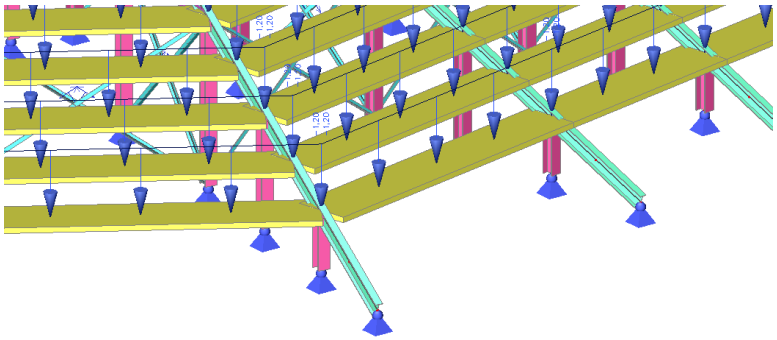




2.9 Snow

1.2 kN/m² due to snow pressure has been considered in the calculation.





3 Steel section design

The following parameters have been considered in the design of the structure:

- Steel S355.
- Pinned structure.
- Only tension capacity bracing system.
- Pinned column bases.

3.1 Steel stress check

The analysis of the steel sections is performed in accordance with the design requirements of EN 1993-1- 1 and NEN EN 1993-1-1.

For Ultimate Limit State design, the platform is verified to satisfy:

- Resistance of cross-section.

- Buckling resistance of members.

The capacity ratio for the platform is summarised below, note that only the most stressed element is included.

Name	dx [m]	Case	Cross-section	Material	UCOverall [-]	UCSec [-]	UCStab [-]
B61	1,801+	NC_ULS_SETTLEMENT	IPE220	S 355	0,8	0,8	0
B103	1,801+	NC_ULS_SETTLEMENT	IPE220	S 355	0,78	0,78	0
B192	0	NC_ULS_SETTLEMENT	L80x8	S 355	0,78	0,78	0
B506	0	NC_ULS_SETTLEMENT	L60x60	S 355	0,54	0,54	0
B104	3,602+	NC_ULS_SETTLEMENT	IPE220	S 355	0,53	0,53	0
B151	0	NC_ULS-LC14	HEA 180	S 355	0,52	0,12	0,52
B106	2,701+	NC_ULS_SETTLEMENT	IPE220	S 355	0,51	0,16	0,51
B105	3,602+	NC_ULS_SETTLEMENT	IPE220	S 355	0,5	0,5	0
B108	2,701+	NC_ULS_SETTLEMENT	IPE220	S 355	0,5	0,16	0,5
B531	0	NC_ULS-LC14	HEA 180	S 355	0,49	0,12	0,49
B178	0	NC_ULS_SETTLEMENT	IPE 180	S 355	0,49	0,16	0,49
B62	0	NC_ULS_SETTLEMENT	IPE220	S 355	0,48	0,14	0,48
B385	0	NC_ULS-LC16	HEA 180	S 355	0,46	0,1	0,46
B181	0	NC_ULS_SETTLEMENT	IPE 180	S 355	0,46	0,15	0,46
B182	0	NC_ULS_SETTLEMENT	IPE 180	S 355	0,44	0,14	0,44
B532	0	NC_ULS-LC14	HEA 180	S 355	0,44	0,11	0,44
B323	0	NC_ULS_SETTLEMENT	HEA 180	S 355	0,43	0,43	0
B334	0	NC_ULS_SETTLEMENT	HEA 180	S 355	0,43	0,43	0

The most loaded element is found in the element **B61**. Its capacity ration is **0.80**. The full check of the element is developed below:

EC-EN 1993 Steel check ULS

Nonlinear calculation
Class: ALL ULS-NL
Coordinate system: Principal
Extreme 1D: Member
Selection: All

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B61	**1,801 / 7,203 m**	**IPE220**	**S 355**	**ALL ULS-NL**	**0,80 -**

Combination key
ALL ULS-NL / NC_ULS_SETTLEMENT

Partial safety factors	
γ_{M0} for resistance of cross-sections	1,00
γ_{M1} for resistance to instability	1,00
γ_{M2} for resistance of net sections	1,25

Material			
Yield strength	f_y	355,0	MPa
Ultimate strength	f_u	490,0	MPa
Fabrication		Rolled	

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

The critical check is on position 1,801 m

Internal forces		Calculated	Unit
Normal force	N_{Ed}	137,74	kN
Shear force	$V_{y,Ed}$	0,77	kN
Shear force	$V_{z,Ed}$	-92,41	kN
Torsion	T_{Ed}	0,00	kNm
Bending moment	$M_{y,Ed}$	80,84	kNm
Bending moment	$M_{z,Ed}$	-0,27	kNm

Classification for cross-section design
Classification according to EN 1993-1-1 article 5.5.2
Classification of Internal and Outstand parts according to EN 1993-1-1 Table 5.2 Sheet 1 & 2

Id	Type	c [mm]	t [mm]	σ_1 [kN/m²]	σ_2 [kN/m²]	Ψ [-]	k_σ [-]	α [-]	c/t [-]	Class
1	SO	40	9	-3,466e+05	-3,412e+05					
3	SO	40	9	-3,506e+05	-3,559e+05					
4	I	178	6	-3,002e+05	2,177e+05	-1,38		0,31	30,10	1
5	SO	40	9	2,641e+05	2,587e+05	0,98	0,44	1,00	4,35	1
7	SO	40	9	2,681e+05	2,734e+05	0,98	0,43	1,00	4,35	1

Note: The Classification limits have been set according to Semi-Comp+.
The cross-section is classified as Class 1

Tension check
According to EN 1993-1-1 article 6.2.3 and formula (6.5)

Cross-section area	A	3,3400e-03	m^2
Plastic tension resistance	$N_{pl,Rd}$	1185,70	kN
Ultimate tension resistance	$N_{u,Rd}$	1178,35	kN
Tension resistance	$N_{t,Rd}$	1178,35	kN
Unity check		0,12	-

Bending moment check for M_y
According to EN 1993-1-1 article 6.2.5 and formula (6.12),(6.13)

Plastic section modulus	$W_{pl,y}$	2,8500e-04	m^3
Plastic bending moment	$M_{pl,y,Rd}$	101,17	kNm
Unity check		0,80	-

Bending moment check for M_z
According to EN 1993-1-1 article 6.2.5 and formula (6.12),(6.13)

Plastic section modulus	$W_{pl,z}$	5,8100e-05	m^3
Plastic bending moment	$M_{pl,z,Rd}$	20,63	kNm
Unity check		0,01	-

Shear check for V_y
According to EN 1993-1-1 article 6.2.6 and formula (6.17)

Shear correction factor	η	1,20	
Shear area	A_v	2,1296e-03	m^2
Plastic shear resistance for V_y	$V_{pl,y,Rd}$	436,48	kN
Unity check		0,00	-

Shear check for V_z
According to EN 1993-1-1 article 6.2.6 and formula (6.17)

Shear correction factor	η	1,20	
Shear area	A_v	1,5911e-03	m^2
Plastic shear resistance for V_z	$V_{pl,z,Rd}$	326,11	kN
Unity check		0,28	-

Torsion check
According to EN 1993-1-1 article 6.2.7 and formula (6.23)

Index of fibre	Fibre	2	
Total torsional moment	τ_{Ed}	0,2	MPa
Elastic shear resistance	τ_{Rd}	205,0	MPa
Unity check		0,00	-

Note: The unity check for torsion is lower than the limit value of 0,05. Therefore torsion is considered as insignificant and is ignored in the combined checks.

Combined bending, axial force and shear force check
According to EN 1993-1-1 article 6.2.9.1 and formula (6.41)

Plastic bending moment	$M_{pl,y,Rd}$	101,17	kNm
Exponent of bending ratio y	α	2,00	
Plastic bending moment	$M_{pl,z,Rd}$	20,63	kNm
Exponent of bending ratio z	β	1,00	

Unity check (6.41) = 0,64 + 0,01 = 0,65 -

Note: Since the shear forces are less than half the plastic shear resistances their effect on the moment resistances is neglected.
Note: Since the axial force satisfies both criteria (6.33) and (6.34) of EN 1993-1-1 article 6.2.9.1(4) its effect on the moment resistance about the y-y axis is neglected.
Note: Since the axial force satisfies criteria (6.35) of EN 1993-1-1 article 6.2.9.1(4) its effect on the moment resistance about the z-z axis is neglected.

The member satisfies the section check.

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

Classification for member buckling design
Decisive position for stability classification: 7,203 m
Classification according to EN 1993-1-1 article 5.5.2
Classification of Internal and Outstand parts according to EN 1993-1-1 Table 5.2 Sheet 1 & 2

Id	Type	c [mm]	t [mm]	σ_1 [kN/m²]	σ_2 [kN/m²]	Ψ [-]	k_σ [-]	α [-]	c/t [-]	Class
1	SO	40	9	1,429e-03	2,407e-03	0,59	0,47	1,00	4,35	1
3	SO	40	9	6,997e-04	-2,777e-04	-0,40	6,38	1,00	4,35	1
4	I	178	6	8,968e-04	-8,968e-04	-1,00		1,00	30,10	3
5	SO	40	9	-1,429e-03	-2,407e-03					
7	SO	40	9	-6,997e-04	2,777e-04	-2,52	1,54	1,00	4,35	1

Note: The Classification limits have been set according to Semi-Comp+.
The cross-section is classified as Class 3

Semi-Comp+ properties			
Material coefficient	ε	0,81	
Flange class 2 slenderness limit	$\beta_{2,y,f}$	8,14	
Flange class 3 slenderness limit	$\beta_{3,y,f}$	11,39	
Web class 2 slenderness limit	$\beta_{2,y,w}$	67,53	
Web class 3 slenderness limit	$\beta_{3,y,w}$	100,89	
Flange class 2 slenderness limit	$\beta_{2,z,f}$	8,14	
Flange class 3 slenderness limit	$\beta_{3,z,f}$	13,02	
Web slenderness ratio	c/t_w	30,10	
Flange slenderness ratio	c/t_f	4,35	
Reference slenderness ratio	$c/t_{ref,y}$	0,00	
Reference slenderness ratio	$c/t_{ref,z}$	0,00	
Interpolated section modulus	$W_{3,y}$	2,8500e-04	m^3
Interpolated section modulus	$W_{3,z}$	5,8100e-05	m^3

Note: The resistance for this semi-compact section has been calculated according to Semi-Comp+.

Lateral Torsional Buckling check

According to EN 1993-1-1 article 6.3.2.1 & 6.3.2.3 and formula (6.54)

LTB parameters			
Method for LTB curve		Alternative case	
Interpolated section modulus	$W_{3,y}$	2,8500e-04	m^3
Elastic critical moment	M_{cr}	1053,98	kNm
Relative slenderness	$\lambda_{rel,LT}$	0,31	
Limit slenderness	$\lambda_{rel,LT,0}$	0,40	

Note: 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).

Mcr parameters			
LTB length	l_{LT}	0,900	m
Influence of load position		no influence	
Correction factor	k	1,00	
Correction factor	k_w	1,00	
LTB moment factor	C_1	1,80	
LTB moment factor	C_2	0,00	
LTB moment factor	C_3	1,00	
Shear centre distance	d_z	0	mm
Distance of load application	z_g	0	mm
Mono-symmetry constant	β_y	0	mm
Mono-symmetry constant	z_j	0	mm

Warning: Not all conditions of the Dutch NEN-EN NA (Art. NB.NB.1) are fulfilled, therefore the standard EC-EN approach is used.
Note: C parameters are determined according to ECCS 119 2006 / Galea 2002.

Shear Buckling check
According to EN 1993-1-5 article 5 & 7.1 and formula (5.10) & (7.1)

Shear Buckling parameters			
Buckling field length	a	7,203	m
Web		unstiffened	
Web height	h_w	202	mm
Web thickness	t	6	mm
Material coefficient	ε	0,81	
Shear correction factor	η	1,20	

Shear Buckling verification		
Web slenderness	h_w/t	34,17
Web slenderness limit		48,82

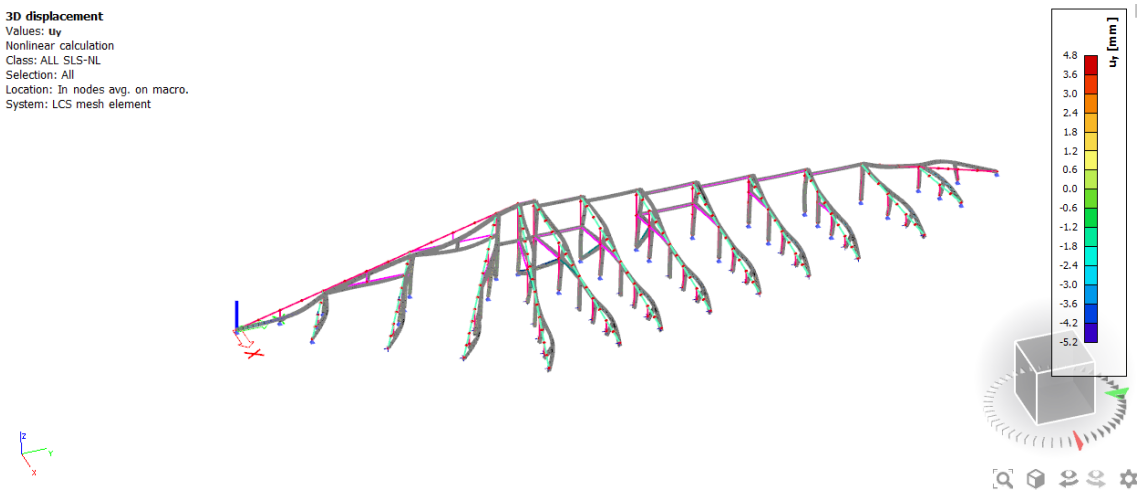
Note: The web slenderness is such that Shear Buckling effects may be ignored according to EN 1993-1-5 article 5.1(2).

The member satisfies the stability check.

3.2 Deflection and lateral drift check

Deflection caused by the total dead load shall not exceed span/300. Under live load shall not exceed span/500.

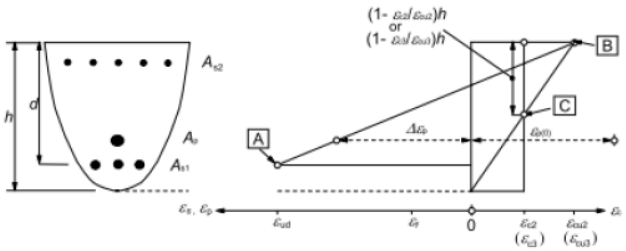
Lateral drift is limited to h/200 or 5mm in cases were the column has a height ≤ 1m.



4 Concrete section design

In accordance with the design requirements of NEN EN 1992-1-1, for Ultimate Limit State design, the concrete elements are verified to satisfy the following:

- The ultimate strain (elastic plus plastic) of the reinforcing steel does not exceed 10‰
- The concrete does not exceed the compressive strain, which is equal to 2.2‰ (εc2) for the concrete C55/67 in accordance with Table 3.1 of EN 1992-1-1. Note, for the design of cross-sections, the Parabola-Rectangle diagram for concrete under compression has been used.



The following parameters have been considered in the design of the structure:

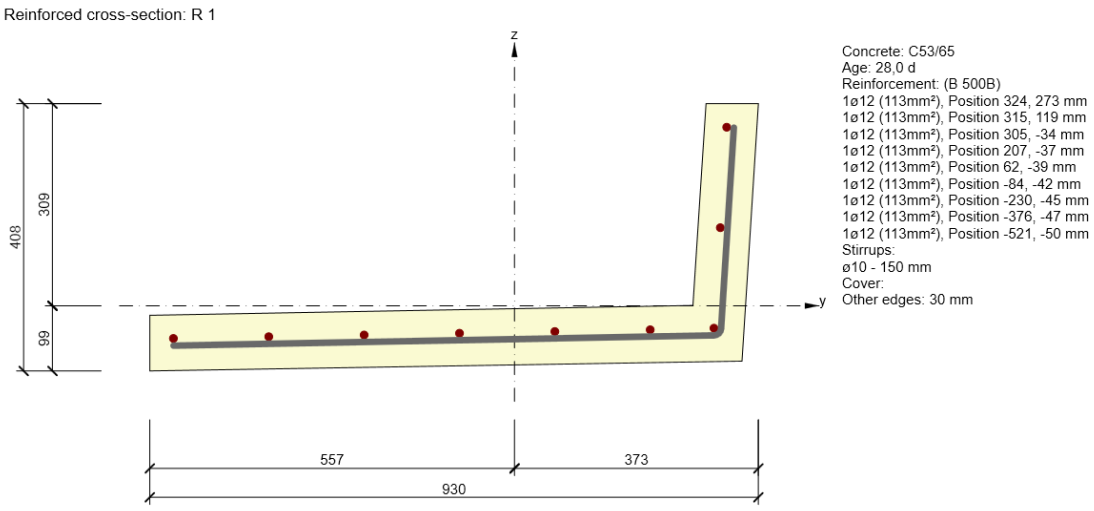
- Concrete c53/65.
- Simply supported structure.
- Cover 30mm.
- Reinforcement B500.
- Maximum crack width = 0.3mm

4.1 "L-shape" elements

By inspection the maximum vertical load is produced under load combination ULS-LC7:

ULS-LC7		Linear - ultimate	G1 - Eigen gewicht	0,9
			G2 - Dead	0,9
			Q1 - Live	1,50

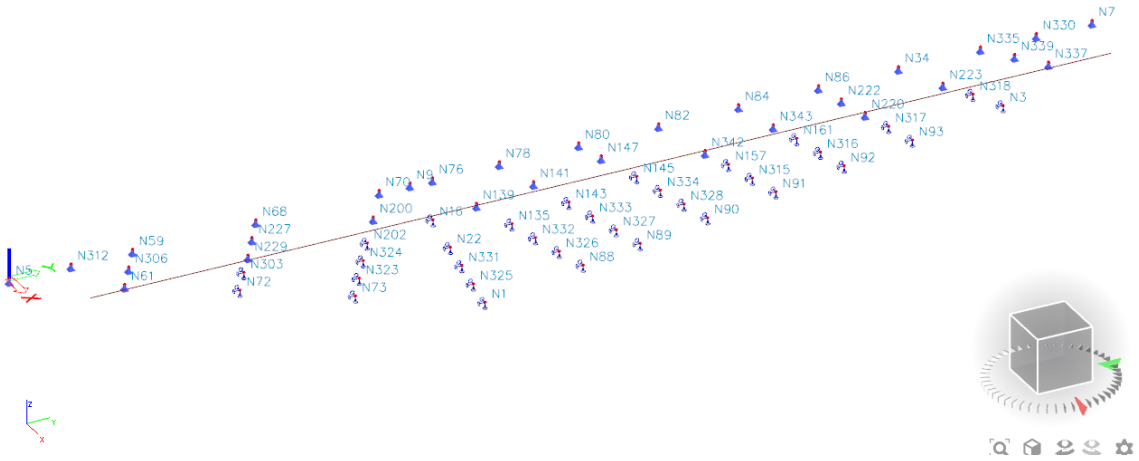
M_{ed} = (2.23kN/m*0.9+5.0kN/m*1.5)*(5.7m)^2 /8 ≈ 38.6 kNm
M_k = (2.23kN/m+5.0kN/m)*(5.7m)^2 /8 ≈ 29.4 kNm



For calculation see Annex A.2

5 Reactions foundation

In below image the numbers of the supports are given. For complete output see page of annex A-108 and A-113 for output ULS and per load case.



6 Bill of materials

The steel weight of the main structure, considering an increment of 30% due to connections, it is of:

- 10838,2kg*1,30 = 14089,7 kg approx.

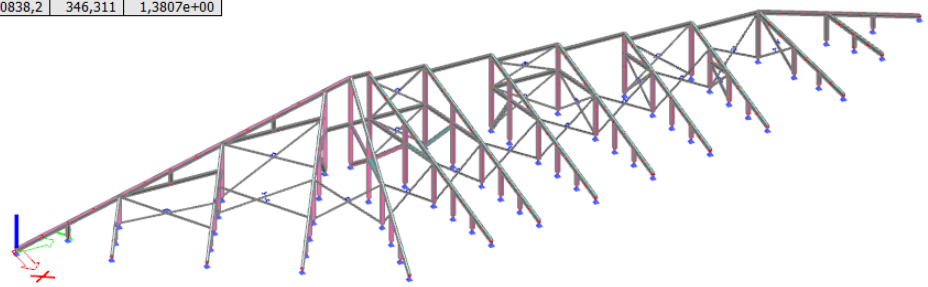
Since the structure covers an area of around 343 m^2:

- Ratio steel/area = 14089,7 kg/ 343m^2 = **41kg/m^2 approx.**

6.1 Complete steel structure

Bill of material
Selection: All
Filter: Material = S 355

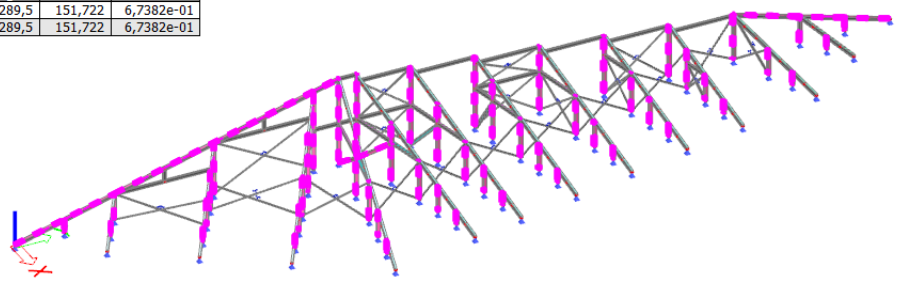
Material	Mass [kg]	Surface [m^2]	Volume [m^3]
Steel	10838,2	346,311	1,3807e+00
Total	10838,2	346,311	1,3807e+00



6.2 HEA 180 section

Bill of material
Selection: All
Filter: Cross-section = HEA 180 - HEA180

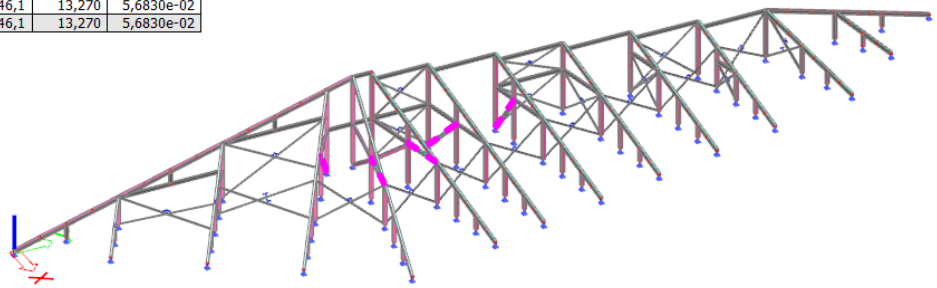
Material	Mass [kg]	Surface [m^2]	Volume [m^3]
Steel	5289,5	151,722	6,7382e-01
Total	5289,5	151,722	6,7382e-01



6.3 HEA 160 section

Bill of material
Selection: All
Filter: Cross-section = HEA 160 - HEA160

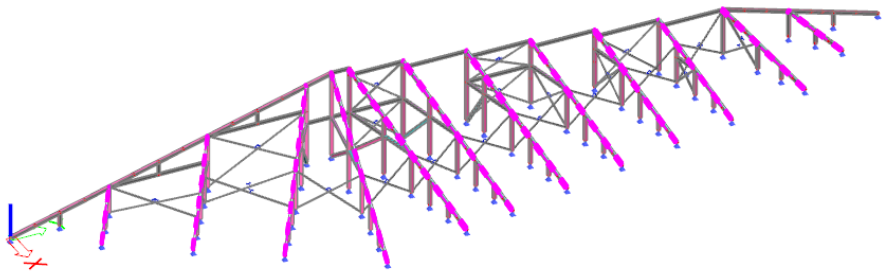
Material	Mass [kg]	Surface [m^2]	Volume [m^3]
Steel	446,1	13,270	5,6830e-02
Total	446,1	13,270	5,6830e-02



6.4 IPE 220 section

Bill of material
Selection: All
Filter: Cross-section = IPE220 - IPE220

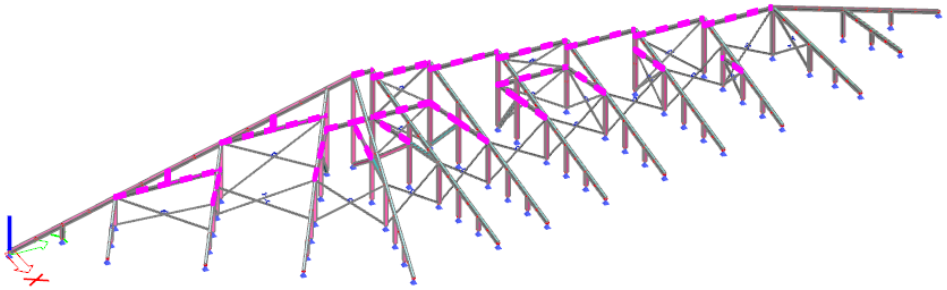
Material	Mass [kg]	Surface [m²]	Volume [m³]
Steel	2626,3	84,891	3,3456e-01
Total	2626,3	84,891	3,3456e-01



6.5 IPE 180 section

Bill of material
Selection: All
Filter: Cross-section = IPE 180 - IPE180

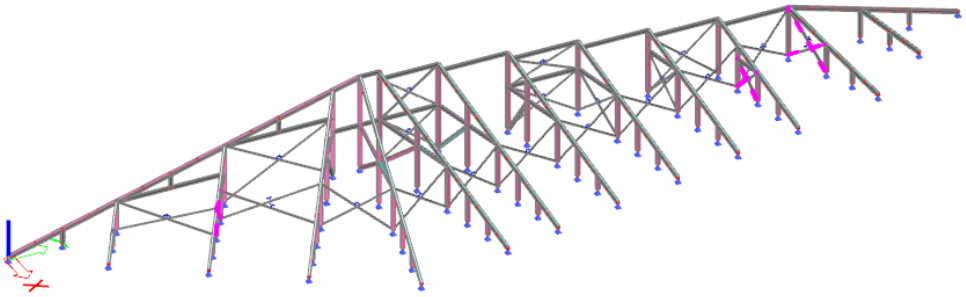
Material	Mass [kg]	Surface [m²]	Volume [m³]
Steel	1443,9	53,711	1,8394e-01
Total	1443,9	53,711	1,8394e-01



6.6 Bracing system, L-80x80 sections

Bill of material
Selection: All
Filter: Cross-section = L80x8 - L80X8

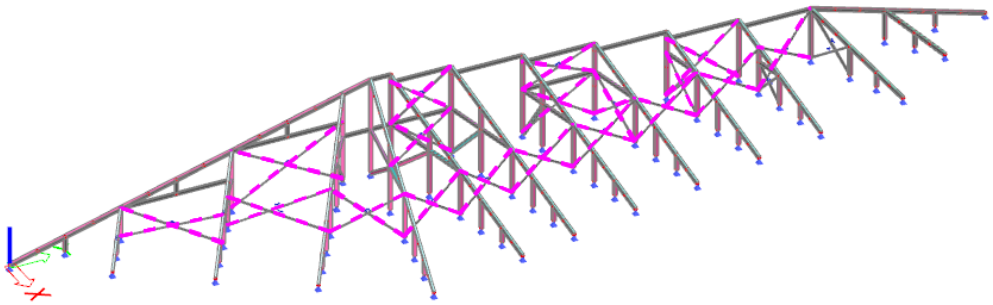
Material	Mass [kg]	Surface [m²]	Volume [m³]
Steel	151,5	4,879	1,9298e-02
Total	151,5	4,879	1,9298e-02



6.7 Bracing system, L-60x60 sections

Bill of material
Selection: All
Filter: Cross-section = L60x60 - L60X6

Material	Mass [kg]	Surface [m²]	Volume [m³]
Steel	880,9	37,837	1,1221e-01
Total	880,9	37,837	1,1221e-01



Bijlage A : Computeruitvoer

A.1. Geometrical inputs and results_Long-term analysis

1. Table of contents

2. General

2.1. Materials

Steel EC3

Name	ρ [kg/m³]	E_{mod} [MPa]	μ	Lower limit [mm]	Upper limit [mm]	F_y [MPa]	F_u [MPa]	Colour
		G_{mod} [MPa]	α [m/mK]					
S 355	7850,0	2,1000e+05	0.3	0	40	355,0	490,0	
		8,0769e+04	0,00	40	80	335,0	470,0	
dummy	0,0	2,1000e+05	0.3	0	100	140,0	270,0	
		8,0769e+04	0,00					

Name	Type	ρ [kg/m³]	Density in fresh state [kg/m³]	E_{mod} [MPa]	μ	α [m/mK]	$f_{c.k.28}$ [MPa]	Colour
C25/30	Concrete	2500,0	2600,0	3,1500e+04	0.2	0,00	25,00	

Explanations of symbols	
Density in fresh state	The value in the density in fresh state property is used only in case a composite deck is input and its self-weight load is taken into account.

2.2. Result classes

Name	List
All ULS	ULS-LC - EN-ULS (STR/GEO) Set B
	ULS-LC1 - Linear - ultimate
	ULS-LC2 - Linear - ultimate
	ULS-LC3 - Linear - ultimate
	ULS-LC4 - Linear - ultimate
	ULS-LC5 - Linear - ultimate
	ULS-LC6 - Linear - ultimate
	ULS-LC7 - Linear - ultimate
	ULS-LC8 - Linear - ultimate
	ULS-LC9 - Linear - ultimate
	ULS-LC10 - Linear - ultimate
	ULS-LC11 - Linear - ultimate
	ULS-LC12 - Linear - ultimate
	ULS-LC13 - Linear - ultimate
	ULS-LC14 - Linear - ultimate
	ULS-LC15 - Linear - ultimate
	ULS-LC16 - Linear - ultimate
	ULS-LC17 - Linear - ultimate
	ULS-LC18 - Linear - ultimate
	ULS-LC19 - Linear - ultimate
	ULS-LC20 - Linear - ultimate
	ULS-LC21 - Linear - ultimate
	ULS-LC22 - Linear - ultimate
	ULS-LC23 - Linear - ultimate
	ULS-LC24 - Linear - ultimate
	ULS-LC25 - Linear - ultimate
	ULS-LC26 - Linear - ultimate
	ULS-LC27 - Linear - ultimate
	ULS-LC28 - Linear - ultimate
	ULS-LC29 - Linear - ultimate
	ULS-LC30 - Linear - ultimate
	ULS-LC31 - Linear - ultimate
	ULS-LC32 - Linear - ultimate
All SLS	SLS_LC - EN-SLS Characteristic
	SLS_LC1 - Linear - serviceability
	SLS_LC2 - Linear - serviceability
	SLS_LC3 - Linear - serviceability
	SLS_LC4 - Linear - serviceability
	SLS_LC5 - Linear - serviceability
	SLS_LC6 - Linear - serviceability
	SLS_LC7 - Linear - serviceability

Name	List
	SLS_LC8 - Linear - serviceability
	SLS_LC9 - Linear - serviceability
	SLS_LC10 - Linear - serviceability
	SLS_LC11 - Linear - serviceability
	SLS_LC12 - Linear - serviceability
	SLS_LC13 - Linear - serviceability
	SLS_LC14 - Linear - serviceability
	SLS_LC15 - Linear - serviceability
	SLS-Quasi (auto) - EN-SLS Quasi-permanent
GEO	G1
	G2
	Q1
	Q2
	Q3
	Q4
	Q5
	Q6
	Q7
	Q8
ALL ULS-NL	NC_ULS-LC1
	NC_ULS-LC2
	NC_ULS-LC3
	NC_ULS-LC4
	NC_ULS-LC5
	NC_ULS-LC6
	NC_ULS-LC7
	NC_ULS-LC8
	NC_ULS-LC9
	NC_ULS-LC10
	NC_ULS-LC11
	NC_ULS-LC12
	NC_ULS-LC13
	NC_ULS-LC14
	NC_ULS-LC15
	NC_ULS-LC16
	NC_ULS-LC17
	NC_ULS-LC18
	NC_ULS-LC19
	NC_ULS-LC20
	NC_ULS-LC21
	NC_ULS-LC22
	NC_ULS-LC23
	NC_ULS-LC24
	NC_ULS-LC25
	NC_ULS-LC26
	NC_ULS-LC27
	NC_ULS-LC28
	NC_ULS-LC29
	NC_ULS-LC30
	NC_ULS-LC31
	NC_ULS-LC32
	NC_ULS_SETTLEMENT
ALL SLS-NL	NC_ULS_SETTLEMENT
	NC_SLS_LC1
	NC_SLS_LC2
	NC_SLS_LC3
	NC_SLS_LC4
	NC_SLS_LC5
	NC_SLS_LC6
	NC_SLS_LC7
	NC_SLS_LC8
	NC_SLS_LC9
	NC_SLS_LC10
	NC_SLS_LC11
	NC_SLS_LC12
	NC_SLS_LC13
	NC_SLS_LC14

Name	List
	NC_SLS_LC15
GEO	ULS-LC - EN-ULS (STR/GEO) Set B

2.3. Nodes

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1	11,162	17,195	0,000
N2	0,000	19,261	5,200
N3	5,219	45,125	0,000
N5	0,000	0,000	0,000
N7	0,000	52,048	0,000
N9	0,000	19,261	0,000
N11	0,859	19,102	4,800
N13	1,717	18,943	4,400
N15	2,576	18,784	4,000
N16	3,434	18,625	0,000
N17	3,434	18,625	3,600
N19	4,293	18,466	3,200
N21	5,152	18,307	2,800
N22	6,010	18,149	0,000
N23	6,010	18,149	2,400
N25	6,869	17,990	2,000
N27	7,728	17,831	1,600
N29	8,586	17,672	1,200
N31	9,445	17,513	0,800
N33	10,303	17,354	0,400
N34	0,000	42,745	0,000
N47	0,000	1,482	0,400
N48	0,000	2,963	0,800
N49	0,000	4,445	1,200
N50	0,000	5,926	1,600
N51	0,000	7,408	2,000
N52	0,000	8,890	2,400
N53	0,000	10,371	2,800
N54	0,000	11,853	3,200
N55	0,000	13,335	3,600
N56	0,000	14,816	4,000
N57	0,000	16,298	4,400
N58	0,000	17,779	4,800
N59	0,000	5,926	0,000
N61	2,707	4,169	0,000
N68	0,000	11,853	0,000
N70	0,000	17,779	0,000
N72	5,413	8,339	0,000
N73	8,120	12,508	0,000
N76	0,000	20,341	0,000
N77	0,000	20,341	5,200
N78	0,000	23,554	0,000
N80	0,000	27,370	0,000
N82	0,000	31,214	0,000
N84	0,000	35,058	0,000
N86	0,000	38,902	0,000
N88	10,038	22,477	0,000
N89	9,384	25,551	0,000
N90	8,607	29,201	0,000
N91	7,825	32,879	0,000
N92	7,042	36,556	0,000
N93	6,260	40,234	0,000
N96	4,467	44,782	0,400
N97	0,000	42,745	2,777
N110	0,000	20,341	5,089
N111	0,000	23,554	4,757
N112	0,000	27,370	4,363
N113	0,000	31,214	3,967
N114	0,000	35,058	3,570
N115	0,000	38,902	3,173
N116	3,715	44,439	0,800
N117	2,963	44,096	1,200
N118	2,212	43,754	1,600
N120	0,708	43,068	2,400
N121	0,736	39,059	2,800
N122	0,730	35,213	3,200
N123	0,723	31,368	3,600
N124	0,717	27,522	4,000
N125	0,704	23,704	4,400
N126	0,569	20,462	4,800
N135	5,304	21,470	0,000
N136	5,304	21,470	2,400
N139	2,936	20,966	0,000
N140	2,936	20,966	3,600
N141	2,282	24,040	0,000
N142	2,282	24,040	3,600
N143	4,650	24,543	0,000
N144	4,650	24,543	2,400
N145	3,873	28,194	0,000
N146	3,873	28,194	2,400
N147	1,506	27,690	0,000
N148	1,506	27,690	3,600
N157	4,668	32,207	0,000
N158	4,668	32,207	1,600
N161	3,886	35,885	0,000
N162	3,886	35,885	1,600
N164	1,519	35,381	2,800
N166	2,301	31,704	2,800
N172	1,460	43,411	2,000
N187	0,000	44,007	2,400
N188	0,000	45,347	2,000
N189	0,000	46,687	1,600
N190	0,000	48,027	1,200
N191	0,000	49,368	0,800
N192	0,000	50,708	0,400
N193	0,000	35,058	3,173
N194	0,000	38,902	2,777
N195	0,000	31,214	3,570
N196	0,000	27,370	3,967
N197	0,000	23,554	4,363
N198	0,000	20,341	4,757
N199	2,030	16,462	3,600
N200	2,030	16,462	0,000
N201	4,060	15,144	2,400
N202	4,060	15,144	0,000
N205	2,030	16,462	2,400
N206	3,434	18,625	2,400
N207	2,936	20,966	2,400
N208	2,282	24,040	2,400
N209	1,506	27,690	2,400
N213	7,671	21,973	1,200
N215	7,017	25,047	1,200
N217	6,240	28,698	1,200
N219	3,103	39,562	1,600
N220	3,103	39,562	0,000
N221	1,525	39,227	2,400
N222	1,525	39,227	0,000
N223	2,212	43,754	0,000
N226	1,353	10,974	2,400
N227	1,353	10,974	0,000
N228	2,707	10,096	1,600
N229	2,707	10,096	0,000
N230	1,525	39,227	1,600
N231	1,353	10,974	1,600
N232	6,090	13,826	1,200
N234	2,030	4,609	0,400
N235	4,737	8,778	0,400
N236	7,443	12,948	0,400
N237	1,353	5,048	0,800
N238	4,060	9,217	0,800
N239	6,766	13,387	0,800
N240	0,677	5,487	1,200
N241	5,413	14,265	1,600
N242	2,030	10,535	2,000
N243	0,677	11,414	2,800
N244	2,707	16,022	3,200
N245	0,677	17,340	4,400
N246	3,383	9,657	1,200
N247	4,737	14,705	2,000
N248	3,383	15,583	2,800
N249	1,353	16,901	4,000
N250	9,249	22,309	0,400
N251	8,460	22,141	0,800
N252	6,882	21,805	1,600
N253	6,093	21,637	2,000
N254	4,515	21,302	2,800
N255	3,726	21,134	3,200
N256	2,147	20,798	4,000
N257	1,358	20,630	4,400
N258	8,595	25,383	0,400
N259	7,818	29,034	0,400
N260	7,036	32,711	0,400
N261	6,253	36,389	0,400
N262	5,471	40,066	0,400
N263	7,806	25,215	0,800
N264	7,029	28,866	0,800
N265	6,247	32,543	0,800
N266	5,464	36,221	0,800
N267	4,682	39,898	0,800
N268	5,458	32,375	1,200
N269	4,675	36,053	1,200
N270	3,893	39,730	1,200
N271	6,228	24,879	1,600
N272	5,451	28,530	1,600
N273	5,439	24,711	2,000
N274	4,662	28,362	2,000
N275	3,879	32,039	2,000
N276	3,097	35,717	2,000
N277	2,314	39,394	2,000
N278	3,090	31,872	2,400
N279	2,308	35,549	2,400
N280	3,861	24,375	2,800
N281	3,084	28,026	2,800
N282	3,071	24,208	3,200
N283	2,295	27,858	3,200
N284	1,512	31,536	3,200
N285	1,493	23,872	4,000
N292	0,000	23,554	2,400
N293	0,000	20,341	2,400
N294	0,000	27,370	2,400

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N295	0,000	31,214	2,400
N296	0,000	19,261	2,400
N297	0,000	17,779	2,400
N303	4,060	9,217	0,000
N306	1,353	5,048	0,000
N312	0,000	2,963	0,000
N313	0,000	48,698	1,000
N315	6,247	32,543	0,000
N316	5,464	36,221	0,000
N317	4,682	39,898	0,000
N318	3,715	44,439	0,000
N319	0,000	11,853	1,600
N320	0,000	35,058	1,600

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N321	0,000	31,214	1,600
N322	0,000	17,779	3,200
N323	6,766	13,387	0,000
N324	5,413	14,265	0,000
N325	9,445	17,513	0,000
N326	8,460	22,141	0,000
N327	7,806	25,215	0,000
N328	7,029	28,866	0,000
N330	0,000	49,368	0,000
N331	7,728	17,831	0,000
N332	6,882	21,805	0,000
N333	6,228	24,879	0,000
N334	5,451	28,530	0,000

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N335	0,000	46,687	0,000
N337	2,555	48,658	0,000
N338	1,278	47,673	0,800
N339	1,278	47,673	0,000
N340	1,916	48,166	0,400
N341	0,639	47,180	1,200
N342	3,090	31,872	0,000
N343	2,308	35,549	0,000
N345	0,000	8,890	1,600
N346	0,000	14,816	3,200
N347	0,000	35,058	2,400

2.4. Members

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1	IPE220 - IPE220	S 355	12,486	N1	N2	general (0)
B14	HEA 180 - HEA180	S 355	5,200	N9	N2	general (0)
B18	HEA 180 - HEA180	S 355	3,600	N16	N17	general (0)
B21	HEA 180 - HEA180	S 355	2,400	N22	N23	general (0)
B28	HEA 180 - HEA180	S 355	2,777	N97	N34	general (0)
B36	Dummy - Rectangle (80; 800)	dummy	2,485	N48	N237	general (0)
B37	Dummy - Rectangle (80; 800)	dummy	1,243	N49	N240	general (0)
B38	Dummy - Rectangle (80; 800)	dummy	4,251	N241	N27	general (0)
B39	Dummy - Rectangle (80; 800)	dummy	3,728	N51	N242	general (0)
B40	Dummy - Rectangle (80; 800)	dummy	3,582	N201	N23	general (0)
B41	Dummy - Rectangle (80; 800)	dummy	1,243	N53	N243	general (0)
B42	Dummy - Rectangle (80; 800)	dummy	4,971	N54	N244	general (0)
B43	Dummy - Rectangle (80; 800)	dummy	2,580	N199	N17	general (0)
B44	Dummy - Rectangle (80; 800)	dummy	2,485	N56	N249	general (0)
B45	Dummy - Rectangle (80; 800)	dummy	1,911	N245	N13	general (0)
B46	Dummy - Rectangle (80; 800)	dummy	1,577	N58	N11	general (0)
B47	HEA 180 - HEA180	S 355	1,600	N59	N50	general (0)
B56	HEA 180 - HEA180	S 355	3,200	N68	N54	general (0)
B57	HEA 180 - HEA180	S 355	4,800	N70	N58	general (0)
B60	IPE220 - IPE220	S 355	3,602	N61	N50	general (0)
B61	IPE220 - IPE220	S 355	7,203	N72	N54	general (0)
B62	IPE220 - IPE220	S 355	10,805	N73	N58	general (0)
B74	HEA 180 - HEA180	S 355	5,200	N76	N77	general (0)
B75	HEA 180 - HEA180	S 355	4,757	N78	N111	general (0)
B76	HEA 180 - HEA180	S 355	4,363	N80	N112	general (0)
B77	HEA 180 - HEA180	S 355	3,967	N82	N113	general (0)
B78	HEA 180 - HEA180	S 355	3,570	N84	N114	general (0)
B79	HEA 180 - HEA180	S 355	3,173	N86	N115	general (0)
B96	IPE220 - IPE220	S 355	6,373	N3	N97	general (0)
B103	IPE220 - IPE220	S 355	7,143	N93	N115	general (0)
B104	IPE220 - IPE220	S 355	8,036	N92	N114	general (0)
B105	IPE220 - IPE220	S 355	8,929	N91	N113	general (0)
B106	IPE220 - IPE220	S 355	9,822	N90	N112	general (0)
B107	IPE220 - IPE220	S 355	11,455	N88	N110	general (0)
B108	IPE220 - IPE220	S 355	10,709	N89	N111	general (0)
B109	Dummy - Rectangle (80; 800)	dummy	4,732	N31	N251	general (0)
B110	Dummy - Rectangle (80; 800)	dummy	4,398	N29	N213	general (0)
B111	Dummy - Rectangle (80; 800)	dummy	4,064	N27	N252	general (0)
B112	Dummy - Rectangle (80; 800)	dummy	3,729	N25	N253	general (0)
B113	Dummy - Rectangle (80; 800)	dummy	3,395	N23	N136	general (0)
B114	Dummy - Rectangle (80; 800)	dummy	3,061	N21	N254	general (0)
B115	Dummy - Rectangle (80; 800)	dummy	2,727	N19	N255	general (0)
B116	Dummy - Rectangle (80; 800)	dummy	2,393	N17	N140	general (0)
B117	Dummy - Rectangle (80; 800)	dummy	2,059	N15	N256	general (0)
B118	Dummy - Rectangle (80; 800)	dummy	3,143	N257	N125	general (0)
B119	Dummy - Rectangle (80; 800)	dummy	1,390	N11	N126	general (0)
B124	HEA 180 - HEA180	S 355	2,400	N135	N136	general (0)
B126	HEA 180 - HEA180	S 355	3,600	N139	N140	general (0)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B127	HEA 180 - HEA180	S 355	3,600	N141	N142	general (0)
B128	HEA 180 - HEA180	S 355	2,400	N143	N144	general (0)
B130	HEA 180 - HEA180	S 355	3,600	N147	N148	general (0)
B135	HEA 180 - HEA180	S 355	1,600	N157	N158	general (0)
B137	HEA 180 - HEA180	S 355	1,600	N161	N162	general (0)
B145	Dummy - Rectangle (80; 800)	dummy	3,733	N125	N112	general (0)
B146	Dummy - Rectangle (80; 800)	dummy	3,144	N126	N111	general (0)
B147	Dummy - Rectangle (80; 800)	dummy	3,761	N124	N113	general (0)
B148	Dummy - Rectangle (80; 800)	dummy	3,760	N123	N114	general (0)
B149	Dummy - Rectangle (80; 800)	dummy	3,760	N122	N115	general (0)
B151	HEA 180 - HEA180	S 355	4,114	N189	N97	general (0)
B158	Dummy - Rectangle (80; 800)	dummy	1,176	N120	N187	general (0)
B160	Dummy - Rectangle (80; 800)	dummy	3,674	N118	N189	general (0)
B161	Dummy - Rectangle (80; 800)	dummy	3,862	N117	N341	general (0)
B162	Dummy - Rectangle (80; 800)	dummy	4,049	N116	N338	general (0)
B166	IPE 180 - IPE180	S 355	1,080	N2	N77	general (0)
B167	IPE 180 - IPE180	S 355	3,844	N193	N115	general (0)
B168	IPE 180 - IPE180	S 355	3,843	N194	N97	general (0)
B169	IPE 180 - IPE180	S 355	3,844	N195	N114	general (0)
B170	IPE 180 - IPE180	S 355	3,844	N196	N113	general (0)
B171	IPE 180 - IPE180	S 355	3,816	N197	N112	general (0)
B172	IPE 180 - IPE180	S 355	3,213	N198	N111	general (0)
B173	Dummy - Rectangle (80; 800)	dummy	3,759	N121	N97	general (0)
B174	HEA 180 - HEA180	S 355	3,600	N199	N200	general (0)
B175	HEA 180 - HEA180	S 355	2,400	N201	N202	general (0)
B178	IPE 180 - IPE180	S 355	2,420	N201	N205	general (0)
B179	HEA 160 - HEA160	S 355	2,620	N23	N206	general (0)
B180	HEA 160 - HEA160	S 355	2,420	N136	N207	general (0)
B181	IPE 180 - IPE180	S 355	2,420	N144	N208	general (0)
B182	IPE 180 - IPE180	S 355	2,420	N146	N209	general (0)
B189	HEA 180 - HEA180	S 355	1,600	N219	N220	general (0)
B190	HEA 180 - HEA180	S 355	2,400	N221	N222	general (0)
B191	HEA 180 - HEA180	S 355	1,600	N118	N223	general (0)
B192	L80x8 - L80X8	S 355	2,910	N34	N118	general (0)
B194	HEA 180 - HEA180	S 355	2,400	N226	N227	general (0)
B195	HEA 180 - HEA180	S 355	1,600	N228	N229	general (0)
B196	IPE 180 - IPE180	S 355	1,613	N219	N230	general (0)
B197	IPE 180 - IPE180	S 355	1,613	N228	N231	general (0)
B202	Dummy - Rectangle (80; 800)	dummy	4,971	N237	N238	general (0)
B203	Dummy - Rectangle (80; 800)	dummy	4,971	N238	N239	general (0)
B204	Dummy - Rectangle (80; 800)	dummy	4,919	N239	N31	general (0)
B205	Dummy - Rectangle (80; 800)	dummy	4,971	N240	N246	general (0)
B206	Dummy - Rectangle (80; 800)	dummy	4,585	N232	N29	general (0)
B207	Dummy - Rectangle (80; 800)	dummy	4,971	N246	N232	general (0)
B208	Dummy - Rectangle (80; 800)	dummy	4,971	N50	N228	general (0)
B209	Dummy - Rectangle (80; 800)	dummy	4,971	N228	N241	general (0)
B210	Dummy - Rectangle (80; 800)	dummy	3,916	N247	N25	general (0)
B211	Dummy - Rectangle (80; 800)	dummy	4,971	N242	N247	general (0)
B212	Dummy - Rectangle (80; 800)	dummy	2,485	N52	N226	general (0)
B213	Dummy - Rectangle (80; 800)	dummy	4,971	N226	N201	general (0)
B214	Dummy - Rectangle (80; 800)	dummy	3,248	N248	N21	general (0)
B215	Dummy - Rectangle (80; 800)	dummy	4,971	N243	N248	general (0)
B216	Dummy - Rectangle (80; 800)	dummy	2,914	N244	N19	general (0)
B217	Dummy - Rectangle (80; 800)	dummy	3,728	N55	N199	general (0)
B218	Dummy - Rectangle (80; 800)	dummy	1,243	N57	N245	general (0)
B219	Dummy - Rectangle (80; 800)	dummy	2,245	N249	N15	general (0)
B226	Dummy - Rectangle (80; 800)	dummy	3,143	N251	N263	general (0)
B227	Dummy - Rectangle (80; 800)	dummy	3,732	N263	N264	general (0)
B228	Dummy - Rectangle (80; 800)	dummy	3,760	N264	N265	general (0)
B229	Dummy - Rectangle (80; 800)	dummy	3,760	N265	N266	general (0)
B230	Dummy - Rectangle (80; 800)	dummy	4,643	N267	N116	general (0)
B231	Dummy - Rectangle (80; 800)	dummy	3,760	N266	N267	general (0)
B232	Dummy - Rectangle (80; 800)	dummy	3,143	N213	N215	general (0)
B233	Dummy - Rectangle (80; 800)	dummy	3,732	N215	N217	general (0)
B234	Dummy - Rectangle (80; 800)	dummy	3,760	N217	N268	general (0)
B235	Dummy - Rectangle (80; 800)	dummy	3,760	N268	N269	general (0)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B236	Dummy - Rectangle (80; 800)	dummy	4,464	N270	N117	general (0)
B237	Dummy - Rectangle (80; 800)	dummy	3,760	N269	N270	general (0)
B238	Dummy - Rectangle (80; 800)	dummy	3,143	N252	N271	general (0)
B239	Dummy - Rectangle (80; 800)	dummy	3,732	N271	N272	general (0)
B240	Dummy - Rectangle (80; 800)	dummy	3,760	N272	N158	general (0)
B241	Dummy - Rectangle (80; 800)	dummy	3,760	N158	N162	general (0)
B242	Dummy - Rectangle (80; 800)	dummy	4,285	N219	N118	general (0)
B243	Dummy - Rectangle (80; 800)	dummy	3,760	N162	N219	general (0)
B244	Dummy - Rectangle (80; 800)	dummy	3,143	N253	N273	general (0)
B245	Dummy - Rectangle (80; 800)	dummy	3,732	N273	N274	general (0)
B246	Dummy - Rectangle (80; 800)	dummy	3,760	N274	N275	general (0)
B247	Dummy - Rectangle (80; 800)	dummy	3,760	N275	N276	general (0)
B248	Dummy - Rectangle (80; 800)	dummy	4,106	N277	N172	general (0)
B249	Dummy - Rectangle (80; 800)	dummy	3,760	N276	N277	general (0)
B250	Dummy - Rectangle (80; 800)	dummy	3,143	N136	N144	general (0)
B251	Dummy - Rectangle (80; 800)	dummy	3,732	N144	N146	general (0)
B252	Dummy - Rectangle (80; 800)	dummy	3,760	N146	N278	general (0)
B253	Dummy - Rectangle (80; 800)	dummy	3,760	N278	N279	general (0)
B254	Dummy - Rectangle (80; 800)	dummy	3,927	N221	N120	general (0)
B255	Dummy - Rectangle (80; 800)	dummy	3,760	N279	N221	general (0)
B256	Dummy - Rectangle (80; 800)	dummy	3,143	N254	N280	general (0)
B257	Dummy - Rectangle (80; 800)	dummy	3,732	N280	N281	general (0)
B258	Dummy - Rectangle (80; 800)	dummy	3,760	N281	N166	general (0)
B259	Dummy - Rectangle (80; 800)	dummy	3,760	N164	N121	general (0)
B260	Dummy - Rectangle (80; 800)	dummy	3,760	N166	N164	general (0)
B261	Dummy - Rectangle (80; 800)	dummy	3,143	N255	N282	general (0)
B262	Dummy - Rectangle (80; 800)	dummy	3,732	N282	N283	general (0)
B263	Dummy - Rectangle (80; 800)	dummy	3,760	N284	N122	general (0)
B264	Dummy - Rectangle (80; 800)	dummy	3,760	N283	N284	general (0)
B265	Dummy - Rectangle (80; 800)	dummy	3,143	N140	N142	general (0)
B266	Dummy - Rectangle (80; 800)	dummy	3,760	N148	N123	general (0)
B267	Dummy - Rectangle (80; 800)	dummy	3,732	N142	N148	general (0)
B268	Dummy - Rectangle (80; 800)	dummy	3,732	N285	N124	general (0)
B269	Dummy - Rectangle (80; 800)	dummy	3,143	N256	N285	general (0)
B270	Dummy - Rectangle (80; 800)	dummy	1,725	N13	N257	general (0)
B275	Dummy - Rectangle (80; 800)	dummy	2,425	N172	N188	general (0)
B286	L80x8 - L80X8	S 355	2,272	N220	N230	general (0)
B287	L80x8 - L80X8	S 355	2,272	N222	N219	general (0)
B291	L80x8 - L80X8	S 355	2,272	N227	N228	general (0)
B292	L80x8 - L80X8	S 355	2,272	N229	N231	general (0)
B302	IPE 180 - IPE180	S 355	3,213	N292	N293	general (0)
B304	IPE 180 - IPE180	S 355	3,844	N294	N295	general (0)
B306	L60x60 - L60X6	S 355	4,151	N295	N196	general (0)
B305	L60x60 - L60X6	S 355	4,151	N294	N113	general (0)
B307	L60x60 - L60X6	S 355	4,532	N80	N295	general (0)
B308	L60x60 - L60X6	S 355	4,532	N82	N294	general (0)
B309	L60x60 - L60X6	S 355	4,010	N78	N293	general (0)
B310	L60x60 - L60X6	S 355	3,985	N111	N293	general (0)
B311	L60x60 - L60X6	S 355	3,985	N198	N292	general (0)
B312	L60x60 - L60X6	S 355	4,010	N76	N292	general (0)
B313	IPE 180 - IPE180	S 355	3,493	N206	N296	general (0)
B314	IPE 180 - IPE180	S 355	3,002	N207	N293	general (0)
B315	IPE 180 - IPE180	S 355	2,333	N208	N292	general (0)
B316	IPE 180 - IPE180	S 355	2,420	N205	N297	general (0)
B323	HEA 180 - HEA180	S 355	0,800	N238	N303	general (0)
B326	HEA 180 - HEA180	S 355	0,800	N237	N306	general (0)
B330	HEA 180 - HEA180	S 355	0,800	N48	N312	general (0)
B332	HEA 180 - HEA180	S 355	0,800	N265	N315	general (0)
B333	HEA 180 - HEA180	S 355	0,800	N266	N316	general (0)
B334	HEA 180 - HEA180	S 355	0,800	N267	N317	general (0)
B335	HEA 180 - HEA180	S 355	0,800	N116	N318	general (0)
B337	IPE 180 - IPE180	S 355	1,613	N231	N319	general (0)
B338	IPE 180 - IPE180	S 355	1,539	N209	N294	general (0)
B377	IPE 180 - IPE180	S 355	5,926	N54	N322	general (0)
B378	L60x60 - L60X6	S 355	6,735	N70	N54	general (0)
B379	L60x60 - L60X6	S 355	6,735	N68	N322	general (0)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B380	IPE 180 - IPE180	S 355	5,926	N50	N319	general (0)
B385	HEA 180 - HEA180	S 355	6,139	N5	N50	general (0)
B386	L60x60 - L60X6	S 355	4,985	N84	N115	general (0)
B387	L60x60 - L60X6	S 355	4,985	N86	N193	general (0)
B392	IPE 180 - IPE180	S 355	1,482	N297	N296	general (0)
B418	HEA 180 - HEA180	S 355	0,800	N239	N323	general (0)
B419	HEA 180 - HEA180	S 355	1,600	N241	N324	general (0)
B420	HEA 180 - HEA180	S 355	0,800	N31	N325	general (0)
B421	HEA 180 - HEA180	S 355	0,800	N251	N326	general (0)
B422	HEA 180 - HEA180	S 355	0,800	N263	N327	general (0)
B423	HEA 180 - HEA180	S 355	0,800	N264	N328	general (0)
B425	HEA 180 - HEA180	S 355	0,800	N191	N330	general (0)
B426	HEA 180 - HEA180	S 355	1,600	N27	N331	general (0)
B427	HEA 180 - HEA180	S 355	1,600	N252	N332	general (0)
B428	HEA 180 - HEA180	S 355	1,600	N271	N333	general (0)
B429	HEA 180 - HEA180	S 355	1,600	N272	N334	general (0)
B430	HEA 180 - HEA180	S 355	1,600	N335	N189	general (0)
B433	IPE220 - IPE220	S 355	3,602	N337	N189	general (0)
B434	HEA 180 - HEA180	S 355	0,800	N338	N339	general (0)
B436	Dummy - Rectangle (80; 800)	dummy	2,122	N338	N191	general (0)
B437	Dummy - Rectangle (80; 800)	dummy	1,061	N341	N190	general (0)
B438	L80x8 - L80X8	S 355	3,690	N223	N97	general (0)
B487	HEA 180 - HEA180	S 355	2,400	N342	N278	general (0)
B488	HEA 180 - HEA180	S 355	2,400	N343	N279	general (0)
B489	HEA 180 - HEA180	S 355	2,400	N145	N146	general (0)
B491	L60x60 - L60X6	S 355	3,968	N82	N278	general (0)
B492	L60x60 - L60X6	S 355	3,366	N84	N279	general (0)
B494	L60x60 - L60X6	S 355	5,520	N227	N201	general (0)
B495	L60x60 - L60X6	S 355	5,222	N202	N231	general (0)
B498	L60x60 - L60X6	S 355	4,312	N202	N23	general (0)
B499	L60x60 - L60X6	S 355	4,312	N22	N201	general (0)
B500	L60x60 - L60X6	S 355	4,158	N22	N136	general (0)
B501	L60x60 - L60X6	S 355	4,158	N135	N23	general (0)
B502	L60x60 - L60X6	S 355	3,954	N135	N144	general (0)
B503	L60x60 - L60X6	S 355	3,954	N143	N136	general (0)
B504	L60x60 - L60X6	S 355	4,437	N143	N146	general (0)
B505	L60x60 - L60X6	S 355	4,437	N145	N144	general (0)
B506	L60x60 - L60X6	S 355	4,461	N145	N278	general (0)
B507	L60x60 - L60X6	S 355	4,461	N342	N146	general (0)
B508	L60x60 - L60X6	S 355	4,461	N342	N279	general (0)
B509	L60x60 - L60X6	S 355	4,461	N343	N278	general (0)
B510	L60x60 - L60X6	S 355	4,461	N343	N221	general (0)
B511	L60x60 - L60X6	S 355	4,461	N222	N279	general (0)
B512	L60x60 - L60X6	S 355	4,735	N222	N97	general (0)
B513	L60x60 - L60X6	S 355	4,524	N34	N221	general (0)
B514	L60x60 - L60X6	S 355	5,222	N59	N228	general (0)
B515	L60x60 - L60X6	S 355	5,222	N229	N50	general (0)
B531	HEA 180 - HEA180	S 355	2,797	N7	N191	general (0)
B532	HEA 180 - HEA180	S 355	2,797	N191	N189	general (0)
B533	HEA 180 - HEA180	S 355	13,812	N50	N2	general (0)
B545	IPE 180 - IPE180	S 355	0,800	N52	N345	general (0)
B546	IPE 180 - IPE180	S 355	0,800	N56	N346	general (0)
B547	IPE 180 - IPE180	S 355	3,159	N278	N295	general (0)
B548	L60x60 - L60X6	S 355	3,968	N342	N295	general (0)
B549	IPE 180 - IPE180	S 355	2,359	N279	N347	general (0)
B550	L60x60 - L60X6	S 355	3,366	N347	N343	general (0)
B553	HEA 180 - HEA180	S 355	4,238	N9	N206	general (0)
B554	HEA 160 - HEA160	S 355	3,408	N70	N205	general (0)
B555	HEA 180 - HEA180	S 355	3,844	N76	N207	general (0)
B556	HEA 160 - HEA160	S 355	3,347	N78	N208	general (0)
B557	HEA 160 - HEA160	S 355	2,851	N80	N209	general (0)
B558	IPE 180 - IPE180	S 355	1,080	N296	N293	general (0)

2.5. Hinges

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H5	B39	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H6	B202	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H7	B205	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H8	B208	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H9	B212	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H10	B41	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H11	B203	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H12	B207	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H13	B209	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H14	B211	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H15	B213	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H16	B215	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H17	B42	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H18	B217	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H19	B44	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H20	B46	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H21	B218	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H22	B45	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H23	B219	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H24	B43	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H25	B214	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H26	B216	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H27	B38	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H28	B40	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H29	B210	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H30	B204	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H31	B206	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H32	B36	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H33	B37	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H35	B109	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H36	B110	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H37	B111	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H38	B112	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H39	B113	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H40	B114	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H41	B115	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H42	B116	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H43	B117	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H44	B119	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H45	B270	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H46	B118	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H48	B226	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H49	B232	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H50	B238	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H51	B244	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H52	B250	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H53	B256	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H54	B261	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H55	B265	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H56	B269	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H57	B146	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H59	B227	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H60	B233	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H61	B239	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H62	B245	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H63	B251	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H64	B257	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H65	B262	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H66	B267	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H67	B268	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H68	B145	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H70	B228	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H71	B234	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H72	B240	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H73	B246	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H74	B252	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H75	B258	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H76	B264	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H77	B266	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H78	B147	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H80	B229	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H81	B235	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H82	B241	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H83	B247	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H84	B253	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H85	B260	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H86	B263	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H87	B148	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H89	B231	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H90	B237	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H91	B243	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H92	B249	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H93	B255	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H94	B259	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H95	B149	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H97	B230	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H98	B236	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H99	B242	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H100	B248	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H101	B254	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H102	B173	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H103	B162	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H105	B161	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H108	B158	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H109	B160	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H114	B168	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H115	B167	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H116	B169	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H117	B170	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H118	B171	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H119	B172	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H121	B166	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H122	B60	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H123	B61	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H124	B62	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H125	B1	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H126	B107	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H127	B108	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H128	B106	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H129	B105	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H130	B104	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H131	B103	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H132	B96	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H134	B275	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H157	B304	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H158	B306	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H159	B305	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H160	B302	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H162	B310	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H163	B311	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H165	B316	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H166	B313	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H167	B314	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H168	B315	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H171	B338	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H172	B337	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H199	B377	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H202	B380	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H216	B291	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H217	B292	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H218	B378	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H219	B379	End	Rigid	Rigid	Rigid	Rigid	Free	Free

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H226	B309	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H227	B312	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H238	B308	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H239	B307	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H248	B287	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H249	B286	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H256	B192	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H260	B386	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H261	B387	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H266	B392	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H268	B436	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H269	B437	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H270	B433	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H271	B438	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H321	B491	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H322	B492	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H326	B512	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H327	B494	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H328	B495	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H329	B498	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H330	B499	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H331	B500	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H332	B501	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H333	B502	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H334	B503	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H335	B504	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H336	B505	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H337	B506	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H338	B507	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H339	B508	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H340	B509	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H341	B510	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H342	B511	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H343	B513	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H324	B514	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H344	B515	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H365	B533	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H371	B547	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H372	B548	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H373	B550	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H374	B151	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H376	B553	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H377	B179	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H378	B178	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H379	B555	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H380	B180	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H381	B556	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H382	B181	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H383	B182	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H384	B557	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H385	B554	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H386	B558	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

2.6. Beam nonlinearity

Name	Member	Type
BN12	B286	Tension only
BN13	B287	Tension only
BN17	B291	Tension only
BN18	B292	Tension only
BN23	B306	Tension only
BN24	B305	Tension only
BN25	B307	Tension only
BN26	B308	Tension only
BN27	B309	Tension only
BN28	B310	Tension only
BN29	B311	Tension only

Name	Member	Type
BN30	B312	Tension only
BN32	B60	Tension only
BN33	B61	Tension only
BN59	B378	Tension only
BN60	B379	Tension only
BN64	B386	Tension only
BN65	B387	Tension only
BN70	B438	Tension only
BN71	B192	Tension only
BN121	B491	Tension only
BN122	B492	Tension only

Name	Member	Type
BN126	B512	Tension only
BN127	B494	Tension only
BN128	B495	Tension only
BN129	B498	Tension only
BN130	B499	Tension only
BN131	B500	Tension only
BN132	B501	Tension only
BN133	B502	Tension only
BN134	B503	Tension only
BN135	B504	Tension only
BN136	B505	Tension only

Name	Member	Type
BN137	B506	Tension only
BN138	B507	Tension only
BN139	B508	Tension only
BN140	B509	Tension only

Name	Member	Type
BN141	B510	Tension only
BN142	B511	Tension only
BN143	B513	Tension only
BN124	B514	Tension only

Name	Member	Type
BN144	B515	Tension only
BN161	B548	Tension only
BN162	B550	Tension only

2.7. Nodal supports

Name	Node	System	Type	X	Y	Z	Rx	Ry	Rz
Sn1	N5	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn2	N61	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn3	N59	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn5	N229	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn6	N227	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn7	N68	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn10	N202	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn11	N200	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn12	N70	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn13	N1	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn14	N3	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn15	N7	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn16	N9	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn17	N16	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn18	N22	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn19	N34	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn22	N76	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn23	N78	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn24	N80	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn25	N82	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn26	N84	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn27	N86	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn28	N88	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn29	N89	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn30	N90	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn31	N91	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn32	N92	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn33	N93	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn34	N135	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn35	N139	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn36	N141	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn37	N143	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn38	N145	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn39	N147	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn40	N157	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn41	N161	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn48	N220	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn49	N222	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn50	N223	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn52	N312	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn53	N306	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn54	N303	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn55	N316	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn56	N317	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn58	N315	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn59	N318	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn60	N323	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn61	N324	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn62	N325	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn63	N326	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn64	N327	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn65	N328	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn67	N330	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn68	N331	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn69	N332	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn70	N333	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn71	N334	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn72	N335	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn73	N339	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free

Name	Node	System	Type	X	Y	Z	Rx	Ry	Rz
Sn74	N337	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn75	N342	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn76	N343	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn77	N72	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn78	N73	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free

3. Loads and load cases

3.1. Load cases

Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
G1	Eigen gewicht	Permanent Self weight	LG1	-Z		
G2	Dead	Permanent Standard	LG1			
Q1	Live Standard	Variable Static	Variable-C		Long	None
Q2	Horizontal_ Load_+X Static wind	Variable Static	Wind			None
Q3	Horizontal_ Load_+Y Static wind	Variable Static	Wind			None
Q4	Horizontal_ Load_-Y Static wind	Variable Static	Wind			None
Q5	Horizontal_ Load_-X Static wind	Variable Static	Wind			None
Q6	Uplift Static wind	Variable Static	Wind			None
Q7	Snow Snow	Variable Static	Snow			None
Q8	Long-term settlement	Permanent Standard	Settlement			

3.2. Combinations

Name	Description	Type	Load cases	Coeff. [-]
ULS-LC.1		Envelope - ultimate	G1 - Eigen gewicht	1,35
			G2 - Dead	1,35
ULS-LC.2		Envelope - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
ULS-LC.3		Envelope - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
ULS-LC.4		Envelope - ultimate	G1 - Eigen gewicht	1,35
			G2 - Dead	1,35
			Q1 - Live	0,90
ULS-LC.5		Envelope - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q1 - Live	0,90
ULS-LC.6		Envelope - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q1 - Live	1,50
ULS-LC.7		Envelope - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q1 - Live	1,50
ULS-LC.8		Envelope - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q1 - Live	0,90
			Q3 - Horizontal_ Load_+Y	1,50
			Q2 - Horizontal_ Load_+X	1,50
			Q4 - Horizontal_ Load_-Y	1,50
			Q5 - Horizontal_ Load_-X	1,50
			Q6 - Uplift	1,50
ULS-LC.9		Envelope - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q1 - Live	0,90
			Q3 - Horizontal_ Load_+Y	1,50
			Q2 - Horizontal_ Load_+X	1,50
			Q4 - Horizontal_ Load_-Y	1,50
			Q5 - Horizontal_ Load_-X	1,50
			Q6 - Uplift	1,50
ULS-LC.10		Envelope - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20

Name	Description	Type	Load cases	Coeff. [-]
			Q1 - Live	0,90
			Q7 - Snow	1,50
ULS-LC.11		Envelope - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q1 - Live	0,90
			Q7 - Snow	1,50
SLS_LC.1		Envelope - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
SLS_LC.2		Envelope - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q1 - Live	1,00
			Q3 - Horizontal_ Load_+Y	0,00
			Q2 - Horizontal_ Load_+X	0,00
			Q4 - Horizontal_ Load_-Y	0,00
			Q5 - Horizontal_ Load_-X	0,00
			Q6 - Uplift	0,00
			Q7 - Snow	0,00
SLS_LC.3		Envelope - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q1 - Live	0,60
			Q3 - Horizontal_ Load_+Y	1,00
			Q2 - Horizontal_ Load_+X	1,00
			Q4 - Horizontal_ Load_-Y	1,00
			Q5 - Horizontal_ Load_-X	1,00
			Q6 - Uplift	1,00
			Q7 - Snow	0,00
SLS_LC.4		Envelope - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q1 - Live	0,60
			Q3 - Horizontal_ Load_+Y	0,00
			Q2 - Horizontal_ Load_+X	0,00
			Q4 - Horizontal_ Load_-Y	0,00
			Q5 - Horizontal_ Load_-X	0,00
			Q6 - Uplift	0,00
			Q7 - Snow	1,00
ULS-LC1.1		Linear - ultimate	G1 - Eigen gewicht	1,35
			G2 - Dead	1,35
ULS-LC2.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
ULS-LC3.1		Linear - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
ULS-LC4.1		Linear - ultimate	G1 - Eigen gewicht	1,35
			G2 - Dead	1,35
			Q1 - Live	0,90
ULS-LC5.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q1 - Live	0,90
ULS-LC6.1		Linear - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q1 - Live	1,50
ULS-LC7.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q1 - Live	1,50
ULS-LC8.1		Linear - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q1 - Live	0,90
ULS-LC9.1		Linear - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q3 - Horizontal_ Load_+Y	1,50
ULS-LC10.1		Linear - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q2 - Horizontal_ Load_+X	1,50
ULS-LC11.1		Linear - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q4 - Horizontal_ Load_-Y	1,50
ULS-LC12.1		Linear - ultimate	G1 - Eigen gewicht	1,20

Name	Description	Type	Load cases	Coeff. [-]
			G2 - Dead	1,20
			Q5 - Horizontal_ Load_-X	1,50
ULS-LC13.1		Linear - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q6 - Uplift	1,50
ULS-LC14.1		Linear - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q1 - Live	0,90
			Q3 - Horizontal_ Load_+Y	1,50
ULS-LC15.1		Linear - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q1 - Live	0,90
			Q2 - Horizontal_ Load_+X	1,50
ULS-LC16.1		Linear - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q1 - Live	0,90
			Q4 - Horizontal_ Load_-Y	1,50
ULS-LC17.1		Linear - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q1 - Live	0,90
			Q5 - Horizontal_ Load_-X	1,50
ULS-LC18.1		Linear - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q1 - Live	0,90
			Q6 - Uplift	1,50
ULS-LC19.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q3 - Horizontal_ Load_+Y	1,50
ULS-LC20.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q2 - Horizontal_ Load_+X	1,50
ULS-LC21.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q4 - Horizontal_ Load_-Y	1,50
ULS-LC22.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q5 - Horizontal_ Load_-X	1,50
ULS-LC23.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q6 - Uplift	1,50
ULS-LC24.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q1 - Live	0,90
			Q3 - Horizontal_ Load_+Y	1,50
ULS-LC25.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q1 - Live	0,90
			Q2 - Horizontal_ Load_+X	1,50
ULS-LC26.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q1 - Live	0,90
			Q4 - Horizontal_ Load_-Y	1,50
ULS-LC27.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q1 - Live	0,90
			Q5 - Horizontal_ Load_-X	1,50
ULS-LC28.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q1 - Live	0,90
			Q6 - Uplift	1,50
ULS-LC29.1		Linear - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q7 - Snow	1,50
ULS-LC30.1		Linear - ultimate	G1 - Eigen gewicht	1,20
			G2 - Dead	1,20
			Q1 - Live	0,90

Name	Description	Type	Load cases	Coeff. [-]
			Q7 - Snow	1,50
ULS-LC31.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q7 - Snow	1,50
ULS-LC32.1		Linear - ultimate	G1 - Eigen gewicht	0,90
			G2 - Dead	0,90
			Q1 - Live	0,90
			Q7 - Snow	1,50
SLS_LC1.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
SLS_LC2.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q1 - Live	1,00
SLS_LC3.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q1 - Live	0,60
SLS_LC4.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q3 - Horizontal_ Load_+Y	1,00
SLS_LC5.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q2 - Horizontal_ Load_+X	1,00
SLS_LC6.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q4 - Horizontal_ Load_-Y	1,00
SLS_LC7.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q5 - Horizontal_ Load_-X	1,00
SLS_LC8.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q6 - Uplift	1,00
SLS_LC9.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q1 - Live	0,60
			Q3 - Horizontal_ Load_+Y	1,00
SLS_LC10.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q1 - Live	0,60
			Q2 - Horizontal_ Load_+X	1,00
SLS_LC11.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q1 - Live	0,60
			Q4 - Horizontal_ Load_-Y	1,00
SLS_LC12.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q1 - Live	0,60
			Q5 - Horizontal_ Load_-X	1,00
SLS_LC13.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q1 - Live	0,60
			Q6 - Uplift	1,00
SLS_LC14.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q7 - Snow	1,00
SLS_LC15.1		Linear - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q1 - Live	0,60
			Q7 - Snow	1,00
SLS-Quasi (auto).1		Envelope - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q8 - Long-term settlement	1,00
SLS-Quasi (auto).2		Envelope - serviceability	G1 - Eigen gewicht	1,00
			G2 - Dead	1,00
			Q1 - Live	0,60
			Q3 - Horizontal_ Load_+Y	0,00
			Q2 - Horizontal_ Load_+X	0,00

Name	Description	Type	Load cases	Coeff. [-]
			Q4 - Horizontal_ Load_-Y	0,00
			Q5 - Horizontal_ Load_-X	0,00
			Q6 - Uplift	0,00
			Q7 - Snow	0,00
			Q8 - Long-term settlement	1,00

3.3. Nonlinear combinations

Name	Type	Load cases	Coeff. [-]
NC_ULS-LC1	Ultimate	G1 - Eigen gewicht	1,35
		G2 - Dead	1,35
NC_ULS-LC2	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
NC_ULS-LC3	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
NC_ULS-LC4	Ultimate	G1 - Eigen gewicht	1,35
		G2 - Dead	1,35
		Q1 - Live	0,90
NC_ULS-LC5	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
		Q1 - Live	0,90
NC_ULS-LC6	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
		Q1 - Live	1,50
NC_ULS-LC7	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
		Q1 - Live	1,50
NC_ULS-LC8	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
		Q1 - Live	0,90
NC_ULS-LC9	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
		Q3 - Horizontal_ Load_+Y	1,50
NC_ULS-LC10	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
		Q2 - Horizontal_ Load_+X	1,50
NC_ULS-LC11	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
		Q4 - Horizontal_ Load_-Y	1,50
NC_ULS-LC12	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
		Q5 - Horizontal_ Load_-X	1,50
NC_ULS-LC13	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
		Q6 - Uplift	1,50
NC_ULS-LC14	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
		Q1 - Live	0,90
		Q3 - Horizontal_ Load_+Y	1,50
NC_ULS-LC15	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
		Q1 - Live	0,90
		Q2 - Horizontal_ Load_+X	1,50
NC_ULS-LC16	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
		Q1 - Live	0,90
		Q4 - Horizontal_ Load_-Y	1,50
NC_ULS-LC17	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
		Q1 - Live	0,90
		Q5 - Horizontal_ Load_-X	1,50
NC_ULS-LC18	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
		Q1 - Live	0,90
		Q6 - Uplift	1,50

Name	Type	Load cases	Coeff. [-]
NC_ULS-LC19	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
		Q3 - Horizontal_ Load_+Y	1,50
NC_ULS-LC20	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
		Q2 - Horizontal_ Load_+X	1,50
NC_ULS-LC21	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
		Q4 - Horizontal_ Load_-Y	1,50
NC_ULS-LC22	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
		Q5 - Horizontal_ Load_-X	1,50
NC_ULS-LC23	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
		Q6 - Uplift	1,50
NC_ULS-LC24	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
		Q1 - Live	0,90
		Q3 - Horizontal_ Load_+Y	1,50
NC_ULS-LC25	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
		Q1 - Live	0,90
		Q2 - Horizontal_ Load_+X	1,50
NC_ULS-LC26	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
		Q1 - Live	0,90
		Q4 - Horizontal_ Load_-Y	1,50
NC_ULS-LC27	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
		Q1 - Live	0,90
		Q5 - Horizontal_ Load_-X	1,50
NC_ULS-LC28	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
		Q1 - Live	0,90
		Q6 - Uplift	1,50
NC_ULS-LC29	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
		Q7 - Snow	1,50
NC_ULS-LC30	Ultimate	G1 - Eigen gewicht	1,20
		G2 - Dead	1,20
		Q1 - Live	0,90
		Q7 - Snow	1,50
NC_ULS-LC31	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
		Q7 - Snow	1,50
NC_ULS-LC32	Ultimate	G1 - Eigen gewicht	0,90
		G2 - Dead	0,90
		Q1 - Live	0,90
		Q7 - Snow	1,50
NC_SLS_LC1	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
NC_SLS_LC2	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
		Q1 - Live	1,00
NC_SLS_LC3	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
		Q1 - Live	0,60
NC_SLS_LC4	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
		Q3 - Horizontal_ Load_+Y	1,00
NC_SLS_LC5	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
		Q2 - Horizontal_ Load_+X	1,00
NC_SLS_LC6	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
		Q4 - Horizontal_ Load_-Y	1,00

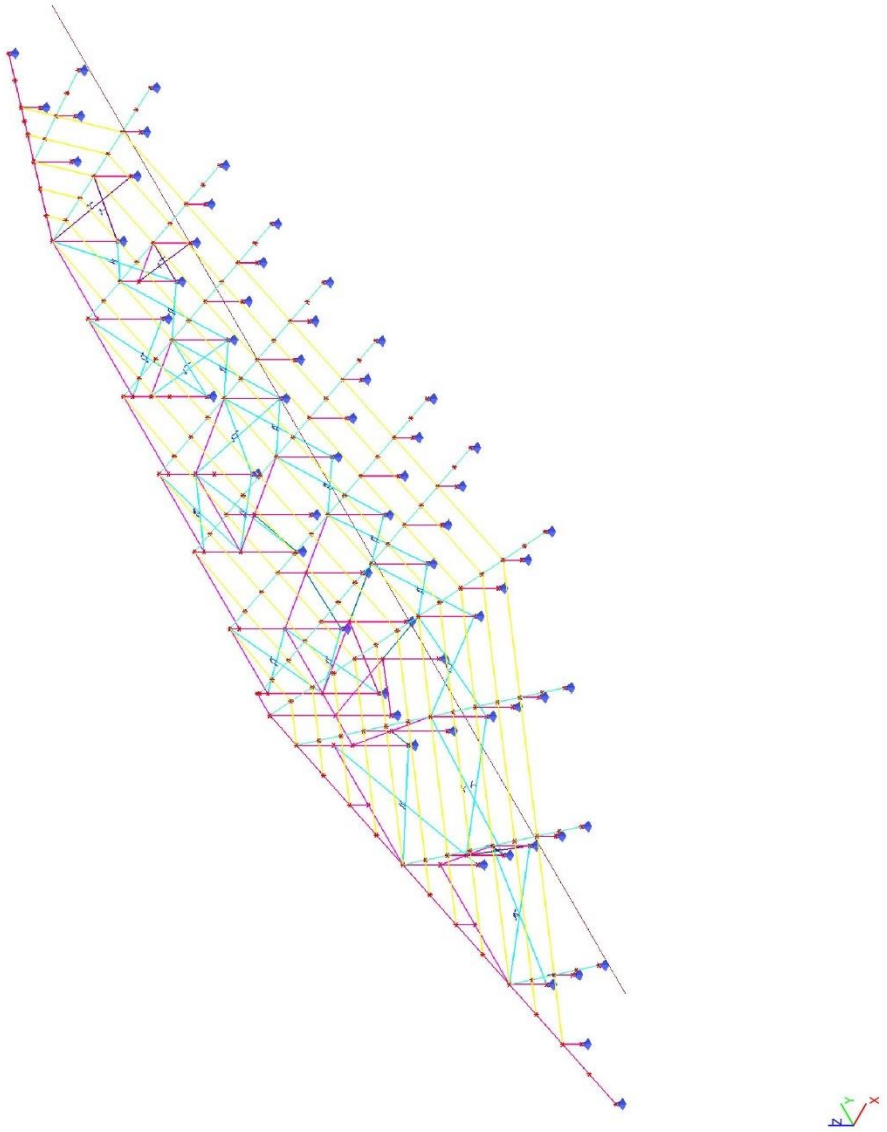
Name	Type	Load cases	Coeff. [-]
NC_SLS_LC7	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
		Q5 - Horizontal_ Load_-X	1,00
NC_SLS_LC8	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
		Q6 - Uplift	1,00
NC_SLS_LC9	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
		Q1 - Live	0,60
		Q3 - Horizontal_ Load_+Y	1,00
NC_SLS_LC10	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
		Q1 - Live	0,60
		Q2 - Horizontal_ Load_+X	1,00
NC_SLS_LC11	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
		Q1 - Live	0,60
		Q4 - Horizontal_ Load_-Y	1,00
NC_SLS_LC12	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
		Q1 - Live	0,60
		Q5 - Horizontal_ Load_-X	1,00
NC_SLS_LC13	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
		Q1 - Live	0,60
		Q6 - Uplift	1,00
NC_SLS_LC14	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
		Q7 - Snow	1,00
NC_SLS_LC15	Serviceability	G1 - Eigen gewicht	1,00
		G2 - Dead	1,00
		Q1 - Live	0,60
		Q7 - Snow	1,00
NC_ULS_SETTLEMENT	Ultimate	Q8 - Long-term settlement	1,00

3.4. Loads per load cases

3.4.1. Loads per load cases - G1

Name	Description	Action type	Load group	Direction
	Spec	Load type		
G1	Eigen gewicht	Permanent	LG1	-Z
		Self weight		

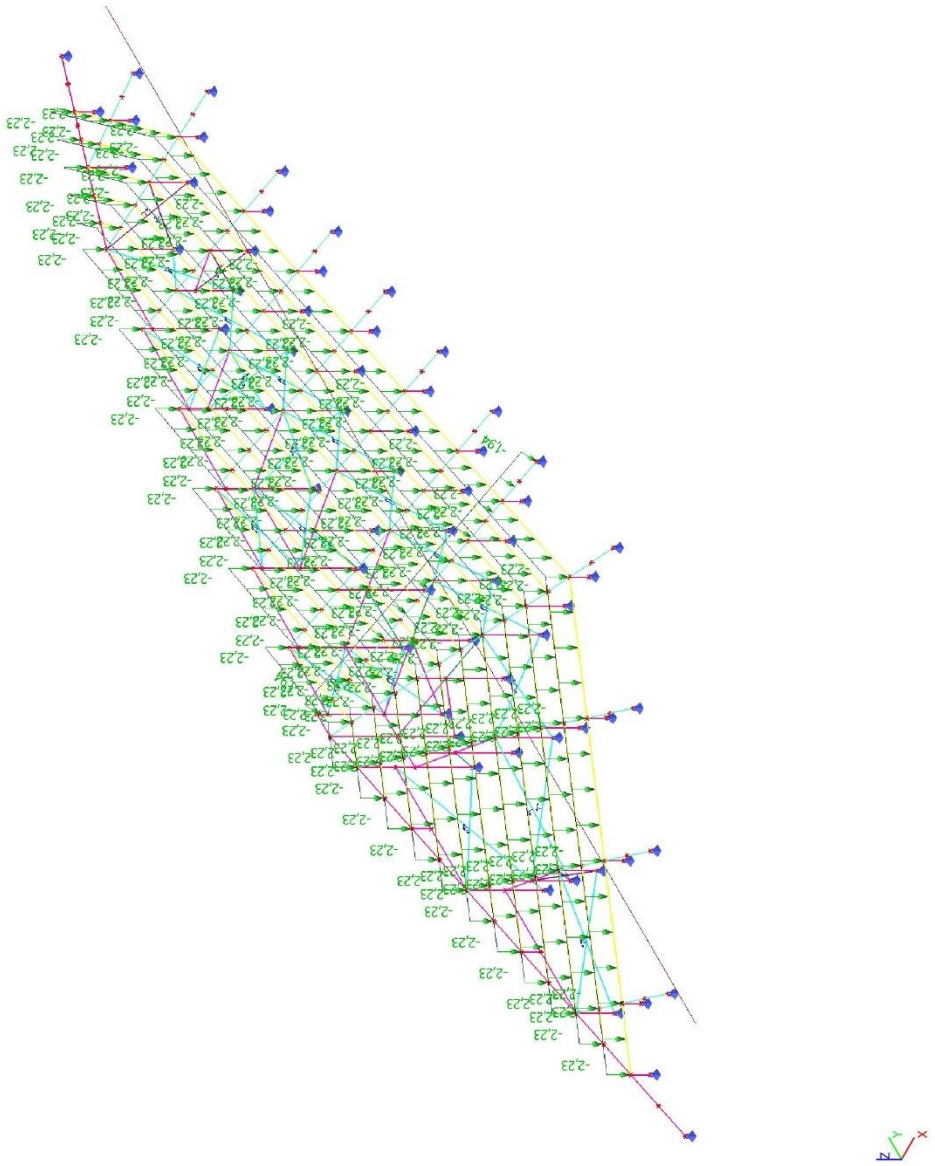
3.4.1.1. Loads



3.4.2. Loads per load cases - G2

Name	Description	Action type	Load group
	Spec	Load type	
G2	Dead	Permanent	LG1
		Standard	

3.4.2.1. Loads



3.4.2.2. Line force

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF2	B36	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF3	B37	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF4	B38	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF5	B40	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF6	B39	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF7	B41	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF8	B42	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF9	B43	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF10	B44	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF11	B45	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF12	B46	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF13	B119	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF14	B118	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF15	B116	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF16	B115	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF17	B114	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF18	B113	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF19	B111	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF20	B112	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF22	B109	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF23	B110	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF24	B146	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF25	B145	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF26	B117	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF27	B147	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF28	B148	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF29	B149	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF30	B173	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF31	B158	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF33	B160	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF34	B161	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF35	B162	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF37	B107	Force	Z	-1,94	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF41	B202	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF42	B203	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF43	B204	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF44	B205	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF45	B206	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF46	B207	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF47	B208	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF48	B209	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF49	B210	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF50	B211	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF51	B212	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF52	B213	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF53	B214	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF54	B215	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF55	B216	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF56	B217	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF57	B218	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF58	B219	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF65	B226	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF66	B227	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF67	B228	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF68	B229	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF69	B230	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF70	B231	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF71	B232	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF72	B233	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF73	B234	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF74	B235	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF75	B236	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF76	B237	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000

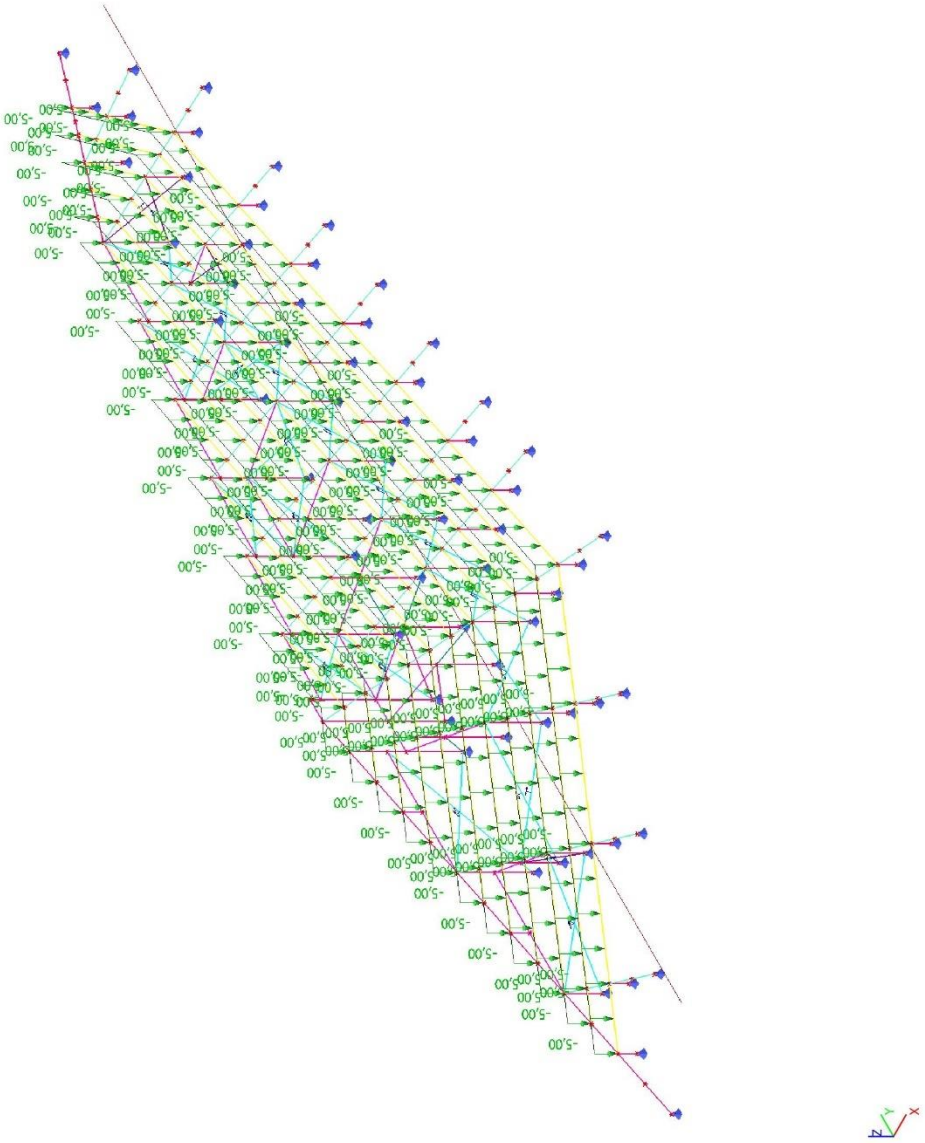
Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF77	B238	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF78	B239	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF79	B240	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF80	B241	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF81	B242	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF82	B243	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF83	B244	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF84	B245	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF85	B246	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF86	B247	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF87	B248	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF88	B249	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF89	B250	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF90	B251	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF91	B252	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF92	B253	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF93	B254	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF94	B255	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF95	B256	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF96	B257	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF97	B258	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF98	B259	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF99	B260	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF100	B261	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF101	B262	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF102	B263	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF103	B264	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF104	B265	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF105	B266	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF106	B267	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF107	B268	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF108	B269	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF109	B270	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF228	B275	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF799	B436	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000
LF805	B437	Force	Z	-2,23	0.000	Rela	From start	0,000
	G2 - Dead	LCS	Uniform		1.000	Length		0,000

3.4.3. Loads per load cases - Q1

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
Q1	Live Standard	Variable Static	Variable-C	Long	None

3.4.3.1. Loads



3.4.3.2. Line force

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF114	B268	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF116	B36	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF117	B37	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF118	B38	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF119	B39	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF120	B40	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF121	B41	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF122	B42	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF123	B43	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF124	B44	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF125	B45	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF126	B46	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF128	B109	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF129	B110	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF130	B111	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF131	B112	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF132	B113	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF133	B114	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF134	B115	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF135	B116	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF136	B117	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF137	B118	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF138	B119	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF139	B145	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF140	B146	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF141	B147	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF142	B148	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF143	B149	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF144	B158	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF145	B160	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF146	B161	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF147	B162	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF149	B173	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF156	B202	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF157	B203	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF158	B204	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF159	B205	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF160	B206	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF161	B207	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF162	B208	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF163	B209	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF164	B210	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF165	B211	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF166	B212	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF167	B213	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF168	B214	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF169	B215	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF170	B216	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF171	B217	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF172	B218	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF173	B219	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF180	B226	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF181	B227	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF182	B228	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF183	B229	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF184	B230	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF185	B231	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF186	B232	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF187	B233	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF188	B234	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF189	B235	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF190	B236	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF191	B237	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000

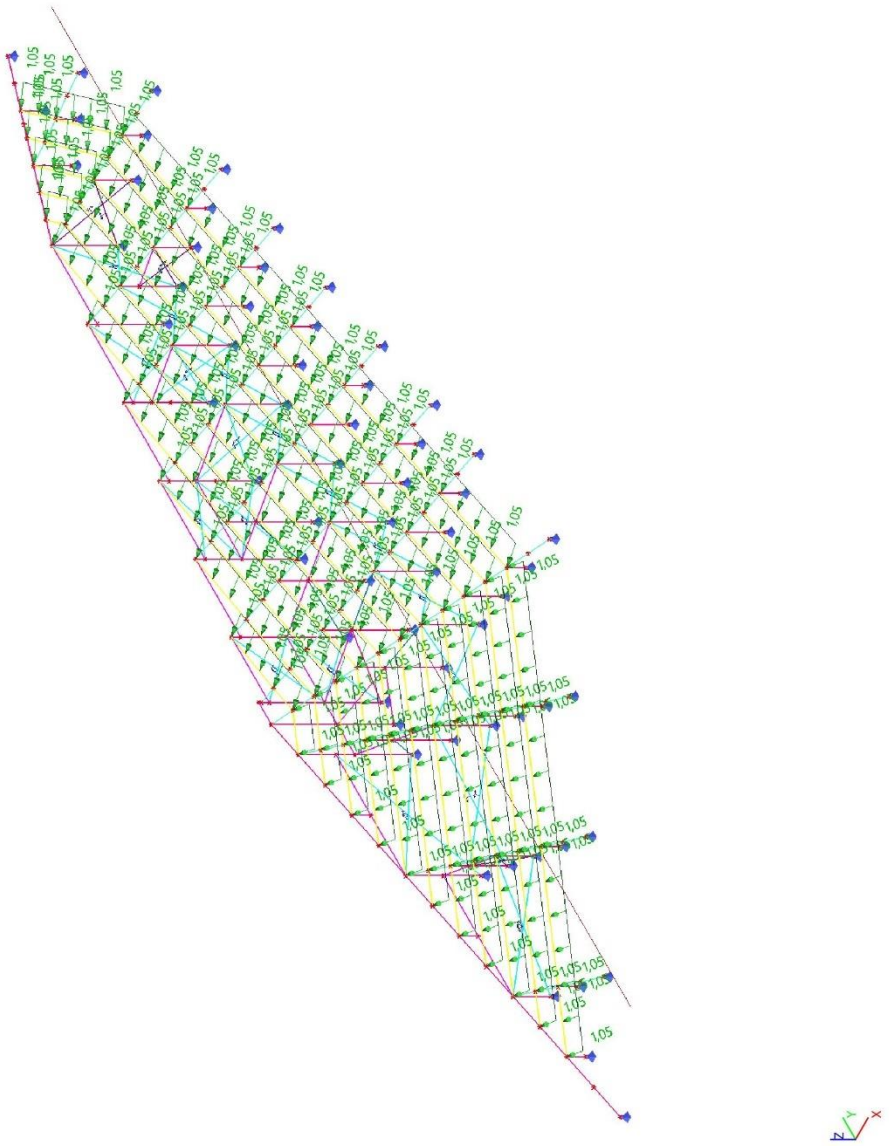
Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF192	B238	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF193	B239	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF194	B240	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF195	B241	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF196	B242	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF197	B243	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF198	B244	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF199	B245	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF200	B246	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF201	B247	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF202	B248	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF203	B249	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF204	B250	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF205	B251	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF206	B252	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF207	B253	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF208	B254	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF209	B255	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF210	B256	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF211	B257	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF212	B258	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF213	B259	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF214	B260	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF215	B261	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF216	B262	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF217	B263	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF218	B264	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF219	B265	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF220	B266	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF221	B267	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF222	B269	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF223	B270	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF229	B275	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF800	B436	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000
LF806	B437	Force	Z	-5,00	0.000	Rela	From start	0,000
	Q1 - Live	LCS	Uniform		1.000	Length		0,000

3.4.4. Loads per load cases - Q2

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
Q2	Horizontal_ Load_+X Static wind	Variable Static	Wind	None

3.4.4.1. Loads



3.4.4.2. Line force

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF346	B36	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF347	B37	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF348	B38	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF349	B39	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF350	B40	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF351	B41	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF352	B42	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF353	B43	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF354	B44	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF355	B45	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF356	B46	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF358	B109	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF359	B110	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF360	B111	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF361	B112	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF362	B113	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF363	B114	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF364	B115	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF365	B116	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF366	B117	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF367	B118	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF368	B119	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF369	B145	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF370	B146	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF371	B147	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF372	B148	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF373	B149	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF374	B158	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF375	B160	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF376	B161	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF377	B162	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF379	B173	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF383	B202	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF384	B203	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF385	B204	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF386	B205	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF387	B206	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF388	B207	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF389	B208	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF390	B209	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF391	B210	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF392	B211	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF393	B212	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF394	B213	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF395	B214	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF396	B215	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF397	B216	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF398	B217	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF399	B218	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF400	B219	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF407	B226	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF408	B227	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF409	B228	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF410	B229	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF411	B230	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF412	B231	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF413	B232	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF414	B233	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF415	B234	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF416	B235	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF417	B236	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF418	B237	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF419	B238	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000

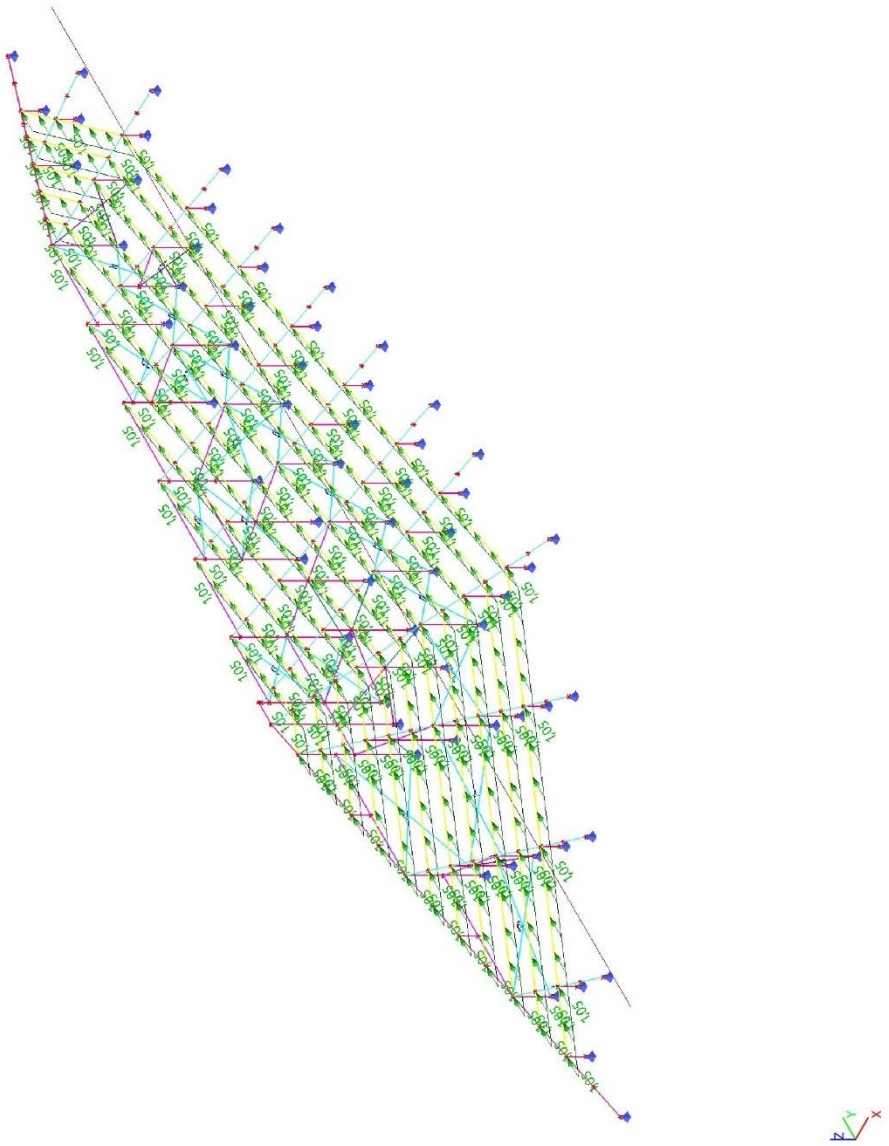
Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF420	B239	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF421	B240	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF422	B241	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF423	B242	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF424	B243	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF425	B244	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF426	B245	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF427	B246	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF428	B247	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF429	B248	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF430	B249	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF431	B250	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF432	B251	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF433	B252	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF434	B253	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF435	B254	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF436	B255	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF437	B256	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF438	B257	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF439	B258	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF440	B259	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF441	B260	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF442	B261	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF443	B262	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF444	B263	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF445	B264	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF446	B265	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF447	B266	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF448	B267	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF449	B268	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF450	B269	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF451	B270	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF456	B275	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF801	B436	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000
LF807	B437	Force	Y	1,05	0.000	Rela	From start	0,000
	Q2 - Horizontal_ Load_+X	LCS	Uniform		1.000	Length		0,000

3.4.5. Loads per load cases - Q3

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
Q3	Horizontal_ Load_+Y Static wind	Variable Static	Wind	None

3.4.5.1. Loads



3.4.5.2. Line force

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF458	B36	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF459	B37	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF460	B38	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF461	B39	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF462	B40	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF463	B41	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF464	B42	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF465	B43	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF466	B44	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF467	B45	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF468	B46	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF470	B109	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF471	B110	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF472	B111	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF473	B112	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF474	B113	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF475	B114	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF476	B115	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF477	B116	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF478	B117	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF479	B118	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF480	B119	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF481	B145	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF482	B146	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF483	B147	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF484	B148	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF485	B149	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF486	B158	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF487	B160	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF488	B161	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF489	B162	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF491	B173	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF495	B202	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF496	B203	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF497	B204	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF498	B205	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF499	B206	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF500	B207	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF501	B208	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF502	B209	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF503	B210	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF504	B211	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF505	B212	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF506	B213	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF507	B214	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF508	B215	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF509	B216	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF510	B217	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF511	B218	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF512	B219	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF519	B226	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF520	B227	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF521	B228	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF522	B229	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF523	B230	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF524	B231	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF525	B232	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF526	B233	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF527	B234	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF528	B235	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF529	B236	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF530	B237	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF531	B238	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000

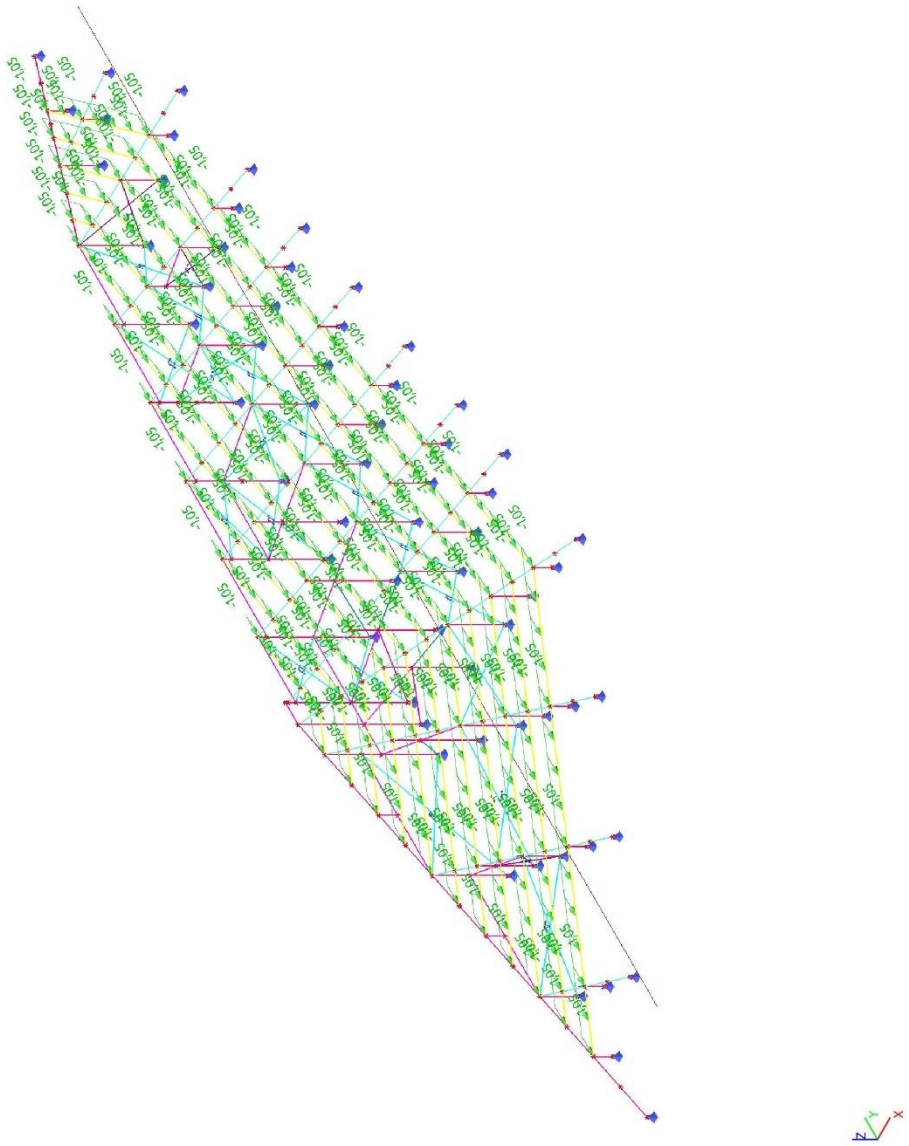
Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF532	B239	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF533	B240	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF534	B241	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF535	B242	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF536	B243	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF537	B244	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF538	B245	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF539	B246	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF540	B247	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF541	B248	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF542	B249	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF543	B250	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF544	B251	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF545	B252	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF546	B253	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF547	B254	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF548	B255	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF549	B256	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF550	B257	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF551	B258	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF552	B259	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF553	B260	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF554	B261	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF555	B262	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF556	B263	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF557	B264	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF558	B265	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF559	B266	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF560	B267	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF561	B268	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF562	B269	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF563	B270	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF568	B275	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF802	B436	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000
LF808	B437	Force	Y	1,05	0.000	Rela	From start	0,000
	Q3 - Horizontal_ Load_+Y	GCS	Uniform		1.000	Length		0,000

3.4.6. Loads per load cases - Q4

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
Q4	Horizontal_ Load_-Y Static wind	Variable Static	Wind	None

3.4.6.1. Loads



3.4.6.2. Line force

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF570	B36	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF571	B37	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF572	B38	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF573	B39	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF574	B40	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF575	B41	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF576	B42	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF577	B43	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF578	B44	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF579	B45	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF580	B46	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF582	B109	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF583	B110	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF584	B111	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF585	B112	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF586	B113	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF587	B114	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF588	B115	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF589	B116	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF590	B117	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF591	B118	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF592	B119	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF593	B145	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF594	B146	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF595	B147	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF596	B148	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF597	B149	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF598	B158	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF599	B160	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF600	B161	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF601	B162	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF603	B173	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF607	B202	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF608	B203	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF609	B204	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF610	B205	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF611	B206	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF612	B207	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF613	B208	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF614	B209	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF615	B210	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF616	B211	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF617	B212	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF618	B213	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF619	B214	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF620	B215	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF621	B216	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF622	B217	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF623	B218	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF624	B219	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF631	B226	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF632	B227	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF633	B228	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF634	B229	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF635	B230	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF636	B231	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF637	B232	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF638	B233	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF639	B234	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF640	B235	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF641	B236	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF642	B237	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF643	B238	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000

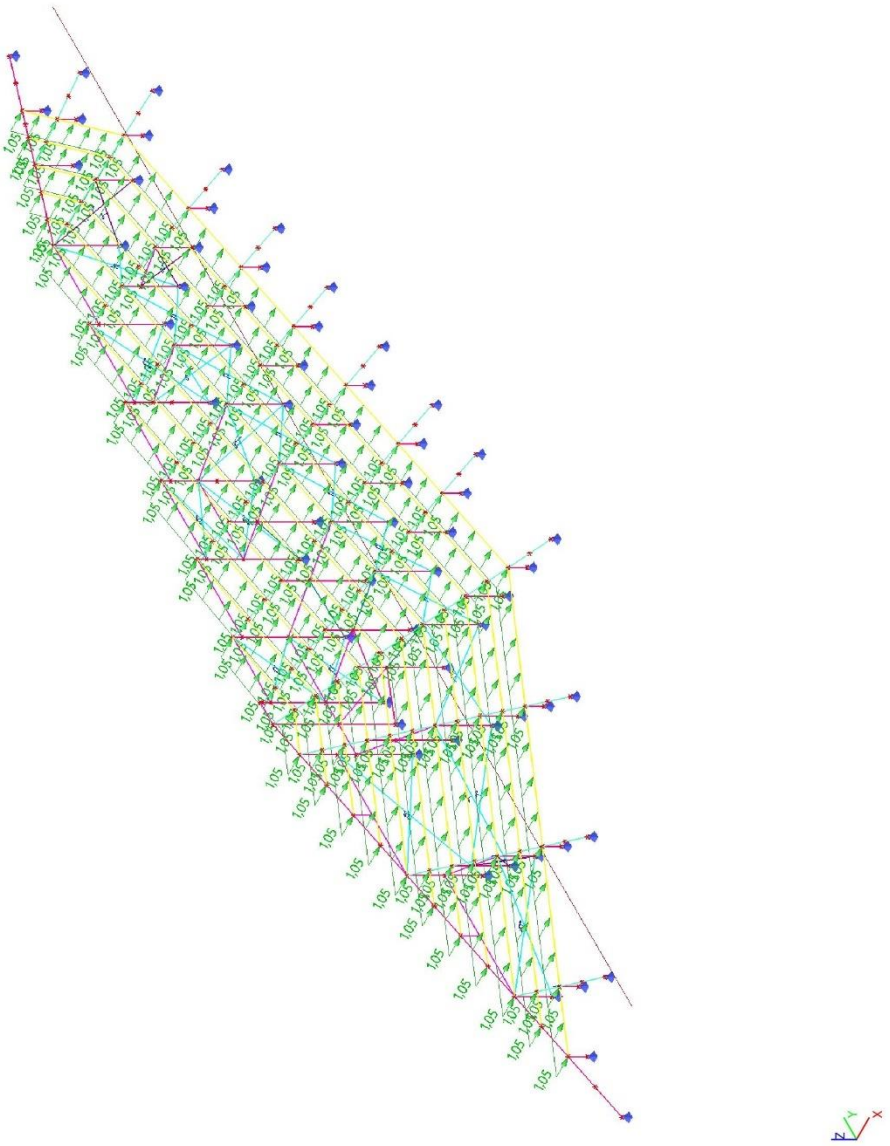
Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF644	B239	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF645	B240	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF646	B241	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF647	B242	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF648	B243	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF649	B244	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF650	B245	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF651	B246	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF652	B247	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF653	B248	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF654	B249	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF655	B250	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF656	B251	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF657	B252	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF658	B253	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF659	B254	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF660	B255	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF661	B256	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF662	B257	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF663	B258	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF664	B259	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF665	B260	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF666	B261	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF667	B262	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF668	B263	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF669	B264	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF670	B265	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF671	B266	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF672	B267	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF673	B268	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF674	B269	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF675	B270	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF680	B275	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF803	B436	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000
LF809	B437	Force	Y	-1,05	0.000	Rela	From start	0,000
	Q4 - Horizontal_ Load_-Y	GCS	Uniform		1.000	Length		0,000

3.4.7. Loads per load cases - Q5

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
Q5	Horizontal_ Load_-X Static wind	Variable Static	Wind	None

3.4.7.1. Loads



3.4.7.2. Line force

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF682	B36	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF683	B37	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF684	B38	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF685	B39	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF686	B40	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF687	B41	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF688	B42	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF689	B43	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF690	B44	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF691	B45	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF692	B46	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF694	B109	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF695	B110	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF696	B111	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF697	B112	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF698	B113	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF699	B114	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF700	B115	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF701	B116	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF702	B117	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF703	B118	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF704	B119	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF705	B145	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF706	B146	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF707	B147	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF708	B148	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF709	B149	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF710	B158	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF711	B160	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF712	B161	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF713	B162	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF715	B173	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF719	B202	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF720	B203	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF721	B204	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF722	B205	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF723	B206	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF724	B207	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF725	B208	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF726	B209	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF727	B210	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF728	B211	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF729	B212	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF730	B213	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF731	B214	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF732	B215	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF733	B216	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF734	B217	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF735	B218	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF736	B219	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF743	B226	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF744	B227	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF745	B228	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF746	B229	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF747	B230	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF748	B231	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF749	B232	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF750	B233	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF751	B234	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF752	B235	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF753	B236	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF754	B237	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF755	B238	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000

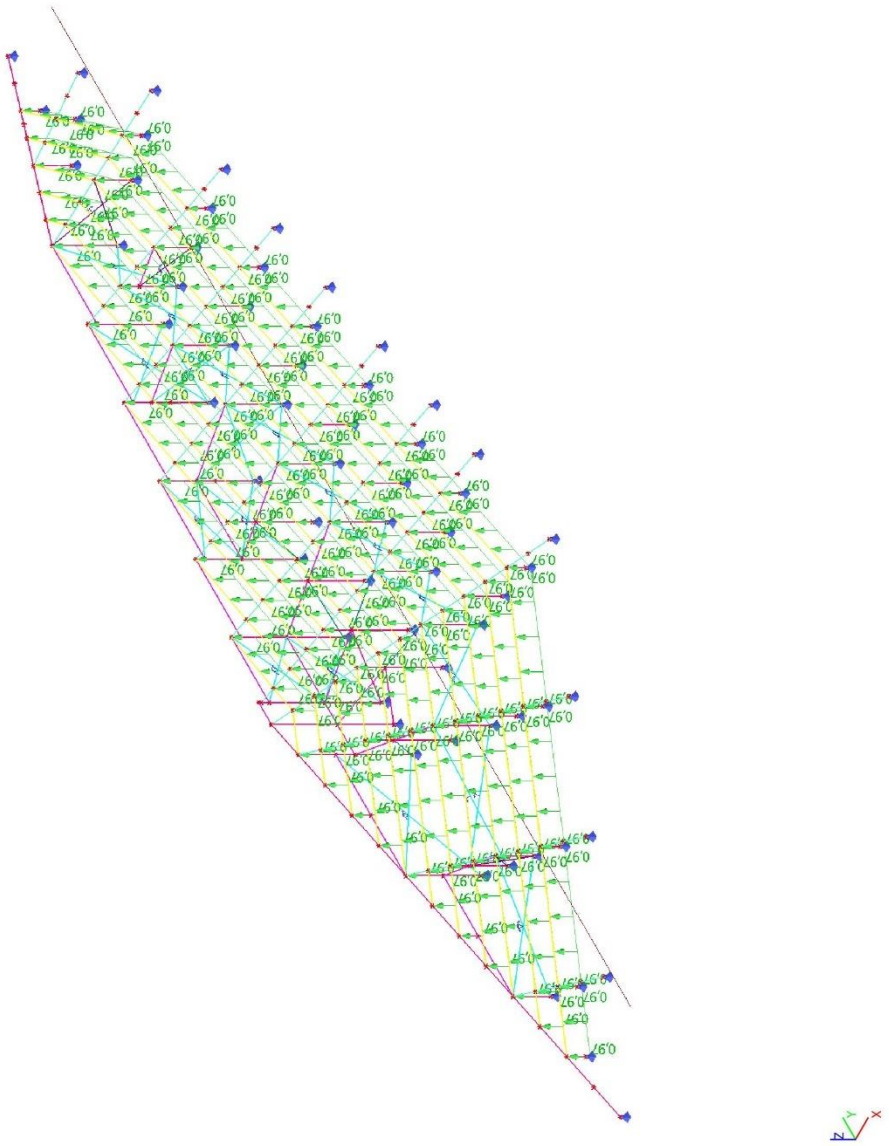
Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF756	B239	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF757	B240	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF758	B241	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF759	B242	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF760	B243	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF761	B244	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF762	B245	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF763	B246	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF764	B247	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF765	B248	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF766	B249	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF767	B250	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF768	B251	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF769	B252	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF770	B253	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF771	B254	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF772	B255	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF773	B256	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF774	B257	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF775	B258	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF776	B259	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF777	B260	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF778	B261	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF779	B262	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF780	B263	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF781	B264	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF782	B265	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF783	B266	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF784	B267	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF785	B268	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF786	B269	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF787	B270	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF792	B275	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF804	B436	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000
LF810	B437	Force	X	1,05	0.000	Rela	From start	0,000
	Q5 - Horizontal_ Load_-X	GCS	Uniform		1.000	Length		0,000

3.4.8. Loads per load cases - Q6

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
Q6	Uplift Static wind	Variable Static	Wind	None

3.4.8.1. Loads



3.4.8.2. Line force

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF920	B36	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF921	B37	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF922	B38	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF923	B39	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF924	B40	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF925	B41	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF926	B42	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF927	B43	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF928	B44	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF929	B45	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF930	B46	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF932	B109	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF933	B110	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF934	B111	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF935	B112	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF936	B113	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF937	B114	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF938	B115	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF939	B116	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF940	B117	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF941	B118	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF942	B119	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF943	B145	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF944	B146	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF945	B147	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF946	B148	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF947	B149	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF948	B158	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF949	B160	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF950	B161	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF951	B162	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF953	B173	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF957	B202	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF958	B203	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF959	B204	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF960	B205	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF961	B206	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF962	B207	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF963	B208	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF964	B209	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF965	B210	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF966	B211	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF967	B212	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF968	B213	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF969	B214	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF970	B215	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF971	B216	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF972	B217	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF973	B218	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF974	B219	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF981	B226	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF982	B227	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF983	B228	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF984	B229	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF985	B230	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF986	B231	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF987	B232	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF988	B233	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF989	B234	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF990	B235	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF991	B236	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF992	B237	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF993	B238	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000

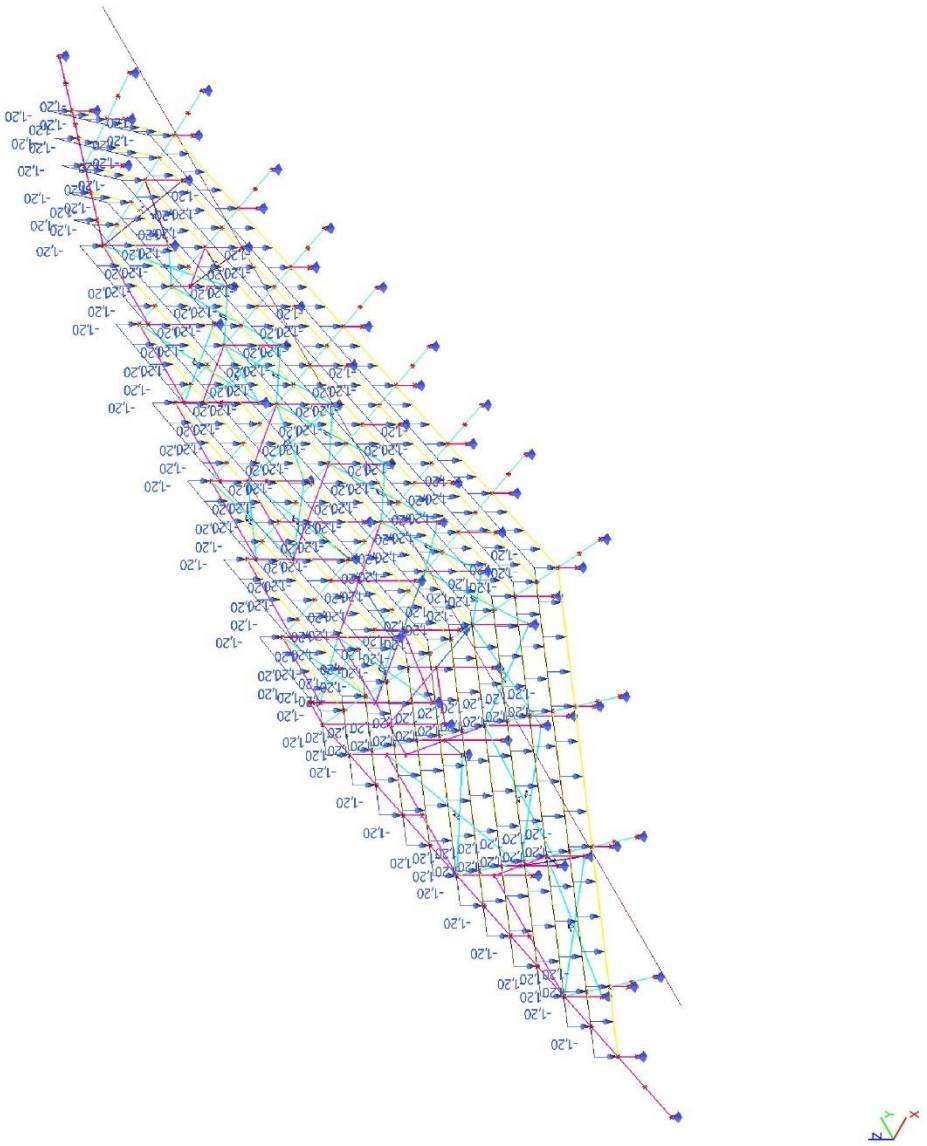
Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF994	B239	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF995	B240	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF996	B241	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF997	B242	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF998	B243	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF999	B244	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1000	B245	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1001	B246	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1002	B247	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1003	B248	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1004	B249	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1005	B250	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1006	B251	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1007	B252	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1008	B253	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1009	B254	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1010	B255	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1011	B256	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1012	B257	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1013	B258	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1014	B259	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1015	B260	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1016	B261	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1017	B262	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1018	B263	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1019	B264	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1020	B265	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1021	B266	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1022	B267	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1023	B268	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1024	B269	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1025	B270	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF1026	B275	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1028	B436	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000
LF1029	B437	Force	Z	0,97	0.000	Rela	From start	0,000
	Q6 - Uplift	GCS	Uniform		1.000	Length		0,000

3.4.9. Loads per load cases - Q7

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
Q7	Snow Snow	Variable Static	Snow	None

3.4.9.1. Loads



3.4.9.2. Line force

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF1031	B36	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1032	B37	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1033	B38	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1034	B39	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1035	B40	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1036	B41	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1037	B42	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1038	B43	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1039	B44	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1040	B45	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1041	B46	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1043	B109	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1044	B110	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1045	B111	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1046	B112	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1047	B113	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1048	B114	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1049	B115	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1050	B116	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1051	B117	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1052	B118	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1053	B119	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1054	B145	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1055	B146	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1056	B147	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1057	B148	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1058	B149	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1059	B158	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1060	B160	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1061	B161	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1062	B162	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF1064	B173	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1068	B202	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1069	B203	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1070	B204	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1071	B205	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1072	B206	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1073	B207	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1074	B208	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1075	B209	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1076	B210	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1077	B211	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1078	B212	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1079	B213	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1080	B214	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1081	B215	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1082	B216	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1083	B217	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1084	B218	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1085	B219	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1092	B226	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1093	B227	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1094	B228	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1095	B229	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1096	B230	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1097	B231	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1098	B232	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1099	B233	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1100	B234	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1101	B235	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1102	B236	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1103	B237	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1104	B238	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000

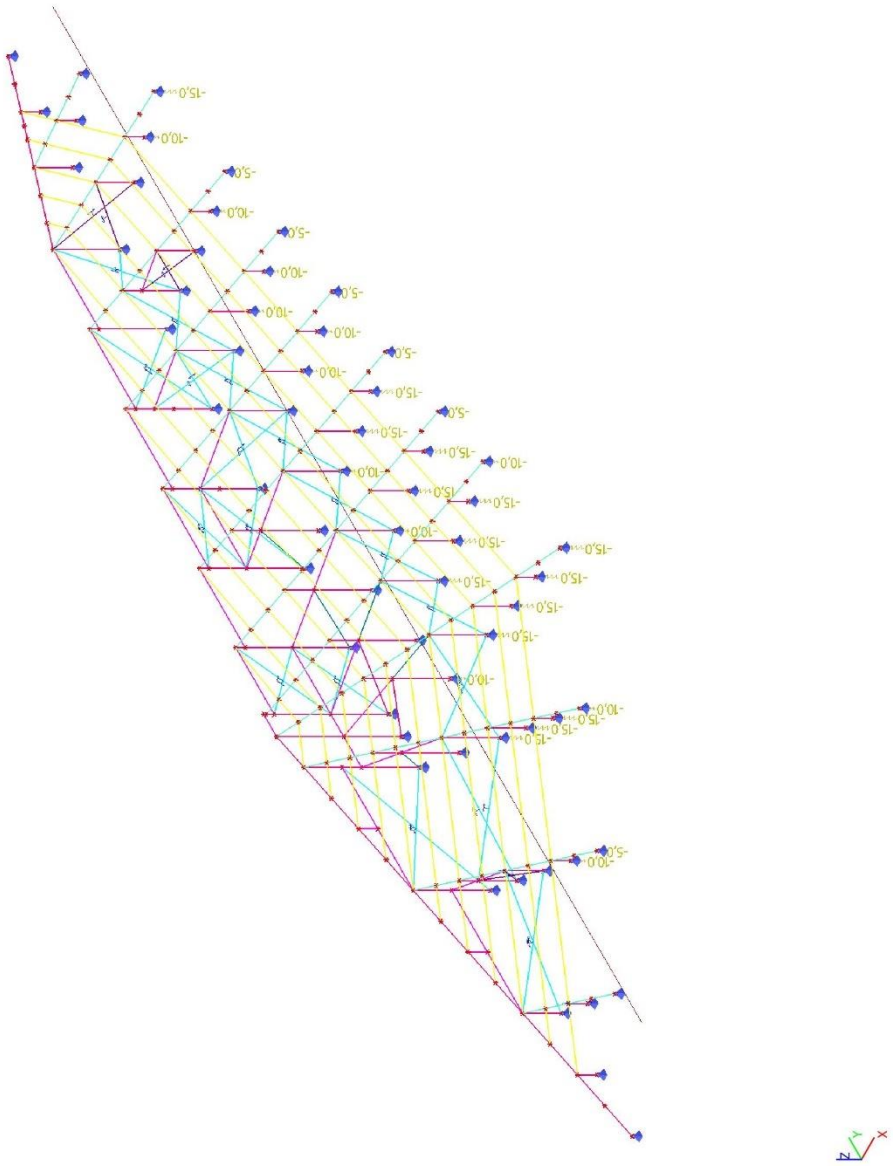
Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF1105	B239	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1106	B240	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1107	B241	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1108	B242	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1109	B243	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1110	B244	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1111	B245	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1112	B246	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1113	B247	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1114	B248	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1115	B249	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1116	B250	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1117	B251	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1118	B252	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1119	B253	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1120	B254	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1121	B255	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1122	B256	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1123	B257	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1124	B258	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1125	B259	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1126	B260	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1127	B261	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1128	B262	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1129	B263	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1130	B264	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1131	B265	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1132	B266	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1133	B267	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1134	B268	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1135	B269	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1136	B270	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000

Name	Member	Type	Dir	Value - P_1 [kN/m]	Pos x_1	Coor	Orig	Ecc ey [m]
	Load case	System	Distribution	Value - P_2 [kN/m]	Pos x_2	Loc		Ecc ez [m]
LF1137	B275	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1139	B436	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000
LF1140	B437	Snow	Z	-1,20	0.000	Rela	From start	0,000
	Q7 - Snow	GCS	Uniform	-1,20	1.000	Length		0,000

3.4.10. Loads per load cases - Q8

Name	Description	Action type	Load group
	Spec	Load type	
Q8	Long-term settlement	Permanent	Settlement
		Standard	

3.4.10.1. Loads



3.4.10.2. Point translation

Name	Support in node	Load case	System	Dir	Value - U [mm]
TRS1	Sn77	Q8 - Long-term settlement	LCS	Z	-5,0
TRS2	Sn78	Q8 - Long-term settlement	LCS	Z	-10,0
TRS3	Sn60	Q8 - Long-term settlement	LCS	Z	-15,0
TRS4	Sn10	Q8 - Long-term settlement	LCS	Z	-15,0
TRS5	Sn13	Q8 - Long-term settlement	LCS	Z	-15,0
TRS6	Sn14	Q8 - Long-term settlement	LCS	Z	-15,0
TRS7	Sn18	Q8 - Long-term settlement	LCS	Z	-15,0
TRS8	Sn28	Q8 - Long-term settlement	LCS	Z	-10,0
TRS9	Sn29	Q8 - Long-term settlement	LCS	Z	-5,0
TRS10	Sn30	Q8 - Long-term settlement	LCS	Z	-5,0
TRS11	Sn31	Q8 - Long-term settlement	LCS	Z	-5,0
TRS12	Sn32	Q8 - Long-term settlement	LCS	Z	-5,0
TRS13	Sn33	Q8 - Long-term settlement	LCS	Z	-5,0
TRS14	Sn34	Q8 - Long-term settlement	LCS	Z	-15,0
TRS15	Sn37	Q8 - Long-term settlement	LCS	Z	-10,0
TRS16	Sn40	Q8 - Long-term settlement	LCS	Z	-10,0
TRS17	Sn54	Q8 - Long-term settlement	LCS	Z	-10,0
TRS18	Sn55	Q8 - Long-term settlement	LCS	Z	-10,0
TRS19	Sn56	Q8 - Long-term settlement	LCS	Z	-10,0
TRS20	Sn58	Q8 - Long-term settlement	LCS	Z	-10,0
TRS22	Sn61	Q8 - Long-term settlement	LCS	Z	-15,0
TRS23	Sn62	Q8 - Long-term settlement	LCS	Z	-15,0
TRS24	Sn63	Q8 - Long-term settlement	LCS	Z	-15,0
TRS25	Sn64	Q8 - Long-term settlement	LCS	Z	-15,0
TRS26	Sn65	Q8 - Long-term settlement	LCS	Z	-15,0
TRS27	Sn68	Q8 - Long-term settlement	LCS	Z	-15,0
TRS28	Sn69	Q8 - Long-term settlement	LCS	Z	-15,0
TRS29	Sn70	Q8 - Long-term settlement	LCS	Z	-15,0
TRS30	Sn71	Q8 - Long-term settlement	LCS	Z	-15,0
TRS33	Sn17	Q8 - Long-term settlement	LCS	Z	-10,0
TRS34	Sn38	Q8 - Long-term settlement	LCS	Z	-10,0
TRS35	Sn41	Q8 - Long-term settlement	LCS	Z	-10,0
TRS36	Sn59	Q8 - Long-term settlement	LCS	Z	-10,0

Explanations of symbols	
Load case	Long-term settlement

4. Results

4.1. Reactions per Load case

4.1.1. Reactions per Load case - G1

Name	Description	Action type	Load group	Direction
	Spec	Load type		
G1	Eigen gewicht	Permanent	LG1	-Z
		Self weight		

4.1.1.1. Reactions

Linear calculation
Load case: G1
System: Global
Extreme: Global
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn13/N1	G1	**-0,34**	0,06	0,35	0,00	0,00	0,00	0,0	0,0
Sn12/N70	G1	0,22	**-0,37**	**5,88**	0,00	0,00	0,00	0,0	0,0
Sn22/N76	G1	**0,31**	**0,30**	4,68	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn2/N61	G1	0,05	-0,03	**0,14**	0,00	0,00	0,00	0,0	0,0

4.1.2. Reactions per Load case - G2

Name	Description	Action type	Load group
	Spec	Load type	
G2	Dead	Permanent	LG1
		Standard	

4.1.2.1. Reactions

Linear calculation
Load case: G2
System: Global
Extreme: Global
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn13/N1	G2	**-2,43**	0,45	0,82	0,00	0,00	0,00	0,0	0,0
Sn12/N70	G2	3,49	**-2,39**	12,91	0,00	0,00	0,00	0,0	0,0
Sn22/N76	G2	**6,89**	**1,47**	13,71	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn28/N88	G2	3,74	0,80	**-0,69**	0,00	0,00	0,00	0,0	0,0
Sn75/N342	G2	-0,93	0,09	**28,19**	0,00	0,00	0,00	0,0	0,0

4.1.3. Reactions per Load case - Q1

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
Q1	Live	Variable	Variable-C	Long	None
	Standard	Static			

4.1.3.1. Reactions

Linear calculation
Load case: Q1
System: Global
Extreme: Global
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn13/N1	Q1	**-5,36**	0,99	1,81	0,00	0,00	0,00	0,0	0,0
Sn24/N80	Q1	**7,96**	2,14	26,39	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn12/N70	Q1	7,73	**-5,34**	28,97	0,00	0,00	0,00	0,0	0,0
Sn74/N337	Q1	1,02	0,81	**-1,18**	0,00	0,00	0,00	0,0	0,0
Sn75/N342	Q1	-2,07	0,19	**63,20**	0,00	0,00	0,00	0,0	0,0
Sn1/N5	Q1	-0,03	**2,42**	0,68	0,00	0,00	**0,00**	0,0	0,0

4.1.4. Reactions per Load case - Q2

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
Q2	Horizontal_ Load_+X Static wind	Variable Static	Wind	None

4.1.4.1. Reactions

Linear calculation
Load case: Q2
System: Global
Extreme: Global
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn36/N141	Q2	**-0,28**	-0,06	-5,35	0,00	0,00	0,00	0,0	0,0
Sn30/N90	Q2	**26,60**	5,67	-13,75	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn74/N337	Q2	9,37	**7,24**	-6,04	0,00	0,00	0,00	0,0	0,0
Sn78/N73	Q2	23,78	**-15,43**	**-14,34**	0,00	0,00	0,00	0,0	0,0
Sn24/N80	Q2	8,75	2,87	**16,47**	0,00	0,00	0,00	0,0	0,0

4.1.5. Reactions per Load case - Q3

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
Q3	Horizontal_ Load_+Y Static wind	Variable Static	Wind	None

4.1.5.1. Reactions

Linear calculation
Load case: Q3
System: Global
Extreme: Global
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn14/N3	Q3	**-18,22**	-8,74	9,79	0,00	0,00	0,00	0,0	0,0
Sn15/N7	Q3	0,83	**-83,70**	25,87	0,00	0,00	0,00	0,0	0,0
Sn74/N337	Q3	**25,29**	**18,97**	-17,35	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn24/N80	Q3	-1,39	-14,12	**-28,98**	0,00	0,00	0,00	0,0	0,0
Sn25/N82	Q3	-0,14	-13,83	**28,41**	0,00	0,00	0,00	0,0	0,0

4.1.6. Reactions per Load case - Q4

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
Q4	Horizontal_ Load_-Y Static wind	Variable Static	Wind	None

4.1.6.1. Reactions

Linear calculation
Load case: Q4
System: Global
Extreme: Global
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn14/N3	Q4	**18,22**	8,74	-9,79	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn74/N337	Q4	**-25,29**	**-18,97**	17,35	0,00	0,00	0,00	0,0	0,0
Sn15/N7	Q4	-0,83	**83,70**	-25,87	0,00	0,00	0,00	0,0	0,0
Sn25/N82	Q4	0,14	13,83	**-28,41**	0,00	0,00	0,00	0,0	0,0
Sn24/N80	Q4	1,39	14,12	**28,98**	0,00	0,00	0,00	0,0	0,0

4.1.7. Reactions per Load case - Q5

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
Q5	Horizontal_ Load_-X Static wind	Variable Static	Wind	None

4.1.7.1. Reactions

Linear calculation
Load case: Q5
System: Global
Extreme: Global
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn13/N1	Q5	**-39,94**	7,39	**19,02**	0,00	0,00	0,00	0,0	0,0
Sn17/N16	Q5	**0,40**	-0,07	4,92	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn74/N337	Q5	-10,02	**-7,74**	6,45	0,00	0,00	0,00	0,0	0,0
Sn78/N73	Q5	-20,91	**13,57**	12,62	0,00	0,00	0,00	0,0	0,0
Sn24/N80	Q5	-8,57	-2,34	**-15,27**	0,00	0,00	0,00	0,0	0,0

4.1.8. Reactions per Load case - Q6

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
Q6	Uplift Static wind	Variable Static	Wind	None

4.1.8.1. Reactions

Linear calculation
Load case: Q6
System: Global
Extreme: Global
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn24/N80	Q6	**-1,55**	-0,39	-5,08	0,00	0,00	0,00	0,0	0,0
Sn13/N1	Q6	**1,03**	-0,19	-0,35	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn12/N70	Q6	-1,50	**1,04**	-5,63	0,00	0,00	0,00	0,0	0,0
Sn75/N342	Q6	0,40	-0,03	**-12,28**	0,00	0,00	0,00	0,0	0,0
Sn74/N337	Q6	-0,20	-0,16	**0,23**	0,00	0,00	0,00	0,0	0,0
Sn1/N5	Q6	0,01	**-0,44**	-0,13	0,00	0,00	**0,00**	0,0	0,0

4.1.9. Reactions per Load case - Q7

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
Q7	Snow Snow	Variable Static	Snow	None

4.1.9.1. Reactions

Linear calculation
Load case: Q7
System: Global
Extreme: Global
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn13/N1	Q7	**-1,27**	0,23	0,43	0,00	0,00	0,00	0,0	0,0
Sn24/N80	Q7	**1,91**	0,48	6,27	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn12/N70	Q7	1,85	**-1,29**	6,96	0,00	0,00	0,00	0,0	0,0
Sn74/N337	Q7	0,25	0,20	**-0,29**	0,00	0,00	0,00	0,0	0,0
Sn75/N342	Q7	-0,50	0,04	**15,17**	0,00	0,00	0,00	0,0	0,0
Sn1/N5	Q7	-0,01	**0,55**	0,15	0,00	0,00	**0,00**	0,0	0,0

4.1.10. Reactions per Load case - Q8

Name	Description	Action type	Load group
	Spec	Load type	
Q8	Long-term settlement	Permanent Standard	Settlement

4.1.10.1. Reactions

Linear calculation
Load case: Q8
System: Global
Extreme: Global
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn14/N3	Q8	**362,30**	**165,22**	-191,75	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn19/N34	Q8	**-232,56**	-65,04	**-297,15**	0,00	0,00	0,00	0,0	0,0
Sn50/N223	Q8	-97,90	-45,36	**484,76**	0,00	0,00	0,00	0,0	0,0
Sn1/N5	Q8	0,10	**-100,11**	-27,46	0,00	0,00	**0,00**	0,0	0,0

4.2. Reactions ULS

Nonlinear calculation
Class: ALL ULS-NL
System: Global
Extreme: Member
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn1/N5	NC_ULS-LC21	**1,00**	156,24	43,84	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn1/N5	NC_ULS-LC19	-0,96	**-89,31**	**-24,77**	0,00	0,00	0,00	0,0	0,0
Sn1/N5	NC_ULS-LC16	0,97	**160,44**	**45,13**	0,00	0,00	0,00	0,0	0,0
Sn1/N5	NC_ULS-LC14	**-0,97**	-79,89	-22,07	0,00	0,00	**0,00**	0,0	0,0
Sn2/N61	NC_ULS-LC16	**33,63**	**-21,12**	**-23,48**	0,00	0,00	0,00	0,0	0,0
Sn2/N61	NC_ULS-LC19	1,08	-1,41	**3,48**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn2/N61	NC_ULS-LC27	**0,02**	**-0,01**	0,15	0,00	0,00	**0,00**	0,0	0,0
Sn3/N59	NC_ULS-LC16	**0,61**	**3,70**	60,09	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn3/N59	NC_ULS-LC6	-1,16	1,28	**69,04**	0,00	0,00	0,00	0,0	0,0
Sn3/N59	NC_ULS_SETTLEMENT	**-28,83**	**-45,48**	**-22,66**	0,00	0,00	**0,00**	0,0	0,0

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn5/N229	NC_ULS-LC26	**18,44**	26,79	50,01	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn5/N229	NC_ULS_SETTLEMENT	7,77	**-5,34**	**270,89**	0,00	0,00	0,00	0,0	0,0
Sn5/N229	NC_ULS-LC16	18,15	**27,02**	57,67	0,00	0,00	0,00	0,0	0,0
Sn5/N229	NC_ULS-LC21	18,25	26,47	**5,63**	0,00	0,00	0,00	0,0	0,0
Sn5/N229	NC_ULS-LC22	**-1,27**	0,72	52,72	0,00	0,00	**0,00**	0,0	0,0
Sn6/N227	NC_ULS-LC15	**0,24**	-0,23	74,48	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn6/N227	NC_ULS-LC14	-5,87	**-9,28**	52,90	0,00	0,00	0,00	0,0	0,0
Sn6/N227	NC_ULS-LC6	-0,60	0,47	**81,08**	0,00	0,00	0,00	0,0	0,0
Sn6/N227	NC_ULS_SETTLEMENT	**-73,50**	**37,02**	**-96,41**	0,00	0,00	**0,00**	0,0	0,0
Sn7/N68	NC_ULS-LC14	**3,92**	-12,11	62,85	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn7/N68	NC_ULS-LC19	3,39	**-12,63**	20,16	0,00	0,00	0,00	0,0	0,0
Sn7/N68	NC_ULS-LC11	0,00	**0,58**	40,28	0,00	0,00	0,00	0,0	0,0
Sn7/N68	NC_ULS-LC6	0,25	-0,25	**86,45**	0,00	0,00	0,00	0,0	0,0
Sn7/N68	NC_ULS_SETTLEMENT	**-0,91**	-0,26	**-9,37**	0,00	0,00	**0,00**	0,0	0,0
Sn10/N202	NC_ULS-LC16	-0,10	**1,68**	78,30	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn10/N202	NC_ULS_SETTLEMENT	**8,57**	1,03	**-154,69**	0,00	0,00	0,00	0,0	0,0
Sn10/N202	NC_ULS-LC6	-1,15	0,70	**105,56**	0,00	0,00	0,00	0,0	0,0
Sn10/N202	NC_ULS-LC14	**-7,35**	**-9,58**	75,30	0,00	0,00	**0,00**	0,0	0,0
Sn11/N200	NC_ULS_SETTLEMENT	**7,44**	**-4,83**	**5,46**	0,00	0,00	0,00	0,0	0,0
Sn11/N200	NC_ULS-LC6	-0,52	0,34	**85,61**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn11/N200	NC_ULS-LC15	**-0,74**	**0,48**	51,62	0,00	0,00	**0,00**	0,0	0,0
Sn12/N70	NC_ULS_SETTLEMENT	**74,21**	**-46,67**	61,05	0,00	0,00	0,00	0,0	0,0
Sn12/N70	NC_ULS-LC21	-2,54	**22,12**	-2,95	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn12/N70	NC_ULS-LC15	26,91	-17,75	**69,58**	0,00	0,00	0,00	0,0	0,0
Sn12/N70	NC_ULS-LC22	**-11,61**	11,69	**-5,34**	0,00	0,00	**0,00**	0,0	0,0
Sn13/N1	NC_ULS-LC20	**28,43**	**-5,26**	**-13,66**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn13/N1	NC_ULS_SETTLEMENT	**-232,96**	**43,25**	**109,05**	0,00	0,00	**0,00**	0,0	0,0
Sn14/N3	NC_ULS_SETTLEMENT	**262,56**	**119,82**	**-138,05**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn14/N3	NC_ULS-LC14	**-43,39**	**-20,34**	**22,79**	0,00	0,00	**0,00**	0,0	0,0
Sn15/N7	NC_ULS-LC19	**1,14**	-182,48	56,40	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn15/N7	NC_ULS-LC14	1,08	**-189,96**	**58,77**	0,00	0,00	0,00	0,0	0,0
Sn15/N7	NC_ULS-LC26	-1,29	157,32	**-48,08**	0,00	0,00	0,00	0,0	0,0
Sn15/N7	NC_ULS-LC16	**-1,29**	**157,41**	-47,99	0,00	0,00	**0,00**	0,0	0,0
Sn16/N9	NC_ULS_SETTLEMENT	**313,67**	**-57,89**	**224,15**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn16/N9	NC_ULS-LC22	**-37,32**	**6,91**	**-19,87**	0,00	0,00	**0,00**	0,0	0,0
Sn17/N16	NC_ULS-LC22	**0,78**	-0,21	31,41	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn17/N16	NC_ULS-LC17	0,77	**-0,32**	79,60	0,00	0,00	0,00	0,0	0,0
Sn17/N16	NC_ULS-LC6	-0,05	-0,22	**96,24**	0,00	0,00	0,00	0,0	0,0
Sn17/N16	NC_ULS_SETTLEMENT	**-5,87**	**1,02**	**-236,88**	0,00	0,00	**0,00**	0,0	0,0
Sn18/N22	NC_ULS-LC19	2,39	**-11,93**	12,56	0,00	0,00	0,00	0,0	0,0
Sn18/N22	NC_ULS-LC21	**4,42**	**7,50**	27,34	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn18/N22	NC_ULS_SETTLEMENT	-0,10	0,16	**-96,43**	0,00	0,00	0,00	0,0	0,0
Sn18/N22	NC_ULS-LC6	**-1,17**	0,26	**82,51**	0,00	0,00	**0,00**	0,0	0,0
Sn19/N34	NC_ULS-LC10	**0,07**	-0,01	21,94	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn19/N34	NC_ULS-LC16	-4,61	**10,68**	38,90	0,00	0,00	0,00	0,0	0,0
Sn19/N34	NC_ULS-LC6	0,02	-0,02	**47,75**	0,00	0,00	0,00	0,0	0,0
Sn19/N34	NC_ULS_SETTLEMENT	**-271,18**	**-79,97**	**-219,92**	0,00	0,00	**0,00**	0,0	0,0
Sn22/N76	NC_ULS-LC19	2,68	**-14,27**	**-5,44**	0,00	0,00	0,00	0,0	0,0
Sn22/N76	NC_ULS_SETTLEMENT	**110,73**	**22,75**	**77,95**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn22/N76	NC_ULS-LC22	**-11,70**	-2,49	5,16	0,00	0,00	**0,00**	0,0	0,0
Sn23/N78	NC_ULS_SETTLEMENT	**87,29**	**25,85**	59,65	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn23/N78	NC_ULS-LC15	28,21	6,01	**68,93**	0,00	0,00	0,00	0,0	0,0
Sn23/N78	NC_ULS-LC22	**-13,65**	**0,10**	**-9,57**	0,00	0,00	**0,00**	0,0	0,0
Sn24/N80	NC_ULS-LC19	1,79	**-34,48**	**-19,77**	0,00	0,00	0,00	0,0	0,0
Sn24/N80	NC_ULS_SETTLEMENT	**72,26**	**15,04**	**92,17**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn24/N80	NC_ULS-LC22	**-9,36**	-4,77	-8,66	0,00	0,00	**0,00**	0,0	0,0
Sn25/N82	NC_ULS-LC16	**0,25**	30,54	20,45	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn25/N82	NC_ULS-LC21	0,15	**31,13**	-15,07	0,00	0,00	0,00	0,0	0,0
Sn25/N82	NC_ULS-LC14	0,08	0,43	**85,26**	0,00	0,00	0,00	0,0	0,0
Sn25/N82	NC_ULS_SETTLEMENT	**-37,96**	**-4,20**	**-48,68**	0,00	0,00	**0,00**	0,0	0,0
Sn26/N84	NC_ULS-LC14	0,04	**-34,40**	11,98	0,00	0,00	0,00	0,0	0,0
Sn26/N84	NC_ULS-LC23	0,04	**0,00**	5,32	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn26/N84	NC_ULS-LC16	**0,56**	-0,97	**61,23**	0,00	0,00	0,00	0,0	0,0
Sn26/N84	NC_ULS_SETTLEMENT	**-36,81**	-7,48	**-46,59**	0,00	0,00	**0,00**	0,0	0,0
Sn27/N86	NC_ULS-LC6	**0,58**	0,22	40,66	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn27/N86	NC_ULS-LC10	0,24	**-0,05**	15,30	0,00	0,00	0,00	0,0	0,0

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn27/N86	NC_ULS-LC21	0,18	**26,81**	**-15,50**	0,00	0,00	0,00	0,0	0,0
Sn27/N86	NC_ULS-LC14	0,35	1,17	**59,71**	0,00	0,00	0,00	0,0	0,0
Sn27/N86	NC_ULS_SETTLEMENT	**-0,64**	6,35	-9,19	0,00	0,00	**0,00**	0,0	0,0
Sn28/N88	NC_ULS-LC10	**37,07**	**7,90**	**-17,48**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn28/N88	NC_ULS_SETTLEMENT	**-144,85**	**-30,68**	**79,86**	0,00	0,00	**0,00**	0,0	0,0
Sn29/N89	NC_ULS-LC20	**35,32**	**7,52**	**-18,35**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn29/N89	NC_ULS_SETTLEMENT	**-157,56**	**-33,39**	**92,46**	0,00	0,00	**0,00**	0,0	0,0
Sn30/N90	NC_ULS-LC20	**38,05**	**8,11**	**-19,78**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn30/N90	NC_ULS_SETTLEMENT	**-139,69**	**-29,59**	**82,81**	0,00	0,00	**0,00**	0,0	0,0
Sn31/N91	NC_ULS-LC15	**44,74**	**9,54**	**-23,87**	0,00	0,00	0,00	0,0	0,0
Sn31/N91	NC_ULS-LC12	-39,33	-8,35	**20,19**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn31/N91	NC_ULS-LC17	**-39,80**	**-8,43**	19,81	0,00	0,00	**0,00**	0,0	0,0
Sn32/N92	NC_ULS-LC15	**39,10**	**8,34**	**-20,96**	0,00	0,00	0,00	0,0	0,0
Sn32/N92	NC_ULS-LC12	-34,98	-7,43	**17,96**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn32/N92	NC_ULS-LC17	**-35,68**	**-7,55**	17,71	0,00	0,00	**0,00**	0,0	0,0
Sn33/N93	NC_ULS-LC15	**34,77**	**7,41**	**-18,75**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn33/N93	NC_ULS-LC17	**-30,44**	**-6,44**	**15,00**	0,00	0,00	**0,00**	0,0	0,0
Sn34/N135	NC_ULS_SETTLEMENT	**11,50**	**-19,94**	**-217,45**	0,00	0,00	0,00	0,0	0,0
Sn34/N135	NC_ULS-LC6	-1,03	-0,22	**77,26**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn34/N135	NC_ULS-LC16	**-3,22**	**11,66**	55,47	0,00	0,00	**0,00**	0,0	0,0
Sn35/N139	NC_ULS_SETTLEMENT	**8,54**	**1,80**	**-2,89**	0,00	0,00	0,00	0,0	0,0
Sn35/N139	NC_ULS-LC6	-0,40	-0,07	**107,81**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn35/N139	NC_ULS-LC15	**-0,71**	**-0,14**	73,29	0,00	0,00	**0,00**	0,0	0,0
Sn36/N141	NC_ULS_SETTLEMENT	**5,64**	**1,19**	**-50,29**	0,00	0,00	0,00	0,0	0,0
Sn36/N141	NC_ULS-LC6	-0,49	-0,11	**101,83**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn36/N141	NC_ULS-LC15	**-0,78**	**-0,17**	64,61	0,00	0,00	**0,00**	0,0	0,0
Sn37/N143	NC_ULS_SETTLEMENT	**9,24**	1,96	16,85	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn37/N143	NC_ULS-LC19	2,22	**-11,98**	19,02	0,00	0,00	0,00	0,0	0,0
Sn37/N143	NC_ULS-LC26	-3,39	**11,76**	52,05	0,00	0,00	0,00	0,0	0,0
Sn37/N143	NC_ULS-LC23	-0,09	-0,01	**6,17**	0,00	0,00	0,00	0,0	0,0
Sn37/N143	NC_ULS-LC6	-1,37	-0,28	**84,12**	0,00	0,00	0,00	0,0	0,0
Sn37/N143	NC_ULS-LC16	**-3,48**	11,75	58,03	0,00	0,00	**0,00**	0,0	0,0
Sn38/N145	NC_ULS_SETTLEMENT	**26,23**	**-74,59**	**-156,08**	0,00	0,00	0,00	0,0	0,0
Sn38/N145	NC_ULS-LC6	-1,88	-0,40	**95,27**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn38/N145	NC_ULS-LC16	**-3,91**	**11,92**	67,69	0,00	0,00	**0,00**	0,0	0,0
Sn39/N147	NC_ULS_SETTLEMENT	**5,72**	**1,22**	**-47,76**	0,00	0,00	0,00	0,0	0,0
Sn39/N147	NC_ULS-LC6	-0,83	-0,18	**81,21**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn39/N147	NC_ULS-LC15	**-0,94**	**-0,20**	46,82	0,00	0,00	**0,00**	0,0	0,0
Sn40/N157	NC_ULS_SETTLEMENT	**21,41**	**4,55**	**-70,35**	0,00	0,00	0,00	0,0	0,0
Sn40/N157	NC_ULS-LC6	1,25	0,27	**65,40**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn40/N157	NC_ULS-LC22	**-0,44**	**-0,10**	8,88	0,00	0,00	**0,00**	0,0	0,0
Sn41/N161	NC_ULS_SETTLEMENT	**22,39**	**4,76**	**-96,72**	0,00	0,00	0,00	0,0	0,0
Sn41/N161	NC_ULS-LC6	0,70	0,15	**73,36**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn41/N161	NC_ULS-LC22	**-0,44**	**-0,09**	9,87	0,00	0,00	**0,00**	0,0	0,0
Sn48/N220	NC_ULS-LC19	0,03	**-0,17**	16,66	0,00	0,00	0,00	0,0	0,0
Sn48/N220	NC_ULS-LC23	-0,01	0,00	**5,67**	0,00	0,00	0,00	0,0	0,0
Sn48/N220	NC_ULS_SETTLEMENT	**9,71**	**2,08**	**258,63**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn48/N220	NC_ULS-LC12	**-0,44**	-0,09	25,63	0,00	0,00	**0,00**	0,0	0,0
Sn49/N222	NC_ULS-LC14	**9,19**	**-21,09**	50,80	0,00	0,00	0,00	0,0	0,0
Sn49/N222	NC_ULS-LC21	-2,42	**11,50**	19,79	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn49/N222	NC_ULS-LC6	0,42	-0,69	**84,32**	0,00	0,00	0,00	0,0	0,0
Sn49/N222	NC_ULS_SETTLEMENT	**-88,55**	6,46	**-110,88**	0,00	0,00	**0,00**	0,0	0,0
Sn50/N223	NC_ULS-LC21	**3,23**	**1,71**	32,54	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn50/N223	NC_ULS-LC23	-0,19	-0,10	**7,15**	0,00	0,00	0,00	0,0	0,0
Sn50/N223	NC_ULS_SETTLEMENT	2,39	0,22	**389,07**	0,00	0,00	0,00	0,0	0,0
Sn50/N223	NC_ULS-LC14	**-2,32**	**-1,48**	66,04	0,00	0,00	**0,00**	0,0	0,0
Sn52/N312	NC_ULS-LC16	17,49	**-2,56**	1,39	0,00	0,00	0,00	0,0	0,0
Sn52/N312	NC_ULS-LC24	-20,66	**4,89**	19,93	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn52/N312	NC_ULS-LC21	**17,94**	-2,42	**-5,42**	0,00	0,00	0,00	0,0	0,0
Sn52/N312	NC_ULS-LC14	**-20,80**	4,87	**21,18**	0,00	0,00	**0,00**	0,0	0,0
Sn53/N306	NC_ULS-LC14	**6,93**	**-4,52**	37,87	0,00	0,00	0,00	0,0	0,0
Sn53/N306	NC_ULS_SETTLEMENT	1,00	-0,65	**2,40**	0,00	0,00	0,00	0,0	0,0
Sn53/N306	NC_ULS-LC6	-2,78	1,82	**61,21**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn53/N306	NC_ULS-LC16	**-9,18**	**6,00**	45,92	0,00	0,00	**0,00**	0,0	0,0
Sn54/N303	NC_ULS_SETTLEMENT	**51,49**	**-33,42**	**-151,55**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn54/N303	NC_ULS-LC6	**-3,93**	**2,55**	**78,17**	0,00	0,00	**0,00**	0,0	0,0

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn55/N316	NC_ULS_SETTLEMENT	**14,83**	**3,16**	**-0,43**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn55/N316	NC_ULS-LC6	**-4,26**	**-0,90**	**60,78**	0,00	0,00	**0,00**	0,0	0,0
Sn56/N317	NC_ULS_SETTLEMENT	**60,62**	**12,90**	**-143,05**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn56/N317	NC_ULS-LC6	**-4,36**	**-0,93**	**66,36**	0,00	0,00	**0,00**	0,0	0,0
Sn58/N315	NC_ULS_SETTLEMENT	**11,03**	**2,35**	**-11,09**	0,00	0,00	0,00	0,0	0,0
Sn58/N315	NC_ULS-LC6	-4,28	-0,91	**61,57**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn58/N315	NC_ULS-LC17	**-4,33**	**-0,92**	40,47	0,00	0,00	**0,00**	0,0	0,0
Sn59/N318	NC_ULS_SETTLEMENT	**22,00**	**9,67**	**-60,60**	0,00	0,00	0,00	0,0	0,0
Sn59/N318	NC_ULS-LC6	-3,29	-1,48	**63,60**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn59/N318	NC_ULS-LC14	**-3,99**	**-3,86**	38,52	0,00	0,00	**0,00**	0,0	0,0
Sn60/N323	NC_ULS_SETTLEMENT	**13,70**	**-8,89**	**-25,28**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn60/N323	NC_ULS-LC6	**-4,85**	**3,15**	**78,84**	0,00	0,00	**0,00**	0,0	0,0
Sn61/N324	NC_ULS_SETTLEMENT	**4,79**	**-3,11**	20,45	0,00	0,00	0,00	0,0	0,0
Sn61/N324	NC_ULS-LC23	0,03	-0,02	**5,84**	0,00	0,00	0,00	0,0	0,0
Sn61/N324	NC_ULS-LC6	0,55	-0,35	**92,82**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn61/N324	NC_ULS-LC22	**-0,47**	**0,30**	13,59	0,00	0,00	**0,00**	0,0	0,0
Sn62/N325	NC_ULS-LC20	**-0,33**	0,11	20,46	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn62/N325	NC_ULS-LC19	-1,29	**-3,74**	22,08	0,00	0,00	0,00	0,0	0,0
Sn62/N325	NC_ULS-LC16	-4,77	**4,78**	48,10	0,00	0,00	0,00	0,0	0,0
Sn62/N325	NC_ULS-LC23	-0,34	0,06	**4,83**	0,00	0,00	0,00	0,0	0,0
Sn62/N325	NC_ULS-LC6	-6,21	1,19	**76,59**	0,00	0,00	0,00	0,0	0,0
Sn62/N325	NC_ULS_SETTLEMENT	**-13,67**	1,54	10,50	0,00	0,00	**0,00**	0,0	0,0
Sn63/N326	NC_ULS_SETTLEMENT	**12,13**	**2,59**	**-32,18**	0,00	0,00	0,00	0,0	0,0
Sn63/N326	NC_ULS-LC6	-4,28	-0,91	**67,99**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn63/N326	NC_ULS-LC16	**-4,51**	**-0,94**	50,80	0,00	0,00	**0,00**	0,0	0,0
Sn64/N327	NC_ULS_SETTLEMENT	**31,49**	**6,71**	**-59,14**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn64/N327	NC_ULS-LC6	**-4,40**	**-0,94**	**55,96**	0,00	0,00	**0,00**	0,0	0,0
Sn65/N328	NC_ULS_SETTLEMENT	**30,68**	**6,53**	**-57,46**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn65/N328	NC_ULS-LC6	**-4,73**	**-1,01**	**61,03**	0,00	0,00	**0,00**	0,0	0,0
Sn67/N330	NC_ULS-LC21	-17,32	**-2,49**	11,63	0,00	0,00	0,00	0,0	0,0
Sn67/N330	NC_ULS_SETTLEMENT	1,16	**2,67**	-0,97	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn67/N330	NC_ULS-LC19	**17,08**	2,01	**-4,64**	0,00	0,00	0,00	0,0	0,0
Sn67/N330	NC_ULS-LC16	**-17,70**	-2,39	**17,62**	0,00	0,00	**0,00**	0,0	0,0
Sn68/N331	NC_ULS-LC15	**0,91**	-0,16	63,70	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn68/N331	NC_ULS-LC14	0,49	**-0,60**	62,91	0,00	0,00	0,00	0,0	0,0
Sn68/N331	NC_ULS-LC21	-0,52	**0,46**	**3,47**	0,00	0,00	0,00	0,0	0,0
Sn68/N331	NC_ULS-LC6	0,49	-0,13	**82,82**	0,00	0,00	0,00	0,0	0,0
Sn68/N331	NC_ULS_SETTLEMENT	**-3,99**	0,28	24,54	0,00	0,00	**0,00**	0,0	0,0
Sn69/N332	NC_ULS_SETTLEMENT	**5,59**	**1,18**	38,45	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn69/N332	NC_ULS-LC23	0,10	0,02	**8,05**	0,00	0,00	0,00	0,0	0,0
Sn69/N332	NC_ULS-LC6	0,58	0,12	**77,23**	0,00	0,00	0,00	0,0	0,0
Sn69/N332	NC_ULS-LC22	**-0,35**	**-0,07**	13,03	0,00	0,00	**0,00**	0,0	0,0
Sn70/N333	NC_ULS_SETTLEMENT	**19,69**	**4,18**	**-8,33**	0,00	0,00	0,00	0,0	0,0
Sn70/N333	NC_ULS-LC6	0,39	0,08	**68,43**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn70/N333	NC_ULS-LC22	**-0,53**	**-0,11**	9,23	0,00	0,00	**0,00**	0,0	0,0
Sn71/N334	NC_ULS_SETTLEMENT	**20,91**	**4,44**	**1,71**	0,00	0,00	0,00	0,0	0,0
Sn71/N334	NC_ULS-LC6	0,56	0,12	**72,98**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn71/N334	NC_ULS-LC22	**-0,53**	**-0,11**	9,74	0,00	0,00	**0,00**	0,0	0,0
Sn72/N335	NC_ULS-LC14	0,67	**-2,82**	34,23	0,00	0,00	0,00	0,0	0,0
Sn72/N335	NC_ULS_SETTLEMENT	**3,38**	**2,10**	**-7,25**	0,00	0,00	0,00	0,0	0,0
Sn72/N335	NC_ULS-LC6	-0,23	-2,18	**48,97**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn72/N335	NC_ULS-LC16	**-0,86**	-0,39	36,32	0,00	0,00	**0,00**	0,0	0,0
Sn73/N339	NC_ULS-LC21	**3,75**	**2,70**	10,21	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn73/N339	NC_ULS_SETTLEMENT	0,92	0,55	**3,30**	0,00	0,00	0,00	0,0	0,0
Sn73/N339	NC_ULS-LC6	-2,57	-2,01	**51,07**	0,00	0,00	0,00	0,0	0,0
Sn73/N339	NC_ULS-LC14	**-5,36**	**-3,96**	36,34	0,00	0,00	**0,00**	0,0	0,0
Sn74/N337	NC_ULS-LC14	**64,70**	**49,21**	**-43,58**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn74/N337	NC_ULS_SETTLEMENT	**-49,00**	**-37,76**	**32,13**	0,00	0,00	**0,00**	0,0	0,0
Sn75/N342	NC_ULS-LC19	1,68	**-12,08**	28,12	0,00	0,00	0,00	0,0	0,0
Sn75/N342	NC_ULS-LC21	-2,24	**11,77**	30,25	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn75/N342	NC_ULS-LC23	-0,23	-0,05	**9,94**	0,00	0,00	0,00	0,0	0,0
Sn75/N342	NC_ULS_SETTLEMENT	**7,32**	1,54	**205,50**	0,00	0,00	0,00	0,0	0,0
Sn75/N342	NC_ULS-LC16	**-3,50**	11,70	101,01	0,00	0,00	**0,00**	0,0	0,0
Sn76/N343	NC_ULS-LC20	**4,72**	1,00	23,92	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn76/N343	NC_ULS-LC19	2,18	**-12,23**	21,60	0,00	0,00	0,00	0,0	0,0
Sn76/N343	NC_ULS-LC23	-0,13	-0,03	**7,95**	0,00	0,00	0,00	0,0	0,0

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn76/N343	NC_ULS_SETTLEMENT	0,52	**24,05**	**142,88**	0,00	0,00	0,00	0,0	0,0
Sn76/N343	NC_ULS-LC16	**-3,27**	10,44	80,19	0,00	0,00	**0,00**	0,0	0,0
Sn77/N72	NC_ULS-LC15	**36,30**	**-23,60**	**-22,89**	0,00	0,00	0,00	0,0	0,0
Sn77/N72	NC_ULS_SETTLEMENT	17,76	-11,35	**7,50**	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn77/N72	NC_ULS-LC12	**0,11**	**-0,06**	0,39	0,00	0,00	**0,00**	0,0	0,0
Sn78/N73	NC_ULS-LC20	**35,43**	**-23,01**	-21,54	**0,00**	**0,00**	**0,00**	0,0	0,0
Sn78/N73	NC_ULS-LC25	34,29	-22,30	**-21,61**	0,00	0,00	0,00	0,0	0,0
Sn78/N73	NC_ULS_SETTLEMENT	**-121,87**	**79,28**	**79,66**	0,00	0,00	**0,00**	0,0	0,0

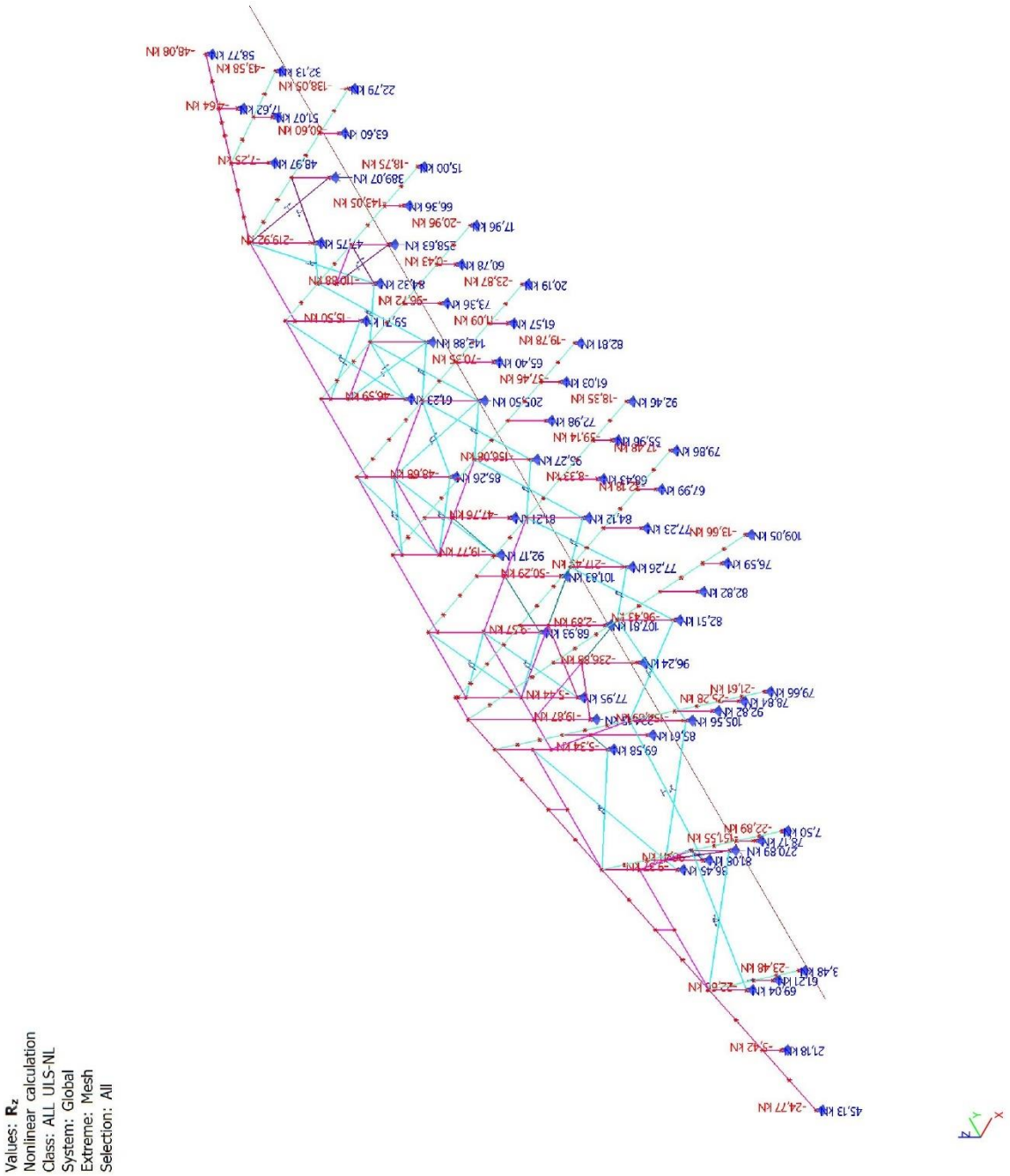
4.3. Resultant of reactions

Linear calculation
Class: All ULS
Extreme: Global
Selection: All
System: Global

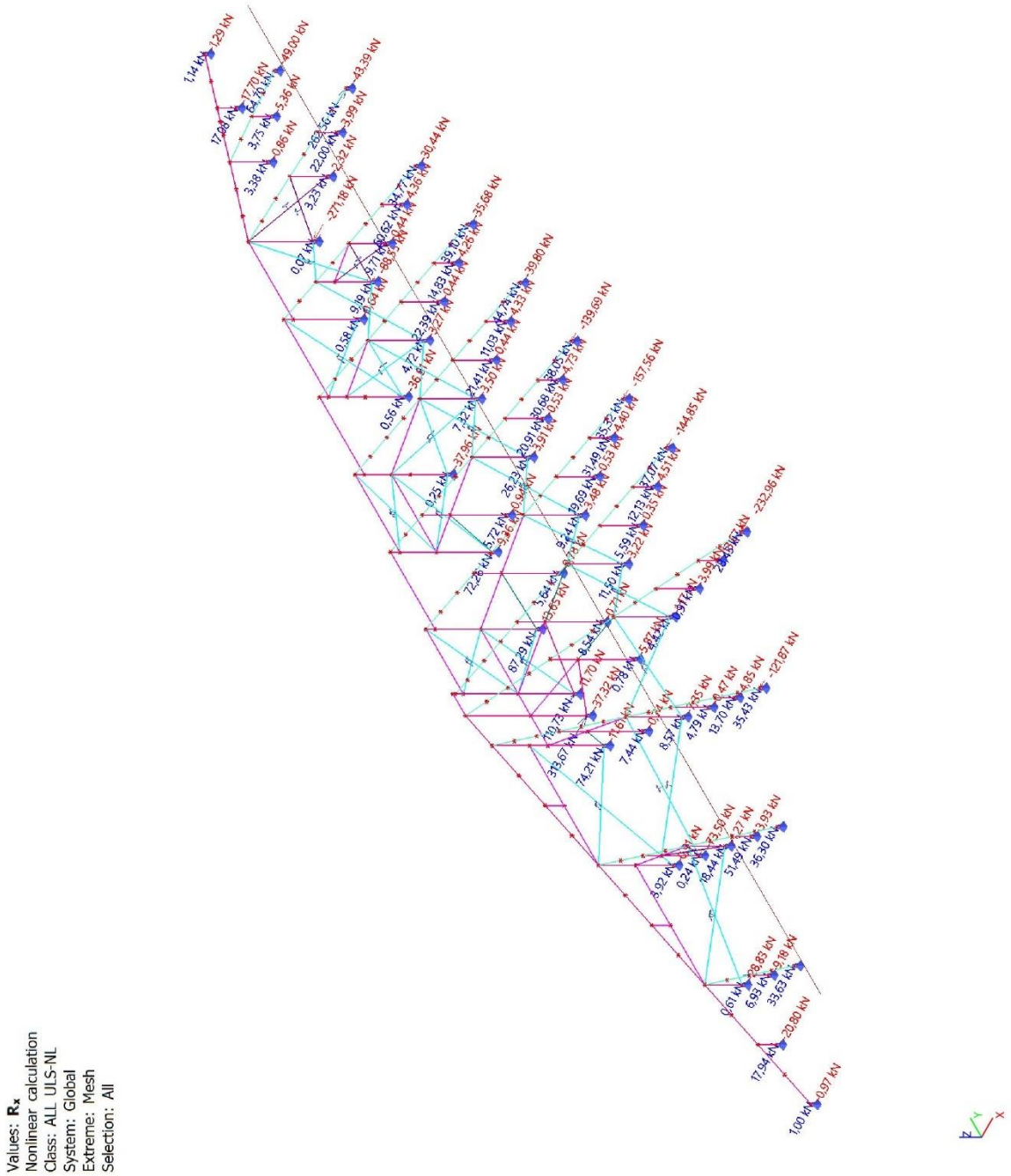
x [m]	y [m]	z [m]	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
3,801	26,123	0,000	ULS-LC/1	8,62	**-538,69**	802,89	**421,10**	381,99	220,84
3,801	26,123	0,000	ULS-LC/2	8,62	2,23	**302,16**	-381,54	216,62	42,20
3,801	26,123	0,000	ULS-LC/3	11,23	4,40	**3647,64**	-3107,04	1359,54	52,53
3,801	26,123	0,000	ULS-LC/4	11,34	**544,75**	2617,33	**-3484,32**	1019,70	-124,59
3,801	26,123	0,000	ULS-LC/5	-532,30	2,23	802,89	-781,62	**-820,73**	-389,98
3,801	26,123	0,000	ULS-LC/6	512,50	3,83	2617,33	-2281,50	**2140,94**	278,13
3,801	26,123	0,000	ULS-LC/7	**-532,46**	3,09	2348,36	-2019,77	-310,98	**-392,26**
3,801	26,123	0,000	ULS-LC/8	**512,66**	2,98	1071,86	-1043,35	1631,19	**280,41**

Name	Combination key
ULS-LC/1	0.90*G1 + 0.90*G2 + 1.50*Q3
ULS-LC/2	0.90*G1 + 0.90*G2 + 1.50*Q6
ULS-LC/3	1.20*G1 + 1.20*G2 + 1.50*Q1
ULS-LC/4	1.20*G1 + 1.20*G2 + 0.90*Q1 + 1.50*Q4
ULS-LC/5	0.90*G1 + 0.90*G2 + 1.50*Q5
ULS-LC/6	1.20*G1 + 1.20*G2 + 0.90*Q1 + 1.50*Q2
ULS-LC/7	0.90*G1 + 0.90*G2 + 0.90*Q1 + 1.50*Q5
ULS-LC/8	1.20*G1 + 1.20*G2 + 1.50*Q2

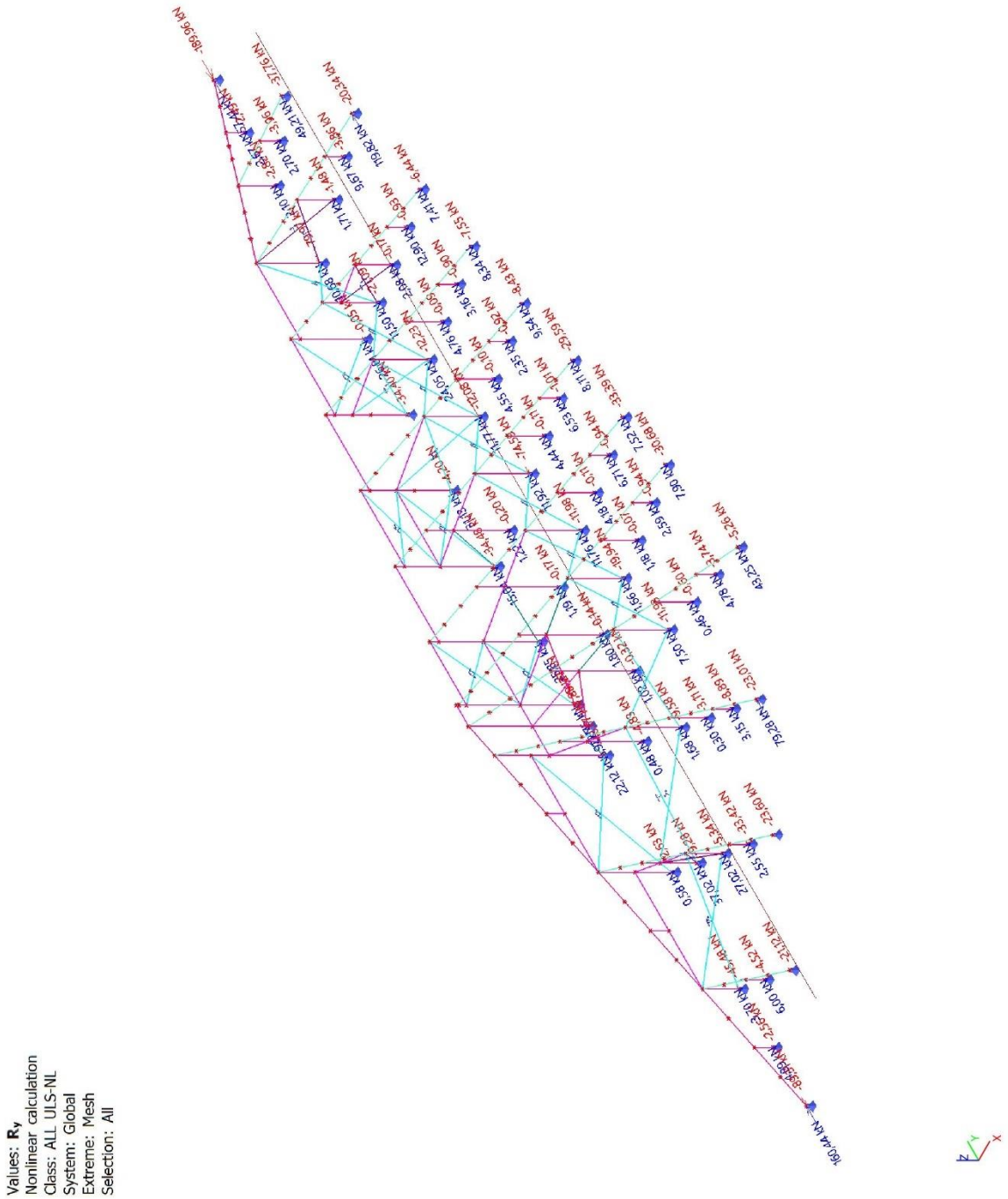
4.4. Reacties; R_z



4.5. Reacties; R_x



4.6. Reacties; R_y



5. Steel checks

6. EC-EN 1993 Steel check ULS

Nonlinear calculation
Class: ALL ULS-NL
Coordinate system: Principal
Extreme 1D: Global
Selection: All

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B61	1,801 / 7,203 m	IPE220	S 355	ALL ULS-NL	0,80 -

Combination key
ALL ULS-NL / NC_ULS_SETTLEMENT

Partial safety factors	
γ_{M0} for resistance of cross-sections	1,00
γ_{M1} for resistance to instability	1,00
γ_{M2} for resistance of net sections	1,25

Material			
Yield strength	f_y	355,0	MPa
Ultimate strength	f_u	490,0	MPa
Fabrication		Rolled	

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

The critical check is on position 1,801 m

Internal forces		Calculated	Unit
Normal force	N_{Ed}	137,87	kN
Shear force	$V_{y,Ed}$	0,77	kN
Shear force	$V_{z,Ed}$	-92,43	kN
Torsion	T_{Ed}	0,00	kNm
Bending moment	$M_{y,Ed}$	80,84	kNm
Bending moment	$M_{z,Ed}$	-0,27	kNm

Classification for cross-section design
Classification according to EN 1993-1-1 article 5.5.2
Classification of Internal and Outstand parts according to EN 1993-1-1 Table 5.2 Sheet 1 & 2

Id	Type	c [mm]	t [mm]	σ_1 [kN/m²]	σ_2 [kN/m²]	Ψ [-]	k_σ [-]	α [-]	c/t [-]	Class 1 Limit [-]	Class 2 Limit [-]	Class 3 Limit [-]	Class
1	SO	40	9	-3,467e+05	-3,413e+05								
3	SO	40	9	-3,507e+05	-3,560e+05								
4	I	178	6	-3,003e+05	2,176e+05	-1,38		0,31	30,10	93,08	107,30	140,99	1
5	SO	40	9	2,640e+05	2,587e+05	0,98	0,44	1,00	4,35	7,32	8,14	11,31	1
7	SO	40	9	2,680e+05	2,734e+05	0,98	0,43	1,00	4,35	7,32	8,14	11,22	1

Note: The Classification limits have been set according to Semi-Comp+.
The cross-section is classified as Class 1

Tension check
According to EN 1993-1-1 article 6.2.3 and formula (6.5)

Cross-section area	A	3,3400e-03	m^2
Plastic tension resistance	$N_{pl,Rd}$	1185,70	kN
Ultimate tension resistance	$N_{u,Rd}$	1178,35	kN
Tension resistance	$N_{t,Rd}$	1178,35	kN
Unity check		0,12	-

Bending moment check for M_y
According to EN 1993-1-1 article 6.2.5 and formula (6.12),(6.13)

Plastic section modulus	$W_{pl,y}$	2,8500e-04	m^3
Plastic bending moment	$M_{pl,y,Rd}$	101,17	kNm
Unity check		0,80	-

Bending moment check for M_z
According to EN 1993-1-1 article 6.2.5 and formula (6.12),(6.13)

Plastic section modulus	$W_{pl,z}$	5,8100e-05	m^3
Plastic bending moment	$M_{pl,z,Rd}$	20,63	kNm
Unity check		0,01	-

Shear check for V_y
According to EN 1993-1-1 article 6.2.6 and formula (6.17)

Shear correction factor	η	1,20	
Shear area	A_v	2,1296e-03	m^2
Plastic shear resistance for V_y	$V_{pl,y,Rd}$	436,48	kN
Unity check		0,00	-

Shear check for V_z
According to EN 1993-1-1 article 6.2.6 and formula (6.17)

Shear correction factor	η	1,20	
Shear area	A_v	1,5911e-03	m^2
Plastic shear resistance for V_z	$V_{pl,z,Rd}$	326,11	kN
Unity check		0,28	-

Torsion check
According to EN 1993-1-1 article 6.2.7 and formula (6.23)

Index of fibre	Fibre	2	
Total torsional moment	τ_{Ed}	0,2	MPa
Elastic shear resistance	τ_{Rd}	205,0	MPa
Unity check		0,00	-

Note: The unity check for torsion is lower than the limit value of 0,05. Therefore torsion is considered as insignificant and is ignored in the combined checks.

Combined bending, axial force and shear force check
According to EN 1993-1-1 article 6.2.9.1 and formula (6.41)

Plastic bending moment	$M_{pl,y,Rd}$	101,17	kNm
Exponent of bending ratio y	α	2,00	
Plastic bending moment	$M_{pl,z,Rd}$	20,63	kNm
Exponent of bending ratio z	β	1,00	

Unity check (6.41) = 0,64 + 0,01 = 0,65 -

Note: Since the shear forces are less than half the plastic shear resistances their effect on the moment resistances is neglected.
Note: Since the axial force satisfies both criteria (6.33) and (6.34) of EN 1993-1-1 article 6.2.9.1(4) its effect on the moment resistance about the y-y axis is neglected.
Note: Since the axial force satisfies criteria (6.35) of EN 1993-1-1 article 6.2.9.1(4) its effect on the moment resistance about the z-z axis is neglected.

The member satisfies the section check.

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

Classification for member buckling design
Decisive position for stability classification: 7,203 m
Classification according to EN 1993-1-1 article 5.5.2
Classification of Internal and Outstand parts according to EN 1993-1-1 Table 5.2 Sheet 1 & 2

Id	Type	c [mm]	t [mm]	σ_1 [kN/m²]	σ_2 [kN/m²]	Ψ [-]	k_σ [-]	α [-]	c/t [-]	Class 1 Limit [-]	Class 2 Limit [-]	Class 3 Limit [-]	Class
1	SO	40	9	1,616e-03	2,789e-03	0,58	0,47	1,00	4,35	7,32	8,14	11,74	1
3	SO	40	9	7,408e-04	-4,321e-04	-0,58	10,43	1,00	4,35	7,32	8,14	55,19	1
4	I	178	6	9,929e-04	-9,929e-04	-1,00		1,00	30,10	22,78	27,66	100,89	3
5	SO	40	9	-1,616e-03	-2,789e-03								
7	SO	40	9	-7,408e-04	4,321e-04	-1,71	1,14	1,00	4,35	7,32	8,14	18,21	1

Note: The Classification limits have been set according to Semi-Comp+.
The cross-section is classified as Class 3

Semi-Comp+ properties			
Material coefficient	ε	0,81	
Flange class 2 slenderness limit	$\beta_{2,y,f}$	8,14	
Flange class 3 slenderness limit	$\beta_{3,y,f}$	11,39	
Web class 2 slenderness limit	$\beta_{2,y,w}$	67,53	
Web class 3 slenderness limit	$\beta_{3,y,w}$	100,89	
Flange class 2 slenderness limit	$\beta_{2,z,f}$	8,14	
Flange class 3 slenderness limit	$\beta_{3,z,f}$	13,02	
Web slenderness ratio	c/t_w	30,10	
Flange slenderness ratio	c/t_f	4,35	
Reference slenderness ratio	$c/t_{ref,y}$	0,00	
Reference slenderness ratio	$c/t_{ref,z}$	0,00	
Interpolated section modulus	$W_{3,y}$	2,8500e-04	m^3
Interpolated section modulus	$W_{3,z}$	5,8100e-05	m^3

Note: The resistance for this semi-compact section has been calculated according to Semi-Comp+.

Lateral Torsional Buckling check
According to EN 1993-1-1 article 6.3.2.1 & 6.3.2.3 and formula (6.54)

LTB parameters			
Method for LTB curve		Alternative case	
Interpolated section modulus	$W_{3,y}$	2,8500e-04	m^3
Elastic critical moment	M_{cr}	1054,01	kNm
Relative slenderness	$\lambda_{rel,LT}$	0,31	
Limit slenderness	$\lambda_{rel,LT,0}$	0,40	

Note: 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).

Mcr parameters			
LTB length	l_{LT}	0,900	m
Influence of load position		no influence	
Correction factor	k	1,00	
Correction factor	k_w	1,00	
LTB moment factor	C_1	1,80	
LTB moment factor	C_2	0,00	
LTB moment factor	C_3	1,00	
Shear centre distance	d_z	0	mm
Distance of load application	z_g	0	mm
Mono-symmetry constant	β_y	0	mm
Mono-symmetry constant	z_j	0	mm

Warning: Not all conditions of the Dutch NEN-EN NA (Art. NB.NB.1) are fulfilled, therefore the standard EC-EN approach is used.
Note: C parameters are determined according to ECCS 119 2006 / Galea 2002.

Shear Buckling check
According to EN 1993-1-5 article 5 & 7.1 and formula (5.10) & (7.1)

Shear Buckling parameters			
Buckling field length	a	7,203	m
Web		unstiffened	
Web height	h_w	202	mm
Web thickness	t	6	mm
Material coefficient	ε	0,81	
Shear correction factor	η	1,20	

Shear Buckling verification		
Web slenderness	h_w/t	34,17
Web slenderness limit		48,82

Note: The web slenderness is such that Shear Buckling effects may be ignored according to EN 1993-1-5 article 5.1(2).

The member satisfies the stability check.

A.2. RC “L-Shape” calculation

Project: Ontwerp tribune constructie te Neer
Project number: 1971
Author: CEng. Daniel Pozo

Table of contents

1 Project data

Project title	Ontwerp tribune constructie te Neer
Project number	1971
Description	Grandstand concept design
Author	CEng. Daniel Pozo
Date of creation	10/03/2020
Version	10.1.113.54939

National code

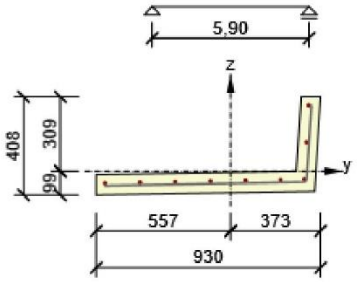
National code	EN 1992-1-1:2014-12, NEN:2011/NB:2016-11
Design working life	50 years

2 Sectional checks

2.1 Section S 1

2.1.1 Extreme S 1 - E 1

Design member	M 1
Reinforced cross-section	R 1



Concrete: C53/65
Age: 28,0 d
Reinforcement: (B 500B)
1ø12 (113mm²), Position 324, 273 mm
1ø12 (113mm²), Position 315, 119 mm
1ø12 (113mm²), Position 305, -34 mm
1ø12 (113mm²), Position 207, -37 mm
1ø12 (113mm²), Position 62, -39 mm
1ø12 (113mm²), Position -84, -42 mm
1ø12 (113mm²), Position -230, -45 mm
...

Stirrups:
ø10 - 150 mm
Cover:
Other edges: 30 m

2.1.1.1 Load effects - internal forces

Load type	Combination type	N [kN]	V_y [kN]	V_z [kN]	T [kNm]	M_y [kNm]	M_z [kNm]
Total	Fundamental ULS	0,0	0,0	0,0	0,0	38,6	0,0
Total	Characteristic	0,0	0,0	0,0	0,0	29,4	0,0
Total	Frequent	0,0	0,0	0,0	0,0	29,4	0,0
Total	Quasi-permanent	0,0	0,0	0,0	0,0	29,4	0,0

2.1.1.2 Overall

Governing type of check	N_{Ed} [kN]	$M_{Ed,y}$ [kNm]	$M_{Ed,z}$ [kNm]	V_{Ed} [kN]	T_{Ed} [kNm]	Value [%]	Check
Flexural slenderness	0,0	29,4	0,0			89,5	OK
Type of check	**N_{Ed} [kN]**	**$M_{Ed,y}$ [kNm]**	**$M_{Ed,z}$ [kNm]**	**V_{Ed} [kN]**	**T_{Ed} [kNm]**	**Value [%]**	**Check**
Capacity N-M-M	0,0	38,6	0,0			64,2	OK
Shear	0,0			0,0	0,0	0,0	OK
Torsion					0,0	0,0	OK
Interaction	0,0	38,6	0,0	0,0	0,0	0,0	OK
Crack Width	0,0	29,4	0,0			46,8	OK
Flexural slenderness	0,0	29,4	0,0			89,5	OK

Limit value of the exploitation of the cross-section: 100,0 %

Nonconformity

	Nonconformities
⚠	Shear is resisted by concrete, shear reinforcement is required according to detailing provisions, see 6.2.2
⚠	It is not possible to create equivalent thin-walled section for torsion check, but it is not necessary because torsional moment is zero.
ℹ	The check of interaction of shear, torsion and bending was not performed. It was not necessary, because shear force and torsional moment are equal to zero.
ℹ	According EN 1992-1-1 article 7.4.2 check of span/depth is satified. Any other calculation of deflection musn't be done.

2.1.1.3 Capacity N-M-M

Results presented for combination : Fundamental ULS

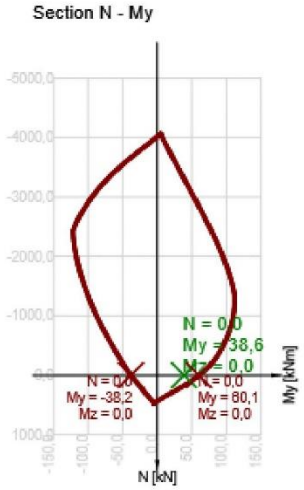
N_{Ed} [kN]	$M_{Ed,y}$ [kNm]	$M_{Ed,z}$ [kNm]	Type	Value [%]	Limit [%]	Check
0,0	38,6	0,0	Nu-Mu-Mu	64,2	100,0	OK

Design resistance of css subjected to bending and axial force

Type	F_{Ed}	F_{Rd1}	F_{Rd2}
N [kN]	0,0	0,0	0,0
M_y [kNm]	38,6	60,1	-38,2
M_z [kNm]	0,0	0,0	0,0

Nonconformity

No nonconformities



Explanation

Symbol	Explanation
N_{Ed}	Design value of the applied axial force caused by permanent and variable external load, and by secondary effects of prestressing
$M_{Ed,y}$	Design value of the applied bending moment around y axis caused by permanent and variable external load, and by secondary effects of prestressing
$M_{Ed,z}$	Design value of the applied bending moment around z axis caused by permanent and variable external load, and by secondary effects of prestressing
Type	Nu-Mu-Mu: Cross-sectional resistance is determined assuming proportional change of all components of acting internal forces (the eccentricity of normal force remains constant) until interaction surface is reached. The change of acting internal forces can be interpreted as the movement along the line connecting the origin of coordinate system (0,0,0) and the point of acting internal forces (NEd, MEdy, MEdz). Two points of intersection of the connecting line and interaction surface, which can be found, represent two sets of forces of resistance. Three resistance forces are determined in each point of intersection by the program: normal force capacity NRd, and capacities in flexure MRdy and MRdz
Value	Calculated value of the exploitation of the cross-section or its component (e.g. reinforcement bar) related to the limit value
Limit	Limit value of the exploitation of the cross-section
Check	Result of the check
F_{Ed}	The applied design force caused by external load (without effects of prestressing)
F_{Rd1}	First set of forces of resistance resulting from first point of intersection reached at interaction surface
F_{Rd2}	Second set of forces of resistance resulting from second point of intersection reached at interaction surface

2.1.1.4 Shear

Results presented for combination : Fundamental ULS

V_{Ed} [kN]	N_{Ed} [kN]	V_{Rd} [kN]	Check zone	Clause	Value [%]	Limit [%]	Check
0,0	0,0	43,7	without reduction	6.2.3(3)	0,0	100,0	OK

Design and resistance shear forces

V_{Ed} [kN]	$V_{Rd,c}$ [kN]	$V_{Rd,max}$ [kN]	$V_{Rd,r}$ [kN]	$V_{Rd,s}$ [kN]	V_{Rd} [kN]
0,0	26,9	177,5	222,7	43,7	43,7

Input values and intermediate results of shear design

n_c	a_{sw} [mm²/m]	A_{sl} [mm²]	b_w [mm]	d [mm]	z [mm]	θ [°]	α [°]	α_{cw} [-]
1	523	792	80	333	209	45,0	90,0	1,00

$C_{Rd,c}$ [-]	k [-]	k_1 [-]	ρ_l [-]	σ_{cp} [MPa]	σ_{wd} [MPa]	v_{min} [MPa]	v [-]	v_1 [-]
0,12	1,78	0,15	0,02	0,0	0,0	0,6	0,47	0,60

Nonconformity

	Nonconformities
⚠	Shear is resisted by concrete, shear reinforcement is required according to detailing provisions, see 6.2.2

Explanation

Symbol	Explanation
V_{Ed}	Design value of the applied shear force (with effect of prestressing)
N_{Ed}	Design value of the applied axial force (with effect of prestressing)
V_{Rd}	Final value of the design shear resistance
Check zone	Type of zone in which check is performed
Clause	The number of clause (type of method) used for shear check
Value	Calculated value of the exploitation of the cross-section or its component (e.g. reinforcement bar) related to the limit value
Limit	Limit value of the exploitation of the cross-section
Check	Result of the check
$V_{Rd,c}$	The design shear resistance of the member without shear reinforcement
$V_{Rd,max}$	The design value of the maximum shear force which can be sustained by the member, limited by crushing of the compression struts
$V_{Rd,r}$	Limit value of design shear force considered without reduction by Beta factor acc. (6.2.2(6))
$V_{Rd,s}$	Design value of the shear force which can be sustained by the yielding of shear reinforcement
n_c	Number of branches of shear reinforcement
a_{sw}	The cross-sectional area of the shear reinforcement per unit length
A_{sl}	The area of the tensile longitudinal reinforcement
b_w	The width of the cross-section in the centroid of css
d	Effective depth of the cross-section
z	The inner lever arm
θ	The angle between the concrete compression strut and the beam axis perpendicular to the shear force
α	The angle between shear reinforcement and the beam axis perpendicular to the shear force
α_{cw}	Coefficient taking account of the state of the stress in the compression chord
$C_{Rd,c}$	Coefficient for calculation the design shear resistance of the member without shear reinforcement
k	Coefficient for calculation the design shear resistance of the member without shear reinforcement
k_1	Coefficient for calculation the design shear resistance of the member without shear reinforcement
ρ_l	Reinforcement ratio of the tensile longitudinal reinforcement
σ_{cp}	Normal stress in the cross-section due to loading or prestressing limited by 0.2 fcd
σ_{wd}	Design stress of the shear reinforcement, see note 2 of clause 6.2.3 (3)
v_{min}	Coefficient for calculation the design shear resistance of the member without shear reinforcement
v	Concrete strength reduction factor for the calculation of shear resistance
v_1	Concrete strength reduction factor for the calculation of shear resistance

2.1.1.5 Torsion

Results presented for combination : Fundamental ULS

T_{Ed} [kNm]	T_{Rd} [kNm]	Value [%]	Limit [%]	Check
0,0	8,1	0,0	100,0	OK

Design and resistance torsional moments

T_{Ed} [kNm]	$T_{Rd,c}$ [kNm]	$T_{Rd,max}$ [kNm]	$T_{Rd,s}$ [kNm]	T_{Rd} [kNm]
0,0	8,1	34,7	0,0	8,1

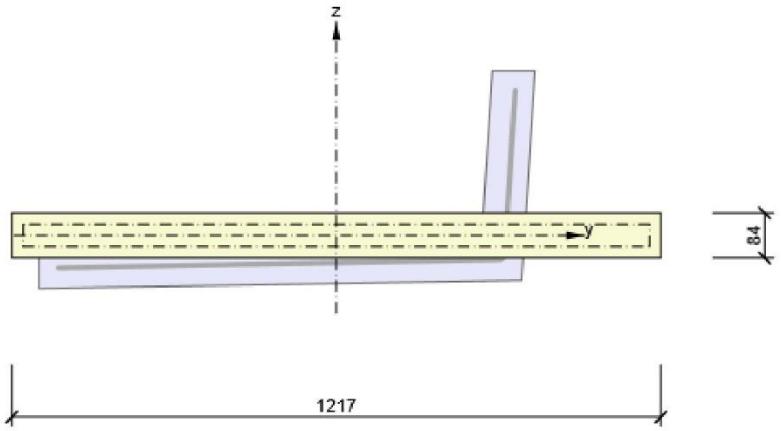
Input values and intermediate results of torsion design

A_k [mm^2]	u_k [mm]	t_{eff} [mm]	a_{sw} [mm^2/m]	A_{sl} [mm^2]	A_{sp} [mm^2]	θ [°]
49439	2434	42	0	0	0	45,0

Nonconformity

	Nonconformities
⚠	It is not possible to create equivalent thin-walled section for torsion check, but it is not necessary because torsional moment is zero.

Equivalent thin-walled section for torsion check



Explanation

Symbol	Explanation
T_{Ed}	Design value of the applied torsional moment (with effect of prestressing)
T_{Rd}	Governing design torsional resistance moment
Value	Calculated value of the exploitation of the cross-section or its component (e.g. reinforcement bar) related to the limit value
Limit	Limit value of the exploitation of the cross-section
Check	Result of the check
$T_{Rd,c}$	The design torsional cracking moment
$T_{Rd,max}$	The design torsional resistance moment
$T_{Rd,s}$	The design value of the torsional moment, which can be sustained by the yielding of torsion reinforcement
A_k	The area enclosed by the centre-lines of the connecting walls, including inner hollow areas
u_k	The perimeter of the area Ak
t_{eff}	The effective wall thickness
a_{sw}	Cross-sectional area of the shear reinforcement per unit length used for torsion check
A_{sl}	Area of longitudinal reinforcement inside of the stirrup, which is effective for torsion resistance
A_{sp}	Area of prestressing reinforcement inside of the stirrup, which is effective for torsion resistance
θ	The angle between the concrete compression strut and the beam axis perpendicular to the shear force

2.1.1.6 Interaction

Nonconformity

	Nonconformities
ℹ	The check of interaction of shear, torsion and bending was not performed. It was not necessary, because shear force and torsional moment are equal to zero.

2.1.1.7 Crack width

Crack width - short-term effect

Combination	N [kN]	M_y [kNm]	M_z [kNm]	w_k [mm]	w_{lim} [mm]	Value [%]	Limit [%]	Check
Freq	0,0	29,4	0,0	0,171	0,400	42,8	100,0	OK

Crack width - long-term effect

Combination	N [kN]	M_y [kNm]	M_z [kNm]	w_k [mm]	w_{lim} [mm]	Value [%]	Limit [%]	Check
Freq	0,0	29,4	0,0	0,187	0,400	46,8	100,0	OK

Intermediate results and coefficients for crack width calculation - short-term effect

x [mm]	$h_{c,eff}$ [mm]	d [mm]	$A_{c,eff}$ [mm^2]	$A_{s,eff}$ [mm^2]	$\rho_{p,eff}$ [-]
101	96	316	16721	226	0,01

k_t [-]	ε_{sm}-ε_{cm} [1e-4]	k_1 [-]	k_2 [-]	k_3 [-]	k_4 [-]
0,60	9,5	0,80	0,50	3,40	0,43

c [mm]	ε_1 [1e-4]	ε_2 [1e-4]	$s_{r,max}$ [mm]	Φ [mm]	σ_s [MPa]
40	20,1	-7,1	180	12	316,8

Intermediate results and coefficients for crack width calculation - long-term effect

x [mm]	$h_{c,eff}$ [mm]	d [mm]	$A_{c,eff}$ [mm^2]	$A_{s,eff}$ [mm^2]	$\rho_{p,eff}$ [-]
132	87	331	14378	113	0,01

k_t [-]	ε_{sm}-ε_{cm} [1e-4]	k_1 [-]	k_2 [-]	k_3 [-]	k_4 [-]
0,40	10,4	0,80	0,50	3,40	0,43

c [mm]	ε_1 [1e-4]	ε_2 [1e-4]	$s_{r,max}$ [mm]	Φ [mm]	σ_s [MPa]
40	22,6	-11,5	180	12	346,7

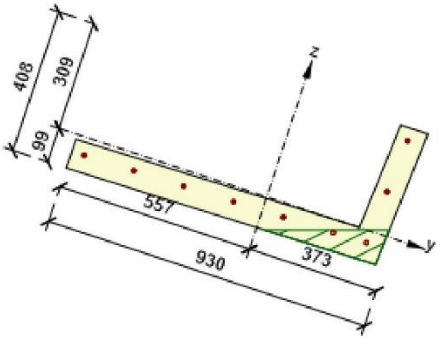
Creep coefficient

Way of assessment	h_0 [mm]	A_c [mm^2]	u [mm]	t [d]	t_0 [d]	t_s [d]	RH [%]	Use γ_{lt}	$\varphi(t,t_0)$ [-]
Automatic	79	102420	2603	18250,0	28,0	7,0	65	No	1,41

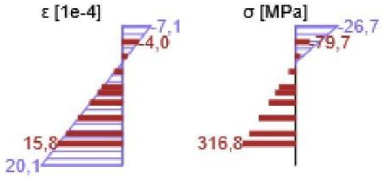
Nonconformity

No nonconformities

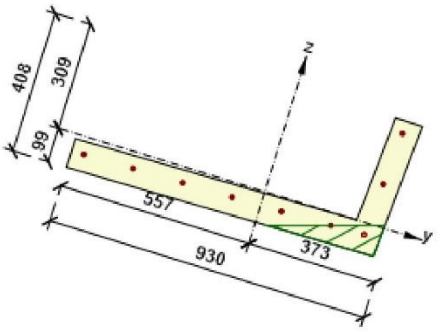
Stress and strain distributions in the cross-section



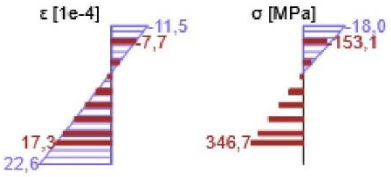
Results presented for :
- Frequent combination
- Short-term stiffness calculation



Stress and strain distributions in the cross-section



Results presented for :
- Frequent combination
- Long-term stiffness calculation



Explanation

Symbol	Explanation
Combination	Combination used for calculation including rsup or rinf coefficient acc. to 5.10.9
N	Normal force for quasi-permanent combination
M_y	Bending moment around y axis for quasi-permanent combination
M_z	Bending moment around z axis for quasi-permanent combination
w_k	The crack width calculated according to 7.3.4
w_{lim}	Limit value of crack width according to table 7.1N
Value	Calculated value of the exploitation of the cross-section or its component (e.g. reinforcement bar) related to the limit value
Limit	Limit value of the exploitation of the cross-section
Check	Result of the check
x	Depth of compression zone (position of neutral axis)
$h_{c,eff}$	Depth of effective tension area of the concrete surrounding the reinforcement or prestressing tendons (7.3.2 (3))
d	Effective depth of the cross-section
$A_{c,eff}$	Effective area of the concrete in tension surrounding the reinforcement or prestressing tendons
$A_{s,eff}$	Effective area of reinforcing steel within effective area of the concrete
$\rho_{p,eff}$	Ratio of the effective area of prestressing and reinforcing steel and effective area of the concrete in tension
k_t	Factor dependent on the duration of the load (7.3.4 (2))
k_1	Coefficient which takes account of the bond properties of the bonded reinforcement (7.3.4 (3))
k_2	Coefficient which takes account of the distribution of strain
c	Thickness of concrete cover of main longitudinal reinforcement
ε_1	Greater tensile strain at the boundaries of the section considered, assessed on the basis of a cracked section
ε_2	Lesser tensile strain at the boundaries of the section considered, assessed on the basis of a cracked section
$s_{r,max}$	Maximum final crack spacing
Φ	Diameter of bar or equivalent diameter of bar for more diameters of bars within effective tension area of the concrete
σ_s	Maximum stress in the tension reinforcement assuming a cracked section
h_0	The notional size = 2Ac /u, where Ac is the concrete cross-sectional area and u is the perimeter of that part which is exposed to drying
A_c	The cross-sectional area of the concrete
u	The perimeter of that part which is exposed to drying
t	The age of concrete at the moment considered
t_0	The age of concrete at loading
t_s	The age of the concrete at the beginning of drying shrinkage (or swelling). Normally this is at the end of curing
Use γ_{lt}	Use long-term delayed strain estimation factor acc. to Annex B, clause B.105 (103)
$\varphi(t,t_0)$	Calculated value of creep coefficient

2.1.1.8 Flexural slenderness

N [kN]	M_y [kNm]	M_z [kNm]	λ [-]	$λ_d$ [-]	Value [%]	Limit [%]	Check
0,0	29,4	0,0	22,36	24,97	89,5	100,0	OK

l_n [mm]	l_{eff} [mm]	d [mm]	K	ρ [%]	$ρ_0$ [%]	ρ' [%]	$σ_s$
5700	5900	264	1	0,8	0,7	0,1	298,4

Nonconformity

	Nonconformities
ⓘ	According EN 1992-1-1 article 7.4.2 check of span/depth is satified. Any other calculation of deflection musn't be done.

Explanation

Symbol	Explanation
N	Normal force for quasi-permanent combination
M_y	Bending moment around y axis for quasi-permanent combination
M_z	Bending moment around z axis for quasi-permanent combination
λ	Span to depth ratio
$λ_d$	Limiting span/depth ratio multiplied by correction factors to allow for the type of reinforcement used acc. 7.4.2(2) and other variables
Value	Calculated value of the exploitation of the cross-section or its component (e.g. reinforcement bar) related to the limit value
Limit	Limit value of the exploitation of the cross-section
Check	Result of the check
l_n	Clear distance between the faces of the supports
l_{eff}	Effective span of a member
d	Effective depth of the cross-section
K	Factor to take into account the different structural systems
ρ	Required tension reinforcement ratio at mid-span to resist the moment due to the design loads (at support for cantilevers)
$ρ_0$	Reference reinforcement ratio
ρ'	Required compression reinforcement ratio at mid-span to resist the moment due to design loads (at support for cantilevers)
$σ_s$	Tensile steel stress at mid-span (at support for cantilevers) under the design load at SLS

2.1.1.9 Detailing rules

Results presented for combination : Fundamental ULS

N_{Ed} [kN]	$M_{Ed,y}$ [kNm]	$M_{Ed,z}$ [kNm]	$Ratio_{long}$ [%]	$Ratio_{shear}$ [%]	Governing [%]	Limit [%]	Check
0,0	38,6	0,0	24,8	50,0	50,0	100,0	OK

Check of detailing provisions of longitudinal reinforcement

Type	$Value_{calc}$	$Value_{lim}$	Ratio [%]	Check
Minimal reinf. ratio for longitudinal reinforcement (9.2.1.1 (1)) [%]	1,32	0,22	16,4	OK
Maximal reinf. ratio for longitudinal reinforcement (9.2.1.1(3)) [%]	0,99	4,00	24,8	OK
Minimal clear distance of longitudinal reinforcement (8.2 (2)) [mm]	85	21	24,6	OK
Maximal axial distance of longitudinal reinforcement (9.2.3 (4)) [mm]	-	350	0,0	Off

Check detailing provisions of shear reinforcement

Type	$Value_{calc}$	$Value_{lim}$	Ratio [%]	Check
Minimal reinf. ratio for shear reinforcement (9.2.2 (5)) [%]	0,65	0,12	17,9	OK
Maximal distance of stirrups (9.2.2 (6)) [mm]	150	300	50,0	OK
Maximal transversal distance of branches of stirrups (9.2.2 (8)) [mm]	0	500	0,0	OK
Minimum mandrel diameter of stirrup (8.3 (2)) [-]	0,00	0,00	0,0	Off

Input values and intermediate results for detailing

b_w [mm]	d [mm]	A_c [mm^2]	$b_t * d$ [mm^2]	f_{yk} [MPa]	f_{yd} [MPa]	f_{ck} [MPa]	f_{ctm} [MPa]	f_{cd} [MPa]
80	333	102420	59977	500,0	434,8	53,0	4,2	35,3

Nonconformity

No nonconformities

Explanation

Symbol	Explanation
N_{Ed}	Design value of the applied axial force (with effect of prestressing)
$M_{Ed,y}$	Design value of the applied bending moment around y axis (with effect of prestressing)
$M_{Ed,z}$	Design value of the applied bending moment around z axis (with effect of prestressing)
$Ratio_{long}$	Critical ratio of calculated to limit value, which expresses detailing rules for longitudinal reinforcement
$Ratio_{shear}$	Critical ratio of calculated to limit value, which expresses detailing rules for shear reinforcement
Governing	Governing ratio of calculated to limit value, which expresses detailing rules
Limit	Limit ratio representing detailing rules
Check	Result of the check
Type	Type of checked detailing provisions
$Value_{calc}$	Calculated or input quantity, which expresses given detailing rule
$Value_{lim}$	Limit value of the quantity, which expresses given detailing rule
Ratio	Ratio of calculated or input quantity, which expresses given detailing rule, to its limit value

2.1.1.10 Response N-M-M

Results presented for combination : Fundamental ULS

$N_{Ed,tot}$ [kN]	$M_{Ed,ytot}$ [kNm]	$M_{Ed,ztot}$ [kNm]	Concrete fibre	Extreme in bar	Value [%]	Limit [%]	Check
0,0	38,6	0,0	5	9	92,7	100,0	OK

Plane of strain

x [mm]	x_{lim} [mm]	d [mm]	z [mm]	ε_x [1e-4]	φ_z [1e-4]	φ_y [1e-4]
114	138	267	210	9,1	30,4	-95,2

Forces in components of cross-section

Component of css	N [kN]	M_y [kNm]	M_z [kNm]	A [mm^2]	y_i [mm]	z_i [mm]
Concrete	-163,7	30,0	14,3	16485	87	183
Reinforcement in tension	184,2	4,4	-23,9	792	130	-24
Reinforcement in compression	-20,4	4,1	2,7	226	133	199
Total	0,0	38,5	-6,9			

Detailed check of concrete

Fibre	y_i [mm]	z_i [mm]	ε [1e-4]	ε_{lim} [1e-4]	σ [MPa]	σ_{lim} [MPa]	Value [%]	Check
5	293	309	-11,4	-32,6	-26,5	-35,3	74,9	OK

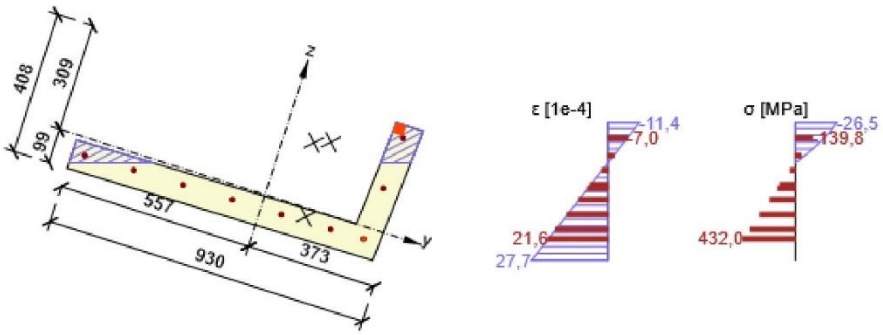
Detailed check of reinforcement

Bar	y_i [mm]	z_i [mm]	ε [1e-4]	ε_{lim} [1e-4]	σ [MPa]	σ_{lim} [MPa]	Value [%]	Check
9	305	-34	21,6	450,0	432,0	465,9	92,7	OK

Nonconformity

No nonconformities

Stress and strain distributions in the cross-section



Explanation

Symbol	Explanation
$N_{Ed,tot}$	Design value of the applied axial force (with effect of prestressing)
$M_{Ed,ytot}$	Design value of the applied bending moment around y axis (with effect of prestressing)
$M_{Ed,ztot}$	Design value of the applied bending moment around z axis (with effect of prestressing)
Concrete fibre	Number of the fibre with the extreme value of the check
Extreme in bar	Number of the non-prestressed bar with the extreme value of the check
Value	Calculated value of the exploitation of the cross-section or its component (e.g. reinforcement bar) related to the limit value
Limit	Limit value of the exploitation of the cross-section
Check	Result of the check
x	Depth of compression zone (position of neutral axis)
x_{lim}	Limit depth of compression zone (position of neutral axis)
d	Effective depth of the cross-section
z	The inner lever arm
ε_x	Axial strain
φ_z	Tangent of the angle between 'z' axis and its perpendicular projection into plane of strain (around 'y' axis)
φ_y	Tangent of the angle between 'y' axis and its perpendicular projection into plane of strain (around 'z' axis)
Component of css	Type of component of the css
N	The value of normal force resisted by component of the css
M_y	The value of bending moment around 'y' axis resisted by component of css
M_z	The value of bending moment around 'z' axis resisted by component of css
A	Area of css component (fibre/bar/tendon...)
y_i	y-coordinate of the css component (fibre/bar/tendon...) related to the centroid of css
z_i	z-coordinate of the css component (fibre/bar/tendon...) related to the centroid of css
Fibre	Number of concrete fibre with the extreme value of the check
ε	Strain in current css component (fibre/bar/tendon...) calculated for ULS
ε_{lim}	Limit value of strain in css component (fibre/bar/tendon...)
σ	Stress in css component (fibre/bar/tendon...) calculated for appropriate SLS combination
σ_{lim}	Limit value of the stress in css component (fibre/bar/tendon...) calculated for appropriate SLS combination
Bar	Number of reinforcement bar with the extreme value of the check

2.1.1.11 Stiffness

Short-term stiffness

Type	N [kN]	M_y [kNm]	M_z [kNm]	EI_y [MNm^2]	EI_z [MNm^2]	EA_x [MN]
Resulting stiffness	0,0	29,4	0,0	41	349	4080
Uncracked cross-section	0,0	44,9	0,0	41	349	4080
Cracked cross-section	0,0	29,4	0,0	16	107	733

Stiffness ratio

Type	EI_y [MNm^2]	EI_y/EI_{yl} [-]	EI_z [MNm^2]	EI_z/EI_{zl} [-]	EA_x [MN]	EA_x/EA_{xl} [-]
Uncracked cross-section	41	1,06	349	1,06	4080	1,05
Cracked cross-section	16	0,41	107	0,32	733	0,19
Linear	39	1,00	331	1,00	3876	1,00

Curvatures

Type	N [kN]	M_y [kNm]	M_z [kNm]	EI_y [MNm^2]	EI_z [MNm^2]	EA_x [MN]	r_y [1e-4]	r_z [1e-4]	ε_x [1e-4]
Resulting stiffness	0,0	29,4	0,0	41	349	4080	7,2	0,0	0,0
Uncracked cross-section	0,0	44,9	0,0	41	349	4080	11,0	0,0	0,0
Cracked cross-section	0,0	29,4	0,0	16	107	733	18,5	0,0	0,0

Long-term stiffness

Type	N [kN]	M_y [kNm]	M_z [kNm]	EI_y [MNm^2]	EI_z [MNm^2]	EA_x [MN]
Resulting stiffness	0,0	29,4	0,0	18	155	1810
Uncracked cross-section	0,0	48,1	0,0	18	155	1810
Cracked cross-section	0,0	29,4	0,0	10	68	512

Stiffness ratio

Type	EI_y [MNm^2]	EI_y/EI_{yl} [-]	EI_z [MNm^2]	EI_z/EI_{zl} [-]	EA_x [MN]	EA_x/EA_{xl} [-]
Uncracked cross-section	18	0,47	155	0,47	1810	0,47
Cracked cross-section	10	0,25	68	0,21	512	0,13
Linear	39	1,00	331	1,00	3876	1,00

Curvatures

Type	N [kN]	M_y [kNm]	M_z [kNm]	EI_y [MNm^2]	EI_z [MNm^2]	EA_x [MN]	r_y [1e-4]	r_z [1e-4]	ε_x [1e-4]
Resulting stiffness	0,0	29,4	0,0	18	155	1810	16,1	0,0	0,0
Uncracked cross-section	0,0	48,1	0,0	18	155	1810	26,3	0,0	0,0
Cracked cross-section	0,0	29,4	0,0	10	68	512	30,0	0,0	0,0

Intermediate results of short-term stiffness calculation

A_s [mm^2]	A_{st} [mm^2]	A_{sc} [mm^2]	ζ [-]	β [-]	σ_{sr} [MPa]	σ_{ss} [MPa]
1018	792	226	0,00	1,00	455,7	298,4

Cross-section characteristics for short-term stiffness

Type	A [mm^2]	S_y [mm^3]	S_z [mm^3]	I_y [mm^4]	I_z [mm^4]	t_y [mm]	t_z [mm]	x [mm]
Uncracked cross-section	107799	0	0	1080803189	9223110398	0	1	104
Cracked cross-section	19370	0	0	418801470	2815975125	-22	98	104

Intermediate results of long-term stiffness calculation

A_s [mm^2]	A_{st} [mm^2]	A_{sc} [mm^2]	ζ [-]	β [-]	σ_{sr} [MPa]	σ_{ss} [MPa]
1018	792	226	0,00	0,50	529,1	323,2

Cross-section characteristics for long-term stiffness

Type	A [mm^2]	S_y [mm^3]	S_z [mm^3]	I_y [mm^4]	I_z [mm^4]	t_y [mm]	t_z [mm]	x [mm]
Uncracked cross-section	115400	0	0	1165943909	9912682967	0	1	135
Cracked cross-section	32650	0	0	625232576	4357658716	-26	72	135

Intermediate results of shrinkage calculation

Type	$1/r_{cs}$ [1/m]	ε_{cs} [1e-4]	α_e [-]	S [mm^3]	I_y [mm^4]
Uncracked cross-section	0,00	4,9	14,29	9717	1183428933
Cracked cross-section	0,00	4,9	14,29	-59422	657965658

Curvature due to shrinkage

$1/r_{cs}$ [1/m]	ε_{cs} [1e-4]
0,00	4,9

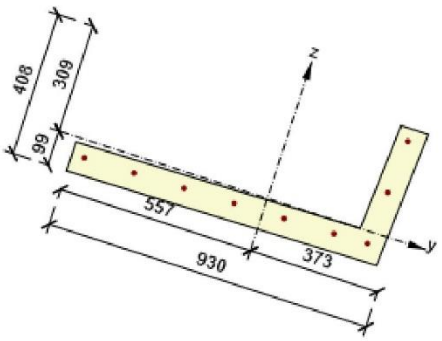
Creep coefficient

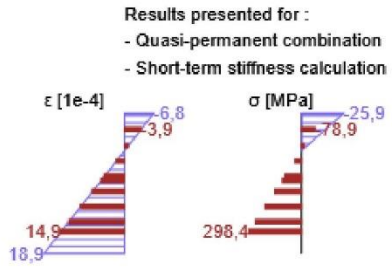
Way of assessment	h_0 [mm]	A_c [mm^2]	u [mm]	t [d]	t_0 [d]	t_s [d]	RH [%]	Use γ_{lt}	$\varphi(t,t_0)$ [-]
Automatic	79	102420	2603	18250,0	28,0	7,0	65	No	1,41

Nonconformity

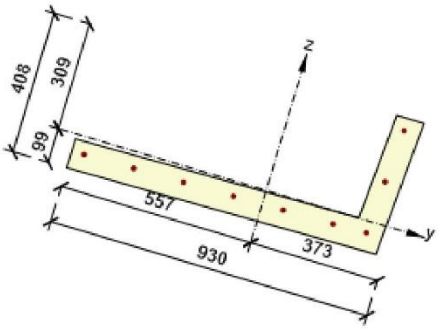
No nonconformities

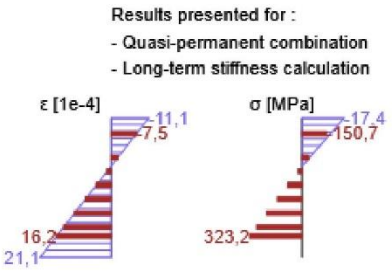
Stress and strain distributions in the cross-section





Stress and strain distributions in the cross-section





Explanation

Symbol	Explanation
N	Normal force for quasi-permanent combination
M_y	Bending moment around y axis for quasi-permanent combination
M_z	Bending moment around z axis for quasi-permanent combination
EI_y	Flexural stiffness around y axis
EI_z	Flexural stiffness around z axis
EA_x	Axial stiffness
EI_y/EI_{yl}	Ratio between resulting stiffness and linear bending stiffness
EI_z/EI_{zl}	Ratio between resulting stiffness and linear bending stiffness
EA_x/EA_{xl}	Ratio between axial resulting stiffness and linear axial stiffness
r_y	Resulting curvature around the y axis
r_z	Resulting curvature around the z axis
ε_x	Axial strain
A_s	Total area of longitudinal reinforcement in cross-section
A_{st}	Area of tensile longitudinal reinforcement in cracked zone of cross-section
A_{sc}	Area of compression longitudinal reinforcement in compression zone of cracked cross-section
ζ	Distribution coefficient (EN 1992-1-1, equation 7.19)
β	Coefficient taking account of the influence of the duration of the loading or of repeated loading on the average strain
σ_{sr}	Stress in tension reinforcement calculated assuming cracked section under the loading conditions causing first cracking
σ_{ss}	Stress in tension reinforcement calculated assuming cracked section
Type	Indication of type of the result – cracked/uncracked cross-section
A	Cross-sectional area of the transformed cross-section
S_y	First moment of area of the transformed cross-section around y axis related to center of gravity of transformed cross-section
S_z	First moment of area of the transformed cross-section around z axis related to center of gravity of transformed cross-section
I_y	Second moment of area of the transformed cross-section around y axis related to center of gravity of transformed cross-section
I_z	Second moment of area of the transformed cross-section around z axis related to center of gravity of transformed cross-section
t_y	Distance between center of gravity of cracked/uncracked section to center gravity of original cross-section
t_z	Distance between center of gravity of cracked/uncracked section to center gravity of original cross-section
x	Depth of compression zone (position of neutral axis)
$1/r_{cs}$	Curvature due to shrinkage
ε_{cs}	Free shrinkage strain
α_e	Effective modular ratio
S	First moment of area of the reinforcement about the centroid of the transformed cross-section
h_0	The notional size = 2Ac /u, where Ac is the concrete cross-sectional area and u is the perimeter of that part which is exposed to drying
A_c	The cross-sectional area of the concrete
u	The perimeter of that part which is exposed to drying
t	The age of concrete at the moment considered
t_0	The age of concrete at loading
t_s	The age of the concrete at the beginning of drying shrinkage (or swelling). Normally this is at the end of curing
Use γ_{lt}	Use long-term delayed strain estimation factor acc. to Annex B, clause B.105 (103)
$\varphi(t,t_0)$	Calculated value of creep coefficient

2.1.1.12 M-N-κ diagram

Nonconformity

	Nonconformities
⊗	Reinforced cross-section is not symmetric with respect to Z local axis of cross-section. The calculation of M-N-κ diagram is not available for non-symmetrical cross-section (shape, reinforcement) in this version of the program.

3 List of design members

Design member M 1

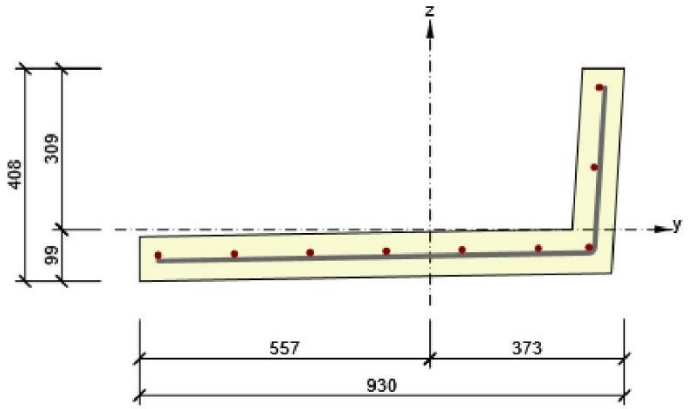
Member type	Beam
Exposure class	XC1
Relative humidity	65 %
Φ_{inf}	Calculated
Structural member importance	Major
Coefficient kx (7.3.1(5))	1,00

Flexural slenderness data

Clear distance between faces of the supports (5.3.2.2 (1)) m	Width of supporting element (5.3.2.2 (1))		Support condition	
	Left mm	Right mm	Left	Right
5,70	200	200	Non-continuous member	Non-continuous member

4 List of reinforced sections

Reinforced section R 1



Cross-section components

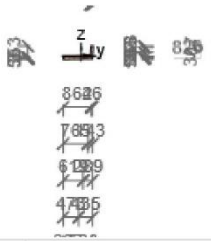
General cross-section, Material: C53/65	
Vertex 1	-557; -14 mm
Vertex 2	273; 1 mm
Vertex 3	293; 309 mm
Vertex 4	373; 309 mm
Vertex 5	348; -84 mm
Vertex 6	-557; -99 mm
Vertex 7	-557; -14 mm

Cross-section characteristics

A [mm^2]	S_y [mm^3]	S_z [mm^3]	I_y [mm^4]	I_z [mm^4]	C_{gy} [mm]	C_{gz} [mm]	i_y [mm]	i_z [mm]
102420	0	0	1020479774	8735091664	0	0	100	292

Concrete cover related to cross-section edges

1	30 mm
2	30 mm
3	30 mm
4	30 mm
5	30 mm
6	30 mm



Longitudinal reinforcement [kg/m]	Shear reinforcement [kg/m]	Total mass [kg/m]	Reinforcement / m3 concrete [kg/m^3]

Longitudinal reinforcement [kg/m]	Shear reinforcement [kg/m]	Total mass [kg/m]	Reinforcement / m3 concrete [kg/m^3]
8	5	13	124

Longitudinal reinforcement

Bar	Ø [mm]	Material	Y [mm]	Z [mm]
1	12	B 500B	-521	-50
2	12	B 500B	-376	-47
3	12	B 500B	-230	-45
4	12	B 500B	-84	-42
5	12	B 500B	62	-39
6	12	B 500B	207	-37
7	12	B 500B	324	273
8	12	B 500B	315	119
9	12	B 500B	305	-34

Stirrups

Stirrup	Ø [mm]	Material	Distance [mm]	Closed	Shear check	Torsion check	Diameter of mandrel
1	10	B 500B	150	No	Yes	No	0,00

Stirrup	Vertex	Y [mm]	Z [mm]
1	1	-521	-50
1	2	305	-34
1	3	324	273

5 List of used materials

Concrete

Name	f_{ck} [MPa]	f_{cm} [MPa]	f_{ctm} [MPa]	E_{cm} [MPa]	μ [-]	Unit mass [kg/m^3]
C53/65	53,0	61,0	4,2	37846,1	0,20	2500
	ε_{c2} = 21,5 1e-4, ε_{cu2} = 32,6 1e-4, ε_{c3} = 17,9 1e-4, ε_{cu3} = 32,6 1e-4, Exponent - n: 1,84, Aggregate size = 16 mm, Cement class: R (s = 0,20), Diagram type: Parabolic					

Explanation

Symbol	Explanation
f_{ck}	Characteristic compressive cylinder strength of concrete at 28 days
f_{cm}	Mean value of concrete cylinder compressive strength
f_{ctm}	Mean value of axial tensile strength of concrete
E_{cm}	Secant modulus of elasticity of concrete
ε_c	Compressive strain in the concrete at the peak stress fc
ε_{cu}	Ultimate compressive strain in the concrete

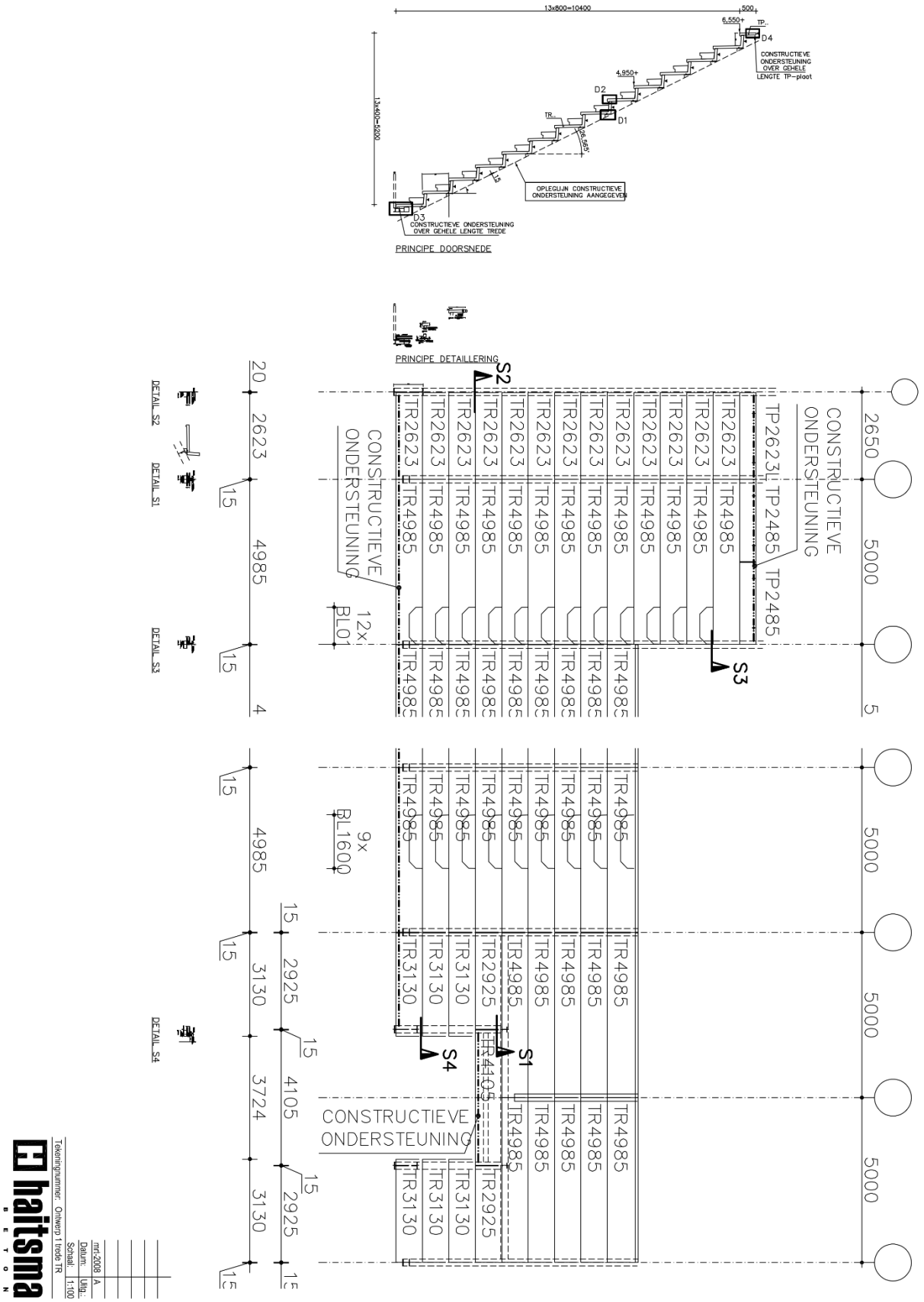
Reinforcement Steel

Name	f_{yk} [MPa]	f_{tk} [MPa]	E [MPa]	μ [-]	Unit mass [kg/m^3]
B 500B	500,0	540,0	200000,0	0,20	7850
	f_{tk}/f_{yk} = 1,08, ε_{uk} = 500,0 1e-4, Type: Bars, Bar surface: Ribbed, Class: B, Fabrication: Hot rolled, Diagram type: Bilinear with an inclined top branch				

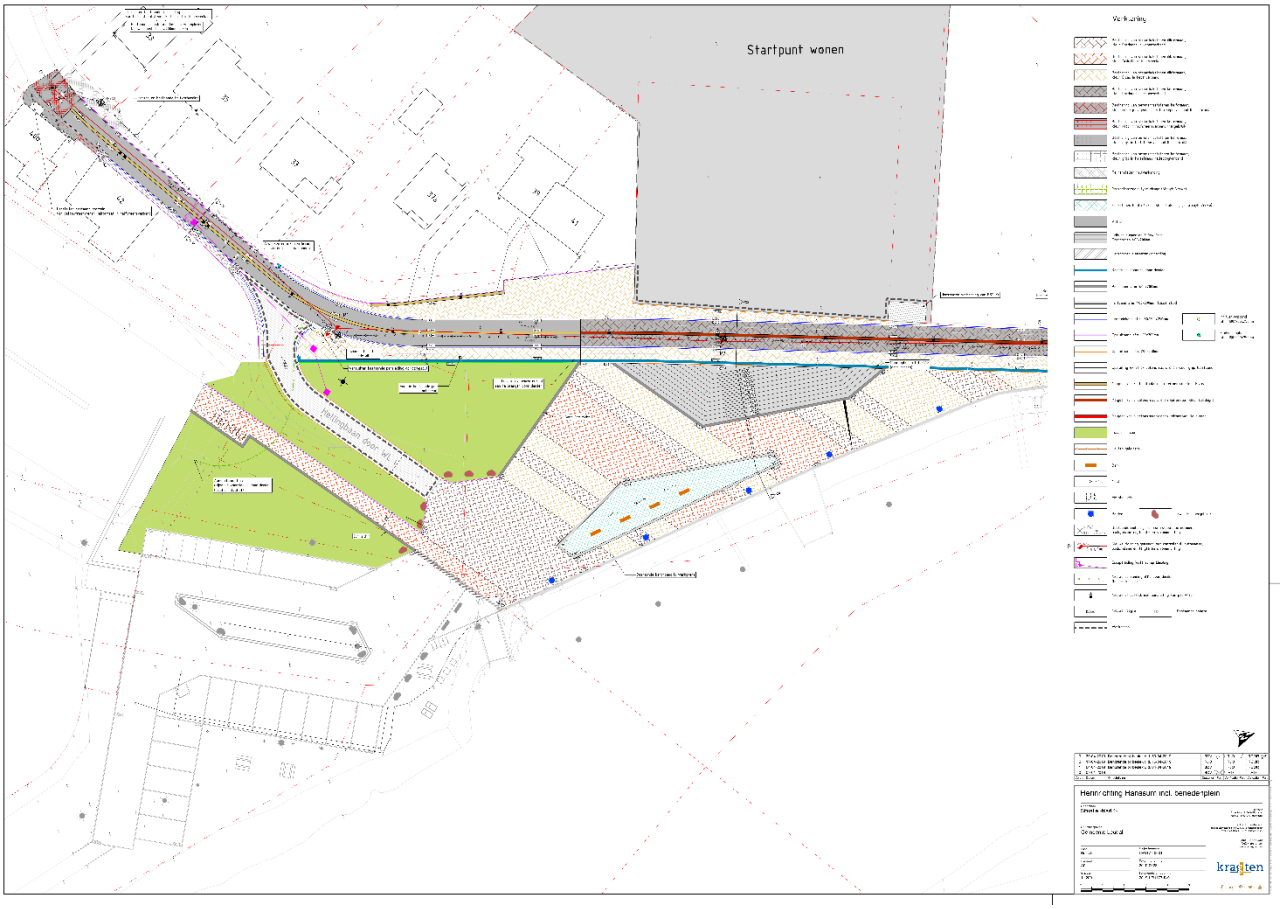
Explanation

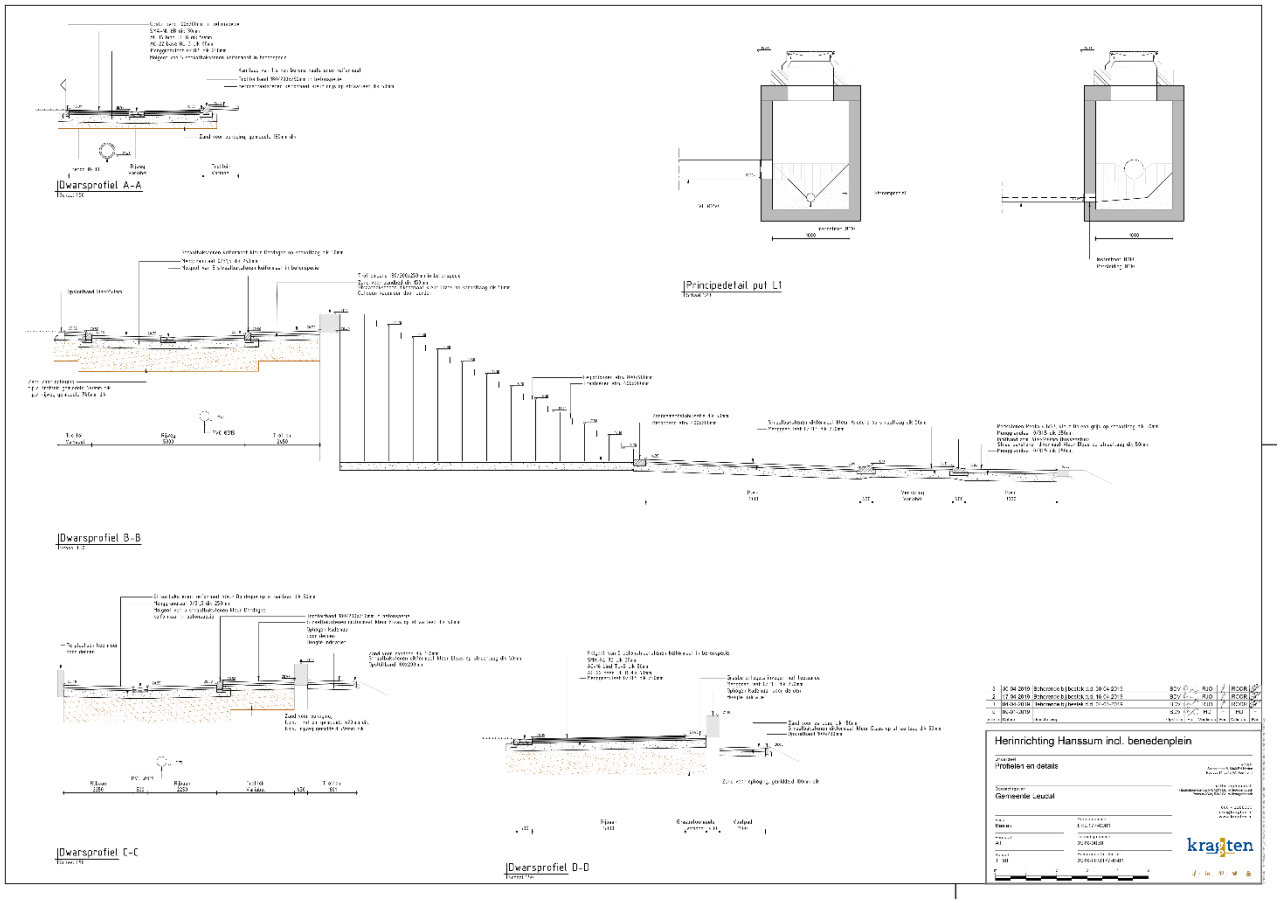
Symbol	Explanation
f_{yk}	Characteristic yield strength of reinforcement
f_{tk}	Characteristic tensile strength of reinforcement
E	Modulus of elasticity of reinforcement steel
ε_{uk}	Characteristic strain of reinforcement or prestressing steel at maximum load

A.3. Haitsma´s sketch

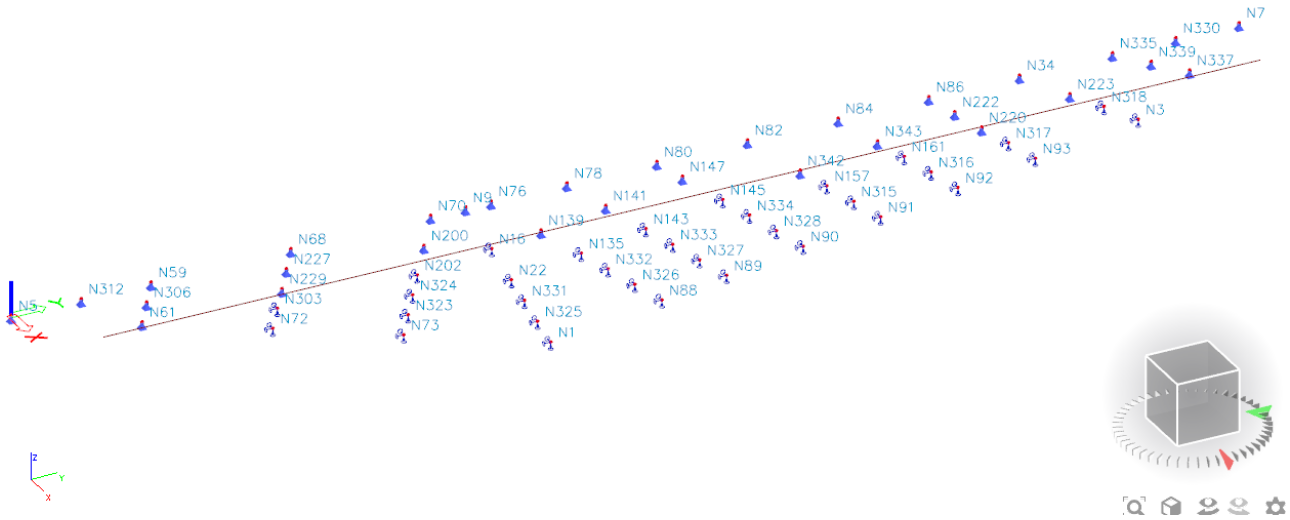


A.4. Kragten´s drawings





A.5. Base reactions load combinations short term analysis



Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn1/N5	NC_ULS-LC16	1,0	141,5	40,0	0	0	0
Sn1/N5	NC_ULS-LC21	1,0	142,3	40,0	0	0	0
Sn1/N5	NC_ULS-LC11	1,0	141,9	40,0	0	0	0
Sn1/N5	NC_ULS-LC19	-0,9	-89,7	-24,9	0	0	0
Sn2/N61	NC_ULS-LC16	30,6	-19,1	-21,8	0	0	0
Sn2/N61	NC_ULS-LC19	1,0	-1,4	3,4	0	0	0
Sn2/N61	NC_ULS-LC17	0,3	-0,2	0,8	0	0	0
Sn3/N59	NC_ULS-LC16	1,1	3,3	56,9	0	0	0
Sn3/N59	NC_ULS-LC19	-26,3	-38,9	2,4	0	0	0
Sn3/N59	NC_ULS-LC6	-3,0	-2,5	66,2	0	0	0
Sn3/N59	NC_ULS-LC14	-27,7	-40,0	36,9	0	0	0
Sn5/N229	NC_ULS-LC21	15,8	24,0	22,5	0	0	0
Sn5/N229	NC_ULS-LC20	21,3	-9,6	8,1	0	0	0
Sn5/N229	NC_ULS-LC6	2,5	-1,9	160,5	0	0	0
Sn5/N229	NC_ULS-LC22	-0,8	0,4	69,9	0	0	0
Sn6/N227	NC_ULS-LC20	0,1	-1,0	43,1	0	0	0
Sn6/N227	NC_ULS-LC15	-0,9	-2,3	72,2	0	0	0
Sn6/N227	NC_ULS-LC22	-27,0	14,2	-18,9	0	0	0
Sn6/N227	NC_ULS-LC17	-30,8	18,6	13,9	0	0	0
Sn7/N68	NC_ULS-LC14	5,2	-13,0	61,6	0	0	0
Sn7/N68	NC_ULS-LC9	4,2	-13,0	26,8	0	0	0
Sn7/N68	NC_ULS-LC11	-0,4	0,7	36,3	0	0	0
Sn7/N68	NC_ULS-LC23	0,2	0,1	9,0	0	0	0
Sn7/N68	NC_ULS-LC6	2,9	-1,1	84,8	0	0	0
Sn7/N68	NC_ULS-LC16	-0,7	0,6	66,7	0	0	0
Sn10/N202	NC_ULS-LC16	5,6	6,0	54,1	0	0	0
Sn10/N202	NC_ULS-LC23	0,0	-0,3	5,0	0	0	0
Sn10/N202	NC_ULS-LC6	0,8	-3,8	72,6	0	0	0
Sn10/N202	NC_ULS-LC14	-7,3	-15,5	48,7	0	0	0
Sn11/N200	NC_ULS-LC6	2,8	-1,8	104,3	0	0	0
Sn11/N200	NC_ULS-LC17	2,7	-1,8	106,2	0	0	0
Sn11/N200	NC_ULS-LC20	-0,1	0,1	-7,1	0	0	0
Sn12/N70	NC_ULS-LC15	52,0	-33,6	92,8	0	0	0
Sn12/N70	NC_ULS-LC21	-7,7	23,5	-9,8	0	0	0
Sn12/N70	NC_ULS-LC22	-27,5	21,2	-25,4	0	0	0

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn13/N1	NC_ULS-LC20	-2,6	0,5	2,0	0	0	0
Sn13/N1	NC_ULS-LC17	-92,1	17,1	41,7	0	0	0
Sn14/N3	NC_ULS-LC21	15,9	7,9	-6,1	0	0	0
Sn14/N3	NC_ULS-LC14	-15,8	-7,8	9,5	0	0	0
Sn15/N7	NC_ULS-LC14	1,2	-186,6	57,8	0	0	0
Sn15/N7	NC_ULS-LC16	-1,2	182,5	-55,5	0	0	0
Sn15/N7	NC_ULS-LC21	-1,2	174,3	-53,2	0	0	0
Sn16/N9	NC_ULS-LC15	77,6	-14,4	65,9	0	0	0
Sn16/N9	NC_ULS-LC6	73,3	-13,6	68,0	0	0	0
Sn16/N9	NC_ULS-LC22	-27,4	5,1	-10,4	0	0	0
Sn17/N16	NC_ULS-LC22	0,0	-0,1	20,0	0	0	0
Sn17/N16	NC_ULS-LC14	-0,8	-0,2	26,6	0	0	0
Sn17/N16	NC_ULS-LC21	-0,2	0,1	14,2	0	0	0
Sn17/N16	NC_ULS-LC23	-0,1	0,0	3,5	0	0	0
Sn17/N16	NC_ULS-LC6	-1,0	-0,1	40,9	0	0	0
Sn17/N16	NC_ULS-LC15	-1,2	0,0	25,1	0	0	0
Sn18/N22	NC_ULS-LC24	2,7	-9,7	43,3	0	0	0
Sn18/N22	NC_ULS-LC21	1,5	4,2	19,6	0	0	0
Sn18/N22	NC_ULS-LC23	-0,1	0,0	5,4	0	0	0
Sn18/N22	NC_ULS-LC6	0,1	0,0	71,5	0	0	0
Sn18/N22	NC_ULS-LC12	-1,8	0,3	29,1	0	0	0
Sn19/N34	NC_ULS-LC10	0,1	0,0	25,6	0	0	0
Sn19/N34	NC_ULS-LC16	-8,3	19,4	38,6	0	0	0
Sn19/N34	NC_ULS-LC22	-20,9	-1,1	-11,7	0	0	0
Sn19/N34	NC_ULS-LC15	-1,4	3,3	39,2	0	0	0
Sn19/N34	NC_ULS-LC14	-41,1	-18,7	7,2	0	0	0
Sn22/N76	NC_ULS-LC15	59,4	12,6	74,0	0	0	0
Sn22/N76	NC_ULS-LC19	0,4	-14,5	-8,1	0	0	0
Sn22/N76	NC_ULS-LC16	35,1	7,3	74,9	0	0	0
Sn22/N76	NC_ULS-LC22	-23,6	-5,2	-5,2	0	0	0
Sn23/N78	NC_ULS-LC16	28,0	23,6	37,0	0	0	0
Sn23/N78	NC_ULS-LC15	55,5	11,7	91,0	0	0	0
Sn23/N78	NC_ULS-LC22	-28,3	-2,0	-28,3	0	0	0
Sn24/N80	NC_ULS-LC19	0,2	-34,5	-23,5	0	0	0
Sn24/N80	NC_ULS-LC15	48,2	10,1	98,0	0	0	0
Sn24/N80	NC_ULS-LC22	-24,8	-6,8	-32,4	0	0	0
Sn25/N82	NC_ULS-LC15	0,4	3,5	56,5	0	0	0
Sn25/N82	NC_ULS-LC16	0,2	33,5	12,0	0	0	0
Sn25/N82	NC_ULS-LC21	0,2	32,5	-18,1	0	0	0
Sn25/N82	NC_ULS-LC14	-0,1	0,5	79,7	0	0	0
Sn25/N82	NC_ULS-LC22	-15,7	-3,2	-1,8	0	0	0
Sn26/N84	NC_ULS-LC20	0,4	-0,1	28,1	0	0	0
Sn26/N84	NC_ULS-LC14	-1,9	-34,4	6,3	0	0	0
Sn26/N84	NC_ULS-LC23	-0,1	0,0	4,9	0	0	0
Sn26/N84	NC_ULS-LC19	-1,3	-33,4	-16,3	0	0	0
Sn26/N84	NC_ULS-LC16	0,2	-1,0	60,3	0	0	0
Sn26/N84	NC_ULS-LC17	-13,0	-5,6	16,3	0	0	0
Sn27/N86	NC_ULS-LC15	0,4	1,6	28,9	0	0	0
Sn27/N86	NC_ULS-LC23	0,0	0,0	3,9	0	0	0
Sn27/N86	NC_ULS-LC16	0,3	30,7	-0,7	0	0	0
Sn27/N86	NC_ULS-LC21	0,2	29,2	-17,7	0	0	0
Sn27/N86	NC_ULS-LC14	0,2	1,2	58,6	0	0	0
Sn27/N86	NC_ULS-LC22	-0,1	0,3	8,4	0	0	0
Sn28/N88	NC_ULS-LC20	7,1	1,5	-0,8	0	0	0
Sn28/N88	NC_ULS-LC6	-37,7	-8,0	22,9	0	0	0

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn28/N88	NC_ULS-LC17	-38,7	-8,1	22,5	0	0	0
Sn29/N89	NC_ULS-LC20	6,8	1,4	-2,4	0	0	0
Sn29/N89	NC_ULS-LC17	-43,6	-9,2	22,1	0	0	0
Sn30/N90	NC_ULS-LC20	9,5	2,0	-3,6	0	0	0
Sn30/N90	NC_ULS-LC17	-42,3	-8,9	21,7	0	0	0
Sn31/N91	NC_ULS-LC20	24,7	5,3	-11,4	0	0	0
Sn31/N91	NC_ULS-LC17	-39,2	-8,3	21,4	0	0	0
Sn32/N92	NC_ULS-LC20	21,5	4,6	-9,7	0	0	0
Sn32/N92	NC_ULS-LC17	-36,5	-7,7	20,3	0	0	0
Sn33/N93	NC_ULS-LC15	11,0	2,4	-2,4	0	0	0
Sn33/N93	NC_ULS-LC20	11,0	2,3	-4,1	0	0	0
Sn33/N93	NC_ULS-LC17	-11,8	-2,4	7,7	0	0	0
Sn34/N135	NC_ULS-LC14	3,3	-6,8	45,1	0	0	0
Sn34/N135	NC_ULS-LC19	2,9	-11,4	14,1	0	0	0
Sn34/N135	NC_ULS-LC11	-0,9	9,2	19,0	0	0	0
Sn34/N135	NC_ULS-LC23	0,2	0,7	5,6	0	0	0
Sn34/N135	NC_ULS-LC6	2,6	0,6	62,3	0	0	0
Sn34/N135	NC_ULS-LC21	-1,1	8,8	14,3	0	0	0
Sn35/N139	NC_ULS-LC17	3,0	0,6	108,4	0	0	0
Sn35/N139	NC_ULS-LC6	3,0	0,6	120,1	0	0	0
Sn35/N139	NC_ULS-LC20	-0,2	0,0	9,7	0	0	0
Sn36/N141	NC_ULS-LC17	2,8	0,6	104,8	0	0	0
Sn36/N141	NC_ULS-LC6	2,6	0,6	108,5	0	0	0
Sn36/N141	NC_ULS-LC20	-0,3	-0,1	-3,7	0	0	0
Sn37/N143	NC_ULS-LC14	3,9	-11,8	43,3	0	0	0
Sn37/N143	NC_ULS-LC9	3,4	-13,7	17,8	0	0	0
Sn37/N143	NC_ULS-LC16	-1,7	15,9	41,6	0	0	0
Sn37/N143	NC_ULS-LC23	0,2	0,0	4,5	0	0	0
Sn37/N143	NC_ULS-LC6	0,7	7,2	59,4	0	0	0
Sn37/N143	NC_ULS-LC21	-2,0	12,2	11,9	0	0	0
Sn38/N145	NC_ULS-LC14	10,8	-45,0	36,7	0	0	0
Sn38/N145	NC_ULS-LC11	-2,3	14,0	13,9	0	0	0
Sn38/N145	NC_ULS-LC23	0,8	-3,0	3,7	0	0	0
Sn38/N145	NC_ULS-LC6	10,2	-39,0	52,0	0	0	0
Sn38/N145	NC_ULS-LC21	-2,4	13,8	10,3	0	0	0
Sn39/N147	NC_ULS-LC17	2,1	0,4	103,4	0	0	0
Sn39/N147	NC_ULS-LC20	-0,3	-0,1	-17,5	0	0	0
Sn40/N157	NC_ULS-LC23	0,7	0,2	3,0	0	0	0
Sn40/N157	NC_ULS-LC6	11,5	2,4	45,9	0	0	0
Sn40/N157	NC_ULS-LC22	-0,1	0,0	6,6	0	0	0
Sn41/N161	NC_ULS-LC23	0,7	0,2	3,0	0	0	0
Sn41/N161	NC_ULS-LC6	11,3	2,4	45,9	0	0	0
Sn41/N161	NC_ULS-LC22	0,1	0,0	6,7	0	0	0
Sn48/N220	NC_ULS-LC20	22,3	4,7	3,5	0	0	0
Sn48/N220	NC_ULS-LC6	3,0	0,6	131,5	0	0	0
Sn48/N220	NC_ULS-LC22	-0,8	-0,2	53,3	0	0	0
Sn49/N222	NC_ULS-LC19	5,7	-17,8	6,6	0	0	0
Sn49/N222	NC_ULS-LC16	-7,2	17,6	51,8	0	0	0
Sn49/N222	NC_ULS-LC22	-25,9	-1,3	-12,2	0	0	0
Sn49/N222	NC_ULS-LC15	-0,6	4,4	71,1	0	0	0
Sn49/N222	NC_ULS-LC17	-30,3	1,7	21,8	0	0	0
Sn50/N223	NC_ULS-LC21	16,9	7,9	28,1	0	0	0
Sn50/N223	NC_ULS-LC23	0,0	0,0	9,6	0	0	0
Sn50/N223	NC_ULS-LC6	1,0	0,1	143,4	0	0	0
Sn50/N223	NC_ULS-LC19	-1,6	-1,2	49,8	0	0	0

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn52/N312	NC_ULS-LC16	18,3	-3,5	0,8	0	0	0
Sn52/N312	NC_ULS-LC24	-20,0	4,6	19,5	0	0	0
Sn52/N312	NC_ULS-LC21	18,0	-2,9	-5,6	0	0	0
Sn52/N312	NC_ULS-LC14	-20,1	4,6	20,8	0	0	0
Sn53/N306	NC_ULS-LC14	7,4	-4,8	38,9	0	0	0
Sn53/N306	NC_ULS-LC23	-0,1	0,1	4,1	0	0	0
Sn53/N306	NC_ULS-LC6	-3,0	2,0	63,1	0	0	0
Sn53/N306	NC_ULS-LC16	-9,6	6,3	47,7	0	0	0
Sn54/N303	NC_ULS-LC15	10,4	-6,7	22,7	0	0	0
Sn54/N303	NC_ULS-LC23	0,6	-0,4	2,2	0	0	0
Sn54/N303	NC_ULS-LC6	8,5	-5,5	34,3	0	0	0
Sn54/N303	NC_ULS-LC22	-3,0	1,9	8,5	0	0	0
Sn55/N316	NC_ULS-LC15	9,0	1,9	31,0	0	0	0
Sn55/N316	NC_ULS-LC23	0,6	0,1	2,9	0	0	0
Sn55/N316	NC_ULS-LC6	8,0	1,7	44,3	0	0	0
Sn55/N316	NC_ULS-LC22	-1,3	-0,3	9,1	0	0	0
Sn56/N317	NC_ULS-LC15	10,4	2,2	19,6	0	0	0
Sn56/N317	NC_ULS-LC23	0,7	0,1	2,0	0	0	0
Sn56/N317	NC_ULS-LC6	9,9	2,1	30,0	0	0	0
Sn56/N317	NC_ULS-LC22	-0,5	-0,1	7,2	0	0	0
Sn58/N315	NC_ULS-LC15	8,3	1,8	30,0	0	0	0
Sn58/N315	NC_ULS-LC23	0,5	0,1	2,9	0	0	0
Sn58/N315	NC_ULS-LC6	6,8	1,5	43,3	0	0	0
Sn58/N315	NC_ULS-LC22	-1,6	-0,3	9,3	0	0	0
Sn59/N318	NC_ULS-LC16	13,0	8,0	19,6	0	0	0
Sn59/N318	NC_ULS-LC23	0,7	0,3	1,9	0	0	0
Sn59/N318	NC_ULS-LC6	10,2	4,6	29,5	0	0	0
Sn59/N318	NC_ULS-LC19	-2,9	-3,5	6,8	0	0	0
Sn60/N323	NC_ULS-LC15	6,7	-4,4	44,9	0	0	0
Sn60/N323	NC_ULS-LC23	0,3	-0,2	4,1	0	0	0
Sn60/N323	NC_ULS-LC6	4,4	-2,8	64,0	0	0	0
Sn60/N323	NC_ULS-LC22	-2,1	1,4	13,9	0	0	0
Sn61/N324	NC_ULS-LC15	7,4	-4,8	62,2	0	0	0
Sn61/N324	NC_ULS-LC23	0,4	-0,2	5,4	0	0	0
Sn61/N324	NC_ULS-LC6	6,6	-4,3	84,6	0	0	0
Sn61/N324	NC_ULS-LC22	-1,3	0,9	15,4	0	0	0
Sn62/N325	NC_ULS-LC20	2,3	-0,3	12,8	0	0	0
Sn62/N325	NC_ULS-LC19	1,7	-4,0	15,8	0	0	0
Sn62/N325	NC_ULS-LC16	-6,9	5,0	46,5	0	0	0
Sn62/N325	NC_ULS-LC23	-0,5	0,0	4,7	0	0	0
Sn62/N325	NC_ULS-LC6	-4,5	1,0	67,9	0	0	0
Sn62/N325	NC_ULS-LC17	-11,7	2,0	49,3	0	0	0
Sn63/N326	NC_ULS-LC15	6,1	1,3	39,2	0	0	0
Sn63/N326	NC_ULS-LC23	1,3	0,3	5,7	0	0	0
Sn63/N326	NC_ULS-LC6	3,6	0,8	54,6	0	0	0
Sn63/N326	NC_ULS-LC22	-0,8	-0,2	13,4	0	0	0
Sn64/N327	NC_ULS-LC25	3,2	0,7	29,7	0	0	0
Sn64/N327	NC_ULS-LC23	-0,1	0,0	3,4	0	0	0
Sn64/N327	NC_ULS-LC6	-0,1	0,0	48,1	0	0	0
Sn64/N327	NC_ULS-LC12	-3,5	-0,7	14,8	0	0	0
Sn65/N328	NC_ULS-LC15	5,1	1,1	33,9	0	0	0
Sn65/N328	NC_ULS-LC23	0,1	0,0	3,3	0	0	0
Sn65/N328	NC_ULS-LC6	1,9	0,4	49,7	0	0	0
Sn65/N328	NC_ULS-LC22	-3,4	-0,7	11,7	0	0	0
Sn67/N330	NC_ULS-LC14	18,0	2,5	0,8	0	0	0

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn67/N330	NC_ULS-LC19	17,6	2,1	-4,9	0	0	0
Sn67/N330	NC_ULS-LC16	-16,8	-1,2	16,7	0	0	0
Sn67/N330	NC_ULS-LC21	-17,4	-2,0	11,4	0	0	0
Sn68/N331	NC_ULS-LC15	5,3	-1,0	57,4	0	0	0
Sn68/N331	NC_ULS-LC14	4,6	-1,5	61,0	0	0	0
Sn68/N331	NC_ULS-LC21	-2,7	0,9	12,6	0	0	0
Sn68/N331	NC_ULS-LC23	0,1	0,0	5,7	0	0	0
Sn68/N331	NC_ULS-LC6	3,9	-0,9	82,6	0	0	0
Sn68/N331	NC_ULS-LC22	-5,2	0,8	14,7	0	0	0
Sn69/N332	NC_ULS-LC15	7,6	1,6	54,3	0	0	0
Sn69/N332	NC_ULS-LC23	0,9	0,2	7,3	0	0	0
Sn69/N332	NC_ULS-LC6	6,5	1,4	73,1	0	0	0
Sn69/N332	NC_ULS-LC22	-1,2	-0,3	15,6	0	0	0
Sn70/N333	NC_ULS-LC15	6,5	1,4	48,7	0	0	0
Sn70/N333	NC_ULS-LC23	0,3	0,1	4,7	0	0	0
Sn70/N333	NC_ULS-LC6	5,1	1,1	66,6	0	0	0
Sn70/N333	NC_ULS-LC22	-2,0	-0,4	12,9	0	0	0
Sn71/N334	NC_ULS-LC15	8,1	1,7	49,6	0	0	0
Sn71/N334	NC_ULS-LC23	0,4	0,1	4,5	0	0	0
Sn71/N334	NC_ULS-LC6	7,1	1,5	67,1	0	0	0
Sn71/N334	NC_ULS-LC22	-1,6	-0,3	12,2	0	0	0
Sn72/N335	NC_ULS-LC14	1,3	-2,5	33,1	0	0	0
Sn72/N335	NC_ULS-LC23	0,1	-0,2	4,4	0	0	0
Sn72/N335	NC_ULS-LC6	0,7	-1,7	47,6	0	0	0
Sn72/N335	NC_ULS-LC21	-0,7	0,8	12,1	0	0	0
Sn73/N339	NC_ULS-LC21	3,0	2,2	10,9	0	0	0
Sn73/N339	NC_ULS-LC23	-0,2	-0,2	3,6	0	0	0
Sn73/N339	NC_ULS-LC6	-3,6	-2,8	52,9	0	0	0
Sn73/N339	NC_ULS-LC14	-5,8	-4,3	37,3	0	0	0
Sn74/N337	NC_ULS-LC14	61,4	46,6	-41,6	0	0	0
Sn74/N337	NC_ULS-LC21	-46,4	-35,0	31,1	0	0	0
Sn75/N342	NC_ULS-LC20	13,9	3,0	36,6	0	0	0
Sn75/N342	NC_ULS-LC19	1,9	-10,5	42,6	0	0	0
Sn75/N342	NC_ULS-LC21	-0,6	3,4	45,2	0	0	0
Sn75/N342	NC_ULS-LC23	-0,1	0,0	14,1	0	0	0
Sn75/N342	NC_ULS-LC6	-1,2	-0,2	203,3	0	0	0
Sn75/N342	NC_ULS-LC17	-1,4	-0,3	152,1	0	0	0
Sn76/N343	NC_ULS-LC20	11,3	2,4	25,1	0	0	0
Sn76/N343	NC_ULS-LC19	2,3	-11,0	29,4	0	0	0
Sn76/N343	NC_ULS-LC23	-0,1	0,5	10,3	0	0	0
Sn76/N343	NC_ULS-LC6	-0,9	6,4	145,3	0	0	0
Sn76/N343	NC_ULS-LC16	-3,4	17,5	105,0	0	0	0
Sn77/N72	NC_ULS-LC21	0,6	0,3	0,8	0	0	0
Sn77/N72	NC_ULS-LC20	9,8	-6,3	-4,1	0	0	0
Sn77/N72	NC_ULS-LC6	1,6	-1,0	3,9	0	0	0
Sn77/N72	NC_ULS-LC23	0,1	-0,1	0,4	0	0	0
Sn78/N73	NC_ULS-LC20	5,5	-3,6	-1,6	0	0	0
Sn78/N73	NC_ULS-LC6	-40,4	26,3	26,6	0	0	0
Sn78/N73	NC_ULS-LC17	-41,8	27,2	25,9	0	0	0

A.6. Base reactions load cases

G1-Self-weight

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn1/N5	G1	0,0	-0,9	0,2	0	0	0
Sn2/N61	G1	-0,2	0,1	0,3	0	0	0
Sn3/N59	G1	-0,1	0,1	3,2	0	0	0
Sn5/N229	G1	-0,6	-0,1	3,3	0	0	0
Sn6/N227	G1	0,1	0,6	1,7	0	0	0
Sn7/N68	G1	0,0	0,0	4,9	0	0	0
Sn10/N202	G1	-0,1	-0,2	1,1	0	0	0
Sn11/N200	G1	0,1	0,0	3,3	0	0	0
Sn12/N70	G1	0,3	-0,5	5,9	0	0	0
Sn13/N1	G1	-1,6	0,3	0,9	0	0	0
Sn14/N3	G1	0,3	0,2	0,1	0	0	0
Sn15/N7	G1	0,0	1,1	0,1	0	0	0
Sn16/N9	G1	3,0	-0,6	5,5	0	0	0
Sn17/N16	G1	-0,1	0,0	1,4	0	0	0
Sn18/N22	G1	-0,2	0,0	1,5	0	0	0
Sn19/N34	G1	0,0	0,2	2,3	0	0	0
Sn22/N76	G1	0,5	0,4	4,7	0	0	0
Sn23/N78	G1	0,4	0,1	4,1	0	0	0
Sn24/N80	G1	0,3	0,2	4,1	0	0	0
Sn25/N82	G1	0,0	-0,1	3,5	0	0	0
Sn26/N84	G1	0,0	0,3	2,8	0	0	0
Sn27/N86	G1	0,0	0,0	1,9	0	0	0
Sn28/N88	G1	-0,6	-0,1	0,5	0	0	0
Sn29/N89	G1	-0,6	-0,1	0,5	0	0	0
Sn30/N90	G1	-0,4	-0,1	0,4	0	0	0
Sn31/N91	G1	-0,1	0,0	0,3	0	0	0
Sn32/N92	G1	-0,1	0,0	0,3	0	0	0
Sn33/N93	G1	0,3	0,1	0,1	0	0	0
Sn34/N135	G1	0,0	0,2	1,3	0	0	0
Sn35/N139	G1	0,1	0,0	3,7	0	0	0
Sn36/N141	G1	0,1	0,0	3,0	0	0	0
Sn37/N143	G1	0,0	0,0	1,2	0	0	0
Sn38/N145	G1	0,2	-0,8	0,9	0	0	0
Sn39/N147	G1	0,0	0,0	2,7	0	0	0
Sn40/N157	G1	0,1	0,0	0,6	0	0	0
Sn41/N161	G1	0,1	0,0	0,6	0	0	0
Sn48/N220	G1	-0,4	-0,1	2,6	0	0	0
Sn49/N222	G1	-0,3	0,4	1,6	0	0	0
Sn50/N223	G1	-0,2	-0,1	2,2	0	0	0
Sn52/N312	G1	0,0	-0,2	1,3	0	0	0
Sn53/N306	G1	0,0	0,0	0,9	0	0	0
Sn54/N303	G1	0,1	-0,1	0,4	0	0	0
Sn55/N316	G1	0,2	0,0	0,6	0	0	0
Sn56/N317	G1	0,2	0,0	0,4	0	0	0
Sn58/N315	G1	0,2	0,0	0,6	0	0	0
Sn59/N318	G1	0,2	0,1	0,4	0	0	0
Sn60/N323	G1	0,1	0,0	0,8	0	0	0
Sn61/N324	G1	0,0	0,0	1,0	0	0	0
Sn62/N325	G1	-0,2	0,0	1,1	0	0	0
Sn63/N326	G1	0,0	0,0	0,8	0	0	0
Sn64/N327	G1	0,0	0,0	0,8	0	0	0

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn65/N328	G1	0,1	0,0	0,7	0	0	0
Sn67/N330	G1	0,0	0,2	1,2	0	0	0
Sn68/N331	G1	-0,1	0,0	1,3	0	0	0
Sn69/N332	G1	0,0	0,0	1,1	0	0	0
Sn70/N333	G1	0,0	0,0	1,1	0	0	0
Sn71/N334	G1	0,1	0,0	1,0	0	0	0
Sn72/N335	G1	0,0	-0,1	2,2	0	0	0
Sn73/N339	G1	0,0	0,0	0,9	0	0	0
Sn74/N337	G1	-0,5	-0,4	0,5	0	0	0
Sn75/N342	G1	-0,1	-0,6	4,7	0	0	0
Sn76/N343	G1	-0,3	0,4	3,2	0	0	0
Sn77/N72	G1	0,2	-0,1	0,1	0	0	0
Sn78/N73	G1	-0,4	0,3	0,4	0	0	0

G1-Dead load

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn1/N5	G2	0,0	-3,1	-0,8	0	0	0
Sn2/N61	G2	1,4	-0,9	-1,2	0	0	0
Sn3/N59	G2	0,1	0,3	13,4	0	0	0
Sn5/N229	G2	-4,2	1,7	41,4	0	0	0
Sn6/N227	G2	3,1	7,5	14,0	0	0	0
Sn7/N68	G2	-0,2	-1,0	14,0	0	0	0
Sn10/N202	G2	0,8	0,1	13,4	0	0	0
Sn11/N200	G2	0,5	-0,3	22,4	0	0	0
Sn12/N70	G2	4,6	-4,2	13,8	0	0	0
Sn13/N1	G2	-17,6	3,3	8,2	0	0	0
Sn14/N3	G2	-0,2	-0,1	0,8	0	0	0
Sn15/N7	G2	0,0	3,1	-0,9	0	0	0
Sn16/N9	G2	17,0	-3,2	14,3	0	0	0
Sn17/N16	G2	-0,3	0,0	9,2	0	0	0
Sn18/N22	G2	-1,5	-0,5	15,1	0	0	0
Sn19/N34	G2	-1,3	1,6	6,1	0	0	0
Sn22/N76	G2	10,2	2,1	15,0	0	0	0
Sn23/N78	G2	6,2	0,6	15,6	0	0	0
Sn24/N80	G2	4,2	1,8	12,5	0	0	0
Sn25/N82	G2	0,9	0,5	11,7	0	0	0
Sn26/N84	G2	0,2	2,2	11,1	0	0	0
Sn27/N86	G2	0,1	1,1	4,5	0	0	0
Sn28/N88	G2	-5,7	-1,2	5,0	0	0	0
Sn29/N89	G2	-8,3	-1,8	4,4	0	0	0
Sn30/N90	G2	-6,9	-1,5	3,8	0	0	0
Sn31/N91	G2	-3,4	-0,7	2,2	0	0	0
Sn32/N92	G2	-3,5	-0,7	2,4	0	0	0
Sn33/N93	G2	-0,3	-0,1	0,8	0	0	0
Sn34/N135	G2	0,5	0,9	14,0	0	0	0
Sn35/N139	G2	0,6	0,1	28,8	0	0	0
Sn36/N141	G2	0,5	0,1	22,9	0	0	0
Sn37/N143	G2	0,7	-1,1	12,4	0	0	0
Sn38/N145	G2	2,3	-9,1	9,6	0	0	0
Sn39/N147	G2	0,3	0,1	20,2	0	0	0
Sn40/N157	G2	2,5	0,5	9,9	0	0	0
Sn41/N161	G2	2,5	0,5	9,9	0	0	0
Sn48/N220	G2	-2,5	-0,5	30,7	0	0	0
Sn49/N222	G2	-0,9	2,7	12,3	0	0	0
Sn50/N223	G2	-1,7	-0,9	31,5	0	0	0
Sn52/N312	G2	0,1	-0,3	2,6	0	0	0
Sn53/N306	G2	-1,0	0,7	14,1	0	0	0
Sn54/N303	G2	2,1	-1,4	7,4	0	0	0
Sn55/N316	G2	1,8	0,4	9,5	0	0	0
Sn56/N317	G2	2,2	0,5	6,3	0	0	0
Sn58/N315	G2	1,5	0,3	9,3	0	0	0
Sn59/N318	G2	2,3	1,1	6,2	0	0	0
Sn60/N323	G2	1,3	-0,8	13,3	0	0	0
Sn61/N324	G2	1,7	-1,1	17,3	0	0	0
Sn62/N325	G2	-1,0	0,2	14,7	0	0	0
Sn63/N326	G2	1,9	0,4	13,5	0	0	0
Sn64/N327	G2	0,0	0,0	10,3	0	0	0
Sn65/N328	G2	0,6	0,1	10,4	0	0	0
Sn67/N330	G2	0,2	0,3	2,2	0	0	0
Sn68/N331	G2	1,0	-0,2	17,9	0	0	0

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn69/N332	G2	2,0	0,4	17,7	0	0	0
Sn70/N333	G2	1,2	0,3	14,3	0	0	0
Sn71/N334	G2	1,7	0,4	13,8	0	0	0
Sn72/N335	G2	0,1	-0,3	9,9	0	0	0
Sn73/N339	G2	-0,8	-0,6	11,4	0	0	0
Sn74/N337	G2	0,4	0,3	-0,6	0	0	0
Sn75/N342	G2	-0,2	-6,6	51,3	0	0	0
Sn76/N343	G2	-2,2	3,2	32,6	0	0	0
Sn77/N72	G2	-0,8	0,6	1,3	0	0	0
Sn78/N73	G2	-7,6	4,9	5,1	0	0	0

Q1-Live load

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn1/N5	Q1	0,0	-6,8	-1,8	0	0	0
Sn2/N61	Q1	3,1	-2,0	-2,7	0	0	0
Sn3/N59	Q1	0,3	0,8	30,0	0	0	0
Sn5/N229	Q1	-9,2	3,7	92,3	0	0	0
Sn6/N227	Q1	6,9	16,7	31,5	0	0	0
Sn7/N68	Q1	-0,3	-2,2	31,5	0	0	0
Sn10/N202	Q1	1,4	-0,2	29,9	0	0	0
Sn11/N200	Q1	1,1	-0,7	50,2	0	0	0
Sn12/N70	Q1	10,0	-9,3	30,7	0	0	0
Sn13/N1	Q1	-38,6	7,2	18,1	0	0	0
Sn14/N3	Q1	-0,4	-0,2	1,8	0	0	0
Sn15/N7	Q1	0,1	6,4	-1,9	0	0	0
Sn16/N9	Q1	37,7	-7,0	32,0	0	0	0
Sn17/N16	Q1	-0,8	0,0	20,3	0	0	0
Sn18/N22	Q1	-3,2	-3,9	33,1	0	0	0
Sn19/N34	Q1	-2,8	3,6	13,7	0	0	0
Sn22/N76	Q1	13,4	2,7	20,3	0	0	0
Sn23/N78	Q1	13,1	1,5	33,5	0	0	0
Sn24/N80	Q1	9,1	3,8	27,6	0	0	0
Sn25/N82	Q1	1,9	1,0	26,3	0	0	0
Sn26/N84	Q1	0,5	4,7	24,8	0	0	0
Sn27/N86	Q1	0,2	2,4	10,3	0	0	0
Sn28/N88	Q1	-19,8	-4,2	10,7	0	0	0
Sn29/N89	Q1	-18,1	-3,8	9,6	0	0	0
Sn30/N90	Q1	-15,4	-3,3	8,6	0	0	0
Sn31/N91	Q1	-7,6	-1,6	5,0	0	0	0
Sn32/N92	Q1	-7,7	-1,6	5,3	0	0	0
Sn33/N93	Q1	-0,6	-0,1	1,8	0	0	0
Sn34/N135	Q1	0,8	1,8	29,0	0	0	0
Sn35/N139	Q1	1,4	0,3	54,3	0	0	0
Sn36/N141	Q1	1,2	0,3	52,0	0	0	0
Sn37/N143	Q1	0,9	0,5	26,8	0	0	0
Sn38/N145	Q1	5,0	-19,5	21,2	0	0	0
Sn39/N147	Q1	0,7	0,2	45,5	0	0	0
Sn40/N157	Q1	5,7	1,2	22,2	0	0	0
Sn41/N161	Q1	5,6	1,2	22,2	0	0	0
Sn48/N220	Q1	-5,5	-1,2	68,8	0	0	0
Sn49/N222	Q1	-2,0	5,9	27,6	0	0	0
Sn50/N223	Q1	-3,8	-1,9	70,7	0	0	0
Sn52/N312	Q1	0,3	-0,7	5,7	0	0	0
Sn53/N306	Q1	-2,2	1,5	31,6	0	0	0
Sn54/N303	Q1	4,8	-3,1	16,7	0	0	0
Sn55/N316	Q1	4,0	0,9	21,2	0	0	0
Sn56/N317	Q1	5,0	1,1	14,2	0	0	0
Sn58/N315	Q1	3,3	0,7	20,9	0	0	0
Sn59/N318	Q1	5,2	2,4	13,9	0	0	0
Sn60/N323	Q1	2,8	-1,8	29,9	0	0	0
Sn61/N324	Q1	3,8	-2,5	38,8	0	0	0
Sn62/N325	Q1	-2,0	0,6	32,5	0	0	0
Sn63/N326	Q1	1,0	0,2	24,9	0	0	0
Sn64/N327	Q1	0,3	0,1	22,8	0	0	0
Sn65/N328	Q1	1,4	0,3	23,2	0	0	0
Sn67/N330	Q1	0,6	0,6	4,9	0	0	0

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn68/N331	Q1	2,2	-0,5	39,5	0	0	0
Sn69/N332	Q1	2,9	0,6	33,6	0	0	0
Sn70/N333	Q1	2,7	0,6	31,4	0	0	0
Sn71/N334	Q1	3,9	0,8	30,8	0	0	0
Sn72/N335	Q1	0,3	-0,7	22,2	0	0	0
Sn73/N339	Q1	-1,8	-1,4	25,5	0	0	0
Sn74/N337	Q1	1,0	0,8	-1,3	0	0	0
Sn75/N342	Q1	-0,5	-14,7	114,7	0	0	0
Sn76/N343	Q1	-4,9	7,1	73,1	0	0	0
Sn77/N72	Q1	-1,8	1,2	2,8	0	0	0
Sn78/N73	Q1	-16,8	10,9	11,3	0	0	0

Q2-Horizontal load

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn1/N5	Q3	-0,7	-72,5	-20,3	0	0	0
Sn2/N61	Q3	-14,3	8,8	10,2	0	0	0
Sn3/N59	Q3	-7,9	-12,7	-9,1	0	0	0
Sn5/N229	Q3	-6,9	-12,5	9,2	0	0	0
Sn6/N227	Q3	0,6	-2,6	3,3	0	0	0
Sn7/N68	Q3	0,0	-7,6	-10,3	0	0	0
Sn10/N202	Q3	-0,7	-1,8	-1,7	0	0	0
Sn11/N200	Q3	-0,3	0,2	-10,2	0	0	0
Sn12/N70	Q3	10,7	-15,5	21,9	0	0	0
Sn13/N1	Q3	9,4	-2,1	-3,9	0	0	0
Sn14/N3	Q3	-6,4	-3,4	2,7	0	0	0
Sn15/N7	Q3	0,8	-94,9	29,3	0	0	0
Sn16/N9	Q3	6,6	-1,3	4,0	0	0	0
Sn17/N16	Q3	0,1	-0,1	-3,3	0	0	0
Sn18/N22	Q3	0,3	-3,8	-2,5	0	0	0
Sn19/N34	Q3	-13,2	-11,3	-8,7	0	0	0
Sn22/N76	Q3	-6,4	-8,8	-25,0	0	0	0
Sn23/N78	Q3	-4,1	-7,9	16,1	0	0	0
Sn24/N80	Q3	-3,3	-14,6	-32,0	0	0	0
Sn25/N82	Q3	-0,4	-13,9	28,2	0	0	0
Sn26/N84	Q3	-1,0	-13,2	-22,1	0	0	0
Sn27/N86	Q3	0,0	-12,3	23,3	0	0	0
Sn28/N88	Q3	-0,9	-0,6	0,7	0	0	0
Sn29/N89	Q3	-1,5	-0,8	0,7	0	0	0
Sn30/N90	Q3	-1,7	-0,8	0,8	0	0	0
Sn31/N91	Q3	-0,7	-0,6	0,4	0	0	0
Sn32/N92	Q3	-1,7	-0,8	0,8	0	0	0
Sn33/N93	Q3	-0,4	-0,5	0,1	0	0	0
Sn34/N135	Q3	1,3	-6,3	-0,5	0	0	0
Sn35/N139	Q3	0,1	0,0	2,6	0	0	0
Sn36/N141	Q3	0,1	0,0	3,1	0	0	0
Sn37/N143	Q3	1,8	-9,0	0,2	0	0	0
Sn38/N145	Q3	2,0	-10,0	0,2	0	0	0
Sn39/N147	Q3	0,1	0,0	3,4	0	0	0
Sn40/N157	Q3	-0,2	0,0	-0,5	0	0	0
Sn41/N161	Q3	-0,2	0,0	-0,4	0	0	0
Sn48/N220	Q3	-0,2	-0,2	-0,2	0	0	0
Sn49/N222	Q3	4,8	-14,4	-5,6	0	0	0
Sn50/N223	Q3	-7,9	-3,8	15,1	0	0	0
Sn52/N312	Q3	-11,8	2,4	6,3	0	0	0
Sn53/N306	Q3	4,4	-2,9	-0,9	0	0	0
Sn54/N303	Q3	0,5	-0,3	0,7	0	0	0
Sn55/N316	Q3	-0,4	-0,1	-0,2	0	0	0
Sn56/N317	Q3	-0,7	-0,2	-0,2	0	0	0
Sn58/N315	Q3	-0,1	0,0	-0,3	0	0	0
Sn59/N318	Q3	-2,6	-2,6	-0,5	0	0	0
Sn60/N323	Q3	0,3	-0,2	0,1	0	0	0
Sn61/N324	Q3	1,2	-0,8	1,3	0	0	0
Sn62/N325	Q3	2,4	-2,7	1,2	0	0	0
Sn63/N326	Q3	0,4	0,1	-0,2	0	0	0
Sn64/N327	Q3	-0,3	-0,1	0,0	0	0	0
Sn65/N328	Q3	-0,5	-0,1	0,0	0	0	0
Sn67/N330	Q3	11,7	2,2	-5,9	0	0	0

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn68/N331	Q3	2,2	-0,6	3,5	0	0	0
Sn69/N332	Q3	-0,3	-0,1	-0,6	0	0	0
Sn70/N333	Q3	-0,3	-0,1	-0,3	0	0	0
Sn71/N334	Q3	-0,4	-0,1	-0,4	0	0	0
Sn72/N335	Q3	0,4	-0,7	-0,4	0	0	0
Sn73/N339	Q3	-2,7	-1,9	0,1	0	0	0
Sn74/N337	Q3	31,1	23,4	-21,0	0	0	0
Sn75/N342	Q3	1,1	-10,1	0,4	0	0	0
Sn76/N343	Q3	1,8	-9,8	0,2	0	0	0
Sn77/N72	Q3	0,5	-0,8	-0,2	0	0	0
Sn78/N73	Q3	4,4	-3,3	-2,7	0	0	0

Q3-Horizontal load_+Y load

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn1/N5	Q3	-0,7	-72,5	-20,3	0	0	0
Sn2/N61	Q3	-14,3	8,8	10,2	0	0	0
Sn3/N59	Q3	-7,9	-12,7	-9,1	0	0	0
Sn5/N229	Q3	-6,9	-12,5	9,2	0	0	0
Sn6/N227	Q3	0,6	-2,6	3,3	0	0	0
Sn7/N68	Q3	0,0	-7,6	-10,3	0	0	0
Sn10/N202	Q3	-0,7	-1,8	-1,7	0	0	0
Sn11/N200	Q3	-0,3	0,2	-10,2	0	0	0
Sn12/N70	Q3	10,7	-15,5	21,9	0	0	0
Sn13/N1	Q3	9,4	-2,1	-3,9	0	0	0
Sn14/N3	Q3	-6,4	-3,4	2,7	0	0	0
Sn15/N7	Q3	0,8	-94,9	29,3	0	0	0
Sn16/N9	Q3	6,6	-1,3	4,0	0	0	0
Sn17/N16	Q3	0,1	-0,1	-3,3	0	0	0
Sn18/N22	Q3	0,3	-3,8	-2,5	0	0	0
Sn19/N34	Q3	-13,2	-11,3	-8,7	0	0	0
Sn22/N76	Q3	-6,4	-8,8	-25,0	0	0	0
Sn23/N78	Q3	-4,1	-7,9	16,1	0	0	0
Sn24/N80	Q3	-3,3	-14,6	-32,0	0	0	0
Sn25/N82	Q3	-0,4	-13,9	28,2	0	0	0
Sn26/N84	Q3	-1,0	-13,2	-22,1	0	0	0
Sn27/N86	Q3	0,0	-12,3	23,3	0	0	0
Sn28/N88	Q3	-0,9	-0,6	0,7	0	0	0
Sn29/N89	Q3	-1,5	-0,8	0,7	0	0	0
Sn30/N90	Q3	-1,7	-0,8	0,8	0	0	0
Sn31/N91	Q3	-0,7	-0,6	0,4	0	0	0
Sn32/N92	Q3	-1,7	-0,8	0,8	0	0	0
Sn33/N93	Q3	-0,4	-0,5	0,1	0	0	0
Sn34/N135	Q3	1,3	-6,3	-0,5	0	0	0
Sn35/N139	Q3	0,1	0,0	2,6	0	0	0
Sn36/N141	Q3	0,1	0,0	3,1	0	0	0
Sn37/N143	Q3	1,8	-9,0	0,2	0	0	0
Sn38/N145	Q3	2,0	-10,0	0,2	0	0	0
Sn39/N147	Q3	0,1	0,0	3,4	0	0	0
Sn40/N157	Q3	-0,2	0,0	-0,5	0	0	0
Sn41/N161	Q3	-0,2	0,0	-0,4	0	0	0
Sn48/N220	Q3	-0,2	-0,2	-0,2	0	0	0
Sn49/N222	Q3	4,8	-14,4	-5,6	0	0	0
Sn50/N223	Q3	-7,9	-3,8	15,1	0	0	0
Sn52/N312	Q3	-11,8	2,4	6,3	0	0	0
Sn53/N306	Q3	4,4	-2,9	-0,9	0	0	0
Sn54/N303	Q3	0,5	-0,3	0,7	0	0	0
Sn55/N316	Q3	-0,4	-0,1	-0,2	0	0	0
Sn56/N317	Q3	-0,7	-0,2	-0,2	0	0	0
Sn58/N315	Q3	-0,1	0,0	-0,3	0	0	0
Sn59/N318	Q3	-2,6	-2,6	-0,5	0	0	0
Sn60/N323	Q3	0,3	-0,2	0,1	0	0	0
Sn61/N324	Q3	1,2	-0,8	1,3	0	0	0
Sn62/N325	Q3	2,4	-2,7	1,2	0	0	0
Sn63/N326	Q3	0,4	0,1	-0,2	0	0	0
Sn64/N327	Q3	-0,3	-0,1	0,0	0	0	0
Sn65/N328	Q3	-0,5	-0,1	0,0	0	0	0
Sn67/N330	Q3	11,7	2,2	-5,9	0	0	0

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn68/N331	Q3	2,2	-0,6	3,5	0	0	0
Sn69/N332	Q3	-0,3	-0,1	-0,6	0	0	0
Sn70/N333	Q3	-0,3	-0,1	-0,3	0	0	0
Sn71/N334	Q3	-0,4	-0,1	-0,4	0	0	0
Sn72/N335	Q3	0,4	-0,7	-0,4	0	0	0
Sn73/N339	Q3	-2,7	-1,9	0,1	0	0	0
Sn74/N337	Q3	31,1	23,4	-21,0	0	0	0
Sn75/N342	Q3	1,1	-10,1	0,4	0	0	0
Sn76/N343	Q3	1,8	-9,8	0,2	0	0	0
Sn77/N72	Q3	0,5	-0,8	-0,2	0	0	0
Sn78/N73	Q3	4,4	-3,3	-2,7	0	0	0

Q4-Horizontal load_-Y load

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn1/N5	Q4	0,7	72,5	20,3	0	0	0
Sn2/N61	Q4	14,3	-8,8	-10,2	0	0	0
Sn3/N59	Q4	7,9	12,7	9,1	0	0	0
Sn5/N229	Q4	6,9	12,5	-9,2	0	0	0
Sn6/N227	Q4	-0,6	2,6	-3,3	0	0	0
Sn7/N68	Q4	0,0	7,6	10,3	0	0	0
Sn10/N202	Q4	0,7	1,8	1,7	0	0	0
Sn11/N200	Q4	0,3	-0,2	10,2	0	0	0
Sn12/N70	Q4	-10,7	15,5	-21,9	0	0	0
Sn13/N1	Q4	-9,4	2,1	3,9	0	0	0
Sn14/N3	Q4	6,4	3,4	-2,7	0	0	0
Sn15/N7	Q4	-0,8	94,9	-29,3	0	0	0
Sn16/N9	Q4	-6,6	1,3	-4,0	0	0	0
Sn17/N16	Q4	-0,1	0,1	3,3	0	0	0
Sn18/N22	Q4	-0,3	3,8	2,5	0	0	0
Sn19/N34	Q4	13,2	11,3	8,7	0	0	0
Sn22/N76	Q4	6,4	8,8	25,0	0	0	0
Sn23/N78	Q4	4,1	7,9	-16,1	0	0	0
Sn24/N80	Q4	3,3	14,6	32,0	0	0	0
Sn25/N82	Q4	0,4	13,9	-28,2	0	0	0
Sn26/N84	Q4	1,0	13,2	22,1	0	0	0
Sn27/N86	Q4	0,0	12,3	-23,3	0	0	0
Sn28/N88	Q4	0,9	0,6	-0,7	0	0	0
Sn29/N89	Q4	1,5	0,8	-0,7	0	0	0
Sn30/N90	Q4	1,7	0,8	-0,8	0	0	0
Sn31/N91	Q4	0,7	0,6	-0,4	0	0	0
Sn32/N92	Q4	1,7	0,8	-0,8	0	0	0
Sn33/N93	Q4	0,4	0,5	-0,1	0	0	0
Sn34/N135	Q4	-1,3	6,3	0,5	0	0	0
Sn35/N139	Q4	-0,1	0,0	-2,6	0	0	0
Sn36/N141	Q4	-0,1	0,0	-3,1	0	0	0
Sn37/N143	Q4	-1,8	9,0	-0,2	0	0	0
Sn38/N145	Q4	-2,0	10,0	-0,2	0	0	0
Sn39/N147	Q4	-0,1	0,0	-3,4	0	0	0
Sn40/N157	Q4	0,2	0,0	0,5	0	0	0
Sn41/N161	Q4	0,2	0,0	0,4	0	0	0
Sn48/N220	Q4	0,2	0,2	0,2	0	0	0
Sn49/N222	Q4	-4,8	14,4	5,6	0	0	0
Sn50/N223	Q4	7,9	3,8	-15,1	0	0	0
Sn52/N312	Q4	11,8	-2,4	-6,3	0	0	0
Sn53/N306	Q4	-4,4	2,9	0,9	0	0	0
Sn54/N303	Q4	-0,5	0,3	-0,7	0	0	0
Sn55/N316	Q4	0,4	0,1	0,2	0	0	0
Sn56/N317	Q4	0,7	0,2	0,2	0	0	0
Sn58/N315	Q4	0,1	0,0	0,3	0	0	0
Sn59/N318	Q4	2,6	2,6	0,5	0	0	0
Sn60/N323	Q4	-0,3	0,2	-0,1	0	0	0
Sn61/N324	Q4	-1,2	0,8	-1,3	0	0	0
Sn62/N325	Q4	-2,4	2,7	-1,2	0	0	0
Sn63/N326	Q4	-0,4	-0,1	0,2	0	0	0
Sn64/N327	Q4	0,3	0,1	0,0	0	0	0
Sn65/N328	Q4	0,5	0,1	0,0	0	0	0

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn67/N330	Q4	-11,7	-2,2	5,9	0	0	0
Sn68/N331	Q4	-2,2	0,6	-3,5	0	0	0
Sn69/N332	Q4	0,3	0,1	0,6	0	0	0
Sn70/N333	Q4	0,3	0,1	0,3	0	0	0
Sn71/N334	Q4	0,4	0,1	0,4	0	0	0
Sn72/N335	Q4	-0,4	0,7	0,4	0	0	0
Sn73/N339	Q4	2,7	1,9	-0,1	0	0	0
Sn74/N337	Q4	-31,1	-23,4	21,0	0	0	0
Sn75/N342	Q4	-1,1	10,1	-0,4	0	0	0
Sn76/N343	Q4	-1,8	9,8	-0,2	0	0	0
Sn77/N72	Q4	-0,5	0,8	0,2	0	0	0
Sn78/N73	Q4	-4,4	3,3	2,7	0	0	0

Q5-Horizontal load_-X load

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn1/N5	Q5	-0,1	-15,0	-4,1	0	0	0
Sn2/N61	Q5	-17,2	11,1	10,6	0	0	0
Sn3/N59	Q5	-2,8	-4,5	-6,3	0	0	0
Sn5/N229	Q5	-11,7	1,6	28,2	0	0	0
Sn6/N227	Q5	-12,0	2,4	-26,1	0	0	0
Sn7/N68	Q5	-0,2	-1,1	-6,0	0	0	0
Sn10/N202	Q5	-2,3	-2,6	2,0	0	0	0
Sn11/N200	Q5	0,4	-0,3	18,2	0	0	0
Sn12/N70	Q5	-19,2	11,2	-22,6	0	0	0
Sn13/N1	Q5	-16,8	3,1	6,9	0	0	0
Sn14/N3	Q5	-2,4	-1,1	1,0	0	0	0
Sn15/N7	Q5	0,0	23,6	-7,2	0	0	0
Sn16/N9	Q5	-20,9	3,9	-14,3	0	0	0
Sn17/N16	Q5	0,3	0,0	4,7	0	0	0
Sn18/N22	Q5	-2,3	-2,4	5,5	0	0	0
Sn19/N34	Q5	-6,2	0,9	-12,8	0	0	0
Sn22/N76	Q5	-21,7	-4,8	-18,6	0	0	0
Sn23/N78	Q5	-22,5	-4,7	-25,9	0	0	0
Sn24/N80	Q5	-19,9	-4,8	-32,4	0	0	0
Sn25/N82	Q5	-8,0	-2,0	-13,7	0	0	0
Sn26/N84	Q5	-6,6	0,1	-12,9	0	0	0
Sn27/N86	Q5	-0,1	1,5	-4,9	0	0	0
Sn28/N88	Q5	-8,9	-1,9	4,1	0	0	0
Sn29/N89	Q5	-10,0	-2,1	4,6	0	0	0
Sn30/N90	Q5	-11,0	-2,3	5,0	0	0	0
Sn31/N91	Q5	-13,7	-2,9	6,7	0	0	0
Sn32/N92	Q5	-12,5	-2,7	6,1	0	0	0
Sn33/N93	Q5	-4,6	-1,0	2,0	0	0	0
Sn34/N135	Q5	-0,6	0,3	3,8	0	0	0
Sn35/N139	Q5	0,6	0,1	13,0	0	0	0
Sn36/N141	Q5	0,6	0,1	17,7	0	0	0
Sn37/N143	Q5	-0,8	1,1	2,9	0	0	0
Sn38/N145	Q5	-0,7	0,5	1,7	0	0	0
Sn39/N147	Q5	0,4	0,1	24,5	0	0	0
Sn40/N157	Q5	-1,4	-0,3	-2,0	0	0	0
Sn41/N161	Q5	-1,3	-0,3	-1,9	0	0	0
Sn48/N220	Q5	-9,6	-2,0	22,5	0	0	0
Sn49/N222	Q5	-11,9	2,5	-20,0	0	0	0
Sn50/N223	Q5	-2,6	-1,1	6,2	0	0	0
Sn52/N312	Q5	-0,9	-0,1	-0,2	0	0	0
Sn53/N306	Q5	0,1	-0,1	-2,7	0	0	0
Sn54/N303	Q5	-1,3	0,8	0,3	0	0	0
Sn55/N316	Q5	-1,7	-0,4	-0,4	0	0	0
Sn56/N317	Q5	-1,4	-0,3	0,1	0	0	0
Sn58/N315	Q5	-1,6	-0,3	-0,3	0	0	0
Sn59/N318	Q5	-1,1	-0,4	-0,8	0	0	0
Sn60/N323	Q5	-2,0	1,3	0,3	0	0	0
Sn61/N324	Q5	-1,7	1,1	-1,2	0	0	0
Sn62/N325	Q5	-4,7	0,9	0,1	0	0	0
Sn63/N326	Q5	-1,9	-0,4	0,4	0	0	0
Sn64/N327	Q5	-2,2	-0,5	0,8	0	0	0
Sn65/N328	Q5	-2,6	-0,5	0,8	0	0	0
Sn67/N330	Q5	-1,0	0,3	-0,2	0	0	0

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn68/N331	Q5	-2,9	0,5	0,0	0	0	0
Sn69/N332	Q5	-2,0	-0,4	-0,7	0	0	0
Sn70/N333	Q5	-2,0	-0,4	-0,8	0	0	0
Sn71/N334	Q5	-2,0	-0,4	-1,2	0	0	0
Sn72/N335	Q5	-0,2	0,2	-1,9	0	0	0
Sn73/N339	Q5	-0,2	-0,2	-1,9	0	0	0
Sn74/N337	Q5	-20,4	-15,7	13,2	0	0	0
Sn75/N342	Q5	-7,6	0,5	12,7	0	0	0
Sn76/N343	Q5	-6,8	2,1	11,2	0	0	0
Sn77/N72	Q5	-4,4	2,8	2,2	0	0	0
Sn78/N73	Q5	-8,2	5,3	4,3	0	0	0

Q6-Uplift load

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn1/N5	Q6	0,0	1,4	0,4	0	0	0
Sn2/N61	Q6	-0,6	0,4	0,5	0	0	0
Sn3/N59	Q6	-0,1	-0,2	-5,8	0	0	0
Sn5/N229	Q6	1,8	-0,7	-18,0	0	0	0
Sn6/N227	Q6	-1,3	-3,2	-6,1	0	0	0
Sn7/N68	Q6	0,1	0,4	-6,1	0	0	0
Sn10/N202	Q6	-0,3	0,0	-5,8	0	0	0
Sn11/N200	Q6	-0,2	0,1	-9,8	0	0	0
Sn12/N70	Q6	-1,9	1,8	-6,0	0	0	0
Sn13/N1	Q6	7,5	-1,4	-3,5	0	0	0
Sn14/N3	Q6	0,1	0,0	-0,4	0	0	0
Sn15/N7	Q6	0,0	-1,2	0,4	0	0	0
Sn16/N9	Q6	-7,3	1,4	-6,3	0	0	0
Sn17/N16	Q6	0,2	0,0	-3,9	0	0	0
Sn18/N22	Q6	0,6	0,8	-6,4	0	0	0
Sn19/N34	Q6	0,6	-0,7	-2,7	0	0	0
Sn22/N76	Q6	-2,6	-0,5	-3,9	0	0	0
Sn23/N78	Q6	-2,6	-0,3	-6,6	0	0	0
Sn24/N80	Q6	-1,8	-0,7	-5,3	0	0	0
Sn25/N82	Q6	-0,4	-0,2	-5,2	0	0	0
Sn26/N84	Q6	-0,1	-0,9	-4,8	0	0	0
Sn27/N86	Q6	0,0	-0,4	-2,0	0	0	0
Sn28/N88	Q6	3,9	0,8	-2,1	0	0	0
Sn29/N89	Q6	3,5	0,8	-1,9	0	0	0
Sn30/N90	Q6	3,0	0,6	-1,7	0	0	0
Sn31/N91	Q6	1,5	0,3	-1,0	0	0	0
Sn32/N92	Q6	1,5	0,3	-1,0	0	0	0
Sn33/N93	Q6	0,1	0,0	-0,4	0	0	0
Sn34/N135	Q6	-0,2	-0,4	-5,6	0	0	0
Sn35/N139	Q6	-0,3	-0,1	-10,6	0	0	0
Sn36/N141	Q6	-0,2	-0,1	-10,1	0	0	0
Sn37/N143	Q6	-0,2	-0,1	-5,2	0	0	0
Sn38/N145	Q6	-1,0	3,8	-4,1	0	0	0
Sn39/N147	Q6	-0,1	0,0	-8,9	0	0	0
Sn40/N157	Q6	-1,1	-0,2	-4,3	0	0	0
Sn41/N161	Q6	-1,1	-0,2	-4,3	0	0	0
Sn48/N220	Q6	1,1	0,2	-13,4	0	0	0
Sn49/N222	Q6	0,4	-1,1	-5,4	0	0	0
Sn50/N223	Q6	0,7	0,4	-13,8	0	0	0
Sn52/N312	Q6	-0,1	0,1	-1,1	0	0	0
Sn53/N306	Q6	0,4	-0,3	-6,2	0	0	0
Sn54/N303	Q6	-0,9	0,6	-3,2	0	0	0
Sn55/N316	Q6	-0,8	-0,2	-4,1	0	0	0
Sn56/N317	Q6	-1,0	-0,2	-2,8	0	0	0
Sn58/N315	Q6	-0,7	-0,1	-4,1	0	0	0
Sn59/N318	Q6	-1,0	-0,5	-2,7	0	0	0
Sn60/N323	Q6	-0,6	0,4	-5,8	0	0	0
Sn61/N324	Q6	-0,7	0,5	-7,6	0	0	0
Sn62/N325	Q6	0,4	-0,1	-6,3	0	0	0
Sn63/N326	Q6	-0,2	0,0	-4,9	0	0	0
Sn64/N327	Q6	-0,1	0,0	-4,4	0	0	0
Sn65/N328	Q6	-0,3	-0,1	-4,5	0	0	0
Sn67/N330	Q6	-0,1	-0,1	-0,9	0	0	0

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn68/N331	Q6	-0,4	0,1	-7,7	0	0	0
Sn69/N332	Q6	-0,6	-0,1	-6,5	0	0	0
Sn70/N333	Q6	-0,5	-0,1	-6,1	0	0	0
Sn71/N334	Q6	-0,8	-0,2	-6,0	0	0	0
Sn72/N335	Q6	-0,1	0,1	-4,3	0	0	0
Sn73/N339	Q6	0,4	0,3	-5,0	0	0	0
Sn74/N337	Q6	-0,2	-0,2	0,3	0	0	0
Sn75/N342	Q6	0,1	2,9	-22,3	0	0	0
Sn76/N343	Q6	0,9	-1,4	-14,2	0	0	0
Sn77/N72	Q6	0,4	-0,2	-0,6	0	0	0
Sn78/N73	Q6	3,3	-2,1	-2,2	0	0	0

Q7-Snow load

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn1/N5	Q7	0,0	-1,7	-0,5	0	0	0
Sn2/N61	Q7	0,8	-0,5	-0,7	0	0	0
Sn3/N59	Q7	0,1	0,2	7,2	0	0	0
Sn5/N229	Q7	-2,2	0,9	22,2	0	0	0
Sn6/N227	Q7	1,7	4,0	7,6	0	0	0
Sn7/N68	Q7	-0,1	-0,5	7,5	0	0	0
Sn10/N202	Q7	0,3	0,0	7,2	0	0	0
Sn11/N200	Q7	0,3	-0,2	12,1	0	0	0
Sn12/N70	Q7	2,4	-2,2	7,4	0	0	0
Sn13/N1	Q7	-9,3	1,7	4,4	0	0	0
Sn14/N3	Q7	-0,1	0,0	0,4	0	0	0
Sn15/N7	Q7	0,0	1,5	-0,5	0	0	0
Sn16/N9	Q7	9,1	-1,7	7,7	0	0	0
Sn17/N16	Q7	-0,2	0,0	4,9	0	0	0
Sn18/N22	Q7	-0,8	-0,9	7,9	0	0	0
Sn19/N34	Q7	-0,7	0,9	3,3	0	0	0
Sn22/N76	Q7	3,2	0,6	4,8	0	0	0
Sn23/N78	Q7	3,2	0,3	8,1	0	0	0
Sn24/N80	Q7	2,2	0,9	6,6	0	0	0
Sn25/N82	Q7	0,5	0,2	6,4	0	0	0
Sn26/N84	Q7	0,1	1,1	5,9	0	0	0
Sn27/N86	Q7	0,1	0,6	2,5	0	0	0
Sn28/N88	Q7	-4,8	-1,0	2,6	0	0	0
Sn29/N89	Q7	-4,3	-0,9	2,3	0	0	0
Sn30/N90	Q7	-3,7	-0,8	2,1	0	0	0
Sn31/N91	Q7	-1,8	-0,4	1,2	0	0	0
Sn32/N92	Q7	-1,9	-0,4	1,3	0	0	0
Sn33/N93	Q7	-0,1	0,0	0,4	0	0	0
Sn34/N135	Q7	0,2	0,4	7,0	0	0	0
Sn35/N139	Q7	0,3	0,1	13,0	0	0	0
Sn36/N141	Q7	0,3	0,1	12,5	0	0	0
Sn37/N143	Q7	0,2	0,1	6,4	0	0	0
Sn38/N145	Q7	1,2	-4,7	5,1	0	0	0
Sn39/N147	Q7	0,2	0,0	10,9	0	0	0
Sn40/N157	Q7	1,4	0,3	5,3	0	0	0
Sn41/N161	Q7	1,3	0,3	5,3	0	0	0
Sn48/N220	Q7	-1,3	-0,3	16,5	0	0	0
Sn49/N222	Q7	-0,5	1,4	6,6	0	0	0
Sn50/N223	Q7	-0,9	-0,5	17,0	0	0	0
Sn52/N312	Q7	0,1	-0,2	1,4	0	0	0
Sn53/N306	Q7	-0,5	0,4	7,6	0	0	0
Sn54/N303	Q7	1,1	-0,7	4,0	0	0	0
Sn55/N316	Q7	1,0	0,2	5,1	0	0	0
Sn56/N317	Q7	1,2	0,3	3,4	0	0	0
Sn58/N315	Q7	0,8	0,2	5,0	0	0	0
Sn59/N318	Q7	1,2	0,6	3,3	0	0	0
Sn60/N323	Q7	0,7	-0,4	7,2	0	0	0
Sn61/N324	Q7	0,9	-0,6	9,3	0	0	0
Sn62/N325	Q7	-0,5	0,1	7,8	0	0	0
Sn63/N326	Q7	0,2	0,1	6,0	0	0	0
Sn64/N327	Q7	0,1	0,0	5,5	0	0	0
Sn65/N328	Q7	0,4	0,1	5,6	0	0	0
Sn67/N330	Q7	0,1	0,2	1,2	0	0	0

Name	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn68/N331	Q7	0,5	-0,1	9,5	0	0	0
Sn69/N332	Q7	0,7	0,2	8,1	0	0	0
Sn70/N333	Q7	0,7	0,1	7,5	0	0	0
Sn71/N334	Q7	0,9	0,2	7,4	0	0	0
Sn72/N335	Q7	0,1	-0,2	5,3	0	0	0
Sn73/N339	Q7	-0,4	-0,3	6,1	0	0	0
Sn74/N337	Q7	0,3	0,2	-0,3	0	0	0
Sn75/N342	Q7	-0,1	-3,5	27,5	0	0	0
Sn76/N343	Q7	-1,2	1,7	17,5	0	0	0
Sn77/N72	Q7	-0,4	0,3	0,7	0	0	0
Sn78/N73	Q7	-4,0	2,6	2,7	0	0	0