

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

STRUCTURAL ANALYSIS

PROJECT

ACT Hengelo

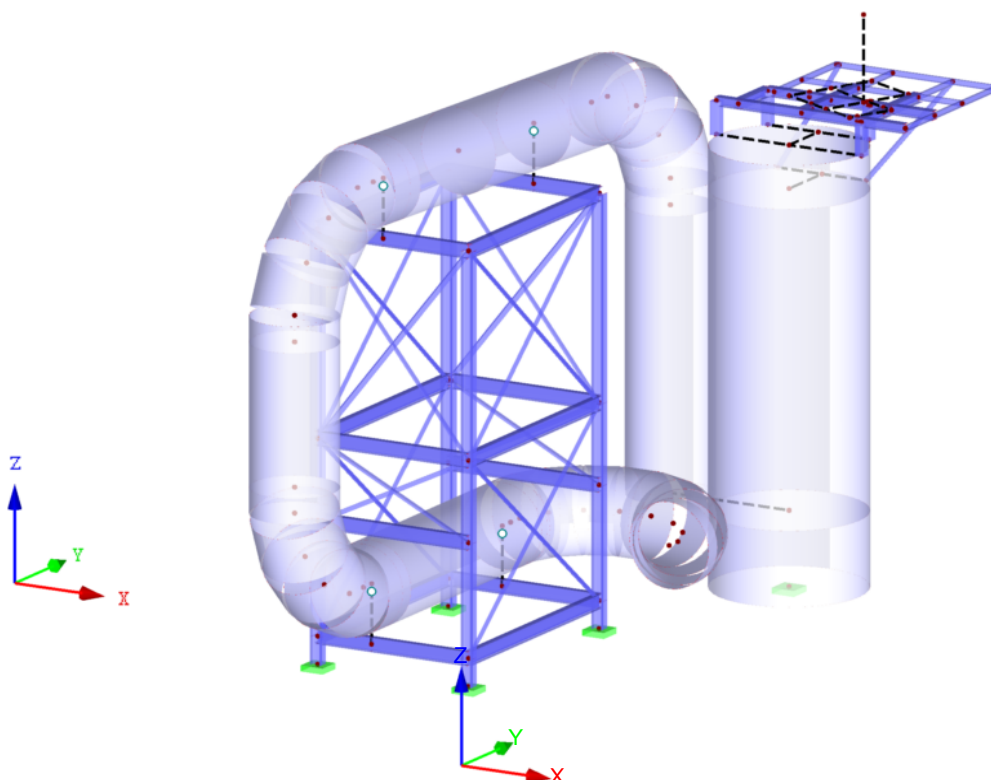
CLIENT

Environox

CREATED BY

A. [REDACTED]

Isometric



Project:

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26-2-2026

Environox ACT Hengelo voorberekening

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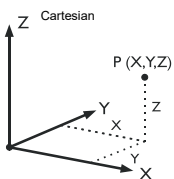
■ MODEL - GENERAL DATA

General	Model name	: Environox constructie
	Model description	: Environox ACT Hengelo voorberekening
	Type of model	: 3D
	Positive direction of global axis Z	: Upward
	Classification of load cases and combinations	: According to Standard: EN 1990 National Annex: NEN:2011 - Netherlands
Options	☐ RF-FORM-FINDING - Find initial equilibrium shapes of membrane and cable structures	
	☐ RF-CUTTING-PATTERN	
	☐ Piping analysis	
	☐ Use CQC Rule	
	☐ Enable CAD/BIM model	
	Standard Gravity	: 10.00 m/s ²
	g	

■ FE MESH SETTINGS

General	Target length of finite elements	l_{FE}	: 0.500 m
	Maximum distance between a node and a line to integrate it into the line	ϵ	: 0.001 m
	Maximum number of mesh nodes (in thousands)		: 500
Members	Number of divisions of members with cable, elastic foundation, taper, or plastic characteristic		: 10
	☒ Activate member divisions for large deformation or post-critical analysis		
	☒ Use division also for straight members, which are not integrated in surfaces, with		: Target length LFE of finite elements
	Minimum number of member divisions		: 2
	☒ Use division for members with node lying on them		
Surfaces	Maximum ratio of FE rectangle diagonals	Δ_D	: 1.800
	Maximum out-of-plane inclination of two finite elements	α	: 0.50 °
	Shape direction of finite elements		: Triangles and quadrangles ☒ Same squares where possible

■ 1.1 NODES



Node No.	Node Type	Reference Node	Coordinate System	Node Coordinates			Comment
				X [m]	Y [m]	Z [m]	
1	Standard	-	Cartesian	-2.930	10.509	8.993	
2	Standard	-	Cartesian	-2.930	10.509	0.000	Supported
3	Standard	-	Cartesian	-6.360	5.359	8.993	
4	Standard	-	Cartesian	-6.360	5.359	0.000	Supported
5	Standard	-	Cartesian	-1.536	11.192	1.826	
6	Standard	-	Cartesian	-1.536	10.846	1.826	
7	Standard	-	Cartesian	1.334	15.186	9.820	
8	Standard	-	Cartesian	0.587	15.930	9.920	
9	Standard	-	Cartesian	-1.311	15.185	9.120	
10	Standard	-	Cartesian	-1.311	15.185	0.000	Supported
11	Standard	-	Cartesian	-2.930	5.359	8.993	
12	Standard	-	Cartesian	-6.360	10.509	8.993	
13	Standard	-	Cartesian	0.163	15.020	9.920	
14	Standard	-	Cartesian	-5.136	4.485	1.826	
15	Standard	-	Cartesian	-1.810	11.854	1.826	
16	Standard	-	Cartesian	1.334	16.336	9.820	

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1.1 NODES

Node No.	Node Type	Reference Node	Coordinate System	Node Coordinates			Comment
				X [m]	Y [m]	Z [m]	
17	Standard	-	Cartesian	-2.461	16.336	9.820	
18	Standard	-	Cartesian	1.334	18.775	9.820	
19	Standard	-	Cartesian	-1.291	16.806	9.920	
20	Standard	-	Cartesian	-4.011	15.185	1.575	
21	Standard	-	Cartesian	-1.716	15.896	9.920	
22	Standard	-	Cartesian	-2.930	5.359	0.000	Supported Supported
23	Standard	-	Cartesian	-6.360	10.509	0.000	
24	Standard	-	Cartesian	-5.136	2.322	8.076	
25	Standard	-	Cartesian	-0.192	16.182	11.732	
26	Standard	-	Cartesian	-5.136	3.493	2.237	
27	Standard	-	Cartesian	-2.317	12.360	1.826	
28	Standard	-	Cartesian	-2.461	15.186	9.820	
29	Standard	-	Cartesian	-2.311	18.775	9.820	
30	Standard	-	Cartesian	-1.311	16.485	8.220	
31	Standard	-	Cartesian	-1.311	15.185	8.220	
32	Standard	-	Cartesian	-2.930	10.509	0.581	
33	Standard	-	Cartesian	-2.930	5.359	0.581	
34	Standard	-	Cartesian	-6.360	10.509	0.581	
35	Standard	-	Cartesian	-6.360	5.359	0.581	
36	Standard	-	Cartesian	-0.192	16.182	9.920	
37	Standard	-	Cartesian	-5.136	10.509	0.581	
38	Standard	-	Cartesian	-5.101	2.732	9.068	
39	Standard	-	Cartesian	-5.136	2.734	2.997	
40	Standard	-	Cartesian	-2.978	12.634	1.826	
41	Standard	-	Cartesian	-2.461	16.336	9.120	
42	Standard	-	Cartesian	-2.311	16.336	9.820	
43	Standard	-	Cartesian	-0.311	16.485	8.220	
44	Standard	-	Cartesian	-2.311	16.485	8.220	
45	Standard	-	Cartesian	-2.930	10.509	4.670	
46	Standard	-	Cartesian	-2.930	5.359	4.670	
47	Standard	-	Cartesian	-6.360	10.509	4.670	
48	Standard	-	Cartesian	-6.360	5.359	4.670	
49	Standard	-	Cartesian	-2.242	18.775	9.820	
50	Standard	-	Cartesian	-5.136	5.359	0.581	
51	Standard	-	Cartesian	-5.034	3.489	9.827	
52	Standard	-	Cartesian	-5.136	2.322	3.989	
53	Standard	-	Cartesian	-3.694	12.634	1.826	
54	Standard	-	Cartesian	0.339	18.775	9.820	
55	Standard	-	Cartesian	0.339	15.186	9.820	
56	Standard	-	Cartesian	0.339	15.185	9.120	
57	Standard	-	Cartesian	-2.961	15.186	9.120	
58	Standard	-	Cartesian	-4.871	5.359	10.238	
59	Standard	-	Cartesian	-4.871	5.359	8.993	
60	Standard	-	Cartesian	-4.948	4.477	10.238	
61	Standard	-	Cartesian	-5.136	2.322	4.526	
62	Standard	-	Cartesian	-4.356	12.360	1.826	
63	Standard	-	Cartesian	-1.026	18.775	9.820	
64	Standard	-	Cartesian	-1.026	15.186	9.820	
65	Standard	-	Cartesian	-0.161	16.335	9.120	
66	Standard	-	Cartesian	-4.420	10.509	10.238	
67	Standard	-	Cartesian	-2.930	10.509	2.970	
68	Standard	-	Cartesian	-4.901	5.012	10.238	
69	Standard	-	Cartesian	-5.136	2.322	7.526	
70	Standard	-	Cartesian	-4.862	11.854	1.826	
71	Standard	-	Cartesian	1.339	17.411	9.820	
72	Standard	-	Cartesian	-2.930	5.359	2.970	
73	Standard	-	Cartesian	-4.247	12.484	10.238	
74	Standard	-	Cartesian	-5.136	11.192	1.826	
75	Standard	-	Cartesian	-2.961	15.186	9.820	
76	Standard	-	Cartesian	-4.200	13.031	10.238	
77	Standard	-	Cartesian	-5.136	10.834	1.826	
78	Standard	-	Cartesian	-6.360	10.509	2.970	
79	Standard	-	Cartesian	-4.113	14.019	9.827	
80	Standard	-	Cartesian	-5.136	5.034	1.826	
81	Standard	-	Cartesian	-0.161	16.336	9.820	
82	Standard	-	Cartesian	-4.047	14.776	9.068	
83	Standard	-	Cartesian	-4.011	15.185	8.076	
84	Standard	-	Cartesian	-4.011	15.185	7.523	
85	Standard	-	Cartesian	-5.136	5.359	1.826	
86	Standard	-	Cartesian	0.339	17.411	9.820	
87	Standard	-	Cartesian	0.339	16.336	9.820	
88	Standard	-	Cartesian	-5.136	10.509	1.826	
89	Standard	-	Cartesian	-4.420	10.509	8.993	
90	Standard	-	Cartesian	-2.311	17.411	9.820	
91	Standard	-	Cartesian	-1.026	17.411	9.820	
92	Standard	-	Cartesian	1.334	17.411	9.820	
93	Standard	-	Cartesian	-1.026	16.336	9.820	
94	Standard	-	Cartesian	-1.311	16.335	9.120	
95	Standard	-	Cartesian	-1.311	15.185	1.575	
96	Standard	-	Cartesian	-6.360	5.359	2.970	
97	Standard	-	Cartesian	-6.299	10.509	4.670	
98	Standard	-	Cartesian	-0.877	17.694	9.920	
99	Standard	-	Cartesian	-0.120	16.336	9.920	
100	Standard	-	Cartesian	-0.120	16.336	9.820	
101	Standard	-	Cartesian	0.265	17.162	9.920	
102	Standard	-	Cartesian	-1.510	16.336	9.920	
103	Standard	-	Cartesian	-1.510	16.336	9.820	
104	Standard	-	Cartesian	-0.149	16.273	9.920	
105	Standard	-	Cartesian	-1.026	15.574	9.920	
106	Standard	-	Cartesian	-1.026	15.574	9.820	
107	Standard	-	Cartesian	-0.574	15.363	9.920	
108	Standard	-	Cartesian	0.339	16.046	9.920	
109	Standard	-	Cartesian	0.339	16.046	9.820	
110	Standard	-	Cartesian	0.240	15.186	9.920	

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1.1 NODES

Node No.	Node Type	Reference Node	Coordinate System	Node Coordinates			Comment
				X [m]	Y [m]	Z [m]	
111	Standard	-	Cartesian	0.240	15.186	9.820	
112	Standard	-	Cartesian	-4.645	7.934	10.238	

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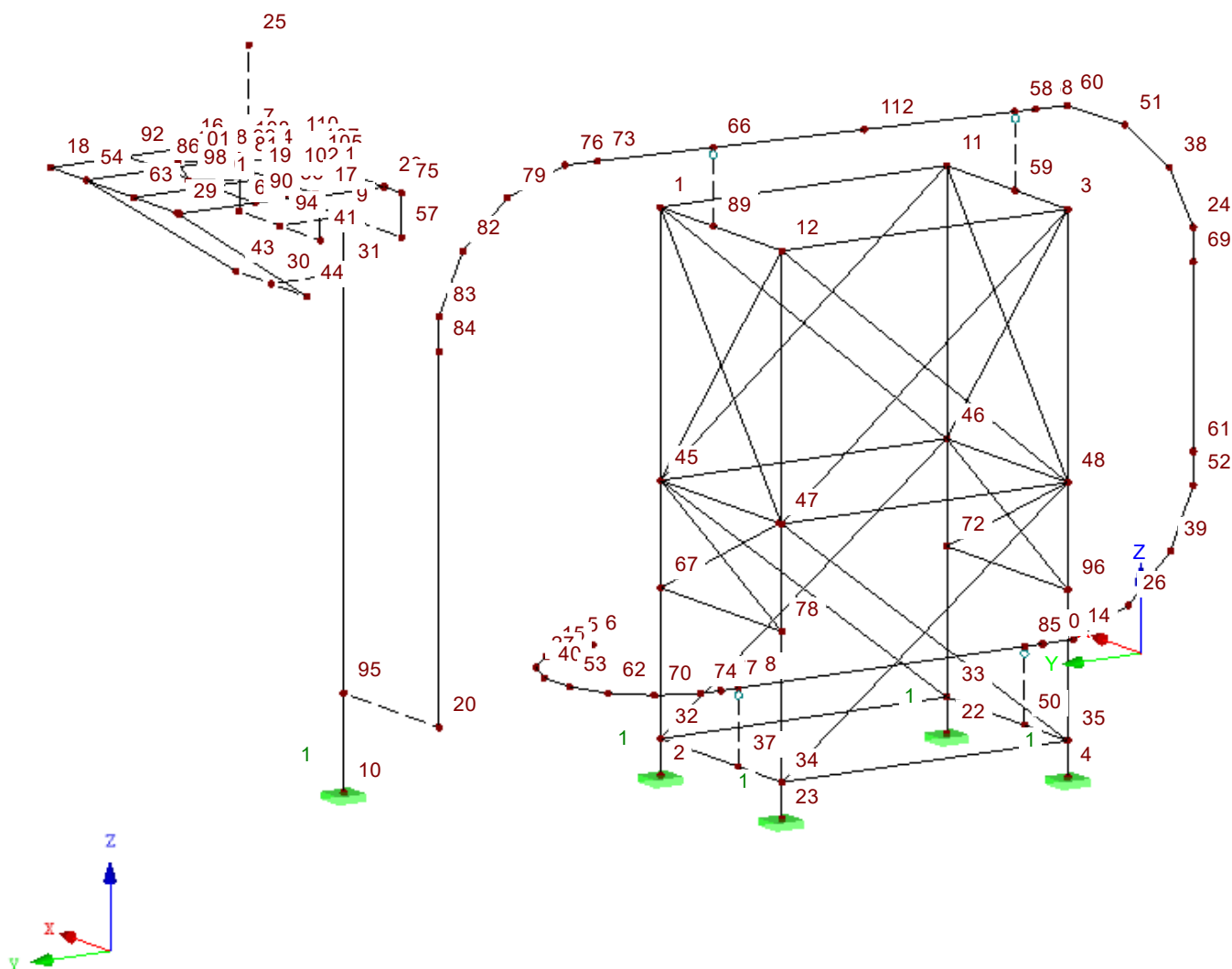
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■ MODEL

Node Numbering
Support Numbering

Isometric



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■ 1.2 LINES

Line No.	Line Type	Nodes No.	Line Length L [m]		Comment
1	Polyline	1,45	4.324	Z	
2	Polyline	3,48	4.324	Z	
3	Polyline	5,6	0.346	Y	
4	Polyline	7,55	0.995	X	
5	Polyline	9,31	0.900	Z	
6	Polyline	1,11	5.150	Y	
7	Polyline	12,3	5.150	Y	
8	Polyline	80,14	0.549	Y	
9	Polyline	15,5	0.716	XY	
10	Polyline	16,87	0.995	X	
11	Polyline	18,92	1.365	Y	
12	Polyline	44,49	2.794		
13	Polyline	49,29	0.068	X	
14	Polyline	1,89	1.490	X	
15	Polyline	11,46	4.324	Z	
16	Polyline	11,59	1.940	X	
17	Polyline	12,47	4.324	Z	
18	Polyline	24,69	0.549	Z	
19	Polyline	14,26	1.074	YZ	
20	Polyline	27,15	0.716	XY	
21	Polyline	17,28	1.150	Y	
22	Polyline	18,54	0.995	X	
23	Polyline	30,31	1.300	Y	
24	Polyline	32,33	5.150	Y	
25	Polyline	34,35	5.150	Y	
26	Polyline	43,54	2.868		
27	Polyline	38,24	1.074		
28	Polyline	39,26	1.074	YZ	
29	Polyline	27,40	0.716	XY	
30	Polyline	17,41	0.700	Z	
31	Polyline	29,90	1.365	Y	
32	Polyline	43,30	1.000	X	
33	Polyline	45,46	5.150	Y	
34	Polyline	32,37	2.206	X	
35	Polyline	47,48	5.150	Y	
36	Polyline	33,50	2.206	X	
37	Polyline	1,47	5.519	XZ	
38	Polyline	51,38	1.074		
39	Polyline	52,39	1.074	YZ	
40	Polyline	40,53	0.716	X	
41	Polyline	54,86	1.365	Y	
42	Polyline	56,9	1.650	X	
43	Polyline	45,97	3.368	X	
44	Polyline	46,48	3.430	X	
45	Polyline	58,59	1.245	Z	
46	Polyline	60,51	1.074		
47	Polyline	61,52	0.537	Z	
48	Polyline	53,62	0.716	XY	
49	Polyline	63,91	1.365	Y	
50	Polyline	65,94	1.150	X	
51	Polyline	66,89	1.245	Z	
52	Polyline	68,60	0.537	XY	
53	Polyline	69,61	3.000	Z	
54	Polyline	62,70	0.716	XY	
55	Polyline	71,92	0.005	X	
56	Polyline	73,66	1.982	XY	
57	Polyline	70,74	0.716	XY	
58	Polyline	75,57	0.700	Z	
59	Polyline	76,73	0.549	XY	
60	Polyline	74,77	0.358	Y	
61	Polyline	55,56	0.700	YZ	
62	Polyline	79,76	1.074		
63	Polyline	77,88	0.325	Y	
64	Polyline	81,65	0.700	YZ	
65	Polyline	82,79	1.074		
66	Polyline	82,83	1.074		
67	Polyline	83,84	0.552	Z	
68	Polyline	84,20	5.949	Z	
69	Polyline	50,35	1.224	X	
70	Polyline	37,34	1.224	X	
71	Polyline	85,50	1.245	Z	
72	Polyline	86,87	1.075	Y	
73	Polyline	87,109	0.290	Y	
74	Polyline	9,57	1.650	X	
75	Polyline	88,85	5.150	Y	
76	Polyline	85,80	0.325	Y	
77	Polyline	45,12	5.519	XZ	
78	Polyline	66,112	2.585	XY	
79	Polyline	58,68	0.349	XY	
80	Polyline	92,86	0.995	X	
81	Polyline	86,91	1.365	X	
82	Polyline	91,90	1.285	X	
83	Polyline	11,48	5.519	XZ	
84	Polyline	88,37	1.245	Z	
85	Polyline	90,42	1.075	Y	
86	Polyline	30,44	1.000	X	
87	Polyline	91,93	1.075	Y	
88	Polyline	93,106	0.762	Y	
89	Polyline	94,41	1.150	X	
90	Polyline	31,95	6.645	Z	
91	Polyline	95,10	1.575	Z	
92	Polyline	45,67	1.700	Z	
93	Polyline	32,2	0.581	Z	
94	Polyline	55,111	0.099	X	

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1.2 LINES

Line No.	Line Type	Nodes No.	Line Length L [m]		Comment
95	Polyline	64,28	1.435	X	
96	Polyline	28,75	0.500	X	
97	Polyline	46,3	5.519	XZ	
98	Polyline	48,96	1.700	Z	
99	Polyline	35,4	0.581	Z	
100	Polyline	87,100	0.459	X	
101	Polyline	81,93	0.865	X	
102	Polyline	93,103	0.485	X	
103	Polyline	42,17	0.150	X	
104	Polyline	89,12	1.940	X	
105	Polyline	92,16	1.075	Y	
106	Polyline	16,7	1.150	Y	
107	Polyline	95,20	2.700	X	
108	Polyline	47,78	1.700	Z	
109	Polyline	34,23	0.581	Z	
110	Polyline	46,72	1.700	Z	
111	Polyline	33,22	0.581	Z	
112	Polyline	94,9	1.150	Y	
113	Polyline	59,3	1.490	X	
114	Polyline	54,63	1.365	X	
115	Polyline	63,49	1.217	X	
116	Polyline	3,47	6.724	YZ	
117	Polyline	12,48	6.724	YZ	
118	Polyline	1,46	6.724	YZ	
119	Polyline	11,45	6.724	YZ	
120	Polyline	45,33	6.575	YZ	
121	Polyline	46,32	6.575	YZ	
122	Polyline	48,34	6.575	YZ	
123	Polyline	47,35	6.575	YZ	
124	Polyline	67,78	3.430	X	
125	Polyline	72,96	3.430	X	
126	Polyline	67,32	2.388	Z	
127	Polyline	96,35	2.388	Z	
128	Polyline	78,34	2.388	Z	
129	Polyline	72,33	2.388	Z	
130	Polyline	45,78	3.828	XZ	
131	Polyline	67,97	3.773	XZ	
132	Polyline	97,47	0.062	X	
133	Polyline	72,48	3.828	XZ	
134	Polyline	46,96	3.828	XZ	
135	Polyline	8,110	0.822	XY	
136	Polyline	8,108	0.274	XY	
137	Polyline	13,107	0.812	XY	
138	Polyline	25,36	1.812	Z	
139	Polyline	98,19	0.980	XY	
140	Polyline	99,100	0.100	Z	
141	Polyline	101,98	1.260	XY	
142	Polyline	102,103	0.100	Z	
143	Polyline	101,99	0.912	XY	
144	Polyline	105,106	0.100	Z	
145	Polyline	104,36	0.101	XY	
146	Polyline	36,107	0.904	XY	
147	Polyline	108,109	0.100	Z	
148	Polyline	110,111	0.100	Z	
149	Polyline	109,55	0.860	Y	
150	Polyline	106,64	0.388	Y	
151	Polyline	111,64	1.266	X	
152	Polyline	100,81	0.041	X	
153	Polyline	103,42	0.800	X	
154	Polyline	19,102	0.519	XY	
155	Polyline	102,21	0.485	XY	
156	Polyline	107,105	0.499	XY	
157	Polyline	105,21	0.761	XY	
158	Polyline	110,13	0.183	XY	
159	Polyline	108,104	0.539	XY	
160	Polyline	104,19	1.260	XY	
161	Polyline	99,104	0.068	XY	
162	Polyline	112,58	2.585	XY	

1.3 MATERIALS

Matl. No.	Modulus E [kN/cm ²]	Modulus G [kN/cm ²]	Poisson's Ratio ν [-]	Spec. Weight γ [kN/m ³]	Coeff. of Th. Ex α [1/°C]	Partial Factor γ_M [-]	Material Model
1	Steel S 235 EN 10025-2:2004-11 21000.00	8076.92	0.300	78.50	1.20E-05	1.00	Isotropic Linear Elastic
2	Steel S 355 EN 10025-2:2004-11 21000.00	8076.92	0.300	78.50	1.20E-05	1.00	Isotropic Linear Elastic
3	X2CrNiMo17-12-2 20000.00	1.4404 (EN 10216-5) 7692.31	EN 13480-3:2013 0.300	80.00	1.60E-05	1.00	Isotropic Linear Elastic

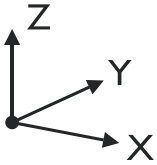
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1.7 NODAL SUPPORTS

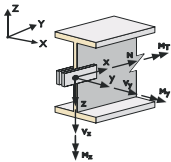
Support No.	Nodes No.	Axis System	Column in Z	u _x	u _y	u _z	φ _x	φ _y	φ _z
1	2,4,10,22,23	Global X,Y,Z	☐	☒	☒	☒	☒	☒	☒

1.13 CROSS-SECTIONS

Section No.	Matl. No.	J [cm ⁴] A [cm ²]	I _{y/lu} [cm ⁴] A _{y/lu} [cm ²]	I _{z/v} [cm ⁴] A _{z/v} [cm ²]	Principal Axes α [°]	Rotation α' [°]	Overall Dimensions [mm]	
							Width b	Height h
1	Pipe 1800/3/K 3	1367277.75 169.36	683638.88 84.36	683638.87 84.36	0.00	0.00	1800.0	1800.0
2	Pipe 3200/5/K 3	12807762.00 501.87	6403881.00 249.98	6403881.01 249.98	0.00	0.00	3200.0	3200.0
3	HE A 200 Euronorm 53-62 1	21.10 53.80	3690.00 33.30	1340.00 10.77	0.00	0.00	200.0	190.0
4	IPE 300 1	20.12 53.81	8356.00 26.81	603.80 19.82	0.00	0.00	150.0	300.0
5	HE A 240 Euronorm 53-62 1	41.70 76.80	7760.00 47.96	2770.00 15.10	0.00	0.00	240.0	230.0
6	QRO 200x6 EN 10219-2:2006 1	4459.00 45.60	2833.00 19.56	2833.00 19.56	0.00	0.00	200.0	200.0
7	U 120 1	4.15 17.00	364.00 5.12	43.20 6.95	0.00	0.00	55.0	120.0
8	QRO 80x5 (warmgeformt) 1	217.00 14.70	137.00 6.34	137.00 6.34	0.00	0.00	80.0	80.0
9	L 100x100x8 1	3.19 15.50	230.20 6.46	59.49 6.36	-45.00	0.00	100.0	100.0

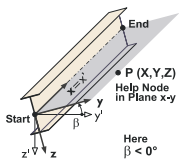
1.14 MEMBER HINGES

Release No.	Reference System	Axial/Shear Release or Spring [kN/m]			Moment Release or Spring [kNm/rad]			Comment
		u _x	u _y	u _z	φ _x	φ _y	φ _z	
1	Local x,y,z	☐	☐	☐	☒	☒	☒	



1.17 MEMBERS

Mbr. No.	Line No.	Member	Rotation		Cross-Section		Hinge No.		Ecc. No.	Div. No.	Length L [m]	
			Type	β [°]	Start	End	Start	End				
1	3	Beam	Angle	0.00	1	1	-	-	-	-	0.346	Y
2	8	Beam	Angle	0.00	1	1	-	-	-	-	0.549	Y
3	9	Beam	Angle	0.00	1	1	-	-	-	-	0.716	XY
4	18	Beam	Angle	0.00	1	1	-	-	-	-	0.549	Z
5	19	Beam	Angle	0.00	1	1	-	-	-	-	1.074	YZ
6	20	Beam	Angle	0.00	1	1	-	-	-	-	0.716	XY
7	27	Beam	Angle	0.00	1	1	-	-	-	-	1.074	
8	28	Beam	Angle	0.00	1	1	-	-	-	-	1.074	YZ
9	29	Beam	Angle	0.00	1	1	-	-	-	-	0.716	XY
10	38	Beam	Angle	0.00	1	1	-	-	-	-	1.074	
11	39	Beam	Angle	0.00	1	1	-	-	-	-	1.074	YZ
12	40	Beam	Angle	0.00	1	1	-	-	-	-	0.716	X
13	46	Beam	Angle	0.00	1	1	-	-	-	-	1.074	
14	47	Beam	Angle	0.00	1	1	-	-	-	-	0.537	Z
15	48	Beam	Angle	0.00	1	1	-	-	-	-	0.716	XY
16	52	Beam	Angle	0.00	1	1	-	-	-	-	0.537	XY
17	53	Beam	Angle	0.00	1	1	-	-	-	-	3.000	Z
18	54	Beam	Angle	0.00	1	1	-	-	-	-	0.716	XY
19	56	Beam	Angle	0.00	1	1	-	-	-	-	1.982	XY
20	57	Beam	Angle	0.00	1	1	-	-	-	-	0.716	XY
21	59	Beam	Angle	0.00	1	1	-	-	-	-	0.549	XY
22	60	Beam	Angle	0.00	1	1	-	-	-	-	0.358	Y
23	62	Beam	Angle	0.00	1	1	-	-	-	-	1.074	
24	63	Beam	Angle	0.00	1	1	-	-	-	-	0.325	Y
25	65	Beam	Angle	0.00	1	1	-	-	-	-	1.074	
26	66	Beam	Angle	0.00	1	1	-	-	-	-	1.074	
27	67	Beam	Angle	0.00	1	1	-	-	-	-	0.552	Z
28	68	Beam	Angle	0.00	1	1	-	-	-	-	5.949	Z
29	75	Beam	Angle	0.00	1	1	-	-	-	-	5.150	Y
30	76	Beam	Angle	0.00	1	1	-	-	-	-	0.325	Y
31	78	Beam	Angle	0.00	1	1	-	-	-	-	2.585	XY
32	79	Beam	Angle	0.00	1	1	-	-	-	-	0.349	XY
33	1	Beam	Angle	0.00	5	5	-	-	-	-	4.324	Z
34	2	Beam	Angle	0.00	5	5	-	-	-	-	4.324	Z
35	15	Beam	Angle	0.00	5	5	-	-	-	-	4.324	Z
36	17	Beam	Angle	0.00	5	5	-	-	-	-	4.324	Z



Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 1.17 MEMBERS

Mbr. No.	Line No.	Member	Rotation		Cross-Section		Hinge No.		Ecc. No.	Div. No.	Length L [m]	
			Type	β [°]	Start	End	Start	End				
37	92	Beam	Angle	0.00	5	5	-	-	-	-	1.700	Z
38	93	Beam	Angle	0.00	5	5	-	-	-	-	0.581	Z
39	98	Beam	Angle	0.00	5	5	-	-	-	-	1.700	Z
40	99	Beam	Angle	0.00	5	5	-	-	-	-	0.581	Z
41	108	Beam	Angle	0.00	5	5	-	-	-	-	1.700	Z
42	109	Beam	Angle	0.00	5	5	-	-	-	-	0.581	Z
43	111	Beam	Angle	0.00	5	5	-	-	-	-	0.581	Z
44	110	Beam	Angle	0.00	5	5	-	-	-	-	1.700	Z
45	6	Beam	Angle	0.00	4	4	-	-	-	-	5.150	Y
46	7	Beam	Angle	0.00	4	4	-	-	-	-	5.150	Y
47	14	Beam	Angle	0.00	4	4	-	-	-	-	1.490	X
48	16	Beam	Angle	0.00	4	4	-	-	-	-	1.940	X
49	24	Beam	Angle	0.00	4	4	-	-	-	-	5.150	Y
50	25	Beam	Angle	0.00	4	4	-	-	-	-	5.150	Y
51	33	Beam	Angle	0.00	4	4	-	-	-	-	5.150	Y
52	34	Beam	Angle	0.00	4	4	-	-	-	-	2.206	X
53	35	Beam	Angle	0.00	4	4	-	-	-	-	5.150	Y
54	36	Beam	Angle	0.00	4	4	-	-	-	-	2.206	X
55	43	Beam	Angle	0.00	4	4	-	-	-	-	3.368	X
56	44	Beam	Angle	0.00	4	4	-	-	-	-	3.430	X
57	69	Beam	Angle	0.00	4	4	-	-	-	-	1.224	X
58	70	Beam	Angle	0.00	4	4	-	-	-	-	1.224	X
59	104	Beam	Angle	0.00	4	4	-	-	-	-	1.940	X
60	113	Beam	Angle	0.00	4	4	-	-	-	-	1.490	X
61	51	Rigid Member	Angle	0.00	0	0	1	-	-	-	1.245	Z
62	45	Rigid Member	Angle	5.00	0	0	1	-	-	-	1.245	Z
63	71	Rigid Member	Angle	0.00	0	0	1	-	-	-	1.245	Z
64	84	Rigid Member	Angle	0.00	0	0	1	-	-	-	1.245	Z
65	5	Beam	Angle	0.00	2	2	-	-	-	-	0.900	Z
66	90	Beam	Angle	0.00	2	2	-	-	-	-	6.645	Z
67	91	Beam	Angle	0.00	2	2	-	-	-	-	1.575	Z
68	23	Rigid Member	Angle	0.00	0	0	-	-	-	-	1.300	Y
69	32	Rigid Member	Angle	0.00	0	0	-	-	-	-	1.000	X
70	42	Rigid Member	Angle	0.00	0	0	-	-	-	-	1.650	X
71	50	Rigid Member	Angle	0.00	0	0	-	-	-	-	1.150	X
72	74	Rigid Member	Angle	0.00	0	0	-	-	-	-	1.650	X
73	86	Rigid Member	Angle	0.00	0	0	-	-	-	-	1.000	X
74	89	Rigid Member	Angle	0.00	0	0	-	-	-	-	1.150	X
75	112	Rigid Member	Angle	0.00	0	0	-	-	-	-	1.150	Y
76	107	Rigid Member	Angle	0.00	0	0	-	-	-	-	2.700	X
77	30	Beam	Angle	0.00	6	6	-	-	-	-	0.700	Z
78	58	Beam	Angle	0.00	6	6	-	-	-	-	0.700	Z
79	61	Beam	Angle	0.00	6	6	-	-	-	-	0.700	YZ
80	64	Beam	Angle	0.00	6	6	-	-	-	-	0.700	YZ
81	4	Beam	Angle	0.00	3	3	-	-	-	-	0.995	X
82	10	Beam	Angle	0.00	3	3	-	-	-	-	0.995	X
83	21	Beam	Angle	0.00	3	3	-	-	-	-	1.150	Y
84	72	Beam	Angle	0.00	3	3	-	-	-	-	1.075	Y
85	73	Beam	Angle	0.00	3	3	-	-	-	-	0.290	Y
86	87	Beam	Angle	0.00	3	3	-	-	-	-	1.075	Y
87	88	Beam	Angle	0.00	3	3	-	-	-	-	0.762	Y
88	94	Beam	Angle	0.00	3	3	-	-	-	-	0.099	X
89	95	Beam	Angle	0.00	3	3	-	-	-	-	1.435	X
90	96	Beam	Angle	0.00	3	3	-	-	-	-	0.500	X
91	100	Beam	Angle	0.00	3	3	-	-	-	-	0.459	X
92	101	Beam	Angle	0.00	3	3	-	-	-	-	0.865	X
93	102	Beam	Angle	0.00	3	3	-	-	-	-	0.485	X
94	103	Beam	Angle	0.00	3	3	-	-	-	-	0.150	X
95	11	Beam	Angle	0.00	7	7	-	-	-	-	1.365	Y
96	22	Beam	Angle	0.00	7	7	-	-	-	-	0.995	X
97	31	Beam	Angle	0.00	7	7	-	-	-	-	1.365	Y
98	41	Beam	Angle	0.00	7	7	-	-	-	-	1.365	Y
99	49	Beam	Angle	0.00	7	7	-	-	-	-	1.365	Y
100	80	Beam	Angle	0.00	7	7	-	-	-	-	0.995	X
101	81	Beam	Angle	0.00	7	7	-	-	-	-	1.365	X
102	82	Beam	Angle	0.00	7	7	-	-	-	-	1.285	X
103	85	Beam	Angle	0.00	7	7	-	-	-	-	1.075	Y
104	105	Beam	Angle	0.00	7	7	-	-	-	-	1.075	Y
105	106	Beam	Angle	0.00	7	7	-	-	-	-	1.150	Y
106	114	Beam	Angle	0.00	7	7	-	-	-	-	1.365	X
107	115	Beam	Angle	0.00	7	7	-	-	-	-	1.217	X
108	12	Beam	Angle	0.00	8	8	-	-	-	-	2.794	
109	13	Beam	Angle	0.00	7	7	-	-	-	-	0.068	X
110	26	Beam	Angle	0.00	8	8	-	-	-	-	2.868	
111	37	Beam	Angle	0.00	9	9	-	-	-	-	5.519	XZ
112	77	Beam	Angle	0.00	9	9	-	-	-	-	5.519	XZ
113	83	Beam	Angle	0.00	9	9	-	-	-	-	5.519	XZ
114	97	Beam	Angle	0.00	9	9	-	-	-	-	5.519	XZ
115	116	Beam	Angle	0.00	9	9	-	-	-	-	6.724	YZ
116	117	Beam	Angle	0.00	9	9	-	-	-	-	6.724	YZ
117	118	Beam	Angle	0.00	9	9	-	-	-	-	6.724	YZ
118	119	Beam	Angle	0.00	9	9	-	-	-	-	6.724	YZ
119	120	Beam	Angle	0.00	9	9	-	-	-	-	6.575	YZ
120	121	Beam	Angle	0.00	9	9	-	-	-	-	6.575	YZ
121	122	Beam	Angle	0.00	9	9	-	-	-	-	6.575	YZ
122	123	Beam	Angle	0.00	9	9	-	-	-	-	6.575	YZ
123	124	Beam	Angle	0.00	4	4	-	-	-	-	3.430	X
124	125	Beam	Angle	0.00	4	4	-	-	-	-	3.430	X
125	126	Beam	Angle	0.00	5	5	-	-	-	-	2.388	Z
126	127	Beam	Angle	0.00	5	5	-	-	-	-	2.388	Z
127	128	Beam	Angle	0.00	5	5	-	-	-	-	2.388	Z
128	129	Beam	Angle	0.00	5	5	-	-	-	-	2.388	Z
129	130	Beam	Angle	0.00	9	9	-	-	-	-	3.828	XZ
130	131	Beam	Angle	0.00	9	9	-	-	-	-	3.773	XZ

Project:

Model: Environox constructie

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Environox ACT Hengelo voorberekening

■ 1.17 MEMBERS

Mbr. No.	Line No.	Member	Rotation		Cross-Section		Hinge No.		Ecc. No.	Div. No.	Length L [m]	
			Type	β [°]	Start	End	Start	End				
131	132	Beam	Angle	0.00	3	3	-	-	-	-	0.062	X
132	133	Beam	Angle	0.00	9	9	-	-	-	-	3.828	XZ
133	134	Beam	Angle	0.00	9	9	-	-	-	-	3.828	XZ
134	149	Beam	Angle	0.00	3	3	-	-	-	-	0.860	Y
135	150	Beam	Angle	0.00	3	3	-	-	-	-	0.388	Y
136	151	Beam	Angle	0.00	3	3	-	-	-	-	1.266	X
137	152	Beam	Angle	0.00	3	3	-	-	-	-	0.041	X
138	153	Beam	Angle	0.00	3	3	-	-	-	-	0.800	X
139	135	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.822	XY
140	136	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.274	XY
141	137	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.812	XY
142	138	Rigid Member	Angle	0.00	0	0	-	-	-	-	1.812	Z
143	139	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.980	XY
144	140	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.100	Z
145	141	Rigid Member	Angle	0.00	0	0	-	-	-	-	1.260	XY
146	142	Truss	Angle	0.00	9	9	-	-	-	-	0.100	Z
147	143	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.912	XY
148	144	Truss	Angle	0.00	9	9	-	-	-	-	0.100	Z
149	145	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.101	XY
150	146	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.904	XY
151	147	Truss	Angle	0.00	9	9	-	-	-	-	0.100	Z
152	148	Truss	Angle	0.00	9	9	-	-	-	-	0.100	Z
153	154	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.519	XY
154	155	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.485	XY
155	156	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.499	XY
156	157	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.761	XY
157	158	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.183	XY
158	159	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.539	XY
159	160	Rigid Member	Angle	0.00	0	0	-	-	-	-	1.260	XY
160	161	Rigid Member	Angle	0.00	0	0	-	-	-	-	0.068	XY
161	162	Beam	Angle	0.00	1	1	-	-	-	-	2.585	XY

■ 2.1 LOAD CASES

Load Case	Load Case Description	EN 1990 NEN:2011 Action Category	Self-Weight - Factor in Direction			
			Active	X	Y	Z
LC1	Eigen gewicht	Permanent	☒	0.000	0.000	-1.000
LC2	Wind loodrecht	Wind	☐			
LC3	Wind parallel	Wind	☐			
LC4	Platform belasting	Permanent/Imposed	☐			
LC5	Sneeuw	Snow ($H \leq 1000$ m a.s.l.)	☐			

■ 2.1.1 LOAD CASES - CALCULATION PARAMETERS

Load Case	Load Case Description	Calculation Parameters	
LC1	Eigen gewicht	Method of analysis	☒ Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	☒ Newton-Raphson
		Activate stiffness factors of:	☒ Cross-sections (factor for J, I _y , I _z , A, A _y , A _z)
			☒ Members (factor for GJ, EI _y , EI _z , EA, GA _y , GA _z)
LC2	Wind loodrecht	Method of analysis	☒ Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	☒ Newton-Raphson
		Activate stiffness factors of:	☒ Cross-sections (factor for J, I _y , I _z , A, A _y , A _z)
			☒ Members (factor for GJ, EI _y , EI _z , EA, GA _y , GA _z)
LC3	Wind parallel	Method of analysis	☒ Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	☒ Newton-Raphson
		Activate stiffness factors of:	☒ Cross-sections (factor for J, I _y , I _z , A, A _y , A _z)
			☒ Members (factor for GJ, EI _y , EI _z , EA, GA _y , GA _z)
LC4	Platform belasting	Method of analysis	☒ Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	☒ Newton-Raphson
		Activate stiffness factors of:	☒ Cross-sections (factor for J, I _y , I _z , A, A _y , A _z)
			☒ Members (factor for GJ, EI _y , EI _z , EA, GA _y , GA _z)
LC5	Sneeuw	Method of analysis	☒ Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	☒ Newton-Raphson
		Activate stiffness factors of:	☒ Cross-sections (factor for J, I _y , I _z , A, A _y , A _z)
			☒ Members (factor for GJ, EI _y , EI _z , EA, GA _y , GA _z)

■ 2.5 LOAD COMBINATIONS

Load Combin.	Load Combination		No.	Factor	Load Case	
	DS	Description				
CO1		Wind loodrecht	1	1.35	LC1	Eigen gewicht
			2	1.50	LC2	Wind loodrecht
CO2		Wind parallel	1	1.35	LC1	Eigen gewicht
			2	1.35	LC3	Wind parallel
CO3		Platform	1	1.35	LC1	Eigen gewicht
			2	1.35	LC4	Platform belasting
CO4		Sneeuw	1	1.35	LC1	Eigen gewicht
			2	1.50	LC5	Sneeuw

LOADS

Project: Model: Environox constructie
Environox ACT Hengelo voorberekening

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2.5.2 LOAD COMBINATIONS - CALCULATION PARAMETERS

Load Combin.	Description	Calculation Parameters
CO1	Wind loodrecht	Method of analysis : Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : Picard Options : Consider favorable effects due to tension : Refer internal forces to deformed system for: : Normal forces N : Shear forces V_y and V_z : Moments M_y , M_z and M_T Activate stiffness factors of: : Materials (partial factor γ_M) : Cross-sections (factor for J , I_y , I_z , A , A_y , A_z) : Members (factor for GJ , El_y , El_z , EA , GA_y , GA_z)
CO2	Wind parallel	Method of analysis : Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : Picard Options : Consider favorable effects due to tension : Refer internal forces to deformed system for: : Normal forces N : Shear forces V_y and V_z : Moments M_y , M_z and M_T Activate stiffness factors of: : Materials (partial factor γ_M) : Cross-sections (factor for J , I_y , I_z , A , A_y , A_z) : Members (factor for GJ , El_y , El_z , EA , GA_y , GA_z)
CO3	Platform	Method of analysis : Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : Picard Options : Consider favorable effects due to tension : Refer internal forces to deformed system for: : Normal forces N : Shear forces V_y and V_z : Moments M_y , M_z and M_T Activate stiffness factors of: : Materials (partial factor γ_M) : Cross-sections (factor for J , I_y , I_z , A , A_y , A_z) : Members (factor for GJ , El_y , El_z , EA , GA_y , GA_z)
CO4	Sneeuw	Method of analysis : Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : Picard Options : Consider favorable effects due to tension : Refer internal forces to deformed system for: : Normal forces N : Shear forces V_y and V_z : Moments M_y , M_z and M_T Activate stiffness factors of: : Materials (partial factor γ_M) : Cross-sections (factor for J , I_y , I_z , A , A_y , A_z) : Members (factor for GJ , El_y , El_z , EA , GA_y , GA_z)

3.1 NODAL LOADS - BY COMPONENTS
- COORDINATE SYSTEM

LC1: Eigen gewicht

LC1
Eigen gewicht

No.	On Nodes No.	Coordinate System	Force [kN]			Moment [kNm]		
			P_X / P_U	P_Y / P_V	P_Z / P_W	M_X / M_U	M_Y / M_V	M_Z / M_W
1	25	0 Global XYZ	0.000	0.000	-12.500	0.000	0.000	0.000
2	112	0 Global XYZ	0.000	0.000	-2.500	0.000	0.000	0.000

Project: Model: Environox constructie

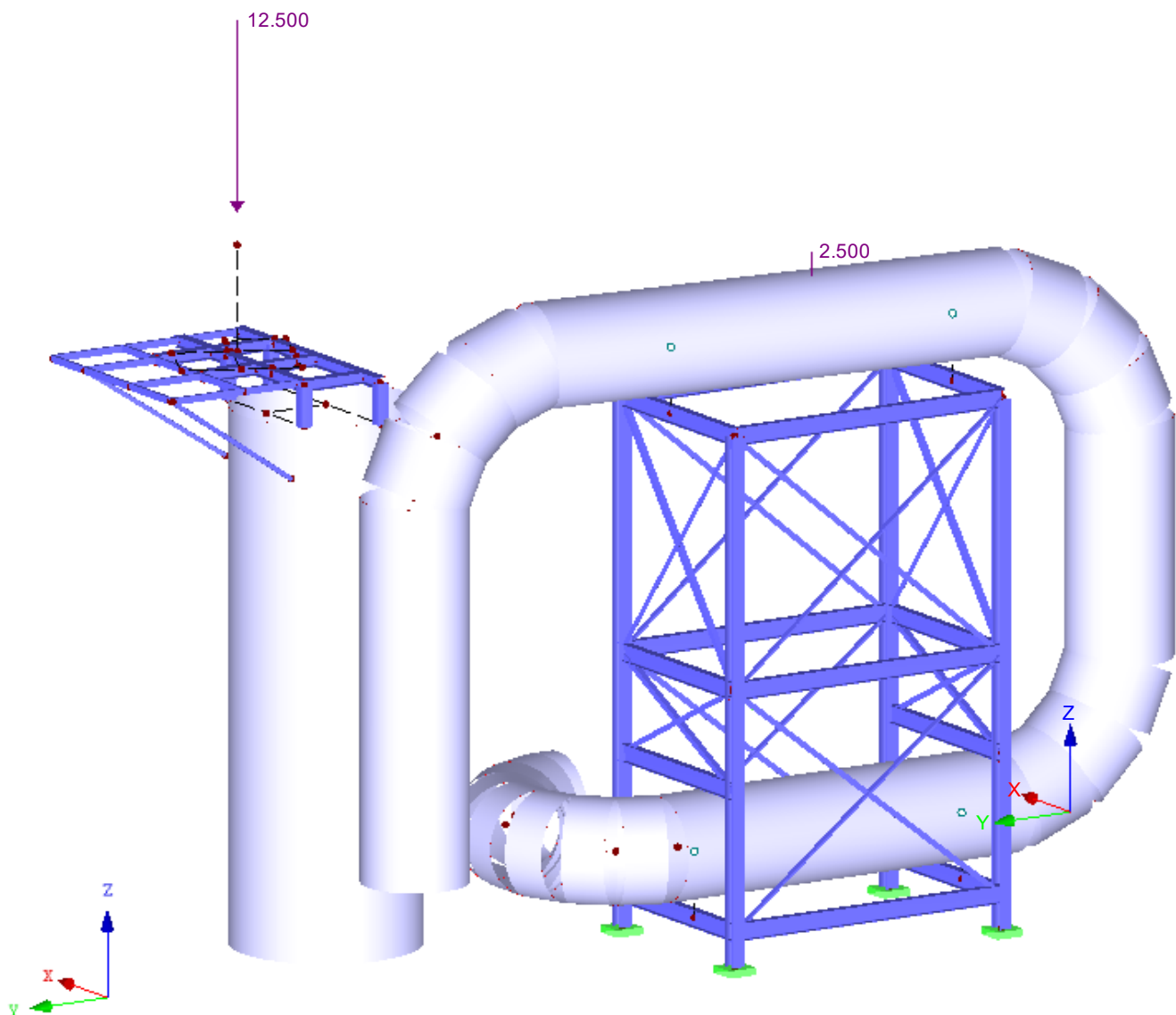
Environox ACT Hengelo voorberekening

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■ LC1: EIGEN GEWICHT

LC1 : Eigen gewicht
Loads [kN]

Isometric



Project: Model: Environox constructie
Environox ACT Hengelo voorberekening

Date: 26-2-2026

3.1 NODAL LOADS - BY COMPONENTS
- COORDINATE SYSTEM

LC2: Wind loodrecht

No.	On Nodes No.	Coordinate System	Force [kN]			Moment [kNm]		
			P_X / P_U	P_Y / P_V	P_Z / P_W	M_X / M_U	M_Y / M_V	M_Z / M_W
1	25	0 Global XYZ	13.000	0.000	0.000	0.000	0.000	0.000

3.2 MEMBER LOADS

LC2: Wind loodrecht

No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Load Parameters		
							Symbol	Value	Unit
1	Members	2,4,5,7,8, 10,11,13-32, 161	Force	Uniform	XL	True Length	p	0.730	kN/m
2	Members	34,36,39-42, 126,127	Force	Uniform	XL	True Length	p	0.420	kN/m
3	Members	46,50,53	Force	Uniform	XL	True Length	p	0.330	kN/m
4	Members	65-67	Force	Uniform	XL	True Length	p	1.300	kN/m

3.2/1 MEMBER LOADS - LOAD ECCENTRICITY

LC2: Wind loodrecht

No.	Referenc to	On Member No.	Absolute Offset		Absolute Offset		Relative Offset		Relative Offset	
			Mbr. Start	Mbr. Start	Mbr. End	Mbr. End	Mbr. Start	Mbr. Start	Mbr. End	Mbr. End
			e_Y [mm]	e_Z [mm]	e_Y [mm]	e_Z [mm]	y-Axis	z-Axis	y-Axis	z-Axis
1	Members	2,4,5,7,8, 10,11, 13-32,161	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
2	Members	34,36, 39-42,126, 127	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
3	Members	46,50,53	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
4	Members	65-67	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle

LC2
Wind loodrecht

Project:

Model: Environox constructie

Date:

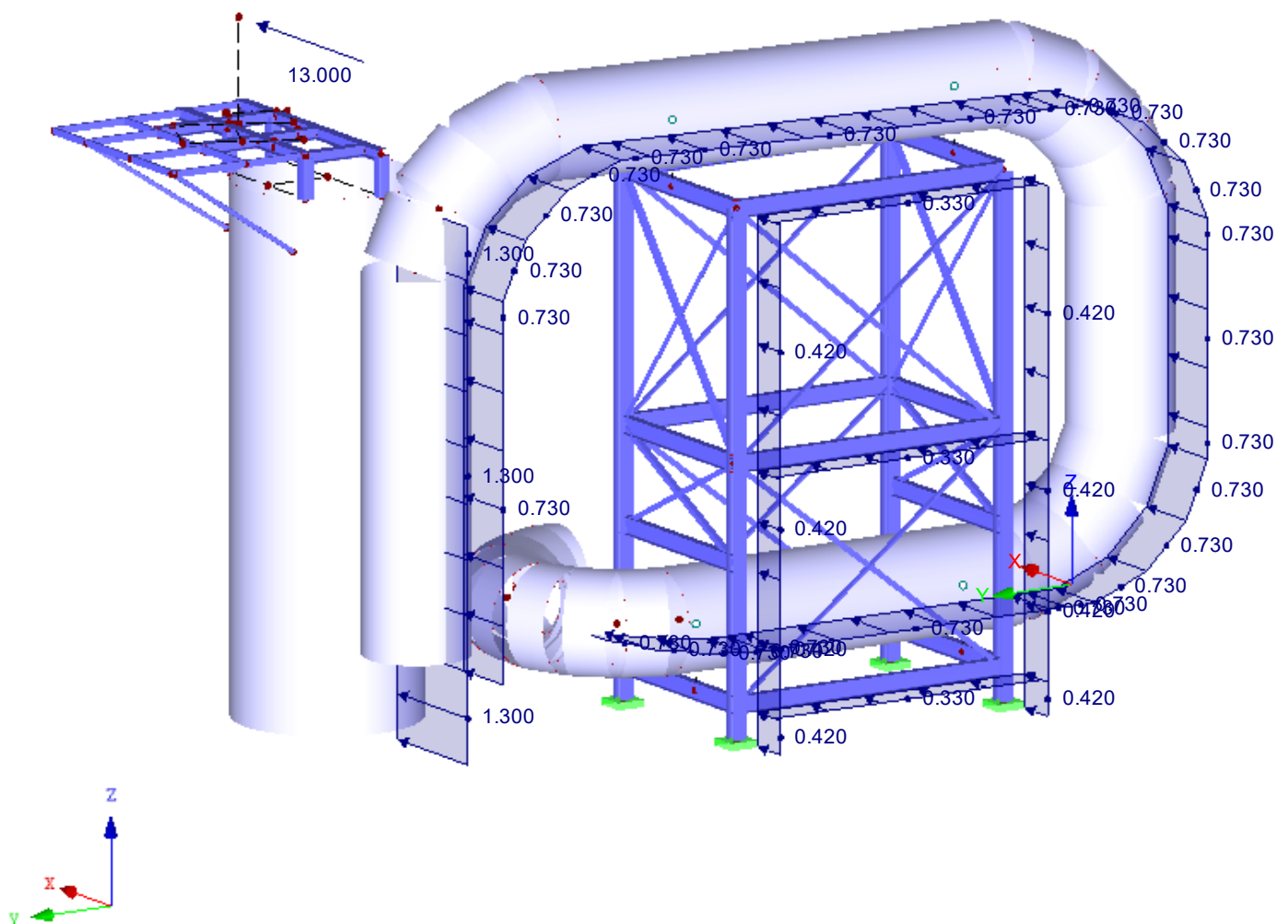
26-2-2026

Environox ACT Hengelo voorberekening

■ LC2: WIND LOODRECHT

LC2 : Wind loodrecht
Loads [kN/m], [kN]

Isometric



LOADS

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

3.1 NODAL LOADS - BY COMPONENTS - COORDINATE SYSTEM

LC3: Wind parallel

No.	On Nodes No.	Coordinate System	Force [kN]			Moment [kNm]		
			P_X / P_U	P_Y / P_V	P_Z / P_W	M_X / M_U	M_Y / M_V	M_Z / M_W
1	25	0 Global XYZ	0.000	-13.000	0.000	0.000	0.000	0.000

3.2 MEMBER LOADS

LC3: Wind parallel

No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Symbol	Load Parameters	
								Value	Unit
1	Members	65-67	Force	Uniform	YL	True Length	p	-1.300	kN/m
2	Members	4,5,7,8, 10-15,17,18, 20,23,25-28	Force	Uniform	YL	True Length	p	-0.730	kN/m
3	Members	33,36-38,41, 42,125,127	Force	Uniform	YL	True Length	p	-0.420	kN/m
4	Members	47,52,55, 58,59,123	Force	Uniform	YL	True Length	p	-0.330	kN/m

3.2/1 MEMBER LOADS - LOAD ECCENTRICITY

LC3: Wind parallel

No.	Referenc to	On Member No.	Absolute Offset		Absolute Offset		Relative Offset		Relative Offset	
			Mbr. Start e_Y [mm]	Mbr. Start e_Z [mm]	Mbr. End e_Y [mm]	Mbr. End e_Z [mm]	Mbr. Start y-Axis	Mbr. Start z-Axis	Mbr. End y-Axis	Mbr. End z-Axis
1	Members	65-67	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
2	Members	4,5,7,8, 10-15,17, 18,20,23, 25-28	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
3	Members	33,36-38, 41,42,125, 127	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
4	Members	47,52,55, 58,59,123	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle

LC3
Wind parallel

Project: Model: Environox constructie
Environox ACT Hengelo voorberekening

Date: 26-2-2026

LC4
Platform belasting

3.2 MEMBER LOADS

LC4: Platform belasting

No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Symbol	Load Parameters	
								Value	Unit
1	Members	81-83,89, 95-100, 102-107,138	Force	Uniform	ZL	True Length	p	-1.000	kN/m

3.2/1 MEMBER LOADS - LOAD ECCENTRICITY

LC4: Platform belasting

No.	Referenc to	On Member No.	Absolute Offset		Absolute Offset		Relative Offset		Relative Offset	
			Mbr. Start	Mbr. Start	Mbr. End	Mbr. End	Mbr. Start	Mbr. Start	Mbr. End	Mbr. End
			e _y [mm]	e _z [mm]	e _y [mm]	e _z [mm]	y-Axis	z-Axis	y-Axis	z-Axis
1	Members	81-83,89, 95-100, 102-107, 138	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle

Project:

Model: Environox constructie

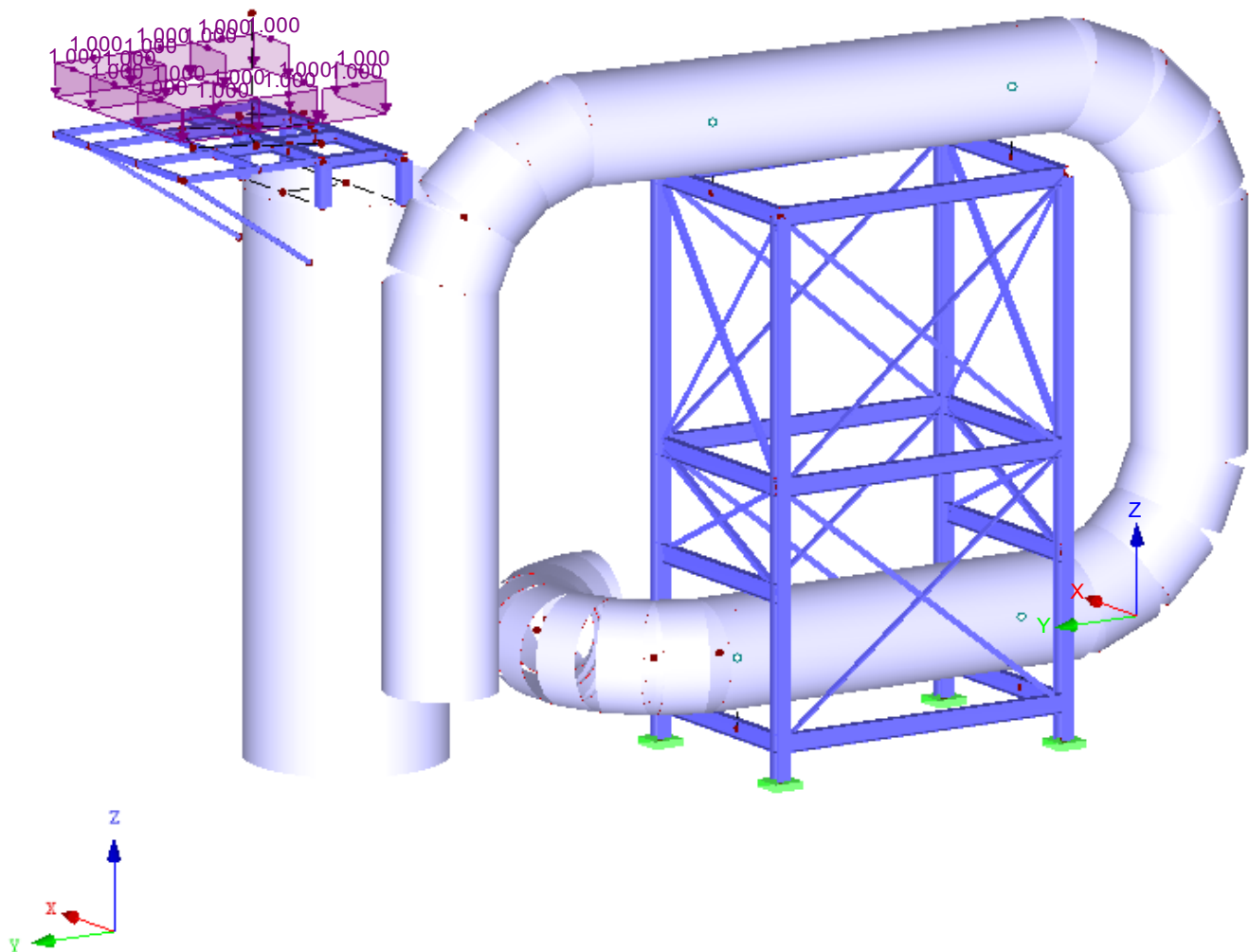
Date: 26-2-2026

Environox ACT Hengelo voorberekening

■ LC4: PLATFORM BELASTING

LC4 : Platform belasting
Loads [kN/m]

Isometric



LOADS

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

LC5
Sneeuw**3.2 MEMBER LOADS**

LC5: Sneeuw

No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Symbol	Load Parameters	
								Value	Unit
1	Members	1-3,5-7,9,10,12,13,15,16,18-26,29-32,161	Force	Uniform	ZL	True Length	p	-0.495	kN/m
2	Members	45-56,58-60	Force	Uniform	ZL	True Length	p	-0.080	kN/m
3	Members	81-83,89,97-100,103	Force	Uniform	ZL	True Length	p	-0.400	kN/m

3.2/1 MEMBER LOADS - LOAD ECCENTRICITY

LC5: Sneeuw

No.	Referenc to	On Member No.	Absolute Offset		Absolute Offset		Relative Offset		Relative Offset	
			Mbr. Start	Mbr. Start	Mbr. End	Mbr. End	Mbr. Start	Mbr. Start	Mbr. End	Mbr. End
			e_y [mm]	e_z [mm]	e_y [mm]	e_z [mm]	y-Axis	z-Axis	y-Axis	z-Axis
1	Members	1-3,5-7,9,10,12,13,15,16,18-26,29-32,161	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
2	Members	45-56,58-60	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
3	Members	81-83,89,97-100,103	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle

Project:

Model: Environox constructie

Date:

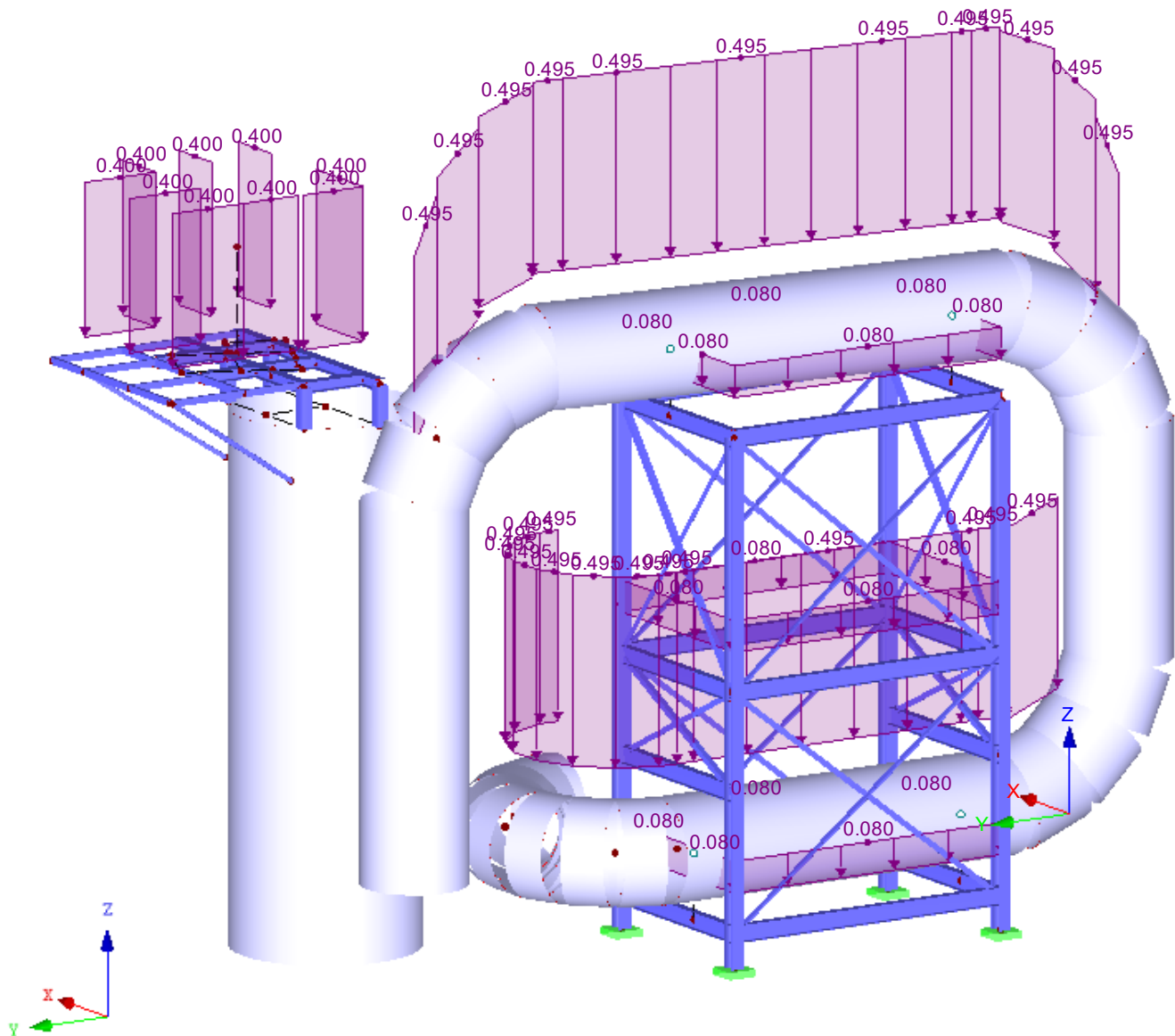
26-2-2026

Environox ACT Hengelo voorberekening

■ LC5: SNEEUW

LC5 : Sneeuw
Loads [kN/m]

Isometric



Project:

Model: Environox constructie

Date: 26-2-2026

Environox ACT Hengelo voorberekening

■ 4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
Load Case LC1 - Eigen gewicht				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	0.00	kN	
	Sum of support reactions in Y	0.00	kN	
	Sum of loads in Z	-174.01	kN	
	Sum of support reactions in Z	-174.01	kN	Deviation 0.00%
	Resultant of reactions about X	-64.878	kNm	At center of gravity of model (X:-3.590, Y:10.482, Z:5.311 m)
	Resultant of reactions about Y	39.833	kNm	At center of gravity of model
	Resultant of reactions about Z	0.000	kNm	At center of gravity of model
	Max. displacement in X	1.7	mm	Member No. 117, x: 3.362 m
	Max. displacement in Y	-1.7	mm	Member No. 115, x: 3.362 m
	Max. displacement in Z	-2.1	mm	Member No. 118, x: 3.362 m
	Max. vector displacement	3.2	mm	Member No. 117, x: 3.362 m
	Max. rotation about X	1.2	mrاد	Member No. 115, x: 5.283 m
	Max. rotation about Y	0.6	mrاد	Member No. 114, x: 4.599 m
	Max. rotation about Z	0.6	mrاد	Member No. 118, x: 1.441 m
	Maximum member strain	0.000	‰	Member No. 0, x: 0.000 m
	Method of analysis	Linear		Geometrically linear analysis
	Reduction of stiffness			Cross-sections, Members, Surfaces
	Number of load increments	1		
	Number of iterations	1		
	Maximum value of element of stiffness matrix on diagonal	5.78E+16		
	Minimum value of element of stiffness matrix on diagonal	1.348E+04		
	Stiffness matrix determinant	1.050E+3009		
	Infinity Norm	1.413E+17		
Load Case LC2 - Wind loodrecht				
	Sum of loads in X	65.03	kN	
	Sum of support reactions in X	65.03	kN	Deviation 0.00%
	Sum of loads in Y	0.00	kN	
	Sum of support reactions in Y	0.00	kN	
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.000	kNm	At center of gravity of model (X:-3.590, Y:10.482, Z:5.311 m)
	Resultant of reactions about Y	86.629	kNm	At center of gravity of model
	Resultant of reactions about Z	-49.033	kNm	At center of gravity of model
	Max. displacement in X	2.2	mm	Member No. 46, x: 2.809 m
	Max. displacement in Y	0.2	mm	Member No. 59, x: 0.554 m
	Max. displacement in Z	-0.7	mm	Member No. 1, x: 0.346 m
	Max. vector displacement	2.2	mm	Member No. 46, x: 2.809 m
	Max. rotation about X	1.3	mrاد	Member No. 146, x: 0.000 m
	Max. rotation about Y	2.2	mrاد	Member No. 152, x: 0.000 m
	Max. rotation about Z	0.6	mrاد	Member No. 46, x: 0.936 m
	Maximum member strain	0.000	‰	Member No. 0, x: 0.000 m
	Method of analysis	Linear		Geometrically linear analysis
	Reduction of stiffness			Cross-sections, Members, Surfaces
	Number of load increments	1		
	Number of iterations	1		
	Maximum value of element of stiffness matrix on diagonal	5.78E+16		
	Minimum value of element of stiffness matrix on diagonal	1.348E+04		
	Stiffness matrix determinant	1.050E+3009		
	Infinity Norm	1.413E+17		
Load Case LC3 - Wind parallel				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	-53.79	kN	
	Sum of support reactions in Y	-53.79	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	69.310	kNm	At center of gravity of model (X:-3.590, Y:10.482, Z:5.311 m)
	Resultant of reactions about Y	0.000	kNm	At center of gravity of model
	Resultant of reactions about Z	-42.234	kNm	At center of gravity of model
	Max. displacement in X	0.3	mm	Member No. 117, x: 2.402 m
	Max. displacement in Y	-2.6	mm	Member No. 1, x: 0.000 m
	Max. displacement in Z	0.5	mm	Member No. 95, x: 0.000 m
	Max. vector displacement	2.6	mm	Member No. 1, x: 0.000 m
	Max. rotation about X	2.1	mrاد	Member No. 146, x: 0.000 m
	Max. rotation about Y	1.0	mrاد	Member No. 152, x: 0.000 m
	Max. rotation about Z	-0.3	mrاد	Member No. 41, x: 1.700 m
	Maximum member strain	0.000	‰	Member No. 0, x: 0.000 m
	Method of analysis	Linear		Geometrically linear analysis
	Reduction of stiffness			Cross-sections, Members, Surfaces
	Number of load increments	1		
	Number of iterations	1		
	Maximum value of element of stiffness matrix on diagonal	5.78E+16		
	Minimum value of element of stiffness matrix on diagonal	1.348E+04		
	Stiffness matrix determinant	1.050E+3009		
	Infinity Norm	1.413E+17		
Load Case LC4 - Platform belasting				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	0.00	kN	

Project:

Model: Environox constructie

Date: 26-2-2026

Environox ACT Hengelo voorberekening

■ 4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
	Sum of support reactions in Y	0.00	kN	
	Sum of loads in Z	-19.99	kN	
	Sum of support reactions in Z	-19.99	kN	Deviation 0.00%
	Resultant of reactions about X	-134.816	kNm	At center of gravity of model (X:-3.590, Y:10.482, Z:5.311 m)
	Resultant of reactions about Y	61.838	kNm	At center of gravity of model
	Resultant of reactions about Z	0.000	kNm	At center of gravity of model
	Max. displacement in X	1.9	mm	Member No. 96, x: 0.995 m
	Max. displacement in Y	0.3	mm	Member No. 142, x: 0.000 m
	Max. displacement in Z	-2.4	mm	Member No. 95, x: 0.000 m
	Max. vector displacement	3.1	mm	Member No. 95, x: 0.000 m
	Max. rotation about X	-1.0	mrاد	Member No. 104, x: 0.403 m
	Max. rotation about Y	1.5	mrاد	Member No. 95, x: 0.000 m
	Max. rotation about Z	-1.6	mrاد	Member No. 99, x: 0.682 m
	Maximum member strain	0.000	‰	Member No. 0, x: 0.000 m
	Method of analysis	Linear		Geometrically linear analysis
	Reduction of stiffness			Cross-sections, Members, Surfaces
	Number of load increments	1		
	Number of iterations	1		
	Maximum value of element of stiffness matrix on diagonal	5.78E+16		
	Minimum value of element of stiffness matrix on diagonal	1.348E+04		
	Stiffness matrix determinant	1.050E+3009		
	Infinity Norm	1.413E+17		
Load Case LC5 - Sneeuw				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	0.00	kN	
	Sum of support reactions in Y	0.00	kN	
	Sum of loads in Z	-22.26	kN	
	Sum of support reactions in Z	-22.26	kN	Deviation 0.00%
	Resultant of reactions about X	3.607	kNm	At center of gravity of model (X:-3.590, Y:10.482, Z:5.311 m)
	Resultant of reactions about Y	-4.769	kNm	At center of gravity of model
	Resultant of reactions about Z	0.000	kNm	At center of gravity of model
	Max. displacement in X	0.2	mm	Member No. 96, x: 0.995 m
	Max. displacement in Y	-0.1	mm	Member No. 13, x: 0.000 m
	Max. displacement in Z	-0.4	mm	Member No. 1, x: 0.000 m
	Max. vector displacement	0.4	mm	Member No. 1, x: 0.000 m
	Max. rotation about X	-0.3	mrاد	Member No. 103, x: 0.941 m
	Max. rotation about Y	-0.1	mrاد	Member No. 97, x: 1.365 m
	Max. rotation about Z	-0.2	mrاد	Member No. 97, x: 0.682 m
	Maximum member strain	0.000	‰	Member No. 0, x: 0.000 m
	Method of analysis	Linear		Geometrically linear analysis
	Reduction of stiffness			Cross-sections, Members, Surfaces
	Number of load increments	1		
	Number of iterations	1		
	Maximum value of element of stiffness matrix on diagonal	5.78E+16		
	Minimum value of element of stiffness matrix on diagonal	1.348E+04		
	Stiffness matrix determinant	1.050E+3009		
	Infinity Norm	1.413E+17		
Load Combination CO1 - Wind loodrecht				
	Sum of loads in X	97.54	kN	
	Sum of support reactions in X	97.54	kN	Deviation -0.00%
	Sum of loads in Y	-0.00	kN	
	Sum of support reactions in Y	0.00	kN	
	Sum of loads in Z	-234.92	kN	
	Sum of support reactions in Z	-234.92	kN	Deviation 0.00%
	Resultant of reactions about X	-87.6	kNm	At center of gravity of model (X:-3.6, Y:10.5, Z:5.3 m)
	Resultant of reactions about Y	184.0	kNm	At center of gravity of model
	Resultant of reactions about Z	-73.5	kNm	At center of gravity of model
	Max. displacement in X	4.5	mm	Member No. 116, x: 3.362 m
	Max. displacement in Y	-2.3	mm	Member No. 118, x: 3.362 m
	Max. displacement in Z	-2.9	mm	Member No. 118, x: 3.362 m
	Max. vector displacement	5.7	mm	Member No. 116, x: 3.362 m
	Max. rotation about X	2.0	mrاد	Member No. 146, x: 0.000 m
	Max. rotation about Y	3.4	mrاد	Member No. 152, x: 0.000 m
	Max. rotation about Z	1.1	mrاد	Member No. 116, x: 0.961 m
	Maximum member strain	0.000	‰	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V _y , V _z , M _y , M _z , M _t
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	3		
	Maximum value of element of stiffness matrix on diagonal	5.78E+16		
	Minimum value of element of stiffness matrix on diagonal	1.348E+04		
	Stiffness matrix determinant	6.981E+3009		
	Infinity Norm	1.413E+17		
Load Combination CO2 - Wind parallel				
	Sum of loads in X	-0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	-72.62	kN	
	Sum of support reactions in Y	-72.62	kN	Deviation 0.00%

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
	Sum of loads in Z	-234.92	kN	
	Sum of support reactions in Z	-234.92	kN	Deviation 0.00%
	Resultant of reactions about X	6.2	kNm	At center of gravity of model (X:-3.6, Y:10.5, Z:5.3 m)
	Resultant of reactions about Y	53.8	kNm	At center of gravity of model
	Resultant of reactions about Z	-57.0	kNm	At center of gravity of model
	Max. displacement in X	2.7	mm	Member No. 117, x: 3.362 m
	Max. displacement in Y	-2.9	mm	Member No. 1, x: 0.000 m
	Max. displacement in Z	-2.8	mm	Member No. 117, x: 3.362 m
	Max. vector displacement	4.4	mm	Member No. 117, x: 3.362 m
	Max. rotation about X	3.0	mrاد	Member No. 146, x: 0.050 m
	Max. rotation about Y	1.5	mrاد	Member No. 152, x: 0.000 m
	Max. rotation about Z	-0.9	mrاد	Member No. 115, x: 5.283 m
	Maximum member strain	0.000	‰	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V _y , V _z , M _y , M _z , M _T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	4		
	Maximum value of element of stiffness matrix on diagonal	5.78E+16		
	Minimum value of element of stiffness matrix on diagonal	1.348E+04		
	Stiffness matrix determinant	6.119E+3009		
	Infinity Norm	1.413E+17		

Load Combination CO3 - Platform

	Sum of loads in X	-0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	0.00	kN	
	Sum of support reactions in Y	0.00	kN	
	Sum of loads in Z	-261.91	kN	
	Sum of support reactions in Z	-261.91	kN	Deviation 0.00%
	Resultant of reactions about X	-269.6	kNm	At center of gravity of model (X:-3.6, Y:10.5, Z:5.3 m)
	Resultant of reactions about Y	137.3	kNm	At center of gravity of model
	Resultant of reactions about Z	0.0	kNm	At center of gravity of model
	Max. displacement in X	3.0	mm	Member No. 96, x: 0.995 m
	Max. displacement in Y	-2.3	mm	Member No. 115, x: 3.362 m
	Max. displacement in Z	-3.9	mm	Member No. 95, x: 0.000 m
	Max. vector displacement	4.9	mm	Member No. 95, x: 0.000 m
	Max. rotation about X	1.6	mrاد	Member No. 118, x: 5.283 m
	Max. rotation about Y	2.3	mrاد	Member No. 95, x: 0.000 m
	Max. rotation about Z	-2.5	mrاد	Member No. 99, x: 0.682 m
	Maximum member strain	0.000	‰	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V _y , V _z , M _y , M _z , M _T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	3		
	Maximum value of element of stiffness matrix on diagonal	5.78E+16		
	Minimum value of element of stiffness matrix on diagonal	1.348E+04		
	Stiffness matrix determinant	6.945E+3009		
	Infinity Norm	1.413E+17		

Load Combination CO4 - Sneeuw

	Sum of loads in X	-0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	0.00	kN	
	Sum of support reactions in Y	0.00	kN	
	Sum of loads in Z	-268.30	kN	
	Sum of support reactions in Z	-268.30	kN	Deviation 0.00%
	Resultant of reactions about X	-82.2	kNm	At center of gravity of model (X:-3.6, Y:10.5, Z:5.3 m)
	Resultant of reactions about Y	46.7	kNm	At center of gravity of model
	Resultant of reactions about Z	0.0	kNm	At center of gravity of model
	Max. displacement in X	2.4	mm	Member No. 117, x: 3.362 m
	Max. displacement in Y	-2.3	mm	Member No. 115, x: 3.362 m
	Max. displacement in Z	-2.9	mm	Member No. 118, x: 3.362 m
	Max. vector displacement	4.4	mm	Member No. 117, x: 3.362 m
	Max. rotation about X	1.6	mrاد	Member No. 118, x: 5.283 m
	Max. rotation about Y	0.8	mrاد	Member No. 114, x: 4.599 m
	Max. rotation about Z	0.8	mrاد	Member No. 118, x: 1.441 m
	Maximum member strain	0.000	‰	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V _y , V _z , M _y , M _z , M _T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	3		
	Maximum value of element of stiffness matrix on diagonal	5.78E+16		
	Minimum value of element of stiffness matrix on diagonal	1.348E+04		
	Stiffness matrix determinant	6.672E+3009		
	Infinity Norm	1.413E+17		

Project:

Model: Environox constructie

Date: 26-2-2026

Environox ACT Hengelo voorberekening

■ 4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
Summary	Max. displacement in X	4.5	mm	CO1, Member No. 116, x: 3.362 m
	Max. displacement in Y	-2.9	mm	CO2, Member No. 1, x: 0.000 m
	Max. displacement in Z	-3.9	mm	CO3, Member No. 95, x: 0.000 m
	Max. vector displacement	5.7	mm	CO1, Member No. 116, x: 3.362 m
	Max. rotation about X	3.0	mrاد	CO2, Member No. 146, x: 0.050 m
	Max. rotation about Y	3.4	mrاد	CO1, Member No. 152, x: 0.000 m
	Max. rotation about Z	-2.5	mrاد	CO3, Member No. 99, x: 0.682 m
	Other Settings:			
	Number of 1D finite elements	671		
	Number of 2D finite elements	0		
	Number of 3D finite elements	0		
	Number of FE mesh nodes	621		
	Number of equations	3726		
	Internal forces referred to deformed system for....			
	Max. number of iterations	100		
	Number of divisions for member results	10		
	Division of cable/foundation/tapered members	10		
	Number of member divisions for searching maximum values	10		
	Subdivisions of FE mesh for graphical results	3		
	Percentage of iterations according to Picard method in combination with Newton-Raphson method	5	%	
	Options:			
	Activate shear stiffness of members (Ay, Az)	☒		
	Activate member divisions for large deformation or post-critical analysis	☒		
	Activate entered stiffness modifications	☒		
	Ignore rotational degrees of freedom	☐		
	Check of critical forces of members	☒		
	Nonsymmetric direct solver if demanded by nonlinear model	☐		
	Method for the system of equations	Direct		
	Plate bending theory	Mindlin		
	Solver version	64-bit		
	Precision and Tolerance:			
	Change default setting	☐		

■ 4.1 NODES - SUPPORT FORCES

Node No.	LC/CO	Support Forces [kN]			Support Moments [kNm]			
		P _x	P _y	P _z	M _x	M _y	M _z	
2	LC1	2.67	1.59	-21.87	-0.19	-0.09	0.00	Eigen gewicht
	LC2	5.95	0.28	-17.59	-0.11	4.93	-0.01	Wind loodrecht
	LC3	1.07	-2.71	-0.82	1.30	-0.11	0.01	Wind parallel
	LC4	0.02	0.00	-0.03	0.00	0.02	0.00	Platform belasting
	LC5	1.12	0.23	-3.80	-0.03	-0.09	0.00	Sneeuw
	CO1	12.53	2.57	-55.92	-0.41	7.28	-0.01	Wind loodrecht
	CO2	5.06	-1.49	-30.72	1.50	-0.27	0.02	Wind parallel
	CO3	3.63	2.14	-29.56	-0.25	-0.10	0.00	Platform
4	LC1	4.57	-1.55	-30.88	0.18	2.66	0.00	Eigen gewicht
	LC2	10.22	0.12	26.69	-0.06	7.63	-0.02	Wind loodrecht
	LC3	1.48	-3.35	0.31	1.25	-0.30	0.00	Wind parallel
	LC4	0.00	0.00	0.03	0.00	0.00	0.00	Platform belasting
	LC5	-0.91	-0.22	-3.86	0.02	0.58	0.00	Sneeuw
	CO1	9.16	-1.92	-1.64	0.15	15.05	-0.03	Wind loodrecht
	CO2	-4.16	-6.59	-41.16	1.91	3.19	0.00	Wind parallel
	CO3	-6.18	-2.10	-41.65	0.24	3.60	0.00	Platform
10	LC1	-0.10	-0.01	-73.17	-16.81	-19.33	2.61	Eigen gewicht
	LC2	32.17	0.00	-0.34	2.89	254.65	-5.46	Wind loodrecht
	LC3	-0.88	-41.64	5.61	302.98	9.86	31.40	Wind parallel
	LC4	-0.03	0.00	-20.11	-40.11	15.55	-0.11	Platform belasting
	LC5	-0.02	0.00	-6.62	-4.95	-4.21	0.77	Sneeuw
	CO1	48.12	0.01	-99.29	-18.46	356.00	-4.68	Wind loodrecht
	CO2	-1.33	-56.35	-91.18	387.16	-12.72	46.23	Wind parallel
	CO3	-0.18	0.00	-125.93	-76.98	-5.05	3.34	Platform
22	LC1	-0.16	0.01	-108.71	-30.23	-32.40	4.64	Sneeuw
	LC2	3.96	-1.55	-27.14	0.18	-0.41	0.00	Eigen gewicht
	LC3	10.76	-0.13	-26.43	0.07	6.82	0.01	Wind loodrecht
	LC4	-0.64	-3.35	-4.33	1.25	0.49	0.00	Wind parallel
	LC5	0.00	0.00	0.00	0.00	0.00	0.00	Platform belasting
	LC5	0.74	-0.22	-3.93	0.02	-0.01	0.00	Sneeuw
	CO1	21.47	-2.29	-76.31	0.35	9.68	0.01	Wind loodrecht
	CO2	4.47	-6.61	-42.45	1.92	0.11	0.00	Wind parallel
23	CO3	5.34	-2.10	-36.65	0.25	-0.56	0.00	Platform
	CO4	6.45	-2.44	-42.55	0.28	-0.58	0.00	Sneeuw
	LC1	-1.96	1.53	-20.95	-0.16	1.60	0.00	Eigen gewicht
	LC2	5.92	-0.28	17.67	0.11	5.28	0.02	Wind loodrecht
	LC3	-1.03	-2.73	-0.76	1.32	0.67	-0.01	Wind parallel
	LC4	0.02	0.00	0.12	0.00	0.02	0.00	Platform belasting
	LC5	-0.93	0.21	-4.04	-0.02	0.67	0.00	Sneeuw
	CO1	6.25	1.63	-1.76	-0.05	10.09	0.04	Wind loodrecht
CO2		-4.05	-1.58	-29.41	1.55	3.08	-0.01	Wind parallel
	CO3	-2.61	2.06	-28.11	-0.22	2.18	0.00	Platform
	CO4	-4.04	2.37	-34.34	-0.24	3.17	0.00	Sneeuw

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.1 NODES - SUPPORT FORCES

Node No.	LC/CO	Support Forces [kN]			Support Moments [kNm]		
		P _{X'}	P _{Y'}	P _{Z'}	M _{X'}	M _{Y'}	M _{Z'}
Σ Supp.	LC1	0.00	0.00	-174.01			
Σ Loads	LC1	0.00	0.00	-174.01			
Σ Supp.	LC2	65.03	0.00	0.00			
Σ Loads	LC2	65.03	0.00	0.00			
Σ Supp.	LC3	0.00	-53.79	0.00			
Σ Loads	LC3	0.00	-53.79	0.00			
Σ Supp.	LC4	0.00	0.00	-19.99			
Σ Loads	LC4	0.00	0.00	-19.99			
Σ Supp.	LC5	0.00	0.00	-22.26			
Σ Loads	LC5	0.00	0.00	-22.26			
Σ Supp.	CO1	97.54	0.00	-234.92			
Σ Supp.	CO1	97.54	0.00	-234.92			
Σ Supp.	CO2	0.00	-72.62	-234.92			
Σ Supp.	CO2	0.00	-72.62	-234.92			
Σ Supp.	CO3	0.00	0.00	-261.91			
Σ Supp.	CO3	0.00	0.00	-261.91			
Σ Supp.	CO4	0.00	0.00	-268.30			
Σ Supp.	CO4	0.00	0.00	-268.30			

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
1	Section No. 1: Pipe 1800/3/K									
	LC1	5	0.000	0.00	0.00	0.47	0.00	-0.08	0.00	
		6	0.346	0.00	0.00	0.00	0.00	0.00	0.00	
	LC2	5	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
		6	0.346	0.00	0.00	0.00	0.00	0.00	0.00	
	LC3	5	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
		6	0.346	0.00	0.00	0.00	0.00	0.00	0.00	
	LC4	5	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
		6	0.346	0.00	0.00	0.00	0.00	0.00	0.00	
	LC5	5	0.000	0.00	0.00	0.17	0.00	-0.03	0.00	
		6	0.346	0.00	0.00	0.00	0.00	0.00	0.00	
	CO1	5	0.000	0.00	-0.00	0.63	0.00	-0.11	-0.00	
		6	0.346	0.00	0.00	0.00	0.00	0.00	0.00	
	CO2	5	0.000	-0.00	-0.00	0.63	-0.00	-0.11	-0.00	
		6	0.346	0.00	0.00	0.00	0.00	0.00	0.00	
	CO3	5	0.000	0.00	-0.00	0.63	0.00	-0.11	-0.00	
6		0.346	0.00	0.00	0.00	0.00	0.00	0.00		
2	LC1	5	0.000	0.00	-0.00	0.89	-0.00	-0.15	-0.00	
		6	0.346	0.00	0.00	0.00	0.00	0.00	0.00	
	LC2	80	0.000	-0.01	1.50	11.63	13.91	-21.06	0.08	
		14	0.549	-0.01	1.50	10.89	13.91	-14.88	-0.75	
	LC3	80	0.000	0.00	-4.53	-1.17	0.00	-0.13	-11.89	
		14	0.549	0.00	-4.13	-1.17	0.00	-0.77	-9.51	
	LC4	80	0.000	-2.03	-0.22	-0.13	0.00	23.69	-2.45	
		14	0.549	-2.03	-0.22	-0.13	0.00	23.62	-2.33	
	LC5	80	0.000	-0.00	0.00	-0.00	0.00	-0.03	0.06	
		14	0.549	-0.00	0.00	-0.00	0.00	-0.03	0.05	
	CO1	80	0.000	0.00	0.55	2.16	5.08	-3.56	-0.17	
		14	0.549	0.00	0.55	1.89	5.08	-2.45	-0.47	
	CO2	80	0.000	0.01	-4.78	13.95	18.78	-28.71	-17.75	
		14	0.549	0.01	-4.18	12.95	18.78	-21.32	-15.29	
	CO3	80	0.000	-2.83	1.73	15.53	18.78	3.89	-3.23	
		14	0.549	-2.83	1.73	14.53	18.78	12.14	-4.18	
3	LC1	80	0.000	0.00	2.03	15.70	18.78	-28.56	0.18	
		14	0.549	0.00	2.03	14.70	18.78	-20.21	-0.94	
	LC2	80	0.000	0.01	2.85	18.95	26.41	-33.87	-0.15	
		14	0.549	0.01	2.85	17.54	26.41	-23.86	-1.72	
	LC3	15	0.000	0.00	0.00	1.44	0.03	-0.76	0.00	
		5	0.716	0.00	0.00	0.47	0.03	-0.07	0.00	
	LC4	15	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
		5	0.716	0.00	0.00	0.00	0.00	0.00	0.00	
	LC5	15	0.000	0.00	0.00	0.53	0.01	-0.28	0.00	
		5	0.716	0.00	0.00	0.17	0.01	-0.03	0.00	
	CO1	15	0.000	0.00	-0.00	1.94	0.04	-1.02	-0.00	
		5	0.716	0.00	-0.00	0.63	0.04	-0.10	-0.00	
	CO2	15	0.000	0.00	-0.00	1.94	0.04	-1.02	-0.00	
		5	0.716	0.00	-0.00	0.63	0.04	-0.10	-0.00	
	CO3	15	0.000	0.00	-0.00	1.94	0.04	-1.02	-0.00	
		5	0.716	0.00	-0.00	0.63	0.04	-0.10	-0.00	
4	LC1	15	0.000	0.00	-0.00	2.73	0.06	-1.44	-0.00	
		5	0.716	0.00	-0.00	0.89	0.06	-0.14	-0.00	
	LC2	24	0.000	-0.99	0.01	-1.50	4.00	-4.53	-4.73	
		69	0.549	-1.73	0.01	-1.50	4.00	-5.35	-4.73	
	LC3	24	0.000	1.17	-0.00	-1.20	2.66	-7.12	3.30	
		69	0.549	1.17	-0.00	-0.80	2.66	-7.67	3.30	
	LC4	24	0.000	0.13	7.36	0.22	1.86	-1.35	8.05	
		69	0.549	0.13	6.96	0.22	1.86	-1.23	4.12	
	LC5	24	0.000	0.00	0.00	-0.00	-0.05	0.02	0.05	
		69	0.549	0.00	0.00	-0.00	-0.05	0.02	0.05	
	CO1	24	0.000	-1.36	-0.00	-0.55	1.65	-1.66	-0.76	
		69	0.549	-1.36	-0.00	-0.55	1.65	-1.96	-0.76	
	CO2	24	0.000	0.42	-0.00	-3.83	9.39	-16.80	-1.48	
		69	0.549	-0.59	-0.00	-3.23	9.39	-18.73	-1.48	
	CO2	24	0.000	-1.16	10.03	-1.73	7.93	-7.95	4.62	
		69	0.549	-2.16	9.49	-1.73	7.93	-8.90	-0.74	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]		
				N	V_y / V_u	V_z / V_v	M_T	M_y / M_u	M_z / M_v
4	CO3	24	0.000	-1.33	-0.00	-2.03	5.33	-6.08	-6.36
		69	0.549	-2.33	-0.00	-2.03	5.33	-7.20	-6.36
	CO4	24	0.000	-3.37	-0.01	-2.85	7.87	-8.59	-7.57
5	LC1	69	0.549	-4.38	-0.01	-2.85	7.87	-10.16	-7.57
		14	0.000	-4.18	1.50	10.06	13.14	-14.88	4.63
	LC2	26	1.074	-3.62	1.50	8.71	13.14	-4.80	3.02
		14	0.000	0.45	-4.13	-1.08	3.64	-0.77	-8.79
	LC3	26	1.074	0.45	-3.35	-1.08	3.64	-1.93	-4.77
		14	0.000	-1.82	-0.22	-0.90	0.89	23.62	-2.15
	LC4	26	1.074	-2.55	-0.22	-1.20	0.89	22.50	-1.92
		14	0.000	0.00	0.00	-0.00	-0.02	-0.03	0.05
	LC5	26	1.074	0.00	0.00	-0.00	-0.02	-0.04	0.05
		14	0.000	-0.72	0.55	1.75	4.88	-2.45	1.51
	CO1	26	1.074	-0.52	0.55	1.26	4.88	-0.83	0.92
		14	0.000	-4.95	-4.18	11.96	23.20	-21.32	-6.94
6	CO2	26	1.074	-4.20	-3.00	10.15	23.20	-9.44	-3.09
		14	0.000	-8.18	1.73	12.34	18.95	12.14	3.33
	CO3	26	1.074	-8.40	1.73	10.12	18.95	24.20	1.47
		14	0.000	-5.62	2.03	13.58	17.71	-20.21	6.32
	CO4	26	1.074	-4.87	2.03	11.76	17.71	-6.60	4.14
		14	0.000	-6.70	2.85	16.21	25.05	-23.86	8.52
	LC1	26	1.074	-5.65	2.85	13.66	25.05	-7.82	5.46
		27	0.000	0.00	0.00	2.41	0.32	-2.07	0.00
	LC2	15	0.716	0.00	0.00	1.44	0.32	-0.69	0.00
		27	0.000	0.00	0.00	0.00	0.00	0.00	0.00
	LC3	15	0.716	0.00	0.00	0.00	0.00	0.00	0.00
		27	0.000	0.00	0.00	0.00	0.00	0.00	0.00
	LC4	15	0.716	0.00	0.00	0.00	0.00	0.00	0.00
		27	0.000	0.00	0.00	0.00	0.00	0.00	0.00
	LC5	15	0.716	0.00	0.00	0.00	0.00	0.00	0.00
		27	0.000	0.00	0.00	0.88	0.12	-0.75	0.00
	CO1	15	0.716	0.00	0.00	0.53	0.12	-0.25	0.00
		27	0.000	0.00	-0.00	3.25	0.43	-2.79	-0.00
	CO2	15	0.716	0.00	-0.00	1.94	0.43	-0.93	-0.00
		27	0.000	0.00	-0.00	3.25	0.43	-2.79	-0.00
	CO3	15	0.716	0.00	-0.00	1.94	0.43	-0.93	-0.00
		27	0.000	0.00	-0.00	3.25	0.43	-2.79	-0.00
	CO4	15	0.716	0.00	-0.00	1.94	0.43	-0.93	-0.00
		27	0.000	0.00	-0.00	4.57	0.61	-3.92	-0.00
7	LC1	15	0.716	0.00	-0.00	2.73	0.61	-1.31	-0.00
		38	0.000	0.39	-1.50	0.29	1.81	-4.33	4.47
	LC2	24	1.074	-0.96	-1.50	-0.27	1.81	-4.32	6.08
		38	0.000	1.01	-1.98	0.61	-0.15	3.28	5.60
	LC3	24	1.074	1.04	-1.20	0.54	-0.15	3.90	7.31
		38	0.000	3.24	-0.50	-7.47	1.48	15.77	0.81
	LC4	24	1.074	2.94	-0.43	-6.75	1.48	8.14	1.31
		38	0.000	0.00	-0.00	0.00	-0.04	0.04	-0.04
	LC5	24	1.074	0.00	-0.00	0.00	-0.04	0.05	-0.04
		38	0.000	-0.78	-0.55	-0.27	0.87	-0.21	1.64
	CO1	24	1.074	-1.28	-0.55	-0.48	0.87	-0.61	2.22
		38	0.000	2.03	-4.99	1.32	2.22	-0.97	14.44
	CO2	24	1.074	0.26	-3.82	0.47	2.22	-0.01	19.17
		38	0.000	4.92	-2.69	-9.76	4.45	15.66	7.13
	CO3	24	1.074	2.70	-2.60	-9.54	4.45	5.30	9.98
		38	0.000	0.52	-2.02	0.41	2.39	-5.84	5.97
8	CO4	24	1.074	-1.29	-2.02	-0.34	2.39	-5.81	8.15
		38	0.000	-0.66	-2.84	0.00	3.75	-6.23	8.48
	LC1	24	1.074	-3.22	-2.84	-1.06	3.75	-6.80	11.53
		39	0.000	-5.65	1.50	-5.63	10.98	1.81	-6.20
	LC2	26	1.074	-6.68	1.50	-6.66	10.98	-4.80	-7.82
		39	0.000	0.83	-2.56	0.83	5.19	-2.82	-0.16
	LC3	26	1.074	0.83	-3.35	0.83	5.19	-1.93	3.01
		39	0.000	-2.45	-0.22	2.64	1.56	19.96	1.20
	LC4	26	1.074	-1.90	-0.22	2.08	1.56	22.50	1.43
		39	0.000	0.00	0.00	0.00	-0.04	-0.04	-0.03
	LC5	26	1.074	0.00	0.00	0.00	-0.04	-0.04	-0.04
		39	0.000	-0.96	0.55	-0.96	4.15	0.20	-2.13
	CO1	26	1.074	-0.96	0.55	-0.96	4.15	-0.83	-2.72
		39	0.000	-6.37	-1.82	-6.38	22.61	-1.84	-8.62
	CO2	26	1.074	-7.76	-3.00	-7.77	22.62	-9.44	-6.03
		39	0.000	-10.99	1.73	-3.99	16.95	29.64	-6.74
	CO3	26	1.074	-11.63	1.73	-6.13	16.95	24.20	-8.61
		39	0.000	-7.61	2.03	-7.62	14.78	2.33	-8.42
	CO4	26	1.074	-9.00	2.03	-9.00	14.78	-6.60	-10.60
		39	0.000	-9.05	2.85	-9.07	21.05	2.67	-11.57
9	LC1	26	1.074	-10.44	2.85	-10.46	21.06	-7.82	-14.63
		27	0.000	0.00	0.00	-2.41	1.09	-1.79	0.00
	LC2	40	0.716	0.00	0.00	-3.38	1.09	-3.86	0.00
		27	0.000	0.00	0.00	0.00	0.00	0.00	0.00
	LC3	40	0.716	0.00	0.00	0.00	0.00	0.00	0.00
		27	0.000	0.00	0.00	0.00	0.00	0.00	0.00
	LC4	40	0.716	0.00	0.00	0.00	0.00	0.00	0.00
		27	0.000	0.00	0.00	0.00	0.00	0.00	0.00
	LC5	40	0.716	0.00	0.00	0.00	0.00	0.00	0.00
		27	0.000	0.00	0.00	-0.88	0.40	-0.65	0.00
	CO1	40	0.716	0.00	0.00	-1.23	0.40	-1.41	0.00
		27	0.000	0.00	-0.00	-3.25	1.47	-2.41	0.00
	CO2	40	0.716	0.00	-0.00	-4.56	1.47	-5.21	0.00
		27	0.000	0.00	-0.00	-3.25	1.47	-2.41	0.00
	CO3	40	0.716	0.00	-0.00	-4.56	1.47	-5.21	0.00
		27	0.000	0.00	-0.00	-3.25	1.47	-2.41	0.00
	CO4	40	0.716	0.00	-0.00	-4.56	1.47	-5.21	0.00
		27	0.000	0.00	-0.00	-4.57	2.06	-3.39	0.00
		40	0.716	0.00	-0.00	-6.41	2.06	-7.33	0.00

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
10	LC1	51	0.000	1.28	-1.50	1.44	-0.04	-5.32	3.21	
		38	1.074	0.25	-1.50	0.41	-0.04	-4.33	4.82	
	LC2	51	0.000	0.65	-2.76	1.00	-2.28	2.24	2.57	
		38	1.074	0.70	-1.98	0.95	-2.28	3.28	5.12	
	LC3	51	0.000	6.40	-0.56	-6.21	1.05	22.15	0.75	
		38	1.074	5.85	-0.50	-5.66	1.05	15.77	1.31	
	LC4	51	0.000	0.00	-0.00	0.00	-0.02	0.04	-0.06	
		38	1.074	0.00	-0.00	0.00	-0.02	0.04	-0.05	
	LC5	51	0.000	-0.24	-0.55	-0.18	0.18	0.18	1.26	
		38	1.074	-0.62	-0.55	-0.55	0.18	-0.21	1.84	
	CO1	51	0.000	2.69	-6.16	3.46	-3.47	-3.90	8.20	
		38	1.074	1.37	-4.99	2.00	-3.47	-0.97	14.19	
	CO2	51	0.000	10.41	-2.79	-6.49	1.38	22.98	5.35	
		38	1.074	8.28	-2.69	-7.14	1.38	15.66	8.29	
	CO3	51	0.000	1.71	-2.02	1.97	-0.08	-7.21	4.26	
		38	1.074	0.32	-2.02	0.58	-0.08	-5.84	6.44	
CO4	51	0.000	1.34	-2.84	1.70	0.21	-7.01	6.22		
	38	1.074	-0.61	-2.84	-0.25	0.21	-6.23	9.27		
11	LC1	52	0.000	-6.03	1.50	-2.49	7.77	4.78	-8.32	
		39	1.074	-7.38	1.50	-3.04	7.77	1.81	-9.94	
	LC2	52	0.000	1.08	-1.78	0.45	4.73	-3.30	-4.47	
		39	1.074	1.08	-2.56	0.45	4.73	-2.82	-2.14	
	LC3	52	0.000	-1.56	-0.22	4.10	1.90	15.95	0.28	
		39	1.074	-1.26	-0.22	3.37	1.90	19.96	0.51	
	LC4	52	0.000	0.00	0.00	0.00	-0.05	-0.04	-0.01	
		39	1.074	0.00	0.00	0.00	-0.05	-0.04	-0.02	
	LC5	52	0.000	-1.26	0.55	-0.52	3.02	0.76	-2.97	
		39	1.074	-1.26	0.55	-0.52	3.02	0.20	-3.56	
	CO1	52	0.000	-6.52	-0.64	-2.70	17.59	1.46	-17.94	
		39	1.074	-8.33	-1.82	-3.46	17.60	-1.84	-16.61	
	CO2	52	0.000	-10.28	1.73	2.25	13.08	28.15	-10.86	
		39	1.074	-11.69	1.73	0.52	13.08	29.64	-12.72	
	CO3	52	0.000	-8.13	2.03	-3.37	10.43	6.35	-11.25	
		39	1.074	-9.95	2.03	-4.12	10.43	2.33	-13.43	
CO4	52	0.000	-10.02	2.85	-4.16	15.02	7.54	-15.69		
	39	1.074	-11.84	2.85	-4.91	15.02	2.67	-18.75		
12	LC1	40	0.000	0.00	0.00	-3.38	2.48	-3.15	0.00	
		53	0.716	0.00	0.00	-4.35	2.48	-5.92	0.00	
	LC2	40	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
		53	0.716	0.00	0.00	0.00	0.00	0.00	0.00	
	LC3	40	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
		53	0.716	0.00	0.52	0.00	0.00	0.00	-0.19	
	LC4	40	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
		53	0.716	0.00	0.00	0.00	0.00	0.00	0.00	
	LC5	40	0.000	0.00	0.00	-1.23	0.91	-1.15	0.00	
		53	0.716	0.00	0.00	-1.59	0.91	-2.16	0.00	
	CO1	40	0.000	0.00	0.00	-4.56	3.35	-4.25	0.00	
		53	0.716	0.00	0.00	-5.87	3.35	-7.99	0.00	
	CO2	40	0.000	0.00	-0.00	-4.56	3.35	-4.25	0.00	
		53	0.716	0.00	0.71	-5.87	3.35	-7.99	-0.25	
	CO3	40	0.000	0.00	0.00	-4.56	3.35	-4.25	0.00	
		53	0.716	0.00	0.00	-5.87	3.35	-7.99	0.00	
CO4	40	0.000	0.00	-0.00	-6.41	4.71	-5.98	0.00		
	53	0.716	0.00	-0.00	-8.26	4.71	-11.23	0.00		
13	LC1	60	0.000	1.18	-1.50	3.17	-1.26	-8.00	1.34	
		51	1.074	0.63	-1.50	1.82	-1.26	-5.32	2.95	
	LC2	60	0.000	0.16	-3.54	1.20	-3.09	0.97	-1.88	
		51	1.074	0.22	-2.76	1.17	-3.09	2.24	1.50	
	LC3	60	0.000	9.01	-0.63	-3.59	0.69	25.84	0.45	
		51	1.074	8.29	-0.56	-3.29	0.69	22.15	1.09	
	LC4	60	0.000	0.00	-0.00	0.00	0.01	0.04	-0.06	
		51	1.074	0.00	-0.00	0.00	0.01	0.04	-0.06	
	LC5	60	0.000	0.04	-0.55	0.23	-0.32	0.19	0.64	
		51	1.074	-0.16	-0.55	-0.26	-0.32	0.18	1.23	
	CO1	60	0.000	1.82	-7.33	6.08	-6.35	-9.43	-1.00	
		51	1.074	1.16	-6.16	4.22	-6.35	-3.90	6.25	
	CO2	60	0.000	13.83	-2.88	-0.60	-0.77	24.39	2.43	
		51	1.074	12.10	-2.79	-2.02	-0.77	22.98	5.47	
	CO3	60	0.000	1.58	-2.02	4.29	-1.70	-10.84	1.73	
		51	1.074	0.83	-2.02	2.47	-1.70	-7.21	3.91	
CO4	60	0.000	1.64	-2.84	4.64	-2.18	-10.62	2.78		
	51	1.074	0.59	-2.84	2.08	-2.18	-7.01	5.83		
14	LC1	61	0.000	-5.80	0.01	-1.50	4.00	-9.86	-4.77	
		52	0.537	-6.52	0.01	-1.50	4.00	-10.66	-4.78	
	LC2	61	0.000	1.17	-0.00	1.39	2.66	-6.79	3.30	
		52	0.537	1.17	-0.00	1.78	2.66	-5.94	3.30	
	LC3	61	0.000	0.13	4.77	0.22	1.86	-0.58	-13.49	
		52	0.537	0.13	4.38	0.22	1.86	-0.47	-15.95	
	LC4	61	0.000	0.00	0.00	-0.00	-0.05	0.01	0.04	
		52	0.537	0.00	0.00	-0.00	-0.05	0.01	0.04	
	LC5	61	0.000	-1.36	-0.00	-0.55	1.65	-3.60	-0.76	
		52	0.537	-1.36	-0.00	-0.55	1.65	-3.90	-0.76	
	CO1	61	0.000	-6.07	-0.00	0.06	9.39	-23.50	-1.47	
		52	0.537	-7.05	-0.00	0.64	9.39	-23.31	-1.46	
	CO2	61	0.000	-7.65	6.54	-1.73	7.93	-14.10	-24.78	
		52	0.537	-8.63	6.01	-1.73	7.93	-15.03	-28.15	
	CO3	61	0.000	-7.82	-0.00	-2.03	5.33	-13.29	-6.35	
		52	0.537	-8.80	-0.00	-2.03	5.33	-14.39	-6.35	
CO4	61	0.000	-9.87	-0.01	-2.85	7.88	-18.71	-7.55		
	52	0.537	-10.85	-0.01	-2.85	7.88	-20.24	-7.54		
15	LC1	53	0.000	0.00	0.00	-4.35	4.56	-4.52	0.00	
		62	0.716	0.00	0.00	-5.32	4.56	-7.98	0.00	
	LC2	53	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
		62	0.716	0.48	0.20	0.00	0.00	0.00	-0.07	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
15	LC3	53	0.000	-0.20	0.48	0.00	0.00	0.00	-0.19	
		62	0.716	-0.40	0.97	0.00	0.00	0.00	-0.71	
	LC4	53	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
		62	0.716	0.00	0.00	0.00	0.00	0.00	0.00	
	LC5	53	0.000	0.00	0.00	-1.59	1.66	-1.65	0.00	
		62	0.716	0.00	0.00	-1.94	1.66	-2.92	0.00	
	CO1	53	0.000	0.00	0.00	-5.87	6.15	-6.10	0.00	
		62	0.716	0.73	0.30	-7.18	6.15	-10.77	-0.11	
	CO2	53	0.000	-0.27	0.65	-5.87	6.15	-6.10	-0.25	
		62	0.716	-0.54	1.30	-7.18	6.15	-10.77	-0.95	
	CO3	53	0.000	0.00	0.00	-5.87	6.15	-6.10	0.00	
		62	0.716	0.00	0.00	-7.18	6.15	-10.77	0.00	
	CO4	53	0.000	0.00	0.00	-8.26	8.65	-8.58	0.00	
		62	0.716	0.00	0.00	-10.10	8.65	-15.15	0.00	
16	LC1	68	0.000	-0.12	-1.50	4.11	-1.68	-10.01	-0.05	
		60	0.537	-0.12	-1.50	3.38	-1.68	-8.00	0.76	
	LC2	68	0.000	-0.34	-3.93	1.17	-2.14	0.34	-4.93	
		60	0.537	-0.31	-3.54	1.17	-2.14	0.97	-2.92	
	LC3	68	0.000	9.70	-0.63	0.13	0.46	25.77	0.34	
		60	0.537	9.70	-0.63	0.13	0.46	25.84	0.68	
	LC4	68	0.000	0.00	-0.00	0.00	0.03	0.03	-0.06	
		60	0.537	0.00	-0.00	0.00	0.03	0.04	-0.05	
	LC5	68	0.000	-0.05	-0.55	0.50	-0.54	-0.01	0.18	
		60	0.537	-0.05	-0.55	0.23	-0.54	0.19	0.47	
	CO1	68	0.000	-0.69	-7.92	7.29	-5.48	-13.09	-7.45	
		60	0.537	-0.64	-7.33	6.31	-5.48	-9.43	-3.35	
	CO2	68	0.000	13.01	-2.88	5.72	-1.64	21.58	0.40	
		60	0.537	13.01	-2.88	4.74	-1.64	24.39	1.95	
	CO3	68	0.000	-0.18	-2.02	5.55	-2.23	-13.55	-0.14	
		60	0.537	-0.18	-2.02	4.57	-2.23	-10.84	0.95	
17	LC1	68	0.000	-0.25	-2.84	6.29	-3.08	-13.63	0.21	
		60	0.537	-0.26	-2.84	4.91	-3.08	-10.62	1.73	
	LC2	69	0.000	-1.73	0.01	-1.50	4.00	-5.35	-4.73	
		61	3.000	-5.80	0.01	-1.50	4.00	-9.86	-4.77	
	LC3	69	0.000	1.17	-0.00	-0.80	2.66	-7.67	3.30	
		61	3.000	1.17	-0.00	1.39	2.66	-6.79	3.30	
	LC4	69	0.000	0.13	6.96	0.22	1.86	-1.23	4.12	
		61	3.000	0.13	4.77	0.22	1.86	-0.58	-13.49	
	LC5	69	0.000	0.00	0.00	-0.00	-0.05	0.02	0.05	
		61	3.000	0.00	0.00	-0.00	-0.05	0.01	0.04	
	CO1	69	0.000	-1.36	-0.00	-0.55	1.65	-1.96	-0.76	
		61	3.000	-1.36	-0.00	-0.55	1.65	-3.60	-0.76	
	CO2	69	0.000	-0.59	-0.00	-3.23	9.39	-18.73	-1.48	
		61	3.000	-6.07	-0.00	0.06	9.39	-23.50	-1.47	
	CO3	69	0.000	-2.16	9.49	-1.73	7.93	-8.90	-0.74	
		61	3.000	-7.65	6.54	-1.73	7.93	-14.10	-24.78	
18	LC1	69	0.000	-2.33	-0.00	-2.03	5.33	-7.20	-6.36	
		61	3.000	-7.82	-0.00	-2.03	5.33	-13.29	-6.35	
	LC2	69	0.000	-4.38	-0.01	-2.85	7.87	-10.16	-7.57	
		61	3.000	-9.87	-0.01	-2.85	7.88	-18.71	-7.55	
	LC3	62	0.000	0.00	0.00	-5.32	7.26	-5.63	0.00	
		70	0.716	0.00	0.00	-6.29	7.26	-9.79	0.00	
	LC4	62	0.000	0.37	0.37	0.00	0.00	0.00	-0.07	
		70	0.716	0.74	0.74	0.00	0.00	0.00	-0.47	
	LC5	62	0.000	-0.74	0.74	0.00	0.00	0.00	-0.71	
		70	0.716	-1.11	1.11	0.00	0.00	0.00	-1.37	
	CO1	62	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
		70	0.716	0.00	0.00	-1.94	2.65	-2.06	0.00	
	CO2	62	0.000	0.00	0.00	-2.30	2.65	-3.58	0.00	
		70	0.716	0.00	0.00	-7.18	9.81	-7.60	-0.11	
	CO3	62	0.000	0.56	0.56	-8.49	9.81	-13.21	-0.70	
		70	0.716	1.11	1.11	-7.18	9.81	-7.60	-0.95	
19	LC1	62	0.000	-1.00	1.00	-8.49	9.81	-13.21	-1.85	
		70	0.716	-1.50	1.50	-7.18	9.81	-7.60	0.00	
	LC2	62	0.000	0.00	0.00	-8.49	9.81	-13.21	-0.00	
		70	0.716	0.00	0.00	-10.10	13.79	-10.69	0.00	
	LC3	62	0.000	0.00	0.00	-11.94	13.79	-18.58	-0.00	
		70	0.716	0.00	0.00	0.51	-1.68	-0.32	-2.86	
	LC4	66	1.982	0.02	0.10	-2.18	-1.68	-1.97	-3.06	
		73	0.000	0.01	0.19	0.34	-2.14	-1.84	-4.96	
	LC5	66	1.982	0.14	1.63	0.34	-2.14	-1.18	-6.76	
		73	0.000	9.73	0.03	-5.61	0.46	32.65	-0.52	
	CO1	66	1.982	9.73	0.03	-5.61	0.46	21.54	-0.57	
		73	0.000	0.00	0.03	0.12	0.03	-0.37	0.03	
	CO2	66	1.982	0.00	0.02	0.46	-0.54	1.19	-0.81	
		73	0.000	-0.00	0.02	-0.52	-0.54	1.13	-0.84	
	CO3	66	1.982	0.03	0.41	1.19	-5.49	-3.24	-11.32	
		73	0.000	0.22	2.57	-2.43	-5.49	-4.46	-14.27	
20	LC1	66	1.982	13.27	0.17	-6.92	-1.64	43.96	-4.56	
		73	0.000	13.27	0.17	-10.54	-1.64	26.66	-4.90	
	LC2	66	1.982	0.01	0.18	0.85	-2.23	-0.98	-3.83	
		73	0.000	0.01	0.18	-2.78	-2.23	-2.89	-4.18	
	LC3	66	1.982	0.01	0.16	1.38	-3.08	1.31	-5.08	
		73	0.000	0.01	0.16	-3.72	-3.08	-1.01	-5.39	
	LC4	66	1.982	0.00	0.00	-6.29	10.46	-6.26	0.00	
		74	0.716	0.00	0.00	-7.26	10.46	-11.11	0.00	
	LC5	66	1.982	0.40	0.97	0.00	0.00	0.00	-0.47	
		74	0.716	0.60	1.45	0.00	0.00	0.00	-1.33	
	CO1	66	1.982	0.00	0.60	0.00	0.00	0.00	-1.37	
		74	0.716	-1.93	0.80	0.00	0.00	0.00	-1.87	
	CO2	66	1.982	0.00	0.00	0.00	0.00	0.00	0.00	
		74	0.716	0.00	0.00	0.00	0.00	0.00	0.00	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
20	LC5	70	0.000	0.00	0.00	-2.30	3.82	-2.29	0.00	
		74	0.716	0.00	0.00	-2.65	3.82	-4.06	0.00	
	CO1	70	0.000	0.60	1.45	-8.49	14.12	-8.45	-0.70	
		74	0.716	0.90	2.18	-9.80	14.12	-15.00	-2.00	
	CO2	70	0.000	-1.95	0.81	-8.49	14.12	-8.45	-1.85	
		74	0.716	-2.61	1.08	-9.80	14.11	-15.00	-2.52	
21	CO3	70	0.000	0.00	0.00	-8.49	14.11	-8.45	-0.00	
		74	0.716	0.00	0.00	-9.80	14.11	-15.00	-0.00	
	CO4	70	0.000	0.00	0.00	-11.94	19.84	-11.89	-0.00	
		74	0.716	0.00	0.00	-13.78	19.84	-21.09	-0.00	
	LC1	76	0.000	0.02	0.10	1.25	-1.68	-0.80	-2.81	
		73	0.549	0.02	0.10	0.51	-1.68	-0.32	-2.86	
	LC2	76	0.000	-0.02	-0.21	0.34	-2.14	-2.03	-4.97	
		73	0.549	0.01	0.19	0.34	-2.14	-1.84	-4.96	
	LC3	76	0.000	9.73	0.03	-5.61	0.46	35.73	-0.50	
		73	0.549	9.73	0.03	-5.61	0.46	32.65	-0.52	
	LC4	76	0.000	0.00	0.03	0.12	0.03	-0.43	0.04	
		73	0.549	0.00	0.03	0.12	0.03	-0.37	0.03	
22	LC5	76	0.000	-0.00	0.02	0.73	-0.54	0.87	-0.80	
		73	0.549	-0.00	0.02	0.46	-0.54	1.19	-0.81	
	CO1	76	0.000	-0.02	-0.19	2.20	-5.49	-4.17	-11.25	
		73	0.549	0.03	0.41	1.19	-5.49	-3.24	-11.32	
	CO2	76	0.000	13.27	0.17	-5.91	-1.64	47.48	-4.47	
		73	0.549	13.27	0.17	-6.92	-1.64	43.96	-4.56	
	CO3	76	0.000	0.01	0.18	1.85	-2.23	-1.72	-3.73	
		73	0.549	0.01	0.18	0.85	-2.23	-0.98	-3.83	
	CO4	76	0.000	0.01	0.16	2.79	-3.08	0.17	-5.00	
		73	0.549	0.01	0.16	1.38	-3.08	1.31	-5.08	
	LC1	74	0.000	0.00	0.00	-7.26	13.91	-6.27	0.00	
		77	0.358	0.00	0.00	-7.75	13.91	-8.95	0.00	
23	LC2	74	0.000	0.00	1.57	0.00	0.00	0.00	-1.33	
		77	0.358	0.00	1.83	0.00	0.00	0.00	-1.94	
	LC3	74	0.000	-2.09	0.00	0.00	0.00	0.00	-1.87	
		77	0.358	-2.09	0.00	0.00	0.00	0.00	-1.87	
	LC4	74	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
		77	0.358	0.00	0.00	0.00	0.00	0.00	0.00	
	LC5	74	0.000	0.00	0.00	-2.65	5.08	-2.29	0.00	
		77	0.358	0.00	0.00	-2.83	5.08	-3.27	0.00	
	CO1	74	0.000	-0.00	2.36	-9.80	18.78	-8.46	-2.00	
		77	0.358	-0.00	2.75	-10.46	18.78	-12.08	-2.92	
	CO2	74	0.000	-2.82	0.00	-9.80	18.78	-8.46	-2.52	
		77	0.358	-2.82	0.00	-10.46	18.78	-12.09	-2.53	
24	CO3	74	0.000	-0.00	0.00	-9.80	18.78	-8.46	-0.00	
		77	0.358	-0.00	0.00	-10.46	18.78	-12.09	-0.00	
	CO4	74	0.000	0.00	0.00	-13.78	26.41	-11.89	-0.00	
		77	0.358	0.00	0.00	-14.70	26.41	-16.99	-0.01	
	LC1	79	0.000	-1.02	0.10	2.51	-0.48	-2.78	-3.13	
		76	1.074	-0.46	0.10	1.16	-0.48	-0.80	-3.24	
	LC2	79	0.000	-0.21	-0.99	0.28	-0.07	-2.33	-6.06	
		76	1.074	-0.15	-0.21	0.30	-0.07	-2.03	-5.41	
	LC3	79	0.000	11.86	-0.04	-1.16	0.62	37.14	-0.29	
		76	1.074	11.14	0.03	-1.46	0.62	35.73	-0.28	
	LC4	79	0.000	-0.04	0.03	0.11	0.01	-0.55	0.09	
		76	1.074	-0.04	0.03	0.11	0.01	-0.43	0.05	
25	LC5	79	0.000	-0.48	0.02	1.17	-0.19	-0.12	-0.93	
		76	1.074	-0.28	0.02	0.67	-0.19	0.87	-0.95	
	CO1	79	0.000	-1.71	-1.36	3.80	-0.76	-7.29	-13.33	
		76	1.074	-0.86	-0.19	2.02	-0.76	-4.17	-12.50	
	CO2	79	0.000	14.75	0.08	1.83	0.19	46.70	-4.62	
		76	1.074	14.53	0.17	-0.39	0.19	47.48	-4.76	
	CO3	79	0.000	-1.45	0.18	3.53	-0.64	-4.53	-4.11	
		76	1.074	-0.70	0.18	1.71	-0.64	-1.72	-4.30	
	CO4	79	0.000	-2.12	0.16	5.13	-0.94	-3.97	-5.63	
		76	1.074	-1.06	0.16	2.58	-0.94	0.17	-5.79	
	LC1	77	0.000	0.00	0.00	-7.75	13.91	-8.95	0.00	
		88	0.325	0.00	0.00	-8.19	13.91	-11.54	0.00	
26	LC2	77	0.000	0.00	1.83	0.00	0.00	0.00	-1.94	
		88	0.325	0.00	2.07	0.00	0.00	0.00	-2.57	
	LC3	77	0.000	-2.09	0.00	0.00	0.00	0.00	-1.87	
		88	0.325	-2.09	0.00	0.00	0.00	0.00	-1.87	
	LC4	77	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
		88	0.325	0.00	0.00	0.00	0.00	0.00	0.00	
	LC5	77	0.000	0.00	0.00	-2.83	5.08	-3.27	0.00	
		88	0.325	0.00	0.00	-2.99	5.08	-4.22	0.00	
	CO1	77	0.000	-0.00	2.75	-10.46	18.78	-12.08	-2.92	
		88	0.325	-0.00	3.11	-11.05	18.78	-15.58	-3.87	
	CO2	77	0.000	-2.82	0.00	-10.46	18.78	-12.09	-2.53	
		88	0.325	-2.82	0.00	-11.05	18.78	-15.58	-2.53	
27	CO3	77	0.000	-0.00	0.00	-10.46	18.78	-12.09	-0.00	
		88	0.325	-0.00	0.00	-11.05	18.78	-15.58	-0.00	
	CO4	77	0.000	0.00	0.00	-14.70	26.41	-16.99	-0.01	
		88	0.325	-0.00	0.00	-15.54	26.41	-21.91	-0.01	
	LC1	82	0.000	-2.93	0.10	2.96	0.75	-5.40	-2.97	
		79	1.074	-1.90	0.10	1.93	0.75	-2.78	-3.08	
	LC2	82	0.000	-0.35	-1.78	0.12	2.25	-2.49	-7.11	
		79	1.074	-0.30	-0.99	0.17	2.25	-2.33	-5.63	
	LC3	82	0.000	11.95	-0.11	4.02	0.68	33.11	-0.11	
		79	1.074	11.40	-0.04	3.47	0.68	37.14	-0.03	
	LC4	82	0.000	-0.08	0.03	0.08	-0.02	-0.64	0.12	
		79	1.074	-0.08	0.03	0.08	-0.02	-0.55	0.08	
28	LC5	82	0.000	-1.27	0.02	1.27	0.18	-1.28	-0.92	
		79	1.074	-0.89	0.02	0.89	0.18	-0.12	-0.93	
29	CO1	82	0.000	-4.49	-2.53	4.17	4.40	-11.06	-14.70	
		79	1.074	-3.03	-1.36	2.85	4.40	-7.29	-12.61	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]		
				N	V_y / V_u	V_z / V_v	M_T	M_y / M_u	M_z / M_v
25	CO2	82	0.000	12.28	-0.01	9.47	1.95	37.68	-4.16
		79	1.074	12.92	0.08	7.34	1.95	46.70	-4.20
	CO3	82	0.000	-4.08	0.18	4.10	0.99	-8.19	-3.85
		79	1.074	-2.69	0.18	2.71	0.98	-4.53	-4.04
26	CO4	82	0.000	-5.87	0.16	5.88	1.29	-9.24	-5.39
		79	1.074	-3.92	0.16	3.93	1.29	-3.97	-5.56
	LC1	82	0.000	-3.84	0.10	-1.61	1.83	-5.40	2.45
		83	1.074	-5.19	0.10	-2.17	1.83	-7.42	2.35
27	LC2	82	0.000	-0.37	-1.78	0.02	4.80	-2.49	5.71
		83	1.074	-0.40	-2.56	0.08	4.80	-2.44	8.04
	LC3	82	0.000	9.50	-0.11	-8.29	0.67	33.11	-0.16
		83	1.074	9.80	-0.18	-9.01	0.67	23.83	-0.01
28	LC4	82	0.000	-0.11	0.03	-0.05	-0.07	-0.64	-0.10
		83	1.074	-0.11	0.03	-0.05	-0.07	-0.69	-0.14
	LC5	82	0.000	-1.66	0.02	-0.69	0.52	-1.28	0.78
		83	1.074	-2.15	0.02	-0.89	0.52	-2.13	0.76
29	CO1	82	0.000	-5.75	-2.53	-2.13	9.69	-11.06	11.89
		83	1.074	-7.60	-3.70	-2.79	9.69	-13.70	15.24
	CO2	82	0.000	7.72	-0.01	-13.45	3.39	37.68	3.10
		83	1.074	6.31	-0.11	-15.18	3.39	22.30	3.16
30	CO3	82	0.000	-5.34	0.18	-2.22	2.38	-8.19	3.18
		83	1.074	-7.15	0.18	-2.98	2.38	-10.98	2.99
	CO4	82	0.000	-7.68	0.16	-3.19	3.25	-9.24	4.49
		83	1.074	-10.23	0.16	-4.24	3.25	-13.23	4.32
27	LC1	83	0.000	-5.62	-0.01	-0.10	2.59	0.82	7.52
		84	0.552	-6.37	-0.01	-0.10	2.59	0.76	7.53
	LC2	83	0.000	-0.34	0.00	2.57	7.51	5.35	2.92
		84	0.552	-0.34	0.00	2.97	7.51	6.88	2.92
28	LC3	83	0.000	5.61	-12.04	-0.88	0.62	1.81	-23.76
		84	0.552	5.61	-12.45	-0.88	0.62	1.33	-17.00
	LC4	83	0.000	-0.12	-0.00	-0.03	-0.11	-0.16	0.68
		84	0.552	-0.12	-0.00	-0.03	-0.11	-0.18	0.68
29	LC5	83	0.000	-2.32	0.00	-0.02	0.77	0.32	2.16
		84	0.552	-2.32	0.00	-0.02	0.77	0.31	2.16
	CO1	83	0.000	-8.09	0.01	3.72	14.79	9.14	14.55
		84	0.552	-9.10	0.01	4.32	14.78	11.36	14.55
30	CO2	83	0.000	0.02	-16.38	-1.33	4.34	3.56	-22.08
		84	0.552	-0.99	-16.93	-1.33	4.34	2.83	-12.88
	CO3	83	0.000	-7.74	0.00	-0.18	3.35	0.89	11.10
		84	0.552	-8.75	0.00	-0.18	3.35	0.79	11.10
28	CO4	83	0.000	-11.07	0.01	-0.16	4.66	1.58	13.42
		84	0.552	-12.08	0.01	-0.16	4.66	1.50	13.42
	LC1	84	0.000	-6.37	-0.01	-0.10	2.59	0.76	7.53
		20	5.949	-14.43	-0.01	-0.10	2.59	0.17	7.57
29	LC2	84	0.000	-0.34	0.00	2.97	7.51	6.88	2.92
		20	5.949	-0.34	0.00	7.31	7.51	37.46	2.90
	LC3	84	0.000	5.61	-12.45	-0.88	0.62	1.33	-17.00
		20	5.949	5.61	-16.79	-0.88	0.62	-3.89	69.96
30	LC4	84	0.000	-0.12	-0.00	-0.03	-0.11	-0.18	0.68
		20	5.949	-0.12	-0.00	-0.03	-0.11	-0.37	0.69
	LC5	84	0.000	-2.32	0.00	-0.02	0.77	0.31	2.16
		20	5.949	-2.32	0.00	-0.02	0.77	0.22	2.15
28	CO1	84	0.000	-9.10	0.01	4.32	14.78	11.36	14.55
		20	5.949	-19.98	0.01	10.84	14.78	56.46	14.50
	CO2	84	0.000	-0.99	-16.93	-1.33	4.34	2.83	-12.88
		20	5.949	-11.87	-22.79	-1.33	4.34	-5.06	105.26
29	CO3	84	0.000	-8.75	0.00	-0.18	3.35	0.79	11.10
		20	5.949	-19.64	0.00	-0.18	3.35	-0.27	11.08
	CO4	84	0.000	-12.08	0.01	-0.16	4.66	1.50	13.42
		20	5.949	-22.97	0.01	-0.16	4.66	0.57	13.37
30	LC1	88	0.000	-0.01	-0.11	0.89	13.91	-11.54	0.00
		85	5.150	-0.01	-0.11	-6.08	13.91	-24.91	0.56
	LC2	88	0.000	0.00	0.22	0.05	0.00	0.00	-2.57
		85	5.150	0.00	3.98	0.05	0.00	0.25	-13.40
29	LC3	88	0.000	-2.06	0.13	4.61	0.00	0.00	-1.87
		85	5.150	-2.06	0.13	4.61	0.00	23.74	-2.52
	LC4	88	0.000	-0.00	-0.01	-0.01	0.00	0.00	0.00
		85	5.150	-0.00	-0.01	-0.01	0.00	-0.03	0.06
30	LC5	88	0.000	0.00	-0.00	1.26	5.08	-4.22	0.00
		85	5.150	0.00	-0.00	-1.29	5.08	-4.29	0.01
	CO1	88	0.000	-0.00	0.19	1.26	18.78	-15.58	-3.87
		85	5.150	-0.00	5.83	-8.16	18.78	-33.34	-19.36
28	CO2	88	0.000	-2.83	0.03	7.49	18.78	-15.58	-2.53
		85	5.150	-2.83	0.03	-1.93	18.78	-1.26	-2.66
	CO3	88	0.000	-0.00	-0.16	1.18	18.78	-15.58	-0.00
		85	5.150	-0.00	-0.16	-8.24	18.78	-33.75	0.84
30	CO4	88	0.000	0.00	-0.15	3.08	26.41	-21.91	-0.01
		85	5.150	-0.00	-0.15	-10.17	26.41	-40.17	0.77
	LC1	85	0.000	-0.01	1.50	12.07	13.91	-24.91	0.56
		80	0.325	-0.01	1.50	11.63	13.91	-21.06	0.08
29	LC2	85	0.000	0.00	-4.77	-1.17	0.00	0.25	-13.40
		80	0.325	0.00	-4.53	-1.17	0.00	-0.13	-11.89
	LC3	85	0.000	-2.03	-0.22	-0.13	0.00	23.74	-2.52
		80	0.325	-2.03	-0.22	-0.13	0.00	23.69	-2.45
30	LC4	85	0.000	-0.00	0.00	-0.00	0.00	-0.03	0.06
		80	0.325	-0.00	0.00	-0.00	0.00	-0.03	0.06
	LC5	85	0.000	0.00	0.55	2.33	5.08	-4.29	0.01
		80	0.325	0.00	0.55	2.16	5.08	-3.56	-0.17
28	CO1	85	0.000	0.01	-5.13	14.55	18.78	-33.34	-19.36
		80	0.325	0.01	-4.78	13.95	18.78	-28.71	-17.75
	CO2	85	0.000	-2.83	1.73	16.13	18.78	-1.26	-2.66
		80	0.325	-2.83	1.73	15.53	18.78	3.89	-3.23
30	CO3	85	0.000	0.00	2.03	16.29	18.78	-33.75	0.84
		80	0.325	0.00	2.03	15.70	18.78	-28.56	0.18

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
30	CO4	85	0.000	0.01	2.85	19.79	26.41	-40.17	0.77	
		80	0.325	0.01	2.85	18.95	26.41	-33.87	-0.15	
31	LC1	66	0.000	-0.03	-0.48	2.90	-1.68	-1.97	-3.06	
		112	2.585	-0.03	-0.48	-0.60	-1.68	1.01	-1.81	
	LC2	66	0.000	-0.17	-1.96	0.21	-2.14	-1.18	-6.76	
		112	2.585	-0.01	-0.08	0.21	-2.14	-0.62	-4.12	
	LC3	66	0.000	9.73	-0.13	0.81	0.46	21.54	-0.57	
		112	2.585	9.73	-0.13	0.81	0.46	23.63	-0.23	
	LC4	66	0.000	0.00	0.00	0.03	0.03	-0.14	-0.04	
		112	2.585	0.00	0.00	0.03	0.03	-0.05	-0.05	
	LC5	66	0.000	-0.02	-0.16	1.02	-0.54	1.13	-0.84	
		112	2.585	-0.02	-0.16	-0.26	-0.54	2.11	-0.43	
	CO1	66	0.000	-0.32	-3.59	4.23	-5.49	-4.46	-14.27	
		112	2.585	-0.07	-0.77	-0.49	-5.49	0.37	-8.63	
	CO2	66	0.000	13.18	-0.83	5.03	-1.64	26.66	-4.90	
		112	2.585	13.18	-0.83	0.30	-1.64	33.54	-2.75	
	CO3	66	0.000	-0.06	-0.65	3.96	-2.23	-2.89	-4.18	
		112	2.585	-0.06	-0.65	-0.77	-2.23	1.23	-2.51	
	CO4	66	0.000	-0.09	-0.89	5.44	-3.08	-1.01	-5.39	
		112	2.585	-0.09	-0.89	-1.21	-3.08	4.46	-3.09	
32	LC1	58	0.000	-0.12	-1.50	4.58	-1.68	-11.53	-0.57	
		68	0.349	-0.12	-1.50	4.11	-1.68	-10.01	-0.05	
	LC2	58	0.000	-0.37	-4.19	1.17	-2.14	-0.07	-6.34	
		68	0.349	-0.34	-3.93	1.17	-2.14	0.34	-4.93	
	LC3	58	0.000	9.70	-0.63	0.13	0.46	25.72	0.12	
		68	0.349	9.70	-0.63	0.13	0.46	25.77	0.34	
	LC4	58	0.000	0.00	-0.00	0.00	0.03	0.03	-0.06	
		68	0.349	0.00	-0.00	0.00	0.03	0.03	-0.06	
	LC5	58	0.000	-0.05	-0.55	0.67	-0.54	-0.21	-0.01	
		68	0.349	-0.05	-0.55	0.50	-0.54	-0.01	0.18	
	CO1	58	0.000	-0.73	-8.30	7.93	-5.48	-15.74	-10.28	
		68	0.349	-0.69	-7.92	7.29	-5.48	-13.09	-7.45	
	CO2	58	0.000	13.01	-2.88	6.35	-1.64	19.48	-0.60	
		68	0.349	13.01	-2.88	5.72	-1.64	21.58	0.40	
	CO3	58	0.000	-0.18	-2.02	6.19	-2.23	-15.60	-0.84	
		68	0.349	-0.18	-2.02	5.55	-2.23	-13.55	-0.14	
	CO4	58	0.000	-0.25	-2.84	7.19	-3.08	-15.98	-0.78	
		68	0.349	-0.25	-2.84	6.29	-3.08	-13.63	0.21	
161	LC1	112	0.000	-0.03	-0.48	-3.10	-1.68	1.01	-1.81	
		58	2.585	-0.03	-0.48	-6.60	-1.68	-11.53	-0.57	
	LC2	112	0.000	-0.01	-0.08	0.21	-2.14	-0.62	-4.12	
		58	2.585	0.16	1.80	0.21	-2.14	-0.07	-6.34	
	LC3	112	0.000	9.73	-0.13	0.81	0.46	23.63	-0.23	
		58	2.585	9.73	-0.13	0.81	0.46	25.72	0.12	
	LC4	112	0.000	0.00	0.00	0.03	0.03	-0.05	-0.05	
		58	2.585	0.00	0.00	0.03	0.03	0.03	-0.06	
	LC5	112	0.000	-0.02	-0.16	-0.26	-0.54	2.11	-0.43	
		58	2.585	-0.02	-0.16	-1.54	-0.54	-0.21	-0.01	
	CO1	112	0.000	-0.07	-0.77	-3.87	-5.49	0.37	-8.63	
		58	2.585	0.17	2.05	-8.60	-5.48	-15.74	-10.28	
	CO2	112	0.000	13.18	-0.83	-3.08	-1.64	33.54	-2.75	
		58	2.585	13.18	-0.83	-7.80	-1.64	19.48	-0.60	
	CO3	112	0.000	-0.06	-0.65	-4.15	-2.23	1.23	-2.51	
		58	2.585	-0.06	-0.65	-8.87	-2.23	-15.60	-0.84	
	CO4	112	0.000	-0.09	-0.89	-4.58	-3.08	4.46	-3.09	
		58	2.585	-0.09	-0.89	-11.23	-3.08	-15.98	-0.78	
Section No. 2: Pipe 3200/5/K										
65	LC1	9	0.000	-20.45	1.82	0.30	0.15	18.93	-20.39	
		31	0.900	-24.07	1.82	0.30	0.15	19.20	-22.03	
	LC2	9	0.000	0.05	0.04	13.04	-12.56	33.58	0.11	
		31	0.900	0.05	0.04	14.21	-12.56	45.84	0.08	
	LC3	9	0.000	-0.07	-13.06	-0.03	-14.63	0.14	33.78	
		31	0.900	-0.07	-14.23	-0.03	-14.63	0.12	46.06	
	LC4	9	0.000	-13.07	9.75	1.69	1.34	12.19	-22.88	
		31	0.900	-13.07	9.75	1.69	1.34	13.70	-31.65	
	LC5	9	0.000	-3.24	1.46	0.18	-0.28	1.70	-4.36	
		31	0.900	-3.24	1.46	0.18	-0.28	1.87	-5.68	
	CO1	9	0.000	-27.54	2.52	19.97	-18.64	75.93	-27.36	
		31	0.900	-32.42	2.52	21.73	-18.64	94.70	-29.63	
	CO2	9	0.000	-27.71	-15.17	0.37	-19.54	25.74	18.09	
		31	0.900	-32.58	-16.75	0.37	-19.54	26.07	32.46	
	CO3	9	0.000	-45.26	15.63	2.71	1.98	42.03	-58.42	
		31	0.900	-50.14	15.63	2.71	1.98	44.47	-72.48	
	CO4	9	0.000	-32.47	4.66	0.68	-0.21	28.11	-34.07	
		31	0.900	-37.35	4.66	0.68	-0.21	28.72	-38.26	
66	LC1	31	0.000	-25.74	0.00	-0.00	0.00	19.61	-24.40	
		95	6.645	-52.42	0.00	-0.00	0.00	19.61	-24.40	
	LC2	31	0.000	0.00	-0.00	14.17	-12.96	46.19	0.00	
		95	6.645	0.00	-0.00	22.81	-12.96	169.06	0.00	
	LC3	31	0.000	0.00	-14.17	0.00	-14.55	0.00	46.19	
		95	6.645	0.00	-22.81	0.00	-14.55	0.00	169.06	
	LC4	31	0.000	-19.99	-0.00	0.00	-0.00	16.29	-40.80	
		95	6.645	-19.99	-0.00	0.00	-0.00	16.29	-40.80	
	LC5	31	0.000	-4.30	-0.00	0.00	0.00	1.87	-7.10	
		95	6.645	-4.30	-0.00	0.00	0.00	1.87	-7.10	
	CO1	31	0.000	-34.75	0.00	21.26	-19.44	95.78	-32.95	
		95	6.645	-70.77	0.00	34.22	-19.44	280.12	-32.95	
	CO2	31	0.000	-34.75	-19.13	0.00	-19.65	26.48	29.44	
		95	6.645	-70.77	-30.79	-0.00	-19.65	26.48	195.34	
	CO3	31	0.000	-61.74	0.00	0.00	0.00	48.51	-88.03	
		95	6.645	-97.76	0.00	-0.00	0.00	48.52	-88.05	
	CO4	31	0.000	-41.19	0.00	0.00	0.00	29.28	-43.58	
		95	6.645	-77.21	0.00	-0.00	0.00	29.29	-43.59	
67	LC1	95	0.000	-66.85	-0.01	-0.10	2.61	-19.17	-16.82	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]		
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v
67	LC1	10	1.575	-73.17	-0.01	-0.10	2.61	-19.33	-16.81
	LC2	95	0.000	-0.34	0.00	30.12	-5.46	205.61	2.90
		10	1.575	-0.34	0.00	32.17	-5.46	254.65	2.89
	LC3	95	0.000	5.61	-39.60	-0.88	31.40	11.24	239.01
		10	1.575	5.61	-41.64	-0.88	31.40	9.86	302.98
	LC4	95	0.000	-20.11	-0.00	-0.03	-0.11	15.60	-40.11
		10	1.575	-20.11	-0.00	-0.03	-0.11	15.55	-40.11
	LC5	95	0.000	-6.62	0.00	-0.02	0.77	-4.19	-4.95
		10	1.575	-6.62	0.00	-0.02	0.77	-4.21	-4.95
	CO1	95	0.000	-90.75	0.01	45.05	-4.68	282.64	-18.45
		10	1.575	-99.29	0.01	48.12	-4.68	356.00	-18.46
	CO2	95	0.000	-82.64	-53.59	-1.33	46.23	-10.64	300.60
		10	1.575	-91.18	-56.35	-1.33	46.23	-12.72	387.16
	CO3	95	0.000	-117.39	0.00	-0.18	3.34	-4.77	-76.97
		10	1.575	-125.93	0.00	-0.18	3.34	-5.05	-76.98
	CO4	95	0.000	-100.18	0.01	-0.16	4.64	-32.15	-30.22
		10	1.575	-108.71	0.01	-0.16	4.64	-32.40	-30.23
Section No. 3: HE A 200 Euronorm 53-62									
81	LC1	7	0.000	-0.01	0.08	-0.01	-0.00	-0.00	0.01
		55	0.995	-0.01	0.08	-0.43	-0.00	-0.22	-0.07
	LC2	7	0.000	0.03	-0.01	-0.09	-0.00	-0.00	-0.02
		55	0.995	0.03	-0.01	-0.09	-0.00	-0.09	-0.01
	LC3	7	0.000	0.02	-0.17	0.00	-0.00	-0.00	-0.01
		55	0.995	0.02	-0.17	0.00	-0.00	0.00	0.16
	LC4	7	0.000	-0.06	0.45	0.01	-0.00	-0.00	0.03
		55	0.995	-0.06	0.45	-0.98	-0.00	-0.48	-0.41
	LC5	7	0.000	-0.01	0.05	0.04	-0.00	-0.00	0.00
		55	0.995	-0.01	0.05	-0.36	-0.00	-0.16	-0.04
	CO1	7	0.000	0.03	0.09	-0.15	-0.00	-0.00	-0.02
		55	0.995	0.03	0.09	-0.72	-0.00	-0.44	-0.11
	CO2	7	0.000	0.02	-0.13	-0.01	-0.00	-0.00	-0.01
		55	0.995	0.02	-0.13	-0.57	-0.00	-0.29	0.11
	CO3	7	0.000	-0.09	0.72	0.00	-0.01	-0.00	0.05
		55	0.995	-0.09	0.72	-1.91	-0.01	-0.95	-0.66
82	LC1	7	0.000	-0.02	0.18	0.04	-0.00	-0.00	0.01
		55	0.995	-0.02	0.18	-1.12	-0.00	-0.54	-0.17
	LC2	16	0.000	-0.00	0.05	-0.33	-0.00	0.00	0.01
		87	0.995	-0.00	0.05	-0.75	-0.00	-0.53	-0.05
	LC3	16	0.000	-0.03	0.02	0.10	-0.00	0.00	-0.01
		87	0.995	-0.03	0.02	0.10	-0.00	0.10	-0.03
	LC4	16	0.000	-0.01	0.21	0.01	-0.00	0.00	-0.02
		87	0.995	-0.01	0.21	0.01	-0.00	0.01	-0.23
	LC5	16	0.000	-0.02	0.30	-2.56	-0.01	-0.00	0.04
		87	0.995	-0.02	0.30	-3.56	-0.01	-3.05	-0.25
	CO1	16	0.000	-0.00	0.03	-0.15	-0.00	0.00	0.01
		87	0.995	-0.00	0.03	-0.55	-0.00	-0.34	-0.03
	CO2	16	0.000	-0.06	0.10	-0.29	-0.00	0.00	-0.01
		87	0.995	-0.05	0.10	-0.86	-0.00	-0.57	-0.11
	CO3	16	0.000	-0.02	0.36	-0.43	-0.00	0.00	-0.01
		87	0.995	-0.02	0.36	-1.00	-0.00	-0.71	-0.37
83	LC1	16	0.000	-0.03	0.47	-3.90	-0.01	-0.00	0.07
		87	0.995	-0.03	0.47	-5.81	-0.01	-4.83	-0.40
	LC2	16	0.000	-0.01	0.12	-0.66	-0.00	0.00	0.02
		87	0.995	-0.01	0.12	-1.83	-0.00	-1.24	-0.10
	LC3	17	0.000	0.15	0.13	0.44	0.00	-0.23	0.08
		28	1.150	0.15	0.13	-0.04	0.00	0.00	-0.07
	LC4	17	0.000	0.31	0.39	-0.23	0.00	0.27	0.22
		28	1.150	0.31	0.39	-0.23	0.00	-0.00	-0.23
	LC5	17	0.000	0.49	-0.58	-0.10	-0.00	0.11	-0.30
		28	1.150	0.49	-0.58	-0.10	-0.00	0.00	0.37
	CO1	17	0.000	1.02	0.64	1.28	0.00	-0.81	0.40
		28	1.150	1.02	0.64	0.13	0.00	0.00	-0.34
	CO2	17	0.000	0.19	0.09	0.41	-0.00	-0.20	0.06
		28	1.150	0.19	0.09	-0.05	-0.00	0.00	-0.05
	CO3	17	0.000	0.66	0.75	0.25	0.00	0.09	0.44
		28	1.150	0.66	0.75	-0.41	0.00	-0.00	-0.43
84	LC1	17	0.000	0.87	-0.61	0.47	-0.00	-0.16	-0.29
		28	1.150	0.87	-0.61	-0.19	-0.00	0.00	0.42
	LC2	17	0.000	1.59	1.04	2.33	0.00	-1.40	0.65
		28	1.150	1.59	1.04	0.12	0.00	0.00	-0.54
	LC3	17	0.000	0.49	0.31	1.21	-0.00	-0.62	0.20
		28	1.150	0.49	0.31	-0.13	-0.00	0.00	-0.16
	LC4	86	0.000	1.21	0.17	-0.35	0.00	0.07	-0.01
		87	1.075	1.21	0.17	-0.80	0.00	-0.55	-0.19
	LC5	86	0.000	0.19	0.05	0.38	0.00	0.10	0.01
		87	1.075	0.19	0.05	0.38	0.00	0.51	-0.04
	CO1	86	0.000	-0.07	0.41	-0.15	-0.00	-0.05	0.03
		87	1.075	-0.07	0.41	-0.15	-0.00	-0.21	-0.41
	CO2	86	0.000	6.80	0.93	-2.03	0.01	-0.03	-0.09
		87	1.075	6.80	0.93	-2.03	0.01	-2.22	-1.08
	CO3	86	0.000	0.73	0.10	-0.41	0.00	0.02	-0.01
		87	1.075	0.73	0.10	-0.41	0.00	-0.42	-0.12
85	LC1	86	0.000	1.92	0.29	0.11	0.00	0.24	-0.00
		87	1.075	1.92	0.29	-0.51	0.00	0.03	-0.32
	LC2	86	0.000	1.54	0.78	-0.68	0.00	0.03	0.02
		87	1.075	1.54	0.78	-1.29	0.00	-1.03	-0.82
	LC1	86	0.000	10.82	1.48	-3.21	0.01	0.05	-0.13
		87	1.075	10.82	1.49	-3.83	0.01	-3.73	-1.73
	LC2	86	0.000	2.72	0.38	-1.09	0.00	0.13	-0.03
		87	1.075	2.72	0.38	-1.70	0.00	-1.37	-0.44
	LC1	86	0.000	0.70	-0.08	-0.54	0.00	-0.55	-0.06
		109	0.290	0.70	-0.08	-0.67	0.00	-0.72	-0.03
	LC2	86	0.000	0.67	0.96	0.04	0.00	0.51	0.56
		109	0.290	0.67	0.96	0.04	0.00	0.52	0.28

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]		
				N	V_y / V_u	V_z / V_v	M_T	M_y / M_u	M_z / M_v
85	LC3	87	0.000	-4.99	0.90	0.77	0.00	-0.21	0.65
		109	0.290	-4.99	0.90	0.77	0.00	0.01	0.38
	LC4	87	0.000	4.07	-0.50	-2.62	0.00	-2.21	-0.35
		109	0.290	4.07	-0.50	-2.62	0.00	-2.97	-0.21
	LC5	87	0.000	0.44	-0.08	-0.29	0.00	-0.42	-0.05
		109	0.290	0.44	-0.08	-0.29	0.00	-0.50	-0.03
	CO1	87	0.000	1.94	1.33	-0.67	0.00	0.03	0.76
		109	0.290	1.94	1.33	-0.83	0.00	-0.19	0.37
	CO2	87	0.000	-5.76	1.12	0.31	0.00	-1.02	0.81
		109	0.290	-5.76	1.12	0.15	0.00	-0.96	0.48
	CO3	87	0.000	6.45	-0.78	-4.28	0.01	-3.73	-0.55
		109	0.290	6.45	-0.78	-4.44	0.01	-4.99	-0.32
	CO4	87	0.000	1.61	-0.23	-1.16	0.00	-1.36	-0.15
		109	0.290	1.61	-0.23	-1.33	0.00	-1.72	-0.09
86	LC1	91	0.000	-0.01	0.16	-0.23	0.00	0.02	-0.01
		93	1.075	-0.01	0.16	-0.69	0.00	-0.47	-0.18
	LC2	91	0.000	0.02	-0.01	-0.45	-0.00	-0.05	0.01
		93	1.075	0.02	-0.01	-0.45	-0.00	-0.54	0.03
	LC3	91	0.000	0.11	-0.41	0.10	0.00	-0.03	-0.03
		93	1.075	0.11	-0.41	0.10	0.00	0.08	0.41
	LC4	91	0.000	-0.10	0.89	-1.68	-0.00	-0.33	-0.08
		93	1.075	-0.10	0.89	-1.68	-0.00	-2.13	-1.03
	LC5	91	0.000	0.00	0.09	-0.43	-0.00	-0.05	-0.01
		93	1.075	0.00	0.09	-0.43	-0.00	-0.50	-0.11
	CO1	91	0.000	0.02	0.20	-0.99	-0.00	-0.05	-0.00
		93	1.075	0.02	0.20	-1.61	-0.00	-1.45	-0.21
	CO2	91	0.000	0.13	-0.35	-0.18	0.00	-0.01	-0.06
		93	1.075	0.13	-0.35	-0.80	0.00	-0.53	0.31
	CO3	91	0.000	-0.16	1.42	-2.58	-0.01	-0.41	-0.13
		93	1.075	-0.16	1.42	-3.19	-0.01	-3.51	-1.65
87	CO4	91	0.000	-0.01	0.35	-0.95	-0.00	-0.04	-0.03
		93	1.075	-0.01	0.35	-1.57	-0.00	-1.40	-0.41
	LC1	93	0.000	-0.00	-0.03	0.54	-0.00	-0.47	-0.05
		106	0.762	-0.00	-0.03	0.21	-0.00	-0.19	-0.02
	LC2	93	0.000	-0.67	0.70	-1.47	0.00	-0.54	0.35
		106	0.762	-0.67	0.70	-1.47	0.00	-1.66	-0.18
	LC3	93	0.000	-1.11	-0.48	0.68	-0.00	0.08	-0.36
		106	0.762	-1.11	-0.48	0.68	-0.00	0.60	0.01
	LC4	93	0.000	-0.05	-0.29	1.97	0.00	-2.14	-0.32
		106	0.762	-0.05	-0.29	1.97	0.00	-0.64	-0.10
	LC5	93	0.000	0.01	-0.07	0.47	0.00	-0.51	-0.06
		106	0.762	0.01	-0.07	0.47	0.00	-0.15	-0.00
	CO1	93	0.000	-1.00	1.00	-1.49	0.00	-1.45	0.47
		106	0.762	-1.00	1.00	-1.92	0.00	-2.74	-0.29
	CO2	93	0.000	-1.52	-0.69	1.65	-0.00	-0.53	-0.54
		106	0.762	-1.52	-0.69	1.21	-0.00	0.56	-0.02
88	CO3	93	0.000	-0.08	-0.43	3.37	0.00	-3.52	-0.49
		106	0.762	-0.07	-0.43	2.94	0.00	-1.12	-0.16
	CO4	93	0.000	0.01	-0.15	1.43	0.00	-1.40	-0.15
		106	0.762	0.01	-0.15	0.99	0.00	-0.48	-0.04
	LC1	55	0.000	-0.40	-0.02	2.82	-0.00	-0.39	-0.02
		111	0.099	-0.40	-0.02	2.78	-0.00	-0.11	-0.02
	LC2	55	0.000	1.97	-0.69	1.02	-0.00	1.02	-0.48
		111	0.099	1.97	-0.69	1.02	-0.00	1.12	-0.42
	LC3	55	0.000	-1.16	-0.44	20.27	0.00	-1.61	-0.27
		111	0.099	-1.16	-0.44	20.27	0.00	0.40	-0.22
	LC4	55	0.000	0.04	-0.05	1.06	-0.00	-0.04	-0.09
		111	0.099	0.04	-0.05	1.06	-0.00	0.07	-0.09
	LC5	55	0.000	-0.03	0.02	0.18	-0.00	-0.09	0.01
		111	0.099	-0.03	0.02	0.18	-0.00	-0.07	0.00
	CO1	55	0.000	2.42	-1.07	5.33	-0.00	1.00	-0.76
		111	0.099	2.42	-1.07	5.27	-0.00	1.53	-0.65
89	CO2	55	0.000	-2.08	-0.62	31.18	0.00	-2.70	-0.40
		111	0.099	-2.08	-0.62	31.12	0.00	0.39	-0.34
	CO3	55	0.000	-0.48	-0.09	5.24	-0.00	-0.58	-0.15
		111	0.099	-0.48	-0.09	5.18	-0.00	-0.06	-0.14
	CO4	55	0.000	-0.59	0.01	4.09	-0.00	-0.66	-0.02
		111	0.099	-0.59	0.01	4.03	-0.00	-0.26	-0.02
	LC1	64	0.000	-0.43	-0.01	0.28	-0.00	0.07	-0.01
		28	1.435	-0.43	-0.01	-0.33	-0.00	0.03	0.01
	LC2	64	0.000	2.67	-0.02	1.81	0.00	-2.01	0.01
		28	1.435	2.67	-0.02	1.81	0.00	0.59	0.04
	LC3	64	0.000	-1.64	0.66	-1.03	0.00	1.06	0.53
		28	1.435	-1.64	0.66	-1.03	0.00	-0.41	-0.42
	LC4	64	0.000	-0.25	0.00	1.19	0.00	-0.51	-0.01
		28	1.435	-0.25	0.00	-0.24	0.00	0.17	-0.01
	LC5	64	0.000	-0.11	0.01	0.38	-0.00	-0.07	0.00
		28	1.435	-0.11	0.01	-0.19	-0.00	0.07	-0.01
90	CO1	64	0.000	3.42	-0.05	3.09	0.00	-2.92	0.00
		28	1.435	3.42	-0.05	2.27	0.00	0.92	0.08
	CO2	64	0.000	-2.82	0.88	-1.01	-0.00	1.52	0.72
		28	1.435	-2.82	0.88	-1.83	-0.00	-0.52	-0.55
	CO3	64	0.000	-0.92	-0.01	1.98	-0.00	-0.60	-0.02
		28	1.435	-0.92	-0.01	-0.77	-0.00	0.27	-0.01
	CO4	64	0.000	-0.74	0.00	0.95	-0.00	-0.02	-0.01
		28	1.435	-0.74	0.00	-0.73	-0.00	0.14	-0.01
	LC1	28	0.000	-0.30	-0.16	-0.37	0.00	0.03	-0.06
		75	0.500	-0.30	-0.16	-0.58	0.00	-0.21	0.02
	LC2	28	0.000	3.05	-0.33	1.58	-0.00	0.59	-0.18
		75	0.500	3.05	-0.33	1.58	-0.00	1.38	-0.02
	LC3	28	0.000	-2.23	0.18	-1.12	0.00	-0.41	-0.04
		75	0.500	-2.23	0.18	-1.12	0.00	-0.97	-0.13
	LC4	28	0.000	0.39	-1.02	-0.11	0.00	0.17	-0.35
		75	0.500	0.39	-1.02	-0.11	0.00	0.12	0.16

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]		
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v
90	LC5	28	0.000	-0.01	-0.18	-0.24	0.00	0.07	-0.06
		75	0.500	-0.01	-0.18	-0.24	0.00	-0.06	0.03
	CO1	28	0.000	4.17	-0.72	1.86	-0.00	0.92	-0.35
		75	0.500	4.17	-0.72	1.58	-0.00	1.78	0.01
	CO2	28	0.000	-3.43	0.02	-2.02	0.00	-0.52	-0.14
		75	0.500	-3.43	0.02	-2.30	0.00	-1.60	-0.15
	CO3	28	0.000	0.12	-1.60	-0.65	0.00	0.27	-0.55
		75	0.500	0.12	-1.60	-0.94	0.00	-0.13	0.25
	CO4	28	0.000	-0.43	-0.49	-0.87	0.00	0.14	-0.17
		75	0.500	-0.43	-0.49	-1.15	0.00	-0.37	0.08
91	LC1	87	0.000	0.24	-0.45	-1.01	-0.00	-0.53	-0.18
		100	0.459	0.24	-0.45	-1.20	-0.00	-1.04	0.02
	LC2	87	0.000	-0.95	0.50	0.44	0.00	0.10	-0.63
		100	0.459	-0.95	0.50	0.44	0.00	0.30	-0.86
	LC3	87	0.000	-0.50	-4.71	-0.92	-0.00	0.01	-1.28
		100	0.459	-0.50	-4.71	-0.92	-0.00	-0.41	0.88
	LC4	87	0.000	1.40	-2.43	-2.97	-0.01	-3.05	-0.98
		100	0.459	1.40	-2.43	-2.97	-0.01	-4.41	0.13
	LC5	87	0.000	0.18	-0.25	-0.67	-0.00	-0.34	-0.10
		100	0.459	0.18	-0.25	-0.67	-0.00	-0.65	0.02
92	CO1	87	0.000	-1.09	0.13	-0.70	-0.00	-0.57	-1.19
		100	0.459	-1.09	0.13	-0.96	-0.00	-0.95	-1.25
	CO2	87	0.000	-0.36	-6.95	-2.60	-0.01	-0.71	-1.99
		100	0.459	-0.36	-6.95	-2.86	-0.00	-1.96	1.20
	CO3	87	0.000	2.24	-3.90	-5.36	-0.02	-4.84	-1.58
		100	0.459	2.24	-3.90	-5.63	-0.02	-7.36	0.21
	CO4	87	0.000	0.60	-0.99	-2.37	-0.01	-1.24	-0.39
		100	0.459	0.60	-0.99	-2.63	-0.01	-2.39	0.06
	LC1	81	0.000	-0.44	-0.06	1.28	0.00	-0.48	0.02
		93	0.865	-0.44	-0.06	0.91	0.00	0.47	0.07
93	LC2	81	0.000	11.14	0.51	-4.73	0.00	1.43	0.62
		93	0.865	11.14	0.51	-4.73	0.00	-2.66	0.18
	LC3	81	0.000	-2.80	1.77	1.71	0.00	-0.47	1.13
		93	0.865	-2.80	1.77	1.71	0.00	1.01	-0.40
	LC4	81	0.000	1.04	-0.29	0.81	0.00	-0.40	0.12
		93	0.865	1.04	-0.29	0.81	0.00	0.30	0.37
	LC5	81	0.000	0.05	0.00	0.33	0.00	-0.14	0.03
		93	0.865	0.05	0.00	0.33	0.00	0.15	0.02
	CO1	81	0.000	16.12	0.65	-5.38	0.00	1.51	0.93
		93	0.865	16.11	0.64	-5.87	0.00	-3.35	0.37
94	CO2	81	0.000	-4.35	2.35	4.04	0.01	-1.28	1.58
		93	0.865	-4.35	2.35	3.54	0.01	2.00	-0.45
	CO3	81	0.000	0.82	-0.47	2.81	0.00	-1.18	0.18
		93	0.865	0.82	-0.47	2.32	0.00	1.04	0.59
	CO4	81	0.000	-0.52	-0.07	2.23	0.00	-0.85	0.07
		93	0.865	-0.52	-0.07	1.74	0.00	0.87	0.13
	LC1	93	0.000	-0.25	-0.05	-0.31	0.00	0.47	-0.07
		103	0.485	-0.25	-0.05	-0.51	0.00	0.27	-0.04
	LC2	93	0.000	10.43	-0.19	-3.72	-0.00	-2.66	-0.14
		103	0.485	10.43	-0.19	-3.72	-0.00	-4.46	-0.05
99	LC3	93	0.000	-2.73	0.56	1.13	0.00	1.00	0.36
		103	0.485	-2.73	0.56	1.13	0.00	1.55	0.09
	LC4	93	0.000	2.22	-0.24	-2.84	0.01	0.30	-0.35
		103	0.485	2.22	-0.24	-2.84	0.01	-1.07	-0.24
	LC5	93	0.000	0.21	0.01	-0.56	0.00	0.15	-0.03
		103	0.485	0.21	0.01	-0.56	0.00	-0.12	-0.03
	CO1	93	0.000	15.31	-0.37	-5.99	-0.00	-3.35	-0.31
		103	0.485	15.31	-0.37	-6.27	-0.00	-6.32	-0.13
	CO2	93	0.000	-4.01	0.70	1.10	0.00	1.99	0.40
		103	0.485	-4.01	0.70	0.83	0.00	2.46	0.06
100	CO3	93	0.000	2.67	-0.39	-4.24	0.02	1.04	-0.57
		103	0.485	2.67	-0.39	-4.52	0.01	-1.08	-0.38
	CO4	93	0.000	-0.02	-0.05	-1.26	0.01	0.87	-0.13
		103	0.485	-0.02	-0.05	-1.53	0.01	0.19	-0.10
	LC1	42	0.000	-0.26	-0.81	-0.92	-0.01	-0.17	-0.01
		17	0.150	-0.26	-0.81	-0.99	-0.01	-0.31	0.11
	LC2	42	0.000	10.44	-0.02	9.28	0.01	2.88	0.09
		17	0.150	10.44	-0.02	9.28	0.01	4.28	0.10
	LC3	42	0.000	-2.77	0.62	-2.87	-0.00	-0.72	-0.33
		17	0.150	-2.77	0.62	-2.87	-0.00	-1.15	-0.42
101	LC4	42	0.000	2.17	-4.04	0.19	-0.10	0.54	-0.07
		17	0.150	2.17	-4.04	0.19	-0.10	0.57	0.53
	LC5	42	0.000	0.21	-0.81	-0.23	-0.03	0.06	-0.04
		17	0.150	0.21	-0.81	-0.23	-0.03	0.02	0.09
	CO1	42	0.000	15.32	-1.11	12.69	-0.01	4.10	0.12
		17	0.150	15.32	-1.11	12.60	-0.01	6.00	0.29
	CO2	42	0.000	-4.07	-0.26	-5.11	-0.02	-1.19	-0.46
		17	0.150	-4.07	-0.26	-5.20	-0.02	-1.97	-0.43
	CO3	42	0.000	2.60	-6.54	-0.98	-0.15	0.51	-0.11
		17	0.150	2.60	-6.54	-1.07	-0.15	0.36	0.87
102	CO4	42	0.000	-0.04	-2.31	-1.59	-0.06	-0.13	-0.07
		17	0.150	-0.04	-2.31	-1.68	-0.06	-0.38	0.28
	LC1	97	0.000	0.47	0.01	-0.52	-0.00	-0.42	-0.02
		47	0.062	0.47	0.01	-0.55	-0.00	-0.45	-0.02
	LC2	97	0.000	-6.05	0.21	2.83	-0.04	0.59	-0.53
		47	0.062	-6.05	0.21	2.83	-0.04	0.77	-0.54
	LC3	97	0.000	0.75	0.57	0.08	-0.00	-0.11	-0.16
		47	0.062	0.75	0.57	0.08	-0.00	-0.11	-0.20
	LC4	97	0.000	-0.03	-0.00	0.01	-0.00	0.00	0.00
		47	0.062	-0.03	-0.00	0.01	-0.00	0.00	0.00
103	LC5	97	0.000	0.17	0.00	-0.03	-0.00	-0.07	-0.00
		47	0.062	0.17	0.00	-0.03	-0.00	-0.07	-0.00
	CO1	97	0.000	-8.44	0.32	3.54	-0.06	0.31	-0.82
		47	0.062	-8.44	0.31	3.51	-0.06	0.53	-0.84

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
131	CO2	97	0.000	1.66	0.78	-0.60	-0.01	-0.72	-0.25	
		47	0.062	1.66	0.78	-0.63	-0.01	-0.76	-0.29	
	CO3	97	0.000	0.59	0.01	-0.70	-0.00	-0.56	-0.02	
		47	0.062	0.59	0.01	-0.73	-0.00	-0.61	-0.02	
	CO4	97	0.000	0.89	0.01	-0.76	-0.01	-0.68	-0.03	
134	LC1	47	0.062	0.89	0.01	-0.79	-0.01	-0.72	-0.03	
		109	0.000	0.70	-0.08	1.13	0.00	-0.72	-0.03	
	LC2	55	0.860	0.70	-0.08	0.77	0.00	0.10	0.03	
		109	0.000	0.67	0.96	-1.36	0.00	0.52	0.28	
	LC3	55	0.860	0.67	0.96	-1.36	0.00	-0.65	-0.55	
		109	0.000	-4.99	0.90	-1.01	0.00	0.01	0.38	
	LC4	55	0.860	-4.99	0.90	-1.01	0.00	-0.86	-0.39	
		109	0.000	4.07	-0.50	4.33	0.00	-2.97	-0.21	
	LC5	55	0.860	4.07	-0.50	4.33	0.00	0.75	0.22	
		109	0.000	0.44	-0.08	0.69	0.00	-0.50	-0.03	
	CO1	55	0.860	0.44	-0.08	0.69	0.00	0.09	0.04	
		109	0.000	1.94	1.33	-0.51	0.00	-0.19	0.37	
	CO2	55	0.860	1.94	1.33	-1.00	0.00	-0.84	-0.77	
		109	0.000	-5.76	1.12	0.17	0.00	-0.96	0.48	
	CO3	55	0.860	-5.76	1.12	-0.32	0.00	-1.02	-0.49	
109		0.000	6.44	-0.78	7.38	0.01	-4.99	-0.32		
135	CO4	55	0.860	6.45	-0.78	6.89	0.01	1.15	0.35	
		109	0.000	1.61	-0.23	2.57	0.00	-1.72	-0.09	
	LC1	55	0.860	1.61	-0.23	2.08	0.00	0.27	0.11	
		106	0.000	-0.00	-0.03	0.57	-0.00	-0.19	-0.02	
	LC2	64	0.388	-0.00	-0.03	0.40	-0.00	-0.00	-0.01	
		106	0.000	-0.67	0.70	4.28	0.00	-1.66	-0.18	
	LC3	64	0.388	-0.67	0.70	4.28	0.00	0.00	-0.45	
		106	0.000	-1.11	-0.48	-1.55	-0.00	0.60	0.01	
	LC4	64	0.388	-1.11	-0.48	-1.55	-0.00	-0.00	0.20	
		106	0.000	-0.05	-0.29	1.65	0.00	-0.64	-0.10	
	LC5	64	0.388	-0.05	-0.29	1.65	0.00	0.00	0.02	
		106	0.000	0.01	-0.07	0.39	0.00	-0.15	-0.00	
	CO1	64	0.388	0.01	-0.07	0.39	0.00	0.00	0.02	
		106	0.000	-1.01	1.02	7.19	0.00	-2.74	-0.29	
	136	CO2	64	0.388	-1.01	1.02	6.96	0.00	0.01	-0.69
106			0.000	-1.52	-0.69	-1.33	-0.00	0.56	-0.02	
CO3		64	0.388	-1.52	-0.69	-1.55	-0.00	-0.00	0.25	
		106	0.000	-0.07	-0.43	2.99	0.00	-1.12	-0.16	
CO4		64	0.388	-0.07	-0.43	2.77	0.00	0.00	0.01	
		106	0.000	0.01	-0.15	1.34	0.00	-0.48	-0.04	
LC1		64	0.388	0.01	-0.15	1.12	0.00	0.00	0.02	
		111	0.000	-0.40	-0.02	0.41	-0.00	-0.11	-0.02	
LC2		64	1.266	-0.40	-0.02	-0.12	-0.00	0.07	-0.00	
		111	0.000	1.97	-0.69	-2.47	-0.00	1.12	-0.42	
LC3		64	1.266	1.97	-0.69	-2.47	-0.00	-2.01	0.46	
		111	0.000	-1.16	-0.44	0.53	0.00	0.40	-0.22	
LC4		64	1.266	-1.16	-0.44	0.53	0.00	1.06	0.34	
		111	0.000	0.04	-0.05	-0.46	-0.00	0.07	-0.09	
LC5		64	1.266	0.04	-0.05	-0.46	-0.00	-0.51	-0.02	
	111	0.000	-0.03	0.02	-0.00	-0.00	-0.07	0.00		
137	CO1	64	1.266	-0.03	0.02	-0.00	-0.00	-0.07	-0.02	
		111	0.000	2.40	-1.06	-3.15	-0.00	1.53	-0.65	
	CO2	64	1.266	2.40	-1.06	-3.87	-0.00	-2.92	0.69	
		111	0.000	-2.13	-0.63	1.26	0.00	0.39	-0.34	
	CO3	64	1.266	-2.13	-0.63	0.54	0.00	1.52	0.46	
		111	0.000	-0.49	-0.09	-0.06	-0.00	-0.06	-0.14	
	CO4	64	1.266	-0.49	-0.09	-0.78	-0.00	-0.60	-0.03	
		111	0.000	-0.59	0.01	0.55	-0.00	-0.26	-0.02	
	138	LC1	64	1.266	-0.59	0.01	-0.17	-0.00	-0.02	-0.03
			100	0.000	0.24	-0.45	-13.66	0.00	0.40	0.02
		LC2	81	0.041	0.24	-0.45	-13.68	0.00	-0.16	0.04
			100	0.000	12.05	0.50	-13.31	-0.04	0.47	1.13
		LC3	81	0.041	12.05	0.50	-13.31	-0.04	-0.07	1.11
			100	0.000	-0.50	8.29	26.81	-0.06	-0.01	1.81
		LC4	81	0.041	-0.50	8.29	26.81	-0.06	1.08	1.47
100			0.000	1.40	-2.43	-13.35	0.02	-0.04	0.13	
LC5		81	0.041	1.40	-2.43	-13.35	0.02	-0.59	0.23	
		100	0.000	0.18	-0.25	-2.16	0.00	-0.02	0.02	
139		CO1	81	0.041	0.18	-0.25	-2.16	0.00	-0.11	0.03
			100	0.000	18.42	0.07	-38.42	-0.05	1.26	1.69
		CO2	81	0.041	18.42	0.07	-38.45	-0.05	-0.31	1.69
			100	0.000	-0.32	10.64	17.75	-0.08	0.53	2.53
		CO3	81	0.041	-0.32	10.63	17.73	-0.08	1.25	2.09
	100		0.000	2.24	-3.90	-36.48	0.04	0.49	0.21	
	CO4	81	0.041	2.24	-3.91	-36.50	0.04	-1.00	0.37	
		100	0.000	0.60	-0.99	-21.69	0.01	0.51	0.06	
	140	LC1	81	0.041	0.60	-0.99	-21.71	0.01	-0.37	0.10
			103	0.000	-0.25	-0.05	-0.38	0.00	0.27	-0.04
		LC2	42	0.800	-0.25	-0.05	-0.72	0.00	-0.17	-0.01
			103	0.000	10.43	-0.19	9.17	-0.00	-4.46	-0.05
		LC3	42	0.800	10.43	-0.19	9.17	-0.00	2.88	0.10
			103	0.000	-2.73	0.56	-2.84	0.00	1.55	0.09
		LC4	42	0.800	-2.73	0.56	-2.84	0.00	-0.72	-0.36
103			0.000	2.22	-0.24	2.42	0.01	-1.07	-0.24	
LC5		42	0.800	2.22	-0.24	1.62	0.01	0.54	-0.05	
		103	0.000	0.21	0.01	0.22	0.00	-0.12	-0.03	
141		CO1	42	0.800	0.21	0.01	0.22	0.00	0.06	-0.03
			103	0.000	15.32	-0.33	13.26	-0.00	-6.32	-0.13
		CO2	42	0.800	15.32	-0.33	12.80	-0.00	4.10	0.14
			103	0.000	-4.00	0.69	-4.34	0.00	2.46	0.06
		CO3	42	0.800	-4.00	0.69	-4.80	0.00	-1.19	-0.49
	103		0.000	2.67	-0.38	2.76	0.01	-1.08	-0.38	
	CO4	42	0.800	2.67	-0.38	1.22	0.01	0.51	-0.08	
		103	0.000	2.67	-0.38	1.22	0.01	0.51	-0.08	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
138	CO4	103	0.000	-0.02	-0.05	-0.18	0.01	0.19	-0.10	
		42	0.800	-0.02	-0.05	-0.63	0.01	-0.13	-0.06	
Section No. 4: IPE 300										
45	LC1	1	0.000	0.09	0.00	1.09	0.00	-0.34	0.00	
		11	5.150	0.09	0.00	-1.09	0.00	-0.33	-0.01	
	LC2	1	0.000	0.42	-0.02	0.00	0.00	-0.00	-0.14	
		11	5.150	0.42	-0.02	0.00	0.00	0.01	-0.01	
	LC3	1	0.000	-0.48	0.04	0.08	-0.00	-0.37	0.15	
		11	5.150	-0.48	0.04	0.08	-0.00	0.04	-0.04	
	LC4	1	0.000	-0.00	0.00	0.00	0.00	-0.00	0.00	
		11	5.150	-0.00	0.00	0.00	0.00	0.00	-0.00	
	LC5	1	0.000	0.04	-0.00	0.21	0.00	-0.09	-0.00	
		11	5.150	0.04	-0.00	-0.21	0.00	-0.09	0.00	
	CO1	1	0.000	0.76	-0.03	1.47	0.00	-0.46	-0.20	
		11	5.150	0.76	-0.03	-1.46	0.00	-0.43	-0.02	
	CO2	1	0.000	-0.52	0.05	1.58	0.00	-0.95	0.21	
		11	5.150	-0.52	0.05	-1.36	-0.00	-0.39	-0.05	
	CO3	1	0.000	0.12	0.00	1.47	0.00	-0.45	0.00	
		11	5.150	0.12	0.00	-1.47	0.00	-0.44	-0.01	
46	CO4	1	0.000	0.17	0.00	1.78	0.00	-0.59	0.00	
		11	5.150	0.17	0.00	-1.77	0.00	-0.58	-0.01	
	LC1	12	0.000	0.04	-0.01	1.10	-0.00	-0.35	-0.02	
		3	5.150	0.04	-0.01	-1.08	-0.00	-0.31	0.02	
	LC2	12	0.000	-0.41	-0.88	-0.01	-0.00	-0.00	-0.60	
		3	5.150	-0.41	0.82	-0.01	-0.00	-0.04	-0.47	
	LC3	12	0.000	-0.53	-0.04	0.08	0.00	-0.39	-0.16	
		3	5.150	-0.53	-0.04	0.08	0.00	0.03	0.05	
	LC4	12	0.000	-0.00	0.00	0.00	-0.00	0.00	0.00	
		3	5.150	-0.00	0.00	0.00	-0.00	0.00	-0.00	
	LC5	12	0.000	0.01	-0.00	0.21	-0.00	-0.09	-0.01	
		3	5.150	0.01	-0.00	-0.20	-0.00	-0.09	0.01	
	CO1	12	0.000	-0.57	-1.32	1.47	-0.00	-0.47	-0.92	
		3	5.150	-0.57	1.23	-1.47	-0.00	-0.47	-0.67	
	CO2	12	0.000	-0.67	-0.06	1.59	-0.00	-1.00	-0.24	
		3	5.150	-0.67	-0.06	-1.35	-0.00	-0.37	0.09	
47	CO3	12	0.000	0.05	-0.01	1.48	-0.00	-0.47	-0.02	
		3	5.150	0.05	-0.01	-1.46	-0.00	-0.41	0.03	
	CO4	12	0.000	0.06	-0.01	1.79	-0.00	-0.61	-0.03	
		3	5.150	0.06	-0.01	-1.76	-0.00	-0.54	0.04	
	LC1	1	0.000	-0.43	0.01	3.89	-0.00	-1.54	0.01	
		89	1.490	-0.43	0.01	3.27	-0.00	3.80	0.00	
	LC2	1	0.000	-2.53	0.20	1.40	-0.00	-0.22	0.14	
		89	1.490	-2.53	0.20	1.40	-0.00	1.86	-0.15	
	LC3	1	0.000	-0.44	-0.57	3.76	-0.01	-1.66	-0.19	
		89	1.490	-0.44	-0.08	3.76	-0.01	3.94	0.30	
	LC4	1	0.000	-0.01	-0.00	-0.03	0.00	0.02	-0.00	
		89	1.490	-0.01	-0.00	-0.03	0.00	-0.03	-0.00	
	LC5	1	0.000	-0.16	0.00	1.10	-0.00	-0.46	0.00	
		89	1.490	-0.16	0.00	0.98	-0.00	1.09	0.00	
	CO1	1	0.000	-4.38	0.31	7.35	-0.01	-2.41	0.24	
		89	1.490	-4.38	0.31	6.50	-0.00	7.90	-0.22	
48	CO2	1	0.000	-1.17	-0.75	10.36	-0.01	-4.32	-0.23	
		89	1.490	-1.18	-0.10	9.51	-0.01	10.48	0.41	
	CO3	1	0.000	-0.60	0.01	5.21	-0.00	-2.05	0.02	
		89	1.490	-0.60	0.01	4.36	-0.00	5.08	0.01	
	CO4	1	0.000	-0.82	0.01	6.90	-0.00	-2.76	0.03	
		89	1.490	-0.82	0.01	5.88	-0.00	6.76	0.01	
	LC1	11	0.000	-0.93	0.00	5.92	-0.00	-2.87	0.02	
		59	1.940	-0.93	0.00	5.10	-0.00	7.82	0.01	
	LC2	11	0.000	-3.91	-0.12	2.92	0.00	-1.21	-0.00	
		59	1.940	-3.91	-0.12	2.92	0.00	4.45	0.23	
	LC3	11	0.000	-0.16	-0.00	-0.07	-0.01	0.07	-0.04	
		59	1.940	-0.16	-0.00	-0.07	-0.01	-0.07	-0.03	
	LC4	11	0.000	-0.00	-0.00	-0.01	0.00	0.01	-0.00	
		59	1.940	-0.00	-0.00	-0.01	0.00	-0.01	-0.00	
	LC5	11	0.000	-0.30	0.00	1.24	-0.00	-0.61	0.01	
		59	1.940	-0.30	0.00	1.09	-0.00	1.66	0.00	
49	CO1	11	0.000	-7.12	-0.17	12.38	-0.00	-5.69	0.02	
		59	1.940	-7.13	-0.17	11.26	-0.00	17.25	0.36	
	CO2	11	0.000	-1.47	0.01	7.89	-0.01	-3.77	-0.02	
		59	1.940	-1.48	0.00	6.78	-0.01	10.46	-0.03	
	CO3	11	0.000	-1.26	0.01	7.98	-0.00	-3.86	0.03	
		59	1.940	-1.26	0.01	6.88	-0.00	10.55	0.01	
	CO4	11	0.000	-1.70	0.01	9.86	-0.00	-4.78	0.04	
		59	1.940	-1.70	0.01	8.52	-0.00	13.05	0.02	
	LC1	32	0.000	-0.50	-0.00	1.09	0.00	-0.75	0.00	
		33	5.150	-0.50	-0.00	-1.09	0.00	-0.75	0.00	
	LC2	32	0.000	0.75	-0.00	0.00	-0.00	-0.02	-0.07	
		33	5.150	0.75	-0.00	0.00	-0.00	-0.01	-0.06	
	LC3	32	0.000	-0.98	0.04	-0.30	-0.00	0.88	0.16	
		33	5.150	-0.98	0.04	-0.30	-0.00	-0.69	-0.05	
	LC4	32	0.000	0.00	-0.00	0.00	0.00	-0.00	-0.00	
		33	5.150	0.00	-0.00	0.00	0.00	-0.00	0.00	
	LC5	32	0.000	-0.08	0.00	0.21	-0.00	-0.15	0.00	
		33	5.150	-0.08	0.00	-0.21	-0.00	-0.15	0.00	
50	CO1	32	0.000	0.45	-0.00	1.47	-0.00	-1.05	-0.10	
		33	5.150	0.45	-0.00	-1.46	0.00	-1.03	-0.09	
	CO2	32	0.000	-2.00	0.05	1.06	-0.00	0.16	0.22	
		33	5.150	-2.00	0.05	-1.88	-0.00	-1.94	-0.05	
	CO3	32	0.000	-0.67	-0.00	1.47	0.00	-1.01	0.00	
		33	5.150	-0.67	-0.00	-1.47	0.00	-1.01	0.00	
	CO4	32	0.000	-0.79	0.00	1.78	0.00	-1.24	0.00	
		33	5.150	-0.79	-0.00	-1.78	0.00	-1.23	0.00	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
50	LC1	35	5.150	-0.63	0.00	-1.09	-0.00	-0.74	-0.01	
	LC2	34	0.000	-0.73	-0.85	-0.00	-0.00	0.03	-0.54	
		35	5.150	-0.73	0.85	-0.00	-0.00	0.01	-0.53	
	LC3	34	0.000	-1.07	-0.04	-0.31	0.00	0.89	-0.17	
		35	5.150	-1.07	-0.04	-0.31	0.00	-0.70	0.05	
	LC4	34	0.000	-0.00	0.00	0.00	0.00	-0.00	0.00	
		35	5.150	-0.00	0.00	0.00	0.00	0.00	-0.00	
	LC5	34	0.000	-0.13	0.00	0.21	0.00	-0.15	-0.00	
		35	5.150	-0.13	0.00	-0.21	0.00	-0.15	-0.00	
	CO1	34	0.000	-1.94	-1.28	1.46	0.00	-0.97	-0.81	
		35	5.150	-1.94	1.27	-1.47	-0.00	-0.99	-0.80	
	CO2	34	0.000	-2.30	-0.05	1.06	0.00	0.19	-0.21	
		35	5.150	-2.30	-0.05	-1.88	0.00	-1.94	0.05	
	CO3	34	0.000	-0.86	0.00	1.47	-0.00	-1.01	-0.00	
		35	5.150	-0.86	0.00	-1.47	-0.00	-1.00	-0.00	
51	CO4	34	0.000	-1.05	0.00	1.78	-0.00	-1.23	-0.00	
		35	5.150	-1.05	0.00	-1.78	-0.00	-1.22	-0.00	
	LC1	45	0.000	1.34	-0.00	1.09	-0.00	-0.44	-0.01	
		46	5.150	1.34	-0.00	-1.09	-0.00	-0.44	0.01	
	LC2	45	0.000	1.20	-0.02	-0.00	-0.00	0.01	-0.10	
		46	5.150	1.20	-0.02	-0.00	-0.00	-0.01	-0.01	
	LC3	45	0.000	-0.94	0.04	0.01	0.00	-0.06	0.15	
		46	5.150	-0.94	0.04	0.01	0.00	-0.02	-0.04	
	LC4	45	0.000	0.00	0.00	-0.00	-0.00	0.00	0.00	
		46	5.150	0.00	0.00	-0.00	-0.00	-0.00	-0.00	
	LC5	45	0.000	0.21	-0.00	0.21	-0.00	-0.13	-0.00	
		46	5.150	0.21	-0.00	-0.21	-0.00	-0.13	0.00	
	CO1	45	0.000	3.62	-0.03	1.46	-0.00	-0.57	-0.17	
		46	5.150	3.62	-0.03	-1.47	-0.00	-0.60	-0.00	
	CO2	45	0.000	0.55	0.04	1.48	0.00	-0.67	0.19	
		46	5.150	0.55	0.04	-1.46	-0.00	-0.63	-0.03	
52	CO3	45	0.000	1.81	-0.01	1.47	-0.00	-0.59	-0.01	
		46	5.150	1.81	-0.01	-1.47	-0.00	-0.59	0.01	
	CO4	45	0.000	2.12	-0.01	1.78	-0.00	-0.78	-0.02	
		46	5.150	2.12	-0.01	-1.78	-0.00	-0.78	0.02	
	LC1	32	0.000	-1.62	0.00	3.85	0.00	-3.19	0.01	
		37	2.206	-1.62	0.00	2.92	0.00	4.28	-0.00	
	LC2	32	0.000	-1.66	0.18	2.73	-0.00	-3.78	0.11	
		37	2.206	-1.66	0.18	2.73	-0.00	2.24	-0.28	
	LC3	32	0.000	-0.72	-0.58	1.47	-0.01	-1.32	-0.19	
		37	2.206	-0.72	0.15	1.47	-0.01	1.93	0.28	
	LC4	32	0.000	-0.01	0.00	0.01	0.00	-0.01	0.00	
		37	2.206	-0.01	0.00	0.01	0.00	0.01	-0.00	
	LC5	32	0.000	-0.74	0.00	1.56	-0.00	-1.34	0.00	
		37	2.206	-0.74	0.00	1.38	-0.00	1.90	0.00	
	CO1	32	0.000	-4.69	0.27	9.29	-0.00	-9.98	0.16	
		37	2.206	-4.69	0.27	8.03	0.00	9.13	-0.43	
53	CO2	32	0.000	-3.17	-0.76	7.21	-0.01	-6.11	-0.24	
		37	2.206	-3.17	0.21	5.95	-0.01	8.40	0.37	
	CO3	32	0.000	-2.20	0.00	5.20	0.00	-4.31	0.01	
		37	2.206	-2.20	0.00	3.95	0.00	5.78	-0.00	
	CO4	32	0.000	-3.31	0.00	7.53	0.00	-6.30	0.01	
		37	2.206	-3.31	0.00	6.00	0.00	8.62	0.00	
	LC1	47	0.000	1.12	-0.00	1.09	0.00	-0.45	-0.00	
		48	5.150	1.12	-0.00	-1.09	0.00	-0.44	0.00	
	LC2	47	0.000	-1.19	-0.87	-0.00	-0.00	0.01	-0.61	
		48	5.150	-1.19	0.83	-0.00	-0.00	-0.01	-0.51	
	LC3	47	0.000	-1.09	-0.04	0.01	-0.00	-0.05	-0.16	
		48	5.150	-1.09	-0.04	0.01	-0.00	-0.02	0.04	
	LC4	47	0.000	-0.01	0.00	-0.00	0.00	-0.00	0.00	
		48	5.150	-0.01	0.00	-0.00	0.00	-0.00	-0.00	
	LC5	47	0.000	0.12	-0.00	0.21	0.00	-0.13	-0.00	
		48	5.150	0.12	-0.00	-0.21	0.00	-0.13	0.00	
54	CO1	47	0.000	-0.27	-1.31	1.46	0.00	-0.59	-0.92	
		48	5.150	-0.27	1.24	-1.47	-0.00	-0.61	-0.76	
	CO2	47	0.000	0.04	-0.05	1.48	-0.00	-0.68	-0.22	
		48	5.150	0.04	-0.05	-1.46	0.00	-0.62	0.06	
	CO3	47	0.000	1.51	-0.00	1.47	0.00	-0.61	-0.01	
		48	5.150	1.51	-0.00	-1.47	0.00	-0.59	0.01	
	CO4	47	0.000	1.69	-0.00	1.78	0.00	-0.80	-0.01	
		48	5.150	1.69	-0.00	-1.77	0.00	-0.78	0.01	
	LC1	33	0.000	-2.19	0.00	6.11	0.00	-5.39	-0.00	
		50	2.206	-2.19	0.00	5.18	0.00	7.06	-0.01	
	LC2	33	0.000	-5.24	-0.17	5.89	0.00	-6.30	-0.09	
		50	2.206	-5.24	-0.17	5.89	0.00	6.70	0.28	
	LC3	33	0.000	0.65	-0.01	-1.28	-0.01	1.05	-0.05	
		50	2.206	0.65	-0.01	-1.28	-0.01	-1.77	-0.02	
	LC4	33	0.000	0.01	0.00	-0.00	0.00	0.00	0.00	
		50	2.206	0.01	0.00	-0.00	0.00	-0.01	-0.00	
55	LC5	33	0.000	-0.32	-0.00	1.13	-0.00	-1.05	-0.00	
		50	2.206	-0.32	-0.00	0.95	-0.00	1.25	-0.00	
	CO1	33	0.000	-10.83	-0.25	17.09	0.01	-16.73	-0.14	
		50	2.206	-10.83	-0.24	15.83	0.01	19.59	0.40	
	CO2	33	0.000	-2.08	0.00	6.51	-0.02	-5.84	-0.06	
		50	2.206	-2.08	-0.01	5.25	-0.02	7.13	-0.04	
	CO3	33	0.000	-2.95	-0.00	8.25	0.00	-7.28	-0.00	
		50	2.206	-2.95	0.00	6.99	0.00	9.53	-0.01	
	CO4	33	0.000	-3.44	-0.00	9.95	0.00	-8.86	-0.01	
		50	2.206	-3.44	0.00	8.43	0.00	11.42	-0.01	
	LC1	45	0.000	1.18	0.01	0.76	0.00	-0.48	0.01	
		97	3.368	1.18	0.01	-0.66	0.00	-0.30	-0.01	
	LC2	45	0.000	-1.06	0.17	0.28	0.00	-0.42	0.12	
		97	3.368	-1.06	0.17	0.28	0.00	0.53	-0.45	
	LC3	45	0.000	0.85	-0.56	0.02	0.00	-0.18	-0.19	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]		
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v
55	LC3	97	3.368	0.85	0.55	0.02	0.00	-0.11	-0.16
	LC4	45	0.000	-0.01	-0.00	0.00	-0.00	0.00	-0.00
		97	3.368	-0.01	-0.00	0.00	-0.00	0.00	0.00
	LC5	45	0.000	0.34	0.00	0.15	0.00	-0.11	0.00
		97	3.368	0.34	0.00	-0.12	0.00	-0.07	-0.00
	CO1	45	0.000	0.01	0.26	1.45	0.00	-1.27	0.19
		97	3.368	0.01	0.26	-0.47	0.00	0.38	-0.69
	CO2	45	0.000	2.75	-0.75	1.06	0.00	-0.89	-0.24
		97	3.368	2.75	0.75	-0.86	-0.00	-0.56	-0.24
	CO3	45	0.000	1.58	0.01	1.03	0.00	-0.64	0.01
		97	3.368	1.58	0.01	-0.89	0.00	-0.40	-0.01
	CO4	45	0.000	2.11	0.01	1.25	0.00	-0.82	0.01
		97	3.368	2.11	0.01	-1.07	0.00	-0.51	-0.02
	LC1	46	0.000	2.27	0.01	0.75	-0.00	-0.60	0.01
		48	3.430	2.27	0.01	-0.70	-0.00	-0.53	-0.01
56	LC2	46	0.000	-0.68	-0.12	0.43	0.00	-0.69	-0.03
		48	3.430	-0.68	-0.12	0.43	0.00	0.78	0.37
	LC3	46	0.000	-0.04	0.00	0.02	0.00	-0.03	-0.04
		48	3.430	-0.04	0.00	0.02	0.00	0.05	-0.04
	LC4	46	0.000	-0.00	-0.00	0.00	-0.00	0.00	-0.00
		48	3.430	-0.00	-0.00	0.00	-0.00	0.00	0.00
	LC5	46	0.000	0.44	0.00	0.15	0.00	-0.14	0.00
		48	3.430	0.44	0.00	-0.13	0.00	-0.10	-0.00
	CO1	46	0.000	2.05	-0.17	1.65	0.00	-1.85	-0.04
		48	3.430	2.05	-0.17	-0.31	0.00	0.45	0.54
	CO2	46	0.000	3.01	0.01	1.04	-0.00	-0.86	-0.04
		48	3.430	3.01	0.01	-0.92	0.00	-0.65	-0.06
	CO3	46	0.000	3.06	0.01	1.01	-0.00	-0.81	0.01
		48	3.430	3.06	0.01	-0.95	0.00	-0.71	-0.02
	CO4	46	0.000	3.72	0.01	1.23	0.00	-1.02	0.02
		48	3.430	3.72	0.01	-1.14	0.00	-0.86	-0.02
57	LC1	50	0.000	-3.80	-0.00	-12.98	-0.00	9.07	-0.01
		35	1.224	-3.80	-0.00	-13.50	-0.00	-7.13	-0.00
	LC2	50	0.000	3.51	-0.17	7.10	-0.00	-4.20	0.28
		35	1.224	3.51	-0.17	7.10	-0.00	4.49	0.48
	LC3	50	0.000	0.99	0.02	3.46	0.03	-2.19	-0.02
		35	1.224	0.99	0.02	3.46	0.03	2.04	-0.05
	LC4	50	0.000	-0.01	-0.00	-0.01	-0.00	0.01	-0.00
		35	1.224	-0.01	-0.00	-0.01	-0.00	0.00	0.00
	LC5	50	0.000	-0.87	0.00	-2.66	0.00	1.93	-0.00
		35	1.224	-0.87	0.00	-2.66	0.00	-1.32	-0.00
	CO1	50	0.000	0.13	-0.25	-6.87	-0.01	5.95	0.41
		35	1.224	0.13	-0.25	-7.57	-0.01	-2.89	0.72
	CO2	50	0.000	-3.79	0.03	-12.80	0.03	9.26	-0.04
		35	1.224	-3.78	-0.00	-13.50	0.03	-6.85	-0.06
	CO3	50	0.000	-5.14	-0.01	-17.54	-0.01	12.27	-0.01
		35	1.224	-5.14	0.00	-18.24	-0.01	-9.64	-0.01
58	CO4	50	0.000	-6.44	-0.00	-21.53	-0.01	15.16	-0.01
		35	1.224	-6.44	0.00	-22.23	-0.01	-11.62	-0.01
	LC1	37	0.000	-1.51	-0.00	-6.16	-0.01	4.14	-0.00
		34	1.224	-1.51	-0.00	-6.68	-0.01	-3.72	0.00
	LC2	37	0.000	0.18	0.18	2.68	0.00	-0.06	-0.28
		34	1.224	0.18	0.18	2.68	0.00	3.23	-0.50
	LC3	37	0.000	-0.85	0.18	-3.13	0.02	2.09	0.28
		34	1.224	-0.85	0.58	-3.13	0.02	-1.75	-0.19
	LC4	37	0.000	0.01	-0.00	0.01	-0.00	-0.01	-0.00
		34	1.224	0.01	-0.00	0.01	-0.00	0.01	0.00
	LC5	37	0.000	-0.74	0.00	-2.87	0.00	1.90	0.00
		34	1.224	-0.74	0.00	-2.97	0.00	-1.67	0.00
	CO1	37	0.000	-1.78	0.26	-4.28	-0.00	5.50	-0.43
		34	1.224	-1.78	0.26	-4.98	-0.00	-0.17	-0.75
	CO2	37	0.000	-3.20	0.24	-12.59	0.03	8.43	0.37
		34	1.224	-3.20	0.76	-13.29	0.02	-7.41	-0.24
59	CO3	37	0.000	-2.04	-0.01	-8.29	-0.01	5.57	-0.00
		34	1.224	-2.03	-0.00	-8.98	-0.01	-5.00	0.00
	CO4	37	0.000	-3.16	-0.00	-12.61	-0.01	8.43	0.00
		34	1.224	-3.16	0.00	-13.45	-0.01	-7.52	0.00
	LC1	89	0.000	0.15	0.01	-1.81	0.00	3.07	0.00
		12	1.940	0.15	0.01	-2.63	0.00	-1.24	-0.01
	LC2	89	0.000	1.07	0.20	1.52	0.00	-2.63	-0.15
		12	1.940	1.07	0.20	1.52	0.00	0.31	-0.55
	LC3	89	0.000	-0.28	-0.07	-2.66	0.01	3.74	0.30
		12	1.940	-0.28	0.57	-2.66	0.01	-1.41	-0.19
	LC4	89	0.000	0.02	-0.00	0.05	-0.00	-0.07	-0.00
		12	1.940	0.02	-0.00	0.05	-0.00	0.02	0.00
	LC5	89	0.000	0.02	0.00	-0.56	0.00	0.87	0.00
		12	1.940	0.02	0.00	-0.72	0.00	-0.37	-0.00
	CO1	89	0.000	1.81	0.31	-0.17	0.00	0.20	-0.23
		12	1.940	1.81	0.31	-1.27	0.00	-1.20	-0.83
60	CO2	89	0.000	-0.17	-0.08	-6.06	0.01	9.23	0.41
		12	1.940	-0.17	0.78	-7.16	0.01	-3.59	-0.27
	CO3	89	0.000	0.23	0.01	-2.38	0.00	4.05	0.01
		12	1.940	0.23	0.01	-3.48	0.00	-1.64	-0.01
	CO4	89	0.000	0.23	0.01	-3.29	0.00	5.45	0.01
		12	1.940	0.23	0.01	-4.62	0.00	-2.22	-0.02
	LC1	59	0.000	0.09	0.01	-6.08	0.00	6.55	0.01
		3	1.490	0.09	0.01	-6.71	0.00	-2.97	-0.00
	LC2	59	0.000	2.09	-0.12	1.96	-0.00	-3.03	0.23
		3	1.490	2.09	-0.12	1.96	-0.00	-0.10	0.41
	LC3	59	0.000	0.34	0.01	0.60	0.01	-0.69	-0.03
		3	1.490	0.34	0.01	0.60	0.01	0.21	-0.05
	LC4	59	0.000	0.00	-0.00	0.02	-0.00	-0.02	-0.00
		3	1.490	0.00	-0.00	0.02	-0.00	0.01	0.00
	LC5	59	0.000	0.09	0.00	-1.12	0.00	1.17	0.00

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
60	LC5	3	1.490	0.09	0.00	-1.24	0.00	-0.59	-0.00	
	CO1	59	0.000	3.26	-0.17	-5.26	0.00	4.31	0.36	
		3	1.490	3.26	-0.17	-6.11	-0.00	-4.16	0.61	
	CO2	59	0.000	0.58	0.03	-7.38	0.02	7.90	-0.03	
		3	1.490	0.58	0.01	-8.23	0.02	-3.72	-0.06	
	CO3	59	0.000	0.13	0.01	-8.18	0.00	8.83	0.01	
		3	1.490	0.13	0.01	-9.03	0.00	-4.00	-0.00	
	CO4	59	0.000	0.26	0.02	-9.89	0.00	10.62	0.02	
		3	1.490	0.26	0.01	-10.92	0.00	-4.89	-0.01	
	LC1	67	0.000	-0.39	-0.00	0.88	-0.00	-0.69	-0.00	
		78	3.430	-0.39	-0.00	-0.56	-0.00	-0.14	0.00	
	LC2	67	0.000	-0.28	-0.01	1.83	0.00	-3.16	-0.05	
123		78	3.430	-0.28	-0.01	1.83	0.00	3.10	-0.00	
	LC3	67	0.000	-0.63	-0.57	0.05	0.00	-0.11	-0.07	
		78	3.430	-0.63	0.57	0.05	0.00	0.07	-0.07	
	LC4	67	0.000	0.00	-0.00	0.01	-0.00	-0.01	-0.00	
		78	3.430	0.00	-0.00	0.01	-0.00	0.01	0.00	
	LC5	67	0.000	-0.33	-0.00	0.05	0.00	-0.13	-0.00	
		78	3.430	-0.33	-0.00	0.05	0.00	0.05	0.00	
	CO1	67	0.000	-0.93	-0.02	3.94	-0.00	-5.67	-0.07	
		78	3.430	-0.93	-0.02	1.98	-0.00	4.47	-0.00	
	CO2	67	0.000	-1.39	-0.77	1.27	0.00	-1.08	-0.10	
		78	3.430	-1.39	0.76	-0.69	-0.00	-0.10	-0.10	
	CO3	67	0.000	-0.52	-0.00	1.20	-0.00	-0.95	-0.00	
124		78	3.430	-0.52	-0.00	-0.75	-0.00	-0.18	0.00	
	CO4	67	0.000	-1.02	-0.00	1.28	-0.00	-1.13	-0.00	
		78	3.430	-1.02	-0.00	-0.68	-0.00	-0.11	0.00	
	LC1	72	0.000	-1.21	-0.00	1.00	-0.00	-0.96	-0.00	
		96	3.430	-1.21	-0.00	-0.44	-0.00	0.00	0.00	
	LC2	72	0.000	-0.51	-0.01	2.31	0.00	-4.01	0.01	
		96	3.430	-0.51	-0.01	2.31	0.00	3.91	0.04	
	LC3	72	0.000	0.41	-0.00	0.09	0.00	-0.12	-0.01	
		96	3.430	0.41	-0.00	0.09	0.00	0.20	-0.00	
	LC4	72	0.000	0.00	0.00	0.00	-0.00	-0.00	0.00	
		96	3.430	0.00	0.00	0.00	-0.00	0.00	-0.00	
	LC5	72	0.000	-0.29	-0.00	0.10	-0.00	-0.19	-0.00	
33		96	3.430	-0.29	-0.00	0.10	-0.00	0.14	0.00	
	CO1	72	0.000	-2.38	-0.01	4.82	0.00	-7.31	0.01	
		96	3.430	-2.38	-0.01	2.87	0.00	5.88	0.06	
	CO2	72	0.000	-1.08	-0.00	1.48	-0.00	-1.45	-0.01	
		96	3.430	-1.08	-0.00	-0.47	-0.00	0.28	-0.01	
	CO3	72	0.000	-1.63	-0.00	1.36	-0.00	-1.30	-0.01	
		96	3.430	-1.63	-0.00	-0.60	-0.00	0.01	0.00	
	CO4	72	0.000	-2.07	-0.00	1.50	-0.00	-1.58	-0.01	
		96	3.430	-2.07	-0.00	-0.46	-0.00	0.21	0.00	
	Section No. 5: HE A 240 Euronorm 53-62									
	LC1	1	0.000	-5.20	0.29	0.57	0.00	-1.69	0.66	
34		45	4.324	-7.81	0.29	0.57	0.00	0.80	-0.61	
	LC2	1	0.000	-4.29	0.00	0.13	-0.00	-0.24	0.00	
		45	4.324	-4.29	0.00	0.13	-0.00	0.30	-0.00	
	LC3	1	0.000	-2.93	0.81	0.51	0.00	-1.61	0.41	
		45	4.324	-2.93	-1.00	0.51	0.00	0.59	0.82	
	LC4	1	0.000	0.01	-0.00	-0.01	-0.00	0.02	-0.00	
		45	4.324	0.01	-0.00	-0.01	-0.00	-0.01	-0.00	
	LC5	1	0.000	-1.26	0.04	0.15	0.00	-0.45	0.09	
		45	4.324	-1.26	0.04	0.15	0.00	0.19	-0.07	
	CO1	1	0.000	-13.45	0.40	0.96	0.00	-2.64	0.89	
		45	4.324	-16.97	0.40	0.96	-0.00	1.53	-0.83	
	CO2	1	0.000	-11.01	1.49	1.47	0.00	-4.47	1.44	
35		45	4.324	-14.53	-0.96	1.47	-0.00	1.88	0.28	
	CO3	1	0.000	-7.00	0.40	0.77	0.00	-2.25	0.89	
		45	4.324	-10.52	0.40	0.77	-0.00	1.07	-0.83	
	CO4	1	0.000	-8.90	0.45	1.00	0.00	-2.95	1.02	
		45	4.324	-12.42	0.45	1.00	-0.00	1.36	-0.94	
	LC1	3	0.000	-6.87	-0.30	-1.01	-0.00	3.11	-0.67	
		48	4.324	-9.48	-0.30	-1.01	-0.00	-1.24	0.62	
	LC2	3	0.000	6.28	0.01	-0.71	-0.00	0.16	0.02	
		48	4.324	6.28	0.01	1.10	-0.00	1.00	-0.01	
	LC3	3	0.000	0.50	0.01	0.07	0.00	-0.21	0.04	
		48	4.324	0.50	0.01	0.07	0.00	0.10	-0.02	
	LC4	3	0.000	0.02	-0.00	0.00	0.00	-0.01	-0.00	
36		48	4.324	0.02	-0.00	0.00	0.00	0.00	0.00	
	LC5	3	0.000	-1.06	-0.04	-0.18	-0.00	0.58	-0.09	
		48	4.324	-1.06	-0.04	-0.18	-0.00	-0.21	0.07	
	CO1	3	0.000	0.14	-0.40	-2.43	-0.00	4.44	-0.88	
		48	4.324	-3.38	-0.39	0.30	-0.00	-0.17	0.83	
	CO2	3	0.000	-8.58	-0.38	-1.26	0.00	3.92	-0.84	
		48	4.324	-12.10	-0.38	-1.26	-0.00	-1.53	0.82	
	CO3	3	0.000	-9.25	-0.40	-1.35	0.00	4.19	-0.90	
		48	4.324	-12.77	-0.40	-1.36	-0.00	-1.67	0.84	
	CO4	3	0.000	-10.87	-0.46	-1.63	0.00	5.06	-1.03	
		48	4.324	-14.39	-0.46	-1.63	-0.00	-1.99	0.95	
	LC1	11	0.000	-7.32	-0.29	0.99	0.00	-3.00	-0.66	
37		46	4.324	-9.93	-0.29	0.99	0.00	1.28	0.62	
	LC2	11	0.000	-6.98	0.00	0.45	0.00	-1.20	0.01	
		46	4.324	-6.98	0.00	0.45	0.00	0.76	-0.00	
	LC3	11	0.000	-0.54	0.01	-0.02	0.00	0.07	0.04	
		46	4.324	-0.54	0.01	-0.02	0.00	-0.01	-0.02	
	LC4	11	0.000	0.00	-0.00	-0.00	-0.00	0.01	-0.00	
		46	4.324	0.00	-0.00	-0.00	-0.00	-0.00	0.00	
	LC5	11	0.000	-1.51	-0.04	0.20	0.00	-0.60	-0.09	
		46	4.324	-1.51	-0.04	0.20	0.00	0.25	0.07	
	CO1	11	0.000	-20.37	-0.39	2.01	0.00	-5.84	-0.88	
		46	4.324	-23.88	-0.39	2.02	0.00	2.87	0.83	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
35	CO2	11	0.000	-10.61	-0.38	1.31	-0.00	-3.95	-0.84	
		46	4.324	-14.13	-0.38	1.31	0.00	1.71	0.81	
	CO3	11	0.000	-9.88	-0.40	1.33	-0.00	-4.05	-0.89	
		46	4.324	-13.40	-0.40	1.34	0.00	1.73	0.83	
36	CO4	11	0.000	-12.15	-0.45	1.63	-0.00	-4.95	-1.02	
		46	4.324	-15.67	-0.45	1.63	0.00	2.10	0.94	
	LC1	12	0.000	-3.38	0.29	-0.46	-0.00	1.39	0.66	
		47	4.324	-5.98	0.29	-0.46	-0.00	-0.62	-0.61	
	LC2	12	0.000	4.54	-0.00	-0.58	0.00	-0.31	-0.01	
		47	4.324	4.54	-0.00	1.24	0.00	1.11	-0.00	
	LC3	12	0.000	-1.76	0.81	-0.43	-0.00	1.38	0.39	
		47	4.324	-1.76	-1.01	-0.43	-0.00	-0.48	0.83	
	LC4	12	0.000	0.06	0.00	0.01	0.00	-0.02	0.00	
		47	4.324	0.06	0.00	0.01	0.00	0.01	-0.00	
	LC5	12	0.000	-0.70	0.04	-0.11	-0.00	0.36	0.09	
		47	4.324	-0.70	0.04	-0.11	-0.00	-0.14	-0.07	
37	CO1	12	0.000	2.26	0.39	-1.49	0.00	1.41	0.87	
		47	4.324	-1.26	0.39	1.23	0.00	0.84	-0.82	
	CO2	12	0.000	-6.96	1.48	-1.21	0.00	3.74	1.42	
		47	4.324	-10.48	-0.97	-1.21	0.00	-1.49	0.30	
	CO3	12	0.000	-4.47	0.39	-0.61	-0.00	1.84	0.89	
		47	4.324	-7.99	0.39	-0.61	0.00	-0.82	-0.82	
	CO4	12	0.000	-5.61	0.45	-0.79	-0.00	2.40	1.01	
		47	4.324	-9.13	0.45	-0.80	0.00	-1.04	-0.93	
	LC1	45	0.000	-11.54	0.21	-0.06	0.00	-0.02	0.49	
		67	1.700	-12.56	0.21	-0.06	0.00	-0.12	0.14	
	LC2	45	0.000	-9.79	-0.02	-0.99	-0.00	-0.10	-0.01	
		67	1.700	-9.79	-0.02	-0.99	-0.00	-1.78	0.03	
	LC3	45	0.000	-0.99	1.21	-0.33	-0.00	0.39	0.87	
		67	1.700	-0.99	0.50	-0.33	-0.00	-0.18	-0.59	
	LC4	45	0.000	-0.01	-0.00	-0.00	-0.00	-0.00	-0.00	
		67	1.700	-0.01	-0.00	-0.00	-0.00	-0.01	0.00	
	LC5	45	0.000	-1.79	0.02	-0.14	0.00	0.07	0.05	
		67	1.700	-1.79	0.02	-0.14	0.00	-0.16	0.01	
	CO1	45	0.000	-30.27	0.24	-1.57	-0.00	-0.17	0.66	
		67	1.700	-31.66	0.25	-1.57	-0.00	-2.84	0.24	
38	CO2	45	0.000	-16.97	1.92	-0.54	-0.00	0.50	1.84	
		67	1.700	-18.35	0.96	-0.54	-0.00	-0.41	-0.61	
	CO3	45	0.000	-15.59	0.28	-0.08	0.00	-0.03	0.67	
		67	1.700	-16.97	0.28	-0.08	0.00	-0.17	0.19	
	CO4	45	0.000	-18.27	0.32	-0.29	0.00	0.08	0.75	
		67	1.700	-19.65	0.32	-0.29	0.00	-0.40	0.21	
	LC1	32	0.000	-21.52	1.59	2.67	0.00	-1.64	0.74	
		2	0.581	-21.87	1.59	2.67	0.00	-0.09	-0.19	
	LC2	32	0.000	-17.59	0.28	5.95	-0.01	1.47	0.06	
		2	0.581	-17.59	0.28	5.95	-0.01	4.93	-0.11	
	LC3	32	0.000	-0.82	-2.47	1.07	0.01	-0.73	-0.20	
		2	0.581	-0.82	-2.71	1.07	0.01	-0.11	1.30	
	LC4	32	0.000	-0.03	-0.00	0.02	-0.00	0.01	-0.00	
		2	0.581	-0.03	-0.00	0.02	-0.00	0.02	0.00	
	LC5	32	0.000	-3.80	0.23	1.12	0.00	-0.74	0.11	
		2	0.581	-3.80	0.23	1.12	0.00	-0.09	-0.03	
	CO1	32	0.000	-55.45	2.57	12.53	-0.01	-0.01	1.08	
		2	0.581	-55.92	2.57	12.53	-0.01	7.28	-0.41	
	CO2	32	0.000	-30.25	-1.17	5.06	0.02	-3.21	0.72	
		2	0.581	-30.72	-1.49	5.06	0.02	-0.27	1.50	
39	CO3	32	0.000	-29.09	2.14	3.63	0.00	-2.21	0.99	
		2	0.581	-29.56	2.14	3.63	0.00	-0.10	-0.25	
	CO4	32	0.000	-34.75	2.49	5.27	0.00	-3.33	1.15	
		2	0.581	-35.22	2.49	5.28	0.00	-0.26	-0.29	
	LC1	48	0.000	-11.98	-0.21	0.16	0.00	-0.36	-0.49	
		96	1.700	-13.00	-0.21	0.16	0.00	-0.09	-0.13	
	LC2	48	0.000	13.68	0.01	-1.70	-0.01	0.29	-0.00	
		96	1.700	13.68	0.01	-0.98	-0.01	-1.99	-0.01	
	LC3	48	0.000	-1.26	-0.01	-0.13	0.00	0.04	-0.04	
		96	1.700	-1.26	-0.01	-0.13	0.00	-0.18	-0.03	
	LC4	48	0.000	0.03	-0.00	-0.00	-0.00	0.00	0.00	
		96	1.700	0.03	-0.00	-0.00	-0.00	-0.00	0.00	
	LC5	48	0.000	-1.13	-0.02	0.06	0.00	-0.11	-0.05	
		96	1.700	-1.13	-0.02	0.06	0.00	-0.00	-0.01	
	CO1	48	0.000	4.36	-0.27	-2.33	-0.01	-0.06	-0.67	
		96	1.700	2.98	-0.27	-1.26	-0.01	-3.11	-0.20	
	CO2	48	0.000	-17.83	-0.29	0.04	0.00	-0.43	-0.72	
		96	1.700	-19.21	-0.30	0.04	0.00	-0.37	-0.22	
	CO3	48	0.000	-16.13	-0.28	0.21	0.00	-0.49	-0.66	
		96	1.700	-17.51	-0.28	0.21	0.00	-0.13	-0.18	
40	CO4	48	0.000	-17.87	-0.32	0.31	0.00	-0.66	-0.74	
		96	1.700	-19.25	-0.32	0.31	0.00	-0.13	-0.20	
	LC1	35	0.000	-30.53	-1.55	-4.57	0.00	5.32	-0.72	
		4	0.581	-30.88	-1.55	-4.57	0.00	2.66	0.18	
	LC2	35	0.000	26.69	0.12	9.98	-0.02	1.76	0.01	
		4	0.581	26.69	0.12	10.22	-0.02	7.63	-0.06	
	LC3	35	0.000	0.31	-3.35	1.48	0.00	-1.15	-0.70	
		4	0.581	0.31	-3.35	1.48	0.00	-0.30	1.25	
	LC4	35	0.000	0.03	0.00	-0.00	0.00	0.00	0.00	
		4	0.581	0.03	0.00	-0.00	0.00	0.00	-0.00	
	LC5	35	0.000	-3.86	-0.22	-0.91	0.00	1.10	-0.10	
		4	0.581	-3.86	-0.22	-0.91	0.00	0.58	0.02	
	CO1	35	0.000	-1.17	-1.91	8.80	-0.03	9.83	-0.97	
		4	0.581	-1.64	-1.92	9.16	-0.03	15.05	0.15	
	CO2	35	0.000	-40.69	-6.59	-4.15	0.00	5.61	-1.93	
		4	0.581	-41.16	-6.59	-4.16	0.00	3.19	1.91	
	CO3	35	0.000	-41.18	-2.10	-6.17	0.00	7.19	-0.98	
		4	0.581	-41.65	-2.10	-6.18	0.00	3.60	0.24	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]		
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v
40	CO4	35	0.000	-47.00	-2.43	-7.53	0.00	8.84	-1.14
		4	0.581	-47.48	-2.43	-7.54	0.00	4.46	0.27
41	LC1	47	0.000	-8.67	0.21	-0.14	0.00	0.04	0.49
		78	1.700	-9.70	0.21	-0.14	0.00	-0.20	0.14
	LC2	47	0.000	10.15	-0.00	-1.51	0.01	0.34	-0.00
		78	1.700	10.15	-0.00	-0.80	0.01	-1.62	0.00
	LC3	47	0.000	0.42	1.22	0.25	0.00	-0.35	0.87
		78	1.700	0.42	0.50	0.25	0.00	0.08	-0.59
	LC4	47	0.000	0.09	-0.00	-0.01	-0.00	0.00	0.00
		78	1.700	0.09	-0.00	-0.01	-0.00	-0.01	0.00
	LC5	47	0.000	-0.92	0.02	0.06	0.00	-0.06	0.05
		78	1.700	-0.92	0.02	0.06	0.00	0.05	0.01
	CO1	47	0.000	3.51	0.28	-2.46	0.01	0.57	0.66
		78	1.700	2.13	0.28	-1.39	0.01	-2.70	0.18
	CO2	47	0.000	-11.19	1.92	0.15	0.00	-0.43	1.84
		78	1.700	-12.57	0.96	0.16	0.00	-0.16	-0.61
	CO3	47	0.000	-11.59	0.28	-0.20	0.00	0.06	0.66
		78	1.700	-12.97	0.28	-0.20	0.00	-0.27	0.18
	CO4	47	0.000	-13.09	0.31	-0.09	0.00	-0.04	0.74
		78	1.700	-14.48	0.32	-0.09	0.00	-0.19	0.20
42	LC1	34	0.000	-20.60	1.53	-1.96	-0.00	2.74	0.73
		23	0.581	-20.95	1.53	-1.96	-0.00	1.60	-0.16
	LC2	34	0.000	17.67	-0.28	5.68	0.02	1.90	-0.06
		23	0.581	17.67	-0.28	5.92	0.02	5.28	0.11
	LC3	34	0.000	-0.76	-2.48	-1.03	-0.01	1.27	-0.20
		23	0.581	-0.76	-2.73	-1.03	-0.01	0.67	1.32
	LC4	34	0.000	0.12	0.00	0.02	0.00	0.01	0.00
		23	0.581	0.12	0.00	0.02	0.00	0.02	-0.00
	LC5	34	0.000	-4.04	0.21	-0.93	-0.00	1.22	0.10
		23	0.581	-4.04	0.21	-0.93	-0.00	0.67	-0.02
	CO1	34	0.000	-1.28	1.62	5.89	0.04	6.55	0.90
		23	0.581	-1.76	1.63	6.25	0.04	10.09	-0.05
	CO2	34	0.000	-28.94	-1.26	-4.04	-0.02	5.43	0.72
		23	0.581	-29.41	-1.58	-4.05	-0.01	3.08	1.55
	CO3	34	0.000	-27.64	2.06	-2.61	-0.00	3.70	0.98
		23	0.581	-28.11	2.06	-2.61	-0.00	2.18	-0.22
	CO4	34	0.000	-33.87	2.37	-4.03	-0.00	5.52	1.13
		23	0.581	-34.34	2.37	-4.04	-0.00	3.17	-0.24
43	LC1	33	0.000	-26.79	-1.55	3.96	-0.00	-2.72	-0.72
		22	0.581	-27.14	-1.55	3.96	-0.00	-0.41	0.18
	LC2	33	0.000	-26.43	-0.13	10.76	0.01	0.57	-0.01
		22	0.581	-26.43	-0.13	10.76	0.01	6.82	0.07
	LC3	33	0.000	-4.33	-3.35	-0.64	-0.00	0.87	-0.70
		22	0.581	-4.33	-3.35	-0.64	-0.00	0.49	1.25
	LC4	33	0.000	-0.00	-0.00	-0.00	-0.00	0.00	-0.00
		22	0.581	-0.00	-0.00	-0.00	-0.00	0.00	0.00
	LC5	33	0.000	-3.93	-0.22	0.74	-0.00	-0.44	-0.10
		22	0.581	-3.93	-0.22	0.74	-0.00	-0.01	0.02
	CO1	33	0.000	-75.83	-2.30	21.48	0.01	-2.82	-0.99
		22	0.581	-76.31	-2.29	21.47	0.01	9.68	0.35
	CO2	33	0.000	-41.98	-6.61	4.47	-0.00	-2.49	-1.92
		22	0.581	-42.45	-6.61	4.47	-0.00	0.11	1.92
	CO3	33	0.000	-36.18	-2.10	5.34	-0.00	-3.66	-0.98
		22	0.581	-36.65	-2.10	5.34	-0.00	-0.56	0.25
	CO4	33	0.000	-42.08	-2.43	6.45	-0.00	-4.33	-1.13
		22	0.581	-42.55	-2.44	6.45	-0.00	-0.58	0.28
44	LC1	46	0.000	-14.30	-0.21	-0.48	0.00	0.34	-0.49
		72	1.700	-15.33	-0.21	-0.48	0.00	-0.47	-0.13
	LC2	46	0.000	-14.51	0.03	-1.37	0.00	0.05	0.03
		72	1.700	-14.51	0.03	-1.37	0.00	-2.29	-0.01
	LC3	46	0.000	-3.17	-0.01	0.04	-0.00	-0.03	-0.04
		72	1.700	-3.17	-0.01	0.04	-0.00	0.03	-0.03
	LC4	46	0.000	-0.00	0.00	0.00	-0.00	-0.00	-0.00
		72	1.700	-0.00	0.00	0.00	-0.00	-0.00	-0.00
	LC5	46	0.000	-2.26	-0.02	-0.17	0.00	0.11	-0.05
		72	1.700	-2.26	-0.02	-0.17	0.00	-0.18	-0.01
	CO1	46	0.000	-41.09	-0.24	-2.71	0.00	0.53	-0.61
		72	1.700	-42.47	-0.24	-2.70	0.00	-4.07	-0.20
	CO2	46	0.000	-23.57	-0.29	-0.59	-0.00	0.41	-0.72
		72	1.700	-24.95	-0.29	-0.59	-0.00	-0.60	-0.22
	CO3	46	0.000	-19.31	-0.28	-0.64	0.00	0.46	-0.66
		72	1.700	-20.69	-0.28	-0.64	0.00	-0.64	-0.18
	CO4	46	0.000	-22.71	-0.32	-0.90	0.00	0.62	-0.74
		72	1.700	-24.09	-0.32	-0.90	0.00	-0.90	-0.20
125	LC1	67	0.000	-14.04	0.21	1.04	-0.00	-0.95	0.14
		32	2.388	-15.48	0.21	1.04	-0.00	1.54	-0.36
	LC2	67	0.000	-14.17	-0.00	4.28	0.00	-4.99	0.01
		32	2.388	-14.17	-0.00	4.28	0.00	5.23	0.01
	LC3	67	0.000	-1.11	-0.05	0.39	0.00	-0.33	-0.62
		32	2.388	-1.11	-1.05	0.39	0.00	0.61	0.68
	LC4	67	0.000	-0.02	-0.00	0.01	0.00	-0.02	-0.00
		32	2.388	-0.02	-0.00	0.01	0.00	0.02	0.00
	LC5	67	0.000	-1.94	0.02	0.37	-0.00	-0.29	0.01
		32	2.388	-1.94	0.02	0.37	-0.00	0.60	-0.04
	CO1	67	0.000	-40.22	0.29	7.82	0.00	-8.78	0.20
		32	2.388	-42.17	0.28	7.82	0.00	9.93	-0.48
	CO2	67	0.000	-20.50	0.22	1.94	0.00	-1.73	-0.66
		32	2.388	-22.45	-1.13	1.94	0.00	2.91	0.43
	CO3	67	0.000	-18.99	0.28	1.42	-0.00	-1.30	0.19
		32	2.388	-20.93	0.28	1.42	-0.00	2.10	-0.49
	CO4	67	0.000	-21.86	0.32	1.96	-0.00	-1.72	0.21
		32	2.388	-23.81	0.32	1.96	-0.00	2.97	-0.56
126	LC1	96	0.000	-13.53	-0.21	-0.77	-0.00	0.03	-0.13
		35	2.388	-14.97	-0.21	-0.77	-0.00	-1.81	0.37

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]		
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v
126	LC2	96	0.000	19.04	-0.01	4.61	0.00	-5.95	0.00
		35	2.388	19.04	-0.01	5.61	0.00	6.26	0.01
	LC3	96	0.000	-1.04	-0.00	0.53	-0.00	-0.38	-0.03
		35	2.388	-1.04	-0.00	0.53	-0.00	0.89	-0.02
	LC4	96	0.000	0.03	-0.00	0.00	-0.00	-0.00	0.00
		35	2.388	0.03	-0.00	0.00	-0.00	0.01	0.00
	LC5	96	0.000	-0.94	-0.02	-0.03	-0.00	-0.14	-0.01
		35	2.388	-0.94	-0.02	-0.03	-0.00	-0.22	0.05
	CO1	96	0.000	10.30	-0.29	5.89	0.01	-8.89	-0.18
		35	2.388	8.36	-0.29	7.39	0.01	6.97	0.52
	CO2	96	0.000	-19.64	-0.29	-0.31	-0.00	-0.48	-0.22
		35	2.388	-21.58	-0.29	-0.31	-0.00	-1.22	0.47
	CO3	96	0.000	-18.23	-0.29	-1.04	-0.00	0.04	-0.18
		35	2.388	-20.17	-0.28	-1.03	-0.00	-2.43	0.50
	CO4	96	0.000	-19.68	-0.32	-1.09	-0.00	-0.17	-0.20
		35	2.388	-21.62	-0.32	-1.08	-0.00	-2.76	0.57
127	LC1	78	0.000	-10.45	0.21	-0.44	0.00	0.08	0.14
		34	2.388	-11.89	0.21	-0.44	0.00	-0.98	-0.36
	LC2	78	0.000	14.32	0.01	3.64	-0.01	-4.75	0.01
		34	2.388	14.32	0.01	4.64	-0.01	5.14	-0.02
	LC3	78	0.000	0.54	-0.04	-0.23	-0.00	0.05	-0.62
		34	2.388	0.54	-1.04	-0.23	-0.00	-0.49	0.67
	LC4	78	0.000	0.10	0.00	0.01	-0.00	-0.02	0.00
		34	2.388	0.10	0.00	0.01	-0.00	0.02	0.00
	LC5	78	0.000	-0.83	0.02	-0.19	0.00	-0.00	0.01
		34	2.388	-0.83	0.02	-0.19	0.00	-0.46	-0.04
	CO1	78	0.000	7.37	0.30	4.88	-0.01	-7.04	0.19
		34	2.388	5.43	0.30	6.38	-0.01	6.40	-0.52
	CO2	78	0.000	-13.43	0.23	-0.90	-0.00	0.17	-0.66
		34	2.388	-15.37	-1.13	-0.90	-0.00	-1.99	0.42
	CO3	78	0.000	-13.97	0.28	-0.58	0.00	0.08	0.19
		34	2.388	-15.91	0.28	-0.57	0.00	-1.29	-0.49
128	LC1	72	0.000	-17.08	-0.21	1.77	0.00	-1.57	-0.14
		33	2.388	-18.52	-0.21	1.77	0.00	2.66	0.37
	LC2	72	0.000	-19.99	-0.00	5.51	-0.00	-6.32	-0.01
		33	2.388	-19.99	-0.00	5.51	-0.00	6.85	-0.00
	LC3	72	0.000	-3.44	-0.00	-0.04	0.00	-0.10	-0.03
		33	2.388	-3.44	-0.00	-0.04	0.00	-0.19	-0.02
	LC4	72	0.000	-0.00	-0.00	0.00	0.00	-0.00	-0.00
		33	2.388	-0.00	-0.00	0.00	0.00	0.00	-0.00
	LC5	72	0.000	-2.50	-0.02	0.41	0.00	-0.37	-0.01
		33	2.388	-2.50	-0.02	0.41	0.00	0.61	0.04
	CO1	72	0.000	-53.05	-0.29	10.66	-0.00	-11.61	-0.20
		33	2.388	-54.99	-0.29	10.65	-0.00	13.88	0.49
	CO2	72	0.000	-27.68	-0.29	2.34	0.00	-2.25	-0.22
		33	2.388	-29.62	-0.29	2.34	0.00	3.34	0.47
	CO3	72	0.000	-23.07	-0.29	2.40	0.00	-2.12	-0.18
		33	2.388	-25.01	-0.28	2.39	0.00	3.60	0.50
77	LC1	17	0.000	-1.43	0.65	-0.39	0.03	0.31	0.22
		41	0.700	-1.68	0.65	-0.39	0.03	0.04	-0.24
	LC2	17	0.000	9.52	-0.29	10.05	-0.12	-4.28	-0.26
		41	0.700	9.52	-0.29	10.05	-0.12	2.76	-0.06
	LC3	17	0.000	-2.77	-1.10	-2.18	-0.13	1.15	-0.11
		41	0.700	-2.77	-1.10	-2.18	-0.13	-0.38	0.66
	LC4	17	0.000	-1.09	3.01	1.53	0.14	-0.57	0.71
		41	0.700	-1.09	3.01	1.53	0.14	0.50	-1.40
	LC5	17	0.000	-0.64	0.62	0.11	0.03	-0.02	0.18
		41	0.700	-0.64	0.62	0.11	0.03	0.06	-0.26
	CO1	17	0.000	12.35	0.45	14.57	-0.15	-6.00	-0.09
		41	0.700	12.02	0.45	14.57	-0.15	4.20	-0.41
	CO2	17	0.000	-5.67	-0.61	-3.46	-0.14	1.97	0.14
		41	0.700	-6.00	-0.61	-3.46	-0.14	-0.45	0.56
	CO3	17	0.000	-3.40	4.96	1.56	0.22	-0.36	1.25
		41	0.700	-3.74	4.96	1.56	0.22	0.73	-2.22
78	LC1	17	0.000	-2.89	1.82	-0.35	0.08	0.38	0.55
		41	0.700	-3.23	1.82	-0.35	0.08	0.14	-0.72
	LC2	75	0.000	-0.58	0.16	-0.30	0.02	0.21	0.00
		57	0.700	-0.83	0.16	-0.30	0.02	-0.00	-0.11
	LC3	75	0.000	1.58	0.33	3.05	-0.02	-1.38	-0.00
		57	0.700	1.58	0.33	3.05	-0.02	0.76	-0.23
	LC4	75	0.000	-1.12	-0.18	-2.23	-0.13	0.97	0.00
		57	0.700	-1.12	-0.18	-2.23	-0.13	-0.59	0.12
	LC5	75	0.000	-0.11	1.02	0.39	0.16	-0.12	0.00
		57	0.700	-0.11	1.02	0.39	0.16	0.16	-0.71
	CO1	75	0.000	-0.24	0.18	-0.01	0.03	0.06	0.00
		57	0.700	-0.24	0.18	-0.01	0.03	0.05	-0.12
	CO2	75	0.000	1.58	0.72	4.17	0.01	-1.78	-0.00
		57	0.700	1.24	0.72	4.17	0.01	1.14	-0.50
	CO3	75	0.000	-2.30	-0.02	-3.43	-0.15	1.60	0.00
		57	0.700	-2.64	-0.02	-3.43	-0.15	-0.80	0.01
79	LC1	55	0.000	-0.94	1.60	0.12	0.25	0.13	0.00
		57	0.700	-1.28	1.60	0.12	0.25	0.21	-1.12
	LC2	55	0.000	-1.15	0.49	-0.43	0.08	0.37	0.00
		57	0.700	-1.49	0.49	-0.43	0.08	0.06	-0.34
	LC3	55	0.000	-2.48	0.31	-0.61	-0.02	0.10	0.17
		56	0.700	-2.73	0.31	-0.61	-0.02	-0.33	-0.05

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
79	LC3	56	0.700	-21.28	2.09	5.25	0.03	2.81	0.15	
	LC4	55	0.000	2.30	-0.60	-3.57	-0.10	0.75	-0.45	
		56	0.700	2.30	-0.60	-3.57	-0.10	-1.75	-0.03	
	LC5	55	0.000	0.14	-0.05	-0.41	-0.01	0.09	-0.07	
		56	0.700	0.14	-0.05	-0.41	-0.01	-0.19	-0.04	
	CO1	55	0.000	-7.05	-1.06	-0.79	-0.12	-0.84	-1.44	
		56	0.700	-7.39	-1.06	-0.79	-0.12	-1.39	-0.70	
	CO2	55	0.000	-32.08	3.22	6.24	0.02	-1.02	2.41	
		56	0.700	-32.41	3.22	6.24	0.02	3.34	0.15	
	CO3	55	0.000	-0.25	-0.39	-5.64	-0.16	1.14	-0.38	
		56	0.700	-0.59	-0.39	-5.64	-0.16	-2.80	-0.10	
	CO4	55	0.000	-3.13	0.34	-1.44	-0.04	0.27	0.12	
		56	0.700	-3.47	0.34	-1.44	-0.04	-0.74	-0.12	
	LC1	81	0.000	-14.96	0.68	-0.41	0.02	0.00	0.32	
		65	0.700	-15.21	0.68	-0.41	0.02	-0.28	-0.16	
	LC2	81	0.000	-8.58	0.91	-0.02	0.49	-0.04	-1.50	
80		65	0.700	-8.58	0.91	-0.02	0.49	-0.05	-2.14	
	LC3	81	0.000	25.09	2.29	6.53	0.35	-0.07	1.56	
		65	0.700	25.09	2.29	6.53	0.35	4.50	-0.05	
	LC4	81	0.000	-14.16	0.36	-2.15	0.11	0.02	-0.19	
		65	0.700	-14.16	0.36	-2.15	0.11	-1.48	-0.44	
	LC5	81	0.000	-2.50	0.13	-0.26	0.00	0.00	0.03	
		65	0.700	-2.50	0.13	-0.26	0.00	-0.18	-0.07	
	CO1	81	0.000	-33.07	2.30	-0.60	0.76	-0.05	-1.82	
		65	0.700	-33.41	2.29	-0.60	0.76	-0.47	-3.43	
	CO2	81	0.000	13.69	4.03	8.30	0.51	-0.09	2.54	
		65	0.700	13.35	4.03	8.30	0.51	5.72	-0.29	
	CO3	81	0.000	-39.31	1.42	-3.46	0.18	0.04	0.18	
		65	0.700	-39.65	1.42	-3.46	0.18	-2.39	-0.81	
	CO4	81	0.000	-23.94	1.12	-0.94	0.04	0.01	0.47	
		65	0.700	-24.28	1.12	-0.93	0.04	-0.65	-0.31	
Section No. 7: U 120										
95	LC1	18	0.000	-0.08	0.06	0.12	0.00	0.00	0.04	
		92	1.365	-0.08	0.06	-0.06	0.00	0.04	-0.04	
	LC2	18	0.000	-0.00	0.01	0.07	-0.00	-0.00	0.00	
		92	1.365	-0.00	0.01	0.07	-0.00	0.10	-0.01	
	LC3	18	0.000	-0.01	0.01	-0.02	0.00	0.00	0.00	
		92	1.365	-0.01	0.01	-0.02	0.00	-0.02	-0.00	
	LC4	18	0.000	-0.44	0.35	0.86	0.00	0.00	0.23	
		92	1.365	-0.44	0.35	-0.51	0.00	0.24	-0.25	
	LC5	18	0.000	-0.05	0.04	0.06	0.00	0.00	0.03	
		92	1.365	-0.05	0.04	0.06	0.00	0.08	-0.03	
	CO1	18	0.000	-0.11	0.10	0.27	0.00	-0.00	0.06	
		92	1.365	-0.11	0.10	0.02	0.00	0.20	-0.07	
	CO2	18	0.000	-0.12	0.09	0.14	0.00	0.00	0.06	
		92	1.365	-0.12	0.09	-0.11	0.00	0.02	-0.07	
	CO3	18	0.000	-0.70	0.56	1.32	0.00	0.00	0.37	
96		92	1.365	-0.70	0.56	-0.77	0.00	0.38	-0.40	
	CO4	18	0.000	-0.18	0.14	0.25	0.00	0.00	0.09	
		92	1.365	-0.18	0.14	0.00	0.00	0.17	-0.10	
	LC1	18	0.000	-0.06	-0.08	-0.12	-0.00	0.00	-0.04	
		54	0.995	-0.06	-0.08	-0.25	-0.00	-0.19	0.04	
	LC2	18	0.000	-0.01	-0.00	-0.07	0.00	-0.00	-0.00	
		54	0.995	-0.01	-0.00	-0.07	0.00	-0.07	-0.00	
	LC3	18	0.000	-0.01	-0.01	0.02	-0.00	0.00	-0.00	
		54	0.995	-0.01	-0.01	0.02	-0.00	0.02	0.00	
	LC4	18	0.000	-0.35	-0.44	-0.86	-0.00	0.00	-0.23	
		54	0.995	-0.35	-0.44	-1.85	-0.00	-1.35	0.20	
	LC5	18	0.000	-0.04	-0.05	-0.06	-0.00	0.00	-0.03	
		54	0.995	-0.04	-0.05	-0.06	-0.00	-0.06	0.02	
	CO1	18	0.000	-0.10	-0.11	-0.27	0.00	0.00	-0.06	
		54	0.995	-0.10	-0.11	-0.45	-0.00	-0.36	0.05	
97	CO2	18	0.000	-0.09	-0.12	-0.14	-0.00	0.00	-0.06	
		54	0.995	-0.09	-0.12	-0.32	-0.00	-0.23	0.06	
	CO3	18	0.000	-0.56	-0.70	-1.32	-0.00	0.00	-0.37	
		54	0.995	-0.56	-0.70	-2.85	-0.00	-2.07	0.32	
	CO4	18	0.000	-0.14	-0.18	-0.25	-0.00	0.00	-0.09	
		54	0.995	-0.14	-0.18	-0.43	-0.00	-0.34	0.09	
	LC1	29	0.000	0.71	0.07	0.18	0.00	0.00	0.05	
		90	1.365	0.71	0.07	0.00	0.00	0.13	-0.05	
	LC2	29	0.000	-0.17	-0.00	-0.08	0.00	0.00	-0.01	
		90	1.365	-0.17	-0.00	-0.08	0.00	-0.11	0.00	
	LC3	29	0.000	-0.01	-0.02	0.02	-0.00	-0.00	-0.01	
		90	1.365	-0.01	-0.02	0.02	-0.00	0.03	0.01	
	LC4	29	0.000	3.55	0.39	1.34	0.00	-0.04	0.27	
		90	1.365	3.55	0.39	-0.03	0.00	0.86	-0.26	
	LC5	29	0.000	0.79	0.05	0.45	0.00	-0.01	0.04	
98		90	1.365	0.79	0.05	-0.10	0.00	0.23	-0.03	
	CO1	29	0.000	0.70	0.09	0.13	0.00	0.01	0.06	
		90	1.365	0.70	0.09	-0.12	0.00	0.01	-0.06	
	CO2	29	0.000	0.95	0.07	0.27	0.00	0.00	0.05	
		90	1.365	0.95	0.07	0.03	0.00	0.21	-0.05	
	CO3	29	0.000	5.75	0.62	2.05	0.00	-0.05	0.43	
		90	1.365	5.75	0.62	-0.03	0.01	1.32	-0.41	
	CO4	29	0.000	2.15	0.17	0.92	0.00	-0.02	0.12	
		90	1.365	2.15	0.17	-0.15	0.00	0.51	-0.11	
	LC1	54	0.000	1.18	0.08	0.12	0.00	0.02	0.05	
		86	1.365	1.18	0.08	-0.06	0.00	0.07	-0.06	
	LC2	54	0.000	0.21	0.02	0.09	-0.00	-0.03	0.01	
		86	1.365	0.21	0.02	0.09	-0.00	0.10	-0.01	
	LC3	54	0.000	-0.09	-0.01	-0.06	0.00	0.03	-0.00	
		86	1.365	-0.09	-0.01	-0.06	0.00	-0.05	0.01	
	LC4	54	0.000	6.64	0.46	0.70	0.00	-0.06	0.31	
		86	1.365	6.64	0.46	-0.66	0.00	-0.03	-0.33	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V_y / V_u	V_z / V_v	M_T	M_y / M_u	M_z / M_v	
98	LC5	54	0.000	0.71	0.05	0.32	-0.00	-0.03	0.03	
		86	1.365	0.71	0.05	-0.23	-0.00	0.02	-0.03	
	CO1	54	0.000	1.92	0.14	0.31	-0.00	-0.01	0.09	
		86	1.365	1.92	0.14	0.06	-0.00	0.24	-0.09	
	CO2	54	0.000	1.47	0.10	0.09	0.00	0.07	0.07	
		86	1.365	1.47	0.10	-0.15	0.00	0.03	-0.07	
	CO3	54	0.000	10.57	0.75	1.12	-0.00	-0.05	0.48	
		86	1.365	10.57	0.75	-0.97	0.00	0.05	-0.52	
	CO4	54	0.000	2.66	0.18	0.64	-0.00	-0.02	0.12	
		86	1.365	2.66	0.18	-0.42	-0.00	0.13	-0.13	
	LC1	63	0.000	0.00	0.09	0.11	0.00	0.00	0.06	
		91	1.365	0.00	0.09	-0.08	0.00	0.02	-0.06	
99	LC2	63	0.000	0.00	0.02	-0.04	-0.00	0.00	0.02	
		91	1.365	0.00	0.02	-0.04	-0.00	-0.05	-0.01	
	LC3	63	0.000	0.05	-0.01	-0.02	0.00	-0.00	-0.01	
		91	1.365	0.05	-0.01	-0.02	0.00	-0.03	0.00	
	LC4	63	0.000	-0.00	0.48	0.44	0.00	0.00	0.32	
		91	1.365	-0.00	0.48	-0.92	0.00	-0.33	-0.34	
	LC5	63	0.000	0.02	0.05	0.24	0.00	0.00	0.03	
		91	1.365	0.02	0.05	-0.31	0.00	-0.05	-0.03	
	CO1	63	0.000	0.01	0.15	0.09	-0.00	0.00	0.10	
		91	1.365	0.01	0.15	-0.16	-0.00	-0.05	-0.10	
	CO2	63	0.000	0.07	0.10	0.12	0.00	0.00	0.06	
		91	1.365	0.07	0.10	-0.13	0.00	-0.01	-0.08	
100	CO3	63	0.000	0.00	0.76	0.74	0.00	0.00	0.51	
		91	1.365	0.00	0.76	-1.35	0.00	-0.41	-0.53	
	CO4	63	0.000	0.03	0.19	0.50	0.00	0.00	0.12	
		91	1.365	0.03	0.19	-0.56	0.00	-0.04	-0.13	
	LC1	92	0.000	0.08	-0.06	-0.02	-0.00	-0.00	-0.03	
		86	0.995	0.08	-0.06	-0.16	-0.00	-0.09	0.02	
	LC2	92	0.000	0.01	-0.00	0.06	0.00	0.00	-0.00	
		86	0.995	0.01	-0.00	0.06	0.00	0.06	0.00	
	LC3	92	0.000	-0.01	-0.03	-0.03	-0.00	0.00	-0.01	
		86	0.995	-0.01	-0.03	-0.03	-0.00	-0.03	0.02	
	LC4	92	0.000	0.43	-0.31	-0.18	-0.00	0.00	-0.17	
		86	0.995	0.43	-0.31	-1.17	-0.00	-0.67	0.14	
101	LC5	92	0.000	0.05	-0.03	0.17	0.00	-0.00	-0.02	
		86	0.995	0.05	-0.03	-0.23	0.00	-0.03	0.01	
	CO1	92	0.000	0.12	-0.08	0.06	0.00	0.00	-0.05	
		86	0.995	0.12	-0.08	-0.12	0.00	-0.03	0.03	
	CO2	92	0.000	0.10	-0.11	-0.07	-0.00	-0.00	-0.06	
		86	0.995	0.10	-0.11	-0.25	-0.00	-0.16	0.06	
	CO3	92	0.000	0.69	-0.50	-0.27	-0.00	0.00	-0.28	
		86	0.995	0.69	-0.50	-1.79	-0.00	-1.03	0.22	
	CO4	92	0.000	0.17	-0.12	0.22	0.00	-0.00	-0.07	
		86	0.995	0.17	-0.12	-0.55	0.00	-0.17	0.05	
	LC1	86	0.000	-0.01	-0.03	0.13	-0.00	-0.09	-0.02	
		91	1.365	-0.01	-0.03	-0.05	-0.00	-0.03	0.02	
102	LC2	86	0.000	-0.02	-0.03	-0.22	0.00	0.06	-0.02	
		91	1.365	-0.02	-0.03	-0.22	0.00	-0.24	0.02	
	LC3	86	0.000	-0.42	-0.01	0.07	-0.00	-0.03	-0.01	
		91	1.365	-0.42	-0.01	0.07	-0.00	0.06	0.00	
	LC4	86	0.000	-0.03	-0.16	0.20	-0.00	-0.66	-0.11	
		91	1.365	-0.03	-0.16	0.20	-0.00	-0.39	0.11	
	LC5	86	0.000	-0.01	-0.02	-0.05	-0.00	-0.03	-0.01	
		91	1.365	-0.01	-0.02	-0.05	-0.00	-0.09	0.01	
	CO1	86	0.000	-0.03	-0.08	-0.16	0.00	-0.02	-0.06	
		91	1.365	-0.03	-0.08	-0.40	0.00	-0.40	0.06	
	CO2	86	0.000	-0.58	-0.05	0.27	-0.00	-0.16	-0.04	
		91	1.365	-0.58	-0.05	0.03	-0.00	0.04	0.03	
103	CO3	86	0.000	-0.04	-0.25	0.45	-0.00	-1.02	-0.17	
		91	1.365	-0.04	-0.25	0.21	-0.00	-0.57	0.17	
	CO4	86	0.000	-0.03	-0.06	0.11	-0.00	-0.16	-0.04	
		91	1.365	-0.03	-0.06	-0.13	-0.00	-0.18	0.04	
	LC1	91	0.000	-0.08	-0.05	0.11	-0.00	-0.03	-0.03	
		90	1.285	-0.08	-0.05	-0.06	-0.00	0.00	0.03	
	LC2	91	0.000	0.02	-0.01	0.19	-0.00	-0.24	-0.00	
		90	1.285	0.02	-0.01	0.19	-0.00	0.00	0.01	
	LC3	91	0.000	-0.02	0.05	-0.05	0.00	0.06	0.04	
		90	1.285	-0.02	0.05	-0.05	0.00	0.00	-0.03	
	LC4	91	0.000	-0.43	-0.26	0.95	-0.00	-0.40	-0.15	
		90	1.285	-0.43	-0.26	-0.33	-0.00	0.00	0.18	
104	LC5	91	0.000	-0.06	-0.03	0.07	-0.00	-0.09	-0.02	
		90	1.285	-0.06	-0.03	0.07	-0.00	0.00	0.02	
	CO1	91	0.000	-0.09	-0.07	0.43	-0.00	-0.41	-0.04	
		90	1.285	-0.09	-0.07	0.20	-0.00	0.00	0.05	
	CO2	91	0.000	-0.13	0.01	0.08	0.00	0.04	0.01	
		90	1.285	-0.13	0.01	-0.15	0.00	0.00	0.00	
	CO3	91	0.000	-0.70	-0.41	1.44	-0.00	-0.58	-0.23	
		90	1.285	-0.70	-0.41	-0.53	-0.00	0.01	0.29	
	CO4	91	0.000	-0.19	-0.11	0.26	-0.00	-0.18	-0.06	
		90	1.285	-0.19	-0.11	0.03	-0.00	0.00	0.08	
	LC1	90	0.000	0.76	-0.01	-0.06	-0.00	0.13	-0.01	
		42	1.075	0.76	-0.01	-0.20	-0.00	-0.02	-0.00	
105	LC2	90	0.000	-0.17	0.01	0.11	0.00	-0.11	0.01	
		42	1.075	-0.17	0.01	0.11	0.00	0.01	-0.01	
	LC3	90	0.000	-0.06	-0.04	-0.03	-0.00	0.03	-0.02	
		42	1.075	-0.06	-0.04	-0.03	-0.00	-0.00	0.02	
	LC4	90	0.000	3.80	-0.05	-0.36	-0.00	0.86	-0.07	
		42	1.075	3.80	-0.05	-1.43	-0.00	-0.11	-0.02	
	LC5	90	0.000	0.82	-0.01	-0.02	-0.00	0.23	-0.01	
		42	1.075	0.82	-0.01	-0.45	-0.00	-0.03	-0.00	
	CO1	90	0.000	0.78	0.00	0.08	0.00	0.01	-0.01	
		42	1.075	0.78	0.00	-0.11	0.00	-0.01	-0.01	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
103	CO2	90	0.000	0.95	-0.06	-0.12	-0.00	0.21	-0.04	
		42	1.075	0.95	-0.06	-0.31	-0.00	-0.03	0.03	
	CO3	90	0.000	6.16	-0.08	-0.56	-0.00	1.32	-0.12	
		42	1.075	6.16	-0.07	-2.20	-0.00	-0.16	-0.04	
	CO4	90	0.000	2.25	-0.02	-0.12	-0.00	0.51	-0.03	
104	LC1	42	1.075	2.25	-0.02	-0.96	-0.00	-0.07	-0.01	
		92	0.000	-0.13	-0.01	-0.04	0.00	0.04	-0.01	
	LC2	16	1.075	-0.13	-0.01	-0.18	0.00	-0.08	0.00	
		92	0.000	-0.01	-0.00	0.01	0.00	0.10	-0.00	
	LC3	16	1.075	-0.01	-0.00	0.01	0.00	0.10	0.00	
		92	0.000	-0.04	0.01	0.01	0.00	-0.02	0.01	
	LC4	16	1.075	-0.04	0.01	0.01	0.00	-0.01	-0.01	
		92	0.000	-0.75	-0.08	-0.33	0.00	0.24	-0.08	
	LC5	16	1.075	-0.75	-0.08	-1.40	0.00	-0.69	0.01	
		92	0.000	-0.08	-0.01	-0.11	-0.00	0.08	-0.01	
105	CO1	16	1.075	-0.08	-0.01	-0.11	-0.00	-0.04	0.00	
		92	0.000	-0.19	-0.03	-0.04	0.00	0.20	-0.02	
	CO2	16	1.075	-0.19	-0.03	-0.24	0.00	0.05	0.01	
		92	0.000	-0.23	-0.00	-0.03	0.00	0.02	-0.01	
	CO3	16	1.075	-0.23	-0.00	-0.23	0.00	-0.12	-0.01	
		92	0.000	-1.19	-0.12	-0.50	0.00	0.38	-0.12	
	CO4	16	1.075	-1.19	-0.12	-2.14	0.00	-1.03	0.01	
		92	0.000	-0.30	-0.03	-0.22	0.00	0.17	-0.03	
	LC1	16	1.075	-0.30	-0.03	-0.41	0.00	-0.17	0.00	
		7	0.000	-0.08	-0.01	0.14	0.00	-0.08	-0.01	
106	LC2	7	1.150	-0.08	-0.01	-0.01	0.00	-0.00	0.01	
		16	0.000	0.01	0.03	-0.09	0.00	0.11	0.02	
	LC3	7	1.150	0.01	0.03	-0.09	0.00	-0.00	-0.02	
		16	0.000	0.17	0.02	0.00	0.00	-0.01	0.01	
	LC4	7	1.150	0.17	0.02	0.00	0.00	-0.00	-0.01	
		16	0.000	-0.45	-0.06	1.16	0.00	-0.68	-0.03	
	LC5	7	1.150	-0.45	-0.06	0.01	0.00	-0.00	0.03	
		16	0.000	-0.05	-0.01	0.04	0.00	-0.04	-0.00	
	CO1	7	1.150	-0.05	-0.01	0.04	0.00	-0.00	0.00	
		16	0.000	-0.09	0.03	0.05	0.00	0.05	0.02	
107	CO2	7	1.150	-0.09	0.03	-0.15	0.00	-0.00	-0.02	
		16	0.000	0.13	0.02	0.20	0.00	-0.12	0.01	
	CO3	7	1.150	0.13	0.02	-0.01	0.00	-0.00	-0.01	
		16	0.000	-0.72	-0.10	1.76	0.00	-1.02	-0.05	
	CO4	7	1.150	-0.72	-0.09	0.00	0.00	-0.01	0.05	
		16	0.000	-0.18	-0.02	0.25	0.00	-0.17	-0.01	
	LC1	7	1.150	-0.18	-0.02	0.04	0.00	-0.00	0.01	
		54	0.000	0.16	-0.05	0.29	0.00	-0.19	-0.03	
	LC2	63	1.365	0.16	-0.05	0.11	0.00	0.09	0.03	
		54	0.000	0.04	-0.02	0.02	0.00	-0.07	-0.01	
109	LC3	63	1.365	0.04	-0.02	0.02	0.00	-0.05	0.01	
		54	0.000	-0.03	-0.01	-0.02	-0.00	0.01	-0.01	
	LC4	63	1.365	-0.03	-0.01	-0.02	-0.00	-0.01	0.01	
		54	0.000	0.91	-0.25	2.02	0.00	-1.39	-0.17	
	LC5	63	1.365	0.91	-0.25	0.66	0.00	0.44	0.16	
		54	0.000	0.09	-0.03	0.13	0.00	-0.08	-0.02	
	CO1	63	1.365	0.09	-0.03	0.13	0.00	0.11	0.02	
		54	0.000	0.27	-0.09	0.42	0.00	-0.36	-0.06	
	CO2	63	1.365	0.27	-0.09	0.17	0.00	0.04	0.06	
		54	0.000	0.17	-0.08	0.38	-0.00	-0.23	-0.05	
109	CO3	63	1.365	0.17	-0.08	0.13	0.00	0.11	0.06	
		54	0.000	1.44	-0.39	3.13	-0.00	-2.13	-0.27	
	CO4	63	1.365	1.44	-0.39	1.04	0.00	0.71	0.26	
		54	0.000	0.36	-0.11	0.60	0.00	-0.37	-0.07	
	LC1	63	1.365	0.36	-0.11	0.35	0.00	0.28	0.07	
		49	0.000	0.08	-0.04	0.00	-0.00	0.09	-0.03	
	LC2	49	1.217	0.08	-0.04	-0.16	-0.00	-0.00	0.02	
		63	0.000	0.02	-0.02	0.05	-0.00	-0.05	-0.00	
	LC3	49	1.217	0.02	-0.02	0.05	-0.00	0.01	0.02	
		63	0.000	-0.02	0.03	0.00	0.00	-0.01	0.02	
109	LC4	49	1.217	-0.02	0.03	0.00	0.00	-0.00	-0.02	
		63	0.000	0.43	-0.25	0.22	-0.00	0.44	-0.16	
	LC5	49	1.217	0.43	-0.25	-1.00	-0.00	-0.04	0.15	
		63	0.000	0.05	-0.01	-0.10	-0.00	0.11	-0.01	
	CO1	49	1.217	0.05	-0.01	-0.10	-0.00	-0.02	0.00	
		63	0.000	0.13	-0.08	0.09	-0.00	0.04	-0.04	
	CO2	49	1.217	0.13	-0.08	-0.13	-0.00	0.02	0.06	
		63	0.000	0.07	-0.01	0.01	-0.00	0.11	-0.01	
	CO3	49	1.217	0.07	-0.01	-0.21	-0.00	-0.01	0.00	
		63	0.000	0.68	-0.39	0.30	-0.00	0.71	-0.25	
109	CO4	49	1.217	0.68	-0.39	-1.56	-0.00	-0.05	0.23	
		63	0.000	0.17	-0.08	-0.15	-0.00	0.28	-0.05	
	LC1	49	1.217	0.17	-0.08	-0.37	-0.00	-0.04	0.04	
		29	0.000	0.07	-0.71	0.19	0.00	-0.01	0.00	
	LC2	29	0.068	0.07	-0.71	0.18	0.00	-0.00	0.05	
		49	0.000	-0.00	0.17	-0.08	0.00	0.01	0.01	
	LC3	29	0.068	-0.00	0.17	-0.08	0.00	-0.00	-0.01	
		49	0.000	-0.02	0.01	0.02	-0.00	-0.00	-0.01	
	LC4	29	0.068	-0.02	0.01	0.02	-0.00	0.00	-0.01	
		49	0.000	0.39	-3.55	1.34	-0.04	-0.09	0.03	
109	LC5	29	0.068	0.39	-3.55	1.34	-0.04	-0.00	0.27	
		49	0.000	0.05	-0.79	0.45	-0.01	-0.03	-0.02	
	CO1	29	0.068	0.05	-0.79	0.45	-0.01	-0.00	0.04	
		49	0.000	0.09	-0.70	0.14	0.01	-0.01	0.01	
	CO2	29	0.068	0.09	-0.70	0.13	0.01	-0.00	0.06	
		49	0.000	0.07	-0.95	0.29	0.00	-0.02	-0.02	
	CO3	29	0.068	0.07	-0.95	0.27	0.00	-0.00	0.05	
		49	0.000	0.62	-5.75	2.07	-0.05	-0.14	0.04	
		29	0.068	0.62	-5.75	2.05	-0.05	-0.00	0.43	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
109	CO4	49	0.000	0.17	-2.15	0.93	-0.02	-0.06	-0.02	
		29	0.068	0.17	-2.15	0.92	-0.02	-0.00	0.12	
108	Section No. 8: QRO 80x5 (Hot Formed)									
	LC1	44	0.000	-0.94	0.03	0.17	0.01	-0.10	0.05	
49		2.794	-0.75	0.03	-0.10	0.01	-0.00	-0.02		
	LC2	44	0.000	0.23	0.01	-0.00	-0.00	0.00	0.03	
		49	2.794	0.23	0.01	-0.00	-0.00	-0.00	-0.01	
	LC3	44	0.000	-0.03	-0.00	-0.00	-0.00	0.01	-0.01	
		49	2.794	-0.03	-0.00	-0.00	-0.00	0.00	0.01	
	LC4	44	0.000	-4.04	0.14	0.03	0.02	-0.05	0.26	
		49	2.794	-4.04	0.14	0.03	0.02	0.04	-0.13	
	LC5	44	0.000	-0.95	0.02	0.01	0.00	-0.01	0.03	
		49	2.794	-0.95	0.02	0.01	0.00	0.01	-0.02	
	CO1	44	0.000	-0.92	0.05	0.22	0.00	-0.13	0.10	
		49	2.794	-0.67	0.05	-0.14	0.00	-0.01	-0.05	
	CO2	44	0.000	-1.31	0.03	0.22	0.00	-0.12	0.05	
		49	2.794	-1.06	0.03	-0.14	0.00	-0.00	-0.02	
	CO3	44	0.000	-6.72	0.22	0.27	0.04	-0.20	0.42	
		49	2.794	-6.47	0.22	-0.09	0.04	0.05	-0.21	
	CO4	44	0.000	-2.69	0.06	0.24	0.01	-0.15	0.11	
		49	2.794	-2.44	0.06	-0.12	0.01	0.02	-0.06	
110	LC1	43	0.000	-1.55	0.02	0.17	0.00	-0.11	0.04	
		54	2.868	-1.36	0.02	-0.11	0.00	-0.02	-0.02	
	LC2	43	0.000	-0.30	0.00	0.02	0.01	-0.03	0.02	
		54	2.868	-0.30	0.00	0.02	0.01	0.03	0.00	
	LC3	43	0.000	0.12	0.01	-0.02	-0.00	0.03	0.01	
		54	2.868	0.12	0.01	-0.02	-0.00	-0.03	-0.01	
	LC4	43	0.000	-8.10	0.10	0.08	0.02	-0.16	0.21	
		54	2.868	-8.10	0.10	0.08	0.02	0.07	-0.07	
	LC5	43	0.000	-0.87	0.02	0.02	-0.00	-0.03	0.03	
		54	2.868	-0.87	0.02	0.02	-0.00	0.04	-0.02	
	CO1	43	0.000	-2.53	0.03	0.26	0.01	-0.19	0.08	
		54	2.868	-2.28	0.03	-0.12	0.01	0.01	-0.02	
	CO2	43	0.000	-1.92	0.04	0.20	0.00	-0.10	0.06	
		54	2.868	-1.67	0.04	-0.17	0.00	-0.06	-0.04	
	CO3	43	0.000	-13.03	0.15	0.32	0.03	-0.36	0.34	
		54	2.868	-12.78	0.16	-0.04	0.03	0.06	-0.12	
	CO4	43	0.000	-3.40	0.05	0.26	-0.00	-0.20	0.10	
		54	2.868	-3.15	0.05	-0.11	-0.00	0.03	-0.05	
111	Section No. 9: L 100x100x8									
	LC1	1	0.000	0.01	-0.15	0.13	0.00	-0.08	-0.13	
47		5.519	-0.51	0.15	-0.16	0.00	-0.17	-0.13		
	LC2	1	0.000	3.92	0.00	0.01	-0.00	-0.01	0.00	
		47	5.519	3.92	0.00	0.01	-0.00	0.05	-0.01	
	LC3	1	0.000	-0.19	0.00	-0.01	0.00	0.01	0.01	
		47	5.519	-0.19	0.00	-0.01	0.00	-0.03	-0.00	
	LC4	1	0.000	0.03	-0.00	0.00	-0.00	-0.00	-0.00	
		47	5.519	0.03	-0.00	0.00	-0.00	0.00	0.00	
	LC5	1	0.000	0.01	0.00	-0.00	0.00	0.01	0.00	
		47	5.519	0.01	0.00	-0.00	0.00	-0.01	-0.00	
	CO1	1	0.000	5.90	-0.20	0.19	-0.00	-0.13	-0.17	
		47	5.519	5.19	0.20	-0.20	-0.00	-0.16	-0.20	
	CO2	1	0.000	-0.25	-0.19	0.17	0.00	-0.10	-0.16	
		47	5.519	-0.96	0.20	-0.23	0.00	-0.27	-0.19	
	CO3	1	0.000	0.05	-0.20	0.18	-0.00	-0.11	-0.18	
		47	5.519	-0.66	0.20	-0.22	-0.00	-0.23	-0.18	
	CO4	1	0.000	0.04	-0.20	0.17	-0.00	-0.10	-0.18	
		47	5.519	-0.67	0.20	-0.23	-0.00	-0.24	-0.18	
112	LC1	45	0.000	-1.28	-0.15	0.16	-0.00	-0.17	-0.13	
		12	5.519	-0.75	0.15	-0.13	-0.00	-0.09	-0.14	
	LC2	45	0.000	-4.07	0.00	0.01	0.00	-0.01	0.01	
		12	5.519	-4.07	0.00	0.01	0.00	0.04	-0.02	
	LC3	45	0.000	-0.33	-0.00	0.00	-0.00	-0.02	-0.00	
		12	5.519	-0.33	-0.00	0.00	-0.00	0.00	0.01	
	LC4	45	0.000	-0.02	0.00	-0.00	-0.00	0.00	0.00	
		12	5.519	-0.02	0.00	-0.00	-0.00	-0.00	-0.00	
	LC5	45	0.000	-0.22	-0.00	0.00	-0.00	-0.01	-0.00	
		12	5.519	-0.22	-0.00	0.00	-0.00	0.01	0.00	
	CO1	45	0.000	-7.83	-0.19	0.23	0.00	-0.25	-0.17	
		12	5.519	-7.12	0.20	-0.17	0.00	-0.06	-0.22	
	CO2	45	0.000	-2.18	-0.20	0.23	-0.00	-0.26	-0.18	
		12	5.519	-1.47	0.20	-0.17	-0.00	-0.11	-0.17	
	CO3	45	0.000	-1.75	-0.20	0.22	0.00	-0.23	-0.18	
		12	5.519	-1.04	0.20	-0.18	0.00	-0.12	-0.18	
	CO4	45	0.000	-2.06	-0.20	0.22	0.00	-0.24	-0.18	
		12	5.519	-1.35	0.20	-0.17	0.00	-0.10	-0.18	
113	LC1	11	0.000	0.15	-0.14	0.14	0.00	-0.11	-0.11	
		48	5.519	-0.38	0.15	-0.15	0.00	-0.14	-0.15	
	LC2	11	0.000	5.52	-0.00	-0.01	0.00	0.01	0.00	
		48	5.519	5.52	-0.00	-0.01	0.00	-0.04	0.01	
	LC3	11	0.000	0.35	-0.00	0.00	-0.00	0.00	-0.00	
		48	5.519	0.35	-0.00	0.00	-0.00	0.00	-0.00	
	LC4	11	0.000	0.01	-0.00	0.00	-0.00	-0.00	-0.00	
		48	5.519	0.01	-0.00	0.00	-0.00	0.00	0.00	
	LC5	11	0.000	0.15	0.00	-0.00	-0.00	0.01	0.00	
		48	5.519	0.15	0.00	-0.00	-0.00	-0.00	-0.00	
	CO1	11	0.000	8.48	-0.19	0.17	0.00	-0.12	-0.14	
		48	5.519	7.77	0.21	-0.22	0.00	-0.25	-0.18	
	CO2	11	0.000	0.68	-0.19	0.19	-0.00	-0.14	-0.16	
		48	5.519	-0.03	0.21	-0.21	-0.00	-0.19	-0.20	
	CO3	11	0.000	0.21	-0.19	0.19	0.00	-0.14	-0.15	
		48	5.519	-0.50	0.21	-0.21	0.00	-0.19	-0.20	
	CO4	11	0.000	0.43	-0.19	0.19	0.00	-0.13	-0.15	
		48	5.519	-0.28	0.21	-0.21	0.00	-0.20	-0.21	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
114	LC1	46	0.000	-2.03	-0.15	0.16	0.00	-0.15	-0.15	
		3	5.519	-1.51	-0.14	0.14	0.00	-0.10	-0.11	
	LC2	46	0.000	-5.82	-0.00	-0.01	-0.00	0.01	-0.00	
		3	5.519	-5.82	-0.00	-0.01	-0.00	-0.05	0.01	
	LC3	46	0.000	-0.36	0.00	-0.00	0.00	0.00	-0.00	
		3	5.519	-0.36	0.00	-0.00	0.00	0.00	-0.00	
	LC4	46	0.000	-0.00	0.00	-0.00	0.00	0.00	0.00	
		3	5.519	-0.00	0.00	-0.00	0.00	-0.00	-0.00	
	LC5	46	0.000	-0.44	-0.00	0.00	0.00	-0.00	-0.00	
		3	5.519	-0.44	-0.00	0.00	0.00	0.01	0.00	
	CO1	46	0.000	-11.48	-0.21	0.19	-0.00	-0.18	-0.21	
		3	5.519	-10.77	0.19	-0.20	-0.00	-0.21	-0.15	
	CO2	46	0.000	-3.23	-0.21	0.21	0.00	-0.19	-0.21	
		3	5.519	-2.52	0.19	-0.19	0.00	-0.13	-0.16	
	CO3	46	0.000	-2.75	-0.21	0.21	-0.00	-0.20	-0.20	
		3	5.519	-2.04	0.19	-0.19	-0.00	-0.14	-0.16	
115	CO4	46	0.000	-3.40	-0.21	0.21	-0.00	-0.20	-0.21	
		3	5.519	-2.69	0.19	-0.19	-0.00	-0.12	-0.15	
	LC1	3	0.000	-0.16	-0.22	0.23	-0.00	-0.26	-0.24	
		47	6.724	-0.69	0.22	-0.22	-0.00	-0.23	-0.25	
	LC2	3	0.000	0.37	-0.00	-0.01	-0.00	0.05	-0.01	
		47	6.724	0.37	-0.00	-0.01	-0.00	0.01	-0.00	
	LC3	3	0.000	0.73	-0.00	-0.01	0.00	0.01	-0.00	
		47	6.724	0.73	-0.00	-0.01	0.00	-0.03	0.01	
	LC4	3	0.000	0.00	0.00	0.00	0.00	-0.00	0.00	
		47	6.724	0.00	0.00	0.00	0.00	0.00	-0.00	
	LC5	3	0.000	-0.06	0.00	0.00	-0.00	-0.00	0.00	
		47	6.724	-0.06	0.00	0.00	-0.00	0.00	-0.00	
	CO1	3	0.000	0.34	-0.30	0.30	-0.00	-0.29	-0.34	
		47	6.724	-0.37	0.30	-0.30	-0.00	-0.30	-0.34	
	CO2	3	0.000	0.76	-0.30	0.30	0.00	-0.35	-0.32	
		47	6.724	0.05	0.30	-0.30	-0.00	-0.35	-0.33	
116	CO3	3	0.000	-0.21	-0.30	0.31	0.00	-0.36	-0.32	
		47	6.724	-0.92	0.30	-0.29	-0.00	-0.31	-0.34	
	CO4	3	0.000	-0.30	-0.30	0.31	0.00	-0.36	-0.32	
		47	6.724	-1.01	0.30	-0.29	-0.00	-0.31	-0.34	
	LC1	12	0.000	-0.19	-0.22	0.22	0.00	-0.22	-0.25	
		48	6.724	-0.72	0.22	-0.23	0.00	-0.25	-0.25	
	LC2	12	0.000	0.26	0.00	0.00	0.00	-0.04	0.01	
		48	6.724	0.26	0.00	0.00	0.00	-0.03	0.01	
	LC3	12	0.000	-1.11	-0.00	-0.01	-0.00	0.03	-0.01	
		48	6.724	-1.11	-0.00	-0.01	-0.00	-0.01	0.00	
	LC4	12	0.000	0.00	0.00	0.00	-0.00	-0.00	0.00	
		48	6.724	0.00	0.00	0.00	-0.00	0.00	-0.00	
	LC5	12	0.000	-0.07	-0.00	-0.00	0.00	0.01	-0.00	
		48	6.724	-0.07	-0.00	-0.00	0.00	-0.00	0.00	
	CO1	12	0.000	0.14	-0.30	0.30	0.00	-0.36	-0.32	
		48	6.724	-0.57	0.30	-0.30	0.00	-0.37	-0.32	
117	CO2	12	0.000	-1.74	-0.30	0.29	-0.00	-0.26	-0.36	
		48	6.724	-2.45	0.30	-0.31	0.00	-0.35	-0.33	
	CO3	12	0.000	-0.25	-0.30	0.29	0.00	-0.30	-0.34	
		48	6.724	-0.96	0.30	-0.30	0.00	-0.34	-0.33	
	CO4	12	0.000	-0.36	-0.30	0.29	0.00	-0.29	-0.34	
		48	6.724	-1.07	0.30	-0.31	0.00	-0.34	-0.33	
	LC1	1	0.000	-0.24	-0.22	0.22	-0.00	-0.25	-0.24	
		46	6.724	-0.77	0.22	-0.22	-0.00	-0.24	-0.25	
	LC2	1	0.000	-0.28	-0.00	-0.00	-0.00	0.02	-0.00	
		46	6.724	-0.28	-0.00	-0.00	-0.00	-0.00	-0.00	
	LC3	1	0.000	-1.18	0.00	0.01	0.00	-0.05	0.01	
		46	6.724	-1.18	0.00	0.01	0.00	0.02	-0.00	
	LC4	1	0.000	0.00	-0.00	-0.00	0.00	0.00	-0.00	
		46	6.724	0.00	-0.00	-0.00	0.00	0.00	-0.00	
	LC5	1	0.000	-0.09	0.00	0.00	-0.00	-0.00	0.00	
		46	6.724	-0.09	0.00	0.00	-0.00	0.00	-0.00	
118	CO1	1	0.000	-0.75	-0.30	0.30	-0.00	-0.31	-0.34	
		46	6.724	-1.46	0.30	-0.30	-0.00	-0.32	-0.34	
	CO2	1	0.000	-1.91	-0.30	0.31	0.00	-0.40	-0.32	
		46	6.724	-2.62	0.30	-0.28	-0.00	-0.30	-0.34	
	CO3	1	0.000	-0.33	-0.30	0.30	0.00	-0.34	-0.33	
		46	6.724	-1.04	0.30	-0.30	-0.00	-0.32	-0.34	
	CO4	1	0.000	-0.47	-0.30	0.30	0.00	-0.34	-0.33	
		46	6.724	-1.18	0.30	-0.30	-0.00	-0.32	-0.34	
	LC1	11	0.000	-0.25	-0.22	0.21	0.00	-0.21	-0.25	
		45	6.724	-0.78	0.22	-0.23	0.00	-0.26	-0.24	
	LC2	11	0.000	-0.39	-0.00	-0.00	0.00	0.01	-0.00	
		45	6.724	-0.39	-0.00	-0.00	0.00	-0.02	0.01	
	LC3	11	0.000	0.65	0.00	0.00	-0.00	-0.01	0.00	
		45	6.724	0.65	0.00	0.00	-0.00	0.02	-0.01	
	LC4	11	0.000	0.00	0.00	0.00	-0.00	-0.00	0.00	
		45	6.724	0.00	0.00	0.00	-0.00	0.00	-0.00	
119	LC5	11	0.000	-0.10	-0.00	-0.00	0.00	0.01	-0.00	
		45	6.724	-0.10	-0.00	-0.00	0.00	-0.00	0.00	
	CO1	11	0.000	-0.92	-0.30	0.28	0.00	-0.27	-0.35	
		45	6.724	-1.63	0.30	-0.32	0.00	-0.39	-0.32	
	CO2	11	0.000	0.53	-0.30	0.30	-0.00	-0.29	-0.34	
		45	6.724	-0.18	0.30	-0.30	0.00	-0.32	-0.34	
	CO3	11	0.000	-0.34	-0.30	0.29	0.00	-0.28	-0.34	
		45	6.724	-1.05	0.30	-0.31	0.00	-0.35	-0.33	
	CO4	11	0.000	-0.48	-0.30	0.29	0.00	-0.27	-0.34	
		45	6.724	-1.19	0.30	-0.31	0.00	-0.35	-0.33	
	LC1	45	0.000	-0.84	-0.22	0.22	0.00	-0.24	-0.24	
		33	6.575	-1.33	0.22	-0.22	0.00	-0.24	-0.25	
	LC2	45	0.000	-0.90	0.00	0.01	-0.00	-0.01	0.00	
		33	6.575	-0.90	0.00	0.01	-0.00	0.03	-0.01	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
119	LC3	45	0.000	-3.01	0.00	0.00	0.00	-0.02	0.01	
		33	6.575	-3.01	0.00	0.00	0.00	0.00	-0.00	
	LC4	45	0.000	-0.00	0.00	0.00	-0.00	-0.00	0.00	
		33	6.575	-0.00	0.00	0.00	-0.00	0.00	-0.00	
	LC5	45	0.000	-0.15	0.00	0.00	0.00	-0.00	0.00	
		33	6.575	-0.15	0.00	0.00	0.00	0.00	-0.00	
	CO1	45	0.000	-2.48	-0.29	0.31	-0.00	-0.34	-0.32	
		33	6.575	-3.15	0.30	-0.29	-0.00	-0.28	-0.35	
	CO2	45	0.000	-5.19	-0.30	0.30	0.00	-0.35	-0.32	
		33	6.575	-5.86	0.30	-0.29	0.00	-0.32	-0.35	
	CO3	45	0.000	-1.13	-0.30	0.30	0.00	-0.32	-0.32	
		33	6.575	-1.80	0.30	-0.30	0.00	-0.32	-0.34	
	CO4	45	0.000	-1.35	-0.30	0.30	0.00	-0.32	-0.32	
		33	6.575	-2.02	0.30	-0.30	0.00	-0.32	-0.34	
120	LC1	46	0.000	-0.87	-0.22	0.22	-0.00	-0.22	-0.24	
		32	6.575	-1.37	0.22	-0.23	-0.00	-0.25	-0.24	
	LC2	46	0.000	-1.10	-0.00	-0.01	0.00	0.02	-0.01	
		32	6.575	-1.10	-0.00	-0.01	0.00	-0.04	0.01	
	LC3	46	0.000	2.33	0.00	0.01	-0.00	-0.01	0.00	
		32	6.575	2.33	0.00	0.01	-0.00	0.03	-0.00	
	LC4	46	0.000	-0.00	-0.00	-0.00	0.00	0.00	-0.00	
		32	6.575	-0.00	-0.00	-0.00	0.00	0.00	-0.00	
	LC5	46	0.000	-0.16	-0.00	-0.00	-0.00	0.00	-0.00	
		32	6.575	-0.16	-0.00	-0.00	-0.00	-0.00	0.00	
	CO1	46	0.000	-2.83	-0.30	0.28	0.00	-0.27	-0.34	
		32	6.575	-3.50	0.30	-0.32	0.00	-0.41	-0.32	
	CO2	46	0.000	1.96	-0.30	0.30	-0.00	-0.31	-0.32	
		32	6.575	1.29	0.30	-0.30	-0.00	-0.30	-0.33	
	CO3	46	0.000	-1.18	-0.30	0.29	-0.00	-0.30	-0.33	
		32	6.575	-1.85	0.30	-0.31	-0.00	-0.34	-0.33	
121	LC1	48	0.000	-1.42	-0.30	0.29	-0.00	-0.30	-0.33	
		32	6.575	-2.10	0.30	-0.31	-0.00	-0.35	-0.33	
	LC2	48	0.000	-0.62	-0.22	0.22	0.00	-0.23	-0.24	
		34	6.575	-1.12	0.22	-0.22	0.00	-0.24	-0.24	
	LC3	48	0.000	1.08	-0.00	-0.01	-0.00	0.05	-0.01	
		34	6.575	1.08	-0.00	-0.01	-0.00	0.01	-0.00	
	LC4	48	0.000	2.45	-0.00	-0.00	0.00	0.00	-0.00	
		34	6.575	2.45	-0.00	-0.00	0.00	-0.01	0.01	
	LC5	48	0.000	0.00	0.00	0.00	0.00	0.00	-0.00	
		34	6.575	0.00	0.00	0.00	0.00	0.00	-0.00	
	CO1	48	0.000	-0.07	0.00	0.00	0.00	0.00	-0.00	
		34	6.575	-0.07	0.00	0.00	0.00	0.00	-0.00	
	CO2	48	0.000	0.78	-0.30	0.29	-0.00	-0.23	-0.34	
		34	6.575	0.11	0.30	-0.31	0.00	-0.31	-0.33	
	CO3	48	0.000	2.46	-0.30	0.29	0.00	-0.30	-0.32	
		34	6.575	1.79	0.30	-0.31	0.00	-0.34	-0.31	
122	LC1	48	0.000	-0.83	-0.30	0.30	0.00	-0.31	-0.33	
		34	6.575	-1.51	0.30	-0.30	0.00	-0.33	-0.33	
	LC2	48	0.000	-0.94	-0.30	0.30	0.00	-0.31	-0.33	
		34	6.575	-1.61	0.30	-0.30	0.00	-0.32	-0.33	
	LC3	47	0.000	-0.66	-0.22	0.22	-0.00	-0.23	-0.24	
		35	6.575	-1.16	0.22	-0.23	-0.00	-0.26	-0.24	
	LC4	47	0.000	0.88	0.00	0.00	0.00	-0.04	0.01	
		35	6.575	0.88	0.00	0.00	0.00	-0.02	0.01	
	LC5	47	0.000	-2.89	-0.00	-0.00	-0.00	0.02	-0.01	
		35	6.575	-2.89	-0.00	-0.00	-0.00	-0.00	-0.00	
	CO1	47	0.000	0.01	0.00	0.00	0.00	-0.00	0.00	
		35	6.575	0.01	0.00	0.00	0.00	0.00	-0.00	
	CO2	47	0.000	-0.08	-0.00	-0.00	-0.00	0.00	0.00	
		35	6.575	-0.08	-0.00	-0.00	-0.00	-0.00	0.00	
	CO3	47	0.000	0.43	-0.30	0.30	0.00	-0.37	-0.31	
		35	6.575	-0.24	0.30	-0.30	-0.00	-0.39	-0.31	
129	LC1	47	0.000	-4.78	-0.30	0.29	-0.00	-0.28	-0.34	
		35	6.575	-5.45	0.30	-0.31	-0.00	-0.36	-0.33	
	LC2	47	0.000	-0.88	-0.30	0.29	-0.00	-0.30	-0.33	
		35	6.575	-1.55	0.30	-0.31	-0.00	-0.35	-0.33	
	LC3	47	0.000	-1.01	-0.30	0.29	-0.00	-0.30	-0.33	
		35	6.575	-1.68	0.30	-0.31	-0.00	-0.35	-0.33	
	LC4	45	0.000	0.20	-0.15	0.15	0.00	-0.09	-0.10	
		78	3.828	-0.01	0.15	-0.15	0.00	-0.09	-0.09	
	LC5	45	0.000	5.27	-0.01	0.01	-0.00	0.01	-0.01	
		78	3.828	5.27	-0.01	0.01	-0.00	0.03	0.01	
	CO1	45	0.000	0.17	-0.01	-0.02	0.00	-0.00	-0.00	
		78	3.828	0.17	-0.01	-0.02	0.00	-0.08	0.02	
	CO2	45	0.000	0.02	-0.00	0.00	-0.00	0.00	-0.00	
		78	3.828	0.02	-0.00	0.00	-0.00	0.00	-0.00	
	CO3	45	0.000	0.09	-0.00	0.00	0.00	-0.00	-0.00	
		78	3.828	0.09	-0.00	0.00	0.00	0.00	-0.00	
130	LC1	45	0.000	8.18	-0.21	0.21	-0.00	-0.11	-0.15	
		78	3.828	7.90	0.19	-0.19	0.00	-0.08	-0.11	
	LC2	45	0.000	0.50	-0.21	0.17	0.00	-0.12	-0.13	
		78	3.828	0.22	0.19	-0.23	0.00	-0.24	-0.10	
	LC3	45	0.000	0.30	-0.20	0.20	0.00	-0.12	-0.13	
		78	3.828	0.02	0.20	-0.20	0.00	-0.12	-0.13	
	LC4	45	0.000	0.40	-0.20	0.20	0.00	-0.12	-0.13	
		78	3.828	0.12	0.20	-0.20	0.00	-0.12	-0.13	
	CO1	67	0.000	-0.90	-0.15	0.15	-0.00	-0.10	-0.09	
		97	3.773	-0.70	0.14	-0.14	-0.00	-0.08	-0.09	
	LC2	67	0.000	-5.61	0.00	0.05	0.00	-0.07	-0.00	
		97	3.773	-5.61	0.00	0.05	0.00	0.11	-0.02	
	LC3	67	0.000	-0.11	0.01	0.02	-0.00	-0.09	0.02	
		97	3.773	-0.11	0.01	0.02	-0.00	-0.00	-0.00	
	LC4	67	0.000	-0.02	-0.00	0.00	-0.00	-0.00	-0.00	
		97	3.773	-0.02	-0.00	0.00	-0.00	0.00	0.00	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V _y / V _u	V _z / V _v	M _T	M _y / M _u	M _z / M _v	
130	LC5	67	0.000	-0.20	-0.00	0.00	-0.00	-0.00	-0.00	
		97	3.773	-0.20	-0.00	0.00	-0.00	0.00	0.00	
	CO1	67	0.000	-9.63	-0.19	0.27	0.00	-0.24	-0.13	
		97	3.773	-9.35	0.20	-0.12	0.00	0.05	-0.15	
	CO2	67	0.000	-1.38	-0.19	0.23	-0.00	-0.24	-0.10	
		97	3.773	-1.10	0.20	-0.16	-0.00	-0.11	-0.13	
	CO3	67	0.000	-1.25	-0.20	0.20	-0.00	-0.13	-0.13	
		97	3.773	-0.97	0.20	-0.19	-0.00	-0.11	-0.12	
	CO4	67	0.000	-1.52	-0.20	0.20	-0.00	-0.13	-0.13	
		97	3.773	-1.24	0.19	-0.19	-0.00	-0.11	-0.12	
132	LC1	72	0.000	-1.26	-0.15	0.15	0.00	-0.10	-0.10	
		48	3.828	-1.05	0.15	-0.15	0.00	-0.10	-0.09	
	LC2	72	0.000	-7.12	-0.02	-0.01	-0.00	-0.01	-0.02	
		48	3.828	-7.12	-0.02	-0.01	-0.00	-0.07	0.03	
	LC3	72	0.000	-0.38	0.00	0.01	0.00	-0.01	0.00	
		48	3.828	-0.38	0.00	0.01	0.00	0.02	-0.00	
	LC4	72	0.000	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	
		48	3.828	-0.00	-0.00	-0.00	-0.00	-0.00	0.00	
	LC5	72	0.000	-0.32	-0.00	0.00	0.00	-0.00	-0.00	
		48	3.828	-0.32	-0.00	0.00	0.00	0.00	0.00	
133	CO1	72	0.000	-12.39	-0.22	0.18	-0.00	-0.15	-0.17	
		48	3.828	-12.11	0.18	-0.22	-0.00	-0.23	-0.08	
	CO2	72	0.000	-2.21	-0.20	0.21	0.00	-0.15	-0.13	
		48	3.828	-1.93	0.20	-0.19	0.00	-0.11	-0.13	
	CO3	72	0.000	-1.71	-0.20	0.20	0.00	-0.14	-0.13	
		48	3.828	-1.43	0.20	-0.20	0.00	-0.13	-0.13	
	CO4	72	0.000	-2.19	-0.20	0.20	0.00	-0.14	-0.13	
		48	3.828	-1.91	0.20	-0.20	0.00	-0.13	-0.13	
	LC1	46	0.000	0.42	-0.15	0.15	-0.00	-0.11	-0.09	
		96	3.828	0.21	0.15	-0.14	-0.00	-0.09	-0.09	
146	LC2	46	0.000	6.82	-0.00	0.03	0.00	-0.06	0.00	
		96	3.828	6.82	-0.00	0.03	0.00	0.06	0.01	
	LC3	46	0.000	0.28	-0.00	-0.00	-0.00	0.01	-0.00	
		96	3.828	0.28	-0.00	-0.00	-0.00	-0.00	0.00	
	LC4	46	0.000	0.01	-0.00	-0.00	-0.00	0.00	-0.00	
		96	3.828	0.01	-0.00	-0.00	-0.00	0.00	0.00	
	LC5	46	0.000	0.22	-0.00	0.00	-0.00	-0.00	-0.00	
		96	3.828	0.22	-0.00	0.00	-0.00	0.00	0.00	
	CO1	46	0.000	10.80	-0.20	0.25	0.00	-0.24	-0.12	
		96	3.828	10.52	0.19	-0.15	0.00	-0.04	-0.11	
148	CO2	46	0.000	0.95	-0.20	0.20	-0.00	-0.13	-0.13	
		96	3.828	0.68	0.20	-0.20	-0.00	-0.13	-0.12	
	CO3	46	0.000	0.57	-0.20	0.20	-0.00	-0.14	-0.13	
		96	3.828	0.29	0.20	-0.19	-0.00	-0.12	-0.13	
	CO4	46	0.000	0.90	-0.20	0.21	-0.00	-0.15	-0.13	
		96	3.828	0.62	0.20	-0.19	-0.00	-0.12	-0.12	
	LC1	102	0.000	0.15	0.00	0.00	0.00	0.00	0.00	
		103	0.100	0.13	0.00	-0.00	0.00	0.00	0.00	
	LC2	102	0.000	12.89	0.00	0.00	0.00	0.00	0.00	
		103	0.100	12.89	0.00	0.00	0.00	0.00	0.00	
151	LC3	102	0.000	-3.96	0.00	0.00	0.00	0.00	0.00	
		103	0.100	-3.96	0.00	0.00	0.00	0.00	0.00	
	LC4	102	0.000	5.26	0.00	0.00	0.00	0.00	0.00	
		103	0.100	5.26	0.00	0.00	0.00	0.00	0.00	
	LC5	102	0.000	0.78	0.00	0.00	0.00	0.00	0.00	
		103	0.100	0.78	0.00	0.00	0.00	0.00	0.00	
	CO1	102	0.000	19.55	-0.00	0.00	-0.00	0.00	-0.00	
		103	0.100	19.53	-0.00	-0.00	0.00	-0.00	0.00	
	CO2	102	0.000	-5.15	0.00	0.00	-0.00	-0.00	0.00	
		103	0.100	-5.17	-0.00	-0.00	0.00	0.00	-0.00	
151	CO3	102	0.000	7.30	0.00	0.00	0.00	0.00	-0.00	
		103	0.100	7.28	-0.00	-0.00	0.00	-0.00	0.00	
	CO4	102	0.000	1.37	0.00	0.00	0.00	0.00	-0.00	
		103	0.100	1.36	-0.00	-0.00	0.00	-0.00	0.00	
	LC1	105	0.000	0.36	0.00	0.00	0.00	0.00	0.00	
		106	0.100	0.35	-0.00	-0.00	0.00	0.00	0.00	
	LC2	105	0.000	5.75	0.00	0.00	0.00	0.00	0.00	
		106	0.100	5.75	0.00	0.00	0.00	0.00	0.00	
	LC3	105	0.000	-2.24	0.00	0.00	0.00	0.00	0.00	
		106	0.100	-2.24	0.00	0.00	0.00	0.00	0.00	
151	LC4	105	0.000	-0.32	0.00	0.00	0.00	0.00	0.00	
		106	0.100	-0.32	0.00	0.00	0.00	0.00	0.00	
	LC5	105	0.000	-0.08	0.00	0.00	0.00	0.00	0.00	
		106	0.100	-0.08	0.00	0.00	0.00	0.00	0.00	
	CO1	105	0.000	9.12	0.00	-0.00	-0.00	-0.00	-0.00	
		106	0.100	9.11	-0.00	0.00	0.00	0.00	0.00	
	CO2	105	0.000	-2.52	0.00	0.00	0.00	-0.00	0.00	
		106	0.100	-2.54	-0.00	-0.00	0.00	0.00	-0.00	
	CO3	105	0.000	0.07	0.00	-0.00	0.00	-0.00	-0.00	
		106	0.100	0.05	-0.00	0.00	0.00	0.00	0.00	
151	CO4	105	0.000	0.37	0.00	-0.00	0.00	0.00	-0.00	
		106	0.100	0.35	-0.00	0.00	0.00	-0.00	0.00	
	LC1	108	0.000	1.81	-0.00	-0.00	0.00	0.00	0.00	
		109	0.100	1.80	0.00	0.00	0.00	0.00	0.00	
	LC2	108	0.000	-1.40	0.00	0.00	0.00	0.00	0.00	
		109	0.100	-1.40	0.00	0.00	0.00	0.00	0.00	
	LC3	108	0.000	-1.79	0.00	0.00	0.00	0.00	0.00	
		109	0.100	-1.79	0.00	0.00	0.00	0.00	0.00	
	LC4	108	0.000	6.96	0.00	0.00	0.00	0.00	0.00	
		109	0.100	6.96	0.00	0.00	0.00	0.00	0.00	
151	LC5	108	0.000	0.97	0.00	0.00	0.00	0.00	0.00	
		109	0.100	0.97	0.00	0.00	0.00	0.00	0.00	
	CO1	108	0.000	0.34	0.00	-0.00	0.00	-0.00	-0.00	
		109	0.100	0.32	-0.00	0.00	0.00	0.00	0.00	

Project:

Model: Environox constructie

Date:

26-2-2026

Environox ACT Hengelo voorberekening

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN]			Moments [kNm]			
				N	V_y / V_u	V_z / V_v	M_T	M_y / M_u	M_z / M_v	
151	CO2	108	0.000	0.04	0.00	0.00	0.00	-0.00	-0.00	
		109	0.100	0.02	-0.00	-0.00	0.00	0.00	0.00	
	CO3	108	0.000	11.84	-0.00	-0.00	0.00	-0.00	-0.00	
		109	0.100	11.83	-0.00	0.00	0.00	-0.00	0.00	
152	CO4	108	0.000	3.91	-0.00	-0.00	0.00	-0.00	-0.00	
		109	0.100	3.89	0.00	0.00	0.00	-0.00	0.00	
	LC1	110	0.000	-2.36	0.00	0.00	0.00	0.00	0.00	
		111	0.100	-2.37	-0.00	-0.00	0.00	0.00	0.00	
	LC2	110	0.000	-3.49	0.00	0.00	0.00	0.00	0.00	
		111	0.100	-3.49	0.00	0.00	0.00	0.00	0.00	
	LC3	110	0.000	-19.74	0.00	0.00	0.00	0.00	0.00	
		111	0.100	-19.74	0.00	0.00	0.00	0.00	0.00	
	LC4	110	0.000	-1.51	0.00	0.00	0.00	0.00	0.00	
		111	0.100	-1.51	0.00	0.00	0.00	0.00	0.00	
	LC5	110	0.000	-0.19	0.00	0.00	0.00	0.00	0.00	
		111	0.100	-0.19	0.00	0.00	0.00	0.00	0.00	
	CO1	110	0.000	-8.41	0.00	-0.00	0.00	0.00	0.00	
		111	0.100	-8.42	-0.00	0.00	-0.00	-0.00	-0.00	
	CO2	110	0.000	-29.85	0.00	-0.00	0.00	0.00	0.00	
		111	0.100	-29.86	0.00	0.00	0.00	-0.00	-0.00	
	CO3	110	0.000	-5.23	0.00	-0.00	0.00	0.00	0.00	
		111	0.100	-5.24	-0.00	0.00	0.00	-0.00	-0.00	
	CO4	110	0.000	-3.46	0.00	-0.00	0.00	0.00	0.00	
		111	0.100	-3.48	-0.00	0.00	0.00	-0.00	-0.00	

Project:

Model: Environox constructie

Date:

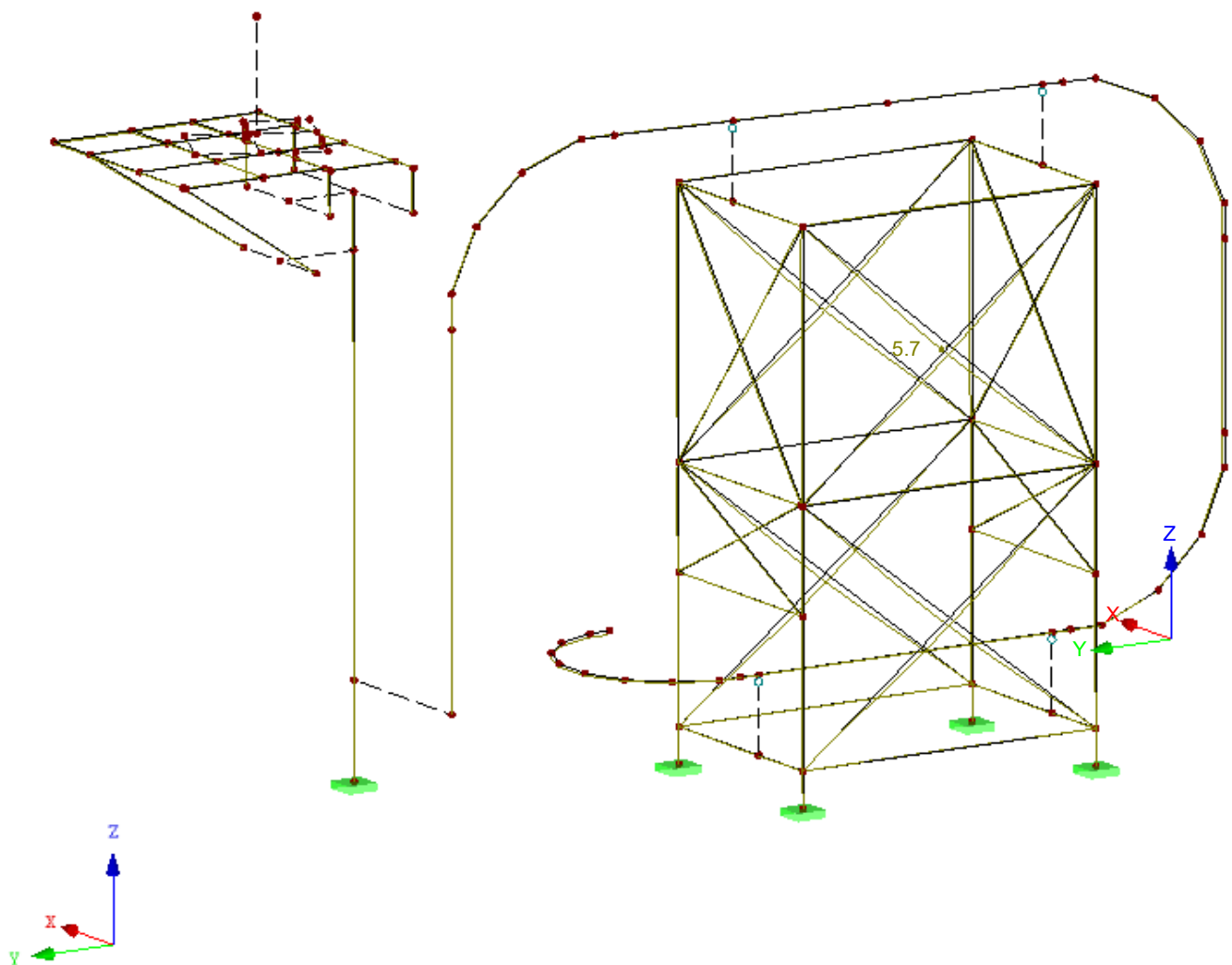
26-2-2026

Environox ACT Hengelo voorberekening

■ GLOBAL DEFORMATIONS u

CO1 : Wind loodrecht
Global Deformations u [mm]

Isometric

Factor of deformations: 28.00
Max u: 5.7, Min u: 0.0 mm

Project:

Model: Environox constructie

Date:

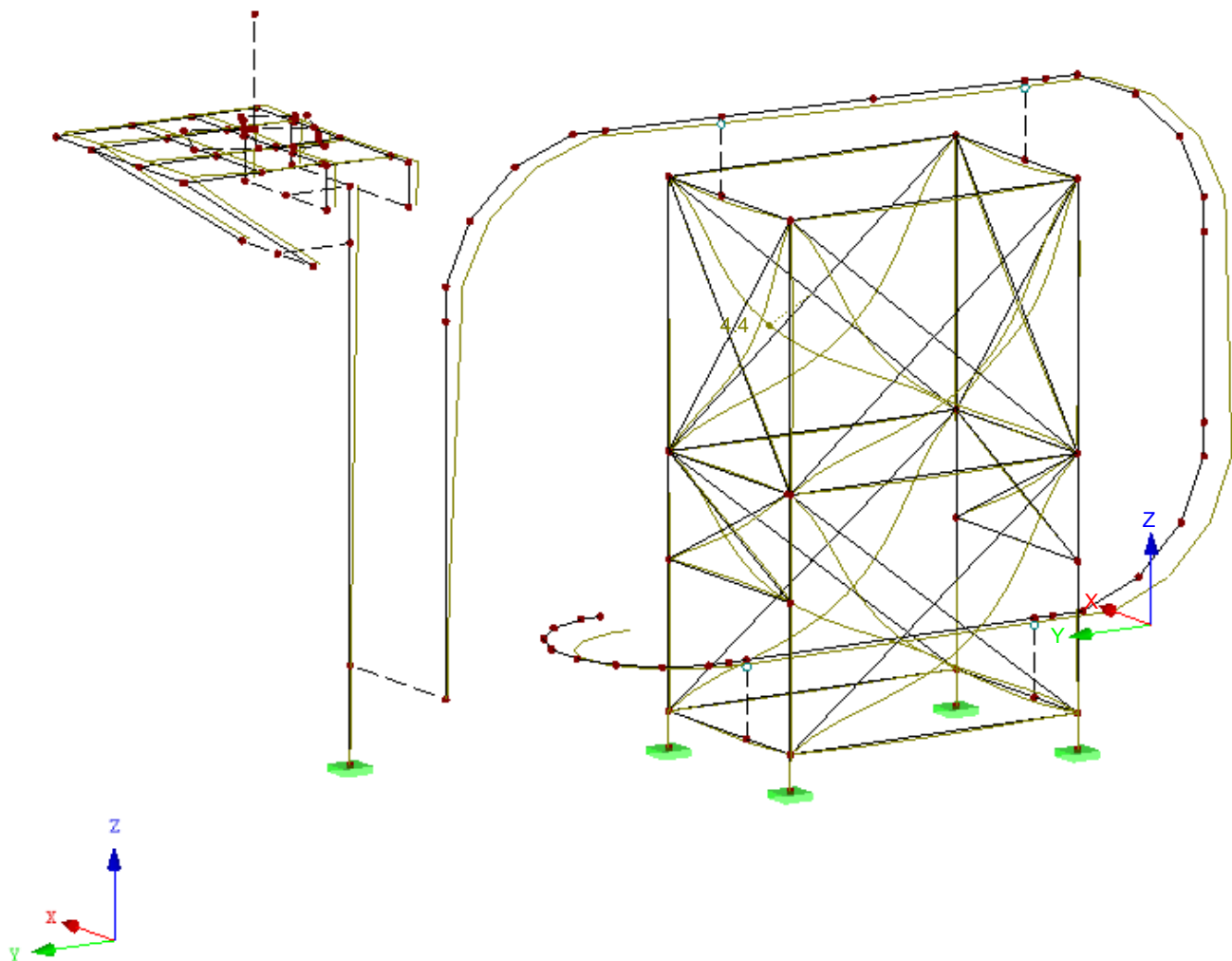
26-2-2026

Environox ACT Hengelo voorberekening

■ GLOBAL DEFORMATIONS u

CO2 : Wind parallel
Global Deformations u [mm]

Isometric

Factor of deformations: 200.00
Max u: 4.4, Min u: 0.0 mm

Project: Model: Environox constructie

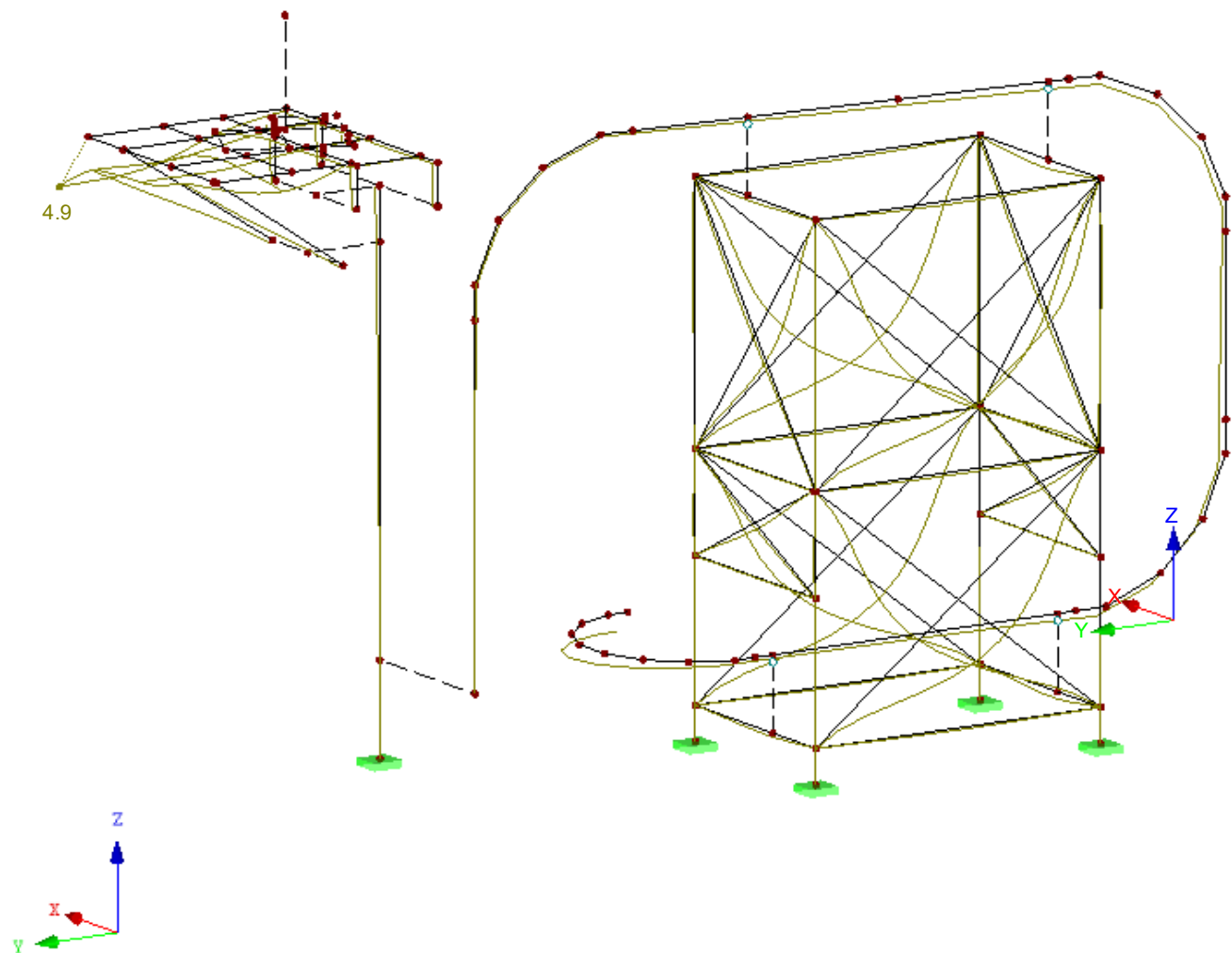
Environox ACT Hengelo voorberekening

Date: 26-2-2026

■ GLOBAL DEFORMATIONS u

CO3 : Platform
Global Deformations u [mm]

Isometric

Factor of deformations: 240.00
Max u: 4.9, Min u: 0.0 mm

Project:

Model: Environox constructie

Date:

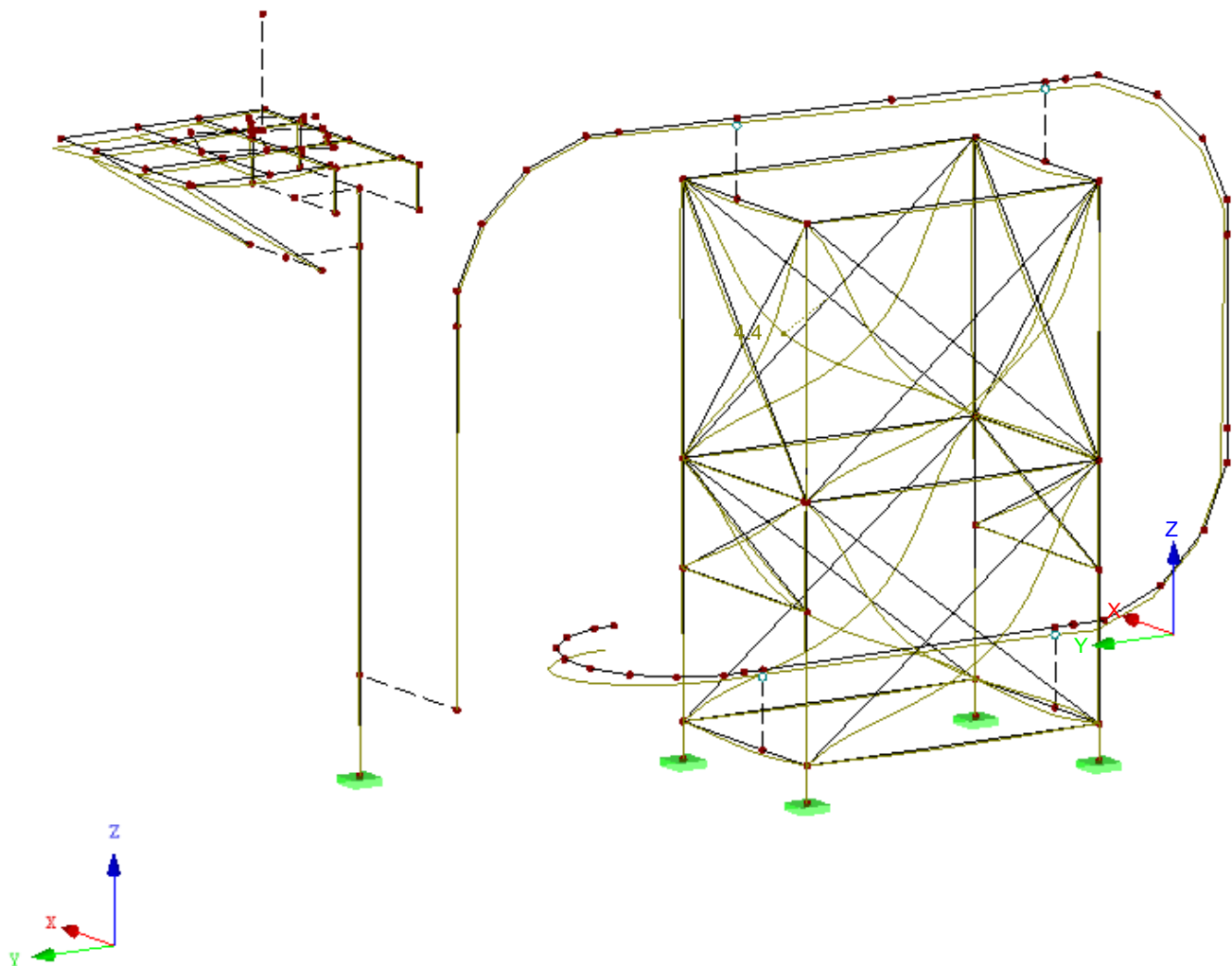
26-2-2026

Environox ACT Hengelo voorberekening

■ GLOBAL DEFORMATIONS u

CO4 : Sneeuw
Global Deformations u [mm]

Isometric

Factor of deformations: 210.00
Max u: 4.4, Min u: 0.0 mm