

8. Bijlage 3- Resultaten berekeningen
8.1. *Hoofdspant (model 2)*

Project: 15019 kap 1e kamer

Model: 15019 hoofdspant [2] met ..

Datum: 5-6-2015

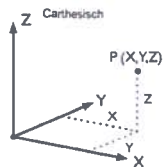
INHOUD

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ALGEMENE GEGEVENS MODEL

Algemeen	Modelnaam	: 15019 hoofdspant [2] met horizontale last uit tussenspan v2
	Projectnaam	: 15019 kap 1e kamer
	Modeltype	: 2D-XZ (ux/uz/uy)
	Positieve richting van globale z-as	: Naar Boven
	Classificatie van belastinggevallen en combinaties	: Volgens norm: EN 1990 + EN 1995 Nationale bijlage: NEN - Nederland

KNOPEN



Knoop No.	Referentie Knoop	Coördinaat Systeem	Knoopcoördinaten		Opm.
			X [m]	Z [m]	
124	-	Cartesisch	60.000	0.000	
125	-	Cartesisch	60.672	1.424	
126	-	Cartesisch	61.045	2.213	
127	-	Cartesisch	61.664	3.526	
128	-	Cartesisch	61.844	3.526	
129	-	Cartesisch	62.273	4.435	
130	-	Cartesisch	62.806	5.563	
131	-	Cartesisch	63.343	3.526	
132	-	Cartesisch	63.435	5.563	
133	-	Cartesisch	63.435	7.063	
134	-	Cartesisch	63.621	5.563	
135	-	Cartesisch	64.706	5.563	
136	-	Cartesisch	65.131	5.225	
137	-	Cartesisch	65.131	5.563	
138	-	Cartesisch	65.468	3.526	
139	-	Cartesisch	65.468	5.563	
140	-	Cartesisch	66.562	3.526	
141	-	Cartesisch	66.562	5.225	
142	-	Cartesisch	66.562	5.563	
143	-	Cartesisch	66.562	7.063	
144	-	Cartesisch	67.656	3.526	
145	-	Cartesisch	67.656	5.563	
146	-	Cartesisch	67.993	5.225	
147	-	Cartesisch	67.993	5.563	
148	-	Cartesisch	68.418	5.563	
149	-	Cartesisch	69.503	5.563	
150	-	Cartesisch	69.689	5.563	
151	-	Cartesisch	69.689	7.063	
152	-	Cartesisch	69.781	3.526	
153	-	Cartesisch	70.318	5.563	
154	-	Cartesisch	70.851	4.435	
155	-	Cartesisch	71.280	3.526	
156	-	Cartesisch	71.460	3.526	
157	-	Cartesisch	72.079	2.213	
158	-	Cartesisch	72.452	1.424	
159	-	Cartesisch	73.124	-7.500	
160	-	Cartesisch	73.124	0.000	

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MATERIALEN

Matl. No.	Modulus E [N/mm ²]	Modulus G [N/mm ²]	Vol. gewicht γ [kN/m ³]	Therm. uitz. α [1/°C]	Matenaalfactor γ_M [-]	Materiaal Model
1	Eiken D30 10000.000	2500.000	5.50	5.00E-06	1.00	Standaard
2	Eiken D30 9500.000	2375.000	5.70	5.00E-06	1.00	Standaard
3	onbekend-staal 210000.000	80769.200	0.00E+00	1.20E-05	1.00	Standaard
4	onbekend-mw 2550.000	1062.500	18.00	1.00E-05	1.00	Standaard

DOORSNEDES

Sned No.	Matl. No.	J [mm ⁴] A [mm ²]	I_y [mm ⁴] A_y [mm ²]	I_z [mm ⁴] A_z [mm ²]	Hoofdassen α [°]	Rotatie α' [°]	Globale maatvoering [mm]	
							Breedte b	Hoogte h
1	Rechthoek 275/295 1	81125.0	588325312.0	67604.2	0.00	0.00	275.0	295.0
2	Rechthoek 275/370 1	101750.0	1160797952.0	84791.7	0.00	0.00	275.0	370.0
3	Rechthoek 275/370 1	101750.0	1160797952.0	84791.7	0.00	0.00	275.0	370.0
4	Rechthoek 275/285 1	78375.0	530500768.0	65312.5	0.00	0.00	275.0	285.0
5	Rechthoek 275/340 1	93500.0	900716608.0	77916.7	0.00	0.00	275.0	340.0
6	Rechthoek 50/200 2	10000.0	33333334.0	8333.3	0.00	0.00	50.0	200.0
7	Rechthoek 100/22 3	2200.0	88733.3	1833.3	0.00	0.00	100.0	22.0
8	Rechthoek 2084/1392 4	2900928.0	46841865830.4	2417440.0	0.00	0.00	2084.0	1392.0
9	Rechthoek 355/440 1	156200.0	2520026624.0	130166.7	0.00	0.00	355.0	440.0
10	Rechthoek 355/350 1	124250.0	1268385408.0	103541.7	0.00	0.00	355.0	350.0

Rechthoek 275/295 Rechthoek 275/370



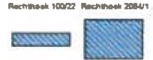
Rechthoek 275/370 Rechthoek 275/285



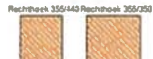
Rechthoek 275/340 Rechthoek 50/200



Rechthoek 100/22 Rechthoek 2084/1

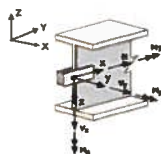


Rechthoek 355/440 Rechthoek 355/350



STAAFEINDSCHARNIEREN

Vrijgave No.	Referentie Systeem	Scharnier / Veer [kN/m] [kNm/rad]			Opm.
		u_x	u_z	ϕ_y	
1	Lok. x,y,z	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2	Lok. x,y,z	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	



STAAFEINDSCHARNIEREN - NIET-LINEAIRITEITEN - GEDEELTELIJKE ACTIVITEIT

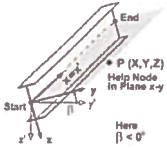
Vrijgave No.	Vrijheids Graad	Type	Waarde [kN, kNm, m, rad]	Slip [m, rad]	Opm.
2	u_z	Scharnier alleen voor negatieve kracht	-	-	

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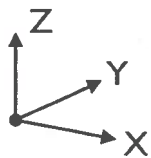
Datum: 5-6-2015

STAVEN



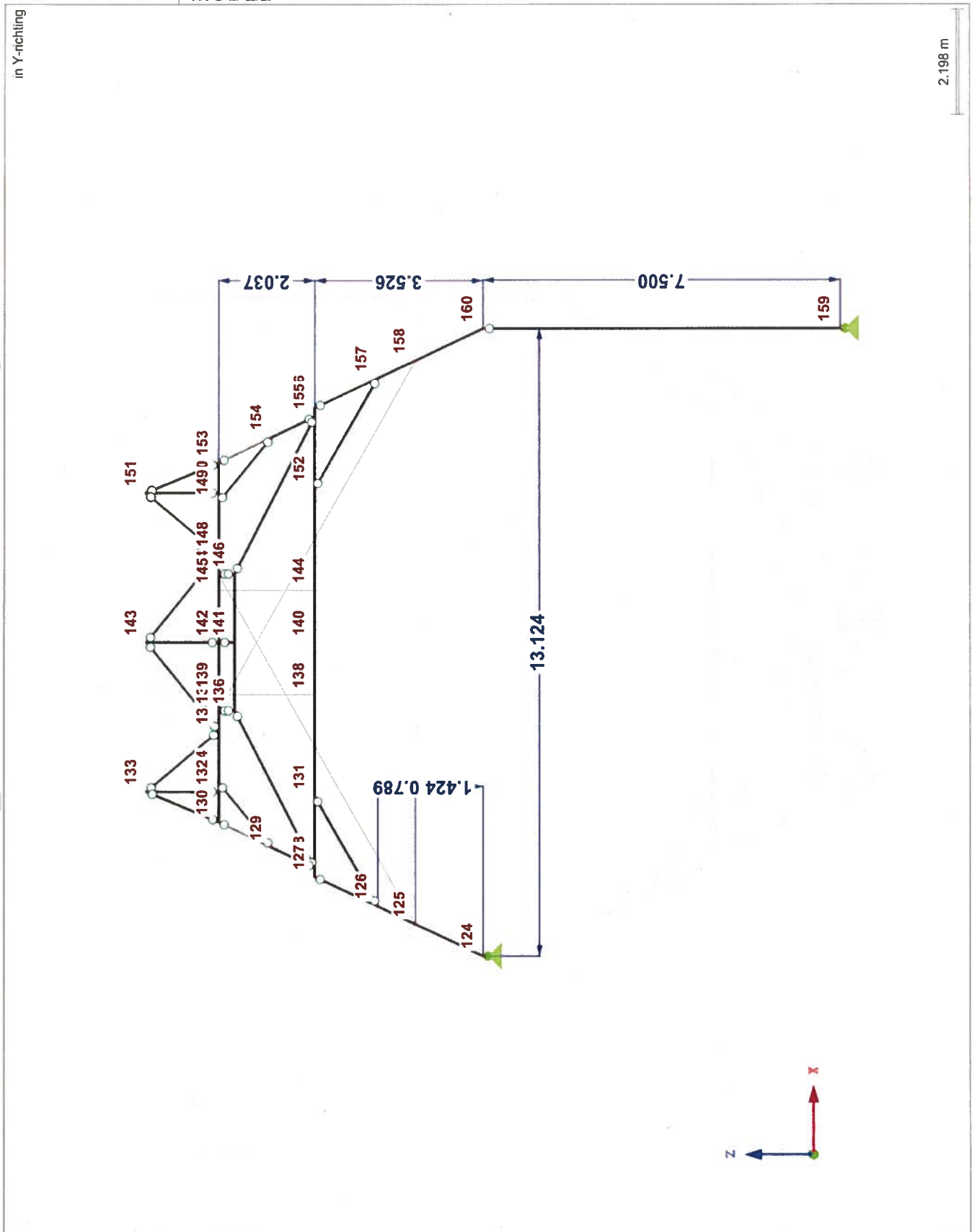
Stf. No.	StAAF	Knoop		Rotatie		Doorsnede		Scharnier No.		Exc. No.	Deel No.	Lengte L [m]	
		Begin	Einde	Type	β [°]	Begin	Einde	Begin	Einde				
161	Ligger	125	124	Hoek	0.00	9	9	-	-	-	-	1.575	XZ
162	Ligger	125	126	Hoek	0.00	9	9	-	-	-	-	0.873	XZ
163	Ligger	126	127	Hoek	0.00	9	9	-	1	-	-	1.452	XZ
164	Ligger	128	127	Hoek	0.00	9	9	-	-	-	-	0.180	X
165	Ligger	128	129	Hoek	0.00	1	1	1	-	-	-	1.005	XZ
166	Ligger	126	131	Hoek	0.00	10	10	1	1	-	-	2.647	XZ
167	Nul	129	130	Hoek	0.00	1	1	-	1	-	-	1.248	XZ
168	Ligger	128	131	Hoek	0.00	9	9	-	-	-	-	1.499	X
169	Ligger	129	134	Hoek	0.00	4	4	1	1	-	-	1.758	XZ
170	Ligger	132	130	Hoek	0.00	2	2	-	-	-	-	0.629	X
171	Ligger	130	133	Hoek	0.00	6	6	1	1	-	-	1.627	XZ
172	Ligger	132	133	Hoek	0.00	6	6	1	-	-	-	1.500	Z
173	Ligger	136	128	Hoek	0.00	3	3	1	1	-	-	3.700	XZ
174	Ligger	134	132	Hoek	0.00	2	2	-	-	-	-	0.186	X
175	Ligger	133	135	Hoek	0.00	6	6	1	1	-	-	1.966	XZ
176	Ligger	135	134	Hoek	0.00	2	2	-	-	-	-	1.085	X
177	Trek	125	147	Hoek	0.00	7	7	-	-	-	-	8.410	XZ
178	Ligger	131	138	Hoek	0.00	9	9	-	-	-	-	2.125	X
179	Ligger	137	135	Hoek	0.00	2	2	-	-	-	-	0.425	X
180	Ligger	136	137	Hoek	0.00	3	3	1	1	-	-	0.338	Z
181	Ligger	137	139	Hoek	0.00	2	2	-	-	-	-	0.337	X
182	Trek	139	138	Hoek	0.00	7	7	-	-	-	-	2.037	Z
183	Ligger	143	135	Hoek	0.00	6	6	1	1	-	-	2.386	XZ
184	Ligger	141	136	Hoek	0.00	5	5	-	-	-	-	1.431	X
185	Ligger	138	140	Hoek	0.00	9	9	-	-	-	-	1.094	X
186	Ligger	139	142	Hoek	0.00	2	2	-	-	-	-	1.094	X
187	Ligger	141	142	Hoek	0.00	3	3	-	1	-	-	0.338	Z
188	Ligger	142	143	Hoek	0.00	6	6	1	-	-	-	1.500	Z
189	Ligger	140	144	Hoek	0.00	9	9	-	-	-	-	1.094	X
190	Ligger	145	142	Hoek	0.00	2	2	-	-	-	-	1.094	X
191	Ligger	141	146	Hoek	0.00	5	5	-	-	-	-	1.431	X
192	Ligger	143	148	Hoek	0.00	6	6	1	1	-	-	2.386	XZ
193	Trek	145	144	Hoek	0.00	7	7	-	-	-	-	2.037	Z
194	Ligger	147	145	Hoek	0.00	2	2	-	-	-	-	0.337	X
195	Ligger	146	147	Hoek	0.00	3	3	1	1	-	-	0.338	Z
196	Ligger	147	148	Hoek	0.00	2	2	-	-	-	-	0.425	X
197	Ligger	144	152	Hoek	0.00	9	9	-	-	-	-	2.125	X
198	Trek	158	137	Hoek	0.00	7	7	-	-	-	-	8.410	XZ
199	Ligger	148	149	Hoek	0.00	2	2	-	-	-	-	1.085	X
200	Ligger	151	148	Hoek	0.00	6	6	1	1	-	-	1.966	XZ
201	Ligger	149	150	Hoek	0.00	2	2	-	-	-	-	0.186	X
202	Ligger	146	155	Hoek	0.00	3	3	1	1	-	-	3.700	XZ
203	Ligger	150	151	Hoek	0.00	6	6	1	-	-	-	1.500	Z
204	Ligger	150	153	Hoek	0.00	2	2	-	-	-	-	0.629	X
205	Ligger	153	151	Hoek	0.00	6	6	1	1	-	-	1.627	XZ
206	Ligger	154	149	Hoek	0.00	4	4	1	1	-	-	1.758	XZ
207	Ligger	152	155	Hoek	0.00	9	9	-	-	-	-	1.499	X
208	Nul	154	153	Hoek	0.00	1	1	-	1	-	-	1.248	XZ
209	Ligger	157	152	Hoek	0.00	10	10	1	1	-	-	2.647	XZ
210	Ligger	155	154	Hoek	0.00	1	1	1	-	-	-	1.005	XZ
211	Ligger	155	156	Hoek	0.00	9	9	-	-	-	-	0.180	X
212	Ligger	157	156	Hoek	0.00	9	9	-	1	-	-	1.452	XZ
213	Ligger	158	157	Hoek	0.00	9	9	-	-	-	-	0.873	XZ
214	Ligger	160	158	Hoek	0.00	9	9	-	-	-	-	1.575	XZ
215	Ligger	160	159	Hoek	0.00	8	8	1	-	-	-	7.500	Z

STEUNPUNTEN

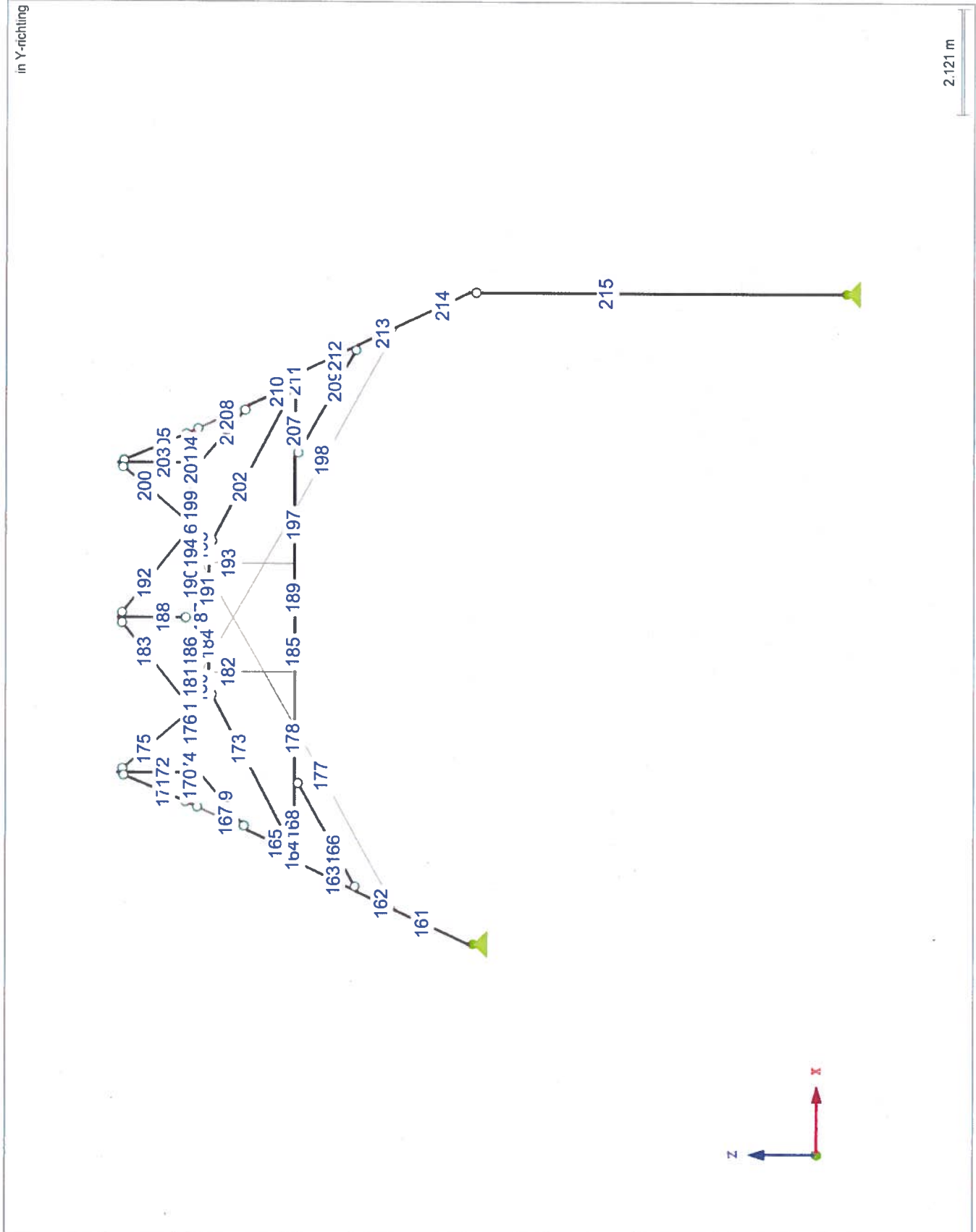


Steunpnt. No.	Knope No.	Rotatie [°] om Y	Oplegging of Veer [kN/m] [kNm/rad]			Opm.
			u_x	u_z	ϕ_y	
9	124	0.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
10	159	0.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

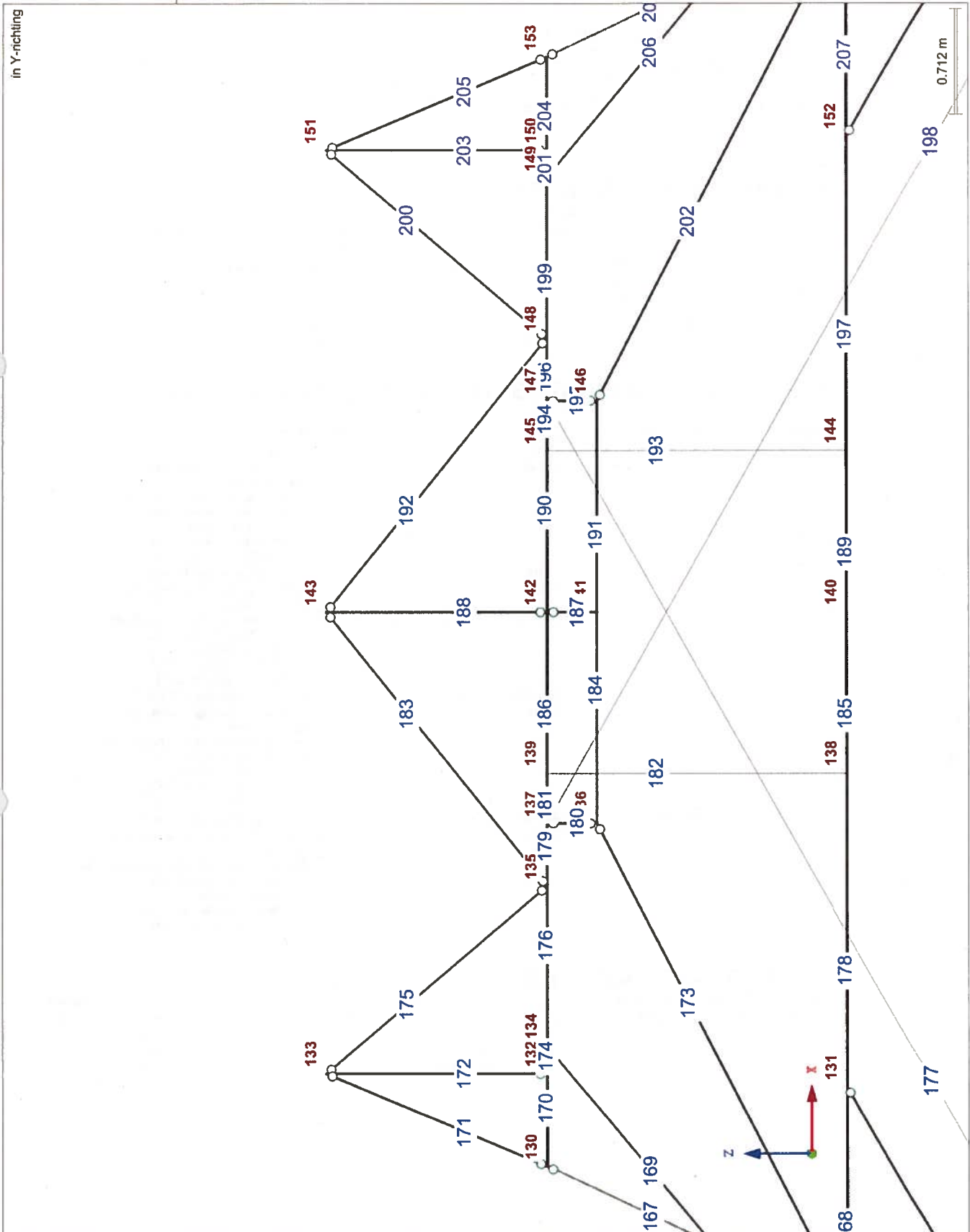
■ MODEL



■ MODEL



MODEL



Project: 15019 kap 1e kamer

Model: 15019 hoofdspant [2] met ..

Datum: 5-6-2015

BELASTINGSGEVALLEN

Bel. Geval	BG omschrijving	Belastingscategorie	Actief	Eigen gewicht - factor in richting			EN 1990 + 1995 NEN Belastingsduur
				X	Y	Z	
BG1	Rustend	Blijvend Opgelegd - Categorie H: daken	<input checked="" type="checkbox"/>	0.000			Blijvend
BG2	Veranderlijke last		<input type="checkbox"/>				
BG3	Sneeuw	Sneeuw (H ≤ 1000 m a.s.l.)	<input type="checkbox"/>				Kortetermijn
BG4	Wind	Wind	<input type="checkbox"/>				Kortetermijn

BELASTINGSCOMBINATIES

Last Combin.	OS	Belastingscombinatie		No.	Factor	Belastingsgeval
		Omschrijving				
BC1		1.2*BG1		1	1.20	BG1 Rustend
BC2		1.1*BG1 + 1.15*BG2		1	1.10	BG1 Rustend
				2	1.15	BG2 Veranderlijke last
BC3		1.1*BG1 + 1.15*BG3		1	1.10	BG1 Rustend
				2	1.15	BG3 Sneeuw
BC4		1.1*BG1 + 1.3*BG4		1	1.10	BG1 Rustend
				2	1.30	BG4 Wind

BELASTINGSCOMBINATIES - BEREKENINGSPARAMETERS

Last Combin.	Omschrijving	Berekeningsparameters	
BC1	1.2*BG1	Berekeningsmethode Opties	<input checked="" type="checkbox"/> 2 ^o Orde berekening (P-Delta) <input checked="" type="checkbox"/> Beschouw gunstige effecten t.g.v. trekkracht(en) <input checked="" type="checkbox"/> Snedekrachten volgens het vervormde systeem beschouwen voor: <input checked="" type="checkbox"/> Normalkrachten N <input checked="" type="checkbox"/> Afschuifkrachten V _y en V _z <input checked="" type="checkbox"/> Momenten M _y , M _z en M _T
BC2	1.1*BG1 + 1.15*BG2	Berekeningsmethode Opties	<input checked="" type="checkbox"/> 2 ^o Orde berekening (P-Delta) <input checked="" type="checkbox"/> Beschouw gunstige effecten t.g.v. trekkracht(en) <input checked="" type="checkbox"/> Snedekrachten volgens het vervormde systeem beschouwen voor: <input checked="" type="checkbox"/> Normalkrachten N <input checked="" type="checkbox"/> Afschuifkrachten V _y en V _z <input checked="" type="checkbox"/> Momenten M _y , M _z en M _T
BC3	1.1*BG1 + 1.15*BG3	Berekeningsmethode Opties	<input checked="" type="checkbox"/> 2 ^o Orde berekening (P-Delta) <input checked="" type="checkbox"/> Beschouw gunstige effecten t.g.v. trekkracht(en) <input checked="" type="checkbox"/> Snedekrachten volgens het vervormde systeem beschouwen voor: <input checked="" type="checkbox"/> Normalkrachten N <input checked="" type="checkbox"/> Afschuifkrachten V _y en V _z <input checked="" type="checkbox"/> Momenten M _y , M _z en M _T
BC4	1.1*BG1 + 1.3*BG4	Berekeningsmethode Opties	<input checked="" type="checkbox"/> 2 ^o Orde berekening (P-Delta) <input checked="" type="checkbox"/> Beschouw gunstige effecten t.g.v. trekkracht(en) <input checked="" type="checkbox"/> Snedekrachten volgens het vervormde systeem beschouwen voor: <input checked="" type="checkbox"/> Normalkrachten N <input checked="" type="checkbox"/> Afschuifkrachten V _y en V _z <input checked="" type="checkbox"/> Momenten M _y , M _z en M _T

RESULTAATCOMBINATIES

Resultaat Combin.	Resultaatcombinatie		No.	Factor	Belasting	Criterium	Alternat. Groep
	DS	Omschrijving					
RC1			1	1.00	BC2	Variabel	1
			2	1.00	BC3	Variabel	1
			3	1.00	BC4	Variabel	1

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**■ KNOOPLASTEN - PER COMPONENT
 - COÖRDINATENSISTEEM**

 BG1
 Rustend

BG1: Rustend

No.	Op Knoop No.	Coördinaten Systeem	Kracht [kN]		Moment M _y [kNm]
			P _x	P _z	
1	160	0 Globale XYZ	13.800	0.000	0.000

■ STAAFLASTEN

BG1: Rustend

No.	Referentie tot	Op Staven No.	Belasting Type	Belasting Verdeling	Belasting Richting	Referentie Lengte	Lastparameters		
							Symbool	Waarde	Eenheid
43	Staven	171	Kracht	Gelijkmatig	Z	Ware Lengte	p	-4.050	kN/m
44	Staven	175	Kracht	Gelijkmatig	Z	Ware Lengte	p	-4.050	kN/m
45	Staven	183	Kracht	Gelijkmatig	Z	Ware Lengte	p	-4.050	kN/m
46	Staven	192	Kracht	Gelijkmatig	Z	Ware Lengte	p	-4.050	kN/m
47	Staven	200	Kracht	Gelijkmatig	Z	Ware Lengte	p	-4.050	kN/m
48	Staven	205	Kracht	Gelijkmatig	Z	Ware Lengte	p	-4.050	kN/m
49	Staven	168	Kracht	Gelijkmatig	Z	Ware Lengte	p	-0.300	kN/m
50	Staven	178	Kracht	Gelijkmatig	Z	Ware Lengte	p	-0.300	kN/m
51	Staven	185	Kracht	Gelijkmatig	Z	Ware Lengte	p	-0.300	kN/m
52	Staven	189	Kracht	Gelijkmatig	Z	Ware Lengte	p	-0.300	kN/m
53	Staven	197	Kracht	Gelijkmatig	Z	Ware Lengte	p	-0.300	kN/m
54	Staven	207	Kracht	Gelijkmatig	Z	Ware Lengte	p	-0.300	kN/m

**■ KNOOPLASTEN - PER COMPONENT
 - COÖRDINATENSISTEEM**

 BG2
 Veranderlijke last

BG2: Veranderlijke last

No.	Op Knoop No.	Coördinaten Systeem	Kracht [kN]		Moment M _y [kNm]
			P _x	P _z	
1	160	0 Globale XYZ	13.800	0.000	0.000

■ STAAFLASTEN

BG2: Veranderlijke last

No.	Referentie tot	Op Staven No.	Belasting Type	Belasting Verdeling	Belasting Richting	Referentie Lengte	Lastparameters		
							Symbool	Waarde	Eenheid
1	Staven	168,178, 185,189, 197,207	Kracht	Gelijkmatig	Z	Ware Lengte	p	-0.500	kN/m

**■ KNOOPLASTEN - PER COMPONENT
 - COÖRDINATENSISTEEM**

 BG3
 Sneeuw

BG3: Sneeuw

No.	Op Knoop No.	Coördinaten Systeem	Kracht [kN]		Moment M _y [kNm]
			P _x	P _z	
1	135,148	0 Globale XYZ	0.000	-10.000	0.000

**■ KNOOPLASTEN - PER COMPONENT
 - COÖRDINATENSISTEEM**

 BG4
 Wind

BG4: Wind

No.	Op Knoop No.	Coördinaten Systeem	Kracht [kN]		Moment M _y [kNm]
			P _x	P _z	
1	160	0 Globale XYZ	11.400	0.000	0.000

■ RESULTATEN - OPSOMMING

Omschrijving	Waarde	Eenheid	Opm.
BG1 - Rustend Som van belastingen in X Som van de steunpntreacties in X Som van belastingen in Z Som van de steunpntreacties in Z Resultante van reacties om x-as Resultante van reacties om y-as Resultante van reacties om z-as Max. verplaatsing in x-richting Max. verplaatsing in z-richting Max. vector verplaatsing Max. rotatie om y-as Berekeningsmethode Stijfheidsreductie maal factor Aantal lastincrementen Aantal iteraties	13.8 13.8 -475.4 -475.4 0.0 -259.5 0.0 21.5 -13.3 21.5 7.5 Linear <input type="checkbox"/> 1 1	kN kN kN kN kNm kNm kNm mm mm mm mrad Linear	Afwijking 0.00% In zwaartepunt van het model (X:72.6, Y:0.0, Z:-3.2 m) Afwijking -0.00% In zwaartepunt van het model In zwaartepunt van het model In zwaartepunt van het model Staaft No. 214, x: 0.000 m Staaft No. 204, x: 0.629 m Staaft No. 214, x: 0.000 m Staaft No. 210, x: 1.005 m Geometrisch lineaire statische berekening
BG2 - Veranderlijke last Som van belastingen in X Som van de steunpntreacties in X Som van belastingen in Z Som van de steunpntreacties in Z Resultante van reacties om x-as Resultante van reacties om y-as Resultante van reacties om z-as Max. verplaatsing in x-richting Max. verplaatsing in z-richting Max. vector verplaatsing Max. rotatie om y-as Berekeningsmethode Stijfheidsreductie maal factor Aantal lastincrementen Aantal iteraties	13.8 13.8 -4.7 -4.7 0.0 15.0 0.0 8.5 -2.8 8.5 2.1 Linear <input type="checkbox"/> 1 1	kN kN kN kN kNm kNm kNm mm mm mm mrad Linear	Afwijking 0.00% In zwaartepunt van het model (X:72.6, Y:0.0, Z:-3.2 m) Afwijking 0.00% In zwaartepunt van het model In zwaartepunt van het model In zwaartepunt van het model Staaft No. 214, x: 0.000 m Staaft No. 197, x: 1.063 m Staaft No. 214, x: 0.000 m Staaft No. 161, x: 1.575 m Geometrisch lineaire statische berekening
BG3 - Sneeuw Som van belastingen in X Som van de steunpntreacties in X Som van belastingen in Z Som van de steunpntreacties in Z Resultante van reacties om x-as Resultante van reacties om y-as Resultante van reacties om z-as Max. verplaatsing in x-richting Max. verplaatsing in z-richting Max. vector verplaatsing Max. rotatie om y-as Berekeningsmethode Stijfheidsreductie maal factor Aantal lastincrementen Aantal iteraties	0.0 -0.0 -20.0 -20.0 0.0 -120.9 0.0 3.5 -2.0 3.5 1.2 Linear <input type="checkbox"/> 1 1	kN kN kN kN kNm kNm kNm mm mm mm mrad Linear	Afwijking 0.00% In zwaartepunt van het model (X:72.6, Y:0.0, Z:-3.2 m) In zwaartepunt van het model In zwaartepunt van het model In zwaartepunt van het model Staaft No. 214, x: 0.000 m Staaft No. 214, x: 0.000 m Staaft No. 210, x: 0.000 m Geometrisch lineaire statische berekening
BG4 - Wind Som van belastingen in X Som van de steunpntreacties in X Som van belastingen in Z Som van de steunpntreacties in Z Resultante van reacties om x-as Resultante van reacties om y-as Resultante van reacties om z-as Max. verplaatsing in x-richting Max. verplaatsing in z-richting Max. vector verplaatsing Max. rotatie om y-as Berekeningsmethode Stijfheidsreductie maal factor Aantal lastincrementen Aantal iteraties	11.4 11.4 0.0 0.0 0.0 36.0 0.0 6.4 -2.1 6.4 1.6 Linear <input type="checkbox"/> 1 1	kN kN kN kN kNm kNm kNm mm mm mm mrad Linear	Afwijking 0.00% In zwaartepunt van het model (X:72.6, Y:0.0, Z:-3.2 m) In zwaartepunt van het model In zwaartepunt van het model In zwaartepunt van het model Staaft No. 214, x: 0.000 m Staaft No. 178, x: 1.063 m Staaft No. 214, x: 0.000 m Staaft No. 161, x: 1.575 m Geometrisch lineaire statische berekening
BC1 - 1.2*BG1 Som van belastingen in X Som van de steunpntreacties in X Som van belastingen in Z Som van de steunpntreacties in Z Max. verplaatsing in x-richting Max. verplaatsing in z-richting Max. vector verplaatsing Max. rotatie om y-as Berekeningsmethode Snedekrachten t.o.v. vervormde systeem voor... Stijfheidsreductie maal factor Neem de gunstige effecten van trekkrachten mee	16.6 16.6 -570.4 -570.4 26.5 -16.2 26.5 9.1 2° Orde <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	kN kN kN kN mm mm mm mrad 2° Orde	Afwijking 0.00% Afwijking -0.00% Staaft No. 214, x: 0.000 m Staaft No. 214, x: 0.000 m Staaft No. 210, x: 1.005 m 2° Orde berekening (niet-lineaire, Timoshenko) N, V _y , V _z , M _y , M _z , M _T

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■ **RESULTATEN - OPSOMMING**

Omschrijving	Waarde	Eenheid	Opm.
Deel de resultaten terug door BC-factor	<input type="checkbox"/>		
Aantal lastincrementen	1		
Aantal iteraties	3		
Bereken de kritische lastfactor	<input type="checkbox"/>		
BC2 - 1.1*BG1 + 1.15*BG2			
Som van belastingen in X	31.1	kN	Afwijking 0.00%
Som van de steunpuntreacties in X	31.1	kN	
Som van belastingen in Z	-528.3	kN	
Som van de steunpuntreacties in Z	-528.3	kN	
Max. verplaatsing in x-richting	34.3	mm	
Max. verplaatsing in z-richting	-18.0	mm	
Max. vector verplaatsing	34.3	mm	
Max. rotatie om y-as	9.2	mrاد	
Berekeningsmethode	2° Orde		
Snedekrachten t.o.v. vervormde systeem voor...	<input checked="" type="checkbox"/>		
Stijfheidsreductie maal factor	<input type="checkbox"/>		
Neem de gunstige effecten van trekkrachten mee	<input checked="" type="checkbox"/>		
Deel de resultaten terug door BC-factor	<input type="checkbox"/>		
Aantal lastincrementen	1		
Aantal iteraties	3		
Bereken de kritische lastfactor	<input type="checkbox"/>		
BC3 - 1.1*BG1 + 1.15*BG3			
Som van belastingen in X	15.2	kN	Afwijking 0.00%
Som van de steunpuntreacties in X	15.2	kN	
Som van belastingen in Z	-545.9	kN	
Som van de steunpuntreacties in Z	-545.9	kN	
Max. verplaatsing in x-richting	28.5	mm	
Max. verplaatsing in z-richting	-17.2	mm	
Max. vector verplaatsing	28.5	mm	
Max. rotatie om y-as	9.7	mrاد	
Berekeningsmethode	2° Orde		
Snedekrachten t.o.v. vervormde systeem voor...	<input checked="" type="checkbox"/>		
Stijfheidsreductie maal factor	<input type="checkbox"/>		
Neem de gunstige effecten van trekkrachten mee	<input checked="" type="checkbox"/>		
Deel de resultaten terug door BC-factor	<input type="checkbox"/>		
Aantal lastincrementen	1		
Aantal iteraties	3		
Bereken de kritische lastfactor	<input type="checkbox"/>		
BC4 - 1.1*BG1 + 1.3*BG4			
Som van belastingen in X	30.0	kN	Afwijking 0.00%
Som van de steunpuntreacties in X	30.0	kN	
Som van belastingen in Z	-522.9	kN	
Som van de steunpuntreacties in Z	-522.9	kN	
Max. verplaatsing in x-richting	32.7	mm	
Max. verplaatsing in z-richting	-17.5	mm	
Max. vector verplaatsing	32.7	mm	
Max. rotatie om y-as	9.0	mrاد	
Berekeningsmethode	2° Orde		
Snedekrachten t.o.v. vervormde systeem voor...	<input checked="" type="checkbox"/>		
Stijfheidsreductie maal factor	<input type="checkbox"/>		
Neem de gunstige effecten van trekkrachten mee	<input checked="" type="checkbox"/>		
Deel de resultaten terug door BC-factor	<input type="checkbox"/>		
Aantal lastincrementen	1		
Aantal iteraties	3		
Bereken de kritische lastfactor	<input type="checkbox"/>		
Samenvatting			
Max. verplaatsing in x-richting	34.3	mm	BC2, Staaf No. 214, x: 0.000 m
Max. verplaatsing in z-richting	-18.0	mm	BC2, Staaf No. 204, x: 0.629 m
Max. vector verplaatsing	34.3	mm	BC2, Staaf No. 214, x: 0.000 m
Max. rotatie om y-as	9.7	mrاد	BC3, Staaf No. 210, x: 1.005 m
Aantal 1D-eindige elementen (staafelementen)	55		
Aantal EE-knopen	37		
Aantal vergelijkingen	111		
Max. aantal iteraties	100		
Staafterdelingen voor staafteresultaten	10		
Verdelingen van kabels, fundatie of verlopende staven	10		
Zet glijdingsmodulus (A-y, A-x) van staven AAN	<input type="checkbox"/>		
Zet Bezweken Staven AAN	<input checked="" type="checkbox"/>		
Andere instellingen	Max. aantal iteraties	:	100

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■ RESULTATEN - OPSOMMING

	Aantal doorsnedes voor staafresultaten	: 10
	Staafdelingen, kabels, steunvlakken en verlopende staven	: 10
	Aantal staafverdelingen voor het zoeken naar max waarden	: 10
Opties	<input type="checkbox"/> Afschuiftijheid activeren voor Staven (Ay, Az)	
	<input checked="" type="checkbox"/> Modify stiffness (material, cross-sections, members, load cases and combinations)	
Precisie en Tolerantie	<input type="checkbox"/> Wijzig standaardinstelling	
Niet-lineaire effecten - Activeren	<input type="checkbox"/> Ondersteuning en elastische beddingen	
	<input checked="" type="checkbox"/> Bezwijkende staven t.g.v. staaftype	
	<input type="checkbox"/> Staafeiendscharnieren	
	<input type="checkbox"/> Elastische staafbedding	
	<input type="checkbox"/> Staaf niet-lineairiteiten	
Re-activeren van bezwijkende staven	<input checked="" type="checkbox"/> Controleer vervorming van bezwijkende staven en re-activeer indien van toepassing.	
	Max. aantal van re-activeringen	: 3

■ STAVEN - SNEDEKRACHTEN

StAAF No.	BG/BC	Knoop No.	SneDe x [m]	Krachten [kN]		Momenten My [kNm]	Snedes
				N	Vz		
161	BC1	125	0.000	-36.3	-36.8	58.6	9 - Rechthoek 355/440
		124	1.575	-37.7	-37.6	0.0	
		Max N	0.000	-36.3	-36.8	58.6	
		Min N	1.575	-37.7	-37.6	0.0	
		Max Vz	0.000	-36.3	-36.8	58.6	
		Min Vz	1.575	-37.7	-37.6	0.0	
		Max My	0.000	-36.3	-36.8	58.6	
		Min My	1.575	-37.7	-37.6	0.0	
	BC2	125	0.000	-28.7	-49.5	78.5	
		124	1.575	-29.9	-50.2	0.0	
		Max N	0.000	-28.7	-49.5	78.5	
		Min N	1.575	-29.9	-50.2	0.0	
		Max Vz	0.000	-28.7	-49.5	78.5	
		Min Vz	1.575	-29.9	-50.2	0.0	
		Max My	0.000	-28.7	-49.5	78.5	
		Min My	1.575	-29.9	-50.2	0.0	
	BC3	125	0.000	-43.6	-38.8	61.7	
		124	1.575	-44.9	-39.5	0.0	
		Max N	0.000	-43.6	-38.8	61.7	
		Min N	1.575	-44.9	-39.5	0.0	
		Max Vz	0.000	-43.6	-38.8	61.7	
		Min Vz	1.575	-44.9	-39.5	0.0	
		Max My	0.000	-43.6	-38.8	61.7	
		Min My	1.575	-44.9	-39.5	0.0	
	BC4	125	0.000	-26.7	-47.3	75.1	
		124	1.575	-28.0	-48.0	0.0	
		Max N	0.000	-26.7	-47.3	75.1	
		Min N	1.575	-28.0	-48.0	0.0	
Max Vz		0.000	-26.7	-47.3	75.1		
Min Vz		1.575	-28.0	-48.0	0.0		
Max My		0.000	-26.7	-47.3	75.1		
Min My		1.575	-28.0	-48.0	0.0		
162	BC1	125	0.000	-108.7	-13.9	58.6	
		126	0.873	-107.9	-14.5	46.2	
		Max N	0.873	-107.9	-14.5	46.2	
		Min N	0.000	-108.7	-13.9	58.6	
		Max Vz	0.000	-108.7	-13.9	58.6	
		Min Vz	0.873	-107.9	-14.5	46.2	
		Max My	0.000	-108.7	-13.9	58.6	
		Min My	0.873	-107.9	-14.5	46.2	
	BC2	125	0.000	-126.2	-18.6	78.5	
		126	0.873	-125.4	-19.3	62.0	
		Max N	0.873	-125.4	-19.3	62.0	
		Min N	0.000	-126.2	-18.6	78.5	
		Max Vz	0.000	-126.2	-18.6	78.5	
		Min Vz	0.873	-125.4	-19.3	62.0	
		Max My	0.000	-126.2	-18.6	78.5	
		Min My	0.873	-125.4	-19.3	62.0	
	BC3	125	0.000	-120.0	-14.7	61.7	
		126	0.873	-119.2	-15.3	48.6	
		Max N	0.873	-119.2	-15.3	48.6	
		Min N	0.000	-120.0	-14.7	61.7	
		Max Vz	0.000	-120.0	-14.7	61.7	

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■ **STAVEN - SNEDEKRACHTEN**

StAAF No.	BG/BC	Knoop No.	Sneede x [m]	Krachten [kN]		Momenten My [kNm]	Snedes			
				N	Vz					
162	BC3	Min Vz	0.873	-119.2	-15.3	48.6				
		Max My	0.000	-120.0	-14.7	61.7				
		Min My	0.873	-119.2	-15.3	48.6				
	BC4	125	0.000	-119.4	-17.4	75.1				
		126	0.873	-118.6	-18.1	59.6				
		Max N	0.873	-118.6	-18.1	59.6				
		Min N	0.000	-119.4	-17.4	75.1				
		Max Vz	0.000	-119.4	-17.4	75.1				
		Min Vz	0.873	-118.6	-18.1	59.6				
		Max My	0.000	-119.4	-17.4	75.1				
		Min My	0.873	-118.6	-18.1	59.6				
	163	BC1	126	0.000	-130.1	-31.4	46.2	9 - Rechthoek 355/440		
			127	1.452	-128.7	-32.2	0.0			
			Max N	1.452	-128.7	-32.2	0.0			
Min N			0.000	-130.1	-31.4	46.2				
Max Vz			0.000	-130.1	-31.4	46.2				
Min Vz			1.452	-128.7	-32.2	0.0				
Max My			0.000	-130.1	-31.4	46.2				
Min My			1.452	-128.7	-32.2	0.0				
BC2			126	0.000	-156.5	-42.2	62.0			
			127	1.452	-155.2	-43.1	0.0			
		Max N	1.452	-155.2	-43.1	0.0				
		Min N	0.000	-156.5	-42.2	62.0				
		Max Vz	0.000	-156.5	-42.2	62.0				
		Min Vz	1.452	-155.2	-43.1	0.0				
		Max My	0.000	-156.5	-42.2	62.0				
		Min My	1.452	-155.2	-43.1	0.0				
BC3		126	0.000	-143.0	-33.1	48.6				
		127	1.452	-141.7	-33.9	0.0				
		Max N	1.452	-141.7	-33.9	0.0				
		Min N	0.000	-143.0	-33.1	48.6				
		Max Vz	0.000	-143.0	-33.1	48.6				
		Min Vz	1.452	-141.7	-33.9	0.0				
		Max My	0.000	-143.0	-33.1	48.6				
		Min My	1.452	-141.7	-33.9	0.0				
BC4		126	0.000	-149.1	-40.6	59.6				
		127	1.452	-147.8	-41.4	0.0				
		Max N	1.452	-147.8	-41.4	0.0				
		Min N	0.000	-149.1	-40.6	59.6				
		Max Vz	0.000	-149.1	-40.6	59.6				
		Min Vz	1.452	-147.8	-41.4	0.0				
		Max My	0.000	-149.1	-40.6	59.6				
		Min My	1.452	-147.8	-41.4	0.0				
		164	BC1	128	0.000	-83.9	-102.6	18.5	9 - Rechthoek 355/440	
				127	0.180	-83.9	-102.8	0.0		
Max N				0.180	-83.9	-102.8	0.0			
Min N				0.000	-83.9	-102.6	18.5			
Max Vz				0.000	-83.9	-102.6	18.5			
Min Vz				0.180	-83.9	-102.8	0.0			
Max My				0.000	-83.9	-102.6	18.5			
Min My				0.180	-83.9	-102.8	0.0			
BC2				128	0.000	-105.0	-121.9	22.0		
				127	0.180	-105.0	-122.1	0.0		
	Max N		0.180	-105.0	-122.1	0.0				
	Min N		0.000	-105.0	-121.9	22.0				
	Max Vz		0.000	-105.0	-121.9	22.0				
	Min Vz		0.180	-105.0	-122.1	0.0				
	Max My		0.000	-105.0	-121.9	22.0				
	Min My		0.180	-105.0	-122.1	0.0				
BC3	128		0.000	-90.9	-113.6	20.5				
	127		0.180	-90.9	-113.8	0.0				
	Max N		0.180	-90.9	-113.8	0.0				
	Min N		0.000	-90.9	-113.6	20.5				
	Max Vz		0.000	-90.9	-113.6	20.5				
	Min Vz		0.180	-90.9	-113.8	0.0				
	Max My		0.000	-90.9	-113.6	20.5				
	Min My		0.180	-90.9	-113.8	0.0				
	BC4		128	0.000	-100.4	-115.9	20.9			
			127	0.180	-100.4	-116.1	0.0			
Max N			0.180	-100.4	-116.1	0.0				
Min N			0.000	-100.4	-115.9	20.9				
Max Vz			0.000	-100.4	-115.9	20.9				
Min Vz			0.180	-100.4	-116.1	0.0				
Max My			0.000	-100.4	-115.9	20.9				
Min My			0.180	-100.4	-116.1	0.0				

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■ **STAVEN - SNEDEKRACHTEN**

StAAF No.	BG/BC	Knoop No.	Sneede x [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes
				N	V _z		
165	BC1	128	0.000	-1.5	0.1	0.0	1 - Rechthoek 275/295
		129	1.005	-1.0	-0.1	0.0	
		Max N	1.005	-1.0	-0.1	0.0	
		Min N	0.000	-1.5	0.1	0.0	
		Max V _z	0.000	-1.5	0.1	0.0	
		Min V _z	1.005	-1.0	-0.1	0.0	
		Max M _y	0.503	-1.3	0.0	0.0	
		Min M _y	0.000	-1.5	0.1	0.0	
	BC2	128	0.000	-1.4	0.1	0.0	
		129	1.005	-1.0	-0.1	0.0	
		Max N	1.005	-1.0	-0.1	0.0	
		Min N	0.000	-1.4	0.1	0.0	
		Max V _z	0.000	-1.4	0.1	0.0	
		Min V _z	1.005	-1.0	-0.1	0.0	
		Max M _y	0.503	-1.2	0.0	0.0	
		Min M _y	1.005	-1.0	-0.1	0.0	
	BC3	128	0.000	-1.4	0.1	0.0	
		129	1.005	-1.0	-0.1	0.0	
		Max N	1.005	-1.0	-0.1	0.0	
		Min N	0.000	-1.4	0.1	0.0	
		Max V _z	0.000	-1.4	0.1	0.0	
		Min V _z	1.005	-1.0	-0.1	0.0	
		Max M _y	0.503	-1.2	0.0	0.0	
		Min M _y	1.005	-1.0	-0.1	0.0	
	BC4	128	0.000	-1.4	0.1	0.0	
		129	1.005	-1.0	-0.1	0.0	
		Max N	1.005	-1.0	-0.1	0.0	
		Min N	0.000	-1.4	0.1	0.0	
Max V _z		0.000	-1.4	0.1	0.0		
Min V _z		1.005	-1.0	-0.1	0.0		
Max M _y		0.503	-1.2	0.0	0.0		
Min M _y		0.000	-1.4	0.1	0.0		
166	BC1	126	0.000	27.9	0.9	0.0	10 - Rechthoek 355/350
		131	2.647	28.9	-0.9	0.0	
		Max N	2.647	28.9	-0.9	0.0	
		Min N	0.000	27.9	0.9	0.0	
		Max V _z	0.000	27.9	0.9	0.0	
		Min V _z	2.647	28.9	-0.9	0.0	
		Max M _y	1.323	28.4	0.0	0.6	
		Min M _y	2.647	28.9	-0.9	0.0	
	BC2	126	0.000	38.5	0.9	0.0	
		131	2.647	39.5	-0.9	0.0	
		Max N	2.647	39.5	-0.9	0.0	
		Min N	0.000	38.5	0.9	0.0	
		Max V _z	0.000	38.5	0.9	0.0	
		Min V _z	2.647	39.5	-0.9	0.0	
		Max M _y	1.323	39.0	0.0	0.6	
		Min M _y	0.000	38.5	0.9	0.0	
	BC3	126	0.000	29.6	0.9	0.0	
		131	2.647	30.6	-0.9	0.0	
		Max N	2.647	30.6	-0.9	0.0	
		Min N	0.000	29.6	0.9	0.0	
		Max V _z	0.000	29.6	0.9	0.0	
		Min V _z	2.647	30.6	-0.9	0.0	
		Max M _y	1.323	30.1	0.0	0.6	
		Min M _y	0.000	29.6	0.9	0.0	
	BC4	126	0.000	37.8	0.9	0.0	
		131	2.647	38.8	-0.9	0.0	
		Max N	2.647	38.8	-0.9	0.0	
		Min N	0.000	37.8	0.9	0.0	
Max V _z		0.000	37.8	0.9	0.0		
Min V _z		2.647	38.8	-0.9	0.0		
Max M _y		1.323	38.3	0.0	0.6		
Min M _y		0.000	37.8	0.9	0.0		
168	BC1	128	0.000	99.1	5.3	18.5	9 - Rechthoek 355/440
		131	1.499	99.1	3.3	25.0	
		Max N	0.000	99.1	5.3	18.5	
		Min N	1.499	99.1	3.3	25.0	
		Max V _z	0.000	99.1	5.3	18.5	
		Min V _z	1.499	99.1	3.3	25.0	
		Max M _y	1.499	99.1	3.3	25.0	
		Min M _y	0.000	99.1	5.3	18.5	
	BC2	128	0.000	110.7	7.8	22.0	
		131	1.499	110.7	5.2	31.6	
		Max N	0.000	110.7	7.8	22.0	
		Min N	1.499	110.7	5.2	31.6	

■ STAVEN - SNEDEKRACHTEN

StAAF No.	BG/BC	Knoop No.	SneDe x [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes
				N	V _z		
168	BC2	Max V _z	0.000	110.7	7.8	22.0	
		Min V _z	1.499	110.7	5.2	31.6	
		Max M _y	1.499	110.7	5.2	31.6	
		Min M _y	0.000	110.7	7.8	22.0	
	BC3	128	0.000	114.1	5.0	20.5	
		131	1.499	114.1	3.3	26.7	
		Max N	0.000	114.1	5.0	20.5	
		Min N	1.499	114.1	3.3	26.7	
		Max V _z	0.000	114.1	5.0	20.5	
		Min V _z	1.499	114.1	3.3	26.7	
		Max M _y	1.499	114.1	3.3	26.7	
		Min M _y	0.000	114.1	5.0	20.5	
	BC4	128	0.000	105.4	7.0	20.9	
		131	1.499	105.4	5.2	30.0	
		Max N	0.000	105.4	7.0	20.9	
		Min N	1.499	105.4	5.2	30.0	
Max V _z		0.000	105.4	7.0	20.9		
Min V _z		1.499	105.4	5.2	30.0		
Max M _y		1.499	105.4	5.2	30.0		
Min M _y		0.000	105.4	7.0	20.9		
169	BC1	129	0.000	-1.0	0.4	0.0	4 - Rechthoek 275/285
		134	1.758	-0.4	-0.4	0.0	
		Max N	1.758	-0.4	-0.4	0.0	
		Min N	0.000	-1.0	0.4	0.0	
		Max V _z	0.000	-1.0	0.4	0.0	
		Min V _z	1.758	-0.4	-0.4	0.0	
		Max M _y	0.879	-0.7	0.0	0.2	
		Min M _y	1.758	-0.4	-0.4	0.0	
	BC2	129	0.000	-0.9	0.3	0.0	
		134	1.758	-0.4	-0.3	0.0	
		Max N	1.758	-0.4	-0.3	0.0	
		Min N	0.000	-0.9	0.3	0.0	
		Max V _z	0.000	-0.9	0.3	0.0	
		Min V _z	1.758	-0.4	-0.3	0.0	
		Max M _y	0.879	-0.6	0.0	0.1	
		Min M _y	0.000	-0.9	0.3	0.0	
	BC3	129	0.000	-0.9	0.3	0.0	
		134	1.758	-0.4	-0.3	0.0	
		Max N	1.758	-0.4	-0.3	0.0	
		Min N	0.000	-0.9	0.3	0.0	
		Max V _z	0.000	-0.9	0.3	0.0	
		Min V _z	1.758	-0.4	-0.3	0.0	
		Max M _y	0.879	-0.6	0.0	0.1	
		Min M _y	0.000	-0.9	0.3	0.0	
BC4	129	0.000	-0.9	0.3	0.0		
	134	1.758	-0.4	-0.3	0.0		
	Max N	1.758	-0.4	-0.3	0.0		
	Min N	0.000	-0.9	0.3	0.0		
	Max V _z	0.000	-0.9	0.3	0.0		
	Min V _z	1.758	-0.4	-0.3	0.0		
	Max M _y	0.879	-0.6	0.0	0.1		
	Min M _y	0.000	-0.9	0.3	0.0		
170	BC1	132	0.000	-0.5	3.2	-1.9	2 - Rechthoek 275/370
		130	0.629	-0.5	2.7	0.0	
		Max N	0.000	-0.5	3.2	-1.9	
		Min N	0.629	-0.5	2.7	0.0	
		Max V _z	0.000	-0.5	3.2	-1.9	
		Min V _z	0.629	-0.5	2.7	0.0	
		Max M _y	0.629	-0.5	2.7	0.0	
		Min M _y	0.000	-0.5	3.2	-1.9	
	BC2	132	0.000	-0.5	2.9	-1.7	
		130	0.629	-0.5	2.5	0.0	
		Max N	0.000	-0.5	2.9	-1.7	
		Min N	0.629	-0.5	2.5	0.0	
		Max V _z	0.000	-0.5	2.9	-1.7	
		Min V _z	0.629	-0.5	2.5	0.0	
		Max M _y	0.629	-0.5	2.5	0.0	
		Min M _y	0.000	-0.5	2.9	-1.7	
	BC3	132	0.000	-0.5	2.9	-1.7	
		130	0.629	-0.5	2.5	0.0	
		Max N	0.000	-0.5	2.9	-1.7	
		Min N	0.629	-0.5	2.5	0.0	
		Max V _z	0.000	-0.5	2.9	-1.7	
		Min V _z	0.629	-0.5	2.5	0.0	
		Max M _y	0.629	-0.5	2.5	0.0	
		Min M _y	0.000	-0.5	2.9	-1.7	

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■ **STAVEN - SNEDEKRACHTEN**

Staal No.	BG/BC	Knoop No.	Sneede x [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes
				N	V _z		
170	BC3	Min M _y	0.000	-0.5	2.9	-1.7	
		132	0.000	-0.5	2.9	-1.7	
	BC4	130	0.629	-0.5	2.5	0.0	
		Max N	0.000	-0.5	2.9	-1.7	
		Min N	0.629	-0.5	2.5	0.0	
		Max V _z	0.000	-0.5	2.9	-1.7	
		Min V _z	0.629	-0.5	2.5	0.0	
		Max M _y	0.629	-0.5	2.5	0.0	
		Min M _y	0.000	-0.5	2.9	-1.7	
		130	0.000	-2.3	1.5	0.0	6 - Rechthoek 50/200
133	1.627	5.1	-1.5	0.0			
Max N	1.627	5.1	-1.5	0.0			
Min N	0.000	-2.3	1.5	0.0			
Max V _z	0.000	-2.3	1.5	0.0			
Min V _z	1.627	5.1	-1.5	0.0			
Max M _y	0.813	1.4	0.0	0.6			
Min M _y	0.000	-2.3	1.5	0.0			
171	BC2	130	0.000	-2.1	1.4	0.0	
		133	1.627	4.6	-1.4	0.0	
	Max N	1.627	4.6	-1.4	0.0		
	Min N	0.000	-2.1	1.4	0.0		
	Max V _z	0.000	-2.1	1.4	0.0		
	Min V _z	1.627	4.6	-1.4	0.0		
	Max M _y	0.813	1.3	0.0	0.6		
	Min M _y	0.000	-2.1	1.4	0.0		
	BC3	130	0.000	-2.1	1.4	0.0	
		133	1.627	4.6	-1.4	0.0	
Max N		1.627	4.6	-1.4	0.0		
Min N		0.000	-2.1	1.4	0.0		
Max V _z		0.000	-2.1	1.4	0.0		
Min V _z		1.627	4.6	-1.4	0.0		
Max M _y		0.813	1.3	0.0	0.6		
Min M _y		0.000	-2.1	1.4	0.0		
BC4	130	0.000	-2.1	1.4	0.0		
	133	1.627	4.6	-1.4	0.0		
	Max N	1.627	4.6	-1.4	0.0		
	Min N	0.000	-2.1	1.4	0.0		
	Max V _z	0.000	-2.1	1.4	0.0		
	Min V _z	1.627	4.6	-1.4	0.0		
	Max M _y	0.813	1.3	0.0	0.6		
	Min M _y	0.000	-2.1	1.4	0.0		
172	BC1	132	0.000	-10.9	0.0	0.0	6 - Rechthoek 50/200
		133	1.500	-10.8	0.0	0.0	
		Max N	1.500	-10.8	0.0	0.0	
		Min N	0.000	-10.9	0.0	0.0	
		Max V _z	1.500	-10.8	0.0	0.0	
		Min V _z	0.000	-10.9	0.0	0.0	
		Max M _y	1.350	-10.8	0.0	0.0	
		Min M _y	0.000	-10.9	0.0	0.0	
	BC2	132	0.000	-10.0	0.0	0.0	
		133	1.500	-9.9	0.0	0.0	
		Max N	1.500	-9.9	0.0	0.0	
		Min N	0.000	-10.0	0.0	0.0	
		Max V _z	1.500	-9.9	0.0	0.0	
		Min V _z	0.000	-10.0	0.0	0.0	
		Max M _y	1.350	-9.9	0.0	0.0	
		Min M _y	1.500	-9.9	0.0	0.0	
	BC3	132	0.000	-10.0	0.0	0.0	
		133	1.500	-9.9	0.0	0.0	
		Max N	1.500	-9.9	0.0	0.0	
		Min N	0.000	-10.0	0.0	0.0	
Max V _z		1.500	-9.9	0.0	0.0		
Min V _z		0.000	-10.0	0.0	0.0		
Max M _y		1.350	-9.9	0.0	0.0		
Min M _y		0.000	-10.0	0.0	0.0		
BC4	132	0.000	-10.0	0.0	0.0		
	133	1.500	-9.9	0.0	0.0		
	Max N	1.500	-9.9	0.0	0.0		
	Min N	0.000	-10.0	0.0	0.0		
	Max V _z	1.500	-9.9	0.0	0.0		
	Min V _z	0.000	-10.0	0.0	0.0		
	Max M _y	0.000	-10.0	0.0	0.0		
	Min M _y	1.350	-9.9	0.0	0.0		
173	BC1	136	0.000	-205.0	1.1	0.0	3 - Rechthoek 275/370
		128	3.700	-206.2	-1.1	0.0	
		Max N	0.000	-205.0	1.1	0.0	

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Staal No.	BG/BC	Knoop No.	Sneede x [m]	Krachten [kN]		Momenten My [kNm]	Snedes
				N	Vz		
173	BC1	Min N	3.700	-206.2	-1.1	0.0	
		Max Vz	0.000	-205.0	1.1	0.0	
		Min Vz	3.700	-206.2	-1.1	0.0	
		Max My	1.850	-205.6	0.0	1.0	
		Min My	0.000	-205.0	1.1	0.0	
	BC2	136	0.000	-242.0	1.0	0.0	
		128	3.700	-243.0	-1.0	0.0	
		Max N	0.000	-242.0	1.0	0.0	
		Min N	3.700	-243.0	-1.0	0.0	
		Max Vz	0.000	-242.0	1.0	0.0	
		Min Vz	3.700	-243.0	-1.0	0.0	
		Max My	1.850	-242.5	0.0	1.0	
		Min My	0.000	-242.0	1.0	0.0	
	BC3	136	0.000	-229.9	1.0	0.0	
		128	3.700	-231.0	-1.0	0.0	
		Max N	0.000	-229.9	1.0	0.0	
		Min N	3.700	-231.0	-1.0	0.0	
		Max Vz	0.000	-229.9	1.0	0.0	
		Min Vz	3.700	-231.0	-1.0	0.0	
		Max My	1.850	-230.5	0.0	1.0	
		Min My	0.000	-229.9	1.0	0.0	
	BC4	136	0.000	-230.7	1.0	0.0	
		128	3.700	-231.8	-1.0	0.0	
		Max N	0.000	-230.7	1.0	0.0	
		Min N	3.700	-231.8	-1.0	0.0	
		Max Vz	0.000	-230.7	1.0	0.0	
		Min Vz	3.700	-231.8	-1.0	0.0	
		Max My	1.850	-231.3	0.0	1.0	
Min My		3.700	-231.8	-1.0	0.0		
174	BC1	134	0.000	-0.5	14.2	-4.5	2 - Rechthoek 275/370
		132	0.186	-0.5	14.0	-1.9	
		Max N	0.186	-0.5	14.0	-1.9	
		Min N	0.000	-0.5	14.2	-4.5	
		Max Vz	0.000	-0.5	14.2	-4.5	
		Min Vz	0.186	-0.5	14.0	-1.9	
		Max My	0.186	-0.5	14.0	-1.9	
		Min My	0.000	-0.5	14.2	-4.5	
	BC2	134	0.000	-0.5	13.0	-4.1	
		132	0.186	-0.5	12.9	-1.7	
		Max N	0.186	-0.5	12.9	-1.7	
		Min N	0.000	-0.5	13.0	-4.1	
		Max Vz	0.000	-0.5	13.0	-4.1	
		Min Vz	0.186	-0.5	12.9	-1.7	
		Max My	0.186	-0.5	12.9	-1.7	
		Min My	0.000	-0.5	13.0	-4.1	
	BC3	134	0.000	-0.5	13.0	-4.1	
		132	0.186	-0.5	12.9	-1.7	
		Max N	0.186	-0.5	12.9	-1.7	
		Min N	0.000	-0.5	13.0	-4.1	
		Max Vz	0.000	-0.5	13.0	-4.1	
		Min Vz	0.186	-0.5	12.9	-1.7	
		Max My	0.186	-0.5	12.9	-1.7	
		Min My	0.000	-0.5	13.0	-4.1	
	BC4	134	0.000	-0.5	13.0	-4.1	
		132	0.186	-0.5	12.9	-1.7	
		Max N	0.186	-0.5	12.9	-1.7	
		Min N	0.000	-0.5	13.0	-4.1	
Max Vz		0.000	-0.5	13.0	-4.1		
Min Vz		0.186	-0.5	12.9	-1.7		
Max My		0.186	-0.5	12.9	-1.7		
Min My		0.000	-0.5	13.0	-4.1		
175	BC1	133	0.000	4.6	3.1	0.0	6 - Rechthoek 50/200
		135	1.966	-2.8	-3.2	0.0	
		Max N	0.000	4.6	3.1	0.0	
		Min N	1.966	-2.8	-3.2	0.0	
		Max Vz	0.000	4.6	3.1	0.0	
		Min Vz	1.966	-2.8	-3.2	0.0	
		Max My	0.983	0.9	0.0	1.5	
		Min My	0.000	4.6	3.1	0.0	
	BC2	133	0.000	4.2	2.9	0.0	
		135	1.966	-2.6	-2.9	0.0	
		Max N	0.000	4.2	2.9	0.0	
		Min N	1.966	-2.6	-2.9	0.0	
		Max Vz	0.000	4.2	2.9	0.0	
		Min Vz	1.966	-2.6	-2.9	0.0	

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Staaf No.	BG/BC	Knoop No.	Snedes x [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes			
				N	V _z					
175	BC2	Max M _y	0.983	0.8	0.0	1.4				
		Min M _y	0.000	4.2	2.9	0.0				
	BC3	133	0.000	4.2	2.9	0.0				
		135	1.966	-2.6	-2.9	0.0				
		Max N	0.000	4.2	2.9	0.0				
		Min N	1.966	-2.6	-2.9	0.0				
		Max V _z	0.000	4.2	2.9	0.0				
		Min V _z	1.966	-2.6	-2.9	0.0				
		Max M _y	0.983	0.8	0.0	1.4				
		Min M _y	0.000	4.2	2.9	0.0				
	BC4	133	0.000	4.2	2.9	0.0				
		135	1.966	-2.6	-2.9	0.0				
		Max N	0.000	4.2	2.9	0.0				
		Min N	1.966	-2.6	-2.9	0.0				
		Max V _z	0.000	4.2	2.9	0.0				
		Min V _z	1.966	-2.6	-2.9	0.0				
Max M _y		0.983	0.8	0.0	1.4					
Min M _y		1.966	-2.6	-2.9	0.0					
176	BC1	135	0.000	-1.1	14.9	-20.3	2 - Rechthoek 275/370			
		134	1.085	-1.0	14.2	-4.5				
		Max N	1.085	-1.0	14.2	-4.5				
		Min N	0.000	-1.1	14.9	-20.3				
		Max V _z	0.000	-1.1	14.9	-20.3				
		Min V _z	1.085	-1.0	14.2	-4.5				
		Max M _y	1.085	-1.0	14.2	-4.5				
		Min M _y	0.000	-1.1	14.9	-20.3				
	BC2	135	0.000	-1.0	13.7	-18.6				
		134	1.085	-1.0	13.0	-4.1				
		Max N	1.085	-1.0	13.0	-4.1				
		Min N	0.000	-1.0	13.7	-18.6				
		Max V _z	0.000	-1.0	13.7	-18.6				
		Min V _z	1.085	-1.0	13.0	-4.1				
		Max M _y	1.085	-1.0	13.0	-4.1				
		Min M _y	0.000	-1.0	13.7	-18.6				
	BC3	135	0.000	-1.0	13.7	-18.6				
		134	1.085	-1.0	13.0	-4.1				
		Max N	1.085	-1.0	13.0	-4.1				
		Min N	0.000	-1.0	13.7	-18.6				
		Max V _z	0.000	-1.0	13.7	-18.6				
		Min V _z	1.085	-1.0	13.0	-4.1				
		Max M _y	1.085	-1.0	13.0	-4.1				
		Min M _y	0.000	-1.0	13.7	-18.6				
	BC4	135	0.000	-1.0	13.7	-18.6				
		134	1.085	-1.0	13.0	-4.1				
		Max N	1.085	-1.0	13.0	-4.1				
		Min N	0.000	-1.0	13.7	-18.6				
		Max V _z	0.000	-1.0	13.7	-18.6				
		Min V _z	1.085	-1.0	13.0	-4.1				
		Max M _y	1.085	-1.0	13.0	-4.1				
		Min M _y	0.000	-1.0	13.7	-18.6				
	177	BC1	125	0.000	88.4				7 - Rechthoek 100/22	
			147	8.410	88.4					
			Max N	0.000	88.4					
			Min N	0.000	88.4					
		BC2	125	0.000	119.0					
			147	8.410	119.0					
			Max N	0.000	119.0					
			Min N	0.000	119.0					
		BC3	125	0.000	93.3					
			147	8.410	93.3					
			Max N	0.000	93.3					
			Min N	0.000	93.3					
		BC4	125	0.000	113.1					
			147	8.410	113.1					
			Max N	0.000	113.1					
			Min N	0.000	113.1					
178	BC1	131	0.000	123.8	-11.8	25.0	9 - Rechthoek 355/440			
		138	2.125	123.8	-14.7	-3.1				
		Max N	1.913	123.8	-14.4	0.0				
		Min N	0.000	123.8	-11.8	25.0				
		Max V _z	0.000	123.8	-11.8	25.0				
		Min V _z	2.125	123.8	-14.7	-3.1				
		Max M _y	0.000	123.8	-11.8	25.0				
		Min M _y	2.125	123.8	-14.7	-3.1				
	BC2	131	0.000	144.6	-15.2	31.6				
		138	2.125	144.6	-18.9	-4.5				

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■ **STAVEN - SNEDEKRACHTEN**

Staal No.	BG/BC	Knoop No.	Snode x [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes
				N	V _z		
178	BC2	Max N	1.913	144.6	-18.5	-0.5	
		Min N	0.000	144.6	-15.2	31.6	
		Max V _z	0.000	144.6	-15.2	31.6	
		Min V _z	2.125	144.6	-18.9	-4.5	
		Max M _y	0.000	144.6	-15.2	31.6	
		Min M _y	2.125	144.6	-18.9	-4.5	
	BC3	131	0.000	140.3	-12.6	26.7	
		138	2.125	140.3	-15.2	-2.7	
		Max N	1.913	140.3	-14.9	0.4	
		Min N	0.000	140.3	-12.6	26.7	
		Max V _z	0.000	140.3	-12.6	26.7	
		Min V _z	2.125	140.3	-15.2	-2.7	
		Max M _y	0.000	140.3	-12.6	26.7	
		Min M _y	2.125	140.3	-15.2	-2.7	
	BC4	131	0.000	138.7	-14.8	30.0	
		138	2.125	138.7	-17.3	-4.0	
		Max N	1.913	138.7	-17.0	-0.4	
		Min N	0.000	138.7	-14.8	30.0	
		Max V _z	0.000	138.7	-14.8	30.0	
		Min V _z	2.125	138.7	-17.3	-4.0	
		Max M _y	0.000	138.7	-14.8	30.0	
Min M _y		2.125	138.7	-17.3	-4.0		
179	BC1	137	0.000	-10.3	17.3	-27.6	2 - Rechthoek 275/370
		135	0.425	-10.3	17.1	-20.3	
		Max N	0.425	-10.3	17.1	-20.3	
		Min N	0.000	-10.3	17.3	-27.6	
		Max V _z	0.000	-10.3	17.3	-27.6	
		Min V _z	0.425	-10.3	17.1	-20.3	
		Max M _y	0.425	-10.3	17.1	-20.3	
		Min M _y	0.000	-10.3	17.3	-27.6	
	BC2	137	0.000	-8.2	16.9	-25.7	
		135	0.425	-8.2	16.7	-18.6	
		Max N	0.425	-8.2	16.7	-18.6	
		Min N	0.000	-8.2	16.9	-25.7	
		Max V _z	0.000	-8.2	16.9	-25.7	
		Min V _z	0.425	-8.2	16.7	-18.6	
		Max M _y	0.425	-8.2	16.7	-18.6	
		Min M _y	0.000	-8.2	16.9	-25.7	
	BC3	137	0.000	-11.8	25.5	-29.4	
		135	0.425	-11.8	25.3	-18.6	
		Max N	0.425	-11.8	25.3	-18.6	
		Min N	0.000	-11.8	25.5	-29.4	
		Max V _z	0.000	-11.8	25.5	-29.4	
		Min V _z	0.425	-11.8	25.3	-18.6	
		Max M _y	0.425	-11.8	25.3	-18.6	
		Min M _y	0.000	-11.8	25.5	-29.4	
	BC4	137	0.000	-8.6	16.6	-25.6	
		135	0.425	-8.6	16.3	-18.6	
		Max N	0.425	-8.6	16.3	-18.6	
Min N		0.000	-8.6	16.6	-25.6		
Max V _z		0.000	-8.6	16.6	-25.6		
Min V _z		0.425	-8.6	16.3	-18.6		
Max M _y		0.425	-8.6	16.3	-18.6		
Min M _y		0.000	-8.6	16.6	-25.6		
180	BC1	136	0.000	-96.1	0.0	0.0	3 - Rechthoek 275/370
		137	0.338	-95.8	0.0	0.0	
		Max N	0.338	-95.8	0.0	0.0	
		Min N	0.000	-96.1	0.0	0.0	
		Max V _z	0.338	-95.8	0.0	0.0	
		Min V _z	0.000	-96.1	0.0	0.0	
		Max M _y	0.304	-95.8	0.0	0.0	
		Min M _y	0.000	-96.1	0.0	0.0	
	BC2	136	0.000	-112.5	0.0	0.0	
		137	0.338	-112.3	0.0	0.0	
		Max N	0.338	-112.3	0.0	0.0	
		Min N	0.000	-112.5	0.0	0.0	
		Max V _z	0.338	-112.3	0.0	0.0	
		Min V _z	0.000	-112.5	0.0	0.0	
		Max M _y	0.304	-112.3	0.0	0.0	
		Min M _y	0.000	-112.5	0.0	0.0	
	BC3	136	0.000	-108.0	0.0	0.0	
		137	0.338	-107.8	0.0	0.0	
		Max N	0.338	-107.8	0.0	0.0	
		Min N	0.000	-108.0	0.0	0.0	
		Max V _z	0.338	-107.8	0.0	0.0	

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Staal No.	BG/BC	Knoop No.	Snedex [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes	
				N	V _z			
180	BC3	Min V _z	0.000	-108.0	0.0	0.0		
		Max M _y	0.304	-107.9	0.0	0.0		
		Min M _y	0.000	-108.0	0.0	0.0		
	BC4	136	0.000	-107.5	0.0	0.0		
		137	0.338	-107.3	0.0	0.0		
		Max N	0.338	-107.3	0.0	0.0		
		Min N	0.000	-107.5	0.0	0.0		
		Max V _z	0.338	-107.3	0.0	0.0		
		Min V _z	0.000	-107.5	0.0	0.0		
		Max M _y	0.000	-107.5	0.0	0.0		
		Min M _y	0.304	-107.3	0.0	0.0		
	181	BC1	137	0.000	-87.4	35.0	-27.6	2 - Rechthoek 275/370
			139	0.337	-87.4	34.8	-15.8	
			Max N	0.337	-87.4	34.8	-15.8	
Min N			0.000	-87.4	35.0	-27.6		
Max V _z			0.000	-87.4	35.0	-27.6		
Min V _z			0.337	-87.4	34.8	-15.8		
Max M _y			0.337	-87.4	34.8	-15.8		
Min M _y			0.000	-87.4	35.0	-27.6		
BC2			137	0.000	-111.9	36.8	-25.7	
			139	0.337	-111.8	36.6	-13.3	
		Max N	0.337	-111.8	36.6	-13.3		
		Min N	0.000	-111.9	36.8	-25.7		
		Max V _z	0.000	-111.9	36.8	-25.7		
		Min V _z	0.337	-111.8	36.6	-13.3		
		Max M _y	0.337	-111.8	36.6	-13.3		
		Min M _y	0.000	-111.9	36.8	-25.7		
		BC3	137	0.000	-93.0	36.4	-29.4	
			139	0.337	-93.0	36.2	-17.1	
Max N			0.337	-93.0	36.2	-17.1		
Min N			0.000	-93.0	36.4	-29.4		
Max V _z			0.000	-93.0	36.4	-29.4		
Min V _z			0.337	-93.0	36.2	-17.1		
Max M _y			0.337	-93.0	36.2	-17.1		
Min M _y			0.000	-93.0	36.4	-29.4		
BC4			137	0.000	-107.1	35.0	-25.6	
			139	0.337	-107.1	34.9	-13.8	
		Max N	0.337	-107.1	34.9	-13.8		
		Min N	0.000	-107.1	35.0	-25.6		
		Max V _z	0.000	-107.1	35.0	-25.6		
		Min V _z	0.337	-107.1	34.9	-13.8		
	Max M _y	0.337	-107.1	34.9	-13.8			
	Min M _y	0.000	-107.1	35.0	-25.6			
	182	BC1	139	0.000	16.2			7 - Rechthoek 100/22
			138	2.037	16.2			
Max N			0.000	16.2				
Min N			0.000	16.2				
BC2		139	0.000	21.0				
		138	2.037	21.0				
		Max N	0.000	21.0				
		Min N	0.000	21.0				
BC3		139	0.000	16.6				
		138	2.037	16.6				
		Max N	0.000	16.6				
		Min N	0.000	16.6				
BC4		139	0.000	18.7				
		138	2.037	18.7				
		Max N	0.000	18.7				
		Min N	0.000	18.7				
183		BC1	143	0.000	16.4	4.5	0.0	6 - Rechthoek 50/200
			135	2.386	9.0	-4.5	0.0	
			Max N	0.000	16.4	4.5	0.0	
			Min N	2.386	9.0	-4.5	0.0	
	Max V _z		0.000	16.4	4.5	0.0		
	Min V _z		2.386	9.0	-4.5	0.0		
	Max M _y		1.193	12.6	0.0	2.7		
	Min M _y		0.000	16.4	4.5	0.0		
	BC2		143	0.000	13.3	4.1	0.0	
			135	2.386	6.6	-4.2	0.0	
		Max N	0.000	13.3	4.1	0.0		
		Min N	2.386	6.6	-4.2	0.0		
		Max V _z	0.000	13.3	4.1	0.0		
		Min V _z	2.386	6.6	-4.2	0.0		
		Max M _y	1.193	9.9	0.0	2.5		
		Min M _y	2.386	6.6	-4.2	0.0		
		BC3	143	0.000	18.0	4.1	0.0	

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StAAF No.	BG/BC	Knoop No.	Sneede x [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes		
				N	V _z				
183	BC3	135	2.386	11.2	-4.1	0.0			
		Max N	0.000	18.0	4.1	0.0			
		Min N	2.386	11.2	-4.1	0.0			
		Max V _z	0.000	18.0	4.1	0.0			
		Min V _z	2.386	11.2	-4.1	0.0			
		Max M _y	1.193	14.6	0.0	2.4			
		Min M _y	0.000	18.0	4.1	0.0			
	BC4	143	0.000	13.9	4.1	0.0			
		135	2.386	7.1	-4.1	0.0			
		Max N	0.000	13.9	4.1	0.0			
		Min N	2.386	7.1	-4.1	0.0			
		Max V _z	0.000	13.9	4.1	0.0			
		Min V _z	2.386	7.1	-4.1	0.0			
		Max M _y	1.193	10.4	0.0	2.5			
Min M _y	0.000	13.9	4.1	0.0					
184	BC1	141	0.000	-182.8	3.9	-5.0	5 - Rechthoek 275/340		
		136	1.431	-182.8	3.1	0.0			
		Max N	1.288	-182.8	3.2	-0.5			
		Min N	0.000	-182.8	3.9	-5.0			
		Max V _z	0.000	-182.8	3.9	-5.0			
		Min V _z	1.431	-182.8	3.1	0.0			
		Max M _y	1.431	-182.8	3.1	0.0			
		Min M _y	0.000	-182.8	3.9	-5.0			
	BC2	141	0.000	-215.6	3.3	-4.2			
		136	1.431	-215.6	2.5	0.0			
		Max N	1.145	-215.6	2.7	-0.7			
		Min N	0.000	-215.6	3.3	-4.2			
		Max V _z	0.000	-215.6	3.3	-4.2			
		Min V _z	1.431	-215.6	2.5	0.0			
		Max M _y	1.431	-215.6	2.5	0.0			
		Min M _y	0.000	-215.6	3.3	-4.2			
	BC3	141	0.000	-204.9	4.3	-5.7			
		136	1.431	-204.9	3.6	0.0			
		Max N	1.288	-204.9	3.7	-0.5			
		Min N	0.000	-204.9	4.3	-5.7			
		Max V _z	0.000	-204.9	4.3	-5.7			
		Min V _z	1.431	-204.9	3.6	0.0			
		Max M _y	1.431	-204.9	3.6	0.0			
		Min M _y	0.000	-204.9	4.3	-5.7			
	BC4	141	0.000	-205.6	3.4	-4.4			
		136	1.431	-205.6	2.7	0.0			
		Max N	1.145	-205.6	2.8	-0.8			
		Min N	0.000	-205.6	3.4	-4.4			
		Max V _z	0.000	-205.6	3.4	-4.4			
		Min V _z	1.431	-205.6	2.7	0.0			
Max M _y		1.431	-205.6	2.7	0.0				
Min M _y		0.000	-205.6	3.4	-4.4				
185	BC1	138	0.000	123.8	1.5	-3.1	9 - Rechthoek 355/440		
		140	1.094	123.8	0.0	-2.3			
		Max N	0.875	123.8	0.3	-2.3			
		Min N	0.000	123.8	1.5	-3.1			
		Max V _z	0.000	123.8	1.5	-3.1			
		Min V _z	1.094	123.8	0.0	-2.3			
		Max M _y	1.094	123.8	0.0	-2.3			
		Min M _y	0.000	123.8	1.5	-3.1			
		BC2	138	0.000	144.6	2.0		-4.5	
			140	1.094	144.6	0.0		-3.4	
	Max N		0.875	144.6	0.4	-3.4			
	Min N		0.000	144.6	2.0	-4.5			
	Max V _z		0.000	144.6	2.0	-4.5			
	Min V _z		1.094	144.6	0.0	-3.4			
	Max M _y		1.094	144.6	0.0	-3.4			
	Min M _y		0.000	144.6	2.0	-4.5			
	BC3		138	0.000	140.3	1.4	-2.7		
			140	1.094	140.3	0.0	-2.0		
		Max N	0.875	140.3	0.3	-2.0			
		Min N	0.000	140.3	1.4	-2.7			
		Max V _z	0.000	140.3	1.4	-2.7			
		Min V _z	1.094	140.3	0.0	-2.0			
		Max M _y	1.094	140.3	0.0	-2.0			
		Min M _y	0.000	140.3	1.4	-2.7			
		BC4	138	0.000	138.7	1.4	-4.0		
			140	1.094	138.7	0.0	-3.2		
	Max N		0.766	138.7	0.4	-3.3			
	Min N		0.000	138.7	1.4	-4.0			

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Staaf No.	BG/BC	Knoop No.	Snedex [m]	Krachten [kN]		Momenten M_y [kNm]	Snedes
				N	V_z		
185	BC4	Max V_z	0.000	138.7	1.4	-4.0	
		Min V_z	1.094	138.7	0.0	-3.2	
		Max M_y	1.094	138.7	0.0	-3.2	
		Min M_y	0.000	138.7	1.4	-4.0	
186	BC1	139	0.000	-87.3	18.6	-15.8	2 - Rechthoek 275/370
		142	1.094	-87.3	17.9	4.2	
		Max N	0.875	-87.3	18.1	0.2	
		Min N	0.000	-87.3	18.6	-15.8	
		Max V_z	0.000	-87.3	18.6	-15.8	
		Min V_z	1.094	-87.3	17.9	4.2	
		Max M_y	1.094	-87.3	17.9	4.2	
		Min M_y	0.000	-87.3	18.6	-15.8	
	BC2	139	0.000	-111.8	15.7	-13.3	
		142	1.094	-111.8	15.1	3.5	
		Max N	0.875	-111.8	15.2	0.2	
		Min N	0.000	-111.8	15.7	-13.3	
		Max V_z	0.000	-111.8	15.7	-13.3	
		Min V_z	1.094	-111.8	15.1	3.5	
		Max M_y	1.094	-111.8	15.1	3.5	
		Min M_y	0.000	-111.8	15.7	-13.3	
	BC3	139	0.000	-93.0	19.7	-17.1	
		142	1.094	-93.0	19.0	4.0	
		Max N	0.875	-93.0	19.2	-0.1	
		Min N	0.000	-93.0	19.7	-17.1	
		Max V_z	0.000	-93.0	19.7	-17.1	
		Min V_z	1.094	-93.0	19.0	4.0	
		Max M_y	1.094	-93.0	19.0	4.0	
		Min M_y	0.000	-93.0	19.7	-17.1	
	BC4	139	0.000	-107.1	16.1	-13.8	
		142	1.094	-107.0	15.5	3.5	
		Max N	0.875	-107.0	15.7	0.1	
		Min N	0.000	-107.1	16.1	-13.8	
Max V_z		0.000	-107.1	16.1	-13.8		
Min V_z		1.094	-107.0	15.5	3.5		
Max M_y		1.094	-107.0	15.5	3.5		
Min M_y		0.000	-107.1	16.1	-13.8		
187	BC1	141	0.000	7.8	0.0	0.0	3 - Rechthoek 275/370
		142	0.338	8.1	0.0	0.0	
		Max N	0.338	8.1	0.0	0.0	
		Min N	0.000	7.8	0.0	0.0	
		Max V_z	0.000	7.8	0.0	0.0	
		Min V_z	0.338	8.1	0.0	0.0	
		Max M_y	0.338	8.1	0.0	0.0	
		Min M_y	0.000	7.8	0.0	0.0	
	BC2	141	0.000	6.6	0.0	0.0	
		142	0.338	6.8	0.0	0.0	
		Max N	0.338	6.8	0.0	0.0	
		Min N	0.000	6.6	0.0	0.0	
		Max V_z	0.000	6.6	0.0	0.0	
		Min V_z	0.338	6.8	0.0	0.0	
		Max M_y	0.338	6.8	0.0	0.0	
		Min M_y	0.000	6.6	0.0	0.0	
	BC3	141	0.000	8.7	0.0	0.0	
		142	0.338	8.9	0.0	0.0	
		Max N	0.338	8.9	0.0	0.0	
		Min N	0.000	8.7	0.0	0.0	
		Max V_z	0.000	8.7	0.0	0.0	
		Min V_z	0.338	8.9	0.0	0.0	
		Max M_y	0.338	8.9	0.0	0.0	
		Min M_y	0.000	8.7	0.0	0.0	
	BC4	141	0.000	6.8	0.0	0.0	
		142	0.338	7.0	0.0	0.0	
		Max N	0.338	7.0	0.0	0.0	
		Min N	0.000	6.8	0.0	0.0	
Max V_z		0.000	6.8	0.0	0.0		
Min V_z		0.338	7.0	0.0	0.0		
Max M_y		0.338	7.0	0.0	0.0		
Min M_y		0.000	6.8	0.0	0.0		
188	BC1	142	0.000	-27.8	0.0	0.0	6 - Rechthoek 50/200
		143	1.500	-27.6	0.0	0.0	
		Max N	1.500	-27.6	0.0	0.0	
		Min N	0.000	-27.8	0.0	0.0	
		Max V_z	0.000	-27.8	0.0	0.0	
		Min V_z	1.500	-27.6	0.0	0.0	
		Max M_y	0.000	-27.8	0.0	0.0	
		Min M_y	0.000	-27.8	0.0	0.0	

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Staal No.	BG/BC	Knoop No.	Snedes x [m]	Krachten [kN]		Momenten My [kNm]	Snedes	
				N	Vz			
188	BC1	Min My	1.350	-27.7	0.0	0.0		
		142	0.000	-23.4	0.0	0.0		
	BC2	143	1.500	-23.3	0.0	0.0		
		Max N	1.500	-23.3	0.0	0.0		
	Min N	0.000	-23.4	0.0	0.0			
	Max Vz	0.000	-23.4	0.0	0.0			
	Min Vz	1.500	-23.3	0.0	0.0			
	Max My	1.350	-23.3	0.0	0.0			
	Min My	0.000	-23.4	0.0	0.0			
	BC3	142	0.000	-29.2	0.0	0.0		
		143	1.500	-29.1	0.0	0.0		
	Max N	1.500	-29.1	0.0	0.0			
	Min N	0.000	-29.2	0.0	0.0			
	Max Vz	0.000	-29.2	0.0	0.0			
	Min Vz	1.500	-29.1	0.0	0.0			
	Max My	1.500	-29.1	0.0	0.0			
	Min My	0.000	-29.2	0.0	0.0			
	BC4	142	0.000	-24.0	0.0	0.0		
		143	1.500	-23.9	0.0	0.0		
	Max N	1.500	-23.9	0.0	0.0			
	Min N	0.000	-24.0	0.0	0.0			
	Max Vz	0.000	-24.0	0.0	0.0			
	Min Vz	1.500	-23.9	0.0	0.0			
	Max My	0.000	-24.0	0.0	0.0			
	Min My	1.500	-23.9	0.0	0.0			
	189	BC1	140	0.000	123.8	0.0	-2.3	9 - Rechthoek 355/440
			144	1.094	123.8	-1.5	-3.1	
		Max N	0.000	123.8	0.0	-2.3		
Min N		1.094	123.8	-1.5	-3.1			
Max Vz		0.000	123.8	0.0	-2.3			
Min Vz		1.094	123.8	-1.5	-3.1			
Max My		0.000	123.8	0.0	-2.3			
Min My		1.094	123.8	-1.5	-3.1			
BC2		140	0.000	144.6	0.0	-3.4		
		144	1.094	144.6	-2.0	-4.5		
Max N		0.000	144.6	0.0	-3.4			
Min N		1.094	144.6	-2.0	-4.5			
Max Vz		0.000	144.6	0.0	-3.4			
Min Vz		1.094	144.6	-2.0	-4.5			
Max My		0.000	144.6	0.0	-3.4			
Min My		1.094	144.6	-2.0	-4.5			
BC3		140	0.000	140.3	0.0	-2.0		
		144	1.094	140.3	-1.4	-2.7		
Max N		0.000	140.3	0.0	-2.0			
Min N		1.094	140.3	-1.4	-2.7			
Max Vz		0.000	140.3	0.0	-2.0			
Min Vz		1.094	140.3	-1.4	-2.7			
Max My		0.000	140.3	0.0	-2.0			
Min My		1.094	140.3	-1.4	-2.7			
BC4		140	0.000	138.7	0.0	-3.2		
		144	1.094	138.7	-1.4	-4.0		
Max N		0.000	138.7	0.0	-3.2			
Min N		1.094	138.7	-1.4	-4.0			
Max Vz	0.000	138.7	0.0	-3.2				
Min Vz	1.094	138.7	-1.4	-4.0				
Max My	0.000	138.7	0.0	-3.2				
Min My	1.094	138.7	-1.4	-4.0				
190	BC1	145	0.000	-87.3	18.6	-15.8	2 - Rechthoek 275/370	
		142	1.094	-87.3	17.9	4.2		
	Max N	0.875	-87.3	18.1	0.2			
	Min N	0.000	-87.3	18.6	-15.8			
	Max Vz	0.000	-87.3	18.6	-15.8			
	Min Vz	1.094	-87.3	17.9	4.2			
	Max My	1.094	-87.3	17.9	4.2			
	Min My	0.000	-87.3	18.6	-15.8			
	BC2	145	0.000	-111.8	15.7	-13.3		
		142	1.094	-111.8	15.1	3.5		
	Max N	0.875	-111.8	15.2	0.2			
	Min N	0.000	-111.8	15.7	-13.3			
	Max Vz	0.000	-111.8	15.7	-13.3			
	Min Vz	1.094	-111.8	15.1	3.5			
	Max My	1.094	-111.8	15.1	3.5			
	Min My	0.000	-111.8	15.7	-13.3			
	BC3	145	0.000	-93.0	19.7	-17.1		
		142	1.094	-93.0	19.0	4.0		
	Max N	0.875	-93.0	19.2	-0.1			

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StAAF No.	BG/BC	Knoop No.	SneDe x [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes
				N	V _z		
190	BC3	Min N	0.000	-93.0	19.7	-17.1	
		Max V _z	0.000	-93.0	19.7	-17.1	
		Min V _z	1.094	-93.0	19.0	4.0	
		Max M _y	1.094	-93.0	19.0	4.0	
		Min M _y	0.000	-93.0	19.7	-17.1	
	BC4	145	0.000	-107.1	16.1	-13.8	
		142	1.094	-107.0	15.5	3.5	
		Max N	0.875	-107.0	15.7	0.1	
		Min N	0.000	-107.1	16.1	-13.8	
		Max V _z	0.000	-107.1	16.1	-13.8	
		Min V _z	1.094	-107.0	15.5	3.5	
		Max M _y	1.094	-107.0	15.5	3.5	
		Min M _y	0.000	-107.1	16.1	-13.8	
		191	BC1	141	0.000	-182.8	3.9
146	1.431			-182.8	3.1	0.0	
Max N	1.145			-182.8	3.3	-0.9	
Min N	0.000			-182.8	3.9	-5.0	
Max V _z	0.000			-182.8	3.9	-5.0	
Min V _z	1.431			-182.8	3.1	0.0	
Max M _y	1.431			-182.8	3.1	0.0	
Min M _y	0.000			-182.8	3.9	-5.0	
BC2	141		0.000	-215.6	3.3	-4.2	
	146		1.431	-215.6	2.5	0.0	
	Max N		1.145	-215.6	2.7	-0.7	
	Min N		0.000	-215.6	3.3	-4.2	
	Max V _z		0.000	-215.6	3.3	-4.2	
	Min V _z		1.431	-215.6	2.5	0.0	
	Max M _y		1.431	-215.6	2.5	0.0	
	Min M _y		0.000	-215.6	3.3	-4.2	
BC3	141		0.000	-204.9	4.3	-5.7	
	146		1.431	-204.9	3.6	0.0	
	Max N		1.145	-204.9	3.8	-1.1	
	Min N		0.000	-204.9	4.3	-5.7	
	Max V _z		0.000	-204.9	4.3	-5.7	
	Min V _z		1.431	-204.9	3.6	0.0	
	Max M _y		1.431	-204.9	3.6	0.0	
	Min M _y		0.000	-204.9	4.3	-5.7	
BC4	141		0.000	-205.6	3.4	-4.4	
	146		1.431	-205.6	2.7	0.0	
	Max N		1.145	-205.6	2.8	-0.8	
	Min N		0.000	-205.6	3.4	-4.4	
	Max V _z	0.000	-205.6	3.4	-4.4		
	Min V _z	1.431	-205.6	2.7	0.0		
	Max M _y	1.431	-205.6	2.7	0.0		
	Min M _y	0.000	-205.6	3.4	-4.4		
192	BC1	143	0.000	16.4	4.5	0.0	6 - Rechthoek 50/200
		148	2.386	9.0	-4.5	0.0	
		Max N	0.000	16.4	4.5	0.0	
		Min N	2.386	9.0	-4.5	0.0	
		Max V _z	0.000	16.4	4.5	0.0	
		Min V _z	2.386	9.0	-4.5	0.0	
		Max M _y	1.193	12.6	0.0	2.7	
		Min M _y	2.386	9.0	-4.5	0.0	
	BC2	143	0.000	13.3	4.1	0.0	
		148	2.386	6.6	-4.2	0.0	
		Max N	0.000	13.3	4.1	0.0	
		Min N	2.386	6.6	-4.2	0.0	
		Max V _z	0.000	13.3	4.1	0.0	
		Min V _z	2.386	6.6	-4.2	0.0	
		Max M _y	1.193	9.9	0.0	2.5	
		Min M _y	2.386	6.6	-4.2	0.0	
	BC3	143	0.000	18.0	4.1	0.0	
		148	2.386	11.2	-4.1	0.0	
		Max N	0.000	18.0	4.1	0.0	
		Min N	2.386	11.2	-4.1	0.0	
		Max V _z	0.000	18.0	4.1	0.0	
		Min V _z	2.386	11.2	-4.1	0.0	
		Max M _y	1.193	14.6	0.0	2.4	
		Min M _y	2.386	11.2	-4.1	0.0	
	BC4	143	0.000	13.9	4.1	0.0	
		148	2.386	7.1	-4.1	0.0	
		Max N	0.000	13.9	4.1	0.0	
		Min N	2.386	7.1	-4.1	0.0	
Max V _z		0.000	13.9	4.1	0.0		
Min V _z		2.386	7.1	-4.1	0.0		

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StAAF No.	BG/BC	Knoop No.	Sneede x [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes
				N	V _z		
192	BC4	Max M _y	1.193	10.4	0.0	2.5	
		Min M _y	2.386	7.1	-4.1	0.0	
193	BC1	145	0.000	16.2			7 - Rechthoek 100/22
		144	2.037	16.2			
		Max N	0.000	16.2			
		Min N	0.000	16.2			
	BC2	145	0.000	21.0			
		144	2.037	21.0			
		Max N	0.000	21.0			
		Min N	0.000	21.0			
	BC3	145	0.000	16.6			
		144	2.037	16.6			
		Max N	0.000	16.6			
		Min N	0.000	16.6			
BC4	145	0.000	18.7				
	144	2.037	18.7				
	Max N	0.000	18.7				
	Min N	0.000	18.7				
194	BC1	147	0.000	-87.4	35.0	-27.6	2 - Rechthoek 275/370
		145	0.337	-87.4	34.8	-15.8	
		Max N	0.337	-87.4	34.8	-15.8	
		Min N	0.000	-87.4	35.0	-27.6	
		Max V _z	0.000	-87.4	35.0	-27.6	
		Min V _z	0.337	-87.4	34.8	-15.8	
		Max M _y	0.337	-87.4	34.8	-15.8	
		Min M _y	0.000	-87.4	35.0	-27.6	
	BC2	147	0.000	-111.9	36.8	-25.7	
		145	0.337	-111.8	36.6	-13.3	
		Max N	0.337	-111.8	36.6	-13.3	
		Min N	0.000	-111.9	36.8	-25.7	
		Max V _z	0.000	-111.9	36.8	-25.7	
		Min V _z	0.337	-111.8	36.6	-13.3	
		Max M _y	0.337	-111.8	36.6	-13.3	
		Min M _y	0.000	-111.9	36.8	-25.7	
	BC3	147	0.000	-93.0	36.4	-29.4	
		145	0.337	-93.0	36.2	-17.1	
		Max N	0.337	-93.0	36.2	-17.1	
		Min N	0.000	-93.0	36.4	-29.4	
		Max V _z	0.000	-93.0	36.4	-29.4	
		Min V _z	0.337	-93.0	36.2	-17.1	
		Max M _y	0.337	-93.0	36.2	-17.1	
		Min M _y	0.000	-93.0	36.4	-29.4	
BC4	147	0.000	-107.1	35.0	-25.6		
	145	0.337	-107.1	34.9	-13.8		
	Max N	0.337	-107.1	34.9	-13.8		
	Min N	0.000	-107.1	35.0	-25.6		
	Max V _z	0.000	-107.1	35.0	-25.6		
	Min V _z	0.337	-107.1	34.9	-13.8		
	Max M _y	0.337	-107.1	34.9	-13.8		
	Min M _y	0.000	-107.1	35.0	-25.6		
195	BC1	146	0.000	-96.1	0.0	0.0	3 - Rechthoek 275/370
		147	0.338	-95.8	0.0	0.0	
		Max N	0.338	-95.8	0.0	0.0	
		Min N	0.000	-96.1	0.0	0.0	
		Max V _z	0.000	-96.1	0.0	0.0	
		Min V _z	0.338	-95.8	0.0	0.0	
		Max M _y	0.000	-96.1	0.0	0.0	
		Min M _y	0.304	-95.8	0.0	0.0	
	BC2	146	0.000	-112.5	0.0	0.0	
		147	0.338	-112.3	0.0	0.0	
		Max N	0.338	-112.3	0.0	0.0	
		Min N	0.000	-112.5	0.0	0.0	
		Max V _z	0.000	-112.5	0.0	0.0	
		Min V _z	0.338	-112.3	0.0	0.0	
		Max M _y	0.000	-112.5	0.0	0.0	
		Min M _y	0.304	-112.3	0.0	0.0	
	BC3	146	0.000	-108.0	0.0	0.0	
		147	0.338	-107.8	0.0	0.0	
		Max N	0.338	-107.8	0.0	0.0	
		Min N	0.000	-108.0	0.0	0.0	
		Max V _z	0.000	-108.0	0.0	0.0	
		Min V _z	0.338	-107.8	0.0	0.0	
		Max M _y	0.000	-108.0	0.0	0.0	
		Min M _y	0.304	-107.9	0.0	0.0	
BC4	146	0.000	-107.5	0.0	0.0		
	147	0.338	-107.3	0.0	0.0		

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Staal No.	BG/BC	Knoop No.	Sned x [m]	Krachten [kN]		Momenten M _y [kNm]	Sned
				N	V _z		
195	BC4	Max N	0.338	-107.3	0.0	0.0	
		Min N	0.000	-107.5	0.0	0.0	
		Max V _z	0.000	-107.5	0.0	0.0	
		Min V _z	0.338	-107.3	0.0	0.0	
		Max M _y	0.000	-107.5	0.0	0.0	
		Min M _y	0.304	-107.3	0.0	0.0	
196	BC1	147	0.000	-10.3	17.3	-27.6	2 - Rechthoek 275/370
		148	0.425	-10.3	17.1	-20.3	
		Max N	0.425	-10.3	17.1	-20.3	
		Min N	0.000	-10.3	17.3	-27.6	
		Max V _z	0.000	-10.3	17.3	-27.6	
		Min V _z	0.425	-10.3	17.1	-20.3	
	BC2	147	0.000	-8.2	16.9	-25.7	
		148	0.425	-8.2	16.7	-18.6	
		Max N	0.425	-8.2	16.7	-18.6	
		Min N	0.000	-8.2	16.9	-25.7	
		Max V _z	0.000	-8.2	16.9	-25.7	
		Min V _z	0.425	-8.2	16.7	-18.6	
	BC3	147	0.000	-11.8	25.5	-29.4	
		148	0.425	-11.8	25.3	-18.6	
		Max N	0.425	-11.8	25.3	-18.6	
		Min N	0.000	-11.8	25.5	-29.4	
		Max V _z	0.000	-11.8	25.5	-29.4	
		Min V _z	0.425	-11.8	25.3	-18.6	
	BC4	147	0.000	-8.6	16.6	-25.6	
		148	0.425	-8.6	16.3	-18.6	
		Max N	0.425	-8.6	16.3	-18.6	
		Min N	0.000	-8.6	16.6	-25.6	
		Max V _z	0.000	-8.6	16.6	-25.6	
		Min V _z	0.425	-8.6	16.3	-18.6	
197	BC1	144	0.000	123.8	14.7	-3.1	9 - Rechthoek 355/440
		152	2.125	123.8	11.8	24.9	
		Max N	0.213	123.8	14.4	0.0	
		Min N	2.125	123.8	11.8	24.9	
		Max V _z	0.000	123.8	14.7	-3.1	
		Min V _z	2.125	123.8	11.8	24.9	
	BC2	144	0.000	144.6	18.9	-4.5	
		152	2.125	144.6	15.2	31.6	
		Max N	0.213	144.6	18.5	-0.5	
		Min N	2.125	144.6	15.2	31.6	
		Max V _z	0.000	144.6	18.9	-4.5	
		Min V _z	2.125	144.6	15.2	31.6	
	BC3	144	0.000	140.3	15.2	-2.7	
		152	2.125	140.3	12.6	26.7	
		Max N	0.213	140.3	14.9	0.4	
		Min N	2.125	140.3	12.6	26.7	
		Max V _z	0.000	140.3	15.2	-2.7	
		Min V _z	2.125	140.3	12.6	26.7	
	BC4	144	0.000	138.7	17.3	-4.0	
		152	2.125	138.7	14.8	30.0	
		Max N	0.213	138.7	17.0	-0.4	
		Min N	2.125	138.7	14.8	30.0	
		Max V _z	0.000	138.7	17.3	-4.0	
		Min V _z	2.125	138.7	14.8	30.0	
198	BC1	158	0.000	88.4		7 - Rechthoek 100/22	
		137	8.410	88.4			
		Max N	0.000	88.4			
		Min N	0.000	88.4			
	BC2	158	0.000	119.0			
		137	8.410	119.0			

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Staal No.	BG/BC	Knoop No.	Sneede x [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes		
				N	V _z				
198	BC2	Max N	0.000	119.0					
		Min N	0.000	119.0					
	BC3	158	0.000	93.3					
		137	8.410	93.3					
		Max N	0.000	93.3					
		Min N	0.000	93.3					
	BC4	158	0.000	113.1					
		137	8.410	113.1					
		Max N	0.000	113.1					
		Min N	0.000	113.1					
	199	BC1	148	0.000	-1.1	14.9	-20.3	2 - Rechthoek 275/370	
			149	1.085	-1.0	14.2	-4.5		
Max N			1.085	-1.0	14.2	-4.5			
Min N			0.000	-1.1	14.9	-20.3			
Max V _z			0.000	-1.1	14.9	-20.3			
Min V _z			1.085	-1.0	14.2	-4.5			
Max M _y			1.085	-1.0	14.2	-4.5			
Min M _y			0.000	-1.1	14.9	-20.3			
BC2			148	0.000	-1.0	13.7	-18.6		
			149	1.085	-1.0	13.0	-4.1		
			Max N	1.085	-1.0	13.0	-4.1		
			Min N	0.000	-1.0	13.7	-18.6		
		Max V _z	0.000	-1.0	13.7	-18.6			
		Min V _z	1.085	-1.0	13.0	-4.1			
BC3		148	0.000	-1.0	13.7	-18.6			
		149	1.085	-1.0	13.0	-4.1			
		Max N	1.085	-1.0	13.0	-4.1			
		Min N	0.000	-1.0	13.7	-18.6			
		Max V _z	0.000	-1.0	13.7	-18.6			
		Min V _z	1.085	-1.0	13.0	-4.1			
BC4		148	0.000	-1.0	13.7	-18.6			
		149	1.085	-1.0	13.0	-4.1			
		Max N	1.085	-1.0	13.0	-4.1			
		Min N	0.000	-1.0	13.7	-18.6			
		Max V _z	0.000	-1.0	13.7	-18.6			
		Min V _z	1.085	-1.0	13.0	-4.1			
200		BC1	151	0.000	4.6	3.1	0.0	6 - Rechthoek 50/200	
			148	1.966	-2.8	-3.2	0.0		
			Max N	0.000	4.6	3.1	0.0		
			Min N	1.966	-2.8	-3.2	0.0		
			Max V _z	0.000	4.6	3.1	0.0		
			Min V _z	1.966	-2.8	-3.2	0.0		
			Max M _y	0.983	0.9	0.0	1.5		
			Min M _y	1.966	-2.8	-3.2	0.0		
			BC2	151	0.000	4.2	2.9		0.0
				148	1.966	-2.6	-2.9		0.0
				Max N	0.000	4.2	2.9		0.0
				Min N	1.966	-2.6	-2.9		0.0
		Max V _z		0.000	4.2	2.9	0.0		
		Min V _z		1.966	-2.6	-2.9	0.0		
		BC3	151	0.000	4.2	2.9	0.0		
			148	1.966	-2.6	-2.9	0.0		
			Max N	0.000	4.2	2.9	0.0		
			Min N	1.966	-2.6	-2.9	0.0		
			Max V _z	0.000	4.2	2.9	0.0		
			Min V _z	1.966	-2.6	-2.9	0.0		
		BC4	151	0.000	4.2	2.9	0.0		
			148	1.966	-2.6	-2.9	0.0		
	Max N		0.000	4.2	2.9	0.0			
	Min N		1.966	-2.6	-2.9	0.0			
	Max V _z		0.000	4.2	2.9	0.0			
	Min V _z		1.966	-2.6	-2.9	0.0			
	201	BC1	149	0.000	-0.5	14.2	-4.5	2 - Rechthoek 275/370	
			150	0.186	-0.5	14.0	-1.9		

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Staal No.	BG/BC	Knoop No.	Snedes x [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes
				N	V _z		
201	BC1	Max N	0.186	-0.5	14.0	-1.9	
		Min N	0.000	-0.5	14.2	-4.5	
		Max V _z	0.000	-0.5	14.2	-4.5	
		Min V _z	0.186	-0.5	14.0	-1.9	
		Max M _y	0.186	-0.5	14.0	-1.9	
		Min M _y	0.000	-0.5	14.2	-4.5	
		149	0.000	-0.5	13.0	-4.1	
	BC2	150	0.186	-0.5	12.9	-1.7	
		Max N	0.186	-0.5	12.9	-1.7	
		Min N	0.000	-0.5	13.0	-4.1	
		Max V _z	0.000	-0.5	13.0	-4.1	
		Min V _z	0.186	-0.5	12.9	-1.7	
		Max M _y	0.186	-0.5	12.9	-1.7	
		Min M _y	0.000	-0.5	13.0	-4.1	
	BC3	149	0.000	-0.5	13.0	-4.1	
		150	0.186	-0.5	12.9	-1.7	
		Max N	0.186	-0.5	12.9	-1.7	
		Min N	0.000	-0.5	13.0	-4.1	
		Max V _z	0.000	-0.5	13.0	-4.1	
		Min V _z	0.186	-0.5	12.9	-1.7	
		Max M _y	0.186	-0.5	12.9	-1.7	
	BC4	149	0.000	-0.5	13.0	-4.1	
		150	0.186	-0.5	12.9	-1.7	
		Max N	0.186	-0.5	12.9	-1.7	
		Min N	0.000	-0.5	13.0	-4.1	
		Max V _z	0.000	-0.5	13.0	-4.1	
		Min V _z	0.186	-0.5	12.9	-1.7	
		Max M _y	0.186	-0.5	12.9	-1.7	
202	BC1	146	0.000	-205.0	1.1	0.0	3 - Rechthoek 275/370
		155	3.700	-206.2	-1.1	0.0	
		Max N	0.000	-205.0	1.1	0.0	
		Min N	3.700	-206.2	-1.1	0.0	
		Max V _z	0.000	-205.0	1.1	0.0	
		Min V _z	3.700	-206.2	-1.1	0.0	
		Max M _y	1.850	-205.6	0.0	1.0	
	Min M _y	0.000	-205.0	1.1	0.0		
	BC2	146	0.000	-242.0	1.0	0.0	
		155	3.700	-243.0	-1.0	0.0	
		Max N	0.000	-242.0	1.0	0.0	
		Min N	3.700	-243.0	-1.0	0.0	
		Max V _z	0.000	-242.0	1.0	0.0	
		Min V _z	3.700	-243.0	-1.0	0.0	
		Max M _y	1.850	-242.5	0.0	1.0	
	Min M _y	0.000	-242.0	1.0	0.0		
	BC3	146	0.000	-229.9	1.0	0.0	
		155	3.700	-231.0	-1.0	0.0	
		Max N	0.000	-229.9	1.0	0.0	
		Min N	3.700	-231.0	-1.0	0.0	
		Max V _z	0.000	-229.9	1.0	0.0	
		Min V _z	3.700	-231.0	-1.0	0.0	
		Max M _y	1.850	-230.5	0.0	1.0	
	Min M _y	3.700	-231.0	-1.0	0.0		
	BC4	146	0.000	-230.7	1.0	0.0	
		155	3.700	-231.8	-1.0	0.0	
		Max N	0.000	-230.7	1.0	0.0	
		Min N	3.700	-231.8	-1.0	0.0	
Max V _z		0.000	-230.7	1.0	0.0		
Min V _z		3.700	-231.8	-1.0	0.0		
Max M _y		1.850	-231.3	0.0	1.0		
Min M _y	0.000	-230.7	1.0	0.0			
203	BC1	150	0.000	-10.9	0.0	0.0	6 - Rechthoek 50/200
		151	1.500	-10.8	0.0	0.0	
		Max N	1.500	-10.8	0.0	0.0	
		Min N	0.000	-10.9	0.0	0.0	
		Max V _z	0.000	-10.9	0.0	0.0	
		Min V _z	1.500	-10.8	0.0	0.0	
		Max M _y	1.350	-10.8	0.0	0.0	
	Min M _y	0.000	-10.9	0.0	0.0		
	BC2	150	0.000	-10.0	0.0	0.0	
		151	1.500	-9.9	0.0	0.0	
		Max N	1.500	-9.9	0.0	0.0	
		Min N	0.000	-10.0	0.0	0.0	
		Max V _z	0.000	-10.0	0.0	0.0	
		Min V _z	0.000	-10.0	0.0	0.0	
Max M _y		0.000	-10.0	0.0	0.0		

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Staaf No.	BG/BC	Knoop No.	Sneede x [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes
				N	V _z		
203	BC2	Min V _z	1.500	-9.9	0.0	0.0	
		Max M _y	1.350	-9.9	0.0	0.0	
		Min M _y	1.500	-9.9	0.0	0.0	
	BC3	150	0.000	-10.0	0.0	0.0	
		151	1.500	-9.9	0.0	0.0	
		Max N	1.500	-9.9	0.0	0.0	
		Min N	0.000	-10.0	0.0	0.0	
		Max V _z	0.000	-10.0	0.0	0.0	
		Min V _z	1.500	-9.9	0.0	0.0	
		Max M _y	0.000	-10.0	0.0	0.0	
	BC4	150	0.000	-10.0	0.0	0.0	
		151	1.500	-9.9	0.0	0.0	
		Max N	1.500	-9.9	0.0	0.0	
		Min N	0.000	-10.0	0.0	0.0	
		Max V _z	0.000	-10.0	0.0	0.0	
		Min V _z	1.500	-9.9	0.0	0.0	
Max M _y		1.500	-9.9	0.0	0.0		
204	BC1	150	0.000	-0.5	3.2	-1.9	2 - Rechthoek 275/370
		153	0.629	-0.5	2.7	0.0	
		Max N	0.000	-0.5	3.2	-1.9	
		Min N	0.629	-0.5	2.7	0.0	
		Max V _z	0.000	-0.5	3.2	-1.9	
		Min V _z	0.629	-0.5	2.7	0.0	
		Max M _y	0.629	-0.5	2.7	0.0	
		Min M _y	0.000	-0.5	3.2	-1.9	
	BC2	150	0.000	-0.5	2.9	-1.7	
		153	0.629	-0.5	2.5	0.0	
		Max N	0.000	-0.5	2.9	-1.7	
		Min N	0.629	-0.5	2.5	0.0	
		Max V _z	0.000	-0.5	2.9	-1.7	
		Min V _z	0.629	-0.5	2.5	0.0	
		Max M _y	0.629	-0.5	2.5	0.0	
	BC3	150	0.000	-0.5	2.9	-1.7	
153		0.629	-0.5	2.5	0.0		
Max N		0.000	-0.5	2.9	-1.7		
Min N		0.629	-0.5	2.5	0.0		
Max V _z		0.000	-0.5	2.9	-1.7		
Min V _z		0.629	-0.5	2.5	0.0		
Max M _y		0.629	-0.5	2.5	0.0		
BC4	150	0.000	-0.5	2.9	-1.7		
	153	0.629	-0.5	2.5	0.0		
	Max N	0.000	-0.5	2.9	-1.7		
	Min N	0.629	-0.5	2.5	0.0		
	Max V _z	0.000	-0.5	2.9	-1.7		
	Min V _z	0.629	-0.5	2.5	0.0		
	Max M _y	0.629	-0.5	2.5	0.0		
205	BC1	153	0.000	-2.3	1.5	0.0	6 - Rechthoek 50/200
		151	1.627	5.1	-1.5	0.0	
		Max N	1.627	5.1	-1.5	0.0	
		Min N	0.000	-2.3	1.5	0.0	
		Max V _z	0.000	-2.3	1.5	0.0	
		Min V _z	1.627	5.1	-1.5	0.0	
		Max M _y	0.813	1.4	0.0	0.6	
		Min M _y	0.000	-2.3	1.5	0.0	
	BC2	153	0.000	-2.1	1.4	0.0	
		151	1.627	4.6	-1.4	0.0	
		Max N	1.627	4.6	-1.4	0.0	
		Min N	0.000	-2.1	1.4	0.0	
		Max V _z	0.000	-2.1	1.4	0.0	
		Min V _z	1.627	4.6	-1.4	0.0	
		Max M _y	0.813	1.3	0.0	0.6	
	BC3	153	0.000	-2.1	1.4	0.0	
151		1.627	4.6	-1.4	0.0		
Max N		1.627	4.6	-1.4	0.0		
Min N		0.000	-2.1	1.4	0.0		
Max V _z		0.000	-2.1	1.4	0.0		
Min V _z		1.627	4.6	-1.4	0.0		
Max M _y		0.813	1.3	0.0	0.6		
Min M _y	0.000	-2.1	1.4	0.0			

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StAAF No	BG/BC	Knoop No.	SneDe x [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes		
				N	V _z				
205	BC4	153	0.000	-2.1	1.4	0.0			
		151	1.627	4.6	-1.4	0.0			
		Max N	1.627	4.6	-1.4	0.0			
		Min N	0.000	-2.1	1.4	0.0			
		Max V _z	0.000	-2.1	1.4	0.0			
		Min V _z	1.627	4.6	-1.4	0.0			
		Max M _y	0.813	1.3	0.0	0.6			
		Min M _y	0.000	-2.1	1.4	0.0			
		206	BC1	154	0.000	-1.0	0.4	0.0	4 - Rechthoek 275/285
				149	1.758	-0.4	-0.4	0.0	
Max N	1.758			-0.4	-0.4	0.0			
Min N	0.000			-1.0	0.4	0.0			
Max V _z	0.000			-1.0	0.4	0.0			
Min V _z	1.758			-0.4	-0.4	0.0			
Max M _y	0.879			-0.7	0.0	0.2			
Min M _y	0.000			-1.0	0.4	0.0			
BC2	154			0.000	-0.9	0.3	0.0		
	149			1.758	-0.4	-0.3	0.0		
	Max N		1.758	-0.4	-0.3	0.0			
	Min N		0.000	-0.9	0.3	0.0			
	Max V _z		0.000	-0.9	0.3	0.0			
	Min V _z		1.758	-0.4	-0.3	0.0			
	Max M _y		0.879	-0.6	0.0	0.1			
	Min M _y		1.758	-0.4	-0.3	0.0			
	BC3		154	0.000	-0.9	0.3	0.0		
			149	1.758	-0.4	-0.3	0.0		
Max N			1.758	-0.4	-0.3	0.0			
Min N			0.000	-0.9	0.3	0.0			
Max V _z			0.000	-0.9	0.3	0.0			
Min V _z			1.758	-0.4	-0.3	0.0			
Max M _y			0.879	-0.6	0.0	0.1			
Min M _y			0.000	-0.9	0.3	0.0			
BC4			154	0.000	-0.9	0.3	0.0		
			149	1.758	-0.4	-0.3	0.0		
	Max N		1.758	-0.4	-0.3	0.0			
	Min N		0.000	-0.9	0.3	0.0			
	Max V _z	0.000	-0.9	0.3	0.0				
	Min V _z	1.758	-0.4	-0.3	0.0				
	Max M _y	0.879	-0.6	0.0	0.1				
	Min M _y	0.000	-0.9	0.3	0.0				
	207	BC1	152	0.000	99.1	-3.3	24.9	9 - Rechthoek 355/440	
			155	1.499	99.1	-5.3	18.5		
Max N			1.499	99.1	-5.3	18.5			
Min N			0.000	99.1	-3.3	24.9			
Max V _z			0.000	99.1	-3.3	24.9			
Min V _z			1.499	99.1	-5.3	18.5			
Max M _y			0.000	99.1	-3.3	24.9			
Min M _y			1.499	99.1	-5.3	18.5			
BC2			152	0.000	110.7	-5.2	31.6		
			155	1.499	110.7	-7.8	22.0		
		Max N	1.499	110.7	-7.8	22.0			
		Min N	0.000	110.7	-5.2	31.6			
		Max V _z	0.000	110.7	-5.2	31.6			
		Min V _z	1.499	110.7	-7.8	22.0			
		Max M _y	0.000	110.7	-5.2	31.6			
		Min M _y	1.499	110.7	-7.8	22.0			
		BC3	152	0.000	114.1	-3.3	26.7		
			155	1.499	114.1	-5.0	20.5		
Max N			1.499	114.1	-5.0	20.5			
Min N			0.000	114.1	-3.3	26.7			
Max V _z			0.000	114.1	-3.3	26.7			
Min V _z			1.499	114.1	-5.0	20.5			
Max M _y			0.000	114.1	-3.3	26.7			
Min M _y			1.499	114.1	-5.0	20.5			
BC4			152	0.000	105.4	-5.2	30.0		
			155	1.499	105.4	-7.0	20.9		
		Max N	1.499	105.4	-7.0	20.9			
		Min N	0.000	105.4	-5.2	30.0			
		Max V _z	0.000	105.4	-5.2	30.0			
		Min V _z	1.499	105.4	-7.0	20.9			
		Max M _y	0.000	105.4	-5.2	30.0			
		Min M _y	1.499	105.4	-7.0	20.9			
		209	BC1	157	0.000	27.9	0.9	0.0	10 - Rechthoek 355/350
				152	2.647	28.9	-0.9	0.0	
Max N				2.647	28.9	-0.9	0.0		
Min N				0.000	27.9	0.9	0.0		

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StAAF No.	BG/BC	Knoop No.	Snedes x [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes
				N	V _z		
209	BC1	Max V _z	0.000	27.9	0.9	0.0	
		Min V _z	2.647	28.9	-0.9	0.0	
		Max M _y	1.323	28.4	0.0	0.6	
		Min M _y	0.000	27.9	0.9	0.0	
	BC2	157	0.000	38.5	0.9	0.0	
		152	2.647	39.5	-0.9	0.0	
		Max N	2.647	39.5	-0.9	0.0	
		Min N	0.000	38.5	0.9	0.0	
		Max V _z	0.000	38.5	0.9	0.0	
		Min V _z	2.647	39.5	-0.9	0.0	
		Max M _y	1.323	39.0	0.0	0.6	
		Min M _y	2.647	39.5	-0.9	0.0	
	BC3	157	0.000	29.6	0.9	0.0	
		152	2.647	30.6	-0.9	0.0	
		Max N	2.647	30.6	-0.9	0.0	
		Min N	0.000	29.6	0.9	0.0	
		Max V _z	0.000	29.6	0.9	0.0	
		Min V _z	2.647	30.6	-0.9	0.0	
		Max M _y	1.323	30.1	0.0	0.6	
		Min M _y	0.000	29.6	0.9	0.0	
BC4	157	0.000	37.8	0.9	0.0		
	152	2.647	38.8	-0.9	0.0		
	Max N	2.647	38.8	-0.9	0.0		
	Min N	0.000	37.8	0.9	0.0		
	Max V _z	0.000	37.8	0.9	0.0		
	Min V _z	2.647	38.8	-0.9	0.0		
	Max M _y	1.323	38.3	0.0	0.6		
	Min M _y	2.647	38.8	-0.9	0.0		
210	BC1	155	0.000	-1.5	0.1	0.0	1 - Rechthoek 275/295
		154	1.005	-1.0	-0.1	0.0	
		Max N	1.005	-1.0	-0.1	0.0	
		Min N	0.000	-1.5	0.1	0.0	
		Max V _z	0.000	-1.5	0.1	0.0	
		Min V _z	1.005	-1.0	-0.1	0.0	
		Max M _y	0.503	-1.3	0.0	0.0	
		Min M _y	0.000	-1.5	0.1	0.0	
	BC2	155	0.000	-1.4	0.1	0.0	
		154	1.005	-1.0	-0.1	0.0	
		Max N	1.005	-1.0	-0.1	0.0	
		Min N	0.000	-1.4	0.1	0.0	
		Max V _z	0.000	-1.4	0.1	0.0	
		Min V _z	1.005	-1.0	-0.1	0.0	
		Max M _y	0.503	-1.2	0.0	0.0	
		Min M _y	0.000	-1.4	0.1	0.0	
	BC3	155	0.000	-1.4	0.1	0.0	
		154	1.005	-1.0	-0.1	0.0	
		Max N	1.005	-1.0	-0.1	0.0	
		Min N	0.000	-1.4	0.1	0.0	
		Max V _z	0.000	-1.4	0.1	0.0	
		Min V _z	1.005	-1.0	-0.1	0.0	
		Max M _y	0.503	-1.2	0.0	0.0	
		Min M _y	0.000	-1.4	0.1	0.0	
	BC4	155	0.000	-1.4	0.1	0.0	
		154	1.005	-1.0	-0.1	0.0	
		Max N	1.005	-1.0	-0.1	0.0	
		Min N	0.000	-1.4	0.1	0.0	
Max V _z		0.000	-1.4	0.1	0.0		
Min V _z		1.005	-1.0	-0.1	0.0		
Max M _y		0.503	-1.2	0.0	0.0		
Min M _y		0.000	-1.4	0.1	0.0		
211	BC1	155	0.000	-83.9	-102.6	18.5	9 - Rechthoek 355/440
		156	0.180	-83.9	-102.8	0.0	
		Max N	0.180	-83.9	-102.8	0.0	
		Min N	0.000	-83.9	-102.6	18.5	
		Max V _z	0.000	-83.9	-102.6	18.5	
		Min V _z	0.180	-83.9	-102.8	0.0	
		Max M _y	0.000	-83.9	-102.6	18.5	
		Min M _y	0.180	-83.9	-102.8	0.0	
	BC2	155	0.000	-105.0	-121.9	22.0	
		156	0.180	-105.0	-122.1	0.0	
		Max N	0.180	-105.0	-122.1	0.0	
		Min N	0.000	-105.0	-121.9	22.0	
		Max V _z	0.000	-105.0	-121.9	22.0	
		Min V _z	0.180	-105.0	-122.1	0.0	
		Max M _y	0.000	-105.0	-121.9	22.0	
		Min M _y	0.000	-105.0	-121.9	22.0	

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■ **STAVEN - SNEDEKRACHTEN**

Staf No.	BG/BC	Knoop No.	Snedex [m]	Krachten [kN]		Momenten M_y [kNm]	Snedes	
				N	V_z			
211	BC2	Min M_y	0.180	-105.0	-122.1	0.0		
		BC3	155	0.000	-90.9	-113.6	20.5	
			156	0.180	-90.9	-113.8	0.0	
			Max N	0.180	-90.9	-113.8	0.0	
			Min N	0.000	-90.9	-113.6	20.5	
			Max V_z	0.000	-90.9	-113.6	20.5	
			Min V_z	0.180	-90.9	-113.8	0.0	
			Max M_y	0.000	-90.9	-113.6	20.5	
			Min M_y	0.180	-90.9	-113.8	0.0	
	BC4	155	0.000	-100.4	-115.9	20.9		
		156	0.180	-100.4	-116.1	0.0		
		Max N	0.180	-100.4	-116.1	0.0		
		Min N	0.000	-100.4	-115.9	20.9		
		Max V_z	0.000	-100.4	-115.9	20.9		
		Min V_z	0.180	-100.4	-116.1	0.0		
		Max M_y	0.000	-100.4	-115.9	20.9		
		Min M_y	0.180	-100.4	-116.1	0.0		
		212	BC1	157	0.000	-130.1	-31.4	46.2
156	1.452			-128.7	-32.2	0.0		
Max N	1.452			-128.7	-32.2	0.0		
Min N	0.000			-130.1	-31.4	46.2		
Max V_z	0.000			-130.1	-31.4	46.2		
Min V_z	1.452			-128.7	-32.2	0.0		
Max M_y	0.000			-130.1	-31.4	46.2		
Min M_y	1.452			-128.7	-32.2	0.0		
BC2	157			0.000	-156.5	-42.2	62.0	
	156		1.452	-155.2	-43.1	0.0		
	Max N		1.452	-155.2	-43.1	0.0		
	Min N		0.000	-156.5	-42.2	62.0		
	Max V_z		0.000	-156.5	-42.2	62.0		
	Min V_z		1.452	-155.2	-43.1	0.0		
	Max M_y		0.000	-156.5	-42.2	62.0		
	Min M_y		1.452	-155.2	-43.1	0.0		
	BC3		157	0.000	-143.0	-33.1	48.6	
156			1.452	-141.7	-33.9	0.0		
Max N			1.452	-141.7	-33.9	0.0		
Min N			0.000	-143.0	-33.1	48.6		
Max V_z			0.000	-143.0	-33.1	48.6		
Min V_z			1.452	-141.7	-33.9	0.0		
Max M_y			0.000	-143.0	-33.1	48.6		
Min M_y			1.452	-141.7	-33.9	0.0		
BC4			157	0.000	-149.1	-40.6	59.6	
	156		1.452	-147.8	-41.4	0.0		
	Max N		1.452	-147.8	-41.4	0.0		
	Min N		0.000	-149.1	-40.6	59.6		
	Max V_z		0.000	-149.1	-40.6	59.6		
	Min V_z		1.452	-147.8	-41.4	0.0		
	Max M_y		0.000	-149.1	-40.6	59.6		
	Min M_y		1.452	-147.8	-41.4	0.0		
	213		BC1	158	0.000	-108.7	-13.9	58.6
157				0.873	-107.9	-14.5	46.2	
Max N				0.873	-107.9	-14.5	46.2	
Min N				0.000	-108.7	-13.9	58.6	
Max V_z		0.000		-108.7	-13.9	58.6		
Min V_z		0.873		-107.9	-14.5	46.2		
Max M_y		0.000		-108.7	-13.9	58.6		
Min M_y		0.873		-107.9	-14.5	46.2		
BC2		158		0.000	-126.2	-18.6	78.5	
		157	0.873	-125.4	-19.3	62.0		
		Max N	0.873	-125.4	-19.3	62.0		
		Min N	0.000	-126.2	-18.6	78.5		
		Max V_z	0.000	-126.2	-18.6	78.5		
		Min V_z	0.873	-125.4	-19.3	62.0		
		Max M_y	0.000	-126.2	-18.6	78.5		
		Min M_y	0.873	-125.4	-19.3	62.0		
		BC3	158	0.000	-120.0	-14.7	61.7	
157			0.873	-119.2	-15.3	48.6		
Max N			0.873	-119.2	-15.3	48.6		
Min N			0.000	-120.0	-14.7	61.7		
Max V_z			0.000	-120.0	-14.7	61.7		
Min V_z			0.873	-119.2	-15.3	48.6		
Max M_y			0.000	-120.0	-14.7	61.7		
Min M_y			0.873	-119.2	-15.3	48.6		
BC4			158	0.000	-119.4	-17.4	75.1	
		157	0.873	-118.6	-18.1	59.6		
		Max N	0.873	-118.6	-18.1	59.6		

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■ STAVEN - SNEDEKRACHTEN

Staal No.	BG/BC	Knoop No.	Snedede x [m]	Krachten [kN]		Momenten My [kNm]	Snedes		
				N	Vz				
213	BC4	Min N	0.000	-119.4	-17.4	75.1			
		Max Vz	0.000	-119.4	-17.4	75.1			
		Min Vz	0.873	-118.6	-18.1	59.6			
		Max My	0.000	-119.4	-17.4	75.1			
		Min My	0.873	-118.6	-18.1	59.6			
214	BC1	160	0.000	-37.7	37.6	0.0	9 - Rechthoek 355/440		
		158	1.575	-36.3	36.8	58.6			
		Max N	1.575	-36.3	36.8	58.6			
		Min N	0.000	-37.7	37.6	0.0			
		Max Vz	0.000	-37.7	37.6	0.0			
		Min Vz	1.575	-36.3	36.8	58.6			
		Max My	1.575	-36.3	36.8	58.6			
		Min My	0.000	-37.7	37.6	0.0			
	BC2	160	0.000	-29.9	50.2	0.0			
		158	1.575	-28.7	49.5	78.5			
		Max N	1.575	-28.7	49.5	78.5			
		Min N	0.000	-29.9	50.2	0.0			
		Max Vz	0.000	-29.9	50.2	0.0			
		Min Vz	1.575	-28.7	49.5	78.5			
		Max My	1.575	-28.7	49.5	78.5			
		Min My	0.000	-29.9	50.2	0.0			
	BC3	160	0.000	-44.9	39.5	0.0			
		158	1.575	-43.6	38.8	61.7			
		Max N	1.575	-43.6	38.8	61.7			
		Min N	0.000	-44.9	39.5	0.0			
		Max Vz	0.000	-44.9	39.5	0.0			
		Min Vz	1.575	-43.6	38.8	61.7			
		Max My	1.575	-43.6	38.8	61.7			
		Min My	0.000	-44.9	39.5	0.0			
	BC4	160	0.000	-28.0	48.0	0.0			
		158	1.575	-26.8	47.3	75.1			
		Max N	1.575	-26.8	47.3	75.1			
		Min N	0.000	-28.0	48.0	0.0			
		Max Vz	0.000	-28.0	48.0	0.0			
		Min Vz	1.575	-26.8	47.3	75.1			
		Max My	1.575	-26.8	47.3	75.1			
		Min My	0.000	-28.0	48.0	0.0			
	215	BC1	160	0.000	-50.2	-0.8	0.0	8 - Rechthoek 2084/1392	
159			7.500	-520.2	0.8	0.0			
Max N			0.000	-50.2	-0.8	0.0			
Min N			7.500	-520.2	0.8	0.0			
Max Vz			7.500	-520.2	0.8	0.0			
Min Vz			0.000	-50.2	-0.8	0.0			
Max My			7.500	-520.2	0.8	0.0			
Min My			6.750	-473.2	0.7	0.0			
BC2			160	0.000	-48.8	-1.0	0.0		
			159	7.500	-479.6	1.0	0.0		
		Max N	0.000	-48.8	-1.0	0.0			
		Min N	7.500	-479.6	1.0	0.0			
		Max Vz	7.500	-479.6	1.0	0.0			
		Min Vz	0.000	-48.8	-1.0	0.0			
		Max My	0.000	-48.8	-1.0	0.0			
		Min My	6.750	-436.5	0.8	0.0			
		BC3	160	0.000	-57.6	-0.8	0.0		
			159	7.500	-488.3	0.8	0.0		
Max N			0.000	-57.6	-0.8	0.0			
Min N			7.500	-488.3	0.8	0.0			
Max Vz			7.500	-488.3	0.8	0.0			
Min Vz			0.000	-57.6	-0.8	0.0			
Max My			7.500	-488.3	0.8	0.0			
Min My			6.750	-445.3	0.7	0.0			
BC4			160	0.000	-46.1	-0.9	0.0		
			159	7.500	-476.8	0.9	0.0		
		Max N	0.000	-46.1	-0.9	0.0			
		Min N	7.500	-476.8	0.9	0.0			
		Max Vz	7.500	-476.8	0.9	0.0			
		Min Vz	0.000	-46.1	-0.9	0.0			
		Max My	6.750	-433.8	0.8	0.0			
		Min My	7.500	-476.8	0.9	0.0			

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■ KNOPEN - REACTIEKRACHTEN

Knoop No.	BG/BC	Reactiekrachten [kN]		Reactiemomenten		Opm.
		P _x	P _z	M _y [kNm]		
124	BG1	13.8	-41.9	0.0		Rustend
	BG2	13.8	-2.4	0.0		Veranderlijke last
	BG3	0.0	-10.0	0.0		Sneeuw
	BG4	11.4	0.0	0.0		Wind
	BC1	17.6	-50.2	0.0		
	BC2	32.3	-48.8	0.0		
	BC3	16.2	-57.5	0.0		
	BC4	31.1	-46.1	0.0		
159	BG1	0.0	-433.5	0.0		Rustend
	BG2	0.0	-2.4	0.0		Veranderlijke last
	BG3	0.0	-10.0	0.0		Sneeuw
	BG4	0.0	0.0	0.0		Wind
	BC1	-1.0	-520.2	0.0		
	BC2	-1.2	-479.6	0.0		
	BC3	-1.0	-488.3	0.0		
	BC4	-1.1	-476.8	0.0		
Σ Onder	BG1	13.8	-475.4			
Σ	BG1	13.8	-475.4			
Belastingen						
Σ Onder	BG2	13.8	-4.7			
Σ	BG2	13.8	-4.7			
Belastingen						
Σ Onder	BG3	0.0	-20.0			
Σ	BG3	0.0	-20.0			
Belastingen						
Σ Onder	BG4	11.4	0.0			
Σ	BG4	11.4	0.0			
Belastingen						
Σ Onder	BC1	16.6	-570.4			
Σ	BC1	16.6	-570.4			
Belastingen						
Σ Onder	BC2	31.0	-528.3			
Σ	BC2	31.0	-528.3			
Belastingen						
Σ Onder	BC3	15.2	-545.9			
Σ	BC3	15.2	-545.9			
Belastingen						
Σ Onder	BC4	30.0	-522.9			
Σ	BC4	30.0	-522.9			
Belastingen						

■ KNOPEN - VERVORMINGEN

Knoop No.	BG/BC	Translaties [mm]			Rotatie	
		u	u _x	u _z	φ _y [mrad]	
124	BG1	0.0	0.0	0.0	5.1	
	BG2	0.0	0.0	0.0	2.1	
	BG3	0.0	0.0	0.0	0.8	
	BG4	0.0	0.0	0.0	1.6	
125	BG1	7.2	6.5	-3.1	3.6	
	BG2	3.0	2.7	-1.3	1.5	
	BG3	1.1	1.0	-0.5	0.6	
	BG4	2.3	2.0	-1.0	1.1	
126	BG1	9.7	8.7	-4.2	2.1	
	BG2	4.0	3.6	-1.7	0.8	
	BG3	1.5	1.4	-0.7	0.4	
	BG4	3.0	2.7	-1.3	0.6	
127	BG1	11.7	10.5	-5.2	1.8	
	BG2	4.7	4.2	-2.0	0.6	
	BG3	1.9	1.7	-0.8	0.3	
	BG4	3.5	3.1	-1.5	0.4	
128	BG1	11.9	10.5	-5.5	1.8	
	BG2	4.7	4.2	-2.1	0.6	
	BG3	1.9	1.7	-0.9	0.3	
	BG4	3.5	3.1	-1.6	0.4	
129	BG1	4.4	3.7	-2.3	-7.5	
	BG2	4.0	3.6	-1.8	-0.7	
	BG3	0.7	0.6	-0.4	-1.2	
	BG4	3.0	2.7	-1.4	-0.5	
130	BG1	17.1	11.0	-13.1	-2.7	

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■ **KNOPEN - VERVORMINGEN**

Knoop No.	BG/BC	Translaties [mm]			Rotatie
		u	u _x	u _z	φ _y [mrad]
130	BG2	5.1	4.3	-2.7	0.0
	BG3	2.7	1.8	-2.0	-0.2
	BG4	3.8	3.2	-2.0	0.0
131	BG1	12.9	10.6	-7.4	0.7
	BG2	5.0	4.2	-2.7	0.2
	BG3	2.1	1.7	-1.3	0.1
	BG4	3.7	3.1	-2.0	0.2
132	BG1	15.8	11.0	-11.4	-2.7
	BG2	5.1	4.3	-2.7	0.0
	BG3	2.6	1.8	-1.8	-0.2
	BG4	3.8	3.2	-2.0	0.0
133	BG1	13.7	7.3	-11.6	-2.4
	BG2	5.1	4.4	-2.7	0.0
	BG3	2.3	1.4	-1.8	-0.2
	BG4	3.8	3.2	-2.0	0.0
134	BG1	15.5	11.0	-10.9	-2.6
	BG2	5.1	4.3	-2.7	0.0
	BG3	2.5	1.8	-1.8	-0.2
	BG4	3.8	3.2	-2.0	0.0
135	BG1	13.9	11.0	-8.5	-1.7
	BG2	5.1	4.3	-2.7	0.0
	BG3	2.3	1.8	-1.5	-0.2
	BG4	3.8	3.2	-2.0	0.0
136	BG1	13.6	11.1	-7.9	-0.3
	BG2	5.1	4.3	-2.8	0.0
	BG3	2.3	1.8	-1.4	-0.1
	BG4	3.8	3.2	-2.0	0.0
137	BG1	13.5	11.0	-7.9	-1.0
	BG2	5.1	4.3	-2.8	0.0
	BG3	2.3	1.8	-1.4	-0.2
	BG4	3.8	3.2	-2.0	0.0
138	BG1	13.3	10.8	-7.8	-0.1
	BG2	5.1	4.2	-2.8	-0.1
	BG3	2.2	1.8	-1.4	0.0
	BG4	3.8	3.2	-2.0	0.0
139	BG1	13.4	10.9	-7.7	-0.4
	BG2	5.1	4.3	-2.8	0.0
	BG3	2.3	1.8	-1.4	-0.1
	BG4	3.8	3.2	-2.0	0.0
140	BG1	13.3	10.8	-7.7	0.0
	BG2	5.1	4.3	-2.8	0.0
	BG3	2.3	1.8	-1.4	0.0
	BG4	3.8	3.2	-2.0	0.0
141	BG1	13.3	10.9	-7.6	0.0
	BG2	5.1	4.3	-2.8	0.0
	BG3	2.2	1.8	-1.3	0.0
	BG4	3.8	3.2	-2.0	0.0
142	BG1	13.3	10.9	-7.6	0.0
	BG2	5.1	4.3	-2.8	0.0
	BG3	2.2	1.8	-1.3	0.0
	BG4	3.8	3.2	-2.0	0.0
143	BG1	13.5	10.9	-8.0	0.0
	BG2	5.1	4.3	-2.8	0.0
	BG3	2.3	1.8	-1.4	0.0
	BG4	3.8	3.2	-2.0	0.0
144	BG1	13.4	10.9	-7.8	0.1
	BG2	5.1	4.3	-2.8	0.1
	BG3	2.3	1.8	-1.4	0.0
	BG4	3.8	3.2	-2.0	0.0
145	BG1	13.3	10.8	-7.7	0.5
	BG2	5.1	4.2	-2.8	0.0
	BG3	2.2	1.8	-1.4	0.1
	BG4	3.8	3.2	-2.0	0.0
146	BG1	13.3	10.6	-7.9	0.3
	BG2	5.0	4.2	-2.8	0.0
	BG3	2.2	1.7	-1.4	0.1
	BG4	3.7	3.1	-2.0	0.0
147	BG1	13.4	10.8	-8.0	1.0
	BG2	5.0	4.2	-2.8	0.0
	BG3	2.3	1.8	-1.4	0.2
	BG4	3.7	3.2	-2.0	0.0
148	BG1	13.7	10.8	-8.6	1.7
	BG2	5.0	4.2	-2.7	0.0
	BG3	2.3	1.8	-1.5	0.2
	BG4	3.7	3.2	-2.0	0.0
149	BG1	15.4	10.8	-11.1	2.7
	BG2	5.0	4.2	-2.7	0.0
	BG3	2.5	1.8	-1.8	0.2
	BG4	3.7	3.2	-2.0	0.0

Project: 15019 kap 1e kamer

Model: 15019 hoofdspant [2] met ..

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■ KNOPEN - VERVORMINGEN

Knoop No.	BG/BC	Translaties [mm]			Rotatie
		u	u _x	u _z	φ _y [mrad]
150	BG1	15.8	10.8	-11.6	2.7
	BG2	5.0	4.2	-2.7	0.0
	BG3	2.5	1.8	-1.8	0.2
	BG4	3.7	3.2	-2.0	0.0
151	BG1	18.6	14.5	-11.7	2.5
	BG2	5.0	4.2	-2.7	0.0
	BG3	2.8	2.1	-1.8	0.2
	BG4	3.7	3.1	-2.0	0.0
152	BG1	13.4	11.0	-7.5	-0.7
	BG2	5.1	4.3	-2.8	-0.2
	BG3	2.2	1.8	-1.3	-0.1
	BG4	3.8	3.2	-2.0	-0.2
153	BG1	17.1	10.8	-13.3	2.8
	BG2	5.0	4.2	-2.7	0.0
	BG3	2.7	1.8	-2.0	0.2
	BG4	3.7	3.2	-2.0	0.0
154	BG1	18.1	18.0	-2.4	7.5
	BG2	5.3	4.9	-1.8	0.7
	BG3	2.9	2.9	-0.4	1.2
	BG4	3.9	3.7	-1.4	0.5
155	BG1	12.5	11.1	-5.7	-1.7
	BG2	4.8	4.3	-2.1	-0.6
	BG3	2.1	1.8	-0.9	-0.3
	BG4	3.6	3.2	-1.6	-0.4
156	BG1	12.3	11.1	-5.4	-1.8
	BG2	4.8	4.3	-2.0	-0.6
	BG3	2.0	1.8	-0.9	-0.3
	BG4	3.6	3.2	-1.5	-0.4
157	BG1	13.6	12.9	-4.4	-2.1
	BG2	5.2	4.9	-1.7	-0.8
	BG3	2.3	2.2	-0.7	-0.4
	BG4	3.9	3.7	-1.3	-0.6
158	BG1	15.4	15.1	-3.3	-3.6
	BG2	6.0	5.8	-1.3	-1.5
	BG3	2.6	2.5	-0.5	-0.6
	BG4	4.4	4.3	-1.0	-1.1
159	BG1	0.0	0.0	0.0	2.9
	BG2	0.0	0.0	0.0	1.1
	BG3	0.0	0.0	0.0	0.5
	BG4	0.0	0.0	0.0	0.8
160	BG1	21.5	21.5	-0.2	-5.0
	BG2	8.5	8.5	0.0	-2.1
	BG3	3.5	3.5	0.0	-0.8
	BG4	6.4	6.4	0.0	-1.6

■ STAVEN - GLOBALE VERVORMINGEN

Staal No.	BG/BC	Knoop No.	Snedex [m]	Translaties [mm]			Rotaties	Snedes
				u	u _x	u _z	φ _y [mrad]	
161	BG1	Max u _x	1.575	0.0	0.0	0.0	5.1	
		Min u _x	0.000	7.2	6.5	-3.1	3.6	
		Max u _z	1.575	0.0	0.0	0.0	5.1	
		Min u _z	0.000	7.2	6.5	-3.1	3.6	
	BG2	Max u _x	0.000	3.0	2.7	-1.3	1.5	
		Min u _x	1.575	0.0	0.0	0.0	2.1	
		Max u _z	1.575	0.0	0.0	0.0	2.1	
		Min u _z	0.000	3.0	2.7	-1.3	1.5	
	BG3	Max u _x	1.575	0.0	0.0	0.0	0.8	
		Min u _x	0.000	1.1	1.0	-0.5	0.6	
		Max u _z	1.575	0.0	0.0	0.0	0.8	
		Min u _z	0.000	1.1	1.0	-0.5	0.6	
BG4	Max u _x	0.000	2.3	2.0	-1.0	1.1		
	Min u _x	1.575	0.0	0.0	0.0	1.6		
	Max u _z	1.575	0.0	0.0	0.0	1.6		
	Min u _z	0.000	2.3	2.0	-1.0	1.1		
162	BG1	Max u _x	0.873	9.7	8.7	-4.2	2.1	
		Min u _x	0.000	7.2	6.5	-3.1	3.6	
		Max u _z	0.000	7.2	6.5	-3.1	3.6	
		Min u _z	0.873	9.7	8.7	-4.2	2.1	
	BG2	Max u _x	0.873	4.0	3.6	-1.7	0.8	
		Min u _x	0.000	3.0	2.7	-1.3	1.5	
		Max u _z	0.000	3.0	2.7	-1.3	1.5	
		Min u _z	0.873	4.0	3.6	-1.7	0.8	
	BG3	Max u _x	0.873	1.5	1.4	-0.7	0.4	
		Min u _x	0.000	1.1	1.0	-0.5	0.6	

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■ **STAVEN - GLOBALE VERVORMINGEN**

Staal No.	BG/BC	Knoop No.	Snode x [m]	Translaties [mm]			Rotaties φ_y [mrad]	Snedes	
				u	u_x	u_z			
162	BG3	Max u_z	0.000	1.1	1.0	-0.5	0.6		
		Min u_z	0.873	1.5	1.4	-0.7	0.4		
	BG4	Max u_x	0.873	3.0	2.7	-1.3	0.6		
		Min u_x	0.000	2.3	2.0	-1.0	1.1		
		Max u_z	0.000	2.3	2.0	-1.0	1.1		
		Min u_z	0.873	3.0	2.7	-1.3	0.6		
	163	BG1	Max u_x	1.452	11.7	10.5	-5.2	1.1	
			Min u_x	0.000	9.7	8.7	-4.2	2.1	
Max u_z			0.000	9.7	8.7	-4.2	2.1		
Min u_z			1.452	11.7	10.5	-5.2	1.1		
BG2		Max u_x	1.452	4.7	4.2	-2.0	0.3		
		Min u_x	0.000	4.0	3.6	-1.7	0.8		
		Max u_z	0.000	4.0	3.6	-1.7	0.8		
		Min u_z	1.452	4.7	4.2	-2.0	0.3		
BG3		Max u_x	1.452	1.9	1.7	-0.8	0.2		
		Min u_x	0.000	1.5	1.4	-0.7	0.4		
		Max u_z	0.000	1.5	1.4	-0.7	0.4		
		Min u_z	1.452	1.9	1.7	-0.8	0.2		
BG4		Max u_x	1.452	3.5	3.1	-1.5	0.2		
		Min u_x	0.000	3.0	2.7	-1.3	0.6		
		Max u_z	0.000	3.0	2.7	-1.3	0.6		
		Min u_z	1.452	3.5	3.1	-1.5	0.2		
164	BG1	Max u_x	0.000	11.9	10.5	-5.5	1.8		
		Min u_x	0.180	11.7	10.5	-5.2	1.8		
		Max u_z	0.000	11.9	10.5	-5.5	1.8		
		Min u_z	0.180	11.7	10.5	-5.2	1.8		
	BG2	Max u_x	0.000	4.7	4.2	-2.1	0.6		
		Min u_x	0.180	4.7	4.2	-2.0	0.6		
		Max u_z	0.000	4.7	4.2	-2.1	0.6		
		Min u_z	0.180	4.7	4.2	-2.0	0.6		
	BG3	Max u_x	0.000	1.9	1.7	-0.9	0.3		
		Min u_x	0.180	1.9	1.7	-0.8	0.3		
		Max u_z	0.000	1.9	1.7	-0.9	0.3		
		Min u_z	0.180	1.9	1.7	-0.8	0.3		
	BG4	Max u_x	0.000	3.5	3.1	-1.6	0.4		
		Min u_x	0.180	3.5	3.1	-1.5	0.4		
		Max u_z	0.000	3.5	3.1	-1.6	0.4		
		Min u_z	0.180	3.5	3.1	-1.5	0.4		
165	BG1	Max u_x	1.005	4.4	3.7	-2.3	-7.5		
		Min u_x	0.000	11.9	10.5	-5.5	-7.5		
		Max u_z	1.005	4.4	3.7	-2.3	-7.5		
		Min u_z	0.000	11.9	10.5	-5.5	-7.5		
	BG2	Max u_x	0.000	4.7	4.2	-2.1	-0.7		
		Min u_x	0.000	4.7	4.2	-2.1	-0.7		
		Max u_z	0.000	4.7	4.2	-2.1	-0.7		
		Min u_z	1.005	4.0	3.6	-1.8	-0.7		
	BG3	Max u_x	0.000	1.9	1.7	-0.9	-1.2		
		Min u_x	0.000	1.9	1.7	-0.9	-1.2		
		Max u_z	0.000	1.9	1.7	-0.9	-1.2		
		Min u_z	1.005	0.7	0.6	-0.4	-1.2		
	BG4	Max u_x	0.000	3.5	3.1	-1.6	-0.5		
		Min u_x	0.000	3.5	3.1	-1.6	-0.5		
		Max u_z	0.000	3.5	3.1	-1.6	-0.5		
		Min u_z	1.005	3.0	2.7	-1.4	-0.5		
166	BG1	Max u_x	0.000	9.7	8.7	-4.2	1.4		
		Min u_x	2.647	12.9	10.6	-7.4	1.4		
		Max u_z	0.000	9.7	8.7	-4.2	1.4		
		Min u_z	2.647	12.9	10.6	-7.4	1.4		
	BG2	Max u_x	2.647	5.0	4.2	-2.7	0.5		
		Min u_x	0.000	4.0	3.6	-1.7	0.5		
		Max u_z	2.647	5.0	4.2	-2.7	0.5		
		Min u_z	0.000	4.0	3.6	-1.7	0.5		
	BG3	Max u_x	2.647	2.1	1.7	-1.3	0.3		
		Min u_x	0.000	1.5	1.4	-0.7	0.3		
		Max u_z	2.647	2.1	1.7	-1.3	0.3		
		Min u_z	0.000	1.5	1.4	-0.7	0.3		
	BG4	Max u_x	2.647	3.7	3.1	-2.0	0.3		
		Min u_x	0.000	3.0	2.7	-1.3	0.3		
		Max u_z	2.647	3.7	3.1	-2.0	0.3		
		Min u_z	0.000	3.0	2.7	-1.3	0.3		
167	BG1			Bezwijken					
	BG2			Bezwijken					

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Model: 15019 hoofdspant [2] met ..

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■ **STAVEN - GLOBALE VERVORMINGEN**

Staaf No.	BG/BC	Knoop No.	Snedex [m]	Translaties [mm]			Rotaties φ_y [mrad]	Snedes
				u	u_x	u_z		
167	BG3			Bezwichen				
	BG4			Bezwichen				
168	BG1	Max u_x	0.000	11.9	10.5	-5.5	1.8	
		Min u_x	1.499	12.9	10.6	-7.4	0.7	
		Max u_z	0.000	11.9	10.5	-5.5	1.8	
		Min u_z	1.499	12.9	10.6	-7.4	0.7	
	BG2	Max u_x	0.000	4.7	4.2	-2.1	0.6	
		Min u_x	1.499	5.0	4.2	-2.7	0.2	
		Max u_z	0.000	4.7	4.2	-2.1	0.6	
		Min u_z	1.499	5.0	4.2	-2.7	0.2	
	BG3	Max u_x	0.000	1.9	1.7	-0.9	0.3	
		Min u_x	1.499	2.1	1.7	-1.3	0.1	
		Max u_z	0.000	1.9	1.7	-0.9	0.3	
		Min u_z	1.499	2.1	1.7	-1.3	0.1	
	BG4	Max u_x	0.000	3.5	3.1	-1.6	0.4	
		Min u_x	1.499	3.7	3.1	-2.0	0.2	
		Max u_z	0.000	3.5	3.1	-1.6	0.4	
		Min u_z	1.499	3.7	3.1	-2.0	0.2	
169	BG1	Max u_x	0.000	4.4	3.7	-2.3	6.4	
		Min u_x	1.758	15.5	11.0	-10.9	6.4	
		Max u_z	0.000	4.4	3.7	-2.3	6.4	
		Min u_z	1.758	15.5	11.0	-10.9	6.4	
	BG2	Max u_x	0.000	4.0	3.6	-1.8	0.6	
		Min u_x	0.000	4.0	3.6	-1.8	0.6	
		Max u_z	1.758	5.1	4.3	-2.7	0.6	
		Min u_z	0.000	4.0	3.6	-1.8	0.6	
	BG3	Max u_x	0.000	0.7	0.6	-0.4	1.0	
		Min u_x	0.000	0.7	0.6	-0.4	1.0	
		Max u_z	1.758	2.5	1.8	-1.8	1.0	
		Min u_z	0.000	0.7	0.6	-0.4	1.0	
	BG4	Max u_x	0.000	3.0	2.7	-1.4	0.5	
		Min u_x	0.000	3.0	2.7	-1.4	0.5	
		Max u_z	1.758	3.8	3.2	-2.0	0.5	
		Min u_z	0.000	3.0	2.7	-1.4	0.5	
170	BG1	Max u_x	0.629	17.1	11.0	-13.1	-2.7	
		Min u_x	0.000	15.8	11.0	-11.4	-2.7	
		Max u_z	0.629	17.1	11.0	-13.1	-2.7	
		Min u_z	0.000	15.8	11.0	-11.4	-2.7	
	BG2	Max u_x	0.000	5.1	4.3	-2.7	0.0	
		Min u_x	0.000	5.1	4.3	-2.7	0.0	
		Max u_z	0.000	5.1	4.3	-2.7	0.0	
		Min u_z	0.629	5.1	4.3	-2.7	0.0	
	BG3	Max u_x	0.000	2.6	1.8	-1.8	-0.2	
		Min u_x	0.000	2.6	1.8	-1.8	-0.2	
		Max u_z	0.629	2.7	1.8	-2.0	-0.2	
		Min u_z	0.000	2.6	1.8	-1.8	-0.2	
	BG4	Max u_x	0.000	3.8	3.2	-2.0	0.0	
		Min u_x	0.000	3.8	3.2	-2.0	0.0	
		Max u_z	0.000	3.8	3.2	-2.0	0.0	
		Min u_z	0.629	3.8	3.2	-2.0	0.0	
171	BG1	Max u_x	0.488	16.4	10.2	-12.8	-1.9	
		Min u_x	1.627	13.7	7.3	-11.6	-3.4	
		Max u_z	1.627	13.7	7.3	-11.6	-3.4	
		Min u_z	0.000	17.1	11.0	-13.1	-1.6	
	BG2	Max u_x	0.000	5.1	4.3	-2.7	0.0	
		Min u_x	0.000	5.1	4.3	-2.7	0.0	
		Max u_z	1.627	5.1	4.4	-2.7	0.0	
		Min u_z	0.000	5.1	4.3	-2.7	0.0	
	BG3	Max u_x	0.000	2.7	1.8	-2.0	-0.2	
		Min u_x	0.000	2.7	1.8	-2.0	-0.2	
		Max u_z	0.000	2.7	1.8	-2.0	-0.2	
		Min u_z	1.627	2.3	1.4	-1.8	-0.2	
	BG4	Max u_x	0.000	3.8	3.2	-2.0	0.0	
		Min u_x	0.000	3.8	3.2	-2.0	0.0	
		Max u_z	1.627	3.8	3.2	-2.0	0.0	
		Min u_z	0.000	3.8	3.2	-2.0	0.0	
172	BG1	Max u_x	1.500	13.7	7.3	-11.6	-2.4	
		Min u_x	0.000	15.8	11.0	-11.4	-2.4	
		Max u_z	1.500	13.7	7.3	-11.6	-2.4	
		Min u_z	0.000	15.8	11.0	-11.4	-2.4	
	BG2	Max u_x	0.000	5.1	4.3	-2.7	0.0	
		Min u_x	0.000	5.1	4.3	-2.7	0.0	

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Model: 15019 hoofdspant [2] met ..

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■ **STAVEN - GLOBALE VERVORMINGEN**

Staal No.	BG/BC	Knoop No.	Snedes x [m]	Translaties [mm]			Rotaties φ_y [mrad]	Snedes	
				u	u_x	u_z			
172	BG2	Max u_z	1.500	5.1	4.4	-2.7	0.0		
		Min u_z	0.000	5.1	4.3	-2.7	0.0		
	BG3	Max u_x	0.000	2.6	1.8	-1.8	-0.2		
		Min u_x	0.000	2.6	1.8	-1.8	-0.2		
		Max u_z	0.000	2.6	1.8	-1.8	-0.2		
		Min u_z	1.500	2.3	1.4	-1.8	-0.2		
	BG4	Max u_x	0.000	3.8	3.2	-2.0	0.0		
		Min u_x	0.000	3.8	3.2	-2.0	0.0		
		Max u_z	1.500	3.8	3.2	-2.0	0.0		
		Min u_z	0.000	3.8	3.2	-2.0	0.0		
	173	BG1	Max u_x	3.700	11.9	10.5	-5.5	0.7	
			Min u_x	0.000	13.6	11.1	-7.9	0.6	
Max u_z			3.700	11.9	10.5	-5.5	0.7		
Min u_z			0.000	13.6	11.1	-7.9	0.6		
BG2		Max u_x	0.000	5.1	4.3	-2.8	0.2		
		Min u_x	3.700	4.7	4.2	-2.1	0.2		
		Max u_z	0.000	5.1	4.3	-2.8	0.2		
		Min u_z	3.700	4.7	4.2	-2.1	0.2		
BG3		Max u_x	0.000	2.3	1.8	-1.4	0.1		
		Min u_x	3.700	1.9	1.7	-0.9	0.1		
		Max u_z	0.000	2.3	1.8	-1.4	0.1		
		Min u_z	3.700	1.9	1.7	-0.9	0.1		
BG4		Max u_x	0.000	3.8	3.2	-2.0	0.1		
		Min u_x	3.700	3.5	3.1	-1.6	0.1		
		Max u_z	0.000	3.8	3.2	-2.0	0.1		
		Min u_z	3.700	3.5	3.1	-1.6	0.1		
174	BG1	Max u_x	0.186	15.8	11.0	-11.4	-2.7		
		Min u_x	0.000	15.5	11.0	-10.9	-2.6		
		Max u_z	0.186	15.8	11.0	-11.4	-2.7		
		Min u_z	0.000	15.5	11.0	-10.9	-2.6		
	BG2	Max u_x	0.000	5.1	4.3	-2.7	0.0		
		Min u_x	0.000	5.1	4.3	-2.7	0.0		
		Max u_z	0.000	5.1	4.3	-2.7	0.0		
		Min u_z	0.186	5.1	4.3	-2.7	0.0		
	BG3	Max u_x	0.000	2.5	1.8	-1.8	-0.2		
		Min u_x	0.000	2.5	1.8	-1.8	-0.2		
		Max u_z	0.186	2.6	1.8	-1.8	-0.2		
		Min u_z	0.000	2.5	1.8	-1.8	-0.2		
	BG4	Max u_x	0.000	3.8	3.2	-2.0	0.0		
		Min u_x	0.000	3.8	3.2	-2.0	0.0		
		Max u_z	0.000	3.8	3.2	-2.0	0.0		
		Min u_z	0.186	3.8	3.2	-2.0	0.0		
175	BG1	Max u_x	0.000	13.7	7.3	-11.6	0.2		
		Min u_x	1.180	13.6	8.3	-10.7	-3.2		
		Max u_z	1.966	13.9	11.0	-8.5	-5.1		
		Min u_z	0.197	13.7	7.3	-11.6	0.1		
	BG2	Max u_x	0.000	5.1	4.4	-2.7	0.0		
		Min u_x	0.000	5.1	4.4	-2.7	0.0		
		Max u_z	0.000	5.1	4.4	-2.7	0.0		
		Min u_z	1.966	5.1	4.3	-2.7	0.0		
	BG3	Max u_x	0.000	2.3	1.4	-1.8	-0.2		
		Min u_x	0.000	2.3	1.4	-1.8	-0.2		
		Max u_z	1.966	2.3	1.8	-1.5	-0.2		
		Min u_z	0.000	2.3	1.4	-1.8	-0.2		
	BG4	Max u_x	0.000	3.8	3.2	-2.0	0.0		
		Min u_x	0.000	3.8	3.2	-2.0	0.0		
		Max u_z	1.966	3.8	3.2	-2.0	0.0		
		Min u_z	0.000	3.8	3.2	-2.0	0.0		
176	BG1	Max u_x	1.085	15.5	11.0	-10.9	-2.6		
		Min u_x	0.000	13.9	11.0	-8.5	-1.7		
		Max u_z	0.000	13.9	11.0	-8.5	-1.7		
		Min u_z	1.085	15.5	11.0	-10.9	-2.6		
	BG2	Max u_x	0.000	5.1	4.3	-2.7	0.0		
		Min u_x	0.000	5.1	4.3	-2.7	0.0		
		Max u_z	0.000	5.1	4.3	-2.7	0.0		
		Min u_z	1.085	5.1	4.3	-2.7	0.0		
	BG3	Max u_x	0.000	2.3	1.8	-1.5	-0.2		
		Min u_x	0.000	2.3	1.8	-1.5	-0.2		
		Max u_z	1.085	2.5	1.8	-1.8	-0.2		
		Min u_z	0.000	2.3	1.8	-1.5	-0.2		
	BG4	Max u_x	0.000	3.8	3.2	-2.0	0.0		
		Min u_x	0.000	3.8	3.2	-2.0	0.0		

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Staal No.	BG/BC	Knoop No.	Snedes x [m]	Translaties [mm]			Rotaties ϕ_y [mrad]	Snedes
				ju	u_x	u_z		
176	BG4	Max u_z	0.000	3.8	3.2	-2.0	0.0	
		Min u_z	1.085	3.8	3.2	-2.0	0.0	
177	BG1	Max u_x	0.000	7.2	6.5	-3.1	0.0	
		Min u_x	8.410	13.4	10.8	-8.0	0.0	
		Max u_z	0.000	7.2	6.5	-3.1	0.0	
		Min u_z	8.410	13.4	10.8	-8.0	0.0	
		Max u_x	8.410	5.0	4.2	-2.8	0.0	
	BG2	Min u_x	0.000	3.0	2.7	-1.3	0.0	
		Max u_z	8.410	5.0	4.2	-2.8	0.0	
		Min u_z	0.000	3.0	2.7	-1.3	0.0	
		Max u_x	8.410	2.3	1.8	-1.4	0.0	
	BG3	Min u_x	0.000	1.1	1.0	-0.5	0.0	
		Max u_z	8.410	2.3	1.8	-1.4	0.0	
		Min u_z	0.000	1.1	1.0	-0.5	0.0	
		Max u_x	8.410	3.7	3.2	-2.0	0.0	
	BG4	Min u_x	0.000	2.3	2.0	-1.0	0.0	
		Max u_z	8.410	3.7	3.2	-2.0	0.0	
		Min u_z	0.000	2.3	2.0	-1.0	0.0	
Max u_x		0.000	12.9	10.6	-7.4	0.7		
178	BG1	Min u_x	2.125	13.3	10.8	-7.8	-0.1	
		Max u_z	0.000	12.9	10.6	-7.4	0.7	
		Min u_z	1.275	13.2	10.7	-7.8	0.0	
		Max u_x	0.000	5.0	4.2	-2.7	0.2	
	BG2	Min u_x	2.125	5.1	4.2	-2.8	-0.1	
		Max u_z	0.000	5.0	4.2	-2.7	0.2	
		Min u_z	1.063	5.1	4.2	-2.8	0.0	
		Max u_x	0.000	2.1	1.7	-1.3	0.1	
	BG3	Min u_x	2.125	2.2	1.8	-1.4	0.0	
		Max u_z	0.000	2.1	1.7	-1.3	0.1	
		Min u_z	2.125	2.2	1.8	-1.4	0.0	
		Max u_x	0.000	3.7	3.1	-2.0	0.2	
BG4	Min u_x	2.125	3.8	3.2	-2.0	0.0		
	Max u_z	0.000	3.7	3.1	-2.0	0.2		
	Min u_z	1.063	3.8	3.2	-2.1	0.0		
	Max u_x	0.425	13.9	11.0	-8.5	-1.7		
179	BG1	Min u_x	0.000	13.5	11.0	-7.9	-1.0	
		Max u_z	0.425	13.9	11.0	-8.5	-1.7	
		Min u_z	0.000	13.5	11.0	-7.9	-1.0	
		Max u_x	0.000	5.1	4.3	-2.8	0.0	
	BG2	Min u_x	0.425	5.1	4.3	-2.7	0.0	
		Max u_z	0.000	5.1	4.3	-2.8	0.0	
		Min u_z	0.425	5.1	4.3	-2.7	0.0	
		Max u_x	0.425	2.3	1.8	-1.5	-0.2	
	BG3	Min u_x	0.000	2.3	1.8	-1.4	-0.2	
		Max u_z	0.425	2.3	1.8	-1.5	-0.2	
		Min u_z	0.000	2.3	1.8	-1.4	-0.2	
		Max u_x	0.425	3.8	3.2	-2.0	0.0	
	BG4	Min u_x	0.000	3.8	3.2	-2.0	0.0	
		Max u_z	0.000	3.8	3.2	-2.0	0.0	
		Min u_z	0.425	3.8	3.2	-2.0	0.0	
		Max u_x	0.000	13.6	11.1	-7.9	-0.4	
180	BG1	Min u_x	0.338	13.5	11.0	-7.9	-0.4	
		Max u_z	0.000	13.6	11.1	-7.9	-0.4	
		Min u_z	0.338	13.5	11.0	-7.9	-0.4	
		Max u_x	0.000	5.1	4.3	-2.8	-0.1	
	BG2	Min u_x	0.338	5.1	4.3	-2.8	-0.1	
		Max u_z	0.000	5.1	4.3	-2.8	-0.1	
		Min u_z	0.338	5.1	4.3	-2.8	-0.1	
		Max u_x	0.000	2.3	1.8	-1.4	-0.1	
	BG3	Min u_x	0.338	2.3	1.8	-1.4	-0.1	
		Max u_z	0.000	2.3	1.8	-1.4	-0.1	
		Min u_z	0.338	2.3	1.8	-1.4	-0.1	
		Max u_x	0.000	3.8	3.2	-2.0	0.0	
BG4	Min u_x	0.338	3.8	3.2	-2.0	0.0		
	Max u_z	0.000	3.8	3.2	-2.0	0.0		
	Min u_z	0.338	3.8	3.2	-2.0	0.0		
	Max u_x	0.000	13.5	11.0	-7.9	-1.0		
181	BG1	Min u_x	0.337	13.4	10.9	-7.7	-0.4	
		Max u_z	0.000	13.5	11.0	-7.9	-1.0	
		Min u_z	0.337	13.4	10.9	-7.7	-0.4	
		Max u_x	0.000	5.1	4.3	-2.8	0.0	
	BG2	Min u_x	0.337	5.1	4.3	-2.8	0.0	

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StAAF No.	BG/BC	Knoop No.	Snedes x [m]	Translaties [mm]			Rotaties φ_y [mrad]	Snedes	
				u	u_x	u_z			
181	BG2	Max u_z	0.337	5.1	4.3	-2.8	0.0		
		Min u_z	0.000	5.1	4.3	-2.8	0.0		
	BG3	Max u_x	0.000	2.3	1.8	-1.4	-0.2		
		Min u_x	0.337	2.3	1.8	-1.4	-0.1		
		Max u_z	0.000	2.3	1.8	-1.4	-0.2		
		Min u_z	0.337	2.3	1.8	-1.4	-0.1		
	BG4	Max u_x	0.000	3.8	3.2	-2.0	0.0		
		Min u_x	0.337	3.8	3.2	-2.0	0.0		
		Max u_z	0.337	3.8	3.2	-2.0	0.0		
		Min u_z	0.000	3.8	3.2	-2.0	0.0		
	182	BG1	Max u_x	0.000	13.4	10.9	-7.7	0.0	
			Min u_x	2.037	13.3	10.8	-7.8	0.0	
Max u_z			0.000	13.4	10.9	-7.7	0.0		
Min u_z			2.037	13.3	10.8	-7.8	0.0		
BG2		Max u_x	0.000	5.1	4.3	-2.8	0.0		
		Min u_x	2.037	5.1	4.2	-2.8	0.0		
		Max u_z	0.000	5.1	4.3	-2.8	0.0		
		Min u_z	2.037	5.1	4.2	-2.8	0.0		
BG3		Max u_x	2.037	2.2	1.8	-1.4	0.0		
		Min u_x	0.000	2.3	1.8	-1.4	0.0		
		Max u_z	2.037	2.2	1.8	-1.4	0.0		
		Min u_z	0.000	2.3	1.8	-1.4	0.0		
BG4		Max u_x	2.037	3.8	3.2	-2.0	0.0		
		Min u_x	0.000	3.8	3.2	-2.0	0.0		
		Max u_z	2.037	3.8	3.2	-2.0	0.0		
		Min u_z	0.000	3.8	3.2	-2.0	0.0		
183	BG1	Max u_x	2.386	13.9	11.0	-8.5	5.5		
		Min u_x	0.000	13.5	10.9	-8.0	-5.9		
		Max u_z	0.000	13.5	10.9	-8.0	-5.9		
		Min u_z	1.193	17.8	13.6	-11.6	-0.2		
	BG2	Max u_x	0.000	5.1	4.3	-2.8	0.0		
		Min u_x	2.386	5.1	4.3	-2.7	0.0		
		Max u_z	0.000	5.1	4.3	-2.8	0.0		
		Min u_z	2.386	5.1	4.3	-2.7	0.0		
	BG3	Max u_x	2.386	2.3	1.8	-1.5	0.0		
		Min u_x	0.000	2.3	1.8	-1.4	0.0		
		Max u_z	2.386	2.3	1.8	-1.5	0.0		
		Min u_z	0.000	2.3	1.8	-1.4	0.0		
	BG4	Max u_x	0.000	3.8	3.2	-2.0	0.0		
		Min u_x	2.386	3.8	3.2	-2.0	0.0		
		Max u_z	2.386	3.8	3.2	-2.0	0.0		
		Min u_z	0.000	3.8	3.2	-2.0	0.0		
184	BG1	Max u_x	1.431	13.6	11.1	-7.9	-0.3		
		Min u_x	0.000	13.3	10.9	-7.6	0.0		
		Max u_z	0.000	13.3	10.9	-7.6	0.0		
		Min u_z	1.431	13.6	11.1	-7.9	-0.3		
	BG2	Max u_x	0.000	5.1	4.3	-2.8	0.0		
		Min u_x	1.431	5.1	4.3	-2.8	0.0		
		Max u_z	0.000	5.1	4.3	-2.8	0.0		
		Min u_z	1.431	5.1	4.3	-2.8	0.0		
	BG3	Max u_x	1.431	2.3	1.8	-1.4	-0.1		
		Min u_x	0.000	2.2	1.8	-1.3	0.0		
		Max u_z	0.000	2.2	1.8	-1.3	0.0		
		Min u_z	1.431	2.3	1.8	-1.4	-0.1		
	BG4	Max u_x	0.000	3.8	3.2	-2.0	0.0		
		Min u_x	1.431	3.8	3.2	-2.0	0.0		
		Max u_z	0.000	3.8	3.2	-2.0	0.0		
		Min u_z	1.431	3.8	3.2	-2.0	0.0		
185	BG1	Max u_x	0.000	13.3	10.8	-7.8	-0.1		
		Min u_x	1.094	13.3	10.8	-7.7	0.0		
		Max u_z	0.875	13.3	10.8	-7.7	0.0		
		Min u_z	0.000	13.3	10.8	-7.8	-0.1		
	BG2	Max u_x	1.094	5.1	4.3	-2.8	0.0		
		Min u_x	0.000	5.1	4.2	-2.8	-0.1		
		Max u_z	1.094	5.1	4.3	-2.8	0.0		
		Min u_z	0.000	5.1	4.2	-2.8	-0.1		
	BG3	Max u_x	1.094	2.3	1.8	-1.4	0.0		
		Min u_x	0.000	2.2	1.8	-1.4	0.0		
		Max u_z	1.094	2.3	1.8	-1.4	0.0		
		Min u_z	0.000	2.2	1.8	-1.4	0.0		
	BG4	Max u_x	1.094	3.8	3.2	-2.0	0.0		
		Min u_x	0.000	3.8	3.2	-2.0	0.0		

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Staal No.	BG/BC	Knoop No.	Sned x [m]	Translaties [mm]			Rotaties φ_y [mrad]	Sned
				u	u_x	u_z		
185	BG4	Max u_z	0.000	3.8	3.2	-2.0	0.0	
		Min u_z	1.094	3.8	3.2	-2.0	0.0	
186	BG1	Max u_x	1.094	13.3	10.9	-7.6	0.0	
		Min u_x	0.000	13.4	10.9	-7.7	-0.4	
		Max u_z	0.547	13.3	10.9	-7.6	0.0	
		Min u_z	0.000	13.4	10.9	-7.7	-0.4	
	BG2	Max u_x	0.000	5.1	4.3	-2.8	0.0	
		Min u_x	1.094	5.1	4.3	-2.8	0.0	
		Max u_z	0.656	5.1	4.3	-2.8	0.0	
		Min u_z	0.000	5.1	4.3	-2.8	0.0	
	BG3	Max u_x	1.094	2.2	1.8	-1.3	0.0	
		Min u_x	0.000	2.3	1.8	-1.4	-0.1	
		Max u_z	0.875	2.2	1.8	-1.3	0.0	
		Min u_z	0.000	2.3	1.8	-1.4	-0.1	
BG4	Max u_x	0.000	3.8	3.2	-2.0	0.0		
	Min u_x	1.094	3.8	3.2	-2.0	0.0		
	Max u_z	0.547	3.8	3.2	-2.0	0.0		
	Min u_z	0.000	3.8	3.2	-2.0	0.0		
187	BG1	Max u_x	0.338	13.3	10.9	-7.6	0.0	
		Min u_x	0.000	13.3	10.9	-7.6	0.0	
		Max u_z	0.338	13.3	10.9	-7.6	0.0	
		Min u_z	0.000	13.3	10.9	-7.6	0.0	
	BG2	Max u_x	0.000	5.1	4.3	-2.8	0.0	
		Min u_x	0.338	5.1	4.3	-2.8	0.0	
		Max u_z	0.338	5.1	4.3	-2.8	0.0	
		Min u_z	0.000	5.1	4.3	-2.8	0.0	
	BG3	Max u_x	0.338	2.2	1.8	-1.3	0.0	
		Min u_x	0.000	2.2	1.8	-1.3	0.0	
		Max u_z	0.338	2.2	1.8	-1.3	0.0	
		Min u_z	0.000	2.2	1.8	-1.3	0.0	
BG4	Max u_x	0.000	3.8	3.2	-2.0	0.0		
	Min u_x	0.338	3.8	3.2	-2.0	0.0		
	Max u_z	0.000	3.8	3.2	-2.0	0.0		
	Min u_z	0.000	3.8	3.2	-2.0	0.0		
188	BG1	Max u_x	1.500	13.5	10.9	-8.0	0.0	
		Min u_x	0.000	13.3	10.9	-7.6	0.0	
		Max u_z	1.500	13.5	10.9	-8.0	0.0	
		Min u_z	0.000	13.3	10.9	-7.6	0.0	
	BG2	Max u_x	1.500	5.1	4.3	-2.8	0.0	
		Min u_x	0.000	5.1	4.3	-2.8	0.0	
		Max u_z	1.500	5.1	4.3	-2.8	0.0	
		Min u_z	0.000	5.1	4.3	-2.8	0.0	
	BG3	Max u_x	1.500	2.3	1.8	-1.4	0.0	
		Min u_x	0.000	2.2	1.8	-1.3	0.0	
		Max u_z	1.500	2.3	1.8	-1.4	0.0	
		Min u_z	0.000	2.2	1.8	-1.3	0.0	
BG4	Max u_x	1.500	3.8	3.2	-2.0	0.0		
	Min u_x	0.000	3.8	3.2	-2.0	0.0		
	Max u_z	0.000	3.8	3.2	-2.0	0.0		
	Min u_z	0.000	3.8	3.2	-2.0	0.0		
189	BG1	Max u_x	1.094	13.4	10.9	-7.8	0.1	
		Min u_x	0.000	13.3	10.8	-7.7	0.0	
		Max u_z	1.094	13.4	10.9	-7.8	0.1	
		Min u_z	0.000	13.3	10.8	-7.7	0.0	
	BG2	Max u_x	1.094	5.1	4.3	-2.8	0.1	
		Min u_x	0.000	5.1	4.3	-2.8	0.0	
		Max u_z	1.094	5.1	4.3	-2.8	0.1	
		Min u_z	0.000	5.1	4.3	-2.8	0.0	
	BG3	Max u_x	1.094	2.3	1.8	-1.4	0.0	
		Min u_x	0.000	2.3	1.8	-1.4	0.0	
		Max u_z	0.219	2.3	1.8	-1.4	0.0	
		Min u_z	1.094	2.3	1.8	-1.4	0.0	
BG4	Max u_x	1.094	3.8	3.2	-2.0	0.0		
	Min u_x	0.000	3.8	3.2	-2.0	0.0		
	Max u_z	1.094	3.8	3.2	-2.0	0.0		
	Min u_z	0.000	3.8	3.2	-2.0	0.0		
190	BG1	Max u_x	1.094	13.3	10.9	-7.6	0.0	
		Min u_x	0.000	13.3	10.8	-7.7	0.5	
		Max u_z	0.000	13.3	10.8	-7.7	0.5	
		Min u_z	0.656	13.2	10.8	-7.6	0.0	
	BG2	Max u_x	1.094	5.1	4.3	-2.8	0.0	
		Min u_x	0.000	5.1	4.2	-2.8	0.0	

Project: 15019 kap 1e kamer

Model: 15019 hoofdspant [2] met ..

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■ **STAVEN - GLOBALE VERVORMINGEN**

StAAF No.	BG/BC	Knoop No.	Snedes x [m]	Translaties [mm]			Rotaties φ_y [mrad]	Snedes	
				u	u_x	u_z			
190	BG2	Max u_z	0.656	5.1	4.2	-2.8	0.0		
		Min u_z	0.000	5.1	4.2	-2.8	0.0		
	BG3	Max u_x	0.000	2.2	1.8	-1.4	0.1		
		Min u_x	1.094	2.2	1.8	-1.3	0.0		
		Max u_z	0.000	2.2	1.8	-1.4	0.1		
		Min u_z	1.094	2.2	1.8	-1.3	0.0		
	BG4	Max u_x	0.000	3.8	3.2	-2.0	0.0		
		Min u_x	1.094	3.8	3.2	-2.0	0.0		
		Max u_z	0.547	3.8	3.2	-2.0	0.0		
		Min u_z	0.000	3.8	3.2	-2.0	0.0		
	191	BG1	Max u_x	1.431	13.3	10.6	-7.9	0.3	
			Min u_x	0.000	13.3	10.9	-7.6	0.0	
Max u_z			0.000	13.3	10.9	-7.6	0.0		
Min u_z			1.431	13.3	10.6	-7.9	0.3		
BG2		Max u_x	0.000	5.1	4.3	-2.8	0.0		
		Min u_x	1.431	5.0	4.2	-2.8	0.0		
		Max u_z	0.000	5.1	4.3	-2.8	0.0		
		Min u_z	1.431	5.0	4.2	-2.8	0.0		
BG3		Max u_x	1.431	2.2	1.7	-1.4	0.1		
		Min u_x	0.000	2.2	1.8	-1.3	0.0		
		Max u_z	0.000	2.2	1.8	-1.3	0.0		
		Min u_z	1.431	2.2	1.7	-1.4	0.1		
BG4		Max u_x	0.000	3.8	3.2	-2.0	0.0		
		Min u_x	1.431	3.7	3.1	-2.0	0.0		
		Max u_z	0.000	3.8	3.2	-2.0	0.0		
		Min u_z	1.431	3.7	3.1	-2.0	0.0		
192	BG1	Max u_x	0.000	13.5	10.9	-8.0	5.9		
		Min u_x	2.386	13.7	10.8	-8.6	-5.5		
		Max u_z	0.000	13.5	10.9	-8.0	5.9		
		Min u_z	1.193	14.2	8.2	-11.6	0.2		
	BG2	Max u_x	0.000	5.1	4.3	-2.8	0.0		
		Min u_x	2.386	5.0	4.2	-2.7	0.0		
		Max u_z	0.000	5.1	4.3	-2.8	0.0		
		Min u_z	2.386	5.0	4.2	-2.7	0.0		
	BG3	Max u_x	2.386	2.3	1.8	-1.5	0.0		
		Min u_x	0.000	2.3	1.8	-1.4	0.0		
		Max u_z	2.386	2.3	1.8	-1.5	0.0		
		Min u_z	0.000	2.3	1.8	-1.4	0.0		
	BG4	Max u_x	0.000	3.8	3.2	-2.0	0.0		
		Min u_x	2.386	3.7	3.2	-2.0	0.0		
		Max u_z	2.386	3.7	3.2	-2.0	0.0		
		Min u_z	0.000	3.8	3.2	-2.0	0.0		
193	BG1	Max u_x	2.037	13.4	10.9	-7.8	0.0		
		Min u_x	0.000	13.3	10.8	-7.7	0.0		
		Max u_z	2.037	13.4	10.9	-7.8	0.0		
		Min u_z	0.000	13.3	10.8	-7.7	0.0		
	BG2	Max u_x	2.037	5.1	4.3	-2.8	0.0		
		Min u_x	0.000	5.1	4.2	-2.8	0.0		
		Max u_z	2.037	5.1	4.3	-2.8	0.0		
		Min u_z	0.000	5.1	4.2	-2.8	0.0		
	BG3	Max u_x	2.037	2.3	1.8	-1.4	0.0		
		Min u_x	0.000	2.2	1.8	-1.4	0.0		
		Max u_z	0.000	2.2	1.8	-1.4	0.0		
		Min u_z	2.037	2.3	1.8	-1.4	0.0		
	BG4	Max u_x	2.037	3.8	3.2	-2.0	0.0		
		Min u_x	0.000	3.8	3.2	-2.0	0.0		
		Max u_z	0.000	3.8	3.2	-2.0	0.0		
		Min u_z	2.037	3.8	3.2	-2.0	0.0		
194	BG1	Max u_x	0.000	13.4	10.8	-8.0	1.0		
		Min u_x	0.337	13.3	10.8	-7.7	0.5		
		Max u_z	0.000	13.4	10.8	-8.0	1.0		
		Min u_z	0.337	13.3	10.8	-7.7	0.5		
	BG2	Max u_x	0.000	5.0	4.2	-2.8	0.0		
		Min u_x	0.337	5.1	4.2	-2.8	0.0		
		Max u_z	0.337	5.1	4.2	-2.8	0.0		
		Min u_z	0.000	5.0	4.2	-2.8	0.0		
	BG3	Max u_x	0.000	2.3	1.8	-1.4	0.2		
		Min u_x	0.337	2.2	1.8	-1.4	0.1		
		Max u_z	0.000	2.3	1.8	-1.4	0.2		
		Min u_z	0.337	2.2	1.8	-1.4	0.1		
	BG4	Max u_x	0.000	3.7	3.2	-2.0	0.0		
		Min u_x	0.337	3.8	3.2	-2.0	0.0		

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■ **STAVEN - GLOBALE VERVORMINGEN**

Staal No.	BG/BC	Knoop No.	Snedes x [m]	Translaties [mm]			Rotaties φ_y [mrad]	Snedes
				u	u_x	u_z		
194	BG4	Max u_z	0.337	3.8	3.2	-2.0	0.0	
		Min u_z	0.000	3.7	3.2	-2.0	0.0	
195	BG1	Max u_x	0.338	13.4	10.8	-8.0	0.4	
		Min u_x	0.000	13.3	10.6	-7.9	0.4	
		Max u_z	0.338	13.4	10.8	-8.0	0.4	
		Min u_z	0.000	13.3	10.6	-7.9	0.4	
	BG2	Max u_x	0.000	5.0	4.2	-2.8	0.1	
		Min u_x	0.338	5.0	4.2	-2.8	0.1	
		Max u_z	0.338	5.0	4.2	-2.8	0.1	
		Min u_z	0.000	5.0	4.2	-2.8	0.1	
	BG3	Max u_x	0.338	2.3	1.8	-1.4	0.1	
		Min u_x	0.000	2.2	1.7	-1.4	0.1	
		Max u_z	0.338	2.3	1.8	-1.4	0.1	
		Min u_z	0.000	2.2	1.7	-1.4	0.1	
BG4	Max u_x	0.338	3.7	3.2	-2.0	0.0		
	Min u_x	0.000	3.7	3.1	-2.0	0.0		
	Max u_z	0.338	3.7	3.2	-2.0	0.0		
	Min u_z	0.000	3.7	3.1	-2.0	0.0		
196	BG1	Max u_x	0.425	13.7	10.8	-8.6	1.7	
		Min u_x	0.000	13.4	10.8	-8.0	1.0	
		Max u_z	0.425	13.7	10.8	-8.6	1.7	
		Min u_z	0.000	13.4	10.8	-8.0	1.0	
	BG2	Max u_x	0.000	5.0	4.2	-2.8	0.0	
		Min u_x	0.425	5.0	4.2	-2.7	0.0	
		Max u_z	0.000	5.0	4.2	-2.8	0.0	
		Min u_z	0.425	5.0	4.2	-2.7	0.0	
	BG3	Max u_x	0.425	2.3	1.8	-1.5	0.2	
		Min u_x	0.000	2.3	1.8	-1.4	0.2	
		Max u_z	0.425	2.3	1.8	-1.5	0.2	
		Min u_z	0.000	2.3	1.8	-1.4	0.2	
BG4	Max u_x	0.425	3.7	3.2	-2.0	0.0		
	Min u_x	0.000	3.7	3.2	-2.0	0.0		
	Max u_z	0.000	3.7	3.2	-2.0	0.0		
	Min u_z	0.425	3.7	3.2	-2.0	0.0		
197	BG1	Max u_x	0.000	13.4	10.9	-7.8	0.1	
		Min u_x	2.125	13.4	11.0	-7.5	-0.7	
		Max u_z	0.850	13.5	11.0	-7.9	0.0	
		Min u_z	2.125	13.4	11.0	-7.5	-0.7	
	BG2	Max u_x	0.000	5.1	4.3	-2.8	0.1	
		Min u_x	2.125	5.1	4.3	-2.8	-0.2	
		Max u_z	1.063	5.2	4.3	-2.8	0.0	
		Min u_z	2.125	5.1	4.3	-2.8	-0.2	
	BG3	Max u_x	0.000	2.3	1.8	-1.4	0.0	
		Min u_x	2.125	2.2	1.8	-1.3	-0.1	
		Max u_z	0.000	2.3	1.8	-1.4	0.0	
		Min u_z	2.125	2.2	1.8	-1.3	-0.1	
BG4	Max u_x	0.000	3.8	3.2	-2.0	0.0		
	Min u_x	2.125	3.8	3.2	-2.0	-0.2		
	Max u_z	1.063	3.8	3.2	-2.1	0.0		
	Min u_z	2.125	3.8	3.2	-2.0	-0.2		
198	BG1	Max u_x	0.000	15.4	15.1	-3.3	0.0	
		Min u_x	8.410	13.5	11.0	-7.9	0.0	
		Max u_z	0.000	15.4	15.1	-3.3	0.0	
		Min u_z	8.410	13.5	11.0	-7.9	0.0	
	BG2	Max u_x	0.000	6.0	5.8	-1.3	0.0	
		Min u_x	8.410	5.1	4.3	-2.8	0.0	
		Max u_z	0.000	6.0	5.8	-1.3	0.0	
		Min u_z	8.410	5.1	4.3	-2.8	0.0	
	BG3	Max u_x	0.000	2.6	2.5	-0.5	0.0	
		Min u_x	8.410	2.3	1.8	-1.4	0.0	
		Max u_z	0.000	2.6	2.5	-0.5	0.0	
		Min u_z	8.410	2.3	1.8	-1.4	0.0	
BG4	Max u_x	0.000	4.4	4.3	-1.0	0.0		
	Min u_x	8.410	3.8	3.2	-2.0	0.0		
	Max u_z	0.000	4.4	4.3	-1.0	0.0		
	Min u_z	8.410	3.8	3.2	-2.0	0.0		
199	BG1	Max u_x	1.085	15.4	10.8	-11.1	2.7	
		Min u_x	0.000	13.7	10.8	-8.6	1.7	
		Max u_z	0.000	13.7	10.8	-8.6	1.7	
		Min u_z	1.085	15.4	10.8	-11.1	2.7	
	BG2	Max u_x	0.000	5.0	4.2	-2.7	0.0	
		Min u_x	0.000	5.0	4.2	-2.7	0.0	

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■ **STAVEN - GLOBALE VERVORMINGEN**

Staal No.	BG/BC	Knoop No.	Snedes x [m]	Translaties [mm]			Rotaties φ_y [mrad]	Snedes	
				u	u_x	u_z			
199	BG2	Max u_z	0.000	5.0	4.2	-2.7	0.0		
		Min u_z	1.085	5.0	4.2	-2.7	0.0		
	BG3	Max u_x	0.000	2.3	1.8	-1.5	0.2		
		Min u_x	0.000	2.3	1.8	-1.5	0.2		
		Max u_z	1.085	2.5	1.8	-1.8	0.2		
		Min u_z	0.000	2.3	1.8	-1.5	0.2		
	BG4	Max u_x	0.000	3.7	3.2	-2.0	0.0		
		Min u_x	0.000	3.7	3.2	-2.0	0.0		
		Max u_z	0.000	3.7	3.2	-2.0	0.0		
		Min u_z	1.085	3.7	3.2	-2.0	0.0		
	200	BG1	Max u_x	0.000	18.6	14.5	-11.7	-0.2	
			Min u_x	1.180	17.2	13.4	-10.8	3.3	
Max u_z			1.966	13.7	10.8	-8.6	5.1		
Min u_z			0.197	18.6	14.5	-11.7	0.0		
BG2		Max u_x	0.000	5.0	4.2	-2.7	0.0		
		Min u_x	0.000	5.0	4.2	-2.7	0.0		
		Max u_z	1.966	5.0	4.2	-2.7	0.0		
		Min u_z	0.000	5.0	4.2	-2.7	0.0		
BG3		Max u_x	0.000	2.8	2.1	-1.8	0.2		
		Min u_x	1.573	2.4	1.8	-1.6	0.2		
		Max u_z	0.000	2.8	2.1	-1.8	0.2		
		Min u_z	1.966	2.3	1.8	-1.5	0.2		
BG4		Max u_x	0.000	3.7	3.1	-2.0	0.0		
		Min u_x	0.000	3.7	3.1	-2.0	0.0		
		Max u_z	1.966	3.7	3.2	-2.0	0.0		
		Min u_z	0.000	3.7	3.1	-2.0	0.0		
201		BG1	Max u_x	0.186	15.8	10.8	-11.6	2.7	
			Min u_x	0.000	15.4	10.8	-11.1	2.7	
			Max u_z	0.186	15.8	10.8	-11.6	2.7	
			Min u_z	0.000	15.4	10.8	-11.1	2.7	
		BG2	Max u_x	0.000	5.0	4.2	-2.7	0.0	
			Min u_x	0.000	5.0	4.2	-2.7	0.0	
			Max u_z	0.000	5.0	4.2	-2.7	0.0	
			Min u_z	0.186	5.0	4.2	-2.7	0.0	
	BG3	Max u_x	0.000	2.5	1.8	-1.8	0.2		
		Min u_x	0.000	2.5	1.8	-1.8	0.2		
		Max u_z	0.186	2.5	1.8	-1.8	0.2		
		Min u_z	0.000	2.5	1.8	-1.8	0.2		
	BG4	Max u_x	0.000	3.7	3.2	-2.0	0.0		
		Min u_x	0.000	3.7	3.2	-2.0	0.0		
		Max u_z	0.000	3.7	3.2	-2.0	0.0		
		Min u_z	0.186	3.7	3.2	-2.0	0.0		
	202	BG1	Max u_x	3.700	12.5	11.1	-5.7	-0.7	
			Min u_x	0.000	13.3	10.6	-7.9	-0.5	
			Max u_z	3.700	12.5	11.1	-5.7	-0.7	
			Min u_z	0.000	13.3	10.6	-7.9	-0.5	
		BG2	Max u_x	3.700	4.8	4.3	-2.1	-0.2	
			Min u_x	0.000	5.0	4.2	-2.8	-0.2	
			Max u_z	3.700	4.8	4.3	-2.1	-0.2	
			Min u_z	0.000	5.0	4.2	-2.8	-0.2	
BG3		Max u_x	3.700	2.1	1.8	-0.9	-0.1		
		Min u_x	0.000	2.2	1.7	-1.4	-0.1		
		Max u_z	3.700	2.1	1.8	-0.9	-0.1		
		Min u_z	0.000	2.2	1.7	-1.4	-0.1		
BG4		Max u_x	3.700	3.6	3.2	-1.6	-0.1		
		Min u_x	0.000	3.7	3.1	-2.0	-0.1		
		Max u_z	3.700	3.6	3.2	-1.6	-0.1		
		Min u_z	0.000	3.7	3.1	-2.0	-0.1		
203		BG1	Max u_x	1.500	18.6	14.5	-11.7	2.5	
			Min u_x	0.000	15.8	10.8	-11.6	2.5	
			Max u_z	1.500	18.6	14.5	-11.7	2.5	
			Min u_z	0.000	15.8	10.8	-11.6	2.5	
		BG2	Max u_x	0.000	5.0	4.2	-2.7	0.0	
			Min u_x	0.000	5.0	4.2	-2.7	0.0	
			Max u_z	0.000	5.0	4.2	-2.7	0.0	
			Min u_z	1.500	5.0	4.2	-2.7	0.0	
	BG3	Max u_x	0.000	2.5	1.8	-1.8	0.2		
		Min u_x	0.000	2.5	1.8	-1.8	0.2		
		Max u_z	1.500	2.8	2.1	-1.8	0.2		
		Min u_z	0.000	2.5	1.8	-1.8	0.2		
	BG4	Max u_x	0.000	3.7	3.2	-2.0	0.0		
		Min u_x	0.000	3.7	3.2	-2.0	0.0		

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Staf No.	BG/BC	Knoop No.	Sneede x [m]	Translaties [mm]			Rotaties φ_y [mrad]	Snedes
				u	u_x	u_z		
203	BG4	Max u_z	0.000	3.7	3.2	-2.0	0.0	
		Min u_z	1.500	3.7	3.1	-2.0	0.0	
204	BG1	Max u_x	0.629	17.1	10.8	-13.3	2.8	
		Min u_x	0.000	15.8	10.8	-11.6	2.7	
		Max u_z	0.629	17.1	10.8	-13.3	2.8	
		Min u_z	0.000	15.8	10.8	-11.6	2.7	
	BG2	Max u_x	0.000	5.0	4.2	-2.7	0.0	
		Min u_x	0.000	5.0	4.2	-2.7	0.0	
		Max u_z	0.000	5.0	4.2	-2.7	0.0	
		Min u_z	0.629	5.0	4.2	-2.7	0.0	
	BG3	Max u_x	0.000	2.5	1.8	-1.8	0.2	
		Min u_x	0.000	2.5	1.8	-1.8	0.2	
		Max u_z	0.629	2.7	1.8	-2.0	0.2	
		Min u_z	0.000	2.5	1.8	-1.8	0.2	
BG4	Max u_x	0.000	3.7	3.2	-2.0	0.0		
	Min u_x	0.000	3.7	3.2	-2.0	0.0		
	Max u_z	0.000	3.7	3.2	-2.0	0.0		
	Min u_z	0.629	3.7	3.2	-2.0	0.0		
205	BG1	Max u_x	0.488	17.4	11.5	-13.0	2.0	
		Min u_x	1.627	18.6	14.5	-11.7	3.4	
		Max u_z	1.627	18.6	14.5	-11.7	3.4	
		Min u_z	0.000	17.1	10.8	-13.3	1.6	
	BG2	Max u_x	0.000	5.0	4.2	-2.7	0.0	
		Min u_x	0.000	5.0	4.2	-2.7	0.0	
		Max u_z	1.627	5.0	4.2	-2.7	0.0	
		Min u_z	0.000	5.0	4.2	-2.7	0.0	
	BG3	Max u_x	0.000	2.7	1.8	-2.0	0.2	
		Min u_x	0.000	2.7	1.8	-2.0	0.2	
		Max u_z	1.627	2.8	2.1	-1.8	0.2	
		Min u_z	0.000	2.7	1.8	-2.0	0.2	
BG4	Max u_x	0.000	3.7	3.2	-2.0	0.0		
	Min u_x	0.000	3.7	3.2	-2.0	0.0		
	Max u_z	0.000	3.7	3.2	-2.0	0.0		
	Min u_z	1.627	3.7	3.1	-2.0	0.0		
206	BG1	Max u_x	0.000	18.1	18.0	-2.4	-6.4	
		Min u_x	1.758	15.4	10.8	-11.1	-6.4	
		Max u_z	0.000	18.1	18.0	-2.4	-6.4	
		Min u_z	1.758	15.4	10.8	-11.1	-6.4	
	BG2	Max u_x	0.000	5.3	4.9	-1.8	-0.6	
		Min u_x	0.000	5.3	4.9	-1.8	-0.6	
		Max u_z	0.000	5.3	4.9	-1.8	-0.6	
		Min u_z	1.758	5.0	4.2	-2.7	-0.6	
	BG3	Max u_x	0.000	2.9	2.9	-0.4	-1.0	
		Min u_x	0.000	2.9	2.9	-0.4	-1.0	
		Max u_z	0.000	2.9	2.9	-0.4	-1.0	
		Min u_z	1.758	2.5	1.8	-1.8	-1.0	
BG4	Max u_x	0.000	3.9	3.7	-1.4	-0.5		
	Min u_x	0.000	3.9	3.7	-1.4	-0.5		
	Max u_z	0.000	3.9	3.7	-1.4	-0.5		
	Min u_z	1.758	3.7	3.2	-2.0	-0.5		
207	BG1	Max u_x	0.000	13.4	11.0	-7.5	-0.7	
		Min u_x	1.499	12.5	11.1	-5.7	-1.7	
		Max u_z	1.499	12.5	11.1	-5.7	-1.7	
		Min u_z	0.000	13.4	11.0	-7.5	-0.7	
	BG2	Max u_x	0.000	5.1	4.3	-2.8	-0.2	
		Min u_x	1.499	4.8	4.3	-2.1	-0.6	
		Max u_z	1.499	4.8	4.3	-2.1	-0.6	
		Min u_z	0.000	5.1	4.3	-2.8	-0.2	
	BG3	Max u_x	0.000	2.2	1.8	-1.3	-0.1	
		Min u_x	1.499	2.1	1.8	-0.9	-0.3	
		Max u_z	1.499	2.1	1.8	-0.9	-0.3	
		Min u_z	0.000	2.2	1.8	-1.3	-0.1	
BG4	Max u_x	0.000	3.8	3.2	-2.0	-0.2		
	Min u_x	1.499	3.6	3.2	-1.6	-0.4		
	Max u_z	1.499	3.6	3.2	-1.6	-0.4		
	Min u_z	0.000	3.8	3.2	-2.0	-0.2		
208	BG1			Bezwijken				
	BG2			Bezwijken				
	BG3			Bezwijken				
	BG4			Bezwijken				
209	BG1	Max u_x	0.000	13.6	12.9	-4.4	-1.4	
		Min u_x	2.647	13.4	11.0	-7.5	-1.3	

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■ **STAVEN - GLOBALE VERVORMINGEN**

Staal No.	BG/BC	Knoop No.	Snedes x [m]	Translaties [mm]			Rotaties φ_y [mrad]	Snedes	
				u	u_x	u_z			
209	BG1	Max u_z	0.000	13.6	12.9	-4.4	-1.4		
		Min u_z	2.647	13.4	11.0	-7.5	-1.3		
	BG2	Max u_x	0.000	5.2	4.9	-1.7	-0.5		
		Min u_x	2.647	5.1	4.3	-2.8	-0.5		
		Max u_z	0.000	5.2	4.9	-1.7	-0.5		
		Min u_z	2.647	5.1	4.3	-2.8	-0.5		
	BG3	Max u_x	0.000	2.3	2.2	-0.7	-0.3		
		Min u_x	2.647	2.2	1.8	-1.3	-0.3		
		Max u_z	0.000	2.3	2.2	-0.7	-0.3		
		Min u_z	2.647	2.2	1.8	-1.3	-0.3		
	BG4	Max u_x	0.000	3.9	3.7	-1.3	-0.3		
		Min u_x	2.647	3.8	3.2	-2.0	-0.3		
		Max u_z	0.000	3.9	3.7	-1.3	-0.3		
		Min u_z	2.647	3.8	3.2	-2.0	-0.3		
	210	BG1	Max u_x	1.005	18.1	18.0	-2.4	7.5	
			Min u_x	0.000	12.5	11.1	-5.7	7.5	
Max u_z			1.005	18.1	18.0	-2.4	7.5		
Min u_z			0.000	12.5	11.1	-5.7	7.5		
BG2		Max u_x	0.000	4.8	4.3	-2.1	0.7		
		Min u_x	0.000	4.8	4.3	-2.1	0.7		
		Max u_z	1.005	5.3	4.9	-1.8	0.7		
		Min u_z	0.000	4.8	4.3	-2.1	0.7		
BG3		Max u_x	0.000	2.1	1.8	-0.9	1.2		
		Min u_x	0.000	2.1	1.8	-0.9	1.2		
		Max u_z	1.005	2.9	2.9	-0.4	1.2		
		Min u_z	0.000	2.1	1.8	-0.9	1.2		
BG4		Max u_x	0.000	3.6	3.2	-1.6	0.5		
		Min u_x	0.000	3.6	3.2	-1.6	0.5		
		Max u_z	1.005	3.9	3.7	-1.4	0.5		
		Min u_z	0.000	3.6	3.2	-1.6	0.5		
211	BG1	Max u_x	0.180	12.3	11.1	-5.4	-1.8		
		Min u_x	0.000	12.5	11.1	-5.7	-1.7		
		Max u_z	0.180	12.3	11.1	-5.4	-1.8		
		Min u_z	0.000	12.5	11.1	-5.7	-1.7		
	BG2	Max u_x	0.000	4.8	4.3	-2.1	-0.6		
		Min u_x	0.180	4.8	4.3	-2.0	-0.6		
		Max u_z	0.000	4.8	4.3	-2.1	-0.6		
		Min u_z	0.180	4.8	4.3	-2.0	-0.6		
	BG3	Max u_x	0.000	2.1	1.8	-0.9	-0.3		
		Min u_x	0.180	2.0	1.8	-0.9	-0.3		
		Max u_z	0.000	2.1	1.8	-0.9	-0.3		
		Min u_z	0.180	2.0	1.8	-0.9	-0.3		
	BG4	Max u_x	0.000	3.6	3.2	-1.6	-0.4		
		Min u_x	0.180	3.6	3.2	-1.5	-0.4		
		Max u_z	0.000	3.6	3.2	-1.6	-0.4		
		Min u_z	0.180	3.6	3.2	-1.5	-0.4		
212	BG1	Max u_x	1.452	12.3	11.1	-5.4	-1.0		
		Min u_x	0.000	13.6	12.9	-4.4	-2.1		
		Max u_z	0.000	13.6	12.9	-4.4	-2.1		
		Min u_z	1.452	12.3	11.1	-5.4	-1.0		
	BG2	Max u_x	1.452	4.8	4.3	-2.0	-0.3		
		Min u_x	0.000	5.2	4.9	-1.7	-0.8		
		Max u_z	0.000	5.2	4.9	-1.7	-0.8		
		Min u_z	1.452	4.8	4.3	-2.0	-0.3		
	BG3	Max u_x	1.452	2.0	1.8	-0.9	-0.2		
		Min u_x	0.000	2.3	2.2	-0.7	-0.4		
		Max u_z	0.000	2.3	2.2	-0.7	-0.4		
		Min u_z	1.452	2.0	1.8	-0.9	-0.2		
	BG4	Max u_x	1.452	3.6	3.2	-1.5	-0.2		
		Min u_x	0.000	3.9	3.7	-1.3	-0.6		
		Max u_z	0.000	3.9	3.7	-1.3	-0.6		
		Min u_z	1.452	3.6	3.2	-1.5	-0.2		
213	BG1	Max u_x	0.873	13.6	12.9	-4.4	-2.1		
		Min u_x	0.000	15.4	15.1	-3.3	-3.6		
		Max u_z	0.000	15.4	15.1	-3.3	-3.6		
		Min u_z	0.873	13.6	12.9	-4.4	-2.1		
	BG2	Max u_x	0.873	5.2	4.9	-1.7	-0.8		
		Min u_x	0.000	6.0	5.8	-1.3	-1.5		
		Max u_z	0.000	6.0	5.8	-1.3	-1.5		
		Min u_z	0.873	5.2	4.9	-1.7	-0.8		
	BG3	Max u_x	0.873	2.3	2.2	-0.7	-0.4		
		Min u_x	0.000	2.6	2.5	-0.5	-0.6		

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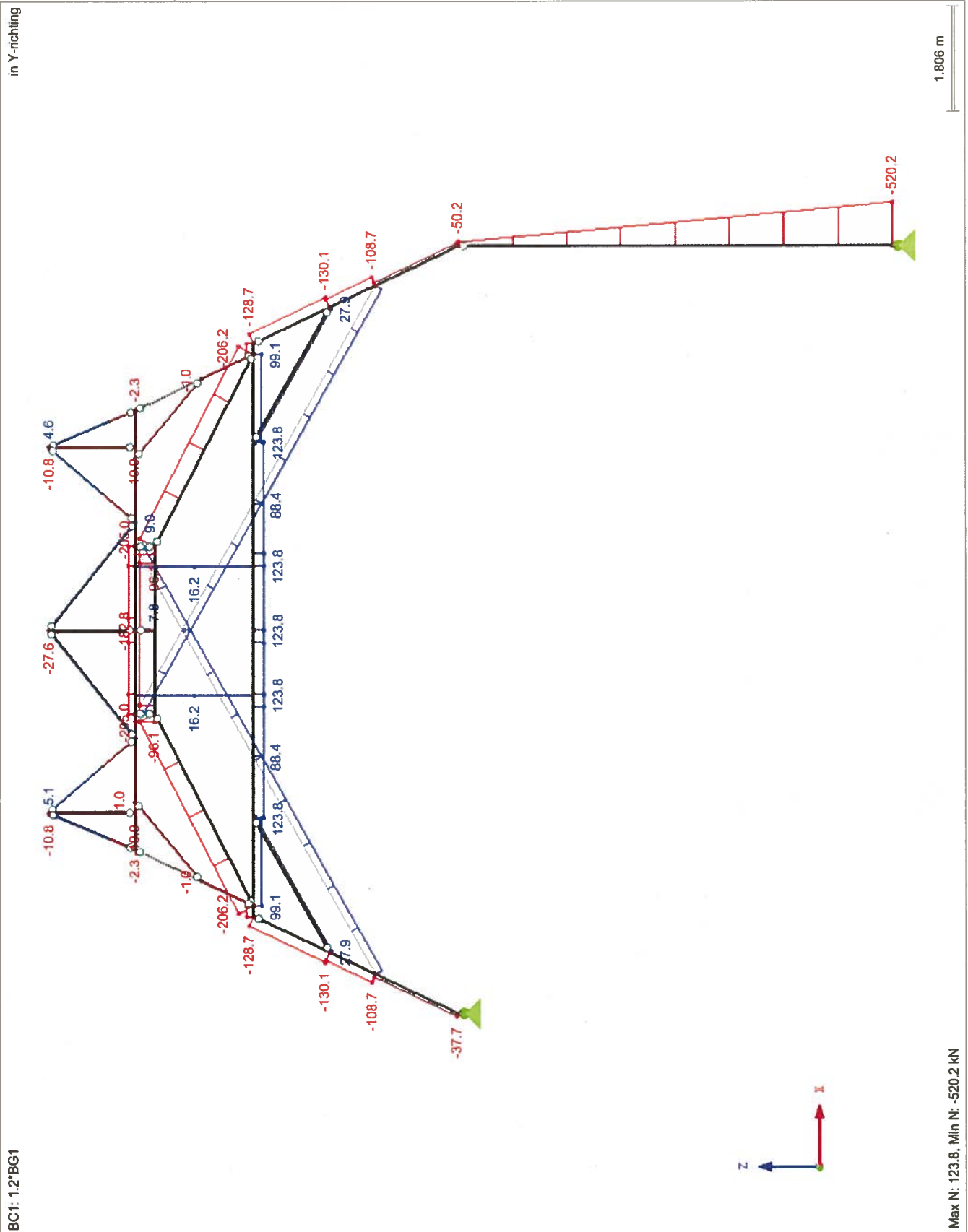
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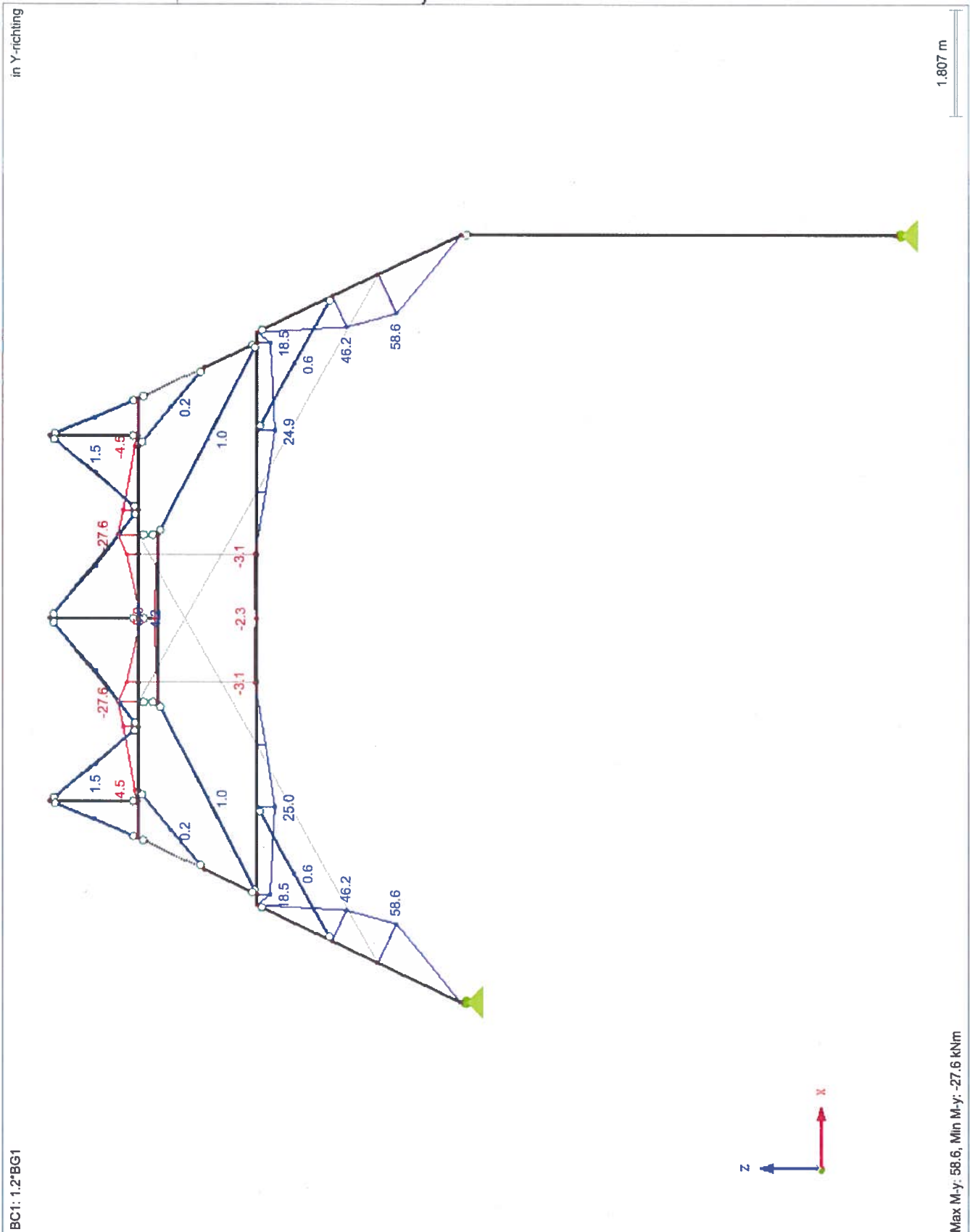
■ **STAVEN - GLOBALE VERVORMINGEN**

Staaf No.	BG/BC	Knoop No.	Sneede x [m]	Translaties [mm]			Rotaties φ_y [mrad]	Snedes	
				u	u_x	u_z			
213	BG3	Max u_z	0.000	2.6	2.5	-0.5	-0.6		
		Min u_z	0.873	2.3	2.2	-0.7	-0.4		
	BG4	Max u_x	0.873	3.9	3.7	-1.3	-0.6		
		Min u_x	0.000	4.4	4.3	-1.0	-1.1		
		Max u_z	0.000	4.4	4.3	-1.0	-1.1		
		Min u_z	0.873	3.9	3.7	-1.3	-0.6		
	214	BG1	Max u_x	1.575	15.4	15.1	-3.3	-3.6	
			Min u_x	0.000	21.5	21.5	-0.2	-5.0	
Max u_z			0.000	21.5	21.5	-0.2	-5.0		
Min u_z			1.575	15.4	15.1	-3.3	-3.6		
BG2		Max u_x	0.000	8.5	8.5	0.0	-2.1		
		Min u_x	1.575	6.0	5.8	-1.3	-1.5		
		Max u_z	0.000	8.5	8.5	0.0	-2.1		
		Min u_z	1.575	6.0	5.8	-1.3	-1.5		
BG3		Max u_x	0.000	3.5	3.5	0.0	-0.8		
		Min u_x	1.575	2.6	2.5	-0.5	-0.6		
		Max u_z	0.000	3.5	3.5	0.0	-0.8		
		Min u_z	1.575	2.6	2.5	-0.5	-0.6		
BG4		Max u_x	0.000	6.4	6.4	0.0	-1.6		
		Min u_x	1.575	4.4	4.3	-1.0	-1.1		
		Max u_z	0.000	6.4	6.4	0.0	-1.6		
		Min u_z	1.575	4.4	4.3	-1.0	-1.1		
215		BG1	Max u_x	7.500	0.0	0.0	0.0	2.9	
			Min u_x	0.000	21.5	21.5	-0.2	2.9	
			Max u_z	0.000	21.5	21.5	-0.2	2.9	
			Min u_z	7.500	0.0	0.0	0.0	2.9	
	BG2	Max u_x	0.000	8.5	8.5	0.0	1.1		
		Min u_x	7.500	0.0	0.0	0.0	1.1		
		Max u_z	0.000	8.5	8.5	0.0	1.1		
		Min u_z	7.500	0.0	0.0	0.0	1.1		
	BG3	Max u_x	0.000	3.5	3.5	0.0	0.5		
		Min u_x	7.500	0.0	0.0	0.0	0.5		
		Max u_z	0.000	3.5	3.5	0.0	0.5		
		Min u_z	7.500	0.0	0.0	0.0	0.5		
	BG4	Max u_x	0.000	6.4	6.4	0.0	0.8		
		Min u_x	7.500	0.0	0.0	0.0	0.8		
		Max u_z	0.000	6.4	6.4	0.0	0.8		
		Min u_z	7.500	0.0	0.0	0.0	0.8		

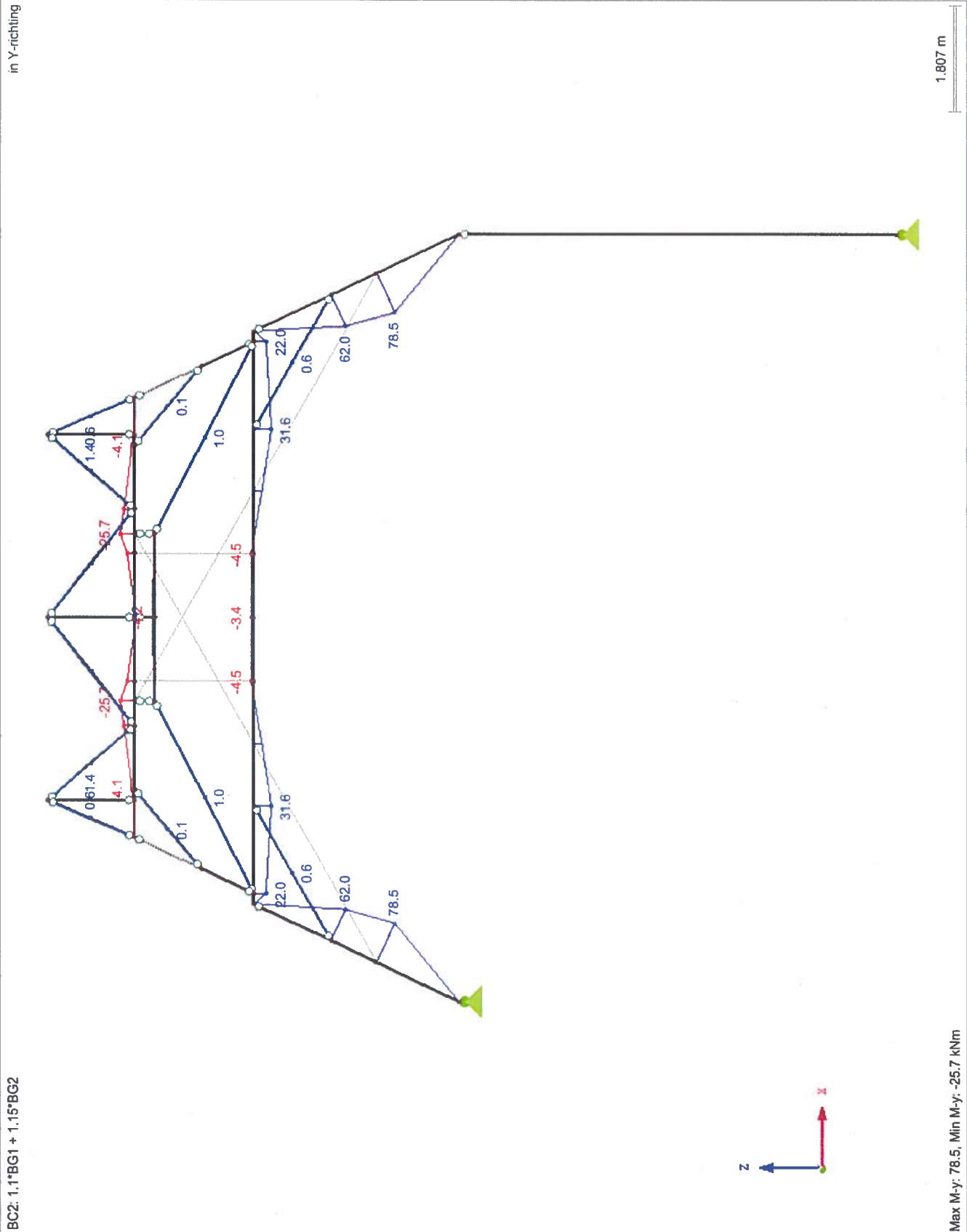
■ SNEDEKRACHTEN N



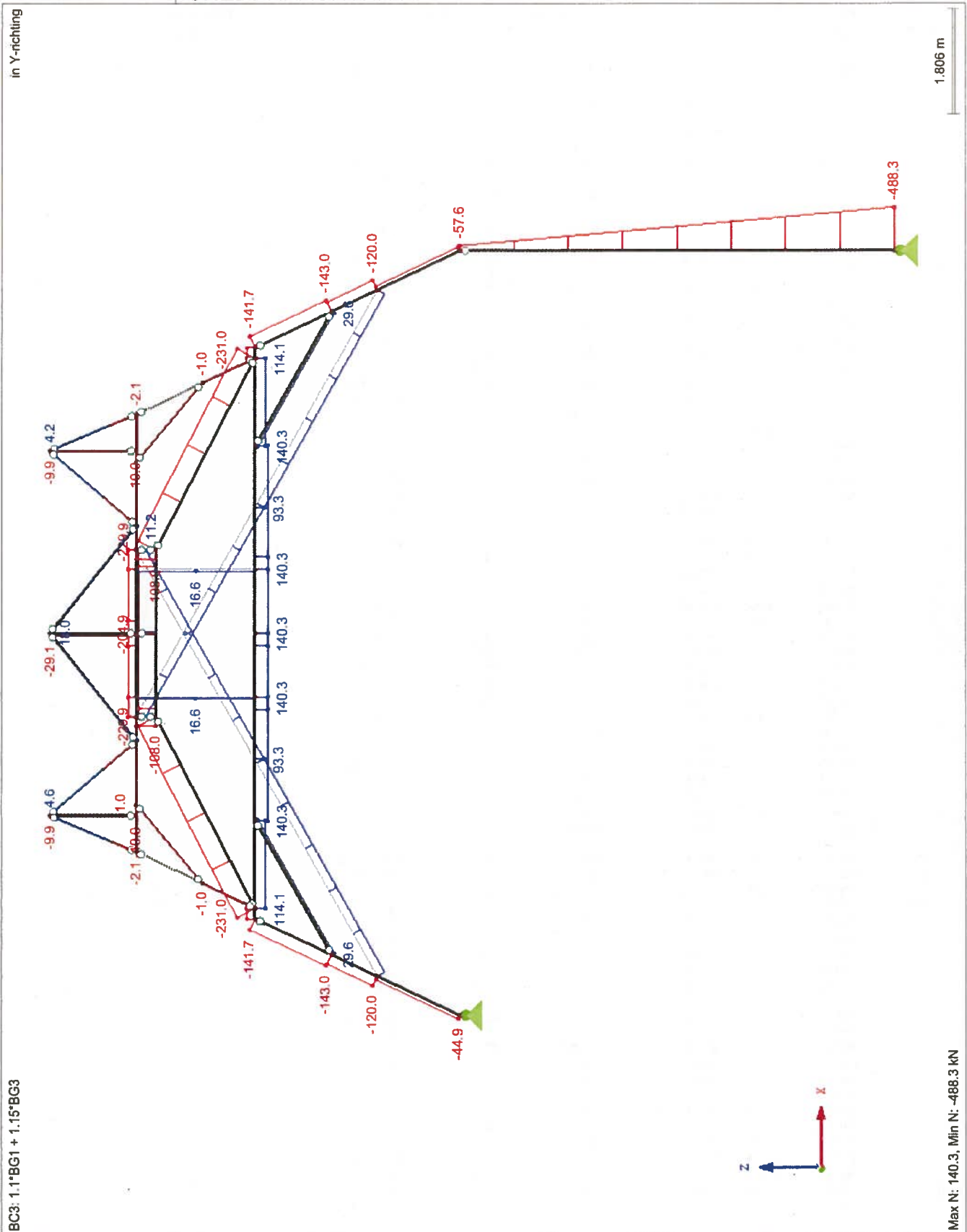
■ SNEDEKRACHTEN M_y



■ SNEDEKRACHTEN M_y



■ SNEDEKRACHTEN N



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■ **STAVEN - SNEDEKRACHTEN**

Resultaatcombinaties

Staaf No.	RC	Knoop No.	Snedex [m]	Krachten [kN]			Momenten My [kNm]	Bijbehorend Belastinggev.	
				N	Vz				
161	RC1	125	0.000	max N	0.0	0.0	0.0		
				min N	-43.6	-38.8	61.7	BC 3	
				max Vz	0.0	0.0	0.0		
				min Vz	-28.7	-49.5	78.5	BC 2	
				max My	-28.7	-49.5	78.5	BC 2	
				min My	0.0	0.0	0.0		
		124	1.575	max N	0.0	0.0	0.0		
				min N	-44.9	-39.5	0.0	BC 3	
				max Vz	0.0	0.0	0.0		
				min Vz	-29.9	-50.2	0.0	BC 2	
				max My	0.0	0.0	0.0		
				min My	0.0	0.0	0.0		
		Max	0.000	Max N	0.0	0.0	0.0		
				Min N	1.575	-39.5	0.0	BC 3	
				Max Vz	0.000	0.0	0.0		
				Min Vz	1.575	-29.9	0.0	BC 2	
				Max My	0.000	-28.7	-49.5	78.5	BC 2
				Min My	0.000	0.0	0.0		
162	RC1	125	0.000	max N	0.0	0.0	0.0		
				min N	-126.2	-18.6	78.5	BC 2	
				max Vz	0.0	0.0	0.0		
				min Vz	-126.2	-18.6	78.5	BC 2	
				max My	-126.2	-18.6	78.5	BC 2	
				min My	0.0	0.0	0.0		
		126	0.873	max N	0.0	0.0	0.0		
				min N	-125.4	-19.3	62.0	BC 2	
				max Vz	0.0	0.0	0.0		
				min Vz	-125.4	-19.3	62.0	BC 2	
				max My	-125.4	-19.3	62.0	BC 2	
				min My	0.0	0.0	0.0		
		Max	0.000	Max N	0.000	0.0	0.0		
				Min N	0.000	-126.2	-18.6	78.5	BC 2
				Max Vz	0.000	0.0	0.0		
				Min Vz	0.873	-125.4	-19.3	62.0	BC 2
				Max My	0.000	-126.2	-18.6	78.5	BC 2
				Min My	0.000	0.0	0.0		
163	RC1	126	0.000	max N	0.0	0.0	0.0		
				min N	-156.5	-42.2	62.0	BC 2	
				max Vz	0.0	0.0	0.0		
				min Vz	-156.5	-42.2	62.0	BC 2	
				max My	-156.5	-42.2	62.0	BC 2	
				min My	0.0	0.0	0.0		
		127	1.452	max N	0.0	0.0	0.0		
				min N	-155.2	-43.1	0.0	BC 2	
				max Vz	0.0	0.0	0.0		
				min Vz	-155.2	-43.1	0.0	BC 2	
				max My	0.0	0.0	0.0		
				min My	0.0	0.0	0.0		
		Max	0.000	Max N	0.000	0.0	0.0		
				Min N	0.000	-156.5	-42.2	62.0	BC 2
				Max Vz	0.000	0.0	0.0		
				Min Vz	1.452	-155.2	-43.1	0.0	BC 2
				Max My	0.000	-156.5	-42.2	62.0	BC 2
				Min My	0.000	0.0	0.0		
164	RC1	128	0.000	max N	0.0	0.0	0.0		
				min N	-105.0	-121.9	22.0	BC 2	
				max Vz	0.0	0.0	0.0		
				min Vz	-105.0	-121.9	22.0	BC 2	
				max My	-105.0	-121.9	22.0	BC 2	
				min My	0.0	0.0	0.0		
		127	0.180	max N	0.0	0.0	0.0		
				min N	-105.0	-122.1	0.0	BC 2	
				max Vz	0.0	0.0	0.0		
				min Vz	-105.0	-122.1	0.0	BC 2	
				max My	0.0	0.0	0.0		
				min My	0.0	0.0	0.0		
		Max	0.000	Max N	0.000	0.0	0.0		
				Min N	0.000	-105.0	-121.9	22.0	BC 2
				Max Vz	0.000	0.0	0.0		
				Min Vz	0.180	-105.0	-122.1	0.0	BC 2
				Max My	0.000	-105.0	-121.9	22.0	BC 2
				Min My	0.000	0.0	0.0		
165	RC1	128	0.000	max N	0.0	0.0	0.0		
				min N	-1.4	0.1	0.0	BC 4	

■ STAVEN - SNEDEKRACHTEN

Resultaatcombinaties

Staal No.	RC	Knoop No.	Sneede x [m]	Krachten [kN]		Momenten M _y [kNm]	Bijbehorend Belastingsgev.				
				N	V _z						
165	RC1	max V _z		max V _z	-1.4	0.1	0.0	BC 4			
		min V _z		min V _z	0.0	0.0	0.0				
		max M _y		max M _y	0.0	0.0	0.0				
		min M _y		min M _y	0.0	0.0	0.0				
		129	1.005	max N	0.0	0.0	0.0		BC 4		
		min N		-1.0	-0.1	0.0					
		max V _z		0.0	0.0	0.0					
		min V _z		-1.0	-0.1	0.0					
		max M _y		0.0	0.0	0.0					
		min M _y		0.0	0.0	0.0					
		Max N		0.000	Max N	0.0	0.0			0.0	
		Min N		0.000	Min N	-1.4	0.1			0.0	
		Max V _z		0.000	Max V _z	-1.4	0.1			0.0	
		Min V _z		1.005	Min V _z	-1.0	-0.1			0.0	
Max M _y	0.503	Max M _y		-1.2	0.0	0.0					
Min M _y	0.000	Min M _y		0.0	0.0	0.0					
166	RC1	126		0.000	max N	38.5	0.9	0.0		BC 2	
		min N			0.0	0.0	0.0				
		max V _z	29.6		0.9	0.0					
		min V _z	0.0		0.0	0.0					
		max M _y	0.0		0.0	0.0					
		min M _y	0.0		0.0	0.0					
		131	2.647		max N	39.5	-0.9	0.0	BC 2		
		min N			0.0	0.0	0.0				
		max V _z			0.0	0.0	0.0				
		min V _z			30.6	-0.9	0.0				
		max M _y			0.0	0.0	0.0				
		min M _y			0.0	0.0	0.0				
		Max N			2.647	Max N	39.5	-0.9			0.0
		Min N			0.000	Min N	0.0	0.0			0.0
Max V _z	0.000	Max V _z		29.6	0.9	0.0					
Min V _z	2.647	Min V _z		30.6	-0.9	0.0					
Max M _y	1.323	Max M _y		30.1	0.0	0.6					
Min M _y	0.000	Min M _y		0.0	0.0	0.0					
168	RC1	128		0.000	max N	114.1	5.0	20.5		BC 3	
		min N			0.0	0.0	0.0				
		max V _z	110.7		7.8	22.0					
		min V _z	0.0		0.0	0.0					
		max M _y	110.7		7.8	22.0					
		min M _y	0.0		0.0	0.0					
		131	1.499		max N	114.1	3.3	26.7	BC 3		
		min N			0.0	0.0	0.0				
		max V _z			105.4	5.2	30.0				
		min V _z			0.0	0.0	0.0				
		max M _y			110.7	5.2	31.6				
		min M _y			0.0	0.0	0.0				
		Max N			0.000	Max N	114.1	5.0			20.5
		Min N			0.000	Min N	0.0	0.0			0.0
Max V _z	0.000	Max V _z		110.7	7.8	22.0					
Min V _z	0.000	Min V _z		0.0	0.0	0.0					
Max M _y	1.499	Max M _y		110.7	5.2	31.6					
Min M _y	0.000	Min M _y		0.0	0.0	0.0					
169	RC1	129		0.000	max N	0.0	0.0	0.0		BC 4	
		min N			-0.9	0.3	0.0				
		max V _z	-0.9		0.3	0.0					
		min V _z	0.0		0.0	0.0					
		max M _y	0.0		0.0	0.0					
		min M _y	0.0		0.0	0.0					
		134	1.758		max N	0.0	0.0	0.0	BC 4		
		min N			-0.4	-0.3	0.0				
		max V _z			0.0	0.0	0.0				
		min V _z			-0.4	-0.3	0.0				
		max M _y			0.0	0.0	0.0				
		min M _y			0.0	0.0	0.0				
		Max N			0.000	Max N	0.0	0.0			0.0
		Min N			0.000	Min N	-0.9	0.3			0.0
Max V _z	0.000	Max V _z		-0.9	0.3	0.0					
Min V _z	1.758	Min V _z		-0.4	-0.3	0.0					
Max M _y	0.879	Max M _y		-0.6	0.0	0.1					
Min M _y	0.000	Min M _y		0.0	0.0	0.0					
170	RC1	132		0.000	max N	0.0	0.0	0.0		BC 2	
		min N			-0.5	2.9	-1.7				
		max V _z	-0.5		2.9	-1.7					
		min V _z	0.0		0.0	0.0					

Project: 15019 kap 1e kamer

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■ **STAVEN - SNEDEKRACHTEN**

Resultaatcombinaties

Staaf No.	RC	Knoop No.	Snedex [m]	Krachten [kN]		Momenten M_y [kNm]	Bijbehorend Belastingsgev.		
				N	V_z				
170	RC1	max M_y	0.629	max M_y	0.0	0.0	0.0		
		min M_y		min M_y	-0.5	2.9	-1.7	BC 3	
		130		max N	0.0	0.0	0.0		
		min N		min N	-0.5	2.5	0.0	BC 2	
		max V_z		max V_z	-0.5	2.5	0.0	BC 3	
		min V_z		min V_z	0.0	0.0	0.0		
		max M_y		max M_y	0.0	0.0	0.0		
		min M_y		min M_y	0.0	0.0	0.0		
		Max N		Max N	0.000	0.0	0.0	0.0	
		Min N		Min N	0.629	-0.5	2.5	0.0	BC 2
		Max V_z		Max V_z	0.000	-0.5	2.9	-1.7	BC 3
		Min V_z		Min V_z	0.000	0.0	0.0	0.0	
		Max M_y		Max M_y	0.000	0.0	0.0	0.0	
		Min M_y		Min M_y	0.000	-0.5	2.9	-1.7	BC 3
171	RC1	130	1.627	max N	0.0	0.0	0.0		
		min N		min N	-2.1	1.4	0.0	BC 3	
		max V_z		max V_z	-2.1	1.4	0.0	BC 2	
		min V_z		min V_z	0.0	0.0	0.0		
		max M_y		max M_y	0.0	0.0	0.0		
		min M_y		min M_y	0.0	0.0	0.0		
		133		max N	4.6	-1.4	0.0	0.0	BC 2
		min N		min N	0.0	0.0	0.0		
		max V_z		max V_z	0.0	0.0	0.0		
		min V_z		min V_z	4.6	-1.4	0.0	0.0	BC 2
		max M_y		max M_y	0.0	0.0	0.0		
		min M_y		min M_y	0.0	0.0	0.0		
		Max N		Max N	1.627	4.6	-1.4	0.0	BC 2
		Min N		Min N	0.000	-2.1	1.4	0.0	BC 3
Max V_z	Max V_z	0.000	-2.1	1.4	0.0	BC 2			
Min V_z	Min V_z	1.627	4.6	-1.4	0.0	BC 2			
Max M_y	Max M_y	0.813	1.3	0.0	0.6	BC 3			
Min M_y	Min M_y	0.000	0.0	0.0	0.0				
172	RC1	132	1.500	max N	0.0	0.0	0.0		
		min N		min N	-10.0	0.0	0.0	BC 3	
		max V_z		max V_z	0.0	0.0	0.0		
		min V_z		min V_z	-10.0	0.0	0.0	BC 3	
		max M_y		max M_y	0.0	0.0	0.0		
		min M_y		min M_y	0.0	0.0	0.0		
		133		max N	0.0	0.0	0.0		
		min N		min N	-9.9	0.0	0.0	0.0	BC 3
		max V_z		max V_z	-9.9	0.0	0.0	0.0	BC 3
		min V_z		min V_z	0.0	0.0	0.0		
		max M_y		max M_y	0.0	0.0	0.0		
		min M_y		min M_y	0.0	0.0	0.0		
		Max N		Max N	0.000	0.0	0.0	0.0	
		Min N		Min N	0.000	-10.0	0.0	0.0	BC 3
Max V_z	Max V_z	1.500	-9.9	0.0	0.0	BC 3			
Min V_z	Min V_z	0.000	-10.0	0.0	0.0	BC 3			
Max M_y	Max M_y	0.000	0.0	0.0	0.0				
Min M_y	Min M_y	0.000	0.0	0.0	0.0				
173	RC1	136	3.700	max N	0.0	0.0	0.0		
		min N		min N	-242.0	1.0	0.0	0.0	BC 2
		max V_z		max V_z	-242.0	1.0	0.0	0.0	BC 2
		min V_z		min V_z	0.0	0.0	0.0		
		max M_y		max M_y	0.0	0.0	0.0		
		min M_y		min M_y	0.0	0.0	0.0		
		128		max N	0.0	0.0	0.0		
		min N		min N	-243.0	-1.0	0.0	0.0	BC 2
		max V_z		max V_z	0.0	0.0	0.0		
		min V_z		min V_z	-243.0	-1.0	0.0	0.0	BC 2
		max M_y		max M_y	0.0	0.0	0.0		
		min M_y		min M_y	0.0	0.0	0.0		
		Max N		Max N	0.000	0.0	0.0	0.0	
		Min N		Min N	3.700	-243.0	-1.0	0.0	BC 2
Max V_z	Max V_z	0.000	-242.0	1.0	0.0	BC 2			
Min V_z	Min V_z	3.700	-243.0	-1.0	0.0	BC 2			
Max M_y	Max M_y	1.850	-242.5	0.0	1.0	BC 2			
Min M_y	Min M_y	0.000	0.0	0.0	0.0				
174	RC1	134	0.000	max N	0.0	0.0	0.0		
		min N		min N	-0.5	13.0	-4.1	0.0	BC 2
		max V_z		max V_z	-0.5	13.0	-4.1	0.0	BC 3
		min V_z		min V_z	0.0	0.0	0.0		
		max M_y		max M_y	0.0	0.0	0.0		
		min M_y		min M_y	-0.5	13.0	-4.1	0.0	BC 3

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■ **STAVEN - SNEDEKRACHTEN**

Resultaatcombinaties

Staal No.	RC	Knoop No.	Snedex [m]	Krachten [kN]			Momenten My [kNm]	Bijbehorend Belastingsgev.	
				N	Vz				
174	RC1	132	0.186	max N	0.0	0.0	0.0		
				min N	-0.5	12.9	-1.7	BC 2	
				max Vz	-0.5	12.9	-1.7	BC 3	
		min Vz		0.0	0.0	0.0			
		max My		0.0	0.0	0.0			
		min My		-0.5	12.9	-1.7	BC 3		
		Max N		0.000	0.0	0.0			
		Min N		0.000	-0.5	13.0	-4.1	BC 2	
		Max Vz		0.000	-0.5	13.0	-4.1	BC 3	
		Min Vz		0.000	0.0	0.0	0.0		
		Max My		0.000	0.0	0.0	0.0		
		Min My		0.000	-0.5	13.0	-4.1	BC 3	
		175		RC1	133	0.000	max N	4.2	2.9
min N	0.0		0.0				0.0		
max Vz	4.2		2.9				0.0	BC 3	
min Vz	0.0		0.0		0.0				
max My	0.0		0.0		0.0				
min My	0.0		0.0		0.0				
135	1.966		max N		0.0		0.0	0.0	
min N			-2.6		-2.9		0.0	BC 2	
max Vz			0.0		0.0		0.0		
min Vz			-2.6		-2.9		0.0	BC 3	
max My			0.0		0.0		0.0		
min My			0.0		0.0		0.0		
Max N			0.000		4.2		2.9	0.0	BC 3
Min N		1.966	-2.6	-2.9	0.0	BC 2			
Max Vz		0.000	4.2	2.9	0.0	BC 3			
Min Vz		1.966	-2.6	-2.9	0.0	BC 3			
Max My		0.983	0.8	0.0	1.4	BC 2			
Min My		0.000	0.0	0.0	0.0				
176		RC1	135	0.000	max N	0.0	0.0	0.0	
	min N				-1.0	13.7	-18.6	BC 4	
	max Vz				-1.0	13.7	-18.6	BC 3	
	min Vz		0.0		0.0	0.0			
	max My		0.0		0.0	0.0			
	min My		-1.0		13.7	-18.6	BC 3		
	134		1.085		max N	0.0	0.0	0.0	
	min N				-1.0	13.0	-4.1	BC 4	
	max Vz				-1.0	13.0	-4.1	BC 3	
	min Vz				0.0	0.0	0.0		
	max My				0.0	0.0	0.0		
	min My				-1.0	13.0	-4.1	BC 3	
	Max N				0.000	0.0	0.0	0.0	
Min N	0.000	-1.0		13.7	-18.6	BC 4			
Max Vz	0.000	-1.0		13.7	-18.6	BC 3			
Min Vz	0.000	0.0		0.0	0.0				
Max My	0.000	0.0		0.0	0.0				
Min My	0.000	-1.0		13.7	-18.6	BC 3			
177	RC1	125		0.000	max N	119.0			BC 2
			min N		0.0				
		147	8.410		max N	119.0			BC 2
		min N			0.0				
		Max N			0.000	119.0			BC 2
		Min N			0.000	0.0			
178	RC1	131	0.000	max N	144.6	-15.2	31.6	BC 2	
				min N	0.0	0.0	0.0		
				max Vz	0.0	0.0	0.0		
		min Vz		144.6	-15.2	31.6	BC 2		
		max My		144.6	-15.2	31.6	BC 2		
		min My		0.0	0.0	0.0			
		138		2.125	max N	144.6	-18.9	-4.5	BC 2
		min N			0.0	0.0	0.0		
		max Vz			0.0	0.0	0.0		
		min Vz			144.6	-18.9	-4.5	BC 2	
		max My			0.0	0.0	0.0		
		min My			144.6	-18.9	-4.5	BC 2	
		Max N			1.913	144.6	-18.5	-0.5	BC 2
Min N	0.000	0.0	0.0		0.0				
Max Vz	0.000	0.0	0.0		0.0				
Min Vz	2.125	144.6	-18.9		-4.5	BC 2			
Max My	0.000	144.6	-15.2		31.6	BC 2			
Min My	2.125	144.6	-18.9		-4.5	BC 2			
179	RC1	137	0.000		max N	0.0	0.0	0.0	
				min N	-11.8	25.5	-29.4	BC 3	
				max Vz	-11.8	25.5	-29.4	BC 3	

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■ **STAVEN - SNEDEKRACHTEN**

Resultaatcombinaties

Staal No.	RC	Knoop No.	Snedex [m]	Krachten [kN]		Momenten My [kNm]	Bijbehorend Belastingsgev.	
				N	Vz			
179	RC1	min Vz		min Vz	0.0	0.0	0.0	
		max My		max My	0.0	0.0	0.0	
		min My		min My	-11.8	25.5	-29.4	BC 3
		135	0.425	max N	0.0	0.0	0.0	
		min N		min N	-11.8	25.3	-18.6	BC 3
		max Vz		max Vz	-11.8	25.3	-18.6	BC 3
		min Vz		min Vz	0.0	0.0	0.0	
		max My		max My	0.0	0.0	0.0	
		min My		min My	-11.8	25.3	-18.6	BC 3
		Max N	0.000	Max N	0.0	0.0	0.0	
		Min N	0.000	Min N	-11.8	25.5	-29.4	BC 3
		Max Vz	0.000	Max Vz	-11.8	25.5	-29.4	BC 3
		Min Vz	0.000	Min Vz	0.0	0.0	0.0	
		Max My	0.000	Max My	0.0	0.0	0.0	
Min My	0.000	Min My	-11.8	25.5	-29.4	BC 3		
180	RC1	136	0.000	max N	0.0	0.0	0.0	
		min N		min N	-112.5	0.0	0.0	BC 2
		max Vz		max Vz	0.0	0.0	0.0	
		min Vz		min Vz	0.0	0.0	0.0	
		max My		max My	0.0	0.0	0.0	
		min My		min My	0.0	0.0	0.0	
		137	0.338	max N	0.0	0.0	0.0	
		min N		min N	-112.3	0.0	0.0	BC 2
		max Vz		max Vz	0.0	0.0	0.0	
		min Vz		min Vz	0.0	0.0	0.0	
		max My		max My	0.0	0.0	0.0	
		min My		min My	0.0	0.0	0.0	
		Max N	0.000	Max N	0.0	0.0	0.0	
		Min N	0.000	Min N	-112.5	0.0	0.0	BC 2
Max Vz	0.000	Max Vz	0.0	0.0	0.0			
Min Vz	0.000	Min Vz	0.0	0.0	0.0			
Max My	0.000	Max My	0.0	0.0	0.0			
Min My	0.000	Min My	0.0	0.0	0.0			
181	RC1	137	0.000	max N	0.0	0.0	0.0	
		min N		min N	-111.9	36.8	-25.7	BC 2
		max Vz		max Vz	-111.9	36.8	-25.7	BC 2
		min Vz		min Vz	0.0	0.0	0.0	
		max My		max My	0.0	0.0	0.0	
		min My		min My	-93.0	36.4	-29.4	BC 3
		139	0.337	max N	0.0	0.0	0.0	
		min N		min N	-111.8	36.6	-13.3	BC 2
		max Vz		max Vz	-111.8	36.6	-13.3	BC 2
		min Vz		min Vz	0.0	0.0	0.0	
		max My		max My	0.0	0.0	0.0	
		min My		min My	-93.0	36.2	-17.1	BC 3
		Max N	0.000	Max N	0.0	0.0	0.0	
		Min N	0.000	Min N	-111.9	36.8	-25.7	BC 2
Max Vz	0.000	Max Vz	-111.9	36.8	-25.7	BC 2		
Min Vz	0.000	Min Vz	0.0	0.0	0.0			
Max My	0.000	Max My	0.0	0.0	0.0			
Min My	0.000	Min My	-93.0	36.4	-29.4	BC 3		
182	RC1	139	0.000	max N	21.0			BC 2
		min N		min N	0.0			
		138	2.037	max N	21.0			BC 2
		min N		min N	0.0			
Max N	0.000	Max N	21.0			BC 2		
Min N	0.000	Min N	0.0					
183	RC1	143	0.000	max N	18.0	4.1	0.0	BC 3
		min N		min N	0.0	0.0	0.0	
		max Vz		max Vz	13.3	4.1	0.0	BC 2
		min Vz		min Vz	0.0	0.0	0.0	
		max My		max My	0.0	0.0	0.0	
		min My		min My	0.0	0.0	0.0	
		135	2.386	max N	11.2	-4.1	0.0	BC 3
		min N		min N	0.0	0.0	0.0	
		max Vz		max Vz	0.0	0.0	0.0	
		min Vz		min Vz	6.6	-4.2	0.0	BC 2
		max My		max My	0.0	0.0	0.0	
		min My		min My	0.0	0.0	0.0	
		Max N	0.000	Max N	18.0	4.1	0.0	BC 3
		Min N	0.000	Min N	0.0	0.0	0.0	
Max Vz	0.000	Max Vz	13.3	4.1	0.0	BC 2		
Min Vz	2.386	Min Vz	6.6	-4.2	0.0	BC 2		
Max My	1.193	Max My	9.9	0.0	2.5	BC 2		

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Resultaatcombinaties

Staal No.	RC	Knoop No.	Snedex [m]	Krachten [kN]		Momenten M _y [kNm]	Bijbehorend Belastingsgev.			
				N	V _z					
183	RC1	Min M _y	0.000	Min M _y	0.0	0.0	0.0			
184	RC1	141	0.000	max N	0.0	0.0	0.0			
		min N		-215.6	3.3	-4.2	BC 2			
		max V _z		-204.9	4.3	-5.7	BC 3			
		min V _z		0.0	0.0	0.0				
		max M _y		0.0	0.0	0.0				
		min M _y		-204.9	4.3	-5.7	BC 3			
		136		1.431	max N	0.0	0.0	0.0		
		min N			-215.6	2.5	0.0	BC 2		
		max V _z			-204.9	3.6	0.0	BC 3		
		min V _z			0.0	0.0	0.0			
		max M _y			0.0	0.0	0.0			
		min M _y			0.0	0.0	0.0			
		Max N			0.000	Max N	0.0	0.0	0.0	
		Min N			0.000	Min N	-215.6	3.3	-4.2	BC 2
Max V _z	0.000	Max V _z	-204.9		4.3	-5.7	BC 3			
Min V _z	0.000	Min V _z	0.0		0.0	0.0				
Max M _y	0.000	Max M _y	0.0		0.0	0.0				
Min M _y	0.000	Min M _y	-204.9		4.3	-5.7	BC 3			
185	RC1	138	0.000		max N	144.6	2.0	-4.5	BC 2	
		min N			0.0	0.0	0.0			
		max V _z		144.6	2.0	-4.5	BC 2			
		min V _z		0.0	0.0	0.0				
		max M _y		0.0	0.0	0.0				
		min M _y		144.6	2.0	-4.5	BC 2			
		140		1.094	max N	144.6	0.0	-3.4	BC 2	
		min N			0.0	0.0	0.0			
		max V _z			140.3	0.0	-2.0	BC 3		
		min V _z			0.0	0.0	0.0			
		max M _y			0.0	0.0	0.0			
		min M _y			144.6	0.0	-3.4	BC 2		
		Max N			0.875	Max N	144.6	0.4	-3.4	BC 2
		Min N			0.000	Min N	0.0	0.0	0.0	
Max V _z	0.000	Max V _z	144.6		2.0	-4.5	BC 2			
Min V _z	0.000	Min V _z	0.0		0.0	0.0				
Max M _y	0.000	Max M _y	0.0		0.0	0.0				
Min M _y	0.000	Min M _y	144.6		2.0	-4.5	BC 2			
186	RC1	139	0.000		max N	0.0	0.0	0.0		
		min N			-111.8	15.7	-13.3	BC 2		
		max V _z		-93.0	19.7	-17.1	BC 3			
		min V _z		0.0	0.0	0.0				
		max M _y		0.0	0.0	0.0				
		min M _y		-93.0	19.7	-17.1	BC 3			
		142		1.094	max N	0.0	0.0	0.0		
		min N			-111.8	15.1	3.5	BC 2		
		max V _z			-93.0	19.0	4.0	BC 3		
		min V _z			0.0	0.0	0.0			
		max M _y			-93.0	19.0	4.0	BC 3		
		min M _y			0.0	0.0	0.0			
		Max N			0.000	Max N	0.0	0.0	0.0	
		Min N			0.000	Min N	-111.8	15.7	-13.3	BC 2
Max V _z	0.000	Max V _z	-93.0		19.7	-17.1	BC 3			
Min V _z	0.000	Min V _z	0.0		0.0	0.0				
Max M _y	1.094	Max M _y	-93.0		19.0	4.0	BC 3			
Min M _y	0.000	Min M _y	-93.0		19.7	-17.1	BC 3			
187	RC1	141	0.000		max N	8.7	0.0	0.0	BC 3	
		min N			0.0	0.0	0.0			
		max V _z		8.7	0.0	0.0	BC 3			
		min V _z		0.0	0.0	0.0				
		max M _y		0.0	0.0	0.0				
		min M _y		0.0	0.0	0.0				
		142		0.338	max N	8.9	0.0	0.0	BC 3	
		min N			0.0	0.0	0.0			
		max V _z			8.9	0.0	0.0	BC 3		
		min V _z			0.0	0.0	0.0			
		max M _y			0.0	0.0	0.0			
		min M _y			0.0	0.0	0.0			
		Max N			0.338	Max N	8.9	0.0	0.0	BC 3
		Min N			0.000	Min N	0.0	0.0	0.0	
Max V _z	0.000	Max V _z	8.7		0.0	0.0	BC 3			
Min V _z	0.000	Min V _z	0.0		0.0	0.0				
Max M _y	0.000	Max M _y	0.0		0.0	0.0				
Min M _y	0.000	Min M _y	0.0		0.0	0.0				
188	RC1	142	0.000		max N	0.0	0.0	0.0		

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Resultaatcombinaties

Staaf No.	RC	Knoop No.	Sneede x [m]	Krachten [kN]		Momenten M _y [kNm]	Bijbehorend Belastingsgev.	
				N	V _z			
188	RC1	min N	1.500	min N	-29.2	0.0	0.0	BC 3
		max V _z		max V _z	0.0	0.0	0.0	
		min V _z		min V _z	0.0	0.0	0.0	
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	0.0	0.0	0.0	
		143		max N	0.0	0.0	0.0	
		min N		min N	-29.1	0.0	0.0	BC 3
		max V _z		max V _z	0.0	0.0	0.0	
		min V _z		min V _z	0.0	0.0	0.0	
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	0.0	0.0	0.0	
		Max N		Max N	0.0	0.0	0.0	
		Min N		Min N	-29.2	0.0	0.0	BC 3
		Max V _z		Max V _z	0.0	0.0	0.0	
		Min V _z		Min V _z	0.0	0.0	0.0	
		Max M _y		Max M _y	0.0	0.0	0.0	
Min M _y	Min M _y	0.0	0.0	0.0				
189	RC1	140	1.094	max N	144.6	0.0	-3.4	BC 2
		min N		min N	0.0	0.0	0.0	
		max V _z		max V _z	140.3	0.0	-2.0	BC 3
		min V _z		min V _z	0.0	0.0	0.0	
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	144.6	0.0	-3.4	BC 2
		144		max N	144.6	-2.0	-4.5	BC 2
		min N		min N	0.0	0.0	0.0	
		max V _z		max V _z	0.0	0.0	0.0	
		min V _z		min V _z	144.6	-2.0	-4.5	BC 2
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	144.6	-2.0	-4.5	BC 2
		Max N		Max N	144.6	0.0	-3.4	BC 2
		Min N		Min N	0.0	0.0	0.0	
		Max V _z		Max V _z	140.3	0.0	-2.0	BC 3
		Min V _z		Min V _z	144.6	-2.0	-4.5	BC 2
Max M _y	Max M _y	0.0	0.0	0.0				
Min M _y	Min M _y	144.6	-2.0	-4.5	BC 2			
190	RC1	145	1.094	max N	0.0	0.0	0.0	
		min N		min N	-111.8	15.7	-13.3	BC 2
		max V _z		max V _z	-93.0	19.7	-17.1	BC 3
		min V _z		min V _z	0.0	0.0	0.0	
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	-93.0	19.7	-17.1	BC 3
		142		max N	0.0	0.0	0.0	
		min N		min N	-111.8	15.1	3.5	BC 2
		max V _z		max V _z	-93.0	19.0	4.0	BC 3
		min V _z		min V _z	0.0	0.0	0.0	
		max M _y		max M _y	-93.0	19.0	4.0	BC 3
		min M _y		min M _y	0.0	0.0	0.0	
		Max N		Max N	0.0	0.0	0.0	
		Min N		Min N	-111.8	15.7	-13.3	BC 2
		Max V _z		Max V _z	-93.0	19.7	-17.1	BC 3
		Min V _z		Min V _z	0.0	0.0	0.0	
Max M _y	Max M _y	-93.0	19.0	4.0	BC 3			
Min M _y	Min M _y	-93.0	19.7	-17.1	BC 3			
191	RC1	141	1.431	max N	0.0	0.0	0.0	
		min N		min N	-215.6	3.3	-4.2	BC 2
		max V _z		max V _z	-204.9	4.3	-5.7	BC 3
		min V _z		min V _z	0.0	0.0	0.0	
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	-204.9	4.3	-5.7	BC 3
		146		max N	0.0	0.0	0.0	
		min N		min N	-215.6	2.5	0.0	BC 2
		max V _z		max V _z	-204.9	3.6	0.0	BC 3
		min V _z		min V _z	0.0	0.0	0.0	
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	0.0	0.0	0.0	
		Max N		Max N	0.0	0.0	0.0	
		Min N		Min N	-215.6	3.3	-4.2	BC 2
		Max V _z		Max V _z	-204.9	4.3	-5.7	BC 3
		Min V _z		Min V _z	0.0	0.0	0.0	
Max M _y	Max M _y	0.0	0.0	0.0				
Min M _y	Min M _y	-204.9	4.3	-5.7	BC 3			
192	RC1	143	0.000	max N	18.0	4.1	0.0	BC 3
		min N		min N	0.0	0.0	0.0	
		max V _z		max V _z	13.3	4.1	0.0	BC 2

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StAAF No.	RC	Knoop No.	Sneede x [m]	Krachten [kN]		Momenten M _y [kNm]	Bijbehorend Belastingsgev.	
				N	V _z			
192	RC1	min V _z		min V _z	0.0	0.0	0.0	
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	0.0	0.0	0.0	
		148	2.386	max N	11.2	-4.1	0.0	BC 3
		min N		min N	0.0	0.0	0.0	
		max V _z		max V _z	0.0	0.0	0.0	
		min V _z		min V _z	6.6	-4.2	0.0	BC 2
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	0.0	0.0	0.0	
		Max N	0.000	Max N	18.0	4.1	0.0	BC 3
		Min N	0.000	Min N	0.0	0.0	0.0	
		Max V _z	0.000	Max V _z	13.3	4.1	0.0	BC 2
		Min V _z	2.386	Min V _z	6.6	-4.2	0.0	BC 2
Max M _y	1.193	Max M _y	9.9	0.0	2.5	BC 2		
Min M _y	0.000	Min M _y	0.0	0.0	0.0			
193	RC1	145	0.000	max N	21.0		BC 2	
		min N		min N	0.0			
		144	2.037	max N	21.0		BC 2	
		min N		min N	0.0			
Max N	0.000	Max N	21.0		BC 2			
Min N	0.000	Min N	0.0					
194	RC1	147	0.000	max N	0.0	0.0	0.0	
		min N		min N	-111.9	36.8	-25.7	BC 2
		max V _z		max V _z	-111.9	36.8	-25.7	BC 2
		min V _z		min V _z	0.0	0.0	0.0	
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	-93.0	36.4	-29.4	BC 3
		145	0.337	max N	0.0	0.0	0.0	
		min N		min N	-111.8	36.6	-13.3	BC 2
		max V _z		max V _z	-111.8	36.6	-13.3	BC 2
		min V _z		min V _z	0.0	0.0	0.0	
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	-93.0	36.2	-17.1	BC 3
		Max N	0.000	Max N	0.0	0.0	0.0	
		Min N	0.000	Min N	-111.9	36.8	-25.7	BC 2
		Max V _z	0.000	Max V _z	-111.9	36.8	-25.7	BC 2
Min V _z	0.000	Min V _z	0.0	0.0	0.0			
Max M _y	0.000	Max M _y	0.0	0.0	0.0			
Min M _y	0.000	Min M _y	-93.0	36.4	-29.4	BC 3		
195	RC1	146	0.000	max N	0.0	0.0	0.0	
		min N		min N	-112.5	0.0	0.0	BC 2
		max V _z		max V _z	0.0	0.0	0.0	
		min V _z		min V _z	0.0	0.0	0.0	
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	0.0	0.0	0.0	
		147	0.338	max N	0.0	0.0	0.0	
		min N		min N	-112.3	0.0	0.0	BC 2
		max V _z		max V _z	0.0	0.0	0.0	
		min V _z		min V _z	0.0	0.0	0.0	
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	0.0	0.0	0.0	
		Max N	0.000	Max N	0.0	0.0	0.0	
Min N	0.000	Min N	-112.5	0.0	0.0	BC 2		
Max V _z	0.000	Max V _z	0.0	0.0	0.0			
Min V _z	0.000	Min V _z	0.0	0.0	0.0			
Max M _y	0.000	Max M _y	0.0	0.0	0.0			
Min M _y	0.000	Min M _y	0.0	0.0	0.0			
196	RC1	147	0.000	max N	0.0	0.0	0.0	
		min N		min N	-11.8	25.5	-29.4	BC 3
		max V _z		max V _z	-11.8	25.5	-29.4	BC 3
		min V _z		min V _z	0.0	0.0	0.0	
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	-11.8	25.5	-29.4	BC 3
		148	0.425	max N	0.0	0.0	0.0	
		min N		min N	-11.8	25.3	-18.6	BC 3
		max V _z		max V _z	-11.8	25.3	-18.6	BC 3
		min V _z		min V _z	0.0	0.0	0.0	
		max M _y		max M _y	0.0	0.0	0.0	
		min M _y		min M _y	-11.8	25.3	-18.6	BC 3
		Max N	0.000	Max N	0.0	0.0	0.0	
Min N	0.000	Min N	-11.8	25.5	-29.4	BC 3		
Max V _z	0.000	Max V _z	-11.8	25.5	-29.4	BC 3		
Min V _z	0.000	Min V _z	0.0	0.0	0.0			
Max M _y	0.000	Max M _y	0.0	0.0	0.0			

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Resultaatcombinaties

Staaf No.	RC	Knoop No.	Sneede x [m]		Krachten [kN]		Momenten M _y [kNm]	Bijbehorend Belastingsgev.		
					N	V _z				
196	RC1	Min M _y	0.000	Min M _y	-11.8	25.5	-29.4	BC 3		
197	RC1	144	0.000	max N	144.6	18.9	-4.5	BC 2		
		min N		0.0	0.0	0.0				
		max V _z		144.6	18.9	-4.5	BC 2			
		min V _z		0.0	0.0	0.0				
		max M _y	0.0	0.0	0.0					
		min M _y	144.6	18.9	-4.5	BC 2				
		152	2.125	max N	144.6	15.2	31.6	BC 2		
				min N	0.0	0.0	0.0			
				max V _z	144.6	15.2	31.6	BC 2		
				min V _z	0.0	0.0	0.0			
				max M _y	144.6	15.2	31.6	BC 2		
				min M _y	0.0	0.0	0.0			
				Max N	0.213	Max N	144.6	18.5	-0.5	BC 2
				Min N	0.000	Min N	0.0	0.0	0.0	
		Max V _z	0.000	Max V _z	144.6	18.9	-4.5	BC 2		
		Min V _z	0.000	Min V _z	0.0	0.0	0.0			
Max M _y	2.125	Max M _y	144.6	15.2	31.6	BC 2				
Min M _y	0.000	Min M _y	144.6	18.9	-4.5	BC 2				
198	RC1	158	0.000	max N	119.0			BC 2		
		min N		0.0						
		137	8.410	max N	119.0			BC 2		
		min N		0.0						
		Max N		0.000	Max N	119.0			BC 2	
Min N	0.000	Min N	0.0							
199	RC1	148	0.000	max N	0.0	0.0	0.0			
		min N		-1.0	13.7	-18.6	BC 4			
		max V _z		-1.0	13.7	-18.6	BC 3			
		min V _z		0.0	0.0	0.0				
		max M _y	0.0	0.0	0.0					
		min M _y	-1.0	13.7	-18.6	BC 3				
		149	1.085	max N	0.0	0.0	0.0			
				min N	-1.0	13.0	-4.1	BC 4		
				max V _z	-1.0	13.0	-4.1	BC 3		
				min V _z	0.0	0.0	0.0			
				max M _y	0.0	0.0	0.0			
				min M _y	-1.0	13.0	-4.1	BC 3		
				Max N	0.000	Max N	0.0	0.0	0.0	
				Min N	0.000	Min N	-1.0	13.7	-18.6	BC 4
		Max V _z	0.000	Max V _z	-1.0	13.7	-18.6	BC 3		
		Min V _z	0.000	Min V _z	0.0	0.0	0.0			
Max M _y	0.000	Max M _y	0.0	0.0	0.0					
Min M _y	0.000	Min M _y	-1.0	13.7	-18.6	BC 3				
200	RC1	151	0.000	max N	4.2	2.9	0.0	BC 3		
		min N		0.0	0.0	0.0				
		max V _z		4.2	2.9	0.0	BC 3			
		min V _z		0.0	0.0	0.0				
		max M _y	0.0	0.0	0.0					
		min M _y	0.0	0.0	0.0					
		148	1.966	max N	0.0	0.0	0.0			
				min N	-2.6	-2.9	0.0	BC 2		
				max V _z	0.0	0.0	0.0			
				min V _z	-2.6	-2.9	0.0	BC 3		
				max M _y	0.0	0.0	0.0			
				min M _y	0.0	0.0	0.0			
				Max N	0.000	Max N	4.2	2.9	0.0	BC 3
				Min N	1.966	Min N	-2.6	-2.9	0.0	BC 2
		Max V _z	0.000	Max V _z	4.2	2.9	0.0	BC 3		
		Min V _z	1.966	Min V _z	-2.6	-2.9	0.0	BC 3		
Max M _y	0.983	Max M _y	0.8	0.0	1.4	BC 2				
Min M _y	0.000	Min M _y	0.0	0.0	0.0					
201	RC1	149	0.000	max N	0.0	0.0	0.0			
		min N		-0.5	13.0	-4.1	BC 2			
		max V _z		-0.5	13.0	-4.1	BC 3			
		min V _z		0.0	0.0	0.0				
		max M _y	0.0	0.0	0.0					
		min M _y	-0.5	13.0	-4.1	BC 3				
		150	0.186	max N	0.0	0.0	0.0			
				min N	-0.5	12.9	-1.7	BC 2		
				max V _z	-0.5	12.9	-1.7	BC 3		
				min V _z	0.0	0.0	0.0			
				max M _y	0.0	0.0	0.0			
				min M _y	-0.5	12.9	-1.7	BC 3		
Max N	0.000			Max N	0.0	0.0	0.0			
Min N	0.000			Min N	-0.5	13.0	-4.1	BC 2		

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Resultaatcombinaties

Staal No.	RC	Knoop No.	Snedes x [m]	Krachten [kN]		Momenten M _y [kNm]	Bijbehorend Belastingsgev.			
				N	V _z					
201	RC1	Max V _z	0.000	Max V _z	-0.5	13.0	-4.1	BC 3		
		Min V _z	0.000	Min V _z	0.0	0.0	0.0			
		Max M _y	0.000	Max M _y	0.0	0.0	0.0			
		Min M _y	0.000	Min M _y	-0.5	13.0	-4.1	BC 3		
202	RC1	146	0.000	max N	0.0	0.0	0.0			
				min N	-242.0	1.0	0.0	BC 2		
				max V _z	-242.0	1.0	0.0	BC 2		
				min V _z	0.0	0.0	0.0			
				max M _y	0.0	0.0	0.0			
				min M _y	0.0	0.0	0.0			
				155	3.700	max N	0.0	0.0	0.0	
				min N		min N	-243.0	-1.0	0.0	BC 2
				max V _z		max V _z	0.0	0.0	0.0	
				min V _z		min V _z	-243.0	-1.0	0.0	BC 2
				max M _y		max M _y	0.0	0.0	0.0	
				min M _y		min M _y	0.0	0.0	0.0	
				Max N	0.000	Max N	0.0	0.0	0.0	
				Min N	3.700	Min N	-243.0	-1.0	0.0	BC 2
				Max V _z	0.000	Max V _z	-242.0	1.0	0.0	BC 2
				Min V _z	3.700	Min V _z	-243.0	-1.0	0.0	BC 2
		Max M _y	1.850	Max M _y	-242.5	0.0	1.0	BC 2		
		Min M _y	0.000	Min M _y	0.0	0.0	0.0			
203	RC1	150	0.000	max N	0.0	0.0	0.0			
				min N	-10.0	0.0	0.0	BC 3		
				max V _z	-10.0	0.0	0.0	BC 3		
				min V _z	0.0	0.0	0.0			
				max M _y	0.0	0.0	0.0			
				min M _y	0.0	0.0	0.0			
				151	1.500	max N	0.0	0.0	0.0	
				min N		min N	-9.9	0.0	0.0	BC 3
				max V _z		max V _z	0.0	0.0	0.0	
				min V _z		min V _z	-9.9	0.0	0.0	BC 3
				max M _y		max M _y	0.0	0.0	0.0	
				min M _y		min M _y	0.0	0.0	0.0	
				Max N	0.000	Max N	0.0	0.0	0.0	
				Min N	0.000	Min N	-10.0	0.0	0.0	BC 3
				Max V _z	0.000	Max V _z	-10.0	0.0	0.0	BC 3
				Min V _z	1.500	Min V _z	-9.9	0.0	0.0	BC 3
		Max M _y	0.000	Max M _y	0.0	0.0	0.0			
		Min M _y	0.000	Min M _y	0.0	0.0	0.0			
204	RC1	150	0.000	max N	0.0	0.0	0.0			
				min N	-0.5	2.9	-1.7	BC 2		
				max V _z	-0.5	2.9	-1.7	BC 3		
				min V _z	0.0	0.0	0.0			
				max M _y	0.0	0.0	0.0			
				min M _y	0.0	0.0	0.0			
				153	0.629	max N	-0.5	2.9	-1.7	BC 3
				min N		min N	0.0	0.0	0.0	
				max V _z		max V _z	-0.5	2.5	0.0	BC 2
				min V _z		min V _z	-0.5	2.5	0.0	BC 3
				max M _y		max M _y	0.0	0.0	0.0	
				min M _y		min M _y	0.0	0.0	0.0	
				Max N	0.000	Max N	0.0	0.0	0.0	
				Min N	0.629	Min N	-0.5	2.5	0.0	BC 2
				Max V _z	0.000	Max V _z	-0.5	2.9	-1.7	BC 3
				Min V _z	0.000	Min V _z	0.0	0.0	0.0	
		Max M _y	0.000	Max M _y	0.0	0.0	0.0			
		Min M _y	0.000	Min M _y	-0.5	2.9	-1.7	BC 3		
205	RC1	153	0.000	max N	0.0	0.0	0.0			
				min N	-2.1	1.4	0.0	BC 3		
				max V _z	-2.1	1.4	0.0	BC 2		
				min V _z	0.0	0.0	0.0			
				max M _y	0.0	0.0	0.0			
				min M _y	0.0	0.0	0.0			
				151	1.627	max N	4.6	-1.4	0.0	BC 2
				min N		min N	0.0	0.0	0.0	
				max V _z		max V _z	0.0	0.0	0.0	
				min V _z		min V _z	4.6	-1.4	0.0	BC 2
				max M _y		max M _y	0.0	0.0	0.0	
				min M _y		min M _y	0.0	0.0	0.0	
		Max N	1.627	Max N	4.6	-1.4	0.0	BC 2		
		Min N	0.000	Min N	-2.1	1.4	0.0	BC 3		
		Max V _z	0.000	Max V _z	-2.1	1.4	0.0	BC 2		
		Min V _z	1.627	Min V _z	4.6	-1.4	0.0	BC 2		

Project: 15019 kap 1e kamer

Model: 15019 hoofdspant [2] met ..

Datum: 5-6-2015

■ **STAVEN - SNEDEKRACHTEN**

Resultaatcombinaties

Staal No.	RC	Knoop No.	Snedex [m]		Krachten [kN]		Momenten M _y [kNm]	Bijbehorend Belastingsgev.						
					N	V _z								
205	RC1	Max M _y Min M _y	0.813 0.000	Max M _y Min M _y	1.3 0.0	0.0 0.0	0.6 0.0	BC 3						
206	RC1	154	0.000	max N min N max V _z min V _z max M _y min M _y	0.0 -0.9 -0.9 0.0 0.0 0.0	0.0 0.3 0.3 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0	BC 4 BC 3						
		149	1.758	max N min N max V _z min V _z max M _y min M _y	0.0 -0.4 0.0 -0.4 0.0 0.0	0.0 -0.3 0.0 -0.3 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0	BC 4 BC 3						
			0.000	Max N Min N Max V _z Min V _z Max M _y Min M _y	0.0 -0.9 -0.9 -0.4 0.0 0.0	0.0 0.3 0.3 -0.3 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0	BC 4 BC 3 BC 3 BC 4						
			0.000	Max N Min N Max V _z Min V _z Max M _y Min M _y	0.0 -0.9 -0.9 -0.4 -0.6 0.0	0.0 0.3 0.3 -0.3 0.0 0.0	0.0 0.0 0.0 0.0 0.1 0.0	BC 4 BC 3 BC 3 BC 4						
		207	RC1	152	0.000	max N min N max V _z min V _z max M _y min M _y	114.1 0.0 0.0 105.4 110.7 0.0	-3.3 0.0 0.0 -5.2 -5.2 0.0	26.7 0.0 0.0 30.0 31.6 0.0	BC 3 BC 4 BC 2				
				155	1.499	max N min N max V _z min V _z max M _y min M _y	114.1 0.0 0.0 110.7 110.7 0.0	-5.0 0.0 0.0 -7.8 -7.8 0.0	20.5 0.0 0.0 22.0 22.0 0.0	BC 3 BC 2 BC 2				
					1.499	Max N Min N Max V _z Min V _z Max M _y Min M _y	114.1 0.0 0.0 110.7 110.7 0.0	-5.0 0.0 0.0 -7.8 -7.8 0.0	20.5 0.0 0.0 22.0 22.0 0.0	BC 3 BC 2 BC 2				
				209	RC1	157	0.000	max N min N max V _z min V _z max M _y min M _y	38.5 0.0 29.6 0.0 0.0 0.0	0.9 0.0 0.9 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0	BC 2 BC 3		
						152	2.647	max N min N max V _z min V _z max M _y min M _y	39.5 0.0 0.0 30.6 0.0 0.0	-0.9 0.0 0.0 -0.9 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0	BC 2 BC 3		
							2.647	Max N Min N Max V _z Min V _z Max M _y Min M _y	39.5 0.0 29.6 30.6 30.1 0.0	-0.9 0.0 0.9 -0.9 0.0 0.0	0.0 0.0 0.0 0.0 0.6 0.0	BC 2 BC 3 BC 3 BC 3		
						210	RC1	155	0.000	max N min N max V _z min V _z max M _y min M _y	0.0 -1.4 -1.4 0.0 0.0 0.0	0.0 0.1 0.1 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0	BC 4 BC 4
								154	1.005	max N min N max V _z min V _z max M _y min M _y	0.0 -1.0 0.0 -1.0 0.0 0.0	0.0 -0.1 0.0 -0.1 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0	BC 4 BC 4
									0.000	Max N Min N Max V _z Min V _z Max M _y Min M _y	0.0 -1.4 -1.4 -1.0 -1.2 0.0	0.0 0.1 0.1 -0.1 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0	BC 4 BC 4 BC 4 BC 2

Project: 15019 kap 1e kamer

Model: 15019 hoofdspant [2] met ..

Datum: 5-6-2015

■ STAVEN - SNEDEKRACHTEN

Resultaatcombinaties

Staal No.	RC	Knoop No.	Sneede x [m]	Krachten [kN]		Momenten M _y [kNm]	Bijbehorend Belastingsgev.	
				N	V _z			
211	RC1	155	0.000	max N	0.0	0.0	0.0	BC 2
				min N	-105.0	-121.9	22.0	
		max V _z	0.0	0.0	0.0	BC 2		
		min V _z	-105.0	-121.9	22.0			
		max M _y	-105.0	-121.9	22.0	BC 2		
		min M _y	0.0	0.0	0.0			
		156	0.180	max N	0.0	0.0	0.0	BC 2
				min N	-105.0	-122.1	0.0	
		max V _z	0.0	0.0	0.0	BC 2		
		min V _z	-105.0	-122.1	0.0			
		max M _y	0.0	0.0	0.0	BC 2		
		min M _y	0.0	0.0	0.0			
		Max N	0.000	Max N	0.0	0.0	BC 2	
		Min N	0.000	Min N	-105.0	-121.9		22.0
		Max V _z	0.000	Max V _z	0.0	0.0	BC 2	
		Min V _z	0.180	Min V _z	-105.0	-122.1		0.0
Max M _y	0.000	Max M _y	-105.0	-121.9	22.0	BC 2		
Min M _y	0.000	Min M _y	0.0	0.0	0.0			
212	RC1	157	0.000	max N	0.0	0.0	0.0	BC 2
				min N	-156.5	-42.2	62.0	
		max V _z	0.0	0.0	0.0	BC 2		
		min V _z	-156.5	-42.2	62.0			
		max M _y	-156.5	-42.2	62.0	BC 2		
		min M _y	0.0	0.0	0.0			
		156	1.452	max N	0.0	0.0	0.0	BC 2
				min N	-155.2	-43.1	0.0	
		max V _z	0.0	0.0	0.0	BC 2		
		min V _z	-155.2	-43.1	0.0			
		max M _y	0.0	0.0	0.0	BC 2		
		min M _y	0.0	0.0	0.0			
		Max N	0.000	Max N	0.0	0.0	BC 2	
		Min N	0.000	Min N	-156.5	-42.2		62.0
		Max V _z	0.000	Max V _z	0.0	0.0	BC 2	
		Min V _z	1.452	Min V _z	-155.2	-43.1		0.0
Max M _y	0.000	Max M _y	-156.5	-42.2	62.0	BC 2		
Min M _y	0.000	Min M _y	0.0	0.0	0.0			
213	RC1	158	0.000	max N	0.0	0.0	0.0	BC 2
				min N	-126.2	-18.6	78.5	
		max V _z	0.0	0.0	0.0	BC 2		
		min V _z	-126.2	-18.6	78.5			
		max M _y	-126.2	-18.6	78.5	BC 2		
		min M _y	0.0	0.0	0.0			
		157	0.873	max N	0.0	0.0	0.0	BC 2
				min N	-125.4	-19.3	62.0	
		max V _z	0.0	0.0	0.0	BC 2		
		min V _z	-125.4	-19.3	62.0			
		max M _y	-125.4	-19.3	62.0	BC 2		
		min M _y	0.0	0.0	0.0			
		Max N	0.000	Max N	0.0	0.0	BC 2	
		Min N	0.000	Min N	-126.2	-18.6		78.5
		Max V _z	0.000	Max V _z	0.0	0.0	BC 2	
		Min V _z	0.873	Min V _z	-125.4	-19.3		62.0
Max M _y	0.000	Max M _y	-126.2	-18.6	78.5	BC 2		
Min M _y	0.000	Min M _y	0.0	0.0	0.0			
214	RC1	160	0.000	max N	0.0	0.0	0.0	BC 3
				min N	-44.9	39.5	0.0	
		max V _z	-29.9	50.2	0.0	BC 2		
		min V _z	0.0	0.0	0.0			
		max M _y	0.0	0.0	0.0	BC 2		
		min M _y	0.0	0.0	0.0			
		158	1.575	max N	0.0	0.0	0.0	BC 3
				min N	-43.6	38.8	61.7	
		max V _z	-28.7	49.5	78.5	BC 2		
		min V _z	0.0	0.0	0.0			
		max M _y	-28.7	49.5	78.5	BC 2		
		min M _y	0.0	0.0	0.0			
		Max N	0.000	Max N	0.0	0.0	BC 3	
		Min N	0.000	Min N	-44.9	39.5		0.0
		Max V _z	0.000	Max V _z	-29.9	50.2	0.0	BC 2
		Min V _z	0.000	Min V _z	0.0	0.0	0.0	
Max M _y	1.575	Max M _y	-28.7	49.5	78.5	BC 2		
Min M _y	0.000	Min M _y	0.0	0.0	0.0			
215	RC1	160	0.000	max N	0.0	0.0	0.0	BC 3
				min N	-57.6	-0.8	0.0	

Project: 15019 kap 1e kamer

Model: 15019 hoofdspant [2] met ..

Datum: 5-6-2015

■ **STAVEN - SNEDEKRACHTEN**

Resultaatcombinaties

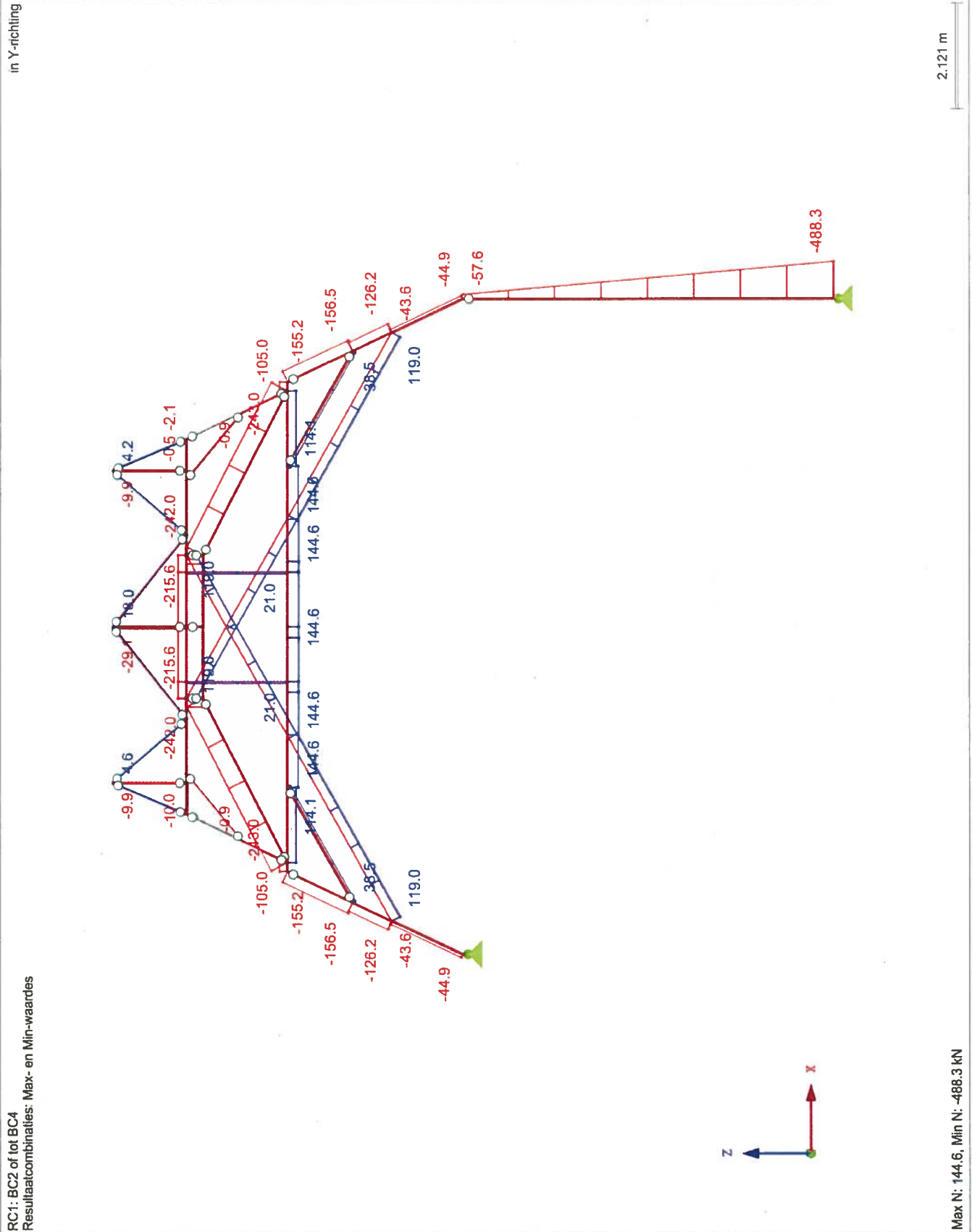
StAAF No.	RC	Knoop No.	Sneede x [m]	Krachten [kN]			Momenten M _y [kNm]	Bijbehorend Belastingsgev.	
				N	V _z				
215	RC1	max V _z		max V _z	0.0	0.0	0.0		
		min V _z		min V _z	-48.8	-1.0	0.0	BC 2	
		max M _y		max M _y	0.0	0.0	0.0		
		min M _y		min M _y	0.0	0.0	0.0		
		159	7.500	max N	0.0	0.0	0.0		
				min N	-488.3	0.8	0.0	BC 3	
				max V _z	-479.6	1.0	0.0	BC 2	
				min V _z	0.0	0.0	0.0		
				max M _y	0.0	0.0	0.0		
				min M _y	0.0	0.0	0.0		
				Max N	0.000	0.0	0.0		
				Min N	7.500	-488.3	0.8	0.0	BC 3
				Max V _z	7.500	-479.6	1.0	0.0	BC 2
				Min V _z	0.000	-48.8	-1.0	0.0	BC 2
				Max M _y	0.000	0.0	0.0	0.0	
				Min M _y	0.000	0.0	0.0	0.0	

■ **KNOPEN - REACTIEKRACHTEN**

Resultaatcombinaties

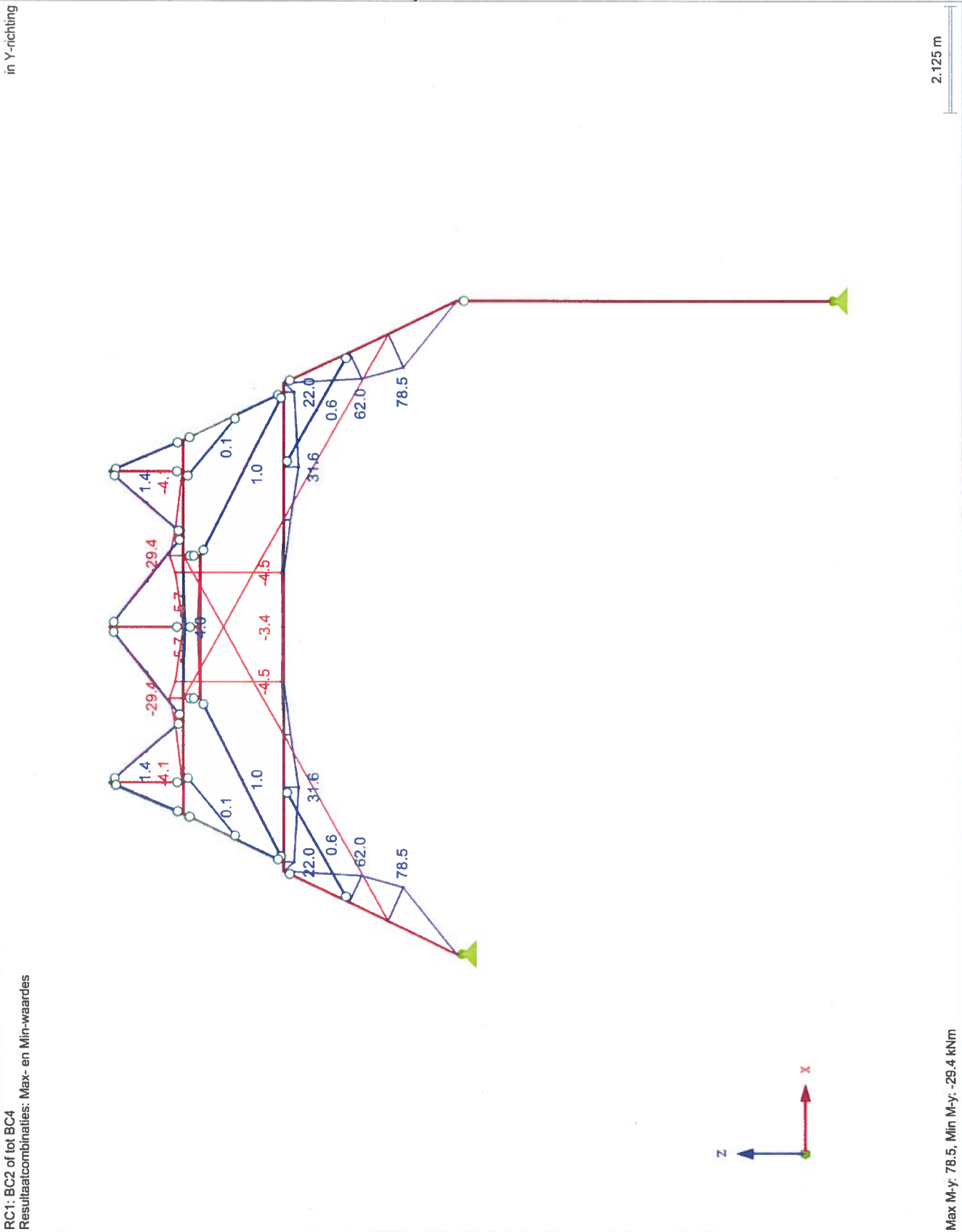
Knoop No.	RC		Reactiekrachten [kN]		Reactiemomenten M _r [kNm]	Bijbehorend Belastingsgev.
			P _x	P _z		
124	RC1	▷ Max P _x	32.3	-48.8	0.0	BC 2
		▷ Min P _x	0.0	0.0	0.0	
		▷ Max P _z	0.0	0.0	0.0	
		▷ Min P _z	16.2	-57.5	0.0	BC 3
159	RC1	▷ Max P _x	0.0	0.0	0.0	
		▷ Min P _x	-1.2	-479.6	0.0	BC 2
		▷ Max P _z	0.0	0.0	0.0	
		▷ Min P _z	-1.0	-488.3	0.0	BC 3

■ SNEDEKRACHTEN N



RC1: BC2 of lot BC4
 Resultaatcombinaties: Max- en Min-waardes

■ SNEDEKRACHTEN M_y



8.2. *Tussenspanten*

400

Dieft

Classificat

Aanvragen

Project: 15019 kap 1e kamer

Model: 15019 tussenspan v2

Datum: 28-5-2015

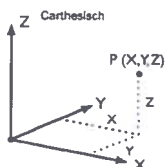
INHOUD

1	Algemene Gegevens Model	1	4	BG2 - 1.00 Kn/m2 veranderlijk - Staaflasten	4
	Model			Resultaten - Belastingsgevallen, -combinaties	
	Knopen	1		Resultaten - Opsomming	5
	Materialen	1		Staven - Snedekrachten	6
	Doorsnedes	1		Knopen - Reactiekrachten	10
2	Staafeindscharnieren	1	Knopen - Vervormingen	10	
	Staven	2	Staven - Globale vervormingen	10	
	Steunpunten	2	Grafisch Snedekrachten N, BC1: 1.2*BG1, in Y-richting	14	
2	Grafisch Model, BG1: Rustend, in Y-richting	3	Grafisch Snedekrachten M_y , BC1: 1.2*BG1, in Y-richting	15	
	Belastingsgevallen - en combinaties		Grafisch Snedekrachten N, BC2: 1.1*BG1 + 1.15*BG2, in Y-richting	16	
3	Belastingsgevallen	4	Grafisch Snedekrachten M_y , BC2: 1.1*BG1 + 1.15*BG2, in Y-richting	17	
	Belastingsgevallen - Berekeningsparameters	4			
	Belastingscombinaties	4			
	Belastingscombinaties - Details	4			
3	Belastingen				
	BG1 - Rustend - Staaflasten	4			

ALGEMENE GEGEVENS MODEL

Algemeen	Modelnaam	: 15019 tussenspan v2
	Projectnaam	: 15019 kap 1e kamer
	Modeltype	: 2D-XZ (ux/uz/φy)
	Positieve richting van globale z-as	: Naar Boven
	Classificatie van belastingsgevallen en combinaties	: Volgens norm:EN 1990 + EN 1995 Nationale bijlage:NEN - Nederland

KNOPEN



Knoop No.	Referentie Knoop	Coördinaat Systeem	Knoopcoördinaten		Opm.
			X [m]	Z [m]	
1	-	Cartesisch	-20.000	0.000	
2	-	Cartesisch	-19.328	1.424	
3	-	Cartesisch	-18.955	2.213	
4	-	Cartesisch	-18.336	3.526	
5	-	Cartesisch	-18.156	3.526	
6	-	Cartesisch	-16.657	3.526	
7	-	Cartesisch	-14.532	3.526	
8	-	Cartesisch	-13.438	3.526	
9	-	Cartesisch	-12.344	3.526	
10	-	Cartesisch	-10.219	3.526	
11	-	Cartesisch	-8.720	3.526	
12	-	Cartesisch	-8.540	3.526	
13	-	Cartesisch	-7.921	2.213	
14	-	Cartesisch	-7.548	1.424	
15	-	Cartesisch	-6.876	0.000	
16	-	Cartesisch	-15.594	3.526	
17	-	Cartesisch	-11.281	3.526	

MATERIALEN

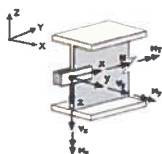
Matl. No.	Modulus E [N/mm ²]	Modulus G [N/mm ²]	Vol. gewicht γ [kN/m ³]	Therm. uitz. α [1/°C]	Materiaalfactor γ_M [-]	Materiaal Model
1	Eiken D30 10000.000	2500.000	5.50	5.00E-06	1.00	Standaard

DOORSNEDES



Snedes No.	Matl. No.	J [mm ⁴] A [mm ²]	I_y [mm ⁴] A_y [mm ²]	I_z [mm ⁴] A_z [mm ²]	Hoofdasen α [°]	Rotatie α' [°]	Globale maatvoering [mm]	
							Breedte b	Hoogte h
1	T-Rechthoek 120/170 1	20400.0	49130000.0	17000.0	0.00	0.00	120.0	170.0

STAAFEINDSCHARNIEREN

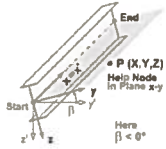


Vrijgave No.	Referentie Systeem	Scharnier / Veer [kN/m] [kNm/rad]			Opm.
		u_x	u_z	ϕ_y	
1	Lok. x,y,z	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

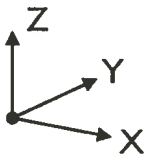
Project: 15019 kap 1e kamer

Model: 15019 tussenspan v2

Datum: 28-5-2015

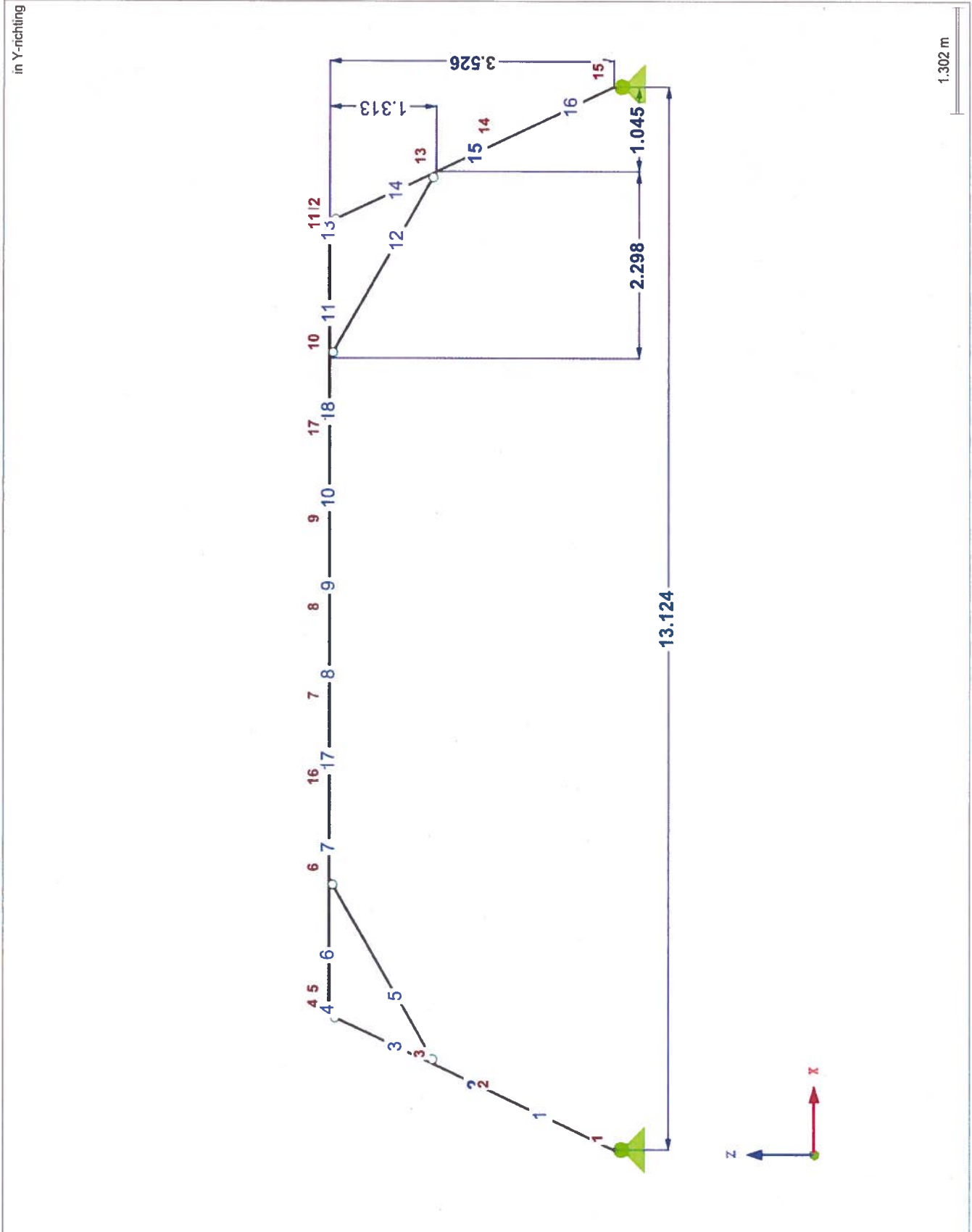
STAVEN


Stf. No.	Staaf	Knoop		Rotatie		Doorsnede		Scharnier No.		Exc. No.	Deel No.	Lengte L [m]	
		Begin	Einde	Type	β [°]	Begin	Einde	Begin	Einde				
1	Ligger	2	1	Hoek	0.00	1	1	-	-	-	-	1.575	XZ
2	Ligger	2	3	Hoek	0.00	1	1	-	-	-	-	0.873	XZ
3	Ligger	3	4	Hoek	0.00	1	1	-	1	-	-	1.452	XZ
4	Ligger	4	5	Hoek	0.00	1	1	-	-	-	-	0.180	X
5	Ligger	3	6	Hoek	0.00	1	1	1	1	-	-	2.647	XZ
6	Ligger	5	6	Hoek	0.00	1	1	-	-	-	-	1.499	X
7	Ligger	6	16	Hoek	0.00	1	1	-	-	-	-	1.063	X
8	Ligger	7	8	Hoek	0.00	1	1	-	-	-	-	1.094	X
9	Ligger	8	9	Hoek	0.00	1	1	-	-	-	-	1.094	X
10	Ligger	9	17	Hoek	0.00	1	1	-	-	-	-	1.063	X
11	Ligger	10	11	Hoek	0.00	1	1	-	-	-	-	1.499	X
12	Ligger	13	10	Hoek	0.00	1	1	1	1	-	-	2.647	XZ
13	Ligger	11	12	Hoek	0.00	1	1	-	-	-	-	0.180	X
14	Ligger	13	12	Hoek	0.00	1	1	-	1	-	-	1.452	XZ
15	Ligger	14	13	Hoek	0.00	1	1	-	-	-	-	0.873	XZ
16	Ligger	15	14	Hoek	0.00	1	1	-	-	-	-	1.575	XZ
17	Ligger	16	7	Hoek	0.00	1	1	-	-	-	-	1.063	X
18	Ligger	17	10	Hoek	0.00	1	1	-	-	-	-	1.063	X

STEUNPUNTEN


Stpnt. No.	Knopen No.	Rotatie [°] om Y	Oplegging of Veer [kN/m] [kNm/rad]			Opm.
			u_x	u_z	ϕ_y	
1	15	0.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2	1	0.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

MODEL



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■ BELASTINGSGEVALLEN

Bel. Geval	BG omschrijving	Belastingscategorie	Eigen gewicht - factor In richting			EN 1990 + 1995 NEN Belastingsduur	
			Actief	X	Y		Z
BG1 BG2	Rustend 1.00 Kn/m2 veranderlijk	Blijvend Opgelegd - Categorie C: bijeenkomsfunctie	<input checked="" type="checkbox"/>	0.000		-1.000	Blijvend Kortetermijn

■ BELASTINGSGEVALLEN - BEREKENINGSPARAMETERS

Bel. Geval	BG omschrijving	Berekeningsparameters	
BG1	Rustend	Berekeningsmethode	: Geometrisch lineaire statische berekening
BG2	1.00 Kn/m2 veranderlijk	Berekeningsmethode	: Geometrisch lineaire statische berekening

■ BELASTINGSCOMBINATIES

Last Combin.	OS	Belastingcombinatie Omschrijving	No.	Factor	Belastingsgeval	
BC1		1.2*BG1	1	1.20	BG1	Rustend
BC2		1.1*BG1 + 1.15*BG2	1	1.10	BG1	Rustend
			2	1.15	BG2	1.00 Kn/m2 veranderlijk

■ BELASTINGSCOMBINATIES - DETAILS

Last Combin.	Omschrijving	Parameters				
BC1		Belastingsgeval 1	Factor	: 1.200	Belastingsgeval	: BG1 - Rustend
BC2		Belastingsgeval 1	Factor	: 1.100	Belastingsgeval	: BG1 - Rustend
		Belastingsgeval 2	Factor	: 1.150	Belastingsgeval	: BG2 - 1.00 Kn/m2 veranderlijk

■ STAAFLASTEN

BG1: Rustend

BG1
Rustend

No.	Referentie tot	Op Staven No.	Belasting Type	Belasting Verdeling	Belasting Richting	Referentie Lengte	Symbol	Lastparameters	
1	Staven	6-11,17,18	Kracht	Gelijkmatig	Z	Ware Lengte	p	-0.320	kN/m

■ STAAFLASTEN

BG2: 1.00 Kn/m2 veranderlijk

BG2
1.00 Kn/m2 veranderlijk

No.	Referentie tot	Op Staven No.	Belasting Type	Belasting Verdeling	Belasting Richting	Referentie Lengte	Symbol	Lastparameters	
1	Staven	7-10,17,18	Kracht	Gelijkmatig	Z	Ware Lengte	p	-0.650	kN/m

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■ **RESULTATEN - OPSOMMING**

Omschrijving	Waarde	Eenheid	Opm.
BG1 - Rustend Som van belastingen in X Som van de steunpunctreacties in X Som van belastingen in Z Som van de steunpunctreacties in Z Resultante van reacties om x-as Resultante van reacties om y-as Resultante van reacties om z-as Max. verplaatsing in x-richting Max. verplaatsing in z-richting Max. vector verplaatsing Max. rotatie om y-as Berekeningsmethode Stijfheidsreductie maal factor Aantal lastincrementen Aantal iteraties	0.0 0.0 -5.6 -5.6 0.0 0.0 0.0 -5.3 -18.3 18.3 5.2 Linear <input type="checkbox"/> 1 1	kN kN kN kN kNm kNm kNm mm mm mm mrad	Afwijking 0.00% In zwaartepunt van het model (X:-13.4, Y:0.0, Z:2.8 m) In zwaartepunt van het model In zwaartepunt van het model Staaf No. 2, x: 0.524 m Staaf No. 8, x: 1.094 m Staaf No. 8, x: 1.094 m Staaf No. 7, x: 0.638 m Geometrisch lineaire statische berekening
BG2 - 1.00 Kn/m2 veranderlijk Som van belastingen in X Som van de steunpunctreacties in X Som van belastingen in Z Som van de steunpunctreacties in Z Resultante van reacties om x-as Resultante van reacties om y-as Resultante van reacties om z-as Max. verplaatsing in x-richting Max. verplaatsing in z-richting Max. vector verplaatsing Max. rotatie om y-as Berekeningsmethode Stijfheidsreductie maal factor Aantal lastincrementen Aantal iteraties	0.0 0.0 -4.2 -4.2 0.0 0.0 0.0 -6.9 -25.2 25.2 7.4 Linear <input type="checkbox"/> 1 1	kN kN kN kN kNm kNm kNm mm mm mm mrad	Afwijking 0.00% In zwaartepunt van het model (X:-13.4, Y:0.0, Z:2.8 m) In zwaartepunt van het model In zwaartepunt van het model Staaf No. 2, x: 0.524 m Staaf No. 8, x: 1.094 m Staaf No. 8, x: 1.094 m Staaf No. 7, x: 0.638 m Geometrisch lineaire statische berekening
BC1 - 1.2*BG1 Som van belastingen in X Som van de steunpunctreacties in X Som van belastingen in Z Som van de steunpunctreacties in Z Max. verplaatsing in x-richting Max. verplaatsing in z-richting Max. vector verplaatsing Max. rotatie om y-as Berekeningsmethode Stijfheidsreductie maal factor Aantal lastincrementen Aantal iteraties	0.0 0.0 -6.7 -6.7 -6.4 -22.0 22.0 6.2 Linear <input type="checkbox"/> 1 1	kN kN kN kN mm mm mm mrad	Afwijking 0.00% Staaf No. 2, x: 0.524 m Staaf No. 8, x: 1.094 m Staaf No. 8, x: 1.094 m Staaf No. 7, x: 0.638 m Geometrisch lineaire statische berekening
BC2 - 1.1*BG1 + 1.15*BG2 Som van belastingen in X Som van de steunpunctreacties in X Som van belastingen in Z Som van de steunpunctreacties in Z Max. verplaatsing in x-richting Max. verplaatsing in z-richting Max. vector verplaatsing Max. rotatie om y-as Berekeningsmethode Stijfheidsreductie maal factor Aantal lastincrementen Aantal iteraties	0.0 0.0 -11.0 -11.0 -13.8 -49.1 49.1 14.2 Linear <input type="checkbox"/> 1 1	kN kN kN kN mm mm mm mrad	Afwijking 0.00% Staaf No. 2, x: 0.524 m Staaf No. 8, x: 1.094 m Staaf No. 8, x: 1.094 m Staaf No. 7, x: 0.638 m Geometrisch lineaire statische berekening
Samenvatting Max. verplaatsing in x-richting Max. verplaatsing in z-richting Max. vector verplaatsing Max. rotatie om y-as Aantal 1D-eindige elementen (staafelementen) Aantal EE-knopen Aantal vergelijkingen Max. aantal iteraties Staafverdelingen voor staafresultaten Verdelingen van kabels, fundatie of verlopende staven Zet glijdingsmodulus (A-y, A-x) van slaven AAN	-13.8 -49.1 49.1 14.2 18 17 51 100 10 10 <input checked="" type="checkbox"/>	mm mm mm mrad	BC2, Staaf No. 2, x: 0.524 m BC2, Staaf No. 8, x: 1.094 m BC2, Staaf No. 8, x: 1.094 m BC2, Staaf No. 7, x: 0.638 m
Andere instellingen	Max. aantal iteraties Aantal doorsnedes voor staafresultaten Staafdelingen, kabels, steunvlakken en verlopende staven Aantal staafverdelingen voor het zoeken naar max.waardes	: : : :	100 10 10 10

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■ RESULTATEN - OPSOMMING

Opties	<input checked="" type="checkbox"/> Afschuifstijfheid activeren voor Staven (Ay, Az) <input checked="" type="checkbox"/> Modify stiffness (material, cross-sections, members, load cases and combinations)
Precisie en Tolerantie	<input type="checkbox"/> Wijzig standaardinstelling

■ STAVEN - SNEDEKRACHTEN

StAAF No.	BG/BC	Knoop No.	SneDe x [m]	Krachten [kN]		Momenten My [kNm]	Snedes
				N	Vz		
1	BC1	2	0.000	-4.0	1.2	-1.8	1 - T-Rechthoek 120/170
		1	1.575	-4.2	1.1	0.0	
		Max N	0.000	-4.0	1.2	-1.8	
		Min N	1.575	-4.2	1.1	0.0	
		Max Vz	0.000	-4.0	1.2	-1.8	
		Min Vz	1.575	-4.2	1.1	0.0	
		Max My	1.575	-4.2	1.1	0.0	
	Min My	0.000	-4.0	1.2	-1.8		
	BC2	2	0.000	-7.0	2.5	-3.8	
		1	1.575	-7.2	2.4	0.0	
		Max N	0.000	-7.0	2.5	-3.8	
		Min N	1.575	-7.2	2.4	0.0	
		Max Vz	0.000	-7.0	2.5	-3.8	
		Min Vz	1.575	-7.2	2.4	0.0	
Max My		1.575	-7.2	2.4	0.0		
Min My	0.000	-7.0	2.5	-3.8			
2	BC1	2	0.000	-4.0	-1.2	-1.8	1 - T-Rechthoek 120/170
		3	0.873	-3.9	-1.2	-2.8	
		Max N	0.873	-3.9	-1.2	-2.8	
		Min N	0.000	-4.0	-1.2	-1.8	
		Max Vz	0.000	-4.0	-1.2	-1.8	
		Min Vz	0.873	-3.9	-1.2	-2.8	
		Max My	0.000	-4.0	-1.2	-1.8	
	Min My	0.873	-3.9	-1.2	-2.8		
	BC2	2	0.000	-7.0	-2.5	-3.8	
		3	0.873	-6.9	-2.5	-6.0	
		Max N	0.873	-6.9	-2.5	-6.0	
		Min N	0.000	-7.0	-2.5	-3.8	
		Max Vz	0.000	-7.0	-2.5	-3.8	
		Min Vz	0.873	-6.9	-2.5	-6.0	
Max My		0.000	-7.0	-2.5	-3.8		
Min My	0.873	-6.9	-2.5	-6.0			
3	BC1	3	0.000	0.9	2.0	-2.8	1 - T-Rechthoek 120/170
		4	1.452	1.1	1.9	0.0	
		Max N	1.452	1.1	1.9	0.0	
		Min N	0.000	0.9	2.0	-2.8	
		Max Vz	0.000	0.9	2.0	-2.8	
		Min Vz	1.452	1.1	1.9	0.0	
		Max My	1.452	1.1	1.9	0.0	
	Min My	0.000	0.9	2.0	-2.8		
	BC2	3	0.000	2.9	4.2	-6.0	
		4	1.452	3.1	4.1	0.0	
		Max N	1.452	3.1	4.1	0.0	
		Min N	0.000	2.9	4.2	-6.0	
		Max Vz	0.000	2.9	4.2	-6.0	
		Min Vz	1.452	3.1	4.1	0.0	
Max My		1.452	3.1	4.1	0.0		
Min My	0.000	2.9	4.2	-6.0			
4	BC1	4	0.000	2.2	-0.2	0.0	1 - T-Rechthoek 120/170
		5	0.180	2.2	-0.2	0.0	
		Max N	0.000	2.2	-0.2	0.0	
		Min N	0.000	2.2	-0.2	0.0	
		Max Vz	0.000	2.2	-0.2	0.0	
		Min Vz	0.180	2.2	-0.2	0.0	
		Max My	0.000	2.2	-0.2	0.0	
	Min My	0.180	2.2	-0.2	0.0		
	BC2	4	0.000	5.0	-1.0	0.0	
		5	0.180	5.0	-1.0	-0.2	
		Max N	0.000	5.0	-1.0	0.0	
		Min N	0.000	5.0	-1.0	0.0	
		Max Vz	0.000	5.0	-1.0	0.0	
		Min Vz	0.180	5.0	-1.0	-0.2	
Max My		0.000	5.0	-1.0	0.0		
Min My	0.180	5.0	-1.0	-0.2			
5	BC1	3	0.000	-5.8	0.2	0.0	1 - T-Rechthoek 120/170
		6	2.647	-5.6	-0.2	0.0	

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■ **STAVEN - SNEDEKRACHTEN**

Staaf No.	BG/BC	Knoop No.	Sneede x [m]	Krachten [kN]		Momenten	Snedes
				N	V _z	M _y [kNm]	
5	BC1	Max N	2.647	-5.6	-0.2	0.0	
		Min N	0.000	-5.8	0.2	0.0	
		Max V _z	0.000	-5.8	0.2	0.0	
		Min V _z	2.647	-5.6	-0.2	0.0	
		Max M _y	1.323	-5.7	0.0	0.1	
		Min M _y	2.647	-5.6	-0.2	0.0	
	BC2	3	0.000	-11.9	0.1	0.0	
		6	2.647	-11.7	-0.1	0.0	
		Max N	2.647	-11.7	-0.1	0.0	
		Min N	0.000	-11.9	0.1	0.0	
		Max V _z	0.000	-11.9	0.1	0.0	
		Min V _z	2.647	-11.7	-0.1	0.0	
		Max M _y	1.323	-11.8	0.0	0.1	
		Min M _y	2.647	-11.7	-0.1	0.0	
6	BC1	5	0.000	2.2	-0.2	0.0	1 - T-Rechthoek 120/170
		6	1.499	2.2	-1.0	-0.9	
		Max N	0.000	2.2	-0.2	0.0	
		Min N	0.000	2.2	-0.2	0.0	
		Max V _z	0.000	2.2	-0.2	0.0	
		Min V _z	1.499	2.2	-1.0	-0.9	
		Max M _y	0.000	2.2	-0.2	0.0	
		Min M _y	1.499	2.2	-1.0	-0.9	
	BC2	5	0.000	5.0	-1.0	-0.2	
		6	1.499	5.0	-1.8	-2.3	
		Max N	0.000	5.0	-1.0	-0.2	
		Min N	0.000	5.0	-1.0	-0.2	
		Max V _z	0.000	5.0	-1.0	-0.2	
		Min V _z	1.499	5.0	-1.8	-2.3	
7	BC1	6	0.000	-2.8	1.7	-0.9	1 - T-Rechthoek 120/170
		16	1.063	-2.8	1.1	0.6	
		Max N	0.000	-2.8	1.7	-0.9	
		Min N	0.000	-2.8	1.7	-0.9	
		Max V _z	0.000	-2.8	1.7	-0.9	
		Min V _z	1.063	-2.8	1.1	0.6	
		Max M _y	1.063	-2.8	1.1	0.6	
		Min M _y	0.000	-2.8	1.7	-0.9	
	BC2	6	0.000	-5.2	3.9	-2.3	
		16	1.063	-5.2	2.6	1.2	
		Max N	0.000	-5.2	3.9	-2.3	
		Min N	0.000	-5.2	3.9	-2.3	
		Max V _z	0.000	-5.2	3.9	-2.3	
		Min V _z	1.063	-5.2	2.6	1.2	
8	BC1	7	0.000	-2.8	0.6	1.4	1 - T-Rechthoek 120/170
		8	1.094	-2.8	0.0	1.8	
		Max N	0.000	-2.8	0.6	1.4	
		Min N	0.000	-2.8	0.6	1.4	
		Max V _z	0.000	-2.8	0.6	1.4	
		Min V _z	1.094	-2.8	0.0	1.8	
		Max M _y	1.094	-2.8	0.0	1.8	
		Min M _y	0.000	-2.8	0.6	1.4	
	BC2	7	0.000	-5.2	1.3	3.3	
		8	1.094	-5.2	0.0	4.1	
		Max N	0.000	-5.2	1.3	3.3	
		Min N	0.000	-5.2	1.3	3.3	
		Max V _z	0.000	-5.2	1.3	3.3	
		Min V _z	1.094	-5.2	0.0	4.1	
9	BC1	8	0.000	-2.8	0.0	1.8	1 - T-Rechthoek 120/170
		9	1.094	-2.8	-0.6	1.4	
		Max N	0.000	-2.8	0.0	1.8	
		Min N	0.000	-2.8	0.0	1.8	
		Max V _z	0.000	-2.8	0.0	1.8	
		Min V _z	1.094	-2.8	-0.6	1.4	
		Max M _y	0.000	-2.8	0.0	1.8	
		Min M _y	1.094	-2.8	-0.6	1.4	
	BC2	8	0.000	-5.2	0.0	4.1	
		9	1.094	-5.2	-1.3	3.3	
		Max N	0.000	-5.2	0.0	4.1	
		Min N	0.000	-5.2	0.0	4.1	
		Max V _z	0.000	-5.2	0.0	4.1	
		Min V _z	1.094	-5.2	0.0	4.1	

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■ **STAVEN - SNEDEKRACHTEN**

Staal No.	BG/BC	Knoop No.	Snedes x [m]	Krachten [kN]		Momenten M_y [kNm]	Snedes
				N	V_z		
9	BC2	Min V_z	1.094	-5.2	-1.3	3.3	
		Max M_y	0.000	-5.2	0.0	4.1	
		Min M_y	1.094	-5.2	-1.3	3.3	
10	BC1	9	0.000	-2.8	-0.6	1.4	1 - T-Rechthoek 120/170
		17	1.063	-2.8	-1.1	0.6	
		Max N	0.000	-2.8	-0.6	1.4	
		Min N	0.000	-2.8	-0.6	1.4	
		Max V_z	0.000	-2.8	-0.6	1.4	
		Min V_z	1.063	-2.8	-1.1	0.6	
	BC2	9	0.000	-5.2	-1.3	3.3	
		17	1.063	-5.2	-2.6	1.2	
		Max N	0.000	-5.2	-1.3	3.3	
		Min N	0.000	-5.2	-1.3	3.3	
		Max V_z	0.000	-5.2	-1.3	3.3	
		Min V_z	1.063	-5.2	-2.6	1.2	
11	BC1	10	0.000	2.2	1.0	-0.9	1 - T-Rechthoek 120/170
		11	1.499	2.2	0.2	0.0	
		Max N	0.000	2.2	1.0	-0.9	
		Min N	0.000	2.2	1.0	-0.9	
		Max V_z	0.000	2.2	1.0	-0.9	
		Min V_z	1.499	2.2	0.2	0.0	
	BC2	10	0.000	5.0	1.8	-2.3	
		11	1.499	5.0	1.0	-0.2	
		Max N	0.000	5.0	1.8	-2.3	
		Min N	0.000	5.0	1.8	-2.3	
		Max V_z	0.000	5.0	1.8	-2.3	
		Min V_z	1.499	5.0	1.0	-0.2	
12	BC1	13	0.000	-5.8	0.2	0.0	1 - T-Rechthoek 120/170
		10	2.647	-5.6	-0.2	0.0	
		Max N	2.647	-5.6	-0.2	0.0	
		Min N	0.000	-5.8	0.2	0.0	
		Max V_z	0.000	-5.8	0.2	0.0	
		Min V_z	2.647	-5.6	-0.2	0.0	
	BC2	13	0.000	-11.9	0.1	0.0	
		10	2.647	-11.7	-0.1	0.0	
		Max N	2.647	-11.7	-0.1	0.0	
		Min N	0.000	-11.9	0.1	0.0	
		Max V_z	0.000	-11.9	0.1	0.0	
		Min V_z	2.647	-11.7	-0.1	0.0	
13	BC1	11	0.000	2.2	0.2	0.0	1 - T-Rechthoek 120/170
		12	0.180	2.2	0.2	0.0	
		Max N	0.000	2.2	0.2	0.0	
		Min N	0.000	2.2	0.2	0.0	
		Max V_z	0.000	2.2	0.2	0.0	
		Min V_z	0.180	2.2	0.2	0.0	
	BC2	11	0.000	5.0	1.0	-0.2	
		12	0.180	5.0	1.0	0.0	
		Max N	0.000	5.0	1.0	-0.2	
		Min N	0.000	5.0	1.0	-0.2	
		Max V_z	0.000	5.0	1.0	-0.2	
		Min V_z	0.180	5.0	1.0	0.0	
14	BC1	13	0.000	0.9	2.0	-2.8	1 - T-Rechthoek 120/170
		12	1.452	1.1	1.9	0.0	
		Max N	1.452	1.1	1.9	0.0	
		Min N	0.000	0.9	2.0	-2.8	
		Max V_z	0.000	0.9	2.0	-2.8	
		Min V_z	1.452	1.1	1.9	0.0	
		Max M_y	1.452	1.1	1.9	0.0	
		Min M_y	0.000	0.9	2.0	-2.8	

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■ **STAVEN - SNEDEKRACHTEN**

Staf No.	BG/BC	Knoop No.	Sneede x [m]	Krachten [kN]		Momenten M _y [kNm]	Snedes
				N	V _z		
14	BC2	13	0.000	2.9	4.2	-6.0	
		12	1.452	3.1	4.1	0.0	
		Max N	1.452	3.1	4.1	0.0	
		Min N	0.000	2.9	4.2	-6.0	
		Max V _z	0.000	2.9	4.2	-6.0	
		Min V _z	1.452	3.1	4.1	0.0	
		Max M _y	1.452	3.1	4.1	0.0	
		Min M _y	0.000	2.9	4.2	-6.0	
15	BC1	14	0.000	-4.0	-1.2	-1.8	1 - T-Rechthoek 120/170
		13	0.873	-3.9	-1.2	-2.8	
		Max N	0.873	-3.9	-1.2	-2.8	
		Min N	0.000	-4.0	-1.2	-1.8	
		Max V _z	0.000	-4.0	-1.2	-1.8	
		Min V _z	0.873	-3.9	-1.2	-2.8	
		Max M _y	0.000	-4.0	-1.2	-1.8	
	Min M _y	0.873	-3.9	-1.2	-2.8		
	BC2	14	0.000	-7.0	-2.5	-3.8	
		13	0.873	-6.9	-2.5	-6.0	
		Max N	0.873	-6.9	-2.5	-6.0	
		Min N	0.000	-7.0	-2.5	-3.8	
		Max V _z	0.000	-7.0	-2.5	-3.8	
		Min V _z	0.873	-6.9	-2.5	-6.0	
Max M _y		0.000	-7.0	-2.5	-3.8		
Min M _y	0.873	-6.9	-2.5	-6.0			
16	BC1	15	0.000	-4.2	-1.1	0.0	1 - T-Rechthoek 120/170
		14	1.575	-4.0	-1.2	-1.8	
		Max N	1.575	-4.0	-1.2	-1.8	
		Min N	0.000	-4.2	-1.1	0.0	
		Max V _z	0.000	-4.2	-1.1	0.0	
		Min V _z	1.575	-4.0	-1.2	-1.8	
		Max M _y	0.000	-4.2	-1.1	0.0	
	Min M _y	1.575	-4.0	-1.2	-1.8		
	BC2	15	0.000	-7.2	-2.4	0.0	
		14	1.575	-7.0	-2.5	-3.8	
		Max N	1.575	-7.0	-2.5	-3.8	
		Min N	0.000	-7.2	-2.4	0.0	
		Max V _z	0.000	-7.2	-2.4	0.0	
		Min V _z	1.575	-7.0	-2.5	-3.8	
Max M _y		0.000	-7.2	-2.4	0.0		
Min M _y	1.575	-7.0	-2.5	-3.8			
17	BC1	16	0.000	-2.8	1.1	0.6	1 - T-Rechthoek 120/170
		7	1.063	-2.8	0.6	1.4	
		Max N	0.000	-2.8	1.1	0.6	
		Min N	0.000	-2.8	1.1	0.6	
		Max V _z	0.000	-2.8	1.1	0.6	
		Min V _z	1.063	-2.8	0.6	1.4	
		Max M _y	1.063	-2.8	0.6	1.4	
	Min M _y	0.000	-2.8	1.1	0.6		
	BC2	16	0.000	-5.2	2.6	1.2	
		7	1.063	-5.2	1.3	3.3	
		Max N	0.000	-5.2	2.6	1.2	
		Min N	0.000	-5.2	2.6	1.2	
		Max V _z	0.000	-5.2	2.6	1.2	
		Min V _z	1.063	-5.2	1.3	3.3	
Max M _y		1.063	-5.2	1.3	3.3		
Min M _y	0.000	-5.2	2.6	1.2			
18	BC1	17	0.000	-2.8	-1.1	0.6	1 - T-Rechthoek 120/170
		10	1.063	-2.8	-1.7	-0.9	
		Max N	0.000	-2.8	-1.1	0.6	
		Min N	0.000	-2.8	-1.1	0.6	
		Max V _z	0.000	-2.8	-1.1	0.6	
		Min V _z	1.063	-2.8	-1.7	-0.9	
		Max M _y	0.000	-2.8	-1.1	0.6	
	Min M _y	1.063	-2.8	-1.7	-0.9		
	BC2	17	0.000	-5.2	-2.6	1.2	
		10	1.063	-5.2	-3.9	-2.3	
		Max N	0.000	-5.2	-2.6	1.2	
		Min N	0.000	-5.2	-2.6	1.2	
		Max V _z	0.000	-5.2	-2.6	1.2	
		Min V _z	1.063	-5.2	-3.9	-2.3	
Max M _y		0.000	-5.2	-2.6	1.2		
Min M _y	1.063	-5.2	-3.9	-2.3			

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■ KNOPEN - REACTIEKRACHTEN

Knoop No.	BG/BC	Reactiekrachten [kN]		Reactiemomenten		Opm.
		P _x	P _z	M _y [kNm]		
1 15	BG1	-2.3	-2.8	0.0	Rustend	
	BG2	-2.3	-2.1	0.0	1.00 Kn/m2 veranderlijk	
	BG1	2.3	-2.8	0.0	Rustend	
	BG2	2.3	-2.1	0.0	1.00 Kn/m2 veranderlijk	
Σ Onder	BG1	0.0	-5.6			
Σ	BG1	0.0	-5.6			
Belastingen						
Σ Onder	BG2	0.0	-4.2			
Σ	BG2	0.0	-4.2			
Belastingen						

■ KNOPEN - VERVORMINGEN

Knoop No.	BG/BC	Translaties [mm]			Rotatie	
		u	u _x	u _z	φ _y [mrad]	
1	BG1	0.0	0.0	0.0	-4.2	
	BG2	0.0	0.0	0.0	-5.4	
2	BG1	5.4	-4.9	2.3	-1.8	
	BG2	6.9	-6.3	2.9	-2.3	
3	BG1	5.6	-5.1	2.4	1.6	
	BG2	7.2	-6.6	3.1	2.0	
4	BG1	0.1	0.0	0.0	3.7	
	BG2	0.0	0.0	0.0	4.4	
5	BG1	0.7	0.0	-0.7	3.7	
	BG2	0.8	0.0	-0.8	4.5	
6	BG1	6.7	0.0	-6.7	4.7	
	BG2	8.6	0.0	-8.6	6.6	
7	BG1	16.6	0.0	-16.6	3.1	
	BG2	22.7	0.0	-22.7	4.4	
8	BG1	18.3	0.0	-18.3	0.0	
	BG2	25.2	0.0	-25.2	0.0	
9	BG1	16.6	0.0	-16.6	-3.1	
	BG2	22.7	0.0	-22.7	-4.4	
10	BG1	6.7	0.0	-6.7	-4.7	
	BG2	8.6	0.0	-8.6	-6.6	
11	BG1	0.7	0.0	-0.7	-3.7	
	BG2	0.8	0.0	-0.8	-4.5	
12	BG1	0.1	0.0	0.0	-3.7	
	BG2	0.0	0.0	0.0	-4.4	
13	BG1	5.6	5.1	2.4	-1.6	
	BG2	7.2	6.6	3.1	-2.0	
14	BG1	5.4	4.9	2.3	1.8	
	BG2	6.9	6.3	2.9	2.3	
15	BG1	0.0	0.0	0.0	4.2	
	BG2	0.0	0.0	0.0	5.4	
16	BG1	12.1	0.0	-12.1	5.0	
	BG2	16.3	0.0	-16.3	7.1	
17	BG1	12.1	0.0	-12.1	-5.0	
	BG2	16.3	0.0	-16.3	-7.1	

■ STAVEN - GLOBALE VERVORMINGEN

Staf No.	BG/BC	Knoop No.	Snedes x [m]	Translaties [mm]			Rotaties		Snedes
				u	u _x	u _z	φ _y [mrad]		
1	BG1	2	0.000	5.4	0.0	-5.4	-1.8	1 - T-Rechthoek 120/170	
		1	1.575	0.0	0.0	-4.2			
		Max u _x	1.575	0.0	0.0	-4.2			
		Min u _x	0.000	5.4	-4.9	2.3	-1.8		
		Max u _z	0.000	5.4	-4.9	2.3	-1.8		
		Min u _z	1.575	0.0	0.0	-4.2			
	BG2	2	0.000	6.9	0.0	-6.9	-2.3		
		1	1.575	0.0	0.0	-5.4			
		Max u _x	1.575	0.0	0.0	-5.4			
		Min u _x	0.000	6.9	-6.3	2.9	-2.3		
		Max u _z	0.000	6.9	-6.3	2.9	-2.3		
		Min u _z	1.575	0.0	0.0	-5.4			
2	BG1	2	0.000	5.4	0.0	-5.4	1.8		
		3	0.873	5.6	0.0	-5.6	-1.6		
		Max u _x	0.873	5.6	-5.1	2.4	1.6		
		Min u _x	0.000	5.4	-4.9	2.3	-1.8		
		Max u _z	0.524	5.9	-5.3	2.5	0.0		
		Min u _z	0.000	5.4	-4.9	2.3	-1.8		
		BG2	2	0.000	6.9	0.0	-6.9	2.3	

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■ **STAVEN - GLOBALE VERVORMINGEN**

Staaf No.	BG/BC	Knoop No.	Snedes x [m]	Translaties [mm]			Rotaties φ_y [mrad]	Snedes
				u	u_x	u_z		
2	BG2	3	0.873	7.2	0.0	-7.2	-2.0	1 - T-Rechthoek 120/170
		Max u_x	0.873	7.2	-6.6	3.1	2.0	
		Min u_x	0.000	6.9	-6.3	2.9	-2.3	
		Max u_z	0.524	7.6	-6.9	3.2	0.1	
		Min u_z	0.000	6.9	-6.3	2.9	-2.3	
3	BG1	3	0.000	5.6	0.0	-5.6	-1.6	1 - T-Rechthoek 120/170
		4	1.452	0.1	0.0	0.0	-5.0	
		Max u_x	0.000	5.6	-5.1	2.4	1.6	
		Min u_x	1.452	0.1	0.0	0.0	5.0	
		Max u_z	0.000	5.6	-5.1	2.4	1.6	
		Min u_z	1.452	0.1	0.0	0.0	5.0	
	BG2	3	0.000	7.2	0.0	-7.2	-2.0	
		4	1.452	0.0	0.0	0.0	-6.4	
		Max u_x	0.000	7.2	-6.6	3.1	2.0	
		Min u_x	1.452	0.0	0.0	0.0	6.4	
		Max u_z	0.000	7.2	-6.6	3.1	2.0	
		Min u_z	1.452	0.0	0.0	0.0	6.4	
4	BG1	4	0.000	0.1	0.0	0.0	-3.7	1 - T-Rechthoek 120/170
		5	0.180	0.7	0.0	0.7	-3.7	
		Max u_x	0.000	0.1	0.0	0.0	3.7	
		Min u_x	0.180	0.7	0.0	-0.7	3.7	
		Max u_z	0.000	0.1	0.0	0.0	3.7	
		Min u_z	0.180	0.7	0.0	-0.7	3.7	
	BG2	4	0.000	0.0	0.0	0.0	-4.4	
		5	0.180	0.8	0.0	0.8	-4.5	
		Max u_x	0.000	0.0	0.0	0.0	4.4	
		Min u_x	0.180	0.8	0.0	-0.8	4.5	
		Max u_z	0.000	0.0	0.0	0.0	4.4	
		Min u_z	0.180	0.8	0.0	-0.8	4.5	
5	BG1	3	0.000	5.6	-3.3	-4.6	-4.1	1 - T-Rechthoek 120/170
		6	2.647	6.7	-3.3	5.9	-3.8	
		Max u_x	2.647	6.7	0.0	-6.7	3.8	
		Min u_x	0.000	5.6	-5.1	2.4	4.1	
		Max u_z	0.000	5.6	-5.1	2.4	4.1	
		Min u_z	2.647	6.7	0.0	-6.7	3.8	
	BG2	3	0.000	7.2	-4.2	-5.9	-5.1	
		6	2.647	8.6	-4.3	7.5	-5.1	
		Max u_x	2.647	8.6	0.0	-8.6	5.1	
		Min u_x	0.000	7.2	-6.6	3.1	5.1	
		Max u_z	0.000	7.2	-6.6	3.1	5.1	
		Min u_z	2.647	8.6	0.0	-8.6	5.1	
6	BG1	5	0.000	0.7	0.0	0.7	-3.7	1 - T-Rechthoek 120/170
		6	1.499	6.7	0.0	6.7	-4.7	
		Max u_x	1.499	6.7	0.0	-6.7	4.7	
		Min u_x	0.000	0.7	0.0	-0.7	3.7	
		Max u_z	1.499	6.7	0.0	-6.7	4.7	
		Min u_z	0.000	0.7	0.0	-0.7	3.7	
	BG2	5	0.000	0.8	0.0	0.8	-4.5	
		6	1.499	8.6	0.0	8.6	-6.6	
		Max u_x	1.499	8.6	0.0	-8.6	6.6	
		Min u_x	0.000	0.8	0.0	-0.8	4.5	
		Max u_z	1.499	8.6	0.0	-8.6	6.6	
		Min u_z	0.000	0.8	0.0	-0.8	4.5	
7	BG1	6	0.000	6.7	0.0	6.7	-4.7	1 - T-Rechthoek 120/170
		16	1.063	12.1	0.0	12.1	-5.0	
		Max u_x	1.063	12.1	0.0	-12.1	5.0	
		Min u_x	0.000	6.7	0.0	-6.7	4.7	
		Max u_z	0.000	6.7	0.0	-6.7	4.7	
		Min u_z	1.063	12.1	0.0	-12.1	5.0	
	BG2	6	0.000	8.6	0.0	8.6	-6.6	
		16	1.063	16.3	0.0	16.3	-7.1	
		Max u_x	1.063	16.3	0.0	-16.3	7.1	
		Min u_x	0.000	8.6	0.0	-8.6	6.6	
		Max u_z	0.000	8.6	0.0	-8.6	6.6	
		Min u_z	1.063	16.3	0.0	-16.3	7.1	
8	BG1	7	0.000	16.6	0.0	16.6	-3.1	1 - T-Rechthoek 120/170
		8	1.094	18.3	0.0	18.3	0.0	
		Max u_x	1.094	18.3	0.0	-18.3	0.0	
		Min u_x	0.000	16.6	0.0	-16.6	3.1	
		Max u_z	0.000	16.6	0.0	-16.6	3.1	
		Min u_z	1.094	18.3	0.0	-18.3	0.0	
	BG2	7	0.000	22.7	0.0	22.7	-4.4	
		8	1.094	25.2	0.0	25.2	0.0	
		Max u_x	1.094	25.2	0.0	-25.2	0.0	

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■ **STAVEN - GLOBALE VERVORMINGEN**

Staal No.	BG/BC	Knoop No.	Snedex [m]	Translaties [mm]			Rotaties φ_y [mrad]	Snedes
				[u]	u_x	u_z		
8	BG2	Min u_x	0.000	22.7	0.0	-22.7	4.4	1 - T-Rechthoek 120/170
		Max u_z	0.000	22.7	0.0	-22.7	4.4	
		Min u_z	1.094	25.2	0.0	-25.2	0.0	
9	BG1	8	0.000	18.3	0.0	18.3	0.0	1 - T-Rechthoek 120/170
		9	1.094	16.6	0.0	16.6	3.1	
		Max u_x	0.000	18.3	0.0	-18.3	0.0	
		Min u_x	1.094	16.6	0.0	-16.6	-3.1	
		Max u_z	0.000	18.3	0.0	-18.3	0.0	
	BG2	8	0.000	25.2	0.0	25.2	0.0	
		9	1.094	22.7	0.0	22.7	4.4	
		Max u_x	0.000	25.2	0.0	-25.2	0.0	
		Min u_x	1.094	22.7	0.0	-22.7	-4.4	
		Max u_z	0.000	25.2	0.0	-25.2	0.0	
10	BG1	9	0.000	16.6	0.0	16.6	3.1	1 - T-Rechthoek 120/170
		17	1.063	12.1	0.0	12.1	5.0	
		Max u_x	1.063	12.1	0.0	-12.1	-5.0	
		Min u_x	0.000	16.6	0.0	-16.6	-3.1	
		Max u_z	1.063	12.1	0.0	-12.1	-5.0	
	BG2	9	0.000	22.7	0.0	22.7	4.4	
		17	1.063	16.3	0.0	16.3	7.1	
		Max u_x	1.063	16.3	0.0	-16.3	-7.1	
		Min u_x	0.000	22.7	0.0	-22.7	-4.4	
		Max u_z	1.063	16.3	0.0	-16.3	-7.1	
11	BG1	10	0.000	6.7	0.0	6.7	4.7	1 - T-Rechthoek 120/170
		11	1.499	0.7	0.0	0.7	3.7	
		Max u_x	0.000	6.7	0.0	-6.7	-4.7	
		Min u_x	1.499	0.7	0.0	-0.7	-3.7	
		Max u_z	0.000	6.7	0.0	-6.7	-4.7	
	BG2	10	0.000	8.6	0.0	8.6	6.6	
		11	1.499	0.8	0.0	0.8	4.5	
		Max u_x	0.000	8.6	0.0	-8.6	-6.6	
		Min u_x	1.499	0.8	0.0	-0.8	-4.5	
		Max u_z	0.000	8.6	0.0	-8.6	-6.6	
12	BG1	13	0.000	5.6	-3.3	-4.6	-4.1	1 - T-Rechthoek 120/170
		10	2.647	6.7	-3.3	5.9	-3.8	
		Max u_x	0.000	5.6	5.1	2.4	-4.1	
		Min u_x	2.647	6.7	0.0	-6.7	-3.8	
		Max u_z	0.000	5.6	5.1	2.4	-4.1	
	BG2	13	0.000	7.2	-4.2	-5.9	-5.1	
		10	2.647	8.6	-4.3	7.5	-5.1	
		Max u_x	0.000	7.2	6.6	3.1	-5.1	
		Min u_x	2.647	8.6	0.0	-8.6	-5.1	
		Max u_z	0.000	7.2	6.6	3.1	-5.1	
13	BG1	11	0.000	0.7	0.0	0.7	3.7	1 - T-Rechthoek 120/170
		12	0.180	0.1	0.0	0.0	3.7	
		Max u_x	0.180	0.1	0.0	0.0	-3.7	
		Min u_x	0.000	0.7	0.0	-0.7	-3.7	
		Max u_z	0.180	0.1	0.0	0.0	-3.7	
	BG2	11	0.000	0.8	0.0	0.8	4.5	
		12	0.180	0.0	0.0	0.0	4.4	
		Max u_x	0.000	0.8	0.0	-0.8	-4.5	
		Min u_x	0.180	0.0	0.0	0.0	-4.4	
		Max u_z	0.180	0.0	0.0	0.0	-4.4	
14	BG1	13	0.000	5.6	0.0	-5.6	-1.6	1 - T-Rechthoek 120/170
		12	1.452	0.1	0.0	0.0	-5.0	
		Max u_x	0.000	5.6	5.1	2.4	-1.6	
		Min u_x	1.452	0.1	0.0	0.0	-5.0	
		Max u_z	0.000	5.6	5.1	2.4	-1.6	
	BG2	13	0.000	7.2	0.0	-7.2	-2.0	
		12	1.452	0.0	0.0	0.0	-6.4	
		Max u_x	0.000	7.2	6.6	3.1	-2.0	
		Min u_x	1.452	0.0	0.0	0.0	-6.4	
		Max u_z	0.000	7.2	6.6	3.1	-2.0	

Project: 15019 kap 1e kamer

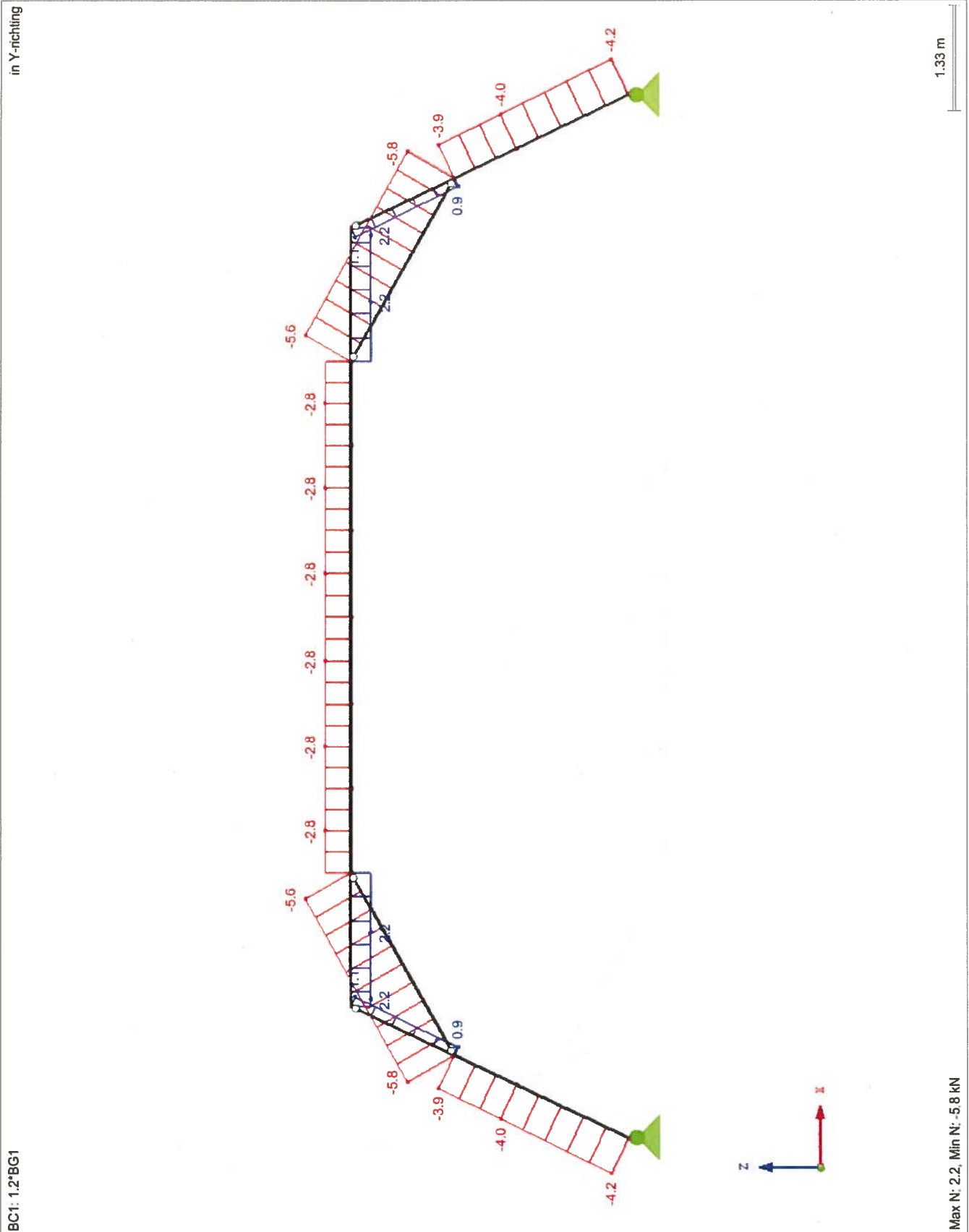
Model: 15019 tussenspan v2

Datum: 28-5-2015

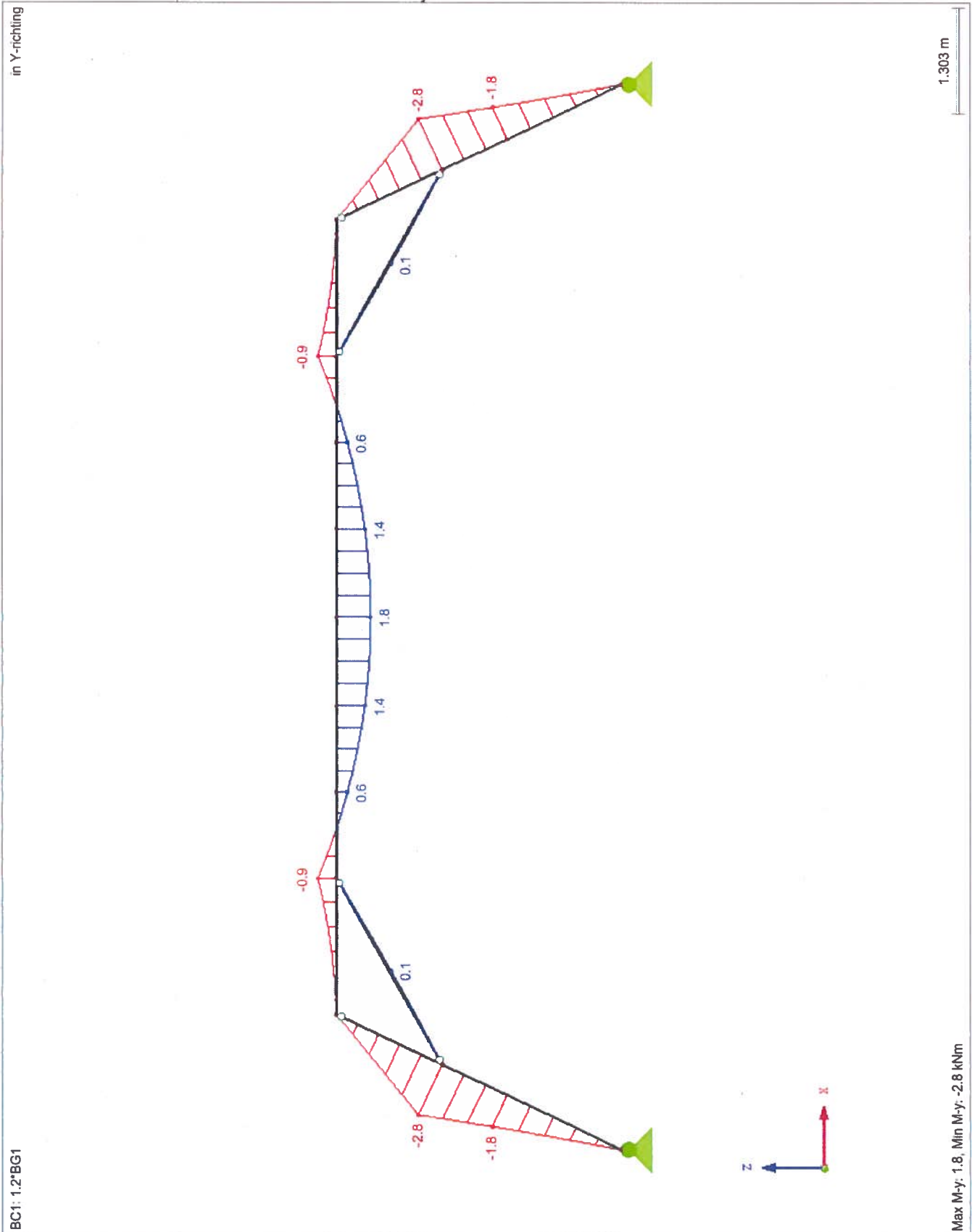
■ **STAVEN - GLOBALE VERVORMINGEN**

Staal No.	BG/BC	Knoop No.	Snedes x [m]	Translaties [mm]			Rotaties φ_y [mrad]	Snedes
				u	u_x	u_z		
14	BG2	Min u_z	1.452	0.0	0.0	0.0	-6.4	1 - T-Rechthoek 120/170
15	BG1	14	0.000	5.4	0.0	-5.4	1.8	1 - T-Rechthoek 120/170
		13	0.873	5.6	0.0	-5.6	-1.6	
		Max u_x	0.873	5.6	5.1	2.4	-1.6	
		Min u_x	0.000	5.4	4.9	2.3	1.8	
		Max u_z	0.524	5.9	5.3	2.5	0.0	
		Min u_z	0.000	5.4	4.9	2.3	1.8	
	BG2	14	0.000	6.9	0.0	-6.9	2.3	
		13	0.873	7.2	0.0	-7.2	-2.0	
		Max u_x	0.873	7.2	6.6	3.1	-2.0	
		Min u_x	0.000	6.9	6.3	2.9	2.3	
		Max u_z	0.524	7.6	6.9	3.2	-0.1	
		Min u_z	0.000	6.9	6.3	2.9	2.3	
16	BG1	15	0.000	0.0	0.0	0.0	4.2	1 - T-Rechthoek 120/170
		14	1.575	5.4	0.0	-5.4	1.8	
		Max u_x	1.575	5.4	4.9	2.3	1.8	
		Min u_x	0.000	0.0	0.0	0.0	4.2	
		Max u_z	1.575	5.4	4.9	2.3	1.8	
		Min u_z	0.000	0.0	0.0	0.0	4.2	
	BG2	15	0.000	0.0	0.0	0.0	5.4	
		14	1.575	6.9	0.0	-6.9	2.3	
		Max u_x	1.575	6.9	6.3	2.9	2.3	
		Min u_x	0.000	0.0	0.0	0.0	5.4	
		Max u_z	1.575	6.9	6.3	2.9	2.3	
		Min u_z	0.000	0.0	0.0	0.0	5.4	
17	BG1	16	0.000	12.1	0.0	12.1	-5.0	1 - T-Rechthoek 120/170
		7	1.063	16.6	0.0	16.6	-3.1	
		Max u_x	1.063	16.6	0.0	-16.6	3.1	
		Min u_x	0.000	12.1	0.0	-12.1	5.0	
		Max u_z	0.000	12.1	0.0	-12.1	5.0	
		Min u_z	1.063	16.6	0.0	-16.6	3.1	
	BG2	16	0.000	16.3	0.0	16.3	-7.1	
		7	1.063	22.7	0.0	22.7	-4.4	
		Max u_x	1.063	22.7	0.0	-22.7	4.4	
		Min u_x	0.000	16.3	0.0	-16.3	7.1	
		Max u_z	0.000	16.3	0.0	-16.3	7.1	
		Min u_z	1.063	22.7	0.0	-22.7	4.4	
18	BG1	17	0.000	12.1	0.0	12.1	5.0	1 - T-Rechthoek 120/170
		10	1.063	6.7	0.0	6.7	4.7	
		Max u_x	1.063	6.7	0.0	-6.7	-4.7	
		Min u_x	0.000	12.1	0.0	-12.1	-5.0	
		Max u_z	1.063	6.7	0.0	-6.7	-4.7	
		Min u_z	0.000	12.1	0.0	-12.1	-5.0	
	BG2	17	0.000	16.3	0.0	16.3	7.1	
		10	1.063	8.6	0.0	8.6	6.6	
		Max u_x	1.063	8.6	0.0	-8.6	-6.6	
		Min u_x	0.000	16.3	0.0	-16.3	-7.1	
		Max u_z	1.063	8.6	0.0	-8.6	-6.6	
		Min u_z	0.000	16.3	0.0	-16.3	-7.1	

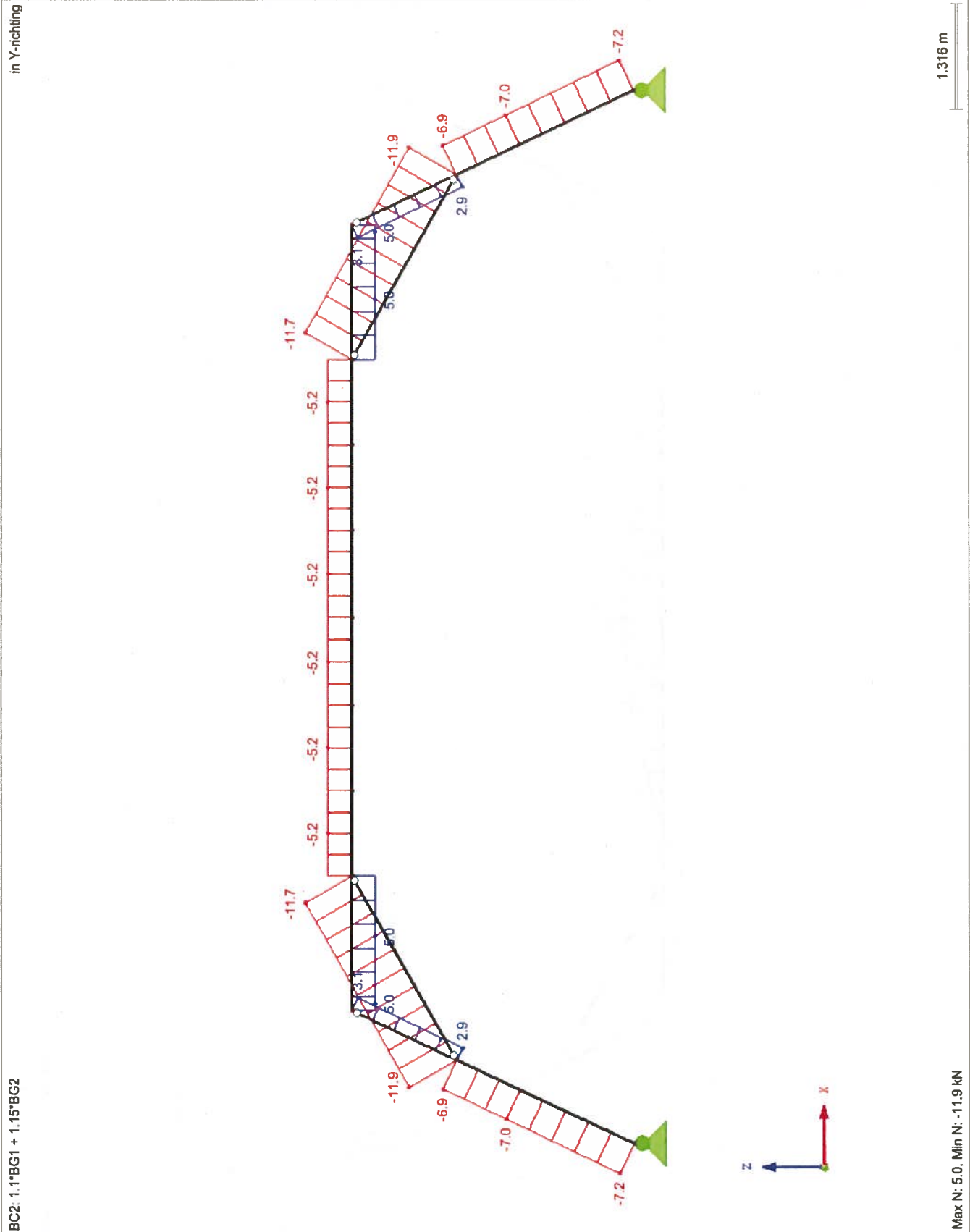
■ SNEDEKRACHTEN N



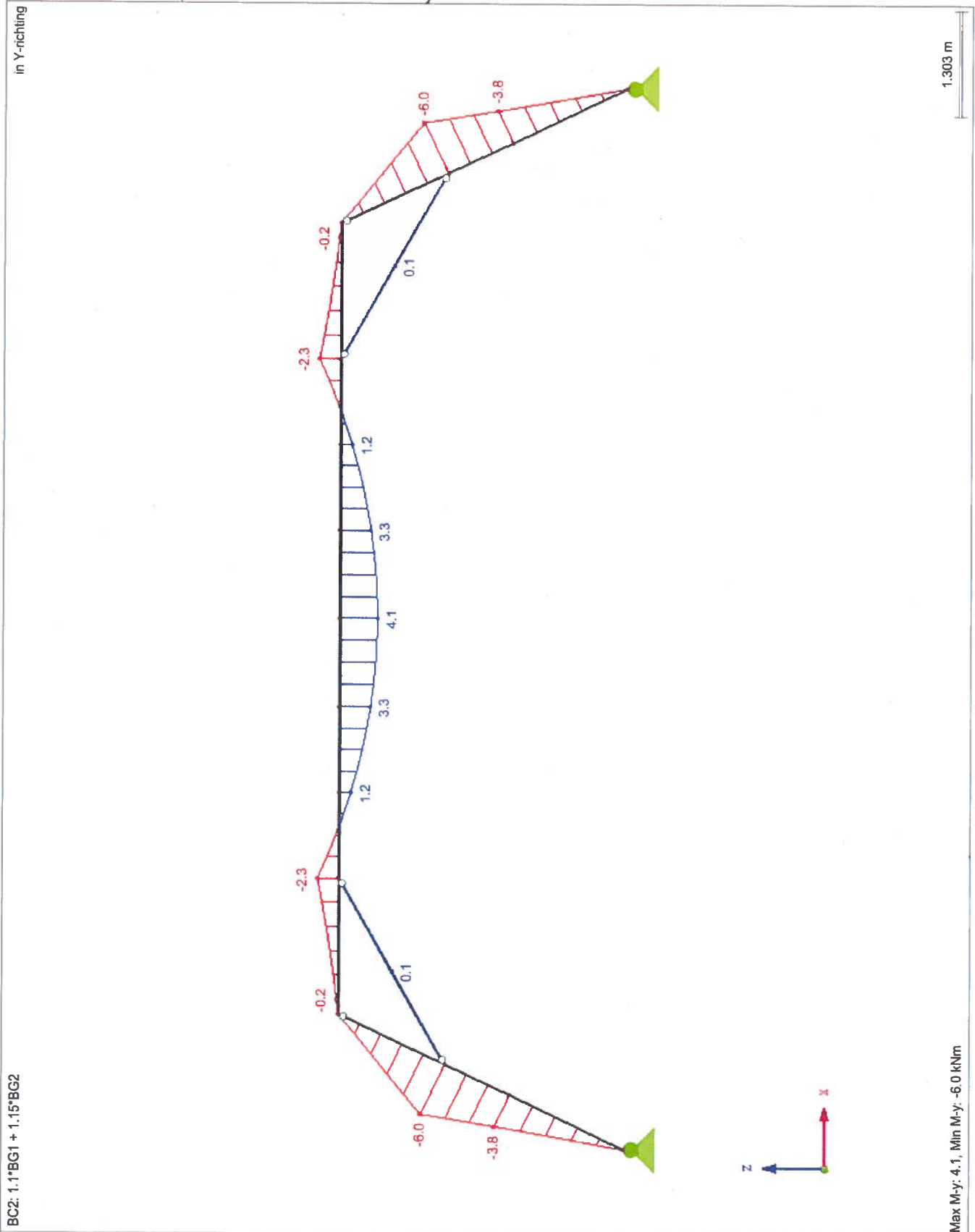
■ SNEDEKRACHTEN M_y



■ **SNEDEKRACHTEN N**



■ SNEDEKRACHTEN M_y



9. **Bijlage 4- Controle hoofddoorsneden**

100%

Deft

Dassentor

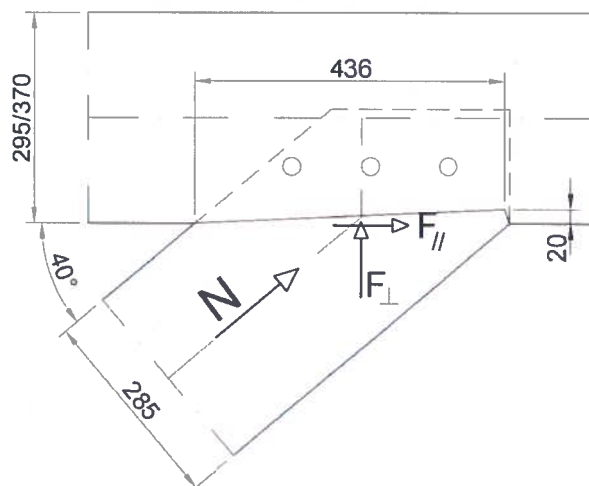
Anders

10.

Bijlage 5- Detailberekeningen
Detail A - Aansluiting korbeel op druk

Staven 166 en 209 (detail A1).

Staven 169 en 206 (detail A2).



Figuur 21

Toelaatbare kracht op druk:

$$F_{//} = N * \cos 40^\circ = 0.766 * N$$

$$F_{\perp} = N * \sin 40^\circ = 0.643 * N$$

 Toelaatbare druk op D30 onder een hoek van $40/2 = 20^\circ$

 bij belastingsduurklasse "blijvend" bedraagt: $F_{c;20;d} = 8.71 \text{ N/mm}^2$.

 Toelaatbare druk op D30 onder een hoek van $90-20 = 70^\circ$

 bij belastingsduurklasse "blijvend" bedraagt: $F_{c;70;d} = 4.00 \text{ N/mm}^2$.

$$\text{Daarmee is } F_{//;\text{max}} = 8.71 * (275-50) \text{ mm} * 20 \text{ mm} / 1000 = 39.2 \text{ kN en,}$$

$$N_{\text{max}} = 39.2 \text{ kN} / 0.766 = 51.2 \text{ kN}$$

$$F_{\perp} = 51.2 * 0.643 = 32.9 \text{ kN}$$

Minimaal benodigd lengte drukvlak:

$$32.9 * 10^3 \text{ N} / (4.0 \text{ N/mm}^2 * (275-50) \text{ mm}) = 37 \text{ mm. Ruim aanwezig!}$$

 Belastingduurklasse blijvend: $F_{c;20;d} = 8.71 \text{ N/mm}^2$ en $N_{\text{max}} = 51.2 \text{ kN}$

 Belastingduurklasse middellang: $F_{c;20;d} = 11.61 \text{ N/mm}^2$ en $N_{\text{max}} = 68.2 \text{ kN}$

 Belastingduurklasse kort: $F_{c;20;d} = 13.06 \text{ N/mm}^2$ en $N_{\text{max}} = 76.7 \text{ kN}$
Controle verbinding:

Aansluiting korbeel op dekbalk zoldergebint is maatgevend boven de aansluiting korbeel aan vlieringgebint.

Staven 166 en 209:

 Belastingduurklasse blijvend: $N_{;d} = -28.9 \text{ kN}$, $N_{\text{max}} = -51.2 \text{ kN}$ u.c. = 0.56

 Belastingduurklasse kort: $N_{;d} = -39.5 \text{ kN}$, $N_{\text{max}} = -76.7 \text{ kN}$ u.c. = 0.52

Staven 169 en 206:

 Belastingduurklasse blijvend: $N_{;d} = -1.0 \text{ kN}$, $N_{\text{max}} = -51.2 \text{ kN}$ u.c. = 0.02

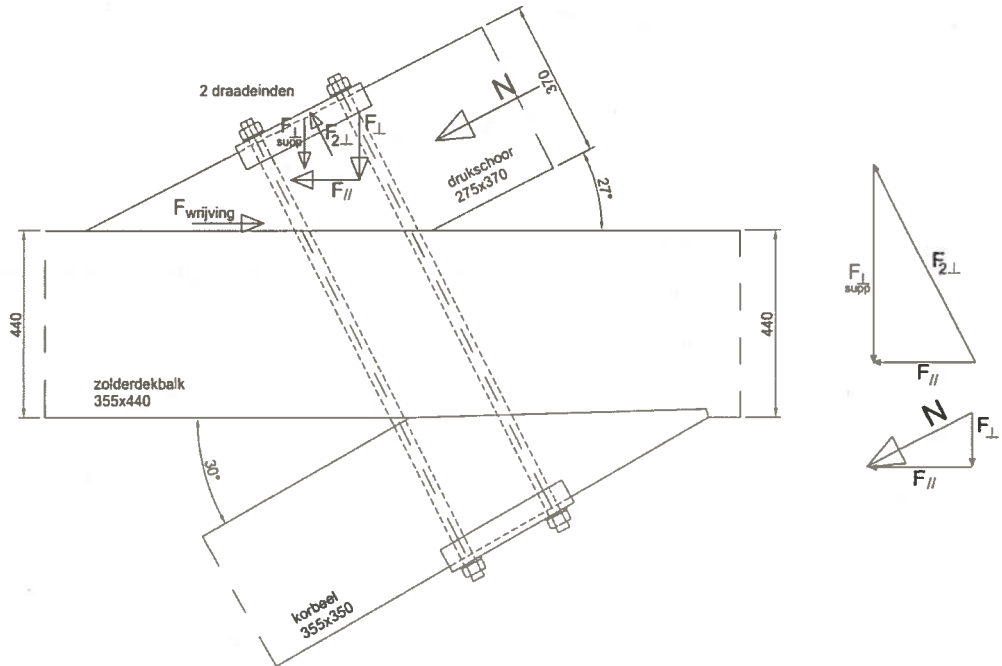
 Belastingduurklasse kort: $N_{;d} = -0.9 \text{ kN}$, $N_{\text{max}} = -76.7 \text{ kN}$ u.c. = 0.01

Aansluiting korbeel op trek:

In de genoemde staven komt bij geen enkele belastingcombinatie trek op de verbinding voor.

Detail B- Aansluiting drukboog op dekbalk zoldergebint op druk

Staven 173, en 202.



Figuur 22

Toelaatbare kracht op druk:

$$F_{//} = N * \cos 27^\circ = 0.891 * N$$

$$F_{\perp} = N * \sin 27^\circ = 0.454 * N$$

Toelaatbare druk op D30 onder een hoek van 90° bij belastingduurklasse "blijvend" bedraagt: $F_{c;90;d} = 3.69 \text{ N/mm}^2$.

Gerekend wordt met een wrijvingscoëfficiënt van $\mu = 0.25$ voor hout op hout.

Maatgevend is druk loodrecht vezel onder de stalen borgplaat:

Opneembare trekkracht door 2 draadeinden M30 (4.6) op trek bedraagt:
 $2 * 161.6 \text{ kN} = 323.2 \text{ kN}$

Op druk loodrecht:

$$F_{2\perp,max} = 3.69 * 275 * 300 / 1000 = 304.4 \text{ kN en daarmee,}$$

$$F_{//,max} = 304.4 \text{ kN} * \sin 27^\circ = 138.2 \text{ kN en}$$

$$F_{\perp} = 138.2 / 0.891 * 0.454 = 70.4 \text{ kN en}$$

$$F_{\perp, \text{supp}} = 138.2 / \sin 27^\circ * \cos 27^\circ = 272.4 \text{ kN}$$

oor wrijving opgenomen: $(70.4 + 272.4) * 0.25 = 85.7 \text{ kN}$

$$F_{//,netto} = 138.2 \text{ kN} - 85.7 = 52.5 \text{ kN}$$

Zo is iteratief te bepalen dat:

$$N_{max} = 265.3 \text{ kN, dan}$$

$$F_{\perp} = 265.3 * 0.454 = 120.4 \text{ kN met hierdoor}$$

$$120.4 * 0.25 = 30.1 \text{ kN wrijving en}$$

$$F_{//,netto} = 265.3 * 0.891 - 30.1 - (272.4 * 0.25) = 138.2 \text{ kN}$$

Controle druk loodrecht op vlak tussen schoor en dekbalk:

$$F_{c;90;d} = \frac{(272.4 + 265.3 * 0.454) * 1000}{(275 * 370 / \sin 27^\circ)} = 1.77 \text{ N/mm}^2 \leq 3.69$$

Belastingduurklasse blijvend: $F_{c;90;d} = 3.69 \text{ N/mm}^2$ en $N_{\max} = 265.3 \text{ kN}$
Belastingduurklasse middellang: $F_{c;90;d} = 4.92 \text{ N/mm}^2$ en $N_{\max} = 276.3 \text{ kN}$
(2-M30 maatgevend)
Belastingduurklasse kort: $F_{c;90;d} = 5.54 \text{ N/mm}^2$ en $N_{\max} = 267.3 \text{ kN}$
(2-M30 maatgevend)

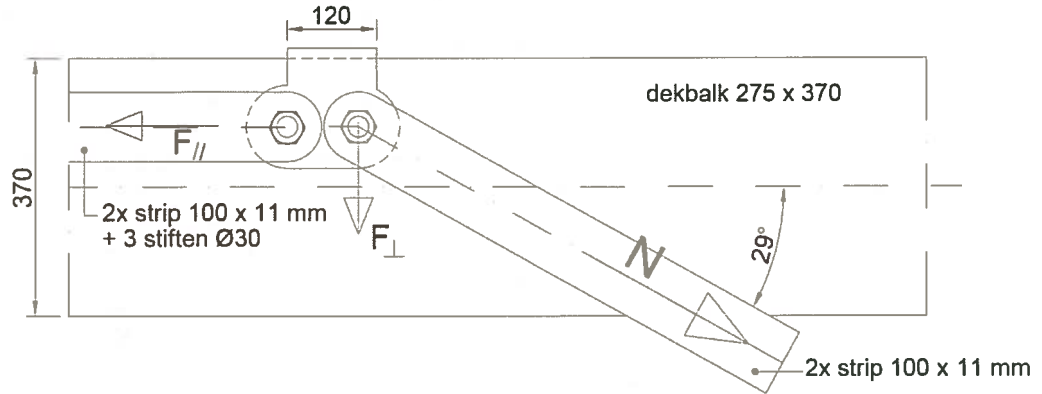
Controle verbinding voor de staven 173 en 202:

Belastingduurklasse blijvend: $N_{;d} = -206.2 \text{ kN}$, $N_{\max} = -265.3 \text{ kN}$ u.c. = 0.78
Belastingduurklasse kort: $N_{;d} = -243.0 \text{ kN}$, $N_{\max} = -267.3 \text{ kN}$ u.c. = 0.91

Aansluiting op trek:

In de genoemde staven komt bij geen enkele belastingcombinatie trek op de verbinding voor.

Detail C- Aansluiting staalconstructie (trekstaaf) op dekbalk zoldergebint.
Staven 177, en 198.



Figuur 23

Toelaatbare kracht N op trek:

$$F_{//} = N * \cos 29^\circ = 0.875 * N$$

$$F_{\perp} = N * \sin 29^\circ = 0.485 * N$$

Toelaatbare druk op D30 onder een hoek van 90°

bij belastingsduurklasse "blijvend" bedraagt: $F_{c;20;d} = 3.69 \text{ N/mm}^2$.

Daarmee is $F_{\perp,max}$	=	$3.69 * 275 \text{ mm} * 120 \text{ mm} / 1000$	=	121.8 kN en,
N_{max}	=	$121.8 \text{ kN} / 0.485$	=	251.0 kN
$F_{//}$	=	$251.0 * 0.875$	=	219.6 kN

Toelaatbare afschuiving 3 stiften Ø30 bij belastingsduurklasse "blijvend" bedraagt

$F_{v,d}$	=	25.16 kN (zie berekening volgende bladzijde) en daarmee:
$F_{//,max}$	=	$2 * 3 * 25.16 \text{ kN}$ = 151.0 kN en,
N_{max}	=	$151.0 \text{ kN} / 0.875$ = 172.5 kN
F_{\perp}	=	$172.5 * 0.485$ = 83.7 kN

Belastingduurklasse blijvend:	$F_{v;d} = 25.16 \text{ kN}$ en $N_{max} =$	172.5 kN
Belastingduurklasse middellang:	$F_{v;d} = 33.55 \text{ kN}$ en $N_{max} =$	230.0 kN
Belastingduurklasse kort:	$F_{v;d} = 37.75 \text{ kN}$ en $N_{max} =$	258.9 kN

Controle verbinding voor de staven 177 en 198:

Aansluiting staalconstructie op dekbalk zoldergebint afschuiving stiften maatgevend boven druk loodrecht vezel.

Belastingduurklasse blijvend:	$N_{;d} = 88.4 \text{ kN}$, $N_{max} =$	172.5 kN	u.c. = 0.51
Belastingduurklasse kort:	$N_{;d} = 119.0 \text{ kN}$, $N_{max} =$	258.9 kN	u.c. = 0.46

NEN EN 1995-1-1:2011 art. 8.2.3

Staal-op-houtverbindingen: karakteristieke sterkte voor een dubbel schuifvlak

Belastingduurklasse:	Blijvend	boutkwaliteit =	8.8
Type verbindingmiddel:	stift	$f_{u,k} =$	800 N/mm ²
Laag:	(1) (2)	$d = d_{ef} =$	30.0 mm
Kwaliteit:	S235 D30	$\gamma_M =$	1.30 : verbindingen
Klimaatklasse:	1	$M_{y,Rk} =$	1662365 Nmm
Materiaal:	staalplaat gezaagd hout	$\rho_{k,i}$ [kg/m ³]:	530
Materiaal type:	loofhout	Dikte t_i [mm]:	11 275
Vorgeboorde gaten:	ja	α [°]:	90
$f_{h,i(\alpha),k}$ [N/mm ²]:			22.53
Voor dunne ($t_1 < 0$)	$k_{mod,i}$:	1.00	0.60

$$F_{v,Rd} = [0,5 \cdot f_{h,\alpha,k,2} \cdot t_2 \cdot d] \cdot \frac{k_{mod,2}}{\gamma_M} = 42.90 \text{ kN} \quad \text{Mech.(j)}$$

$$F_{v,Rd} = \left[1,15 \cdot \sqrt{2 \cdot M_{y,Rk} \cdot f_{h,\alpha,k,2} \cdot d + \frac{F_{ax,Rk}}{4}} \right] \cdot \frac{k_{mod,2}}{\gamma_M} = 25.16 \text{ kN} \quad \text{Mech.(k)}$$

Voor dikke ($t_1 > d$) staalplaten geldt: (54.52 + 0.00) · 0.46

$$F_{v,Rd} = [0,5 \cdot f_{h,\alpha,k,2} \cdot t_2 \cdot d] \cdot \frac{k_{mod,2}}{\gamma_M} = 42.90 \text{ kN} \quad \text{Mech.(l)}$$

$$F_{v,Rd} = \left[2,3 \cdot \sqrt{M_{y,Rk} \cdot f_{h,\alpha,k,2} \cdot d + \frac{F_{ax,Rk}}{4}} \right] \cdot \frac{k_{mod,1}}{\gamma_M} = 59.31 \text{ kN} \quad \text{Mech.(m)}$$

(77.10 + 0.00) · 0.77

als $t_1 \leq 0,5 \cdot d$	$F_{v,Rd} =$	25.16 kN	Mech.(k)
als $t_1 \geq d$:	$F_{v,Rd} =$	42.90 kN	Mech.(l)
Maatgevend: Mech.(k)	$F_{v,Rd} =$	25.16 kN per schuifvlak	

Detail D, Aansluiting spantbeen op metselwerk.

Staven 214, en 215.

Gerekend wordt met wrijvingscoëfficiënt $\mu = 0.45-0,60$ voor hout op metselwerk.Reactiekracht uit spantbeen $R_d = 0.90 \times 41,9 \text{ kN} = 37.70 \text{ kN}$ Opneembaar aan horizontale belasting $F_{h,d;\min} = 0.45 \times 37.7 \text{ kN} = 17 \text{ kN}$ $F_{h,d;\min} = 0.60 \times 37.7 \text{ kN} = 23 \text{ kN}$

Zonder verdere bevestiging, welke ongetwijfeld aanwezig zal zijn, kan minimaal een horizontale kracht van 17kN worden opgenomen door wrijving.

De windbelasting vanuit het metselwerkpenant zal worden afgedragen naar het hoofdspant en tevens dient de horizontaalbelasting van uit de tussenspanen worden opgenomen.

Rustende belasting $F_{h,d} = 13.27 \times 1,10 = 14.6 \text{ kN}$ Windbelasting (zuiging) $F_{h,d} = 11.40 \times 1,30 = \underline{14.8 \text{ kN}}$ $29,4 \text{ kN} > 17 \text{ kN}.$

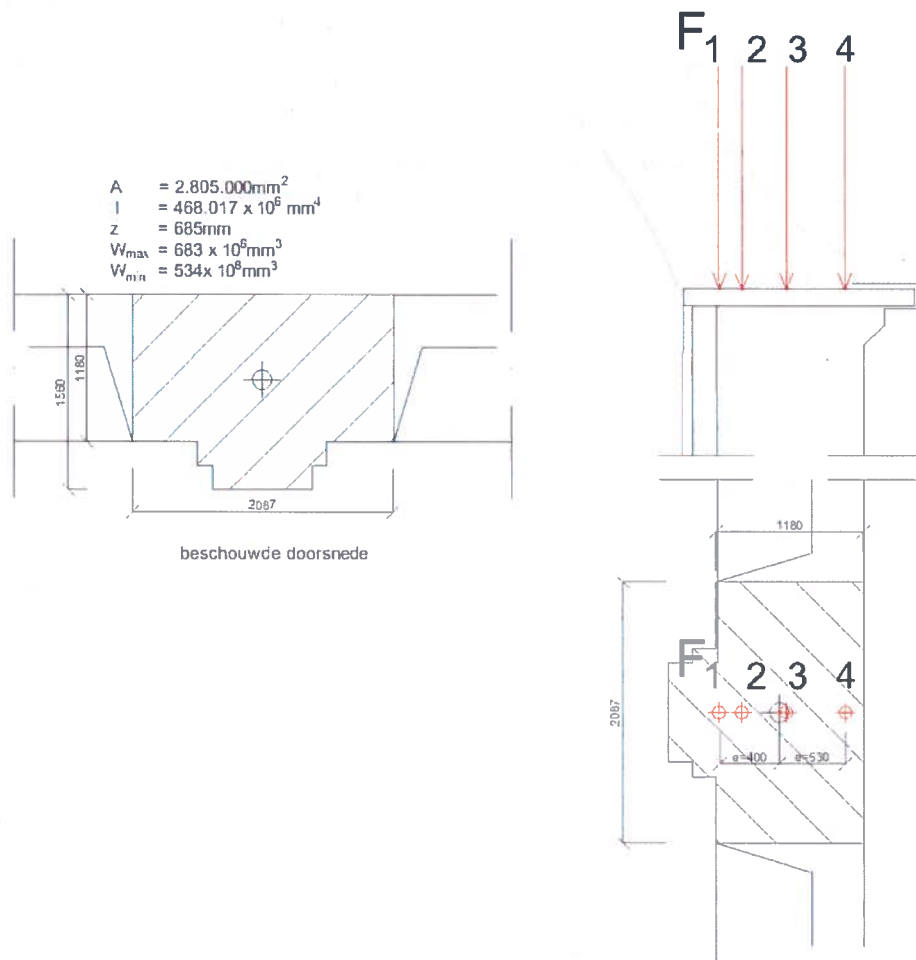
Naast wrijving zal er bevestiging van de spantbeen aan het metselwerk penant aanwezig zijn, waardoor de horizontaal belasting opgenomen kan worden. Nader (destructief) onderzoek zal ter plaatse van spantbeen aansluiting moeten uitwijzen hoe deze verbinding is uitgevoerd.

Het hoofdspant is gecontroleerd met de horizontaal belasting van circa 30kN en het metselwerkpenant is in staat om circa 14 kN horizontaal op te nemen.

Metselwerk penant

Voor de control-berekening van het hoofdspant is het metselwerk penant als pendel geschematiseerd (aangehouden bezwijkmechnisme).

In de onderstaande beschouwing wordt de theoretische horizontaal belasting en de optredende spanningen inzichtelijk gemaakt.



Figuur 24

RZ;1 (hoofdspant)		= 41,90 kN (e= 400mm)
RZ;2 (tussenspanen)	6 stuks x 2.60kN	= 15,60 kN (e= 230mm)
RZ;3 (dakvlak)	6,50m x 4,05kN/m'	= 26,35 kN (e= -60mm)
RZ;4 (metselwerk boven raam)	1,50m x 0,30x 2,163m x <u>18,5</u>	= <u>18,00 kN</u> (e=-530mm)
RZ;totaal (1+2+3+4)		=101,85 kN (e = 80mm)

$$M = 41,90 \times 0,400 + 15,60 \times 0,230 - 26,35 \times 0,060 - 18,00 \times 0,530 = 9,23 \text{ kNm}$$

N / A	= 101.85 / 2.805.000	= 0,036 N/mm ² (druk)
M/ W _{min}	= 9,23 x 10 ⁶ / 534 x 10 ⁶	= 0,017 N/mm ² (druk)
M/ W _{max}	= 9,23 x 10 ⁶ / -683 x 10 ⁶	= -0,013 N/mm ² (trek)

Spanning binnenzijde penant	= 0,053 N/mm ² (druk)
Spanning buitenzijde penant	= 0,022 N/mm ² (druk)

Capaciteit van de penant

Uitgangspunt is geen trek in het metselwerk en maximale druk $f'_{rep} = 2,55 \text{ N/mm}^2$ (metselmortel M5- aangehouden voor metselmortel met kalk).

RZ; ₁₊₂₊₃₊₄	= 101,85 kN
RZ;5 (metselwerk boven raam)	= 18,00 kN
RZ;penant	= <u>389,20 kN</u>
RZ;totaal	= 508,05 kN

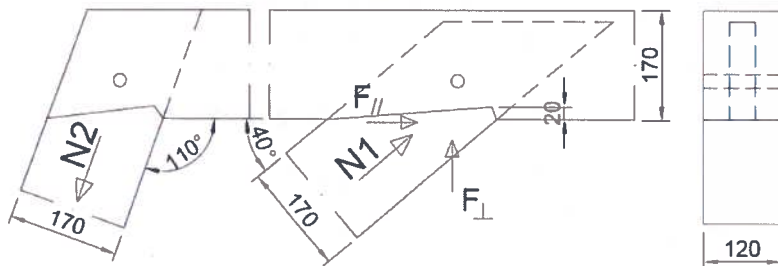
$$M \text{ totaal} = 9,23 + (-14,10 \times 7,50\text{m}) = -96,52 \text{ kNm}$$

N / A	= 506.05 / 2.805.000	= 0,181 N/mm ² (druk)
M/ W	= -96,52 x 10 ⁶ / 534 x 10 ⁶	= -0,181 N/mm ² (trek)
M/ W	= -96,52 x 10 ⁶ / -683 x 10 ⁶	= 0,141 N/mm ² (druk)

Spanning binnenzijde penant	= 0,000 N/mm ² (druk)
Spanning buitenzijde penant	= 0,322 N/mm ² (druk)

Het penant is in staat om theoretisch $F_{\text{horizontaal}} = 14,10 \text{ kN}$ tegen reactie te geven, zonder trekspanning in de doorsnede aan de voet van het penant.

Detail E
Aansluitingen tussenspant op druk en trek

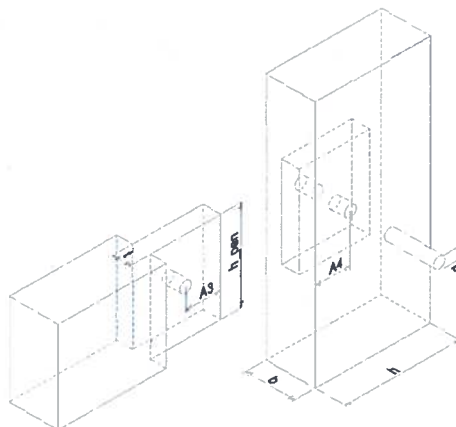


Figuur 25

Toelaatbare kracht N2 op trek:
Belastbaarheid pen en gat verbindingen.

- aantal stiften: n = 1 stuks
- Stift diameter d.= (Ø): 20 mm
- dikte pen: t = 40 mm
- hoogte pen: h_pen = 170 mm
- randafstand: a3 = 100 mm
- randafstand: a4 = 60 mm
- hoogte stijl met gat: h = 170 mm
- breedte stijl met gat: b = 120 mm

- Rho pen: 500 kg/m³
- Rho houten delen: 530 kg/m³
- schuifspanning hout: 4 N/mm²
- trekspanning hout: 18 N/mm²



afschuiving pen: $V \leq 33 * d * t * (G_{pen}/1000)^{0,93} * (G_{hout}/1000)^{0,78} = 8.44 \text{ kN/snede}$ totaal 16.9 kN

Afschuiven hout pen achter stift: $T1 \leq 2 * a_3 * t * f_v = 32.00 \text{ kN/stift}$ 32.0 kN

Bezwijken pen op trek: $T2 \leq (h_{pen} - n * d) * t * f_{t,0} = 108.00 \text{ kN}$ 108.0 kN

Bezwijken stijl voor stift: $T3 \leq 14 * b * \sqrt{\frac{a_4}{1 - \frac{a_4}{h}}} = 16.18 \text{ kN}$ 16.2 kN

$F_{v,k} =$ 16.2 kN

$F_{v,d} =$ 7.5 kN blijvend

$F_{v,d} =$ 10.0 kN middellang

$F_{v,d} =$ 11.2 kN kort

Controle verbinding tussenspant:

Staven 3 en 14:

Belastingduurklasse blijvend: $N_{2;d} = 1.1 \text{ kN}$, $N_{max} = 7.5 \text{ kN}$ u.c. = 0.15.

Belastingduurklasse kort: $N_{2;d} = 3.1 \text{ kN}$, $N_{max} = 11.2 \text{ kN}$ u.c. = 0.28

Aansluiting op druk:

In de genoemde staven komt bij geen enkele belastingcombinatie druk op de verbinding voor.

Toelaatbare kracht op druk:

$$F_{//} = N1 * \cos 40^\circ = 0.766 * N$$

$$F_{\perp} = N1 * \sin 40^\circ = 0.643 * N$$

Toelaatbare druk op D30 onder een hoek van $40/2 = 20^\circ$

bij belastingsduurklasse "blijvend" bedraagt: $F_{c;20;d} = 8.71 \text{ N/mm}^2$.

Toelaatbare druk op D30 onder een hoek van $90-20 = 70^\circ$

bij belastingsduurklasse "blijvend" bedraagt: $F_{c;70;d} = 4.00 \text{ N/mm}^2$.

Daarmee is $F_{//;max} =$	$8.71 * (120-40) \text{ mm} * 20 \text{ mm} / 1000 = 13.9 \text{ kN}$	en,
$N1_{max} =$	$13.9 \text{ kN} / 0.766 =$	18.2 kN
$F_{\perp} =$	$18.2 * 0.643 =$	11.7 kN

Minimaal benodigd lengte drukvlak:

$$11.7 \times 10^3 \text{ N} / (4.0 \text{ N/mm}^2 * (120-50) \text{ mm}) = 37 \text{ mm. Ruim aanwezig!}$$

Belastingduurklasse blijvend: $F_{c;20;d} = 8.71 \text{ N/mm}^2$ en $N1_{max} = 18.2 \text{ kN}$

Belastingduurklasse middellang: $F_{c;20;d} = 11.61 \text{ N/mm}^2$ en $N1_{max} = 24.3 \text{ kN}$

Belastingduurklasse kort: $F_{c;20;d} = 13.06 \text{ N/mm}^2$ en $N1_{max} = 27.3 \text{ kN}$

Controle verbinding tussenspant:

Staven 5 en 12:

Belastingduurklasse blijvend: $N1_{,d} = -5.8 \text{ kN}$, $N_{max} = 18.2 \text{ kN}$ u.c. = 0.32.

Belastingduurklasse kort: $N1_{,d} = -11.9 \text{ kN}$, $N_{max} = 27.3 \text{ kN}$ u.c. = 0.44

