



9504 Frittschen, 15.01.10

Letrona AG
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Statische Berechnung Gittermast

Bauherr: Botschaftsfunk New Delhi
Bauobjekt: 12m Aluminium Gittermast, 2x abgespannt
Bauvorhaben: L120-G3-50-3.3kN-2

Belastungen: Antennenlasten bei Windgeschwindigkeit $v = 130 \text{ km/h}$

Belegung: Antenne Model LP-1017 H= 12.00m W=3000N
Rotor Typ T-3501 H= 12.00m W= 300N

Berechnungsgrundlagen:

- Standort: Botschaftsfunk New Delhi
- Baumaterial: Eckstiel-Rohre: Aluminium Anticorodal AlMgSi1 F31, EN AW-6082 T6
Ausfachung: Aluminium Anticorodal AlMgSi0.5 F22, EN AW-6060 T66
Abspannseile: Inox-Seil SE, AISI 316, DIN 1.4401 Firma Jakob
Schrauben nicht rostend A2-70
- Belastungen
 - Horizontal:**
Antennenbelegung gemäss Angabe Kunde (siehe oben)
Windlasten: nach DIN 4131
Windgeschwindigkeit $v = 130 \text{ km/h}$, Tragsicherheit
Beiwerte für Fachwerkkonstruktion nach DIN 4131

Die Windlast auf den Gittermast (gesamtes Fachwerk) wird als Gleichlast gleichmässig über die Eckstiele angesetzt.
 - Vertikal:**
Eigengewicht Tragwerk:
Durch Berechnungssoftware direkt in Rechnung eingeführt.
Antennen: gemäss Angabe Kunde
- Vereisung: Berechnung ohne Vereisung
- Nachweis: Die Berechnung erfolgt mit der Software Rstab nach FEM-Methode. Es wird nach Theorie I. Ordnung und Theorie II. Ordnung (alle Lasten mit Faktor 1.5) gerechnet. Struktur gemäss beiliegendem Computeroutput. Lastfälle und Lastfallgruppen sowie Spannungsnachweis siehe beiliegende Zusammenstellungen. Die Elementverbindungen erfolgen durch Verschraubungen.

Letrona AG
D. Bosshard, Dipl. Ing. FH



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GRAFIK

Projekt: Namenlos

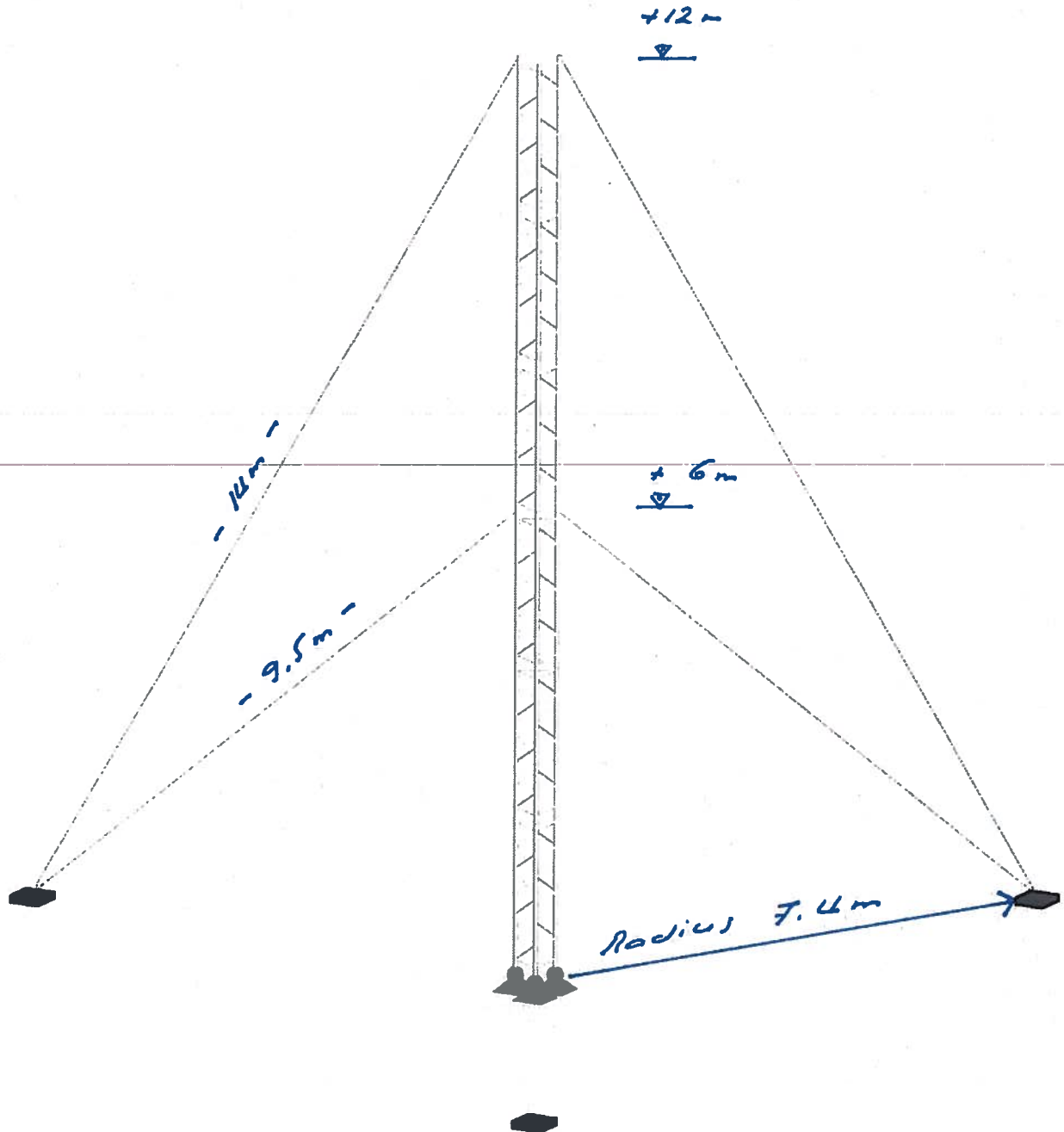
Position: Botschaftsfunk New Delhi R-Stab
Glittermasten L120-G3-50-3.5kN-2

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11.02.2010

STRUKTUR

Isometrie



Projekt: ... *Netzhautsfunke* *Netzhaut* ~~Tafel~~ ...

Windlast LP-1017

$$v = 130 \text{ km/h}$$

$$v_{\max} = 130 \text{ km/h} \Rightarrow q_0 = 0.815 \text{ kN/m}^2$$

$$A = 3.09 \text{ m}^2$$

$$W = 1.2 \times 3.09 \text{ m}^2 \times 0.815 = 3.0 \text{ kN}$$

$$V = 173 \text{ kg}$$

Fachwerk Eigenwind

$$v = 130 \text{ km/h}$$

$$W = \frac{130^2}{150^2} \times 300 \text{ N/m} = 225 \text{ N/m}$$

$$\underline{\underline{\text{pro Eckstiel} = 75 \text{ N/m}}}$$

T-3501 Motor

$$L = 0.5 \text{ m} \times 0.6 \text{ m} \times 1.2 \times 0.815 = 300 \text{ N}$$

$$V = 1.5 \text{ kN}$$

DIN 4131

Windlasten $v = 150 \text{ km/h}$, unverst

$$q_{pe} = 1.085 \text{ kN/m}^2$$

$$\underline{q = 0.75 \times \left(1 + \frac{22}{100}\right) \times 1.085 = 1.0 \text{ kN/m}^2}$$

• Eigenwind Fachwerk

$$Re = \frac{v \cdot d_i}{1.5 \times 10^{-5}} = \frac{40 \times 0.06}{1.5 \times 10^{-5}} = 160'000 \Rightarrow \overset{\text{A.7.}}{c_{pe} = 1.5}$$

$$v = 40 \times \sqrt{q} = 40 \times \sqrt{1.0} = 40 \text{ m/s}$$

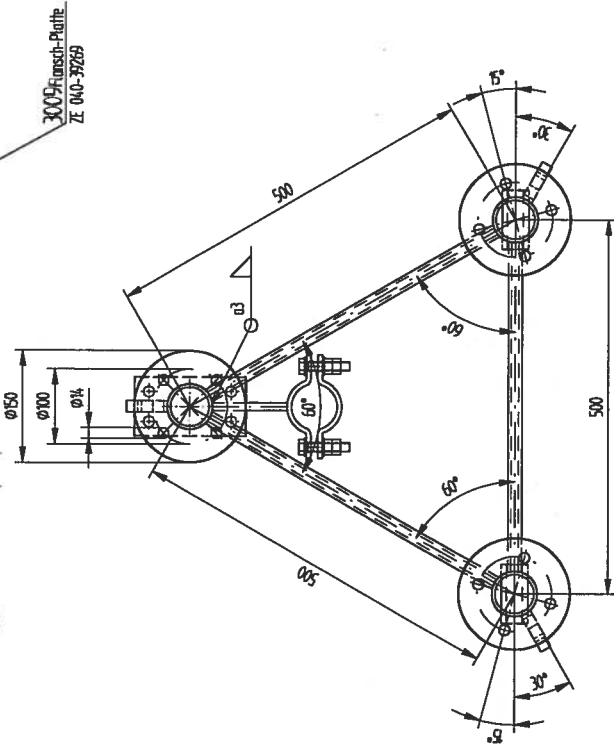
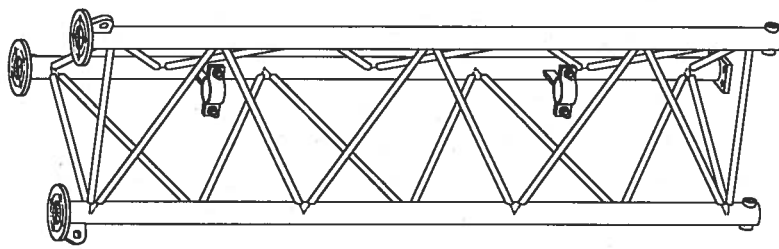
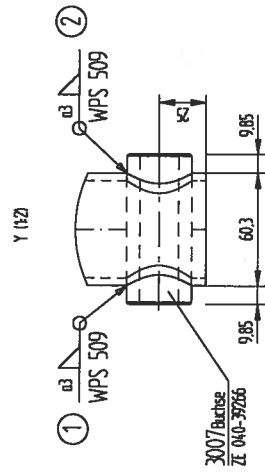
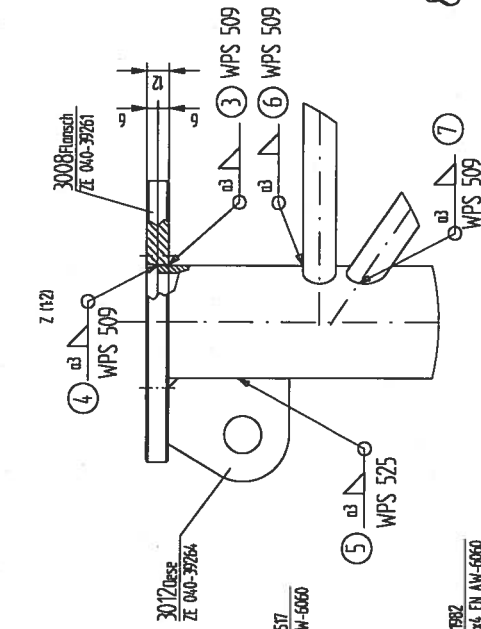
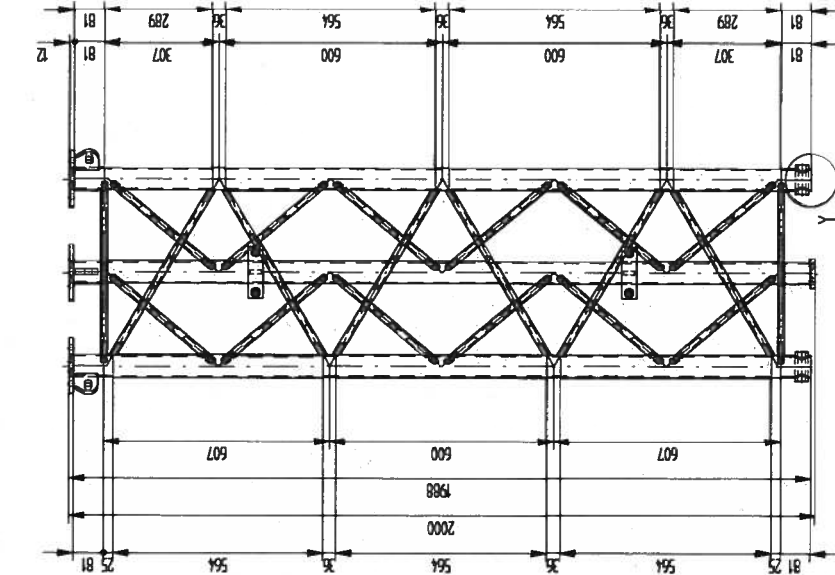
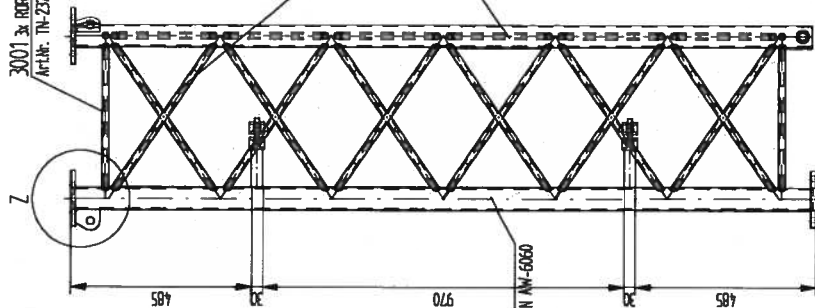
$$\frac{A}{A_e} = 0.28, \quad \lambda = \frac{h}{d} = \frac{22 \text{ m}}{0.56} = 39.3 \Rightarrow \underline{\underline{\mu = 0.96}}$$

$$\underline{c_{fi} = 0.96 \times 1.5 = 1.44}$$

$$\underline{w = 1.44 \times 1.0 \text{ kN/m}^2 \times \frac{5 \times 0.06 \text{ m} + 10 \times 0.018 \text{ m} \times 0.5 \text{ m}}{2.5 \text{ m}}} = \underline{\underline{225 \text{ N/m}'}}$$

$$\rightarrow \underline{\text{pro Eckstiel}} \quad 75 \text{ N/m}' + \overset{\text{Kabel}}{25 \text{ N}} = \underline{\underline{100 \text{ N/m}'}}$$

3001 3x RDR 80x4 - 443
Art.Nr. TN-2373 EN AW-6060



Titel: Gittermast
Bezeichnung: Gittermast-Element Basis
Typ: GE-3-50-50-200-60-18
Kunde: Eid. Dep. für Verteidigung, Bevölkerungsschutz
Standort: Botschaftsfunk Kairo
SITE -Nr.:

Gezeichnet	Freigegeben	Revisiert	13.04.2010
Freigegeben	Freigegeben	Freigegeben	13.04.2010
Gezeichnet	Freigegeben	Revisiert	10/00039
Freigegeben	Freigegeben	Freigegeben	15
Gezeichnet	Freigegeben	Revisiert	15
Freigegeben	Freigegeben	Freigegeben	15

Die Zeichnung ist gezeichnet worden auf Grundlage der Zeichnung der Bauteile, die in der Zeichnung angegeben sind. Die Zeichnung ist nicht verbindlich, wenn sie nicht mit der Zeichnung übereinstimmt.

Fluss-Nr.:

130 - 54459 - 0

130 - 54459 - 0



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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BASISANGABEN

BERECHNUNGSART

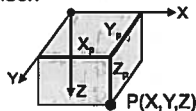
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| ☒ Statik | ☒ Theorie I. Ordnung |
| ☐ Nachweis | ☒ Theorie II. Ordnung |
| ☒ Dynamik | ☒ Seiltheorie |
| ☒ Lastfälle | ☒ Bemessungsfälle |
| ☒ LF-Gruppen | ☒ Dynamikfälle |
| ☒ LF-Kombinationen | ☐ Knickfiguren |

STRUKTURKENNWERTE

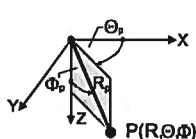
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|---|------------------|--------------------|
| ☐ 1D-Durchlaufträger | 198 Knoten | 294 Stäbe |
| ☐ 2D-Stabwerk | 3 Materialien | 6 Seilstäbe |
| ☒ 3D-Stabwerk | 3 Querschnitte | 0 Voutenstäbe |
| ☐ Trägerrost | 0 Stabendgelenke | 0 El. gebet. Stäbe |
| | 0 Stabteilungen | 0 Stabzüge |

STRUKTUR

Kartesisch



Polar



KNOTEN

Knoten-Nr.	Koordinaten-system	Bezugs-Knoten	X, R [m]	Knotenkoordinaten Y, theta [m, °]	Z, phi [m, °]
1	Kugelförmig	-	0.289	0.000	-90.000
2	Kugelförmig	-	0.289	120.000	-90.000
3	Kugelförmig	-	0.289	240.000	-90.000
4	Kartesisch	-	0.000	0.000	-0.100
5	Kugelförmig	4	0.289	0.000	-90.000
6	Kugelförmig	4	0.289	120.000	-90.000
7	Kugelförmig	4	0.289	240.000	-90.000
8	Kartesisch	-	0.000	0.000	-0.400
9	Kugelförmig	8	0.289	0.000	-90.000
10	Kugelförmig	8	0.289	120.000	-90.000
11	Kugelförmig	8	0.289	240.000	-90.000
12	Kartesisch	-	0.000	0.000	-0.700
13	Kugelförmig	12	0.289	0.000	-90.000
14	Kugelförmig	12	0.289	120.000	-90.000
15	Kugelförmig	12	0.289	240.000	-90.000
16	Kartesisch	-	0.000	0.000	-1.000
17	Kugelförmig	16	0.289	0.000	-90.000
18	Kugelförmig	16	0.289	120.000	-90.000
19	Kugelförmig	16	0.289	240.000	-90.000
20	Kartesisch	-	0.000	0.000	-1.300
21	Kugelförmig	20	0.289	0.000	-90.000
22	Kugelförmig	20	0.289	120.000	-90.000
23	Kugelförmig	20	0.289	240.000	-90.000
24	Kartesisch	-	0.000	0.000	-1.600
25	Kugelförmig	24	0.289	0.000	-90.000
26	Kugelförmig	24	0.289	120.000	-90.000
27	Kugelförmig	24	0.289	240.000	-90.000
28	Kartesisch	-	0.000	0.000	-1.900



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STRUKTUR

Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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KNOTEN

Knoten-Nr.	Koordinaten-system	Bezugs-Knoten	X,R [m]	Knotenkoordinaten Y,Θ [m,°]	Z,Φ [m,°]
29	Kugelförmig	28	0.289	0.000	-90.000
30	Kugelförmig	28	0.289	120.000	-90.000
31	Kugelförmig	28	0.289	240.000	-90.000
32	Kartesisch	-	0.000	0.000	-2.000
33	Kugelförmig	32	0.289	0.000	-90.000
34	Kugelförmig	32	0.289	120.000	-90.000
35	Kugelförmig	32	0.289	240.000	-90.000
36	Kartesisch	-	0.000	0.000	-2.100
37	Kugelförmig	36	0.289	0.000	-90.000
38	Kugelförmig	36	0.289	120.000	-90.000
39	Kugelförmig	36	0.289	240.000	-90.000
40	Kartesisch	-	0.000	0.000	-2.400
41	Kugelförmig	40	0.289	0.000	-90.000
42	Kugelförmig	40	0.289	120.000	-90.000
43	Kugelförmig	40	0.289	240.000	-90.000
44	Kartesisch	-	0.000	0.000	-2.700
45	Kugelförmig	44	0.289	0.000	-90.000
46	Kugelförmig	44	0.289	120.000	-90.000
47	Kugelförmig	44	0.289	240.000	-90.000
48	Kartesisch	-	0.000	0.000	-3.000
49	Kugelförmig	48	0.289	0.000	-90.000
50	Kugelförmig	48	0.289	120.000	-90.000
51	Kugelförmig	48	0.289	240.000	-90.000
52	Kartesisch	-	0.000	0.000	-3.300
53	Kugelförmig	52	0.289	0.000	-90.000
54	Kugelförmig	52	0.289	120.000	-90.000
55	Kugelförmig	52	0.289	240.000	-90.000
56	Kartesisch	-	0.000	0.000	-3.600
57	Kugelförmig	56	0.289	0.000	-90.000
58	Kugelförmig	56	0.289	120.000	-90.000
59	Kugelförmig	56	0.289	240.000	-90.000
60	Kartesisch	-	0.000	0.000	-3.900
61	Kugelförmig	60	0.289	0.000	-90.000
62	Kugelförmig	60	0.289	120.000	-90.000
63	Kugelförmig	60	0.289	240.000	-90.000
64	Kartesisch	-	0.000	0.000	-4.000
65	Kugelförmig	64	0.289	0.000	-90.000
66	Kugelförmig	64	0.289	120.000	-90.000
67	Kugelförmig	64	0.289	240.000	-90.000
68	Kartesisch	-	0.000	0.000	-4.100
69	Kugelförmig	68	0.289	0.000	-90.000
70	Kugelförmig	68	0.289	120.000	-90.000
71	Kugelförmig	68	0.289	240.000	-90.000
72	Kartesisch	-	0.000	0.000	-4.400
73	Kugelförmig	72	0.289	0.000	-90.000
74	Kugelförmig	72	0.289	120.000	-90.000
75	Kugelförmig	72	0.289	240.000	-90.000
76	Kartesisch	-	0.000	0.000	-4.700
77	Kugelförmig	76	0.289	0.000	-90.000
78	Kugelförmig	76	0.289	120.000	-90.000
79	Kugelförmig	76	0.289	240.000	-90.000
80	Kartesisch	-	0.000	0.000	-5.000
81	Kugelförmig	80	0.289	0.000	-90.000
82	Kugelförmig	80	0.289	120.000	-90.000
83	Kugelförmig	80	0.289	240.000	-90.000
84	Kartesisch	-	0.000	0.000	-5.300
85	Kugelförmig	84	0.289	0.000	-90.000
86	Kugelförmig	84	0.289	120.000	-90.000
87	Kugelförmig	84	0.289	240.000	-90.000
88	Kartesisch	-	0.000	0.000	-5.600
89	Kugelförmig	88	0.289	0.000	-90.000
90	Kugelförmig	88	0.289	120.000	-90.000
91	Kugelförmig	88	0.289	240.000	-90.000
92	Kartesisch	-	0.000	0.000	-5.900
93	Kugelförmig	92	0.289	0.000	-90.000
94	Kugelförmig	92	0.289	120.000	-90.000
95	Kugelförmig	92	0.289	240.000	-90.000
96	Kartesisch	-	0.000	0.000	-6.000
97	Kugelförmig	96	0.289	0.000	-90.000
98	Kugelförmig	96	0.289	120.000	-90.000
99	Kugelförmig	96	0.289	240.000	-90.000
100	Kartesisch	-	0.000	0.000	-6.100
101	Kugelförmig	100	0.289	0.000	-90.000
102	Kugelförmig	100	0.289	120.000	-90.000
103	Kugelförmig	100	0.289	240.000	-90.000
104	Kartesisch	-	0.000	0.000	-6.400
105	Kugelförmig	104	0.289	0.000	-90.000
106	Kugelförmig	104	0.289	120.000	-90.000
107	Kugelförmig	104	0.289	240.000	-90.000
108	Kartesisch	-	0.000	0.000	-6.700
109	Kugelförmig	108	0.289	0.000	-90.000
110	Kugelförmig	108	0.289	120.000	-90.000
111	Kugelförmig	108	0.289	240.000	-90.000
112	Kartesisch	-	0.000	0.000	-7.000
113	Kugelförmig	112	0.289	0.000	-90.000
114	Kugelförmig	112	0.289	120.000	-90.000
115	Kugelförmig	112	0.289	240.000	-90.000
116	Kartesisch	-	0.000	0.000	-7.300
117	Kugelförmig	116	0.289	0.000	-90.000



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Gittermasten L120-G3-50-3.5kN-2

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26.07.2010

KNOTEN

Knoten-Nr.	Koordinaten-system	Bezugs-Knoten	X,R [m]	Knotenkoordinaten Y,Θ [m,°]	Z,Φ [m,°]
118	Kugelförmig	116	0.289	120.000	-90.000
119	Kugelförmig	116	0.289	240.000	-90.000
120	Kartesisch	-	0.000	0.000	-7.600
121	Kugelförmig	120	0.289	0.000	-90.000
122	Kugelförmig	120	0.289	120.000	-90.000
123	Kugelförmig	120	0.289	240.000	-90.000
124	Kartesisch	-	0.000	0.000	-7.900
125	Kugelförmig	124	0.289	0.000	-90.000
126	Kugelförmig	124	0.289	120.000	-90.000
127	Kugelförmig	124	0.289	240.000	-90.000
128	Kartesisch	-	0.000	0.000	-8.000
129	Kugelförmig	128	0.289	0.000	-90.000
130	Kugelförmig	128	0.289	120.000	-90.000
131	Kugelförmig	128	0.289	240.000	-90.000
132	Kartesisch	-	0.000	0.000	-8.100
133	Kugelförmig	132	0.289	0.000	-90.000
134	Kugelförmig	132	0.289	120.000	-90.000
135	Kugelförmig	132	0.289	240.000	-90.000
136	Kartesisch	-	0.000	0.000	-8.400
137	Kugelförmig	136	0.289	0.000	-90.000
138	Kugelförmig	136	0.289	120.000	-90.000
139	Kugelförmig	136	0.289	240.000	-90.000
140	Kartesisch	-	0.000	0.000	-8.700
141	Kugelförmig	140	0.289	0.000	-90.000
142	Kugelförmig	140	0.289	120.000	-90.000
143	Kugelförmig	140	0.289	240.000	-90.000
144	Kartesisch	-	0.000	0.000	-9.000
145	Kugelförmig	144	0.289	0.000	-90.000
146	Kugelförmig	144	0.289	120.000	-90.000
147	Kugelförmig	144	0.289	240.000	-90.000
148	Kartesisch	-	0.000	0.000	-9.300
149	Kugelförmig	148	0.289	0.000	-90.000
150	Kugelförmig	148	0.289	120.000	-90.000
151	Kugelförmig	148	0.289	240.000	-90.000
152	Kartesisch	-	0.000	0.000	-9.600
153	Kugelförmig	152	0.289	0.000	-90.000
154	Kugelförmig	152	0.289	120.000	-90.000
155	Kugelförmig	152	0.289	240.000	-90.000
156	Kartesisch	-	0.000	0.000	-9.900
157	Kugelförmig	156	0.289	0.000	-90.000
158	Kugelförmig	156	0.289	120.000	-90.000
159	Kugelförmig	156	0.289	240.000	-90.000
160	Kartesisch	-	0.000	0.000	-10.000
161	Kugelförmig	160	0.289	0.000	-90.000
162	Kugelförmig	160	0.289	120.000	-90.000
163	Kugelförmig	160	0.289	240.000	-90.000
164	Kartesisch	-	0.000	0.000	-10.100
165	Kugelförmig	164	0.289	0.000	-90.000
166	Kugelförmig	164	0.289	120.000	-90.000
167	Kugelförmig	164	0.289	240.000	-90.000
168	Kartesisch	-	0.000	0.000	-10.400
169	Kugelförmig	168	0.289	0.000	-90.000
170	Kugelförmig	168	0.289	120.000	-90.000
171	Kugelförmig	168	0.289	240.000	-90.000
172	Kartesisch	-	0.000	0.000	-10.700
173	Kugelförmig	172	0.289	0.000	-90.000
174	Kugelförmig	172	0.289	120.000	-90.000
175	Kugelförmig	172	0.289	240.000	-90.000
176	Kartesisch	-	0.000	0.000	-11.000
177	Kugelförmig	176	0.289	0.000	-90.000
178	Kugelförmig	176	0.289	120.000	-90.000
179	Kugelförmig	176	0.289	240.000	-90.000
180	Kartesisch	-	0.000	0.000	-11.300
181	Kugelförmig	180	0.289	0.000	-90.000
182	Kugelförmig	180	0.289	120.000	-90.000
183	Kugelförmig	180	0.289	240.000	-90.000
184	Kartesisch	-	0.000	0.000	-11.600
185	Kugelförmig	184	0.289	0.000	-90.000
186	Kugelförmig	184	0.289	120.000	-90.000
187	Kugelförmig	184	0.289	240.000	-90.000
188	Kartesisch	-	0.000	0.000	-11.900
189	Kugelförmig	188	0.289	0.000	-90.000
190	Kugelförmig	188	0.289	120.000	-90.000
191	Kugelförmig	188	0.289	240.000	-90.000
192	Kartesisch	-	0.000	0.000	-12.000
193	Kugelförmig	192	0.289	0.000	-90.000
194	Kugelförmig	192	0.289	120.000	-90.000
195	Kugelförmig	192	0.289	240.000	-90.000
196	Kugelförmig	-	7.400	0.000	-90.000
197	Kugelförmig	-	7.400	120.000	-90.000
198	Kugelförmig	-	7.400	240.000	-90.000



Letrona AG

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STRUKTUR

Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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MATERIALIEN

Mater.-Nr.	Material-Bezeichnung	E-Modul [N/mm ²]	Schubmodul [N/mm ²]	Sp. Gewicht [N/mm ³]	Wärmedehn. [1/°C]
1	Aluminium F 31	6.900E+04	2.700E+04	2.700E-05	2.340E-05
2	Drahtseil inox	1.000E+05	8.100E+04	7.850E-05	1.200E-02
3	Aluminium F 22	6.900E+04	2.700E+04	2.700E-05	2.340E-05

Rohr 60/4

Rohr 18/4



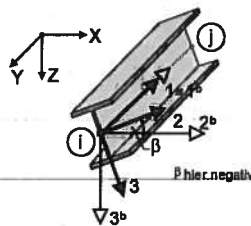
Rundstahl 6



QUERSCHNITTE

Quer.-Nr.	Mater.-Nr.	Querschnitts-Bezeichnung	I _T A	I ₂ A ₂	I ₃ [mm ⁴] A ₃ [mm ²]
1	1	Rohr 60/4	554529.703.7	277264.	277264.
2	3	Rohr 18/4	9324.175.9	4662.	4662.
3	2	Rundstahl 6	127.28.3	64.	64.

Lokales Stabachsensystem



STÄBE

Stab-Nr.	Stab-typ	Knoten Anf.	Knoten Ende	Beta [°]	Querschnitt Anf.	Querschnitt Ende	Gelenk Anf.	Gelenk Ende	Tell.-Nr.	Länge [m]	Stab-lage
1	Balken	1	5	0.0	1	1	-	-	-	0.100	VERT
2	Balken	5	9	0.0	1	1	-	-	-	0.300	VERT
3	Balken	9	13	0.0	1	1	-	-	-	0.300	VERT
4	Balken	13	17	0.0	1	1	-	-	-	0.300	VERT
5	Balken	17	21	0.0	1	1	-	-	-	0.300	VERT
6	Balken	21	25	0.0	1	1	-	-	-	0.300	VERT
7	Balken	25	29	0.0	1	1	-	-	-	0.300	VERT
8	Balken	29	33	0.0	1	1	-	-	-	0.100	VERT
9	Balken	2	6	0.0	1	1	-	-	-	0.100	VERT
10	Balken	6	10	0.0	1	1	-	-	-	0.300	VERT
11	Balken	10	14	0.0	1	1	-	-	-	0.300	VERT
12	Balken	14	18	0.0	1	1	-	-	-	0.300	VERT
13	Balken	18	22	0.0	1	1	-	-	-	0.300	VERT
14	Balken	22	26	0.0	1	1	-	-	-	0.300	VERT
15	Balken	26	30	0.0	1	1	-	-	-	0.300	VERT
16	Balken	30	34	0.0	1	1	-	-	-	0.100	VERT
17	Balken	3	7	0.0	1	1	-	-	-	0.100	VERT
18	Balken	7	11	0.0	1	1	-	-	-	0.300	VERT
19	Balken	11	15	0.0	1	1	-	-	-	0.300	VERT
20	Balken	15	19	0.0	1	1	-	-	-	0.300	VERT
21	Balken	19	23	0.0	1	1	-	-	-	0.300	VERT
22	Balken	23	27	0.0	1	1	-	-	-	0.300	VERT
23	Balken	27	31	0.0	1	1	-	-	-	0.300	VERT
24	Balken	31	35	0.0	1	1	-	-	-	0.100	VERT
25	Balken	5	6	0.0	2	2	-	-	-	0.501	HORI
26	Balken	6	7	0.0	2	2	-	-	-	0.501	HORI
27	Balken	7	5	0.0	2	2	-	-	-	0.501	HORI
28	Balken	29	30	0.0	2	2	-	-	-	0.501	HORI
29	Balken	30	31	0.0	2	2	-	-	-	0.501	HORI
30	Balken	31	29	0.0	2	2	-	-	-	0.501	HORI
31	Balken	5	11	0.0	2	2	-	-	-	0.584	ALLG
32	Balken	11	13	0.0	2	2	-	-	-	0.584	ALLG
33	Balken	13	19	0.0	2	2	-	-	-	0.584	ALLG
34	Balken	19	21	0.0	2	2	-	-	-	0.584	ALLG
35	Balken	21	27	0.0	2	2	-	-	-	0.584	ALLG
36	Balken	27	29	0.0	2	2	-	-	-	0.584	ALLG
37	Balken	6	9	0.0	2	2	-	-	-	0.584	ALLG
38	Balken	9	14	0.0	2	2	-	-	-	0.584	ALLG
39	Balken	14	17	0.0	2	2	-	-	-	0.584	ALLG
40	Balken	17	22	0.0	2	2	-	-	-	0.584	ALLG
41	Balken	22	25	0.0	2	2	-	-	-	0.584	ALLG
42	Balken	25	30	0.0	2	2	-	-	-	0.584	ALLG
43	Balken	7	10	0.0	2	2	-	-	-	0.584	ALLG
44	Balken	10	15	0.0	2	2	-	-	-	0.584	ALLG
45	Balken	15	18	0.0	2	2	-	-	-	0.584	ALLG
46	Balken	18	23	0.0	2	2	-	-	-	0.584	ALLG
47	Balken	23	26	0.0	2	2	-	-	-	0.584	ALLG
48	Balken	26	31	0.0	2	2	-	-	-	0.584	ALLG
49	Balken	33	37	0.0	1	1	-	-	-	0.100	VERT
50	Balken	37	41	0.0	1	1	-	-	-	0.300	VERT
51	Balken	41	45	0.0	1	1	-	-	-	0.300	VERT
52	Balken	45	49	0.0	1	1	-	-	-	0.300	VERT
53	Balken	49	53	0.0	1	1	-	-	-	0.300	VERT
54	Balken	53	57	0.0	1	1	-	-	-	0.300	VERT
55	Balken	57	61	0.0	1	1	-	-	-	0.300	VERT
56	Balken	61	65	0.0	1	1	-	-	-	0.100	VERT
57	Balken	34	38	0.0	1	1	-	-	-	0.100	VERT
58	Balken	38	42	0.0	1	1	-	-	-	0.300	VERT
59	Balken	42	46	0.0	1	1	-	-	-	0.300	VERT
60	Balken	46	50	0.0	1	1	-	-	-	0.300	VERT



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STÄBE

Stab-Nr.	Stab-typ	Knoten		Beta [°]	Querschnitt		Gelenk		Teil-Nr.	Länge [m]	Stab-lage
		Anf.	Ende		Anf.	Ende	Anf.	Ende			
81	Balken	50	54	0.0	1	1	-	-	-	0.300	VERT
82	Balken	54	58	0.0	1	1	-	-	-	0.300	VERT
83	Balken	58	62	0.0	1	1	-	-	-	0.300	VERT
84	Balken	62	66	0.0	1	1	-	-	-	0.100	VERT
85	Balken	35	39	0.0	1	1	-	-	-	0.100	VERT
86	Balken	39	43	0.0	1	1	-	-	-	0.300	VERT
87	Balken	43	47	0.0	1	1	-	-	-	0.300	VERT
88	Balken	47	51	0.0	1	1	-	-	-	0.300	VERT
89	Balken	51	55	0.0	1	1	-	-	-	0.300	VERT
70	Balken	55	59	0.0	1	1	-	-	-	0.300	VERT
71	Balken	59	63	0.0	1	1	-	-	-	0.300	VERT
72	Balken	63	67	0.0	1	1	-	-	-	0.100	VERT
73	Balken	37	38	0.0	2	2	-	-	-	0.501	HORI
74	Balken	38	39	0.0	2	2	-	-	-	0.501	HORI
75	Balken	39	37	0.0	2	2	-	-	-	0.501	HORI
76	Balken	61	62	0.0	2	2	-	-	-	0.501	HORI
77	Balken	62	63	0.0	2	2	-	-	-	0.501	HORI
78	Balken	63	61	0.0	2	2	-	-	-	0.501	HORI
79	Balken	37	43	0.0	2	2	-	-	-	0.584	ALLG
80	Balken	43	45	0.0	2	2	-	-	-	0.584	ALLG
81	Balken	45	51	0.0	2	2	-	-	-	0.584	ALLG
82	Balken	51	53	0.0	2	2	-	-	-	0.584	ALLG
83	Balken	53	59	0.0	2	2	-	-	-	0.584	ALLG
84	Balken	59	61	0.0	2	2	-	-	-	0.584	ALLG
85	Balken	38	41	0.0	2	2	-	-	-	0.584	ALLG
86	Balken	41	46	0.0	2	2	-	-	-	0.584	ALLG
87	Balken	46	49	0.0	2	2	-	-	-	0.584	ALLG
88	Balken	49	54	0.0	2	2	-	-	-	0.584	ALLG
89	Balken	54	57	0.0	2	2	-	-	-	0.584	ALLG
90	Balken	57	62	0.0	2	2	-	-	-	0.584	ALLG
91	Balken	39	42	0.0	2	2	-	-	-	0.584	ALLG
92	Balken	42	47	0.0	2	2	-	-	-	0.584	ALLG
93	Balken	47	50	0.0	2	2	-	-	-	0.584	ALLG
94	Balken	50	55	0.0	2	2	-	-	-	0.584	ALLG
95	Balken	55	58	0.0	2	2	-	-	-	0.584	ALLG
96	Balken	58	63	0.0	2	2	-	-	-	0.584	ALLG
97	Balken	65	69	0.0	1	1	-	-	-	0.100	VERT
98	Balken	69	73	0.0	1	1	-	-	-	0.300	VERT
99	Balken	73	77	0.0	1	1	-	-	-	0.300	VERT
100	Balken	77	81	0.0	1	1	-	-	-	0.300	VERT
101	Balken	81	85	0.0	1	1	-	-	-	0.300	VERT
102	Balken	85	89	0.0	1	1	-	-	-	0.300	VERT
103	Balken	89	93	0.0	1	1	-	-	-	0.300	VERT
104	Balken	93	97	0.0	1	1	-	-	-	0.100	VERT
105	Balken	66	70	0.0	1	1	-	-	-	0.100	VERT
106	Balken	70	74	0.0	1	1	-	-	-	0.300	VERT
107	Balken	74	78	0.0	1	1	-	-	-	0.300	VERT
108	Balken	78	82	0.0	1	1	-	-	-	0.300	VERT
109	Balken	82	86	0.0	1	1	-	-	-	0.300	VERT
110	Balken	86	90	0.0	1	1	-	-	-	0.300	VERT
111	Balken	90	94	0.0	1	1	-	-	-	0.300	VERT
112	Balken	94	98	0.0	1	1	-	-	-	0.100	VERT
113	Balken	67	71	0.0	1	1	-	-	-	0.100	VERT
114	Balken	71	75	0.0	1	1	-	-	-	0.300	VERT
115	Balken	75	79	0.0	1	1	-	-	-	0.300	VERT
116	Balken	79	83	0.0	1	1	-	-	-	0.300	VERT
117	Balken	83	87	0.0	1	1	-	-	-	0.300	VERT
118	Balken	87	91	0.0	1	1	-	-	-	0.300	VERT
119	Balken	91	95	0.0	1	1	-	-	-	0.300	VERT
120	Balken	95	99	0.0	1	1	-	-	-	0.100	VERT
121	Balken	69	70	0.0	2	2	-	-	-	0.501	HORI
122	Balken	70	71	0.0	2	2	-	-	-	0.501	HORI
123	Balken	71	69	0.0	2	2	-	-	-	0.501	HORI
124	Balken	93	94	0.0	2	2	-	-	-	0.501	HORI
125	Balken	94	95	0.0	2	2	-	-	-	0.501	HORI
126	Balken	95	93	0.0	2	2	-	-	-	0.501	HORI
127	Balken	69	75	0.0	2	2	-	-	-	0.584	ALLG
128	Balken	75	77	0.0	2	2	-	-	-	0.584	ALLG
129	Balken	77	83	0.0	2	2	-	-	-	0.584	ALLG
130	Balken	83	85	0.0	2	2	-	-	-	0.584	ALLG
131	Balken	85	91	0.0	2	2	-	-	-	0.584	ALLG
132	Balken	91	93	0.0	2	2	-	-	-	0.584	ALLG
133	Balken	70	73	0.0	2	2	-	-	-	0.584	ALLG
134	Balken	73	78	0.0	2	2	-	-	-	0.584	ALLG
135	Balken	78	81	0.0	2	2	-	-	-	0.584	ALLG
136	Balken	81	86	0.0	2	2	-	-	-	0.584	ALLG
137	Balken	86	89	0.0	2	2	-	-	-	0.584	ALLG
138	Balken	89	94	0.0	2	2	-	-	-	0.584	ALLG
139	Balken	71	74	0.0	2	2	-	-	-	0.584	ALLG
140	Balken	74	79	0.0	2	2	-	-	-	0.584	ALLG
141	Balken	79	82	0.0	2	2	-	-	-	0.584	ALLG
142	Balken	82	87	0.0	2	2	-	-	-	0.584	ALLG
143	Balken	87	90	0.0	2	2	-	-	-	0.584	ALLG
144	Balken	90	95	0.0	2	2	-	-	-	0.584	ALLG
145	Balken	97	101	0.0	1	1	-	-	-	0.100	VERT
146	Balken	101	105	0.0	1	1	-	-	-	0.300	VERT
147	Balken	105	109	0.0	1	1	-	-	-	0.300	VERT
148	Balken	109	113	0.0	1	1	-	-	-	0.300	VERT
149	Balken	113	117	0.0	1	1	-	-	-	0.300	VERT



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STÄBE

Stab-Nr.	Stab-typ	Knoten		Beta [°]	Querschnitt		Gelenk		Teil-Nr.	Länge [m]	Stab-lage
		Anf.	Ende		Anf.	Ende	Anf.	Ende			
150	Balken	117	121	0.0	1	1	-	-	-	0.300	VERT
151	Balken	121	125	0.0	1	1	-	-	-	0.300	VERT
152	Balken	125	129	0.0	1	1	-	-	-	0.100	VERT
153	Balken	98	102	0.0	1	1	-	-	-	0.100	VERT
154	Balken	102	106	0.0	1	1	-	-	-	0.300	VERT
155	Balken	106	110	0.0	1	1	-	-	-	0.300	VERT
156	Balken	110	114	0.0	1	1	-	-	-	0.300	VERT
157	Balken	114	118	0.0	1	1	-	-	-	0.300	VERT
158	Balken	118	122	0.0	1	1	-	-	-	0.300	VERT
159	Balken	122	126	0.0	1	1	-	-	-	0.300	VERT
160	Balken	126	130	0.0	1	1	-	-	-	0.100	VERT
161	Balken	99	103	0.0	1	1	-	-	-	0.100	VERT
162	Balken	103	107	0.0	1	1	-	-	-	0.300	VERT
163	Balken	107	111	0.0	1	1	-	-	-	0.300	VERT
164	Balken	111	115	0.0	1	1	-	-	-	0.300	VERT
165	Balken	115	119	0.0	1	1	-	-	-	0.300	VERT
166	Balken	119	123	0.0	1	1	-	-	-	0.300	VERT
167	Balken	123	127	0.0	1	1	-	-	-	0.300	VERT
168	Balken	127	131	0.0	1	1	-	-	-	0.100	VERT
169	Balken	101	102	0.0	2	2	-	-	-	0.501	HORI
170	Balken	102	103	0.0	2	2	-	-	-	0.501	HORI
171	Balken	103	101	0.0	2	2	-	-	-	0.501	HORI
172	Balken	125	126	0.0	2	2	-	-	-	0.501	HORI
173	Balken	126	127	0.0	2	2	-	-	-	0.501	HORI
174	Balken	127	125	0.0	2	2	-	-	-	0.501	HORI
175	Balken	101	107	0.0	2	2	-	-	-	0.584	ALLG
176	Balken	107	109	0.0	2	2	-	-	-	0.584	ALLG
177	Balken	109	115	0.0	2	2	-	-	-	0.584	ALLG
178	Balken	115	117	0.0	2	2	-	-	-	0.584	ALLG
179	Balken	117	123	0.0	2	2	-	-	-	0.584	ALLG
180	Balken	123	125	0.0	2	2	-	-	-	0.584	ALLG
181	Balken	102	105	0.0	2	2	-	-	-	0.584	ALLG
182	Balken	105	110	0.0	2	2	-	-	-	0.584	ALLG
183	Balken	110	113	0.0	2	2	-	-	-	0.584	ALLG
184	Balken	113	118	0.0	2	2	-	-	-	0.584	ALLG
185	Balken	118	121	0.0	2	2	-	-	-	0.584	ALLG
186	Balken	121	126	0.0	2	2	-	-	-	0.584	ALLG
187	Balken	103	106	0.0	2	2	-	-	-	0.584	ALLG
188	Balken	106	111	0.0	2	2	-	-	-	0.584	ALLG
189	Balken	111	114	0.0	2	2	-	-	-	0.584	ALLG
190	Balken	114	119	0.0	2	2	-	-	-	0.584	ALLG
191	Balken	119	122	0.0	2	2	-	-	-	0.584	ALLG
192	Balken	122	127	0.0	2	2	-	-	-	0.584	ALLG
193	Balken	129	133	0.0	1	1	-	-	-	0.100	VERT
194	Balken	133	137	0.0	1	1	-	-	-	0.300	VERT
195	Balken	137	141	0.0	1	1	-	-	-	0.300	VERT
196	Balken	141	145	0.0	1	1	-	-	-	0.300	VERT
197	Balken	145	149	0.0	1	1	-	-	-	0.300	VERT
198	Balken	149	153	0.0	1	1	-	-	-	0.300	VERT
199	Balken	153	157	0.0	1	1	-	-	-	0.300	VERT
200	Balken	157	161	0.0	1	1	-	-	-	0.100	VERT
201	Balken	130	134	0.0	1	1	-	-	-	0.100	VERT
202	Balken	134	138	0.0	1	1	-	-	-	0.300	VERT
203	Balken	138	142	0.0	1	1	-	-	-	0.300	VERT
204	Balken	142	146	0.0	1	1	-	-	-	0.300	VERT
205	Balken	146	150	0.0	1	1	-	-	-	0.300	VERT
206	Balken	150	154	0.0	1	1	-	-	-	0.300	VERT
207	Balken	154	158	0.0	1	1	-	-	-	0.300	VERT
208	Balken	158	162	0.0	1	1	-	-	-	0.100	VERT
209	Balken	131	135	0.0	1	1	-	-	-	0.100	VERT
210	Balken	135	139	0.0	1	1	-	-	-	0.300	VERT
211	Balken	139	143	0.0	1	1	-	-	-	0.300	VERT
212	Balken	143	147	0.0	1	1	-	-	-	0.300	VERT
213	Balken	147	151	0.0	1	1	-	-	-	0.300	VERT
214	Balken	151	155	0.0	1	1	-	-	-	0.300	VERT
215	Balken	155	159	0.0	1	1	-	-	-	0.300	VERT
216	Balken	159	163	0.0	1	1	-	-	-	0.100	VERT
217	Balken	133	134	0.0	2	2	-	-	-	0.501	HORI
218	Balken	134	135	0.0	2	2	-	-	-	0.501	HORI
219	Balken	135	133	0.0	2	2	-	-	-	0.501	HORI
220	Balken	157	158	0.0	2	2	-	-	-	0.501	HORI
221	Balken	158	159	0.0	2	2	-	-	-	0.501	HORI
222	Balken	159	157	0.0	2	2	-	-	-	0.501	HORI
223	Balken	133	139	0.0	2	2	-	-	-	0.584	ALLG
224	Balken	139	141	0.0	2	2	-	-	-	0.584	ALLG
225	Balken	141	147	0.0	2	2	-	-	-	0.584	ALLG
226	Balken	147	149	0.0	2	2	-	-	-	0.584	ALLG
227	Balken	149	155	0.0	2	2	-	-	-	0.584	ALLG
228	Balken	155	157	0.0	2	2	-	-	-	0.584	ALLG
229	Balken	134	137	0.0	2	2	-	-	-	0.584	ALLG
230	Balken	137	142	0.0	2	2	-	-	-	0.584	ALLG
231	Balken	142	145	0.0	2	2	-	-	-	0.584	ALLG
232	Balken	145	150	0.0	2	2	-	-	-	0.584	ALLG
233	Balken	150	153	0.0	2	2	-	-	-	0.584	ALLG
234	Balken	153	158	0.0	2	2	-	-	-	0.584	ALLG
235	Balken	135	138	0.0	2	2	-	-	-	0.584	ALLG
236	Balken	138	143	0.0	2	2	-	-	-	0.584	ALLG
237	Balken	143	146	0.0	2	2	-	-	-	0.584	ALLG
238	Balken	146	151	0.0	2	2	-	-	-	0.584	ALLG



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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STÄBE

Stab-Nr.	Stab-typ	Knoten		Beta [°]	Querschnitt		Gelenk		Teil.-Nr.	Länge [m]	Stab-lage
		Anf.	Ende		Anf.	Ende	Anf.	Ende			
239	Balken	151	154	0.0	2	2	-	-	-	0.584	ALLG
240	Balken	154	159	0.0	2	2	-	-	-	0.584	ALLG
241	Balken	161	165	0.0	1	1	-	-	-	0.100	VERT
242	Balken	165	169	0.0	1	1	-	-	-	0.300	VERT
243	Balken	169	173	0.0	1	1	-	-	-	0.300	VERT
244	Balken	173	177	0.0	1	1	-	-	-	0.300	VERT
245	Balken	177	181	0.0	1	1	-	-	-	0.300	VERT
246	Balken	181	185	0.0	1	1	-	-	-	0.300	VERT
247	Balken	185	189	0.0	1	1	-	-	-	0.300	VERT
248	Balken	189	193	0.0	1	1	-	-	-	0.100	VERT
249	Balken	193	187	0.0	1	1	-	-	-	0.100	VERT
250	Balken	187	171	0.0	1	1	-	-	-	0.300	VERT
251	Balken	171	175	0.0	1	1	-	-	-	0.300	VERT
252	Balken	175	179	0.0	1	1	-	-	-	0.300	VERT
253	Balken	179	183	0.0	1	1	-	-	-	0.300	VERT
254	Balken	183	187	0.0	1	1	-	-	-	0.300	VERT
255	Balken	187	191	0.0	1	1	-	-	-	0.300	VERT
256	Balken	191	195	0.0	1	1	-	-	-	0.100	VERT
257	Balken	162	166	0.0	1	1	-	-	-	0.100	VERT
258	Balken	166	170	0.0	1	1	-	-	-	0.300	VERT
259	Balken	170	174	0.0	1	1	-	-	-	0.300	VERT
260	Balken	174	178	0.0	1	1	-	-	-	0.300	VERT
261	Balken	178	182	0.0	1	1	-	-	-	0.300	VERT
262	Balken	182	186	0.0	1	1	-	-	-	0.300	VERT
263	Balken	186	190	0.0	1	1	-	-	-	0.300	VERT
264	Balken	190	194	0.0	1	1	-	-	-	0.100	VERT
265	Balken	165	166	0.0	2	2	-	-	-	0.501	HORI
266	Balken	166	167	0.0	2	2	-	-	-	0.501	HORI
267	Balken	165	167	0.0	2	2	-	-	-	0.501	HORI
268	Balken	189	190	0.0	2	2	-	-	-	0.501	HORI
269	Balken	190	191	0.0	2	2	-	-	-	0.501	HORI
270	Balken	191	189	0.0	2	2	-	-	-	0.501	HORI
271	Balken	165	171	0.0	2	2	-	-	-	0.584	ALLG
272	Balken	171	173	0.0	2	2	-	-	-	0.584	ALLG
273	Balken	173	179	0.0	2	2	-	-	-	0.584	ALLG
274	Balken	179	181	0.0	2	2	-	-	-	0.584	ALLG
275	Balken	181	187	0.0	2	2	-	-	-	0.584	ALLG
276	Balken	187	189	0.0	2	2	-	-	-	0.584	ALLG
277	Balken	187	170	0.0	2	2	-	-	-	0.584	ALLG
278	Balken	170	175	0.0	2	2	-	-	-	0.584	ALLG
279	Balken	175	178	0.0	2	2	-	-	-	0.584	ALLG
280	Balken	178	183	0.0	2	2	-	-	-	0.584	ALLG
281	Balken	183	186	0.0	2	2	-	-	-	0.584	ALLG
282	Balken	186	191	0.0	2	2	-	-	-	0.584	ALLG
283	Balken	186	169	0.0	2	2	-	-	-	0.584	ALLG
284	Balken	169	174	0.0	2	2	-	-	-	0.584	ALLG
285	Balken	174	177	0.0	2	2	-	-	-	0.584	ALLG
286	Balken	177	182	0.0	2	2	-	-	-	0.584	ALLG
287	Balken	182	185	0.0	2	2	-	-	-	0.584	ALLG
288	Balken	185	190	0.0	2	2	-	-	-	0.584	ALLG
289	Seil	196	193	0.0	3	3	-	-	-	13.949	ALLG
290	Seil	197	194	0.0	3	3	-	-	-	13.949	ALLG
291	Seil	198	195	0.0	3	3	-	-	-	13.949	ALLG
292	Seil	196	97	0.0	3	3	-	-	-	9.304	ALLG
293	Seil	197	98	0.0	3	3	-	-	-	9.304	ALLG
294	Seil	198	99	0.0	3	3	-	-	-	9.304	ALLG

AUFLAGER

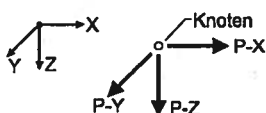
Lager-Nr.	Gelagerte Knoten	Drehung [°]		Festes Auflager bzw. Feder [N/m] [Nm/rad]						
		Alpha	Beta	in X	in Y	in Z	um X	um Y	um Z	
1	1-3	0.0	0.0	Ja	Ja	Ja	Nein	Nein	Ja	
2	196-198	0.0	0.0	Ja	Ja	Ja	Nein	Nein	Ja	

BELASTUNG

BASISANGABEN DER LASTFÄLLE

LF-Nr.	LF-Bezeichnung	Faktor	Überlagerungsart	Eigengewicht
1	Vertikallasten	1.00	Ständig	1.00
2	hor. Lasten in x-Richtung, v=130km/h	1.00	Ständig	-
3	hor. Lasten gegen x-Richtung, v=130km/h	1.00	Ständig	-

Globale Knotenkraft



KNOTENKRÄFTE

LF 1

Nr.	Belastete Knoten	Knotenkräfte		
		P _X [N]	P _Y [N]	P _Z [N]
1	193-195	0.000	0.000	800.000
2	193-195	0.000	0.000	500.000



Projekt: Namenlos	Position: Botschaftsfunk New Delhi R-Stab Gittermasten L120-G3-50-3.5kN-2	Seite: 8 26.07.2010
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KNOTENKRÄFTE

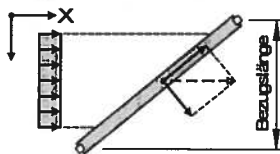
LF 2

Nr.	Belastete Knoten	P_X [N]	Knotenkräfte P_Y [N]	P_Z [N]
1	193-195	1000.000	0.000	0.000
2	193-195	100.000	0.000	0.000

1- Linienlast



X- Global in X-Richtung



STABLASTEN

LF 2

Nr.	Belastete Stäbe	Last-art	Last-Richtung	Parameter [N, Nm, m, °C, N/m, Nm/m]			
1	1-24, 49-72, 97-120, 145 -168, 193-216, 241-264	1	X	100.000			

KNOTENKRÄFTE

LF 3

Nr.	Belastete Knoten	P_X [N]	Knotenkräfte P_Y [N]	P_Z [N]
1	193-195	-1000.000	0.000	0.000
2	193-195	-100.000	0.000	0.000

STABLASTEN

LF 3

Nr.	Belastete Stäbe	Last-art	Last-Richtung	Parameter [N, Nm, m, °C, N/m, Nm/m]			
1	1-24, 49-72, 97-120, 145 -168, 193-216, 241-264	1	X	-100.00			

LF-GRUPPEN

LG-Nr.	LG-Bezeichnung	Faktor	Beiwert γ_M	Lastfälle in LG
1	Grenzwerte Traglast gegen x-Richtung, $v=130\text{km/h}$	1.50	1.10	LF1 + 1.06*LF3
2	Grenzwerte Traglast in x-Richtung, $v=130\text{km/h}$	1.50	1.10	LF1 + 1.06*LF2

LF-KOMBINATIONEN

LK-Nr.	LK-Bezeichnung	Kombinationskriterium
1	Grenzwerte Traglast gegen x-Richtung $v=130\text{km/h}$	LF1/S + 1.06*LF3/S
2	Grenzwerte Traglast in x-Richtung, $v=130\text{km/h}$	LF1/S + 1.06*LF2/S



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Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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DATEN ZUR THEORIE II. ORDNUNG

LG-Nr.	Faktor Ny	Anzahl Iterationen	Eps-Konvergenz		Ny-fache Ergebnisse	Entlastung durch Zugkräfte
			vorhanden	gewollt		
LG1	1.500	15	.36E-02	0.01	Ja	Nein
LG2	1.500	11	.83E-02	0.01	Ja	Nein

AUFLAGERKRÄFTE UND -MOMENTE

Knoten-Nr.	LF/LG-Nr.	Auflagerkräfte [kN]			Auflagermomente [kNm]		
		P _x	P _y	P _z	M _x	M _y	M _z
1	LG1	-0.860	-0.057	52.944	.000	.000	-0.001
	LG2	.655	.045	-16.917	.000	.000	-0.002
2	LG1	-0.739	.208	-12.223	.000	.000	-0.002
	LG2	.448	-0.088	17.776	.000	.000	-0.002
3	LG1	-0.635	-0.151	-12.189	.000	.000	-0.003
	LG2	.373	.023	17.779	.000	.000	-0.001
196	LG1	.000	.000	.039	.000	.000	.000
	LG2	9.495	.000	-11.930	.000	.000	.000
197	LG1	-4.469	7.502	-10.892	.000	.000	.000
	LG2	.000	.000	.039	.000	.000	.000
198	LG1	-4.468	-7.502	-10.893	.000	.000	.000
	LG2	.000	.000	.039	.000	.000	.000
ΣKräfte	LG1	-10.971	.000	6.786			
	ΣLasten	-10.971	.000	6.786			
ΣKräfte	LG2	10.971	.000	6.786			
	ΣLasten	10.971	.000	6.786			

MAX/MIN GLOBALE KNOTENVERFORMUNGEN

Knoten-Nr.	LK-Nr.		Verschiebungen [mm]			Verdrehungen [mrad]		
			u _x	u _y	u _z	φ _x	φ _y	φ _z
1	LK1	Max	.00000	.00000	.00000	-.05304	1.47713	.00000
		Min	.00000	.00000	.00000	-.05304	1.47713	.00000
	LK2	Max	.00000	.00000	.00000	.11882	-.89917	.00000
		Min	.00000	.00000	.00000	.11882	-.89917	.00000
2	LK1	Max	.00000	.00000	.00000	.19955	1.54764	.00000
		Min	.00000	.00000	.00000	.19955	1.54764	.00000
	LK2	Max	.00000	.00000	.00000	-.16590	-.90268	.00000
		Min	.00000	.00000	.00000	-.16590	-.90268	.00000
3	LK1	Max	.00000	.00000	.00000	.07369	1.12563	.00000
		Min	.00000	.00000	.00000	.07369	1.12563	.00000
	LK2	Max	.00000	.00000	.00000	-.08728	-.76701	.00000
		Min	.00000	.00000	.00000	-.08728	-.76701	.00000
5	LK1	Max	-.14225	-.00476	.07178	-.03666	1.31368	-.00357
		Min	-.14225	-.00476	.07178	-.03666	1.31368	-.00357
	LK2	Max	.08574	.01157	-.02351	.10948	-.77413	-.00712
		Min	.08574	.01157	-.02351	.10948	-.77413	-.00712
6	LK1	Max	-.14973	.01852	-.01702	.15631	1.39689	-.00467
		Min	-.14973	.01852	-.01702	.15631	1.39689	-.00467
	LK2	Max	.08717	-.01808	.02438	-.15070	-.81009	-.00577
		Min	.08717	-.01808	.02438	-.15070	-.81009	-.00577
7	LK1	Max	-.10835	.00826	-.01699	.10074	.99977	-.01323
		Min	-.10835	.00826	-.01699	.10074	.99977	-.01323
	LK2	Max	.07423	-.00893	.02438	-.07313	-.69290	-.00149
		Min	.07423	-.00893	.02438	-.07313	-.69290	-.00149
9	LK1	Max	-.48248	.00160	.28167	.09481	1.00315	-.01556
		Min	-.48248	.00160	.28167	.09481	1.00315	-.01556
	LK2	Max	.25815	.03001	-.09084	-.01251	-.51955	-.02230
		Min	.25815	.03001	-.09084	-.01251	-.51955	-.02230
10	LK1	Max	-.48281	.03467	-.06325	-.04873	.95554	-.01829
		Min	-.48281	.03467	-.06325	-.04873	.95554	-.01829
	LK2	Max	.27512	-.04532	.09422	-.01527	-.51548	-.01826
		Min	.27512	-.04532	.09422	-.01527	-.51548	-.01826
11	LK1	Max	-.36826	.03657	-.06787	.00721	.96607	-.04011
		Min	-.36826	.03657	-.06787	.00721	.96607	-.04011
	LK2	Max	.25205	-.02184	.09722	.00591	-.80541	-.00893
		Min	.25205	-.02184	.09722	.00591	-.80541	-.00893
13	LK1	Max	-.82841	.04265	.48273	.12211	1.50280	-.03157
		Min	-.82841	.04265	.48273	.12211	1.50280	-.03157
	LK2	Max	.45391	.00965	-.15257	-.07583	-.82561	-.02962
		Min	.45391	.00965	-.15257	-.07583	-.82561	-.02962
14	LK1	Max	-.80838	.01341	-.10933	-.01712	1.36927	-.01634
		Min	-.80838	.01341	-.10933	-.01712	1.36927	-.01634
	LK2	Max	.44673	-.03571	.16395	.01808	-.72557	-.03476
		Min	.44673	-.03571	.16395	.01808	-.72557	-.03476
15	LK1	Max	-.75204	.01171	-.10997	-.08924	1.56650	-.06508
		Min	-.75204	.01171	-.10997	-.08924	1.56650	-.06508
	LK2	Max	.47164	-.00732	.16455	.03988	-.85052	-.01124
		Min	.47164	-.00732	.16455	.03988	-.85052	-.01124
17	LK1	Max	-1.38015	.06369	.67722	.03812	2.15842	-.04070
		Min	-1.38015	.06369	.67722	.03812	2.15842	-.04070
	LK2	Max	.75686	-.00397	-.21023	-.02298	-1.16446	-.03367
		Min	.75686	-.00397	-.21023	-.02298	-1.16446	-.03367
18	LK1	Max	-1.33562	.03127	-.14863	.08175	2.09590	-.01559
		Min	-1.33562	.03127	-.14863	.08175	2.09590	-.01559
	LK2	Max	.72987	-.04409	.22957	-.04401	-1.12812	-.04458
		Min	.72987	-.04409	.22957	-.04401	-1.12812	-.04458



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Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab

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Gittermasten L120-G3-50-3.5kN-2

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MAX/MIN GLOBALE KNOTENVERFORMUNGEN

Knoten-Nr.	LK-Nr.		Verschiebungen [mm]			Verdrehungen [mrad]		
			u _x	u _y	u _z	φ _x	φ _y	φ _z
18	LK2	Min	.72987	-.04409	.22957	-.04401	-1.12812	-.04458
		Max	-1.30115	.00202	-.15221	.00487	2.09473	-.07989
19	LK1	Min	-1.30115	.00202	-.15221	.00487	2.09473	-.07989
		Max	.76529	-.00533	.23194	-.00269	-1.12383	-.01292
	LK2	Min	.76529	-.00533	.23194	-.00269	-1.12383	-.01292
		Max	-.210228	.07240	.86629	.01918	2.61384	-.05090
21	LK1	Min	-.210228	.07240	.86629	.01918	2.61384	-.05090
		Max	1.14089	-.00810	-.26475	-.00885	-1.38190	-.03230
	LK2	Min	1.14089	-.00810	-.26475	-.00885	-1.38190	-.03230
		Max	-2.04335	.04352	-.18819	-.00932	2.59705	-.01240
22	LK1	Min	-2.04335	.04352	-.18819	-.00932	2.59705	-.01240
		Max	1.11097	-.05203	.29527	-.00200	-1.40430	-.04988
	LK2	Min	1.11097	-.05203	.29527	-.00200	-1.40430	-.04988
		Max	-2.00944	.00740	-.18888	.02883	2.62633	-.08246
23	LK1	Min	-2.00944	.00740	-.18888	.02883	2.62633	-.08246
		Max	1.14679	-.00410	.29600	.00031	-1.40176	-.01546
	LK2	Min	1.14679	-.00410	.29600	.00031	-1.40176	-.01546
		Max	-2.94268	.06709	1.04988	-.07681	3.00471	-.04753
25	LK1	Min	-2.94268	.06709	1.04988	-.07681	3.00471	-.04753
		Max	1.58912	-.00998	-.31630	-.00195	-1.62990	-.03331
	LK2	Min	1.58912	-.00998	-.31630	-.00195	-1.62990	-.03331
		Max	-2.89744	.02646	-.22244	-.08408	3.13126	-.01204
26	LK1	Min	-2.89744	.02646	-.22244	-.08408	3.13126	-.01204
		Max	1.57290	-.03956	.35783	.10001	-1.67992	-.04935
	LK2	Min	1.57290	-.03956	.35783	.10001	-1.67992	-.04935
		Max	-2.88396	.01454	-.22554	.00190	3.22782	-.08433
27	LK1	Min	-2.88396	.01454	-.22554	.00190	3.22782	-.08433
		Max	1.60302	-.00819	.35991	-.00919	-1.64640	-.01380
	LK2	Min	1.60302	-.00819	.35991	-.00919	-1.64640	-.01380
		Max	-3.95090	.03029	1.22689	-.13734	3.84987	-.04434
29	LK1	Min	-3.95090	.03029	1.22689	-.13734	3.84987	-.04434
		Max	2.13510	-.00631	-.36500	.03653	-2.04176	-.03266
	LK2	Min	2.13510	-.00631	-.36500	.03653	-2.04176	-.03266
		Max	-3.94990	.00400	-.25687	-.00447	3.94497	-.01401
30	LK1	Min	-3.94990	.00400	-.25687	-.00447	3.94497	-.01401
		Max	2.12936	-.00714	.42011	.04921	-2.05970	-.04640
	LK2	Min	2.12936	-.00714	.42011	.04921	-2.05970	-.04640
		Max	-3.95279	.00829	-.25675	-.02432	3.88644	-.07984
31	LK1	Min	-3.95279	.00829	-.25675	-.02432	3.88644	-.07984
		Max	2.14526	-.00718	.42073	.00298	-1.99263	-.01363
	LK2	Min	2.14526	-.00718	.42073	.00298	-1.99263	-.01363
		Max	-4.35392	.01751	1.28508	-.11239	4.17206	-.04341
33	LK1	Min	-4.35392	.01751	1.28508	-.11239	4.17206	-.04341
		Max	2.34654	-.00171	-.38072	.05291	-2.16919	-.03376
	LK2	Min	2.34654	-.00171	-.38072	.05291	-2.16919	-.03376
		Max	-4.35857	.00704	-.26698	.05608	4.19579	-.01488
34	LK1	Min	-4.35857	.00704	-.26698	.05608	4.19579	-.01488
		Max	2.34215	-.00612	.44040	-.02498	-2.18060	-.04669
	LK2	Min	2.34215	-.00612	.44040	-.02498	-2.18060	-.04669
		Max	-4.35019	.00657	-.26719	-.00683	4.03879	-.08160
35	LK1	Min	-4.35019	.00657	-.26719	-.00683	4.03879	-.08160
		Max	2.35081	-.00672	.44110	.00443	-2.10731	-.01341
	LK2	Min	2.35081	-.00672	.44110	.00443	-2.10731	-.01341
		Max	-4.77771	.00896	1.34325	-.05300	4.26619	-.04246
37	LK1	Min	-4.77771	.00896	1.34325	-.05300	4.26619	-.04246
		Max	2.56545	.00374	-.39646	.05357	-2.19207	-.03485
	LK2	Min	2.56545	.00374	-.39646	.05357	-2.19207	-.03485
		Max	-4.78266	.01345	-.27731	.06322	4.25480	-.01575
38	LK1	Min	-4.78266	.01345	-.27731	.06322	4.25480	-.01575
		Max	2.56249	-.01127	.46065	-.07334	-2.21166	-.04696
	LK2	Min	2.56249	-.01127	.46065	-.07334	-2.21166	-.04696
		Max	-4.75612	.00757	-.27763	.03001	4.05801	-.08336
39	LK1	Min	-4.75612	.00757	-.27763	.03001	4.05801	-.08336
		Max	2.56466	-.00662	.46144	-.00417	-2.15980	-.01318
	LK2	Min	2.56466	-.00662	.46144	-.00417	-2.15980	-.01318
		Max	-6.06688	.01783	1.51487	.08516	4.35989	-.04592
41	LK1	Min	-6.06688	.01783	1.51487	.08516	4.35989	-.04592
		Max	3.22557	.01341	-.44258	-.00136	-2.25483	-.03974
	LK2	Min	3.22557	.01341	-.44258	-.00136	-2.25483	-.03974
		Max	-6.05887	.02273	-.30596	-.01398	4.29833	-.02171
42	LK1	Min	-6.05887	.02273	-.30596	-.01398	4.29833	-.02171
		Max	3.22696	-.03669	.52022	-.04564	-2.23600	-.05071
	LK2	Min	3.22696	-.03669	.52022	-.04564	-2.23600	-.05071
		Max	-5.98829	.02085	-.30888	.00584	4.27438	-.08094
43	LK1	Min	-5.98829	.02085	-.30888	.00584	4.27438	-.08094
		Max	3.22993	-.00803	.52215	.00845	-2.30005	-.01584
	LK2	Min	3.22993	-.00803	.52215	.00845	-2.30005	-.01584
		Max	-7.42105	.04502	1.68143	.06683	4.71911	-.05389
45	LK1	Min	-7.42105	.04502	1.68143	.06683	4.71911	-.05389
		Max	3.93556	.00588	-.48678	-.02687	-2.48940	-.04167
	LK2	Min	3.93556	.00588	-.48678	-.02687	-2.48940	-.04167
		Max	-7.39560	.01296	-.33463	-.00979	4.68197	-.02082
46	LK1	Min	-7.39560	.01296	-.33463	-.00979	4.68197	-.02082
		Max	3.92181	-.03579	.57988	.01419	-2.43876	-.05699
	LK2	Min	3.92181	-.03579	.57988	.01419	-2.43876	-.05699
		Max	-7.34880	.00791	-.33518	-.04735	4.76988	-.09881
47	LK1	Min	-7.34880	.00791	-.33518	-.04735	4.76988	-.09881
		Max	3.95091	-.00259	.58093	.00799	-2.49788	-.01755
	LK2	Min	3.95091	-.00259	.58093	.00799	-2.49788	-.01755
		Max						



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Seite: 11

Gittermasten L120-G3-50-3.5kN-2

26.07.2010

MAX/MIN GLOBALE KNOTENVERFORMUNGEN

Knoten-Nr.	LK-Nr.		Verschiebungen [mm]			Verdrehungen [mrad]		
			u _x	u _y	u _z	φ _x	φ _y	φ _z
49	LK1	Max	-8.91223	.05441	1.84456	.01377	5.21471	-.05602
		Min	-8.91223	.05441	1.84456	.01377	5.21471	-.05602
	LK2	Max	4.71937	.00223	-.52971	-.00197	-2.72639	-.04353
		Min	4.71937	.00223	-.52971	-.00197	-2.72639	-.04353
50	LK1	Max	-8.88047	.02047	-.35948	.03087	5.18952	-.02143
		Min	-8.88047	.02047	-.35948	.03087	5.18952	-.02143
	LK2	Max	4.69820	-.03807	.63827	-.00445	-2.72046	-.05930
		Min	4.69820	-.03807	.63827	-.00445	-2.72046	-.05930
51	LK1	Max	-8.84272	.00260	-.36157	.00053	5.18951	-.10268
		Min	-8.84272	.00260	-.36157	.00053	5.18951	-.10268
	LK2	Max	4.73106	-.00365	.63977	.00188	-2.71916	-.01772
		Min	4.73106	-.00365	.63977	.00188	-2.71916	-.01772
53	LK1	Max	-10.54106	.05715	2.00465	-.00310	5.61704	-.05925
		Min	-10.54106	.05715	2.00465	-.00310	5.61704	-.05925
	LK2	Max	5.56914	.00415	-.57203	.01889	-2.94155	-.04179
		Min	5.56914	.00415	-.57203	.01889	-2.94155	-.04179
54	LK1	Max	-10.50013	.02382	-.38445	-.00422	5.60529	-.01982
		Min	-10.50013	.02382	-.38445	-.00422	5.60529	-.01982
	LK2	Max	5.55175	-.03701	.69661	-.00858	-2.97867	-.05889
		Min	5.55175	-.03701	.69661	-.00858	-2.97867	-.05889
55	LK1	Max	-10.46251	.00601	-.38497	.02692	5.60848	-.09889
		Min	-10.46251	.00601	-.38497	.02692	5.60848	-.09889
	LK2	Max	5.58282	-.00096	.69784	-.00048	-2.94242	-.01836
		Min	5.58282	-.00096	.69784	-.00048	-2.94242	-.01836
57	LK1	Max	-12.27431	.04711	2.16182	-.07122	5.93296	-.05375
		Min	-12.27431	.04711	2.16182	-.07122	5.93296	-.05375
	LK2	Max	6.48506	.00886	-.61415	.00125	-3.16544	-.04081
		Min	6.48506	.00886	-.61415	.00125	-3.16544	-.04081
58	LK1	Max	-12.24413	.01742	-.40686	-.04486	6.02523	-.01978
		Min	-12.24413	.01742	-.40686	-.04486	6.02523	-.01978
	LK2	Max	6.48119	-.03291	.75463	.06427	-3.19173	-.05467
		Min	6.48119	-.03291	.75463	.06427	-3.19173	-.05467
59	LK1	Max	-12.21501	.01356	-.40838	-.00139	6.09938	-.09444
		Min	-12.21501	.01356	-.40838	-.00139	6.09938	-.09444
	LK2	Max	6.49369	-.00400	.75577	-.00543	-3.13789	-.01682
		Min	6.49369	-.00400	.75577	-.00543	-3.13789	-.01682
61	LK1	Max	-14.12391	.02089	2.31608	-.07575	6.47821	-.04966
		Min	-14.12391	.02089	2.31608	-.07575	6.47821	-.04966
	LK2	Max	7.46271	.00449	-.65660	-.01884	-3.33446	-.03793
		Min	7.46271	.00449	-.65660	-.01884	-3.33446	-.03793
62	LK1	Max	-14.12489	.00381	-.42933	-.01312	6.54218	-.01999
		Min	-14.12489	.00381	-.42933	-.01312	6.54218	-.01999
	LK2	Max	7.45887	-.00542	.81240	.06512	-3.32490	-.05165
		Min	7.45887	-.00542	.81240	.06512	-3.32490	-.05165
63	LK1	Max	-14.11923	.00548	-.42945	-.02574	6.55633	-.08732
		Min	-14.11923	.00548	-.42945	-.02574	6.55633	-.08732
	LK2	Max	7.46588	-.00249	.81378	.00656	-3.33602	-.01524
		Min	7.46588	-.00249	.81378	.00656	-3.33602	-.01524
65	LK1	Max	-14.78384	.01479	2.36717	-.04401	6.70455	-.04950
		Min	-14.78384	.01479	2.36717	-.04401	6.70455	-.04950
	LK2	Max	7.79861	.00290	-.67083	-.01204	-3.38819	-.03803
		Min	7.79861	.00290	-.67083	-.01204	-3.38819	-.03803
66	LK1	Max	-14.78833	.00442	-.43630	.02199	6.71379	-.02089
		Min	-14.78833	.00442	-.43630	.02199	6.71379	-.02089
	LK2	Max	7.79406	-.00163	.83173	.00928	-3.38288	-.05204
		Min	7.79406	-.00163	.83173	.00928	-3.38288	-.05204
67	LK1	Max	-14.77998	.00392	-.43652	-.00412	6.64950	-.08797
		Min	-14.77998	.00392	-.43652	-.00412	6.64950	-.08797
	LK2	Max	7.80285	-.00205	.83319	.00237	-3.40586	-.01556
		Min	7.80285	-.00205	.83319	.00237	-3.40586	-.01556
69	LK1	Max	-15.46175	.01255	2.41824	.00133	6.83889	-.04933
		Min	-15.46175	.01255	2.41824	.00133	6.83889	-.04933
	LK2	Max	8.14144	.00225	-.68506	-.00012	-3.47424	-.03813
		Min	8.14144	.00225	-.68506	-.00012	-3.47424	-.03813
70	LK1	Max	-15.46513	.00753	-.44327	.03684	6.80957	-.02180
		Min	-15.46513	.00753	-.44327	.03684	6.80957	-.02180
	LK2	Max	8.13631	-.00378	.85106	-.05328	-3.46692	-.05244
		Min	8.13631	-.00378	.85106	-.05328	-3.46692	-.05244
71	LK1	Max	-15.44736	.00488	-.44359	.02449	6.68974	-.08863
		Min	-15.44736	.00488	-.44359	.02449	6.68974	-.08863
	LK2	Max	8.14764	-.00196	.85280	-.00020	-3.49319	-.01588
		Min	8.14764	-.00196	.85280	-.00020	-3.49319	-.01588
73	LK1	Max	-17.55163	.02707	2.57009	.06689	7.07638	-.05460
		Min	-17.55163	.02707	2.57009	.06689	7.07638	-.05460
	LK2	Max	9.22424	.00560	-.72839	.01320	-3.73677	-.04242
		Min	9.22424	.00560	-.72839	.01320	-3.73677	-.04242
74	LK1	Max	-17.53768	.01537	-.46361	-.00520	7.02009	-.02810
		Min	-17.53768	.01537	-.46361	-.00520	7.02009	-.02810
	LK2	Max	9.21503	-.03045	.90954	-.05922	-3.71263	-.05800
		Min	9.21503	-.03045	.90954	-.05922	-3.71263	-.05800
75	LK1	Max	-17.48450	.01494	-.46474	.00299	6.97440	-.09650
		Min	-17.48450	.01494	-.46474	.00299	6.97440	-.09650
	LK2	Max	9.23539	-.00077	.91047	.01196	-3.75202	-.01829
		Min	9.23539	-.00077	.91047	.01196	-3.75202	-.01829
77	LK1	Max	-19.71565	.04220	2.72049	.02399	7.38934	-.06291
		Min	-19.71565	.04220	2.72049	.02399	7.38934	-.06291
	LK2	Max	10.37989	.00859	-.77293	.00816	-3.98597	-.04572
		Min	10.37989	.00859	-.77293	.00816	-3.98597	-.04572
78	LK1	Max	-19.69211	.00802	-.48391	-.00912	7.37982	-.03107



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Gittermasten L120-G3-50-3.5kN-2

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MAX/MIN GLOBALE KNOTENVERFORMUNGEN

Knoten-Nr.	LK-Nr.		Verschiebungen [mm]			Verdrehungen [mrad]		
			u _x	u _y	u _z	φ _x	φ _y	φ _z
78	LK1	Min	-19.69211	.00802	-48391	-.00912	7.37982	-.03107
		Max	-10.36411	-.03171	.96810	.01506	-3.98091	-.06361
		Min	10.36411	-.03171	.96810	.01506	-3.98091	-.06361
79	LK1	Max	-19.64832	.00820	-48412	-.02284	7.42429	-.10439
		Min	-19.64832	.00820	-48412	-.02284	7.42429	-.10439
		Max	10.39416	.00267	.96983	-.00164	-3.96331	-.02133
81	LK2	Min	10.39416	.00267	.96983	-.00164	-3.96331	-.02133
		Max	-21.99790	.04584	2.87009	.02516	7.82800	-.06886
		Min	-21.99790	.04584	2.87009	.02516	7.82800	-.06886
82	LK2	Max	11.80490	.00827	-.81907	-.01748	-4.20883	-.04994
		Min	11.80490	.00827	-.81907	-.01748	-4.20883	-.04994
83	LK1	Max	-21.96978	.01579	-.50313	.04869	7.78248	-.03557
		Min	-21.96978	.01579	-.50313	.04869	7.78248	-.03557
		Max	11.58949	-.03268	1.02819	-.02340	-4.18845	-.06833
85	LK2	Min	11.58949	-.03268	1.02819	-.02340	-4.18845	-.06833
		Max	-21.93088	.00685	-.50360	.00637	7.79144	-.11024
		Min	-21.93088	.00685	-.50360	.00637	7.79144	-.11024
86	LK1	Max	11.61493	.00013	1.02892	.00249	-4.18996	-.02273
		Min	11.61493	.00013	1.02892	.00249	-4.18996	-.02273
87	LK2	Max	-24.40177	.06086	3.01935	.06086	8.15691	-.07392
		Min	-24.40177	.06086	3.01935	.06086	8.15691	-.07392
		Max	12.90403	.00141	-.86739	-.01189	-4.44321	-.05078
88	LK1	Min	12.90403	.00141	-.86739	-.01189	-4.44321	-.05078
		Max	-24.35580	.02691	-.52264	.01180	8.12736	-.03872
		Min	-24.35580	.02691	-.52264	.01180	8.12736	-.03872
89	LK2	Max	12.87276	-.04089	1.08827	-.01066	-4.37180	-.06849
		Min	12.87276	-.04089	1.08827	-.01066	-4.37180	-.06849
90	LK1	Max	-24.32233	.00204	-.52285	-.04501	8.15234	-.11130
		Min	-24.32233	.00204	-.52285	-.04501	8.15234	-.11130
		Max	12.90910	.00596	1.09007	.02456	-4.42672	-.02538
91	LK2	Min	12.90910	.00596	1.09007	.02456	-4.42672	-.02538
		Max	-26.88721	.06872	3.18816	-.06043	8.43643	-.07136
		Min	-26.88721	.06872	3.18816	-.06043	8.43643	-.07136
92	LK1	Max	14.26676	.00741	-.91806	.05911	-4.64070	-.05598
		Min	14.26676	.00741	-.91806	.05911	-4.64070	-.05598
93	LK2	Max	-26.85795	.01477	-.54223	-.10217	8.59301	-.04487
		Min	-26.85795	.01477	-.54223	-.10217	8.59301	-.04487
		Max	14.22626	-.02839	1.15059	.10782	-4.69487	-.06638
94	LK1	Min	14.22626	-.02839	1.15059	.10782	-4.69487	-.06638
		Max	-26.83010	-.01304	-.54212	-.02492	8.59144	-.11441
		Min	-26.83010	-.01304	-.54212	-.02492	8.59144	-.11441
95	LK2	Max	14.27174	.00961	1.15098	-.00911	-4.67094	-.02456
		Min	14.27174	.00961	1.15098	-.00911	-4.67094	-.02456
96	LK1	Max	-29.52852	.02693	3.31611	-.15941	9.36691	-.06811
		Min	-29.52852	.02693	3.31611	-.15941	9.36691	-.06811
		Max	15.70774	.03355	-.97070	.09530	-5.03568	-.05842
97	LK2	Min	15.70774	.03355	-.97070	.09530	-5.03568	-.05842
		Max	-29.54271	-.03334	-.56163	-.20142	9.37016	-.05272
		Min	-29.54271	-.03334	-.56163	-.20142	9.37016	-.05272
98	LK1	Max	15.72311	.00559	1.21264	.04217	-5.35275	-.08102
		Min	15.72311	.00559	1.21264	.04217	-5.35275	-.08102
99	LK2	Max	-29.48821	.00704	-.56083	.19550	9.23786	-.11030
		Min	-29.48821	.00704	-.56083	.19550	9.23786	-.11030
		Max	15.74284	.00385	1.21395	-.00839	-5.22722	-.02622
100	LK1	Min	15.74284	.00385	1.21395	-.00839	-5.22722	-.02622
		Max	-30.48699	.01209	3.36531	-.13094	9.75834	-.06550
		Min	-30.48699	.01209	3.36531	-.13094	9.75834	-.06550
101	LK2	Max	16.23229	.04233	-.98857	.07812	-5.58194	-.05905
		Min	16.23229	.04233	-.98857	.07812	-5.58194	-.05905
102	LK1	Max	-30.49908	-.04454	-.56782	.07430	9.78239	-.05302
		Min	-30.49908	-.04454	-.56782	.07430	9.78239	-.05302
		Max	16.27099	.00542	1.23359	-.03879	-5.58145	-.05986
103	LK2	Min	16.27099	.00542	1.23359	-.03879	-5.58145	-.05986
		Max	-30.43895	.02194	-.56714	-.00023	9.61326	-.10995
		Min	-30.43895	.02194	-.56714	-.00023	9.61326	-.10995
104	LK1	Max	16.27809	.00384	1.23503	.00546	-5.46144	-.02534
		Min	16.27809	.00384	1.23503	.00546	-5.46144	-.02534
105	LK2	Max	-31.47144	.00201	3.41447	-.06417	9.88719	-.06288
		Min	-31.47144	.00201	3.41447	-.06417	9.88719	-.06288
		Max	16.81487	.04798	-1.01176	.03307	-5.93043	-.05967
106	LK1	Min	16.81487	.04798	-1.01176	.03307	-5.93043	-.05967
		Max	-31.49194	-.02041	-.57894	.29230	9.97722	-.05334
		Min	-31.49194	-.02041	-.57894	.29230	9.97722	-.05334
107	LK2	Max	16.83482	-.00083	1.25450	-.07982	-5.67302	-.05871
		Min	16.83482	-.00083	1.25450	-.07982	-5.67302	-.05871
108	LK1	Max	-31.41586	.00763	-.57838	-.17688	9.83851	-.10959
		Min	-31.41586	.00763	-.57838	-.17688	9.83851	-.10959
		Max	16.83192	.00439	1.25608	.00307	-5.59942	-.02447
109	LK2	Min	16.83192	.00439	1.25608	.00307	-5.59942	-.02447
		Max	-34.45081	.00852	3.55572	.07181	9.98028	-.05768
		Min	-34.45081	.00852	3.55572	.07181	9.98028	-.05768
110	LK1	Max	18.56910	.03962	-1.07638	-.07207	-5.81487	-.05752
		Min	18.56910	.03962	-1.07638	-.07207	-5.81487	-.05752
111	LK2	Max	-34.46392	.02124	-.60864	.00556	9.89202	-.05122
		Min	-34.46392	.02124	-.60864	.00556	9.89202	-.05122
		Max	18.55413	-.02419	1.31235	-.02759	-5.79664	-.05582
112	LK1	Min	18.55413	-.02419	1.31235	-.02759	-5.79664	-.05582
		Max	-34.37851	-.00275	-.61186	.03492	9.99200	-.10337
		Min	-34.37851	-.00275	-.61186	.03492	9.99200	-.10337

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Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab

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Gittermasten L120-G3-50-3.5kN-2

26.07.2010

MAX/MIN GLOBALE KNOTENVERFORMUNGEN

Knoten-Nr.	LK-Nr.		Verschiebungen [mm]			Verdrehungen [mrad]		
			u _x	u _y	u _z	φ _x	φ _y	φ _z
107	LK2	Max	18.55194	.00530	1.31885	.00797	-5.86054	-.02378
		Min	18.55194	.00530	1.31885	.00797	-5.86054	-.02378
109	LK1	Max	-37.48037	.02998	3.68555	.04711	10.26531	-.05785
		Min	-37.48037	.02998	3.68555	.04711	10.26531	-.05785
	LK2	Max	20.33658	.01714	-1.13158	-.04777	-6.01876	-.05007
		Min	20.33658	.01714	-1.13158	-.04777	-6.01876	-.05007
110	LK1	Max	-37.46737	.00777	-.83455	-.02982	10.21078	-.04095
		Min	-37.46737	.00777	-.83455	-.02982	10.21078	-.04095
	LK2	Max	20.32448	-.01735	1.37028	.02772	-6.03757	-.05728
		Min	20.32448	-.01735	1.37028	.02772	-6.03757	-.05728
111	LK1	Max	-37.43083	.00540	-.63398	.02095	10.33304	-.09725
		Min	-37.43083	.00540	-.63398	.02095	10.33304	-.09725
	LK2	Max	20.34518	.00877	1.37197	.00054	-6.07805	-.02247
		Min	20.34518	.00877	1.37197	.00054	-6.07805	-.02247
113	LK1	Max	-40.62173	.03682	3.80512	.02808	10.65843	-.05599
		Min	-40.62173	.03682	3.80512	.02808	10.65843	-.05599
	LK2	Max	22.18979	.01271	-1.17794	-.00868	-6.31217	-.04407
		Min	22.18979	.01271	-1.17794	-.00868	-6.31217	-.04407
114	LK1	Max	-40.60019	.01606	-.85195	.05863	10.62128	-.03419
		Min	-40.60019	.01606	-.85195	.05863	10.62128	-.03419
	LK2	Max	22.17787	-.01988	1.41929	-.03344	-6.28067	-.05552
		Min	22.17787	-.01988	1.41929	-.03344	-6.28067	-.05552
115	LK1	Max	-40.57204	.00950	-.86814	.00021	10.60993	-.08927
		Min	-40.57204	.00950	-.86814	.00021	10.60993	-.08927
	LK2	Max	22.19678	.00648	1.42518	.00076	-6.27497	-.02177
		Min	22.19678	.00648	1.42518	.00076	-6.27497	-.02177
117	LK1	Max	-43.85693	.05437	3.91525	.08661	10.85514	-.05749
		Min	-43.85693	.05437	3.91525	.08661	10.85514	-.05749
	LK2	Max	24.10648	.00197	-1.21627	-.08571	-6.42447	-.03583
		Min	24.10648	.00197	-1.21627	-.08571	-6.42447	-.03583
118	LK1	Max	-43.81564	.02729	-.86941	-.00982	10.78672	-.02747
		Min	-43.81564	.02729	-.86941	-.00982	10.78672	-.02747
	LK2	Max	24.07768	-.02759	1.46832	.00659	-6.37182	-.05382
		Min	24.07768	-.02759	1.46832	.00659	-6.37182	-.05382
119	LK1	Max	-43.79808	.00587	-.86881	-.01277	10.89313	-.07863
		Min	-43.79808	.00587	-.86881	-.01277	10.89313	-.07863
	LK2	Max	24.11056	.01209	1.47030	.02441	-6.46753	-.02272
		Min	24.11056	.01209	1.47030	.02441	-6.46753	-.02272
121	LK1	Max	-47.13374	.07124	4.01556	-.02213	11.03207	-.05164
		Min	-47.13374	.07124	4.01556	-.02213	11.03207	-.05164
	LK2	Max	28.04812	-.01638	-1.24651	-.02093	-6.56905	-.03189
		Min	28.04812	-.01638	-1.24651	-.02093	-6.56905	-.03189
122	LK1	Max	-47.08957	.00982	-.87741	-.08393	11.12123	-.02281
		Min	-47.08957	.00982	-.87741	-.08393	11.12123	-.02281
	LK2	Max	26.01744	-.00964	1.50921	.11134	-6.82052	-.05013
		Min	26.01744	-.00964	1.50921	.11134	-6.82052	-.05013
123	LK1	Max	-47.11332	.00552	-.88145	.00950	11.22829	-.07192
		Min	-47.11332	.00552	-.88145	.00950	11.22829	-.07192
	LK2	Max	26.07533	.01557	1.51521	-.00992	-6.63932	-.01960
		Min	26.07533	.01557	1.51521	-.00992	-6.63932	-.01960
125	LK1	Max	-50.54794	.03534	4.10517	-.19577	11.91705	-.04332
		Min	-50.54794	.03534	4.10517	-.19577	11.91705	-.04332
	LK2	Max	28.10224	.00027	-1.26814	.13858	-7.25051	-.03083
		Min	28.10224	.00027	-1.26814	.13858	-7.25051	-.03083
126	LK1	Max	-50.54466	-.00266	-.88549	.05115	12.02088	-.02633
		Min	-50.54466	-.00266	-.88549	.05115	12.02088	-.02633
	LK2	Max	28.09387	.01749	1.54988	-.00326	-7.30912	-.03968
		Min	28.09387	.01749	1.54988	-.00326	-7.30912	-.03968
127	LK1	Max	-50.56328	.00704	-.88389	-.00670	11.82852	-.06018
		Min	-50.56328	.00704	-.88389	-.00670	11.82852	-.06018
	LK2	Max	28.12486	.01117	1.55128	-.00080	-7.10616	-.02084
		Min	28.12486	.01117	1.55128	-.00080	-7.10616	-.02084
129	LK1	Max	-51.75861	.01472	4.13326	-.20606	12.22463	-.04018
		Min	-51.75861	.01472	4.13326	-.20606	12.22463	-.04018
	LK2	Max	28.84063	.01646	-1.27381	.17817	-7.45807	-.03295
		Min	28.84063	.01646	-1.27381	.17817	-7.45807	-.03295
130	LK1	Max	-51.76239	.00618	-.88628	.10851	12.27307	-.02797
		Min	-51.76239	.00618	-.88628	.10851	12.27307	-.02797
	LK2	Max	28.83675	.01245	1.56190	-.08348	-7.49806	-.03790
		Min	28.83675	.01245	1.56190	-.08348	-7.49806	-.03790
131	LK1	Max	-51.75564	.00608	-.88472	-.00684	11.97665	-.06059
		Min	-51.75564	.00608	-.88472	-.00684	11.97665	-.06059
	LK2	Max	28.84459	.01198	1.56335	.01145	-7.25358	-.01994
		Min	28.84459	.01198	1.56335	.01145	-7.25358	-.01994
133	LK1	Max	-52.97863	-.00372	4.16133	-.15188	12.10475	-.03704
		Min	-52.97863	-.00372	4.16133	-.15188	12.10475	-.03704
	LK2	Max	29.58213	.03372	-1.27949	.16022	-7.31359	-.03507
		Min	29.58213	.03372	-1.27949	.16022	-7.31359	-.03507
134	LK1	Max	-52.98720	.01565	-.88708	.06385	12.16325	-.02961
		Min	-52.98720	.01565	-.88708	.06385	12.16325	-.02961
	LK2	Max	29.58352	.00363	1.57391	-.07880	-7.38768	-.03613
		Min	29.58352	.00363	1.57391	-.07880	-7.38768	-.03613
135	LK1	Max	-52.95029	.00691	-.88555	.02999	11.87489	-.06101
		Min	-52.95029	.00691	-.88555	.02999	11.87489	-.06101
	LK2	Max	29.58868	.01243	1.57542	-.00768	-7.19424	-.01906
		Min	29.58868	.01243	1.57542	-.00768	-7.19424	-.01906
137	LK1	Max	-56.51434	-.01581	4.24011	.06265	11.59447	-.03680
		Min	-56.51434	-.01581	4.24011	.06265	11.59447	-.03680
	LK2	Max	31.68492	.05966	-1.29234	-.00391	-6.84382	-.04013



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MAX/MIN GLOBALE KNOTENVERFORMUNGEN

Knoten-Nr.	LK-Nr.		Verschiebungen [mm]			Verdrehungen [mrad]		
			u _x	u _y	u _z	φ _x	φ _y	φ _z
137	LK2	Min	31.68492	.05988	-1.29234	-.00391	-8.84382	-.04013
		Max	-56.53983	.00885	-.68454	-.09130	11.60782	-.04005
138	LK1	Min	-56.53983	.00885	-.68454	-.09130	11.60782	-.04005
		Max	31.71232	-.00290	1.60565	.04182	-6.87586	-.03216
	LK2	Min	31.71232	-.00290	1.60565	.04182	-6.87586	-.03216
		Max	-56.45605	.02185	-.68804	.01369	11.63513	-.06020
139	LK1	Min	-56.45605	.02185	-.68804	.01369	11.63513	-.06020
		Max	31.68112	.00708	1.61136	.00275	-6.96804	-.02469
	LK2	Min	31.68112	.00708	1.61136	.00275	-6.96804	-.02469
		Max	-59.99819	.01744	4.30952	.10374	11.70159	-.04157
141	LK1	Min	-59.99819	.01744	4.30952	.10374	11.70159	-.04157
		Max	33.74531	.04044	-1.29749	-.07312	-6.93784	-.04150
	LK2	Min	33.74531	.04044	-1.29749	-.07312	-6.93784	-.04150
		Max	-60.01048	-.01579	-.68191	-.00776	11.64039	-.04092
142	LK1	Min	-60.01048	-.01579	-.68191	-.00776	11.64039	-.04092
		Max	33.75848	.01438	1.63738	.01949	-6.86046	-.03609
	LK2	Min	33.75848	.01438	1.63738	.01949	-6.86046	-.03609
		Max	-59.96968	.01116	-.68109	-.03622	11.76954	-.06434
143	LK1	Min	-59.96968	.01116	-.68109	-.03622	11.76954	-.06434
		Max	33.77436	.01523	1.63968	.01789	-6.97808	-.02617
	LK2	Min	33.77436	.01523	1.63968	.01789	-6.97808	-.02617
		Max	-63.54745	.03536	4.37111	.03619	11.92459	-.04790
145	LK1	Min	-63.54745	.03536	4.37111	.03619	11.92459	-.04790
		Max	35.85081	.02771	-1.29636	-.02364	-7.06198	-.03890
	LK2	Min	35.85081	.02771	-1.29636	-.02364	-7.06198	-.03890
		Max	-63.54383	.00207	-.67147	.07338	11.88785	-.04094
146	LK1	Min	-63.54383	.00207	-.67147	.07338	11.88785	-.04094
		Max	35.84823	.00379	1.66280	-.05079	-7.01707	-.03902
	LK2	Min	35.84823	.00379	1.66280	-.05079	-7.01707	-.03902
		Max	-63.51413	.00938	-.67412	.00576	11.86629	-.06354
147	LK1	Min	-63.51413	.00938	-.67412	.00576	11.86629	-.06354
		Max	35.87067	.01485	1.66795	.00169	-7.01384	-.02951
	LK2	Min	35.87067	.01485	1.66795	.00169	-7.01384	-.02951
		Max	-67.13287	.04752	4.42597	.04775	11.93750	-.05284
149	LK1	Min	-67.13287	.04752	4.42597	.04775	11.93750	-.05284
		Max	37.96630	.02014	-1.28998	-.03336	-7.01980	-.03587
	LK2	Min	37.96630	.02014	-1.28998	-.03336	-7.01980	-.03587
		Max	-67.11024	.01130	-.66124	-.01531	11.88574	-.04018
150	LK1	Min	-67.11024	.01130	-.66124	-.01531	11.88574	-.04018
		Max	37.95182	-.00317	1.68830	.01173	-7.00460	-.04011
	LK2	Min	37.95182	-.00317	1.68830	.01173	-7.00460	-.04011
		Max	-67.08988	.00953	-.66038	-.00021	11.96377	-.06053
151	LK1	Min	-67.08988	.00953	-.66038	-.00021	11.96377	-.06053
		Max	37.98359	.02024	1.69075	.02156	-7.05320	-.03182
	LK2	Min	37.98359	.02024	1.69075	.02156	-7.05320	-.03182
		Max	-70.71027	.05557	4.47387	-.02129	11.94657	-.05262
153	LK1	Min	-70.71027	.05557	4.47387	-.02129	11.94657	-.05262
		Max	40.08868	.01029	-1.27837	-.01780	-7.03540	-.03455
	LK2	Min	40.08868	.01029	-1.27837	-.01780	-7.03540	-.03455
		Max	-70.68541	.00009	-.64425	-.03333	12.00225	-.03886
154	LK1	Min	-70.68541	.00009	-.64425	-.03333	12.00225	-.03886
		Max	40.05618	.01015	1.70837	.07060	-7.05799	-.04040
	LK2	Min	40.05618	.01015	1.70837	.07060	-7.05799	-.04040
		Max	-70.69505	.01055	-.64675	.00430	12.08682	-.05985
155	LK1	Min	-70.69505	.01055	-.64675	.00430	12.08682	-.05985
		Max	40.09881	.02339	1.71349	-.00467	-7.05231	-.03080
	LK2	Min	40.09881	.02339	1.71349	-.00467	-7.05231	-.03080
		Max	-74.35120	.03128	4.51428	-.13003	12.45234	-.05040
157	LK1	Min	-74.35120	.03128	4.51428	-.13003	12.45234	-.05040
		Max	42.21977	.01721	-1.26130	.07900	-7.36935	-.03588
	LK2	Min	42.21977	.01721	-1.26130	.07900	-7.36935	-.03588
		Max	-74.35098	.00182	-.62738	.05702	12.51440	-.04391
158	LK1	Min	-74.35098	.00182	-.62738	.05702	12.51440	-.04391
		Max	42.21431	.02566	1.72830	-.00634	-7.38888	-.03668
	LK2	Min	42.21431	.02566	1.72830	-.00634	-7.38888	-.03668
		Max	-74.36073	.01006	-.62600	-.00746	12.38829	-.05673
159	LK1	Min	-74.36073	.01006	-.62600	-.00746	12.38829	-.05673
		Max	42.23843	.02115	1.73053	.00161	-7.25880	-.03173
	LK2	Min	42.23843	.02115	1.73053	.00161	-7.25880	-.03173
		Max	-75.60767	.01754	4.52650	-.13757	12.62771	-.05041
161	LK1	Min	-75.60767	.01754	4.52650	-.13757	12.62771	-.05041
		Max	42.96292	.02708	-1.25464	.11297	-7.45744	-.03846
	LK2	Min	42.96292	.02708	-1.25464	.11297	-7.45744	-.03846
		Max	-75.61177	.00896	-.62045	.07437	12.68008	-.04683
162	LK1	Min	-75.61177	.00896	-.62045	.07437	12.68008	-.04683
		Max	42.95935	.02230	1.73398	-.05223	-7.48074	-.03713
	LK2	Min	42.95935	.02230	1.73398	-.05223	-7.48074	-.03713
		Max	-75.60416	.00928	-.61907	-.00408	12.45199	-.05949
163	LK1	Min	-75.60416	.00928	-.61907	-.00408	12.45199	-.05949
		Max	42.96703	.02189	1.73622	.00965	-7.33130	-.03198
	LK2	Min	42.96703	.02189	1.73622	.00965	-7.33130	-.03198
		Max	-76.86697	.00524	4.53873	-.10095	12.50981	-.05043
165	LK1	Min	-76.86697	.00524	4.53873	-.10095	12.50981	-.05043
		Max	43.70412	.03873	-1.24797	.11468	-7.33141	-.04104
	LK2	Min	43.70412	.03873	-1.24797	.11468	-7.33141	-.04104
		Max	-76.87486	.01445	-.61351	.02423	12.56130	-.04975
166	LK1	Min	-76.87486	.01445	-.61351	.02423	12.56130	-.04975
		Max	43.70432	.01700	1.73968	-.04498	-7.38838	-.03760
	LK2	Min	43.70432	.01700	1.73968	-.04498	-7.38838	-.03760
		Max	43.70432	.01700	1.73968	-.04498	-7.38838	-.03760



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Projekt: Namenlos

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MAX/MIN GLOBALE KNOTENVERFORMUNGEN

Knoten-Nr.	LK-Nr.		Verschiebungen [mm]			Verdrehungen [mrad]		
			u _x	u _y	u _z	φ _x	φ _y	φ _z
167	LK1	Max	-76.84547	.01000	-.61213	.02208	12.34630	-.06225
		Min	-76.84547	.01000	-.61213	.02208	12.34630	-.06225
	LK2	Max	43.69845	.02239	1.74192	-.00319	-7.27689	-.03223
		Min	43.69845	.02239	1.74192	-.00319	-7.27689	-.03223
169	LK1	Max	-80.53801	-.00288	4.57180	.03957	12.05105	-.06025
		Min	-80.53801	-.00288	4.57180	.03957	12.05105	-.06025
	LK2	Max	45.83448	.05957	-1.22557	-.00349	-6.96994	-.05007
		Min	45.83448	.05957	-1.22557	-.00349	-6.96994	-.05007
170	LK1	Max	-80.56388	-.00028	-.58952	-.08189	12.08106	-.06582
		Min	-80.56388	-.00028	-.58952	-.08189	12.08106	-.06582
	LK2	Max	45.85556	.01775	1.75400	.05996	-6.99581	-.04189
		Min	45.85556	.01775	1.75400	.05996	-6.99581	-.04189
171	LK1	Max	-80.49973	.01989	-.59152	.00200	12.12795	-.07205
		Min	-80.49973	.01989	-.59152	.00200	12.12795	-.07205
	LK2	Max	45.84411	.01864	1.75877	.00610	-7.07382	-.04049
		Min	45.84411	.01864	1.75877	.00610	-7.07382	-.04049
173	LK1	Max	-84.14308	.01707	4.59834	.05458	12.03910	-.07464
		Min	-84.14308	.01707	4.59834	.05458	12.03910	-.07464
	LK2	Max	47.91722	.04021	-1.19862	-.08312	-6.91731	-.05932
		Min	47.91722	.04021	-1.19862	-.08312	-6.91731	-.05932
174	LK1	Max	-84.15970	-.01703	-.56529	-.00712	11.96434	-.07816
		Min	-84.15970	-.01703	-.56529	-.00712	11.96434	-.07816
	LK2	Max	47.93422	.03870	1.76827	.02229	-6.92866	-.05182
		Min	47.93422	.03870	1.76827	.02229	-6.92866	-.05182
175	LK1	Max	-84.14411	.01637	-.56469	.03779	12.12138	-.08820
		Min	-84.14411	.01637	-.56469	.03779	12.12138	-.08820
	LK2	Max	47.95415	.02508	1.77130	.00090	-6.97631	-.04686
		Min	47.95415	.02508	1.77130	.00090	-6.97631	-.04686
177	LK1	Max	-87.76986	.02604	4.62041	.03372	12.10772	-.09817
		Min	-87.76986	.02604	4.62041	.03372	12.10772	-.09817
	LK2	Max	49.98422	.02931	-1.16815	.03455	-6.85855	-.06746
		Min	49.98422	.02931	-1.16815	.03455	-6.85855	-.06746
178	LK1	Max	-87.76102	-.00997	-.53596	.01310	12.03262	-.09230
		Min	-87.76102	-.00997	-.53596	.01310	12.03262	-.09230
	LK2	Max	50.01634	.02200	1.77936	-.10552	-6.89358	-.06815
		Min	50.01634	.02200	1.77936	-.10552	-6.89358	-.06815
179	LK1	Max	-87.75240	.04205	-.53750	.06553	11.91155	-.10847
		Min	-87.75240	.04205	-.53750	.06553	11.91155	-.10847
	LK2	Max	50.02754	.02026	1.78385	-.00451	-6.85485	-.05586
		Min	50.02754	.02026	1.78385	-.00451	-6.85485	-.05586
181	LK1	Max	-91.38367	.04722	4.63812	.10799	11.92789	-.12508
		Min	-91.38367	.04722	4.63812	.10799	11.92789	-.12508
	LK2	Max	52.05099	.06835	-1.13517	.22414	-6.98782	-.08344
		Min	52.05099	.06835	-1.13517	.22414	-6.98782	-.08344
182	LK1	Max	-91.38033	-.01014	-.50733	.02795	12.11018	-.11289
		Min	-91.38033	-.01014	-.50733	.02795	12.11018	-.11289
	LK2	Max	52.04269	-.00108	1.79075	.00678	-6.58118	-.08869
		Min	52.04269	-.00108	1.79075	.00678	-6.58118	-.08869
183	LK1	Max	-91.29979	.00566	-.50608	-.40810	11.79249	-.13956
		Min	-91.29979	.00566	-.50608	-.40810	11.79249	-.13956
	LK2	Max	52.07075	.03427	1.79310	.10694	-6.76613	-.06389
		Min	52.07075	.03427	1.79310	.10694	-6.76613	-.06389
185	LK1	Max	-94.93218	.07414	4.65085	.01208	11.79880	-.14396
		Min	-94.93218	.07414	4.65085	.01208	11.79880	-.14396
	LK2	Max	54.16709	.12954	-1.10028	.06635	-7.01133	-.10069
		Min	54.16709	.12954	-1.10028	.06635	-7.01133	-.10069
186	LK1	Max	-95.01830	.01728	-.47522	.14586	12.09316	-.13353
		Min	-95.01830	.01728	-.47522	.14586	12.09316	-.13353
	LK2	Max	54.00441	.02777	1.79831	.13876	-6.66672	-.10234
		Min	54.00441	.02777	1.79831	.13876	-6.66672	-.10234
187	LK1	Max	-94.86726	-.14984	-.47627	-.34058	12.07101	-.16882
		Min	-94.86726	-.14984	-.47627	-.34058	12.07101	-.16882
	LK2	Max	54.09483	.06452	1.80226	.01398	-6.75214	-.07007
		Min	54.09483	.06452	1.80226	.01398	-6.75214	-.07007
189	LK1	Max	-98.56704	.05193	4.65909	-.11023	12.71688	-.16501
		Min	-98.56704	.05193	4.65909	-.11023	12.71688	-.16501
	LK2	Max	56.09338	.09831	-1.06284	-.18377	-5.37919	-.09469
		Min	56.09338	.09831	-1.06284	-.18377	-5.37919	-.09469
190	LK1	Max	-98.61343	-.10736	-.44256	-.159916	11.84773	-.14212
		Min	-98.61343	-.10736	-.44256	-.159916	11.84773	-.14212
	LK2	Max	56.15127	.06948	1.80567	.14156	-7.84117	-.11052
		Min	56.15127	.06948	1.80567	.14156	-7.84117	-.11052
191	LK1	Max	-98.52512	.01651	-.44217	1.89041	12.16361	-.16834
		Min	-98.52512	.01651	-.44217	1.89041	12.16361	-.16834
	LK2	Max	56.21589	.03496	1.80923	-.15320	-7.68019	-.08434
		Min	56.21589	.03496	1.80923	-.15320	-7.68019	-.08434
193	LK1	Max	-99.85912	.04091	4.66139	-.11023	13.02252	-.16501
		Min	-99.85912	.04091	4.66139	-.11023	13.02252	-.16501
	LK2	Max	56.59716	.07993	-1.04955	-.18379	-4.86726	-.09469
		Min	56.59716	.07993	-1.04955	-.18379	-4.86726	-.09469
194	LK1	Max	-99.79437	-.30815	-.43085	-2.21226	11.79003	-.14212
		Min	-99.79437	-.30815	-.43085	-2.21226	11.79003	-.14212
	LK2	Max	56.95578	.08363	1.80797	.14156	-8.14684	-.11052
		Min	56.95578	.08363	1.80797	.14156	-8.14684	-.11052
195	LK1	Max	-99.73765	.24644	-.43045	2.50379	12.10575	-.16834
		Min	-99.73765	.24644	-.43045	2.50379	12.10575	-.16834
	LK2	Max	57.00428	.01965	1.81153	-.15320	-7.98585	-.08434
		Min	57.00428	.01965	1.81153	-.15320	-7.98585	-.08434
196	LK1	Max	.00000	.00000	.00000	.00000	.00000	.00000



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MAX/MIN GLOBALE KNOTENVERFORMUNGEN

Knoten-Nr.	LK-Nr.		Verschiebungen [mm]			Verdrehungen [mrad]		
			u_x	u_y	u_z	ϕ_x	ϕ_y	ϕ_z
196	LK1	Min	.00000	.00000	.00000	.00000	.00000	.00000
		Max	.00000	.00000	.00000	.00000	.00000	.00000
		Min	.00000	.00000	.00000	.00000	.00000	.00000
197	LK1	Max	.00000	.00000	.00000	.00000	.00000	.00000
		Min	.00000	.00000	.00000	.00000	.00000	.00000
		Max	.00000	.00000	.00000	.00000	.00000	.00000
198	LK1	Max	.00000	.00000	.00000	.00000	.00000	.00000
		Min	.00000	.00000	.00000	.00000	.00000	.00000
		Max	.00000	.00000	.00000	.00000	.00000	.00000
	LK2	Max	.00000	.00000	.00000	.00000	.00000	.00000
		Min	.00000	.00000	.00000	.00000	.00000	.00000
		Max	.00000	.00000	.00000	.00000	.00000	.00000
	LK1	*MAX	.00000	.24644	4.66139	2.50379	13.02252	.00000
		*MIN	-89.85812	-.30815	-.68804	-2.21226	.00000	-.16834
		*MAX	57.00428	.12954	1.81153	.22414	.00000	.00000
	LK2	*MIN	.00000	-.05203	-1.29749	-.18379	-8.14684	-.11052



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STAHL

Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
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STAHL1 - SPANNUNGSANALYSE

BASISANGABEN

ZU BEMESSENDE STÄBE
Alle

ZU BEMESSENDE LASTFÄLLE

- LF1 - Vertikallasten
- LG1 - Grenzwerte Traglast gegen x-Richtung, v=130km/h
- LK1 - Grenzwerte Traglast gegen x-Richtung v=130km/h
- LF2 - hor. Lasten in x-Richtung, v=130km/h
- LG2 - Grenzwerte Traglast in x-Richtung, v=130km/h
- LK2 - Grenzwerte Traglast in x-Richtung, v=130km/h
- LF3 - hor. Lasten gegen x-Richtung, v=130km/h

GRENZSPANNUNGEN

Mat.-Nr.	Material-Bezeichnung	Material-Norm, Kriterium	Grenzspannungen [kN/cm ²]		
			Sigma	Tau	Sigma-v
1	Aluminium F 31		15.3	8.8	15.3
2	Drahtseil inox		100	57.7	100
3	Aluminium F 22		10.2	5.9	10.2

Rohr 60/4

Rohr 18/4



Rundstahl 6



QUERSCHNITTE

Quer.-Nr.	Mat.-Nr.	Querschnittsbezeichnung Querschnittsdrehung	I-T [cm ⁴] A [cm ²]	I-2 [cm ⁴] Alpha pl. y	I-3 [cm ⁴] Alpha pl. z
1	1	Rohr 60/4	55.45 7.04	27.73 1.00	27.73 1.00
2	3	Rohr 18/4	0.93 1.76	0.47 1.00	0.47 1.00
3	2	Rundstahl 6	0.01 0.28	0.01 1.00	0.01 1.00

MAX. SPANNUNGEN IN QUERSCHNITTEN

Spannungsart	Stab-Nr.	x-Stelle [m]	S-Punkt Nr.	LF Nr.	Spannung [kN/cm ²]		Ausnutzung
					vorrh	grenz	
Querschnitt Nr. 1 - Rohr 60/4							
Sigma gesamt	1	0.100	9	LG1	-8.39	15.30	0.55
Tau gesamt	256	0.100	10	LG1	-1.06	8.80	0.12
Sigma-v	1	0.100	9	LG1	8.39	15.30	0.55
Querschnitt Nr. 2 - Rohr 18/4							
Sigma gesamt	269	0.000	1	LG1	2.73	10.20	0.27
Tau gesamt	25	0.000	1	LG1	0.02	5.90	0.00
Sigma-v	269	0.500	1	LG1	2.73	10.20	0.27
Querschnitt Nr. 3 - Rundstahl 6							
Sigma gesamt	289	0.000	1	LG2	33.21	100.00	0.33
Tau gesamt	289	0.000	1	LF1	0.00	57.70	0.00
Sigma-v	289	0.000	1	LG2	33.21	100.00	0.33



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DYNAM1 - DYNAMISCHE ANALYSE

BASISANGABEN

- Anzahl der kleinsten Eigenwerte: 4
- ☒ Berücksichtigung der Eigengewichte
- mit Faktor: 1.00
- Wirkung der Massen in
☒ X-Richtung ☒ X-Rotatorische
☒ Y-Richtung ☒ Y-Rotatorische
☒ Z-Richtung ☒ Z-Rotatorische
- Interne Stabteilung wegen
- Näherungsmethode: 1
- Vouten-/Bettungsstäbe: 6
- Typ der Massenmatrix
☐ Diagonal
☒ Konsistent
☐ Einheitsmatrix
- Zusätzlich sollen berechnet werden
☐ Normierte Knotenverformungen
☐ Knotenmassen
☐ Ersatzmassen
☐ Vergrößerungsfaktoren
- ☐ Berücksichtigung der geometrischen Steifigkeitsmatrizen
- Details
- Erdbeschleunigung: 10.00 [m/s²]
- Max. Anzahl der Iterationen: 20
- Abbruchschranke: 0.00001

KNOTEN-ZUSATZMASSEN

Nr.	Liste der Knoten mit Masse	Masse in Richtung			Massenmomente um		
		X [kg]	Y [kg]	Z [kg]	X [kgm ²]	Y [kgm ²]	Z [kgm ²]
1	193-195	60.000	60.000	60.000	0.000	0.000	0.000
2	193-195	50.000	50.000	50.000	0.000	0.000	0.000

EIGENWERTE UND EIGENFREQUENZEN

Eigen-Nr.	Eigenwert [1/sec ²]	Kreisfrequenz [1/sec]	Frequenz [Hz]	Eigenperiode [sec]
1	339.72462	18.43162	2.93348	0.340892
2	339.72462	18.43162	2.93348	0.340892
3	729.11514	27.00213	4.28752	0.232692
4	11054.45588	105.14017	16.73358	0.05976

EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
1	1	1	0.00000	0.00000	0.00000	0.00191	-0.00858	0.00000
		2	0.00000	0.00000	0.00000	-0.00757	0.00099	0.00000
		3	0.00000	0.00000	0.00000	0.05131	-0.00817	0.00000
		4	0.00000	0.00000	0.00000	-0.18094	0.17480	0.00000
	5	1	0.00079	0.00018	0.00016	0.00162	-0.00863	-0.00002
		2	-0.00009	-0.00072	0.00000	-0.00638	0.00063	0.00003
		3	0.00057	0.00493	0.00000	0.04536	-0.00465	-0.01014
		4	-0.01657	-0.01737	0.00284	-0.15933	0.14758	-0.00090
2	5	1	0.00079	0.00018	0.00016	0.00162	-0.00863	-0.00002
		2	-0.00009	-0.00072	0.00000	-0.00638	0.00063	0.00003
		3	0.00057	0.00493	0.00000	0.04536	-0.00465	-0.01014
		4	-0.01657	-0.01737	0.00284	-0.15933	0.14758	-0.00090
	9	1	0.00153	0.00042	0.00070	-0.00002	0.00050	-0.00004
		2	-0.00005	-0.00174	-0.00004	-0.00085	-0.00067	0.00015
		3	0.00081	0.01474	0.00020	0.02341	0.00262	-0.03840
		4	-0.04421	-0.05127	0.01029	-0.08157	0.05435	-0.00330
3	9	1	0.00153	0.00042	0.00070	-0.00002	0.00050	-0.00004
		2	-0.00005	-0.00174	-0.00004	-0.00085	-0.00067	0.00015
		3	0.00081	0.01474	0.00020	0.02341	0.00262	-0.03840
		4	-0.04421	-0.05127	0.01029	-0.08157	0.05435	-0.00330
	13	1	0.00103	0.00027	0.00133	-0.00081	0.00238	-0.00005
		2	0.00016	-0.00147	-0.00003	0.00230	-0.00033	0.00021
		3	-0.00025	0.02076	0.00001	0.01870	0.00197	-0.08539
		4	-0.08047	-0.07479	0.01739	-0.08900	0.07421	-0.00736
4	13	1	0.00103	0.00027	0.00133	-0.00081	0.00238	-0.00005
		2	0.00016	-0.00147	-0.00003	0.00230	-0.00033	0.00021
		3	-0.00025	0.02076	0.00001	0.01870	0.00197	-0.08539
		4	-0.08047	-0.07479	0.01739	-0.08900	0.07421	-0.00736
	17	1	0.00014	0.00015	0.00203	-0.00024	0.00394	0.00002
		2	0.00012	-0.00043	-0.00006	0.00470	0.00029	0.00028
		3	0.00000	0.02654	0.00018	0.01947	-0.00225	-0.09170
		4	-0.09184	-0.10782	0.02285	-0.12758	0.12441	-0.01149
5	17	1	0.00014	0.00015	0.00203	-0.00024	0.00394	0.00002



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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
5	17	2	0.00012	-0.00043	-0.00008	0.00470	0.00029	0.00026
		3	0.00000	0.02654	0.00018	0.01947	-0.00225	-0.09170
		4	-0.09184	-0.10782	0.02285	-0.12758	0.12441	-0.01149
		1	-0.00155	0.00003	0.00281	-0.00089	0.00784	0.00005
	21	2	0.00016	0.00142	-0.00006	0.00781	-0.00081	0.00030
		3	0.00025	0.03231	0.00001	0.01869	0.00196	-0.17399
		4	-0.12949	-0.14909	0.02808	-0.14417	0.11766	-0.01519
		1	-0.00155	0.00003	0.00281	-0.00089	0.00784	0.00005
6	21	2	0.00016	0.00142	-0.00006	0.00781	-0.00081	0.00030
		3	0.00025	0.03231	0.00001	0.01869	0.00196	-0.17399
		4	-0.12949	-0.14909	0.02808	-0.14417	0.11766	-0.01519
		1	-0.00436	-0.00017	0.00366	-0.00022	0.01051	0.00007
	25	2	0.00045	0.00418	-0.00010	0.01020	-0.00046	0.00030
		3	-0.00080	0.03832	0.00020	0.02336	0.00261	-0.14495
		4	-0.16388	-0.19638	0.03173	-0.18077	0.12437	-0.01899
		1	-0.00436	-0.00017	0.00366	-0.00022	0.01051	0.00007
7	25	2	0.00045	0.00418	-0.00010	0.01020	-0.00046	0.00030
		3	-0.00080	0.03832	0.00020	0.02336	0.00261	-0.14495
		4	-0.16388	-0.19638	0.03173	-0.18077	0.12437	-0.01899
		1	-0.00727	0.00003	0.00481	0.00159	0.00765	0.00004
	29	2	0.00032	0.00714	-0.00009	0.00856	0.00109	0.00037
		3	-0.00056	0.04810	0.00000	0.04521	-0.00463	-0.17315
		4	-0.21321	-0.26305	0.03508	-0.27269	0.22252	-0.02074
		1	-0.00727	0.00003	0.00481	0.00159	0.00765	0.00004
8	29	2	0.00032	0.00714	-0.00009	0.00856	0.00109	0.00037
		3	-0.00056	0.04810	0.00000	0.04521	-0.00463	-0.17315
		4	-0.21321	-0.26305	0.03508	-0.27269	0.22252	-0.02074
		1	-0.00797	0.00022	0.00494	0.00204	0.00705	0.00002
	33	2	0.00021	0.00795	-0.00009	0.00820	0.00108	0.00038
		3	0.00000	0.05302	0.00000	0.05114	-0.00815	-0.18328
		4	-0.23739	-0.29176	0.03586	-0.29486	0.25246	-0.02170
		1	0.00000	0.00000	0.00000	-0.00070	-0.00909	0.00000
9	2	2	0.00000	0.00000	0.00000	-0.00706	-0.00161	0.00000
		3	0.00000	0.00000	0.00000	-0.02031	0.04752	0.00000
		4	0.00000	0.00000	0.00000	-0.13606	0.13155	0.00000
		1	0.00085	-0.00005	-0.00008	-0.00018	-0.00743	0.00003
	6	2	0.00015	-0.00086	-0.00014	-0.00559	-0.00116	0.00001
		3	-0.00456	-0.00198	0.00000	-0.01865	0.04161	-0.01014
		4	-0.01271	-0.01302	0.00161	-0.11839	0.11811	0.00171
		1	0.00085	-0.00005	-0.00008	-0.00018	-0.00743	0.00003
10	6	2	0.00015	-0.00086	-0.00014	-0.00559	-0.00116	0.00001
		3	-0.00456	-0.00198	0.00000	-0.01865	0.04161	-0.01014
		4	-0.01271	-0.01302	0.00161	-0.11839	0.11811	0.00171
		1	0.00189	0.00016	-0.00038	0.00109	-0.00021	0.00015
	10	2	0.00021	-0.00138	-0.00059	-0.00014	0.00043	-0.00004
		3	-0.01317	-0.00667	0.00020	-0.01397	0.01896	-0.03840
		4	-0.03938	-0.04057	0.00658	-0.08907	0.06955	0.00533
		1	0.00189	0.00016	-0.00038	0.00109	-0.00021	0.00015
11	10	2	0.00021	-0.00138	-0.00059	-0.00014	0.00043	-0.00004
		3	-0.01317	-0.00667	0.00020	-0.01397	0.01896	-0.03840
		4	-0.03938	-0.04057	0.00658	-0.08907	0.06955	0.00533
		1	0.00141	0.00038	-0.00069	0.00013	0.00273	0.00020
	14	2	0.00005	-0.00109	-0.00113	0.00196	0.00041	-0.00006
		3	-0.01785	-0.01059	0.00001	-0.01105	0.01521	-0.06539
		4	-0.06031	-0.07240	0.00995	-0.11680	0.07995	0.01007
		1	0.00141	0.00038	-0.00069	0.00013	0.00273	0.00020
12	14	2	0.00005	-0.00109	-0.00113	0.00196	0.00041	-0.00006
		3	-0.01785	-0.01059	0.00001	-0.01105	0.01521	-0.06539
		4	-0.06031	-0.07240	0.00995	-0.11680	0.07995	0.01007
		1	0.00038	0.00025	-0.00107	-0.00061	0.00450	0.00022
	18	2	0.00002	0.00020	-0.00172	0.00415	-0.00008	-0.00015
		3	-0.02298	-0.01327	0.00018	-0.00778	0.01799	-0.09170
		4	-0.08940	-0.10947	0.01360	-0.13252	0.11078	0.01385
		1	0.00038	0.00025	-0.00107	-0.00061	0.00450	0.00022
13	18	2	0.00002	-0.00020	-0.00172	0.00415	-0.00008	-0.00015
		3	-0.02298	-0.01327	0.00018	-0.00778	0.01799	-0.09170
		4	-0.08940	-0.10947	0.01360	-0.13252	0.11078	0.01385
		1	-0.00151	0.00018	-0.00145	0.00035	0.00843	0.00023
	22	2	0.00001	0.00146	-0.00240	0.00702	0.00023	-0.00019
		3	-0.02811	-0.01594	0.00001	-0.01104	0.01520	-0.11799
		4	-0.12502	-0.15316	0.01599	-0.15988	0.12416	0.01752
		1	-0.00151	0.00018	-0.00145	0.00035	0.00843	0.00023
14	22	2	0.00001	0.00146	-0.00240	0.00702	0.00023	-0.00019
		3	-0.02811	-0.01594	0.00001	-0.01104	0.01520	-0.11799
		4	-0.12502	-0.15316	0.01599	-0.15988	0.12416	0.01752
		1	-0.00450	0.00037	-0.00192	0.00042	0.01058	0.00022
	26	2	-0.00008	0.00404	-0.00312	0.01013	0.00018	-0.00021
		3	-0.03279	-0.01986	0.00020	-0.01394	0.01892	-0.14495
		4	-0.16477	-0.20495	0.01864	-0.18358	0.14618	0.02149
		1	-0.00450	0.00037	-0.00192	0.00042	0.01058	0.00022
15	26	2	-0.00008	0.00404	-0.00312	0.01013	0.00018	-0.00021
		3	-0.03279	-0.01986	0.00020	-0.01394	0.01892	-0.14495
		4	-0.16477	-0.20495	0.01864	-0.18358	0.14618	0.02149
		1	-0.00731	0.00030	-0.00238	-0.00082	0.00719	0.00030
	30	2	0.00005	0.00710	-0.00394	0.00903	-0.00132	-0.00022
		3	-0.04137	-0.02454	0.00000	-0.01860	0.04147	-0.17315
		4	-0.21625	-0.26662	0.01983	-0.24044	0.20353	0.02482
		1	-0.00731	0.00030	-0.00238	-0.00082	0.00719	0.00030
16	30	2	0.00005	0.00710	-0.00394	0.00903	-0.00132	-0.00022



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung			
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z	
16	30	3	-0.04137	-0.02454	0.00000	-0.01860	0.04147	-0.17315	
		4	-0.21625	-0.26882	0.01983	-0.24044	0.20353	0.02482	
	34	1	-0.00797	0.00021	-0.00255	-0.00080	0.00857	0.00032	
		2	0.00021	0.00796	-0.00422	0.00868	-0.00176	-0.00021	
3		-0.04591	-0.02651	0.00000	-0.02024	0.04736	-0.18326		
17	3	4	-0.23754	-0.29196	0.02028	-0.25723	0.21821	0.02648	
		1	0.00000	0.00000	0.00000	0.00017	-0.00658	0.00000	
		2	0.00000	0.00000	0.00000	-0.00957	-0.00075	0.00000	
		3	0.00000	0.00000	0.00000	-0.03100	-0.04135	0.00000	
	7	4	0.00000	0.00000	0.00000	-0.19603	0.11420	0.00000	
		1	0.00062	0.00001	-0.00008	0.00003	-0.00548	-0.00001	
		2	0.00008	-0.00089	0.00014	-0.00754	-0.00095	-0.00003	
		3	0.00399	-0.00296	0.00000	-0.02671	-0.03695	-0.01014	
	18	7	4	-0.01086	-0.01855	-0.00444	-0.16445	0.09731	-0.00084
			1	0.00062	0.00001	-0.00008	0.00003	-0.00548	-0.00001
			2	0.00008	-0.00089	0.00014	-0.00754	-0.00095	-0.00003
			3	0.00399	-0.00296	0.00000	-0.02671	-0.03695	-0.01014
11		4	-0.01086	-0.01855	-0.00444	-0.16445	0.09731	-0.00084	
		1	0.00148	-0.00002	-0.00032	-0.00008	-0.00082	-0.00011	
		2	0.00039	-0.00178	0.00063	0.00046	-0.00074	-0.00011	
		3	0.01236	-0.00807	0.00020	-0.00944	-0.02158	-0.03840	
19		11	4	-0.03250	-0.05012	-0.01687	-0.07218	0.06839	-0.00212
			1	0.00148	-0.00002	-0.00032	-0.00008	-0.00082	-0.00011
			2	0.00039	-0.00178	0.00063	0.00046	-0.00074	-0.00011
			3	0.01236	-0.00807	0.00020	-0.00944	-0.02158	-0.03840
	15	4	-0.03250	-0.05012	-0.01687	-0.07218	0.06839	-0.00212	
		1	0.00132	-0.00001	-0.00064	0.00008	0.00192	-0.00016	
		2	0.00043	-0.00118	0.00116	0.00276	0.00034	-0.00014	
		3	0.01810	-0.01016	0.00001	-0.00764	-0.01718	-0.06539	
	20	15	4	-0.05828	-0.07376	-0.02734	-0.09795	0.10111	-0.00286
			1	0.00132	-0.00001	-0.00064	0.00008	0.00192	-0.00016
			2	0.00043	-0.00118	0.00116	0.00276	0.00034	-0.00014
			3	0.01810	-0.01016	0.00001	-0.00764	-0.01718	-0.06539
19		4	-0.05828	-0.07376	-0.02734	-0.09795	0.10111	-0.00286	
		1	0.00034	0.00000	-0.00096	0.00005	0.00454	-0.00023	
		2	0.00027	-0.00023	0.00179	0.00411	0.00059	-0.00012	
		3	0.02298	-0.01327	0.00018	-0.01168	-0.01574	-0.09170	
21		19	4	-0.09199	-0.11079	-0.03645	-0.14188	0.12183	-0.00258
			1	0.00034	0.00000	-0.00096	0.00005	0.00454	-0.00023
			2	0.00027	-0.00023	0.00179	0.00411	0.00059	-0.00012
			3	0.02298	-0.01327	0.00018	-0.01168	-0.01574	-0.09170
	23	4	-0.09199	-0.11079	-0.03645	-0.14188	0.12183	-0.00258	
		1	-0.00140	0.00008	-0.00135	0.00052	0.00713	-0.00028	
		2	0.00012	0.00157	0.00245	0.00832	0.00040	-0.00011	
		3	0.02786	-0.01637	0.00001	-0.00765	-0.01716	-0.11799	
	22	23	4	-0.13070	-0.15503	-0.04407	-0.14632	0.13431	-0.00280
			1	-0.00140	0.00008	-0.00135	0.00052	0.00713	-0.00028
			2	0.00012	0.00157	0.00245	0.00832	0.00040	-0.00011
			3	0.02786	-0.01637	0.00001	-0.00765	-0.01716	-0.11799
27		4	-0.13070	-0.15503	-0.04407	-0.14632	0.13431	-0.00280	
		1	-0.00396	0.00023	-0.00175	0.00016	0.01000	-0.00029	
		2	0.00006	0.00458	0.00321	0.01071	-0.00008	-0.00008	
		3	0.03359	-0.01847	0.00020	-0.00942	-0.02153	-0.14495	
23		27	4	-0.17166	-0.19994	-0.05037	-0.16331	0.13768	-0.00283
			1	-0.00396	0.00023	-0.00175	0.00016	0.01000	-0.00029
			2	0.00006	0.00458	0.00321	0.01071	-0.00008	-0.00008
			3	0.03359	-0.01847	0.00020	-0.00942	-0.02153	-0.14495
	31	4	-0.17166	-0.19994	-0.05037	-0.16331	0.13768	-0.00283	
		1	-0.00705	0.00020	-0.00223	-0.00001	0.00951	-0.00034	
		2	0.00016	0.00735	0.00403	0.00671	-0.00052	-0.00015	
		3	0.04194	-0.02356	0.00000	-0.02661	-0.03684	-0.17315	
	24	31	4	-0.21789	-0.26236	-0.05490	-0.27306	0.18502	-0.00448
			1	-0.00705	0.00020	-0.00223	-0.00001	0.00951	-0.00034
			2	0.00016	0.00735	0.00403	0.00671	-0.00052	-0.00015
			3	0.04194	-0.02356	0.00000	-0.02661	-0.03684	-0.17315
35		4	-0.21789	-0.26236	-0.05490	-0.27306	0.18502	-0.00448	
		1	-0.00797	0.00021	-0.00239	0.00020	0.00927	-0.00034	
		2	0.00022	0.00795	-0.00432	0.00598	-0.00076	-0.00018	
		3	0.04592	-0.02651	0.00000	-0.03090	-0.04121	-0.18326	
25		5	4	-0.23753	-0.29180	-0.05614	-0.30578	0.20266	-0.00519
			1	0.00079	0.00018	-0.00063	0.00162	-0.00683	-0.00002
			2	-0.00009	-0.00072	0.00000	-0.00638	0.00083	0.00003
			3	0.00057	0.00493	0.00000	0.04536	-0.00465	-0.01014
	6	4	-0.01657	-0.01737	0.00284	-0.15933	0.14758	-0.00090	
		1	0.00085	-0.00005	-0.00008	-0.00018	-0.00743	0.00003	
		2	0.00015	-0.00066	-0.00014	-0.00559	-0.00116	0.00001	
		3	-0.00456	-0.00198	0.00000	-0.01865	0.04161	-0.01014	
	26	6	4	-0.01271	-0.01302	0.00161	-0.11839	0.11811	0.00171
			1	0.00085	-0.00005	-0.00008	-0.00018	-0.00743	0.00003
			2	0.00015	-0.00066	-0.00014	-0.00559	-0.00116	0.00001
			3	-0.00456	-0.00198	0.00000	-0.01865	0.04161	-0.01014
7		4	-0.01271	-0.01302	0.00161	-0.11839	0.11811	0.00171	
		1	0.00062	0.00001	-0.00008	0.00003	-0.00548	-0.00001	
		2	0.00008	-0.00089	0.00014	-0.00754	-0.00095	-0.00003	
		3	0.00399	-0.00296	0.00000	-0.02671	-0.03695	-0.01014	
27		7	4	-0.01086	-0.01855	-0.00444	-0.16445	0.09731	-0.00084
			1	0.00062	0.00001	-0.00008	0.00003	-0.00548	-0.00001
			2	0.00008	-0.00089	0.00014	-0.00754	-0.00095	-0.00003
			3	0.00399	-0.00296	0.00000	-0.02671	-0.03695	-0.01014



Projekt: Namenlos

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
27	7	4	-0.01088	-0.01855	-0.00444	-0.16445	0.09731	-0.00084
		1	0.00079	0.00018	0.00018	-0.00162	-0.00663	-0.00002
		2	-0.00009	-0.00072	0.00000	-0.00638	0.00063	0.00003
		3	0.00057	0.00493	0.00000	0.04536	-0.00465	-0.01014
28	29	4	-0.01857	-0.01737	0.00284	-0.15933	0.14758	-0.00090
		1	-0.00727	0.00003	0.00481	0.00159	0.00765	0.00004
		2	0.00032	0.00714	-0.00009	0.00856	0.00109	0.00037
		3	-0.00056	0.04810	0.00000	0.04521	-0.00463	-0.17315
	30	4	-0.21321	-0.26305	0.03506	-0.27269	0.22252	-0.02074
		1	-0.00731	0.00030	-0.00238	-0.00082	0.00719	0.00030
		2	0.00005	0.00710	-0.00394	0.00903	-0.00132	-0.00022
		3	-0.04137	-0.02454	0.00000	-0.01880	0.04147	-0.17315
29	30	4	-0.21625	-0.26682	0.01983	-0.24044	0.20353	0.02482
		1	-0.00731	0.00030	-0.00238	-0.00082	0.00719	0.00030
		2	0.00005	0.00710	-0.00394	0.00903	-0.00132	-0.00022
		3	-0.04137	-0.02454	0.00000	-0.01880	0.04147	-0.17315
	31	4	-0.21625	-0.26682	0.01983	-0.24044	0.20353	0.02482
		1	-0.00705	0.00020	-0.00223	-0.00001	0.00851	-0.00034
		2	0.00016	0.00735	0.00403	0.00671	-0.00052	-0.00015
		3	0.04194	-0.02356	0.00000	-0.02661	-0.03684	-0.17315
30	31	4	-0.21789	-0.26236	-0.05490	-0.27306	0.18502	-0.00448
		1	-0.00705	0.00020	-0.00223	-0.00001	0.00851	-0.00034
		2	0.00016	0.00735	0.00403	0.00671	-0.00052	-0.00015
		3	0.04194	-0.02356	0.00000	-0.02661	-0.03684	-0.17315
	29	4	-0.21789	-0.26236	-0.05490	-0.27306	0.18502	-0.00448
		1	-0.00727	0.00003	0.00481	0.00159	0.00765	0.00004
		2	0.00032	0.00714	-0.00009	0.00856	0.00109	0.00037
		3	-0.00056	0.04810	0.00000	0.04521	-0.00463	-0.17315
31	5	4	-0.21321	-0.26305	0.03506	-0.27269	0.22252	-0.02074
		1	0.00079	0.00018	0.00018	0.00162	-0.00663	-0.00002
		2	-0.00009	-0.00072	0.00000	-0.00638	0.00063	0.00003
		3	0.00057	0.00493	0.00000	0.04536	-0.00465	-0.01014
	11	4	-0.01857	-0.01737	0.00284	-0.15933	0.14758	-0.00090
		1	0.00148	-0.00002	-0.00032	-0.00008	-0.00082	-0.00011
		2	0.00039	-0.00178	0.00063	0.00046	-0.00074	-0.00011
		3	0.01236	-0.0807	0.00020	-0.00944	-0.02158	-0.03840
32	11	4	-0.03250	-0.05012	-0.01887	-0.07218	0.06839	-0.00212
		1	0.00148	-0.00002	-0.00032	-0.00008	-0.00082	-0.00011
		2	0.00039	-0.00178	0.00063	0.00046	-0.00074	-0.00011
		3	0.01236	-0.0807	0.00020	-0.00944	-0.02158	-0.03840
	13	4	-0.03250	-0.05012	-0.01887	-0.07218	0.06839	-0.00212
		1	0.00103	0.00027	0.00133	-0.00061	0.00238	-0.00005
		2	0.00018	-0.00147	-0.00003	0.00230	-0.00033	0.00021
		3	-0.00025	0.02076	0.00001	0.01870	0.00197	-0.06539
33	13	4	-0.08047	-0.07479	0.01739	-0.08900	0.07421	-0.00736
		1	0.00103	0.00027	0.00133	-0.00061	0.00238	-0.00005
		2	0.00018	-0.00147	-0.00003	0.00230	-0.00033	0.00021
		3	-0.00025	0.02076	0.00001	0.01870	0.00197	-0.06539
	19	4	-0.08047	-0.07479	0.01739	-0.08900	0.07421	-0.00736
		1	0.00034	0.00000	-0.00096	0.00005	0.00454	-0.00023
		2	0.00027	-0.00023	0.00179	0.00411	0.00059	-0.00012
		3	0.02298	-0.01327	0.00018	-0.01168	-0.01574	-0.09170
34	19	4	-0.09199	-0.11079	-0.03645	-0.14188	0.12183	-0.00258
		1	0.00034	0.00000	-0.00096	0.00005	0.00454	-0.00023
		2	0.00027	-0.00023	0.00179	0.00411	0.00059	-0.00012
		3	0.02298	-0.01327	0.00018	-0.01168	-0.01574	-0.09170
	21	4	-0.09199	-0.11079	-0.03645	-0.14188	0.12183	-0.00258
		1	-0.00155	0.00003	0.00281	-0.00069	0.00764	0.00005
		2	0.00018	0.00142	-0.00006	0.00781	-0.00081	0.00030
		3	0.00025	0.03231	0.00001	0.01889	0.00196	-0.11799
35	21	4	-0.12949	-0.14909	0.02808	-0.14417	0.11766	-0.01519
		1	-0.00155	0.00003	0.00281	-0.00069	0.00764	0.00005
		2	0.00018	0.00142	-0.00006	0.00781	-0.00081	0.00030
		3	0.00025	0.03231	0.00001	0.01889	0.00196	-0.11799
	27	4	-0.12949	-0.14909	0.02808	-0.14417	0.11766	-0.01519
		1	-0.00396	0.00023	-0.00175	0.00016	0.01000	-0.00029
		2	0.00008	0.00458	0.00321	0.01071	-0.00008	-0.00008
		3	0.03359	-0.01847	0.00020	-0.00942	-0.02153	-0.14495
36	27	4	-0.17166	-0.19994	-0.05037	-0.16331	0.13766	-0.00283
		1	-0.00396	0.00023	-0.00175	0.00016	0.01000	-0.00029
		2	0.00008	0.00458	0.00321	0.01071	-0.00008	-0.00008
		3	0.03359	-0.01847	0.00020	-0.00942	-0.02153	-0.14495
	29	4	-0.17166	-0.19994	-0.05037	-0.16331	0.13766	-0.00283
		1	-0.00727	0.00003	0.00481	0.00159	0.00765	0.00004
		2	0.00032	0.00714	-0.00009	0.00856	0.00109	0.00037
		3	-0.00056	0.04810	0.00000	0.04521	-0.00463	-0.17315
37	6	4	-0.21321	-0.26305	0.03506	-0.27269	0.22252	-0.02074
		1	0.00085	-0.00005	-0.00008	-0.00018	-0.00743	0.00003
		2	0.00015	-0.00066	-0.00014	-0.00559	-0.00116	0.00001
		3	-0.00458	-0.00198	0.00000	-0.01865	0.04161	-0.01014
	9	4	-0.01271	-0.01302	0.00161	-0.11839	0.11811	0.00171
		1	0.00153	0.00042	0.00070	-0.00002	0.00050	-0.00004
		2	-0.00005	-0.00174	-0.00004	-0.00085	-0.00067	0.00015
		3	0.00081	0.01474	0.00020	0.02341	0.00262	-0.03840
38	9	4	-0.04421	-0.05127	0.01029	-0.08157	0.05435	-0.00330
		1	0.00153	0.00042	0.00070	-0.00002	0.00050	-0.00004
		2	-0.00005	-0.00174	-0.00004	-0.00085	-0.00067	0.00015
		3	0.00081	0.01474	0.00020	0.02341	0.00262	-0.03840



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
38	14	1	0.00141	0.00038	-0.00069	0.00013	0.00273	0.00020
		2	0.00005	-0.00109	-0.00113	0.00196	0.00041	-0.00006
		3	-0.01785	-0.01059	0.00001	-0.01105	0.01521	-0.06539
		4	-0.06031	-0.07240	0.00995	-0.11680	0.07995	0.01007
39	14	1	0.00141	0.00038	-0.00069	0.00013	0.00273	0.00020
		2	0.00005	-0.00109	-0.00113	0.00196	0.00041	-0.00006
		3	-0.01785	-0.01059	0.00001	-0.01105	0.01521	-0.06539
		4	-0.06031	-0.07240	0.00995	-0.11680	0.07995	0.01007
	17	1	0.00014	0.00015	0.00203	-0.00024	0.00394	0.00002
		2	0.00012	-0.00043	-0.00006	0.00470	0.00029	0.00026
		3	0.00000	0.02654	0.00018	0.01947	-0.00225	-0.09170
		4	-0.09184	-0.10782	0.02285	-0.12758	0.12441	-0.01149
40	17	1	0.00014	0.00015	0.00203	-0.00024	0.00394	0.00002
		2	0.00012	-0.00043	-0.00006	0.00470	0.00029	0.00026
		3	0.00000	0.02654	0.00018	0.01947	-0.00225	-0.09170
		4	-0.09184	-0.10782	0.02285	-0.12758	0.12441	-0.01149
	22	1	-0.00151	0.00018	-0.00145	0.00035	0.00843	0.00023
		2	0.00001	0.00146	-0.00240	0.00702	0.00023	-0.00019
		3	-0.02811	-0.01594	0.00001	-0.01104	0.01520	-0.11799
		4	-0.12502	-0.15316	0.01599	-0.15968	0.12416	0.01752
41	22	1	-0.00151	0.00018	-0.00145	0.00035	0.00843	0.00023
		2	0.00001	0.00146	-0.00240	0.00702	0.00023	-0.00019
		3	-0.02811	-0.01594	0.00001	-0.01104	0.01520	-0.11799
		4	-0.12502	-0.15316	0.01599	-0.15968	0.12416	0.01752
	25	1	-0.00436	-0.00017	0.00366	-0.00022	0.01051	0.00007
		2	0.00045	0.00418	-0.00010	0.01020	-0.00046	0.00030
		3	-0.00080	0.03832	0.00020	0.02336	0.00261	-0.14495
		4	-0.16388	-0.19638	0.03173	-0.18077	0.12437	-0.01899
42	25	1	-0.00436	-0.00017	0.00366	-0.00022	0.01051	0.00007
		2	0.00045	0.00418	-0.00010	0.01020	-0.00046	0.00030
		3	-0.00080	0.03832	0.00020	0.02336	0.00261	-0.14495
		4	-0.16388	-0.19638	0.03173	-0.18077	0.12437	-0.01899
	30	1	-0.00731	0.00030	-0.00238	-0.00082	0.00719	0.00030
		2	0.00005	0.00710	-0.00394	0.00903	-0.00132	-0.00022
		3	-0.04137	-0.02454	0.00000	-0.01880	0.04147	-0.17315
		4	-0.21625	-0.26882	0.01983	-0.24044	0.20353	0.02482
43	7	1	0.00062	0.00001	-0.00008	0.00003	-0.00548	-0.00001
		2	0.00008	-0.00089	0.00014	-0.00754	-0.00095	-0.00003
		3	0.00399	-0.00296	0.00000	-0.02671	-0.03695	-0.01014
		4	-0.01086	-0.01855	-0.00444	-0.16445	0.09731	-0.00084
	10	1	0.00189	0.00016	-0.00038	0.00109	-0.00021	0.00015
		2	0.00021	-0.00138	-0.00059	-0.00014	0.00043	-0.00004
		3	-0.01317	-0.00667	0.00020	-0.01397	0.01896	-0.03840
		4	-0.03938	-0.04057	0.00658	-0.08907	0.08955	0.00533
44	10	1	0.00189	0.00016	-0.00038	0.00109	-0.00021	0.00015
		2	0.00021	-0.00138	-0.00059	-0.00014	0.00043	-0.00004
		3	-0.01317	-0.00667	0.00020	-0.01397	0.01896	-0.03840
		4	-0.03938	-0.04057	0.00658	-0.08907	0.08955	0.00533
	15	1	0.00132	-0.00001	-0.00064	0.00006	0.00192	-0.00016
		2	0.00043	-0.00118	0.00116	0.00276	0.00034	-0.00014
		3	0.01810	-0.01016	0.00001	-0.00764	-0.01718	-0.06539
		4	-0.05828	-0.07376	-0.02734	-0.09795	0.10111	-0.00266
45	15	1	0.00132	-0.00001	-0.00064	0.00006	0.00192	-0.00016
		2	0.00043	-0.00118	0.00116	0.00276	0.00034	-0.00014
		3	0.01810	-0.01016	0.00001	-0.00764	-0.01718	-0.06539
		4	-0.05828	-0.07376	-0.02734	-0.09795	0.10111	-0.00266
	18	1	0.00038	0.00025	-0.00107	-0.00061	0.00450	0.00022
		2	0.00002	-0.00020	-0.00172	0.00415	-0.00008	-0.00015
		3	-0.02298	-0.01327	0.00018	-0.00778	0.01799	-0.09170
		4	-0.08940	-0.10947	0.01360	-0.13252	0.11078	0.01385
46	18	1	0.00038	0.00025	-0.00107	-0.00061	0.00450	0.00022
		2	0.00002	-0.00020	-0.00172	0.00415	-0.00008	-0.00015
		3	-0.02298	-0.01327	0.00018	-0.00778	0.01799	-0.09170
		4	-0.08940	-0.10947	0.01360	-0.13252	0.11078	0.01385
	23	1	-0.00140	0.00008	-0.00135	0.00052	0.00713	-0.00028
		2	0.00012	0.00157	0.00245	0.00832	0.00040	-0.00011
		3	0.02786	-0.01637	0.00001	-0.00765	-0.01718	-0.11799
		4	-0.13070	-0.15503	-0.04407	-0.14632	0.13431	-0.00260
47	23	1	-0.00140	0.00008	-0.00135	0.00052	0.00713	-0.00028
		2	0.00012	0.00157	0.00245	0.00832	0.00040	-0.00011
		3	0.02786	-0.01637	0.00001	-0.00765	-0.01718	-0.11799
		4	-0.13070	-0.15503	-0.04407	-0.14632	0.13431	-0.00260
	26	1	-0.00450	0.00037	-0.00192	0.00042	0.01058	0.00022
		2	-0.00008	0.00404	-0.00312	0.01013	0.00018	-0.00021
		3	-0.03279	-0.01986	0.00020	-0.01394	0.01892	-0.14495
		4	-0.16477	-0.20495	0.01864	-0.18358	0.14618	0.02149
48	26	1	-0.00450	0.00037	-0.00192	0.00042	0.01058	0.00022
		2	-0.00008	0.00404	-0.00312	0.01013	0.00018	-0.00021
		3	-0.03279	-0.01986	0.00020	-0.01394	0.01892	-0.14495
		4	-0.16477	-0.20495	0.01864	-0.18358	0.14618	0.02149
	31	1	-0.00705	0.00020	-0.00223	-0.00001	0.00951	-0.00034
		2	0.00016	0.00735	0.00403	0.00671	-0.00052	-0.00015
		3	0.04194	-0.02356	0.00000	-0.02661	-0.03684	-0.17315
		4	-0.21789	-0.26236	-0.05490	-0.27306	0.18502	-0.00448
49	33	1	-0.00787	0.00022	-0.00484	-0.00204	0.00705	0.00002
		2	0.00021	0.00795	-0.00009	0.00820	0.00108	0.00038
		3	0.00000	0.05302	0.00000	0.05114	-0.00615	-0.18328
		4	-0.23739	-0.29178	0.03586	-0.29486	0.25246	-0.02170
	37	1	-0.00881	0.00042	0.00527	0.00196	0.01032	-0.00001



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
49	37	2	0.00013	0.00886	-0.00010	0.01025	0.00042	0.00040
		3	0.00056	0.05793	0.00000	0.04520	-0.00464	-0.19337
		4	-0.26201	-0.32071	0.03665	-0.27773	0.23155	-0.02267
50	37	1	-0.00881	0.00042	0.00527	0.00196	0.01032	-0.00001
		2	0.00013	0.00886	-0.00010	0.01025	0.00042	0.00040
		3	0.00056	0.05793	0.00000	0.04520	-0.00464	-0.19337
		4	-0.26201	-0.32071	0.03665	-0.27773	0.23155	-0.02267
	41	1	-0.01361	0.00082	0.00631	0.00050	0.02012	-0.00003
		2	0.00031	0.01320	-0.00015	0.01825	-0.00125	0.00052
51	41	3	0.00081	0.06770	0.00020	0.02330	0.00261	-0.22149
		4	-0.31662	-0.39096	0.03814	-0.19947	0.14630	-0.02635
	45	1	-0.01361	0.00082	0.00631	0.00050	0.02012	-0.00003
		2	0.00031	0.01320	-0.00015	0.01825	-0.00125	0.00052
	45	3	0.00081	0.06770	0.00020	0.02330	0.00261	-0.22149
		4	-0.31662	-0.39096	0.03814	-0.19947	0.14630	-0.02635
52	45	1	-0.02023	0.00078	0.00745	-0.00026	0.02354	-0.00005
		2	0.00067	0.01953	-0.00015	0.02350	-0.00072	0.00057
		3	-0.00025	0.07369	0.00001	0.01858	0.00196	-0.24834
		4	-0.35865	-0.44644	0.03935	-0.18200	0.14990	-0.02992
	49	1	-0.02772	0.00078	0.00866	0.00018	0.02684	0.00003
		2	0.00073	0.02719	-0.00019	0.02763	-0.00011	0.00062
53	49	3	0.00000	0.07943	0.00018	0.01934	-0.00224	-0.27448
		4	-0.40822	-0.50294	0.03921	-0.19198	0.16946	-0.03491
	53	1	-0.02772	0.00078	0.00866	0.00018	0.02684	0.00003
		2	0.00073	0.02719	-0.00019	0.02763	-0.00011	0.00062
	53	3	0.00000	0.07943	0.00018	0.01934	-0.00224	-0.27448
		4	-0.40822	-0.50294	0.03921	-0.19198	0.16946	-0.03491
54	53	1	-0.03656	0.00079	0.00995	-0.00024	0.03238	0.00005
		2	0.00092	0.03618	-0.00019	0.03253	-0.00138	0.00065
		3	0.00024	0.08517	0.00001	0.01855	0.00194	-0.30058
		4	-0.45646	-0.55999	0.03888	-0.18597	0.15000	-0.03771
	57	1	-0.04704	0.00072	0.01131	0.00017	0.03687	0.00009
		2	0.00138	0.04665	-0.00025	0.03687	-0.00083	0.00063
55	57	3	-0.00079	0.09113	0.00020	0.02314	0.00258	-0.32733
		4	-0.49960	-0.61517	0.03740	-0.18606	0.14358	-0.04205
	61	1	-0.05810	0.00104	0.01277	0.00208	0.03572	0.00006
		2	0.00133	0.05786	-0.00025	0.03683	0.00071	0.00069
	61	3	-0.00056	0.10081	0.00000	0.04475	-0.00458	-0.35528
		4	-0.54746	-0.67532	0.03572	-0.22343	0.18570	-0.04305
56	61	1	-0.05810	0.00104	0.01277	0.00208	0.03572	0.00006
		2	0.00133	0.05786	-0.00025	0.03683	0.00071	0.00069
		3	-0.00056	0.10081	0.00000	0.04475	-0.00458	-0.35528
		4	-0.54746	-0.67532	0.03572	-0.22343	0.18570	-0.04305
	65	1	-0.06165	0.00128	0.01327	0.00263	0.03580	0.00004
		2	0.00128	0.08153	-0.00026	0.03688	0.00053	0.00071
57	34	3	0.00000	0.10568	0.00000	0.05062	-0.00609	-0.36529
		4	-0.56690	-0.69840	0.03496	-0.23417	0.19799	-0.04394
	38	1	-0.00797	0.00021	-0.00255	-0.00080	0.00657	0.00032
		2	0.00021	0.00796	-0.00422	0.00866	-0.00176	-0.00021
	38	3	-0.04591	-0.02651	0.00000	-0.02024	0.04736	-0.18326
		4	-0.23754	-0.29196	0.02028	-0.25723	0.21821	0.02648
58	38	1	-0.00873	0.00017	-0.00272	0.00020	0.00925	0.00035
		2	0.00037	0.00894	-0.00451	0.01131	-0.00134	-0.00019
		3	-0.05045	-0.02848	0.00000	-0.01858	0.04147	-0.19337
		4	-0.25910	-0.31723	0.02073	-0.24303	0.20919	0.02814
	42	1	-0.00873	0.00017	-0.00272	0.00020	0.00925	0.00035
		2	0.00037	0.00894	-0.00451	0.01131	-0.00134	-0.00019
59	42	3	-0.05045	-0.02848	0.00000	-0.01858	0.04147	-0.19337
		4	-0.25910	-0.31723	0.02073	-0.24303	0.20919	0.02814
	46	1	-0.01310	0.00061	-0.00328	0.00185	0.01907	0.00047
		2	0.00052	0.01371	-0.00538	0.01930	0.00011	-0.00023
	46	3	-0.05904	-0.03315	0.00020	-0.01391	0.01887	-0.22149
		4	-0.31426	-0.38212	0.02222	-0.20543	0.16382	0.03210
60	46	1	-0.01968	0.00099	-0.00385	0.00048	0.02397	0.00052
		2	0.00046	0.02008	-0.00637	0.02308	0.00002	-0.00025
		3	-0.06369	-0.03706	0.00001	-0.01099	0.01511	-0.24834
		4	-0.36114	-0.44409	0.02236	-0.20182	0.15600	0.03751
	50	1	-0.01968	0.00099	-0.00385	0.00048	0.02397	0.00052
		2	0.00046	0.02008	-0.00637	0.02308	0.00002	-0.00025



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
60	50	3	-0.06879	-0.03971	0.00018	-0.00773	0.01786	-0.27448
		4	-0.40910	-0.50294	0.02271	-0.19547	0.16055	0.04122
		1	-0.02734	0.00096	-0.00450	-0.00024	0.02745	0.00053
		2	0.00056	0.02757	-0.00739	0.02703	-0.00051	-0.00034
61	50	3	-0.06879	-0.03971	0.00018	-0.00773	0.01786	-0.27448
		4	-0.40910	-0.50294	0.02271	-0.19547	0.16055	0.04122
		1	-0.03638	0.00103	-0.00514	0.00089	0.03324	0.00054
		2	0.00069	0.03636	-0.00850	0.03168	-0.00026	-0.00037
	54	3	-0.07388	-0.04237	0.00001	-0.01096	0.01510	-0.30058
		4	-0.45633	-0.56207	0.02208	-0.19534	0.15390	0.04555
		1	-0.03638	0.00103	-0.00514	0.00089	0.03324	0.00054
		2	0.00069	0.03636	-0.00850	0.03168	-0.00026	-0.00037
62	54	3	-0.07388	-0.04237	0.00001	-0.01096	0.01510	-0.30058
		4	-0.45633	-0.56207	0.02208	-0.19534	0.15390	0.04555
		1	-0.04709	0.00135	-0.00587	0.00064	0.03721	0.00051
		2	0.00075	0.04860	-0.00968	0.03653	-0.00036	-0.00039
	58	3	-0.07852	-0.04625	0.00020	-0.01381	0.01875	-0.32733
		4	-0.50191	-0.61944	0.02165	-0.18822	0.15192	0.04879
		1	-0.04709	0.00135	-0.00587	0.00064	0.03721	0.00051
		2	0.00075	0.04860	-0.00968	0.03653	-0.00036	-0.00039
63	58	3	-0.07852	-0.04625	0.00020	-0.01381	0.01875	-0.32733
		4	-0.50191	-0.61944	0.02165	-0.18822	0.15192	0.04879
		1	-0.05813	0.00132	-0.00660	-0.00053	0.03539	0.00057
		2	0.00105	0.05784	-0.01091	0.03716	-0.00189	-0.00040
	62	3	-0.08702	-0.05089	0.00000	-0.01841	0.04104	-0.35528
		4	-0.54965	-0.67770	0.02023	-0.20674	0.17173	0.05218
		1	-0.05813	0.00132	-0.00660	-0.00053	0.03539	0.00057
		2	0.00105	0.05784	-0.01091	0.03716	-0.00189	-0.00040
64	62	3	-0.08702	-0.05089	0.00000	-0.01841	0.04104	-0.35528
		4	-0.54965	-0.67770	0.02023	-0.20674	0.17173	0.05218
		1	-0.06163	0.00127	-0.00666	-0.00024	0.03529	0.00060
		2	0.00127	0.06154	-0.01134	0.03739	-0.00233	-0.00039
	66	3	-0.09152	-0.05284	0.00000	-0.02004	0.04688	-0.36529
		4	-0.56723	-0.69878	0.01979	-0.21163	0.17738	0.05356
		1	-0.06163	0.00127	-0.00666	-0.00024	0.03529	0.00060
		2	0.00127	0.06154	-0.01134	0.03739	-0.00233	-0.00039
65	35	3	-0.04592	-0.02651	0.00000	-0.03090	-0.04121	-0.18326
		4	-0.23753	-0.29180	-0.05614	-0.30578	0.20266	-0.00519
		1	-0.00898	0.00023	-0.00255	0.00015	0.01131	-0.00034
		2	0.00032	0.00868	0.00461	0.00926	-0.00139	-0.00020
	39	3	0.04989	-0.02946	0.00000	-0.02862	-0.03682	-0.19337
		4	-0.25742	-0.32156	-0.05739	-0.27980	0.19025	-0.00591
		1	-0.00898	0.00023	-0.00255	0.00015	0.01131	-0.00034
		2	0.00032	0.00868	0.00461	0.00926	-0.00139	-0.00020
66	39	3	0.04989	-0.02946	0.00000	-0.02862	-0.03682	-0.19337
		4	-0.25742	-0.32156	-0.05739	-0.27980	0.19025	-0.00591
		1	-0.01354	0.00027	-0.00303	0.00027	0.01842	-0.00044
		2	0.00086	0.01327	0.00553	0.01995	-0.00148	-0.00029
	43	3	0.05823	-0.03455	0.00020	-0.00939	-0.02148	-0.22149
		4	-0.30765	-0.38867	-0.06036	-0.18729	0.16018	-0.00624
		1	-0.01354	0.00027	-0.00303	0.00027	0.01842	-0.00044
		2	0.00086	0.01327	0.00553	0.01995	-0.00148	-0.00029
67	43	3	0.05823	-0.03455	0.00020	-0.00939	-0.02148	-0.22149
		4	-0.30765	-0.38867	-0.06036	-0.18729	0.16018	-0.00624
		1	-0.01978	0.00041	-0.00360	0.00048	0.02312	-0.00048
		2	0.00104	0.01998	0.00851	0.02393	0.00002	-0.00033
	47	3	0.06394	-0.03663	0.00001	-0.00759	-0.01707	-0.24834
		4	-0.35772	-0.44319	-0.06171	-0.18664	0.17009	-0.00813
		1	-0.01978	0.00041	-0.00360	0.00048	0.02312	-0.00048
		2	0.00104	0.01998	0.00851	0.02393	0.00002	-0.00033
68	47	3	0.06394	-0.03663	0.00001	-0.00759	-0.01707	-0.24834
		4	-0.35772	-0.44319	-0.06171	-0.18664	0.17009	-0.00813
		1	-0.02738	0.00053	-0.00416	0.00049	0.02750	-0.00056
		2	0.00098	0.02753	0.00758	0.02698	0.00022	-0.00029
	51	3	0.06879	-0.03971	0.00018	-0.01161	-0.01563	-0.27448
		4	-0.40851	-0.50227	-0.06192	-0.20146	0.16800	-0.00889
		1	-0.02738	0.00053	-0.00416	0.00049	0.02750	-0.00056
		2	0.00098	0.02753	0.00758	0.02698	0.00022	-0.00029
69	51	3	0.06879	-0.03971	0.00018	-0.01161	-0.01563	-0.27448
		4	-0.40851	-0.50227	-0.06192	-0.20146	0.16800	-0.00889
		1	-0.03627	0.00076	-0.00480	0.00107	0.03184	-0.00059
		2	0.00096	0.03647	0.00870	0.03308	-0.00008	-0.00028
	55	3	0.07363	-0.04279	0.00001	-0.00760	-0.01704	-0.30058
		4	-0.45804	-0.56124	-0.06097	-0.18729	0.16004	-0.00847
		1	-0.03627	0.00076	-0.00480	0.00107	0.03184	-0.00059
		2	0.00096	0.03647	0.00870	0.03308	-0.00008	-0.00028
70	55	3	0.07363	-0.04279	0.00001	-0.00760	-0.01704	-0.30058
		4	-0.45804	-0.56124	-0.06097	-0.18729	0.16004	-0.00847
		1	-0.04652	0.00108	-0.00544	0.00069	0.03663	-0.00059
		2	0.00102	0.04717	0.00990	0.03711	-0.00030	-0.00024
	59	3	0.07932	-0.04488	0.00020	-0.00934	-0.02133	-0.32733
		4	-0.50428	-0.61540	-0.05906	-0.17993	0.14959	-0.00741
		1	-0.04652	0.00108	-0.00544	0.00069	0.03663	-0.00059
		2	0.00102	0.04717	0.00990	0.03711	-0.00030	-0.00024
71	59	3	0.07932	-0.04488	0.00020	-0.00934	-0.02133	-0.32733
		4	-0.50428	-0.61540	-0.05906	-0.17993	0.14959	-0.00741
		1	-0.05767	0.00120	-0.00817	0.00049	0.03781	-0.00063
		2	0.00117	0.05809	0.01116	0.03474	-0.00029	-0.00029
	63	3	0.08758	-0.04992	0.00000	-0.02634	-0.03647	-0.35528
		4						
		1						
		2						



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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26.07.2010

EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
71	63	4	-0.55043	-0.67471	-0.05596	-0.22722	0.16422	-0.00984
72	63	1	-0.05787	0.00120	-0.00617	0.00049	0.03781	-0.00063
		2	0.00117	0.05809	0.01116	0.03474	-0.00087	-0.00029
		3	0.08758	-0.04992	0.00000	-0.02634	-0.03647	-0.35528
		4	-0.55043	-0.67471	-0.05596	-0.22722	0.16422	-0.00984
	67	1	-0.06185	0.00126	-0.00641	0.00075	0.03802	-0.00064
		2	0.00127	0.06153	0.01160	0.03466	-0.00134	-0.00032
		3	0.09152	-0.05284	0.00000	-0.03058	-0.04079	-0.36529
		4	-0.56720	-0.69841	-0.05475	-0.24079	0.16811	-0.01034
73	37	1	-0.00881	0.00042	0.00527	0.00196	0.01032	-0.00001
		2	0.00013	0.00886	-0.00010	0.01025	0.00042	0.00040
		3	0.00056	0.05793	0.00000	0.04520	-0.00464	-0.19337
		4	-0.26201	-0.32071	0.03665	-0.27773	0.23155	-0.02267
	38	1	-0.00873	0.00017	-0.00272	0.00020	0.00925	0.00035
		2	0.00037	0.00894	-0.00451	0.01131	-0.00134	-0.00019
		3	-0.05045	-0.02848	0.00000	-0.01858	0.04147	-0.19337
		4	-0.25910	-0.31723	0.02073	-0.24303	0.20919	0.02814
74	38	1	-0.00873	0.00017	-0.00272	0.00020	0.00925	0.00035
		2	0.00037	0.00894	-0.00451	0.01131	-0.00134	-0.00019
		3	-0.05045	-0.02848	0.00000	-0.01858	0.04147	-0.19337
		4	-0.25910	-0.31723	0.02073	-0.24303	0.20919	0.02814
	39	1	-0.00898	0.00023	-0.00255	0.00015	0.01131	-0.00034
		2	0.00032	0.00888	0.00461	0.00926	-0.00139	-0.00020
		3	0.04989	-0.02946	0.00000	-0.02862	-0.03682	-0.19337
		4	-0.25742	-0.32156	-0.05739	-0.27980	0.19025	-0.00591
75	39	1	-0.00898	0.00023	-0.00255	0.00015	0.01131	-0.00034
		2	0.00032	0.00888	0.00461	0.00926	-0.00139	-0.00020
		3	0.04989	-0.02946	0.00000	-0.02862	-0.03682	-0.19337
		4	-0.25742	-0.32156	-0.05739	-0.27980	0.19025	-0.00591
	37	1	-0.00881	0.00042	0.00527	0.00196	0.01032	-0.00001
		2	0.00013	0.00886	-0.00010	0.01025	0.00042	0.00040
		3	0.00056	0.05793	0.00000	0.04520	-0.00464	-0.19337
		4	-0.26201	-0.32071	0.03665	-0.27773	0.23155	-0.02267
76	61	1	-0.05810	0.00104	0.01277	0.00208	0.03572	0.00008
		2	0.00133	0.05786	-0.00025	0.03683	0.00071	0.00069
		3	-0.00056	0.10081	0.00000	0.04475	-0.00458	-0.35528
		4	-0.54746	-0.67532	0.03572	-0.22343	0.18570	-0.04305
	62	1	-0.05813	0.00132	-0.00660	-0.00053	0.03539	0.00057
		2	0.00105	0.05784	-0.01091	0.03716	-0.00189	-0.00040
		3	-0.08702	-0.05089	0.00000	-0.01841	0.04104	-0.35528
		4	-0.54965	-0.67770	0.02023	-0.20674	0.17173	0.05218
77	62	1	-0.05813	0.00132	-0.00660	-0.00053	0.03539	0.00057
		2	0.00105	0.05784	-0.01091	0.03716	-0.00189	-0.00040
		3	-0.08702	-0.05089	0.00000	-0.01841	0.04104	-0.35528
		4	-0.54965	-0.67770	0.02023	-0.20674	0.17173	0.05218
	63	1	-0.05787	0.00120	-0.00617	0.00049	0.03781	-0.00063
		2	0.00117	0.05809	0.01116	0.03474	-0.00087	-0.00029
		3	0.08758	-0.04992	0.00000	-0.02634	-0.03647	-0.35528
		4	-0.55043	-0.67471	-0.05596	-0.22722	0.16422	-0.00984
78	63	1	-0.05787	0.00120	-0.00617	0.00049	0.03781	-0.00063
		2	0.00117	0.05809	0.01116	0.03474	-0.00087	-0.00029
		3	0.08758	-0.04992	0.00000	-0.02634	-0.03647	-0.35528
		4	-0.55043	-0.67471	-0.05596	-0.22722	0.16422	-0.00984
	61	1	-0.05810	0.00104	0.01277	0.00208	0.03572	0.00008
		2	0.00133	0.05786	-0.00025	0.03683	0.00071	0.00069
		3	-0.00056	0.10081	0.00000	0.04475	-0.00458	-0.35528
		4	-0.54746	-0.67532	0.03572	-0.22343	0.18570	-0.04305
79	37	1	-0.00881	0.00042	0.00527	0.00196	0.01032	-0.00001
		2	0.00013	0.00886	-0.00010	0.01025	0.00042	0.00040
		3	0.00056	0.05793	0.00000	0.04520	-0.00464	-0.19337
		4	-0.26201	-0.32071	0.03665	-0.27773	0.23155	-0.02267
	43	1	-0.01354	0.00027	-0.00303	0.00027	0.01842	-0.00044
		2	0.00086	0.01327	0.00553	0.01995	-0.00148	-0.00029
		3	0.05823	-0.03455	0.00020	-0.00939	-0.02148	-0.22149
		4	-0.30765	-0.38867	-0.06036	-0.18729	0.16018	-0.00624
80	43	1	-0.01354	0.00027	-0.00303	0.00027	0.01842	-0.00044
		2	0.00086	0.01327	0.00553	0.01995	-0.00148	-0.00029
		3	0.05823	-0.03455	0.00020	-0.00939	-0.02148	-0.22149
		4	-0.30765	-0.38867	-0.06036	-0.18729	0.16018	-0.00624
	45	1	-0.02023	0.00078	0.00745	-0.00026	0.02354	-0.00005
		2	0.00067	0.01953	-0.00015	0.02350	-0.00072	0.00057
		3	-0.00025	0.07369	0.00001	0.01858	0.00196	-0.24834
		4	-0.35865	-0.44644	0.03935	-0.18200	0.14990	-0.02992
81	45	1	-0.02023	0.00078	0.00745	-0.00026	0.02354	-0.00005
		2	0.00067	0.01953	-0.00015	0.02350	-0.00072	0.00057
		3	-0.00025	0.07369	0.00001	0.01858	0.00196	-0.24834
		4	-0.35865	-0.44644	0.03935	-0.18200	0.14990	-0.02992
	51	1	-0.02738	0.00053	-0.00416	0.00049	0.02750	-0.00056
		2	0.00098	0.02753	0.00758	0.02698	0.00022	-0.00029
		3	0.06879	-0.03871	0.00018	-0.01161	-0.01563	-0.27448
		4	-0.40851	-0.50227	-0.06192	-0.20146	0.16800	-0.00689
82	51	1	-0.02738	0.00053	-0.00416	0.00049	0.02750	-0.00056
		2	0.00098	0.02753	0.00758	0.02698	0.00022	-0.00029
		3	0.06879	-0.03871	0.00018	-0.01161	-0.01563	-0.27448
		4	-0.40851	-0.50227	-0.06192	-0.20146	0.16800	-0.00689
	53	1	-0.03856	0.00079	0.00995	-0.00024	0.03238	0.00005
		2	0.00092	0.03618	-0.00019	0.03253	-0.00138	0.00065
		3	0.00024	0.08517	0.00001	0.01855	0.00194	-0.30058
		4	-0.45646	-0.55999	0.03888	-0.18597	0.15000	-0.03771



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
83	53	1	-0.03656	0.00079	0.00995	-0.00024	0.03238	0.00005
		2	0.00092	0.03618	-0.00019	0.03253	-0.00138	0.00065
		3	0.00024	0.08517	0.00001	0.01855	0.00194	-0.30058
		4	-0.45646	-0.55999	0.03888	-0.18597	0.15000	-0.03771
	59	1	-0.04852	0.00108	-0.00544	0.00069	0.03663	-0.00059
		2	0.00102	0.04717	0.00990	0.03711	-0.00030	-0.00024
		3	0.07932	-0.04488	0.00020	-0.00934	-0.02133	-0.32733
		4	-0.50428	-0.61540	-0.05908	-0.17993	0.14959	-0.00741
84	59	1	-0.04852	0.00108	-0.00544	0.00069	0.03663	-0.00059
		2	0.00102	0.04717	0.00990	0.03711	-0.00030	-0.00024
		3	0.07932	-0.04488	0.00020	-0.00934	-0.02133	-0.32733
		4	-0.50428	-0.61540	-0.05908	-0.17993	0.14959	-0.00741
	61	1	-0.05810	0.00104	0.01277	0.00208	0.03572	0.00006
		2	0.00133	0.05786	-0.00025	0.03683	0.00071	0.00069
		3	-0.00056	0.10081	0.00000	0.04475	-0.00458	-0.35528
		4	-0.54746	-0.67532	0.03572	-0.22343	0.18570	-0.04305
85	38	1	-0.00873	0.00017	-0.00272	0.00020	0.00925	0.00035
		2	0.00037	0.00894	-0.00451	0.01131	-0.00134	-0.00019
		3	-0.05045	-0.02848	0.00000	-0.01858	0.04147	-0.19337
		4	-0.25910	-0.31723	0.02073	-0.24303	0.20919	0.02814
	41	1	-0.01361	0.00082	0.00631	0.00050	0.02012	-0.00003
		2	0.00031	0.01320	-0.00015	0.01825	-0.00125	0.00052
		3	0.00081	0.06770	0.00020	0.02330	0.00261	-0.22149
		4	-0.31862	-0.39096	0.03814	-0.19947	0.14830	-0.02635
86	41	1	-0.01361	0.00082	0.00631	0.00050	0.02012	-0.00003
		2	0.00031	0.01320	-0.00015	0.01825	-0.00125	0.00052
		3	0.00081	0.06770	0.00020	0.02330	0.00261	-0.22149
		4	-0.31862	-0.39096	0.03814	-0.19947	0.14830	-0.02635
	46	1	-0.01988	0.00089	-0.00385	0.00048	0.02397	0.00052
		2	0.00046	0.02008	-0.00637	0.02308	0.00002	-0.00025
		3	-0.06369	-0.03706	0.00001	-0.01099	0.01511	-0.24834
		4	-0.36114	-0.44409	0.02236	-0.20182	0.15600	0.03751
87	46	1	-0.01988	0.00089	-0.00385	0.00048	0.02397	0.00052
		2	0.00046	0.02008	-0.00637	0.02308	0.00002	-0.00025
		3	-0.06369	-0.03706	0.00001	-0.01099	0.01511	-0.24834
		4	-0.36114	-0.44409	0.02236	-0.20182	0.15600	0.03751
	49	1	-0.02772	0.00078	0.00866	0.00016	0.02684	0.00003
		2	0.00073	0.02719	-0.00019	0.02763	-0.00011	0.00062
		3	0.00000	0.07943	0.00018	0.01934	-0.00224	-0.27448
		4	-0.40822	-0.50294	0.03921	-0.19198	0.16946	-0.03491
88	49	1	-0.02772	0.00078	0.00866	0.00016	0.02684	0.00003
		2	0.00073	0.02719	-0.00019	0.02763	-0.00011	0.00062
		3	0.00000	0.07943	0.00018	0.01934	-0.00224	-0.27448
		4	-0.40822	-0.50294	0.03921	-0.19198	0.16946	-0.03491
	54	1	-0.03638	0.00103	-0.00514	0.00089	0.03324	0.00054
		2	0.00069	0.03636	-0.00850	0.03168	-0.00028	-0.00037
		3	-0.07388	-0.04237	0.00001	-0.01096	0.01510	-0.30058
		4	-0.45633	-0.56207	0.02208	-0.19534	0.15390	0.04555
89	54	1	-0.03638	0.00103	-0.00514	0.00089	0.03324	0.00054
		2	0.00069	0.03636	-0.00850	0.03168	-0.00028	-0.00037
		3	-0.07388	-0.04237	0.00001	-0.01096	0.01510	-0.30058
		4	-0.45633	-0.56207	0.02208	-0.19534	0.15390	0.04555
	57	1	-0.04704	0.00072	0.01131	0.00017	0.03687	0.00009
		2	0.00138	0.04665	-0.00025	0.03687	-0.00083	0.00063
		3	-0.00079	0.09113	0.00020	0.02314	0.00258	-0.32733
		4	-0.49960	-0.61517	0.03740	-0.18606	0.14358	-0.04205
90	57	1	-0.04704	0.00072	0.01131	0.00017	0.03687	0.00009
		2	0.00138	0.04665	-0.00025	0.03687	-0.00083	0.00063
		3	-0.00079	0.09113	0.00020	0.02314	0.00258	-0.32733
		4	-0.49960	-0.61517	0.03740	-0.18606	0.14358	-0.04205
	62	1	-0.05813	0.00132	-0.00660	-0.00053	0.03539	0.00057
		2	0.00105	0.05784	-0.01091	0.03718	-0.00189	-0.00040
		3	-0.08702	-0.05089	0.00000	-0.01841	0.04104	-0.35528
		4	-0.54965	-0.67770	0.02023	-0.20674	0.17173	0.05218
91	39	1	-0.00898	0.00023	-0.00255	0.00015	0.01131	-0.00034
		2	0.00032	0.00868	0.00461	0.00926	-0.00139	-0.00020
		3	0.04989	-0.02946	0.00000	-0.02682	-0.03682	-0.19337
		4	-0.25742	-0.32156	-0.05739	-0.27980	0.19025	-0.00591
	42	1	-0.01310	0.00061	-0.00328	0.00185	0.01907	0.00047
		2	0.00052	0.01371	-0.00538	0.01930	0.00011	-0.00023
		3	-0.05904	-0.03315	0.00020	-0.01391	0.01887	-0.22149
		4	-0.31426	-0.38212	0.02222	-0.20543	0.16382	0.03210
92	42	1	-0.01310	0.00061	-0.00328	0.00185	0.01907	0.00047
		2	0.00052	0.01371	-0.00538	0.01930	0.00011	-0.00023
		3	-0.05904	-0.03315	0.00020	-0.01391	0.01887	-0.22149
		4	-0.31426	-0.38212	0.02222	-0.20543	0.16382	0.03210
	47	1	-0.01978	0.00041	-0.00360	0.00048	0.02312	-0.00048
		2	0.00104	0.01998	0.00651	0.02393	0.00002	-0.00033
		3	0.06394	-0.03663	0.00001	-0.00759	-0.01707	-0.24834
		4	-0.35772	-0.44319	-0.06171	-0.18664	0.17009	-0.00813
93	47	1	-0.01978	0.00041	-0.00360	0.00048	0.02312	-0.00048
		2	0.00104	0.01998	0.00651	0.02393	0.00002	-0.00033
		3	0.06394	-0.03663	0.00001	-0.00759	-0.01707	-0.24834
		4	-0.35772	-0.44319	-0.06171	-0.18664	0.17009	-0.00813
	50	1	-0.02734	0.00096	-0.00450	-0.00024	0.02745	0.00053
		2	0.00056	0.02757	-0.00739	0.02703	-0.00051	-0.00034
		3	-0.08879	-0.03971	0.00018	-0.00773	0.01786	-0.27448
		4	-0.40910	-0.50294	0.02271	-0.19547	0.18055	0.04122
94	50	1	-0.02734	0.00096	-0.00450	-0.00024	0.02745	0.00053



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
94	50	2	0.00056	0.02757	-0.00739	0.02703	-0.00051	-0.00034
		3	-0.06879	-0.03971	0.00018	0.00773	0.01786	-0.27448
		4	-0.40910	-0.50294	0.02271	-0.19547	0.18055	0.04122
	55	1	-0.03627	0.00076	-0.00480	0.00107	0.03184	-0.00059
		2	0.00096	0.03647	0.00870	0.03308	-0.00008	-0.00028
		3	0.07363	-0.04279	0.00001	-0.00760	-0.01704	-0.30058
95	55	4	-0.45804	-0.56124	-0.06097	-0.18729	0.18004	-0.00847
		1	-0.03627	0.00076	-0.00480	0.00107	0.03184	-0.00059
		2	0.00096	0.03647	0.00870	0.03308	-0.00008	-0.00028
		3	0.07363	-0.04279	0.00001	-0.00760	-0.01704	-0.30058
	58	4	-0.45804	-0.56124	-0.06097	-0.18729	0.18004	-0.00847
		1	-0.04709	0.00135	-0.00587	0.00064	0.03721	0.00051
		2	0.00075	0.04660	-0.00966	0.03653	-0.00036	-0.00039
		3	-0.07852	-0.04625	0.00020	-0.01381	0.01875	-0.32733
		4	-0.50191	-0.61944	0.02165	-0.18822	0.15192	0.04879
	58	1	-0.04709	0.00135	-0.00587	0.00064	0.03721	0.00051
		2	0.00075	0.04660	-0.00966	0.03653	-0.00036	-0.00039
		3	-0.07852	-0.04625	0.00020	-0.01381	0.01875	-0.32733
		4	-0.50191	-0.61944	0.02165	-0.18822	0.15192	0.04879
96	58	1	-0.04709	0.00135	-0.00587	0.00064	0.03721	0.00051
		2	0.00075	0.04660	-0.00966	0.03653	-0.00036	-0.00039
		3	-0.07852	-0.04625	0.00020	-0.01381	0.01875	-0.32733
		4	-0.50191	-0.61944	0.02165	-0.18822	0.15192	0.04879
	63	1	-0.05787	0.00120	-0.00617	0.00049	0.03781	-0.00063
		2	0.00117	0.05809	0.01116	0.03474	-0.00087	-0.00029
		3	0.08758	-0.04992	0.00000	-0.02634	-0.03647	-0.35528
		4	-0.55043	-0.67471	-0.05596	-0.22722	0.16422	-0.00984
	65	1	-0.06165	0.00128	0.01327	0.00263	0.03580	0.00004
		2	0.00128	0.06153	-0.00026	0.03888	0.00053	0.00071
		3	0.00000	0.10588	0.00000	0.05062	-0.00609	-0.36529
		4	-0.56890	-0.69840	0.03496	-0.23417	0.19799	-0.04394
	69	1	-0.06539	0.00154	0.01377	0.00263	0.03978	0.00001
		2	0.00124	0.06532	-0.00026	0.03936	-0.00032	0.00073
		3	0.00056	0.11054	0.00000	0.04473	-0.00460	-0.37530
		4	-0.58604	-0.72137	0.03419	-0.22141	0.17985	-0.04483
98	69	1	-0.06539	0.00154	0.01377	0.00263	0.03978	0.00001
		2	0.00124	0.06532	-0.00026	0.03936	-0.00032	0.00073
		3	0.00056	0.11054	0.00000	0.04473	-0.00460	-0.37530
		4	-0.58604	-0.72137	0.03419	-0.22141	0.17985	-0.04483
	73	1	-0.07932	0.00214	0.01532	0.00110	0.05127	-0.00001
		2	0.00167	0.07865	-0.00032	0.04919	-0.00192	0.00088
		3	0.00080	0.12021	0.00020	0.02304	0.00259	-0.40310
		4	-0.62843	-0.77783	0.03141	-0.15729	0.11109	-0.04896
	73	1	-0.07932	0.00214	0.01532	0.00110	0.05127	-0.00001
		2	0.00167	0.07865	-0.00032	0.04919	-0.00192	0.00088
		3	0.00080	0.12021	0.00020	0.02304	0.00259	-0.40310
		4	-0.62843	-0.77783	0.03141	-0.15729	0.11109	-0.04896
99	73	1	-0.07932	0.00214	0.01532	0.00110	0.05127	-0.00001
		2	0.00167	0.07865	-0.00032	0.04919	-0.00192	0.00088
		3	0.00080	0.12021	0.00020	0.02304	0.00259	-0.40310
		4	-0.62843	-0.77783	0.03141	-0.15729	0.11109	-0.04896
	77	1	-0.09551	0.00226	0.01897	0.00024	0.05638	-0.00002
		2	0.00219	0.09458	-0.00033	0.05651	-0.00136	0.00095
		3	-0.00025	0.12612	0.00001	0.01834	0.00194	-0.42964
		4	-0.65877	-0.81891	0.02846	-0.12501	0.10346	-0.05069
	77	1	-0.09551	0.00226	0.01897	0.00024	0.05638	-0.00002
		2	0.00219	0.09458	-0.00033	0.05651	-0.00136	0.00095
		3	-0.00025	0.12612	0.00001	0.01834	0.00194	-0.42964
		4	-0.65877	-0.81891	0.02846	-0.12501	0.10346	-0.05069
100	77	1	-0.09551	0.00226	0.01897	0.00024	0.05638	-0.00002
		2	0.00219	0.09458	-0.00033	0.05651	-0.00136	0.00095
		3	-0.00025	0.12612	0.00001	0.01834	0.00194	-0.42964
		4	-0.65877	-0.81891	0.02846	-0.12501	0.10346	-0.05069
	81	1	-0.11319	0.00249	0.01870	0.00134	0.06200	0.00004
		2	0.00252	0.11236	-0.00039	0.06186	-0.00122	0.00102
		3	0.00000	0.13178	0.00018	0.01907	-0.00221	-0.45545
		4	-0.69106	-0.85472	0.02493	-0.11155	0.10120	-0.05495
	81	1	-0.11319	0.00249	0.01870	0.00134	0.06200	0.00004
		2	0.00252	0.11236	-0.00039	0.06186	-0.00122	0.00102
		3	0.00000	0.13178	0.00018	0.01907	-0.00221	-0.45545
		4	-0.69106	-0.85472	0.02493	-0.11155	0.10120	-0.05495
101	85	1	-0.13279	0.00299	0.02050	0.00168	0.06852	0.00004
		2	0.00294	0.13172	-0.00040	0.06749	-0.00122	0.00108
		3	0.00024	0.13744	0.00001	0.01828	0.00191	-0.48121
		4	-0.71702	-0.88506	0.02135	-0.09050	0.07391	-0.05547
	85	1	-0.13279	0.00299	0.02050	0.00168	0.06852	0.00004
		2	0.00294	0.13172	-0.00040	0.06749	-0.00122	0.00108
		3	0.00024	0.13744	0.00001	0.01828	0.00191	-0.48121
		4	-0.71702	-0.88506	0.02135	-0.09050	0.07391	-0.05547
	89	1	-0.15417	0.00333	0.02238	0.00029	0.07382	0.00013
		2	0.00319	0.15310	-0.00046	0.07562	-0.00064	0.00108
		3	-0.00078	0.14331	0.00020	0.02278	0.00254	-0.50759
		4	-0.73670	-0.90978	0.01749	-0.07706	0.05952	-0.05842
102	85	1	-0.15417	0.00333	0.02238	0.00029	0.07382	0.00013
		2	0.00319	0.15310	-0.00046	0.07562	-0.00064	0.00108
		3	-0.00078	0.14331	0.00020	0.02278	0.00254	-0.50759
		4	-0.73670	-0.90978	0.01749	-0.07706	0.05952	-0.05842
	93	1	-0.17748	0.00328	0.02433	0.00010	0.08316	0.00018
		2	0.00350	0.17743	-0.00048	0.08711	-0.00176	0.00105
		3	-0.00055	0.15284	0.00000	0.04409	-0.00451	-0.53514
		4	-0.75563	-0.93498	0.01358	-0.10065	0.07426	-0.05709
	93	1	-0.17748	0.00328	0.02433	0.00010	0.08316	0.00018
		2	0.00350	0.17743	-0.00048	0.08711	-0.00176	0.00105
		3	-0.00055	0.15284	0.00000	0.04409	-0.00451	-0.53514
		4	-0.75563	-0.93498	0.01358	-0.10065	0.07426	-0.05709
103	93	1	-0.17748	0.00328	0.02433	0.00010	0.08316	0.00018
		2	0.00350	0.17743	-0.00048	0.08711	-0.00176	0.00105
		3	-0.00055	0.15284	0.00000	0.04409	-0.00451	-0.53514
		4	-0.75563	-0.93498	0.01358	-0.10065	0.07426	-0.05709
	97	1	-0.18816	0.00333	0.02499	0.00090	0.09172	0.00020
		2	0.00371	0.18634	-0.00049	0.09096	-0.00248	0.00107
		3	0.00000	0.15764	0.00000	0.04991	-0.00800	-0.54500
		4	-0.78401	-0.94569	0.01223	-0.11061	0.09560	-0.05739
104	66	1	-0.08163	0.00127	-0.00686	-0.00024	0.03529	0.00060
		2	0.00127	0.06154	-0.01134	0.03739	-0.00233	-0.00039



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

Seite: 28

26.07.2010

EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
105	66	3	-0.09152	-0.05284	0.00000	-0.02004	0.04688	-0.36529
		4	-0.58723	-0.69878	0.01979	-0.21163	0.17738	0.05356
	70	1	-0.06530	0.00130	-0.00711	0.00105	0.03852	0.00083
		2	0.00148	0.06542	-0.01177	0.04062	-0.00190	-0.00038
106	70	3	-0.09801	-0.05479	0.00000	-0.01838	0.04104	-0.37530
		4	-0.58465	-0.71941	0.01935	-0.19787	0.16887	0.05494
		1	-0.06530	0.00130	-0.00711	0.00105	0.03852	0.00083
		2	0.00148	0.06542	-0.01177	0.04062	-0.00190	-0.00038
	74	3	-0.09801	-0.05479	0.00000	-0.01838	0.04104	-0.37530
		4	-0.58465	-0.71941	0.01935	-0.19787	0.16887	0.05494
		1	-0.07872	0.00202	-0.00794	0.00258	0.05013	0.00077
		2	0.00179	0.07925	-0.01309	0.05032	-0.00044	-0.00043
107	74	3	-0.10450	-0.05941	0.00020	-0.01376	0.01868	-0.40310
		4	-0.62880	-0.77158	0.01810	-0.16014	0.12713	0.05814
		1	-0.07872	0.00202	-0.00794	0.00258	0.05013	0.00077
		2	0.00179	0.07925	-0.01309	0.05032	-0.00044	-0.00043
	78	3	-0.10450	-0.05941	0.00020	-0.01376	0.01868	-0.40310
		4	-0.62880	-0.77158	0.01810	-0.16014	0.12713	0.05814
		1	-0.08491	0.00254	-0.00877	0.00098	0.05704	0.00084
		2	0.00191	0.09518	-0.01450	0.05585	-0.00062	-0.00046
108	78	3	-0.10910	-0.06327	0.00001	-0.01085	0.01491	-0.42984
		4	-0.68316	-0.81894	0.01817	-0.13567	0.10775	0.06277
		1	-0.08491	0.00254	-0.00877	0.00098	0.05704	0.00084
		2	0.00191	0.09518	-0.01450	0.05585	-0.00062	-0.00046
	82	3	-0.10910	-0.06327	0.00001	-0.01085	0.01491	-0.42984
		4	-0.68316	-0.81894	0.01817	-0.13567	0.10775	0.06277
		1	-0.11273	0.00279	-0.00968	0.00126	0.08192	0.00088
		2	0.00222	0.11281	-0.01597	0.06194	-0.00129	-0.00055
109	82	3	-0.11413	-0.06589	0.00018	-0.00762	0.01762	-0.45545
		4	-0.69407	-0.85333	0.01432	-0.11463	0.09456	0.06479
		1	-0.08491	0.00254	-0.00877	0.00098	0.05704	0.00084
		2	0.00191	0.09518	-0.01450	0.05585	-0.00062	-0.00046
	86	3	-0.11413	-0.06589	0.00018	-0.00762	0.01762	-0.45545
		4	-0.69407	-0.85333	0.01432	-0.11463	0.09456	0.06479
		1	-0.13214	0.00332	-0.01060	0.00173	0.08764	0.00090
		2	0.00261	0.13237	-0.01752	0.06837	-0.00117	-0.00057
110	86	3	-0.11914	-0.06851	0.00001	-0.01080	0.01487	-0.48121
		4	-0.71901	-0.88633	0.01214	-0.09952	0.07256	0.06791
		1	-0.13214	0.00332	-0.01060	0.00173	0.08764	0.00090
		2	0.00261	0.13237	-0.01752	0.06837	-0.00117	-0.00057
	90	3	-0.11914	-0.06851	0.00001	-0.01080	0.01487	-0.48121
		4	-0.71901	-0.88633	0.01214	-0.09952	0.07256	0.06791
		1	-0.15351	0.00358	-0.01159	-0.00028	0.07543	0.00087
		2	0.00294	0.15375	-0.01912	0.07402	-0.00121	-0.00065
111	90	3	-0.12372	-0.07233	0.00020	-0.01358	0.01846	-0.50759
		4	-0.73857	-0.91210	0.01002	-0.07495	0.08033	0.06886
		1	-0.15351	0.00358	-0.01159	-0.00028	0.07543	0.00087
		2	0.00294	0.15375	-0.01912	0.07402	-0.00121	-0.00065
	94	3	-0.12372	-0.07233	0.00020	-0.01358	0.01846	-0.50759
		4	-0.73857	-0.91210	0.01002	-0.07495	0.08033	0.06886
		1	-0.17777	0.00333	-0.01259	-0.00043	0.08696	0.00082
		2	0.00344	0.17713	-0.02079	0.08331	-0.00229	-0.00068
112	94	3	-0.13209	-0.07690	0.00000	-0.01814	0.04043	-0.53514
		4	-0.75817	-0.93449	0.00768	-0.08214	0.07784	0.07033
		1	-0.17777	0.00333	-0.01259	-0.00043	0.08696	0.00082
		2	0.00344	0.17713	-0.02079	0.08331	-0.00229	-0.00068
	98	3	-0.13209	-0.07690	0.00000	-0.01814	0.04043	-0.53514
		4	-0.75817	-0.93449	0.00768	-0.08214	0.07784	0.07033
		1	-0.18671	0.00340	-0.01293	-0.00235	0.09196	0.00083
		2	0.00364	0.18579	-0.02136	0.09072	-0.00103	-0.00070
113	67	3	-0.13652	-0.07882	0.00000	-0.01975	0.04622	-0.54500
		4	-0.78632	-0.94333	0.00691	-0.09522	0.08152	0.07089
		1	-0.18671	0.00340	-0.01293	-0.00235	0.09196	0.00083
		2	0.00364	0.18579	-0.02136	0.09072	-0.00103	-0.00070
	71	3	-0.13652	-0.07882	0.00000	-0.01975	0.04622	-0.54500
		4	-0.78632	-0.94333	0.00691	-0.09522	0.08152	0.07089
		1	-0.06165	0.00126	-0.00641	0.00075	0.03802	-0.00064
		2	0.00127	0.08153	-0.01180	0.03466	-0.00134	-0.00032
114	71	3	0.09152	-0.05284	0.00000	-0.03058	-0.04079	-0.36529
		4	-0.58720	-0.69841	-0.05475	-0.24079	0.16811	-0.01034
		1	-0.06555	0.00134	-0.00866	0.00075	0.04052	-0.00064
		2	0.00145	0.06516	-0.01204	0.03863	-0.00220	-0.00036
	75	3	0.09545	-0.05575	0.00000	-0.02635	-0.03644	-0.37530
		4	-0.58345	-0.72170	-0.05354	-0.21918	0.15394	-0.01084
		1	-0.08555	0.00134	-0.00866	0.00075	0.04052	-0.00064
		2	0.00145	0.06516	-0.01204	0.03863	-0.00220	-0.00036
115	75	3	0.09545	-0.05575	0.00000	-0.02635	-0.03644	-0.37530
		4	-0.58345	-0.72170	-0.05354	-0.21918	0.15394	-0.01084
		1	-0.07913	0.00156	-0.00738	0.00085	0.04942	-0.00076
		2	0.00225	0.07884	-0.01341	0.05103	-0.00216	-0.00045
	79	3	0.10370	-0.06080	0.00020	-0.00928	-0.02124	-0.40310
		4	-0.62300	-0.77450	-0.04951	-0.14483	0.12156	-0.00994
		1	-0.07913	0.00156	-0.00738	0.00085	0.04942	-0.00076
		2	0.00225	0.07884	-0.01341	0.05103	-0.00216	-0.00045
116	79	3	0.10370	-0.06080	0.00020	-0.00928	-0.02124	-0.40310
		4	-0.62300	-0.77450	-0.04951	-0.14483	0.12156	-0.00994
		1	-0.09497	0.00188	-0.00820	0.00119	0.05607	-0.00081
		2	0.00257	0.09512	-0.01484	0.05682	-0.00042	-0.00050
	79	3	0.10935	-0.06285	0.00001	-0.00748	-0.01685	-0.42984
		4	-0.65905	-0.81424	-0.04464	-0.12663	0.11483	-0.01285
		1	-0.09497	0.00188	-0.00820	0.00119	0.05607	-0.00081
		2	0.00257	0.09512	-0.01484	0.05682	-0.00042	-0.00050



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
116	79	4	-0.65905	-0.81424	-0.04464	-0.12663	0.11483	-0.01285
	83	1	-0.11270	0.00224	-0.00901	0.00123	0.06203	-0.00090
		2	0.00277	0.11285	0.01636	0.06183	-0.00132	-0.00047
		3	0.11413	-0.06589	0.00018	-0.01145	-0.01541	-0.45545
117	83	4	-0.69115	-0.85154	-0.03926	-0.11885	0.10055	-0.01083
		1	-0.11270	0.00224	-0.00901	0.00123	0.06203	-0.00090
		2	0.00277	0.11285	0.01636	0.06183	-0.00132	-0.00047
		3	0.11413	-0.06589	0.00018	-0.01145	-0.01541	-0.45545
	87	4	-0.69115	-0.85154	-0.03926	-0.11885	0.10055	-0.01083
		1	-0.13218	0.00259	-0.00990	0.00095	0.06804	-0.00094
		2	0.00333	0.13233	0.01793	0.06797	-0.00195	-0.00050
		3	0.11891	-0.06893	0.00001	-0.00748	-0.01678	-0.48121
	87	4	-0.71890	-0.88409	-0.03350	-0.09818	0.08104	-0.01324
		1	-0.13218	0.00259	-0.00990	0.00095	0.06804	-0.00094
		2	0.00333	0.13233	0.01793	0.06797	-0.00195	-0.00050
		3	0.11891	-0.06893	0.00001	-0.00748	-0.01678	-0.48121
118	87	4	-0.71890	-0.88409	-0.03350	-0.09818	0.08104	-0.01324
		1	-0.15363	0.00288	-0.01079	0.00139	0.07512	-0.00100
		2	0.00364	0.15364	0.01958	0.07433	0.00046	-0.00043
		3	0.12450	-0.07098	0.00020	-0.00919	-0.02099	-0.50759
	91	4	-0.73943	-0.90944	-0.02751	-0.07530	0.05810	-0.01125
		1	-0.15363	0.00288	-0.01079	0.00139	0.07512	-0.00100
		2	0.00364	0.15364	0.01958	0.07433	0.00046	-0.00043
		3	0.12450	-0.07098	0.00020	-0.00919	-0.02099	-0.50759
	91	4	-0.73943	-0.90944	-0.02751	-0.07530	0.05810	-0.01125
		1	-0.17758	0.00356	-0.01175	0.00313	0.08552	-0.00100
		2	0.00321	0.17732	0.02128	0.08475	0.00126	-0.00037
		3	0.13264	-0.07594	0.00000	-0.02595	-0.03593	-0.53514
119	91	4	-0.73943	-0.90944	-0.02751	-0.07530	0.05810	-0.01125
		1	-0.17758	0.00356	-0.01175	0.00313	0.08552	-0.00100
		2	0.00321	0.17732	0.02128	0.08475	0.00126	-0.00037
		3	0.13264	-0.07594	0.00000	-0.02595	-0.03593	-0.53514
	95	4	-0.75626	-0.93266	-0.02127	-0.08829	0.06002	-0.01405
		1	-0.17758	0.00356	-0.01175	0.00313	0.08552	-0.00100
		2	0.00321	0.17732	0.02128	0.08475	0.00126	-0.00037
		3	0.13264	-0.07594	0.00000	-0.02595	-0.03593	-0.53514
	99	4	-0.75626	-0.93266	-0.02127	-0.08829	0.06002	-0.01405
		1	-0.18637	0.00384	-0.01207	0.00182	0.09058	-0.00102
		2	0.00319	0.18612	0.02185	0.09210	-0.00155	-0.00036
		3	0.13852	-0.07882	0.00000	-0.03015	-0.04022	-0.54500
120	95	4	-0.76291	-0.94264	-0.01915	-0.11511	0.07524	-0.01432
		1	-0.06539	0.00154	0.01377	0.00263	0.03978	0.00001
		2	0.00124	0.06532	-0.00026	0.03936	-0.00032	0.00073
		3	0.00056	0.11054	0.00000	0.04473	-0.00460	-0.37530
	70	4	-0.58604	-0.72137	0.03419	-0.22141	0.17985	-0.04483
		1	-0.06530	0.00130	-0.00711	0.00105	0.03852	0.00063
		2	0.00148	0.06542	-0.01177	0.04062	-0.00190	-0.00038
		3	-0.09601	-0.05479	0.00000	-0.01838	0.04104	-0.37530
	70	4	-0.58604	-0.72137	0.03419	-0.22141	0.17985	-0.04483
		1	-0.06530	0.00130	-0.00711	0.00105	0.03852	0.00063
		2	0.00148	0.06542	-0.01177	0.04062	-0.00190	-0.00038
		3	-0.09601	-0.05479	0.00000	-0.01838	0.04104	-0.37530
121	69	4	-0.58604	-0.72137	0.03419	-0.22141	0.17985	-0.04483
		1	-0.06530	0.00130	-0.00711	0.00105	0.03852	0.00063
		2	0.00148	0.06542	-0.01177	0.04062	-0.00190	-0.00038
		3	-0.09601	-0.05479	0.00000	-0.01838	0.04104	-0.37530
	71	4	-0.58604	-0.72137	0.03419	-0.22141	0.17985	-0.04483
		1	-0.06530	0.00130	-0.00711	0.00105	0.03852	0.00063
		2	0.00148	0.06542	-0.01177	0.04062	-0.00190	-0.00038
		3	-0.09601	-0.05479	0.00000	-0.01838	0.04104	-0.37530
	71	4	-0.58604	-0.72137	0.03419	-0.22141	0.17985	-0.04483
		1	-0.06530	0.00130	-0.00711	0.00105	0.03852	0.00063
		2	0.00148	0.06542	-0.01177	0.04062	-0.00190	-0.00038
		3	-0.09601	-0.05479	0.00000	-0.01838	0.04104	-0.37530
122	70	4	-0.58604	-0.72137	0.03419	-0.22141	0.17985	-0.04483
		1	-0.06530	0.00130	-0.00711	0.00105	0.03852	0.00063
		2	0.00148	0.06542	-0.01177	0.04062	-0.00190	-0.00038
		3	-0.09601	-0.05479	0.00000	-0.01838	0.04104	-0.37530
	71	4	-0.58604	-0.72137	0.03419	-0.22141	0.17985	-0.04483
		1	-0.06530	0.00130	-0.00711	0.00105	0.03852	0.00063
		2	0.00148	0.06542	-0.01177	0.04062	-0.00190	-0.00038
		3	-0.09601	-0.05479	0.00000	-0.01838	0.04104	-0.37530
	71	4	-0.58604	-0.72137	0.03419	-0.22141	0.17985	-0.04483
		1	-0.06530	0.00130	-0.00711	0.00105	0.03852	0.00063
		2	0.00148	0.06542	-0.01177	0.04062	-0.00190	-0.00038
		3	-0.09601	-0.05479	0.00000	-0.01838	0.04104	-0.37530
123	71	4	-0.58604	-0.72137	0.03419	-0.22141	0.17985	-0.04483
		1	-0.06530	0.00130	-0.00711	0.00105	0.03852	0.00063
		2	0.00145	0.06516	0.01204	0.03863	-0.00220	-0.00036
		3	0.09545	-0.05575	0.00000	-0.02635	-0.03644	-0.37530
	69	4	-0.58345	-0.72170	-0.05354	-0.21918	0.15394	-0.01084
		1	-0.06539	0.00154	0.01377	0.00263	0.03978	0.00001
		2	0.00124	0.06532	-0.00026	0.03936	-0.00032	0.00073
		3	0.00056	0.11054	0.00000	0.04473	-0.00460	-0.37530
	69	4	-0.58604	-0.72137	0.03419	-0.22141	0.17985	-0.04483
		1	-0.06530	0.00130	-0.00711	0.00105	0.03852	0.00063
		2	0.00148	0.06542	-0.01177	0.04062	-0.00190	-0.00038
		3	-0.09601	-0.05479	0.00000	-0.01838	0.04104	-0.37530
124	93	4	-0.17748	0.00328	0.02433	0.00010	0.08316	0.00018
		2	0.00350	0.17743	-0.00048	0.08711	-0.00176	0.00105
		3	-0.00055	0.15284	0.00000	0.04409	-0.00451	-0.53514
		4	-0.75563	-0.93498	0.01358	-0.10065	0.07428	-0.05709
	94	4	-0.17777	0.00333	-0.01259	-0.00043	0.08696	0.00082
		2	0.00344	0.17713	-0.02079	0.08331	-0.00229	-0.00068
		3	-0.13209	-0.07890	0.00000	-0.01814	0.04043	-0.53514
		4	-0.75817	-0.93449	0.00768	-0.08214	0.07784	0.07033
	94	4	-0.17777	0.00333	-0.01259	-0.00043	0.08696	0.00082
		2	0.00344	0.17713	-0.02079	0.08331	-0.00229	-0.00068
		3	-0.13209	-0.07890	0.00000	-0.01814	0.04043	-0.53514
		4	-0.75817	-0.93449	0.00768	-0.08214	0.07784	0.07033
125	94	4	-0.17777	0.00333	-0.01259	-0.00043	0.08696	0.00082
		2	0.00344	0.17713	-0.02079	0.08331	-0.00229	-0.00068
		3	-0.13209	-0.07890	0.00000	-0.01814	0.04043	-0.53514
		4	-0.75817	-0.93449	0.00768	-0.08214	0.07784	0.07033
	95	4	-0.17758	0.00356	-0.01175	0.00313	0.08552	-0.00100
		2	0.00321	0.17732	0.02128	0.08475	0.00126	-0.00037
		3	0.13264	-0.07594	0.00000	-0.02595	-0.03593	-0.53514
		4	-0.75626	-0.93266	-0.02127	-0.08829	0.06002	-0.01405
	95	4	-0.17758	0.00356	-0.01175	0.00313	0.08552	-0.00100
		2	0.00321	0.17732	0.02128	0.08475	0.00126	-0.00037
		3	0.13264	-0.07594	0.00000	-0.02595	-0.03593	-0.53514
		4	-0.75626	-0.93266	-0.02127	-0.08829	0.06002	-0.01405
126	95	4	-0.17758	0.00356	-0.01175	0.00313	0.08552	-0.00100
		2	0.00321	0.17732	0.02128	0.08475	0.00126	-0.00037
		3	0.13264	-0.07594	0.00000	-0.02595	-0.03593	-0.53514
		4	-0.75626	-0.93266	-0.02127	-0.08829	0.06002	-0.01405
	93	4	-0.17748	0.00328	0.02433	0.00010	0.08316	0.00018
		2	0.00350	0.17743	-0.00048	0.08711	-0.00176	0.00105
		3	-0.00055	0.15284	0.00000	0.04409	-0.00451	-0.53514
		4	-0.75563	-0.93498	0.01358	-0.10065	0.07428	-0.05709
	93	4	-0.17748	0.00328	0.02433	0.00010	0.08316	0.00018
		2	0.00350	0.17743	-0.00048	0.08711	-0.00176	0.00105
		3	-0.00055	0.15284	0.00000	0.04409	-0.00451	-0.53514
		4	-0.75563	-0.93498	0.01358	-0.10065	0.07428	-0.05709
69	4	-0.06539	0.00154	0.01377	0.00263	0.03978	0.00001	
	2	0.00124	0.06532	-0.00026	0.03936	-0.00032	0.00073	
	3	0.00056	0.11054	0.00000	0.04473	-0.00460	-0.37530	
	4	-0.58604	-0.72137	0.03419	-0.22141	0.17985	-0.04483	



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
127	75	1	-0.07913	0.00156	-0.00738	0.00085	0.04942	-0.00076
		2	0.00225	0.07884	0.01341	0.05103	-0.00216	-0.00045
		3	0.10370	-0.06080	0.00020	-0.00928	-0.02124	-0.40310
		4	-0.62300	-0.77450	-0.04951	-0.14483	0.12156	-0.00994
128	75	1	-0.07913	0.00156	-0.00738	0.00085	0.04942	-0.00076
		2	0.00225	0.07884	0.01341	0.05103	-0.00216	-0.00045
		3	0.10370	-0.06080	0.00020	-0.00928	-0.02124	-0.40310
		4	-0.62300	-0.77450	-0.04951	-0.14483	0.12156	-0.00994
	77	1	-0.09551	0.00226	0.01697	0.00024	0.05638	-0.00002
		2	0.00219	0.09458	-0.00033	0.05651	-0.00136	0.00095
		3	-0.00025	0.12612	0.00001	0.01834	0.00194	-0.42964
		4	-0.65877	-0.81891	0.02846	-0.12501	0.10346	-0.05069
129	77	1	-0.09551	0.00226	0.01697	0.00024	0.05638	-0.00002
		2	0.00219	0.09458	-0.00033	0.05651	-0.00136	0.00095
		3	-0.00025	0.12612	0.00001	0.01834	0.00194	-0.42964
		4	-0.65877	-0.81891	0.02846	-0.12501	0.10346	-0.05069
	83	1	-0.11270	0.00224	-0.00901	0.00123	0.06203	-0.00090
		2	0.00277	0.11285	0.01636	0.08183	-0.00132	-0.00047
		3	0.11413	-0.06589	0.00018	-0.01145	-0.01541	-0.45545
		4	-0.69115	-0.85154	-0.03926	-0.11885	0.10055	-0.01063
130	83	1	-0.11270	0.00224	-0.00901	0.00123	0.06203	-0.00090
		2	0.00277	0.11285	0.01636	0.08183	-0.00132	-0.00047
		3	0.11413	-0.06589	0.00018	-0.01145	-0.01541	-0.45545
		4	-0.69115	-0.85154	-0.03926	-0.11885	0.10055	-0.01063
	85	1	-0.13279	0.00299	0.02050	0.00168	0.06852	0.00004
		2	0.00294	0.13172	-0.00040	0.06749	-0.00122	0.00106
		3	0.00024	0.13744	0.00001	0.01828	0.00191	-0.48121
		4	-0.71702	-0.88506	0.02135	-0.09050	0.07391	-0.05547
131	85	1	-0.13279	0.00299	0.02050	0.00168	0.06852	0.00004
		2	0.00294	0.13172	-0.00040	0.06749	-0.00122	0.00106
		3	0.00024	0.13744	0.00001	0.01828	0.00191	-0.48121
		4	-0.71702	-0.88506	0.02135	-0.09050	0.07391	-0.05547
	91	1	-0.15363	0.00288	-0.01079	0.00139	0.07512	-0.00100
		2	0.00364	0.15364	0.01958	0.07433	0.00046	-0.00043
		3	0.12450	-0.07098	0.00020	-0.00919	-0.02099	-0.50759
		4	-0.73943	-0.90944	-0.02751	-0.07530	0.05810	-0.01125
132	91	1	-0.15363	0.00288	-0.01079	0.00139	0.07512	-0.00100
		2	0.00364	0.15364	0.01958	0.07433	0.00046	-0.00043
		3	0.12450	-0.07098	0.00020	-0.00919	-0.02099	-0.50759
		4	-0.73943	-0.90944	-0.02751	-0.07530	0.05810	-0.01125
	93	1	-0.17748	0.00328	0.02433	0.00010	0.08316	0.00018
		2	0.00350	0.17743	-0.00048	0.08711	-0.00176	0.00105
		3	-0.00055	0.15284	0.00000	0.04409	-0.00451	-0.53514
		4	-0.75563	-0.93498	0.01358	-0.10065	0.07428	-0.05709
133	70	1	-0.06530	0.00130	-0.00711	0.00105	0.03852	0.00063
		2	0.00148	0.06542	-0.01177	0.04062	-0.00190	-0.00038
		3	-0.09801	-0.05479	0.00000	-0.01838	0.04104	-0.37530
		4	-0.58465	-0.71941	0.01935	-0.19787	0.16887	0.05494
	73	1	-0.07932	0.00214	0.01532	0.00110	0.05127	-0.00001
		2	0.00167	0.07885	-0.00032	0.04919	-0.00192	0.00088
		3	0.00080	0.12021	0.00020	0.02304	0.00259	-0.40310
		4	-0.62843	-0.77783	0.03141	-0.15729	0.11109	-0.04898
134	73	1	-0.07932	0.00214	0.01532	0.00110	0.05127	-0.00001
		2	0.00167	0.07885	-0.00032	0.04919	-0.00192	0.00088
		3	0.00080	0.12021	0.00020	0.02304	0.00259	-0.40310
		4	-0.62843	-0.77783	0.03141	-0.15729	0.11109	-0.04898
	78	1	-0.09491	0.00254	-0.00877	0.00098	0.05704	0.00084
		2	0.00191	0.09518	-0.01450	0.05585	-0.00062	-0.00046
		3	-0.10910	-0.06327	0.00001	-0.01085	0.01491	-0.42964
		4	-0.66316	-0.81694	0.01617	-0.13567	0.10775	0.06277
135	78	1	-0.09491	0.00254	-0.00877	0.00098	0.05704	0.00084
		2	0.00191	0.09518	-0.01450	0.05585	-0.00062	-0.00046
		3	-0.10910	-0.06327	0.00001	-0.01085	0.01491	-0.42964
		4	-0.66316	-0.81694	0.01617	-0.13567	0.10775	0.06277
	81	1	-0.11319	0.00249	0.01870	0.00134	0.06200	0.00004
		2	0.00252	0.11236	-0.00039	0.06186	-0.00122	0.00102
		3	0.00000	0.13178	0.00018	0.01907	-0.00221	-0.45545
		4	-0.69106	-0.85472	0.02493	-0.11155	0.10120	-0.05495
136	81	1	-0.11319	0.00249	0.01870	0.00134	0.06200	0.00004
		2	0.00252	0.11236	-0.00039	0.06186	-0.00122	0.00102
		3	0.00000	0.13178	0.00018	0.01907	-0.00221	-0.45545
		4	-0.69106	-0.85472	0.02493	-0.11155	0.10120	-0.05495
	86	1	-0.13214	0.00332	-0.01060	0.00173	0.06764	0.00090
		2	0.00261	0.13237	-0.01752	0.06837	-0.00117	-0.00057
		3	-0.11914	-0.06851	0.00001	-0.01080	0.01487	-0.48121
		4	-0.71901	-0.88633	0.01214	-0.09952	0.07256	0.06791
137	86	1	-0.13214	0.00332	-0.01060	0.00173	0.06764	0.00090
		2	0.00261	0.13237	-0.01752	0.06837	-0.00117	-0.00057
		3	-0.11914	-0.06851	0.00001	-0.01080	0.01487	-0.48121
		4	-0.71901	-0.88633	0.01214	-0.09952	0.07256	0.06791
	89	1	-0.15417	0.00333	0.02238	0.00029	0.07382	0.00013
		2	0.00319	0.15310	-0.00046	0.07562	-0.00064	0.00108
		3	-0.00078	0.14331	0.00020	0.02278	0.00254	-0.50759
		4	-0.73670	-0.90978	0.01749	-0.07706	0.05952	-0.05842
138	89	1	-0.15417	0.00333	0.02238	0.00029	0.07382	0.00013
		2	0.00319	0.15310	-0.00046	0.07562	-0.00064	0.00108
		3	-0.00078	0.14331	0.00020	0.02278	0.00254	-0.50759
		4	-0.73670	-0.90978	0.01749	-0.07706	0.05952	-0.05842
	94	1	-0.17777	0.00333	-0.01259	-0.00043	0.08696	0.00062



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
138	94	2	0.00344	0.17713	-0.02079	0.08331	-0.00229	-0.00088
		3	-0.13209	-0.07690	0.00000	-0.01814	0.04043	-0.53514
		4	-0.75817	-0.93449	0.00768	-0.08214	0.07784	0.07033
		1	-0.06555	0.00134	-0.00666	0.00075	0.04052	-0.00064
139	71	2	0.00145	0.06516	0.01204	0.03863	-0.00220	-0.00038
		3	0.09545	-0.05575	0.00000	-0.02635	-0.03644	-0.37530
		4	-0.58345	-0.72170	-0.05354	-0.21918	0.15394	-0.01084
		1	-0.07872	0.00202	-0.00794	0.00258	0.05013	0.00077
	74	2	0.00179	0.07925	-0.01309	0.05032	-0.00044	-0.00043
		3	-0.10450	-0.05941	0.00020	-0.01376	0.01866	-0.40310
		4	-0.62880	-0.77158	0.01810	-0.16014	0.12713	0.05814
		1	-0.07872	0.00202	-0.00794	0.00258	0.05013	0.00077
140	74	2	0.00179	0.07925	-0.01309	0.05032	-0.00044	-0.00043
		3	-0.10450	-0.05941	0.00020	-0.01376	0.01866	-0.40310
		4	-0.62880	-0.77158	0.01810	-0.16014	0.12713	0.05814
		1	-0.07872	0.00202	-0.00794	0.00258	0.05013	0.00077
	79	2	-0.09497	0.00188	-0.00820	0.00119	0.05607	-0.00081
		3	0.00257	0.09512	0.01484	0.05682	-0.00042	-0.00050
		4	0.10935	-0.06285	0.00001	-0.00748	-0.01885	-0.42864
		1	-0.65905	-0.81424	-0.04464	-0.12663	0.11483	-0.01285
141	79	2	-0.09497	0.00188	-0.00820	0.00119	0.05607	-0.00081
		3	0.00257	0.09512	0.01484	0.05682	-0.00042	-0.00050
		4	0.10935	-0.06285	0.00001	-0.00748	-0.01885	-0.42864
		1	-0.65905	-0.81424	-0.04464	-0.12663	0.11483	-0.01285
	82	2	-0.11273	0.00279	-0.00988	0.00126	0.06192	0.00088
		3	0.00222	0.11281	-0.01597	0.06194	-0.00129	-0.00055
		4	-0.11413	-0.06589	0.00018	-0.00762	0.01762	-0.45545
		1	-0.69407	-0.85333	0.01432	-0.11463	0.09456	0.08479
142	82	2	-0.11273	0.00279	-0.00988	0.00126	0.06192	0.00088
		3	0.00222	0.11281	-0.01597	0.06194	-0.00129	-0.00055
		4	-0.11413	-0.06589	0.00018	-0.00762	0.01762	-0.45545
		1	-0.69407	-0.85333	0.01432	-0.11463	0.09456	0.08479
	87	2	-0.13218	0.00259	-0.00990	0.00095	0.06804	-0.00094
		3	0.00333	0.13233	0.01793	0.06797	-0.00195	-0.00050
		4	0.11891	-0.06893	0.00001	-0.00748	-0.01678	-0.48121
		1	-0.71890	-0.88409	-0.03350	-0.09618	0.06104	-0.01324
143	87	2	-0.13218	0.00259	-0.00990	0.00095	0.06804	-0.00094
		3	0.00333	0.13233	0.01793	0.06797	-0.00195	-0.00050
		4	0.11891	-0.06893	0.00001	-0.00748	-0.01678	-0.48121
		1	-0.71890	-0.88409	-0.03350	-0.09618	0.06104	-0.01324
	90	2	-0.15351	0.00358	-0.01159	-0.00028	0.07543	0.00087
		3	0.00294	0.15375	-0.01912	0.07402	-0.00121	-0.00065
		4	-0.12372	-0.07233	0.00020	-0.01358	0.01846	-0.50759
		1	-0.73857	-0.91210	0.01002	-0.07495	0.06033	0.06886
144	90	2	-0.15351	0.00358	-0.01159	-0.00028	0.07543	0.00087
		3	0.00294	0.15375	-0.01912	0.07402	-0.00121	-0.00065
		4	-0.12372	-0.07233	0.00020	-0.01358	0.01846	-0.50759
		1	-0.73857	-0.91210	0.01002	-0.07495	0.06033	0.06886
	95	2	-0.17758	0.00356	-0.01175	0.00313	0.08552	-0.00100
		3	0.00321	0.17732	0.02128	0.08475	0.00126	-0.00037
		4	0.13264	-0.07594	0.00000	-0.02595	-0.03593	-0.53514
		1	-0.75626	-0.93266	-0.02127	-0.08829	0.06002	-0.01405
145	97	2	-0.18616	0.00333	0.02499	0.00090	0.09172	0.00020
		3	0.00371	0.18634	-0.00049	0.09096	-0.00248	0.00107
		4	0.00000	0.15764	0.00000	0.04991	-0.00800	-0.54500
		1	-0.76401	-0.94569	0.01223	-0.11061	0.09560	-0.05739
	101	2	-0.19576	0.00346	0.02572	0.00194	0.09839	0.00021
		3	0.00398	0.19558	-0.00051	0.09361	-0.00288	0.00109
		4	0.00055	0.16243	0.00000	0.04414	-0.00454	-0.55486
		1	-0.77407	-0.95657	0.01112	-0.10467	0.09645	-0.05768
146	101	2	-0.19576	0.00346	0.02572	0.00194	0.09839	0.00021
		3	0.00398	0.19558	-0.00051	0.09361	-0.00288	0.00109
		4	0.00055	0.16243	0.00000	0.04414	-0.00454	-0.55486
		1	-0.77407	-0.95657	0.01112	-0.10467	0.09645	-0.05768
	105	2	-0.22580	0.00436	0.02781	0.00338	0.10178	0.00019
		3	0.00482	0.22467	-0.00050	0.10062	-0.00229	0.00117
		4	0.00079	0.17198	0.00020	0.02276	0.00256	-0.58224
		1	-0.79341	-0.98168	0.00717	-0.06062	0.03784	-0.06060
147	105	2	-0.22580	0.00436	0.02781	0.00338	0.10178	0.00019
		3	0.00482	0.22467	-0.00050	0.10062	-0.00229	0.00117
		4	0.00079	0.17198	0.00020	0.02276	0.00256	-0.58224
		1	-0.79341	-0.98168	0.00717	-0.06062	0.03784	-0.06060
	109	2	-0.25707	0.00528	0.02974	0.00261	0.10742	0.00010
		3	0.00535	0.25599	-0.00059	0.10800	-0.00173	0.00129
		4	-0.00025	0.17782	0.00001	0.01810	0.00192	-0.60835
		1	-0.80122	-0.99411	0.00302	-0.02834	0.02384	-0.06006
148	109	2	-0.25707	0.00528	0.02974	0.00261	0.10742	0.00010
		3	0.00535	0.25599	-0.00059	0.10800	-0.00173	0.00129
		4	-0.00025	0.17782	0.00001	0.01810	0.00192	-0.60835
		1	-0.80122	-0.99411	0.00302	-0.02834	0.02384	-0.06006
	113	2	-0.29044	0.00598	0.03152	0.00250	0.11480	0.00005
		3	0.00801	0.28932	-0.00058	0.11383	-0.00268	0.00135
		4	0.00000	0.18340	0.00017	0.01880	-0.00217	-0.63373
		1	-0.80777	-1.00000	-0.00202	-0.00893	0.00978	-0.06234
149	113	2	-0.29044	0.00598	0.03152	0.00250	0.11480	0.00005
		3	0.00801	0.28932	-0.00058	0.11383	-0.00268	0.00135
		4	0.00000	0.18340	0.00017	0.01880	-0.00217	-0.63373
		1	-0.80777	-1.00000	-0.00202	-0.00893	0.00978	-0.06234



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
149	117	3	0.00023	0.18898	0.00001	0.01801	0.00187	-0.65902
		4	-0.80586	-0.99866	-0.00718	0.01810	-0.01675	-0.08017
		1	-0.32566	0.00894	0.03315	0.00394	0.11912	-0.00005
		2	0.00674	0.32418	-0.00065	0.11880	-0.00162	0.00139
150	117	3	0.00023	0.18898	0.00001	0.01801	0.00187	-0.65902
		4	-0.80586	-0.99866	-0.00718	0.01810	-0.01675	-0.08017
	121	1	-0.36193	0.00806	0.03463	0.00256	0.12350	-0.00006
		2	0.00704	0.36075	-0.00064	0.12603	-0.00110	0.00144
151	121	3	-0.00077	0.19476	0.00019	0.02240	0.00249	-0.68487
		4	-0.79878	-0.98852	-0.01290	0.05154	-0.03313	-0.08091
	125	1	-0.36193	0.00806	0.03463	0.00256	0.12350	-0.00006
		2	0.00704	0.36075	-0.00064	0.12603	-0.00110	0.00144
152	125	3	-0.00077	0.19476	0.00019	0.02240	0.00249	-0.68487
		4	-0.79878	-0.98852	-0.01290	0.05154	-0.03313	-0.08091
	129	1	-0.40097	0.00832	0.03592	-0.00051	0.13976	0.00001
		2	0.00774	0.40039	-0.00072	0.13929	-0.00414	0.00134
153	129	3	-0.00054	0.20412	0.00000	0.04324	-0.00441	-0.71184
		4	-0.78568	-0.98899	-0.01867	0.07232	-0.05273	-0.05729
	98	1	-0.40097	0.00832	0.03592	-0.00051	0.13976	0.00001
		2	0.00774	0.40039	-0.00072	0.13929	-0.00414	0.00134
154	98	3	-0.00054	0.20412	0.00000	0.04324	-0.00441	-0.71184
		4	-0.78568	-0.98899	-0.01867	0.07232	-0.05273	-0.05729
	102	1	-0.41527	0.00825	0.03632	-0.00083	0.14511	0.00006
		2	0.00822	0.41453	-0.00073	0.14264	-0.00522	0.00135
155	102	3	0.00000	0.20882	0.00000	0.04880	-0.00588	-0.72145
		4	-0.78014	-0.96170	-0.02065	0.07419	-0.05910	-0.05689
	106	1	-0.18671	0.00340	-0.01293	0.00235	0.09196	0.00083
		2	0.00364	0.18579	-0.02136	0.09072	-0.00103	-0.00070
156	106	3	-0.13652	-0.07882	0.00000	-0.01875	0.04622	-0.54500
		4	-0.76632	-0.94333	0.00891	-0.09522	0.08152	0.07089
	110	1	-0.19611	0.00378	-0.01330	0.00465	0.09534	0.00084
		2	0.00366	0.19523	-0.02198	0.09666	-0.00018	-0.00073
157	110	3	-0.14095	-0.08074	0.00000	-0.01814	0.04050	-0.55486
		4	-0.77416	-0.95312	0.00628	-0.09572	0.07559	0.07146
	108	1	-0.19611	0.00378	-0.01330	0.00465	0.09534	0.00084
		2	0.00366	0.19523	-0.02198	0.09666	-0.00018	-0.00073
158	108	3	-0.14095	-0.08074	0.00000	-0.01814	0.04050	-0.55486
		4	-0.77416	-0.95312	0.00628	-0.09572	0.07559	0.07146
	114	1	-0.22545	0.00502	-0.01434	0.00299	0.10058	0.00092
		2	0.00415	0.22502	-0.02379	0.10182	-0.00268	-0.00075
159	114	3	-0.14933	-0.08530	0.00020	-0.01359	0.01843	-0.58224
		4	-0.79370	-0.97686	0.00447	-0.08652	0.05224	0.07229
	118	1	-0.22545	0.00502	-0.01434	0.00299	0.10058	0.00092
		2	0.00415	0.22502	-0.02379	0.10182	-0.00268	-0.00075
160	118	3	-0.14933	-0.08530	0.00020	-0.01359	0.01843	-0.58224
		4	-0.79370	-0.97686	0.00447	-0.08652	0.05224	0.07229
	122	1	-0.25663	0.00561	-0.01538	0.00182	0.10762	0.00107
		2	0.00502	0.25642	-0.02542	0.10780	-0.00271	-0.00073
161	122	3	-0.15387	-0.08912	0.00001	-0.01071	0.01471	-0.60835
		4	-0.80561	-0.99290	0.00173	-0.03453	0.03003	0.07443
	126	1	-0.25663	0.00561	-0.01538	0.00182	0.10762	0.00107
		2	0.00502	0.25642	-0.02542	0.10780	-0.00271	-0.00073
162	126	3	-0.15387	-0.08912	0.00001	-0.01071	0.01471	-0.60835
		4	-0.80561	-0.99290	0.00173	-0.03453	0.03003	0.07443
	130	1	-0.28000	0.00627	-0.01626	0.00298	0.11429	0.00115
		2	0.00572	0.28976	-0.02696	0.11434	-0.00220	-0.00072
163	130	3	-0.15883	-0.09170	0.00017	-0.00752	0.01737	-0.63373
		4	-0.81172	-0.99822	-0.00088	-0.00899	0.00768	0.07356
	134	1	-0.28000	0.00627	-0.01626	0.00298	0.11429	0.00115
		2	0.00572	0.28976	-0.02696	0.11434	-0.00220	-0.00072
164	134	3	-0.15883	-0.09170	0.00017	-0.00752	0.01737	-0.63373
		4	-0.81172	-0.99822	-0.00088	-0.00899	0.00768	0.07356
	138	1	-0.32490	0.00719	-0.01714	0.00234	0.11789	0.00123
		2	0.00649	0.32494	-0.02833	0.11983	-0.00322	-0.00065
165	138	3	-0.16378	-0.09429	0.00001	-0.01063	0.01466	-0.65902
		4	-0.81002	-0.99843	-0.00407	-0.01584	-0.01665	0.07392
	142	1	-0.32490	0.00719	-0.01714	0.00234	0.11789	0.00123
		2	0.00649	0.32494	-0.02833	0.11983	-0.00322	-0.00065
166	142	3	-0.16378	-0.09429	0.00001	-0.01063	0.01466	-0.65902
		4	-0.81002	-0.99843	-0.00407	-0.01584	-0.01665	0.07392
	146	1	-0.36109	0.00754	-0.01787	0.00027	0.12493	0.00128
		2	0.00756	0.36159	-0.02962	0.12460	-0.00338	-0.00066
167	146	3	-0.16828	-0.09804	0.00019	-0.01335	0.01816	-0.68487
		4	-0.80187	-0.98771	-0.00714	0.05068	-0.03967	0.07152
	150	1	-0.36109	0.00754	-0.01787	0.00027	0.12493	0.00128
		2	0.00756	0.36159	-0.02962	0.12460	-0.00338	-0.00066
168	150	3	-0.16828	-0.09804	0.00019	-0.01335	0.01816	-0.68487
		4	-0.80187	-0.98771	-0.00714	0.05068	-0.03967	0.07152
	154	1	-0.40082	0.00784	-0.01858	0.00308	0.14161	0.00115
		2	0.00823	0.40053	-0.03070	0.13745	-0.00055	-0.00067
169	154	3	-0.17650	-0.10253	0.00000	-0.01780	0.03965	-0.71184
		4	-0.78661	-0.98953	-0.01057	0.07062	-0.05875	0.06999
	158	1	-0.40082	0.00784	-0.01858	0.00308	0.14161	0.00115
		2	0.00823	0.40053	-0.03070	0.13745	-0.00055	-0.00067
170	158	3	-0.17650	-0.10253	0.00000	-0.01780	0.03965	-0.71184
		4	-0.78661	-0.98953	-0.01057	0.07062	-0.05875	0.06999
	162	1	-0.41526	0.00824	-0.01879	0.00467	0.14608	0.00114
		2	0.00823	0.41454	-0.03104	0.14168	0.00028	-0.00073
		3	-0.18084	-0.10441	0.00000	-0.01936	0.04529	-0.72145



Letrona AG

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D Y N A M

Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab

Seite: 33

Gittermasten L120-G3-50-3.5kN-2

26.07.2010

EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
180	130	4	-0.78057	-0.96214	-0.01170	0.07789	-0.06236	0.08932
181	99	1	-0.18637	0.00384	-0.01207	0.00182	0.09058	-0.00102
		2	0.00319	0.18812	0.02185	0.09210	-0.00155	-0.00036
		3	0.13652	-0.07882	0.00000	-0.03015	-0.04022	-0.54500
		4	-0.76291	-0.94284	-0.01915	-0.11511	0.07524	-0.01432
	103	1	-0.19566	0.00393	-0.01242	0.00065	0.09452	-0.00105
		2	0.00352	0.19568	0.02249	0.09747	-0.00417	-0.00036
		3	0.14040	-0.08169	0.00000	-0.02600	-0.03598	-0.55486
		4	-0.77091	-0.95489	-0.01740	-0.11826	0.07828	-0.01459
182	103	1	-0.19566	0.00393	-0.01242	0.00065	0.09452	-0.00105
		2	0.00352	0.19568	0.02249	0.09747	-0.00417	-0.00036
		3	0.14040	-0.08169	0.00000	-0.02600	-0.03598	-0.55486
		4	-0.77091	-0.95489	-0.01740	-0.11826	0.07828	-0.01459
	107	1	-0.22505	0.00439	-0.01347	0.00214	0.10151	-0.00111
		2	0.00478	0.22542	0.02429	0.10089	-0.00353	-0.00042
		3	0.14854	-0.08667	0.00020	-0.00916	-0.02099	-0.58224
		4	-0.78917	-0.97914	-0.01164	-0.05110	0.05016	-0.01249
183	107	1	-0.22505	0.00439	-0.01347	0.00214	0.10151	-0.00111
		2	0.00478	0.22542	0.02429	0.10089	-0.00353	-0.00042
		3	0.14854	-0.08667	0.00020	-0.00916	-0.02099	-0.58224
		4	-0.78917	-0.97914	-0.01164	-0.05110	0.05016	-0.01249
	111	1	-0.25657	0.00507	-0.01436	0.00228	0.10837	-0.00117
		2	0.00556	0.25649	0.02801	0.10704	-0.00205	-0.00056
		3	0.15412	-0.08870	0.00001	-0.00739	-0.01663	-0.60835
		4	-0.80217	-0.98982	-0.00476	-0.02607	0.03231	-0.01515
184	111	1	-0.25657	0.00507	-0.01436	0.00228	0.10837	-0.00117
		2	0.00556	0.25649	0.02801	0.10704	-0.00205	-0.00056
		3	0.15412	-0.08870	0.00001	-0.00739	-0.01663	-0.60835
		4	-0.80217	-0.98982	-0.00476	-0.02607	0.03231	-0.01515
	115	1	-0.28997	0.00575	-0.01526	0.00229	0.11415	-0.00120
		2	0.00624	0.28979	0.02754	0.11448	-0.00287	-0.00064
		3	0.15883	-0.09170	0.00017	-0.01128	-0.01520	-0.63373
		4	-0.80800	-0.99581	0.00289	-0.01073	0.00888	-0.01198
185	115	1	-0.28997	0.00575	-0.01526	0.00229	0.11415	-0.00120
		2	0.00624	0.28979	0.02754	0.11448	-0.00287	-0.00064
		3	0.15883	-0.09170	0.00017	-0.01128	-0.01520	-0.63373
		4	-0.80800	-0.99581	0.00289	-0.01073	0.00888	-0.01198
	119	1	-0.32507	0.00641	-0.01601	0.00207	0.11989	-0.00118
		2	0.00727	0.32478	0.02899	0.11784	-0.00349	-0.00074
		3	0.16354	-0.09469	0.00001	-0.00739	-0.01654	-0.65902
		4	-0.80754	-0.99506	0.01124	0.01707	-0.01473	-0.01449
186	119	1	-0.32507	0.00641	-0.01601	0.00207	0.11989	-0.00118
		2	0.00727	0.32478	0.02899	0.11784	-0.00349	-0.00074
		3	0.16354	-0.09469	0.00001	-0.00739	-0.01654	-0.65902
		4	-0.80754	-0.99506	0.01124	0.01707	-0.01473	-0.01449
	123	1	-0.36196	0.00707	-0.01676	0.00266	0.12620	-0.00121
		2	0.00803	0.36072	0.03025	0.12333	-0.00100	-0.00077
		3	0.16905	-0.09672	0.00019	-0.00905	-0.02064	-0.68487
		4	-0.79944	-0.98555	0.02003	0.04546	-0.03562	-0.01132
187	123	1	-0.36196	0.00707	-0.01676	0.00266	0.12620	-0.00121
		2	0.00803	0.36072	0.03025	0.12333	-0.00100	-0.00077
		3	0.16905	-0.09672	0.00019	-0.00905	-0.02064	-0.68487
		4	-0.79944	-0.98555	0.02003	0.04546	-0.03562	-0.01132
	127	1	-0.40132	0.00796	-0.01734	0.00288	0.13758	-0.00116
		2	0.00811	0.40004	0.03141	0.14147	-0.00075	-0.00066
		3	0.17704	-0.10159	0.00000	-0.02544	-0.03524	-0.71184
		4	-0.78644	-0.96857	0.02923	0.06630	-0.05422	-0.01338
188	127	1	-0.40132	0.00796	-0.01734	0.00288	0.13758	-0.00116
		2	0.00811	0.40004	0.03141	0.14147	-0.00075	-0.00066
		3	0.17704	-0.10159	0.00000	-0.02544	-0.03524	-0.71184
		4	-0.78644	-0.96857	0.02923	0.06630	-0.05422	-0.01338
	131	1	-0.41527	0.00823	-0.01753	0.00275	0.14083	-0.00120
		2	0.00823	0.41453	0.03176	0.14692	-0.00164	-0.00063
		3	0.18085	-0.10441	0.00000	-0.02955	-0.03941	-0.72145
		4	-0.78056	-0.96164	0.03235	0.07326	-0.06387	-0.01329
189	101	1	-0.19576	0.00346	0.02572	0.00194	0.09839	0.00021
		2	0.00398	0.19558	-0.00051	0.09381	-0.00288	0.00109
		3	0.00055	0.16243	0.00000	0.04414	-0.00454	-0.55486
		4	-0.77407	-0.95657	0.01112	-0.10467	0.09645	-0.05768
	102	1	-0.19611	0.00378	-0.01330	0.00465	0.09534	0.00084
		2	0.00366	0.19523	-0.02198	0.09666	-0.00018	-0.00073
		3	-0.14095	-0.08074	0.00000	-0.01814	0.04050	-0.55486
		4	-0.77416	-0.95312	0.00628	-0.09572	0.07559	0.07146
170	102	1	-0.19611	0.00378	-0.01330	0.00465	0.09534	0.00084
		2	0.00366	0.19523	-0.02198	0.09666	-0.00018	-0.00073
		3	-0.14095	-0.08074	0.00000	-0.01814	0.04050	-0.55486
		4	-0.77416	-0.95312	0.00628	-0.09572	0.07559	0.07146
	103	1	-0.19566	0.00393	-0.01242	0.00065	0.09452	-0.00105
		2	0.00352	0.19568	0.02249	0.09747	-0.00417	-0.00036
		3	0.14040	-0.08169	0.00000	-0.02600	-0.03598	-0.55486
		4	-0.77091	-0.95489	-0.01740	-0.11826	0.07828	-0.01459
171	103	1	-0.19566	0.00393	-0.01242	0.00065	0.09452	-0.00105
		2	0.00352	0.19568	0.02249	0.09747	-0.00417	-0.00036
		3	0.14040	-0.08169	0.00000	-0.02600	-0.03598	-0.55486
		4	-0.77091	-0.95489	-0.01740	-0.11826	0.07828	-0.01459
	101	1	-0.19576	0.00346	0.02572	0.00194	0.09839	0.00021
		2	0.00398	0.19558	-0.00051	0.09381	-0.00288	0.00109
		3	0.00055	0.16243	0.00000	0.04414	-0.00454	-0.55486
		4	-0.77407	-0.95657	0.01112	-0.10467	0.09645	-0.05768



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
172	125	1	-0.40097	0.00832	0.03592	-0.00051	0.13976	0.00001
		2	0.00774	0.40039	-0.00072	0.13929	-0.00414	0.00134
		3	-0.00054	0.20412	0.00000	0.04324	-0.00441	-0.71184
		4	-0.78568	-0.96899	-0.01867	0.07232	-0.05273	-0.05729
	126	1	-0.40082	0.00784	-0.01858	0.00308	0.14161	0.00115
		2	0.00823	0.40053	-0.03070	0.13745	-0.00055	-0.00087
		3	-0.17650	-0.10253	0.00000	-0.01780	0.03985	-0.71184
		4	-0.78661	-0.96953	-0.01057	0.07062	-0.05875	0.06999
173	126	1	-0.40082	0.00784	-0.01858	0.00308	0.14161	0.00115
		2	0.00823	0.40053	-0.03070	0.13745	-0.00055	-0.00087
		3	-0.17650	-0.10253	0.00000	-0.01780	0.03985	-0.71184
		4	-0.78661	-0.96953	-0.01057	0.07062	-0.05875	0.06999
	127	1	-0.40132	0.00796	-0.01734	0.00288	0.13758	-0.00116
		2	0.00811	0.40004	0.03141	0.14147	-0.00075	-0.00086
		3	0.17704	-0.10159	0.00000	-0.02544	-0.03524	-0.71184
		4	-0.78644	-0.96857	0.02923	0.06830	-0.05422	-0.01338
174	127	1	-0.40132	0.00796	-0.01734	0.00288	0.13758	-0.00116
		2	0.00811	0.40004	0.03141	0.14147	-0.00075	-0.00086
		3	0.17704	-0.10159	0.00000	-0.02544	-0.03524	-0.71184
		4	-0.78644	-0.96857	0.02923	0.06830	-0.05422	-0.01338
	125	1	-0.40097	0.00832	0.03592	-0.00051	0.13976	0.00001
		2	0.00774	0.40039	-0.00072	0.13929	-0.00414	0.00134
		3	-0.00054	0.20412	0.00000	0.04324	-0.00441	-0.71184
		4	-0.78568	-0.96899	-0.01867	0.07232	-0.05273	-0.05729
175	101	1	-0.19576	0.00346	0.02572	0.00194	0.09839	0.00021
		2	0.00398	0.19558	-0.00051	0.09381	-0.00288	0.00109
		3	0.00055	0.16243	0.00000	0.04414	-0.00454	-0.55486
		4	-0.77407	-0.95857	0.01112	-0.10467	0.09845	-0.05768
	107	1	-0.22505	0.00439	-0.01347	0.00214	0.10151	-0.00111
		2	0.00478	0.22542	0.02429	0.10089	-0.00353	-0.00042
		3	0.14854	-0.08667	0.00020	-0.00916	-0.02099	-0.58224
		4	-0.78917	-0.97914	-0.01164	-0.05110	0.05016	-0.01249
176	107	1	-0.22505	0.00439	-0.01347	0.00214	0.10151	-0.00111
		2	0.00478	0.22542	0.02429	0.10089	-0.00353	-0.00042
		3	0.14854	-0.08667	0.00020	-0.00916	-0.02099	-0.58224
		4	-0.78917	-0.97914	-0.01164	-0.05110	0.05016	-0.01249
	109	1	-0.25707	0.00528	0.02974	0.00281	0.10742	0.00010
		2	0.00535	0.25599	-0.00059	0.10800	-0.00173	0.00129
		3	-0.00025	0.17782	0.00001	0.01810	0.00192	-0.60835
		4	-0.80122	-0.99411	0.00302	-0.02834	0.02384	-0.06006
177	109	1	-0.25707	0.00528	0.02974	0.00281	0.10742	0.00010
		2	0.00535	0.25599	-0.00059	0.10800	-0.00173	0.00129
		3	-0.00025	0.17782	0.00001	0.01810	0.00192	-0.60835
		4	-0.80122	-0.99411	0.00302	-0.02834	0.02384	-0.06006
	115	1	-0.28997	0.00575	-0.01526	0.00229	0.11415	-0.00120
		2	0.00624	0.28979	0.02754	0.11448	-0.00287	-0.00064
		3	0.15883	-0.09170	0.00017	-0.01128	-0.01520	-0.63373
		4	-0.80800	-0.99581	0.00289	-0.01073	0.00888	-0.01198
178	115	1	-0.28997	0.00575	-0.01526	0.00229	0.11415	-0.00120
		2	0.00624	0.28979	0.02754	0.11448	-0.00287	-0.00064
		3	0.15883	-0.09170	0.00017	-0.01128	-0.01520	-0.63373
		4	-0.80800	-0.99581	0.00289	-0.01073	0.00888	-0.01198
	117	1	-0.32566	0.00694	0.03315	0.00394	0.11912	-0.00005
		2	0.00674	0.32418	-0.00065	0.11860	-0.00162	0.00139
		3	0.00023	0.18898	0.00001	0.01801	0.00187	-0.65902
		4	-0.80586	-0.99866	-0.00718	0.01810	-0.01675	-0.06017
179	117	1	-0.32566	0.00694	0.03315	0.00394	0.11912	-0.00005
		2	0.00674	0.32418	-0.00065	0.11860	-0.00162	0.00139
		3	0.00023	0.18898	0.00001	0.01801	0.00187	-0.65902
		4	-0.80586	-0.99866	-0.00718	0.01810	-0.01675	-0.06017
	123	1	-0.36198	0.00707	-0.01676	0.00266	0.12620	-0.00121
		2	0.00803	0.36072	0.03025	0.12333	-0.00100	-0.00077
		3	0.16905	-0.09672	0.00019	-0.00905	-0.02064	-0.68487
		4	-0.79944	-0.98555	0.02003	0.04546	-0.03562	-0.01132
180	123	1	-0.36198	0.00707	-0.01676	0.00266	0.12620	-0.00121
		2	0.00803	0.36072	0.03025	0.12333	-0.00100	-0.00077
		3	0.16905	-0.09672	0.00019	-0.00905	-0.02064	-0.68487
		4	-0.79944	-0.98555	0.02003	0.04546	-0.03562	-0.01132
	125	1	-0.40097	0.00832	0.03592	-0.00051	0.13976	0.00001
		2	0.00774	0.40039	-0.00072	0.13929	-0.00414	0.00134
		3	-0.00054	0.20412	0.00000	0.04324	-0.00441	-0.71184
		4	-0.78568	-0.96899	-0.01867	0.07232	-0.05273	-0.05729
181	102	1	-0.18611	0.00378	-0.01330	0.00485	0.09534	0.00084
		2	0.00366	0.19523	-0.02198	0.09866	-0.00018	-0.00073
		3	-0.14095	-0.08074	0.00000	-0.01814	0.04050	-0.55486
		4	-0.77416	-0.95312	0.00628	-0.08572	0.07559	0.07146
	105	1	-0.22580	0.00436	0.02781	0.00338	0.10178	0.00019
		2	0.00482	0.22467	-0.00050	0.10062	-0.00229	0.00117
		3	0.00079	0.17198	0.00020	0.02276	0.00256	-0.58224
		4	-0.79341	-0.98168	0.00717	-0.06062	0.03784	-0.06060
182	105	1	-0.22580	0.00436	0.02781	0.00338	0.10178	0.00019
		2	0.00482	0.22467	-0.00050	0.10062	-0.00229	0.00117
		3	0.00079	0.17198	0.00020	0.02276	0.00256	-0.58224
		4	-0.79341	-0.98168	0.00717	-0.06062	0.03784	-0.06060
	110	1	-0.25663	0.00581	-0.01538	0.00162	0.10762	0.00107
		2	0.00502	0.25642	-0.02542	0.10780	-0.00271	-0.00073
		3	-0.15387	-0.08912	0.00001	-0.01071	0.01471	-0.60835
		4	-0.80561	-0.99290	0.00173	-0.03453	0.03003	0.07443
183	110	1	-0.25663	0.00581	-0.01538	0.00162	0.10762	0.00107



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
183	110	2	0.00502	0.25842	-0.02542	0.10780	-0.00271	-0.00073
		3	-0.15387	-0.08912	0.00001	-0.01071	0.01471	-0.60835
		4	-0.80561	-0.99290	0.00173	-0.03453	0.03003	0.07443
		1	-0.28044	0.00598	0.03152	0.00250	0.11480	0.00005
	113	2	0.00601	0.28932	-0.00058	0.11383	-0.00268	0.00135
		3	0.00000	0.18340	0.00017	0.01880	-0.00217	-0.63373
		4	-0.80777	-1.00000	-0.00202	-0.00883	0.00978	-0.06234
		1	-0.29044	0.00598	0.03152	0.00250	0.11480	0.00005
184	113	2	0.00601	0.28932	-0.00058	0.11383	-0.00268	0.00135
		3	0.00000	0.18340	0.00017	0.01880	-0.00217	-0.63373
		4	-0.80777	-1.00000	-0.00202	-0.00883	0.00978	-0.06234
		1	-0.32490	0.00719	-0.01714	0.00234	0.11789	0.00123
	118	2	0.00649	0.32494	-0.02833	0.11983	-0.00322	-0.00085
		3	-0.16378	-0.09429	0.00001	-0.01063	0.01466	-0.65902
		4	-0.81002	-0.99843	-0.00407	-0.01584	-0.01665	0.07392
185	118	1	-0.32490	0.00719	-0.01714	0.00234	0.11789	0.00123
		2	0.00649	0.32494	-0.02833	0.11983	-0.00322	-0.00085
		3	-0.16378	-0.09429	0.00001	-0.01063	0.01466	-0.65902
		4	-0.81002	-0.99843	-0.00407	-0.01584	-0.01665	0.07392
	121	1	-0.36193	0.00806	0.03463	0.00256	0.12350	-0.00006
		2	0.00704	0.36075	-0.00084	0.12603	-0.00110	0.00144
		3	-0.00077	0.19476	0.00019	0.02240	0.00249	-0.68487
		4	-0.79878	-0.98852	-0.01290	0.05154	-0.03313	-0.06091
186	121	1	-0.36193	0.00806	0.03463	0.00256	0.12350	-0.00006
		2	0.00704	0.36075	-0.00084	0.12603	-0.00110	0.00144
		3	-0.00077	0.19476	0.00019	0.02240	0.00249	-0.68487
		4	-0.79878	-0.98852	-0.01290	0.05154	-0.03313	-0.06091
	126	1	-0.40082	0.00784	-0.01858	0.00308	0.14161	0.00115
		2	0.00823	0.40053	-0.03070	0.13745	-0.00055	-0.00087
		3	-0.17650	-0.10253	0.00000	-0.01780	0.03965	-0.71184
		4	-0.78661	-0.96953	-0.01057	0.07082	-0.05875	0.06999
187	103	1	-0.19566	0.00393	-0.01242	0.00065	0.09452	-0.00105
		2	0.00352	0.19568	0.02249	0.08747	-0.00417	-0.00038
		3	0.14040	-0.08169	0.00000	-0.02600	-0.03598	-0.55488
		4	-0.77091	-0.95489	-0.01740	-0.11826	0.07828	-0.01459
	106	1	-0.22545	0.00502	-0.01434	0.00299	0.10058	0.00092
		2	0.00415	0.22502	-0.02379	0.10182	-0.00268	-0.00075
		3	-0.14933	-0.08530	0.00020	-0.01359	0.01843	-0.58224
		4	-0.79370	-0.97686	0.00447	-0.06652	0.05224	0.07229
188	106	1	-0.22545	0.00502	-0.01434	0.00299	0.10058	0.00092
		2	0.00415	0.22502	-0.02379	0.10182	-0.00268	-0.00075
		3	-0.14933	-0.08530	0.00020	-0.01359	0.01843	-0.58224
		4	-0.79370	-0.97686	0.00447	-0.06652	0.05224	0.07229
	111	1	-0.25857	0.00507	-0.01436	0.00228	0.10837	-0.00117
		2	0.00556	0.25849	0.02801	0.10704	-0.00205	-0.00058
		3	0.15412	-0.08870	0.00001	-0.00739	-0.01663	-0.60835
		4	-0.80217	-0.98982	-0.00476	-0.02607	0.03231	-0.01515
189	111	1	-0.25857	0.00507	-0.01436	0.00228	0.10837	-0.00117
		2	0.00556	0.25849	0.02801	0.10704	-0.00205	-0.00058
		3	0.15412	-0.08870	0.00001	-0.00739	-0.01663	-0.60835
		4	-0.80217	-0.98982	-0.00476	-0.02607	0.03231	-0.01515
	114	1	-0.29000	0.00627	-0.01626	0.00296	0.11429	0.00115
		2	0.00572	0.28976	-0.02696	0.11434	-0.00220	-0.00072
		3	-0.15883	-0.09170	0.00017	-0.00752	0.01737	-0.63373
		4	-0.81172	-0.98822	-0.00088	-0.00899	0.00768	0.07356
190	114	1	-0.29000	0.00627	-0.01626	0.00296	0.11429	0.00115
		2	0.00572	0.28976	-0.02696	0.11434	-0.00220	-0.00072
		3	-0.15883	-0.09170	0.00017	-0.00752	0.01737	-0.63373
		4	-0.81172	-0.98822	-0.00088	-0.00899	0.00768	0.07356
	119	1	-0.32507	0.00641	-0.01601	0.00207	0.11989	-0.00118
		2	0.00727	0.32478	0.02899	0.11784	-0.00349	-0.00074
		3	0.16354	-0.09469	0.00001	-0.00739	-0.01654	-0.65902
		4	-0.80754	-0.99506	0.01124	0.01707	-0.01473	-0.01449
191	119	1	-0.32507	0.00641	-0.01601	0.00207	0.11989	-0.00118
		2	0.00727	0.32478	0.02899	0.11784	-0.00349	-0.00074
		3	0.16354	-0.09469	0.00001	-0.00739	-0.01654	-0.65902
		4	-0.80754	-0.99506	0.01124	0.01707	-0.01473	-0.01449
	122	1	-0.36109	0.00754	-0.01787	0.00027	0.12493	0.00128
		2	0.00756	0.36159	-0.02962	0.12460	-0.00338	-0.00066
		3	-0.16828	-0.09804	0.00019	-0.01335	0.01818	-0.68487
		4	-0.80187	-0.98771	-0.00714	-0.05068	-0.03967	0.07152
192	122	1	-0.36109	0.00754	-0.01787	0.00027	0.12493	0.00128
		2	0.00756	0.36159	-0.02962	0.12460	-0.00338	-0.00066
		3	-0.16828	-0.09804	0.00019	-0.01335	0.01818	-0.68487
		4	-0.80187	-0.98771	-0.00714	-0.05068	-0.03967	0.07152
	127	1	-0.40132	0.00796	-0.01734	0.00288	0.13758	-0.00118
		2	0.00811	0.40004	0.03141	0.14147	-0.00075	-0.00088
		3	0.17704	-0.10159	0.00000	-0.02544	-0.03524	-0.71184
		4	-0.78644	-0.96857	0.02923	0.06630	-0.05422	-0.01338
193	129	1	-0.41527	0.00825	0.03632	-0.00083	0.14511	0.00008
		2	0.00822	0.41453	-0.00073	0.14284	-0.00522	0.00135
		3	0.00000	0.20882	0.00000	0.04890	-0.00588	-0.72145
		4	-0.78014	-0.96170	-0.02065	0.07419	-0.05910	-0.05689
	133	1	-0.42874	0.00819	0.03672	-0.00011	0.14298	0.00011
		2	0.00874	0.42876	-0.00073	0.14132	-0.00502	0.00137
		3	0.00054	0.21352	0.00000	0.04321	-0.00446	-0.73106
		4	-0.77370	-0.95402	-0.02263	0.07997	-0.07048	-0.05610
194	133	1	-0.42874	0.00819	0.03672	-0.00011	0.14298	0.00011
		2	0.00874	0.42876	-0.00073	0.14132	-0.00502	0.00137



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
194	133	3	0.00054	0.21352	0.00000	0.04321	-0.00448	-0.73108
		4	-0.77370	-0.95402	-0.02263	0.07997	-0.07048	-0.05610
		1	-0.47103	0.00867	0.03783	0.00331	0.13485	0.00014
		2	0.00983	0.47008	-0.00070	0.13578	-0.00193	0.00137
		3	0.00078	0.22285	0.00019	0.02222	0.00251	-0.75758
		4	-0.74681	-0.92505	-0.02858	0.11785	-0.10654	-0.05807
195	137	1	-0.47103	0.00867	0.03783	0.00331	0.13485	0.00014
		2	0.00983	0.47008	-0.00070	0.13578	-0.00193	0.00137
		3	0.00078	0.22285	0.00019	0.02222	0.00251	-0.75758
		4	-0.74681	-0.92505	-0.02858	0.11785	-0.10654	-0.05807
	141	1	-0.51180	0.00995	0.03877	0.00434	0.13806	0.00014
		2	0.01016	0.51097	-0.00077	0.13754	-0.00162	0.00150
		3	-0.00024	0.22855	0.00001	0.01764	0.00188	-0.78277
		4	-0.71160	-0.88325	-0.03454	0.15653	-0.12410	-0.05222
196	141	1	-0.51180	0.00995	0.03877	0.00434	0.13806	0.00014
		2	0.01016	0.51097	-0.00077	0.13754	-0.00162	0.00150
		3	-0.00024	0.22855	0.00001	0.01764	0.00188	-0.78277
		4	-0.71160	-0.88325	-0.03454	0.15653	-0.12410	-0.05222
	145	1	-0.55401	0.01109	0.03955	0.00349	0.14264	0.00002
		2	0.01103	0.55277	-0.00074	0.14086	-0.00356	0.00159
		3	0.00000	0.23399	0.00017	0.01833	-0.00214	-0.80711
		4	-0.67158	-0.83266	-0.04025	0.17978	-0.14931	-0.05098
197	145	1	-0.55401	0.01109	0.03955	0.00349	0.14264	0.00002
		2	0.01103	0.55277	-0.00074	0.14086	-0.00356	0.00159
		3	0.00000	0.23399	0.00017	0.01833	-0.00214	-0.80711
		4	-0.67158	-0.83266	-0.04025	0.17978	-0.14931	-0.05098
	149	1	-0.59699	0.01220	0.04020	0.00414	0.14310	-0.00004
		2	0.01195	0.59534	-0.00079	0.14276	-0.00209	0.00165
		3	0.00023	0.23943	0.00001	0.01755	0.00185	-0.83120
		4	-0.62304	-0.77588	-0.04590	0.19819	-0.16418	-0.04591
198	149	1	-0.59699	0.01220	0.04020	0.00414	0.14310	-0.00004
		2	0.01195	0.59534	-0.00079	0.14276	-0.00209	0.00165
		3	0.00023	0.23943	0.00001	0.01755	0.00185	-0.83120
		4	-0.62304	-0.77588	-0.04590	0.19819	-0.16418	-0.04591
	153	1	-0.63996	0.01339	0.04071	0.00305	0.14433	-0.00009
		2	0.01241	0.63867	-0.00076	0.14613	-0.00181	0.00173
		3	0.00076	0.24506	0.00019	0.02189	0.00244	-0.85563
		4	-0.57313	-0.71137	-0.05102	0.24026	-0.17817	-0.04324
199	153	1	-0.63996	0.01339	0.04071	0.00305	0.14433	-0.00009
		2	0.01241	0.63867	-0.00076	0.14613	-0.00181	0.00173
		3	0.00076	0.24506	0.00019	0.02189	0.00244	-0.85563
		4	-0.57313	-0.71137	-0.05102	0.24026	-0.17817	-0.04324
	157	1	-0.68466	0.01387	0.04106	0.00026	0.15624	0.00000
		2	0.01333	0.68361	-0.00082	0.15526	-0.00460	0.00168
		3	-0.00053	0.25424	0.00000	0.04247	-0.00435	-0.88083
		4	-0.51050	-0.62903	-0.05598	0.30953	-0.24886	-0.03832
200	157	1	-0.68466	0.01387	0.04106	0.00026	0.15624	0.00000
		2	0.01333	0.68361	-0.00082	0.15526	-0.00460	0.00168
		3	-0.00053	0.25424	0.00000	0.04247	-0.00435	-0.88083
		4	-0.51050	-0.62903	-0.05598	0.30953	-0.24886	-0.03832
	161	1	-0.70053	0.01387	0.04114	-0.00021	0.15994	0.00005
		2	0.01384	0.69928	-0.00082	0.15758	-0.00534	0.00171
		3	0.00000	0.25886	0.00000	0.04805	-0.00578	-0.88958
		4	-0.48433	-0.59720	-0.05748	0.32345	-0.26985	-0.03710
201	130	1	-0.41526	0.00824	-0.01879	0.00467	0.14608	0.00114
		2	0.00823	0.41454	-0.03104	0.14188	0.00028	-0.00073
		3	-0.18084	-0.10441	0.00000	-0.01936	0.04529	-0.72145
		4	-0.78057	-0.96214	-0.01170	0.07789	-0.06236	0.06932
	134	1	-0.42982	0.00871	-0.01900	0.00436	0.14415	0.00113
		2	0.00823	0.42868	-0.03138	0.14015	-0.00058	-0.00078
		3	-0.18518	-0.10629	0.00000	-0.01775	0.03965	-0.73108
		4	-0.77406	-0.95386	-0.01284	0.08805	-0.06834	0.06865
202	134	1	-0.42982	0.00871	-0.01900	0.00436	0.14415	0.00113
		2	0.00823	0.42868	-0.03138	0.14015	-0.00058	-0.00078
		3	-0.18518	-0.10629	0.00000	-0.01775	0.03965	-0.73108
		4	-0.77406	-0.95386	-0.01284	0.08805	-0.06834	0.06865
	138	1	-0.47146	0.00960	-0.01952	0.00177	0.13513	0.00112
		2	0.00890	0.46986	-0.03236	0.13550	-0.00346	-0.00080
		3	-0.19338	-0.11075	0.00019	-0.01328	0.01799	-0.75758
		4	-0.74953	-0.92264	-0.01623	0.11779	-0.09730	0.06807
203	138	1	-0.47146	0.00960	-0.01952	0.00177	0.13513	0.00112
		2	0.00890	0.46986	-0.03236	0.13550	-0.00346	-0.00080
		3	-0.19338	-0.11075	0.00019	-0.01328	0.01799	-0.75758
		4	-0.74953	-0.92264	-0.01623	0.11779	-0.09730	0.06807
	142	1	-0.51196	0.01009	-0.02005	0.00242	0.13668	0.00124
		2	0.01002	0.51081	-0.03313	0.13892	-0.00354	-0.00087
		3	-0.19781	-0.11448	0.00001	-0.01045	0.01434	-0.78277
		4	-0.71591	-0.88258	-0.01955	0.15384	-0.12396	0.06446
204	142	1	-0.51196	0.01009	-0.02005	0.00242	0.13668	0.00124
		2	0.01002	0.51081	-0.03313	0.13892	-0.00354	-0.00087
		3	-0.19781	-0.11448	0.00001	-0.01045	0.01434	-0.78277
		4	-0.71591	-0.88258	-0.01955	0.15384	-0.12396	0.06446
	146	1	-0.55380	0.01117	-0.02042	0.00421	0.14153	0.00136
		2	0.01095	0.55298	-0.03382	0.14197	-0.00284	-0.00081
		3	-0.20265	-0.11700	0.00017	-0.00731	0.01694	-0.80711
		4	-0.67549	-0.83125	-0.02294	0.18091	-0.14727	0.06034
205	146	1	-0.55380	0.01117	-0.02042	0.00421	0.14153	0.00136
		2	0.01095	0.55298	-0.03382	0.14197	-0.00284	-0.00081
		3	-0.20265	-0.11700	0.00017	-0.00731	0.01694	-0.80711
		4	-0.67549	-0.83125	-0.02294	0.18091	-0.14727	0.06034



Projekt: Namenlos

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
205	146	4	-0.67549	-0.83125	-0.02294	0.18091	-0.14727	0.06034
		1	-0.59645	0.01228	-0.02079	0.00264	0.14215	0.00145
		2	0.01187	0.59588	-0.03436	0.14371	-0.00358	-0.00079
		3	-0.20747	-0.11951	0.00001	-0.01038	0.01427	-0.83120
206	150	4	-0.62788	-0.77396	-0.02801	0.20852	-0.16743	0.05726
		1	-0.59645	0.01228	-0.02079	0.00264	0.14215	0.00145
		2	0.01187	0.59588	-0.03436	0.14371	-0.00358	-0.00079
		3	-0.20747	-0.11951	0.00001	-0.01038	0.01427	-0.83120
207	154	4	-0.62788	-0.77396	-0.02801	0.20852	-0.16743	0.05726
		1	-0.63936	0.01278	-0.02102	0.00123	0.14534	0.00155
		2	0.01302	0.63917	-0.03481	0.14512	-0.00363	-0.00079
		3	-0.21185	-0.12319	0.00019	-0.01306	0.01773	-0.85563
208	158	4	-0.57436	-0.70547	-0.02914	0.24281	-0.19445	0.05175
		1	-0.63936	0.01278	-0.02102	0.00123	0.14534	0.00155
		2	0.01302	0.63917	-0.03481	0.14512	-0.00363	-0.00079
		3	-0.21185	-0.12319	0.00019	-0.01306	0.01773	-0.85563
209	162	4	-0.57436	-0.70547	-0.02914	0.24281	-0.19445	0.05175
		1	-0.68456	0.01342	-0.02124	0.00383	0.15760	0.00146
		2	0.01379	0.68371	-0.03508	0.15391	-0.00104	-0.00084
		3	-0.21991	-0.12758	0.00000	-0.01746	0.03895	-0.88083
210	131	4	-0.50930	-0.62711	-0.03165	0.28770	-0.24068	0.04754
		1	-0.70053	0.01387	-0.02128	0.00486	0.16079	0.00146
		2	0.01384	0.69928	-0.03518	0.15673	-0.00028	-0.00089
		3	-0.22418	-0.12943	0.00000	-0.01902	0.04450	-0.88956
211	135	4	-0.48461	-0.59746	-0.03251	0.30247	-0.25098	0.04583
		1	-0.41527	0.00823	-0.01753	0.00275	0.14083	-0.00120
		2	0.00823	0.41453	0.03176	0.14692	-0.00184	-0.00083
		3	0.18085	-0.10441	0.00000	-0.02955	-0.03941	-0.72145
212	139	4	-0.78058	-0.96164	0.03235	0.07326	-0.06387	-0.01329
		1	-0.42934	0.00852	-0.01773	0.00313	0.13970	-0.00124
		2	0.00841	0.42917	0.03211	0.14460	-0.00179	-0.00059
		3	0.18465	-0.10723	0.00000	-0.02547	-0.03520	-0.73106
213	143	4	-0.77357	-0.95373	0.03546	0.08591	-0.07635	-0.01321
		1	-0.42934	0.00852	-0.01773	0.00313	0.13970	-0.00124
		2	0.00841	0.42917	0.03211	0.14460	-0.00179	-0.00059
		3	0.18465	-0.10723	0.00000	-0.02547	-0.03520	-0.73106
214	147	4	-0.77357	-0.95373	0.03546	0.08591	-0.07635	-0.01321
		1	-0.47044	0.00951	-0.01831	0.00278	0.13632	-0.00125
		2	0.00900	0.47067	0.03308	0.13431	-0.00245	-0.00057
		3	0.19261	-0.11210	0.00019	-0.00894	-0.02050	-0.75758
215	151	4	-0.74593	-0.92157	0.04481	0.12584	-0.10183	-0.01061
		1	-0.47044	0.00951	-0.01831	0.00278	0.13632	-0.00125
		2	0.00900	0.47067	0.03308	0.13431	-0.00245	-0.00057
		3	0.19261	-0.11210	0.00019	-0.00894	-0.02050	-0.75758
216	155	4	-0.74593	-0.92157	0.04481	0.12584	-0.10183	-0.01061
		1	-0.51178	0.01016	-0.01872	0.00219	0.13903	-0.00137
		2	0.00996	0.51101	0.03390	0.13657	-0.00377	-0.00063
		3	0.19805	-0.11407	0.00001	-0.00719	-0.01622	-0.78277
217	159	4	-0.71303	-0.87926	0.05408	0.15532	-0.12167	-0.01281
		1	-0.51178	0.01016	-0.01872	0.00219	0.13903	-0.00137
		2	0.00996	0.51101	0.03390	0.13657	-0.00377	-0.00063
		3	0.19805	-0.11407	0.00001	-0.00719	-0.01622	-0.78277
218	163	4	-0.71303	-0.87926	0.05408	0.15532	-0.12167	-0.01281
		1	-0.55383	0.01095	-0.01913	0.00289	0.14146	-0.00139
		2	0.01117	0.55295	0.03456	0.14204	-0.00416	-0.00077
		3	0.20265	-0.11700	0.00017	-0.01102	-0.01480	-0.80711
219	167	4	-0.67217	-0.82862	0.06318	0.18213	-0.14924	-0.00988
		1	-0.55383	0.01095	-0.01913	0.00289	0.14146	-0.00139
		2	0.01117	0.55295	0.03456	0.14204	-0.00416	-0.00077
		3	0.20265	-0.11700	0.00017	-0.01102	-0.01480	-0.80711
220	171	4	-0.67217	-0.82862	0.06318	0.18213	-0.14924	-0.00988
		1	-0.59665	0.01178	-0.01941	0.00257	0.14392	-0.00141
		2	0.01238	0.59588	0.03515	0.14194	-0.00366	-0.00086
		3	0.20723	-0.11991	0.00001	-0.00717	-0.01612	-0.83120
221	175	4	-0.62367	-0.77080	0.07190	0.20056	-0.17471	-0.01183
		1	-0.59665	0.01178	-0.01941	0.00257	0.14392	-0.00141
		2	0.01238	0.59588	0.03515	0.14194	-0.00366	-0.00086
		3	0.20723	-0.11991	0.00001	-0.00717	-0.01612	-0.83120
222	179	4	-0.62367	-0.77080	0.07190	0.20056	-0.17471	-0.01183
		1	-0.64019	0.01257	-0.01969	0.00302	0.14641	-0.00146
		2	0.01323	0.63834	0.03558	0.14405	-0.00184	-0.00094
		3	0.21261	-0.12188	0.00019	-0.00883	-0.02018	-0.85563
223	183	4	-0.56852	-0.70742	0.08015	0.22746	-0.18847	-0.00893
		1	-0.64019	0.01257	-0.01969	0.00302	0.14641	-0.00146
		2	0.01323	0.63834	0.03558	0.14405	-0.00184	-0.00094
		3	0.21261	-0.12188	0.00019	-0.00883	-0.02018	-0.85563
224	187	4	-0.56852	-0.70742	0.08015	0.22746	-0.18847	-0.00893
		1	-0.68501	0.01355	-0.01982	0.00322	0.15383	-0.00146
		2	0.01365	0.68326	0.03590	0.15767	-0.00165	-0.00084
		3	0.22044	-0.12666	0.00000	-0.02500	-0.03460	-0.88083
225	191	4	-0.50813	-0.62917	0.08761	0.30578	-0.22579	-0.00959
		1	-0.68501	0.01355	-0.01982	0.00322	0.15383	-0.00146
		2	0.01365	0.68326	0.03590	0.15767	-0.00165	-0.00084
		3	0.22044	-0.12666	0.00000	-0.02500	-0.03460	-0.88083
226	195	4	-0.50813	-0.62917	0.08761	0.30578	-0.22579	-0.00959
		1	-0.68501	0.01355	-0.01982	0.00322	0.15383	-0.00146
		2	0.01365	0.68326	0.03590	0.15767	-0.00165	-0.00084
		3	0.22044	-0.12666	0.00000	-0.02500	-0.03460	-0.88083



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DYNAM

Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab

Seite: 38

Gittermasten L120-G3-50-3.5kN-2

26.07.2010

EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
216	163	1	-0.70053	0.01388	-0.01988	0.00306	0.15597	-0.00151
		2	0.01384	0.89928	0.03598	0.16154	-0.00208	-0.00081
		3	0.22418	-0.12943	0.00000	-0.02903	-0.03872	-0.88956
		4	-0.48460	-0.59714	0.08997	0.32937	-0.24215	-0.00909
217	133	1	-0.42974	0.00819	0.03672	-0.00011	0.14298	0.00011
		2	0.00874	0.42876	-0.00073	0.14132	-0.00502	0.00137
		3	0.00054	0.21352	0.00000	0.04321	-0.00446	-0.73108
		4	-0.77370	-0.95402	-0.02263	0.07997	-0.07048	-0.05610
	134	1	-0.42982	0.00871	-0.01900	0.00436	0.14415	0.00113
		2	0.00823	0.42888	-0.03138	0.14015	-0.00056	-0.00078
		3	-0.18518	-0.10629	0.00000	-0.01775	0.03985	-0.73108
		4	-0.77408	-0.95386	-0.01284	0.08805	-0.06834	0.08865
218	134	1	-0.42982	0.00871	-0.01900	0.00436	0.14415	0.00113
		2	0.00823	0.42888	-0.03138	0.14015	-0.00056	-0.00078
		3	-0.18518	-0.10629	0.00000	-0.01775	0.03985	-0.73108
		4	-0.77408	-0.95386	-0.01284	0.08805	-0.06834	0.08865
	135	1	-0.42934	0.00852	-0.01773	0.00313	0.13970	-0.00124
		2	0.00841	0.42917	0.03211	0.14460	-0.00179	-0.00059
		3	0.18465	-0.10723	0.00000	-0.02547	-0.03520	-0.73108
		4	-0.77357	-0.95373	0.03546	0.08591	-0.07635	-0.01321
219	135	1	-0.42934	0.00852	-0.01773	0.00313	0.13970	-0.00124
		2	0.00841	0.42917	0.03211	0.14460	-0.00179	-0.00059
		3	0.18465	-0.10723	0.00000	-0.02547	-0.03520	-0.73108
		4	-0.77357	-0.95373	0.03546	0.08591	-0.07635	-0.01321
	133	1	-0.42974	0.00819	0.03672	-0.00011	0.14298	0.00011
		2	0.00874	0.42876	-0.00073	0.14132	-0.00502	0.00137
		3	0.00054	0.21352	0.00000	0.04321	-0.00446	-0.73108
		4	-0.77370	-0.95402	-0.02263	0.07997	-0.07048	-0.05610
220	157	1	-0.68466	0.01387	0.04108	0.00026	0.15624	0.00000
		2	0.01333	0.88361	-0.00082	0.15528	-0.00460	0.00168
		3	-0.00053	0.25424	0.00000	0.04247	-0.00435	-0.88083
		4	-0.51050	-0.62903	-0.05598	0.30953	-0.24886	-0.03832
	158	1	-0.68466	0.01342	-0.02124	0.00383	0.15760	0.00146
		2	0.01379	0.88371	-0.03508	0.15391	-0.00104	-0.00084
		3	-0.21991	-0.12758	0.00000	-0.01746	0.03895	-0.88083
		4	-0.50930	-0.62711	-0.03165	-0.28770	-0.24068	-0.04754
221	158	1	-0.68466	0.01342	-0.02124	0.00383	0.15760	0.00146
		2	0.01379	0.88371	-0.03508	0.15391	-0.00104	-0.00084
		3	-0.21991	-0.12758	0.00000	-0.01746	0.03895	-0.88083
		4	-0.50930	-0.62711	-0.03165	-0.28770	-0.24068	-0.04754
	159	1	-0.68501	0.01355	-0.01982	0.00322	0.15383	-0.00146
		2	0.01365	0.88326	0.03590	0.15767	-0.00165	-0.00084
		3	0.22044	-0.12666	0.00000	-0.02500	-0.03460	-0.88083
		4	-0.50813	-0.62917	0.08761	0.30576	-0.22579	-0.00959
222	159	1	-0.68501	0.01355	-0.01982	0.00322	0.15383	-0.00146
		2	0.01365	0.88326	0.03590	0.15767	-0.00165	-0.00084
		3	0.22044	-0.12666	0.00000	-0.02500	-0.03460	-0.88083
		4	-0.50813	-0.62917	0.08761	0.30576	-0.22579	-0.00959
	157	1	-0.68466	0.01387	0.04108	0.00026	0.15624	0.00000
		2	0.01333	0.88361	-0.00082	0.15528	-0.00460	0.00168
		3	-0.00053	0.25424	0.00000	0.04247	-0.00435	-0.88083
		4	-0.51050	-0.62903	-0.05598	0.30953	-0.24886	-0.03832
223	133	1	-0.42974	0.00819	0.03672	-0.00011	0.14298	0.00011
		2	0.00874	0.42876	-0.00073	0.14132	-0.00502	0.00137
		3	0.00054	0.21352	0.00000	0.04321	-0.00446	-0.73108
		4	-0.77370	-0.95402	-0.02263	0.07997	-0.07048	-0.05610
	139	1	-0.47044	0.00951	-0.01831	0.00278	0.13632	-0.00125
		2	0.00900	0.47067	0.03306	0.13431	-0.00245	-0.00057
		3	0.19261	-0.11210	0.00019	-0.00894	-0.02050	-0.75758
		4	-0.74593	-0.92157	0.04481	0.12584	-0.10183	-0.01061
224	139	1	-0.47044	0.00951	-0.01831	0.00278	0.13632	-0.00125
		2	0.00900	0.47067	0.03306	0.13431	-0.00245	-0.00057
		3	0.19261	-0.11210	0.00019	-0.00894	-0.02050	-0.75758
		4	-0.74593	-0.92157	0.04481	0.12584	-0.10183	-0.01061
	141	1	-0.51180	0.00995	0.03877	0.00434	0.13806	0.00014
		2	0.01016	0.51097	-0.00077	0.13754	-0.00162	0.00150
		3	-0.00024	0.22855	0.00001	0.01764	0.00188	-0.78277
		4	-0.71160	-0.88325	-0.03454	0.15653	-0.12410	-0.05222
225	141	1	-0.51180	0.00995	0.03877	0.00434	0.13806	0.00014
		2	0.01016	0.51097	-0.00077	0.13754	-0.00162	0.00150
		3	-0.00024	0.22855	0.00001	0.01764	0.00188	-0.78277
		4	-0.71160	-0.88325	-0.03454	0.15653	-0.12410	-0.05222
	147	1	-0.55383	0.01095	-0.01913	0.00289	0.14146	-0.00139
		2	0.01117	0.55295	0.03456	0.14204	-0.00416	-0.00077
		3	0.20265	-0.11700	0.00017	-0.01102	-0.01480	-0.80711
		4	-0.67217	-0.82862	0.06318	0.18213	-0.14924	-0.00988
226	147	1	-0.55383	0.01095	-0.01913	0.00289	0.14146	-0.00139
		2	0.01117	0.55295	0.03456	0.14204	-0.00416	-0.00077
		3	0.20265	-0.11700	0.00017	-0.01102	-0.01480	-0.80711
		4	-0.67217	-0.82862	0.06318	0.18213	-0.14924	-0.00988
	149	1	-0.59699	0.01220	0.04020	0.00414	0.14310	-0.00004
		2	0.01195	0.59534	-0.00079	0.14276	-0.00209	0.00165
		3	0.00023	0.23943	0.00001	0.01755	0.00185	-0.83120
		4	-0.62304	-0.77588	-0.04590	0.19819	-0.16418	-0.04591
227	149	1	-0.59699	0.01220	0.04020	0.00414	0.14310	-0.00004
		2	0.01195	0.59534	-0.00079	0.14276	-0.00209	0.00165
		3	0.00023	0.23943	0.00001	0.01755	0.00185	-0.83120
		4	-0.62304	-0.77588	-0.04590	0.19819	-0.16418	-0.04591
	155	1	-0.64019	0.01257	-0.01989	0.00302	0.14841	-0.00146



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab

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Gittermasten L120-G3-50-3.5kN-2

26.07.2010

EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
227	155	2	0.01323	0.63834	0.03558	0.14405	-0.00184	-0.00094
		3	0.21261	-0.12188	0.00019	-0.00883	-0.02018	-0.85563
		4	-0.56852	-0.70742	0.08015	0.22746	-0.18847	-0.00893
		1	-0.64019	0.01257	-0.01969	0.00302	0.14641	-0.00146
228	155	2	0.01323	0.63834	0.03558	0.14405	-0.00184	-0.00094
		3	0.21261	-0.12188	0.00019	-0.00883	-0.02018	-0.85563
		4	-0.56852	-0.70742	0.08015	0.22746	-0.18847	-0.00893
		1	-0.68486	0.01387	0.04108	0.00028	0.15624	0.00000
	157	2	0.01333	0.68361	-0.00082	0.15526	-0.00460	0.00168
		3	-0.00053	0.25424	0.00000	0.04247	-0.00435	-0.88083
		4	-0.51050	-0.62903	-0.05598	0.30953	-0.24886	-0.03832
		1	-0.42982	0.00871	-0.01900	0.00436	0.14415	0.00113
229	134	2	0.00823	0.42868	-0.03138	0.14015	-0.00056	-0.00078
		3	-0.18518	-0.10629	0.00000	-0.01775	0.03965	-0.73106
		4	-0.77406	-0.95386	-0.01284	0.08805	-0.06834	0.06865
		1	-0.47103	0.00867	0.03783	0.00331	0.13485	0.00014
	137	2	0.00983	0.47008	-0.00070	0.13578	-0.00193	0.00137
		3	0.00078	0.22285	0.00019	0.02222	0.00251	-0.75758
		4	-0.74681	-0.92505	-0.02858	0.11785	-0.10654	-0.05807
		1	-0.47103	0.00867	0.03783	0.00331	0.13485	0.00014
230	137	2	0.00983	0.47008	-0.00070	0.13578	-0.00193	0.00137
		3	0.00078	0.22285	0.00019	0.02222	0.00251	-0.75758
		4	-0.74681	-0.92505	-0.02858	0.11785	-0.10654	-0.05807
		1	-0.51198	0.01009	-0.02005	0.00242	0.13668	0.00124
	142	2	0.01002	0.51081	-0.03313	0.13892	-0.00354	-0.00087
		3	-0.19781	-0.11448	0.00001	-0.01045	0.01434	-0.78277
		4	-0.71591	-0.88258	-0.01955	0.15384	-0.12396	0.06446
		1	-0.51198	0.01009	-0.02005	0.00242	0.13668	0.00124
231	142	2	0.01002	0.51081	-0.03313	0.13892	-0.00354	-0.00087
		3	-0.19781	-0.11448	0.00001	-0.01045	0.01434	-0.78277
		4	-0.71591	-0.88258	-0.01955	0.15384	-0.12396	0.06446
		1	-0.55401	0.01109	0.03955	0.00349	0.14264	0.00002
	145	2	0.01103	0.55277	-0.00074	0.14086	-0.00356	0.00159
		3	0.00000	0.23399	0.00017	0.01833	-0.00214	-0.80711
		4	-0.67156	-0.83266	-0.04025	0.17978	-0.14931	-0.05098
		1	-0.55401	0.01109	0.03955	0.00349	0.14264	0.00002
232	145	2	0.01103	0.55277	-0.00074	0.14086	-0.00356	0.00159
		3	0.00000	0.23399	0.00017	0.01833	-0.00214	-0.80711
		4	-0.67156	-0.83266	-0.04025	0.17978	-0.14931	-0.05098
		1	-0.59845	0.01228	-0.02079	0.00264	0.14215	0.00145
	150	2	0.01187	0.59588	-0.03436	0.14371	-0.00358	-0.00079
		3	-0.20747	-0.11951	0.00001	-0.01038	0.01427	-0.83120
		4	-0.62788	-0.77396	-0.02601	0.20852	-0.16743	0.05726
		1	-0.59845	0.01228	-0.02079	0.00264	0.14215	0.00145
233	150	2	0.01187	0.59588	-0.03436	0.14371	-0.00358	-0.00079
		3	-0.20747	-0.11951	0.00001	-0.01038	0.01427	-0.83120
		4	-0.62788	-0.77396	-0.02601	0.20852	-0.16743	0.05726
		1	-0.63996	0.01339	0.04071	0.00305	0.14433	-0.00009
	153	2	0.01241	0.63857	-0.00076	0.14613	-0.00181	0.00173
		3	-0.00076	0.24506	0.00019	0.02189	0.00244	-0.85563
		4	-0.57313	-0.71137	-0.05102	0.24026	-0.17817	-0.04324
		1	-0.63996	0.01339	0.04071	0.00305	0.14433	-0.00009
234	153	2	0.01241	0.63857	-0.00076	0.14613	-0.00181	0.00173
		3	-0.00076	0.24506	0.00019	0.02189	0.00244	-0.85563
		4	-0.57313	-0.71137	-0.05102	0.24026	-0.17817	-0.04324
		1	-0.68456	0.01342	-0.02124	0.00383	0.15760	0.00146
	158	2	0.01379	0.68371	-0.03508	0.15391	-0.00104	-0.00084
		3	-0.21991	-0.12758	0.00000	-0.01748	0.03895	-0.88083
		4	-0.50930	-0.62711	-0.03165	0.26770	-0.24068	0.04754
		1	-0.42834	0.00852	-0.01773	0.00313	0.13970	-0.00124
235	135	2	0.00841	0.42917	0.03211	0.14460	-0.00179	-0.00059
		3	0.18465	-0.10723	0.00000	-0.02547	-0.03520	-0.73106
		4	-0.77357	-0.95373	0.03548	0.08591	-0.07635	-0.01321
		1	-0.47146	0.00960	-0.01952	0.00177	0.13513	0.00112
	138	2	0.00890	0.48966	-0.03236	0.13550	-0.00346	-0.00080
		3	-0.19338	-0.11075	0.00019	-0.01328	0.01799	-0.75758
		4	-0.74953	-0.92284	-0.01623	0.11779	-0.09730	0.08607
		1	-0.47146	0.00960	-0.01952	0.00177	0.13513	0.00112
236	138	2	0.00890	0.48966	-0.03236	0.13550	-0.00346	-0.00080
		3	-0.19338	-0.11075	0.00019	-0.01328	0.01799	-0.75758
		4	-0.74953	-0.92284	-0.01623	0.11779	-0.09730	0.08607
		1	-0.51176	0.01016	-0.01872	0.00219	0.13903	-0.00137
	143	2	0.00996	0.51101	0.03390	0.13657	-0.00377	-0.00063
		3	0.19805	-0.11407	0.00001	-0.00719	-0.01622	-0.78277
		4	-0.71303	-0.87926	0.05408	0.15532	-0.12167	-0.01281
		1	-0.51176	0.01016	-0.01872	0.00219	0.13903	-0.00137
237	143	2	0.00996	0.51101	0.03390	0.13657	-0.00377	-0.00063
		3	0.19805	-0.11407	0.00001	-0.00719	-0.01622	-0.78277
		4	-0.71303	-0.87926	0.05408	0.15532	-0.12167	-0.01281
		1	-0.55380	0.01117	-0.02042	0.00421	0.14153	0.00136
	146	2	0.01095	0.55298	-0.03382	0.14197	-0.00284	-0.00081
		3	-0.20265	-0.11700	0.00017	-0.00731	0.01694	-0.80711
		4	-0.67549	-0.83125	-0.02294	0.18091	-0.14727	0.06034
		1	-0.55380	0.01117	-0.02042	0.00421	0.14153	0.00136
238	146	2	0.01095	0.55298	-0.03382	0.14197	-0.00284	-0.00081
		3	-0.20265	-0.11700	0.00017	-0.00731	0.01694	-0.80711
		4	-0.67549	-0.83125	-0.02294	0.18091	-0.14727	0.06034
		1	-0.59665	0.01178	-0.01941	0.00257	0.14392	-0.00141
	151	2	0.01238	0.59568	0.03515	0.14194	-0.00366	-0.00086



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab

Seite: 40

Gittermasten L120-G3-50-3.5kN-2

26.07.2010

EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
238	151	3	0.20723	-0.11991	0.00001	-0.00717	-0.01612	-0.83120
		4	-0.62367	-0.77080	0.07190	0.20056	-0.17471	-0.01183
		1	-0.59665	0.01178	-0.01941	0.00257	0.14392	-0.00141
		2	0.01238	0.59568	0.03515	0.14194	-0.00368	-0.00086
239	151	3	0.20723	-0.11991	0.00001	-0.00717	-0.01612	-0.83120
		4	-0.62367	-0.77080	0.07190	0.20056	-0.17471	-0.01183
		1	-0.63936	0.01278	-0.02102	0.00123	0.14534	0.00155
		2	0.01302	0.63917	-0.03481	0.14512	-0.00363	-0.00079
240	154	3	-0.21185	-0.12319	0.00019	-0.01308	0.01773	-0.85563
		4	-0.57436	-0.70547	-0.02914	0.24281	-0.19445	0.05175
		1	-0.63936	0.01278	-0.02102	0.00123	0.14534	0.00155
		2	0.01302	0.63917	-0.03481	0.14512	-0.00363	-0.00079
241	161	3	-0.21185	-0.12319	0.00019	-0.01308	0.01773	-0.85563
		4	-0.57436	-0.70547	-0.02914	0.24281	-0.19445	0.05175
		1	-0.68501	0.01355	-0.01982	0.00322	0.15383	-0.00146
		2	0.01365	0.68326	0.03580	0.15767	-0.00165	-0.00084
242	165	3	0.22044	-0.12666	0.00000	-0.02500	-0.03460	-0.88083
		4	-0.50813	-0.62917	0.08761	0.30576	-0.22579	-0.00959
		1	-0.70053	0.01387	0.04114	-0.00021	0.15994	0.00005
		2	0.01384	0.69928	-0.00082	0.15758	-0.00534	0.00171
243	169	3	0.00000	0.25886	0.00000	0.04805	-0.00578	-0.88956
		4	-0.48433	-0.59720	-0.05748	0.32345	-0.26985	-0.03710
		1	-0.71643	0.01386	0.04123	0.00026	0.15887	0.00009
		2	0.01436	0.71498	-0.00082	0.15567	-0.00493	0.00174
244	173	3	0.00053	0.26348	0.00000	0.04248	-0.00435	-0.89829
		4	-0.45746	-0.56506	-0.05898	0.31573	-0.26280	-0.03587
		1	-0.78160	0.01440	0.04140	0.00353	0.14679	0.00009
		2	0.01538	0.76038	-0.00078	0.14846	-0.00159	0.00178
245	177	3	0.00075	0.27268	0.00019	0.02201	0.00242	-0.92099
		4	-0.38444	-0.47553	-0.06292	0.28966	-0.23183	-0.03368
		1	-0.76160	0.01440	0.04140	0.00353	0.14679	0.00009
		2	0.01538	0.76038	-0.00078	0.14846	-0.00159	0.00178
246	181	3	0.00075	0.27268	0.00019	0.02201	0.00242	-0.92099
		4	-0.38444	-0.47553	-0.06292	0.28966	-0.23183	-0.03368
		1	-0.80550	0.01581	0.04142	0.00493	0.14651	0.00013
		2	0.01569	0.80466	-0.00082	0.14723	-0.00219	0.00193
247	185	3	-0.00023	0.27835	0.00001	0.01765	0.00191	-0.94147
		4	-0.31412	-0.38760	-0.06668	0.30060	-0.24333	-0.02880
		1	-0.80550	0.01581	0.04142	0.00493	0.14651	0.00013
		2	0.01569	0.80466	-0.00082	0.14723	-0.00219	0.00193
248	189	3	-0.00023	0.27835	0.00001	0.01765	0.00191	-0.94147
		4	-0.31412	-0.38760	-0.06668	0.30060	-0.24333	-0.02880
		1	-0.84959	0.01699	0.04131	0.00275	0.14704	-0.00003
		2	0.01693	0.84863	-0.00078	0.14511	-0.00511	0.00211
249	193	3	-0.00002	0.28382	0.00017	0.01850	-0.00220	-0.95976
		4	-0.23702	-0.29447	-0.06942	0.31831	-0.26850	-0.02544
		1	-0.84959	0.01699	0.04131	0.00275	0.14704	-0.00003
		2	0.01693	0.84863	-0.00078	0.14511	-0.00511	0.00211
250	197	3	-0.00002	0.28382	0.00017	0.01850	-0.00220	-0.95976
		4	-0.23702	-0.29447	-0.06942	0.31831	-0.26850	-0.02544
		1	-0.89378	0.01745	0.04108	0.00042	0.14805	-0.00001
		2	0.01792	0.89145	-0.00082	0.14019	0.00032	0.00236
251	201	3	0.00027	0.28937	0.00000	0.01818	0.00187	-0.97586
		4	-0.15592	-0.19794	-0.07200	0.32323	-0.26435	-0.02098
		1	-0.89378	0.01745	0.04108	0.00042	0.14805	-0.00001
		2	0.01792	0.89145	-0.00082	0.14019	0.00032	0.00236
252	205	3	0.00027	0.28937	0.00000	0.01818	0.00187	-0.97586
		4	-0.15592	-0.19794	-0.07200	0.32323	-0.26435	-0.02098
		1	-0.93830	0.01763	0.04073	0.00199	0.14768	0.00004
		2	0.01728	0.93369	-0.00077	0.14473	0.00026	0.00250
253	209	3	-0.00076	0.29535	0.00019	0.02357	0.00216	-0.98951
		4	-0.07754	-0.09868	-0.07343	0.34633	-0.26823	-0.01826
		1	-0.93830	0.01763	0.04073	0.00199	0.14768	0.00004
		2	0.01728	0.93369	-0.00077	0.14473	0.00026	0.00250
254	213	3	-0.00076	0.29535	0.00019	0.02357	0.00216	-0.98951
		4	-0.07754	-0.09868	-0.07343	0.34633	-0.26823	-0.01826
		1	-0.98080	0.01883	0.04024	0.00526	0.13125	-0.00025
		2	0.01825	0.98136	-0.00079	0.18001	-0.00469	0.00235
255	217	3	-0.00069	0.30549	-0.00002	0.04800	-0.00114	-1.00000
		4	0.00917	0.01519	-0.07462	0.42321	-0.31383	-0.01611
		1	-0.98080	0.01883	0.04024	0.00526	0.13125	-0.00025
		2	0.01825	0.98136	-0.00079	0.18001	-0.00469	0.00235
256	221	3	-0.00069	0.30549	-0.00002	0.04800	-0.00114	-1.00000
		4	0.00917	0.01519	-0.07462	0.42321	-0.31383	-0.01611
		1	-0.99359	0.01936	0.04005	0.00544	0.12625	-0.00025
		2	0.01872	0.10000	-0.00079	0.18961	-0.00459	0.00235
257	225	3	-0.00058	0.31072	-0.00002	0.05449	-0.00113	-1.00000
		4	0.04128	0.05877	-0.07478	0.44205	-0.32474	-0.01611
		1	-0.98053	0.01388	-0.01686	0.00306	0.15597	-0.00151
		2	0.01384	0.69928	0.03598	0.16154	-0.00208	-0.00081
258	229	3	0.22418	-0.12943	0.00000	-0.02903	-0.03872	-0.88956
		4	-0.48460	-0.59714	0.08997	0.32937	-0.24215	-0.00909
		1	-0.71607	0.01418	-0.01990	0.00336	0.15416	-0.00155
		2	0.01405	0.71534	0.03605	0.15838	-0.00183	-0.00079
259	233	3	0.22791	-0.13220	0.00000	-0.02501	-0.03462	-0.88929
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Letrona AG

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D Y N A M

Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab

Seite: 41

Gittermasten L120-G3-50-3.5kN-2

26.07.2010

EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
249 250	167	4	-0.46026	-0.56438	0.09234	0.32047	-0.24181	-0.00859
		1	-0.71607	0.01418	-0.01990	0.00336	0.15416	-0.00155
		2	0.01405	0.71534	0.03605	0.15838	-0.00183	-0.00079
		3	0.22791	-0.13220	0.00000	-0.02501	-0.03482	-0.89829
	171	4	-0.46026	-0.56438	0.09234	0.32047	-0.24181	-0.00859
		1	-0.76126	0.01521	-0.02003	0.00291	0.14908	-0.00158
		2	0.01456	0.76071	0.03618	0.14617	-0.00221	-0.00081
		3	0.23577	-0.13699	0.00019	-0.00891	-0.02028	-0.92099
251	171	4	-0.38914	-0.47487	0.09894	0.28684	-0.23800	-0.00645
		1	-0.76126	0.01521	-0.02003	0.00291	0.14908	-0.00158
		2	0.01456	0.76071	0.03618	0.14617	-0.00221	-0.00081
		3	0.23577	-0.13699	0.00019	-0.00891	-0.02028	-0.92099
	175	4	-0.38914	-0.47487	0.09894	0.28684	-0.23800	-0.00645
		1	-0.80598	0.01600	-0.02000	0.00330	0.14843	-0.00174
		2	0.01550	0.80418	0.03621	0.14531	-0.00382	-0.00085
		3	0.24117	-0.13698	0.00001	-0.00717	-0.01624	-0.94147
252	175	4	-0.31529	-0.38739	0.10446	0.30157	-0.25466	-0.00732
		1	-0.80598	0.01600	-0.02000	0.00330	0.14843	-0.00174
		2	0.01550	0.80418	0.03621	0.14531	-0.00382	-0.00085
		3	0.24117	-0.13698	0.00001	-0.00717	-0.01624	-0.94147
	179	4	-0.31529	-0.38739	0.10446	0.30157	-0.25466	-0.00732
		1	-0.85002	0.01721	-0.01998	0.00381	0.14476	-0.00182
		2	0.01671	0.84820	0.03610	0.14739	-0.00406	-0.00108
		3	0.24581	-0.14189	0.00017	-0.01115	-0.01492	-0.95978
253	179	4	-0.23693	-0.29305	0.10912	0.32451	-0.26560	-0.00622
		1	-0.85002	0.01721	-0.01998	0.00381	0.14476	-0.00182
		2	0.01671	0.84820	0.03610	0.14739	-0.00406	-0.00108
		3	0.24581	-0.14189	0.00017	-0.01115	-0.01492	-0.95978
	183	4	-0.23693	-0.29305	0.10912	0.32451	-0.26560	-0.00622
		1	-0.89300	0.01751	-0.01983	-0.00343	0.14266	-0.00204
		2	0.01786	0.89222	0.03593	0.14557	-0.00352	-0.00119
		3	0.25047	-0.14492	0.00000	-0.00747	-0.01668	-0.97586
254	183	4	-0.15621	-0.19425	0.11276	0.33126	-0.27287	-0.00722
		1	-0.89300	0.01751	-0.01983	-0.00343	0.14266	-0.00204
		2	0.01786	0.89222	0.03593	0.14557	-0.00352	-0.00119
		3	0.25047	-0.14492	0.00000	-0.00747	-0.01668	-0.97586
	187	4	-0.15621	-0.19425	0.11276	0.33126	-0.27287	-0.00722
		1	-0.93623	0.01611	-0.01970	-0.00086	0.14663	-0.00219
		2	0.01879	0.93576	0.03560	0.14578	-0.00259	-0.00121
		3	0.25616	-0.14702	0.00019	-0.00991	-0.02150	-0.98951
255	187	4	-0.07343	-0.09412	0.11545	0.33890	-0.27788	-0.00638
		1	-0.93623	0.01611	-0.01970	-0.00086	0.14663	-0.00219
		2	0.01879	0.93576	0.03560	0.14578	-0.00259	-0.00121
		3	0.25616	-0.14702	0.00019	-0.00991	-0.02150	-0.98951
	191	4	-0.07343	-0.09412	0.11545	0.33890	-0.27788	-0.00638
		1	-0.98276	0.01842	-0.01943	0.02609	0.16830	-0.00192
		2	0.01766	0.97940	0.03518	0.14303	0.01611	-0.00139
		3	0.26491	-0.15214	-0.00002	-0.02498	-0.04100	-1.00000
256	191	4	0.01414	0.01278	0.11681	0.38301	-0.31761	-0.00708
		1	-0.98276	0.01842	-0.01943	0.02609	0.16830	-0.00192
		2	0.01766	0.97940	0.03518	0.14303	0.01611	-0.00139
		3	0.26491	-0.15214	-0.00002	-0.02498	-0.04100	-1.00000
	195	4	0.01414	0.01278	0.11681	0.38301	-0.31761	-0.00708
		1	-1.00000	0.02245	-0.01934	0.03239	0.17439	-0.00192
		2	0.01564	0.99360	0.03502	0.14156	0.02231	-0.00139
		3	0.26938	-0.15486	-0.00002	-0.02823	-0.04663	-1.00000
257	162	4	0.04678	0.05198	0.11705	0.39654	-0.33080	-0.00708
		1	-0.70053	0.01387	-0.02128	0.00486	0.16079	0.00146
		2	0.01384	0.69929	-0.03516	0.15673	-0.00028	-0.00089
		3	-0.22418	-0.12943	0.00000	-0.01902	0.04450	-0.88956
	166	4	-0.48461	-0.59746	0.03251	0.30247	-0.25098	0.04583
		1	-0.71652	0.01433	-0.02133	0.00417	0.15820	0.00146
		2	0.01390	0.71488	-0.03523	0.15434	-0.00103	-0.00095
		3	-0.22844	-0.13128	0.00000	-0.01747	0.03897	-0.89829
258	166	4	-0.45953	-0.56719	-0.03337	0.29996	-0.24830	0.04412
		1	-0.71652	0.01433	-0.02133	0.00417	0.15820	0.00146
		2	0.01390	0.71488	-0.03523	0.15434	-0.00103	-0.00095
		3	-0.22844	-0.13128	0.00000	-0.01747	0.03897	-0.89829
	170	4	-0.45953	-0.56719	-0.03337	0.29996	-0.24830	0.04412
		1	-0.76214	0.01509	-0.02137	0.00124	0.14740	0.00150
		2	0.01468	0.75984	-0.03540	0.14785	-0.00387	-0.00096
		3	-0.23652	-0.13569	0.00019	-0.01311	0.01785	-0.92099
259	170	4	-0.36743	-0.47931	-0.03603	0.29363	-0.23741	0.03985
		1	-0.76214	0.01509	-0.02137	0.00124	0.14740	0.00150
		2	0.01468	0.75984	-0.03540	0.14785	-0.00387	-0.00096
		3	-0.23652	-0.13569	0.00019	-0.01311	0.01785	-0.92099
	174	4	-0.31494	-0.38854	-0.03778	0.31093	-0.24821	0.03588
		1	-0.80590	0.01548	-0.02142	0.00245	0.14608	0.00161
		2	0.01602	0.80425	-0.03540	0.14768	-0.00466	-0.00108
		3	-0.24095	-0.13937	0.00001	-0.01048	0.01433	-0.94147
260	174	4	-0.31494	-0.38854	-0.03778	0.31093	-0.24821	0.03588
		1	-0.84999	0.01672	-0.02133	0.00525	0.14882	0.00185
		2	0.01720	0.84823	-0.03532	0.14534	-0.00282	-0.00103
		3	-0.24579	-0.14193	0.00017	-0.00735	0.01712	-0.95978
	178	4	-0.23623	-0.29370	-0.03972	0.31890	-0.26172	0.03146
		1	-0.80590	0.01548	-0.02142	0.00245	0.14608	0.00161
		2	0.01602	0.80425	-0.03540	0.14768	-0.00466	-0.00108
		3	-0.24095	-0.13937	0.00001	-0.01048	0.01433	-0.94147



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
261	178	1	-0.84999	0.01672	-0.02133	0.00525	0.14882	0.00185
		2	0.01720	0.84823	-0.03532	0.14534	-0.00282	-0.00103
		3	-0.24579	-0.14193	0.00017	-0.00735	0.01712	-0.95976
		4	-0.23823	-0.29370	-0.03972	0.31890	-0.26172	0.03146
	182	1	-0.89344	0.01815	-0.02126	0.00316	0.14203	0.00205
		2	0.01722	0.89178	-0.03511	0.14821	0.00308	-0.00117
		3	-0.25074	-0.14445	0.00000	-0.01071	0.01481	-0.97586
		4	-0.15928	-0.19636	-0.04078	0.33465	-0.28165	0.02803
262	182	1	-0.89344	0.01815	-0.02126	0.00316	0.14203	0.00205
		2	0.01722	0.89178	-0.03511	0.14821	0.00308	-0.00117
		3	-0.25074	-0.14445	0.00000	-0.01071	0.01481	-0.97586
		4	-0.15928	-0.19636	-0.04078	0.33465	-0.28165	0.02803
	186	1	-0.93595	0.01867	-0.02104	0.00147	0.14489	0.00215
		2	0.01624	0.93604	-0.03483	0.14772	-0.00026	-0.00129
		3	-0.25540	-0.14833	0.00019	-0.01366	0.01933	-0.98951
		4	-0.07947	-0.09285	-0.04203	0.35104	-0.27951	0.02448
263	186	1	-0.93595	0.01867	-0.02104	0.00147	0.14489	0.00215
		2	0.01624	0.93604	-0.03483	0.14772	-0.00026	-0.00129
		3	-0.25540	-0.14833	0.00019	-0.01366	0.01933	-0.98951
		4	-0.07947	-0.09285	-0.04203	0.35104	-0.27951	0.02448
	190	1	-0.98230	0.01742	-0.02081	-0.01642	0.16782	0.00217
		2	0.01965	0.97987	-0.03439	0.14351	-0.02632	-0.00096
		3	-0.26422	-0.15335	-0.00002	-0.02301	0.04214	-1.00000
		4	0.01375	0.01829	-0.04220	0.40625	-0.35079	0.02307
264	190	1	-0.98230	0.01742	-0.02081	-0.01642	0.16782	0.00217
		2	0.01965	0.97987	-0.03439	0.14351	-0.02632	-0.00096
		3	-0.26422	-0.15335	-0.00002	-0.02301	0.04214	-1.00000
		4	0.01375	0.01829	-0.04220	0.40625	-0.35079	0.02307
	194	1	-0.99947	0.01536	-0.02071	-0.02277	0.17366	0.00217
		2	0.02272	0.99414	-0.03423	0.14229	-0.03275	-0.00096
		3	-0.26880	-0.15586	-0.00002	-0.02627	0.04776	-1.00000
		4	0.04994	0.06012	-0.04229	0.42434	-0.36749	0.02307
265	165	1	-0.71643	0.01386	0.04123	0.00026	0.15687	0.00009
		2	0.01436	0.71498	-0.00082	0.15567	-0.00493	0.00174
		3	0.00053	0.26348	0.00000	0.04248	-0.00435	-0.89829
		4	-0.45746	-0.56506	-0.05898	0.31573	-0.26280	-0.03587
	166	1	-0.71652	0.01433	-0.02133	0.00417	0.15620	0.00146
		2	0.01390	0.71488	-0.03523	0.15434	-0.00103	-0.00095
		3	-0.22844	-0.13128	0.00000	-0.01747	0.03897	-0.89829
		4	-0.45953	-0.56719	-0.03337	0.29996	-0.24830	0.04412
266	166	1	-0.71652	0.01433	-0.02133	0.00417	0.15620	0.00146
		2	0.01390	0.71488	-0.03523	0.15434	-0.00103	-0.00095
		3	-0.22844	-0.13128	0.00000	-0.01747	0.03897	-0.89829
		4	-0.45953	-0.56719	-0.03337	0.29996	-0.24830	0.04412
	167	1	-0.71607	0.01418	-0.01990	0.00336	0.15416	-0.00155
		2	0.01405	0.71534	0.03605	0.15838	-0.00183	-0.00079
		3	0.22791	-0.13220	0.00000	-0.02501	-0.03462	-0.89829
		4	-0.46026	-0.56438	0.09234	0.32047	-0.24181	-0.00859
267	165	1	-0.71643	0.01386	0.04123	0.00026	0.15687	0.00009
		2	0.01436	0.71498	-0.00082	0.15567	-0.00493	0.00174
		3	0.00053	0.26348	0.00000	0.04248	-0.00435	-0.89829
		4	-0.45746	-0.56506	-0.05898	0.31573	-0.26280	-0.03587
	167	1	-0.71607	0.01418	-0.01990	0.00336	0.15416	-0.00155
		2	0.01405	0.71534	0.03605	0.15838	-0.00183	-0.00079
		3	0.22791	-0.13220	0.00000	-0.02501	-0.03462	-0.89829
		4	-0.46026	-0.56438	0.09234	0.32047	-0.24181	-0.00859
268	189	1	-0.98080	0.01883	0.04024	0.00526	0.13125	-0.00025
		2	0.01825	0.98136	-0.00079	0.18001	-0.00469	0.00235
		3	-0.00069	0.30549	-0.00002	0.04800	-0.00114	-1.00000
		4	0.00917	0.01519	-0.07462	0.42321	-0.31383	0.01611
	190	1	-0.98230	0.01742	-0.02081	-0.01642	0.16782	0.00217
		2	0.01965	0.97987	-0.03439	0.14351	-0.02632	-0.00096
		3	-0.26422	-0.15335	-0.00002	-0.02301	0.04214	-1.00000
		4	0.01375	0.01829	-0.04220	0.40625	-0.35079	0.02307
269	190	1	-0.98230	0.01742	-0.02081	-0.01642	0.16782	0.00217
		2	0.01965	0.97987	-0.03439	0.14351	-0.02632	-0.00096
		3	-0.26422	-0.15335	-0.00002	-0.02301	0.04214	-1.00000
		4	0.01375	0.01829	-0.04220	0.40625	-0.35079	0.02307
	191	1	-0.98276	0.01942	-0.01943	0.02609	0.16830	-0.00192
		2	0.01766	0.97940	0.03518	0.14303	0.01611	-0.00139
		3	0.26491	-0.15214	-0.00002	-0.02498	-0.04100	-1.00000
		4	0.01414	0.01278	0.11881	0.38301	-0.31761	-0.00708
270	191	1	-0.98276	0.01942	-0.01943	0.02609	0.16830	-0.00192
		2	0.01766	0.97940	0.03518	0.14303	0.01611	-0.00139
		3	0.26491	-0.15214	-0.00002	-0.02498	-0.04100	-1.00000
		4	0.01414	0.01278	0.11881	0.38301	-0.31761	-0.00708
	189	1	-0.98080	0.01883	0.04024	0.00526	0.13125	-0.00025
		2	0.01825	0.98136	-0.00079	0.18001	-0.00469	0.00235
		3	-0.00069	0.30549	-0.00002	0.04800	-0.00114	-1.00000
		4	0.00917	0.01519	-0.07462	0.42321	-0.31383	0.01611
271	185	1	-0.71643	0.01386	0.04123	0.00026	0.15687	0.00009
		2	0.01436	0.71498	-0.00082	0.15567	-0.00493	0.00174
		3	0.00053	0.26348	0.00000	0.04248	-0.00435	-0.89829
		4	-0.45746	-0.56506	-0.05898	0.31573	-0.26280	-0.03587
	171	1	-0.76126	0.01521	-0.02003	0.00291	0.14908	-0.00158
		2	0.01456	0.76071	0.03818	0.14617	-0.00221	-0.00081
		3	0.23577	-0.13689	0.00019	-0.00891	-0.02028	-0.92099
		4	-0.38914	-0.47487	0.09894	0.28684	-0.23800	-0.00645
272	171	1	-0.76126	0.01521	-0.02003	0.00291	0.14908	-0.00158



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab
Gittermasten L120-G3-50-3.5kN-2

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
272	171	2	0.01456	0.76071	0.03618	0.14617	-0.00221	-0.00081
		3	0.23577	-0.13699	0.00019	-0.00891	-0.02028	-0.92099
		4	-0.38914	-0.47487	0.08994	0.28684	-0.23800	-0.00845
		1	-0.80550	0.01581	0.04142	0.00493	0.14651	0.00013
	173	2	0.01569	0.80468	-0.00082	0.14723	-0.00219	0.00193
		3	-0.00023	0.27835	0.00001	0.01765	0.00191	-0.94147
		4	-0.31412	-0.38760	-0.06668	0.30060	-0.24333	-0.02880
		1	-0.80550	0.01581	0.04142	0.00493	0.14651	0.00013
273	173	2	0.01569	0.80468	-0.00082	0.14723	-0.00219	0.00193
		3	-0.00023	0.27835	0.00001	0.01765	0.00191	-0.94147
		4	-0.31412	-0.38760	-0.06668	0.30060	-0.24333	-0.02880
		1	-0.85002	0.01721	-0.01998	0.00381	0.14476	-0.00182
	179	2	0.01671	0.84820	0.03610	0.14739	-0.00408	-0.00108
		3	0.24581	-0.14189	0.00017	-0.01115	-0.01492	-0.95976
		4	-0.23893	-0.29305	0.10912	0.32451	-0.26560	-0.00822
		1	-0.85002	0.01721	-0.01998	0.00381	0.14476	-0.00182
274	179	2	0.01671	0.84820	0.03610	0.14739	-0.00408	-0.00108
		3	0.24581	-0.14189	0.00017	-0.01115	-0.01492	-0.95976
		4	-0.23893	-0.29305	0.10912	0.32451	-0.26560	-0.00822
		1	-0.89378	0.01745	0.04108	0.00042	0.14805	-0.00001
	181	2	0.01792	0.89145	-0.00082	0.14019	0.00032	0.00236
		3	0.00027	0.28937	0.00000	0.01818	0.00187	-0.97586
		4	-0.15592	-0.19794	-0.07200	0.32323	-0.26435	-0.02098
		1	-0.89378	0.01745	0.04108	0.00042	0.14805	-0.00001
275	181	2	0.01792	0.89145	-0.00082	0.14019	0.00032	0.00236
		3	0.00027	0.28937	0.00000	0.01818	0.00187	-0.97586
		4	-0.15592	-0.19794	-0.07200	0.32323	-0.26435	-0.02098
		1	-0.93623	0.01611	-0.01970	-0.00088	0.14663	-0.00219
	187	2	0.01879	0.93576	0.03560	0.14578	-0.00259	-0.00121
		3	0.25616	-0.14702	0.00019	-0.00991	-0.02150	-0.98951
		4	-0.07343	-0.09412	0.11545	0.33890	-0.27788	-0.00636
		1	-0.93623	0.01611	-0.01970	-0.00088	0.14663	-0.00219
276	187	2	0.01879	0.93576	0.03560	0.14578	-0.00259	-0.00121
		3	0.25616	-0.14702	0.00019	-0.00991	-0.02150	-0.98951
		4	-0.07343	-0.09412	0.11545	0.33890	-0.27788	-0.00636
		1	-0.98080	0.01883	-0.04024	0.00626	0.13125	-0.00025
	199	2	0.01825	0.98136	-0.00079	0.18001	-0.00489	0.00235
		3	-0.00069	0.30549	-0.00002	0.04800	-0.00114	-1.00000
		4	0.00917	0.01519	-0.07462	0.42321	-0.31383	-0.01611
		1	-0.71607	0.01418	-0.01990	0.00336	0.15416	-0.00155
277	167	2	0.01405	0.71534	0.03605	0.15838	-0.00183	-0.00079
		3	0.22791	-0.13220	0.00000	-0.02501	-0.03462	-0.89829
		4	-0.46026	-0.56438	0.09234	0.32047	-0.24181	-0.00859
		1	-0.76214	0.01509	-0.02137	0.00124	0.14740	0.00150
	170	2	0.01468	0.75984	-0.03540	0.14785	-0.00387	-0.00098
		3	-0.23652	-0.13569	0.00019	-0.01311	0.01785	-0.92099
		4	-0.38743	-0.47931	-0.03603	0.29363	-0.23741	0.03985
		1	-0.76214	0.01509	-0.02137	0.00124	0.14740	0.00150
278	170	2	0.01468	0.75984	-0.03540	0.14785	-0.00387	-0.00098
		3	-0.23652	-0.13569	0.00019	-0.01311	0.01785	-0.92099
		4	-0.38743	-0.47931	-0.03603	0.29363	-0.23741	0.03985
		1	-0.80598	0.01600	-0.02000	0.00330	0.14843	-0.00174
	175	2	0.01550	0.80418	0.03621	0.14531	-0.00382	-0.00085
		3	0.24117	-0.13898	0.00001	-0.00717	-0.01624	-0.94147
		4	-0.31529	-0.38739	0.10446	0.30157	-0.25466	-0.00732
		1	-0.80598	0.01600	-0.02000	0.00330	0.14843	-0.00174
279	175	2	0.01550	0.80418	0.03621	0.14531	-0.00382	-0.00085
		3	0.24117	-0.13898	0.00001	-0.00717	-0.01624	-0.94147
		4	-0.31529	-0.38739	0.10446	0.30157	-0.25466	-0.00732
		1	-0.84999	0.01672	-0.02133	0.00525	0.14682	0.00185
	178	2	0.01720	0.84823	-0.03532	0.14534	-0.00282	-0.00103
		3	-0.24579	-0.14193	0.00017	-0.00735	0.01712	-0.95976
		4	-0.23623	-0.29370	-0.03972	0.31890	-0.26172	0.03146
		1	-0.84999	0.01672	-0.02133	0.00525	0.14682	0.00185
280	178	2	0.01720	0.84823	-0.03532	0.14534	-0.00282	-0.00103
		3	-0.24579	-0.14193	0.00017	-0.00735	0.01712	-0.95976
		4	-0.23623	-0.29370	-0.03972	0.31890	-0.26172	0.03146
		1	-0.89300	0.01751	-0.01983	-0.00343	0.14266	-0.00204
	183	2	0.01786	0.89222	0.03593	0.14557	-0.00352	-0.00119
		3	0.25047	-0.14492	0.00000	-0.00747	-0.01688	-0.97586
		4	-0.15621	-0.19425	0.11276	0.33126	-0.27287	-0.00722
		1	-0.89300	0.01751	-0.01983	-0.00343	0.14266	-0.00204
281	183	2	0.01786	0.89222	0.03593	0.14557	-0.00352	-0.00119
		3	0.25047	-0.14492	0.00000	-0.00747	-0.01688	-0.97586
		4	-0.15621	-0.19425	0.11276	0.33126	-0.27287	-0.00722
		1	-0.93595	0.01867	-0.02104	0.00147	0.14469	0.00215
	186	2	0.01624	0.93604	-0.03483	0.14772	-0.00026	-0.00129
		3	-0.25540	-0.14833	0.00019	-0.01368	0.01833	-0.98951
		4	-0.07947	-0.09285	-0.04203	0.35104	-0.27951	0.02448
		1	-0.93595	0.01867	-0.02104	0.00147	0.14469	0.00215
282	186	2	0.01624	0.93604	-0.03483	0.14772	-0.00026	-0.00129
		3	-0.25540	-0.14833	0.00019	-0.01368	0.01833	-0.98951
		4	-0.07947	-0.09285	-0.04203	0.35104	-0.27951	0.02448
		1	-0.98276	0.01942	-0.01943	0.02609	0.16830	-0.00192
	191	2	0.01766	0.97940	0.03518	0.14303	0.01611	-0.00139
		3	0.26491	-0.15214	-0.00002	-0.02498	-0.04100	-1.00000
		4	0.01414	0.01278	0.11681	0.38301	-0.31761	-0.00708
		1	-0.71852	0.01433	-0.02133	0.00417	0.15820	0.00146
283	166	2	0.01390	0.71488	-0.03523	0.15434	-0.00103	-0.00095



Projekt: Namenlos

Position: Botschaftsfunk New Delhi R-Stab

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EIGENSCHWINGUNGEN

Stab-Nr.	Knoten-Nr.	Eigen-Nr.	Normierte Verschiebung			Normierte Verdrehung		
			u-X	u-Y	u-Z	Phi-X	Phi-Y	Phi-Z
283	168	3	-0.22844	-0.13128	0.00000	-0.01747	0.03897	-0.89829
		4	-0.45953	-0.56719	-0.03337	0.29996	-0.24830	0.04412
		1	-0.76160	0.01440	0.04140	0.00353	0.14879	0.00009
		2	0.01538	0.76038	-0.00078	0.14846	-0.00159	0.00178
284	169	3	0.00075	0.27268	0.00019	0.02201	0.00242	-0.92099
		4	-0.38444	-0.47553	-0.06292	0.28966	-0.23183	-0.03368
		1	-0.76160	0.01440	0.04140	0.00353	0.14879	0.00009
		2	0.01538	0.76038	-0.00078	0.14846	-0.00159	0.00178
	174	3	0.00075	0.27268	0.00019	0.02201	0.00242	-0.92099
		4	-0.38444	-0.47553	-0.06292	0.28966	-0.23183	-0.03368
		1	-0.80590	0.01548	-0.02142	0.00245	0.14608	0.00181
		2	0.01602	0.80425	-0.03540	0.14768	-0.00466	-0.00108
285	174	3	-0.24095	-0.13937	0.00001	-0.01048	0.01433	-0.94147
		4	-0.31494	-0.38854	-0.03778	0.31093	-0.24821	0.03588
		1	-0.80590	0.01548	-0.02142	0.00245	0.14608	0.00181
		2	0.01602	0.80425	-0.03540	0.14768	-0.00466	-0.00108
	177	3	-0.24095	-0.13937	0.00001	-0.01048	0.01433	-0.94147
		4	-0.31494	-0.38854	-0.03778	0.31093	-0.24821	0.03588
		1	-0.84959	0.01899	0.04131	0.00275	0.14704	-0.00003
		2	0.01693	0.84863	-0.00078	0.14511	-0.00511	0.00211
286	177	3	-0.00002	0.28382	0.00017	0.01850	-0.00220	-0.95976
		4	-0.23702	-0.29447	-0.06942	0.31831	-0.26850	-0.02544
		1	-0.84959	0.01899	0.04131	0.00275	0.14704	-0.00003
		2	0.01693	0.84863	-0.00078	0.14511	-0.00511	0.00211
	182	3	-0.00002	0.28382	0.00017	0.01850	-0.00220	-0.95976
		4	-0.23702	-0.29447	-0.06942	0.31831	-0.26850	-0.02544
		1	-0.89344	0.01815	-0.02126	0.00316	0.14203	0.00205
		2	0.01722	0.89178	-0.03511	0.14621	0.00308	-0.00117
287	182	3	-0.25074	-0.14445	0.00000	-0.01071	0.01481	-0.97586
		4	-0.15928	-0.19636	-0.04078	0.33465	-0.26165	0.02803
		1	-0.89344	0.01815	-0.02126	0.00316	0.14203	0.00205
		2	0.01722	0.89178	-0.03511	0.14621	0.00308	-0.00117
	185	3	-0.25074	-0.14445	0.00000	-0.01071	0.01481	-0.97586
		4	-0.15928	-0.19636	-0.04078	0.33465	-0.26165	0.02803
		1	-0.93830	0.01783	0.04073	0.00199	0.14768	0.00004
		2	0.01728	0.93369	-0.00077	0.14473	0.00026	0.00250
288	185	3	-0.00076	0.29535	0.00019	0.02357	0.00216	-0.98951
		4	-0.07754	-0.09868	-0.07343	0.34633	-0.26823	-0.01826
		1	-0.93830	0.01783	0.04073	0.00199	0.14768	0.00004
		2	0.01728	0.93369	-0.00077	0.14473	0.00026	0.00250
	190	3	-0.00076	0.29535	0.00019	0.02357	0.00216	-0.98951
		4	-0.07754	-0.09868	-0.07343	0.34633	-0.26823	-0.01826
		1	-0.98230	0.01742	-0.02081	-0.01642	0.16782	0.00217
		2	0.01965	0.97987	-0.03439	0.14351	-0.02632	-0.00096
289	196	3	-0.26422	-0.15335	-0.00002	-0.02301	0.04214	-1.00000
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Letrona AG

Postfach, 9504 FRILTSCHEN

Tel: 0041/71/6546464 - Fax: 0041/71/6546465

D Y N A M

Projekt: Namenlos

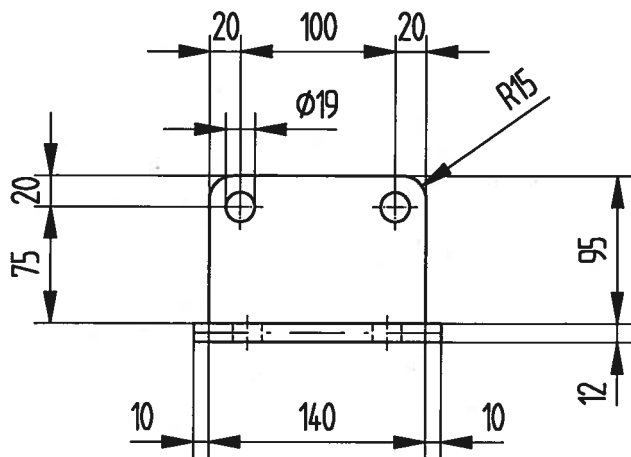
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26.07.2010

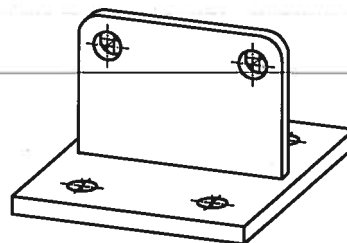
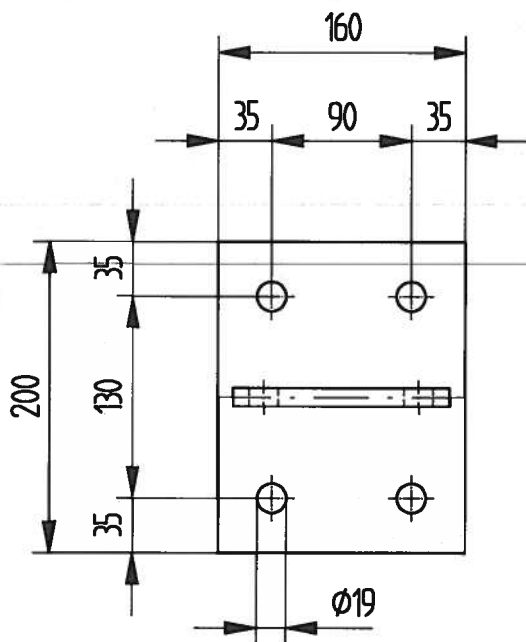
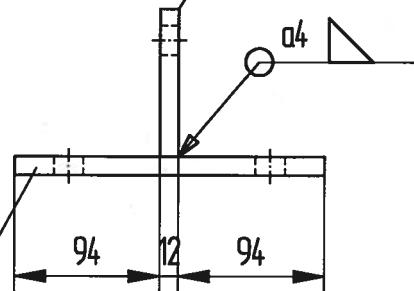
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Art.Nr. 8000343 S235JR

1 1x BLE 12 dek.x95x140
Art.Nr. 8002437 S235JR



Titel Stahlkonstruktion
Bezeichn. Seilaufnahme
Typ zu Abspannseile
Kunde Eid. Dep. für Verteidigung, Bevölkerungsschutz und
Standort Botschaftsfunk Kairo
SITE -Nr.

Gezeichnet	SSpiegel	17.07.2008
Freigabe	RSchwarz	22.07.2008
Geändert		
Auftr.-Nr.	10/100539	
Artikel-Nr.		
Maßstab	1:5	
Gewicht		

A4

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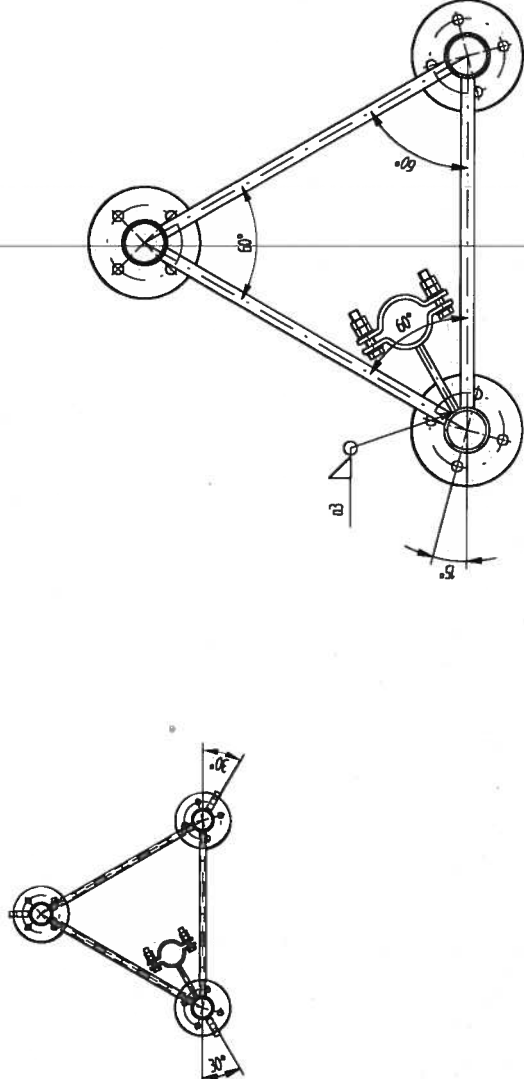
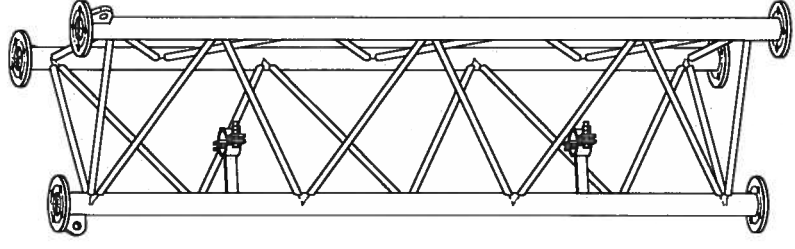
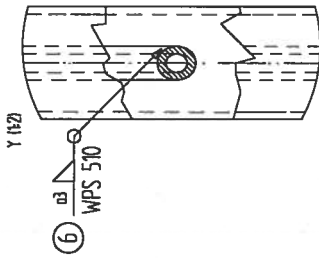
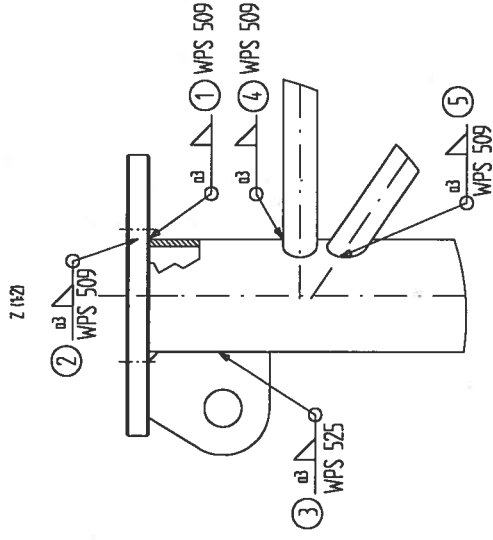
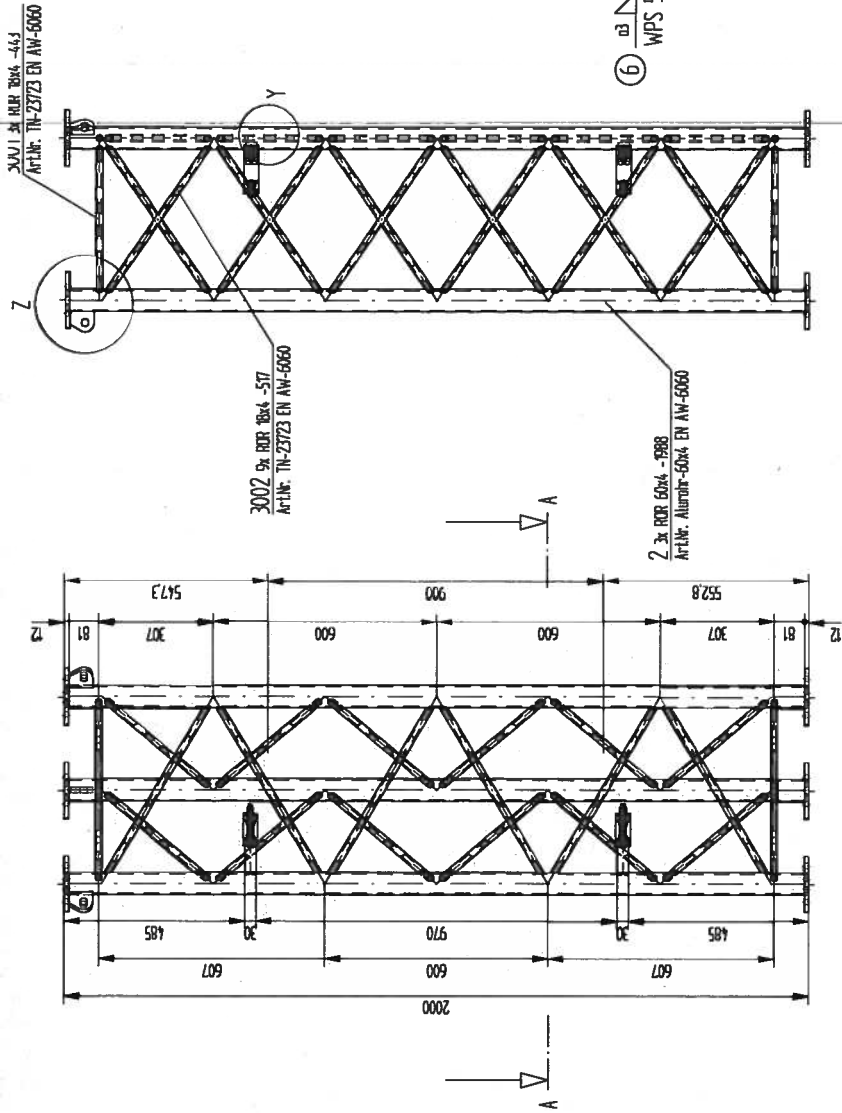
07 2010

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Tel.: +41(0)71-654 64 64, Fax: +41(0)71-654 64 65
E-Mail: info@letrona.ch

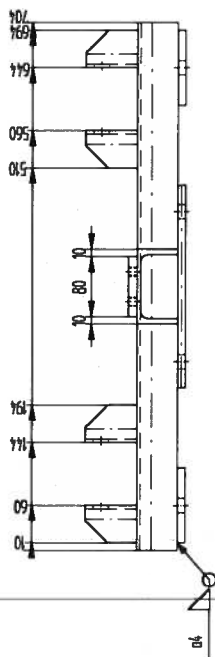
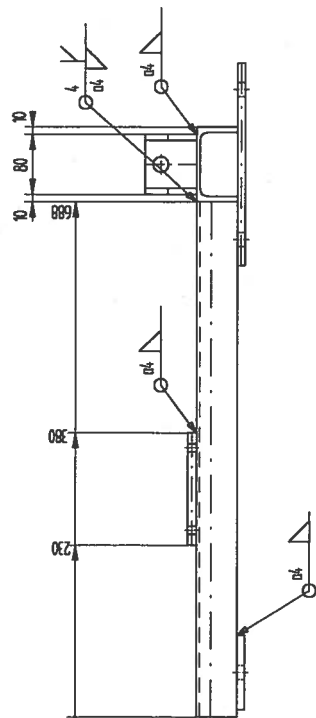
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Plan-Nr.
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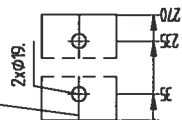
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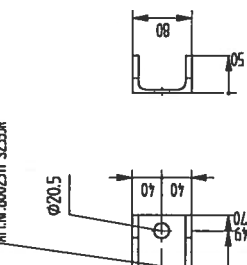
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Bezeichnung		Freigeleite	Revisiert	13.04.2010
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Kunde		Autr.-Nr.	10/100539	
Standort		Artikel-Nr.	15	
SITE -Nr.		Gewicht		
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		Sollstrasse 22, CH-5504 Fetschen		
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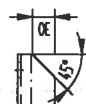
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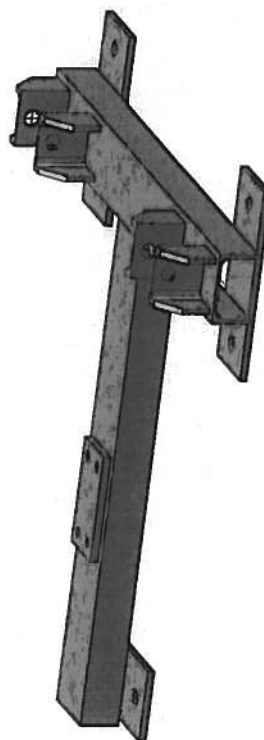
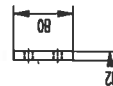
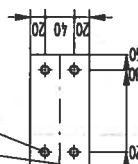
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DIN B-M2

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