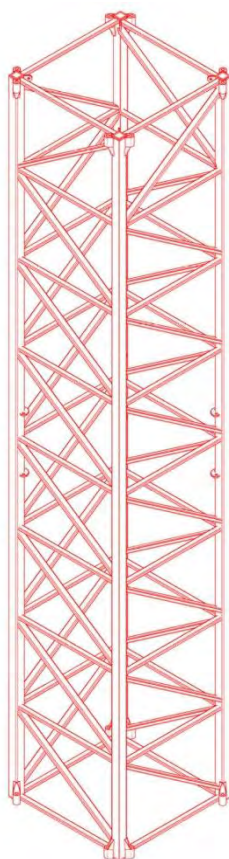


**Foundation loads  
TLS 65  
WZ C25  
S17- Type K section**

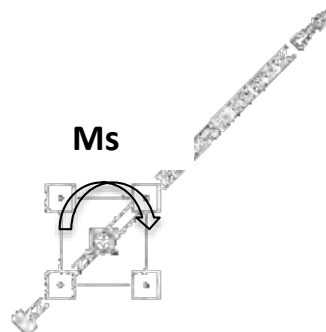
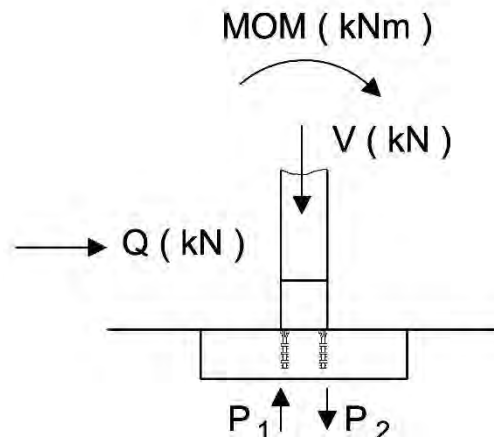


There are the following load case:

- LC1: In service, with no load and wind from the queue.
- LC2: In service with rear wind 72 Km/h
- LC3: Out of service zone C25, wind from the queue
- LC7: Out of service, frontal wind

Where:

- V: Axial load (kN)
- Q: Horizontal load (kN)
- M: Moment (kN·m)
- P<sub>1</sub>: Max tensile effort (kN).
- P<sub>2</sub>: Max compressive effort (kN).
- Ms: Turning moment in service= 396 KN/mt



**Jib position 45 °**

## CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	603.2	4.5	1547.	578	-879
35.0	647.5	4.5	1526.	557	-881
40.0	667.4	4.5	1863.	711	-1045
45.0	688.9	4.5	1630.	595	-940
50.0	706.9	4.5	1553.	555	-908
55.0	724.1	4.5	1521.	535	-897
60.0	727.8	4.5	1609.	576	-940
65.0	730.4	4.5	1588.	566	-931

## CRANE IN SERVICE LC 2

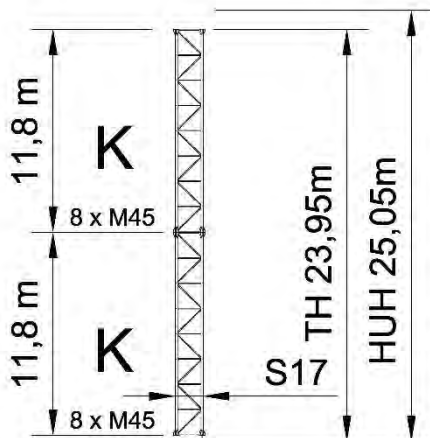
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	603.2	21.4	1887.	738	-1040
35.0	647.5	21.7	1878.	723	-1047
40.0	667.4	22.1	2228.	883	-1216
45.0	688.9	22.4	2002.	771	-1115
50.0	706.9	22.7	1934.	735	-1088
55.0	724.1	22.9	1910.	719	-1081
60.0	727.8	23.1	2004.	762	-1126
65.0	730.4	23.4	1991.	755	-1121

## REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	463.6	61.2	8.	-112	-119
35.0	505.8	62.7	66.	-95	-157
40.0	524.8	64.4	206.	-34	-228
45.0	545.2	65.5	283.	-3	-269
50.0	562.4	66.8	393.	44	-326
55.0	578.8	67.8	478.	80	-370
60.0	582.3	68.7	722.	194	-485
65.0	584.8	69.7	932.	293	-585

## FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	510.0	46.4	2298.	955	-1210
35.0	556.4	47.4	2319.	953	-1232
40.0	577.3	48.6	2256.	919	-1207
45.0	599.7	49.3	2230.	901	-1201
50.0	618.6	50.2	2178.	872	-1181
55.0	636.7	50.9	2143.	851	-1169
60.0	640.5	51.5	1919.	744	-1064
65.0	643.3	52.2	1743.	660	-982



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	617.9	4.5	1581.	590	-899
35.0	662.2	4.5	1562.	570	-901
40.0	682.1	4.5	1905.	727	-1068
45.0	703.6	4.5	1669.	610	-962
50.0	721.6	4.5	1591.	569	-930
55.0	738.8	4.5	1559.	550	-919
60.0	742.5	4.5	1649.	591	-963
65.0	745.1	4.5	1628.	581	-953

### CRANE IN SERVICE LC 2

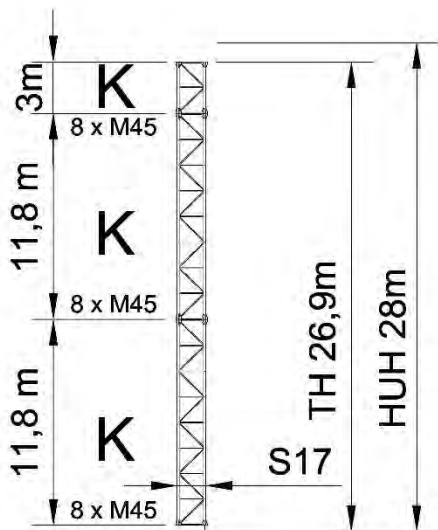
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	617.9	22.5	1978.	777	-1086
35.0	662.2	22.8	1971.	763	-1094
40.0	682.1	23.2	2329.	927	-1268
45.0	703.6	23.5	2101.	814	-1166
50.0	721.6	23.8	2035.	778	-1139
55.0	738.8	24.0	2012.	763	-1132
60.0	742.5	24.2	2108.	808	-1179
65.0	745.1	24.5	2096.	801	-1174

### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	477.6	66.5	235.	-8	-229
35.0	519.8	68.0	299.	10	-270
40.0	538.8	69.7	447.	76	-345
45.0	559.2	70.8	529.	109	-389
50.0	576.4	72.1	646.	160	-448
55.0	592.8	73.2	736.	198	-495
60.0	596.3	74.1	986.	315	-614
65.0	598.8	75.1	1203.	417	-716

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	525.4	49.7	2466.	1030	-1293
35.0	571.8	50.7	2493.	1032	-1317
40.0	592.7	51.8	2434.	999	-1295
45.0	615.1	52.5	2411.	982	-1290
50.0	634.0	53.4	2362.	954	-1271
55.0	652.1	54.1	2330.	935	-1261
60.0	655.9	54.7	2104.	827	-1155
65.0	658.7	55.4	1928.	744	-1073



## CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	632.6	4.5	1618.	604	-920
35.0	676.9	4.5	1601.	585	-923
40.0	696.8	4.5	1951.	745	-1093
45.0	718.3	4.5	1711.	627	-986
50.0	736.3	4.5	1634.	586	-954
55.0	753.5	4.5	1602.	566	-943
60.0	757.2	4.5	1694.	609	-987
65.0	759.8	4.5	1672.	598	-978

## CRANE IN SERVICE LC 2

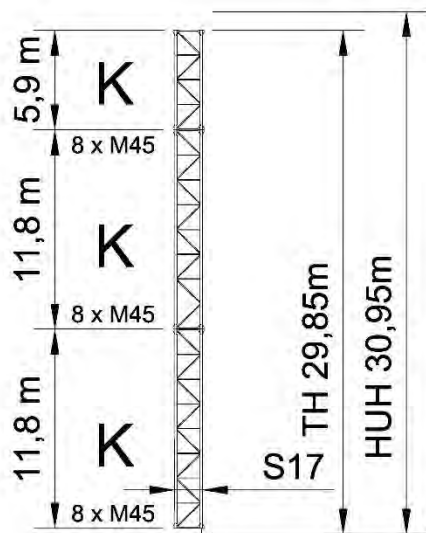
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	632.6	23.6	2076.	820	-1136
35.0	676.9	24.0	2074.	808	-1146
40.0	696.8	24.4	2439.	975	-1324
45.0	718.3	24.6	2210.	862	-1221
50.0	736.3	24.9	2144.	826	-1194
55.0	753.5	25.2	2122.	812	-1188
60.0	757.2	25.4	2222.	858	-1236
65.0	759.8	25.6	2210.	851	-1231

## REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	491.6	71.8	484.	105	-350
35.0	533.8	73.3	555.	128	-395
40.0	552.8	75.1	712.	197	-473
45.0	573.2	76.2	799.	233	-520
50.0	590.4	77.5	923.	287	-582
55.0	606.8	78.6	1019.	328	-632
60.0	610.3	79.5	1276.	448	-754
65.0	612.8	80.6	1500.	553	-860

## FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	540.8	52.9	2649.	1113	-1383
35.0	587.2	53.9	2682.	1117	-1411
40.0	608.1	55.0	2627.	1086	-1390
45.0	630.5	55.8	2609.	1072	-1387
50.0	649.4	56.6	2562.	1045	-1370
55.0	667.5	57.3	2533.	1027	-1360
60.0	671.3	57.9	2305.	918	-1254
65.0	674.1	58.6	2129.	834	-1171



## CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	647.3	4.5	1659.	620	-943
35.0	691.6	4.5	1643.	601	-947
40.0	711.5	4.5	2001.	765	-1121
45.0	733.0	4.5	1759.	645	-1012
50.0	751.0	4.5	1680.	604	-979
55.0	768.2	4.5	1649.	585	-969
60.0	771.9	4.5	1743.	628	-1014
65.0	774.5	4.5	1721.	617	-1004

## CRANE IN SERVICE LC 2

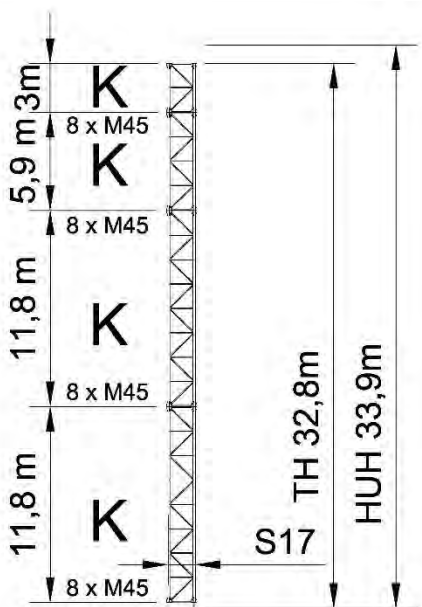
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	647.3	24.7	2183.	867	-1191
35.0	691.6	25.1	2185.	856	-1202
40.0	711.5	25.5	2560.	1028	-1384
45.0	733.0	25.7	2329.	914	-1280
50.0	751.0	26.0	2264.	879	-1254
55.0	768.2	26.3	2243.	865	-1249
60.0	771.9	26.5	2346.	912	-1298
65.0	774.5	26.7	2334.	906	-1294

## REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	505.6	77.1	756.	230	-482
35.0	547.8	78.7	835.	256	-530
40.0	566.8	80.5	1001.	330	-613
45.0	587.2	81.6	1095.	369	-662
50.0	604.4	83.0	1226.	426	-729
55.0	620.8	84.1	1328.	470	-781
60.0	624.3	85.0	1593.	594	-906
65.0	626.8	86.1	1825.	703	-1016

## FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	556.2	56.1	2848.	1203	-1481
35.0	602.6	57.1	2889.	1211	-1512
40.0	623.5	58.3	2838.	1182	-1493
45.0	645.9	59.0	2823.	1169	-1492
50.0	664.8	59.9	2780.	1144	-1476
55.0	682.9	60.6	2754.	1127	-1468
60.0	686.7	61.2	2524.	1018	-1361
65.0	689.5	61.9	2347.	933	-1278



## CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	662.0	4.5	1704.	637	-968
35.0	706.3	4.5	1690.	620	-973
40.0	726.2	4.5	2057.	788	-1151
45.0	747.7	4.5	1811.	666	-1040
50.0	765.7	4.5	1732.	624	-1007
55.0	782.9	4.5	1700.	605	-997
60.0	786.6	4.5	1797.	650	-1043
65.0	789.2	4.5	1775.	639	-1033

## CRANE IN SERVICE LC 2

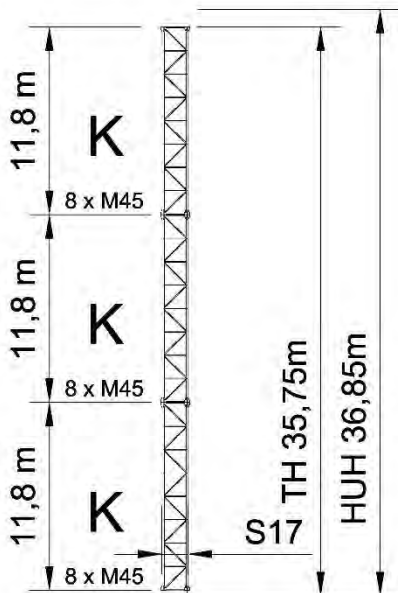
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	662.0	25.8	2300.	918	-1249
35.0	706.3	26.2	2306.	910	-1263
40.0	726.2	26.6	2692.	1087	-1450
45.0	747.7	26.8	2458.	971	-1345
50.0	765.7	27.1	2394.	937	-1320
55.0	782.9	27.4	2376.	924	-1315
60.0	786.6	27.6	2481.	972	-1366
65.0	789.2	27.8	2470.	967	-1361

## REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	519.6	82.6	1054.	366	-626
35.0	561.8	84.2	1141.	397	-678
40.0	580.8	86.0	1317.	475	-766
45.0	601.2	87.1	1417.	517	-818
50.0	618.4	88.5	1557.	579	-888
55.0	634.8	89.7	1666.	626	-943
60.0	638.3	90.6	1939.	754	-1073
65.0	640.8	91.7	2179.	867	-1187

## FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	571.6	59.3	3063.	1301	-1586
35.0	618.0	60.3	3113.	1312	-1621
40.0	638.9	61.5	3067.	1286	-1605
45.0	661.3	62.2	3056.	1275	-1605
50.0	680.2	63.1	3017.	1252	-1592
55.0	698.3	63.8	2994.	1236	-1586
60.0	702.1	64.4	2762.	1126	-1477
65.0	704.9	65.1	2583.	1041	-1393



## CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	676.7	4.5	1752.	656	-995
35.0	721.0	4.5	1742.	640	-1001
40.0	740.9	4.5	2119.	813	-1183
45.0	762.4	4.5	1868.	689	-1071
50.0	780.4	4.5	1788.	647	-1038
55.0	797.6	4.5	1757.	629	-1027
60.0	801.3	4.5	1856.	674	-1075
65.0	803.9	4.5	1834.	663	-1065

## CRANE IN SERVICE LC 2

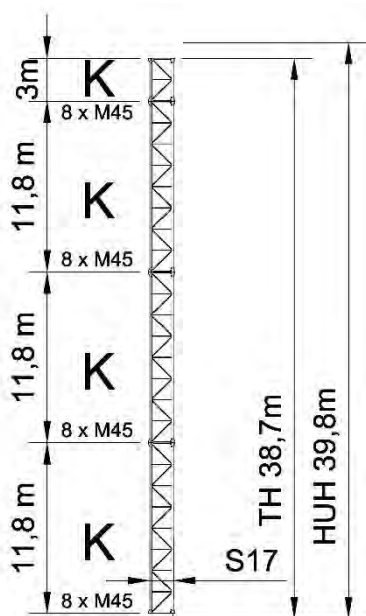
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	676.7	27.0	2426.	974	-1313
35.0	721.0	27.3	2438.	968	-1329
40.0	740.9	27.7	2836.	1151	-1522
45.0	762.4	28.0	2599.	1034	-1416
50.0	780.4	28.3	2537.	1000	-1390
55.0	797.6	28.5	2520.	988	-1387
60.0	801.3	28.7	2629.	1039	-1439
65.0	803.9	29.0	2619.	1033	-1435

## REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	533.6	88.1	1378.	515	-782
35.0	575.8	89.7	1475.	551	-839
40.0	594.8	91.5	1662.	634	-932
45.0	615.2	92.7	1769.	680	-987
50.0	632.4	94.1	1917.	745	-1061
55.0	648.8	95.3	2034.	796	-1121
60.0	652.3	96.2	2316.	928	-1254
65.0	654.8	97.4	2566.	1045	-1373

## FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	587.0	62.6	3297.	1407	-1701
35.0	633.4	63.6	3356.	1423	-1740
40.0	654.3	64.7	3316.	1399	-1726
45.0	676.7	65.4	3309.	1390	-1729
50.0	695.6	66.3	3274.	1369	-1717
55.0	713.7	67.0	3255.	1356	-1713
60.0	717.5	67.6	3020.	1244	-1603
65.0	720.3	68.3	2840.	1158	-1518





## CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	691.4	4.5	1806.	678	-1024
35.0	735.7	4.5	1799.	663	-1031
40.0	755.6	4.5	2187.	841	-1219
45.0	777.1	4.5	1931.	716	-1104
50.0	795.1	4.5	1851.	673	-1071
55.0	812.3	4.5	1821.	655	-1061
60.0	816.0	4.5	1923.	702	-1110
65.0	818.6	4.5	1900.	690	-1100

## CRANE IN SERVICE LC 2

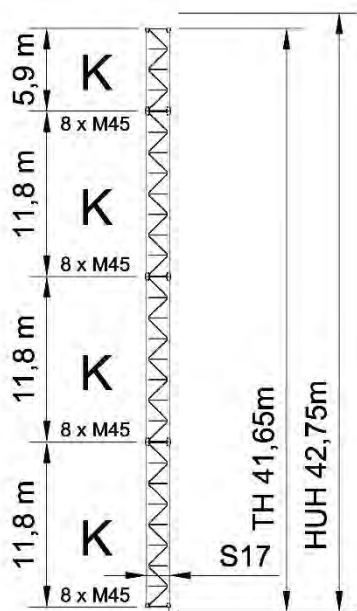
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	691.4	28.1	2564.	1035	-1381
35.0	735.7	28.4	2581.	1032	-1400
40.0	755.6	28.8	2993.	1222	-1599
45.0	777.1	29.1	2754.	1104	-1492
50.0	795.1	29.4	2693.	1070	-1468
55.0	812.3	29.6	2678.	1059	-1465
60.0	816.0	29.8	2792.	1112	-1520
65.0	818.6	30.1	2783.	1107	-1516

## REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	547.6	93.6	1729.	678	-952
35.0	589.8	95.3	1837.	718	-1013
40.0	608.8	97.2	2037.	807	-1112
45.0	629.2	98.3	2152.	857	-1171
50.0	646.4	99.7	2310.	927	-1250
55.0	662.8	100.9	2435.	982	-1313
60.0	666.3	101.9	2728.	1119	-1452
65.0	668.8	103.0	2988.	1241	-1575

## FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	602.4	65.8	3551.	1523	-1824
35.0	648.8	66.8	3621.	1544	-1868
40.0	669.7	68.0	3586.	1522	-1857
45.0	692.1	68.7	3585.	1516	-1862
50.0	711.0	69.5	3554.	1497	-1853
55.0	729.1	70.3	3540.	1486	-1850
60.0	732.9	70.8	3301.	1372	-1739
65.0	735.7	71.6	3119.	1286	-1654



## CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	706.1	4.5	1865.	702	-1055
35.0	750.4	4.5	1861.	689	-1064
40.0	770.3	4.5	2262.	873	-1258
45.0	791.8	4.5	2001.	745	-1141
50.0	809.8	4.5	1921.	702	-1107
55.0	827.0	4.5	1891.	684	-1098
60.0	830.7	4.5	1997.	733	-1148
65.0	833.3	4.5	1973.	721	-1138

## CRANE IN SERVICE LC 2

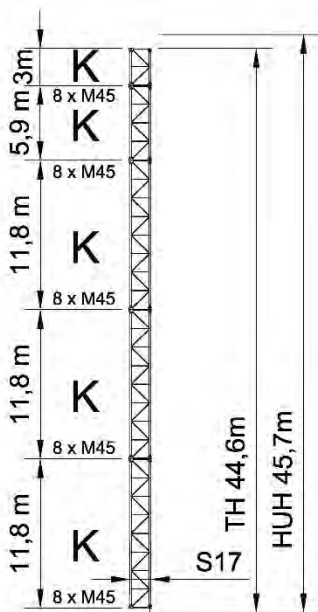
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	706.1	29.2	2714.	1103	-1456
35.0	750.4	29.6	2739.	1103	-1478
40.0	770.3	30.0	3166.	1299	-1685
45.0	791.8	30.2	2924.	1180	-1576
50.0	809.8	30.5	2864.	1147	-1552
55.0	827.0	30.8	2852.	1137	-1551
60.0	830.7	31.0	2970.	1192	-1607
65.0	833.3	31.2	2962.	1187	-1604

## REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	561.6	99.2	2112.	854	-1135
35.0	603.8	100.9	2232.	901	-1203
40.0	622.8	102.8	2444.	996	-1307
45.0	643.2	104.0	2569.	1050	-1371
50.0	660.4	105.4	2739.	1125	-1456
55.0	676.8	106.6	2873.	1185	-1523
60.0	680.3	107.6	3177.	1327	-1667
65.0	682.8	108.8	3448.	1454	-1795

## FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	617.8	69.0	3825.	1648	-1957
35.0	664.2	70.0	3908.	1676	-2008
40.0	685.1	71.2	3879.	1657	-1999
45.0	707.5	71.9	3884.	1654	-2007
50.0	726.4	72.8	3859.	1637	-2000
55.0	744.5	73.5	3849.	1628	-2000
60.0	748.3	74.1	3606.	1513	-1887
65.0	751.1	74.8	3422.	1425	-1800



## CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	720.8	4.5	1930.	729	-1089
35.0	765.1	4.5	1930.	718	-1101
40.0	785.0	4.5	2346.	909	-1302
45.0	806.5	4.5	2079.	778	-1181
50.0	824.5	4.5	1998.	735	-1147
55.0	841.7	4.5	1969.	717	-1138
60.0	845.4	4.5	2079.	768	-1191
65.0	848.0	4.5	2055.	756	-1180

## CRANE IN SERVICE LC 2

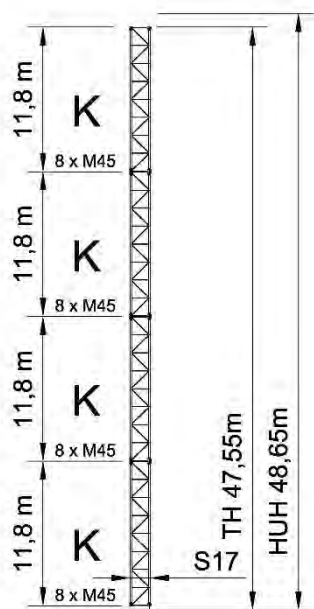
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	720.8	30.3	2878.	1176	-1536
35.0	765.1	30.7	2911.	1180	-1563
40.0	785.0	31.1	3356.	1385	-1778
45.0	806.5	31.3	3110.	1264	-1667
50.0	824.5	31.6	3052.	1232	-1644
55.0	841.7	31.9	3044.	1224	-1645
60.0	845.4	32.1	3167.	1281	-1704
65.0	848.0	32.3	3160.	1277	-1701

## REAR-STORM LC 3

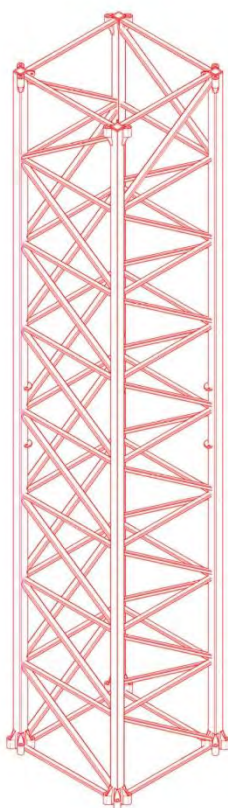
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	575.6	104.9	2526.	1046	-1334
35.0	617.8	106.6	2661.	1099	-1408
40.0	636.8	108.5	2888.	1202	-1520
45.0	657.2	109.7	3023.	1260	-1589
50.0	674.4	111.2	3205.	1342	-1679
55.0	690.8	112.4	3350.	1406	-1752
60.0	694.3	113.4	3666.	1554	-1901
65.0	696.8	114.6	3949.	1687	-2035

## FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	633.2	72.3	4123.	1785	-2101
35.0	679.6	73.3	4220.	1819	-2159
40.0	700.5	74.4	4198.	1803	-2154
45.0	722.9	75.1	4210.	1803	-2165
50.0	741.8	76.0	4190.	1789	-2160
55.0	759.9	76.7	4186.	1783	-2163
60.0	763.7	77.3	3939.	1666	-2047
65.0	766.5	78.0	3752.	1577	-1960



**Foundation loads**  
**TLS 65B10T**  
**WZ C25**  
**s21- Type 0 section**

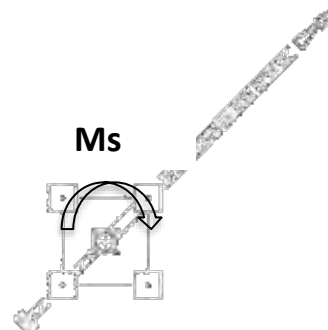
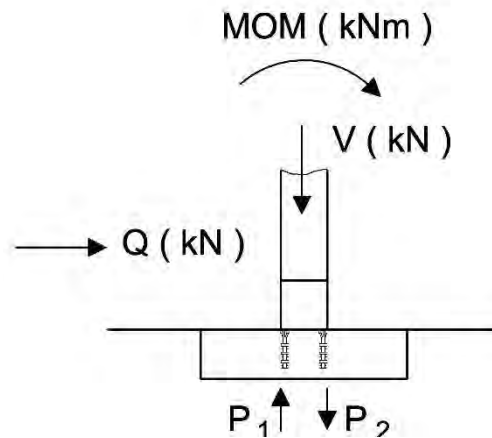


There are the following load case:

- LC1: In service, with no load and wind from the queue.
- LC2: In service with rear wind 72 Km/h
- LC3: Out of service zone C25, wind from the queue
- LC7: Out of service, frontal wind

Where:

- V: Axial load (kN)
- Q: Horizontal load (kN)
- M: Moment (kN·m)
- P<sub>1</sub>: Max tensile effort (kN).
- P<sub>2</sub>: Max compressive effort (kN).
- Ms: Turning moment in service= 396 KN/mt



**Jib position 45 °**

### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	751.2	4.5	1900.	501	-876
35.0	795.5	4.5	1897.	489	-886
40.0	815.5	4.5	2300.	630	-1037
45.0	836.9	4.5	2038.	529	-948
50.0	855.0	4.5	1958.	496	-923
55.0	872.2	4.5	1928.	481	-917
60.0	875.9	4.5	2034.	518	-956
65.0	878.5	4.5	2011.	509	-948

### CRANE IN SERVICE LC 2

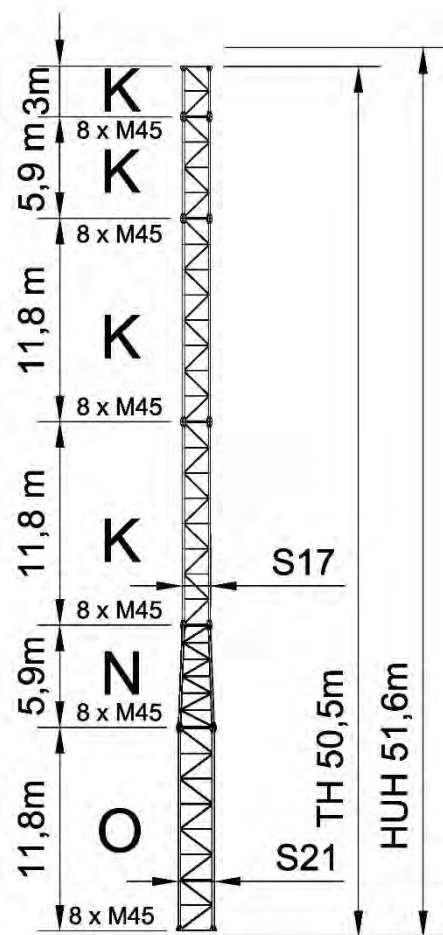
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	751.2	31.8	2916.	869	-1245
35.0	795.5	32.2	2943.	868	-1266
40.0	815.5	32.6	3376.	1020	-1427
45.0	836.9	32.8	3135.	927	-1345
50.0	855.0	33.1	3077.	902	-1329
55.0	872.2	33.4	3067.	894	-1330
60.0	875.9	33.6	3187.	936	-1374
65.0	878.5	33.8	3181.	933	-1373

### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	604.6	111.9	2902.	901	-1203
35.0	646.8	113.6	3039.	940	-1263
40.0	665.8	115.6	3268.	1018	-1351
45.0	686.2	116.8	3405.	1063	-1406
50.0	703.4	118.3	3587.	1125	-1476
55.0	719.8	119.5	3733.	1173	-1533
60.0	723.3	120.5	4046.	1286	-1647
65.0	725.8	121.7	4327.	1387	-1750

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	665.1	76.5	4290.	1389	-1721
35.0	711.5	77.5	4382.	1410	-1766
40.0	732.4	78.7	4361.	1398	-1764
45.0	754.8	79.4	4372.	1396	-1773
50.0	773.7	80.2	4353.	1384	-1771
55.0	791.8	81.0	4348.	1378	-1774
60.0	795.6	81.5	4109.	1290	-1688
65.0	798.4	82.3	3928.	1224	-1623



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	765.9	4.5	1965.	521	-904
35.0	810.2	4.5	1967.	510	-915
40.0	830.2	4.5	2384.	656	-1072
45.0	851.6	4.5	2117.	554	-980
50.0	869.7	4.5	2035.	520	-955
55.0	886.9	4.5	2006.	505	-949
60.0	890.6	4.5	2117.	544	-990
65.0	893.2	4.5	2093.	535	-982

### CRANE IN SERVICE LC 2

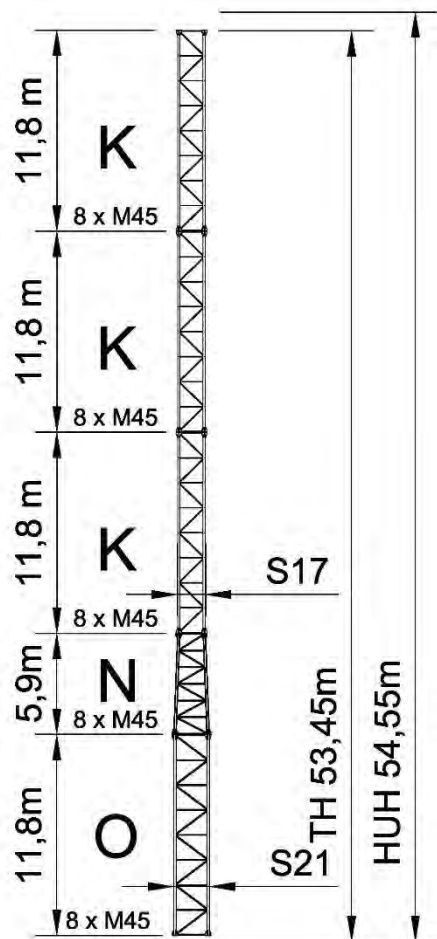
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	765.9	32.9	3088.	928	-1311
35.0	810.2	33.3	3124.	930	-1335
40.0	830.2	33.7	3574.	1088	-1503
45.0	851.6	33.9	3330.	994	-1420
50.0	869.7	34.2	3274.	969	-1404
55.0	886.9	34.5	3268.	963	-1406
60.0	890.6	34.7	3393.	1007	-1452
65.0	893.2	34.9	3387.	1004	-1451


### REAR-STORM LC 3

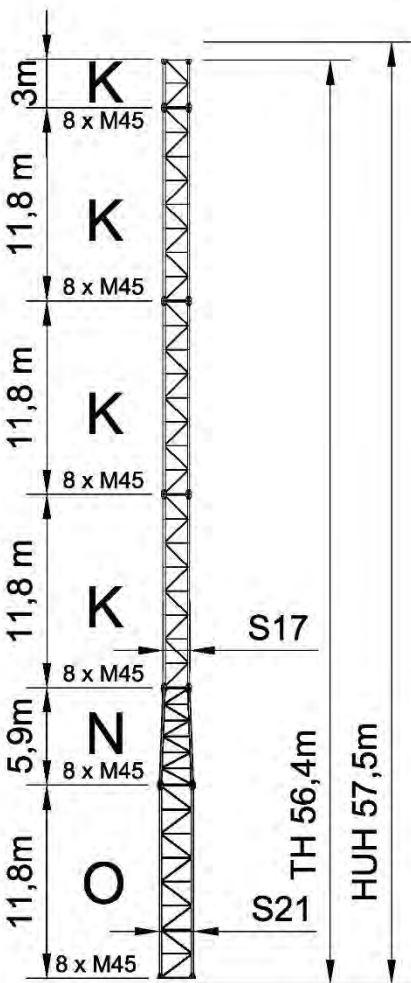
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	618.6	117.7	3364.	1065	-1374
35.0	660.8	119.4	3517.	1110	-1440
40.0	679.8	121.4	3761.	1193	-1533
45.0	700.2	122.6	3909.	1242	-1592
50.0	717.4	124.1	4104.	1308	-1667
55.0	733.8	125.3	4261.	1361	-1728
60.0	737.3	126.3	4586.	1478	-1847
65.0	739.8	127.6	4880.	1584	-1954

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	680.5	79.7	4610.	1501	-1841
35.0	726.9	80.7	4716.	1528	-1891
40.0	747.8	81.9	4703.	1518	-1892
45.0	770.2	82.6	4721.	1519	-1904
50.0	789.1	83.5	4707.	1509	-1904
55.0	807.2	84.2	4709.	1505	-1909
60.0	811.0	84.8	4465.	1416	-1821
65.0	813.8	85.5	4281.	1348	-1755




**Max Tower Configuration**  
 for **J45** or shorter length.



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	780.6	4.5	2037.	543	-933
35.0	824.9	4.5	2044.	534	-947
40.0	844.9	4.5	2478.	687	-1109
<b>45.0</b>	<b>866.3</b>	<b>4.5</b>	<b>2204.</b>	<b>582</b>	<b>-1015</b>

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	780.6	34.0	3275.	992	-1382
35.0	824.9	34.4	3321.	998	-1410
40.0	844.9	34.8	3791.	1163	-1586
<b>45.0</b>	<b>866.3</b>	<b>35.0</b>	<b>3544.</b>	<b>1068</b>	<b>-1501</b>

### REAR-STORM LC 3

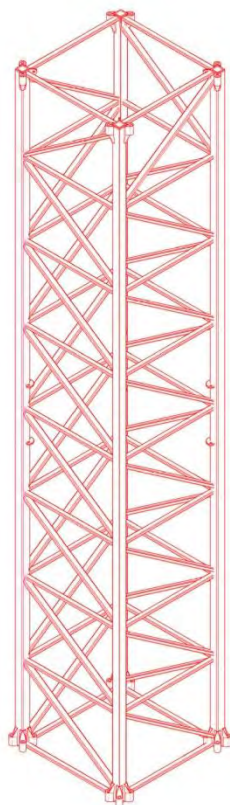
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	632.6	123.5	3863.	1242	-1559
35.0	674.8	125.2	4033.	1293	-1631
40.0	693.8	127.2	4295.	1383	-1730
<b>45.0</b>	<b>714.2</b>	<b>128.5</b>	<b>4455.</b>	<b>1436</b>	<b>-1793</b>

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	695.9	83.0	4955.	1622	-1970
35.0	742.3	84.0	5078.	1655	-2027
40.0	763.2	85.1	5073.	1648	-2030
<b>45.0</b>	<b>785.6</b>	<b>85.8</b>	<b>5100.</b>	<b>1652</b>	<b>-2045</b>



**Foundation loads  
TLS 65B10T  
WZ C25  
S21- Type P section**

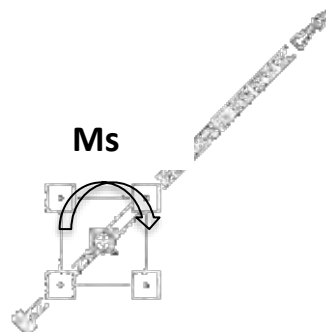
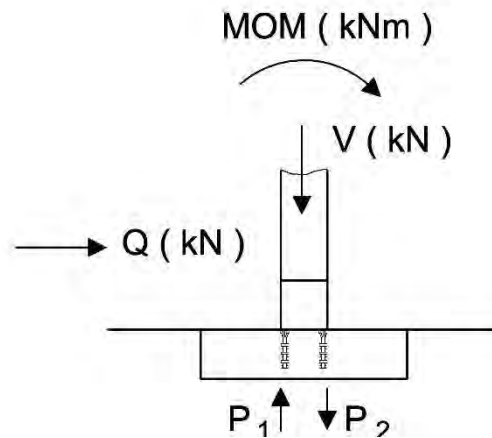


There are the following load case:

- LC1: In service, with no load and wind from the queue.
- LC2: In service with rear wind 72 Km/h
- LC3: Out of service zone C25, wind from the queue
- LC7: Out of service, frontal wind

Where:

- V: Axial load (kN)
- Q: Horizontal load (kN)
- M: Moment (kN·m)
- P<sub>1</sub>: Max tensile effort (kN).
- P<sub>2</sub>: Max compressive effort (kN).
- Ms: Turning moment in service= 396 KN/mt



**Jib position 45 °**

### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	790.1	4.5	1908.	494	-889
35.0	834.4	4.5	1902.	481	-898
40.0	854.3	4.5	2298.	619	-1046
45.0	875.8	4.5	2039.	520	-958
50.0	893.8	4.5	1958.	486	-933
55.0	911.0	4.5	1928.	471	-926
60.0	914.7	4.5	2033.	508	-965
65.0	917.3	4.5	2009.	499	-958

### CRANE IN SERVICE LC 2

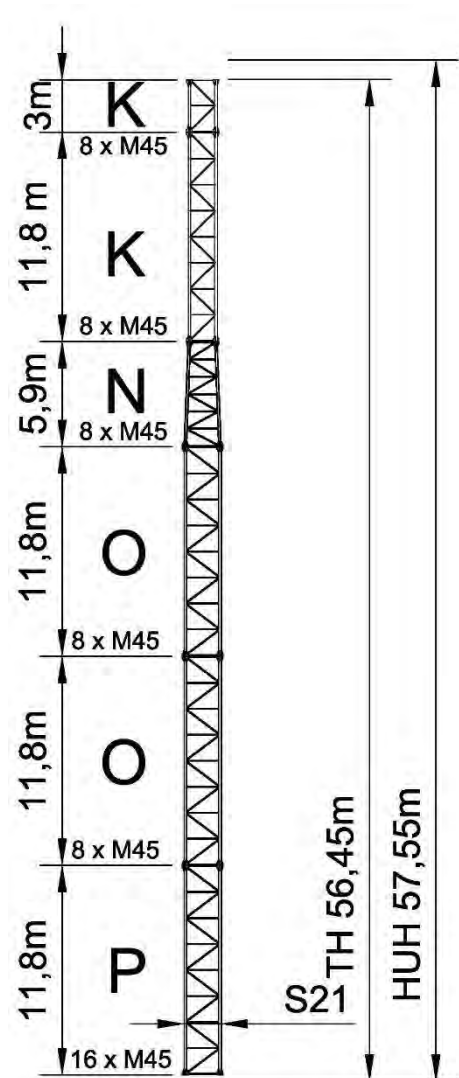
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	790.1	34.5	3114.	931	-1326
35.0	834.4	34.9	3142.	930	-1347
40.0	854.3	35.3	3570.	1080	-1508
45.0	875.8	35.5	3333.	989	-1427
50.0	893.8	35.8	3278.	965	-1412
55.0	911.0	36.1	3269.	957	-1413
60.0	914.7	36.3	3389.	1000	-1457
65.0	917.3	36.5	3384.	997	-1456

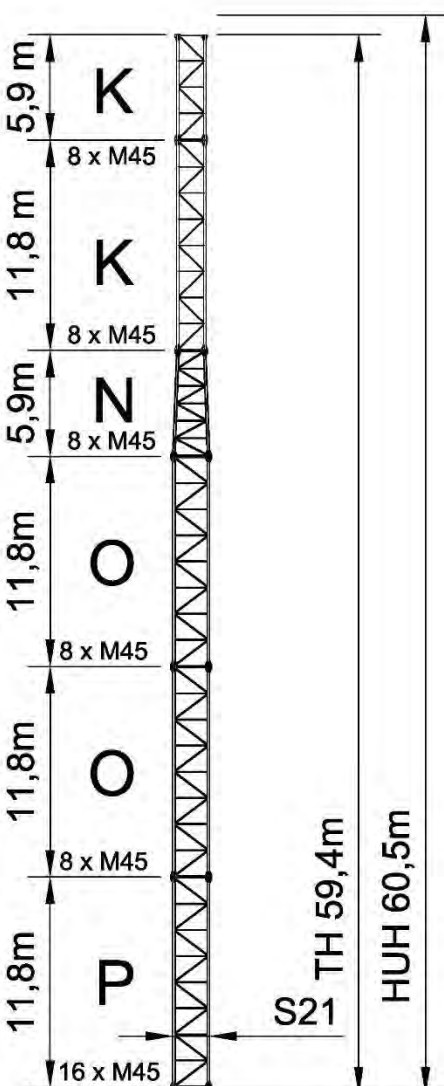
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	641.6	124.7	3826.	1227	-1547
35.0	683.8	126.4	3981.	1272	-1614
40.0	702.8	128.4	4227.	1356	-1708
45.0	723.2	129.7	4374.	1405	-1766
50.0	740.4	131.2	4569.	1471	-1841
55.0	756.8	132.4	4725.	1524	-1902
60.0	760.3	133.4	5043.	1638	-2018
65.0	762.8	134.7	5331.	1742	-2123

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	705.8	84.3	4809.	1567	-1920
35.0	752.2	85.3	4906.	1590	-1967
40.0	773.1	86.5	4893.	1581	-1967
45.0	795.5	87.2	4909.	1581	-1978
50.0	814.4	88.1	4896.	1571	-1978
55.0	832.5	88.8	4897.	1567	-1983
60.0	836.3	89.4	4664.	1482	-1900
65.0	839.1	90.1	4491.	1418	-1838





### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	804.8	4.5	1967.	511	-914
35.0	849.1	4.5	1965.	500	-924
40.0	869.0	4.5	2373.	643	-1077
45.0	890.5	4.5	2109.	542	-987
50.0	908.5	4.5	2028.	508	-962
55.0	925.7	4.5	1998.	493	-956
60.0	929.4	4.5	2106.	531	-996
65.0	932.0	4.5	2083.	522	-988

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	804.8	35.6	3286.	990	-1392
35.0	849.1	36.0	3321.	992	-1416
40.0	869.0	36.4	3765.	1148	-1582
45.0	890.5	36.6	3526.	1055	-1501
50.0	908.5	36.9	3472.	1031	-1486
55.0	925.7	37.2	3467.	1025	-1488
60.0	929.4	37.4	3591.	1069	-1534
65.0	932.0	37.6	3587.	1067	-1533

### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	655.6	130.5	4335.	1408	-1735
35.0	697.8	132.3	4505.	1459	-1808
40.0	716.8	134.3	4766.	1549	-1907
45.0	737.2	135.6	4924.	1601	-1969
50.0	754.4	137.1	5132.	1672	-2049
55.0	770.8	138.4	5299.	1728	-2114
60.0	774.3	139.4	5628.	1847	-2234
65.0	776.8	140.6	5928.	1955	-2343

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	721.2	87.5	5143.	1684	-2045
35.0	767.6	88.6	5254.	1713	-2097
40.0	788.5	89.7	5248.	1706	-2100
45.0	810.9	90.4	5271.	1708	-2113
50.0	829.8	91.3	5263.	1701	-2116
55.0	847.9	92.0	5270.	1699	-2122
60.0	851.7	92.6	5034.	1612	-2038
65.0	854.5	93.3	4858.	1548	-1975

### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	819.5	4.5	2031.	531	-941
35.0	863.8	4.5	2034.	521	-953
40.0	883.7	4.5	2457.	669	-1111
45.0	905.2	4.5	2187.	566	-1019
50.0	923.2	4.5	2105.	532	-994
55.0	940.4	4.5	2076.	517	-988
60.0	944.1	4.5	2188.	557	-1029
65.0	946.7	4.5	2164.	548	-1021

### CRANE IN SERVICE LC 2

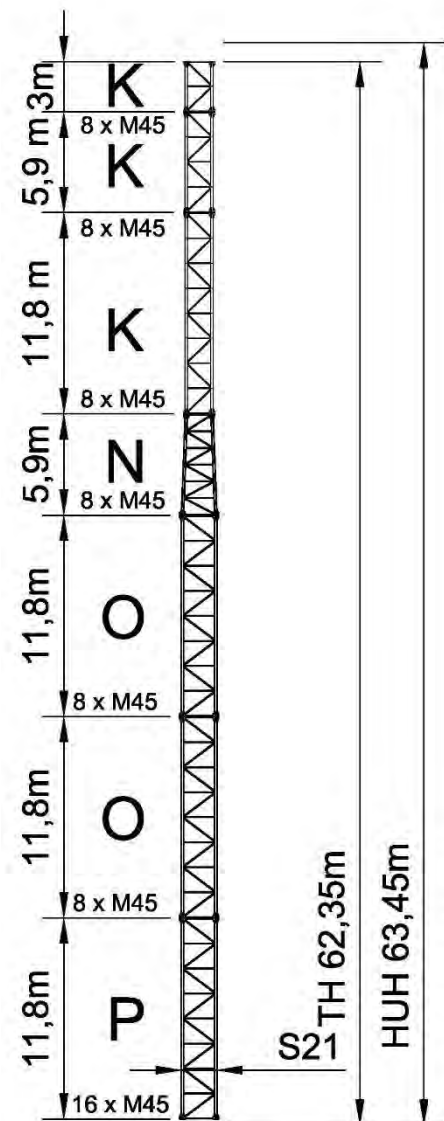
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	819.5	36.8	3472.	1053	-1463
35.0	863.8	37.1	3516.	1059	-1490
40.0	883.7	37.5	3977.	1221	-1663
45.0	905.2	37.8	3735.	1128	-1580
50.0	923.2	38.1	3684.	1105	-1566
55.0	940.4	38.3	3682.	1099	-1570
60.0	944.1	38.5	3811.	1145	-1618
65.0	946.7	38.8	3808.	1144	-1617

### REAR-STORM LC 3

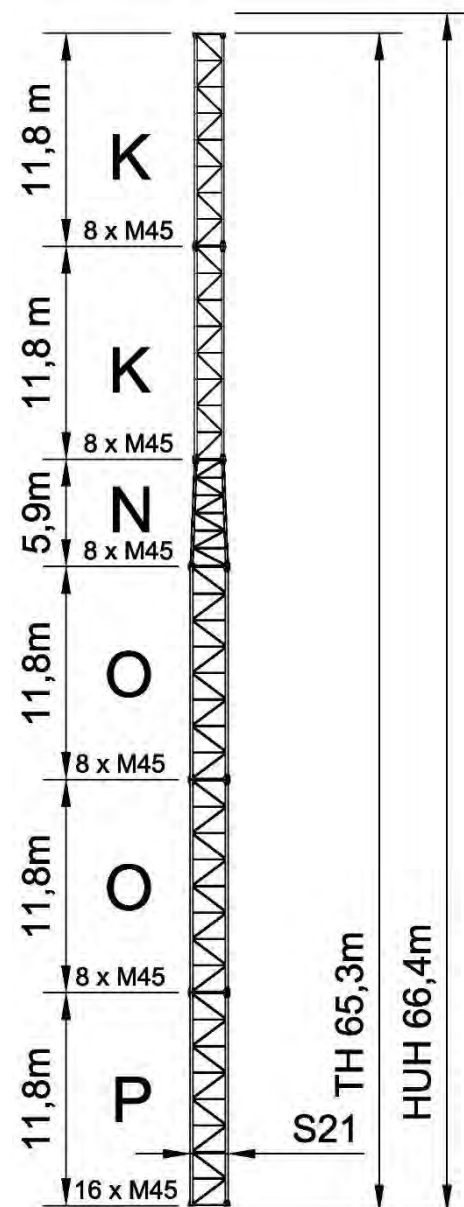
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	669.6	136.5	4880.	1602	-1936
35.0	711.8	138.2	5067.	1659	-2015
40.0	730.8	140.3	5345.	1755	-2120
45.0	751.2	141.6	5515.	1812	-2187
50.0	768.4	143.1	5737.	1888	-2272
55.0	784.8	144.4	5917.	1949	-2341
60.0	788.3	145.4	6258.	2072	-2466
65.0	790.8	146.7	6571.	2185	-2580

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	736.6	90.8	5502.	1810	-2179
35.0	783.0	91.8	5628.	1845	-2236
40.0	803.9	92.9	5630.	1840	-2242
45.0	826.3	93.7	5660.	1845	-2259
50.0	845.2	94.5	5659.	1840	-2263
55.0	863.3	95.2	5672.	1841	-2272
60.0	867.1	95.8	5432.	1752	-2186
65.0	869.9	96.5	5254.	1687	-2122




 Max Tower Configuration  
 for **J50** or shorter length.



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	834.2	4.5	2103.	553	-971
35.0	878.5	4.5	2110.	545	-984
40.0	898.4	4.5	2549.	699	-1149
45.0	919.9	4.5	2273.	594	-1054
<b>50.0</b>	<b>937.9</b>	<b>4.5</b>	<b>2191.</b>	<b>559</b>	<b>-1028</b>

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	834.2	37.9	3673.	1123	-1540
35.0	878.5	38.2	3728.	1132	-1571
40.0	898.4	38.6	4209.	1301	-1750
45.0	919.9	38.9	3964.	1207	-1667
<b>50.0</b>	<b>937.9</b>	<b>39.2</b>	<b>3915.</b>	<b>1185</b>	<b>-1654</b>

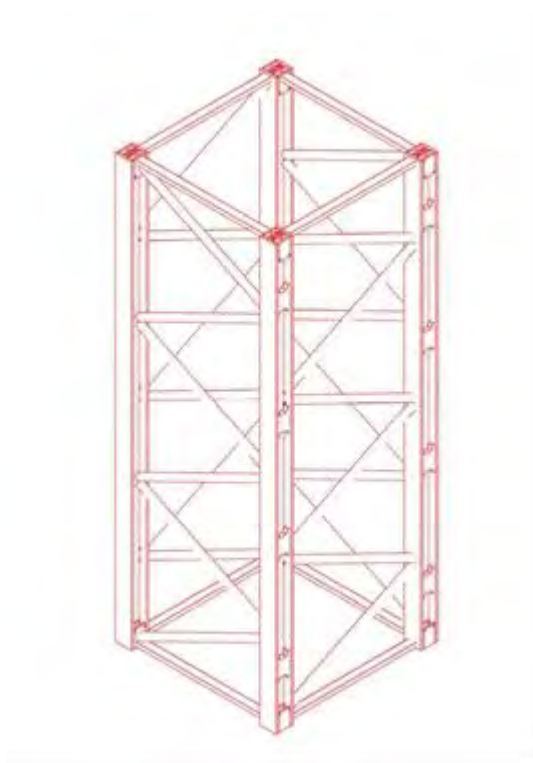
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	683.6	142.4	5463.	1810	-2151
35.0	725.8	144.2	5671.	1874	-2237
40.0	744.8	146.3	5966.	1977	-2349
45.0	765.2	147.6	6151.	2039	-2421
<b>50.0</b>	<b>782.4</b>	<b>149.1</b>	<b>6388.</b>	<b>2120</b>	<b>-2512</b>

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	752.0	94.0	5886.	1946	-2322
35.0	798.4	95.0	6031.	1987	-2386
40.0	819.3	96.2	6041.	1985	-2395
45.0	841.7	96.9	6080.	1994	-2415
<b>50.0</b>	<b>860.6</b>	<b>97.7</b>	<b>6087.</b>	<b>1992</b>	<b>-2422</b>

**Foundation loads**  
**TLS 65B10T**  
**WZ C25**  
**S23- Type T section**

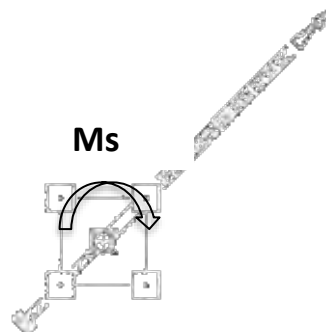
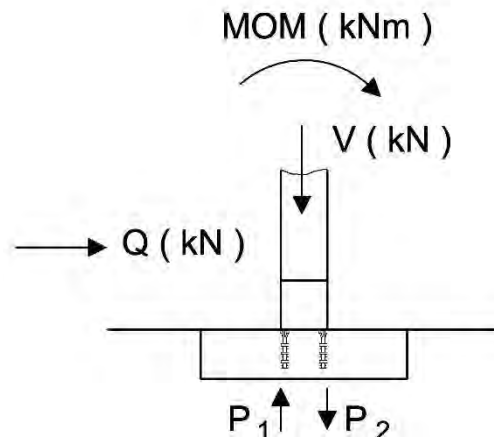


There are the following load case:

- LC1: In service, with no load and wind from the queue.
- LC2: In service with rear wind 72 Km/h
- LC3: Out of service zone C25, wind from the queue
- LC7: Out of service, frontal wind

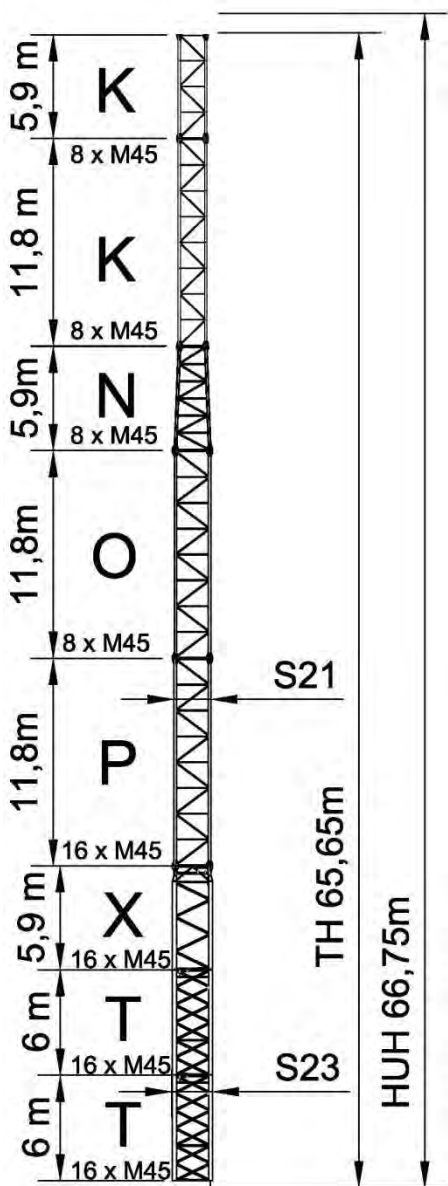
Where:

- V: Axial load (kN)
- Q: Horizontal load (kN)
- M: Moment (kN·m)
- P<sub>1</sub>: Max tensile effort (kN).
- P<sub>2</sub>: Max compressive effort (kN).
- Ms: Turning moment in service= 396 KN/mt



**Jib position 45 °**





### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	911.9	4.5	1929.	437	-893
35.0	956.2	4.5	1922.	423	-902
40.0	976.1	4.5	2312.	553	-1041
45.0	997.6	4.5	2055.	459	-958
50.0	1015.6	4.5	1975.	427	-935
55.0	1032.8	4.5	1944.	412	-928
60.0	1036.5	4.5	2047.	446	-965
65.0	1039.1	4.5	2024.	438	-957

### CRANE IN SERVICE LC 2

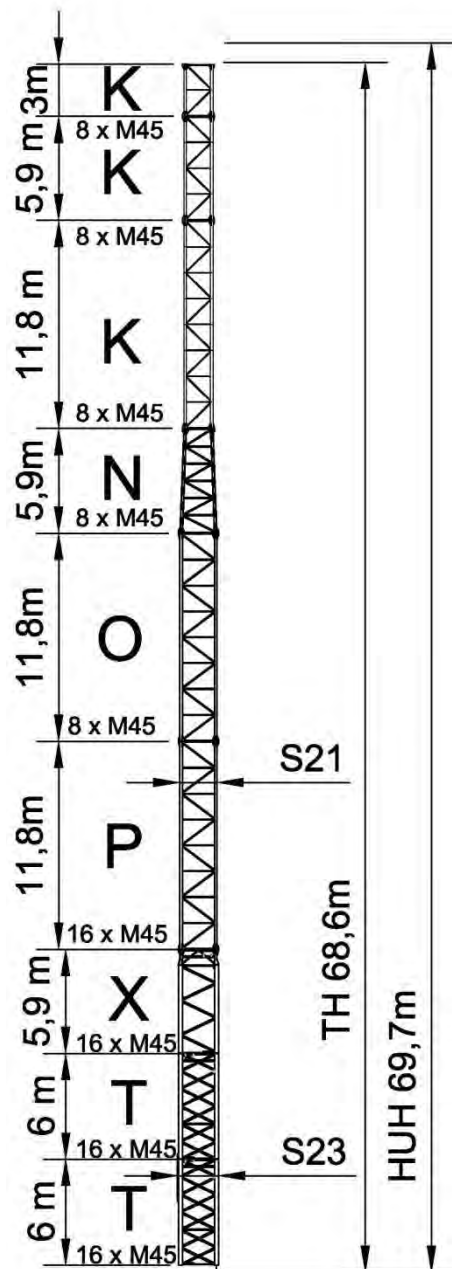
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	911.9	41.9	3485.	974	-1430
35.0	956.2	42.3	3515.	973	-1451
40.0	976.1	42.7	3940.	1115	-1603
45.0	997.6	42.9	3709.	1029	-1528
50.0	1015.6	43.2	3656.	1007	-1515
55.0	1032.8	43.5	3650.	1000	-1517
60.0	1036.5	43.7	3769.	1040	-1559
65.0	1039.1	43.9	3767.	1039	-1559

### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	757.6	157.5	5558.	1727	-2106
35.0	799.8	159.3	5737.	1778	-2178
40.0	818.8	161.4	6006.	1867	-2276
45.0	839.2	162.6	6170.	1918	-2337
50.0	856.4	164.2	6383.	1987	-2415
55.0	872.8	165.5	6554.	2042	-2478
60.0	876.3	166.5	6880.	2154	-2592
65.0	878.8	167.8	7181.	2257	-2696

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	833.4	105.7	5781.	1785	-2202
35.0	879.8	106.7	5886.	1810	-2250
40.0	900.7	107.9	5885.	1804	-2254
45.0	923.1	108.6	5907.	1806	-2268
50.0	942.0	109.5	5902.	1800	-2271
55.0	960.1	110.2	5910.	1798	-2278
60.0	963.9	110.7	5686.	1720	-2202
65.0	966.7	111.5	5522.	1663	-2146



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	926.6	4.5	1984.	452	-916
35.0	970.9	4.5	1980.	440	-925
40.0	990.8	4.5	2381.	573	-1068
45.0	1012.3	4.5	2120.	478	-984
50.0	1030.3	4.5	2039.	445	-960
55.0	1047.5	4.5	2009.	430	-954
60.0	1051.2	4.5	2114.	466	-992
65.0	1053.8	4.5	2091.	457	-984

### CRANE IN SERVICE LC 2

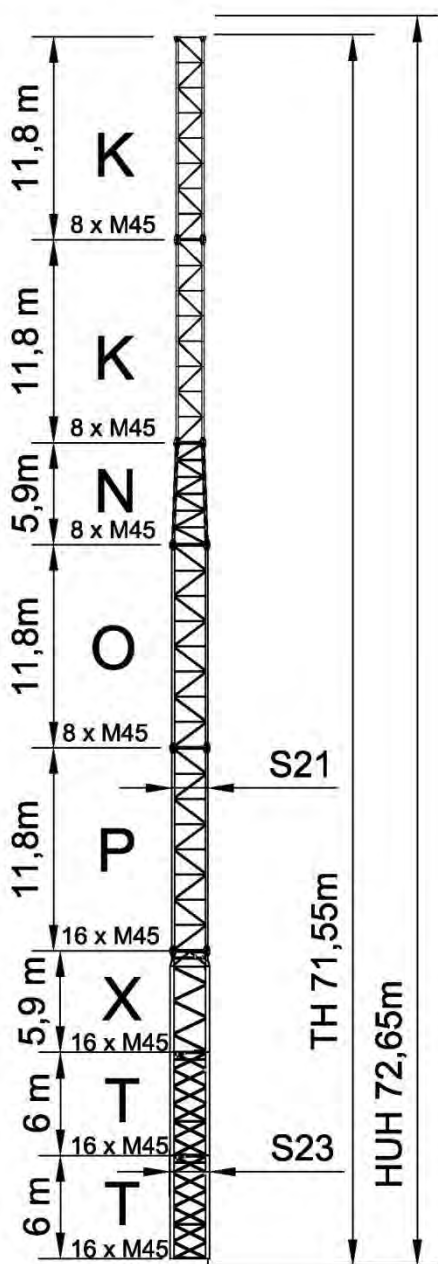
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	926.6	43.1	3662.	1031	-1494
35.0	970.9	43.4	3699.	1033	-1518
40.0	990.8	43.8	4138.	1179	-1675
45.0	1012.3	44.1	3904.	1093	-1599
50.0	1030.3	44.4	3854.	1071	-1586
55.0	1047.5	44.6	3850.	1066	-1589
60.0	1051.2	44.8	3973.	1107	-1633
65.0	1053.8	45.1	3972.	1106	-1633

### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	771.6	163.5	6136.	1923	-2309
35.0	813.8	165.3	6331.	1980	-2387
40.0	832.8	167.4	6615.	2073	-2489
45.0	853.2	168.7	6789.	2128	-2555
50.0	870.4	170.3	7015.	2201	-2637
55.0	886.8	171.6	7197.	2260	-2704
60.0	890.3	172.6	7534.	2376	-2821
65.0	892.8	173.9	7846.	2483	-2929

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	848.8	108.9	6141.	1905	-2330
35.0	895.2	109.9	6259.	1935	-2382
40.0	916.1	111.1	6264.	1931	-2389
45.0	938.5	111.8	6292.	1935	-2405
50.0	957.4	112.7	6293.	1931	-2410
55.0	975.5	113.4	6307.	1931	-2419
60.0	979.3	114.0	6080.	1852	-2341
65.0	982.1	114.7	5914.	1794	-2285



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	941.3	4.5	2044.	469	-940
35.0	985.6	4.5	2044.	458	-951
40.0	1005.5	4.5	2457.	596	-1098
45.0	1027.0	4.5	2191.	498	-1012
50.0	1045.0	4.5	2109.	466	-988
55.0	1062.2	4.5	2080.	451	-982
60.0	1065.9	4.5	2189.	488	-1021
65.0	1068.5	4.5	2165.	479	-1014

### CRANE IN SERVICE LC 2

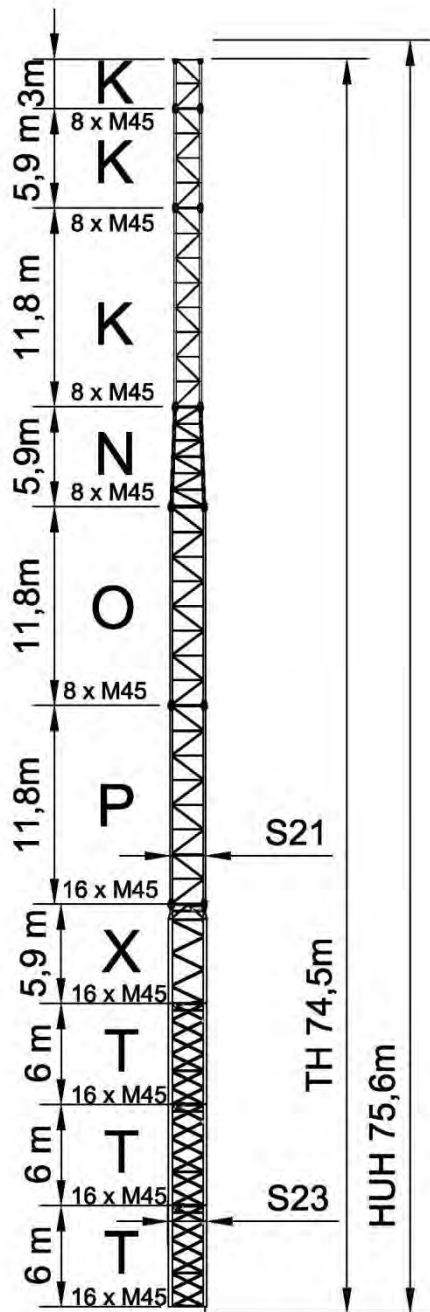
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	941.3	44.2	3852.	1093	-1564
35.0	985.6	44.5	3897.	1097	-1590
40.0	1005.5	44.9	4352.	1249	-1752
45.0	1027.0	45.2	4116.	1162	-1676
50.0	1045.0	45.5	4067.	1141	-1664
55.0	1062.2	45.7	4066.	1136	-1668
60.0	1065.9	45.9	4195.	1180	-1713
65.0	1068.5	46.2	4194.	1179	-1713

### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	785.6	169.6	6750.	2132	-2524
35.0	827.8	171.4	6962.	2194	-2608
40.0	846.8	173.5	7263.	2293	-2716
45.0	867.2	174.8	7449.	2352	-2786
50.0	884.4	176.4	7688.	2430	-2872
55.0	900.8	177.7	7882.	2493	-2944
60.0	904.3	178.8	8232.	2613	-3065
65.0	906.8	180.1	8556.	2724	-3177

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	864.2	112.2	6524.	2034	-2466
35.0	910.6	113.2	6656.	2068	-2523
40.0	931.5	114.3	6669.	2067	-2533
45.0	953.9	115.0	6704.	2074	-2550
50.0	972.8	115.9	6711.	2071	-2558
55.0	990.9	116.6	6731.	2073	-2569
60.0	994.7	117.2	6500.	1993	-2490
65.0	997.5	117.9	6332.	1934	-2433



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	956.0	4.5	2110.	488	-966
35.0	1000.3	4.5	2114.	479	-979
40.0	1020.2	4.5	2542.	621	-1131
45.0	1041.7	4.5	2270.	522	-1043
50.0	1059.7	4.5	2188.	489	-1019
55.0	1076.9	4.5	2159.	475	-1013
60.0	1080.6	4.5	2272.	513	-1053
65.0	1083.2	4.5	2248.	504	-1046

### CRANE IN SERVICE LC 2

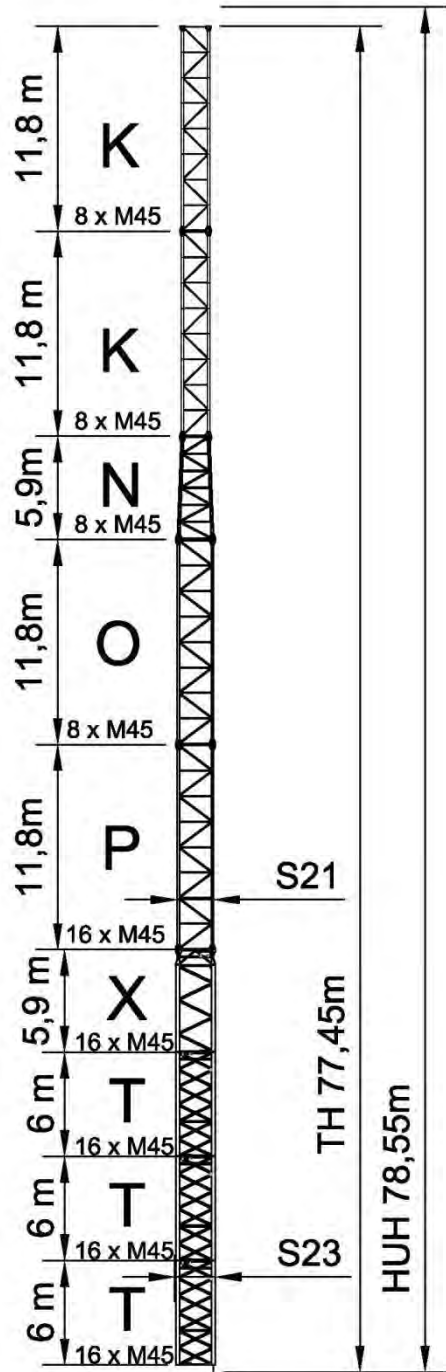
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	956.0	45.3	4057.	1160	-1638
35.0	1000.3	45.7	4111.	1167	-1667
40.0	1020.2	46.1	4584.	1326	-1836
45.0	1041.7	46.3	4344.	1238	-1758
50.0	1059.7	46.6	4298.	1217	-1747
55.0	1076.9	46.9	4301.	1214	-1752
60.0	1080.6	47.1	4435.	1259	-1799
65.0	1083.2	47.3	4435.	1259	-1800

### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	799.6	175.7	7403.	2353	-2753
35.0	841.8	177.5	7634.	2422	-2843
40.0	860.8	179.7	7953.	2527	-2958
45.0	881.2	181.0	8152.	2591	-3032
50.0	898.4	182.6	8406.	2675	-3124
55.0	914.8	183.9	8614.	2742	-3200
60.0	918.3	184.9	8977.	2866	-3325
65.0	920.8	186.3	9315.	2982	-3443

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	879.6	115.4	6931.	2170	-2610
35.0	926.0	116.4	7080.	2210	-2673
40.0	946.9	117.6	7101.	2212	-2685
45.0	969.3	118.3	7145.	2222	-2706
50.0	988.2	119.1	7159.	2222	-2716
55.0	1006.3	119.9	7185.	2226	-2729
60.0	1010.1	120.4	6950.	2144	-2649
65.0	1012.9	121.2	6780.	2085	-2591



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	970.7	4.5	2182.	510	-995
35.0	1015.0	4.5	2191.	502	-1009
40.0	1034.9	4.5	2636.	650	-1167
45.0	1056.4	4.5	2358.	549	-1077
50.0	1074.4	4.5	2275.	515	-1053
55.0	1091.6	4.5	2247.	502	-1048
60.0	1095.3	4.5	2365.	542	-1089
65.0	1097.9	4.5	2340.	532	-1081

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	970.7	46.4	4277.	1232	-1718
35.0	1015.0	46.8	4342.	1243	-1751
40.0	1034.9	47.2	4835.	1409	-1926
45.0	1056.4	47.4	4593.	1320	-1848
50.0	1074.4	47.7	4550.	1300	-1837
55.0	1091.6	48.0	4557.	1298	-1844
60.0	1095.3	48.2	4697.	1346	-1893
65.0	1097.9	48.4	4698.	1346	-1895

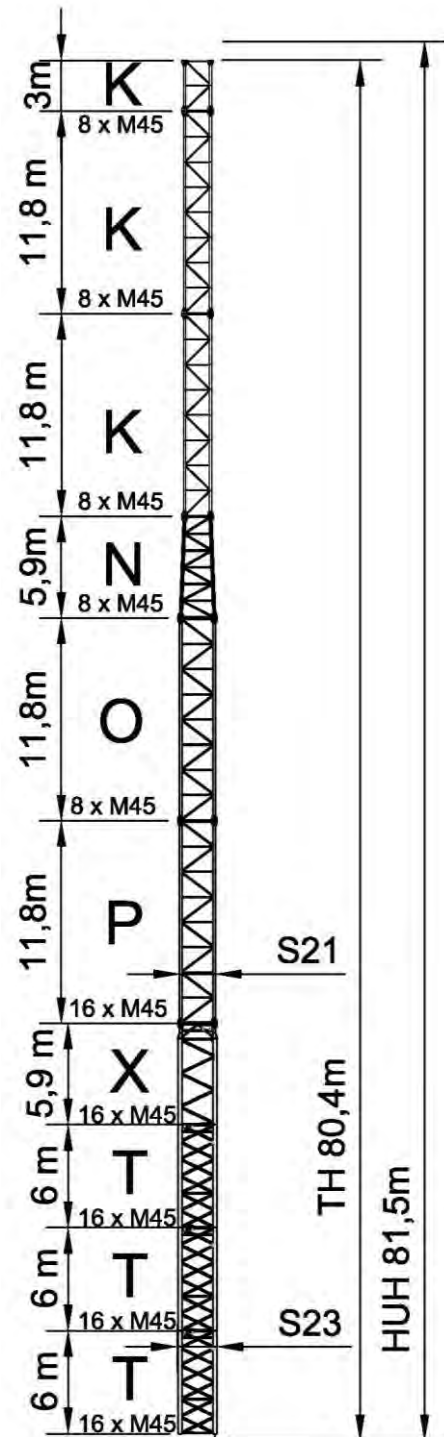
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	813.6	181.8	8096.	2589	-2995
35.0	855.8	183.7	8350.	2666	-3093
40.0	874.8	185.8	8688.	2778	-3215
45.0	895.2	187.2	8903.	2847	-3294
50.0	912.4	188.8	9174.	2936	-3392
55.0	928.8	190.1	9397.	3009	-3473
60.0	932.3	191.2	9775.	3138	-3604
65.0	934.8	192.5	10127.	3259	-3726

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	895.0	118.6	7365.	2316	-2764
35.0	941.4	119.6	7533.	2363	-2833
40.0	962.3	120.8	7563.	2368	-2849
45.0	984.7	121.5	7617.	2381	-2873
50.0	1003.6	122.4	7639.	2383	-2885
55.0	1021.7	123.1	7673.	2391	-2901
60.0	1025.5	123.7	7433.	2307	-2820
65.0	1028.3	124.4	7260.	2247	-2761


 Max Tower Configuration  
 for **J55** or shorter length.



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	985.4	4.5	2262.	533	-1026
35.0	1029.7	4.5	2277.	528	-1042
40.0	1049.6	4.5	2740.	682	-1207
45.0	1071.1	4.5	2455.	579	-1114
50.0	1089.1	4.5	2372.	545	-1090
<b>55.0</b>	<b>1106.3</b>	<b>4.5</b>	<b>2346.</b>	<b>532</b>	<b>-1085</b>

### CRANE IN SERVICE LC 2


BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	985.4	47.5	4516.	1311	-1803
35.0	1029.7	47.9	4593.	1326	-1841
40.0	1049.6	48.3	5109.	1499	-2024
45.0	1071.1	48.5	4864.	1410	-1945
50.0	1089.1	48.8	4824.	1391	-1936
<b>55.0</b>	<b>1106.3</b>	<b>49.1</b>	<b>4837.</b>	<b>1391</b>	<b>-1944</b>

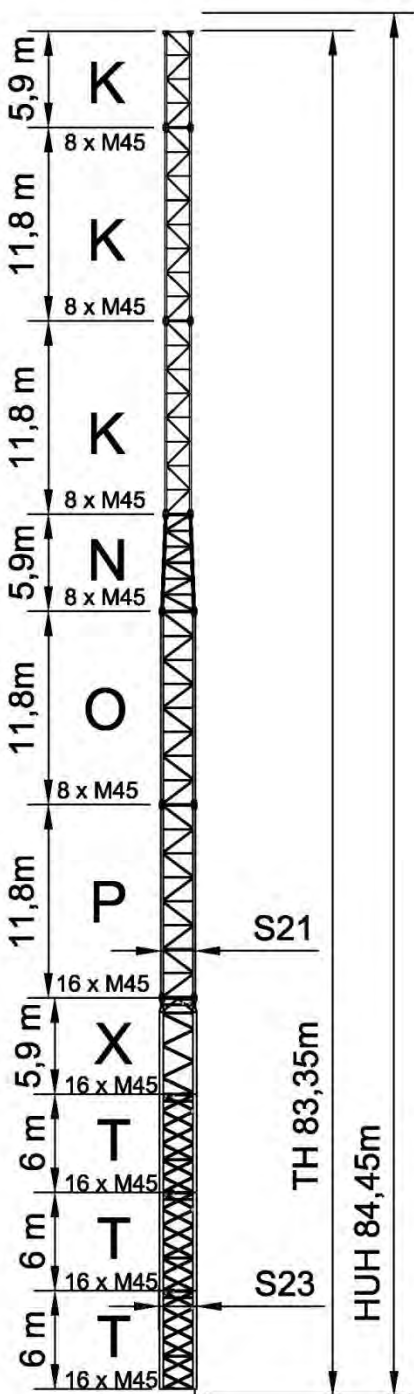
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	827.6	188.0	8834.	2840	-3254
35.0	869.8	189.9	9113.	2925	-3360
40.0	888.8	192.1	9474.	3045	-3490
45.0	909.2	193.4	9706.	3120	-3575
50.0	926.4	195.0	9997.	3216	-3679
<b>55.0</b>	<b>942.8</b>	<b>196.4</b>	<b>10237.</b>	<b>3295</b>	<b>-3766</b>

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	910.4	121.8	7829.	2472	-2927
35.0	956.8	122.9	8019.	2526	-3005
40.0	977.7	124.0	8060.	2535	-3024
45.0	1000.1	124.7	8124.	2552	-3052
50.0	1019.0	125.6	8155.	2558	-3067
<b>55.0</b>	<b>1037.1</b>	<b>126.3</b>	<b>8198.</b>	<b>2568</b>	<b>-3087</b>


 Max Tower Configuration  
 for **J35** or shorter length.



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1000.1	4.5	2351.	560	-1060
<b>35.0</b>	<b>1044.4</b>	<b>4.5</b>	<b>2373.</b>	<b>557</b>	<b>-1079</b>

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1000.1	48.7	4774.	1396	-1896
<b>35.0</b>	<b>1044.4</b>	<b>49.0</b>	<b>4866.</b>	<b>1417</b>	<b>-1939</b>

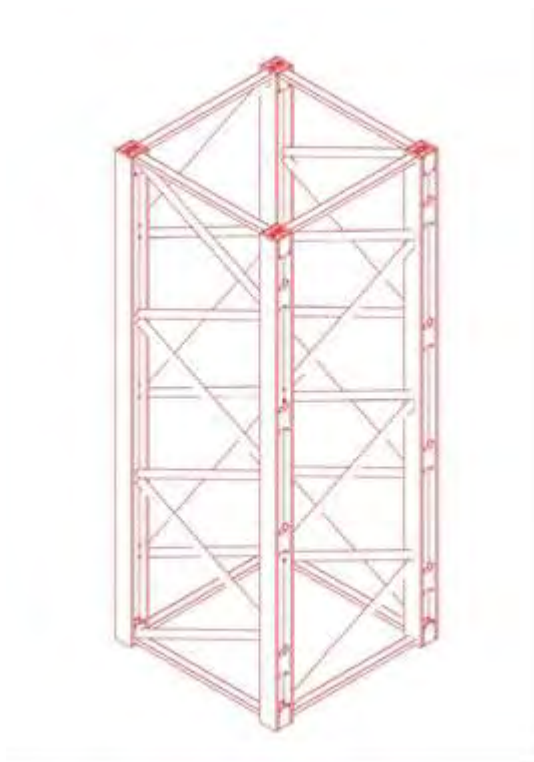
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	841.6	194.3	9621.	3108	-3529
<b>35.0</b>	<b>883.8</b>	<b>196.2</b>	<b>9930.</b>	<b>3204</b>	<b>-3645</b>

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	925.8	125.1	8325.	2640	-3103
<b>35.0</b>	<b>972.2</b>	<b>126.1</b>	<b>8541.</b>	<b>2702</b>	<b>-3189</b>

**Foundation loads**  
**TLS 65B10T**  
**WZ C25**  
**S23- Type U section**



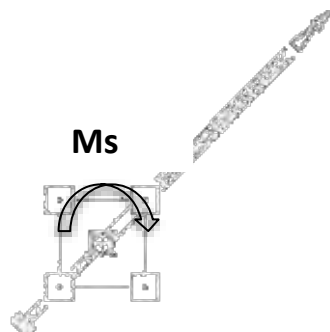
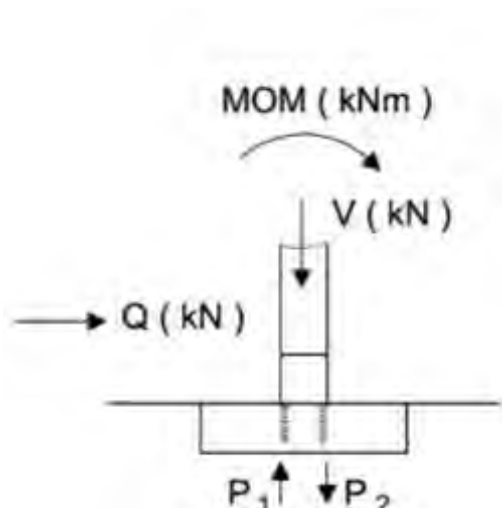


There are the following load case:

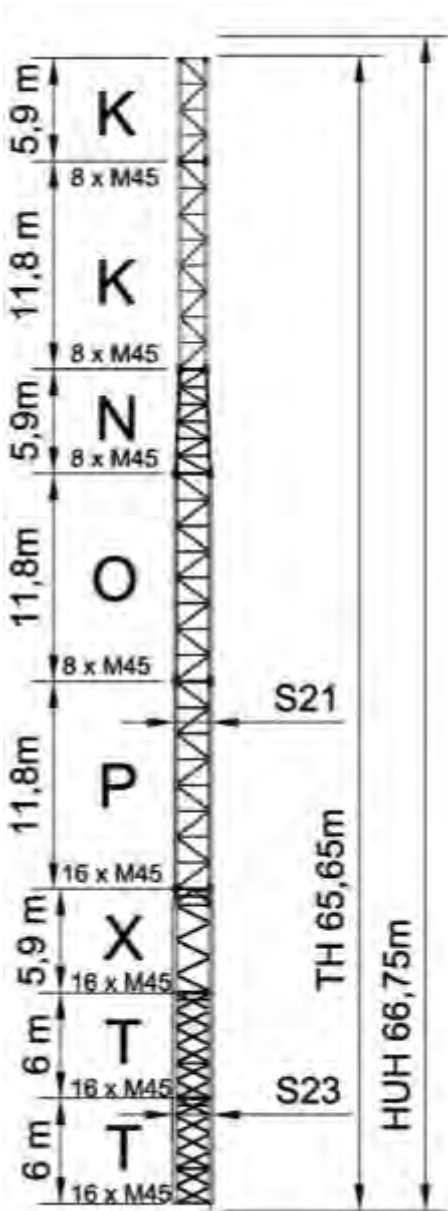
- LC1: In service, with no load and wind from the queue.
- LC2: In service with rear wind 72 Km/h
- LC3: Out of service zone C25, wind from the queue
- LC7: Out of service, frontal wind

Where:

- V: Axial load (kN)
- Q: Horizontal load (kN)
- M: Moment (kN·m)
- P<sub>1</sub>: Max tensile effort (kN).
- P<sub>2</sub>: Max compressive effort (kN).
- Ms: Turning moment in service= 396 KN/mt



**Jib position 45 °**



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	911.9	4.5	1929.	437	-893
35.0	956.2	4.5	1922.	423	-902
40.0	976.1	4.5	2312.	553	-1041
45.0	997.6	4.5	2055.	459	-958
50.0	1015.6	4.5	1975.	427	-935
55.0	1032.8	4.5	1944.	412	-928
60.0	1036.5	4.5	2047.	446	-965
65.0	1039.1	4.5	2024.	438	-957

### CRANE IN SERVICE LC 2

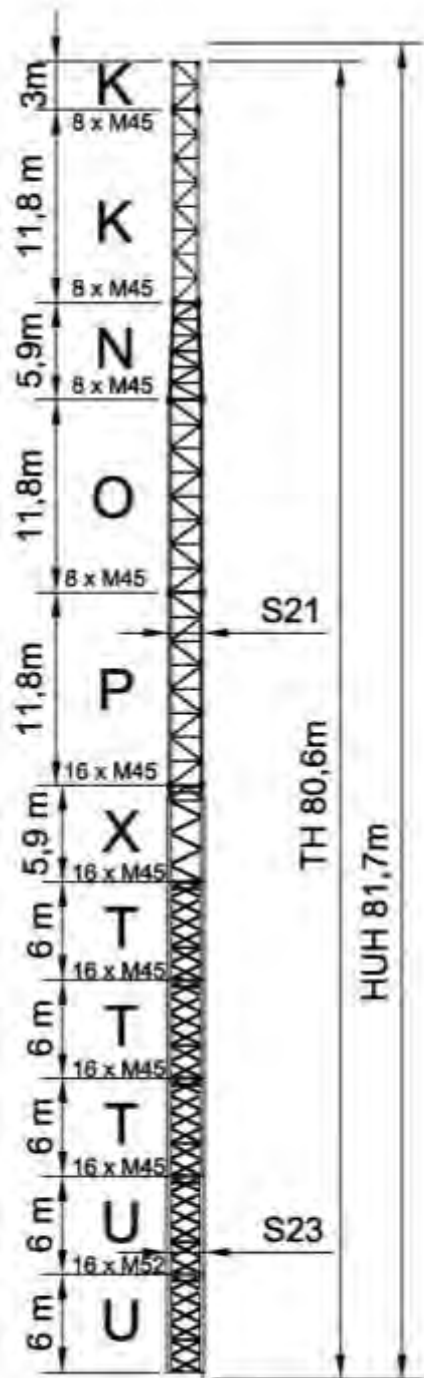
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	911.9	41.9	3485.	974	-1430
35.0	956.2	42.3	3515.	973	-1451
40.0	976.1	42.7	3940.	1115	-1603
45.0	997.6	42.9	3709.	1029	-1528
50.0	1015.6	43.2	3656.	1007	-1515
55.0	1032.8	43.5	3650.	1000	-1517
60.0	1036.5	43.7	3769.	1040	-1559
65.0	1039.1	43.9	3767.	1039	-1559

### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	757.6	157.5	5558.	1727	-2106
35.0	799.8	159.3	5737.	1778	-2178
40.0	818.8	161.4	6006.	1867	-2276
45.0	839.2	162.6	6170.	1918	-2337
50.0	856.4	164.2	6383.	1987	-2415
55.0	872.8	165.5	6554.	2042	-2478
60.0	876.3	166.5	6880.	2154	-2592
65.0	878.8	167.8	7181.	2257	-2696

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	833.4	105.7	5781.	1785	-2202
35.0	879.8	106.7	5886.	1810	-2250
40.0	900.7	107.9	5885.	1804	-2254
45.0	923.1	108.6	5907.	1806	-2268
50.0	942.0	109.5	5902.	1800	-2271
55.0	960.1	110.2	5910.	1798	-2278
60.0	963.9	110.7	5686.	1720	-2202
65.0	966.7	111.5	5522.	1663	-2146



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1098.3	4.5	2094.	447	-996
35.0	1142.6	4.5	2094.	436	-1007
40.0	1162.5	4.5	2508.	574	-1155
45.0	1183.9	4.5	2241.	477	-1069
50.0	1202.0	4.5	2159.	444	-1045
55.0	1219.2	4.5	2130.	429	-1039
60.0	1222.9	4.5	2240.	466	-1078
65.0	1225.5	4.5	2216.	457	-1070

### CRANE IN SERVICE LC 2

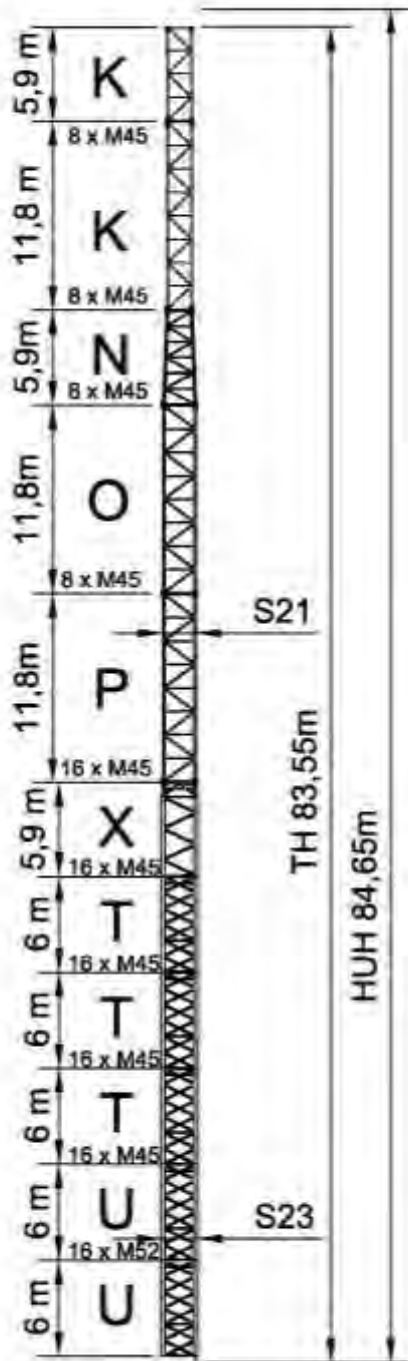
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1098.3	52.3	4383.	1237	-1786
35.0	1142.6	52.7	4433.	1243	-1814
40.0	1162.5	53.1	4894.	1397	-1978
45.0	1183.9	53.3	4660.	1311	-1903
50.0	1202.0	53.6	4615.	1291	-1892
55.0	1219.2	53.9	4618.	1287	-1897
60.0	1222.9	54.1	4748.	1332	-1943
65.0	1225.5	54.3	4750.	1332	-1944

### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	935.1	207.6	9172.	2929	-3397
35.0	977.3	209.5	9416.	3003	-3492
40.0	996.3	211.6	9747.	3113	-3611
45.0	1016.7	213.0	9955.	3179	-3687
50.0	1033.9	214.6	10218.	3265	-3782
55.0	1050.3	215.9	10433.	3335	-3861
60.0	1053.8	217.0	10796.	3460	-3987
65.0	1056.3	218.3	11138.	3577	-4106

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1028.6	135.6	7880.	2461	-2975
35.0	1075.0	136.6	8028.	2500	-3037
40.0	1095.9	137.8	8054.	2504	-3052
45.0	1118.4	138.5	8100.	2514	-3073
50.0	1137.3	139.4	8118.	2515	-3084
55.0	1155.3	140.1	8146.	2520	-3098
60.0	1159.2	140.7	7921.	2442	-3021
65.0	1161.9	141.4	7760.	2386	-2967



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1113.0	4.5	2159.	466	-1023
35.0	1157.3	4.5	2163.	456	-1035
40.0	1177.2	4.5	2592.	599	-1188
45.0	1198.6	4.5	2320.	500	-1099
50.0	1216.7	4.5	2237.	467	-1075
55.0	1233.9	4.5	2209.	453	-1070
60.0	1237.6	4.5	2322.	491	-1110
65.0	1240.2	4.5	2298.	482	-1102

### CRANE IN SERVICE LC 2

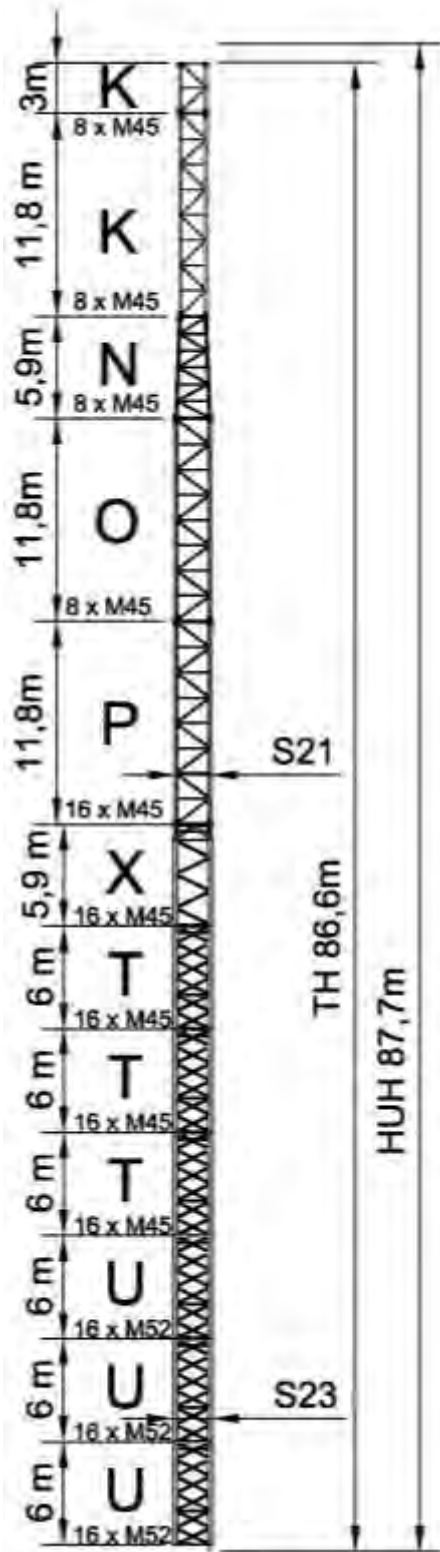
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1113.0	53.4	4599.	1308	-1864
35.0	1157.3	53.8	4658.	1317	-1896
40.0	1177.2	54.2	5138.	1477	-2066
45.0	1198.6	54.4	4901.	1390	-1990
50.0	1216.7	54.7	4858.	1371	-1980
55.0	1233.9	55.0	4865.	1369	-1986
60.0	1237.6	55.2	5001.	1415	-2034
65.0	1240.2	55.4	5004.	1415	-2036

### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	949.1	213.8	9906.	3179	-3654
35.0	991.3	215.7	10171.	3260	-3755
40.0	1010.3	217.9	10520.	3376	-3881
45.0	1030.7	219.2	10742.	3447	-3962
50.0	1047.9	220.9	11021.	3539	-4063
55.0	1064.3	222.2	11250.	3614	-4146
60.0	1067.8	223.3	11627.	3743	-4277
65.0	1070.3	224.7	11982.	3865	-4400

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1044.0	138.8	8323.	2609	-3131
35.0	1090.4	139.8	8487.	2654	-3200
40.0	1111.3	141.0	8522.	2661	-3217
45.0	1133.8	141.7	8576.	2674	-3241
50.0	1152.7	142.6	8601.	2678	-3254
55.0	1170.7	143.3	8636.	2686	-3271
60.0	1174.6	143.9	8407.	2606	-3193
65.0	1177.3	144.6	8244.	2549	-3137



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1127.7	4.5	2231.	487	-1051
35.0	1172.0	4.5	2240.	479	-1065
40.0	1191.9	4.5	2686.	628	-1224
45.0	1213.3	4.5	2407.	526	-1133
50.0	1231.4	4.5	2324.	493	-1109
55.0	1248.6	4.5	2296.	479	-1104
60.0	1252.3	4.5	2414.	519	-1145
65.0	1254.9	4.5	2390.	510	-1137

### CRANE IN SERVICE LC 2

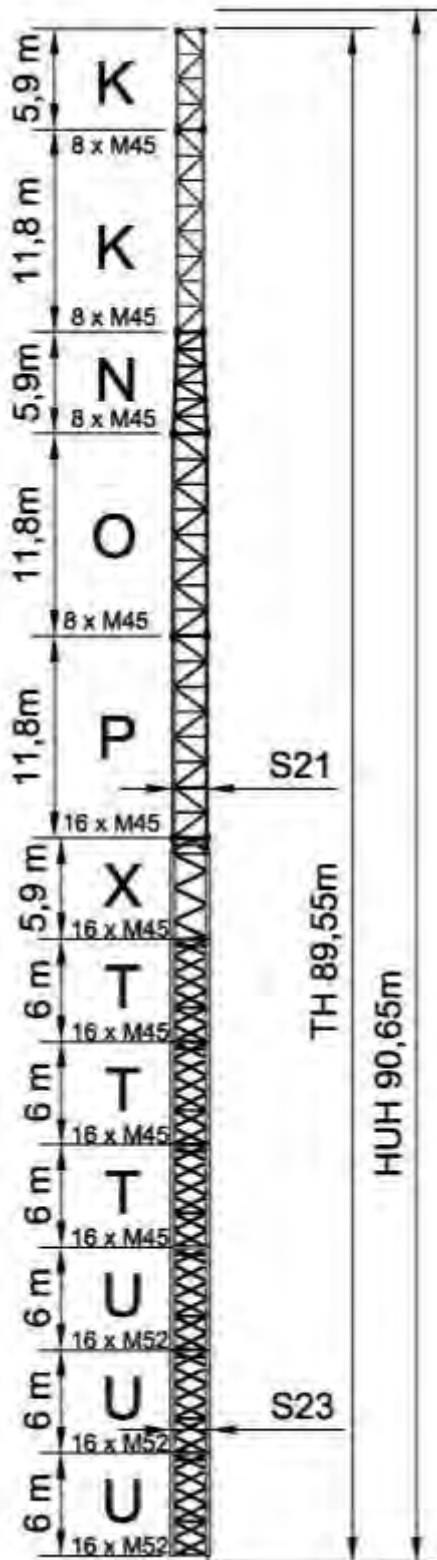
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1127.7	54.6	4832.	1384	-1948
35.0	1172.0	54.9	4902.	1397	-1983
40.0	1191.9	55.3	5401.	1565	-2161
45.0	1213.3	55.6	5162.	1477	-2083
50.0	1231.4	55.9	5122.	1458	-2074
55.0	1248.6	56.1	5133.	1458	-2082
60.0	1252.3	56.3	5275.	1506	-2132
65.0	1254.9	56.6	5279.	1507	-2134

### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	963.1	220.1	10682.	3443	-3925
35.0	1005.3	222.0	10970.	3532	-4035
40.0	1024.3	224.2	11341.	3655	-4167
45.0	1044.7	225.6	11578.	3732	-4254
50.0	1061.9	227.2	11875.	3830	-4361
55.0	1078.3	228.6	12119.	3910	-4449
60.0	1081.8	229.7	12512.	4045	-4586
65.0	1084.3	231.0	12882.	4172	-4714

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1059.4	142.1	8792.	2767	-3297
35.0	1105.8	143.1	8976.	2819	-3372
40.0	1126.7	144.2	9020.	2829	-3393
45.0	1149.2	144.9	9084.	2845	-3420
50.0	1168.1	145.8	9117.	2852	-3436
55.0	1186.1	146.5	9160.	2863	-3456
60.0	1190.0	147.1	8926.	2781	-3376
65.0	1192.7	147.8	8760.	2723	-3319



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1142.4	4.5	2311.	511	-1082
35.0	1186.7	4.5	2326.	505	-1098
40.0	1206.6	4.5	2789.	660	-1263
45.0	1228.0	4.5	2504.	556	-1170
50.0	1246.1	4.5	2420.	523	-1146
55.0	1263.3	4.5	2394.	510	-1141
60.0	1267.0	4.5	2517.	551	-1185
65.0	1269.6	4.5	2492.	542	-1176

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1142.4	55.7	5082.	1467	-2038
35.0	1186.7	56.0	5165.	1484	-2078
40.0	1206.6	56.4	5687.	1660	-2263
45.0	1228.0	56.7	5445.	1571	-2185
50.0	1246.1	57.0	5409.	1554	-2177
55.0	1263.3	57.2	5425.	1555	-2186
60.0	1267.0	57.4	5574.	1605	-2239
65.0	1269.6	57.7	5579.	1607	-2241

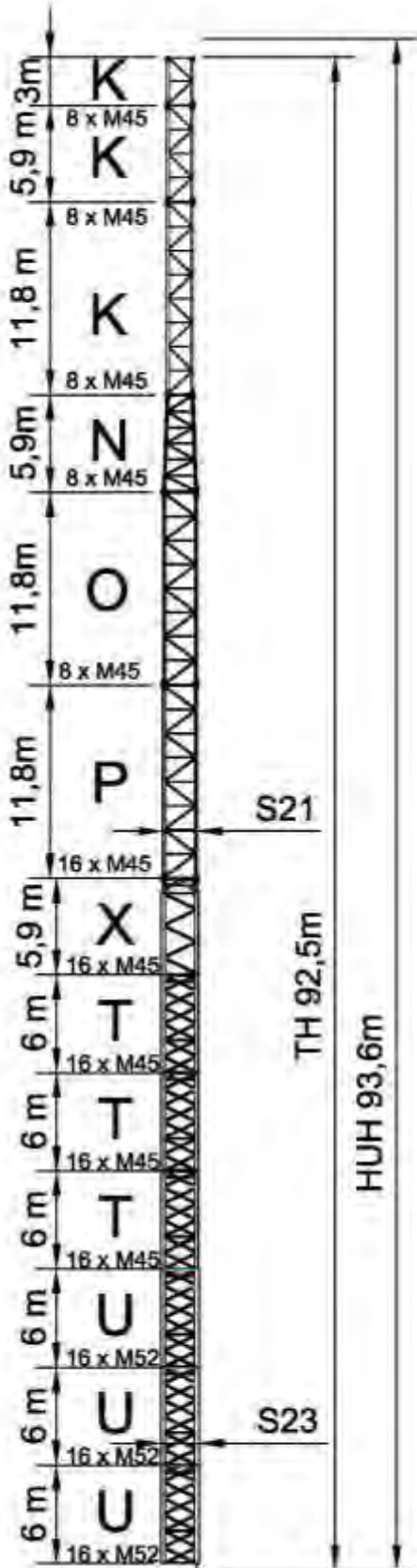
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	977.1	226.4	11504.	3723	-4212
35.0	1019.3	228.3	11819.	3821	-4331
40.0	1038.3	230.5	12213.	3952	-4472
45.0	1058.7	231.9	12468.	4036	-4565
50.0	1075.9	233.6	12785.	4140	-4678
55.0	1092.3	234.9	13047.	4227	-4773
60.0	1095.8	236.0	13456.	4367	-4915
65.0	1098.3	237.4	13842.	4499	-5049

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1074.8	145.3	9291.	2936	-3473
35.0	1121.2	146.3	9497.	2995	-3556
40.0	1142.1	147.5	9552.	3009	-3580
45.0	1164.6	148.2	9627.	3029	-3611
50.0	1183.5	149.0	9670.	3039	-3631
55.0	1201.5	149.8	9722.	3053	-3653
60.0	1205.4	150.3	9483.	2969	-3572
65.0	1208.1	151.1	9314.	2910	-3514


 Max Tower Configuration  
 for **J50** or shorter length.



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1157.1	4.5	2399.	538	-1116
35.0	1201.4	4.5	2421.	534	-1135
40.0	1221.3	4.5	2905.	696	-1307
45.0	1242.7	4.5	2612.	590	-1211
<b>50.0</b>	<b>1260.8</b>	<b>4.5</b>	<b>2528.</b>	<b>556</b>	<b>-1187</b>

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1157.1	56.8	5353.	1556	-2135
35.0	1201.4	57.2	5450.	1579	-2180
40.0	1221.3	57.6	5999.	1763	-2374
45.0	1242.7	57.8	5754.	1674	-2295
<b>50.0</b>	<b>1260.8</b>	<b>58.1</b>	<b>5722.</b>	<b>1658</b>	<b>-2288</b>

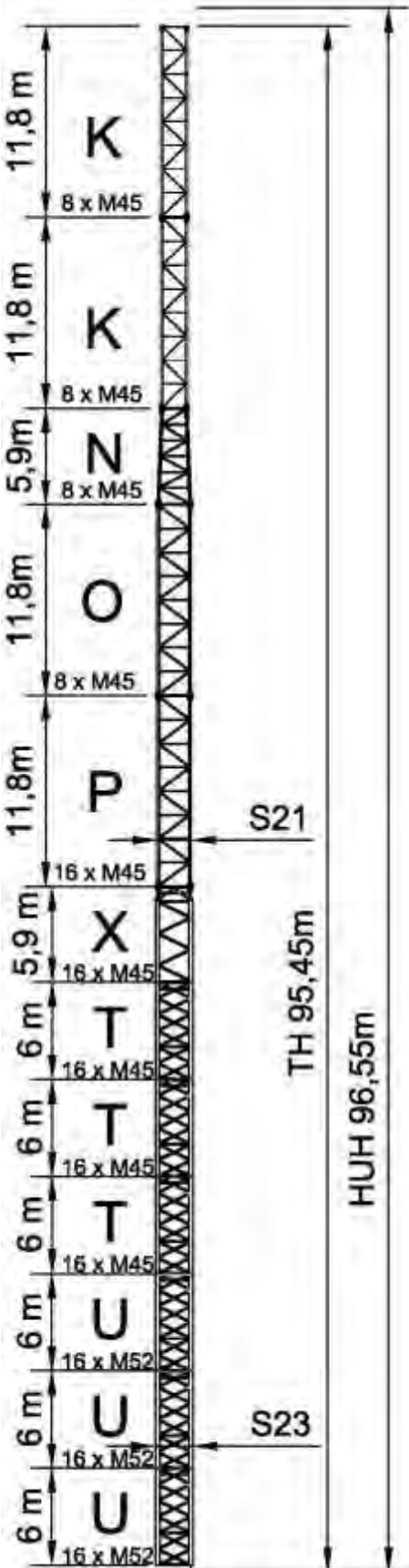
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	991.1	232.8	12376.	4021	-4516
35.0	1033.3	234.7	12722.	4129	-4646
40.0	1052.3	236.9	13141.	4269	-4795
45.0	1072.7	238.3	13418.	4360	-4896
<b>50.0</b>	<b>1089.9</b>	<b>240.0</b>	<b>13757.</b>	<b>4472</b>	<b>-5017</b>

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1090.2	148.5	9823.	3115	-3660
35.0	1136.6	149.5	10055.	3184	-3752
40.0	1157.5	150.7	10122.	3202	-3780
45.0	1180.0	151.4	10210.	3226	-3816
<b>50.0</b>	<b>1198.9</b>	<b>152.3</b>	<b>10264.</b>	<b>3240</b>	<b>-3839</b>


 Max Tower Configuration  
 for **J35** or shorter length.



### CRANE IN SERVICE LC 1

BOOM	V	Q	MOM	P1	P2
[m]	[kN]	[kN]	[kNm]	[kN]	[kN]
30.0	1171.8	4.5	2497.	568	-1154
<b>35.0</b>	<b>1216.1</b>	<b>4.5</b>	<b>2527.</b>	<b>567</b>	<b>-1175</b>

### CRANE IN SERVICE LC 2

BOOM	V	Q	MOM	P1	P2
[m]	[kN]	[kN]	[kNm]	[kN]	[kN]
30.0	1171.8	57.9	5646.	1654	-2240
<b>35.0</b>	<b>1216.1</b>	<b>58.3</b>	<b>5762.</b>	<b>1683</b>	<b>-2291</b>

### REAR-STORM LC 3

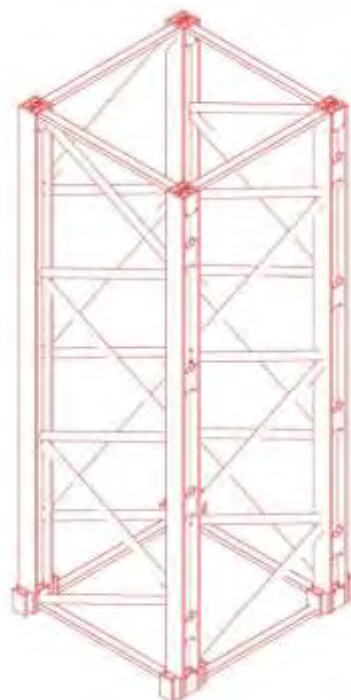
BOOM	V	Q	MOM	P1	P2
[m]	[kN]	[kN]	[kNm]	[kN]	[kN]
30.0	1005.1	239.2	13304.	4337	-4840
<b>35.0</b>	<b>1047.3</b>	<b>241.1</b>	<b>13685.</b>	<b>4458</b>	<b>-4982</b>

### FRONT-STORM LC 7

BOOM	V	Q	MOM	P1	P2
[m]	[kN]	[kN]	[kNm]	[kN]	[kN]
30.0	1105.6	151.8	10391.	3307	-3860
<b>35.0</b>	<b>1152.0</b>	<b>152.8</b>	<b>10654.</b>	<b>3386</b>	<b>-3962</b>



**Foundation loads**  
**TLS 65B10T**  
**WZ C25**  
**S23- Type Z section**

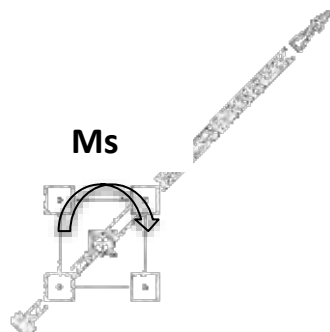
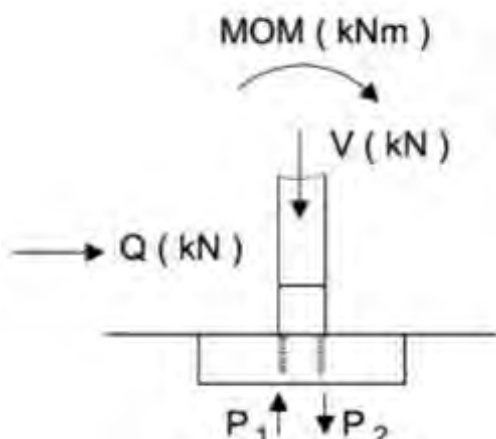


There are the following load case:

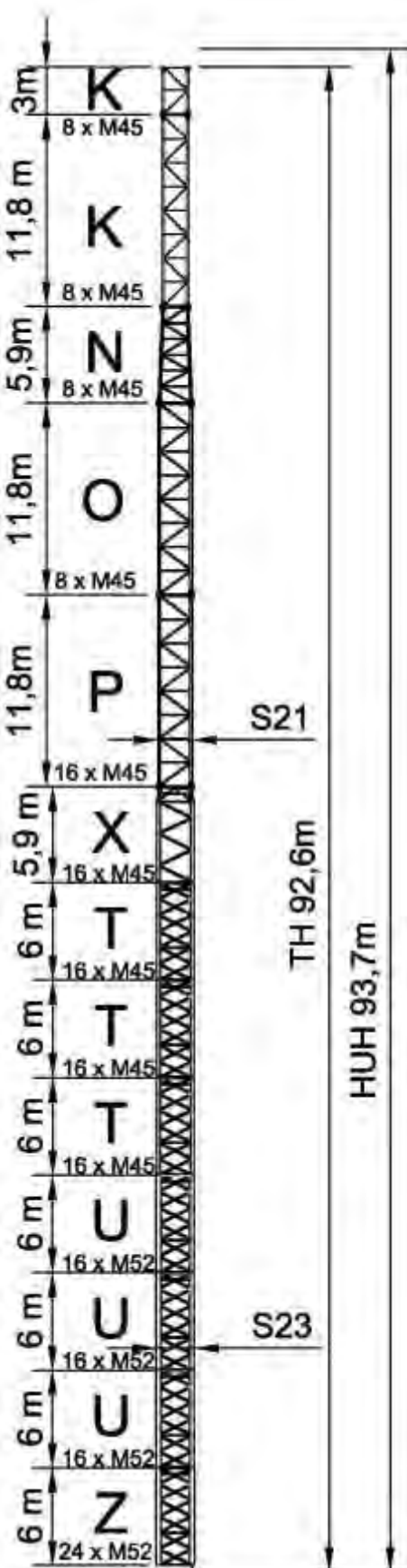
- LC1: In service, with no load and wind from the queue.
- LC2: In service with rear wind 72 Km/h
- LC3: Out of service zone C25, wind from the queue
- LC7: Out of service, frontal wind

Where:

- V: Axial load (kN)
- Q: Horizontal load (kN)
- M: Moment (kN·m)
- P<sub>1</sub>: Max tensile effort (kN).
- P<sub>2</sub>: Max compressive effort (kN).
- Ms: Turning moment in service= 396 KN/mt



**Jib position 45 °**



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1194.9	4.5	2298.	493	-1091
35.0	1239.2	4.5	2310.	487	-1106
40.0	1259.1	4.5	2766.	639	-1268
45.0	1280.5	4.5	2483.	536	-1176
50.0	1298.6	4.5	2399.	502	-1152
55.0	1315.8	4.5	2373.	489	-1147
60.0	1319.5	4.5	2493.	530	-1189
65.0	1322.1	4.5	2468.	520	-1181

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1194.9	58.5	5260.	1515	-2112
35.0	1239.2	58.8	5340.	1532	-2151
40.0	1259.1	59.2	5854.	1704	-2334
45.0	1280.5	59.5	5615.	1616	-2257
50.0	1298.6	59.8	5579.	1599	-2249
55.0	1315.8	60.0	5595.	1600	-2258
60.0	1319.5	60.2	5742.	1650	-2310
65.0	1322.1	60.5	5748.	1652	-2313

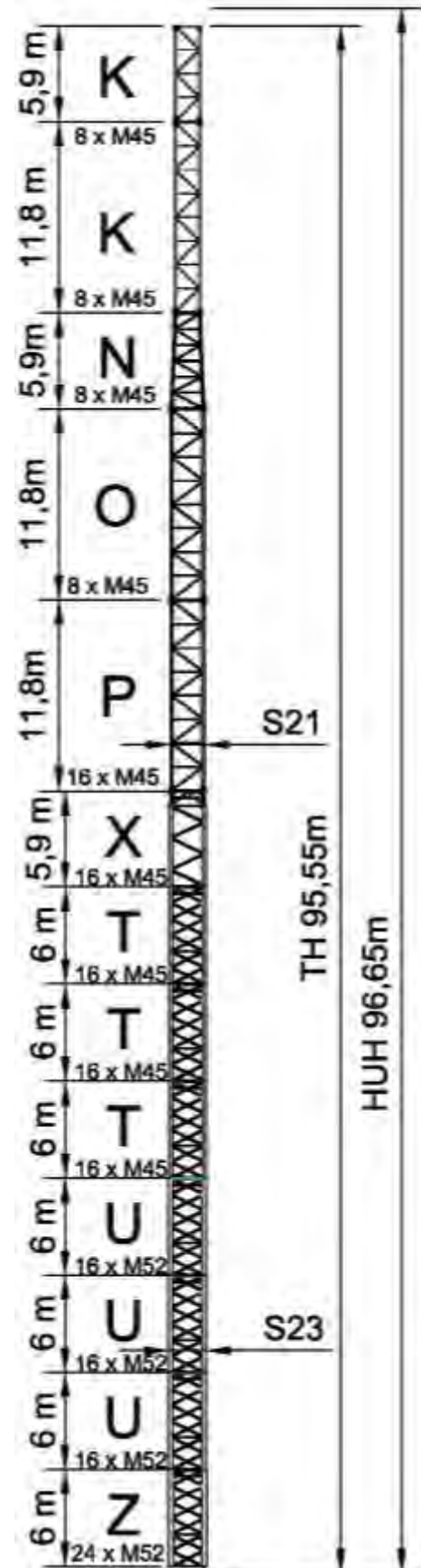
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1027.1	240.1	12525.	4063	-4576
35.0	1069.3	242.0	12846.	4163	-4698
40.0	1088.3	244.2	13246.	4296	-4841
45.0	1108.7	245.6	13506.	4381	-4935
50.0	1125.9	247.3	13826.	4487	-5050
55.0	1142.3	248.6	14092.	4575	-5146
60.0	1145.8	249.7	14501.	4715	-5288
65.0	1148.3	251.1	14889.	4848	-5422

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1129.8	153.3	9821.	3104	-3669
35.0	1176.2	154.3	10025.	3164	-3752
40.0	1197.1	155.5	10083.	3178	-3777
45.0	1219.6	156.2	10158.	3198	-3808
50.0	1238.5	157.0	10202.	3209	-3828
55.0	1256.5	157.8	10255.	3223	-3851
60.0	1260.4	158.3	10021.	3141	-3771
65.0	1263.1	159.1	9857.	3084	-3715

Max Tower Configuration  
for **J50** or shorter length.



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1209.6	4.5	2381.	518	-1123
35.0	1253.9	4.5	2400.	514	-1141
40.0	1273.8	4.5	2875.	673	-1309
45.0	1295.2	4.5	2585.	567	-1215
<b>50.0</b>	<b>1313.3</b>	<b>4.5</b>	<b>2501.</b>	<b>534</b>	<b>-1190</b>

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1209.6	59.6	5527.	1603	-2208
35.0	1253.9	59.9	5620.	1625	-2252
40.0	1273.8	60.3	6159.	1806	-2443
45.0	1295.2	60.6	5918.	1717	-2364
<b>50.0</b>	<b>1313.3</b>	<b>60.9</b>	<b>5886.</b>	<b>1701</b>	<b>-2358</b>

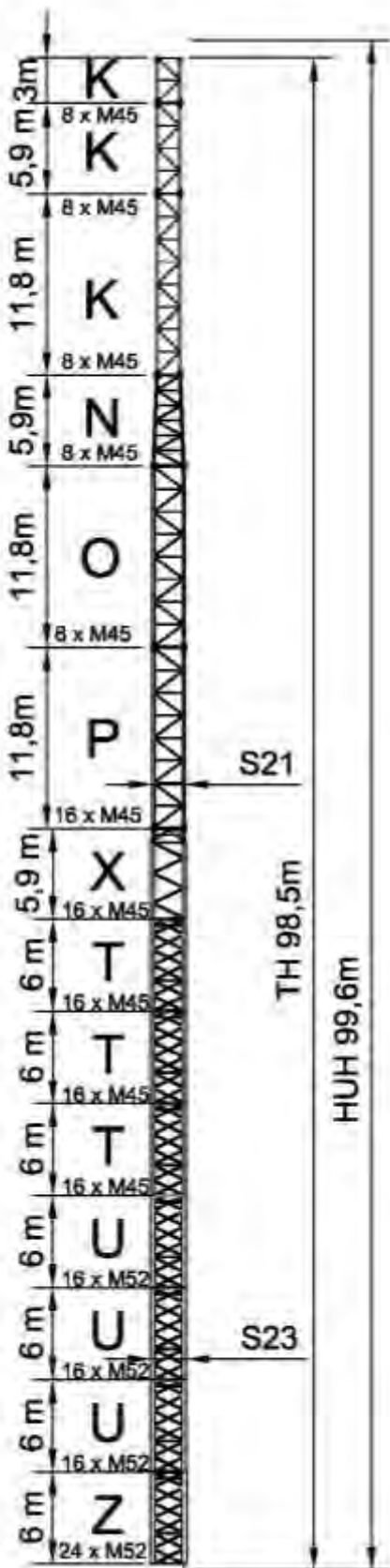
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1041.1	246.5	13417.	4367	-4888
35.0	1083.3	248.4	13768.	4478	-5019
40.0	1102.3	250.6	14193.	4620	-5171
45.0	1122.7	252.0	14473.	4711	-5272
<b>50.0</b>	<b>1139.9</b>	<b>253.7</b>	<b>14815.</b>	<b>4825</b>	<b>-5395</b>

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1145.2	156.5	10355.	3285	-3858
35.0	1191.6	157.5	10584.	3352	-3948
40.0	1212.5	158.7	10653.	3371	-3977
45.0	1235.0	159.4	10740.	3395	-4013
<b>50.0</b>	<b>1253.9</b>	<b>160.3</b>	<b>10795.</b>	<b>3409</b>	<b>-4036</b>


 Max Tower Configuration  
 for **J35** or shorter length.



CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1224.3	4.5	2473.	547	-1159
<b>35.0</b>	<b>1268.6</b>	<b>4.5</b>	<b>2500.</b>	<b>545</b>	<b>-1179</b>

CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1224.3	60.7	5815.	1699	-2311
<b>35.0</b>	<b>1268.6</b>	<b>61.1</b>	<b>5925.</b>	<b>1726</b>	<b>-2360</b>

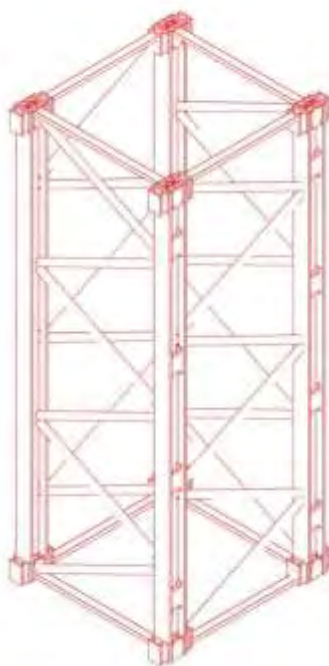
REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1055.1	252.9	14362.	4690	-5217
<b>35.0</b>	<b>1097.3</b>	<b>254.8</b>	<b>14748.</b>	<b>4812</b>	<b>-5361</b>

FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1160.6	159.8	10924.	3477	-4058
<b>35.0</b>	<b>1207.0</b>	<b>160.8</b>	<b>11181.</b>	<b>3554</b>	<b>-4158</b>

**Foundation loads**  
**TLS 65B10T**  
**WZ C25**  
**S23- Type ZR section**

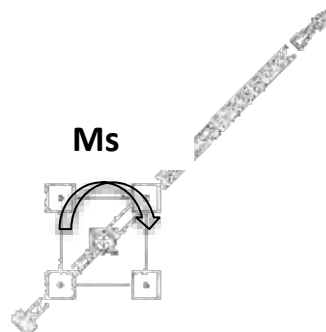
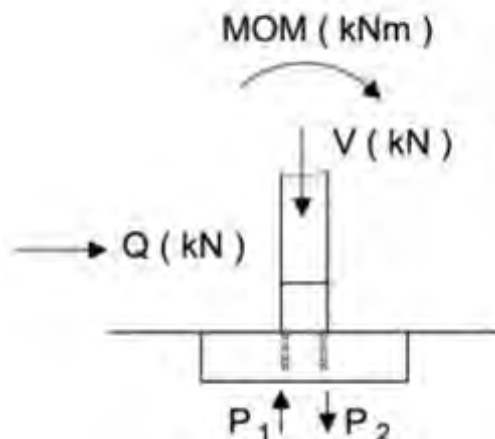


There are the following load case:

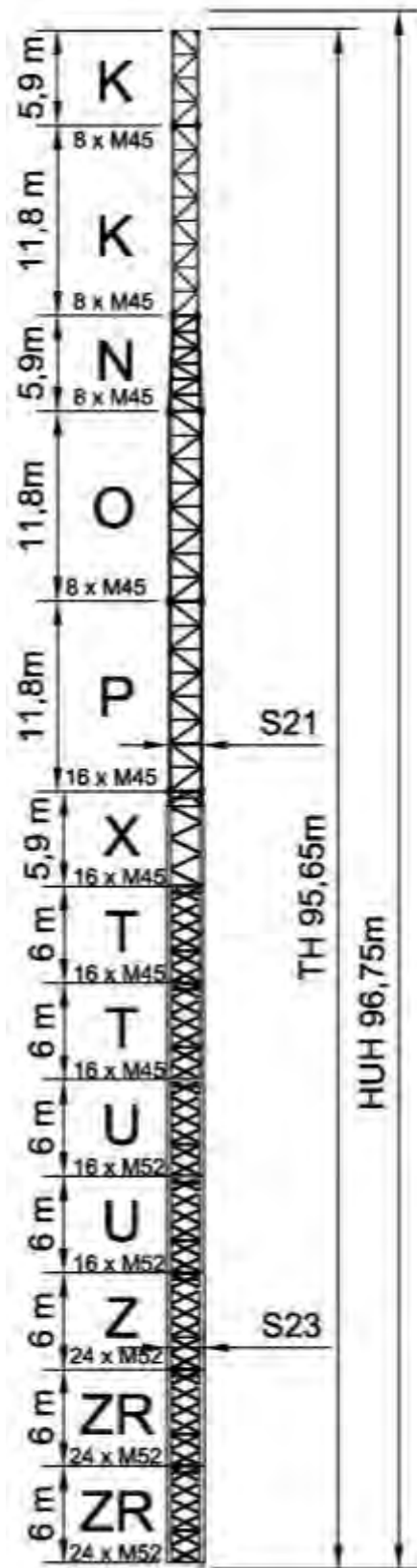
- LC1: In service, with no load and wind from the queue.
- LC2: In service with rear wind 72 Km/h
- LC3: Out of service zone C25, wind from the queue
- LC7: Out of service, frontal wind

Where:

- V: Axial load (kN)
- Q: Horizontal load (kN)
- M: Moment (kN·m)
- P<sub>1</sub>: Max tensile effort (kN).
- P<sub>2</sub>: Max compressive effort (kN).
- Ms: Turning moment in service= 396 KN/mt



**Jib position 45 °**



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1260.0	4.5	2216.	449	-1079
35.0	1304.3	4.5	2219.	439	-1091
40.0	1324.2	4.5	2646.	581	-1243
45.0	1345.6	4.5	2374.	482	-1155
50.0	1363.7	4.5	2291.	449	-1131
55.0	1380.9	4.5	2262.	435	-1125
60.0	1384.6	4.5	2375.	473	-1165
65.0	1387.2	4.5	2351.	464	-1157

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1260.0	62.1	5388.	1543	-2173
35.0	1304.3	62.4	5454.	1555	-2207
40.0	1324.2	62.8	5939.	1717	-2379
45.0	1345.6	63.1	5707.	1632	-2305
50.0	1363.7	63.4	5670.	1614	-2296
55.0	1380.9	63.6	5681.	1614	-2304
60.0	1384.6	63.8	5820.	1661	-2353
65.0	1387.2	64.1	5826.	1662	-2356

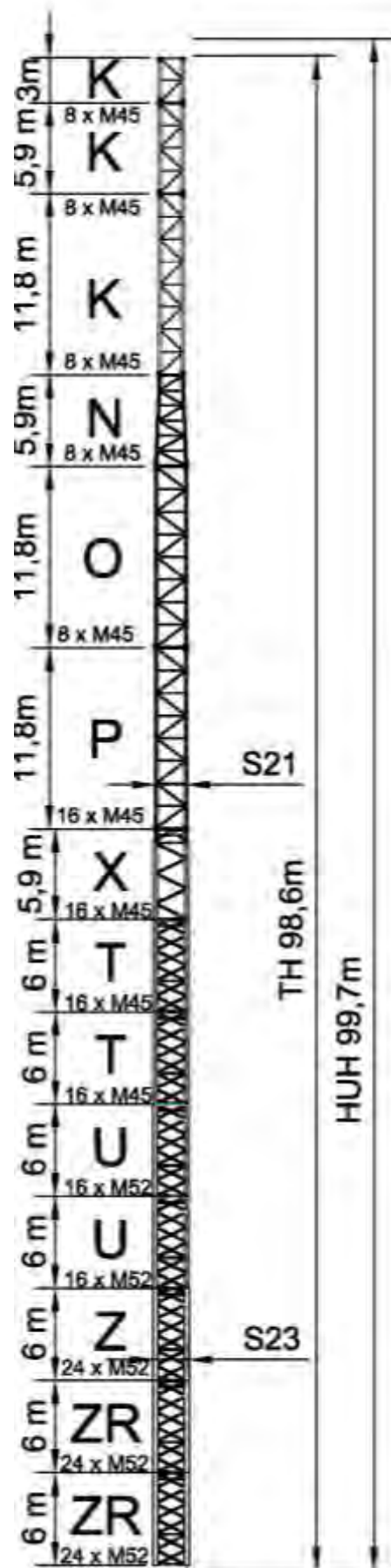
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1089.1	257.5	13701.	4453	-4998
35.0	1131.3	259.5	14016.	4551	-5117
40.0	1150.3	261.7	14411.	4683	-5258
45.0	1170.7	263.1	14664.	4765	-5350
50.0	1187.9	264.8	14978.	4869	-5463
55.0	1204.3	266.2	15237.	4954	-5556
60.0	1207.8	267.3	15634.	5090	-5694
65.0	1210.3	268.7	16013.	5220	-5825

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1198.0	163.7	10382.	3281	-3880
35.0	1244.4	164.7	10569.	3334	-3956
40.0	1265.3	165.9	10623.	3347	-3980
45.0	1287.8	166.6	10691.	3365	-4009
50.0	1306.7	167.5	10732.	3375	-4028
55.0	1324.7	168.2	10781.	3387	-4049
60.0	1328.6	168.8	10561.	3310	-3974
65.0	1331.3	169.5	10409.	3257	-3923





### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1274.7	4.5	2284.	469	-1106
35.0	1319.0	4.5	2291.	460	-1120
40.0	1338.9	4.5	2733.	607	-1277
45.0	1360.3	4.5	2455.	506	-1186
50.0	1378.4	4.5	2372.	473	-1162
55.0	1395.6	4.5	2344.	459	-1157
60.0	1399.3	4.5	2461.	498	-1198
65.0	1401.9	4.5	2436.	489	-1190

### CRANE IN SERVICE LC 2

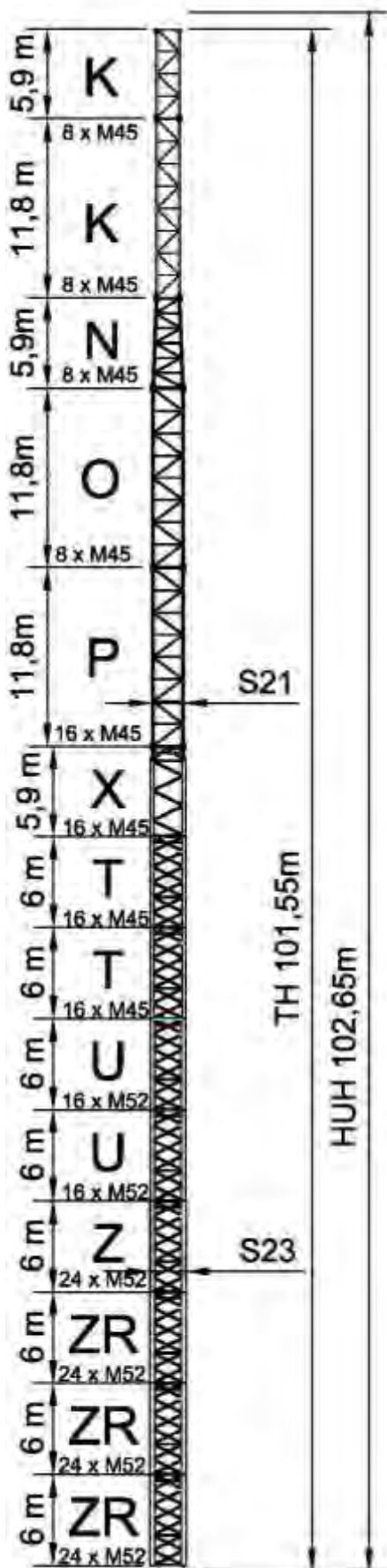
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1274.7	63.2	5632.	1624	-2261
35.0	1319.0	63.6	5709.	1639	-2298
40.0	1338.9	64.0	6212.	1808	-2477
45.0	1360.3	64.2	5979.	1722	-2402
50.0	1378.4	64.5	5944.	1705	-2394
55.0	1395.6	64.8	5959.	1706	-2404
60.0	1399.3	65.0	6104.	1755	-2455
65.0	1401.9	65.2	6112.	1757	-2458

### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1103.1	264.0	14592.	4757	-5308
35.0	1145.3	265.9	14932.	4864	-5436
40.0	1164.3	268.2	15348.	5002	-5585
45.0	1184.7	269.6	15618.	5091	-5683
50.0	1201.9	271.2	15951.	5201	-5802
55.0	1218.3	272.6	16226.	5292	-5901
60.0	1221.8	273.8	16637.	5433	-6044
65.0	1224.3	275.2	17030.	5568	-6180

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1213.4	166.9	10896.	3454	-4061
35.0	1259.8	167.9	11102.	3514	-4144
40.0	1280.7	169.1	11166.	3531	-4171
45.0	1303.2	169.8	11244.	3552	-4204
50.0	1322.1	170.7	11293.	3564	-4225
55.0	1340.1	171.4	11350.	3579	-4249
60.0	1344.0	172.0	11126.	3501	-4173
65.0	1346.7	172.7	10971.	3447	-4121



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1289.4	4.5	2358.	491	-1135
35.0	1333.7	4.5	2371.	484	-1151
40.0	1353.6	4.5	2829.	637	-1314
45.0	1375.0	4.5	2545.	533	-1221
50.0	1393.1	4.5	2461.	500	-1197
55.0	1410.3	4.5	2434.	486	-1192
60.0	1414.0	4.5	2556.	528	-1235
65.0	1416.6	4.5	2530.	518	-1226

### CRANE IN SERVICE LC 2

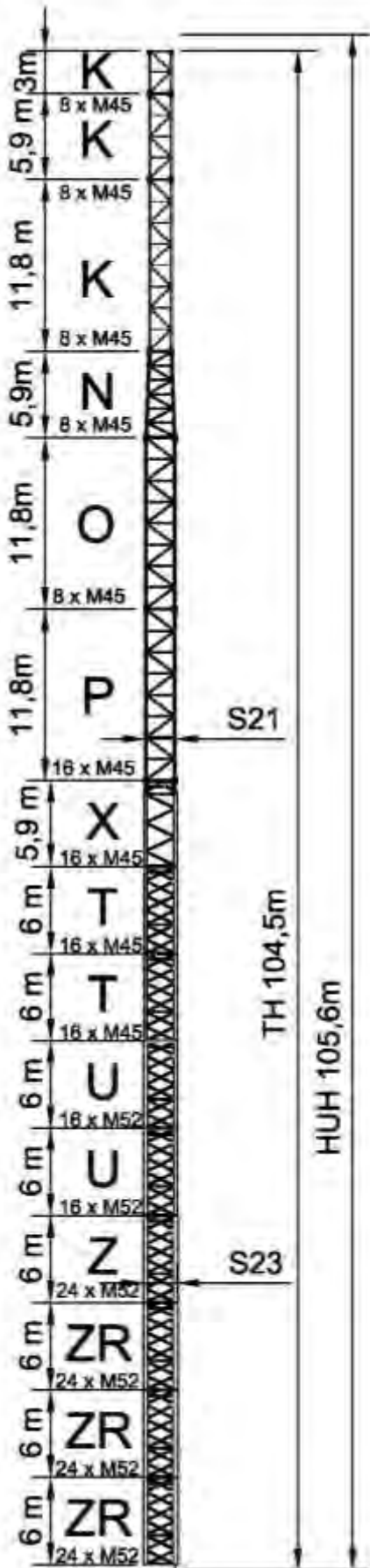
BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1289.4	64.3	5894.	1710	-2355
35.0	1333.7	64.7	5982.	1730	-2396
40.0	1353.6	65.1	6507.	1905	-2582
45.0	1375.0	65.3	6271.	1819	-2506
50.0	1393.1	65.6	6240.	1804	-2500
55.0	1410.3	65.9	6260.	1806	-2511
60.0	1414.0	66.1	6410.	1857	-2564
65.0	1416.6	66.3	6420.	1860	-2568

### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1117.1	270.4	15530.	5077	-5635
35.0	1159.3	272.4	15898.	5194	-5773
40.0	1178.3	274.6	16338.	5340	-5929
45.0	1198.7	276.1	16627.	5435	-6034
50.0	1215.9	277.7	16979.	5552	-6160
55.0	1232.3	279.2	17273.	5649	-6266
60.0	1235.8	280.3	17700.	5796	-6414
65.0	1238.3	281.7	18109.	5936	-6555

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1228.8	170.2	11439.	3638	-4252
35.0	1275.2	171.2	11667.	3705	-4342
40.0	1296.1	172.3	11742.	3725	-4374
45.0	1318.6	173.0	11830.	3750	-4410
50.0	1337.5	173.9	11889.	3766	-4435
55.0	1355.5	174.6	11955.	3784	-4462
60.0	1359.4	175.2	11726.	3704	-4384
65.0	1362.1	175.9	11570.	3650	-4331



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1304.1	4.5	2440.	515	-1167
35.0	1348.4	4.5	2458.	510	-1185
40.0	1368.3	4.5	2935.	670	-1354
45.0	1389.7	4.5	2644.	564	-1259
50.0	1407.8	4.5	2560.	531	-1234
55.0	1425.0	4.5	2535.	518	-1230
60.0	1428.7	4.5	2662.	560	-1275
65.0	1431.3	4.5	2636.	551	-1266

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1304.1	65.4	6174.	1803	-2455
35.0	1348.4	65.8	6277.	1827	-2502
40.0	1368.3	66.2	6825.	2011	-2696
45.0	1389.7	66.4	6587.	1924	-2619
50.0	1407.8	66.7	6560.	1910	-2614
55.0	1425.0	67.0	6585.	1915	-2627
60.0	1428.7	67.2	6743.	1968	-2683
65.0	1431.3	67.4	6754.	1971	-2687

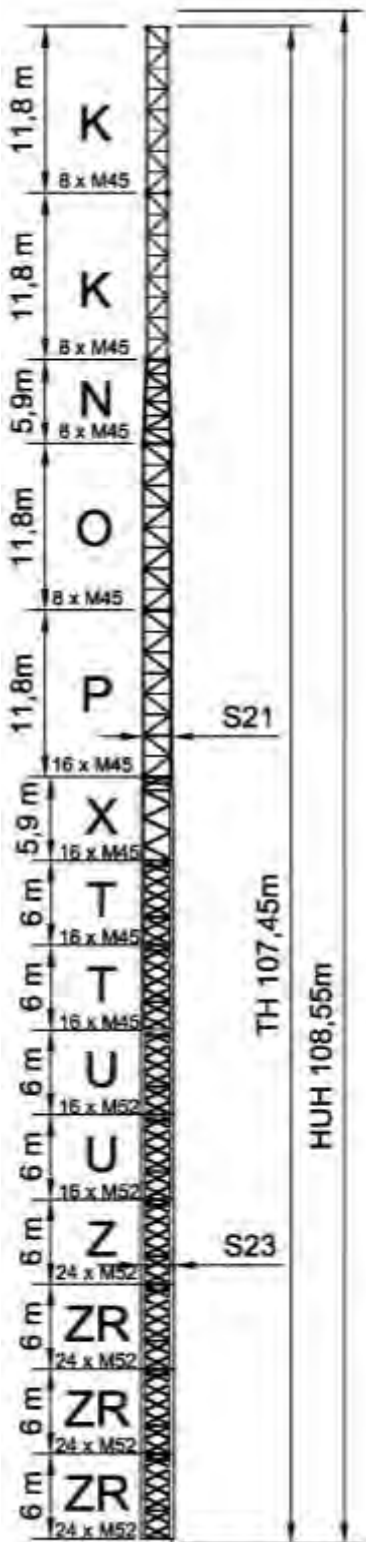
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1131.1	276.9	16519.	5414	-5980
35.0	1173.3	278.9	16919.	5542	-6129
40.0	1192.3	281.2	17385.	5698	-6294
45.0	1212.7	282.6	17695.	5800	-6406
50.0	1229.9	284.3	18070.	5925	-6540
55.0	1246.3	285.7	18385.	6029	-6652
60.0	1249.8	286.8	18829.	6182	-6807
65.0	1252.3	288.3	19255.	6328	-6954

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1244.2	173.4	12013.	3832	-4454
35.0	1290.6	174.4	12266.	3908	-4553
40.0	1311.5	175.6	12353.	3933	-4588
45.0	1334.0	176.3	12455.	3962	-4629
50.0	1352.9	177.1	12524.	3981	-4658
55.0	1370.9	177.9	12601.	4003	-4689
60.0	1374.8	178.4	12367.	3922	-4609
65.0	1377.5	179.2	12208.	3866	-4555

Max Tower Configuration  
for **J55** or shorter length.



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1318.8	4.5	2530.	542	-1202
35.0	1363.1	4.5	2556.	540	-1222
40.0	1383.0	4.5	3054.	707	-1399
45.0	1404.4	4.5	2756.	599	-1301
50.0	1422.5	4.5	2671.	565	-1276
<b>55.0</b>	<b>1439.7</b>	<b>4.5</b>	<b>2648.</b>	<b>553</b>	<b>-1273</b>

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1318.8	66.6	6476.	1903	-2563
35.0	1363.1	66.9	6595.	1933	-2615
40.0	1383.0	67.3	7170.	2127	-2818
45.0	1404.4	67.6	6930.	2039	-2741
50.0	1422.5	67.9	6908.	2027	-2738
<b>55.0</b>	<b>1439.7</b>	<b>68.1</b>	<b>6940.</b>	<b>2033</b>	<b>-2753</b>

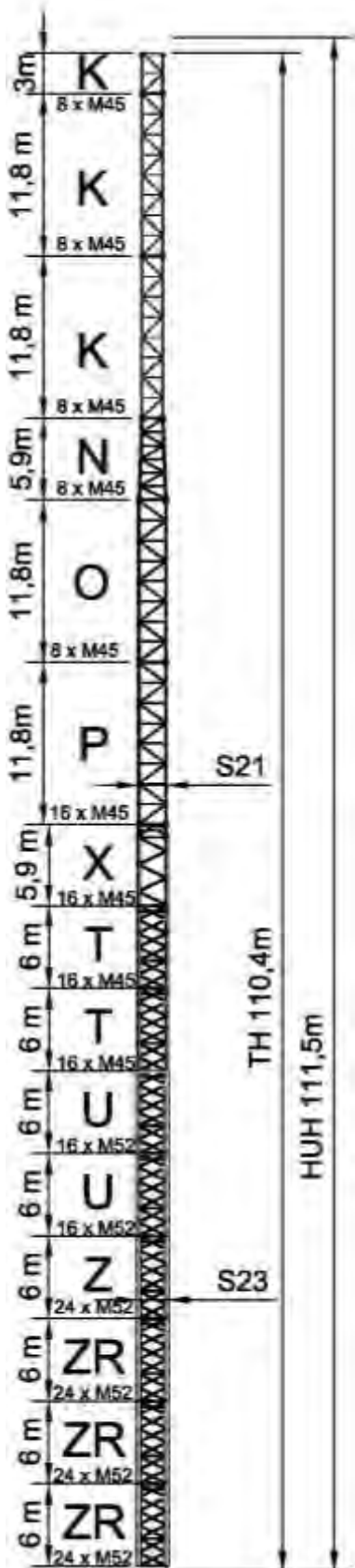
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1145.1	283.5	17562.	5771	-6344
35.0	1187.3	285.4	18000.	5911	-6505
40.0	1206.3	287.7	18495.	6077	-6680
45.0	1226.7	289.2	18829.	6187	-6801
50.0	1243.9	290.9	19230.	6321	-6943
<b>55.0</b>	<b>1260.3</b>	<b>292.3</b>	<b>19567.</b>	<b>6434</b>	<b>-7064</b>

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1259.6	176.6	12623.	4039	-4668
35.0	1306.0	177.6	12905.	4124	-4777
40.0	1326.9	178.8	13006.	4154	-4817
45.0	1349.4	179.5	13122.	4188	-4863
50.0	1368.3	180.4	13204.	4212	-4896
<b>55.0</b>	<b>1386.3</b>	<b>181.1</b>	<b>13293.</b>	<b>4238</b>	<b>-4931</b>

Max Tower Configuration  
for **J45** or shorter length.



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1333.5	4.5	2630.	573	-1240
35.0	1377.8	4.5	2665.	574	-1263
40.0	1397.7	4.5	3188.	750	-1448
<b>45.0</b>	<b>1419.1</b>	<b>4.5</b>	<b>2881.</b>	<b>638</b>	<b>-1348</b>

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1333.5	67.7	6801.	2012	-2679
35.0	1377.8	68.0	6940.	2049	-2738
40.0	1397.7	68.4	7546.	2253	-2952
<b>45.0</b>	<b>1419.1</b>	<b>68.7</b>	<b>7304.</b>	<b>2164</b>	<b>-2874</b>

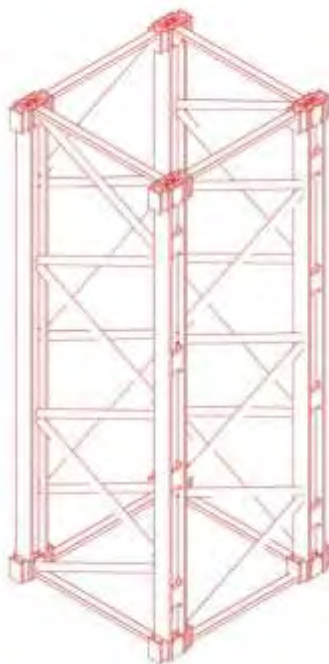
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1159.1	290.0	18667.	6148	-6728
35.0	1201.3	292.0	19147.	6303	-6904
40.0	1220.3	294.3	19674.	6481	-7091
<b>45.0</b>	<b>1240.7</b>	<b>295.8</b>	<b>20036.</b>	<b>6600</b>	<b>-7221</b>

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1275.0	179.9	13271.	4258	-4896
35.0	1321.4	180.9	13587.	4356	-5016
40.0	1342.3	182.0	13704.	4391	-5062
<b>45.0</b>	<b>1364.8</b>	<b>182.7</b>	<b>13837.</b>	<b>4431</b>	<b>-5114</b>

**Foundation loads**  
**TLS 65B10T**  
**WZ C25**  
**S23- Type ZRR section**

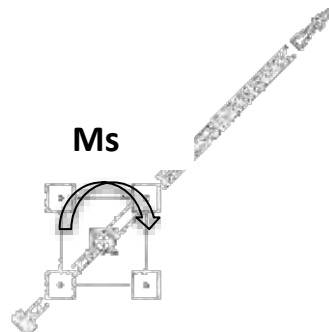
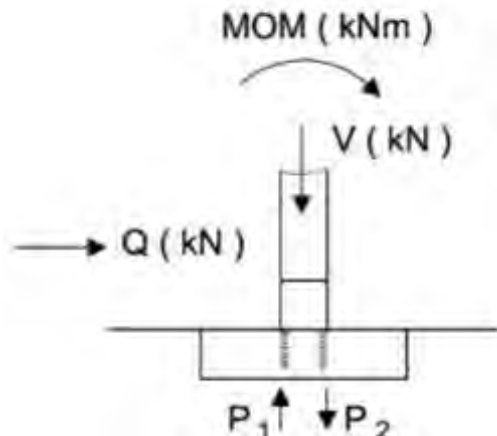


There are the following load case:

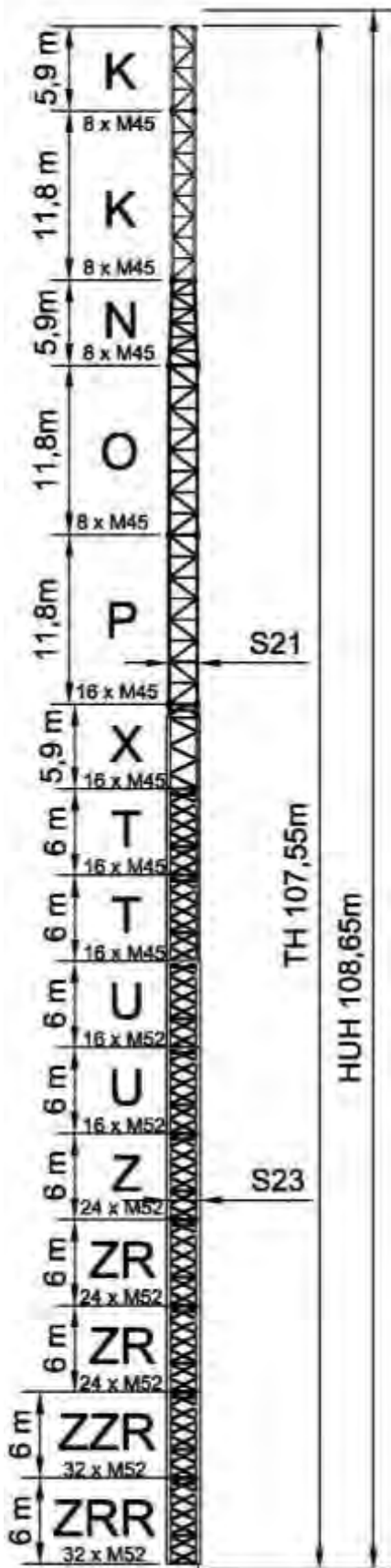
- LC1: In service, with no load and wind from the queue.
- LC2: In service with rear wind 72 Km/h
- LC3: Out of service zone C25, wind from the queue
- LC7: Out of service, frontal wind

Where:

- V: Axial load (kN)
- Q: Horizontal load (kN)
- M: Moment (kN·m)
- P<sub>1</sub>: Max tensile effort (kN).
- P<sub>2</sub>: Max compressive effort (kN).
- Ms: Turning moment in service= 396 KN/mt



**Jib position 45 °**



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1377.6	4.5	2415.	488	-1177
35.0	1421.9	4.5	2429.	482	-1193
40.0	1441.8	4.5	2893.	637	-1358
45.0	1463.2	4.5	2606.	533	-1264
50.0	1481.3	4.5	2522.	499	-1240
55.0	1498.5	4.5	2495.	486	-1235
60.0	1502.2	4.5	2618.	527	-1278
65.0	1504.8	4.5	2593.	518	-1270

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1377.6	69.2	6469.	1887	-2575
35.0	1421.9	69.5	6568.	1909	-2620
40.0	1441.8	69.9	7104.	2089	-2810
45.0	1463.2	70.2	6870.	2004	-2735
50.0	1481.3	70.5	6844.	1990	-2731
55.0	1498.5	70.7	6869.	1994	-2743
60.0	1502.2	70.9	7023.	2046	-2798
65.0	1504.8	71.2	7035.	2050	-2802

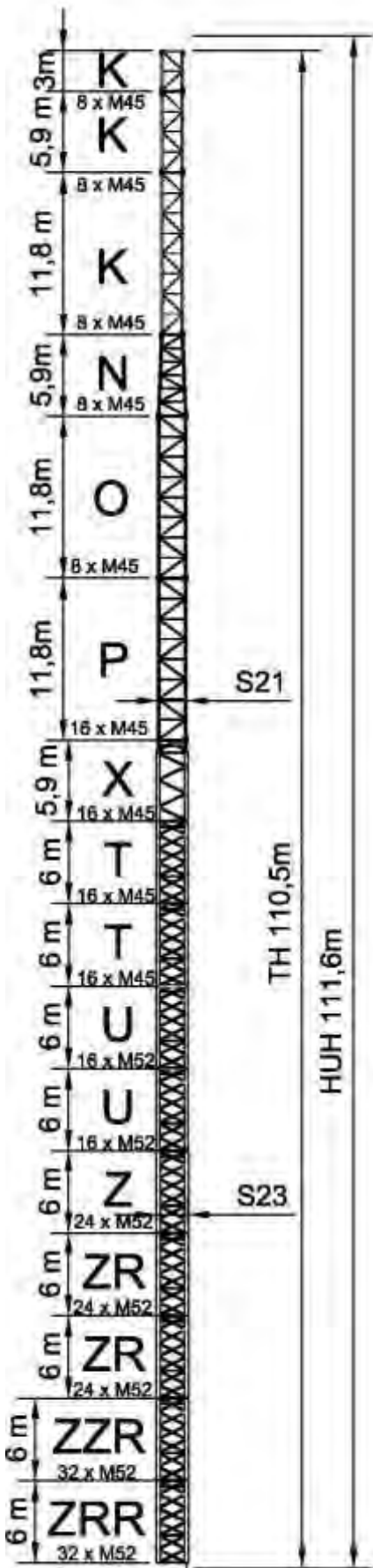
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1201.1	296.3	18247.	5993	-6594
35.0	1243.3	298.3	18661.	6125	-6747
40.0	1262.3	300.6	19135.	6284	-6915
45.0	1282.7	302.0	19452.	6388	-7030
50.0	1299.9	303.8	19833.	6516	-7165
55.0	1316.3	305.2	20153.	6622	-7280
60.0	1319.8	306.3	20596.	6774	-7434
65.0	1322.3	307.8	21023.	6920	-7582

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1321.2	184.1	12903.	4120	-4780
35.0	1367.6	185.1	13156.	4195	-4879
40.0	1388.5	186.3	13246.	4221	-4916
45.0	1411.0	187.0	13349.	4251	-4957
50.0	1429.9	187.9	13421.	4271	-4986
55.0	1447.9	188.6	13500.	4294	-5018
60.0	1451.8	189.1	13274.	4215	-4941
65.0	1454.5	189.9	13122.	4162	-4889





### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1392.3	4.5	2497.	513	-1209
35.0	1436.6	4.5	2517.	509	-1227
40.0	1456.5	4.5	3000.	670	-1398
45.0	1477.9	4.5	2707.	564	-1303
50.0	1496.0	4.5	2622.	530	-1278
55.0	1513.2	4.5	2597.	517	-1273
60.0	1516.9	4.5	2725.	560	-1319
65.0	1519.5	4.5	2699.	551	-1310

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1392.3	70.3	6763.	1984	-2680
35.0	1436.6	70.6	6876.	2012	-2731
40.0	1456.5	71.0	7437.	2200	-2929
45.0	1477.9	71.3	7201.	2114	-2853
50.0	1496.0	71.6	7180.	2102	-2850
55.0	1513.2	71.8	7210.	2108	-2865
60.0	1516.9	72.0	7372.	2163	-2921
65.0	1519.5	72.3	7385.	2167	-2927

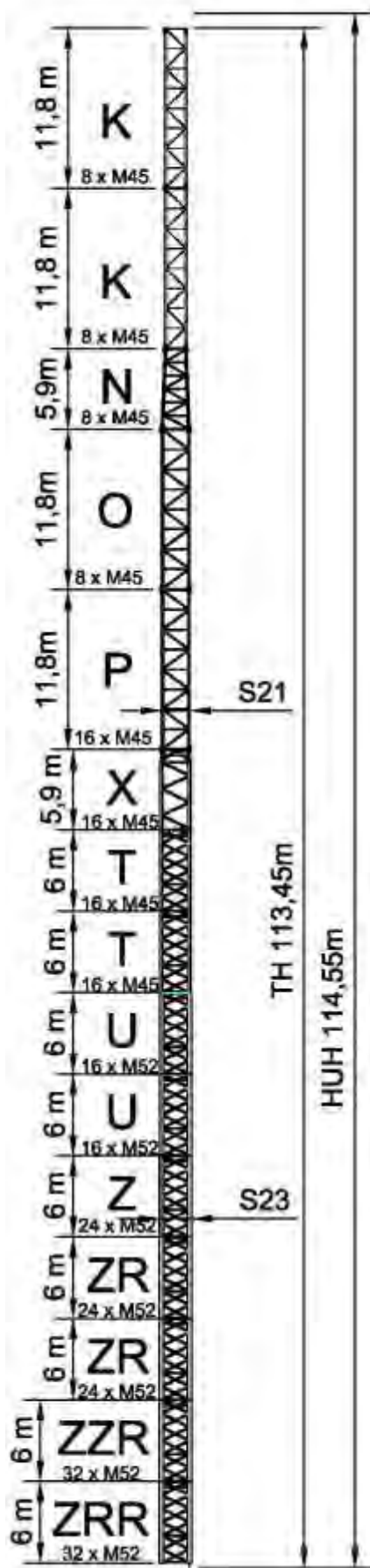
### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1215.1	302.9	19314.	6358	-6965
35.0	1257.3	304.9	19763.	6502	-7131
40.0	1276.3	307.2	20265.	6670	-7309
45.0	1296.7	308.6	20604.	6782	-7431
50.0	1313.9	310.4	21010.	6918	-7575
55.0	1330.3	311.8	21351.	7032	-7697
60.0	1333.8	313.0	21813.	7190	-7857
65.0	1336.3	314.4	22258.	7343	-8011

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1336.6	187.3	13513.	4327	-4995
35.0	1383.0	188.3	13793.	4411	-5103
40.0	1403.9	189.5	13897.	4442	-5144
45.0	1426.4	190.2	14013.	4476	-5189
50.0	1445.3	191.1	14096.	4500	-5223
55.0	1463.3	191.8	14186.	4527	-5259
60.0	1467.2	192.4	13955.	4446	-5180
65.0	1469.9	193.1	13800.	4392	-5127

Max Tower Configuration  
for **J50** or shorter length.



### CRANE IN SERVICE LC 1

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1407.0	4.5	2588.	541	-1244
35.0	1451.3	4.5	2616.	539	-1264
40.0	1471.2	4.5	3120.	708	-1443
45.0	1492.6	4.5	2818.	598	-1345
<b>50.0</b>	<b>1510.7</b>	<b>4.5</b>	<b>2733.</b>	<b>565</b>	<b>-1320</b>

### CRANE IN SERVICE LC 2

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1407.0	71.4	7079.	2090	-2793
35.0	1451.3	71.8	7209.	2123	-2849
40.0	1471.2	72.2	7797.	2321	-3057
45.0	1492.6	72.4	7560.	2234	-2980
<b>50.0</b>	<b>1510.7</b>	<b>72.7</b>	<b>7543.</b>	<b>2224</b>	<b>-2979</b>

### REAR-STORM LC 3

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1229.1	309.5	20439.	6742	-7357
35.0	1271.3	311.5	20928.	6900	-7536
40.0	1290.3	313.8	21460.	7079	-7724
45.0	1310.7	315.3	21825.	7200	-7855
<b>50.0</b>	<b>1327.9</b>	<b>317.0</b>	<b>22258.</b>	<b>7345</b>	<b>-8009</b>

### FRONT-STORM LC 7

BOOM [m]	V [kN]	Q [kN]	MOM [kNm]	P1 [kN]	P2 [kN]
30.0	1352.0	190.6	14160.	4546	-5222
35.0	1398.4	191.6	14470.	4641	-5340
40.0	1419.3	192.7	14588.	4677	-5386
45.0	1441.8	193.4	14720.	4716	-5437
<b>50.0</b>	<b>1460.7</b>	<b>194.3</b>	<b>14817.</b>	<b>4745</b>	<b>-5475</b>