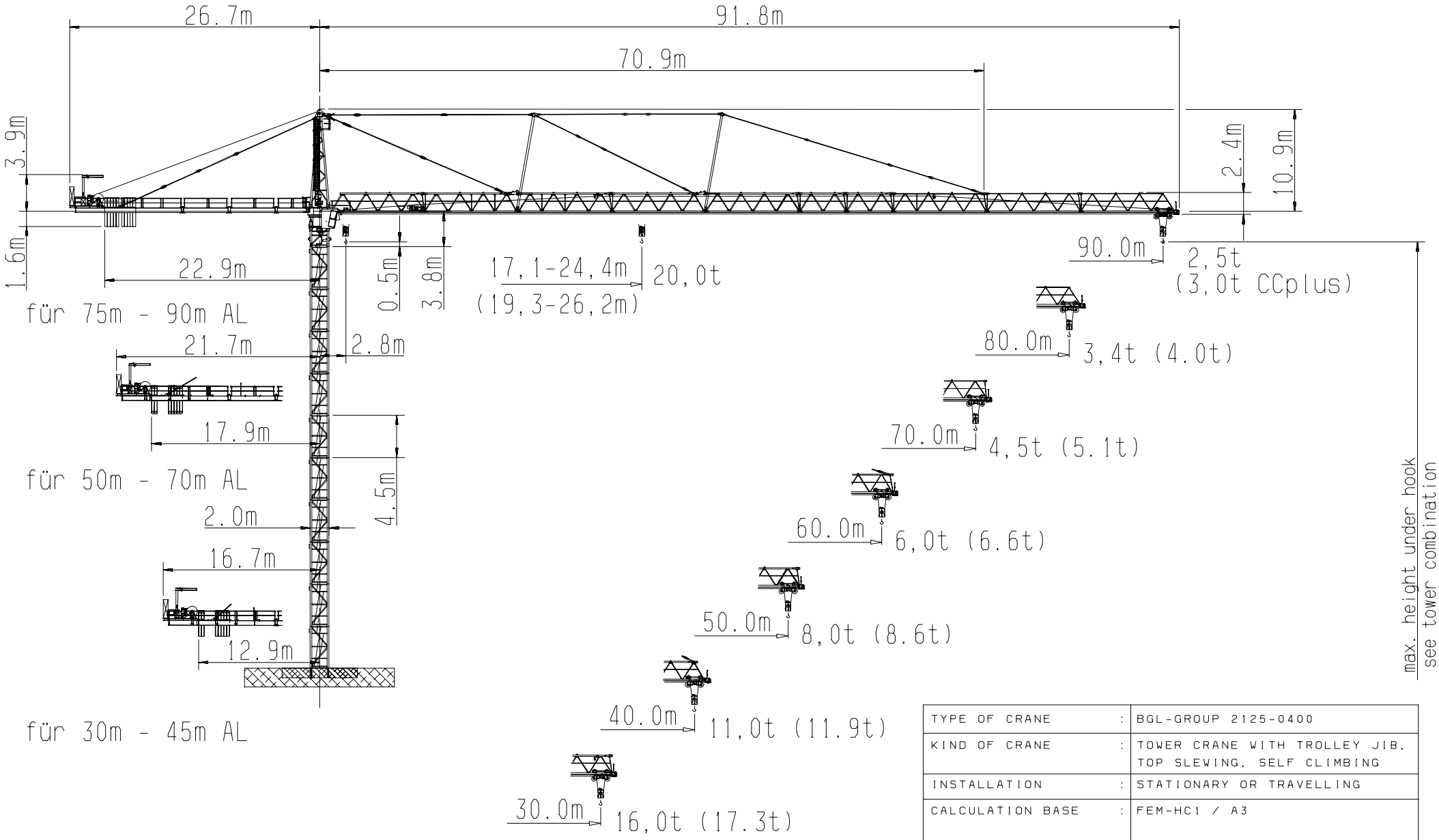


TYPE OF CRANE	:	BGL-GROUP 2125-0400
KIND OF CRANE	:	TOWER CRANE WITH TROLLEY JIB, TOP SLEWING, SELF CLIMBING
INSTALLATION	:	STATIONARY OR TRAVELLING
CALCULATION BASE	:	FEM-HC1 / A3
LOADMOMENT	:	max. 4888 kNm

PLANING DIAGRAM

962-3-020918E

WOLFF 9025

2.2.1.1 **Load capacity table**

length of jib [m]	radius [m]	20,0	30	35	40	45	50	55	60	65	70	75	80	85	90	load capacity [t]
90	2,8–17,1		10,7	8,9	7,6	6,6	5,7	5,1	4,5	4,0	3,6	3,3	3,0	2,7	**2,5**	
85	2,8–17,7		11,1	9,3	7,9	6,9	6,0	5,3	4,7	4,2	3,8	3,5	3,2	**2,9**		
80	2,8–18,5		11,7	9,8	8,4	7,2	6,4	5,6	5,0	4,5	4,1	3,7	**3,4**			
75	2,8–19,1		12,1	10,1	8,7	7,5	6,6	5,9	5,2	4,7	4,3	**3,9**				
70	2,8–19,8		12,6	10,6	9,1	7,8	6,9	6,1	5,5	4,9	**4,5**					
65	2,8–20,4		13,1	11,0	9,4	8,2	7,2	6,4	5,7	**5,2**						
60	2,8–21,1		13,6	11,4	9,8	8,5	7,5	6,6	**6,0**							
55	2,8–21,6		13,9	11,7	10,0	8,7	7,7	**6,9**								
50	2,8–22,2		14,4	12,1	10,4	9,0	**8,0**									
45	2,8–22,9		14,9	12,5	10,7	**9,4**										
40	2,8–23,3		15,2	12,8	**11,0**											
35	2,8–24,0		15,6	**13,2**												
30	2,8–24,4		**16,0**													

The load capacities refer to a hook path of 42,0 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 5,7 kg per meter hook path).

Arrangement of counterweights with hoisting winch **Hw 2075 FU**

26,7 m counterjib

90 m jib	85 m jib	80 m jib	75 m jib	Attention !
9 x 3,4 t	8 x 3,4 t	7 x 3,4 t	6 x 3,4 t	intermediate ballasti 6x 3,4 t see assembly section 5
33,6	30,2	26,8	23,4	

total weight [t]

21,7 m counterjib

70 m jib	65 m jib	60 m jib	55 m jib	50 m jib
9 x 3,4 t	9 x 3,4 t	8 x 3,4 t	6 x 3,4 t	5 x 3,4 t
33,6	33,6	30,2	23,4	20,0

total weight [t]

16,7 m counterjib

45 m jib	40 m jib	35 m jib	30 m jib
9 x 3,4 t	8 x 3,4 t	6 x 3,4 t	6 x 3,4 t
33,6	30,2	23,4	23,4

total weight [t]

2.2.1.1 **Load capacity table**

length of jib [m]	radius [m]	20,0	30	35	40	45	50	55	60	65	70	75	80	85	90	load capacity [t]
90	2,8–19,3		12,3	10,3	8,8	7,6	6,7	6,0	5,3	4,8	4,3	3,9	3,6	3,3	**3,0**	
85	2,8–20,0		12,8	10,7	9,2	8,0	7,0	6,2	5,6	5,0	4,5	4,1	3,8	**3,5**		
80	2,8–20,9		13,4	11,3	9,6	8,4	7,4	6,6	5,9	5,3	4,8	4,4	**4,0**			
75	2,8–21,4		13,8	11,6	9,9	8,6	7,6	6,8	6,1	5,5	5,0	**4,5**				
70	2,8–21,9		14,1	11,9	10,2	8,9	7,8	7,0	6,3	5,6	**5,1**					
65	2,8–22,5		14,6	12,2	10,5	9,2	8,1	7,2	6,5	**5,8**						
60	2,8–22,9		14,9	12,5	10,8	9,4	8,3	7,4	**6,6**							
55	2,8–23,4		15,3	12,9	11,0	9,6	8,5	**7,6**								
50	2,8–23,7		15,5	13,0	11,2	9,8	**8,6**									
45	2,8–24,4		16,0	13,5	11,6	**10,1**										
40	2,8–24,9		16,4	13,8	**11,9**											
35	2,8–25,6		16,9	**14,2**												
30	2,8–26,2		**17,3**													

The load capacities refer to a hook path of 42,0 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 5,7 kg per meter hook path).

Arrangement of counterweights with hoisting winch **Hw 2075 FU**

26,7 m counterjib

90 m jib	85 m jib	80 m jib	75 m jib	Attention !
9 x 3,4 t	8 x 3,4 t	7 x 3,4 t	6 x 3,4 t	intermediate ballasti 6x 3,4 t see assembly section 5
33,6	30,2	26,8	23,4	

total weight [t]

21,7 m counterjib

70 m jib	65 m jib	60 m jib	55 m jib	50 m jib
9 x 3,4 t	9 x 3,4 t	8 x 3,4 t	6 x 3,4 t	5 x 3,4 t
33,6	33,6	30,2	23,4	20,0

total weight [t]

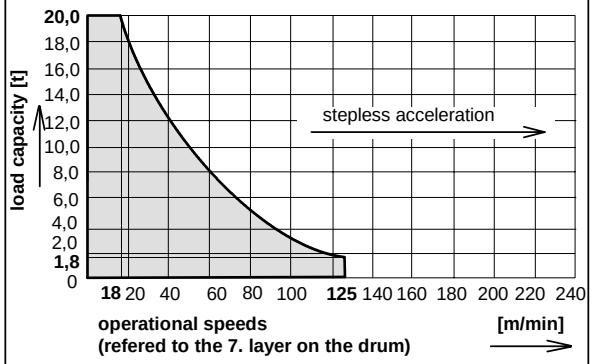
16,7 m counterjib

45 m jib	40 m jib	35 m jib	30 m jib
9 x 3,4 t	8 x 3,4 t	6 x 3,4 t	6 x 3,4 t
33,6	30,2	23,4	23,4

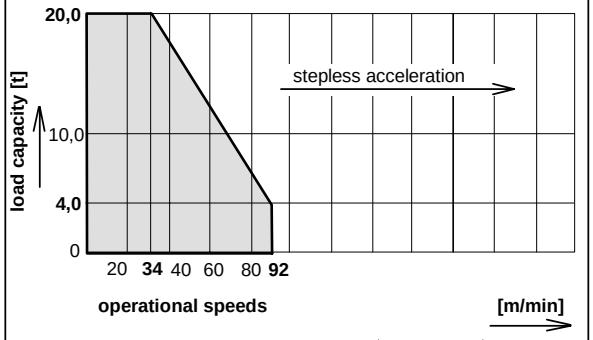
total weight [t]

2.2.2.1 **Operational speeds** **380 V - 460 V, 50/60 Hz**

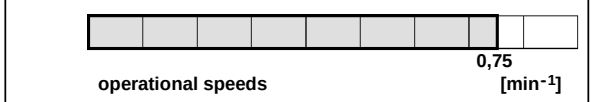
drive [model]	operational speed load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 2075 FU	**hoisting**	**400**	**75**	



Kw	**traversing**		**9,0**	**98** total-output for a simultaneity factor of 0,7



Dw	**Slewing**	**0,75 min^{-1}**	**2 x 7,5**	



962-4-019680E

2.2.3.1 **Load capacity [kg] data given in distances of meters** **DIN 15018 / H1 - B3**

radius	jib length [m]												
[m]	30	35	40	45	50	55	60	65	70	75	80	85	90
17,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
18,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	19560	18900
19,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	19450	18530	17820
20,0	20000	20000	20000	20000	20000	20000	20000	20000	19750	19030	18400	17530	16850
21,0	20000	20000	20000	20000	20000	20000	20000	19450	18730	18040	17450	16610	15970
22,0	20000	20000	20000	20000	20000	19650	19130	18490	17810	17150	16580	15790	15170
23,0	20000	20000	20000	19920	19270	18730	18230	17620	16970	16340	15790	15030	14440
24,0	20000	20000	19400	19030	18400	17880	17400	16820	16190	15590	15070	14340	13780
25,0	19520	19120	18560	18200	17600	17100	16640	16080	15480	14900	14400	13700	13160
26,0	18710	18320	17790	17440	16860	16380	15940	15400	14820	14270	13790	13110	12590
27,0	17960	17590	17070	16730	16180	15720	15290	14770	14220	13680	13220	12570	12070
28,0	17260	16900	16400	16080	15540	15100	14690	14190	13650	13130	12690	12060	11580
29,0	16610	16260	15780	15470	14950	14520	14120	13640	13120	12620	12190	11590	11120
30,0	16000	15600	15200	14900	14400	13900	13600	13100	12600	12100	11700	11100	10700
31,0		15110	14660	14370	13880	13480	13110	12660	12170	11710	11300	10740	10300
32,0		14590	14150	13870	13400	13010	12650	12210	11740	11290	10900	10350	9930
33,0		14100	13670	13400	12950	12570	12220	11790	11340	10900	10520	9990	9580
34,0		13640	13220	12960	12520	12150	11810	11400	10960	10530	10170	9650	9250
35,0		13200	12800	12500	12100	11700	11400	11000	10600	10100	9800	9300	8900
36,0			12400	12150	11730	11390	11070	10780	10260	9860	9510	9030	8650
37,0			12020	11780	11370	11040	10720	10350	9940	9550	9210	8740	8370
38,0			11660	11430	11030	10700	10400	10030	9640	9260	8930	8470	8110
39,0			11320	11090	10710	10390	10090	9730	9350	8980	8660	8210	7860
40,0			11000	10700	10400	10000	9800	9400	9100	8700	8400	7900	7600
41,0				10470	10110	9800	9520	9180	8820	8460	8160	7730	7400
42,0				10190	9830	9530	9260	8920	8570	8220	7920	7510	7190
43,0				9910	9560	9270	9010	8680	8330	7990	7700	7300	6980
44,0				9650	9310	9030	8760	8450	8110	7780	7490	7090	6790
45,0				9400	9000	8700	8500	8200	7800	7500	7200	6900	6600
46,0					8840	8560	8310	8010	7680	7370	7100	6720	6420
47,0					8610	8350	8100	7800	7490	7180	6910	6540	6250
48,0					8400	8140	7900	7610	7300	6990	6730	6370	6090
49,0					8200	7940	7710	7420	7110	6820	6563	6210	5930
50,0					8000	7700	7500	7200	6900	6600	6400	6000	5700
51,0						7570	7340	7070	6770	6490	6240	5900	5640
52,0						7390	7170	6900	6610	6330	6060	5760	5500
53,0						7220	7000	6740	6460	6180	5950	5620	5360
54,0						7060	6840	6590	6310	6040	5810	5480	5230
55,0						6900	6690	6400	6100	5900	5600	5300	5100
56,0							6540	6290	6030	5770	5540	5230	4990
57,0							6400	6150	5890	5640	5420	5110	4870
58,0							6260	6020	5760	5510	5300	5000	4760
59,0							6130	5890	5640	5390	5200	4880	4650
60,0							6000	5700	5500	5200	5070	4700	4500
61,0								5650	5400	5160	4960	4670	4450
62,0								5530	5290	5050	4850	4570	4350
63,0								5420	5180	4950	4750	4470	4260
64,0								5310	5070	4850	4650	4380	4170
65,0								5200	4900	4700	4500	4200	4000

962-4-020928E-1

2.2.3.1 **Load capacity [kg] data given in distances of meters** **DIN 15018 / H1 - B3**

radius	jib lenghth [m]												
[m]	30	35	40	45	50	55	60	65	70	75	80	85	90
66,0									4870	4650	4460	4200	3990
67,0									4770	4560	4370	4110	3910
68,0									4680	4470	4280	4030	3830
69,0									4590	4380	4200	3940	3750
70,0									4500	4300	4100	3800	3600
71,0										4210	4030	3790	3590
72,0										4130	3960	3710	3530
73,0										4050	3880	3640	3460
74,0										3970	3810	3570	3390
75,0										3900	3730	3500	3300
76,0											3660	3430	3260
77,0											3600	3370	3190
78,0											3530	3300	3130
79,0											3460	3240	3070
80,0											3400	3200	3000
81,0												3120	2960
82,0												3070	2900
83,0												3010	2850
84,0												2950	2790
85,0												2900	2700
86,0													2690
87,0													2640
88,0													2590
89,0													2550
90,0													2500

2.2.3.2 **load capacity [kg] data given in distances of meters** **DIN 15018 / H1 - B3**

radius	jib length [m]												
[m]	30	35	40	45	50	55	60	65	70	75	80	85	90
17,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
18,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
19,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
20,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	19240
21,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	19850	18970	18250
22,0	20000	20000	20000	20000	20000	20000	20000	20000	19890	19390	18870	18030	17340
23,0	20000	20000	20000	20000	20000	20000	19930	19480	18950	18470	17980	17170	16520
24,0	20000	20000	20000	20000	19750	19490	19030	18600	18100	17640	17160	16390	15760
25,0	20000	20000	19940	19520	18890	18650	18200	17790	17310	16860	16410	15670	15060
26,0	20000	19710	19110	18700	18100	17870	17440	17050	16580	16150	15720	15000	14420
27,0	19350	18920	18340	17950	17370	17150	16730	16350	15900	15490	15070	14390	13830
28,0	18600	18190	17630	17250	16690	16480	16070	15710	15280	14880	14480	13810	13270
29,0	17910	17500	16970	16600	16060	15850	15460	15110	14690	14310	13920	13280	12760
30,0	17300	16900	16400	16000	15500	15300	14900	14550	14100	13800	13400	12800	12300
31,0		16270	15770	15420	14920	14720	14360	14030	13640	13280	12920	12320	11830
32,0		15710	15220	14890	14400	14210	13860	13540	13160	12820	12460	11880	11410
33,0		15180	14710	14390	13920	13730	13390	13080	12710	12380	12030	11470	11020
34,0		14690	14230	13920	13460	13280	12950	12650	12290	11970	11630	11090	10640
35,0		14200	13800	13500	13000	12900	12500	12200	11900	11600	11300	10700	10300
36,0			13350	13050	12620	12450	12140	11860	11520	11210	10900	10380	9960
37,0			12940	12650	12230	12070	11770	11490	11160	10860	10560	10060	9650
38,0			12560	12280	11870	11710	11410	11150	10830	10530	10240	9750	9350
39,0			12200	11920	11520	11370	11080	10820	10510	10220	9930	9460	9070
40,0			11900	11600	11200	11000	10800	10500	10200	9900	9600	9200	8800
41,0				11260	10880	10730	10460	10210	9910	9640	9370	8910	8550
42,0				10950	10580	10440	10170	9930	9640	9370	9100	8660	8300
43,0				10660	10300	10160	9900	9660	9380	9120	8850	8420	8070
44,0				10380	10030	9890	9630	9400	9130	8870	8620	8190	7850
45,0				10100	9800	9600	9400	9200	8900	8600	8400	8000	7600
46,0					9520	9390	9140	8920	8660	8420	8170	7770	7440
47,0					9280	9150	8910	8700	8440	8200	7960	7570	7250
48,0					9050	8930	8690	8480	8230	8000	7760	7380	7060
49,0					8840	8710	8480	8280	8030	7800	7570	7190	6880
50,0					8600	8500	8300	8100	7800	7600	7400	7000	6700
51,0						8310	8090	7890	7650	7430	7210	6850	6550
52,0						8110	7900	7700	7470	7260	7040	6680	6390
53,0						7930	7720	7530	7300	7090	6870	6520	6240
54,0						7750	7550	7360	7130	6930	6720	6370	6090
55,0						7600	7400	7200	7000	6800	6600	6200	6000
56,0							7220	7040	6820	6620	6420	6090	5820
57,0							7060	6880	6670	6480	6280	5950	5690
58,0							6910	6740	6530	6340	6140	5820	5560
59,0							6770	6590	6390	6200	6010	5690	5440
60,0							6600	6500	6300	6100	5900	5600	5300
61,0								6320	6130	5940	5760	5450	5210
62,0								6200	6000	5820	5640	5340	5100
63,0								6070	5880	5700	5520	5230	4990
64,0								5950	5760	5590	5410	5120	4890
65,0								5830	5600	5500	5300	5000	4800

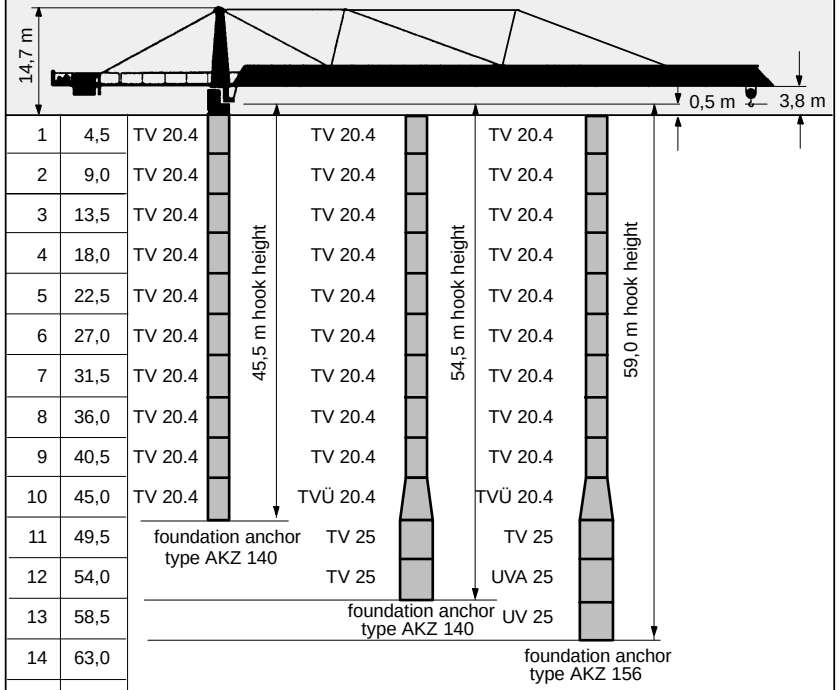
2.2.3.2 **load capacity [kg] data given in distances of meters** **DIN 15018 / H1 - B3**

radius	jib length [m]												
[m]	30	35	40	45	50	55	60	65	70	75	80	85	90
66,0									5540	5370	5200	4920	4690
67,0									5430	5270	5100	4820	4590
68,0									5330	5160	5000	4720	4500
69,0									5230	5060	4900	4630	4410
70,0									5100	5000	4800	4500	4300
71,0										4880	4720	4460	4240
72,0										4790	4630	4370	4160
73,0										4700	4540	4290	4080
74,0										4610	4460	4210	4000
75,0										4500	4400	4100	3900
76,0											4300	4050	3860
77,0											4220	3980	3780
78,0											4150	3910	3710
79,0											4070	3840	3650
80,0											4000	3800	3600
81,0												3700	3520
82,0												3640	3450
83,0												3570	3390
84,0												3510	3330
85,0												3500	3300
86,0													3220
87,0													3160
88,0													3110
89,0													3050
90,0													3000

2.2.7.1 **Tower configurations**

for a free standing stationary tower crane without climbing drive on a concrete foundation

Slewing part:



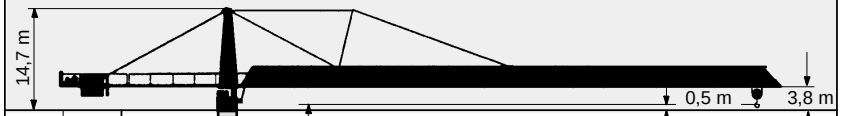
tower elements	height of tower [m]			
1	4,5	TV 20.4	TV 20.4	TV 20.4
2	9,0	TV 20.4	TV 20.4	TV 20.4
3	13,5	TV 20.4	TV 20.4	TV 20.4
4	18,0	TV 20.4	TV 20.4	TV 20.4
5	22,5	TV 20.4	TV 20.4	TV 20.4
6	27,0	TV 20.4	TV 20.4	TV 20.4
7	31,5	TV 20.4	TV 20.4	TV 20.4
8	36,0	TV 20.4	TV 20.4	TV 20.4
9	40,5	TV 20.4	TV 20.4	TV 20.4
10	45,0	TV 20.4	TVÜ 20.4	TVÜ 20.4
11	49,5		TV 25	TV 25
12	54,0		TV 25	UVA 25
13	58,5			UV 25
14	63,0			
15	67,5			
16	72,0			
17	76,5			
18	81,0			

For data regarding foundation anchors see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

2.2.7.2 **Tower configurations** **Jib 30 m to 60 m**

for a free standing stationary crane without climbing device on a concrete foundation

Slewing part:



tower elements	height of tower [m]	
1	4,5	TV 20.4
2	9,0	TV 20.4
3	13,5	TV 20.4
4	18,0	TV 20.4
5	22,5	TV 20.4
6	27,0	TV 20.4
7	31,5	TV 20.4
8	36,0	TV 20.4
9	40,5	TVÜ 20.4
10	45,0	UVA 25
11	49,5	UV 25
12	50,7	VR 2529
13	55,2	UV 29
14	59,7	UV 29
15	64,2	UV 29
16	68,7	UV 29
17	73,2	UV 29
18	77,7	UV 29
19	87,7	BT 29

88,2 m hook height

foundation anchor
type FUA – BT 29

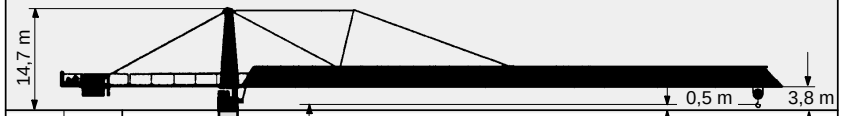
For data regarding foundation anchors see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case. Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

962-4-027015E

2.2.7.3 **Tower configurations** **Jib 65 m to 80 m**

for a free standing stationary crane without climbing device on a concrete foundation

Slewing part:



tower elements	height of tower [m]	
1	4,5	TV 20.4
2	9,0	TV 20.4
3	13,5	TV 20.4
4	18,0	TV 20.4
5	22,5	TV 20.4
6	27,0	TV 20.4
7	31,5	TV 20.4
8	36,0	TV 20.4
9	40,5	TVÜ 20.4
10	45,0	UVA 25
11	49,5	UV 25
12	50,7	VR 2529
13	55,2	UV 29
14	59,7	UV 29
15	64,2	UV 29
16	68,7	UV 29
17	73,2	UV 29
18	83,2	BT 29

83,7 m hook height

foundation anchor
type FUA – BT 29

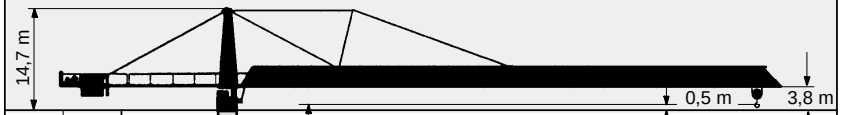
For data regarding foundation anchors see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case. Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

962-4-027118E

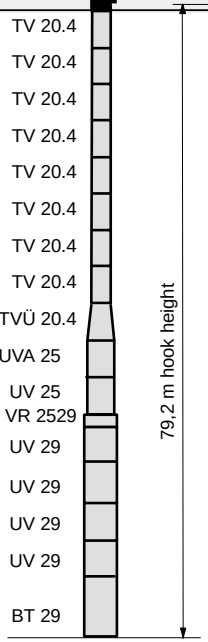
2.2.7.4 **Tower configurations** **Jib 85 m to 90 m**

for a free standing stationary crane without climbing device on a concrete foundation

Slewing part:



tower elements	height of tower [m]	
1	4,5	TV 20.4
2	9,0	TV 20.4
3	13,5	TV 20.4
4	18,0	TV 20.4
5	22,5	TV 20.4
6	27,0	TV 20.4
7	31,5	TV 20.4
8	36,0	TV 20.4
9	40,5	TVÜ 20.4
10	45,0	UVA 25
11	49,5	UV 25
12	50,7	VR 2529
13	55,2	UV 29
14	59,7	UV 29
15	64,2	UV 29
16	68,7	UV 29
17	78,7	BT 29



foundation anchor
type FUA - BT 29

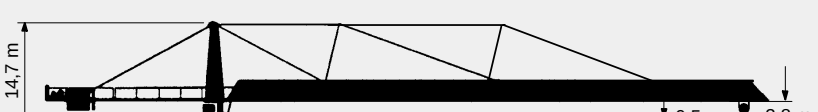
For data regarding foundation anchors see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

962-4-027119E

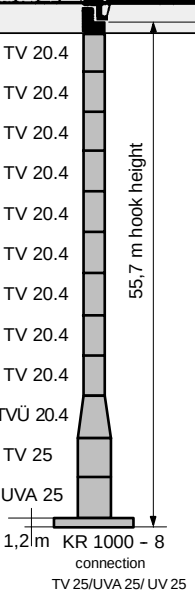
2.2.8.1 **Tower configurations**

for a free standing stationary tower crane without climbing drive on a cross frame.

Slewing part:



tower elements	height of tower [m]	
1	4,5	TV 20.4
2	9,0	TV 20.4
3	13,5	TV 20.4
4	18,0	TV 20.4
5	22,5	TV 20.4
6	27,0	TV 20.4
7	31,5	TV 20.4
8	36,0	TV 20.4
9	40,5	TV 20.4
10	45,0	TVÜ 20.4
11	49,5	TV 25
12	54,0	UVA 25
13	58,5	
14	63,0	
15	67,5	
16	72,0	
17	76,5	
18	81,0	



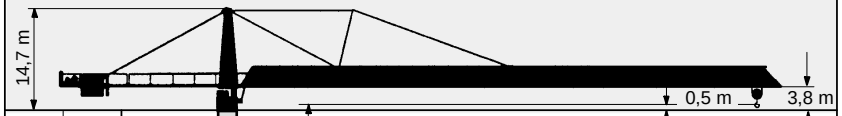
For data regarding foundation anchors see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

962-4-020929E

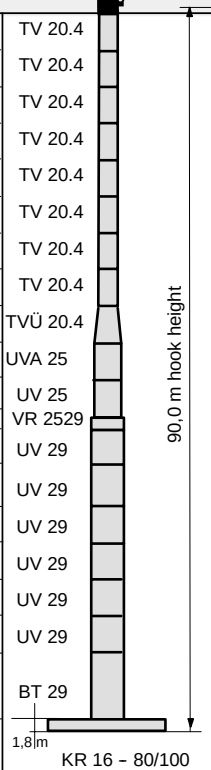
2.2.8.2 **Tower configurations** **jib 30 m to 60 m**

for a free standing stationary crane without climbing device on a cross frame

Drehteil:



tower elements	height of tower [m]	
1	4,5	TV 20.4
2	9,0	TV 20.4
3	13,5	TV 20.4
4	18,0	TV 20.4
5	22,5	TV 20.4
6	27,0	TV 20.4
7	31,5	TV 20.4
8	36,0	TV 20.4
9	40,5	TVÜ 20.4
10	45,0	UVA 25
11	49,5	UV 25
12	50,7	VR 2529
13	55,2	UV 29
14	59,7	UV 29
15	64,2	UV 29
16	68,7	UV 29
17	73,2	UV 29
18	77,7	UV 29
19	87,7	BT 29



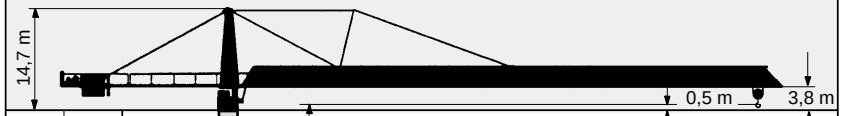
KR 16 – 80/100
(10 m x 10 m)
connection
TV 25 / UV 25 / UV 25 S / BT 29

For data regarding cross frames see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case. Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

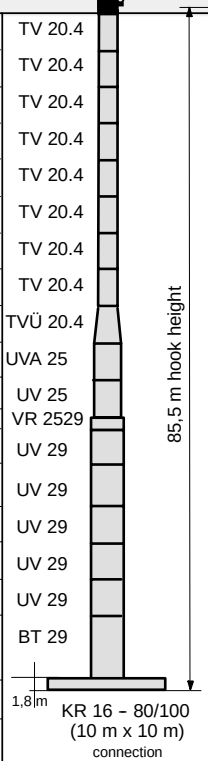
2.2.8.3 **Tower configurations** **jib 65 m to 80 m**

for a free standing stationary crane without climbing device on a cross frame

Drehteil:



tower elements	height of tower [m]	
1	4,5	TV 20.4
2	9,0	TV 20.4
3	13,5	TV 20.4
4	18,0	TV 20.4
5	22,5	TV 20.4
6	27,0	TV 20.4
7	31,5	TV 20.4
8	36,0	TV 20.4
9	40,5	TVÜ 20.4
10	45,0	UVA 25
11	49,5	UV 25
12	50,7	VR 2529
13	55,2	UV 29
14	59,7	UV 29
15	64,2	UV 29
16	68,7	UV 29
17	73,2	UV 29
18	83,2	BT 29



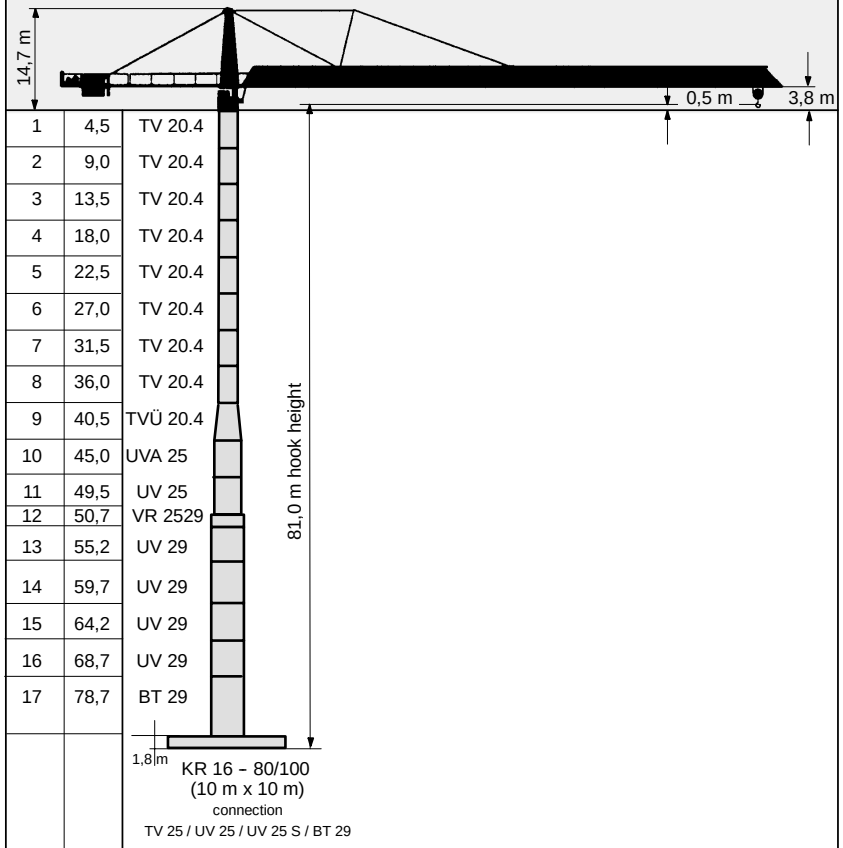
KR 16 – 80/100
(10 m x 10 m)
connection
TV 25 / UV 25 / UV 25 S / BT 29

For data regarding cross frames see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case. Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

2.2.8.4 **Tower configurations** **jib 85 m to 90 m**

for a free standing stationary crane without climbing device on a cross frame.

Drehteil:



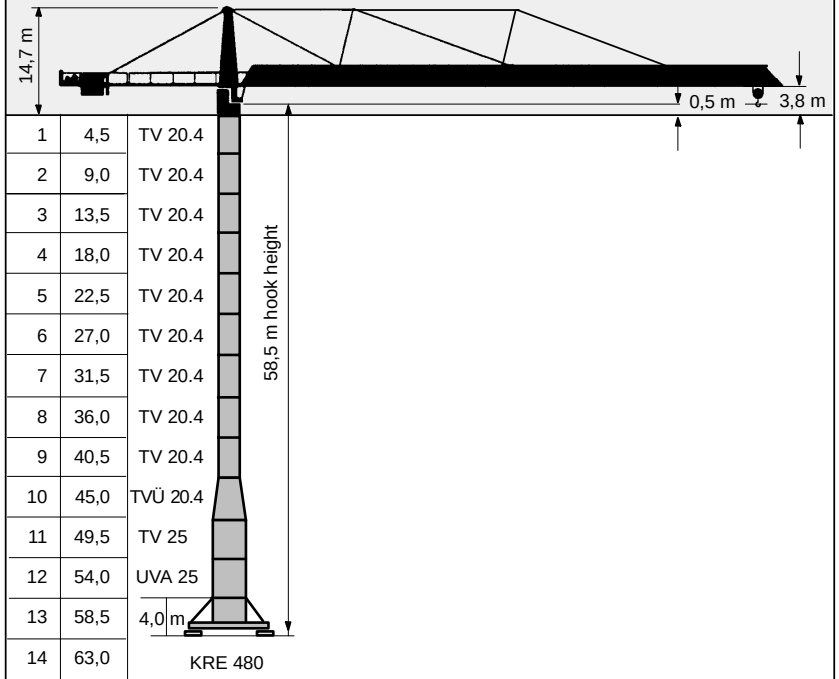
tower elements	height of tower [m]	
1	4,5	TV 20.4
2	9,0	TV 20.4
3	13,5	TV 20.4
4	18,0	TV 20.4
5	22,5	TV 20.4
6	27,0	TV 20.4
7	31,5	TV 20.4
8	36,0	TV 20.4
9	40,5	TVÜ 20.4
10	45,0	UVA 25
11	49,5	UV 25
12	50,7	VR 2529
13	55,2	UV 29
14	59,7	UV 29
15	64,2	UV 29
16	68,7	UV 29
17	78,7	BT 29

For data regarding cross frames see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

2.2.9.1 **Tower configurations**

for a free standing stationary tower crane without climbing drive on a cross frame element.

Slewing part:



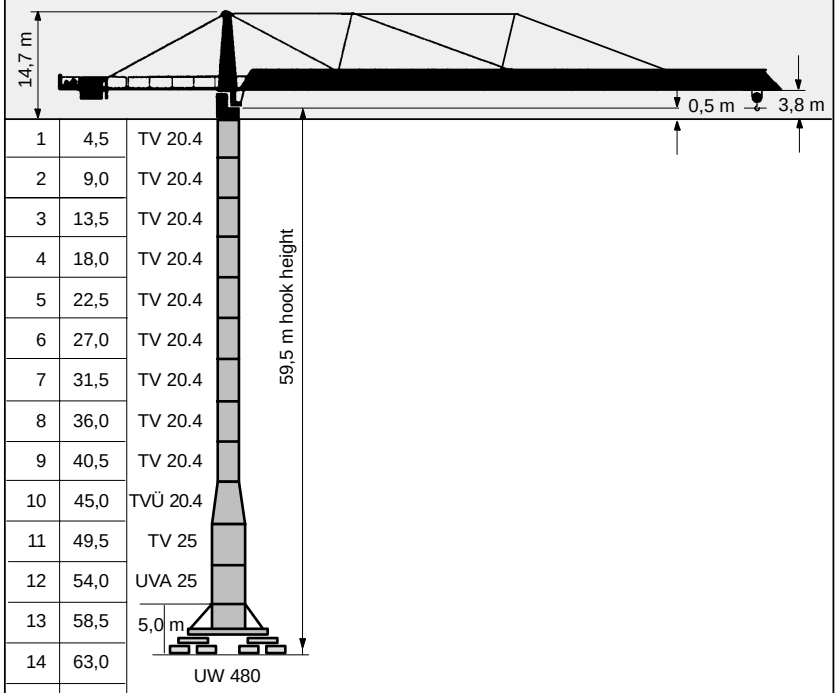
tower elements	height of tower [m]	
1	4,5	TV 20.4
2	9,0	TV 20.4
3	13,5	TV 20.4
4	18,0	TV 20.4
5	22,5	TV 20.4
6	27,0	TV 20.4
7	31,5	TV 20.4
8	36,0	TV 20.4
9	40,5	TV 20.4
10	45,0	TVÜ 20.4
11	49,5	TV 25
12	54,0	UVA 25
13	58,5	
14	63,0	
15	67,5	
16	72,0	
17	76,5	
18	81,0	

For data regarding foundation anchors see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

2.2.10.1 **Tower configurations**

for a travelling tower crane without climbing drive.

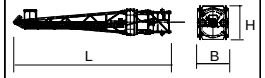
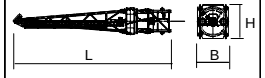
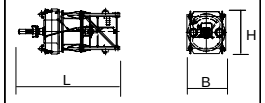
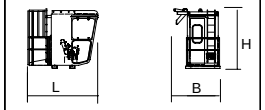
Slewing part:



tower elements	height of tower [m]	
1	4,5	TV 20.4
2	9,0	TV 20.4
3	13,5	TV 20.4
4	18,0	TV 20.4
5	22,5	TV 20.4
6	27,0	TV 20.4
7	31,5	TV 20.4
8	36,0	TV 20.4
9	40,5	TV 20.4
10	45,0	TVÜ 20.4
11	49,5	TV 25
12	54,0	UVA 25
13	58,5	
14	63,0	
15	67,5	
16	72,0	
17	76,5	
18	81,0	

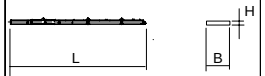
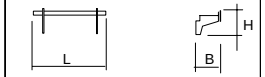
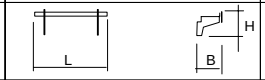
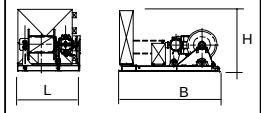
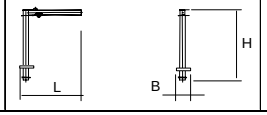
For data regarding foundation anchors see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

2.3.1 **Colli list**

Item	pcs.	Designation	Colli	L (m)	B (m)	H (m)	weight (kg)	volume (m^3)
1	1	tower top complete with platforms at tower top, ladders and different bracing brackets, without platform at slewing frame		14,68	2,98	2,50	18040	109,4
	Pos. 1 dismantled	tower top complete without bracing brackets, platforms or ladders		14,68	2,30	2,50	16750	84,4
		upper part of tower top without platforms, ladders or bracing brackets		10,52	2,10	2,20	4280	48,6
		lower part of tower top with slewing frame, DV, slewing drives, slip ring system and adapter; without platform at slewing frame		5,61	2,30	2,50	12470	32,3
		lower part of tower top with slewing frame, DV, slewing drives, slip ring system without adapter or platform at slewing frame		3,50	2,30	2,50	9730	20,1
2	1	platform slewing frame		1,84	0,77	0,99	110	1,4
3	1	driver's cabin with driver's cabin suspension		2,80	2,15	2,45	1100	14,8
		driver's cabin suspension		1,03	1,85	0,91	170	1,7

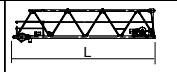
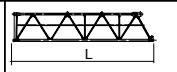
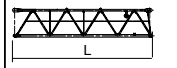
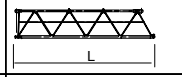
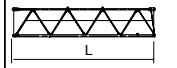
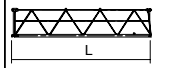
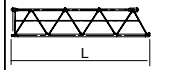
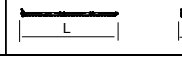
Loose and small parts can be distributed depending on the available space.

2.3.2 **Colli list**

Item	pcs.	designation	colli	L (m)	B (m)	H (m)	weight (kg)	volume (m^3)
4	1	counterjib **26,7 m** folded without platforms		16,60	2,10	1,50	7700	52,3
		counterjib **26,7 m** unfolded without platforms		25,12	2,10	0,75	7700	39,6
		counterjib **21,7 m** folded without platforms		11,60	2,10	1,50	6250	36,5
		counterjib **21,7 m** unfolded without platforms		20,12	2,10	0,75	6250	31,7
		counterjib **16,7 m** folded without platforms		11,60	2,10	1,50	4750	36,5
		counterjib **16,7 m** unfolded without platforms		15,12	2,10	0,75	4750	23,8
5	1	platform**1**/460x2570		2,61	0,62	0,52	81	0,8
	1	platform**2**/460x2560		2,56	0,62	0,52	74	0,8
	1	platform**3**/460x2060		2,06	0,62	0,52	63	0,7
	1	platform**5**/460x2078		2,11	0,62	0,52	70	0,7
6	2	platform**4**/310x2060		2,06	0,47	0,52	48	0,5
	1	platform**6**/310x2065		2,07	0,47	0,52	70	0,5
7	1	machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m)		2,30	3,73	2,30	6950	19,7
8	1	disassembly crane		2,35	0,4	3,05	300	2,87

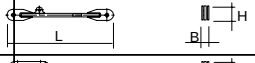
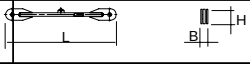
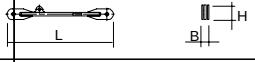
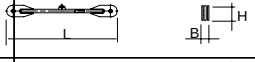
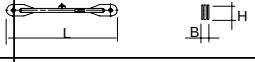
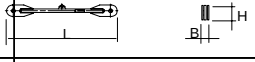
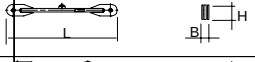
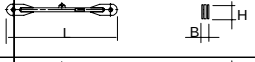
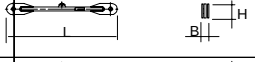
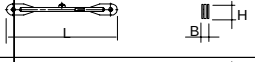
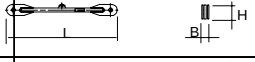
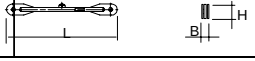
Loose and small parts can be distributed depending on the available space.

2.3.3 **Colli list**

Item	pcs.	designation	colli	L (m)	B (m)	H (m)	weight (kg)	volume (m^3)
9	1	jib part **1** with trolley drive		10,25	2,06	2,35	3740	49,6
10	1	jib part **2**		10,22	2,06	2,16	2460	45,5
11	1	jib part **3**		10,32	2,06	2,16	2220	45,9
12	1	jib part **4**		10,12	2,06	2,15	1600	45,2
13	1	jib part **5**		10,27	2,06	2,15	1440	45,5
14	1	jib part **6**		5,27	2,06	2,15	780	23,3
15	1	jib part **7**		10,25	2,06	2,14	1320	45,2
16	1	jib part **8**		10,25	2,06	2,12	1260	44,8
17	1	jib part **9**		10,23	2,06	2,11	1120	44,5
18	1	jib part **10**		5,23	2,06	2,15	740	23,2
19	1	rope swivel traverse		1,53	1,98	0,50	280	1,5
20	1	bracing trestle **1**		10,25	1,88	0,93	970	17,9
21	1	bracing trestle **2** with assembly trestle		10,50	1,83	0,64	700	12,3

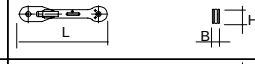
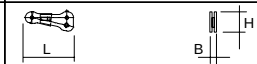
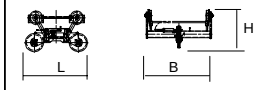
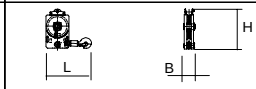
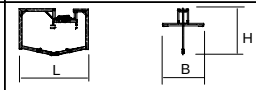
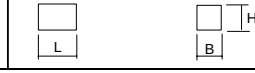
Loose and small parts can be distributed depending on the available space.

2.3.4 **Colli list**

Item	pcs.	designation	colli	L (m)	B (m)	H (m)	weight (kg)	volume (m^3)
22	1	**trolley jib** bracing **1.1**		0,65	0,09	0,21	33	0,01
23	1	bracing **1.2**		2,06	0,09	0,26	110	0,05
24	1	bracing **1.3**		0,55	0,04	0,21	30	0,01
25	1 (2x)	bracing **1.4**		8,95	0,09	0,22	370	0,18
26	1	bracing **1.5**		1,25	0,20	0,21	90	0,05
27	1	bracing **2.1**		3,29	0,09	0,26	130	0,08
28	1 (2x)	bracing **2.2**		9,55	0,09	0,22	270	0,19
29	1	bracing **3.1**		5,20	0,07	0,19	120	0,07
30	1	bracing **3.2**		3,30	0,07	0,19	80	0,04
31	1	bracing **3.3**		9,86	0,07	0,19	210	0,13
32	1	bracing **3.4**		1,20	0,17	0,16	50	0,03
33	1 (3x)	bracing **4.1**		9,46	0,07	0,19	160	0,13
34	1	bracing **4.2**		2,70	0,07	0,19	70	0,04
35	1	bracing **4.3**		7,84	0,07	0,19	150	0,10
36	1	bracing **5.1**		4,82	0,07	0,19	80	0,06
37	1	bracing **5.2**		4,95	0,07	0,19	95	0,07

Loose and small parts can be distributed depending on the available space.

2.3.5 **Colli list**

Item	pcs.	designation	colli	L (m)	B (m)	H (m)	weight (kg)	volume (m^3)
38	1	bracing **5.3**		1,20	0,15	0,16	41	0,03
39	1	connection strap **1**		1,19	0,11	0,50	180	0,07
40	1	connection strap **2**		1,13	0,11	0,40	120	0,05
41	1	assembly platform		1,24	1,30	1,70	140	2,74
42	1	trolley LK 20		2,00	2,23	1,30	740	5,8
43	1	hook block		0,95	0,60	1,30	620	0,8
44	1	hoisting rope support		2,58	1,51	1,76	200	6,9
45	1 (2x)	**Counterjib** bracing **1**		9,56	0,07	0,21	295	0,14
46	1 (2x)	bracing **2**		4,69	0,07	0,21	155	0,07
47	1 (2x)	bracing **3**		4,31	0,07	0,21	145	0,06
48	1 (2x)	bracing **4**		5,35	0,07	0,21	175	0,08
49	1	standard handrail (small parts)		2,55	1,1	1,80	460	5,05
50	1	box (small parts)		1,60	0,90	0,80	500	1,15

Loose and small parts can be distributed depending on the available space.

2.5.1 **Assembly weights – tower top – counterjib**

Tower top, complete		
bracing brackets (1x530 mm, 2x9300mm), driver's cabin, driver's cabin suspension, platform and standard handrails		**18 800 kg**
– upper part of tower top, complete	5 440 kg	
– driver's cabin with driver's cabin suspension	760 kg	
– lower part of tower top with slewing frame, DV, slewing drives, platform, standard handrails and slip ring system	12 600 kg	
Counterjib 26,7 m – with hoisting drive Hw 2075 FU, complete		
machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 6 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform),		**19 220 kg**
– counterjib with 6 bracing brackets, platforms, assembly trestles and standard handrail	9 270 kg	
– machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m)	6 950 kg	
– counterweight 3 t (under machinery platform)	3 000 kg	
Counterjib 21,7 m – with hoisting drive Hw 2075 FU, complete		
machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 6 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform),		**17 700 kg**
– counterjib with 4 bracing brackets, platforms, assembly trestles and standard handrail	7 750 kg	
– machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m)	6 950 kg	
– counterweight 3 t (under machinery platform)	3 000 kg	
Counterjib 16,7 m – with hoisting drive Hw 2075 FU, complete		
machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 2 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform),		**16 180 kg**
– counterjib with 2 bracing brackets, platforms, assembly trestles and standard handrail	6 230 kg	
– machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m)	6 950 kg	
– counterweight 3 t (under machinery platform)	3 000 kg	

2.5.2 **Assembly weights - trolley jib**

90 m trolley jib, complete (70 m = 21 500 kg + 20 m = 2 700 kg) – bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	**24 200 kg**
85 m trolley jib, complete (65 m = 20 600 kg + 20 m = 2 700 kg) – bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	**23 300 kg**
80 m trolley jib, complete (65 m = 20 600 kg + 20 m = 2 200 kg) – bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	**22 800 kg**
75 m trolley jib, complete – bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	**22 100 kg**
70 m trolley jib, complete – bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	**21 400 kg**
65 m trolley jib, complete – bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	**20 900 kg**
60 m trolley jib, complete – bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	**20 100 kg**
55 m trolley jib, complete – bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	**18 150 kg**
50 m trolley jib, complete – bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	**17 350 kg**
45 m trolley jib, complete – bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	**16 700 kg**
40 m trolley jib, complete – bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	**15 900 kg**
35 m trolley jib, complete – bracing brackets, trolley, traversing ropes, hook block and standard handrails	**12 800 kg**
30 m trolley jib, complete – bracing brackets, trolley, traversing ropes, hook block and standard handrails	**12 000 kg**

2.5.3 **Assembly weights - cross frame / cross frame element / undercarriage**

cross frame KR 1000 - 8 (without optional parts)		**14 630 kg**
(8 m x 8 m)		
	- 4 spigots AZ 140 E	684 kg
	- 4 spigots AZ 156 M	748 kg
Cross frame KR 16 - 80/100 (without optional features)		**21 450 kg**
(8 m x 8 m)		
	- 4 spigots AZ 140 E KR16-80	620 kg
	- 4 spigots AZ 156 M KR16-80	680 kg
	- 4 spigots AZ 156S M KR16-80	675 kg
Cross frame KR 16 - 80/100 (without optional features)		**25 400 kg**
(10 m x 10 m)		
	- 4 spigots AZ 140 E KR16-80	620 kg
	- 4 spigots AZ 156 M KR16-80	680 kg
	- 4 spigots AZ 156S M KR16-80	675 kg
cross frame element KRE 480, complete		**24 250 kg**
	- base mast part	7 100 kg
	- swivel arms with corner bearings	6 250 kg
	- diagonal struts and ballast rest	9 260 kg
	- assembly platform, ladder and small parts	1 640 kg
undercarriage UW 480, complete		**34 000 kg**
	- base mast part	7 100 kg
	- swivel arms with crosshead and subframe	16 000 kg
	- diagonal struts and ballast rest	9 260 kg
	- assembly platform, ladder and small parts	1 640 kg

2.5.4

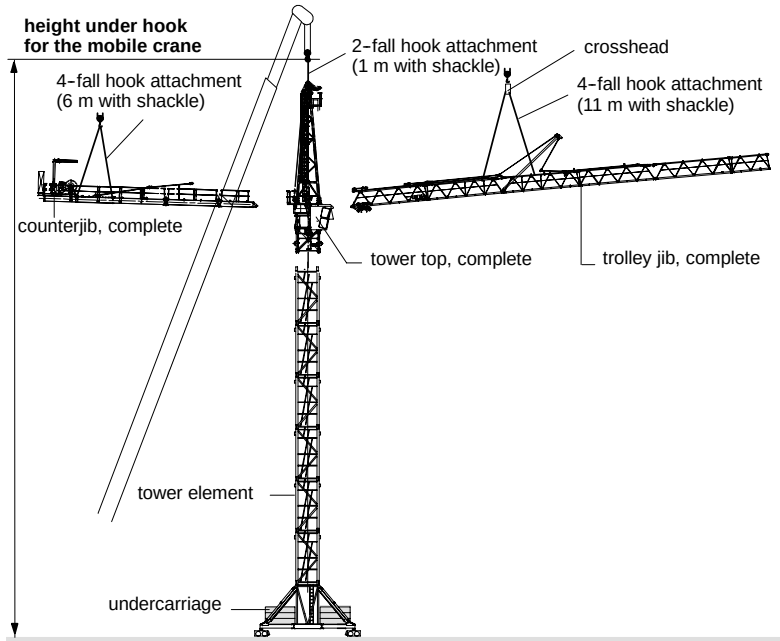
Danger!
Use suspension ropes with sufficient capacity and observe susopension plans!

Required height under hook for the mobile crane
=
Height under hook of WOLFF tower crane + 18 m.

For data regarding the height under hook of WOLFF tower cranes see tower configurations.

If the crane will be erected on another substructure, the required height under hook of the crane increases by the stuctural dimension of the substructure.

Differences in ground (mobile crane basis - tower crane basis) must be considered for erection.



2.6.3.1 Trolley jib – suspension plan 90 m jib

Danger during disassembly!
Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.
The parts of the jib are labeled with a building part identification at the top chord.

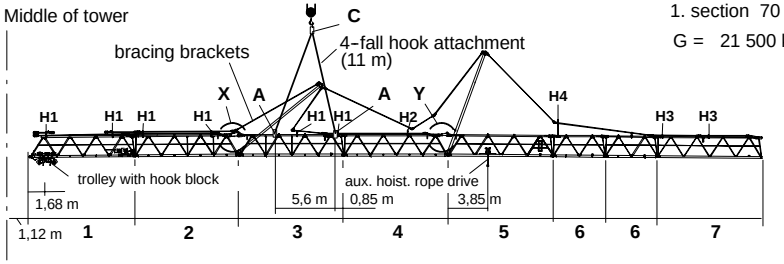
Lengths:	trolley jib part	1/2/3/4/5/7/8/9	= 10,0 m
	trolley jib part	6/10	= 5,0 m
	rope swivel traverse		= 0,61 m

More details about suspensions **A** , **B and C** see item 2.6.3.10 / 2.6.3.11 and supports **H1 to H4** see item 2.6.3.12.

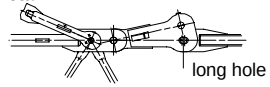
Attention!
For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 14 mm x 12 m) and secure at the trolley.

jib 90 m

1. section 70 m
G = 21 500 kg

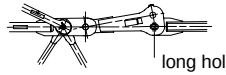


Detail " X "



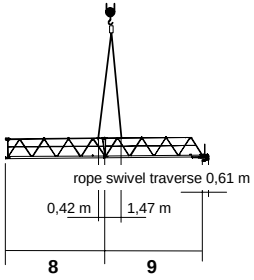
Attention !
Connecting strap **1** must show to the top and be bolted in the long hole.

Detail " Y "



Attention !
Connecting strap **2** must show to the top and be bolted in the long hole.

2. section 20 m
G = 2 700 kg



2.6.3.2 Trolley jib – suspension plan 85 m jib

Danger during disassembly!
Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.
The parts of the jib are labeled with a building part identification at the top chord.

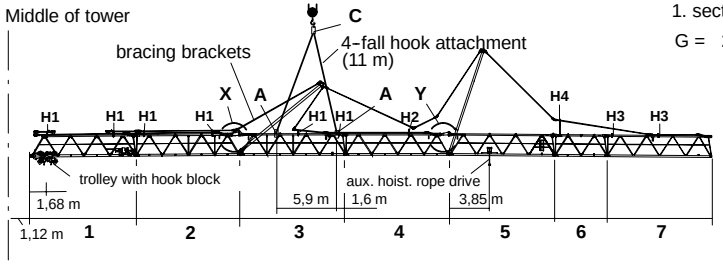
Lengths:	trolley jib part	1/2/3/4/5/7/8/9	= 10,0 m
	trolley jib part	6/10	= 5,0 m
	rope swivel traverse		= 0,61 m

More details about suspensions **A** , **B and C** see item 2.6.3.10 / 2.6.3.11 and supports **H1 to H4** see item 2.6.3.12.

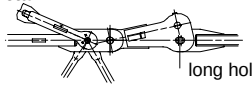
Attention!
For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 14 mm x 12 m) and secure at the trolley.

jib 85 m

1. section 65 m
G = 20 600 kg

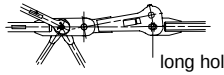


Detail " X "



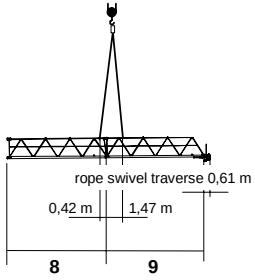
Attention !
Connecting strap **1** must show to the top and be bolted in the long hole.

Detail " Y "



Attention !
Connecting strap **2** must show to the top and be bolted in the long hole.

2. section 20 m
G = 2 700 kg



2.6.3.3 Trolley jib – suspension plan 80 m jib

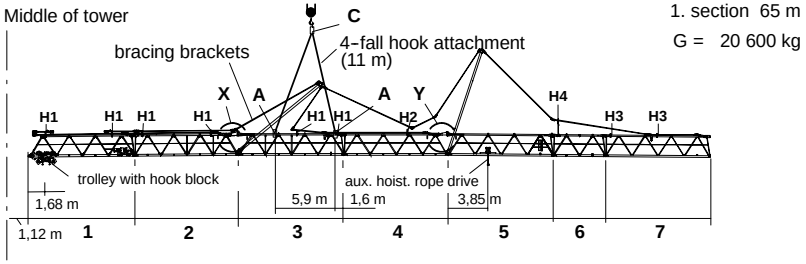
Danger during disassembly!
Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.
The parts of the jib are labeled with a building part identification at the top chord.

Lengths:	trolley jib part	1/2/3/4/5/7/8/9	= 10,0 m
	trolley jib part	6/10	= 5,0 m
	rope swivel traverse		= 0,61 m

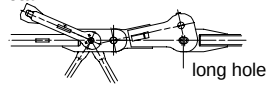
More details about suspensions **A** , **B and C** see item 2.6.3.10 / 2.6.3.11 and supports **H1 to H4** see item 2.6.3.12.

Attention!
For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 14 mm x 12 m) and secure at the trolley.

jib 80 m
1. section 65 m
G = 20 600 kg

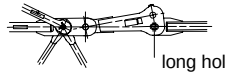


Detail " X "



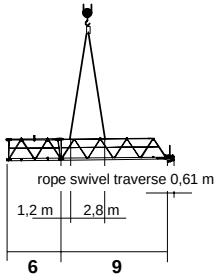
Attention !
Connecting strap **1** must show to the top and be bolted in the long hole.

Detail " Y "



Attention !
Connecting strap **2** must show to the top and be bolted in the long hole.

2. section 15 m
G = 2 200 kg



2.6.3.4 Trolley jib – suspension plan 75 m jib

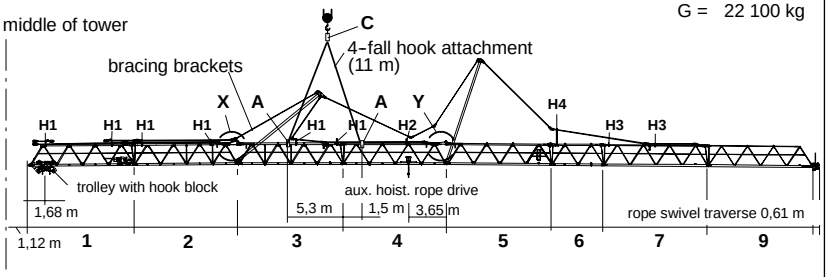
Danger during disassembly!
Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.
The parts of the jib are labeled with a building part identification at the top chord.

Lengths:	trolley jib part	1/2/3/4/5/7/8/9	= 10,0 m
	trolley jib part	6/10	= 5,0 m
	rope swivel traverse		= 0,61 m

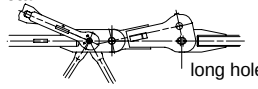
More details about suspensions **A** , **B and C** see item 2.6.3.10 / 2.6.3.11 and supports **H1 to H4** see item 2.6.3.12.

Attention!
For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 14 mm x 12 m) and secure at the trolley.

jib 75 m
G = 22 100 kg

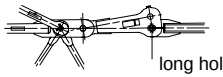


Detail " X "



Attention !
Connecting strap **1** must show to the top and be bolted in the long hole.

Detail " Y "



Attention !
Connecting strap **2** must show to the top and be bolted in the long hole.

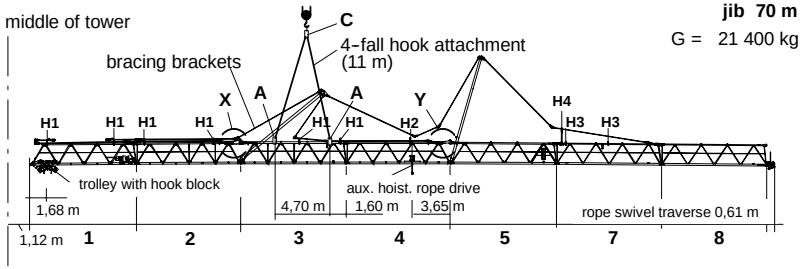
2.6.3.5 Trolley jib – suspension plan 70 m and 65 m jib

Danger during disassembly!
Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.
The parts of the jib are labeled with a building part identification at the top chord.

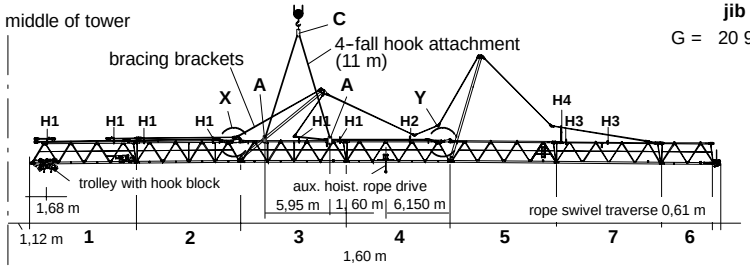
Lengths:	trolley jib part	1/2/3/4/5/7/8/9	= 10,0 m
	trolley jib part	6/10	= 5,0 m
	rope swivel traverse		= 0,61 m

More details about suspensions **A** , **B and C** see item 2.6.3.10 / 2.6.3.11 and supports **H1 to H4** see item 2.6.3.12.

Attention!
For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 14 mm x 12 m) and secure at the trolley.

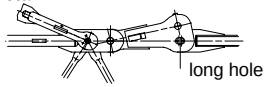


jib 70 m
G = 21 400 kg



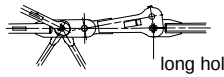
jib 65 m
G = 20 900 kg

Detail " X "



Attention !
Connecting strap **1** must show to the top and be bolted in the long hole.

Detail " Y "



Attention !
Connecting strap **2** must show to the top and be bolted in the long hole.

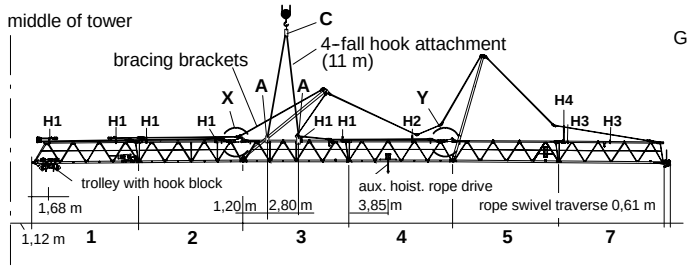
2.6.3.6 Trolley jib – suspension plan 60 m jib

Danger during disassembly!
Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.
The parts of the jib are labeled with a building part identification at the top chord.

Lengths:	trolley jib part	1/2/3/4/5/7/8/9	= 10,0 m
	trolley jib part	6/10	= 5,0 m
	rope swivel traverse		= 0,61 m

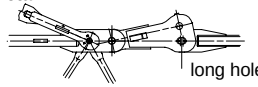
More details about suspensions **A** , **B and C** see item 2.6.3.10 / 2.6.3.11 and supports **H1 to H4** see item 2.6.3.12.

Attention!
For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 14 mm x 12 m) and secure at the trolley.



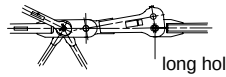
jib 60 m
G = 20 100 kg

Detail " X "



Attention !
Connecting strap **1** must show to the top and be bolted in the long hole.

Detail " Y "



Attention !
Connecting strap **2** must show to the top and be bolted in the long hole.

2.6.3.7 Trolley jib – suspension plan 55 m and 50 m jib

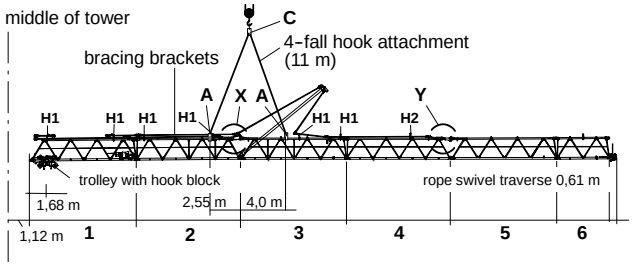
Danger during disassembly!
Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.
The parts of the jib are labeled with a building part identification at the top chord.

Lengths:	trolley jib part	1/2/3/4/5/7/8/9	=	10,0 m
	trolley jib part	6/10	=	5,0 m
	rope swivel traverse		=	0,61 m

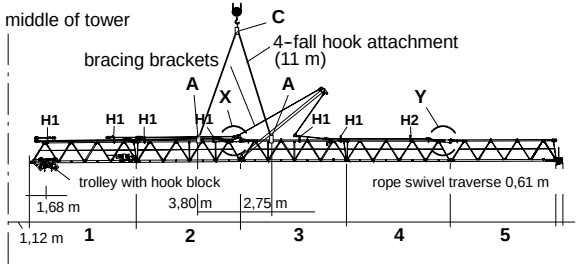
More details about suspensions **A** , **B and C** see item 2.6.3.10 / 2.6.3.11 and supports **H1 to H4** see item 2.6.3.12.

Attention!
For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 14 mm x 12 m) and secure at the trolley.

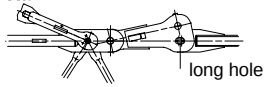
jib 55 m
G = 18 150 kg



jib 50 m
G = 17 350 kg

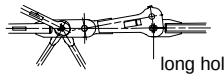


Detail " X "



Attention !
Connecting strap **1** must show to the top and be bolted in the long hole.

Detail " Y "



Attention !
Connecting strap **2** must show to the top and be bolted in the long hole.

2.6.3.8 Trolley jib – suspension plan 45 m and 40 m jib

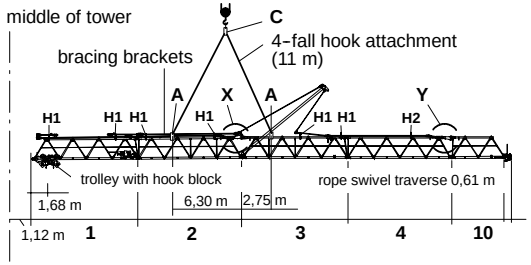
Danger during disassembly!
Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.
The parts of the jib are labeled with a building part identification at the top chord.

Lengths:	trolley jib part	1/2/3/4/5/7/8/9	=	10,0 m
	trolley jib part	6/10	=	5,0 m
	rope swivel traverse		=	0,61 m

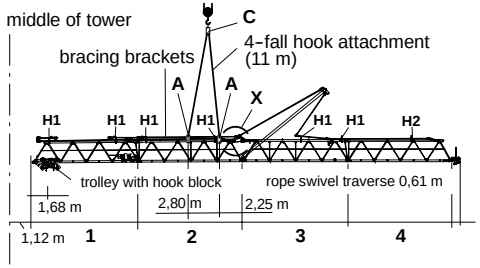
More details about suspensions **A** , **B and C** see item 2.6.3.10 / 2.6.3.11 and supports **H1 to H4** see item 2.6.3.12.

Attention!
For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 14 mm x 12 m) and secure at the trolley.

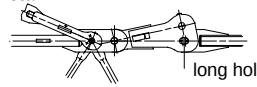
jib 45 m
G = 16 700 kg



jib 40 m
G = 15 900 kg

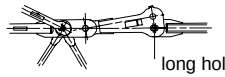


Detail " X "



Attention !
Connecting strap **1** must show to the top and be bolted in the long hole.

Detail " Y "



Attention !
Connecting strap **2** must show to the top and be bolted in the long hole.

2.6.3.9 **Trolley jib - suspension plan 35 m and 30 m jib**

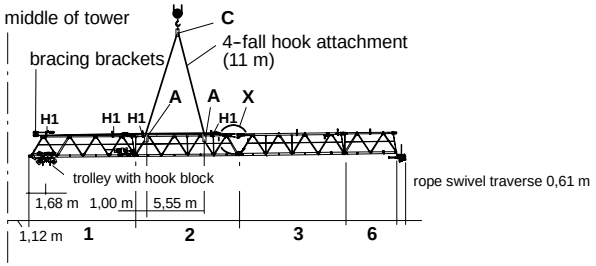
Danger during disassembly!
Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.
The parts of the jib are labeled with a building part identification at the top chord.

Lengths:	trolley jib part	1/2/3/4/5/7/8/9	= 10,0 m
	trolley jib part	6/10	= 5,0 m
	rope swivel traverse		= 0,61 m

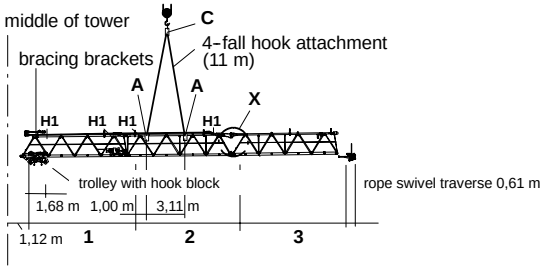
More details about suspensions **A** , **B and C** see item 2.6.3.10 / 2.6.3.11 and supports **H1 to H4** see item 2.6.3.12.

Attention!
For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 14 mm x 12 m) and secure at the trolley.

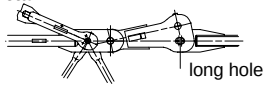
jib 35 m
G = 12 800 kg



jib 30 m
G = 12 000 kg



Detail " X "



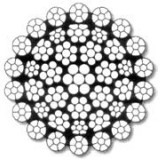
Attention !
Connecting strap **1** must show to the top and be bolted in the long hole.

2.7.1 **Hoisting rope** **for hoisting winch - Hw 2075 FU**

Cable Ø = 24 mm + 4% + 2%

design according to DIN 15 020
kind of operation TWG 1 Am

First equipment



CASAR EUROLIFT -
non twisting
flexible hoisting rope
with compressed outer strands
and compressed cable core

with special packing material grip

nominal strength = 2160 N/mm²
calc. breaking strength = 706,0 kN
min. breaking strength = 564,1 kN
weight per meter = 2,843 kg

Design

langs lay rope, right handed,
made from blank cable wire.

middle space factor	= 0,720
spinning loss factor	= 0,82
weight factor	= 0,87
total twist number	= 280

Number of carryig wires in the outer strands
is to be judged by the state of wear according to
DIN 15020 Bl. 2 / ISO DIS 4309 = **126**

Attention! **hoisting rope with special packing material grip**

Basic equipment

cable length	**225 m**	**for crane with:**	**cable 2 fall** **radius 90 m** **hook path 41 m**

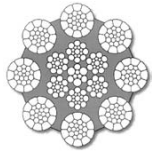
By lengthening the hook path by 1 tower element (4,5 m) the necessary cable length increases by **9,0 m for operation in 2 falls.**

Attention!
A wire cable is a complex machine element.

Conventional cable design frequently doesn't meet the requirements of modern rope drives, short service life is the result.

2.7.2 **Traversing rope**

Cable Ø = 12 mm + 4% + 2%	design according to DIN 15 020 kind of operation TWG 1 Am
First equipment	**CASAR TURBOPLAST -** cable with 8 strands made out of compressed outer strands. **with special packing material grip** **nominal strength = 1960 N/mm²** **calc. breaking strength = 148,3 kN** **min. breaking strength = 124,9 kN** **weight per meter = 0,658 kg**
Design	ordinary lay rope, right handed, surface of wires zinc coated. middle space factor = 0,665 middle spinning loss factor = 0,85 middle weight factor = 0,87 total twist number = 327 Number of carryig wires in the outer strands is to be judged by the state of wear according to DIN 15020 Bl. 2 / ISO DIS 4309 = **208**



Attention! short traversing rope with special packing material grip

Basic equipment

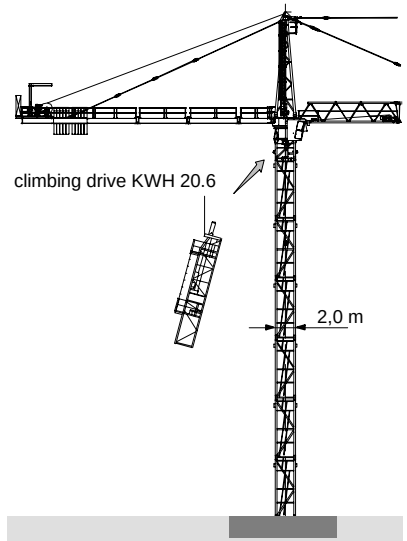
cable lengths	**1 x 100 m** **1 x 176 m**	**for crane with: radius 60 m - 90 m**
cable lengths	**1 x 100 m** **1 x 106 m**	**for crane with: radius 30 m - 55 m**

! **Attention!**
A wire cable is a complex machine element.

Conventional cable design frequently doesn't meet the requirements of modern rope drives. short service life is the result.

2.8.1 **Insertable exterior climbing drive KWH 20.6**

More details about the climbing drive KWH 20.6 see seperate documentation in section 12 "Additional equipment".



Minimum height with stationary erection:
2 tower elements = 9,0 m tower height

Minimum height with travelling erection:
2 tower elements + undercarriage appr. 13,5 m tower height

2.8.1.1 **Balancing weights**

WOLFF 9025	**jib**								
	30 m	35 m	40 m	45 m	50 m	55 m	60 m		
balancing weight * TV 20.4 = 3,02 t	--	--	** 30,8 m	28,7 m	30,5 m	31,2 m	29,1 m		
load = 5,0 t	25,5 m	24,3 m	--	--	--	--	--		

* The indicated balancing weights are gross-weights of tower sections or a load.

** The given radius (m) is an approximate value and refers to the center of the tower. The exact balancing position can be reached by carefully moving the trolley and can be checked by a frictionless moving in or out of the concerned tower section.

-- balancing not possible

Danger!
While climbing, the slewing part of the crane must be locked in the insertion direction of the tower sections. Until the tower has been repinned fully and in all holes, the balancing must be kept and the slewing part must remain locked. (For details, please see operational manual KWH 20.6).
The climbing gear is an auxilliary device for assembly and mustn't stay at the tower crane WOLFF under normal working conditions.

2.8.5. **Insertable internal climbing drive KSH 20 H**

For use of the WOLFF 9025 in connection with internal climbing drive KSH 20 H the tower combination has to be observed as shown here.

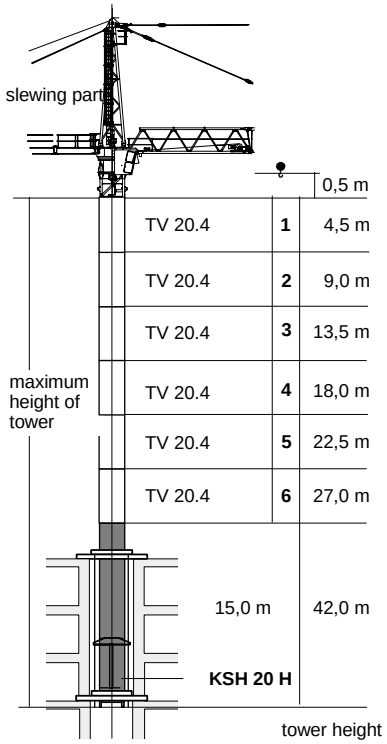
more details about the climbing drive KSH 20 H see seperate documentation in section 12 “Additional equipment”..

2.8.5.1 **Balancing weights**

* The indicated balancing weights are gross-weights of tower elements or a load.

** The indicated radius refers to the centre of the tower and shall be treated as standard value. Exact balancing must achieved by travelling of trolley with tower element or load and can checked by measuring the distance between corner posts and tensioning brackets. This distance shall be equal at all four corner posts.

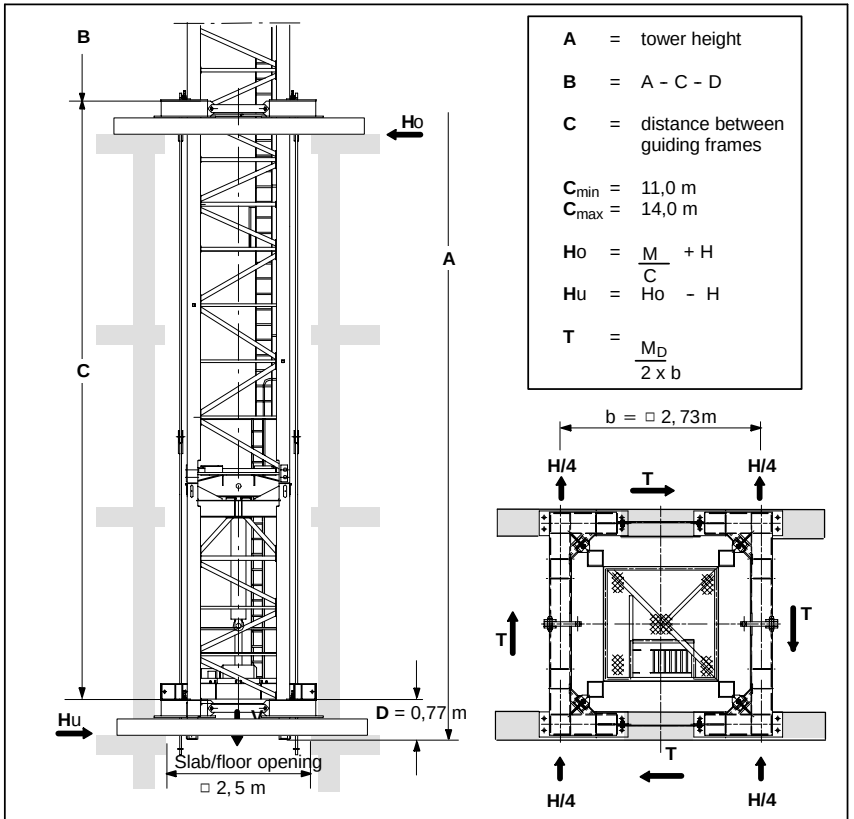
-- balancing not possible



WOLFF 9025	jib								
balancing weight *	30 m	35 m	40 m	45 m	50 m	55 m	60 m **		
TV 20.4 = 3,02 t	--	--	--	--	--	--	55,8 m		
load = 5,00 t	--	--	--	38,5 m	37,8 m	39,0 m	--		
load = 8,00 t	28,7 m	27,9 m	27,0 m	--	--	--	--		

WOLFF 9025	jib								
balancing weight *	65 m	70 m	75 m	80 m	85 m	90 m			
TV 20.4 = 3,02 t	55,8 m **	48,5 m	46,2 m	44,0 m	51,9 m	51,8 m			

2.8.5.2 **Reacting forces to building** **for hydraulic internal climbing gear KSH 20 H**

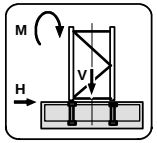


reacting forces to building (kN)	in service															
A(m)	42,0				37,5				33,0				28,5			
C(m)	11	12	13	14	11	12	13	14	11	12	13	14	11	12	13	14
V	1302				1271				1240				1209			
Ho	509	471	438	410	479	443	412	386	452	418	389	364	427	395	368	345
Hu	462	424	391	361	434	398	367	341	409	375	346	321	385	353	326	303
T	119				119				119				119			

reacting forces to building (kN)	out of service															
A(m)	42,0				37,5				33,0				28,5			
C(m)	11	12	13	14	11	12	13	14	11	12	13	14	11	12	13	14
V	1236				1207				1179				1151			
Ho	593	557	526	499	514	483	457	435	440	415	393	375	372	352	335	320
Hu	437	401	370	343	366	335	309	287	301	276	254	236	241	221	204	189
T	0				0				0				0			

3.1.1 **Foundation loads according to DIN**

Inclusive all dynamic factors, theory order II taken into account.
for a stationary tower crane on a concrete foundation
according to tower configuration without climbing drive
Permanent acting moment = **2270 kNm**
M = moment **H** = horizontal force **V** = vertical load

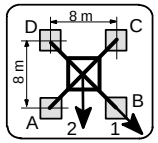


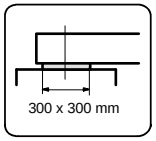
Foundation loads — Jib length 30 - 90 m

height under hook	Crane in cervice torque moment **651** kNm			crane out of service			Assembly		
[m]	**M** [kNm]	**H** [kN]	**V** [kN]	**M** [kNm]	**H** [kN]	**V** [kN]	**M** [kNm]	**H** [kN]	**V** [kN]
9,5	3618	36	981	87	65	989	4450	22	451
14,0	3804	38	1012	240	71	1017	4570	24	480
18,5	4011	40	1043	1110	99	1045	4690	26	508
23,0	4240	42	1074	1650	107	1074	4840	27	536
27,5	4494	43	1105	2240	115	1103	5000	29	564
32,0	4774	45	1136	2888	124	1130	5180	32	593
36,5	5086	47	1168	3590	132	1159	5370	33	621
41,0	5431	49	1199	4360	141	1187	5590	35	650
45,5	5816	51	1230	5210	149	1215	5820	37	678
50,0	6133	54	1274	6050	159	1255	6030	40	717
54,5	6520	56	1309	6990	168	1287	6280	42	749
59,0	6891	58	1354	7970	178	1327	6520	44	789
Attention ! Tower configuration with basis tower BT 29									
61,2	7130	61	1453	8280	185	1389	6560	46	851
65,7	7540	63	1499	9370	195	1435	6830	49	898
70,2	7975	66	1545	10540	206	1481	7130	51	944
74,5	8460	68	1592	11840	219	1528	7440	54	990
79,2	8970	71	1638	13210	230	1574	7770	56	1036

3.2.1.1 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



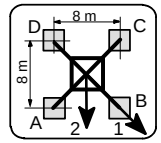


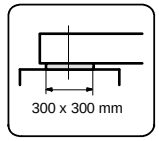
KR 1000 - 8 **Corner distance 8,0 m x 8,0 m** **Jib length 30 m**

hook height	central ballast	jib position	crane in service torque moment: **230** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
10,7	40,0	1	368	665	368	72	39	1	318	462	318	175	60
		2	578	578	159	159		2	420	420	217	217	
15,2	40,0	1	376	687	376	64	41	1	248	469	248	28	66
		2	596	596	155	155		2	412	412	239	239	
19,7	40,0	1	383	711	383	54	43	1	255	485	255	26	87
		2	615	615	150	150		2	417	417	93	93	
24,2	40,0	1	390	737	390	42	45	1	262	501	262	24	95
		2	635	635	144	144		2	431	431	94	94	
28,7	40,0	1	397	765	397	29	47	1	270	519	270	20	104
		2	657	657	136	136		2	446	446	93	93	
33,2	40,0	1	404	795	404	13	49	1	277	538	277	15	112
		2	680	680	127	127		2	462	462	92	92	
37,7	40,0	1	406	832	406	0	51	1	284	558	284	9	121
		2	705	705	117	117		2	478	478	89	89	
42,2	40,0	1	392	888	392	0	53	1	291	580	291	1	129
		2	732	732	104	104		2	495	495	86	86	
46,7	52,5	1	438	949	438	0	55	1	329	634	329	24	138
		2	792	792	121	121		2	559	559	254	254	
51,2	65,0	1	487	1008	487	0	57	1	446	723	446	168	147
		2	852	852	139	139		2	642	642	249	249	
55,7	80,0	1	541	1077	541	5	59	1	491	836	491	146	156
		2	920	920	162	162		2	735	735	247	247	
60,2	92,5	1	582	1149	582	16	62	1	532	948	532	116	166
		2	983	983	182	182		2	827	827	238	238	

3.2.1.2 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



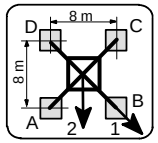


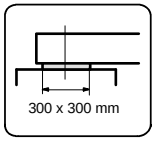
KR 1000 - 8 **Corner distance 8,0 m x 8,0 m** **Jib length 35 m**

hook height	central ballast	jib position	crane in service torque moment: **230** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
10,7	40,0	1	370	661	370	79	40	1	241	454	241	28	59
		2	576	576	165	165		2	413	413	228	228	
15,2	40,0	1	377	684	377	71	41	1	248	469	248	28	66
		2	594	594	161	161		2	405	405	250	250	
19,7	40,0	1	385	708	385	61	43	1	255	484	255	26	86
		2	613	613	156	156		2	417	417	94	94	
24,2	40,0	1	392	734	392	49	45	1	262	501	262	24	95
		2	634	634	150	150		2	431	431	94	94	
28,7	40,0	1	399	762	399	36	47	1	270	519	270	20	103
		2	655	655	142	142		2	446	446	93	93	
33,2	40,0	1	406	792	406	20	49	1	277	538	277	16	112
		2	679	679	133	133		2	461	461	92	92	
37,7	40,0	1	413	824	413	2	51	1	284	558	284	9	120
		2	704	704	122	122		2	478	478	90	90	
42,2	40,0	1	401	878	401	0	53	1	291	579	291	2	129
		2	730	730	109	109		2	495	495	87	87	
46,7	47,5	1	421	940	421	0	55	1	396	623	396	168	137
		2	778	778	113	113		2	557	557	235	235	
51,2	60,0	1	470	999	470	0	57	1	435	724	435	146	146
		2	838	838	132	132		2	640	640	230	230	
55,7	72,5	1	517	1063	517	0	60	1	474	831	474	118	155
		2	900	900	148	148		2	726	726	222	222	
60,2	87,5	1	572	1134	572	9	62	1	522	950	522	94	165
		2	970	970	174	174		2	824	824	219	219	

3.2.1.3 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



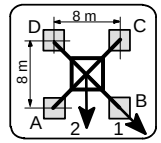


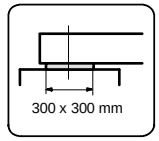
KR 1000 - 8 **Corner distance 8,0 m x 8,0 m** **Jib length 40 m**

hook height	central ballast	jib position	crane in service torque moment: **327** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
10,7	30,0	1	370	660	370	80	41	1	216	431	216	1	64
		2	575	575	165	165		2	397	397	243	243	
15,2	30,0	1	377	683	377	71	43	1	223	447	223	0	86
		2	594	594	161	161		2	381	381	65	65	
19,7	30,0	1	384	708	384	61	45	1	228	465	228	0	92
		2	613	613	155	155		2	395	395	66	66	
24,2	30,0	1	391	735	391	48	47	1	232	485	232	0	101
		2	634	634	148	148		2	409	409	66	66	
28,7	30,0	1	398	764	398	33	49	1	235	507	235	0	109
		2	657	657	140	140		2	424	424	65	65	
33,2	30,0	1	405	795	405	16	51	1	237	532	237	0	118
		2	681	681	130	130		2	440	440	63	63	
37,7	30,0	1	409	833	409	0	53	1	237	560	237	0	126
		2	707	707	118	118		2	474	474	251	251	
42,2	30,0	1	393	892	393	0	54	1	236	590	236	0	135
		2	735	735	104	104		2	522	522	218	218	
46,7	42,5	1	437	958	437	0	56	1	408	685	408	131	143
		2	797	797	119	119		2	604	604	212	212	
51,2	55,0	1	484	1021	484	0	59	1	447	790	447	104	152
		2	858	858	136	136		2	690	690	205	205	
55,7	70,0	1	541	1089	541	0	61	1	493	907	493	78	162
		2	928	928	158	158		2	786	786	200	200	
60,2	85,0	1	590	1168	590	13	63	1	540	1030	540	51	171
		2	998	998	182	182		2	886	886	194	194	

3.2.1.4 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



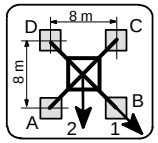


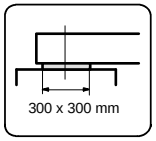
KR 1000 - 8 **Corner distance 8,0 m x 8,0 m** **Jib length 45 m**

hook height	central ballast	jib position	crane in service torque moment: **327** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
10,7	22,5	1	362	643	362	81	41	1	179	431	179	0	65
		2	561	561	163	163		2	380	380	244	244	
15,2	22,5	1	369	666	369	72	43	1	185	447	185	0	87
		2	579	579	159	159		2	363	363	46	46	
19,7	22,5	1	376	691	376	61	45	1	190	466	190	0	94
		2	599	599	153	153		2	376	376	47	47	
24,2	22,5	1	383	718	383	48	47	1	194	486	194	0	102
		2	620	620	146	146		2	391	391	47	47	
28,7	22,5	1	390	748	390	33	49	1	197	509	197	0	111
		2	643	643	138	138		2	406	406	46	46	
33,2	22,5	1	397	779	397	16	51	1	199	534	199	0	119
		2	667	667	128	128		2	434	434	261	261	
37,7	22,5	1	400	817	400	0	53	1	199	562	199	0	127
		2	693	693	116	116		2	479	479	230	230	
42,2	22,5	1	385	877	385	0	55	1	362	595	362	128	136
		2	722	722	101	101		2	527	527	196	196	
46,7	35,0	1	428	945	428	0	57	1	400	697	400	103	144
		2	784	784	116	116		2	610	610	190	190	
51,2	50,0	1	487	1008	487	0	59	1	445	809	445	82	154
		2	852	852	139	139		2	703	703	188	188	
55,7	65,0	1	541	1079	541	3	61	1	491	928	491	54	163
		2	922	922	160	160		2	800	800	182	182	
60,2	80,0	1	588	1160	588	17	64	1	538	1052	538	25	173
		2	993	993	184	184		2	901	901	176	176	

3.2.1.5 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



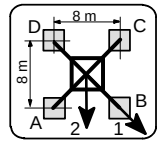


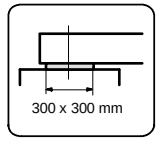
KR 1000 - 8 **Corner distance 8,0 m x 8,0 m** **Jib length 50 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
10,7	32,5	1	359	633	359	85	42	1	154	599	154	0	66
		2	553	553	165	165		2	439	439	15	15	
15,2	32,5	1	366	656	366	76	44	1	160	616	160	0	90
		2	571	571	161	161		2	452	452	16	16	
19,7	32,5	1	373	681	373	65	46	1	164	636	164	0	96
		2	591	591	155	155		2	466	466	16	16	
24,2	32,5	1	380	708	380	52	47	1	167	658	167	0	104
		2	612	612	148	148		2	480	480	15	15	
28,7	35,0	1	393	743	393	44	49	1	182	682	182	0	113
		2	640	640	147	147		2	502	502	20	20	
33,2	35,0	1	401	774	401	28	51	1	182	709	182	0	121
		2	664	664	137	137		2	519	519	18	18	
37,7	37,5	1	414	813	414	15	53	1	194	739	194	0	130
		2	696	696	132	132		2	543	543	20	20	
42,2	40,0	1	426	856	426	0	55	1	204	772	204	0	138
		2	730	730	125	125		2	568	568	22	22	
46,7	45,0	1	434	920	434	0	57	1	225	809	225	0	147
		2	772	772	122	122		2	622	622	172	172	
51,2	57,5	1	482	981	482	0	59	1	285	845	285	0	156
		2	833	833	139	139		2	709	709	163	163	
55,7	72,5	1	532	1055	532	8	62	1	482	940	482	23	165
		2	902	902	161	161		2	806	806	157	157	
60,2	87,5	1	579	1134	579	24	64	1	523	1071	523	0	175
		2	972	972	186	186		2	908	908	151	151	

3.2.1.6 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



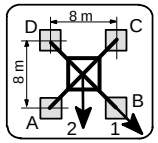


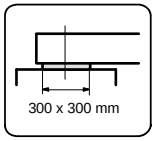
KR 1000 - 8 **Corner distance 8,0 m x 8,0 m** **Jib length 55 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
10,7	32,5	1	369	631	369	108	42	1	154	600	154	0	67
		2	554	554	184	184		2	439	439	15	15	
15,2	32,5	1	376	654	376	98	44	1	159	617	159	0	91
		2	573	573	180	180		2	452	452	16	16	
19,7	32,5	1	384	679	384	88	46	1	163	637	163	0	97
		2	593	593	174	174		2	466	466	16	16	
24,2	32,5	1	391	706	391	75	48	1	167	659	167	0	105
		2	614	614	167	167		2	481	481	15	15	
28,7	35,0	1	404	741	404	67	50	1	181	683	181	0	114
		2	642	642	165	165		2	503	503	20	20	
33,2	35,0	1	411	772	411	50	52	1	181	711	181	0	122
		2	666	666	156	156		2	520	520	17	17	
37,7	37,5	1	424	812	424	37	54	1	193	741	193	0	131
		2	698	698	150	150		2	544	544	20	20	
42,2	40,0	1	438	854	438	21	55	1	203	774	203	0	139
		2	732	732	143	143		2	571	571	204	204	
46,7	42,5	1	451	900	451	2	57	1	211	811	211	0	148
		2	768	768	134	134		2	630	630	172	172	
51,2	55,0	1	490	970	490	11	60	1	272	847	272	0	157
		2	829	829	151	151		2	718	718	163	163	
55,7	70,0	1	536	1049	536	23	62	1	486	952	486	19	166
		2	898	898	173	173		2	816	816	156	156	
60,2	85,0	1	583	1128	583	38	64	1	522	1088	522	0	176
		2	969	969	198	198		2	918	918	149	149	

3.2.1.7 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



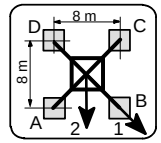


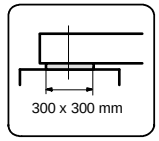
KR 1000 - 8 **Corner distance 8,0 m x 8,0 m** **Jib length 60 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **490** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
10,7	32,5	1	392	645	392	138	43	1	152	604	152	0	71
		2	571	571	213	213		2	440	440	13	13	
15,2	32,5	1	399	669	399	129	45	1	157	622	157	0	96
		2	590	590	208	208		2	455	455	92	92	
19,7	32,5	1	406	695	406	117	47	1	160	643	160	0	103
		2	610	610	202	202		2	471	471	90	90	
24,2	35,0	1	419	729	419	110	49	1	175	666	175	0	111
		2	638	638	201	201		2	494	494	93	93	
28,7	35,0	1	426	758	426	94	51	1	177	692	177	0	120
		2	661	661	192	192		2	512	512	89	89	
33,2	37,5	1	440	796	440	83	53	1	189	720	189	0	128
		2	692	692	187	187		2	538	538	91	91	
37,7	40,0	1	453	837	453	69	55	1	200	752	200	0	136
		2	725	725	181	181		2	567	567	239	239	
42,2	40,0	1	460	875	460	45	57	1	197	786	197	0	145
		2	753	753	167	167		2	618	618	202	202	
46,7	45,0	1	480	928	480	31	59	1	217	824	217	0	153
		2	797	797	162	162		2	687	687	173	173	
51,2	52,5	1	506	987	506	26	61	1	456	892	456	21	163
		2	846	846	167	167		2	764	764	149	149	
55,7	70,0	1	558	1074	558	42	63	1	503	1027	503	0	172
		2	923	923	193	193		2	871	871	145	145	
60,2	85,0	1	606	1155	606	56	66	1	516	1190	516	0	182
		2	994	994	217	217		2	976	976	135	135	

3.2.1.8 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



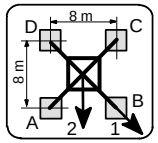


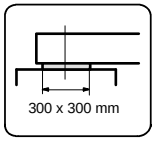
KR 1000 - 8 **Corner distance 8,0 m x 8,0 m** **Jib length 65 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **490** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
10,7	32,5	1	403	647	403	158	44	1	151	605	151	0	72
		2	576	576	230	230		2	478	478	59	59	
15,2	32,5	1	410	672	410	148	45	1	156	623	156	0	98
		2	595	595	225	225		2	493	493	58	58	
19,7	32,5	1	417	697	417	136	47	1	160	644	160	0	104
		2	615	615	218	218		2	510	510	56	56	
24,2	35,0	1	430	731	430	129	49	1	256	672	256	0	112
		2	643	643	217	217		2	534	534	59	59	
28,7	35,0	1	437	761	437	113	51	1	254	704	254	0	121
		2	666	666	208	208		2	552	552	54	54	
33,2	37,5	1	451	800	451	102	53	1	263	740	263	0	129
		2	697	697	204	204		2	578	578	55	55	
37,7	40,0	1	464	841	464	87	55	1	270	779	270	0	138
		2	730	730	197	197		2	605	605	55	55	
42,2	42,5	1	477	885	477	70	57	1	276	822	276	0	146
		2	765	765	189	189		2	646	646	209	209	
46,7	45,0	1	491	932	491	49	59	1	279	869	279	0	155
		2	803	803	178	178		2	709	709	172	172	
51,2	50,0	1	511	985	511	37	61	1	297	915	297	0	164
		2	846	846	176	176		2	781	781	141	141	
55,7	65,0	1	557	1066	557	47	64	1	481	1064	481	0	173
		2	917	917	196	196		2	883	883	131	131	
60,2	82,5	1	610	1155	610	66	66	1	506	1229	506	0	183
		2	995	995	226	226		2	995	995	126	126	

3.2.1.9 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



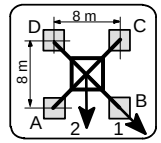


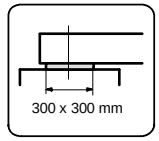
KR 1000 - 8 **Corner distance 8,0 m x 8,0 m** **Jib length 70 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **490** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
10,7	32,5	1	404	668	404	140	44	1	212	656	212	0	73
		2	591	591	217	217		2	502	502	38	38	
15,2	32,5	1	411	693	411	129	46	1	214	681	214	0	99
		2	610	610	212	212		2	518	518	36	36	
19,7	35,0	1	424	725	424	124	48	1	227	708	227	0	105
		2	637	637	212	212		2	541	541	40	40	
24,2	35,0	1	431	753	431	110	50	1	226	738	226	0	114
		2	659	659	204	204		2	558	558	36	36	
28,7	35,0	1	438	783	438	93	52	1	223	771	223	0	122
		2	682	682	194	194		2	577	577	32	32	
33,2	37,5	1	452	822	452	81	54	1	232	808	232	0	130
		2	714	714	190	190		2	603	603	32	32	
37,7	40,0	1	465	864	465	66	55	1	238	848	238	0	139
		2	747	747	183	183		2	631	631	31	31	
42,2	42,5	1	478	909	478	48	57	1	243	892	243	0	147
		2	783	783	174	174		2	680	680	177	177	
46,7	45,0	1	492	958	492	26	59	1	245	941	245	0	156
		2	821	821	162	162		2	744	744	140	140	
51,2	47,5	1	506	1005	506	7	62	1	410	1003	410	0	165
		2	859	859	153	153		2	811	811	101	101	
55,7	67,5	1	564	1099	564	29	64	1	445	1166	445	0	174
		2	943	943	185	185		2	926	926	102	102	

3.2.1.10 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



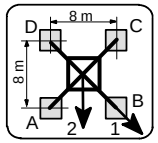


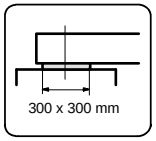
KR 1000 - 8 **Corner distance 8,0 m x 8,0 m** **Jib length 75 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
10,7	60,0	1	453	718	453	189	44	1	205	790	205	0	75
		2	641	641	266	266		2	579	579	21	21	
15,2	60,0	1	460	743	460	178	46	1	209	810	209	0	102
		2	660	660	261	261		2	593	593	21	21	
19,7	60,0	1	468	769	468	166	48	1	212	832	212	0	108
		2	681	681	254	254		2	608	608	20	20	
24,2	62,5	1	481	803	481	158	50	1	226	858	226	0	116
		2	709	709	253	253		2	631	631	24	24	
28,7	62,5	1	488	834	488	142	52	1	226	886	226	0	125
		2	732	732	244	244		2	648	648	21	21	
33,2	65,0	1	501	872	501	130	54	1	237	917	237	0	133
		2	764	764	239	239		2	672	672	24	24	
37,7	67,5	1	515	914	515	115	56	1	246	951	246	0	142
		2	797	797	232	232		2	697	697	25	25	
42,2	70,0	1	528	958	528	98	58	1	254	989	254	0	150
		2	832	832	224	224		2	750	750	206	206	
46,7	75,0	1	547	1012	547	83	60	1	272	1031	272	0	159
		2	876	876	219	219		2	821	821	174	174	
51,2	77,5	1	562	1059	562	65	62	1	281	1072	281	0	168
		2	913	913	210	210		2	888	888	135	135	
55,7	85,0	1	588	1121	588	56	65	1	463	1229	463	0	177
		2	965	965	212	212		2	973	973	104	104	

3.2.1.11 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



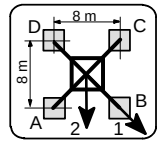


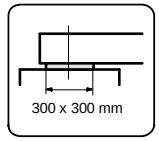
KR 1000 - 8 **Corner distance 8,0 m x 8,0 m** **Jib length 80 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
10,7	60,0	1	465	729	465	200	45	1	204	791	204	0	76
		2	651	651	278	278		2	579	579	20	20	
15,2	60,0	1	472	754	472	190	47	1	209	811	209	0	103
		2	671	671	272	272		2	594	594	20	20	
19,7	60,0	1	479	780	479	178	49	1	211	833	211	0	109
		2	692	692	266	266		2	609	609	19	19	
24,2	62,5	1	492	815	492	170	51	1	225	859	225	0	117
		2	720	720	264	264		2	631	631	24	24	
28,7	65,0	1	505	851	505	159	52	1	238	887	238	0	126
		2	750	750	261	261		2	654	654	27	27	
33,2	65,0	1	512	884	512	141	54	1	236	918	236	0	134
		2	775	775	250	250		2	672	672	23	23	
37,7	67,5	1	526	926	526	126	56	1	246	953	246	0	143
		2	809	809	243	243		2	716	716	235	235	
42,2	72,5	1	545	977	545	113	58	1	266	991	266	0	151
		2	851	851	240	240		2	784	784	207	207	
46,7	75,0	1	559	1026	559	92	60	1	271	1033	271	0	160
		2	889	889	228	228		2	850	850	168	168	
51,2	77,5	1	573	1073	573	73	62	1	487	1118	487	0	169
		2	927	927	219	219		2	918	918	128	128	
55,7	90,0	1	612	1149	612	76	65	1	482	1285	482	0	178
		2	992	992	233	233		2	1016	1016	108	108	

3.2.1.12 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



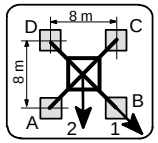


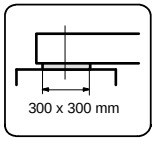
KR 1000 - 8 **Corner distance 8,0 m x 8,0 m** **Jib length 85 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
10,7	60,0	1	474	689	474	258	45	1	204	791	204	0	77
		2	626	626	321	321		2	580	580	20	20	
15,2	60,0	1	481	713	481	248	47	1	208	812	208	0	104
		2	645	645	316	316		2	594	594	20	20	
19,7	62,5	1	494	746	494	242	49	1	223	834	223	0	110
		2	672	672	316	316		2	615	615	25	25	
24,2	62,5	1	501	774	501	228	51	1	225	860	225	0	119
		2	694	694	308	308		2	631	631	23	23	
28,7	65,0	1	514	810	514	219	53	1	237	889	237	0	127
		2	723	723	305	305		2	655	655	27	27	
33,2	65,0	1	521	842	521	201	55	1	235	920	235	0	135
		2	748	748	295	295		2	673	673	22	22	
37,7	67,5	1	535	883	535	186	57	1	245	955	245	0	144
		2	781	781	288	288		2	709	709	260	260	
42,2	72,5	1	554	933	554	175	59	1	265	994	265	0	152
		2	822	822	286	286		2	777	777	231	231	
46,7	75,0	1	568	981	568	155	60	1	270	1036	270	0	161
		2	860	860	276	276		2	843	843	192	192	
51,2	77,5	1	582	1027	582	137	63	1	278	1077	278	0	170
		2	897	897	267	267		2	912	912	152	152	
55,7	82,5	1	602	1083	602	122	65	1	483	1243	483	0	179
		2	942	942	262	262		2	992	992	113	113	

3.2.1.13 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



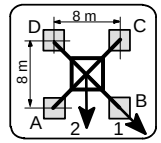


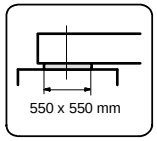
KR 1000 - 8 **Corner distance 8,0 m x 8,0 m** **Jib length 90 m**

hook height	central ballast	jib position	crane in service torque moment: **651** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
10,7	60,0	1	484	687	484	282	45	1	204	792	204	0	78
		2	628	628	341	341		2	580	580	20	20	
15,2	60,0	1	491	712	491	271	47	1	208	813	208	0	105
		2	647	647	336	336		2	594	594	20	20	
19,7	62,5	1	505	744	505	265	49	1	223	836	223	0	111
		2	674	674	335	335		2	616	616	25	25	
24,2	62,5	1	512	772	512	252	51	1	224	862	224	0	120
		2	696	696	328	328		2	632	632	23	23	
28,7	65,0	1	525	808	525	242	53	1	236	890	236	0	128
		2	725	725	325	325		2	655	655	26	26	
33,2	67,5	1	538	847	538	230	55	1	247	922	247	0	137
		2	756	756	320	320		2	680	680	28	28	
37,7	70,0	1	552	888	552	216	57	1	256	957	256	0	145
		2	789	789	314	314		2	736	736	267	267	
42,2	72,5	1	565	932	565	198	59	1	263	996	263	0	154
		2	824	824	306	306		2	799	799	232	232	
46,7	75,0	1	578	979	578	177	61	1	269	1039	269	0	162
		2	862	862	295	295		2	866	866	191	191	
51,2	80,0	1	599	1033	599	165	63	1	542	1111	542	0	171
		2	906	906	292	292		2	942	942	156	156	
55,7	82,5	1	613	1082	613	144	65	1	485	1282	485	0	181
		2	945	945	281	281		2	1016	1016	110	110	

3.2.2.1 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



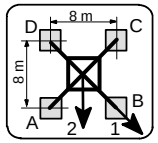


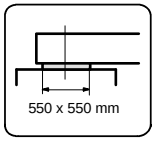
KR 16 - 80/100 **Corner distance 8,0 m x 8,0 m** **Jib length 30 m**

hook height	central ballast	jib position	crane in service torque moment: **230** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
60,8	90	1	585	1161	586	10	65	1	535	961	536	110	173
		2	993	993	178	178		2	836	836	235	235	
63,0	90	1	601	1177	601	24	67	1	551	1006	551	95	177
		2	1009	1009	193	193		2	873	873	229	229	
67,5	105	1	650	1260	650	40	70	1	600	1137	600	63	188
		2	1081	1081	219	219		2	980	980	220	220	
72,0	120	1	699	1345	699	53	72	1	649	1276	649	22	200
		2	1156	1156	242	242		2	1092	1092	206	206	
76,5	140	1	761	1446	761	76	75	1	700	1442	701	0	211
		2	1245	1245	276	276		2	1221	1221	201	201	
81,0	160	1	822	1549	822	95	77	1	722	1645	722	0	222
		2	1336	1336	308	308		2	1354	1354	191	191	
85,5	185	1	896	1668	896	124	80	1	762	1862	762	0	233
		2	1442	1442	351	351		2	1505	1505	188	188	
90,0	215	1	983	1803	983	162	82	1	818	2096	818	0	244
		2	1563	1563	403	403		2	1674	1674	192	192	

3.2.2.2 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



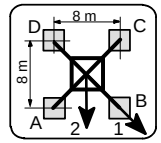


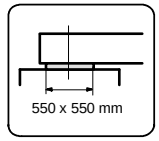
KR 16 - 80/100 **Corner distance 8,0 m x 8,0 m** **Jib length 35 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **230** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	85	1	575	1146	575	3	65	1	525	962	525	88	173
		2	979	979	171	171		2	834	834	216	216	
63,0	85	1	590	1163	590	18	68	1	540	1007	540	74	176
		2	995	995	186	186		2	870	870	210	210	
67,5	100	1	639	1245	640	34	70	1	589	1137	589	41	187
		2	1068	1068	211	211		2	977	977	202	202	
72,0	115	1	688	1331	689	46	73	1	638	1276	639	1	199
		2	1143	1143	234	234		2	1089	1089	188	188	
76,5	135	1	750	1431	750	69	75	1	668	1464	668	0	210
		2	1232	1232	269	269		2	1218	1218	182	182	
81,0	155	1	812	1535	812	89	78	1	690	1667	690	0	221
		2	1323	1323	300	300		2	1351	1351	172	172	
85,5	180	1	886	1654	886	117	80	1	729	1885	729	0	232
		2	1429	1429	342	342		2	1502	1502	169	169	
90,0	215	1	985	1802	985	168	83	1	810	2119	811	0	244
		2	1563	1563	407	407		2	1684	1684	186	186	

3.2.2.3 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



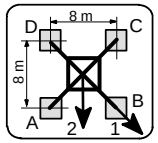


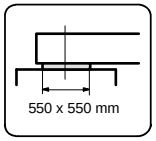
KR 16 - 80/100 **Corner distance 8,0 m x 8,0 m** **Jib length 40 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	85	1	600	1185	600	14	67	1	550	1048	550	51	179
		2	1013	1013	186	186		2	902	902	197	197	
63,0	85	1	615	1200	615	31	69	1	565	1093	565	38	182
		2	1028	1028	202	202		2	938	938	192	192	
67,5	95	1	652	1272	652	32	71	1	591	1225	591	0	193
		2	1090	1090	213	213		2	1035	1035	168	168	
72,0	115	1	713	1371	713	55	74	1	620	1414	620	0	205
		2	1179	1179	248	248		2	1163	1163	163	163	
76,5	135	1	775	1474	775	76	76	1	644	1612	644	0	216
		2	1269	1269	280	280		2	1295	1295	155	155	
81,0	165	1	861	1605	861	118	79	1	710	1826	710	0	227
		2	1387	1387	336	336		2	1457	1457	166	166	
85,5	200	1	960	1752	961	169	82	1	793	2056	794	0	239
		2	1520	1520	401	401		2	1637	1637	184	184	
90,0	235	1	1059	1903	1060	216	84	1	868	2303	868	0	250
		2	1656	1656	463	463		2	1824	1824	195	195	

3.2.2.4 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



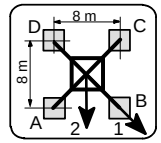


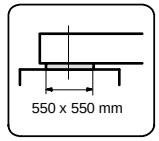
KR 16 - 80/100 **Corner distance 8,0 m x 8,0 m** **Jib length 45 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	80	1	598	1177	598	19	67	1	548	1069	548	26	180
		2	1008	1008	188	188		2	917	917	179	179	
63,0	80	1	613	1192	613	35	69	1	563	1114	563	13	184
		2	1022	1022	204	204		2	952	952	174	174	
67,5	90	1	650	1264	650	36	72	1	563	1273	564	0	194
		2	1084	1084	216	216		2	1050	1050	150	150	
72,0	110	1	711	1364	712	59	74	1	591	1464	591	0	207
		2	1173	1173	250	250		2	1179	1179	144	144	
76,5	135	1	785	1480	786	91	77	1	638	1666	638	0	218
		2	1276	1276	295	295		2	1325	1325	146	146	
81,0	170	1	885	1624	885	145	79	1	728	1883	728	0	229
		2	1407	1407	362	362		2	1501	1501	169	169	
85,5	205	1	984	1772	984	195	82	1	809	2117	809	0	240
		2	1541	1541	426	426		2	1682	1682	185	185	
90,0	245	1	1095	1937	1095	254	84	1	906	2369	906	0	251
		2	1690	1690	500	500		2	1883	1883	208	208	

3.2.2.5 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



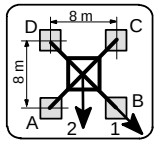


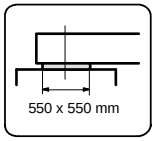
KR 16 - 80/100 **Corner distance 8,0 m x 8,0 m** **Jib length 50 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	85	1	582	1146	582	19	68	1	521	1088	521	0	182
		2	981	981	184	184		2	917	917	148	148	
63,0	85	1	598	1162	598	33	70	1	522	1147	522	0	186
		2	997	997	199	199		2	953	953	142	142	
67,5	100	1	647	1246	647	48	72	1	533	1320	534	0	197
		2	1070	1070	223	223		2	1064	1064	130	130	
72,0	125	1	721	1357	721	85	75	1	586	1511	586	0	209
		2	1171	1171	271	271		2	1205	1205	136	136	
76,5	155	1	807	1484	807	131	77	1	659	1713	659	0	220
		2	1286	1286	329	329		2	1363	1363	152	152	
81,0	185	1	894	1613	894	175	80	1	724	1928	724	0	231
		2	1403	1403	385	385		2	1526	1526	162	162	
85,5	220	1	993	1759	993	227	82	1	806	2160	807	0	242
		2	1535	1535	451	451		2	1707	1707	179	179	
90,0	260	1	1105	1921	1105	288	85	1	905	2408	905	0	253
		2	1682	1682	527	527		2	1906	1906	203	203	

3.2.2.5 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



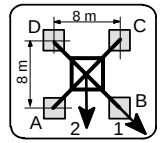


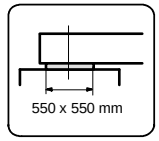
KR 16 - 80/100 **Corner distance 8,0 m x 8,0 m** **Jib length 55 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	85	1	593	1145	593	40	68	1	533	1105	533	0	183
		2	984	984	202	202		2	933	933	152	152	
63,0	85	1	608	1162	608	55	70	1	535	1164	535	0	187
		2	999	999	217	217		2	970	970	147	147	
67,5	100	1	657	1246	657	69	72	1	545	1339	545	0	198
		2	1073	1073	241	241		2	1081	1081	134	134	
72,0	125	1	731	1357	731	105	75	1	597	1532	597	0	210
		2	1174	1174	289	289		2	1223	1223	139	139	
76,5	155	1	818	1484	818	151	77	1	668	1736	668	0	221
		2	1289	1289	347	347		2	1382	1382	154	154	
81,0	185	1	904	1614	905	194	80	1	732	1954	732	0	232
		2	1406	1406	402	402		2	1545	1545	163	163	
85,5	225	1	1016	1773	1016	259	82	1	838	2189	838	0	243
		2	1551	1551	481	481		2	1740	1740	192	192	
90,0	260	1	1115	1923	1115	307	85	1	910	2441	910	0	254
		2	1686	1686	544	544		2	1928	1928	202	202	

3.2.2.7 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



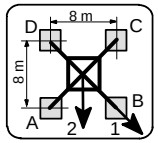


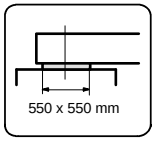
KR 16 - 80/100 **Corner distance 8,0 m x 8,0 m** **Jib length 60 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **490** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	85	1	615	1171	615	59	69	1	527	1206	528	0	189
		2	1008	1008	222	222		2	991	991	139	139	
63,0	85	1	630	1186	631	75	71	1	530	1263	530	0	193
		2	1023	1023	238	238		2	1027	1027	134	134	
67,5	105	1	692	1284	692	100	73	1	561	1446	561	0	203
		2	1111	1111	273	273		2	1153	1153	131	131	
72,0	135	1	779	1410	779	148	76	1	633	1648	634	0	216
		2	1225	1225	332	332		2	1311	1311	146	146	
76,5	165	1	865	1539	865	192	79	1	700	1861	700	0	227
		2	1341	1341	389	389		2	1473	1473	157	157	
81,0	200	1	964	1683	964	245	81	1	784	2090	784	0	238
		2	1473	1473	456	456		2	1653	1653	175	175	
85,5	240	1	1076	1844	1076	308	84	1	884	2336	884	0	249
		2	1619	1619	533	533		2	1852	1852	200	200	

3.2.2.8 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



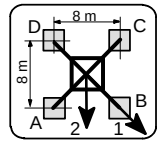


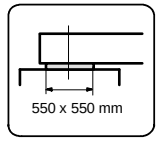
KR 16 - 80/100 **Corner distance 8,0 m x 8,0 m** **Jib length 65 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **490** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	80	1	613	1164	614	63	69	1	505	1244	505	0	190
		2	1003	1003	224	224		2	1004	1004	123	123	
63,0	80	1	629	1179	629	79	71	1	508	1301	508	0	194
		2	1018	1018	240	240		2	1039	1039	119	119	
67,5	105	1	703	1289	703	117	74	1	563	1486	563	0	205
		2	1118	1118	288	288		2	1179	1179	127	127	
72,0	140	1	802	1428	802	176	76	1	659	1691	659	0	217
		2	1245	1245	360	360		2	1350	1350	154	154	
76,5	170	1	889	1557	889	220	79	1	724	1907	724	0	228
		2	1361	1361	416	416		2	1513	1513	164	164	
81,0	205	1	988	1702	988	273	81	1	806	2140	806	0	239
		2	1493	1493	482	482		2	1694	1694	181	181	
85,5	245	1	1099	1864	1099	334	84	1	904	2390	904	0	250
		2	1640	1640	559	559		2	1895	1895	204	204	

3.2.2.9 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



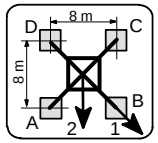


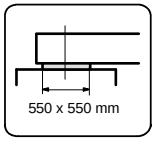
KR 16 - 80/100 **Corner distance 8,0 m x 8,0 m** **Jib length 70 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **490** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	90	1	640	1217	640	63	70	1	505	1348	506	0	191
		2	1048	1048	232	232		2	1067	1067	113	113	
63,0	95	1	668	1243	668	92	72	1	534	1403	534	0	195
		2	1075	1075	261	261		2	1114	1114	122	122	
67,5	120	1	742	1355	742	129	74	1	588	1591	588	0	206
		2	1175	1175	308	308		2	1254	1254	129	129	
72,0	155	1	841	1494	841	187	77	1	683	1798	683	0	218
		2	1303	1303	379	379		2	1427	1427	155	155	
76,5	185	1	927	1624	927	230	79	1	746	2018	746	0	229
		2	1420	1420	435	435		2	1591	1591	164	164	
81,0	220	1	1026	1771	1027	282	82	1	826	2254	826	0	240
		2	1553	1553	500	500		2	1773	1773	179	179	
85,5	260	1	1138	1933	1138	343	84	1	922	2508	922	0	251
		2	1700	1700	576	576		2	1975	1975	201	201	

3.2.2.10 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



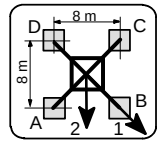


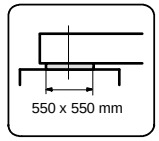
KR 16 - 80/100 **Corner distance 8,0 m x 8,0 m** **Jib length 75 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	110	1	670	1244	671	97	70	1	535	1413	535	0	194
		2	1076	1076	265	265		2	1120	1120	121	121	
63,0	115	1	698	1272	698	125	72	1	563	1469	563	0	198
		2	1104	1104	293	293		2	1168	1168	129	129	
67,5	140	1	772	1383	773	162	75	1	616	1658	616	0	209
		2	1204	1204	341	341		2	1309	1309	136	136	
72,0	170	1	859	1509	859	209	77	1	685	1867	685	0	221
		2	1319	1319	399	399		2	1469	1469	149	149	
76,5	205	1	958	1651	958	265	80	1	773	2087	773	0	232
		2	1448	1448	468	468		2	1646	1646	170	170	
81,0	240	1	1057	1796	1057	318	82	1	853	2323	853	0	243
		2	1580	1580	535	535		2	1829	1829	186	186	
85,5	280	1	1169	1958	1169	380	85	1	949	2577	949	0	254
		2	1727	1727	611	611		2	2030	2030	207	207	

3.2.2.11 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



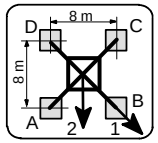


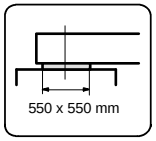
KR 16 - 80/100 **Corner distance 8,0 m x 8,0 m** **Jib length 80 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	115	1	694	1272	694	116	70	1	553	1471	553	0	195
		2	1103	1103	285	285		2	1164	1164	124	124	
63,0	115	1	709	1287	710	132	72	1	557	1525	557	0	199
		2	1118	1118	301	301		2	1199	1199	120	120	
67,5	145	1	796	1411	796	181	75	1	634	1717	634	0	210
		2	1231	1231	361	361		2	1353	1353	139	139	
72,0	175	1	883	1538	883	227	77	1	701	1929	701	0	222
		2	1346	1346	419	419		2	1515	1515	151	151	
76,5	210	1	982	1681	982	283	80	1	787	2153	788	0	233
		2	1476	1476	488	488		2	1693	1693	171	171	
81,0	245	1	1081	1827	1081	335	83	1	865	2393	866	0	244
		2	1608	1608	554	554		2	1877	1877	185	185	

3.2.2.12 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



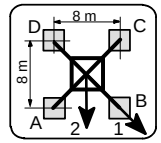


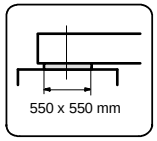
KR 16 - 80/100 **Corner distance 8,0 m x 8,0 m** **Jib length 85 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	105	1	678	1198	678	158	70	1	541	1431	541	0	196
		2	1046	1046	310	310		2	1134	1134	122	122	
63,0	110	1	706	1227	706	185	72	1	570	1485	570	0	200
		2	1074	1074	338	338		2	1181	1181	131	131	
67,5	135	1	780	1337	780	223	75	1	621	1679	621	0	211
		2	1174	1174	386	386		2	1324	1324	136	136	
72,0	170	1	879	1476	879	282	77	1	712	1892	713	0	223
		2	1301	1301	457	457		2	1498	1498	160	160	
76,5	200	1	966	1605	966	326	80	1	773	2117	773	0	234
		2	1418	1418	514	514		2	1664	1664	167	167	
81,0	240	1	1077	1763	1077	392	82	1	875	2360	875	0	245
		2	1562	1562	593	593		2	1862	1862	193	193	

3.2.2.13 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



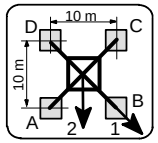


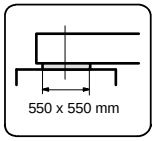
KR 16 - 80/100 **Corner distance 8,0 m x 8,0 m** **Jib length 90 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	105	1	689	1197	689	180	71	1	542	1472	542	0	198
		2	1048	1048	329	329		2	1159	1159	118	118	
63,0	110	1	717	1226	717	208	73	1	571	1525	572	0	201
		2	1077	1077	357	357		2	1206	1206	128	128	
67,5	140	1	803	1349	803	258	75	1	646	1721	647	0	212
		2	1189	1189	417	417		2	1362	1362	145	145	
72,0	170	1	890	1475	890	304	78	1	711	1937	712	0	224
		2	1304	1304	476	476		2	1525	1525	155	155	
76,5	205	1	989	1617	989	361	80	1	795	2166	795	0	235
		2	1433	1433	545	545		2	1705	1705	173	173	
81,0	245	1	1100	1776	1101	426	83	1	895	2413	895	0	246
		2	1578	1578	623	623		2	1904	1904	197	197	

3.2.3.1 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



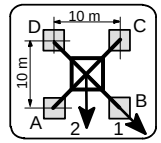


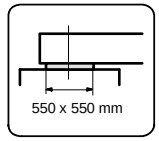
KR 16 - 80/100 **Corner distance 10,0 m x 10,0 m** **Jib length 30 m**

hook height	central ballast	jib position	crane in service torque moment: **230** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
60,8	45	1	478	939	478	17	65	1	428	768	428	88	173
		2	804	804	152	152		2	669	669	187	187	
63,0	45	1	493	955	493	32	67	1	443	808	443	79	177
		2	819	819	167	167		2	701	701	186	186	
67,5	55	1	530	1018	530	42	70	1	480	909	480	50	188
		2	875	875	185	185		2	784	784	176	176	
72,0	70	1	579	1096	579	62	72	1	529	1030	529	28	200
		2	945	945	214	214		2	884	884	175	175	
76,5	80	1	616	1164	616	68	75	1	555	1153	555	0	211
		2	1003	1003	228	228		2	974	974	158	158	
81,0	100	1	677	1259	677	96	77	1	597	1316	597	0	222
		2	1088	1088	266	266		2	1092	1092	162	162	
85,5	115	1	726	1344	726	109	80	1	608	1490	608	0	233
		2	1163	1163	290	290		2	1203	1203	149	149	
90,0	140	1	800	1457	800	144	82	1	663	1677	663	0	244
		2	1265	1265	336	336		2	1343	1343	157	157	

3.2.3.2 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



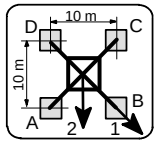


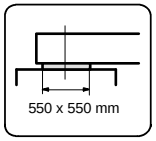
KR 16 - 80/100 **Corner distance 10,0 m x 10,0 m** **Jib length 35 m**

hook height	central ballast	jib position	crane in service torque moment: **230** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
60,8	40	1	467	925	467	10	65	1	417	767	417	68	173
		2	791	791	144	144		2	665	665	170	170	
63,0	40	1	483	941	483	25	68	1	433	806	433	59	176
		2	806	806	159	159		2	697	697	169	169	
67,5	50	1	519	1004	519	35	70	1	469	908	469	31	187
		2	862	862	177	177		2	779	779	159	159	
72,0	65	1	568	1082	569	55	73	1	518	1029	519	8	199
		2	932	932	205	205		2	879	879	158	158	
76,5	75	1	605	1150	605	60	75	1	525	1171	525	0	210
		2	990	990	220	220		2	969	969	141	141	
81,0	95	1	667	1245	667	88	78	1	567	1333	567	0	221
		2	1076	1076	258	258		2	1088	1088	145	145	
85,5	110	1	716	1330	716	101	80	1	578	1508	578	0	232
		2	1150	1150	281	281		2	1199	1199	133	133	
90,0	140	1	802	1456	802	149	83	1	657	1695	658	0	244
		2	1265	1265	340	340		2	1352	1352	153	153	

3.2.3.3 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



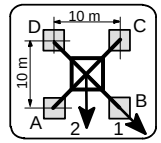


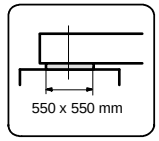
KR 16 - 80/100 **Corner distance 10,0 m x 10,0 m** **Jib length 40 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	40	1	492	960	492	24	67	1	442	841	442	44	179
		2	823	823	161	161		2	724	724	160	160	
63,0	40	1	508	975	508	40	69	1	458	880	458	36	182
		2	838	838	177	177		2	756	756	159	159	
67,5	45	1	532	1028	532	36	71	1	474	980	474	0	193
		2	882	882	181	181		2	828	828	135	135	
72,0	60	1	581	1107	581	54	74	1	496	1131	496	0	205
		2	953	953	208	208		2	931	931	131	131	
76,5	75	1	630	1189	630	70	76	1	515	1290	515	0	216
		2	1025	1025	234	234		2	1036	1036	124	124	
81,0	100	1	704	1299	704	109	79	1	578	1461	578	0	227
		2	1125	1125	283	283		2	1170	1170	137	137	
85,5	125	1	778	1411	778	145	82	1	634	1644	634	0	239
		2	1226	1226	330	330		2	1309	1309	146	146	
90,0	155	1	864	1540	865	189	84	1	708	1842	708	0	250
		2	1342	1342	387	387		2	1466	1466	163	163	

3.2.3.4 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



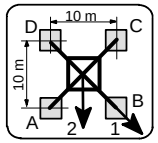


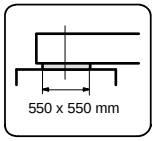
KR 16 - 80/100 **Corner distance 10,0 m x 10,0 m** **Jib length 45 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	35	1	490	954	490	27	67	1	440	858	440	23	180
		2	818	818	163	163		2	735	735	145	145	
63,0	35	1	506	968	506	43	69	1	456	896	456	16	184
		2	833	833	179	179		2	767	767	145	145	
67,5	40	1	530	1021	530	39	72	1	451	1018	451	0	194
		2	877	877	183	183		2	840	840	120	120	
72,0	55	1	579	1101	579	57	74	1	472	1171	473	0	207
		2	948	948	210	210		2	943	943	115	115	
76,5	75	1	640	1196	641	85	77	1	515	1333	515	0	218
		2	1033	1033	248	248		2	1062	1062	119	119	
81,0	100	1	715	1306	715	123	79	1	576	1507	576	0	229
		2	1133	1133	296	296		2	1197	1197	132	132	
85,5	130	1	801	1432	801	171	82	1	656	1694	656	0	240
		2	1247	1247	355	355		2	1350	1350	152	152	
90,0	160	1	888	1561	888	215	84	1	728	1895	728	0	251
		2	1364	1364	412	412		2	1508	1508	168	168	

3.2.3.5 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



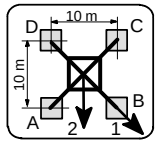


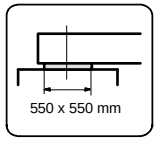
KR 16 - 80/100 **Corner distance 10,0 m x 10,0 m** **Jib length 50 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	40	1	475	925	475	24	68	1	415	870	415	0	182
		2	793	793	156	156		2	732	732	117	117	
63,0	40	1	490	942	490	39	70	1	422	917	422	0	186
		2	809	809	171	171		2	765	765	116	116	
67,5	50	1	527	1006	527	47	72	1	426	1056	426	0	197
		2	866	866	188	188		2	850	850	103	103	
72,0	70	1	588	1097	588	79	75	1	472	1209	472	0	209
		2	948	948	228	228		2	966	966	111	111	
76,5	95	1	662	1203	662	121	77	1	540	1370	540	0	220
		2	1045	1045	280	280		2	1097	1097	128	128	
81,0	120	1	736	1312	737	161	80	1	602	1543	602	0	231
		2	1143	1143	330	330		2	1232	1232	141	141	
85,5	145	1	810	1423	811	198	82	1	657	1728	658	0	242
		2	1244	1244	377	377		2	1372	1372	150	150	
90,0	175	1	897	1550	897	244	85	1	731	1927	731	0	253
		2	1359	1359	435	435		2	1528	1528	166	166	

3.2.3.6 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



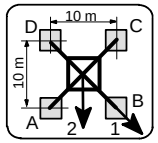


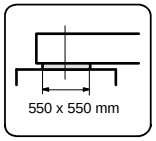
KR 16 - 80/100 **Corner distance 10,0 m x 10,0 m** **Jib length 55 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	40	1	485	927	485	43	68	1	429	884	429	0	183
		2	798	798	173	173		2	748	748	123	123	
63,0	40	1	501	943	501	58	70	1	436	931	436	0	187
		2	814	814	188	188		2	780	780	121	121	
67,5	50	1	537	1008	537	66	72	1	439	1071	439	0	198
		2	870	870	204	204		2	866	866	108	108	
72,0	70	1	599	1100	599	98	75	1	485	1226	485	0	210
		2	953	953	245	245		2	982	982	115	115	
76,5	90	1	660	1193	660	127	77	1	527	1388	527	0	221
		2	1037	1037	283	283		2	1101	1101	119	119	
81,0	115	1	734	1302	734	166	80	1	587	1563	588	0	232
		2	1136	1136	333	333		2	1237	1237	132	132	
85,5	145	1	821	1427	821	215	82	1	667	1751	667	0	243
		2	1249	1249	393	393		2	1390	1390	152	152	
90,0	175	1	908	1554	908	261	85	1	739	1953	739	0	254
		2	1365	1365	451	451		2	1548	1548	167	167	

3.2.3.7 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



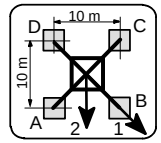


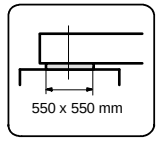
KR 16 - 80/100 **Corner distance 10,0 m x 10,0 m** **Jib length 60 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **490** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	35	1	495	940	495	50	69	1	408	964	408	0	189
		2	810	810	181	181		2	786	786	104	104	
63,0	35	1	510	955	511	66	71	1	416	1010	416	0	193
		2	825	825	196	196		2	818	818	103	103	
67,5	50	1	560	1033	560	86	73	1	441	1157	441	0	203
		2	894	894	225	225		2	919	919	100	100	
72,0	75	1	634	1139	634	129	76	1	508	1318	508	0	216
		2	991	991	277	277		2	1050	1050	117	117	
76,5	100	1	708	1246	708	169	79	1	571	1489	571	0	227
		2	1089	1089	327	327		2	1184	1184	131	131	
81,0	125	1	782	1357	782	207	81	1	628	1672	628	0	238
		2	1188	1188	375	375		2	1323	1323	141	141	
85,5	155	1	868	1483	868	254	84	1	703	1869	703	0	249
		2	1303	1303	434	434		2	1479	1479	158	158	
90,0	185	1	955	1612	955	298	86	1	770	2081	770	0	260
		2	1420	1420	490	490		2	1641	1641	169	169	

3.2.3.8 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



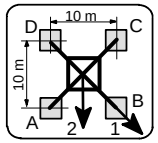


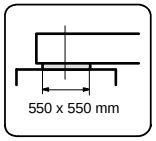
KR 16 - 80/100 **Corner distance 10,0 m x 10,0 m** **Jib length 65 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **490** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	35	1	506	946	506	66	69	1	415	995	415	0	190
		2	817	817	195	195		2	808	808	104	104	
63,0	35	1	521	961	521	82	71	1	423	1040	423	0	194
		2	832	832	211	211		2	839	839	103	103	
67,5	55	1	583	1052	583	114	74	1	472	1189	472	0	205
		2	915	915	251	251		2	953	953	113	113	
72,0	75	1	645	1145	645	144	76	1	513	1353	513	0	217
		2	999	999	291	291		2	1073	1073	116	116	
76,5	100	1	719	1253	719	184	79	1	575	1525	575	0	228
		2	1097	1097	341	341		2	1208	1208	129	129	
81,0	130	1	805	1377	805	233	81	1	655	1712	655	0	239
		2	1210	1210	401	401		2	1361	1361	150	150	
85,5	160	1	892	1504	892	280	84	1	728	1912	728	0	250
		2	1324	1324	459	459		2	1518	1518	166	166	

3.2.3.9 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



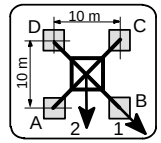


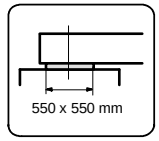
KR 16 - 80/100 **Corner distance 10,0 m x 10,0 m** **Jib length 70 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **490** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	45	1	532	994	532	71	70	1	425	1079	425	0	191
		2	859	859	206	206		2	864	864	101	101	
63,0	45	1	548	1008	548	87	72	1	435	1122	435	0	195
		2	873	873	222	222		2	894	894	101	101	
67,5	65	1	609	1100	609	119	74	1	482	1272	483	0	206
		2	956	956	262	262		2	1009	1009	109	109	
72,0	90	1	683	1206	683	161	77	1	548	1439	548	0	218
		2	1053	1053	314	314		2	1142	1142	125	125	
76,5	115	1	757	1315	757	200	79	1	608	1614	608	0	229
		2	1152	1152	363	363		2	1278	1278	137	137	
81,0	140	1	831	1427	831	236	82	1	662	1803	662	0	240
		2	1252	1252	411	411		2	1419	1419	144	144	
85,5	170	1	918	1554	918	282	84	1	733	2007	733	0	251
		2	1368	1368	468	468		2	1578	1578	158	158	

3.2.3.10 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



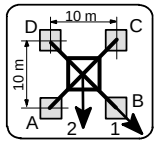


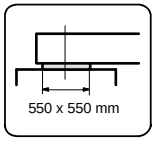
KR 16 - 80/100 **Corner distance 10,0 m x 10,0 m** **Jib length 75 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	60	1	550	1010	550	91	70	1	436	1130	436	0	194
		2	875	875	226	226		2	900	900	101	101	
63,0	60	1	566	1025	566	107	72	1	445	1175	445	0	198
		2	890	890	241	241		2	931	931	100	100	
67,5	80	1	627	1116	627	139	75	1	492	1326	492	0	209
		2	973	973	282	282		2	1047	1047	108	108	
72,0	105	1	701	1222	702	181	77	1	557	1493	557	0	221
		2	1069	1069	334	334		2	1180	1180	123	123	
76,5	130	1	776	1330	776	221	80	1	617	1669	617	0	232
		2	1168	1168	384	384		2	1316	1316	135	135	
81,0	155	1	850	1441	850	258	82	1	670	1858	671	0	243
		2	1268	1268	432	432		2	1457	1457	143	143	
85,5	185	1	936	1567	936	305	85	1	742	2062	742	0	254
		2	1383	1383	490	490		2	1615	1615	157	157	

3.2.3.11 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



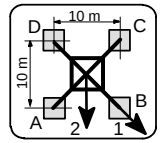


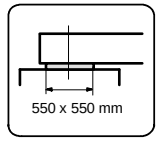
KR 16 - 80/100 **Corner distance 10,0 m x 10,0 m** **Jib length 80 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	60	1	562	1024	562	99	70	1	435	1177	435	0	195
		2	889	889	235	235		2	928	928	95	95	
63,0	60	1	577	1039	577	115	72	1	444	1220	445	0	199
		2	904	904	250	250		2	958	958	96	96	
67,5	85	1	651	1143	651	159	75	1	516	1374	516	0	210
		2	999	999	303	303		2	1087	1087	115	115	
72,0	110	1	725	1249	725	201	77	1	579	1543	579	0	222
		2	1096	1096	355	355		2	1221	1221	130	130	
76,5	135	1	799	1358	799	240	80	1	638	1722	638	0	233
		2	1195	1195	404	404		2	1358	1358	140	140	
81,0	160	1	873	1470	873	277	83	1	690	1914	690	0	244
		2	1295	1295	451	451		2	1500	1500	146	146	
85,5	190	1	960	1597	960	323	85	1	759	2121	760	0	255
		2	1411	1411	509	509		2	1660	1660	160	160	

3.2.3.12 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



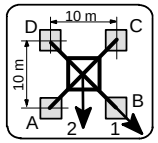


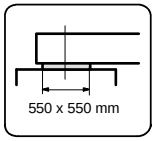
KR 16 - 80/100 **Corner distance 10,0 m x 10,0 m** **Jib length 85 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
60,8	55	1	558	974	558	142	70	1	444	1145	444	0	196
		2	852	852	264	264		2	913	913	103	103	
63,0	55	1	573	990	574	157	72	1	453	1188	453	0	200
		2	868	868	279	279		2	944	944	103	103	
67,5	75	1	635	1081	635	189	75	1	499	1343	499	0	211
		2	950	950	320	320		2	1060	1060	110	110	
72,0	100	1	709	1187	709	232	77	1	562	1514	562	0	223
		2	1047	1047	372	372		2	1194	1194	124	124	
76,5	125	1	783	1295	783	272	80	1	620	1694	620	0	234
		2	1145	1145	422	422		2	1332	1332	134	134	
81,0	155	1	870	1418	870	321	82	1	696	1888	696	0	245
		2	1258	1258	482	482		2	1487	1487	152	152	

3.2.3.13 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame without climbing drive



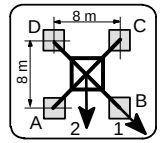


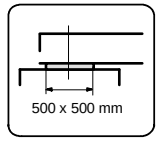
KR 16 - 80/100 **Corner distance 10,0 m x 10,0 m** **Jib length 90 m**

hook height	central ballast	jib position	crane in service torque moment: **651** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
60,8	55	1	569	976	569	162	71	1	449	1178	449	0	198
		2	856	856	281	281		2	935	935	102	102	
63,0	55	1	584	991	584	177	73	1	459	1220	459	0	201
		2	872	872	296	296		2	966	966	103	103	
67,5	75	1	646	1082	646	209	75	1	504	1377	504	0	212
		2	955	955	337	337		2	1083	1083	109	109	
72,0	100	1	720	1188	720	251	78	1	565	1550	565	0	224
		2	1051	1051	389	389		2	1218	1218	122	122	
76,5	130	1	806	1309	807	304	80	1	647	1733	647	0	235
		2	1162	1162	451	451		2	1369	1369	144	144	
81,0	155	1	881	1421	881	341	83	1	696	1930	697	0	246
		2	1262	1262	499	499		2	1513	1513	148	148	

3.3.1.1 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame element without climbing drive



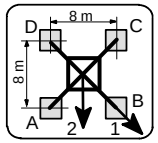


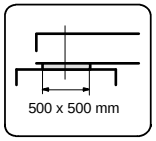
KRE 480 **Corner distance 8,0 m x 8,0 m** **Jib length 30 m**

hook height	central ballast	jib position	crane in service torque moment: **230** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
13,5	30,0	1	368	674	368	61	43	1	240	459	240	21	71
		2	584	584	151	151		2	407	407	229	229	
18,0	30,0	1	375	697	375	53	45	1	248	474	248	21	92
		2	603	603	147	147		2	408	408	87	87	
22,5	30,0	1	382	721	382	42	47	1	255	491	255	19	98
		2	622	622	142	142		2	421	421	88	88	
27,0	30,0	1	389	747	389	30	49	1	262	508	262	16	106
		2	642	642	135	135		2	436	436	88	88	
31,5	30,0	1	396	775	396	17	51	1	269	526	269	12	115
		2	664	664	128	128		2	451	451	87	87	
36,0	30,0	1	403	805	403	1	53	1	276	545	276	6	123
		2	687	687	119	119		2	466	466	85	85	
40,5	30,0	1	393	855	393	0	55	1	283	566	283	0	132
		2	712	712	108	108		2	483	483	83	83	
45,0	37,5	1	416	911	416	0	57	1	309	607	309	11	140
		2	758	758	114	114		2	522	522	250	250	
49,5	50,0	1	462	973	462	0	59	1	424	677	424	172	149
		2	818	818	130	130		2	603	603	246	246	
54,0	65,0	1	517	1041	517	0	61	1	469	786	469	151	157
		2	887	887	151	151		2	693	693	244	244	
58,5	80,0	1	564	1118	564	11	63	1	514	902	514	127	166
		2	956	956	173	173		2	789	789	240	240	
63,0	95,0	1	611	1198	611	23	66	1	561	1024	561	98	176
		2	1026	1026	195	195		2	888	888	233	233	

3.3.1.2 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame element without climbing drive



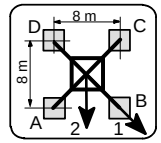


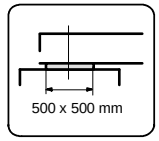
KRE 480 **Corner distance 8,0 m x 8,0 m** **Jib length 35 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **230** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
13,5	30,0	1	370	671	370	68	44	1	240	459	240	22	70
		2	583	583	157	157		2	400	400	240	240	
18,0	30,0	1	377	694	377	60	46	1	248	474	248	21	91
		2	601	601	153	153		2	408	408	87	87	
22,5	30,0	1	384	718	384	50	48	1	255	490	255	19	97
		2	620	620	147	147		2	421	421	88	88	
27,0	30,0	1	391	744	391	38	49	1	262	507	262	16	106
		2	641	641	141	141		2	435	435	88	88	
31,5	30,0	1	398	772	398	24	51	1	269	525	269	12	114
		2	663	663	133	133		2	450	450	87	87	
36,0	30,0	1	405	802	405	8	53	1	276	545	276	7	122
		2	686	686	124	124		2	466	466	86	86	
40,5	30,0	1	401	846	401	0	55	1	283	565	283	0	131
		2	711	711	113	113		2	483	483	83	83	
45,0	32,5	1	400	902	400	0	57	1	295	595	295	0	139
		2	744	744	107	107		2	520	520	231	231	
49,5	45,0	1	446	964	446	0	59	1	414	678	414	150	148
		2	804	804	123	123		2	600	600	227	227	
54,0	60,0	1	500	1032	500	0	61	1	458	787	458	129	156
		2	873	873	143	143		2	691	691	225	225	
58,5	75,0	1	554	1103	554	5	63	1	504	903	504	104	166
		2	942	942	165	165		2	786	786	221	221	
63,0	90,0	1	600	1184	600	17	66	1	550	1025	550	75	176
		2	1013	1013	188	188		2	886	886	215	215	

3.3.1.3 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame element without climbing drive



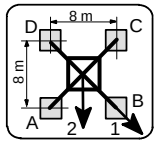


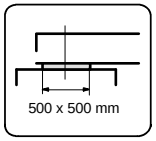
KRE 480 **Corner distance 8,0 m x 8,0 m** **Jib length 40 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
13,5	20,0	1	369	670	369	69	45	1	209	443	209	0	75
		2	582	582	157	157		2	383	383	256	256	
18,0	20,0	1	376	693	376	60	47	1	215	460	215	0	97
		2	600	600	152	152		2	385	385	60	60	
22,5	20,0	1	383	718	383	49	49	1	220	479	220	0	103
		2	620	620	147	147		2	399	399	60	60	
27,0	20,0	1	391	745	391	36	51	1	223	500	223	0	112
		2	641	641	140	140		2	413	413	60	60	
31,5	20,0	1	398	775	398	21	53	1	226	523	226	0	120
		2	664	664	131	131		2	429	429	59	59	
36,0	20,0	1	405	806	405	3	55	1	227	549	227	0	129
		2	688	688	121	121		2	453	453	257	257	
40,5	20,0	1	395	856	395	0	57	1	227	577	227	0	137
		2	715	715	109	109		2	498	498	226	226	
45,0	25,0	1	405	916	405	0	59	1	381	632	381	130	146
		2	755	755	108	108		2	559	559	204	204	
49,5	40,0	1	461	982	461	0	61	1	426	741	426	111	154
		2	823	823	129	129		2	649	649	203	203	
54,0	55,0	1	513	1055	513	0	63	1	470	855	470	86	163
		2	894	894	147	147		2	742	742	199	199	
58,5	72,5	1	572	1135	572	9	65	1	522	981	522	63	172
		2	970	970	174	174		2	847	847	198	198	
63,0	87,5	1	619	1218	619	19	67	1	569	1108	569	30	182
		2	1043	1043	195	195		2	950	950	188	188	

3.3.1.4 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame element without climbing drive



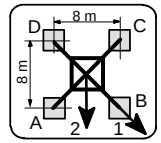


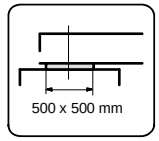
KRE 480 **Corner distance 8,0 m x 8,0 m** **Jib length 45 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
13,5	15,0	1	368	659	368	76	45	1	184	444	184	0	76
		2	574	574	161	161		2	372	372	263	263	
18,0	15,0	1	375	683	375	67	47	1	190	461	190	0	98
		2	592	592	157	157		2	373	373	47	47	
22,5	15,0	1	382	708	382	55	49	1	194	480	194	0	105
		2	612	612	151	151		2	387	387	47	47	
27,0	15,0	1	389	735	389	42	51	1	198	501	198	0	113
		2	634	634	144	144		2	401	401	47	47	
31,5	15,0	1	396	765	396	27	53	1	200	525	200	0	121
		2	657	657	135	135		2	420	420	272	272	
36,0	15,0	1	403	796	403	10	55	1	201	551	201	0	130
		2	681	681	125	125		2	463	463	243	243	
40,5	15,0	1	399	841	399	0	57	1	201	580	201	0	138
		2	707	707	113	113		2	509	509	211	211	
45,0	20,0	1	409	901	409	0	59	1	380	650	380	110	147
		2	748	748	111	111		2	570	570	189	189	
49,5	35,0	1	464	968	464	0	61	1	424	759	424	89	155
		2	816	816	132	132		2	661	661	187	187	
54,0	50,0	1	516	1043	516	0	63	1	469	875	469	63	164
		2	887	887	150	150		2	756	756	182	182	
58,5	65,0	1	564	1121	564	7	65	1	514	996	514	32	173
		2	958	958	170	170		2	855	855	173	173	
63,0	82,5	1	617	1211	617	23	67	1	567	1130	567	4	183
		2	1037	1037	197	197		2	965	965	169	169	

3.3.1.5 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame element without climbing drive



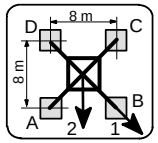


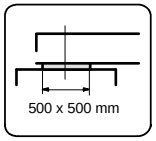
KRE 480 **Corner distance 8,0 m x 8,0 m** **Jib length 50 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
13,5	25,0	1	364	649	364	80	46	1	158	612	158	0	77
		2	566	566	163	163		2	448	448	16	16	
18,0	25,0	1	371	673	371	70	48	1	164	630	164	0	101
		2	584	584	158	158		2	462	462	17	17	
22,5	25,0	1	379	698	379	59	50	1	168	650	168	0	107
		2	604	604	153	153		2	476	476	17	17	
27,0	25,0	1	386	725	386	46	52	1	170	673	170	0	115
		2	626	626	146	146		2	491	491	16	16	
31,5	27,5	1	399	760	399	38	54	1	185	698	185	0	124
		2	654	654	144	144		2	513	513	20	20	
36,0	27,5	1	406	791	406	21	56	1	185	726	185	0	132
		2	678	678	134	134		2	530	530	17	17	
40,5	30,0	1	419	831	419	8	57	1	196	756	196	0	141
		2	710	710	129	129		2	555	555	20	20	
45,0	32,5	1	425	880	425	0	59	1	206	790	206	0	149
		2	744	744	121	121		2	589	589	177	177	
49,5	42,5	1	457	944	457	0	61	1	252	827	252	0	158
		2	799	799	131	131		2	667	667	162	162	
54,0	57,5	1	509	1017	509	2	63	1	459	888	459	31	166
		2	868	868	150	150		2	762	762	156	156	
58,5	75,0	1	561	1103	561	19	65	1	511	1016	511	7	175
		2	944	944	178	178		2	868	868	154	154	
63,0	90,0	1	608	1185	608	31	68	1	529	1172	529	0	185
		2	1016	1016	200	200		2	972	972	143	143	

3.3.1.6 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame element without climbing drive



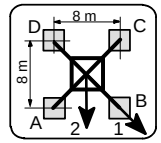


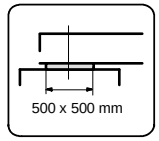
KRE 480 **Corner distance 8,0 m x 8,0 m** **Jib length 55 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
13,5	25,0	1	375	647	375	102	46	1	158	613	158	0	78
		2	567	567	182	182		2	449	449	16	16	
18,0	25,0	1	382	671	382	93	48	1	163	631	163	0	102
		2	586	586	178	178		2	462	462	16	16	
22,5	25,0	1	389	696	389	82	50	1	167	651	167	0	108
		2	606	606	172	172		2	477	477	16	16	
27,0	25,0	1	396	723	396	69	52	1	170	674	170	0	116
		2	627	627	165	165		2	492	492	15	15	
31,5	27,5	1	409	759	409	60	54	1	184	699	184	0	125
		2	656	656	162	162		2	514	514	19	19	
36,0	27,5	1	416	790	416	43	56	1	184	727	184	0	133
		2	680	680	153	153		2	531	531	17	17	
40,5	30,0	1	430	830	430	30	58	1	195	758	195	0	142
		2	712	712	147	147		2	555	555	19	19	
45,0	32,5	1	443	872	443	14	60	1	205	792	205	0	150
		2	746	746	140	140		2	603	603	183	183	
49,5	40,0	1	469	930	469	8	62	1	238	829	238	0	159
		2	795	795	143	143		2	676	676	162	162	
54,0	55,0	1	514	1010	514	17	63	1	464	899	464	28	167
		2	865	865	162	162		2	772	772	156	156	
58,5	72,5	1	565	1097	565	34	66	1	515	1028	515	3	177
		2	941	941	190	190		2	878	878	153	153	
63,0	90,0	1	618	1185	618	51	68	1	541	1190	541	0	186
		2	1019	1019	217	217		2	989	989	147	147	

3.3.1.7 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame element without climbing drive



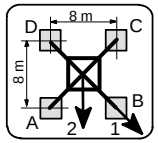


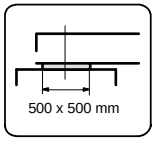
KRE 480 **Corner distance 8,0 m x 8,0 m** **Jib length 60 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **490** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
13,5	25,0	1	397	662	397	133	47	1	156	617	156	0	82
		2	584	584	210	210		2	450	450	93	93	
18,0	25,0	1	404	686	404	123	49	1	160	637	160	0	107
		2	603	603	205	205		2	466	466	91	91	
22,5	25,0	1	411	712	411	111	51	1	164	658	164	0	114
		2	624	624	199	199		2	483	483	89	89	
27,0	27,5	1	425	746	425	103	53	1	178	682	178	0	122
		2	652	652	197	197		2	506	506	92	92	
31,5	27,5	1	432	776	432	88	55	1	179	708	179	0	130
		2	675	675	188	188		2	525	525	88	88	
36,0	30,0	1	445	814	445	76	57	1	191	738	191	0	139
		2	706	706	184	184		2	550	550	89	89	
40,5	32,5	1	458	855	458	62	59	1	202	770	202	0	147
		2	739	739	178	178		2	598	598	219	219	
45,0	35,0	1	472	899	472	45	61	1	211	805	211	0	156
		2	774	774	170	170		2	657	657	186	186	
49,5	37,5	1	485	946	485	24	63	1	219	843	219	0	164
		2	811	811	159	159		2	720	720	150	150	
54,0	55,0	1	536	1034	536	37	65	1	486	966	486	6	173
		2	888	888	183	183		2	825	825	146	146	
58,5	72,5	1	588	1122	588	53	67	1	514	1123	514	0	182
		2	966	966	210	210		2	935	935	141	141	
63,0	90,0	1	640	1213	640	68	69	1	532	1297	532	0	192
		2	1045	1045	236	236		2	1049	1049	132	132	

3.3.1.8 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame element without climbing drive



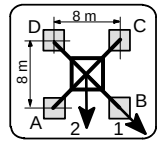


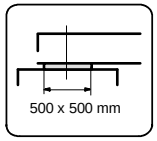
KRE 480 **Corner distance 8,0 m x 8,0 m** **Jib length 65 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **490** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
13,5	25,0	1	408	664	408	152	48	1	155	618	155	0	83
		2	589	589	227	227		2	489	489	59	59	
18,0	25,0	1	415	688	415	142	50	1	160	638	160	0	109
		2	608	608	222	222		2	505	505	57	57	
22,5	27,5	1	429	721	429	136	52	1	259	661	259	0	115
		2	635	635	222	222		2	528	528	61	61	
27,0	27,5	1	436	749	436	122	54	1	258	691	258	0	123
		2	657	657	214	214		2	546	546	57	57	
31,5	27,5	1	443	779	443	107	55	1	256	724	256	0	132
		2	680	680	205	205		2	565	565	53	53	
36,0	30,0	1	456	818	456	95	57	1	264	760	264	0	140
		2	712	712	200	200		2	591	591	53	53	
40,5	32,5	1	469	859	469	80	59	1	271	800	271	0	149
		2	745	745	194	194		2	619	619	220	220	
45,0	35,0	1	483	903	483	63	61	1	276	843	276	0	157
		2	780	780	186	186		2	679	679	187	187	
49,5	37,5	1	496	950	496	42	63	1	279	890	279	0	166
		2	817	817	175	175		2	743	743	149	149	
54,0	50,0	1	534	1027	534	42	65	1	471	995	471	0	174
		2	883	883	186	186		2	836	836	132	132	
58,5	67,5	1	586	1115	586	57	67	1	492	1161	492	0	184
		2	960	960	212	212		2	947	947	126	126	
63,0	87,5	1	645	1212	645	78	70	1	521	1338	521	0	193
		2	1046	1046	244	244		2	1068	1068	122	122	

3.3.1.9 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame element without climbing drive



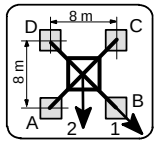


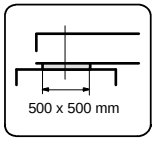
KRE 480 **Corner distance 8,0 m x 8,0 m** **Jib length 70 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **490** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
13,5	25,0	1	409	685	409	134	48	1	214	673	214	0	84
		2	604	604	214	214		2	513	513	37	37	
18,0	25,0	1	416	710	416	123	50	1	216	698	216	0	110
		2	624	624	209	209		2	529	529	36	36	
22,5	27,5	1	430	742	430	117	52	1	228	726	228	0	116
		2	651	651	209	209		2	552	552	39	39	
27,0	27,5	1	437	771	437	103	54	1	227	757	227	0	124
		2	673	673	201	201		2	570	570	35	35	
31,5	27,5	1	444	801	444	87	56	1	224	791	224	0	133
		2	697	697	191	191		2	590	590	30	30	
36,0	30,0	1	457	840	457	74	58	1	232	828	232	0	141
		2	728	728	186	186		2	616	616	30	30	
40,5	32,5	1	471	882	471	59	60	1	239	869	239	0	150
		2	762	762	180	180		2	652	652	189	189	
45,0	35,0	1	484	927	484	41	62	1	243	913	243	0	158
		2	797	797	171	171		2	713	713	155	155	
49,5	37,5	1	497	975	497	19	63	1	245	962	245	0	167
		2	835	835	159	159		2	778	778	117	117	
54,0	50,0	1	536	1053	536	18	65	1	423	1096	423	0	175
		2	901	901	170	170		2	873	873	98	98	
58,5	75,0	1	606	1161	606	51	68	1	480	1264	480	0	185
		2	998	998	214	214		2	1003	1003	109	109	

3.3.1.10 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame element without climbing drive



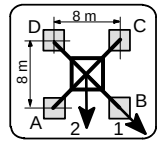


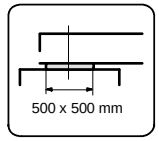
KRE 480 **Corner distance 8,0 m x 8,0 m** **Jib length 75 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
13,5	52,5	1	459	735	459	183	49	1	209	804	209	0	86
		2	654	654	264	264		2	590	590	21	21	
18,0	52,5	1	466	760	466	172	51	1	212	825	212	0	113
		2	674	674	258	258		2	604	604	21	21	
22,5	52,5	1	473	786	473	160	53	1	215	848	215	0	119
		2	695	695	251	251		2	619	619	20	20	
27,0	55,0	1	486	821	486	152	54	1	229	874	229	0	127
		2	723	723	250	250		2	642	642	24	24	
31,5	57,5	1	500	858	500	142	56	1	241	903	241	0	136
		2	753	753	246	246		2	665	665	27	27	
36,0	57,5	1	507	890	507	123	58	1	239	935	239	0	144
		2	778	778	235	235		2	684	684	23	23	
40,5	60,0	1	520	932	520	108	60	1	248	970	248	0	153
		2	811	811	229	229		2	721	721	219	219	
45,0	65,0	1	540	983	540	97	62	1	268	1008	268	0	161
		2	853	853	226	226		2	789	789	190	190	
49,5	67,5	1	553	1030	553	76	64	1	274	1050	274	0	170
		2	890	890	215	215		2	855	855	151	151	
54,0	72,5	1	573	1088	573	57	66	1	466	1158	466	0	178
		2	937	937	208	208		2	932	932	113	113	
58,5	92,5	1	631	1183	631	78	68	1	497	1328	497	0	187
		2	1021	1021	240	240		2	1050	1050	111	111	

3.3.1.11 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame element without climbing drive



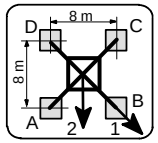


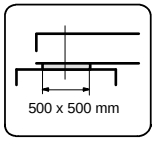
KRE 480 **Corner distance 8,0 m x 8,0 m** **Jib length 80 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
13,5	52,5	1	470	746	470	194	49	1	208	805	208	0	87
		2	665	665	275	275		2	590	590	21	21	
18,0	52,5	1	477	771	477	184	51	1	212	826	212	0	114
		2	685	685	270	270		2	604	604	20	20	
22,5	55,0	1	490	804	490	177	53	1	227	849	227	0	120
		2	712	712	269	269		2	626	626	26	26	
27,0	55,0	1	498	832	498	163	55	1	228	875	228	0	128
		2	734	734	261	261		2	642	642	23	23	
31,5	57,5	1	511	869	511	152	57	1	240	904	240	0	137
		2	764	764	257	257		2	666	666	26	26	
36,0	57,5	1	518	902	518	134	59	1	238	936	238	0	145
		2	790	790	246	246		2	690	690	246	246	
40,5	62,5	1	537	950	537	124	60	1	260	971	260	0	154
		2	830	830	245	245		2	755	755	220	220	
45,0	65,0	1	551	995	551	106	62	1	267	1010	267	0	162
		2	865	865	236	236		2	817	817	184	184	
49,5	67,5	1	564	1044	564	84	64	1	272	1053	272	0	171
		2	903	903	225	225		2	884	884	144	144	
54,0	72,5	1	584	1102	584	65	66	1	461	1212	461	0	179
		2	951	951	217	217		2	962	962	105	105	
58,5	97,5	1	654	1210	654	98	69	1	516	1386	516	0	189
		2	1048	1048	261	261		2	1094	1094	114	114	

3.3.1.12 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame element without climbing drive



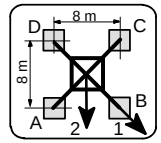


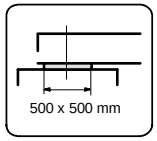
KRE 480 **Corner distance 8,0 m x 8,0 m** **Jib length 85 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
13,5	52,5	1	479	706	479	252	49	1	208	806	208	0	88
		2	639	639	319	319		2	590	590	20	20	
18,0	52,5	1	486	731	486	241	51	1	211	827	211	0	115
		2	659	659	313	313		2	605	605	20	20	
22,5	55,0	1	499	763	499	235	53	1	226	850	226	0	121
		2	686	686	313	313		2	626	626	25	25	
27,0	55,0	1	506	792	506	221	55	1	227	877	227	0	129
		2	708	708	305	305		2	643	643	23	23	
31,5	57,5	1	520	828	520	212	57	1	239	906	239	0	138
		2	738	738	302	302		2	666	666	26	26	
36,0	60,0	1	533	867	533	200	59	1	250	938	250	0	146
		2	769	769	297	297		2	691	691	28	28	
40,5	62,5	1	546	908	546	185	61	1	259	974	259	0	155
		2	802	802	291	291		2	748	748	245	245	
45,0	65,0	1	560	952	560	168	63	1	266	1013	266	0	163
		2	837	837	283	283		2	811	811	209	209	
49,5	67,5	1	573	999	573	147	65	1	271	1055	271	0	172
		2	874	874	272	272		2	878	878	168	168	
54,0	72,5	1	593	1056	593	129	67	1	500	1170	500	0	180
		2	921	921	265	265		2	956	956	129	129	
58,5	87,5	1	638	1138	638	138	69	1	504	1345	504	0	190
		2	992	992	284	284		2	1064	1064	113	113	

3.3.1.13 **Central ballasts and corner loads acc. to DIN 15019**

for a stationary tower crane on a
cross frame element without climbing drive



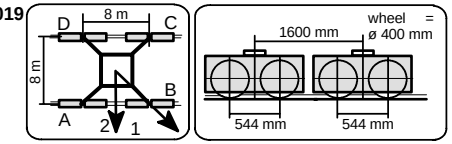


KRE 480 **Corner distance 8,0 m x 8,0 m** **Jib length 90 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
13,5	52,5	1	490	704	490	275	49	1	207	807	207	0	89
		2	641	641	338	338		2	590	590	20	20	
18,0	52,5	1	497	729	497	265	51	1	211	828	211	0	116
		2	661	661	333	333		2	605	605	20	20	
22,5	55,0	1	510	762	510	259	53	1	226	852	226	0	122
		2	688	688	332	332		2	627	627	25	25	
27,0	55,0	1	517	790	517	244	55	1	226	878	226	0	131
		2	710	710	324	324		2	643	643	22	22	
31,5	57,5	1	531	826	531	235	57	1	238	908	238	0	139
		2	740	740	321	321		2	667	667	25	25	
36,0	60,0	1	544	865	544	223	59	1	249	940	249	0	148
		2	771	771	317	317		2	709	709	278	278	
40,5	62,5	1	557	906	557	208	61	1	258	976	258	0	156
		2	804	804	310	310		2	769	769	246	246	
45,0	65,0	1	571	950	571	191	63	1	265	1015	265	0	165
		2	839	839	302	302		2	832	832	209	209	
49,5	70,0	1	590	1004	590	176	65	1	540	1059	540	22	173
		2	883	883	297	297		2	907	907	173	173	
54,0	72,5	1	603	1055	603	151	67	1	503	1207	503	0	182
		2	923	923	284	284		2	980	980	127	127	
58,5	90,0	1	655	1144	655	166	69	1	518	1385	518	0	191
		2	1001	1001	309	309		2	1095	1095	116	116	

3.4.1.1 **Central ballasts and corner loads to DIN 15019**

for a stationary tower crane on an undercarriage without climbing drive

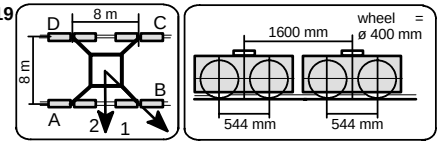


UW 480 **Corner distance 8,0 m x 8,0 m** **Jib length 30 m**

hook height	central ballast	jib position	crane in service torque moment: **230** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
14,5	30,0	1	393	705	393	81	48	1	265	486	265	44	71
		2	613	613	172	172		2	428	428	257	257	
19,0	30,0	1	400	728	400	71	50	1	272	502	272	43	92
		2	632	632	167	167		2	435	435	110	110	
23,5	30,0	1	407	753	407	60	53	1	280	518	280	41	100
		2	652	652	162	162		2	448	448	111	111	
28,0	30,0	1	414	781	414	47	55	1	287	535	287	38	108
		2	673	673	154	154		2	462	462	111	111	
32,5	30,0	1	421	810	421	32	57	1	294	554	294	34	117
		2	696	696	146	146		2	478	478	110	110	
37,0	30,0	1	417	853	417	25	60	1	301	573	301	28	125
		2	721	721	135	135		2	494	494	108	108	
41,5	30,0	1	404	907	404	25	62	1	304	598	304	25	134
		2	747	747	123	123		2	510	510	105	105	
46,0	42,5	1	451	967	451	25	64	1	346	648	346	45	142
		2	806	806	140	140		2	571	571	275	275	
50,5	55,0	1	494	1033	494	25	67	1	462	732	462	191	151
		2	868	868	155	155		2	653	653	271	271	
55,0	70,0	1	546	1107	546	25	69	1	506	843	506	170	159
		2	939	939	174	174		2	744	744	268	268	
59,5	85,0	1	601	1179	601	25	72	1	552	959	552	144	169
		2	1010	1010	194	194		2	840	840	264	264	
64,0	100,0	1	648	1263	648	34	75	1	598	1083	598	113	179
		2	1083	1083	214	214		2	941	941	255	255	

3.4.1.2 **Central ballasts and corner loads to DIN 15019**

for a stationary tower crane on an undercarriage without climbing drive

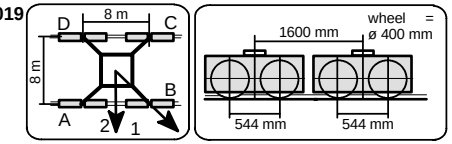


UW 480 **Corner distance 8,0 m x 8,0 m** **Jib length 35 m**

hook height	central ballast	jib position	crane in service torque moment: **230** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
14,5	30,0	1	395	701	395	88	48	1	265	486	265	45	70
		2	611	611	178	178		2	422	422	109	109	
19,0	30,0	1	402	725	402	78	50	1	272	501	272	44	91
		2	630	630	173	173		2	434	434	111	111	
23,5	30,0	1	409	750	409	67	53	1	280	518	280	41	99
		2	650	650	167	167		2	448	448	111	111	
28,0	30,0	1	416	778	416	54	55	1	287	535	287	38	108
		2	672	672	160	160		2	462	462	111	111	
32,5	30,0	1	423	807	423	39	58	1	294	553	294	34	116
		2	695	695	151	151		2	477	477	110	110	
37,0	30,0	1	426	843	426	25	60	1	301	573	301	29	125
		2	719	719	141	141		2	493	493	108	108	
41,5	30,0	1	413	898	413	25	62	1	305	597	305	25	133
		2	745	745	128	128		2	510	510	106	106	
46,0	37,5	1	434	958	434	25	65	1	334	635	334	33	142
		2	793	793	133	133		2	569	569	257	257	
50,5	50,0	1	478	1025	478	25	67	1	451	733	451	169	150
		2	855	855	148	148		2	650	650	252	252	
55,0	65,0	1	530	1099	530	25	69	1	496	844	496	148	159
		2	925	925	166	166		2	742	742	250	250	
59,5	80,0	1	585	1171	585	25	72	1	541	961	541	122	168
		2	996	996	186	186		2	838	838	245	245	
64,0	95,0	1	638	1248	638	27	75	1	588	1084	588	91	178
		2	1069	1069	206	206		2	939	939	237	237	

3.4.1.3 **Central ballasts and corner loads to DIN 15019**

for a stationary tower crane on an undercarriage without climbing drive

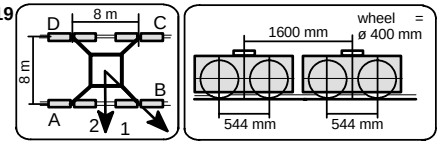


UW 480 **Corner distance 8,0 m x 8,0 m** **Jib length 40 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
14,5	20,0	1	394	700	394	88	49	1	232	472	232	25	75
		2	611	611	178	178		2	404	404	285	285	
19,0	20,0	1	401	724	401	78	52	1	238	489	238	25	97
		2	630	630	173	173		2	412	412	83	83	
23,5	20,0	1	408	751	408	66	54	1	242	509	242	25	106
		2	650	650	166	166		2	426	426	83	83	
28,0	20,0	1	415	779	415	52	57	1	246	530	246	25	114
		2	673	673	158	158		2	440	440	83	83	
32,5	20,0	1	423	810	423	35	59	1	248	554	248	25	122
		2	696	696	149	149		2	456	456	82	82	
37,0	20,0	1	421	851	421	25	61	1	249	580	249	25	131
		2	722	722	138	138		2	489	489	271	271	
41,5	20,0	1	407	909	407	25	64	1	249	609	249	25	139
		2	749	749	124	124		2	534	534	239	239	
46,0	30,0	1	439	973	439	25	66	1	419	687	419	150	148
		2	804	804	134	134		2	609	609	229	229	
50,5	45,0	1	493	1043	493	25	68	1	463	797	463	130	156
		2	873	873	153	153		2	699	699	228	228	
55,0	60,0	1	542	1123	542	25	71	1	508	912	508	104	165
		2	946	946	170	170		2	794	794	222	222	
59,5	77,5	1	607	1199	607	25	73	1	560	1040	560	80	174
		2	1025	1025	195	195		2	899	899	220	220	
64,0	92,5	1	656	1283	656	29	76	1	606	1168	606	44	184
		2	1100	1100	213	213		2	1003	1003	209	209	

3.4.1.4 **Central ballasts and corner loads to DIN 15019**

for a stationary tower crane on an undercarriage without climbing drive

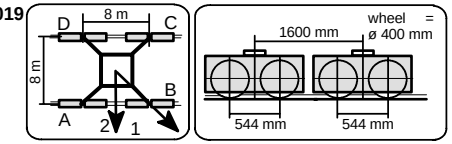


UW 480 **Corner distance 8,0 m x 8,0 m** **Jib length 45 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
14,5	15,0	1	392	690	392	95	50	1	207	473	207	25	76
		2	603	603	182	182		2	393	393	292	292	
19,0	15,0	1	400	714	400	85	52	1	212	491	212	25	98
		2	622	622	177	177		2	400	400	70	70	
23,5	15,0	1	407	740	407	73	54	1	216	510	216	25	107
		2	643	643	171	171		2	414	414	70	70	
28,0	15,0	1	414	769	414	58	57	1	220	532	220	25	115
		2	665	665	162	162		2	428	428	70	70	
32,5	15,0	1	421	800	421	42	59	1	222	556	222	25	124
		2	689	689	153	153		2	456	456	286	286	
37,0	15,0	1	426	836	426	25	62	1	223	582	223	25	132
		2	714	714	141	141		2	499	499	257	257	
41,5	15,0	1	411	894	411	25	64	1	385	612	385	158	141
		2	742	742	128	128		2	545	545	225	225	
46,0	25,0	1	442	958	442	25	66	1	417	705	417	129	149
		2	797	797	137	137		2	620	620	214	214	
50,5	40,0	1	496	1030	496	25	69	1	462	815	462	108	158
		2	867	867	156	156		2	712	712	212	212	
55,0	55,0	1	545	1110	545	25	71	1	506	932	506	80	166
		2	940	940	172	172		2	807	807	205	205	
59,5	70,0	1	597	1188	597	25	74	1	552	1055	552	49	176
		2	1013	1013	191	191		2	907	907	196	196	
64,0	87,5	1	654	1276	654	33	77	1	597	1198	597	25	186
		2	1094	1094	215	215		2	1019	1019	190	190	

3.4.1.5 **Central ballasts and corner loads to DIN 15019**

for a stationary tower crane on an undercarriage without climbing drive

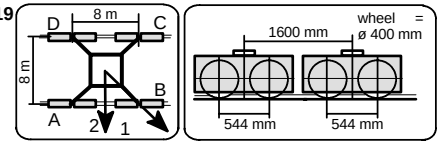


UW 480 **Corner distance 8,0 m x 8,0 m** **Jib length 50 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
14,5	25,0	1	389	680	389	99	50	1	181	641	181	25	77
		2	595	595	184	184		2	475	475	39	39	
19,0	25,0	1	396	704	396	89	53	1	186	660	186	25	101
		2	614	614	179	179		2	489	489	40	40	
23,5	25,0	1	403	730	403	77	55	1	190	680	190	25	109
		2	635	635	172	172		2	503	503	40	40	
28,0	27,5	1	417	765	417	69	57	1	205	703	205	25	118
		2	663	663	171	171		2	525	525	45	45	
32,5	27,5	1	424	795	424	53	60	1	206	729	206	25	126
		2	686	686	161	161		2	541	541	43	43	
37,0	30,0	1	437	834	437	40	62	1	219	757	219	25	134
		2	718	718	157	157		2	564	564	46	46	
41,5	30,0	1	439	875	439	25	64	1	217	789	217	25	143
		2	745	745	144	144		2	582	582	42	42	
46,0	32,5	1	434	937	434	25	67	1	227	823	227	25	151
		2	780	780	135	135		2	626	626	189	189	
50,5	47,5	1	489	1006	489	25	69	1	297	860	297	25	160
		2	849	849	155	155		2	718	718	187	187	
55,0	62,5	1	540	1082	540	25	71	1	497	945	497	49	168
		2	920	920	173	173		2	814	814	180	180	
59,5	80,0	1	599	1164	599	33	74	1	547	1076	547	25	178
		2	998	998	199	199		2	920	920	177	177	
64,0	95,0	1	645	1249	645	41	77	1	556	1243	556	25	188
		2	1072	1072	218	218		2	1026	1026	165	165	

3.4.1.6 **Central ballasts and corner loads to DIN 15019**

for a stationary tower crane on an undercarriage without climbing drive

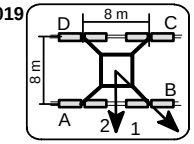


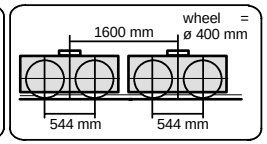
UW 480 **Corner distance 8,0 m x 8,0 m** **Jib length 55 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **327** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
14,5	25,0	1	400	678	400	122	50	1	181	642	181	25	78
		2	596	596	203	203		2	475	475	39	39	
19,0	25,0	1	407	702	407	111	53	1	186	661	186	25	102
		2	616	616	198	198		2	489	489	39	39	
23,5	25,0	1	414	729	414	99	55	1	189	682	189	25	110
		2	637	637	191	191		2	503	503	39	39	
28,0	27,5	1	427	763	427	91	58	1	204	705	204	25	119
		2	665	665	190	190		2	525	525	44	44	
32,5	27,5	1	434	794	434	75	60	1	206	731	206	25	127
		2	688	688	180	180		2	541	541	42	42	
37,0	30,0	1	448	833	448	63	62	1	218	759	218	25	136
		2	720	720	175	175		2	565	565	45	45	
41,5	30,0	1	455	868	455	41	65	1	216	791	216	25	144
		2	747	747	162	162		2	583	583	226	226	
46,0	32,5	1	466	914	466	25	67	1	226	825	226	25	152
		2	783	783	154	154		2	640	640	196	196	
50,5	45,0	1	506	986	506	27	69	1	284	863	284	25	161
		2	845	845	167	167		2	727	727	186	186	
55,0	60,0	1	551	1069	551	33	72	1	501	957	501	45	169
		2	917	917	185	185		2	823	823	179	179	
59,5	77,5	1	603	1158	603	47	74	1	547	1093	547	25	179
		2	995	995	210	210		2	930	930	175	175	
64,0	95,0	1	655	1250	655	61	77	1	568	1262	568	25	189
		2	1076	1076	235	235		2	1043	1043	168	168	

3.4.1.7 **Central ballasts and corner loads to DIN 15019**

for a stationary tower crane on an undercarriage without climbing drive



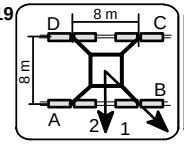


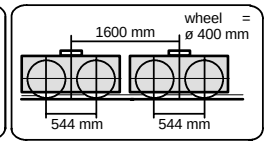
UW 480 **Corner distance 8,0 m x 8,0 m** **Jib length 60 m**

hook height	central ballast	jib position	crane in service torque moment: **490** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
14,5	25,0	1	422	692	422	152	52	1	178	647	178	25	82
		2	613	613	231	231		2	478	478	116	116	
19,0	27,5	1	435	724	435	147	54	1	195	667	195	25	107
		2	639	639	232	232		2	500	500	120	120	
23,5	27,5	1	443	751	443	134	57	1	198	689	198	25	116
		2	661	661	225	225		2	516	516	118	118	
28,0	27,5	1	450	780	450	119	59	1	200	713	200	25	124
		2	683	683	216	216		2	534	534	115	115	
32,5	30,0	1	463	818	463	108	61	1	213	740	213	25	133
		2	714	714	212	212		2	559	559	116	116	
37,0	30,0	1	470	851	470	89	64	1	213	770	213	25	141
		2	740	740	200	200		2	580	580	260	260	
41,5	32,5	1	483	894	483	73	66	1	223	802	223	25	150
		2	774	774	193	193		2	636	636	231	231	
46,0	35,0	1	497	940	497	53	68	1	232	838	232	25	158
		2	810	810	183	183		2	695	695	198	198	
50,5	42,5	1	523	1002	523	43	71	1	473	896	473	49	167
		2	862	862	183	183		2	772	772	173	173	
55,0	60,0	1	573	1093	573	53	73	1	521	1027	521	25	175
		2	941	941	206	206		2	878	878	169	169	
59,5	77,5	1	625	1184	625	66	76	1	541	1192	541	25	185
		2	1021	1021	230	230		2	988	988	162	162	
64,0	95,0	1	678	1278	678	77	79	1	558	1370	558	25	195
		2	1102	1102	253	253		2	1103	1103	152	152	

3.4.1.8 **Central ballasts and corner loads to DIN 15019**

for a stationary tower crane on an undercarriage without climbing drive



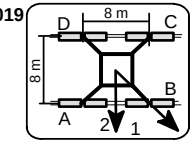


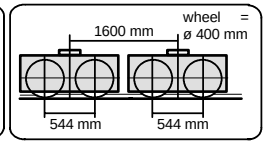
UW 480 **Corner distance 8,0 m x 8,0 m** **Jib length 65 m**

hook height	central ballast	jib position	crane in service torque moment: **490** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
14,5	27,5	1	439	701	439	177	52	1	190	648	190	25	83
		2	625	625	254	254		2	523	523	88	88	
19,0	27,5	1	446	727	446	166	54	1	194	668	194	25	109
		2	645	645	248	248		2	539	539	86	86	
23,5	27,5	1	454	754	454	153	57	1	280	692	280	25	117
		2	666	666	241	241		2	556	556	84	84	
28,0	27,5	1	461	783	461	138	59	1	279	723	279	25	126
		2	689	689	233	233		2	573	573	80	80	
32,5	30,0	1	474	821	474	127	62	1	289	757	289	25	134
		2	719	719	229	229		2	599	599	81	81	
37,0	30,0	1	481	855	481	107	64	1	285	793	285	25	143
		2	745	745	217	217		2	619	619	75	75	
41,5	32,5	1	494	898	494	91	66	1	291	834	291	25	151
		2	780	780	209	209		2	656	656	232	232	
46,0	35,0	1	508	944	508	71	69	1	296	878	296	25	160
		2	816	816	199	199		2	717	717	198	198	
50,5	40,0	1	527	1000	527	54	71	1	311	926	311	25	168
		2	862	862	193	193		2	788	788	167	167	
55,0	55,0	1	572	1086	572	58	73	1	500	1063	500	25	176
		2	935	935	208	208		2	889	889	155	155	
59,5	72,5	1	624	1178	624	69	76	1	519	1231	519	25	186
		2	1015	1015	232	232		2	1000	1000	147	147	
64,0	95,0	1	689	1284	689	93	79	1	559	1412	559	25	196
		2	1110	1110	268	268		2	1129	1129	149	149	

3.4.1.9 **Central ballasts and corner loads to DIN 15019**

for a stationary tower crane on an undercarriage without climbing drive



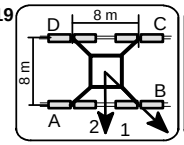


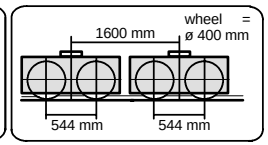
UW 480 **Corner distance 8,0 m x 8,0 m** **Jib length 70 m**

hook height	central ballast	jib position	crane in service torque moment: **490** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
14,5	27,5	1	441	722	441	159	52	1	249	704	249	25	84
		2	640	640	241	241		2	547	547	66	66	
19,0	27,5	1	448	748	448	147	55	1	250	730	250	25	110
		2	660	660	235	235		2	563	563	64	64	
23,5	27,5	1	455	775	455	134	57	1	250	758	250	25	118
		2	681	681	228	228		2	580	580	61	61	
28,0	27,5	1	462	805	462	119	59	1	248	789	248	25	127
		2	704	704	219	219		2	598	598	57	57	
32,5	30,0	1	475	843	475	107	62	1	258	824	258	25	135
		2	735	735	215	215		2	624	624	59	59	
37,0	32,5	1	488	884	488	93	64	1	266	862	266	25	144
		2	768	768	209	209		2	650	650	59	59	
41,5	32,5	1	496	922	496	70	67	1	259	903	259	25	152
		2	797	797	194	194		2	689	689	202	202	
46,0	35,0	1	509	969	509	49	69	1	263	948	263	25	161
		2	834	834	184	184		2	751	751	167	167	
50,5	40,0	1	528	1026	528	31	71	1	444	1000	444	25	169
		2	880	880	177	177		2	823	823	134	134	
55,0	57,5	1	579	1119	579	40	74	1	464	1163	464	25	178
		2	961	961	198	198		2	932	932	127	127	
59,5	82,5	1	650	1230	650	70	76	1	520	1335	520	25	187
		2	1060	1060	240	240		2	1063	1063	137	137	

3.4.1.10 **Central ballasts and corner loads to DIN 15019**

for a stationary tower crane on an undercarriage without climbing drive



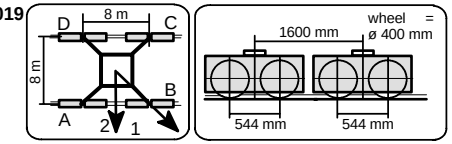


UW 480 **Corner distance 8,0 m x 8,0 m** **Jib length 75 m**

hook height	central ballast	jib position	crane in service torque moment: **651** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
14,5	52,5	1	484	766	484	202	53	1	231	834	231	25	86
		2	683	683	284	284		2	616	616	44	44	
19,0	55,0	1	497	798	497	196	55	1	247	855	247	25	113
		2	710	710	284	284		2	637	637	50	50	
23,5	55,0	1	504	825	504	183	58	1	249	879	249	25	121
		2	731	731	277	277		2	653	653	49	49	
28,0	55,0	1	511	855	511	167	60	1	250	905	250	25	130
		2	754	754	268	268		2	669	669	46	46	
32,5	57,5	1	525	893	525	156	62	1	262	935	262	25	138
		2	785	785	264	264		2	693	693	49	49	
37,0	60,0	1	538	934	538	142	65	1	273	967	273	25	146
		2	818	818	258	258		2	717	717	51	51	
41,5	62,5	1	551	977	551	125	67	1	282	1003	282	25	155
		2	852	852	250	250		2	765	765	237	237	
46,0	65,0	1	565	1024	565	105	70	1	289	1042	289	25	163
		2	889	889	240	240		2	828	828	201	201	
50,5	70,0	1	584	1080	584	88	72	1	306	1085	306	25	172
		2	935	935	233	233		2	901	901	168	168	
55,0	75,0	1	604	1141	604	67	74	1	482	1226	482	25	180
		2	983	983	224	224		2	978	978	129	129	
59,5	100,0	1	674	1251	674	97	77	1	537	1399	537	25	190
		2	1082	1082	266	266		2	1110	1110	138	138	

3.4.1.11 **Central ballasts and corner loads to DIN 15019**

for a stationary tower crane on an undercarriage without climbing drive

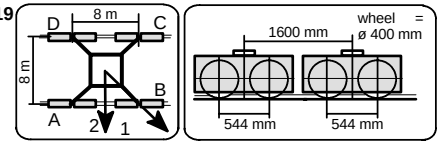


UW 480 **Corner distance 8,0 m x 8,0 m** **Jib length 80 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
14,5	52,5	1	495	777	495	213	53	1	231	835	231	25	87
		2	694	694	296	296		2	617	617	44	44	
19,0	55,0	1	508	809	508	208	56	1	247	856	247	25	114
		2	721	721	296	296		2	638	638	50	50	
23,5	55,0	1	515	837	515	194	58	1	249	880	249	25	122
		2	743	743	288	288		2	653	653	48	48	
28,0	55,0	1	522	867	522	178	60	1	250	907	250	25	131
		2	766	766	279	279		2	670	670	46	46	
32,5	57,5	1	536	905	536	167	63	1	262	936	262	25	139
		2	797	797	275	275		2	693	693	49	49	
37,0	60,0	1	549	946	549	152	65	1	272	969	272	25	147
		2	830	830	269	269		2	733	733	265	265	
41,5	62,5	1	562	990	562	135	67	1	281	1005	281	25	156
		2	865	865	260	260		2	793	793	232	232	
46,0	65,0	1	576	1037	576	115	70	1	288	1044	288	25	164
		2	902	902	250	250		2	856	856	196	196	
50,5	70,0	1	595	1094	595	97	72	1	522	1113	522	25	173
		2	948	948	243	243		2	930	930	161	161	
55,0	77,5	1	621	1162	621	81	74	1	489	1281	489	25	181
		2	1003	1003	239	239		2	1015	1015	127	127	
59,5	105,0	1	698	1279	698	117	77	1	555	1457	555	25	191
		2	1109	1109	287	287		2	1154	1154	142	142	

3.4.1.12 **Central ballasts and corner loads to DIN 15019**

for a stationary tower crane on an undercarriage without climbing drive

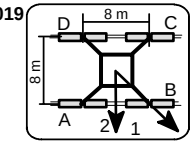


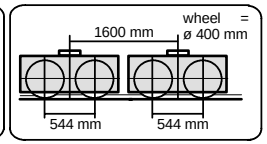
UW 480 **Corner distance 8,0 m x 8,0 m** **Jib length 85 m**

hook height [m]	central ballast [t]	jib position	crane in service torque moment: **651** kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm corner loads A [kN]	B [kN]	C [kN]	D [kN]	horizontal force [kN]
14,5	52,5	1	504	737	504	271	54	1	230	836	230	25	88
		2	669	669	339	339		2	617	617	44	44	
19,0	55,0	1	517	769	517	266	56	1	246	857	246	25	115
		2	695	695	339	339		2	638	638	49	49	
23,5	55,0	1	524	796	524	252	58	1	248	881	248	25	123
		2	717	717	332	332		2	653	653	48	48	
28,0	57,5	1	538	832	538	243	61	1	261	908	261	25	132
		2	746	746	329	329		2	676	676	52	52	
32,5	57,5	1	545	864	545	226	63	1	261	938	261	25	140
		2	770	770	319	319		2	694	694	48	48	
37,0	60,0	1	558	904	558	212	65	1	271	971	271	25	149
		2	803	803	313	313		2	727	727	289	289	
41,5	62,5	1	571	947	571	196	68	1	280	1007	280	25	157
		2	837	837	306	306		2	786	786	257	257	
46,0	65,0	1	585	993	585	176	70	1	286	1046	286	25	166
		2	874	874	296	296		2	850	850	220	220	
50,5	70,0	1	604	1049	604	159	72	1	304	1090	304	25	174
		2	919	919	290	290		2	924	924	185	185	
55,0	75,0	1	624	1109	624	138	75	1	516	1239	516	25	183
		2	967	967	281	281		2	1003	1003	145	145	
59,5	95,0	1	682	1207	682	157	77	1	543	1416	543	25	192
		2	1053	1053	310	310		2	1124	1124	140	140	

3.4.1.13 **Central ballasts and corner loads to DIN 15019**

for a stationary tower crane on an undercarriage without climbing drive





UW 480 **Corner distance 8,0 m x 8,0 m** **Jib length 90 m**

hook height	central ballast	jib position	crane in service torque moment: **651** kNm corner loads				horizontal force	jib position	crane out of service torque moment: 0 kNm corner loads				horizontal force
			A	**B**	**C**	**D**			**A**	**B**	**C**	**D**	
[m]	[t]		[kN]	[kN]	[kN]	[kN]	[kN]		[kN]	[kN]	[kN]	[kN]	[kN]
14,5	55,0	1	521	742	521	300	54	1	242	837	242	25	89
		2	677	677	365	365		2	624	624	49	49	
19,0	55,0	1	528	768	528	289	56	1	245	859	245	25	116
		2	697	697	359	359		2	638	638	49	49	
23,5	55,0	1	535	795	535	275	59	1	247	883	247	25	125
		2	719	719	351	351		2	654	654	47	47	
28,0	57,5	1	548	831	548	266	61	1	261	910	261	25	133
		2	748	748	349	349		2	677	677	51	51	
32,5	57,5	1	555	863	555	248	63	1	260	940	260	25	141
		2	773	773	338	338		2	695	695	48	48	
37,0	60,0	1	569	903	569	234	66	1	270	973	270	25	150
		2	805	805	332	332		2	747	747	291	291	
41,5	62,5	1	582	946	582	218	68	1	278	1009	278	25	158
		2	840	840	325	325		2	807	807	257	257	
46,0	67,5	1	602	999	602	205	70	1	298	1049	298	25	167
		2	883	883	321	321		2	878	878	226	226	
50,5	70,0	1	615	1049	615	181	73	1	565	1105	565	26	175
		2	922	922	308	308		2	947	947	184	184	
55,0	75,0	1	635	1109	635	160	75	1	519	1276	519	25	184
		2	970	970	299	299		2	1027	1027	142	142	
59,5	97,5	1	699	1214	699	184	78	1	557	1457	557	25	193
		2	1063	1063	335	335		2	1155	1155	143	143	