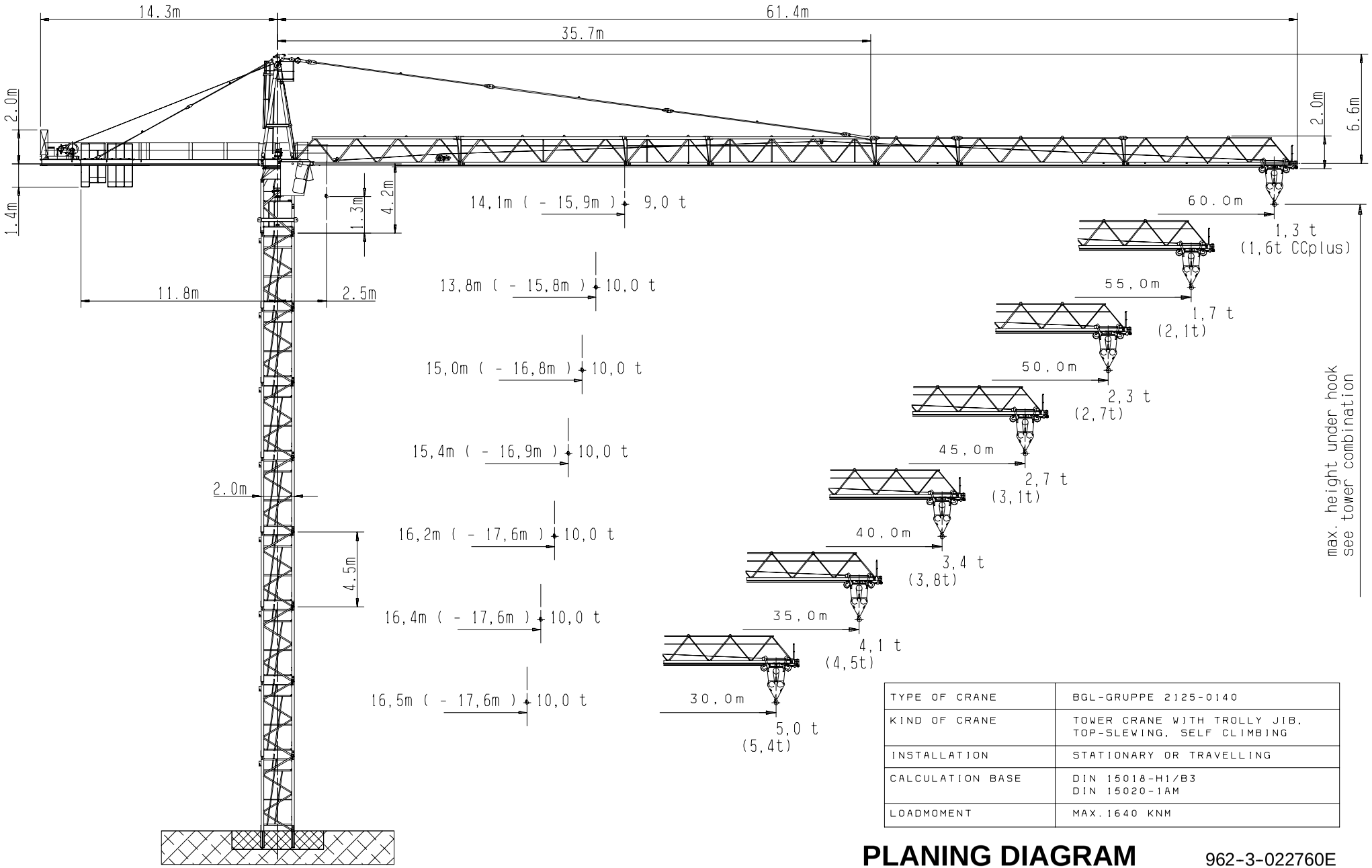


TYPE OF CRANE	BGL-GRUPPE 2125-0140
KIND OF CRANE	TOWER CRANE WITH TROLLY JIB, TOP-SLEWING, SELF CLIMBING
INSTALLATION	STATIONARY OR TRAVELLING
CALCULATION BASE	DIN 15018-H1/B3 DIN 15020-1AM
LOADMOMENT	MAX. 1640 KNM

PLANING DIAGRAM

962-3-022760E

WOLFF 6017.10

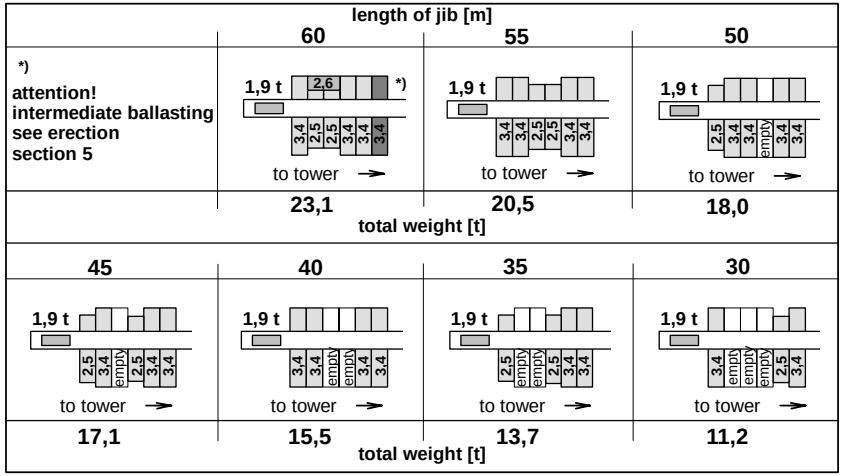
2.2.1.1 **Load capacity table**

radius [m]				25	30	35	40	45	50	55	60	
length of jib [m]	60	2,5 – 14,1	9,0 t	4,6	3,7	3,0	2,5	2,1	1,8	1,5	**1,3**	load capacity [t]
	55	2,5 – 13,8		5,0	4,0	3,3	2,7	2,3	2,0	**1,7**		
	50	2,5 – 15,0		5,6	4,5	3,7	3,1	2,6	**2,3**			
	45	2,5 – 15,4		5,7	4,6	3,8	3,2	**2,7**				
	40	2,5 – 16,2	10,0 t	6,1	4,9	4,0	**3,4**					
	35	2,5 – 16,4		6,2	5,0	**4,1**						
	30	2,5 – 16,5		6,2	**5,0**							

radius [m]				25	30	35	40	45	50	55	60	
length of jib [m]	60	2,5 – 20,6		4,8	3,8	3,1	2,6	2,2	1,9	1,6	**1,4**	load capacity [t]
	55	2,5 – 22,0		5,2	4,1	3,4	2,9	2,4	2,1	**1,8**		
	50	2,5 – 23,9		5,7	4,6	3,8	3,2	2,7	**2,4**			
	45	2,5 – 24,4		5,8	4,7	3,9	3,3	**2,8**				
	40	2,5 – 25,7	6,0 t	6,0	5,0	4,1	**3,5**					
	35	2,5 – 26,0		6,0	5,1	**4,2**						
	30	2,5 – 26,1		6,0	**5,1**							

The load capacities refer to a height of tower of 42,0 m. With greater tower heights the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 2,4 kg per meter hook path).

Arrangement of counterweight **Hw 637 FU**



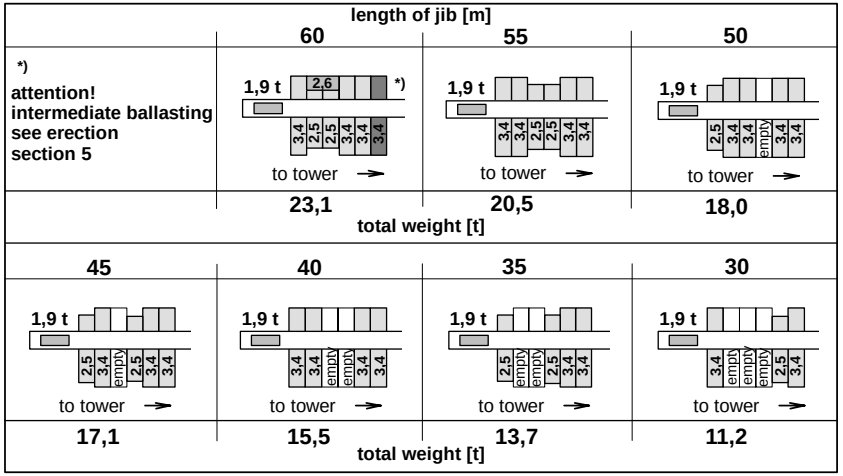
2.2.1.2 **Load capacity table**

radius [m]				25	30	35	40	45	50	55	60	
length of jib [m]	60	2,5 – 15,9	9,0 t	5,3	4,3	3,5	2,9	2,5	2,1	1,8	**1,6**	load capacity [t]
	55	2,5 – 15,8		5,9	4,7	3,9	3,3	2,8	2,4	**2,1**		
	50	2,5 – 16,8		6,4	5,1	4,2	3,6	3,1	**2,7**			
	45	2,5 – 16,9		6,4	5,2	4,3	3,6	**3,1**				
	40	2,5 – 17,6	10,0 t	6,7	5,4	4,5	**3,8**					
	35	2,5 – 17,6		6,7	5,4	**4,5**						
	30	2,5 – 17,6		6,7	**5,4**							

radius [m]				25	30	35	40	45	50	55	60	
length of jib [m]	60	2,5 – 23,1		5,5	4,4	3,6	3,1	2,6	2,2	1,9	**1,7**	load capacity [t]
	55	2,5 – 25,1		6,0	4,9	4,0	3,4	2,9	2,5	**2,2**		
	50	2,5 – 26,8		6,0	5,3	4,4	3,7	3,2	**2,8**			
	45	2,5 – 27,0		6,0	5,3	4,4	3,7	**3,2**				
	40	2,5 – 28,0	6,0 t	6,0	5,5	4,6	**3,9**					
	35	2,5 – 28,0		6,0	5,5	**4,6**						
	30	2,5 – 28,0		6,0	**5,5**							

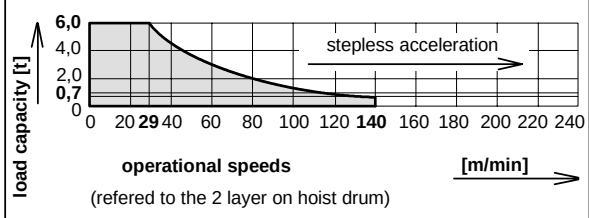
The load capacities refer to a height of tower of 42,0 m. With greater tower heights the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 2,4 kg per meter hook path).

Arrangement of counterweight **Hw 637 FU**



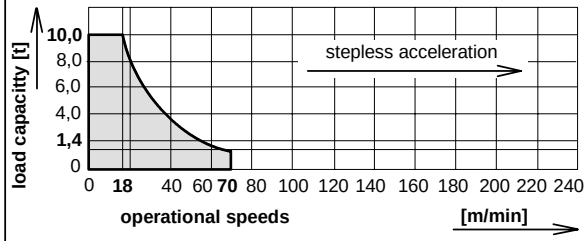
2.2.2.1 **Operational speeds** 400 V, 50 Hz, 40% ED

drive [type]	operational speeds load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 637 FU	hoisting	190	37	



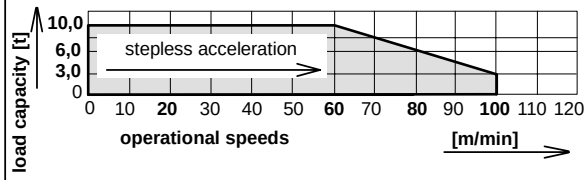
(refered to the 2 layer on hoist drum)

		95	37

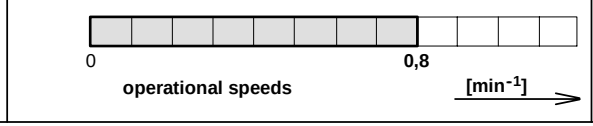


58,0 total output for a simmultaneity factor 0,8

Kw	traversing		7,5	



Dw	slewing 0,8 min^{-1}		2 x 5,0	



2.2.3.1 **Load capacity [kg] 2 fall operation** DIN 15018 / H1 - B3

radius [m]	length of jib [m] 30	35	40	45	50	55	60
20,0	6000	6000	6000	6000	6000	6000	6000
21,0	6000	6000	6000	6000	6000	6000	5860
22,0	6000	6000	6000	6000	6000	6000	5550
23,0	6000	6000	6000	6000	6000	5700	5260
24,0	6000	6000	6000	6000	5980	5420	5000
25,0	6000	6000	6000	5800	5700	5200	4800
26,0	6000	6000	5920	5580	5440	4920	4540
27,0	5780	5740	5670	5330	5200	4700	4330
28,0	5540	5500	5430	5110	4980	4500	4140
29,0	5310	5280	5210	4900	4780	4310	3970
30,0	5100	5100	5000	4700	4600	4100	3800
31,0		4870	4810	4520	4400	3970	3650
32,0		4690	4630	4340	4230	3810	3500
33,0		4520	4460	4180	4080	3670	3360
34,0		4350	4290	4030	3930	3530	3240
35,0		4200	4100	3900	3800	3400	3100
36,0			4000	3750	3650	3278	3000
37,0			3870	3620	3530	3160	2890
38,0			3740	3500	3410	3050	2790
39,0			3620	3390	3300	2950	2690
40,0			3500	3300	3200	2900	2600
41,0				3170	3090	2760	2510
42,0				3070	2990	2670	2430
43,0				2980	2900	2580	2350
44,0				2890	2810	2500	2270
45,0				2800	2700	2400	2200
46,0					2640	2350	2130
47,0					2560	2280	2060
48,0					2490	2210	2000
49,0					2420	2140	1940
50,0					2400	2100	1900
51,0						2020	1820
52,0						1960	1770
53,0						1910	1720
54,0						1850	1670
55,0						1800	1620
56,0							1570
57,0							1530
58,0							1480
59,0							1440
60,0							1400

the load capacities to a range of lift 42,0 m

2.2.3.2 **Load capacity [kg] 2 fall operation** DIN 15018 / H1 - B3

radius	length of jib [m]						
[m]	30	35	40	45	50	55	60
20,0	6000	6000	6000	6000	6000	6000	6000
21,0	6000	6000	6000	6000	6000	6000	6000
22,0	6000	6000	6000	6000	6000	6000	6000
23,0	6000	6000	6000	6000	6000	6000	6000
24,0	6000	6000	6000	6000	6000	6000	5750
25,0	6000	6000	6000	6000	6000	6000	5500
26,0	6000	6000	6000	6000	6000	5770	5230
27,0	6000	6000	6000	6000	5940	5520	5000
28,0	6000	6000	6000	5750	5700	5290	4790
29,0	5760	5760	5760	5520	5470	5070	4590
30,0	5500	5500	5500	5300	5300	4900	4400
31,0		5320	5320	5100	5050	4680	4230
32,0		5130	5130	4910	4860	4500	4060
33,0		4940	4940	4730	4680	4330	3910
34,0		4770	4770	4560	4520	4180	3770
35,0		4600	4600	4400	4400	4000	3600
36,0			4440	4250	4210	3890	3500
37,0			4300	4110	4070	3760	3380
38,0			4160	3970	3930	3630	3260
39,0			4030	3850	3810	3510	3150
40,0			3900	3700	3700	3400	3100
41,0				3610	3570	3290	2950
42,0				3500	3460	3190	2860
43,0				3400	3360	3090	2770
44,0				3300	3260	3000	2680
45,0				3200	3200	2900	2600
46,0					3080	2830	2520
47,0					2990	2750	2450
48,0					2910	2670	2380
49,0					2830	2590	2310
50,0					2800	2500	2200
51,0						2450	2180
52,0						2390	2120
53,0						2320	2060
54,0						2260	2000
55,0						2200	1900
56,0							1890
57,0							1840
58,0							1790
59,0							1750
60,0							1700

the load capacities to a range of lift 42,0 m

2.2.3.3 **Load capacity [kg] 4 fall operation** DIN 15018 / H1 - B3

radius	length of jib [m]						
[m]	30	35	40	45	50	55	60
10,0	10000	10000	10000	10000	10000	10000	9000
11,0	10000	10000	10000	10000	10000	10000	9000
12,0	10000	10000	10000	10000	10000	10000	9000
13,0	10000	10000	10000	10000	10000	10000	9000
14,0	10000	10000	10000	10000	10000	9830	9000
15,0	10000	10000	10000	10000	10000	9100	8430
16,0	10000	10000	10000	9540	9320	8460	7830
17,0	9650	9580	9450	8920	8700	7900	7310
18,0	9050	8990	8870	8360	8160	7400	6840
19,0	8520	8460	8350	7870	7680	6960	6430
20,0	8040	7980	7880	7420	7240	6560	6050
21,0	7600	7550	7450	7010	6840	6190	5710
22,0	7210	7160	7060	6650	6480	5860	5400
23,0	6850	6800	6710	6310	6150	5560	5120
24,0	6520	6470	6380	6000	5850	5280	4860
25,0	6200	6200	6100	5700	5600	5000	4630
26,0	5940	5890	5810	5450	5320	4800	4410
27,0	5680	5630	5560	5220	5080	4580	4200
28,0	5430	5390	5320	4990	4860	4380	4010
29,0	5210	5170	5100	4780	4660	4190	3840
30,0	5000	5000	4900	4600	4500	4000	3700
31,0		4770	4700	4410	4290	3850	3520
32,0		4590	4520	4230	4120	3700	3380
33,0		4410	4350	4070	3960	3550	3240
34,0		4250	4190	3920	3820	3410	3120
35,0		4100	4000	3800	3700	3300	3000
36,0			3900	3640	3540	3170	2880
37,0			3760	3520	3420	3050	2780
38,0			3640	3400	3300	2940	2680
39,0			3520	3280	3190	2840	2580
40,0			3400	3200	3100	2700	2500
41,0				3070	2980	2650	2400
42,0				2970	2880	2560	2320
43,0				2880	2790	2470	2240
44,0				2790	2700	2390	2160
45,0				2700	2600	2300	2100
46,0					2540	2240	2020
47,0					2460	2170	1960
48,0					2390	2110	1890
49,0					2320	2040	1830
50,0					2300	2000	1800

the load capacities to a range of lift 42,0 m

2.2.3.3 **Load capacity [kg] 4 fall operation** **DIN 15018 / H1 - B3**

radius	length of jib [m]						
[m]	30	35	40	45	50	55	60
51,0						1920	1720
52,0						1860	1670
53,0						1810	1610
54,0						1750	1560
55,0						1700	1500
56,0							1470
57,0							1430
58,0							1380
59,0							1340
60,0							1300

the load capacities to a range of lift 42,0 m

2.2.3.4 **Load capacity [kg] 4 fall operation** **DIN 15018 / H1 - B3**

radius	length of jib [m]						
[m]	30	35	40	45	50	55	60
10,0	10000	10000	10000	10000	10000	10000	9000
11,0	10000	10000	10000	10000	10000	10000	9000
12,0	10000	10000	10000	10000	10000	10000	9000
13,0	10000	10000	10000	10000	10000	10000	9000
14,0	10000	10000	10000	10000	10000	10000	9000
15,0	10000	10000	10000	10000	10000	10000	9000
16,0	10000	10000	10000	10000	10000	9840	8960
17,0	10000	10000	10000	9980	9880	9200	8370
18,0	9770	9770	9760	9360	9270	8630	7840
19,0	9200	9200	9190	8810	8730	8120	7470
20,0	8680	8680	8680	8320	8240	7660	6950
21,0	8220	8220	8210	7870	7790	7240	6570
22,0	7790	7790	7790	7470	7390	6860	6220
23,0	7410	7410	7400	7090	7020	6520	5900
24,0	7060	7060	7050	6750	6690	6200	5610
25,0	6730	6730	6700	6400	6400	5900	5300
26,0	6430	6430	6430	6150	6090	5640	5100
27,0	6150	6150	6150	5880	5820	5390	4870
28,0	5890	5890	5890	5640	5580	5160	4660
29,0	5650	5650	5650	5400	5350	4950	4460
30,0	5400	5400	5400	5200	5100	4700	4300
31,0		5220	5220	4990	4930	4560	4100
32,0		5020	5020	4800	4750	4380	3940
33,0		4840	4830	4620	4570	4220	3790
34,0		4660	4660	4450	4400	4060	3650
35,0		4500	4500	4300	4200	3900	3500
36,0			4340	4140	4100	3780	3380
37,0			4200	4000	3960	3650	3260
38,0			4060	3870	3830	3520	3150
39,0			3930	3740	3700	3400	3040
40,0			3800	3600	3600	3300	2900
41,0				3510	3470	3180	2840
42,0				3400	3360	3080	2750
43,0				3300	3260	2990	2660
44,0				3200	3160	2890	2570
45,0				3100	3100	2800	2500
46,0					2970	2720	2410
47,0					2890	2640	2340
48,0					2810	2560	2270
49,0					2730	2490	2200
50,0					2700	2400	2100

the load capacities to a range of lift 42,0 m

2.2.3.4 **Load capacity [kg] 4 fall operation** **DIN 15018 / H1 - B3**

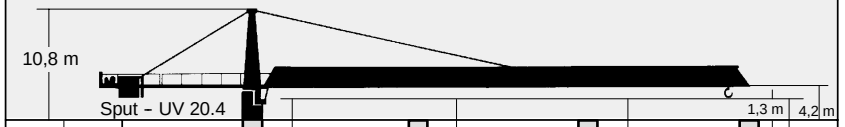
radius	length [m]						
[m]	30	35	40	45	50	55	60
51,0						2350	2070
52,0						2280	2010
53,0						2220	1950
54,0						2160	1900
55,0						2100	1800
56,0							1790
57,0							1740
58,0							1690
59,0							1650
60,0							1600

the load capacities to a range of lift 42,0 m

2.2.6.1 **Tower configurations**

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

Slewing part:



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

50,8 m hook height
64,3 m hook height
73,3 m hook height
77,8 m hook height

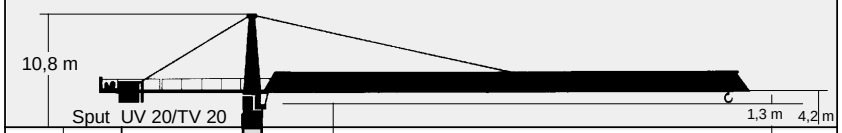
foundation anchor Typ AKZ 120
foundation anchor Typ AKZ 140
foundation anchor Typ AKZ 140
foundation anchor Typ AKZ 156

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.

2.2.6.2 **Tower configurations**

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

Slewing part:



tower elements	height of tower [m]	
1	4,5	UV 20.4
2	9,0	UV 20.4
3	13,5	UV 20.4
4	18,0	UV 20.4
5	22,5	UV 20.4
6	27,0	UV 20.4
7	31,5	UV 20.4
8	36,0	UV 20.4
9	40,5	UV 20.4
10	40,5	TVA 20.4
11	45,0	TV 20.4
12	49,5	TV 20.4
13	54,0	TV 20.4
14	58,5	TVÜ 20.4
15	63,0	TV 25
16	67,5	UVA 25
17	68,7	VR 2529
18	73,2	UV 29
19	77,7	UV 29
20	82,2	UV 29
21	96,7	BT 29

98,0 m hook height

foundation anchor
type FUA – BT 29

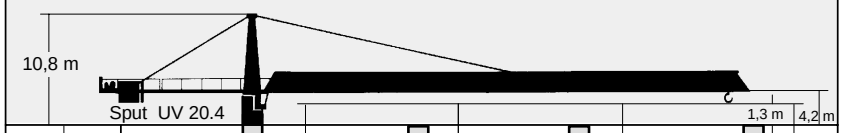
For data regarding foundation anchors see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation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

962-4-027641E

2.2.7.1 **Tower configurations**

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

Slewing part:



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

38,2 m hook height
61,0 m hook height
61,0 m hook height
70,0 m hook height

0,9 m
KRS 8 – 46
connection
TFS 20/UV 20

1,2 m
KR 10 – 46
connection
UV 20/TV 20

1,2 m
KR 10 – 60
connection
UV 20/TV 20

1,2 m
KR 1000 – 8
connection
UV 25 / TV 25

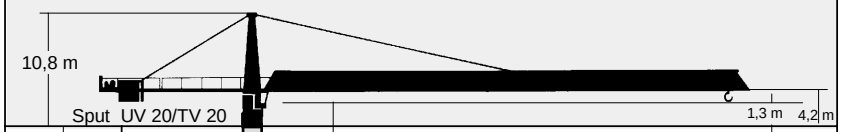
For data regarding cross frames see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation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

962-4-024640E

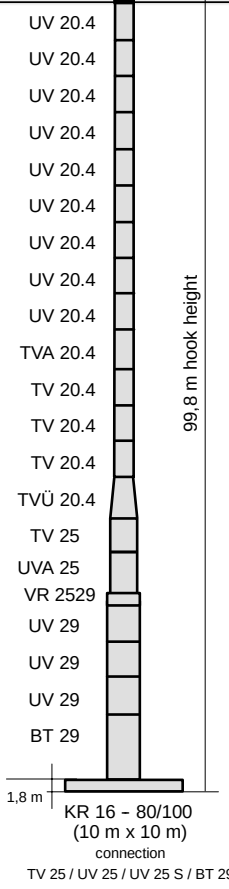
2.2.7.2 **Tower configurations**

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

Slewing part:



tower elements	height of tower [m]	
1	4,5	UV 20.4
2	9,0	UV 20.4
3	13,5	UV 20.4
4	18,0	UV 20.4
5	22,5	UV 20.4
6	27,0	UV 20.4
7	31,5	UV 20.4
8	36,0	UV 20.4
9	40,5	UV 20.4
10	40,5	TVA 20.4
11	45,0	TV 20.4
12	49,5	TV 20.4
13	54,0	TV 20.4
14	58,5	TVÜ 20.4
15	63,0	TV 25
16	67,5	UVA 25
17	68,7	VR 2529
18	73,2	UV 29
19	77,7	UV 29
20	82,2	UV 29
21	96,7	BT 29



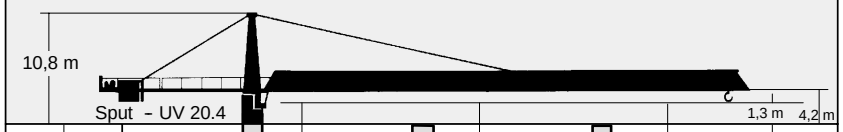
For data regarding cross frames see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation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

962-4-027642E

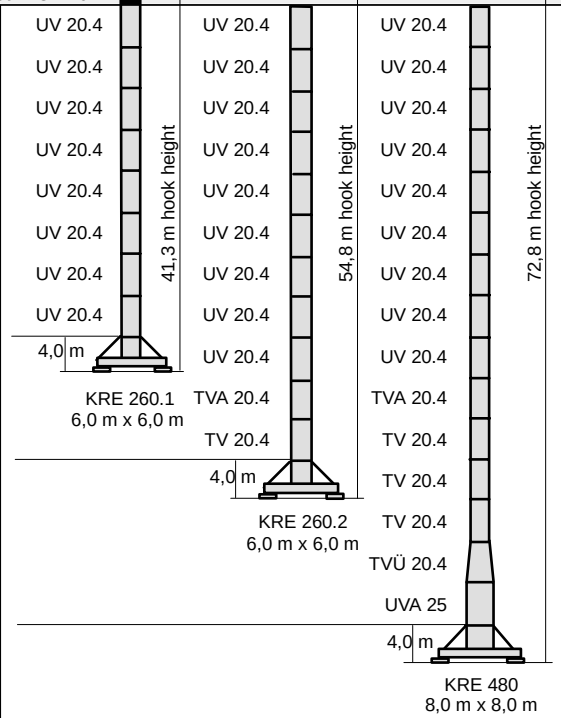
2.2.8.1 **Tower configurations**

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

Slewing part:



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



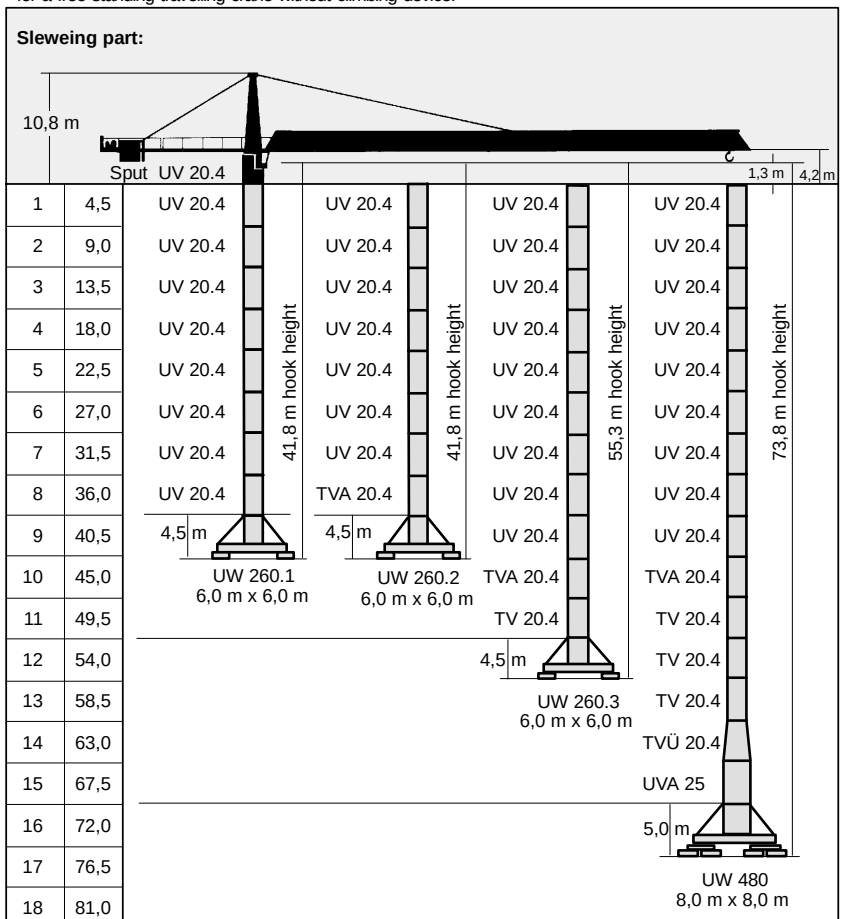
For data regarding cross frame elements see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane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

962-4-022292E

2.2.9.1 **Tower configuration**

for a free standing travelling crane without climbing device.

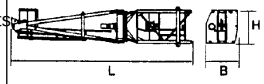
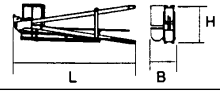
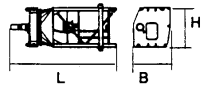
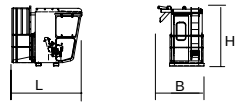
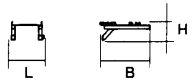
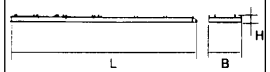
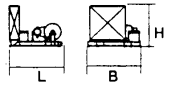
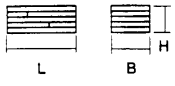
Sleweing part:



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

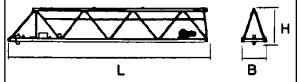
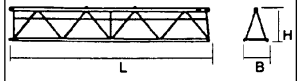
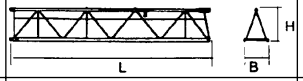
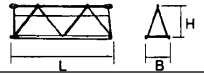
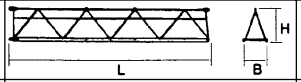
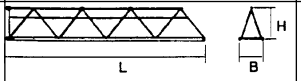
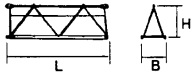
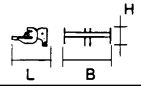
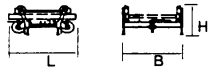
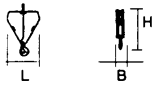
For data regarding undercarriage see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation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

2.3.1 **Colli list**

item	psc.	Designation	Colli	L (m)	B (m)	H (m)	weight (kg)	volume ($m^{3)}$
1	1	tower top complete with platforms and diverse bracing parts (Sput – UV 20.4)		10,80	2,17	2,42	7860	56,72
	item 1 dasassembled	tower top upper part with platforms and div. bracing parts		6,30	1,35	2,10	1720	17,86
		tower top lower part with slewing frame, KDV slewing drives and slip ring system		5,92	2,17	2,42	6140	31,10
2	1	driver's cabin with driver's cabin suspension		2,80	2,15	2,15	1100	14,75
		driver's cabin suspension		1,03	2,01	0,59	230	1,22
4	1	counterjib with bracing parts		13,48	2,38	0,55	2730	17,65
5	1	machinery platform Hw 637 FU with hoisting rope (ø 16 mm x 265 m)		2,38	2,29	2,17	2850	11,83
6	1	standard handrail (loose part)		2,55	1,1	1,00	320	2,81

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)
7	1	jib part **1** with tolley drive		10,19	1,26	1,96	1960	25,17
8	1	jib part **2**		10,23	1,23	1,96	1470	24,66
9	1	jib part **3** with bracings		10,23	1,23	1,96	2400	24,66
10	1	jib part **4**		5,25	1,23	1,76	620	11,37
11	1	jib part **5**		10,23	1,23	1,76	1070	22,15
12	1	jib part **6**		10,19	1,23	1,75	865	21,93
13	1	jib part **7**		5,25	1,23	1,96	650	12,66
14	1	rope swivel traverse		0,91	1,20	0,46	107	0,50
15	1	trolley		1,87	1,50	0,96	360	2,69
16	1	hook block (loose part)		1,02	0,26	1,70	560	0,45
17	1	box (small part)		1,6	0,9	0,8	370	1,15

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

2.5.1 **Assembly weights - slewing part**

Tower top complete - tower connection UV 20.4 **8 410 kg**
bracing brackets (1 x 600 mm, 2 x 5700 mm), drive's cabin
driver's cabin suspension, platform with standard handrail

- upper part of tower top compl. with bracing brackets and platform 1 720 kg
- driver's cabin with suspension and standard handrail 1 230 kg
- lower part ot top with slewing frame, KDV, slewing drive 5 460 kg
  standard handrail and slip ring system

Counterjib with Hw 637 FU complete **7 860 kg**
counterweight stone 1,9 t (machinery platform),
machinery platform Hw 637 FU with hoist rope (ø 16 mm x 265 m)
2 bracing brackets (2 x 6330 mm) and standard handrail

- counter jib with 2 bracing brackets and standard handrail 3 110 kg
- machinery platform Hw 637 FU + hoist rope (ø 16 mm x 265 m) 2 850 kg
- counterweight stone 1,9 t 1 900 kg

60 m Trolley jib complete **10 030 kg**
- bracing brackets, trolley, trolley ropes, hook block and standard handrail

55 m Trolley jib complete **9 200 kg**
- bracing brackets, trolley, trolley ropes, hook block and standard handrail

50 m Trolley jib complete **8 600 kg**
- bracing brackets, trolley, trolley ropes, hook block and standard handrail

45 m Trolley jib complete **8 360 kg**
- bracing brackets, trolley, trolley ropes, hook block and standard handrail

40 m Trolley jib complete **7 760 kg**
- bracing brackets, trolley, trolley ropes, hook block and standard handrail

35 m Trolley jib complete **7 300 kg**
- bracing brackets, trolley, trolley ropes, hook block and standard handrail

30 m Trolley jib complete **6 700 kg**
- bracing brackets, trolley, trolley ropes, hook block and standard handrail

2.5.2 **Assembly weights – cross frame / cross frame element / undercarriage**

Cross frame KR 8 – 46 (without optional features)		**5 000 kg**
– 4 spigots TFS 20		200 kg
– 4 spigots UV 20		272 kg
– option 4 corner spindle		800 kg
Cross frame KR 10 – 60 (without optional features)		**10 000 kg**
– 4 spigots UV 20		272 kg
– 4 spigots TV 20		684 kg
– option 4 corner spindle		800 kg
Cross frame KR 1000 – 8		**14 630 kg**
– 4 spigots TV 25		684 kg
– 4 spigots UV 25		748 kg
Cross frame element KRE 260.1 kompl.		**8 100 kg**
– cross frame platform with swivel arms, corner bearings and transport safety devices	4 320 kg	
– base mast part with diagonal struts and track rod	3 780 kg	
Cross frame element KRE 260.2 kompl.		**10 900 kg**
– cross frame platform with swivel arms, corner bearings and transport safety devices	5 455 kg	
– base mast part with diagonal struts and track rod	5 445 kg	
Undercarriage UW 260.1 kompl.		**11 400 kg**
– undercarriage platform with swivel arms, subframes and transport safety devices	7 150 kg	
– subframes and transport safety devices	4 250 kg	
Undercarriage UW 260.2 kompl.		**13 930 kg**
– undercarriage platform with swivel arms, subframes and transport safety devices	8 050 kg	
– base mast part with diagonal struts and track rod	5 880 kg	
Undercarriage UW 260.3 kompl.		**17 100 kg**
– undercarriage platform with swivel arms, subframes and transport safety devices	11 220 kg	
– base mast part with diagonal struts and track rod	5 880 kg	

2.5.3 **Required height under hook for the mobile crane**

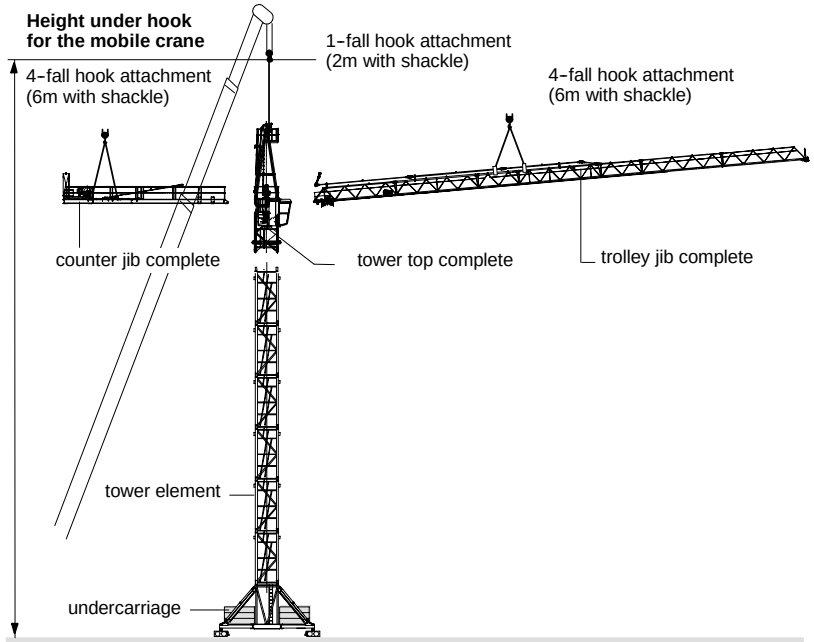
Warning!
Use suspension ropes with sufficient capacity and observe suspension plan!

Required height under hook for mobile crane
=
Height under hook of WOLFF tower crane + min. 15 m.

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

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

Fifferences in ground (mobile crane basis – tower crane basis) must be considered for erection.



2.6.1 **Trolley jib - suspension plan - 60 m to 50 m jib**

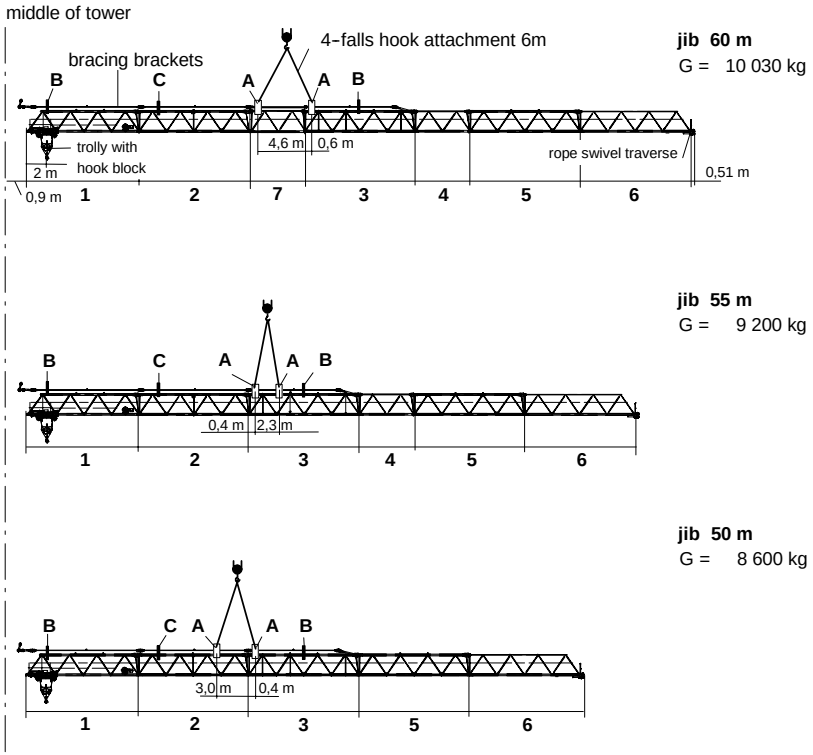
Danger in case of disassembling!
Release fixing bolts at the pivot point of the jib. Jib must be balanced before it can be extended. There mustn't be any loose parts on the jib. The parts of the jib are labeled with a building part identification at the top chord.

Lengths:	jib part	**1/2/3/5/6**	=	10,0 m
	jib part	**4/7**	=	5,0 m
	rope swivel traverse		=	0,51 m

More details about suspension **A** and support **B** and support **C** see next side.

Attention!
For assembly hang on snatch 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.

Attention!
Before mounting the 60 m long jib you must insert a temporary counterweight, see pages 2/15 and 2/16.



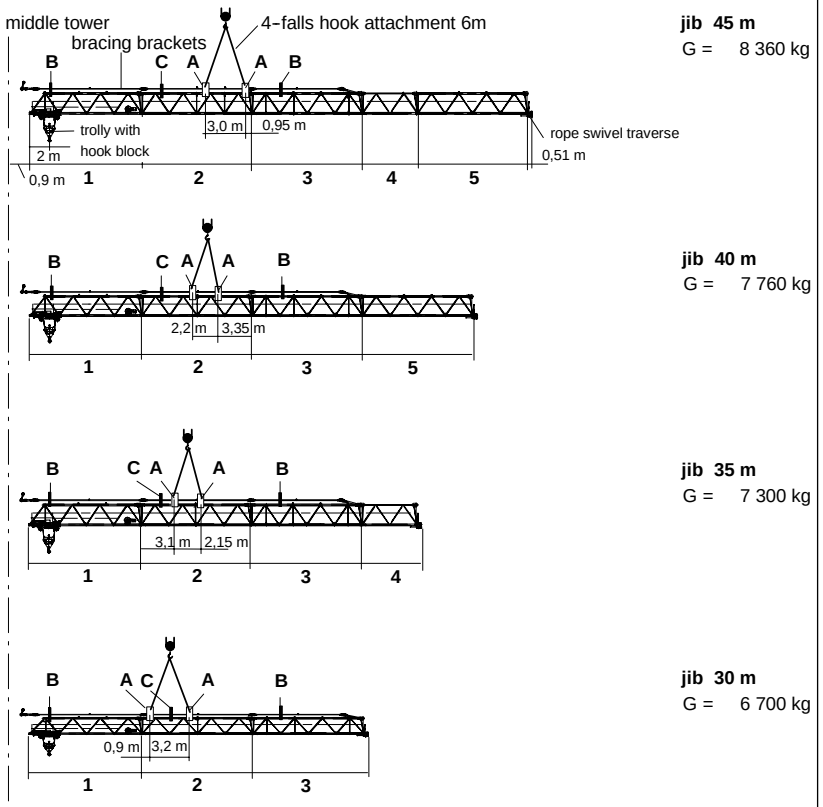
2.6.2 **Trolley jib - suspension plan -45 m to 30 m jib**

Danger in case of disassembling!
Release fixing bolts at the pivot point of the jib. Jib must be balanced before it can be extended. There mustn't be any loose parts on the jib. The parts of the jib are labeled with a building part identification at the top chord.

Lengths:	jib part	**1/2/3/5**	=	10,0 m
	jib part	**4**	=	5,0 m
	rope swivel traverse		=	0,51 m

More details about suspension **A** and support **B** and support **C** see next side.

Attention!
For assembly hang on snatch 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.



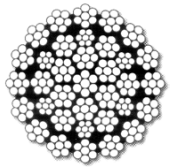
2.7.1 **Hoisting rope**

Cable Ø = 16 mm + 4% + 2%

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

First equipment

CASAR STARLIFT –
non twisting
flexible hoisting rope
with compressed
cable core



nominal strength = 1770 N/mm²
calc. breaking strength = 234,1 kN
min. breaking strength = 178,1 kN
weight per meter = 1,191 kg

Design

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

middle space factor = 0,654
spinning loss factor = 0,76
weight factor = 0,90
total twist number = 245

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 = **112**

Basic equipment

cable length 265 m	**for crane with:**	**cable**	**4 fall**
		radius	**60 m**
		hook path	**42 m**

By lengthening the hook path by 1 tower element (4,5 m) the necessary cable length increases by **9 m for operation in 2 falls** and **18 m for operation in 4 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.

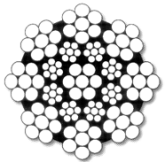
2.7.2 **Traversing rope**

Cable Ø = 8 mm + 4% + 2%

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

First equipment

CASAR UNILIFT –
cable with 8 strands
in non-overlapped double
parallel construction
made out of uncompressed strands.



nominal strength = 1770 N/mm²
calc. breaking strength = 57,4 kN
min. breaking strength = 49,9 kN
weight per meter = 0,282 kg

Design

ordinary lay rope, right handed,
surface of wires zinc coated.

middle space factor = 0,643
spinning loss factor = 0,90
weight factor = 0,87
total twist number = 119

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 = **56**

Basic equipment

cable lengths	**1 x 70 m**	**for crane with:**	**radius** **60 m**
	1 x 118 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 gear

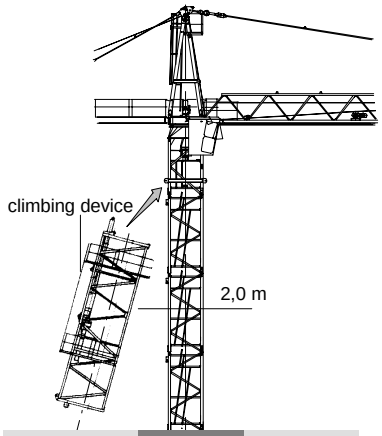
The following removable hydraulic exterior climbing gear can be used with the tower crane WOLFF 6017 FL – 6/10 .

-	KWH 20.3

KWH 20.3 information is given in a seperate documentation in section 12, Additional Equipment.

Min. height with stationary erection:
3 tower elements = 13,5 m tower height

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



2.8.1.1 Balancing weights for climbing

* The indicated balancing weights are gross–weights of towersections or a load.

** The given (m) data for position of weights along jib are approximate only and refer to center of tower. The exact balance point is arrived at by short moves of trolley and is considered arrived when the towersection concerned lifts out of the resting tower without any friction. Be careful and try repeatedly until best possible balancing is assured.

--- balancing not possible

for climbing in UV 20 tower	jib						
elements	30 m	35 m	40 m	45 m	50 m	55 m	60 m
with balancing load * UV 20.4 = 1,95 t	** 14,8	14,4	14,5	---	---	---	---
without balancing load	---	---	---	33,1	29,4	21,7	2,5

Danger!
While climbing, the slewing part of the crane must be locked in the direction of of moving towersections in or out the tower. Until tower has been repinned fully and in all holes, the balancing must be kept and the slew part must remain locked. (For details, please see operational manual KWH 20.3).
The climbing device is an auxilliary device for assembly and mustn't stay at the tower crane WOLFF under normal working conditions.

2.8.1 Insertable exterior climbing gear

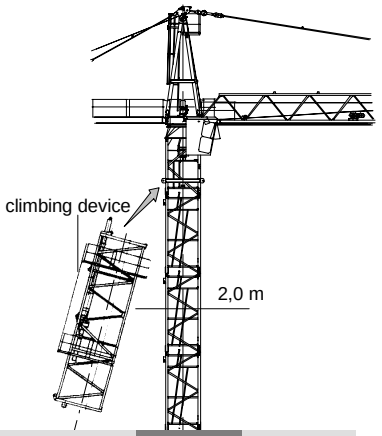
The following removable hydraulic exterior climbing gear can be used with the tower crane WOLFF 6017 FL – 6/10 .

-	KWH 20.4

KWH 20.4 information is given in a seperate documentation in section 12, Additional Equipment.

Min. height with stationary erection:
3 tower elements = 13,5 m tower height

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



2.8.1.1 Balancing weights for climbing

* The indicated balancing weights are gross–weights of towersections or a load.

** The given (m) data for position of weights along jib are approximate only and refer to center of tower. The exact balance point is arrived at by short moves of trolley and is considered arrived when the towersection concerned lifts out of the resting tower without any friction. Be careful and try repeatedly until best possible balancing is assured.

--- balancing not possible

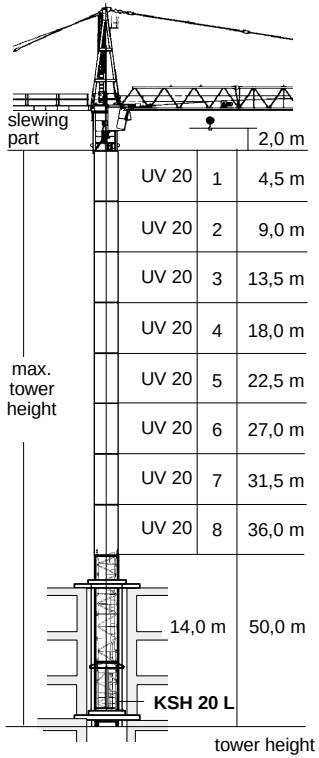
for climbing in UV 20 tower	jib						
elements	30 m	35 m	40 m	45 m	50 m	55 m	60 m
with balancing load * UV 20.4 = 1,95 t	** 13,9	13,5	13,6	---	---	---	---
without balancing load	---	---	---	30,3	26,5	18,7	---

Danger!
While climbing, the slewing part of the crane must be locked in the direction of of moving towersections in or out the tower. Until tower has been repinned fully and in all holes, the balancing must be kept and the slew part must remain locked. (For details, please see operational manual KWH 20.4).
The climbing device 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 device KSH 20 L

For use of the WOLFF 6017 FL in connection with internal climbing device KSH20L, the tower combination has to be observed as shown here.

KSH20L informations is given in a seperate documentation in section 12, Additional Equipment.



2.8.5.1 Table of balancing weights

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

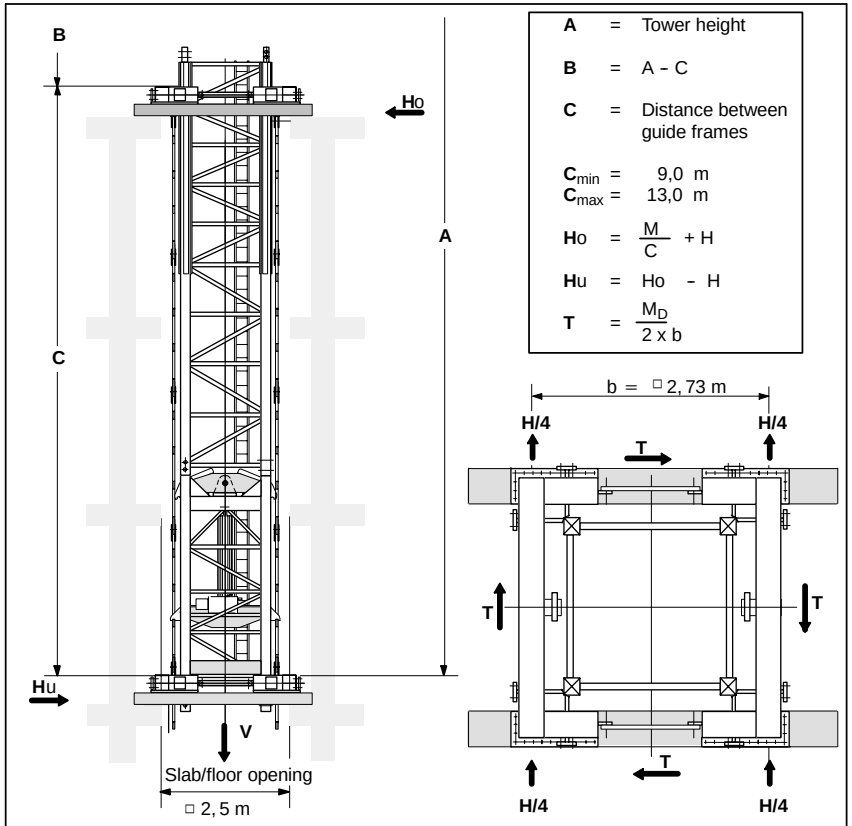
** The indicated radius refers to the centre of the tower and shall be treated as standard value. Exact balancing must achieved by travelling of trolley with tower element or load and can checked by measuring the distance between corner posts and guide plates. This distance shall be equal at all four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

-- balancing not possible

6017 FL - 6 balancing weight *	jib 30 m	35 m	40 m	45 m	50 m	55 m	60 m
UV 20.4 = 1,95 t	---	---	---	33,9 m	33,0 m	31,6 m	** 25,8 m
load = 3,00 t	25,4 m	26,1 m	26,9 m	24,4 m	---	---	---
load = 5,00 t	16,6 m	17,1 m	17,6 m	---	---	---	---

6017 FL - 6/10 balancing weight *	jib 30 m	35 m	40 m	45 m	50 m	55 m	60 m
UV 20.4 = 1,95 t	---	---	---	31,1 m	30,2 m	28,9 m	** 23,6 m
load = 3,00 t	23,8 m	24,5 m	25,2 m	22,9 m	---	---	---
load = 5,00 t	15,9 m	16,3 m	16,8 m	---	---	---	---

2.8.5.2 Reacting forces to building for internal hydraulic climbing device KSH 20 L



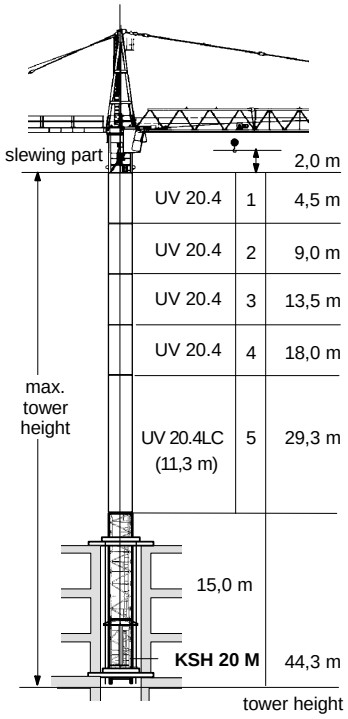
Reacting forces to building (kN) in operation																
A(m)	45,5				41,0				36,5				32,0			
C(m)	9	10	11	13	9	10	11	13	9	10	11	13	9	10	11	13
V	830				810				790				770			
Ho	270	250	220	190	255	230	210	175	240	215	195	165	220	200	180	155
Hu	240	210	190	155	225	195	175	145	205	185	165	135	195	170	155	125
T	60				60				60				60			

Reacting forces to building (kN) out of operation																
A(m)	45,5				41,0				36,5				32,0			
C(m)	9	10	11	13	9	10	11	13	9	10	11	13	9	10	11	13
V	750				730				710				690			
Ho	520	470	430	360	455	410	375	315	380	345	315	265	340	305	280	235
Hu	390	340	300	230	330	285	250	190	260	225	190	145	225	190	160	120
T	0				0				0				0			

2.8.6 **Insertable internal climbing device KSH 20 M**

For use of the WOLFF 6017 FL in connection with internal climbing device KSH 20 M, the tower combination has to be observed as shown here.

KSH20M informations is given in a seperate documentation in section 12, Additional Equipment.



2.8.6.1 **Table of balancing weights**

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

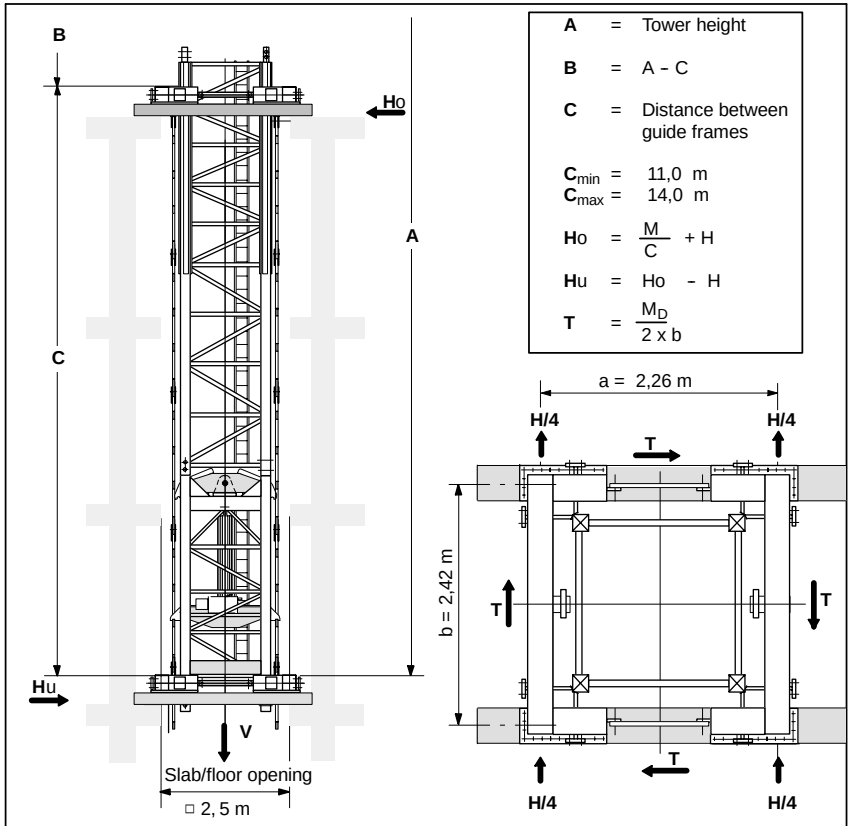
** The indicated radius refers to the centre of the tower and shall be treated as standard value. Exact balancing must achieved by travelling of trolley with tower element or load and can checked by measuring the distance between corner posts and guide plates. This distance shall be equal at all four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

-- balancing not possible

6017 FL - 6 balancing weight *	**jib** 30 m	35 m	40 m	45 m	50 m	55 m	60 m
UV 20.4 = 1,95 t	---	---	---	33,9 m	33,0 m	31,6 m	25,8 m **
load = 3,00 t	25,4 m	26,1 m	26,9 m	24,4 m	---	---	---
load = 5,00 t	16,6 m	17,1 m	17,6 m	---	---	---	---

6017 FL - 6/10 balancing weight *	**jib** 30 m	35 m	40 m	45 m	50 m	55 m	60 m
UV 20.4 = 1,95 t	---	---	---	31,1 m	30,2 m	28,9 m	23,6 m **
load = 3,00 t	23,8 m	24,5 m	25,2 m	22,9 m	---	---	---
load = 5,00 t	15,9 m	16,3 m	16,8 m	---	---	---	---

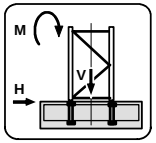
2.8.6.2 **Reacting forces to building** **for internal hydraulic climbing device KSH 20 M**



Reacting forces to building (kN)	**in operation**															
A(m)	**44,3**				**39,8**				**35,3**				**30,8**			
C(m)	11	12	13	14	11	12	13	14	11	12	13	14	11	12	13	14
V	830				810				790				770			
Ho	220	205	190	175	210	190	175	165	195	180	165	155	180	165	155	145
Hu	190	170	155	140	175	160	145	130	165	150	135	125	155	140	125	115
T	60				60				60				60			
Reacting forces to building (kN)	**out of operation**															
A(m)	**44,3**				**39,8**				**35,3**				**30,8**			
C(m)	11	12	13	14	11	12	13	14	11	12	13	14	11	12	13	14
V	750				730				710				690			
Ho	430	390	360	335	375	340	315	295	315	285	265	245	280	255	235	220
Hu	300	260	230	205	250	215	190	170	190	165	145	125	160	140	120	105
T	0				0				0				0			

3.1.1 **Foundation loads according to DIN**

Inclusive all dynamic factors, theory order II taken into account
for statioary tower crane on a concrete foundation
according to tower configuration without climbing device
Permanent acting moment = **653** kNm
M = moment **H** = horizintal force **V** = vertical load



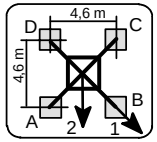
Foundation loads — Jib length 30 - 60 m

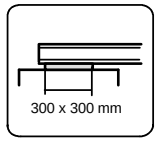
height under hook		Crane in service torque moment **240** kNm			Crane out of service			Assembly		
[m]	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
14,8	15,5	1490	19	575	900	61	531	1421	13	333
19,3	20,0	1600	21	595	1210	68	550	1498	15	351
23,8	24,5	1720	22	615	1560	74	568	1585	16	369
28,3	29,0	1850	24	635	1930	81	586	1681	18	387
32,8	33,5	1980	25	655	2320	86	604	1788	19	405
37,3	38,0	2110	27	675	2740	91	622	1906	21	424
41,8	42,5	2250	28	695	3170	95	640	2036	22	442
46,3	47,0	2390	30	715	3610	100	659	2178	24	460
50,8	51,5	2520	31	735	4060	103	668	2334	25	478
55,3	56,0	2770	34	778	4700	112	730	2477	28	517
59,8	60,5	2950	36	820	5410	121	760	2644	30	555
64,3	65,0	3120	38	851	6040	129	790	2833	32	583
68,8	69,5	3370	41	890	6800	138	825	3005	35	619
73,3	74,0	3600	43	925	7650	150	860	3209	37	651
77,8	78,5	3800	45	961	8490	162	890	3420	39	687
Attention ! Tower configuration with basis tower BT 29										
80,0	80,7	3990	46	989	8710	163	943	3650	40	745
84,5	85,2	4280	49	1021	9680	170	975	3880	42	778
89,0	89,7	4570	51	1067	10700	181	1022	4110	45	824
93,5	94,2	4880	54	1113	11710	192	1067	4370	48	871
98,0	98,7	5220	56	1160	13820	211	1114	4640	51	917

Attention!
For the **WOLFF 6017.6** only the column for the hook height is valid.

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

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



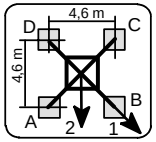


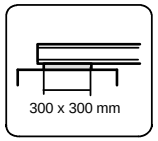
KRS 8 - 46 **Corner distance 4,6 m x 4,6 m** **Jib length 30 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,2	11,9	45,0	1	237	417	237	56	22	1	169	321	169	18	43
			2	364	364	109	109		2	276	276	62	62	
15,7	16,4	45,0	1	241	434	241	48	23	1	174	334	174	14	48
			2	378	378	105	105		2	287	287	61	61	
20,2	20,9	45,0	1	246	452	246	39	25	1	178	348	178	9	62
			2	392	392	100	100		2	298	298	59	59	
24,7	25,4	45,0	1	250	472	250	28	26	1	183	363	183	3	69
			2	407	407	93	93		2	310	310	56	56	
29,2	29,9	45,0	1	255	494	255	16	28	1	183	385	183	0	75
			2	424	424	86	86		2	335	335	124	124	
33,7	34,4	50,0	1	272	530	272	14	29	1	247	452	247	42	82
			2	454	454	90	90		2	392	392	102	102	
38,2	38,9	62,5	1	308	586	308	29	31	1	283	550	283	16	89
			2	505	505	111	111		2	471	471	94	94	
42,7	43,4	77,5	1	350	651	350	48	32	1	315	669	315	0	95
			2	563	563	137	137		2	561	561	88	88	

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

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



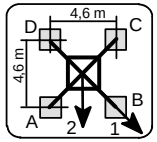


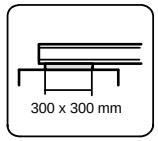
KRS 8 - 46 **Corner distance 4,6 m x 4,6 m** **Jib length 35 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,2	11,9	42,5	1	238	416	238	60	22	1	163	315	163	11	44
			2	364	364	112	112		2	270	270	56	56	
15,7	16,4	42,5	1	243	433	243	52	23	1	168	328	168	7	48
			2	377	377	108	108		2	281	281	54	54	
20,2	20,9	42,5	1	247	452	247	43	25	1	172	342	172	2	63
			2	392	392	103	103		2	292	292	52	52	
24,7	25,4	42,5	1	252	472	252	32	26	1	173	362	173	0	69
			2	407	407	96	96		2	305	305	49	49	
29,2	29,9	42,5	1	256	494	256	19	28	1	231	388	231	75	76
			2	424	424	89	89		2	342	342	121	121	
33,7	34,4	47,5	1	273	530	273	17	29	1	248	462	248	35	83
			2	455	455	92	92		2	399	399	98	98	
38,2	38,9	60,0	1	309	587	309	32	31	1	284	560	284	9	89
			2	505	505	113	113		2	479	479	89	89	
42,7	43,4	75,0	1	351	652	351	51	32	1	309	688	309	0	96
			2	564	564	139	139		2	570	570	83	83	

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

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



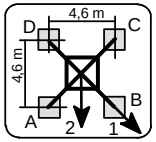


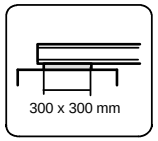
KRS 8 - 46 **Corner distance 4,6 m x 4,6 m** **Jib length 40 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,2	11,9	37,5	1	231	405	231	57	22	1	149	304	149	0	44
			2	354	354	108	108		2	262	262	73	73	
15,7	16,4	37,5	1	236	422	236	49	23	1	150	321	150	0	49
			2	368	368	104	104		2	274	274	70	70	
20,2	20,9	37,5	1	240	441	240	40	25	1	149	341	149	0	63
			2	382	382	99	99		2	287	287	66	66	
24,7	25,4	37,5	1	245	461	245	29	26	1	147	363	147	0	70
			2	398	398	92	92		2	301	301	61	61	
29,2	29,9	37,5	1	250	483	250	16	28	1	225	389	225	60	77
			2	415	415	84	84		2	341	341	108	108	
33,7	34,4	45,0	1	273	526	273	20	29	1	248	470	248	26	83
			2	452	452	94	94		2	405	405	91	91	
38,2	38,9	57,5	1	309	583	309	35	31	1	282	570	282	0	90
			2	502	502	115	115		2	485	485	82	82	
42,7	43,4	72,5	1	351	648	351	53	33	1	297	709	297	0	96
			2	561	561	140	140		2	576	576	75	75	

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

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



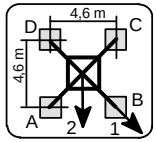


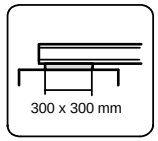
KRS 8 - 46 **Corner distance 4,6 m x 4,6 m** **Jib length 45 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,2	11,9	35,0	1	231	408	231	53	22	1	152	348	152	0	45
			2	356	356	105	105		2	286	286	40	40	
15,7	16,4	35,0	1	235	426	235	45	24	1	150	370	150	0	50
			2	370	370	100	100		2	298	298	36	36	
20,2	20,9	35,0	1	240	444	240	35	25	1	146	395	146	0	64
			2	384	384	95	95		2	312	312	32	32	
24,7	25,4	35,0	1	244	465	244	24	27	1	142	422	142	0	71
			2	400	400	88	88		2	326	326	27	27	
29,2	29,9	35,0	1	249	487	249	11	28	1	136	452	136	0	77
			2	417	417	80	80		2	359	359	88	88	
33,7	34,4	37,5	1	260	517	260	2	30	1	219	501	219	0	84
			2	442	442	77	77		2	412	412	58	58	
38,2	38,9	55,0	1	308	588	308	28	31	1	251	629	251	0	91
			2	506	506	110	110		2	505	505	60	60	
42,7	43,4	75,0	1	362	666	362	59	33	1	290	771	290	0	97
			2	577	577	148	148		2	610	610	65	65	

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

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



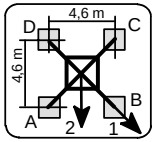


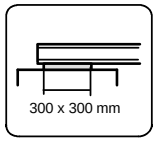
KRS 8 - 46 **Corner distance 4,6 m x 4,6 m** **Jib length 50 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,2	11,9	35,0	1	233	413	233	54	22	1	134	386	134	0	45
			2	360	360	106	106		2	300	300	27	27	
15,7	16,4	35,0	1	238	430	238	46	24	1	132	408	132	0	50
			2	374	374	102	102		2	312	312	24	24	
20,2	20,9	35,0	1	242	449	242	36	25	1	128	433	128	0	65
			2	389	389	96	96		2	326	326	19	19	
24,7	25,4	35,0	1	247	470	247	24	27	1	124	461	124	0	72
			2	404	404	89	89		2	340	340	14	14	
29,2	29,9	37,5	1	258	498	258	17	28	1	130	491	130	0	78
			2	428	428	88	88		2	380	380	86	86	
33,7	34,4	40,0	1	269	529	269	8	30	1	220	535	220	0	85
			2	453	453	84	84		2	433	433	55	55	
38,2	38,9	57,5	1	317	599	317	34	31	1	251	665	251	0	91
			2	517	517	117	117		2	527	527	57	57	

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

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



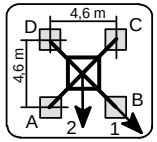


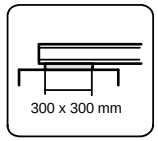
KRS 8 - 46 **Corner distance 4,6 m x 4,6 m** **Jib length 55 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,2	11,9	42,5	1	260	428	260	92	22	1	127	480	127	0	46
			2	379	379	141	141		2	353	353	14	14	
15,7	16,4	45,0	1	271	452	271	90	24	1	137	503	137	0	51
			2	399	399	143	143		2	372	372	17	17	
20,2	20,9	47,5	1	281	477	281	86	25	1	146	528	146	0	66
			2	420	420	143	143		2	392	392	18	18	
24,7	25,4	50,0	1	292	504	292	81	27	1	154	557	154	0	72
			2	442	442	143	143		2	413	413	19	19	
29,2	29,9	52,5	1	303	533	303	73	28	1	159	588	159	0	79
			2	465	465	141	141		2	439	439	117	117	
33,7	34,4	55,0	1	314	563	314	64	30	1	164	623	164	0	86
			2	490	490	137	137		2	492	492	86	86	
38,2	38,9	62,5	1	337	609	337	65	32	1	270	708	270	0	92
			2	529	529	145	145		2	562	562	62	62	

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

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



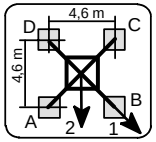


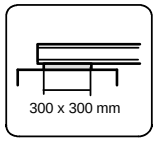
KRS 8 - 46 **Corner distance 4,6 m x 4,6 m** **Jib length 60 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,2	11,9	42,5	1	266	436	266	96	22	1	134	509	134	0	46
			2	386	386	145	145		2	374	374	14	14	
15,7	16,4	45,0	1	277	460	277	94	24	1	144	532	144	0	51
			2	406	406	147	147		2	393	393	17	17	
20,2	20,9	47,5	1	287	485	287	90	25	1	153	557	153	0	66
			2	427	427	148	148		2	413	413	19	19	
24,7	25,4	50,0	1	298	512	298	85	27	1	160	586	160	0	73
			2	449	449	147	147		2	434	434	19	19	
29,2	29,9	52,5	1	309	541	309	77	28	1	165	618	165	0	79
			2	473	473	145	145		2	472	472	101	101	
33,7	34,4	55,0	1	320	571	320	68	30	1	169	653	169	0	86
			2	498	498	142	142		2	527	527	68	68	
38,2	38,9	70,0	1	362	636	362	88	31	1	287	784	287	0	93
			2	555	555	168	168		2	616	616	62	62	

3.2.2.1 **Center ballasts and corner loads DIN 15019**

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



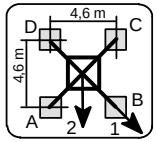


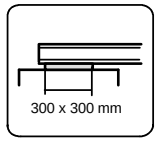
KR 10 - 46 **Corner distance 4,6 m x 4,6 m** **Jib length 30 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	42,5	1	236	418	236	55	22	1	169	321	169	17	43
			2	365	365	108	108		2	277	277	62	62	
16,0	16,7	42,5	1	241	435	241	47	23	1	174	334	174	13	48
			2	378	378	104	104		2	287	287	60	60	
20,5	21,2	42,5	1	245	453	245	38	25	1	178	348	178	8	62
			2	392	392	99	99		2	299	299	58	58	
25,0	25,7	42,5	1	250	473	250	27	26	1	183	364	183	2	69
			2	408	408	92	92		2	311	311	55	55	
29,5	30,2	42,5	1	255	495	255	14	28	1	181	387	181	0	75
			2	424	424	85	85		2	337	337	122	122	
34,0	34,7	50,0	1	278	537	278	19	29	1	253	462	253	44	82
			2	461	461	95	95		2	401	401	105	105	
38,5	39,2	62,5	1	314	594	314	34	31	1	289	559	289	18	89
			2	512	512	116	116		2	480	480	97	97	
43,0	43,7	75,0	1	349	652	349	47	32	1	310	677	310	0	95
			2	564	564	135	135		2	564	564	85	85	
47,5	48,2	92,5	1	398	726	398	69	34	1	333	826	333	0	102
			2	630	630	166	166		2	665	665	81	81	
52,0	52,7	117,5	1	465	821	465	109	35	1	385	988	385	0	108
			2	717	717	213	213		2	789	789	90	90	
56,5	57,2	140,0	1	533	913	533	153	38	1	438	1156	438	0	118
			2	802	802	265	265		2	917	917	99	99	
61,0	61,7	170,0	1	615	1026	615	205	40	1	507	1347	507	0	126
			2	905	905	325	325		2	1066	1066	114	114	
65,5	66,2	202,5	1	704	1147	704	260	42	1	578	1558	578	0	135
			2	1017	1017	390	390		2	1229	1229	128	128	

3.2.2.2 **Center ballasts and corner loads DIN 15019**

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



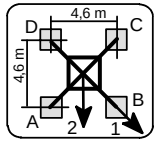


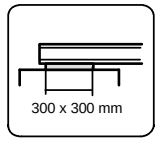
KR 10 - 46 **Corner distance 4,6 m x 4,6 m** **Jib length 35 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	40,0	1	238	417	238	59	22	1	163	315	163	11	44
			2	365	365	111	111		2	271	271	55	55	
16,0	16,7	40,0	1	242	434	242	51	23	1	167	328	167	7	48
			2	378	378	107	107		2	281	281	54	54	
20,5	21,2	40,0	1	247	453	247	42	25	1	172	343	172	1	63
			2	392	392	102	102		2	293	293	51	51	
25,0	25,7	40,0	1	252	473	252	31	26	1	171	363	171	0	69
			2	408	408	95	95		2	305	305	48	48	
29,5	30,2	40,0	1	256	494	256	18	28	1	231	391	231	71	76
			2	425	425	88	88		2	344	344	118	118	
34,0	34,7	45,0	1	273	531	273	16	29	1	248	465	248	31	83
			2	455	455	91	91		2	401	401	95	95	
38,5	39,2	60,0	1	315	594	315	37	31	1	290	570	290	11	89
			2	512	512	118	118		2	488	488	93	93	
43,0	43,7	72,5	1	351	653	351	49	32	1	304	696	304	0	96
			2	565	565	137	137		2	572	572	80	80	
47,5	48,2	90,0	1	399	727	399	71	34	1	325	847	325	0	102
			2	631	631	167	167		2	674	674	75	75	
52,0	52,7	117,5	1	473	829	473	116	35	1	389	1012	389	0	109
			2	725	725	221	221		2	805	805	90	90	
56,5	57,2	140,0	1	541	921	541	161	38	1	441	1181	441	0	119
			2	810	810	272	272		2	934	934	98	98	
61,0	61,7	170,0	1	623	1034	623	212	40	1	509	1374	509	0	127
			2	914	914	332	332		2	1084	1084	112	112	
65,5	66,2	205,0	1	718	1163	718	272	42	1	591	1589	591	0	135
			2	1033	1033	403	403		2	1254	1254	131	131	

3.2.2.3 **Center ballasts and corner loads DIN 15019**

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



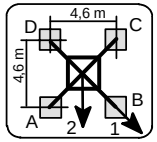


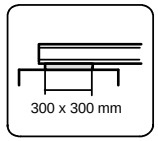
KR 10 - 46 **Corner distance 4,6 m x 4,6 m** **Jib length 40 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	35,0	1	231	406	231	56	22	1	148	305	148	0	44
			2	355	355	107	107		2	262	262	72	72	
16,0	16,7	35,0	1	236	423	236	48	23	1	148	323	148	0	49
			2	368	368	103	103		2	274	274	69	69	
20,5	21,2	35,0	1	240	442	240	39	25	1	148	343	148	0	63
			2	383	383	98	98		2	287	287	65	65	
25,0	25,7	35,0	1	245	462	245	28	26	1	146	365	146	0	70
			2	398	398	91	91		2	301	301	60	60	
29,5	30,2	35,0	1	249	484	249	15	28	1	224	392	224	57	77
			2	415	415	83	83		2	343	343	106	106	
34,0	34,7	45,0	1	279	533	279	25	29	1	254	479	254	28	83
			2	458	458	99	99		2	413	413	94	94	
38,5	39,2	57,5	1	315	590	315	39	31	1	290	579	290	1	90
			2	509	509	120	120		2	494	494	85	85	
43,0	43,7	72,5	1	357	656	357	58	33	1	305	717	305	0	96
			2	568	568	145	145		2	585	585	78	78	
47,5	48,2	92,5	1	411	736	411	86	34	1	337	870	337	0	103
			2	641	641	181	181		2	694	694	79	79	
52,0	52,7	120,0	1	485	839	485	130	36	1	400	1038	400	0	110
			2	735	735	234	234		2	826	826	93	93	
56,5	57,2	142,5	1	553	931	553	175	38	1	452	1208	452	0	120
			2	820	820	286	286		2	955	955	101	101	
61,0	61,7	172,5	1	635	1044	635	225	40	1	518	1404	518	0	128
			2	925	925	345	345		2	1106	1106	114	114	
65,5	66,2	207,5	1	730	1174	730	285	42	1	598	1621	598	0	136
			2	1044	1044	415	415		2	1278	1278	131	131	

3.2.2.4 **Center ballasts and corner loads DIN 15019**

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



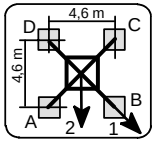


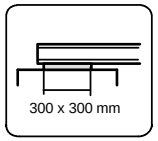
KR 10 - 46 **Corner distance 4,6 m x 4,6 m** **Jib length 45 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	32,5	1	230	409	230	52	22	1	150	350	150	0	45
			2	357	357	104	104		2	286	286	39	39	
16,0	16,7	32,5	1	235	426	235	43	24	1	148	372	148	0	50
			2	370	370	100	100		2	299	299	36	36	
20,5	21,2	32,5	1	239	445	239	34	25	1	145	397	145	0	64
			2	385	385	94	94		2	312	312	31	31	
25,0	25,7	32,5	1	244	466	244	22	27	1	140	424	140	0	71
			2	401	401	87	87		2	326	326	26	26	
29,5	30,2	32,5	1	249	488	249	9	28	1	134	454	134	0	77
			2	418	418	79	79		2	362	362	85	85	
34,0	34,7	37,5	1	266	525	266	6	30	1	227	508	227	0	84
			2	449	449	82	82		2	420	420	61	61	
38,5	39,2	52,5	1	308	589	308	27	31	1	247	637	247	0	91
			2	506	506	109	109		2	508	508	57	57	
43,0	43,7	75,0	1	368	674	368	63	33	1	297	779	297	0	97
			2	584	584	153	153		2	619	619	68	68	
47,5	48,2	100,0	1	435	767	435	104	34	1	353	935	353	0	104
			2	670	670	201	201		2	741	741	80	80	
52,0	52,7	127,5	1	509	870	509	147	36	1	414	1107	414	0	110
			2	764	764	253	253		2	875	875	93	93	
56,5	57,2	152,5	1	583	969	583	198	39	1	478	1278	478	0	120
			2	856	856	311	311		2	1010	1010	106	106	
61,0	61,7	182,5	1	665	1083	665	248	41	1	542	1477	542	0	128
			2	961	961	370	370		2	1163	1163	118	118	
65,5	66,2	217,5	1	760	1213	760	307	43	1	621	1699	621	0	137
			2	1080	1080	440	440		2	1336	1336	134	134	

3.2.2.5 **Center ballasts and corner loads DIN 15019**

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



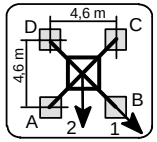


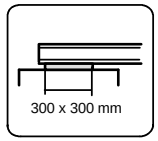
KR 10 - 46 **Corner distance 4,6 m x 4,6 m** **Jib length 50 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	32,5	1	233	413	233	53	22	1	132	387	132	0	45
			2	361	361	106	106		2	300	300	26	26	
16,0	16,7	32,5	1	238	431	238	44	24	1	130	410	130	0	50
			2	374	374	101	101		2	313	313	23	23	
20,5	21,2	32,5	1	242	450	242	34	25	1	127	435	127	0	65
			2	389	389	95	95		2	326	326	18	18	
25,0	25,7	32,5	1	247	471	247	23	27	1	122	463	122	0	72
			2	405	405	88	88		2	340	340	13	13	
29,5	30,2	35,0	1	258	499	258	16	28	1	128	494	128	0	78
			2	429	429	87	87		2	382	382	83	83	
34,0	34,7	37,5	1	268	530	268	7	30	1	216	542	216	0	85
			2	453	453	83	83		2	435	435	52	52	
38,5	39,2	57,5	1	323	607	323	39	31	1	259	673	259	0	91
			2	524	524	122	122		2	536	536	60	60	
43,0	43,7	80,0	1	384	692	384	75	33	1	309	817	309	0	98
			2	602	602	166	166		2	648	648	70	70	
47,5	48,2	105,0	1	451	786	451	115	34	1	364	975	364	0	105
			2	688	688	214	214		2	771	771	81	81	
52,0	52,7	132,5	1	524	890	524	159	36	1	423	1149	423	0	111
			2	782	782	266	266		2	905	905	93	93	
56,5	57,2	157,5	1	599	988	599	209	39	1	486	1322	486	0	121
			2	874	874	323	323		2	1041	1041	106	106	
61,0	61,7	187,5	1	681	1103	681	259	41	1	550	1523	550	0	129
			2	979	979	382	382		2	1194	1194	117	117	
65,5	66,2	225,0	1	782	1239	782	324	43	1	639	1748	639	0	138
			2	1105	1105	458	458		2	1374	1374	139	139	

3.2.2.6 **Center ballasts and corner loads DIN 15019**

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



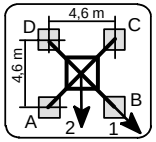


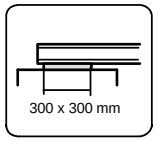
KR 10 - 46 **Corner distance 4,6 m x 4,6 m** **Jib length 55 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	40,0	1	260	429	260	91	22	1	126	482	126	0	46
			2	379	379	140	140		2	354	354	13	13	
16,0	16,7	42,5	1	270	452	270	89	24	1	136	505	136	0	51
			2	399	399	142	142		2	373	373	16	16	
20,5	21,2	45,0	1	281	478	281	85	25	1	145	530	145	0	66
			2	420	420	142	142		2	392	392	17	17	
25,0	25,7	47,5	1	292	505	292	79	27	1	152	559	152	0	72
			2	442	442	142	142		2	413	413	18	18	
29,5	30,2	50,0	1	303	534	303	72	28	1	158	591	158	0	79
			2	466	466	140	140		2	441	441	115	115	
34,0	34,7	52,5	1	314	565	314	63	30	1	162	625	162	0	86
			2	491	491	136	136		2	494	494	83	83	
38,5	39,2	60,0	1	337	610	337	64	32	1	266	716	266	0	92
			2	530	530	144	144		2	565	565	59	59	
43,0	43,7	82,5	1	398	696	398	100	33	1	314	863	314	0	99
			2	608	608	187	187		2	678	678	68	68	
47,5	48,2	110,0	1	471	796	471	146	35	1	380	1024	380	0	105
			2	701	701	241	241		2	808	808	84	84	
52,0	52,7	137,5	1	544	900	544	189	36	1	438	1202	438	0	112
			2	796	796	293	293		2	944	944	94	94	
56,5	57,2	162,5	1	619	999	619	239	39	1	500	1376	500	0	122
			2	887	887	350	350		2	1081	1081	107	107	
61,0	61,7	195,0	1	707	1120	707	294	41	1	574	1582	574	0	130
			2	999	999	415	415		2	1242	1242	123	123	

3.2.2.7 **Center ballasts and corner loads DIN 15019**

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



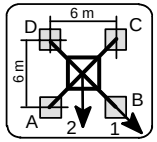


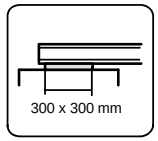
KR 10 - 46 **Corner distance 4,6 m x 4,6 m** **Jib length 60 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	40,0	1	266	437	266	94	22	1	132	510	132	0	46
			2	387	387	145	145		2	374	374	13	13	
16,0	16,7	42,5	1	276	460	276	92	24	1	143	533	143	0	51
			2	406	406	146	146		2	393	393	16	16	
20,5	21,2	45,0	1	287	486	287	89	25	1	151	559	151	0	66
			2	427	427	147	147		2	413	413	18	18	
25,0	25,7	47,5	1	298	513	298	83	27	1	158	588	158	0	73
			2	450	450	146	146		2	434	434	18	18	
29,5	30,2	50,0	1	309	542	309	76	28	1	164	620	164	0	79
			2	473	473	144	144		2	475	475	98	98	
34,0	34,7	52,5	1	320	572	320	67	30	1	266	656	266	0	86
			2	498	498	141	141		2	529	529	65	65	
38,5	39,2	67,5	1	362	637	362	86	31	1	282	792	282	0	93
			2	556	556	167	167		2	619	619	59	59	
43,0	43,7	92,5	1	429	729	429	129	33	1	341	942	341	0	99
			2	641	641	216	216		2	739	739	73	73	
47,5	48,2	117,5	1	496	823	496	168	34	1	393	1107	393	0	106
			2	727	727	264	264		2	865	865	82	82	
52,0	52,7	147,5	1	575	934	575	217	36	1	461	1290	461	0	112
			2	829	829	322	322		2	1009	1009	97	97	
56,5	57,2	172,5	1	650	1032	650	268	39	1	522	1465	522	0	122
			2	920	920	380	380		2	1145	1145	109	109	
61,0	61,7	205,0	1	738	1154	738	323	41	1	594	1675	594	0	130
			2	1032	1032	444	444		2	1308	1308	124	124	

3.2.3.1 **Center ballasts and corner loads DIN 15019**

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



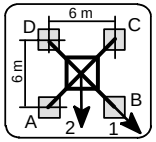


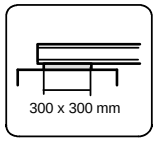
KR 10 - 60 **Corner distance 6 m x 6 m** **Jib length 30 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	17,5	1	178	317	178	39	22	1	105	233	105	0	43
			2	276	276	79	79		2	193	193	28	28	
16,0	16,7	17,5	1	182	331	182	34	23	1	107	246	107	0	48
			2	288	288	77	77		2	202	202	28	28	
20,5	21,2	17,5	1	187	346	187	28	25	1	109	261	109	0	62
			2	300	300	74	74		2	212	212	27	27	
25,0	25,7	17,5	1	192	363	192	20	26	1	110	278	110	0	69
			2	313	313	71	71		2	222	222	26	26	
29,5	30,2	17,5	1	196	380	196	12	28	1	109	296	109	0	75
			2	326	326	66	66		2	254	254	88	88	
34,0	34,7	25,0	1	219	418	219	21	29	1	194	355	194	34	82
			2	360	360	79	79		2	308	308	81	81	
38,5	39,2	35,0	1	249	464	249	34	31	1	224	432	224	16	89
			2	401	401	97	97		2	371	371	77	77	
43,0	43,7	45,0	1	278	511	278	46	32	1	247	519	247	0	95
			2	443	443	114	114		2	437	437	70	70	
47,5	48,2	55,0	1	308	560	308	56	34	1	249	633	249	0	102
			2	486	486	130	130		2	507	507	59	59	
52,0	52,7	75,0	1	363	636	363	89	35	1	296	758	296	0	108
			2	556	556	169	169		2	605	605	70	70	
56,5	57,2	92,5	1	418	710	418	127	38	1	344	887	344	0	118
			2	624	624	213	213		2	707	707	80	80	
61,0	61,7	112,5	1	476	790	476	161	40	1	385	1032	385	0	126
			2	698	698	253	253		2	816	816	86	86	
65,5	66,2	137,5	1	545	885	545	205	42	1	443	1194	443	0	135
			2	786	786	304	304		2	942	942	98	98	

3.2.3.2 **Center ballasts and corner loads DIN 15019**

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



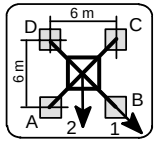


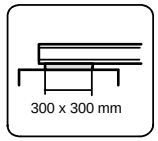
KR 10 - 60 **Corner distance 6 m x 6 m** **Jib length 35 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	15,0	1	179	317	179	42	22	1	92	233	92	0	44
			2	277	277	82	82		2	187	187	22	22	
16,0	16,7	15,0	1	184	331	184	37	23	1	94	247	94	0	48
			2	288	288	80	80		2	196	196	22	22	
20,5	21,2	15,0	1	189	346	189	31	25	1	96	262	96	0	63
			2	300	300	77	77		2	206	206	21	21	
25,0	25,7	15,0	1	193	363	193	24	26	1	97	279	97	0	69
			2	313	313	73	73		2	227	227	109	109	
29,5	30,2	15,0	1	198	380	198	15	28	1	96	297	96	0	76
			2	327	327	68	68		2	259	259	86	86	
34,0	34,7	22,5	1	221	418	221	23	29	1	196	362	196	30	83
			2	361	361	81	81		2	313	313	78	78	
38,5	39,2	30,0	1	244	458	244	31	31	1	219	433	219	5	89
			2	395	395	93	93		2	371	371	68	68	
43,0	43,7	42,5	1	280	512	280	48	32	1	243	534	243	0	96
			2	444	444	116	116		2	444	444	66	66	
47,5	48,2	55,0	1	316	567	316	64	34	1	257	650	257	0	102
			2	494	494	138	138		2	520	520	61	61	
52,0	52,7	75,0	1	370	644	370	97	35	1	303	776	303	0	109
			2	564	564	177	177		2	620	620	71	71	
56,5	57,2	92,5	1	426	718	426	135	38	1	350	906	350	0	119
			2	632	632	220	220		2	721	721	81	81	
61,0	61,7	115,0	1	490	805	490	174	40	1	402	1054	402	0	127
			2	712	712	267	267		2	837	837	92	92	
65,5	66,2	140,0	1	559	901	559	218	42	1	459	1218	459	0	135
			2	801	801	318	318		2	965	965	104	104	

3.2.3.3 **Center ballasts and corner loads DIN 15019**

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



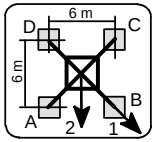


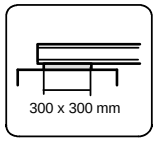
KR 10 - 60 **Corner distance 6 m x 6 m** **Jib length 40 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	12,5	1	179	313	179	45	22	1	79	234	79	0	44
			2	274	274	84	84		2	188	188	42	42	
16,0	16,7	12,5	1	183	327	183	40	23	1	82	247	82	0	49
			2	285	285	82	82		2	198	198	41	41	
20,5	21,2	12,5	1	188	342	188	33	25	1	83	263	83	0	63
			2	297	297	79	79		2	209	209	39	39	
25,0	25,7	12,5	1	192	359	192	26	26	1	84	280	84	0	70
			2	310	310	75	75		2	230	230	105	105	
29,5	30,2	12,5	1	197	377	197	17	28	1	172	301	172	43	77
			2	324	324	70	70		2	263	263	81	81	
34,0	34,7	20,0	1	220	415	220	26	29	1	195	368	195	23	83
			2	358	358	83	83		2	317	317	73	73	
38,5	39,2	30,0	1	250	461	250	39	31	1	225	446	225	3	90
			2	399	399	101	101		2	381	381	68	68	
43,0	43,7	40,0	1	279	509	279	50	33	1	234	550	234	0	96
			2	442	442	117	117		2	449	449	60	60	
47,5	48,2	55,0	1	321	571	321	72	34	1	259	667	259	0	103
			2	498	498	145	145		2	532	532	61	61	
52,0	52,7	75,0	1	376	648	376	104	36	1	304	796	304	0	110
			2	568	568	184	184		2	632	632	70	70	
56,5	57,2	92,5	1	432	722	432	142	38	1	351	926	351	0	120
			2	637	637	227	227		2	734	734	79	79	
61,0	61,7	115,0	1	495	809	495	181	40	1	402	1076	402	0	128
			2	717	717	273	273		2	851	851	90	90	
65,5	66,2	140,0	1	565	905	565	224	42	1	458	1243	458	0	136
			2	806	806	324	324		2	979	979	100	100	

3.2.3.5 **Center ballasts and corner loads DIN 15019**

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



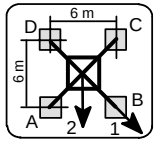


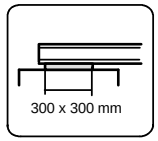
KR 10 - 60 **Corner distance 6 m x 6 m** **Jib length 45 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	12,5	1	184	321	184	47	22	1	99	268	99	0	45
			2	281	281	87	87		2	211	211	22	22	
16,0	16,7	12,5	1	189	336	189	42	24	1	100	285	100	0	50
			2	293	293	85	85		2	222	222	20	20	
20,5	21,2	12,5	1	193	351	193	36	25	1	99	304	99	0	64
			2	305	305	82	82		2	233	233	18	18	
25,0	25,7	12,5	1	198	368	198	28	27	1	98	325	98	0	71
			2	318	318	78	78		2	250	250	96	96	
29,5	30,2	12,5	1	203	386	203	19	28	1	95	348	95	0	77
			2	332	332	73	73		2	283	283	72	72	
34,0	34,7	12,5	1	207	406	207	8	30	1	169	389	169	0	84
			2	348	348	67	67		2	320	320	44	44	
38,5	39,2	25,0	1	243	458	243	27	31	1	192	489	192	0	91
			2	395	395	91	91		2	391	391	45	45	
43,0	43,7	42,5	1	291	525	291	57	33	1	234	598	234	0	97
			2	457	457	126	126		2	477	477	55	55	
47,5	48,2	60,0	1	339	594	339	85	34	1	270	717	270	0	104
			2	519	519	160	160		2	568	568	61	61	
52,0	52,7	80,0	1	394	671	394	117	36	1	314	848	314	0	110
			2	590	590	198	198		2	669	669	69	69	
56,5	57,2	97,5	1	450	745	450	154	39	1	360	980	360	0	120
			2	659	659	241	241		2	771	771	78	78	
61,0	61,7	122,5	1	519	840	519	199	41	1	423	1133	423	0	128
			2	746	746	293	293		2	895	895	94	94	
65,5	66,2	147,5	1	589	936	589	242	43	1	477	1303	477	0	137
			2	835	835	344	344		2	1025	1025	104	104	

3.2.3.5 **Center ballasts and corner loads DIN 15019**

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



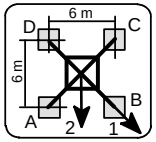


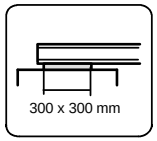
KR 10 - 60 **Corner distance 6 m x 6 m** **Jib length 50 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	10,0	1	181	319	181	43	22	1	73	297	73	0	45
			2	279	279	83	83		2	216	216	6	6	
16,0	16,7	12,5	1	192	340	192	43	24	1	86	314	86	0	50
			2	296	296	87	87		2	233	233	11	11	
20,5	21,2	12,5	1	196	355	196	37	25	1	86	334	86	0	65
			2	309	309	84	84		2	244	244	8	8	
25,0	25,7	15,0	1	207	379	207	35	27	1	97	355	97	0	72
			2	328	328	86	86		2	268	268	96	96	
29,5	30,2	15,0	1	212	397	212	26	28	1	94	378	94	0	78
			2	343	343	80	80		2	301	301	72	72	
34,0	34,7	17,5	1	222	423	222	22	30	1	187	416	187	0	85
			2	364	364	80	80		2	344	344	50	50	
38,5	39,2	27,5	1	252	470	252	34	31	1	196	516	196	0	91
			2	406	406	98	98		2	409	409	44	44	
43,0	43,7	45,0	1	300	537	300	64	33	1	237	626	237	0	98
			2	467	467	133	133		2	497	497	54	54	
47,5	48,2	65,0	1	355	612	355	98	34	1	286	748	286	0	105
			2	537	537	173	173		2	594	594	65	65	
52,0	52,7	85,0	1	409	689	409	129	36	1	328	881	328	0	111
			2	607	607	211	211		2	696	696	73	73	
56,5	57,2	102,5	1	465	764	465	167	39	1	374	1014	374	0	121
			2	676	676	254	254		2	799	799	82	82	
61,0	61,7	125,0	1	528	852	528	205	41	1	423	1168	423	0	129
			2	757	757	300	300		2	916	916	91	91	
65,5	66,2	152,5	1	604	955	604	253	43	1	489	1340	489	0	138
			2	853	853	356	356		2	1053	1053	106	106	

3.2.3.6 **Center ballasts and corner loads DIN 15019**

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



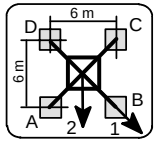


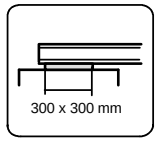
KR 10 - 60 **Corner distance 6 m x 6 m** **Jib length 55 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	22,5	1	220	349	220	90	22	1	103	369	103	0	46
			2	311	311	128	128		2	274	274	13	13	
16,0	16,7	22,5	1	224	364	224	85	24	1	103	387	103	0	51
			2	323	323	126	126		2	285	285	11	11	
20,5	21,2	22,5	1	229	380	229	78	25	1	102	407	102	0	66
			2	335	335	122	122		2	296	296	9	9	
25,0	25,7	25,0	1	240	403	240	77	27	1	113	429	113	0	72
			2	355	355	124	124		2	315	315	12	12	
29,5	30,2	27,5	1	251	428	251	74	28	1	122	453	122	0	79
			2	376	376	125	125		2	351	351	101	101	
34,0	34,7	30,0	1	261	454	261	69	30	1	130	479	130	0	86
			2	397	397	125	125		2	394	394	79	79	
38,5	39,2	32,5	1	272	482	272	63	32	1	220	549	220	0	92
			2	420	420	124	124		2	441	441	53	53	
43,0	43,7	47,5	1	314	543	314	86	33	1	248	661	248	0	99
			2	476	476	153	153		2	523	523	55	55	
47,5	48,2	67,5	1	369	618	369	119	35	1	295	785	295	0	105
			2	545	545	192	192		2	621	621	66	66	
52,0	52,7	87,5	1	423	696	423	151	36	1	336	922	336	0	112
			2	616	616	230	230		2	724	724	72	72	
56,5	57,2	105,0	1	479	770	479	188	39	1	381	1055	381	0	122
			2	685	685	273	273		2	827	827	81	81	
61,0	61,7	130,0	1	549	865	549	232	41	1	441	1213	441	0	130
			2	773	773	325	325		2	953	953	95	95	

3.2.3.7 **Center ballasts and corner loads DIN 15019**

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



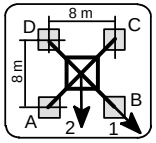


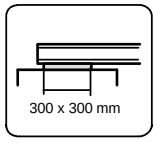
KR 10 - 60 **Corner distance 6 m x 6 m** **Jib length 60 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	20,0	1	220	351	220	88	22	1	100	391	100	0	46
			2	312	312	127	127		2	286	286	9	9	
16,0	16,7	20,0	1	224	365	224	83	24	1	100	409	100	0	51
			2	324	324	124	124		2	297	297	8	8	
20,5	21,2	22,5	1	235	387	235	83	25	1	112	429	112	0	66
			2	342	342	127	127		2	315	315	12	12	
25,0	25,7	25,0	1	246	410	246	81	27	1	122	451	122	0	73
			2	362	362	129	129		2	338	338	109	109	
29,5	30,2	25,0	1	250	429	250	72	28	1	119	475	119	0	79
			2	376	376	124	124		2	372	372	83	83	
34,0	34,7	27,5	1	261	455	261	67	30	1	226	503	226	0	86
			2	398	398	124	124		2	416	416	61	61	
38,5	39,2	35,0	1	284	495	284	73	31	1	220	607	220	0	93
			2	434	434	135	135		2	476	476	47	47	
43,0	43,7	52,5	1	333	563	333	103	33	1	259	722	259	0	99
			2	495	495	170	170		2	565	565	55	55	
47,5	48,2	72,5	1	387	638	387	136	34	1	305	849	305	0	106
			2	565	565	210	210		2	665	665	65	65	
52,0	52,7	95,0	1	448	723	448	173	36	1	357	989	357	0	112
			2	642	642	254	254		2	775	775	76	76	
56,5	57,2	112,5	1	504	797	504	211	39	1	401	1123	401	0	122
			2	711	711	297	297		2	878	878	84	84	
61,0	61,7	137,5	1	573	892	573	255	41	1	460	1284	460	0	130
			2	799	799	348	348		2	1005	1005	97	97	

3.2.4.1 **Center ballasts and corner loads DIN 15019**

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



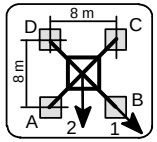


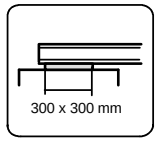
KR 1000 - 8 **Corner distance 8 m x 8 m** **Jib length 30 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	0,0	1	152	257	152	48	22	1	82	175	82	0	45
			2	226	226	78	78		2	147	147	23	23	
16,0	16,7	0,0	1	159	271	159	48	24	1	91	186	91	0	51
			2	238	238	80	80		2	158	158	27	27	
20,5	21,2	0,0	1	164	283	164	44	26	1	95	197	95	0	65
			2	248	248	79	79		2	166	166	27	27	
25,0	25,7	0,0	1	169	297	169	40	27	1	98	209	98	0	71
			2	259	259	78	78		2	186	186	101	101	
29,5	30,2	0,0	1	173	311	173	35	29	1	148	237	148	60	78
			2	270	270	76	76		2	211	211	85	85	
34,0	34,7	0,0	1	178	326	178	29	30	1	153	273	153	32	84
			2	282	282	73	73		2	238	238	67	67	
38,5	39,2	2,5	1	188	348	188	29	32	1	163	319	163	8	91
			2	301	301	75	75		2	274	274	53	53	
43,0	43,7	10,0	1	212	384	212	39	34	1	179	388	179	0	98
			2	334	334	90	90		2	324	324	49	49	
47,5	48,2	20,0	1	241	428	241	55	35	1	197	472	197	0	104
			2	373	373	109	109		2	383	383	49	49	
52,0	52,7	32,5	1	277	479	277	75	37	1	223	563	223	0	111
			2	420	420	134	134		2	451	451	53	53	
56,5	57,2	45,0	1	315	533	315	98	39	1	249	663	249	0	119
			2	469	469	161	161		2	525	525	56	56	
61,0	61,7	62,5	1	366	601	366	131	41	1	296	772	296	0	127
			2	532	532	200	200		2	614	614	68	68	
65,5	66,2	80,0	1	417	671	417	163	42	1	338	893	338	0	135
			2	597	597	237	237		2	708	708	76	76	
70,0	70,7	97,5	1	469	742	469	196	45	1	378	1019	378	0	145
			2	662	662	276	276		2	804	804	84	84	
74,5	75,2	117,5	1	527	820	527	233	47	1	426	1155	426	0	154
			2	734	734	319	319		2	910	910	93	93	

3.2.4.2 **Center ballasts and corner loads DIN 15019**

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



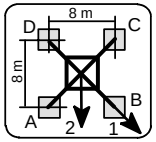


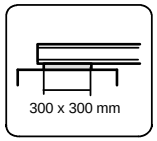
KR 1000 - 8 **Corner distance 8 m x 8 m** **Jib length 35 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	0,0	1	160	263	160	57	22	1	82	175	82	0	45
			2	233	233	87	87		2	147	147	23	23	
16,0	16,7	0,0	1	167	278	167	57	24	1	91	186	91	0	51
			2	245	245	89	89		2	158	158	26	26	
20,5	21,2	0,0	1	172	290	172	54	26	1	95	197	95	0	65
			2	255	255	88	88		2	173	173	121	121	
25,0	25,7	0,0	1	176	303	176	49	28	1	151	215	151	88	72
			2	266	266	87	87		2	196	196	107	107	
29,5	30,2	0,0	1	181	317	181	44	29	1	156	248	156	63	78
			2	277	277	84	84		2	221	221	90	90	
34,0	34,7	0,0	1	185	333	185	38	31	1	160	285	160	35	85
			2	289	289	81	81		2	249	249	72	72	
38,5	39,2	0,0	1	190	349	190	31	32	1	165	325	165	4	92
			2	302	302	78	78		2	278	278	51	51	
43,0	43,7	7,5	1	213	385	213	41	34	1	177	399	177	0	98
			2	335	335	92	92		2	329	329	47	47	
47,5	48,2	17,5	1	243	429	243	57	35	1	194	484	194	0	105
			2	374	374	111	111		2	389	389	47	47	
52,0	52,7	30,0	1	279	480	279	77	37	1	219	576	219	0	111
			2	421	421	136	136		2	457	457	50	50	
56,5	57,2	45,0	1	323	541	323	105	39	1	258	678	258	0	119
			2	477	477	169	169		2	538	538	59	59	
61,0	61,7	62,5	1	374	609	374	139	41	1	304	788	304	0	127
			2	540	540	207	207		2	628	628	70	70	
65,5	66,2	80,0	1	425	680	425	170	43	1	344	910	344	0	136
			2	605	605	245	245		2	722	722	78	78	
70,0	70,7	97,5	1	477	751	477	202	45	1	384	1038	384	0	145
			2	670	670	283	283		2	818	818	85	85	
74,5	75,2	117,5	1	535	829	535	240	47	1	431	1176	431	0	155
			2	743	743	326	326		2	925	925	94	94	

3.2.4.3 **Center ballasts and corner loads DIN 15019**

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



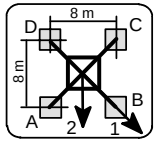


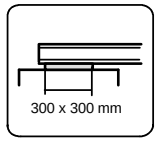
KR 1000 - 8 **Corner distance 8 m x 8 m** **Jib length 40 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	0,0	1	166	266	166	65	23	1	102	179	102	25	46
			2	237	237	95	95		2	157	157	47	47	
16,0	16,7	0,0	1	173	281	173	65	25	1	109	193	109	25	52
			2	249	249	96	96		2	168	168	50	50	
20,5	21,2	0,0	1	177	293	177	62	26	1	114	204	114	23	66
			2	259	259	95	95		2	181	181	124	124	
25,0	25,7	0,0	1	182	307	182	57	28	1	157	224	157	90	73
			2	270	270	94	94		2	205	205	109	109	
29,5	30,2	0,0	1	186	321	186	52	29	1	161	259	161	64	79
			2	281	281	92	92		2	230	230	93	93	
34,0	34,7	0,0	1	191	336	191	46	31	1	166	296	166	36	86
			2	294	294	88	88		2	258	258	74	74	
38,5	39,2	0,0	1	196	352	196	39	32	1	171	336	171	5	92
			2	307	307	85	85		2	288	288	53	53	
43,0	43,7	5,0	1	213	383	213	43	34	1	170	410	170	0	99
			2	333	333	92	92		2	333	333	43	43	
47,5	48,2	17,5	1	248	433	248	64	35	1	199	496	199	0	106
			2	379	379	118	118		2	399	399	48	48	
52,0	52,7	30,0	1	284	484	284	84	37	1	223	590	223	0	112
			2	426	426	143	143		2	468	468	51	51	
56,5	57,2	45,0	1	329	545	329	112	39	1	261	693	261	0	120
			2	482	482	176	176		2	549	549	59	59	
61,0	61,7	62,5	1	380	614	380	145	41	1	307	805	307	0	128
			2	545	545	214	214		2	639	639	70	70	
65,5	66,2	80,0	1	430	685	430	176	43	1	346	929	346	0	137
			2	610	610	251	251		2	734	734	77	77	
70,0	70,7	97,5	1	482	756	482	209	45	1	386	1058	386	0	146
			2	676	676	289	289		2	831	831	83	83	
74,5	75,2	120,0	1	546	841	546	252	47	1	444	1198	444	0	155
			2	755	755	338	338		2	945	945	98	98	

3.2.4.4 **Center ballasts and corner loads DIN 15019**

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



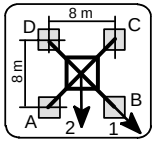


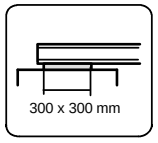
KR 1000 - 8 **Corner distance 8 m x 8 m** **Jib length 45 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	0,0	1	171	274	171	68	23	1	104	204	104	3	46
			2	244	244	99	99		2	175	175	32	32	
16,0	16,7	0,0	1	178	289	178	68	25	1	111	218	111	3	52
			2	256	256	100	100		2	187	187	35	35	
20,5	21,2	0,0	1	183	301	183	65	26	1	115	230	115	1	67
			2	267	267	99	99		2	197	197	119	119	
25,0	25,7	0,0	1	187	315	187	60	28	1	162	245	162	80	73
			2	277	277	98	98		2	221	221	104	104	
29,5	30,2	0,0	1	192	329	192	55	29	1	167	280	167	54	80
			2	289	289	95	95		2	247	247	87	87	
34,0	34,7	0,0	1	197	344	197	49	31	1	172	318	172	25	87
			2	301	301	92	92		2	275	275	68	68	
38,5	39,2	0,0	1	201	361	201	41	32	1	170	365	170	0	93
			2	314	314	88	88		2	305	305	47	47	
43,0	43,7	7,5	1	224	398	224	51	34	1	176	445	176	0	100
			2	347	347	102	102		2	357	357	42	42	
47,5	48,2	20,0	1	260	448	260	72	35	1	204	533	204	0	106
			2	393	393	127	127		2	424	424	47	47	
52,0	52,7	35,0	1	302	506	302	98	37	1	240	629	240	0	113
			2	447	447	158	158		2	499	499	55	55	
56,5	57,2	50,0	1	347	568	347	126	39	1	277	733	277	0	121
			2	503	503	191	191		2	581	581	63	63	
61,0	61,7	65,0	1	391	630	391	152	41	1	309	847	309	0	129
			2	560	560	222	222		2	666	666	67	67	
65,5	66,2	85,0	1	448	708	448	189	43	1	360	973	360	0	138
			2	632	632	265	265		2	768	768	79	79	
70,0	70,7	102,5	1	500	779	500	221	45	1	399	1104	399	0	147
			2	697	697	303	303		2	865	865	85	85	
74,5	75,2	125,0	1	564	865	564	264	47	1	456	1246	456	0	156
			2	777	777	352	352		2	980	980	99	99	

3.2.4.5 **Center ballasts and corner loads DIN 15019**

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



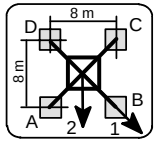


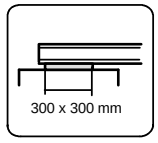
KR 1000 - 8 **Corner distance 8 m x 8 m** **Jib length 50 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	0,0	1	174	278	174	70	23	1	97	223	97	0	47
			2	247	247	101	101		2	183	183	25	25	
16,0	16,7	0,0	1	181	292	181	70	25	1	104	237	104	0	53
			2	260	260	102	102		2	195	195	27	27	
20,5	21,2	0,0	1	186	305	186	66	27	1	106	251	106	0	67
			2	270	270	101	101		2	206	206	115	115	
25,0	25,7	0,0	1	190	319	190	62	28	1	107	266	107	0	74
			2	281	281	99	99		2	230	230	101	101	
29,5	30,2	0,0	1	195	333	195	56	30	1	170	292	170	48	81
			2	293	293	97	97		2	256	256	83	83	
34,0	34,7	0,0	1	199	349	199	50	31	1	174	330	174	19	87
			2	305	305	94	94		2	284	284	64	64	
38,5	39,2	0,0	1	204	365	204	42	33	1	165	386	165	0	94
			2	318	318	90	90		2	315	315	43	43	
43,0	43,7	10,0	1	233	408	233	58	34	1	184	467	184	0	100
			2	357	357	110	110		2	373	373	43	43	
47,5	48,2	22,5	1	269	459	269	79	36	1	211	555	211	0	107
			2	403	403	135	135		2	441	441	48	48	
52,0	52,7	37,5	1	311	517	311	105	37	1	246	652	246	0	114
			2	457	457	165	165		2	517	517	56	56	
56,5	57,2	52,5	1	356	579	356	133	39	1	283	758	283	0	122
			2	514	514	198	198		2	599	599	63	63	
61,0	61,7	70,0	1	407	648	407	165	41	1	327	873	327	0	130
			2	577	577	236	236		2	690	690	73	73	
65,5	66,2	87,5	1	457	719	457	196	43	1	364	1001	364	0	138
			2	643	643	272	272		2	786	786	79	79	
70,0	70,7	107,5	1	515	797	515	234	45	1	415	1133	415	0	147
			2	715	715	316	316		2	891	891	90	90	
74,5	75,2	127,5	1	573	877	573	270	47	1	459	1276	459	0	157
			2	788	788	359	359		2	1000	1000	97	97	

3.2.4.6 **Center ballasts and corner loads DIN 15019**

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



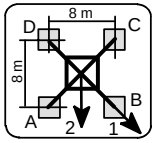


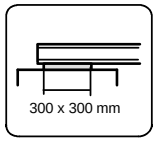
KR 1000 - 8 **Corner distance 8 m x 8 m** **Jib length 55 m**

height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** 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]
11,5	12,2	0,0	1	182	279	182	85	23	1	73	277	73	0	47
			2	251	251	113	113		2	204	204	8	8	
16,0	16,7	0,0	1	189	294	189	84	25	1	80	291	80	0	53
			2	263	263	115	115		2	215	215	10	10	
20,5	21,2	0,0	1	193	306	193	81	27	1	82	305	82	0	68
			2	273	273	114	114		2	225	225	9	9	
25,0	25,7	0,0	1	198	320	198	76	28	1	83	321	83	0	75
			2	284	284	112	112		2	245	245	101	101	
29,5	30,2	0,0	1	203	335	203	71	30	1	83	339	83	0	81
			2	296	296	109	109		2	272	272	84	84	
34,0	34,7	2,5	1	213	356	213	70	31	1	95	359	95	0	88
			2	315	315	112	112		2	307	307	70	70	
38,5	39,2	2,5	1	218	373	218	63	33	1	181	410	181	0	95
			2	328	328	108	108		2	338	338	48	48	
43,0	43,7	10,0	1	241	410	241	72	34	1	186	492	186	0	101
			2	361	361	122	122		2	390	390	42	42	
47,5	48,2	22,5	1	277	461	277	93	36	1	213	582	213	0	108
			2	407	407	147	147		2	458	458	46	46	
52,0	52,7	37,5	1	319	519	319	119	37	1	247	681	247	0	114
			2	461	461	177	177		2	535	535	53	53	
56,5	57,2	52,5	1	364	581	364	146	39	1	283	789	283	0	122
			2	517	517	210	210		2	618	618	60	60	
61,0	61,7	70,0	1	414	651	414	178	41	1	326	906	326	0	130
			2	581	581	247	247		2	710	710	69	69	
65,5	66,2	90,0	1	472	728	472	215	43	1	375	1037	375	0	139
			2	653	653	290	290		2	813	813	80	80	
70,0	70,7	110,0	1	530	806	530	253	45	1	424	1171	424	0	148
			2	725	725	334	334		2	918	918	91	91	

3.2.4.7 **Center ballasts and corner loads DIN 15019**

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





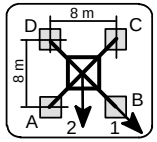
KR 1000 - 8 **Corner distance 8 m x 8 m** **Jib length 60 m**

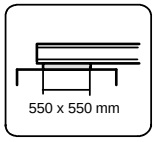
height under hook [m]		Centerballasts [t]	Jib position	Crane in service torque moment: **240** kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]	Jib position	Crane out of service torque moment: 0 kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]
11,5	12,2	0,0	1	188	286	188	89	23	1	85	294	85	0	48
			2	257	257	118	118		2	220	220	12	12	
16,0	16,7	0,0	1	195	301	195	89	25	1	93	307	93	0	53
			2	270	270	120	120		2	232	232	14	14	
20,5	21,2	0,0	1	199	313	199	85	26	1	94	322	94	0	69
			2	280	280	119	119		2	243	243	111	111	
25,0	25,7	0,0	1	204	327	204	81	28	1	95	338	95	0	75
			2	291	291	117	117		2	268	268	95	95	
29,5	30,2	0,0	1	208	342	208	75	29	1	96	356	96	0	82
			2	303	303	114	114		2	294	294	78	78	
34,0	34,7	0,0	1	213	357	213	69	31	1	191	378	191	3	88
			2	315	315	111	111		2	323	323	58	58	
38,5	39,2	2,5	1	224	380	224	67	32	1	176	452	176	0	95
			2	334	334	113	113		2	361	361	41	41	
43,0	43,7	12,5	1	253	423	253	83	34	1	194	536	194	0	102
			2	374	374	133	133		2	421	421	41	41	
47,5	48,2	27,5	1	295	480	295	110	35	1	232	629	232	0	108
			2	426	426	165	165		2	495	495	51	51	
52,0	52,7	42,5	1	337	539	337	136	37	1	265	730	265	0	115
			2	480	480	195	195		2	573	573	57	57	
56,5	57,2	57,5	1	382	601	382	163	39	1	299	839	299	0	123
			2	537	537	227	227		2	656	656	63	63	
61,0	61,7	75,0	1	433	671	433	195	41	1	341	959	341	0	131
			2	601	601	265	265		2	749	749	71	71	
65,5	66,2	95,0	1	490	748	490	231	43	1	389	1093	389	0	139
			2	673	673	307	307		2	854	854	81	81	
70,0	70,7	115,0	1	548	827	548	269	45	1	436	1229	436	0	149
			2	745	745	351	351		2	960	960	91	91	

3.2.5.1 **Centralballasts and Cornerloads according to DIN 15019**

for a standing tower crane on a
cross frame without climbing gear

Attention!
for the **WOLFF 6017.6** only the section
is valid for height under hook.





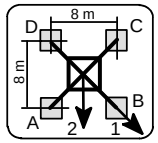
KR 16 - 80 **Corner distance 8,0 m x 8,0 m** **jib 30 m**

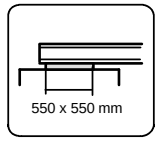
height under hook [m]		Center ballasts [t]	Crane in service torque moment: **240** kNm						Crane out of service torque moment: 0 kNm					
			jib position	Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]	jib position	Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]
79,6	80,3	140	1	603	924	603	281	52	1	499	1312	499	0	171
			2	830	830	375	375		2	1042	1042	113	113	
81,8	82,5	140	1	616	945	616	287	54	1	499	1366	499	0	173
			2	849	849	384	384		2	1074	1074	108	108	
86,3	87,0	165	1	687	1039	687	334	56	1	560	1527	560	0	183
			2	936	936	437	437		2	1202	1202	122	122	
90,8	91,5	190	1	761	1138	761	384	58	1	622	1698	623	0	194
			2	1027	1027	494	494		2	1336	1336	135	135	
95,3	96,0	215	1	835	1238	835	432	61	1	676	1886	677	0	206
			2	1120	1120	550	550		2	1477	1477	143	143	
99,8	100,5	270	1	984	1415	984	553	64	1	813	2210	813	0	223
			2	1289	1289	679	679		2	1740	1740	177	177	

3.2.5.2 **Centralballasts and Cornerloads according to DIN 15019**

for a standing tower crane on a
cross frame without climbing gear

Attention!
for the **WOLFF 6017.6** only the section
is valid for height under hook.





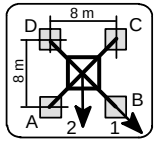
KR 16 - 80 **Corner distance 8,0 m x 8,0 m** **jib 35 m**

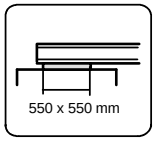
height under hook [m]		Center ballasts [t]	Crane in service torque moment: **240** kNm						Crane out of service torque moment: 0 kNm					
			jib position	Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]	jib position	Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]
79,6	80,3	140	1	610	934	610	287	52	1	504	1334	504	0	172
			2	839	839	382	382		2	1057	1057	114	114	
81,8	82,5	140	1	624	954	624	293	54	1	504	1388	504	0	174
			2	857	857	390	390		2	1090	1090	108	108	
86,3	87,0	165	1	694	1049	694	340	56	1	564	1550	564	0	183
			2	945	945	444	444		2	1218	1218	121	121	
90,8	91,5	190	1	768	1148	768	389	59	1	625	1723	626	0	194
			2	1037	1037	500	500		2	1353	1353	134	134	
95,3	96,0	220	1	855	1261	855	449	61	1	703	1914	704	0	206
			2	1142	1142	568	568		2	1507	1507	153	153	
99,8	100,5	270	1	992	1426	992	557	64	1	812	2243	812	0	224
			2	1299	1299	684	684		2	1760	1760	173	173	

3.2.5.3 **Centralballasts and Cornerloads according to DIN 15019**

for a standing tower crane on a
cross frame without climbing gear

Attention!
for the **WOLFF 6017.6** only the section
is valid for height under hook.





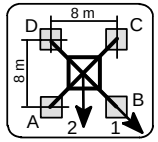
KR 16 - 80 **Corner distance 8,0 m x 8,0 m** **jib 40 m**

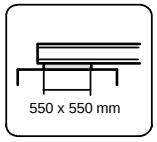
height under hook [m]		Center ballasts [t]	jib position	Crane in service torque moment: **240** kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]
79,6	80,3	140	1	616	940	616	292	52	1	504	1357	504	0	172
			2	845	845	387	387		2	1071	1071	111	111	
81,8	82,5	145	1	642	972	642	312	54	1	529	1410	529	0	174
			2	875	875	409	409		2	1116	1116	118	118	
86,3	87,0	170	1	712	1067	713	358	56	1	588	1575	588	0	184
			2	963	963	462	462		2	1244	1244	131	131	
90,8	91,5	195	1	787	1166	787	407	59	1	649	1749	649	0	195
			2	1055	1055	518	518		2	1380	1380	143	143	
95,3	96,0	220	1	861	1267	861	454	61	1	701	1941	701	0	207
			2	1148	1148	573	573		2	1522	1522	149	149	
99,8	100,5	275	1	1010	1445	1010	574	64	1	831	2277	831	0	225
			2	1318	1318	702	702		2	1790	1790	180	180	

3.2.5.4 **Centralballasts and Cornerloads according to DIN 15019**

for a standing tower crane on a
cross frame without climbing gear

Attention!
for the **WOLFF 6017.6** only the section
is valid for height under hook.





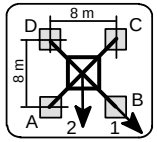
KR 16 - 80 **Corner distance 8,0 m x 8,0 m** **jib 45 m**

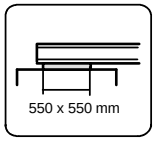
height under hook [m]		Center ballasts [t]	jib position	Crane in service torque moment: **240** kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]
79,6	80,3	145	1	635	965	635	305	53	1	517	1408	517	0	173
			2	869	869	402	402		2	1108	1108	112	112	
81,8	82,5	150	1	661	998	661	325	54	1	543	1460	543	0	175
			2	899	899	423	423		2	1153	1153	120	120	
86,3	87,0	175	1	732	1093	732	370	56	1	600	1627	600	0	185
			2	987	987	476	476		2	1282	1282	131	131	
90,8	91,5	200	1	806	1193	806	419	59	1	660	1804	660	0	196
			2	1080	1080	532	532		2	1419	1419	143	143	
95,3	96,0	225	1	880	1294	880	466	61	1	710	1999	711	0	208
			2	1173	1173	587	587		2	1562	1562	148	148	
99,8	100,5	280	1	1029	1473	1029	585	64	1	837	2341	838	0	225
			2	1343	1343	715	715		2	1832	1832	176	176	

3.2.5.5 **Centralballasts and Cornerloads according to DIN 15019**

for a standing tower crane on a
cross frame without climbing gear

Attention!
for the **WOLFF 6017.6** only the section
is valid for height under hook.





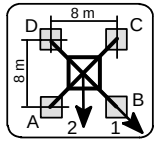
KR 16 - 80 **Corner distance 8,0 m x 8,0 m** **jib 50 m**

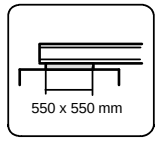
height under hook [m]		Center ballasts [t]	jib position	Crane in service torque moment: **240** kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]
79,6	80,3	150	1	650	984	651	317	53	1	532	1439	532	0	174
			2	886	886	415	415		2	1135	1135	117	117	
81,8	82,5	150	1	664	1004	664	324	54	1	532	1492	533	0	176
			2	904	904	424	424		2	1167	1167	112	112	
86,3	87,0	175	1	734	1100	735	369	57	1	589	1660	589	0	186
			2	993	993	476	476		2	1297	1297	122	122	
90,8	91,5	205	1	821	1212	821	430	59	1	673	1838	673	0	196
			2	1097	1097	545	545		2	1446	1446	146	146	
95,3	96,0	230	1	895	1314	895	477	62	1	723	2035	723	0	209
			2	1191	1191	599	599		2	1590	1590	151	151	
99,8	100,5	285	1	1044	1492	1044	596	64	1	848	2382	848	0	226
			2	1361	1361	727	727		2	1861	1861	177	177	

3.2.5.6 **Centralballasts and Cornerloads according to DIN 15019**

for a standing tower crane on a
cross frame without climbing gear

Attention!
for the **WOLFF 6017.6** only the section
is valid for height under hook.





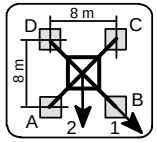
KR 16 - 80 **Corner distance 8,0 m x 8,0 m** **jib 55 m**

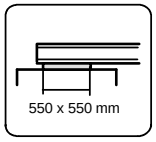
height under hook [m]		Center ballasts [t]	jib position	Crane in service torque moment: **240** kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]
79,6	80,3	150	1	658	987	658	329	53	1	526	1481	526	0	175
			2	891	891	426	426		2	1157	1157	109	109	
81,8	82,5	155	1	684	1019	684	349	54	1	552	1533	553	0	177
			2	921	921	447	447		2	1201	1201	117	117	
86,3	87,0	180	1	755	1116	755	394	57	1	608	1704	608	0	186
			2	1010	1010	500	500		2	1332	1332	127	127	
90,8	91,5	205	1	829	1216	829	442	59	1	666	1885	666	0	197
			2	1102	1102	555	555		2	1470	1470	137	137	
95,3	96,0	235	1	915	1330	915	501	62	1	739	2084	739	0	209
			2	1209	1209	622	622		2	1627	1627	154	154	
99,8	100,5	290	1	1064	1509	1065	620	64	1	860	2438	860	0	227
			2	1379	1379	750	750		2	1902	1902	177	177	

3.2.5.7 **Centralballasts and Cornerloads according to DIN 15019**

for a standing tower crane on a
cross frame without climbing gear

Attention!
for the **WOLFF 6017.6** only the section
is valid for height under hook.





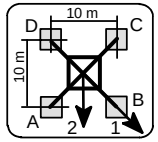
KR 16 - 80 **Corner distance 8,0 m x 8,0 m** **jib 60 m**

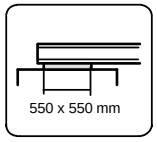
height under hook [m]		Center ballasts [t]	jib position	Crane in service torque moment: **240** kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]
79,6	80,3	160	1	689	1021	689	358	53	1	562	1543	562	0	175
			2	924	924	455	455		2	1213	1213	121	121	
81,8	82,5	160	1	703	1040	703	365	54	1	564	1594	564	0	177
			2	941	941	464	464		2	1244	1244	117	117	
86,3	87,0	185	1	773	1136	773	410	56	1	618	1768	618	0	187
			2	1030	1030	516	516		2	1376	1376	125	125	
90,8	91,5	215	1	860	1249	860	470	59	1	699	1951	699	0	197
			2	1135	1135	584	584		2	1527	1527	147	147	
95,3	96,0	245	1	946	1364	946	529	62	1	771	2153	771	0	210
			2	1242	1242	651	651		2	1685	1685	162	162	
99,8	100,5	300	1	1095	1543	1095	648	64	1	889	2514	889	0	228
			2	1412	1412	779	779		2	1962	1962	184	184	

3.2.6.1 **Centralballasts and Cornerloads according to DIN 15019**

for a standing tower crane on a
cross frame without climbing gear

Attention!
for the **WOLFF 6017.6** only the section
is valid for height under hook.





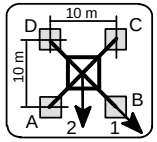
KR 16 - 100 **Corner distance 10,0 m x 10,0 m** **jib 30 m**

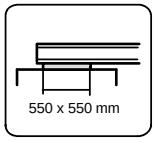
height under hook [m]		Center ballasts [t]	jib position	Crane in service torque moment: **240** kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]
79,6	80,3	90	1	483	740	483	225	52	1	391	1050	391	0	171
			2	665	665	301	301		2	829	829	86	86	
81,8	82,5	90	1	496	759	496	233	54	1	396	1093	396	0	173
			2	682	682	310	310		2	858	858	84	84	
86,3	87,0	110	1	554	836	554	272	56	1	448	1221	448	0	183
			2	753	753	355	355		2	961	961	97	97	
90,8	91,5	130	1	616	917	616	314	58	1	502	1358	502	0	194
			2	829	829	402	402		2	1071	1071	110	110	
95,3	96,0	150	1	677	1000	677	355	61	1	550	1509	550	0	206
			2	905	905	449	449		2	1186	1186	119	119	
99,8	100,5	190	1	789	1134	789	444	64	1	644	1768	644	0	223
			2	1033	1033	545	545		2	1389	1389	139	139	

3.2.6.2 **Centralballasts and Cornerloads according to DIN 15019**

for a standing tower crane on a
cross frame without climbing gear

Attention!
for the **WOLFF 6017.6** only the section
is valid for height under hook.





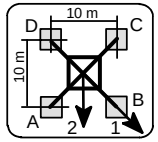
KR 16 - 100 **Corner distance 10,0 m x 10,0 m** **jib 35 m**

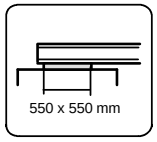
height under hook [m]		Center ballasts [t]	jib position	Crane in service torque moment: **240** kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]
79,6	80,3	90	1	490	749	490	231	52	1	397	1067	397	0	172
			2	673	673	307	307		2	843	843	88	88	
81,8	82,5	90	1	504	768	504	240	54	1	403	1110	403	0	174
			2	691	691	317	317		2	871	871	86	86	
86,3	87,0	110	1	562	845	562	278	56	1	454	1240	454	0	183
			2	762	762	361	361		2	975	975	98	98	
90,8	91,5	130	1	623	927	623	320	59	1	508	1378	508	0	194
			2	838	838	409	409		2	1086	1086	111	111	
95,3	96,0	150	1	685	1010	685	360	61	1	555	1531	555	0	206
			2	915	915	455	455		2	1201	1201	119	119	
99,8	100,5	190	1	797	1144	797	449	64	1	646	1794	646	0	224
			2	1042	1042	551	551		2	1406	1406	137	137	

3.2.6.3 **Centralballasts and Cornerloads according to DIN 15019**

for a standing tower crane on a
cross frame without climbing gear

Attention!
for the **WOLFF 6017.6** only the section
is valid for height under hook.





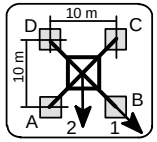
KR 16 - 100 **Corner distance 10,0 m x 10,0 m** **jib 40 m**

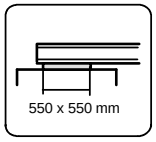
height under hook [m]		Center ballasts [t]	jib position	Crane in service torque moment: **240** kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]
79,6	80,3	90	1	496	755	496	237	52	1	400	1085	400	0	172
			2	679	679	313	313		2	855	855	87	87	
81,8	82,5	95	1	522	786	522	258	54	1	430	1128	430	0	174
			2	709	709	335	335		2	896	896	98	98	
86,3	87,0	110	1	567	851	568	284	56	1	455	1260	456	0	184
			2	768	768	367	367		2	988	988	97	97	
90,8	91,5	130	1	629	933	629	325	59	1	509	1399	509	0	195
			2	844	844	414	414		2	1099	1099	109	109	
95,3	96,0	155	1	703	1028	703	378	61	1	580	1553	580	0	207
			2	933	933	473	473		2	1227	1227	129	129	
99,8	100,5	195	1	815	1163	815	466	64	1	669	1821	669	0	225
			2	1061	1061	568	568		2	1434	1434	146	146	

3.2.6.4 **Centralballasts and Cornerloads according to DIN 15019**

for a standing tower crane on a
cross frame without climbing gear

Attention!
for the **WOLFF 6017.6** only the section
is valid for height under hook.





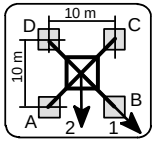
KR 16 - 100 **Corner distance 10,0 m x 10,0 m** **jib 45 m**

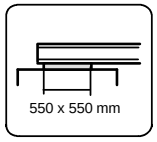
height under hook [m]		Center ballasts [t]	jib position	Crane in service torque moment: **240** kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]
79,6	80,3	95	1	515	779	515	251	53	1	418	1126	418	0	173
			2	702	702	329	329		2	889	889	92	92	
81,8	82,5	95	1	529	798	529	259	54	1	424	1168	424	0	175
			2	719	719	338	338		2	917	917	91	91	
86,3	87,0	115	1	587	876	587	297	56	1	473	1302	473	0	185
			2	791	791	382	382		2	1022	1022	101	101	
90,8	91,5	135	1	648	958	648	339	59	1	525	1443	525	0	196
			2	867	867	429	429		2	1134	1134	113	113	
95,3	96,0	155	1	710	1041	710	378	61	1	570	1599	571	0	208
			2	944	944	476	476		2	1250	1250	119	119	
99,8	100,5	200	1	834	1189	834	479	64	1	682	1873	682	0	225
			2	1085	1085	583	583		2	1471	1471	147	147	

3.2.6.5 **Centralballasts and Cornerloads according to DIN 15019**

for a standing tower crane on a
cross frame without climbing gear

Attention!
for the **WOLFF 6017.6** only the section
is valid for height under hook.





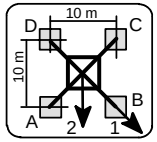
KR 16 - 100 **Corner distance 10,0 m x 10,0 m** **jib 50 m**

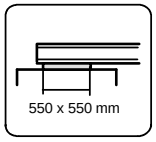
height under hook [m]		Center ballasts [t]	jib position	Crane in service torque moment: **240** kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]
79,6	80,3	95	1	518	785	518	251	53	1	411	1151	411	0	174
			2	707	707	329	329		2	900	900	86	86	
81,8	82,5	100	1	544	816	544	272	54	1	442	1193	442	0	176
			2	736	736	352	352		2	941	941	97	97	
86,3	87,0	120	1	602	894	602	310	57	1	490	1328	490	0	186
			2	809	809	395	395		2	1047	1047	107	107	
90,8	91,5	140	1	664	976	664	351	59	1	542	1471	542	0	196
			2	885	885	442	442		2	1159	1159	119	119	
95,3	96,0	160	1	725	1060	725	390	62	1	587	1628	587	0	209
			2	962	962	488	488		2	1276	1276	125	125	
99,8	100,5	205	1	849	1208	849	491	64	1	696	1905	696	0	226
			2	1103	1103	596	596		2	1498	1498	150	150	

3.2.6.6 **Centralballasts and Cornerloads according to DIN 15019**

for a standing tower crane on a
cross frame without climbing gear

Attention!
for the **WOLFF 6017.6** only the section
is valid for height under hook.





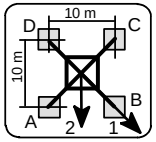
KR 16 - 100 **Corner distance 10,0 m x 10,0 m** **jib 55 m**

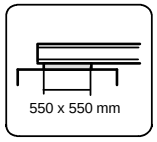
height under hook [m]		Center ballasts [t]	jib position	Crane in service torque moment: **240** kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm Corner loads A [kN]	B [kN]	C [kN]	D [kN]	Horizontal force [kN]
79,6	80,3	100	1	538	801	538	275	53	1	434	1185	435	0	175
			2	724	724	352	352		2	932	932	94	94	
81,8	82,5	100	1	552	820	552	284	54	1	441	1226	441	0	177
			2	741	741	362	362		2	960	960	93	93	
86,3	87,0	120	1	610	898	610	321	57	1	488	1363	488	0	186
			2	814	814	406	406		2	1067	1067	103	103	
90,8	91,5	140	1	671	981	671	362	59	1	539	1508	539	0	197
			2	890	890	453	453		2	1180	1180	113	113	
95,3	96,0	165	1	745	1077	745	414	62	1	608	1667	608	0	209
			2	980	980	511	511		2	1310	1310	131	131	
99,8	100,5	205	1	857	1213	857	501	64	1	689	1951	689	0	227
			2	1108	1108	606	606		2	1522	1522	142	142	

3.2.6.7 **Centralballasts and Cornerloads according to DIN 15019**

for a standing tower crane on a
cross frame without climbing gear

Attention!
for the **WOLFF 6017.6** only the section
is valid for height under hook.



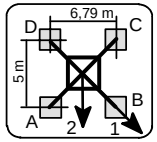


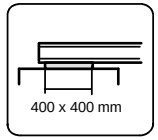
KR 16 - 100 **Corner distance 10,0 m x 10,0 m** **jib 60 m**

height under hook [m]		Center ballasts [t]	jib position	Crane in service torque moment: **240** 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]
79,6	80,3	105	1	557	822	557	292	53	1	451	1235	452	0	175
			2	744	744	369	369		2	971	971	98	98	
81,8	82,5	105	1	570	840	570	300	54	1	458	1275	458	0	177
			2	761	761	379	379		2	999	999	97	97	
86,3	87,0	125	1	628	919	628	338	56	1	504	1414	505	0	187
			2	834	834	423	423		2	1106	1106	106	106	
90,8	91,5	145	1	690	1001	690	378	59	1	554	1561	554	0	197
			2	910	910	470	470		2	1219	1219	115	115	
95,3	96,0	170	1	764	1098	764	430	62	1	622	1723	622	0	210
			2	1000	1000	528	528		2	1351	1351	132	132	
99,8	100,5	215	1	888	1246	888	530	64	1	725	2011	726	0	228
			2	1141	1141	635	635		2	1577	1577	154	154	

3.3.1.1 **Center ballasts and corner loads DIN 15019**

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



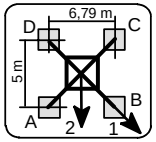


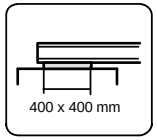
KRE 260.1 **Corner distance 5 m x 6,79 m** **Jib length 30 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	32,5	1	259	368	168	60	24	1	185	275	108	18	51
			2	338	338	90	90		2	250	250	43	43	
18,8	19,5	32,5	1	267	383	170	54	26	1	191	287	111	15	65
			2	351	351	86	86		2	260	260	42	42	
23,3	24,0	32,5	1	275	399	171	47	27	1	198	300	113	11	69
			2	365	365	81	81		2	272	272	40	40	
27,8	28,5	32,5	1	284	417	171	38	29	1	206	314	115	7	76
			2	380	380	75	75		2	289	289	116	116	
32,3	33,0	37,5	1	305	448	184	41	30	1	264	371	175	68	83
			2	409	409	80	80		2	341	341	98	98	
36,8	37,5	47,5	1	339	494	209	54	32	1	308	448	190	50	89
			2	451	451	97	97		2	409	409	89	89	
41,3	42,0	60,0	1	380	547	239	73	34	1	360	536	210	33	96
			2	501	501	119	119		2	487	487	82	82	

3.3.1.2 **Center ballasts and corner loads DIN 15019**

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



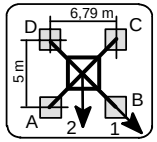


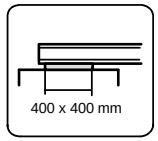
KRE 260.1 **Corner distance 5 m x 6,79 m** **Jib length 35 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	30,0	1	260	367	170	63	24	1	178	269	102	12	51
			2	338	338	93	93		2	244	244	37	37	
18,8	19,5	30,0	1	268	382	172	57	26	1	185	281	104	9	65
			2	351	351	89	89		2	254	254	35	35	
23,3	24,0	30,0	1	276	399	173	50	28	1	192	294	106	5	70
			2	365	365	84	84		2	266	266	33	33	
27,8	28,5	30,0	1	285	417	173	41	29	1	238	317	170	91	77
			2	380	380	78	78		2	295	295	113	113	
32,3	33,0	35,0	1	306	448	186	44	31	1	268	378	174	64	83
			2	409	409	83	83		2	348	348	94	94	
36,8	37,5	45,0	1	340	494	211	57	32	1	312	456	189	45	90
			2	451	451	100	100		2	416	416	85	85	
41,3	42,0	57,5	1	381	548	241	75	34	1	363	545	210	27	96
			2	502	502	121	121		2	495	495	78	78	

3.3.1.3 **Center ballasts and corner loads DIN 15019**

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



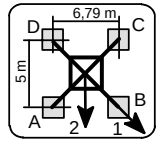


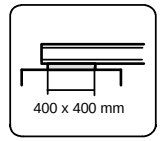
KRE 260.1 **Corner distance 5 m x 6,79 m** **Jib length 40 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	27,5	1	259	363	171	66	25	1	185	266	117	36	52
			2	334	334	95	95		2	244	244	58	58	
18,8	19,5	27,5	1	267	379	172	60	26	1	192	280	119	31	66
			2	348	348	91	91		2	256	256	55	55	
23,3	24,0	27,5	1	275	395	173	53	28	1	200	295	120	25	71
			2	362	362	86	86		2	268	268	52	52	
27,8	28,5	27,5	1	283	413	174	44	29	1	239	323	168	84	77
			2	377	377	80	80		2	300	300	107	107	
32,3	33,0	32,5	1	305	445	186	46	31	1	269	384	172	56	84
			2	406	406	85	85		2	352	352	88	88	
36,8	37,5	42,5	1	339	491	211	59	32	1	313	463	187	37	91
			2	449	449	101	101		2	422	422	78	78	
41,3	42,0	55,0	1	380	544	241	77	34	1	365	553	207	19	97
			2	499	499	123	123		2	501	501	71	71	

3.3.1.4 **Center ballasts and corner loads DIN 15019**

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



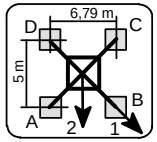


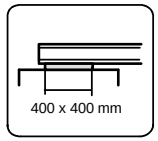
KRE 260.1 **Corner distance 5 m x 6,79 m** **Jib length 45 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	25,0	1	259	366	169	62	25	1	188	296	100	0	52
			2	336	336	92	92		2	265	265	27	27	
18,8	19,5	25,0	1	267	381	170	56	26	1	191	315	97	0	67
			2	349	349	88	88		2	278	278	24	24	
23,3	24,0	25,0	1	275	398	171	48	28	1	192	336	93	0	72
			2	364	364	82	82		2	291	291	20	20	
27,8	28,5	25,0	1	284	416	172	39	29	1	193	360	87	0	78
			2	379	379	76	76		2	316	316	89	89	
32,3	33,0	25,0	1	293	435	172	29	31	1	263	394	152	21	85
			2	396	396	68	68		2	357	357	57	57	
36,8	37,5	37,5	1	333	488	203	48	32	1	313	479	173	7	91
			2	445	445	91	91		2	433	433	53	53	
41,3	42,0	55,0	1	387	554	246	78	34	1	378	583	205	0	98
			2	508	508	124	124		2	526	526	57	57	

3.3.1.5 **Center ballasts and corner loads DIN 15019**

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



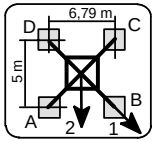


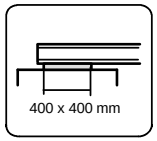
KRE 260.1 **Corner distance 5 m x 6,79 m** **Jib length 50 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	25,0	1	262	370	171	64	25	1	179	327	82	0	53
			2	340	340	93	93		2	278	278	15	15	
18,8	19,5	25,0	1	270	385	173	57	27	1	181	346	78	0	67
			2	353	353	89	89		2	291	291	12	12	
23,3	24,0	27,5	1	284	409	180	56	28	1	195	367	86	0	72
			2	374	374	90	90		2	310	310	14	14	
27,8	28,5	27,5	1	293	427	180	47	30	1	196	391	80	0	79
			2	390	390	84	84		2	336	336	87	87	
32,3	33,0	32,5	1	315	459	193	48	31	1	288	429	169	29	85
			2	419	419	88	88		2	390	390	68	68	
36,8	37,5	40,0	1	343	499	211	55	33	1	326	503	178	1	92
			2	456	456	98	98		2	454	454	50	50	
41,3	42,0	60,0	1	403	572	260	91	34	1	397	613	216	1	99
			2	525	525	138	138		2	553	553	60	60	

3.3.1.6 **Center ballasts and corner loads DIN 15019**

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



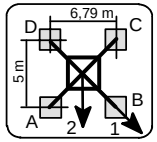


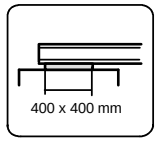
KRE 260.1 **Corner distance 5 m x 6,79 m** **Jib length 55 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	35,0	1	292	393	207	106	25	1	205	403	85	0	53
			2	365	365	134	134		2	335	335	11	11	
18,8	19,5	37,5	1	306	415	214	105	27	1	220	423	94	0	68
			2	385	385	135	135		2	354	354	14	14	
23,3	24,0	40,0	1	321	439	221	104	28	1	233	445	101	0	73
			2	406	406	136	136		2	374	374	16	16	
27,8	28,5	42,5	1	336	463	228	101	30	1	246	469	107	0	80
			2	428	428	136	136		2	394	394	17	17	
32,3	33,0	45,0	1	351	489	234	96	31	1	259	496	112	0	86
			2	451	451	135	135		2	441	441	94	94	
36,8	37,5	47,5	1	367	517	240	90	33	1	358	546	199	11	93
			2	475	475	132	132		2	494	494	63	63	
41,3	42,0	62,5	1	414	578	277	114	34	1	414	647	221	0	99
			2	532	532	159	159		2	581	581	60	60	

3.3.1.7 **Center ballasts and corner loads DIN 15019**

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



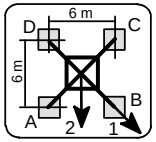


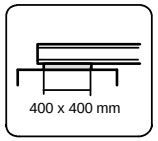
KRE 260.1 **Corner distance 5 m x 6,79 m** **Jib length 60 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	35,0	1	299	401	212	110	25	1	218	426	91	0	53
			2	373	373	138	138		2	355	355	12	12	
18,8	19,5	37,5	1	313	423	220	110	26	1	232	446	100	0	69
			2	392	392	140	140		2	374	374	15	15	
23,3	24,0	40,0	1	327	446	227	108	28	1	246	468	107	0	73
			2	413	413	141	141		2	394	394	17	17	
27,8	28,5	42,5	1	342	471	234	105	29	1	259	492	113	0	80
			2	435	435	141	141		2	424	424	106	106	
32,3	33,0	45,0	1	357	497	240	101	31	1	349	521	203	31	87
			2	458	458	139	139		2	473	473	79	79	
36,8	37,5	50,0	1	379	531	252	101	32	1	377	594	201	0	93
			2	489	489	143	143		2	532	532	54	54	

3.3.2.1 **Center ballasts and corner loads DIN 15019**

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



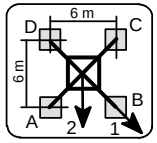


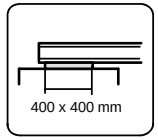
KRE 260.1 **Corner distance 6 m x 6 m** **Jib length 30 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	20,0	1	183	329	183	36	24	1	109	244	109	0	51
			2	286	286	79	79		2	201	201	29	29	
18,8	19,5	20,0	1	187	343	187	31	26	1	111	258	111	0	65
			2	297	297	77	77		2	211	211	29	29	
23,3	24,0	20,0	1	192	359	192	24	27	1	112	274	112	0	69
			2	310	310	73	73		2	221	221	28	28	
27,8	28,5	20,0	1	196	376	196	17	29	1	112	291	112	0	76
			2	323	323	69	69		2	243	243	99	99	
32,3	33,0	22,5	1	207	400	207	14	30	1	182	326	182	38	83
			2	344	344	70	70		2	283	283	80	80	
36,8	37,5	32,5	1	237	445	237	28	32	1	212	401	212	23	89
			2	384	384	89	89		2	345	345	78	78	
41,3	42,0	42,5	1	266	491	266	41	34	1	241	480	241	2	96
			2	425	425	107	107		2	410	410	72	72	
45,8	46,5	52,5	1	296	539	296	52	35	1	248	587	248	0	102
			2	468	468	124	124		2	478	478	63	63	

3.3.2.2 **Center ballasts and corner loads DIN 15019**

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



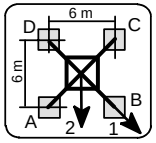


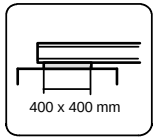
KRE 260.1 **Corner distance 6 m x 6 m** **Jib length 35 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	17,5	1	184	328	184	40	24	1	96	244	96	0	51
			2	286	286	82	82		2	195	195	23	23	
18,8	19,5	17,5	1	189	343	189	34	26	1	98	258	98	0	65
			2	298	298	79	79		2	205	205	22	22	
23,3	24,0	17,5	1	193	359	193	28	28	1	99	274	99	0	70
			2	310	310	76	76		2	217	217	119	119	
27,8	28,5	17,5	1	198	376	198	20	29	1	99	292	99	0	77
			2	324	324	72	72		2	249	249	97	97	
32,3	33,0	20,0	1	209	400	209	17	31	1	184	333	184	34	83
			2	344	344	73	73		2	289	289	78	78	
36,8	37,5	27,5	1	232	439	232	25	32	1	207	402	207	12	90
			2	378	378	85	85		2	345	345	69	69	
41,3	42,0	37,5	1	261	485	261	37	34	1	227	491	227	0	96
			2	420	420	103	103		2	410	410	63	63	
45,8	46,5	50,0	1	297	540	297	54	35	1	243	602	243	0	103
			2	469	469	126	126		2	485	485	59	59	

3.3.2.3 **Center ballasts and corner loads DIN 15019**

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



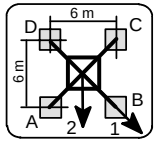


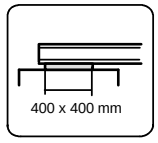
KRE 260.1 **Corner distance 6 m x 6 m** **Jib length 40 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	15,0	1	183	324	183	42	25	1	83	245	83	0	52
			2	283	283	84	84		2	197	197	43	43	
18,8	19,5	15,0	1	188	339	188	37	26	1	85	259	85	0	66
			2	295	295	81	81		2	208	208	41	41	
23,3	24,0	15,0	1	193	355	193	30	28	1	86	275	86	0	71
			2	307	307	78	78		2	221	221	114	114	
27,8	28,5	15,0	1	197	372	197	22	29	1	86	294	86	0	77
			2	321	321	73	73		2	252	252	92	92	
32,3	33,0	17,5	1	208	397	208	19	31	1	183	339	183	27	84
			2	342	342	74	74		2	293	293	73	73	
36,8	37,5	27,5	1	237	442	237	33	32	1	212	415	212	10	91
			2	382	382	93	93		2	355	355	69	69	
41,3	42,0	37,5	1	267	489	267	45	34	1	231	506	231	0	97
			2	424	424	110	110		2	421	421	63	63	
45,8	46,5	50,0	1	303	543	303	62	35	1	246	618	246	0	104
			2	473	473	133	133		2	496	496	59	59	

3.3.2.4 **Center ballasts and corner loads DIN 15019**

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



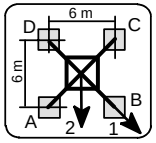


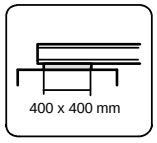
KRE 260.1 **Corner distance 6 m x 6 m** **Jib length 45 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	12,5	1	183	327	183	39	25	1	89	281	89	0	52
			2	285	285	81	81		2	214	214	16	16	
18,8	19,5	12,5	1	187	342	187	33	26	1	89	299	89	0	67
			2	296	296	78	78		2	225	225	14	14	
23,3	24,0	12,5	1	192	358	192	26	28	1	89	319	89	0	72
			2	309	309	75	75		2	237	237	11	11	
27,8	28,5	12,5	1	196	375	196	18	29	1	87	341	87	0	78
			2	323	323	70	70		2	266	266	77	77	
32,3	33,0	15,0	1	207	400	207	14	31	1	96	365	96	0	85
			2	344	344	71	71		2	307	307	57	57	
36,8	37,5	20,0	1	224	433	224	16	32	1	174	449	174	0	91
			2	372	372	77	77		2	358	358	41	41	
41,3	42,0	37,5	1	273	499	273	46	34	1	219	553	219	0	98
			2	432	432	113	113		2	443	443	52	52	
45,8	46,5	55,0	1	321	566	321	76	35	1	258	667	258	0	105
			2	494	494	147	147		2	532	532	60	60	

3.3.2.5 **Center ballasts and corner loads DIN 15019**

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



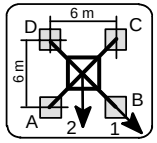


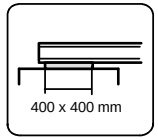
KRE 260.1 **Corner distance 6 m x 6 m** **Jib length 50 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	12,5	1	185	331	185	40	25	1	76	310	76	0	53
			2	288	288	83	83		2	225	225	6	6	
18,8	19,5	15,0	1	196	352	196	40	27	1	88	328	88	0	67
			2	306	306	86	86		2	242	242	10	10	
23,3	24,0	15,0	1	201	368	201	33	28	1	87	349	87	0	72
			2	319	319	82	82		2	254	254	8	8	
27,8	28,5	17,5	1	212	392	212	31	30	1	98	371	98	0	79
			2	339	339	84	84		2	290	290	83	83	
32,3	33,0	20,0	1	222	417	222	28	31	1	107	396	107	0	85
			2	360	360	85	85		2	332	332	63	63	
36,8	37,5	22,5	1	233	444	233	23	33	1	179	476	179	0	92
			2	382	382	84	84		2	376	376	40	40	
41,3	42,0	40,0	1	282	510	282	53	34	1	223	581	223	0	99
			2	443	443	120	120		2	462	462	51	51	
45,8	46,5	57,5	1	330	578	330	82	36	1	262	696	262	0	105
			2	505	505	155	155		2	551	551	59	59	

3.3.2.6 **Center ballasts and corner loads DIN 15019**

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



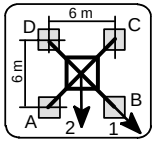


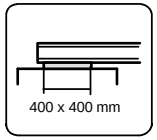
KRE 260.1 **Corner distance 6 m x 6 m** **Jib length 55 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	25,0	1	225	361	225	88	25	1	105	382	105	0	53
			2	321	321	128	128		2	283	283	13	13	
18,8	19,5	25,0	1	229	376	229	82	27	1	105	401	105	0	68
			2	333	333	125	125		2	295	295	11	11	
23,3	24,0	27,5	1	240	399	240	81	28	1	116	422	116	0	73
			2	352	352	128	128		2	313	313	14	14	
27,8	28,5	27,5	1	244	416	244	72	30	1	114	445	114	0	80
			2	366	366	123	123		2	333	333	106	106	
32,3	33,0	30,0	1	255	442	255	69	31	1	123	470	123	0	86
			2	387	387	123	123		2	375	375	85	85	
36,8	37,5	32,5	1	266	468	266	64	33	1	228	507	228	0	93
			2	409	409	123	123		2	420	420	62	62	
41,3	42,0	42,5	1	296	516	296	75	34	1	234	614	234	0	99
			2	451	451	140	140		2	488	488	53	53	

3.3.2.7 **Center ballasts and corner loads DIN 15019**

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



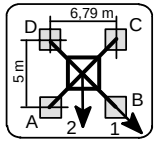


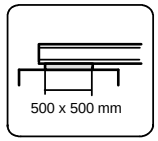
KRE 260.1 **Corner distance 6 m x 6 m** **Jib length 60 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	22,5	1	224	362	224	86	25	1	103	404	103	0	53
			2	322	322	126	126		2	295	295	10	10	
18,8	19,5	25,0	1	235	384	235	86	26	1	115	423	115	0	69
			2	340	340	130	130		2	313	313	14	14	
23,3	24,0	25,0	1	240	400	240	79	28	1	114	444	114	0	73
			2	353	353	126	126		2	325	325	11	11	
27,8	28,5	27,5	1	250	424	250	77	29	1	124	467	124	0	80
			2	373	373	128	128		2	360	360	95	95	
32,3	33,0	30,0	1	261	449	261	73	31	1	132	493	132	0	87
			2	394	394	128	128		2	403	403	74	74	
36,8	37,5	32,5	1	272	476	272	68	32	1	217	564	217	0	93
			2	416	416	128	128		2	449	449	50	50	
41,3	42,0	47,5	1	314	536	314	92	34	1	246	673	246	0	100
			2	471	471	157	157		2	529	529	53	53	

3.3.3.1 **Center ballasts and corner loads DIN 15019**

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



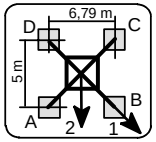


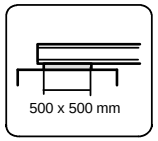
KRE 260.2 **Corner distance 5 m x 6,79 m** **Jib length 30 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	30,0	1	260	368	168	60	24	1	185	275	109	18	50
			2	338	338	90	90		2	250	250	43	43	
18,8	19,5	30,0	1	267	383	170	54	26	1	191	287	111	16	64
			2	351	351	86	86		2	260	260	42	42	
23,3	24,0	30,0	1	275	399	171	47	27	1	199	300	113	12	69
			2	365	365	81	81		2	272	272	40	40	
27,8	28,5	30,0	1	284	417	171	38	29	1	206	314	115	7	76
			2	380	380	75	75		2	289	289	116	116	
32,3	33,0	35,0	1	305	448	184	41	30	1	265	371	175	69	82
			2	409	409	81	81		2	341	341	98	98	
36,8	37,5	45,0	1	339	494	209	55	32	1	308	448	190	50	89
			2	451	451	97	97		2	410	410	89	89	
41,3	42,0	57,5	1	380	547	240	73	33	1	360	537	210	33	95
			2	501	501	119	119		2	488	488	82	82	
45,8	46,5	72,5	1	428	608	276	96	35	1	419	636	235	18	102
			2	558	558	146	146		2	576	576	78	78	
50,3	51,0	90,0	1	483	678	318	123	36	1	486	747	265	4	109
			2	624	624	177	177		2	675	675	76	76	
54,8	55,5	115,0	1	557	768	378	167	38	1	573	882	312	3	115
			2	710	710	225	225		2	797	797	88	88	

3.3.3.2 **Center ballasts and corner loads DIN 15019**

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



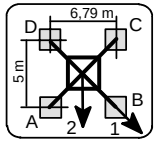


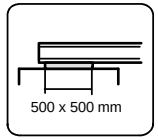
KRE 260.2 **Corner distance 5 m x 6,79 m** **Jib length 35 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	27,5	1	261	367	170	64	24	1	179	269	102	12	51
			2	338	338	93	93		2	244	244	37	37	
18,8	19,5	27,5	1	268	383	172	58	26	1	185	281	105	9	65
			2	351	351	89	89		2	255	255	35	35	
23,3	24,0	27,5	1	276	399	173	50	27	1	192	294	107	5	70
			2	365	365	84	84		2	266	266	33	33	
27,8	28,5	27,5	1	285	417	173	42	29	1	238	317	171	91	76
			2	380	380	78	78		2	295	295	113	113	
32,3	33,0	32,5	1	306	448	186	44	30	1	268	378	175	64	83
			2	409	409	83	83		2	348	348	95	95	
36,8	37,5	42,5	1	341	494	211	57	32	1	312	456	190	45	89
			2	452	452	100	100		2	416	416	85	85	
41,3	42,0	55,0	1	382	548	241	75	33	1	363	545	210	28	96
			2	502	502	121	121		2	495	495	78	78	
45,8	46,5	70,0	1	430	609	278	98	35	1	423	646	235	12	102
			2	559	559	148	148		2	584	584	73	73	
50,3	51,0	90,0	1	490	685	326	131	36	1	496	764	270	3	109
			2	631	631	185	185		2	689	689	77	77	
54,8	55,5	115,0	1	565	776	386	174	38	1	584	900	317	0	116
			2	718	718	233	233		2	812	812	88	88	

3.3.3.3 **Center ballasts and corner loads DIN 15019**

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



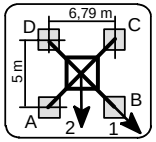


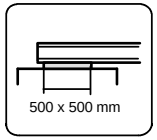
KRE 260.2 **Corner distance 5 m x 6,79 m** **Jib length 40 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	25,0	1	259	363	171	66	24	1	185	266	117	36	51
			2	334	334	95	95		2	244	244	59	59	
18,8	19,5	25,0	1	267	379	172	60	26	1	193	280	119	31	65
			2	348	348	91	91		2	256	256	56	56	
23,3	24,0	25,0	1	275	395	173	53	27	1	200	295	120	26	70
			2	362	362	86	86		2	269	269	52	52	
27,8	28,5	25,0	1	283	413	174	44	29	1	239	323	168	84	77
			2	377	377	80	80		2	300	300	107	107	
32,3	33,0	30,0	1	305	445	186	46	30	1	269	385	172	57	83
			2	406	406	85	85		2	353	353	89	89	
36,8	37,5	40,0	1	339	491	211	60	32	1	313	463	187	37	90
			2	449	449	102	102		2	422	422	79	79	
41,3	42,0	52,5	1	380	544	242	77	34	1	365	553	207	19	97
			2	499	499	123	123		2	501	501	71	71	
45,8	46,5	67,5	1	428	606	278	100	35	1	425	654	231	2	103
			2	557	557	149	149		2	590	590	66	66	
50,3	51,0	92,5	1	502	695	338	145	37	1	511	785	279	5	110
			2	642	642	198	198		2	709	709	81	81	
54,8	55,5	117,5	1	576	787	398	188	38	1	599	923	325	2	116
			2	728	728	246	246		2	833	833	91	91	

3.3.3.4 **Center ballasts and corner loads DIN 15019**

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



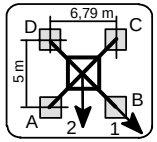


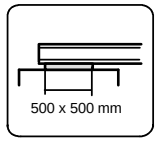
KRE 260.2 **Corner distance 5 m x 6,79 m** **Jib length 45 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	22,5	1	259	366	169	63	25	1	189	296	101	0	52
			2	336	336	92	92		2	266	266	27	27	
18,8	19,5	22,5	1	267	381	170	56	26	1	191	315	98	0	66
			2	350	350	88	88		2	278	278	24	24	
23,3	24,0	22,5	1	275	398	171	49	28	1	193	336	93	0	71
			2	364	364	83	83		2	291	291	20	20	
27,8	28,5	22,5	1	284	416	172	40	29	1	194	359	87	0	78
			2	379	379	76	76		2	317	317	89	89	
32,3	33,0	22,5	1	293	436	172	29	31	1	263	394	152	21	84
			2	396	396	69	69		2	358	358	57	57	
36,8	37,5	35,0	1	333	488	203	48	32	1	313	480	173	7	91
			2	445	445	91	91		2	434	434	53	53	
41,3	42,0	52,5	1	387	555	246	78	34	1	378	583	205	0	97
			2	508	508	125	125		2	526	526	57	57	
45,8	46,5	75,0	1	454	636	301	119	35	1	457	703	248	1	104
			2	585	585	169	169		2	635	635	70	70	
50,3	51,0	97,5	1	521	719	355	157	37	1	533	834	286	0	111
			2	664	664	212	212		2	749	749	77	77	

3.3.3.5 **Center ballasts and corner loads DIN 15019**

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



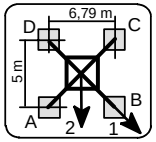


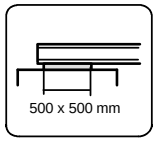
KRE 260.2 **Corner distance 5 m x 6,79 m** **Jib length 50 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	22,5	1	262	370	171	64	25	1	179	327	82	0	52
			2	340	340	94	94		2	278	278	15	15	
18,8	19,5	22,5	1	270	386	173	57	26	1	181	346	79	0	67
			2	354	354	89	89		2	291	291	12	12	
23,3	24,0	25,0	1	285	409	180	56	28	1	195	367	86	0	72
			2	374	374	90	90		2	310	310	14	14	
27,8	28,5	25,0	1	293	427	180	47	29	1	196	391	80	0	78
			2	390	390	84	84		2	336	336	88	88	
32,3	33,0	27,5	1	309	453	187	42	31	1	282	423	163	23	85
			2	413	413	82	82		2	384	384	62	62	
36,8	37,5	37,5	1	343	499	211	55	32	1	327	503	178	2	92
			2	456	456	98	98		2	454	454	51	51	
41,3	42,0	57,5	1	403	572	260	91	34	1	398	613	216	1	98
			2	525	525	138	138		2	553	553	60	60	
45,8	46,5	80,0	1	470	654	315	132	35	1	476	734	259	1	105
			2	603	603	182	182		2	663	663	72	72	
50,3	51,0	102,5	1	538	737	369	170	37	1	552	867	295	0	111
			2	682	682	225	225		2	777	777	79	79	

3.3.3.6 **Center ballasts and corner loads DIN 15019**

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



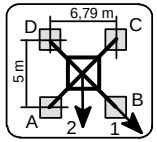


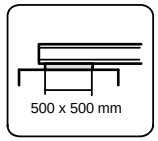
KRE 260.2 **Corner distance 5 m x 6,79 m** **Jib length 55 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	32,5	1	292	394	207	106	25	1	205	403	86	0	53
			2	366	366	134	134		2	336	336	11	11	
18,8	19,5	35,0	1	307	415	215	106	26	1	220	422	95	0	68
			2	385	385	136	136		2	354	354	14	14	
23,3	24,0	37,5	1	321	439	222	104	28	1	234	444	102	0	73
			2	406	406	137	137		2	374	374	16	16	
27,8	28,5	40,0	1	336	463	228	101	29	1	247	469	108	0	79
			2	428	428	136	136		2	395	395	17	17	
32,3	33,0	42,5	1	351	489	235	97	31	1	259	495	112	0	86
			2	451	451	135	135		2	442	442	94	94	
36,8	37,5	45,0	1	367	517	240	90	32	1	358	546	199	12	92
			2	475	475	132	132		2	494	494	64	64	
41,3	42,0	60,0	1	415	578	277	114	34	1	414	647	222	0	99
			2	533	533	159	159		2	581	581	60	60	
45,8	46,5	82,5	1	482	659	332	154	36	1	492	771	263	0	106
			2	610	610	203	203		2	692	692	71	71	
50,3	51,0	107,5	1	555	749	392	198	37	1	578	907	309	0	112
			2	695	695	252	252		2	814	814	83	83	

3.3.3.7 **Center ballasts and corner loads DIN 15019**

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



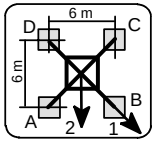


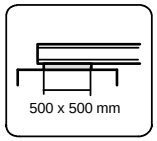
KRE 260.2 **Corner distance 5 m x 6,79 m** **Jib length 60 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	32,5	1	299	401	212	110	25	1	218	426	92	0	53
			2	373	373	138	138		2	355	355	12	12	
18,8	19,5	35,0	1	313	423	220	110	26	1	233	446	100	0	68
			2	393	393	140	140		2	374	374	15	15	
23,3	24,0	37,5	1	327	446	227	108	28	1	247	468	108	0	73
			2	413	413	141	141		2	394	394	17	17	
27,8	28,5	40,0	1	342	471	234	105	29	1	260	492	113	0	80
			2	435	435	141	141		2	425	425	107	107	
32,3	33,0	42,5	1	358	497	240	101	31	1	349	521	204	32	86
			2	458	458	139	139		2	473	473	79	79	
36,8	37,5	47,5	1	380	531	252	101	32	1	378	594	202	0	93
			2	489	489	143	143		2	533	533	54	54	
41,3	42,0	67,5	1	440	604	301	137	34	1	447	709	236	0	99
			2	558	558	182	182		2	633	633	62	62	
45,8	46,5	90,0	1	507	686	356	177	35	1	524	836	276	0	106
			2	636	636	226	226		2	745	745	72	72	
50,3	51,0	115,0	1	581	776	416	221	37	1	609	975	320	0	112
			2	722	722	275	275		2	868	868	83	83	

3.3.4.1 **Center ballasts and corner loads DIN 15019**

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



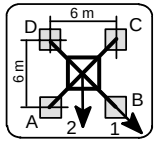


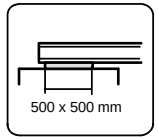
KRE 260.2 **Corner distance 6 m x 6 m** **Jib length 30 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	17,5	1	183	329	183	37	24	1	109	243	109	0	50
			2	286	286	79	79		2	201	201	29	29	
18,8	19,5	17,5	1	187	343	187	31	26	1	111	258	111	0	64
			2	298	298	77	77		2	211	211	29	29	
23,3	24,0	17,5	1	192	359	192	25	27	1	112	273	112	0	69
			2	310	310	74	74		2	221	221	28	28	
27,8	28,5	17,5	1	196	376	196	17	29	1	113	291	113	0	76
			2	323	323	69	69		2	244	244	99	99	
32,3	33,0	20,0	1	207	400	207	14	30	1	182	326	182	39	82
			2	344	344	71	71		2	284	284	81	81	
36,8	37,5	30,0	1	237	445	237	28	32	1	212	401	212	23	89
			2	384	384	89	89		2	345	345	78	78	
41,3	42,0	40,0	1	266	491	266	41	33	1	241	480	241	3	95
			2	425	425	107	107		2	410	410	72	72	
45,8	46,5	50,0	1	296	539	296	53	35	1	249	586	249	0	102
			2	468	468	124	124		2	478	478	64	64	
50,3	51,0	65,0	1	338	601	338	75	36	1	273	705	273	0	109
			2	524	524	152	152		2	562	562	64	64	
54,8	55,5	85,0	1	392	678	392	107	38	1	318	835	318	0	115
			2	594	594	191	191		2	663	663	72	72	
59,3	60,0	105,0	1	455	759	455	150	41	1	373	972	373	0	126
			2	670	670	239	239		2	773	773	86	86	

3.3.4.2 **Center ballasts and corner loads DIN 15019**

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



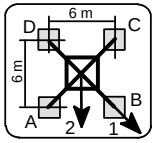


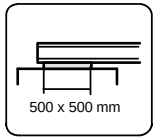
KRE 260.2 **Corner distance 6 m x 6 m** **Jib length 35 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	15,0	1	184	328	184	40	24	1	96	244	96	0	51
			2	286	286	82	82		2	195	195	23	23	
18,8	19,5	15,0	1	189	343	189	35	26	1	98	258	98	0	65
			2	298	298	80	80		2	205	205	22	22	
23,3	24,0	15,0	1	193	359	193	28	27	1	99	274	99	0	70
			2	310	310	76	76		2	218	218	119	119	
27,8	28,5	15,0	1	198	376	198	20	29	1	100	292	100	0	76
			2	324	324	72	72		2	249	249	97	97	
32,3	33,0	17,5	1	209	401	209	17	30	1	184	333	184	35	83
			2	344	344	73	73		2	289	289	78	78	
36,8	37,5	25,0	1	232	439	232	25	32	1	207	402	207	12	89
			2	379	379	86	86		2	345	345	69	69	
41,3	42,0	35,0	1	262	486	262	38	33	1	228	491	228	0	96
			2	420	420	103	103		2	410	410	63	63	
45,8	46,5	47,5	1	297	540	297	55	35	1	244	601	244	0	102
			2	469	469	126	126		2	485	485	60	60	
50,3	51,0	65,0	1	346	609	346	83	36	1	280	722	280	0	109
			2	532	532	160	160		2	576	576	65	65	
54,8	55,5	85,0	1	400	686	400	114	38	1	324	854	324	0	116
			2	602	602	198	198		2	677	677	73	73	
59,3	60,0	105,0	1	462	767	462	157	41	1	379	992	379	0	126
			2	678	678	247	247		2	788	788	87	87	

3.3.4.3 **Center ballasts and corner loads DIN 15019**

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



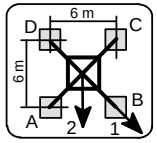


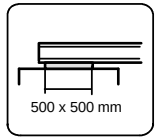
KRE 260.2 **Corner distance 6 m x 6 m** **Jib length 40 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	12,5	1	184	325	184	43	24	1	84	245	84	0	51
			2	283	283	84	84		2	197	197	43	43	
18,8	19,5	12,5	1	188	339	188	37	26	1	85	259	85	0	65
			2	295	295	81	81		2	208	208	41	41	
23,3	24,0	12,5	1	193	355	193	30	27	1	86	275	86	0	70
			2	308	308	78	78		2	221	221	115	115	
27,8	28,5	12,5	1	197	372	197	22	29	1	86	293	86	0	77
			2	321	321	73	73		2	252	252	92	92	
32,3	33,0	15,0	1	208	397	208	19	30	1	183	339	183	28	83
			2	342	342	74	74		2	293	293	73	73	
36,8	37,5	25,0	1	238	442	238	33	32	1	213	415	213	11	90
			2	382	382	93	93		2	356	356	70	70	
41,3	42,0	35,0	1	267	489	267	46	34	1	231	506	231	0	97
			2	424	424	111	111		2	421	421	63	63	
45,8	46,5	47,5	1	303	543	303	63	35	1	247	618	247	0	103
			2	473	473	133	133		2	497	497	60	60	
50,3	51,0	65,0	1	351	612	351	90	37	1	282	740	282	0	110
			2	536	536	167	167		2	588	588	65	65	
54,8	55,5	87,5	1	412	696	412	128	38	1	337	874	337	0	116
			2	613	613	211	211		2	696	696	78	78	
59,3	60,0	105,0	1	468	771	468	165	41	1	379	1013	379	0	127
			2	683	683	253	253		2	801	801	85	85	

3.3.4.4 **Center ballasts and corner loads DIN 15019**

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



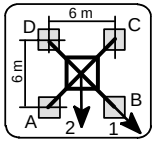


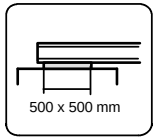
KRE 260.2 **Corner distance 6 m x 6 m** **Jib length 45 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	10,0	1	183	327	183	39	25	1	90	281	90	0	52
			2	285	285	81	81		2	215	215	16	16	
18,8	19,5	10,0	1	187	342	187	33	26	1	90	299	90	0	66
			2	297	297	78	78		2	225	225	14	14	
23,3	24,0	10,0	1	192	358	192	26	28	1	89	319	89	0	71
			2	309	309	75	75		2	237	237	11	11	
27,8	28,5	10,0	1	197	375	197	18	29	1	87	341	87	0	78
			2	323	323	70	70		2	266	266	77	77	
32,3	33,0	12,5	1	207	400	207	15	31	1	97	365	97	0	84
			2	344	344	71	71		2	308	308	57	57	
36,8	37,5	17,5	1	224	433	224	16	32	1	175	449	175	0	91
			2	372	372	77	77		2	358	358	41	41	
41,3	42,0	35,0	1	273	499	273	47	34	1	219	552	219	0	97
			2	433	433	113	113		2	443	443	52	52	
45,8	46,5	52,5	1	321	566	321	76	35	1	259	666	259	0	104
			2	494	494	148	148		2	532	532	60	60	
50,3	51,0	70,0	1	369	636	369	103	37	1	293	791	293	0	111
			2	558	558	181	181		2	624	624	65	65	
54,8	55,5	92,5	1	430	720	430	140	38	1	346	928	346	0	117
			2	635	635	225	225		2	733	733	77	77	
59,3	60,0	112,5	1	492	802	492	183	41	1	400	1068	400	0	128
			2	711	711	274	274		2	845	845	90	90	

3.3.4.5 **Center ballasts and corner loads DIN 15019**

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



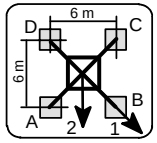


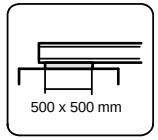
KRE 260.2 **Corner distance 6 m x 6 m** **Jib length 50 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	10,0	1	186	331	186	40	25	1	76	310	76	0	52
			2	288	288	83	83		2	225	225	6	6	
18,8	19,5	12,5	1	196	352	196	41	26	1	89	328	89	0	67
			2	307	307	86	86		2	243	243	10	10	
23,3	24,0	12,5	1	201	368	201	34	28	1	88	349	88	0	72
			2	319	319	83	83		2	254	254	8	8	
27,8	28,5	15,0	1	212	392	212	31	29	1	98	371	98	0	78
			2	339	339	84	84		2	290	290	83	83	
32,3	33,0	17,5	1	223	417	223	28	31	1	107	396	107	0	85
			2	360	360	85	85		2	332	332	63	63	
36,8	37,5	20,0	1	233	444	233	23	32	1	179	475	179	0	92
			2	382	382	84	84		2	376	376	40	40	
41,3	42,0	37,5	1	282	510	282	54	34	1	223	581	223	0	98
			2	443	443	120	120		2	462	462	51	51	
45,8	46,5	55,0	1	330	578	330	82	35	1	262	696	262	0	105
			2	505	505	155	155		2	551	551	59	59	
50,3	51,0	75,0	1	385	654	385	115	37	1	308	822	308	0	111
			2	575	575	194	194		2	650	650	69	69	
54,8	55,5	97,5	1	445	738	445	152	38	1	360	961	360	0	118
			2	653	653	238	238		2	760	760	81	81	
59,3	60,0	115,0	1	501	814	501	189	41	1	401	1102	401	0	128
			2	722	722	280	280		2	866	866	87	87	

3.3.4.6 **Center ballasts and corner loads DIN 15019**

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



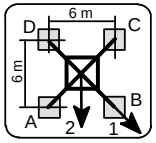


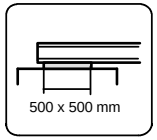
KRE 260.2 **Corner distance 6 m x 6 m** **Jib length 55 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	22,5	1	225	361	225	88	25	1	106	382	106	0	53
			2	321	321	128	128		2	284	284	13	13	
18,8	19,5	22,5	1	229	376	229	82	26	1	106	401	106	0	68
			2	333	333	125	125		2	295	295	11	11	
23,3	24,0	25,0	1	240	399	240	81	28	1	117	422	117	0	73
			2	352	352	128	128		2	313	313	15	15	
27,8	28,5	25,0	1	245	417	245	73	29	1	114	445	114	0	79
			2	366	366	123	123		2	333	333	106	106	
32,3	33,0	27,5	1	255	442	255	69	31	1	123	470	123	0	86
			2	387	387	124	124		2	375	375	86	86	
36,8	37,5	30,0	1	266	469	266	64	32	1	229	507	229	0	92
			2	409	409	123	123		2	420	420	62	62	
41,3	42,0	40,0	1	296	516	296	76	34	1	235	614	235	0	99
			2	451	451	140	140		2	488	488	54	54	
45,8	46,5	57,5	1	344	584	344	104	36	1	272	732	272	0	106
			2	514	514	175	175		2	578	578	60	60	
50,3	51,0	77,5	1	399	660	399	137	37	1	317	861	317	0	112
			2	583	583	214	214		2	678	678	69	69	
54,8	55,5	100,0	1	459	745	459	174	39	1	368	1002	368	0	119
			2	661	661	257	257		2	789	789	80	80	

3.3.4.7 **Center ballasts and corner loads DIN 15019**

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



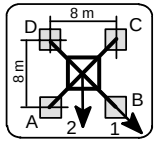


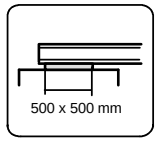
KRE 260.2 **Corner distance 6 m x 6 m** **Jib length 60 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	20,0	1	224	363	224	86	25	1	103	404	103	0	53
			2	322	322	127	127		2	296	296	10	10	
18,8	19,5	22,5	1	235	384	235	87	26	1	115	423	115	0	68
			2	340	340	130	130		2	313	313	14	14	
23,3	24,0	22,5	1	240	400	240	79	28	1	114	444	114	0	73
			2	353	353	126	126		2	325	325	11	11	
27,8	28,5	25,0	1	251	424	251	77	29	1	124	467	124	0	80
			2	373	373	128	128		2	361	361	96	96	
32,3	33,0	27,5	1	261	449	261	74	31	1	133	493	133	0	86
			2	394	394	129	129		2	403	403	75	75	
36,8	37,5	30,0	1	272	476	272	68	32	1	217	564	217	0	93
			2	416	416	128	128		2	449	449	50	50	
41,3	42,0	45,0	1	314	536	314	93	34	1	247	673	247	0	99
			2	471	471	157	157		2	530	530	54	54	
45,8	46,5	62,5	1	362	604	362	121	35	1	283	793	283	0	106
			2	533	533	192	192		2	620	620	60	60	
50,3	51,0	82,5	1	417	680	417	154	37	1	327	925	327	0	112
			2	603	603	231	231		2	722	722	67	67	
54,8	55,5	105,0	1	478	765	478	190	38	1	375	1070	375	0	119
			2	681	681	275	275		2	834	834	77	77	

3.3.5.1 **Center ballasts and corner loads DIN 15019**

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



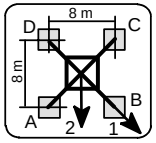


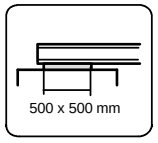
KRE 480 **Corner distance 8 m x 8 m** **Jib length 30 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	0,0	1	175	285	175	65	26	1	107	199	107	15	54
			2	252	252	97	97		2	172	172	42	42	
18,8	19,5	0,0	1	182	299	182	64	28	1	114	212	114	17	70
			2	265	265	98	98		2	183	183	45	45	
23,3	24,0	0,0	1	186	312	186	60	30	1	119	222	119	15	75
			2	275	275	97	97		2	198	198	125	125	
27,8	28,5	0,0	1	191	326	191	56	31	1	166	245	166	86	81
			2	286	286	95	95		2	222	222	110	110	
32,3	33,0	0,0	1	195	340	195	50	33	1	170	280	170	60	88
			2	298	298	93	93		2	248	248	92	92	
36,8	37,5	0,0	1	200	356	200	44	34	1	175	319	175	31	94
			2	310	310	90	90		2	277	277	73	73	
41,3	42,0	0,0	1	204	372	204	36	36	1	178	361	178	0	101
			2	323	323	86	86		2	307	307	52	52	
45,8	46,5	7,5	1	228	409	228	47	37	1	185	442	185	0	108
			2	356	356	100	100		2	359	359	47	47	
50,3	51,0	20,0	1	264	459	264	68	39	1	212	529	212	0	114
			2	402	402	125	125		2	426	426	51	51	
54,8	55,5	32,5	1	299	511	299	88	40	1	237	624	237	0	121
			2	449	449	150	150		2	495	495	54	54	
59,3	60,0	47,5	1	344	572	344	116	42	1	273	729	273	0	129
			2	505	505	183	183		2	577	577	61	61	
63,8	64,5	65,0	1	395	641	395	149	44	1	318	842	318	0	137
			2	569	569	221	221		2	667	667	72	72	
68,3	69,0	82,5	1	446	712	446	180	46	1	357	968	357	0	145
			2	634	634	257	257		2	763	763	78	78	
72,8	73,5	102,5	1	504	789	504	218	48	1	407	1100	407	0	155
			2	706	706	302	302		2	867	867	90	90	
77,3	78,0	122,5	1	562	869	562	254	51	1	452	1243	452	0	164
			2	779	779	344	344		2	976	976	97	97	

3.3.5.2 **Center ballasts and corner loads DIN 15019**

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



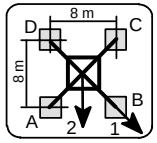


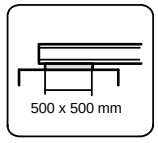
KRE 480 **Corner distance 8 m x 8 m** **Jib length 35 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	0,0	1	182	291	182	74	26	1	107	199	107	15	54
			2	259	259	106	106		2	172	172	42	42	
18,8	19,5	0,0	1	189	306	189	73	28	1	114	212	114	17	70
			2	272	272	107	107		2	188	188	141	141	
23,3	24,0	0,0	1	194	319	194	69	30	1	169	224	169	114	75
			2	282	282	106	106		2	208	208	130	130	
27,8	28,5	0,0	1	199	332	199	65	31	1	174	257	174	90	82
			2	293	293	104	104		2	232	232	115	115	
32,3	33,0	0,0	1	203	347	203	59	33	1	178	292	178	64	88
			2	305	305	101	101		2	259	259	97	97	
36,8	37,5	0,0	1	208	363	208	53	34	1	183	331	183	34	95
			2	317	317	98	98		2	288	288	78	78	
41,3	42,0	0,0	1	212	379	212	45	36	1	187	373	187	1	102
			2	330	330	94	94		2	319	319	56	56	
45,8	46,5	5,0	1	229	410	229	49	37	1	182	453	182	0	108
			2	357	357	102	102		2	364	364	44	44	
50,3	51,0	17,5	1	265	460	265	70	39	1	209	541	209	0	115
			2	403	403	127	127		2	431	431	49	49	
54,8	55,5	32,5	1	307	518	307	96	40	1	245	638	245	0	121
			2	457	457	158	158		2	508	508	57	57	
59,3	60,0	47,5	1	352	580	352	123	42	1	282	743	282	0	129
			2	513	513	190	190		2	590	590	64	64	
63,8	64,5	65,0	1	402	649	402	156	44	1	326	858	326	0	137
			2	577	577	228	228		2	681	681	74	74	
68,3	69,0	82,5	1	453	720	453	186	46	1	364	986	364	0	146
			2	642	642	265	265		2	777	777	80	80	
72,8	73,5	102,5	1	511	798	511	224	49	1	413	1120	413	0	155
			2	714	714	308	308		2	882	882	90	90	
77,3	78,0	125,0	1	576	884	576	267	51	1	469	1264	469	0	165
			2	794	794	357	357		2	998	998	104	104	

3.3.5.3 **Center ballasts and corner loads DIN 15019**

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



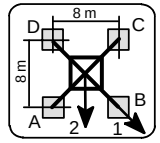


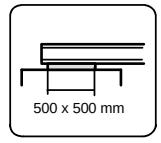
KRE 480 **Corner distance 8 m x 8 m** **Jib length 40 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	0,0	1	188	294	188	82	26	1	124	207	124	42	55
			2	263	263	113	113		2	183	183	66	66	
18,8	19,5	0,0	1	195	309	195	81	28	1	131	221	131	42	71
			2	276	276	114	114		2	196	196	144	144	
23,3	24,0	0,0	1	200	322	200	77	30	1	175	234	175	116	76
			2	286	286	113	113		2	216	216	133	133	
27,8	28,5	0,0	1	204	336	204	73	31	1	179	267	179	92	83
			2	297	297	111	111		2	241	241	117	117	
32,3	33,0	0,0	1	209	350	209	67	33	1	184	303	184	65	89
			2	309	309	109	109		2	268	268	100	100	
36,8	37,5	0,0	1	213	366	213	60	34	1	188	342	188	35	96
			2	321	321	105	105		2	297	297	80	80	
41,3	42,0	0,0	1	218	383	218	53	36	1	193	384	193	2	102
			2	335	335	101	101		2	328	328	58	58	
45,8	46,5	5,0	1	235	414	235	56	38	1	187	465	187	0	109
			2	361	361	108	108		2	374	374	46	46	
50,3	51,0	17,5	1	271	464	271	77	39	1	214	554	214	0	115
			2	408	408	134	134		2	442	442	50	50	
54,8	55,5	32,5	1	313	523	313	103	41	1	249	652	249	0	122
			2	461	461	164	164		2	518	518	57	57	
59,3	60,0	47,5	1	357	584	357	130	43	1	285	759	285	0	130
			2	518	518	197	197		2	601	601	64	64	
63,8	64,5	65,0	1	408	654	408	162	44	1	328	876	328	0	138
			2	582	582	234	234		2	693	693	73	73	
68,3	69,0	85,0	1	465	731	465	199	46	1	378	1005	378	0	147
			2	653	653	277	277		2	796	796	85	85	
72,8	73,5	105,0	1	523	810	523	237	49	1	426	1141	426	0	156
			2	726	726	321	321		2	901	901	95	95	
77,3	78,0	125,0	1	581	890	581	273	51	1	469	1287	469	0	165
			2	799	799	363	363		2	1011	1011	101	101	

3.3.5.4 **Center ballasts and corner loads DIN 15019**

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



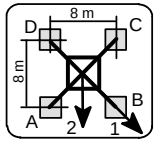


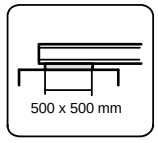
KRE 480 **Corner distance 8 m x 8 m** **Jib length 45 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	0,0	1	194	302	194	85	27	1	126	232	126	20	56
			2	270	270	117	117		2	201	201	51	51	
18,8	19,5	0,0	1	201	317	201	84	29	1	133	246	133	20	72
			2	283	283	118	118		2	213	213	53	53	
23,3	24,0	0,0	1	205	330	205	80	30	1	137	258	137	17	77
			2	293	293	117	117		2	233	233	128	128	
27,8	28,5	0,0	1	210	344	210	76	32	1	185	288	185	82	83
			2	305	305	115	115		2	258	258	112	112	
32,3	33,0	0,0	1	214	359	214	70	33	1	189	324	189	54	90
			2	316	316	112	112		2	285	285	94	94	
36,8	37,5	0,0	1	219	375	219	63	35	1	194	364	194	24	96
			2	329	329	109	109		2	314	314	74	74	
41,3	42,0	0,0	1	223	392	223	55	36	1	188	417	188	0	103
			2	342	342	104	104		2	346	346	51	51	
45,8	46,5	7,5	1	247	429	247	64	38	1	193	500	193	0	110
			2	375	375	118	118		2	399	399	45	45	
50,3	51,0	20,0	1	282	480	282	85	39	1	219	592	219	0	116
			2	422	422	143	143		2	467	467	48	48	
54,8	55,5	35,0	1	325	539	325	110	41	1	253	691	253	0	123
			2	476	476	173	173		2	544	544	55	55	
59,3	60,0	52,5	1	375	607	375	144	43	1	301	800	301	0	131
			2	539	539	212	212		2	633	633	67	67	
63,8	64,5	70,0	1	426	677	426	176	45	1	343	919	343	0	139
			2	603	603	249	249		2	726	726	76	76	
68,3	69,0	90,0	1	483	755	483	212	47	1	391	1051	391	0	147
			2	675	675	291	291		2	830	830	87	87	
72,8	73,5	110,0	1	541	833	541	249	49	1	439	1188	439	0	157
			2	748	748	335	335		2	936	936	96	96	

3.3.5.5 **Center ballasts and corner loads DIN 15019**

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



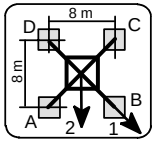


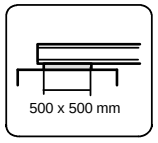
KRE 480 **Corner distance 8 m x 8 m** **Jib length 50 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	0,0	1	196	306	196	87	27	1	126	243	126	10	56
			2	274	274	119	119		2	209	209	44	44	
18,8	19,5	0,0	1	203	321	203	86	29	1	133	257	133	9	73
			2	286	286	120	120		2	221	221	46	46	
23,3	24,0	0,0	1	208	334	208	82	30	1	138	269	138	6	77
			2	297	297	119	119		2	241	241	124	124	
27,8	28,5	0,0	1	212	348	212	77	32	1	187	300	187	75	84
			2	308	308	117	117		2	267	267	108	108	
32,3	33,0	0,0	1	217	363	217	71	33	1	192	336	192	48	91
			2	320	320	114	114		2	294	294	90	90	
36,8	37,5	0,0	1	222	379	222	64	35	1	197	376	197	17	97
			2	333	333	110	110		2	324	324	69	69	
41,3	42,0	0,0	1	226	396	226	56	36	1	184	437	184	0	104
			2	346	346	106	106		2	356	356	47	47	
45,8	46,5	10,0	1	256	440	256	72	38	1	200	522	200	0	110
			2	386	386	126	126		2	415	415	46	46	
50,3	51,0	22,5	1	291	491	291	92	39	1	226	615	226	0	117
			2	432	432	151	151		2	484	484	49	49	
54,8	55,5	37,5	1	334	550	334	117	41	1	259	715	259	0	124
			2	486	486	181	181		2	561	561	56	56	
59,3	60,0	55,0	1	384	618	384	151	43	1	306	826	306	0	132
			2	550	550	219	219		2	651	651	67	67	
63,8	64,5	72,5	1	435	688	435	182	45	1	348	946	348	0	139
			2	614	614	256	256		2	744	744	76	76	
68,3	69,0	92,5	1	492	766	492	218	47	1	395	1079	395	0	148
			2	686	686	298	298		2	849	849	86	86	
72,8	73,5	112,5	1	550	845	550	255	49	1	442	1217	442	0	157
			2	759	759	342	342		2	956	956	95	95	

3.3.5.6 **Center ballasts and corner loads DIN 15019**

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



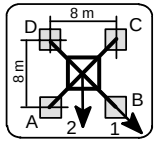


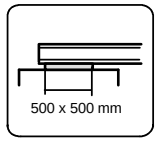
KRE 480 **Corner distance 8 m x 8 m** **Jib length 55 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	0,0	1	204	307	204	101	27	1	112	288	112	0	57
			2	277	277	131	131		2	230	230	26	26	
18,8	19,5	0,0	1	211	322	211	100	29	1	119	302	119	0	73
			2	290	290	133	133		2	242	242	28	28	
23,3	24,0	0,0	1	216	335	216	96	30	1	120	318	120	0	78
			2	300	300	131	131		2	256	256	125	125	
27,8	28,5	0,0	1	220	349	220	91	32	1	121	335	121	0	85
			2	312	312	129	129		2	282	282	108	108	
32,3	33,0	0,0	1	225	364	225	85	33	1	200	355	200	44	91
			2	323	323	126	126		2	310	310	90	90	
36,8	37,5	0,0	1	229	380	229	78	35	1	204	396	204	13	98
			2	336	336	122	122		2	340	340	69	69	
41,3	42,0	0,0	1	234	398	234	70	37	1	187	462	187	0	105
			2	350	350	118	118		2	372	372	46	46	
45,8	46,5	10,0	1	263	441	263	85	38	1	203	548	203	0	111
			2	389	389	138	138		2	432	432	45	45	
50,3	51,0	25,0	1	305	499	305	112	40	1	240	642	240	0	118
			2	442	442	169	169		2	508	508	53	53	
54,8	55,5	40,0	1	348	558	348	137	41	1	272	745	272	0	124
			2	496	496	199	199		2	586	586	59	59	
59,3	60,0	57,5	1	398	627	398	170	43	1	318	857	318	0	132
			2	560	560	237	237		2	676	676	70	70	
63,8	64,5	75,0	1	449	697	449	201	45	1	359	980	359	0	140
			2	624	624	274	274		2	771	771	78	78	
68,3	69,0	95,0	1	506	775	506	237	47	1	405	1116	405	0	149
			2	697	697	316	316		2	876	876	87	87	
72,8	73,5	115,0	1	564	854	564	274	49	1	450	1256	450	0	158
			2	769	769	359	359		2	983	983	95	95	

3.3.5.7 **Center ballasts and corner loads DIN 15019**

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



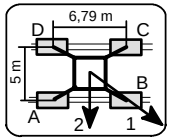


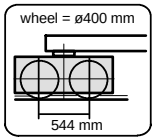
KRE 480 **Corner distance 8 m x 8 m** **Jib length 60 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,3	15,0	0,0	1	210	314	210	106	27	1	124	304	124	0	57
			2	284	284	136	136		2	246	246	31	31	
18,8	19,5	0,0	1	217	329	217	105	29	1	131	319	131	0	74
			2	296	296	138	138		2	258	258	33	33	
23,3	24,0	0,0	1	222	342	222	101	30	1	133	334	133	0	79
			2	307	307	136	136		2	279	279	119	119	
27,8	28,5	0,0	1	226	356	226	96	32	1	133	351	133	0	85
			2	318	318	134	134		2	305	305	103	103	
32,3	33,0	0,0	1	231	371	231	90	33	1	208	384	208	32	92
			2	330	330	131	131		2	333	333	84	84	
36,8	37,5	0,0	1	235	387	235	83	35	1	213	425	213	0	98
			2	343	343	128	128		2	363	363	63	63	
41,3	42,0	0,0	1	240	405	240	75	36	1	182	505	182	0	105
			2	356	356	123	123		2	396	396	39	39	
45,8	46,5	12,5	1	276	455	276	97	38	1	210	593	210	0	112
			2	402	402	149	149		2	463	463	44	44	
50,3	51,0	27,5	1	318	512	318	123	39	1	246	689	246	0	118
			2	455	455	180	180		2	539	539	52	52	
54,8	55,5	45,0	1	366	578	366	154	41	1	290	794	290	0	125
			2	516	516	216	216		2	624	624	63	63	
59,3	60,0	60,0	1	411	640	411	181	43	1	322	909	322	0	133
			2	573	573	248	248		2	709	709	67	67	
63,8	64,5	80,0	1	468	717	468	218	45	1	374	1033	374	0	141
			2	644	644	291	291		2	810	810	80	80	
68,3	69,0	100,0	1	525	796	525	254	47	1	418	1173	418	0	149
			2	716	716	333	333		2	917	917	88	88	
72,8	73,5	120,0	1	583	875	583	291	49	1	463	1316	463	0	159
			2	789	789	376	376		2	1025	1025	95	95	

3.4.1.1 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage
without climbing drive



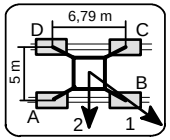


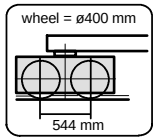
UW 260.1 **Corner distance 5 m x 6,79 m** **Jib length 30 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	32,5	1	268	377	175	66	24	1	193	283	116	25	50
			2	346	346	97	97		2	258	258	50	50	
19,3	20,0	32,5	1	275	392	177	60	26	1	199	295	118	22	64
			2	360	360	93	93		2	269	269	49	49	
23,8	24,5	32,5	1	283	408	178	53	27	1	206	309	120	18	71
			2	374	374	88	88		2	280	280	46	46	
28,3	29,0	32,5	1	292	426	179	44	29	1	245	327	176	94	77
			2	389	389	82	82		2	304	304	117	117	
32,8	33,5	40,0	1	319	464	198	53	30	1	281	394	186	73	84
			2	424	424	93	93		2	363	363	104	104	
37,3	38,0	50,0	1	354	509	222	67	32	1	325	472	201	54	91
			2	466	466	110	110		2	431	431	95	95	
41,8	42,5	62,5	1	395	563	253	85	33	1	376	560	221	37	97
			2	516	516	131	131		2	509	509	88	88	

3.4.1.2 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



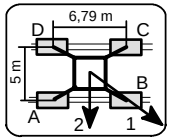


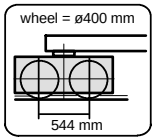
UW 260.1 **Corner distance 5 m x 6,79 m** **Jib length 35 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	30,0	1	269	376	178	70	24	1	186	277	110	18	51
			2	346	346	100	100		2	252	252	44	44	
19,3	20,0	30,0	1	276	392	179	64	26	1	193	290	112	15	65
			2	360	360	96	96		2	263	263	42	42	
23,8	24,5	30,0	1	284	408	180	56	27	1	200	303	114	11	71
			2	374	374	91	91		2	274	274	40	40	
28,3	29,0	30,0	1	293	426	181	48	29	1	248	334	175	90	78
			2	389	389	84	84		2	310	310	113	113	
32,8	33,5	37,5	1	321	464	199	56	30	1	284	401	186	69	85
			2	424	424	96	96		2	369	369	101	101	
37,3	38,0	47,5	1	355	510	224	69	32	1	328	480	201	49	91
			2	467	467	112	112		2	438	438	91	91	
41,8	42,5	60,0	1	396	563	255	87	33	1	380	569	221	31	98
			2	517	517	134	134		2	517	517	84	84	

3.4.1.3 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



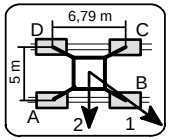


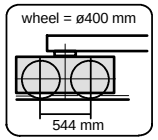
UW 260.1 **Corner distance 5 m x 6,79 m** **Jib length 40 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	27,5	1	267	372	178	73	24	1	193	275	124	43	51
			2	343	343	102	102		2	252	252	65	65	
19,3	20,0	27,5	1	275	388	179	66	26	1	201	289	126	38	65
			2	356	356	98	98		2	264	264	62	62	
23,8	24,5	27,5	1	283	404	180	59	27	1	208	304	127	32	72
			2	371	371	93	93		2	277	277	58	58	
28,3	29,0	27,5	1	291	422	181	50	29	1	249	339	173	83	79
			2	386	386	86	86		2	314	314	108	108	
32,8	33,5	35,0	1	319	460	200	58	30	1	286	408	183	61	85
			2	421	421	98	98		2	374	374	95	95	
37,3	38,0	45,0	1	353	506	224	72	32	1	330	487	198	41	92
			2	464	464	114	114		2	443	443	85	85	
41,8	42,5	57,5	1	395	560	255	89	34	1	382	577	218	23	98
			2	514	514	135	135		2	523	523	77	77	

3.4.1.4 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



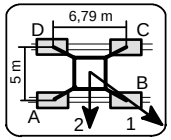


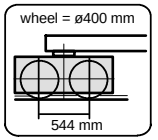
UW 260.1 **Corner distance 5 m x 6,79 m** **Jib length 45 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	25,0	1	267	375	176	69	25	1	195	306	107	8	52
			2	345	345	99	99		2	274	274	34	34	
19,3	20,0	25,0	1	275	390	178	62	26	1	198	325	103	8	66
			2	358	358	94	94		2	286	286	31	31	
23,8	24,5	25,0	1	283	407	179	55	28	1	199	347	99	8	73
			2	373	373	89	89		2	300	300	27	27	
28,3	29,0	25,0	1	292	425	179	46	29	1	200	370	93	8	79
			2	388	388	83	83		2	331	331	90	90	
32,8	33,5	27,5	1	307	451	185	41	31	1	279	417	163	25	86
			2	411	411	81	81		2	379	379	64	64	
37,3	38,0	40,0	1	348	504	216	60	32	1	330	503	184	11	93
			2	460	460	103	103		2	455	455	59	59	
41,8	42,5	60,0	1	408	577	265	96	34	1	401	613	222	10	99
			2	530	530	143	143		2	554	554	69	69	

3.4.1.5 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



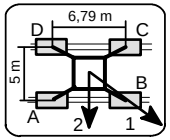


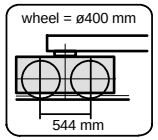
UW 260.1 **Corner distance 5 m x 6,79 m** **Jib length 50 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	25,0	1	270	379	179	70	25	1	186	337	88	8	52
			2	349	349	100	100		2	287	287	22	22	
19,3	20,0	25,0	1	278	395	180	64	26	1	188	356	84	8	67
			2	362	362	96	96		2	299	299	19	19	
23,8	24,5	27,5	1	293	418	187	62	28	1	202	378	92	8	74
			2	383	383	97	97		2	319	319	21	21	
28,3	29,0	30,0	1	308	442	194	59	29	1	215	402	98	8	80
			2	405	405	96	96		2	357	357	94	94	
32,8	33,5	32,5	1	323	468	200	54	31	1	299	446	174	27	87
			2	428	428	95	95		2	405	405	68	68	
37,3	38,0	45,0	1	364	521	231	73	32	1	349	532	195	12	93
			2	477	477	117	117		2	482	482	63	63	

3.4.1.6 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



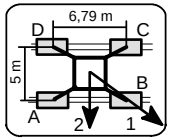


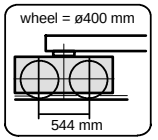
UW 260.1 **Corner distance 5 m x 6,79 m** **Jib length 55 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	37,5	1	307	409	220	118	25	1	224	413	104	8	53
			2	380	380	147	147		2	350	350	24	24	
19,3	20,0	37,5	1	314	424	222	112	26	1	226	433	100	8	68
			2	394	394	142	142		2	363	363	21	21	
23,8	24,5	40,0	1	329	448	229	110	28	1	240	455	107	8	74
			2	415	415	143	143		2	383	383	23	23	
28,3	29,0	42,5	1	344	472	235	107	29	1	253	479	113	8	81
			2	437	437	142	142		2	408	408	121	121	
32,8	33,5	45,0	1	359	499	242	102	31	1	265	506	117	8	88
			2	460	460	141	141		2	457	457	94	94	
37,3	38,0	47,5	1	375	526	247	96	33	1	368	563	204	9	94
			2	485	485	138	138		2	509	509	63	63	

3.4.1.7 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



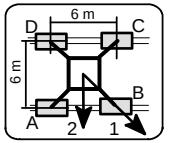


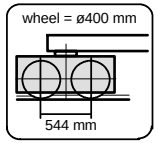
UW 260.1 **Corner distance 5 m x 6,79 m** **Jib length 60 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	35,0	1	307	410	220	116	25	1	225	436	97	8	53
			2	381	381	145	145		2	364	364	19	19	
19,3	20,0	37,5	1	321	432	227	116	26	1	239	456	106	8	68
			2	401	401	147	147		2	383	383	22	22	
23,8	24,5	40,0	1	335	455	234	114	28	1	253	478	113	8	75
			2	422	422	148	148		2	402	402	24	24	
28,3	29,0	42,5	1	350	480	241	111	29	1	266	503	119	8	81
			2	444	444	147	147		2	439	439	107	107	
32,8	33,5	45,0	1	366	506	247	107	31	1	359	538	208	30	88
			2	467	467	146	146		2	489	489	79	79	
37,3	38,0	52,5	1	394	546	265	113	32	1	391	622	208	8	95
			2	504	504	155	155		2	554	554	60	60	

3.4.2.1 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



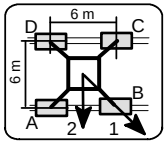


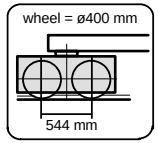
UW 260.1 **Corner distance 6 m x 6 m** **Jib length 30 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	20,0	1	190	338	190	43	24	1	116	253	116	8	50
			2	294	294	86	86		2	210	210	36	36	
19,3	20,0	20,0	1	195	352	195	37	26	1	118	267	118	8	64
			2	306	306	84	84		2	219	219	36	36	
23,8	24,5	20,0	1	199	368	199	31	27	1	119	283	119	8	71
			2	319	319	80	80		2	229	229	35	35	
28,3	29,0	20,0	1	204	385	204	23	29	1	119	301	119	8	77
			2	332	332	76	76		2	257	257	101	101	
32,8	33,5	25,0	1	221	416	221	26	30	1	196	348	196	44	84
			2	359	359	83	83		2	304	304	88	88	
37,3	38,0	35,0	1	251	461	251	40	32	1	226	424	226	28	91
			2	399	399	102	102		2	366	366	86	86	
41,8	42,5	45,0	1	280	507	280	53	33	1	254	504	254	8	97
			2	440	440	120	120		2	431	431	80	80	
46,3	47,0	55,0	1	310	555	310	64	35	1	258	614	258	8	104
			2	483	483	136	136		2	499	499	70	70	

3.4.2.2 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



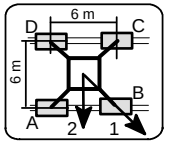


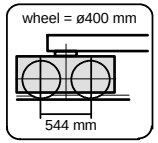
UW 260.1 **Corner distance 6 m x 6 m** **Jib length 35 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	17,5	1	192	337	192	46	24	1	103	254	103	8	51
			2	295	295	89	89		2	204	204	30	30	
19,3	20,0	17,5	1	196	352	196	41	26	1	105	268	105	8	65
			2	306	306	86	86		2	213	213	29	29	
23,8	24,5	17,5	1	201	368	201	34	27	1	106	284	106	8	71
			2	319	319	83	83		2	231	231	121	121	
28,3	29,0	17,5	1	205	385	205	26	29	1	106	302	106	8	78
			2	332	332	79	79		2	262	262	99	99	
32,8	33,5	22,5	1	223	416	223	29	30	1	198	355	198	40	85
			2	359	359	86	86		2	309	309	86	86	
37,3	38,0	30,0	1	246	455	246	37	32	1	221	425	221	16	91
			2	394	394	98	98		2	365	365	76	76	
41,8	42,5	40,0	1	275	501	275	49	33	1	238	518	238	8	98
			2	435	435	116	116		2	431	431	70	70	
46,3	47,0	52,5	1	311	556	311	67	35	1	254	629	254	8	104
			2	484	484	138	138		2	506	506	66	66	

3.4.2.3 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



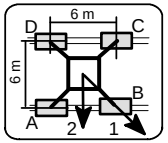


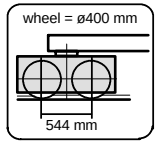
UW 260.1 **Corner distance 6 m x 6 m** **Jib length 40 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	15,0	1	191	333	191	49	24	1	90	254	90	8	51
			2	292	292	91	91		2	205	205	50	50	
19,3	20,0	15,0	1	196	348	196	43	26	1	92	269	92	8	65
			2	304	304	88	88		2	216	216	48	48	
23,8	24,5	15,0	1	200	364	200	36	27	1	93	285	93	8	72
			2	316	316	84	84		2	234	234	117	117	
28,3	29,0	15,0	1	205	381	205	28	29	1	93	304	93	8	79
			2	330	330	80	80		2	266	266	94	94	
32,8	33,5	20,0	1	222	413	222	31	30	1	197	361	197	33	85
			2	357	357	87	87		2	313	313	81	81	
37,3	38,0	27,5	1	245	451	245	39	32	1	220	432	220	9	92
			2	391	391	99	99		2	370	370	71	71	
41,8	42,5	40,0	1	281	504	281	58	34	1	241	533	241	8	98
			2	439	439	123	123		2	442	442	70	70	
46,3	47,0	52,5	1	317	559	317	74	35	1	257	646	257	8	105
			2	488	488	145	145		2	517	517	66	66	

3.4.2.4 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



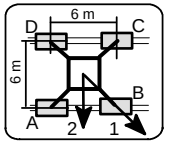


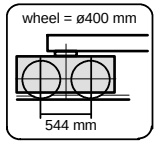
UW 260.1 **Corner distance 6 m x 6 m** **Jib length 45 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	12,5	1	190	336	190	45	25	1	96	291	96	8	52
			2	293	293	88	88		2	223	223	23	23	
19,3	20,0	12,5	1	195	351	195	39	26	1	96	309	96	8	66
			2	305	305	85	85		2	234	234	21	21	
23,8	24,5	12,5	1	200	367	200	32	28	1	95	329	95	8	73
			2	318	318	81	81		2	247	247	102	102	
28,3	29,0	15,0	1	210	391	210	30	29	1	106	352	106	8	79
			2	338	338	83	83		2	286	286	85	85	
32,8	33,5	15,0	1	215	409	215	20	31	1	186	379	186	8	86
			2	352	352	77	77		2	321	321	59	59	
37,3	38,0	25,0	1	244	455	244	34	32	1	198	475	198	8	93
			2	393	393	96	96		2	385	385	54	54	
41,8	42,5	40,0	1	287	514	287	59	34	1	229	580	229	8	99
			2	448	448	125	125		2	464	464	59	59	
46,3	47,0	57,5	1	335	582	335	88	35	1	269	695	269	8	106
			2	510	510	160	160		2	553	553	67	67	

3.4.2.5 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



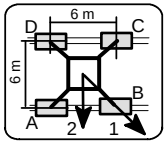


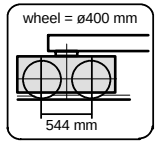
UW 260.1 **Corner distance 6 m x 6 m** **Jib length 50 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	15,0	1	199	346	199	53	25	1	95	320	95	8	52
			2	303	303	96	96		2	240	240	19	19	
19,3	20,0	15,0	1	204	361	204	47	26	1	95	338	95	8	67
			2	315	315	93	93		2	251	251	17	17	
23,8	24,5	15,0	1	209	377	209	40	28	1	94	359	94	8	74
			2	328	328	89	89		2	265	265	102	102	
28,3	29,0	17,5	1	219	401	219	37	29	1	104	382	104	8	80
			2	348	348	91	91		2	304	304	85	85	
32,8	33,5	20,0	1	230	427	230	34	31	1	113	406	113	8	87
			2	369	369	91	91		2	346	346	65	65	
37,3	38,0	27,5	1	253	466	253	41	32	1	202	502	202	8	93
			2	404	404	103	103		2	403	403	54	54	
41,8	42,5	42,5	1	296	526	296	65	34	1	233	608	233	8	100
			2	458	458	133	133		2	483	483	58	58	

3.4.2.6 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



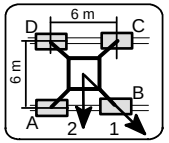


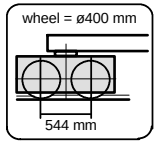
UW 260.1 **Corner distance 6 m x 6 m** **Jib length 55 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	25,0	1	232	370	232	94	25	1	112	392	112	8	53
			2	330	330	135	135		2	292	292	20	20	
19,3	20,0	25,0	1	237	385	237	88	26	1	112	411	112	8	68
			2	342	342	132	132		2	303	303	18	18	
23,8	24,5	27,5	1	248	408	248	87	28	1	123	432	123	8	74
			2	361	361	134	134		2	321	321	21	21	
28,3	29,0	27,5	1	252	426	252	79	29	1	120	455	120	8	81
			2	375	375	130	130		2	347	347	108	108	
32,8	33,5	30,0	1	263	451	263	75	31	1	129	481	129	8	88
			2	396	396	130	130		2	389	389	87	87	
37,3	38,0	32,5	1	274	478	274	70	33	1	227	533	227	8	94
			2	418	418	129	129		2	435	435	63	63	
41,8	42,5	45,0	1	310	532	310	88	34	1	244	642	244	8	101
			2	467	467	153	153		2	509	509	60	60	

3.4.2.7 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



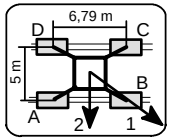


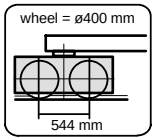
UW 260.1 **Corner distance 6 m x 6 m** **Jib length 60 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	22,5	1	232	371	232	93	25	1	109	414	109	8	53
			2	331	331	133	133		2	304	304	17	17	
19,3	20,0	25,0	1	243	393	243	93	26	1	122	433	122	8	68
			2	349	349	137	137		2	321	321	21	21	
23,8	24,5	25,0	1	247	409	247	86	28	1	120	454	120	8	75
			2	362	362	133	133		2	334	334	115	115	
28,3	29,0	27,5	1	258	433	258	83	29	1	130	478	130	8	81
			2	382	382	134	134		2	374	374	97	97	
32,8	33,5	30,0	1	269	458	269	79	31	1	139	504	139	8	88
			2	403	403	135	135		2	417	417	76	76	
37,3	38,0	32,5	1	280	485	280	74	32	1	215	590	215	8	95
			2	425	425	134	134		2	463	463	51	51	
41,8	42,5	50,0	1	328	551	328	104	34	1	257	701	257	8	101
			2	486	486	170	170		2	550	550	61	61	

3.4.3.1 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



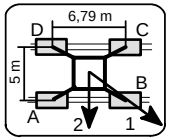


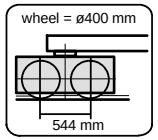
UW 260.2 **Corner distance 5 m x 6,79 m** **Jib length 30 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	30,0	1	268	377	176	67	24	1	193	284	116	25	50
			2	347	347	97	97		2	258	258	50	50	
19,3	20,0	30,0	1	276	392	177	60	26	1	200	296	118	22	64
			2	360	360	93	93		2	269	269	49	49	
23,8	24,5	30,0	1	284	408	178	53	27	1	207	309	120	18	71
			2	374	374	88	88		2	280	280	47	47	
28,3	29,0	30,0	1	292	426	179	45	29	1	245	327	176	94	77
			2	389	389	82	82		2	304	304	117	117	
32,8	33,5	37,5	1	320	464	198	53	30	1	281	394	186	73	84
			2	424	424	93	93		2	363	363	105	105	
37,3	38,0	47,5	1	354	510	223	67	32	1	325	472	201	55	91
			2	466	466	110	110		2	431	431	95	95	
41,8	42,5	60,0	1	395	563	253	85	33	1	377	561	221	37	97
			2	516	516	132	132		2	510	510	88	88	
46,3	47,0	75,0	1	443	624	289	108	35	1	436	661	246	22	104
			2	574	574	158	158		2	598	598	84	84	

3.4.3.2 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



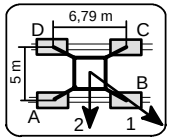


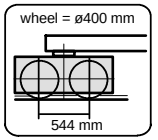
UW 260.2 **Corner distance 5 m x 6,79 m** **Jib length 35 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	27,5	1	269	376	178	70	24	1	187	278	110	19	51
			2	347	347	100	100		2	252	252	44	44	
19,3	20,0	27,5	1	276	392	179	64	26	1	193	290	112	16	65
			2	360	360	96	96		2	263	263	42	42	
23,8	24,5	27,5	1	285	408	180	56	27	1	200	303	114	12	71
			2	374	374	91	91		2	275	275	40	40	
28,3	29,0	27,5	1	293	426	181	48	29	1	248	334	176	90	78
			2	389	389	85	85		2	310	310	114	114	
32,8	33,5	35,0	1	321	464	200	56	30	1	285	402	186	69	85
			2	424	424	96	96		2	369	369	101	101	
37,3	38,0	45,0	1	355	510	224	70	32	1	329	480	201	49	91
			2	467	467	113	113		2	438	438	91	91	
41,8	42,5	57,5	1	396	564	255	88	33	1	380	569	221	32	98
			2	517	517	134	134		2	517	517	84	84	
46,3	47,0	72,5	1	444	625	291	110	35	1	440	670	245	15	104
			2	575	575	160	160		2	606	606	79	79	

3.4.3.3 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



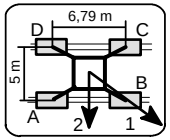


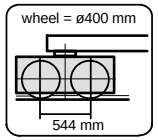
UW 260.2 **Corner distance 5 m x 6,79 m** **Jib length 40 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	25,0	1	267	372	178	73	24	1	193	275	124	43	51
			2	343	343	102	102		2	252	252	65	65	
19,3	20,0	25,0	1	275	388	180	67	26	1	201	289	126	38	65
			2	357	357	98	98		2	265	265	62	62	
23,8	24,5	25,0	1	283	404	181	59	27	1	208	304	128	32	72
			2	371	371	93	93		2	277	277	59	59	
28,3	29,0	25,0	1	292	422	181	50	29	1	249	339	173	83	79
			2	386	386	86	86		2	315	315	108	108	
32,8	33,5	32,5	1	319	461	200	59	30	1	286	408	183	61	85
			2	421	421	98	98		2	374	374	95	95	
37,3	38,0	42,5	1	354	507	225	72	32	1	330	487	198	41	92
			2	464	464	114	114		2	443	443	85	85	
41,8	42,5	55,0	1	395	560	255	89	34	1	382	577	218	23	98
			2	515	515	135	135		2	523	523	77	77	
46,3	47,0	72,5	1	449	629	297	118	35	1	448	685	248	12	105
			2	579	579	168	168		2	619	619	77	77	

3.4.3.4 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



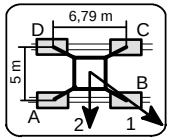


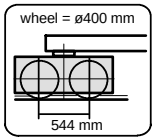
UW 260.2 **Corner distance 5 m x 6,79 m** **Jib length 45 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	22,5	1	267	375	177	69	25	1	196	306	107	8	52
			2	345	345	99	99		2	274	274	34	34	
19,3	20,0	22,5	1	275	390	178	63	26	1	198	325	104	8	66
			2	359	359	94	94		2	287	287	31	31	
23,8	24,5	22,5	1	283	407	179	55	28	1	200	347	99	8	73
			2	373	373	89	89		2	300	300	27	27	
28,3	29,0	22,5	1	292	425	179	46	29	1	201	370	93	8	79
			2	388	388	83	83		2	331	331	90	90	
32,8	33,5	25,0	1	307	451	186	41	31	1	280	417	163	26	86
			2	411	411	81	81		2	379	379	64	64	
37,3	38,0	37,5	1	348	504	216	61	32	1	330	503	184	11	93
			2	461	461	104	104		2	455	455	59	59	
41,8	42,5	57,5	1	408	577	265	97	34	1	401	613	222	10	99
			2	530	530	143	143		2	554	554	69	69	

3.4.3.5 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



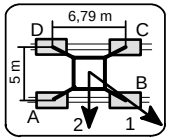


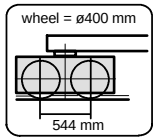
UW 260.2 **Corner distance 5 m x 6,79 m** **Jib length 50 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	22,5	1	271	379	179	70	25	1	186	337	88	8	52
			2	349	349	100	100		2	287	287	22	22	
19,3	20,0	22,5	1	278	395	180	64	26	1	188	356	85	8	67
			2	363	363	96	96		2	300	300	19	19	
23,8	24,5	25,0	1	293	418	187	62	28	1	202	378	92	8	74
			2	383	383	97	97		2	319	319	21	21	
28,3	29,0	27,5	1	308	443	194	59	29	1	215	402	99	8	80
			2	405	405	96	96		2	357	357	95	95	
32,8	33,5	30,0	1	323	469	200	55	31	1	299	446	175	27	87
			2	428	428	95	95		2	405	405	68	68	
37,3	38,0	42,5	1	364	521	231	74	32	1	350	533	195	12	93
			2	478	478	117	117		2	482	482	63	63	
41,8	42,5	62,5	1	424	594	280	109	34	1	421	643	233	11	100
			2	547	547	157	157		2	582	582	72	72	

3.4.3.6 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



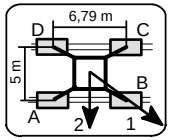


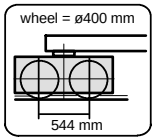
UW 260.2 **Corner distance 5 m x 6,79 m** **Jib length 55 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	32,5	1	301	403	214	112	25	1	212	413	92	8	53
			2	374	374	141	141		2	344	344	18	18	
19,3	20,0	35,0	1	315	425	222	112	26	1	227	433	101	8	68
			2	394	394	142	142		2	363	363	21	21	
23,8	24,5	37,5	1	329	448	229	110	28	1	241	455	108	8	74
			2	415	415	143	143		2	383	383	23	23	
28,3	29,0	40,0	1	344	473	236	107	29	1	254	479	114	8	81
			2	437	437	143	143		2	408	408	121	121	
32,8	33,5	42,5	1	359	499	242	103	31	1	266	506	118	8	88
			2	460	460	141	141		2	457	457	94	94	
37,3	38,0	45,0	1	375	527	248	96	33	1	369	563	204	9	94
			2	485	485	138	138		2	510	510	63	63	
41,8	42,5	65,0	1	435	600	297	132	34	1	439	676	241	8	101
			2	554	554	178	178		2	610	610	72	72	

3.4.3.7 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



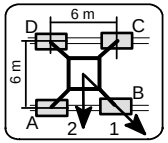


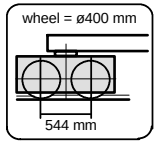
UW 260.2 **Corner distance 5 m x 6,79 m** **Jib length 60 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	32,5	1	307	410	220	116	25	1	225	436	98	8	53
			2	382	382	145	145		2	364	364	19	19	
19,3	20,0	35,0	1	321	432	227	116	26	1	240	456	107	8	68
			2	401	401	147	147		2	383	383	22	22	
23,8	24,5	37,5	1	336	455	234	115	28	1	253	478	114	8	75
			2	422	422	148	148		2	403	403	24	24	
28,3	29,0	40,0	1	350	480	241	112	29	1	266	503	119	8	81
			2	444	444	147	147		2	440	440	107	107	
32,8	33,5	42,5	1	366	506	247	107	31	1	360	538	209	30	88
			2	467	467	146	146		2	489	489	79	79	
37,3	38,0	50,0	1	394	547	266	113	32	1	391	622	209	8	95
			2	504	504	155	155		2	555	555	60	60	
41,8	42,5	70,0	1	454	620	315	149	34	1	459	738	243	8	101
			2	574	574	195	195		2	656	656	68	68	

3.4.4.1 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



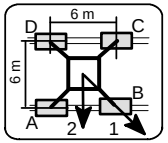


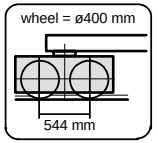
UW 260.2 **Corner distance 6 m x 6 m** **Jib length 30 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	17,5	1	190	338	190	43	24	1	116	253	116	8	50
			2	295	295	86	86		2	210	210	36	36	
19,3	20,0	17,5	1	195	352	195	38	26	1	118	267	118	8	64
			2	306	306	84	84		2	219	219	36	36	
23,8	24,5	17,5	1	200	368	200	31	27	1	119	283	119	8	71
			2	319	319	80	80		2	230	230	35	35	
28,3	29,0	17,5	1	204	385	204	23	29	1	119	301	119	8	77
			2	332	332	76	76		2	257	257	101	101	
32,8	33,5	22,5	1	221	416	221	26	30	1	196	348	196	44	84
			2	359	359	83	83		2	304	304	89	89	
37,3	38,0	30,0	1	244	455	244	34	32	1	219	418	219	21	91
			2	393	393	96	96		2	360	360	79	79	
41,8	42,5	40,0	1	274	501	274	47	33	1	242	504	242	8	97
			2	434	434	114	114		2	425	425	73	73	
46,3	47,0	52,5	1	310	555	310	65	35	1	259	614	259	8	104
			2	483	483	136	136		2	499	499	70	70	
50,8	51,5	70,0	1	358	624	358	93	36	1	296	734	296	8	110
			2	546	546	170	170		2	590	590	76	76	

3.4.4.2 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



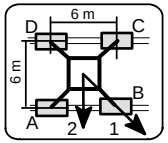


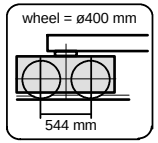
UW 260.2 **Corner distance 6 m x 6 m** **Jib length 35 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	15,0	1	192	337	192	47	24	1	103	254	103	8	51
			2	295	295	89	89		2	204	204	30	30	
19,3	20,0	15,0	1	197	352	197	41	26	1	105	268	105	8	65
			2	307	307	87	87		2	213	213	29	29	
23,8	24,5	15,0	1	201	368	201	34	27	1	106	284	106	8	71
			2	319	319	83	83		2	231	231	121	121	
28,3	29,0	15,0	1	206	385	206	26	29	1	106	302	106	8	78
			2	333	333	79	79		2	263	263	99	99	
32,8	33,5	20,0	1	223	416	223	29	30	1	198	356	198	40	85
			2	360	360	86	86		2	309	309	86	86	
37,3	38,0	27,5	1	246	455	246	37	32	1	221	425	221	17	91
			2	394	394	98	98		2	366	366	77	77	
41,8	42,5	37,5	1	276	501	276	50	33	1	238	518	238	8	98
			2	435	435	116	116		2	431	431	70	70	
46,3	47,0	50,0	1	311	556	311	67	35	1	254	629	254	8	104
			2	484	484	138	138		2	506	506	67	67	
50,8	51,5	67,5	1	360	625	360	94	36	1	290	751	290	8	111
			2	547	547	172	172		2	597	597	72	72	

3.4.4.3 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



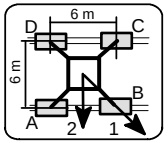


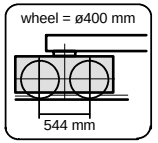
UW 260.2 **Corner distance 6 m x 6 m** **Jib length 40 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	12,5	1	191	334	191	49	24	1	90	254	90	8	51
			2	292	292	91	91		2	206	206	50	50	
19,3	20,0	12,5	1	196	348	196	44	26	1	92	269	92	8	65
			2	304	304	88	88		2	216	216	48	48	
23,8	24,5	12,5	1	201	364	201	37	27	1	93	285	93	8	72
			2	316	316	85	85		2	234	234	117	117	
28,3	29,0	12,5	1	205	382	205	28	29	1	93	304	93	8	79
			2	330	330	80	80		2	266	266	94	94	
32,8	33,5	17,5	1	222	413	222	31	30	1	197	361	197	33	85
			2	357	357	87	87		2	313	313	81	81	
37,3	38,0	25,0	1	245	452	245	39	32	1	220	432	220	9	92
			2	391	391	100	100		2	370	370	71	71	
41,8	42,5	37,5	1	281	505	281	58	34	1	242	533	242	8	98
			2	439	439	123	123		2	442	442	70	70	
46,3	47,0	50,0	1	317	559	317	75	35	1	257	646	257	8	105
			2	488	488	146	146		2	518	518	66	66	

3.4.4.4 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



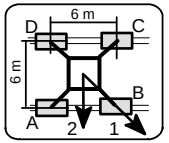


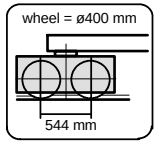
UW 260.2 **Corner distance 6 m x 6 m** **Jib length 45 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	10,0	1	191	336	191	46	25	1	97	291	97	8	52
			2	293	293	88	88		2	223	223	23	23	
19,3	20,0	10,0	1	195	351	195	40	26	1	97	309	97	8	66
			2	305	305	85	85		2	234	234	21	21	
23,8	24,5	10,0	1	200	367	200	33	28	1	96	329	96	8	73
			2	318	318	82	82		2	248	248	102	102	
28,3	29,0	12,5	1	211	391	211	30	29	1	106	352	106	8	79
			2	338	338	83	83		2	286	286	85	85	
32,8	33,5	12,5	1	215	410	215	21	31	1	187	379	187	8	86
			2	353	353	78	78		2	322	322	59	59	
37,3	38,0	22,5	1	245	455	245	34	32	1	198	475	198	8	93
			2	393	393	96	96		2	385	385	55	55	
41,8	42,5	37,5	1	287	515	287	59	34	1	230	580	230	8	99
			2	448	448	126	126		2	464	464	60	60	
46,3	47,0	55,0	1	335	582	335	88	35	1	269	695	269	8	106
			2	510	510	160	160		2	553	553	67	67	

3.4.4.5 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



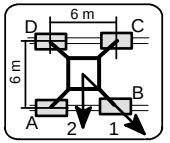


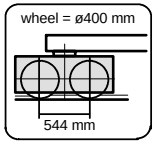
UW 260.2 **Corner distance 6 m x 6 m** **Jib length 50 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	10,0	1	193	340	193	47	25	1	83	320	83	8	52
			2	297	297	90	90		2	234	234	13	13	
19,3	20,0	12,5	1	204	361	204	47	26	1	95	338	95	8	67
			2	315	315	93	93		2	251	251	17	17	
23,8	24,5	12,5	1	209	378	209	40	28	1	94	359	94	8	74
			2	328	328	89	89		2	265	265	103	103	
28,3	29,0	15,0	1	220	401	220	38	29	1	105	382	105	8	80
			2	348	348	91	91		2	304	304	85	85	
32,8	33,5	17,5	1	230	427	230	34	31	1	114	406	114	8	87
			2	369	369	92	92		2	346	346	65	65	
37,3	38,0	25,0	1	254	466	254	41	32	1	203	502	203	8	93
			2	404	404	103	103		2	403	403	54	54	
41,8	42,5	40,0	1	296	526	296	66	34	1	234	608	234	8	100
			2	458	458	133	133		2	483	483	59	59	
46,3	47,0	57,5	1	344	594	344	94	35	1	272	724	272	8	107
			2	521	521	167	167		2	572	572	66	66	

3.4.4.6 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



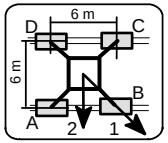


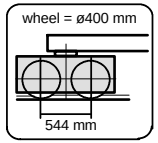
UW 260.2 **Corner distance 6 m x 6 m** **Jib length 55 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	22,5	1	232	370	232	95	25	1	112	392	112	8	53
			2	330	330	135	135		2	292	292	20	20	
19,3	20,0	22,5	1	237	385	237	89	26	1	112	411	112	8	68
			2	342	342	132	132		2	303	303	18	18	
23,8	24,5	25,0	1	248	408	248	88	28	1	123	432	123	8	74
			2	361	361	134	134		2	322	322	22	22	
28,3	29,0	25,0	1	252	426	252	79	29	1	121	455	121	8	81
			2	375	375	130	130		2	347	347	108	108	
32,8	33,5	27,5	1	263	451	263	75	31	1	129	481	129	8	88
			2	396	396	130	130		2	389	389	87	87	
37,3	38,0	30,0	1	274	478	274	70	33	1	227	533	227	8	94
			2	418	418	130	130		2	435	435	63	63	
41,8	42,5	42,5	1	310	532	310	88	34	1	245	642	245	8	101
			2	467	467	153	153		2	509	509	61	61	

3.4.4.7 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



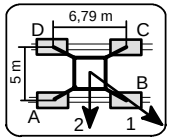


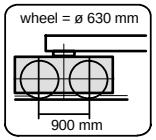
UW 260.2 **Corner distance 6 m x 6 m** **Jib length 60 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	20,0	1	232	372	232	93	25	1	110	414	110	8	53
			2	331	331	134	134		2	304	304	17	17	
19,3	20,0	22,5	1	243	393	243	93	26	1	122	433	122	8	68
			2	349	349	137	137		2	322	322	21	21	
23,8	24,5	22,5	1	247	409	247	86	28	1	121	454	121	8	75
			2	362	362	133	133		2	335	335	115	115	
28,3	29,0	25,0	1	258	433	258	83	29	1	130	478	130	8	81
			2	382	382	135	135		2	374	374	97	97	
32,8	33,5	27,5	1	269	459	269	80	31	1	139	504	139	8	88
			2	403	403	135	135		2	417	417	76	76	
37,3	38,0	30,0	1	280	485	280	74	32	1	216	590	216	8	95
			2	425	425	135	135		2	463	463	51	51	
41,8	42,5	47,5	1	328	552	328	105	34	1	257	701	257	8	101
			2	486	486	170	170		2	551	551	61	61	

3.4.5.1 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



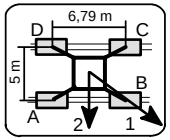


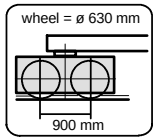
UW 260.3 **Corner distance 5 m x 6,79 m** **Jib length 30 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	30,0	1	276	385	183	74	24	1	201	291	124	33	50
			2	354	354	105	105		2	266	266	58	58	
19,3	20,0	30,0	1	283	400	185	68	26	1	207	303	126	30	64
			2	368	368	101	101		2	277	277	57	57	
23,8	24,5	30,0	1	291	416	186	61	27	1	214	316	128	26	71
			2	382	382	96	96		2	288	288	54	54	
28,3	29,0	30,0	1	300	434	187	52	29	1	253	334	184	102	77
			2	397	397	90	90		2	312	312	124	124	
32,8	33,5	37,5	1	327	472	205	61	30	1	289	402	194	81	84
			2	432	432	101	101		2	371	371	112	112	
37,3	38,0	47,5	1	362	517	230	75	32	1	333	480	209	62	91
			2	474	474	118	118		2	439	439	103	103	
41,8	42,5	60,0	1	403	571	261	93	33	1	384	568	229	45	97
			2	524	524	139	139		2	517	517	96	96	
46,3	47,0	75,0	1	451	632	297	115	35	1	444	668	254	29	104
			2	582	582	166	166		2	606	606	92	92	
50,8	51,5	95,0	1	511	708	345	149	36	1	517	786	290	21	110
			2	654	654	203	203		2	711	711	95	95	
55,3	56,0	120,0	1	585	799	405	192	38	1	604	922	337	19	117
			2	740	740	251	251		2	834	834	107	107	

3.4.5.2 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



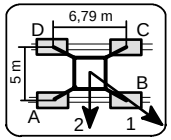


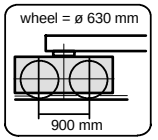
UW 260.3 **Corner distance 5 m x 6,79 m** **Jib length 35 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	27,5	1	276	384	186	78	24	1	194	285	117	26	51
			2	354	354	108	108		2	260	260	52	52	
19,3	20,0	27,5	1	284	399	187	72	26	1	201	298	120	23	65
			2	368	368	104	104		2	271	271	50	50	
23,8	24,5	27,5	1	292	416	188	64	27	1	208	311	122	19	71
			2	382	382	98	98		2	282	282	48	48	
28,3	29,0	27,5	1	301	434	189	55	29	1	256	342	183	98	78
			2	397	397	92	92		2	318	318	121	121	
32,8	33,5	35,0	1	328	472	207	64	30	1	292	409	194	77	85
			2	432	432	104	104		2	377	377	109	109	
37,3	38,0	45,0	1	363	518	232	77	32	1	336	488	209	57	91
			2	475	475	120	120		2	446	446	99	99	
41,8	42,5	57,5	1	404	571	263	95	33	1	388	577	228	39	98
			2	525	525	142	142		2	525	525	92	92	
46,3	47,0	72,5	1	452	633	299	118	35	1	448	678	253	23	104
			2	583	583	168	168		2	614	614	87	87	
50,8	51,5	95,0	1	519	716	353	157	36	1	527	803	295	20	111
			2	661	661	211	211		2	726	726	96	96	
55,3	56,0	120,0	1	593	807	413	200	38	1	615	940	341	17	117
			2	748	748	259	259		2	850	850	107	107	

3.4.5.3 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



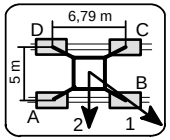


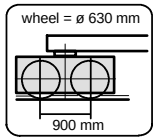
UW 260.3 **Corner distance 5 m x 6,79 m** **Jib length 40 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	25,0	1	275	380	186	81	24	1	201	283	132	51	51
			2	351	351	110	110		2	260	260	73	73	
19,3	20,0	25,0	1	283	396	187	74	26	1	208	297	134	46	65
			2	364	364	106	106		2	272	272	70	70	
23,8	24,5	25,0	1	291	412	188	67	27	1	216	312	135	40	72
			2	379	379	100	100		2	285	285	66	66	
28,3	29,0	25,0	1	299	430	189	58	29	1	257	347	181	91	79
			2	394	394	94	94		2	322	322	116	116	
32,8	33,5	32,5	1	327	468	208	66	30	1	294	416	191	69	85
			2	429	429	106	106		2	382	382	103	103	
37,3	38,0	42,5	1	361	514	232	80	32	1	338	495	206	49	92
			2	472	472	122	122		2	451	451	93	93	
41,8	42,5	55,0	1	403	568	263	97	34	1	390	585	226	31	98
			2	522	522	143	143		2	531	531	85	85	
46,3	47,0	72,5	1	457	636	305	126	35	1	456	692	256	20	105
			2	587	587	175	175		2	627	627	85	85	
50,8	51,5	95,0	1	524	719	359	164	37	1	536	818	298	16	112
			2	665	665	218	218		2	740	740	94	94	
55,3	56,0	122,5	1	605	817	426	213	38	1	630	962	350	18	118
			2	758	758	272	272		2	870	870	110	110	

3.4.5.4 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



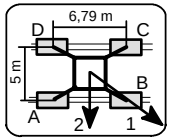


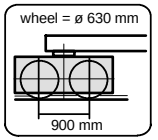
UW 260.3 **Corner distance 5 m x 6,79 m** **Jib length 45 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	22,5	1	275	383	184	77	25	1	203	314	115	16	52
			2	353	353	107	107		2	282	282	42	42	
19,3	20,0	22,5	1	283	398	186	70	26	1	206	333	112	16	66
			2	366	366	102	102		2	294	294	39	39	
23,8	24,5	22,5	1	291	415	186	63	28	1	207	354	107	16	73
			2	381	381	97	97		2	307	307	35	35	
28,3	29,0	22,5	1	300	433	187	53	29	1	208	378	101	16	79
			2	396	396	90	90		2	339	339	97	97	
32,8	33,5	25,0	1	315	459	193	49	31	1	287	425	171	33	86
			2	419	419	89	89		2	387	387	71	71	
37,3	38,0	37,5	1	356	512	224	68	32	1	338	511	192	19	93
			2	468	468	111	111		2	463	463	67	67	
41,8	42,5	57,5	1	416	585	273	104	34	1	409	621	230	18	99
			2	538	538	151	151		2	562	562	77	77	
46,3	47,0	80,0	1	483	666	328	145	35	1	488	742	273	18	106
			2	615	615	196	196		2	672	672	89	89	
50,8	51,5	102,5	1	550	749	382	183	37	1	566	872	312	16	112
			2	694	694	238	238		2	786	786	96	96	

3.4.5.5 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



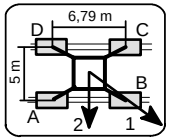


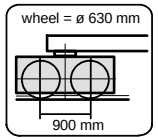
UW 260.3 **Corner distance 5 m x 6,79 m** **Jib length 50 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	22,5	1	278	387	187	78	25	1	194	344	96	16	52
			2	357	357	108	108		2	295	295	30	30	
19,3	20,0	22,5	1	286	402	188	71	26	1	196	364	93	16	67
			2	370	370	104	104		2	307	307	27	27	
23,8	24,5	25,0	1	301	426	195	70	28	1	210	386	100	16	74
			2	391	391	105	105		2	327	327	29	29	
28,3	29,0	27,5	1	315	450	202	67	29	1	223	409	106	16	80
			2	413	413	104	104		2	365	365	102	102	
32,8	33,5	30,0	1	331	476	208	62	31	1	307	454	182	35	87
			2	436	436	103	103		2	413	413	76	76	
37,3	38,0	42,5	1	372	529	239	81	32	1	357	540	203	20	93
			2	485	485	125	125		2	490	490	71	71	
41,8	42,5	62,5	1	432	602	288	117	34	1	429	651	241	19	100
			2	555	555	164	164		2	589	589	80	80	
46,3	47,0	82,5	1	492	677	336	151	35	1	498	770	274	16	107
			2	626	626	202	202		2	693	693	85	85	
50,8	51,5	107,5	1	566	767	396	195	37	1	585	905	321	16	113
			2	712	712	251	251		2	814	814	98	98	

3.4.5.6 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



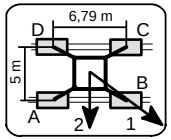


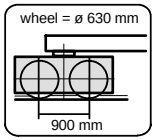
UW 260.3 **Corner distance 5 m x 6,79 m** **Jib length 55 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	32,5	1	308	410	222	120	25	1	220	421	100	16	53
			2	382	382	148	148		2	352	352	26	26	
19,3	20,0	35,0	1	322	432	230	120	26	1	235	441	108	16	68
			2	402	402	150	150		2	371	371	29	29	
23,8	24,5	37,5	1	337	456	237	118	28	1	248	463	116	16	74
			2	423	423	151	151		2	391	391	30	30	
28,3	29,0	40,0	1	352	480	243	115	29	1	261	487	121	16	81
			2	445	445	150	150		2	416	416	129	129	
32,8	33,5	42,5	1	367	507	250	110	31	1	274	514	125	16	88
			2	468	468	149	149		2	465	465	102	102	
37,3	38,0	45,0	1	383	534	255	104	33	1	376	571	212	17	94
			2	492	492	146	146		2	517	517	71	71	
41,8	42,5	65,0	1	443	608	304	140	34	1	447	683	249	16	101
			2	562	562	185	185		2	618	618	80	80	
46,3	47,0	87,5	1	510	689	359	180	36	1	525	808	290	16	107
			2	640	640	229	229		2	729	729	90	90	
50,8	51,5	112,5	1	584	779	419	224	37	1	611	945	335	16	114
			2	725	725	278	278		2	851	851	102	102	

3.4.5.7 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



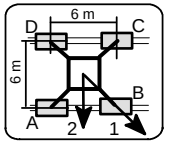


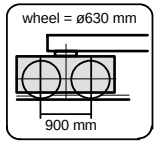
UW 260.3 **Corner distance 5 m x 6,79 m** **Jib length 60 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	32,5	1	315	418	228	124	25	1	233	444	106	16	53
			2	389	389	153	153		2	372	372	27	27	
19,3	20,0	35,0	1	329	440	235	124	26	1	247	464	114	16	68
			2	409	409	155	155		2	391	391	30	30	
23,8	24,5	37,5	1	343	463	242	122	28	1	261	486	121	16	75
			2	430	430	155	155		2	410	410	32	32	
28,3	29,0	40,0	1	358	488	249	119	29	1	274	511	127	16	81
			2	452	452	155	155		2	447	447	115	115	
32,8	33,5	42,5	1	374	514	255	115	31	1	367	546	216	38	88
			2	475	475	154	154		2	497	497	87	87	
37,3	38,0	50,0	1	402	554	273	121	32	1	399	630	217	16	95
			2	512	512	163	163		2	562	562	68	68	
41,8	42,5	70,0	1	462	628	322	157	34	1	467	746	251	16	101
			2	582	582	203	203		2	664	664	76	76	
46,3	47,0	95,0	1	535	716	383	203	35	1	556	873	302	16	108
			2	666	666	253	253		2	782	782	91	91	
50,8	51,5	120,0	1	609	806	443	247	37	1	641	1013	345	16	114
			2	751	751	301	301		2	906	906	102	102	

3.4.6.1 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



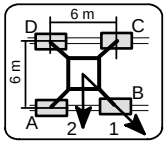


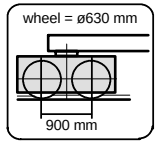
UW 260.3 **Corner distance 6 m x 6 m** **Jib length 30 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	17,5	1	198	346	198	51	24	1	124	261	124	16	50
			2	302	302	94	94		2	218	218	44	44	
19,3	20,0	17,5	1	203	360	203	45	26	1	126	275	126	16	64
			2	314	314	92	92		2	227	227	44	44	
23,8	24,5	17,5	1	207	376	207	39	27	1	127	291	127	16	71
			2	327	327	88	88		2	237	237	43	43	
28,3	29,0	17,5	1	212	393	212	31	29	1	127	309	127	16	77
			2	340	340	84	84		2	265	265	109	109	
32,8	33,5	22,5	1	229	424	229	34	30	1	204	356	204	52	84
			2	367	367	91	91		2	312	312	96	96	
37,3	38,0	30,0	1	252	462	252	42	32	1	227	425	227	29	91
			2	401	401	104	104		2	367	367	87	87	
41,8	42,5	40,0	1	282	509	282	55	33	1	250	512	250	16	97
			2	442	442	121	121		2	432	432	81	81	
46,3	47,0	52,5	1	318	563	318	72	35	1	267	622	267	16	104
			2	491	491	144	144		2	507	507	78	78	
50,8	51,5	70,0	1	366	631	366	100	36	1	303	742	303	16	110
			2	554	554	178	178		2	598	598	84	84	
55,3	56,0	90,0	1	420	708	420	133	38	1	347	872	347	16	117
			2	624	624	217	217		2	698	698	93	93	
59,8	60,5	107,5	1	476	783	476	169	41	1	389	1011	389	16	127
			2	693	693	259	259		2	803	803	99	99	

3.4.6.2 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



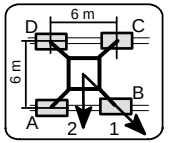


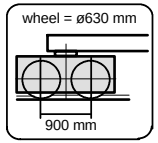
UW 260.3 **Corner distance 6 m x 6 m** **Jib length 35 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	15,0	1	200	345	200	54	24	1	111	261	111	16	51
			2	303	303	97	97		2	212	212	38	38	
19,3	20,0	15,0	1	204	360	204	49	26	1	113	276	113	16	65
			2	314	314	94	94		2	221	221	37	37	
23,8	24,5	15,0	1	209	376	209	42	27	1	114	292	114	16	71
			2	327	327	91	91		2	239	239	129	129	
28,3	29,0	15,0	1	213	393	213	34	29	1	114	310	114	16	78
			2	340	340	86	86		2	270	270	107	107	
32,8	33,5	20,0	1	230	424	230	37	30	1	205	363	205	48	85
			2	367	367	94	94		2	317	317	94	94	
37,3	38,0	27,5	1	254	463	254	45	32	1	229	433	229	24	91
			2	401	401	106	106		2	373	373	84	84	
41,8	42,5	37,5	1	283	509	283	57	33	1	246	526	246	16	98
			2	443	443	124	124		2	439	439	78	78	
46,3	47,0	50,0	1	319	564	319	75	35	1	262	637	262	16	104
			2	492	492	146	146		2	514	514	74	74	
50,8	51,5	67,5	1	367	633	367	102	36	1	298	759	298	16	111
			2	555	555	180	180		2	605	605	80	80	
55,3	56,0	90,0	1	428	716	428	140	38	1	353	891	353	16	117
			2	632	632	225	225		2	713	713	94	94	
59,8	60,5	107,5	1	484	791	484	177	41	1	395	1031	395	16	128
			2	701	701	267	267		2	818	818	100	100	

3.4.6.3 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



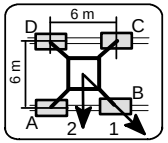


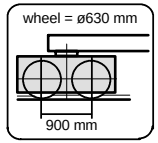
UW 260.3 **Corner distance 6 m x 6 m** **Jib length 40 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	12,5	1	199	341	199	57	24	1	98	262	98	16	51
			2	300	300	99	99		2	213	213	57	57	
19,3	20,0	12,5	1	204	356	204	51	26	1	100	277	100	16	65
			2	311	311	96	96		2	224	224	56	56	
23,8	24,5	12,5	1	208	372	208	44	27	1	101	293	101	16	72
			2	324	324	92	92		2	242	242	125	125	
28,3	29,0	12,5	1	213	389	213	36	29	1	101	311	101	16	79
			2	338	338	88	88		2	274	274	102	102	
32,8	33,5	17,5	1	230	421	230	39	30	1	205	369	205	41	85
			2	365	365	95	95		2	321	321	89	89	
37,3	38,0	25,0	1	253	459	253	47	32	1	228	439	228	17	92
			2	399	399	107	107		2	378	378	79	79	
41,8	42,5	37,5	1	289	512	289	66	34	1	250	541	250	16	98
			2	447	447	131	131		2	450	450	78	78	
46,3	47,0	50,0	1	325	567	325	82	35	1	265	654	265	16	105
			2	496	496	153	153		2	525	525	74	74	
50,8	51,5	70,0	1	379	643	379	116	37	1	312	777	312	16	112
			2	565	565	193	193		2	624	624	85	85	
55,3	56,0	90,0	1	434	720	434	148	38	1	354	912	354	16	118
			2	636	636	231	231		2	726	726	92	92	
59,8	60,5	110,0	1	496	802	496	190	41	1	408	1052	408	16	129
			2	712	712	280	280		2	838	838	104	104	

3.4.6.4 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



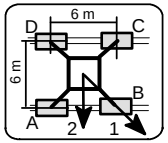


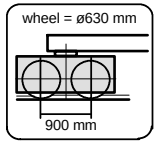
UW 260.3 **Corner distance 6 m x 6 m** **Jib length 45 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	10,0	1	198	344	198	53	25	1	104	299	104	16	52
			2	301	301	96	96		2	231	231	31	31	
19,3	20,0	10,0	1	203	359	203	47	26	1	104	317	104	16	66
			2	313	313	93	93		2	242	242	29	29	
23,8	24,5	10,0	1	208	375	208	40	28	1	103	337	103	16	73
			2	326	326	89	89		2	255	255	110	110	
28,3	29,0	12,5	1	218	399	218	38	29	1	114	359	114	16	79
			2	346	346	91	91		2	294	294	93	93	
32,8	33,5	12,5	1	223	417	223	28	31	1	194	387	194	16	86
			2	360	360	85	85		2	329	329	66	66	
37,3	38,0	22,5	1	252	463	252	42	32	1	206	483	206	16	93
			2	401	401	104	104		2	393	393	62	62	
41,8	42,5	37,5	1	294	522	294	67	34	1	237	587	237	16	99
			2	456	456	133	133		2	472	472	67	67	
46,3	47,0	55,0	1	343	590	343	96	35	1	277	702	277	16	106
			2	518	518	168	168		2	561	561	75	75	
50,8	51,5	75,0	1	397	666	397	129	37	1	323	828	323	16	112
			2	587	587	207	207		2	660	660	85	85	
55,3	56,0	95,0	1	452	744	452	160	38	1	363	965	363	16	119
			2	658	658	245	245		2	763	763	91	91	
59,8	60,5	115,0	1	514	826	514	202	41	1	417	1107	417	16	130
			2	734	734	294	294		2	875	875	103	103	

3.4.6.5 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



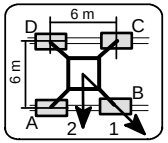


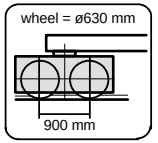
UW 260.3 **Corner distance 6 m x 6 m** **Jib length 50 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	10,0	1	201	348	201	55	25	1	91	328	91	16	52
			2	305	305	98	98		2	242	242	21	21	
19,3	20,0	12,5	1	212	369	212	55	26	1	103	346	103	16	67
			2	323	323	101	101		2	259	259	25	25	
23,8	24,5	12,5	1	217	385	217	48	28	1	102	367	102	16	74
			2	336	336	97	97		2	273	273	110	110	
28,3	29,0	15,0	1	227	409	227	45	29	1	112	389	112	16	80
			2	356	356	99	99		2	312	312	93	93	
32,8	33,5	17,5	1	238	435	238	42	31	1	121	414	121	16	87
			2	377	377	99	99		2	354	354	73	73	
37,3	38,0	25,0	1	261	474	261	49	32	1	210	509	210	16	93
			2	412	412	111	111		2	411	411	62	62	
41,8	42,5	40,0	1	303	534	303	73	34	1	241	616	241	16	100
			2	466	466	141	141		2	491	491	66	66	
46,3	47,0	57,5	1	352	601	352	102	35	1	280	732	280	16	107
			2	528	528	175	175		2	580	580	73	73	
50,8	51,5	77,5	1	406	678	406	135	37	1	325	859	325	16	113
			2	598	598	215	215		2	680	680	83	83	
55,3	56,0	100,0	1	467	762	467	172	38	1	377	999	377	16	120
			2	676	676	258	258		2	790	790	94	94	
59,8	60,5	120,0	1	529	844	529	214	41	1	430	1142	430	16	130
			2	752	752	307	307		2	902	902	106	106	

3.4.6.6 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



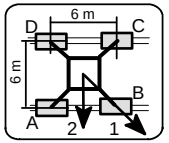


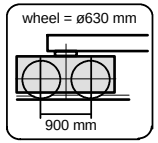
UW 260.3 **Corner distance 6 m x 6 m** **Jib length 55 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	22,5	1	240	378	240	102	25	1	120	400	120	16	53
			2	338	338	143	143		2	300	300	28	28	
19,3	20,0	22,5	1	245	393	245	96	26	1	120	419	120	16	68
			2	350	350	140	140		2	311	311	26	26	
23,8	24,5	25,0	1	256	416	256	95	28	1	131	440	131	16	74
			2	369	369	142	142		2	329	329	29	29	
28,3	29,0	25,0	1	260	434	260	87	29	1	128	463	128	16	81
			2	383	383	137	137		2	355	355	116	116	
32,8	33,5	27,5	1	271	459	271	83	31	1	137	489	137	16	88
			2	404	404	138	138		2	397	397	95	95	
37,3	38,0	30,0	1	282	486	282	78	33	1	235	541	235	16	94
			2	426	426	137	137		2	443	443	71	71	
41,8	42,5	42,5	1	318	540	318	95	34	1	253	649	253	16	101
			2	475	475	161	161		2	517	517	68	68	
46,3	47,0	60,0	1	366	608	366	124	36	1	290	768	290	16	107
			2	537	537	195	195		2	607	607	75	75	
50,8	51,5	80,0	1	420	684	420	157	37	1	334	898	334	16	114
			2	607	607	234	234		2	707	707	83	83	
55,3	56,0	102,5	1	481	769	481	193	39	1	384	1041	384	16	120
			2	685	685	278	278		2	819	819	94	94	

3.4.6.7 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



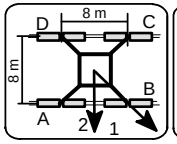


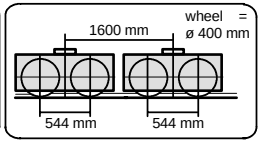
UW 260.3 **Corner distance 6 m x 6 m** **Jib length 60 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
14,8	15,5	20,0	1	240	379	240	100	25	1	118	422	118	16	53
			2	338	338	141	141		2	312	312	24	24	
19,3	20,0	22,5	1	251	401	251	101	26	1	130	441	130	16	68
			2	357	357	145	145		2	329	329	29	29	
23,8	24,5	22,5	1	255	417	255	93	28	1	128	462	128	16	75
			2	370	370	141	141		2	342	342	123	123	
28,3	29,0	25,0	1	266	441	266	91	29	1	138	485	138	16	81
			2	390	390	142	142		2	382	382	105	105	
32,8	33,5	27,5	1	277	466	277	87	31	1	147	511	147	16	88
			2	411	411	143	143		2	425	425	84	84	
37,3	38,0	30,0	1	288	493	288	82	32	1	223	598	223	16	95
			2	433	433	142	142		2	471	471	59	59	
41,8	42,5	47,5	1	336	559	336	112	34	1	265	708	265	16	101
			2	494	494	178	178		2	558	558	69	69	
46,3	47,0	65,0	1	384	628	384	141	35	1	301	829	301	16	108
			2	556	556	212	212		2	649	649	74	74	
50,8	51,5	87,5	1	445	710	445	180	37	1	356	962	356	16	114
			2	633	633	257	257		2	757	757	88	88	
55,3	56,0	110,0	1	506	796	506	216	38	1	405	1109	405	16	121
			2	711	711	301	301		2	870	870	97	97	

3.4.7.1 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



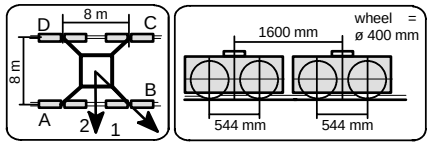


UW 480 **Corner distance 8 m x 8 m** **Jib lenght 30 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
15,3	16,0	0,0	1	200	312	200	88	26	1	132	226	132	39	54
			2	279	279	120	120		2	198	198	66	66	
19,8	20,5	0,0	1	207	327	207	87	28	1	139	239	139	40	70
			2	291	291	122	122		2	210	210	69	69	
24,3	25,0	0,0	1	211	339	211	83	30	1	144	249	144	39	76
			2	302	302	120	120		2	229	229	143	143	
28,8	29,5	0,0	1	216	353	216	78	31	1	191	280	191	102	83
			2	313	313	118	118		2	254	254	128	128	
33,3	34,0	0,0	1	220	368	220	73	33	1	195	316	195	75	90
			2	325	325	116	116		2	281	281	110	110	
37,8	38,5	0,0	1	225	384	225	66	34	1	200	355	200	45	96
			2	337	337	113	113		2	309	309	90	90	
42,3	43,0	2,5	1	236	407	236	65	36	1	204	410	204	25	103
			2	357	357	115	115		2	347	347	74	74	
46,8	47,5	10,0	1	259	443	259	75	37	1	209	492	209	25	109
			2	389	389	129	129		2	399	399	69	69	
51,3	52,0	22,5	1	295	494	295	96	39	1	237	581	237	25	116
			2	435	435	154	154		2	466	466	73	73	
55,8	56,5	37,5	1	337	552	337	122	40	1	273	677	273	25	123
			2	489	489	185	185		2	542	542	81	81	
60,3	61,0	52,5	1	381	613	381	149	42	1	309	783	309	25	130
			2	545	545	217	217		2	624	624	88	88	
64,8	65,5	70,0	1	432	682	432	182	44	1	351	901	351	25	139
			2	609	609	255	255		2	717	717	97	97	
69,3	70,0	90,0	1	489	760	489	219	46	1	402	1028	402	25	148
			2	680	680	298	298		2	819	819	109	109	
73,8	74,5	110,0	1	547	838	547	257	48	1	451	1162	451	25	157
			2	753	753	342	342		2	924	924	120	120	
78,3	79,0	130,0	1	605	917	605	293	51	1	494	1307	494	25	166
			2	826	826	385	385		2	1034	1034	127	127	

3.4.7.2 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive

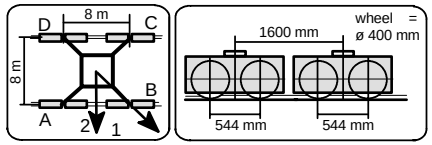


UW 480 **Corner distance 8 m x 8 m** **Jib lenght 35 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
15,3	16,0	0,0	1	207	318	207	97	26	1	132	226	132	39	54
			2	286	286	129	129		2	198	198	66	66	
19,8	20,5	0,0	1	214	333	214	96	28	1	139	239	139	40	70
			2	298	298	130	130		2	217	217	162	162	
24,3	25,0	0,0	1	219	346	219	92	30	1	194	258	194	130	77
			2	309	309	129	129		2	239	239	148	148	
28,8	29,5	0,0	1	223	360	223	87	31	1	198	292	198	105	84
			2	320	320	127	127		2	264	264	133	133	
33,3	34,0	0,0	1	228	375	228	81	33	1	203	328	203	78	90
			2	332	332	124	124		2	291	291	115	115	
37,8	38,5	0,0	1	233	390	233	75	34	1	208	367	208	48	97
			2	344	344	121	121		2	321	321	95	95	
42,3	43,0	0,0	1	237	407	237	67	36	1	202	420	202	25	103
			2	357	357	117	117		2	352	352	72	72	
46,8	47,5	10,0	1	267	450	267	83	37	1	219	503	219	25	110
			2	397	397	137	137		2	411	411	73	73	
51,3	52,0	22,5	1	302	501	302	104	39	1	246	593	246	25	117
			2	443	443	162	162		2	478	478	77	77	
55,8	56,5	37,5	1	345	560	345	130	40	1	281	691	281	25	123
			2	497	497	193	193		2	555	555	84	84	
60,3	61,0	52,5	1	389	621	389	157	42	1	317	798	317	25	131
			2	553	553	225	225		2	637	637	91	91	
64,8	65,5	70,0	1	440	691	440	189	44	1	359	917	359	25	140
			2	617	617	263	263		2	730	730	99	99	
69,3	70,0	90,0	1	497	768	497	226	46	1	408	1047	408	25	148
			2	689	689	305	305		2	833	833	111	111	
73,8	74,5	110,0	1	555	847	555	263	49	1	456	1182	456	25	158
			2	761	761	349	349		2	939	939	121	121	
78,3	79,0	130,0	1	613	927	613	299	51	1	499	1329	499	25	167
			2	835	835	391	391		2	1049	1049	127	127	

3.4.7.3 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive

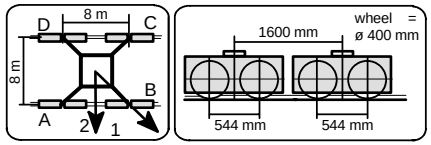


UW 480 **Corner distance 8 m x 8 m** **Jib lenght 40 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
15,3	16,0	0,0	1	213	321	213	105	26	1	149	233	149	65	55
			2	289	289	136	136		2	209	209	90	90	
19,8	20,5	0,0	1	220	336	220	104	28	1	156	248	156	65	71
			2	302	302	138	138		2	225	225	165	165	
24,3	25,0	0,0	1	225	349	225	100	30	1	200	268	200	131	78
			2	313	313	136	136		2	248	248	151	151	
28,8	29,5	0,0	1	229	363	229	95	31	1	204	302	204	107	84
			2	324	324	134	134		2	273	273	135	135	
33,3	34,0	0,0	1	234	378	234	89	33	1	209	338	209	79	91
			2	336	336	132	132		2	300	300	117	117	
37,8	38,5	0,0	1	238	394	238	82	35	1	213	378	213	48	97
			2	348	348	128	128		2	330	330	97	97	
42,3	43,0	0,0	1	243	411	243	74	36	1	207	431	207	25	104
			2	362	362	124	124		2	362	362	74	74	
46,8	47,5	7,5	1	266	448	266	84	38	1	212	515	212	25	111
			2	395	395	137	137		2	414	414	68	68	
51,3	52,0	22,5	1	308	505	308	111	39	1	251	606	251	25	117
			2	448	448	169	169		2	489	489	78	78	
55,8	56,5	37,5	1	350	564	350	137	41	1	285	705	285	25	124
			2	501	501	199	199		2	566	566	85	85	
60,3	61,0	52,5	1	395	626	395	164	43	1	320	814	320	25	132
			2	558	558	231	231		2	649	649	91	91	
64,8	65,5	70,0	1	446	696	446	196	44	1	361	935	361	25	140
			2	622	622	269	269		2	742	742	99	99	
69,3	70,0	90,0	1	503	773	503	232	46	1	410	1066	410	25	149
			2	694	694	311	311		2	846	846	110	110	
73,8	74,5	110,0	1	561	852	561	269	49	1	457	1204	457	25	158
			2	767	767	355	355		2	952	952	119	119	
78,3	79,0	132,5	1	625	938	625	311	51	1	511	1352	511	25	168
			2	847	847	403	403		2	1069	1069	131	131	

3.4.7.4 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive

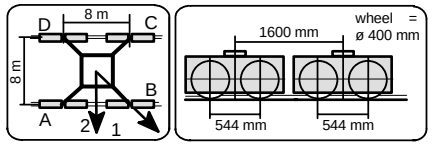


UW 480 **Corner distance 8 m x 8 m** **Jib lenght 45 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
15,3	16,0	0,0	1	218	329	218	108	27	1	151	258	151	43	56
			2	297	297	140	140		2	227	227	75	75	
19,8	20,5	0,0	1	226	344	226	107	29	1	158	273	158	43	72
			2	309	309	142	142		2	241	241	160	160	
24,3	25,0	0,0	1	230	357	230	103	30	1	205	289	205	122	79
			2	320	320	140	140		2	264	264	146	146	
28,8	29,5	0,0	1	235	371	235	98	32	1	210	323	210	97	85
			2	331	331	138	138		2	290	290	130	130	
33,3	34,0	0,0	1	239	386	239	92	33	1	214	360	214	69	92
			2	343	343	135	135		2	317	317	111	111	
37,8	38,5	0,0	1	244	403	244	85	35	1	219	400	219	37	98
			2	356	356	131	131		2	347	347	90	90	
42,3	43,0	0,0	1	248	420	248	77	36	1	201	466	201	25	105
			2	370	370	127	127		2	379	379	67	67	
46,8	47,5	12,5	1	284	470	284	99	38	1	230	551	230	25	111
			2	415	415	153	153		2	445	445	73	73	
51,3	52,0	25,0	1	320	521	320	119	39	1	256	644	256	25	118
			2	462	462	178	178		2	514	514	76	76	
55,8	56,5	40,0	1	362	580	362	144	41	1	289	745	289	25	125
			2	516	516	208	208		2	591	591	82	82	
60,3	61,0	57,5	1	413	648	413	177	43	1	335	855	335	25	133
			2	579	579	246	246		2	681	681	94	94	
64,8	65,5	75,0	1	464	718	464	209	45	1	376	978	376	25	141
			2	644	644	284	284		2	776	776	102	102	
69,3	70,0	95,0	1	521	797	521	245	47	1	423	1112	423	25	150
			2	716	716	326	326		2	880	880	111	111	
73,8	74,5	115,0	1	579	875	579	282	49	1	469	1251	469	25	159
			2	789	789	369	369		2	987	987	120	120	

3.4.7.5 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive

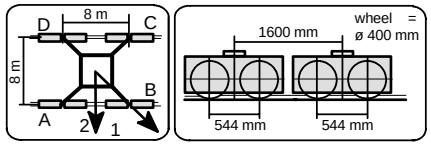


UW 480 **Corner distance 8 m x 8 m** **Jib lenght 50 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
15,3	16,0	0,0	1	221	333	221	110	27	1	151	270	151	33	56
			2	300	300	142	142		2	235	235	67	67	
19,8	20,5	0,0	1	228	348	228	109	29	1	158	284	158	32	73
			2	313	313	144	144		2	249	249	157	157	
24,3	25,0	0,0	1	233	361	233	104	30	1	208	300	208	116	79
			2	324	324	142	142		2	273	273	143	143	
28,8	29,5	0,0	1	237	375	237	99	32	1	212	335	212	90	86
			2	335	335	140	140		2	299	299	126	126	
33,3	34,0	0,0	1	242	391	242	93	33	1	217	372	217	62	92
			2	347	347	137	137		2	327	327	107	107	
37,8	38,5	0,0	1	247	407	247	86	35	1	222	413	222	30	99
			2	360	360	133	133		2	357	357	86	86	
42,3	43,0	0,0	1	251	424	251	78	36	1	196	487	196	25	106
			2	373	373	129	129		2	389	389	63	63	
46,8	47,5	15,0	1	293	480	293	106	38	1	237	573	237	25	112
			2	426	426	161	161		2	462	462	74	74	
51,3	52,0	27,5	1	329	532	329	126	39	1	262	667	262	25	119
			2	472	472	186	186		2	531	531	77	77	
55,8	56,5	42,5	1	371	591	371	151	41	1	295	769	295	25	125
			2	526	526	215	215		2	609	609	83	83	
60,3	61,0	60,0	1	422	660	422	184	43	1	341	881	341	25	133
			2	590	590	254	254		2	699	699	94	94	
64,8	65,5	77,5	1	473	730	473	215	45	1	380	1005	380	25	142
			2	655	655	291	291		2	794	794	101	101	
69,3	70,0	97,5	1	530	808	530	251	47	1	427	1140	427	25	150
			2	727	727	333	333		2	899	899	110	110	
73,8	74,5	120,0	1	594	894	594	294	49	1	485	1281	485	25	160
			2	806	806	382	382		2	1013	1013	125	125	

3.4.7.6 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive

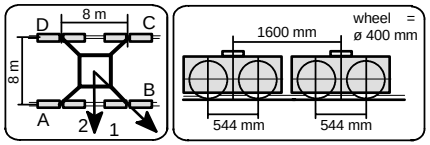


UW 480 **Corner distance 8 m x 8 m** **Jib lenght 55 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
15,3	16,0	0,0	1	229	334	229	124	27	1	135	316	135	25	57
			2	303	303	155	155		2	256	256	50	50	
19,8	20,5	0,0	1	236	349	236	123	29	1	141	332	141	25	73
			2	316	316	156	156		2	268	268	51	51	
24,3	25,0	0,0	1	241	363	241	119	30	1	143	347	143	25	80
			2	327	327	154	154		2	288	288	143	143	
28,8	29,5	0,0	1	245	377	245	114	32	1	143	364	143	25	87
			2	338	338	152	152		2	314	314	126	126	
33,3	34,0	0,0	1	250	392	250	107	33	1	225	391	225	58	93
			2	350	350	149	149		2	342	342	107	107	
37,8	38,5	0,0	1	254	408	254	100	35	1	229	432	229	26	100
			2	363	363	145	145		2	373	373	86	86	
42,3	43,0	2,5	1	265	432	265	98	37	1	212	511	212	25	106
			2	383	383	147	147		2	412	412	68	68	
46,8	47,5	15,0	1	301	482	301	120	38	1	240	599	240	25	113
			2	429	429	173	173		2	479	479	73	73	
51,3	52,0	30,0	1	343	540	343	146	40	1	276	695	276	25	120
			2	482	482	204	204		2	555	555	81	81	
55,8	56,5	45,0	1	385	599	385	171	41	1	308	799	308	25	126
			2	537	537	233	233		2	634	634	86	86	
60,3	61,0	62,5	1	436	668	436	204	43	1	353	913	353	25	134
			2	600	600	272	272		2	725	725	97	97	
64,8	65,5	80,0	1	487	739	487	235	45	1	391	1040	391	25	143
			2	665	665	308	308		2	820	820	103	103	
69,3	70,0	100,0	1	544	817	544	270	47	1	436	1177	436	25	151
			2	737	737	350	350		2	926	926	111	111	
73,8	74,5	122,5	1	608	903	608	313	49	1	493	1321	493	25	161
			2	817	817	399	399		2	1041	1041	125	125	

3.4.7.7 **Center ballasts and corner loads DIN 15019**

for a travelling tower crane on an undercarriage without climbing drive



UW 480 **Corner distance 8 m x 8 m** **Jib lenght 60 m**

height under hook [m]		Center ballasts [t]	Jib position	Crane in service torque moment: **240** 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]
15,3	16,0	0,0	1	235	341	235	129	27	1	148	333	148	25	57
			2	310	310	160	160		2	272	272	54	54	
19,8	20,5	0,0	1	242	356	242	128	29	1	154	348	154	25	74
			2	323	323	161	161		2	286	286	153	153	
24,3	25,0	0,0	1	247	370	247	123	30	1	155	364	155	25	80
			2	334	334	160	160		2	311	311	138	138	
28,8	29,5	0,0	1	251	384	251	118	32	1	229	382	229	76	87
			2	345	345	157	157		2	337	337	120	120	
33,3	34,0	0,0	1	256	399	256	112	33	1	233	420	233	46	94
			2	357	357	154	154		2	365	365	101	101	
37,8	38,5	0,0	1	260	415	260	105	35	1	226	473	226	25	100
			2	370	370	151	151		2	396	396	79	79	
42,3	43,0	5,0	1	277	445	277	109	36	1	220	555	220	25	107
			2	396	396	158	158		2	442	442	67	67	
46,8	47,5	17,5	1	313	495	313	131	38	1	247	644	247	25	113
			2	442	442	184	184		2	509	509	72	72	
51,3	52,0	32,5	1	355	553	355	157	39	1	282	742	282	25	120
			2	495	495	215	215		2	586	586	79	79	
55,8	56,5	50,0	1	403	619	403	188	41	1	325	848	325	25	126
			2	556	556	251	251		2	672	672	90	90	
60,3	61,0	65,0	1	448	682	448	214	43	1	356	965	356	25	134
			2	613	613	283	283		2	758	758	93	93	
64,8	65,5	85,0	1	505	759	505	252	45	1	406	1094	406	25	143
			2	684	684	326	326		2	860	860	105	105	
69,3	70,0	105,0	1	562	838	562	287	47	1	449	1235	449	25	152
			2	757	757	367	367		2	967	967	112	112	
73,8	74,5	127,5	1	626	923	626	329	49	1	505	1380	505	25	161
			2	836	836	416	416		2	1083	1083	125	125	