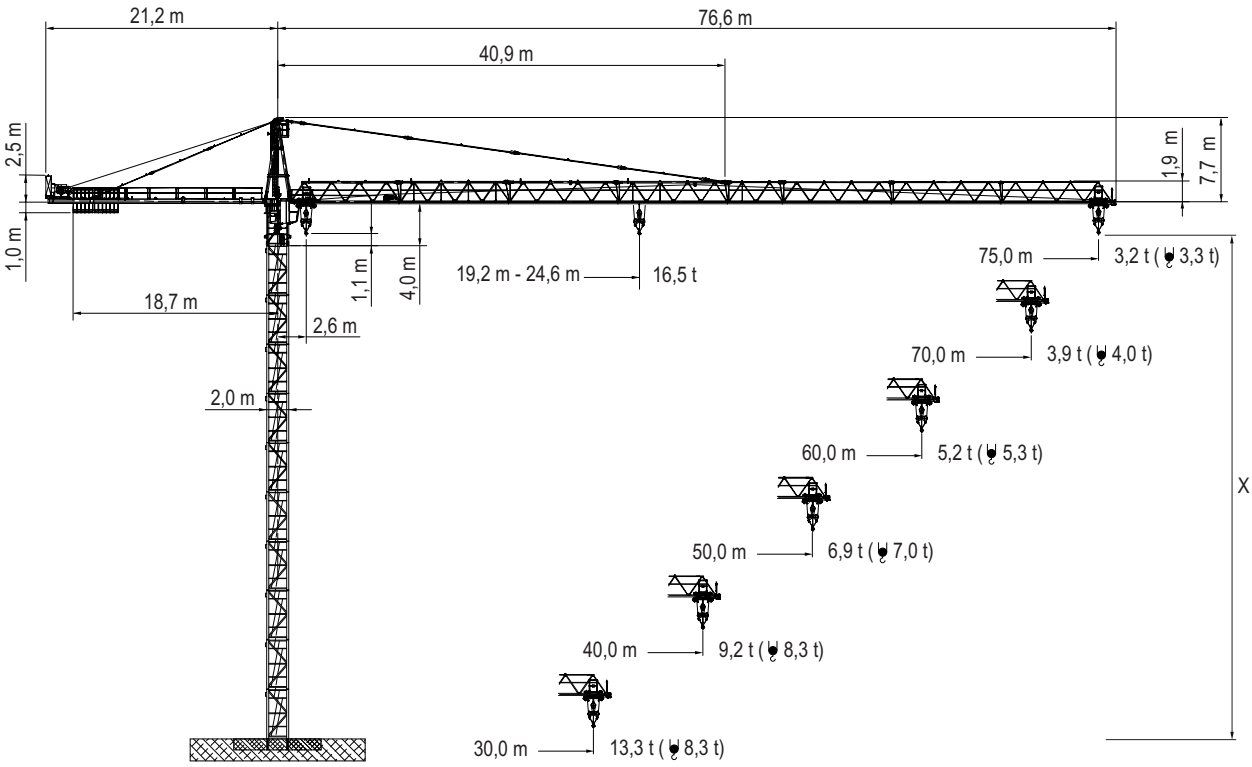
WOLFFKRAN

1 Schedule drawing

1.1 Schedule drawing WOLFF 7532.16cross



Data WOLFF 7532.16

Item	Data
Crane type	BGL GROUP C.0.10.0315
Design	Overhead travelling crane with top slewing trolley jib, with climbing feature
Type of setup	Stationary or travelling
Basis of calculation	EN 14439 (C25)
Payload torque	max. 4060 kN/m
Hoist winch	Hw 875 FU

2 Load carrying capacities

2.1 Table of load carrying capacity WOLFF 7532.16 (8.3 t, 2-fall mode)

8.3 t		Operating radius[m]		20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0	75.0	
JL [m]	75.0	2.6 – 35.9		8.3	8.3	8.3	8.3	7.3	6.4	5.6	5.0	4.5	4.0	3.6	**3.3**	LCC [t]
	70.0	2.6 – 38.6		8.3	8.3	8.3	8.3	8.0	6.9	6.1	5.4	4.9	4.4	**4.0**		
	65.0	2.6 – 40.6		8.3	8.3	8.3	8.3	8.3	7.4	6.5	5.8	5.2	**4.7**			
	60.0	2.6 – 41.2		8.3	8.3	8.3	8.3	8.3	7.5	6.6	5.9	**5.3**				
	55.0	2.6 – 42.4		8.3	8.3	8.3	8.3	8.3	7.7	6.8	**6.1**					
	50.0	2.6 – 43.2		8.3	8.3	8.3	8.3	8.3	7.9	**7.0**						
	45.0	2.6 – 44.1		8.3	8.3	8.3	8.3	8.3	**8.1**							
	40.0	2.6 – 44.2		8.3	8.3	8.3	8.3	**8.3**								
	35.0	2.6 – 45.2		8.3	8.3	8.3	**8.3**									
	30.0	2.6 – 46.0		8.3	8.3	**8.3**										

JL	Jib length
LCC	Load carrying capacity

The load carrying capacity is related to a hook range of 42.0 m. Hook ranges greater than that reduce the maximum load carrying capacity by the weight of the additional hoisting ropes (2-fall mode = 2.5 kg per meter of the hook range).

2.2 Table of load carrying capacities (kg) in meter intervals, WOLFF 7532.16 (8.3 t, 2-fall mode)

Operating radius	Jib length [m]									
[m]	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0	75.0
10	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
11	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
12	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
13	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
14	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
15	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
16	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
17	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
18	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
19	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
20	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**
21	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
22	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
23	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
24	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
25	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**
26	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
27	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
28	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
29	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
30	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**
31		8300	8300	8300	8300	8300	8300	8300	8300	8300
32		8300	8300	8300	8300	8300	8300	8300	8300	8300
33		8300	8300	8300	8300	8300	8300	8300	8300	8300
34		8300	8300	8300	8300	8300	8300	8300	8300	8300
35		**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**8300**
36			8300	8300	8300	8300	8300	8300	8300	8270
37			8300	8300	8300	8300	8300	8300	8300	8010
38			8300	8300	8300	8300	8300	8300	8300	7770
39			8300	8300	8300	8300	8300	8300	8200	7540
40			**8300**	**8300**	**8300**	**8300**	**8300**	**8300**	**7970**	**7320**
41				8300	8300	8300	8300	8210	7740	7110
42				8300	8300	8300	8120	7980	7530	6910
43				8300	8300	8160	7910	7760	7320	6720
44				8300	8130	7950	7700	7560	7130	6530
45				**8100**	**7920**	**7740**	**7500**	**7360**	**6940**	**6360**
46					7720	7550	7310	7170	6760	6190
47					7530	7360	7120	6990	6590	6030
48					7350	7180	6950	6820	6420	5880
49					7170	7000	6780	6660	6270	5740
50					**7000**	**6840**	**6620**	**6500**	**6120**	**5600**
51						6680	6460	6340	5970	5460
52						6530	6310	6200	5830	5330
53						6380	6170	6060	5700	5210
54						6240	6030	5920	5570	5090
55						**6100**	**5900**	**5790**	**5440**	**4970**
56							5770	5660	5320	4860
57							5650	5540	5210	4750
58							5530	5420	5090	4650
59							5410	5310	4990	4540
60							**5300**	**5200**	**4880**	**4450**
61								5090	4780	4350
62								4990	4680	4260
63								4890	4590	4170
64								4790	4500	4090
65								**4700**	**4410**	**4010**
66									4320	3930
67									4240	3850
68									4160	3770
69									4080	3700
70									**4000**	**3630**
71										3560
72										3490
73										3430
74										3360
75										**3300**

2.3 Table of load carrying capacity WOLFF 7532.16 (16.5 t, 4-fall mode)

16.5 t		Operating radius[m]		20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0	75.0	
JL [m]	75.0	2.6 – 19.2		15.8	12.4	10.1	8.5	7.2	6.3	5.5	4.9	4.4	3.9	3.5	**3.2**	LCC [t]
	70.0	2.6 – 20.7		16.5	13.4	11.0	9.2	7.9	6.8	6.0	5.3	4.8	4.3	**3.9**		
	65.0	2.6 – 21.8		16.5	14.2	11.6	9.7	8.3	7.3	6.4	5.7	5.1	**4.6**			
	60.0	2.6 – 22.1		16.5	14.4	11.8	9.9	8.5	7.4	6.5	5.8	**5.2**				
	55.0	2.6 – 22.7		16.5	14.9	12.2	10.2	8.8	7.6	6.7	**6.0**					
	50.0	2.6 – 23.2		16.5	15.2	12.4	10.5	9.0	7.8	**6.9**						
	45.0	2.6 – 23.6		16.5	15.5	12.7	10.7	9.2	**8.0**							
	40.0	2.6 – 23.7		16.5	15.6	12.7	10.7	**9.2**								
	35.0	2.6 – 24.2		16.5	16.0	13.1	**11.0**									
	30.0	2.6 – 24.6		16.5	16.2	**13.3**										

JL	Jib length
LCC	Load carrying capacity

The load carrying capacity is related to a hook range of 42.0 m. Hook ranges greater than that reduce the maximum load carrying capacity by the weight of the additional hoisting ropes (4-fall mode = 5.0 kg per meter of the hook range).

2.4 Table of load carrying capacities (kg) in meter intervals, WOLFF 7532.16 (16.5 t, 4-fall mode)

Operating radius	Jib length [m]									
[m]	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0	75.0
10	16500	16500	16500	16500	16500	16500	16500	16500	16500	16500
11	16500	16500	16500	16500	16500	16500	16500	16500	16500	16500
12	16500	16500	16500	16500	16500	16500	16500	16500	16500	16500
13	16500	16500	16500	16500	16500	16500	16500	16500	16500	16500
14	16500	16500	16500	16500	16500	16500	16500	16500	16500	16500
15	16500	16500	16500	16500	16500	16500	16500	16500	16500	16500
16	16500	16500	16500	16500	16500	16500	16500	16500	16500	16500
17	16500	16500	16500	16500	16500	16500	16500	16500	16500	16500
18	16500	16500	16500	16500	16500	16500	16500	16500	16500	16500
19	16500	16500	16500	16500	16500	16500	16500	16500	16500	16500
20	**16500**	**16500**	**16500**	**16500**	**16500**	**16500**	**16500**	**16500**	**16500**	**15820**
21	16500	16500	16500	16500	16500	16500	16500	16500	16240	15000
22	16500	16500	16500	16500	16500	16500	16500	16310	15440	14260
23	16500	16500	16500	16500	16500	16280	15800	15540	14710	13580
24	16500	16500	16260	16220	15880	15550	15090	14830	14040	12950
25	**16240**	**15960**	**15550**	**15510**	**15190**	**14870**	**14430**	**14180**	**13420**	**12380**
26	15560	15290	14900	14860	14550	14240	13820	13590	12850	11850
27	14930	14670	14300	14260	13960	13660	13250	13030	12320	11360
28	14350	14100	13740	13700	13410	13130	12730	12520	11840	10900
29	13810	13560	13220	13180	12900	12630	12240	12040	11380	10480
30	**13300**	**13070**	**12730**	**12700**	**12430**	**12160**	**11790**	**11590**	**10950**	**10090**
31		12600	12270	12240	11980	11720	11360	11170	10560	9710
32		12160	11850	11810	11560	11310	10970	10780	10180	9370
33		11750	11450	11410	11170	10930	10590	10410	9830	9040
34		11360	11070	11040	10800	10560	10240	10060	9500	8740
35		**11000**	**10710**	**10680**	**10450**	**10220**	**9910**	**9730**	**9190**	**8450**
36			10380	10350	10120	9900	9590	9430	8900	8170
37			10060	10030	9810	9600	9300	9130	8620	7910
38			9760	9730	9520	9310	9020	8860	8350	7670
39			9470	9440	9240	9030	8750	8590	8100	7440
40			**9200**	**9170**	**8970**	**8770**	**8500**	**8340**	**7870**	**7220**
41				8920	8720	8520	8250	8110	7640	7010
42				8670	8480	8290	8020	7880	7430	6810
43				8440	8250	8060	7810	7660	7220	6620
44				8210	8030	7850	7600	7460	7030	6430
45				**8000**	**7820**	**7640**	**7400**	**7260**	**6840**	**6260**
46					7620	7450	7210	7070	6660	6090
47					7430	7260	7020	6890	6490	5930
48					7250	7080	6850	6720	6320	5780
49					7070	6900	6680	6560	6170	5640
50					**6900**	**6740**	**6520**	**6400**	**6020**	**5500**
51						6580	6360	6240	5870	5360
52						6430	6210	6100	5730	5230
53						6280	6070	5960	5600	5110
54						6140	5930	5820	5470	4990
55						**6000**	**5800**	**5690**	**5340**	**4870**
56							5670	5560	5220	4760
57							5550	5440	5110	4650
58							5430	5320	4990	4550
59							5310	5210	4890	4440
60							**5200**	**5100**	**4780**	**4350**
61								4990	4680	4250
62								4890	4580	4160
63								4790	4490	4070
64								4690	4400	3990
65								**4600**	**4310**	**3910**
66									4220	3830
67									4140	3750
68									4060	3670
69									3980	3600
70									**3900**	**3530**
71										3460
72										3390
73										3330
74										3260
75										**3200**

3 Tower combinations



DANGER

Usage of incorrect tower combinations.

The slewing tower crane may overturn.

1) Use the specified tower combinations.

2) If you need another tower combination that is not specified here, please contact WOLFFKRAN to get an approved alternative setup in writing.



NOTICE

All tower combinations apply to free standing slewing tower cranes without climbing gear.



NOTICE

For tower combination with tower element TV 25 and UV 25 please contact WOLFFKRAN.

3.1 Tower combinations on foundation anchor

Jib length		30 m – 75 m			
Item					
1	4.5 m	UV 20.4	TV 20.4	UV 20.4	
2	9.0 m	UV 20.4	TV 20.4	UV 20.4	
3	13.5 m	UV 20.4	TV 20.4	UV 20.4	
4	18.0 m	UV 20.4	TV 20.4	UV 20.4	
5	22.5 m	UV 20.4	TV 20.4	UV 20.4	
6	27.0 m	UV 20.4	TV 20.4	TVA 20.4	
7	31.5 m	UV 20.4	TV 20.4	TV 20.4	
8	36.0 m		TV 20.4	TV 20.4	
9	40.5 m		TV 20.4	TV 20.4	
10	45.0 m		TV 20.4	TV 20.4	
11	49.5 m		TV 20.4	TV 20.4	
12	54.0 m		TV 20.4	TV 20.4	
13	58.5 m		TV 20.4	TV 20.4	
14	63.0 m			TV 20.4	
Foundation		FUA 120 type C-120	FUA 140 type D-140	FUA 140 type D-140	
Tower height [m]		31.5	58.5	63.0	
Hook height 2-fall operation [m]		33.0	60.0	64.5	
Hook height 4-fall operation [m]		32.6	59.6	64.1	

Jib length		30 m – 75 m			
Item					
1	4.5 m	UV 20.4			
2	9.0 m	UV 20.4			
3	13.5 m	UV 20.4			
4	18.0 m	UV 20.4			
5	22.5 m	TVA 20.4			
6	27.0 m	TV 20.4			
7	31.5 m	TV 20.4			
8	36.0 m	TV 20.4			
9	40.5 m	TV 20.4			
10	45.0 m	TV 20.4			
11	49.5 m	TV 20.4			
12	54.0 m	TV 20.4			
13	55.0 m	VR 2023			
14	59.5 m	TV 23			
15	64.0 m	HTA 23			
16	68.5 m	HT 23			
17	73.0 m	HT 23			
18	77.5 m	HT 23			
Foundation		FUA G 160			
Tower height [m]		77.5			
Hook height 2-fall operation [m]		79.0			
Hook height 4-fall operation [m]		78.6			

Jib length		30 m – 75 m			
Item					
1	4.5 m	UV 20.4			
2	9.0 m	UV 20.4			
3	13.5 m	UV 20.4			
4	18.0 m	UV 20.4			
5	22.5 m	TVA 20.4			
6	27.0 m	TV 20.4			
7	31.5 m	TV 20.4			
8	36.0 m	TV 20.4			
9	40.5 m	TV 20.4			
10	45.0 m	TV 20.4			
11	49.5 m	TV 20.4			
12	54.0 m	TV 20.4			
13	55.0 m	VR 2023			
14	59.5 m	TV 23			
15	64.0 m	HTA 23			
16	68.5 m	HT 23			
17	73.0 m	HT 23			
18	84.3 m	BT 23			
Foundation		FUA G 210			
Tower height [m]		84.3			
Hook height 2-fall operation [m]		85.8			
Hook height 4-fall operation [m]		85.4			

Jib length		30 m – 75 m			
Item					
1	4.5 m	UV 20.4			
2	9.0 m	UV 20.4			
3	13.5 m	UV 20.4			
4	18.0 m	UV 20.4			
5	22.5 m	TVA 20.4			
6	27.0 m	TV 20.4			
7	31.5 m	TV 20.4			
8	36.0 m	TV 20.4			
9	40.5 m	TV 20.4			
10	45.0 m	TV 20.4			
11	49.5 m	TV 20.4			
12	54.0 m	TV 20.4			
13	55.0 m	VR 2023			
14	59.5 m	TV 23			
15	64.0 m	HTA 23			
16	68.5 m	HT 23			
17	73.0 m	HT 23			
18	74.2 m	VR 23/25-29			
19	78.7 m	UV 29			
20	88.7 m	BT 29			
Foundation		FUA BT 29			
Tower height [m]		88.7			
Hook height 2-fall operation [m]		90.2			
Hook height 4-fall operation [m]		89.8			

3.2 Tower combinations on cross frame

Jib length		30 m – 75 m			
Item					
1	4.5 m	UV 20.4	UV 20.4	UV 20.4	UV 20.4
2	9.0 m	UV 20.4	UV 20.4	UV 20.4	UV 20.4
3	13.5 m	UV 20.4	UV 20.4	UV 20.4	UV 20.4
4	18.0 m	UV 20.4	UV 20.4	UV 20.4	UV 20.4
5	22.5 m	UV 20.4	UV 20.4	UV 20.4	UV 20.4
6	27.0 m	TVA 20.4	UV 20.4	TVA 20.4	TVA 20.4
7	31.5 m	TV 20.4	TVA 20.4	TV 20.4	TV 20.4
8	36.0 m	TV 20.4	TV 20.4	TV 20.4	TV 20.4
9	40.5 m	TV 20.4		TV 20.4	TV 20.4
10	45.0 m	TV 20.4		TV 20.4	TV 20.4
11	49.5 m			TV 20.4	TV 20.4
12	54.0 m			TV 20.4	TV 20.4
13	58.5 m			TVÜ 20.4	TV 20.4
14	63.0 m				TV 20.4
Substructure		KR 10-46	KR 10-46/60	KR 1000-8	KR 12-60 KR 12-60/80
Corner distance [m x m]		4.6 x 4.6	6.0 x 6.0	8.0 x 8.0	6.0 x 6.0 8.0 x 8.0
Substructure height [m]		1.2	1.2	1.2	1.4
Tower height [m]		46.2	37.2	59.7	64.4
Hook height 2-fall operation [m]		47.7	38.7	61.2	65.9
Hook height 4-fall operation [m]		47.3	38.3	60.8	65.5

Jib length		30 m – 75 m			
Item					
1	4.5 m	UV 20.4	UV 20.4		
2	9.0 m	UV 20.4	UV 20.4		
3	13.5 m	UV 20.4	UV 20.4		
4	18.0 m	UV 20.4	UV 20.4		
5	22.5 m	TVA 20.4	TVA 20.4		
6	27.0 m	TV 20.4	TV 20.4		
7	31.5 m	TV 20.4	TV 20.4		
8	36.0 m	TV 20.4	TV 20.4		
9	40.5 m	TV 20.4	TV 20.4		
10	45.0 m	TV 20.4	TV 20.4		
11	49.5 m	TV 20.4	TV 20.4		
12	54.0 m	TV 20.4	TV 20.4		
13	55.0 m	VR 2023	VR 2023		
14	59.5 m	TV 23	TV 23		
15	64.0 m	TV 23	HTA 23		
16	68.5 m	HTA 23	HT 23		
17	73.0 m	HT 23	HT 23		
18	77.5 m		HT 23		
Substructure		KR 12-60 KR 12-60/80	KR 16-80 KR 16-80/100		
Corner distance [m x m]		6.0 x 6.0 8.0 x 8.0	8.0 x 8.0 10.0 x 10.0		
Substructure height [m]		1.4	1.8		
Tower height [m]		74.4	79.3		
Hook height 2-fall operation [m]		75.9	80.8		
Hook height 4-fall operation [m]		75.5	80.4		

Jib length		30 m – 75 m			
Item					
1	4.5 m	UV 20.4			
2	9.0 m	UV 20.4			
3	13.5 m	UV 20.4			
4	18.0 m	UV 20.4			
5	22.5 m	TVA 20.4			
6	27.0 m	TV 20.4			
7	31.5 m	TV 20.4			
8	36.0 m	TV 20.4			
9	40.5 m	TV 20.4			
10	45.0 m	TV 20.4			
11	49.5 m	TV 20.4			
12	54.0 m	TV 20.4			
13	55.0 m	VR 2023			
14	59.5 m	TV 23			
15	64.0 m	HTA 23			
16	68.5 m	HT 23			
17	73.0 m	HT 23			
18	74.2 m	VR 23/25-29			
19	78.7 m	UV 29			
20	88.7 m	BT 29			
Substructure		KR 16-80 KR 16-80/100			
Corner distance [m x m]		8.0 x 8.0 10.0 x 10.0			
Substructure height [m]		1.8			
Tower height [m]		90.5			
Hook height 2-fall operation [m]		92.0			
Hook height 4-fall operation [m]		91.6			

3.3 Tower combinations on cross frame element

Jib length		30 m – 75 m			
Item					
1	4.5 m	UV 20.4	UV 20.4		
2	9.0 m	UV 20.4	UV 20.4		
3	13.5 m	UV 20.4	UV 20.4		
4	18.0 m	UV 20.4	UV 20.4		
5	22.5 m	UV 20.4	UV 20.4		
6	27.0 m	TVA 20.4	TVA 20.4		
7	31.5 m	TV 20.4	TV 20.4		
8	36.0 m	TV 20.4	TV 20.4		
9	40.5 m	TV 20.4	TV 20.4		
10	45.0 m		TV 20.4		
11	49.5 m		TV 20.4		
12	54.0 m		TV 20.4		
13	58.5 m		TVÜ 20.4		
14	63.0 m		UVA 25		
Substructure		KRE 260.2	KRE 480		
Corner distance [m x m]		6.0 x 6.0	8.0 x 8.0		
Substructure height [m]		4.0	4.0		
Tower height [m]		44.5	67.0		
Hook height 2-fall operation [m]		46.0	68.5		
Hook height 4-fall operation [m]		45.6	68.1		

3.4 Tower combinations on cross frame, traveling

Jib length		30 m – 75 m			
Item					
1	4.5 m	UV 20.4	UV 20.4	UV 20.4	
2	9.0 m	UV 20.4	UV 20.4	UV 20.4	
3	13.5 m	UV 20.4	UV 20.4	UV 20.4	
4	18.0 m	UV 20.4	UV 20.4	UV 20.4	
5	22.5 m	TVA 20.4	TVA 20.4	TVA 20.4	
6	27.0 m	TV 20.4	TV 20.4	TV 20.4	
7	31.5 m	TV 20.4	TV 20.4	TV 20.4	
8	36.0 m	TV 20.4	TV 20.4	TV 20.4	
9	40.5 m	TV 20.4	TV 20.4	TV 20.4	
10	45.0 m	TV 20.4	TV 20.4	TV 20.4	
11	49.5 m	TV 20.4	TV 20.4	TV 20.4	
12	54.0 m		TV 20.4	TV 20.4	
13	58.5 m		TV 20.4	TV 20.4	
Substructure		KRF 10-46/60	KRF4 12-60/80	KRF6 12-60/80	
Corner distance [m x m]		6.0 x 6.0	8.0 x 8.0	8.0 x 8.0	
Substructure height [m]		2.0	2.5	2.9	
Tower height [m]		51.5	61.0	61.4	
Hook height 2-fall operation [m]		53.0	62.5	62.9	
Hook height 4-fall operation [m]		52.6	62.1	62.5	

Jib length		30 m – 75 m			
Item					
1	4.5 m	UV 20.4			
2	9.0 m	UV 20.4			
3	13.5 m	UV 20.4			
4	18.0 m	UV 20.4			
5	22.5 m	TVA 20.4			
6	27.0 m	TV 20.4			
7	31.5 m	TV 20.4			
8	36.0 m	TV 20.4			
9	40.5 m	TV 20.4			
10	45.0 m	TV 20.4			
11	49.5 m	TV 20.4			
12	50.5 m	VR 2023			
13	55.0 m	TV 23			
14	59.5 m	TV 23			
15	64.0 m	HTA 23			
16	68.5 m	HT 23			
Substructure		KRF6 12-60/80			
Corner distance [m x m]		8.0 x 8.0			
Substructure height [m]		2.9			
Tower height [m]		71.4			
Hook height 2-fall operation [m]		72.9			
Hook height 4-fall operation [m]		72.5			

Jib length		30 m – 75 m			
Item					
1	4.5 m	UV 20.4			
2	9.0 m	UV 20.4			
3	13.5 m	UV 20.4			
4	18.0 m	TVA 20.4			
5	22.5 m	TV 20.4			
6	27.0 m	TV 20.4			
7	31.5 m	TV 20.4			
8	36.0 m	TV 20.4			
9	40.5 m	TV 20.4			
10	45.0 m	TV 20.4			
11	46.0 m	VR 2023			
12	50.5 m	TV 23			
13	55.0 m	TV 23			
14	59.5 m	TV 23			
15	64.0 m	HTA 23			
16	68.5 m	HT 23			
17	73.0 m	HT 23			
18	77.5 m	HT 23			
Substructure		KRF 16-80/100			
Corner distance [m x m]		10.0 x 10.0			
Substructure height [m]		3.3			
Tower height [m]		80.8			
Hook height 2-fall operation [m]		82.3			
Hook height 4-fall operation [m]		81.9			

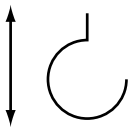
Jib length		30 m – 75 m			
Item					
1	4.5 m	UV 20.4			
2	9.0 m	UV 20.4			
3	13.5 m	UV 20.4			
4	18.0 m	TVA 20.4			
5	22.5 m	TV 20.4			
6	27.0 m	TV 20.4			
7	31.5 m	TV 20.4			
8	36.0 m	TV 20.4			
9	40.5 m	TV 20.4			
10	45.0 m	TV 20.4			
11	46.0 m	VR 2023			
12	50.5 m	TV 23			
13	55.0 m	TV 23			
14	59.5 m	HTA 23			
15	64.0 m	HT 23			
16	68.5 m	HT 23			
17	73.0 m	HT 23			
18	74.2 m	VR 23/25-29			
19	84.2 m	BT 29			
Substructure		KRF 16-80/100			
Corner distance [m x m]		10.0 x 10.0			
Substructure height [m]		3.3			
Tower height [m]		87.5			
Hook height 2-fall operation [m]		89.0			
Hook height 4-fall operation [m]		88.6			

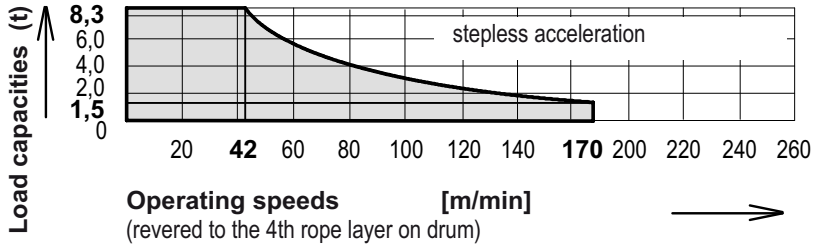
3.5 Tower combinations on bogie truck

Jib length		30 m – 75 m			
Item					
1	4.5 m	UV 20.4	UV 20.4		
2	9.0 m	UV 20.4	UV 20.4		
3	13.5 m	UV 20.4	UV 20.4		
4	18.0 m	UV 20.4	UV 20.4		
5	22.5 m	TVA 20.4	TVA 20.4		
6	27.0 m	TV 20.4	TV 20.4		
7	31.5 m	TV 20.4	TV 20.4		
8	36.0 m	TV 20.4	TV 20.4		
9	40.5 m	TV 20.4	TV 20.4		
10	45.0 m		TV 20.4		
11	49.5 m		TV 20.4		
12	54.0 m		TVÜ 20.4		
13	58.5 m		UVA 25		
Substructure		UW 260.3	UW 480		
Corner distance [m x m]		6.0 x 6.0	8.0 x 8.0		
Substructure height [m]		4.5	5.0		
Tower height [m]		45.0	63.5		
Hook height 2-fall operation [m]		46.5	65.0		
Hook height 4-fall operation [m]		46.1	64.6		

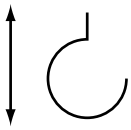
4 Operating speeds

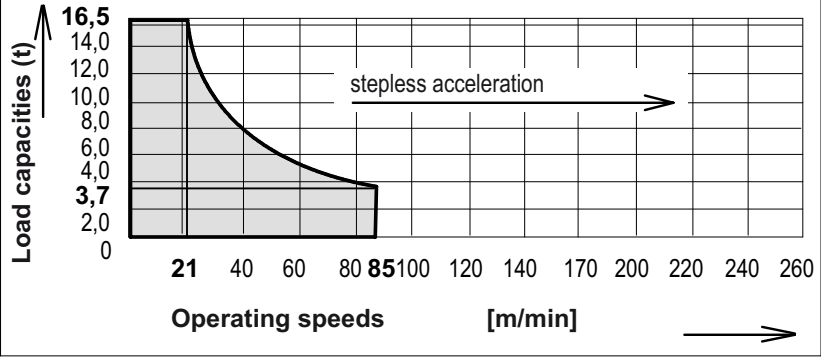
Drive unit [type]	Operating speed Carrying load		Hook travel distance max. [m]	Power [kW]	Total connected load [kVA]
Hw875FU	**Lifting / lowering**		**460**	**75**	96.0 Total connected load at coincidence factor of 0.8



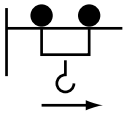


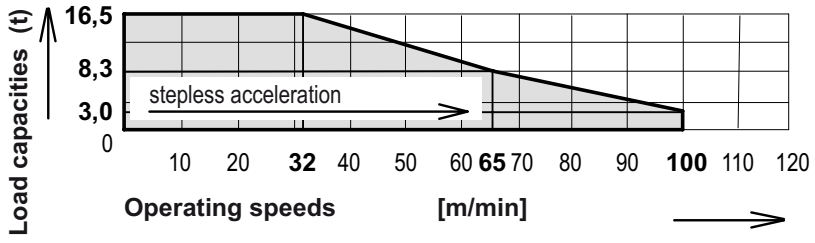
Drive unit [type]	Operating speed Carrying load		Hook travel distance max. [m]	Power [kW]	Total connected load [kVA]
Hw875FU	**Lifting / lowering**		**230**	**75**	96.0 Total connected load at coincidence factor of 0.8





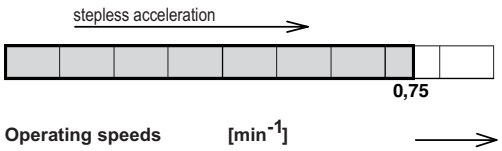
KW	Crab movement	9.0



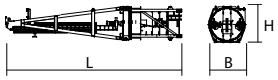
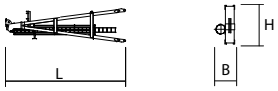
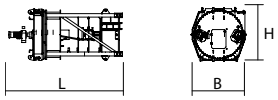
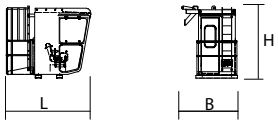
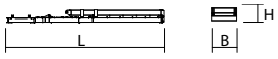
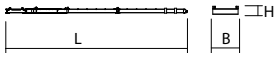
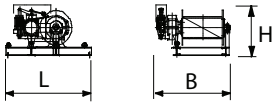
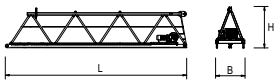
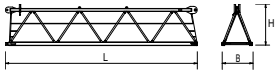
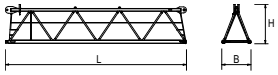
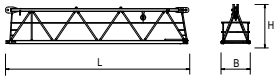
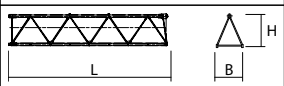
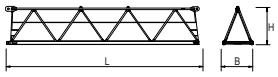
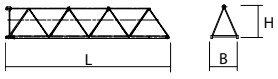


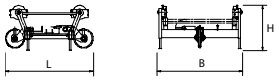
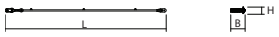
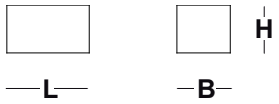
SG	Slewing	2x6.0





5 Package list 7532.16

Quantity	Description	Package	L [m]	W [m]	H [m]	Weight [kg]	Volume [m³]
1	Tower head section, complete including platforms and misc. stay parts		11.72	2.42	2.42	11250	68.64
	Tower head section upper part including platforms and misc. stay parts		7.45	1.37	2.42	2730	24.70
	Tower head section lower part including slewing frame, ball slew bearing, slewing gears and slip ring system		5.39	2.42	2.42	8520	31.57
1	Driver's cab suspension		1.03	2.01	0.58	230	1.20
1	Driver's cab with driver's cab suspension		2.80	2.15	2.45	1100	14.75
1	Counter jib in hinged position (stay parts)		12.40	2.49	1.05	5500 (555)	32.29
	Counter jib (stay parts)		20.35	2.49	0.65	5500 (555)	32.80
1	Machine platform Hw875FU including hoisting rope (Ø 16 mm x 285 m)		2.48	2.46	2.18	4670	13.30
1	Jib section 1 with traverse gear		10.18	1.64	2.30	3000	38.40
1	Jib section 2		10.21	1.64	2.05	2150	34.32
1	Jib section 3		10.21	1.64	2.03	2000	33.99
1	Jib section 4 (stay parts)		10.27	1.64	2.05	1900 (2820)	34.53
1	Jib section 5		5.26	1.64	2.02	990	17.43
1	Jib section 6		10.24	1.64	2.01	1700	33.76
1	Jib section 7		10.22	1.64	2.00	1260	33.52
1	Jib section 8		10.20	1.64	2.00	1010	33.46

Qua-ntity	Description	Package	L [m]	W [m]	H [m]	Weight [kg]	Volume [m³]
1	Rope swivel cross-beam		1.05	1.54	0.47	135	0.76
1	Trolley LK 8/16		1.87	1.85	1.00	460	3.46
	Maintenance cage		0.75	0.58	1.69	55	0.74
1	Snatch block U 8/16		1.02	0.26	1.70	640	0.45
1	Brace rods for operating radius 75 m		10.17	0.92	0.37	2720	3.46
	Standard railings		2.60	1.10	0.65	300	1.86
1	Box (small parts)		0.63	0.50	0.38	100	1.12

6 Assembly weights

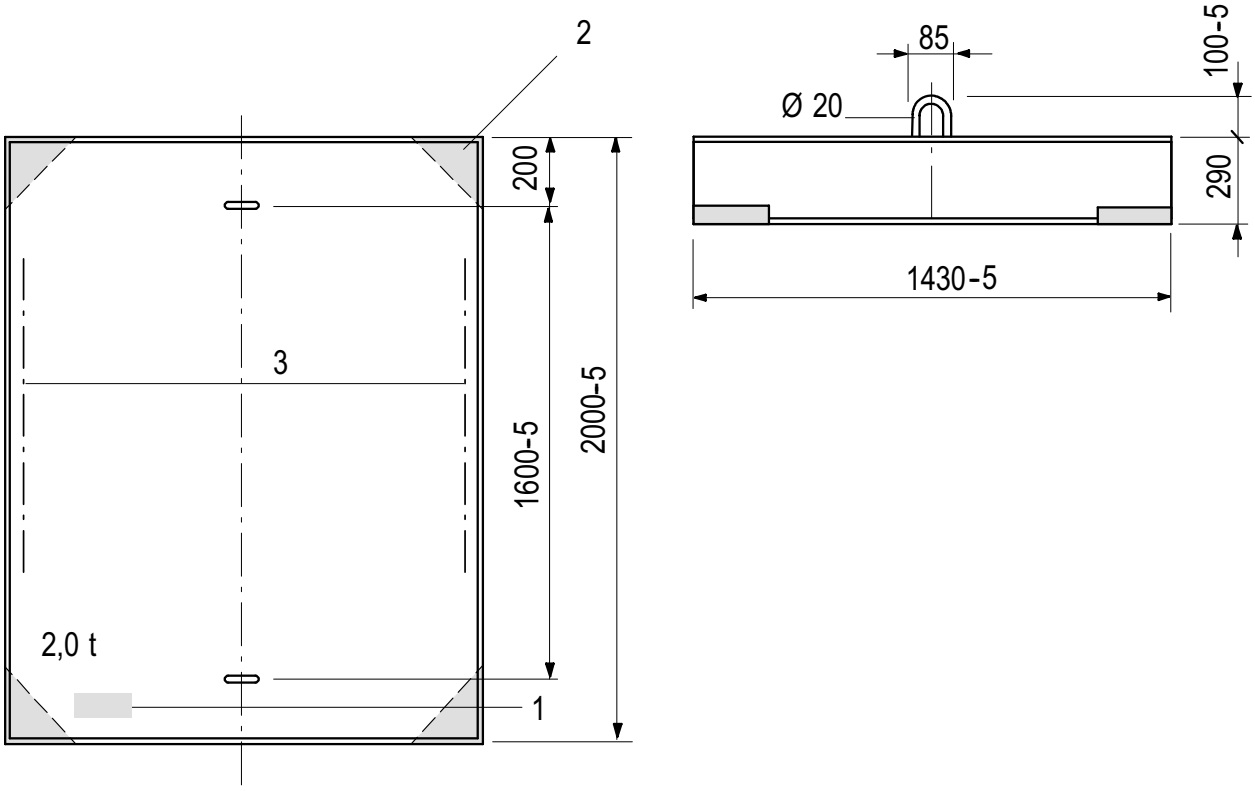
6.1 Counterweight blocks



NOTICE

The described diagrams of the counterweights and central ballast blocks only show sketches. Have them issue the reinforcement charts by experts.

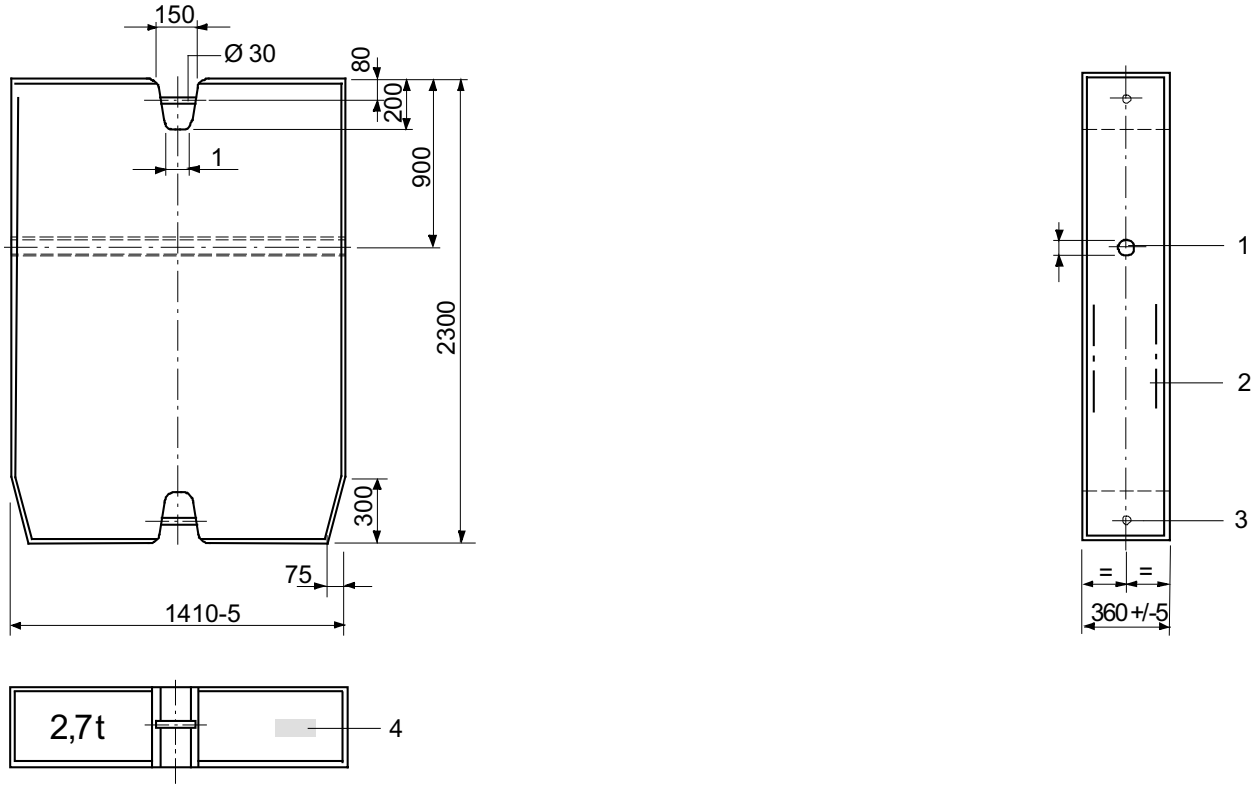
6.1.1 Counterweight block, 2.0 t



Data counterweight block 2.0 t

Item	Data
Material	Concrete, min. C 20/25
Max. permitted weight tolerance	+/- 3 %
Order number	962-2-006590
1	Component identifier
2	Corner guard

6.1.2 Counterweight block, 2.7 t



Data counterweight block 2.7 t

Item	Data
Material	Concrete, min. C 20/25
Max. permitted weight tolerance	+/- 3 %
Order number	962-2-005966
1	Connection for stub shaft (Ø 40/ 78 x 215 962-4-006490)
2	Structural steel reinforcement
3	Suspension
4	Component identifier

6.2 Total weight jib assembly

Assembly weights 7532

Trolley jib, complete: Brace plates, crab, trolley drive rope, snatch block and standard railings

Jib length [m]	Weight [kg] WOLFF 7532
75.0	17700
70.0	16800
65.0	16700
60.0	15800
55.0	14200
50.0	13200
45.0	12900
40.0	12000
35.0	11300
30.0	10300

6.3 Assembly weight slewing gear

Module	Crane parts	Weight [kg]	
Tower head section complete (including brace plates, driver's cab, driver's cab suspension, platform and standard railings)			12480
	▪ Tower head section upper part complete	2730	
	▪ Driver's cab with driver's cab suspension	1230	
	▪ Tower head section lower part including slewing frame, ball race bearing, slewing gears, standard railings and slip ring system	8520	
Counter jib with Hw875FU			12450
	▪ Counter jib with 4 brace plates and standard railings	5780	
	▪ Machine platform Hw875FU including hoisting rope (Ø16mm x 285m)	4670	
	▪ Counterweight 2t (below machine platform)	2000	

6.4 Assembly weight cross frame

Module	crane part	Weight [kg]	
Cross frame KR 10-46 (without accessories)			7000
	▪ 4 bolted spigots UV20	560	
	▪ 4 bolted spigots TV 20	684	
Cross frame KR 10-60 (without accessories)			8200
	▪ 4 bolted spigots UV20	560	
	▪ 4 bolted spigots TV 20	684	
Cross frame KR 1000-8 (without accessories)			14050
	▪ 4 bolted spigots TV 25	684	
	▪ 4 bolted spigots UV25	748	
Mobile cross frame KRF 10-46/60 (without accessories)			17500
	▪ 4 bolted spigots TV 25	684	
	▪ 4 bolted spigots UV25	748	

6.5 Assembly weight cross frame elements

Module	Crane parts	Weight [kg]	
Cross frame element KRE 260.2, complete			10900
	▪ Cross frame platform with hinged section, corner plates and transport locks	5455	
	▪ Mast base with diagonal struts and tie rods	5445	
Cross frame element KRE 480 complete			24250
	▪ Mast base	7100	
	▪ Hinged sections with corner plates	6250	
	▪ Diagonal struts and ballast carrier	9260	
	▪ Assembly platform, ladder, and small parts	1640	

6.6 Assembly weight bogie truck

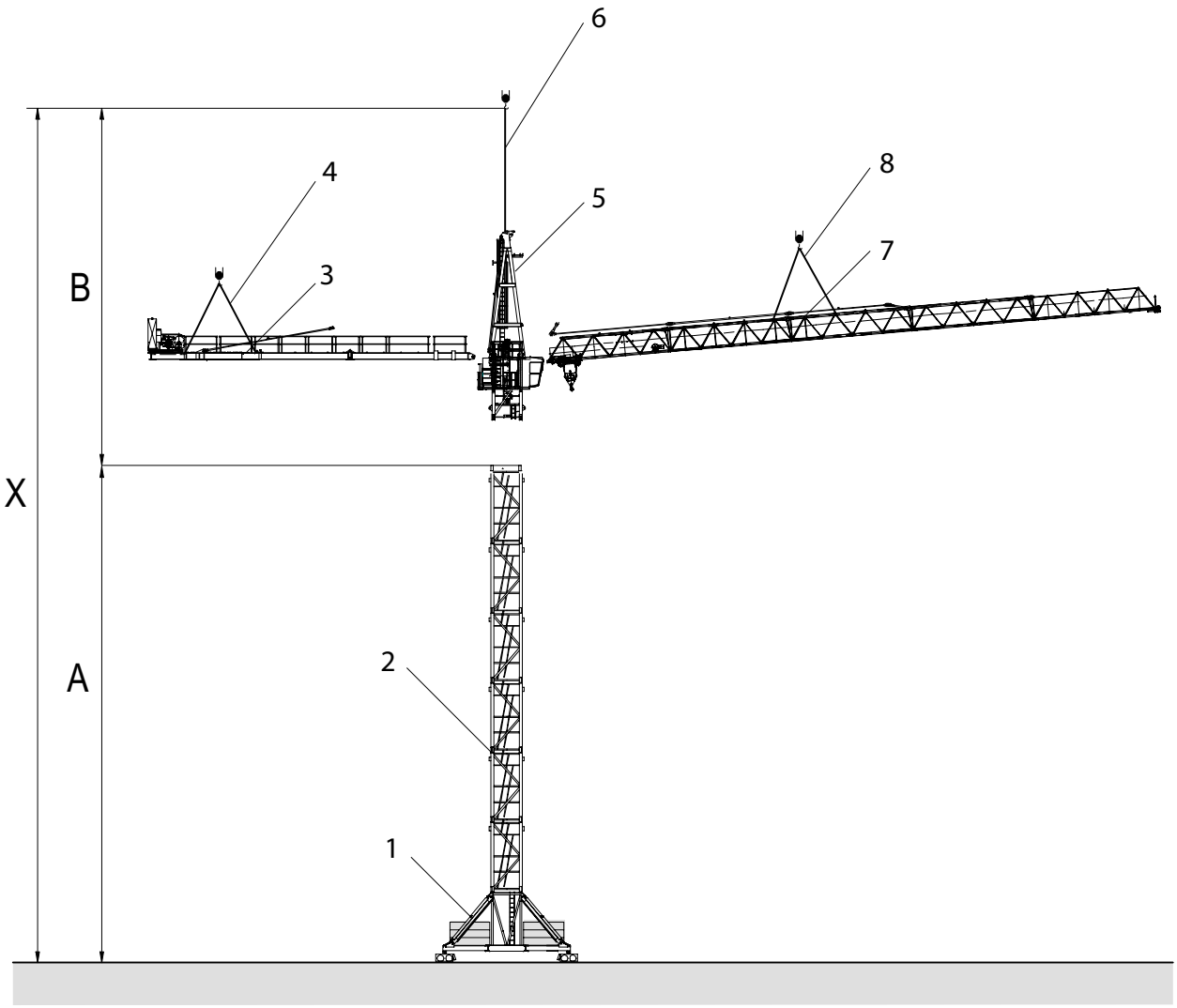
Module	Crane parts	Weight [kg]	
Bogie truck UW 260.3, complete			17100
	▪ Bogie truck platform with hinged sections, subframes and transport locks	11220	
	▪ Mast base with diagonal struts and tie rods	5880	
Bogie truck UW 480, complete			34000
	▪ Mast base including control cabinet	7100	
	▪ Hinged sections with lifting beam and subframes	16000	
	▪ Diagonal struts and ballast carrier	9260	
	▪ Assembly platform, ladder, and small parts	1640	

6.7 Hook height above ground required for mobile cranes

For information about the height of the WOLFF slewing tower crane, refer to Tower combinations [6].

NOTICE! During assembly, allowances must be made for level differences (mobile crane to base of the slewing tower crane).

Hook height above ground required for mobile cranes (X) = height of the WOLFF slewing tower crane (A) + clearance of 15 (B).



Exemplary illustration

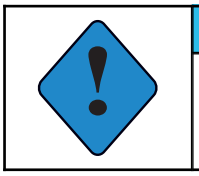
[A]	Height of the WOLFF slewing tower crane	[B]	Clearance 15 m
[X]	Hook height above ground required for the mobile crane		
1	Substructure	5	Tower head section, complete
2	Tower element	6	Single-point lifting tackle (1 m with shackle)
3	Counter jib including hoisting winch platform	7	Jib, complete
4	Four-point lifting tackle (6 m with shackle)	8	Four-point lifting tackle (6 m with shackle)

(see also):

- Tower combinations [6]

7 Assembly diagrams

7.1 Jib attachment diagram



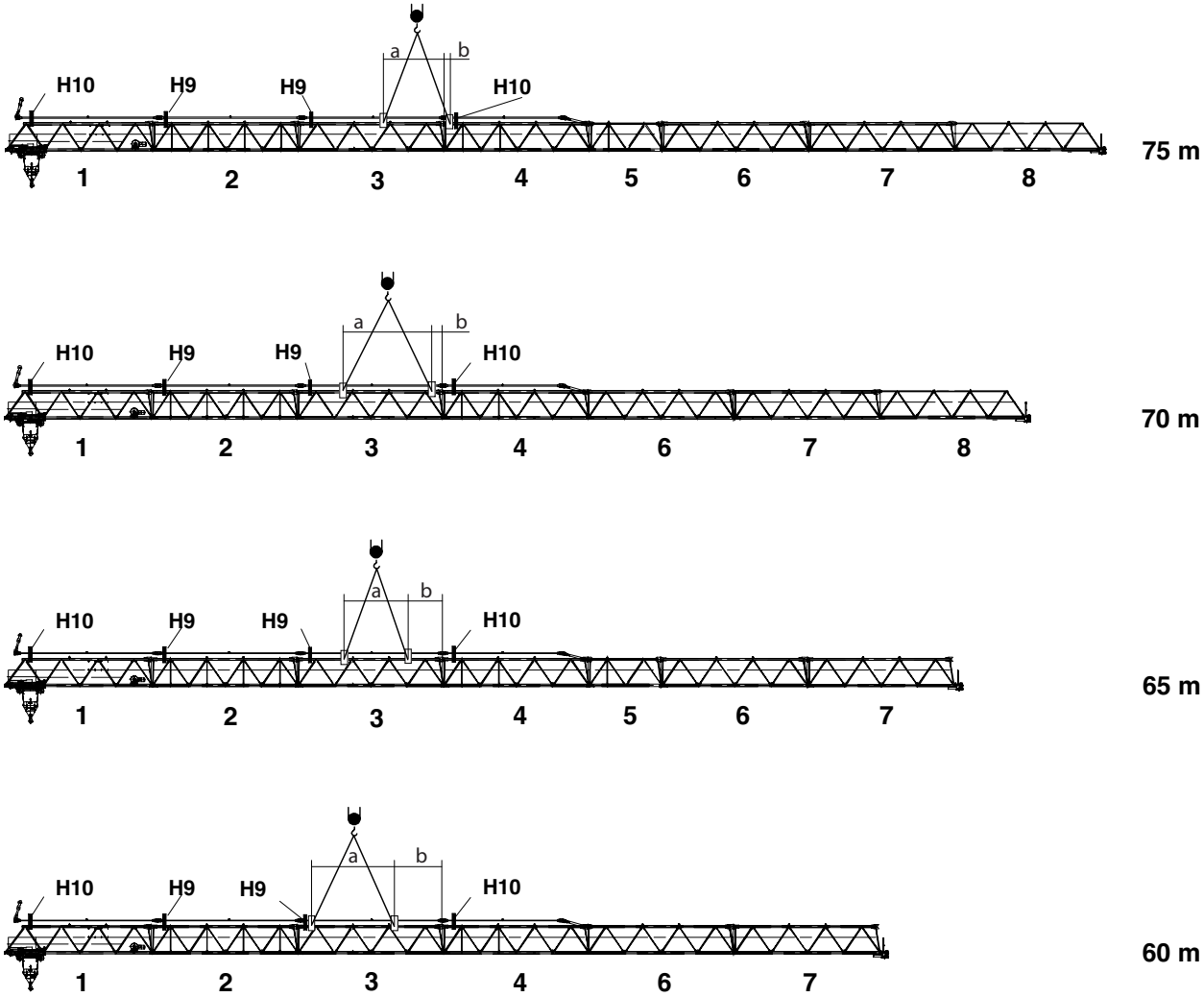
NOTICE

For jib assembly, use a Four-point lifting tackle (6 m with shackle).

Length of jib elements

Item	in [m]
Jib section 1, 2, 3, 4, 6, 7, 8	10.0
Jib section 5	5.0

7.1.1 Trolley jib - attachment diagram 75 m to 60 m

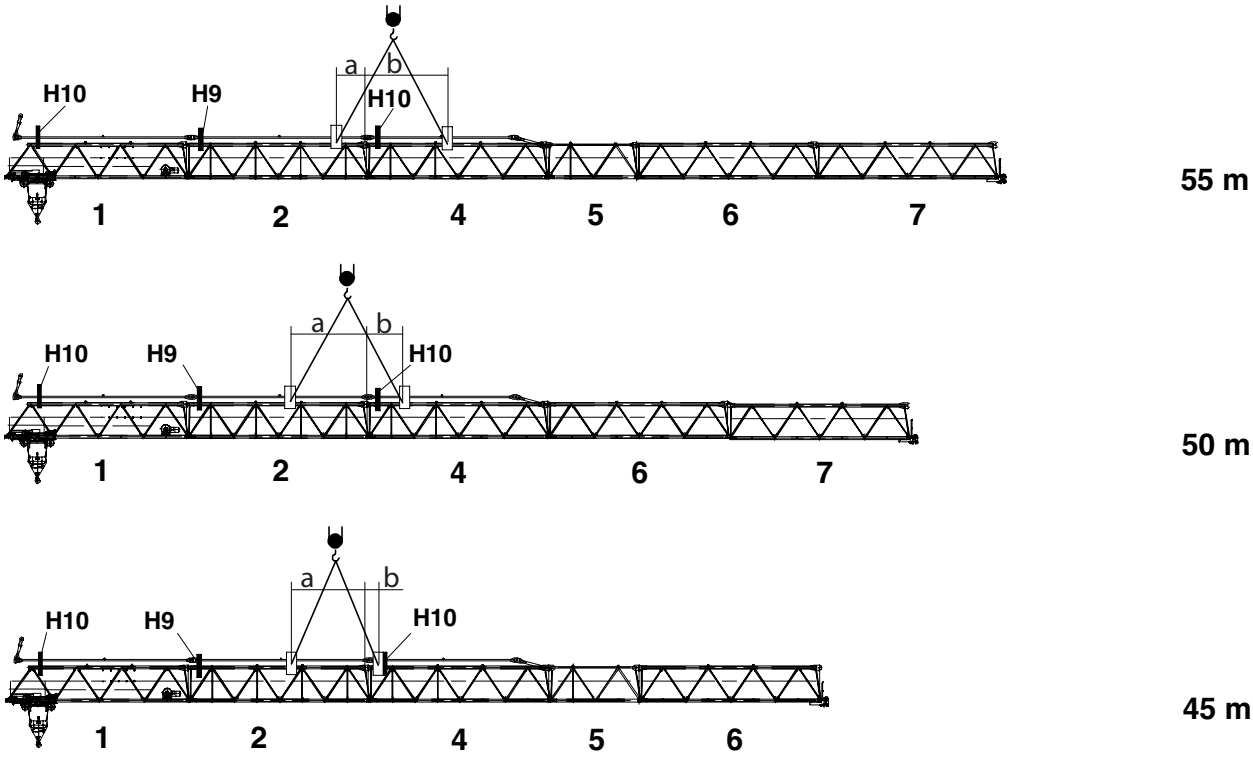


a	Dimension a	H9	Mounting rig H9
b	Dimension b	H10	Mounting rig H10

Attachment data 7532 cross

	Jib length [m]			
Data	**75.0**	**70.0**	**65.0**	**60.0**
a [m]	3.92	5.50	4.27	1.08
b [m]	0.52	0.92	2.15	5.51
Weight [kg]	17700	16800	16700	15800

7.1.2 Trolley jib - attachment diagram 55 m to 45 m

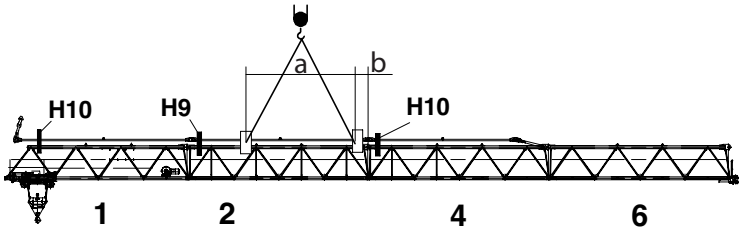


a	Dimension a	H9	Mounting rig H9
b	Dimension b	H10	Mounting rig H10

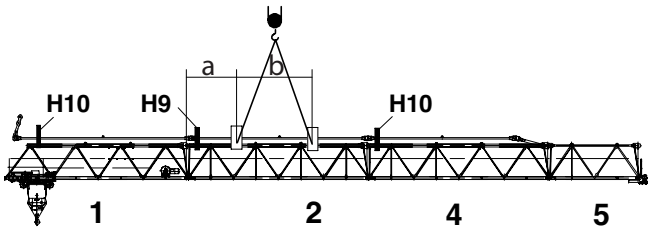
Attachment data 7532 cross

	Jib length [m]		
Data	**55.0**	**50.0**	**45.0**
a [m]	1.44	3.94	3.94
b [m]	4.11	1.61	0.52
Weight [kg]	14200	13200	12900

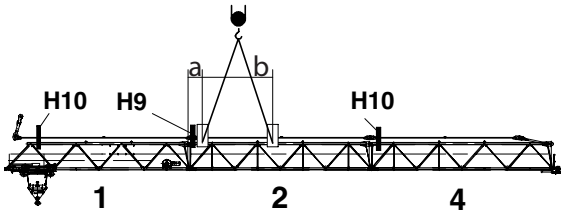
7.1.3 Trolley jib - attachment diagram 40 m to 30 m



40 m



35 m



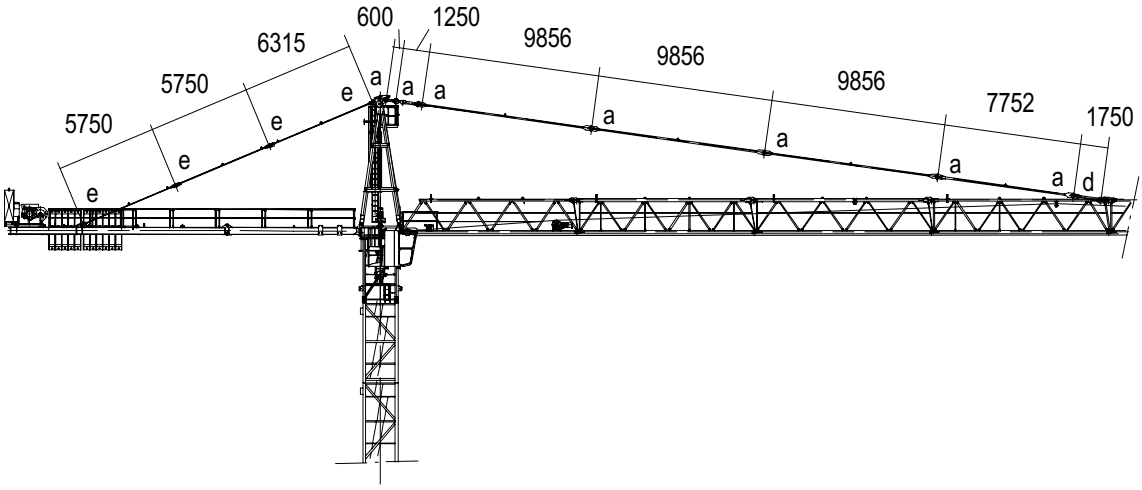
30 m

Attachment data 7532 cross

	Jib length [m]		
Data	**40.0**	**35.0**	**30.0**
a [m]	5.54	2.70	1.06
b [m]	0.90	3.90	3.60
Weight [kg]	12000	11300	10300

7.2 Jib brace diagram

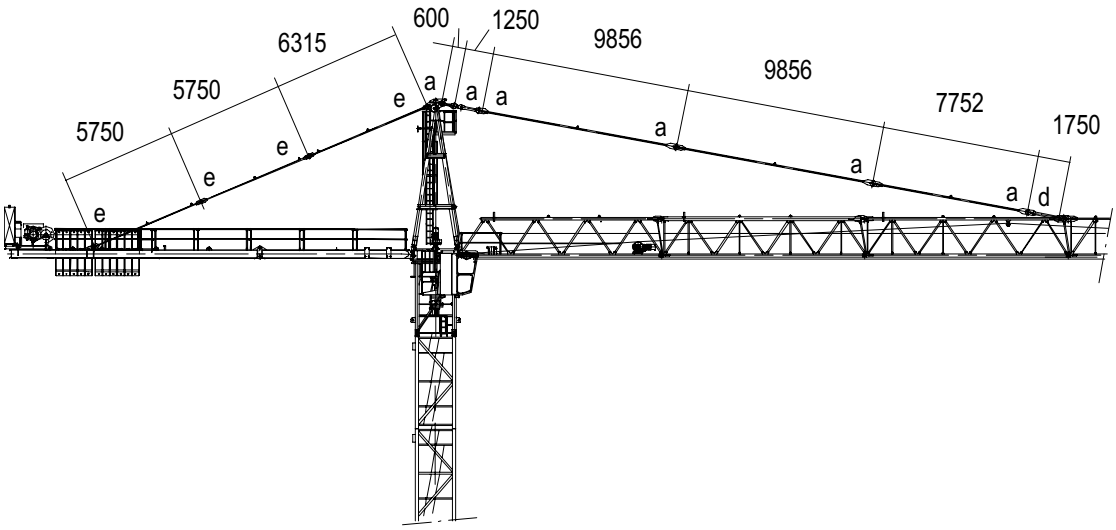
Jib brace diagram 75m – 60m



Bolt table

Jib length	Item	Bolts		Fuse	
		Quant-ity	Dimension [mm]	Quant-ity	Dimension [mm]
Jib 75m – 60m	a	7	Ø 100/90x225	7	Spring retainers Ø10/60-80, steel gal-vanized, yellow
	d	1	Ø 100/90x300	1	Axle retainer 40x10x140
				2	Hex. screws M16x30 DIN 933-8.8 galv.
				2	Lock washer A 16 DIN 127 Fed.steel, galvanized
Counter jib	e	8	Ø 70/60x150mm	8	Spring retainers Ø10/60-80, steel gal-vanized, yellow

Jib brace diagram 55m – 30m



Bolt table

Jib length	Item	Bolts		Fuse	
		Quantity	Dimension [mm]	Quantity	Dimension [mm]
Jib 55m – 30m	a	6	Ø 100/90x225	6	Spring retainers Ø10/60-80, steel galvanized, yellow
	d	1	Ø 100/90x300	1	Axle retainer 40x10x140
				2	Hex. screws M16x30 DIN 933-8.8 galv.
				2	Lock washer A 16 DIN 127 Fed.steel, galvanized
Counter jib	e	8	Ø 70/60x150mm	8	Spring retainers Ø10/60-80, steel galvanized, yellow

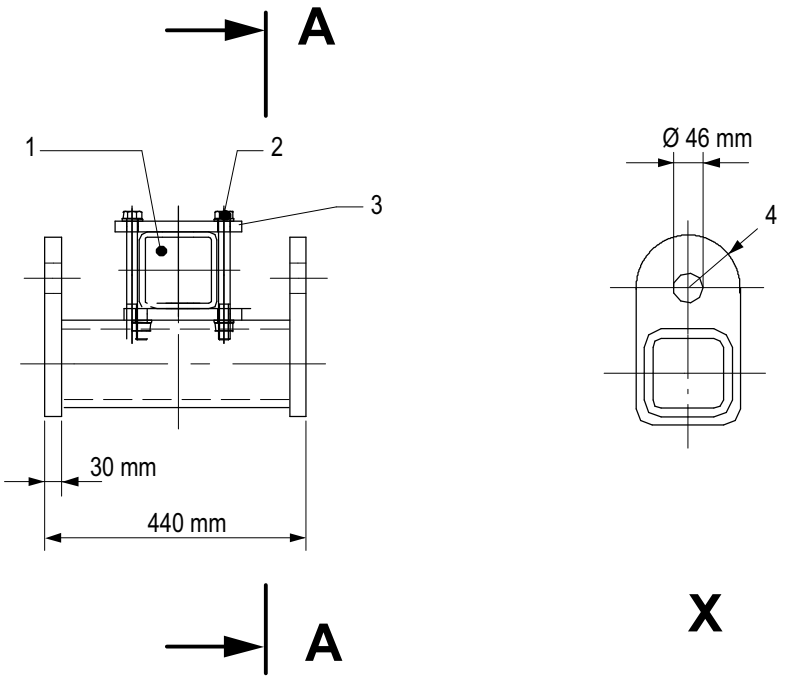
7.3 Trolley jib mounting rig

	NOTICE
	For information on the arrangement of the mounting rig, refer to the attachment diagram. Two mounting rigs are required per slewing tower crane.

Elements required for each mounting rig

Quantity	Item	Dimensions	Material
1	Mounting rig		
4	Hexagonal head bolt	M16 x 220	ISO 4014-8.8 galv.
4	HSFG washer	17	EN 14399 galvanized
4	Hexagonal nut	M16	ISO 4032-8 galvanized
4	Hexagonal nut	M16	DIN 7967, galvanized

Mounting rig

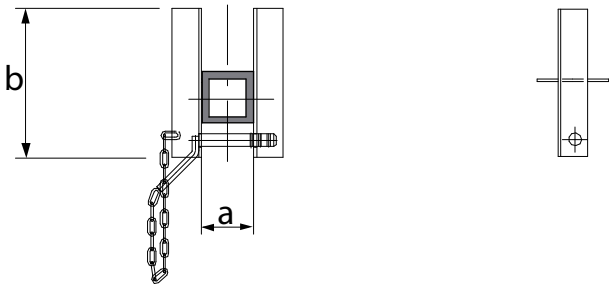


1	Top belt trolley jib	4	Radius 65 mm
2	Hexagonal head screw	A	Section A-A
3	Metal plate 12x240x240	X	View section A-A

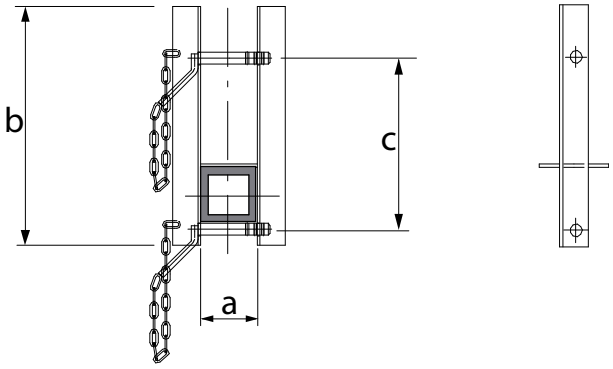
7.4 Mountig rig for trolley jib

	NOTICE
	For information on the arrangement of the mounting rig, refer to the attachment diagram.For information on the arrangement of the mounting rig, refer to the attachment diagram. Two mounting rigs are required per slewing tower crane.

Dimensions for mounting rig



Mounting rig H9



Mounting rig H10

Type	Dimensions		
	a [mm]	b [mm]	c [mm]
H9	164	450	–
H10	144	450	312

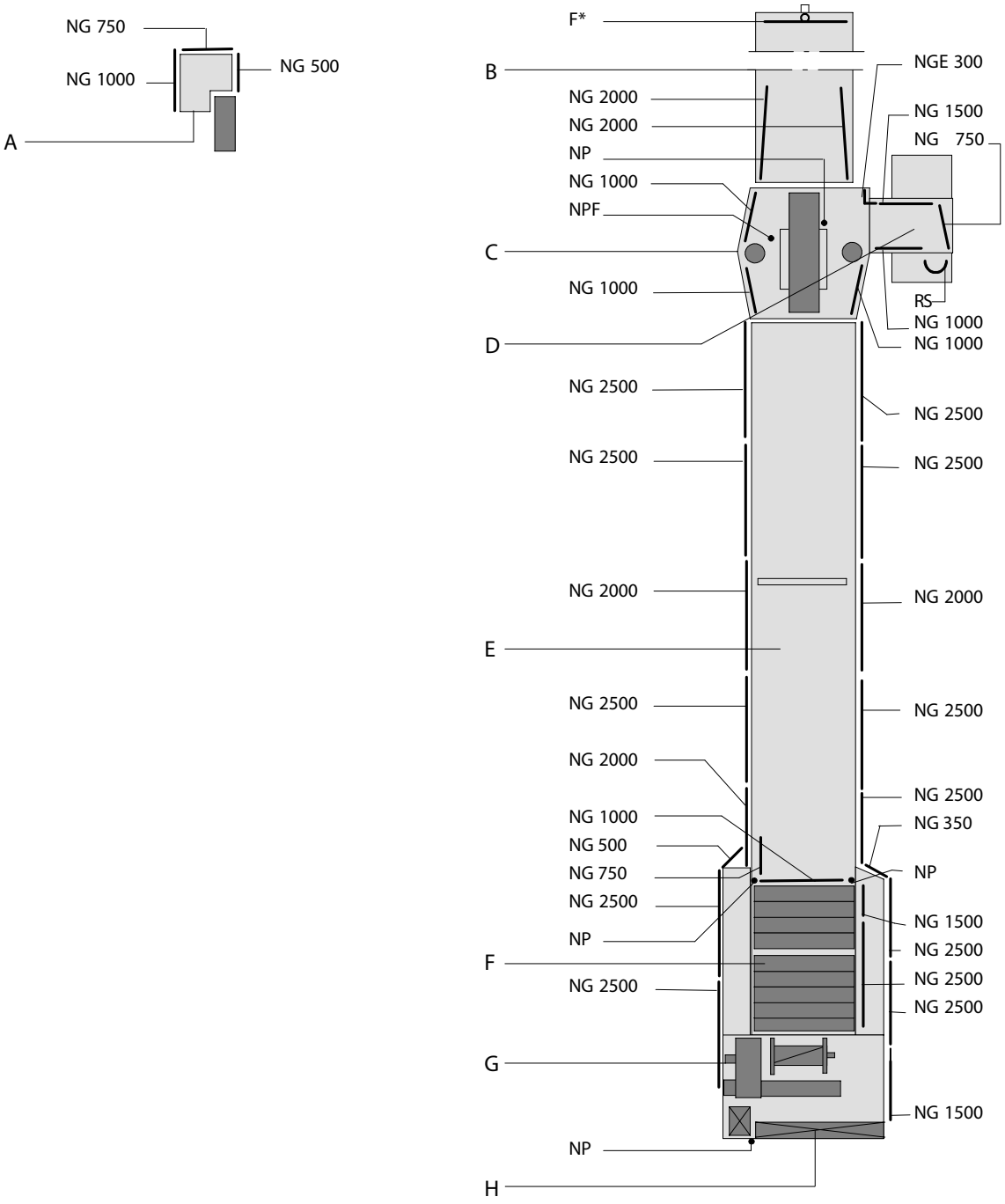
7.5 Arrangement of standard railings

7.5.1 Standard railings (NG) and accessories

Arrangement of standard railings Hw875FU

Quantity	Standard railings (NG)/ accessories	Dimensions / spacing of posts / height
4	Standard posts (NP)	–
1	Standard posts with holder (NPF)	–
1	Flagpole holder (F*)	1400 mm
1	NGE 300	–
1	Standard railing350	200 mm
2	Standard railing500	400 mm
3	Standard railing750	600 mm
6	Standard railing1000	900 mm
2	Standard railing1500	1400 mm
5	Standard railing2000	1900 mm
12	Standard railing2500	2400 mm
1	Back guard (RS)	–
1	Support block AB 1	700 mm
1	Support block AB 2	1400 mm

7.5.2 Arrangement of standard railings



Arrangement of standard railings Hw845FU

A	Cat head pedestal	E	Counter jib
B	Trolley jib	F	Counterweights
C	Slewing frame	G	Machine platform
D	Driver's cab	H	Control cabinet

8 Suitable climbing frames

This section contains information on

- Outer climbing units
- Inner climbing units (KSH)



⚠ WARNING

Climbing unit attached to the cat head bottom section

Increased wind surface. The slewing tower crane may overturn.

1) Lower the climbing unit down on the tower, or

2) dismantle the climbing unit.



NOTICE

Clamping forces for the inner climbing unit (KSH) are specified based on a building height of < 250m and wind category C 25



NOTICE

The operating radius specified is measured from the tower center and is to be considered a reference value. Exact balancing can be achieved by moving the trolley with the tower elements specified in the table or a load and can be checked by moving the end stops of the tower apart without offsets.



NOTICE

The data required and the instructions for tower assemblies with inner climbing unit is available in the separate description of the inner climbing unit.

DANGER! Observe the special tower combination for the inner climbing unit.



NOTICE

Details for climbing balancing

The climbing balancing details apply to the snatch block in maximum hook position.

8.1 Outer climbing units



NOTICE

If feasible, you should preferably operate your climbing frame without balancing weight.



NOTICE

Tower element on the transfer carriage

The data on climbing balance was specified under the assumption that a tower element is on the transfer carriage.

8.1.1 Outer climbing unit KWH 20.3/ KWH 20.3.1



NOTICE

Minimum height for stationary setup:

3 tower elements = 13.5 m tower height

Minimum height for crawling towers:

2 tower elements + bogie truck = approx. 13.5 m tower height

Climbing radius for the balancing weights - WOLFF 7532.16

	Jib length [m]				
7532.16	**75**	**70**	**65**	**60**	**55**
without weight	31.8	49.8	-	-	-
UV 20.4 = 2.05 t	-	-	22.3	27.4	37.0
TV 20.4 = 2.98 t	-	-	16.3	20.3	27.8
Weight = 5.0 t	-	-	-	-	-

Climbing radius for the balancing weights - WOLFF 7532.16

	Jib length [m]				
7532.16	**50**	**45**	**40**	**35**	**30**
without weight	-	-	-	-	-
UV 20.4 = 2.05 t	39.8	35.0	-	-	-
TV 20.4 = 2.98 t	30.0	26.3	34.1	-	-
Weight = 5.0 t	-	-	22.7	22.2	21.8

8.1.2 Outer climbing unit KWH 20.6/ KWH 20.6.1



NOTICE

Minimum height for stationary setup:

2 tower elements = 9.0 m tower height

Minimum height for crawling towers:

2 tower elements + bogie truck = approx. 13.5 m tower height

Climbing radius for the balancing weights - WOLFF 7532.16

	Jib length [m]				
7532.16	**75**	**70**	**65**	**60**	**55**
without weight	30.0	48.0	-	-	-
UV 20.4 = 2.05 t	11.9	18.9	21.6	26.7	36.3
TV 20.4 = 2.98 t	8.2	13.7	15.8	19.8	27.3
Weight = 5.0 t	-	-	10.3	13.0	18.1

Climbing radius for the balancing weights - WOLFF 7532.16

	Jib length [m]				
7532.16	**50**	**45**	**40**	**35**	**30**
without weight	-	-	-	-	-
UV 20.4 = 2.05 t	39.1	34.3	-	-	-
TV 20.4 = 2.98 t	29.5	25.8	33.5	-	-
Weight = 5.0 t	19.6	17.1	22.4	21.8	21.4

8.2 Inner climbing units

8.2.1 Inner climbing unit KSH 20 SH

Tower combinations for slewing tower cranes with inner climbing unit.

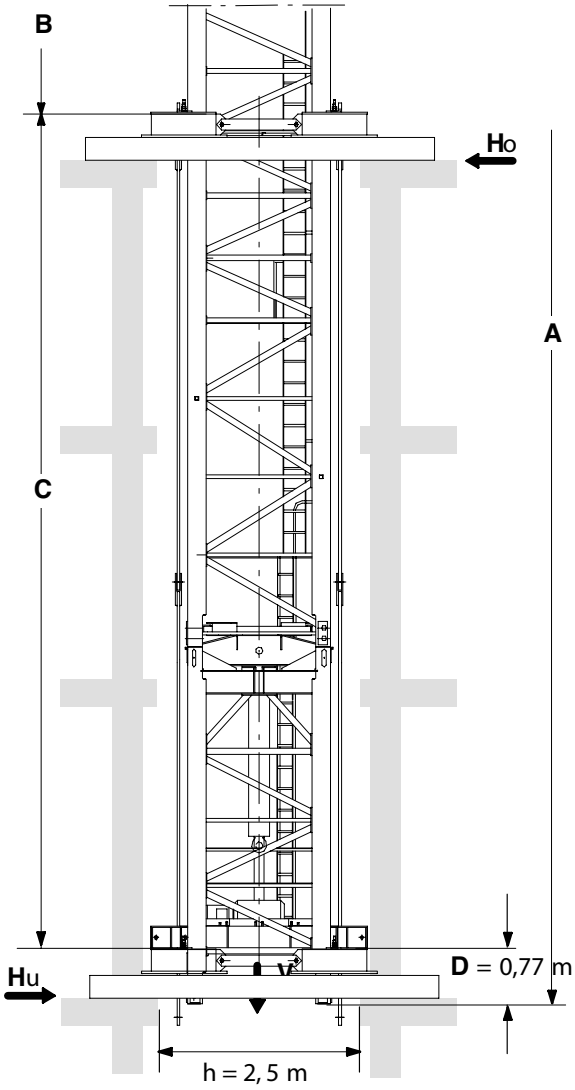
Item				
1	UV 20.4	UV 20.4	UV 20.4	UV 20.4
2	UV 20.4	UV 20.4	UV 20.4	UV 20.4
3	UV 20.4	UV 20.4	UV 20.4	UV 20.4
4	UV 20.4	UV 20.4	UV 20.4	UV 20.4
5	UV 20.4	UV 20.4	UV 20.4	UV 20.4
6	TVA 20.4	TVA 20.4	TVA 20.4	TVA 20.4
7	TV 20.4	TV 20.4	TV 20.4	
8	TV 20.4	TV 20.4		
9	TV 20.4			
Inner climbing unit	KSH 20 SH	KSH 20 SH	KSH 20 SH	KSH 20 SH
Foundation	FUA TYPE FS-156 / FUA 156S	FUA TYPE FS-156 / FUA 156S	FUA TYPE FS-156 / FUA 156S	FUA TYPE FS-156 / FUA 156S
Tower height [m]	55.5	51.0	46.5	42.0
Hook height (2-fall) [m]	57.0	52.5	48.0	43.5
Hook height (4-fall) [m]	56.6	52.1	47.6	43.1

Climbing radius for the balancing weights - WOLFF 7532.16

	Jib length [m]				
7532.16	75	70	65	60	55
UV 20.4 = 2.05 t	42.6	48.2	51.0	54.7	-
TV 20.4 = 2.98 t	33.3	37.7	39.9	42.8	49.1
Weight = 5.0 t	-	-	-	29.0	33.3
Weight = 8.0 t	-	-	-	-	-

Climbing radius for the balancing weights - WOLFF 7532.16

	Jib length [m]				
7532.16	50	45	40	35	30
UV 20.4 = 2.05 t	-	-	-	-	-
TV 20.4 = 2.98 t	-	-	-	-	-
Weight = 5.0 t	34.1	31.0	36.1	-	-
Weight = 8.0 t	-	-	-	23.6	22.9

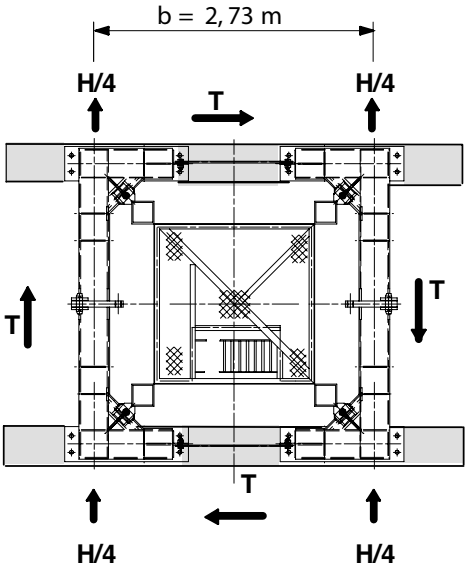


C_{min} = 11,0 m
C_{max} = 14,0 m

$Ho = \frac{M}{C} + H$

$Hu = Ho - H$

$T = \frac{M_D}{2 \times b}$



A	Tower height	C	Distance between guide frames
W	A-C-D		

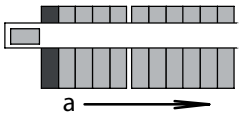
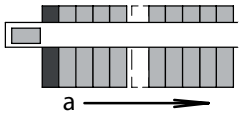
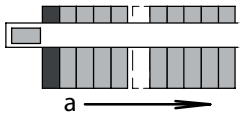
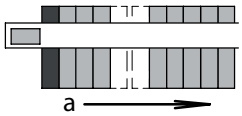
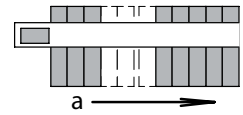
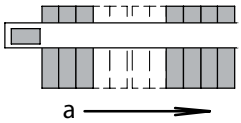
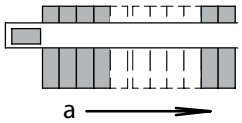
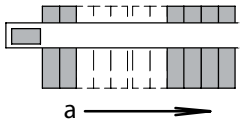
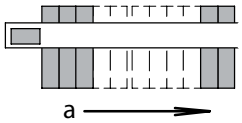
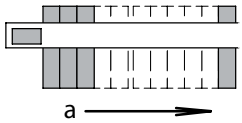
In service clamping forces

In service clamping forces [kN] inside a building																
A [m]	55.5				51.0				46.5				42.0			
C [m]	11.0	12.0	13.0	14.0	11.0	12.0	13.0	14.0	11.0	12.0	13.0	14.0	11.0	12.0	13.0	14.0
V	1286				1258				1229				1201			
Ho	450	410	380	350	420	390	360	330	400	370	340	320	380	350	320	300
Hu	400	360	330	300	380	340	310	290	360	320	300	270	340	310	280	260
T	72				72				72				72			

Out of service clamping forces

Out of service clamping forces [kN] inside a building																
A [m]	55.5				51.0				46.5				42.0			
C [m]	11.0	12.0	13.0	14.0	11.0	12.0	13.0	14.0	11.0	12.0	13.0	14.0	11.0	12.0	13.0	14.0
V	1107				1079				1051				1022			
Ho	800	730	680	630	700	640	600	550	610	560	520	480	530	480	450	420
Hu	560	490	430	390	470	410	360	320	390	340	300	260	320	280	240	210
T	-				-				-				-			

9 Arrangement of counterweight blocks

L = 75 m	L = 70 m	L = 65 m	L = 60 m	L = 55 m
11 x 2.7 t	10 x 2.7 t	10 x 2.7 t	9 x 2.7 t	8 x 2.7 t
				
W = 31.7 t	W = 29.0 t	W = 29.0 t	W = 26.3 t	W = 23.6 t
Permanent counterweight below machine platform = 2.0 t				
L = 50 m	**L = 45 m**	**L = 40 m**	**L = 35 m**	**L = 30 m**
7 x 2.7 t	6 x 2.7 t	6 x 2.7 t	5 x 2.7 t	4 x 2.7 t
				
W = 20.9 t	W = 18.2 t	W = 18.2 t	W = 15.5 t	W = 12.8 t
Permanent counterweight below machine platform = 2.0 t				

	Intermediate ballast 1 x 2.7 t		Counterweight block 1 x 2.7 t
	No counterweight	L	Jib length [m]
a	To the tower	G	Total weight [t]