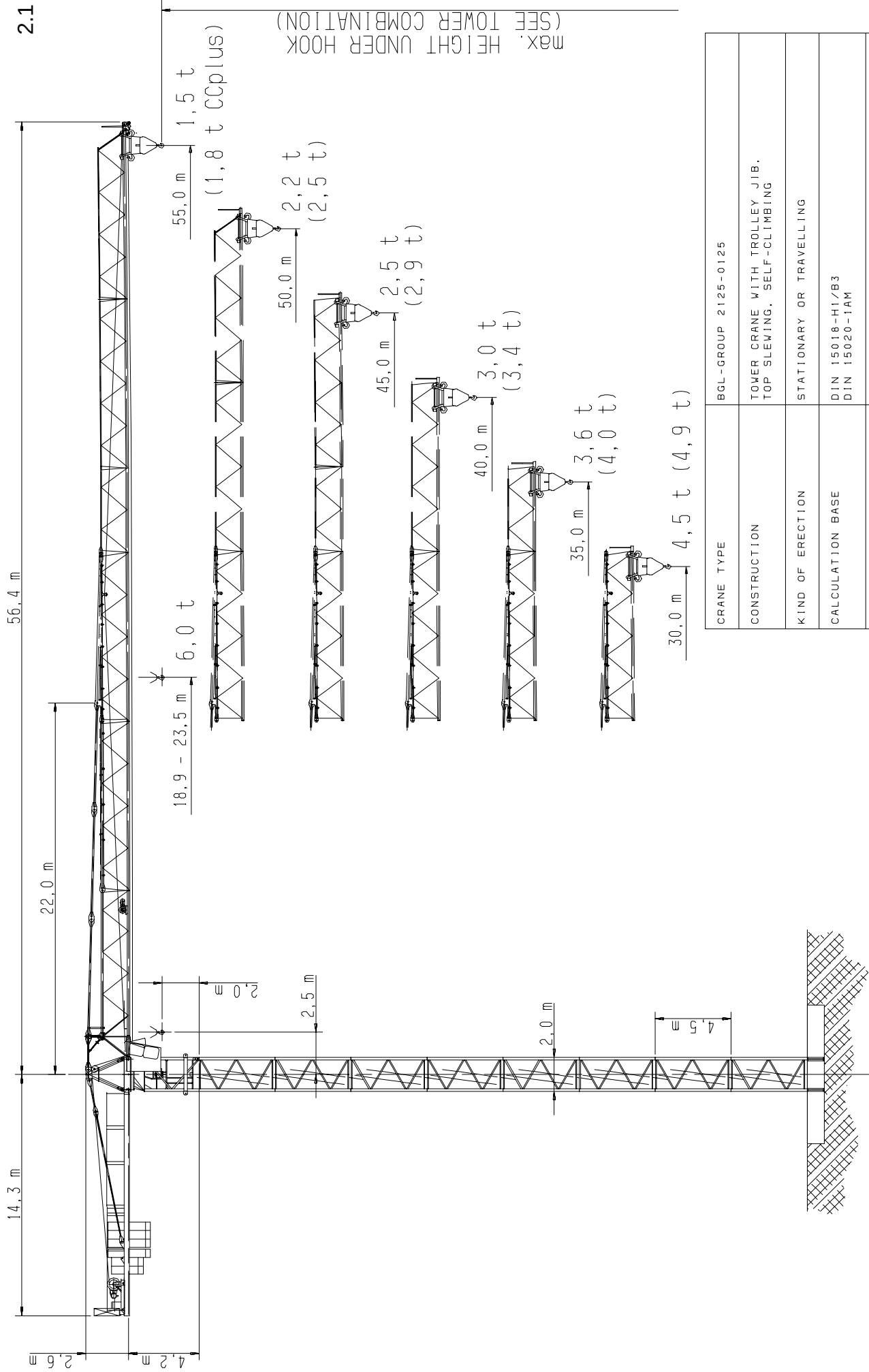




CRANE TYPE	BGL-GROUP 2125-0125
CONSTRUCTION	TOWER CRANE WITH TROLLEY JIB. TOP SLEWING. SELF-CLIMBING
KIND OF ERECTION	STATIONARY OR TRAVELLING
CALCULATION BASE	DIN 15018-H1/B3 DIN 15020-1AM
WORKING LOAD MOMENT	MAX. 1411 KNM

2.2.1.1

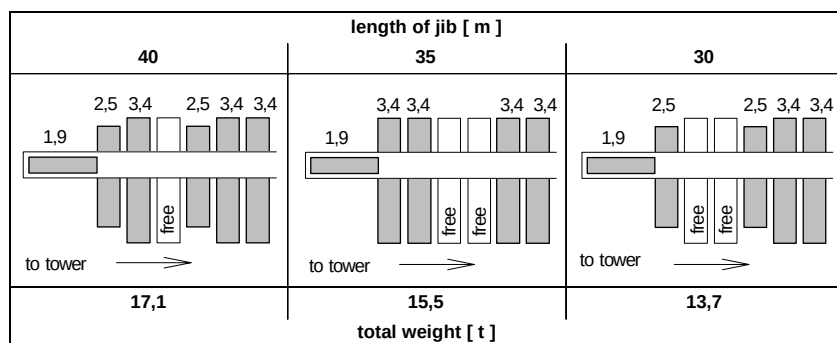
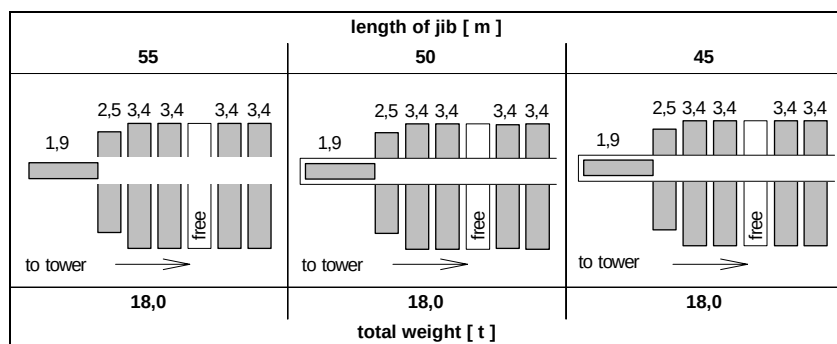
Load capacity table

radius [m]			25	30	35	40	45	50	55	load capacity [t]
length of jib [m]	55	2,5 - 18,9		4,3	3,4	2,8	2,4	2,0	1,7	
	50	2,5 - 22,3		5,3	4,2	3,5	3,0	2,5	2,2	
	45	2,5 - 22,1		5,2	4,2	3,5	2,9	2,5		
	40	2,5 - 22,7		5,4	4,3	3,6	3,0			
	35	2,5 - 22,8		5,4	4,3	3,6				
	30	2,5 - 23,5		5,6	4,5					

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

Arrangement of counterweights

Hw 628 FU



2.2.1.2

Load capacity table

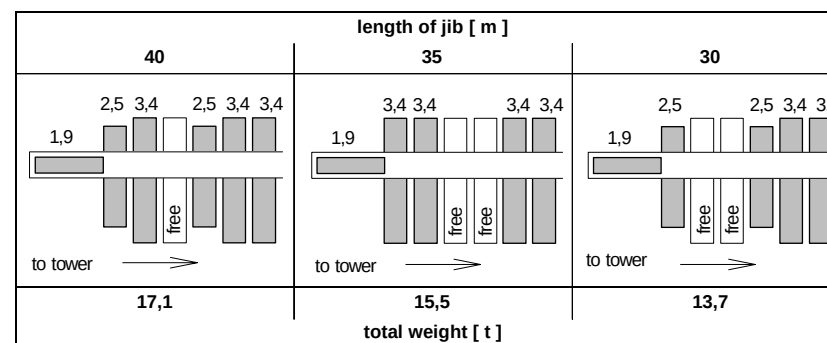
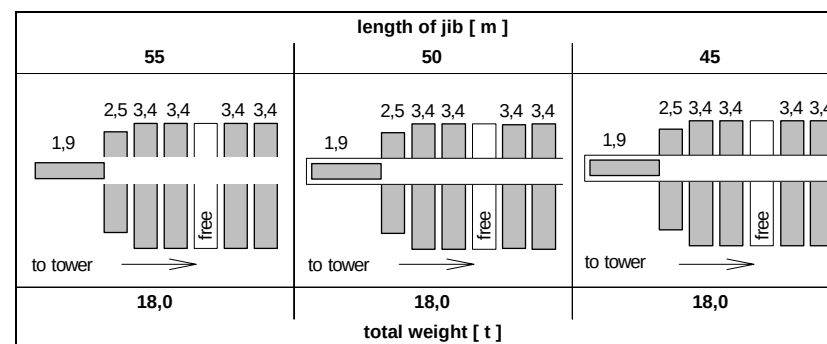
(these load values are switch-off values)

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

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

Arrangement of counterweights

Hw 628 FU



2.2.1.3

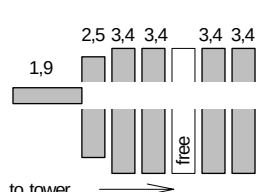
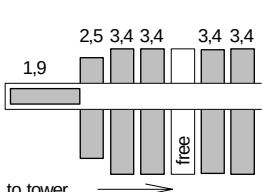
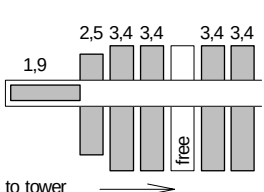
Load capacity table

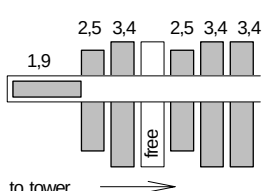
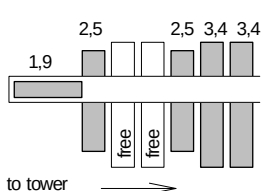
radius [m]			25	30	35	40	45	50	55	load capacity [t]	
length of jib [m]	55	2,5 - 18,9		4,3	3,4	2,8	2,4	2,0	1,7		1,5
	50	2,5 - 22,3		5,3	4,2	3,5	3,0	2,5	2,2		
	45	2,5 - 22,1		5,2	4,2	3,5	2,9	2,5			
	40	2,5 - 22,7		5,4	4,3	3,6	3,0				
	35	2,5 - 22,8		5,4	4,3	3,6					
	30	2,5 - 23,5		5,6	4,5						
6,0											

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 counterweights

Hw 637 FU

length of jib [m]		
55	50	45
		
18,0	18,0	18,0
total weight [t]		

length of jib [m]		
40	35	30
		
17,1	15,5	13,7
total weight [t]		

2.2.1.4

Load capacity table

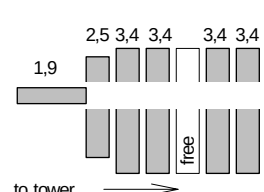
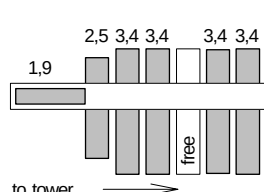
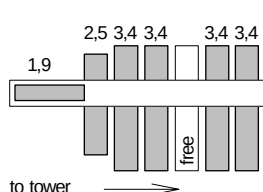
(these load values are switch-off values)

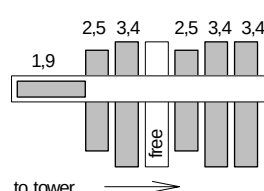
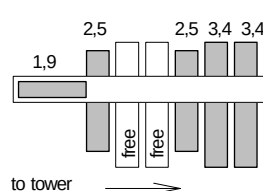
radius [m]			25	30	35	40	45	50	55		
length of jib [m]	55	2,5 - 20,8		4,9	3,9	3,3	2,8	2,4	2,1	1,8	load capacity [t]
	50	2,5 - 24,3		5,8	4,7	3,9	3,4	2,9	2,5		
	45	2,5 - 24,3		5,8	4,7	3,9	3,4	2,9			
	40	2,5 - 24,6		5,9	4,8	4,0	3,4				
	35	2,5 - 24,6		5,9	4,8	4,0					
	30	2,5 - 25,2		6,0	4,9						

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

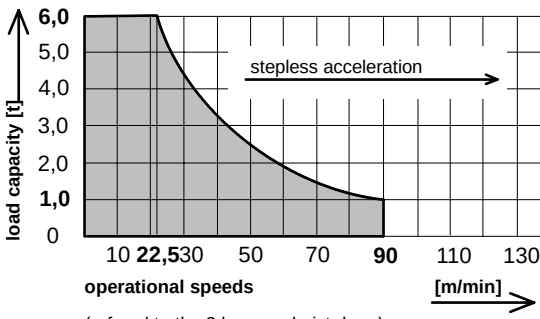
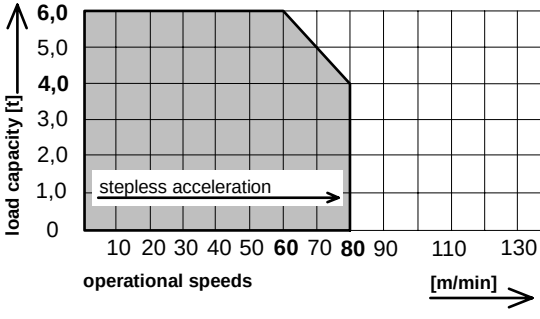
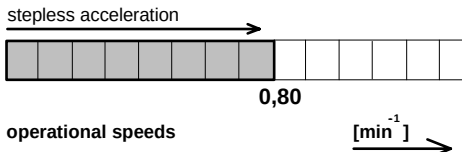
Arrangement of counterweights

Hw 637 FU

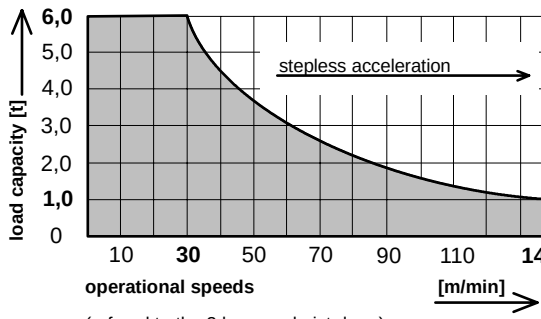
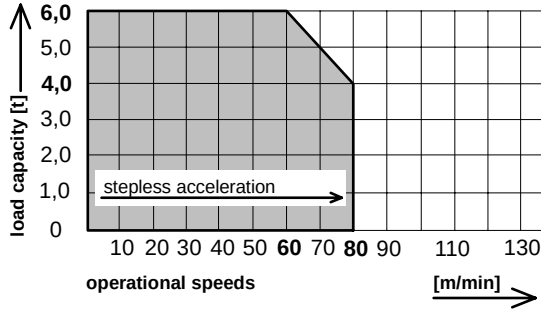
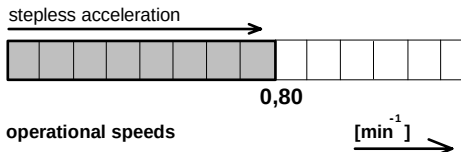
length of jib [m]		
55	50	45
		
18,0	18,0	18,0
total weight [t]		

length of jib [m]		
40	35	30
		
17,1	15,5	13,7
total weight [t]		

2.2.2.1 Operational speeds 400 V, 50 Hz

drive [type]	operational speeds load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 628 FU	hoisting 	190	28	46,0 total output for a simultaneity factor 0,8
	 load capacity [t] operational speeds [m/min] (referred to the 2 layer on hoist drum)			
Kw	traversing		4,0	
	 load capacity [t] operational speeds [m/min]			
Dw	slewing 0,8 min ⁻¹		7,5	
	 operational speeds [min⁻¹]			

2.2.2.2 Operational speeds 400 V, 50 Hz

drive [type]	operational speeds load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 637 FU	hoisting 	190	37	52,0 total output for a simultaneity factor 0,8
	 load capacity [t] operational speeds [m/min] (referred to the 2 layer on hoist drum)			
Kw	traversing		4,0	
	 load capacity [t] operational speeds [m/min]			
Dw	slewing 0,8 min ⁻¹		7,5	
	 operational speeds [min⁻¹]			

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

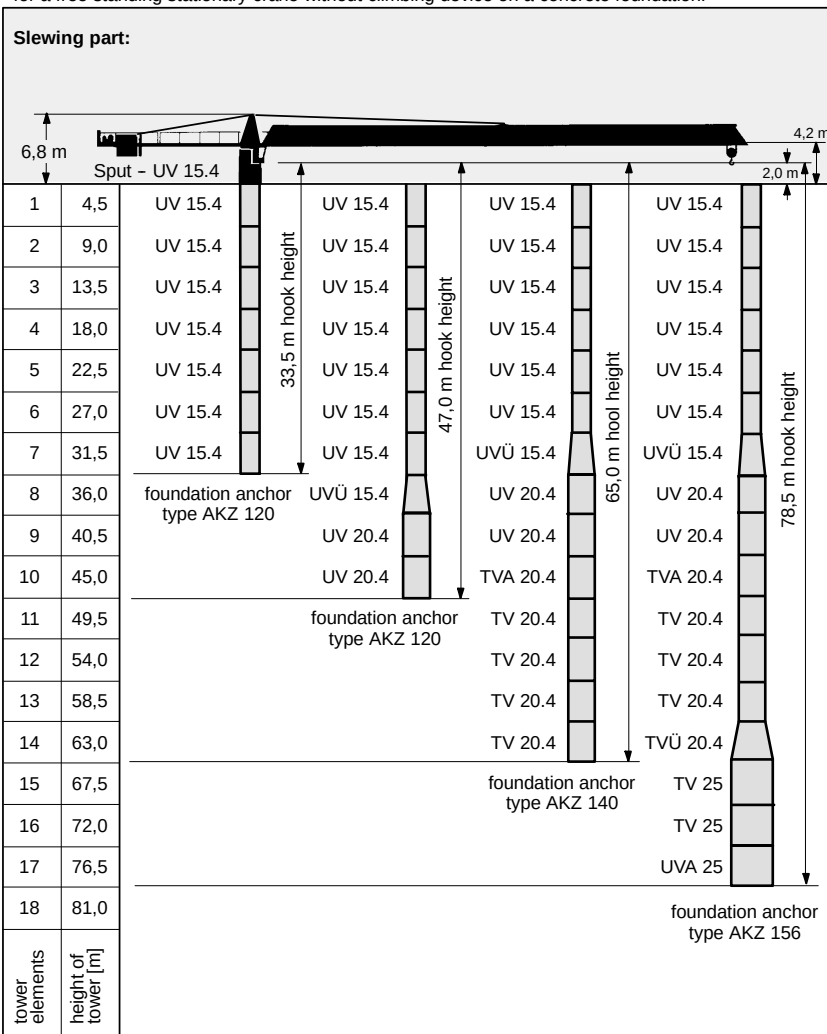
radius [m]	length of jib [m]					
	30	35	40	45	50	55
18,0	6000	6000	6000	6000	6000	6000
19,0	6000	6000	6000	6000	6000	5980
20,0	6000	6000	6000	6000	6000	5600
21,0	6000	6000	6000	6000	6000	5310
22,0	6000	6000	6000	6000	6000	5020
23,0	6000	5960	5920	5740	5800	4760
24,0	5860	5670	5630	5450	5520	4520
25,0	5600	5400	5400	5200	5300	4300
26,0	5340	5160	5120	4960	5020	4100
27,0	5100	4930	4900	4740	4800	3910
28,0	4890	4720	4690	4540	4590	3740
29,0	4690	4530	4500	4350	4400	3580
30,0	4500	4300	4300	4200	4200	3400
31,0		4180	4150	4010	4060	3290
32,0		4020	3990	3860	3910	3160
33,0		3870	3840	3710	3760	3040
34,0		3730	3700	3580	3630	2930
35,0		3600	3600	3500	3500	2800
36,0			3450	3330	3380	2720
37,0			3330	3220	3260	2620
38,0			3220	3110	3150	2530
39,0			3120	3010	3050	2440
40,0			3000	2900	3000	2400
41,0				2820	2860	2290
42,0				2740	2770	2210
43,0				2650	2690	2140
44,0				2580	2610	2070
45,0				2500	2500	2000
46,0	the load capacities to a range of lift 42,0 m				2460	1950
47,0					2390	1890
48,0					2330	1830
49,0					2260	1780
50,0					2200	1700
51,0						1680
52,0						1630
53,0						1590
54,0						1540
55,0						1500

2.2.3.2 Load capacity [kg] Data given in distances of meters DIN 15018 / H1 - B3

radius [m]	length of jib [m]					
	30	35	40	45	50	55
18,0	6000	6000	6000	6000	6000	6000
19,0	6000	6000	6000	6000	6000	6000
20,0	6000	6000	6000	6000	6000	6000
21,0	6000	6000	6000	6000	6000	5930
22,0	6000	6000	6000	6000	6000	5630
23,0	6000	6000	6000	6000	6000	5350
24,0	6000	6000	6000	6000	6000	5100
25,0	6000	5900	5900	5800	5800	4900
26,0	5790	5640	5640	5570	5560	4640
27,0	5550	5410	5400	5330	5320	4440
28,0	5330	5190	5180	5120	5110	4260
29,0	5120	4980	4970	4910	4910	4090
30,0	4900	4800	4800	4700	4700	3900
31,0		4610	4610	4550	4540	3770
32,0		4450	4440	4380	4380	3630
33,0		4290	4280	4230	4220	3500
34,0		4140	4130	4080	4070	3380
35,0		4000	4000	3900	3900	3300
36,0			3860	3810	3810	3150
37,0			3740	3690	3680	3040
38,0			3620	3570	3570	2940
39,0			3510	3460	3460	2850
40,0			3400	3400	3400	2800
41,0				3260	5250	2670
42,0				3160	3160	2590
43,0				3070	3060	2510
44,0				2980	2980	2440
45,0				2900	2900	2400
46,0	the load capacities to a range of lift 42,0 m				2820	2300
47,0					2740	2230
48,0					2670	2170
49,0					2600	2110
50,0					2500	2100
51,0						2000
52,0						1950
53,0						1900
54,0						1850
55,0						1800

2.2.6.1 Tower configurations

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



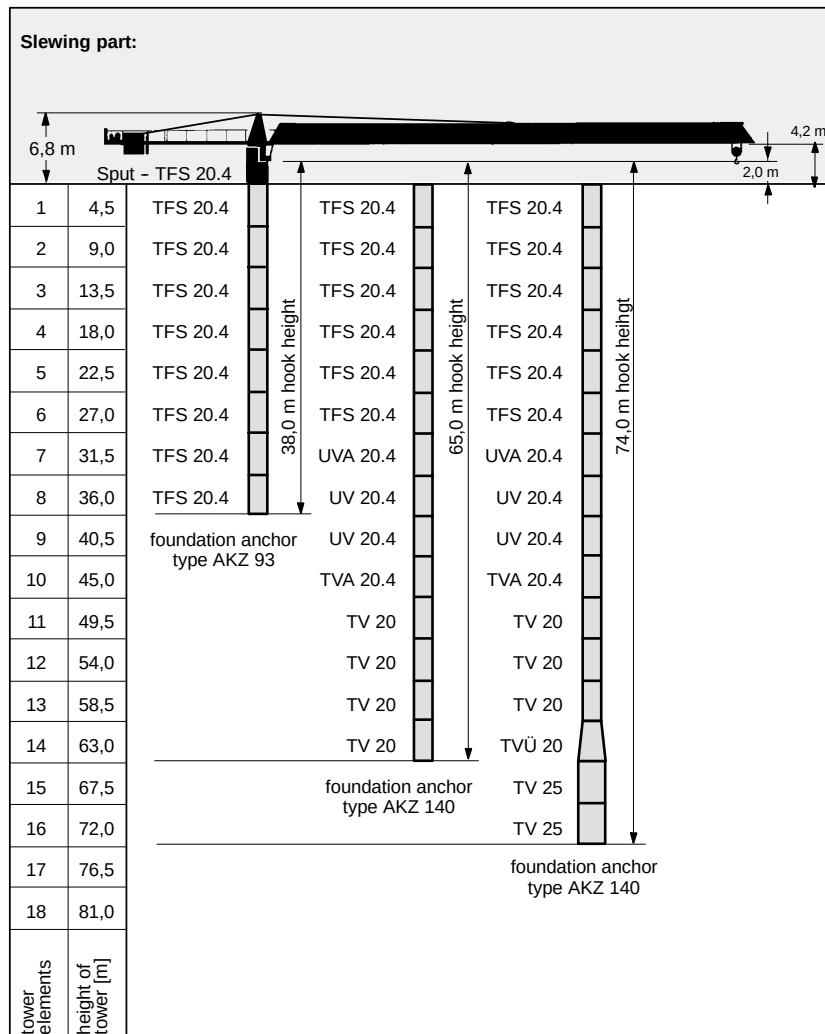
For data regarding foundation anchors see section 12.

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.



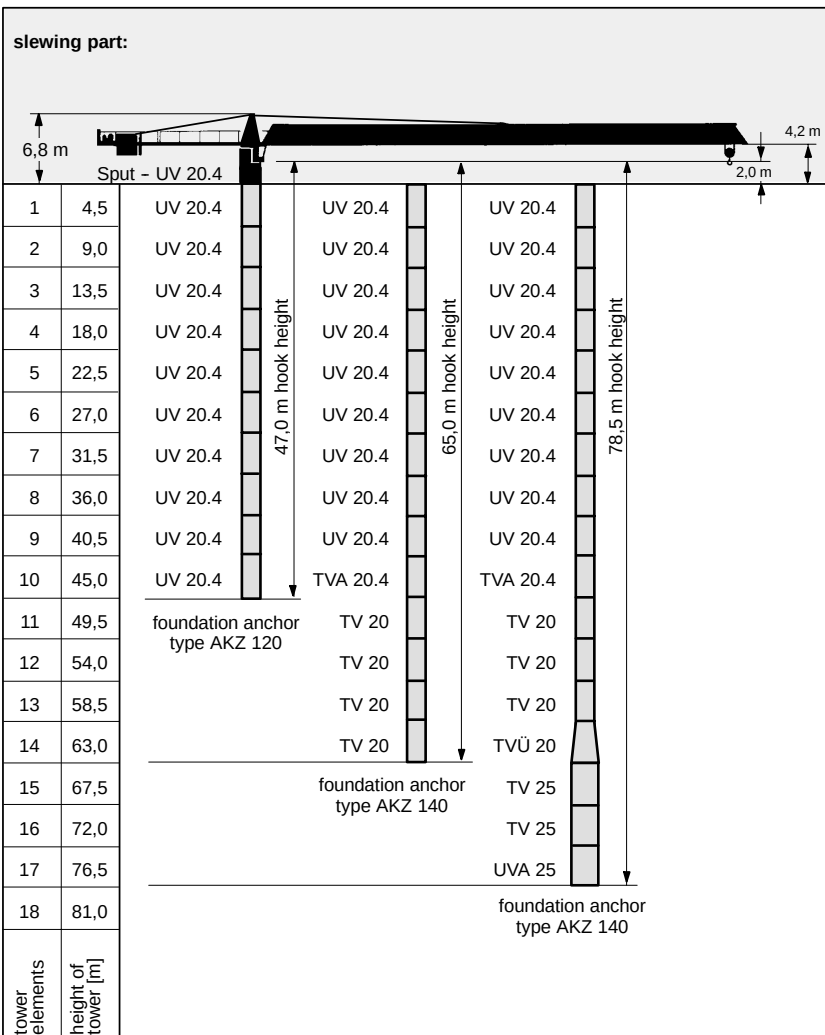
For data regarding foundation anchors see section 12.

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.

2.2.6.3 Tower configurations

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



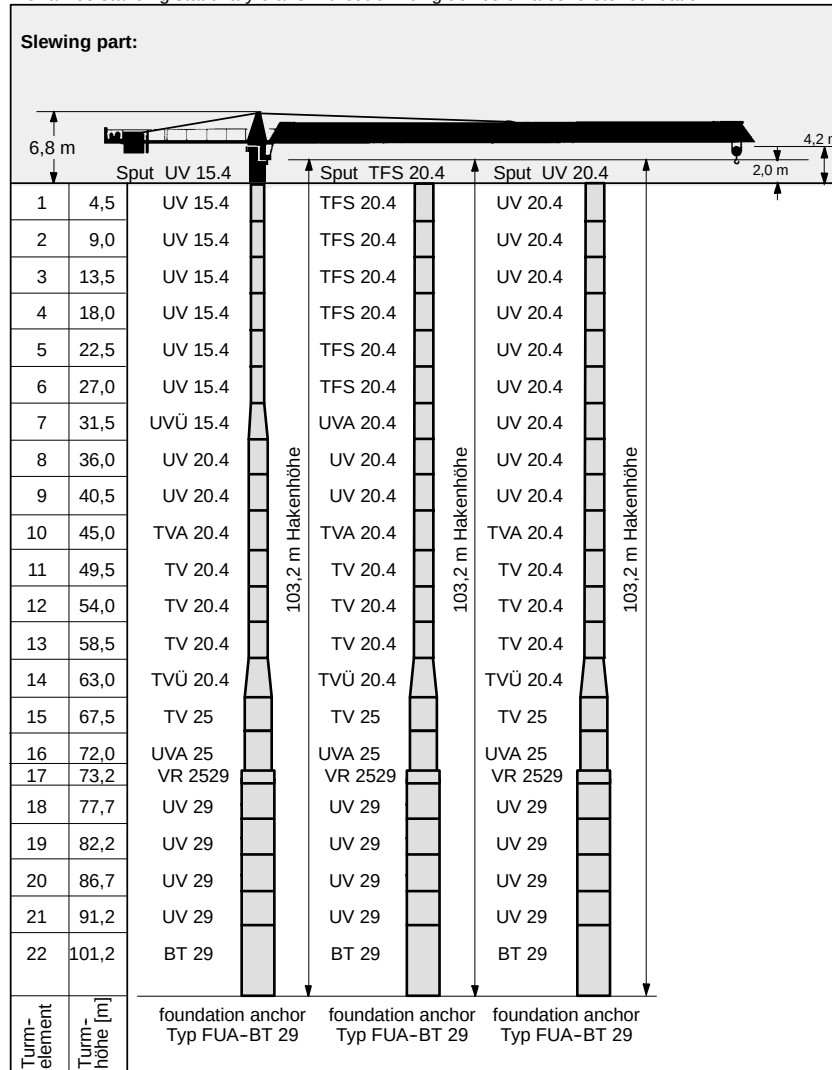
For data regarding foundation anchors see section 12.

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.

2.2.6.4 Tower configurations

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



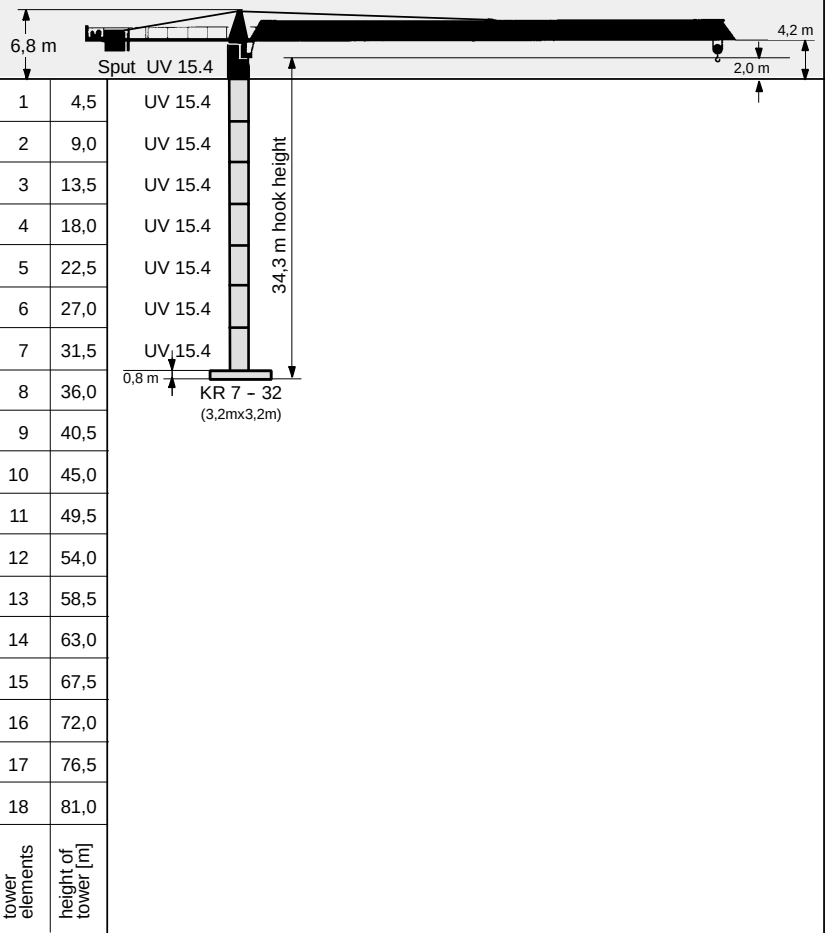
Angaben über Fundamentanker siehe Abschnitt 12.

Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar. Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.

2.2.7.1 Tower configurations

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

Slewing part:

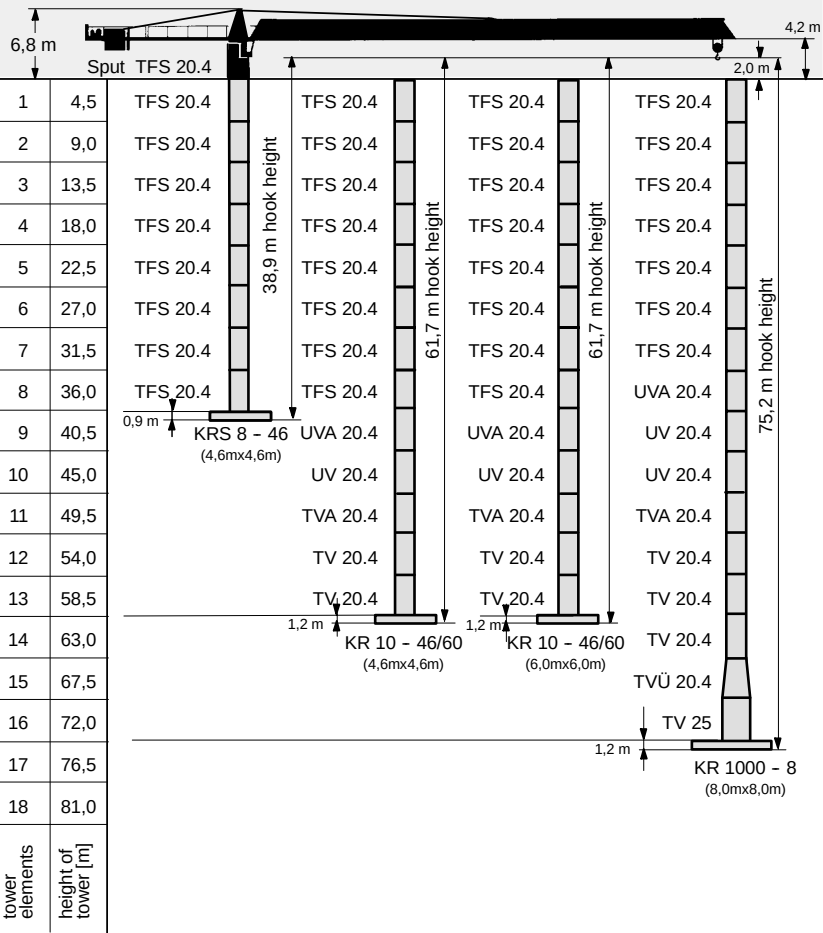


For data regarding cross frames see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation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

2.2.7.2 Tower configurations

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

Slewing part:



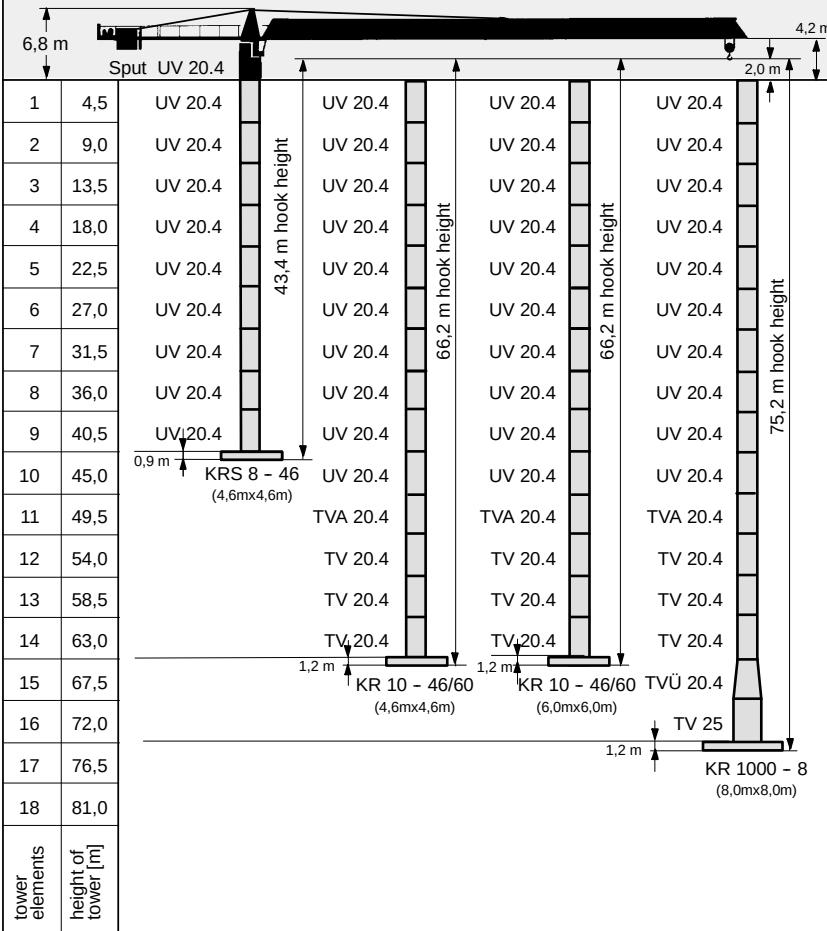
For data regarding cross frames see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation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

2.2.7.3

Tower configurations

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

Slewing part:



For data regarding cross frames see section 12.

The tower configurations are recommended for economic crane installation and may be used in any case.

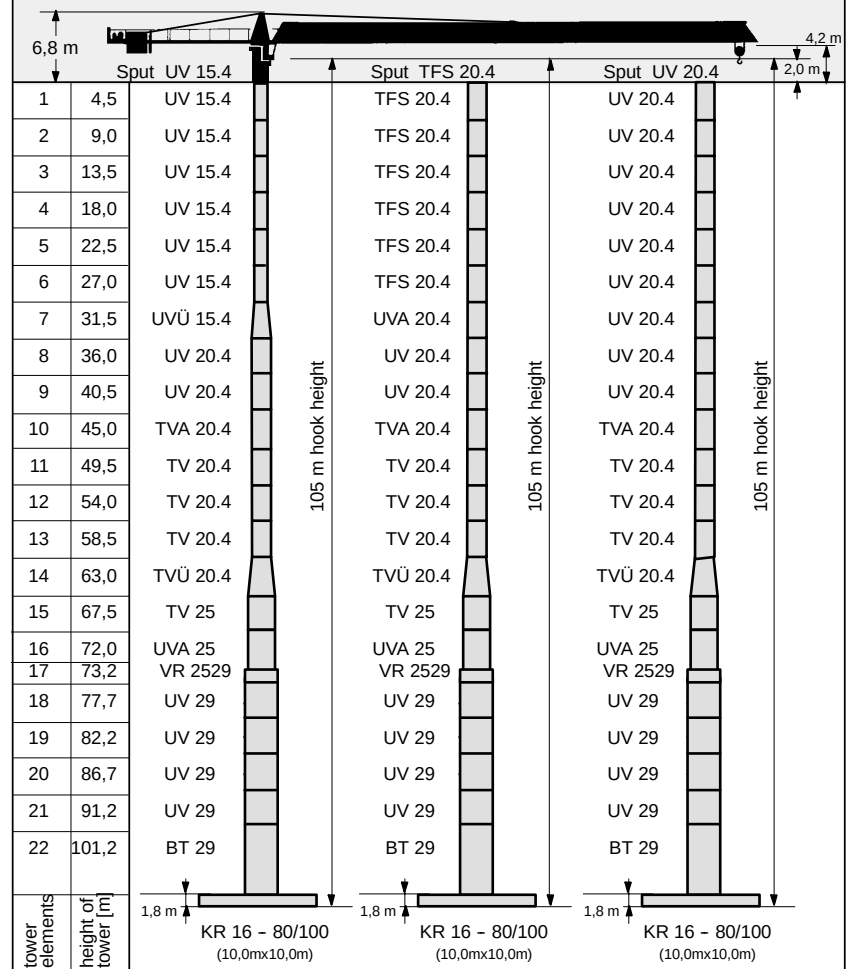
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

2.2.7.4

Tower configurations

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

Slewing part:



For data regarding cross frames see section 12.

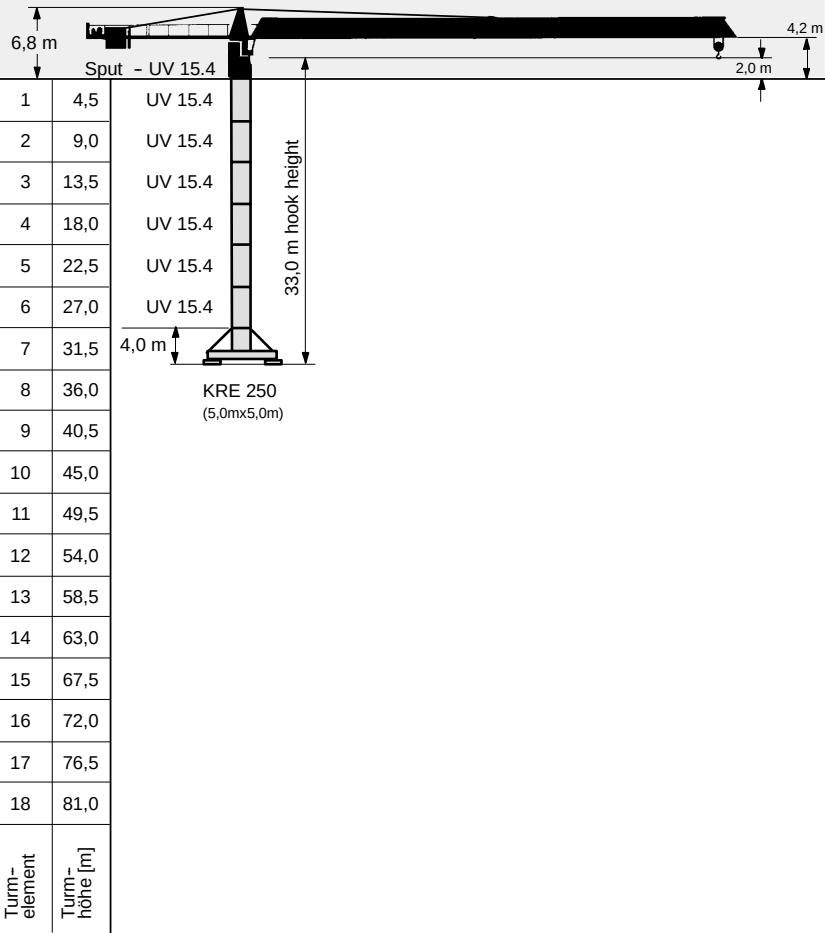
The tower configurations are recommended for economic crane installation and may be used in any case.

Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

2.2.8.1 Tower configurations

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

Slewing part:

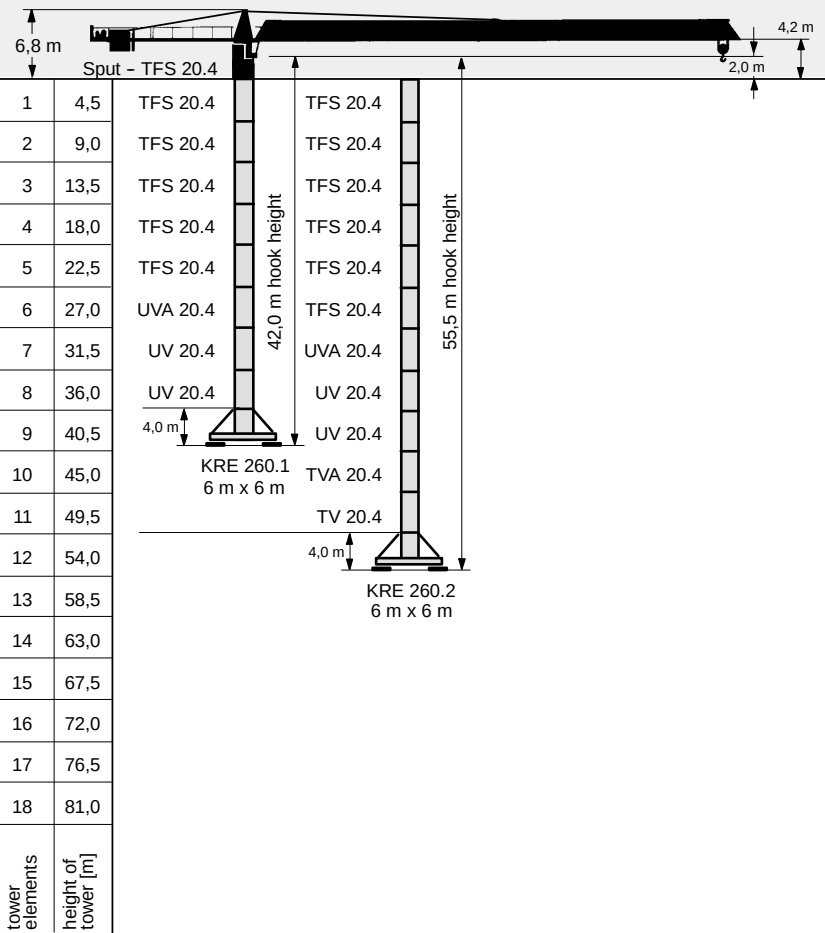


For data regarding cross frame elements see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane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

2.2.8.2 Tower configurations

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

Slewing part:

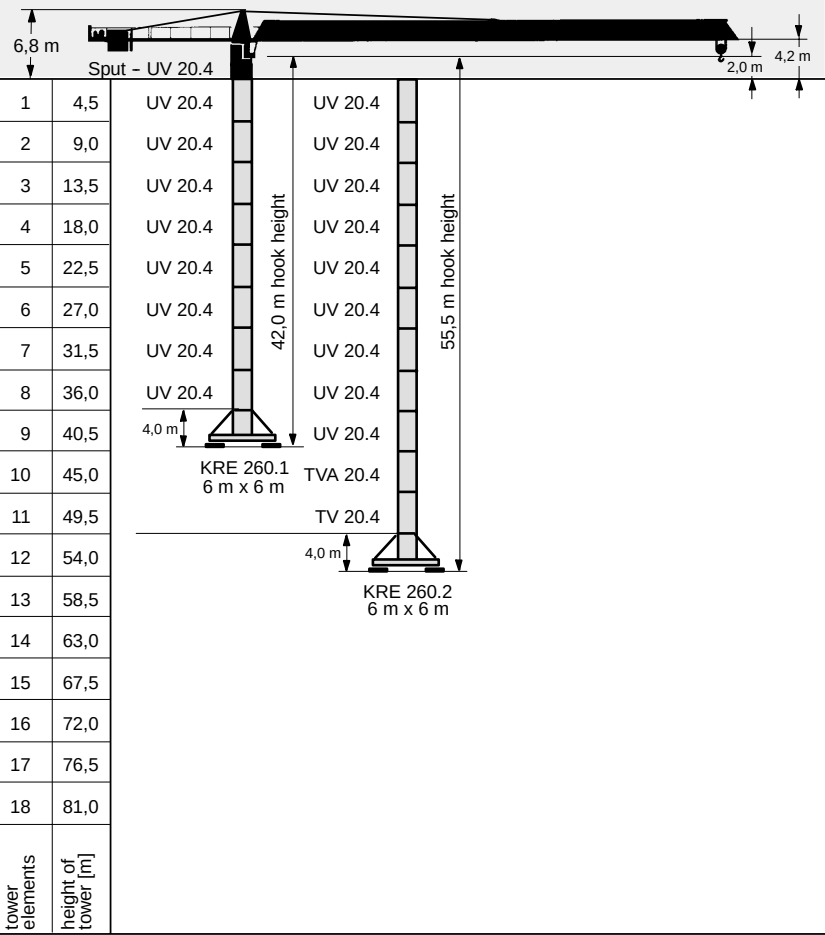


For data regarding cross frame elements see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane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

2.2.8.3 Tower configurations

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

Drehteil:

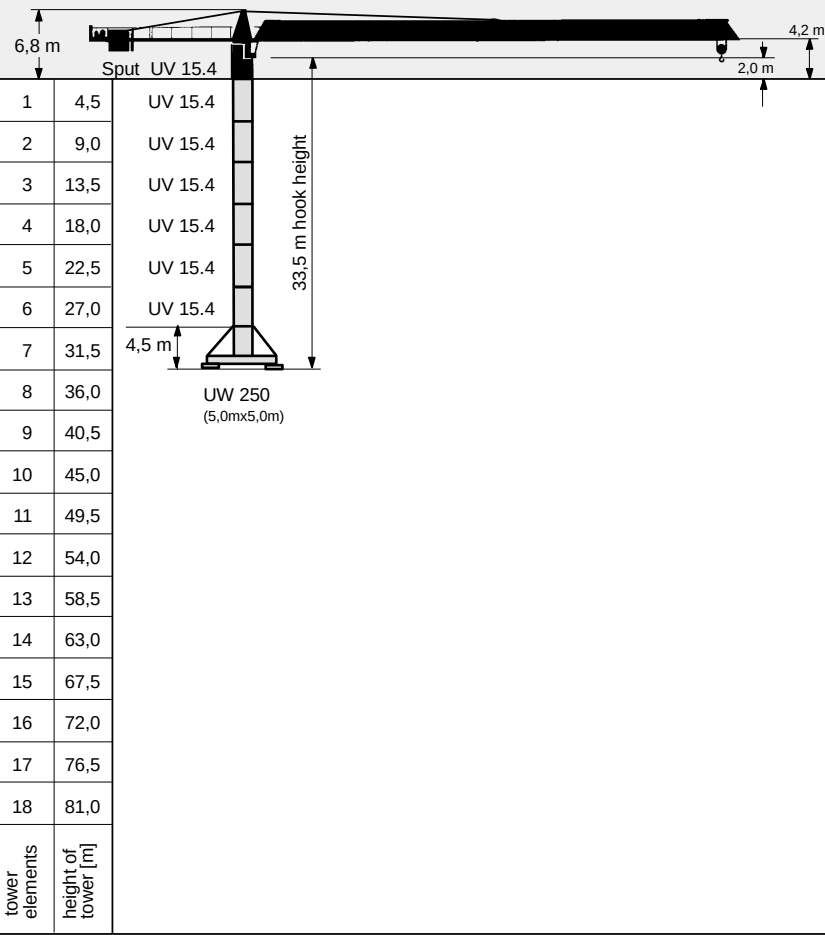


For data regarding cross frame elements see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane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

2.2.9.1 Tower configurations

for a free standing travelling crane without climbing device.

Slewing part:



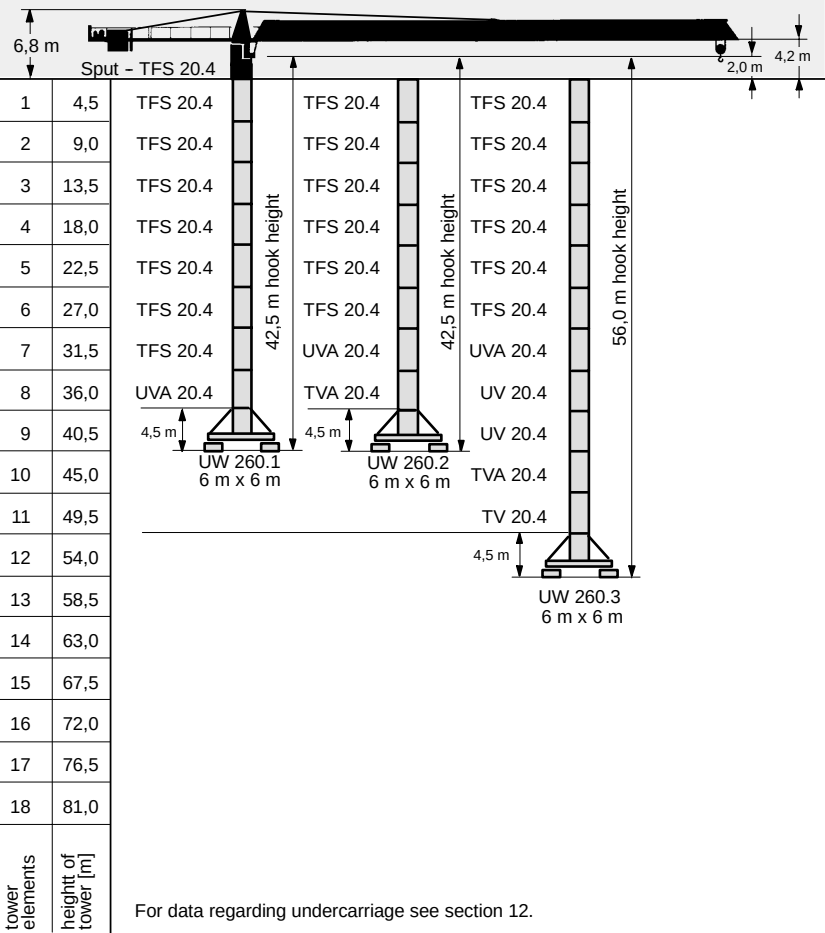
For data regarding undercarriage see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation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

2.2.9.2

Tower configurations

for a free standing travelling crane without climbing device.

Slwving part:



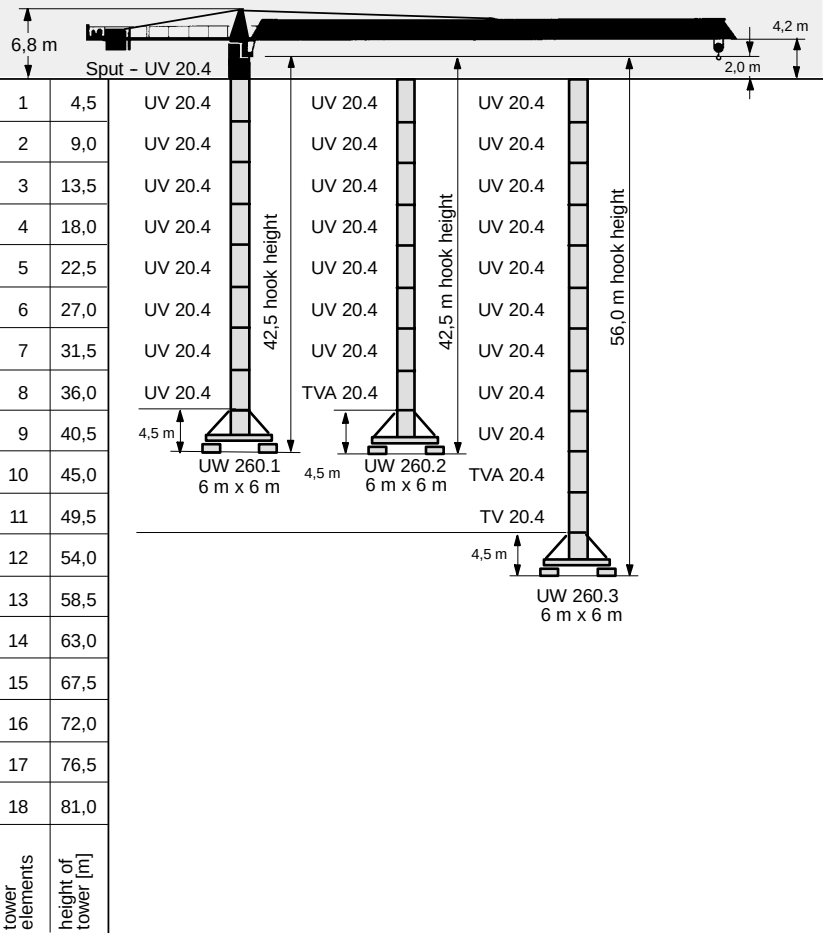
The tower configurations are recommended for economic crane installation and may be used in any case. Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

2.2.9.3

Tower configurations

for a free standing travelling crane without climbing device.

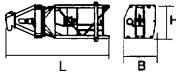
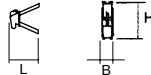
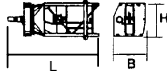
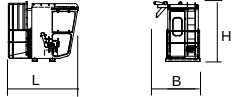
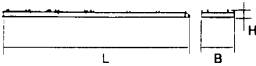
Slwving part:



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.

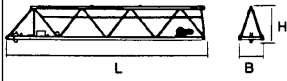
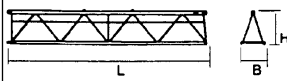
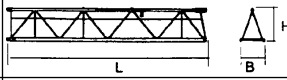
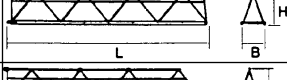
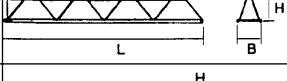
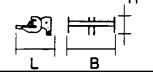
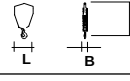
2.3.1

Colli liste

Item	Pcs.	Designation	Colli	L (m)	B (m)	H (m)	Weight (kg)	Volume (m ³)
1	1	tower top complete div. bracing parts		sput - UV 15.4				
		6,80		1,95	2,00	5800	26,52	
1	1	tower top complete div. bracing parts		sput - TFS 20.4				
		6,80	2,17	2,42	5700	35,71		
1	1	tower top complete div. bracing parts		sput - UV 20.4				
		6,80	2,17	2,42	5860	35,71		
item 1 disassembled		tower top upper part with platforms and div. bracing parts		2,27	0,5	1,96	720	2,22
		tower top lower part with slewing frame KDV slewing drive and slip ring system		sput - UV 15.4				
				5,62	1,88	2,33	5080	24,62
				sput - TFS 20.4				
				5,62	2,17	2,42	4980	29,51
				sput - UV 20.4				
		5,62	2,17	2,42	5140	29,51		
2	1	driver's cabin with suspension		2,80	2,15	2,45	1100	14,75
		driver's cabin suspension		1,03	2,01	0,59	230	1,22
4	1	counter jib with bracing parts		13,48	2,38	0,55	2730	17,65
5	1	machinery platform with hoisting rope (ø 16 mm x 170 m)		Hw 628 FU				
				2,38	2,29	2,17	2630	11,83
				Hw 637 FU				
				2,38	2,29	2,17	2700	11,83
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)
6	1	Jib part 1 with trolley drive and bracing parts		10,19	1,26	1,96	2010	25,04
7	1	jib part 2 with reinforcement		10,23	1,23	1,96	1910	24,66
8	1	jib part 3 with bracing parts a.reforcem.		10,23	1,23	1,96	4320	24,66
9	2	jib part 4		5,25	1,23	1,76	620	11,37
10	1	jib part 5		10,23	1,23	1,76	1070	22,15
11	1	jib part 6		10,19	1,23	1,75	865	21,93
12	1	rope swivel traverse		0,91	1,20	0,46	107	0,50
13	1	trolley		1,59	1,50	0,96	300	2,29
14	1	hook block U6 (small part)		0,50	0,22	1,11	350	0,12
16	1	standard handrail (small part)		2,55	1,1	1,00	320	2,81
17	1	box (small parts)		1,6	0,9	0,8	400	1,15
Loose and small parts can be distributed depending on the available space.								

2.5.1

Assembly weights - slewing part

Tower top complete - Sput UV 15.4		7030 kg
bracing brackets (2 x 1900 mm), driver's cabin, driver's cabin suspension, platform and standard handrail		
- tower top upper part complete with platform, bracing brackets	720 kg	
- driver's cabin with driver's cabin suspension, standard handrail	1230 kg	
- tower top lower part with slewing frame, KDV, slewing drives, standard handrails and slipring system	5080 kg	
Tower top complete - Sput TFS 20.4		6930 kg
bracing brackets (2 x 1900 mm), driver's cabin, driver's cabin suspension, platform and standard handrail		
- tower top upper part complete with platform, bracing brackets	720 kg	
- driver's cabin with driver's cabin suspension, standard handrail	1230 kg	
- tower top lower part with slewing frame, KDV, slewing drives, standard handrails and slipring system	4980 kg	
Tower top complete - Sput UV 20.4		7090 kg
bracing brackets (2 x 1900 mm), driver's cabin, driver's cabin suspension, platform and standard handrail		
- tower top upper part complete with platform, bracing brackets	720 kg	
- driver's cabin with driver's cabin suspension, standard handrail	1230 kg	
- tower top lower part with slewing frame, KDV, slewing drives, standard handrails and slipring system	5140 kg	
Counterjib with Hw 628 FU compl.		8100 kg
machinery platform Hw 628 FU with hoisting rope (ø 16 mm x 170 m) counterweight stone 1,9 t (under machinery platform), 2 bracing brackets (2x 7820 mm) and standard handrail		
- counterjib with 2 bracing brackets and standard handrail	3570 kg	
- machinery platform Hw 628 FU with hoisting rope (ø 16 mm x 170 m)	2630 kg	
- counterweight stone 1,9 t	1900 kg	
Counterjib with Hw 637 FU compl.		8100 kg
machinery platform Hw 637 FU with hoisting rope (ø 16 mm x 170 m) counterweight stone 1,9 t (under machinery platform), 2 bracing brackets (2x 7820 mm) and standard handrail		
- counterjib with 2 bracing brackets and standard handrail	3570 kg	
- machinery platform Hw 637 FU with hoisting rope (ø 16 mm x 170 m)	2700 kg	
- counterweight stone 1,9 t	1900 kg	

2.5.2

Assembly weights - slewing part

55 m	Trolley jib complete	11 550 kg
- bracing brackets - trolley - traversing rope - hook block - standard handrail		
50 m	Trolley jib complete	10 930 kg
- bracing brackets - trolley - traversing rope - hook block - standard handrail		
45 m	Trolley jib complete	10 685 kg
- bracing brackets - trolley - traversing rope - hook block - standard handrail		
40 m	Trolley jib complete	10 065 kg
- bracing brackets - trolley - traversing rope - hook block - standard handrail		
35 m	Trolley jib complete	9 615 kg
- bracing brackets - trolley - traversing rope - hook block - standard handrail		
30 m	Trolley jib complete	8 995 kg
- bracing brackets - trolley - traversing rope - hook block - standard handrail		

2.5.3

Assembly weights - cross frame / cross frame element / undercarriage

Cross frame KR 7 - 32 (3,2 m x 3,2 m)	(without optional features)	3 450 kg
- 4 spigots AZ 85 E 20.5		195 kg
- 4 spigots AZ 93.4		200 kg
- 4 spigots AZ 120		272 kg
Cross frame KRS 8 - 46 (4,6 m x 4,6 m)	(without optional features)	5 200 kg
- 4 spigots AZ 85 E 20.5		195 kg
- 4 spigots AZ 93.4		200 kg
- 4 spigots AZ 120		272 kg
Cross frame KR 10 - 46/60 (4,6 m x 4,6 m)	(without optional features)	7 000 kg
- 4 spigots AZR 120 E 15.5		560 kg
- 4 spigots AZ 140 M		684 kg
Cross frame KR 10 - 46/60 (6,0 m x 6,0 m)	(without optional features)	8 805 kg
- 4 spigots AZR 120 E 15.5		560 kg
- 4 spigots AZ 140 M		684 kg
Cross frame KR 1000 - 8 (8,0 m x 8,0 m)	(without optional features)	14 630 kg
- 4 spigots AZ 140 E		684 kg
- 4 spigots AZ 156 M		748 kg
Cross frame KR 16 - 80/100 (8,0 m x 8,0 m)	(without optional features)	21 450 kg
- 4 spigots AZ 140 E KR16-80		620 kg
- 4 spigots AZ 156 M KR16-80		680 kg
- 4 spigots AZ 156S M KR16-80		675 kg
Cross frame KR 16 - 80/100 (10,0 m x 10,0 m)	(without optional features)	25 400 kg
- 4 spigots AZ 140 E KR16-80		620 kg
- 4 spigots AZ 156 M KR16-80		680 kg
- 4 spigots AZ 156S M KR16-80		675 kg

2.5.2

Assembly weights - cross frame / cross frame element / undercarriage

Cross frame element KRE 250 kompl.	5 750 kg
- cross frame platform with swivel arms,	2 730 kg
corner bearings and transport safety devices	
- base mast part with diagonal struts and track rod	3 020 kg
Cross frame element KRE 260.1 kompl.	8 100 kg
- cross frame platform with swivel arms,	4 320 kg
corner bearings and transport safety devices	
- 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,	5 455 kg
corner bearings and transport safety devices	
- base mast part with diagonal struts and track rod	5 445 kg
Undercarriage UW 250 kompl.	8 800 kg
- undercarriage platform with swivel arms,	5 600 kg
subframes and transport safety devices	
- subframes and transport safety devices	3 200 kg
Undercarriage UW 260.1 kompl.	11 400 kg
- undercarriage platform with swivel arms,	7 150 kg
subframes and transport safety devices	
- subframes and transport safety devices	4 250 kg
Undercarriage UW 260.2 kompl.	13 930 kg
- undercarriage platform with swivel arms,	8 050 kg
subframes and transport safety devices	
- base mast part with diagonal struts and track rod	5 880 kg
Undercarriage UW 260.3 kompl.	17 200 kg
- undercarriage platform with swivel arms,	11 300 kg
subframes and transport safety devices	
- base mast part with diagonal struts and track rod	5 900 kg

2.5.5 Required height under hook for the mobile crane



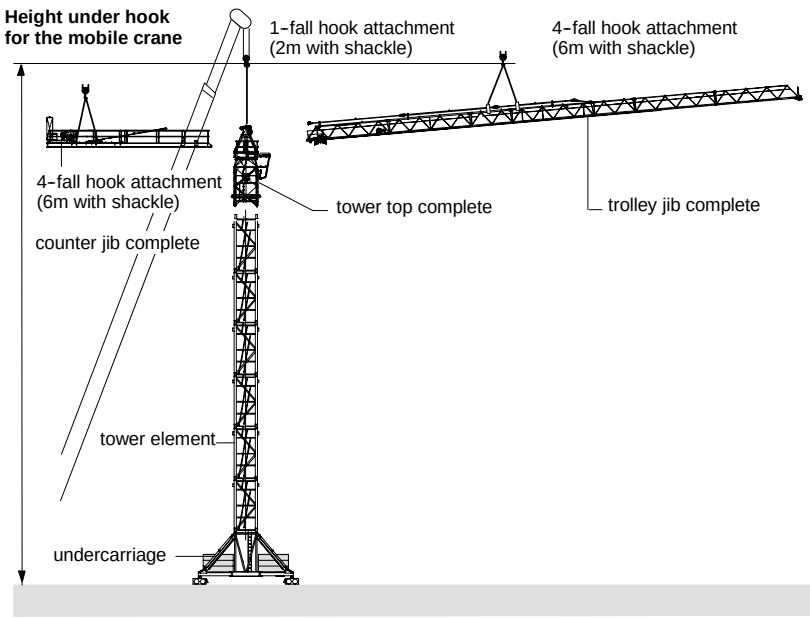
Warning!
Use suspension ropes with sufficient capacity and observe suspension plan!

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.

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



2.6.1.1 Trolley jib – suspension plan jib 55 m to 50 m



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.

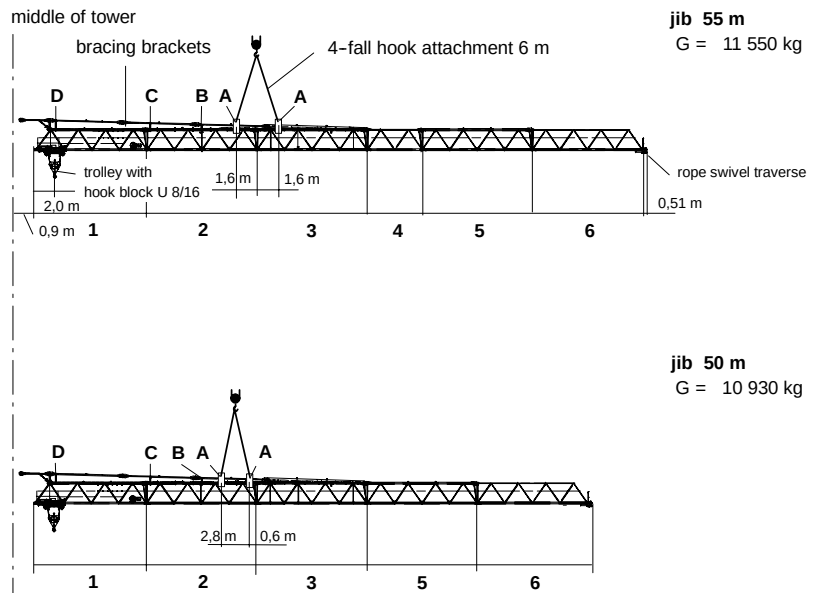
The parts of the jib are labeled with a building part identification at the top chord.

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 **H9** and **H10** see section 2.6.2



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.



2.6.1.2 Trolly jib - suspension plan jib 45 m to 30 m



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.

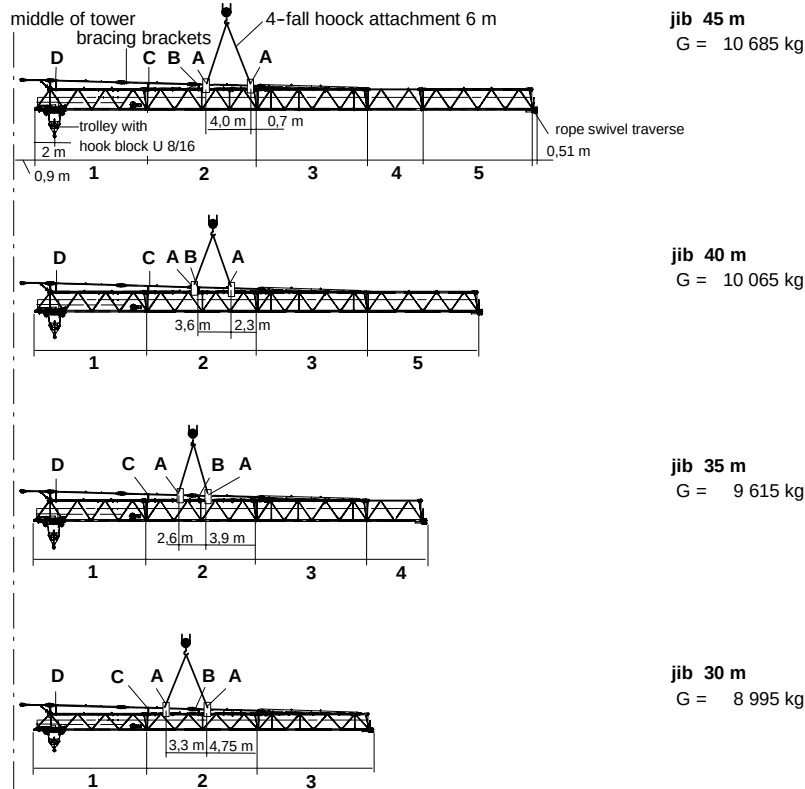
The parts of the jib are labeled with a building part identification at the top chord.

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 **H9 and H10** see section 2.6.2



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 for hoisting winch Hw 628 FU / Hw 637 FU

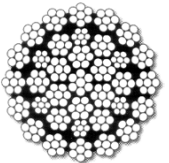
Cable Ø = 16 mm

+ 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
middle spinning loss factor = 0,76
middle 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 170 m	for crane with:	cable	2 fall
		radius	55 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.

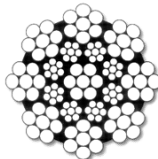


Attention!
A wire cable is a complex machine element.

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.											
Design		nominal strength = 1770 N/mm ² calc. breaking strength = 57,4 kN min. breaking strength = 49,9 kN weight per meter = 0,282 kg ordinary lay rope, right handed, surface of wires zinc coated. middle space factor = 0,643 middle spinning loss factor = 0,90 middle 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													
<table><tr><td>cable lengths</td><td>1 x 65 m</td><td>for crane with:</td><td>radius</td><td>55 m</td></tr><tr><td></td><td>1 x 108 m</td><td></td><td></td><td></td></tr></table>				cable lengths	1 x 65 m	for crane with:	radius	55 m		1 x 108 m			
cable lengths	1 x 65 m	for crane with:	radius	55 m									
	1 x 108 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.													

962-4-027427E

2.8.1

Insertable exterior climbing gear

The following removable hydraulic exterior climbing gear can be used with the tower crane WOLFF 5515 compact.

-	KWH 20.3
---	----------

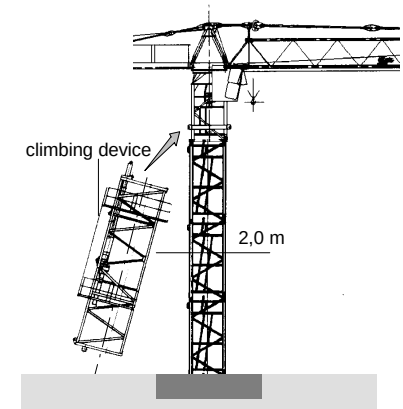
KWH 20.3 information is given in a separate documentation in section 12, Additional Equipment.

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



2.8.5

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 elements	jib					
	30 m	35 m	40 m	45 m	50 m	55 m
with balancing load * UV 20.4 = 1,95 t	** 7,4	5,2	4,0	---	---	*** 37,2
without balancing load	29,8	21,9	17,5	10,5	7,8	---
for climbing in TFS 20.4 tower elements						
	30 m	35 m	40 m	45 m	50 m	55 m
with balancing load * TFS 20.4 = 1,45 t	** 10,2	7,6	6,0	3,7	3,1	--
without balancing load	---	24,5	20,0	13,0	11,5	---

**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.

962-4-017469E

2.8.4 Insertable internal climbing device KSH 15

For use of the WOLFF 5515compact in connection with internal climbing device KSH15, the tower combination has to be observed as shown here.

KSH15 informations is given in a separate documentation in section 12, Additional Equipment.

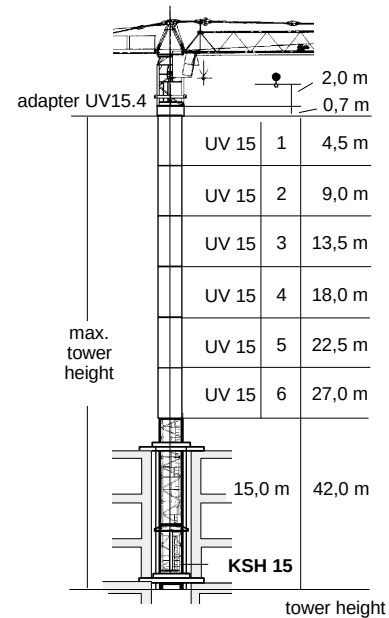
2.8.4.1 Table of balancing weights

* 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 tensioning brackets. This distance shall be equal at all four corner posts.

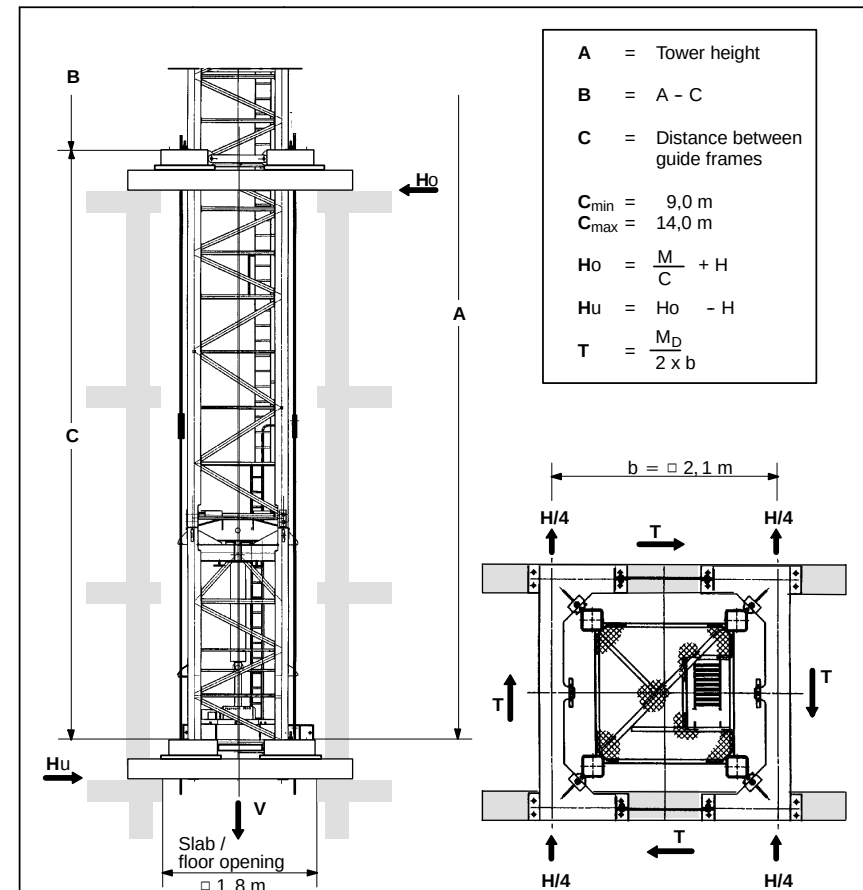
-- balancing not possible

slewing part



5515compact balancing weight *	jib					
	30 m	35 m	40 m	45 m	50 m	55 m
UV 15.4 = 1,75 t	---	31,3	30,9	30,1	30,4	14,8
weight = 5,00 t	13,9	13,4	13,2	12,9	13,0	6,3

2.8.4.2 Reacting forces to building for internal hydraulic climbing device KSH 15



Reacting forces to building (kN)

A (m)	42,0				37,5				33,0				28,5			
C (m)	9	10	12	14	9	10	12	14	9	10	12	14	9	10	12	14
V	771	771	771	771	751	751	751	751	732	732	732	732	713	713	713	713
H_o	259	235	198	173	247	224	190	165	234	212	165	156	222	202	171	148
H_u	223	197	161	137	213	190	156	131	204	182	135	126	194	174	143	120
T	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45

2.8.6 Insertable internal climbing device KSH 20 L

For use of the WOLFF 5515 compact in connection with internal climbing device KSH20L, the tower combination has to be observed as shown here.

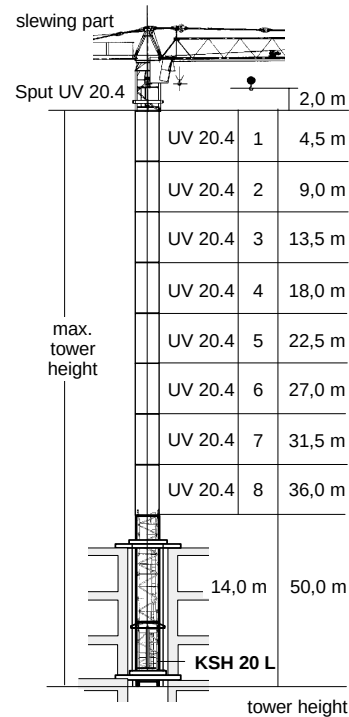
KSH20L informations is given in a separate documentation in section 12, Additional Equipment.

2.8.6.1 Table of balancing weights

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

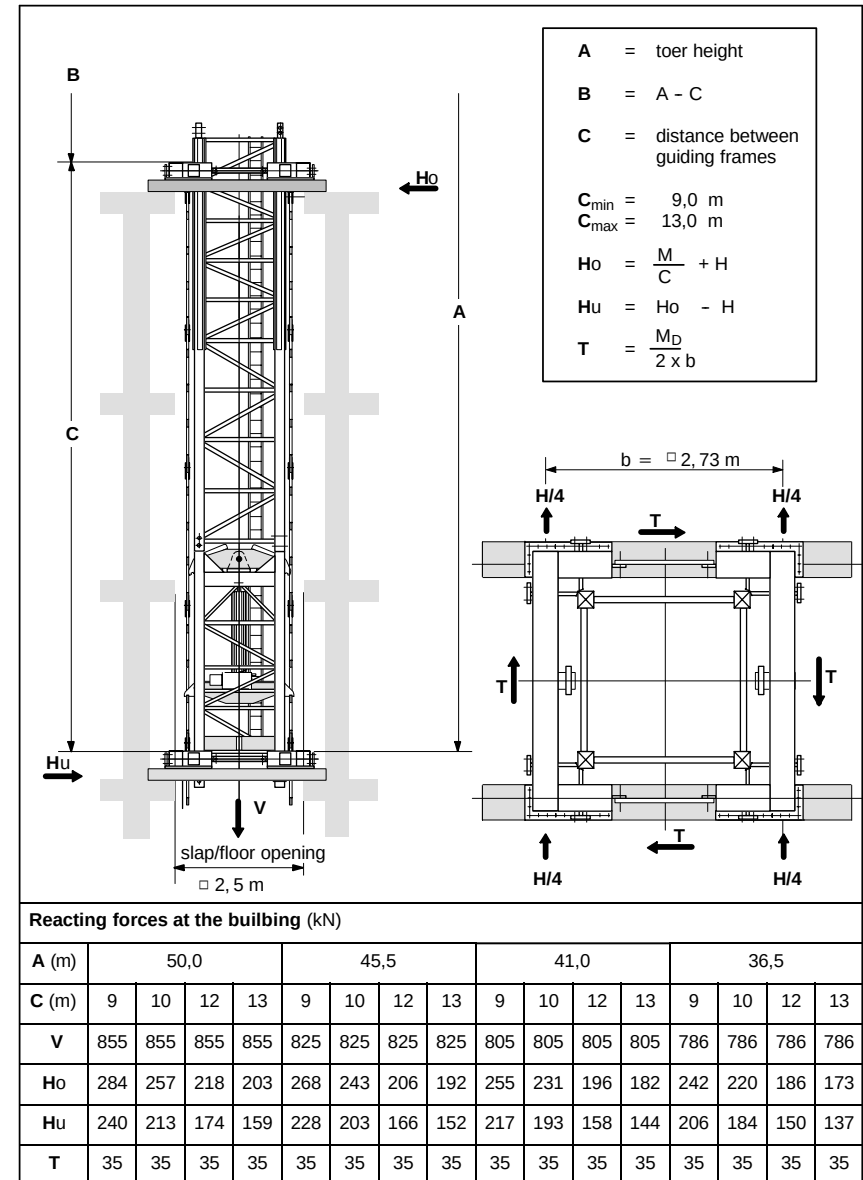
** The indicated radius refers to the centre of the tower and shall be treated as standard value. Exact balancing must achieved by travelling of trolley with tower element or load and can checked by measuring the distance between corner posts and guide plates. This distance shall be equal at all four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

-- balancing not possible



5520 compact balancing weight*	Jib					
	30 m	35 m	40 m	45 m	50 m	55 m
UV 20.4 = 1,95 t	29,5	28,5	28,1	27,4	27,7	13,5
TFS 20.4 = 1,45 t	---	35,0	34,5	33,7	34,0	16,6
weight = 5,00 t	13,9	13,4	13,2	12,9	13,0	6,3

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



2.8.6 Insertable internal climbing device KSH 20 M

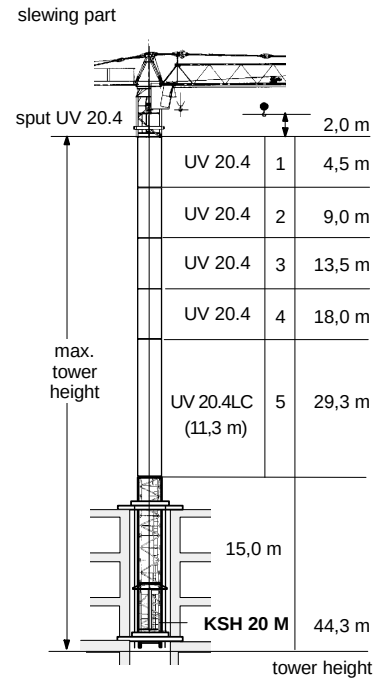
For use of the WOLFF 5515_{compact} in connection with internal climbing device KSH20M, the tower combination has to be observed as shown here.

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

2.8.6.1 Table of balancing weights

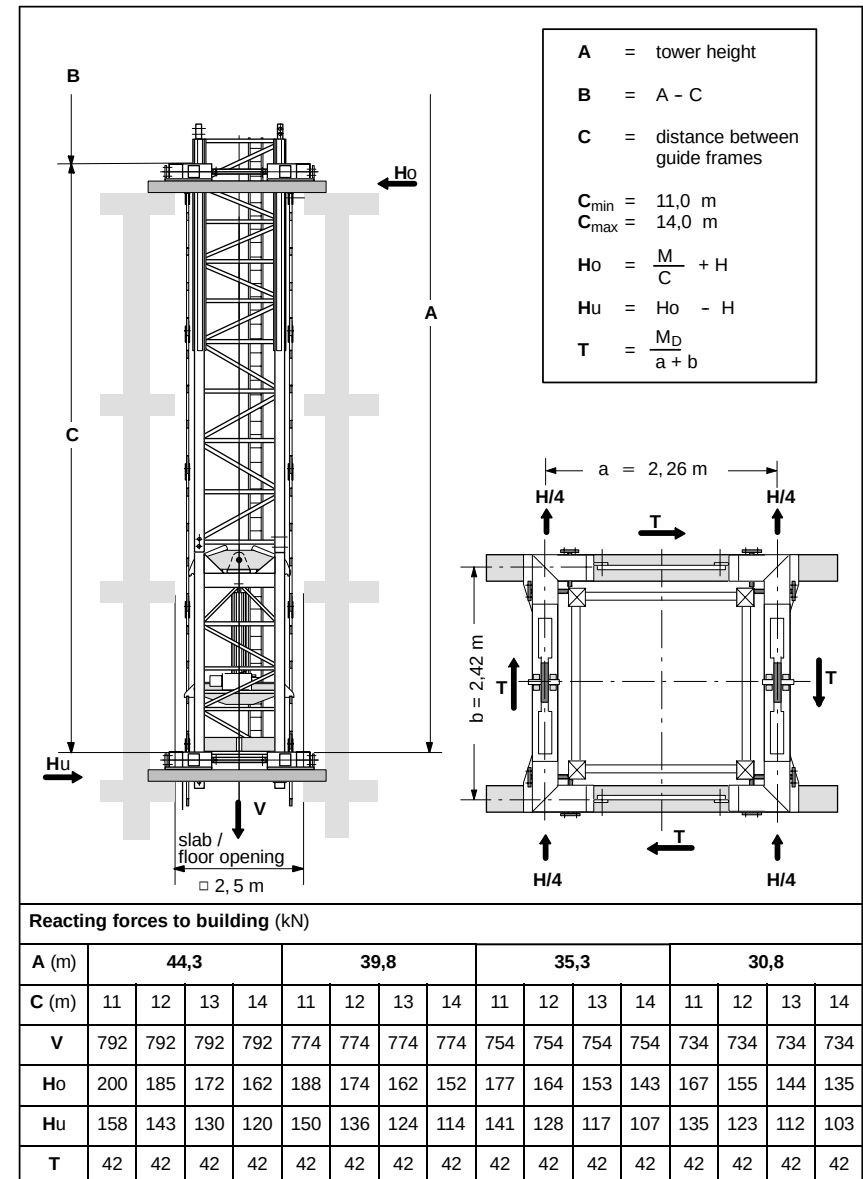
- * The indicated balancing weights are gross-weights of tower elements or load.
- ** The indicated radius refers to the centre of the tower and shall be treated as standard value. Exact balancing must be achieved by travelling of trolley with tower element or load and can be checked by measuring the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

-- balancing not possible



5515 compact balancing weight *	Jib					
	30 m	35 m	40 m	45 m	50 m	55 m
UV 20.4 = 1,95 t	**					
TFS 20.4 = 1,45 t	--	35,0	34,5	33,7	34,0	16,6
weight = 5,00 t	13,9	13,4	13,2	12,9	13,0	6,3

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



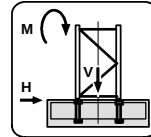
3.1.1 Foundation loads according to DIN

for stationary tower crane on a concrete foundation
according to tower configuration without climbing device

M = moment

H = horizontal force

V = vertical load



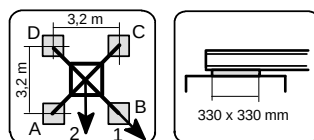
Foundation loads

jib length 30 - 55 m

height under hook [m]	Crane in service torque moment 190 kNm			Crane out of service			Assembly		
	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
11,0	1446	15	564	1069	45	458	1801	9	291
15,5	1537	18	580	1294	52	476	1852	11	307
20,0	1640	20	595	1552	57	495	1914	12	322
24,5	1757	21	611	1780	58	513	1986	14	337
29,0	1887	23	626	2110	64	531	2069	15	353
33,5	2032	24	642	2479	71	550	2164	16	368
38,0	2195	26	657	2889	77	567	2271	18	384
42,5	2377	27	672	3344	84	586	2391	19	399
47,0	2544	29	699	3848	90	604	2506	21	425
51,5	2748	30	719	4354	100	642	2643	22	445
56,0	2919	33	761	4937	109	670	2767	25	488
60,5	3134	35	792	5578	116	699	2918	27	519
65,0	3372	37	823	6294	126	727	3086	29	550
69,5	3632	38	854	6995	135	767	3270	31	581
74,0	3857	41	898	7787	145	799	3439	33	625
78,5	3928	42	912	8175	150	845	3800	37	665
Attention! Tower configuration with basis tower BT 29									
80,7	4000	43	955	8471	154	888	3870	39	709
85,2	4258	45	987	9394	164	921	4090	42	741
89,7	4530	48	1034	10367	174	968	4320	44	787
94,2	4822	50	1079	11415	186	1013	4566	47	833
98,7	5137	53	1126	13256	204	1059	4831	49	879
103,2	5476	55	1172	14510	215	1106	5115	52	926

3.2.1.1 Centralballasts and Cornerloads according to DIN 15019

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

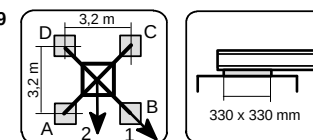


KR 7 - 32	Corner distance 3,2 m x 3,2 m	jib 30 m
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[illegible]

3.2.1.2 Centralballasts and Cornerloads according to DIN 15019

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

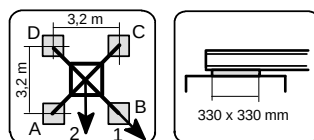


KR 7 - 32	Corner distance 3,2 m x 3,2 m	jib 35 m
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[illegible]

3.2.1.3 Centralballasts and Cornerloads according to DIN 15019

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

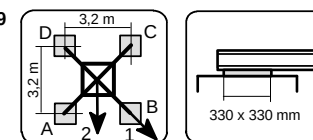


KR 7 - 32	Corner distance 3,2 m x 3,2 m	jib 40 m
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[illegible]

3.2.1.4 Centralballasts and Cornerloads according to DIN 15019

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

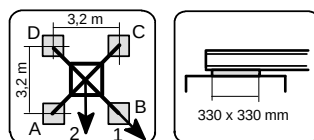


KR 7 - 32	Corner distance 3,2 m x 3,2 m	jib 45 m
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[illegible]

3.2.1.5 Centralballasts and Cornerloads according to DIN 15019

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

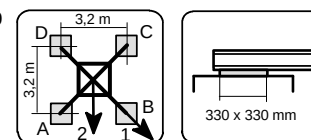


KR 7 - 32	Corner distance 3,2 m x 3,2 m	jib 50 m
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[illegible]

3.2.1.6 Centralballasts and Cornerloads according to DIN 15019

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

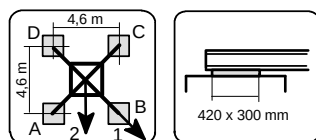


KR 7 - 32	Corner distance 3,2 m x 3,2 m	jib 55 m
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[illegible]

3.2.2.1 Centralballasts and Cornerloads according to DIN 15019

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

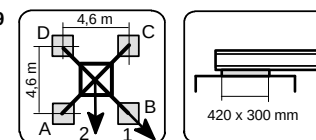


KRS 8 - 46	Corner distance 4,6 m x 4,6 m	jib 30 m
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[illegible]

3.2.2.2 Centralballasts and Cornerloads according to DIN 15019

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

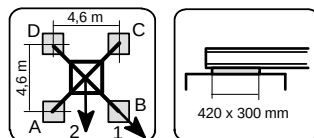


KRS 8 - 46	Corner distance 4,6 m x 4,6 m	jib 35 m
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[illegible]

3.2.2.3 Centralballasts and Cornerloads according to DIN 15019

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

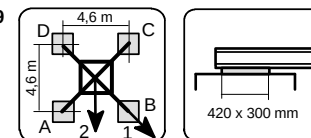


KRS 8 - 46	Corner distance 4,6 m x 4,6 m	jib 40 m
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[illegible]

3.2.2.4 Centralballasts and Cornerloads according to DIN 15019

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

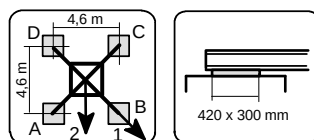


KR 8 - 46	Corner distance 4,6 m x 4,6 m	jib 45 m
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[illegible]

3.2.2.5 Centralballasts and Cornerloads according to DIN 15019

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

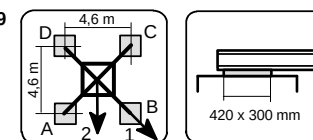


KR 8 - 46	Corner distance 4,6 m x 4,6 m	jib 50 m
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[illegible]

3.2.2.6 Centralballasts and Cornerloads according to DIN 15019

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

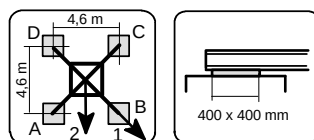


KR 8 - 46	Corner distance 4,6 m x 4,6 m	jib 55 m
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[illegible]

3.2.3.1 Centralballasts and Cornerloads according to DIN 15019

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



KR 10 - 46/60

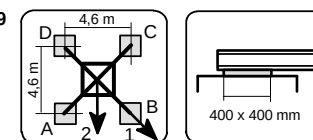
Corner distance 4,6 m x 4,6 m

jib 30 m

[illegible]

3.2.3.2 Centralballasts and Cornerloads according to DIN 15019

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



KR 10 - 46/60

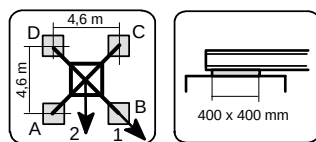
Corner distance 4,6 m x 4,6 m

jib 35 m

[illegible]

3.2.3.3 Centralballasts and Cornerloads according to DIN 15019

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



KR 10 - 46/60

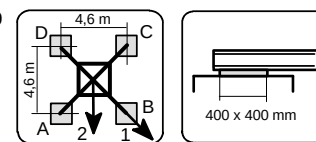
Corner distance 4,6 m x 4,6 m

jib 40 m

[illegible]

3.2.3.4 Centralballasts and Cornerloads according to DIN 15019

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



KR 10 - 46/60

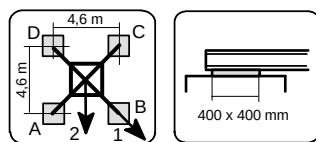
Corner distance 4,6 m x 4,6 m

jib 45 m

[illegible]

3.2.3.5 Centralballasts and Cornerloads according to DIN 15019

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



KR 10 - 46/60

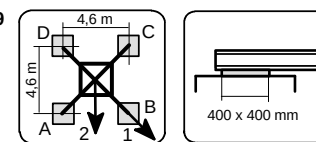
Corner distance 4,6 m x 4,6 m

jib 50 m

[illegible]

3.2.3.6 Centralballasts and Cornerloads according to DIN 15019

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



KR 10 - 46/60

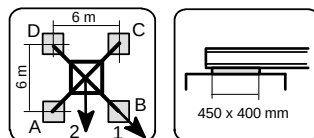
Corner distance 4,6 m x 4,6 m

jib 55 m

[illegible]

3.2.4.1 Centralballasts and Cornerloads according to DIN 15019

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



KR 10 - 46/60

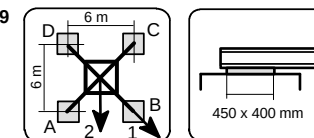
Corner distance 6,0 m x 6,0 m

jib 30 m

[illegible]

3.2.4.2 Centralballasts and Cornerloads according to DIN 15019

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



KR 10 - 46/60

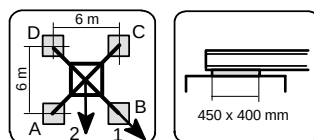
Corner distance 6,0 m x 6,0 m

jib 35 m

[illegible]

3.2.4.3 Centralballasts and Cornerloads according to DIN 15019

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

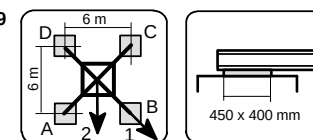


KR 10 - 46/60	Corner distance 6,0 m x 6,0 m	jib 40 m
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[illegible]

3.2.4.4 Centralballasts and Cornerloads according to DIN 15019

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

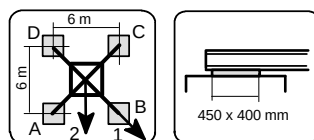


KR 10 - 46/60	Corner distance 6,0 m x 6,0 m	jib 45 m
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[illegible]

3.2.4.5 Centralballasts and Cornerloads according to DIN 15019

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



KR 10 - 46/60

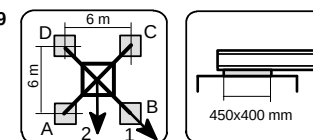
Corner distance 6,0 m x 6,0 m

jib 50 m

[illegible]

3.2.4.6 Centralballasts and Cornerloads according to DIN 15019

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



KR 10 - 46/60

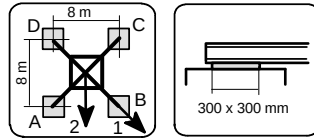
Corner distance 6,0 m x 6,0 m

jib 55 m

[illegible]

3.2.5.1 Centralballasts and Cornerloads according to DIN 15019

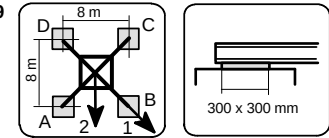
for a standing tower crane on a
cross frame without climbing gear


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

Height under hook	Centerballast	Jib position	Crane in service torque moment: 190 kNm				Horizontal force	Jib position	Crane out of service torque moment: 0 kNm				Horizontal force
			Cornerloads						Cornerloads				
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
[m]	[t]					[kN]						[kN]	
21,2	0,0	1	168	282	168	54	23	1	119	208	119	30	62
		2	249	249	88	88		2	182	182	56	56	
25,7	0,0	1	172	293	172	51	25	1	122	218	122	27	68
		2	257	257	86	86		2	198	198	115	115	
30,2	0,0	1	175	304	175	47	26	1	160	245	160	76	74
		2	266	266	84	84		2	220	220	100	100	
34,7	0,0	1	179	316	179	41	28	1	164	277	164	51	80
		2	276	276	82	82		2	244	244	84	84	
39,2	0,0	1	182	329	182	35	29	1	167	312	167	23	86
		2	286	286	78	78		2	270	270	65	65	
43,7	0,0	1	186	344	186	28	31	1	162	359	162	0	93
		2	298	298	74	74		2	298	298	44	44	
48,2	7,5	1	208	378	208	38	32	1	169	434	169	0	99
		2	328	328	88	88		2	347	347	39	39	
52,7	20,0	1	243	426	243	59	33	1	197	517	197	0	105
		2	372	372	113	113		2	411	411	45	45	
57,2	35,0	1	284	482	284	85	35	1	233	608	233	0	111
		2	424	424	144	144		2	484	484	54	54	
61,7	50,0	1	326	540	326	112	36	1	268	707	268	0	118
		2	477	477	175	175		2	561	561	61	61	
66,2	65,0	1	370	601	370	140	38	1	303	816	303	0	126
		2	533	533	208	208		2	644	644	67	67	
70,7	82,5	1	421	669	421	173	40	1	344	937	344	0	135
		2	597	597	246	246		2	737	737	75	75	
75,2	102,5	1	479	747	479	212	42	1	394	1070	394	0	143
		2	668	668	290	290		2	843	843	86	86	

3.2.3.2 Centralballasts and Cornerloads according to DIN 15019

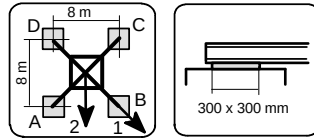
for a standing tower crane on a
cross frame without climbing gear


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

Height under hook [m]	Centerballast [t]	Jib position	Crane in service torque moment: 190 kNm				Horizontal force [kN]	Jib position	Crane out of service torque moment: 0 kNm				Horizontal force [kN]
			Cornerloads						Cornerloads				
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
21,2	0,0	1	174	283	174	65	24	1	121	228	121	13	62
		2	251	251	97	97		2	197	197	44	44	
25,7	0,0	1	178	294	178	62	25	1	124	238	124	10	69
		2	260	260	96	96		2	206	206	119	119	
30,2	0,0	1	181	305	181	57	27	1	166	254	166	78	75
		2	269	269	94	94		2	228	228	104	104	
34,7	0,0	1	185	317	185	52	28	1	170	287	170	53	81
		2	279	279	91	91		2	253	253	87	87	
39,2	0,0	1	188	331	188	46	29	1	173	322	173	24	87
		2	289	289	87	87		2	279	279	68	68	
43,7	0,0	1	192	345	192	38	31	1	169	368	169	0	93
		2	300	300	83	83		2	307	307	47	47	
48,2	7,5	1	214	380	214	48	32	1	175	445	175	0	100
		2	331	331	97	97		2	356	356	42	42	
52,7	20,0	1	249	428	249	70	34	1	203	529	203	0	106
		2	375	375	122	122		2	421	421	47	47	
57,2	35,0	1	290	484	290	96	35	1	239	621	239	0	112
		2	427	427	152	152		2	494	494	55	55	
61,7	50,0	1	332	542	332	122	37	1	272	722	272	0	119
		2	480	480	183	183		2	572	572	61	61	
66,2	65,0	1	376	603	376	150	38	1	306	833	306	0	127
		2	537	537	216	216		2	656	656	67	67	
70,7	85,0	1	433	678	433	189	40	1	359	955	359	0	135
		2	606	606	260	260		2	756	756	81	81	
75,2	102,5	1	485	749	485	221	42	1	395	1090	395	0	144
		2	672	672	299	299		2	856	856	85	85	

3.2.5.3 Centralballasts and Cornerloads according to DIN 15019

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

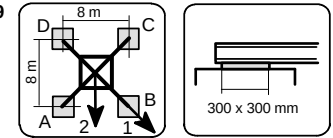


KR 1000 - 8 Corner distance 8,0 m x 8,0 m **jib 40 m**

Height under hook	Centerballast	Jib position	Crane in service torque moment: 190 kNm				Horizontal force	Jib position	Crane out of service torque moment: 0 kNm				Horizontal force
			Cornerloads						Cornerloads				
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
[m]	[t]					[kN]						[kN]	
21,2	0,0	1	179	292	179	67	24	1	119	250	119	0	63
		2	259	259	100	100		2	210	210	33	33	
25,7	0,0	1	183	302	183	63	25	1	119	262	119	0	69
		2	267	267	98	98		2	218	218	32	32	
30,2	0,0	1	186	314	186	59	27	1	119	277	119	0	76
		2	277	277	96	96		2	240	240	103	103	
34,7	0,0	1	190	326	190	53	28	1	175	302	175	48	82
		2	286	286	93	93		2	264	264	85	85	
39,2	0,0	1	193	340	193	47	30	1	178	337	178	19	88
		2	297	297	90	90		2	291	291	66	66	
43,7	0,0	1	197	355	197	39	31	1	169	389	169	0	94
		2	308	308	85	85		2	320	320	44	44	
48,2	7,5	1	219	389	219	49	32	1	175	468	175	0	100
		2	340	340	99	99		2	369	369	39	39	
52,7	22,5	1	260	444	260	76	34	1	214	553	214	0	107
		2	390	390	130	130		2	441	441	50	50	
57,2	37,5	1	301	501	301	102	35	1	249	647	249	0	113
		2	442	442	160	160		2	515	515	57	57	
61,7	52,5	1	343	559	343	127	37	1	282	750	282	0	120
		2	496	496	191	191		2	593	593	63	63	
66,2	67,5	1	388	620	388	155	39	1	315	862	315	0	128
		2	552	552	223	223		2	677	677	68	68	
70,7	87,5	1	445	696	445	194	41	1	366	987	366	0	136
		2	622	622	267	267		2	779	779	81	81	
75,2	107,5	1	503	774	503	232	43	1	414	1124	414	0	145
		2	695	695	311	311		2	885	885	91	91	

3.2.5.4 Centralballasts and Cornerloads according to DIN 15019

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

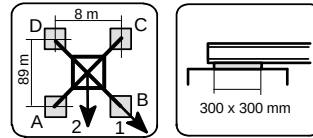


KR 1000 - 8 Corner distance 8,0 m x 8,0 m **jib 45 m**

Height under hook	Centerballast	Jib position	Crane in service torque moment: 190 kNm				Horizontal force	Jib position	Crane out of service torque moment: 0 kNm				Horizontal force
			Cornerloads						Cornerloads				
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
[m]	[t]					[kN]						[kN]	
21,2	0,0	1	183	308	183	58	24	1	98	297	98	0	64
		2	271	271	95	95		2	228	228	18	18	
25,7	0,0	1	187	319	187	55	25	1	98	310	98	0	70
		2	280	280	93	93		2	236	236	17	17	
30,2	0,0	1	190	330	190	50	27	1	98	325	98	0	76
		2	289	289	91	91		2	258	258	93	93	
34,7	0,0	1	194	343	194	44	28	1	97	341	97	0	83
		2	299	299	88	88		2	282	282	75	75	
39,2	0,0	1	197	357	197	37	30	1	182	362	182	3	89
		2	310	310	84	84		2	309	309	55	55	
43,7	2,5	1	207	379	207	35	31	1	168	432	168	0	95
		2	328	328	86	86		2	345	345	39	39	
48,2	12,5	1	235	420	235	51	33	1	185	512	185	0	101
		2	366	366	105	105		2	401	401	40	40	
52,7	27,5	1	276	475	276	77	34	1	223	599	223	0	107
		2	417	417	136	136		2	473	473	50	50	
57,2	42,5	1	317	532	317	102	35	1	257	695	257	0	114
		2	469	469	165	165		2	548	548	57	57	
61,7	57,5	1	359	591	359	127	37	1	289	800	289	0	120
		2	524	524	195	195		2	627	627	62	62	
66,2	75,0	1	410	660	410	161	39	1	333	914	333	0	128
		2	587	587	234	234		2	719	719	72	72	
70,7	92,5	1	461	730	461	193	41	1	372	1041	372	0	137
		2	651	651	271	271		2	814	814	78	78	
75,2	112,5	1	519	808	519	230	43	1	418	1181	418	0	146
		2	724	724	315	315		2	922	922	87	87	

3.2.5.5 Centralballasts and Cornerloads according to DIN 15019

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

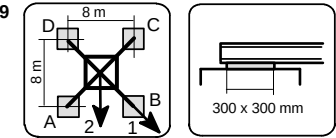


KR 1000 - 8 Corner distance 8,0 m x 8,0 m **jib 50 m**

Height under hook	Centerballast	Jib position	Crane in service torque moment: 190 kNm				Horizontal force	Jib position	Crane out of service torque moment: 0 kNm				Horizontal force	
			Cornerloads						Cornerloads					
			A [kN]	B [kN]	C [kN]	D [kN]				A [kN]	B [kN]	C [kN]		D [kN]
[m]	[t]					[kN]								
21,2	0,0	1	184	320	184	47	24	1	88	319	88	0	65	
		2	280	280	87	87		2	236	236	11	11		
25,7	0,0	1	187	331	187	43	26	1	88	332	88	0	71	
		2	289	289	85	85		2	247	247	98	98		
30,2	0,0	1	191	343	191	38	27	1	88	347	88	0	77	
		2	298	298	83	83		2	270	270	82	82		
34,7	2,5	1	200	362	200	39	28	1	99	364	99	0	83	
		2	315	315	86	86		2	301	301	70	70		
39,2	2,5	1	204	376	204	31	30	1	181	394	181	0	89	
		2	326	326	82	82		2	328	328	50	50		
43,7	7,5	1	220	404	220	36	31	1	176	468	176	0	96	
		2	350	350	90	90		2	370	370	40	40		
48,2	17,5	1	248	446	248	51	33	1	193	549	193	0	102	
		2	388	388	109	109		2	427	427	39	39		
52,7	32,5	1	289	502	289	77	34	1	230	638	230	0	108	
		2	440	440	139	139		2	500	500	49	49		
57,2	47,5	1	330	560	330	101	36	1	263	735	263	0	114	
		2	492	492	168	168		2	575	575	55	55		
61,7	65,0	1	379	625	379	132	37	1	306	842	306	0	121	
		2	553	553	204	204		2	661	661	66	66		
66,2	80,0	1	423	688	423	159	39	1	338	958	338	0	129	
		2	610	610	236	236		2	747	747	70	70		
70,7	100,0	1	480	764	480	196	41	1	388	1086	388	0	138	
		2	681	681	280	280		2	849	849	81	81		
75,2	120,0	1	539	843	539	234	43	1	433	1227	433	0	146	
		2	754	754	323	323		2	957	957	90	90		

3.2.5.6 Centralballasts and Cornerloads according to DIN 15019

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

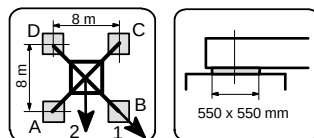


KR 1000 - 8 Corner distance 8,0 m x 8,0 m **jib 55 m**

Height under hook	Centerballast	Jib position	Crane in service torque moment: 190 kNm				Horizontal force	Jib position	Crane out of service torque moment: 0 kNm				Horizontal force
			Cornerloads						Cornerloads				
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
[m]	[t]					[kN]						[kN]	
21,2	7,5	1	204	346	204	62	24	1	101	373	101	0	65
		2	305	305	103	103		2	276	276	12	12	
25,7	7,5	1	207	357	207	58	26	1	101	387	101	0	72
		2	313	313	102	102		2	290	290	95	95	
30,2	7,5	1	211	369	211	53	27	1	101	403	101	0	78
		2	323	323	99	99		2	313	313	79	79	
34,7	10,0	1	221	389	221	53	29	1	111	420	111	0	84
		2	340	340	102	102		2	345	345	66	66	
39,2	10,0	1	224	403	224	45	30	1	187	463	187	0	90
		2	351	351	98	98		2	373	373	46	46	
43,7	15,0	1	240	431	240	49	31	1	181	539	181	0	97
		2	375	375	105	105		2	416	416	35	35	
48,2	27,5	1	275	480	275	70	33	1	209	622	209	0	103
		2	420	420	130	130		2	480	480	40	40	
52,7	42,5	1	316	536	316	96	34	1	245	713	245	0	109
		2	471	471	160	160		2	553	553	49	49	
57,2	57,5	1	357	594	357	120	36	1	277	814	277	0	115
		2	524	524	189	189		2	630	630	54	54	
61,7	75,0	1	405	660	405	151	37	1	319	924	319	0	122
		2	585	585	225	225		2	717	717	64	64	
66,2	92,5	1	456	729	456	183	39	1	361	1041	361	0	130
		2	649	649	263	263		2	809	809	73	73	
70,7	112,5	1	513	806	513	220	41	1	410	1173	410	0	138
		2	720	720	306	306		2	913	913	84	84	
75,2	132,5	1	571	885	571	257	43	1	454	1316	454	0	147
		2	793	793	349	349		2	1022	1022	91	91	

3.2.6.1 Centralballasts and Cornerloads according to DIN 15019

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

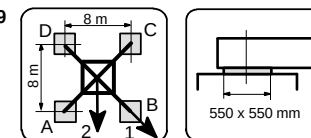


KR 16 - 80/100	Corner distance 8,0 m x 8,0 m	jib 30 m
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Height under hook [m]	Centerballast [t]	Jib position	Crane in service torque moment: 190 kNm				Horizontal force [kN]	Jib position	Crane out of service torque moment: 0 kNm				Horizontal force [kN]
			Cornerloads						Cornerloads				
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
80,3	120	1	546	836	546	256	48	1	448	1230	448	0	164
		2	751	751	341	341		2	966	966	96	96	
82,5	125	1	572	869	572	276	50	1	474	1281	474	0	165
		2	782	782	363	363		2	1010	1010	104	104	
87,0	150	1	643	961	643	325	52	1	538	1436	538	0	175
		2	868	868	418	418		2	1135	1135	120	120	
91,5	170	1	704	1045	704	364	54	1	579	1600	579	0	186
		2	945	945	464	464		2	1255	1255	123	123	
96,0	195	1	778	1143	779	414	57	1	636	1783	636	0	198
		2	1036	1036	521	521		2	1394	1394	133	133	
100,5	245	1	915	1305	915	525	59	1	760	2079	761	0	214
		2	1191	1191	639	639		2	1635	1635	165	165	
105,0	280	1	1014	1431	1014	597	62	1	842	2313	842	0	227
		2	1309	1309	719	719		2	1817	1817	181	181	

3.2.6.2 Centralballasts and Cornerloads according to DIN 15019

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

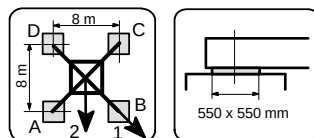


KR 16 - 80/100	Corner distance 8,0 m x 8,0 m	jib 35 m
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Height under hook	Centerballast	Jib position	Crane in service torque moment: 190 kNm				Horizontal force	Jib position	Crane out of service torque moment: 0 kNm				Horizontal force
			Cornerloads						Cornerloads				
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
[m]	[t]					[kN]						[kN]	
80,3	125	1	564	850	564	278	48	1	473	1250	473	0	164
		2	766	766	361	361		2	991	991	107	107	
82,5	125	1	577	870	577	285	50	1	474	1301	475	0	166
		2	784	784	370	370		2	1022	1022	102	102	
87,0	150	1	648	962	648	334	52	1	537	1457	538	0	176
		2	870	870	426	426		2	1148	1148	118	118	
91,5	175	1	722	1059	722	385	55	1	602	1623	602	0	187
		2	960	960	484	484		2	1281	1281	133	133	
96,0	200	1	796	1157	796	435	57	1	658	1807	659	0	199
		2	1051	1051	541	541		2	1420	1420	142	142	
100,5	245	1	920	1307	920	533	60	1	755	2110	756	0	215
		2	1193	1193	647	647		2	1651	1651	159	159	
105,0	280	1	1019	1433	1019	605	62	1	836	2345	836	0	228
		2	1312	1312	726	726		2	1833	1833	175	175	
				</									

3.2.6.3 Centralballasts and Cornerloads according to DIN 15019

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



KR 16 - 80/100

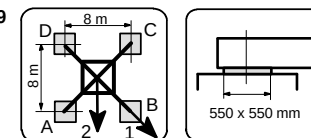
Corner distance 8,0 m x 8,0 m

jib 40 m

[illegible]

3.2.6.4 Centralballasts and Cornerloads according to DIN 15019

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



KR 16 - 80/100

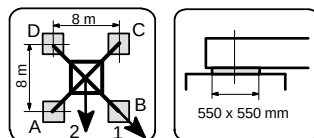
Corner distance 8,0 m x 8,0 m

jib 45 m

Height under hook	Centerballast	Jib position	Crane in service torque moment: 190 kNm				Horizontal force	Jib position	Crane out of service torque moment: 0 kNm				Horizontal force	
			Cornerloads						Cornerloads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
[m]	[t]					[kN]								
80,3	135	1	598	910	598	286	49	1	496	1340	496	0	166	
		2	818	818	377	377		2	1057	1057	109	109		
82,5	135	1	611	929	611	293	50	1	497	1391	498	0	168	
		2	836	836	387	387		2	1088	1088	104	104		
87,0	160	1	682	1022	682	341	52	1	558	1551	559	0	178	
		2	923	923	441	441		2	1215	1215	118	118		
91,5	185	1	756	1120	756	392	55	1	622	1721	622	0	188	
		2	1013	1013	499	499		2	1349	1349	132	132		
96,0	210	1	830	1219	830	441	58	1	676	1908	676	0	201	
		2	1105	1105	555	555		2	1490	1490	140	140		
100,5	260	1	966	1382	967	551	60	1	792	2222	792	0	217	
		2	1260	1260	673	673		2	1737	1737	166	166		
105,0	295	1	1065	1510	1066	621	63	1	870	2463	870	0	229	
		2	1380	1380	751	751		2	1922	1922	180	180		

3.2.6.5 Centralballasts and Cornerloads according to DIN 15019

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



KR 16 - 80/100

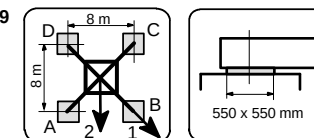
Corner distance 8,0 m x 8,0 m

jib 50 m

[illegible]

3.2.6.6 Centralballasts and Cornerloads according to DIN 15019

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



KR 16 - 80/100

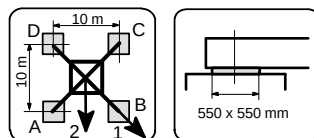
Corner distance 8,0 m x 8,0 m

jib 55 m

[illegible]

3.2.7.1 Centralballasts and Cornerloads according to DIN 15019

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



KR 16 - 80/100

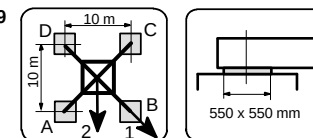
Corner distance 10,0 m x 10,0 m

jib 30 m

[illegible]

3.2.7.2 Centralballasts and Cornerloads according to DIN 15019

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



KR 16 - 80/100

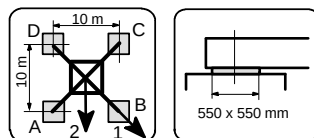
Corner distance 10,0 m x 10,0 m

jib 35 m

Height under hook	Centerballast	Jib position	Crane in service torque moment: 190 kNm				Horizontal force [kN]	Jib position	Crane out of service torque moment: 0 kNm				Horizontal force [kN]
			Cornerloads						Cornerloads				
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
80,3	80	1	456	685	456	227	48	1	383	1000	383	0	164
		2	618	618	294	294		2	795	795	88	88	
82,5	80	1	470	704	470	236	50	1	390	1041	390	0	166
		2	635	635	304	304		2	823	823	87	87	
87,0	95	1	515	767	515	264	52	1	418	1165	418	0	176
		2	693	693	338	338		2	913	913	88	88	
91,5	115	1	577	846	577	308	55	1	475	1299	475	0	187
		2	767	767	386	386		2	1021	1021	103	103	
96,0	135	1	638	927	639	350	57	1	524	1446	524	0	199
		2	843	843	434	434		2	1135	1135	112	112	
100,5	170	1	738	1047	738	428	60	1	601	1688	602	0	215
		2	956	956	519	519		2	1319	1319	126	126	
105,0	200	1	824	1156	824	493	62	1	680	1876	681	0	228
		2	1058	1058	590	590		2	1473	1473	146	146	

3.2.7.3 Centralballasts and Cornerloads according to DIN 15019

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

**KR 16 - 80/100**

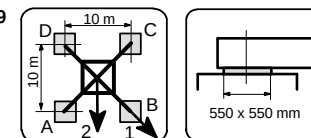
Corner distance 10,0 m x 10,0 m

jib 40 m

Height under hook	Centerballast	Jib position	Crane in service torque moment: 190 kNm				Horizontal force	Jib position	Crane out of service torque moment: 0 kNm				Horizontal force
			Cornerloads						Cornerloads				
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
[m]	[t]					[kN]						[kN]	
80,3	80	1	461	696	462	227	48	1	380	1027	380	0	165
		2	627	627	296	296		2	810	810	83	83	
82,5	80	1	475	715	475	235	50	1	387	1067	387	0	167
		2	644	644	306	306		2	837	837	83	83	
87,0	100	1	533	790	533	276	52	1	439	1193	440	0	177
		2	715	715	351	351		2	940	940	96	96	
91,5	120	1	595	870	595	319	55	1	495	1328	495	0	188
		2	789	789	400	400		2	1049	1049	110	110	
96,0	140	1	656	951	656	361	57	1	544	1477	544	0	200
		2	865	865	448	448		2	1163	1163	119	119	
100,5	175	1	755	1071	755	439	60	1	619	1723	619	0	216
		2	979	979	532	532		2	1349	1349	131	131	
105,0	205	1	842	1180	842	503	62	1	697	1914	697	0	229
		2	1081	1081	602	602		2	1503	1503	150	150	
										</			

3.2.7.4 Centralballasts and Cornerloads according to DIN 15019

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



KR 16 - 80/100

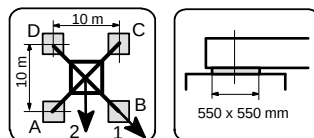
Corner distance 10,0 m x 10,0 m

jib 45 m

[illegible]

3.2.7.5 Centralballasts and Cornerloads according to DIN 15019

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

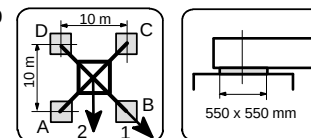


KR 16 - 80/100	Corner distance 10,0 m x 10,0 m	jib 50 m
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[illegible]

3.2.7.6 Centralballasts and Cornerloads according to DIN 15019

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

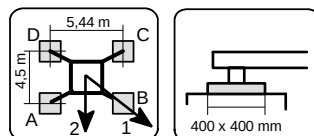


KR 16 - 80/100	Corner distance 10,0 m x 10,0 m	jib 55 m
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[illegible]

3.3.1.1 Centralballasts and Cornerloads according to DIN 15019

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

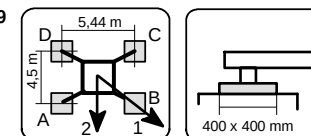


KRE 250	Corner distance 4,5 m x 5,44 m	jib 30 m
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[illegible]

3.3.1.2 Centralballasts and Cornerloads according to DIN 15019

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

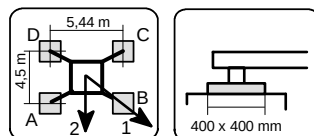


KRE 250	Corner distance 4,5 m x 5,44 m	jib 35 m
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[illegible]

3.3.1.3 Centralballasts and Cornerloads according to DIN 15019

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

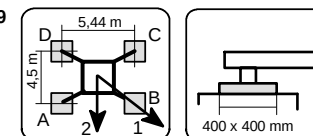


KRE 250	Corner distance 4,5 m x 5,44 m	jib 40 m
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[illegible]

3.3.1.4 Centralballasts and Cornerloads according to DIN 15019

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

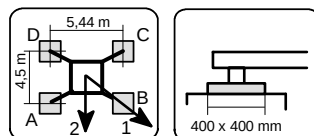


KRE 250	Corner distance 4,5 m x 5,44 m	jib 45 m
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[illegible]

3.3.1.5 Centralballasts and Cornerloads according to DIN 15019

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

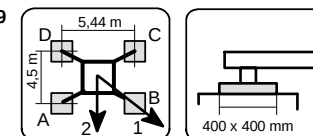


KRE 250	Corner distance 4,5 m x 5,44 m	jib 50 m
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[illegible]

3.3.1.6 Centralballasts and Cornerloads according to DIN 15019

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

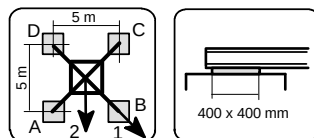


KRE 250	Corner distance 4,5 m x 5,44 m	jib 55 m
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[illegible]

3.3.2.1 Centralballasts and Cornerloads according to DIN 15019

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

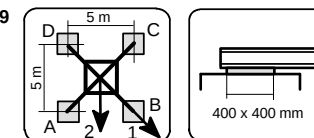


KRE 250	Corner distance 5,0 m x 5,0 m	jib 30 m
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[illegible]

3.3.2.2 Centralballasts and Cornerloads according to DIN 15019

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

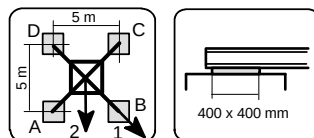


KRE 250	Corner distance 5,0 m x 5,0 m	jib 35 m
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[illegible]

3.3.2.3 Centralballasts and Cornerloads according to DIN 15019

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

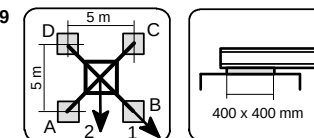


KRE 250	Corner distance 5,0 m x 5,0 m	jib 40 m
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[illegible]

3.3.2.4 Centralballasts and Cornerloads according to DIN 15019

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

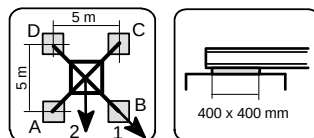


KRE 250	Corner distance 5,0 m x 5,0 m	jib 45 m
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[illegible]

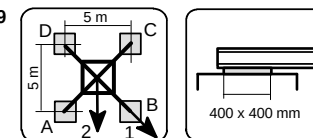
3.3.2.5 Centralballasts and Cornerloads according to DIN 15019

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

[illegible]

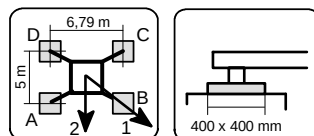
3.3.2.6 Centralballasts and Cornerloads according to DIN 15019

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

[illegible]

3.3.3.1 Centralballasts and Cornerloads according to DIN 15019

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

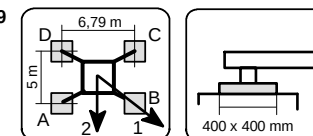


KRE 260.1	Corner distance 5,0 m x 6,79 m	jib 30 m
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[illegible]

3.3.3.2 Centralballasts and Cornerloads according to DIN 15019

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

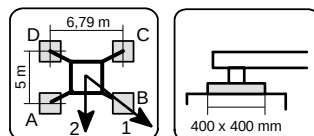


KRE 260.1	Corner distance 5,0 m x 6,79 m	jib 35 m
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[illegible]

3.3.3.3 Centralballasts and Cornerloads according to DIN 15019

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

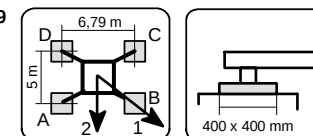


KRE 260.1	Corner distance 5,0 m x 6,79 m	jib 40 m
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[illegible]

3.3.3.4 Centralballasts and Cornerloads according to DIN 15019

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

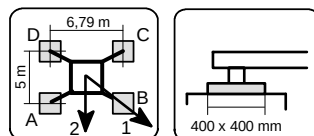


KRE 260.1	Corner distance 5,0 m x 6,79 m	jib 45 m
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[illegible]

3.3.3.5 Centralballasts and Cornerloads according to DIN 15019

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

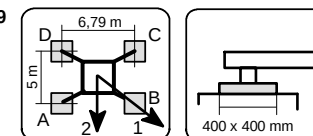


KRE 260.1	Corner distance 5,0 m x 6,79 m	jib 50 m
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[illegible]

3.3.3.6 Centralballasts and Cornerloads according to DIN 15019

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

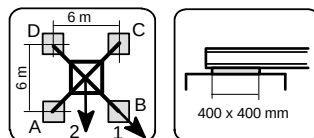


KRE 260.1	Corner distance 5,0 m x 6,79 m	jib 55 m
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[illegible]

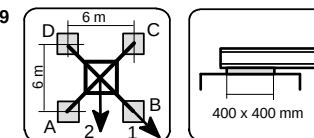
3.3.4.1 Centralballasts and Cornerloads according to DIN 15019

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

[illegible]

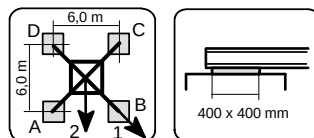
3.3.4.2 Centralballasts and Cornerloads according to DIN 15019

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

[illegible]

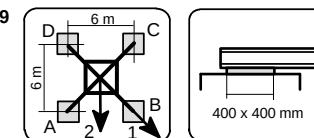
3.3.4.3 Centralballasts and Cornerloads according to DIN 15019

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

[illegible]

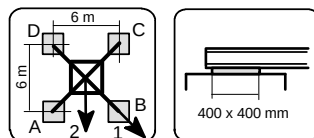
3.3.4.4 Centralballasts and Cornerloads according to DIN 15019

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

[illegible]

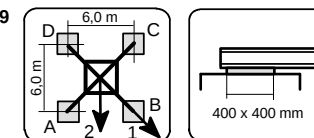
3.3.4.5 Centralballasts and Cornerloads according to DIN 15019

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

[illegible]

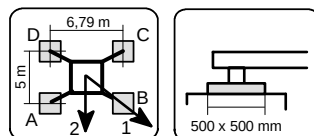
3.3.4.6 Centralballasts and Cornerloads according to DIN 15019

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

[illegible]

3.3.5.1 Centralballasts and Cornerloads according to DIN 15019

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

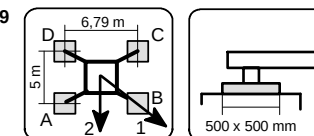


KRE 260.2	Corner distance 5,0 m x 6,79 m	jib 30 m
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[illegible]

3.3.5.2 Centralballasts and Cornerloads according to DIN 15019

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

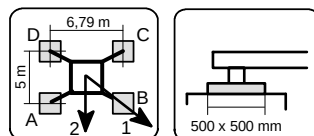


KRE 260.2	Corner distance 5,0 m x 6,79 m	jib 35 m
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[illegible]

3.3.5.3 Centralballasts and Cornerloads according to DIN 15019

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

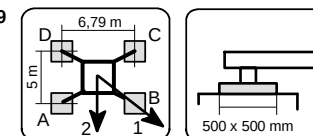


KRE 260.2	Corner distance 5,0 m x 6,79 m	jib 40 m
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[illegible]

3.3.5.4 Centralballasts and Cornerloads according to DIN 15019

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

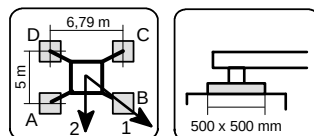


KRE 260.2	Corner distance 5,0 m x 6,79 m	jib 45 m
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[illegible]

3.3.5.5 Centralballasts and Cornerloads according to DIN 15019

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



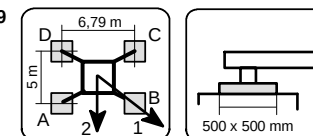
KRE 260.2	Corner distance 5,0 m x 6,79 m	jib 50 m
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[illegible]

962-4-021741-5E

3.3.5.6 Centralballasts and Cornerloads according to DIN 15019

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



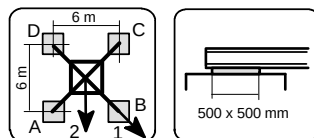
KRE 260.2	Corner distance 5,0 m x 6,79 m	jib 55 m
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[illegible]

962-4-021741-6E

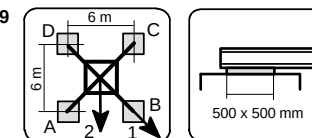
3.3.6.1 Centralballasts and Cornerloads according to DIN 15019

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

[illegible]

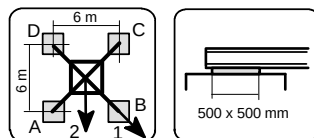
3.3.6.2 Centralballasts and Cornerloads according to DIN 15019

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

[illegible]

3.3.6.3 Centralballasts and Cornerloads according to DIN 15019

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

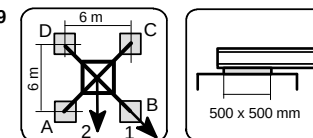


KRE 260.2	Corner distance 6,0 m x 6,0 m	jib 40 m
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[illegible]

3.3.6.4 Centralballasts and Cornerloads according to DIN 15019

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

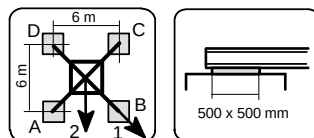


KRE 260.2	Corner distance 6,0 m x 6,0 m	jib 45 m
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[illegible]

3.3.6.5 Centralballasts and Cornerloads according to DIN 15019

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

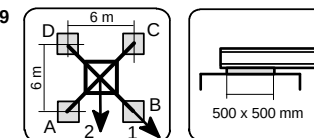


KRE 260.2	Corner distance 6,0 m x 6,0 m	jib 50 m
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[illegible]

3.3.6.6 Centralballasts and Cornerloads according to DIN 15019

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

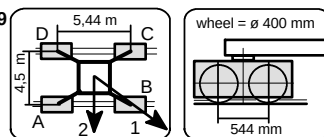


KRE 260.2	Corner distance 6,0 m x 6,0 m	jib 55 m
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[illegible]

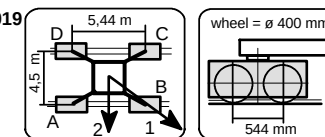
3.4.1.1 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear

[illegible]

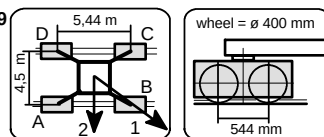
3.4.1.2 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear

[illegible]

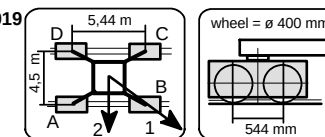
3.4.1.3 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear

[illegible]

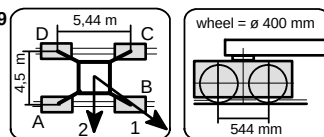
3.4.1.4 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear

[illegible]

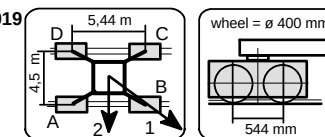
3.4.1.5 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear

[illegible]

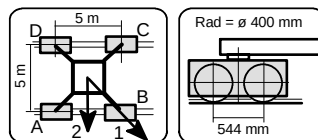
3.4.1.6 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear

[illegible]

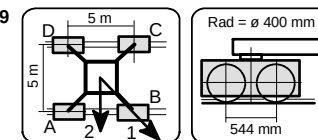
3.4.2.1 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear

[illegible]

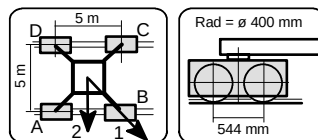
3.4.2.2 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear

[illegible]

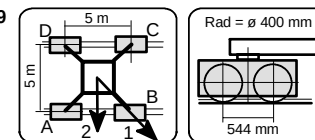
3.4.2.3 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear

[illegible]

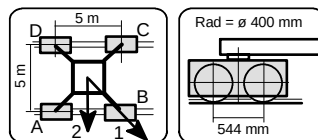
3.4.2.4 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear

[illegible]

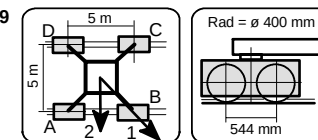
3.4.2.5 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear

[illegible]

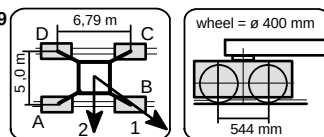
3.4.2.6 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear

[illegible]

3.4.3.1 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on undercarriage without climbing gear



UW 260.1

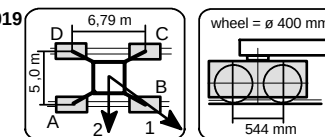
Corner distance 5,0 m x 6,79 m

jib 30 m

[illegible]

3.4.3.2 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on undercarriage without climbing gear



UW 260.1

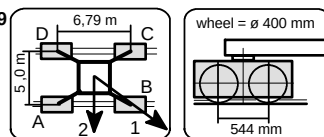
Corner distance 5,0 m x 6,79 m

jib 35 m

[illegible]

3.4.3.3 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear



UW 260.1

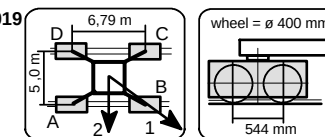
Corner distance 5,0 m x 6,79 m

jib 40 m

[illegible]

3.4.3.4 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear



UW 260.1

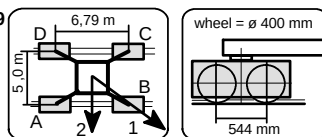
Corner distance 5,0 m x 6,79 m

jib 45 m

[illegible]

3.4.3.5 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear

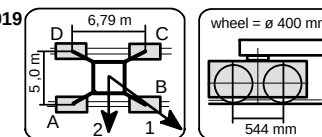


UW 260.1	Corner distance 5,0 m x 6,79 m	jib 50 m
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[illegible]

3.4.3.6 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear

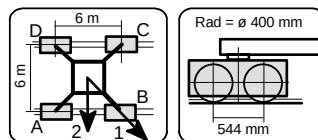


UW 260.1	Corner distance 5,0 m x 6,79 m	jib 55 m
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[illegible]

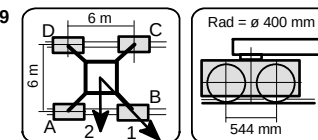
3.4.4.1 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear

[illegible]

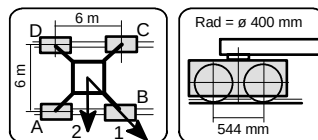
3.4.4.2 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear

[illegible]

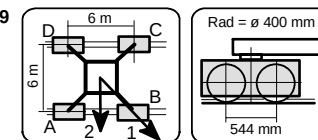
3.4.4.3 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on undercarriage without climbing gear

[illegible]

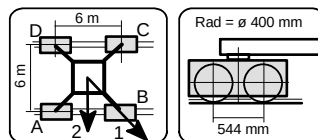
3.4.4.4 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear

[illegible]

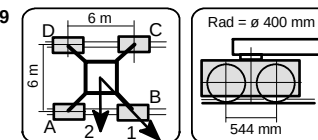
3.4.4.5 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear

[illegible]

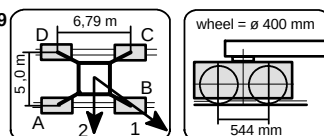
3.4.4.6 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear

[illegible]

3.4.5.1 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on undercarriage without climbing gear

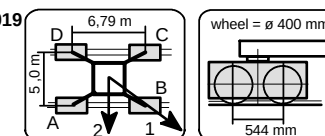


UW 260.2	Corner distance 5,0 m x 6,79 m	jib 30 m
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[illegible]

3.4.5.2 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear

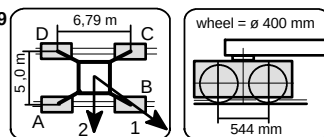


UW 260.2	Corner distance 5,0 m x 6,79 m	jib 35 m
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[illegible]

3.4.5.3 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on undercarriage without climbing gear



UW 260.2

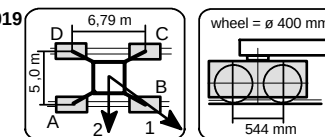
Corner distance 5,0 m x 6,79 m

jib 40 m

[illegible]

3.4.5.4 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear



UW 260.2

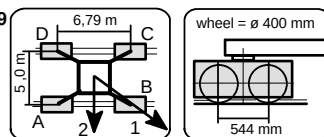
Corner distance 5,0 m x 6,79 m

jib 45 m

[illegible]

3.4.5.5 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on undercarriage without climbing gear



UW 260.2

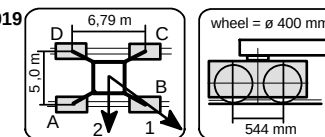
Corner distance 5,0 m x 6,79 m

jib 50 m

[illegible]

3.4.5.6 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear



UW 260.2

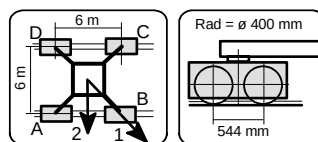
Corner distance 5,0 m x 6,79 m

jib 55 m

Height under hook	Centerballasts	Jib position	Crane in service torque moment: 190 kNm				Horizontal force	Jib position	Crane out of service torque moment: 0 kNm				Horizontal force
			Cornerloads						Cornerloads				
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
[m]	[t]					[kN]						[kN]	
15,5	50,0	1	344	476	233	100	22	1	272	510	123	8	49
		2	440	440	137	137		2	431	431	26	26	
20,0	50,0	1	352	491	234	95	23	1	275	528	121	8	62
		2	452	452	134	134		2	442	442	24	24	
24,5	52,5	1	366	512	242	95	25	1	290	547	130	8	69
		2	472	472	136	136		2	461	461	27	27	
29,0	55,0	1	380	536	249	94	27	1	304	569	137	8	75
		2	492	492	137	137		2	481	481	28	28	
33,5	57,5	1	395	560	256	90	28	1	317	594	143	8	82
		2	514	514	136	136		2	527	527	94	94	
38,0	60,0	1	410	587	262	86	30	1	411	645	222	8	89
		2	538	538	134	134		2	578	578	65	65	
42,5	75,0	1	458	646	299	110	31	1	456	753	235	8	95
		2	594	594	162	162		2	663	663	63	63	
				</									

3.4.6.1 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on undercarriage without climbing gear

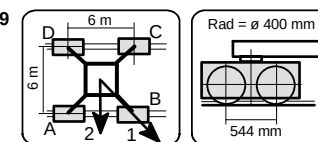


UW 260.2 Corner distance 6,0 m x 6,0 m jib 30 m

[illegible]

3.4.6.2 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear

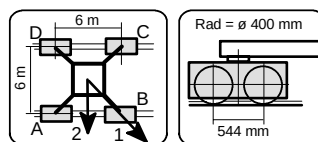


UW 260.2 Corner distance 6,0 m x 6,0 m jib 35 m

[illegible]

3.4.6.3 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on undercarriage without climbing gear

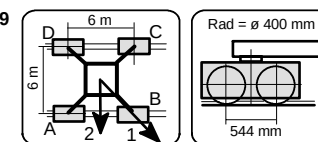


UW 260.2 Corner distance 6,0 m x 6,0 m jib 40 m

[illegible]

3.4.6.4 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear

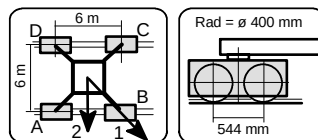


UW 260.2 Corner distance 6,0 m x 6,0 m jib 45 m

[illegible]

3.4.6.5 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on undercarriage without climbing gear



UW 260.2

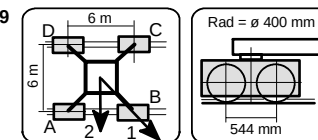
Corner distance 6,0 m x 6,0 m

jib 50 m

[illegible]

3.4.6.6 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear



UW 260.2

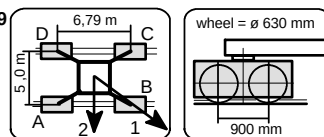
Corner distance 6,0 m x 6,0 m

jib 55 m

[illegible]

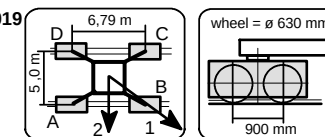
3.4.7.1 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on undercarriage without climbing gear

[illegible]

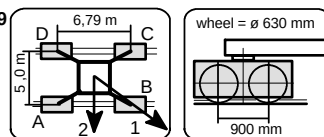
3.4.7.2 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear

[illegible]

3.4.7.3 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on undercarriage without climbing gear

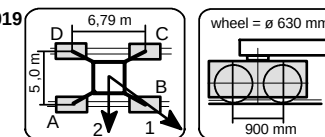


UW 260.3	Corner distance 5,0 m x 6,79 m	jib 40 m
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[illegible]

3.4.7.4 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on
undercarriage without climbing gear

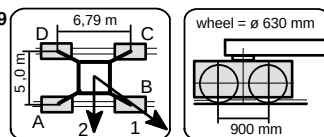


UW 260.3	Corner distance 5,0 m x 6,79 m	jib 45 m
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[illegible]

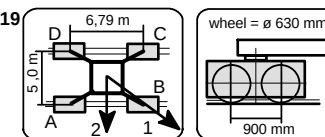
3.4.7.5 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on undercarriage without climbing gear

[illegible]

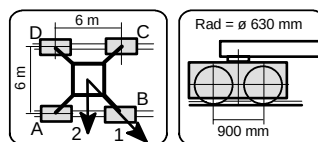
3.4.7.6 Centralballasts and Cornerloads according to DIN 15019

for a travelling tower crane on undercarriage without climbing gear

[illegible]

3.3.8.1 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on undercarriage without climbing gear



UW 260.3

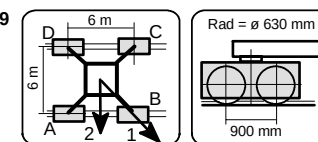
Corner distance 6,0 m x 6,0 m

jib 30 m

[illegible]

3.3.8.2 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear



UW 260.3

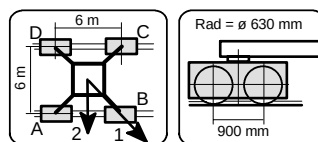
Corner distance 6,0 m x 6,0 m

jib 35 m

[illegible]

3.3.8.3 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear



UW 260.3

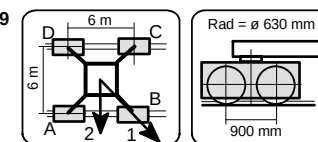
Corner distance 6,0 m x 6,0 m

jib 40 m

[illegible]

3.3.8.4 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear



UW 260.3

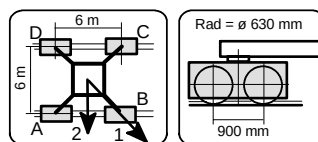
Corner distance 6,0 m x 6,0 m

jib 45 m

[illegible]

3.3.8.5 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on undercarriage without climbing gear



UW 260.3

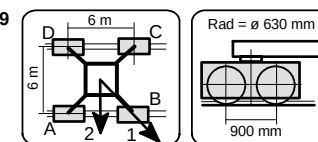
Corner distance 6,0 m x 6,0 m

jib 50 m

[illegible]

3.3.8.6 Centralballasts and Cornerloads according to DIN 15019

for a standing tower crane on
undercarriage without climbing gear



UW 260.3

Corner distance 6,0 m x 6,0 m

jib 55 m

[illegible]