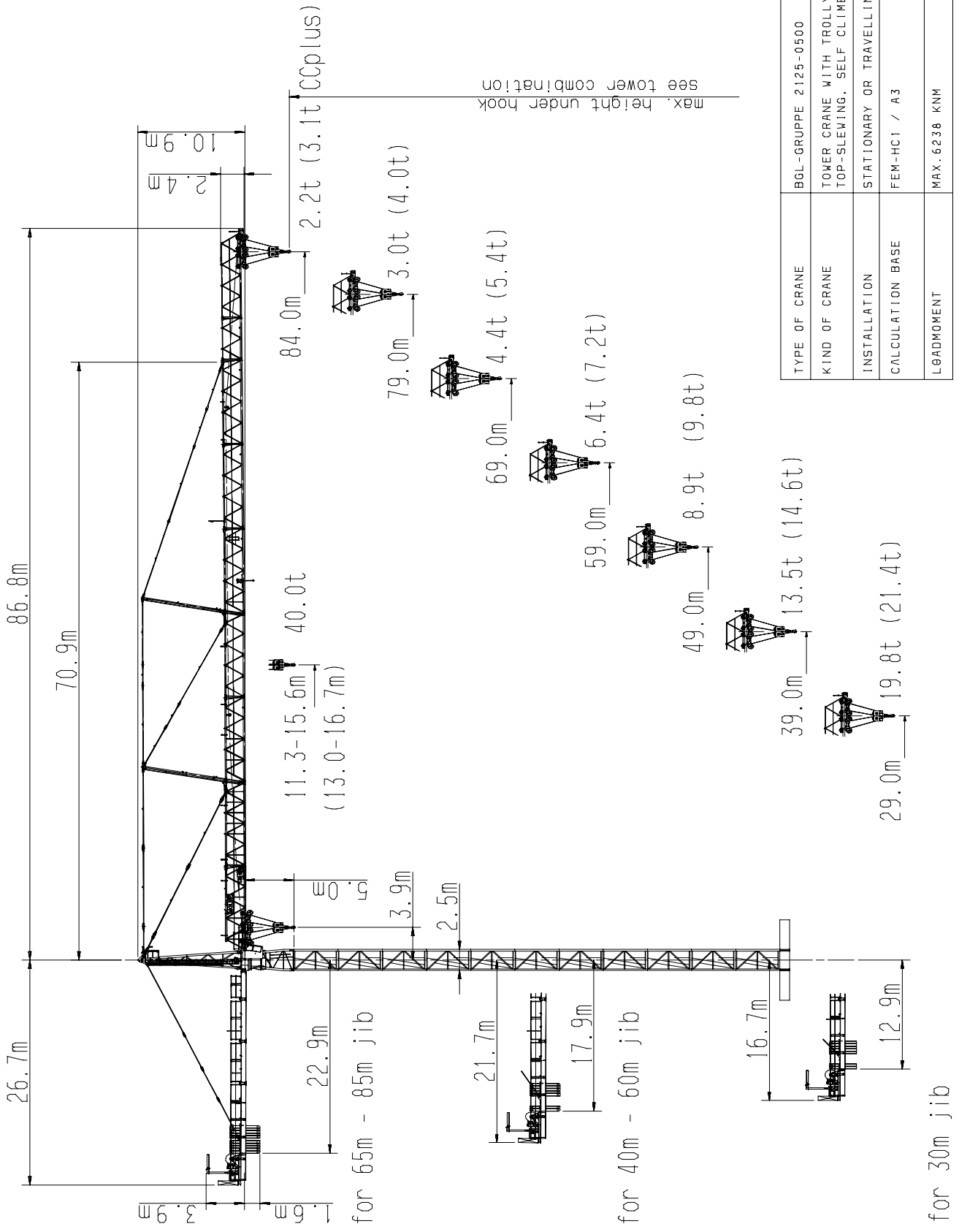


2.1



TYPE OF CRANE	BGL-GRUPPE 2125-0500
KIND OF CRANE	TOWER CRANE WITH TROLLEY JIB, TOP-SLEWING, SELF CLIMBING
INSTALLATION	STATIONARY OR TRAVELLING
CALCULATION BASE	FEM-HC1 / A3
LOADMOMENT	MAX. 6238 KNM

2.2.1.1 Load capacity table

radius [m]		30	35	40	45	50	55	60	65	70	75	80	85
length of jib [m]	85 5,0-22,8	14,7	12,4	10,6	9,2	8,1	7,2	6,4	5,8	5,3	4,8	4,4	4,0
	80 5,0-24,4	15,9	13,4	11,5	10,0	8,8	7,8	7,0	6,3	5,8	5,2	4,8	
	75 5,0-25,2	16,5	13,9	11,9	10,4	9,2	8,2	7,3	6,6	6,0	5,5		
	70 5,0-25,8	16,9	14,3	12,2	10,7	9,4	8,4	7,5	6,8	6,2			
	65 5,0-26,3	17,3	14,6	12,5	10,9	9,7	8,6	7,7	7,0				
	60 5,0-27,1	17,9	15,0	12,9	11,3	10,0	8,9	8,0					
	55 5,0-27,6	18,2	15,4	13,2	11,5	10,2	9,1						
	50 5,0-28,3	18,7	15,8	13,6	11,9	10,5							
	45 5,0-28,7	19,1	16,1	13,8	12,1								
	40 5,0-30,7	20,0	17,3	14,9									
	30 5,0-30,0	20,0											

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 5,626 kg per meter hook path).

2.2.1.2 Load capacity table

radius [m]		30	35	40	45	50	55	60	65	70	75	80	85
jib length [m]	85 5,0-26,1	17,2	14,5	12,4	10,8	9,6	8,5	7,7	6,9	6,3	5,8	5,3	4,9
	80 5,0-27,9	18,5	15,6	13,4	11,7	10,4	9,2	8,3	7,5	6,9	6,3	5,8	
	75 5,0-28,6	19,0	16,0	13,8	12,0	10,6	9,5	8,6	7,8	7,1	6,5		
	70 5,0-28,9	19,2	16,2	14,0	12,2	10,8	9,7	8,7	7,9	7,2			
	65 5,0-29,2	19,4	16,4	14,1	12,3	10,9	9,8	8,8	8,0				
	60 5,0-29,5	19,7	16,6	14,3	12,5	11,1	9,9	8,9					
	55 5,0-30,0	20,0	16,8	14,5	12,7	11,2	10,0						
	50 5,0-30,4	20,0	17,1	14,7	12,9	11,4							
	45 5,0-30,7	20,0	17,3	14,9	13,1								
	40 5,0-32,9	20,0	18,7	16,1									
	30 5,0-30,0	20,0											

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 5,626 kg per meter hook path).

Arrangement of counterweights with hoisting winch

Hw 2075 FU

26,7 m counterjib				
85 m jib 10 x 3,4 t 37,0	80 m jib 9 x 3,4 t 33,6	75 m jib 9 x 3,4 t 33,6	70 m jib 8 x 3,4 t 30,2	65 m jib 7 x 3,4 t 26,8
total weight [t]				
21,7 m counterjib				
60 m jib 10 x 3,4 t 37,0	55 m jib 8 x 3,4 t 30,2	50 m jib 8 x 3,4 t 30,2	45 m jib 7 x 3,4 t 26,8	40 m jib 7 x 3,4 t 26,8
total weight [t]				
16,7 m counterjib				
30 m jib 9 x 3,4 t 33,6				Attention ! intermediate ballasting = 6x 3,4 t see assembly, section 5
total weight [t]				

Arrangement of counterweights with hoisting winch

Hw 2075 FU

26,7 m counterjib				
85 m jib 10 x 3,4 t 37,0	80 m jib 9 x 3,4 t 33,6	75 m jib 9 x 3,4 t 33,6	70 m jib 8 x 3,4 t 30,2	65 m jib 7 x 3,4 t 26,8
total weight [t]				
21,7 m counterjib				
60 m jib 10 x 3,4 t 37,0	55 m jib 8 x 3,4 t 30,2	50 m jib 8 x 3,4 t 30,2	45 m jib 7 x 3,4 t 26,8	40 m jib 7 x 3,4 t 26,8
total weight [t]				
16,7 m counterjib				
	30 m jib 9 x 3,4 t 33,6	Attention ! intermediate ballasting = 6x 3,4 t see assembly, section 5		
total weight [t]				

2.2.1.3 Load capacity table

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

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 4 fall operation = 11,252 kg per meter hook path).

Attention!

In operation with 4 falls the maximum radius is decreased about 1 meter.

Arrangement of counterweights with hoisting winch

Hw 2075 FU

26,7 m counterjib				
85 m jib 10 x 3,4 t 37,0	80 m jib 9 x 3,4 t 33,6	75 m jib 9 x 3,4 t 33,6	70 m jib 8 x 3,4 t 30,2	65 m jib 7 x 3,4 t 26,8
total weight [t]				
21,7 m counterjib				
60 m jib 10 x 3,4 t 37,0	55 m jib 8 x 3,4 t 30,2	50 m jib 8 x 3,4 t 30,2	45 m jib 7 x 3,4 t 26,8	40 m jib 7 x 3,4 t 26,8
total weight [t]				
16,7 m counterjib				
30 m jib 9 x 3,4 t 33,6				Attention ! intermediate ballasting = 6x 3,4 t see assembly, section 5
total weight [t]				

2.2.1.4 Load capacity table

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

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 4 fall operation = 11,252 kg per meter hook path).

Attention!

In operation with 4 falls the maximum radius is decreased about 1 meter.

Arrangement of counterweights with hoisting winch

Hw 2075 FU

26,7 m counterjib				
85 m jib 10 x 3,4 t 37,0	80 m jib 9 x 3,4 t 33,6	75 m jib 9 x 3,4 t 33,6	70 m jib 8 x 3,4 t 30,2	65 m jib 7 x 3,4 t 26,8
total weight [t]				
21,7 m counterjib				
60 m jib 10 x 3,4 t 37,0	55 m jib 8 x 3,4 t 30,2	50 m jib 8 x 3,4 t 30,2	45 m jib 7 x 3,4 t 26,8	40 m jib 7 x 3,4 t 26,8
total weight [t]				
16,7 m counterjib				
		30 m jib 9 x 3,4 t 33,6	Attention ! intermediate ballasting = 6x 3,4 t see assembly, section 5	
total weight [t]				

2.2.1.5 Load capacity table

radius [m]		30	35	40	45	50	55	60	65	70	75	80	85
length of jib [m]	85 5,0-22,8	14,7	12,4	10,6	9,2	8,1	7,2	6,4	5,8	5,3	4,8	4,4	4,0
	80 5,0-24,4	15,9	13,4	11,5	10,0	8,8	7,8	7,0	6,3	5,8	5,2	4,8	
	75 5,0-25,2	16,5	13,9	11,9	10,4	9,2	8,2	7,3	6,6	6,0	5,5		
	70 5,0-25,8	16,9	14,3	12,2	10,7	9,4	8,4	7,5	6,8	6,2			
	65 5,0-26,3	17,3	14,6	12,5	10,9	9,7	8,6	7,7	7,0				
	60 5,0-27,1	17,9	15,0	12,9	11,3	10,0	8,9	8,0					
	55 5,0-27,6	18,2	15,4	13,2	11,5	10,2	9,1						
	50 5,0-28,3	18,7	15,8	13,6	11,9	10,5							
	45 5,0-28,7	19,1	16,1	13,8	12,1								
	40 5,0-30,7	20,0	17,3	14,9									
	30 5,0-30,0	20,0											

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 5,626 kg per meter hook path).

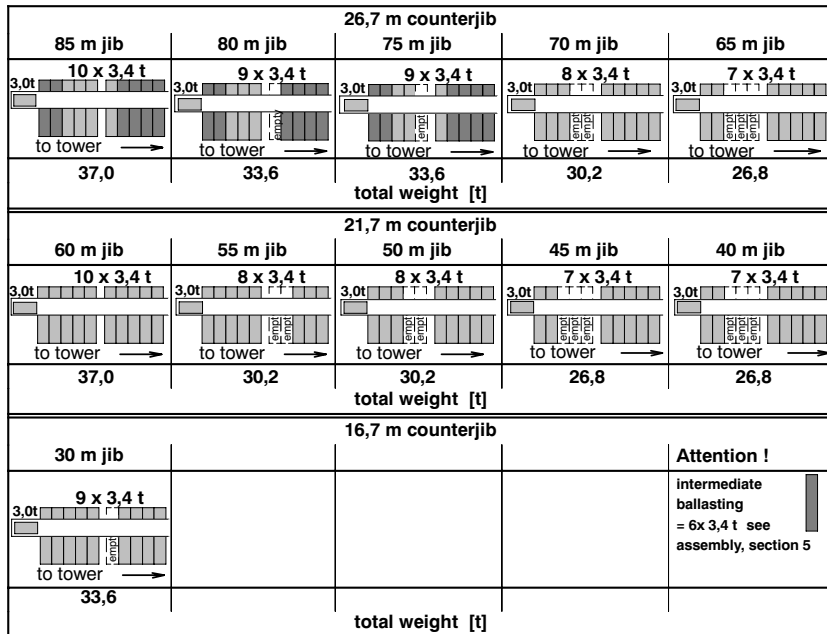
2.2.1.6 Load capacity table

radius [m]		30	35	40	45	50	55	60	65	70	75	80	85
jib length [m]	85 5,0-26,1	17,2	14,5	12,4	10,8	9,6	8,5	7,7	6,9	6,3	5,8	5,3	4,9
	80 5,0-27,9	18,5	15,6	13,4	11,7	10,4	9,2	8,3	7,5	6,9	6,3	5,8	
	75 5,0-28,6	19,0	16,0	13,8	12,0	10,6	9,5	8,6	7,8	7,1	6,5		
	70 5,0-28,9	19,2	16,2	14,0	12,2	10,8	9,7	8,7	7,9	7,2			
	65 5,0-29,2	19,4	16,4	14,1	12,3	10,9	9,8	8,8	8,0				
	60 5,0-29,5	19,7	16,6	14,3	12,5	11,1	9,9	8,9					
	55 5,0-30,0	20,0	16,8	14,5	12,7	11,2	10,0						
	50 5,0-30,4	20,0	17,1	14,7	12,9	11,4							
	45 5,0-30,7	20,0	17,3	14,9	13,1								
	40 5,0-32,9	20,0	18,7	16,1									
	30 5,0-30,0	20,0											

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 5,626 kg per meter hook path).

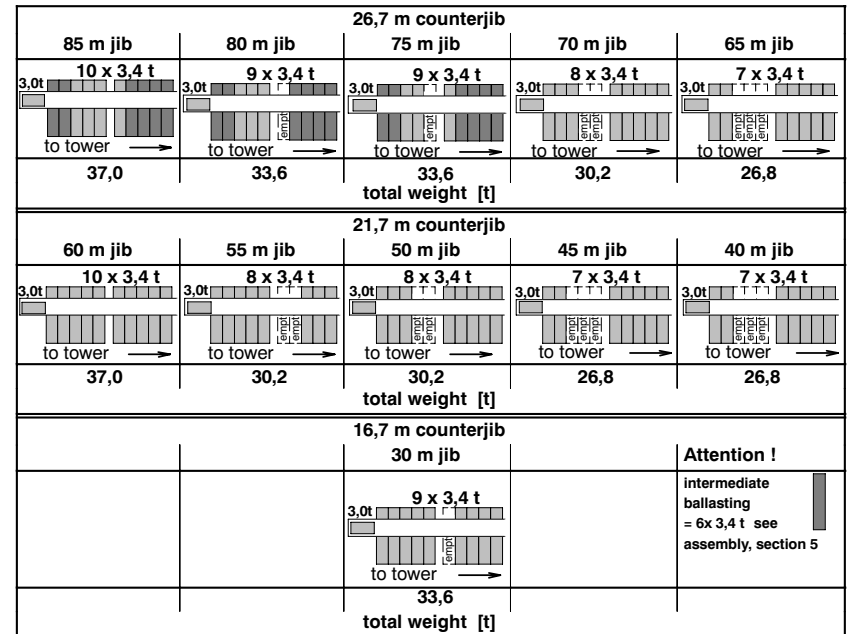
Arrangement of counterweights with hoisting winch

Hw 2090 FU



Arrangement of counterweights with hoisting winch

Hw 2090 FU



2.2.1.7 Load capacity table

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

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 4 fall operation = 11,252 kg per meter hook path).

Attention!

In operation with 4 falls the maximum radius is decreased about 1 meter.

Arrangement of counterweights with hoisting winch

Hw 2090 FU

26,7 m counterjib				
85 m jib 10 x 3,4 t 37,0	80 m jib 9 x 3,4 t 33,6	75 m jib 9 x 3,4 t 33,6	70 m jib 8 x 3,4 t 30,2	65 m jib 7 x 3,4 t 26,8
total weight [t]				
21,7 m counterjib				
60 m jib 10 x 3,4 t 37,0	55 m jib 8 x 3,4 t 30,2	50 m jib 8 x 3,4 t 30,2	45 m jib 7 x 3,4 t 26,8	40 m jib 7 x 3,4 t 26,8
total weight [t]				
16,7 m counterjib				
30 m jib 9 x 3,4 t 33,6				Attention ! intermediate ballasting = 6x 3,4 t see assembly, section 5
total weight [t]				

2.2.1.8 Load capacity table

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

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 4 fall operation = 11,252 kg per meter hook path).

Attention!

In operation with 4 falls the maximum radius is decreased about 1 meter.

Arrangement of counterweights with hoisting winch





Hw 2090 FU

26,7 m counterjib				
85 m jib 10 x 3,4 t 37,0	80 m jib 9 x 3,4 t 33,6	75 m jib 9 x 3,4 t 33,6	70 m jib 8 x 3,4 t 30,2	65 m jib 7 x 3,4 t 26,8
total weight [t]				
21,7 m counterjib				
60 m jib 10 x 3,4 t 37,0	55 m jib 8 x 3,4 t 30,2	50 m jib 8 x 3,4 t 30,2	45 m jib 7 x 3,4 t 26,8	40 m jib 7 x 3,4 t 26,8
total weight [t]				
16,7 m counterjib				
		30 m jib 9 x 3,4 t 33,6	Attention ! intermediate ballasting = 6x 3,4 t see assembly, section 5	
total weight [t]				

2.2.2.1

Operational speeds





380 V - 460 V, 50/60 Hz

drive [model]	operational speed load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 2075 FU	hoisting 	400	75	116 total- output for a simultaneity factor of 0,7
	<p>load capacity [t]</p> <p>operational speeds [m/min] (referred to the 7. layer on the drum)</p> <p>stepless acceleration</p>			
Kw	traversing		18,0	
	<p>load capacity [t]</p> <p>operational speeds [m/min]</p> <p>stepless acceleration</p>			
Dw	slewing 0,75 min ⁻¹		2 x 7,5	
	<p>operational speeds [min⁻¹]</p>			

2.2.2.2

Operational speeds





380 V - 460 V, 50/60 Hz

drive [model]	operational speed load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 2075 FU	hoisting 	200	75	103 total- output for a simultaneity factor of 0,7
	<p>load capacity [t]</p> <p>operational speeds [m/min] (referred to the 7. layer on the drum)</p> <p>stepless acceleration</p>			
Kw	traversing		18,0	
	<p>load capacity [t]</p> <p>operational speeds [m/min]</p> <p>stepless acceleration</p>			
	operational speeds			
Dw	slewing 0,75 min ⁻¹		2 x 7,5	
	<p>operational speeds [min⁻¹]</p>			

2.2.2.3

Operational speeds





380 V - 460 V, 50/60 Hz

drive [model]	operational speed load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 2090 FU	hoisting 	400	90	121 total output for a simultaneity factor of 0,7
	<p>load capacity [t]</p> <p>operational speeds (referred to the 7. layer on the drum) [m/min]</p> <p>stepless acceleration</p>			
Kw	traversing		18,0	
	<p>load capacity [t]</p> <p>operational speeds [m/min]</p> <p>stepless acceleration</p>			
Dw	slewing 0,75 min ⁻¹		2 x 7,5	
	<p>operational speeds [min⁻¹]</p>			

2.2.2.4

Operational speeds

380 V - 460 V, 50/60 Hz

drive [model]	operational speed load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 2090 FU	hoisting 	200	90	116 total output for a simultaneity factor of 0,7
	<p>load capacity [t]</p> <p>operational speeds (referred to the 7. layer on the drum) [m/min]</p> <p>stepless acceleration</p>			
Kw	traversing		18,0	
	<p>load capacity [t]</p> <p>operational speeds [m/min]</p> <p>stepless acceleration</p>			
Dw	slewing 0,75 min ⁻¹		2 x 7,5	
	<p>operational speeds [min⁻¹]</p>			

2.2.3.1 Load capacity table [kg] data given in distances of meters

DIN 15018 / H1 - B3

radius [m]	jib length [m]										
	30	40	45	50	55	60	65	70	75	80	85
17,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
18,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
19,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
20,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
21,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
22,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
23,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	19770
24,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	18870
25,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	19430	18040
26,0	20000	20000	20000	20000	20000	20000	20000	19820	19350	18610	17280
27,0	20000	20000	20000	20000	20000	20000	19460	19020	18570	17850	16570
28,0	20000	20000	20000	20000	19660	19260	18700	18280	17840	17150	15910
29,0	20000	20000	19800	19440	18920	18530	17990	17580	17160	16500	15300
30,0	20000	20000	19100	18700	18200	17900	17300	16900	16500	15900	14700
31,0		19760	18400	18070	17580	17220	16710	16330	15930	15310	14190
32,0		19090	17770	17450	16970	16620	16130	15760	15380	14780	13690
33,0		18450	17170	16860	16400	16060	15580	15230	14860	14270	13220
34,0		17860	16610	16310	15860	15530	15070	14720	14360	13800	12780
35,0		17300	16100	15800	15400	15000	14600	14300	13900	13400	12400
36,0		16760	15590	15300	14880	14570	14130	13800	13460	12930	11960
37,0		16260	15120	14840	14430	14120	13700	13380	13050	12530	11590
38,0		15780	14670	14400	14000	13700	13290	12980	12660	12150	11340
39,0		15330	14250	13980	13590	13300	12900	12600	12290	11790	10900
40,0		14900	13800	13600	13200	12900	12500	12200	11900	11500	10600
41,0			13460	13210	12840	12570	12180	11890	11600	11130	10280
42,0			13100	12850	12490	12220	11850	11570	11280	10820	9990
43,0			12750	12510	12160	12890	11530	11260	10970	10520	9710
44,0			12420	12180	11840	11580	11220	10960	10680	10240	9450
45,0			12100	11900	11500	11300	10900	10700	10400	10000	9200
46,0				11570	11240	11000	10660	10400	10130	9720	8960
47,0				11290	10960	10720	10390	10140	9880	9470	8730
48,0				11020	10700	10460	10130	9890	9630	9230	8510
49,0				10750	10440	10210	9890	9650	9400	9010	8300
50,0				10500	10200	10000	9700	9400	9200	8800	8100
51,0					9960	9740	9430	9200	8960	8580	7900
52,0					9730	9520	9210	8990	8750	8380	7710
53,0					9510	9300	9000	8780	8550	8190	7530
54,0					9300	9090	8800	8590	8360	8000	7360
55,0					9100	8900	8600	8400	8200	7800	7200

The loads refer to a hook path of 40,5 m

2.2.3.1 Load capacity table [kg] data given in distances of meters

DIN 15018 / H1 - B3

radius [m]	jib length [m]										
	30	40	45	50	55	60	65	70	75	80	85
56,0						8700	8420	8210	7990	7650	7030
57,0						8520	8240	8040	7820	7480	6870
58,0						8340	8070	7870	7650	7320	6720
59,0						8170	7900	7700	7490	7180	6580
60,0						8000	7700	7500	7300	7000	6400
61,0							7580	7390	7190	6870	6300
62,0							7430	7240	7040	6730	6170
63,0							7280	7090	6900	6590	6040
64,0							7140	6960	6760	6460	5920
65,0							7000	6800	6600	6300	5800
66,0								6690	6500	6210	5680
67,0								6560	6380	6090	5570
68,0								6440	6260	5860	5460
69,0								6320	6140	5750	5360
70,0								6200	6000	5800	5300
71,0									5910	5640	5150
72,0									5810	5540	5060
73,0									5700	5440	4960
74,0									5600	5340	4870
75,0									5500	5200	4800
76,0										5150	4690
77,0										5060	4610
78,0										4970	4530
79,0										4880	4440
80,0										4800	4400
81,0											4290
82,0											4210
83,0											4140
84,0											4070
85,0											4000

The loads refer to a hook path of 40,5 m

2.2.3.2

Load capacity table [kg] data given in distances of meters

DIN 15018 / H1 - B3

radius [m]	jib length [m]										
	30	40	45	50	55	60	65	70	75	80	85
17,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
18,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
19,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
20,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
21,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
22,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
23,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
24,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
25,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
26,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
27,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	19280
28,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	19940	18530
29,0	20000	20000	20000	20000	20000	20000	20000	19960	19710	19190	17830
30,0	20000	20000	20000	20000	20000	19700	19400	19200	19000	18500	17200
31,0		20000	19810	19560	19250	18940	18760	18560	18320	17840	16560
32,0		20000	19130	18890	18590	18310	18120	17920	17690	17220	15980
33,0		19900	18500	18260	17970	17700	17510	17320	17100	16640	15440
34,0		19260	17900	17670	17390	17130	16940	16760	16540	16100	14930
35,0		18700	17300	17100	16800	16600	16400	16200	16000	15600	14500
36,0		18090	16800	16590	16320	16070	15900	15720	15520	15590	14000
37,0		17550	16300	16090	15830	15590	15420	15250	15050	15100	13570
38,0		17040	15820	15620	15370	15130	14960	14800	14610	14640	13170
39,0		16550	15370	15170	14920	14700	14530	14370	14190	14210	12780
40,0		16100	14900	14700	14500	14300	14100	14000	13800	13400	12400
41,0			14530	14340	14110	13890	13730	13580	13400	13030	12070
42,0			14140	13950	13730	13510	13360	13210	13040	12680	11740
43,0			13760	13590	13360	13160	13010	12860	12690	12340	11420
44,0			13410	13230	13020	12820	12670	12530	12360	12020	11120
45,0			13100	12900	12700	12500	12300	12200	12000	11700	10800
46,0				12580	12370	12180	12040	11900	11750	11420	10550
47,0				12270	12070	11880	11740	11610	11460	11130	10290
48,0				11980	11780	11590	11460	11330	11180	10860	10040
49,0				11700	11500	11320	11190	11060	10910	10600	9800
50,0				11400	11200	11100	10900	10800	10600	10400	9600
51,0					10980	11060	10680	10550	10410	10360	9340
52,0					10730	10800	10440	10320	10180	10120	9120
53,0					10490	10560	10200	10090	9950	9890	8920
54,0					10260	10320	9980	9870	9730	9660	8720
55,0					10000	9900	9800	9700	9500	9200	8500

The loads refer to a hook path of 40,5 m

2.2.3.2

Load capacity table [kg] data given in distances of meters


DIN 15018 / H1 - B3

radius [m]	jib length [m]										
	30	40	45	50	55	60	65	70	75	80	85
56,0						9670	9560	9450	9320	9050	8340
57,0						9470	9360	9250	9120	8860	8160
58,0						9280	9170	9060	8930	8670	7990
59,0						9090	8980	8870	8750	8490	7820
60,0						8900	8800	8700	8600	8300	7700
61,0							8620	8520	8400	8150	7500
62,0							8460	8350	8240	7990	7350
63,0							8290	8190	8080	7840	7210
64,0							8130	8030	7920	7690	7070
65,0							8000	7900	7800	7500	6900
66,0								7740	7630	7400	6800
67,0								7590	7490	7260	6670
68,0								7450	7350	7120	6540
69,0								7320	7210	6990	6420
70,0								7200	7100	6900	6300
71,0									6960	6750	6190
72,0									6840	6630	6080
73,0									6720	6510	5970
74,0									6600	6400	5860
75,0									6500	6300	5800
76,0										6180	5660
77,0										6080	5560
78,0										5970	5470
79,0										5880	5370
80,0										5800	5300
81,0											5200
82,0											5110
83,0											5030
84,0											4940
85,0											4900

The loads refer to a hook path of 40,5 m

2.2.3.3 Load capacity table [kg] data given in distances of meters

DIN 15018 / H1 - B3

radius [m]	jib length [m]											
	30	40	45	50	55	60	65	70	75	80	85	
11,0	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000
12,0	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	37600
13,0	40000	40000	40000	40000	40000	40000	40000	39290	38420	37020	34420	
14,0	40000	40000	40000	40000	39110	38860	37440	36220	35410	34110	31700	
15,0	40000	40000	37950	37460	36260	36030	34700	33560	32810	31590	29340	
16,0	38890	38230	35350	34890	33760	33540	32300	31230	30530	29380	27280	
17,0	36390	35760	33050	32620	31560	31350	30180	29180	28510	27440	25450	
18,0	34160	33570	31010	30600	29600	29410	28300	27350	26720	25710	23830	
19,0	32170	31610	29180	28800	27850	27660	26620	25720	25120	24160	22380	
20,0	30380	29840	27540	27170	26270	26100	25100	24250	23680	22770	21080	
21,0	28750	28240	26050	25700	24840	24680	23730	22910	22380	21510	19900	
22,0	27280	26790	24700	24360	23550	23390	22480	21710	21190	20360	18830	
23,0	25930	25470	23470	23140	22360	22210	21340	20600	20110	19320	17850	
24,0	24700	24250	22330	22030	21280	21130	20300	19590	19120	18350	16950	
25,0	23560	23130	21290	21000	20280	20140	19340	18660	18200	17470	16120	
26,0	22510	22100	20330	20050	19350	19220	18450	17800	17360	16660	15360	
27,0	21540	21140	19440	19170	18500	18370	17630	17000	16580	15900	14660	
28,0	20640	20260	18610	18350	17710	17580	16870	16260	15860	15200	14000	
29,0	19800	19430	17850	17590	16970	16850	16160	15570	15180	14550	13390	
30,0		18700	17100	16900	16300	16100	15500	14900	14600	14000	12800	
31,0		17940	16460	16220	15640	15520	14880	14330	13970	13370	12290	
32,0		17260	15830	15590	15030	14920	14300	13770	13410	12840	11790	
33,0		16630	15230	15010	14460	14360	13760	13240	12890	12340	11320	
34,0		16030	14680	14460	13930	13830	13240	12740	12410	11870	10880	
35,0		15500	14200	13900	13400	13300	12800	12300	12000	11400	10500	
36,0		14930	13660	13450	12950	12850	12300	11830	11510	11000	10070	
37,0		14430	13190	12990	12500	12410	11870	11410	11100	10610	10000	
38,0		13950	12740	12550	12070	11980	11460	11010	10710	10230	9340	
39,0		13500	12320	12130	11670	11580	11070	10630	10340	9870	9010	
40,0			11900	11700	11300	11200	10700	10300	10000	9500	8700	
41,0			11540	11360	10920	10830	10350	9930	9660	9210	8390	
42,0			11180	11000	10570	10490	10010	9610	9340	8900	8100	
43,0			10830	10660	10240	10160	9700	9300	9040	8610	7830	
44,0			10500	10330	9920	9840	9390	9000	8750	8330	7560	
45,0				10000	9600	9500	9100	8700	8500	8100	7300	
46,0				9720	9330	9250	8820	8450	8200	7810	7070	
47,0				9440	9050	8980	8560	8190	7950	7560	6850	
48,0				9160	8790	8720	8300	7940	7710	7330	6630	
49,0				8900	8530	8460	8060	7710	7480	7100	6410	

The loads refer to a hook path of 40,5 m

2.2.3.3 Load capacity table [kg] data given in distances of meters

DIN 15018 / H1 - B3

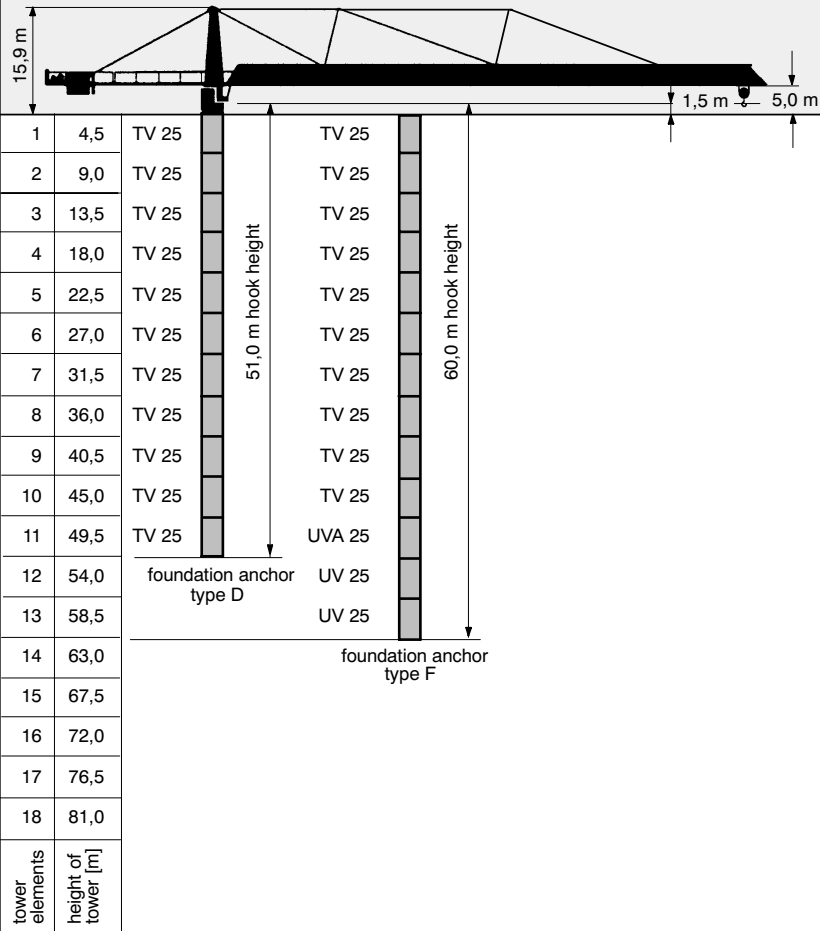
radius [m]	jib length [m]											
	30	40	45	50	55	60	65	70	75	80	85	
50,0					8300	8200	7800	7500	7300	6900	6200	
51,0					8050	7980	7590	7260	7040	6680	6020	
52,0					7830	7760	7380	7050	6830	6480	5830	
53,0					7610	7540	7170	6850	6630	6290	5650	
54,0					7400	7340	6970	6650	6440	6100	5480	
55,0						7100	6800	6500	6300	5900	5300	
56,0						6940	6590	6280	6080	5750	5150	
57,0						6750	6410	6110	5910	5590	5000	
58,0						6570	6230	5940	5740	5430	4850	
59,0						6400	6060	5770	5580	5270	4700	
60,0							5900	5600	5400	5100	4600	
61,0							5740	5460	5280	4980	4430	
62,0							5590	5320	5130	4840	4290	
63,0							5440	5170	4990	4700	4170	
64,0							5300	5030	4860	4570	4040	
65,0								4900	4700	4400	4000	
66,0								4770	4600	4320	3810	
67,0								4640	4470	4200	3700	
68,0								4520	4360	4090	3590	
69,0								4400	4240	3970	3480	
70,0									4100	3900	3400	
71,0									4010	3760	3280	
72,0										3910	3650	3180
73,0										3800	3550	3090
74,0										3700	3450	3000
75,0											3400	2900
76,0											3260	2820
77,0											3170	2740
78,0											3090	2650
79,0											3000	2570
80,0												2500
81,0												2420
82,0												2340
83,0												2270
84,0												2200
85,0												

The loads refer to a hook path of 40,5 m

2.2.7.1 Tower configurations

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

Slewing part:

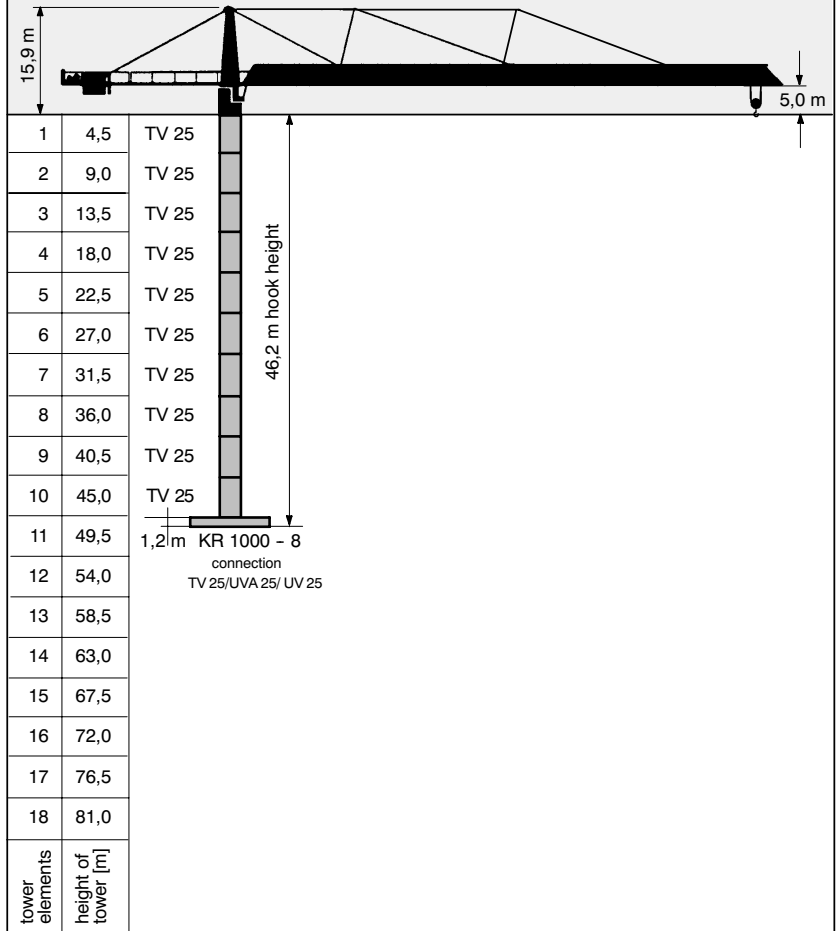


For data regarding foundation anchors see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation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

2.2.8.1 Tower configurations

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

Slewing part:

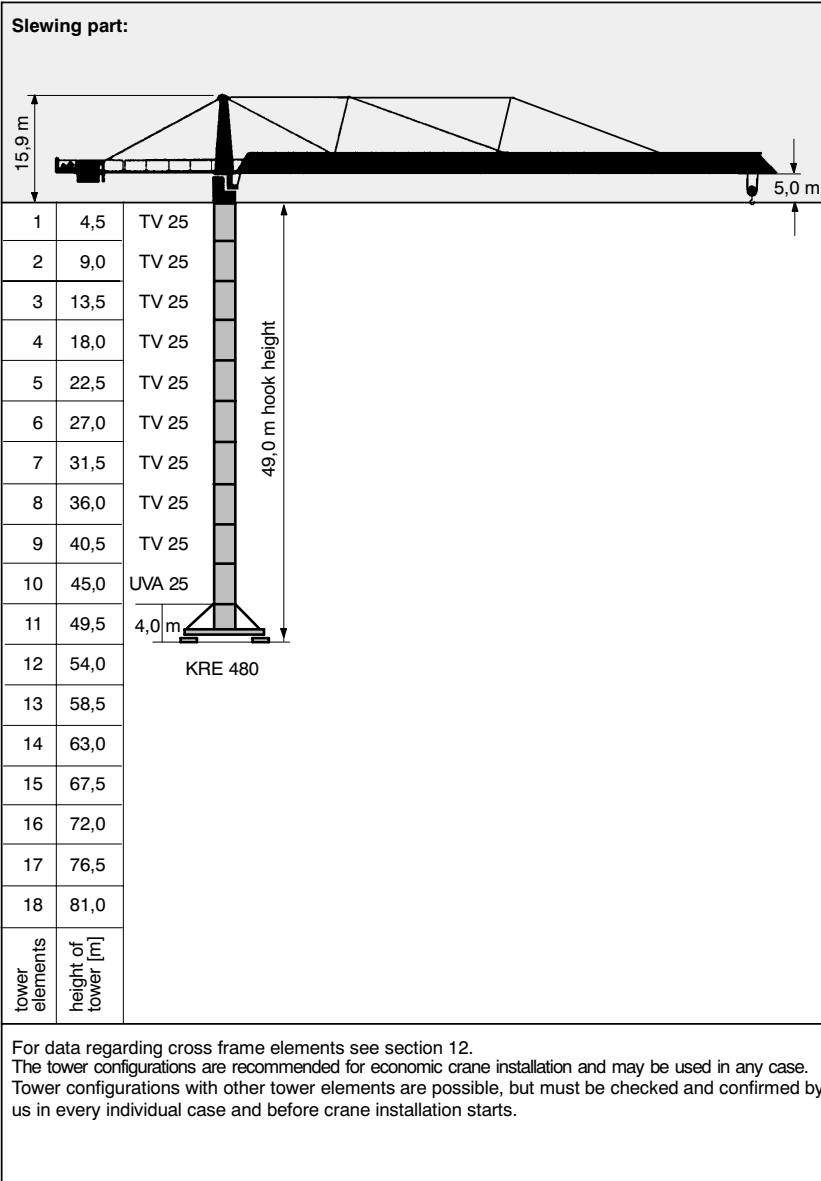


For data regarding cross frames see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation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

2.2.9.1 Tower configuration

for jibs 85 m and 80 m

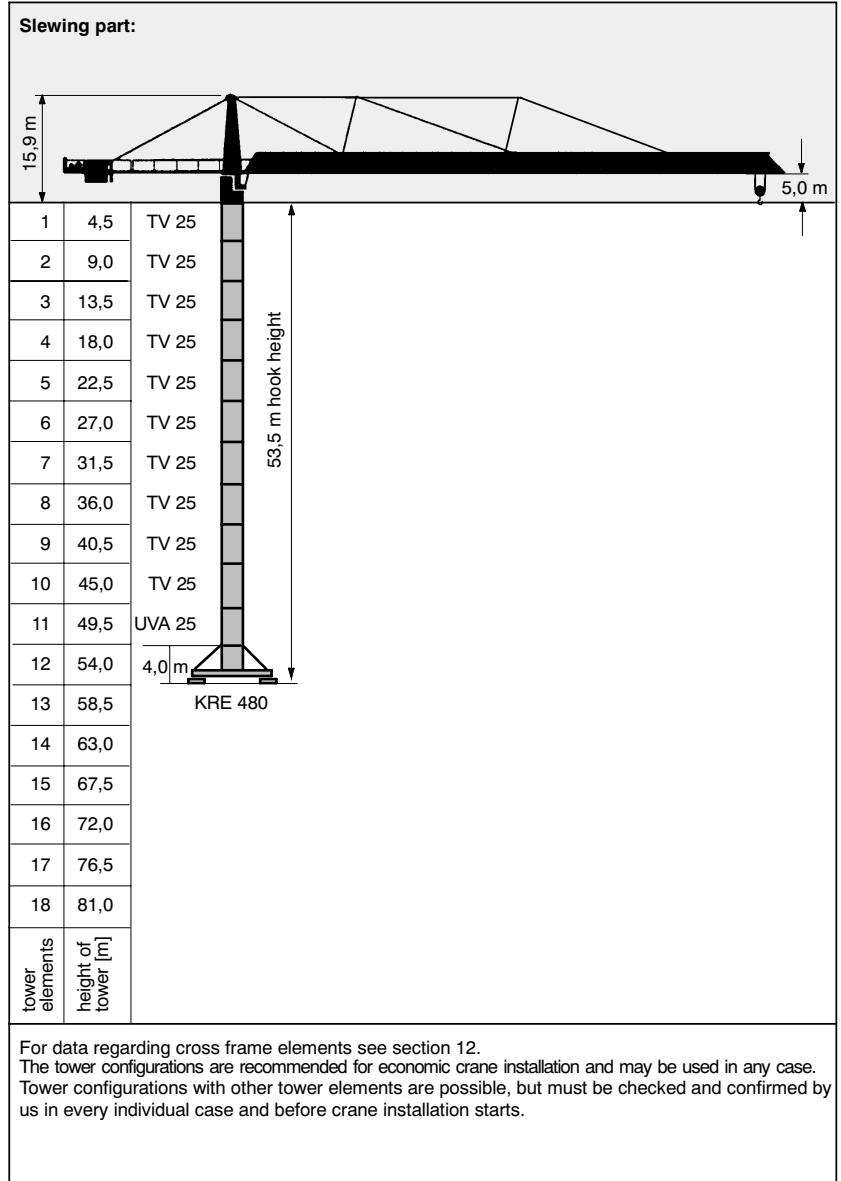
for a free standing stationary crane without climbing device on a cross frame element.



2.2.9.2 Tower configuration

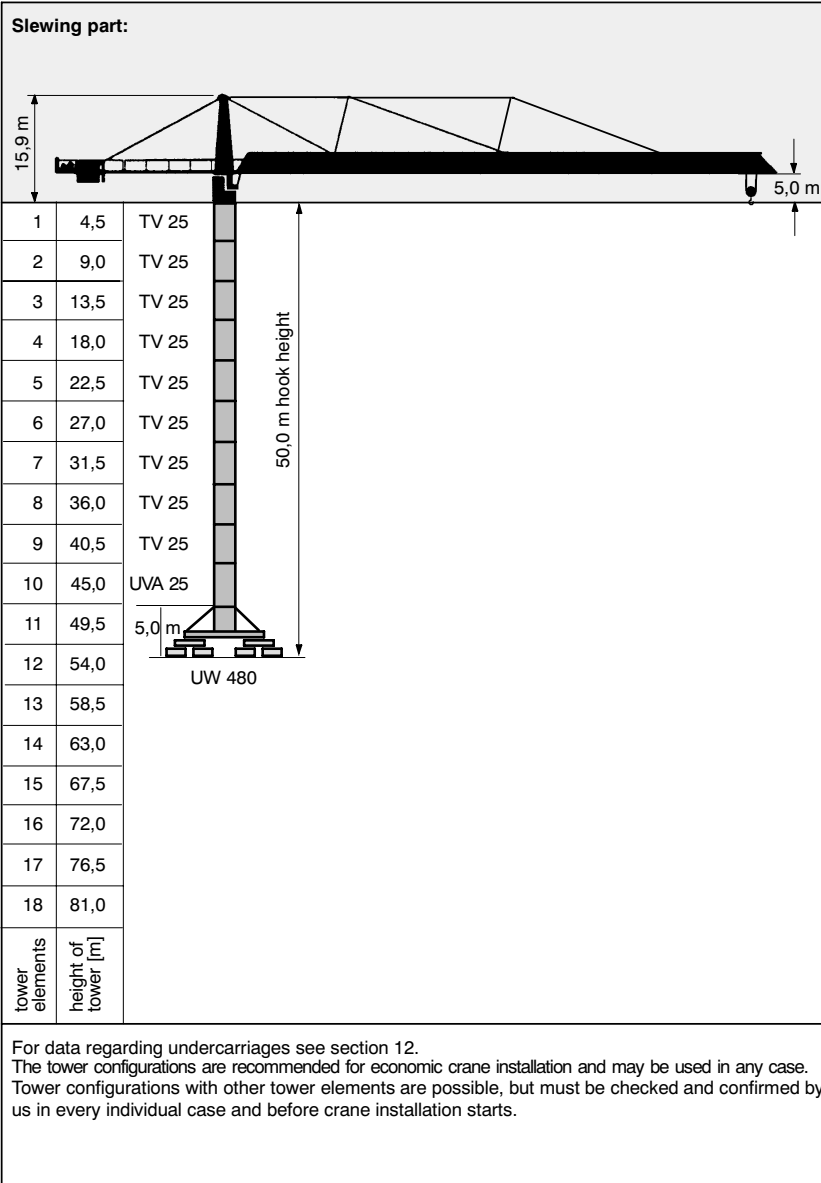
for jibs 30 m up to 75 m

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



2.2.10.1 Tower configuration

for a travelling crane without climbing device



2.3.1 Colli list

Item	pcs.	Designation	Colli	L (m)	B (m)	H (m)	weight (kg)	Volume (m ³)
1	1	tower top complete with platforms at tower top, ladders and different bracing brackets, without platform at slewing frame		15,88	2,99	2,57	19840	122,0
		tower top complete without bracing brackets, platforms or ladders		15,88	2,57	2,57	18550	104,9
		upper part of tower top without platforms, ladders or bracing brackets		10,52	2,10	2,20	4280	48,6
		lower part of tower top with slewing frame, DV, slewing drives, slip ring system and adapter; without platform at slewing frame		6,81	2,57	2,57	14270	51,5
		lower part of tower top with slewing frame, DV, slewing drives, slip ring system without adapter or platform at slewing frame		3,50	2,30	2,50	9730	20,1
2	1	platform slewing frame		1,84	0,77	0,99	110	1,4
3	1	driver's cabin with driver's cabin suspension		2,13	2,05	2,32	760	10,1
		driver's cabin suspension		1,03	1,85	0,91	170	1,7

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

2.3.2

Colli list

Item	pcs.	designation	colli	L (m)	B (m)	H (m)	weight (kg)	volume (m ³)
4	1	counterjib 26,7 m folded without platforms		16,60	2,10	1,50	7700	52,3
		counterjib 26,7 m unfolded without platforms		25,12	2,10	0,75	7700	39,6
		counterjib 21,7 m folded without platforms		11,60	2,10	1,50	6250	36,5
		counterjib 21,7 m unfolded without platforms		20,12	2,10	0,75	6250	31,7
		counterjib 16,7 m folded without platforms		11,60	2,10	1,50	4750	36,5
		counterjib 16,7 m unfolded without platforms		15,12	2,10	0,75	4750	23,8
5	1	platform1/460x2570		2,61	0,62	0,52	81	0,8
	1	platform2/460x2560		2,56	0,62	0,52	74	0,8
	1	platform3/460x2060		2,06	0,62	0,52	63	0,7
	1	platform5/460x2078		2,11	0,62	0,52	70	0,7
6	2	platform4/310x2060		2,06	0,47	0,52	48	0,5
	1	platform6/310x2065		2,07	0,47	0,52	70	0,5
7	1	machinery platform HW 2075 FU with hoisting rope (Ø 24 mm x 225 m) (HW 2090 FU)		2,30	3,73	2,30	6950	19,7
				2,47	3,73	2,26	7660	20,8
8	1	disassembly crane		2,35	0,4	3,05	300	2,87

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

2.3.3

Colli list

Item	pcs.	designation	colli	L (m)	B (m)	H (m)	weight (kg)	volume (m ³)
9	1	jib part 1 with trolley drive		10,22	2,06	2,43	4985	51,2
10	1	jib part 2		10,22	2,06	2,16	2880	45,5
11	1	jib part 3		10,28	2,06	2,16	2320	45,7
12	1	jib part 4		10,22	2,06	2,16	2160	45,5
13	1	jib part 5		10,25	2,06	2,16	1660	45,6
14	1	jib part 6		10,21	2,06	2,15	1450	45,2
15	1	jib part 7		10,22	2,06	2,15	1360	45,3
16	1	jib part 8		5,23	2,06	2,12	780	22,8
17	1	jib part 9		10,20	2,06	2,11	1170	44,3
18	1	jib part 10		5,23	2,06	2,15	740	23,2
19	1	rope swivel traverse		1,53	1,98	0,50	280	1,5
20	1	bracing trestle 1		10,43	1,88	0,96	1020	18,8
21	1	bracing trestle 2 with assembly trestle		10,39	1,86	0,64	710	12,4

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

2.3.4

Colli list

Item	pcs.	designation	colli	L (m)	B (m)	H (m)	weight (kg)	volume (m ³)
22	1	trolley jib bracing 1.1		0,70	0,09	0,24	68	0,02
23	1	bracing 1.2		2,18	0,07	0,28	153	0,04
24	1	bracing 1.3		0,62	0,05	0,24	50	0,01
25	1 (2x)	bracing 1.4		9,00	0,11	0,24	502	0,24
26	1	bracing 1.5		1,30	0,25	0,24	130	0,08
27	1	bracing 2.1		3,28	0,11	0,27	172	0,10
28	1 (2x)	bracing 2.2		9,58	0,11	0,23	416	0,24
29	1	bracing 3.1		5,22	0,09	0,20	172	0,09
30	1	bracing 3.2		3,32	0,09	0,20	117	0,06
31	1	bracing 3.3		9,88	0,09	0,20	306	0,18
32	1	bracing 3.4		1,22	0,20	0,18	68	0,04
33	1 (3x)	bracing 4.1		9,46	0,09	0,19	213	0,16
34	1	bracing 4.2		2,70	0,09	0,19	78	0,05
35	1	bracing 4.3		7,84	0,09	0,19	185	0,13
36	1	bracing 5.1		4,82	0,09	0,19	120	0,08
37	1	bracing 5.2		4,95	0,09	0,19	123	0,08

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

2.3.5

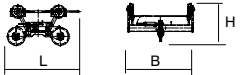

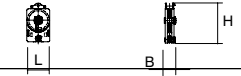
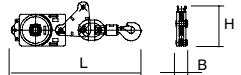
Colli list

Item	pcs.	designation	colli	L (m)	B (m)	H (m)	weight (kg)	volume (m ³)
38	1	bracing 5.3		1,20	0,18	0,16	57	0,03
39	1	connection strap 1		1,19	0,13	0,50	208	0,15
40	1	connection strap 2		1,16	0,11	0,43	130	0,05
41	1	assembly platform		1,24	1,30	1,70	140	2,74
42	1	hoisting rope support		2,58	1,51	1,76	200	6,9
43	1 (2x)	counterjib bracing 1		9,56	0,07	0,21	295	0,14
44	1 (2x)	bracing 2		4,69	0,07	0,21	155	0,07
45	1 (2x)	bracing 3		4,31	0,07	0,21	145	0,06
46	1 (2x)	bracing 4		5,35	0,07	0,21	175	0,08
47	1	standard handrail (small parts)		2,55	1,1	1,80	460	5,05
48	1	box (small parts)		1,60	0,90	0,80	500	1,15

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

2.3.6

Colli list

Item	pcs.	designation	colli	L (m)	B (m)	H (m)	weight (kg)	volume (m ³)
50	1	trolley 2 LK 25		2,32	2,30	1,30	950	6,9
51	1	trolley 1 LK 25		2,00	2,30	1,30	960	6,0
52	1	half No. 2 of hook block		0,6	0,30	1,01	550	0,2
53	1	half No. 1 of hook block with traverse and load hook		2,44	0,60	0,80	750	1,2
Loose and small parts can be distributed depending on the available space.								

2.5.1

Assembly weights - tower top - counterjib

Tower top, complete

bracing brackets (1x560 mm, 2x9300mm), driver's cabin, driver's cabin suspension, platform and standard handrails

20 600 kg

- upper part of tower top, complete 5 440 kg
- driver's cabin with driver's cabin suspension 760 kg
- lower part of tower top with slewing frame, DV, slewing drives, platform, standard handrails and slip ring system 14 400 kg

Counterjib 26,7 m - with hoisting drive Hw 2075 FU, complete

machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 6 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform),

19 000 kg

- counterjib with 6 bracing brackets, platforms, assembly trestles and standard handrail 9 050 kg
- machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m) 6 950 kg
- counterweight 3 t (under machinery platform) 3 000 kg

Counterjib 21,7 m - with hoisting drive Hw 2075 FU, complete

machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 6 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform),

17 100 kg

- counterjib with 4 bracing brackets, platforms, assembly trestles and standard handrail 7 150 kg
- machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m) 6 950 kg
- counterweight 3 t (under machinery platform) 3 000 kg

Counterjib 16,7 m - with hoisting drive Hw 2075 FU, complete

machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 2 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform),

15 300 kg

- counterjib with 2 bracing brackets, platforms, assembly trestles and standard handrail 5 350 kg
- machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m) 6 950 kg
- counterweight 3 t (under machinery platform) 3 000 kg

2.5.1.2 Assembly weights - tower top - counterjib

Counterjib 26,7 m - with hoisting drive Hw 2090 FU, complete machinery platform Hw 2090 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 6 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform),	19 710 kg
- counterjib with 6 bracing brackets, platforms, assembly trestles and standard handrail	9 050 kg
- machinery platform Hw 2090 FU with hoisting rope (Ø 24 mm x 225 m)	7 660 kg
- counterweight 3 t (under machinery platform)	3 000 kg
Counterjib 21,7 m - with hoisting drive Hw 2090 FU, complete machinery platform Hw 2090 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 6 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform),	17 810 kg
- counterjib with 4 bracing brackets, platforms, assembly trestles and standard handrail	7 150 kg
- machinery platform Hw 2090 FU with hoisting rope (Ø 24 mm x 225 m)	7 660 kg
- counterweight 3 t (under machinery platform)	3 000 kg
Counterjib 16,7 m - with hoisting drive Hw 2090 FU, complete machinery platform Hw 2090 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 2 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform),	16 010 kg
- counterjib with 2 bracing brackets, platforms, assembly trestles and standard handrail	5 350 kg
- machinery platform Hw 2090 FU with hoisting rope (Ø 24 mm x 225 m)	7 660 kg
- counterweight 3 t (under machinery platform)	3 000 kg

2.5.2 Assembly weights - trolley jib

85 m trolley jib, complete (70 m = 27 600 kg + 20 m = 2 300 kg) - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	29 900 kg
80 m trolley jib, complete (70 m = 27 600 kg + 10 m = 1 500 kg) - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	29 100 kg
75 m trolley jib, complete (70 m = 27 600 kg + 5 m = 1 100 kg) - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	28 700 kg
70 m trolley jib, complete - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	27 400 kg
65 m trolley jib, complete - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	26 600 kg
60 m trolley jib, complete - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	25 800 kg
55 m trolley jib, complete - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	23 500 kg
50 m trolley jib, complete - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	22 700 kg
45 m trolley jib, complete - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	21 800 kg
40 m trolley jib, complete - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	21 000 kg
30 m trolley jib, complete - bracing brackets, trolley, traversing ropes, hook block and standard handrails	15 600 kg

2.5.3

Assembly weights - cross frame / cross frame element / undercarriage

cross frame KR 1000 - 8 (without optional parts) - 4 spigots TV 25 / TV 25	8 200 kg 684 kg
cross frame element KRE 480, complete - base mast part - swivel arms with corner bearings - diagonal struts and ballast rest - assembly platform, ladder and small parts	24 250 kg 7 100 kg 6 250 kg 9 260 kg 1 640 kg
undercarriage UW 480, complete - base mast part - swivel arms with crosshead and subframe - diagonal struts and ballast rest - assembly platform, ladder and small parts	34 000 kg 7 100 kg 16 000 kg 9 260 kg 1 640 kg

2.5.4

Required hook height for the mobile crane



Danger!

Use suspension ropes with sufficient capacity and observe suspension plans!

Required height under hook for the mobile crane

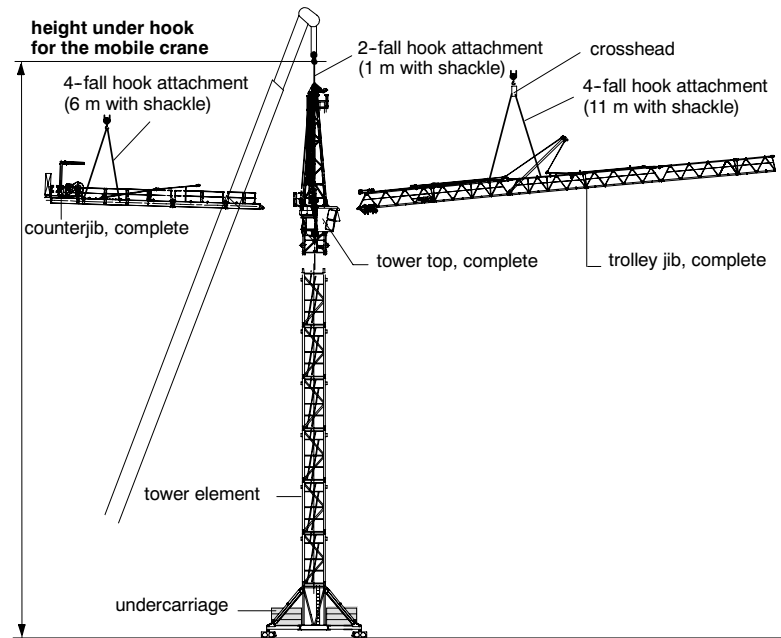
=

Height under hook of WOLFF tower crane + 18 m.

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

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

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



2.6.3.1 Trolley jib - suspension plan 85 m jib



Danger during disassembly!

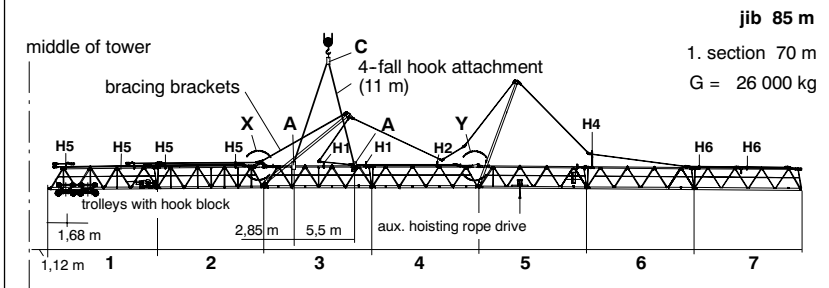
Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

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

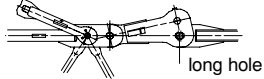
Lengths: trolley jib part 1/2/3/4/5/6/7/9 = 10,0 m
 trolley jib part 8/10 = 5,0 m
 rope swivel traverse = 0,61 m

More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

Attention!
 For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.

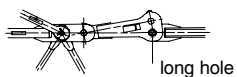


Detail " X "

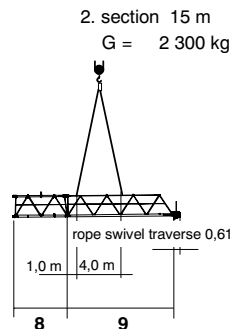


Attention !
 Connecting strap 1 must show to the top and be bolted in the long hole.

Detail " Y "



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



2.6.3.2 Trolley jib - suspension plan 80 m jib



Danger during disassembly!

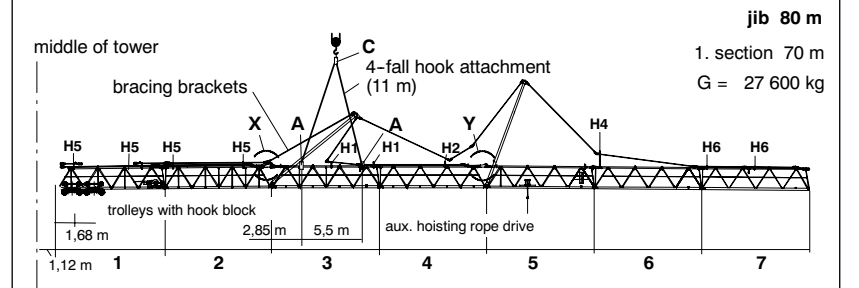
Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

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

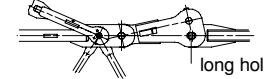
Lengths: trolley jib part 1/2/3/4/5/6/7/9 = 10,0 m
 trolley jib part 8/10 = 5,0 m
 rope swivel traverse = 0,61 m

More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

Attention!
 For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.

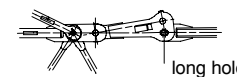


Detail " X "

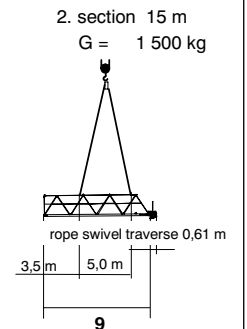


Attention !
 Connecting strap 1 must show to the top and be bolted in the long hole.

Detail " Y "



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



2.6.3.3 Trolley jib - suspension plan 75 m jib



Danger during disassembly!

Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

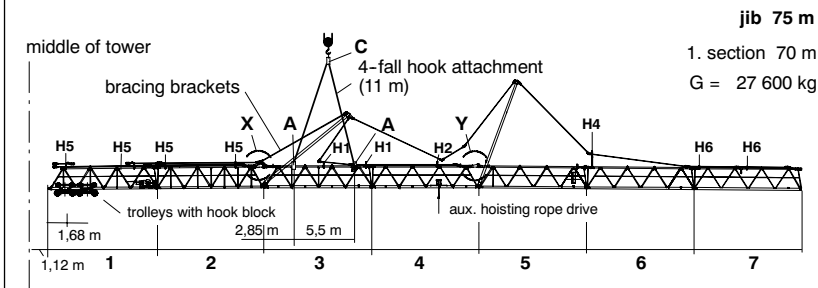
The parts of the jib are labeled with a building part identification at the top chord.

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

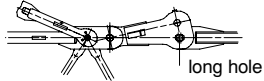
More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

Attention!

For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.



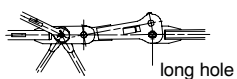
Detail " X "



Attention !

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

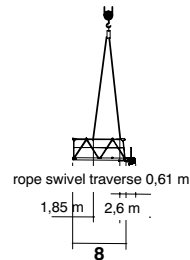
Detail " Y "



Attention !

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

2. section 5 m
G = 1 100 kg



2.6.3.4 Trolley jib - suspension plan 70 m and 65 m jib



Danger during disassembly!

Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

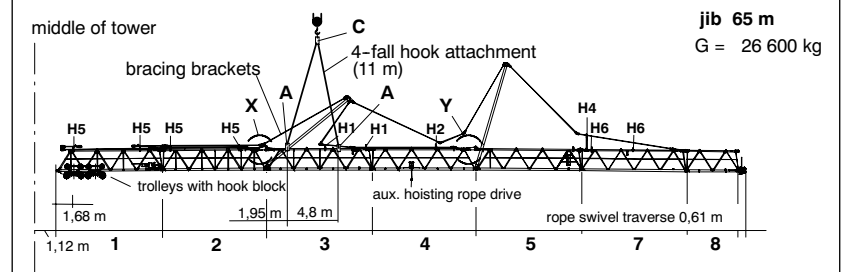
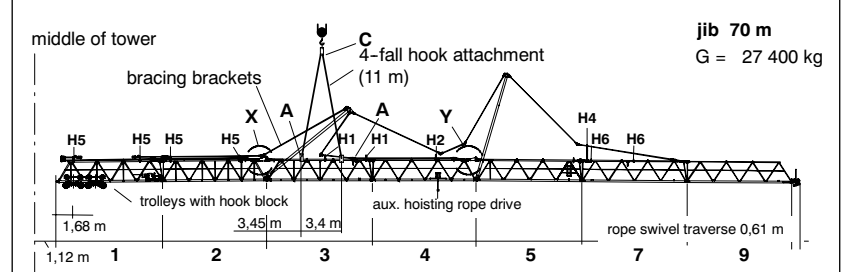
The parts of the jib are labeled with a building part identification at the top chord.

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

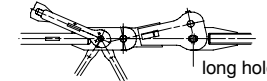
More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

Attention!

For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.



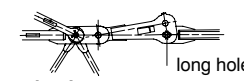
Detail " X "



Attention !

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

Detail " Y "



Attention !

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

2.6.3.5 Trolley jib - suspension plan 60 m jib



Danger during disassembly!

Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

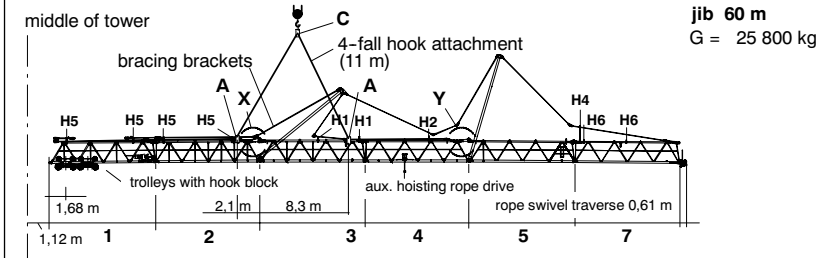
The parts of the jib are labeled with a building part identification at the top chord.

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

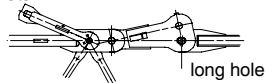
More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

Attention!

For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.

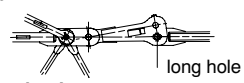


Detail " X "



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

Detail " Y "



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

2.6.3.6 Trolley jib - suspension plan 55 m and 50 m jib



Danger during disassembly!

Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

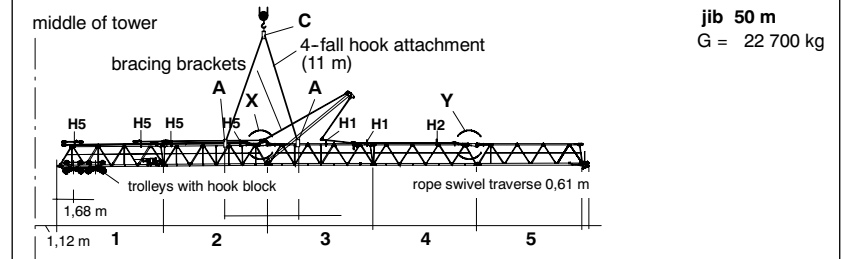
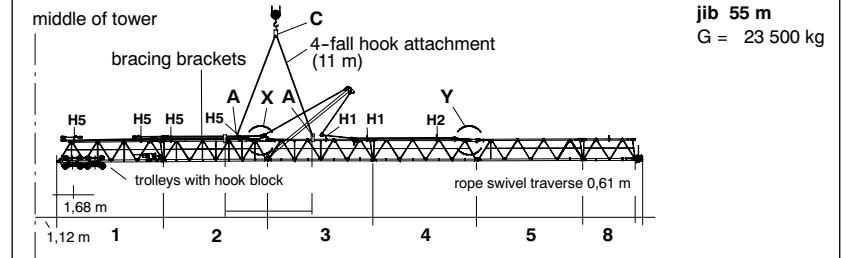
The parts of the jib are labeled with a building part identification at the top chord.

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

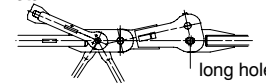
More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

Attention!

For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.

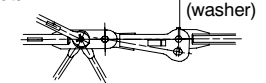


Detail " X "



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

Detail " Y "



Attention !
The connection strap 2 must show down and be bolted with the bore.

2.6.3.7 Trolley jib - suspension plan 45 m and 40 m jib



Danger during disassembly!

Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

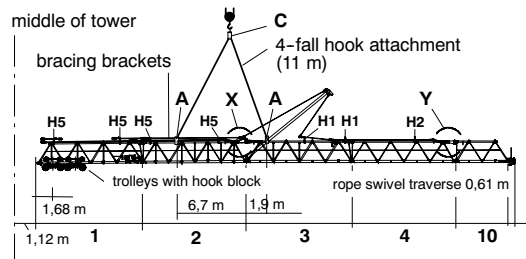
The parts of the jib are labeled with a building part identification at the top chord.

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

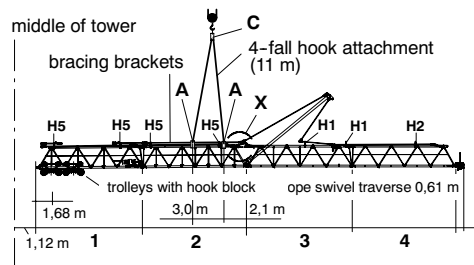
More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

Attention!

For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.

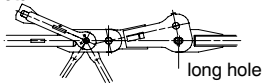


jib 45 m
G = 21 800 kg



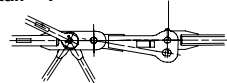
jib 40 m
G = 21 000 kg

Detail " X "



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

Detail " Y "



Attention !
The connection strap 2 must show down and be bolted with the bore.

2.6.3.8 Trolley jib - suspension plan 30 m jib



Danger during disassembly!

Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

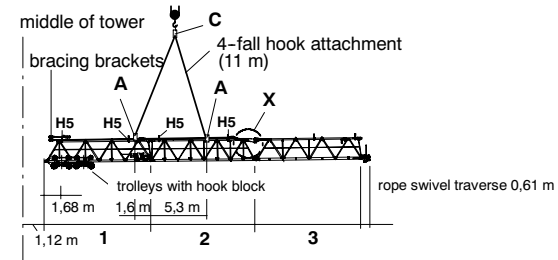
The parts of the jib are labeled with a building part identification at the top chord.

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

More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

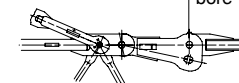
Attention!

For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.



jib 30 m
G = 15 600 kg

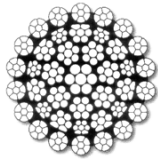
Detail " X "



Attention !
The connection strap 1 must show down and be bolted with the bore.

2.7.1

Hoisting rope

<p>Cable Ø = 24 mm +4% +2%</p>	
<p>First equipment</p>	<p>CASAR EUROLIFT - non twisting flexible hoisting rope with compressed outer strands and compressed cable core</p>  <p>with special packing material grip</p> <p>nominal strength = 2160 N/mm² calc. breaking strength = 706,0 kN min. breaking strength = 564,1 kN weight per meter = 2,843 kg</p>
<p>Design</p>	<p>langs-lay rope, right handed, made from blank cable wire.</p> <p>middle space factor = 0,720 middle spinning loss factor = 0,82 middle weight factor = 0,87 total twist number = 280</p> <p>Number of carryig wires in the outer strands is to be judged by the state of wear according to DIN 15020 Bl. 2 / ISO DIS 4309 = 126</p>

Attention! hoisting rope with special packing material grip

Basic equipment

cable length 225 m	cable for crane with:	radius	4 fall 85 m 40,5 m
--------------------	--------------------------	--------	--------------------------

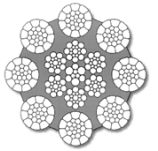
By lengthening the hook path by 1 tower element (4,5 m) the necessary cable length increases by **18,0 m for operation in 4 falls.**

Attention!
A wire cable is a complex machine element.

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

2.7.2

Traversing rope

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

Attention! short traversing rope with special packing material grip

Basic equipment

cable lengths	1 x 100 m 1 x 176 m	for crane with:	radius 60 m - 85 m
cable lengths	1 x 100 m 1 x 106 m	for crane with:	radius 30 m - 55 m

Attention!
A wire cable is a complex machine element.

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

WOLFF 8540.40

Crane data

2 / 100

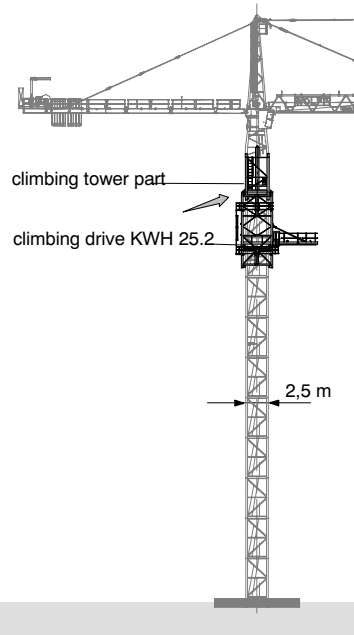
2.8.1 **Insertable exterior climbing drive KWH 25.2**



Attention!

The assembly of the climbing drive with the WOLFF tower crane 8540 FL 20/40 is possible with operation in 2 falls.

More details about the climbing drive KWH 25.2 see additional equipment, section 12.



Minimum height with stationary erection:

- 1 climbing tower part
- 2 tower elements = 13,5 m tower height

Minimum height with travelling erection:

- 1 climbing tower part
- 2 tower elements + undercarriage
appr. 13,5 m tower height

2.8.1.1 **Balancing weights**

8540 FL - 20/40	jib										
	30 m	40 m	45 m	50 m	55 m	60 m	65 m	70 m	75 m	80 m	85 m
balancing weight * TV 25 = 3,02 t	--	--	--	--	** 48,3m	46,8m	45,8m	53,2m	50,2m	45,8m	46,6m
UV 25 = 3,68 t	--	--	--	--	44,8m	43,4m	42,6m	49,5m	46,7m	42,6m	43,3m
load = 5,0 t	--	--	40,6m	42,6m	--	--	--	--	--	--	--
load = 8,0 t	--	33,2m	29,9m	31,4m	--	--	--	--	--	--	--
load = 12,0 t	25,1m	24,6m	--	--	--	--	--	--	--	--	--

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

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

-- balancing not possible



Danger!

During climbing the slewing part must be fixed in the push-in direction of the traverse carriage. Before the final bolting of the tower you are not allowed to take away the balancing weight or to loosen the fixing of the slewing part (see operation instruction KWH 25.2).

The climbing gear is an auxiliary device for assembly and mustn't stay at the tower crane WOLFF under normal working conditions.

962-4-023615E

WOLFF 8540.40

Crane data

2 / 105

2.8.5. **Insertable internal climbing drive KSH 25**

For use of the WOLFF 8540.40 in connection with internal climbing drive KSH 25 the tower combination has to be observed as shown here.

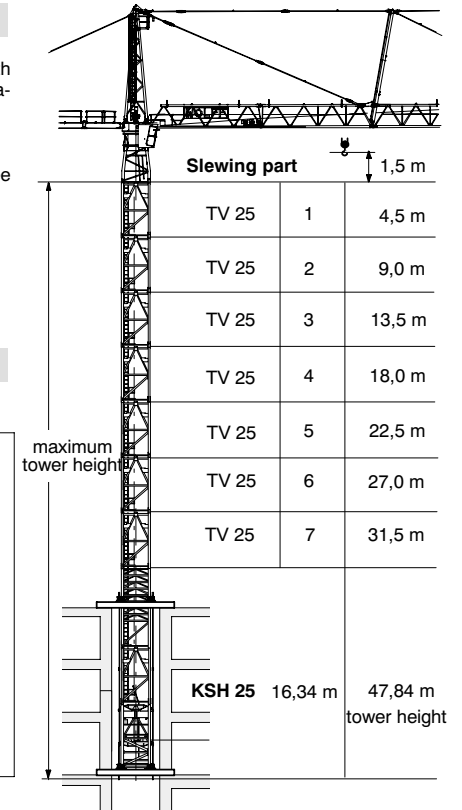
More details about the climbing drive KSH 25 see additional equipment, section 12.

2.8.5.1 **Balancing weights**

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

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

-- balancing not possible



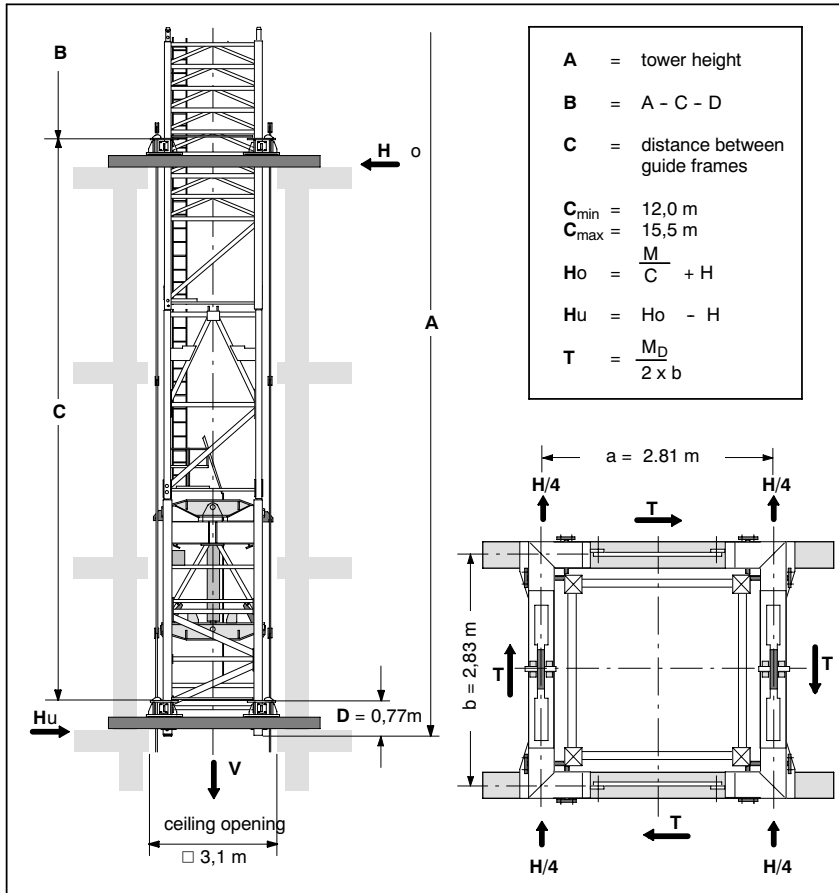
8540.40	jib										
	30 m	40 m	45 m	50 m	55 m	60 m	65 m	70 m	75 m	80 m	85 m
balancing weight * TV 25 = 3,02 t	--	--	--	--	** 49,6m	48,1m	47,2m	54,6m	51,5m	47,2m	48,0m
UV 25 = 3,68 t	--	--	--	--	46,3m	44,9m	44,0m	50,9m	48,2m	44,0m	45,3m
load = 5,0 t	--	--	41,6m	43,6m	--	--	--	--	--	--	--
load = 8,0 t	--	33,8m	30,7m	32,2m	--	--	--	--	--	--	--
load = 12,0 t	25,6m	25,1m	--	--	--	--	--	--	--	--	--

962-4-032616E

2.8.5.2

Reacting forces to building

for hydraulic interior climbing drive KSH 25



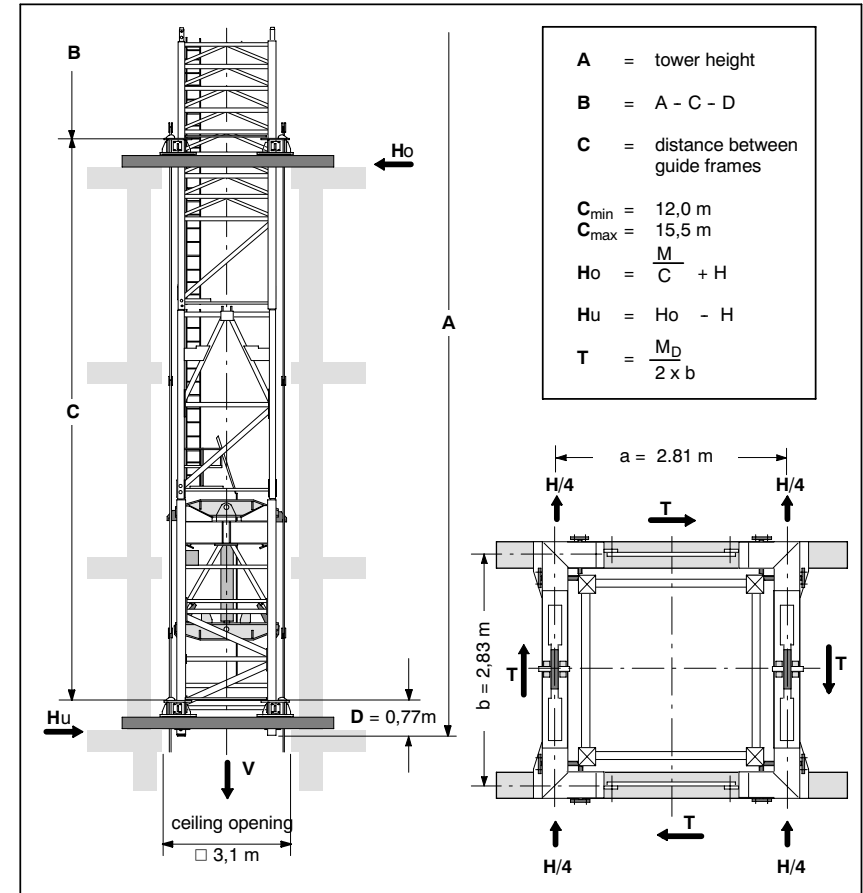
Reacting forces to building (kN)		in service															
A (m)		47,8				43,3				38,8				34,3			
C (m)		12,0	13,0	14,0	15,0	12,0	13,0	14,0	15,0	12,0	13,0	14,0	15,0	12,0	13,0	14,0	15,0
V		1800				1770				1740				1710			
Ho		565	520	485	455	535	495	460	430	510	470	435	405	480	445	410	380
Hu		500	455	415	385	470	430	395	360	445	405	370	340	420	380	350	330
T		115				115				115				115			

962-4-023618E

2.8.5.2

Reacting forces to building

for hydraulic interior climbing drive KSH 25

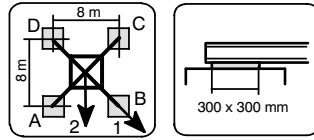


Reacting forces to building (kN)		out of service															
A (m)		47,8				43,3				38,8				34,3			
C (m)		12,0	13,0	14,0	15,0	12,0	13,0	14,0	15,0	12,0	13,0	14,0	15,0	12,0	13,0	14,0	15,0
V		1520				1490				1460				1430			
Ho		695	640	600	555	610	565	525	490	530	490	455	425	455	420	390	365
Hu		470	420	370	330	400	350	310	275	330	290	255	220	265	230	200	175
T		0				0				0				0			

962-4-023619E

3.2.1.1 Central ballasts and corner loads acc. to DIN 15019

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

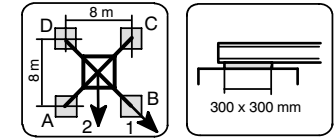


KR 1000 - 8 Corner distance 8 m x 8 m Jib length 30 m

hook height [m]	central ballast [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
10,2	11,7	55,0	1	496	839	496	152	50	1	396	589	396	202	62
			2	739	739	252	252		2	532	532	259	259	
14,7	16,2	55,0	1	504	867	504	140	52	1	404	546	404	261	84
			2	761	761	247	247		2	504	504	303	303	
19,2	20,7	55,0	1	512	897	512	127	54	1	300	540	300	60	91
			2	784	784	239	239		2	489	489	334	334	
23,7	25,2	55,0	1	520	928	520	111	57	1	308	558	308	58	101
			2	808	808	231	231		2	485	485	132	132	
28,2	29,7	55,0	1	528	961	528	94	59	1	316	577	316	55	111
			2	834	834	221	221		2	501	501	132	132	
32,7	34,2	55,0	1	536	997	536	74	61	1	324	598	324	51	121
			2	862	862	209	209		2	518	518	131	131	
37,2	38,7	55,0	1	544	1035	544	52	64	1	332	619	332	45	131
			2	891	891	196	196		2	535	535	129	129	
41,7	43,2	60,0	1	564	1089	564	39	66	1	353	655	353	51	141
			2	935	935	193	193		2	566	566	139	139	
46,2	47,7	72,5	1	603	1164	603	42	68	1	392	710	392	74	151
			2	1000	1000	207	207		2	643	643	364	364	

3.2.1.2 Central ballasts and corner loads acc. to DIN 15019

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

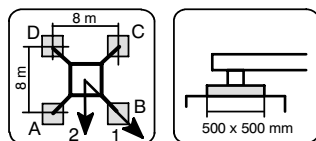


KR 1000 - 8 Corner distance 8 m x 8 m Jib length 40 m

hook height [m]	central ballast [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
10,2	11,7	57,5	1	501	843	501	160	51	1	277	625	277	0	68
			2	743	743	260	260		2	516	516	74	74	
14,7	16,2	57,5	1	509	871	509	147	54	1	284	642	284	0	93
			2	765	765	253	253		2	530	530	76	76	
19,2	20,7	57,5	1	517	901	517	133	56	1	290	662	290	0	100
			2	789	789	246	246		2	545	545	77	77	
23,7	25,2	57,5	1	525	934	525	117	58	1	295	685	295	0	110
			2	814	814	237	237		2	561	561	77	77	
28,2	29,7	57,5	1	533	968	533	99	61	1	299	709	299	0	120
			2	841	841	226	226		2	578	578	76	76	
32,7	34,2	57,5	1	541	1004	541	78	63	1	301	737	301	0	130
			2	869	869	214	214		2	595	595	74	74	
37,2	38,7	57,5	1	549	1043	549	55	65	1	302	767	302	0	139
			2	899	899	200	200		2	614	614	72	72	
41,7	43,2	62,5	1	570	1098	570	42	67	1	326	800	326	0	149
			2	943	943	197	197		2	646	646	80	80	
46,2	47,7	75,0	1	609	1174	609	44	70	1	387	836	387	0	159
			2	1008	1008	210	210		2	710	710	308	308	

3.3.1.2 Central ballasts and corner loads acc. to DIN 15019

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

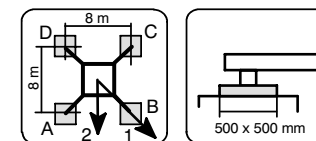


KRE 480 Corner distance 8 m x 8 m Jib length 40 m

hook height [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
13,0	14,5	50,0	1	505	860	505	150	55	1	278	637	278	0	78
			2	756	756	254	254		2	524	524	73	73	
17,5	19,0	50,0	1	513	889	513	137	57	1	284	656	284	0	103
			2	779	779	247	247		2	538	538	74	74	
22,0	23,5	50,0	1	521	920	521	122	60	1	290	678	290	0	110
			2	803	803	238	238		2	554	554	75	75	
26,5	28,0	50,0	1	529	953	529	104	62	1	294	701	294	0	120
			2	829	829	229	229		2	570	570	74	74	
31,0	32,5	50,0	1	537	989	537	85	64	1	297	728	297	0	130
			2	856	856	217	217		2	588	588	73	73	
35,5	37,0	50,0	1	545	1026	545	63	67	1	298	757	298	0	140
			2	885	885	204	204		2	606	606	71	71	
40,0	41,5	50,0	1	553	1067	553	39	69	1	298	788	298	0	150
			2	916	916	190	190		2	625	625	68	68	
44,5	46,0	62,5	1	592	1141	592	43	71	1	360	823	360	0	160
			2	980	980	204	204		2	676	676	95	95	
49,0	50,5	77,5	1	638	1225	638	50	73	1	538	865	538	210	169
			2	1053	1053	222	222		2	769	769	306	306	
53,5	55,0	95,0	1	689	1319	689	60	76	1	589	993	589	185	179
			2	1135	1135	244	244		2	875	875	304	304	

3.3.1.3 Central ballasts and corner loads acc. to DIN 15019

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

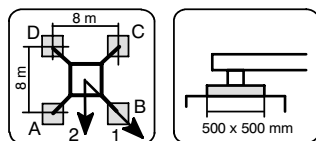


KRE 480 Corner distance 8 m x 8 m Jib length 45 m

hook height [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
13,0	14,5	42,5	1	488	835	488	141	56	1	240	638	240	0	79
			2	734	734	242	242		2	505	505	54	54	
17,5	19,0	42,5	1	496	865	496	127	58	1	246	658	246	0	105
			2	757	757	235	235		2	520	520	55	55	
22,0	23,5	42,5	1	504	896	504	112	60	1	251	679	251	0	112
			2	781	781	227	227		2	536	536	55	55	
26,5	28,0	42,5	1	512	929	512	95	62	1	255	703	255	0	122
			2	807	807	217	217		2	552	552	55	55	
31,0	32,5	42,5	1	520	965	520	75	65	1	258	730	258	0	131
			2	834	834	206	206		2	569	569	53	53	
35,5	37,0	42,5	1	528	1002	528	54	67	1	259	759	259	0	141
			2	864	864	193	193		2	588	588	51	51	
40,0	41,5	42,5	1	536	1043	536	29	69	1	260	791	260	0	151
			2	894	894	178	178		2	612	612	260	260	
44,5	46,0	52,5	1	569	1111	569	27	71	1	308	826	308	0	161
			2	952	952	186	186		2	692	692	246	246	
49,0	50,5	67,5	1	615	1195	615	34	73	1	515	902	515	127	171
			2	1025	1025	204	204		2	789	789	241	241	
53,5	55,0	82,5	1	660	1283	660	37	76	1	560	1026	560	94	181
			2	1101	1101	220	220		2	889	889	231	231	

3.3.1.4 Central ballasts and corner loads acc. to DIN 15019

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

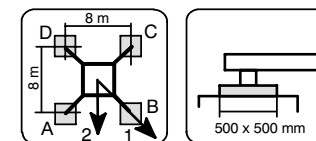


KRE 480 Corner distance 8 m x 8 m Jib length 50 m

hook height [m]	central ballast [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
13,0	14,5	32,5	1	474	801	474	146	56	1	189	639	189	0	80
			2	705	705	242	242		2	481	481	28	28	
17,5	19,0	32,5	1	482	831	482	133	58	1	196	659	196	0	106
			2	728	728	235	235		2	495	495	30	30	
22,0	23,5	32,5	1	490	862	490	117	60	1	201	681	201	0	113
			2	753	753	226	226		2	511	511	30	30	
26,5	28,0	32,5	1	498	895	498	100	63	1	205	705	205	0	123
			2	779	779	217	217		2	528	528	29	29	
31,0	32,5	32,5	1	506	931	506	81	65	1	207	732	207	0	133
			2	806	806	205	205		2	545	545	28	28	
35,5	37,0	32,5	1	514	969	514	59	67	1	208	761	208	0	142
			2	835	835	192	192		2	564	564	25	25	
40,0	41,5	37,5	1	534	1021	534	47	69	1	233	793	233	0	152
			2	879	879	190	190		2	615	615	254	254	
44,5	46,0	50,0	1	573	1096	573	51	72	1	294	828	294	0	162
			2	943	943	204	204		2	702	702	245	245	
49,0	50,5	65,0	1	619	1180	619	58	74	1	519	915	519	123	172
			2	1016	1016	222	222		2	799	799	239	239	
53,5	55,0	82,5	1	671	1274	671	67	76	1	571	1046	571	95	182
			2	1098	1098	244	244		2	907	907	235	235	

3.3.1.5 Central ballasts and corner loads acc. to DIN 15019

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

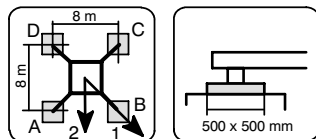


KRE 480 Corner distance 8 m x 8 m Jib length 55 m

hook height [m]	central ballast [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
13,0	14,5	40,0	1	494	846	494	143	56	1	226	640	226	0	81
			2	743	743	246	246		2	500	500	47	47	
17,5	19,0	40,0	1	502	875	502	130	58	1	232	660	232	0	107
			2	766	766	239	239		2	515	515	48	48	
22,0	23,5	40,0	1	510	907	510	114	61	1	237	682	237	0	114
			2	791	791	230	230		2	530	530	48	48	
26,5	28,0	40,0	1	518	941	518	96	63	1	241	707	241	0	124
			2	817	817	220	220		2	547	547	47	47	
31,0	32,5	40,0	1	526	977	526	76	65	1	244	734	244	0	134
			2	845	845	208	208		2	565	565	46	46	
35,5	37,0	40,0	1	534	1015	534	54	67	1	245	763	245	0	144
			2	874	874	195	195		2	611	611	257	257	
40,0	41,5	40,0	1	542	1056	542	29	70	1	245	796	245	0	154
			2	906	906	179	179		2	664	664	220	220	
44,5	46,0	40,0	1	550	1100	550	1	72	1	450	833	450	68	163
			2	939	939	162	162		2	721	721	180	180	
49,0	50,5	55,0	1	596	1185	596	7	74	1	496	953	496	38	173
			2	1013	1013	179	179		2	819	819	172	172	
53,5	55,0	70,0	1	641	1274	641	9	76	1	541	1080	541	3	183
			2	1089	1089	194	194		2	922	922	161	161	

3.3.1.6 Central ballasts and corner loads acc. to DIN 15019

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

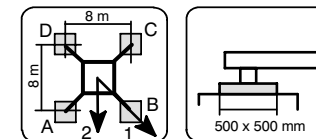


KRE 480 Corner distance 8 m x 8 m Jib length 60 m

hook height [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
13,0	14,5	30,0	1	493	850	493	136	57	1	174	645	174	0	85
			2	745	745	240	240		2	511	511	97	97	
17,5	19,0	30,0	1	501	880	501	121	60	1	179	666	179	0	113
			2	769	769	232	232		2	530	530	94	94	
22,0	23,5	30,0	1	509	913	509	105	62	1	184	689	184	0	120
			2	794	794	223	223		2	550	550	91	91	
26,5	28,0	30,0	1	517	947	517	86	64	1	187	714	187	0	130
			2	821	821	212	212		2	570	570	86	86	
31,0	32,5	30,0	1	525	984	525	65	66	1	189	743	189	0	139
			2	850	850	200	200		2	593	593	256	256	
35,5	37,0	32,5	1	539	1030	539	48	69	1	202	773	202	0	149
			2	886	886	192	192		2	651	651	227	227	
40,0	41,5	32,5	1	547	1072	547	22	71	1	447	814	447	81	159
			2	919	919	176	176		2	706	706	188	188	
44,5	46,0	35,0	1	560	1126	560	0	73	1	461	900	461	22	169
			2	959	959	163	163		2	772	772	151	151	
49,0	50,5	47,5	1	597	1209	597	0	75	1	483	1035	483	0	179
			2	1028	1028	173	173		2	867	867	135	135	
53,5	55,0	65,0	1	652	1302	652	2	78	1	501	1206	501	0	189
			2	1112	1112	193	193		2	979	979	126	126	

3.3.1.7 Central ballasts and corner loads acc. to DIN 15019

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

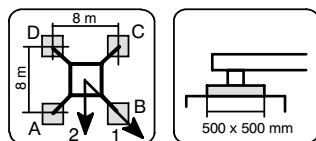


KRE 480 Corner distance 8 m x 8 m Jib length 65 m

hook height [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
13,0	14,5	55,0	1	536	893	536	179	58	1	212	836	212	0	87
			2	788	788	284	284		2	611	611	19	19	
17,5	19,0	55,0	1	544	924	544	165	60	1	217	858	217	0	115
			2	812	812	276	276		2	626	626	20	20	
22,0	23,5	57,5	1	558	962	558	155	62	1	234	882	234	0	122
			2	844	844	273	273		2	649	649	25	25	
26,5	28,0	57,5	1	566	997	566	136	65	1	236	909	236	0	132
			2	871	871	262	262		2	667	667	24	24	
31,0	32,5	60,0	1	581	1040	581	122	67	1	250	939	250	0	142
			2	905	905	256	256		2	691	691	28	28	
35,5	37,0	60,0	1	589	1079	589	98	69	1	250	971	250	0	152
			2	936	936	242	242		2	724	724	254	254	
40,0	41,5	62,5	1	603	1128	603	78	71	1	260	1007	260	0	162
			2	974	974	232	232		2	786	786	220	220	
44,5	46,0	65,0	1	617	1179	617	55	74	1	270	1045	270	0	172
			2	1015	1015	220	220		2	852	852	182	182	
49,0	50,5	67,5	1	631	1234	631	29	76	1	509	1107	509	0	182
			2	1058	1058	205	205		2	923	923	140	140	
53,5	55,0	75,0	1	658	1306	658	11	78	1	476	1280	476	0	191
			2	1116	1116	200	200		2	1011	1011	106	106	

3.3.1.10 Central ballasts and corner loads acc. to DIN 15019

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

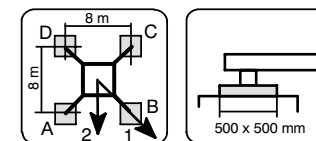


KRE 480 Corner distance 8 m x 8 m Jib length 80 m

hook height [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
13,0	14,5	57,5	1	565	898	565	231	59	1	223	839	223	0	90
			2	801	801	328	328		2	663	663	105	105	
17,5	19,0	57,5	1	573	929	573	216	61	1	228	861	228	0	119
			2	825	825	320	320		2	683	683	102	102	
22,0	23,5	57,5	1	581	962	581	199	63	1	232	886	232	0	126
			2	850	850	311	311		2	703	703	97	97	
26,5	28,0	57,5	1	589	997	589	180	66	1	234	913	234	0	136
			2	877	877	300	300		2	725	725	92	92	
31,0	32,5	60,0	1	603	1040	603	165	68	1	247	944	247	0	146
			2	912	912	293	293		2	754	754	91	91	
35,5	37,0	62,5	1	617	1086	617	148	70	1	382	983	382	0	155
			2	949	949	285	285		2	798	798	236	236	
40,0	41,5	62,5	1	625	1129	625	121	72	1	373	1032	373	0	165
			2	981	981	269	269		2	856	856	194	194	
44,5	46,0	67,5	1	646	1187	646	104	75	1	546	1090	546	1	175
			2	1029	1029	262	262		2	930	930	161	161	
49,0	50,5	70,0	1	660	1243	660	76	77	1	492	1255	492	0	185
			2	1072	1072	247	247		2	1004	1004	116	116	

3.3.1.11 Central ballasts and corner loads acc. to DIN 15019

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

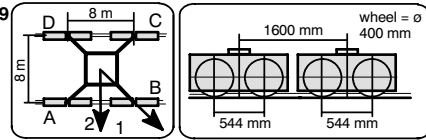


KRE 480 Corner distance 8 m x 8 m Jib length 85 m

hook height [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
13,0	14,5	57,5	1	575	868	575	282	59	1	319	907	319	0	91
			2	782	782	368	368		2	707	707	65	65	
17,5	19,0	57,5	1	583	899	583	267	61	1	318	941	318	0	120
			2	807	807	359	359		2	727	727	62	62	
22,0	23,5	57,5	1	591	932	591	250	64	1	316	977	316	0	127
			2	832	832	350	350		2	748	748	57	57	
26,5	28,0	57,5	1	599	967	599	232	66	1	312	1017	312	0	137
			2	859	859	339	339		2	770	770	51	51	
31,0	32,5	60,0	1	613	1010	613	217	68	1	319	1060	319	0	147
			2	894	894	333	333		2	799	799	50	50	
35,5	37,0	62,5	1	628	1055	628	200	70	1	324	1107	324	0	157
			2	930	930	325	325		2	830	830	47	47	
40,0	41,5	65,0	1	642	1104	642	180	73	1	327	1158	327	0	167
			2	968	968	315	315		2	886	886	197	197	
44,5	46,0	67,5	1	656	1155	656	157	75	1	328	1213	328	0	177
			2	1009	1009	303	303		2	956	956	156	156	
49,0	50,5	70,0	1	670	1211	670	130	77	1	490	1300	490	0	186
			2	1052	1052	288	288		2	1030	1030	110	110	

3.4.1.3 Central ballasts and corner loads to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

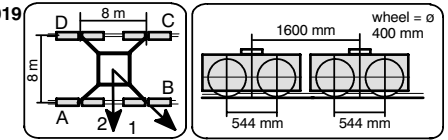


UW 480 Corner distance 8 m x 8 m Jib length 45 m

hook height [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
14,0	15,5	42,5	1	513	867	513	159	60	1	262	668	262	25	97
			2	763	763	263	263		2	532	532	77	77	
18,5	20,0	42,5	1	521	897	521	145	63	1	268	688	268	25	105
			2	787	787	255	255		2	547	547	78	78	
23,0	24,5	42,5	1	529	930	529	128	65	1	273	710	273	25	114
			2	812	812	246	246		2	563	563	78	78	
27,5	29,0	42,5	1	537	965	537	110	68	1	277	734	277	25	124
			2	839	839	235	235		2	579	579	78	78	
32,0	33,5	42,5	1	545	1002	545	88	71	1	280	761	280	25	134
			2	868	868	222	222		2	597	597	76	76	
36,5	38,0	42,5	1	553	1041	553	65	73	1	281	791	281	25	144
			2	898	898	208	208		2	615	615	74	74	
41,0	42,5	42,5	1	561	1084	561	38	76	1	281	824	281	25	154
			2	931	931	191	191		2	650	650	272	272	
45,5	47,0	55,0	1	600	1161	600	40	79	1	341	859	341	25	164
			2	997	997	204	204		2	737	737	263	263	
50,0	51,5	72,5	1	652	1254	652	50	82	1	552	961	552	144	173
			2	1078	1078	226	226		2	841	841	263	263	

3.4.1.4 Central ballasts and corner loads to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

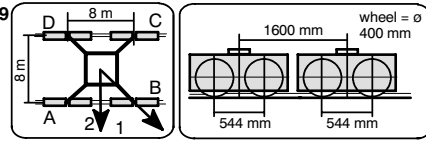


UW 480 Corner distance 8 m x 8 m Jib length 50 m

hook height [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
14,0	15,5	32,5	1	499	833	499	164	60	1	212	669	212	25	99
			2	735	735	262	262		2	507	507	52	52	
18,5	20,0	32,5	1	507	863	507	150	63	1	218	689	218	25	106
			2	759	759	254	254		2	522	522	53	53	
23,0	24,5	32,5	1	515	896	515	133	66	1	223	711	223	25	116
			2	784	784	245	245		2	538	538	53	53	
27,5	29,0	32,5	1	523	931	523	115	68	1	226	736	226	25	125
			2	811	811	234	234		2	555	555	52	52	
32,0	33,5	32,5	1	531	968	531	94	71	1	229	763	229	25	135
			2	840	840	222	222		2	572	572	50	50	
36,5	38,0	32,5	1	539	1007	539	70	74	1	230	793	230	25	145
			2	870	870	207	207		2	591	591	48	48	
41,0	42,5	42,5	1	572	1075	572	68	77	1	279	826	279	25	155
			2	928	928	216	216		2	665	665	278	278	
45,5	47,0	55,0	1	611	1152	611	69	79	1	340	862	340	25	165
			2	994	994	228	228		2	753	753	269	269	
50,0	51,5	72,5	1	663	1246	663	80	82	1	563	980	563	146	175
			2	1075	1075	250	250		2	858	858	268	268	

3.4.1.5 Central ballasts and corner loads to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

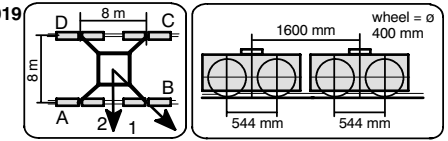


UW 480 Corner distance 8 m x 8 m Jib length 55 m

hook height [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
14,0	15,5	40,0	1	519	877	519	162	60	1	249	670	249	25	100
			2	772	772	266	266		2	526	526	70	70	
18,5	20,0	40,0	1	527	908	527	147	63	1	255	690	255	25	107
			2	796	796	258	258		2	541	541	71	71	
23,0	24,5	40,0	1	535	941	535	130	66	1	259	713	259	25	117
			2	822	822	249	249		2	557	557	71	71	
27,5	29,0	40,0	1	543	976	543	111	69	1	263	738	263	25	127
			2	849	849	237	237		2	574	574	70	70	
32,0	33,5	40,0	1	551	1014	551	89	71	1	265	765	265	25	137
			2	878	878	225	225		2	599	599	304	304	
36,5	38,0	40,0	1	559	1054	559	65	74	1	266	796	266	25	146
			2	909	909	210	210		2	649	649	270	270	
41,0	42,5	40,0	1	567	1097	567	37	77	1	266	828	266	25	156
			2	942	942	193	193		2	703	703	232	232	
45,5	47,0	42,5	1	570	1162	570	25	80	1	482	885	482	79	166
			2	984	984	180	180		2	767	767	197	197	
50,0	51,5	60,0	1	631	1247	631	25	82	1	533	1012	533	54	176
			2	1065	1065	201	201		2	872	872	195	195	

3.4.1.6 Central ballasts and corner loads to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

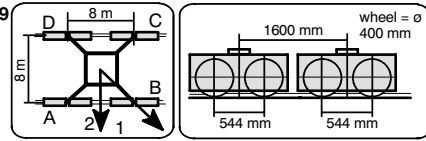


UW 480 Corner distance 8 m x 8 m Jib length 60 m

hook height [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
14,0	15,5	30,0	1	518	882	518	154	62	1	196	675	196	25	105
			2	775	775	261	261		2	539	539	120	120	
18,5	20,0	30,0	1	526	913	526	138	64	1	202	696	202	25	113
			2	800	800	252	252		2	558	558	116	116	
23,0	24,5	30,0	1	534	947	534	121	67	1	206	720	206	25	122
			2	826	826	242	242		2	578	578	112	112	
27,5	29,0	30,0	1	542	983	542	101	70	1	209	746	209	25	132
			2	854	854	230	230		2	598	598	108	108	
32,0	33,5	32,5	1	556	1028	556	84	73	1	223	775	223	25	142
			2	890	890	222	222		2	637	637	275	275	
36,5	38,0	32,5	1	564	1069	564	59	75	1	223	806	223	25	152
			2	921	921	207	207		2	689	689	239	239	
41,0	42,5	35,0	1	578	1120	578	36	78	1	478	864	478	92	162
			2	962	962	195	195		2	751	751	205	205	
45,5	47,0	37,5	1	578	1190	578	25	81	1	493	952	493	33	172
			2	1004	1004	181	181		2	818	818	167	167	
50,0	51,5	52,5	1	624	1278	624	25	83	1	511	1105	511	25	181
			2	1081	1081	195	195		2	920	920	156	156	

3.4.1.7 Central ballasts and corner loads to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

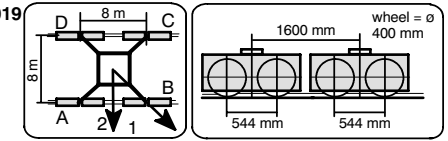


UW 480 Corner distance 8 m x 8 m Jib length 65 m

hook height [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
14,0	15,5	57,5	1	567	931	567	204	62	1	247	867	247	25	108
			2	824	824	310	310		2	644	644	49	49	
18,5	20,0	57,5	1	575	963	575	188	65	1	252	889	252	25	115
			2	849	849	302	302		2	660	660	49	49	
23,0	24,5	57,5	1	583	996	583	171	68	1	255	913	255	25	125
			2	875	875	291	291		2	676	676	48	48	
27,5	29,0	57,5	1	591	1032	591	150	70	1	258	941	258	25	135
			2	903	903	280	280		2	694	694	47	47	
32,0	33,5	60,0	1	606	1077	606	134	73	1	271	971	271	25	145
			2	939	939	272	272		2	719	719	50	50	
36,5	38,0	62,5	1	620	1125	620	115	76	1	283	1004	283	25	155
			2	977	977	263	263		2	768	768	272	272	
41,0	42,5	65,0	1	634	1175	634	93	79	1	294	1040	294	25	165
			2	1017	1017	251	251		2	831	831	237	237	
45,5	47,0	67,5	1	648	1229	648	67	81	1	302	1080	302	25	174
			2	1059	1059	238	238		2	898	898	198	198	
50,0	51,5	70,0	1	663	1287	663	38	84	1	524	1177	524	25	184
			2	1104	1104	221	221		2	970	970	155	155	

3.4.1.8 Central ballasts and corner loads to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

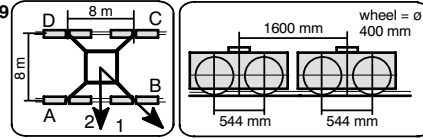


UW 480 Corner distance 8 m x 8 m Jib length 70 m

hook height [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
14,0	15,5	57,5	1	577	888	577	266	63	1	246	867	246	25	109
			2	797	797	357	357		2	644	644	48	48	
18,5	20,0	57,5	1	585	919	585	251	65	1	251	890	251	25	116
			2	821	821	348	348		2	660	660	49	49	
23,0	24,5	57,5	1	593	953	593	233	68	1	255	915	255	25	126
			2	847	847	338	338		2	677	677	48	48	
27,5	29,0	60,0	1	607	994	607	220	71	1	270	942	270	25	136
			2	881	881	333	333		2	701	701	52	52	
32,0	33,5	60,0	1	615	1033	615	198	74	1	270	973	270	25	146
			2	910	910	320	320		2	720	720	50	50	
36,5	38,0	62,5	1	629	1079	629	179	76	1	282	1006	282	25	156
			2	948	948	311	311		2	761	761	298	298	
41,0	42,5	65,0	1	644	1129	644	158	79	1	293	1042	293	25	166
			2	987	987	300	300		2	824	824	263	263	
45,5	47,0	67,5	1	658	1183	658	133	82	1	301	1082	301	25	175
			2	1029	1029	287	287		2	891	891	224	224	
50,0	51,5	70,0	1	672	1240	672	104	84	1	566	1131	566	25	185
			2	1073	1073	271	271		2	963	963	181	181	

3.4.1.9 Central ballasts and corner loads to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

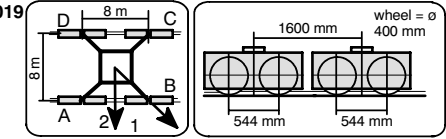


UW 480 Corner distance 8 m x 8 m Jib length 75 m

hook height [m]	central ballast [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,0	15,5	57,5	1	589	912	589	265	63	1	246	868	246	25	110
			2	817	817	360	360		2	670	670	147	147	
18,5	20,0	57,5	1	597	944	597	250	66	1	251	891	251	25	118
			2	842	842	351	351		2	690	690	143	143	
23,0	24,5	57,5	1	605	977	605	232	68	1	254	916	254	25	127
			2	868	868	341	341		2	710	710	138	138	
27,5	29,0	60,0	1	619	1020	619	218	71	1	269	944	269	25	137
			2	902	902	335	335		2	738	738	139	139	
32,0	33,5	60,0	1	627	1058	627	195	74	1	270	974	270	25	147
			2	932	932	322	322		2	761	761	132	132	
36,5	38,0	62,5	1	641	1106	641	176	76	1	281	1008	281	25	157
			2	970	970	312	312		2	801	801	281	281	
41,0	42,5	65,0	1	655	1157	655	154	79	1	291	1044	291	25	167
			2	1010	1010	301	301		2	865	865	246	246	
45,5	47,0	67,5	1	670	1211	670	129	82	1	570	1084	570	55	177
			2	1052	1052	287	287		2	934	934	206	206	
50,0	51,5	70,0	1	684	1269	684	99	85	1	545	1221	545	25	186
			2	1097	1097	270	270		2	1007	1007	161	161	

3.4.1.10 Central ballasts and corner loads to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

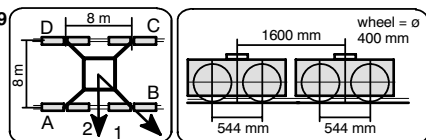


UW 480 Corner distance 8 m x 8 m Jib length 80 m

hook height [m]	central ballast [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,0	15,5	57,5	1	589	930	589	249	63	1	246	869	246	25	111
			2	830	830	349	349		2	691	691	128	128	
18,5	20,0	57,5	1	597	962	597	233	66	1	250	892	250	25	119
			2	855	855	340	340		2	711	711	124	124	
23,0	24,5	57,5	1	605	996	605	215	69	1	254	917	254	25	129
			2	882	882	329	329		2	731	731	119	119	
27,5	29,0	60,0	1	620	1039	620	201	71	1	268	945	268	25	138
			2	916	916	323	323		2	760	760	119	119	
32,0	33,5	60,0	1	628	1078	628	178	74	1	269	976	269	25	148
			2	946	946	310	310		2	783	783	112	112	
36,5	38,0	62,5	1	642	1126	642	158	77	1	402	1019	402	25	158
			2	984	984	300	300		2	836	836	248	248	
41,0	42,5	65,0	1	656	1177	656	136	79	1	405	1069	405	25	168
			2	1024	1024	288	288		2	901	901	211	211	
45,5	47,0	67,5	1	670	1232	670	109	82	1	550	1157	550	25	178
			2	1067	1067	274	274		2	971	971	170	170	
50,0	51,5	72,5	1	691	1297	691	85	85	1	506	1327	506	25	188
			2	1119	1119	263	263		2	1051	1051	131	131	

3.4.1.11 Central ballasts and corner loads to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive



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

hook height [m]	central ballast [m]	central ballast [t]	Crane in service torque moment: 327 kNm					horizontal force [kN]	Crane out of service torque moment: 0 kNm					horizontal force [kN]
			corner loads				jib position		corner loads				jib position	
☐	☐		A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
14,0	15,5	57,5	1	600	900	600	300	63	1	340	940	340	25	113
			2	812	812	388	388		2	735	735	88	88	
18,5	20,0	57,5	1	608	932	608	284	66	1	339	974	339	25	120
			2	837	837	379	379		2	755	755	84	84	
23,0	24,5	57,5	1	616	966	616	266	69	1	336	1011	336	25	130
			2	863	863	369	369		2	776	776	79	79	
27,5	29,0	60,0	1	630	1008	630	252	72	1	345	1051	345	25	140
			2	898	898	363	363		2	804	804	79	79	
32,0	33,5	60,0	1	638	1047	638	229	74	1	339	1095	339	25	150
			2	927	927	349	349		2	828	828	71	71	
36,5	38,0	62,5	1	652	1095	652	210	77	1	344	1143	344	25	160
			2	965	965	340	340		2	860	860	245	245	
41,0	42,5	65,0	1	667	1145	667	188	80	1	346	1194	346	25	169
			2	1005	1005	328	328		2	926	926	207	207	
45,5	47,0	67,5	1	681	1200	681	162	83	1	347	1250	347	25	179
			2	1048	1048	314	314		2	996	996	166	166	
50,0	51,5	72,5	1	701	1264	701	139	85	1	504	1372	504	25	189
			2	1099	1099	304	304		2	1078	1078	125	125	

2.2.1.1 Load capacity table

radius [m]		30	35	40	45	50	55	60	65	70	75	80	85
length of jib [m]	85 5,0-22,8	14,7	12,4	10,6	9,2	8,1	7,2	6,4	5,8	5,3	4,8	4,4	4,0
	80 5,0-24,4	15,9	13,4	11,5	10,0	8,8	7,8	7,0	6,3	5,8	5,2	4,8	
	75 5,0-25,2	16,5	13,9	11,9	10,4	9,2	8,2	7,3	6,6	6,0	5,5		
	70 5,0-25,8	16,9	14,3	12,2	10,7	9,4	8,4	7,5	6,8	6,2			
	65 5,0-26,3	17,3	14,6	12,5	10,9	9,7	8,6	7,7	7,0				
	60 5,0-27,1	17,9	15,0	12,9	11,3	10,0	8,9	8,0					
	55 5,0-27,6	18,2	15,4	13,2	11,5	10,2	9,1						
	50 5,0-28,3	18,7	15,8	13,6	11,9	10,5							
	45 5,0-28,7	19,1	16,1	13,8	12,1								
	40 5,0-30,7	20,0	17,3	14,9									
	30 5,0-30,0	20,0											

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 5,626 kg per meter hook path).

2.2.1.2 Load capacity table

radius [m]		30	35	40	45	50	55	60	65	70	75	80	85
jib length [m]	85 5,0-26,1	17,2	14,5	12,4	10,8	9,6	8,5	7,7	6,9	6,3	5,8	5,3	4,9
	80 5,0-27,9	18,5	15,6	13,4	11,7	10,4	9,2	8,3	7,5	6,9	6,3	5,8	
	75 5,0-28,6	19,0	16,0	13,8	12,0	10,6	9,5	8,6	7,8	7,1	6,5		
	70 5,0-28,9	19,2	16,2	14,0	12,2	10,8	9,7	8,7	7,9	7,2			
	65 5,0-29,2	19,4	16,4	14,1	12,3	10,9	9,8	8,8	8,0				
	60 5,0-29,5	19,7	16,6	14,3	12,5	11,1	9,9	8,9					
	55 5,0-30,0	20,0	16,8	14,5	12,7	11,2	10,0						
	50 5,0-30,4	20,0	17,1	14,7	12,9	11,4							
	45 5,0-30,7	20,0	17,3	14,9	13,1								
	40 5,0-32,9	20,0	18,7	16,1									
	30 5,0-30,0	20,0											

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 5,626 kg per meter hook path).

Arrangement of counterweights with hoisting winch

Hw 2075 FU

26,7 m counterjib				
85 m jib 10 x 3,4 t 37,0	80 m jib 9 x 3,4 t 33,6	75 m jib 9 x 3,4 t 33,6	70 m jib 8 x 3,4 t 30,2	65 m jib 7 x 3,4 t 26,8
total weight [t]				
21,7 m counterjib				
60 m jib 10 x 3,4 t 37,0	55 m jib 8 x 3,4 t 30,2	50 m jib 8 x 3,4 t 30,2	45 m jib 7 x 3,4 t 26,8	40 m jib 7 x 3,4 t 26,8
total weight [t]				
16,7 m counterjib				
30 m jib 9 x 3,4 t 33,6				Attention ! intermediate ballasting = 6x 3,4 t see assembly, section 5
total weight [t]				

Arrangement of counterweights with hoisting winch

Hw 2075 FU

26,7 m counterjib				
85 m jib 10 x 3,4 t 37,0	80 m jib 9 x 3,4 t 33,6	75 m jib 9 x 3,4 t 33,6	70 m jib 8 x 3,4 t 30,2	65 m jib 7 x 3,4 t 26,8
total weight [t]				
21,7 m counterjib				
60 m jib 10 x 3,4 t 37,0	55 m jib 8 x 3,4 t 30,2	50 m jib 8 x 3,4 t 30,2	45 m jib 7 x 3,4 t 26,8	40 m jib 7 x 3,4 t 26,8
total weight [t]				
16,7 m counterjib				
		30 m jib 9 x 3,4 t 33,6		Attention ! intermediate ballasting = 6x 3,4 t see assembly, section 5
total weight [t]				

2.2.1.3 Load capacity table

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

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 4 fall operation = 11,252 kg per meter hook path).

Attention!

In operation with 4 falls the maximum radius is decreased about 1 meter.

Arrangement of counterweights with hoisting winch

Hw 2075 FU

26,7 m counterjib				
85 m jib 10 x 3,4 t 37,0	80 m jib 9 x 3,4 t 33,6	75 m jib 9 x 3,4 t 33,6	70 m jib 8 x 3,4 t 30,2	65 m jib 7 x 3,4 t 26,8
total weight [t]				
21,7 m counterjib				
60 m jib 10 x 3,4 t 37,0	55 m jib 8 x 3,4 t 30,2	50 m jib 8 x 3,4 t 30,2	45 m jib 7 x 3,4 t 26,8	40 m jib 7 x 3,4 t 26,8
total weight [t]				
16,7 m counterjib				
30 m jib 9 x 3,4 t 33,6				Attention ! intermediate ballasting = 6x 3,4 t see assembly, section 5
total weight [t]				

2.2.1.4 Load capacity table

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

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 4 fall operation = 11,252 kg per meter hook path).

Attention!

In operation with 4 falls the maximum radius is decreased about 1 meter.

Arrangement of counterweights with hoisting winch

Hw 2075 FU

26,7 m counterjib				
85 m jib 10 x 3,4 t 37,0	80 m jib 9 x 3,4 t 33,6	75 m jib 9 x 3,4 t 33,6	70 m jib 8 x 3,4 t 30,2	65 m jib 7 x 3,4 t 26,8
total weight [t]				
21,7 m counterjib				
60 m jib 10 x 3,4 t 37,0	55 m jib 8 x 3,4 t 30,2	50 m jib 8 x 3,4 t 30,2	45 m jib 7 x 3,4 t 26,8	40 m jib 7 x 3,4 t 26,8
total weight [t]				
16,7 m counterjib				
		30 m jib 9 x 3,4 t 33,6	Attention ! intermediate ballasting = 6x 3,4 t see assembly, section 5	
total weight [t]				

2.2.1.5 Load capacity table

radius [m]		30	35	40	45	50	55	60	65	70	75	80	85
length of jib [m]	85 5,0-22,8	14,7	12,4	10,6	9,2	8,1	7,2	6,4	5,8	5,3	4,8	4,4	4,0
	80 5,0-24,4	15,9	13,4	11,5	10,0	8,8	7,8	7,0	6,3	5,8	5,2	4,8	
	75 5,0-25,2	16,5	13,9	11,9	10,4	9,2	8,2	7,3	6,6	6,0	5,5		
	70 5,0-25,8	16,9	14,3	12,2	10,7	9,4	8,4	7,5	6,8	6,2			
	65 5,0-26,3	17,3	14,6	12,5	10,9	9,7	8,6	7,7	7,0				
	60 5,0-27,1	17,9	15,0	12,9	11,3	10,0	8,9	8,0					
	55 5,0-27,6	18,2	15,4	13,2	11,5	10,2	9,1						
	50 5,0-28,3	18,7	15,8	13,6	11,9	10,5							
	45 5,0-28,7	19,1	16,1	13,8	12,1								
	40 5,0-30,7	20,0	17,3	14,9									
	30 5,0-30,0	20,0											

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 5,626 kg per meter hook path).

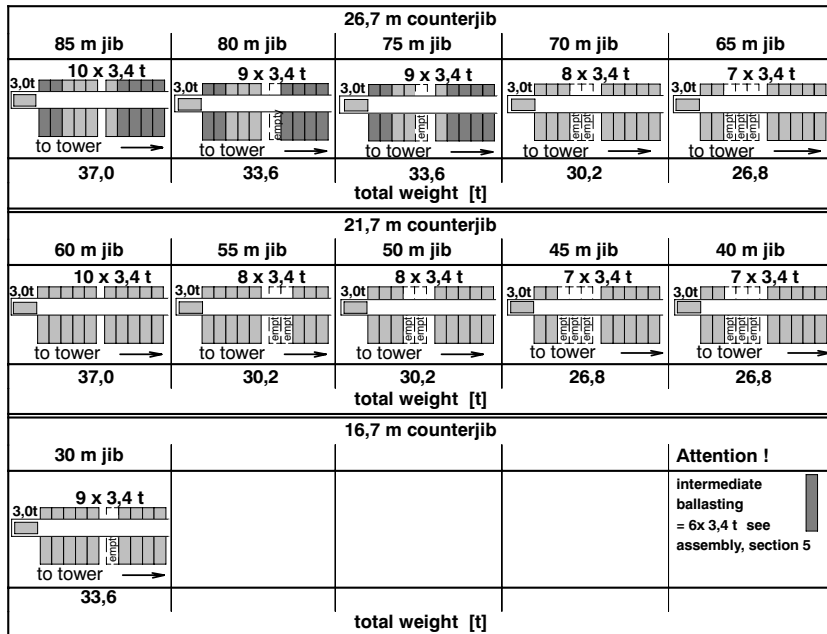
2.2.1.6 Load capacity table

radius [m]		30	35	40	45	50	55	60	65	70	75	80	85
jib length [m]	85 5,0-26,1	17,2	14,5	12,4	10,8	9,6	8,5	7,7	6,9	6,3	5,8	5,3	4,9
	80 5,0-27,9	18,5	15,6	13,4	11,7	10,4	9,2	8,3	7,5	6,9	6,3	5,8	
	75 5,0-28,6	19,0	16,0	13,8	12,0	10,6	9,5	8,6	7,8	7,1	6,5		
	70 5,0-28,9	19,2	16,2	14,0	12,2	10,8	9,7	8,7	7,9	7,2			
	65 5,0-29,2	19,4	16,4	14,1	12,3	10,9	9,8	8,8	8,0				
	60 5,0-29,5	19,7	16,6	14,3	12,5	11,1	9,9	8,9					
	55 5,0-30,0	20,0	16,8	14,5	12,7	11,2	10,0						
	50 5,0-30,4	20,0	17,1	14,7	12,9	11,4							
	45 5,0-30,7	20,0	17,3	14,9	13,1								
	40 5,0-32,9	20,0	18,7	16,1									
	30 5,0-30,0	20,0											

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 5,626 kg per meter hook path).

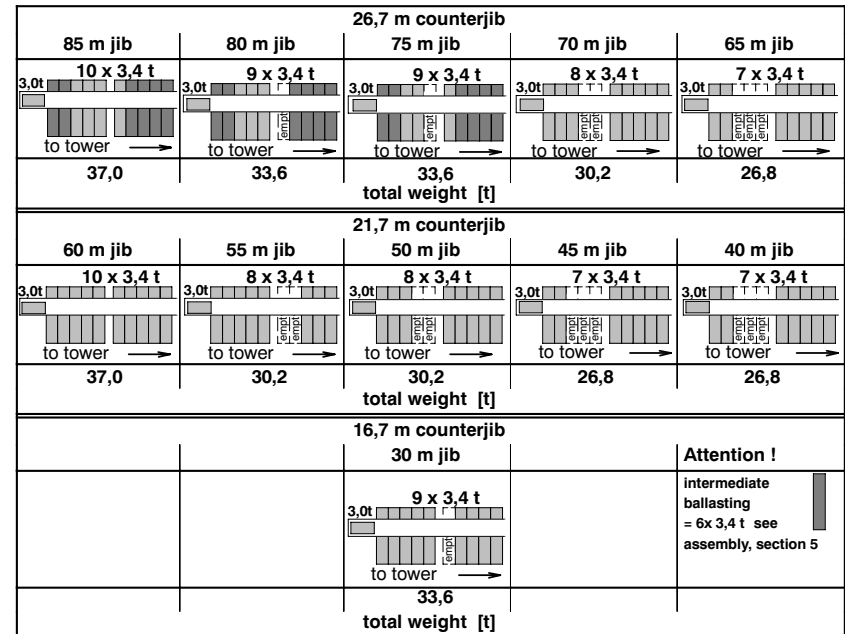
Arrangement of counterweights with hoisting winch

Hw 2090 FU



Arrangement of counterweights with hoisting winch

Hw 2090 FU



2.2.1.7 Load capacity table

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

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 4 fall operation = 11,252 kg per meter hook path).

Attention!

In operation with 4 falls the maximum radius is decreased about 1 meter.

Arrangement of counterweights with hoisting winch

Hw 2090 FU

26,7 m counterjib				
85 m jib 10 x 3,4 t 37,0	80 m jib 9 x 3,4 t 33,6	75 m jib 9 x 3,4 t 33,6	70 m jib 8 x 3,4 t 30,2	65 m jib 7 x 3,4 t 26,8
total weight [t]				
21,7 m counterjib				
60 m jib 10 x 3,4 t 37,0	55 m jib 8 x 3,4 t 30,2	50 m jib 8 x 3,4 t 30,2	45 m jib 7 x 3,4 t 26,8	40 m jib 7 x 3,4 t 26,8
total weight [t]				
16,7 m counterjib				
30 m jib 9 x 3,4 t 33,6				Attention ! intermediate ballasting = 6x 3,4 t see assembly, section 5
total weight [t]				

2.2.1.8 Load capacity table

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

The load capacities refer to a hook path of 40,5 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 4 fall operation = 11,252 kg per meter hook path).

Attention!

In operation with 4 falls the maximum radius is decreased about 1 meter.

Arrangement of counterweights with hoisting winch



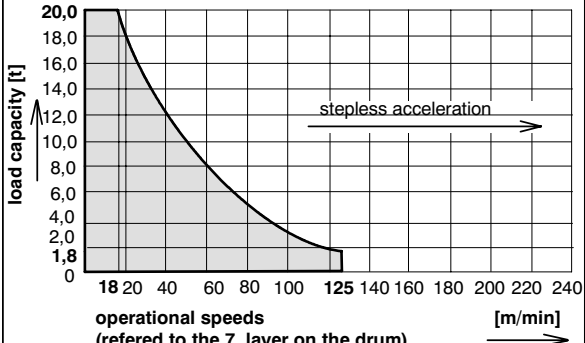

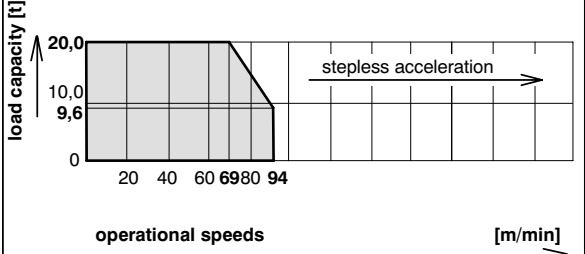

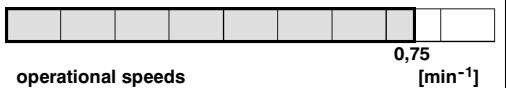
Hw 2090 FU

26,7 m counterjib				
85 m jib 10 x 3,4 t 37,0	80 m jib 9 x 3,4 t 33,6	75 m jib 9 x 3,4 t 33,6	70 m jib 8 x 3,4 t 30,2	65 m jib 7 x 3,4 t 26,8
total weight [t]				
21,7 m counterjib				
60 m jib 10 x 3,4 t 37,0	55 m jib 8 x 3,4 t 30,2	50 m jib 8 x 3,4 t 30,2	45 m jib 7 x 3,4 t 26,8	40 m jib 7 x 3,4 t 26,8
total weight [t]				
16,7 m counterjib				
		30 m jib 9 x 3,4 t 33,6	Attention ! intermediate ballasting = 6x 3,4 t see assembly, section 5	
total weight [t]				

2.2.2.1



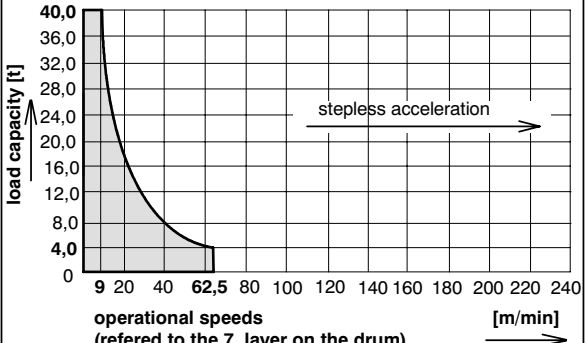

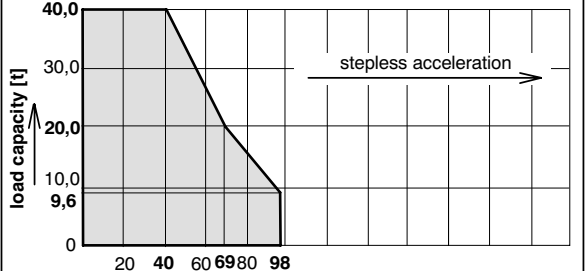

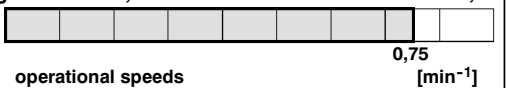
Operational speeds

380 V - 460 V, 50/60 Hz

drive [model]	operational speed load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 2075 FU	hoisting 	400	75	116 total- output for a simultaneity factor of 0,7
				
Kw	traversing		18,0	
				
Dw	slewing 0,75 min ⁻¹		2 x 7,5	
				

2.2.2.2 Operational speeds





380 V - 460 V, 50/60 Hz

drive [model]	operational speed load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 2075 FU	hoisting 	200	75	103 total- output for a simultaneity factor of 0,7
				
Kw	traversing		18,0	
				
	operational speeds			
Dw	slewing 0,75 min ⁻¹		2 x 7,5	
				

2.2.2.3

Operational speeds





380 V - 460 V, 50/60 Hz

drive [model]	operational speed load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 2090 FU	hoisting 	400	90	121 total output for a simultaneity factor of 0,7
	<p>load capacity [t]</p> <p>operational speeds (referred to the 7. layer on the drum) [m/min]</p> <p>stepless acceleration</p>			
Kw	traversing		18,0	
	<p>load capacity [t]</p> <p>operational speeds [m/min]</p> <p>stepless acceleration</p>			
Dw	slewing 0,75 min ⁻¹		2 x 7,5	
	<p>operational speeds [min⁻¹]</p>			

2.2.2.4

Operational speeds

380 V - 460 V, 50/60 Hz

drive [model]	operational speed load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 2090 FU	hoisting 	200	90	116 total output for a simultaneity factor of 0,7
	<p>load capacity [t]</p> <p>operational speeds (referred to the 7. layer on the drum) [m/min]</p> <p>stepless acceleration</p>			
Kw	traversing		18,0	
	<p>load capacity [t]</p> <p>operational speeds [m/min]</p> <p>stepless acceleration</p>			
Dw	slewing 0,75 min ⁻¹		2 x 7,5	
	<p>operational speeds [min⁻¹]</p>			

2.2.3.1

Load capacity table [kg] data given in distances of meters

DIN 15018 / H1 - B3

radius [m]	jib length [m]										
	30	40	45	50	55	60	65	70	75	80	85
17,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
18,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
19,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
20,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
21,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
22,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
23,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	19770
24,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	18870
25,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	19430	18040
26,0	20000	20000	20000	20000	20000	20000	20000	19820	19350	18610	17280
27,0	20000	20000	20000	20000	20000	20000	19460	19020	18570	17850	16570
28,0	20000	20000	20000	20000	19660	19260	18700	18280	17840	17150	15910
29,0	20000	20000	19800	19440	18920	18530	17990	17580	17160	16500	15300
30,0	20000	20000	19100	18700	18200	17900	17300	16900	16500	15900	14700
31,0		19760	18400	18070	17580	17220	16710	16330	15930	15310	14190
32,0		19090	17770	17450	16970	16620	16130	15760	15380	14780	13690
33,0		18450	17170	16860	16400	16060	15580	15230	14860	14270	13220
34,0		17860	16610	16310	15860	15530	15070	14720	14360	13800	12780
35,0		17300	16100	15800	15400	15000	14600	14300	13900	13400	12400
36,0		16760	15590	15300	14880	14570	14130	13800	13460	12930	11960
37,0		16260	15120	14840	14430	14120	13700	13380	13050	12530	11590
38,0		15780	14670	14400	14000	13700	13290	12980	12660	12150	11340
39,0		15330	14250	13980	13590	13300	12900	12600	12290	11790	10900
40,0		14900	13800	13600	13200	12900	12500	12200	11900	11500	10600
41,0			13460	13210	12840	12570	12180	11890	11600	11130	10280
42,0			13100	12850	12490	12220	11850	11570	11280	10820	9990
43,0			12750	12510	12160	12890	11530	11260	10970	10520	9710
44,0			12420	12180	11840	11580	11220	10960	10680	10240	9450
45,0			12100	11900	11500	11300	10900	10700	10400	10000	9200
46,0				11570	11240	11000	10660	10400	10130	9720	8960
47,0				11290	10960	10720	10390	10140	9880	9470	8730
48,0				11020	10700	10460	10130	9890	9630	9230	8510
49,0				10750	10440	10210	9890	9650	9400	9010	8300
50,0				10500	10200	10000	9700	9400	9200	8800	8100
51,0					9960	9740	9430	9200	8960	8580	7900
52,0					9730	9520	9210	8990	8750	8380	7710
53,0					9510	9300	9000	8780	8550	8190	7530
54,0					9300	9090	8800	8590	8360	8000	7360
55,0					9100	8900	8600	8400	8200	7800	7200

The loads refer to a hook path of 40,5 m

2.2.3.1

Load capacity table [kg] data given in distances of meters

DIN 15018 / H1 - B3

radius [m]	jib length [m]										
	30	40	45	50	55	60	65	70	75	80	85
56,0						8700	8420	8210	7990	7650	7030
57,0						8520	8240	8040	7820	7480	6870
58,0						8340	8070	7870	7650	7320	6720
59,0						8170	7900	7700	7490	7180	6580
60,0						8000	7700	7500	7300	7000	6400
61,0							7580	7390	7190	6870	6300
62,0							7430	7240	7040	6730	6170
63,0							7280	7090	6900	6590	6040
64,0							7140	6960	6760	6460	5920
65,0							7000	6800	6600	6300	5800
66,0								6690	6500	6210	5680
67,0								6560	6380	6090	5570
68,0								6440	6260	5860	5460
69,0								6320	6140	5750	5360
70,0								6200	6000	5800	5300
71,0									5910	5640	5150
72,0									5810	5540	5060
73,0									5700	5440	4960
74,0									5600	5340	4870
75,0									5500	5200	4800
76,0										5150	4690
77,0										5060	4610
78,0										4970	4530
79,0										4880	4440
80,0										4800	4400
81,0											4290
82,0											4210
83,0											4140
84,0											4070
85,0											4000

The loads refer to a hook path of 40,5 m

2.2.3.2

Load capacity table [kg] data given in distances of meters

DIN 15018 / H1 - B3

radius [m]	jib length [m]														
	30	40	45	50	55	60	65	70	75	80	85				
17,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000				
18,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000				
19,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000				
20,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000				
21,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000				
22,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000				
23,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000				
24,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000				
25,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000				
26,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000				
27,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	19280				
28,0	20000	20000	20000	20000	20000	20000	20000	20000	20000	19940	18530				
29,0	20000	20000	20000	20000	20000	20000	20000	19960	19710	19190	17830				
30,0	20000	20000	20000	20000	20000	19700	19400	19200	19000	18500	17200				
31,0		20000	19810	19560	19250	18940	18760	18560	18320	17840	16560				
32,0		20000	19130	18890	18590	18310	18120	17920	17690	17220	15980				
33,0		19900	18500	18260	17970	17700	17510	17320	17100	16640	15440				
34,0		19260	17900	17670	17390	17130	16940	16760	16540	16100	14930				
35,0		18700	17300	17100	16800	16600	16400	16200	16000	15600	14500				
36,0		18090	16800	16590	16320	16070	15900	15720	15520	15590	14000				
37,0		17550	16300	16090	15830	15590	15420	15250	15050	15100	13570				
38,0		17040	15820	15620	15370	15130	14960	14800	14610	14640	13170				
39,0		16550	15370	15170	14920	14700	14530	14370	14190	14210	12780				
40,0		16100	14900	14700	14500	14300	14100	14000	13800	13400	12400				
41,0			14530	14340	14110	13890	13730	13580	13400	13030	12070				
42,0			14140	13950	13730	13510	13360	13210	13040	12680	11740				
43,0			13760	13590	13360	13160	13010	12860	12690	12340	11420				
44,0			13410	13230	13020	12820	12670	12530	12360	12020	11120				
45,0			13100	12900	12700	12500	12300	12200	12000	11700	10800				
46,0				12580	12370	12180	12040	11900	11750	11420	10550				
47,0				12270	12070	11880	11740	11610	11460	11130	10290				
48,0				11980	11780	11590	11460	11330	11180	10860	10040				
49,0				11700	11500	11320	11190	11060	10910	10600	9800				
50,0				11400	11200	11100	10900	10800	10600	10400	9600				
51,0					10980	11060	10680	10550	10410	10360	9340				
52,0						10730	10800	10440	10320	10180	9120				
53,0							10490	10560	10200	10090	9950	9890	8920		
54,0								10260	10320	9980	9870	9730	9660	8720	
55,0									10000	9900	9800	9700	9500	9200	8500

The loads refer to a hook path of 40,5 m

2.2.3.2

Load capacity table [kg] data given in distances of meters


DIN 15018 / H1 - B3

radius [m]	jib length [m]										
	30	40	45	50	55	60	65	70	75	80	85
56,0						9670	9560	9450	9320	9050	8340
57,0						9470	9360	9250	9120	8860	8160
58,0						9280	9170	9060	8930	8670	7990
59,0						9090	8980	8870	8750	8490	7820
60,0						8900	8800	8700	8600	8300	7700
61,0							8620	8520	8400	8150	7500
62,0							8460	8350	8240	7990	7350
63,0							8290	8190	8080	7840	7210
64,0							8130	8030	7920	7690	7070
65,0							8000	7900	7800	7500	6900
66,0								7740	7630	7400	6800
67,0								7590	7490	7260	6670
68,0								7450	7350	7120	6540
69,0								7320	7210	6990	6420
70,0								7200	7100	6900	6300
71,0									6960	6750	6190
72,0									6840	6630	6080
73,0									6720	6510	5970
74,0									6600	6400	5860
75,0									6500	6300	5800
76,0										6180	5660
77,0										6080	5560
78,0										5970	5470
79,0										5880	5370
80,0										5800	5300
81,0											5200
82,0											5110
83,0											5030
84,0											4940
85,0											4900

The loads refer to a hook path of 40,5 m

2.2.3.3 Load capacity table [kg] data given in distances of meters


DIN 15018 / H1 - B3

radius [m]	jib length [m]											
	30	40	45	50	55	60	65	70	75	80	85	
11,0	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000
12,0	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	37600
13,0	40000	40000	40000	40000	40000	40000	40000	39290	38420	37020	34420	
14,0	40000	40000	40000	40000	39110	38860	37440	36220	35410	34110	31700	
15,0	40000	40000	37950	37460	36260	36030	34700	33560	32810	31590	29340	
16,0	38890	38230	35350	34890	33760	33540	32300	31230	30530	29380	27280	
17,0	36390	35760	33050	32620	31560	31350	30180	29180	28510	27440	25450	
18,0	34160	33570	31010	30600	29600	29410	28300	27350	26720	25710	23830	
19,0	32170	31610	29180	28800	27850	27660	26620	25720	25120	24160	22380	
20,0	30380	29840	27540	27170	26270	26100	25100	24250	23680	22770	21080	
21,0	28750	28240	26050	25700	24840	24680	23730	22910	22380	21510	19900	
22,0	27280	26790	24700	24360	23550	23390	22480	21710	21190	20360	18830	
23,0	25930	25470	23470	23140	22360	22210	21340	20600	20110	19320	17850	
24,0	24700	24250	22330	22030	21280	21130	20300	19590	19120	18350	16950	
25,0	23560	23130	21290	21000	20280	20140	19340	18660	18200	17470	16120	
26,0	22510	22100	20330	20050	19350	19220	18450	17800	17360	16660	15360	
27,0	21540	21140	19440	19170	18500	18370	17630	17000	16580	15900	14660	
28,0	20640	20260	18610	18350	17710	17580	16870	16260	15860	15200	14000	
29,0	19800	19430	17850	17590	16970	16850	16160	15570	15180	14550	13390	
30,0		18700	17100	16900	16300	16100	15500	14900	14600	14000	12800	
31,0		17940	16460	16220	15640	15520	14880	14330	13970	13370	12290	
32,0		17260	15830	15590	15030	14920	14300	13770	13410	12840	11790	
33,0		16630	15230	15010	14460	14360	13760	13240	12890	12340	11320	
34,0		16030	14680	14460	13930	13830	13240	12740	12410	11870	10880	
35,0		15500	14200	13900	13400	13300	12800	12300	12000	11400	10500	
36,0		14930	13660	13450	12950	12850	12300	11830	11510	11000	10070	
37,0		14430	13190	12990	12500	12410	11870	11410	11100	10610	10000	
38,0		13950	12740	12550	12070	11980	11460	11010	10710	10230	9340	
39,0		13500	12320	12130	11670	11580	11070	10630	10340	9870	9010	
40,0			11900	11700	11300	11200	10700	10300	10000	9500	8700	
41,0			11540	11360	10920	10830	10350	9930	9660	9210	8390	
42,0			11180	11000	10570	10490	10010	9610	9340	8900	8100	
43,0			10830	10660	10240	10160	9700	9300	9040	8610	7830	
44,0			10500	10330	9920	9840	9390	9000	8750	8330	7560	
45,0				10000	9600	9500	9100	8700	8500	8100	7300	
46,0				9720	9330	9250	8820	8450	8200	7810	7070	
47,0				9440	9050	8980	8560	8190	7950	7560	6850	
48,0				9160	8790	8720	8300	7940	7710	7330	6630	
49,0				8900	8530	8460	8060	7710	7480	7100	6410	

The loads refer to a hook path of 40,5 m

2.2.3.3 Load capacity table [kg] data given in distances of meters


DIN 15018 / H1 - B3

radius [m]	jib length [m]											
	30	40	45	50	55	60	65	70	75	80	85	
50,0					8300	8200	7800	7500	7300	6900	6200	
51,0					8050	7980	7590	7260	7040	6680	6020	
52,0					7830	7760	7380	7050	6830	6480	5830	
53,0					7610	7540	7170	6850	6630	6290	5650	
54,0					7400	7340	6970	6650	6440	6100	5480	
55,0						7100	6800	6500	6300	5900	5300	
56,0						6940	6590	6280	6080	5750	5150	
57,0						6750	6410	6110	5910	5590	5000	
58,0						6570	6230	5940	5740	5430	4850	
59,0						6400	6060	5770	5580	5270	4700	
60,0							5900	5600	5400	5100	4600	
61,0							5740	5460	5280	4980	4430	
62,0							5590	5320	5130	4840	4290	
63,0							5440	5170	4990	4700	4170	
64,0							5300	5030	4860	4570	4040	
65,0								4900	4700	4400	4000	
66,0								4770	4600	4320	3810	
67,0								4640	4470	4200	3700	
68,0								4520	4360	4090	3590	
69,0								4400	4240	3970	3480	
70,0									4100	3900	3400	
71,0									4010	3760	3280	
72,0										3910	3650	3180
73,0										3800	3550	3090
74,0										3700	3450	3000
75,0											3400	2900
76,0											3260	2820
77,0											3170	2740
78,0											3090	2650
79,0											3000	2570
80,0												2500
81,0												2420
82,0												2340
83,0												2270
84,0												2200
85,0												

The loads refer to a hook path of 40,5 m

2.2.3.4 Load capacity table [kg] data given in distances of meters


DIN 15018 / H1 - B3

radius [m]	jib length [m]											
	30	40	45	50	55	60	65	70	75	80	85	
11,0	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000
12,0	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000
13,0	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	39950	39950
14,0	40000	40000	40000	40000	40000	40000	40000	40000	40000	39750	36840	36840
15,0	40000	40000	40000	40000	39590	39170	38680	37960	37540	36850	34130	34130
16,0	40000	40000	38020	37640	36880	36490	36030	35360	34960	34320	31770	31770
17,0	39090	38240	35570	35210	34500	34130	33690	33060	32690	32080	29680	29680
18,0	36710	35910	33390	33050	32380	32030	31610	31020	30670	30090	27830	27830
19,0	34580	33820	31440	31120	30480	30150	29760	29190	28860	28320	26170	26170
20,0	32670	31950	29680	29380	28770	28460	28080	27550	27230	26720	24680	24680
21,0	30940	30250	28090	27800	27220	26920	26570	26060	25760	25270	23320	23320
22,0	29360	28710	26640	26370	25820	25530	25190	24710	24420	23950	22100	22100
23,0	27930	27300	25330	25060	24530	24260	23940	23470	23190	22750	20970	20970
24,0	26610	26010	24120	23860	23360	23100	22790	22340	22070	21650	19950	19950
25,0	25400	24820	23000	22760	22270	22020	21730	21300	21040	20630	19000	19000
26,0	24280	23720	21980	21740	21280	21040	20750	20340	20090	19700	18130	18130
27,0	23240	22700	21030	20800	20350	20120	19840	19450	19210	18830	17320	17320
28,0	22280	21760	20140	19930	19490	19270	19000	18620	18390	18030	16570	16570
29,0	21400	20880	19320	19110	18690	18480	18220	17850	17630	17280	15870	15870
30,0		20100	18600	18400	17900	17700	17500	17100	16900	16600	15200	15200
31,0		19300	17830	17640	17250	17050	16810	16460	16250	15920	14607	14607
32,0		18580	17160	16970	16590	16400	16160	15830	15630	15310	14040	14040
33,0		17900	16530	16350	15980	15790	15560	15240	15040	14730	13500	13500
34,0		17270	15930	15760	15400	15220	15000	14680	14490	14190	13000	13000
35,0		16700	15400	15200	14900	14700	14500	14200	14000	13700	12500	12500
36,0		16100	14840	14680	14340	14160	13960	13660	13480	13200	12060	12060
37,0		15570	14340	14180	13850	13680	13480	13190	13020	12740	11640	11640
38,0		15060	13870	13710	13390	13220	13030	12750	12580	12310	11230	11230
39,0		14600	13420	13260	12950	12790	12600	12320	12160	11900	10850	10850
40,0			13000	12800	12500	12400	12200	11900	11700	11500	10500	10500
41,0			12580	12430	12140	11990	11800	11540	11390	11140	10140	10140
42,0			12190	12050	11760	11610	11430	11180	11030	10780	9810	9810
43,0			11830	11680	11400	11260	11080	10830	10690	10450	9500	9500
44,0			11500	11330	11060	10920	10750	10500	10360	10130	9200	9200
45,0				11000	10700	10600	10400	10200	10000	9800	8900	8900
46,0				10680	10730	10280	10120	9890	9750	9520	8640	8640
47,0				10370	10420	9980	9820	9600	9460	9240	8380	8380
48,0				10080	10120	9700	9540	9320	9190	8970	8120	8120
49,0				9800	9830	9420	9270	9050	8920	8710	7880	7880

The loads refer to a hook path of 40,5 m

2.2.3.4 Load capacity table [kg] data given in distances of meters

DIN 15018 / H1 - B3

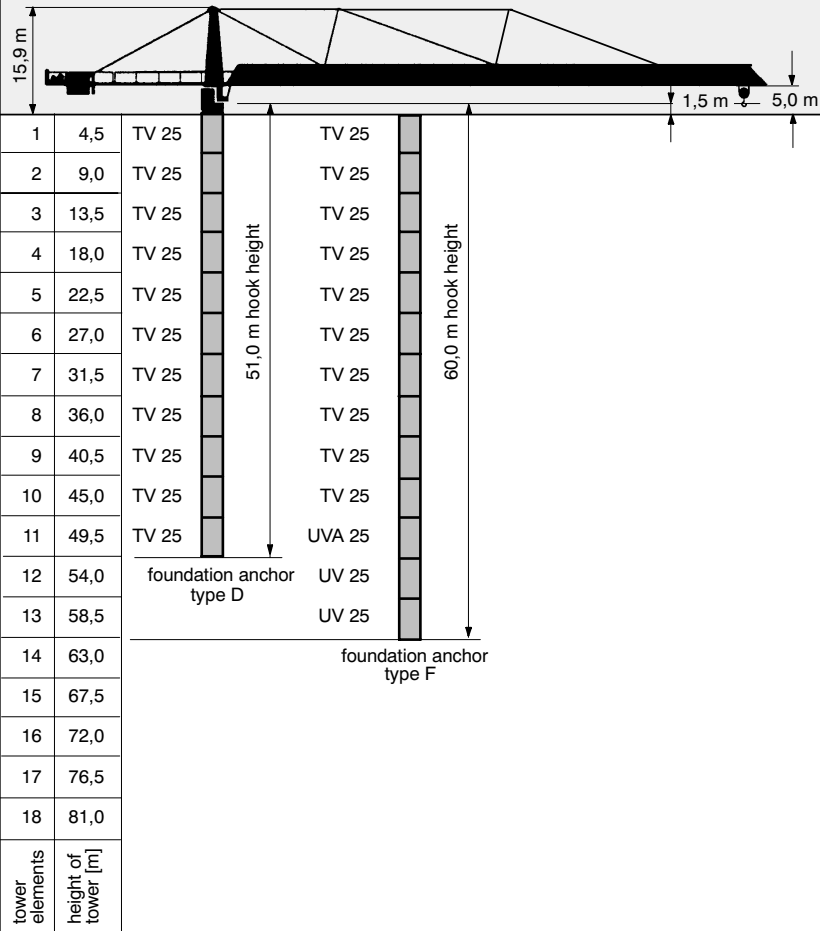
radius [m]	jib length [m]											
	30	40	45	50	55	60	65	70	75	80	85	
50,0					9300	9200	9000	8800	8700	8500	7700	7700
51,0					9030	8910	8760	8550	8430	8230	7430	7430
52,0					8790	8670	8520	8320	8200	8000	7210	7210
53,0					8550	8430	8290	8090	7970	7780	7010	7010
54,0					8300	8210	8070	7870	7760	7570	6810	6810
55,0						8000	7900	7700	7500	7400	6600	6600
56,0						7780	7650	7460	7350	7160	6430	6430
57,0						7580	7450	7260	7150	6970	6260	6260
58,0						7390	7260	7080	6970	6790	6090	6090
59,0						7200	7070	6890	6780	6610	5920	5920
60,0							6800	6700	6600	6400	5800	5800
61,0							6720	6550	6440	6270	5600	5600
62,0							6550	6380	6280	6110	5450	5450
63,0							6390	6220	6120	5960	5310	5310
64,0							6200	6070	5970	5810	5170	5170
65,0								5900	5800	5700	5000	5000
66,0								5770	5670	5520	4900	4900
67,0								5630	5530	5380	4770	4770
68,0								5492	5270	5250	4650	4650
69,0								5400	5400	5120	4530	4530
70,0									5100	5000	4400	4400
71,0									5010	4870	4290	4290
72,0									4890	4750	4180	4180
73,0									4770	4630	4070	4070
74,0									4700	4520	3970	3970
75,0										4400	3900	3900
76,0										4300	3770	3770
77,0										4200	3670	3670
78,0										4100	3580	3580
79,0										4000	3480	3480
80,0											3400	3400
81,0											3310	3310
82,0											3220	3220
83,0											3140	3140
84,0											3100	3100
85,0												

The loads refer to a hook path of 40,5 m

2.2.7.1 Tower configurations

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

Slewing part:

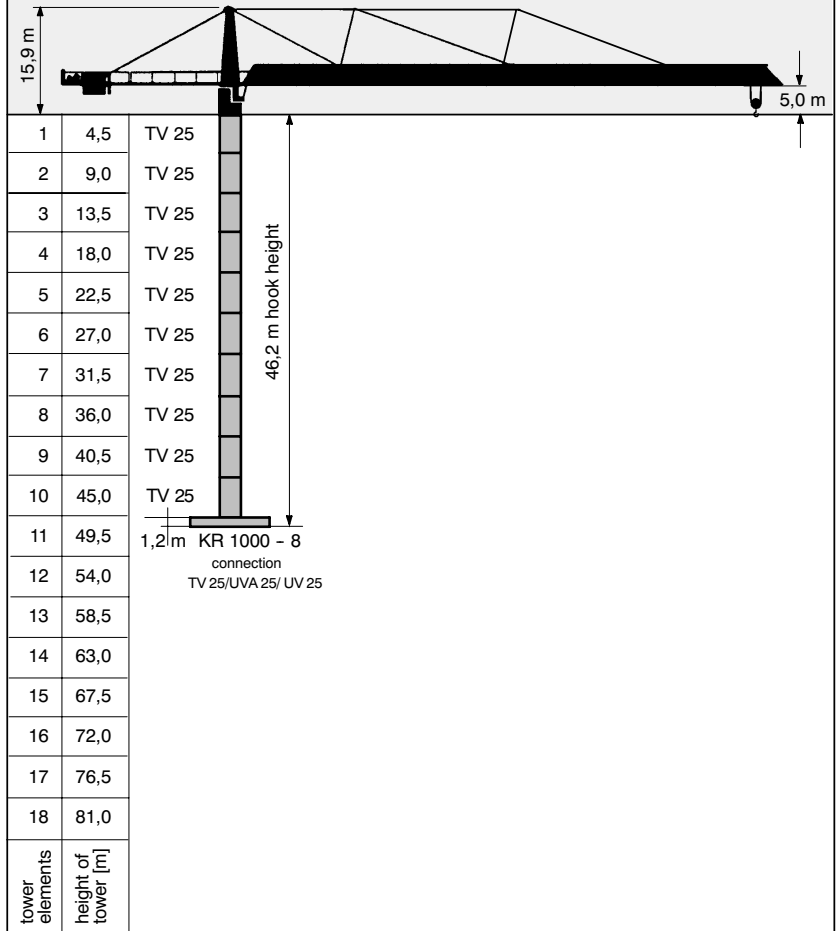


For data regarding foundation anchors see section 12.
The tower configurations are recommended for economic crane installation and may be used in any case.
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation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

2.2.8.1 Tower configurations

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

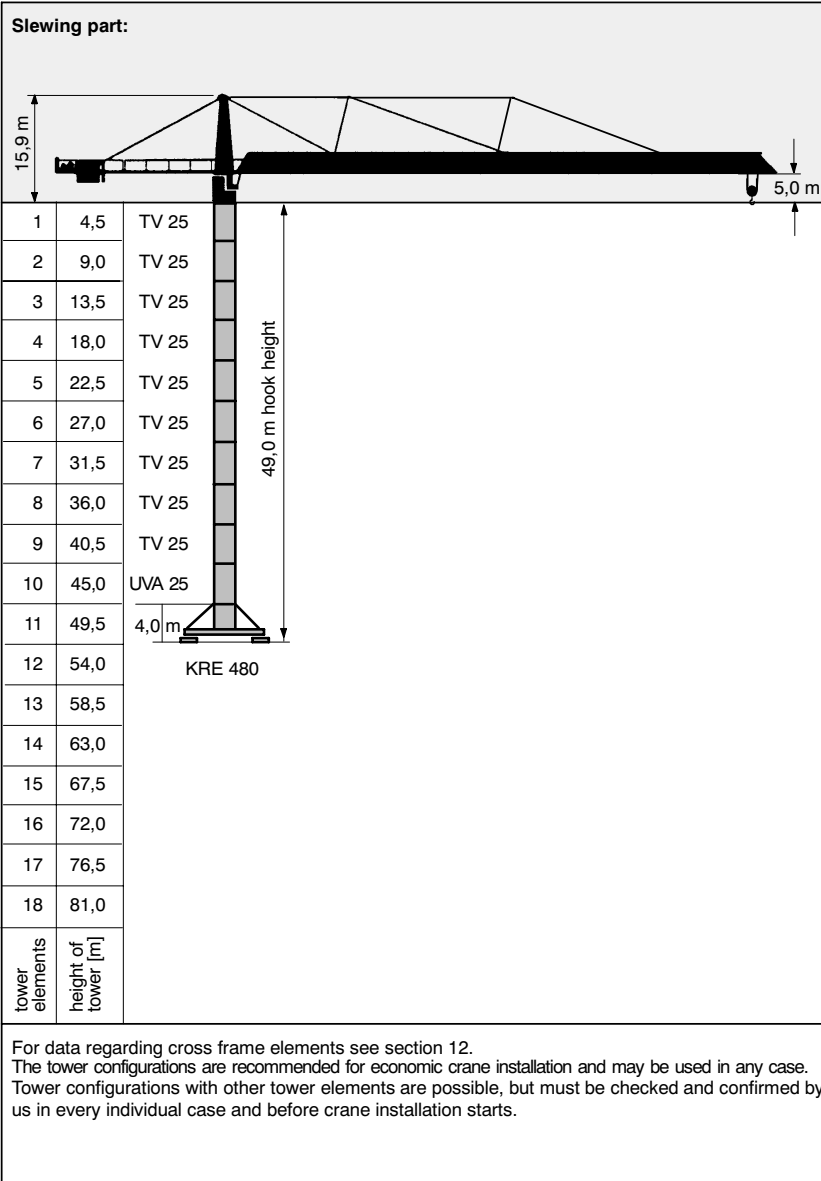
Slewing part:



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.

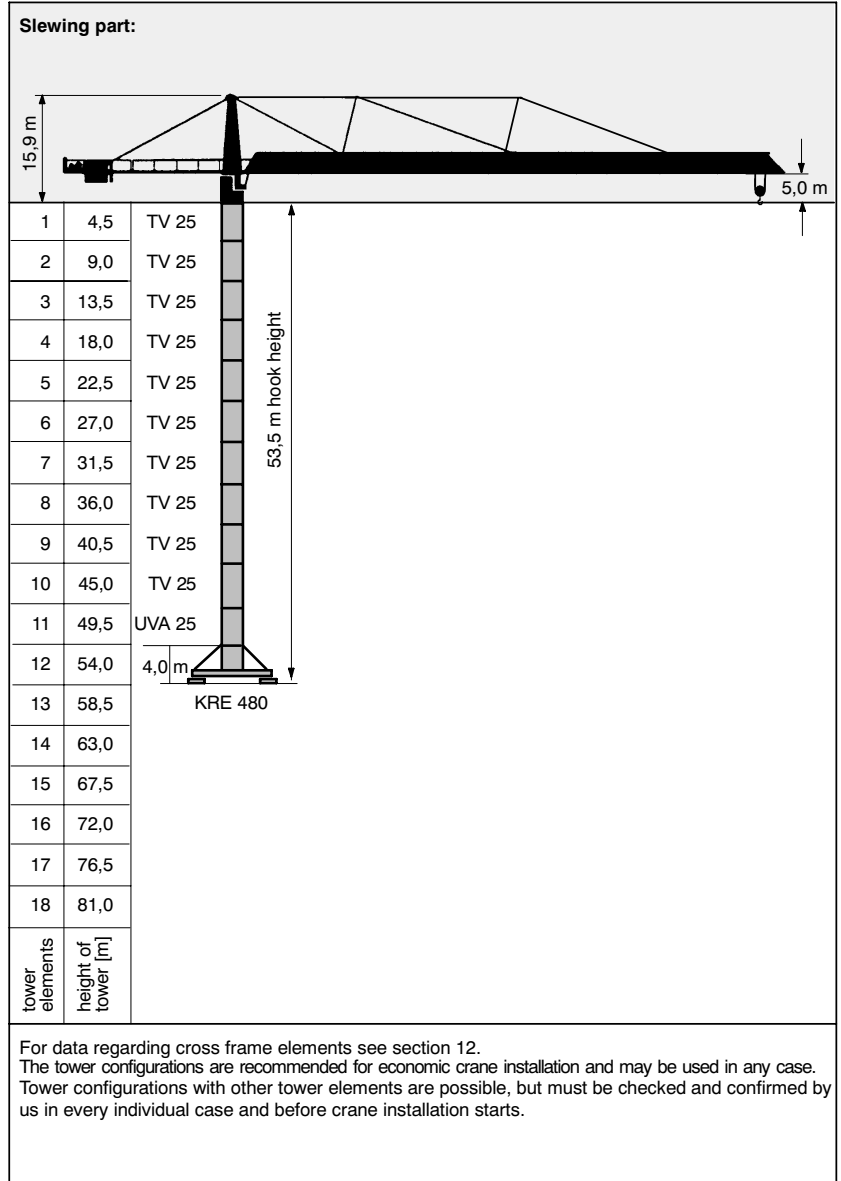
2.2.9.1 Tower configuration for jibs 85 m and 80 m

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



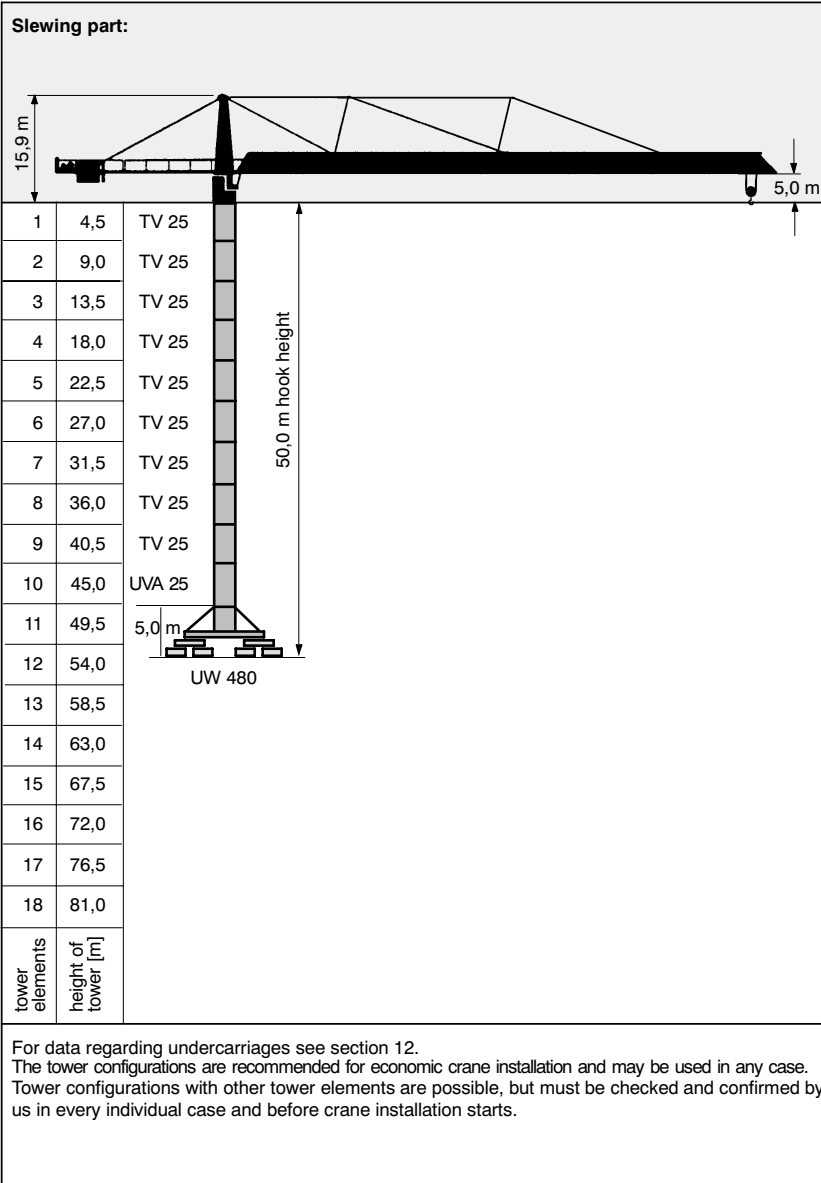
2.2.9.2 Tower configuration for jibs 30 m up to 75 m

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



2.2.10.1 Tower configuration

for a travelling crane without climbing device



2.3.1 Colli list

Item	pcs.	Designation	Colli	L (m)	B (m)	H (m)	weight (kg)	Volume (m ³)
1	1	tower top complete with platforms at tower top, ladders and different bracing brackets, without platform at slewing frame		15,88	2,99	2,57	19840	122,0
		tower top complete without bracing brackets, platforms or ladders		15,88	2,57	2,57	18550	104,9
		upper part of tower top without platforms, ladders or bracing brackets		10,52	2,10	2,20	4280	48,6
		lower part of tower top with slewing frame, DV, slewing drives, slip ring system and adapter; without platform at slewing frame		6,81	2,57	2,57	14270	51,5
		lower part of tower top with slewing frame, DV, slewing drives, slip ring system without adapter or platform at slewing frame		3,50	2,30	2,50	9730	20,1
2	1	platform slewing frame		1,84	0,77	0,99	110	1,4
3	1	driver's cabin with driver's cabin suspension		2,13	2,05	2,32	760	10,1
		driver's cabin suspension		1,03	1,85	0,91	170	1,7

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

2.3.2

Colli list

Item	pcs.	designation	colli	L (m)	B (m)	H (m)	weight (kg)	volume (m ³)
4	1	counterjib 26,7 m folded without platforms		16,60	2,10	1,50	7700	52,3
		counterjib 26,7 m unfolded without platforms		25,12	2,10	0,75	7700	39,6
		counterjib 21,7 m folded without platforms		11,60	2,10	1,50	6250	36,5
		counterjib 21,7 m unfolded without platforms		20,12	2,10	0,75	6250	31,7
		counterjib 16,7 m folded without platforms		11,60	2,10	1,50	4750	36,5
		counterjib 16,7 m unfolded without platforms		15,12	2,10	0,75	4750	23,8
5	1	platform1/460x2570		2,61	0,62	0,52	81	0,8
	1	platform2/460x2560		2,56	0,62	0,52	74	0,8
	1	platform3/460x2060		2,06	0,62	0,52	63	0,7
	1	platform5/460x2078		2,11	0,62	0,52	70	0,7
6	2	platform4/310x2060		2,06	0,47	0,52	48	0,5
	1	platform6/310x2065		2,07	0,47	0,52	70	0,5
7	1	machinery platform HW 2075 FU with hoisting rope (Ø 24 mm x 225 m) (HW 2090 FU)		2,30	3,73	2,30	6950	19,7
				2,47	3,73	2,26	7660	20,8
8	1	disassembly crane		2,35	0,4	3,05	300	2,87

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

2.3.3

Colli list

Item	pcs.	designation	colli	L (m)	B (m)	H (m)	weight (kg)	volume (m ³)
9	1	jib part 1 with trolley drive		10,22	2,06	2,43	4985	51,2
10	1	jib part 2		10,22	2,06	2,16	2880	45,5
11	1	jib part 3		10,28	2,06	2,16	2320	45,7
12	1	jib part 4		10,22	2,06	2,16	2160	45,5
13	1	jib part 5		10,25	2,06	2,16	1660	45,6
14	1	jib part 6		10,21	2,06	2,15	1450	45,2
15	1	jib part 7		10,22	2,06	2,15	1360	45,3
16	1	jib part 8		5,23	2,06	2,12	780	22,8
17	1	jib part 9		10,20	2,06	2,11	1170	44,3
18	1	jib part 10		5,23	2,06	2,15	740	23,2
19	1	rope swivel traverse		1,53	1,98	0,50	280	1,5
20	1	bracing trestle 1		10,43	1,88	0,96	1020	18,8
21	1	bracing trestle 2 with assembly trestle		10,39	1,86	0,64	710	12,4

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

2.3.4

Colli list

Item	pcs.	designation	colli	L (m)	B (m)	H (m)	weight (kg)	volume (m ³)
22	1	trolley jib bracing 1.1		0,70	0,09	0,24	68	0,02
23	1	bracing 1.2		2,18	0,07	0,28	153	0,04
24	1	bracing 1.3		0,62	0,05	0,24	50	0,01
25	1 (2x)	bracing 1.4		9,00	0,11	0,24	502	0,24
26	1	bracing 1.5		1,30	0,25	0,24	130	0,08
27	1	bracing 2.1		3,28	0,11	0,27	172	0,10
28	1 (2x)	bracing 2.2		9,58	0,11	0,23	416	0,24
29	1	bracing 3.1		5,22	0,09	0,20	172	0,09
30	1	bracing 3.2		3,32	0,09	0,20	117	0,06
31	1	bracing 3.3		9,88	0,09	0,20	306	0,18
32	1	bracing 3.4		1,22	0,20	0,18	68	0,04
33	1 (3x)	bracing 4.1		9,46	0,09	0,19	213	0,16
34	1	bracing 4.2		2,70	0,09	0,19	78	0,05
35	1	bracing 4.3		7,84	0,09	0,19	185	0,13
36	1	bracing 5.1		4,82	0,09	0,19	120	0,08
37	1	bracing 5.2		4,95	0,09	0,19	123	0,08

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

2.3.5

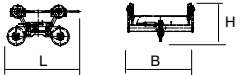

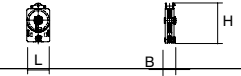
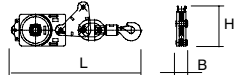
Colli list

Item	pcs.	designation	colli	L (m)	B (m)	H (m)	weight (kg)	volume (m ³)
38	1	bracing 5.3		1,20	0,18	0,16	57	0,03
39	1	connection strap 1		1,19	0,13	0,50	208	0,15
40	1	connection strap 2		1,16	0,11	0,43	130	0,05
41	1	assembly platform		1,24	1,30	1,70	140	2,74
42	1	hoisting rope support		2,58	1,51	1,76	200	6,9
43	1 (2x)	counterjib bracing 1		9,56	0,07	0,21	295	0,14
44	1 (2x)	bracing 2		4,69	0,07	0,21	155	0,07
45	1 (2x)	bracing 3		4,31	0,07	0,21	145	0,06
46	1 (2x)	bracing 4		5,35	0,07	0,21	175	0,08
47	1	standard handrail (small parts)		2,55	1,1	1,80	460	5,05
48	1	box (small parts)		1,60	0,90	0,80	500	1,15

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

2.3.6

Colli list

Item	pcs.	designation	colli	L (m)	B (m)	H (m)	weight (kg)	volume (m ³)
50	1	trolley 2 LK 25		2,32	2,30	1,30	950	6,9
51	1	trolley 1 LK 25		2,00	2,30	1,30	960	6,0
52	1	half No. 2 of hook block		0,6	0,30	1,01	550	0,2
53	1	half No. 1 of hook block with traverse and load hook		2,44	0,60	0,80	750	1,2
Loose and small parts can be distributed depending on the available space.								

2.5.1

Assembly weights - tower top - counterjib

Tower top, complete bracing brackets (1x560 mm, 2x9300mm), driver's cabin, driver's cabin suspension, platform and standard handrails - upper part of tower top, complete - driver's cabin with driver's cabin suspension - lower part of tower top with slewing frame, DV, slewing drives, platform, standard handrails and slip ring system	20 600 kg 5 440 kg 760 kg 14 400 kg
Counterjib 26,7 m - with hoisting drive Hw 2075 FU, complete machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 6 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform), - counterjib with 6 bracing brackets, platforms, assembly trestles and standard handrail - machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m) - counterweight 3 t (under machinery platform)	19 000 kg 9 050 kg 6 950 kg 3 000 kg
Counterjib 21,7 m - with hoisting drive Hw 2075 FU, complete machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 6 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform), - counterjib with 4 bracing brackets, platforms, assembly trestles and standard handrail - machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m) - counterweight 3 t (under machinery platform)	17 100 kg 7 150 kg 6 950 kg 3 000 kg
Counterjib 16,7 m - with hoisting drive Hw 2075 FU, complete machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 2 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform), - counterjib with 2 bracing brackets, platforms, assembly trestles and standard handrail - machinery platform Hw 2075 FU with hoisting rope (Ø 24 mm x 225 m) - counterweight 3 t (under machinery platform)	15 300 kg 5 350 kg 6 950 kg 3 000 kg

2.5.1.2 Assembly weights - tower top - counterjib

Counterjib 26,7 m - with hoisting drive Hw 2090 FU, complete machinery platform Hw 2090 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 6 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform),	19 710 kg
- counterjib with 6 bracing brackets, platforms, assembly trestles and standard handrail	9 050 kg
- machinery platform Hw 2090 FU with hoisting rope (Ø 24 mm x 225 m)	7 660 kg
- counterweight 3 t (under machinery platform)	3 000 kg
Counterjib 21,7 m - with hoisting drive Hw 2090 FU, complete machinery platform Hw 2090 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 6 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform),	17 810 kg
- counterjib with 4 bracing brackets, platforms, assembly trestles and standard handrail	7 150 kg
- machinery platform Hw 2090 FU with hoisting rope (Ø 24 mm x 225 m)	7 660 kg
- counterweight 3 t (under machinery platform)	3 000 kg
Counterjib 16,7 m - with hoisting drive Hw 2090 FU, complete machinery platform Hw 2090 FU with hoisting rope (Ø 24 mm x 225 m), 6 platforms, 2 bracing brackets, assembly trestles and standard handrail, counterweight 3 t (under machinery platform),	16 010 kg
- counterjib with 2 bracing brackets, platforms, assembly trestles and standard handrail	5 350 kg
- machinery platform Hw 2090 FU with hoisting rope (Ø 24 mm x 225 m)	7 660 kg
- counterweight 3 t (under machinery platform)	3 000 kg

2.5.2 Assembly weights - trolley jib

85 m trolley jib, complete (70 m = 27 600 kg + 20 m = 2 300 kg) - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	29 900 kg
80 m trolley jib, complete (70 m = 27 600 kg + 10 m = 1 500 kg) - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	29 100 kg
75 m trolley jib, complete (70 m = 27 600 kg + 5 m = 1 100 kg) - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	28 700 kg
70 m trolley jib, complete - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	27 400 kg
65 m trolley jib, complete - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	26 600 kg
60 m trolley jib, complete - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	25 800 kg
55 m trolley jib, complete - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	23 500 kg
50 m trolley jib, complete - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	22 700 kg
45 m trolley jib, complete - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	21 800 kg
40 m trolley jib, complete - bracing brackets, bracing trestles, trolley, traversing ropes, hook block and standard handrails	21 000 kg
30 m trolley jib, complete - bracing brackets, trolley, traversing ropes, hook block and standard handrails	15 600 kg

2.5.3

Assembly weights - cross frame / cross frame element / undercarriage

cross frame KR 1000 - 8 (without optional parts) - 4 spigots TV 25 / TV 25	8 200 kg 684 kg
cross frame element KRE 480, complete - base mast part - swivel arms with corner bearings - diagonal struts and ballast rest - assembly platform, ladder and small parts	24 250 kg 7 100 kg 6 250 kg 9 260 kg 1 640 kg
undercarriage UW 480, complete - base mast part - swivel arms with crosshead and subframe - diagonal struts and ballast rest - assembly platform, ladder and small parts	34 000 kg 7 100 kg 16 000 kg 9 260 kg 1 640 kg

2.5.4

Required hook height for the mobile crane



Danger!

Use suspension ropes with sufficient capacity and observe suspension plans!

Required height under hook for the mobile crane

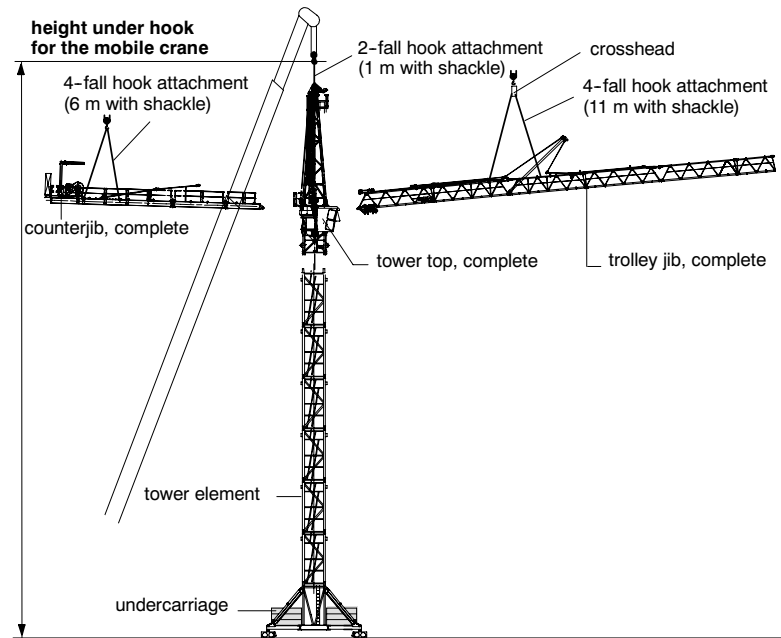
=

Height under hook of WOLFF tower crane + 18 m.

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

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

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



2.6.3.1 Trolley jib - suspension plan 85 m jib



Danger during disassembly!

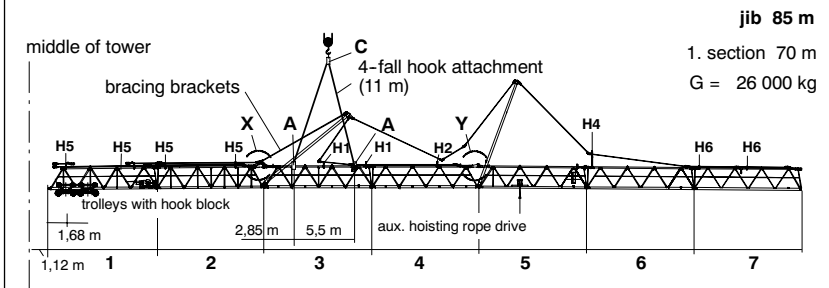
Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

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

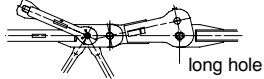
Lengths: trolley jib part 1/2/3/4/5/6/7/9 = 10,0 m
 trolley jib part 8/10 = 5,0 m
 rope swivel traverse = 0,61 m

More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

Attention!
 For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.

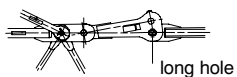


Detail " X "

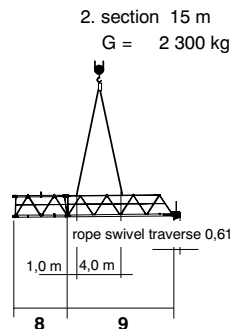


Attention !
 Connecting strap 1 must show to the top and be bolted in the long hole.

Detail " Y "



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



2.6.3.2 Trolley jib - suspension plan 80 m jib



Danger during disassembly!

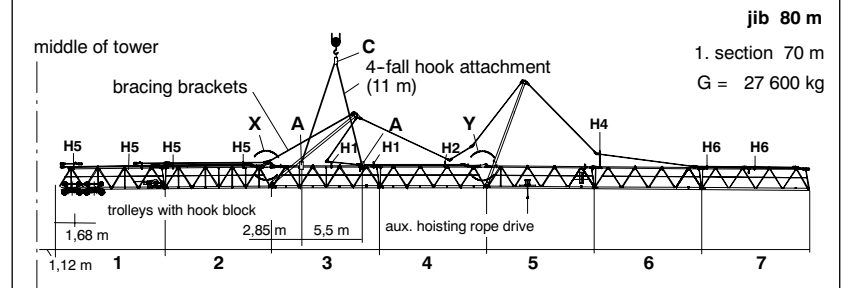
Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

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

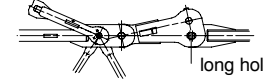
Lengths: trolley jib part 1/2/3/4/5/6/7/9 = 10,0 m
 trolley jib part 8/10 = 5,0 m
 rope swivel traverse = 0,61 m

More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

Attention!
 For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.

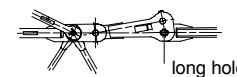


Detail " X "

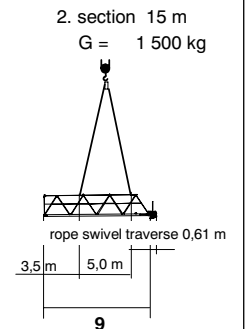


Attention !
 Connecting strap 1 must show to the top and be bolted in the long hole.

Detail " Y "



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



2.6.3.3 Trolley jib - suspension plan 75 m jib



Danger during disassembly!

Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

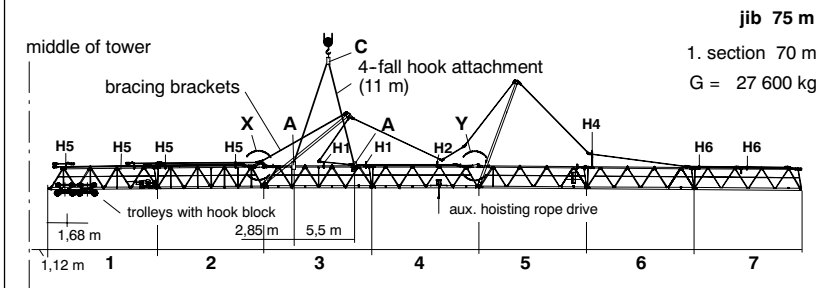
The parts of the jib are labeled with a building part identification at the top chord.

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

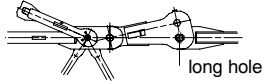
More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

Attention!

For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.



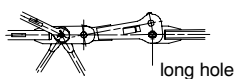
Detail " X "



Attention !

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

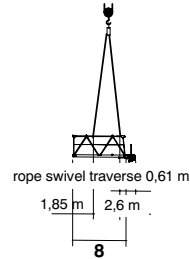
Detail " Y "



Attention !

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

2. section 5 m
G = 1 100 kg



2.6.3.4 Trolley jib - suspension plan 70 m and 65 m jib



Danger during disassembly!

Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

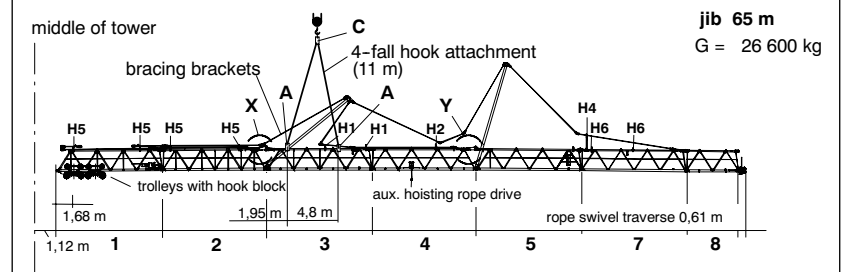
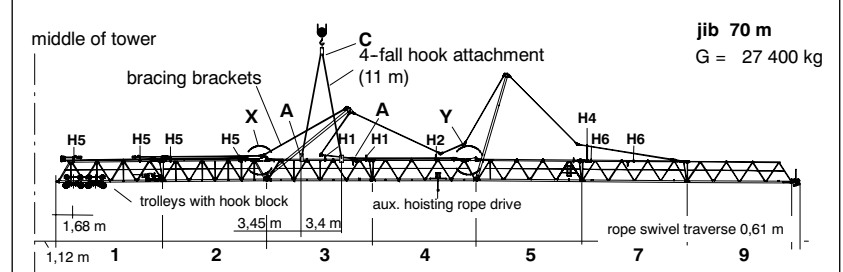
The parts of the jib are labeled with a building part identification at the top chord.

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

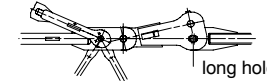
More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

Attention!

For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.



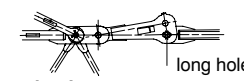
Detail " X "



Attention !

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

Detail " Y "



Attention !

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

2.6.3.5 Trolley jib - suspension plan 60 m jib



Danger during disassembly!

Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

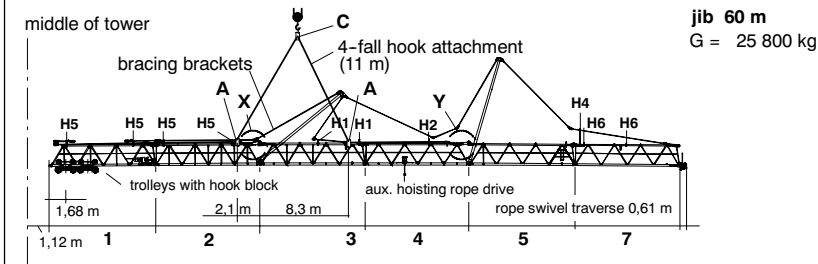
The parts of the jib are labeled with a building part identification at the top chord.

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

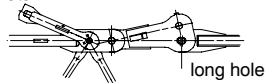
More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

Attention!

For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.

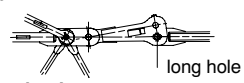


Detail " X "



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

Detail " Y "



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

2.6.3.6 Trolley jib - suspension plan 55 m and 50 m jib



Danger during disassembly!

Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

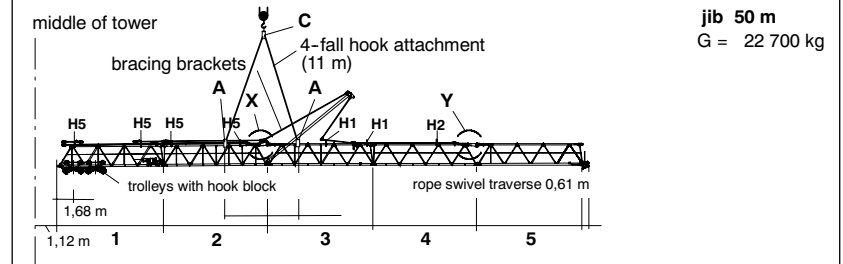
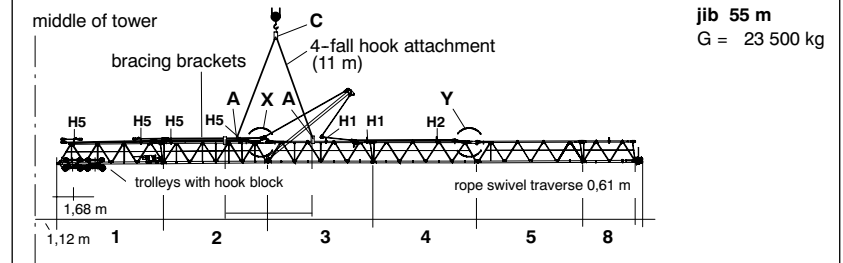
The parts of the jib are labeled with a building part identification at the top chord.

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

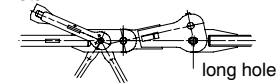
More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

Attention!

For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.

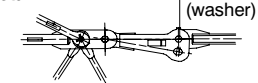


Detail " X "



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

Detail " Y "



Attention !
The connection strap 2 must show down and be bolted with the bore.

2.6.3.7 Trolley jib - suspension plan 45 m and 40 m jib



Danger during disassembly!

Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

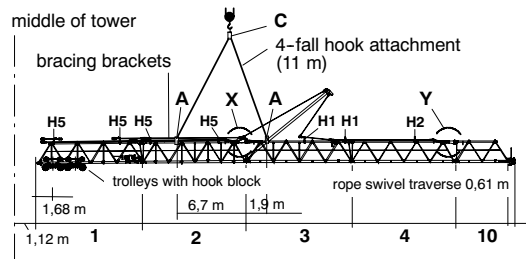
The parts of the jib are labeled with a building part identification at the top chord.

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

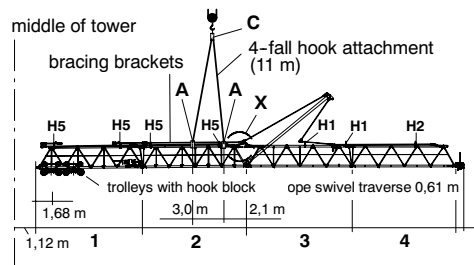
More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

Attention!

For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.

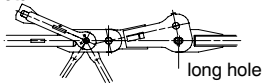


jib 45 m
G = 21 800 kg



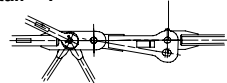
jib 40 m
G = 21 000 kg

Detail " X "



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

Detail " Y "



Attention !
The connection strap 2 must show down and be bolted with the bore.

2.6.3.8 Trolley jib - suspension plan 30 m jib



Danger during disassembly!

Loosen bolts at the pivot point of the jib. Trolley jib must be balanced before it is lifted away. There mustn't be any loose parts on the trolley jib.

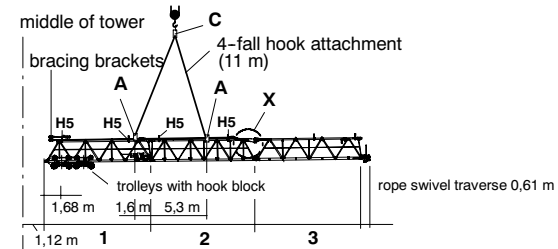
The parts of the jib are labeled with a building part identification at the top chord.

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

More details about suspensions **A**, **B** and **C** see item 2.6.3.10 / 2.6.3.11 and supports **H1** to **H6** see item 2.6.3.12.

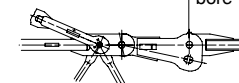
Attention!

For assembly attach hook block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (Perlon rope Ø 20 mm x 25 m) and secure at the trolley.



jib 30 m
G = 15 600 kg

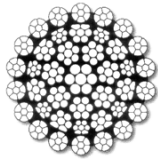
Detail " X "



Attention !
The connection strap 1 must show down and be bolted with the bore.

2.7.1

Hoisting rope

<p>Cable Ø = 24 mm +4% +2%</p>	
<p>First equipment</p>	<p>CASAR EUROLIFT - non twisting flexible hoisting rope with compressed outer strands and compressed cable core</p>  <p>with special packing material grip</p> <p>nominal strength = 2160 N/mm² calc. breaking strength = 706,0 kN min. breaking strength = 564,1 kN weight per meter = 2,843 kg</p>
<p>Design</p>	<p>langs-lay rope, right handed, made from blank cable wire.</p> <p>middle space factor = 0,720 middle spinning loss factor = 0,82 middle weight factor = 0,87 total twist number = 280</p> <p>Number of carryig wires in the outer strands is to be judged by the state of wear according to DIN 15020 Bl. 2 / ISO DIS 4309 = 126</p>

Attention! hoisting rope with special packing material grip

Basic equipment

cable length 225 m	cable for crane with: radius	4 fall 85 m 40,5 m
--------------------	--------------------------------------	--------------------------

By lengthening the hook path by 1 tower element (4,5 m) the necessary cable length increases by **18,0 m for operation in 4 falls.**

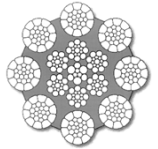


Attention!
A wire cable is a complex machine element.

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

2.7.2

Traversing rope

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

Attention! short traversing rope with special packing material grip

Basic equipment

cable lengths	1 x 100 m 1 x 176 m	for crane with: radius	60 m - 85 m
cable lengths	1 x 100 m 1 x 106 m	for crane with: radius	30 m - 55 m



Attention!
A wire cable is a complex machine element.

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

WOLFF 8540.40

Crane data

2 / 100

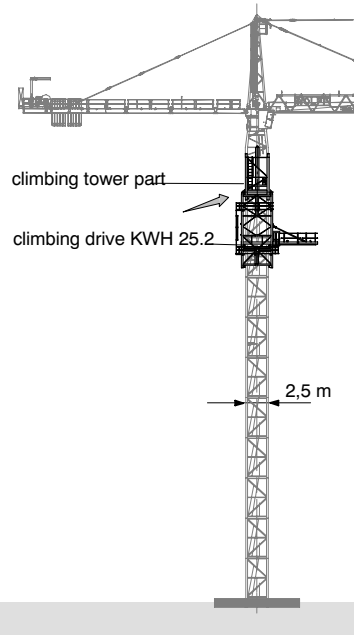
2.8.1 **Insertable exterior climbing drive KWH 25.2**



Attention!

The assembly of the climbing drive with the WOLFF tower crane 8540 FL 20/40 is possible with operation in 2 falls.

More details about the climbing drive KWH 25.2 see additional equipment, section 12.



Minimum height with stationary erection:

- 1 climbing tower part
- 2 tower elements = 13,5 m tower height

Minimum height with travelling erection:

- 1 climbing tower part
- 2 tower elements + undercarriage
appr. 13,5 m tower height

2.8.1.1 **Balancing weights**

8540 FL - 20/40	jib										
	30 m	40 m	45 m	50 m	55 m	60 m	65 m	70 m	75 m	80 m	85 m
balancing weight * TV 25 = 3,02 t	--	--	--	--	48,3m	46,8m	45,8m	53,2m	50,2m	45,8m	46,6m
UV 25 = 3,68 t	--	--	--	--	44,8m	43,4m	42,6m	49,5m	46,7m	42,6m	43,3m
load = 5,0 t	--	--	40,6m	42,6m	--	--	--	--	--	--	--
load = 8,0 t	--	33,2m	29,9m	31,4m	--	--	--	--	--	--	--
load = 12,0 t	25,1m	24,6m	--	--	--	--	--	--	--	--	--

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

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

-- balancing not possible



Danger!

During climbing the slewing part must be fixed in the push-in direction of the traverse carriage. Before the final bolting of the tower you are not allowed to take away the balancing weight or to loosen the fixing of the slewing part (see operation instruction KWH 25.2).

The climbing gear is an auxiliary device for assembly and mustn't stay at the tower crane WOLFF under normal working conditions.

962-4-023615E

WOLFF 8540.40

Crane data

2 / 105

2.8.5. **Insertable internal climbing drive KSH 25**

For use of the WOLFF 8540.40 in connection with internal climbing drive KSH 25 the tower combination has to be observed as shown here.

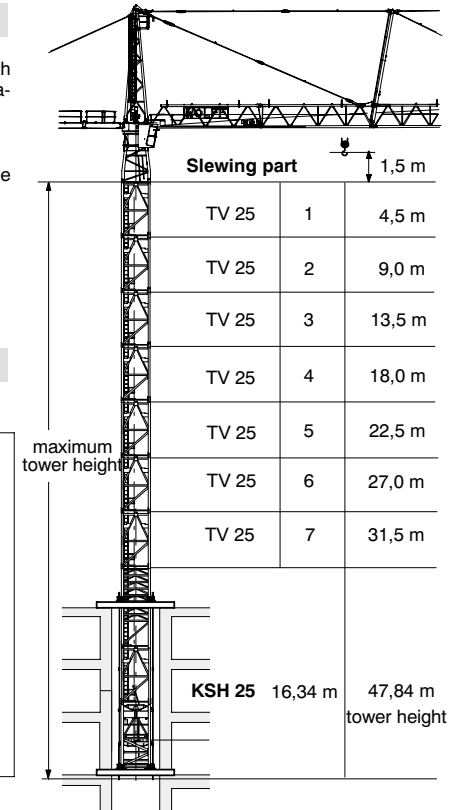
More details about the climbing drive KSH 25 see additional equipment, section 12.

2.8.5.1 **Balancing weights**

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

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

-- balancing not possible



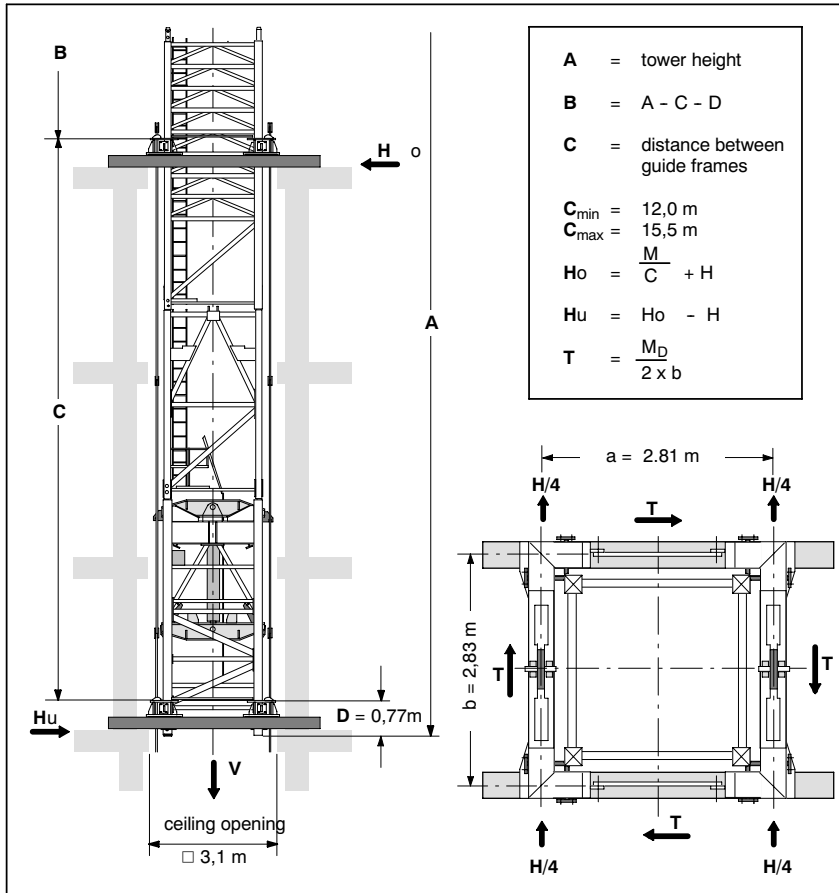
8540.40	jib										
	30 m	40 m	45 m	50 m	55 m	60 m	65 m	70 m	75 m	80 m	85 m
balancing weight * TV 25 = 3,02 t	--	--	--	--	49,6m	48,1m	47,2m	54,6m	51,5m	47,2m	48,0m
UV 25 = 3,68 t	--	--	--	--	46,3m	44,9m	44,0m	50,9m	48,2m	44,0m	45,3m
load = 5,0 t	--	--	41,6m	43,6m	--	--	--	--	--	--	--
load = 8,0 t	--	33,8m	30,7m	32,2m	--	--	--	--	--	--	--
load = 12,0 t	25,6m	25,1m	--	--	--	--	--	--	--	--	--

962-4-032616E

2.8.5.2

Reacting forces to building

for hydraulic interior climbing drive KSH 25



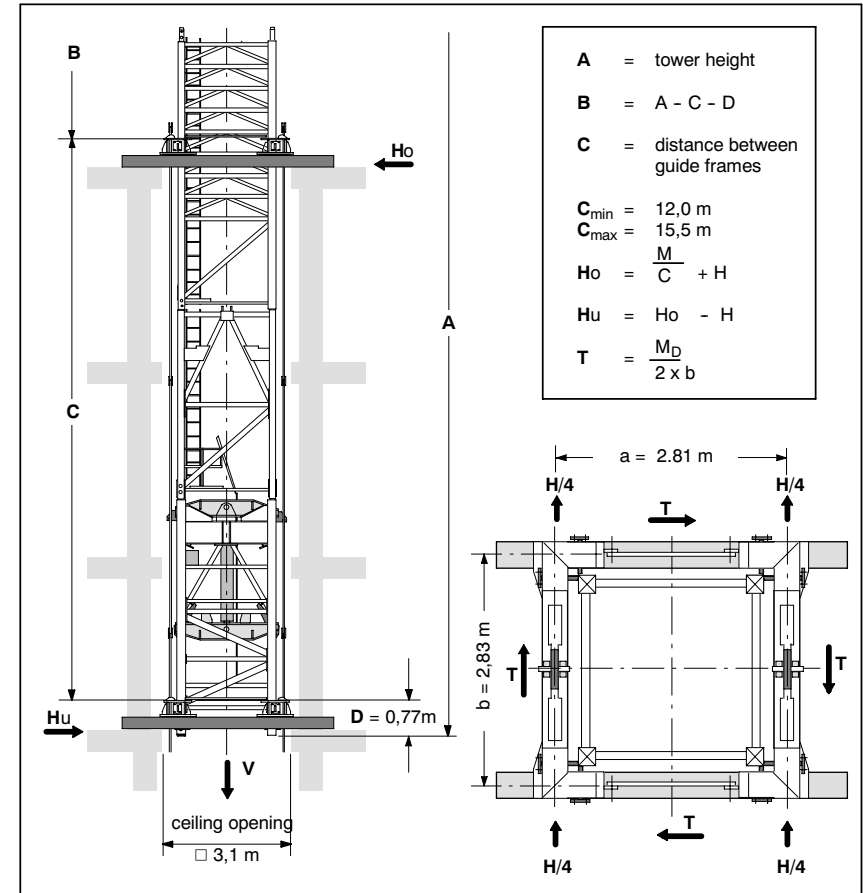
Reacting forces to building (kN)		in service															
A (m)		47,8				43,3				38,8				34,3			
C (m)		12,0	13,0	14,0	15,0	12,0	13,0	14,0	15,0	12,0	13,0	14,0	15,0	12,0	13,0	14,0	15,0
V		1800				1770				1740				1710			
Ho		565	520	485	455	535	495	460	430	510	470	435	405	480	445	410	380
Hu		500	455	415	385	470	430	395	360	445	405	370	340	420	380	350	330
T		115				115				115				115			

962-4-023618E

2.8.5.2

Reacting forces to building

for hydraulic interior climbing drive KSH 25

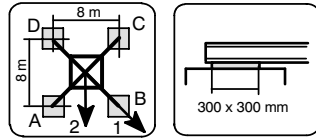


Reacting forces to building (kN)		out of service															
A (m)		47,8				43,3				38,8				34,3			
C (m)		12,0	13,0	14,0	15,0	12,0	13,0	14,0	15,0	12,0	13,0	14,0	15,0	12,0	13,0	14,0	15,0
V		1520				1490				1460				1430			
Ho		695	640	600	555	610	565	525	490	530	490	455	425	455	420	390	365
Hu		470	420	370	330	400	350	310	275	330	290	255	220	265	230	200	175
T		0				0				0				0			

962-4-023619E

3.2.1.1 Central ballasts and corner loads acc. to DIN 15019

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

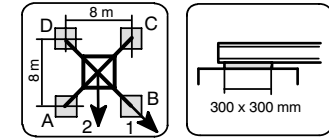


KR 1000 - 8 Corner distance 8 m x 8 m Jib length 30 m

hook height [m]	central ballast [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
10,2	11,7	55,0	1	496	839	496	152	50	1	396	589	396	202	62
			2	739	739	252	252		2	532	532	259	259	
14,7	16,2	55,0	1	504	867	504	140	52	1	404	546	404	261	84
			2	761	761	247	247		2	504	504	303	303	
19,2	20,7	55,0	1	512	897	512	127	54	1	300	540	300	60	91
			2	784	784	239	239		2	489	489	334	334	
23,7	25,2	55,0	1	520	928	520	111	57	1	308	558	308	58	101
			2	808	808	231	231		2	485	485	132	132	
28,2	29,7	55,0	1	528	961	528	94	59	1	316	577	316	55	111
			2	834	834	221	221		2	501	501	132	132	
32,7	34,2	55,0	1	536	997	536	74	61	1	324	598	324	51	121
			2	862	862	209	209		2	518	518	131	131	
37,2	38,7	55,0	1	544	1035	544	52	64	1	332	619	332	45	131
			2	891	891	196	196		2	535	535	129	129	
41,7	43,2	60,0	1	564	1089	564	39	66	1	353	655	353	51	141
			2	935	935	193	193		2	566	566	139	139	
46,2	47,7	72,5	1	603	1164	603	42	68	1	392	710	392	74	151
			2	1000	1000	207	207		2	643	643	364	364	

3.2.1.2 Central ballasts and corner loads acc. to DIN 15019

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

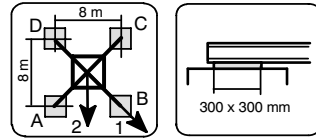


KR 1000 - 8 Corner distance 8 m x 8 m Jib length 40 m

hook height [m]	central ballast [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
10,2	11,7	57,5	1	501	843	501	160	51	1	277	625	277	0	68
			2	743	743	260	260		2	516	516	74	74	
14,7	16,2	57,5	1	509	871	509	147	54	1	284	642	284	0	93
			2	765	765	253	253		2	530	530	76	76	
19,2	20,7	57,5	1	517	901	517	133	56	1	290	662	290	0	100
			2	789	789	246	246		2	545	545	77	77	
23,7	25,2	57,5	1	525	934	525	117	58	1	295	685	295	0	110
			2	814	814	237	237		2	561	561	77	77	
28,2	29,7	57,5	1	533	968	533	99	61	1	299	709	299	0	120
			2	841	841	226	226		2	578	578	76	76	
32,7	34,2	57,5	1	541	1004	541	78	63	1	301	737	301	0	130
			2	869	869	214	214		2	595	595	74	74	
37,2	38,7	57,5	1	549	1043	549	55	65	1	302	767	302	0	139
			2	899	899	200	200		2	614	614	72	72	
41,7	43,2	62,5	1	570	1098	570	42	67	1	326	800	326	0	149
			2	943	943	197	197		2	646	646	80	80	
46,2	47,7	75,0	1	609	1174	609	44	70	1	387	836	387	0	159
			2	1008	1008	210	210		2	710	710	308	308	

3.2.1.3 Central ballasts and corner loads acc. to DIN 15019

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

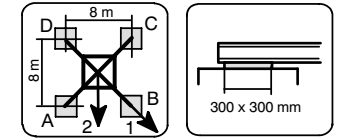


KR 1000 - 8 Corner distance 8 m x 8 m Jib length 45 m

hook height [m]	central ballast [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
10,2	11,7	52,5	1	491	825	491	157	52	1	252	626	252	0	69
			2	727	727	255	255		2	503	503	61	61	
14,7	16,2	52,5	1	499	853	499	144	54	1	259	643	259	0	94
			2	750	750	248	248		2	518	518	63	63	
19,2	20,7	52,5	1	507	884	507	130	56	1	265	664	265	0	101
			2	773	773	240	240		2	533	533	64	64	
23,7	25,2	52,5	1	515	916	515	114	58	1	269	686	269	0	111
			2	798	798	231	231		2	549	549	64	64	
28,2	29,7	52,5	1	523	950	523	96	61	1	273	711	273	0	121
			2	825	825	221	221		2	566	566	63	63	
32,7	34,2	52,5	1	531	987	531	75	63	1	275	739	275	0	131
			2	853	853	208	208		2	584	584	61	61	
37,2	38,7	52,5	1	539	1026	539	52	65	1	276	769	276	0	141
			2	883	883	194	194		2	602	602	58	58	
41,7	43,2	52,5	1	547	1068	547	26	67	1	275	803	275	0	151
			2	915	915	179	179		2	640	640	253	253	
46,2	47,7	65,0	1	586	1144	586	28	70	1	335	839	335	0	161
			2	981	981	192	192		2	729	729	244	244	

3.2.1.4 Central ballasts and corner loads acc. to DIN 15019

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

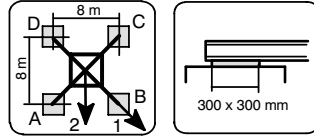


KR 1000 - 8 Corner distance 8 m x 8 m Jib length 50 m

hook height [m]	central ballast [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
10,2	11,7	42,5	1	476	791	476	162	52	1	201	626	201	0	70
			2	699	699	254	254		2	479	479	36	36	
14,7	16,2	42,5	1	484	819	484	150	54	1	208	644	208	0	96
			2	721	721	248	248		2	493	493	37	37	
19,2	20,7	42,5	1	492	849	492	135	57	1	214	665	214	0	103
			2	745	745	240	240		2	508	508	38	38	
23,7	25,2	42,5	1	500	882	500	119	59	1	219	688	219	0	113
			2	770	770	231	231		2	524	524	38	38	
28,2	29,7	42,5	1	508	916	508	101	61	1	222	713	222	0	122
			2	797	797	220	220		2	541	541	37	37	
32,7	34,2	42,5	1	516	953	516	80	63	1	224	741	224	0	132
			2	825	825	208	208		2	559	559	35	35	
37,2	38,7	42,5	1	524	992	524	57	66	1	225	772	225	0	142
			2	855	855	194	194		2	578	578	32	32	
41,7	43,2	50,0	1	551	1053	551	50	68	1	261	805	261	0	152
			2	906	906	197	197		2	650	650	252	252	
46,2	47,7	65,0	1	597	1135	597	58	70	1	497	848	497	146	162
			2	977	977	216	216		2	745	745	249	249	

3.2.1.5 Central ballasts and corner loads acc. to DIN 15019

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

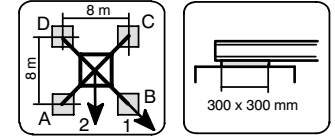


KR 1000 - 8 Corner distance 8 m x 8 m Jib length 55 m

hook height [m]	central ballast [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
10,2	11,7	47,5	1	491	828	491	153	52	1	226	627	226	0	71
			2	730	730	252	252		2	491	491	48	48	
14,7	16,2	47,5	1	499	857	499	141	55	1	233	645	233	0	97
			2	752	752	245	245		2	506	506	50	50	
19,2	20,7	47,5	1	507	888	507	126	57	1	238	666	238	0	104
			2	776	776	237	237		2	521	521	50	50	
23,7	25,2	47,5	1	515	921	515	109	59	1	243	689	243	0	114
			2	802	802	228	228		2	537	537	50	50	
28,2	29,7	47,5	1	523	955	523	90	61	1	246	715	246	0	124
			2	829	829	217	217		2	554	554	49	49	
32,7	34,2	47,5	1	531	993	531	69	64	1	248	743	248	0	134
			2	857	857	204	204		2	582	582	280	280	
37,2	38,7	47,5	1	539	1032	539	45	66	1	249	774	249	0	143
			2	888	888	190	190		2	633	633	245	245	
41,7	43,2	47,5	1	547	1075	547	19	68	1	248	808	248	0	153
			2	920	920	173	173		2	687	687	206	206	
46,2	47,7	52,5	1	567	1134	567	1	70	1	467	879	467	56	163
			2	968	968	167	167		2	758	758	176	176	

3.2.1.6 Central ballasts and corner loads acc. to DIN 15019

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

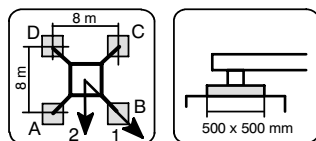


KR 1000 - 8 Corner distance 8 m x 8 m Jib length 60 m

hook height [m]	central ballast [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
10,2	11,7	40,0	1	496	839	496	152	54	1	186	631	186	0	75
			2	738	738	253	253		2	507	507	107	107	
14,7	16,2	40,0	1	504	868	504	139	56	1	193	651	193	0	102
			2	761	761	246	246		2	525	525	105	105	
19,2	20,7	40,0	1	512	900	512	124	58	1	198	672	198	0	110
			2	786	786	237	237		2	544	544	101	101	
23,7	25,2	40,0	1	520	933	520	106	60	1	202	697	202	0	119
			2	812	812	227	227		2	564	564	97	97	
28,2	29,7	40,0	1	528	969	528	86	63	1	204	723	204	0	129
			2	840	840	216	216		2	586	586	92	92	
32,7	34,2	40,0	1	536	1007	536	64	65	1	206	752	206	0	139
			2	869	869	202	202		2	620	620	251	251	
37,2	38,7	40,0	1	544	1048	544	39	67	1	206	784	206	0	149
			2	900	900	187	187		2	673	673	214	214	
41,7	43,2	40,0	1	552	1092	552	11	69	1	452	846	452	57	159
			2	934	934	169	169		2	730	730	173	173	
46,2	47,7	45,0	1	564	1161	564	0	72	1	472	942	472	2	169
			2	982	982	162	162		2	804	804	140	140	

3.3.1.2 Central ballasts and corner loads acc. to DIN 15019

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

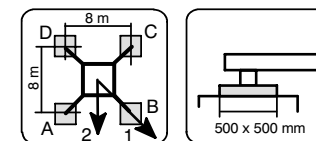


KRE 480 Corner distance 8 m x 8 m Jib length 40 m

hook height [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
13,0	14,5	50,0	1	505	860	505	150	55	1	278	637	278	0	78
			2	756	756	254	254		2	524	524	73	73	
17,5	19,0	50,0	1	513	889	513	137	57	1	284	656	284	0	103
			2	779	779	247	247		2	538	538	74	74	
22,0	23,5	50,0	1	521	920	521	122	60	1	290	678	290	0	110
			2	803	803	238	238		2	554	554	75	75	
26,5	28,0	50,0	1	529	953	529	104	62	1	294	701	294	0	120
			2	829	829	229	229		2	570	570	74	74	
31,0	32,5	50,0	1	537	989	537	85	64	1	297	728	297	0	130
			2	856	856	217	217		2	588	588	73	73	
35,5	37,0	50,0	1	545	1026	545	63	67	1	298	757	298	0	140
			2	885	885	204	204		2	606	606	71	71	
40,0	41,5	50,0	1	553	1067	553	39	69	1	298	788	298	0	150
			2	916	916	190	190		2	625	625	68	68	
44,5	46,0	62,5	1	592	1141	592	43	71	1	360	823	360	0	160
			2	980	980	204	204		2	676	676	95	95	
49,0	50,5	77,5	1	638	1225	638	50	73	1	538	865	538	210	169
			2	1053	1053	222	222		2	769	769	306	306	
53,5	55,0	95,0	1	689	1319	689	60	76	1	589	993	589	185	179
			2	1135	1135	244	244		2	875	875	304	304	

3.3.1.3 Central ballasts and corner loads acc. to DIN 15019

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

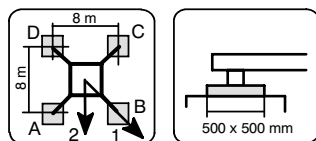


KRE 480 Corner distance 8 m x 8 m Jib length 45 m

hook height [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
13,0	14,5	42,5	1	488	835	488	141	56	1	240	638	240	0	79
			2	734	734	242	242		2	505	505	54	54	
17,5	19,0	42,5	1	496	865	496	127	58	1	246	658	246	0	105
			2	757	757	235	235		2	520	520	55	55	
22,0	23,5	42,5	1	504	896	504	112	60	1	251	679	251	0	112
			2	781	781	227	227		2	536	536	55	55	
26,5	28,0	42,5	1	512	929	512	95	62	1	255	703	255	0	122
			2	807	807	217	217		2	552	552	55	55	
31,0	32,5	42,5	1	520	965	520	75	65	1	258	730	258	0	131
			2	834	834	206	206		2	569	569	53	53	
35,5	37,0	42,5	1	528	1002	528	54	67	1	259	759	259	0	141
			2	864	864	193	193		2	588	588	51	51	
40,0	41,5	42,5	1	536	1043	536	29	69	1	260	791	260	0	151
			2	894	894	178	178		2	612	612	260	260	
44,5	46,0	52,5	1	569	1111	569	27	71	1	308	826	308	0	161
			2	952	952	186	186		2	692	692	246	246	
49,0	50,5	67,5	1	615	1195	615	34	73	1	515	902	515	127	171
			2	1025	1025	204	204		2	789	789	241	241	
53,5	55,0	82,5	1	660	1283	660	37	76	1	560	1026	560	94	181
			2	1101	1101	220	220		2	889	889	231	231	

3.3.1.4 Central ballasts and corner loads acc. to DIN 15019

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

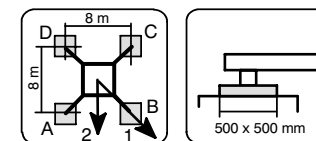


KRE 480 Corner distance 8 m x 8 m Jib length 50 m

hook height [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
13,0	14,5	32,5	1	474	801	474	146	56	1	189	639	189	0	80
			2	705	705	242	242		2	481	481	28	28	
17,5	19,0	32,5	1	482	831	482	133	58	1	196	659	196	0	106
			2	728	728	235	235		2	495	495	30	30	
22,0	23,5	32,5	1	490	862	490	117	60	1	201	681	201	0	113
			2	753	753	226	226		2	511	511	30	30	
26,5	28,0	32,5	1	498	895	498	100	63	1	205	705	205	0	123
			2	779	779	217	217		2	528	528	29	29	
31,0	32,5	32,5	1	506	931	506	81	65	1	207	732	207	0	133
			2	806	806	205	205		2	545	545	28	28	
35,5	37,0	32,5	1	514	969	514	59	67	1	208	761	208	0	142
			2	835	835	192	192		2	564	564	25	25	
40,0	41,5	37,5	1	534	1021	534	47	69	1	233	793	233	0	152
			2	879	879	190	190		2	615	615	254	254	
44,5	46,0	50,0	1	573	1096	573	51	72	1	294	828	294	0	162
			2	943	943	204	204		2	702	702	245	245	
49,0	50,5	65,0	1	619	1180	619	58	74	1	519	915	519	123	172
			2	1016	1016	222	222		2	799	799	239	239	
53,5	55,0	82,5	1	671	1274	671	67	76	1	571	1046	571	95	182
			2	1098	1098	244	244		2	907	907	235	235	

3.3.1.5 Central ballasts and corner loads acc. to DIN 15019

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

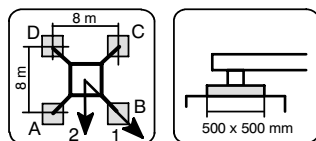


KRE 480 Corner distance 8 m x 8 m Jib length 55 m

hook height [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
13,0	14,5	40,0	1	494	846	494	143	56	1	226	640	226	0	81
			2	743	743	246	246		2	500	500	47	47	
17,5	19,0	40,0	1	502	875	502	130	58	1	232	660	232	0	107
			2	766	766	239	239		2	515	515	48	48	
22,0	23,5	40,0	1	510	907	510	114	61	1	237	682	237	0	114
			2	791	791	230	230		2	530	530	48	48	
26,5	28,0	40,0	1	518	941	518	96	63	1	241	707	241	0	124
			2	817	817	220	220		2	547	547	47	47	
31,0	32,5	40,0	1	526	977	526	76	65	1	244	734	244	0	134
			2	845	845	208	208		2	565	565	46	46	
35,5	37,0	40,0	1	534	1015	534	54	67	1	245	763	245	0	144
			2	874	874	195	195		2	611	611	257	257	
40,0	41,5	40,0	1	542	1056	542	29	70	1	245	796	245	0	154
			2	906	906	179	179		2	664	664	220	220	
44,5	46,0	40,0	1	550	1100	550	1	72	1	450	833	450	68	163
			2	939	939	162	162		2	721	721	180	180	
49,0	50,5	55,0	1	596	1185	596	7	74	1	496	953	496	38	173
			2	1013	1013	179	179		2	819	819	172	172	
53,5	55,0	70,0	1	641	1274	641	9	76	1	541	1080	541	3	183
			2	1089	1089	194	194		2	922	922	161	161	

3.3.1.6 Central ballasts and corner loads acc. to DIN 15019

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

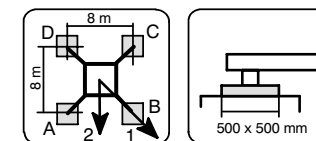


KRE 480 Corner distance 8 m x 8 m Jib length 60 m

hook height [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
13,0	14,5	30,0	1	493	850	493	136	57	1	174	645	174	0	85
			2	745	745	240	240		2	511	511	97	97	
17,5	19,0	30,0	1	501	880	501	121	60	1	179	666	179	0	113
			2	769	769	232	232		2	530	530	94	94	
22,0	23,5	30,0	1	509	913	509	105	62	1	184	689	184	0	120
			2	794	794	223	223		2	550	550	91	91	
26,5	28,0	30,0	1	517	947	517	86	64	1	187	714	187	0	130
			2	821	821	212	212		2	570	570	86	86	
31,0	32,5	30,0	1	525	984	525	65	66	1	189	743	189	0	139
			2	850	850	200	200		2	593	593	256	256	
35,5	37,0	32,5	1	539	1030	539	48	69	1	202	773	202	0	149
			2	886	886	192	192		2	651	651	227	227	
40,0	41,5	32,5	1	547	1072	547	22	71	1	447	814	447	81	159
			2	919	919	176	176		2	706	706	188	188	
44,5	46,0	35,0	1	560	1126	560	0	73	1	461	900	461	22	169
			2	959	959	163	163		2	772	772	151	151	
49,0	50,5	47,5	1	597	1209	597	0	75	1	483	1035	483	0	179
			2	1028	1028	173	173		2	867	867	135	135	
53,5	55,0	65,0	1	652	1302	652	2	78	1	501	1206	501	0	189
			2	1112	1112	193	193		2	979	979	126	126	

3.3.1.7 Central ballasts and corner loads acc. to DIN 15019

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

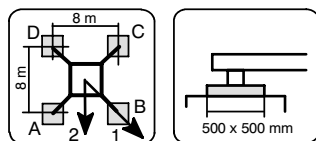


KRE 480 Corner distance 8 m x 8 m Jib length 65 m

hook height [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]	
			corner loads						corner loads					
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
13,0	14,5	55,0	1	536	893	536	179	58	1	212	836	212	0	87
			2	788	788	284	284		2	611	611	19	19	
17,5	19,0	55,0	1	544	924	544	165	60	1	217	858	217	0	115
			2	812	812	276	276		2	626	626	20	20	
22,0	23,5	57,5	1	558	962	558	155	62	1	234	882	234	0	122
			2	844	844	273	273		2	649	649	25	25	
26,5	28,0	57,5	1	566	997	566	136	65	1	236	909	236	0	132
			2	871	871	262	262		2	667	667	24	24	
31,0	32,5	60,0	1	581	1040	581	122	67	1	250	939	250	0	142
			2	905	905	256	256		2	691	691	28	28	
35,5	37,0	60,0	1	589	1079	589	98	69	1	250	971	250	0	152
			2	936	936	242	242		2	724	724	254	254	
40,0	41,5	62,5	1	603	1128	603	78	71	1	260	1007	260	0	162
			2	974	974	232	232		2	786	786	220	220	
44,5	46,0	65,0	1	617	1179	617	55	74	1	270	1045	270	0	172
			2	1015	1015	220	220		2	852	852	182	182	
49,0	50,5	67,5	1	631	1234	631	29	76	1	509	1107	509	0	182
			2	1058	1058	205	205		2	923	923	140	140	
53,5	55,0	75,0	1	658	1306	658	11	78	1	476	1280	476	0	191
			2	1116	1116	200	200		2	1011	1011	106	106	

3.3.1.10 Central ballasts and corner loads acc. to DIN 15019

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

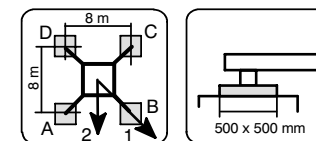


KRE 480 Corner distance 8 m x 8 m Jib length 80 m

hook height [m]	central ballast [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
13,0	14,5	57,5	1	565	898	565	231	59	1	223	839	223	0	90
			2	801	801	328	328		2	663	663	105	105	
17,5	19,0	57,5	1	573	929	573	216	61	1	228	861	228	0	119
			2	825	825	320	320		2	683	683	102	102	
22,0	23,5	57,5	1	581	962	581	199	63	1	232	886	232	0	126
			2	850	850	311	311		2	703	703	97	97	
26,5	28,0	57,5	1	589	997	589	180	66	1	234	913	234	0	136
			2	877	877	300	300		2	725	725	92	92	
31,0	32,5	60,0	1	603	1040	603	165	68	1	247	944	247	0	146
			2	912	912	293	293		2	754	754	91	91	
35,5	37,0	62,5	1	617	1086	617	148	70	1	382	983	382	0	155
			2	949	949	285	285		2	798	798	236	236	
40,0	41,5	62,5	1	625	1129	625	121	72	1	373	1032	373	0	165
			2	981	981	269	269		2	856	856	194	194	
44,5	46,0	67,5	1	646	1187	646	104	75	1	546	1090	546	1	175
			2	1029	1029	262	262		2	930	930	161	161	
49,0	50,5	70,0	1	660	1243	660	76	77	1	492	1255	492	0	185
			2	1072	1072	247	247		2	1004	1004	116	116	

3.3.1.11 Central ballasts and corner loads acc. to DIN 15019

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

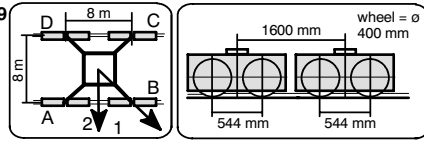


KRE 480 Corner distance 8 m x 8 m Jib length 85 m

hook height [m]	central ballast [m]	central ballast [t]	jib position	crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
13,0	14,5	57,5	1	575	868	575	282	59	1	319	907	319	0	91
			2	782	782	368	368		2	707	707	65	65	
17,5	19,0	57,5	1	583	899	583	267	61	1	318	941	318	0	120
			2	807	807	359	359		2	727	727	62	62	
22,0	23,5	57,5	1	591	932	591	250	64	1	316	977	316	0	127
			2	832	832	350	350		2	748	748	57	57	
26,5	28,0	57,5	1	599	967	599	232	66	1	312	1017	312	0	137
			2	859	859	339	339		2	770	770	51	51	
31,0	32,5	60,0	1	613	1010	613	217	68	1	319	1060	319	0	147
			2	894	894	333	333		2	799	799	50	50	
35,5	37,0	62,5	1	628	1055	628	200	70	1	324	1107	324	0	157
			2	930	930	325	325		2	830	830	47	47	
40,0	41,5	65,0	1	642	1104	642	180	73	1	327	1158	327	0	167
			2	968	968	315	315		2	886	886	197	197	
44,5	46,0	67,5	1	656	1155	656	157	75	1	328	1213	328	0	177
			2	1009	1009	303	303		2	956	956	156	156	
49,0	50,5	70,0	1	670	1211	670	130	77	1	490	1300	490	0	186
			2	1052	1052	288	288		2	1030	1030	110	110	

3.4.1.1 Central ballasts and corner loads to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

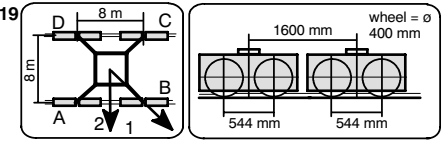


UW 480 Corner distance 8 m x 8 m Jib length 30 m

hook height [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]	
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
14,0	15,5	45,0	1	518	881	518	155	58	1	418	561	418	274	87
			2	775	775	261	261	61	2	519	519	316	316	95
18,5	20,0	45,0	1	526	910	526	141	61	1	314	554	314	75	95
			2	798	798	254	254	64	2	505	505	347	347	104
23,0	24,5	45,0	1	534	942	534	126	64	1	322	572	322	73	104
			2	822	822	245	245	66	2	499	499	146	146	114
27,5	29,0	45,0	1	542	976	542	108	66	1	330	591	330	70	114
			2	849	849	235	235	69	2	515	515	146	146	124
32,0	33,5	45,0	1	550	1012	550	87	69	1	338	611	338	66	124
			2	877	877	223	223	72	2	531	531	146	146	134
36,5	38,0	45,0	1	558	1051	558	65	72	1	346	632	346	60	134
			2	907	907	209	209	75	2	549	549	144	144	144
41,0	42,5	52,5	1	585	1112	585	58	75	1	373	674	373	73	144
			2	957	957	212	212	77	2	586	586	161	161	154
45,5	47,0	65,0	1	624	1188	624	60	77	1	412	729	412	96	154
			2	1023	1023	225	225	80	2	659	659	389	389	163
50,0	51,5	80,0	1	669	1274	669	65	80	1	569	827	569	312	163
			2	1097	1097	242	242		2	751	751	387	387	

3.4.1.2 Central ballasts and corner loads to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive



UW 480 Corner distance 8 m x 8 m Jib length 40 m

hook height [m]	central ballast [t]	jib position	Crane in service torque moment: 327 kNm				horizontal force [kN]	jib position	Crane out of service torque moment: 0 kNm				horizontal force [kN]	
			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]		
14,0	15,5	50,0	1	530	891	530	168	60	1	300	667	300	25	96
			2	785	785	274	274	62	2	550	550	96	96	103
18,5	20,0	50,0	1	538	921	538	154	62	1	307	687	307	25	103
			2	809	809	266	266	65	2	565	565	97	97	113
23,0	24,5	50,0	1	546	954	546	138	65	1	312	708	312	25	113
			2	834	834	257	257	68	2	581	581	98	98	123
27,5	29,0	50,0	1	554	988	554	119	68	1	316	733	316	25	123
			2	861	861	246	246	71	2	597	597	97	97	133
32,0	33,5	50,0	1	562	1025	562	98	71	1	318	759	318	25	133
			2	890	890	234	234	73	2	615	615	96	96	143
36,5	38,0	50,0	1	570	1065	570	74	73	1	319	789	319	25	143
			2	920	920	219	219	76	2	633	633	93	93	152
41,0	42,5	55,0	1	590	1120	590	60	76	1	344	821	344	25	152
			2	965	965	216	216	79	2	665	665	102	102	162
45,5	47,0	67,5	1	630	1197	630	62	79	1	405	856	405	25	162
			2	1031	1031	228	228	81	2	725	725	334	334	172
50,0	51,5	82,5	1	675	1284	675	66	81	1	575	923	575	227	172
			2	1106	1106	244	244		2	821	821	329	329	

