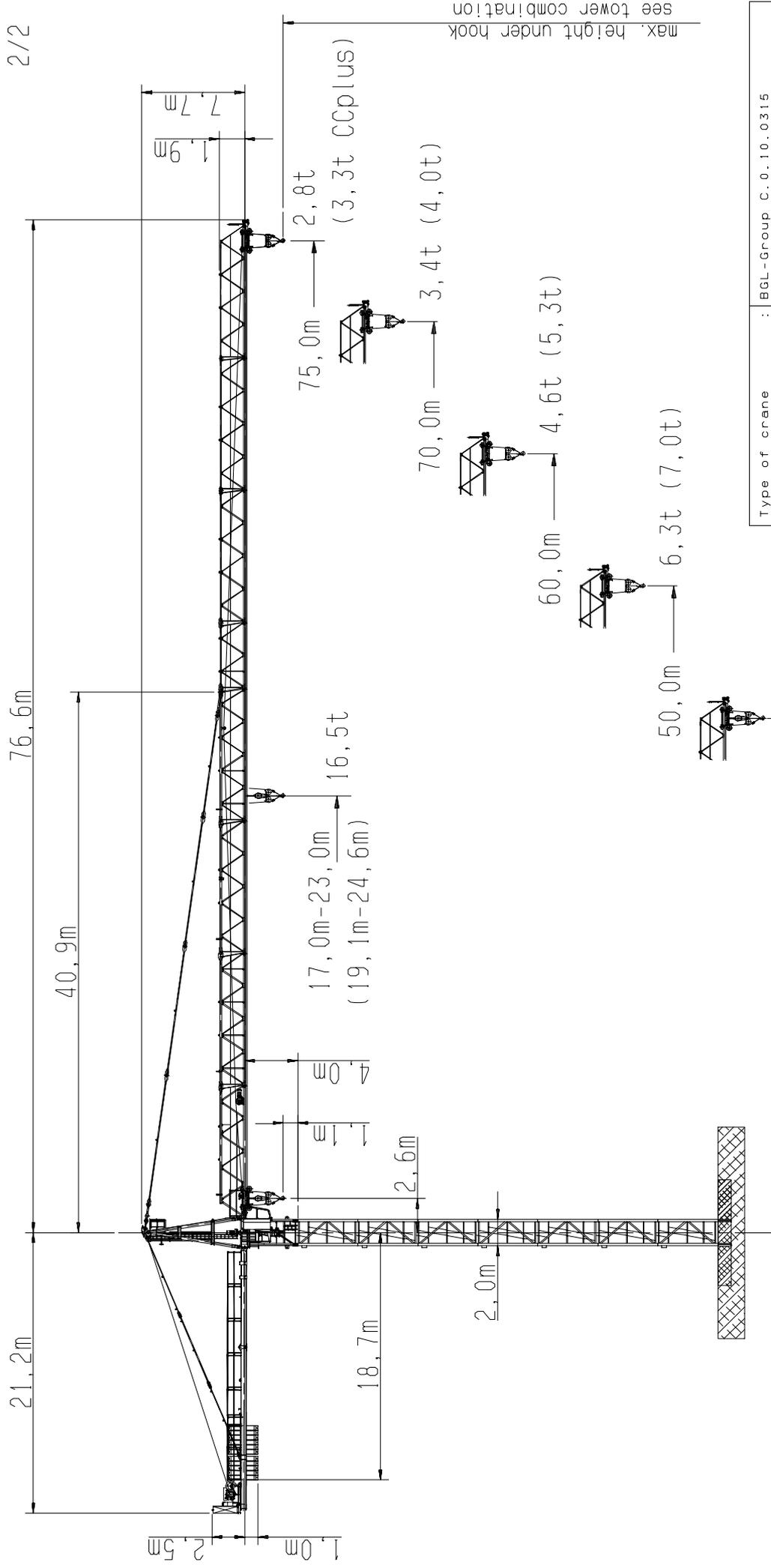


max. height under hook  
see tower combination

Type of crane	: BGL-Group C.0.10.0315
Kind of crane	: Tower crane with trolley jib, top slewing, self climbing
Installation	: stationary or travelling
Calculation base	: FEM-HC1 / A3
Load moment	: max. 3660 kNm

**PLANING DIAGRAM 7532** 962-3-025157E  
(Hw 645 FU / Hw 675 FU)



Type of crane	: BGL-Group C.0.10.0315
Kind of crane	: Tower crane with trolley jib, top slewing, self climbing
Installation	: stationary or travelling
Calculation base	: FEM-HC1 / A3
Load moment	: max. 3795 kNm

**PLANING DIAGRAM 7532**  
(Hw 87FU)

962-3-025162E

2.2.1.1

Load capacity table

radius [m]		25	30	35	40	45	50	55	60	65	70	75	load capacity [t]
length of jib [m]	75 2,6 - 22,9	10,9	8,9	7,4	6,3	5,5	4,8	4,3	3,8	3,4	3,1	2,8	
	70 2,6 - 24,5	11,8	9,6	8,0	6,9	6,0	5,3	4,7	4,2	3,8	3,4		
	65 2,6 - 25,7	12,0	10,1	8,5	7,3	6,3	5,6	5,0	4,4	4,0			
	60 2,6 - 26,5	12,0	10,4	8,8	7,5	6,6	5,8	5,1	4,6				
	55 2,6 - 27,6	12,0	10,9	9,2	7,9	6,9	6,1	5,4					
	50 2,6 - 28,4	12,0	11,3	9,5	8,2	7,1	6,3						
	45 2,6 - 29,3	12,0	11,7	9,9	8,5	7,4							
	40 2,6 - 29,7	12,0	11,9	10,0	8,6								
	35 2,6 - 30,5	12,0	12,0	10,3									
	30 2,6 - 30,0	12,0	12,0										
length of jib [m]	75 2,6 - 42,4	6,0	6,0	6,0	6,0	5,6	4,9	4,4	3,9	3,5	3,2	2,9	6,0
	70 2,6 - 45,4	6,0	6,0	6,0	6,0	6,0	5,4	4,8	4,3	3,9	3,5		
	65 2,6 - 47,7	6,0	6,0	6,0	6,0	6,0	5,7	5,1	4,5	4,1			
	60 2,6 - 49,1	6,0	6,0	6,0	6,0	6,0	5,9	5,2	4,7				
	55 2,6 - 51,1	6,0	6,0	6,0	6,0	6,0	6,0	5,5					
	50 2,6 - 50,0	6,0	6,0	6,0	6,0	6,0	6,0	6,0					
	45 2,6 - 45,0	6,0	6,0	6,0	6,0	6,0	6,0						
	40 2,6 - 40,0	6,0	6,0	6,0	6,0	6,0							
	35 2,6 - 35,0	6,0	6,0	6,0									
	30 2,6 - 30,0	6,0	6,0										

The load capacities refer to a hook path of 42,0 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 2,4 kg per meter hook path, with 4 fall operation = 4,8 kg per meter hook path).

Arrangement of counterweights with hoisting winch

Hw 645 FU

jib [m]		75	70	65	60	55
2 t	11 x 2,7 t	10 x 2,7 t		10 x 2,7 t	9 x 2,7 t	8 x 2,7 t
	to tower →	to tower →	to tower →	to tower →	to tower →	to tower →
		31,7	29,0	29,0	26,3	23,6
		intermediate ballasting = 1 x 2,7 t see assembly, section 5				
		total weight [t]				
jib [m]		50	45	40	35	30
2 t	7 x 2,7 t	6 x 2,7 t		6 x 2,7 t	5 x 2,7 t	4 x 2,7 t
	to tower →	to tower →	to tower →	to tower →	to tower →	to tower →
		20,9	18,2	18,2	15,5	12,8
		total weight [t]				

2.2.1.2

Load capacity table

(these load values are switch-off values)

radius [m]		25	30	35	40	45	50	55	60	65	70	75	load capacity [t]
length of jib [m]	75 2,6 - 25,7	12,0	10,1	8,5	7,3	6,3	5,6	5,0	4,4	4,0	3,6	3,3	
	70 2,6 - 27,7	12,0	11,0	9,2	7,9	6,9	6,1	5,4	4,9	4,4	4,0		
	65 2,6 - 29,1	12,0	11,6	9,8	8,4	7,3	6,5	5,8	5,2	4,7			
	60 2,6 - 29,6	12,0	11,8	10,0	8,6	7,5	6,6	5,9	5,3				
	55 2,6 - 30,5	12,0	12,0	10,3	8,9	7,7	6,8	6,1					
	50 2,6 - 31,1	12,0	12,0	10,5	9,1	7,9	7,0						
	45 2,6 - 31,7	12,0	12,0	10,8	9,3	8,1							
	40 2,6 - 31,8	12,0	12,0	10,8	9,3								
	35 2,6 - 32,6	12,0	12,0	11,1									
	30 2,6 - 30,0	12,0	12,0										
length of jib [m]	75 2,6 - 47,6	6,0	6,0	6,0	6,0	6,0	5,7	5,1	4,5	4,1	3,7	3,4	6,0
	70 2,6 - 51,3	6,0	6,0	6,0	6,0	6,0	6,0	5,5	5,0	4,5	4,1		
	65 2,6 - 54,1	6,0	6,0	6,0	6,0	6,0	6,0	5,9	5,3	4,8			
	60 2,6 - 55,0	6,0	6,0	6,0	6,0	6,0	6,0	6,0	5,4				
	55 2,6 - 55,0	6,0	6,0	6,0	6,0	6,0	6,0	6,0	6,0				
	50 2,6 - 50,0	6,0	6,0	6,0	6,0	6,0	6,0	6,0	6,0				
	45 2,6 - 45,0	6,0	6,0	6,0	6,0	6,0	6,0	6,0					
	40 2,6 - 40,0	6,0	6,0	6,0	6,0	6,0							
	35 2,6 - 35,0	6,0	6,0	6,0									
	30 2,6 - 30,0	6,0	6,0										

The load capacities refer to a hook path of 42,0 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 2,4 kg per meter hook path, with 4 fall operation = 4,8 kg per meter hook path).

Arrangement of counterweights with hoisting winch

Hw 645 FU

jib [m]		75	70	65	60	55
2 t	11 x 2,7 t	10 x 2,7 t		10 x 2,7 t	9 x 2,7 t	8 x 2,7 t
	to tower →	to tower →	to tower →	to tower →	to tower →	to tower →
		31,7	29,0	29,0	26,3	23,6
		intermediate ballasting = 1 x 2,7 t see assembly, section 5				
		total weight [t]				
jib [m]		50	45	40	35	30
2 t	7 x 2,7 t	6 x 2,7 t		6 x 2,7 t	5 x 2,7 t	4 x 2,7 t
	to tower →	to tower →	to tower →	to tower →	to tower →	to tower →
		20,9	18,2	18,2	15,5	12,8
		total weight [t]				

2.2.1.3

Load capacity table

radius [m]		25	30	35	40	45	50	55	60	65	70	75	load capacity [t]
length of jib [m]	75 2,6 - 22,9	10,9	8,9	7,4	6,3	5,5	4,8	4,3	3,8	3,4	3,1	2,8	
	70 2,6 - 24,5	11,8	9,6	8,0	6,9	6,0	5,3	4,7	4,2	3,8	3,4		
	65 2,6 - 25,7	12,0	10,1	8,5	7,3	6,3	5,6	5,0	4,4	4,0			
	60 2,6 - 26,5	12,0	10,4	8,8	7,5	6,6	5,8	5,1	4,6				
	55 2,6 - 27,6	12,0	10,9	9,2	7,9	6,9	6,1	5,4					
	50 2,6 - 28,4	12,0	11,3	9,5	8,2	7,1	6,3						
	45 2,6 - 29,3	12,0	11,7	9,9	8,5	7,4							
	40 2,6 - 29,7	12,0	11,9	10,0	8,6								
	35 2,6 - 30,5	12,0	12,0	10,3									
	30 2,6 - 30,0	12,0	12,0										
length of jib [m]	75 2,6 - 42,4	6,0	6,0	6,0	6,0	5,6	4,9	4,4	3,9	3,5	3,2	2,9	6,0
	70 2,6 - 45,4	6,0	6,0	6,0	6,0	6,0	5,4	4,8	4,3	3,9	3,5		
	65 2,6 - 47,7	6,0	6,0	6,0	6,0	6,0	5,7	5,1	4,5	4,1			
	60 2,6 - 49,1	6,0	6,0	6,0	6,0	6,0	5,9	5,2	4,7				
	55 2,6 - 51,1	6,0	6,0	6,0	6,0	6,0	6,0	5,5					
	50 2,6 - 50,0	6,0	6,0	6,0	6,0	6,0	6,0	6,0					
	45 2,6 - 45,0	6,0	6,0	6,0	6,0	6,0	6,0						
	40 2,6 - 40,0	6,0	6,0	6,0	6,0	6,0							
	35 2,6 - 35,0	6,0	6,0	6,0									
	30 2,6 - 30,0	6,0	6,0										

The load capacities refer to a hook path of 42,0 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 2,4 kg per meter hook path, with 4 fall operation = 4,8 kg per meter hook path).

Arrangement of counterweights with hoisting winch

Hw 675 FU

jib [m]		75	70	65	60	55	
2 t	11 x 2,7 t	10 x 2,7 t		10 x 2,7 t	9 x 2,7 t	8 x 2,7 t	
	to tower →	to tower →	to tower →	to tower →	to tower →	to tower →	
		31,7	29,0	29,0	26,3	23,6	
		intermediate ballasting = 1 x 2,7 t see assembly, section 5					total weight [t]
jib [m]		50	45	40	35	30	
2 t	7 x 2,7 t	6 x 2,7 t		6 x 2,7 t	5 x 2,7 t	4 x 2,7 t	
	to tower →	to tower →	to tower →	to tower →	to tower →	to tower →	
		20,9	18,2	18,2	15,5	12,8	
		total weight [t]					

2.2.1.4

Load capacity table

(these load values are switch-off values)

radius [m]		25	30	35	40	45	50	55	60	65	70	75	load capacity [t]
length of jib [m]	75 2,6 - 25,7	12,0	10,1	8,5	7,3	6,3	5,6	5,0	4,4	4,0	3,6	3,3	
	70 2,6 - 27,7	12,0	11,0	9,2	7,9	6,9	6,1	5,4	4,9	4,4	4,0		
	65 2,6 - 29,1	12,0	11,6	9,8	8,4	7,3	6,5	5,8	5,2	4,7			
	60 2,6 - 29,6	12,0	11,8	10,0	8,6	7,5	6,6	5,9	5,3				
	55 2,6 - 30,5	12,0	12,0	10,3	8,9	7,7	6,8	6,1					
	50 2,6 - 31,1	12,0	12,0	10,5	9,1	7,9	7,0						
	45 2,6 - 31,7	12,0	12,0	10,8	9,3	8,1							
	40 2,6 - 31,8	12,0	12,0	10,8	9,3								
	35 2,6 - 32,6	12,0	12,0	11,1									
	30 2,6 - 30,0	12,0	12,0										
length of jib [m]	75 2,6 - 47,6	6,0	6,0	6,0	6,0	6,0	5,7	5,1	4,5	4,1	3,7	3,4	6,0
	70 2,6 - 51,3	6,0	6,0	6,0	6,0	6,0	6,0	5,5	5,0	4,5	4,1		
	65 2,6 - 54,1	6,0	6,0	6,0	6,0	6,0	6,0	5,9	5,3	4,8			
	60 2,6 - 55,0	6,0	6,0	6,0	6,0	6,0	6,0	6,0	5,4				
	55 2,6 - 55,0	6,0	6,0	6,0	6,0	6,0	6,0	6,0	6,0				
	50 2,6 - 50,0	6,0	6,0	6,0	6,0	6,0	6,0	6,0					
	45 2,6 - 45,0	6,0	6,0	6,0	6,0	6,0	6,0						
	40 2,6 - 40,0	6,0	6,0	6,0	6,0								
	35 2,6 - 35,0	6,0	6,0	6,0									
	30 2,6 - 30,0	6,0	6,0										

The load capacities refer to a hook path of 42,0 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 2,4 kg per meter hook path, with 4 fall operation = 4,8 kg per meter hook path).

Arrangement of counterweights with hoisting winch

Hw 675 FU

jib [m]		75	70	65	60	55	
2 t	11 x 2,7 t	10 x 2,7 t		10 x 2,7 t	9 x 2,7 t	8 x 2,7 t	
	to tower →	to tower →	to tower →	to tower →	to tower →	to tower →	
		31,7	29,0	29,0	26,3	23,6	
		intermediate ballasting = 1 x 2,7 t see assembly, section 5					total weight [t]
jib [m]		50	45	40	35	30	
2 t	7 x 2,7 t	6 x 2,7 t		6 x 2,7 t	5 x 2,7 t	4 x 2,7 t	
	to tower →	to tower →	to tower →	to tower →	to tower →	to tower →	
		20,9	18,2	18,2	15,5	12,8	
		total weight [t]					

2.2.1.5

Load capacity table

radius [m]		25	30	35	40	45	50	55	60	65	70	75	load capacity [t]
length of jib [m]	75 2,6 - 17,0	10,8	8,8	7,3	6,2	5,4	4,7	4,2	3,7	3,3	3,0	2,7	
	70 2,6 - 18,2	11,7	9,5	7,9	6,8	5,9	5,2	4,6	4,1	3,7	3,3		
	65 2,6 - 19,1	12,3	10,0	8,4	7,2	6,2	5,5	4,9	4,3	3,9			
	60 2,6 - 19,6	12,7	10,3	8,7	7,4	6,5	5,7	5,0	4,5				
	55 2,6 - 20,5	13,3	10,8	9,1	7,8	6,8	6,0	5,3					
	50 2,6 - 21,1	13,7	11,2	9,4	8,1	7,0	6,2						
	45 2,6 - 21,8	14,2	11,6	9,8	8,4	7,3							
	40 2,6 - 22,1	14,4	11,8	9,9	8,5								
	35 2,6 - 22,6	14,8	12,1	10,2									
	30 2,6 - 23,0	15,0	12,3										
length of jib [m]	75 2,6 - 31,8	8,3	8,3	7,4	6,3	5,5	4,8	4,3	3,8	3,4	3,1	2,8	8,3
	70 2,6 - 34,0	8,3	8,3	8,0	6,9	6,0	5,3	4,7	4,2	3,8	3,4		
	65 2,6 - 35,7	8,3	8,3	8,2	7,3	6,3	5,6	5,0	4,4	4,0			
	60 2,6 - 36,7	8,3	8,3	8,3	7,5	6,6	5,8	5,1	4,6				
	55 2,6 - 38,3	8,3	8,3	8,3	7,9	6,9	6,1	5,4					
	50 2,6 - 39,5	8,3	8,3	8,3	8,2	7,1	6,3						
	45 2,6 - 40,8	8,3	8,3	8,3	8,3	7,4							
	40 2,6 - 40,0	8,3	8,3	8,3	8,3								
	35 2,6 - 35,0	8,3	8,3	8,3									
	30 2,6 - 30,0	8,3	8,3										

The load capacities refer to a hook path of 42,0 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 2,5 kg per meter hook path, with 4 fall operation = 5,0 kg per meter hook path).

Arrangement of counterweights with hoisting winch

Hw 875 FU

jib [m]		75	70	65	60	55
to tower →	2 t	11 x 2,7 t	10 x 2,7 t	10 x 2,7 t	9 x 2,7 t	8 x 2,7 t
	intermediate ballasting = 1 x 2,7 t see assembly, section 5					
total weight [t]		31,7	29,0	29,0	26,3	23,6
jib [m]		50	45	40	35	30
to tower →	2 t	7 x 2,7 t	6 x 2,7 t	6 x 2,7 t	5 x 2,7 t	4 x 2,7 t
	intermediate ballasting = 1 x 2,7 t see assembly, section 5					
total weight [t]		20,9	18,2	18,2	15,5	12,8

2.2.1.6

Load capacity table

(these load values are switch-off values)

Ausladung [m]		25	30	35	40	45	50	55	60	65	70	75	Tragfähigkeit [t]
length of jib [m]	75 2,6 - 19,1	12,3	10,0	8,4	7,2	6,2	5,5	4,9	4,3	3,9	3,5	3,2	
	70 2,6 - 20,6	13,3	10,9	9,1	7,8	6,8	6,0	5,3	4,8	4,3	3,9		
	65 2,6 - 21,6	14,1	11,5	9,7	8,3	7,2	6,4	5,7	5,1	4,6			
	60 2,6 - 22,0	14,4	11,7	9,9	8,5	7,4	6,5	5,8	5,2				
	55 2,6 - 22,6	14,8	12,1	10,2	8,8	7,6	6,7	6,0					
	50 2,6 - 23,1	15,1	12,4	10,4	9,0	7,8	6,9						
	45 2,6 - 23,6	15,5	12,7	10,7	9,2	8,0							
	40 2,6 - 23,6	15,5	12,7	10,7	9,2								
	35 2,6 - 24,2	15,9	13,1	11,0									
	30 2,6 - 24,6	16,2	13,3										
length of jib [m]	75 2,6 - 35,7	8,3	8,3	8,3	7,3	6,3	5,6	5,0	4,4	4,0	3,6	3,3	8,3
	70 2,6 - 38,4	8,3	8,3	8,3	7,9	6,9	6,1	5,4	4,9	4,4	4,0		
	65 2,6 - 40,5	8,3	8,3	8,3	8,3	7,3	6,5	5,8	5,2	4,7			
	60 2,6 - 41,1	8,3	8,3	8,3	8,3	7,5	6,6	5,9	5,3				
	55 2,6 - 42,3	8,3	8,3	8,3	8,3	7,7	6,8	6,1					
	50 2,6 - 43,2	8,3	8,3	8,3	8,3	7,9	7,0						
	45 2,6 - 44,1	8,3	8,3	8,3	8,3	8,1							
	40 2,6 - 40,0	8,3	8,3	8,3	8,3								
	35 2,6 - 35,0	8,3	8,3	8,3									
	30 2,6 - 30,0	8,3	8,3										

The load capacities refer to a hook path of 42,0 m. With greater hook paths the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 2,5 kg per meter hook path, with 4 fall operation = 5,0 kg per meter hook path).

Arrangement of counterweights with hoisting winch

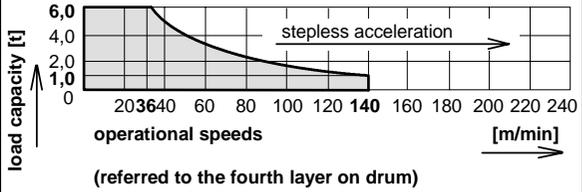
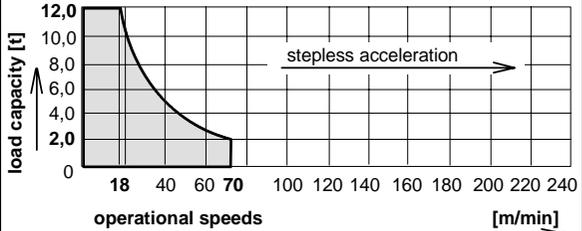
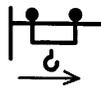
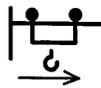
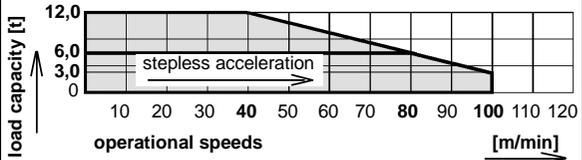
Hw 875 FU

jib [m]		75	70	65	60	55
to tower →	2 t	11 x 2,7 t	10 x 2,7 t	10 x 2,7 t	9 x 2,7 t	8 x 2,7 t
	intermediate ballasting = 1 x 2,7 t see assembly, section 5					
total weight [t]		31,7	29,0	29,0	26,3	23,6
jib [m]		50	45	40	35	30
to tower →	2 t	7 x 2,7 t	6 x 2,7 t	6 x 2,7 t	5 x 2,7 t	4 x 2,7 t
	intermediate ballasting = 1 x 2,7 t see assembly, section 5					
total weight [t]		20,9	18,2	18,2	15,5	12,8

2.2.2.1

Operational speeds

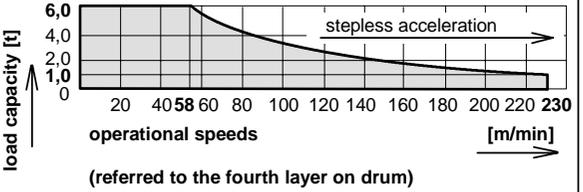
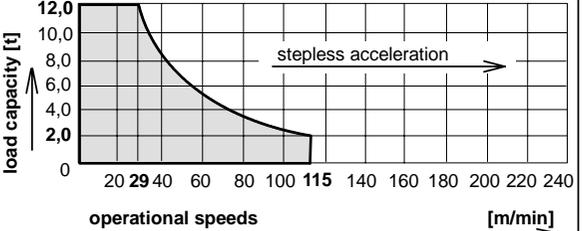
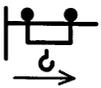
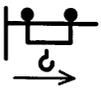
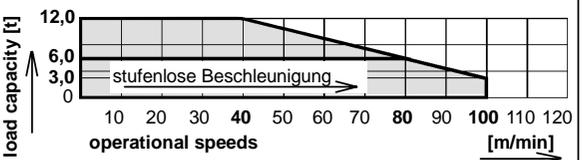
400 V, 50 Hz, 60% ED

drive [model]	operational speeds load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 645 FU	hoisting 	190	45	68,0 total output for a simultaneity factor of 0,8
	 load capacity [t] vs operational speeds [m/min] (referred to the fourth layer on drum) stepless acceleration			
	 load capacity [t] vs operational speeds [m/min] stepless acceleration	95		
Kw	travelling 		9,0	
	 load capacity [t] vs operational speeds [m/min] stepless acceleration			
	Dw	slewing 0,75 min <sup>-1</sup>	2 x 6,0	
	 operational speeds [min <sup>-1</sup> ]	0,75		

2.2.2.2

Operational speeds

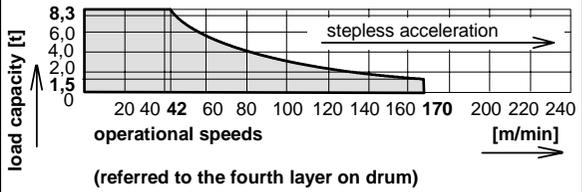
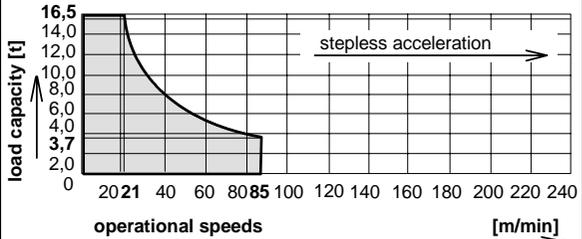
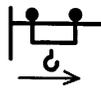
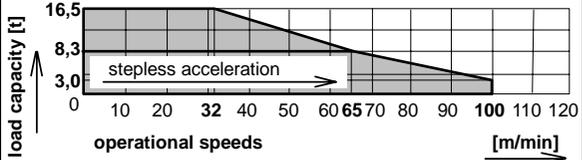
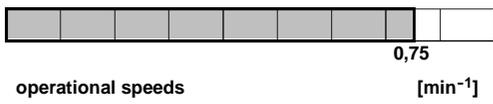
400 V, 50 Hz, 60% ED

drive [model]	operational speeds load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 675 FU	hoisting 	460	75	96,0 total output for a simultaneity factor of 0,8
	 load capacity [t] vs operational speeds [m/min] (referred to the fourth layer on drum) stepless acceleration			
	 load capacity [t] vs operational speeds [m/min] stepless acceleration	230		
Kw	travelling 		9,0	
	 load capacity [t] vs operational speeds [m/min] stufenlose Beschleunigung			
	Dw	slewing 0,75 min <sup>-1</sup>	2 x 6,0	
	 operational speeds [min <sup>-1</sup> ]	0,75		

2.2.2.3

Operational speeds

400 V, 50 Hz, 60% ED

drive [model]	operational speeds load capacity	max. lift [m]	output [kW]	total output [kVA]
Hw 875 FU	hoisting 	460	75	96,0 total output for a simultaneity factor of 0,8
	 <p>load capacity [t]</p> <p>operational speeds [m/min]</p> <p>(referred to the fourth layer on drum)</p>			
	 <p>load capacity [t]</p> <p>operational speeds [m/min]</p>	230		
Kw	travelling 		9,0	
	 <p>load capacity [t]</p> <p>operational speeds [m/min]</p>			
Dw	slewing 	0,75 min <sup>-1</sup>	2 x 6,0	
	 <p>operational speeds [min<sup>-1</sup>]</p>			

2.2.3.1

6 t / Load capacity [kg] Data given in distances of meters

DIN 15018 / H1 - B3

radius [m]	length of jib [m]												
	30	35	40	45	50	55	60	65	70	75			
20	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000			
21	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000			
22	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000			
23	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000			
24	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000			
25	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000			
26	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000			
27	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000			
28	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000			
29	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000			
30	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000			
31		6000	6000	6000	6000	6000	6000	6000	6000	6000			
32		6000	6000	6000	6000	6000	6000	6000	6000	6000			
33		6000	6000	6000	6000	6000	6000	6000	6000	6000			
34		6000	6000	6000	6000	6000	6000	6000	6000	6000			
35		6000	6000	6000	6000	6000	6000	6000	6000	6000			
36			6000	6000	6000	6000	6000	6000	6000	6000			
37			6000	6000	6000	6000	6000	6000	6000	6000			
38			6000	6000	6000	6000	6000	6000	6000	6000			
39			6000	6000	6000	6000	6000	6000	6000	6000			
40			6000	6000	6000	6000	6000	6000	6000	6000			
41				6000	6000	6000	6000	6000	6000	6000			
42				6000	6000	6000	6000	6000	6000	6000			
43				6000	6000	6000	6000	6000	6000	5910			
44				6000	6000	6000	6000	6000	6000	5750			
45					6000	6000	6000	6000	6000	5600			
46						6000	6000	6000	6000	5450			
47							6000	6000	6000	5310			
48							6000	6000	5960	5170			
49							6000	6000	5810	5040			
50							6000	6000	5900	4900			
51								6000	5730	5230	4800		
52									5880	5600	5110	4690	
53									5750	5470	5290	4990	4580
54									5620	5350	5170	4870	4470
55									5500	5200	5100	4800	4400
56										5120	4940	4660	4270
57										5010	4840	4560	4180
58										4900	4730	4460	4080
59										4800	4630	4370	4000
60										4700	4500	4300	3900
61											4440	4180	3830
62											4350	4100	3750
63											4270	4020	3670
64											4180	3940	3590
65											4100	3900	3500
66												3780	3450
67												3710	3380
68												3640	3320
69												3570	3250
70												3500	3200
71													3130
72													3070
73													3010
74													2950
75													2900

The load capacities refer to a range of lift of 42 m

2.2.3.2 6 t / Load capacity [kg] Data given in distances of meters DIN 15018 / H1 - B3

radius [m]	length of jib [m]									
	30	35	40	45	50	55	60	65	70	75
20	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
21	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
22	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
23	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
24	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
25	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
26	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
27	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
28	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
29	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
30	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
31		6000	6000	6000	6000	6000	6000	6000	6000	6000
32		6000	6000	6000	6000	6000	6000	6000	6000	6000
33		6000	6000	6000	6000	6000	6000	6000	6000	6000
34		6000	6000	6000	6000	6000	6000	6000	6000	6000
35		6000	6000	6000	6000	6000	6000	6000	6000	6000
36			6000	6000	6000	6000	6000	6000	6000	6000
37			6000	6000	6000	6000	6000	6000	6000	6000
38			6000	6000	6000	6000	6000	6000	6000	6000
39			6000	6000	6000	6000	6000	6000	6000	6000
40			6000	6000	6000	6000	6000	6000	6000	6000
41				6000	6000	6000	6000	6000	6000	6000
42				6000	6000	6000	6000	6000	6000	6000
43				6000	6000	6000	6000	6000	6000	6000
44				6000	6000	6000	6000	6000	6000	6000
45				6000	6000	6000	6000	6000	6000	6000
46					6000	6000	6000	6000	6000	6000
47					6000	6000	6000	6000	6000	6000
48					6000	6000	6000	6000	6000	5950
49					6000	6000	6000	6000	6000	5810
50					6000	6000	6000	6000	6000	5700
51						6000	6000	6000	6000	5540
52						6000	6000	6000	5910	5410
53						6000	6000	6000	5780	5280
54						6000	6000	6000	5650	5170
55						6000	6000	5900	5500	5100
56							5870	5750	5410	4940
57							5740	5630	5300	4830
58							5630	5520	5180	4730
59							5510	5400	5080	4630
60							5400	5300	5000	4500
61								5190	4870	4440
62								5090	4780	4350
63								4990	4680	4260
64								4890	4590	4180
65								4800	4500	4100
66									4420	4020
67									4330	3940
68									4250	3870
69									4180	3790
70									4100	3700
71										3660
72										3590
73										3520
74										3460
75										3400

The load capacities refer to a range of lift of 42,0 m

2.2.3.3 12 t / Load capacity [kg] Data given in distances of meters DIN 15018 / H1 - B3

radius [m]	length of jib [m]									
	30	35	40	45	50	55	60	65	70	75
20	12000	12000	12000	12000	12000	12000	12000	12000	12000	12000
21	12000	12000	12000	12000	12000	12000	12000	12000	12000	12000
22	12000	12000	12000	12000	12000	12000	12000	12000	12000	12000
23	12000	12000	12000	12000	12000	12000	12000	12000	12000	11930
24	12000	12000	12000	12000	12000	12000	12000	12000	12000	11390
25	12000	12000	12000	12000	12000	12000	12000	12000	12000	11750
26	12000	12000	12000	12000	12000	12000	12000	12000	11860	11250
27	12000	12000	12000	12000	12000	12000	11740	11370	10790	9980
28	12000	12000	12000	12000	12000	11800	11270	10920	10360	9580
29	12000	12000	12000	12000	11760	11350	10840	10500	9960	9210
30	12000	12000	11900	11700	11300	10900	10400	10100	9600	8900
31		11790	11460	11300	10920	10540	10060	9750	9240	8530
32		11380	11060	10910	10540	10170	9710	9400	8910	8230
33		11000	10690	10540	10180	9830	9380	9080	8600	7940
34		10640	10340	10200	9850	9500	9070	8780	8310	7670
35		10300	10000	9900	9500	9200	8800	8500	8000	7400
36			9690	9560	9230	8900	8490	8220	7780	7180
37			9400	9270	8950	8630	8230	7970	7540	6950
38			9120	8990	8680	8370	7980	7720	7310	6730
39			8850	8730	8430	8120	7740	7490	7090	6530
40			8600	8500	8200	7900	7500	7300	6900	6300
41				8240	7960	7670	7310	7070	6680	6150
42				8020	7740	7460	7100	6870	6490	5970
43				7800	7530	7250	6910	6680	6310	5810
44				7600	7330	7060	6720	6500	6140	5650
45				7400	7100	6900	6600	6300	6000	5500
46					6960	6700	6380	6160	5820	5350
47					6780	6530	6220	6010	5670	5210
48					6610	6370	6060	5860	5530	5070
49					6450	6210	5910	5710	5390	4940
50					6300	6060	5800	5600	5300	4800
51						5920	5630	5440	5130	4700
52						5780	5500	5310	5010	4590
53						5650	5370	5190	4890	4480
54						5520	5250	5070	4770	4370
55						5400	5100	5000	4700	4300
56							5020	4840	4560	4170
57							4910	4740	4460	4080
58							4800	4630	4360	3980
59							4700	4530	4270	3900
60							4600	4400	4200	3800
61								4340	4080	3730
62								4250	4000	3650
63								4170	3920	3570
64								4080	3840	3490
65								4000	3800	3400
66									3680	3350
67									3610	3280
68									3540	3220
69									3470	3150
70									3400	3100
71										3030
72										2970
73										2910
74										2850
75										2800

The load capacities refer to a range of lift of 42,0 m

2.2.3.4 12 t / load capacity [kg] Data given distances of meters DIN 15018 / H1 - B3

radius [m]	length of jib [m]									
	30	35	40	45	50	55	60	65	70	75 <sup>c</sup>
20	12000	12000	12000	12000	12000	12000	12000	12000	12000	12000
21	12000	12000	12000	12000	12000	12000	12000	12000	12000	12000
22	12000	12000	12000	12000	12000	12000	12000	12000	12000	12000
23	12000	12000	12000	12000	12000	12000	12000	12000	12000	12000
24	12000	12000	12000	12000	12000	12000	12000	12000	12000	12000
25	12000	12000	12000	12000	12000	12000	12000	12000	12000	12000
26	12000	12000	12000	12000	12000	12000	12000	12000	12000	11860
27	12000	12000	12000	12000	12000	12000	12000	12000	12000	11370
28	12000	12000	12000	12000	12000	12000	12000	12000	11860	10920
29	12000	12000	12000	12000	12000	12000	12000	12000	11410	10500
30	12000	12000	12000	12000	12000	12000	11800	11600	11000	10100
31		12000	12000	12000	12000	11780	11420	11210	10590	9740
32		12000	11940	11890	11640	11380	11020	10830	10220	9400
33		11850	11540	11500	11240	10990	10650	10460	9880	9080
34		11460	11160	11120	10880	10630	10300	10120	9550	8770
35		11100	10810	10770	10530	10290	9970	9790	9240	8490
36			10470	10440	10200	9970	9660	9490	8950	8220
37			10150	10120	9900	9670	9370	9200	8670	7960
38			9850	9820	9600	9380	9090	8920	8410	7720
39			9570	9540	9320	9110	8820	8660	8170	7490
40			9300	9270	9060	8850	8570	8410	7930	7270
41				9010	8810	8610	8330	8180	7710	7060
42				8770	8570	8370	8100	7950	7490	6870
43				8530	8340	8150	7890	7740	7290	6680
44				8310	8120	7940	7680	7540	7100	6500
45				8100	7920	7730	7480	7340	6910	6330
46					7720	7540	7290	7150	6730	6160
47					7530	7350	7110	6970	6560	6000
48					7340	7170	6940	6800	6400	5850
49					7170	7000	6770	6640	6250	5710
50					7000	6830	6610	6480	6100	5570
51						6680	6450	6330	5950	5440
52						6520	6310	6190	5810	5310
53						6380	6160	6040	5680	5180
54						6240	6030	5910	5550	5070
55						6100	5890	5780	5430	4950
56							5770	5650	5310	4840
57							5640	5530	5200	4730
58							5530	5420	5080	4630
59							5410	5300	4980	4530
60							5300	5200	4870	4440
61								5090	4770	4340
62								4990	4680	4250
63								4890	4580	4160
64								4790	4490	4080
65								4700	4400	4000
66									4320	3920
67									4230	3840
68									4150	3770
69									4080	3690
70									4000	3620
71										3560
72										3490
73										3420
74										3360
75										3300

The load capacities refer to a range of lift of 42,0 m

2.2.3.5 8,3 t / Load capacity [kg] Data given in distances of meters DIN 15018 / H1 - B3

radius [m]	length of jib [m]									
	30	35	40	45	50	55	60	65	70	75 <sup>c</sup>
20	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
21	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
22	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
23	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
24	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
25	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
26	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
27	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
28	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
29	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
30	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
31		8300	8300	8300	8300	8300	8300	8300	8300	8300
32		8300	8300	8300	8300	8300	8300	8300	8300	8230
33		8300	8300	8300	8300	8300	8300	8300	8300	7940
34		8300	8300	8300	8300	8300	8300	8300	8300	7670
35		8300	8300	8300	8300	8300	8300	8300	8000	7400
36			8300	8300	8300	8300	8300	8300	8220	7780
37			8300	8300	8300	8300	8300	8230	7970	7540
38			8300	8300	8300	8300	7980	7720	7310	6730
39			8300	8300	8300	8120	7740	7490	7090	6530
40			8300	8300	8200	7900	7500	7300	6900	6300
41				8240	7960	7670	7310	7070	6680	6150
42				8020	7740	7460	7100	6870	6490	5970
43				7800	7530	7250	6910	6680	6310	5810
44				7600	7330	7060	6720	6500	6140	5650
45				7400	7100	6900	6600	6300	6000	5500
46					6960	6700	6380	6160	5820	5350
47					6780	6530	6220	6010	5670	5210
48					6610	6370	6060	5860	5530	5070
49					6450	6210	5910	5710	5390	4940
50					6300	6100	5800	5600	5300	4800
51						5920	5630	5440	5130	4700
52						5780	5500	5310	5010	4590
53						5650	5370	5190	4890	4480
54						5520	5250	5070	4770	4370
55						5400	5100	5000	4700	4300
56							5020	4840	4560	4170
57							4910	4740	4460	4080
58							4800	4630	4360	3980
59							4700	4530	4270	3900
60							4600	4400	4200	3800
61								4340	4080	3730
62								4250	4000	3650
63								4170	3920	3570
64								4080	3840	3490
65								4000	3800	3400
66									3680	3350
67									3610	3280
68									3540	3220
69									3470	3150
70									3400	3100
71										3030
72										2970
73										2910
74										2850
75										2800

The load capacities refer to a range of lift of 42,0 m

2.2.3.6 8,3 t / Load capacity [kg] Data given in distances of meters DIN 15018 / H1 - B3

radius [m]	length of jib [m]									
	30	35	40	45	50	55	60	65	70	75
20	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
21	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
22	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
23	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
24	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
25	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
26	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
27	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
28	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
29	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
30	8300	8300	8300	8300	8300	8300	8300	8300	8300	8300
31		8300	8300	8300	8300	8300	8300	8300	8300	8300
32		8300	8300	8300	8300	8300	8300	8300	8300	8300
33		8300	8300	8300	8300	8300	8300	8300	8300	8300
34		8300	8300	8300	8300	8300	8300	8300	8300	8300
35		8300	8300	8300	8300	8300	8300	8300	8300	8300
36			8300	8300	8300	8300	8300	8300	8300	8220
37			8300	8300	8300	8300	8300	8300	8300	7960
38			8300	8300	8300	8300	8300	8300	8300	7720
39			8300	8300	8300	8300	8300	8300	8170	7490
40			8300	8300	8300	8300	8300	8300	7900	7300
41				8300	8300	8300	8300	8180	7710	7060
42				8300	8300	8300	8100	7950	7490	6870
43				8300	8300	8150	7890	7740	7290	6680
44				8300	8120	7940	7680	7540	7100	6500
45					8100	7900	7700	7500	7300	6900
46						7720	7540	7290	7150	6160
47						7530	7350	7110	6970	6000
48						7340	7170	6940	6800	6400
49						7170	7000	6770	6640	6250
50						7000	6800	6600	6500	6100
51							6680	6450	6330	5950
52							6520	6310	6190	5810
53							6380	6160	6040	5680
54							6240	6030	5910	5550
55							6100	5900	5800	5400
56								5770	5650	5310
57								5640	5530	5200
58								5530	5420	5080
59								5410	5300	4980
60								5300	5200	4900
61									5090	4770
62									4990	4680
63									4890	4580
64									4790	4490
65									4700	4400
66										4320
67										4230
68										4150
69										4080
70										4000
71										3560
72										3490
73										3420
74										3360
75										3300

The load capacities refer to a range of lift of 42,0 m

2.2.3.7 16,5 t / Load capacity [kg] Data given in distances of meters DIN 15018 / H1 - B3

radius [m]	length of jib [m]									
	30	35	40	45	50	55	60	65	70	75
20	16500	16500	16500	16500	16500	16500	16180	15690	14900	13810
21	16500	16500	16500	16500	16500	16050	15350	14880	14130	13090
22	16500	16500	16500	16330	15800	15260	14590	14140	13420	12430
23	16450	16220	15770	15560	15050	14540	13890	13470	12780	11830
24	15710	15490	15060	14860	14370	13880	13260	12850	12190	11290
25	15000	14800	14400	14200	13700	13300	12700	12300	11700	10800
26	14400	14190	13800	13610	13160	12710	12140	11760	11150	10310
27	13820	13620	13240	13060	12620	12190	11640	11270	10690	9880
28	13270	13090	12720	12550	12120	11700	11170	10820	10260	9480
29	12770	12590	12230	12070	11660	11250	10740	10400	9860	9110
30	12300	12100	11800	11600	11200	10800	10300	10000	9500	8800
31		11690	11360	11200	10820	10440	9960	9650	9140	8430
32		11280	10960	10810	10440	10070	9610	9300	8810	8130
33		10900	10590	10440	10080	9730	9280	8980	8500	7840
34		10540	10240	10100	9750	9400	8970	8680	8210	7570
35		10200	9900	9800	9400	9100	8700	8400	7900	7300
36			9590	9460	9130	8800	8390	8120	7680	7080
37			9300	9170	8850	8530	8130	7870	7440	6850
38			9020	8890	8580	8270	7880	7620	7210	6630
39			8750	8630	8330	8020	7640	7390	6990	6430
40			8500	8400	8100	7800	7400	7200	6800	6200
41				8140	7860	7570	7210	6970	6580	6050
42				7920	7640	7360	7000	6770	6390	5870
43				7700	7430	7150	6810	6580	6210	5710
44				7500	7230	6960	6620	6400	6040	5550
45					7300	7000	6800	6500	6200	5900
46						6860	6600	6280	6060	5720
47						6680	6430	6120	5910	5570
48						6510	6270	5960	5760	5430
49						6350	6110	5810	5610	5290
50						6200	6000	5700	5500	5200
51							5820	5530	5340	5030
52							5680	5400	5210	4910
53							5550	5270	5090	4790
54							5420	5150	4970	4670
55							5300	5000	4900	4600
56								4920	4740	4460
57								4810	4640	4360
58								4700	4530	4260
59								4600	4430	4170
60								4500	4300	4100
61									4240	3980
62									4150	3900
63									4070	3820
64									3980	3740
65									3900	3700
66										3580
67										3510
68										3440
69										3370
70										3300
71										2930
72										2870
73										2810
74										2750
75										2700

The load capacities refer to a range of lift of 42,0 m

2.2.3.8 16,5 t / Load capacity [kg] Data given in distances of meters DIN 15018 / H1 - B3

radius [m]	length of jib [m]									
	30	35	40	45	50	55	60	65	70	75
20	16500	16500	16500	16500	16500	16500	16500	16500	16500	15690
21	16500	16500	16500	16500	16500	16500	16500	16500	16130	14870
22	16500	16500	16500	16500	16500	16500	16500	16210	15330	14140
23	16500	16500	16500	16500	16500	16210	15720	15450	14610	13460
24	16500	16500	16230	16170	15830	15480	15010	14750	13940	12850
25	16200	15900	15500	15500	15100	14800	14400	14100	13300	12300
26	15550	15270	14880	14830	14510	14190	13750	13510	12770	11760
27	14930	14660	14270	14230	13920	13610	13190	12960	12250	11270
28	14350	14090	13720	13670	13370	13080	12670	12450	11760	10820
29	13800	13550	13200	13150	12870	12580	12190	11970	11310	10400
30	13300	13100	12700	12700	12400	12100	11700	11500	10900	10000
31		12590	12260	12220	11950	11680	11320	11110	10490	9640
32		12160	11840	11790	11540	11280	10920	10730	10120	9300
33		11750	11440	11400	11140	10890	10550	10360	9780	8980
34		11360	11060	11020	10780	10530	10200	10020	9450	8670
35		11000	10700	10700	10400	10200	9900	9700	9100	8400
36			10370	10340	10100	9870	9560	9390	8850	8120
37			10050	10020	9800	9570	9270	9100	8570	7860
38			9750	9720	9500	9280	8990	8820	8310	7620
39			9470	9440	9220	9010	8720	8560	8070	7390
40			9200	9200	9000	8800	8500	8300	7800	7200
41				8910	8710	8510	8230	8080	7610	6960
42				8670	8470	8270	8000	7850	7390	6770
43				8430	8240	8050	7790	7640	7190	6580
44				8210	8020	7840	7580	7440	7000	6400
45				8000	7800	7600	7400	7200	6800	6200
46					7620	7440	7190	7050	6630	6060
47					7430	7250	7010	6870	6460	5900
48					7240	7070	6840	6700	6300	5750
49					7070	6900	6670	6540	6150	5610
50					6900	6700	6500	6400	6000	5500
51						6580	6350	6230	5850	5340
52						6420	6210	6090	5710	5210
53						6280	6060	5940	5580	5080
54						6140	5930	5810	5450	4970
55						6000	5800	5700	5300	4900
56							5670	5550	5210	4740
57							5540	5430	5100	4630
58							5430	5320	4980	4530
59							5310	5200	4880	4430
60							5200	5100	4800	4300
61								4990	4670	4240
62								4890	4580	4150
63								4790	4480	4060
64								4690	4390	3980
65								4600	4300	3900
66									4220	3820
67									4130	3740
68									4050	3670
69									3980	3590
70									3900	3500
71										3460
72										3390
73										3320
74										3260
75										3200

The load capacities refer to a range of lift of 42,0 m

2.2.7.1 Tower configurations

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

**Slewing part:**

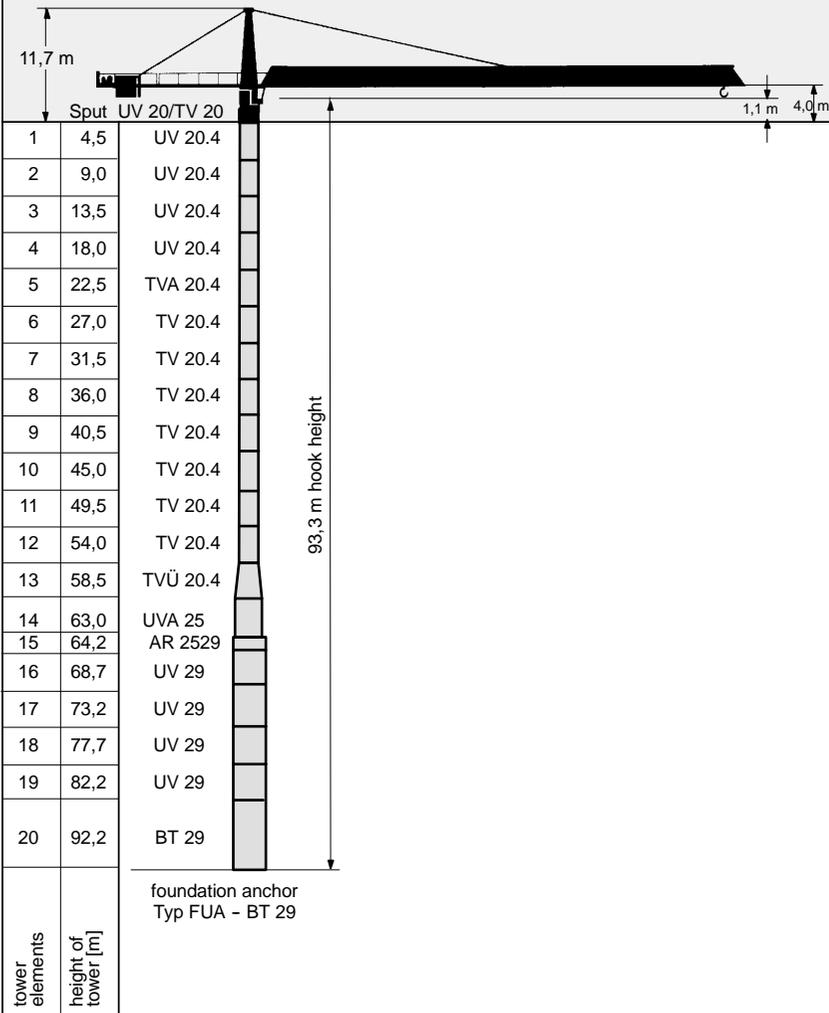
1	4,5	UV 20.4	UV 20.4	UV 20.4	UV 20.4
2	9,0	UV 20.4	UV 20.4	UV 20.4	UV 20.4
3	13,5	UV 20.4	UV 20.4	UV 20.4	UV 20.4
4	18,0	UV 20.4	UV 20.4	UV 20.4	UV 20.4
5	22,5	UV 20.4	UV 20.4	TVA 20.4	TVA 20.4
6	27,0	UV 20.4	TVA 20.4	TV 20.4	TV 20.4
7	31,5	UV 20.4	TV 20.4	TV 20.4	TV 20.4
8	36,0	foundation anchor type AKZ 120	TV 20.4	TV 20.4	TV 20.4
9	40,5		TV 20.4	TV 20.4	TV 20.4
10	45,0		TV 20.4	TV 20.4	TV 20.4
11	49,5		TV 20.4	TV 20.4	TV 20.4
12	54,0		TV 20.4	TV 20.4	TV 20.4
13	58,5		TV 20.4	TVÜ 20.4	TVÜ 20.4
14	63,0	foundation anchor type AKZ 140	TV 25	TV 25	TV 25
15	67,5		TV 25	UVA 25	
16	72,0	foundation anchor type AKZ 140			UV 25
17	76,5				foundation anchor type AKZ 156
18	81,0				
tower elements	height of tower [m]				

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

2.2.7.2 Tower configurations

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

Slewing part:

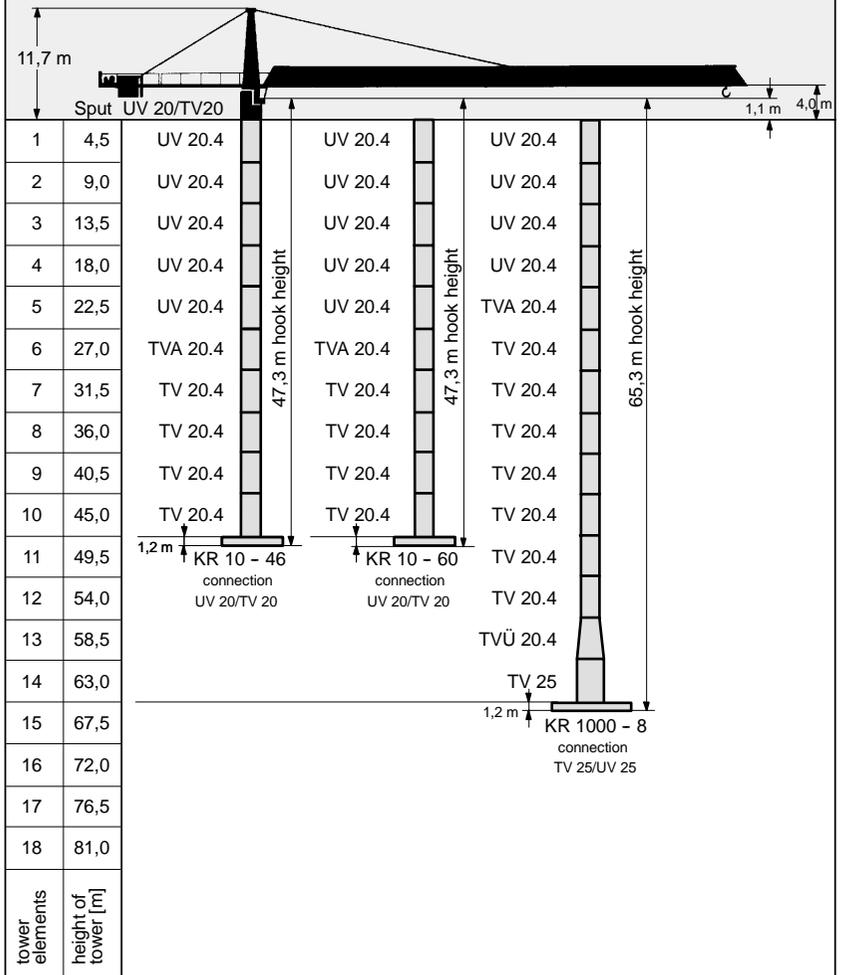


For data regarding foundation anchors see section 12.  
The tower configurations are recommended for economic crane installation and may be used in any case.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane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

2.2.8.1 Tower configurations

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

Slewing part:

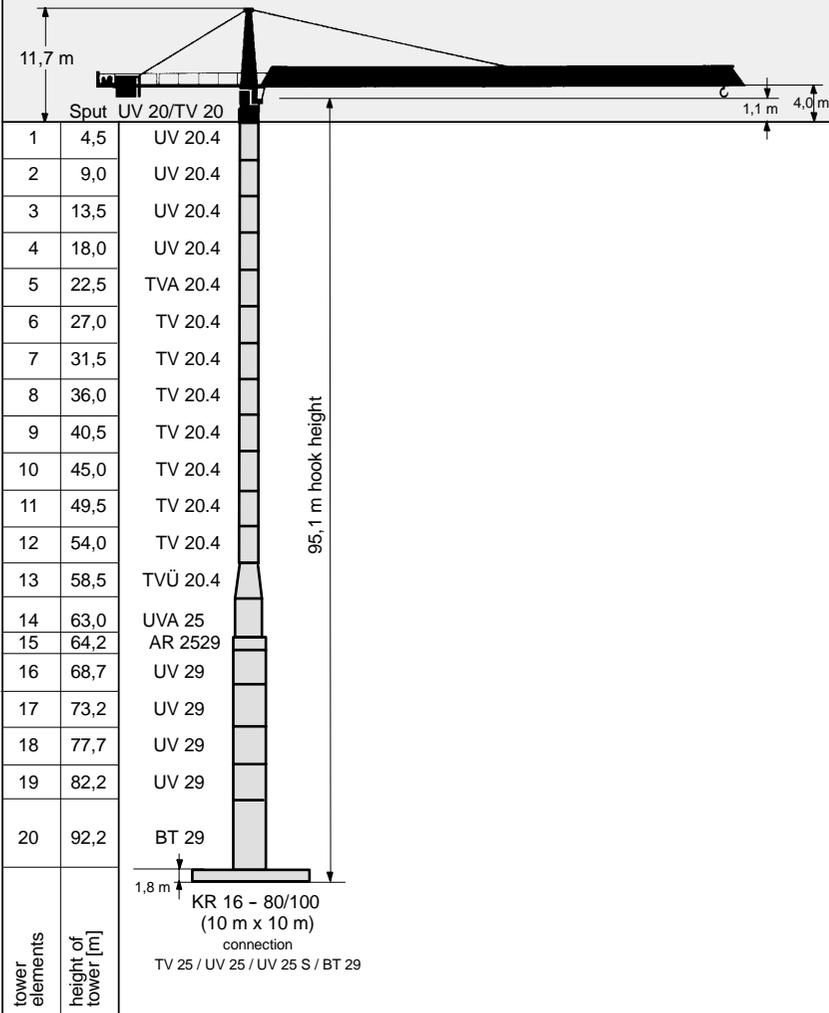


For data regarding cross frames see section 12.  
The tower configurations are recommended for economic crane installation and may be used in any case.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation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

2.2.8.2 Tower configurations

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

Slewing part:

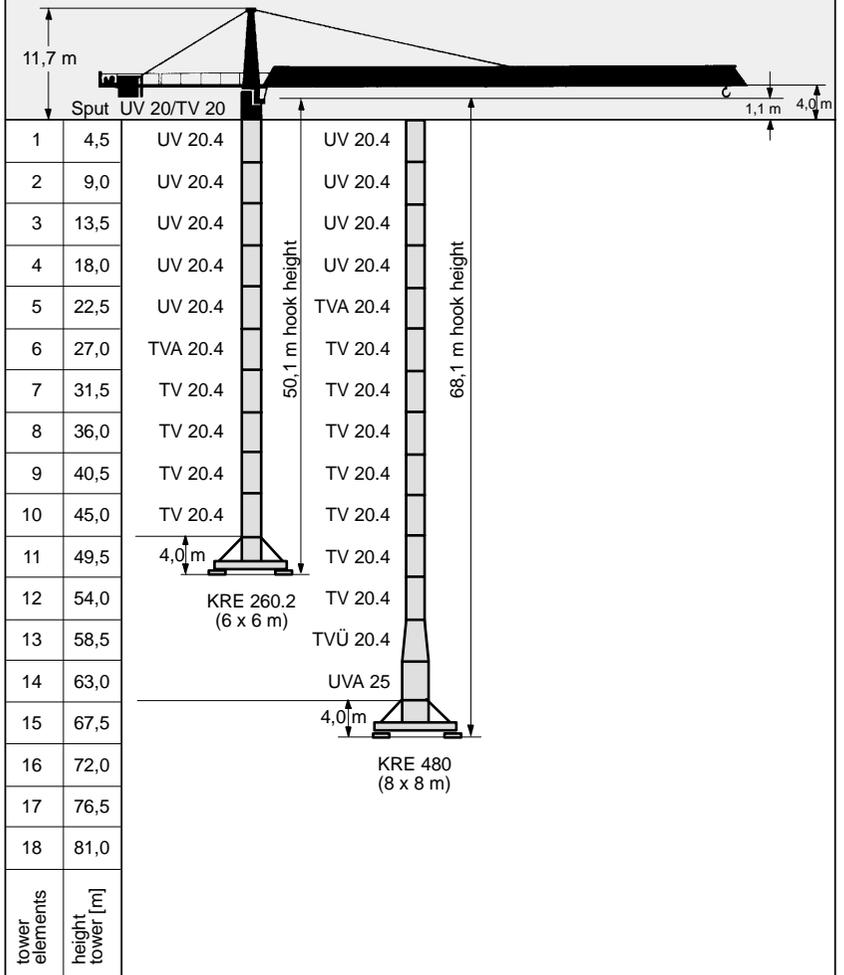


For data regarding cross frames see section 12.  
The tower configurations are recommended for economic crane installation and may be used in any case.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation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

2.2.9.1 Tower configurations

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

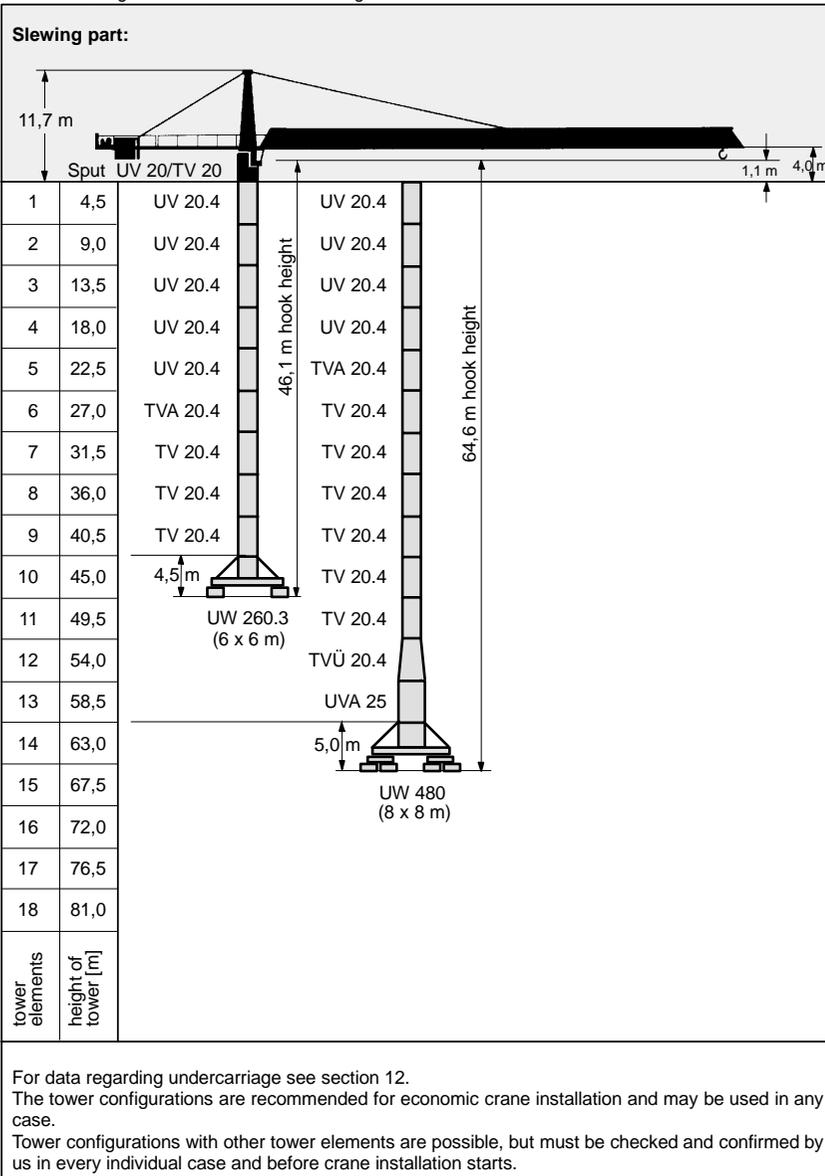
Slewing part:



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

2.2.10.1 Tower configuration

for a travelling tower crane without climbing drive.



2.3.1 Colli list

Item	pcs.	Designation	Colli	L (m)	B (m)	H (m)	weight (kg)	volume (m <sup>3</sup> )		
1	1	tower top complete with platforms and diverse bracing parts		11,72	2,42	2,42	10560	68,64		
	item 1 disassembled	tower top upper part with platforms and diverse bracing parts		7,45	1,37	2,42	2730	24,70		
		tower top lower part with slewing frame, DV; slewing drives and slip ring system		5,39	2,42	2,42	7830	31,57		
2	1	driver's cabin with driver's cabin suspension		2,80	2,15	2,45	1100	14,75		
		driver's cabin suspension		1,03	2,01	0,58	230	1,20		
3	1	counterjib folded (with bracing parts)		12,40	2,49	1,05	5500 (555)	32,29		
		counterjib (with bracing parts)		20,35	2,49	0,65	5500 (555)	32,80		
4	1	machinery platform Hw645FU with hoisting rope (Ø16mmx285m)		Hoist drive Hw 675 FU		2,48	2,46	2,18	4570	13,30
				Hoist drive Hw 875 FU		2,48	2,46	2,18	4670	13,30

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

2.3.2

Kolliliste

Pos.	Stck.	Beschreibung	Kolli	L (m)	B (m)	H (m)	Gewicht (kg)	Volumen (m <sup>3</sup> )
5	1	Auslegerteil 1 mit Katzfahrwerk		10,18	1,64	2,30	3000	38,40
6	1	Auslegerteil 2		10,21	1,64	2,05	2150	34,32
7	1	Auslegerteil 3		10,21	1,64	2,03	2000	33,99
8	1	Auslegerteil 4 (Abspannteile)		10,27	1,64	2,05	1900 (2620)	34,53
9	1	Auslegerteil 5		5,26	1,64	2,02	990	17,43
10	1	Auslegerteil 6		10,24	1,64	2,01	1700	33,76
11	1	Auslegerteil 7		10,22	1,64	2,00	1260	33,52
12	1	Auslegerteil 8		10,20	1,64	2,00	1010	33,46
13	1	Seilwirbeltraverse		1,05	1,54	0,47	135	0,76
14	1	Laufkatze LK 6/12 LK 8/16		1,87 1,87	1,85 1,85	0,99 1,00	400 460	3,43 3,46
15	1	Unterflasche U 8/16 (Losteil)		1,02	0,26	1,70	640	0,45
16	1	Normgeländer (Losteil)		2,55	1,1	1,8	460	5,05
17	1	Kiste (Kleinteil)		1,6	0,9	0,8	370	1,15

Losteile und Kleinteile können nach vorhandenen Platzverhältnissen verteilt werden.

2.5.1

Assembly weights - slewing part

<b>Tower top complete</b>	<b>11 790 kg</b>
bracing brackets (1 x 600 mm, 2 x 6315 mm), driver's cabin, driver's cabin suspension, platform and standard handrails	
- tower top upper part complete	2 730 kg
- driver's cabin with driver's cabin suspension	1 230 kg
- Tower top lower part with slewing frame, KDV, slewing drives, standard handrails and slipping system	7 830 kg
<b>Counterjib with Hw 645 FU complete</b>	<b>11 980 kg</b>
- counterjib with 4 bracing brackets and standard handrails	5 780 kg
- machinery platform with hoisting rope (Ø 16 mm x 280 m)	4 200 kg
- counterweight stone 2 t (under the machinery platform)	2 000 kg
<b>Counterjib with Hw 675 FU complete</b>	<b>12 350 kg</b>
- counterjib with 4 bracing brackets and standard handrails	5 780 kg
- machinery platform with hoisting rope (Ø 16 mm x 280 m)	4 570 kg
- counterweight stone 2 t (under the machinery platform)	2 000 kg
<b>Counterjib with Hw 875 FU complete</b>	<b>12 450 kg</b>
- counterjib with 4 bracing brackets and standard handrails	5 780 kg
- machinery platform with hoisting rope (Ø 16 mm x 280 m)	4 670 kg
- counterweight stone 2 t (under the machinery platform)	2 000 kg
<b>75 m Trolley jib complete</b>	<b>17 700 kg</b>
- bracing brackets, trolley, traversing ropes, hook block and standard handrails	
<b>70 m Trolley jib complete</b>	<b>16 800 kg</b>
- bracing brackets, trolley, traversing ropes, hook block and standard handrails	
<b>65 m Trolley jib complete</b>	<b>16 700 kg</b>
- bracing brackets, trolley, traversing ropes, hook block and standard handrails	
<b>60 m Trolley jib complete</b>	<b>15 800 kg</b>
- bracing brackets, trolley, traversing ropes, hook block and standard handrails	
<b>55 m Trolley jib complete</b>	<b>14 200 kg</b>
- bracing brackets, trolley, traversing ropes, hook block and standard handrails	
<b>50 m Trolley jib complete</b>	<b>13 200 kg</b>
- bracing brackets, trolley, traversing ropes, hook block and standard handrails	
<b>45 m Trolley jib complete</b>	<b>12 900 kg</b>
- bracing brackets, trolley, traversing ropes, hook block and standard handrails	
<b>40 m Trolley jib complete</b>	<b>12 000 kg</b>
- bracing brackets, trolley, traversing ropes, hook block and standard handrails	
<b>35 m Trolley jib complete</b>	<b>11 300 kg</b>
- bracing brackets, trolley, traversing ropes, hook block and standard handrails	
<b>30 m Trolley jib complete</b>	<b>10 300 kg</b>
- bracing brackets, trolley, traversing ropes, hook block and standard handrails	

2.5.2

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

<b>Cross frame KR 10 - 46</b> (without optional features)	<b>7 000 kg</b>
- 4 spigots UV 20	<b>560 kg</b>
- 4 spigots TV 20	<b>684 kg</b>
<b>Cross frame KR 10 - 60</b> (without optional features)	<b>8 200 kg</b>
- 4 spigots UV 20	<b>560 kg</b>
- 4 spigots TV 20	<b>684 kg</b>
<b>Cross frame KR 1000 - 8</b> (without optional features)	<b>14 630 kg</b>
- 4 spigots TV 25	<b>684 kg</b>
- 4 spigots UV 25	<b>748 kg</b>
<b>Cross frame element KRE 260.2 complete</b>	<b>10 900 kg</b>
- base mast part with diagonal struts and track rod	5 445 kg
- cross frame platform with swivel arms, corner bearings and transport safety devices	5 455 kg
<b>Cross frame element KRE 480 complete</b>	<b>24 250 kg</b>
- base mast part	7 100 kg
- swivel arms and corner bearings	6 250 kg
- diagonal struts and ballast suspension means	9 260 kg
- assembly platform, ladder and small parts	1 640 kg
<b>Undercarriage UW 260.3 complete</b>	<b>17 100 kg</b>
- base mast part with diagonal struts and track rod	5 880 kg
- undercarriage platform with swivel arms, subframes and transport safety devices	11 220 kg
<b>Undercarriage UW 480 complete</b>	<b>34 000 kg</b>
- base mast part	7 100 kg
- swivel arms with traverse and subframes	(2x) 8 000 kg
- diagonal struts and ballast suspension means	(2x) 4 630 kg
- assembly platform, ladder and small parts	1 640 kg

2.5.3

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



**Warning!**

Use suspension ropes with sufficient capacity and observe suspension plan!

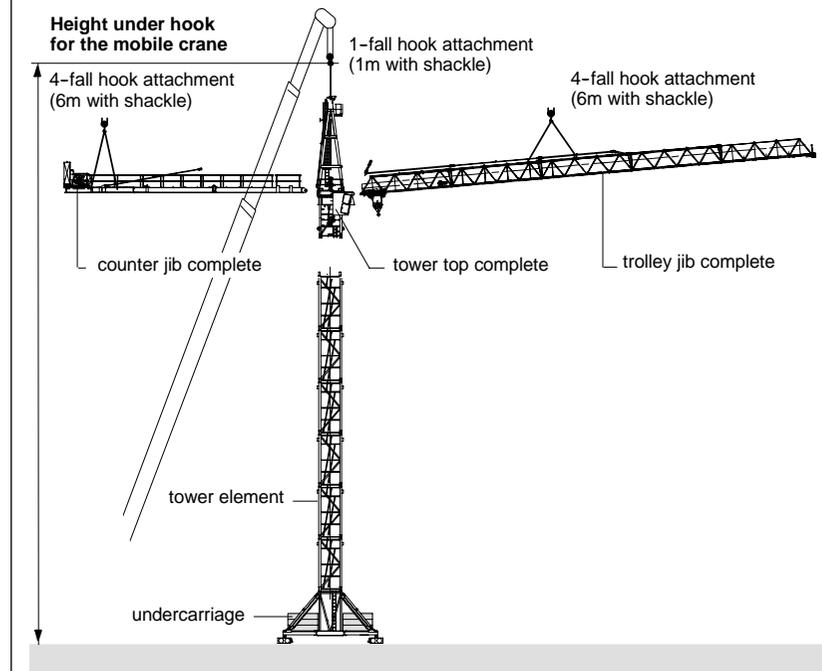
**Required height under hook for mobile crane**

=  
Height under hook of WOLFF tower crane + min. 15 m.

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

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

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



2.6.1.1 Trolley jib - suspension plan jib 75 m to 60 m



**Danger in case of disassembling!**

Release fixing bolts at the pivot point of the jib. Jib must be balanced before it can be extended. There mustn't be any loose parts on the jib.

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

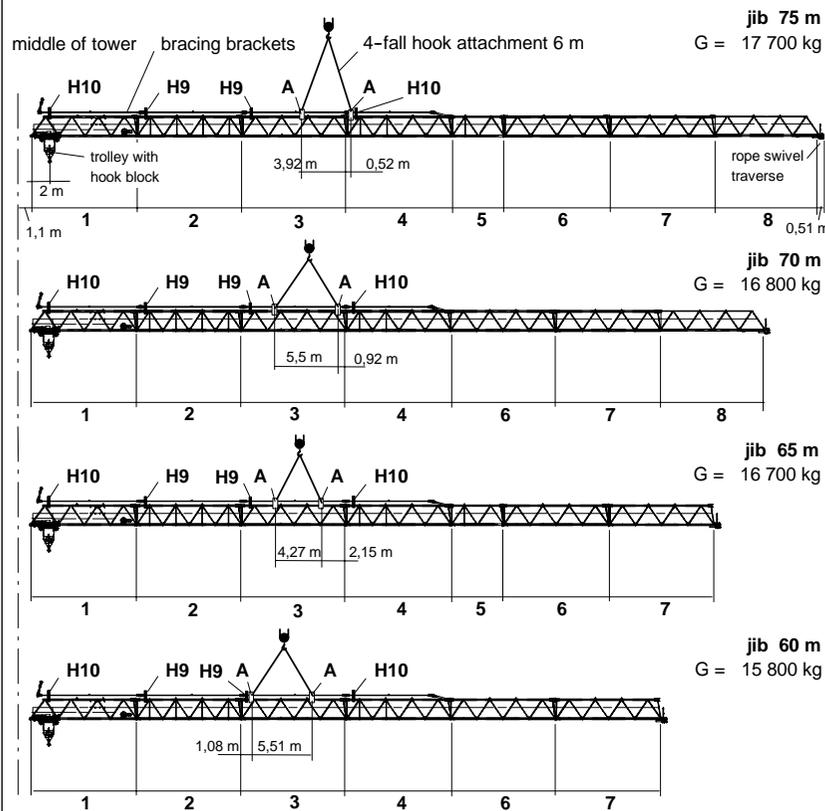
<b>Lengths:</b>	jib part	1/2/3/4/6/7/8	= 10,0 m
	jib part	5	= 5,0 m
	rope swivel traverse		= 0,51 m

More details about suspension **A** and support **H9 and H10** see section 2.6.2



**Attention!**

For assembly hang on snatch block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (perlon rope Ø 14 mm x 12 m) and secure at the trolley.



2.6.1.2 Trolley jib - suspension plan 55 m to 30 m



**Danger in case of disassembling!**

Release fixing bolts at the pivot point of the jib. Jib must be balanced before it can be extended. There mustn't be any loose parts on the jib.

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

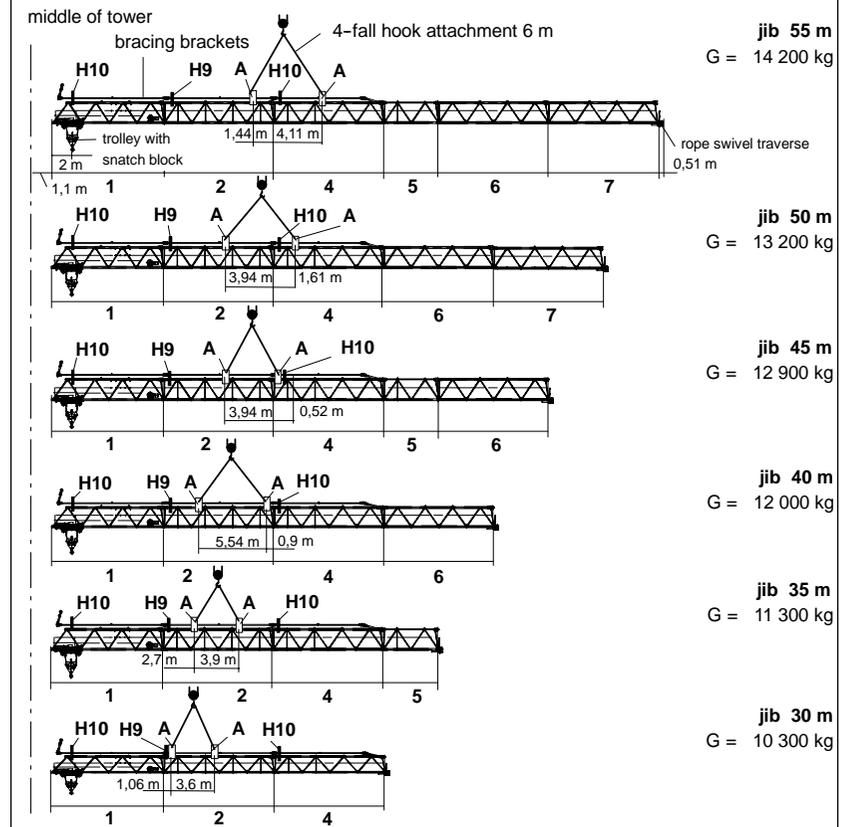
<b>Lengths:</b>	jib part	1/2/3/4/6/7/8	= 10,0 m
	jib part	5	= 5,0 m
	rope swivel traverse		= 0,51 m

More details about suspension **A** and support **H9 and H10** see section 2.6.2



**Attention!**

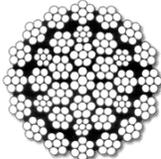
For assembly hang on snatch block with 2 sling ropes DIN 3088 (Ø 8 mm x 1 m with shackle) to the trolley, reeve in assembly rope (perlon rope Ø 14 mm x 12 m) and secure at the trolley.



2.7.1

Hoisting rope

for hoisting winch - Hw 645 FU / Hw 675 FU

<p><b>Rope Ø = 16 mm</b>      + 4%                                  + 2%</p>	<p>design according to DIN 15 020 kind of operation TWG 1 Am</p>
<p><b>First equipment</b></p>	<p><b>CASAR STARLIFT -</b> non twisting flexible hoisting rope with compressed rope core</p> 
<p><b>Design</b></p>	<p>nominal strength      = 1770 N/mm<sup>2</sup> calc. breaking strength = 234,1 kN min. breaking strength = 178,1 kN weight per meter      = 1,191 kg</p> <p>langs lay rope, right handed, made from cable wire.</p> <p>middle space factor      = 0,654 middle spinning loss factor = 0,76 middle weight factor      = 0,90 total twist number      = 245</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 = 112</p>

Basic equipment

rope length	285 m	for crane with:	cable radius	4 fall 75 m
			hook path	42 m

By lengthening the hook path by 1 tower element (4,5 m) the necessary rope length increases by **9 m for operation in 2 falls** and **18,0 m for operation in 4 falls**.

!

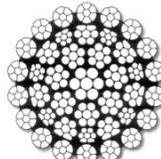
**Attention!**  
A wire rope is a complex machine element.

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

2.7.1.2

Hoisting rope

for hoisting winch - Hw 875 FU

<p><b>Rope Ø = 16 mm</b>      + 4%                                  + 2%</p>	<p>design according to DIN 15 020 kind of operation TWG 1 Am</p>
<p><b>First equipment</b></p>	<p><b>CASAR EUROLIFT -</b> non twisting flexible hoisting rope with compressed outer strands and compressed rope core</p> 
<p><b>Design</b></p>	<p>with special packing material grip</p> <p>nominal strength      = 1770 N/mm<sup>2</sup> calc. breaking strength = 257,7 kN min. breaking strength = 209,4 kN weight per meter      = 1,267 kg</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>

Basic equipment

rope length	285 m	for crane with:	cable radius	4 fall 75 m
			hook path	42 m

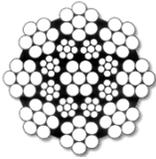
By lengthening the hook path by 1 tower element (4,5 m) the necessary rope length increases by **9 m for operation in 2 falls** and **18,0 m for operation in 4 falls**.

!

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

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

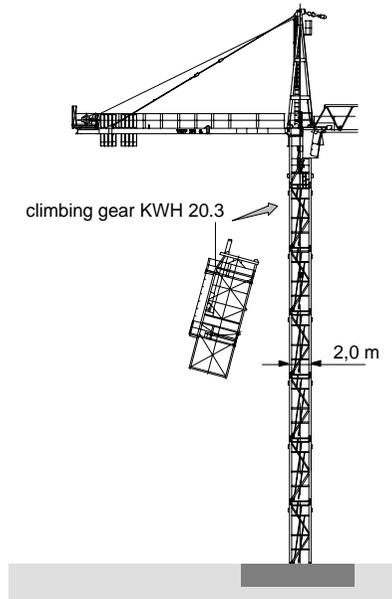
2.7.2 Traversing rope

<p>rope <math>\varnothing</math> = 8 mm <span style="float: right;">+ 4% + 2%</span></p>	<p>design according to DIN 15 020 kind of operation TWG 1 Am</p>				
<p><b>First equipment</b></p>	<p><b>CASAR UNILIFT</b> – cable with 8 strands in non-overlapped double parallel construction made out of uncompressed strands.</p> 				
<p><b>Design</b></p>	<p>nominal strength = 1770 N/mm<sup>2</sup>                  calc. breaking strength = 57,4 kN                  min. breaking strength = 49,9 kN                  weight per meter = 0,282 kg</p> <p>ordinary lay rope, right handed, surface of wires zinc coated.</p> <p>middle space factor = 0,643                  middle spinning loss factor = 0,90                  middle weight factor = 0,87                  total twist number = 119</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 = 56</p>				
<p><b>Basic equipment</b></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 30%; text-align: center;">rope lengths</td> <td style="width: 30%; text-align: center;">1 x 87 m 1 x 147 m</td> <td style="width: 30%; text-align: center;">for crane with: radius</td> <td style="width: 10%; text-align: center;">75 m</td> </tr> </table>		rope lengths	1 x 87 m 1 x 147 m	for crane with: radius	75 m
rope lengths	1 x 87 m 1 x 147 m	for crane with: radius	75 m		
<p><b>! Attention!</b> A wire rope is a complex machine element.</p> <p>Conventional rope design frequently doesn't meet the requirements of modern rope drives. Short service life is the result.</p>					

2.8.1 Insertable exterior climbing gear KWH 20.3

**! Attention!**  
The erection of the climbing gear with the tower crane WOLFF 7532 is possible with operation in 2 falls.

Details about climbing gear KWH 20.3 see additional equipment, section 12.



**Min. height with stationary erection:**

3 tower elements = 13,5 m tower height

**Min. height with travelling erection:**

2 tower elements + undercarriage  
ca. 13,5 m tower height

2.8.1.1 Table of balancing weights

7532 FL balancing weight	jib									
	30 m	35 m	40 m	45 m	50 m	55 m	60 m	65 m	70 m	75 m
UV 20 = 1,95 t *	--	--	--	38,5 m **	43,8 m	41,0 m	31,0 m	25,8 m	23,0 m	15,8 m
TV 20 = 3,05 t	--	--	35,8 m	28,0 m	31,9 m	29,8 m	22,2 m	18,3 m	16,2 m	10,8 m
load = 5,00 t	20,7 m	21,2 m	21,8 m	--	--	--	--	--	--	--

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

\*\* The indicated radius refers to the centre of the tower and shall be treated as standard value. Exact balancing will be achieved by travelling of trolley with tower element or load and may be checked by travelling apart free of mismatch at the joints of the tower.

-- balancing not possible



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

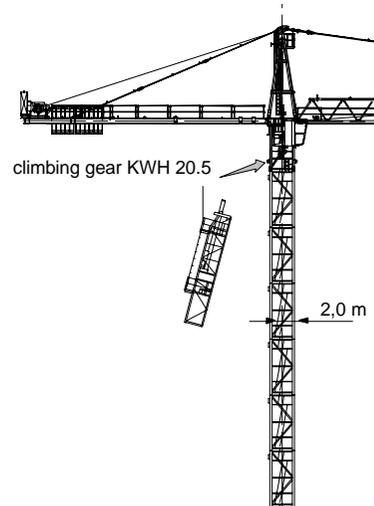
**WOLFF 7532**

**Crane data**  
**2 / 92**

2.8.3 **Insertable exterior climbing gear KWH 20.5**

**!** **Attention!**  
The erection of the climbing gear with the tower crane WOLFF 7532 is possible with operation in 4 falls.

Details about climbing gear KWH 20.5 see additional equipment, section 12.



<b>Min. height with stationary erection</b>
<b>2 tower elements = 9,0 m tower height</b>

<b>Min. height with travelling erection:</b>
<b>2 tower elements + undercarriage ca. 13,5 m tower height</b>

2.8.3.1 **Table of balancing weights**

7532 FL balancing weight	jib										
	30 m	35 m	40 m	45 m	50 m	55 m	60 m	65 m	70 m	75 m	
UV 20 = 1,95 t *	--	--	--	37,8 m **	43,0 m	40,1 m	--	--	--	--	
TV 20 = 3,05 t	--	--	35,2 m	27,4 m	31,3 m	29,1 m	--	--	--	--	
load = 5,00 t	20,3 m	20,7 m	21,3 m	--	--	--	--	--	--	--	

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

\*\* The indicated radius refers to the centre of the tower and shall be treated as standard value. Exact balancing will be achieved by travelling of trolley with tower element or load and may be checked by travelling apart free of mismatch at the joints of the tower.

-- balancing not possible

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

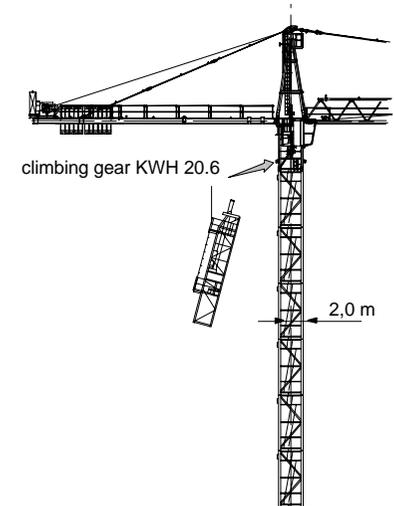
**WOLFF 7532**

**Crane data**  
**2 / 93**

2.8.4 **Insertable exterior climbing gear KWH 20.6**

**!** **Attention!**  
The erection of the climbing gear with the tower crane WOLFF 7532 is possible with operation in 4 falls.

Details about climbing gear KWH 20.6 see additional equipment, section 12.



<b>Min. height with stationary erection</b>
<b>2 tower elements = 9,0 m tower height</b>

<b>Min. height with travelling erection:</b>
<b>2 tower elements + undercarriage ca. 13,5 m tower height</b>

2.8.4.1 **Table of balancing weights**

7532 FL balancing weight	jib										
	30 m	35 m	40 m	45 m	50 m	55 m	60 m	65 m	70 m	75 m	
UV 20 = 1,95 t *	--	--	--	37,8 m **	43,0 m	40,1 m	30,1 m	25,0 m	22,2 m	15,0 m	
TV 20 = 3,05 t	--	--	35,2 m	27,4 m	31,3 m	29,1 m	21,6 m	17,7 m	15,6 m	10,1 m	
load = 5,00 t	20,3 m	20,7 m	21,3 m	--	--	--	--	--	--	--	

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

\*\* The indicated radius refers to the centre of the tower and shall be treated as standard value. Exact balancing will be achieved by travelling of trolley with tower element or load and may be checked by travelling apart free of mismatch at the joints of the tower.

-- balancing not possible

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

**WOLFF 7532**

**Crane data**  
2 / 95

2.8.5 **Insertable internal climbing gear KSH 20 H**

For use of the WOLFF 7532 in connection with internal climbing gear KSH 20 H, the tower combination has to be observed as shown here.

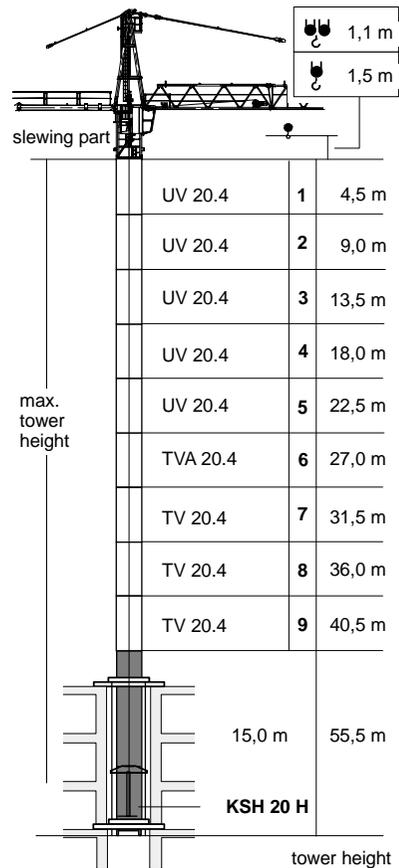
Details about climbing drive KSH 20 H see additional equipment, section 12.

2.8.5.1 **Table of balancing weights**

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

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

-- balancing not possible

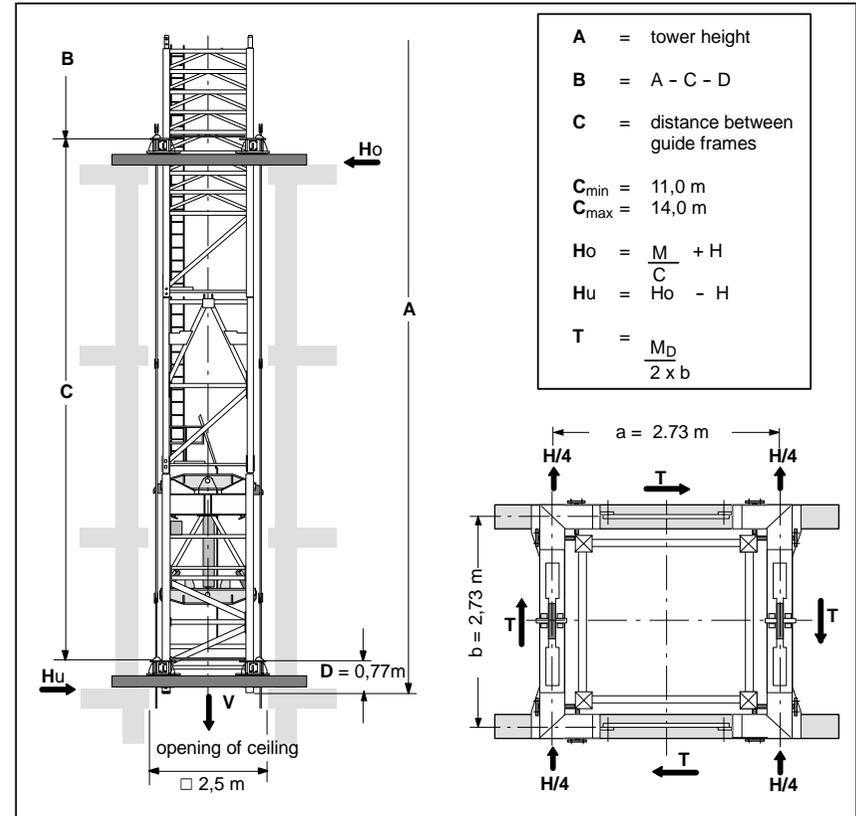


7532 FL balancing weight *	jib									
	30 m	35 m	40 m	45 m	50 m	55 m	60 m	65 m	70 m	75 m
UV 20 = 1,95 t	--	--	--	--	--	--	--	55,6m	52,8m	47,0m
TV 20 = 3,05 t	--	--	--	--	--	51,3m	45,0m	42,1m	40,0m	35,6m
load = 5,00 t	--	--	36,3m	31,3m	34,5m	33,8m	29,6m	--	--	--
load = 8,00 t	23,0m	23,8m								

**WOLFF 7532**

**Crane data**  
2 / 96

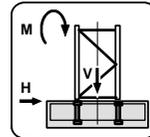
2.8.2.2 **Reacting forces to building for hydraulic interior climbing drive KSH 25**



Reacting forces to building (kN)		in operation															
A(m)		55,5				51,0				46,5				42,0			
C(m)	V	11	12	13	14	11	12	13	14	11	12	13	14	11	12	13	14
		1287				1258				1230				1201			
	$H_o$	450	415	380	355	430	390	360	335	410	375	345	320	385	355	330	305
	$H_u$	405	365	335	310	380	350	315	290	365	330	305	280	345	315	285	265
	T	72				72				72				72			
Reacting forces to building (kN)		out of operation															
A(m)		55,5				51,0				46,5				42,0			
C(m)	V	11	12	13	14	11	12	13	14	11	12	13	14	11	12	13	14
		1104				1076				1047				1019			
	$H_o$	600	550	510	475	525	480	445	415	460	420	385	360	390	360	330	310
	$H_u$	420	370	330	290	355	310	275	240	300	260	225	200	240	205	180	155
	T	0				0				0				0			

3.1.1 Foundation loads according to DIN

Inclusive all dynamic factors, theory order II taken into account for stationary tower crane on a concrete foundation according to tower configuration without climbing device  
 Permanent acting moment = 1740 kNm  
**M** = moment **H** = horizontal force **V** = vertical load

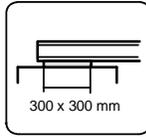
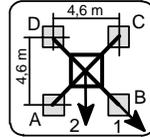


**Foundation loads** **Jib length 30 - 75 m**

height under hook		Crane in service torque moment 390 kNm			Crane out of service			Assembly		
 [m]	 [m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
10,1	10,5	3000	26	651	80	45	732	3190	15	462
14,6	15,0	3140	27	669	320	49	751	3280	17	481
19,1	19,5	3290	29	687	910	68	769	3380	18	509
23,6	24,0	3470	30	706	1300	75	787	3490	20	517
28,1	28,5	3660	32	724	1730	82	806	3620	21	535
32,6	33,0	3880	33	742	2200	88	823	3760	23	554
37,1	37,5	4050	36	791	2700	98	872	3880	25	602
41,6	42,0	4280	38	814	3270	106	900	4040	27	630
46,1	46,5	4530	40	847	3900	115	928	4220	29	658
50,6	51,0	4810	42	875	4600	123	957	4420	31	687
55,1	55,5	5190	45	1130	5370	132	985	4640	33	715
59,6	60,0	5590	47	1159	6220	140	1013	4840	35	743
64,1	64,5	5900	50	1209	7120	152	1063	5110	38	793
68,6	69,0	6300	53	1241	8060	161	1045	5360	40	825
73,1	73,5	6670	55	1281	9020	171	1135	5600	43	865
<b>Attention ! Tower configuration with basis tower BT 29</b>										
75,3	75,7	6700	56	1335	9660	176	1190	5670	44	919
79,8	80,2	7100	59	1381	10400	187	1236	5930	47	966
84,3	84,7	7520	62	1427	11570	200	1282	6230	50	1012
88,8	89,2	7990	64	1474	12820	210	1328	6540	52	1058
93,3	93,7	8500	67	1520	14170	221	1374	6880	55	1105

3.2.1.1 Center ballasts and corner loads acc. to DIN 15019

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

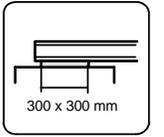
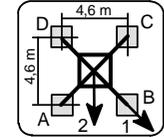


**KR 10 - 46** Corner distance 4,6 m x 4,6 m Jib length 30 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	135	1	514	915	514	114	32	1	417	700	417	133	51
			2	797	797	231	231		2	617	617	216	216	
15,8	16,2	135	1	519	940	519	97	33	1	421	716	421	127	56
			2	817	817	221	221		2	629	629	213	213	
20,3	20,7	135	1	523	968	523	78	35	1	426	732	426	119	73
			2	838	838	208	208		2	642	642	209	209	
24,8	25,2	135	1	528	999	528	57	36	1	430	750	430	111	80
			2	861	861	195	195		2	657	657	204	204	
29,3	29,7	140	1	545	1045	545	45	38	1	447	782	447	113	86
			2	899	899	191	191		2	684	684	211	211	
33,8	34,2	140	1	550	1081	549	17	39	1	452	803	452	101	93
			2	926	926	173	173		2	700	700	204	204	
38,3	38,7	140	1	562	1120	561	3	42	1	464	833	464	95	103
			2	957	957	166	166		2	725	725	203	203	
42,8	43,2	140	1	544	1187	544	0	44	1	471	860	471	83	111
			2	989	989	149	149		2	746	746	196	196	
47,3	47,7	150	1	570	1264	570	0	46	1	503	913	503	93	119
			2	1048	1048	154	154		2	799	799	320	320	

3.2.1.2 Center ballasts and corner loads acc. to DIN 15019

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

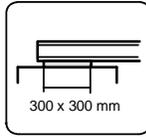
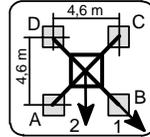


**KR 10 - 46** Corner distance 4,6 m x 4,6 m Jib length 35 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	125	1	498	877	498	120	32	1	392	676	392	108	52
			2	766	766	231	231		2	593	593	191	191	
15,8	16,4	125	1	503	902	503	103	33	1	396	691	396	101	57
			2	785	785	220	220		2	605	605	188	188	
20,3	20,7	125	1	508	931	507	84	35	1	401	708	401	94	74
			2	807	807	208	208		2	618	618	184	184	
24,8	25,2	125	1	512	961	512	63	36	1	405	726	405	85	81
			2	830	830	194	194		2	632	632	179	179	
29,3	29,7	130	1	529	1008	529	51	38	1	422	758	422	87	87
			2	867	867	191	191		2	660	660	185	185	
33,8	34,2	130	1	534	1044	534	23	39	1	427	780	427	74	94
			2	895	895	173	173		2	676	676	178	178	
38,3	38,7	130	1	546	1083	546	8	42	1	439	809	439	69	104
			2	926	926	166	166		2	701	701	177	177	
42,8	43,2	130	1	534	1145	533	0	44	1	446	836	446	56	112
			2	958	958	148	148		2	722	722	170	170	
47,3	47,7	150	1	609	1222	609	0	46	1	569	915	569	222	120
			2	1042	1042	178	178		2	814	814	324	324	

3.2.1.3 Center ballasts and corner loads acc. to DIN 15019

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

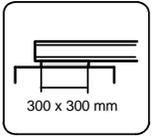
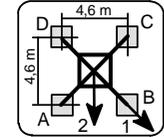


**KR 10 - 46** Corner distance 4,6 m x 4,6 m Jib length 40 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	115	1	441	839	441	43	32	1	367	651	367	82	52
			2	729	729	235	235		2	571	571	310	310	
15,8	16,2	115	1	445	861	445	30	33	1	371	667	371	76	57
			2	749	749	224	224		2	580	580	162	162	
20,3	20,7	115	1	491	886	491	96	35	1	376	684	376	68	75
			2	770	770	212	212		2	593	593	158	158	
24,8	25,2	115	1	496	916	495	75	36	1	380	702	380	59	81
			2	793	793	198	198		2	608	608	153	153	
29,3	29,7	115	1	436	963	436	0	38	1	385	722	385	48	88
			2	818	818	182	182		2	623	623	147	147	
33,8	34,2	120	1	443	1017	443	0	39	1	402	755	402	49	94
			2	858	858	176	176		2	652	652	152	152	
38,3	38,7	120	1	444	1064	444	0	42	1	414	785	414	43	104
			2	889	889	169	169		2	676	676	152	152	
42,8	43,2	130	1	478	1125	478	0	44	1	446	837	446	55	112
			2	946	946	177	177		2	723	723	170	170	
47,3	47,7	150	1	619	1201	618	36	46	1	577	927	577	227	121
			2	1030	1030	207	207		2	825	825	330	330	

3.2.1.4 Center ballasts and corner loads acc. to DIN 15019

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

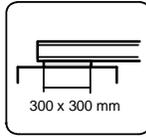
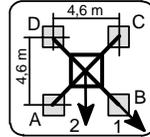


**KR 10 - 46** Corner distance 4,6 m x 4,6 m Jib length 45 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	125	1	509	907	509	112	32	1	392	677	392	107	53
			2	790	790	228	228		2	593	593	190	190	
15,8	16,2	125	1	514	933	514	95	34	1	396	692	396	100	58
			2	810	810	217	217		2	606	606	187	187	
20,3	20,7	125	1	519	962	518	75	35	1	401	709	401	92	76
			2	832	832	205	205		2	619	619	183	183	
24,8	25,2	130	1	536	1006	535	65	37	1	418	740	418	96	82
			2	869	869	202	202		2	646	646	190	190	
29,3	29,7	130	1	540	1041	540	39	38	1	422	760	422	85	89
			2	894	894	186	186		2	661	661	184	184	
33,8	34,2	130	1	545	1079	544	10	40	1	427	782	427	72	95
			2	923	923	167	167		2	678	678	176	176	
38,3	38,7	130	1	552	1124	552	0	43	1	439	811	439	67	105
			2	954	954	159	159		2	702	702	176	176	
42,8	43,2	130	1	530	1197	529	0	44	1	523	854	522	191	113
			2	987	987	141	141		2	757	757	288	288	
47,3	47,7	135	1	529	1277	529	0	46	1	542	964	542	121	122
			2	1035	1035	132	132		2	840	840	244	244	

3.2.1.5 Center ballasts and corner loads acc. to DIN 15019

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

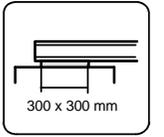
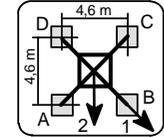


**KR 10 - 46** Corner distance 4,6 m x 4,6 m Jib length 50 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	110	1	479	833	479	126	32	1	354	640	354	69	53
			2	729	729	229	229		2	556	556	152	152	
15,8	16,2	110	1	484	859	484	109	34	1	359	655	359	62	58
			2	749	749	218	218		2	568	568	149	149	
20,3	20,7	110	1	488	888	488	89	35	1	363	672	363	54	76
			2	771	771	206	206		2	582	582	145	145	
24,8	25,2	110	1	493	919	493	67	37	1	368	691	368	45	83
			2	794	794	192	192		2	596	596	139	139	
29,3	29,7	110	1	498	953	497	42	38	1	372	711	372	34	89
			2	820	820	175	175		2	612	612	133	133	
33,8	34,2	115	1	515	1004	514	26	40	1	390	745	389	34	96
			2	860	860	169	169		2	641	641	138	138	
38,3	38,7	115	1	527	1043	527	10	43	1	402	775	402	28	106
			2	892	892	162	162		2	666	666	137	137	
42,8	43,2	120	1	541	1104	540	0	44	1	505	820	505	190	114
			2	937	937	156	156		2	728	728	282	282	
47,3	47,7	140	1	603	1195	603	11	46	1	562	968	562	156	123
			2	1022	1022	185	185		2	849	849	275	275	

3.2.1.6 Center ballasts and corner loads acc. to DIN 15019

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

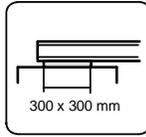
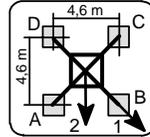


**KR 10 - 46** Corner distance 4,6 m x 4,6 m Jib length 55 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	105	1	476	824	476	128	32	1	381	636	381	126	54
			2	722	722	230	230		2	561	561	200	200	
15,8	16,2	105	1	481	851	480	110	34	1	385	652	385	119	59
			2	742	742	219	219		2	574	574	197	197	
20,3	20,7	105	1	485	880	485	90	35	1	390	670	390	110	77
			2	764	764	206	206		2	588	588	192	192	
24,8	25,2	105	1	490	911	490	68	37	1	394	689	394	100	84
			2	788	788	191	191		2	603	603	186	186	
29,3	29,7	105	1	494	946	494	42	38	1	399	710	399	88	90
			2	814	814	175	175		2	619	619	179	179	
33,8	34,2	105	1	499	984	499	13	40	1	404	733	403	74	97
			2	842	842	155	155		2	637	637	170	170	
38,3	38,7	105	1	509	1026	509	0	43	1	416	764	416	68	107
			2	874	874	148	148		2	662	662	170	170	
42,8	43,2	115	1	537	1099	537	0	45	1	502	843	502	160	115
			2	932	932	154	154		2	743	743	260	260	
47,3	47,7	135	1	600	1190	600	10	47	1	559	993	559	125	124
			2	1017	1017	183	183		2	866	866	252	252	

3.2.1.7 Center ballasts and corner loads acc. to DIN 15019

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

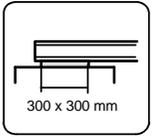
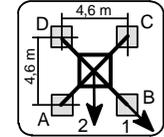


**KR 10 - 46** Corner distance 4,6 m x 4,6 m Jib length 60 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	105	1	487	859	487	114	33	1	334	726	334	0	55
			2	750	750	223	223		2	605	605	92	92	
15,8	16,2	105	1	491	886	491	96	34	1	332	749	332	0	59
			2	771	771	212	212		2	618	618	88	88	
20,3	20,7	105	1	496	916	496	76	36	1	328	776	327	0	78
			2	793	793	199	199		2	632	632	83	83	
24,8	25,2	105	1	500	948	500	52	37	1	322	805	322	0	84
			2	817	817	183	183		2	647	647	77	77	
29,3	29,7	105	1	505	984	505	25	39	1	315	838	314	0	91
			2	844	844	166	166		2	663	663	70	70	
33,8	34,2	110	1	522	1036	522	8	40	1	330	875	330	0	98
			2	886	886	158	158		2	693	693	74	74	
38,3	38,7	110	1	527	1084	526	0	43	1	336	911	336	0	108
			2	917	917	151	151		2	718	718	268	268	
42,8	43,2	110	1	503	1160	503	0	45	1	329	954	329	0	116
			2	951	951	131	131		2	784	784	215	215	
47,3	47,7	115	1	500	1243	500	0	47	1	520	1016	519	23	124
			2	1001	1001	121	121		2	871	871	168	168	

3.2.1.8 Center ballasts and corner loads acc. to DIN 15019

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

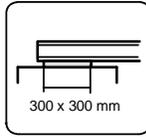
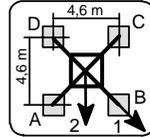


**KR 10 - 46** Corner distance 4,6 m x 4,6 m Jib length 65 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	100	1	483	865	483	102	33	1	381	763	381	0	55
			2	753	753	213	213		2	651	651	111	111	
15,8	16,2	100	1	488	893	488	83	34	1	378	789	378	0	60
			2	774	774	202	202		2	665	665	107	107	
20,3	20,7	100	1	493	923	492	62	36	1	373	817	372	0	79
			2	797	797	188	188		2	680	680	101	101	
24,8	25,2	100	1	497	956	497	38	37	1	365	850	365	0	85
			2	822	822	172	172		2	696	696	94	94	
29,3	29,7	105	1	514	1005	514	23	39	1	381	887	381	0	92
			2	861	861	167	167		2	726	726	98	98	
33,8	34,2	105	1	511	1053	511	0	40	1	369	929	369	0	98
			2	891	891	146	146		2	745	745	88	88	
38,3	38,7	105	1	507	1109	507	0	43	1	375	966	375	0	109
			2	923	923	138	138		2	771	771	87	87	
42,8	43,2	105	1	482	1187	482	0	45	1	365	1014	365	0	116
			2	958	958	118	118		2	808	808	185	185	
47,3	47,7	105	1	454	1273	453	0	47	1	471	1073	471	0	125
			2	995	995	95	95		2	883	883	124	124	

3.2.1.9 Center ballasts and corner loads acc. to DIN 15019

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

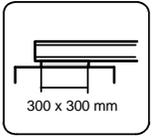
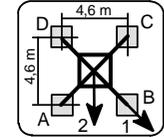


**KR 10 - 46** Corner distance 4,6 m x 4,6 m Jib length 70 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	90	1	458	824	458	93	33	1	318	791	318	0	56
			2	717	717	200	200		2	636	636	77	77	
15,8	16,2	90	1	463	851	463	75	34	1	314	816	314	0	61
			2	738	738	188	188		2	650	650	72	72	
20,3	20,7	90	1	468	881	467	54	36	1	308	846	308	0	80
			2	760	760	175	175		2	665	665	66	66	
24,8	25,2	90	1	472	914	472	30	37	1	301	879	301	0	86
			2	785	785	159	159		2	681	681	59	59	
29,3	29,7	95	1	489	963	489	15	39	1	316	917	316	0	93
			2	824	824	154	154		2	711	711	63	63	
33,8	34,2	95	1	478	1019	478	0	40	1	304	959	304	0	99
			2	854	854	133	133		2	731	731	52	52	
38,3	38,7	95	1	474	1075	474	0	43	1	310	997	309	0	109
			2	886	886	125	125		2	756	756	51	51	
42,8	43,2	95	1	450	1152	450	0	45	1	300	1045	299	0	117
			2	921	921	105	105		2	806	806	137	137	
47,3	47,7	105	1	471	1238	471	0	47	1	438	1140	438	0	126
			2	983	983	107	107		2	907	907	101	101	

3.2.1.10 Center ballasts and corner loads acc. to DIN 15019

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

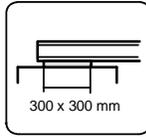
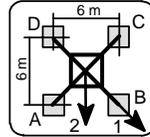


**KR 10 - 46** Corner distance 4,6 m x 4,6 m Jib length 75 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	100	1	493	846	493	139	33	1	275	986	275	0	56
			2	743	743	242	242		2	733	733	35	35	
15,8	16,2	105	1	510	886	510	133	35	1	295	1013	295	0	61
			2	776	776	243	243		2	759	759	42	42	
20,3	20,7	105	1	514	917	514	112	36	1	289	1044	289	0	80
			2	799	799	230	230		2	775	775	36	36	
24,8	25,2	110	1	531	962	531	100	38	1	305	1080	305	0	87
			2	836	836	226	226		2	805	805	40	40	
29,3	29,7	115	1	548	1012	548	85	39	1	319	1120	319	0	94
			2	876	876	221	221		2	836	836	43	43	
33,8	34,2	120	1	565	1064	565	66	41	1	331	1166	331	0	100
			2	918	918	212	212		2	869	869	44	44	
38,3	38,7	120	1	578	1105	577	50	43	1	336	1204	336	0	110
			2	950	950	204	204		2	895	895	43	43	
42,8	43,2	125	1	597	1163	597	31	45	1	350	1255	349	0	118
			2	998	998	196	196		2	932	932	44	44	
47,3	47,7	130	1	617	1226	616	7	47	1	360	1311	360	0	127
			2	1048	1048	186	186		2	1016	1016	135	135	

3.2.2.1 Center ballasts and corner loads acc. to DIN 15019

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

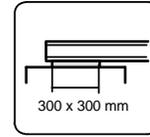
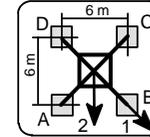


**KR 10 - 60** Corner distance 6 m x 6 m Jib length 30 m

height under hook ☹☹ [m]	center ballast ☹ [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	85	1	392	699	392	85	32	1	294	512	294	77	51
			2	609	609	175	175		2	450	450	251	251	
15,8	16,2	85	1	396	719	396	73	33	1	299	524	299	73	56
			2	625	625	168	168		2	458	458	139	139	
20,3	20,7	85	1	401	742	401	60	35	1	303	538	303	68	73
			2	642	642	159	159		2	469	469	137	137	
24,8	25,2	85	1	405	767	405	44	36	1	308	553	308	63	80
			2	661	661	150	150		2	481	481	135	135	
29,3	29,7	85	1	410	793	410	27	38	1	312	569	312	56	86
			2	681	681	139	139		2	494	494	131	131	
33,8	34,2	85	1	414	822	414	7	39	1	317	586	317	48	93
			2	703	703	126	126		2	507	507	127	127	
38,3	38,7	85	1	425	856	425	0	42	1	329	612	329	47	103
			2	730	730	124	124		2	529	529	129	129	
42,8	43,2	85	1	413	910	413	0	44	1	336	634	336	38	111
			2	756	756	112	112		2	547	547	126	126	
47,3	47,7	100	1	472	969	472	0	46	1	437	697	437	177	119
			2	821	821	136	136		2	621	621	253	253	

3.2.2.2 Center ballasts and corner loads acc. to DIN 15019

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

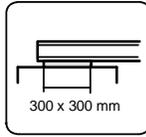
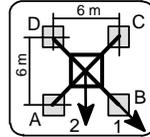


**KR 10 - 60** Corner distance 6 m x 6 m Jib length 35 m

height under hook ☹☹ [m]	center ballast ☹ [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	80	1	388	678	388	99	32	1	282	500	282	64	52
			2	593	593	183	183		2	447	447	248	248	
15,8	16,2	80	1	393	699	393	87	33	1	286	512	286	60	57
			2	609	609	176	176		2	446	446	126	126	
20,3	20,7	80	1	398	722	398	73	35	1	291	526	291	55	74
			2	627	627	168	168		2	457	457	124	124	
24,8	25,2	80	1	402	747	402	58	36	1	295	541	295	49	81
			2	646	646	158	158		2	469	469	121	121	
29,3	29,7	80	1	407	773	407	40	38	1	300	557	300	42	87
			2	666	666	147	147		2	482	482	118	118	
33,8	34,2	80	1	411	803	411	20	39	1	304	575	304	34	94
			2	688	688	134	134		2	496	496	113	113	
38,3	38,7	80	1	423	835	423	11	42	1	317	600	317	33	104
			2	715	715	132	132		2	517	517	116	116	
42,8	43,2	85	1	443	882	443	4	44	1	336	635	336	37	112
			2	753	753	132	132		2	548	548	125	125	
47,3	47,7	100	1	487	956	487	19	46	1	446	712	446	180	120
			2	819	819	156	156		2	634	634	258	258	

3.2.2.3 Center ballasts and corner loads acc. to DIN 15019

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

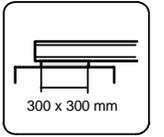
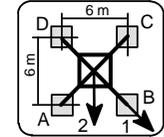


**KR 10 - 60** Corner distance 6 m x 6 m **Jib length 40 m**

height under hook ☺ [m]	center ballast ☺ [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	70	1	372	640	372	104	32	1	257	475	257	39	52
			2	562	562	182	182		2	431	431	230	230	
15,8	16,2	70	1	376	661	376	92	33	1	261	488	261	35	57
			2	578	578	175	175		2	421	421	101	101	
20,3	20,7	70	1	381	684	381	78	35	1	266	502	266	30	75
			2	595	595	167	167		2	433	433	99	99	
24,8	25,2	70	1	386	708	386	63	36	1	270	517	270	24	81
			2	614	614	157	157		2	445	445	96	96	
29,3	29,7	70	1	329	738	329	0	38	1	275	533	275	17	88
			2	634	634	146	146		2	457	457	92	92	
33,8	34,2	70	1	317	780	317	0	39	1	279	550	279	9	94
			2	656	656	133	133		2	471	471	88	88	
38,3	38,7	70	1	323	816	323	0	42	1	292	576	292	7	104
			2	683	683	131	131		2	493	493	90	90	
42,8	43,2	80	1	364	862	364	0	44	1	324	623	324	24	112
			2	734	734	144	144		2	539	539	256	256	
47,3	47,7	95	1	483	930	483	37	46	1	442	711	442	174	121
			2	799	799	168	168		2	632	632	252	252	

3.2.2.4 Center ballasts and corner loads acc. to DIN 15019

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

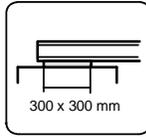
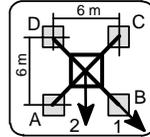


**KR 10 - 60** Corner distance 6 m x 6 m **Jib length 45 m**

height under hook ☺ [m]	center ballast ☺ [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	80	1	399	704	399	95	32	1	282	500	282	63	53
			2	615	615	184	184		2	436	436	127	127	
15,8	16,2	80	1	404	725	404	82	34	1	286	513	286	59	58
			2	631	631	177	177		2	447	447	126	126	
20,3	20,7	80	1	408	749	408	68	35	1	291	527	291	54	76
			2	649	649	168	168		2	458	458	124	124	
24,8	25,2	80	1	413	774	413	52	37	1	295	542	295	48	82
			2	668	668	158	158		2	470	470	121	121	
29,3	29,7	80	1	418	802	418	33	38	1	300	559	300	41	89
			2	689	689	146	146		2	483	483	117	117	
33,8	34,2	80	1	422	832	422	12	40	1	304	576	304	33	95
			2	712	712	132	132		2	497	497	112	112	
38,3	38,7	80	1	434	865	434	3	43	1	317	602	317	31	105
			2	739	739	130	130		2	529	529	257	257	
42,8	43,2	80	1	424	917	424	0	44	1	400	654	400	146	113
			2	766	766	117	117		2	580	580	221	221	
47,3	47,7	85	1	433	979	433	0	46	1	420	743	420	96	122
			2	807	807	115	115		2	648	648	191	191	

3.2.2.5 Center ballasts and corner loads acc. to DIN 15019

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

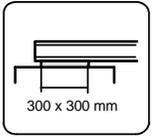
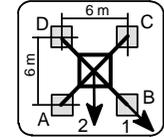


**KR 10 - 60** Corner distance 6 m x 6 m Jib length 50 m

height under hook ☺ [m]	center ballast ☺ [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	65	1	369	640	369	98	32	1	244	463	244	25	53
			2	561	561	178	178		2	406	406	250	250	
15,8	16,2	65	1	374	662	374	86	34	1	249	476	249	21	58
			2	577	577	170	170		2	410	410	88	88	
20,3	20,7	65	1	378	685	378	72	35	1	253	490	253	16	76
			2	595	595	162	162		2	421	421	86	86	
24,8	25,2	65	1	383	710	383	56	37	1	258	506	258	10	83
			2	614	614	152	152		2	433	433	83	83	
29,3	29,7	65	1	388	737	388	38	38	1	262	522	262	3	89
			2	635	635	140	140		2	446	446	79	79	
33,8	34,2	65	1	392	767	392	17	40	1	262	545	262	0	96
			2	657	657	127	127		2	460	460	74	74	
38,3	38,7	65	1	404	800	404	8	43	1	272	572	272	0	106
			2	684	684	124	124		2	490	490	236	236	
42,8	43,2	70	1	424	847	424	0	44	1	383	624	383	141	114
			2	723	723	124	124		2	553	553	212	212	
47,3	47,7	85	1	468	922	468	15	46	1	427	739	427	116	123
			2	789	789	147	147		2	647	647	207	207	

3.2.2.6 Center ballasts and corner loads acc. to DIN 15019

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

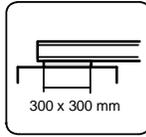
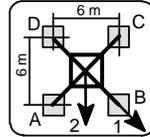


**KR 10 - 60** Corner distance 6 m x 6 m Jib length 55 m

height under hook ☺ [m]	center ballast ☺ [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	60	1	366	633	366	99	32	1	271	466	271	75	54
			2	555	555	177	177		2	409	409	133	133	
15,8	16,2	60	1	371	654	371	87	34	1	275	480	275	71	59
			2	571	571	170	170		2	420	420	131	131	
20,3	20,7	60	1	375	678	375	73	35	1	280	494	280	65	77
			2	589	589	161	161		2	432	432	128	128	
24,8	25,2	60	1	380	703	380	56	37	1	284	510	284	58	84
			2	608	608	151	151		2	444	444	125	125	
29,3	29,7	60	1	384	731	384	38	38	1	289	528	289	50	90
			2	629	629	139	139		2	458	458	120	120	
33,8	34,2	60	1	389	761	389	17	40	1	236	547	236	0	97
			2	652	652	126	126		2	472	472	115	115	
38,3	38,7	60	1	401	794	401	8	43	1	246	574	246	0	107
			2	679	679	123	123		2	500	500	219	219	
42,8	43,2	65	1	420	842	420	0	45	1	379	641	379	117	115
			2	718	718	122	122		2	564	564	194	194	
47,3	47,7	80	1	465	917	465	13	47	1	424	756	424	91	124
			2	785	785	145	145		2	659	659	189	189	

3.2.2.7 Center ballasts and corner loads acc. to DIN 15019

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

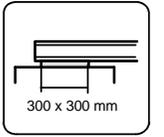
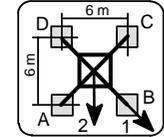


**KR 10 - 60** Corner distance 6 m x 6 m Jib length 60 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	60	1	377	662	377	91	33	1	199	556	199	0	55
			2	579	579	175	175		2	440	440	123	123	
15,8	16,2	60	1	381	684	381	78	34	1	199	574	199	0	59
			2	595	595	167	167		2	451	451	121	121	
20,3	20,7	60	1	386	708	386	64	36	1	198	595	198	0	78
			2	613	613	158	158		2	463	463	118	118	
24,8	25,2	60	1	390	734	390	47	37	1	196	617	196	0	84
			2	633	633	147	147		2	476	476	115	115	
29,3	29,7	60	1	395	762	395	27	39	1	192	643	192	0	91
			2	655	655	135	135		2	490	490	110	110	
33,8	34,2	60	1	399	794	399	5	40	1	187	670	187	0	98
			2	678	678	121	121		2	505	505	104	104	
38,3	38,7	60	1	408	831	408	0	43	1	198	698	198	0	108
			2	705	705	118	118		2	543	543	198	198	
42,8	43,2	60	1	393	889	393	0	45	1	195	731	195	0	116
			2	733	733	104	104		2	595	595	159	159	
47,3	47,7	65	1	400	953	400	0	47	1	397	778	397	16	124
			2	775	775	101	101		2	666	666	128	128	

3.2.2.8 Center ballasts and corner loads acc. to DIN 15019

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

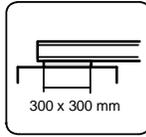
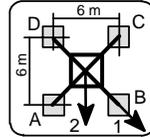


**KR 10 - 60** Corner distance 6 m x 6 m Jib length 65 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	55	1	373	666	373	81	33	1	251	585	251	0	55
			2	580	580	166	166		2	478	478	64	64	
15,8	16,2	55	1	378	688	378	68	34	1	250	604	250	0	60
			2	597	597	159	159		2	490	490	62	62	
20,3	20,7	55	1	382	712	382	53	36	1	248	627	248	0	79
			2	616	616	149	149		2	502	502	59	59	
24,8	25,2	55	1	387	739	387	35	37	1	244	652	244	0	85
			2	636	636	138	138		2	516	516	54	54	
29,3	29,7	60	1	404	780	404	28	39	1	264	680	264	0	92
			2	670	670	138	138		2	543	543	61	61	
33,8	34,2	60	1	409	813	409	5	40	1	258	712	258	0	98
			2	694	694	123	123		2	559	559	55	55	
38,3	38,7	60	1	417	850	417	0	43	1	267	741	267	0	109
			2	722	722	120	120		2	581	581	57	57	
42,8	43,2	60	1	401	910	401	0	45	1	263	777	263	0	116
			2	750	750	106	106		2	625	625	148	148	
47,3	47,7	65	1	407	976	407	0	47	1	401	823	401	0	125
			2	793	793	102	102		2	697	697	115	115	

3.2.2.9 Center ballasts and corner loads acc. to DIN 15019

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

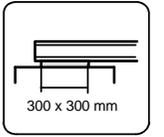
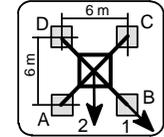


**KR 10 - 60** Corner distance 6 m x 6 m Jib length 70 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	55	1	373	654	373	93	33	1	240	606	240	0	56
			2	572	572	175	175		2	486	486	57	57	
15,8	16,2	55	1	378	676	378	80	34	1	239	626	239	0	61
			2	588	588	167	167		2	497	497	55	55	
20,3	20,7	55	1	383	700	383	65	36	1	237	648	237	0	80
			2	607	607	158	158		2	510	510	51	51	
24,8	25,2	55	1	387	726	387	48	37	1	233	674	233	0	86
			2	627	627	147	147		2	523	523	47	47	
29,3	29,7	60	1	404	768	404	41	39	1	253	703	253	0	93
			2	661	661	147	147		2	551	551	53	53	
33,8	34,2	60	1	409	799	409	18	40	1	246	735	246	0	99
			2	685	685	132	132		2	567	567	47	47	
38,3	38,7	60	1	421	833	421	8	43	1	256	764	256	0	109
			2	712	712	129	129		2	589	589	171	171	
42,8	43,2	60	1	414	883	414	0	45	1	252	801	252	0	117
			2	740	740	115	115		2	643	643	130	130	
47,3	47,7	65	1	421	949	421	0	47	1	376	874	376	0	126
			2	783	783	112	112		2	715	715	97	97	

3.2.2.10 Center ballasts and corner loads acc. to DIN 15019

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

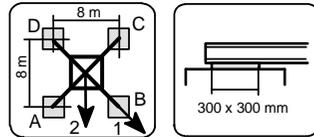


**KR 10 - 60** Corner distance 6 m x 6 m Jib length 75 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	65	1	408	679	408	136	33	1	220	756	220	0	56
			2	599	599	216	216		2	566	566	31	31	
15,8	16,2	65	1	412	701	412	123	35	1	219	777	219	0	61
			2	616	616	208	208		2	578	578	29	29	
20,3	20,7	70	1	429	738	429	121	36	1	241	801	241	0	80
			2	647	647	211	211		2	604	604	37	37	
24,8	25,2	70	1	434	764	434	103	38	1	236	828	236	0	87
			2	667	667	200	200		2	618	618	32	32	
29,3	29,7	70	1	438	793	438	83	39	1	230	859	230	0	94
			2	689	689	187	187		2	633	633	26	26	
33,8	34,2	75	1	455	838	455	73	41	1	247	893	247	0	100
			2	726	726	185	185		2	663	663	31	31	
38,3	38,7	75	1	467	872	467	63	43	1	256	923	256	0	110
			2	753	753	182	182		2	685	685	32	32	
42,8	43,2	80	1	487	921	487	53	45	1	276	962	276	0	118
			2	794	794	180	180		2	729	729	162	162	
47,3	47,7	80	1	494	961	494	27	47	1	268	1005	268	0	127
			2	825	825	164	164		2	791	791	115	115	

3.2.3.1 Center ballasts and corner loads to DIN 15019

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

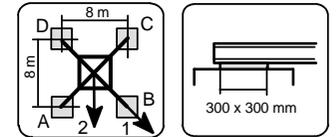


**KR 1000 - 8** Corner distance 8 m x 8 m Jib length 30 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	40	1	293	523	293	63	32	1	195	359	195	32	51
			2	456	456	130	130		2	327	327	177	177	
15,8	16,2	40	1	298	540	298	55	33	1	200	369	200	31	56
			2	469	469	126	126		2	320	320	80	80	
20,3	20,7	40	1	302	558	302	46	35	1	205	381	205	28	73
			2	483	483	121	121		2	329	329	80	80	
24,8	25,2	40	1	307	577	307	36	36	1	209	393	209	25	80
			2	498	498	115	115		2	339	339	79	79	
29,3	29,7	40	1	311	598	311	24	38	1	214	406	214	21	86
			2	514	514	108	108		2	350	350	78	78	
33,8	34,2	40	1	316	621	316	10	39	1	218	420	218	16	93
			2	532	532	100	100		2	361	361	75	75	
38,3	38,7	40	1	328	649	328	7	42	1	230	442	230	19	103
			2	555	555	101	101		2	380	380	81	81	
42,8	43,2	40	1	329	681	329	0	44	1	237	461	237	14	111
			2	576	576	94	94		2	396	396	191	191	
47,3	47,7	50	1	367	730	367	4	46	1	326	520	326	131	119
			2	623	623	110	110		2	463	463	188	188	
51,8	52,3	60	1	399	786	399	12	48	1	358	607	358	109	128
			2	672	672	126	126		2	534	534	182	182	
56,3	56,7	75	1	444	857	444	31	50	1	402	710	402	95	136
			2	736	736	152	152		2	620	620	185	185	
60,8	61,2	85	1	476	917	476	34	52	1	434	806	434	63	145
			2	788	788	163	163		2	697	697	172	172	
65,3	65,7	100	1	526	993	526	59	55	1	484	930	484	39	156
			2	856	856	195	195		2	799	799	170	170	

3.2.3.2 Center ballasts and corner loads to DIN 15019

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

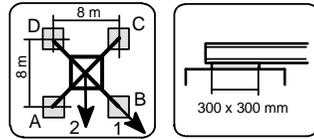


**KR 1000 - 8** Corner distance 8 m x 8 m Jib length 35 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	35	1	290	507	290	72	32	1	248	354	248	143	52
			2	443	443	136	136		2	323	323	174	174	
15,8	16,2	35	1	294	524	294	65	33	1	188	357	188	18	57
			2	457	457	132	132		2	315	315	191	191	
20,3	20,7	35	1	299	542	299	56	35	1	192	369	192	16	74
			2	471	471	127	127		2	317	317	67	67	
24,8	25,2	35	1	303	561	303	45	36	1	197	381	197	12	81
			2	486	486	121	121		2	327	327	66	66	
29,3	29,7	35	1	308	583	308	33	38	1	201	394	201	8	87
			2	502	502	114	114		2	338	338	65	65	
33,8	34,2	35	1	312	606	312	19	39	1	206	408	206	3	94
			2	520	520	105	105		2	349	349	62	62	
38,3	38,7	35	1	325	633	325	16	42	1	218	431	218	5	104
			2	543	543	106	106		2	368	368	67	67	
42,8	43,2	40	1	344	673	344	15	44	1	237	462	237	13	112
			2	577	577	112	112		2	408	408	198	198	
47,3	47,7	50	1	376	727	376	25	46	1	335	534	335	136	120
			2	624	624	128	128		2	476	476	194	194	
51,8	52,2	60	1	408	783	408	33	48	1	367	621	367	113	129
			2	673	673	143	143		2	546	546	188	188	
56,3	56,7	70	1	440	842	440	39	50	1	399	713	399	86	137
			2	724	724	157	157		2	621	621	177	177	
60,8	61,2	85	1	485	915	485	54	52	1	444	822	444	65	146
			2	789	789	180	180		2	711	711	176	176	
65,3	65,7	100	1	535	991	535	79	55	1	494	946	494	41	157
			2	857	857	212	212		2	814	814	173	173	

3.2.3.3 Center ballasts and corner loads to DIN 15019

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

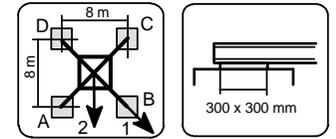


**KR 1000 - 8** Corner distance 8 m x 8 m **Jib length 40 m**

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	30	1	286	487	286	85	32	1	244	351	244	138	52
			2	428	428	143	143		2	320	320	169	169	
15,8	16,2	30	1	290	503	290	77	33	1	175	345	175	5	57
			2	441	441	139	139		2	311	311	187	187	
20,3	20,7	30	1	295	522	295	68	35	1	180	356	180	3	75
			2	455	455	134	134		2	305	305	55	55	
24,8	25,2	30	1	299	541	299	58	36	1	184	369	184	0	81
			2	470	470	128	128		2	315	315	53	53	
29,3	29,7	30	1	304	562	304	46	38	1	184	386	184	0	88
			2	487	487	121	121		2	325	325	52	52	
33,8	34,2	30	1	308	585	308	32	39	1	184	406	184	0	94
			2	504	504	113	113		2	337	337	50	50	
38,3	38,7	30	1	321	613	321	28	42	1	198	426	198	0	104
			2	527	527	114	114		2	356	356	55	55	
42,8	43,2	35	1	340	652	340	28	44	1	225	450	225	0	112
			2	561	561	119	119		2	405	405	193	193	
47,3	47,7	45	1	372	706	372	38	46	1	331	532	331	130	121
			2	609	609	136	136		2	473	473	189	189	
51,8	52,2	60	1	417	775	417	58	48	1	376	632	376	119	129
			2	670	670	163	163		2	557	557	194	194	
56,3	56,7	70	1	449	834	449	64	50	1	408	724	408	91	138
			2	721	721	177	177		2	631	631	184	184	
60,8	61,2	85	1	493	908	493	79	52	1	452	834	452	70	146
			2	786	786	201	201		2	722	722	182	182	
65,3	65,7	95	1	531	971	531	91	55	1	490	947	490	32	158
			2	842	842	220	220		2	813	813	166	166	

3.2.3.4 Center ballasts and corner loads to DIN 15019

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

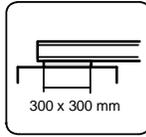
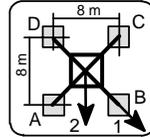


**KR 1000 - 8** Corner distance 8 m x 8 m **Jib length 45 m**

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	35	1	301	529	301	72	32	1	183	347	183	19	53
			2	462	462	139	139		2	310	310	209	209	
15,8	16,2	35	1	305	546	305	64	34	1	188	358	188	17	58
			2	476	476	135	135		2	308	308	67	67	
20,3	20,5	35	1	310	565	310	55	35	1	192	369	192	15	76
			2	490	490	129	129		2	317	317	67	67	
24,8	25,2	35	1	314	585	314	44	37	1	197	382	197	11	82
			2	506	506	123	123		2	328	328	66	66	
29,3	29,7	35	1	319	607	319	31	38	1	201	395	201	7	89
			2	522	522	115	115		2	338	338	64	64	
33,8	34,2	35	1	323	630	323	16	40	1	206	410	206	2	95
			2	540	540	106	106		2	353	353	211	211	
38,3	38,7	35	1	335	658	335	13	43	1	294	438	294	151	105
			2	564	564	107	107		2	396	396	193	193	
42,8	43,2	35	1	342	687	342	0	44	1	301	491	301	111	113
			2	585	585	100	100		2	436	436	167	167	
47,3	47,7	35	1	333	732	333	0	46	1	308	550	308	66	122
			2	609	609	91	91		2	480	480	137	137	
51,8	52,2	45	1	372	783	372	0	48	1	340	639	340	42	130
			2	659	659	105	105		2	551	551	129	129	
56,3	56,7	60	1	426	846	426	7	50	1	385	745	385	25	139
			2	723	723	130	130		2	640	640	130	130	
60,8	61,2	75	1	471	921	471	21	52	1	430	857	430	2	147
			2	789	789	153	153		2	732	732	128	128	
65,3	65,7	85	1	508	984	508	32	55	1	432	1005	432	0	159
			2	845	845	172	172		2	823	823	111	111	

3.2.3.5 Center ballasts and corner loads to DIN 15019

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

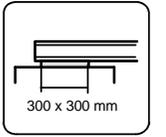
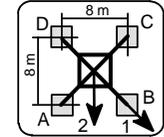


**KR 1000 - 8** Corner distance 8 m x 8 m Jib length 50 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	25	1	283	486	283	80	32	1	152	328	152	0	53
			2	427	427	139	139		2	300	300	183	183	
15,8	16,2	25	1	288	503	288	72	34	1	155	340	155	0	58
			2	440	440	135	135		2	291	291	201	201	
20,3	20,7	25	1	292	522	292	63	35	1	157	355	157	0	76
			2	454	454	130	130		2	293	293	41	41	
24,8	25,2	25	1	297	542	297	52	37	1	158	371	158	0	83
			2	470	470	124	124		2	303	303	40	40	
29,3	29,7	25	1	301	563	301	39	38	1	158	389	158	0	89
			2	486	486	116	116		2	314	314	39	39	
33,8	34,2	25	1	306	587	306	25	40	1	158	408	158	0	96
			2	504	504	107	107		2	329	329	200	200	
38,3	38,7	25	1	318	614	318	22	43	1	172	429	172	0	106
			2	528	528	108	108		2	372	372	182	182	
42,8	43,2	30	1	338	655	338	20	44	1	296	477	296	115	114
			2	562	562	113	113		2	424	424	168	168	
47,3	47,7	40	1	370	709	370	30	46	1	328	562	328	95	123
			2	610	610	129	129		2	493	493	163	163	
51,8	52,2	50	1	402	766	402	37	48	1	360	650	360	70	131
			2	659	659	144	144		2	566	566	155	155	
56,3	56,7	60	1	434	826	434	42	50	1	392	745	392	40	140
			2	711	711	157	157		2	641	641	143	143	
60,8	61,2	75	1	478	900	478	56	52	1	437	857	437	17	148
			2	777	777	180	180		2	734	734	140	140	
65,3	65,7	90	1	528	976	528	80	55	1	478	992	478	0	160
			2	845	845	211	211		2	838	838	136	136	

3.2.3.6 Center ballasts and corner loads to DIN 15019

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

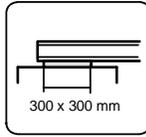
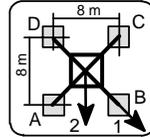


**KR 1000 - 8** Corner distance 8 m x 8 m Jib length 55 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	20	1	280	480	280	80	32	1	185	331	185	38	54
			2	421	421	138	138		2	289	289	188	188	
15,8	16,2	20	1	284	497	284	72	34	1	189	342	189	36	59
			2	435	435	134	134		2	297	297	81	81	
20,3	20,7	20	1	289	516	289	62	35	1	132	356	132	0	77
			2	449	449	129	129		2	307	307	80	80	
24,8	25,2	20	1	293	536	293	51	37	1	132	372	132	0	84
			2	465	465	122	122		2	318	318	78	78	
29,3	29,7	20	1	298	558	298	38	38	1	133	390	133	0	90
			2	481	481	114	114		2	329	329	76	76	
33,8	34,2	20	1	303	581	303	24	40	1	132	410	132	0	97
			2	500	500	105	105		2	341	341	73	73	
38,3	38,7	20	1	315	609	315	20	43	1	146	430	146	0	107
			2	523	523	106	106		2	378	378	168	168	
42,8	43,2	25	1	334	650	334	19	45	1	293	489	293	97	115
			2	557	557	111	111		2	432	432	154	154	
47,3	47,7	35	1	366	705	366	28	47	1	325	574	325	76	124
			2	606	606	127	127		2	501	501	149	149	
51,8	52,2	45	1	398	762	398	35	48	1	357	664	357	50	132
			2	656	656	141	141		2	574	574	140	140	
56,3	56,7	60	1	443	835	443	51	50	1	402	772	402	32	141
			2	720	720	166	166		2	663	663	140	140	
60,8	61,2	70	1	475	898	475	52	52	1	429	878	429	0	149
			2	774	774	176	176		2	744	744	123	123	
65,3	65,7	85	1	525	974	525	76	55	1	452	1032	452	0	161
			2	842	842	207	207		2	849	849	119	119	

3.2.3.7 Center ballasts and corner loads to DIN 15019

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

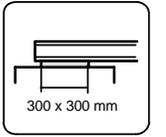
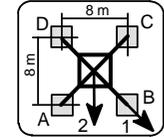


**KR 1000 - 8** Corner distance 8 m x 8 m **Jib length 60 m**

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	25	1	303	517	303	89	33	1	121	417	121	0	55
			2	454	454	152	152		2	326	326	89	89	
15,8	16,2	25	1	307	534	307	81	34	1	124	431	124	0	59
			2	468	468	147	147		2	336	336	89	89	
20,3	20,7	25	1	312	553	312	71	36	1	125	446	125	0	78
			2	483	483	141	141		2	346	346	88	88	
24,8	25,2	25	1	317	574	317	59	37	1	126	463	126	0	84
			2	499	499	135	135		2	357	357	86	86	
29,3	29,7	30	1	334	609	334	58	39	1	150	482	150	0	91
			2	528	528	139	139		2	381	381	96	96	
33,8	34,2	30	1	338	633	338	43	40	1	149	502	149	0	98
			2	547	547	129	129		2	395	395	199	199	
38,3	38,7	30	1	350	661	350	39	43	1	163	523	163	0	108
			2	570	570	130	130		2	438	438	180	180	
42,8	43,2	30	1	357	690	357	24	45	1	165	548	165	0	116
			2	593	593	122	122		2	479	479	153	153	
47,3	47,7	30	1	364	721	364	8	47	1	323	608	323	38	124
			2	617	617	112	112		2	525	525	122	122	
51,8	52,2	35	1	384	767	384	1	49	1	342	688	342	0	133
			2	655	655	113	113		2	586	586	99	99	
56,3	56,7	45	1	416	829	416	4	51	1	341	818	341	0	141
			2	708	708	124	124		2	664	664	85	85	
60,8	61,2	65	1	473	918	473	28	53	1	384	960	384	0	150
			2	788	788	159	159		2	772	772	92	92	
65,3	65,7	85	1	536	1007	536	64	56	1	431	1117	431	0	161
			2	869	869	202	202		2	889	889	99	99	

3.2.3.8 Center ballasts and corner loads to DIN 15019

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

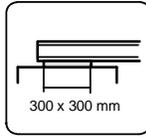
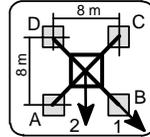


**KR 1000 - 8** Corner distance 8 m x 8 m **Jib length 65 m**

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	25	1	312	531	312	93	33	1	201	439	201	0	55
			2	467	467	157	157		2	365	365	55	55	
15,8	16,2	25	1	317	549	317	84	34	1	203	453	203	0	60
			2	481	481	152	152		2	375	375	54	54	
20,3	20,7	25	1	321	568	321	74	36	1	204	470	204	0	79
			2	496	496	146	146		2	385	385	53	53	
24,8	25,2	25	1	326	589	326	62	37	1	204	488	204	0	85
			2	512	512	139	139		2	397	397	51	51	
29,3	29,7	30	1	343	625	343	61	39	1	227	510	227	0	92
			2	542	542	143	143		2	421	421	60	60	
33,8	34,2	30	1	347	650	347	45	40	1	224	533	224	0	98
			2	561	561	134	134		2	434	434	57	57	
38,3	38,7	30	1	360	678	360	41	43	1	238	555	238	0	109
			2	585	585	134	134		2	462	462	174	174	
42,8	43,2	30	1	367	707	367	26	45	1	238	582	238	0	116
			2	608	608	126	126		2	504	504	147	147	
47,3	47,7	30	1	374	739	374	8	47	1	332	640	332	24	125
			2	632	632	115	115		2	550	550	115	115	
51,8	52,2	30	1	370	784	370	0	49	1	311	736	311	0	134
			2	658	658	103	103		2	600	600	79	79	
56,3	56,7	45	1	425	848	425	3	51	1	334	869	334	0	142
			2	724	724	126	126		2	691	691	77	77	
60,8	61,2	70	1	495	951	495	39	53	1	400	1014	400	0	150
			2	817	817	172	172		2	812	812	95	95	
65,3	65,7	90	1	557	1041	557	74	56	1	446	1173	446	0	162
			2	899	899	215	215		2	931	931	101	101	

3.2.3.9 Center ballasts and corner loads to DIN 15019

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

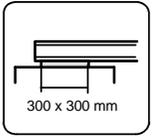
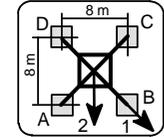


**KR 1000 - 8** Corner distance 8 m x 8 m **Jib length 70 m**

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
11,3	11,7	25	1	312	522	312	102	33	1	193	454	193	0	56
			2	461	461	164	164		2	371	371	49	49	
15,8	16,2	25	1	317	540	317	94	34	1	195	469	195	0	61
			2	474	474	159	159		2	381	381	49	49	
20,3	20,7	25	1	321	559	321	84	36	1	196	486	196	0	80
			2	489	489	153	153		2	391	391	47	47	
24,8	25,2	25	1	326	580	326	72	37	1	195	505	195	0	86
			2	505	505	146	146		2	403	403	45	45	
29,3	29,7	30	1	343	615	343	71	39	1	219	527	219	0	93
			2	535	535	150	150		2	427	427	55	55	
33,8	34,2	30	1	347	640	347	55	40	1	216	551	216	0	99
			2	554	554	140	140		2	440	440	51	51	
38,3	38,7	30	1	360	668	360	51	43	1	229	572	229	0	109
			2	578	578	141	141		2	475	475	162	162	
42,8	43,2	30	1	367	697	367	36	45	1	230	600	230	0	117
			2	600	600	133	133		2	517	517	134	134	
47,3	47,7	30	1	374	729	374	19	47	1	332	660	332	5	126
			2	625	625	123	123		2	564	564	101	101	
51,8	52,2	30	1	380	764	380	0	49	1	291	776	291	0	134
			2	651	651	111	111		2	614	614	65	65	
56,3	56,7	50	1	438	850	438	26	51	1	338	910	338	0	143
			2	729	729	147	147		2	719	719	75	75	
60,8	61,2	75	1	507	952	507	62	53	1	404	1058	404	0	151
			2	822	822	193	193		2	840	840	92	92	
65,3	65,7	95	1	570	1042	570	97	56	1	449	1217	449	0	163
			2	904	904	236	236		2	959	959	98	98	

3.2.3.10 Center ballasts and corner loads 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 75 m**

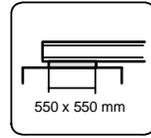
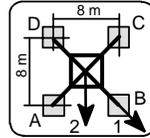
height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
				corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
11,3	11,7	30	1	334	537	334	131	33	1	167	567	167	0	56
			2	478	478	190	190		2	426	426	25	25	
15,8	16,2	30	1	338	555	338	122	35	1	168	582	168	0	61
			2	491	491	185	185		2	436	436	24	24	
20,3	20,7	30	1	343	574	343	112	36	1	169	600	169	0	80
			2	506	506	179	179		2	447	447	22	22	
24,8	25,2	30	1	348	595	348	100	38	1	168	620	168	0	87
			2	523	523	172	172		2	458	458	19	19	
29,3	29,7	35	1	365	631	365	99	39	1	190	643	190	0	94
			2	553	553	176	176		2	483	483	28	28	
33,8	34,2	35	1	369	656	369	83	41	1	186	669	186	0	100
			2	572	572	166	166		2	497	497	24	24	
38,3	38,7	35	1	381	684	381	79	43	1	200	691	200	0	110
			2	595	595	167	167		2	517	517	28	28	
42,8	43,2	35	1	388	713	388	63	45	1	199	720	199	0	118
			2	618	618	159	159		2	559	559	135	135	
47,3	47,7	35	1	395	745	395	46	47	1	197	753	197	0	127
			2	643	643	148	148		2	607	607	101	101	
51,8	52,2	40	1	415	792	415	38	49	1	328	840	328	0	135
			2	681	681	148	148		2	671	671	77	77	
56,3	56,7	60	1	472	879	472	65	51	1	373	978	373	0	144
			2	760	760	184	184		2	777	777	85	85	
60,8	61,2	80	1	529	970	529	88	53	1	411	1129	411	0	152
			2	841	841	217	217		2	887	887	88	88	
65,3	65,7	105	1	604	1073	604	135	56	1	480	1291	480	0	164
			2	935	935	273	273		2	1019	1019	106	106	





3.2.4.5 Center ballasts and corner loads to DIN 15019

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

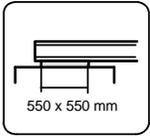
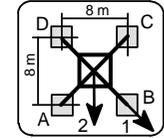


**KR 16 - 80/100** Corner distance 8 m x 8 m **Jib length 50 m**

height under hook ☺ [m]	center ballast ☺ [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
74,9	75,3	120	1	631	1143	631	119	62	1	516	1328	516	0	187
			2	993	993	269	269		2	1060	1060	120	120	
77,1	77,5	125	1	657	1174	657	140	64	1	540	1385	540	0	189
			2	1023	1023	292	292		2	1106	1106	126	126	
81,6	82,0	150	1	731	1280	731	182	66	1	599	1564	599	0	199
			2	1119	1119	343	343		2	1243	1243	137	137	
86,1	86,5	180	1	818	1401	818	235	69	1	673	1761	673	0	211
			2	1230	1230	406	406		2	1399	1399	154	154	
90,6	91,0	210	1	904	1525	905	284	71	1	742	1968	743	0	223
			2	1343	1343	466	466		2	1559	1559	167	167	
95,1	95,5	245	1	1003	1664	1004	344	74	1	829	2191	830	0	234
			2	1470	1470	537	537		2	1737	1737	188	188	

3.2.4.6 Center ballasts and corner loads to DIN 15019

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

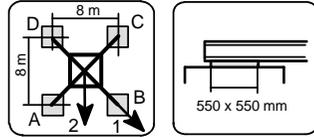


**KR 16 - 80/100** Corner distance 8 m x 8 m **Jib length 55 m**

height under hook ☺ [m]	center ballast ☺ [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
74,9	75,3	125	1	653	1167	653	139	62	1	537	1374	537	0	188
			2	1016	1016	290	290		2	1098	1098	126	126	
77,1	77,5	130	1	679	1197	679	160	64	1	561	1430	561	0	189
			2	1046	1046	312	312		2	1143	1143	132	132	
81,6	82,0	155	1	753	1304	753	202	67	1	618	1611	619	0	200
			2	1143	1143	363	363		2	1281	1281	142	142	
86,1	86,5	185	1	840	1426	840	254	69	1	691	1811	692	0	212
			2	1254	1254	425	425		2	1439	1439	158	158	
90,6	91,0	215	1	926	1550	926	302	72	1	759	2022	760	0	223
			2	1367	1367	485	485		2	1600	1600	170	170	
95,1	95,5	250	1	1025	1690	1025	361	74	1	844	2248	845	0	235
			2	1495	1495	556	556		2	1779	1779	189	189	

3.2.4.7 Center ballasts and corner loads to DIN 15019

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

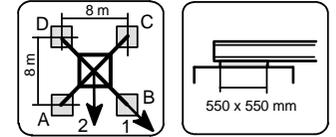


**KR 16 - 80/100** Corner distance 8 m x 8 m Jib length 60 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
74,9	75,3	135	1	689	1228	689	150	63	1	563	1465	563	0	188
			2	1070	1070	308	308		2	1166	1166	129	129	
77,1	77,5	135	1	702	1245	702	159	64	1	562	1519	562	0	190
			2	1086	1086	318	318		2	1198	1198	124	124	
81,6	82,0	165	1	789	1365	789	212	67	1	643	1704	644	0	201
			2	1196	1196	381	381		2	1350	1350	145	145	
86,1	86,5	195	1	875	1488	875	263	69	1	715	1907	715	0	213
			2	1309	1309	442	442		2	1509	1509	160	160	
90,6	91,0	225	1	962	1614	962	310	72	1	780	2122	781	0	224
			2	1423	1423	501	501		2	1671	1671	170	170	
95,1	95,5	260	1	1061	1755	1061	367	74	1	863	2353	863	0	235
			2	1552	1552	570	570		2	1852	1852	188	188	

3.2.4.8 Center ballasts and corner loads to DIN 15019

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

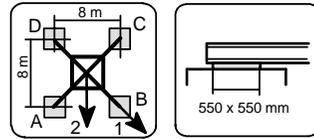


**KR 16 - 80/100** Corner distance 8 m x 8 m Jib length 65 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
74,9	75,3	140	1	710	1263	710	158	63	1	575	1527	575	0	189
			2	1101	1101	320	320		2	1209	1209	129	129	
77,1	77,5	145	1	736	1292	736	180	65	1	600	1580	600	0	191
			2	1129	1129	343	343		2	1254	1254	136	136	
81,6	82,0	170	1	810	1401	810	220	67	1	655	1767	655	0	202
			2	1228	1228	393	393		2	1394	1394	144	144	
86,1	86,5	200	1	897	1524	897	270	70	1	725	1974	725	0	214
			2	1341	1341	453	453		2	1554	1554	158	158	
90,6	91,0	235	1	996	1664	996	329	72	1	813	2193	814	0	225
			2	1468	1468	524	524		2	1730	1730	179	179	
95,1	95,5	270	1	1095	1806	1095	384	75	1	894	2428	894	0	236
			2	1598	1598	592	592		2	1912	1912	195	195	

3.2.4.9 Center ballasts and corner loads to DIN 15019

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

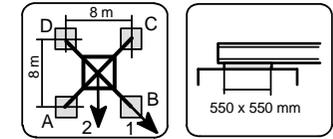


**KR 16 - 80/100** Corner distance 8 m x 8 m **Jib length 70 m**

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
74,9	75,3	145	1	723	1264	723	182	63	1	576	1574	576	0	190
			2	1105	1105	340	340		2	1238	1238	125	125	
77,1	77,5	150	1	749	1294	749	204	65	1	602	1627	602	0	192
			2	1134	1134	364	364		2	1283	1283	132	132	
81,6	82,0	175	1	823	1402	823	244	67	1	656	1816	656	0	202
			2	1232	1232	414	414		2	1424	1424	140	140	
86,1	86,5	210	1	922	1538	922	306	70	1	750	2024	750	0	215
			2	1357	1357	487	487		2	1597	1597	165	165	
90,6	91,0	240	1	1009	1664	1009	353	72	1	813	2244	813	0	226
			2	1472	1472	545	545		2	1761	1761	174	174	
95,1	95,5	275	1	1108	1806	1108	409	75	1	892	2481	893	0	237
			2	1602	1602	614	614		2	1944	1944	189	189	

3.2.4.10 Center ballasts and corner loads to DIN 15019

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

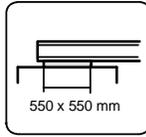
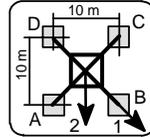


**KR 16 - 80/100** Corner distance 8 m x 8 m **Jib length 75 m**

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
74,9	75,3	155	1	757	1295	757	219	63	1	604	1656	604	0	191
			2	1138	1138	377	377		2	1301	1301	130	130	
77,1	77,5	160	1	783	1325	783	242	65	1	630	1707	631	0	193
			2	1166	1166	400	400		2	1345	1345	138	138	
81,6	82,0	185	1	857	1433	857	281	67	1	683	1899	683	0	203
			2	1265	1265	450	450		2	1487	1487	144	144	
86,1	86,5	220	1	956	1570	956	343	70	1	775	2111	775	0	216
			2	1390	1390	522	522		2	1661	1661	168	168	
90,6	91,0	250	1	1043	1697	1043	389	72	1	835	2336	836	0	227
			2	1505	1505	580	580		2	1827	1827	176	176	
95,1	95,5	290	1	1154	1852	1154	456	75	1	938	2578	938	0	238
			2	1648	1648	661	661		2	2025	2025	202	202	

3.2.5.1 Center ballasts and corner loads to DIN 15019

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

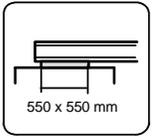
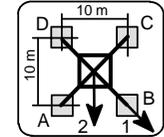


**KR 16 - 80/100** Corner distance 10,0 m x 10,0 m **Jib length 30 m**

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☺	☹			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
74,9	75,3	80	1	509	931	509	86	62	1	450	969	451	0	183
			2	807	807	210	210	2	810	810	125	125		
77,1	77,5	80	1	522	949	522	95	63	1	454	1016	454	0	185
			2	824	824	220	220	2	840	840	122	122		
81,6	82,0	90	1	559	1010	559	107	66	1	459	1153	459	0	196
			2	878	878	239	239	2	925	925	110	110		
86,1	86,5	110	1	620	1098	620	142	68	1	506	1305	506	0	208
			2	958	958	282	282	2	1040	1040	118	118		
90,6	91,0	135	1	694	1201	694	188	71	1	575	1463	575	0	219
			2	1052	1052	336	336	2	1171	1171	136	136		
95,1	95,5	155	1	756	1293	756	219	73	1	613	1633	613	0	230
			2	1135	1135	377	377	2	1292	1292	137	137		

3.2.5.2 Center ballasts and corner loads to DIN 15019

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

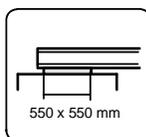
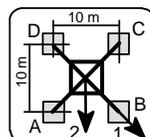


**KR 16 - 80/100** Corner distance 10,0 m x 10,0 m **Jib length 35 m**

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☺	☹			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
74,9	75,3	75	1	505	920	505	91	62	1	436	984	436	0	184
			2	798	798	213	213	2	812	812	116	116		
77,1	77,5	75	1	519	937	519	100	63	1	440	1031	440	0	186
			2	815	815	223	223	2	842	842	113	113		
81,6	82,0	90	1	568	1011	568	124	66	1	469	1170	469	0	197
			2	882	882	254	254	2	940	940	113	113		
86,1	86,5	110	1	629	1100	630	159	68	1	515	1323	515	0	209
			2	962	962	297	297	2	1056	1056	120	120		
90,6	91,0	135	1	704	1202	704	205	71	1	583	1484	583	0	220
			2	1056	1056	351	351	2	1187	1187	138	138		
95,1	95,5	155	1	765	1295	765	236	74	1	620	1656	620	0	231
			2	1140	1140	391	391	2	1309	1309	138	138		

3.2.5.3 Center ballasts and corner loads to DIN 15019

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

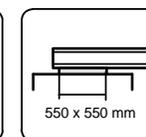
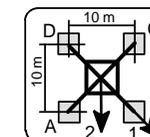


**KR 16 - 80/100** Corner distance 10,0 m x 10,0 m **Jib length 40 m**

height under hook ☪ [m]	center ballast ☪ [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
74,9	75,3	75	1	514	915	514	113	62	1	448	994	449	0	185
			2	798	798	230	230		2	824	824	121	121	
77,1	77,5	75	1	527	933	527	122	63	1	452	1040	452	0	187
			2	814	814	241	241		2	854	854	118	118	
81,6	82,0	90	1	576	1007	576	146	66	1	480	1180	481	0	198
			2	881	881	272	272		2	953	953	118	118	
86,1	86,5	110	1	638	1096	638	181	69	1	526	1335	526	0	210
			2	962	962	315	315		2	1069	1069	125	125	
90,6	91,0	130	1	700	1186	700	213	71	1	568	1497	568	0	221
			2	1043	1043	356	356		2	1188	1188	129	129	
95,1	95,5	155	1	774	1291	774	256	74	1	629	1671	630	0	232
			2	1139	1139	408	408		2	1323	1323	141	141	

3.2.5.4 Center ballasts and corner loads to DIN 15019

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

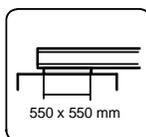
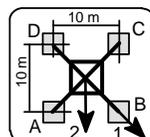


**KR 16 - 80/100** Corner distance 10,0 m x 10,0 m **Jib length 45 m**

height under hook ☪ [m]	center ballast ☪ [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
74,9	75,3	75	1	516	948	516	84	62	1	415	1071	415	0	186
			2	822	822	211	211		2	854	854	96	96	
77,1	77,5	80	1	542	978	542	106	64	1	444	1117	444	0	188
			2	851	851	234	234		2	896	896	106	106	
81,6	82,0	100	1	604	1065	604	142	66	1	496	1258	496	0	198
			2	930	930	278	278		2	1008	1008	118	118	
86,1	86,5	120	1	665	1155	666	176	69	1	541	1415	541	0	211
			2	1011	1011	320	320		2	1125	1125	124	124	
90,6	91,0	145	1	739	1258	740	221	71	1	607	1580	607	0	222
			2	1106	1106	373	373		2	1257	1257	140	140	
95,1	95,5	170	1	814	1364	814	263	74	1	667	1756	667	0	233
			2	1203	1203	424	424		2	1393	1393	151	151	

3.2.5.5 Center ballasts and corner loads to DIN 15019

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

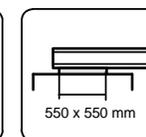
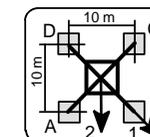


**KR 16 - 80/100** Corner distance 10,0 m x 10,0 m **Jib length 50 m**

height under hook ☪ [m]	center ballast ☪ [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
74,9	75,3	70	1	511	921	511	102	62	1	409	1062	409	0	187
			2	801	801	222	222		2	846	846	94	94	
77,1	77,5	75	1	537	951	537	124	64	1	438	1108	438	0	189
			2	830	830	245	245		2	888	888	104	104	
81,6	82,0	95	1	599	1038	599	160	66	1	490	1251	490	0	199
			2	909	909	288	288		2	1000	1000	115	115	
86,1	86,5	115	1	660	1127	660	194	69	1	534	1409	534	0	211
			2	990	990	330	330		2	1117	1117	121	121	
90,6	91,0	140	1	734	1231	735	238	71	1	599	1575	600	0	223
			2	1085	1085	384	384		2	1250	1250	136	136	
95,1	95,5	165	1	809	1337	809	281	74	1	659	1753	659	0	234
			2	1182	1182	435	435		2	1387	1387	148	148	

3.2.5.6 Center ballasts and corner loads to DIN 15019

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

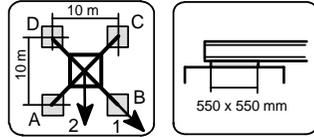


**KR 16 - 80/100** Corner distance 10,0 m x 10,0 m **Jib length 55 m**

height under hook ☪ [m]	center ballast ☪ [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
74,9	75,3	75	1	533	944	533	122	62	1	434	1099	434	0	188
			2	824	824	242	242		2	880	880	103	103	
77,1	77,5	75	1	546	961	547	132	64	1	439	1144	439	0	189
			2	840	840	253	253		2	910	910	101	101	
81,6	82,0	95	1	608	1049	608	167	67	1	490	1289	490	0	200
			2	920	920	296	296		2	1023	1023	111	111	
86,1	86,5	120	1	682	1151	682	213	69	1	558	1449	558	0	212
			2	1014	1014	351	351		2	1153	1153	129	129	
90,6	91,0	145	1	756	1255	756	257	72	1	622	1617	622	0	223
			2	1109	1109	403	403		2	1287	1287	143	143	
95,1	95,5	170	1	830	1362	830	299	74	1	679	1798	679	0	235
			2	1206	1206	455	455		2	1425	1425	153	153	

3.2.5.7 Center ballasts and corner loads to DIN 15019

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

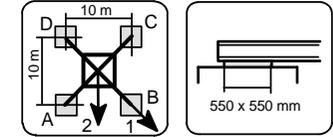


**KR 16 - 80/100** Corner distance 10,0 m x 10,0 m **Jib length 60 m**

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
74,9	75,3	80	1	556	987	556	125	63	1	444	1172	444	0	188
			2	861	861	251	251	2	929	929	100	100		
77,1	77,5	85	1	582	1017	582	148	64	1	474	1215	474	0	190
			2	889	889	275	275	2	971	971	111	111		
81,6	82,0	105	1	644	1105	644	182	67	1	524	1363	524	0	201
			2	970	970	318	318	2	1084	1084	121	121		
86,1	86,5	125	1	705	1195	705	215	69	1	565	1526	566	0	213
			2	1052	1052	359	359	2	1204	1204	124	124		
90,6	91,0	150	1	779	1301	779	258	72	1	628	1698	628	0	224
			2	1148	1148	411	411	2	1338	1338	138	138		
95,1	95,5	180	1	866	1421	866	311	74	1	708	1882	709	0	235
			2	1258	1258	473	473	2	1490	1490	159	159		

3.2.5.8 Center ballasts and corner loads to DIN 15019

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

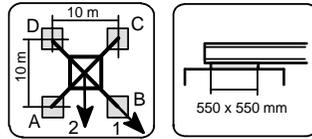


**KR 16 - 80/100** Corner distance 10,0 m x 10,0 m **Jib length 65 m**

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
74,9	75,3	85	1	578	1020	578	136	63	1	463	1222	463	0	189
			2	890	890	265	265	2	969	969	105	105		
77,1	77,5	85	1	591	1036	591	147	65	1	468	1264	468	0	191
			2	906	906	277	277	2	997	997	103	103		
81,6	82,0	105	1	653	1125	653	181	67	1	517	1414	517	0	202
			2	987	987	319	319	2	1112	1112	112	112		
86,1	86,5	130	1	727	1229	727	225	70	1	582	1579	582	0	214
			2	1082	1082	372	372	2	1244	1244	127	127		
90,6	91,0	155	1	801	1335	801	267	72	1	643	1754	643	0	225
			2	1179	1179	423	423	2	1380	1380	140	140		
95,1	95,5	185	1	888	1456	888	319	75	1	722	1942	722	0	236
			2	1290	1290	486	486	2	1533	1533	160	160		

3.2.5.9 Center ballasts and corner loads to DIN 15019

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

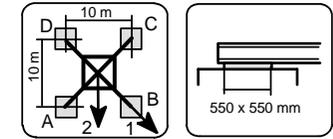


**KR 16 - 80/100** Corner distance 10,0 m x 10,0 m Jib length 70 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
74,9	75,3	90	1	590	1023	590	158	63	1	469	1259	469	0	190
			2	896	896	284	284		2	995	995	104	104	
77,1	77,5	90	1	604	1040	604	168	65	1	475	1302	475	0	192
			2	912	912	296	296		2	1023	1023	102	102	
81,6	82,0	115	1	678	1141	678	215	67	1	547	1452	548	0	202
			2	1005	1005	351	351		2	1150	1150	123	123	
86,1	86,5	135	1	739	1232	740	247	70	1	587	1619	587	0	215
			2	1088	1088	391	391		2	1271	1271	126	126	
90,6	91,0	160	1	814	1338	814	289	72	1	647	1795	647	0	226
			2	1184	1184	443	443		2	1407	1407	137	137	
95,1	95,5	190	1	900	1459	900	341	75	1	726	1985	726	0	237
			2	1295	1295	505	505		2	1561	1561	157	157	

3.2.5.10 Center ballasts and corner loads to DIN 15019

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

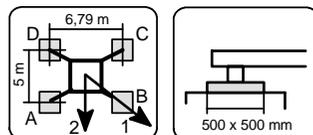


**KR 16 - 80/100** Corner distance 10,0 m x 10,0 m Jib length 75 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
74,9	75,3	95	1	612	1043	612	182	63	1	480	1324	480	0	191
			2	916	916	308	308		2	1039	1039	102	102	
77,1	77,5	100	1	638	1071	638	205	65	1	511	1365	511	0	193
			2	944	944	332	332		2	1080	1080	114	114	
81,6	82,0	120	1	700	1161	700	239	67	1	558	1519	558	0	203
			2	1026	1026	374	374		2	1196	1196	121	121	
86,1	86,5	145	1	774	1265	774	283	70	1	621	1689	621	0	216
			2	1121	1121	427	427		2	1330	1330	135	135	
90,6	91,0	170	1	848	1371	848	324	72	1	679	1868	679	0	227
			2	1218	1218	478	478		2	1467	1467	146	146	
95,1	95,5	200	1	934	1493	934	376	75	1	755	2062	756	0	238
			2	1329	1329	540	540		2	1622	1622	164	164	

3.3.1.1 Center ballasts and corner loads acc. to DIN 15019

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

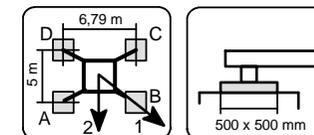


**KRE 260.2** Corner distance 5 m x 6,79 m Jib length 30 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☺	☹			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	115	1	571	806	372	137	34	1	444	610	304	139	58
			2	741	741	202	202		2	564	564	184	184	
18,6	19,0	115	1	581	828	372	124	36	1	451	623	306	134	75
			2	760	760	192	192		2	576	576	182	182	
23,1	23,5	115	1	591	853	370	109	37	1	459	638	307	128	80
			2	780	780	181	181		2	589	589	178	178	
27,6	28,0	115	1	602	879	368	91	39	1	467	654	309	121	86
			2	802	802	168	168		2	602	602	173	173	
32,1	32,5	120	1	626	920	378	84	40	1	488	684	322	126	93
			2	839	839	166	166		2	630	630	180	180	
36,6	37,0	120	1	639	951	375	62	42	1	496	702	322	116	100
			2	865	865	149	149		2	645	645	173	173	

3.3.1.2 Center ballasts and corner loads acc. to DIN 15019

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

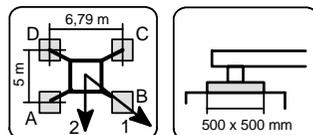


**KRE 260.2** Corner distance 5 m x 6,79 m Jib length 35 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☺	☹			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	105	1	550	772	362	139	34	1	419	585	279	113	59
			2	711	711	201	201		2	539	539	159	159	
18,6	19,0	105	1	560	795	361	126	36	1	426	599	281	108	76
			2	730	730	191	191		2	551	551	156	156	
23,1	23,5	105	1	570	819	360	111	37	1	434	614	282	102	81
			2	750	750	180	180		2	564	564	152	152	
27,6	28,0	110	1	594	858	370	106	39	1	455	643	296	108	87
			2	785	785	179	179		2	590	590	160	160	
32,1	32,5	110	1	605	887	368	86	40	1	463	660	297	100	94
			2	809	809	164	164		2	605	605	154	154	
36,6	37,0	110	1	618	918	364	64	42	1	472	679	297	90	101
			2	835	835	147	147		2	621	621	147	147	

3.3.1.3 Center ballasts and corner loads acc. to DIN 15019

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

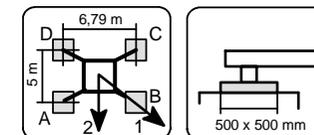


**KRE 260.2** Corner distance 5 m x 6,79 m Jib length 40 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☹	☹			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	95	1	526	733	352	146	34	1	394	560	254	88	59
			2	676	676	203	203		2	514	514	134	134	
18,6	19,0	95	1	536	755	351	132	36	1	402	574	256	83	77
			2	695	695	193	193		2	527	527	131	131	
23,1	23,5	95	1	547	780	350	117	37	1	409	589	257	77	81
			2	715	715	182	182		2	540	540	127	127	
27,6	28,0	95	1	558	806	348	100	39	1	417	606	258	70	88
			2	737	737	169	169		2	553	553	122	122	
32,1	32,5	95	1	569	835	345	80	40	1	426	623	259	62	95
			2	761	761	154	154		2	568	568	116	116	
36,6	37,0	100	1	594	878	355	71	42	1	447	654	272	64	101
			2	800	800	149	149		2	597	597	122	122	

3.3.1.4 Center ballasts and corner loads acc. to DIN 15019

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

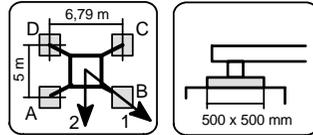


**KRE 260.2** Corner distance 5 m x 6,79 m Jib length 45 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☹	☹			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	110	1	578	811	381	147	35	1	432	598	291	125	60
			2	747	747	212	212		2	552	552	171	171	
18,6	19,0	110	1	588	834	380	133	36	1	439	612	293	120	78
			2	766	766	201	201		2	564	564	168	168	
23,1	23,5	110	1	598	859	378	117	38	1	447	628	294	114	82
			2	787	787	189	189		2	578	578	164	164	
27,6	28,0	110	1	610	887	376	99	39	1	455	644	295	107	89
			2	810	810	176	176		2	592	592	159	159	
32,1	32,5	110	1	622	916	373	78	41	1	463	661	296	98	95
			2	835	835	160	160		2	607	607	153	153	
36,6	37,0	110	1	635	949	369	55	42	1	472	680	296	88	102
			2	862	862	142	142		2	623	623	146	146	

3.3.1.5 Center ballasts and corner loads acc. to DIN 15019

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

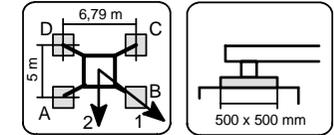


**KRE 260.2** Corner distance 5 m x 6,79 m Jib length 50 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☺	☹			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	95	1	537	746	361	152	35	1	394	561	254	87	60
			2	688	688	210	210		2	515	515	133	133	
18,6	19,0	95	1	547	769	360	139	36	1	402	575	255	82	78
			2	707	707	200	200		2	527	527	130	130	
23,1	23,5	95	1	558	794	359	123	38	1	410	591	257	76	83
			2	728	728	188	188		2	541	541	126	126	
27,6	28,0	95	1	569	820	357	105	39	1	418	607	258	68	90
			2	751	751	175	175		2	555	555	121	121	
32,1	32,5	95	1	581	850	354	85	41	1	426	625	258	60	96
			2	775	775	159	159		2	570	570	115	115	
36,6	37,0	95	1	594	882	350	62	42	1	435	644	259	50	103
			2	802	802	142	142		2	586	586	108	108	

3.3.1.6 Center ballasts and corner loads acc. to DIN 15019

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

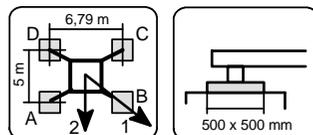


**KRE 260.2** Corner distance 5 m x 6,79 m Jib length 55 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☺	☹			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	85	1	520	726	346	141	35	1	401	551	275	125	61
			2	669	669	198	198		2	509	509	167	167	
18,6	19,0	85	1	530	749	346	127	36	1	409	565	277	120	79
			2	688	688	187	187		2	522	522	163	163	
23,1	23,5	85	1	541	774	344	111	38	1	417	581	278	113	84
			2	709	709	175	175		2	536	536	159	159	
27,6	28,0	85	1	552	801	342	93	39	1	425	598	279	105	91
			2	732	732	162	162		2	550	550	153	153	
32,1	32,5	90	1	577	843	351	85	41	1	446	629	291	108	97
			2	770	770	159	159		2	579	579	159	159	
36,6	37,0	90	1	589	876	348	61	42	1	455	649	291	97	104
			2	797	797	141	141		2	596	596	151	151	

3.3.1.7 Center ballasts and corner loads acc. to DIN 15019

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

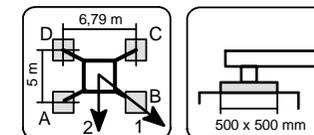


**KRE 260.2** Corner distance 5 m x 6,79 m Jib length 60 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☹	☺			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	85	1	537	756	351	132	35	1	395	606	217	6	61
			2	695	695	193	193		2	548	548	64	64	
18,6	19,0	85	1	547	780	350	117	37	1	402	621	218	0	80
			2	715	715	182	182		2	560	560	60	60	
23,1	23,5	85	1	558	805	349	101	38	1	404	643	213	0	85
			2	737	737	170	170		2	574	574	56	56	
27,6	28,0	85	1	569	833	346	82	40	1	404	668	206	0	91
			2	760	760	155	155		2	589	589	50	50	
32,1	32,5	90	1	594	876	355	73	41	1	429	696	222	0	98
			2	798	798	151	151		2	617	617	56	56	
36,6	37,0	90	1	607	910	351	48	43	1	427	726	211	0	104
			2	826	826	132	132		2	634	634	49	49	

3.3.1.8 Center ballasts and corner loads acc. to DIN 15019

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

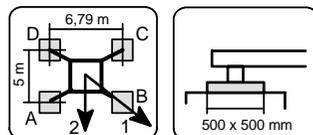


**KRE 260.2** Corner distance 5 m x 6,79 m Jib length 65 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☹	☺			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	85	1	548	773	358	133	35	1	445	667	258	36	62
			2	711	711	196	196		2	605	605	97	97	
18,6	19,0	85	1	558	797	357	119	37	1	453	682	259	29	81
			2	731	731	185	185		2	619	619	93	93	
23,1	23,5	85	1	569	823	355	102	38	1	461	699	260	22	85
			2	753	753	172	172		2	633	633	88	88	
27,6	28,0	85	1	581	851	353	82	40	1	470	717	260	12	92
			2	776	776	157	157		2	649	649	81	81	
32,1	32,5	85	1	593	883	349	60	41	1	479	738	260	1	99
			2	803	803	140	140		2	666	666	73	73	
36,6	37,0	90	1	619	930	358	47	43	1	501	772	272	1	105
			2	844	844	133	133		2	697	697	76	76	

3.3.1.9 Center ballasts and corner loads acc. to DIN 15019

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

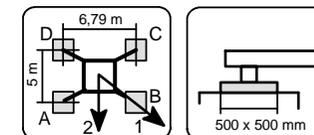


**KRE 260.2** Corner distance 5 m x 6,79 m Jib length 70 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☐	☐			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	75	1	519	735	337	121	35	1	423	653	229	0	63
			2	675	675	181	181		2	589	589	63	63	
18,6	19,0	75	1	530	759	336	107	37	1	425	675	224	0	82
			2	695	695	170	170		2	603	603	59	59	
23,1	23,5	75	1	540	785	334	90	38	1	425	700	217	0	86
			2	717	717	158	158		2	617	617	53	53	
27,6	28,0	75	1	552	813	332	71	40	1	424	728	208	0	93
			2	741	741	143	143		2	633	633	47	47	
32,1	32,5	80	1	577	857	341	61	41	1	447	760	221	0	99
			2	779	779	139	139		2	663	663	51	51	
36,6	37,0	80	1	590	891	337	36	43	1	444	795	208	0	106
			2	808	808	119	119		2	682	682	41	41	

3.3.1.10 Center ballasts and corner loads acc. to DIN 15019

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



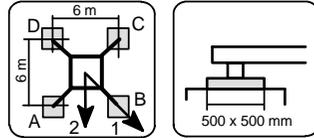
**KRE 260.2** Corner distance 5 m x 6,79 m Jib length 75 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☐	☐			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	90	1	563	772	387	178	36	1	448	811	207	0	63
			2	714	714	236	236		2	693	693	39	39	
18,6	19,0	90	1	573	796	386	163	37	1	449	834	201	0	82
			2	734	734	225	225		2	707	707	35	35	
23,1	23,5	95	1	597	835	396	158	39	1	473	861	218	0	87
			2	769	769	224	224		2	735	735	41	41	
27,6	28,0	95	1	609	863	394	139	40	1	472	891	207	0	94
			2	793	793	209	209		2	751	751	34	34	
32,1	32,5	100	1	634	907	403	129	42	1	494	925	219	0	100
			2	831	831	205	205		2	782	782	37	37	
36,6	37,0	105	1	660	954	411	116	43	1	515	963	229	0	107
			2	872	872	198	198		2	814	814	39	39	



3.3.2.3 Center ballasts and corner loads acc. to DIN 15019

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

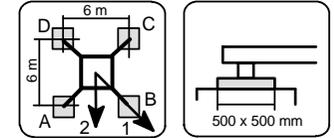


**KRE 260.2** Corner distance 6 m x 6 m Jib length 40 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☹	☺			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	65	1	364	643	364	86	34	1	249	473	249	25	59
			2	561	561	167	167		2	410	410	236	236	
18,6	19,0	65	1	369	664	369	73	36	1	254	487	254	20	77
			2	578	578	160	160		2	419	419	89	89	
23,1	23,5	65	1	373	688	373	59	37	1	258	501	258	15	81
			2	596	596	151	151		2	430	430	86	86	
27,6	28,0	65	1	312	722	312	0	39	1	263	517	263	8	88
			2	615	615	141	141		2	443	443	83	83	
32,1	32,5	65	1	302	761	302	0	40	1	267	534	267	1	95
			2	636	636	129	129		2	456	456	79	79	
36,6	37,0	70	1	315	804	315	0	42	1	284	564	284	4	101
			2	671	671	128	128		2	482	482	86	86	
41,1	41,5	75	1	345	842	345	0	45	1	309	603	309	15	112
			2	711	711	138	138		2	517	517	101	101	
45,6	46,0	90	1	469	902	469	35	47	1	427	668	427	187	120
			2	775	775	162	162		2	597	597	257	257	
50,1	50,5	105	1	513	977	513	49	48	1	472	784	472	160	128
			2	841	841	185	185		2	692	692	252	252	

3.3.2.3 Center ballasts and corner loads acc. to DIN 15019

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

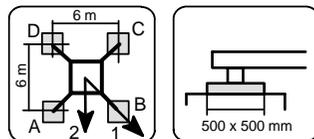


**KRE 260.2** Corner distance 6 m x 6 m Jib length 45 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☹	☺			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	80	1	404	720	404	89	35	1	287	511	287	62	60
			2	627	627	181	181		2	445	445	128	128	
18,6	19,0	80	1	409	742	409	76	36	1	291	525	291	57	78
			2	644	644	173	173		2	456	456	126	126	
23,1	23,5	80	1	413	766	413	61	38	1	296	539	296	52	82
			2	662	662	164	164		2	468	468	123	123	
27,6	28,0	80	1	418	792	418	44	39	1	300	555	300	45	89
			2	682	682	154	154		2	481	481	120	120	
32,1	32,5	80	1	422	820	422	25	41	1	305	572	305	37	95
			2	704	704	141	141		2	494	494	116	116	
36,6	37,0	80	1	427	851	427	3	42	1	309	590	309	28	102
			2	727	727	127	127		2	508	508	111	111	
41,1	41,5	80	1	432	892	432	0	45	1	398	627	398	168	113
			2	755	755	123	123		2	560	560	236	236	
45,6	46,0	80	1	417	950	417	0	47	1	405	699	405	110	121
			2	782	782	110	110		2	613	613	197	197	
50,1	50,5	90	1	450	1014	450	0	49	1	437	804	437	70	129
			2	837	837	120	120		2	697	697	177	177	

3.3.2.5 Center ballasts and corner loads acc. to DIN 15019

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

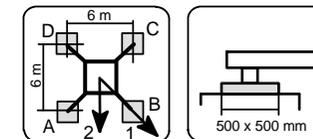


**KRE 260.2** Corner distance 6 m x 6 m Jib length 50 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☐	☐			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	65	1	374	656	374	92	35	1	249	474	249	24	60
			2	573	573	175	175		2	408	408	90	90	
18,6	19,0	65	1	379	678	379	80	36	1	254	488	254	19	78
			2	590	590	167	167		2	419	419	88	88	
23,1	23,5	65	1	383	701	383	65	38	1	258	503	258	14	83
			2	608	608	158	158		2	431	431	85	85	
27,6	28,0	65	1	388	727	388	48	39	1	263	518	263	7	90
			2	628	628	148	148		2	444	444	82	82	
32,1	32,5	65	1	392	755	392	29	41	1	267	536	267	0	96
			2	649	649	136	136		2	457	457	78	78	
36,6	37,0	65	1	397	786	397	8	42	1	262	563	262	0	103
			2	672	672	122	122		2	471	471	73	73	
41,1	41,5	65	1	407	822	407	0	45	1	272	592	272	0	113
			2	700	700	118	118		2	521	521	214	214	
45,6	46,0	80	1	454	894	454	14	47	1	412	695	412	130	121
			2	765	765	143	143		2	612	612	213	213	
50,1	50,5	95	1	498	970	498	27	49	1	457	813	457	101	130
			2	831	831	165	165		2	708	708	205	205	

3.3.2.6 Center ballasts and corner loads acc. to DIN 15019

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

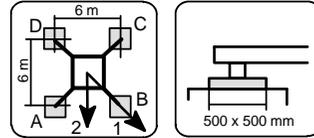


**KRE 260.2** Corner distance 6 m x 6 m Jib length 55 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☐	☐			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	60	1	371	649	371	93	35	1	276	478	276	74	61
			2	567	567	174	174		2	418	418	133	133	
18,6	19,0	60	1	375	671	375	80	36	1	280	492	280	69	79
			2	584	584	167	167		2	430	430	131	131	
23,1	23,5	60	1	380	695	380	65	38	1	285	507	285	63	84
			2	602	602	157	157		2	442	442	128	128	
27,6	28,0	60	1	385	721	385	48	39	1	289	523	289	55	91
			2	622	622	147	147		2	455	455	124	124	
32,1	32,5	60	1	389	749	389	29	41	1	294	541	294	46	97
			2	644	644	134	134		2	469	469	119	119	
36,6	37,0	60	1	394	780	394	7	42	1	236	565	236	0	104
			2	667	667	120	120		2	484	484	113	113	
41,1	41,5	60	1	403	817	403	0	45	1	364	601	364	128	114
			2	695	695	117	117		2	532	532	197	197	
45,6	46,0	75	1	450	888	450	12	47	1	409	712	409	106	122
			2	760	760	141	141		2	623	623	195	195	
50,1	50,5	90	1	495	965	495	25	49	1	454	831	454	76	131
			2	827	827	163	163		2	720	720	187	187	

3.3.2.7 Center ballasts and corner loads acc. to DIN 15019

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

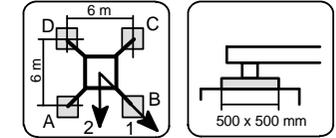


**KRE 260.2** Corner distance 6 m x 6 m Jib length 60 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☐	☐			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	60	1	382	678	382	85	35	1	202	569	202	0	61
			2	591	591	172	172		2	449	449	123	123	
18,6	19,0	60	1	386	700	386	72	37	1	202	588	202	0	80
			2	608	608	164	164		2	461	461	121	121	
23,1	23,5	60	1	391	725	391	56	38	1	200	610	200	0	85
			2	627	627	154	154		2	473	473	118	118	
27,6	28,0	60	1	395	752	395	39	40	1	197	634	197	0	91
			2	647	647	143	143		2	486	486	114	114	
32,1	32,5	60	1	400	781	400	18	41	1	193	660	193	0	98
			2	669	669	130	130		2	501	501	108	108	
36,6	37,0	60	1	400	817	400	0	43	1	188	689	188	0	104
			2	693	693	115	115		2	518	518	208	208	
41,1	41,5	60	1	402	863	402	0	45	1	197	719	197	0	115
			2	722	722	111	111		2	575	575	175	175	
45,6	46,0	60	1	386	923	386	0	47	1	194	754	194	0	123
			2	750	750	97	97		2	630	630	135	135	
50,1	50,5	75	1	442	989	442	0	49	1	427	853	427	1	132
			2	818	818	118	118		2	728	728	125	125	

3.3.2.8 Center ballasts and corner loads acc. to DIN 15019

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



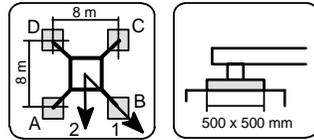
**KRE 260.2** Corner distance 6 m x 6 m Jib length 65 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☐	☐			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,1	14,5	55	1	378	682	378	75	35	1	254	598	254	0	62
			2	593	593	164	164		2	488	488	65	65	
18,6	19,0	55	1	383	705	383	61	37	1	252	619	252	0	81
			2	610	610	155	155		2	500	500	62	62	
23,1	23,5	55	1	387	729	387	45	38	1	250	642	250	0	85
			2	629	629	145	145		2	513	513	58	58	
27,6	28,0	55	1	392	757	392	27	40	1	246	669	246	0	92
			2	650	650	134	134		2	526	526	53	53	
32,1	32,5	60	1	409	799	409	19	41	1	265	698	265	0	99
			2	685	685	133	133		2	554	554	60	60	
36,6	37,0	60	1	409	837	409	0	43	1	258	731	258	0	105
			2	710	710	117	117		2	570	570	53	53	
41,1	41,5	60	1	410	883	410	0	46	1	266	762	266	0	116
			2	738	738	113	113		2	604	604	164	164	
45,6	46,0	65	1	418	944	418	0	48	1	286	800	286	0	124
			2	779	779	111	111		2	673	673	135	135	
50,1	50,5	65	1	398	1013	398	0	50	1	365	914	365	0	132
			2	810	810	94	94		2	734	734	88	88	



3.3.3.1 Center ballasts and corner loads acc. to DIN 15019

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

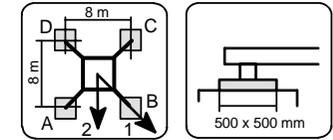


**KRE 480** Corner distance 8 m x 8 m Jib length 30 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
14,1	14,5	30	1	290	528	290	52	35	1	193	361	193	25	60
			2	459	459	122	122		2	314	314	184	184	
18,6	19,0	30	1	295	546	295	44	37	1	197	372	197	23	78
			2	472	472	117	117		2	321	321	74	74	
23,1	23,5	30	1	299	564	299	34	38	1	202	384	202	20	82
			2	487	487	112	112		2	330	330	73	73	
27,6	28,0	30	1	304	584	304	23	40	1	206	396	206	17	89
			2	502	502	106	106		2	341	341	72	72	
32,1	32,5	30	1	308	606	308	11	41	1	211	410	211	12	95
			2	519	519	98	98		2	352	352	70	70	
36,6	37,0	30	1	310	633	310	0	43	1	215	424	215	7	102
			2	537	537	89	89		2	363	363	68	68	
41,1	41,5	30	1	318	665	318	0	46	1	228	447	228	8	113
			2	560	560	90	90		2	383	383	72	72	
45,6	46,0	40	1	357	711	357	3	48	1	316	491	316	141	121
			2	607	607	107	107		2	440	440	192	192	
50,1	50,5	50	1	389	766	389	13	50	1	348	575	348	121	129
			2	655	655	123	123		2	509	509	187	187	
54,6	55,0	60	1	421	823	421	20	52	1	380	664	380	96	138
			2	705	705	138	138		2	581	581	179	179	
59,1	59,5	75	1	466	894	466	37	53	1	425	770	425	79	146
			2	769	769	163	163		2	669	669	180	180	
63,6	64,0	85	1	498	956	498	39	55	1	457	869	457	45	155
			2	822	822	174	174		2	748	748	165	165	
68,1	68,5	100	1	548	1033	548	63	58	1	507	996	507	17	166
			2	891	891	205	205		2	853	853	160	160	
72,6	73,0	115	1	593	1109	593	77	61	1	539	1132	539	0	176
			2	958	958	229	229		2	953	953	152	152	

3.3.3.2 Center ballasts and corner loads acc. to DIN 15019

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

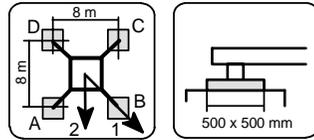


**KRE 480** Corner distance 8 m x 8 m Jib length 35 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
14,1	14,5	25	1	287	512	287	61	35	1	180	348	180	12	61
			2	446	446	127	127		2	310	310	181	181	
18,6	19,0	25	1	291	530	291	53	37	1	185	360	185	10	78
			2	460	460	123	123		2	308	308	61	61	
23,1	23,5	25	1	296	548	296	44	38	1	189	372	189	7	83
			2	474	474	118	118		2	318	318	60	60	
27,6	28,0	25	1	301	569	301	33	40	1	194	384	194	3	90
			2	490	490	111	111		2	329	329	59	59	
32,1	32,5	25	1	305	590	305	20	41	1	198	399	198	0	96
			2	507	507	103	103		2	340	340	57	57	
36,6	37,0	25	1	310	614	310	5	43	1	197	419	197	0	103
			2	525	525	95	95		2	351	351	55	55	
41,1	41,5	30	1	334	655	334	14	46	1	228	448	228	7	114
			2	561	561	108	108		2	386	386	200	200	
45,6	46,0	35	1	354	695	354	12	48	1	313	492	313	134	122
			2	595	595	112	112		2	439	439	186	186	
50,1	50,5	45	1	386	750	386	21	50	1	345	577	345	113	130
			2	644	644	128	128		2	509	509	181	181	
54,6	55,0	60	1	431	820	431	41	52	1	389	679	389	100	139
			2	706	706	155	155		2	594	594	185	185	
59,1	59,5	70	1	463	880	463	45	54	1	421	773	421	70	147
			2	758	758	168	168		2	670	670	173	173	
63,6	64,0	85	1	507	955	507	60	55	1	466	885	466	46	156
			2	824	824	191	191		2	762	762	169	169	
68,1	68,5	100	1	557	1032	557	83	58	1	516	1014	516	18	167
			2	893	893	222	222		2	868	868	164	164	
72,6	73,0	115	1	603	1108	603	97	61	1	548	1150	548	0	177
			2	960	960	245	245		2	968	968	154	154	

3.3.3.3 Center ballasts and corner loads acc. to DIN 15019

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

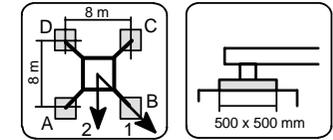


**KRE 480** Corner distance 8 m x 8 m Jib length 40 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
14,1	14,5	20	1	283	492	283	74	35	1	168	336	168	0	62
			2	431	431	135	135		2	307	307	177	177	
18,6	19,0	20	1	287	509	287	66	37	1	170	350	170	0	79
			2	444	444	131	131		2	296	296	48	48	
23,1	23,5	20	1	292	528	292	56	38	1	172	365	172	0	84
			2	459	459	125	125		2	306	306	48	48	
27,6	28,0	20	1	297	548	297	45	40	1	172	381	172	0	91
			2	474	474	119	119		2	316	316	46	46	
32,1	32,5	20	1	234	571	234	0	41	1	172	400	172	0	97
			2	491	491	111	111		2	327	327	44	44	
36,6	37,0	20	1	227	603	227	0	43	1	171	420	171	0	104
			2	509	509	102	102		2	339	339	42	42	
41,1	41,5	25	1	330	634	330	26	46	1	210	442	210	0	114
			2	545	545	115	115		2	383	383	195	195	
45,6	46,0	35	1	362	687	362	37	48	1	321	502	321	140	122
			2	592	592	132	132		2	449	449	193	193	
50,1	50,5	45	1	394	742	394	46	50	1	353	587	353	119	131
			2	641	641	148	148		2	519	519	188	188	
54,6	55,0	60	1	439	812	439	66	52	1	398	690	398	106	139
			2	703	703	175	175		2	604	604	191	191	
59,1	59,5	70	1	471	872	471	70	54	1	430	785	430	75	148
			2	755	755	188	188		2	681	681	179	179	
63,6	64,0	85	1	516	947	516	84	55	1	474	898	474	51	156
			2	821	821	211	211		2	774	774	175	175	
68,1	68,5	100	1	566	1024	566	107	58	1	524	1027	524	22	168
			2	890	890	242	242		2	880	880	169	169	
72,6	73,0	115	1	611	1101	611	122	61	1	559	1162	559	0	178
			2	957	957	265	265		2	981	981	159	159	

3.3.3.3 Center ballasts and corner loads acc. to DIN 15019

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

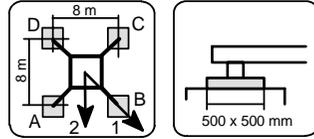


**KRE 480** Corner distance 8 m x 8 m Jib length 45 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
14,1	14,5	25	1	298	535	298	61	36	1	180	349	180	11	62
			2	465	465	130	130		2	300	300	61	61	
18,6	19,0	25	1	302	552	302	53	37	1	185	360	185	9	80
			2	479	479	126	126		2	309	309	61	61	
23,1	23,5	25	1	307	571	307	43	39	1	189	372	189	6	85
			2	494	494	120	120		2	319	319	60	60	
27,6	28,0	25	1	312	592	312	31	40	1	194	385	194	2	91
			2	510	510	113	113		2	329	329	58	58	
32,1	32,5	25	1	316	615	316	18	42	1	197	401	197	0	98
			2	527	527	105	105		2	340	340	56	56	
36,6	37,0	25	1	321	639	321	2	43	1	196	421	196	0	105
			2	546	546	96	96		2	369	369	190	190	
41,1	41,5	25	1	331	670	331	0	46	1	291	464	291	119	115
			2	570	570	96	96		2	413	413	169	169	
45,6	46,0	25	1	323	713	323	0	48	1	299	520	299	77	123
			2	592	592	88	88		2	455	455	142	142	
50,1	50,5	35	1	364	761	364	0	50	1	331	606	331	55	132
			2	641	641	103	103		2	526	526	136	136	
54,6	55,0	45	1	402	813	402	0	52	1	363	698	363	28	140
			2	692	692	116	116		2	599	599	126	126	
59,1	59,5	60	1	449	884	449	13	54	1	407	806	407	8	149
			2	757	757	140	140		2	690	690	125	125	
63,6	64,0	75	1	493	961	493	26	56	1	435	938	435	0	157
			2	824	824	163	163		2	784	784	120	120	
68,1	68,5	90	1	543	1038	543	48	59	1	455	1098	455	0	169
			2	893	893	193	193		2	890	890	113	113	
72,6	73,0	110	1	601	1129	601	74	61	1	491	1257	491	0	178
			2	974	974	228	228		2	1005	1005	115	115	

3.3.3.5 Center ballasts and corner loads acc. to DIN 15019

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

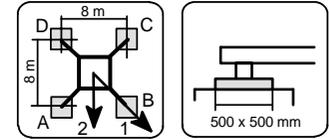


**KRE 480** Corner distance 8 m x 8 m Jib length 50 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
14,1	14,5	15	1	280	492	280	69	36	1	142	338	142	0	63
			2	430	430	131	131		2	287	287	191	191	
18,6	19,0	15	1	285	509	285	60	37	1	144	351	144	0	81
			2	444	444	126	126		2	284	284	35	35	
23,1	23,5	15	1	289	528	289	51	39	1	146	367	146	0	86
			2	458	458	120	120		2	294	294	35	35	
27,6	28,0	15	1	294	549	294	39	40	1	146	383	146	0	92
			2	474	474	114	114		2	305	305	33	33	
32,1	32,5	15	1	299	571	299	26	42	1	146	402	146	0	99
			2	491	491	106	106		2	316	316	31	31	
36,6	37,0	15	1	303	595	303	11	43	1	145	423	145	0	105
			2	510	510	97	97		2	344	344	179	179	
41,1	41,5	15	1	315	624	315	7	46	1	158	445	158	0	116
			2	533	533	97	97		2	389	389	158	158	
45,6	46,0	25	1	347	677	347	17	48	1	306	518	306	94	124
			2	581	581	114	114		2	456	456	156	156	
50,1	50,5	40	1	392	746	392	38	50	1	351	618	351	83	132
			2	642	642	142	142		2	540	540	162	162	
54,6	55,0	50	1	424	804	424	44	52	1	383	709	383	56	141
			2	692	692	155	155		2	614	614	152	152	
59,1	59,5	65	1	468	877	468	60	54	1	427	819	427	36	149
			2	757	757	180	180		2	704	704	150	150	
63,6	64,0	80	1	513	953	513	73	56	1	472	934	472	10	158
			2	824	824	202	202		2	799	799	145	145	
68,1	68,5	90	1	551	1018	551	83	59	1	476	1085	476	0	170
			2	881	881	220	220		2	893	893	125	125	
72,6	73,0	110	1	609	1108	609	109	61	1	512	1246	512	0	179
			2	962	962	255	255		2	1008	1008	127	127	

3.3.3.6 Center ballasts and corner loads acc. to DIN 15019

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

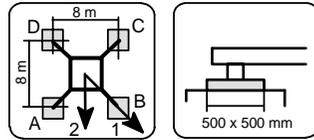


**KRE 480** Corner distance 8 m x 8 m Jib length 55 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
14,1	14,5	10	1	277	485	277	69	36	1	117	338	117	0	63
			2	424	424	130	130		2	289	289	75	75	
18,6	19,0	10	1	282	503	282	60	38	1	119	352	119	0	82
			2	438	438	125	125		2	299	299	74	74	
23,1	23,5	10	1	286	522	286	50	39	1	120	368	120	0	87
			2	453	453	119	119		2	309	309	73	73	
27,6	28,0	10	1	291	543	291	38	41	1	121	385	121	0	93
			2	469	469	112	112		2	320	320	71	71	
32,1	32,5	10	1	295	565	295	25	42	1	120	403	120	0	100
			2	486	486	104	104		2	331	331	69	69	
36,6	37,0	10	1	300	590	300	10	44	1	119	424	119	0	106
			2	505	505	95	95		2	351	351	166	166	
41,1	41,5	10	1	312	619	312	5	46	1	271	449	271	93	117
			2	529	529	95	95		2	396	396	145	145	
45,6	46,0	20	1	344	673	344	15	48	1	303	530	303	75	125
			2	576	576	112	112		2	464	464	142	142	
50,1	50,5	30	1	376	729	376	23	50	1	335	618	335	51	133
			2	625	625	127	127		2	535	535	134	134	
54,6	55,0	45	1	421	800	421	41	52	1	379	723	379	35	142
			2	689	689	153	153		2	623	623	136	136	
59,1	59,5	60	1	465	873	465	57	54	1	424	834	424	14	150
			2	754	754	177	177		2	714	714	134	134	
63,6	64,0	75	1	510	950	510	69	56	1	455	964	455	0	159
			2	821	821	198	198		2	809	809	128	128	
68,1	68,5	90	1	560	1028	560	91	59	1	474	1127	474	0	171
			2	891	891	229	229		2	917	917	120	120	
72,6	73,0	110	1	618	1119	618	117	61	1	508	1291	508	0	180
			2	972	972	263	263		2	1033	1033	120	120	

3.3.3.7 Center ballasts and corner loads acc. to DIN 15019

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

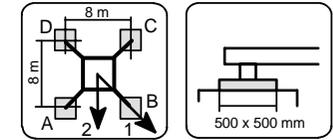


**KRE 480** Corner distance 8 m x 8 m Jib length 60 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
14,1	14,5	20	1	313	535	313	90	36	1	136	427	136	0	64
			2	470	470	155	155		2	340	340	95	95	
18,6	19,0	20	1	317	553	317	81	38	1	137	442	137	0	82
			2	484	484	150	150		2	349	349	95	95	
23,1	23,5	20	1	322	573	322	71	39	1	139	458	139	0	87
			2	499	499	144	144		2	360	360	93	93	
27,6	28,0	20	1	326	594	326	59	41	1	139	476	139	0	94
			2	516	516	137	137		2	371	371	91	91	
32,1	32,5	20	1	331	617	331	45	42	1	138	495	138	0	100
			2	533	533	129	129		2	383	383	88	88	
36,6	37,0	20	1	335	642	335	29	44	1	136	517	136	0	107
			2	552	552	118	118		2	411	411	178	178	
41,1	41,5	20	1	348	671	348	24	47	1	149	540	149	0	118
			2	577	577	119	119		2	456	456	156	156	
45,6	46,0	20	1	355	701	355	8	49	1	313	577	313	50	125
			2	600	600	110	110		2	499	499	127	127	
50,1	50,5	25	1	374	746	374	3	51	1	333	653	333	13	134
			2	637	637	112	112		2	559	559	107	107	
54,6	55,0	35	1	406	805	406	7	52	1	348	764	348	0	143
			2	688	688	124	124		2	635	635	95	95	
59,1	59,5	45	1	438	868	438	9	54	1	345	899	345	0	151
			2	742	742	135	135		2	715	715	79	79	
63,6	64,0	70	1	508	971	508	45	56	1	410	1048	410	0	159
			2	835	835	180	180		2	837	837	96	96	
68,1	68,5	95	1	583	1075	583	91	59	1	477	1213	477	0	171
			2	931	931	235	235		2	971	971	112	112	
72,6	73,0	120	1	653	1179	653	127	62	1	534	1381	534	0	181
			2	1025	1025	281	281		2	1101	1101	124	124	

3.3.3.8 Center ballasts and corner loads acc. to DIN 15019

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

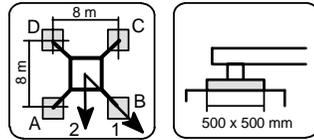


**KRE 480** Corner distance 8 m x 8 m Jib length 65 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
14,1	14,4	20	1	322	550	322	94	37	1	215	449	215	0	64
			2	483	483	161	161		2	379	379	61	61	
18,6	19,0	20	1	326	568	326	85	38	1	217	464	217	0	83
			2	497	497	156	156		2	389	389	60	60	
23,1	23,5	20	1	331	588	331	74	40	1	217	482	217	0	88
			2	513	513	149	149		2	400	400	58	58	
27,6	28,0	20	1	336	609	336	62	41	1	216	502	216	0	95
			2	529	529	142	142		2	411	411	56	56	
32,1	32,5	20	1	340	633	340	47	43	1	214	524	214	0	101
			2	547	547	133	133		2	424	424	53	53	
36,6	37,0	20	1	345	659	345	30	44	1	211	549	211	0	108
			2	567	567	122	122		2	437	437	48	48	
41,1	41,5	20	1	357	688	357	25	47	1	224	572	224	0	118
			2	591	591	122	122		2	481	481	150	150	
45,6	46,0	20	1	364	718	364	9	49	1	323	608	323	37	126
			2	615	615	113	113		2	524	524	121	121	
50,1	50,5	25	1	383	764	383	3	51	1	341	686	341	0	135
			2	652	652	115	115		2	585	585	99	99	
54,6	55,0	30	1	398	816	398	0	53	1	317	813	317	0	143
			2	692	692	114	114		2	649	649	74	74	
59,1	59,5	50	1	460	900	460	20	55	1	362	951	362	0	152
			2	771	771	149	149		2	755	755	82	82	
63,6	64,0	75	1	530	1005	530	55	57	1	425	1104	425	0	160
			2	865	865	194	194		2	879	879	98	98	
68,1	68,5	100	1	605	1109	605	101	59	1	491	1271	491	0	172
			2	961	961	248	248		2	1013	1013	114	114	

3.3.3.9 Center ballasts and corner loads acc. to DIN 15019

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

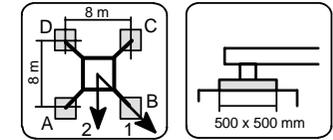


**KRE 480** Corner distance 8 m x 8 m Jib length 70 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
14,1	14,5	20	1	322	540	322	103	37	1	208	465	208	0	65
			2	476	476	167	167		2	384	384	55	55	
18,6	19,0	20	1	326	559	326	94	38	1	209	481	209	0	84
			2	491	491	162	162		2	395	395	54	54	
23,1	23,5	20	1	331	578	331	84	40	1	209	498	209	0	89
			2	506	506	156	156		2	405	405	53	53	
27,6	28,0	20	1	336	600	336	71	41	1	208	519	208	0	95
			2	522	522	149	149		2	417	417	50	50	
32,1	32,5	20	1	340	623	340	57	43	1	206	541	206	0	102
			2	540	540	140	140		2	430	430	47	47	
36,6	37,0	25	1	357	661	357	53	44	1	227	566	227	0	109
			2	572	572	142	142		2	460	460	172	172	
41,1	41,5	25	1	369	691	369	48	47	1	240	590	240	0	119
			2	597	597	142	142		2	506	506	150	150	
45,6	46,0	25	1	376	721	376	32	49	1	335	639	335	31	127
			2	620	620	133	133		2	550	550	120	120	
50,1	50,5	25	1	383	753	383	14	51	1	322	725	322	0	136
			2	645	645	122	122		2	599	599	86	86	
54,6	55,0	35	1	416	814	416	17	53	1	322	853	322	0	144
			2	697	697	134	134		2	676	676	72	72	
59,1	59,5	60	1	485	914	485	56	55	1	391	994	391	0	153
			2	789	789	182	182		2	795	795	92	92	
63,6	64,0	80	1	542	1006	542	78	57	1	428	1148	428	0	161
			2	870	870	214	214		2	907	907	95	95	
68,1	68,5	105	1	617	1110	617	124	60	1	494	1316	494	0	173
			2	966	966	269	269		2	1041	1041	110	110	

3.3.3.10 Center ballasts and corner loads acc. to DIN 15019

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

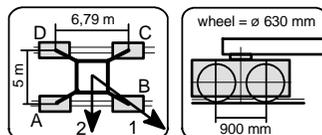


**KRE 480** Corner distance 8 m x 8 m Jib length 75 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
14,1	14,5	25	1	344	555	344	132	37	1	181	578	181	0	66
			2	493	493	194	194		2	439	439	30	30	
18,6	19,0	25	1	348	574	348	123	38	1	182	594	182	0	85
			2	508	508	189	189		2	450	450	29	29	
23,1	23,5	25	1	353	594	353	112	40	1	182	613	182	0	90
			2	523	523	182	182		2	461	461	27	27	
27,6	28,0	25	1	357	615	357	99	41	1	180	634	180	0	96
			2	540	540	175	175		2	473	473	24	24	
32,1	32,5	25	1	362	639	362	85	43	1	177	658	177	0	103
			2	558	558	166	166		2	486	486	20	20	
36,6	37,0	30	1	379	677	379	81	44	1	198	685	198	0	110
			2	590	590	168	168		2	513	513	28	28	
41,1	41,5	30	1	391	707	391	75	47	1	210	709	210	0	120
			2	614	614	168	168		2	548	548	152	152	
45,6	46,0	30	1	398	737	398	59	49	1	209	740	209	0	128
			2	638	638	158	158		2	593	593	121	121	
50,1	50,5	30	1	405	770	405	41	51	1	334	787	334	0	137
			2	663	663	147	147		2	642	642	85	85	
54,6	55,0	45	1	450	843	450	57	53	1	358	918	358	0	145
			2	728	728	172	172		2	733	733	84	84	
59,1	59,5	65	1	507	931	507	82	55	1	400	1062	400	0	154
			2	807	807	207	207		2	841	841	90	90	
63,6	64,0	90	1	576	1036	576	116	57	1	460	1221	460	0	162
			2	902	902	251	251		2	967	967	103	103	
68,1	68,5	115	1	651	1141	651	162	60	1	524	1392	524	0	174
			2	997	997	305	305		2	1102	1102	118	118	

3.4.1.1 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

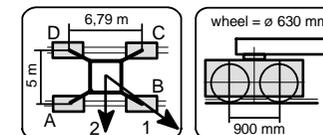


**UW 260.3** Corner distance 5 m x 6,79 m Jib length 30 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☺	☹			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	115	1	591	836	383	138	41	1	460	626	319	153	58
			2	768	768	206	206		2	580	580	199	199	
19,1	19,5	115	1	602	862	382	121	43	1	467	640	321	148	75
			2	790	790	193	193		2	592	592	196	196	
23,6	24,0	115	1	613	891	379	102	44	1	475	655	323	142	82
			2	814	814	179	179		2	605	605	192	192	
28,1	28,5	120	1	638	933	388	93	46	1	495	684	336	148	88
			2	852	852	175	175		2	631	631	200	200	
32,6	33,0	125	1	663	979	397	82	48	1	516	713	349	152	95
			2	891	891	169	169		2	659	659	207	207	

3.4.1.2 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

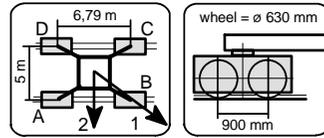


**UW 260.3** Corner distance 5 m x 6,79 m Jib length 35 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☺	☹			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	105	1	570	804	373	139	42	1	435	602	294	127	59
			2	739	739	204	204		2	556	556	174	174	
19,1	19,5	105	1	581	830	371	122	43	1	442	616	296	123	76
			2	761	761	191	191		2	568	568	171	171	
23,6	24,0	105	1	593	858	368	102	45	1	450	631	297	117	83
			2	785	785	176	176		2	581	581	167	167	
28,1	28,5	110	1	617	902	377	93	47	1	470	659	311	122	89
			2	823	823	172	172		2	607	607	174	174	
32,6	33,0	115	1	643	947	386	82	48	1	491	689	324	126	96
			2	863	863	166	166		2	635	635	181	181	

3.4.1.3 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

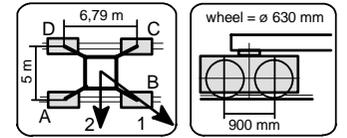


**UW 260.3** Corner distance 5 m x 6,79 m Jib length 40 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☹	☹			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	95	1	547	765	363	145	42	1	410	577	269	102	59
			2	704	704	205	205		2	531	531	148	148	
19,1	19,5	95	1	558	791	361	127	44	1	417	591	271	97	77
			2	727	727	192	192		2	543	543	145	145	
23,6	24,0	95	1	570	820	358	108	45	1	425	606	272	91	83
			2	751	751	177	177		2	556	556	141	141	
28,1	28,5	100	1	594	863	367	98	47	1	446	635	286	96	90
			2	789	789	173	173		2	583	583	149	149	
32,6	33,0	105	1	620	909	376	87	49	1	467	665	299	100	96
			2	829	829	167	167		2	610	610	155	155	

3.4.1.4 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive



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

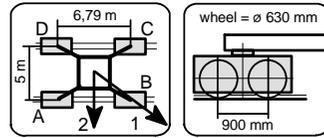
height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☹	☹			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	110	1	598	844	391	146	42	1	448	615	306	139	60
			2	776	776	214	214		2	569	569	185	185	
19,1	19,5	110	1	610	871	389	128	44	1	455	629	308	134	78
			2	798	798	200	200		2	581	581	182	182	
23,6	24,0	110	1	621	900	386	107	46	1	463	644	310	128	84
			2	823	823	185	185		2	594	594	178	178	
28,1	28,5	110	1	634	932	383	85	47	1	471	661	311	121	91
			2	849	849	167	167		2	608	608	173	173	
32,6	33,0	115	1	660	979	391	72	49	1	492	691	324	125	97
			2	891	891	160	160		2	636	636	180	180	





3.4.1.9 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

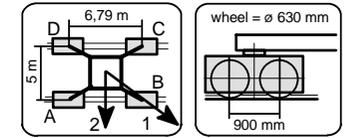


**UW 260.3** Corner distance 5 m x 6,79 m Jib length 70 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☺	☹			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	75	1	541	771	347	117	45	1	438	671	243	15	63
			2	707	707	181	181		2	606	606	78	78	
19,1	19,5	75	1	552	799	344	97	46	1	439	693	238	15	82
			2	731	731	166	166		2	619	619	73	73	
23,6	24,0	80	1	577	843	353	88	48	1	464	718	256	15	88
			2	769	769	161	161		2	647	647	80	80	
28,1	28,5	85	1	603	889	362	76	50	1	489	747	271	15	95
			2	810	810	155	155		2	675	675	86	86	
32,6	33,0	90	1	630	939	369	60	51	1	511	779	284	16	101
			2	853	853	146	146		2	705	705	90	90	

3.4.1.10 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

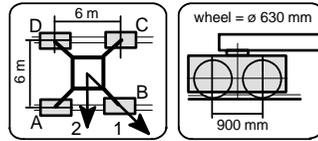


**UW 260.3** Corner distance 5 m x 6,79 m Jib length 75 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☺	☹			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	90	1	585	809	396	172	45	1	462	829	221	15	63
			2	747	747	234	234		2	709	709	54	54	
19,1	19,5	90	1	597	838	393	152	47	1	463	852	215	15	82
			2	771	771	219	219		2	723	723	49	49	
23,6	24,0	95	1	622	882	402	142	48	1	488	879	231	15	89
			2	810	810	214	214		2	751	751	55	55	
28,1	28,5	95	1	635	916	398	117	50	1	486	909	221	15	96
			2	838	838	195	195		2	768	768	48	48	
32,6	33,0	100	1	662	966	405	101	52	1	508	944	233	15	102
			2	882	882	186	186		2	799	799	51	51	

3.4.2.1 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

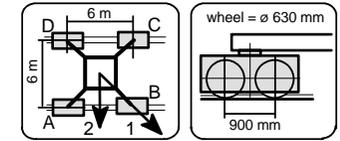


**UW 260.3** Corner distance 6 m x 6 m Jib length 30 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☪	☪			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	85	1	412	744	412	81	41	1	315	539	315	90	58
			2	646	646	178	178		2	473	473	156	156	
19,1	19,5	85	1	417	769	417	65	43	1	319	553	319	86	75
			2	665	665	168	168		2	484	484	154	154	
23,6	24,0	85	1	421	795	421	47	44	1	324	567	324	80	82
			2	686	686	156	156		2	496	496	152	152	
28,1	28,5	85	1	426	825	426	27	46	1	328	582	328	74	88
			2	708	708	144	144		2	508	508	148	148	
32,6	33,0	90	1	443	868	443	17	48	1	345	612	345	79	95
			2	744	744	142	142		2	534	534	157	157	
37,1	37,5	95	1	449	925	449	15	49	1	362	642	362	83	101
			2	782	782	138	138		2	560	560	165	165	
41,6	42,0	95	1	447	978	447	15	53	1	374	669	374	80	112
			2	812	812	131	131		2	582	582	166	166	
46,1	46,5	95	1	429	1043	429	15	55	1	382	692	382	71	121
			2	843	843	115	115		2	611	611	264	264	

3.4.2.2 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

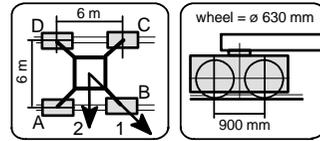


**UW 260.3** Corner distance 6 m x 6 m Jib length 35 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☪	☪			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	75	1	396	712	396	81	42	1	290	515	290	65	59
			2	619	619	173	173		2	449	449	130	130	
19,1	19,5	75	1	401	737	401	65	43	1	294	528	294	60	76
			2	638	638	163	163		2	460	460	129	129	
23,6	24,0	75	1	405	764	405	47	45	1	299	543	299	55	83
			2	659	659	152	152		2	471	471	126	126	
28,1	28,5	80	1	422	806	422	39	47	1	316	571	316	61	89
			2	694	694	151	151		2	496	496	135	135	
32,6	33,0	80	1	427	838	427	16	48	1	320	588	320	53	96
			2	717	717	136	136		2	509	509	131	131	
37,1	37,5	85	1	432	896	432	15	50	1	337	618	337	57	102
			2	756	756	132	132		2	536	536	139	139	
41,6	42,0	85	1	430	950	430	15	53	1	349	645	349	54	113
			2	787	787	126	126		2	558	558	141	141	
46,1	46,5	95	1	461	1016	461	15	56	1	447	698	447	196	121
			2	842	842	134	134		2	624	624	270	270	

3.4.2.3 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

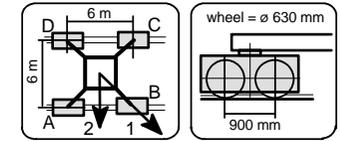


**UW 260.3** Corner distance 6 m x 6 m Jib length 40 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☪	☪			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	65	1	372	666	372	78	42	1	257	482	257	31	59
			2	580	580	164	164		2	416	416	246	246	
19,1	19,5	65	1	320	693	320	7	44	1	261	496	261	27	77
			2	599	599	154	154		2	427	427	96	96	
23,6	24,0	65	1	311	731	311	7	45	1	266	510	266	21	83
			2	620	620	142	142		2	439	439	93	93	
28,1	28,5	70	1	324	773	324	7	47	1	283	539	283	27	90
			2	655	655	142	142		2	464	464	102	102	
32,6	33,0	70	1	310	818	310	7	49	1	288	555	288	20	96
			2	679	679	127	127		2	477	477	98	98	
37,1	37,5	75	1	319	869	319	7	50	1	305	586	305	23	103
			2	717	717	122	122		2	504	504	106	106	
41,6	42,0	80	1	345	915	345	7	54	1	329	625	329	33	114
			2	761	761	128	128		2	539	539	120	120	
46,1	46,5	90	1	389	979	389	15	56	1	443	696	443	190	122
			2	824	824	144	144		2	622	622	264	264	

3.4.2.4 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

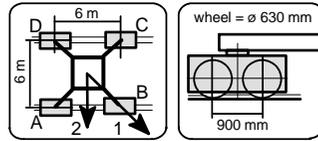


**UW 260.3** Corner distance 6 m x 6 m Jib length 45 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☪	☪			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	80	1	420	751	420	88	42	1	302	528	302	76	60
			2	654	654	185	185		2	462	462	142	142	
19,1	19,5	80	1	424	777	424	72	44	1	307	542	307	72	78
			2	674	674	175	175		2	473	473	141	141	
23,6	24,0	80	1	429	805	429	53	46	1	311	556	311	66	84
			2	695	695	163	163		2	484	484	138	138	
28,1	28,5	80	1	433	835	433	31	47	1	316	572	316	59	91
			2	718	718	149	149		2	497	497	134	134	
32,6	33,0	85	1	450	881	450	20	49	1	333	602	333	64	97
			2	755	755	146	146		2	523	523	143	143	
37,1	37,5	90	1	458	939	458	15	51	1	350	632	350	67	104
			2	794	794	141	141		2	552	552	300	300	
41,6	42,0	90	1	455	993	455	15	54	1	438	678	438	198	114
			2	825	825	134	134		2	608	608	269	269	
46,1	46,5	90	1	435	1062	435	15	56	1	445	753	445	138	123
			2	857	857	116	116		2	663	663	228	228	

3.4.2.5 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

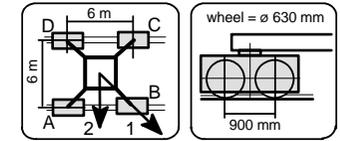


**UW 260.3** Corner distance 6 m x 6 m Jib length 50 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☪	☪			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	65	1	390	688	390	91	43	1	265	491	265	38	60
			2	601	601	179	179		2	425	425	105	105	
19,1	19,5	65	1	394	714	394	75	44	1	269	505	269	34	78
			2	620	620	168	168		2	436	436	103	103	
23,6	24,0	65	1	399	742	399	56	46	1	274	519	274	28	85
			2	641	641	156	156		2	447	447	100	100	
28,1	28,5	65	1	403	772	403	34	48	1	278	535	278	21	91
			2	664	664	143	143		2	460	460	96	96	
32,6	33,0	70	1	420	817	420	23	49	1	295	565	295	26	98
			2	701	701	140	140		2	486	486	105	105	
37,1	37,5	75	1	432	871	432	15	51	1	312	596	312	29	105
			2	740	740	135	135		2	513	513	279	279	
41,6	42,0	75	1	428	926	428	15	54	1	408	636	408	180	115
			2	772	772	127	127		2	569	569	247	247	
46,1	46,5	85	1	458	995	458	15	57	1	440	736	440	145	124
			2	828	828	135	135		2	649	649	231	231	

3.4.2.6 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

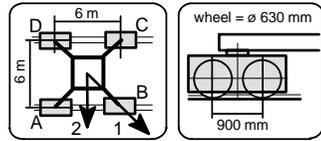


**UW 260.3** Corner distance 6 m x 6 m Jib length 55 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☪	☪			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	60	1	386	681	386	91	43	1	291	494	291	88	61
			2	595	595	178	178		2	435	435	148	148	
19,1	19,5	60	1	391	708	391	74	45	1	296	508	296	83	79
			2	615	615	167	167		2	446	446	145	145	
23,6	24,0	60	1	395	736	395	55	47	1	300	524	300	77	86
			2	636	636	155	155		2	458	458	142	142	
28,1	28,5	60	1	400	767	400	33	48	1	305	540	305	69	92
			2	659	659	141	141		2	471	471	138	138	
32,6	33,0	65	1	417	813	417	21	50	1	322	571	322	73	99
			2	697	697	137	137		2	498	498	146	146	
37,1	37,5	70	1	426	870	426	15	52	1	339	603	339	75	106
			2	736	736	132	132		2	525	525	152	152	
41,6	42,0	70	1	422	926	422	15	55	1	405	652	405	158	116
			2	768	768	124	124		2	580	580	230	230	
46,1	46,5	75	1	426	996	426	15	57	1	425	741	425	109	125
			2	813	813	119	119		2	648	648	201	201	

3.4.2.7 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

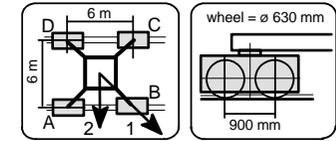


**UW 260.3** Corner distance 6 m x 6 m Jib length 60 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☪	☪			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	60	1	397	712	397	83	44	1	217	587	217	15	61
			2	619	619	175	175		2	465	465	138	138	
19,1	19,5	60	1	402	739	402	65	46	1	216	606	216	15	80
			2	640	640	163	163		2	477	477	136	136	
23,6	24,0	60	1	406	768	406	44	47	1	214	628	214	15	87
			2	662	662	150	150		2	489	489	132	132	
28,1	28,5	65	1	423	812	423	34	49	1	236	652	236	15	93
			2	698	698	148	148		2	515	515	140	140	
32,6	33,0	65	1	421	853	421	15	51	1	232	679	232	15	100
			2	724	724	131	131		2	530	530	135	135	
37,1	37,5	70	1	422	919	422	15	52	1	252	708	252	15	106
			2	765	765	125	125		2	566	566	241	241	
41,6	42,0	70	1	418	976	418	15	56	1	261	738	261	15	117
			2	797	797	117	117		2	623	623	208	208	
46,1	46,5	75	1	421	1049	421	15	58	1	435	799	435	72	125
			2	842	842	111	111		2	692	692	178	178	

3.4.2.8 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

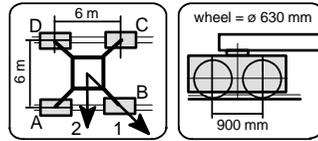


**UW 260.3** Corner distance 6 m x 6 m Jib length 65 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
☪	☪			corner loads						corner loads				
[m]	[m]			A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	55	1	394	716	394	71	44	1	268	616	268	15	62
			2	622	622	166	166		2	504	504	79	79	
19,1	19,5	55	1	398	744	398	53	46	1	267	637	267	15	81
			2	643	643	154	154		2	516	516	76	76	
23,6	24,0	55	1	403	774	403	32	48	1	264	660	264	15	87
			2	665	665	141	141		2	529	529	73	73	
28,1	28,5	60	1	420	819	420	21	50	1	285	687	285	15	94
			2	702	702	138	138		2	555	555	80	80	
32,6	33,0	65	1	429	874	429	15	51	1	304	717	304	15	100
			2	741	741	133	133		2	583	583	87	87	
37,1	37,5	70	1	429	943	429	15	53	1	321	750	321	15	107
			2	782	782	126	126		2	612	612	92	92	
41,6	42,0	70	1	424	1000	424	15	56	1	330	782	330	15	118
			2	815	815	118	118		2	653	653	197	197	
46,1	46,5	75	1	426	1075	426	15	58	1	444	838	444	51	126
			2	861	861	111	111		2	722	722	166	166	

3.4.2.9 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

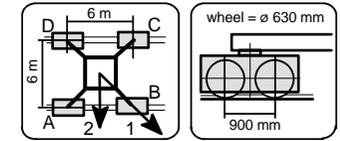


**UW 260.3** Corner distance 6 m x 6 m Jib length 70 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
[m]	[m]			corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	55	1	394	704	394	84	45	1	257	637	257	15	63
			2	613	613	174	174		2	512	512	72	72	
19,1	19,5	55	1	398	731	398	65	46	1	256	658	256	15	82
			2	634	634	163	163		2	524	524	69	69	
23,6	24,0	55	1	403	761	403	45	48	1	253	682	253	15	88
			2	656	656	149	149		2	537	537	65	65	
28,1	28,5	55	1	407	794	407	21	50	1	249	709	249	15	95
			2	680	680	134	134		2	551	551	60	60	
32,6	33,0	60	1	417	849	417	15	51	1	268	740	268	15	101
			2	719	719	130	130		2	579	579	66	66	
37,1	37,5	65	1	417	917	417	15	53	1	285	774	285	15	108
			2	760	760	123	123		2	608	608	71	71	
41,6	42,0	65	1	413	974	413	15	56	1	293	805	293	15	118
			2	793	793	115	115		2	657	657	168	168	
46,1	46,5	65	1	390	1049	390	15	59	1	406	851	406	15	127
			2	826	826	95	95		2	715	715	124	124	

3.4.2.10 Center ballasts and corner loads acc. to DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

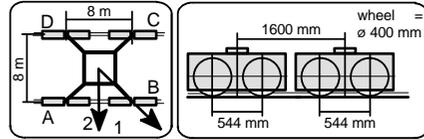


**UW 260.3** Corner distance 6 m x 6 m Jib length 75 m

height under hook		center ballast [t]	jib position	crane in service torque moment: 390 kNm				horizontal force [kN]	jib position	crane out of service torque moment: 0 kNm				horizontal force [kN]
[m]	[m]			corner loads						corner loads				
				A [kN]	B [kN]	C [kN]	D [kN]			A [kN]	B [kN]	C [kN]	D [kN]	
14,6	15,0	65	1	428	730	428	126	45	1	237	788	237	15	63
			2	641	641	214	214		2	592	592	46	46	
19,1	19,5	65	1	433	758	433	107	47	1	235	810	235	15	82
			2	662	662	203	203		2	605	605	43	43	
23,6	24,0	70	1	450	800	450	99	48	1	257	835	257	15	89
			2	698	698	202	202		2	631	631	51	51	
28,1	28,5	70	1	454	833	454	75	50	1	251	864	251	15	96
			2	722	722	186	186		2	645	645	45	45	
32,6	33,0	75	1	471	881	471	61	52	1	269	896	269	15	102
			2	761	761	181	181		2	674	674	51	51	
37,1	37,5	75	1	476	920	476	31	54	1	260	933	260	15	109
			2	790	790	161	161		2	691	691	43	43	
41,6	42,0	75	1	487	963	487	15	57	1	268	965	268	15	119
			2	823	823	153	153		2	718	718	175	175	
46,1	46,5	80	1	488	1038	488	15	59	1	287	1006	287	15	128
			2	869	869	146	146		2	790	790	142	142	

3.4.3.1 Center ballasts and corner loads - DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

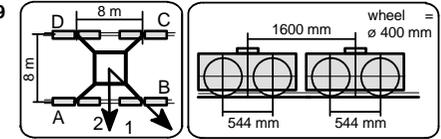


UW 480 Corner distance 8 m x 8 m Jib length 30 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
15,1	15,5	30	1	315	566	315	64	44	1	218	387	218	48	60
			2	493	493	138	138		2	338	338	98	98	
19,6	20,0	30	1	320	586	320	53	45	1	222	398	222	46	78
			2	508	508	131	131		2	347	347	98	98	
24,1	24,5	30	1	324	607	324	41	47	1	227	410	227	43	84
			2	524	524	124	124		2	357	357	97	97	
28,6	29,0	30	1	329	630	329	27	49	1	231	423	231	39	91
			2	542	542	115	115		2	367	367	96	96	
33,1	33,5	35	1	345	668	345	24	50	1	248	449	248	47	97
			2	573	573	118	118		2	391	391	106	106	
37,6	38,0	35	1	332	713	332	24	52	1	253	464	253	42	104
			2	594	594	107	107		2	402	402	104	104	
42,1	42,5	35	1	336	753	336	24	55	1	265	487	265	43	114
			2	620	620	105	105		2	422	422	108	108	
46,6	47,0	45	1	376	802	376	24	58	1	353	543	353	164	123
			2	669	669	120	120		2	487	487	219	219	
51,1	51,5	55	1	413	855	413	24	60	1	385	628	385	143	131
			2	720	720	133	133		2	557	557	214	214	
55,6	56,0	65	1	448	914	448	24	62	1	418	718	417	117	140
			2	773	773	144	144		2	630	630	205	205	
60,1	60,5	75	1	481	978	481	24	64	1	450	812	450	87	148
			2	828	828	154	154		2	706	706	193	193	
64,6	65,0	90	1	535	1048	535	24	66	1	494	924	494	64	157
			2	897	897	174	174		2	798	798	190	190	
69,1	69,5	105	1	585	1129	585	42	70	1	544	1053	544	35	169
			2	970	970	201	201		2	904	904	184	184	
73,6	74,0	120	1	631	1211	631	51	72	1	568	1198	568	24	178
			2	1041	1041	221	221		2	1004	1004	175	175	

3.4.3.2 Center ballasts and corner loads - DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

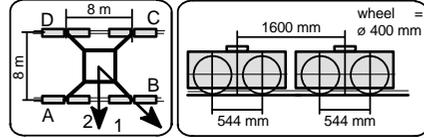


UW 480 Corner distance 8 m x 8 m Jib length 35 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
15,1	15,5	25	1	312	551	312	73	44	1	205	375	205	35	61
			2	481	481	143	143		2	332	332	209	209	
19,6	20,0	25	1	316	571	316	62	46	1	210	386	210	33	78
			2	496	496	137	137		2	335	335	85	85	
24,1	24,5	25	1	321	592	321	49	47	1	214	398	214	30	85
			2	513	513	129	129		2	345	345	84	84	
28,6	29,0	25	1	326	616	326	35	49	1	219	411	219	26	92
			2	531	531	120	120		2	355	355	83	83	
33,1	33,5	30	1	343	653	343	32	51	1	236	438	236	34	98
			2	562	562	123	123		2	379	379	93	93	
37,6	38,0	30	1	336	691	336	24	52	1	240	452	240	28	105
			2	583	583	111	111		2	390	390	91	91	
42,1	42,5	30	1	341	731	341	24	56	1	253	476	253	29	115
			2	609	609	109	109		2	420	420	216	216	
46,6	47,0	40	1	380	781	380	24	58	1	350	544	350	156	124
			2	659	659	124	124		2	487	487	213	213	
51,1	51,5	50	1	417	836	417	24	60	1	382	629	382	135	132
			2	710	710	137	137		2	557	557	207	207	
55,6	56,0	65	1	468	903	468	33	62	1	427	732	427	121	141
			2	776	776	160	160		2	643	643	211	211	
60,1	60,5	75	1	500	968	500	32	65	1	459	828	459	90	149
			2	831	831	169	169		2	720	720	198	198	
64,6	65,0	90	1	545	1048	545	41	67	1	503	941	503	66	158
			2	901	901	189	189		2	813	813	194	194	
69,1	69,5	105	1	595	1130	595	59	70	1	553	1071	553	36	170
			2	973	973	216	216		2	919	919	187	187	
73,6	74,0	120	1	640	1213	640	68	73	1	577	1216	577	24	179
			2	1045	1045	235	235		2	1020	1020	177	177	

3.4.3.3 Center ballasts and corner loads - DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

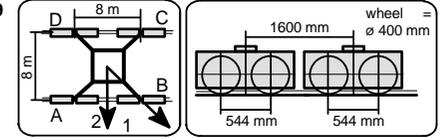


**UW 480** Corner distance 8 m x 8 m Jib length 40 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
15,1	15,5	20	1	308	531	308	85	44	1	191	365	191	24	62
			2	466	466	150	150		2	328	328	205	205	
19,6	20,0	20	1	312	551	312	74	46	1	193	378	193	24	79
			2	481	481	144	144		2	322	322	72	72	
24,1	24,5	20	1	317	573	317	61	48	1	195	394	195	24	86
			2	498	498	136	136		2	332	332	71	71	
28,6	29,0	20	1	247	603	247	24	49	1	195	410	195	24	92
			2	516	516	127	127		2	343	343	70	70	
33,1	33,5	20	1	239	638	239	24	51	1	195	429	195	24	99
			2	535	535	117	117		2	354	354	68	68	
37,6	38,0	25	1	254	675	254	24	53	1	219	450	219	24	105
			2	568	568	118	118		2	378	378	78	78	
42,1	42,5	30	1	285	711	285	24	56	1	253	476	253	29	116
			2	607	607	128	128		2	430	430	223	223	
46,6	47,0	40	1	400	763	400	36	58	1	359	554	359	163	125
			2	657	657	143	143		2	497	497	220	220	
51,1	51,5	50	1	432	823	432	41	61	1	391	640	391	141	133
			2	708	708	155	155		2	567	567	214	214	
55,6	56,0	60	1	464	885	464	43	63	1	423	731	423	114	142
			2	762	762	166	166		2	641	641	205	205	
60,1	60,5	75	1	509	962	509	55	65	1	467	840	467	95	150
			2	829	829	188	188		2	731	731	204	204	
64,6	65,0	90	1	553	1043	553	63	67	1	512	954	512	70	159
			2	899	899	207	207		2	824	824	199	199	
69,1	69,5	105	1	603	1125	603	81	71	1	562	1084	562	39	170
			2	972	972	234	234		2	931	931	192	192	
73,6	74,0	120	1	649	1208	649	89	73	1	588	1228	588	24	180
			2	1044	1044	253	253		2	1033	1033	182	182	

3.4.3.4 Center ballasts and corner loads - DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

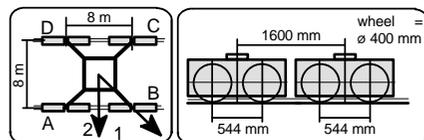


**UW 480** Corner distance 8 m x 8 m Jib length 45 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
15,1	15,5	25	1	323	574	323	72	45	1	205	376	205	35	62
			2	500	500	146	146		2	326	326	85	85	
19,6	20,0	25	1	327	594	327	60	47	1	210	387	210	32	80
			2	516	516	139	139		2	335	335	84	84	
24,1	24,5	25	1	332	617	332	47	48	1	214	399	214	29	87
			2	533	533	131	131		2	345	345	83	83	
28,6	29,0	25	1	336	641	336	32	50	1	219	412	219	25	93
			2	551	551	121	121		2	356	356	82	82	
33,1	33,5	30	1	354	679	354	28	52	1	236	439	236	33	100
			2	584	584	123	123		2	381	381	243	243	
37,6	38,0	35	1	367	723	367	24	53	1	329	468	329	191	106
			2	617	617	124	124		2	427	427	232	232	
42,1	42,5	35	1	371	764	371	24	57	1	341	527	341	156	117
			2	644	644	121	121		2	473	473	210	210	
46,6	47,0	35	1	359	816	359	24	59	1	349	585	349	112	126
			2	670	670	110	110		2	516	516	181	181	
51,1	51,5	40	1	370	873	370	24	61	1	368	659	368	77	134
			2	709	709	109	109		2	574	574	162	162	
55,6	56,0	50	1	403	935	403	24	63	1	400	751	400	49	142
			2	763	763	119	119		2	649	649	152	152	
60,1	60,5	65	1	458	1003	458	24	66	1	445	861	445	28	151
			2	832	832	140	140		2	739	739	150	150	
64,6	65,0	80	1	510	1078	510	24	68	1	466	1000	466	24	159
			2	903	903	158	158		2	834	834	144	144	
69,1	69,5	95	1	576	1145	576	24	71	1	485	1163	485	24	171
			2	977	977	184	184		2	942	942	137	137	
73,6	74,0	115	1	639	1237	638	40	74	1	520	1324	520	24	181
			2	1062	1062	215	215		2	1057	1057	138	138	

3.4.3.5 Center ballasts and corner loads - DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

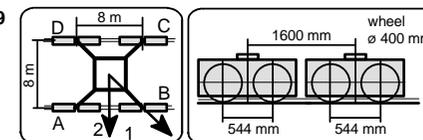


**UW 480** Corner distance 8 m x 8 m Jib length 50 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
15,1	15,5	15	1	305	531	305	79	45	1	165	366	165	24	63
			2	465	465	145	145		2	309	309	219	219	
19,6	20,0	15	1	310	552	310	68	47	1	167	380	167	24	81
			2	481	481	139	139		2	310	310	59	59	
24,1	24,5	15	1	314	574	314	55	49	1	169	395	169	24	87
			2	498	498	131	131		2	320	320	58	58	
28,6	29,0	15	1	319	598	319	40	50	1	169	413	169	24	94
			2	516	516	121	121		2	331	331	57	57	
33,1	33,5	20	1	336	636	336	35	52	1	194	432	194	24	101
			2	548	548	123	123		2	357	357	232	232	
37,6	38,0	25	1	353	677	353	29	54	1	217	452	217	24	107
			2	582	582	124	124		2	403	403	221	221	
42,1	42,5	25	1	361	714	361	24	57	1	324	500	324	148	118
			2	609	609	121	121		2	449	449	199	199	
46,6	47,0	30	1	374	766	374	24	59	1	343	571	343	116	126
			2	647	647	123	123		2	504	504	183	183	
51,1	51,5	40	1	410	822	410	24	61	1	376	658	376	93	135
			2	699	699	135	135		2	576	576	176	176	
55,6	56,0	55	1	461	891	461	31	64	1	420	763	420	77	143
			2	765	765	157	157		2	663	663	177	177	
60,1	60,5	65	1	493	957	493	30	66	1	452	861	452	43	152
			2	821	821	165	165		2	741	741	163	163	
64,6	65,0	85	1	551	1052	550	49	68	1	509	990	509	28	160
			2	905	905	196	196		2	849	849	169	169	
69,1	69,5	95	1	588	1123	588	53	71	1	506	1150	506	24	172
			2	966	966	210	210		2	945	945	149	149	
73,6	74,0	115	1	646	1219	646	73	74	1	541	1313	541	24	182
			2	1051	1051	241	241		2	1060	1060	149	149	

3.4.3.6 Center ballasts and corner loads - DIN 15019

for a travelling tower crane on an undercarriage without climbing drive



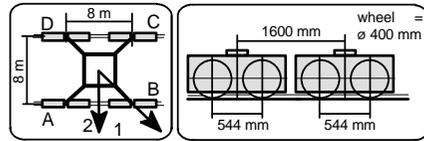
**UW 480** Corner distance 8 m x 8 m Jib length 55 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
15,1	15,5	10	1	302	526	302	78	46	1	140	367	140	24	63
			2	460	460	144	144		2	315	315	98	98	
19,6	20,0	10	1	307	547	307	66	47	1	142	381	142	24	82
			2	476	476	137	137		2	325	325	98	98	
24,1	24,5	10	1	311	569	311	53	49	1	143	397	143	24	88
			2	494	494	129	129		2	335	335	96	96	
28,6	29,0	15	1	328	606	328	50	51	1	168	414	168	24	95
			2	525	525	132	132		2	359	359	107	107	
33,1	33,5	15	1	333	632	333	33	52	1	168	433	168	24	102
			2	545	545	121	121		2	370	370	104	104	
37,6	38,0	20	1	350	673	350	26	54	1	192	454	192	24	108
			2	579	579	121	121		2	410	410	207	207	
42,1	42,5	20	1	355	714	355	24	57	1	321	512	321	130	119
			2	606	606	118	118		2	456	456	185	185	
46,6	47,0	25	1	367	767	367	24	60	1	340	583	340	97	127
			2	644	644	119	119		2	512	512	168	168	
51,1	51,5	35	1	403	824	403	24	62	1	372	671	372	73	136
			2	696	696	131	131		2	584	584	161	161	
55,6	56,0	50	1	458	890	458	26	64	1	417	778	417	56	144
			2	763	763	153	153		2	672	672	162	162	
60,1	60,5	65	1	503	969	503	36	66	1	461	889	461	34	153
			2	833	833	173	173		2	764	764	159	159	
64,6	65,0	80	1	547	1052	547	42	69	1	486	1026	486	24	161
			2	904	904	190	190		2	860	860	152	152	
69,1	69,5	95	1	597	1136	597	58	72	1	503	1192	503	24	173
			2	978	978	216	216		2	969	969	143	143	
73,6	74,0	115	1	655	1234	655	77	75	1	536	1359	536	24	182
			2	1064	1064	246	246		2	1086	1086	142	142	



3.4.3.9 Center ballasts and corner loads - DIN 15019

for a travelling tower crane on an undercarriage without climbing drive

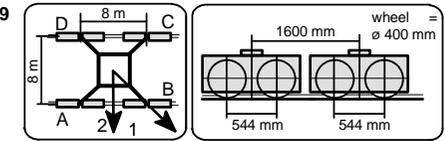


**UW 480** Corner distance 8 m x 8 m Jib length 70 m

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
15,1	15,5	20	1	347	582	347	112	47	1	231	494	231	24	65
			2	513	513	181	181		2	411	411	79	79	
19,6	20,0	20	1	351	604	351	99	49	1	232	510	232	24	84
			2	530	530	173	173		2	421	421	78	78	
24,1	24,5	20	1	356	627	356	85	50	1	232	528	232	24	91
			2	548	548	164	164		2	432	432	76	76	
28,6	29,0	20	1	361	653	361	68	52	1	231	548	231	24	97
			2	567	567	154	154		2	444	444	73	73	
33,1	33,5	20	1	365	681	365	50	54	1	228	571	228	24	104
			2	588	588	142	142		2	456	456	70	70	
37,6	38,0	25	1	382	723	382	41	55	1	250	597	250	24	110
			2	623	623	141	141		2	494	494	188	188	
42,1	42,5	25	1	394	757	394	31	59	1	262	620	262	24	121
			2	651	651	138	138		2	541	541	165	165	
46,6	47,0	25	1	387	806	387	24	61	1	360	680	360	40	130
			2	678	678	125	125		2	586	586	134	134	
51,1	51,5	25	1	370	868	370	24	63	1	331	783	331	24	138
			2	707	707	110	110		2	635	635	99	99	
55,6	56,0	45	1	451	936	451	24	65	1	380	913	380	24	146
			2	788	788	143	143		2	738	738	110	110	
60,1	60,5	65	1	523	1016	523	29	68	1	423	1055	423	24	155
			2	871	871	174	174		2	846	846	117	117	
64,6	65,0	90	1	592	1127	592	57	70	1	484	1211	484	24	163
			2	970	970	214	214		2	970	970	131	131	
69,1	69,5	110	1	655	1225	655	84	73	1	523	1383	523	24	175
			2	1058	1058	251	251		2	1094	1094	133	133	

3.4.3.10 Center ballasts and corner loads - DIN 15019

for a travelling tower crane on an undercarriage without climbing drive



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

height under hook [m]	center ballast [m]	center ballast [t]	jib position	crane in service torque moment: 390 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]	
15,1	15,5	25	1	369	597	369	140	48	1	204	606	204	24	66
			2	530	530	207	207		2	466	466	54	54	
19,6	20,0	25	1	373	620	373	127	49	1	205	623	205	24	85
			2	547	547	199	199		2	476	476	53	53	
24,1	24,5	25	1	378	643	378	112	51	1	204	642	204	24	92
			2	566	566	190	190		2	487	487	51	51	
28,6	29,0	25	1	382	669	382	95	53	1	203	664	203	24	98
			2	585	585	179	179		2	500	500	47	47	
33,1	33,5	30	1	399	710	399	89	54	1	225	688	225	24	105
			2	619	619	180	180		2	525	525	56	56	
37,6	38,0	30	1	404	740	404	67	56	1	220	716	220	24	111
			2	642	642	166	166		2	540	540	51	51	
42,1	42,5	30	1	416	775	416	57	59	1	232	740	232	24	122
			2	670	670	162	162		2	582	582	167	167	
46,6	47,0	30	1	423	810	423	36	62	1	231	771	231	24	130
			2	697	697	149	149		2	629	629	135	135	
51,1	51,5	30	1	417	862	417	24	64	1	343	845	343	24	139
			2	726	726	134	134		2	679	679	99	99	
55,6	56,0	50	1	487	940	487	34	66	1	390	978	390	24	147
			2	808	808	167	167		2	783	783	109	109	
60,1	60,5	70	1	544	1036	544	53	68	1	431	1125	431	24	156
			2	892	892	197	197		2	892	892	114	114	
64,6	65,0	95	1	614	1148	614	80	70	1	490	1285	490	24	164
			2	992	992	236	236		2	1018	1018	127	127	