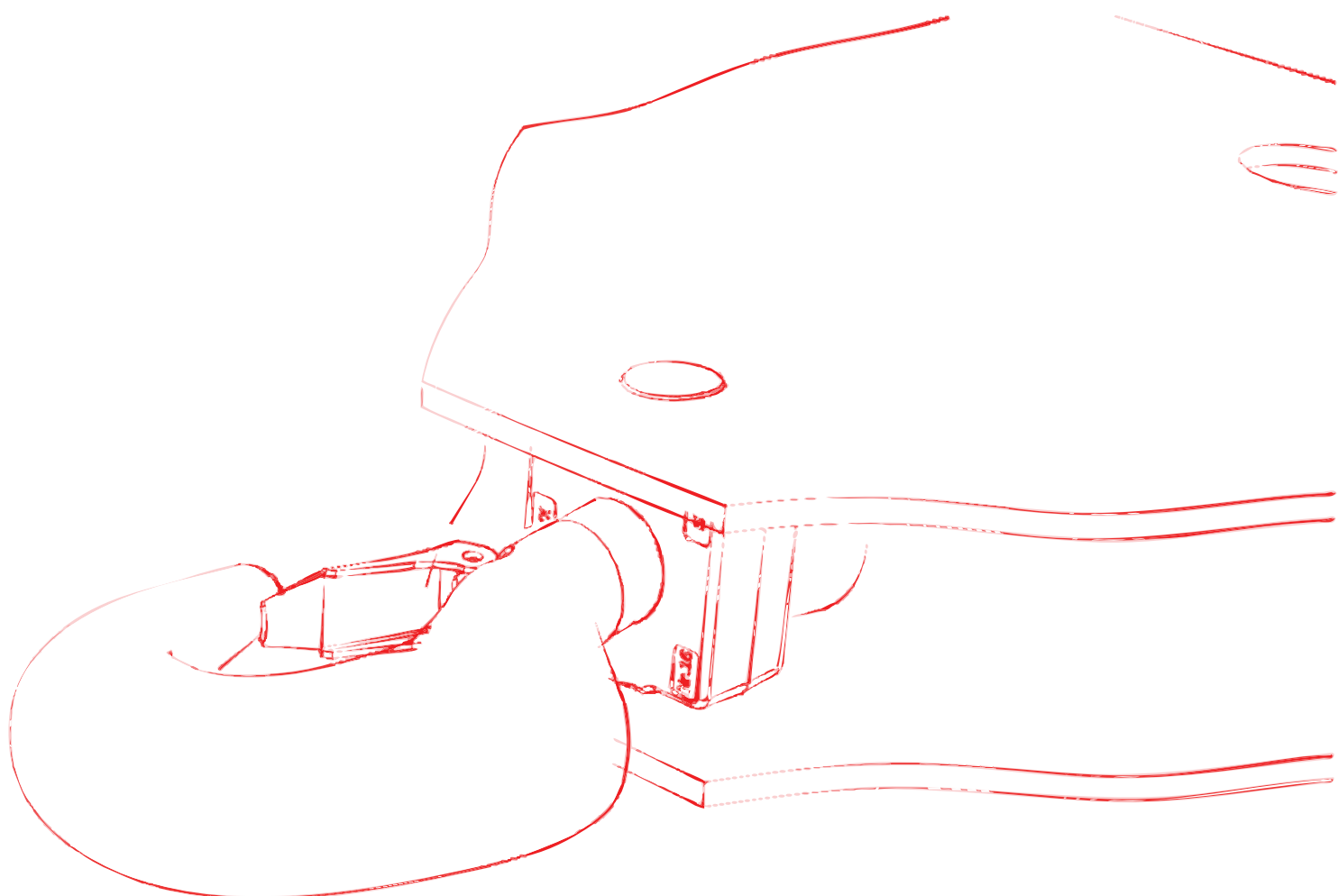


Technical Information

System component

WOLFF Inner Climbing Device



Original operating manual

German

English



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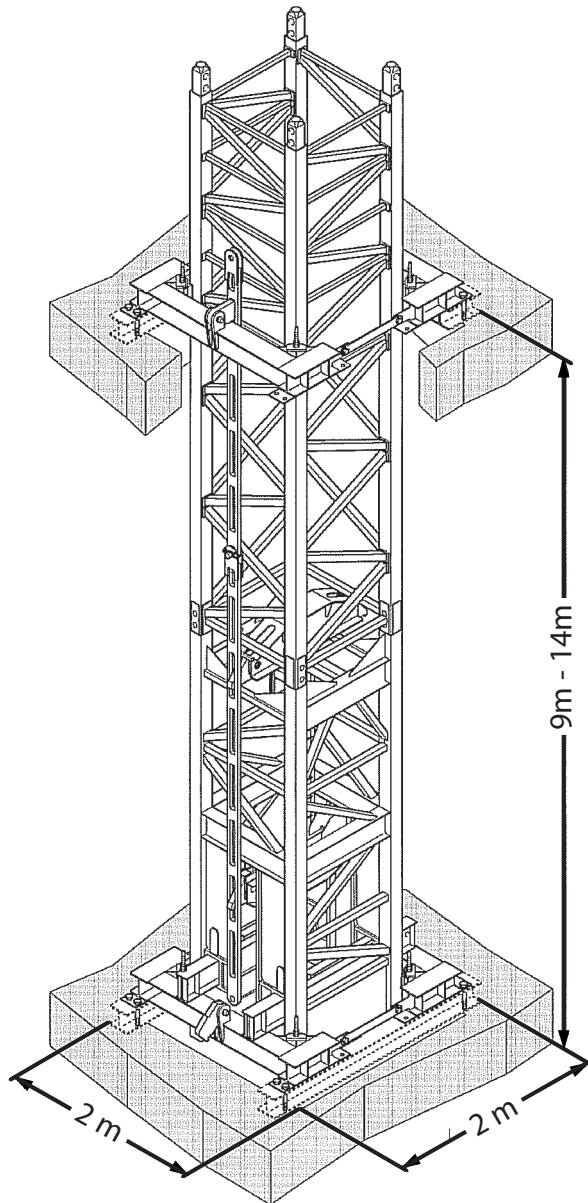
Subject to change of design, error and typos.

Table of contents

1	Inner climbing device KSH 15	1 / 1
2	Inner climbing device KSH 20 SH	2 / 1
3	Inner climbing device KSH 23	3 / 1
4	Internal climbing device KSH (E) 23	4 / 1
5	Inner climbing device KSH 23 - BT 23	5 / 1

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1 Inner climbing device KSH 15



Inner climbing device KSH 15

Use the hydraulic internal climbing device KSH to climb the WOLFF slewing tower crane, operating within a building, up to the height required in the respective construction phase.

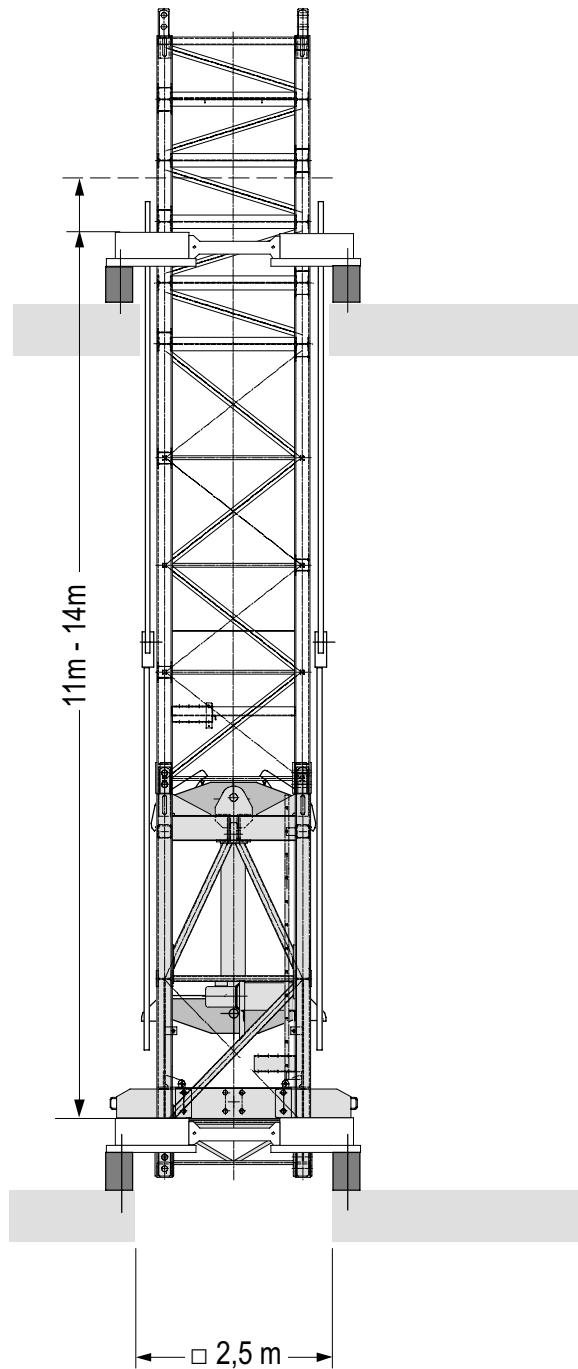
Weights		
Quantity	Component	Weight [kg]
1	Climbing tower element KSH 15.1	5330
1	Climbing tower element KSH 15.2	4650
1	Climbing frame, complete	1250
1	Climbing ladder	260

Double-acting hydraulic cylinder: 3876	
Hoisting time - extend	approx. 5 min
Hoisting time - retract	approx. 3 min
Force at 280 bar	840 kN
Design pressure	350 bar
Operating pressure max.	300 bar
Stroke max.	1150 mm
Hoisting range	0.85m - 2.00m
Piston Ø	200 mm
Rods Ø	140 mm
Oil filling	18.4 liters
Initial filling	ESSO NUTO H 68

Hydraulic unit: 3549	
High-pressure pump	IPH 3/13 R
KL three-phase motor	11 kW, 1450 min-1, 400 V, 50 Hz 11 kW, 1740 min-1, 400 V; 60 Hz
Oil filling	50 liters
Initial filling	ESSO NUTO H 68
Suction filter	
Pressure relief valve set to	280 bar.
Pressure gauge measurement range	400 bar.

Control:	
manual	via hand lever

2 Inner climbing device KSH 20 SH



Inner climbing device KSH 20 SH

Use the hydraulic internal climbing device KSH to climb the WOLFF slewing tower crane, operating within a building, up to the height required in the respective construction phase.

Weights		
Quantity	Component	Weight [kg]
1	Climbing tower element	10060
1	Clamping element	8950
1	Climbing frame	2300
1	Climbing ladder	260

Double-acting hydraulic cylinder: 3746	
Hoisting time - extend	approx. 5 min
Hoisting time - retract	approx. 3 min
Force at 300 bar	1500 kN
Design pressure	350 bar
Operating pressure max.	300 bar
Stroke max.	1670 mm
Piston Ø	250 mm
Rods Ø	140 mm
Oil filling	68 liters
Initial filling	ESSO NUTO H 68

Hydraulic unit: 3549	
High-pressure pump	IPH 3/13
KL three-phase motor	11 kW, 1450 min ⁻¹ , 400 V, 50 Hz
Oil filling	50 liters
Initial filling	ESSO NUTO H 68
Suction filter	
Pressure relief valve set to	310 bar.
Pressure gauge	

Control:	
manual	via hand lever

3 Inner climbing device KSH 23

⚠ CAUTION

First tower element above the clamping element.

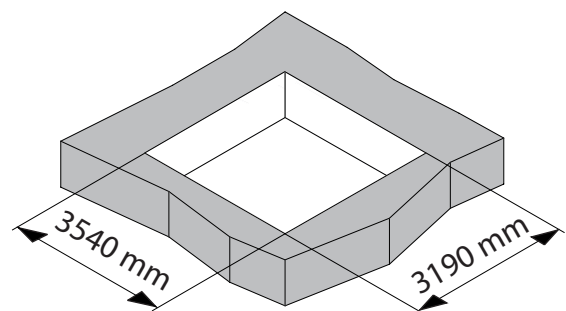
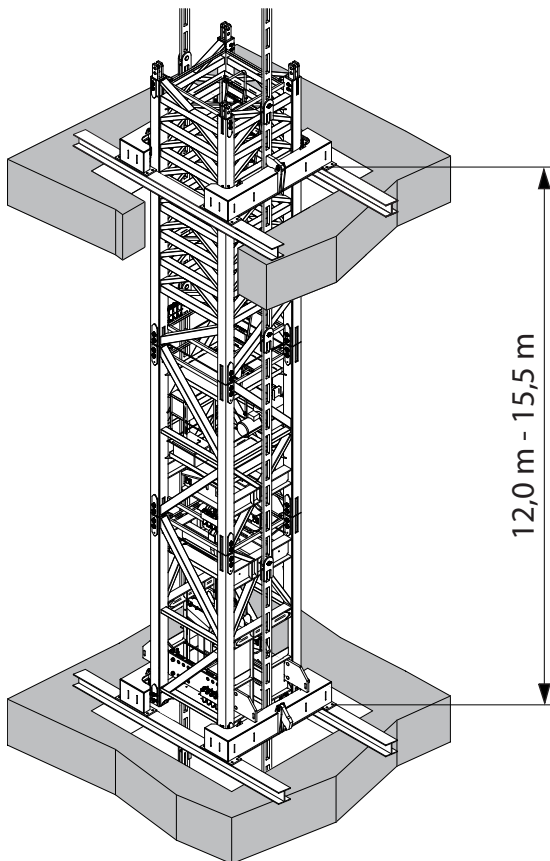
The first tower element above the clamping element must be a HT 23 tower element.



NOTICE

Clamping length variable.

With the KSH 23, the clamping length is variable. With a reduced tower height, a clamping length of 10.5 m - 15.5 m is possible. Please contact WOLFFKRAN for information.



Use the hydraulic internal climbing device KSH 23 to climb the WOLFF slewing tower crane, operating within a building, up to the height required in the respective construction phase. The internal climbing device KSH 23 is used as a part of the tower.

Components:

The climbing tower element 1 comprises the hydraulic cylinder, the piston crossbeam, and the support girders.

The climbing tower element 2 comprises the hydraulic unit and the climbing crossbeam.

The corner guides in the climbing frame guide the tower during the climbing process.

The upper climbing frame is used to fasten the climbing ladders that allow the slewing tower crane to climb up.

While the crane is working, the climbed slewing tower crane is clamped and fixed by means of the corner guides at the climbing frame.

Double-acting hydraulic cylinder:	
Hoisting time - extend	Approx. 5 min
Hoisting time - retract	Approx. 4 min
Pressure at 280 bar	1850 kN
Design pressure	390 bar
Operating pressure max.	310 bar.
Stroke max.	1670 mm
Piston Ø	320 mm
Rods Ø	170 mm

Hydraulic unit:	
High-pressure pump	34 l/min.
KL three-phase motor	15kW, 1500 min-1, 400V, 50Hz
Oil filling	approx. 220 l
Initial filling	ESSO NUTO H 32
Pressure relief valve set to	310 bar.
Pressure gauge	
Oil gauge glass	
Discharge valve	

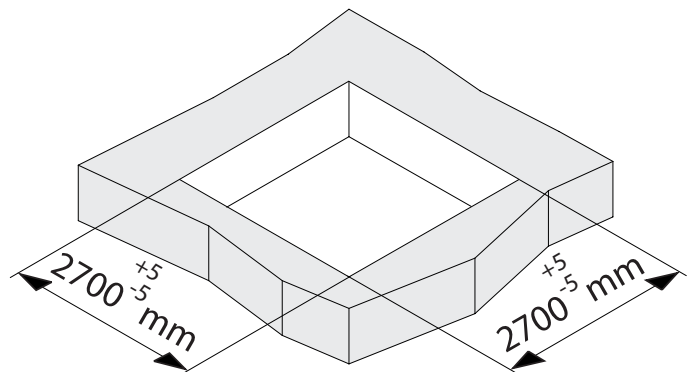
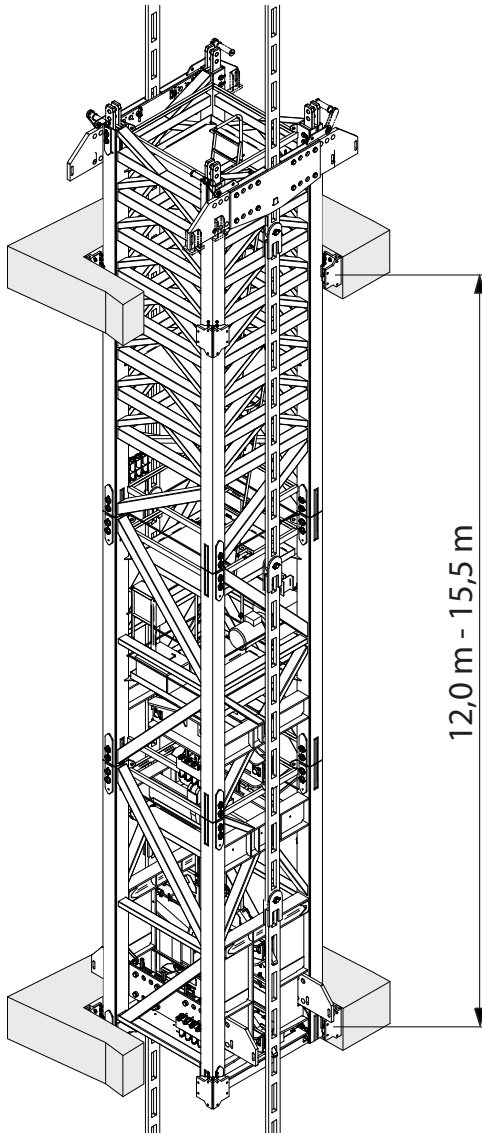
Control:	
Hand-held control console	Electrical

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4 Internal climbing device KSH (E) 23

**NOTICE****Clamping length variable.**

With the KSH E 23, the clamping length is variable. With a reduced tower height, a clamping length of 10.5 m - 15.5 m is possible. Please contact WOLFFKRAN for information.



Use the hydraulic internal climbing device KSH E 23 to climb the WOLFF slewing tower crane, operating within a building, up to the height required in the respective construction phase. The internal climbing device KSH E 23 is used as a part of the tower.

Components:

The climbing tower element 1 comprises the hydraulic cylinder, the piston crossbeam, and the support girders.

The climbing tower element 2 comprises the hydraulic unit and the climbing crossbeam.

The corner guides guide the tower during the climbing process.

The telescopic cross beams are used to fasten the climbing ladders that allow the slewing tower crane to climb up.


While the crane is working, the climbed slewing tower crane is fixed by means of the corner guides at the climbing tower element 1 and the clamping element.

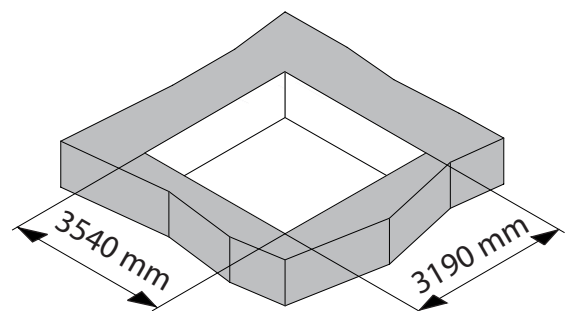
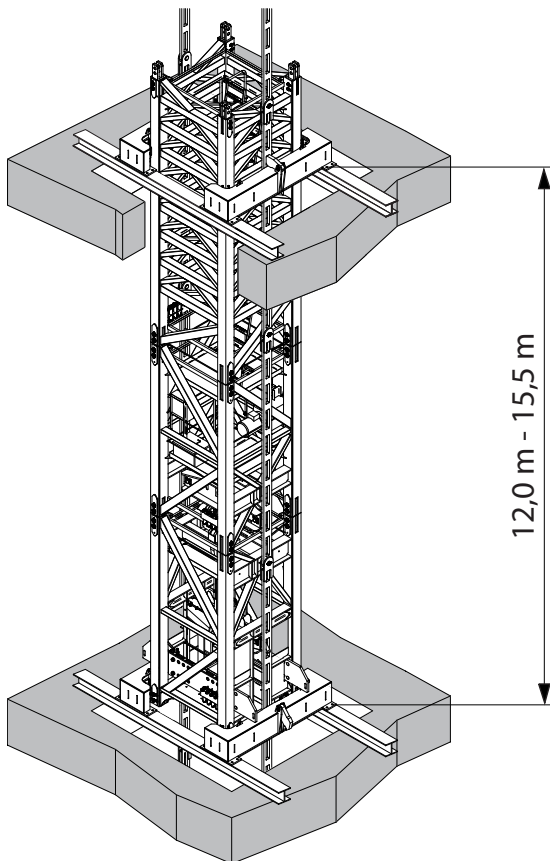
Double-acting hydraulic cylinder:	
Hoisting time - extend	Approx. 5 min
Hoisting time - retract	Approx. 4 min
Pressure at 280 bar	1850 kN
Design pressure	390 bar
Operating pressure max.	310 bar.
Stroke max.	1670 mm
Piston Ø	320 mm
Rods Ø	170 mm

Hydraulic unit:	
High-pressure pump	34 l/min.
KL three-phase motor	15 kW, 1500 min ⁻¹ , 400 V, 50 Hz
Oil filling	approx. 220 l
Initial filling	ESSO NUTO H 32
Pressure relief valve set to	310 bar.
Pressure gauge	
Oil gauge glass	
Discharge valve	

Control:	
Control console (portable)	Electrical

5 Inner climbing device KSH 23 - BT 23

⚠ CAUTION	
First tower element above the clamping element.	
The first tower element above the clamping element must be a BT 23 tower element.	
NOTICE	
	Clamping length variable.
With the KSH 23 - BT 23, the clamping length is variable. With a reduced tower height, a clamping length of 10.5 m - 15.5 m is possible. Please contact WOLFFKRAN for information.	



Use the hydraulic internal climbing device to climb the WOLFF slewing tower crane, operating within a building, up to the height required in the respective construction phase. The internal climbing device is used as a part of the tower.

Components:

The climbing tower element 1 comprises the hydraulic cylinder, the piston crossbeam, and the support girders.

The climbing tower element 2 comprises the hydraulic unit and the climbing crossbeam.

The corner guides in the climbing frame guide the tower during the climbing process.

The upper climbing frame is used to fasten the climbing ladders that allow the slewing tower crane to climb up.

While the crane is working, the climbed slewing tower crane is clamped and fixed by means of the corner guides at the climbing frame.

Use the hydraulic internal climbing device KSH 23 - BT 23 to climb the WOLFF slewing tower crane, operating within a building, up to the height required in the respective construction phase. The climbing device is used as a part of the tower.

Double-acting hydraulic cylinder:	
Hoisting time - extend	Approx. 5 min
Hoisting time - retract	Approx. 4 min
Pressure at 280 bar	1850 kN
Design pressure	390 bar
Operating pressure max.	310 bar.
Stroke max.	1670 mm
Piston Ø	320 mm
Rods Ø	170 mm

Hydraulic unit:	
High-pressure pump	34 l/min.
KL three-phase motor	15kW, 1500 min-1, 400V, 50Hz
Oil filling	approx. 220 l
Initial filling	ESSO NUTO H 32
Pressure relief valve set to	310 bar.
Pressure gauge	
Oil gauge glass	
Discharge valve	

Control:	
Hand-held control console	Electrical

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