

SENEBOGEN

Creative Lösungen

613M

613HD

Lifting Capacity up to 16 t
Engine output 88 kW (120 HP)
Separate hydraulic circuit for swing operation
Most modern load-sensing hydraulic system
Robust, very service-friendly design

Specifications



Engine:

Deutz diesel engine BF4M 1013E with direct injection, water-cooled, Output as per DIN/ISO 88 kW (120 HP) at 2200 rpm
Dry air filter with cyclone preliminary filter, safety element and pollution indicator.
Fuel tank capacity: 300 l
Electric system 24 Volt.
2 highly efficient cold starting batteries



Hydraulic System:

Load-sensing hydraulic system. The variable displacement piston pumps are equipped with pressure cut-off function and with a energy-saving flow-on-demand control. Through the independent and proportional feed of the oil flow all working functions can be operated parallel, independent and very precise.

High efficiency through well designed hydraulic valves and lines. Separate swing pump for individual and precise swing operation.

Flow rate 1 x 210 l/min, working pressure 330 bar and 1 x 30 l/min working pressure 280 bar.

Hydraulic tank capacity 260 l.
Hydraulic oil filter with long time change interval.

Healthy oil temperature through high dimensioned hydraulic oil cooler.
Central service board for easy and rapid check of complete hydraulic-system.
Servo joysticks for operating movements and additional functions as per ISO-System.



Swing System:

The swing operation is driven independently through a separate hydraulic pump. Axial piston motor, spring-loaded hydraulically releasable multiple-disk brake, planetary gear and pinion shaft.
Large dimensioned swing bearing.
Swing speed 0 - 2.5 rpm, infinitely controllable.

Hydraulic motor with integrated brake valves for reduction of wear in braking system to a minimum.



Undercarriage 613 M:

Undercarriage welded as rigid, torsion-free box-type design, 4-point outriggers.

Tires: 8 x 10.00-20 new tires.

All wheel drive via variable hydraulic motor with directly mounted automatic brake valve and 2-stage-powershift-gear. 26 t special wide gauge axles.

2-circuit servo brake system with additional safety brake as parking brake.
Steering axle as hydraulically controllable oscillating axle.

Oscillating axle cylinder with safety check valves.

0 - 5.4 km/h off road

0 - 20 km/h on road.

0 - 32 km/h FT-Version (option)



Upper Structure:

Torsion-free upper frame with continuous bearing-plate for optimum power introduction, precision machined. Steel-bushes for the boom pivot. Special sound insulation for the engine. Large lockable storage compartment. Excellent design



Operator's Cab:

Comfortable F 2000 operator's cab, resiliently mounted, with exceptional sound suppression, large-capacity compartment with excellent allround visibility, all-weather design with tinted safety glass, front windscreen with ventilation position stows under the roof, large-size skylight, window wiper/washer system for front windscreen and skylight, front guard panel, ventilation hatch in the roof, large-capacity stowage rack, ergonomically designed comfortable seat, resiliently mounted, adjustable in suspension and height, seat cushion adjustable in depth and angle, adjustable lumbar support, wide adjustable armrests, clearly laid out instrument panel with ergonomically shaped control levers, adjustable steering column. Infinitely variable cab heating system, outside air and circulating air stages, with particle filter. Five adjustable air vents for optimum work environment, new SDS diagnostic system for monitoring of all essential machine and engine functions, includes visual and audible warning of any malfunctions, wide range of additional features and equipment



Working Equipment:

Telescopic three-piece boom, hydr. extendable and retractable.

Boom hoist cylinder and telescopic cylinder with safety check valves. Hoist winch via hydraulic motor with safety valve and planetary gear with safety multi-disk-brake in the oil bath. Line pull max. 40 kN, hoist speed max. 0-95 m/min, rope dia. 14 mm. Jib 5 m, adjustable (0°/48°).

It can be mounted very fast and very easily without any helping devices. If fly jib is not used, it can be locked on the side of the main boom.

Safety equipment according to German and European regulations.

Safe load indicator (SLI) with clear text indi-

cation of boom angle, boom length, radius, hoist end switch. Complete conformity to German road regulations. Levelling indicator for machine alignment.



Service Weight 613 M:

Service weight including telescopic boom, fly jib and hook approx. 18.000 kg.



Undercarriage 613 HD:

Each track is independently driven by an axial piston motor through planetary final drive. The drives are integrated into the track frames and protected by covers. Spring loaded hydraulically releasable multiple-disk brakes as safety parking brakes for reliable stopping.

Undercarriage hydraulic extendable. Maintenance-free track-type B4HD with 600 mm triple-bar-grouser track pads and hydraulic track-tensioning device.

Travel speed 0 - 2.5 km/h, 2-speed-travel motors. Extremely high traction force and good ground clearance to ensure excellent rough terrain travel.



Service Weight 613 HD:

Service weight complete with telescopic boom, fly jib, hook and track-type B4HD with shoes:

600 mm: 21.3 t - 0.43 kg/cm²

700 mm: 22.1 t - 0.38 kg/cm²

800 mm: 22.4 t - 0.33 kg/cm²

900 mm: 22.5 t - 0.30 kg/cm²

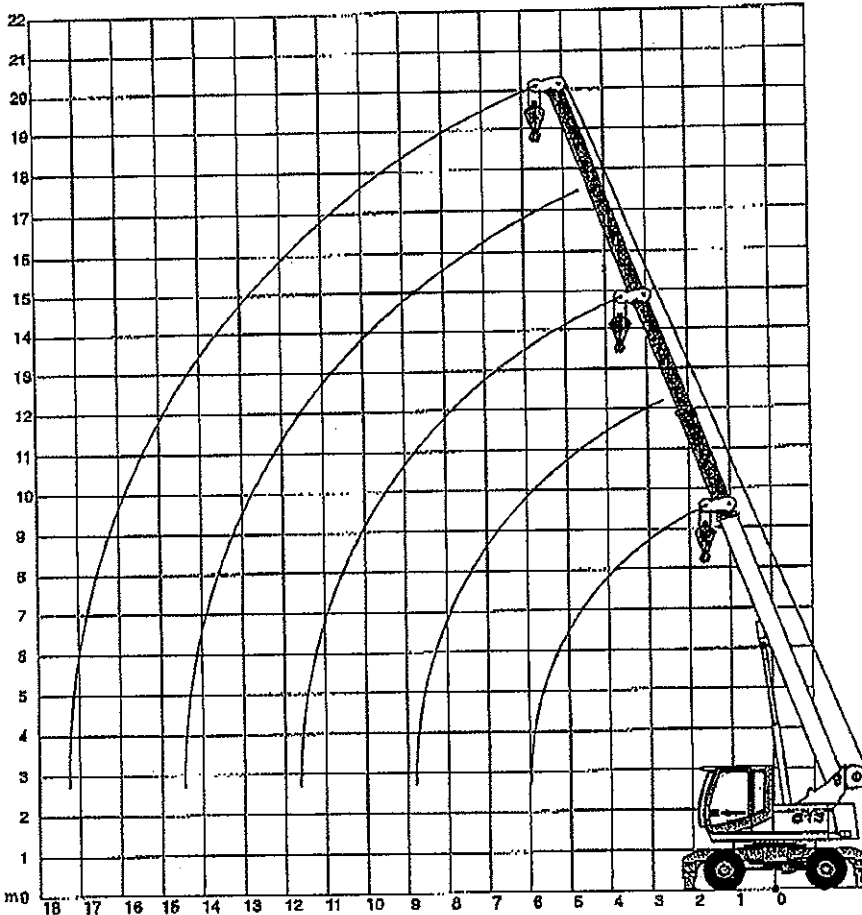
The shown weights may vary with different equipment.

Subject to technical modification!

Kranausrüstung (Teleskopausleger 18,8 m) Crane Equipment (Telescopic Boom 18.8 m)

613M

613HD



Notes:

1. The rated loads shown are based on the machine on firm level ground without travelling.
2. The rated loads shown are in metric tons valid for 360 degrees swing.
3. The rated loads are according to DIN 15018.2 and do not exceed 75 % of tipping load.
4. The rated loads shown include the weight of all lifting attachments, such as hook, etc.
5. The rated loads are valid on outriggers, the figures in brackets () are valid from wheels.
6. The users must permit or limit the lifted loads to allow for adverse conditions such as soft or uneven ground, out of level conditions, wind, side loads, pendulum action, jerking or sudden stopping of loads, inexperience of personnel and travelling with a load.
7. Max. single line pull for crane operation 30 kN

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8. The rated loads shown are valid for 613 HD with crawler undercarriage extended (gauge 3300 mm), the rated loads in brackets () are valid for crawler undercarriage retracted (gauge 2300 mm)

613M / 613HD

Ausladung Radius in m	Auslegerlänge / boom length in m				
	7,5	10,3	13,2	16	18,8
2	15,0 (12,0)				
3	13,3 (9,3)	10,0 (8,4)			
4	10,6 (6,3)	10,0 (5,3)	8,0 (5,4)		
5	8,5 (3,7)	8,6 (3,8)	8,0 (3,8)	6,0 (3,9)	
5,5	7,5 (3,2)	7,6 (3,4)	7,4 (3,4)	6,0 (3,4)	4,5 (3,4)
6		6,7 (2,9)	6,7 (2,9)	5,9 (2,9)	4,5 (2,9)
7		5,2 (2,3)	5,3 (2,3)	5,2 (2,3)	4,5 (2,3)
8		4,2 (1,8)	4,3 (1,8)	4,3 (1,8)	4,1 (1,9)
9			3,5 (1,5)	3,6 (1,5)	3,6 (1,5)
10			3,0 (1,2)	3,0 (1,2)	3,0 (1,2)
11			2,6 (1,0)		2,6 (1,0)
12				2,2 (0,8)	2,3 (0,8)
13				2,0 (0,7)	2,0 (0,7)
14				1,7 (0,6)	1,7 (0,6)
15					1,5
16					1,3

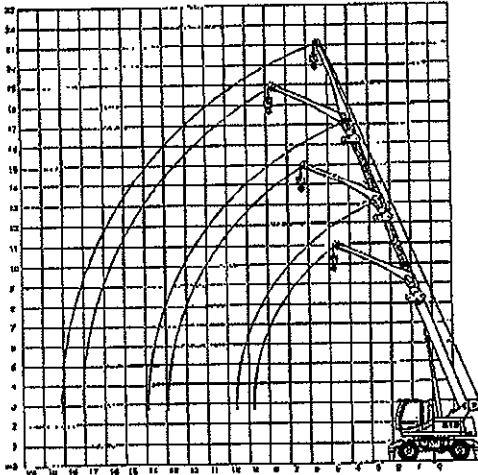
TAB:613M/78/PAH4/03.0/2.5/7,5m Ausleger/boom (=abgerüstet/outriggers)
613M/78/trc/03.0/2.5/7,5m Ausleger/boom (=freistehend/trae on wheels)

Ausladung Radius in m	Traglasten bei Ausleger \times 0° am Grundkörper / Lifting capacity with boom \times 0° at basic boom				
	7,5	10,3	13,2	16,0	18,8
6,0	5,7 (2,9)				
8,8		3,6 (1,5)			
11,6			2,4 (0,9)		
14,4				1,8 (-)	
17,3					1,1 (-)

TAB:613M/78/0/8.99/7,5 m Ausleger/boom

Spitzenausleger-Ausrüstung Jib Equipment

Ausleger / boom 14,6 m



613M/613HD mit Spitze/jib 5m /0°

Ausladung Radius in m	Auslegerlänge / boom length in m				
	5,1	8,2	10,3	12,5	14,6
3	4,2 (4,2)				
4	3,5 (3,5)	4,0 (4,0)			
5	3,0 (3,0)	3,5 (3,5)	3,7 (3,7)	4,0 (4,0)	
6	2,6 (2,6)	3,0 (3,0)	3,4 (3,1)	3,6 (3,0)	3,5 (3,0)
7	2,2 (2,2)	2,7 (2,5)	3,0 (2,4)	3,3 (2,4)	3,4 (2,4)
8	1,9 (1,9)	2,4 (2,0)	2,7 (2,0)	3,0 (1,9)	3,0 (1,9)
9	1,8 (1,7)	2,1 (1,7)	2,5 (1,6)	2,8 (1,6)	2,7 (1,6)
10		1,9 (1,4)	2,2 (1,3)	2,5 (1,3)	2,5 (1,3)
11		1,8 (1,2)	2,0 (1,1)	2,3 (1,1)	2,2 (1,1)
12			1,8 (0,9)	2,0 (0,9)	2,0 (0,9)
13			1,8 (0,8)	1,9 (0,8)	1,9 (0,7)
14				1,7 (0,6)	1,8 (0,6)
15				1,6 (0,5)	1,8 (0,5)
16					1,4

TAB:613M/75/PAH4/03.0/2.5/6,1m Ausleger/SA/boom (=abgesenkt/on outriggers)
613M/75/tru/03.0/2.5/6,1m Ausleger/SA/boom (=freistehend/free on wheels)

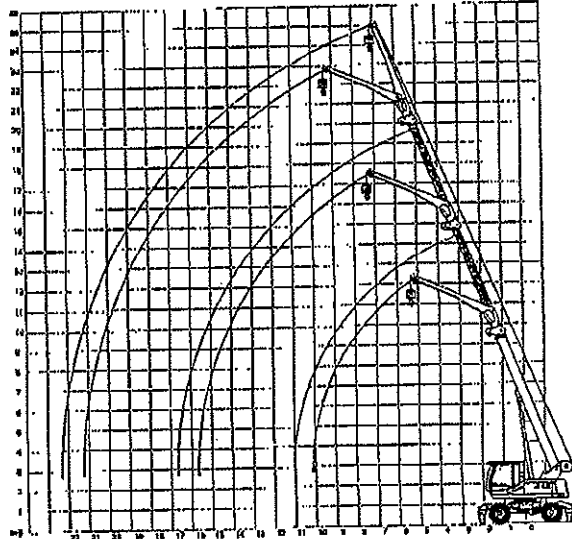
613M/613HD mit Spitze/jib 5m /45°

Ausladung Radius in m	Auslegerlänge / boom length in m				
	5,1	8,2	10,3	12,5	14,6
6	1,9 (1,9)	2,0 (2,0)			
7	1,9 (1,9)	2,0 (2,0)	2,0 (2,0)		
8	1,8 (1,8)	1,9 (1,9)	2,0 (2,0)	2,0 (1,9)	
9		1,8 (1,7)	1,9 (1,6)	1,9 (1,6)	2,0 (1,6)
10			1,9 (1,3)	1,9 (1,3)	1,9 (1,3)
11			1,8 (1,1)	1,8 (1,1)	1,9 (1,1)
12				1,8 (0,9)	1,9 (0,9)
13					1,8 (0,7)
14					1,8 (0,6)

TAB:613M/75/PAH4/03.0/2.5/6,1m Ausleger/SA/boom (=abgesenkt/on outriggers)
613M/75/tru/03.0/2.5/6,1m Ausleger/SA/boom (=freistehend/free on wheels)

613 M 613 HD

Ausleger / boom 18,8 m



613M/613HD mit Spitze/jib 5m /0°

Ausladung Radius in m	Auslegerlänge / boom length in m				
	7,5	10,3	13,2	16,0	18,8
4	3,8 (3,8)	4,4 (4,4)			
5	3,3 (3,3)	3,8 (3,8)	4,2 (4,0)		
6	2,9 (2,9)	3,4 (3,1)	3,8 (3,0)	3,8 (3,0)	
7	2,5 (2,5)	3,1 (2,4)	3,4 (2,4)	3,5 (2,9)	2,7 (2,3)
8	2,2 (2,1)	2,8 (2,0)	3,1 (1,9)	3,2 (1,9)	2,7 (1,8)
9	2,0 (1,7)	2,5 (1,6)	2,8 (1,5)	2,9 (1,5)	2,6 (1,5)
10	1,9 (1,4)	2,2 (1,3)	2,5 (1,3)	2,6 (1,2)	2,4 (1,2)
11		2,0 (1,1)	2,3 (1,0)	2,4 (1,0)	2,2 (0,9)
12		1,8 (0,9)	2,2 (0,8)	2,2 (0,8)	2,0 (0,8)
13		1,8 (0,7)	2,0 (0,7)	2,0 (0,6)	1,9 (0,6)
14			1,7 (0,6)	1,7 (0,5)	1,7
15			1,5	1,5	1,4
16			1,4	1,3	1,3
17				1,1	1,1
18				1,0	1,0
19					0,9
20					0,7

TAB:613M/75/PAH4/03.0/2.5/7,5m Ausleger/SA/boom (=abgesenkt/on outriggers)
613M/75/tru/03.0/2.5/7,5m Ausleger/SA/boom (=freistehend/free on wheels)

613M/613HD mit Spitze/jib 5m /45°

Ausladung Radius in m	Auslegerlänge / boom length in m			
	7,5	10,3	13,2	16,0
6	2,0 (2,0)			
7	1,9 (1,9)	2,0 (2,0)		
8	1,9 (1,9)	2,0 (2,0)	2,0 (1,9)	
9	1,8 (1,7)	1,9 (1,6)	2,0 (1,5)	1,9 (1,5)
10		1,9 (1,3)	1,9 (1,3)	1,9 (1,2)
11		1,8 (1,1)	1,9 (1,0)	1,9 (1,0)
12			1,8 (0,8)	1,9 (0,8)
13			1,8 (0,7)	1,8 (0,6)
14				1,7 (0,5)
15				1,5
16				1,3

TAB:613M/75/PAH4/03.0/2.5/7,5m Ausleger/SA/boom (=abgesenkt/on outriggers)
613M/75/tru/03.0/2.5/7,5m Ausleger/SA/boom (=freistehend/free on wheels)