

Crawler Excavator Specifications

RH 6 compact



Service weight 19,2 - 21,6 t
Engine output 90 kW
Trenching buckets,
up to 1,05 m³ (SAE)

- PMS three-pump hydraulics
- Electronic control and monitoring system
- Noise insulated, deluxe cab
- Low noise and emission values
- Very low fuel consumption



Compact, powerful and cost-efficient: the RH 6 compact from O&K



Electronic immobilizer
standard
Outstanding precision
controllability

Zero-loss superstructure
start-up and braking with
energy recovery

4 stick lengths,
various buckets and
attachments



CE symbol according to EC Machinery Directive

TÜV certificate for compliance with DIN ISO EN 9001

Lifting gear permitted with installed anti-burst and overload warning devices



Ultramodern cab in softline design with ample space for the operator

Electronic engine and pump management system PMS III

Fuel-efficient Deutz diesel engine

Fuel savings through freely selectable engine speeds

Encapsulated ball-bearing swing ring with life-time lubrication

Final drives protected within the crawler profile

LC or NLC undercarriage for excellent lift capacity and punishing applications

O&K track cleaning and guide shoe (optional)

Optimum engine and pump control with PMS III

PMS III manages engine and pump performance to unbeatable levels of comfort and efficiency. All the important functions are monitored in order to reduce downtime and extend durability. Ongoing comparison of stored target data (e.g., temperature) with actual values provides automatic

adjustment of engine and pump performance in the event of any deviations. The engine is never overworked! The diagnosis system makes any malfunctions visible and thus simplifies service.

Electronic immobilizer prevents theft

A standard feature on all O&K excavators is an electronic immobilizer which makes sure that the engine will only start up once a code has been entered. The immobilizing function is overridden by pressing the control panel keys. During

working hours the immobilizer can be disconnected and then reactivated after hours, thus preventing theft, of increasing occurrence on construction sites.

Fuel consumption down

Power under control; O&K has many examples to illustrate this: alongside variable flow, prioritized ECO output level and rev-lowering under zero-load conditions. Plus the closed swing circuit preventing unnecessary hydraulic heat-buildup when swinging or braking the superstructure. Hence, less need to cool and less fuel consumption.

Outstanding precision through volume control

High-precision volume control meters exactly the right amount of oil flow for any particular function. Attachment functions are initiated with maximum sensitivity and virtually no losses. The outcome: lower oil temperatures, extended uptime for all components and appreciable fuel savings.



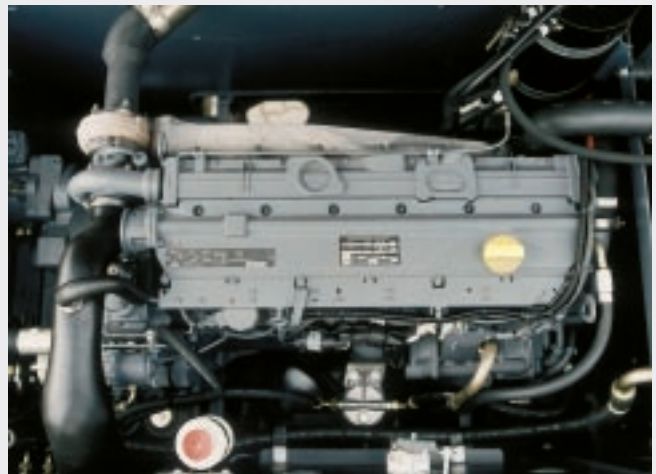
Short tail – ideal for tight construction sites

The tail radius is 500 mm shorter when compared with the standard unit. This offers significant advantages, e.g. in road construction, where the second lane must continue to carry traffic. Or for excavation work with cramped space between the buildings. Despite the very compact design, the MH 5 has enormous muscle - a heavyweight in its class.



Rugged and economical Deutz engine

The powerful water-cooled Deutz engine is efficient and kind to the environment. With its exceptional efficiency, the electronic Pump Managing System PMS III translates this power into ample hydraulic performance.



Quick maintenance increases availability

Quick and easy access to all the service points and extended maintenance intervals are typical features of O&K crawler excavators. The panels open wide allowing comfortable access to all the components. A central display inside the cab reminds the operator of any checks or maintenance chores due.

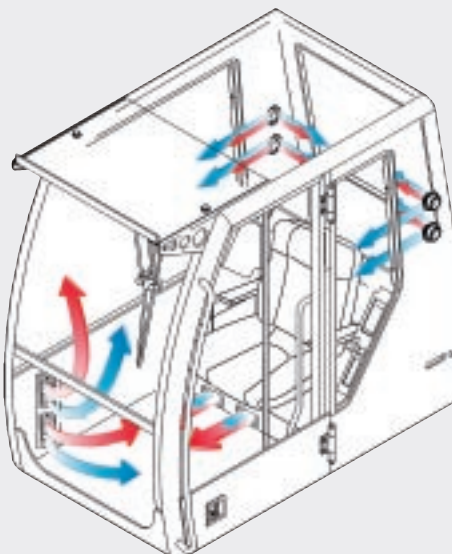


The comfortable basis for more performance: the ergonomical cockpit



The new crawler excavator cab has ample space for the operator plus stowage area behind the seat. The rounded tinted windows of the futuristic softline design prevent glare. The structure of the frame parts and large roof window improve upward visibility substantially. The front pane slides easily under the roof (a standard feature) where it locks safely into place. The lower part can be tilted and removed for optimum cab ventilation.

The doors have sliding windows as standard. The front roof projection in tinted Lexan glass keeps out the rain with the front window open while a standard sunshade prevents rays entering from the front and top.



The bright and stimulating colors and stylish design combine to create an agreeable working ambience. All the controls are designed and positioned according to the latest ergonomic findings. The servo-controlled levers with short throw and integrated buttons for additional functions, are conveniently positioned in the individually adjustable side consoles. Additional assets: the comfortable adjustable swing seat, the low noise level, and an extra-throughout ventilator providing slight overpressure within the cab.

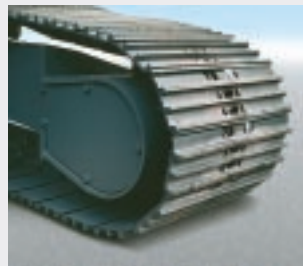
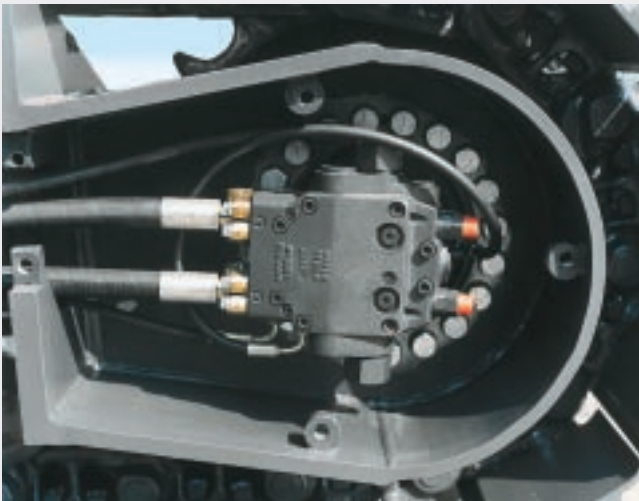
The air conditioning system (optional) uses an ingenious airflow system to ensure agreeable temperatures at all times.

The tracks are automatically cleaned



The patented track cleaning and guide system is an effective safeguard against dirt. While the unit is travelling, the tracks are automatically cleaned. The wedge shape of the cleaning shoe dislodges the dirt sideways out of the tracks, preventing build-up at the idlers and sprockets. Track wear is significantly reduced, the track tensioning system has less work to do and the tracks are prevented from slipping off.

Gear and final drive units — securely protected against damage



The compact gear units and drive motors are fully encapsulated and safely protected from damage. For any maintenance work, the guards are easily removed.

Maintenance-free undercarriage



The oversized crawlers with track tensioning and sealed chain link bearings as well as the entire undercarriage need very little maintenance, the track and support rollers none at all. This shortens maintenance time and boosts productivity.



Engine

Deutz diesel engine BF6M 1012 E
 Water-cooled • Turbocharged • Combined cooler for hydraulic oil and coolant • TDry air filter with safety element and contamination indicator • Electric rev regulation • Electric engine shut-off at key switch

Engine output ISO 9249	90 kW / 2200 RPM
Governed engine output	85 kW
Cylinders/displacement	6 / 4788 cm ³
Bore/stroke	94 mm / 115 mm
Voltage	24 V
2 batteries	each 12 V / 92 Ah
Alternator	28 V/35 A
starter	4.0 kW/24 V



Hydraulics

PMS 3-pump system with two main pumps and separate swing pump • Main pumps with individual control • Flow on demand • Double flow • Parallel bucket circuits for 4 functions simultaneously • Hydraulic oil cooler with hydrostatic fan drive • High-pressure lines with flanged fittings • Microfiltration of return oil, servo and swing circuits.

Max. delivery, main pumps	2 x 170 l/min
Max. delivery, swing pump	62 l/min
Max. pressure, w/o booster	320 bar
Max. pressure with booster	360 bar
Max. pressure, swing gear	390 bar



Control and monitoring system

Engine and pump monitoring system with electronic load limit (PMS III) • Controlled heat-up phase • Engine and hydraulic system temperature monitoring, with rev limit to protect engine and pumps • Automatic engine rev return

3 selectable output levels:

	Heavy	Eco	Lift
RPM	2100	2000	1800
Pump output	100 %	90 %	65 %



Swing gear

Swing pump/motor within sealed circuit for zero-loss superstructure start-up and braking • Swing gear with built-in wear-proof multidisc brake • Encapsulated ball-bearing swing ring with long-term lubrication

Effective slewing moment	43 kNm
Max. rpm	7.8



Cab

Tinted safety glass • Front top pane retracts, lower section can be tilted and removed • Sliding window in the door • Roof window • Rain-protecting roof • Three-speed blower • Defroster nozzles for leg area and front windows • Central display for all control and monitoring functions • Deluxe seat • Control functions to ISO recommendations • Individually adjustable side consoles • Ergonomic servo-control levers



Final drive

Hydraulic drive for each crawler • Stone guard for adjustable motor, final drives and brake valves inside the crawler profile • Crawler brake • Track guard • Low-maintenance crawlers with track tensioning • Sealed chain link bearings • Lifetime lubricated track and support rollers.

Max. effective tractive force	214 kN
Max. travel speed	5.1 km/h
Track pads per crawler	50



Capacities

Fuel tank	260 l
Cooling system	20 l
Engine oil, including filter	16 l
Slewing gear	3,5 l
Hydraulic tank	200 l
Hydraulic system	315 l

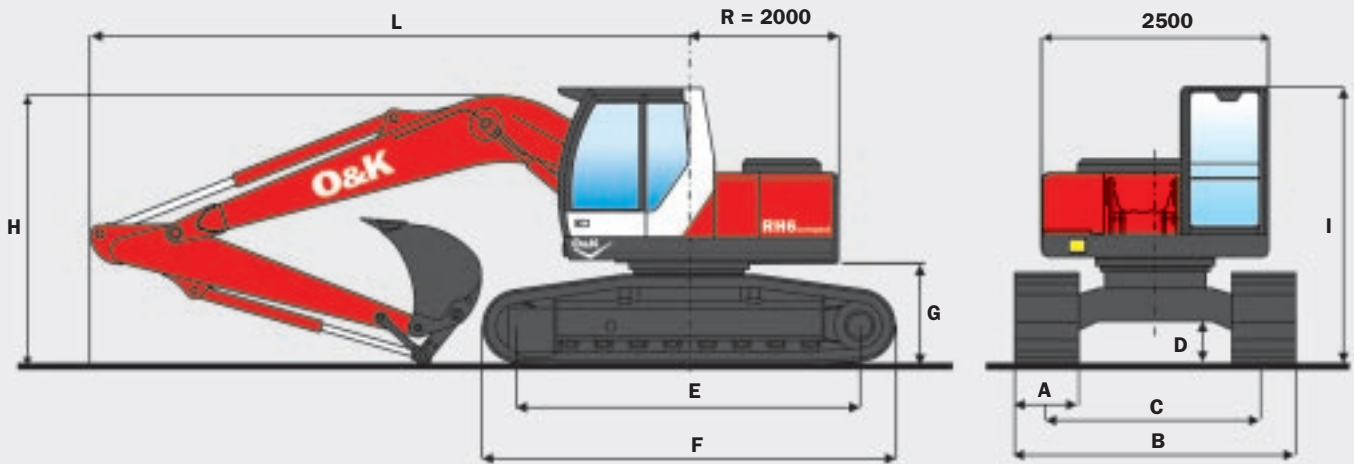
Equipment

Low maintenance through hardened and corrosion-proofed bearing pins, low-wear bushings, sealed bearings and easily accessible grease distributor for boom • Hydraulic cylinders with plain bearings • Spotlight mounted on boom

Options

Air conditioning • Eco-friendly hydraulic oil • Auxiliary heating • Refuelling unit • Anti-burst and overload warning devices • Additional headlamp • Mid-mounted track guide • TCG track guide and cleaning shoe • Pressure booster with power boost operation • Stone guard • Deluxe cab • Fittings for radio/cassette recorder

Dimensions and weights



	A	B	C	D	E	F	G	I
RH 6 compact NLC 500	500	2500	2000	475	3735	4540	1120	3000
RH 6 compact NLC 600	600	2600	2000	475	3735	4540	1120	3000
RH 6 compact NLC 700	700	2700	2000	475	3735	4540	1120	3000
RH 6 compact NLC 850	850	2850	2000	475	3735	4540	1120	3000
RH 6 compact LC 600	600	2980	2380	475	3735	4540	1120	3000
RH 6 compact LC 700	700	3080	2380	475	3735	4540	1120	3000
RH 6 compact LC 850	850	3230	2380	475	3735	4540	1120	3000

Transport dimensions			
Monoboam			
Stick	L	H	
2.4m	8450	3100	
2.7 m	8400	3150	
2.9 m	8400	3200	
3.6 m	8400*	3300*	

* without backhoe

Transport dimensions			
Adjustable boom			
Stick	L	H	
2.4m	8300	3200	
2.7 m	8250	3250	
2.9 m	8250	3300	
3.6 m	8200*	3350*	

* without backhoe

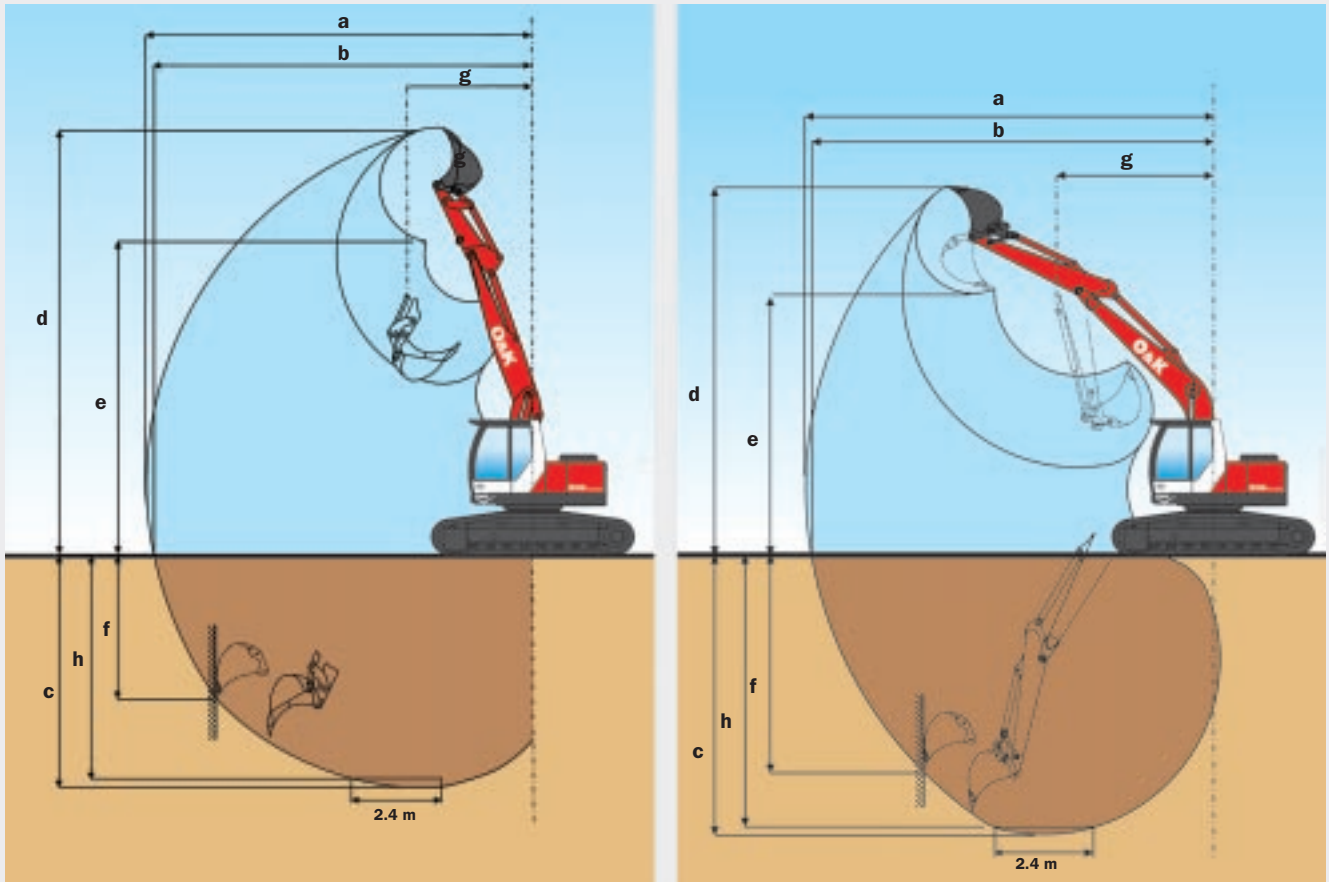
	kg	kg	Crawler			kg/cm ²	kg/cm ²
	Weight ¹	Weight ²	Track size	Track rollers	Upper rollers	Gr. pressure ¹	Gr. pressure ²
RH 6 compact NLC 500	19200	19900	B60	8	2	0.48	0.50
RH 6 compact NLC 600	19500	20200	B60	8	2	0.40	0.42
RH 6 compact NLC 700	20200	20900	B60	8	2	0.36	0.37
RH 6 compact NLC 850	20600	21400	B60	8	2	0.32	0.33
RH 6 compact LC 600	19600	20300	B60	8	2	0.41	0.42
RH 6 compact LC 700	20300	21000	B60	8	2	0.36	0.37
RH 6 compact LC 850	20900	21600	B60	8	2	0.31	0.32

¹ RH 6 compact with 5.2 m monoboam; 2.7 m Stick and trenching bucket (500 kg)

² RH 6 compact mit 2.0/3.6 m adjustable boom; 2.7 m Stick and trenching bucket (500 kg)



Working range with backhoe and adjustable boom 2.0/3.6 m / Monoboom 5.2 m



Range		Adjustable boom				Monoboom				
		Stick length	2.4 m	2.7m	2.9 m	3.6 m	2.4 m	2.7m	2.9 m	3.6 m
a	Maximum reach	m	8.9	9.2	9.4	10.1	9.0	9.3	9.5	10.2
b	Maximum reach at ground level	m	8.8	9.0	9.2	9.9	8.9	9.1	9.3	10.0
c	Maximum digging depth	m	5.8	6.1	6.3	7.0	5.8	6.1	6.3	7.0
d	Maximum penetration height	m	9.1	9.3	10.0	10.0	8.3	8.5	8.6	8.9
e	Maximum dump height	m	6.8	7.0	7.6	7.6	6.1	6.2	6.3	6.7
f	Maximum vertical digging depth	m	4.0	4.3	5.1	5.1	3.5	4.1	4.3	5.0
g	Minimum slew radius	m	3.1	3.1	3.3	3.3	3.8	3.7	3.7	3.7
h	Maximum digging depth with 2.4 m (8') wide base	m	5.7	6.0	6.2	6.9	5.6	6.0	6.1	6.9

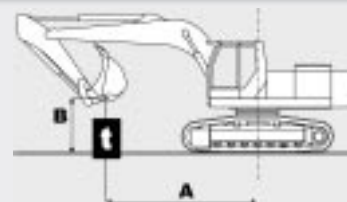
		Digging forces							
		Adjustable boom				Monoboom			
	Sticks	2.5 m	2.7 m	2.9 m	3.6 m	2.5 m	2.7 m	2.9 m	3.6 m
Breakout force*	kN	124	124	124	124	124	124	124	124
Ripping force*	kN	112	103	98	84	112	103	98	84

* with booster

Lift capacities

Adjustable boom 2.0/3.6 m / Monoboam 5.20 m Backhoe 0.50 m³ SAE

As per ISO 10567, the specified values represent 75 percent of the static tipping loads or 87 percent of the hydraulic lift capacity. These values apply with booster activated:



- a Total slewing range 360°
- b Longitudinal direction +/-15°
- * Limited by hydraulic system

RH 6 Compact LC 600 Adjustable boom

RH 6 Compact NLC 600 Adjustable boom

Sticks B	A		3.0 m		4.5 m		6.0 m		7.5 m		max.		3.0 m		4.5 m		6.0 m		7.5 m		max.	
	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b
4.5 m			3.5*	3.5*	3.4*	3.4*								3.5*	3.5*	3.1	3.4*					
3.0 m	8.2*	8.2*	5.0*	5.0*	3.7	4.0*	2.5	3.6*					8.2*	8.2*	4.7	5.0*	3.1	4.0*	1.9	3.6*		
1.5 m	10.2*	10.2*	5.6	6.6*	3.7	4.7*	2.4	3.9*					8.4	10.2*	4.6	6.6*	3.0	4.7*	1.9	3.9*		
2.4 m Gr. level	10.6	12.1*	5.6	7.7*	3.7	5.4*	2.3	4.2	2.1*	2.1*			8.4*	12.1*	4.6	7.7*	2.9	5.4*	1.8	4.2	1.7	2.1*
1.5 m	10.9	13.4*	5.7	8.0*	3.4	5.6*							8.3	13.4*	4.5	8.0*	2.6	5.6*				
3.0 m	10.8	13.8*	5.2	8.4*	3.2	5.3*							8.2	13.8*	4.1	8.4*	2.5	5.3*				
4.5 m					3.1*	3.1*	2.6	3.1*									3.1*	3.1*	2.0	3.1*		
3.0 m	7.1*	7.1*	4.6*	4.6*	3.7	3.7*	2.5	3.4*					7.1*	7.1*	4.6*	4.6*	3.0	3.7*	2.0	3.4*		
1.5 m	10.1*	10.1*	5.0	6.2*	3.6	4.5*	2.5	3.8*					8.3	10.1*	4.5	6.2*	3.0	4.5*	1.9	3.8*		
2.7 m Gr. level	10.4	11.7*	5.5	7.4*	3.7	5.2*	2.3	4.1*	1.8*	1.8*			8.3	11.7*	4.5	7.4*	3.0	5.2*	1.8	4.1*	1.6	1.8*
1.5 m	10.7	13.2*	5.7	7.9*	3.4	5.5*							8.3	13.2*	4.5	7.9*	2.7	5.5*				
3.0 m	10.8	13.6*	5.3	8.2*	3.2	5.6*							8.1	13.6*	4.1	8.2*	2.4	5.6*				
4.5 m					2.9*	2.9*	2.6	3.0*									2.9*	2.9*	2.0	3.0*		
3.0 m	6.4*	6.4*	4.3*	4.3*	3.6*	3.6*	2.6	3.2*					6.4*	6.4*	4.3*	4.3*	3.0	3.6*	2.0	3.2*		
1.5 m	10.1*	10.1*	5.5	6.0*	3.6	4.4*	2.5	3.6*					8.2	10.1*	4.5	6.0*	3.0	4.4*	1.9	3.6*		
2.9 m Gr. level	10.3	11.5*	5.5	7.3*	3.6	5.1*	2.3	4.0*	1.7*	1.7*			8.3	11.5*	4.5	7.3*	3.0	5.1*	1.8	4.0*	1.5	1.7*
1.5 m	10.6	13.0*	5.6	7.8*	3.5	5.5*	2.2	4.1					8.4	13.0*	4.5	7.8*	2.7	5.5*	1.6	4.1*		
3.0 m	10.7	13.5*	5.4	8.1*	3.2	5.7*							8.1	13.5*	4.2	8.1*	2.5	5.7*				
4.5 m					2.3*	2.3*	2.4*	2.4*									2.3*	2.3*	2.1	2.4*		
3.0 m			3.3*	3.3*	3.0*	3.0*	2.6	2.8*							3.3*	3.3*	3.0*	3.0*	2.1	2.8*		
1.5 m	8.8*	8.8*	5.1*	5.1*	3.5	3.8*	2.5	3.2*					8.3	8.8*	4.5	5.1*	2.9	3.8*	2.1	3.2*		
3.6 m Gr. level	10.2	10.6*	5.3	6.6*	3.5	4.7*	2.5	3.7*	1.3*	1.3*			8.1	10.6*	4.4	6.6*	2.9	4.7*	1.9	3.7*	1.3	1.3*
1.5 m	10.3	12.3*	5.4	7.5*	3.6	5.2*	2.3	4.0*					8.3	12.3*	4.5	7.5*	2.9	5.2*	1.7	4.0*		
3.0 m	10.7	13.0*	5.5	7.8*	3.3	5.5*	2.1	4.0*					8.1	13.0*	4.3	7.8*	2.5	5.5*	1.6	4.0*		

RH 6 Compact LC 600 Monoboam

RH 6 Compact NLC 600 Monoboam

Sticks B	A		3.0 m		4.5 m		6.0 m		7.5 m		max.		3.0 m		4.5 m		6.0 m		7.5 m		max.	
	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b
4.5 m					3.6*	3.6*											3.1	3.6*				
3.0 m	9.2*	9.2*	5.4*	5.4*	3.6	4.2*	2.5	3.7*					8.5	9.2*	4.6	5.4*	2.9	4.2*	1.9	3.7*		
1.5 m			5.3	7.0*	3.4	5.0*	2.4	4.1*							4.1	7.0*	2.7	5.0*	1.9	4.1*		
2.4 m Gr. level	6.7*	6.7*	5.0	8.0*	3.2	5.6*	2.3	4.2	2.1	2.7*			6.7*	6.7*	3.9	8.0*	2.5	5.6*	1.8	4.2*	1.6	2.7*
1.5 m	9.6	11.1*	4.9	8.1*	3.2	5.8*							7.1	11.1*	3.8	8.1*	2.4	5.8*				
3.0 m	9.8	11.5*	4.9	7.6*	3.2	5.3*							7.3	11.5*	3.8	7.6*	2.5	5.3*				
4.5 m					3.3*	3.3*	2.6	3.3*									3.1	3.3*	2.0	3.3*		
3.0 m	8.0*	8.0*	5.0*	5.0*	3.6	4.0*	2.5	3.5*					8.0*	8.0*	4.6	5.0*	2.9	4.0*	1.9	3.5*		
1.5 m			5.3	6.7*	3.4	4.8*	2.4	3.9*							4.2	6.7*	2.7	4.8*	1.8	3.9*		
2.7 m Gr. level	7.0*	7.0*	5.0	7.7*	3.2	5.4*	2.3	4.2	2.0	2.3*			7.0	7.0*	3.8	7.7*	2.5	5.4*	1.7	4.1	1.5	2.3*
1.5 m	9.5	10.5*	4.8	8.1*	3.1	5.7*	2.2	4.1					7.0	10.5*	3.7	8.1*	2.4	5.7*	1.7	4.1		
3.0 m	9.6	11.9*	4.8	7.7*	3.1	5.4*							7.1	11.9*	3.7	7.7*	2.4	5.4*				
4.5 m							2.6	3.1*									2.9	3.8*	2.0	3.4*		2.0
3.0 m			4.7*	4.7*	3.7	3.8*	2.5	3.4*							4.7	4.7*	2.9	3.8*	2.0	3.4*		
1.5 m	7.2*	7.2*	5.3	6.4*	3.4	4.6*	2.4	3.8*					7.2*	7.2*	4.2	6.4*	2.7	4.6*	1.8	3.8*		
2.9 m Gr. level	7.2*	7.2*	5.0	7.6*	3.2	5.3*	2.3	4.2	1.9	2.1*			7.1	7.2*	3.8	7.6*	2.5	5.3*	1.7	4.1	1.4	2.1*
1.5 m	9.4	10.2*	4.8	8.0*	3.1	5.6*	2.2	4.1					7.0	10.2*	3.7	8.0*	2.4	5.6*	1.7	4.1		
3.0 m	9.5	12.1*	4.8	7.8*	3.1	5.5*							7.1	12.1*	3.7	7.8*	2.4	5.5*				
4.5 m							2.6	2.6*														2.1
3.0 m					3.2*	3.2*	2.5	3.0*									3.0	3.2*	2.0	3.0*		
1.5 m	9.7*	9.7*	5.5	5.5*	3.5	4.1*	2.4	3.4*					8.0	9.7*	4.3	5.5*	2.7	4.1*	1.8	3.4*		
3.6 m Gr. level	8.0*	8.0*	5.0	7.0*	3.2	4.9*	2.2	3.9*	1.5*	1.5*			7.1	8.0*	3.9	7.0*	2.5	4.9*	1.7	3.9*	1.2	1.5*
1.5 m	9.3	9.4*	4.8	7.8*	3.1	5.4*	2.1	4.0					6.9	9.4*	3.6	7.8*	2.3	5.4*	1.6	4.0		
3.0 m	9.3	12.5*	4.7	7.9*	3.0	5.5*	2.1	4.0					6.9	12.5*	3.6	7.9*	2.3	5.5*	1.6	4.0		

Attachments

Overall dimensions and weights



		Monoboam	Adjustable boom		Stick			
			Lower part	Upper part				
System length	m	5.20	2.0	3.60	2.40	2.7	2.9	3.6
Weight	kg	1220	550	1150	605	665	695	810
Linkage	kg				140	140	140	140
Cylinder	kg	280	250	280	125	125	125	125

Trenching buckets

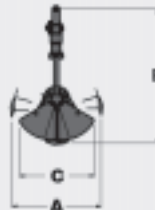


		Rock backhoe					Backhoe				
Capacity (CECE)	m ³	0.40	0.50	0.60	0.70	0.80	0.25	0.30	0.50	0.80	0.95
Capacity (SAE)	m ³	0.48	0.57	0.70	0.79	0.88	0.28	0.36	0.57	0.88	1.05
Width	mm	750	850	1000	1100	1200	500	600	850	1200	1200
Weight	kg	444	486	499	555	605	362	384	486	605	645

Further buckets on request

Clamshell bucket

Capacity (CECE)	m ³	0.30	0.40
Width	mm	600	800
Weight	kg	550	595
A	m	1.60	1.60
B	m	2.43	2.43
C	m	1.35	1.35



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