Crawler Excavator

R 976

Litronic®

Engine
400 kW / 544 HP
Stage IV

Operating Weight
Backhoe: 85,800 – 96,300 kg
Shovel: 91,500 – 93,300 kg

Bucket Capacity
Backhoe: 1,50 – 6.60 m^3
Shovel: 5.10 – 6.00 m^3

LIEBHERR

Performance
Power, versatility
and productivity

Economy
Profitability – efficiency and
reduced operating costs

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Reliability
World-renowned
robustness

Comfort
Spacious cab, ergonomic
and high-visibility

Easy Maintenance
Simple and safe service
check points

Performance

Power, Versatility and Productivity

High Performance for Maximum Productivity
The R 976 crawler excavator is characterised by its maximum productivity. Whether it be in earthmoving or quarry applications, this 90 tonne class excavator has an optimised hydraulic system matched together with intelligent operating modes. This ensures the capability for operating on large construction sites and quarries.

Reliable Working Capacity
The Liebherr V8 engine on the R 976 is very productive thanks to its high torque even at low speeds. The digging and breakout forces of 390 kN and 485 kN respectively ensure fast and efficient working cycles. Equipped with a Liebherr bucket and tooth system it guarantees easy penetration into material for easy extraction. The R 976 stability and smooth movements of the machine ensure comfortable and fast loading of dump trucks.

Optimisation of Hydraulic System for Constant Power
With an independent 3rd pump dedicated for swing the R 976 has optimal power. This provides maximum torque while swinging and the remaining two pumps still have full power for excavatoring and loading.

The Versatility of the Wide Range of Attachments
Thanks to the wide variety of attachments with optimised kinematics, the R 976 impresses with its versatility in all applications.

Liebherr Engine
- Compliant with Stage IV emission standard with SCR exhaust gas after-treatment system
- Designed specifically for construction applications
- Liebherr Common-Rail injection system for optimised output
- Automatic fuel-saving idling system

Choice of Work Mode
- E Mode – Economy: for economical and ecologically-friendly operation. Minor restriction of power without affecting the load lifting and excavating capacities
- P Mode – Power: for high excavation capacities and difficult applications. Pump flow and power are not limited
- S Mode – Sensitivity: for precision jobs and loading of materials
- P+ Mode – Full Power: especially designed for increased power; only recommended for extreme applications

Floating Boom Function
- Increased hydraulic flow for the other cylinders (stick and / or bucket for example)
- More power available, making it easier to extract materials and reduce working cycle times
- Increased service life when a hydraulic hammer is used

Economy

Profitability – Efficiency and Reduced Operating Costs

Low Operating Costs
Thanks to its high technology and innovation, the Liebherr France Company increases the performance of its machines while reducing their fuel consumption. Examples of this are the new diesel engine, automatic idling, electronic engine speed sensing control, Regeneration Plus function and the hydrostatic cooling system (fans operate only when necessary). Consequently, the reduced fuel consumption means less pollution.

LiDAT Fleet and Machine Fleet Management Tool
To improve your machine management, Liebherr has developed its own data transmission system using the GPRS network. This system allows you to instantly know the position of your excavator via a web interface. Thanks to data transmission, the LiDAT system developed and manufactured by Liebherr keeps you informed about fuel consumption, number of service hours or machine faults, just to name a few. LiDAT allows you to be proactive and more responsive: organizing and maintaining your fleet for increased productivity.

An Excellent After-Sales Service
The after-sales services can be customized to suit and respond to your specific needs. Several programs, such as ReMan, ReBuilt and Repair provide the perfect, economical solution, always including the manufacturer's quality and guarantee. A team of technicians, specialized to intervene on your machines, has all the latest-generation diagnostic tools, for a reduced down time of the machine. By following your chosen maintenance program, you will also obtain a higher resale price.

Liebherr Tools
- Wide range of tools suitable for every type of application
- Tools designed for maximum productivity and durability
- Shape of buckets designed to assist the filling and stability of bulky materials during the transport stages
- Hydraulic quick coupler system

Liebherr Lubricants
- Complete range of lubricants and coolants for your Liebherr engines
- Special service with product specialists available to listen to and advise you

Original Lubricants
- Everything from one source, from genuine parts to original lubricants
- Competent advice on parts and lubricants
- Lubrication schedule creation

* Availability depends on product and country

Reliability

World-Renowned Robustness

A Durable and Proven Design

In demanding applications Liebherr represents the benchmark for the robustness of its machines and the quality of the Liebherr components. Several casted parts are used for the design of the machine and are a testimony to the expertise and know-how of the manufacturer. With the large-sized attachments the R 976 crawler excavator is ideal for tough applications.

A Proven Production Process and Advanced Technology

Liebherr development process integrates advanced digital tools in the fields of finite element computation, fatigue calculation and other simulation software. The results are then validated on special test benches prior to carrying out endurance tests on the entire machine in extreme conditions.

High-Performance and Durable Undercarriage

Liebherr offers a large and unique range of welded or bolted undercarriages. The chamfered track pads have optimal manoeuvrability and are more resistant to wear on rocky terrain. The Liebherr travel drive is more powerful and better protected. The supporting rollers with double bearings guarantee improved load distribution and thus better durability over time.

Specific Solutions Tailored to Customer Requirements

In the case a customer has a special request to address a specific application the customized solutions are designed and manufactured by Liebherr. This ensures successful integration and optimal performance of the excavator for the customer. As a sign of reliability Liebherr provides a manufacturer's warranty for the entire excavator including specific components as well as the electronics.

SCR System with Diesel Exhaust Fluid (AdBlue®)

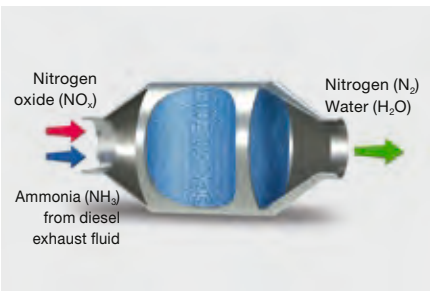
- Diesel exhaust fluid level indicator on the display
- Liebherr design
- Complies with Stage IV standard
- No need for particle filters (DPF) and exhaust gas recycling (EGR)
- Simple system for enhanced reliability and less maintenance

Undercarriage

- Robust design for greater resistance and a better distribution of forces
- Easy and safe transport thanks to integrated securing hooks
- Three different types of undercarriage, welded or bolted

Key Components Developed by Liebherr

- Perfect harmonization of the machine elements, designed specifically for earthmoving and quarry applications
- Combustion engine, hydraulic pumps, swing mechanism, cylinders and electronic components are designed and manufactured by Liebherr
- Purpose built options such as special attachment lengths
- Specific tools and custom protection can be added at the factory



Comfort

Spacious Cab, Ergonomic and High-Visibility

A Spacious and Ergonomic Work Station

The cab offers a generous space for maximum comfort. Equipped, among other things, with a pneumatic seat with heater as standard (optional with airconditioning), controls connected to the seat and high-performance automatic air-conditioning, the cab creates a pleasant working environment. All the controls are precisely laid out in an intuitive manner for greater responsiveness and concentration while working. The cab is mounted on viscoelastic studs for significantly lower vibration.

Fully Automatic Air-Conditioning

The automatic air-conditioning with touchscreen controls has several ventilation outlets for optimum ambient air in the cab.

High Resolution Color Touchscreen

The color touchscreen is a true human-machine interface for controlling several comfort functions, such as the radio, and more operational functions, such as work modes, tool types and even the backup camera.

A Spacious and Comfortable Cab

The cab of the R 976 is the most spacious cab in 90 tonne machine class. It offers unrivalled comfort for higher operator productivity during long working hours. With the highest level of protection on the market the impact-resistant windows offer maximum safety.

Control Screen

- 7" color touchscreen
- Several setting, control and surveillance options
- Robust and reliable design (Ingress Protection Rating IP65)
- Compatible high resolution video for displaying the rear camera image

Increased Visibility

- Rear camera integrated in the counterweight as standard and camera for side area monitoring, for rear visibility and heightened operating safety
- Optimized design of the whole uppercarriage providing the operator with an improved field of vision
- Secure emergency exit through the rear window

New Options

- Lighting in engine compartment
- LED headlights with adjustable current value
- 360° camera
- Follow me home (headlight cutoff delay)
- Windshield wiper on bottom part

Easy Maintenance

Simple and Safe Service Check Points

Ergonomic Access and Time-Saving

For maximum safety during servicing different types of platforms are available with a large central platform in particular for access to engine and hydraulic system components. The two-piece engine hood facilitates easier opening and closing. Fluid level monitoring, such as the engine oil level or urea tank level can be carried out quickly and easily from the touchscreen in the cab. The automatic lubrication system reduces precious servicing time while guaranteeing optimal lubrication of the excavator.

Less Maintenance for more Productivity

The frequency of the service intervals is optimised to guarantee that each part is functioning optimally and that the maintenance tasks are only performed as necessary. Whether it is the interval for changing the hydraulic oil, which can be up to 8,000 hours, or the interval for changing the engine oil, every 1,000 hours, everything has been taken into account to reduce the frequency of interventions and thus limit the machine's downtime and lower costs.

An Exhaust Gas Treatment without Maintenance

Thanks to its unique Liebherr design, the exhaust gas treatment is carried out in compliance with the Stage IV standards, without fitting a particle filter and exhaust gas recycling (EGR). This results in an output with no loss of productivity linked to the regeneration of these filters and, of course, no maintenance time or cost of spare parts associated with this technology.

Expert Advice and Service Provisions

Liebherr offers an expert advice service. Qualified personnel will help you make the appropriate decisions to meet your needs: sales arguments based on the terrain, service agreements, advantageous repair alternatives, original parts management, and remote data transfer for fleet management.

LiDAT Data Transfer System

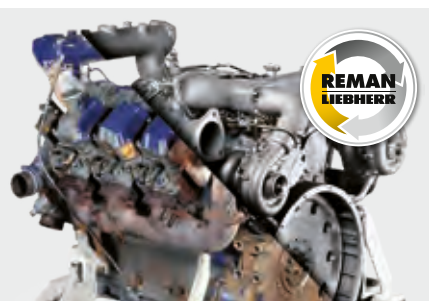
- Complete fleet management, all from one source
- Optimized economical performance of the machine park thanks to detailed view of the distribution of operating states and times
- Reports on capacity commitment and the use of the machine park can be called up daily via the Web portal
- Precise location of the machine
- Regional delimitation and fixed downtimes increase safety and reliability

Liebherr AdBlue Solution

- The crawler excavator has a stainless steel urea tank with capacity for 180 litres
- For maximum safety, the tank can be refilled using a filling pump and gun (optional)
- An 24 V electric field supply is also available for connecting the filling kit

Liebherr Warranties and Remanufacturing

- Significant warranties for the complete excavator and key components
- Optimal planning of all servicing activities
- Liebherr remanufacturing programme for processing worn components, conforming to the highest industrial standards



Long Live Progress with the R 976

Equipment
- Cast steel components
- Greater resistance to stresses
- Longer service life
- Safety check valves for stick and boom cylinders with integrated re-generation for less fuel consumption

Tools
- Different levels of protection to suit the different areas of application
- New Liebherr Z-type tooth system

Operator's Cab

- Comfortable and ergonomic design
- 7" high definition colour touch screen
- Wider for more comfort
- Impact resistant windows at the front and in the roof as standard
- Optional FOPS and FGPS protective guards

Accessibility

- Maintenance platform in the engine compartment
- Broad, anti-slip side catwalks (right and left) as standard

Undercarriage

- Robust structure thanks to the more rigid profile
- Molded two-tooth sprocket for a longer service life
- Two types of undercarriage available: an HD fixed-track gauge and LC-V variable-track gauge

Long Live Progress with the R 976 Shovel

Equipment
- Cast steel parts
- Parallel kinematics for powerful and regular digging
- Bucket cylinders positioned under the equipment for better protection against the elements
- Safety valves on boom cylinder for pipe burst protection

Buckets
- The front shovel is the perfect shape for digging deep into the material and for a high filling rate
- Several levels of protection for the front shovel, depending on requirements
- Type I: non-abrasive materials, such as limestone without flint
- Type II: Shot material, or easily breakable rock (classification 3 to 4 according to DIN 18300)
- Type III: Highly abrasive materials, such as rocks with a high silica content, sandstone, granite, etc.
- Different design of blades: straight blade (loading) semi-delta (compacted materials) delta (direct excavation)

Operator's Cab

- Comfortable and ergonomic design
- 7" high-resolution colour touch screen
- Wider for more comfort
- Impact resistant windows at the front and in the roof as standard
- Optional FOPS and FGPS protection guards
- Operator's cab with a fixed riser for a full view over the work area

Technical Data

Engine

Rating per ISO 9249	400 kW (544 HP) at 1,800 RPM
Torque	2,976 Nm at 1,200 RPM
Model	Liebherr D9508 A7 SCR
Type	8 cylinder V engine
Bore	128 mm
Stroke	157 mm
Displacement	16.16 l
Engine operation	4-stroke diesel Common-Rail
Exhaust gas treatment	SCR system (Selective Catalytic Reduction) emission standard stage IV
Cooling system	water-cooled and integrated motor oil cooler, after-cooled and fuel cooled
Air cleaner	dry-type air cleaner with pre-cleaner, primary and safety elements
Fuel tank	1,498 l
Urea tank	180 l
Electrical system	
Voltage	24 V
Batteries	2 x 180 Ah / 12 V
Starter	24 V / 7.8 kW
Alternator	three-phase current 28 V / 140 A
Engine idling	sensor controlled
Motor management	connection to the integrated excavator system controlling via CAN-BUS to the economical utilisation of the service that is available

Hydraulic Controls

Power distribution	via control valves in single block with integrated safety valves
Flow summation	to boom and stick
Closed-loop circuit	for uppercarriage swing drive
Servo circuit	electro-hydraulic control
Attachment and swing	proportional via joystick levers
Travel	– with proportionally functioning foot pedals or adjusted with plugable levers – speed pre-selection
Additional functions	proportional regulation via foot pedals or joystick toggle switch

Hydraulic System

Hydraulic pump	
for attachment and travel drive	two Liebherr variable displacement, swashplate pumps
Max. flow	2 x 498 l/min.
Max. pressure	350 bar
for swing drive	reversible, variable displacement, swashplate pump, closed-loop circuit
Max. flow	315 l/min.
Max. pressure	350 bar
Pump regulation	electro-hydraulic with electronic engine speed sensing regulation, minimum flow adjustment, flow compensation, high flow
Hydraulic tank	536 l
Hydraulic system	1,134 l
Hydraulic oil filter	2 full flow filters in return line with integrated fine filter area (5 µm)
Cooling system	cooler for transmission pump oil and cooler for oil and condenser of air-conditioning with hydrostatically controlled fan drives
MODE selection	adjustment of engine and hydraulic performance via a mode pre-selector to match application, e.g. for especially economical and environmentally friendly operation or for maximum digging performance and heavy-duty jobs
RPM adjustment	stepless adjustment of engine output via RPM at each selected mode
Tool Control	10 preadjustable pump flows and pressures for add-on tools

Swing Drive

Drive	Liebherr swashplate motor with integrated brake valve
Transmission	Liebherr compact planetary reduction gears
Swing ring	Liebherr, sealed race ball bearing swing ring, internal teeth
Swing speed	0 – 5.9 RPM stepless
Swing torque	295 kNm
Holding brake	wet multi-disc (spring applied, pressure released)

Operator's Cab

Cab	work headlights integrated in the ceiling, a door with a sliding window (can be opened on both sides), large stowing and depositing possibilities, shock-absorbing suspension, sounddamping insulating, tinted laminated safety glass, separate window shades for the sunroof window and windscreen, cigarette lighter and 12 V plug, storage bins, lunchbox, cup holder
Operator's seat	Liebherr-Comfort seat, airsprung with automatic weight adjustment, vertical and longitudinal seat damping including consoles and joysticks. Seat and armrests adjustable separately and in combination, seat heating as standard
Control system	arm consoles, swinging with the seat
Operation and displays	large high-resolution colour display with self-explanatory operation via touchscreen, video, versatile adjusting, control and monitoring facilities, e.g. climate control, implement and tool parameters
Air-conditioning	standard automatic air-conditioning fully controlled on the display, ambient air function, fast de-icing and demisting at the press of a button, air vents can be operated via a menu. Ambient air and fresh air filters can be easily replaced and are accessible from outside and standing on the ground. Heating-cooling unit, designed for extreme outside temperatures, sensors for solar radiation, inside and outside temperatures

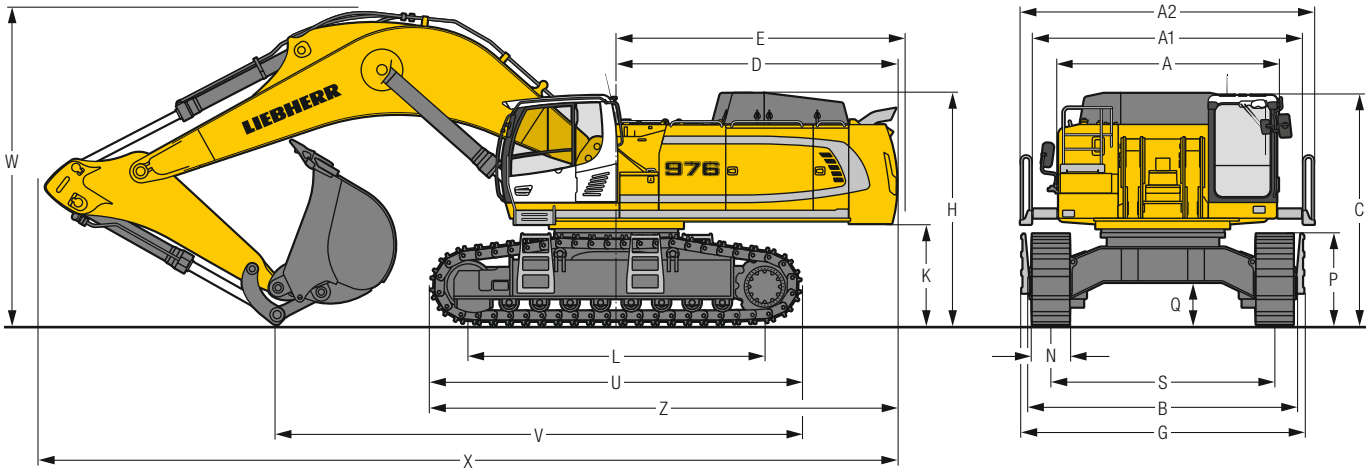
Undercarriage

Versions	
HD	gauge 3,600 mm
LC-V	gauge 3,590 mm
Drive	Liebherr swashplate motor with brake valves on both sides
Transmission	Liebherr compact planetary reduction gear
Maximum travel speed	low range 2.7 km/h high range 4.3 km/h
Net drawbar pull on crawler	568 kN
Track components	D9G, maintenance-free
Track rollers/ Carrier rollers	HD: 8/2 LC-V: 9/3
Tracks	sealed and greased
Track pads	double grouser
Holding brake	wet multi-disc (spring applied, pressure released)
Brake valves	outside the travel motor
Lashing eyes	integrated

Attachment

Type	combination of resistant steel plates and cast steel components
Hydraulic cylinders	Liebherr cylinders with special seal-system, shock protection
Bearings	sealed, low maintenance
Lubrication	automatic central lubrication system (except link and tilt geometry)
Hydraulic connections	pipes and hoses equipped with SAE split-flange connections
Buckets	standard equipped with Liebherr tooth system

Dimensions



	HD			mm
A				3,565
A1				4,355
A2				4,730
C				3,695/3,890*
D				4,515
E				4,640
H				3,725
K				1,620
L				4,770
P				1,460
Q				682
S				3,600
U				5,960
N		500	600	750
B		4,290	4,290	4,350
G		4,540	4,540	4,540
Z				7,490

* with FOPS top guard

** transport position

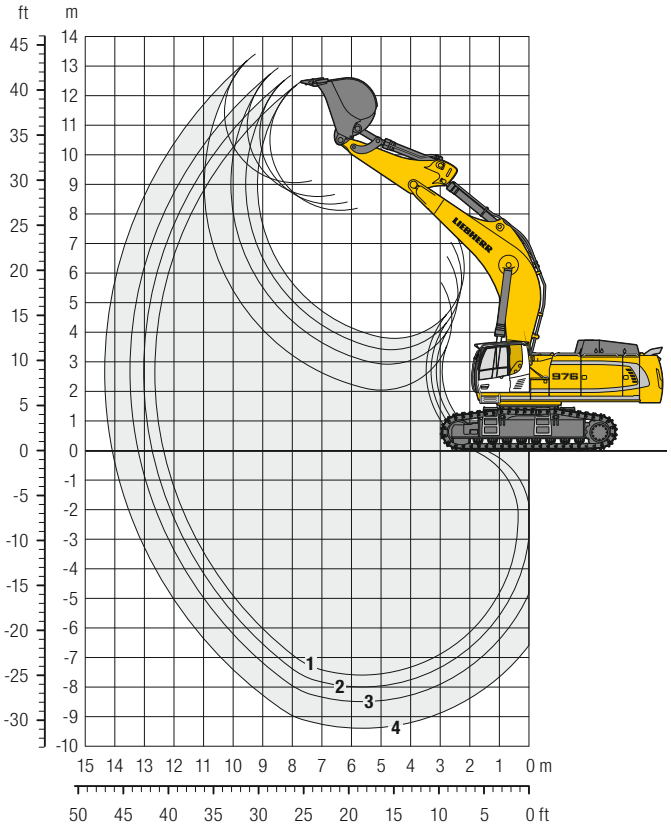
	LC-V			mm
A				3,565
A1				4,355
A2				4,730
C				3,835/4,030*
D				4,515
E				4,640
H				3,865
K				1,755
L				5,160
P				1,495
Q				955
S				2,750**/3,590
U				6,335
N		500	600	750
B		3,490**	3,490**	3,500**
G		3,870**	3,870**	3,870**
Z				7,680

HD-Undercarriage	Stick length m	Mono boom 7.20 m mm	Mono boom 8.60 m mm	Mono boom 10.50 m mm
V	2.90	8,450	–	–
	3.30	8,200	9,950	–
	3.80	8,100	9,850	11,900
	4.70	7,950	9,650	11,700
	5.80	–	9,650	11,550
W	2.90	5,100	–	–
	3.30	5,250	5,450	–
	3.80	5,550	5,600	5,900
	4.70	6,050	6,000	6,100
	5.80	–	6,800	6,800
X	2.90	13,800	–	–
	3.30	13,500	14,900	–
	3.80	13,400	14,750	16,650
	4.70	13,150	14,550	16,450
	5.80	–	14,150	16,150

LC-V-Undercarriage	Stick length m	Mono boom 7.20 m mm	Mono boom 8.60 m mm	Mono boom 10.50 m mm
V	2.90	8,600	–	–
	3.30	8,350	10,100	–
	3.80	8,200	10,000	12,050
	4.70	8,050	9,800	11,850
	5.80	–	9,750	11,700
W	2.90	5,150	–	–
	3.30	5,350	5,500	–
	3.80	5,600	5,700	6,000
	4.70	6,150	6,000	6,200
	5.80	–	6,750	6,800
X	2.90	13,800	–	–
	3.30	13,500	14,900	–
	3.80	13,450	14,750	16,650
	4.70	13,250	14,550	16,500
	5.80	–	14,250	16,250

Backhoe Bucket

with Mono Boom 7.20 m and Counterweight 14.1 t



Digging Envelope

		1	2	3	4
Stick length	**m**	2.90	3.30	3.80	4.70
Max. digging depth	**m**	7.45	7.85	8.35	9.25
Max. reach at ground level	**m**	12.30	12.70	13.20	14.05
Max. dumping height	**m**	8.25	8.50	8.75	9.20
Max. teeth height	**m**	12.60	12.85	13.10	13.55

Forces

		1	2	3	4
Max. digging force (ISO 6015)	**kN**	390	361	329	284
Max. breakout force (ISO 6015)	**kN**	485	485	485	485
Max. digging force (SAE J1179)	**kN**	374	347	317	276
Max. breakout force (SAE J1179)	**kN**	437	437	437	437

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 14.1 t, mono boom 7.20 m, stick 2.90 m and bucket 5.20 m³ (4,600 kg).

Undercarriage		**HD**			**LC-V**		
Pad width	**mm**	500	600	750	500	600	750
Weight	**kg**	85,800	86,600	87,700	91,200	92,000	93,100
Ground pressure	**kg/cm²**	1.65	1.39	1.13	1.64	1.38	1.12

Optional: counterweight 16.0 t
(counterweight 16.0 t increases the operating weight by 1,900 kg and ground pressure by 0.04 kg/cm²) see load tables on page 30

Buckets Machine stability per ISO 10567* (75 % of tipping capacity)

	Cutting width	Capacity ISO 7451	Weight	HD-Undercarriage (with track pads 600 mm) Stick length (m)				LC-V-Undercarriage (with track pads 600 mm) Stick length (m)			
	mm	m³	kg	2.90	3.30	3.80	4.70	2.90	3.30	3.80	4.70
STD[1]	1,400	2.70	3,450	▲	▲	▲	▲	▲	▲	▲	▲
	1,600	3.20	3,750	▲	▲	▲	▲	▲	▲	▲	▲
	1,800	3.80	4,000	▲	▲	▲	▲	▲	▲	▲	▲
	1,950	4.30	4,200	▲	▲	▲	▲	▲	▲	▲	▲
	2,150	4.80	4,450	▲	▲	▲	■	▲	▲	▲	■
	2,300	5.20	4,600	▲	▲	▲	▲	▲	▲	▲	■
	2,300	5.80	4,800	▲	■	▲	△	▲	▲	■	■
	2,600	6.60	5,100	■	▲	■	△	■	■	▲	△
HD[2]	1,400	2.60	3,800	▲	▲	▲	▲	▲	▲	▲	▲
	1,600	3.10	4,250	▲	▲	▲	▲	▲	▲	▲	▲
	1,800	3.60	4,400	▲	▲	▲	▲	▲	▲	▲	▲
	1,950	4.10	4,800	▲	▲	▲	▲	▲	▲	▲	▲
	2,150	4.60	5,050	▲	▲	▲	■	▲	▲	▲	■
	2,300	5.20	5,400	▲	▲	■	■	▲	▲	▲	▲
	2,300	5.60	5,450	▲	■	▲	△	▲	▲	■	■
	2,450	6.20	5,900	■	▲	■	△	■	■	▲	△
HDV[3]	1,950	4.20	5,700	▲	▲	▲	■	▲	▲	▲	▲
	2,150	4.70	6,000	▲	▲	■	■	▲	▲	▲	▲
	2,300	5.20	6,300	▲	■	▲	△	▲	▲	■	■
	2,300	5.70	6,400	■	▲	■	△	▲	■	▲	△

* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground
[1] Standard bucket with Liebherr teeth Z 90
[2] HD bucket with Liebherr teeth Z 90
[3] HDV bucket with Liebherr teeth Z 90
Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.65 t/m³, ■ = ≤ 1.5 t/m³, – = not authorised

Lift Capacities

with Mono Boom 7.20 m, Counterweight 14.1 t and Track Pads 600 mm

Stick 2.90 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
HD	13.5															
	12.0															
	10.5													23.9*	23.9*	6.4
	9.0							21.9*	21.9*					21.3*	21.3*	8.0
	7.5							22.1*	22.1*	19.5	20.4*			19.5	20.2*	9.0
	6.0					27.7*	27.7*	23.6*	23.6*	19.2	21.3*			16.9	19.9*	9.7
	4.5					31.9*	31.9*	24.6	25.6*	18.6	22.2*			15.5	19.9	10.1
	3.0					32.2	35.5*	23.4	27.6*	18.0	23.2*			14.7	19.0	10.3
	1.5					30.8	37.2*	22.4	28.9*	17.4	22.7			14.6	18.9	10.2
	0					30.1	37.0*	21.8	29.1	17.0	22.3			15.0	19.5	9.9
	– 1.5			38.5*	38.5*	29.9	35.1*	21.6	28.0*	16.9	22.1			16.1	21.1*	9.3
	– 3.0	40.6*	40.6*	38.9*	38.9*	30.2	31.4*	21.8	25.0*					18.6	20.7*	8.5
	– 4.5			30.5*	30.5*	24.6*	24.6*							19.2*	19.2*	7.1
	– 6.0															
	– 7.5															
	– 9.0															
	–10.5															
LC-V	13.5															
	12.0															
	10.5													23.5*	23.5*	6.4
	9.0							21.9*	21.9*					21.2*	21.2*	8.0
	7.5							22.2*	22.2*	20.4	21.1*			20.1	20.2*	9.0
	6.0					28.0*	28.0*	23.7*	23.7*	20.1	21.4*			17.6	19.9*	9.7
	4.5					32.2*	32.2*	25.7	25.8*	19.5	22.3*			16.2	20.2*	10.1
	3.0					33.6	35.7*	24.5	27.7*	18.8	23.2*			15.5	20.8*	10.3
	1.5					32.2	37.3*	23.5	28.9*	18.3	23.9*			15.4	20.9*	10.2
	0					31.6	36.9*	22.9	29.1*	17.9	23.7*			15.9	21.1*	9.9
	– 1.5			40.4*	40.4*	31.5	34.9*	22.7	27.8*	17.8	22.2*			17.2	21.1*	9.3
	– 3.0	42.5*	42.5*	38.4*	38.4*	31.0*	31.0*	23.0	24.5*					19.9	20.6*	8.5
	– 4.5			29.5*	29.5*	23.8*	23.8*							18.9*	18.9*	7.1
	– 6.0															
	– 7.5															
	– 9.0															
	–10.5															

Stick 3.30 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
HD	13.5															
	12.0															
	10.5													20.1*	20.1*	7.0
	9.0							20.6*	20.6*					18.2*	18.2*	8.4
	7.5							21.0*	21.0*	19.8	20.0*			17.3*	17.3*	9.4
	6.0					26.3*	26.3*	22.6*	22.6*	19.4	20.5*			15.9	17.1*	10.1
	4.5					30.6*	30.6*	24.8*	24.8*	18.7	21.5*			14.6	17.3*	10.5
	3.0					32.7	34.5*	23.6	26.9*	18.0	22.7*	14.2	18.4	13.9	18.0*	10.6
	1.5					31.1	36.8*	22.6	28.5*	17.4	22.7	13.9	18.0	13.8	17.8	10.6
	0					30.2	37.2*	21.9	29.0*	16.9	22.2			14.1	18.3	10.3
	– 1.5			36.8*	36.8*	29.9	35.8*	21.5	28.3*	16.7	22.0			15.1	19.7	9.7
	– 3.0	36.6*	36.6*	41.3*	41.3*	30.0	32.6*	21.6	25.9*					17.1	20.1*	8.9
	– 4.5			33.5*	33.5*	26.8*	26.8*	20.1*	20.1*					19.1*	19.1*	7.7
	– 6.0															
	– 7.5															
	– 9.0															
	–10.5															
LC-V	13.5															
	12.0															
	10.5													19.9*	19.9*	7.0
	9.0							20.5*	20.5*					18.1*	18.1*	8.4
	7.5							21.1*	21.1*	20.0*	20.0*			17.3*	17.3*	9.4
	6.0					26.7*	26.7*	22.8*	22.8*	20.2	20.5*			16.5	17.1*	10.1
	4.5					31.0*	31.0*	25.0*	25.0*	19.6	21.6*	15.3	17.4*	15.3	17.4*	10.5
	3.0					34.0	34.8*	24.6	27.1*	18.9	22.7*	15.0	20.0*	14.6	18.0*	10.6
	1.5					32.5	36.9*	23.6	28.6*	18.3	23.6*	14.6	20.1*	14.5	19.3*	10.6
	0					31.7	37.1*	23.0	29.0*	17.8	23.7*			14.9	20.1*	10.3
	– 1.5			38.3*	38.3*	31.4	35.6*	22.7	28.2*	17.6	22.7*			16.0	20.2*	9.7
	– 3.0	38.2*	38.2*	40.8*	40.8*	31.5	32.2*	22.7	25.6*					18.3	20.0*	8.9
	– 4.5			32.7*	32.7*	26.1*	26.1*	19.2*	19.2*					18.9*	18.9*	7.7
	– 6.0															
	– 7.5															
	– 9.0															
	–10.5															

Stick 3.80 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
HD	13.5															
	12.0															
	10.5							18.3*	18.3*					16.7*	16.7*	7.7
	9.0									15.7*	15.7*			15.3*	15.3*	9.0
	7.5							19.7*	19.7*	18.8*	18.8*			14.7*	14.7*	10.0
	6.0							21.4*	21.4*	19.5*	19.5*	15.0	15.6*	14.5*	14.5*	10.6
	4.5					28.9*	28.9*	23.7*	23.7*	18.9	20.7*	14.7	18.8*	13.6	14.7*	11.0
	3.0					33.2*	33.2*	23.9	26.1*	18.2	22.0*	14.3	18.5	13.0	15.2*	11.1
	1.5					31.4	36.1*	22.7	27.9*	17.5	22.8	13.9	18.0	12.9	16.1*	11.0
	0					30.3	37.1*	21.9	28.8*	16.9	22.2	13.6	17.7	13.1	17.1	10.8
	– 1.5			34.9*	34.9*	29.8	36.3*	21.5	28.5*	16.6	21.9			13.9	18.2	10.3
	– 3.0	32.7*	32.7*	43.8*	43.8*	29.8	33.8*	21.4	26.8*	16.6	21.2*			15.6	19.3*	9.5
	– 4.5	48.1*	48.1*	36.9*	36.9*	29.0*	29.0*	21.7	22.6*					18.8*	18.8*	8.3
	– 6.0					19.8*	19.8*							17.2*	17.2*	6.5
	– 7.5															
	– 9.0															
	–10.5															
LC-V	13.5															
	12.0															
	10.5							18.9*	18.9*					16.6*	16.6*	7.7
	9.0									16.6*	16.6*			15.2*	15.2*	9.0
	7.5							19.8*	19.8*	18.8*	18.8*			14.6*	14.6*	10.0
	6.0							21.6*	21.6*	19.6*	19.6*	15.7	16.1*	14.5*	14.5*	10.6
	4.5					29.3*	29.3*	23.9*	23.9*	19.8	20.8*	15.4	18.9*	14.3	14.7*	11.0
	3.0					33.5*	33.5*	24.9	26.2*	19.0	22.1*	15.0	19.5*	13.7	15.2*	11.1
	1.5					32.8	36.2*	23.8	28.0*	18.3	23.1*	14.6	19.9*	13.6	16.2*	11.0
	0					31.8	37.1*	23.0	28.8*	17.8	23.6*	14.3	19.7*	13.9	17.7*	10.8
	– 1.5			36.1*	36.1*	31.3	36.2*	22.6	28.5*	17.5	23.1*			14.8	19.3*	10.3
	– 3.0	33.9*	33.9*	43.3*	43.3*	31.3	33.5*	22.5	26.5*	17.6	20.9*			16.7	19.3*	9.5
	– 4.5	47.0*	47.0*	36.2*	36.2*	28.5*	28.5*	22.0*	22.0*					18.7*	18.7*	8.3
	– 6.0															
	– 7.5															
	– 9.0															
	–10.5															

Stick 4.70 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
HD	13.5															
	12.0															
	10.5													12.6*	12.6*	8.9
	9.0									15.8*	15.8*			11.7*	11.7*	10.1
	7.5									16.7*	16.7*	14.0*	14.0*	11.2*	11.2*	10.9
	6.0									17.7*	17.7*	15.4	16.4*	11.1*	11.1*	11.5
	4.5					25.6*	25.6*	21.5*	21.5*	19.1*	19.1*	15.0	17.5*	11.2*	11.2*	11.8
	3.0					30.4*	30.4*	24.2*	24.2*	18.5	20.6*	14.5	18.3*	11.6*	11.6*	12.0
	1.5					32.2	34.2*	23.1	26.6*	17.7	22.1*	14.0	18.1	11.4	12.2*	11.9
	0					30.7	36.4*	22.1	28.1*	17.0	22.3	13.5	17.7	11.6	13.1*	11.6
	– 1.5	18.1*	18.1*	32.5*	32.5*	29.8	36.7*	21.4	28.6*	16.5	21.8	13.3	17.4	12.2	14.6*	11.2
	– 3.0	27.4*	27.4*	43.5*	43.5*	29.5	35.4*	21.1	27.7*	16.3	21.6			13.3	17.0*	10.5
	– 4.5	39.3*	39.3*	41.9*	41.9*	29.6	32.0*	21.2	25.2*	16.5	19.5*			15.5	17.7*	9.4
	– 6.0	44.9*	44.9*	33.5*	33.5*	25.9*	25.9*	19.4*	19.4*					16.9*	16.9*	8.0
	– 7.5															
	– 9.0															
	–10.5															
LC-V	13.5															
	12.0															
	10.5									12.6*	12.6*			12.4*	12.4*	8.9
	9.0									15.9*	15.9*			11.6*	11.6*	10.1
	7.5									16.8*	16.8*	14.2*	14.2*	11.2*	11.2*	10.9
	6.0							18.8*	18.8*	17.8*	17.8*	16.1	16.6*	11.1*	11.1*	11.5
	4.5					26.0*	26.0*	21.8*	21.8*	19.2*	19.2*	15.7	17.6*	11.2*	11.2*	11.8
	3.0					30.8*	30.8*	24.5*	24.5*	19.3	20.8*	15.2	18.4*	11.6*	11.6*	12.0
	1.5					33.6	34.5*	24.2	26.7*	18.5	22.2*	14.7	19.2*	12.1	12.2*	11.9
	0			26.1*	26.1*	32.1	36.5*	23.2	28.2*	17.8	23.1*	14.3	19.5*	12.3	13.3*	11.6
	– 1.5	18.9*	18.9*	33.2*	33.2*	31.3	36.7*	22.5	28.5*	17.4	23.2*	14.0	19.2*	13.0	14.8*	11.2
	– 3.0	28.3*	28.3*	44.7*	44.7*	31.0	35.1*	22.3	27.6*	17.2	22.2*			14.2	17.3*	10.5
	– 4.5	40.5*	40.5*	41.3*	41.3*	31.2	31.6*	22.4	24.9*	17.4	19.1*			16.6	17.7*	9.4
	– 6.0	43.4*	43.4*	32.5*	32.5*	25.1*	25.1*	18.6*	18.6*					16.8*	16.8*	8.0
	– 7.5															
	– 9.0															
	–10.5															

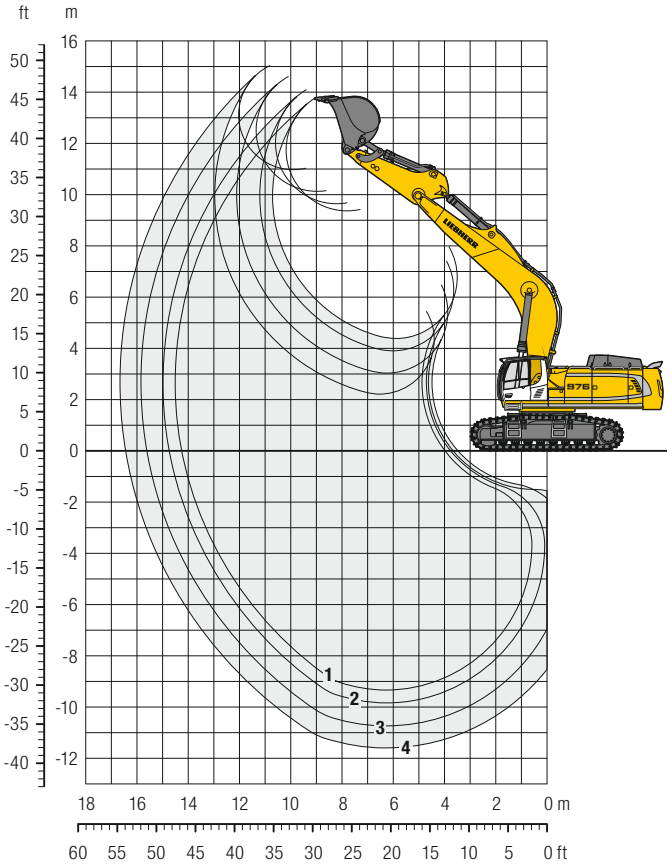
Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

Backhoe Bucket

with Mono Boom 8.60 m and Counterweight 14.1 t



Digging Envelope

		1	2	3	4
Stick length	**m**	3.30	3.80	4.70	5.80
Max. digging depth	**m**	9.20	9.70	10.60	11.45
Max. reach at ground level	**m**	14.20	14.70	15.60	16.40
Max. dumping height	**m**	9.50	9.80	10.30	11.10
Max. teeth height	**m**	13.90	14.20	14.75	15.15

Forces

		1	2	3	4
Max. digging force (ISO 6015)	**kN**	361	329	284	249
Max. breakout force (ISO 6015)	**kN**	485	485	485	356
Max. digging force (SAE J1179)	**kN**	347	317	276	237
Max. breakout force (SAE J1179)	**kN**	437	437	437	315

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 14.1 t, mono boom 8.60 m, stick 3.80 m and bucket 3.80 m³ (4,000 kg).

Undercarriage		**HD**			**LC-V**		
Pad width	**mm**	500	600	750	500	600	750
Weight	**kg**	86,500	87,200	88,300	91,800	92,600	93,700
Ground pressure	**kg/cm²**	1.67	1.40	1.14	1.65	1.39	1.12

Optional: counterweight 16.0 t
(counterweight 16.0 t increases the operating weight by 1,900 kg and ground pressure by 0.04 kg/cm²) see load tables on pages 31 and 32

Buckets Machine stability per ISO 10567* (75 % of tipping capacity)

	Cutting width	Capacity ISO 7451	Weight	HD-Undercarriage (with track pads 600 mm) Stick length (m)				LC-V-Undercarriage (with track pads 600 mm) Stick length (m)			
	mm	m³	kg	3.30	3.80	4.70	5.80	3.30	3.80	4.70	5.80
STD[1]	1,600	3.20	3,750	▲	▲	▲	–	▲	▲	▲	–
	1,800	3.80	4,000	▲	■	▲	–	▲	▲	■	–
	1,950	4.30	4,200	■	▲	△	–	▲	■	■	–
	2,150	4.80	4,450	▲	■	△	–	■	■	△	–
	2,300	5.20	4,600	■	△	–	–	▲	■	△	–
	2,300	5.80	4,800	△	△	–	–	△	△	–	–
HD[2]	1,600	3.10	4,250	▲	▲	■	–	▲	▲	▲	–
	1,800	3.60	4,400	▲	▲	▲	–	▲	▲	■	–
	1,950	4.10	4,800	■	▲	△	–	▲	■	■	–
	2,150	4.60	5,050	▲	△	△	–	▲	■	△	–
	2,300	5.20	5,400	△	△	–	–	■	△	–	–
	2,300	5.60	5,450	△	–	–	–	△	△	–	–
STD[3]	1,750	3.00	3,150	–	–	–	▲	–	–	–	▲
	1,950	3.50	3,450	–	–	–	▲	–	–	–	■
	2,150	4.00	3,600	–	–	–	△	–	–	–	■
	2,150	4.50	3,900	–	–	–	△	–	–	–	△
HD[4]	1,800	2.50	3,850	–	–	–	▲	–	–	–	▲
	2,000	3.00	4,100	–	–	–	■	–	–	–	■
	2,150	3.50	4,450	–	–	–	△	–	–	–	■

* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground
[1] Standard bucket with Liebherr teeth Z 90
[2] HD bucket with Liebherr teeth Z 90
[3] Standard bucket from R 966 Litronic with Liebherr teeth Z 70
[4] HD bucket from R 966 Litronic with Liebherr teeth Z 90
Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.65 t/m³, ■ = ≤ 1.5 t/m³, – = not authorised

Lift Capacities

with Mono Boom 8.60 m, Counterweight 14.1 t and Track Pads 600 mm

Stick 3.30 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m				m
HD	13.5																							
	12.0																							
	10.5									16.4*	16.4*											16.5*	16.5*	**9.1**
	9.0									16.0*	16.0*											15.4	15.9*	**10.3**
	7.5							18.4*	18.4*	16.6*	16.6*	14.7	15.7*									13.2	15.7*	**11.1**
	6.0							20.5*	20.5*	17.8*	17.8*	14.3	16.1*									11.9	15.4	**11.6**
	4.5							22.8	22.9*	17.5	19.1*	13.8	16.9*									11.1	14.4	**12.0**
	3.0							21.3	25.1*	16.6	20.5*	13.3	17.4	10.8	14.2							10.6	13.9	**12.1**
	1.5							20.3	26.5*	15.9	21.1	12.8	16.9	10.6	13.9							10.5	13.8	**12.1**
	0							19.8	26.9	15.4	20.6	12.5	16.6									10.6	14.1	**11.8**
	– 1.5					27.4	31.7*	19.6	26.6*	15.2	20.4	12.4	16.4									11.2	14.8	**11.4**
	– 3.0			27.5*	27.5*	27.7	31.1*	19.7	25.4*	15.2	20.4	12.5	16.6									12.3	16.3	**10.7**
	– 4.5			33.7*	33.7*	27.9*	27.9*	20.1	23.0*	15.6	18.6*											14.4	16.3*	**9.7**
	– 6.0			27.3*	27.3*	22.9*	22.9*	18.3*	18.3*													15.4*	15.4*	**8.3**
	– 7.5																							
	– 9.0																							
	–10.5																							
LC-V	13.5																							
	12.0																							
	10.5									16.3*	16.3*											16.4*	16.4*	**9.1**
	9.0									16.0*	16.0*											15.9*	15.9*	**10.3**
	7.5							18.5*	18.5*	16.7*	16.7*	15.4	15.7*									13.8	15.6*	**11.1**
	6.0							20.7*	20.7*	17.9*	17.9*	15.0	16.2*									12.5	15.6*	**11.6**
	4.5							23.1*	23.1*	18.3	19.3*	14.5	17.0*	11.7	15.7*							11.7	15.6*	**12.0**
	3.0							22.4	25.2*	17.4	20.6*	14.0	17.7*	11.4	15.9*							11.2	15.8*	**12.1**
	1.5							21.4	26.6*	16.7	21.5*	13.5	18.3*	11.2	16.1*							11.1	16.0*	**12.1**
	0							20.9	27.0*	16.3	22.0*	13.2	18.6*									11.3	16.2*	**11.8**
	– 1.5					29.0	32.9*	20.7	26.5*	16.1	21.8*	13.1	18.2*									12.0	16.4*	**11.4**
	– 3.0			28.9*	28.9*	29.3	30.8*	20.8	25.2*	16.2	20.7*	13.3	16.7*									13.2	16.5*	**10.7**
	– 4.5			33.3*	33.3*	27.6*	27.6*	21.3	22.7*	16.6	18.2*											15.5	16.3*	**9.7**
	– 6.0			26.6*	26.6*	22.3*	22.3*	17.7*	17.7*													15.3*	15.3*	**8.3**
	– 7.5																							
	– 9.0																							
	–10.5																							

Stick 3.80 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m				m
HD	13.5																							
	12.0																					16.3*	16.3*	**8.3**
	10.5									15.1*	15.1*											15.3*	15.3*	**9.8**
	9.0									15.0*	15.0*	14.8*	14.8*									14.1	14.9*	**10.8**
	7.5									15.8*	15.8*	14.9*	14.9*									12.3	14.6*	**11.6**
	6.0							19.5*	19.5*	17.0*	17.0*	14.5	15.5*	11.4	14.7*							11.1	14.4	**12.1**
	4.5							22.0*	22.0*	17.7	18.4*	13.9	16.3*	11.1	14.5							10.4	13.6	**12.5**
	3.0							21.6	24.3*	16.7	19.9*	13.3	17.2*	10.8	14.2							9.9	13.1	**12.6**
	1.5							20.5	25.9*	16.0	21.0*	12.8	16.9	10.5	13.9							9.8	13.0	**12.5**
	0							19.8	26.7*	15.4	20.6	12.4	16.5	10.3	13.7							10.0	13.2	**12.3**
	– 1.5					27.2	31.3*	19.5	26.6	15.1	20.3	12.2	16.3									10.4	13.8	**11.9**
	– 3.0			25.7*	25.7*	27.4	32.0*	19.5	25.8*	15.1	20.3	12.3	16.3									11.4	15.1	**11.2**
	– 4.5	29.5*	29.5*	36.2*	36.2*	27.8	29.2*	19.8	23.8*	15.3	19.4*											13.0	15.7*	**10.3**
	– 6.0			30.4*	30.4*	24.9*	24.9*	20.1*	20.1*													15.2*	15.2*	**9.0**
	– 7.5																							
	– 9.0																							
	–10.5																							
LC-V	13.5																							
	12.0																					16.2*	16.2*	**8.3**
	10.5									15.0*	15.0*											15.3*	15.3*	**9.8**
	9.0									15.1*	15.1*	14.7*	14.7*									14.6	14.9*	**10.8**
	7.5									15.8*	15.8*	14.9*	14.9*									12.8	14.6*	**11.6**
	6.0							19.7*	19.7*	17.1*	17.1*	15.2	15.5*	12.0	14.7*							11.7	14.5*	**12.1**
	4.5							22.2*	22.2*	18.5	18.6*	14.6	16.4*	11.8	15.0*							10.9	14.6*	**12.5**
	3.0							22.7	24.4*	17.6	20.0*	14.0	17.2*	11.4	15.4*							10.5	14.9*	**12.6**
	1.5							21.6	26.0*	16.8	21.1*	13.5	17.9*	11.1	15.8*							10.4	15.1*	**12.5**
	0							20.9	26.8*	16.3	21.7*	13.2	18.3*	10.9	15.8*							10.6	15.4*	**12.3**
	– 1.5					28.7	32.3*	20.6	26.6*	16.0	21.8*	13.0	18.3*									11.2	15.6*	**11.9**
	– 3.0			26.9*	26.9*	28.9	31.8*	20.6	25.6*	16.0	21.0*	13.0	17.4*									12.2	15.7*	**11.2**
	– 4.5	30.7*	30.7*	35.8*	35.8*	28.9*	28.9*	21.0	23.6*	16.3	19.2*											14.0	15.7*	**10.3**
	– 6.0			29.8*	29.8*	24.4*	24.4*	19.7*	19.7*													15.1*	15.1*	**9.0**
	– 7.5																							
	– 9.0																							
	–10.5																							

Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

Lift Capacities

with Mono Boom 8.60 m, Counterweight 14.1 t and Track Pads 600 mm

Stick 4.70 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m				m
HD	13.5																							
	12.0																					13.3*	13.3*	**9.5**
	10.5											13.3*	13.3*									12.2*	12.2*	**10.9**
	9.0											13.1*	13.1*									11.5*	11.5*	**11.8**
	7.5											13.4*	13.4*	11.9	13.1*							10.8	11.2*	**12.5**
	6.0									15.5*	15.5*	14.2*	14.2*	11.6	13.4*							9.8	11.1*	**13.0**
	4.5							20.1*	20.1*	17.0*	17.0*	14.1	15.2*	11.3	13.9*							9.2	11.2*	**13.3**
	3.0							22.3	22.6*	17.1	18.6*	13.5	16.2*	10.9	14.3							8.9	11.5*	**13.5**
	1.5							20.9	24.7*	16.1	20.0*	12.9	17.0	10.5	13.9							8.7	11.6	**13.4**
	0							19.9	26.0*	15.4	20.7	12.4	16.5	10.2	13.5							8.8	11.8	**13.2**
	– 1.5					27.0	30.4*	19.4	26.5*	15.0	20.2	12.1	16.2	10.0	13.3							9.2	12.2	**12.8**
	– 3.0			22.9*	22.9*	26.9	33.1*	19.2	26.1*	14.8	20.0	11.9	16.0	10.0	13.4							9.9	13.1	**12.2**
	– 4.5	24.3*	24.3*	33.5*	33.5*	27.2	31.1*	19.3	24.9*	14.9	20.1	12.1	16.1									11.0	14.5*	**11.3**
	– 6.0	35.3*	35.3*	35.1*	35.1*	27.7*	27.7*	19.7	22.3*	15.2	18.0*											13.1	14.4*	**10.1**
	– 7.5			27.7*	27.7*	22.2*	22.2*	17.5*	17.5*													13.6*	13.6*	**8.6**
	– 9.0																							
	–10.5																							
LC-V	13.5																							
	12.0																					13.1*	13.1*	**9.5**
	10.5											13.3*	13.3*									12.1*	12.1*	**10.9**
	9.0											13.1*	13.1*									11.5*	11.5*	**11.8**
	7.5									14.3*	14.3*	13.5*	13.5*	12.5	13.1*							11.2*	11.2*	**12.5**
	6.0							17.7*	17.7*	15.6*	15.6*	14.3*	14.3*	12.3	13.4*							10.4	11.1*	**13.0**
	4.5							20.3*	20.3*	17.2*	17.2*	14.8	15.2*	11.9	14.0*							9.8	11.2*	**13.3**
	3.0							22.8*	22.8*	17.9	18.8*	14.2	16.3*	11.5	14.6*							9.4	11.5*	**13.5**
	1.5							21.9	24.9*	17.0	20.2*	13.6	17.2*	11.1	15.1*							9.3	12.0*	**13.4**
	0							21.0	26.1*	16.3	21.1*	13.1	17.8*	10.8	15.5*							9.4	12.7*	**13.2**
	– 1.5					28.5	31.1*	20.5	26.5*	15.9	21.5*	12.8	18.1*	10.6	15.4*							9.8	13.8*	**12.8**
	– 3.0			23.7*	23.7*	28.5	32.9*	20.3	26.1*	15.7	21.3*	12.7	17.8*	10.7	14.6*							10.6	14.4*	**12.2**
	– 4.5	25.1*	25.1*	34.6*	34.6*	28.8	30.8*	20.5	24.7*	15.8	20.2*	12.8	16.5*									11.9	14.5*	**11.3**
	– 6.0	36.4*	36.4*	34.6*	34.6*	27.3*	27.3*	20.9	22.0*	16.2	17.6*											14.2	14.4*	**10.1**
	– 7.5			26.9*	26.9*	21.6*	21.6*	16.8*	16.8*													13.5*	13.5*	**8.6**
	– 9.0																							
	–10.5																							

Stick 5.80 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m				m
HD	13.5																							
	12.0											11.8*	11.8*									9.9*	9.9*	**11.0**
	10.5													10.1*	10.1*							9.2*	9.2*	**12.2**
	9.0													11.6*	11.6*							8.8*	8.8*	**13.0**
	7.5											12.1*	12.1*	11.8*	11.8*	9.8*	9.8*					8.6*	8.6*	**13.7**
	6.0											12.9*	12.9*	12.2	12.3*	9.7	11.8*					8.5*	8.5*	**14.1**
	4.5							17.9*	17.9*	15.6*	15.6*	14.0*	14.0*	11.8	13.0*	9.5	12.3*					8.3	8.6*	**14.4**
	3.0							20.8*	20.8*	17.4*	17.4*	14.1	15.2*	11.3	13.8*	9.2	12.1					8.0	8.8*	**14.5**
	1.5							22.0	23.3*	16.9	19.1*	13.4	16.4*	10.9	14.3	8.9	11.8					7.9	9.1*	**14.5**
	0							20.7	25.2*	16.0	20.4*	12.8	16.9	10.5	13.8	8.7	11.5					7.9	9.6*	**14.3**
	– 1.5					27.6	30.2*	19.9	26.3*	15.4	20.6	12.3	16.4	10.2	13.5	8.5	11.4					8.2	10.3*	**13.9**
	– 3.0			20.4*	20.4*	27.1	34.2*	19.5	26.6	15.0	20.2	12.1	16.1	10.0	13.3							8.7	11.3*	**13.3**
	– 4.5	19.9*	19.9*	27.8*	27.8*	27.1	33.0*	19.3	26.0*	14.9	20.1	12.0	16.1	10.0	13.4							9.5	12.6	**12.6**
	– 6.0	27.7*	27.7*	37.9*	37.9*	27.4	30.7*	19.5	24.5*	15.0	19.9*	12.1	16.2									10.8	13.5*	**11.5**
	– 7.5	38.2*	38.2*	34.6*	34.6*	26.8*	26.8*	20.0	21.4*	15.4	17.1*											13.3	13.4*	**10.2**
	– 9.0			25.9*	25.9*	20.3*	20.3*	15.5*	15.5*													12.5*	12.5*	**8.3**
	–10.5																							
LC-V	13.5																							
	12.0																					9.8*	9.8*	**11.0**
	10.5													10.5*	10.5*							9.2*	9.2*	**12.2**
	9.0													11.6*	11.6*							8.8*	8.8*	**13.0**
	7.5											12.1*	12.1*	11.8*	11.8*	10.0*	10.0*					8.6*	8.6*	**13.7**
	6.0											13.0*	13.0*	12.4*	12.4*	10.3	11.9*					8.5*	8.5*	**14.1**
	4.5							18.2*	18.2*	15.7*	15.7*	14.1*	14.1*	12.4	13.1*	10.0	12.3*					8.6*	8.6*	**14.4**
	3.0							21.0*	21.0*	17.5*	17.5*	14.8	15.3*	11.9	13.8*	9.8	12.8*					8.5	8.8*	**14.5**
	1.5							23.0	23.5*	17.7	19.2*	14.1	16.4*	11.5	14.6*	9.5	13.2*					8.4	9.1*	**14.5**
	0							21.8	25.4*	16.8	20.5*	13.5	17.4*	11.1	15.2*	9.2	13.5*					8.5	9.6*	**14.3**
	– 1.5					29.0	30.5*	21.0	26.4*	16.2	21.4*	13.1	18.0*	10.8	15.5*	9.1	13.5*					8.8	10.3*	**13.9**
	– 3.0	14.1*	14.1*	21.0*	21.0*	28.7	34.1*	20.6	26.6*	15.9	21.6*	12.8	18.1*	10.6	15.4*							9.3	11.4*	**13.3**
	– 4.5	20.5*	20.5*	28.6*	28.6*	28.7	32.9*	20.5	26.0*	15.8	21.2*	12.7	17.6*	10.7	14.6*							10.2	12.9*	**12.6**
	– 6.0	28.5*	28.5*	39.0*	39.0*	29.0	30.5*	20.7	24.3*	15.9	19.8*	12.9	16.1*									11.7	13.5*	**11.5**
	– 7.5	39.4*	39.4*	34.0*	34.0*	26.4*	26.4*	21.1*	21.1*	16.4	16.7*											13.4*	13.4*	**10.2**
	– 9.0			24.9*	24.9*	19.5*	19.5*	14.6*	14.6*													12.3*	12.3*	**8.3**
	–10.5																							

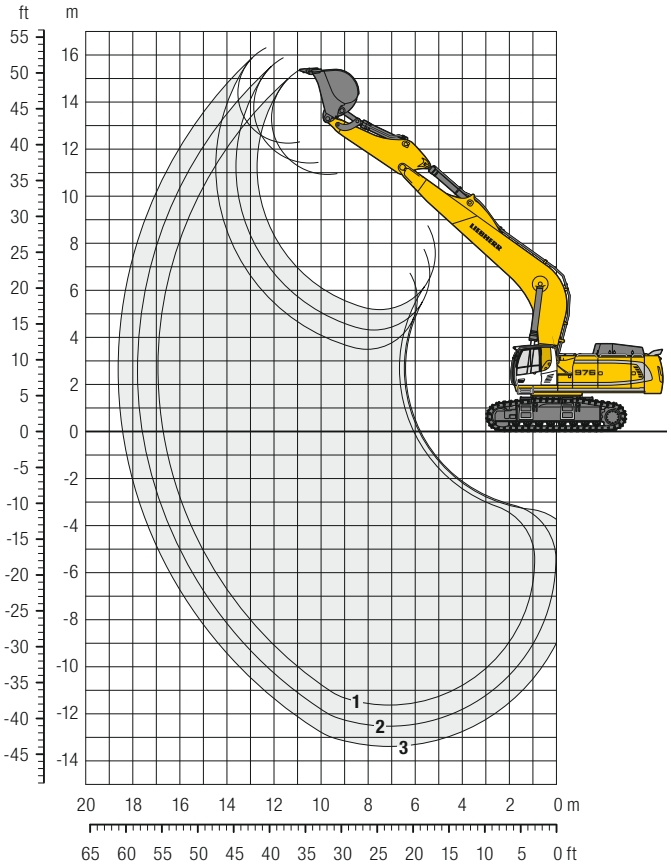
Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

Backhoe Bucket

with Mono Boom 10.50 m and Counterweight 16.0 t



Digging Envelope

		1	2	3
Stick length	**m**	3.80	4.70	5.80
Max. digging depth	**m**	11.50	12.40	13.25
Max. reach at ground level	**m**	16.70	17.55	18.40
Max. dumping height	**m**	11.05	11.55	12.40
Max. teeth height	**m**	15.50	16.00	16.45

Forces

		1	2	3
Max. digging force (ISO 6015)	**kN**	329	284	249
Max. breakout force (ISO 6015)	**kN**	485	485	356
Max. digging force (SAE J1179)	**kN**	317	276	237
Max. breakout force (SAE J1179)	**kN**	437	437	315

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 16.0 t, mono boom 10.50 m, stick 4.70 m and bucket 2.20 m³ (3,100 kg).

Undercarriage		**HD**			**LC-V**		
Pad width	**mm**	500	600	750	500	600	750
Weight	**kg**	89,000	89,800	90,900	94,400	95,200	96,300
Ground pressure	**kg/cm²**	1.72	1.44	1.17	1.70	1.42	1.15

Buckets Machine stability per ISO 10567* (75 % of tipping capacity)

	Cutting width	Capacity ISO 7451	Weight	HD-Undercarriage (with track pads 600 mm) Stick length (m)			LC-V-Undercarriage (with track pads 600 mm) Stick length (m)		
	mm	**m³**	**kg**	3.80	4.70	5.80	3.80	4.70	5.80
STD[1]	1,250	2.20	3,100	▲	▲	–	▲	▲	–
	1,400	2.70	3,450	▲	▲	–	▲	■	–
	1,600	3.20	3,750	■	△	–	■	△	–
	1,800	3.80	4,000	△	–	–	△	△	–
	1,950	4.30	4,200	–	–	–	△	–	–
HD[2]	1,400	2.60	3,800	■	■	–	▲	■	–
	1,600	3.10	4,250	■	△	–	▲	△	–
	1,800	3.60	4,400	△	–	–	△	–	–
	1,950	4.10	4,800	–	–	–	△	–	–
STD[3]	1,150	1.50	2,550	–	–	▲	–	–	▲
	1,350	2.00	2,750	–	–	▲	–	–	▲
	1,550	2.50	2,950	–	–	▲	–	–	■
	1,750	3.00	3,150	–	–	△	–	–	■
	1,950	3.50	3,450	–	–	–	–	–	△
HD[4]	1,400	1.50	3,250	–	–	▲	–	–	▲
	1,600	2.00	3,550	–	–	■	–	–	▲
	1,800	2.50	3,850	–	–	△	–	–	▲
	2,000	3.00	4,100	–	–	–	–	–	△

* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

[1] Standard bucket with Liebherr teeth Z 90

[2] HD bucket with Liebherr teeth Z 90

[3] Standard bucket from R 966 Litronic with Liebherr teeth Z 70

[4] HD bucket from R 966 Litronic with Liebherr teeth Z 90

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.65 t/m³, ■ = ≤ 1.5 t/m³, – = not authorised

Lift Capacities

with Mono Boom 10.50 m, Counterweight 16.0 t and Track Pads 600 mm

Stick 3.80 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m				m
HD	13.5																							
	12.0									11.3*	11.3*											11.5*	11.5*	11.1
	10.5									11.2*	11.2*	11.1*	11.1*									11.2*	11.2*	12.2
	9.0									11.5*	11.5*	11.0*	11.0*									10.3	11.0*	13.1
	7.5							13.7*	13.7*	12.2*	12.2*	11.3*	11.3*	9.6	10.9*							9.2	11.0*	13.7
	6.0							15.1*	15.1*	13.1*	13.1*	11.6	11.9*	9.4	11.1*							8.5	11.0*	14.2
	4.5							16.7*	16.7*	13.5	14.1*	11.1	12.5*	9.1	11.4*							8.0	10.7	14.5
	3.0									12.8	15.0*	10.6	13.1*	8.8	11.7							7.7	10.3	14.6
	1.5									12.2	15.8*	10.1	13.6	8.5	11.4							7.6	10.2	14.5
	0							14.5	19.5*	11.8	16.0	9.8	13.3	8.3	11.2							7.7	10.3	14.3
	– 1.5							14.3	19.6	11.6	15.7	9.7	13.1	8.2	11.2							7.9	10.7	13.9
	– 3.0					18.7	23.3*	14.3	19.4*	11.5	15.7	9.6	13.1									8.5	11.4	13.4
	– 4.5			26.4*	26.4*	19.0	22.2*	14.4	18.6*	11.7	15.8*	9.8	13.2									9.3	12.2*	12.6
	– 6.0	28.6*	28.6*	24.3*	24.3*	19.4	20.5*	14.8	17.3*	12.0	14.5*											10.8	12.2*	11.6
	– 7.5	24.8*	24.8*	21.2*	21.2*	17.9*	17.9*	14.9*	14.9*													11.9*	11.9*	10.2
	– 9.0			16.1*	16.1*	13.2*	13.2*															10.7*	10.7*	8.4
	–10.5																							
LC-V	13.5																					12.2*	12.2*	
	12.0									11.3*	11.3*											11.5*	11.5*	11.1
	10.5									11.2*	11.2*	11.0*	11.0*									11.2*	11.2*	12.2
	9.0									11.6*	11.6*	11.0*	11.0*									10.8	11.0*	13.1
	7.5							13.8*	13.8*	12.3*	12.3*	11.4*	11.4*	10.2	10.9*							9.7	11.0*	13.7
	6.0							15.3*	15.3*	13.2*	13.2*	11.9*	11.9*	9.9	11.1*							9.0	11.0*	14.2
	4.5							16.8*	16.8*	14.2*	14.2*	11.7	12.5*	9.6	11.5*							8.5	11.1*	14.5
	3.0									13.5	15.1*	11.2	13.1*	9.3	11.9*							8.2	11.3*	14.6
	1.5									12.9	15.8*	10.8	13.7*	9.1	12.2*							8.1	11.4*	14.5
	0							15.3	19.6*	12.5	16.3*	10.5	14.0*	8.9	12.4*							8.2	11.6*	14.3
	– 1.5							15.2	19.6*	12.3	16.5*	10.3	14.2*	8.8	12.4*							8.5	11.9*	13.9
	– 3.0					19.8	23.2*	15.2	19.3*	12.3	16.3*	10.3	14.0*									9.1	12.1*	13.4
	– 4.5			26.3*	26.3*	20.1	22.1*	15.4	18.6*	12.4	15.7*	10.5	13.2*									10.0	12.2*	12.6
	– 6.0	28.4*	28.4*	24.1*	24.1*	20.3*	20.3*	15.8	17.2*	12.8	14.3*											11.6	12.2*	11.6
	– 7.5	24.4*	24.4*	20.8*	20.8*	17.6*	17.6*	14.6*	14.6*													11.8*	11.8*	10.2
	– 9.0					12.6*	12.6*															11.2*	11.2*	8.4
	–10.5																							

Stick 4.70 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m				m
HD	13.5																					10.7*	10.7*	10.8
	12.0													10.1*	10.1*							10.2*	10.2*	12.2
	10.5													9.8*	9.8*							10.0*	10.0*	13.2
	9.0													9.9*	9.9*	9.8*	9.8*					9.1	9.9*	14.1
	7.5											11.2*	11.2*	10.4*	10.4*	9.8	9.9*					8.2	9.9*	14.7
	6.0									13.9*	13.9*	12.1*	12.1*	11.0*	11.0*	9.5	10.2*	7.7	9.9*			7.6	9.9*	15.1
	4.5									15.5*	15.5*	13.1*	13.1*	11.2	11.7*	9.2	10.7*	7.5	10.0			7.1	9.6	15.3
	3.0									16.0	16.9*	13.0	14.2*	10.6	12.4*	8.8	11.1*	7.3	9.8			6.9	9.3	15.4
	1.5									15.1	18.1*	12.3	15.0*	10.1	13.0*	8.5	11.4	7.1	9.6			6.8	9.2	15.4
	0									14.5	18.9*	11.7	15.7*	9.7	13.2	8.2	11.1	7.0	9.5			6.8	9.3	15.2
	– 1.5									14.1	19.3*	11.4	15.6	9.5	12.9	8.0	10.9					7.0	9.6	14.9
	– 3.0							18.2	23.6*	14.0	19.3	11.3	15.4	9.4	12.8	8.0	10.9					7.4	10.1	14.3
	– 4.5					23.7*	23.7*	18.4	22.8*	14.0	18.9*	11.3	15.5	9.4	12.8	8.1	11.0					8.1	11.0	13.6
	– 6.0	19.6*	19.6*	24.6*	24.6*	26.1*	26.1*	18.8	21.5*	14.3	17.9*	11.5	15.1*	9.7	12.6*							9.1	11.3*	12.7
	– 7.5	28.9*	28.9*	28.8*	28.8*	23.5*	23.5*	19.4	19.5*	14.8	16.2*	12.0	13.4*									10.9	11.2*	11.5
	– 9.0			23.5*	23.5*	19.5*	19.5*	16.2*	16.2*	13.0*	13.0*											10.7*	10.7*	9.8
	–10.5																							
LC-V	13.5																					10.6*	10.6*	10.8
	12.0													10.0*	10.0*							10.2*	10.2*	12.2
	10.5													9.8*	9.8*							10.0*	10.0*	13.2
	9.0													10.0*	10.0*	9.8*	9.8*					9.5	9.9*	14.1
	7.5											11.2*	11.2*	10.4*	10.4*	9.9*	9.9*					8.6	9.9*	14.7
	6.0									14.0*	14.0*	12.2*	12.2*	11.0*	11.0*	10.1	10.3*	8.1	9.9*			8.0	9.9*	15.1
	4.5									15.6*	15.6*	13.2*	13.2*	11.7*	11.7*	9.7	10.7*	8.0	10.1*			7.6	10.0*	15.3
	3.0									16.8	17.1*	13.6	14.2*	11.2	12.4*	9.3	11.2*	7.8	10.3*			7.3	10.2*	15.4
	1.5									15.9	18.2*	13.0	15.1*	10.7	13.0*	9.0	11.6*	7.6	10.6*			7.3	10.4*	15.4
	0									15.3	19.0*	12.5	15.8*	10.4	13.5*	8.7	11.9*	7.4	10.7*			7.3	10.6*	15.2
	– 1.5									15.0	19.3*	12.2	16.1*	10.1	13.8*	8.6	12.1*					7.5	10.8*	14.9
	– 3.0							19.4	23.5*	14.9	19.3*	12.0	16.2*	10.0	13.8*	8.5	12.0*					8.0	11.0*	14.3
	– 4.5					24.6*	24.6*	19.6	22.7*	15.0	18.8*	12.1	15.8*	10.1	13.5*	8.7	11.2*					8.7	11.2*	13.6
	– 6.0	20.4*	20.4*	25.5*	25.5*	25.9*	25.9*	20.0	21.4*	15.2	17.8*	12.3	15.0*	10.4	12.4*							9.9	11.3*	12.7
	– 7.5	29.8*	29.8*	28.4*	28.4*	23.2*	23.2*	19.2*	19.2*	15.8	16.0*	12.8	13.1*									11.2*	11.2*	11.5
	– 9.0			22.9*	22.9*	19.0*	19.0*	15.8*	15.8*	12.6*	12.6*											10.6*	10.6*	9.8
	–10.5																							

Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

Stick 5.80 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m				
HD	13.5													9.2*	9.2*							9.4*	9.4*	12.3
	12.0															9.1*	9.1*					9.2*	9.2*	13.5
	10.5															8.7*	8.7*					9.0	9.0*	14.5
	9.0													9.0*	9.0*	8.8*	8.8*	8.4	8.9*			8.0	8.7*	15.2
	7.5													9.5*	9.5*	9.1*	9.1*	8.3	8.9*			7.3	8.6*	15.8
	6.0											11.2*	11.2*	10.2*	10.2*	9.6*	9.6*	8.1	9.1*			6.8	8.5*	16.2
	4.5									14.3*	14.3*	12.3*	12.3*	11.0*	11.0*	9.6	10.1*	7.9	9.5*			6.5	8.6*	16.4
	3.0									15.9*	15.9*	13.4*	13.4*	11.1	11.8*	9.2	10.6*	7.6	9.8*	6.3	8.5	6.3	8.5	16.5
	1.5									15.9	17.4*	12.8	14.5*	10.5	12.5*	8.8	11.2*	7.3	9.9			6.2	8.4	16.5
	0									15.0	18.5*	12.2	15.3*	10.1	13.2*	8.4	11.3	7.1	9.6			6.2	8.4	16.3
	– 1.5									14.5	19.2*	11.7	15.9	9.7	13.1	8.2	11.1	7.0	9.5			6.3	8.7	16.0
	– 3.0							18.4	24.0*	14.2	19.5*	11.4	15.6	9.5	12.9	8.0	10.9	6.9	9.4			6.6	9.0	15.5
	– 4.5					20.8*	20.8*	18.4	23.7*	14.1	19.4*	11.3	15.5	9.4	12.8	8.0	10.9					7.1	9.7	14.8
	– 6.0	16.1*	16.1*	20.3*	20.3*	26.5	28.4*	18.6	22.8*	14.2	18.8*	11.4	15.6	9.5	12.9	8.2	11.1					7.9	10.5*	14.0
	– 7.5	22.7*	22.7*	28.4*	28.4*	26.2*	26.2*	19.0	21.3*	14.5	17.7*	11.7	14.8*	9.8	12.3*							9.1	10.6*	12.9
	– 9.0	31.3*	31.3*	29.1*	29.1*	23.1*	23.1*	19.0*	19.0*	15.1	15.7*	12.2	12.7*									10.5*	10.5*	11.5
	–10.5			22.8*	22.8*	18.4*	18.4*	15.0*	15.0*	11.7*	11.7*											9.9*	9.9*	9.6
LC-V	13.5													9.1*	9.1*							9.4*	9.4*	12.3
	12.0															9.1*	9.1*					9.1*	9.1*	13.5
	10.5															8.7*	8.7*					9.0*	9.0*	14.5
	9.0													9.1*	9.1*	8.8*	8.8*	8.9	8.9*			8.5	8.7*	15.2
	7.5													9.6*	9.6*	9.1*	9.1*	8.8	8.9*			7.8	8.6*	15.8
	6.0									12.8*	12.8*	11.3*	11.3*	10.3*	10.3*	9.6*	9.6*	8.6	9.2*			7.3	8.5*	16.2
	4.5									14.5*	14.5*	12.4*	12.4*	11.1*	11.1*	10.1	10.1*	8.4	9.5*			6.9	8.6*	16.4
	3.0									16.1*	16.1*	13.5*	13.5*	11.7	11.8*	9.7	10.7*	8.1	9.9*	6.7	8.9*	6.7	8.7*	16.5
	1.5									16.7	17.5*	13.5	14.6*	11.1	12.6*	9.3	11.2*	7.8	10.2*			6.6	9.0*	16.5
	0									15.9	18.5*	12.9	15.4*	10.7	13.2*	9.0	11.7*	7.6	10.5*			6.6	9.3*	16.3
	– 1.5									15.4	19.2*	12.4	16.0*	10.3	13.7*	8.7	12.0*	7.4	10.7*			6.8	9.9*	16.0
	– 3.0							19.5	24.0*	15.1	19.5*	12.2	16.3*	10.1	13.9*	8.6	12.1*	7.4	10.6*			7.1	10.1*	15.5
	– 4.5			14.5*	14.5*	21.4*	21.4*	19.5	23.6*	15.0	19.3*	12.1	16.2*	10.0	13.8*	8.6	11.9*					7.7	10.3*	14.8
	– 6.0	16.6*	16.6*	20.9*	20.9*	28.1	28.2*	19.8	22.7*	15.1	18.7*	12.2	15.7*	10.1	13.4*	8.7	11.2*					8.5	10.5*	14.0
	– 7.5	23.4*	23.4*	29.2*	29.2*	26.0*	26.0*	20.2	21.2*	15.4	17.5*	12.5	14.7*	10.5	12.1*							9.8	10.6*	12.9
	– 9.0	32.2*	32.2*	28.6*	28.6*	22.8*	22.8*	18.7*	18.7*	15.4*	15.4*	12.5*	12.5*									10.4*	10.4*	11.5
	–10.5					17.9*	17.9*	14.5*	14.5*	11.1*	11.1*											9.8*	9.8*	9.6

Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.
According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

Lift Capacities

with Mono Boom 7.20 m, Counterweight 16.0 t and Track Pads 600 mm

Stick 2.90 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
HD	13.5															
	12.0															
	10.5													23.9*	23.9*	6.4
	9.0							21.9*	21.9*					21.3*	21.3*	8.0
	7.5							22.1*	22.1*	20.4*	20.4*			20.2*	20.2*	9.0
	6.0					27.7*	27.7*	23.6*	23.6*	20.5	21.3*			18.0	19.9*	9.7
	4.5					31.9*	31.9*	25.6*	25.6*	19.9	22.2*			16.5	20.2*	10.1
	3.0					34.3	35.5*	25.0	27.6*	19.2	23.2*			15.8	20.2	10.3
	1.5					32.9	37.2*	24.0	28.9*	18.6	23.8*			15.6	20.1	10.2
	0					32.2	37.0*	23.4	29.1*	18.2	23.7			16.0	20.7	9.9
	– 1.5			38.5*	38.5*	32.0	35.1*	23.1	28.0*	18.1	22.4*			17.3	21.1*	9.3
	– 3.0	40.6*	40.6*	38.9*	38.9*	31.4*	31.4*	23.3	25.0*					19.9	20.7*	8.5
	– 4.5			30.5*	30.5*	24.6*	24.6*							19.2*	19.2*	7.1
	– 6.0															
	– 7.5															
	– 9.0															
	–10.5															
LC-V	13.5															
	12.0															
	10.5													23.5*	23.5*	6.4
	9.0							21.9*	21.9*					21.2*	21.2*	8.0
	7.5							22.2*	22.2*	21.1*	21.1*			20.2*	20.2*	9.0
	6.0					28.0*	28.0*	23.7*	23.7*	21.3	21.4*			18.7	19.9*	9.7
	4.5					32.2*	32.2*	25.8*	25.8*	20.7	22.3*			17.2	20.2*	10.1
	3.0					35.7	35.7*	26.0	27.7*	20.0	23.2*			16.5	20.8*	10.3
	1.5					34.3	37.3*	25.1	28.9*	19.5	23.9*			16.4	20.9*	10.2
	0					33.7	36.9*	24.5	29.1*	19.1	23.7*			16.9	21.1*	9.9
	– 1.5			40.4*	40.4*	33.6	34.9*	24.3	27.8*	19.0	22.2*			18.3	21.1*	9.3
	– 3.0	42.5*	42.5*	38.4*	38.4*	31.0*	31.0*	24.5	24.5*					20.6*	20.6*	8.5
	– 4.5			29.5*	29.5*	23.8*	23.8*							18.9*	18.9*	7.1
	– 6.0															
	– 7.5															
	– 9.0															
	–10.5															

Stick 3.30 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
HD	13.5															
	12.0															
	10.5													20.1*	20.1*	7.0
	9.0							20.6*	20.6*					18.2*	18.2*	8.4
	7.5							21.0*	21.0*	20.0*	20.0*			17.3*	17.3*	9.4
	6.0					26.3*	26.3*	22.6*	22.6*	20.5*	20.5*			17.0	17.1*	10.1
	4.5					30.6*	30.6*	24.8*	24.8*	20.0	21.5*			15.6	17.3*	10.5
	3.0					34.5*	34.5*	25.1	26.9*	19.2	22.7*	15.2	19.5	14.9	18.0*	10.6
	1.5					33.2	36.8*	24.1	28.5*	18.6	23.5*	14.9	19.2	14.7	19.0	10.6
	0					32.3	37.2*	23.4	29.0*	18.2	23.6			15.1	19.5	10.3
	– 1.5			36.8*	36.8*	32.0	35.8*	23.1	28.3*	17.9	22.8*			16.2	20.2*	9.7
	– 3.0	36.6*	36.6*	41.3*	41.3*	32.1	32.6*	23.1	25.9*					18.4	20.1*	8.9
	– 4.5			33.5*	33.5*	26.8*	26.8*	20.1*	20.1*					19.1*	19.1*	7.7
	– 6.0															
	– 7.5															
	– 9.0															
	–10.5															
LC-V	13.5															
	12.0															
	10.5													19.9*	19.9*	7.0
	9.0							20.5*	20.5*					18.1*	18.1*	8.4
	7.5							21.1*	21.1*	20.0*	20.0*			17.3*	17.3*	9.4
	6.0					26.7*	26.7*	22.8*	22.8*	20.5*	20.5*			17.1*	17.1*	10.1
	4.5					31.0*	31.0*	25.0*	25.0*	20.8	21.6*	16.3	17.4*	16.3	17.4*	10.5
	3.0					34.8*	34.8*	26.2	27.1*	20.1	22.7*	15.9	20.0*	15.6	18.0*	10.6
	1.5					34.6	36.9*	25.1	28.6*	19.5	23.6*	15.6	20.1*	15.5	19.3*	10.6
	0					33.7	37.1*	24.5	29.0*	19.0	23.7*			16.0	20.1*	10.3
	– 1.5			38.3*	38.3*	33.5	35.6*	24.2	28.2*	18.9	22.7*			17.2	20.2*	9.7
	– 3.0	38.2*	38.2*	40.8*	40.8*	32.2*	32.2*	24.3	25.6*					19.6	20.0*	8.9
	– 4.5			32.7*	32.7*	26.1*	26.1*	19.2*	19.2*					18.9*	18.9*	7.7
	– 6.0															
	– 7.5															
	– 9.0															
	–10.5															

Stick 3.80 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
HD	13.5															
	12.0															
	10.5							18.3*	18.3*					16.7*	16.7*	7.7
	9.0									15.7*	15.7*			15.3*	15.3*	9.0
	7.5							19.7*	19.7*	18.8*	18.8*			14.7*	14.7*	10.0
	6.0							21.4*	21.4*	19.5*	19.5*	15.6*	15.6*	14.5*	14.5*	10.6
	4.5					28.9*	28.9*	23.7*	23.7*	20.1	20.7*	15.7	18.8*	14.6	14.7*	11.0
	3.0					33.2*	33.2*	25.4	26.1*	19.4	22.0*	15.3	19.4*	14.0	15.2*	11.1
	1.5					33.5	36.1*	24.3	27.9*	18.7	23.1*	14.9	19.2	13.8	16.1*	11.0
	0					32.4	37.1*	23.5	28.8*	18.1	23.6*	14.6	18.9	14.1	17.5*	10.8
	– 1.5			34.9*	34.9*	31.9	36.3*	23.0	28.5*	17.8	23.1*			15.0	19.3*	10.3
	– 3.0	32.7*	32.7*	43.8*	43.8*	31.9	33.8*	22.9	26.8*	17.8	21.2*			16.7	19.3*	9.5
	– 4.5	48.1*	48.1*	36.9*	36.9*	29.0*	29.0*	22.6*	22.6*					18.8*	18.8*	8.3
	– 6.0					19.8*	19.8*							17.2*	17.2*	6.5
	– 7.5															
	– 9.0															
	–10.5															
LC-V	13.5															
	12.0															
	10.5							18.9*	18.9*					16.6*	16.6*	7.7
	9.0									16.6*	16.6*			15.2*	15.2*	9.0
	7.5							19.8*	19.8*	18.8*	18.8*			14.6*	14.6*	10.0
	6.0							21.6*	21.6*	19.6*	19.6*	16.1*	16.1*	14.5*	14.5*	10.6
	4.5					29.3*	29.3*	23.9*	23.9*	20.8*	20.8*	16.4	18.9*	14.7*	14.7*	11.0
	3.0					33.5*	33.5*	26.2*	26.2*	20.2	22.1*	16.0	19.5*	14.6	15.2*	11.1
	1.5					34.9	36.2*	25.3	28.0*	19.5	23.1*	15.6	19.9*	14.5	16.2*	11.0
	0					33.9	37.1*	24.5	28.8*	19.0	23.6*	15.3	19.7*	14.9	17.7*	10.8
	– 1.5			36.1*	36.1*	33.4	36.2*	24.1	28.5*	18.7	23.1*			15.9	19.3*	10.3
	– 3.0	33.9*	33.9*	43.3*	43.3*	33.4	33.5*	24.1	26.5*	18.8	20.9*			17.8	19.3*	9.5
	– 4.5	47.0*	47.0*	36.2*	36.2*	28.5*	28.5*	22.0*	22.0*					18.7*	18.7*	8.3
	– 6.0															
	– 7.5															
	– 9.0															
	–10.5															

Stick 4.70 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
HD	13.5															
	12.0															
	10.5													12.6*	12.6*	8.9
	9.0									15.8*	15.8*			11.7*	11.7*	10.1
	7.5									16.7*	16.7*	14.0*	14.0*	11.2*	11.2*	10.9
	6.0									17.7*	17.7*	16.4	16.4*	11.1*	11.1*	11.5
	4.5					25.6*	25.6*	21.5*	21.5*	19.1*	19.1*	16.0	17.5*	11.2*	11.2*	11.8
	3.0					30.4*	30.4*	24.2*	24.2*	19.7	20.6*	15.5	18.3*	11.6*	11.6*	12.0
	1.5					34.2*	34.2*	24.7	26.6*	18.9	22.1*	15.0	19.1*	12.2*	12.2*	11.9
	0					32.8	36.4*	23.6	28.1*	18.2	23.0*	14.5	18.8	12.5	13.1*	11.6
	– 1.5	18.1*	18.1*	32.5*	32.5*	31.9	36.7*	23.0	28.6*	17.7	23.2	14.3	18.5	13.1	14.6*	11.2
	– 3.0	27.4*	27.4*	43.5*	43.5*	31.6	35.4*	22.7	27.7*	17.5	22.4*			14.3	17.0*	10.5
	– 4.5	39.3*	39.3*	41.9*	41.9*	31.7	32.0*	22.7	25.2*	17.7	19.5*			16.6	17.7*	9.4
	– 6.0	44.9*	44.9*	33.5*	33.5*	25.9*	25.9*	19.4*	19.4*					16.9*	16.9*	8.0
	– 7.5															
	– 9.0															
	–10.5															
LC-V	13.5															
	12.0															
	10.5									12.6*	12.6*			12.4*	12.4*	8.9
	9.0									15.9*	15.9*			11.6*	11.6*	10.1
	7.5									16.8*	16.8*	14.2*	14.2*	11.2*	11.2*	10.9
	6.0							18.8*	18.8*	17.8*	17.8*	16.6*	16.6*	11.1*	11.1*	11.5
	4.5					26.0*	26.0*	21.8*	21.8*	19.2*	19.2*	16.7	17.6*	11.2*	11.2*	11.8
	3.0					30.8*	30.8*	24.5*	24.5*	20.5	20.8*	16.2	18.4*	11.6*	11.6*	12.0
	1.5					34.5*	34.5*	25.7	26.7*	19.7	22.2*	15.7	19.2*	12.2*	12.2*	11.9
	0			26.1*	26.1*	34.2	36.5*	24.7	28.2*	19.1	23.1*	15.3	19.5*	13.2	13.3*	11.6
	– 1.5	18.9*	18.9*	33.2*	33.2*	33.4	36.7*	24.1	28.5*	18.6	23.2*	15.0	19.2*	13.9	14.8*	11.2
	– 3.0	28.3*	28.3*	44.7*	44.7*	33.1	35.1*	23.8	27.6*	18.4	22.2*			15.2	17.3*	10.5
	– 4.5	40.5*	40.5*	41.3*	41.3*	31.6*	31.6*	23.9	24.9*	18.6	19.1*			17.7*	17.7*	9.4
	– 6.0	43.4*	43.4*	32.5*	32.5*	25.1*	25.1*	18.6*	18.6*					16.8*	16.8*	8.0
	– 7.5															
	– 9.0															
	–10.5															

Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

Lift Capacities

with Mono Boom 8.60 m, Counterweight 16.0 t and Track Pads 600 mm

Stick 3.30 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m				m
HD	13.5																							
	12.0																							
	10.5									16.4*	16.4*											16.5*	16.5*	**9.1**
	9.0									16.0*	16.0*											15.9*	15.9*	**10.3**
	7.5							18.4*	18.4*	16.6*	16.6*	15.7*	15.7*									14.2	15.7*	**11.1**
	6.0							20.5*	20.5*	17.8*	17.8*	15.3	16.1*									12.8	15.6*	**11.6**
	4.5							22.9*	22.9*	18.7	19.1*	14.8	16.9*									11.9	15.4	**12.0**
	3.0							22.9	25.1*	17.8	20.5*	14.3	17.7*	11.6	15.1							11.4	14.9	**12.1**
	1.5							21.9	26.5*	17.1	21.5*	13.8	18.1	11.4	14.9							11.3	14.7	**12.1**
	0							21.3	27.0*	16.6	22.0*	13.5	17.7									11.5	15.1	**11.8**
	– 1.5					29.5	31.7*	21.1	26.6*	16.4	21.8	13.4	17.6									12.1	15.9	**11.4**
	– 3.0			27.5*	27.5*	29.8	31.1*	21.2	25.4*	16.5	20.9*	13.5	17.0*									13.3	16.5*	**10.7**
	– 4.5			33.7*	33.7*	27.9*	27.9*	21.6	23.0*	16.8	18.6*											15.5	16.3*	**9.7**
	– 6.0			27.3*	27.3*	22.9*	22.9*	18.3*	18.3*													15.4*	15.4*	**8.3**
	– 7.5																							
	– 9.0																							
	–10.5																							
LC-V	13.5																							
	12.0																							
	10.5									16.3*	16.3*											16.4*	16.4*	**9.1**
	9.0									16.0*	16.0*											15.9*	15.9*	**10.3**
	7.5							18.5*	18.5*	16.7*	16.7*	15.7*	15.7*									14.7	15.6*	**11.1**
	6.0							20.7*	20.7*	17.9*	17.9*	16.0	16.2*									13.3	15.6*	**11.6**
	4.5							23.1*	23.1*	19.3*	19.3*	15.5	17.0*	12.5	15.7*							12.5	15.6*	**12.0**
	3.0							23.9	25.2*	18.6	20.6*	15.0	17.7*	12.3	15.9*							12.1	15.8*	**12.1**
	1.5							22.9	26.6*	18.0	21.5*	14.5	18.3*	12.0	16.1*							12.0	16.0*	**12.1**
	0							22.4	27.0*	17.5	22.0*	14.2	18.6*									12.2	16.2*	**11.8**
	– 1.5					31.1	32.9*	22.3	26.5*	17.3	21.8*	14.1	18.2*									12.9	16.4*	**11.4**
	– 3.0			28.9*	28.9*	30.8*	30.8*	22.4	25.2*	17.4	20.7*	14.3	16.7*									14.2	16.5*	**10.7**
	– 4.5			33.3*	33.3*	27.6*	27.6*	22.7*	22.7*	17.8	18.2*											16.3*	16.3*	**9.7**
	– 6.0			26.6*	26.6*	22.3*	22.3*	17.7*	17.7*													15.3*	15.3*	**8.3**
	– 7.5																							
	– 9.0																							
	–10.5																							

Stick 3.80 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m				m
HD	13.5																							
	12.0																					16.3*	16.3*	**8.3**
	10.5									15.1*	15.1*											15.3*	15.3*	**9.8**
	9.0									15.0*	15.0*	14.8*	14.8*									14.9*	14.9*	**10.8**
	7.5									15.8*	15.8*	14.9*	14.9*									13.2	14.6*	**11.6**
	6.0							19.5*	19.5*	17.0*	17.0*	15.5*	15.5*	12.2	14.7*							11.9	14.5*	**12.1**
	4.5							22.0*	22.0*	18.4*	18.4*	14.9	16.3*	12.0	15.0*							11.2	14.5	**12.5**
	3.0							23.2	24.3*	18.0	19.9*	14.3	17.2*	11.7	15.1							10.7	14.0	**12.6**
	1.5							22.0	25.9*	17.2	21.0*	13.8	17.9*	11.4	14.8							10.6	13.9	**12.5**
	0							21.3	26.7*	16.6	21.7*	13.4	17.7	11.2	14.6							10.8	14.1	**12.3**
	– 1.5					29.3	31.3*	21.0	26.7*	16.3	21.7	13.2	17.5									11.3	14.8	**11.9**
	– 3.0			25.7*	25.7*	29.5	32.0*	21.0	25.8*	16.3	21.1*	13.3	17.5									12.3	15.7*	**11.2**
	– 4.5	29.5*	29.5*	36.2*	36.2*	29.2*	29.2*	21.3	23.8*	16.5	19.4*											14.1	15.7*	**10.3**
	– 6.0			30.4*	30.4*	24.9*	24.9*	20.1*	20.1*													15.2*	15.2*	**9.0**
	– 7.5																							
	– 9.0																							
	–10.5																							
LC-V	13.5																							
	12.0																					16.2*	16.2*	**8.3**
	10.5									15.0*	15.0*											15.3*	15.3*	**9.8**
	9.0									15.1*	15.1*	14.7*	14.7*									14.9*	14.9*	**10.8**
	7.5									15.8*	15.8*	14.9*	14.9*									13.7	14.6*	**11.6**
	6.0							19.7*	19.7*	17.1*	17.1*	15.5*	15.5*	12.9	14.7*							12.5	14.5*	**12.1**
	4.5							22.2*	22.2*	18.6*	18.6*	15.6	16.4*	12.6	15.0*							11.7	14.6*	**12.5**
	3.0							24.2	24.4*	18.8	20.0*	15.0	17.2*	12.3	15.4*							11.3	14.9*	**12.6**
	1.5							23.1	26.0*	18.0	21.1*	14.5	17.9*	12.0	15.8*							11.2	15.1*	**12.5**
	0							22.4	26.8*	17.5	21.7*	14.2	18.3*	11.8	15.8*							11.4	15.4*	**12.3**
	– 1.5					30.8	32.3*	22.2	26.6*	17.2	21.8*	14.0	18.3*									12.0	15.6*	**11.9**
	– 3.0			26.9*	26.9*	31.0	31.8*	22.2	25.6*	17.2	21.0*	14.0	17.4*									13.1	15.7*	**11.2**
	– 4.5	30.7*	30.7*	35.8*	35.8*	28.9*	28.9*	22.5	23.6*	17.5	19.2*											15.0	15.7*	**10.3**
	– 6.0			29.8*	29.8*	24.4*	24.4*	19.7*	19.7*													15.1*	15.1*	**9.0**
	– 7.5																							
	– 9.0																							
	–10.5																							

Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

Lift Capacities

with Mono Boom 8.60 m, Counterweight 16.0 t and Track Pads 600 mm

Stick 4.70 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m				m
HD	13.5																							
	12.0																					13.3*	13.3*	**9.5**
	10.5											13.3*	13.3*									12.2*	12.2*	**10.9**
	9.0											13.1*	13.1*									11.5*	11.5*	**11.8**
	7.5											13.4*	13.4*	12.7	13.1*							11.2*	11.2*	**12.5**
	6.0									15.5*	15.5*	14.2*	14.2*	12.5	13.4*							10.6	11.1*	**13.0**
	4.5							20.1*	20.1*	17.0*	17.0*	15.1	15.2*	12.1	13.9*							10.0	11.2*	**13.3**
	3.0							22.6*	22.6*	18.3	18.6*	14.5	16.2*	11.7	14.5*							9.6	11.5*	**13.5**
	1.5							22.4	24.7*	17.4	20.0*	13.9	17.1*	11.3	14.8							9.5	11.9*	**13.4**
	0							21.5	26.0*	16.7	21.0*	13.4	17.6	11.0	14.5							9.6	12.6	**13.2**
	– 1.5					29.1	30.4*	20.9	26.5*	16.2	21.5*	13.1	17.3	10.8	14.3							10.0	13.1	**12.8**
	– 3.0			22.9*	22.9*	29.0	33.1*	20.7	26.1*	16.0	21.3*	12.9	17.2	10.9	14.3							10.7	14.1	**12.2**
	– 4.5	24.3*	24.3*	33.5*	33.5*	29.3	31.1*	20.8	24.9*	16.1	20.3*	13.1	16.6*									12.0	14.5*	**11.3**
	– 6.0	35.3*	35.3*	35.1*	35.1*	27.7*	27.7*	21.3	22.3*	16.4	18.0*											14.2	14.4*	**10.1**
	– 7.5			27.7*	27.7*	22.2*	22.2*	17.5*	17.5*													13.6*	13.6*	**8.6**
	– 9.0																							
	–10.5																							
LC-V	13.5																							
	12.0																					13.1*	13.1*	**9.5**
	10.5											13.3*	13.3*									12.1*	12.1*	**10.9**
	9.0											13.1*	13.1*									11.5*	11.5*	**11.8**
	7.5									14.3*	14.3*	13.5*	13.5*	13.1*	13.1*							11.2*	11.2*	**12.5**
	6.0							17.7*	17.7*	15.6*	15.6*	14.3*	14.3*	13.1	13.4*							11.1*	11.1*	**13.0**
	4.5							20.3*	20.3*	17.2*	17.2*	15.2*	15.2*	12.7	14.0*							10.5	11.2*	**13.3**
	3.0							22.8*	22.8*	18.8*	18.8*	15.2	16.3*	12.3	14.6*							10.2	11.5*	**13.5**
	1.5							23.5	24.9*	18.2	20.2*	14.6	17.2*	12.0	15.1*							10.1	12.0*	**13.4**
	0							22.6	26.1*	17.5	21.1*	14.1	17.8*	11.7	15.5*							10.2	12.7*	**13.2**
	– 1.5					30.6	31.1*	22.0	26.5*	17.1	21.5*	13.8	18.1*	11.5	15.4*							10.6	13.8*	**12.8**
	– 3.0			23.7*	23.7*	30.6	32.9*	21.9	26.1*	16.9	21.3*	13.7	17.8*	11.5	14.6*							11.4	14.4*	**12.2**
	– 4.5	25.1*	25.1*	34.6*	34.6*	30.8*	30.8*	22.0	24.7*	17.0	20.2*	13.8	16.5*									12.8	14.5*	**11.3**
	– 6.0	36.4*	36.4*	34.6*	34.6*	27.3*	27.3*	22.0*	22.0*	17.4	17.6*											14.4*	14.4*	**10.1**
	– 7.5			26.9*	26.9*	21.6*	21.6*	16.8*	16.8*													13.5*	13.5*	**8.6**
	– 9.0																							
	–10.5																							

Stick 5.80 m

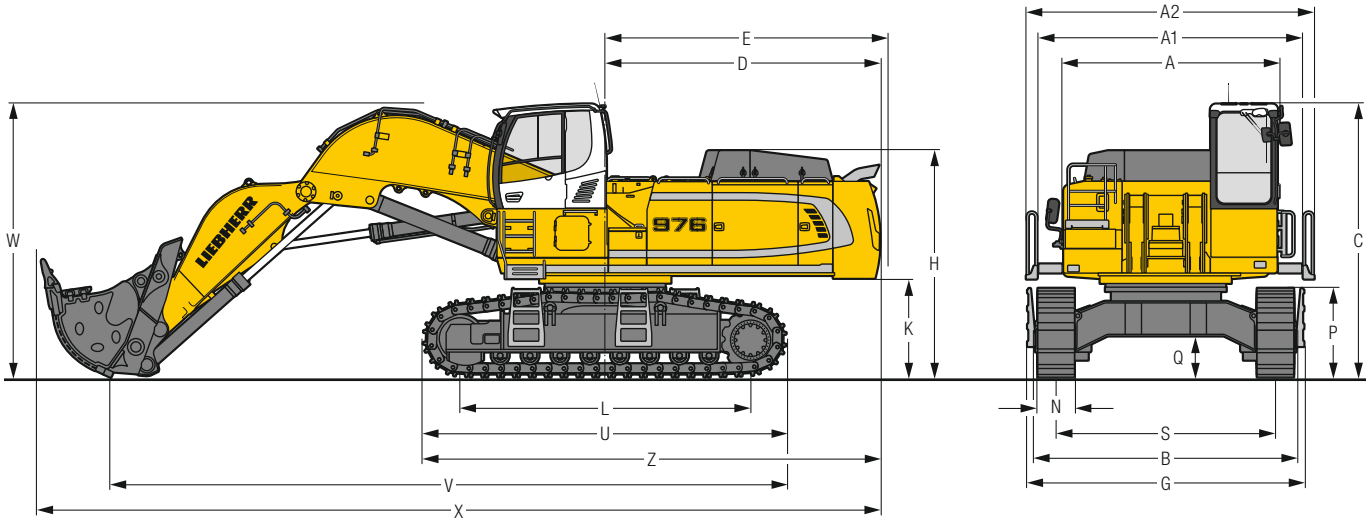
Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m				m
HD	13.5																							
	12.0											11.8*	11.8*									9.9*	9.9*	**11.0**
	10.5													10.1*	10.1*							9.2*	9.2*	**12.2**
	9.0													11.6*	11.6*							8.8*	8.8*	**13.0**
	7.5											12.1*	12.1*	11.8*	11.8*	9.8*	9.8*					8.6*	8.6*	**13.7**
	6.0											12.9*	12.9*	12.3*	12.3*	10.5	11.8*					8.5*	8.5*	**14.1**
	4.5							17.9*	17.9*	15.6*	15.6*	14.0*	14.0*	12.6	13.0*	10.2	12.3*					8.6*	8.6*	**14.4**
	3.0							20.8*	20.8*	17.4*	17.4*	15.1	15.2*	12.2	13.8*	10.0	12.7*					8.7	8.8*	**14.5**
	1.5							23.3*	23.3*	18.1	19.1*	14.4	16.4*	11.7	14.5*	9.7	12.6					8.6	9.1*	**14.5**
	0							22.3	25.2*	17.2	20.4*	13.8	17.3*	11.3	14.8	9.4	12.4					8.6	9.6*	**14.3**
	– 1.5					29.7	30.2*	21.4	26.3*	16.6	21.3*	13.3	17.6	11.0	14.5	9.3	12.2					8.9	10.3*	**13.9**
	– 3.0			20.4*	20.4*	29.2	34.2*	21.0	26.6*	16.2	21.6	13.1	17.3	10.8	14.3							9.4	11.3*	**13.3**
	– 4.5	19.9*	19.9*	27.8*	27.8*	29.2	33.0*	20.9	26.0*	16.1	21.2*	13.0	17.2	10.9	14.3							10.3	12.7*	**12.6**
	– 6.0	27.7*	27.7*	37.9*	37.9*	29.6	30.7*	21.0	24.5*	16.2	19.9*	13.1	16.3*									11.7	13.5*	**11.5**
	– 7.5	38.2*	38.2*	34.6*	34.6*	26.8*	26.8*	21.4*	21.4*	16.7	17.1*											13.4*	13.4*	**10.2**
	– 9.0			25.9*	25.9*	20.3*	20.3*	15.5*	15.5*													12.5*	12.5*	**8.3**
	–10.5																							
LC-V	13.5																							
	12.0																					9.8*	9.8*	**11.0**
	10.5													10.5*	10.5*							9.2*	9.2*	**12.2**
	9.0													11.6*	11.6*							8.8*	8.8*	**13.0**
	7.5											12.1*	12.1*	11.8*	11.8*	10.0*	10.0*					8.6*	8.6*	**13.7**
	6.0											13.0*	13.0*	12.4*	12.4*	11.0	11.9*					8.5*	8.5*	**14.1**
	4.5							18.2*	18.2*	15.7*	15.7*	14.1*	14.1*	13.1*	13.1*	10.8	12.3*					8.6*	8.6*	**14.4**
	3.0							21.0*	21.0*	17.5*	17.5*	15.3*	15.3*	12.8	13.8*	10.5	12.8*					8.8*	8.8*	**14.5**
	1.5							23.5*	23.5*	18.9	19.2*	15.1	16.4*	12.3	14.6*	10.2	13.2*					9.1	9.1*	**14.5**
	0							23.3	25.4*	18.1	20.5*	14.5	17.4*	11.9	15.2*	10.0	13.5*					9.2	9.6*	**14.3**
	– 1.5					30.5*	30.5*	22.5	26.4*	17.5	21.4*	14.1	18.0*	11.6	15.5*	9.8	13.5*					9.5	10.3*	**13.9**
	– 3.0	14.1*	14.1*	21.0*	21.0*	30.8	34.1*	22.1	26.6*	17.1	21.6*	13.8	18.1*	11.5	15.4*							10.0	11.4*	**13.3**
	– 4.5	20.5*	20.5*	28.6*	28.6*	30.8	32.9*	22.0	26.0*	17.0	21.2*	13.7	17.6*	11.5	14.6*							11.0	12.9*	**12.6**
	– 6.0	28.5*	28.5*	39.0*	39.0*	30.5*	30.5*	22.2	24.3*	17.1	19.8*	13.9	16.1*									12.6	13.5*	**11.5**
	– 7.5	39.4*	39.4*	34.0*	34.0*	26.4*	26.4*	21.1*	21.1*	16.7*	16.7*											13.4*	13.4*	**10.2**
	– 9.0			24.9*	24.9*	19.5*	19.5*	14.6*	14.6*													12.3*	12.3*	**8.3**
	–10.5																							

Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

Dimensions Front Shovel

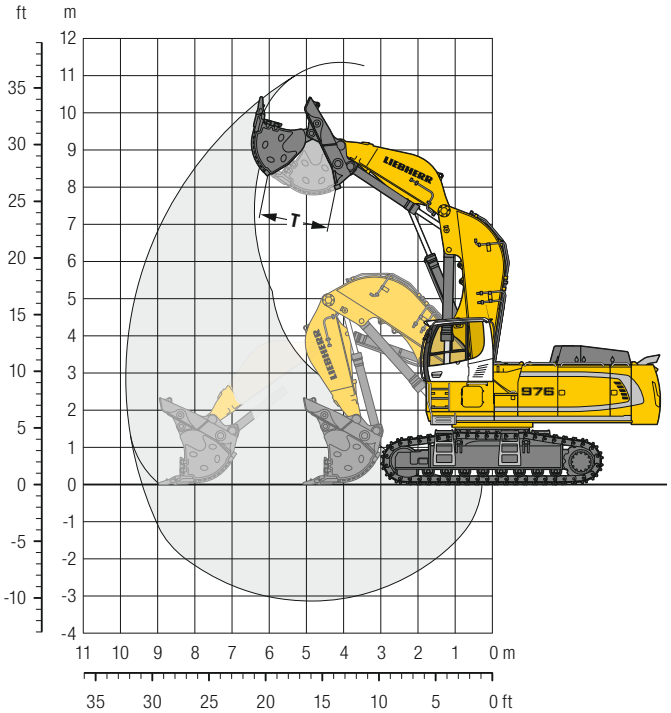


	HD	mm
A		3,565
A1		4,355
A2		4,730
C		4,495 / 4,690*
D		4,515
E		4,640
H		3,725
K		1,620
L		4,770
P		1,460

* with FOPS top guard

	HD			mm
Q				682
S				3,600
U				5,955
N	500	600	750	
B	4,290	4,290	4,350	
G	4,540	4,540	4,540	
Z				7,490
V				11,100
W				4,500
X				13,850

Front Shovel



Digging Envelope

Max. reach at ground level	**m**	9.40
Max. dumping height	**m**	7.80
Max. crowd length	**m**	3.90
Bucket opening width T	**mm**	1,825

Forces

Max. crowd force	**kN**	690
Max. crowd force at ground level	**kN**	490
Max. breakout force	**kN**	500

Operating Weight and Ground Pressure

The operating weight includes the basic machine with cab elevation 800 mm, shovel attachment and front shovel 5.10 m³ (9,100 kg), level II.

Undercarriage		**HD**		
Pad width	**mm**	500	600	750
Weight	**kg**	91,500	92,200	93,300
Ground pressure	**kg/cm²**	1.76	1.48	1.20

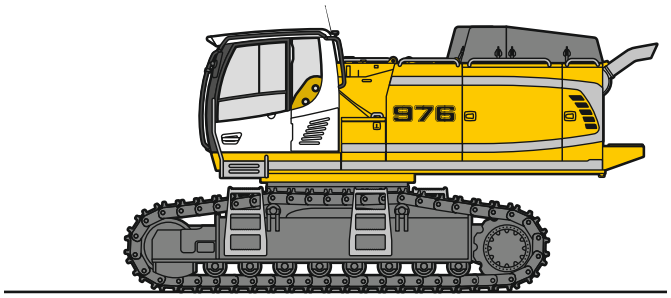
Front Shovels

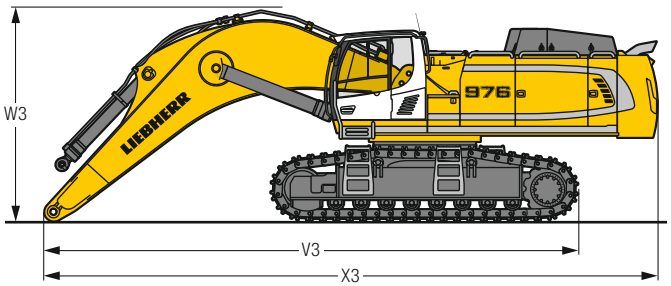
Cutting width	**Capacity ISO 7451**	**Weight**	**Wear kit level**	**HD-Undercarriage**
mm	**m³**	**kg**		**Shovel attachment**
2,700	5.10	8,450	I	▲
2,700	5.10	9,100	II	▲
2,700	5.10	10,150	III	■
2,700	5.40	10,600	III	■
2,700	5.60	8,750	I	■
2,700	5.60	9,450	II	■
2,700	5.60	10,600	III	▲
2,700	6.00	9,950	I	▲
2,700	6.00	10,700	II	■

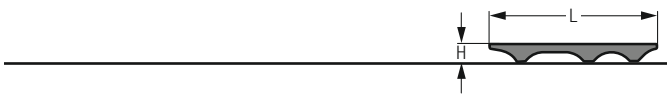
Level I: For non-abrasive materials, such as limestone without flint inclusion, shot material or easily breakable rock, i.e., deteriorated rock, soft limestone, shale, etc.
Level II: For pre-blasted heavy rock, or deteriorated, cracked material (classification 3 to 4, according to DIN 18300)
Level III: For highly-abrasive materials such as rock with a high silica content, sandstone etc.

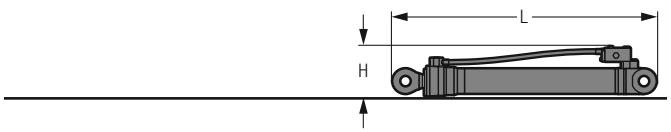
Max. material weight ▲ = ≤ 2.0 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.65 t/m³, ■ = ≤ 1.5 t/m³

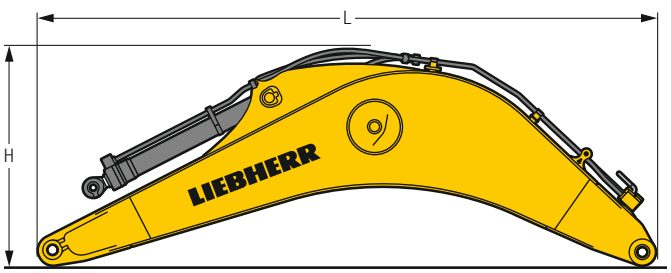
Dimensions and Weights











Basic Machine

Track pads	mm	500	600	750
Weight with backhoe attachment and HD-undercarriage without counterweight	kg	51,050	51,800	52,900
Weight with shovel attachment and HD-undercarriage without counterweight	kg	51,150	51,900	53,000
Weight with backhoe attachment and LC-V-undercarriage without counterweight	kg	56,400	57,200	58,350

Basic Machine

			HD	LC-V
V3	Mono boom 7.20 m	mm	10,350	10,400
	Mono boom 8.60 m	mm	13,450	13,400
	Mono boom 10.50 m	mm	13,650	13,800
W3	Mono boom 7.20 m	mm	4,150	4,250
	Mono boom 8.60 m	mm	4,500	4,550
	Mono boom 10.50 m	mm	4,900	5,000
X3	Mono boom 7.20 m	mm	11,950	11,900
	Mono boom 8.60 m	mm	11,700	11,850
	Mono boom 10.50 m	mm	15,450	15,400

Cab Elevation

			800 mm
L	Length	mm	1,890
H	Height	mm	925
	Width	mm	1,370
	Weight	kg	600

Counterweight

			Std	heavy
L	Length	mm	775	775
H	Height	mm	1,595	1,595
	Width	mm	3,360	3,360
	Weight	kg	14,100	16,000

Upper Protection Screen

L	Length	mm	1,960
H	Height	mm	190
	Width	mm	1,110
	Weight	kg	75

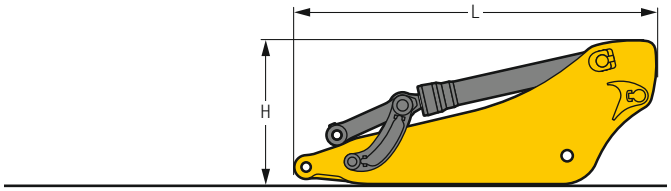
Hoist Cylinders (two)

L	Length	mm	2,920
H	Height	mm	550
	Width	mm	400
	Weight	kg	2 x 1,050

Mono Boom with Stick Cylinder

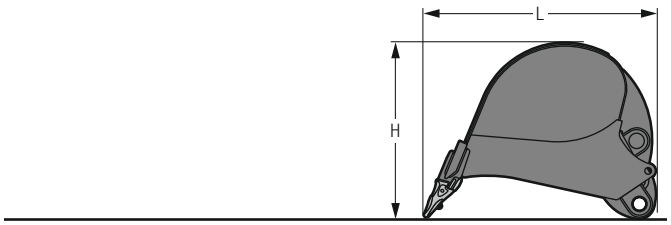
Stick length		m	7.20	8.60	10.50
L	Length	mm	7,550	8,950	10,850
H	Height	mm	2,700	2,800	3,050
	Width	mm	1,460	1,460	1,460
	Weight	kg	9,500	10,400	11,500

Dimensions and Weights



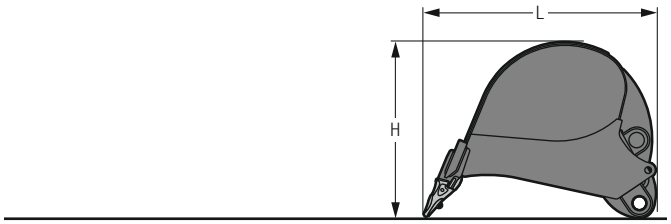
Stick with Bucket Cylinder

	Stick length	m	2.90	3.30	3.80	4.70	5.80
L	Length	mm	4,050	4,450	4,900	5,800	6,900
H	Height	mm	1,700	1,650	1,500	1,450	1,400
	Width	mm	900	900	900	900	900
	Weight	kg	4,450	4,600	4,800	5,150	5,100



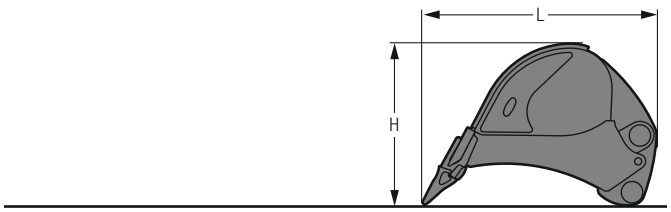
Backhoe Buckets — Std

	Cutting width	mm	1,250	1,400	1,600	1,800	1,950
	Capacity	m³	2.20	2.60	3.10	3.60	4.10
L	Length	mm	2,500	2,500	2,500	2,500	2,500
H	Height	mm	1,900	1,900	1,900	1,900	1,900
	Width	mm	1,300	1,450	1,650	1,850	2,000
	Weight	kg	3,100	3,450	3,750	4,000	4,200



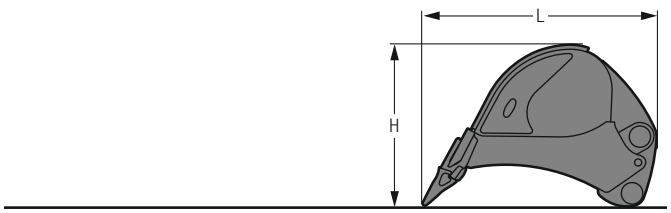
Backhoe Buckets — Std

	Cutting width	mm	2,150	2,150	2,300	2,300	2,450
	Capacity	m³	4.60	5.20	5.60	6.20	6.60
L	Length	mm	2,500	2,600	2,600	2,850	2,850
H	Height	mm	1,900	1,950	1,950	2,050	2,050
	Width	mm	2,200	2,350	2,350	2,350	2,650
	Weight	kg	4,450	4,600	4,800	5,000	5,100



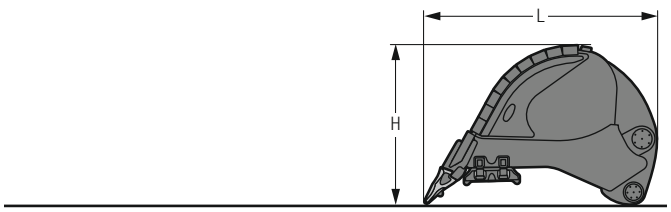
Backhoe Buckets — HD

	Cutting width	mm	1,400	1,600	1,800	1,950
	Capacity	m³	2.60	3.10	3.60	4.10
L	Length	mm	2,450	2,450	2,450	2,450
H	Height	mm	1,950	1,950	1,950	1,950
	Width	mm	1,450	1,650	1,850	2,000
	Weight	kg	3,800	4,250	4,400	4,800



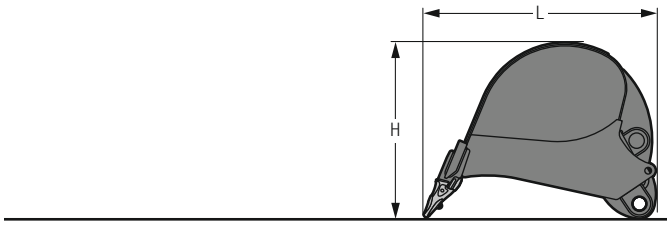
Backhoe Buckets — HD

	Cutting width	mm	2,150	2,150	2,300	2,300
	Capacity	m³	4.60	5.20	5.60	6.20
L	Length	mm	2,450	2,450	2,550	2,850
H	Height	mm	1,950	1,950	1,950	2,050
	Width	mm	2,200	2,350	2,350	2,350
	Weight	kg	5,050	5,400	5,450	5,900



Backhoe Buckets — HDV

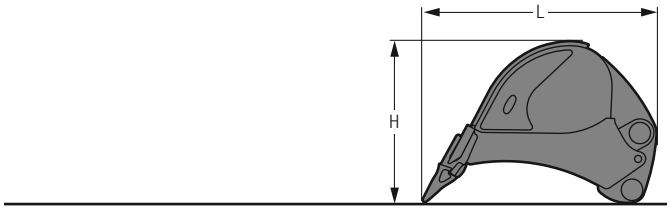
	Cutting width	mm	1,950	2,150	2,150	2,300
	Capacity	m³	4.20	4.70	5.20	5.70
L	Length	mm	2,450	2,450	2,450	2,600
H	Height	mm	1,950	1,950	1,950	1,950
	Width	mm	2,000	2,200	2,350	2,350
	Weight	kg	5,700	6,000	6,300	6,400



Backhoe Buckets R 966

Std

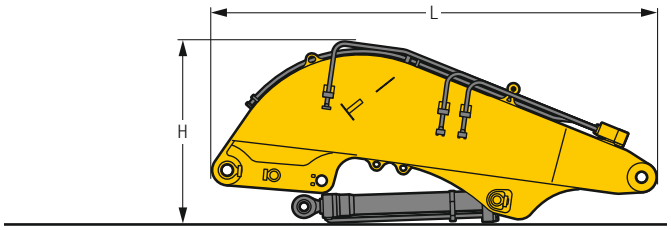
	Cutting width	mm	1,350	1,550	1,750	1,950	2,150
	Capacity	m³	2.00	2.50	3.00	3.50	4.00
L	Length	mm	2,400	2,400	2,400	2,400	2,400
H	Height	mm	1,700	1,700	1,700	1,700	1,700
	Width	mm	1,400	1,600	1,800	2,000	2,200
	Weight	kg	2,750	2,950	3,150	3,450	3,600



Backhoe Buckets R 966

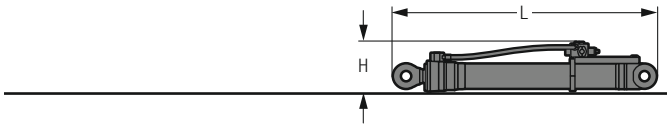
HD

	Cutting width	mm	1,600	1,800	2,000	2,150
	Capacity	m³	2.00	2.50	3.00	3.50
L	Length	mm	2,300	2,300	2,300	2,350
H	Height	mm	1,600	1,600	1,600	1,650
	Width	mm	1,650	1,850	2,050	2,200
	Weight	kg	3,550	3,850	4,100	4,450



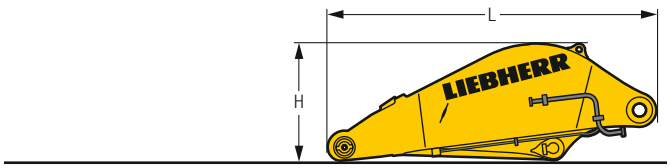
Shovel Boom

L	Length	mm	4,950
H	Height	mm	2,050
	Width	mm	1,650
	Weight without crowd cylinder	kg	7,300
	Weight crowd cylinder	kg	2 x 450



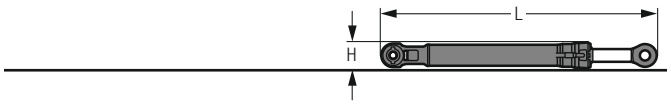
Shovel Hoist Cylinders (two)

L	Length	mm	2,920
H	Height	mm	550
	Width	mm	450
	Weight	kg	2 x 1,100



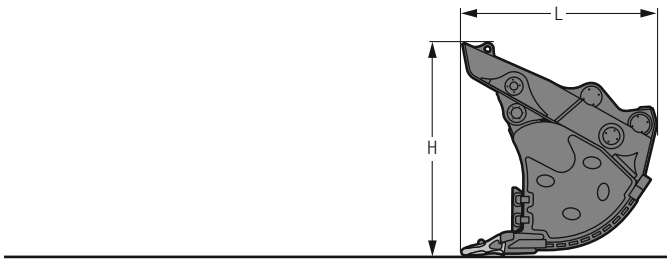
Shovel Stick

L	Length	mm	3,660
H	Height	mm	1,300
	Width	mm	1,800
	Weight	kg	4,650



Shovel Bucket Cylinders (two)

L	Length	mm	3,050
H	Height	mm	450
	Width	mm	450
	Weight	kg	2 x 625



Front Shovels

	Cutting width	mm	2,700	2,700	2,700	2,700
	Capacity	m³	5.10	5.40	5.60	6.00
L	Length	mm	2,600	2,840	2,800	2,800
H	Height	mm	2,700	2,840	2,700	2,800
	Width	mm	2,700	2,700	2,700	2,700
	Weight					
	Level I	kg	8,450	–	8,750	9,950
	Level II	kg	9,100	–	9,450	10,700
	Level III	kg	10,150	10,600	10,600	–

Standard Equipment

Undercarriage

- Chain guide 3 pieces
- Lashing eyelets
- Sprocket double-toothed with dirt ejector
- Supporting rollers with double bearings
- Track pads, chamfered
- Track rollers, lifetime-lubricated
- Tracks, sealed and greased

Uppercarriage

- Engine hood with two-part gas spring opening
- Fuel tank cap lockable with padlock
- Handrails
- Headlights on uppercarriage, front, halogen, 2 pieces
- Internal platform with access to engine and hydraulic compartments
- Manual main switch
- Sound insulation
- Storage space, lockable
- Swing brake lock, maintenance-free
- Tool set 29 pieces
- Walkway, both-sided

Hydraulic System

- Dedicated swing circuit
- Filter with integrated fine filter area
- Liebherr hydraulic oil
- Positive Control system
- Pressure storage for controlled lowering of equipment with engine turned off
- Pressure test ports for hydraulic
- Shut-off valve between hydraulic tank and pumps
- Work mode selector

Engine

- Common-Rail injection system
- Conform with stage IV emission standard
- Engine idling, automatic, sensor-controlled
- Fixed geometry turbo charger
- Fuel filter and water separator
- Intercooler
- Liebherr SCR technology
- Stepless adjustable engine speed

Operator's Cab

- 2" seat belt with retractor
- 7" colour multifunction display with touchscreen
- Air conditioning, automatic
- Camera for side area monitoring
- Cigarette lighter and ashtray
- Coat hook
- Cup holder
- Engine oil level monitoring on touchscreen
- Fuel consumption indicator on touchscreen
- Headlights on cab, front, halogen, 2 pieces
- Hydraulic suspension
- Impact-resistant roof window
- Impact-resistant two-piece windscreen
- Interior light
- LiDAT Plus (Liebherr data transfer system)*
- Mechanical hour meters, readable from outside the cab
- Operator seat Comfort with longitudinal and vertical damping
- Radio pre-installation
- Rain hood over front window opening
- Rearview mirrors
- Rear view monitoring camera
- Rear window emergency exit
- Roll-down sun blinds
- Rubber floor mat
- Sliding windows in cab door
- Storage bin
- Storage space
- Tinted windows
- Urea tank level monitoring on touchscreen
- Wiper/washer

Attachment

- Boom cylinders oil regeneration
- Headlights on boom, halogen, 2 pieces, protections included
- Liebherr central lubrication system, fully-automatic (except connecting link for bucket kinematics)
- Load valve for stick cylinder (on distributor)
- Pipe fracture safety valves for boom and stick cylinders
- Stick cylinder oil regeneration

Non-exhaustive list, please contact us for further information.

* optionally extendable after one year

Options

Undercarriage

- Chain guide 4 pieces
- Chain guide full length
- Protection plate for wrecking ball operation
- Reinforced cover and base plate for undercarriage centre section
- Special painting
- Travel drive protection
- Travel gear support, reinforced

Uppercarriage

- Automatic tiltable access ladder
- Cab elevation
- Counterweight 16.0 t
- Electric socket for external start-up aid (24 V)
- Electric socket for urea filling station (24 V)
- Engine compartment lighting
- Fine filter protection grid for radiator
- Fuel tank refilling pump
- Lubrication line protection (swing ring)
- Protection for headlights on uppercarriage
- Reversible fan drive
- Special painting
- Storage space with extended tool set 40 pieces (incl. tool box)
- Swing drive protection
- Walkway, wide version with guard rail
- Wiggins quick coupling for fuel

Hydraulic System

- Bypass filter for hydraulic oil
- Liebherr hydraulic oil, adapted for extreme climate conditions
- Liebherr hydraulic oil, biodegradable
- Preheating for hydraulic oil (240 V)

Engine

- Air pre-filter with dust trap
- Automatic engine shut-down after idling (without timer)
- Engine shut-down self-timer
- Preheating for fuel, coolant and engine oil (240 V)
- Wiggins quick coupling for engine oil

Operator's Cab

- 4-points seat belt
- Acoustic travel alarm deactivatable
- Additional headlights cab, front and/or rear, halogen or LED, 2 pieces
- Adjustable intensity headlights (LED)
- Amber beacon on cabin, halogen, 1 piece
- Auxiliary heater programmable
- Bottom windscreen wiper
- Cool box (12 V)
- Electronic anti-theft device
- Emergency stop in cab
- FGPS front guard
- Fire extinguisher
- First-aid box
- Follow me home headlights
- Footrest
- FOPS top guard
- Handrests elevated for joysticks
- Headlights on cab, front, LED, 2 pieces
- Liebherr proportional control
- Lighting for cabin access
- Operator seat Comfort
- Operator seat Premium
- Radio Comfort
- Roof window wiper
- Skyview 360°
- Special painting
- Sun visor
- Switchable high-pressure control

Attachment

- Boom bottom protection
- Bucket cylinder rod protection
- Cylinders check valve
- Filter for hydraulic hammer return flow
- Headlights on boom, LED, 2 pieces
- High pressure circuit
- Hoist cylinder stroke limitation, adjustable
- Leak oil line for attachment
- Liebherr automatic lubrication system for connecting link
- Liebherr bucket range
- Liebherr quick coupler, hydraulic or mechanical
- Liebherr tooth system
- Lifting eye on boom and stick
- Load holding valve for bucket cylinder
- Medium pressure circuit
- Overload warning system
- Protection for hoist cylinders hoses
- Security for hoist cylinders
- Special painting
- Stick bottom protection
- Stick cylinder rod protection
- Stick cylinder stroke limitation, adjustable
- Sticks, sealed version
- Tool Control, 10 tool adjustments selectable over the display

Non-exhaustive list, please contact us for further information.

Options and/or special attachments, supplied by vendors other than Liebherr, are only to be installed with the knowledge and approval of Liebherr in order to retain warranty.

The Liebherr Group of Companies

Wide Product Range
The Liebherr Group is one of the largest construction equipment manufacturers in the world. Liebherr's high-value products and services enjoy a high reputation in many other fields. The wide range includes domestic appliances, aerospace and transportation systems, machine tools and maritime cranes.

Exceptional Customer Benefit
Every product line provides a complete range of models in many different versions. With both their technical excellence and acknowledged quality, Liebherr products offer a maximum of customer benefits in practical applications.

State-of-the-art Technology
To provide consistent, top quality products, Liebherr attaches great importance to each product area, its components and core technologies. Important modules and components are developed and manufactured in-house, for instance the entire drive and control technology for construction equipment.

Worldwide and Independent
Hans Liebherr founded the Liebherr family company in 1949. Since then, the family business has steadily grown to a group of more than 130 companies with nearly 44,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

www.liebherr.com

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