

Crawler Excavator

R 956

Litronic®

Motor:
240 kW / 326 HP

Stage IV

Operating weight:

Backhoe: 51,000 – 58,150 kg

Shovel: 56,750 – 57,300 kg

Bucket Capacity:

Backhoe: 1.25 – 3.30 m³

Shovel: 2.50 – 3.10 m³



LIEBHERR

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Performance

Performance, precision
and responsiveness



Economy

High level of productivity for a lower overall operating cost

Reliability

Result of ongoing improvements

Comfort

Spacious, ergonomic and high-visibility

Easy maintenance

Simplified daily checks, longer maintenance intervals



Performance



**Performance, precision
and responsiveness**

Technology serving productivity

Responsive and accurate, the R 956 crawler excavators are high performance excavators for mass excavation works or for digging in quarries. With its proven hydraulic design and variety of operating modes, the R 956 excavator can be used in all major worksites or quarries.

Liebherr Integration

All the major components are designed and manufactured within the Liebherr group. This includes components such as the heat engine, hydraulic pumps, electronic components (injection mapping, hydraulic control, control console) and of course the essential mechanical elements including cylinders, the slewing ring and work tools, resulting in an overall increase in productivity.

Regeneration Plus

The „Regeneration Plus“ function allows for the accelerated lowering of the boom, reduced losses of pressure and an improved work cycle. The optimization and combination of the „zero-pressure lowering of the boom“ and „Regeneration plus“ functions, together with the increased power of the hydraulics, provide increased performance and lower consumption.

Power and speed

Thanks to their kinematics and hydraulic power, the R 956 crawler excavators develop increased breakout and digging forces. The generously sized cylinders allow you to increase the break-out performance in hard materials. The mechanical link between the rotation engine and slewing ring gives the machine a high torque and swing speed, thus improving your operating cycles.

Liebherr Engine

- New Final Tier 4/Stage IV engine 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
- Two-stage turbocharging with intercooler, for increased power at low revs and reduced fuel consumption

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 work cycle times
- Increased service life when a hydraulic hammer is used



Economy



**High level of productivity for
a lower overall operating cost**

Low operating costs

Thanks to its high technology and its 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 park 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



Spare parts service

- Any spare parts required are available within 24 hours – worldwide. And that means high operational readiness of the machines, wherever, whenever
- Over 80,000 spare parts in stock at all times



Reliability



**Result of ongoing
improvements**

A tested and proven undercarriage

With an X-shaped design and an increased slewing ring diameter, this new undercarriage is characterized by an even distribution of stresses over the whole structure. This results in increased performance, greater load properties and an increased service life.

Safe travel

The integration of 3 guiding guards per track as standard significantly reduces the risk of tracks coming off. In addition, track pins and bearings are lubricated for life, which reduces both maintenance tasks and down time.

A tested and proven undercarriage

A tested and proven uppercarriage and further optimised attachments guarantee robustness in even the most testing conditions.

Finest details

The hydraulic, electric and lubrication lines are laid out to ensure optimum operating safety and maximum availability. The finish paint applied before assembly and the appropriate surface treatment of the components guarantee maximum protection against corrosion. The integration of the rear camera in the counter weight elegantly highlights the overall perception of quality, safety and reliability.

SCR system with diesel exhaust fluid (AdBlue®)

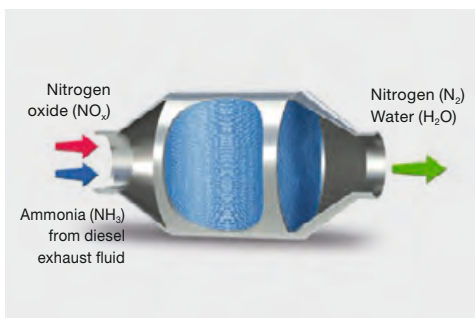
- Diesel exhaust fluid level indicator on the display
- Liebherr design > complies with Final Tier 4/Stage IV standard
- No need for particle filters (DPF)
- Simple system for enhanced reliability and less maintenance

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 undercarriages, one with variable gauge, adapted to different operating configurations and transport conditions

Key components developed by Liebherr

- Perfect harmonization of the machine elements, designed specifically for earthmoving and quarry applications
- Engine, hydraulic pumps, transfer box, transmission, rotating mechanism, slewing ring, 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, 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 cab that's easy to look after

The possibility of working in a clean environment was an important objective in the design of the cab. It is particularly easy to maintain thanks to elements such as a keyboard with soft touch comfort keys and an easily accessible cab air filter.



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

Heightened 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
- Retractable laminated glass roof panel
- 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



**Simplified daily checks,
longer maintenance intervals**

Simplified daily checks

The execution of the daily checks was taken into account from the start of the design, to make them simpler, more accessible and shorter. The engine oil or diesel exhaust fluid levels, for example, can be checked via the display in the operator's cab. The automatic centralised lubrication can save precious intervention time, while guaranteeing that the excavator is in optimum operating condition.

Longer service intervals

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 Final Tier 4/Stage IV standards, without fitting a particle filter. 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

Hydraulic reservoir stop valve

- Easy and quick interruption of the oil circuit between hydraulic reservoir and hydraulic system
- No drainage of fluid necessary for service or repair work on the hydraulic system

Central lubrication system

- The fully-automatic central lubrication system, fitted as standard, allows for rapid maintenance: It saves time-consuming individual lubricating and downtime
- All the lubrication points on the superstructure of the vehicle and the attachment hydraulics are supplied, with the exception of the connecting plate
- Engine oil level visible on display



Long live progress with the R 956

Equipment

- Cast steel elements
- Greater resistance to stresses
- Longer service life

Tools

- Z-type Liebherr teeth for fast replacement
- Wide range of work tools

Automatic centralized lubrication - standard

- Reduced maintenance time
- Longer service life thanks to better lubrication

Undercarriage

- Robust structure thanks to the X-shaped profile
- Improved self-cleaning capacity
- Special heat treatment for low wear and tear of drive sprockets
- 3 guiding guards per track – standard





Visibility

- Rear camera integrated in the counterweight
- Two boom-mounted lights – standard
- Optimized design of the whole uppercarriage providing the operator with a better field of vision

Operator's cab

- Comfortable and ergonomic
- 7" high resolution color touchscreen for heightened readability
- Rear window with improved visibility

Long live progress with the R 956 Shovel

Equipment

- Parallel kinematics for powerful break-out
- Bucket cylinders positioned under the equipment for better protection
- Optional boom cylinder protection

Tools

- Different types of buckets:
- 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.





Operator's cab

- Operator's cab with 2' 7" elevation for improved visibility
- Optionally equipped with a FOPS and FGPS front guard
- Comfortable and quiet cab

Technical Data



Engine

Rating per ISO 9249	240 kW (326 HP) at 1,800 RPM
Model	Liebherr D946 A7
Type	6 cylinder in-line
Bore/Stroke	130/150 mm
Displacement	11,946 l
Engine operation	4-stroke diesel Common-Rail, monoturbo
Exhaust gas treatment	SCR with urea injection emission standard stage IV/Tier 4f
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	770 l
Urea tank	96 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

The controlling is conducted via the integrated excavator system technology, input and output modules, communicated via the CAN-BUS with the electronic central unit.

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	
Attachment and swing	proportional via joystick levers
Travel	– proportional via foot pedals or removable hand levers – speed pre-selection
Additional functions	proportional regulation via foot pedals or rocker



Hydraulic System

Hydraulic pump	Liebherr, variable displacement, swashplate double pump
for attachment and travel drive	2 x 380 l/min.
Max. flow	350 bar
Max. pressure	
for swing drive	reversible, variable flow, swashplate pump, closed-loop circuit
Max. flow	201 l/min.
Max. pressure	375 bar
Pump regulation	electro-hydraulic with electronic engine speed sensing regulation, pressure compensation, flow compensation, automatic oil flow optimizer
Hydraulic tank	380 l
Hydraulic system	743 l
Hydraulic oil filter	2 full flow filters in return line with integrated fine filter area (5 µm)
Cooling system	compact cooler for water cooler, after-cooler, fuel cooler and transmission pump oil, sandwiched with 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 valves
Transmission	Liebherr compact planetary reduction gear
Swing ring	Liebherr, sealed single race ball bearing swing ring, internal teeth
Swing speed	0 – 5.8 RPM stepless
Swing torque	160 kNm
Holding brake	wet multi-disc (spring applied, pressure released)



Operator's Cab

Cab	ROPS safety cab structure (capable of sweeping over) with individual windscreens or featuring a slide-in subpart under the ceiling, work headlights integrated in the ceiling, a door with a side window (can be opened on both sides), large stowing and depositing possibilities, shock-absorbing suspension, sound-damping insulating, tinted laminated safety glass, separate window shades for the sunroof window and windscreen, 12 V plug, storage bins, lunchbox, cup holder
Operator's seat	Liebherr-Comfort seat, airsprung with automatic weight adjustment, vertical and horizontal 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, 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 the outside; heating-cooling unit, designed for extreme outside temperatures, sensors for solar radiation, inside and outside temperatures
Noise emission	
ISO 6396	L_{pA} (inside cab) = 72 dB(A)
2000/14/EC	L_{WA} (surround noise) = 106 dB(A)



Undercarriage

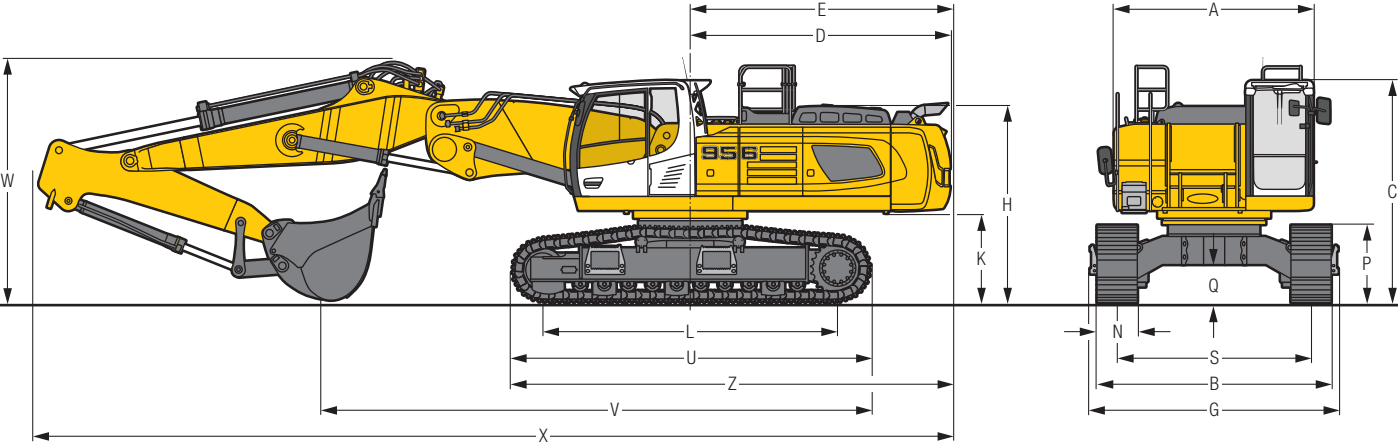
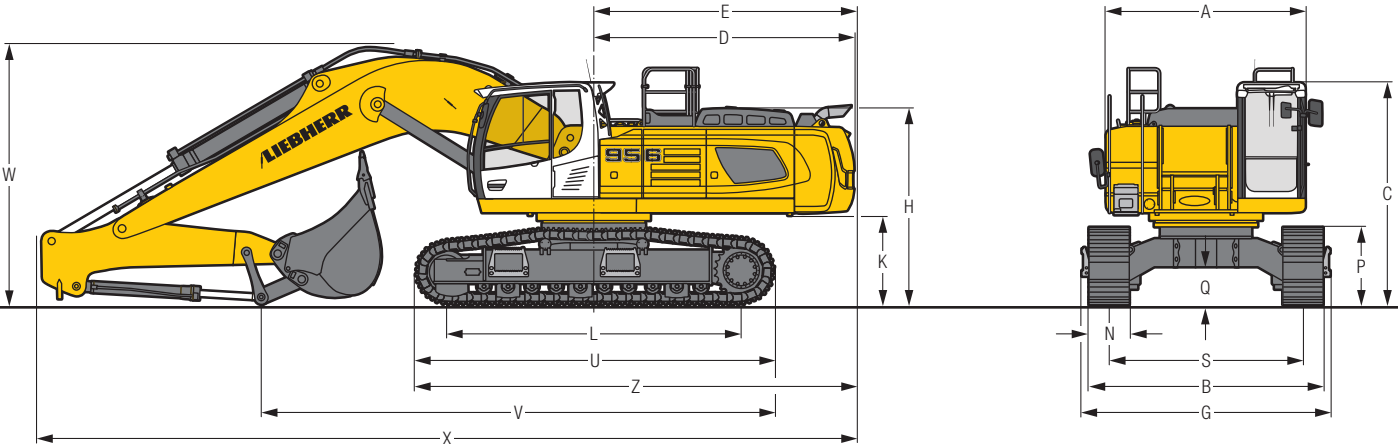
Versions	
LC	gauge 2,900 mm
LC-V	gauge 2,890 mm
HD	gauge 2,900 mm
Drive	Liebherr swashplate motor with integrated brake valves
Transmission	Liebherr planetary reduction gears
Travel speed	LC/LC-V: low range – 3.3 km/h high range – 4.8 km/h HD: low range – 2.4 km/h high range – 3.5 km/h
Net drawbar pull on crawler	LC/LC-V: 363 kN HD: 414 kN
Track components	LC/LC-V: D 7 G, maintenance-free HD: D 8, maintenance-free
Track rollers/Carrier rollers	LC: 10/2 LC-V: 10/3 HD: 9/2
Tracks	sealed and greased
Track pads	triple grouser
Holding brake	wet multi-discs (spring applied, pressure released)
Brake valves	integrated into 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
Bucket	standard equipped with Liebherr tooth system

Dimensions



	LC	mm			LC-V	mm			HD	mm		
A*		2,970				2,970				2,970		
C		3,315/3,510***				3,390/3,585***				3,335/3,530***		
D		3,880				3,880				3,880		
E		3,900				3,900				3,900		
H		2,925				3,000				2,945		
K		1,335				1,410				1,355		
L		4,400				4,400				4,500		
P		1,160				1,160				1,225		
Q		555				760				575		
S		2,900				2,390/2,890**				2,900		
U		5,365				5,365				5,550		
N		500	600	750		500	600	750		500	600	750
B		3,465	3,500	3,650		2,950/3,450**	2,990/3,490**	3,140/3,640**		3,465	3,500	3,650
G		3,715	3,715	3,715		3,200/3,700**	3,200/3,700**	3,200/3,700**		3,715	3,715	3,715
Z		6,565				6,565				6,655		

* without door stop device and spacer

** work position

*** with FOPS top guard

LC-Undercarriage					
	Stick length mm	Mono boom 6.70 m mm	Mono boom 7.60 m mm	Mono boom 9.20 m mm	Two-piece boom 4.70 m mm
V	2.35	7,650	7,600	–	8,200
	2.90	7,100	8,200	8,750	7,600
	3.80	9,300*	7,300	9,000	7,000
	5.00	–	–	7,750	–
W	2.35	3,900	3,900	–	3,650
	2.90	3,950	3,950	4,150	3,750
	3.80	3,900*	4,000	4,250	4,050
	5.00	–	–	4,350	–
X	2.35	12,200	13,250	–	13,700
	2.90	12,250	13,250	14,900	13,600
	3.80	12,200*	13,250	14,900	13,600
	5.00	–	–	14,900	–

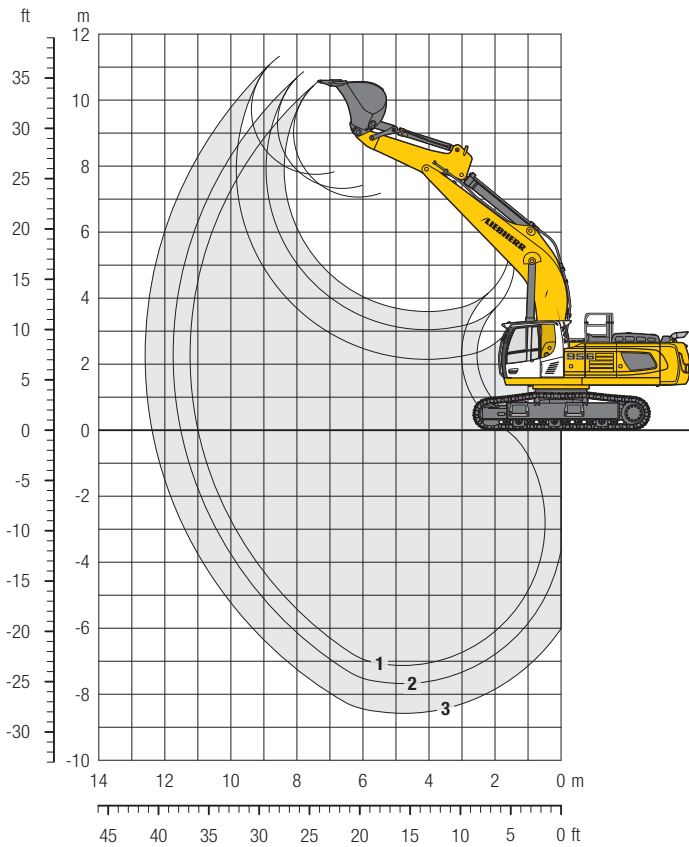
LC-V-Undercarriage					
	Stick length mm	Mono boom 6.70 m mm	Mono boom 7.60 m mm	Mono boom 9.20 m mm	Two-piece boom 4.70 m mm
V	2.35	7,650	7,600	–	8,050
	2.90	7,100	8,200	8,800	7,600
	3.80	9,300*	7,300	9,050	6,900
	5.00	–	–	7,800	–
W	2.35	3,950	3,950	–	3,650
	2.90	4,000	4,000	4,200	3,750
	3.80	3,950*	4,050	4,300	4,100
	5.00	–	–	4,400	–
X	2.35	12,200	13,250	–	13,700
	2.90	12,250	13,250	14,850	13,600
	3.80	12,200*	13,250	14,850	13,600
	5.00	–	–	14,850	–

HD-Undercarriage					
	Stick length mm	Mono boom 6.70 m mm	Mono boom 7.60 m mm	Straight mono boom 8.00 m mm	Two-piece boom 4.70 m mm
V	2.35	7,750	7,700	8,350	8,050
	2.90	7,200	8,300	7,900	7,600
	3.80	9,400*	7,400	8,250	6,900
	5.00	–	–	–	–
W	2.35	3,900	3,900	3,600	3,650
	2.90	3,950	3,950	3,700	3,750
	3.80	3,900*	4,000	3,850	4,000
	5.00	–	–	–	–
X	2.35	12,200	13,250	13,800	13,700
	2.90	12,250	13,250	13,700	13,600
	3.80	12,200*	13,250	13,700	13,600
	5.00	–	–	–	–

* without bucket

Backhoe Bucket

with Mono Boom 6.70 m



Digging Envelope

		1	2	3
Stick length	m	2.35	2.90	3.80
Max. digging depth	m	7.15	7.70	8.60
Max. reach at ground level	m	11.10	11.50	12.40
Max. dumping height	m	7.05	7.30	7.70
Max. teeth height	m	10.55	10.85	11.30

Digging Forces

		1	2	3
Digging force ISO	kN	249	218	182
	t	25.4	22.2	18.5
Breakout force ISO	kN	316	316	316
	t	32.2	32.2	32.2

Max. breakout force ISO with ripper bucket and without quick coupler

345 kN (35.2 t)

Operating Weight and Ground Pressure

The operating weight includes the basic machine with mono boom 6.70 m, stick 2.90 m and HD bucket 2.70 m³.

Undercarriage		LC			LC-V		
Pad width	mm	500	600	750	500	600	750
Weight	kg	51,400	52,000	53,250	53,500	54,100	55,350
Ground pressure	kg/cm ²	1.09	0.92	0.75	1.13	0.95	0.78

Undercarriage		HD		
Pad width	mm	500	600	750
Weight	kg	53,500	54,050	54,850
Ground pressure	kg/cm ²	1.1	0.93	0.75

Optional: heavy counterweight

(heavy counterweight increases the operating weight by 2,000 kg and ground pressure by 0.04 kg/cm²)

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

	Cutting width mm	Capacity ISO 7451 m ³	Weight kg	LC-Undercarriage			LC-V-Undercarriage			HD-Undercarriage		
				Stick length (m)			Stick length (m)			Stick length (m)		
				2.35	2.90	3.80	2.35	2.90	3.80	2.35	2.90	3.80
STD ¹⁾	1,350	1.65	2,100	▲	▲	▲	▲	▲	▲	▲	▲	
	1,550	2.00	2,250	▲	▲	▲	▲	▲	▲	▲	▲	
	1,750	2.35	2,450	▲	▲	■	▲	▲	▲	▲	■	
	1,950	2.70	2,650	▲	■	▲	▲	■	▲	■	▲	
	1,950	3.00	2,750	■	▲	□	■	■	□	■	□	
	2,100	3.30	2,850	■	▲	□	■	▲	□	■	▲	
HD ²⁾	1,350	1.65	2,350	▲	▲	▲	▲	▲	▲	▲	▲	
	1,550	2.00	2,650	▲	▲	■	▲	▲	▲	▲	■	
	1,750	2.35	2,850	▲	▲	▲	▲	▲	▲	▲	▲	
	1,950	2.70	3,100	■	■	□	■	■	□	■	□	
	1,950	3.00	3,200	■	▲	□	■	▲	□	■	▲	

* Indicated loads are based on ISO 10567 max. stick length, lifted 360° on firm

¹⁾ Standard bucket with Liebherr teeth Z 70 (appropriate for materials up to classification 5, according to VOB, Section C, DIN 18300)

²⁾ HD bucket with Liebherr teeth Z 70 (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

Other backhoes available on request

Max. material weight ▲ = ≤ 2.2 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.5 t/m³, □ = ≤ 1.2 t/m³, - = not authorized

Lift Capacities

with Mono Boom 6.70 m

Stick 2.35 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m
		LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	
10.5	LC													
	LC-V													
9.0	LC													
	LC-V													
7.5	LC													
	LC-V													
6.0	LC													
	LC-V													
4.5	LC													
	LC-V													
3.0	LC													
	LC-V													
1.5	LC													
	LC-V													
0	LC													
	LC-V													
-1.5	LC													
	LC-V													
-3.0	LC													
	LC-V													
-4.5	LC													
	LC-V													
-6.0	LC													
	LC-V													

Stick 2.90 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m
		LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	
10.5	LC													
	LC-V													
9.0	LC													
	LC-V													
7.5	LC													
	LC-V													
6.0	LC													
	LC-V													
4.5	LC													
	LC-V													
3.0	LC													
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1.5	LC													
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0	LC													
	LC-V													
-1.5	LC													
	LC-V													
-3.0	LC													
	LC-V													
-4.5	LC													
	LC-V													
-6.0	LC													
	LC-V													

Stick 3.80 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m
		LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	
10.5	LC													
	LC-V													
9.0	LC													
	LC-V													
7.5	LC													
	LC-V													
6.0	LC													
	LC-V													
4.5	LC													
	LC-V													
3.0	LC													
	LC-V													
1.5	LC													
	LC-V													
0	LC													
	LC-V													
-1.5	LC													
	LC-V													
-3.0	LC													
	LC-V													
-4.5	LC													
	LC-V													
-6.0	LC													
	LC-V													

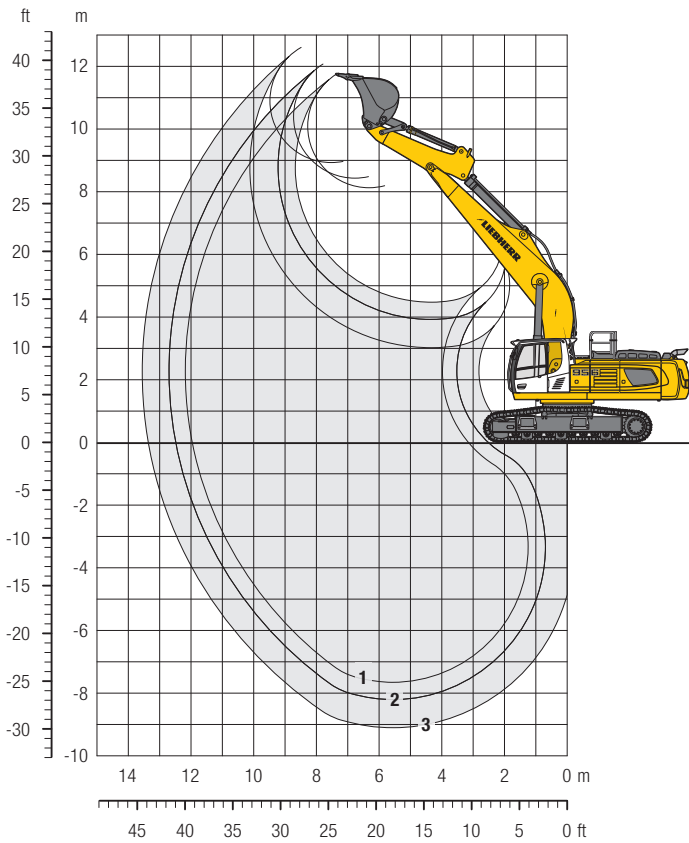
 Height
  Can be slewed through 360°
  In longitudinal position of undercarriage
  Max. reach
 * Limited by hydr. capacity

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 800 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 7.60 m



Digging Envelope

		1	2	3
Stick length	m	2.35	2.90	3.80
Max. digging depth	m	7.65	8.20	9.10
Max. reach at ground level	m	11.95	12.50	13.35
Max. dumping height	m	8.10	8.40	8.90
Max. teeth height	m	11.70	12.05	12.60

Digging Forces

		1	2	3
Digging force ISO	kN	249	218	182
	t	25.4	22.2	18.5
Breakout force ISO	kN	316	316	316
	t	32.2	32.2	32.2

Max. breakout force ISO with ripper bucket and without quick coupler

345 kN (35.2 t)

Operating Weight and Ground Pressure

The operating weight includes the basic machine with mono boom 7.60 m, stick 2.90 m and bucket 2.00 m³.

Undercarriage		LC			LC-V		
Pad width	mm	500	600	750	500	600	750
Weight	kg	51,000	51,600	52,850	53,100	53,700	54,950
Ground pressure	kg/cm ²	1.08	0.91	0.74	1.12	0.94	0.77

Undercarriage		HD		
Pad width	mm	500	600	750
Weight	kg	53,100	53,650	54,450
Ground pressure	kg/cm ²	1.09	0.92	0.74

Optional: heavy counterweight

(heavy counterweight increases the operating weight by 2,000 kg and ground pressure by 0.04 kg/cm²)

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

	Cutting width mm	Capacity ISO 7451 m ³	Weight kg	LC-Undercarriage			LC-V-Undercarriage			HD-Undercarriage		
				Stick length (m)			Stick length (m)			Stick length (m)		
				2.35	2.90	3.80	2.35	2.90	3.80	2.35	2.90	3.80
STD ¹⁾	1,350	1.65	2,100	▲	▲	■	▲	▲	■	▲	▲	■
	1,550	2.00	2,250	▲	■	▲	▲	▲	▲	▲	▲	▲
	1,750	2.35	2,450	■	▲	□	■	■	□	■	■	□
	1,950	2.70	2,650	▲	▲	□	■	▲	□	■	▲	□
	1,950	3.00	2,750	▲	□	-	▲	□	-	▲	□	-
HD ²⁾	1,350	1.65	2,350	▲	▲	■	▲	▲	■	▲	▲	■
	1,550	2.00	2,650	▲	■	▲	▲	■	▲	■	▲	▲
	1,750	2.35	2,850	■	▲	□	■	▲	□	■	▲	□
	1,950	2.70	3,100	▲	□	-	▲	□	-	▲	□	-

* Indicated loads are based on ISO 10567 max. stick length, lifted 360° on firm

¹⁾ Standard bucket with Liebherr teeth Z 70 (appropriate for materials up to classification 5, according to VOB, Section C, DIN 18300)

²⁾ HD bucket with Liebherr teeth Z 70 (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

Other backhoes available on request

Max. material weight ▲ = ≤ 2.2 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.5 t/m³, □ = ≤ 1.2 t/m³, - = not authorized

Lift Capacities

with Mono Boom 7.60 m

Stick 2.35 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m
		LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	
10.5	LC LC-V HD													
9.0	LC LC-V HD							10.5* 10.7*	10.5* 10.7*			9.9* 9.9*	9.9* 9.9*	7.5
7.5	LC LC-V HD							10.5* 10.5*	10.5* 10.5*			8.6* 9.0*	9.2* 9.2*	8.7
6.0	LC LC-V HD			18.2* 18.2*		13.3* 13.3*	13.3* 13.4*	10.7* 11.1*	11.2* 11.2*	8.0* 8.3*	10.1* 10.1*			9.5
4.5	LC LC-V HD							13.7* 14.1*	15.5* 15.6*	10.1* 10.4*	12.2* 12.2*	7.7* 8.0*	10.5* 10.6*	10.0
3.0	LC LC-V HD							12.5* 13.0*	17.4* 17.4*	9.5* 9.8*	13.2* 13.2*	7.4* 7.7*	11.0* 11.1*	10.2
1.5	LC LC-V HD							12.0* 12.5*	16.7* 16.9*	9.0* 9.4*	13.9* 13.9*	7.1* 7.4*	11.2* 11.4*	10.2
0	LC LC-V HD							11.9* 12.4*	17.8* 17.8*	8.8* 9.2*	14.0* 14.0*	7.0* 7.2*	11.1* 11.5*	9.9
-1.5	LC LC-V HD			13.0* 13.2*	13.0* 13.2*	12.0* 12.7*	17.0* 16.9*	8.8* 9.3*	13.7* 13.6*	7.0* 7.3*	11.1* 11.1*			9.5
-3.0	LC LC-V HD			18.4* 18.3*	18.4* 18.3*	12.3* 12.8*	15.5* 15.4*	9.0* 9.3*	12.5* 12.4*			7.5* 7.9*	10.2* 10.2*	8.7
-4.5	LC LC-V HD			15.4* 15.2*	15.4* 15.2*	12.7* 12.7*	12.9* 12.7*					9.5* 9.6*	9.6* 9.6*	7.5
-6.0	LC LC-V HD			15.3* 15.3*	15.3* 15.3*	12.8* 12.8*								

Stick 2.90 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m
		LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	
10.5	LC LC-V HD													
9.0	LC LC-V HD											9.6* 9.6*	9.6* 9.6*	8.2
7.5	LC LC-V HD											9.8* 9.8*	9.8* 9.8*	9.3
6.0	LC LC-V HD							12.3* 12.4*	12.3* 12.4*	10.5* 10.6*	10.5* 10.6*	8.1* 8.4*	9.5* 9.5*	10.0
4.5	LC LC-V HD							14.1* 14.5*	14.5* 14.5*	10.2* 10.6*	11.6* 11.7*	7.8* 8.0*	10.0* 10.1*	10.5
3.0	LC LC-V HD							12.9* 13.3*	16.6* 16.7*	9.6* 9.9*	12.7* 12.8*	7.4* 7.7*	10.6* 10.7*	10.7
1.5	LC LC-V HD							12.1* 12.6*	17.7* 17.8*	9.1* 9.4*	13.5* 13.6*	7.1* 7.4*	11.1* 11.2*	10.7
0	LC LC-V HD							11.9* 12.4*	17.9* 17.9*	8.8* 9.2*	13.9* 13.9*	6.9* 7.2*	11.0* 11.4*	10.5
-1.5	LC LC-V HD					14.9* 15.0*	14.9* 15.0*	11.9* 12.5*	17.3* 17.3*	8.7* 9.0*	13.8* 13.7*	6.8* 7.1*	10.9* 11.2*	10.0
-3.0	LC LC-V HD			17.0* 17.1*	17.0* 17.1*	19.0* 20.0*	20.0* 20.0*	12.0* 12.7*	16.1* 16.1*	8.8* 9.2*	12.9* 12.9*	6.9* 7.3*	10.2* 10.2*	9.3
-4.5	LC LC-V HD			20.6* 20.4*	20.6* 20.4*	17.2* 17.0*	17.2* 17.0*	12.4* 12.9*	14.0* 13.8*	9.1* 9.5*	11.0* 10.8*			8.2
-6.0	LC LC-V HD					20.5* 20.5*		12.4* 12.3*	12.4* 12.3*	9.7* 9.6*	9.7* 9.6*			6.6

Stick 3.80 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m
		LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	
10.5	LC LC-V HD											5.9* 5.8*	5.9* 5.8*	8.0
9.0	LC LC-V HD									7.5* 7.7*	7.5* 7.7*	5.3* 5.3*	5.3* 5.3*	9.3
7.5	LC LC-V HD									8.3* 8.3*	8.3* 8.3*	5.0* 5.0*	5.0* 5.0*	10.3
6.0	LC LC-V HD							9.5* 9.5*	9.5* 9.5*	8.3* 8.6*	8.6* 8.7*	6.3* 6.5*	8.1* 8.2*	11.0
4.5	LC LC-V HD			18.0* 18.3*	18.0* 18.3*	13.0* 13.1*	13.0* 13.1*	10.6* 10.7*	10.6* 10.7*	7.9* 8.2*	9.3* 9.3*	6.1* 6.4*	8.5* 8.5*	11.4
3.0	LC LC-V HD							13.5* 13.9*	15.3* 15.4*	9.8* 10.2*	11.9* 11.9*	5.9* 6.1*	8.9* 8.9*	11.6
1.5	LC LC-V HD							12.5* 12.9*	17.0* 17.0*	9.2* 9.6*	13.0* 13.0*	7.1* 7.4*	10.7* 10.7*	11.6
0	LC LC-V HD					9.5* 9.8*	9.5* 9.8*	12.0* 12.4*	17.8* 17.8*	8.8* 9.2*	13.6* 13.7*	6.9* 7.1*	11.0* 11.1*	11.4
-1.5	LC LC-V HD			8.1* 8.2*	8.1* 8.2*	14.8* 14.9*	14.8* 14.9*	11.8* 12.4*	17.7* 17.7*	8.6* 9.1*	13.8* 13.8*	6.7* 7.1*	10.8* 11.2*	10.9
-3.0	LC LC-V HD			14.3* 14.7*	14.3* 14.7*	18.5* 19.3*	21.6* 22.0*	11.8* 12.3*	17.0* 16.9*	8.6* 9.0*	13.4* 13.4*	6.7* 7.0*	10.8* 10.8*	10.3
-4.5	LC LC-V HD			21.3* 21.7*	21.3* 21.7*	19.0* 19.6*	19.7* 19.6*	12.1* 12.6*	15.4* 15.3*	8.8* 9.1*	12.2* 12.1*	6.9* 7.2*	9.5* 9.3*	9.3
-6.0	LC LC-V HD			20.6* 20.2*	20.6* 20.2*	16.0* 15.7*	16.0* 15.7*	12.6* 12.4*	12.6* 12.4*	9.2* 9.2*	9.5* 9.4*	8.4* 8.3*	8.4* 8.3*	7.9

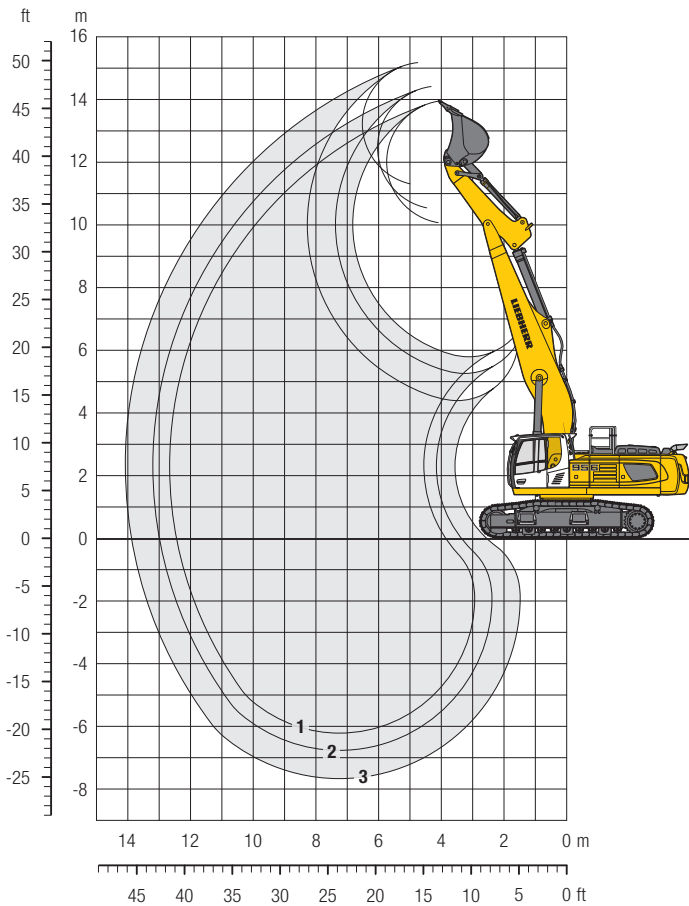
Height
 Can be swivelled through 360°
 In longitudinal position of undercarriage
 Max. reach
 * Limited by hydr. capacity

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 800 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 Straight Mono Boom 8.00 m



Digging Envelope

		1	2	3
Stick length	m	2.35	2.90	3.80
Max. digging depth	m	6.20	6.75	7.65
Max. reach at ground level	m	12.45	13.00	13.90
Max. dumping height	m	10.05	10.55	12.30
Max. teeth height	m	13.95	14.40	15.20

Digging Forces

		1	2	3
Digging force ISO	kN	249	218	182
	t	25.4	22.2	18.5
Breakout force ISO	kN	316	316	316
	t	32.2	32.2	32.2

Max. breakout force ISO with ripper bucket
and without quick coupler

345 kN (35.2 t)

Operating Weight and Ground Pressure

The operating weight includes the basic machine with straight mono boom 8.00 m, stick 2.90 m and bucket 2.00 m³.

Undercarriage		HD		
Pad width	mm	500	600	750
Weight	kg	53,150	53,700	54,500
Ground pressure	kg/cm ²	1.09	0.92	0.74

Optional: heavy counterweight

(heavy counterweight increases the operating weight by 2,000 kg and ground pressure by 0.04 kg/cm²)

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

	Cutting width mm	Capacity ISO 7451 m ³	Weight kg	HD-Undercarriage		
				Stick length (m)		
				2.35	2.90	3.80
STD ¹⁾	1,350	1.65	2,100	▲	▲	■
	1,550	2.00	2,250	▲	■	▲
	1,750	2.35	2,450	■	▲	□
	1,950	2.70	2,650	▲	□	-
	1,950	3.00	2,750	□	□	-
HD ²⁾	1,350	1.65	2,350	▲	■	▲
	1,550	2.00	2,650	■	▲	□
	1,750	2.35	2,850	▲	□	-
	1,950	2.70	3,100	□	-	-

* Indicated loads are based on ISO 10567 max. stick length, lifted 360° on firm

¹⁾ Standard bucket with Liebherr teeth Z 70 (appropriate for materials up to classification 5, according to VOB, Section C, DIN 18300)

²⁾ HD bucket with Liebherr teeth Z 70 (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

Other backhoes available on request

Max. material weight ▲ = ≤ 2.2 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.5 t/m³, □ = ≤ 1.2 t/m³, - = not authorized

Lift Capacities

with Straight Mono Boom 8.00 m

Stick 2.35 m

Stick m	Under- carriage	4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		m
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	
12.0	HD													
10.5	HD			15.0*	15.0*							11.9*	11.9*	6.6
9.0	HD			14.7*	14.7*	11.6	12.8*					9.7	10.2*	8.2
7.5	HD	20.0*	20.0*	15.4*	15.4*	11.3	12.9*	8.3	11.3*			7.8	9.4*	9.3
6.0	HD			14.9	16.7*	10.8	13.4*	8.1	11.4*			6.8	9.0*	10.0
4.5	HD					10.1	13.9*	7.8	11.5*			6.2	8.8*	10.5
3.0	HD					9.5	14.1*	7.5	11.6*	6.0	9.6	5.9	8.9*	10.7
1.5	HD					9.1	13.8*	7.2	11.3*	5.9	9.2*	5.8	8.8*	10.7
0	HD					9.0	12.9*	7.1	10.6*			6.0	8.2*	10.4
-1.5	HD			12.5*	12.5*	9.1	11.3*	7.2	9.3*			6.4	7.3*	10.0
-3.0	HD			9.9*	9.9*	9.0*	9.0*	6.7*	6.7*			5.9*	5.9*	9.2
-4.5	HD													

Stick 2.90 m

Stick m	Under- carriage	4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		m		
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage			
12.0	HD													11.7*	11.7*	5.2
10.5	HD					14.0*	14.0*							8.9*	8.9*	7.5
9.0	HD					14.0*	14.0*	11.8	12.1*					7.8*	7.8*	8.9
7.5	HD	15.3*	15.3*	14.7*	14.7*	11.5	12.4*	8.4	10.9*					7.0	7.2*	9.9
6.0	HD			15.3	16.0*	10.9	12.9*	8.2	11.0*	6.3	8.6*			6.1	6.9*	10.6
4.5	HD					13.9	17.4*	10.2	13.6*	7.8	11.3*	6.1	9.7*	5.6	6.8*	11.0
3.0	HD							9.6	14.0*	7.5	11.4*	6.0	9.5	5.4	6.9*	11.2
1.5	HD							9.2	13.9*	7.2	11.3*	5.8	9.4*	5.3	7.1*	11.2
0	HD					12.2	15.4*	8.9	13.2*	7.0	10.8*	5.7	8.7*	5.4	7.5*	11.0
-1.5	HD			12.3	13.8*	8.9	11.9*	7.0	9.7*	5.8	7.2*			5.8	7.0*	10.6
-3.0	HD			11.2*	11.2*	9.1	9.8*	7.1	7.8*					5.9*	5.9*	9.9
-4.5	HD					7.8*	7.8*	6.7*	6.7*					5.1*	5.1*	8.5

Stick 3.80 m

Stick m	Under- carriage	4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		m		
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage			
12.0	HD			10.9*	10.9*							7.3*	7.3*	6.9		
10.5	HD					10.3*	10.3*					6.0*	6.0*	8.8		
9.0	HD					10.6*	10.6*	8.8	9.8*			5.4*	5.4*	10.0		
7.5	HD					10.6*	10.6*	11.2*	11.2*	8.7	10.2*	6.5	8.2*	5.1*	5.1*	10.9
6.0	HD	18.0*	18.0*	14.7*	14.7*	11.3	12.2*	8.4	10.5*	6.4	9.3*			4.9*	4.9*	11.5
4.5	HD			14.6	16.4*	10.5	13.0*	8.0	10.9*	6.2	9.4*			4.8*	4.8*	11.9
3.0	HD			13.4	17.7*	9.8	13.6*	7.6	11.2*	6.0	9.5*	4.8	6.3*	4.7	4.8*	12.1
1.5	HD			12.5	17.9*	9.3	13.9*	7.2	11.3*	5.8	9.4	4.7	6.4*	4.7	5.0*	12.1
0	HD			12.2	17.0*	9.0	13.6*	7.0	11.0*	5.6	9.1*			4.8	5.2*	11.9
-1.5	HD	9.9*	9.9*	12.1	15.5*	8.8	12.7*	6.9	10.3*	5.6	8.3*			5.0	5.6*	11.5
-3.0	HD	14.8*	14.8*	12.3	13.2*	8.9	11.1*	6.9	9.0*	5.7	6.7*			5.5	5.7*	10.9
-4.5	HD	10.9*	10.9*	10.2*	10.2*	8.6*	8.6*	6.6*	6.6*					4.5*	4.5*	9.9

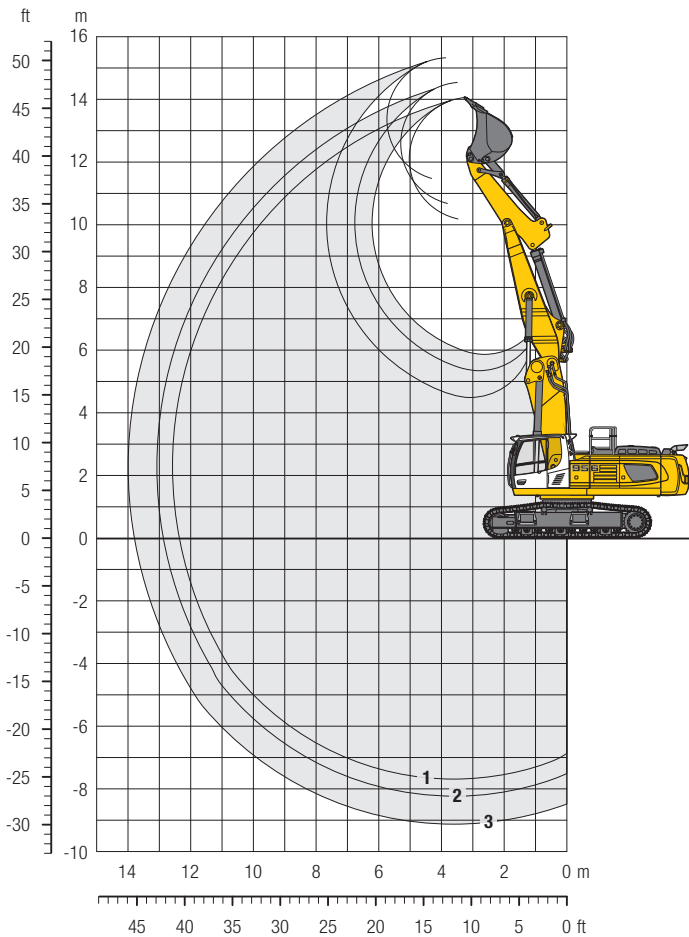
 Height
  Can be slewed through 360°
  In longitudinal position of undercarriage
  Max. reach
 * Limited by hydr. capacity

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 800 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 Two-piece Boom 4.70 m



Digging Envelope

		1	2	3
Stick length	m	2.35	2.90	3.80
Max. digging depth	m	7.70	8.25	9.15
Max. reach at ground level	m	12.35	12.90	13.80
Max. dumping height	m	10.15	10.65	11.45
Max. teeth height	m	14.05	14.50	15.30

Digging Forces

		1	2	3
Digging force ISO	kN	249	218	182
	t	25.4	22.2	18.5
Breakout force ISO	kN	316	316	316
	t	32.2	32.2	32.2

Max. breakout force ISO with ripper bucket and without quick coupler

345 kN (35.2 t)

Operating Weight and Ground Pressure

The operating weight includes the basic machine with two-piece boom 4.70 m, stick 2.90 m and bucket 2.00 m³.

Undercarriage		LC			LC-V		
Pad width	mm	500	600	750	500	600	750
Weight	kg	54,200	54,800	56,050	56,300	56,900	58,150
Ground pressure	kg/cm²	1.14	0.96	0.79	1.19	1.00	0.82

Undercarriage		HD		
Pad width	mm	500	600	750
Weight	kg	56,300	56,850	57,650
Ground pressure	kg/cm²	1.16	0.97	0.79

Optional: heavy counterweight

(heavy counterweight increases the operating weight by 2,000 kg and ground pressure by 0.04 kg/cm²)

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

	Cutting width mm	Capacity ISO 7451 m ³	Weight kg	LC-Undercarriage			LC-V-Undercarriage			HD-Undercarriage		
				Stick length (m)			Stick length (m)			Stick length (m)		
				2.35	2.90	3.80	2.35	2.90	3.80	2.35	2.90	3.80
STD ¹⁾	1,350	1.65	2,100	▲	■	▲	▲	■	▲	▲	▲	
	1,550	2.00	2,250	■	▲	□	■	▲	■	▲	□	
	1,750	2.35	2,450	▲	□	-	▲	□	▲	□	-	
	1,950	2.70	2,650	□	-	-	□	□	□	□	-	
	1,950	3.00	2,750	-	-	-	□	-	□	-	-	
HD ²⁾	1,350	1.65	2,350	■	▲	▲	▲	■	▲	■	▲	
	1,550	2.00	2,650	▲	□	□	■	▲	□	▲	□	
	1,750	2.35	2,850	□	-	-	▲	□	▲	□	-	
	1,950	2.70	3,100	-	-	-	□	-	□	-	-	

* Indicated loads are based on ISO 10567 max. stick length, lifted 360° on firm

¹⁾ Standard bucket with Liebherr teeth Z 70 (appropriate for materials up to classification 5, according to VOB, Section C, DIN 18300)

²⁾ HD bucket with Liebherr teeth Z 70 (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

Other backhoes available on request

Max. material weight ▲ = ≤ 2.2 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.5 t/m³, □ = ≤ 1.2 t/m³, - = not authorized

Lift Capacities

with Two-piece Boom 4.70 m

Stick 3.80 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		m		
10.5	LC					10.7*	10.7*	10.1*	10.1*							6.1*	6.1*	8.6
	LC-V					10.7*	10.7*	10.2*	10.2*							6.0*	6.0*	
	HD					10.7*	10.7*	10.1*	10.1*							6.0*	6.0*	
9.0	LC					10.3*	10.3*	10.6*	10.6*	8.3	9.6*					5.4*	5.4*	9.9
	LC-V					10.3*	10.3*	10.6*	10.6*	8.6	9.7*					5.4*	5.4*	
	HD					10.3*	10.3*	10.6*	10.6*	8.7	9.6*					5.4*	5.4*	
7.5	LC					11.1*	11.1*	11.3	11.4*	8.6	10.1*	5.9	7.5*			5.1*	5.1*	10.8
	LC-V					11.2*	11.2*	11.4*	11.4*	8.8	10.1*	6.1	7.7*			5.1*	5.1*	
	HD					11.2*	11.2*	11.4*	11.4*	8.8	10.1*	6.2	7.6*			5.1*	5.1*	
6.0	LC			16.9*	16.9*	14.6*	14.6*	11.0	12.2*	8.4	10.3*	6.0	8.9*			4.7	4.9*	11.4
	LC-V			18.3*	18.3*	15.0*	15.0*	11.2	12.2*	8.6	10.3*	6.3*	8.9*			4.9*	4.9*	
	HD			17.2*	17.2*	14.7*	14.7*	11.3	12.2*	8.7*	10.3*	6.3*	8.9*			4.9*	4.9*	
4.5	LC			21.4	21.5*	14.4	16.1*	10.6	12.7*	8.3	10.5*	6.0	8.9*			4.3	4.8*	11.8
	LC-V	18.2*	18.2*	21.5*	21.5*	14.7	16.2*	10.9	12.7*	8.5*	10.5*	6.2	8.9*			4.5	4.8*	
	HD	18.5*	18.5*	21.5*	21.5*	14.9*	16.2*	11.0	12.7*	8.6	10.5*	6.3	8.9*			4.6	4.8*	
3.0	LC	19.3*	19.3*	20.6	20.7*	14.0*	16.8*	10.4*	13.0*	8.2	10.6*	5.8	8.8	4.1	4.9*	4.1	4.9*	12.0
	LC-V	19.6*	19.6*	20.7*	20.7*	14.3*	16.8*	10.6	13.0*	8.4*	10.6*	6.1	8.8*	4.3	5.0*	4.3	4.9*	
	HD	19.4*	19.4*	20.7*	20.7*	14.4	16.8*	10.7*	13.0*	8.5	10.6*	6.1	8.8*	4.3	4.9*	4.3	4.9*	
1.5	LC	15.6*	15.6*	20.5	21.7*	13.8*	16.6*	10.4	12.9*	7.9	10.4*	5.6	8.7*			4.0	5.0*	12.0
	LC-V	15.6*	15.6*	20.9	21.8*	14.1	16.6*	10.6	12.9*	8.2	10.4*	5.8	8.7*			4.2	5.0*	
	HD	15.6*	15.6*	21.1	21.7*	14.2*	16.6*	10.7*	12.9*	8.3	10.4*	5.9	8.7*			4.2	5.0*	
0	LC	18.2*	18.2*	20.7	23.1*	13.7	16.6*	9.9	12.8*	7.4	10.4*	5.3	8.6			4.0	5.3*	11.8
	LC-V	18.4*	18.4*	21.2	23.2*	14.1	16.6*	10.3	12.8*	7.7	10.4*	5.5	8.8*			4.3	5.3*	
	HD	18.3*	18.3*	21.3*	23.2*	14.4	16.6*	10.4	12.8*	7.8	10.4*	5.6	8.8*			4.3	5.3*	
-1.5	LC	23.6*	23.6*	19.5	23.8*	12.8	16.8*	9.3	13.0*	6.9	10.8*	5.0	8.3*			4.3	5.2*	11.4
	LC-V	23.9*	23.9*	20.2	23.8*	13.3	16.9*	9.7	13.0*	7.1	10.8*	5.2	8.2*			4.5	5.2*	
	HD	23.7*	23.7*	20.5	23.8*	13.5	16.9*	9.8	13.0*	7.3	10.8*	5.3	8.3*			4.6	5.2*	
-3.0	LC	30.6*	30.6*	19.0	24.4*	12.3	17.5*	9.0	13.7*	6.5	10.3*	4.9	5.8*			4.1*	4.1*	10.8
	LC-V	31.0*	31.0*	19.7	24.5*	12.8	17.5*	9.4	13.7*	6.7	10.3*	5.2	5.5*			4.1*	4.1*	
	HD	30.7*	30.7*	20.0	24.5*	13.0	17.5*	9.5	13.7*	6.8	10.3*	5.2	5.7*			4.1*	4.1*	
-4.5	LC	38.2*	38.2*	19.0	24.3*	12.3	17.5*	8.5	12.4*	6.3	7.4*					3.2*	3.2*	9.8
	LC-V	38.1*	38.1*	19.7	24.2*	12.8	17.5*	8.9	12.2*	6.6	7.1*					3.3*	3.3*	
	HD	38.2*	38.2*	20.0	24.3*	13.0	17.5*	9.0	12.3*	6.7	7.3*					3.3*	3.3*	
-6.0	LC	33.3*	33.3*	19.5	20.5*	12.1	12.9*	6.6*	6.6*							4.7*	4.7*	7.9
	LC-V	32.8*	32.8*	20.0*	20.0*	12.5*	12.5*	6.1*	6.1*							4.8*	4.8*	
	HD	33.2*	33.2*	20.3*	20.3*	12.8*	12.8*	6.4*	6.4*							4.7*	4.7*	

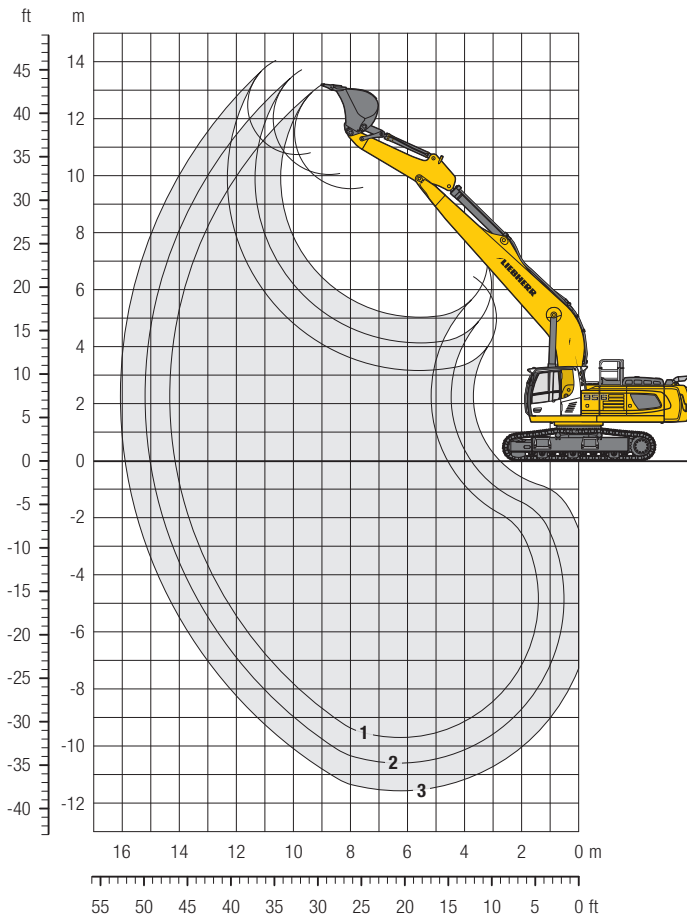
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach * Limited by hydr. capacity

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 with adjusting cylinder in optimal position. 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 800 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 9.20 m and Heavy Counterweight



Digging Envelope

		1	2	3
Stick length	m	2.90	3.80	5.00
Max. digging depth	m	9.70	10.60	11.60
Max. reach at ground level	m	14.10	15.00	15.90
Max. dumping height	m	9.55	10.05	10.75
Max. teeth height	m	13.15	13.70	14.00

Digging Forces

		1	2	3
Digging force ISO	kN	218	182	166
	t	22.2	18.5	16.9
Breakout force ISO	kN	316	316	235
	t	32.2	32.2	23.9

Operating Weight and Ground Pressure

The operating weight includes the basic machine with heavy counterweight and mono boom 9.20 m, stick 3.80 m and bucket 1.65 m³.

Undercarriage	mm	LC			LC-V		
		500	600	750	500	600	750
Weight	kg	53,200	53,800	55,050	55,300	55,900	57,150
Ground pressure	kg/cm ²	1.12	0.94	0.77	1.17	0.98	0.80

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

	Cutting width mm	Capacity ISO 7451 m ³	Weight kg	LC-Undercarriage			LC-V-Undercarriage		
				Stick length (m)			Stick length (m)		
				2.90	3.80	5.00	2.90	3.80	5.00
STD ¹⁾	1,350	1.65	2,100	■	▲	-	▲	■	-
	1,550	2.00	2,250	▲	□	-	■	▲	-
	1,750	2.35	2,450	□	-	-	▲	□	-
	1,950	2.70	2,650	-	-	-	□	-	-
STD ²⁾	1,200	1.25	1,300	-	-	▲	-	-	▲
	1,350	1.50	1,400	-	-	■	-	-	▲
	1,500	1.75	1,500	-	-	▲	-	-	■
	1,650	2.00	1,600	-	-	□	-	-	▲

* Indicated loads are based on ISO 10567 max. stick length, lifted 360° on firm

¹⁾ Standard bucket with Liebherr teeth Z 70 (appropriate for materials up to classification 5, according to VOB, Section C, DIN 18300)

²⁾ Standard bucket with Liebherr teeth Z 50 (appropriate for materials up to classification 5, according to VOB, Section C, DIN 18300)

Other backhoes available on request

Max. material weight ▲ = ≤ 2.2 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.5 t/m³, □ = ≤ 1.2 t/m³, - = not authorized

Lift Capacities

with Mono Boom 9.20 m and Heavy Counterweight

Stick 2.90 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		m			
12.0	LC LC-V																				
10.5	LC LC-V									7.6* 7.5*	7.6* 7.5*							7.6* 7.6*	7.6* 7.6*	9.1	
9.0	LC LC-V									7.3* 7.3*	7.3* 7.3*							7.2* 7.3*	7.3* 7.3*	10.3	
7.5	LC LC-V							8.6* 8.6*	8.6* 8.6*	7.7* 7.7*	7.7* 7.7*	6.9 7.2	7.2* 7.2*					6.1 6.3	7.0* 7.0*	11.2	
6.0	LC LC-V							9.7* 9.7*	9.7* 9.7*	8.2* 8.3*	8.2* 8.3*	6.7 7.0	7.4* 7.5*					5.5 5.6	6.8* 6.8*	11.8	
4.5	LC LC-V							10.3 10.6	11.0* 11.0*	8.1 8.3	8.9* 9.0*	6.4 6.7	7.8* 7.8*	5.2 5.4	7.2* 7.2*			5.0 5.2	6.8* 6.9*	12.2	
3.0	LC LC-V							9.5 9.9	12.1* 12.1*	7.6 7.9	9.6* 9.7*	6.1 6.4	8.2* 8.3*	5.0 5.2	7.4* 7.4*			4.8 5.0	7.0* 7.0*	12.4	
1.5	LC LC-V							9.1 9.5	12.7* 12.7*	7.3 7.5	10.2* 10.2*	5.9 6.2	8.6* 8.6*	4.9 5.1	7.6* 7.6*			4.7 4.9	7.2* 7.3*	12.3	
0	LC LC-V							8.9 9.3	12.9* 12.9*	7.0 7.3	10.4* 10.5*	5.8 6.0	8.8* 8.8*	4.8 5.0	7.6* 7.6*			4.8 5.0	7.5* 7.5*	12.2	
-1.5	LC LC-V					9.7* 10.3*	9.7* 10.3*	8.9 9.3	12.7* 12.7*	7.0 7.3	10.5* 10.5*	5.7 6.0	8.8* 8.8*					5.0 5.2	7.6* 7.6*	11.8	
-3.0	LC LC-V			10.0* 10.0*	10.0* 10.0*	12.7 13.2	14.7* 14.7*	9.0 9.4	12.3* 12.2*	7.0 7.3	10.2* 10.1*	5.8 6.0	8.5* 8.4*					5.4 5.7	7.7* 7.7*	11.1	
-4.5	LC LC-V			15.7* 15.6*	15.7* 15.6*	13.0 13.5	13.6* 13.5*	9.3 9.7	11.4* 11.3*	7.2 7.5	9.4* 9.4*							6.2 6.5	7.7* 7.7*	10.3	
-6.0	LC LC-V			13.8* 13.6*	13.8* 13.6*	11.8* 11.7*	11.8* 11.7*	9.7 9.7	9.9* 9.7*	7.6* 7.6*	7.6* 7.6*							7.5* 7.5*	7.5* 7.5*	9.0	
-7.5	LC LC-V					8.7* 8.5*	8.7* 8.5*											6.7* 6.6*	6.7* 6.6*	7.3	
-9.0	LC LC-V																				

Stick 3.80 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		m			
12.0	LC LC-V																				
10.5	LC LC-V																				
9.0	LC LC-V											6.4* 6.4*	6.4* 6.4*								
7.5	LC LC-V									6.9* 7.0*	6.9* 7.0*	6.5* 6.5*	6.5* 6.5*	5.5 5.7	6.1* 6.3*			4.9* 4.9*	4.9* 4.9*	12.1	
6.0	LC LC-V					10.9* 11.1*	10.9* 11.1*	8.8* 8.8*	8.8* 8.8*	7.6* 7.6*	7.6* 7.6*	6.8* 6.9*	6.8* 6.9*	5.4 5.6	6.4* 6.5*			4.8* 4.8*	4.8* 4.8*	12.7	
4.5	LC LC-V							10.1* 10.1*	10.1* 10.1*	8.3 8.4*	8.3* 8.4*	6.5 6.8	7.3* 7.3*	5.2 5.4	6.7* 6.7*			4.5 4.6	4.8* 4.8*	13.0	
3.0	LC LC-V							9.9 10.2	11.3* 11.3*	7.8 8.0	9.1* 9.1*	6.2 6.4	7.8* 7.8*	5.0 5.2	7.0* 7.0*			4.3 4.4	4.9* 4.9*	13.2	
1.5	LC LC-V							9.3 9.6	12.2* 12.2*	7.3 7.6	9.7* 9.8*	5.9 6.2	8.2* 8.2*	4.9 5.1	7.2* 7.2*			4.2 4.4	5.1* 5.1*	13.2	
0	LC LC-V					7.4* 7.6*	7.4* 7.6*	9.0 9.3	12.7* 12.7*	7.1 7.3	10.2* 10.2*	5.7 6.0	8.5* 8.6*	4.7 4.9	7.4* 7.4*			4.2 4.4	5.3* 5.4*	13.0	
-1.5	LC LC-V					12.1* 12.4*	12.1* 12.4*	8.8 9.2	12.8* 12.8*	6.9 7.2	10.4* 10.4*	5.6 5.9	8.7* 8.7*	4.7 4.9	7.4* 7.4*			4.4 4.6	5.8* 5.8*	12.7	
-3.0	LC LC-V			10.5* 10.8*	10.5* 10.8*	12.3 12.8	15.6* 15.6*	8.9 9.2	12.5* 12.5*	6.9 7.2	10.3* 10.3*	5.6 5.8	8.6* 8.6*	4.7 5.0	7.1* 7.1*			4.7 4.9	6.4* 6.4*	12.1	
-4.5	LC LC-V	12.9* 13.2*	12.9* 13.2*	16.8* 17.2*	16.8* 17.2*	12.6 13.1	14.7* 14.6*	9.0 9.4	11.9* 11.9*	7.0 7.3	9.8* 9.8*	5.7 6.0	8.1* 8.1*					5.3 5.5	7.1* 7.1*	11.3	
-6.0	LC LC-V	19.1* 19.4*	19.1* 19.4*	16.2* 16.1*	16.2* 16.1*	13.0 13.1*	13.2* 13.1*	9.3 9.7	10.8* 10.7*	7.2 7.6	8.8* 8.7*							6.3 6.6	7.1* 7.1*	10.2	
-7.5	LC LC-V			13.2* 13.0*	13.2* 13.0*	10.8* 10.7*	10.8* 10.7*	8.8* 8.6*	8.8* 8.6*									6.8* 6.7*	6.8* 6.7*	8.7	
-9.0	LC LC-V																				

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 800 kg/600 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.

* just for stick 5.00 m

Lift Capacities

with Mono Boom 9.20 m and Heavy Counterweight

Stick 5.00 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		m			
12.0	LC																		4.1*	4.1*	10.4
	LC-V																		4.1*	4.1*	
10.5	LC																		3.8*	3.8*	11.6
	LC-V																		3.8*	3.8*	
9.0	LC														5.7*	5.7*			3.6*	3.6*	12.6
	LC-V														5.7*	5.7*			3.6*	3.6*	
7.5	LC											5.9*	5.9*						3.5*	3.5*	13.3
	LC-V											6.0*	6.0*						3.5*	3.5*	
6.0	LC										6.9*	6.9*	6.4*	6.4*	5.8	6.0*	4.7	5.2*	3.4*	3.4*	13.8
	LC-V										7.0*	7.0*	6.4*	6.4*	6.0*	6.0*	4.8	5.3*	3.4*	3.4*	
4.5	LC					11.6*	11.6*	9.1*	9.1*	7.8*	7.8*	6.9*	6.9*	5.6	6.3*	4.6	6.0*		3.5*	3.5*	14.2
	LC-V					11.8*	11.8*	9.2*	9.2*	7.8*	7.8*	6.9*	6.9*	5.8	6.3*	4.7	6.0*		3.5*	3.5*	
3.0	LC					14.0*	14.0*	10.5*	10.5*	8.3	8.6*	6.6	7.5*	5.4	6.7*	4.4	6.2*		3.5*	3.5*	14.3
	LC-V					14.1*	14.1*	10.6*	10.6*	8.6	8.7*	6.9	7.5*	5.6	6.7*	4.6	6.2*		3.5*	3.5*	
1.5	LC					11.9*	11.9*	10.0	11.7*	7.8	9.4*	6.3	8.0*	5.2	7.1*	4.3	6.4*		3.7*	3.7*	14.3
	LC-V					11.8*	11.8*	10.3	11.7*	8.1	9.5*	6.5	8.0*	5.4	7.1*	4.5	6.4*		3.7*	3.7*	
0	LC					11.6*	11.6*	9.4	12.5*	7.4	10.0*	6.0	8.5*	5.0	7.4*	4.2	6.6*		3.9*	3.9*	14.1
	LC-V					11.7*	11.7*	9.8	12.5*	7.7	10.1*	6.3	8.5*	5.2	7.4*	4.4	6.6*		3.9*	3.9*	
-1.5	LC			7.0*	7.0*	12.4	13.7*	9.2	13.0*	7.2	10.4*	5.9	8.8*	4.9	7.6*	4.1	6.5	4.0	4.1*	4.1*	13.8
	LC-V			7.2*	7.2*	12.9	13.8*	9.5	13.0*	7.5	10.5*	6.1	8.8*	5.1	7.6*	4.3	6.6*	4.2*	4.2*	4.2*	
-3.0	LC	7.5*	7.5*	10.5*	10.5*	12.4	16.6*	9.1	13.0*	7.1	10.6*	5.8	8.9*	4.8	7.6*			4.2	4.6*	4.6*	13.3
	LC-V	7.7*	7.7*	10.7*	10.7*	12.9	16.6*	9.4	13.0*	7.4	10.6*	6.0	8.9*	5.0	7.6*			4.4	4.6*	4.6*	
-4.5	LC	11.1*	11.1*	14.5*	14.5*	12.5	16.0*	9.1	12.7*	7.1	10.4*	5.8	8.7*	4.9	7.3*			4.6	5.2*	5.2*	12.6
	LC-V	11.3*	11.3*	14.7*	14.7*	13.0	16.0*	9.5	12.7*	7.4	10.4*	6.0	8.7*	5.1	7.3*			4.8	5.2*	5.2*	
-6.0	LC	15.1*	15.1*	19.2*	19.2*	12.8	14.9*	9.3	12.0*	7.2	9.9*	5.9	8.1*					5.3	6.1*	6.1*	11.6
	LC-V	15.4*	15.4*	19.1*	19.1*	13.3	14.9*	9.6	12.0*	7.5	9.8*	6.1	8.1*					5.5	6.2*	6.2*	
-7.5	LC	20.1*	20.1*	16.8*	16.8*	13.2	13.3*	9.6	10.7*	7.5	8.7*							6.4	6.8*	6.8*	10.3
	LC-V	20.4*	20.4*	16.6*	16.6*	13.1*	13.1*	10.0	10.6*	7.8	8.6*							6.7	6.8*	6.8*	
-9.0	LC			13.2*	13.2*	10.5*	10.5*	8.3*	8.3*									6.6*	6.6*	6.6*	8.6
	LC-V			12.9*	12.9*	10.3*	10.3*	8.1*	8.1*									6.5*	6.5*	6.5*	

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 800 kg/600 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.

* just for stick 5.00 m

Lift Capacities

with Mono Boom 6.70 m and Heavy Counterweight

Stick 2.35 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m
		LC	LC-V	HD	LC	LC-V	HD	LC	LC-V	HD	LC	LC-V	HD	
10.5	LC													
9.0	LC												10.3*	10.3*
	LC-V												10.2*	10.2*
7.5	LC												9.3*	9.3*
	LC-V												9.2*	9.2*
6.0	LC												8.9*	8.9*
	LC-V												8.9*	8.9*
4.5	LC												8.9*	8.9*
	LC-V												8.9*	8.9*
3.0	LC												8.5*	9.1*
	LC-V												8.8*	9.2*
1.5	LC												8.3*	9.7*
	LC-V												8.6*	9.8*
0	LC												8.6*	10.8*
-1.5	LC												9.3*	12.4*
	LC-V												9.7*	12.4*
-3.0	LC												11.0*	12.5*
	LC-V												11.5*	12.5*
-4.5	LC												11.9*	11.9*
	LC-V												11.8*	11.8*
-6.0	LC												11.9*	11.9*
	LC-V												11.9*	11.9*

Stick 2.90 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m
		LC	LC-V	HD	LC	LC-V	HD	LC	LC-V	HD	LC	LC-V	HD	
10.5	LC													
9.0	LC													7.8*
	LC-V													7.8*
7.5	LC													7.1*
	LC-V													7.1*
6.0	LC													6.9*
	LC-V													6.9*
4.5	LC													6.9*
	LC-V													6.9*
3.0	LC													7.0*
	LC-V													7.1*
1.5	LC													7.5*
	LC-V													7.5*
0	LC													8.2*
-1.5	LC													8.4*
	LC-V													8.8*
-3.0	LC													9.7*
	LC-V													10.1*
-4.5	LC													11.7*
	LC-V													11.6*
-6.0	LC													11.7*
	LC-V													11.7*

Stick 3.80 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m
		LC	LC-V	HD	LC	LC-V	HD	LC	LC-V	HD	LC	LC-V	HD	
10.5	LC													
9.0	LC													5.4*
	LC-V													5.4*
7.5	LC													5.0*
	LC-V													5.0*
6.0	LC													4.8*
	LC-V													4.8*
4.5	LC													4.8*
	LC-V													4.8*
3.0	LC													4.9*
	LC-V													4.9*
1.5	LC													5.2*
	LC-V													5.2*
0	LC													5.7*
-1.5	LC													6.4*
	LC-V													6.4*
-3.0	LC													7.7*
	LC-V													7.8*
-4.5	LC													9.8*
	LC-V													10.3*
-6.0	LC													10.6*
	LC-V													10.6*

 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 800 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 7.60 m and Heavy Counterweight

Stick 2.35 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m
		LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	
10.5	LC LC-V HD													
9.0	LC LC-V HD					10.5*	10.5*					9.9*	9.9*	7.5
7.5	LC LC-V HD					10.5*	10.5*					9.2*	9.2*	8.7
6.0	LC LC-V HD	18.2*	18.2*	13.3*	13.3*	11.2*	11.2*	9.0	10.1*			8.2	8.9*	9.5
4.5	LC LC-V HD			15.4	15.5*	11.3	12.2*	8.7	10.5*			7.4	8.9*	10.0
3.0	LC LC-V HD			14.2	17.4*	10.7	13.2*	8.4	11.0*			7.0	9.1*	10.2
1.5	LC LC-V HD			13.7	16.7*	10.3	13.9*	8.1	11.4*			6.9	9.5*	10.2
0	LC LC-V HD			13.6	17.8*	10.1	14.0*	8.0	11.5*			7.0	10.2*	9.9
-1.5	LC LC-V HD	13.0*	13.0*	13.7	17.0*	10.0	13.7*	8.0	11.1*			7.5	10.3*	9.5
-3.0	LC LC-V HD	18.4*	18.4*	13.9	15.5*	10.2	12.5*					8.6	10.2*	8.7
-4.5	LC LC-V HD	15.4*	15.4*	12.9*	12.9*							9.6*	9.6*	7.5
-6.0	LC LC-V HD	15.3*	15.3*	12.8*	12.8*							9.6*	9.6*	

Stick 2.90 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m
		LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	
10.5	LC LC-V HD													
9.0	LC LC-V HD											9.6*	9.6*	8.2
7.5	LC LC-V HD											9.8*	9.8*	9.3
6.0	LC LC-V HD					12.3*	12.3*	10.5*	10.5*	9.1	9.5*	8.4	10.6*	10.0
4.5	LC LC-V HD					14.5*	14.5*	11.5	11.6*	8.8	10.0*	7.0*	7.0*	10.5
3.0	LC LC-V HD					14.5	16.6*	10.8	12.7*	8.4	10.6*	6.7	9.4*	10.7
1.5	LC LC-V HD					13.8	17.7*	10.3	13.5*	8.1	11.1*	6.5	9.6*	10.7
0	LC LC-V HD					13.5	17.9*	10.0	13.9*	7.9	11.4*	6.4	7.9*	10.5
-1.5	LC LC-V HD			14.9*	14.9*	15.4*	15.4*	14.0	17.3*	10.3	13.7*	8.1	11.2*	10.0
-3.0	LC LC-V HD	17.0*	17.0*	20.0*	20.0*	13.7	16.1*	10.0	12.9*	7.9	10.2*	7.7	9.6*	9.3
-4.5	LC LC-V HD	20.6*	20.6*	17.2*	17.2*	14.0*	14.0*	10.4	11.0*			9.3	9.4*	8.2
-6.0	LC LC-V HD	20.5*	20.5*	12.4*	12.4*	9.7*	9.7*					8.2*	8.2*	6.6

Stick 3.80 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m
		LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	LC	HD	
10.5	LC LC-V HD											5.9*	5.9*	8.0
9.0	LC LC-V HD							7.5*	7.5*			5.3*	5.3*	9.3
7.5	LC LC-V HD							8.3*	8.3*			5.0*	5.0*	10.3
6.0	LC LC-V HD							9.5*	9.5*	8.6*	8.6*	7.1	8.1*	11.0
4.5	LC LC-V HD			18.0*	18.0*	13.0*	13.0*	10.6*	10.6*	8.9	9.3*	6.9	8.5*	11.4
3.0	LC LC-V HD					15.2	15.3*	11.1	11.9*	8.5	10.0*	6.7	8.9*	11.6
1.5	LC LC-V HD					14.2	17.0*	10.5	13.0*	8.1	10.7*	6.5	9.2*	11.6
0	LC LC-V HD			9.5*	9.5*	13.6	17.8*	10.1	13.6*	7.9	11.1*	6.3	9.4*	11.4
-1.5	LC LC-V HD	8.1*	8.1*	14.8*	14.8*	13.4	17.7*	9.9	13.8*	7.7	11.2*	6.3	9.3*	10.9
-3.0	LC LC-V HD	14.3*	14.3*	21.1	21.6*	13.5	17.0*	9.8	13.4*	7.7	10.8*	6.5	7.0*	10.3
-4.5	LC LC-V HD	21.3*	21.3*	19.7*	19.7*	13.7	15.4*	10.0	12.2*	7.9	9.5*	7.6	8.6*	9.3
-6.0	LC LC-V HD	20.6*	20.6*	16.0*	16.0*	12.6*	12.6*	9.5*	9.5*			8.4*	8.4*	7.9

 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 800 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 Straight Mono Boom 8.00 m and Heavy Counterweight

Stick 2.35 m

Height m	Under-carriage	4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		Max. reach m	
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage		
12.0	HD														
10.5	HD			15.0*	15.0*								11.9*	11.9*	6.6
9.0	HD			14.7*	14.7*	12.8*	12.8*						10.2*	10.2*	8.2
7.5	HD	20.0*	20.0*	15.4*	15.4*	12.6	12.9*	9.3	11.3*				8.8	9.4*	9.3
6.0	HD			16.6	16.7*	12.0	13.4*	9.1	11.4*				7.6	9.0*	10.0
4.5	HD					11.3	13.9*	8.8	11.5*				7.0	8.8*	10.5
3.0	HD					10.8	14.1*	8.5	11.6*	6.8	9.6*		6.7	8.9*	10.7
1.5	HD					10.4	13.8*	8.2	11.3*	6.7	9.2*		6.6	8.8*	10.7
0	HD					10.3	12.9*	8.1	10.6*				6.8	8.2*	10.4
-1.5	HD			12.5*	12.5*	10.3	11.3*	8.2	9.3*				7.3	7.3*	10.0
-3.0	HD			9.9*	9.9*	9.0*	9.0*	6.7*	6.7*				5.9*	5.9*	9.2
-4.5	HD														

Stick 2.90 m

Height m	Under-carriage	4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		Max. reach m		
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage			
12.0	HD													11.7*	11.7*	5.2
10.5	HD					14.0*	14.0*							8.9*	8.9*	7.5
9.0	HD					14.0*	14.0*	12.1*	12.1*					7.8*	7.8*	8.9
7.5	HD	15.3*	15.3*	14.7*	14.7*	12.4*	12.4*	9.4	10.9*				7.2*	7.2*	9.9	
6.0	HD			16.0*	16.0*	12.2	12.9*	9.2	11.0*	7.1	8.6*		6.9*	6.9*	10.6	
4.5	HD			15.6	17.4*	11.5	13.6*	8.8	11.3*	7.0	9.7*		6.4	6.8*	11.0	
3.0	HD					10.9	14.0*	8.5	11.4*	6.8	9.6*		6.2	6.9*	11.2	
1.5	HD					10.4	13.9*	8.2	11.3*	6.6	9.4*		6.1	7.1*	11.2	
0	HD					13.9	15.4*	10.2	13.2*	8.0	10.8*	6.6	8.7*	6.2	7.5*	11.0
-1.5	HD			13.8*	13.8*	10.2	11.9*	8.0	9.7*	6.7	7.2*		6.6	7.0*	10.6	
-3.0	HD			11.2*	11.2*	9.8*	9.8*	7.8*	7.8*				5.9*	5.9*	9.9	
-4.5	HD			7.8*	7.8*	6.7*	6.7*						5.1*	5.1*	8.5	

Stick 3.80 m

Height m	Under-carriage	4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		Max. reach m		
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage			
12.0	HD			10.9*	10.9*								7.3*	7.3*	6.9	
10.5	HD					10.3*	10.3*						6.0*	6.0*	8.8	
9.0	HD					10.6*	10.6*	9.8	9.8*				5.4*	5.4*	10.0	
7.5	HD			10.6*	10.6*	11.2*	11.2*	9.7	10.2*	7.4	8.2*		5.1*	5.1*	10.9	
6.0	HD	18.0*	18.0*	14.7*	14.7*	12.2*	12.2*	9.4	10.5*	7.3	9.3*		4.9*	4.9*	11.5	
4.5	HD			16.3	16.4*	11.8	13.0*	9.0	10.9*	7.1	9.4*		4.8*	4.8*	11.9	
3.0	HD			15.0	17.7*	11.1	13.6*	8.6	11.2*	6.8	9.5*	5.5	6.3*	4.8*	4.8*	12.1
1.5	HD			14.2	17.9*	10.5	13.9*	8.2	11.3*	6.6	9.4*	5.4	6.4*	5.0*	5.0*	12.1
0	HD			13.8	17.0*	10.2	13.6*	8.0	11.0*	6.5	9.1*		5.2*	5.2*	11.9	
-1.5	HD	9.9*	9.9*	13.8	15.5*	10.1	12.7*	7.9	10.3*	6.4	8.3*		5.6*	5.6*	11.5	
-3.0	HD	14.8*	14.8*	13.2*	13.2*	10.1	11.1*	7.9	9.0*	6.5	6.7*		5.7*	5.7*	10.9	
-4.5	HD	10.9*	10.9*	10.2*	10.2*	8.6*	8.6*	6.6*	6.6*				4.5*	4.5*	9.9	

 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 800 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 Two-piece Boom 4.70 m and Heavy Counterweight

Stick 2.35 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m
		LC	LC-V	LC	LC-V	LC	LC-V	LC	LC-V	LC	LC-V	LC	LC-V	
10.5	LC			18.6*	18.6*	15.5*	15.5*					12.0*	12.0*	6.4
	LC-V			18.5*	18.5*	15.4*	15.4*					11.8*	11.8*	
	HD			18.6*	18.6*	15.5*	15.5*					11.9*	11.9*	
9.0	LC			17.7*	17.7*	15.2*	15.2*	12.2	12.8*			10.2*	10.2*	8.1
	LC-V			17.7*	17.7*	15.2*	15.2*	12.4	12.8*			10.2*	10.2*	
	HD			17.7*	17.7*	15.2*	15.2*	12.5*	12.8*			10.2*	10.2*	
7.5	LC			29.4*	29.4*	20.5*	20.5*	15.6*	15.6*	12.0*	12.8*	8.5	10.9*	9.2
	LC-V			28.8*	28.8*	20.6*	20.6*	15.6*	15.6*	12.3*	12.8*	8.8	10.9*	
	HD			29.2*	29.2*	20.5*	20.5*	15.6*	15.6*	12.4	12.8*	8.9	10.9*	
6.0	LC					20.3*	20.3*	15.8	16.4*	11.7	13.0*	8.8	10.9*	9.9
	LC-V					20.2*	20.2*	16.1	16.4*	12.0	13.1*	9.1	10.9*	
	HD					20.2*	20.2*	16.2*	16.4*	12.1	13.0*	9.2	10.9*	
4.5	LC					19.6*	19.6*	15.2	17.0*	11.5	13.2*	8.7	10.9*	10.4
	LC-V					19.6*	19.6*	15.5	17.0*	11.7	13.3*	9.0	10.9*	
	HD					19.6*	19.6*	15.6	17.0*	11.8*	13.2*	9.1	10.9*	
3.0	LC					20.8*	20.8*	15.0	16.8*	11.4	13.1*	8.5	10.7*	10.6
	LC-V					20.9*	20.9*	15.3*	16.8*	11.6	13.1*	8.8	10.7*	
	HD					20.8*	20.8*	15.4	16.8*	11.7	13.1*	8.9	10.7*	
1.5	LC					22.5*	23.1*	15.2	16.8*	11.4	13.1*	8.1	10.7*	10.6
	LC-V					22.9*	23.2*	15.4	16.8*	11.7	13.1*	8.4	10.8*	
	HD					23.0*	23.1*	15.5*	16.8*	11.9	13.1*	8.5	10.8*	
0	LC					22.0	24.2*	14.7	17.1*	10.8	13.3*	7.7	10.9*	10.4
	LC-V			16.3*	16.3*	22.7	24.2*	15.2	17.1*	11.2	13.3*	8.0	10.9*	
	HD					23.1	24.2*	15.4	17.1*	11.3	13.3*	8.1	10.9*	
-1.5	LC					31.0*	31.0*	21.6	24.7*	14.2	17.7*	10.3	13.8*	9.9
	LC-V					31.7*	31.7*	22.3	24.7*	14.7	17.7*	10.6	13.8*	
	HD					31.2*	31.2*	22.6	24.7*	14.9	17.7*	10.7	13.8*	
-3.0	LC					37.6*	37.6*	21.7	24.5*	14.2	17.7*	9.9	12.2*	9.1
	LC-V					37.5*	37.5*	22.4	24.4*	14.6	17.6*	10.2	12.0*	
	HD					37.6*	37.6*	22.7	24.5*	14.8	17.7*	10.3	12.1*	
-4.5	LC					33.3*	33.3*	21.1*	21.1*	13.1*	13.1*	5.6*	5.6*	7.6
	LC-V					32.9*	32.9*	20.6*	20.6*	12.6*	12.6*			
	HD					33.2*	33.2*	20.9*	20.9*	12.9*	12.9*	5.4*	5.4*	
-6.0	LC													5.6
	LC-V													
	HD													

Stick 2.90 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m
		LC	LC-V	LC	LC-V	LC	LC-V	LC	LC-V	LC	LC-V	LC	LC-V	
10.5	LC							14.3*	14.3*					7.3
	LC-V							14.4*	14.4*					
	HD							14.4*	14.4*					
9.0	LC							14.4*	14.4*	12.3*	12.3*			8.8
	LC-V							14.4*	14.4*	12.3*	12.3*			
	HD							14.4*	14.4*	12.3*	12.3*			
7.5	LC							15.8*	15.8*	15.0*	15.0*	12.1*	12.4*	9.8
	LC-V							16.2*	16.2*	15.1*	15.1*	12.3	12.4*	
	HD							15.9*	15.9*	15.1*	15.1*	12.4*	12.4*	
6.0	LC							21.6*	21.6*	15.9*	15.9*	11.7	12.7*	10.5
	LC-V							21.4*	21.4*	16.0*	16.0*	12.0	12.7*	
	HD							21.5*	21.5*	15.9*	15.9*	12.1*	12.7*	
4.5	LC							20.2*	20.2*	15.3*	16.7*	11.4	13.0*	10.9
	LC-V							20.2*	20.2*	15.5*	16.8*	11.7*	13.1*	
	HD							20.2*	20.2*	15.7*	16.7*	11.7	13.1*	
3.0	LC							20.7*	20.7*	15.0	16.7*	11.3	13.1*	11.1
	LC-V							20.7*	20.7*	15.2*	16.7*	11.5	13.1*	
	HD							20.7*	20.7*	15.3*	16.7*	11.6	13.1*	
1.5	LC							22.2*	22.5*	15.0	16.7*	11.3	12.9*	11.1
	LC-V							22.5*	22.5*	15.3*	16.7*	11.6*	12.9*	
	HD							22.5*	22.5*	15.4	16.7*	11.6*	12.9*	
0	LC							18.0*	18.0*	22.4	23.8*	14.9	16.8*	10.9
	LC-V							18.4*	18.4*	23.0	23.8*	15.3	16.9*	
	HD							18.1*	18.1*	23.1*	23.8*	15.6	16.8*	
-1.5	LC							27.3*	27.3*	21.7	24.3*	14.3	17.3*	10.5
	LC-V							27.8*	27.8*	22.4	24.3*	14.7	17.3*	
	HD							27.4*	27.4*	22.7	24.3*	14.9	17.3*	
-3.0	LC							38.1*	38.1*	21.5	24.6*	14.0	17.8*	9.8
	LC-V							38.6*	38.6*	22.2	24.6*	14.5	17.8*	
	HD							38.3*	38.3*	22.5	24.6*	14.7	17.8*	
-4.5	LC							35.7*	35.7*	22.0	23.2*	13.9	15.5*	8.5
	LC-V							35.4*	35.4*	22.8	23.0*	14.3	15.2*	
	HD							35.6*	35.6*	23.0	23.1*	14.5	15.4*	
-6.0	LC							23.1*	23.1*	13.3*	13.3*			5.6
	LC-V							21.9*	21.9*	12.6*	12.6*			
	HD							22.8*	22.8*	13.1*	13.1*			

Height Can be steered 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 with adjusting cylinder in optimal position. 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 800 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 Two-piece Boom 4.70 m and Heavy Counterweight

Stick 3.80 m

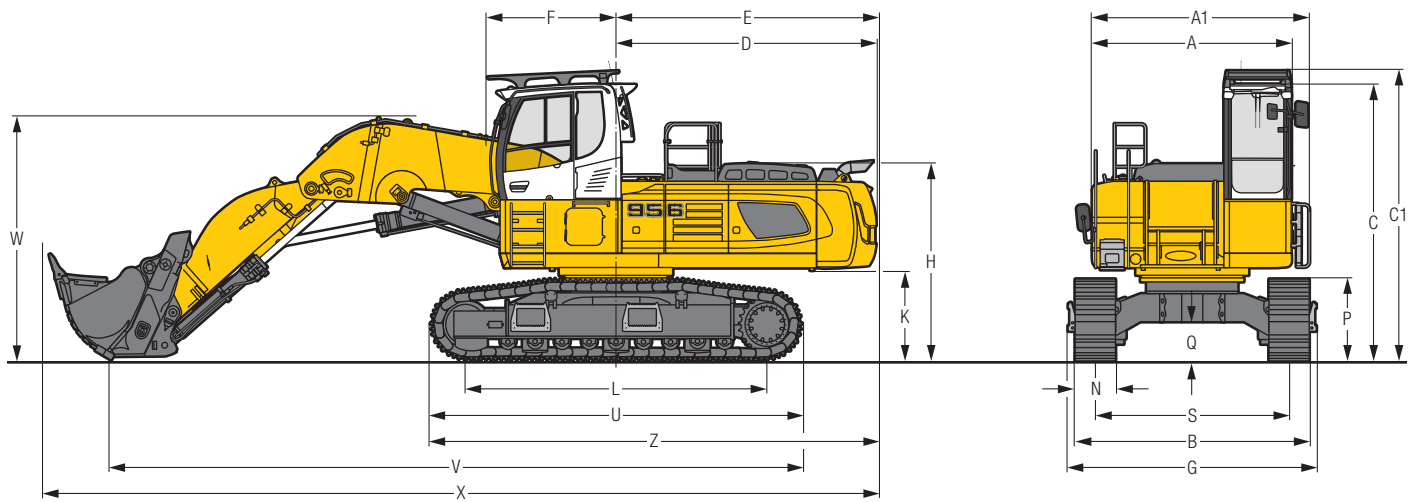
m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		m		
10.5	LC					10.7*	10.7*	10.1*	10.1*							6.1*	6.1*	8.6
	LC-V					10.7*	10.7*	10.2*	10.2*							6.0*	6.0*	
	HD					10.7*	10.7*	10.1*	10.1*							6.0*	6.0*	
9.0	LC					10.3*	10.3*	10.6*	10.6*	9.2	9.6*					5.4*	5.4*	9.9
	LC-V					10.3*	10.3*	10.6*	10.6*	9.5	9.7*					5.4*	5.4*	
	HD					10.3*	10.3*	10.6*	10.6*	9.5	9.6*					5.4*	5.4*	
7.5	LC					11.1*	11.1*	11.4*	11.4*	9.3	10.1*	6.7	7.5*			5.1*	5.1*	10.8
	LC-V					11.2*	11.2*	11.4*	11.4*	9.5	10.1*	6.9	7.7*			5.1*	5.1*	
	HD					11.2*	11.2*	11.4*	11.4*	9.6	10.1*	7.0*	7.6*			5.1*	5.1*	
6.0	LC			16.9*	16.9*	14.6*	14.6*	11.9	12.2*	9.1	10.3*	6.8	8.9*			4.9*	4.9*	11.4
	LC-V			18.3*	18.3*	15.0*	15.0*	12.1*	12.2*	9.3	10.3*	7.1	8.9*			4.9*	4.9*	
	HD			17.2*	17.2*	14.7*	14.7*	12.2*	12.2*	9.4	10.3*	7.1	8.9*			4.9*	4.9*	
4.5	LC			21.5*	21.5*	15.5	16.1*	11.5	12.7*	9.0*	10.5*	6.8*	8.9*			4.8*	4.8*	11.8
	LC-V	18.2*	18.2*	21.5*	21.5*	15.8*	16.2*	11.7	12.7*	9.2*	10.5*	7.0	8.9*			4.8*	4.8*	
	HD	18.5*	18.5*	21.5*	21.5*	16.0	16.2*	11.8	12.7*	9.2	10.5*	7.1	8.9*			4.8*	4.8*	
3.0	LC	19.3*	19.3*	20.7*	20.7*	15.0*	16.8*	11.2*	13.0*	8.9	10.6*	6.6	8.8*	4.8	4.9*	4.8	4.9*	12.0
	LC-V	19.6*	19.6*	20.7*	20.7*	15.3*	16.8*	11.4	13.0*	9.0*	10.6*	6.9	8.8*	5.0*	5.0*	4.9*	4.9*	
	HD	19.4*	19.4*	20.7*	20.7*	15.4	16.8*	11.5	13.0*	9.1	10.6*	6.9	8.8*	4.9*	4.9*	4.9*	4.9*	
1.5	LC	15.6*	15.6*	21.7*	21.7*	14.8	16.6*	11.1	12.9*	8.9	10.4*	6.4	8.7*			4.7	5.0*	12.0
	LC-V	15.6*	15.6*	21.8*	21.8*	15.1	16.6*	11.3*	12.9*	9.1*	10.4*	6.6	8.7*			4.9	5.0*	
	HD	15.6*	15.6*	21.7*	21.7*	15.2	16.6*	11.4	12.9*	9.2	10.4*	6.7	8.7*			5.0	5.0*	
0	LC	18.2*	18.2*	22.1	23.1*	15.0*	16.6*	11.2	12.8*	8.4	10.4*	6.1*	8.8*			4.8	5.3*	11.8
	LC-V	18.4*	18.4*	22.5	23.2*	15.2	16.6*	11.5	12.8*	8.7	10.4*	6.3	8.8*			5.0	5.3*	
	HD	18.3*	18.3*	22.6	23.2*	15.3	16.6*	11.6	12.8*	8.8	10.4*	6.4	8.8*			5.1	5.3*	
-1.5	LC	23.6*	23.6*	22.0	23.8*	14.5	16.8*	10.6	13.0*	7.9	10.8*	5.8	8.3*			5.1	5.2*	11.4
	LC-V	23.9*	23.9*	22.7	23.8*	14.9	16.9*	10.9	13.0*	8.1	10.8*	6.1	8.2*			5.2*	5.2*	
	HD	23.7*	23.7*	23.1	23.8*	15.1	16.9*	11.1	13.0*	8.2	10.8*	6.1	8.3*			5.2*	5.2*	
-3.0	LC	30.6*	30.6*	21.5	24.4*	14.0	17.5*	10.2	13.7*	7.5	10.3*	5.8	5.8*			4.1*	4.1*	10.8
	LC-V	31.0*	31.0*	22.2	24.5*	14.5	17.5*	10.6	13.7*	7.7	10.3*	5.5*	5.5*			4.1*	4.1*	
	HD	30.7*	30.7*	22.5	24.5*	14.7	17.5*	10.7	13.7*	7.8	10.3*	5.7*	5.7*			4.1*	4.1*	
-4.5	LC	38.2*	38.2*	21.5	24.3*	14.0	17.5*	9.8	12.4*	7.3	7.4*					3.2*	3.2*	9.8
	LC-V	38.1*	38.1*	22.3	24.2*	14.5	17.5*	10.1	12.2*	7.1*	7.1*					3.3*	3.3*	
	HD	38.2*	38.2*	22.5	24.3*	14.6	17.5*	10.3	12.3*	7.3*	7.3*					3.3*	3.3*	
-6.0	LC	33.3*	33.3*	20.5*	20.5*	12.9*	12.9*	6.6*	6.6*							4.7*	4.7*	7.9
	LC-V	32.8*	32.8*	20.0*	20.0*	12.5*	12.5*	6.1*	6.1*							4.8*	4.8*	
	HD	33.2*	33.2*	20.3*	20.3*	12.8*	12.8*	6.4*	6.4*							4.7*	4.7*	

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 with adjusting cylinder in optimal position. 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 800 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

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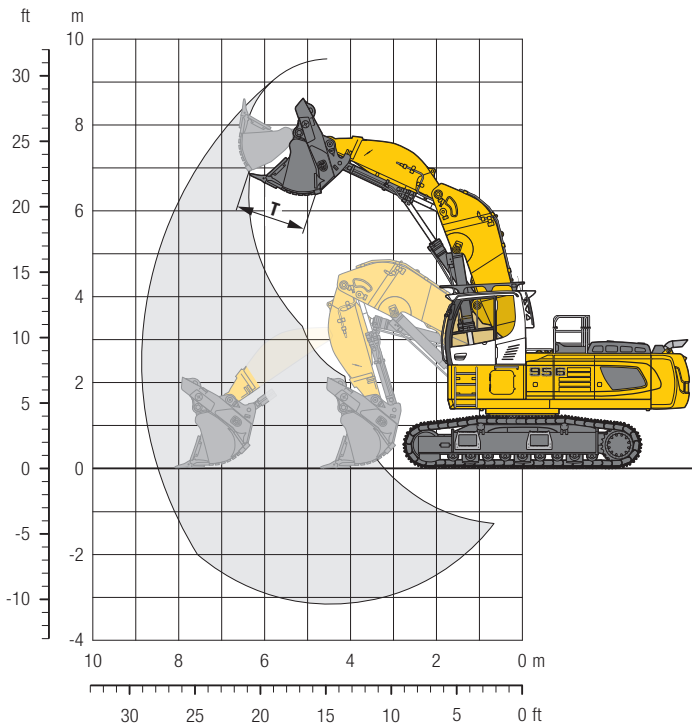
Dimensions Front Shovel



HD	mm
A	2,970
A1	3,240
C	4,135
C1	4,335
D	3,880
E	3,900
F	1,920
H	2,945
K	1,355
L	4,500
P	1,225

HD	mm
Q	575
S	2,900
U	5,550
N	500 600 750
B	3,465 3,500 3,650
G	3,725 3,725 3,725
Z	6,655
V	10,350
W	3,650
X	12,450

Front Shovel



Digging Envelope

Max. reach at ground level	8.50 m
Max. dumping height	6.30 m
Max. crowd length	3.40 m
Bucket opening width T	1,640 mm

Max. crowd force	435 kN/44.3 t
Max. crowd force at ground level	275 kN/28.0 t
Max. breakout force	355 kN/36.2 t

Operating Weight and Ground Pressure

The operating weight includes the basic machine with cab elevation, shovel attachment and front shovel 3.10 m³, level II.

Undercarriage	HD	
Pad width	mm	500 600
Weight	kg	56,750 57,300
Ground pressure	kg/cm ²	1.17 0.98

Front Shovels

Cutting width mm	Capacity ISO 7451 m ³	Weight kg	Wear kit level	HD-Undercarriage	
				Shovel Attachment	
1,850	2.50	4,700	II	▲	
1,850	2.50	5,050	III	▲	
2,150	3.10	5,150	I	■	
2,150	3.10	5,650	II	■	
2,150	3.10	6,050	III	■	

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, accord. to DIN 18300)

Level III: For highly-abrasive materials such as rock with a high silica content, sandstone etc.

Max. material weight ▲ = ≤ 2.2 t/m³, ■ = ≤ 1.8 t/m³

Available Buckets

Sticks 2.35 m/2.90 m/3.80 m

Mounting	Execution	Width (mm)	Capacity (m ³)	Teeth	Number of teeth	Weight (kg)
Direct	STD	1,350	1.65	Z 70	3	2,100
Direct	STD	1,550	2.00	Z 70	4	2,250
Direct	STD	1,750	2.35	Z 70	4	2,450
Direct	STD	1,950	2.70	Z 70	5	2,650
Direct	STD	1,950	3.00	Z 70	5	2,750
Direct	STD	2,100	3.30	Z 70	5	2,850
Direct	HD	1,350	1.65	Z 70	3	2,350
Direct	HD	1,550	2.00	Z 70	4	2,650
Direct	HD	1,750	2.35	Z 70	4	2,850
Direct	HD	1,950	2.70	Z 70	5	3,100
Direct	HD	1,950	3.00	Z 70	5	3,200
SW77	STD	1,350	1.65	Z 70	3	2,250
SW77	STD	1,550	2.00	Z 70	4	2,400
SW77	STD	1,750	2.35	Z 70	4	2,550
SW77	STD	1,950	2.70	Z 70	5	2,800
SW77	STD	1,950	3.00	Z 70	5	2,900
SW77	HD	1,350	1.65	Z 70	3	2,350
SW77	HD	1,550	2.00	Z 70	4	2,700
SW77	HD	1,750	2.35	Z 70	4	2,900
SW77	HD	1,950	2.70	Z 70	5	3,150

Stick 5.00 m

Mounting	Execution	Width (mm)	Capacity (m ³)	Teeth	Number of teeth	Weight (kg)
Direct	STD	1,200	1.25	Z 50	4	1,300
Direct	STD	1,350	1.50	Z 50	4	1,400
Direct	STD	1,500	1.75	Z 50	4	1,500
Direct	STD	1,650	2.00	Z 50	4	1,600

Available Front Shovels

Mounting	Execution	Width (mm)	Capacity (m ³)	Teeth	Number of teeth	Weight (kg)
Direct	2	1,850	2.50	Z 70	5	4,700
Direct	3	1,850	2.50	Z 70	5	5,050
Direct	1	2,150	3.10	Z 70	5	5,150
Direct	2	2,150	3.10	Z 70	5	5,650
Direct	3	2,150	3.10	Z 70	5	6,050

Standard Equipment

Undercarriage

- Lashing eyelets
- Lifetime-lubricated track rollers
- Sprocket with dirt ejector (with LC- and LC-V-Undercarriage)
- Track guide at each track frame (three pieces)
- Tracks sealed and greased

Uppercarriage

- Engine hood with lift help
- Extended tool kit
- Fuel tank cap, lockable
- Handrails, non slip surfaces
- Liebherr full-automatic central lubrication system (except connecting link for bucket kinematics)
- Maintenance-free swing brake lock
- Rear view monitoring camera
- Sound insulation
- Toolbox lockable

Hydraulic System

- Filter with integrated fine filter area
- Hydraulic tank shut-off valve and pumps
- Liebherr hydraulic oil
- Pressure storage for controlled lowering of equipment with engine turned off
- Pressure test ports for hydraulic
- Stepless work mode selector

Engine

- After-cooled
- Common-Rail system injection
- Conform with stage IV / Tier 4f emission standard
- Dual-stage turbo charger
- Fuel filter and water separator
- SCR exhaust gas after-treatment system
- Sensor controlled automatic engine idling

Operator's Cab

- 7" colour multifunction display with touchscreen
- All tinted windows
- Automatic air conditioning
- Cigarette lighter and ashtray
- Coat hook
- Completely retractable windscreen
- Cup holder
- Dome light
- Door with sliding windows
- Emergency exit rear window
- Engine oil level visible on display
- Front windscreen (bottom) retractable
- Fuel consumption indicator
- Headlights (two pieces, Halogen)
- Hydro mounts
- LiDAT Plus (enhanced Liebherr data transfer system)*
- Mechanical hour meters, readable from outside the cab
- Operator seat Liebherr-Comfort
- Preparation for radio installation
- Rain hood over front window opening
- Roll-down sun blind
- Rubber floor mat
- ROPS safety cab structure (capable of sweeping over)
- Seat belt
- Storage bin
- Storage space
- Sunroof, right window and windshield with safety glass
- Wiper/washer

Attachment

- Headlights on boom (both-sided, halogen)
- Safety check valves hoist cylinder

* optionally extendable after one year

Options

Undercarriage

Protection plate for wrecking ball operation
Reinforced cover plate and base plate for centre section
Track guide at each track frame (four pieces)

Uppercarriage

360° SkyView camera
Camera for side area monitoring
Customized colors
Heavy counterweight
Lighting engine compartment
Refuelling pump (electrical)
Reversible fan drive
Rock protection (swing gear and lubrication pipes)
Socket (24 V) for urea filling station
Wiggins diesel fuel

Hydraulic System

Bypass filter
Liebherr hydraulic oil, biodegradable
Liebherr hydraulic oil, specially for warm and cold regions
Preheating for hydraulic oil (240 V)

Engine

Air pre-filter with dust trap
Automatic engine shut-down (adjustable time-period)
Liebherr particle filter
Preheating for fuel, coolant or engine oil (240 V)

Operator's Cab

Additional headlights front or/and rear (Halogen or LED)
Amber beacon
Auxiliary heater (programmable timer)
Electric cool box (12 V)
Electronic drive away lock
Engine shut-down (emergency stop) in cab
Falling objects protection structure (FOPS)
Fire extinguisher
Follow me home (headlight cutoff delay)
Footrest
Front guard protection structure (FGPS)
Headlights (two pieces, LED)
Headlights with adjustable intensity (LED)
Impact resistant front window (one piece, fixed installation – can not be opened)
Impact resistant front window (two pieces, fixed installation – can not be opened)
Impact resistant glass panel in roof
Integral protection guard (FGPS + FOPS)
Operator seat Liebherr-Premium
Proportional controls Liebherr
Radio Comfort controllable from the display
Roof wiper
Seat belt 4 points
Sun visor
Travel alarm system
Windscreen wiper on bottom part

Attachment

Bottom boom protection for mono boom or stick
Headlights on boom (LED)
High pressure circuit
Hydraulic or mechanical quick coupler
Liebherr automatic lubrication system for link geometry
Liebherr line of buckets
Liebherr tooth system
LIKUFIX
Middle pressure circuit
Overload warning device
Piston rod guard for bucket cylinders (backhoe + shovel)
Piston rod guard for crowd cylinder (shovel)
Piston rod guard for hoist cylinder (backhoe)
Safety check valves stick cylinder
Security for hoist cylinder in grab or hammer operation
Tool Control

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 application.

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 that time, the enterprise has steadily grown to a group of more than 130 companies with over 41,000 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.

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