

# R 972 Litronic

## LIEBHERR

Crawler excavator



**Generation**  
6.2

**Operating weight**  
Backhoe: 68,450–77,550 kg  
Shovel: 69,950–70,650 kg

**Engine**  
330 kW / 449 HP  
Stage V

**Bucket capacity**  
Backhoe: 1.65–5.50 m<sup>3</sup>  
Shovel: 3.50–5.00 m<sup>3</sup>

# Experience progress: R 972

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## Equipment

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- Wide choice of backhoe front boom and stick configurations
- Welded structure with cast steel components for improved stress-resistance and longer service life
- Safety check valves to prevent boom and stick cylinder pipes from bursting, with integrated regeneration system for lower fuel consumption

## Buckets

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- Different levels of protection to suit different areas of application:
  - Standard for loose, non-abrasive materials
  - HD for hard-to-break, moderately abrasive materials
  - HDV for highly abrasive materials
- Different blade designs:
  - straight (for earth-moving and grading)
  - semi-delta (for hard-to-break, hard-to-extract materials)
  - delta (for compacted or slightly cracked materials)



## New functions / options

- **Liebherr Power Efficiency – Engine Control**  
Up to 10% lower fuel consumption
- **Bucket Fill Assist**  
Automatic bucket-filling cycle for increased productivity
- **Modetronic**  
Customisable operating modes for optimum adjustment of work cycles to each type of application

## Comfort

- Quiet, comfortable cab, the largest and most spacious in its category
- Seat with heater and pneumatic multi-directional shock absorption (air conditioning optional)
- High-resolution 9" color touchscreen



## Undercarriage

- Welded undercarriage with rigid X profile for increased robustness
- Chamfered rack pads with double grouser for more manoeuvrability on difficult terrain
- Moulded two-tooth sprocket for longer service life
- Track rollers on double bearings for increased reliability and durability over time
- Stronger travel motor housing protection for improved resistance to wear and tear from hard, abrasive rocks

# Experience progress: R 972 Shovel

## Safety

- Completely unobstructed panoramic view, plus rear-view and side-view monitoring cameras for increased safety
- Retractable console for safe and easy access to the cab
- Impact-resistant windscreens and roof glass panel
- Cab riser for the best possible view of the loading area (optional)

## Equipment

- Shovel attachment with parallel drivetrain for powerful, even penetration
- Bucket cylinders located under the equipment for better protection
- Optional cylinder guards

## Buckets

Different bucket designs:

- Design I: Non-abrasive materials such as limestone without flint inclusions
- Design II: Pre-mined material or easily loosened rocks (DIN 18300 classes 3 to 4)
- Design III: Very abrasive materials such as rocks with high silica content, sandstone, granite etc.
- Front shovel with semi-automatic flap closure, ideally shaped for optimum material penetration and high filling rate





## Cab

- 800 mm cab riser for better view
- Optional FOPS and FGPS guards for complete safety when working
- Quiet, comfortable cab

## Maintenance

- Access platform for engine and hydraulic control block compartments to enable safe, ergonomic maintenance work
- Left and right catwalks as standard; wide catwalks with hand rail optional
- Automatic central lubrication system as standard
- Shut-off valve on hydraulic tank outlet as standard

# Technical data

## Engine

Rating per ISO 9249	330kW (449 HP) at 1,800 RPM
Torque	2,750Nm at 1,100RPM
Model	Liebherr D9508 A7 SCR
Type	8 cylinder V engine
Bore	128 mm
Stroke	157 mm
Displacement	16.16l
Engine operation	4-stroke diesel Common-Rail
Exhaust gas treatment	Stage V DOC + DPF + SCR
Cooling system	Passive regeneration by thermo management 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	1,140l
Urea tank	180l
Electrical system	Voltage 24V
Batteries	2 x 180Ah /12V
Starter	24V/7.8kW
Alternator	Three-phase current 28V/140A
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 system

Hydraulic pumps	For equipment and travel drive
Max. flow	Two Liebherr variable displacement, swashplate pumps 2 x 410l/min.
Max. pressure	350bar
For swing drive	Reversible, variable displacement, swashplate pump, closed-loop circuit
Max. flow	245l/min.
Max. pressure	370bar
Pump regulation	Electro-hydraulic with electronic engine speed sensing regulation, minimum flow adjustment, flow compensation, high flow
Hydraulic tank	435l
Hydraulic system	920l
Filtration	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	20 pre-adjustable pump flows and pressures for add-on attachments

## 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
Equipment and swing	Proportional via joystick levers
Travel	- Proportional control via foot pedals or removable levers - Speed pre-selection
Additional functions	Proportional regulation via foot pedals or mini-joystick

## 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	0-5.6 RPM stepless
Swing torque	233kNm
Holding brake	Wet multi-disc (spring applied, pressure released)

## Cab

Cab	LED work headlights integrated in the ceiling, a door with a sliding window (can be opened on both sides), large storing box and several stowing possibilities, shock-absorbing suspension, sound damping insulating, tinted laminated safety glass, separate window shades for the sunroof window and windscreens, cigarette lighter and 12V plug, storage bins, lunchbox, cup holder
Operator's seat	Liebherr-Comfort seat, air sprung with automatic weight adjustment, vertical and longitudinal seat damping including consoles and joysticks. Seat and armrests adjustable separately and in combination (adjustable in length, height and inclination), seat heating as standard
Arm consoles Operation and displays	Oscillating consoles with seat, tilttable console left Large high-resolution operating unit, intuitive, colour display with touchscreen, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine and attachment parameters
Air-conditioning	Automatic air-conditioning, recirculated air function, fast de-icing and demisting at the press of a button, air vents can be operated via a menu. Recirculated 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 The air conditioning system contains fluorinated greenhouse gases
Refrigerant	R134a
Global warming potential	1,430
Quantity at 25 °C*	1,260g
CO <sub>2</sub> equivalent	1.80t
Vibration emission**	< 2.5 m/s <sup>2</sup> , according with ISO 5349-1:2001
Hand / arm vibrations	< 0.5 m/s <sup>2</sup>
Whole-body vibrations	According with standard EN 12096:1997
Measuring inaccuracy	
Noise emission	
ISO 6396	72 dB(A) = L <sub>WA</sub> (inside cab)
2000/14/EC	108 dB(A) = L <sub>WA</sub> (surround noise)

## Undercarriage

Versions	Gauge 3,300 mm
HD	Gauge 3,390 mm
LC-V	Liebherr swashplate motor with brake valves on both sides
Drive	Liebherr compact planetary reduction gear
Transmission	4.1 km/h
Maximum travel speed	3.6 km/h (with drawbar pull increase)
Drawbar pull on crawler	441 kN
	505 kN (with drawbar pull increase)
Track components	DBK, maintenance-free
Track rollers / Carrier rollers	9/2 (HD) 9/3 (LC-V)
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

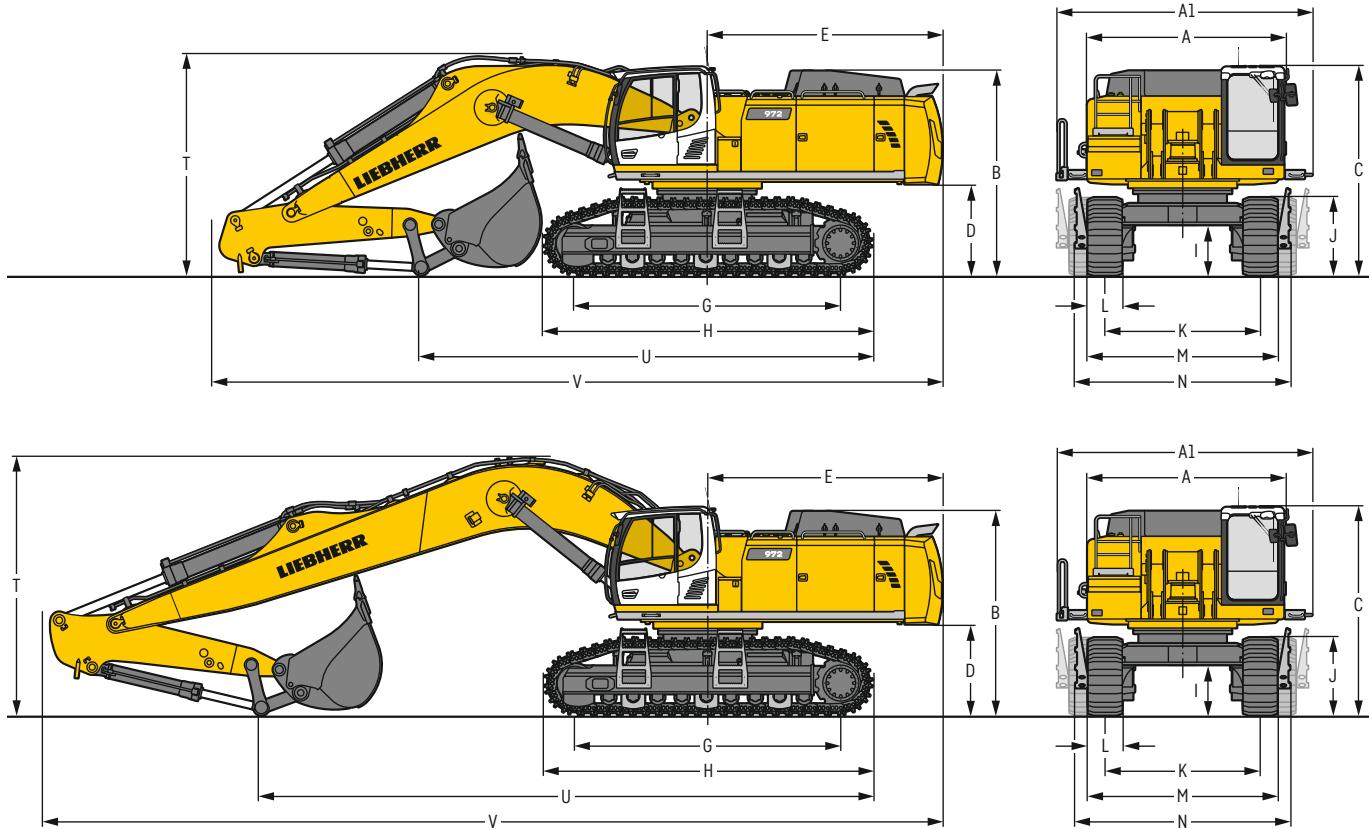
## Equipment

Type	Combination of resistant steel plates and cast steel components
Hydraulic cylinders	Liebherr cylinders with seal and guidance systems
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

\* Valid for standard machine without operator's cab elevation and without height adjustable cab

\*\* For the risk assessment according to 2002/44/EC see ISO/TR 25398:2006

# Dimensions



	HD	mm	LC-V	mm
A Uppercarriage width		3,515		3,515
A1 Uppercarriage width with catwalks		4,495		4,495
B Uppercarriage height		3,450		3,600
C Cab height		3,530		3,680
D Counterweight ground clearance		1,445		1,595
E Rear-end length		4,135		4,135
G Wheelbase		4,575		4,690
H Undercarriage length		5,695		5,780
I Undercarriage ground clearance		610		895
J Track height		1,315		1,390
K Track gauge		3,300		
L Track pad width	500 600 750		500 600	2,730 / 3,390 <sup>2)</sup> 750
M Width over tracks	3,920 4,330 <sup>1)</sup>	3,920 4,330 <sup>1)</sup>	4,050	3,360 / 4,020 <sup>2)</sup> 3,360 / 4,020 <sup>2)</sup>
N Width over steps			4,330 <sup>1)</sup>	3,940 <sup>1)</sup> / 4,600 <sup>1,2)</sup> 3,940 <sup>1)</sup> / 4,600 <sup>1,2)</sup>

<sup>1)</sup> width with removable steps

<sup>2)</sup> work position

T	Boom height	Stick length m	Mono boom 7.00 m direct mounting		Mono boom 8.20 m direct mounting		Mono boom 10.00 m direct mounting	
			HD	mm	HD	mm	HD	mm
2.60	3,900	3,900	-	-	-	-	-	-
3.00	4,000	4,000	4,050	4,150	4,500	4,550		
3.40	4,200	4,200	4,150	4,200	4,550	4,600		
4.20	3,800 <sup>1)</sup>	3,850 <sup>1)</sup>	4,200	4,250	4,200	4,700		
5.00	-	-	4,150	4,150	3,800	4,700		
U	Length on ground	8.000	7,950	-	-	-	-	-
	3.00	6,150	7,600	8,900	8,850	10,800	10,800	
	3.40	6,000	6,000	8,500	8,450	10,400	10,400	
	4.20	9,550 <sup>1)</sup>	9,550 <sup>1)</sup>	7,650	7,650	9,600	9,550	
	5.00	-	-	6,500	6,450	8,550	8,500	
V	Overall length	12,850	12,850	-	-	-	-	-
	3.00	12,750	12,750	14,000	13,950	15,850	15,850	
	3.40	12,850	12,800	14,100	14,100	15,850	15,850	
	4.20	12,700 <sup>1)</sup>	12,700 <sup>1)</sup>	14,150	14,100	15,850	15,850	
	5.00	-	-	14,100	14,050	15,850	15,800	
	Bucket		4,00 m <sup>3</sup>		3,00 m <sup>3</sup>		2,00 m <sup>3</sup>	

<sup>1)</sup> without bucket

## Transport dimensions

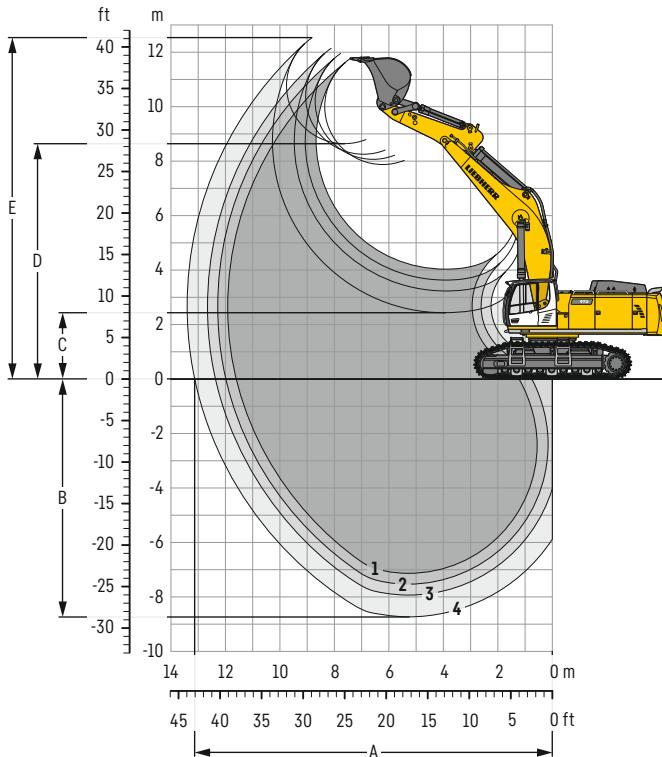
### removable elements disassembled

	Undercarriage / Stick m	Mono boom 7.00 m		Mono boom 8.20 m		Mono boom 10.00 m	
		HD	mm	HD	mm	HD	mm
Transport width		4,495		4,495		4,495	
Transport length	2.60	12,850	12,850	-	-	-	-
	3.00	12,750	12,750	14,000	13,950	15,850	15,850
	3.40	12,850	12,800	14,100	14,100	15,850	15,850
	4.20	12,700 <sup>1)</sup>	12,700 <sup>1)</sup>	14,150	14,100	15,850	15,850
	5.00	-	-	14,100	14,050	15,850	15,800
Transport height	2.60	3,900	3,900	-	-	-	-
	3.00	4,000	4,000	4,050	4,150	4,500	4,550
	3.40	4,200	4,200	4,150	4,200	4,550	4,600
	4.20	3,800 <sup>1)</sup>	3,850 <sup>1)</sup>	4,200	4,250	4,200	4,700
	5.00	-	-	4,150	4,150	3,800	4,700
Bucket		4,00 m <sup>3</sup>		3,00 m <sup>3</sup>		2,00 m <sup>3</sup>	

<sup>1)</sup> without bucket

# Backhoe bucket

with mono boom 7.00 m



## Digging envelope

	1	2	3	4	
without quick coupler					
Stick length	m	2.60	3.00	3.40	4.20
A Max. reach at ground level	m	11.60	11.95	12.35	13.10
B Max. digging depth	m	7.15	7.55	7.95	8.75
C Min. dumping height	m	4.05	3.65	3.25	2.45
D Max. dumping height	m	7.85	8.05	8.25	8.65
E Max. cutting height	m	11.75	11.95	12.10	12.50

## Forces

	1	2	3	4	
without quick coupler					
Stick digging force (ISO 6015)	kN	308	282	260	225
Bucket digging force (ISO 6015)	kN	354	354	354	354
Stick digging force (SAE J1179)	kN	289	266	247	215
Bucket digging force (SAE J1179)	kN	306	306	306	306

## Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 11.0 t, mono boom 7.00 m, stick 2.60 m and HD bucket 4.00 m<sup>3</sup> (4,500 kg).

	HD		
Undercarriage	mm	500	600
Pad width	kg	68,450	69,150
Weight	kg/cm <sup>2</sup>	1.38	1.16
Ground pressure	kg/cm <sup>2</sup>	0.94	

	LC-V		
Undercarriage	mm	500	600
Pad width	kg	71,200	71,900
Weight	kg/cm <sup>2</sup>	1.41	1.18
Ground pressure	kg/cm <sup>2</sup>	0.96	

The operating weight includes the basic machine with counterweight 14.5 t, mono boom 7.00 m, stick 2.60 m and HD bucket 4.00 m<sup>3</sup> (4,500 kg).

	HD		
Undercarriage	mm	500	600
Pad width	kg	71,950	72,650
Weight	kg/cm <sup>2</sup>	1.45	1.23
Ground pressure	kg/cm <sup>2</sup>	1.01	

	LC-V		
Undercarriage	mm	500	600
Pad width	kg	74,700	75,400
Weight	kg/cm <sup>2</sup>	1.48	1.25
Ground pressure	kg/cm <sup>2</sup>	1.03	

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

Cutting width mm	Capacity m <sup>3</sup>	Weight kg	HD undercarriage (with track pads 600 mm)			LC-V undercarriage (with track pads 600 mm)		
			Stick length (m)		Stick length (m)	Stick length (m)		Stick length (m)
			2.60	3.00		3.40	2.60	3.00
<b>with counterweight 11.0t</b>								
STD <sup>1)</sup>	1,950 3.00 3,100	▲	▲	▲	▲	▲	▲	▲
	2,150 3.50 3,350	▲	▲	■	▲	▲	▲	■
	1,950 4.00 3,600	▲	▲	■	■	▲	▲	■
	2,150 4.50 3,800	■	■	△	▲	▲	■	△
	2,250 5.00 3,950	▲	■	△	■	■	■	△
	2,450 5.50 4,200	■	△	-	▲	△	-	-
HD <sup>2)</sup>	2,000 3.00 3,900	▲	▲	■	▲	▲	▲	■
	2,200 3.50 4,300	▲	▲	■	▲	▲	▲	■
	2,000 4.00 4,500	▲	■	△	▲	▲	■	△
	2,200 4.50 4,850	■	■	-	▲	■	■	-
	2,300 5.00 5,050	■	△	-	■	△	-	-
HDV <sup>3)</sup>	2,000 3.00 4,350	▲	▲	■	▲	▲	▲	■
	2,200 3.50 4,750	▲	▲	■	▲	▲	▲	■
	2,000 4.00 5,000	▲	▲	△	▲	▲	▲	△
	2,200 4.50 5,350	▲	■	-	■	■	-	-
	2,300 5.00 5,600	■	△	-	▲	△	-	-
<b>with counterweight 14.5t</b>								
STD <sup>1)</sup>	1,950 3.00 3,100	▲	▲	▲	▲	▲	▲	▲
	2,150 3.50 3,350	▲	▲	■	▲	▲	▲	■
	1,950 4.00 3,600	▲	▲	■	▲	▲	▲	■
	2,150 4.50 3,800	▲	■	△	▲	▲	■	△
	2,250 5.00 3,950	▲	■	△	▲	▲	■	△
	2,450 5.50 4,200	■	△	-	■	△	-	-
HD <sup>2)</sup>	2,000 3.00 3,900	▲	▲	■	▲	▲	▲	■
	2,200 3.50 4,300	▲	▲	■	▲	▲	▲	■
	2,000 4.00 4,500	▲	■	△	▲	▲	■	△
	2,200 4.50 4,850	▲	■	-	▲	■	■	-
	2,300 5.00 5,050	▲	△	-	▲	△	-	-
HDV <sup>3)</sup>	2,000 3.00 4,350	▲	▲	■	▲	▲	▲	■
	2,200 3.50 4,750	▲	▲	■	▲	▲	▲	■
	2,000 4.00 5,000	▲	▲	△	▲	▲	▲	△
	2,200 4.50 5,350	▲	■	-	▲	■	-	-
	2,300 5.00 5,600	■	△	-	■	△	-	-

\* 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 70

2) HD bucket with Liebherr teeth Z 90

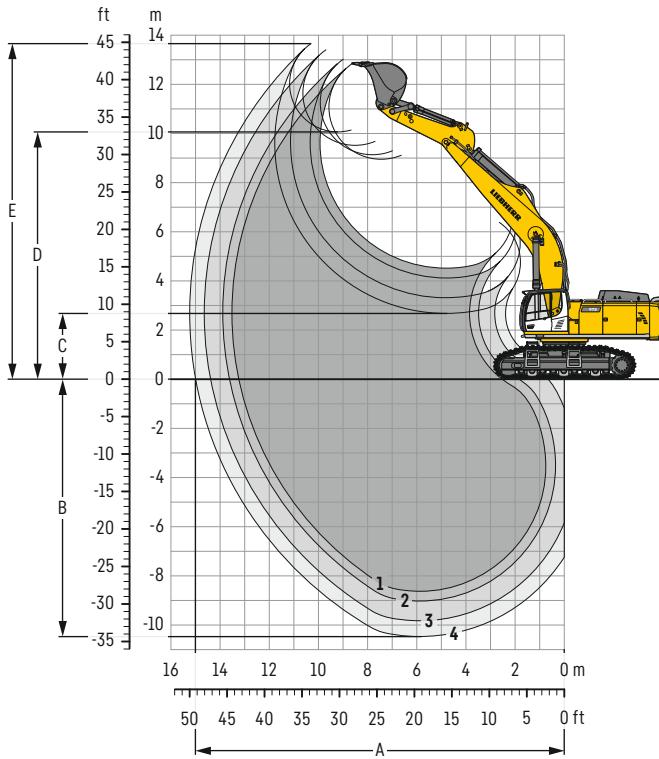
3) HDV bucket with Liebherr teeth Z 90

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0t/m<sup>3</sup>, ■ = ≤ 1.8t/m<sup>3</sup>, ▲ = ≤ 1.65t/m<sup>3</sup>, ■ = ≤ 1.5t/m<sup>3</sup>, △ = ≤ 1.2t/m<sup>3</sup>, - = not authorised

# Backhoe bucket

with mono boom 8.20 m



## Digging envelope

	1	2	3	4*	
without quick coupler	m	3.00	3.40	4.20	5.00
Stick length	m	13.25	13.60	14.35	14.95
A Max. reach at ground level	m	8.65	9.05	9.85	10.50
B Max. digging depth	m	4.50	4.10	3.30	2.70
C Min. dumping height	m	8.95	9.10	9.50	10.05
D Max. dumping height	m	12.80	13.00	13.40	13.60
E Max. cutting height	m				

## Forces

	1	2	3	4*	
without quick coupler	kN	282	260	225	205
Stick digging force (ISO 6015)	kN	354	354	354	314
Bucket digging force (ISO 6015)	kN	266	247	215	190
Stick digging force (SAE J1179)	kN	306	306	306	272
Bucket digging force (SAE J1179)	kN				

\* with kinematic R 956 Litronic

## Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 11.0t, mono boom 8.20 m, stick 3.40 m and HD bucket 3.00 m<sup>3</sup> (3,900 kg).

Undercarriage	HD			
Pad width	mm	500	600	750
Weight	kg	68,850	69,550	70,550
Ground pressure	kg/cm <sup>2</sup>	1.39	1.17	0.95

Undercarriage	LC-V			
Pad width	mm	500	600	750
Weight	kg	71,600	72,300	73,400
Ground pressure	kg/cm <sup>2</sup>	1.42	1.19	0.97

The operating weight includes the basic machine with counterweight 14.5t, mono boom 8.20 m, stick 3.40 m and HD bucket 3.00 m<sup>3</sup> (3,900 kg).

Undercarriage	HD			
Pad width	mm	500	600	750
Weight	kg	72,350	73,050	74,050
Ground pressure	kg/cm <sup>2</sup>	1.46	1.24	1.02

Undercarriage	LC-V			
Pad width	mm	500	600	750
Weight	kg	75,100	75,800	76,900
Ground pressure	kg/cm <sup>2</sup>	1.49	1.26	1.04

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

Cutting width mm	Capacity ISO 7451 m <sup>3</sup>	Weight kg	HD undercarriage (with track pads 600 mm)				LC-V undercarriage (with track pads 600 mm)			
			Stick length (m)				Stick length (m)			
			3.00	3.40	4.20	5.00	3.00	3.40	4.20	5.00
<b>with counterweight 11.0t</b>										
STD <sup>1)</sup>	1,400 2.00 2,500	-	▲	▲	▲	-	▲	▲	▲	-
	1,700 2.50 2,850	-	▲	▲	▲	-	▲	▲	▲	-
	1,950 3.00 3,100	-	▲	■	△	-	▲	▲	△	-
	2,150 3.50 3,350	-	▲	■	-	-	■	■	-	-
	1,950 4.00 3,600	-	△	△	-	-	△	■	-	-
	2,150 4.50 3,800	-	△	-	-	-	△	△	-	-
	2,250 5.00 3,950	-	-	-	-	-	△	△	-	-
HD <sup>2)</sup>	1,450 2.00 3,100	-	▲	▲	▲	-	▲	▲	▲	-
	1,750 2.50 3,600	-	▲	▲	△	-	▲	▲	△	-
	2,000 3.00 3,900	-	■	▲	-	-	▲	■	-	-
	2,200 3.50 4,300	-	■	△	-	-	■	■	-	-
	2,000 4.00 4,500	-	△	△	-	-	■	△	-	-
	2,200 4.50 4,850	-	-	-	-	-	△	-	-	-
HDV <sup>3)</sup>	1,450 2.00 3,500	-	▲	▲	■	-	▲	▲	■	-
	1,750 2.50 4,000	-	▲	▲	△	-	▲	▲	△	-
	2,000 3.00 4,350	-	■	■	-	-	▲	■	-	-
	2,200 3.50 4,750	-	△	△	-	-	△	■	-	-
	2,000 4.00 5,000	-	△	-	-	-	△	△	-	-
	2,200 4.50 5,350	-	-	-	-	-	△	-	-	-
HD <sup>4)</sup>	1,350 1.65 2,100	-	-	-	-	■	-	-	-	■
	1,550 2.00 2,250	-	-	-	-	■	-	-	-	■
	1,750 2.35 2,450	-	-	-	-	△	-	-	-	△
HD <sup>5)</sup>	1,350 1.65 2,350	-	-	-	-	■	-	-	-	■
	1,550 2.00 2,650	-	-	-	-	△	-	-	-	△
<b>with counterweight 14.5t</b>										
STD <sup>1)</sup>	1,400 2.00 2,500	-	▲	▲	▲	-	▲	▲	▲	-
	1,700 2.50 2,850	-	▲	▲	▲	-	▲	▲	▲	-
	1,950 3.00 3,100	-	▲	▲	△	-	▲	▲	△	-
	2,150 3.50 3,350	-	▲	■	-	-	▲	■	-	-
	1,950 4.00 3,600	-	■	■	-	-	▲	■	-	-
	2,150 4.50 3,800	-	■	△	-	-	■	△	-	-
	2,250 5.00 3,950	-	△	△	-	-	■	△	-	-
	2,450 5.50 4,200	-	△	-	-	-	△	-	-	-
HD <sup>2)</sup>	1,450 2.00 3,100	-	▲	▲	▲	-	▲	▲	▲	-
	1,750 2.50 3,600	-	▲	▲	△	-	▲	▲	△	-
	2,000 3.00 3,900	-	▲	▲	-	-	▲	▲	-	-
	2,200 3.50 4,300	-	▲	▲	-	-	▲	▲	-	-
	2,000 4.00 4,500	-	■	△	-	-	■	△	-	-
	2,200 4.50 4,850	-	△	△	-	-	■	△	-	-
	2,300 5.00 5,050	-	△	-	-	-	△	-	-	-
HDV <sup>3)</sup>	1,450 2.00 3,500	-	▲	▲	■	-	▲	▲	■	-
	1,750 2.50 4,000	-	▲	▲	△	-	▲	▲	△	-
	2,000 3.00 4,350	-	■	■	-	-	▲	■	-	-
	2,200 3.50 4,750	-	■	■	-	-	▲	■	-	-
	2,000 4.00 5,000	-	■	△	-	-	■	△	-	-
	2,200 4.50 5,350	-	△	-	-	-	■	-	-	-
	2,300 5.00 5,600	-	△	-	-	-	△	-	-	-
HD <sup>4)</sup>	1,350 1.65 2,100	-	-	-	-	■	-	-	-	■
	1,550 2.00 2,250	-	-	-	-	■	-	-	-	■
	1,750 2.35 2,450	-	-	-	-	△	-	-	-	△
HD <sup>5)</sup>	1,350 1.65 2,350	-	-	-	-	■	-	-	-	■
	1,550 2.00 2,650	-	-	-	-	△	-	-	-	△

\* 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 70

2) HD bucket with Liebherr teeth Z 90

3) HDV bucket with Liebherr teeth Z 90

4) Standard bucket from R 956 Litronic with Liebherr teeth Z 70

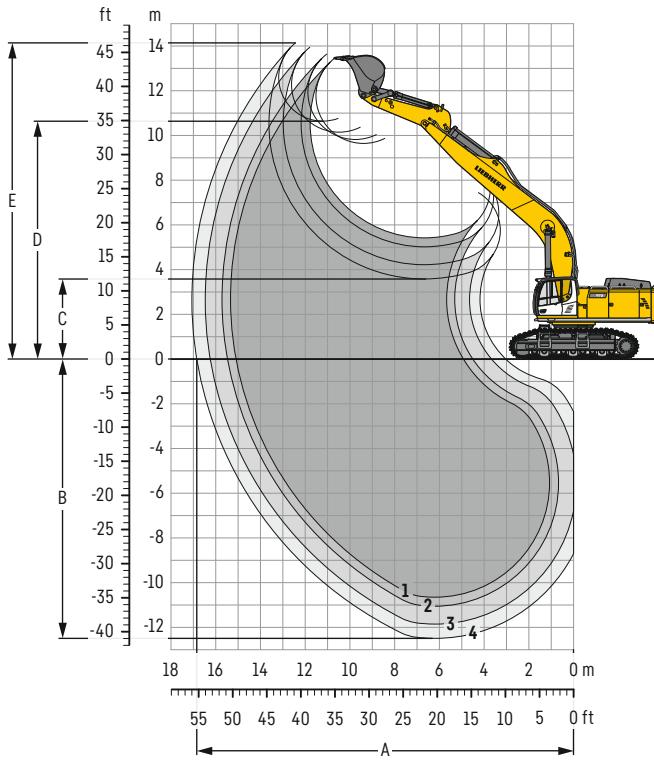
5) HD bucket from R 956 Litronic with Liebherr teeth Z 70

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m<sup>3</sup>, ■ = ≤ 1.8 t/m<sup>3</sup>, ▲ = ≤ 1.65 t/m<sup>3</sup>, ■ = ≤ 1.5 t/m<sup>3</sup>, △ = ≤ 1.2 t/m<sup>3</sup>, - = not authorised

# Backhoe bucket

with mono boom 10.00 m



## Digging envelope

without quick coupler	<b>1</b>	<b>2</b>	<b>3</b>	<b>4*</b>	
Stick length	m	3.00	3.40	4.20	5.00
A Max. reach at ground level	m	15.10	15.45	16.20	16.80
B Max. digging depth	m	10.65	11.05	11.85	12.50
C Min. dumping height	m	5.40	5.00	4.20	3.60
D Max. dumping height	m	9.65	9.80	10.15	10.60
E Max. cutting height	m	13.40	13.60	13.90	14.10

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4*</b>	
Stick digging force (ISO 6015)	kN	282	260	225	205
Bucket digging force (ISO 6015)	kN	354	354	354	314
Stick digging force (SAE J1179)	kN	266	247	215	190
Bucket digging force (SAE J1179)	kN	306	306	306	272

## Forces

without quick coupler	<b>1</b>	<b>2</b>	<b>3</b>	<b>4*</b>	
Stick digging force (ISO 6015)	kN	282	260	225	205
Bucket digging force (ISO 6015)	kN	354	354	354	314
Stick digging force (SAE J1179)	kN	266	247	215	190
Bucket digging force (SAE J1179)	kN	306	306	306	272

\* with kinematic R 956 Litronic

## Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 14.5t, mono boom 10.00 m, stick 4.20 m and HD bucket 2.00 m<sup>3</sup> (3,100 kg).

Undercarriage		<b>HD</b>
Pad width	mm	500 600 750
Weight	kg	73,000 73,700 74,700
Ground pressure	kg/cm <sup>2</sup>	1.48 1.24 1.01

Undercarriage		<b>LC-V</b>
Pad width	mm	500 600 750
Weight	kg	75,750 76,450 77,550
Ground pressure	kg/cm <sup>2</sup>	1.50 1.27 1.03

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

Cutting width mm	Capacity m <sup>3</sup>	ISO 7451 Weight kg	HD undercarriage (with track pads 600 mm)				LC-V undercarriage (with track pads 600 mm)			
			Stick length (m)			Stick length (m)				
			3.00	3.40	4.20	5.00	3.00	3.40	4.20	5.00
<b>with counterweight 14.5t</b>										
STD <sup>1)</sup>	1,400 2.00 2,500	▲	▲	▲	-	-	▲	▲	▲	-
	1,700 2.50 2,850	▲	■	■	-	-	▲	▲	■	-
	1,950 3.00 3,100	▲	■	△	-	-	■	▲	△	-
	2,150 3.50 3,350	△	△	-	-	-	■	△	-	-
	1,950 4.00 3,600	-	-	-	-	-	△	△	-	-
HD <sup>2)</sup>	1,450 2.00 3,100	▲	▲	■	-	-	▲	▲	■	-
	1,750 2.50 3,600	■	▲	△	-	-	▲	■	△	-
	2,000 3.00 3,900	△	△	-	-	-	▲	■	-	-
	2,200 3.50 4,300	-	-	-	-	-	△	△	-	-
HDV <sup>3)</sup>	1,450 2.00 3,500	▲	▲	△	-	-	▲	▲	▲	-
	1,750 2.50 4,000	▲	■	-	-	-	■	■	-	-
	2,000 3.00 4,350	△	△	-	-	-	■	△	-	-
	2,200 3.50 4,750	-	-	-	-	-	△	-	-	-
STD <sup>4)</sup>	1,350 1.65 2,100	-	-	-	■	-	-	-	■	-
	1,550 2.00 2,250	-	-	-	△	-	-	-	△	-
HD <sup>5)</sup>	1,350 1.65 2,350	-	-	-	▲	-	-	-	▲	-
	1,550 2.00 2,650	-	-	-	△	-	-	-	△	-

\* 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 70

2) HD bucket with Liebherr teeth Z 90

3) HDV bucket with Liebherr teeth Z 90

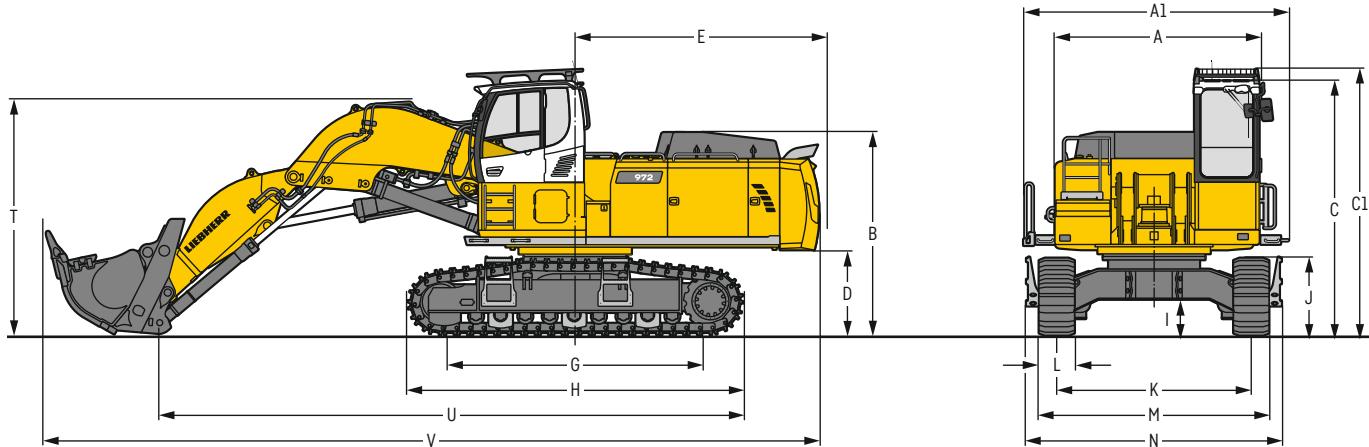
4) Standard bucket from R 956 Litronic with Liebherr teeth Z 70

5) HD bucket from R 956 Litronic with Liebherr teeth Z 70

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0t/m<sup>3</sup>, ■ = ≤ 1.8t/m<sup>3</sup>, ▲ = ≤ 1.65t/m<sup>3</sup>, ■ = ≤ 1.5t/m<sup>3</sup>, △ = ≤ 1.2t/m<sup>3</sup>, - = not authorised

# Dimensions front shovel



	HD	mm		HD	mm
A Uppercarriage width	3,515		I Undercarriage ground clearance	610	
A1 Uppercarriage width with catwalks	4,495		J Track height	1,315	
B Uppercarriage height	3,450		K Track gauge	3,300	
C Cab height	4,330		L Track pad width	500    600    750	
C1 Cab height with FOPS top guard	4,525		M Width over tracks	3,920    3,920	4,050
D Counterweight ground clearance	1,445		N Width over steps	4,330 <sup>1)</sup> 4,330 <sup>1)</sup>	4,330 <sup>1)</sup>
E Rear-end length	4,135		T Boom height	4,000	
G Wheelbase	4,575		U Length on ground	9,900	
H Undercarriage length	5,695		V Overall length	13,200	

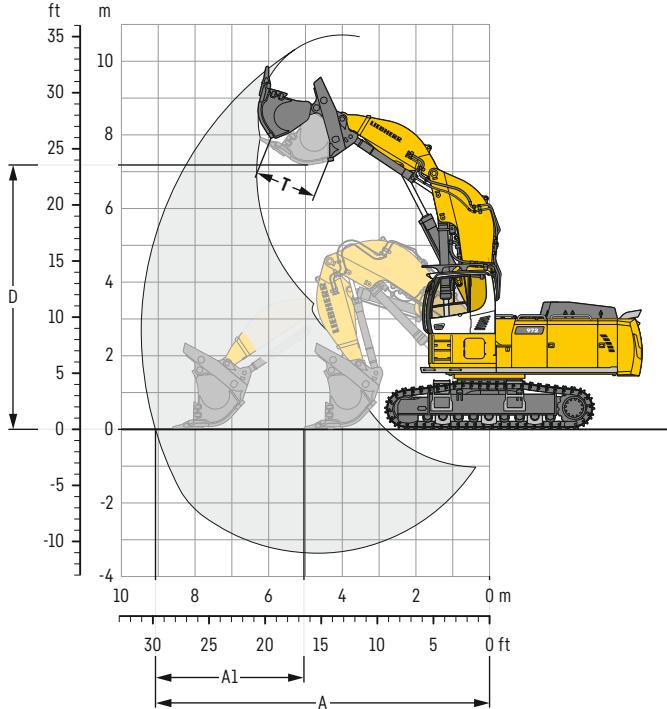
<sup>1)</sup> width with removable steps

## Transport dimensions

### removable elements disassembled

	Shovel equipment mm
Transport width	4,495
Transport length	13,200
Transport height	4,525
Shovel	4.00 m <sup>3</sup>

# Front shovel



## Digging envelope

A Max. reach at ground level	m	9.10
A1 Max. crowd length	m	3.60
D Max. dumping height	m	7.15
T Bucket opening width	mm	1,650

## Forces

Max. crowd force	kN	500
Max. crowd force at ground level	kN	410
Max. breakout force	kN	370

## Operating weight and ground pressure

The operating weight includes the basic machine with cab elevation 800 mm, shovel equipment and front shovel 4.00 m<sup>3</sup> (7,000 kg), level II.

Undercarriage	HD	
Pad width	mm	500 600
Weight	kg	69,950 70,650
Ground pressure	kg/cm <sup>2</sup>	1.41 1.18

## Front shovels

Cutting width	Capacity ISO 7451	Weight	Wear kit level
mm	m <sup>3</sup>	kg	
2,350	3.50	6,600	II
2,350	3.50	7,350	III
2,600	4.00	6,500	I
2,600	4.00	7,000	II
2,600	4.00	7,900	III
2,600	4.50	6,700	I
2,600	4.50	7,200	II
2,600	4.50	7,800	III
2,600	5.00	6,800	I
2,600	5.00	7,500	II

### HD undercarriage

### Shovel equipment



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 ▲ = ≤ 2.0t/m<sup>3</sup>, ■ = ≤ 1.8t/m<sup>3</sup>, ▲ = ≤ 1.65t/m<sup>3</sup>, ■ = ≤ 1.5t/m<sup>3</sup>, Δ = ≤ 1.2t/m<sup>3</sup>

# Lift capacities

with mono boom 7.00 m, counterweight 11.0 t and track pads 600 mm

## Stick 2.60 m

Under-carriage		3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m		m
HD	10.5							10.1* 10.1*	7.2
	9.0							9.4* 9.4*	8.3
	7.5				14.8* 14.8*				
	6.0	23.2* 23.2*	18.1* 18.1*	15.6* 15.6*	11.8* 11.8*			9.2* 9.2*	9.1
	4.5		20.9* 20.9*	16.5 16.9*	12.5 14.8*			9.3* 9.3*	9.6
	3.0		21.5 23.5*	15.7 18.3*	12.1 15.4*			9.7* 9.7*	9.8
	1.5		20.6 24.8*	15.1 19.2*	11.8 15.9*			10.4* 10.4*	9.7
	0	21.8* 21.8*	14.8 18.8*	14.8 19.5*	11.6 15.9*			10.9 11.7	9.4
	-1.5	23.2* 23.2*	29.9* 29.9*	20.3 23.7*	14.8 18.8*			11.9 13.8*	8.9
	-3.0	31.0* 31.0*	26.4* 26.4*	20.6 21.2*	15.1 16.6*			13.9 14.9*	8.0
LC-V	-4.5		20.4* 20.4*	16.1* 16.1*				13.9* 13.9*	6.6
	-6.0								
	10.5							10.0* 10.0*	7.2
	9.0							9.4* 9.4*	8.3
	7.5				14.9* 14.9*				
	6.0	23.9* 23.9*	18.4* 18.4*	15.7* 15.7*	13.2* 13.2*			9.2* 9.2*	9.1
	4.5		21.2* 21.2*	17.1* 17.1*	13.4 14.9*			9.3* 9.3*	9.6
	3.0		23.1 23.1*	16.9 18.4*	13.0 15.5*			9.7* 9.7*	9.8
	1.5		22.3 24.9*	16.3 19.3*	12.7 15.9*			10.5* 10.5*	9.7
	0	23.6* 23.6*	22.0 24.8*	16.0 19.5*	12.6 15.8*			11.8* 11.8*	9.4
LC-V	-1.5	25.0* 25.0*	29.6* 29.6*	22.1 23.5*	16.0 18.4*			13.0 14.1*	8.9
	-3.0	30.5* 30.5*	25.9* 25.9*	20.8* 20.8*	16.2* 16.2*			14.9* 14.9*	8.0
	-4.5		19.5* 19.5*	15.3* 15.3*				13.6* 13.6*	6.6
	-6.0								

## Stick 3.00 m

Under-carriage		3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m		m
HD	10.5							10.5* 10.5*	
	9.0							14.0* 14.0*	
	7.5							14.0* 14.0*	
	6.0				17.1* 17.1*	14.9* 14.9*	12.9 13.7*		
	4.5		28.2* 28.2*	19.9* 19.9*	16.3* 16.3*	12.5 14.3*			
	3.0			21.7 22.7*	15.8 17.7*	12.1 15.0*			
	1.5			20.7 24.5*	15.1 18.9*	11.7 15.6*			
	0		24.0* 24.0*	20.2 24.9*	14.7 19.4*	11.5 15.8*			
	-1.5	22.4* 22.4*	31.3* 31.3*	20.1 24.1*	14.6 18.9*	11.5 15.1*			
	-3.0	34.9* 34.9*	27.9* 27.9*	20.4 21.9*	14.8 17.2*				
LC-V	-4.5	27.7* 27.7*	22.5* 22.5*	17.7* 17.7*					
	-6.0								
	10.5							12.1* 12.1*	
	9.0							14.1* 14.1*	
	7.5				17.4* 17.4*	15.0* 15.0*	13.7* 13.7*		
	6.0		29.0* 29.0*	20.2* 20.2*	16.4* 16.4*	13.5 14.4*			
	4.5			23.0* 23.0*	17.0 17.9*	13.0 15.1*			
	3.0			22.4 24.6*	16.3 19.0*	12.7 15.7*			
	1.5		25.1* 25.1*	22.0 24.8*	16.0 19.4*	12.5 15.8*			
	0			23.7* 23.7*	31.0* 31.0*	21.9 23.9*	15.9 18.8*	12.5 15.0*	
LC-V	-1.5	23.7* 23.7*	34.6* 34.6*	27.5* 27.5*	21.6* 21.6*	16.1 17.0*			
	-3.0			21.7* 21.7*	17.1* 17.1*				
	-4.5								
	-6.0							13.7* 13.7*	7.2

## Stick 3.40 m

Under-carriage		3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m		m
HD	10.5				12.6* 12.6*			7.0* 7.0*	8.2
	9.0				13.2* 13.2*	9.2* 9.2*		6.6* 6.6*	9.2
	7.5								
	6.0		26.1* 26.1*	19.0* 19.0*	15.6* 15.6*	12.6 13.8*		6.5* 6.5*	9.9
	4.5		23.3* 23.3*	21.9* 21.9*	15.9 17.2*	12.1 14.6*	7.2* 7.2*	6.8* 6.8*	10.5
	3.0		19.1* 19.1*	20.8 24.0*	15.2 18.5*	11.7 15.3*		7.2* 7.2*	10.5
	1.5		25.0* 25.0*	20.2 24.8*	14.7 19.2*	11.4 15.7*		8.0* 8.0*	10.2
	0		21.3* 21.3*	31.8 32.3*	20.0 24.3*	14.5 19.0*	11.3 15.3*	9.3* 9.3*	9.7
	-1.5		31.5* 31.5*	29.3* 29.3*	20.2 22.6*	14.6 17.7*		11.5* 11.5*	8.9
	-3.0		31.6* 31.6*	24.4* 24.4*	19.1* 19.1*	14.3* 14.3*		13.6* 13.6*	7.7
LC-V	-4.5				13.1* 13.1*			6.9* 6.9*	8.2
	-6.0				13.3* 13.3*	10.1* 10.1*		6.6* 6.6*	9.2
	10.5				16.4* 16.4*	14.3* 14.3*	13.1* 13.1*	6.5* 6.5*	9.9
	9.0							6.5* 6.5*	10.3
	7.5				16.8* 16.8*	15.8* 15.8*	13.5 13.8*	6.5* 6.5*	10.5
	6.0		26.8* 26.8*	19.3* 19.3*	15.8* 15.8*	13.5 13.8*		7.3* 7.3*	10.5
	4.5		21.8* 21.8*	22.2* 22.2*	17.1 17.4*	13.1 14.7*	7.3* 7.3*	6.8* 6.8*	10.5
	3.0		19.5* 19.5*	22.5 24.1*	16.4 18.6*	12.7 15.4*		8.1* 8.1*	10.2
	1.5		25.8* 25.8*	21.9 24.8*	15.9 19.2*	12.4 15.7*		9.4* 9.4*	9.7
	0		22.3* 22.3*	32.1* 32.1*	21.8 24.2*	16.8 19.0*	12.3 15.2*		
LC-V	-1.5		32.7* 32.7*	28.9* 28.9*	22.0 22.3*	15.9 17.5*		11.9* 11.9*	8.9
	-3.0		30.6* 30.6*	23.7* 23.7*	18.5* 18.5*	13.6* 13.6*		13.5* 13.5*	7.7
	-4.5								
	-6.0								



Height



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 1,150 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.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

# Lift capacities

with mono boom 7.00 m, counterweight 14.5 t and track pads 600 mm

## Stick 2.60 m

Under-carriage		3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m		m
HD	10.5							10.1*	10.1* 7.2
	9.0							9.4*	9.4* 8.3
	7.5							9.2*	9.2* 9.1
	6.0	23.2* 23.2*	18.1* 18.1*	15.6* 15.6*	11.8* 11.8*			9.3*	9.3* 9.6
	4.5							9.7*	9.7* 9.8
	3.0							10.4*	10.4* 9.7
	1.5							11.7*	11.7* 9.4
	0	21.8* 21.8*	23.7* 23.7*	17.3* 18.8*	13.6* 15.9*			13.8*	13.8* 8.9
	-1.5	23.2* 23.2*	29.9* 29.9*	23.7* 23.7*	17.3* 18.8*			14.9*	14.9* 8.0
	-3.0	31.0* 31.0*	26.4* 26.4*	21.2* 21.2*	16.6* 16.6*			13.9*	13.9* 6.6
LC-V	-4.5								
	-6.0								
	10.5							10.0*	10.0* 7.2
	9.0							9.4*	9.4* 8.3
	7.5							9.2*	9.2* 9.1
	6.0	23.9* 23.9*	18.4* 18.4*	15.7* 15.7*	13.2* 13.2*			9.3*	9.3* 9.6
	4.5							9.7*	9.7* 9.8
	3.0							10.5*	10.5* 9.7
	1.5							11.8*	11.8* 9.4
	0	23.6* 23.6*	24.8* 24.8*	18.6* 19.5*	14.6* 15.8*			14.1*	14.1* 8.9
LC-V	-1.5	25.0* 25.0*	29.6* 29.6*	23.5* 23.5*	18.6* 18.6*			14.9*	14.9* 8.0
	-3.0	30.5* 30.5*	25.9* 25.9*	20.8* 20.8*	16.2* 16.2*				
	-4.5								
	-6.0	19.5* 19.5*	15.3* 15.3*					13.6*	13.6* 6.6

## Stick 3.00 m

Under-carriage		3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m		m
HD	10.5							10.5*	10.5* 7.7
	9.0							10.4*	10.4* 8.8
	7.5							14.0*	14.0* 9.5
	6.0							17.1*	17.1* 10.0
	4.5							19.9*	19.9* 10.1
	3.0							16.3*	16.3* 10.1
	1.5							14.3*	14.3* 10.1
	0							17.7*	17.7* 10.1
	-1.5	24.0* 24.8*	17.7* 19.2*	13.8* 15.9*	10.4*	10.4*		17.2*	17.2* 10.1
	-3.0	21.8* 21.8*	23.7* 23.7*	17.3* 18.8*	13.6* 15.9*			17.2*	17.2* 9.3
LC-V	-4.5	23.2* 23.2*	29.9* 29.9*	23.7* 23.7*	17.3* 18.8*			17.2*	17.2* 8.4
	-6.0	31.0* 31.0*	26.4* 26.4*	21.2* 21.2*	16.6* 16.6*			17.2*	17.2* 7.2
	10.5							12.1*	12.1* 7.7
	9.0							14.1*	14.1* 8.8
	7.5							15.0*	15.0* 9.5
	6.0							17.4*	17.4* 10.0
	4.5							20.2*	20.2* 10.1
	3.0							23.0*	23.0* 10.1
	1.5							24.6*	24.6* 10.1
	0							25.1*	25.1* 10.1
LC-V	-1.5	25.0* 25.0*	29.6* 29.6*	23.5* 23.5*	18.6* 18.6*			25.4*	25.4* 10.1
	-3.0	30.5* 30.5*	25.9* 25.9*	20.8* 20.8*	16.2* 16.2*			25.9*	25.9* 9.8
	-4.5							27.5*	27.5* 8.4
	-6.0	19.5* 19.5*	15.3* 15.3*					21.7*	21.7* 7.2

## Stick 3.40 m

Under-carriage		3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m		m
HD	10.5							7.0*	7.0* 8.2
	9.0							6.6*	6.6* 9.2
	7.5							6.5*	6.5* 9.9
	6.0							6.5*	6.5* 10.3
	4.5	26.1* 26.1*	19.0* 19.0*	15.6* 15.6*	13.8* 13.8*			6.5*	6.5* 10.7
	3.0	23.3* 23.3*	21.9* 21.9*	17.2* 17.2*	14.1* 14.6*	7.2*	7.2*	6.8*	6.8* 10.7
	1.5	19.1* 19.1*	24.0* 24.0*	17.7* 18.5*	13.7* 15.3*			7.2*	7.2* 10.2
	0	25.0* 25.0*	23.6* 24.8*	17.3* 19.2*	13.4* 15.7*			8.0*	8.0* 10.2
	-1.5	21.3* 21.3*	32.3* 32.3*	23.5* 24.3*	17.1* 19.0*	13.3* 15.3*		9.3*	9.3* 9.7
	-3.0	31.5* 31.5*	29.3* 29.3*	22.6* 22.6*	17.2* 17.7*			11.5*	11.5* 8.9
LC-V	-4.5	31.6* 31.6*	24.4* 24.4*	19.1* 19.1*	14.3* 14.3*			13.6*	13.6* 7.7
	-6.0								
	10.5							6.9*	6.9* 8.2
	9.0							6.6*	6.6* 9.2
	7.5							10.1*	10.1* 9.2
	6.0							10.1*	10.1* 10.3
	4.5							16.4*	16.4* 10.3
	3.0							16.4*	16.4* 10.7
	1.5							28.8*	28.8* 11.1
	0							20.1*	20.1* 11.1
LC-V	-1.5	21.3* 21.3*	32.1* 32.1*	24.2* 24.2*	18.4* 19.0*	14.4* 15.2*		16.0*	16.0* 11.1
	-3.0	22.3* 22.3*	32.1* 32.1*	24.2* 24.2*	18.4* 19.0*	14.4* 15.2*		16.0*	16.0* 11.1
	-4.5	28.9* 28.9*	28.9* 28.9*	22.3* 22.3*	17.5* 17.5*			16.0*	16.0* 11.1
	-6.0	30.6* 30.6*	23.7* 23.7*	18.5* 18.5*	13.6* 13.6*			16.0*	16.0* 11.1

## Stick 4.20 m

Under-carriage		3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m		m
HD	10.5							6.1*	6.1* 7.7
	9.0							6.1*	6.1* 9.1
	7.5							11.3*	11.3* 9.1
	6.0							12.7*	12.7* 10.1
	4.5							14.2*	14.2* 10.1
	3.0							16.9*	16.9* 11.1
	1.5							17.2*	17.2* 11.1
	0							17.2*	17.2* 11.1
	-1.5	12.5*	26.4*	23.7*	24.2*	17.2*	17.2*	10.3*	10.3* 11.1
	-3.0	26.4*	26.4*	23.7*	24.2*	17.2*	17.2*	10.3*	10.3* 11.1
LC-V	-4.5	19.2* 19.2*	31.8* 31.8*	23.3* 24.5*	16.9* 19.0*	13.1* 15.4*		16.9*	16.9* 10.5
	-6.0	26.7* 26.7*	31.4* 31.4*	23.3* 23.5*	16.8* 18.3*	13.1* 14.6*		17.6*	17.6* 10.5
	10.5							12.8*	12.8* 9.1
	9.0							11.4*	11.4* 9.1
	7.5							12.8*	12.8* 9.1
	6.0							13.8*	13.8* 9.1
	4.5							14.4*	14.4* 9.1
	3.0							14.4*	14.4* 9.1
	1.5							14.4*	14.4* 9.1
	0							14.4*	14.4* 9.1
LC-V	-1.5	13.2*	26.8*	24.3*	24.3*	18.5* 18.7*	14.3* 15.3*	11.5*	11.5* 12.1*
	-3.0	20.0* 20.0*	32.6* 32.6*	24.4* 24.4*	18.2* 18.9*	14.1* 15.3*		12.0*	12.0* 12.1*
	-4.5	27.5* 27.5*	31.1* 31.1*	23.3* 23.3*	18.2* 18.2*	14.2* 14.4*		12.0*	12.0* 12.1*
	-6.0	36.7* 36.7*	27.0* 27.0*	20.6* 20.6*	16.0* 16.0*			12.0*	12.0* 12.1*



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 1,150 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.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

# Lift capacities

with mono boom 8.20 m, counterweight 11.0 t and track pads 600 mm

## Stick 3.00 m

Undercarriage m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		 m
															
12.0															8.9*
10.5															8.2*
9.0															7.8*
7.5															7.8*
6.0															7.8*
4.5															7.9*
3.0															7.9
1.5															8.1*
0															8.6*
-1.5															11.3
-3.0	23.6*	23.6*	18.7*	18.7*	18.6	22.3*	13.4	17.8*	10.5	14.6*	8.6	12.0*			10.6
-4.5	25.6*	25.6*	25.2*	25.2*	18.9	20.8*	13.6	16.9*	10.6	13.8*					9.9
-6.0			22.2*	22.2*	18.4*	18.4*	14.0	14.9*							8.8
-7.5			17.1*	17.1*	14.2*	14.2*									7.3
12.0															
10.5															
9.0															
7.5															
6.0															
4.5															
3.0															
1.5															
0															
-1.5															
-3.0	24.8*	24.8*	20.1*	20.1*	20.4	22.1*	14.7	17.8*	11.5	14.7*	9.4	12.4*			11.1
-4.5			24.9*	24.9*	20.6*	20.6*	14.9	16.7*	11.6	13.6*					10.8*
-6.0			21.8*	21.8*	18.0*	18.0*	14.6*	14.6*							8.8
-7.5			16.4*	16.4*	13.6*	13.6*									7.3

## Stick 3.40 m

Undercarriage m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		 m
															
12.0															7.4*
10.5															6.9*
9.0															6.6*
7.5															6.6*
6.0															6.6*
4.5															6.6*
3.0															6.9*
1.5															6.9*
0															7.3*
-1.5															11.5
-3.0	21.9*	21.9*	19.2*	19.2*	18.5	22.6*	13.3	17.8*	10.4	14.5*	8.4	12.0			11.0
-4.5	29.1*	29.1*	26.6*	26.6*	18.7	21.3*	13.4	17.1*	10.4	13.9*					10.3
-6.0			23.6*	23.6*	19.1*	19.1*	13.7	15.5*	10.8	12.3*					9.3
-7.5			19.0*	19.0*	15.5*	15.5*	12.1*	12.1*							7.9
12.0															
10.5															
9.0															
7.5															
6.0															
4.5															
3.0															
1.5															
0															
-1.5															
-3.0	22.8*	22.8*	20.5	21.1*	14.7	17.0*	11.4	13.8*							10.3
-4.5	28.6*	28.6*	23.2*	23.2*	18.8*	18.8*	15.0	15.2*	11.8	12.0*					9.3
-6.0			18.3*	18.3*	15.0*	15.0*	11.5*	11.5*							7.9
-7.5															



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 1,150 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.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

## Stick 4.20 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		 m
															
12.0									8.7*	8.7*					 9.5
10.5									9.4*	9.4*	6.1*	6.1*			 10.6
9.0									9.8*	9.8*	9.4*	9.4*			 11.4
7.5															 12.0
6.0									11.8*	11.8*	10.5*	10.5*	9.7*	9.7*	 12.0
4.5		25.0*	25.0*		17.0*	17.0*			13.5*	13.5*	11.5*	11.5*	9.4	10.3*	 12.4
3.0					20.0*	20.0*			14.9	15.1*	11.4	12.5*	9.0	10.9*	 12.5
1.5					19.1	22.0*			14.0	16.5*	10.9	13.4*	8.7	11.5*	 12.5
0					18.4	22.8*			13.4	17.4*	10.4	14.1*	8.4	11.9*	 12.3
-1.5	12.3*	12.3*	18.8*	18.8*	18.2	22.8*			13.1	17.7*	10.2	14.3*	8.2	11.8	 11.8
-3.0	18.9*	18.9*	25.8*	25.8*	18.3	22.0*			13.1	17.3*	10.1	14.1*	8.2	11.6*	 11.2
-4.5	25.9*	25.9*	26.1*	26.1*	18.6	20.3*			13.3	16.2*	10.3	13.1*			 10.3
-6.0	29.1*	29.1*	22.2*	22.2*	17.6*	17.6*			13.8	14.0*					 9.0
-7.5			15.9*	15.9*	12.6*	12.6*									 7.2
12.0															 9.5
10.5															 10.6
9.0															 11.4
7.5															 12.0
6.0															 12.4
4.5															 12.4
3.0															 12.5
1.5															 12.5
0															 12.5
-1.5	13.0*	13.0*	19.4*	19.4*	20.0	22.7*			14.4	17.7*	11.1	14.3*	9.0	12.0*	 11.8
-3.0	19.6*	19.6*	26.7*	26.7*	20.1	21.8*			14.4	17.3*	11.1	14.0*	9.0	11.5*	 11.2
-4.5	26.7*	26.7*	25.8*	25.8*	20.1*	20.1*			14.6	16.1*	11.3	12.9*			 10.3
-6.0	28.3*	28.3*	21.6*	21.6*	17.2*	17.2*			13.6*	13.6*					 9.0
-7.5					11.8*	11.8*									 7.2

## Stick 5.00 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		 m
															
12.0															 10.5
10.5															 11.5
9.0															 12.3
7.5															 12.8
6.0									9.7*	9.7*	9.0*	9.0*	8.5*	8.5*	 12.8
4.5					15.2*	15.2*			12.4*	12.4*	10.7*	10.7*	9.6*	9.6*	 13.1
3.0					18.3*	18.3*			18.4*	18.4*	14.2*	14.2*	11.8	11.8*	 13.3
1.5					12.7*	12.7*			19.7	20.9*	14.4	15.8*	11.1	12.9*	 13.2
0					14.5*	14.5*			18.7	22.3*	13.7	16.9*	10.6	13.7*	 13.0
-1.5	11.9*	11.9*	18.3*	18.3*	18.2	22.8*			13.2	17.5*	10.2	14.2*	8.2	11.8	 12.6
-3.0	16.8*	16.8*	23.5*	23.5*	18.1	22.5*			13.0	17.5*	10.1	14.2*	8.1	11.7	 12.0
-4.5	22.3*	22.3*	28.2*	28.2*	18.3	21.4*			13.1	16.9*	10.1	13.7*	8.2	11.1*	 11.2
-6.0	28.7*	28.7*	24.9*	24.9*	18.7	19.2*			13.4	15.3*	10.4	12.2*			 10.0
-7.5	26.7*	26.7*	19.9*	19.9*	15.6*	15.6*			12.1*	12.1*					 8.4
12.0															 4.6*
10.5															 4.2*
9.0															 3.9*
7.5															 3.8*
6.0									9.8*	9.8*	9.1*	9.1*	8.5*	8.7*	 12.8
4.5					21.7*	21.7*			15.5*	15.5*	12.5*	12.5*	10.8*	10.8*	 13.1
3.0					16.9*	16.9*			18.7*	18.7*	14.4*	14.4*	11.9*	11.9*	 13.3
1.5					12.7*	12.7*			21.1*	21.1*	15.6	15.9*	12.0	13.0*	 13.2
0					14.8*	14.8*			20.4	22.4*	14.9	17.0*	11.5	13.8*	 13.0
-1.5	12.4*	12.4*	18.8*	18.8*	20.0	22.8*			14.4	17.6*	11.2	14.2*	9.0	11.9*	 12.6
-3.0	17.4*	17.4*	24.1*	24.1*	19.9	22.4*			14.3	17.5*	11.0	14.2*	8.9	11.8*	 12.0
-4.5	22.9*	22.9*	27.9*	27.9*	20.1	21.2*			14.4	16.7*	11.1	13.6*	9.0	11.0*	 11.2
-6.0	29.5*	29.5*	24.5*	24.5*	19.0*	19.0*			14.7	15.1*	11.4	12.0*			 10.0
-7.5	25.7*	25.7*	19.3*	19.3*	15.1*	15.1*			11.6*	11.6*					 8.4

 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 1,150 kg / 825 kg<sup>1)</sup>. 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.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

<sup>1)</sup> for stick 5.00 m

# Lift capacities

with mono boom 8.20 m, counterweight 14.5 t and track pads 600 mm

## Stick 3.00 m

Undercarriage m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		 m	
																
12.0																8.9*
10.5																8.2*
9.0																7.8*
7.5																7.8*
6.0																7.8*
4.5																7.9*
3.0																8.1*
1.5																8.6*
0																9.4*
-1.5																10.1
-3.0	23.6*	23.6*	25.2*	25.2*	20.8*	20.8*	16.1	16.9*	12.6	13.8*	10.3	12.0*				11.2
-4.5	25.6*	25.6*	22.2*	22.2*	18.4*	18.4*	14.9*	14.9*								11.8*
-6.0			17.1*	17.1*	14.2*	14.2*										11.0*
-7.5																7.3
12.0																
10.5																
9.0																
7.5																
6.0																
4.5																
3.0																
1.5																
0																
-1.5																
-3.0	24.8*	24.8*	20.1*	20.1*	22.1*	22.1*	17.3	17.8*	13.6	14.7*	11.1	12.4*				10.8*
-4.5			21.8*	21.8*	20.6*	20.6*	16.7*	16.7*	13.6*	13.6*	11.1	11.9*				11.9*
-6.0			16.4*	16.4*	13.6*	13.6*										11.8*
-7.5																10.8*

## Stick 3.40 m

Undercarriage m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		 m	
																
12.0																7.4*
10.5																6.9*
9.0																6.6*
7.5																6.6*
6.0																6.6*
4.5																6.6*
3.0																6.9*
1.5																7.3*
0																7.9*
-1.5																8.9*
-3.0	21.9*	21.9*	26.6*	26.6*	21.3*	21.3*	15.9	17.1*	12.4	13.9*						10.5*
-4.5	29.1*	29.1*	23.6*	23.6*	19.1*	19.1*	15.5*	15.5*	12.3*	12.3*						11.5*
-6.0			19.0*	19.0*	15.5*	15.5*	12.1*	12.1*								11.0*
-7.5																7.9
12.0																
10.5																
9.0																
7.5																
6.0																
4.5																
3.0																
1.5																
0																
-1.5																
-3.0	22.8*	22.8*	26.3*	26.3*	21.1*	21.1*	17.0*	17.0*	13.5	13.8*						10.7*
-4.5	28.6*	28.6*	23.2*	23.2*	18.8*	18.8*	15.2*	15.2*	12.0*	12.0*						11.4*
-6.0			18.3*	18.3*	15.0*	15.0*	11.5*	11.5*								10.9*
-7.5																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 1,150 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.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

## Stick 4.20 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		 m	
																
12.0															 9.5	
10.5															 10.6	
9.0															 11.4	
7.5															 12.0	
6.0															 12.4	
4.5		25.0*	25.0*		17.0*	17.0*			8.7*	8.7*	6.1*	6.1*			 12.4	
3.0					20.0*	20.0*			9.4*	9.4*	9.4*	9.4*			 12.5	
1.5					22.0*	22.0*			9.8*	9.8*	9.4*	9.4*			 12.5	
0					21.9	22.8*			11.8*	11.8*	10.5*	10.5*			 12.5	
-1.5	12.3*	12.3*	18.8*	18.8*	21.6	22.8*			13.5*	13.5*	11.5*	11.5*			 11.8	
-3.0	18.9*	18.9*	25.8*	25.8*	21.7	22.0*			15.1*	15.1*	12.5*	12.5*			 11.2	
-4.5	25.9*	25.9*	26.1*	26.1*	20.3*	20.3*			16.5*	16.5*	12.9	13.4*	10.3	8.5	 10.3	
-6.0	29.1*	29.1*	22.2*	22.2*	17.6*	17.6*			14.0*	14.0*	12.3	13.1*	10.0*	10.5*	 9.0	
-7.5			15.9*	15.9*	12.6*	12.6*									 7.2	
12.0															 9.5	
10.5															 10.6	
9.0															 11.4	
7.5															 12.0	
6.0															 12.4	
4.5															 12.4	
3.0															 12.5	
1.5															 12.5	
0															 12.5	
-1.5	12.3*	12.3*	18.8*	18.8*	21.6	22.8*			15.7	17.7*	12.2	14.3*	9.9	12.0*		 11.8
-3.0	18.9*	18.9*	25.8*	25.8*	21.7	22.0*			15.6	17.3*	12.1	14.1*	9.9	11.6*		 11.2
-4.5	25.9*	25.9*	26.1*	26.1*	20.3*	20.3*			15.8	16.2*	12.3	13.1*				 10.3
-6.0	29.1*	29.1*	22.2*	22.2*	17.6*	17.6*			14.0*	14.0*						 9.0
-7.5			15.9*	15.9*	12.6*	12.6*										 7.2
12.0															 9.5	
10.5															 10.6	
9.0															 11.4	
7.5															 12.0	
6.0															 12.4	
4.5															 12.4	
3.0															 12.5	
1.5															 12.5	
0															 12.5	
-1.5	13.0*	13.0*	19.4*	19.4*	22.7*	22.7*			17.3*	17.3*	10.6*	10.6*	10.3*	8.9*	 12.4	
-3.0	19.6*	19.6*	26.7*	26.7*	21.8*	21.8*			20.2*	20.2*	13.6*	13.6*	11.0*	9.3	 12.5	
-4.5	26.7*	26.7*	25.8*	25.8*	20.1*	20.1*			16.5*	16.5*	12.0*	12.0*	10.7	11.5*	 10.3	
-6.0	28.3*	28.3*	21.6*	21.6*	17.2*	17.2*			16.1*	16.1*	12.9*	12.9*			 9.0	
-7.5			19.9*	19.9*	15.6*	15.6*			11.8*	11.8*					 7.2	

## Stick 5.00 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		 m
															
12.0															 10.5
10.5															 11.5
9.0															 12.3
7.5															 12.8
6.0															 12.8
4.5															 13.1
3.0		18.3*	18.3*	18.4*	18.4*	14.2*	14.2*	11.8*	11.8*	10.4*	10.4*	8.8*	9.4*	 13.3	
1.5		12.7*	12.7*	20.9*	20.9*	15.8*	15.8*	12.9*	12.9*	10.5	11.0*	8.6	9.8*	 13.2	
0		14.5*	14.5*	22.1	22.3*	16.2	16.9*	12.6	13.7*	10.1	11.6*	8.3	10.1*	 13.0	
-1.5	11.9*	11.9*	18.3*	18.3*	21.6	22.8*	15.7	17.5*	12.2	14.2*	9.9	11.9*	8.2	10.2*	 12.6
-3.0	16.8*	16.8*	23.5*	23.5*	21.5	22.5*	15.6	17.5*	12.1	14.2*	9.8	11.8*	6.0*	6.0*	 12.0
-4.5	22.3*	22.3*	28.2*	28.2*	21.4*	21.4*	15.6	16.9*	12.1	13.7*	9.9	11.1*	6.0*	6.0*	 11.2
-6.0	28.7*	28.7*	24.9*	24.9*	19.2*	19.2*	15.3*	15.3*	12.2*	12.2*	10.9	11.6*	5.0*	5.0*	 10.0
-7.5	26.7*	26.7*	19.9*	19.9*	15.1*	15.1*	11.6*	11.6*					9.7*	9.7*	 8.4
12.0															 9.5
10.5															 10.5
9.0															 11.5
7.5															 12.3
6.0															 12.8
4.5															 13.1
3.0															 13.3
1.5															 13.2
0															 13.0
-1.5	12.4*	12.4*	18.8*	22.8*	17.0	17.6*	13.2	14.2*	10.7	11.9*	8.9	10.2*			 12.6
-3.0	17.4*	17.4*	24.1*	24.1*	22.4*	22.4*	16.9	17.5*	13.1	14.2*	10.6	11.8*			 12.0
-4.5	22.9*	22.9*	27.9*	27.9*	21.2*	21.2*	16.7*	16.7*	13.						

# Lift capacities

with mono boom 10.00 m, counterweight 14.5 t and track pads 600 mm

## Stick 3.00 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		  m				
																							
12.0																				7.8*	7.8*	10.4	
10.5																				7.6*	7.6*	11.4	
9.0																				7.5*	7.5*	12.2	
7.5																				7.4*	7.4*	12.7	
6.0							11.9*	11.9*												7.1	7.5*	13.1	
4.5																				6.8	7.8*	13.2	
3.0																				6.7	8.2*	13.2	
1.5																				6.8	8.6*	13.0	
0							14.1	16.0*												7.1	8.9*	12.6	
-1.5							14.1	15.9*												7.6	9.2*	12.0	
-3.0							18.4*	18.4*												8.6	9.5*	11.1	
-4.5	20.1*	20.1*					17.6*	17.6*												9.7*	9.7*	10.0	
-6.0	19.0*	19.0*					16.2*	16.2*												9.6*	9.6*	8.4	
-7.5	16.1*	16.1*					13.6*	13.6*															
-9.0																							
-10.5																							
12.0																				7.8*	7.8*	10.4	
10.5																				7.6*	7.6*	11.4	
9.0																				7.4*	7.4*	12.2	
7.5																				7.4*	7.4*	12.7	
6.0																				7.6*	7.6*	13.1	
4.5																				7.4	7.8*	13.2	
3.0																				7.3	8.2*	13.2	
1.5																				7.4	8.6*	13.0	
0																				7.8	8.9*	12.6	
-1.5																				8.4	9.2*	12.0	
-3.0																				9.5*	9.5*	11.1	
-4.5	20.1*	20.1*																		9.7*	9.7*	10.0	
-6.0	18.8*	18.8*																		9.6*	9.6*	8.4	
-7.5	15.6*	15.6*																					
-9.0																							
-10.5																							

## Stick 3.40 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		  m				
																							
12.0																				6.7*	6.7*	10.9	
10.5																				6.4*	6.4*	11.9	
9.0																				6.3*	6.3*	12.6	
7.5																				6.3*	6.3*	13.1	
6.0																				6.4*	6.4*	13.4	
4.5																				6.5	6.6*	13.6	
3.0																				6.4	6.9*	13.6	
1.5																				6.4	7.4*	13.4	
0																				6.7	8.1*	13.0	
-1.5																				7.2	8.7*	12.4	
-3.0																				8.0	9.1*	11.6	
-4.5	24.5*	24.5*					19.0*	19.0*												9.3*	9.3*	10.5	
-6.0	20.2*	20.2*					17.6*	17.6*												9.4*	9.4*	9.0	
-7.5	17.4*	17.4*					14.4*	14.4*												8.8*	8.8*	6.8	
-9.0																							
-10.5																							
12.0																				6.7*	6.7*	10.9	
10.5																				6.4*	6.4*	11.9	
9.0																				6.3*	6.3*	12.6	
7.5																				6.3*	6.3*	13.1	
6.0																				6.4*	6.4*	13.4	
4.5																				6.6*	6.6*	13.6	
3.0																				6.9*	6.9*	13.6	
1.5																				7.0	7.4*	13.4	
0																				7.3	8.1*	13.0	
-1.5																				7.3	8.8*	12.4	
-3.0																				8.9	9.1*	11.6	
-4.5	21																						

## Stick 4.20 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						
																						m		
HD	12.0																					5.3*	5.3*	10.6
	10.5																					4.9*	4.9*	11.8
	9.0																					4.7*	4.7*	12.7
	7.5																					4.6*	4.6*	13.4
	6.0																					4.6*	4.6*	13.9
	4.5																					4.7*	4.7*	14.2
	3.0																					4.8*	4.8*	14.3
	1.5																					5.0*	5.0*	14.3
	0																					5.3*	5.3*	14.1
	-1.5																					5.8*	5.8*	13.8
	-3.0																					6.3	6.5*	13.2
	-4.5	17.3*	17.3*	14.0*	14.0*	19.4	19.6*	13.7	15.5*	10.6	12.6*	8.5	10.5*	7.1	9.0*							7.0	7.5*	12.4
	-6.0	23.2*	23.2*	22.2*	22.2*	17.6*	17.6*	14.3	14.3*	10.9	11.8*	8.9	9.8*									8.1	8.5*	11.4
	-7.5	26.0*	26.0*	19.7*	19.7*	15.8*	15.8*	12.9*	12.9*	10.5*	10.5*											8.8*	8.8*	10.1
	-9.0			15.7*	15.7*	12.7*	12.7*	10.1*	10.1*												8.7*	8.7*	8.2	
	-10.5																							
LC-V	12.0																					5.2*	5.2*	10.6
	10.5																					4.9*	4.9*	11.8
	9.0																					4.7*	4.7*	12.7
	7.5																					4.6*	4.6*	13.4
	6.0																					4.6*	4.6*	13.9
	4.5																					4.7*	4.7*	14.2
	3.0																					4.8*	4.8*	14.3
	1.5																					5.0*	5.0*	14.3
	0																					5.4*	5.4*	14.1
	-1.5																					5.9*	5.9*	13.8
	-3.0																					6.6*	6.6*	13.2
	-4.5	17.9*	17.9*	14.7*	14.7*	19.5*	19.5*	15.0	15.0*	11.6	12.6*	9.4	10.5*	7.8	8.9*							7.7*	7.7*	12.4
	-6.0	23.9*	23.9*	22.0*	22.0*	17.5*	17.5*	14.2*	14.2*	11.7*	11.7*	9.7*	9.7*									8.6*	8.6*	11.4
	-7.5	25.5*	25.5*	19.4*	19.4*	15.5*	15.5*	12.7*	12.7*	10.3*	10.3*											8.8*	8.8*	10.1
	-9.0			15.1*	15.1*	12.3*	12.3*	9.6*	9.6*												8.7*	8.7*	8.2	
	-10.5																							

## Stick 5.00 m

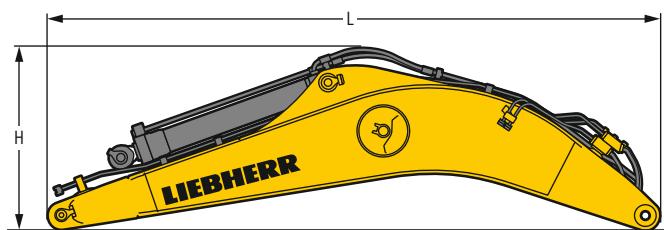
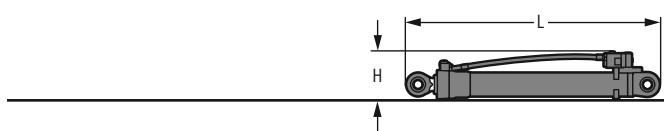
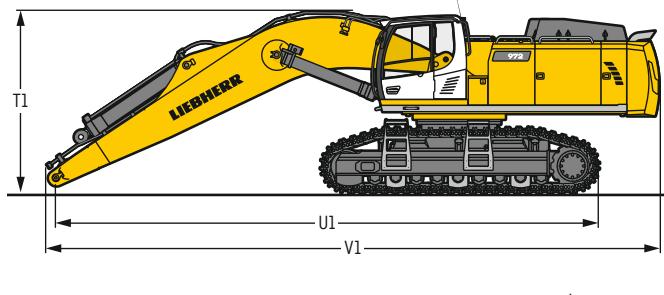
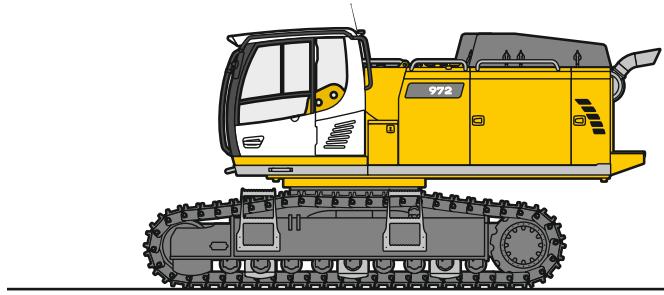
Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m						
																						m		
HD	12.0																					4.1*	4.1*	11.6
	10.5																					3.8*	3.8*	12.7
	9.0																					3.7*	3.7*	13.6
	7.5																					3.6*	3.6*	14.2
	6.0																					3.6*	3.6*	14.7
	4.5																					3.6*	3.6*	15.0
	3.0																					3.7*	3.7*	15.1
	1.5																					3.9*	3.9*	15.1
	0																					4.1*	4.1*	14.9
	-1.5																					4.5*	4.5*	14.5
	-3.0	10.7*	10.7*	8.6*	8.6*	15.4*	15.4*	13.7	15.4*	10.6	12.2*	8.6	10.1*	7.2	8.7*	6.0	7.6*					5.0*	5.0*	14.0
	-4.5	15.1*	15.1*	18.4*	18.4*	19.3	19.4*	13.7	15.3*	10.5	12.5*	8.5	10.4*	7.1	8.9*	6.0	7.7*					5.7*	5.7*	13.3
	-6.0	19.8*	19.8*	24.0*	24.0*	18.5*	18.5*	14.0	14.8*	10.7	12.1*	8.7	10.1*	7.3	8.4*							6.8*	6.8*	12.4
	-7.5	25.2*	25.2*	21.8*	21.8*	17.0*	17.0*	13.7*	13.7*	11.1	11.2*	9.0	9.2*								8.2*	8.2*	11.1	
	-9.0	25.1*	25.1*	18.0*	18.0*	14.6*	14.6*	11.8*	11.8*	9.3*	9.3*										8.4*	8.4*	9.5	
	-10.5																					8.2*	8.2*	7.2
LC-V	12.0																					4.0*	4.0*	11.6
	10.5																					3.8*	3.8*	12.7
	9.0																					3.6*	3.6*	13.6
	7.5																					3.6*	3.6*	14.2
	6.0																					3.6*	3.6*	14.7
	4.5																					3.6*	3.6*	15.0
	3.0																					3.7*	3.7*	15.1
	1.5																					3.9*	3.9*	15.1
	0																					4.2*	4.2*	14.9
	-1.5																					4.5*	4.5*	14.5
	-3.0	9.1*	9.1*	15.8*	15.8*	14.9	15.4*	11.6	12.3*	9.4	10.1*	7.8	8.7*	6.6	7.6*							5.0*	5.0*	14.0
	-4.5	11.2*	11.2*	14.0*	14.0*	19.9*	19.9*	14.9	15.5*	11.5	12.5*	9.3	10.4*	7.7	8.9*	6.6	7.7*					5.8*	5.8*	13.3
	-6.0	20.3*	20.3*	23.8*	23.8*	18.4*	18.4*	14.7*	14.7*	11.7	12.0*	9.5	10.0*	8.0	8.3*							6.9*	6.9*	12.4
	-7.5	25.8*	25.8*	21.5*	21.5*	16.8*	16.8*	13.6*	13.6*	11.1*	11.1*	9.0*	9.0*								8.3*	8.3*	11.1	
	-9.0	24.4*	24.4*	18.0*	18.0*	14.3*	14.3*	11.5*	11.5*	9.0*	9.0*										8.4*	8.4*	9.5	
	-10.5																					8.0*	8.0*	7.2

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 1,150 kg / 825 kg<sup>1)</sup>. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

# Dimensions and weights



## Basic machine

	mm	500	600	750
Track pads	kg	40,750	41,450	42,400
Weight with backhoe equipment and HD undercarriage without counterweight	kg	40,750	41,450	42,400
Weight with shovel equipment and HD undercarriage without counterweight	kg	43,450	44,150	45,250
Weight with backhoe equipment and LC-V undercarriage without counterweight	kg			

## Machine without stick

	HD	LC-V
T1 Mono boom 7.00 m	mm	3,400
Mono boom 8.20 m	mm	3,650
Mono boom 10.00 m	mm	4,100
U1 Mono boom 7.00 m	mm	9,950
Mono boom 8.20 m	mm	11,200
Mono boom 10.00 m	mm	13,100
V1 Mono boom 7.00 m	mm	11,450
Mono boom 8.20 m	mm	12,700
Mono boom 10.00 m	mm	14,550

## Cab elevation

	800 mm
L Length	mm
H Height	mm
Width	mm
Weight	kg

## Counterweight

	Std	heavy
L Length	mm	770
H Height	mm	1,550
Width	mm	3,360
Weight	kg	11,000
		14,500

## Upper protection screen

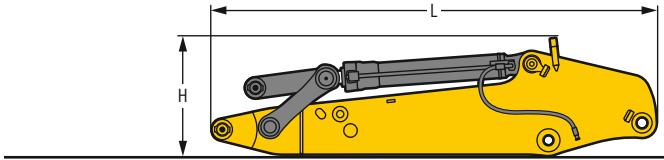
	mm	1,960
L Length	mm	190
H Height	mm	1,110
Width	kg	75

## Hoist cylinders (two)

	mm	2,650
L Length	mm	490
H Height	mm	360
Width	kg	2 x 750

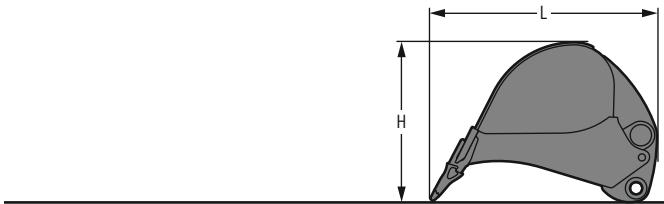
## Mono boom with stick cylinder

	m	7.00	8.20	10.00
Boom length	mm	7,350	8,550	10,350
L Length	mm	2,200	2,050	2,350
H Height	mm	1,450	1,450	1,450
Width	kg	7,200	7,900	9,000
Weight				



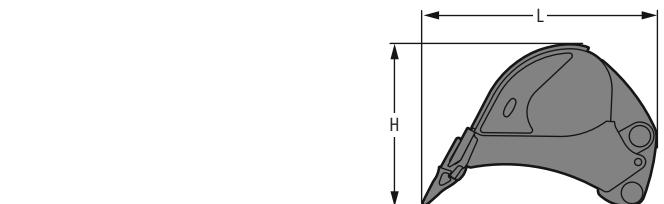
#### Stick with bucket cylinder

Stick length	<b>m</b>	2,60	3,00	3,40	4,20	5,00
L Length	<b>mm</b>	3,950	4,250	4,650	5,450	6,250
H Height	<b>mm</b>	1,250	1,250	1,250	1,200	1,200
Width	<b>mm</b>	950	950	950	950	850
Weight	<b>kg</b>	3,500	3,650	3,800	4,100	4,200



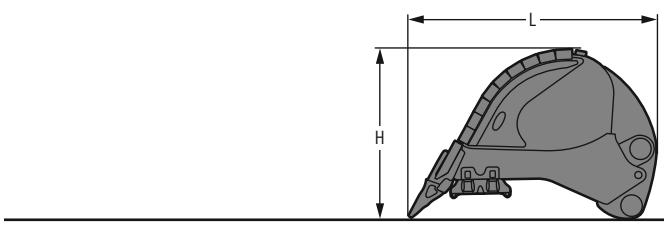
#### Backhoe buckets

Std						
Cutting width	<b>mm</b>	1,400	1,700	1,950	2,150	1,950
Capacity	<b>m³</b>	2,00	2,50	3,00	3,50	4,00
L Length	<b>mm</b>	2,300	2,300	2,300	2,300	2,500
H Height	<b>mm</b>	1,550	1,550	1,550	1,550	1,800
Width	<b>mm</b>	1,450	1,750	2,000	2,200	2,000
Weight	<b>kg</b>	2,500	2,850	3,100	3,350	3,600
						3,800
						3,950
						4,200



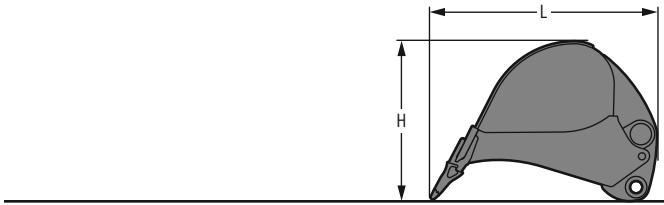
#### Backhoe buckets

HD						
Cutting width	<b>mm</b>	1,450	1,750	2,000	2,200	2,000
Capacity	<b>m³</b>	2,00	2,50	3,00	3,50	4,00
L Length	<b>mm</b>	2,400	2,400	2,400	2,400	2,650
H Height	<b>mm</b>	1,600	1,600	1,600	1,600	1,800
Width	<b>mm</b>	1,500	1,800	2,050	2,250	2,050
Weight	<b>kg</b>	3,100	3,600	3,900	4,300	4,500
						4,850
						5,050



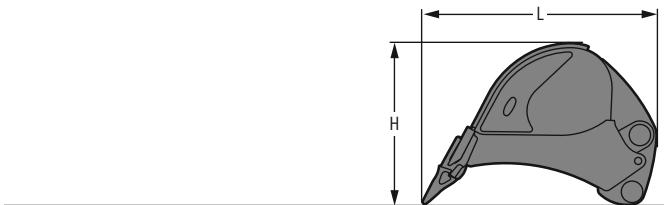
#### Backhoe buckets

HDV						
Cutting width	<b>mm</b>	1,450	1,750	2,000	2,200	2,000
Capacity	<b>m³</b>	2,00	2,50	3,00	3,50	4,00
L Length	<b>mm</b>	2,400	2,400	2,400	2,400	2,650
H Height	<b>mm</b>	1,600	1,600	1,600	1,600	1,800
Width	<b>mm</b>	1,500	1,800	2,050	2,250	2,050
Weight	<b>kg</b>	3,500	4,000	4,350	4,750	5,000
						5,350
						5,600



#### Backhoe buckets R 956

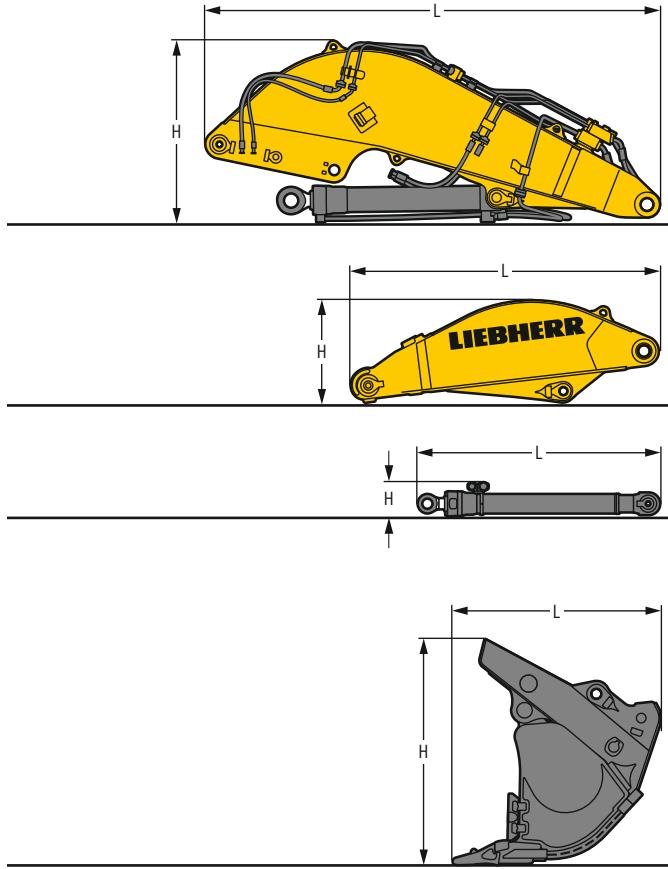
Std						
Cutting width	<b>mm</b>	1,350	1,550	1,750		
Capacity	<b>m³</b>	1,65	2,00	2,35		
L Length	<b>mm</b>	2,200	2,200	2,200		
H Height	<b>mm</b>	1,550	1,550	1,550		
Width	<b>mm</b>	1,400	1,600	1,800		
Weight	<b>kg</b>	2,100	2,250	2,450		



#### Backhoe buckets R 956

HD						
Cutting width	<b>mm</b>	1,350	1,550			
Capacity	<b>m³</b>	1,65	2,00			
L Length	<b>mm</b>	2,200	2,200			
H Height	<b>mm</b>	1,600	1,600			
Width	<b>mm</b>	1,400	1,600			
Weight	<b>kg</b>	2,350	2,650			

# Dimensions and weights



## Shovel boom

L Length	mm   4,750
H Height	mm   1,950
Width	mm   1,900
Weight without crowd cylinder	kg   5,050
Weight crowd cylinder	kg   650

## Shovel stick

L Length	mm   3,250
H Height	mm   1,100
Width	mm   1,500
Weight	kg   2,500

## Shovel bucket cylinders (two)

L Length	mm   2,550
H Height	mm   350
Width	mm   500
Weight	kg   2 x 400

## Front shovels

Cutting width	mm   2,350	mm   2,600	mm   2,600	mm   2,600
Capacity	m³   3.50	4.00	4.50	5.00
L Length	mm   2,200	2,200	2,200	2,300
H Height	mm   2,400	2,400	2,400	2,500
Width	mm   2,400	2,650	2,650	2,650
Weight	kg   -	6,500	6,700	6,800
Level I	kg   6,600	7,000	7,200	7,500
Level II	kg   7,350	7,900	7,800	-
Level III	kg   7,350	7,900	7,800	-

# Serial equipment

## Undercarriage

Lashing eyes  
Sprocket with dirt ejector  
Track and carrier rollers, sealed and lifetime-lubricated  
Travel motor housing protection

## Uppercarriage

Access platforms without protruding parts  
Anti-skid surfaces  
Automatic swing brake lock  
Centralised lubrication system (automatic)  
DEF tank lockable access hatch  
Engine hood with gas spring opening  
Extended tool set including tool box  
Handrails  
Lockable fuel tank cap with padlock  
Lockable service doors  
Lockable storage box  
Main switch, accessible from ground level  
Pre-heating system for fuel  
Protection grid on radiator fan  
Sound insulation  
Swing-out radiators  
Windshield washer fluid tank

## Cab

9" multifunction colour touchscreen  
Air conditioning, automatic, tri-zone, controlled via display  
Armrests adjustable in length, height and inclination  
Bottle holder  
Cab door sliding windows  
Cigarette lighter  
Coat hook  
DEF consumption on touchscreen  
DEF level on touchscreen  
Electric socket in cabin (12 V)  
Electric socket in cabin (24 V)  
Emergency hammer  
Engine oil level on touchscreen  
Footrest  
Fuel consumption on touchscreen  
Fuel level on touchscreen  
Impact resistant roof window  
Impact resistant two-piece windscreen  
Interior lighting  
Laminated right hand side window  
LiDAT Plus (Liebherr data transfer system)\*  
Mobile phone storage net  
Modetronic  
Movement priority between swing and boom, adjustable via touchscreen  
Rearview mirror  
Rear view monitoring camera  
Rear view monitoring camera distance gauge  
Rear window emergency exit  
Right hand side view monitoring camera  
Roll-down sun blinds for windscreen and roof window  
Rubber floor mat, fixed on floor and removable  
Storage box  
Storage nets  
Storage spaces  
Tilttable console left  
Tinted windows  
Visco-elastic damping  
Windscreen wiper and washer  
Work mode selector

## Hydraulic system

Dedicated swing circuit  
Filter with integrated fine filters  
Hydraulic pressure measuring ports  
Hydraulic tank shut-off valve  
Magnetic rod  
Pressure accumulator for controlled lowering of equipment with engine turned off

## Engine

Air filter with automatic dust ejector  
Automatic engine idling / speed increase, controlled via joystick sensors  
Common-Rail injection system  
Exhaust gas after-treatment system - DOC + DPF + SCR  
Fixed geometry turbocharger  
Fuel fine filter  
Fuel pre-filter and water separator  
Fuel priming pump  
Intercooler  
Power Pack EU Stage V  
Stepless adjustable engine speed

## Equipment

Anti-drift system boom cylinders  
Anti-drift system stick cylinder  
Boom cylinders regeneration  
Pipe fracture safety valve for stick cylinder  
Pipe fracture safety valves for boom cylinders  
Pivot points made of cast steel  
SAE split flanges on high pressure lines  
Stick bottom protection  
Stick cylinder regeneration

\* optionally extendable after one year

# Equipment standard / option

## Undercarriage

Chain guide 3 pieces	●
Chain guide 4 pieces	+
Chain guide full length	+
Reinforced cover and base plate for undercarriage centre section	+
Reinforced cover plate for centre section (LC-V undercarriage)	+
Screws protection for sideframe (LC-V undercarriage)	+
Special painting	+
Steps	●
Track pads double grouser 500 mm, chamfered	+
Track pads double grouser 600 mm, chamfered	●
Track pads double grouser 750 mm, chamfered	+
Track pads double grouser 900 mm, chamfered	+
Travel drive gearbox protection	+
Undercarriage HD	+
Undercarriage LC-V	+
Undercarriage protection plate for drop-ball application	+

## Hydraulic system

Bypass filter for hydraulic oil	+
Liebherr hydraulic oil	●
Liebherr hydraulic oil, adapted for extreme climate conditions	+
Liebherr hydraulic oil, biodegradable	+

## Engine

Automatic engine shutdown after idling	+
Engine shut-down with overrun	+
Lighting for engine compartment	+1

## Uppercarriage

Air pre-filter with cyclonical dust trap	+
Boxing ring	+
Catwalks left and right	●
Catwalk wide with railing	+
Counterweight heavy 14.5t	+
Counterweight standard 11.0t	●
Electric socket on uppercarriage (24 V)	+
Filter for hydraulic hammer return flow	+
Fixed cab rise 800 mm	+
Headlight on uppercarriage, lateral right, LED+, 1 piece	+1
Headlights on uppercarriage, front, LED, 2 pieces, protections included	●1
Headlights on uppercarriage, front, LED+, 2 pieces, protections included	+1
Headlights on uppercarriage, rear, LED+, 2 pieces	+1
Liebherr Power Efficiency – Engine Control	●
Lighting for tank area	+1
Lighting for uppercarriage access	+1
Radiator fine mesh protection grid	+
Reversible fan drive	+
Skyview 360°	+
Special painting	+
Swing ring and lubrication hoses protection	+
Tank refilling pump fuel	+
Wiggins coupling for fuel	+


**Cab**

2" seat belt with retractor	●
3" seat belt with retractor, orange colour	+
4-points seat belt	+
Acoustic travel alarm deactivatable	+
Auxiliary heater programmable	+
Bottom windscreen wiper	+
Coming / Leaving Home	+ <sup>1)</sup>
Cool box (12V)	+
Dark tinted windows	+
Electrically adjustable and heated outside rear-view mirrors	+
Electronic immobiliser	+
Emergency stop in cab	+
FGPS front guard tiltable	+
Fire extinguisher	+
First-aid box	+
FOPS top guard	+
Handrests elevated for joysticks	+
Headlights on cab, front, LED, 2 pieces	● <sup>1)</sup>
Headlights on cab, front, LED+, 2 pieces	+ <sup>1)</sup>
Headlights on cab roof, front, LED+, 2 pieces	+ <sup>1)</sup>
High pressure circuit switchable on pedals or mini-joystick	+
High pressure circuit with Tool Control (20 attachment adjustments on display)	+
Lighting for cabin access	+ <sup>1)</sup>
Luminosity control (LED+ headlights)	+ <sup>1)</sup>
Medium pressure circuit	+
Mini-joysticks proportional	+
Operator seat Comfort	●
Operator seat Premium	+
Overload warning system	+
Radio Comfort	+
Radio pre-installation	●
Roof sun shield	+
Roof window wiper	+
Rotating beacon on cabin, LED, 1 piece	+
Shortkey buttons on joystick configurable	●
Special painting	+
Sun visor	+


**Equipment**

Boom bottom protection	+
Boom cylinders rod protection	+
Bucket cylinder rod protection	+
Bucket Fill Assist	+
Centralised lubrication extended for connecting link	+
Floating boom	+
Headlights on boom, LED, 2 pieces, protections included	● <sup>1)</sup>
Headlights on boom, LED+, 2 pieces, protections included	+ <sup>1)</sup>
Mono boom 7.00 m	+
Mono boom 8.20 m	+
Mono boom 10.00 m	+
Preparation for ripper tooth	+
Quick coupler SWA 92 hydraulic	+
Shovel boom 4.50 m	+
Shovel stick 2.90 m	+
Special painting	+
Stick 2.60 m	+
Stick 3.00 m	+
Stick 3.40 m	+
Stick 4.20 m	+
Stick sealed 5.00 m	+

● = Standard, + = Option

<sup>1)</sup> Equipment not individually available, but only as predefined packages

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

Options and / or special equipment, 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



## Global and independent: more than 70 years of success

Liebherr was founded in 1949 when, with the development of the world's first mobile tower crane, Hans Liebherr laid the foundations for a family business now employing nearly 51,000 people and comprising over 140 companies across every continent.

The parent company is Liebherr-International AG in Bulle, Switzerland, whose associates are exclusively members of the Liebherr family.

## Leaders and pioneers

Liebherr is a pioneer and its forward-looking approach has seen it make important contributions to technology history over a wide variety of industries. Employees throughout the world continue to share the courage of the founder, sharing a passion to produce innovative products and a determination to provide world-leading equipment and machinery.

## Diversified portfolio

The company is one of the world's biggest construction equipment manufacturers and provides high-quality, user-oriented products and services to sectors including: earthmoving, material handling, deep foundations, mining, mobile and crawler cranes, tower cranes, concrete production and distribution, maritime cranes, aerospace and transportation, gear technology and automation, refrigeration and freezing, components and hotels.

## Customised care

Liebherr solutions are characterised by precision, implementation and longevity. The company is committed to technological excellence and to providing customers with solutions that match their needs exactly. That customer focus does not end with delivery of a product but continues through a comprehensive range of back-up and support services.

[www.liebherr.com](http://www.liebherr.com)

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