

# Crawler excavator

**R 926**  
Litronic®

Operating Weight: 25,700 - 28,950 kg  
Engine Output: 129 kW / 175 hp  
Bucket Capacity: 0.75 - 1.75 m<sup>3</sup>



# LIEBHERR

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## **Performance**

The new R 926 crawler excavator is a high-performance machine which balances power, accuracy and efficiency in the most effective way. Furthermore, cutting-edge hydraulics allow full flexibility and precision movements on even the most demanding applications.

## **Reliability**

Liebherr-France SAS perpetuates the Liebherr Group's tradition of quality and innovation to offer a product that satisfies the needs of its clients throughout the world. Liebherr-France SAS rigorously selects the materials and components and continuously adapts internal processes to ensure it always attains the quality that customers expect.

## **Comfort**

One of the advantages of the R 926 is a space especially created to satisfy the operator's needs. The cab offers a spacious, comfortable and quiet environment. This aspect of well-being enhances the operator's performance.

## **Economy**

Maintenance is faster and more effective thanks to the improvements made to this machine. The shortened service times result in gains in productivity. The R 926 definitively increases your return on investment.





#### Clean and effective Liebherr engine

- New engine complies with requirements of Tier 4i/Stage IIIB regulations on exhaust gas emissions
- Especially designed for construction engine applications
- Liebherr's common rail injection system with three times less load loss than a conventional Common Rail system
- Automatic idling system optimises energy efficiency
- Two-stage supercharger with intercooler for more power at low revs



# Performance

The new R 926 crawler excavator is a high-performance machine which balances power, accuracy and efficiency in the most effective way. Furthermore, cutting-edge hydraulics allow full flexibility and precision movements on even the most demanding applications.

## Liebherr integrated systems engineering

### High-tech for high performance

The R 926 excavator is fitted with Liebherr's Positive Control hydraulic system. This system is controlled by Liebherr electronics and uses strategically-positioned sensors. All of the machine's work is therefore faster, more accurate and fluid. What's more, as the two hydraulic pump circuits can operate either separately or in unison, this optimises the energy management of the R 926.

### Raw performance

The excellent productivity and high performance of the R 926 are the results of intense research. In particular, this machine has a clean and efficient 129 kW engine that complies with the requirements of the new Tier 4i/stage IIIB regulations on exhaust gas emissions. Maximum performance is also possible in situations that require it thanks to through high-torque rotary dampers and a high lifting power. The optimal kinematics of the equipment allow the R 926 to reach a break-out force of 192 kN and a penetration force of 151 kN. This machine is recommended for work sites requiring high productivity. The R 926 excavator is perfectly suited to difficult tasks such as earthworks or feeding a mobile crusher.

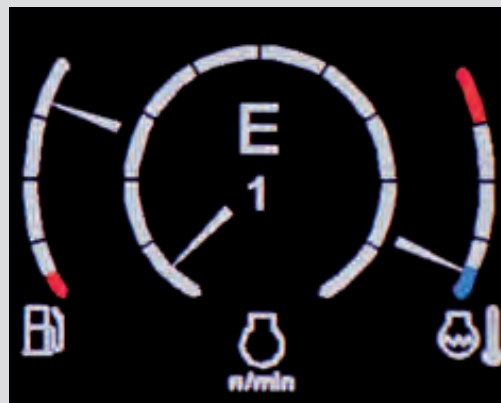
### Highly operational worksites

A 380 bar operating pressure, a balance between power and speed, all these advantageous factors contribute to significantly increasing the number of work cycles on a work site, in even the most difficult applications.



### Innovative tooth system

- Liebherr's patented tooth system, comprising a tooth holder, a tooth, a securing bolt, locking mechanism and protective plug
- Teeth can be replaced quickly and effortlessly
- Different tooth shapes for different applications



### Intelligent work modes

- Economy Mode: for economical and ecologically-friendly operation. Recommended for normal working conditions
- Power Mode: for high excavation capacities and difficult applications
- Sensitivity Mode: for precision jobs and the loading of materials
- Full Power Mode: especially designed for increased power; ideal for extreme applications



#### Liebherr-Service

- Programmes, such as ReMan, ReBuilt and Repair provide the perfect, economical solution, including the builder's quality and guarantee
- A permanent stock of more than 80,000 catalogue items, available 24 hours a day on the Liebherr P@rts 24 online portal for less machine downtime
- A customised and continuously updated documentation system



# Reliability

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## A concept of stress-resistant equipment

### Better stresses distribution

The R 926 crawler excavator is a product designed to withstand major stresses. Molded steel parts strengthen the excavator at strategic points for difficult applications.

### ROPS Structure

The cab is fitted with a roll-over protection system, which allows the operator to work in the safest possible environment.

### A robust undercarriage

The strength of the undercarriage lengthens the service life of the machine. Liebherr-France SAS selects high quality materials for building the undercarriage and can meet the needs of all its customers by offering a large variety of X-shaped undercarriages. Furthermore, the larger openings between the track carriers and the central part of the undercarriage do make them easier to maintain, as do the steps on the vertical side of the track carriers.

### Quality process

Liebherr-France SAS is ISO 9001 certified. The quality process begins with the design of the product and ends with its manufacture. This leads, as an example, to the selection of the best materials on the market. Then several inspections are regularly carried out during the manufacturing process to fulfill this quality objective.



### LiDAT fleet management system

- A single point of contact for full fleet management
- Daily reports on the fleet of machines via the internet portal
- Accurate localisation of the machines
- Optimised security thanks to the geographical limitations and the determined shut off times
- An updated transmission several times a day



### Integration of Liebherr components

- Most of the key components are made by Liebherr, such as the engine and hydraulic pumps
- A balanced and effective design-based interaction of components
- It is possible to make adjustments to your requirements, such as special lengths of equipment and integration of special tools



#### Spacious and comfortable operator's cab

- Several storage spaces behind the seat, with optional chillers for keeping drinks cool at all times
- Fully retractable windscreen, stowable under the roof
- Fully automatic air-conditioning with fast de-icing and defogging functions
- 12 V plug for operating the optional chiller, and all other types of appliances





# Comfort

One of the advantages of the R 926 is a space especially created to satisfy the operator's needs. The cab provides a spacious, comfortable and quiet environment. This aspect of well-being enhances the operator's performance.

## A spacious and comfortable work space

**A first class work space** In this cab, operators have a pneumatic seat, an enlarged space and an environment with all comforts. Depending on the operator's needs, the Liebherr Premium seat can be chosen as an option. This seat offers maximum seating comfort thanks to its pneumatic lumbar support, its electronic weight-actuated height adjuster and its air-conditioning with activated charcoal and built-in fan. It is especially designed for the operators' well-being.

**Ergonomic controls for optimal manipulation** All the controls are positioned so that the operator can intuitively and accurately manipulate them. The consoles on which the controls and manipulators are adjoined to the seat for optimal comfort while working and more accurate movements.

**A panoramic view of the whole work area** A rear-space camera is fitted in the R 926 counterweight. A display on the 7" high resolution screen allows the operator to work in a secure area. This complete visibility gives the operator full confidence in the tasks they perform.

**Ergonomic proportional manipulators** The proportional control allows a very fine manoeuvrability for a sensitive, accurate and more fluid operation of hydraulic tools. The sensitive manipulator with proximity switch allows greater responsiveness while resuming rpm.



### 7" colour touchscreen

- Several adjustment, control and monitoring possibilities (Display of fuel consumption, air-conditioning, tool control, etc.)
- Robust and reliable design (IP 65 ingress protection)
- High resolution video compatibility for displaying rear-space camera images



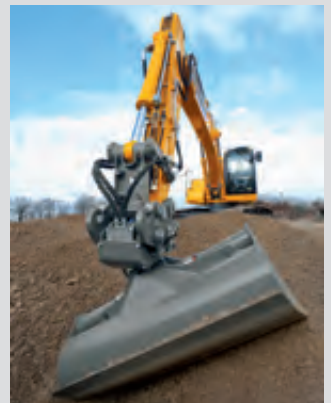
### Sound level and vibrations reduced to the minimum

- Viscoelastic rivets means less noise and fewer vibrations are felt in the cab
- Rubber pipe flange coupling, for better sound and vibration absorption
- Internal sound level of 72 dB(A)



#### Easy transport

- Rapid transport thanks to compact dimensions
- Transport using a standard carrier
- Securing rings fitted in the undercarriage structure for optimal safety during transport



# Economy



Maintenance is faster and more effective thanks to the improvements made to this machine. The shorter service times result in gains in productivity. The R 926 definitively increases your return on investment.

## Fast and effective maintenance for higher profitability

### Easier maintenance

All the maintenance points were designed for easier access and to make the daily maintenance operations shorter. The gull-wing doors provide access to the parts from ground level. The maintenance of most components, such as fuel filters and radiators, is performed in complete safety. Grouped together into very distinct compartments, this machine's maintenance will save you time and increase productivity on your work sites.

### An automatic centralised lubrication system as standard

The fully automated lubrication system is a true time-saver for the operator, with minimum machine downtime.

### More effective energy management at all times

The engineering of Liebherr's integrated systems and the effective management of the engine and hydraulics are constantly controlling fuel consumption. The new diesel engine, automatic idling, electronic engine speed sensing regulation and Regeneration Plus are just some of the elements that contribute to better energy management. This consumption control minimises the discharge of toxic gases into the atmosphere whilst saving on operating costs.

#### Liebherr tools

- Bucket with Liebherr's fast tooth replacement system
- Replace mechanical and hydraulic tools in just a few seconds thanks to the two quick-change systems:
  - Likufix system: hydraulic coupling of all the tools from the operator's work station
  - Liebherr quick-change system



#### Particle filters designed and manufactured by Liebherr

- At least 99% elimination of exhaust gas particle emissions (VERT certification)
- Active regeneration of the particle filter, causing no inconvenience to the operator whilst optimising the machine's performance
- Easily accessible filter unit for maintenance interventions

# Experience the progress

## R 926

### A large choice of equipment

- Two-piece Boom or straight boom : a solution for every application
- Extremely resistant against stresses for a longer service life



### A multi-purpose tool carrier

- Wide range of special Liebherr tools and buckets
- Liebherr's patented tooth system
- Liebherr systems such as quick-change, Likufix, etc.

### A reliable undercarriage

- Reliable and robust undercarriage, easy to secure thanks to fitted securing rings
- Large range of undercarriages to satisfy customer needs
- Easy maintenance and cleaning inherent to the very design of the undercarriage

## A first class operator's workstation

- Modern and spacious workspace
- Pneumatic seat with all modern comforts
- Fewer vibrations and less noise
- 7" high resolution touchscreen

## A new Liebherr engine

- Engine complies with Tier 4i/Stage IIIB emission regulations
- Especially designed for construction engine applications
- Automatic idling system to optimise energy efficiency

## Work in complete safety

- Unobstructed visibility, integrated backup camera, and rear view mirrors fitted in strategic places as standard
- Intelligent layout of controls and clear information in the operator's workstation
- Secure access to the uppercarriage and operator's cab
- ROPS certified structure

## A completely new maintenance concept

- Components within easy reach, accessible from ground level
- The filters are grouped together, for shorter maintenance works
- Automatic centralised lubrication as standard

# Technical Data



## Engine

Rating per ISO 9249	129 kW (175 HP) at 1,800 RPM
Model	Liebherr D 934 A7
Type	4 cylinder in-line
Bore/Stroke	122/150 mm
Displacement	7.0 l
Engine operation	4-stroke diesel
Exhaust gas treatment	Common-Rail, bi-turbo
	particle filter with active regeneration
	emission standard stage IIIB/Tier 4i
Cooling	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	444 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/100 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 System

Hydraulic system	Positive Control. Dual circuit hydraulic system for independent and need-based quantity allotment via the hydraulic pumps; sensor-guided. Features high system dynamics and sensibility provided by integrated system controlling
Hydraulic pump	Liebherr variable displacement pump built in transversal plate style, in parallel arrangement with integrated transfer box
Max. flow	2 x 238 l/min.
Max. pressure	380 bar
Pump management	electronic pump management via the integrated system controlling (CAN-BUS) synchronous to the control block
Hydraulic tank	287 l
Hydraulic system	max. 360 l
Hydraulic oil filter	1 full flow filter (10 µm)
Hydraulic oil cooler	compact cooler, consisting of a water cooler, sandwiched with hydraulic oil cooler, gearbox oil cooler, fuel cooler and after-cooler cores and hydrostatically driven fan
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



## 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 valve with integrated safety valves
Servo circuit	
Attachment and swing	proportional via joystick levers
Travel	- with proportionally functioning foot pedals and adjusted with a plugable lever
	- speed pre-selection
Additional functions	proportional regulation via slide switches or foot pedals



## Swing Drive

Drive by	Liebherr swash plate motor, shockless and anti-reaction
Transmission	Liebherr compact planetary reduction gear
Swing ring	Liebherr, sealed single race ball bearing swing ring, internal teeth
Swing speed	0 - 11 RPM stepless
Swing torque	79 kNm
Holding brake	wet multi-disc (spring applied, pressure released)



## Operator's Cab

Cab	ROPS safety cab structure with individual wind-screens 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, lunch-box, cup holder
Operator's seat	Comfort seat, airsprung with automatic weight adjustment, vertical and horizontal seat damping including consoles and joysticks. Seat and arm-rests 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 touch screen, 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) = 103 dB(A)



## Undercarriage

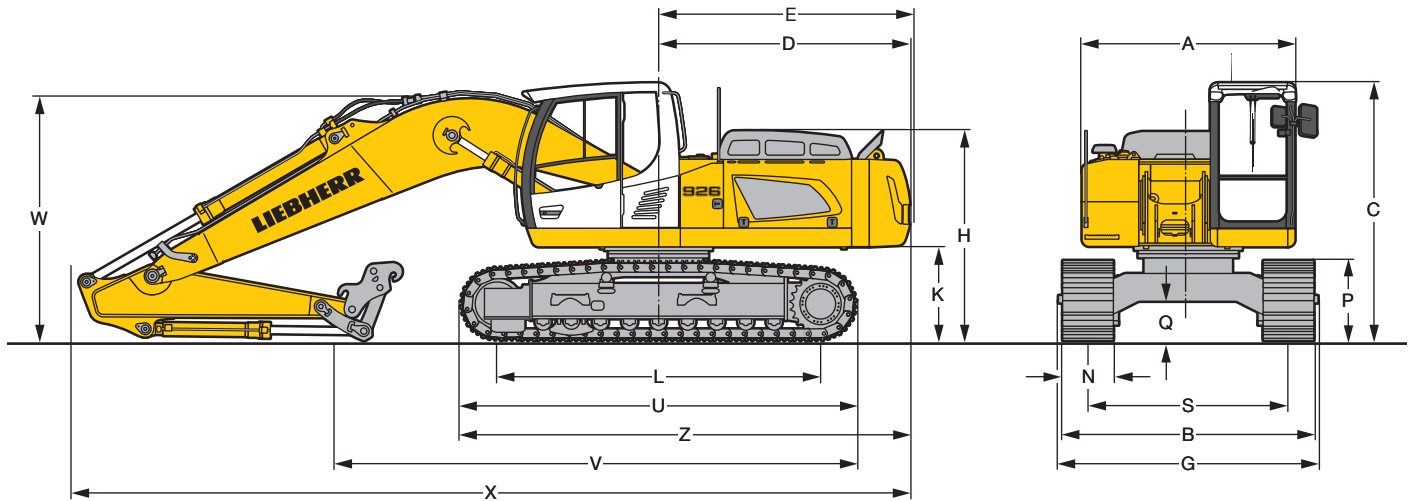
Versions	
NLC	gauge 2,000 mm
SLC	gauge 2,250 mm
LC	standard gauge 2,380 mm
WLC	gauge 2,590 mm
Drive	Liebherr swash plate motors with integrated brake valves on both sides
Transmission	Liebherr planetary reduction gears
Travel speed	low range - 3.7 km/h
	high range - 6.1 km/h
Net drawbar pull on crawler	226 kN
Track components	B 60, maintenance-free
Track rollers/Carrier rollers	9/2
Tracks	sealed and greased
Track pads	triple-grouser
Digging locks	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 steels components
Hydraulic cylinders	Liebherr cylinders with special seal-system, shock protection
Pivots	sealed, low maintenance
Lubrication	automatic central lubrication system (except link and tilt geometry)
Hydraulic connections	pipes and hoses equipped with SAE splitflange connections
Bucket	fitted as standard with Liebherr tooth system

# Dimensions



	<b>NLC</b>				<b>SLC</b>			
	mm				mm			
A	2,535				2,535			
C	3,060				3,060			
D	2,980				2,980			
E	3,000				3,000			
H	2,490				2,490			
K	1,110				1,110			
L	3,838				3,838			
P	955				955			
Q	470				470			
S	2,000				2,250			
U	4,700				4,700			
Z	5,330				5,330			
N	500	600	750	900	500	600	750	900
B	2,500	2,600	2,750	3,150	2,750	2,850	3,000	3,150
G	2,480	2,680*	2,750*	3,090*	2,790	2,790	2,990*	3,090*

	<b>LC</b>				<b>WLC</b>			
	mm				mm			
A	2,535				2,535			
C	3,060				3,060			
D	2,980				2,980			
E	3,000				3,000			
H	2,490				2,490			
K	1,110				1,110			
L	3,838				3,838			
P	955				955			
Q	470				470			
S	2,380				2,590			
U	4,700				4,700			
Z	5,330				5,330			
N	500	600	750	900	500	600	750	900
B	2,880	2,980	3,130	3,280	3,090	3,190	3,340	3,090
G	2,920	2,920	3,120*	3,220*	3,130	3,130	3,330*	3,430*

<b>Mono Boom 5.90 m</b>						
Stick length	m	2.40	2.70	3.00	3.70	
V	for NLC-Undercarriage	mm	5,850	5,600	5,350	4,650
	for SLC-Undercarriage	mm	5,850	5,600	5,350	4,650
	for LC-Undercarriage	mm	5,850	5,600	5,350	4,650
	for WLC-Undercarriage	mm	5,850	5,600	5,350	4,650
W		mm	3,000	3,050	3,100	3,050
X		mm	9,950	9,950	9,950	9,950

<b>Straight Mono Boom 6.00 m</b>						
Stick length	m	2.40	2.70	3.00	3.70	
V	for NLC-Undercarriage	mm	6,200	6,000	5,750	5,150
	for SLC-Undercarriage	mm	6,200	6,000	5,750	5,150
	for LC-Undercarriage	mm	6,200	6,000	5,750	5,150
	for WLC-Undercarriage	mm	6,200	6,000	5,750	5,150
W		mm	2,850	2,950	3,050	3,250
X		mm	10,100	10,100	10,100	10,100

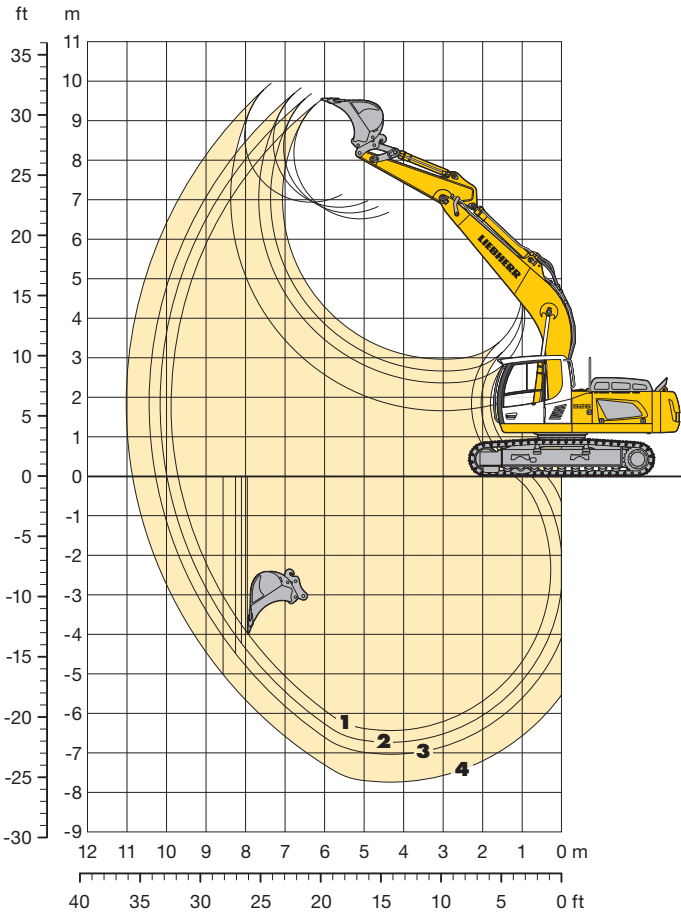
<b>Two-piece Boom 4.00 m</b>						
Stick length	m	2.40	2.70	3.00	3.70	
V	for NLC-Undercarriage	mm	6,500	6,300	6,050	5,400
	for SLC-Undercarriage	mm	6,500	6,300	6,050	5,400
	for LC-Undercarriage	mm	6,500	6,300	6,050	5,400
	for WLC-Undercarriage	mm	6,500	6,300	6,050	5,400
W		mm	2,750	2,800	2,900	3,000
X		mm	10,500	10,500	10,500	10,500

E = Tail radius

\* = Width with removable steps

# Backhoe Bucket

with Mono Boom 5.90 m



## Digging Envelope with Quick Coupler

		1	2	3	4
Stick length	m	2.40	2.70	3.00	3.70
Max. digging depth	m	6.45	6.75	7.05	7.75
Max. reach at ground level	m	9.70	10.0	10.25	10.85
Max. dump height	m	6.50	6.65	6.80	6.95
Max. teeth height	m	9.55	9.70	9.85	9.95

## Digging Forces without Quick Coupler

		1	2	3	4
Digging force ISO	kN	151	139	129	110
	t	15.3	14.1	13.1	11.2
Breakout force ISO	kN	192	192	192	192
	t	19.5	19.5	19.5	19.5

## with Quick Coupler

Digging force ISO	kN	143	132	123	106
	t	14.5	13.4	12.5	10.8
Breakout force ISO	kN	165	165	165	165
	t	16.8	16.8	16.8	16.8

## Operating Weight and Ground Pressure

Operating weight includes basic machine with mono boom 5.90 m, stick 2.70 m, quick coupler 48 and bucket 0.95 m<sup>3</sup>.

		NLC			SLC			
		500	600	750	500	600	750	
Undercarriage	Pad width	mm	500	600	750	500	600	750
	Weight	kg	25,700	25,950	26,700	25,800	26,050	26,800
	Ground pressure	kg/cm <sup>2</sup>	0.62	0.52	0.43	0.62	0.52	0.43

		LC			WLC			
		500	600	750	500	600	750	
Undercarriage	Pad width	mm	500	600	750	500	600	750
	Weight	kg	25,900	26,150	26,900	26,000	26,250	27,000
	Ground pressure	kg/cm <sup>2</sup>	0.63	0.53	0.43	0.63	0.53	0.43

Optional: heavy counterweight  
(Heavy counterweight increases the operating weight by 500 kg and ground pressure by 0.01 kg/cm<sup>2</sup>)

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

Cutting width mm	Capacity ISO 7451 m <sup>3</sup>	Weight kg	NLC-Undercarriage				SLC-Undercarriage				LC-Undercarriage				WLC-Undercarriage			
			Stick length (m)				Stick length (m)				Stick length (m)				Stick length (m)			
			2.40	2.70	3.00	3.70	2.40	2.70	3.00	3.70	2.40	2.70	3.00	3.70	2.40	2.70	3.00	3.70
1,250 <sup>1)</sup>	1.15	780	□	□	□	△	□	□	□	□	□	□	□	□	□	□	□	□
1,400 <sup>1)</sup>	1.35	860	□	△	△	■	□	□	□	△	□	□	□	△	□	□	□	△
1,500 <sup>1)</sup>	1.45	900	△	△	△	■	□	□	△	■	□	□	□	■	□	□	□	■
1,600 <sup>1)</sup>	1.55	940	△	△	■	■	□	△	△	■	□	□	△	■	□	□	□	■
1,500 <sup>1)</sup>	1.65	1,020	■	■	■	▲	△	△	△	▲	□	△	△	▲	□	□	△	▲
1,600 <sup>1)</sup>	1.75	1,060	■	■	▲	▲	△	■	■	▲	△	△	■	▲	□	□	△	▲
1,250 <sup>2)</sup>	1.15	790	□	□	△	△	□	□	□	△	□	□	□	△	□	□	□	△
1,400 <sup>2)</sup>	1.35	870	△	△	△	■	□	□	△	■	□	□	□	■	□	□	□	■
1,500 <sup>2)</sup>	1.45	910	△	■	■	▲	□	△	△	■	□	□	△	■	□	□	□	■
1,600 <sup>2)</sup>	1.55	950	■	■	■	▲	△	△	■	■	□	△	△	■	□	□	△	■
1,500 <sup>2)</sup>	1.65	1,030	■	■	▲	▲	△	■	■	▲	△	△	■	▲	□	□	△	▲
1,600 <sup>2)</sup>	1.75	1,070	■	▲	▲	▲	■	■	■	▲	△	■	■	▲	□	△	■	▲

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

<sup>1)</sup> Standard bucket for direct mounting with teeth Z 40

<sup>2)</sup> Standard bucket for mounting to quick coupler with teeth Z 40

Other backhoes available on request

Max. material weight □ = ≤ 1.8 t/m<sup>3</sup>, △ = ≤ 1.5 t/m<sup>3</sup>, ■ = ≤ 1.2 t/m<sup>3</sup>, ▲ = not authorized



# Lift Capacities

with Mono Boom 5.90 m

## Stick 2.40 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	WLC	LC	WLC	LC	WLC	LC	WLC	LC	WLC	
10.5	NLC <sup>1)</sup> SLC LC WLC											
9.0	NLC <sup>1)</sup> SLC LC WLC											
7.5	NLC <sup>1)</sup> SLC LC WLC					4.5* 4.5* 4.5* 4.5*	4.5* 4.5* 4.5* 4.5*			3.9* 3.9* 3.9* 3.9*	3.9* 3.9* 3.9* 3.9*	6.1
6.0	NLC <sup>1)</sup> SLC LC WLC					5.5 6.2 6.4 6.4	6.4* 6.4* 6.4* 6.4*			3.7* 3.7* 3.7* 3.7*	3.7* 3.7* 3.7* 3.7*	7.3
4.5	NLC <sup>1)</sup> SLC LC WLC			8.1 8.5* 8.5*	8.5* 8.5* 8.5*	5.3 5.9 6.3	7.1* 7.1* 7.1*	3.7 4.2 4.6	6.3* 6.3* 6.3*	3.3 3.8* 3.8*	3.8* 3.8* 3.8*	8.0
3.0	NLC <sup>1)</sup> SLC LC WLC			7.4 8.5 9.0	10.7* 10.7* 10.7*	4.9 5.6 6.0	8.1* 8.1* 8.1*	3.5 4.0 4.3	6.7 6.8* 6.8*	3.0 3.4 3.6	4.0* 4.0* 4.0*	8.3
1.5	NLC <sup>1)</sup> SLC LC WLC			6.8 7.8 8.4	12.5* 12.5* 12.5*	4.6 5.3 5.6	9.0* 9.0* 9.0*	3.4 3.9 4.1	6.6 6.7 6.7	2.9 3.3 3.5	4.4* 4.4* 4.4*	8.4
0	NLC <sup>1)</sup> SLC LC WLC	8.3*	8.3*	6.5 8.3* 8.3*	13.1* 13.1* 13.1*	4.4 5.1 6.0	9.0 9.1 9.2	3.3 3.7 4.0	6.4 6.5 6.6	2.9 3.3 3.5	5.1* 5.1* 5.1*	8.2
-1.5	NLC <sup>1)</sup> SLC LC WLC	12.0 13.7* 13.7*	13.7* 13.7* 13.7*	6.4 7.5 8.0	12.8* 12.8* 12.8*	4.3 5.0 5.3	8.9 9.0 9.1	3.2 3.7 3.9	6.4 6.5 6.5	3.1 3.6 3.8	6.1* 6.3 6.3	7.7
-3.0	NLC <sup>1)</sup> SLC LC WLC	12.2 14.5 15.8	15.9* 15.9* 15.9*	6.5 7.5 8.1	11.6* 11.6* 11.6*	4.4 5.0 5.4	8.7* 8.7* 8.7*	3.7 4.2 5.0	7.3* 7.3* 7.3*	3.7 4.2 5.0	7.3* 7.3* 7.3*	6.8
-4.5	NLC <sup>1)</sup> SLC LC WLC	12.1* 12.1* 12.1*	12.1* 12.1* 12.1*	6.7 7.8 8.3	9.0* 9.0* 9.0*					5.2 6.0 6.4	7.3* 7.3* 7.3*	5.4
-6.0	NLC <sup>1)</sup> SLC LC WLC									7.1	7.3*	

## Stick 2.70 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	WLC	LC	WLC	LC	WLC	LC	WLC	LC	WLC	
10.5	NLC <sup>1)</sup> SLC LC WLC											
9.0	NLC <sup>1)</sup> SLC LC WLC											
7.5	NLC <sup>1)</sup> SLC LC WLC											3.4* 3.4* 3.4* 3.4*
6.0	NLC <sup>1)</sup> SLC LC WLC							5.5 6.1* 6.1*	6.1* 6.1* 6.1*	3.8* 3.8* 3.8*	3.8* 3.8* 3.8*	3.3* 3.3* 3.3* 3.3*
4.5	NLC <sup>1)</sup> SLC LC WLC							5.3 6.3 6.8*	6.8* 6.8* 6.8*	3.7 4.0 4.3	6.1* 6.1* 6.1*	3.1 3.3 3.3 3.3*
3.0	NLC <sup>1)</sup> SLC LC WLC			13.3* 13.3* 13.3*	13.3* 13.3* 13.3*	7.5 8.6 9.1	10.2* 10.2* 10.2*	4.9 5.6 6.0	7.8* 7.8* 7.8*	3.5 4.0 4.3	6.6* 6.6* 6.6*	2.8 3.2 3.4 3.5*
1.5	NLC <sup>1)</sup> SLC LC WLC			6.8 7.9 8.4	12.1* 12.1* 12.1*	4.6 5.3 5.6	8.8* 8.8* 8.8*	3.4 3.8 4.1	6.5 6.7 6.7	2.7 3.1 3.3	4.4* 4.4* 4.4*	3.7 3.8* 3.8* 3.8*
0	NLC <sup>1)</sup> SLC LC WLC	8.7*	8.7*	6.5 8.7* 8.7*	13.0* 13.0* 13.0*	4.4 5.0 5.4	8.9 9.1 9.2	3.2 3.7 4.0	6.4 6.5 6.6	2.7 3.1 3.3	4.3* 4.3* 4.3*	4.3* 4.3* 4.3*
-1.5	NLC <sup>1)</sup> SLC LC WLC	11.8 13.0* 13.0*	13.0* 13.0* 13.0*	6.3 7.4 8.0	12.9* 12.9* 12.9*	4.3 4.9 5.3	8.8 9.0 9.1	3.2 3.6 3.9	6.3 6.4 6.5	2.9 3.3 3.6	5.3* 5.3* 5.3*	8.0
-3.0	NLC <sup>1)</sup> SLC LC WLC	12.0 14.3 15.6	16.6* 16.6* 16.6*	6.4 7.4 8.0	11.9* 11.9* 11.9*	4.3 4.9 5.3	8.9 9.0 9.1	3.2 3.8 4.3	6.3 6.4 6.5	3.4 3.9 4.2	6.9 6.9 6.9	7.2
-4.5	NLC <sup>1)</sup> SLC LC WLC	12.4 13.1* 13.1*	13.1* 13.1* 13.1*	6.6 7.7 8.2	9.6* 9.6* 9.6*					4.6 5.3 5.6	7.1* 7.1* 7.1*	5.9
-6.0	NLC <sup>1)</sup> SLC LC WLC									6.2	7.1*	

## Stick 3.00 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	WLC	LC	WLC	LC	WLC	LC	WLC	LC	WLC	
10.5	NLC <sup>1)</sup> SLC LC WLC											
9.0	NLC <sup>1)</sup> SLC LC WLC											
7.5	NLC <sup>1)</sup> SLC LC WLC									3.0* 3.0* 3.0*	3.0* 3.0* 3.0*	6.9
6.0	NLC <sup>1)</sup> SLC LC WLC							3.8 4.3 4.4*	4.4* 4.4* 4.4*	2.9* 2.9* 2.9*	2.9* 2.9* 2.9*	7.9
4.5	NLC <sup>1)</sup> SLC LC WLC					5.3 6.0 6.4	6.4* 6.4* 6.4*	3.7 4.2 4.5	5.9* 5.9* 5.9*	2.9* 2.9* 2.9*	2.9* 2.9* 2.9*	8.6
3.0	NLC <sup>1)</sup> SLC LC WLC	13.8 15.5* 15.5*	15.5* 15.5* 15.5*	7.6 8.7 9.2	9.6* 9.6* 9.6*	5.0 6.0 6.4	7.5* 7.5* 7.5*	3.5 4.0 4.3	6.4* 6.4* 6.4*	3.0* 3.0* 3.0*	3.0* 3.0* 3.0*	8.9
1.5	NLC <sup>1)</sup> SLC LC WLC	7.4* 7.4* 7.4*	7.4* 7.4* 7.4*	6.9 7.9 8.3	11.7* 11.7* 11.7*	4.6 5.3 5.6	8.5* 8.5* 8.5*	3.3 3.8 4.0	6.5* 6.5* 6.5*	2.5 2.9 3.1	3.3* 3.3* 3.3*	9.0
0	NLC <sup>1)</sup> SLC LC WLC	8.9* 8.9* 8.9*	8.9* 8.9* 8.9*	6.4 7.5 8.0	12.8* 12.8* 12.8*	4.3 5.0 5.4	8.9 9.1 9.1	3.2 3.7 3.9	6.4 6.5 6.5	2.5 2.9 3.1	3.7* 3.7* 3.7*	8.8
-1.5	NLC <sup>1)</sup> SLC LC WLC	11.7 12.4* 12.4*	12.4* 12.4* 12.4*	6.3 7.3 7.9	12.9* 12.9* 12.9*	4.2 4.9 5.2	8.9 8.9 8.9	3.1 3.3 3.4	6.3 6.4 6.4	2.7 3.1 3.3	4.5* 4.5* 4.5*	8.3
-3.0	NLC <sup>1)</sup> SLC LC WLC	11.8 14.1 15.4	17.0* 17.0* 17.0*	6.3 7.3 7.9	12.1* 12.1* 12.1*	4.2 4.9 5.2	8.7 8.9 8.9	3.1 3.6 3.9	6.3 6.4 6.4	3.1 3.6 3.8	6.1* 6.1* 6.1*	7.5
-4.5	NLC <sup>1)</sup> SLC LC WLC	12.2 14.0* 14.0*	14.0* 14.0* 14.0*	6.5 7.5 8.1	10.1* 10.1* 10.1*	4.3 5.0 5.3	7.4* 7.4* 7.4*			4.1 4.7 5.0	6.9* 6.9* 6.9*	6.3
-6.0	NLC <sup>1)</sup> SLC LC WLC									5.6	6.9*	

## Stick 3.70 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	WLC	LC	WLC	LC	WLC	LC	WLC	LC	WLC	
10.5	NLC <sup>1)</sup> SLC LC WLC											
9.0	NLC <sup>1)</sup> SLC LC WLC											
7.5	NLC <sup>1)</sup> SLC LC WLC									2.8* 2.8* 2.8*	2.8* 2.8* 2.8*	2.3* 2.3* 2.3*
6.0	NLC <sup>1)</sup> SLC LC WLC									3.9 4.4 4.4*	4.4* 4.4* 4.4*	2.2* 2.2* 2.2*
4.5	NLC <sup>1)</sup> SLC LC WLC							3.8 4.3 4.9	5.3* 5.3* 5.3*	2.7 2.9* 2.9*	2.9* 2.9* 2.9*	2.2* 2.2* 2.2*
3.0	NLC <sup>1)</sup> SLC LC WLC	13.8 15.5* 15.4*	15.5* 15.5* 15.4*	7.6 8.7 9.6	9.6* 9.6* 9.6*	5.0 6.0 6.4	7.5* 7.5* 7.5*	3.5 4.0 4.3	6.4* 6.4* 6.4*	3.0* 3.0* 3.0*	3.0* 3.0* 3.0*	9.5
1.5	NLC <sup>1)</sup> SLC LC WLC	12.7* 12.7* 12.7*	12.7* 12.7* 12.7*	7.1 8.2 8.7	10.7* 10.7* 10.7*	4.7 5.4 5.7	7.9* 7.9* 7.9*	3.4 3.9 4.1	6.5* 6.5* 6.5*	2.5 2.9 3.1	4.8* 4.8* 4.8*	9.6
0	NLC <sup>1)</sup> SLC LC WLC	10.1* 10.1* 10.1*	10.1* 10.1* 10.1*	6.5 7.6 8.1	12.3* 12.3* 12.3*	4.4 5.0 5.4	8.9* 8.9* 8.9*	3.2 3.7 3.9	6.4 6.5 6.5	2.4 3.0 3.3	4.8* 4.8* 4.8*	9.4
-1.5	NLC <sup>1)</sup> SLC LC WLC	11.6 11.9* 11.9*	11.9* 11.9* 11.9*	6.2 7.3 7.8	12.9* 12.9* 12.9*	4.2 4.8 5.2	8.9* 8.9* 8.9*	3.1 3.5 3.8	6.2 6.3 6.4	2.4 2.7 2.9	4.8* 4.8* 4.8*	9.0
-3.0	NLC <sup>1)</sup> SLC LC WLC	11.6 13.9 15.0	15.0* 15.0* 15.0*	6.2 7.2 7.8	12.5* 12.5* 12.5*	4.1 4.8 5.1	8.6 8.8 8.8	3.0 3.5 3.7	6.2 6.3 6.3	2.7 3.1 3.3	4.3* 4.3* 4.3*	8.2
-4.5	NLC <sup>1)</sup> SLC LC WLC	11.9 14.2 15.5	16.1* 16.1* 16.1*	6.3 7.3 7.9	11.2* 11.2* 11.2*	4.2 4.8 5.2	8.3* 8.3* 8.3*			4.1 4.8 5.2	6.6* 6.6* 6.6*	7.1
-6.0	NLC <sup>1)</sup> SLC LC WLC									5.1 5.9 6.3	6.7* 6.7* 6.7*	5.4

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

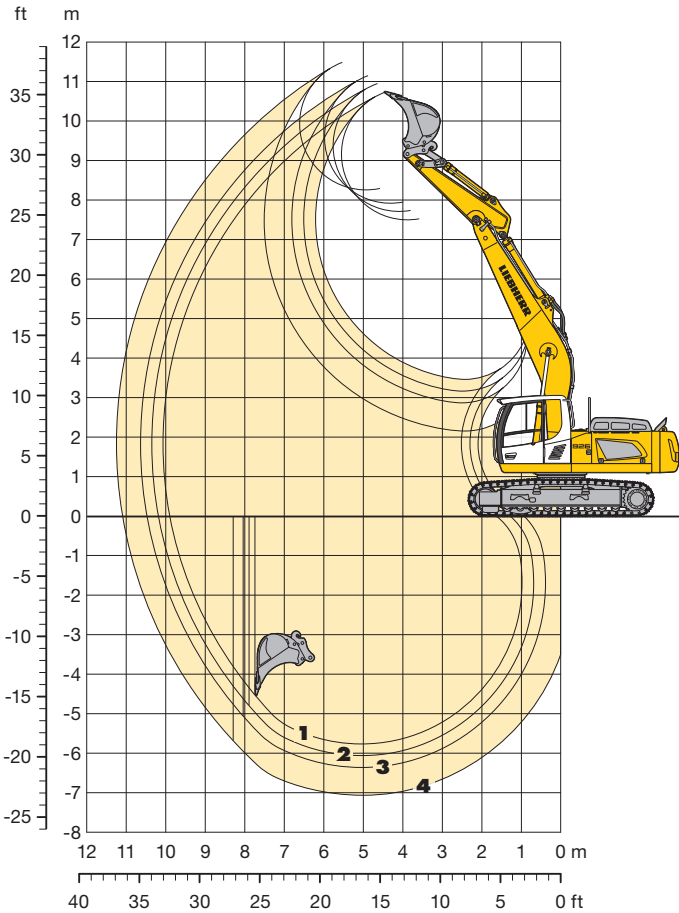
The lift capacities on the load hook of the Liebherr quick coupler 48 without attachment are stated in metric tonnes (t), and can be lifted 360° on firm, level supporting surface. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide triple-grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated by \*) or are limited through the allowed lift capacity of the load hook on the quick coupler (12 t). Without quick coupler the lift capacities will increase by 250 kg, without bucket cylinder, link and lever they increase by an additional 375 kg.

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 check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

<sup>1)</sup> Values are calculated with 500 mm wide triple-grouser pads for the NLC-Undercarriage

# Backhoe Bucket

with Straight Mono Boom 6.00 m



## Digging Envelope with Quick Coupler

		1	2	3	4
Stick length	m	2.40	2.70	3.00	3.70
Max. digging depth	m	5.75	6.05	6.35	7.05
Max. reach at ground level	m	9.90	10.20	10.45	11.10
Max. dump height	m	7.50	7.70	7.90	8.25
Max. teeth height	m	10.70	10.95	11.15	11.50

## Digging Forces without Quick Coupler

		1	2	3	4
Digging force ISO	kN	151	139	129	110
	t	15.3	14.1	13.1	11.2
Breakout force ISO	kN	192	192	192	192
	t	19.5	19.5	19.5	19.5

## with Quick Coupler

Digging force ISO	kN	143	132	123	106
	t	14.5	13.4	12.5	10.8
Breakout force ISO	kN	165	165	165	165
	t	16.8	16.8	16.8	16.8

## Operating Weight and Ground Pressure

Operating weight includes basic machine with straight mono boom 6.00 m, stick 2.70 m, quick coupler 48 and bucket 0.95 m<sup>3</sup>.

		NLC			SLC			
		500	600	750	500	600	750	
Undercarriage	Pad width	mm	500	600	750	500	600	750
	Weight	kg	25,700	25,950	26,700	25,800	26,050	26,800
	Ground pressure	kg/cm <sup>2</sup>	0.62	0.52	0.43	0.62	0.52	0.43

		LC			WLC			
		500	600	750	500	600	750	
Undercarriage	Pad width	mm	500	600	750	500	600	750
	Weight	kg	25,900	26,150	26,900	26,000	26,250	27,000
	Ground pressure	kg/cm <sup>2</sup>	0.63	0.53	0.43	0.63	0.53	0.43

Optional: heavy counterweight  
(Heavy counterweight increases the operating weight by 500 kg and ground pressure by 0.01 kg/cm<sup>2</sup>)

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

Cutting width mm	Capacity ISO 7451 m <sup>3</sup>	Weight kg	NLC-Undercarriage				SLC-Undercarriage				LC-Undercarriage				WLC-Undercarriage			
			Stick length (m)				Stick length (m)				Stick length (m)				Stick length (m)			
			2.40	2.70	3.00	3.70	2.40	2.70	3.00	3.70	2.40	2.70	3.00	3.70	2.40	2.70	3.00	3.70
1,250 <sup>1)</sup>	1.15	780	□	□	□	△	□	□	□	□	□	□	□	□	□	□	□	□
1,400 <sup>1)</sup>	1.35	860	□	△	△	■	□	□	□	△	□	□	□	△	□	□	□	△
1,500 <sup>1)</sup>	1.45	900	△	△	■	■	□	□	△	■	□	□	□	■	□	□	□	■
1,600 <sup>1)</sup>	1.55	940	△	■	■	▲	△	△	△	■	□	△	△	■	□	□	△	■
1,500 <sup>1)</sup>	1.65	1,020	■	■	▲	▲	△	△	■	▲	△	△	△	▲	□	□	△	▲
1,600 <sup>1)</sup>	1.75	1,060	■	▲	▲	▲	■	■	■	▲	△	■	■	▲	□	△	■	▲
1,250 <sup>2)</sup>	1.15	790	□	□	□	△	□	□	□	△	□	□	□	△	□	□	□	△
1,400 <sup>2)</sup>	1.35	870	△	△	■	■	□	□	△	■	□	□	□	■	□	□	□	■
1,500 <sup>2)</sup>	1.45	910	△	■	■	▲	△	△	△	■	□	□	△	■	□	□	△	■
1,600 <sup>2)</sup>	1.55	950	■	■	▲	▲	△	△	■	▲	△	△	△	▲	□	□	△	▲
1,500 <sup>2)</sup>	1.65	1,030	■	▲	▲	▲	■	■	■	▲	△	△	■	▲	□	△	■	▲
1,600 <sup>2)</sup>	1.75	1,070	▲	▲	▲	▲	■	■	▲	▲	■	■	■	▲	△	△	■	▲

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

<sup>1)</sup> Standard bucket for direct mounting with teeth Z 40

<sup>2)</sup> Standard bucket for mounting to quick coupler with teeth Z 40

Other backhoes available on request

Max. material weight □ = ≤ 1.8 t/m<sup>3</sup>, △ = ≤ 1.5 t/m<sup>3</sup>, ■ = ≤ 1.2 t/m<sup>3</sup>, ▲ = not authorized

# Lift Capacities

## with Straight Mono Boom 6.00 m

### Stick 2.40 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m	
		LC	WLC	LC	WLC	LC	WLC	LC	WLC	LC	WLC		
10.5	NLC <sup>1)</sup> SLC LC WLC												
9.0	NLC <sup>1)</sup> SLC LC WLC									4.6*	4.6*	4.7	
7.5	NLC <sup>1)</sup> SLC LC WLC					5.5 5.8*	5.8*			3.9*	3.9*	6.5	
6.0	NLC <sup>1)</sup> SLC LC WLC					5.4 6.1 6.5	7.5*	3.7 4.1*	4.1*	4.1*	3.7*	3.7*	7.6
4.5	NLC <sup>1)</sup> SLC LC WLC	14.5*	14.5*	8.0 9.7	10.0*	5.2 6.2	8.1*	3.6 4.1*	6.9 7.0*	3.1 3.7*	3.7*	8.2	
3.0	NLC <sup>1)</sup> SLC LC WLC			7.2 8.3 8.9	11.9*	4.8 5.5 5.9	8.9*	3.5 4.0 4.2	6.7 6.8 6.8	2.8 3.2 3.4	3.9*	8.6	
1.5	NLC <sup>1)</sup> SLC LC WLC			6.7 7.7 8.3	13.1*	4.5 5.2 5.6	9.1	3.3 3.8 4.1	6.5 6.6 6.6	2.7 3.1 3.3	4.2*	8.6	
0	NLC <sup>1)</sup> SLC LC WLC			6.4 7.5 8.0	13.0*	4.4 5.0 5.4	8.9	3.2 3.7 4.0	6.4 6.5 6.5	2.7 3.2 3.7	4.7*	8.4	
-1.5	NLC <sup>1)</sup> SLC LC WLC	12.0 12.1*	12.1*	6.4 7.4 8.0	11.9*	4.3 4.9 5.3	8.8	3.2 3.7 3.9	6.3 6.5 6.5	3.0 3.4 3.6	5.7*	8.0	
-3.0	NLC <sup>1)</sup> SLC LC WLC	12.2*	12.2*	6.5 7.5 8.1	9.9*	4.3 5.0 5.4	7.6*	3.5 4.0 4.3	5.9*	5.8*	5.7*	7.1	
-4.5	NLC <sup>1)</sup> SLC LC WLC			5.0 5.1*	5.1*							5.6	
-6.0	NLC <sup>1)</sup> SLC LC WLC												

### Stick 2.70 m





m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	WLC	LC	WLC	LC	WLC	LC	WLC	LC	WLC	
10.5	NLC <sup>1)</sup> SLC LC WLC											
9.0	NLC <sup>1)</sup> SLC LC WLC											4.0*
7.5	NLC <sup>1)</sup> SLC LC WLC							5.5 5.9*	5.9*			3.5*
6.0	NLC <sup>1)</sup> SLC LC WLC					5.4 6.1 6.5	7.2*	3.7 4.1*	4.1*	3.7*	3.7*	7.9
4.5	NLC <sup>1)</sup> SLC LC WLC	14.5*	14.5*	8.0 9.7	10.0*	5.2 6.2	8.1*	3.6 4.1*	6.9 7.0*	3.1 3.7*	3.7*	8.5
3.0	NLC <sup>1)</sup> SLC LC WLC			7.2 8.3 8.9	11.9*	4.8 5.5 5.9	8.9*	3.5 4.0 4.2	6.7 6.8 6.8	2.8 3.2 3.4	3.9*	8.9
1.5	NLC <sup>1)</sup> SLC LC WLC			6.7 7.7 8.3	13.1*	4.5 5.2 5.6	9.1	3.3 3.8 4.1	6.5 6.6 6.6	2.7 3.1 3.3	4.2*	8.9
0	NLC <sup>1)</sup> SLC LC WLC			6.4 7.5 8.0	13.0*	4.4 5.0 5.4	8.9	3.2 3.7 4.0	6.4 6.5 6.5	2.7 3.2 3.7	4.7*	8.7
-1.5	NLC <sup>1)</sup> SLC LC WLC	11.5*	11.5*	6.3 7.3 7.9	12.2*	4.2 4.9 5.2	9.0	3.1 3.6 3.9	6.3 6.4 6.4	2.8 3.2 3.6	4.8*	8.3
-3.0	NLC <sup>1)</sup> SLC LC WLC	11.5*	11.5*	6.4 7.4 8.0	10.4*	4.3 4.9 5.3	7.9*	3.2 3.7 4.0	5.9*	5.8*	5.7*	7.5
-4.5	NLC <sup>1)</sup> SLC LC WLC			6.6 7.3*	7.3*							6.2
-6.0	NLC <sup>1)</sup> SLC LC WLC											

### Stick 3.00 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	WLC	LC	WLC	LC	WLC	LC	WLC	LC	WLC	
10.5	NLC <sup>1)</sup> SLC LC WLC											
9.0	NLC <sup>1)</sup> SLC LC WLC									3.5*	3.5*	5.7
7.5	NLC <sup>1)</sup> SLC LC WLC					5.6 5.8*	5.8*			3.1*	3.1*	7.2
6.0	NLC <sup>1)</sup> SLC LC WLC					5.5 6.2 6.8*	6.8*	3.8 4.3 4.9	5.2*	2.9*	2.9*	8.2
4.5	NLC <sup>1)</sup> SLC LC WLC			8.2 9.1*	9.1*	5.2 5.9 6.3	7.5*	3.6 4.1 4.4	6.6*	2.7 2.9*	2.9*	8.8
3.0	NLC <sup>1)</sup> SLC LC WLC	13.4 15.6*	15.6*	7.4 8.5 9.1*	11.0*	4.9 5.5 6.9	8.4*	3.5 4.0 4.6	6.7 6.8 6.8	2.6 2.9 3.0	3.9*	9.2
1.5	NLC <sup>1)</sup> SLC LC WLC			6.7 7.8 8.3	12.6*	4.5 5.2 5.5	9.1*	3.3 3.8 4.0	6.5 6.6 6.6	2.5 2.8 2.9	3.0*	9.2
0	NLC <sup>1)</sup> SLC LC WLC	7.4*	7.4*	6.3 7.4 7.9	13.0*	4.3 4.9 5.3	8.8	3.1 3.6 3.9	6.3 6.4 6.4	2.4 2.8 3.0	3.9*	9.0
-1.5	NLC <sup>1)</sup> SLC LC WLC	11.0*	11.0*	6.2 7.3 7.8	12.4*	4.2 4.8 5.2	8.7	3.1 3.6 3.8	6.2 6.4 6.4	2.6 3.0 3.2	4.1*	8.6
-3.0	NLC <sup>1)</sup> SLC LC WLC	11.9 14.2	14.3*	6.3 7.3 7.9	10.8*	4.2 4.8 5.2	8.2*	3.1 3.6 3.8	6.1*	3.0 3.4 3.6	5.3*	7.8
-4.5	NLC <sup>1)</sup> SLC LC WLC			6.5 7.5 8.0	8.0*							6.6
-6.0	NLC <sup>1)</sup> SLC LC WLC											

### Stick 3.70 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	WLC	LC	WLC	LC	WLC	LC	WLC	LC	WLC	
10.5	NLC <sup>1)</sup> SLC LC WLC											
9.0	NLC <sup>1)</sup> SLC LC WLC											2.6*
7.5	NLC <sup>1)</sup> SLC LC WLC									3.6*	3.6*	8.0
6.0	NLC <sup>1)</sup> SLC LC WLC									3.8 4.3 4.8*	4.8*	8.9
4.5	NLC <sup>1)</sup> SLC LC WLC							5.4 6.1 6.4	6.5*	3.7 4.2 4.5	5.8*	9.5
3.0	NLC <sup>1)</sup> SLC LC WLC	14.5 14.9*	14.9*	7.7 8.8 9.4	9.9*	7.7 8.8 9.4	9.9*	5.0 5.7 6.0	7.8*	3.5 4.0 4.3	6.5*	9.8
1.5	NLC <sup>1)</sup> SLC LC WLC			9.9*	9.9*	6.9 8.0 8.6	11.9*	4.6 5.3 5.6	8.7*	3.3 3.8 4.0	6.5*	9.8
0	NLC <sup>1)</sup> SLC LC WLC	8.5*	8.5*	6.4 7.5 8.0	12.9*	4.3 4.9 5.3	9.1	3.1 3.6 3.9	6.3 6.4 6.4	2.4 2.8 3.0	4.8*	9.7
-1.5	NLC <sup>1)</sup> SLC LC WLC	10.6*	10.6*	6.2 7.2 7.8	12.7*	4.1 4.8 5.1	8.9	3.0 3.5 3.8	6.2 6.3 6.3	2.3 2.7 2.9	4.7*	9.3
-3.0	NLC <sup>1)</sup> SLC LC WLC	11.6 13.9*	13.9*	6.2 7.2 7.7	11.6*	4.1 4.7 5.1	8.7*	3.1 3.6 3.8	6.1 6.3 6.3	2.5 2.9 3.1	4.8*	8.6
-4.5	NLC <sup>1)</sup> SLC LC WLC			11.9 12.8*	12.8*	6.3 7.3 7.9	9.5*	4.2 4.8 5.2	7.1*	3.1 3.6 3.9	5.0*	7.5
-6.0	NLC <sup>1)</sup> SLC LC WLC											

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

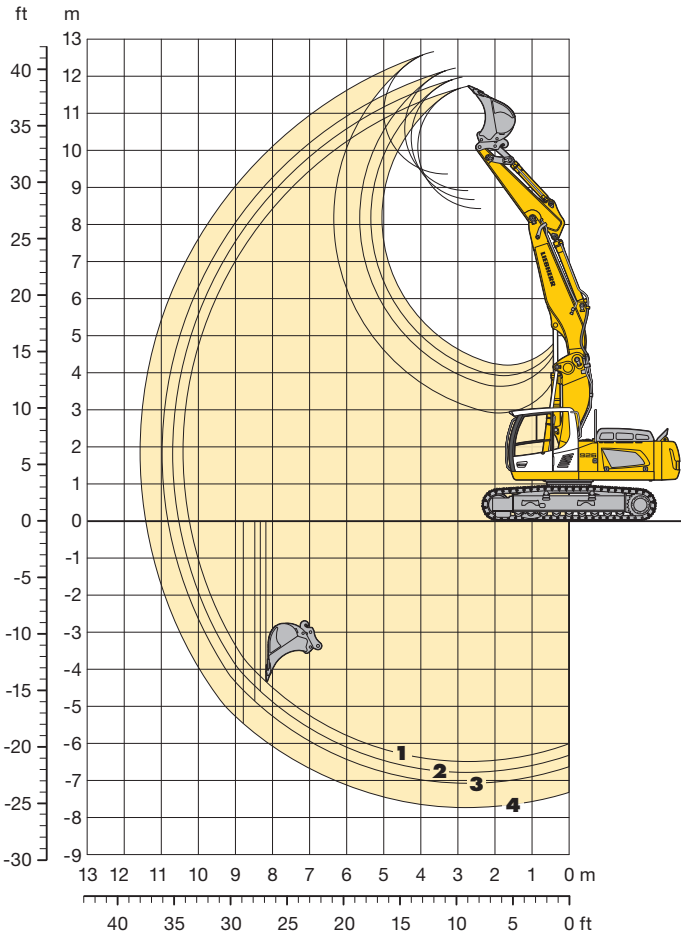
The lift capacities on the load hook of the Liebherr quick coupler 48 without attachment are stated in metric tonnes (t), and can be lifted 360° on firm, level supporting surface. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide triple-grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated by \*) or are limited through the allowed lift capacity of the load hook on the quick coupler (12 t). Without quick coupler the lift capacities will increase by 250 kg, without bucket cylinder, link and lever they increase by an additional 375 kg.

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 check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

<sup>1)</sup> Values are calculated with 500 mm wide triple-grouser pads for the NLC-Undercarriage

# Backhoe Bucket

with Two-piece Boom 4.00 m and Heavy Counterweight



## Digging Envelope with Quick Coupler

		1	2	3	4
Stick length	m	2.40	2.70	3.00	3.70
Max. digging depth	m	6.50	6.80	7.05	7.70
Max. reach at ground level	m	10.25	10.55	10.80	11.40
Max. dump height	m	8.45	8.65	8.90	9.35
Max. teeth height	m	11.75	11.95	12.20	12.65

## Digging Forces without Quick Coupler

		1	2	3	4
Digging force ISO	kN	151	139	129	110
	t	15.3	14.1	13.1	11.2
Breakout force ISO	kN	192	192	192	192
	t	19.5	19.5	19.5	19.5

## with Quick Coupler

Digging force ISO	kN	143	132	123	106
	t	14.5	13.4	12.5	10.8
Breakout force ISO	kN	165	165	165	165
	t	16.8	16.8	16.8	16.8

## Operating Weight and Ground Pressure

Operating weight includes basic machine with heavy counterweight, two-piece boom 4.00 m, stick 2.70 m, quick coupler 48 and bucket 0.95 m<sup>3</sup>.

Undercarriage		NLC			SLC		
Pad width	mm	500	600	750	500	600	750
Weight	kg	27,650	27,900	28,650	27,750	28,000	28,750
Ground pressure	kg/cm <sup>2</sup>	0.67	0.56	0.46	0.67	0.56	0.46

Undercarriage		LC			WLC		
Pad width	mm	500	600	750	500	600	750
Weight	kg	27,850	28,100	28,850	27,950	28,200	28,950
Ground pressure	kg/cm <sup>2</sup>	0.67	0.56	0.46	0.68	0.57	0.47

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

Cutting width mm	Capacity ISO 7451 m <sup>3</sup>	Weight kg	NLC-Undercarriage				SLC-Undercarriage				LC-Undercarriage				WLC-Undercarriage			
			Stick length (m)				Stick length (m)				Stick length (m)				Stick length (m)			
			2.40	2.70	3.00	3.70	2.40	2.70	3.00	3.70	2.40	2.70	3.00	3.70	2.40	2.70	3.00	3.70
850 <sup>1)</sup>	0.75	620	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>1)</sup>	0.95	700	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>1)</sup>	1.15	780	□	□	△	△	□	□	□	□	□	□	□	□	□	□	□	□
1,400 <sup>1)</sup>	1.35	860	△	△	■	■	□	□	△	△	□	□	□	△	□	□	□	△
1,500 <sup>1)</sup>	1.45	900	△	■	■	▲	□	△	△	■	□	□	△	■	□	□	□	■
1,600 <sup>1)</sup>	1.55	940	■	■	■	▲	△	△	■	■	□	△	△	■	□	□	△	■
850 <sup>2)</sup>	0.75	630	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.95	710	□	□	□	△	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	1.15	790	□	△	△	■	□	□	□	△	□	□	□	△	□	□	□	△
1,400 <sup>2)</sup>	1.35	870	△	■	■	▲	□	△	△	■	□	□	△	■	□	□	□	■
1,500 <sup>2)</sup>	1.45	910	■	■	■	▲	△	△	■	■	□	△	△	■	□	□	□	■
1,600 <sup>2)</sup>	1.55	950	■	■	■	▲	△	△	■	■	▲	△	△	■	▲	□	△	▲

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

<sup>1)</sup> Standard bucket for direct mounting with teeth Z 40

<sup>2)</sup> Standard bucket for mounting to quick coupler with teeth Z 40

Other backhoes available on request

Max. material weight □ = ≤ 1.8 t/m<sup>3</sup>, △ = ≤ 1.5 t/m<sup>3</sup>, ■ = ≤ 1.2 t/m<sup>3</sup>, ▲ = not authorized



# Lift Capacities

with Mono Boom 5.90 m and Heavy Counterweight

## Stick 2.40 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	WLC	LC	WLC	LC	WLC	LC	WLC	LC	WLC	
10.5	NLC <sup>1)</sup> SLC LC WLC											
9.0	NLC <sup>1)</sup> SLC LC WLC											
7.5	NLC <sup>1)</sup> SLC LC WLC					4.5*	4.5*			3.9*	3.9*	6.1
6.0	NLC <sup>1)</sup> SLC LC WLC					5.9	6.4*			3.7*	3.7*	7.3
4.5	NLC <sup>1)</sup> SLC LC WLC			8.5*	8.5*	5.7	7.1*	4.0	6.3*	3.6	3.8*	8.0
3.0	NLC <sup>1)</sup> SLC LC WLC			8.0	10.7*	5.3	8.1*	3.8	6.8*	3.3	4.0*	8.3
1.5	NLC <sup>1)</sup> SLC LC WLC			7.4	12.5*	5.0	9.0*	3.7	7.0	3.1	4.4*	8.4
0	NLC <sup>1)</sup> SLC LC WLC	8.3*	8.3*	7.1	13.1*	4.8	9.5*	3.6	6.8	3.2	5.1*	8.2
-1.5	NLC <sup>1)</sup> SLC LC WLC	13.0	13.7*	7.0	12.8*	4.7	9.4	3.5	6.8	3.4	6.4*	7.7
-3.0	NLC <sup>1)</sup> SLC LC WLC	13.2	15.9*	7.1	11.6*	4.8	8.7*	4.0	7.3*	4.0	7.3*	6.8
-4.5	NLC <sup>1)</sup> SLC LC WLC	12.1*	12.1*	7.3	9.0*	5.5	7.3*	6.5	7.3*	5.7	7.3*	5.4
-6.0	NLC <sup>1)</sup> SLC LC WLC	12.1*	12.1*	9.0*	9.0*							

## Stick 2.70 m





m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m	
		LC	WLC	LC	WLC	LC	WLC	LC	WLC	LC	WLC		
10.5	NLC <sup>1)</sup> SLC LC WLC												
9.0	NLC <sup>1)</sup> SLC LC WLC												
7.5	NLC <sup>1)</sup> SLC LC WLC										3.4*	3.4*	6.5
6.0	NLC <sup>1)</sup> SLC LC WLC					5.9	6.1*	3.8*	3.8*		3.3*	3.3*	7.6
4.5	NLC <sup>1)</sup> SLC LC WLC					5.7	6.8*	4.0	6.1*		3.3*	3.3*	8.3
3.0	NLC <sup>1)</sup> SLC LC WLC	13.3*	13.3*	8.0	10.2*	5.3	7.8*	3.8	6.6*		3.1	3.5*	8.6
1.5	NLC <sup>1)</sup> SLC LC WLC			7.4	12.1*	5.0	8.8*	3.7	7.0		2.9	3.8*	8.7
0	NLC <sup>1)</sup> SLC LC WLC	8.7*	8.7*	7.0	13.0*	4.8	9.4*	3.5	6.8		3.0	4.3*	8.5
-1.5	NLC <sup>1)</sup> SLC LC WLC	12.9	13.0*	6.9	12.9*	4.7	9.4	3.5	6.7		3.2	5.3*	8.0
-3.0	NLC <sup>1)</sup> SLC LC WLC	13.1	16.6*	7.0	11.9*	4.7	8.9*	4.7	8.9*		3.7	7.0*	7.2
-4.5	NLC <sup>1)</sup> SLC LC WLC	13.1*	13.1*	7.2	9.6*	6.3	9.5*	4.6	6.9		4.2	7.0*	5.9
-6.0	NLC <sup>1)</sup> SLC LC WLC	13.1*	13.1*	9.6*	9.6*						5.0	7.1*	

## Stick 3.00 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	WLC	LC	WLC	LC	WLC	LC	WLC	LC	WLC	
10.5	NLC <sup>1)</sup> SLC LC WLC											
9.0	NLC <sup>1)</sup> SLC LC WLC											
7.5	NLC <sup>1)</sup> SLC LC WLC									3.0*	3.0*	6.9
6.0	NLC <sup>1)</sup> SLC LC WLC							4.1	4.4*	2.9*	2.9*	7.9
4.5	NLC <sup>1)</sup> SLC LC WLC					5.7	6.4*	4.0	5.9*	2.9*	2.9*	8.6
3.0	NLC <sup>1)</sup> SLC LC WLC	14.8	15.5*	8.1	9.6*	5.4	7.5*	3.8	6.4*	3.0*	3.0*	8.9
1.5	NLC <sup>1)</sup> SLC LC WLC	7.4*	7.4*	7.4	11.7*	5.0	8.5*	3.6	6.9*	2.8	3.3*	9.0
0	NLC <sup>1)</sup> SLC LC WLC	8.9*	8.9*	7.0	12.8*	4.7	9.3*	3.5	6.8	3.2	3.7*	8.8
-1.5	NLC <sup>1)</sup> SLC LC WLC	12.4*	12.4*	7.9	12.9*	5.3	9.5*	3.9	6.8	3.4	4.5*	8.3
-3.0	NLC <sup>1)</sup> SLC LC WLC	12.9	17.0*	6.9	12.1*	4.6	9.0*	3.4	6.5*	3.4	6.1*	7.5
-4.5	NLC <sup>1)</sup> SLC LC WLC	13.2	14.0*	7.0	10.1*	4.7	7.4*	4.5	6.9*	5.1	6.9*	6.3
-6.0	NLC <sup>1)</sup> SLC LC WLC	14.0*	14.0*	9.7	10.1*	5.8	7.4*			6.0	6.9*	

## Stick 3.70 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m	
		LC	WLC	LC	WLC	LC	WLC	LC	WLC	LC	WLC		
10.5	NLC <sup>1)</sup> SLC LC WLC												
9.0	NLC <sup>1)</sup> SLC LC WLC												
7.5	NLC <sup>1)</sup> SLC LC WLC							2.8*	2.8*		2.3*	2.3*	7.7
6.0	NLC <sup>1)</sup> SLC LC WLC							4.2	4.4*		2.2*	2.2*	8.6
4.5	NLC <sup>1)</sup> SLC LC WLC							4.1	5.3*	2.9*	2.2*	2.2*	9.2
3.0	NLC <sup>1)</sup> SLC LC WLC	8.4*	8.4*	5.5	6.7*	3.9	5.9*	2.9	4.0*	2.3*	2.3*	9.5	
1.5	NLC <sup>1)</sup> SLC LC WLC	12.7*	12.7*	7.7	10.7*	5.1	7.9*	3.7	6.5*	2.8	4.8*	9.6	
0	NLC <sup>1)</sup> SLC LC WLC	10.1*	10.1*	7.1	12.3*	4.8	8.9*	3.5	6.8	2.7	4.8*	9.4	
-1.5	NLC <sup>1)</sup> SLC LC WLC	11.9*	11.9*	7.9	12.9*	5.3	9.3*	3.9	6.8	3.0	3.4*	9.0	
-3.0	NLC <sup>1)</sup> SLC LC WLC	12.6	15.0*	6.8	12.5*	4.5	9.2*	3.3	6.6	2.9	4.3*	8.2	
-4.5	NLC <sup>1)</sup> SLC LC WLC	12.9	16.1*	6.8	11.2*	4.6	8.3*	4.1	6.7	3.6	4.3*	7.1	
-6.0	NLC <sup>1)</sup> SLC LC WLC	11.6*	11.6*	7.1	8.3*					5.6	6.7*	5.4	

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

The lift capacities on the load hook of the Liebherr quick coupler 48 without attachment are stated in metric tonnes (t), and can be lifted 360° on firm, level supporting surface. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide triple-grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated by \*) or are limited through the allowed lift capacity of the load hook on the quick coupler (12 t). Without quick coupler the lift capacities will increase by 250 kg, without bucket cylinder, link and lever they increase by an additional 375 kg.

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 check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

<sup>1)</sup> Values are calculated with 500 mm wide triple-grouser pads for the NLC-Undercarriage

# Lift Capacities

with Straight Mono Boom 6.00 m and Heavy Counterweight

## Stick 2.40 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		Height	Can be slewed though 360°	Height	Can be slewed though 360°	Height	Can be slewed though 360°	Height	Can be slewed though 360°	Height	Can be slewed though 360°	
10.5	NLC <sup>1)</sup> SLC LC WLC											
9.0	NLC <sup>1)</sup> SLC LC WLC									4.6*	4.6*	4.7
7.5	NLC <sup>1)</sup> SLC LC WLC					5.8*	5.8*			3.9*	3.9*	6.5
6.0	NLC <sup>1)</sup> SLC LC WLC					5.8	7.5*	4.0	4.1*	3.7*	3.7*	7.6
4.5	NLC <sup>1)</sup> SLC LC WLC	14.5*	14.5*	8.5	10.0*	5.6	8.1*	3.9	7.0*	3.4	3.7*	8.2
3.0	NLC <sup>1)</sup> SLC LC WLC			7.8	11.9*	5.2	8.9*	3.8	7.1*	3.1	3.9*	8.6
1.5	NLC <sup>1)</sup> SLC LC WLC			7.2	13.1*	4.9	9.5*	3.6	6.9	3.0	4.2*	8.6
0	NLC <sup>1)</sup> SLC LC WLC			7.0	13.0*	4.7	9.5	3.5	6.8	3.0	4.7*	8.4
-1.5	NLC <sup>1)</sup> SLC LC WLC	12.1*	12.1*	8.0	11.9*	5.4	9.1*	4.0	6.9	3.7	5.7*	8.0
-3.0	NLC <sup>1)</sup> SLC LC WLC	12.2*	12.2*	7.1	9.8*	4.7	7.6*	4.3	5.7*	3.8	5.9*	7.1
-4.5	NLC <sup>1)</sup> SLC LC WLC			8.1	13.0*	5.4	9.6*	4.0	6.9	3.7	5.7*	5.6
-6.0	NLC <sup>1)</sup> SLC LC WLC			8.0	13.0*	5.4	9.6*	4.0	6.9	3.7	5.7*	

## Stick 2.70 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		Height	Can be slewed though 360°	Height	Can be slewed though 360°	Height	Can be slewed though 360°	Height	Can be slewed though 360°	Height	Can be slewed though 360°	
10.5	NLC <sup>1)</sup> SLC LC WLC											
9.0	NLC <sup>1)</sup> SLC LC WLC											4.0*
7.5	NLC <sup>1)</sup> SLC LC WLC							5.9*	5.9*			3.5*
6.0	NLC <sup>1)</sup> SLC LC WLC							5.8	7.2*	4.0	5.0*	3.3*
4.5	NLC <sup>1)</sup> SLC LC WLC	14.5*	14.5*	8.5	10.0*	5.6	8.1*	3.9	7.0*	3.4	3.7*	8.2
3.0	NLC <sup>1)</sup> SLC LC WLC			7.8	11.9*	5.2	8.9*	3.8	7.1*	3.1	3.9*	8.6
1.5	NLC <sup>1)</sup> SLC LC WLC			7.2	13.1*	4.9	9.5*	3.6	6.9	3.0	4.2*	8.6
0	NLC <sup>1)</sup> SLC LC WLC			7.0	13.0*	4.7	9.5	3.5	6.8	3.0	4.7*	8.4
-1.5	NLC <sup>1)</sup> SLC LC WLC	12.1*	12.1*	8.0	11.9*	5.4	9.1*	4.0	6.9	3.7	5.7*	8.0
-3.0	NLC <sup>1)</sup> SLC LC WLC	12.2*	12.2*	7.1	9.8*	4.7	7.6*	4.3	5.7*	3.8	5.9*	7.1
-4.5	NLC <sup>1)</sup> SLC LC WLC			8.1	13.0*	5.4	9.6*	4.0	6.9	3.7	5.7*	5.6
-6.0	NLC <sup>1)</sup> SLC LC WLC			8.0	13.0*	5.4	9.6*	4.0	6.9	3.7	5.7*	

## Stick 3.00 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		Height	Can be slewed though 360°	Height	Can be slewed though 360°	Height	Can be slewed though 360°	Height	Can be slewed though 360°	Height	Can be slewed though 360°	
10.5	NLC <sup>1)</sup> SLC LC WLC											
9.0	NLC <sup>1)</sup> SLC LC WLC									3.5*	3.5*	5.7
7.5	NLC <sup>1)</sup> SLC LC WLC					5.8*	5.8*			3.1*	3.1*	7.2
6.0	NLC <sup>1)</sup> SLC LC WLC					5.9	6.8*	4.1	5.2*	2.9*	2.9*	8.2
4.5	NLC <sup>1)</sup> SLC LC WLC			8.7	9.1*	5.6	7.5*	3.9	6.6*	2.9*	2.9*	8.8
3.0	NLC <sup>1)</sup> SLC LC WLC	14.4	15.6*	8.0	11.0*	5.3	8.4*	3.8	7.0*	2.8	3.9*	9.2
1.5	NLC <sup>1)</sup> SLC LC WLC			8.4	12.8*	5.6	9.1*	4.1	7.0	3.1	4.7*	9.2
0	NLC <sup>1)</sup> SLC LC WLC	7.4*	7.4*	6.9	13.0*	5.4	9.5*	3.9	6.9	3.0	3.5*	9.0
-1.5	NLC <sup>1)</sup> SLC LC WLC	11.0*	11.0*	7.9	12.4*	5.3	9.2*	3.9	6.8	3.2	4.1*	8.6
-3.0	NLC <sup>1)</sup> SLC LC WLC	12.9	14.3*	6.8	10.8*	4.6	8.2*	3.4	6.1*	3.2	5.3*	7.8
-4.5	NLC <sup>1)</sup> SLC LC WLC			8.0	13.0*	5.4	9.6*	4.0	6.9	3.7	5.7*	6.6
-6.0	NLC <sup>1)</sup> SLC LC WLC			8.0	13.0*	5.4	9.6*	4.0	6.9	3.7	5.7*	

## Stick 3.70 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		Height	Can be slewed though 360°	Height	Can be slewed though 360°	Height	Can be slewed though 360°	Height	Can be slewed though 360°	Height	Can be slewed though 360°	
10.5	NLC <sup>1)</sup> SLC LC WLC											
9.0	NLC <sup>1)</sup> SLC LC WLC											2.6*
7.5	NLC <sup>1)</sup> SLC LC WLC							3.6*	3.6*			2.3*
6.0	NLC <sup>1)</sup> SLC LC WLC							5.8	6.5*	4.0	5.8*	2.2*
4.5	NLC <sup>1)</sup> SLC LC WLC			8.7	9.1*	5.6	7.5*	3.9	6.6*	2.9*	2.9*	9.5
3.0	NLC <sup>1)</sup> SLC LC WLC	14.9*	14.9*	8.3	9.9*	5.3	8.4*	3.8	7.0*	2.7	3.0*	9.8
1.5	NLC <sup>1)</sup> SLC LC WLC			8.4	12.8*	5.6	9.1*	4.1	7.0	3.1	4.7*	9.2
0	NLC <sup>1)</sup> SLC LC WLC	8.5*	8.5*	7.0	12.9*	5.7	9.3*	3.4	6.7	2.6	5.1	9.7
-1.5	NLC <sup>1)</sup> SLC LC WLC	10.6*	10.6*	7.8	12.7*	5.2	9.4*	3.8	6.7	3.0	4.7*	9.3
-3.0	NLC <sup>1)</sup> SLC LC WLC	12.6	13.9*	6.7	11.6*	4.5	8.7*	3.3	6.6	2.8	3.8*	8.6
-4.5	NLC <sup>1)</sup> SLC LC WLC			8.0	13.0*	5.4	9.6*	4.0	6.9	3.7	5.7*	7.5
-6.0	NLC <sup>1)</sup> SLC LC WLC			8.0	13.0*	5.4	9.6*	4.0	6.9	3.7	5.7*	

↑ Height    ↻ Can be slewed though 360°    ⬆ In longitudinal position of undercarriage    🏗️ Max. reach    \* Limited by hydr. capacity

The lift capacities on the load hook of the Liebherr quick coupler 48 without attachment are stated in metric tonnes (t), and can be lifted 360° on firm, level supporting surface. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide triple-grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated by \*) or are limited through the allowed lift capacity of the load hook on the quick coupler (12 t). Without quick coupler the lift capacities will increase by 250 kg, without bucket cylinder, link and lever they increase by an additional 375 kg.

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 check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

1) Values are calculated with 500 mm wide triple-grouser pads for the NLC-Undercarriage

# Available Buckets

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

Cutting width mm	Capacity ISO 7451 m <sup>3</sup>	Weight kg	NLC-Undercarriage				SLC-Undercarriage				LC-Undercarriage				WLC-Undercarriage			
			Stick length (m)				Stick length (m)				Stick length (m)				Stick length (m)			
			2.40	2.70	3.00	3.70	2.40	2.70	3.00	3.70	2.40	2.70	3.00	3.70	2.40	2.70	3.00	3.70
<b>Mono Boom 5.90 m</b>																		
850 <sup>1)</sup>	0.75	695	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>1)</sup>	0.95	790	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>1)</sup>	1.15	880	△	△	△	△	□	□	□	△	□	□	□	△	□	□	□	△
1,400 <sup>1)</sup>	1.35	970	□	△	△	■	□	□	□	■	□	□	□	■	□	□	□	■
1,500 <sup>1)</sup>	1.45	1,015	△	■	■	■	□	□	△	■	□	□	□	■	□	□	□	■
1,600 <sup>1)</sup>	1.55	1,060	△	■	■	▲	□	△	△	■	□	□	△	■	□	□	△	■
850 <sup>2)</sup>	0.75	705	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.95	800	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	1.15	890	□	□	△	△	□	□	□	△	□	□	□	△	□	□	□	△
1,400 <sup>2)</sup>	1.35	980	△	△	■	■	□	□	△	■	□	□	□	■	□	□	□	■
1,500 <sup>2)</sup>	1.45	1,025	△	■	■	▲	□	△	△	■	□	□	△	■	□	□	△	■
1,600 <sup>2)</sup>	1.55	1,070	■	■	▲	▲	△	△	■	▲	□	△	△	▲	□	□	△	▲
<b>Straight Mono Boom 6.00 m</b>																		
850 <sup>1)</sup>	0.75	695	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>1)</sup>	0.95	790	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>1)</sup>	1.15	880	□	□	△	△	□	□	□	△	□	□	□	△	□	□	□	△
1,400 <sup>1)</sup>	1.35	970	△	△	■	■	□	□	△	■	□	□	□	■	□	□	□	■
1,500 <sup>1)</sup>	1.45	1,015	△	■	■	▲	□	△	△	■	□	□	△	■	□	□	□	■
1,600 <sup>1)</sup>	1.55	1,060	■	■	■	▲	△	△	■	▲	□	△	△	▲	□	□	△	▲
850 <sup>2)</sup>	0.75	705	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.95	800	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	1.15	890	□	△	△	■	□	□	□	△	□	□	□	△	□	□	□	△
1,400 <sup>2)</sup>	1.35	980	△	■	■	▲	□	△	△	■	□	□	△	■	□	□	□	■
1,500 <sup>2)</sup>	1.45	1,025	■	■	■	▲	△	△	■	▲	□	△	△	▲	□	□	△	▲
1,600 <sup>2)</sup>	1.55	1,070	■	■	▲	▲	△	△	■	▲	△	△	■	▲	□	△	△	▲
<b>Two-piece Boom 4.00 m</b>																		
850 <sup>1)</sup>	0.75	695	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>1)</sup>	0.95	790	□	□	□	△	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>1)</sup>	1.15	880	□	□	△	■	□	□	□	△	□	□	□	△	□	□	□	△
1,400 <sup>1)</sup>	1.35	970	△	△	■	■	□	□	△	■	□	□	□	■	□	□	□	■
1,500 <sup>1)</sup>	1.45	1,015	■	■	■	▲	△	△	△	■	□	△	△	■	□	□	□	■
1,600 <sup>1)</sup>	1.55	1,060	■	■	▲	▲	△	△	■	▲	□	△	△	■	□	□	△	■
850 <sup>2)</sup>	0.75	705	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.95	800	□	□	□	△	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	1.15	890	△	△	△	■	□	□	□	△	□	□	□	△	□	□	□	△
1,400 <sup>2)</sup>	1.35	980	■	■	■	▲	△	△	△	■	□	□	△	■	□	□	□	■
1,500 <sup>2)</sup>	1.45	1,025	■	■	▲	▲	△	△	■	▲	△	△	△	▲	□	□	△	▲
1,600 <sup>2)</sup>	1.55	1,070	■	▲	▲	▲	■	■	■	▲	△	△	■	▲	□	△	△	▲

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

<sup>1)</sup> HD bucket for direct mounting with teeth Z 40

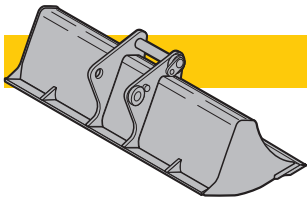
<sup>2)</sup> HD bucket for mounting to quick coupler with teeth Z 40

Other backhoes available on request

Max. material weight □ = ≤ 1.8 t/m<sup>3</sup>, △ = ≤ 1.5 t/m<sup>3</sup>, ■ = ≤ 1.2 t/m<sup>3</sup>, ▲ = not authorized



# Available Tools



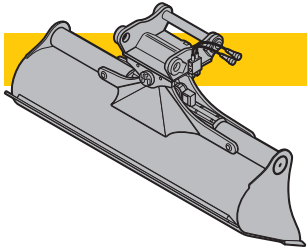
## Rigid Ditchcleaning Bucket

### GRL 90, for direct mounting

Cutting width	mm	1,500	2,000	2,000	2,010	2,400
Capacity	m <sup>3</sup>	0.50	0.45	0.70	0.85	0.85
Weight	kg	400	415	506	528	586

### GRL 90, for mounting to quick coupler 48

Cutting width	mm	1,500	2,000	2,000	2,000	2,400	2,400
Capacity	m <sup>3</sup>	0.50	0.70	1.20	1.25	0.85	1.15
Weight	kg	425	522	637	599	674	646



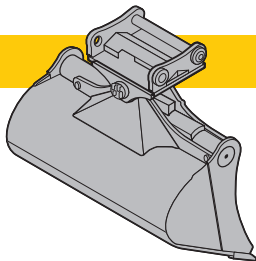
## Ditchcleaning Bucket

### GRL 90, 2 x 50° tiltable, for direct mounting

Cutting width	mm	1,600	2,000	2,000	2,000	2,200	2,400	2,800
Capacity	m <sup>3</sup>	0.80	0.50	0.70	1.00	1.15	0.85	1.45
Weight	kg	798	686	819	883	920	885	1 009

### GRL 90, 2 x 50° tiltable, for mounting to quick coupler 48

Cutting width	mm	1,600	2,000	2,000	2,000	2,200	2,200	2,200	2,400	2,400	2,800
Capacity	m <sup>3</sup>	0.80	0.50	0.70	1.00	0.80	1.15	1.40	0.85	1.25	1.85
Weight	kg	850	690	880	940	880	980	1,000	890	1,000	1,088



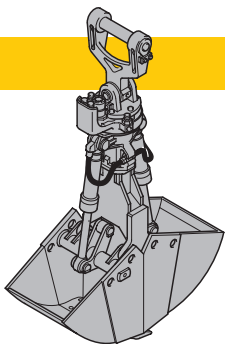
## Tiltable Bucket

### SL 90, 2 x 50° tiltable, for direct mounting

Cutting width	mm	1,600	1,600	1,600
Capacity	m <sup>3</sup>	0.80	1.00	1.35
Weight	kg	768	820	918

### SL 90, 2 x 50° tiltable, for mounting to quick coupler 48

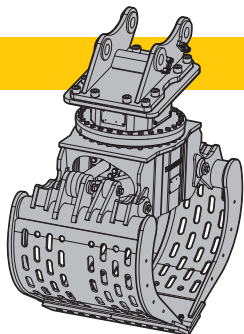
Cutting width	mm	1,500	1,600	1,600	1,600	1,600
Capacity	m <sup>3</sup>	1.20	0.80	1.00	1.35	1.55
Weight	kg	970	820	890	970	1,035
Weight in HD-version	kg	-	-	1,006	1,184	1,550



## Clamshells

### GM 20B, earthmoving shell, for mounting to quick coupler 48

Cutting width	mm	600	800	1,000	1,000	1,200
Capacity	m <sup>3</sup>	0.45	0.60	0.75	1.00	0.90
Weight	kg	1,080	1,130	1,205	1,170	1,270



## Sorting Grapple

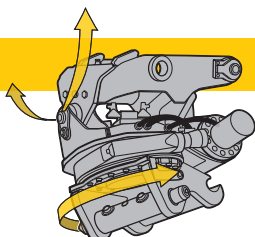
Ribbed      Perforated      Gravel tongs

### SG 30, for direct mounting

Cutting width	mm	1,000	1,150	1,000	1,150	1,020
Capacity	m <sup>3</sup>	0.75	0.90	0.85	1.00	0.85
Weight	kg	1,510	1,590	1,490	1,570	1,765

### SG 30, for mounting to quick coupler 48

Cutting width	mm	1,000	1,150	1,000	1,150	1,020
Capacity	m <sup>3</sup>	0.75	0.90	0.85	1.00	0.85
Weight	kg	1,510	1,590	1,490	1,570	1,765



## Tiltrotator

### LH-TR 25, for mounting to quick coupler 48

Weight	kg	720
Rotation		360°
Tilt		2 x 50°

# Standard Equipment



## Undercarriage

Lashing eyelets  
Lifetime-lubricated track rollers  
Sprocket with dirt ejector  
Track guide at each track frame (one piece)  
Tracks sealed and greased



## Uppercarriage

Engine hood with lift help  
Handrails, non slip surfaces  
Lockable tool box  
Maintenance-free swing brake lock  
Sound insulation



## Hydraulics

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 IIIB/Tier 4i emission standard  
Fuel filter and water separator  
Liebherr particle filter  
Sensor-controlled automatic engine idling  
Turbo charger



## 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  
Front windscreen (bottom) retractable  
Fuel consumption indicator  
Headlights (two pieces, Halogen)  
Hydro mounts  
LiDAT Plus (Liebherr data transfer system)\*  
Mechanical hour meters, readable from outside the cab  
Operator seat Comfort  
Preparation for radio installation  
Rain hood over front window opening  
Rear space monitoring with camera  
Roll-down sun blind  
ROPS safety cab structure  
Rubber floor mat  
Seat belt  
Storage bin  
Storage space  
Sunroof, right window and windshield with safety glass  
Wiper/washer



## Attachment

Headlight on boom (right, Halogen) Liebherr full-automatic central lubrication system  
(except connecting link for bucket kinematics)

\* optionally extendable after one year

# Individual Options



## Undercarriage

Reinforced cover plate and base plate for centre section  
Straight track guide  
Track guide at each track frame (three pieces)



## Uppercarriage

Customized colors  
Extended tool kit  
Fuel anti-theft device  
Heavy counterweight  
Refuelling pump (electrical)  
Reversible fan drive  
Uppercarriage guard at bottom and sides



## Hydraulics

Bypass filter  
Liebherr hydraulic oil, biodegradable  
Liebherr hydraulic oil, specially for warm and cold regions



## Engine

Air pre-filter with dust trap  
Automatic engine shut-down (adjustable time-period)  
Fuel pre-heating system



## Operator's Cab

Additional headlights or/and rear headlights (Halogen or Xenon)  
Amber beacon  
Auxiliary heater with weekly timer  
Bullet-proof front window (one piece, fixed installation – can not be opened)  
Bullet-proof front window (two pieces, fixed installation – can not be opened)  
Bullet-proof glass panel in roof  
Electric cool box (12 V)  
Electronic drive away lock  
Engine shut-down (emergency stop) in cab  
FGPS front guard  
Fire extinguisher  
Footrest  
FOPS top guard  
Headlights (two pieces, Xenon)  
Operator seat Premium  
Proportional controls Liebherr  
Radio Comfort  
Roof wiper  
Sun visor  
Travel alarm system



## Attachment

Additional headlights on boom (left, Halogen or Xenon)  
Bottom boom protection for stick  
Headlight on boom (right, Xenon)  
Headlights on boom (Xenon)  
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 adjustable cylinders  
Piston rod guard for bucket cylinders  
Safety check valves hoist cylinder  
Safety check valves stick cylinder  
Security for hoist cylinder in grab or hammer operation  
Stick cylinder shut-down, adjustable  
Straight mono boom  
Tool Control  
Two-piece boom

**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 120 companies with over 35,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

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

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