

# Crawler Excavator

**R 922**  
Litronic®

Operating Weight: 21,350 – 23,700 kg  
Engine Output: 110 kW / 150 HP  
Bucket Capacity: 0.55 – 1.45 m<sup>3</sup>



**New  
engine output**

# LIEBHERR

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## Performance

The R 922 combines power and versatility while guaranteeing the operator incomparable fluidity and control of movement with its cutting-edge hydraulic system. These key characteristics make it an excavator capable of high performance in delicate or difficult tasks. The R 922 is ideal for earthmoving, trench, pipe and cable work. In parallel, its numerous attachments also allow it to work on demolition sites or other more specific sites.

## Reliability

With 50 years of experience designing and manufacturing hydraulic crawler excavators, Liebherr France SAS is in a strong position to offer its customers ever more reliable machines. The high quality of the product is guaranteed at all stages, from design to manufacture, while the safety and comfort of the operator's working conditions have been even further enhanced. This recognised reliability can also be found in the numerous services that Liebherr has specifically developed for its customers' support and satisfaction.

## Comfort

The cabin of the R 922 is a model of comfort and ergonomics in its category. Equipped with all the latest technology, it is spacious, silent and gives the operator an unparalleled sense of comfort. These features, coupled with improved operational visibility, offer an unrivalled sense of tranquility during use and incomparable quality of work.

## Economy

The R 922's new maintenance plan helps reduce time spent on interventions on the excavator, giving increased productivity. Operating costs are also reduced thanks to even more intelligent energy management and automatic tool changing.





**A Liebherr engine that is even cleaner and with enhanced performance**

- New engine complies with the Stage IIIB emission standards
- Especially designed for construction machine applications
- The most cutting-edge technology with the Liebherr Common-rail system
- Automatic idling system optimises energy efficiency



# Performance

The R 922 combines power and versatility while guaranteeing the user incomparable fluidity of movement with its cutting-edge hydraulic system. These key characteristics make it an excavator capable of high performance in delicate or difficult tasks. The R 922 is ideal for earthmoving, trench, pipe and cable work. In parallel with this, its numerous attachments also allow it to work on demolition sites or other more specific sites.

## Liebherr integrated systems engineering

### Cutting-edge technology for high performance

According to requirements, the two circuits of the hydraulic system pumps are either separated or combined, for levelling operations, or transfer movements in a straight line or curve. The separation of the two circuits allows each actuator to be powered by appropriate pressure in an independent and energy-saving manner. For its part, the combination of the two circuits allows maximum speed to be reached for simple or combined movements.

### Optimal use of energy

According to requirements, the two circuits of the hydraulic system pumps are either separated or combined, for levelling operations, or transfer movements in a straight line or curve. The separation of the two circuits allows each actuator to be powered by appropriate pressure in an independent and energy-saving manner. For its part, the combination of the two circuits allows maximum speed to be reached for simple or combined movements.

## A single shovel for a multitude of applications

### A vast range of attachments

The R 922 is an excavator suitable for all types of work with its vast range of Liebherr attachments. Different sticks can be combined with a variety of booms (mono boom, straight mono boom, offsettable and two-piece boom). A long attachment is also available. Finally, to facilitate tool-changing, a hydraulic quick coupler and the Likufix system are offered as options.



### 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 operating modes

- Economy mode: for an economic and ecological operation. Recommended for normal working conditions
- Power Mode: for high excavation capacities in difficult applications
- Sensitivity Mode: for accurate load-lifting applications
- Full Power Mode: especially designed for higher power, ideal for extreme applications



#### Liebherr services

- Permanent stock of more than 80,000 items, available 24/7 on Liebherr-P@rts 24 online web portal, for a lower machine downtime
- Programmes such as ReMan, ReBuilt and Repair, for a perfect and economical solution including the manufacturer's warranty and quality
- Continually-updated personalised documentation system



# Reliability

With 50 years of experience designing and manufacturing hydraulic crawler excavators, Liebherr France SAS is in a strong position to offer its customers ever more reliable machines. The high quality of the product is guaranteed at all stages, from design to manufacture, while the safety and comfort of the operator's working conditions have been even further enhanced. This recognised reliability can also be found in the numerous services that Liebherr has specifically developed for its customers' support and satisfaction.

## Robustness at all levels

### A robust undercarriage that is easy to maintain

The robustness of the undercarriage lengthens the service life of the machine. Liebherr 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, large openings between the track carriers and the centre piece of the undercarriage will make them easier to maintain, as will the steps on the vertical side of the track carriers.

### Integrated ROPS structure

The cab is fitted with a roll-over protection system, called ROPS. It is invisible and allows the operator to work in complete confidence.

### Optimised stress distribution

The Liebherr R 922 crawler excavator is a product designed to withstand major stresses. The attachments are fitted with cast steel parts strategically positioned on the joints. In addition, the continuous optimisation of the structure allows it to achieve the long service life that customers require.



### Liebherr quality at every stage

- Certification ISO 9001 for Liebherr-France SAS
- Rigorous quality process from design to manufacturing
- Selection of the best materials on the market
- Frequent manufacturing checks to ensure quality objectives are met



### Key Liebherr components

- A perfect harmonisation of the machine's elements for worksite applications
- The main mechanically-welded structures, such as the undercarriage, attachment and uppercarriage are designed by Liebherr
- Engine, hydraulic pumps, transfer gear-box, transmission, rotating mechanism, crown wheel and electronic components manufactured by Liebherr



#### 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





# Comfort

The cabin of the R 922 is a model of comfort and ergonomics in its category. Equipped with all the latest technology, it is spacious, silent and gives the operator an unparalleled sense of comfort. These features, coupled with improved operational visibility, offer an unrivalled sense of tranquility during use and incomparable quality of work.

## Even better working conditions

### A first class work space

In this cab, the operator has a pneumatic seat, an enlarged space and a very comfortable work environment. Depending on the operator's needs, the Liebherr Premium seat can be chosen as an option. This seat offers maximum seating comfort with 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.

### Noise level and reduced vibrations

To increase work comfort and productivity, the acoustic power inside the operator's cab is only 68 dB. The cab is mounted on viscoelastic rivets that ensure the vibrations are fully absorbed. The rubber flanges that support the pipes also actively participate in reducing external noise.

### Increased visibility all around the machine

A rear-view camera is fitted in the R 922 counterweight. A display on the 7" high resolution screen allows the operator to work in a secure area. A side camera is also available as an option. This complete visibility gives the operators full confidence in the tasks they perform.



### 7" colour touch screen

- Several adjustment, control and monitoring possibilities (fuel consumption display, air-conditioning, tool control, radio, etc.)
- Robust and reliable design (ingress protection rating IP 65)
- High resolution video compatibility for displaying the backup camera images



### A fully equipped cabin

- 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



#### **LiDAT fleet management system**

- A single point of contact for the complete management of the fleet
- Optimises your fleet of machines thanks to its overview of the maintenance and service hour reports
- Fuel consumption monitoring
- Exact location of machines
- Improved safety thanks to predetermined geographic areas and operating times



# Economy

The R 922's new maintenance plan helps reduce time spent on interventions on the excavator, giving increased productivity. Operating costs are also reduced thanks to even more intelligent energy management and automatic tool changing.

## The R 922 : an excavator that, quite simply, gets the job done

### Maintenance points grouped together perfectly

All the maintenance points have been designed for easier access and to shorten maintenance operation times. The gull-wing hood openings allow the service points to be accessed from the ground. The maintenance of most elements, such as the air filter, the fuel filters, the engine oil filter and the radiators, is carried out in full safety. The grouping together of the maintenance points into completely separate, easily accessible compartments increases speed and productivity in the worksites.

### Automatic centralised lubrication as standard

The fully automated lubrication system is a true time-saver for the operator, with minimum machine downtime. In parallel, it increases the service life of the moving elements with appropriate lubrication and contributes to site safety by preventing the operator from having to get down from the machine.

### Intelligent and efficient energy management

The engineering of Liebherr's integrated systems and the effective management of the engine and hydraulics constantly control fuel consumption. The new diesel engine, automatic idling, electronic engine speed sensing regulation and regeneration 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. The R 922 also complies with the European Stage IIIB exhaust gas emission regulations with its oxidation catalyst technology.



### Liebherr bucket and teeth: a powerful combination

- 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



### Likifix and Tool-Management

- Ideal for worksites requiring tool changes
- Mechanical and hydraulic coupling of tools possible without leaving the cab
- Optimised excavator operation with automatic tool change system
- Intelligent Tool-Management option, for automatic tool detection, pressure and corresponding flow adjustment

# Long live progress with the R 922

## Variety of robust attachments

- Moulded steel joints for greater stress resistance
- Parts have a long service life thanks to the automated lubrication, fitted as standard
- Wide choice of attachments to adapt the excavator to the customer's needs

## The latest technology for heightened performance

- New Liebherr Stage IIIB engine technology with oxidation catalyst
- Automatic idling and engine cut-off in the event of inactivity
- Positive Control hydraulic system with Liebherr electronics for more accurate and fluid movements

## Reduced maintenance time

- Completely new maintenance concept with elements within arm's reach, accessible from the ground
- Filters grouped together for shorter maintenance interventions
- Adequate lubrication guaranteed thanks to automatic centralised lubrication system, fitted as standard

## A reliable undercarriage

- Reliable and robust X-shaped undercarriage that is easy to tie down thanks to the integrated eyelets
- For specific needs, several types of dozing blades available, as well as rubber tracks for urban use
- Easy to maintain





## A multi-purpose tool carrier

- Wide range of specific Liebherr buckets and tools
- Patented Liebherr tooth system for increased productivity
- Likufix quick-change coupling system for greater flexibility

## A very comfortable operating cab

- Spacious and air-conditioned work space for increased productivity
- Pneumatic seat as standard
- 7" high resolution, easy-to-use, colour touch screen
- Fully retractable window screen

## Work in complete safety

- Backup camera fitted in the counter-weight, for a clear view and increased operating safety
- Protected access to the uppercarriage and cab
- ROPS certified cab frame: rollover resistant
- Emergency exit through the rear window regardless of the excavator's configuration

# Technical Data



## Engine

Rating per ISO 9249	110 kW (150 HP) at 1,800 RPM
Model	Liebherr D 834 A7
Type	4 cylinder in-line
Bore/Stroke	108/125 mm
Displacement	4.58 l
Engine operation	4-stroke diesel Common-Rail injection system exhaust-gas recirculation (eagr)
Exhaust gas treatment	oxidation catalyst emission standard stage IIIB
Option	Liebherr particle filter
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	373 l
Electrical system	
Voltage	24 V
Batteries	2 x 135 Ah/12 V
Starter	24 V/5 kW
Alternator	three phase current 28 V/110 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 196 l/min.
Max. pressure	350 bar
Pump management	electronic pump management via the integrated system controlling (CAN-BUS) synchronous to the control block
Hydraulic tank	229 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, 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 per- formance 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 antireaction
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	71.1 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 possi- bilities, 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 selfexpla- natory operation via touch screen, video, versatile adjusting, control and monitoring facilities, e.g. climate control, implement and tool parameters 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 out- side temperatures, sensors for solar radiation, inside and outside temperatures
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 out- side temperatures, sensors for solar radiation, inside and outside temperatures
Noise emission	
ISO 6396	L <sub>PA</sub> (inside cab) = 68 dB(A)
2000/14/EC	L <sub>WA</sub> (surround noise) = 101 dB(A)



## Undercarriage

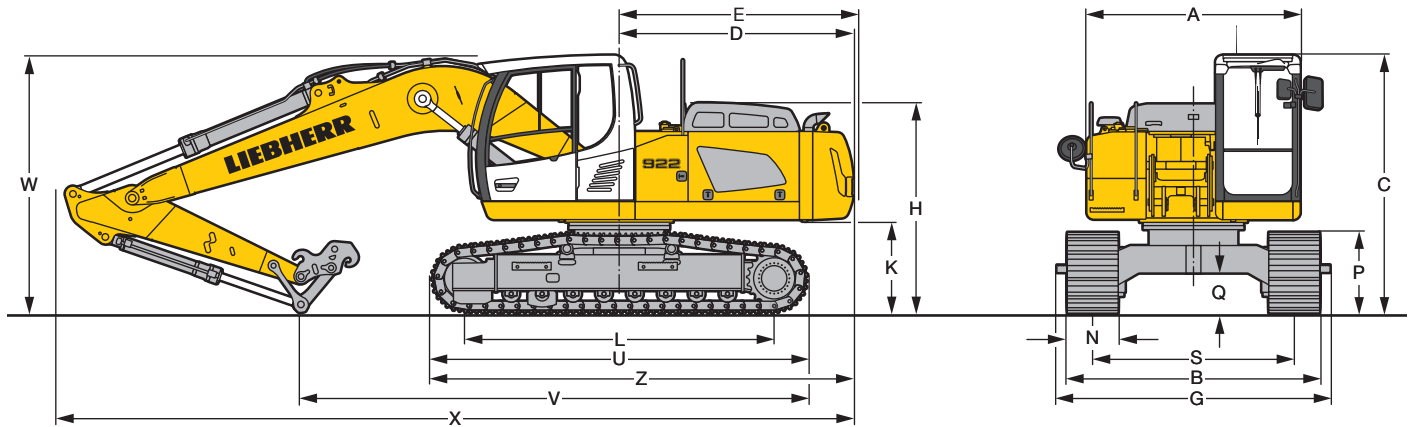
Versions	
NLC	gauge 2,000 mm
SLC	gauge 2,250 mm
LC	standard gauge 2,380 mm
Drive	Liebherr swash plate motors with integrated brake valves on both sides
Transmission	Liebherr planetary reduction gears
Travel speed	low range – 3.2 km/h high range – 5.5 km/h
Net drawbar pull on crawler	190 kN
Track components	B 60, maintenance-free
Track rollers/Carrier rollers	8/2
Tracks	sealed and greased
Track pads	triple-grouser
Digging locks	wet multi-discs (spring applied, pressure released)
Brake valves	integrated into travel motors
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



NLC	mm			SLC	mm			LC	mm			
A	2,545				2,545				2,545			
C	3,050				3,050				3,050			
D	2,760				2,760				2,760			
E	2,800				2,800				2,800			
H	2,480				2,480				2,480			
K	1,075				1,075				1,075			
L	3,655				3,655				3,655			
P	955				955				955			
Q	465				465				465			
S	2,000				2,250				2,380			
U	4,445				4,445				4,445			
Z	4,985				4,985				4,985			
N	500	600	750		500	600	750	900	500	600	750	900
B	2,500	2,600	2,750		2,750	2,850	3,000	3,150	2,880	2,980	3,130	3,280
G	2,460	2,660*	2,660*		2,800	2,800	3,000*	3,100*	2,930	2,930	3,130*	3,230*

E = Tail radius

\* = Width with removable steps

## Mono Boom 5.40 m

Stick length	m	2.20	2.40	2.70	3.00
V	mm	6,000	5,850	5,650	5,500
W	mm	3,050	3,100	3,200	3,300
X	mm	9,400	9,400	9,400	9,400

## Two-piece Boom 3.60 m

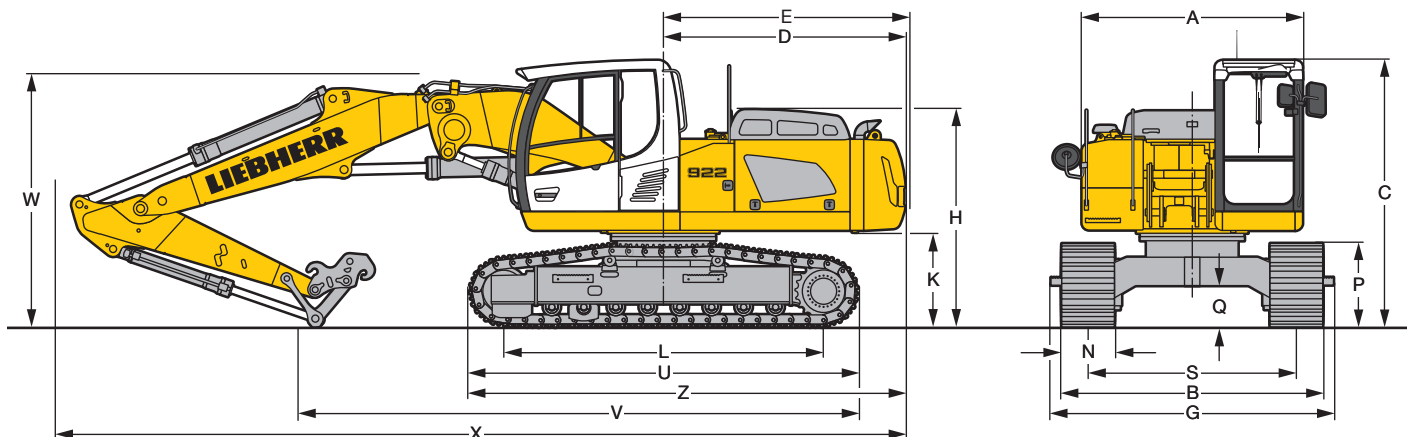
Stick length	m	2.20	2.40	2.70	3.00
V	mm	6,200	6,100	5,900	5,700
W	mm	2,900	2,950	3,100	3,250
X	mm	9,650	9,650	9,650	9,650

## Straight Mono Boom 5.70 m

Stick length	m	2.20	2.40	2.70	3.00
V	mm	6,650	6,500	6,350	6,250
W	mm	2,750	2,850	2,950	3,100
X	mm	9,550	9,550	9,550	9,500

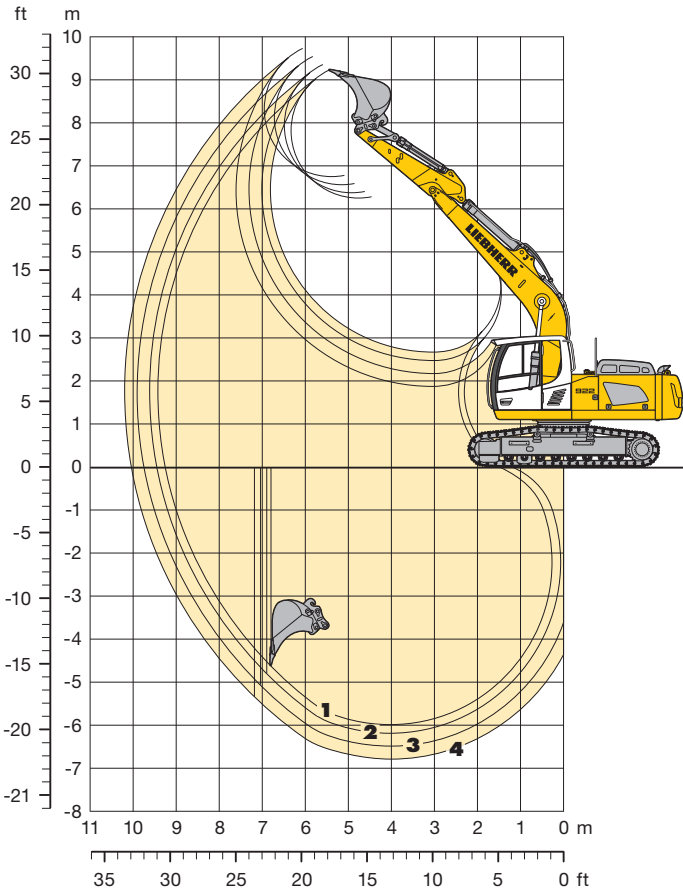
## Offset Mono Boom 5.30 m

Stick length	m	2.20	2.40	2.70	3.00
V	mm	5,800	5,650	5,450	5,250
W	mm	2,950	3,000	3,100	3,200
X	mm	9,200	9,200	9,200	9,200



# Backhoe Bucket

with Mono Boom 5.40 m



## Digging Envelope

		1	2	3	4
Stick length	m	2.20	2.40	2.70	3.00
Max. digging depth	m	6.00	6.20	6.50	6.80
Max. reach at ground level	m	9.25	9.45	9.75	10.05
Max. dump height	m	6.25	6.35	6.55	6.75
Max. teeth height	m	9.20	9.35	9.55	9.70

## Digging Forces

		1	2	3	4
Digging force ISO	kN	123	116	107	99
	t	12.5	11.8	10.9	10.1
Breakout force ISO	kN	149	149	149	149
	t	15.2	15.2	15.2	15.2

## Operating Weight and Ground Pressure

Operating weight includes basic machine with mono boom 5.40 m, stick 2.40 m, quick coupler 48 and bucket 0.80 m<sup>3</sup> (635 kg).

Undercarriage		NLC			SLC		
Pad width	mm	500	600	750	500	600	750
Weight	kg	21,400	21,700	22,100	21,500	21,800	22,200
Ground pressure	kg/cm <sup>2</sup>	0.54	0.46	0.37	0.55	0.46	0.38

Undercarriage		LC		
Pad width	mm	500	600	750
Weight	kg	21,550	21,850	22,250
Ground pressure	kg/cm <sup>2</sup>	0.55	0.46	0.38

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			
			Stick length (m)				Stick length (m)				Stick length (m)			
			2.20	2.40	2.70	3.00	2.20	2.40	2.70	3.00	2.20	2.40	2.70	3.00
650 <sup>1)</sup>	0.55	480	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>1)</sup>	0.60	520	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>1)</sup>	0.80	600	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>1)</sup>	1.00	685	□	□	□	△	□	□	□	□	□	□	□	□
1,400 <sup>1)</sup>	1.15	755	□	△	△	■	□	□	□	△	□	□	□	□
1,400 <sup>1)</sup>	1.35	780	△	■	■	■	□	△	△	■	□	□	△	△
1,500 <sup>1)</sup>	1.45	810	■	■	■	▲	△	△	■	■	□	△	△	△
650 <sup>2)</sup>	0.55	515	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>2)</sup>	0.60	550	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.80	635	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	1.00	715	□	□	△	△	□	□	□	□	□	□	□	□
1,400 <sup>2)</sup>	1.15	785	△	△	■	■	□	□	△	△	□	□	□	△
1,400 <sup>2)</sup>	1.35	810	■	■	■	▲	△	△	■	■	□	△	△	■
1,500 <sup>2)</sup>	1.45	840	■	■	▲	▲	△	△	■	■	■	△	△	■

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

1) Standard bucket for direct mounting with teeth Z 35

2) Standard bucket for mounting to quick coupler 48 with teeth Z 35

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 5.40 m

## Stick 2.20 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
10.5	NLC SLC LC											
9.0	NLC SLC LC											
7.5	NLC SLC LC									2.8* 2.8*	2.8* 2.8*	5.6
6.0	NLC SLC LC					3.9 5.1*	4.5 5.1*			2.5* 2.5*	2.5* 2.5*	6.9
4.5	NLC SLC LC					3.8 5.5*	4.4 5.5*	2.6 3.7*		2.4* 2.4*	2.4* 2.4*	7.7
3.0	NLC SLC LC			5.5 8.1*	6.3 8.1*	3.6 6.3*	4.1 6.3*	2.5 4.8		2.2 2.5*	2.5* 2.5*	8.1
1.5	NLC SLC LC			5.0 9.8*	5.8 9.8*	3.4 6.6	3.9 6.7	2.4 4.7		2.1 2.6*	2.5 2.6*	8.2
0	NLC SLC LC	6.3* 6.3*	6.3* 6.3*	4.7 10.2	5.6 10.4	3.2 6.4	3.7 6.5	2.3 4.6		2.2 2.9*	2.5 2.9*	8.0
-1.5	NLC SLC LC	8.7 11.3*	10.6 11.3*	4.7 10.1	5.5 10.3*	3.1 6.3	3.7 6.5			2.3 3.5*	3.0 3.5*	7.5
-3.0	NLC SLC LC	8.9 13.1*	10.8 13.1*	4.7 9.2*	5.6 9.2*	3.2 6.4	3.7 6.5			2.8 4.8*	3.6 4.8*	6.6
-4.5	NLC SLC LC	9.3 9.4*	10.9 11.0*	6.0 6.6*	6.3 6.6*	4.0 6.5				4.3 5.5*	5.0 5.5*	5.1

## Stick 2.40 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
10.5	NLC SLC LC											
9.0	NLC SLC LC											
7.5	NLC SLC LC										2.6* 2.6*	2.6* 2.6*
6.0	NLC SLC LC							4.0 4.8*		4.5 4.8*	4.8 4.8*	7.1
4.5	NLC SLC LC							3.8 5.3*	2.6 4.3*	4.4 5.3*	4.7 5.3*	7.9
3.0	NLC SLC LC	10.0 12.9*	12.9* 12.9*	5.5 7.8*	6.4 7.8*	3.6 6.1*	4.2 6.1*	4.7 5.3*	2.6 4.3*	3.2 4.3*	2.2* 2.2*	8.3
1.5	NLC SLC LC			5.0 9.5*	5.8 9.5*	3.4 6.6	3.9 6.7	2.4 4.7		2.0 2.4*	2.4* 2.4*	8.4
0	NLC SLC LC	6.6* 6.6*	6.6* 6.6*	4.7 10.2	5.6 10.4	3.2 6.4	3.7 6.5	2.3 4.6		4.7 10.2	5.6 10.4	8.2
-1.5	NLC SLC LC	8.7 10.8*	10.5 10.8*	4.6 10.1	5.5 10.3*	3.1 6.3	3.7 6.4	2.3 4.7		5.9 9.5*	6.7 9.5*	7.7
-3.0	NLC SLC LC	8.8 13.5*	10.7 13.5*	4.7 9.4*	5.5 9.4*	3.1 6.4	3.7 6.5	2.9 4.7		5.9 10.3	6.7 9.5*	6.8
-4.5	NLC SLC LC	9.2 10.1*	10.1* 10.1*	4.9 7.1*	5.8 7.1*	4.0 6.5				4.9 7.1*	5.8 7.1*	5.4

## Stick 2.70 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
10.5	NLC SLC LC											
9.0	NLC SLC LC											
7.5	NLC SLC LC									2.2* 2.2*	2.2* 2.2*	6.3
6.0	NLC SLC LC									2.0* 2.0*	2.0* 2.0*	7.5
4.5	NLC SLC LC					3.9 5.0*	4.4 5.0*	2.6 4.7*		1.9* 1.9*	1.9* 1.9*	8.2
3.0	NLC SLC LC	10.3 11.5*	11.5* 11.5*	5.6 7.3*	6.5 7.3*	3.6 5.8*	4.2 5.8*	2.5 4.8		1.9* 1.9*	1.9* 1.9*	8.6
1.5	NLC SLC LC			5.0 9.2*	5.9 9.2*	3.4 6.6	3.9 6.7*	2.4 4.7		1.9 2.0*	2.0* 2.0*	8.7
0	NLC SLC LC	6.9* 6.9*	6.9* 6.9*	4.7 10.2	5.6 10.2*	3.2 6.4	3.7 6.5	2.3 4.6		1.9 2.3*	2.3* 2.3*	8.5
-1.5	NLC SLC LC	8.5 10.3*	10.3* 10.3*	4.6 10.0	5.4 10.2	3.1 6.3	3.6 6.4	2.3 4.6		2.1 2.6*	2.4 2.6*	8.0
-3.0	NLC SLC LC	8.7 14.1*	10.6 14.1*	4.6 9.6*	5.5 9.6*	3.1 6.3	3.6 6.4	2.9 4.6		2.6 2.6*	2.9 3.4*	7.2
-4.5	NLC SLC LC	9.0 11.0*	10.9 11.0*	4.8 7.7*	5.6 7.7*	3.9 6.4				3.4 5.3*	3.9 5.3*	5.8

## Stick 3.00 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
10.5	NLC SLC LC											
9.0	NLC SLC LC											
7.5	NLC SLC LC										2.0* 2.0*	2.0* 2.0*
6.0	NLC SLC LC									2.7 3.1*	3.1* 3.1*	7.8
4.5	NLC SLC LC					3.9 4.7*	4.5 4.7*	2.6 4.5*		3.1* 3.1*	3.1* 3.1*	8.5
3.0	NLC SLC LC			5.6 6.8*	6.5 6.8*	3.6 5.5*	4.2 5.5*	2.5 4.8		4.7* 4.7*	3.3 4.5*	8.9
1.5	NLC SLC LC	7.2* 7.2*	7.2* 7.2*	5.1 8.8*	6.0 8.8*	3.4 6.5*	3.9 6.5*	2.4 4.7		4.5 5.5*	3.1 4.9*	9.0
0	NLC SLC LC	7.1* 7.1*	7.1* 7.1*	4.7 10.0*	5.6 10.0*	3.1 6.4	3.7 6.5	2.3 4.6		7.2* 7.2*	6.4 8.8*	8.8
-1.5	NLC SLC LC	8.4 9.8*	9.8* 9.8*	4.5 10.0	5.4 10.2	3.0 6.2	3.6 6.4	2.2 4.5		7.1* 7.1*	6.0 10.0*	8.3
-3.0	NLC SLC LC	8.5 14.0*	10.4 14.0*	4.5 9.8*	5.4 9.8*	3.0 6.2	3.6 6.3	2.2 3.3*		8.4 9.8*	5.4 10.2	7.5
-4.5	NLC SLC LC	8.8 11.8*	10.7 11.8*	4.7 8.1*	5.5 8.1*	3.1 5.6*	3.7 5.6*	3.0 4.2*		9.8* 9.8*	5.8 10.2	6.3

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

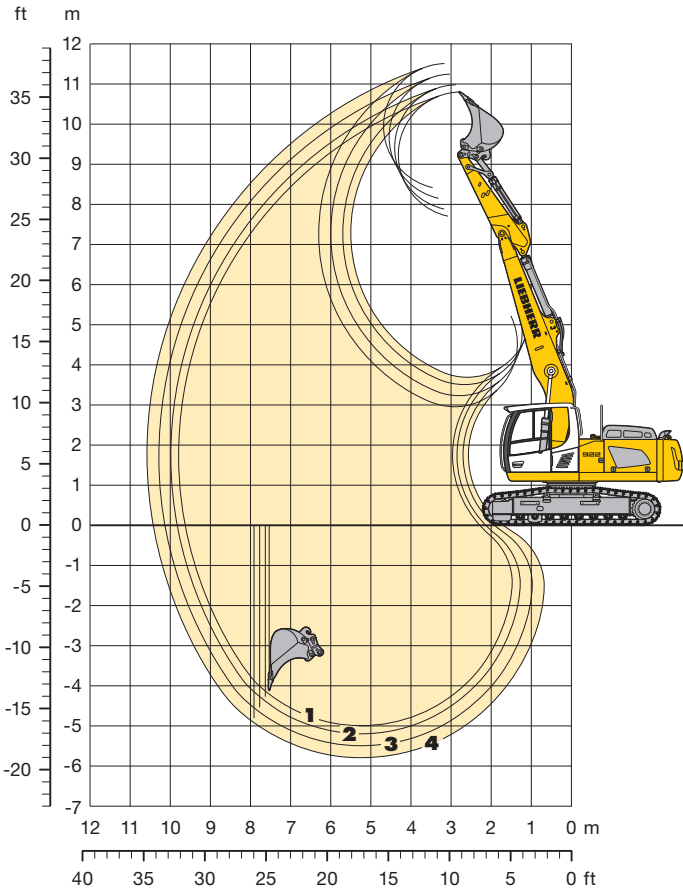
The lift capacities on the load lift hook of the Liebherr quick coupler 48 without attachment are stated in metric tonnes (t), and can be lifted 360° on firm, level supporting surface. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 500 mm/ 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 lift 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 280 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.

\* with SLC-/LC-Undercarriage

# Backhoe Bucket

with Straight Mono Boom 5.70 m



## Digging Envelope

		1	2	3	4
Stick length	m	2.20	2.40	2.70	3.00
Max. digging depth	m	5.00	5.20	5.50	5.80
Max. reach at ground level	m	9.60	9.80	10.10	10.40
Max. dump height	m	7.70	7.90	8.15	8.40
Max. teeth height	m	10.80	10.95	11.25	11.50

## Digging Forces

		1	2	3	4
Digging force ISO	kN	123	116	107	99
	t	12.5	11.8	10.9	10.1
Breakout force ISO	kN	149	149	149	149
	t	15.2	15.2	15.2	15.2

## Operating Weight and Ground Pressure

Operating weight includes basic machine with straight mono boom 5.70 m, stick 2.40 m, quick coupler 48 and bucket 0.80 m<sup>3</sup> (635 kg).

Undercarriage		NLC			SLC		
Pad width	mm	500	600	750	500	600	750
Weight	kg	21,350	21,650	22,050	21,450	21,750	22,150
Ground pressure	kg/cm <sup>2</sup>	0.54	0.46	0.37	0.55	0.46	0.38

Undercarriage		LC		
Pad width	mm	500	600	750
Weight	kg	21,500	21,800	22,200
Ground pressure	kg/cm <sup>2</sup>	0.55	0.46	0.38

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			
			Stick length (m)				Stick length (m)				Stick length (m)			
			2.20	2.40	2.70	3.00	2.20	2.40	2.70	3.00	2.20	2.40	2.70	3.00
650 <sup>1)</sup>	0.55	480	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>1)</sup>	0.60	520	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>1)</sup>	0.80	600	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>1)</sup>	1.00	685	□	□	△	△	□	□	□	□	□	□	□	□
1,400 <sup>1)</sup>	1.15	755	△	△	■	■	□	□	△	△	□	□	□	△
1,400 <sup>1)</sup>	1.35	780	■	■	▲	▲	△	△	■	■	△	△	△	■
1,500 <sup>1)</sup>	1.45	810	■	▲	▲	▲	△	■	■	■	△	△	■	■
650 <sup>2)</sup>	0.55	515	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>2)</sup>	0.60	550	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.80	635	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	1.00	715	△	△	△	■	□	□	△	□	□	□	□	□
1,400 <sup>2)</sup>	1.15	785	■	■	■	▲	△	△	△	■	□	□	△	△
1,400 <sup>2)</sup>	1.35	810	■	▲	▲	▲	■	■	■	▲	△	△	■	■
1,500 <sup>2)</sup>	1.45	840	▲	▲	▲	▲	■	■	■	▲	△	■	■	■

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

1) Standard bucket for direct mounting with teeth Z 35

2) Standard bucket for mounting to quick coupler 48 with teeth Z 35

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 5.70 m

### Stick 2.20 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
10.5	NLC SLC LC											
9.0	NLC SLC LC									4.3*	4.3*	4.2
7.5	NLC SLC LC			6.2	6.7*	3.8	4.6*			3.2*	3.2*	6.2
6.0	NLC SLC LC			6.1	7.0*	3.8	6.3*			2.6	2.9*	7.4
4.5	NLC SLC LC	10.9	12.1*	5.7	8.4*	3.7	6.7*	2.5	4.8	2.2	2.8*	8.1
3.0	NLC SLC LC			5.2	9.8*	3.4	6.7*	2.4	4.7	2.0	2.7*	8.5
1.5	NLC SLC LC			4.7	10.2	3.2	6.4	2.3	4.6	1.9	2.9*	8.6
0	NLC SLC LC			4.6	10.0	3.1	6.3	2.3	4.5	2.0	3.1*	8.4
-1.5	NLC SLC LC	8.2*	8.2*	4.6	8.8*	3.0	6.2	2.3	4.5	2.1	3.5*	7.9
-3.0	NLC SLC LC			4.7	6.7*	3.1	5.1*			2.6	3.5*	7.1
-4.5	NLC SLC LC			5.8	10.1*	3.6	6.4	2.9	4.6	2.5	3.1*	

### Stick 2.40 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
10.5	NLC SLC LC											
9.0	NLC SLC LC											
7.5	NLC SLC LC									3.9	5.0*	
6.0	NLC SLC LC									4.4	5.0*	
4.5	NLC SLC LC	9.4*	9.4*	5.8	8.1*	3.7	6.5*	2.5	4.8	2.1	2.5*	8.3
3.0	NLC SLC LC			5.2	9.6*	3.4	6.7	2.4	4.7	1.9	2.5*	8.7
1.5	NLC SLC LC			4.7	10.2	3.2	6.4	2.3	4.6	1.8	2.6*	8.8
0	NLC SLC LC			4.5	10.0	3.1	6.3	2.2	4.5	1.9	2.8*	8.6
-1.5	NLC SLC LC	7.9*	7.9*	4.5	9.0*	3.0	6.2	2.2	4.5	2.0	3.2*	8.1
-3.0	NLC SLC LC			4.8	8.4*	3.1	5.4*			2.4	3.4*	
-4.5	NLC SLC LC			5.8	10.2	3.9	6.4	2.8	4.6	2.4	2.8*	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
10.5	NLC SLC LC											
9.0	NLC SLC LC			5.2*	5.2*					3.2*	3.2*	5.2
7.5	NLC SLC LC									2.6*	2.6*	6.9
6.0	NLC SLC LC									2.3	2.3*	8.0
4.5	NLC SLC LC			5.8	6.9*	3.7	6.3*	2.5	4.8	2.0	2.2*	8.6
3.0	NLC SLC LC			5.3	9.2*	3.4	6.7	2.4	4.7	1.8	2.2*	9.0
1.5	NLC SLC LC			4.8	10.3	3.2	6.4	2.3	4.6	1.7	2.2*	9.1
0	NLC SLC LC			4.5	9.9	3.0	6.2	2.2	4.5	1.7	2.4*	8.9
-1.5	NLC SLC LC	7.5*	7.5*	4.5	9.3*	3.0	6.2	2.2	4.4	1.9	2.7*	8.5
-3.0	NLC SLC LC			4.6	9.4*	3.0	5.7*	2.3	3.8*	2.2	3.3*	7.7
-4.5	NLC SLC LC			5.8	10.1	3.9	6.4	2.8	4.6	2.2	2.4*	

### Stick 3.00 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
10.5	NLC SLC LC											
9.0	NLC SLC LC											
7.5	NLC SLC LC									4.0	4.8*	
6.0	NLC SLC LC									3.9	5.1*	
4.5	NLC SLC LC									4.5	5.1*	
3.0	NLC SLC LC									5.7*	5.7*	
1.5	NLC SLC LC									4.8	10.1*	
0	NLC SLC LC									4.5	9.9	
-1.5	NLC SLC LC	7.2*	7.2*	4.4	9.5*	2.9	6.1	2.1	4.4	1.7	2.3*	8.8
-3.0	NLC SLC LC									5.8	10.1	
-4.5	NLC SLC LC									4.6	5.2*	

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

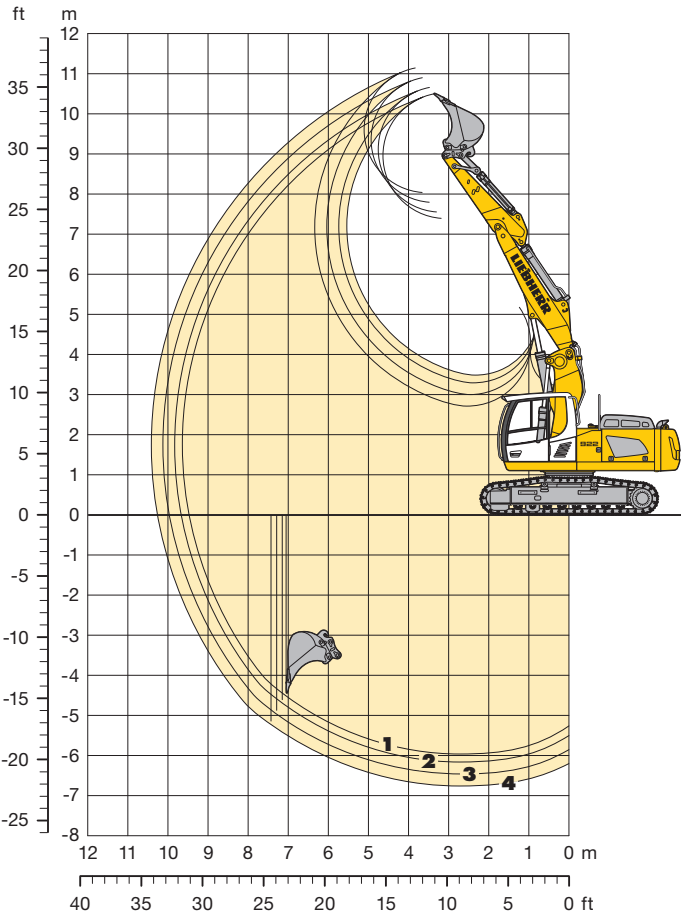
The lift capacities on the load lift hook of the Liebherr quick coupler 48 without attachment are stated in metric tonnes (t), and can be lifted 360° on firm, level supporting surface. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 500 mm/ 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 lift 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 280 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.

\* with SLC-/LC-Undercarriage

# Backhoe Bucket

with Two-piece Boom 3.60 m



## Digging Envelope

		1	2	3	4
Stick length	m	2.20	2.40	2.70	3.00
Max. digging depth	m	5.95	6.15	6.45	6.75
Max. reach at ground level	m	9.45	9.65	9.95	10.25
Max. dump height	m	7.40	7.55	7.80	8.05
Max. teeth height	m	10.50	10.65	10.90	11.15

## Digging Forces

		1	2	3	4
Digging force ISO	kN	123	116	107	99
	t	12.5	11.8	10.9	10.1
Breakout force ISO	kN	149	149	149	149
	t	15.2	15.2	15.2	15.2

## Operating Weight and Ground Pressure

Operating weight includes basic machine with heavy counterweight, two-piece boom 3.60 m, stick 2.40 m, quick coupler 48 and bucket 0.80 m<sup>3</sup> (635 kg).

Undercarriage		NLC			SLC		
Pad width	mm	500	600	750	500	600	750
Weight	kg	22,850	23,150	23,550	22,950	23,250	23,650
Ground pressure	kg/cm <sup>2</sup>	0.58	0.49	0.40	0.58	0.49	0.40

Undercarriage		LC		
Pad width	mm	500	600	750
Weight	kg	23,000	23,300	23,700
Ground pressure	kg/cm <sup>2</sup>	0.59	0.49	0.40

## 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			
			Stick length (m)				Stick length (m)				Stick length (m)			
			2.20	2.40	2.70	3.00	2.20	2.40	2.70	3.00	2.20	2.40	2.70	3.00
650 <sup>1)</sup>	0.55	480	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>1)</sup>	0.60	520	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>1)</sup>	0.80	600	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>1)</sup>	1.00	685	□	□	□	△	□	□	□	□	□	□	□	□
1,400 <sup>1)</sup>	1.15	755	△	△	△	■	□	□	□	△	□	□	□	□
1,400 <sup>1)</sup>	1.35	780	■	■	■	▲	△	△	△	■	□	□	△	△
1,500 <sup>1)</sup>	1.45	810	■	■	▲	▲	△	△	■	■	△	△	△	■
650 <sup>2)</sup>	0.55	515	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>2)</sup>	0.60	550	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.80	635	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	1.00	715	□	△	△	△	□	□	□	□	□	□	□	□
1,400 <sup>2)</sup>	1.15	785	△	△	■	■	□	□	△	△	□	□	□	△
1,400 <sup>2)</sup>	1.35	810	■	■	▲	▲	△	△	■	■	□	△	△	■
1,500 <sup>2)</sup>	1.45	840	■	▲	▲	▲	△	■	■	■	△	△	■	■

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

1) Standard bucket for direct mounting with teeth Z 35

2) Standard bucket for mounting to quick coupler 48 with teeth Z 35

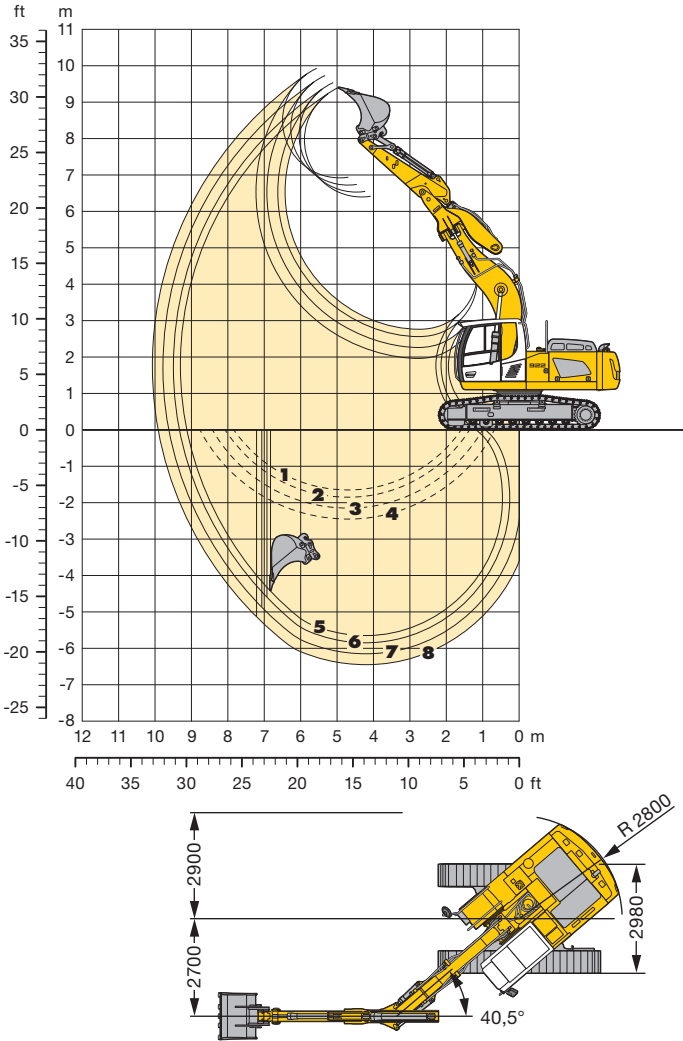
Other backhoes available on request

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



# Backhoe Bucket

with Offset Mono Boom 5.30 m



## Digging Envelope

		5	6	7	8
Stick length	m	2.20	2.40	2.70	3.00
Max. digging depth	m	5.65	5.85	6.15	6.45
Max. reach at ground level	m	9.15	9.35	9.60	9.90
Max. dump height	m	6.40	6.50	6.70	6.90
Max. teeth height	m	9.40	9.50	9.70	9.90

**1** Stick 2.20 m, **2** Stick 2.40 m  
**3** Stick 2.70 m, **4** Stick 3.00 m  
 at max. attachment offset with vertical ditch walls

## Digging Forces

		5	6	7	8
Digging force ISO	kN	123	116	107	99
	t	12.5	11.8	10.9	10.1
Breakout force ISO	kN	149	149	149	149
	t	15.2	15.2	15.2	15.2

## Operating Weight and Ground Pressure

Operating weight includes basic machine with heavy counterweight, offset mono boom 5.30 m, stick 2.40 m, quick coupler 48 and bucket 0.80 m<sup>3</sup> (635 kg).

Undercarriage	NLC			SLC			
Pad width	mm	500	600	750	500	600	750
Weight	kg	22,700	23,000	23,400	22,800	23,100	23,500
Ground pressure	kg/cm <sup>2</sup>	0.58	0.49	0.40	0.58	0.49	0.40

Undercarriage	LC			
Pad width	mm	500	600	750
Weight	kg	22,850	23,150	23,550
Ground pressure	kg/cm <sup>2</sup>	0.58	0.49	0.40

## 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			
			Stick length (m)				Stick length (m)				Stick length (m)			
			2.20	2.40	2.70	3.00	2.20	2.40	2.70	3.00	2.20	2.40	2.70	3.00
650 <sup>1)</sup>	0.55	480	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>1)</sup>	0.60	520	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>1)</sup>	0.80	600	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>1)</sup>	1.00	685	□	□	□	△	□	□	□	□	□	□	□	□
1,400 <sup>1)</sup>	1.15	755	□	△	△	■	□	□	△	□	□	□	□	□
1,400 <sup>1)</sup>	1.35	780	△	■	■	■	□	△	△	△	□	□	△	△
1,500 <sup>1)</sup>	1.45	810	■	■	■	▲	△	△	△	■	□	△	△	△
650 <sup>2)</sup>	0.55	515	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>2)</sup>	0.60	550	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.80	635	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	1.00	715	□	□	△	△	□	□	□	□	□	□	□	□
1,400 <sup>2)</sup>	1.15	785	△	△	■	■	□	□	△	△	□	□	□	△
1,400 <sup>2)</sup>	1.35	810	■	■	■	▲	△	△	△	■	□	△	△	△
1,500 <sup>2)</sup>	1.45	840	■	■	▲	▲	△	△	■	■	△	△	△	■

\* 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 35

<sup>2)</sup> Standard bucket for mounting to quick coupler 48 with teeth Z 35

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 Offset Mono Boom 5.30 m

### Stick 2.20 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
10.5	NLC SLC LC											
9.0	NLC SLC LC											
7.5	NLC SLC LC										2.8* 2.8* 2.8* 2.8* 2.8* 2.8*	5.4
6.0	NLC SLC LC					4.0 5.3* 4.6 5.3* 4.9 5.3*					2.5* 2.5* 2.5* 2.5* 2.5* 2.5*	6.8
4.5	NLC SLC LC			6.2 6.5* 6.5* 6.5*	6.5* 6.5*	3.9 5.6* 4.5 5.6* 4.8 5.6*	2.6 2.7* 2.7* 2.7*	2.7* 2.7*			2.4* 2.4* 2.4* 2.4*	7.5
3.0	NLC SLC LC	9.9 11.9 12.7*	12.7*	5.5 8.1* 6.5 8.1*	5.5 8.1*	3.8 6.2* 4.5 6.2*	2.5 4.9 2.9 5.0	3.1 5.0			2.2 2.5* 2.5* 2.5*	7.9
1.5	NLC SLC LC			4.9 9.4* 5.8 9.4*	4.9 9.4*	3.3 6.7 3.9 6.8	2.3 4.7 2.8 4.8	3.0 4.8			2.1 2.6* 2.5 2.6*	8.0
0	NLC SLC LC	7.3* 7.3* 7.3* 7.3*	7.3*	4.6 9.9* 5.5 9.9*	4.6 9.9*	3.1 6.5 3.7 6.6	2.3 4.6 2.7 4.7	3.1 5.0			2.1 3.0* 2.5 3.0*	7.8
-1.5	NLC SLC LC	8.5 12.2* 10.4 12.2*	4.5 9.5* 5.4 9.5*	3.0 6.4 3.6 6.5							2.3 3.6* 2.8 3.6*	7.3
-3.0	NLC SLC LC	8.7 11.1* 10.7 11.1*	4.6 8.1* 5.5 8.1*	3.1 5.8* 3.7 5.8*							2.9 5.1* 3.4 5.1*	6.4
-4.5	NLC SLC LC	11.1* 11.1*	6.0 8.1* 5.0 5.0*	4.0 5.8* 5.0* 5.0*							4.6* 4.6* 4.6* 4.6*	4.7

### Stick 2.40 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
10.5	NLC SLC LC											
9.0	NLC SLC LC											
7.5	NLC SLC LC										2.6* 2.6* 2.6* 2.6* 2.6* 2.6*	5.7
6.0	NLC SLC LC							4.1 5.1* 4.5 5.4* 4.7 5.1*			2.3* 2.3* 2.3* 2.3* 2.3* 2.3*	7.0
4.5	NLC SLC LC			6.2 6.5* 6.5* 6.5*	6.5* 6.5*	3.9 5.6* 4.5 5.6* 4.8 5.6*	2.6 2.7* 2.7* 2.7*	2.7* 2.7*			2.4* 2.4* 2.4* 2.4*	7.5
3.0	NLC SLC LC	10.2 12.3 12.6*	12.6*	5.6 8.1* 6.5 8.1*	5.6 8.1*	3.8 6.2* 4.5 6.2*	2.5 4.9 2.9 5.0	3.1 5.0			2.2 2.5* 2.5* 2.5*	7.9
1.5	NLC SLC LC			4.9 9.4* 5.8 9.4*	4.9 9.4*	3.3 6.7 3.9 6.8	2.3 4.7 2.8 4.8	3.0 4.8			2.1 2.6* 2.5 2.6*	8.0
0	NLC SLC LC	7.5* 7.5* 7.5* 7.5*	7.5*	4.6 9.9* 5.5 9.9*	4.6 9.9*	3.1 6.5 3.7 6.6	2.3 4.6 2.7 4.7	3.1 5.0			2.1 3.0* 2.5 3.0*	7.8
-1.5	NLC SLC LC	8.4 11.7* 10.3 11.7*	4.5 9.5* 5.3 9.5*	3.0 6.3 3.6 6.5							2.3 3.6* 2.8 3.6*	7.3
-3.0	NLC SLC LC	8.6 11.6* 10.6 11.6*	4.5 8.3* 5.4 8.3*	3.0 6.0* 3.6 6.0*							2.9 5.1* 3.4 5.1*	6.4
-4.5	NLC SLC LC	11.6 11.6*	5.9 8.3* 4.9 5.6* 5.6* 5.6*	4.0 5.8* 5.0* 5.0*							4.6* 4.6* 4.6* 4.6*	4.7

### Stick 2.70 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
10.5	NLC SLC LC											
9.0	NLC SLC LC											
7.5	NLC SLC LC					2.9* 2.9* 2.9* 2.9*					2.2* 2.2* 2.2* 2.2* 2.2* 2.2*	6.2
6.0	NLC SLC LC					4.1 4.8* 4.7 4.8*					2.0* 2.0* 2.0* 2.0*	7.3
4.5	NLC SLC LC					4.0 5.1* 4.6 5.1* 4.9 5.1*	2.6 4.3* 3.1 4.3* 3.3 4.3*	2.6 4.3*			1.9* 1.9* 1.9* 1.9* 1.9* 1.9*	8.1
3.0	NLC SLC LC	10.7 11.5* 11.5* 11.5*	5.7 7.4* 7.1 7.4*	3.6 5.8* 4.2 5.8*	2.5 4.9 2.9 5.0	3.1 5.0					1.9* 1.9* 1.9* 1.9*	8.4
1.5	NLC SLC LC	6.9* 6.9* 6.9* 6.9*	5.0 9.0* 5.9 9.0*	3.3 6.5* 3.9 6.5*	2.3 4.7 2.8 4.8	3.0 4.8					1.9 2.1* 2.1* 2.1*	8.5
0	NLC SLC LC	7.7* 7.7* 7.7* 7.7*	4.6 9.7* 5.5 9.7*	3.1 6.5 3.6 6.6	2.2 4.6 2.6 4.7	3.0 4.8					1.9 2.3* 2.2 2.3*	8.3
-1.5	NLC SLC LC	10.1 11.1* 11.1* 11.1*	4.4 9.6* 5.3 9.6*	2.9 6.3 3.5 6.4	2.2 4.5 2.6 4.6						2.0 2.7* 2.4 2.7*	7.9
-3.0	NLC SLC LC	8.5 12.3* 10.4 12.3*	4.5 8.6* 5.3 8.6*	3.0 6.2* 3.5 6.2*							2.4 3.5* 2.9 3.5*	7.0
-4.5	NLC SLC LC	8.8* 8.8* 8.8* 8.8*	4.7 6.3* 5.6 6.3*	3.8 6.2* 5.8 6.2*							3.1 3.5* 4.1 4.4*	5.6

### Stick 3.00 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
10.5	NLC SLC LC											
9.0	NLC SLC LC											
7.5	NLC SLC LC					3.6* 3.6* 3.6* 3.6*					1.9* 1.9* 1.9* 1.9*	6.6
6.0	NLC SLC LC							2.5* 2.5* 2.5* 2.5*			1.8* 1.8* 1.8* 1.8*	7.7
4.5	NLC SLC LC							4.0 4.9* 4.6 4.9* 4.9* 4.9*	2.5 4.8* 3.1 4.4* 3.3 4.4*		1.7* 1.7* 1.7* 1.7* 1.7* 1.7*	8.4
3.0	NLC SLC LC	10.4* 10.4* 10.4* 10.4*	5.7 7.4* 7.0* 7.4*	3.6 5.8* 4.2 5.8*	2.5 4.9 2.9 5.0	3.1 5.0					1.7* 1.7* 1.7* 1.7*	8.7
1.5	NLC SLC LC	8.8* 8.8* 8.8* 8.8*	5.1 9.0* 5.9 9.0*	3.3 6.5* 3.9 6.5*	2.3 4.7 2.8 4.8	3.0 4.8					1.9 2.1* 2.1* 2.1*	8.5
0	NLC SLC LC	8.0* 8.0* 8.0* 8.0*	4.6 9.6* 5.5 9.6*	3.1 6.5 3.6 6.6	2.2 4.6 2.6 4.7	3.0 4.8					1.9 2.3* 2.2 2.3*	8.3
-1.5	NLC SLC LC	8.1 10.6* 10.0 10.6*	4.4 9.6* 5.2 9.6*	2.9 6.3 3.5 6.4	2.1 4.5 2.5 4.6						2.0 2.7* 2.4 2.7*	7.9
-3.0	NLC SLC LC	8.3 12.9* 10.2 12.9*	4.4 8.8* 5.3 8.8*	3.0 6.2* 3.5 6.2*							2.4 3.5* 2.9 3.5*	7.0
-4.5	NLC SLC LC	8.7 9.7* 9.7* 9.7*	4.6 6.8* 5.5 6.8*	3.1 4.5* 3.7 4.5*							3.1 4.4* 3.6 4.4*	6.1

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

The lift capacities on the load lift 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 500 mm/ 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 lift 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 280 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.

\* with SLC-/LC-Undercarriage

# Lift Capacities

## with Mono Boom 5.40 m and Heavy Counterweight

### Stick 2.20 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	SLC	LC	SLC	LC	SLC	LC	SLC	LC	SLC	
10.5	NLC SLC LC											
9.0	NLC SLC LC											
7.5	NLC SLC LC									2.8*	2.8*	5.6
6.0	NLC SLC LC					4.2	5.1*			2.5*	2.5*	6.9
4.5	NLC SLC LC					4.1	5.5*	2.8	3.7*	2.4*	2.4*	7.7
3.0	NLC SLC LC			5.8	8.1*	3.8	6.3*	2.7	5.1	2.4*	2.5*	8.1
1.5	NLC SLC LC			5.4	9.8*	3.6	7.0	2.6	5.0	2.3	2.6*	8.2
0	NLC SLC LC	6.3*	6.3*	5.1	10.5*	3.5	6.8	2.5	4.9	2.3	2.9*	8.0
-1.5	NLC SLC LC	11.3*	11.3*	5.0	10.3*	3.4	6.7			2.6	3.5*	7.5
-3.0	NLC SLC LC	9.6	13.1*	5.1	9.2*	3.4	6.7*			3.1	4.8*	6.6
-4.5	NLC SLC LC	9.4*	9.4*	6.6*	6.6*					3.6	4.8*	5.1

### Stick 2.40 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	SLC	LC	SLC	LC	SLC	LC	SLC	LC	SLC	
10.5	NLC SLC LC											
9.0	NLC SLC LC											
7.5	NLC SLC LC											2.6*
6.0	NLC SLC LC					4.2	4.8*					2.6*
4.5	NLC SLC LC					4.1	5.3*	2.8	4.3*			2.6*
3.0	NLC SLC LC	10.6	12.9*	5.9	7.8*	3.9	6.1*	2.7	5.1			2.6*
1.5	NLC SLC LC	6.6*	6.6*	6.0	10.4*	4.0	6.9	2.9	5.0			2.2*
0	NLC SLC LC	11.3*	11.3*	5.0	10.3*	3.4	6.7	2.5	4.8			2.2*
-1.5	NLC SLC LC	9.6	13.1*	5.1	9.2*	3.4	6.7*					2.2*
-3.0	NLC SLC LC	9.4*	9.4*	6.6*	6.6*							2.2*
-4.5	NLC SLC LC	9.4*	9.4*	6.6*	6.6*							2.2*

### Stick 2.70 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	SLC	LC	SLC	LC	SLC	LC	SLC	LC	SLC	
10.5	NLC SLC LC											
9.0	NLC SLC LC											
7.5	NLC SLC LC									2.2*	2.2*	6.3
6.0	NLC SLC LC									2.0*	2.0*	7.5
4.5	NLC SLC LC					4.1	5.0*	2.8	4.7*	1.9*	1.9*	8.2
3.0	NLC SLC LC	11.0	11.5*	6.0	7.3*	3.9	5.8*	2.7	5.1*	1.9*	1.9*	8.6
1.5	NLC SLC LC	6.9*	6.9*	6.0	10.2*	4.0	6.9	2.9	4.9	2.0*	2.0*	8.7
0	NLC SLC LC	9.2	10.3*	5.0	10.4*	3.3	6.7	2.5	4.8	2.1*	2.3*	8.5
-1.5	NLC SLC LC	10.3*	10.3*	5.9	10.4*	3.9	6.8	2.9	4.9	2.6*	2.6*	8.0
-3.0	NLC SLC LC	9.4	14.1*	5.0	9.6*	3.3	6.7			2.6*	3.4*	7.2
-4.5	NLC SLC LC	9.7	11.0*	5.2	7.7*					3.6	5.3*	5.8

### Stick 3.00 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	SLC	LC	SLC	LC	SLC	LC	SLC	LC	SLC	
10.5	NLC SLC LC											
9.0	NLC SLC LC											
7.5	NLC SLC LC											2.0*
6.0	NLC SLC LC											2.0*
4.5	NLC SLC LC											2.0*
3.0	NLC SLC LC	7.2*	7.2*	5.5	8.8*	3.9	5.5*	2.7	4.9*			1.8*
1.5	NLC SLC LC	7.2*	7.2*	6.4	8.8*	4.5	6.5*	3.2	4.9*			1.8*
0	NLC SLC LC	7.1*	7.1*	6.0	10.0*	4.0	6.9	2.9	4.9			1.8*
-1.5	NLC SLC LC	9.1	9.8*	4.9	10.3*	3.3	6.6	2.4	4.7			1.8*
-3.0	NLC SLC LC	9.2	14.0*	5.8	9.8*	3.3	6.6	2.4	3.3*			1.8*
-4.5	NLC SLC LC	9.5	11.8*	5.0	8.1*	3.4	5.6*					1.8*

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

The lift capacities on the load lift 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 500 mm/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 lift 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 280 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.

\* with SLC-/LC-Undercarriage



# Lift Capacities

with Straight Mono Boom 5.70 m and Heavy Counterweight

## Stick 2.20 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	SLC	LC	SLC	LC	SLC	LC	SLC	LC	SLC	
10.5	NLC SLC LC											
9.0	NLC SLC LC									4.3*	4.3*	4.2
7.5	NLC SLC LC			6.6 6.7*	6.7*	4.1 4.6*	4.6*			3.2*	3.2*	6.2
6.0	NLC SLC LC			6.5 7.0*	7.0*	4.1 4.7	6.3*			2.8 2.9*	2.9*	7.4
4.5	NLC SLC LC	11.6 12.1*	12.1*	6.1 7.0	8.4*	3.9 4.5	6.7*	2.7 3.2	5.1 5.2	2.4 2.8*	2.8*	8.1
3.0	NLC SLC LC			5.6 6.5	9.8*	3.7 4.3	7.1 7.2	2.6 3.1	5.0 5.1	2.2 2.5	2.7*	8.5
1.5	NLC SLC LC			5.1 6.0	10.5*	3.5 4.0	6.8 6.9	2.5 2.9	4.9 5.0	2.1 2.4	2.9*	8.6
0	NLC SLC LC			4.9 5.8	10.1*	3.3 3.9	6.7 6.8	2.5 2.9	4.8 4.9	2.1 2.5	3.1*	8.4
-1.5	NLC SLC LC	8.2*	8.2*	4.9 5.8	8.8*	3.3 3.9	6.6 6.7*	2.5 2.9	4.8 4.9	2.3 2.7	3.5*	7.9
-3.0	NLC SLC LC			5.0 5.9	6.7*	3.4 3.9	5.1*			2.8 3.2	3.5*	7.1
-4.5	NLC SLC LC			6.4	6.7*	4.2	5.1*			3.4	3.5*	

## Stick 2.40 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	SLC	LC	SLC	LC	SLC	LC	SLC	LC	SLC	
10.5	NLC SLC LC											
9.0	NLC SLC LC									4.5*	4.5*	4.6
7.5	NLC SLC LC							4.1 4.7	5.0*			6.5
6.0	NLC SLC LC					6.3*	6.3*	4.1 6.3*	6.1*	2.8 3.4	3.5*	7.6
4.5	NLC SLC LC	9.4*	9.4*	6.1 7.1	8.1*	3.9 4.5	6.5*	2.7 3.2	5.1 5.2	2.3 2.5*	2.5*	8.3
3.0	NLC SLC LC			5.6 6.5	9.6*	3.7 4.3	7.1*	2.6 3.1	5.0 5.1	2.4 2.5	2.5*	8.7
1.5	NLC SLC LC			5.1 6.0	10.4*	3.5 4.0	6.8 6.9	2.5 2.9	4.9 5.0	2.0 2.3	2.6*	8.8
0	NLC SLC LC			4.9 5.8	10.2*	3.3 3.9	6.6 6.8	2.4 2.9	4.8 4.9	2.0 2.4	2.8*	8.6
-1.5	NLC SLC LC	7.9*	7.9*	4.9 5.8	9.0*	3.3 3.8	6.6 6.7	2.4 2.8	4.8 4.9	2.2 2.6	3.2*	8.1
-3.0	NLC SLC LC	8.4*	8.4*	5.0 5.9	7.0*	3.3 3.9	5.4*			2.6 3.0	3.4*	7.3
-4.5	NLC SLC LC			6.3	7.0*	4.2	5.4*			3.2	3.4*	

## Stick 2.70 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	SLC	LC	SLC	LC	SLC	LC	SLC	LC	SLC	
10.5	NLC SLC LC											
9.0	NLC SLC LC			5.2*	5.2*					3.2*	3.2*	5.2
7.5	NLC SLC LC					4.2 4.8	5.0*			2.6*	2.6*	6.9
6.0	NLC SLC LC					4.1 4.7	5.7*	2.8 3.2	4.3*	2.3*	2.3*	8.0
4.5	NLC SLC LC			6.2 6.9*	6.9*	4.0 4.5	6.3*	2.8 3.2	5.1 5.2	2.1 2.2*	2.2*	8.6
3.0	NLC SLC LC			5.7 6.6	9.2*	3.7 4.3	6.9*	2.6 3.1	5.0 5.1	1.9 2.2*	2.2*	9.0
1.5	NLC SLC LC			5.2 6.1	10.3*	3.5 4.0	6.8 6.9	2.5 2.9	4.8 4.9	1.9 2.2	3.0*	9.1
0	NLC SLC LC			4.9 5.8	10.3*	3.3 3.9	6.6 6.8	2.4 2.8	4.7 4.8	1.9 2.2	2.4*	8.9
-1.5	NLC SLC LC	7.5*	7.5*	4.8 5.7	9.3*	3.2 3.8	6.5 6.7	2.4 2.8	4.7 4.8	2.1 2.4	2.7*	8.5
-3.0	NLC SLC LC	9.3	9.4*	4.9 5.8	7.5*	3.3 3.8	5.7*	2.5 2.9	3.8*	2.4 2.8	3.3*	7.7
-4.5	NLC SLC LC			6.2	7.5*	4.1	5.7*	3.1	3.8*	3.0	3.3*	

## Stick 3.00 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		LC	SLC	LC	SLC	LC	SLC	LC	SLC	LC	SLC	
10.5	NLC SLC LC											
9.0	NLC SLC LC											5.7
7.5	NLC SLC LC					4.2 4.8*	4.8*					7.3
6.0	NLC SLC LC					4.2 4.8	5.1*	2.8 3.3	4.4*			8.3
4.5	NLC SLC LC			5.7*	5.7*	4.0 4.6	5.9*	3.2 3.2	5.2			9.0
3.0	NLC SLC LC			5.7 6.6	8.9*	3.7 4.3	6.7*	2.6 3.0	5.0 5.1	1.9 2.3	3.6*	9.3
1.5	NLC SLC LC			5.2 6.1	10.1*	3.5 4.0	6.8 6.9	2.5 2.9	4.8 4.9	1.9 2.2	3.7	9.4
0	NLC SLC LC			4.9 5.8	10.3*	3.3 3.8	6.6 6.7	2.4 2.8	4.7 4.8	1.8 2.2	3.7	9.2
-1.5	NLC SLC LC	7.2*	7.2*	4.8 5.7	9.5*	3.2 3.7	6.5 6.6	2.3 2.8	4.7 4.8	1.9 2.2	2.3*	8.8
-3.0	NLC SLC LC	9.1	10.3*	4.8 5.7	7.9*	3.2 3.8	5.9*	2.4 2.8	4.2*			8.0
-4.5	NLC SLC LC			5.0 5.2*	5.2*	3.3 3.7*				3.1 3.3*	3.3*	6.3

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

The lift capacities on the load lift 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 500 mm/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 lift 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 280 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.

\* with SLC-/LC-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			
			2.20	Stick length (m) 2.40 2.70 3.00			2.20	Stick length (m) 2.40 2.70 3.00			2.20	Stick length (m) 2.40 2.70 3.00		
<b>Mono Boom 5.40 m</b>														
650 <sup>1)</sup>	0.55	545	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>1)</sup>	0.60	585	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>1)</sup>	0.80	675	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>1)</sup>	1.00	770	□	□	△	△	□	□	□	□	□	□	□	□
1,400 <sup>1)</sup>	1.15	850	△	△	■	■	□	□	□	△	□	□	□	□
1,400 <sup>1)</sup>	1.35	890	■	■	■	▲	△	△	△	■	□	□	△	△
1,500 <sup>1)</sup>	1.45	930	■	■	▲	▲	△	△	■	■	△	△	△	■
650 <sup>2)</sup>	0.55	575	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>2)</sup>	0.60	615	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.80	705	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	1.00	800	□	△	△	△	□	□	□	□	□	□	□	□
1,400 <sup>2)</sup>	1.15	880	△	■	■	■	□	□	△	△	□	□	□	△
1,400 <sup>2)</sup>	1.35	920	■	■	▲	▲	△	△	■	■	△	△	△	■
1,500 <sup>2)</sup>	1.45	960	■	▲	▲	▲	■	■	■	▲	△	△	■	■
<b>Straight Mono Boom 5.70 m</b>														
650 <sup>1)</sup>	0.55	545	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>1)</sup>	0.60	585	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>1)</sup>	0.80	675	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>1)</sup>	1.00	770	□	△	△	△	□	□	□	△	□	□	□	□
1,400 <sup>1)</sup>	1.15	850	△	■	■	■	□	△	△	■	□	□	△	△
1,400 <sup>1)</sup>	1.35	890	■	■	▲	▲	△	■	■	■	△	△	■	■
1,500 <sup>1)</sup>	1.45	930	▲	▲	▲	▲	■	■	■	▲	△	■	■	■
650 <sup>2)</sup>	0.55	575	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>2)</sup>	0.60	615	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.80	705	□	□	△	△	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	1.00	800	△	△	■	■	□	□	△	△	□	□	□	△
1,400 <sup>2)</sup>	1.15	880	■	■	▲	▲	△	△	■	■	□	△	△	■
1,400 <sup>2)</sup>	1.35	920	▲	▲	▲	▲	■	■	■	▲	△	■	■	■
1,500 <sup>2)</sup>	1.45	960	▲	▲	▲	▲	■	■	▲	▲	■	■	■	▲

\* 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 35

<sup>2)</sup> HD bucket for mounting to quick coupler 48 with teeth Z 35

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 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			
			2.20	Stick length (m) 2.40 2.70 3.00			2.20	Stick length (m) 2.40 2.70 3.00			2.20	Stick length (m) 2.40 2.70 3.00		
<b>Two-piece Boom 3.60 m</b>														
650 <sup>1)</sup>	0.55	545	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>1)</sup>	0.60	585	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>1)</sup>	0.80	675	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>1)</sup>	1.00	770	□	□	△	△	□	□	□	□	□	□	□	□
1,400 <sup>1)</sup>	1.15	850	△	△	■	■	□	□	△	△	□	□	□	□
1,400 <sup>1)</sup>	1.35	890	■	■	■	▲	△	△	△	■	□	△	△	△
1,500 <sup>1)</sup>	1.45	930	■	■	▲	▲	△	■	■	■	△	△	△	■
650 <sup>2)</sup>	0.55	575	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>2)</sup>	0.60	615	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.80	705	□	□	□	△	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	1.00	800	□	△	△	■	□	□	□	△	□	□	□	□
1,400 <sup>2)</sup>	1.15	880	△	■	■	▲	□	△	△	■	□	□	△	△
1,400 <sup>2)</sup>	1.35	920	■	▲	▲	▲	△	■	■	■	△	△	△	■
1,500 <sup>2)</sup>	1.45	960	▲	▲	▲	▲	■	■	■	▲	△	△	■	■
<b>Offset Mono Boom 5.30 m</b>														
650 <sup>1)</sup>	0.55	545	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>1)</sup>	0.60	585	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>1)</sup>	0.80	675	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>1)</sup>	1.00	770	□	□	△	△	□	□	□	□	□	□	□	□
1,400 <sup>1)</sup>	1.15	850	△	△	■	■	□	□	□	△	□	□	□	□
1,400 <sup>1)</sup>	1.35	890	■	■	■	▲	△	△	△	■	□	□	△	△
1,500 <sup>1)</sup>	1.45	930	■	■	▲	▲	△	△	■	■	△	△	△	■
650 <sup>2)</sup>	0.55	575	□	□	□	□	□	□	□	□	□	□	□	□
850 <sup>2)</sup>	0.60	615	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.80	705	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	1.00	800	□	△	△	■	□	□	□	□	□	□	□	□
1,400 <sup>2)</sup>	1.15	880	△	■	■	■	□	□	△	△	□	□	□	△
1,400 <sup>2)</sup>	1.35	920	■	■	▲	▲	△	△	■	■	△	△	△	■
1,500 <sup>2)</sup>	1.45	960	■	▲	▲	▲	△	■	■	▲	△	△	■	■

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

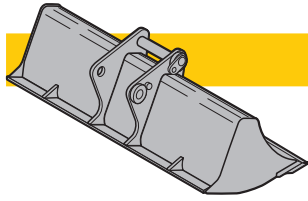
1) HD bucket for direct mounting with teeth Z 35

2) HD bucket for mounting to quick coupler 48 with teeth Z 35

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



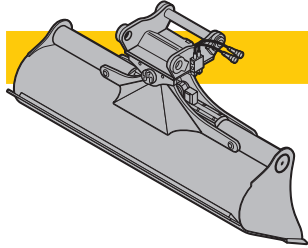
## Rigid Ditchcleaning Bucket

### GRL 90, for direct mounting

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

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

Cutting width	mm	1,500	1,500	2,000	2,000	2,000	2,400	2,400
Capacity	m <sup>3</sup>	0.50	0.95	0.70	1.20	1.25	0.85	1.15
Weight	kg	430	560	400	640	600	600	650



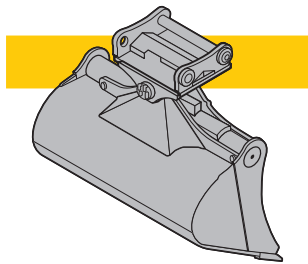
## Ditchcleaning Bucket

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

Cutting width	mm	1,600	1,600	2,000	2,000	2,000	2,200	2,400
Capacity	m <sup>3</sup>	0.55	0.80	0.50	0.70	1.00	0.80	0.85
Weight	kg	650	790	610	800	870	800	870

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

Cutting width	mm	1,600	1,600	2,000	2,000	2,200	2,200	2,400
Capacity	m <sup>3</sup>	0.55	0.80	0.50	1.00	0.80	1.15	0.85
Weight	kg	730	850	740	870	870	970	930



## Tiltable Bucket

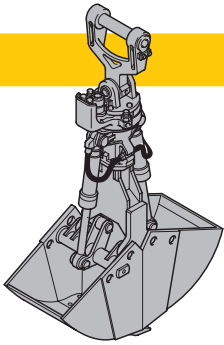
### SL 90, 2 x 50° tiltable, for direct mounting

Cutting width	mm	1,500	1,600	1,600
Capacity	m <sup>3</sup>	1.20	0.80	1.00
Weight	kg	–	750	810
Weight in HD-version	kg	870	–	–

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

Cutting width	mm	1,500	1,600	1,600	1,600
Capacity	m <sup>3</sup>	1.20	0.80	1.00	0.80
Weight	kg	870	820	870	–
Weight in HD-version	kg	–	–	–	950

# Available Tools



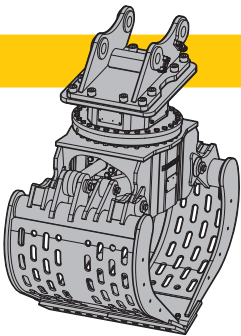
## Clamshells

### GM 10B, earthmoving shells, for mounting to quick coupler 48

Cutting width	mm	320	400	600	800	1,000
Capacity	m <sup>3</sup>	0.17	0.22	0.35	0.45	0.60
Weight	kg	795	835	885	940	995

### GM 10B, round hole shells, for mounting to quick coupler 48

Cutting width	mm	600	800	1,000	1,200	1,500	1,900
Capacity	m <sup>3</sup>	0.10	0.15	0.20	0.25	0.30	0.30
Weight	kg	500	500	500	500	500	500



## Sorting Grapple

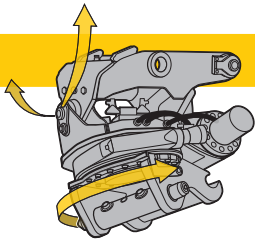
Ribbed

Perforated

Gravel tongs

### SG 25, for mounting to quick coupler 48

Cutting width	mm	800	1,000	800	1,000	800
Capacity	m <sup>3</sup>	0.50	0.65	0.55	0.75	0.60
Weight	kg	1,000	1,080	990	1,070	1,170



## Tiltrotator

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

Weight	kg	720
Rotation		360°
Tilt		2 x 50°

# Standard Equipment



## Undercarriage

Lashing eyelets  
Sprocket with dirt ejector  
Track guide (one piece per track frame)  
Track rollers, lifetime-lubricated  
Tracks, sealed and greased



## Uppercarriage

Engine hood with gas strut  
Handrails  
Non slip surfaces  
Sound insulation  
Storage box, lockable  
Swing brake lock, maintenance-free



## Hydraulics

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



## Engine

Common-Rail injection system  
Conform with stage IIIB emission standard  
Engine idling, automatic, sensor-controlled  
Fuel filter and water separator  
Intercooler  
Stepless adjustable engine speed  
Turbo charger



## Operator's Cab

7" colour multifunction display with touchscreen  
Air conditioning, automatic  
Cigarette lighter and ashtray  
Coat hook  
Cup holder  
Fuel consumption indicator  
Headlights (two pieces, Halogen)  
Hour meters, readable from outside the cab  
Hydraulic Suspension  
Interior light  
LiDAT Plus (Liebherr data transfer system) \*  
Operator seat "Comfort"  
Preparation for radio installation  
Rain hood over front window opening  
Rear view monitoring camera  
Rear window emergency exit  
Roll-down sun blind  
Roof window, right window and windshield with safety glass  
ROPS safety cab structure (ISO 12117-2)  
Rubber floor mat  
Seat belt  
Sliding windows in cab door  
Storage bin  
Storage space  
Tinted windows  
Windscreen, totally or partially retractable  
Wiper/washer



## Attachment

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

\* optionally extendable after one year

# Individual Options



## Undercarriage

- Chain kit, reinforced (D 6 C)
- Cover and base protection plates
- Steps, wide version
- Storage box
- Track guides (three pieces per track frame)
- Track pads, angled or chamfered
- Track pads, rubber version



## Uppercarriage

- Additional right-hand rearview mirror
- Additional headlights on uppercarriage (Halogen or LED) with protection
- Bottom and lateral protection for uppercarriage
- Camera for side area monitoring
- Customized colors
- Diesel refuelling pump (electric)
- Electric socket for external start-up aid
- Fan drive, reversible
- Fine filter protection grid for radiator
- Fuel anti-theft device
- Fuel tank cap lockable with padlock
- Heavy counterweight
- Tool kit, extended version
- Walkway, foldable
- Wiggins quick-coupling for fuel



## Hydraulics

- Hydraulic bypass fine filter
- Liebherr hydraulic oil, adapted for extreme climate conditions
- Liebherr hydraulic oil, biodegradable
- Preheating for hydraulic oil



## Engine

- Air pre-filter with dust trap
- Automatic engine shut-down on idle (adjustable)
- Engine shut-down self-timer
- Liebherr particle filter
- Preheating for fuel, coolant and engine oil
- Wiggins quick coupling for engine oil



## Operator's Cab

- Additional front and/or rear cab headlights (Halogen or LED)
- Amber beacon
- Auxiliary heater (programmable)
- Electric cool box (12 V)
- Electronic immobilizer
- Emergency stop button in cab

- Falling objects protection structure (FOPS)
- Fire extinguisher
- First-aid kit
- Footrest
- Four-point harness
- Front guard protection structure (FGPS)
- Front headlights (two pieces, LED)
- Handrest for joysticks
- Impact-resistant front window (one piece, non removable)
- Impact-resistant front window (two pieces, non removable)
- Impact-resistant roof window
- Integral protection guard
- Liebherr proportional control
- Operator seat "Premium"
- Radio "Comfort"
- Roof window wiper
- Sun visor
- Sunshield on cab roof
- Switchable high-pressure control
- Travel alarm



## Attachment

- Additional headlight on boom (left, Halogen or LED)
- Automatic lubrication system for connecting link
- Bottom protection for stick
- Cylinders check valve
- Double-side middle-pressure couplings on stick
- Eyelet on boom or stick
- Filter for hydraulic hammer return flow
- Headlight on boom (right, LED)
- Headlights protection
- High pressure circuit
- Hoist cylinder stroke limitation, adjustable
- Hoist cylinders float position
- Hydraulic circuit for grapple
- Hydraulic or mechanical quick coupler
- Leak return line for tools
- Liebherr bucket range
- Liebherr Tool Control, 10 tool adjustments selectable via display
- Liebherr Tool Management, automatic tool recognition (in combination with LIKUFIX)
- Liebherr tooth system
- LIKUFIX (quick-coupling system for hydraulic tools)
- Load valve for bucket cylinder
- Lubricant hoses protection on stick
- Middle pressure circuit
- Offset mono boom
- Overload warning device
- Piston rod protection for adjustable cylinder
- Piston rod protection for bucket cylinder
- Piston rod protection for stick cylinder
- Protection for quick change-couplings, sideways on stick
- Safety check valves for hoist cylinder
- Safety check valves for stick cylinder
- Stick cylinder stroke limitation, adjustable
- Sticks, sealed version
- Straight mono boom
- 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 130 companies with over 41,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

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

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