

# Wheeled Excavator

**A 928**  
Litronic®

Operating Weight: 26,500 – 27,600 kg  
Engine Output: 155 kW / 211 HP  
Bucket Capacity: 0.55 – 1.70 m<sup>3</sup>



# LIEBHERR



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## Performance

Liebherr wheeled excavators have the performance to get building work done faster. The above-average high lift capacity and the large digging forces deliver extraordinary productivity in application. More performance for greater efficiency.

## Reliability

Diesel engine, hydraulic components, electronic components, swing ring, swing drive and steel structure: developed, tested and produced by Liebherr. This produces the high quality you have come to expect, for a long service life and maximum machine availability. Greater quality for higher reliability.

## Comfort

The newly developed Liebherr operator's cab offers the machine operator the necessary space and comfort to make optimum use of the machine's performance. The operator seat offers the following features as standard, amongst others: air suspension, seat heating and lumbar support. Greater comfort for higher performance.

## Efficiency

The A 928 Litronic combines outstanding performance with high efficiency. The powerful Liebherr D 934 L diesel engine in conjunction with the efficient Liebherr particle filter reduces emissions and operating costs.







#### Travel drive

- Newly developed travel drive with high traction force for high travel speeds both in the plane and on gradients.
- Reduces unproductive travel time between the working points and on the building site.
- Faster on site. Faster productive.





# Performance

Liebherr wheeled excavators are used on building sites all over the world, where they embody force and speed. Using Liebherr excavators, machine operators achieve impressive levels of performance, day-in and day-out. Whether in classic earthmoving, in roadway construction or for digging trenches and laying pipes: more can be achieved faster with Liebherr wheeled excavators.

## Power, dynamics and precision

### Lifting more

The intelligent structure of the uppercarriage and separate mounting of the hoist cylinders permits a significant lift capacity. That makes the A 928 Litronic the ideal machine for pipeline and trenching workplaces. The most powerful wheeled excavator in its class can effortlessly accomplish tasks such as lifting and moving precast concrete elements and pipes or pulling out shoring boxes.

### Being more efficient

The A 928 Litronic combines power and dynamic properties. This makes it possible to complete heavy-duty earthmoving jobs faster, so that new tasks can be started sooner. As a result, this wheeled excavator is the efficient solution for use on all construction sites which require a high digging performance and mobile flexibility.

### Working with precision

The exceptional sensitivity of the hydraulic system permits precise lifting and positioning of heavy components. The bottom of the trench and other demanding profiling work can be accomplished precisely and in the shortest possible time. For earthmoving, load-lifting or grading work, it is easily possible to adjust the speed of the machine to match the requirements using the MODE switch.



### Digging force

- High digging and breakout force in the field.
- For continuously high digging performance even in tough ground.
- More digging force for faster results.



### Joystick steering

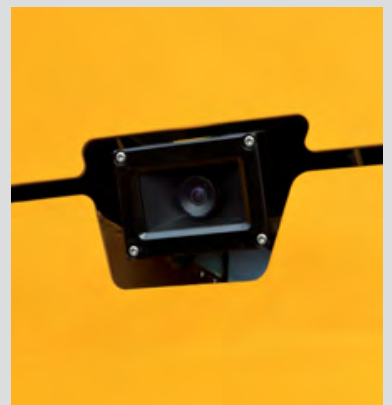
- The optional joystick steering function enables the operator to steer the wheeled excavator using the mini-joystick.
- Working and travelling movements can be executed simultaneously without having to move hands.
- More efficient operation for greater productivity.





#### Bright and durable

- The LED rear lights fitted as standard not only look good, they also have a high brightness level and an extremely long service life.
- The LED front outline marker fitted as standard make it easier to see the machine on the road, and thus provides greater safety.







# Reliability

Reliability offers safety. Safety that significantly influences the success of a project. Whatever the weather, Liebherr stands for safety - with reliable construction machines and customer-oriented sales and service partners. This means a Liebherr construction machine is exactly what it should be: an investment that pays off.

## Durability and innovation

### Quality

Key components such as diesel engine, diesel particle filter, hydraulic components, electronic components, swing ring and swing drive are developed, tested and produced by Liebherr itself. The significant depth of production ensures the highest quality and permits optimum coordination of components. The high-quality Liebherr components are also used in many other sectors and products.

### Expertise

Liebherr has been developing and producing hydraulic excavators for more than 60 years. This experience and the feedback from customers, sales and service form the basis for putting innovative ideas into practice. The result: wheeled excavators with excellent quality and reliability.

### Service

A fast response when service is required minimises downtime and ensures that schedules can be met. This is made possible by a spare part availability rate in excess of 98 % and a 24 h delivery service for spare parts\*. Service engineers trained by Liebherr carry out service and maintenance work on the spot, quickly and in accordance with the manufacturer's specifications.

\* subject to location

### More rear visibility - and to the side too

- The standard camera for rear-view monitoring is integrated in a protected location in the counterweight.
- Optional camera for the right side area, for greater safety on the site.
- Greater visibility for more safety.



### Maintenance without draining oil

- Standard shut-off valve for disconnecting the oil tank from the hydraulic system.
- For simple maintenance work on the hydraulic components without draining the hydraulic oil.
- Reduced maintenance time for higher machine availability.





#### Refuelling

- Using the optional refuelling pump, the machine can be refuelled directly from a fuel container.
- Remote cable operation and automatic shut off when the tank is full, for greater convenience and shorter refuelling times.
- Topping up. Simple, quick and safe.





# Comfort

The modern Liebherr operator's cab offers the best preconditions for healthy, concentrated and productive working. The features which make this possible include the standard feature of an air-sprung operator seat with seat heating, the automatic air conditioning and the ergonomically arranged control elements with touch screen indicating unit. One example of the extensive safety equipment is the roll-over protection system (ROPS) for the cab fitted as standard according to ISO 12117-2.

## An advance in comfort and convenience

### Automatic air conditioning

The automatic air conditioning offers convincingly intuitive operation. Temperature, blower setting and the various air nozzles in the head, chest and foot areas are set using the touch screen on the indicating unit. The defrost/defog one-button function clears fogged up windows in the shortest possible time. The filter for the cab air can be changed easily and conveniently from the outside.

### Operator seats

The Standard, Comfort and Premium operator seat versions that are available have recognized orthopedic properties, and offer sitting comfort at the highest level. Even the standard operator seat offers an extensive range of standard features such as air suspension, seat heating, headrest, lumbar support and many more besides.

### Detailed solutions

The A 928 Litronic offers numerous detailed solutions for greater comfort and efficiency. For example, two different steering wheel versions can be selected: for regular civil engineering tasks, for example, it is recommended to have the thin steering wheel since it affords better visibility of the working area. Also, the stabiliser blade does not have any lubrication points and is maintenance-free. No need for time-consuming lubrication.



### Convenient radio operation

- Optional radio with MP3-capable CD player and front aux-in for connecting external playback devices.
- Operation of the radio using the indicating unit: station search, volume control, mute function.
- Simple operation for greater convenience.



### Intuitive operation

- Display of the machine data and camera image on the large 7-inch indicating unit with touch screen and direct access via menu bar.
- 10 user-programmable memory slots for working tools, which can be used for quickly and easily setting the oil pressure and oil flow at the push of a button when changing tools.
- Quick access keys can be programmed by the machine operator with frequently used menu items.





**Low: emissions and operating costs**

- Compliance with exhaust emission stage IIIB/Tier 4i with efficient Liebherr diesel particle filter and active regeneration system.
- The low-ash Liebherr engine oil, Motoroil 10W-40 low ash, minimises the formation of engine oil ash, and thus extends the cleaning interval for the particle filter.
- Lower emissions. Lower operating costs. Economic environmental protection.







# Efficiency

Liebherr wheeled excavators are machines that combine high productivity with excellent levels of economy - and all this comes as standard from the factory. On request, the efficiency of each wheeled excavator can be boosted further with a Liebherr productive bucket, a fuel-saving Liebherr hydraulic oil or a Liebherr quick coupling system. For more return from each operating hour.

## An investment that pays off

### Fuel efficiency

The newly developed Liebherr D 934 L diesel engine together with the efficient Liebherr particle filter provide low fuel consumption and low emissions. The intelligent engine controller means the particle filter is passively regenerated for the most part. As a result, active regeneration cycles with fuel injection are reduced. The sensor controlled low idle automatic fitted as standard, with proximity sensors and the optional automatic engine shutdown, enable the operating costs of the A 928 Litronic to be reduced even further.

### Increased utilisation

The fully hydraulic Liebherr LIKUFIX quick coupling system increases the utilisation of a wheeled excavator by 30% on average. The construction process is accelerated, and orders are completed faster. That enables more turnover to be achieved per machine.

### Hydraulic oils with added value

Liebherr hydraulic oils achieve a service life of 6,000 operating hours and more. Instead of having defined change intervals, the results of the oil analysis (every 1,000 operating hours or after one year) determine when the oil needs to be changed. The unique Liebherr Hydraulic Plus oil can even achieve a service life of 8,000 operating hours and more - at the same time as reducing fuel consumption by up to 5%.

### Optimum service access

- Large, wide-opening and automatically locking service doors.
- Engine oil, fuel, air and cab air filter can be reached conveniently and safely from ground level.
- The oil level in the hydraulic tank can be checked from the cab.
- Short service times for greater productivity.



### Lubricating during work

- Fully automatic central lubrication system for the attachment and swing ring.
- Can be optionally expanded to the connecting link and quick coupler.
- Lubricating without interrupting work for higher productivity.



# Technical Data



## Engine

Rating per ISO 9249	155 kW (211 HP) at 1.800 RPM
Model	Liebherr D 934 L according to stage IIIB/Tier 4i
Type	4 cylinder in-line
Bore/Stroke	122/150 mm
Displacement	7.0 l
Engine operation	4-stroke diesel common-rail-injection turbo-charged and after-cooler reduced emissions
Harmful emissions values	in accordance with 97/68/EG stage IIIB
Emission control	Liebherr particle filter
Cooling system	water-cooled and integrated motor oil cooler
Air cleaner	dry-type air cleaner with pre-cleaner, main and safety elements
Fuel tank	480 l
Engine idling	sensor controlled
Electrical system	
Voltage	24 V
Batteries	2 x 135 Ah/12 V
Alternator	three phase current 28 V/100 A



## Hydraulic System

Hydraulic pump	Liebherr, variable displacement, swashplate double pump
Max. flow	2 x 215 l/min.
Max. hydr. pressure	350 bar
Hydraulic pump regulation and control	Liebherr-Synchron-Comfort-system (LSC) with electronic horsepower regulation, pressure cut-off, load sensing and torque controlled swing drive priority
Hydraulic tank capacity	190 l
Hydraulic system capacity	max. 430 l
Filtration	main return filter with integrated partial micro filtration (5 µm)
Cooling system	compact cooling system comprising cooling unit for water, hydraulic oil and charge air with stepless, thermostatically controlled 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
Engine speed and performance setting	stepless alignment of engine output and hydraulic power via engine speed



## Hydraulic Controls

Power distribution	via control valve with integrated safety valves, simultaneous and independent operation of travel drive, swing drive and work
Control type	
Attachment and swing	proportional via joystick levers
Travel	electroproportional via foot pedal
Additional functions	via switch and/or electroproportional foot pedals
Option	proportional control, proportionally acting transmitters on the joysticks for additional hydraulic functions



## Swing Drive

Drive	Liebherr swashplate motor with torque control and integrated brake valve
Transmission	Liebherr compact planetary gear
Swing ring	Liebherr sealed single race ball bearing swing ring, internal teeth
Swing speed	0 – 9.0 RPM stepless
Swing torque	75 kNm
Brake	holding brake (spring applied – pressure released)
Option	pedal controlled positioning swing brake



## Operator's Cab

Cab	ROPS safety cab structure (capable of sweeping over) with individual windscreens or featuring a slide-in subpart under the ceiling, work headlights integrated in the ceiling, a door with a side window (can be opened on both sides), large stowing and depositing possibilities, shock-absorbing suspension, sounddamping insulating, tinted laminated safety glass, separate window shades for the sunroof window and windscreen
Operator's seat Standard	air cushioned operator's seat with headrest, lap belt, seat heater, manual weight adjustment, adjustable seat cushion inclination and length and mechanical lumbar vertebrae support
Operator's seat Comfort (Option)	in addition to operator's seat standard: lockable horizontal suspension, automatic weight adjustment, adjustable suspension stiffness, pneumatic lumbar vertebrae support and passive seat climatisation with active coal
Operator's seat Premium (Option)	in addition to operator's seat comfort: active electronic weight adjustment (automatic readjustment), pneumatic low frequency suspension and active seat climatisation with active coal and ventilator
Control system	joysticks with arm consoles and swivel seat
Operation and displays	large high-resolution operating unit, self-explanatory, with touchscreen function, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine and tool parameters
Air-conditioning	automatic air-conditioning, recirculated air function, fast de-icing and demisting at the press of a button, air vents can be operated via a menu; recirculated air and fresh air filters can be easily replaced and are accessible from the outside; heating-cooling unit, designed for extreme outside temperatures, sensors for solar radiation, inside and outside temperatures (country-dependent)
Noise emission	
ISO 6396	$L_{pA}$ (inside cab) = 71 dB(A)
2000/14/EC	$L_{WA}$ (surround noise) = 103 dB(A)



## Undercarriage

Drive	variable flow swashplate motor with automatic brake valve
Transmission	oversized two speed power shift transmission with additional creeper speed
Pulling force	135 kN
Travel speed	0 – 3.5 km/h (creeper speed off road) 0 – 7.0 km/h (off road) 0 – 13.0 km/h (creeper speed on road) 0 – 20.0 km/h (road travel) 0 – max. 25.0 km/h Speeder (Option)
Driving operation	automotive driving using accelerator pedal, cruise control function: storage of variable accelerator pedal positions, both off-road and on-road
Axles	automatic or operator controlled hydraulic front axle oscillation lock
Brakes	steering and rigid axle with wet, maintenance-free multi disc brakes with minimized backlash. Spring applied/pressure released parking brake integrated into gear box
Stabilization	stabilizing blade (adjustable during travel for dozing) 2 point outriggers stabilizing blade + 2 point outriggers 4 point outriggers
Option	EW-undercarriage 2.75 m/9'

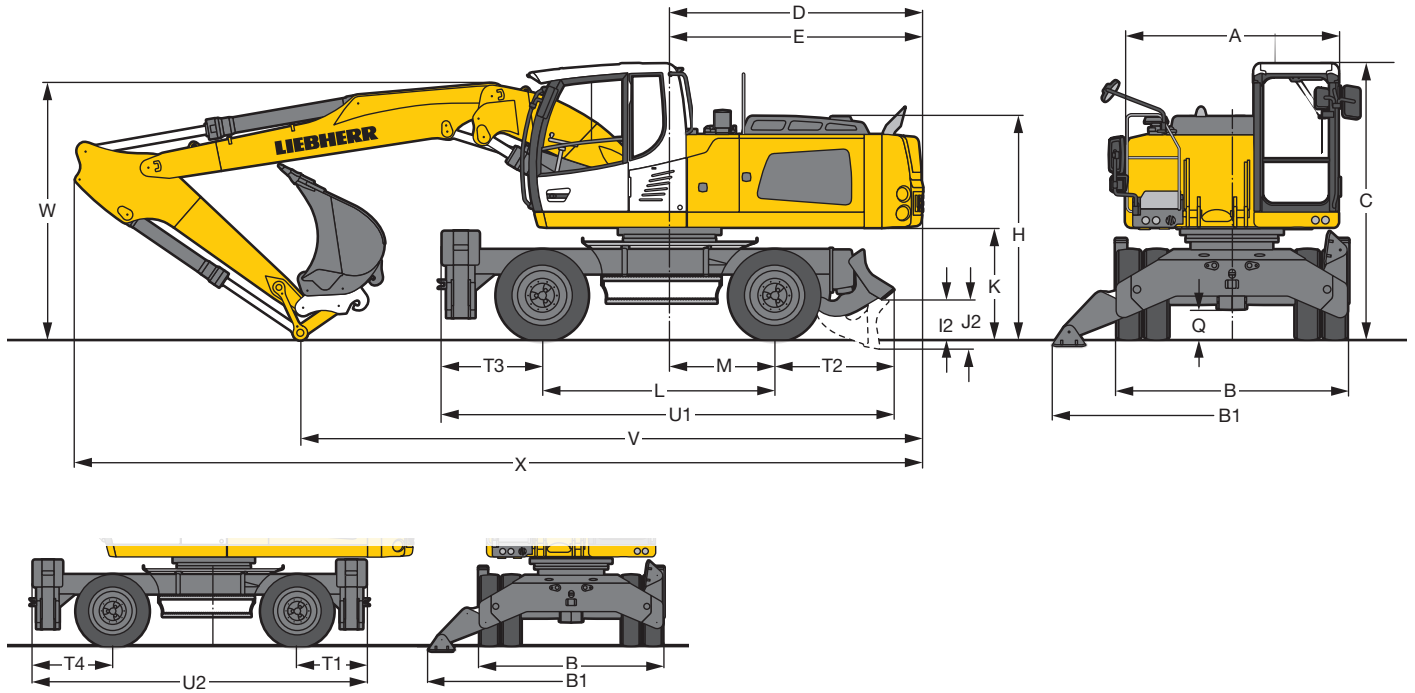


## Attachment

Hydraulic cylinders	Liebherr cylinders with special seal system. Shock absorption
Bearings	sealed, low maintenance
Lubrication	Liebherr central lubrication system (country-dependent)



# Dimensions



	mm
A	2,520
B	2,750
B1	4,260
C	3,220
D	3,000
E	3,000
H	2,605
I2	467
J2	590
K	1,295
L	2,750
M	1,250
Q	350
T1	1,040
T2	1,410
T3	1,190
T4	1,190
U1	5,350
U2	4,980

E = Tail radius  
Tires 11.00-20

	Stick	Two-piece Boom 4.15 m	Mono Boom 5.65 m		
		2 pt. outr., front + stabil. blade, rear	4 pt. outr.	2 pt. outr., front + stabil. blade, rear	4 pt. outr.
	m	mm	mm	mm	mm
V	2.25	7,750	7,750	6,600	6,600
	2.45	7,350	7,350	6,400	6,400
	2.65	7,100	7,100	6,300*	6,300*
	3.05	7,000	7,000	6,300 <sup>1)</sup>	6,300 <sup>1)</sup>
W	2.25	3,150	3,150	3,250	3,250
	2.45	3,100	3,100	3,250	3,250
	2.65	3,100	3,100	3,300*	3,300*
	3.05	3,100	3,100	3,300 <sup>1)</sup>	3,300 <sup>1)</sup>
X	2.25	10,150	10,150	9,800	9,800
	2.45	10,150	10,150	9,850	9,850
	2.65	10,150	10,150	9,850*	9,850*
	3.05	10,150	10,150	9,850 <sup>1)</sup>	9,850 <sup>1)</sup>

Dimensions are with attachment over steering axle

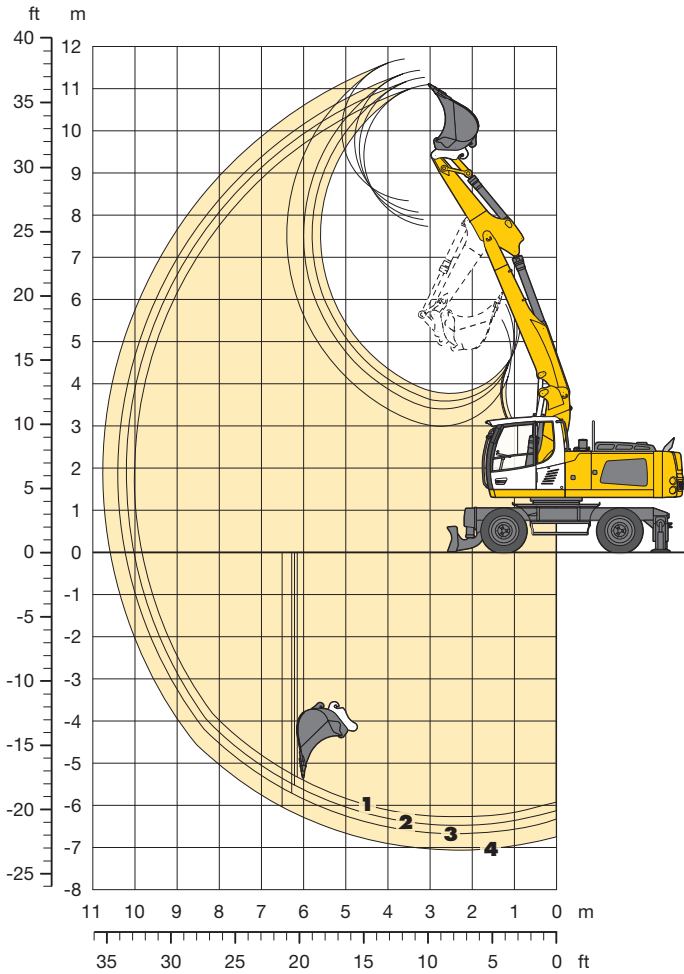
\* Attachment over digging axle for shorter transport dimensions

<sup>1)</sup> without quick coupler



# Backhoe Bucket

with Two-piece Boom 4.15 m



## Digging Envelope with Quick Coupler

		1	2	3	4
Stick length	m	2.25	2.45	2.65	3.05
Max. digging depth	m	6.30	6.50	6.70	7.05
Max. reach at ground level	m	9.85	10.05	10.25	10.60
Max. dumping height	m	7.75	7.90	8.05	8.35
Max. teeth height	m	11.10	11.25	11.45	11.70
Min. attachment radius	m	3.25	3.15	3.10	3.15

## Digging Forces without Quick Coupler

		1	2	3	4
Max. digging force (ISO 6015)	kN	148.5	139.7	131.9	118.8
	t	15.1	14.2	13.4	12.1
Max. breakout force (ISO 6015)	kN	169.6	169.6	169.6	169.6
	t	17.3	17.3	17.3	17.3

Max. breakout force with ripper bucket 218.4 kN (22.3 t)  
 Max. possible digging force (stick 1.70 m) 180.1 kN (18.4 t)

## Operating Weight

The operating weight includes the basic machine with 8 tires plus intermediate rings, two-piece boom 4.15 m, stick 2.45 m, quick coupler 48 and bucket 1,400 mm/1.35 m<sup>3</sup>.

Undercarriage versions	Weight
A 928 Litronic <sup>®</sup> with 2 pt. outriggers + stabilizer blade	27,000 kg
A 928 Litronic <sup>®</sup> with 4 pt. outriggers	27,400 kg

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

Cutting width mm	Capacity ISO 7451 <sup>1)</sup> m <sup>3</sup>	Weight kg	Stabilizers raised				2 point outriggers + Stabilizer blade down				4 point outriggers down			
			Stick length (m)				Stick length (m)				Stick length (m)			
			2.25	2.45	2.65	3.05	2.25	2.45	2.65	3.05	2.25	2.45	2.65	3.05
850 <sup>2)</sup>	0.75	620	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.95	710	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	1.15	810	□	□	□	□	□	□	□	□	□	□	□	□
1,400 <sup>2)</sup>	1.35	850	□	□	△	△	□	□	□	□	□	□	□	□
1,500 <sup>2)</sup>	1.45	880	□	△	△	■	□	□	□	□	□	□	□	□
1,600 <sup>2)</sup>	1.55	940	△	△	△	■	□	□	□	□	□	□	□	□
850 <sup>3)</sup>	0.75	690	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>3)</sup>	0.95	800	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>3)</sup>	1.15	910	□	□	□	□	□	□	□	□	□	□	□	□
1,400 <sup>3)</sup>	1.35	960	□	□	△	△	□	□	□	□	□	□	□	□
1,500 <sup>3)</sup>	1.45	1,000	△	△	△	■	□	□	□	□	□	□	□	□
1,600 <sup>3)</sup>	1.55	1,060	△	△	■	■	□	□	□	□	□	□	□	□
850 <sup>4)</sup>	0.80	630	□	□	□	□	□	□	□	□	□	□	□	□
1,050 <sup>4)</sup>	1.05	720	□	□	□	□	□	□	□	□	□	□	□	□
1,250 <sup>4)</sup>	1.30	800	□	□	□	△	□	□	□	□	□	□	□	□
1,400 <sup>4)</sup>	1.50	870	△	△	△	■	□	□	□	□	□	□	□	□
1,500 <sup>4)</sup>	1.65	890	△	△	■	■	□	□	□	□	□	□	□	□
1,600 <sup>4)</sup>	1.70	950	△	■	■	■	□	□	□	□	□	□	□	□

\* Indicated loads are based on ISO 10567 and do not exceed 75% of tipping or 87% of hydraulic capacity, max. stick length without quick coupler, lifted 360° on firm with blocked oscillating axle

1) comparable with SAE (heaped)

2) Bucket with teeth 3) Bucket with teeth in HD-version 4) Bucket with cutting edge (also available in HD-version)

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 Two-piece Boom 4.15 m

### Stick 2.25 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m		
		Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°			
9.0	Stabilizers raised			7.4*	7.4*							7.1*	7.1*	4.6
	2 pt. outr. + blade down 4 pt. outriggers down			7.4*	7.4*							7.1*	7.1*	
7.5	Stabilizers raised			8.6*	8.6*	5.8	7.5*					5.1	5.9*	6.4
	2 pt. outr. + blade down 4 pt. outriggers down			8.6*	8.6*	7.5*	7.5*					5.9*	5.9*	
6.0	Stabilizers raised			8.9*	8.9*	6.0	8.1	4.0	5.6			3.9	5.4*	7.5
	2 pt. outr. + blade down 4 pt. outriggers down			8.9*	8.9*	8.4*	8.4*	5.7*	5.7*			5.4*	5.4*	
4.5	Stabilizers raised	15.9	16.7*	8.8	11.4*	5.9	8.0	4.0	5.6			3.3	4.7	8.2
	2 pt. outr. + blade down 4 pt. outriggers down	16.7*	16.7*	11.4*	11.4*	8.8	9.0*	6.3	7.7*			5.3	5.3*	
3.0	Stabilizers raised	15.1	16.6*	8.5	11.8	5.8	7.8*	4.0	5.6			3.0	4.3	8.6
	2 pt. outr. + blade down 4 pt. outriggers down	16.6*	16.6*	13.2	13.3*	8.7	9.8*	6.3	7.9*			4.9	5.4*	
1.5	Stabilizers raised	14.9	16.9*	8.4	11.6	5.8	7.8	3.9	5.5			2.9	4.2	8.6
	2 pt. outr. + blade down 4 pt. outriggers down	16.9*	16.9*	13.0	14.2*	8.6*	10.3*	6.2	8.1*			4.8	5.8*	
0	Stabilizers raised	14.9	19.9*	8.3	11.7*	5.6	7.8	3.7	5.3			3.0	4.3	8.4
	2 pt. outr. + blade down 4 pt. outriggers down	19.9*	19.9*	13.0*	14.3*	8.7	10.3*	6.0	8.1*			4.9	6.4*	
-1.5	Stabilizers raised	14.4	22.9*	8.0	11.8	5.2	7.4	3.5	5.1			3.2	4.7	7.9
	2 pt. outr. + blade down 4 pt. outriggers down	23.0*	23.0*	13.3	14.4*	8.4	10.5*	5.8	7.6*			5.3	6.1*	
-3.0	Stabilizers raised	14.3	23.7*	7.7	11.4	4.9	7.1					3.8	5.3*	7.1
	2 pt. outr. + blade down 4 pt. outriggers down	23.7*	23.7*	13.1	14.9*	8.1	9.7*					5.3*	5.3*	
-4.5	Stabilizers raised	14.0	19.2*	7.4	9.9*									5.9
	2 pt. outr. + blade down 4 pt. outriggers down	19.2*	19.2*	9.7*	9.7*									

### Stick 2.45 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m		
		Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°			
9.0	Stabilizers raised											6.4*	6.4*	4.9
	2 pt. outr. + blade down 4 pt. outriggers down											6.4*	6.4*	
7.5	Stabilizers raised											4.8	5.4*	6.7
	2 pt. outr. + blade down 4 pt. outriggers down											5.4*	5.4*	
6.0	Stabilizers raised											3.7	5.0*	7.8
	2 pt. outr. + blade down 4 pt. outriggers down											5.0*	5.0*	
4.5	Stabilizers raised	14.1*	14.1*	8.8	11.0*	5.9	7.9	4.1	5.7			3.2	4.5	8.4
	2 pt. outr. + blade down 4 pt. outriggers down	14.1*	14.1*	11.0*	11.0*	8.8	8.8*	6.3	7.6*			4.9*	4.9*	
3.0	Stabilizers raised	15.2	16.9*	8.0	11.8	5.8	7.8	4.0	5.6			2.9	4.2	8.8
	2 pt. outr. + blade down 4 pt. outriggers down	16.9*	16.9*	13.0*	13.0*	8.6	9.6*	6.3	7.8*			4.7	5.0*	
1.5	Stabilizers raised	14.9	16.7*	8.4	11.6	5.7	7.7	3.9	5.5			2.8	4.0	8.8
	2 pt. outr. + blade down 4 pt. outriggers down	16.7*	16.7*	12.9	14.1*	8.5	10.2*	6.2	8.0*			4.6	5.3*	
0	Stabilizers raised	14.9	19.4*	8.3	11.6	5.6	7.8*	3.7	5.3			2.8	4.1	8.6
	2 pt. outr. + blade down 4 pt. outriggers down	19.4*	19.4*	12.9*	14.2*	8.6*	10.3*	6.0	8.0*			4.7	5.8*	
-1.5	Stabilizers raised	14.4	22.7*	8.0	11.8	5.2	7.5	3.5	5.1			3.1	4.4	8.2
	2 pt. outr. + blade down 4 pt. outriggers down	22.7*	22.7*	13.2*	14.3*	8.5	10.4*	5.8	7.8*			5.0	5.9*	
-3.0	Stabilizers raised	14.2	23.4*	7.7	11.5	4.9	7.1					3.6	5.2*	7.3
	2 pt. outr. + blade down 4 pt. outriggers down	23.5*	23.5*	13.2	14.8*	8.1	10.1*					5.2*	5.2*	
-4.5	Stabilizers raised	14.0	20.8*	7.4	11.1									5.9
	2 pt. outr. + blade down 4 pt. outriggers down	20.8*	20.8*	11.1*	11.1*									

### Stick 2.65 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m		
		Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°			
9.0	Stabilizers raised			7.6*	7.6*							5.9*	5.9*	5.3
	2 pt. outr. + blade down 4 pt. outriggers down			7.6*	7.6*							5.9*	5.9*	
7.5	Stabilizers raised					6.0	7.1*	4.5	5.0*			4.5	5.0*	7.0
	2 pt. outr. + blade down 4 pt. outriggers down					7.1*	7.1*	5.0*	5.0*			5.0*	5.0*	
6.0	Stabilizers raised			7.2*	7.2*	6.0	7.7*	4.1	5.6			3.5	4.6*	8.0
	2 pt. outr. + blade down 4 pt. outriggers down			7.2*	7.2*	7.7*	7.7*	6.3	6.5*			4.6*	4.6*	
4.5	Stabilizers raised	9.9*	9.9*	8.8	9.6*	5.9	7.9	4.1	5.7			3.0	4.3	8.6
	2 pt. outr. + blade down 4 pt. outriggers down	9.9*	9.9*	9.6*	9.6*	8.6*	8.6*	6.4	7.4*			4.5*	4.5*	
3.0	Stabilizers raised	15.2	17.3*	8.5	11.8	5.7	7.8	4.1	5.7			2.8	4.0	9.0
	2 pt. outr. + blade down 4 pt. outriggers down	17.3*	17.3*	12.7*	12.7*	8.6	9.5*	6.3	7.7*			4.5	4.6*	
1.5	Stabilizers raised	14.8	16.6*	8.3	11.5	5.7	7.7	3.9	5.5	2.7	3.9	2.7	4.0	9.0
	2 pt. outr. + blade down 4 pt. outriggers down	16.6*	16.6*	12.9	14.0*	8.5	10.1*	6.2	8.0*	4.4	5.2*	4.4	4.8*	
0	Stabilizers raised	14.9	19.0*	8.3	11.5*	5.5	7.7*	3.8	5.3			2.7	4.0	8.8
	2 pt. outr. + blade down 4 pt. outriggers down	19.0*	19.0*	12.9	14.1*	10.2	10.2*	7.5	8.0*			4.5	5.3*	
-1.5	Stabilizers raised	14.4	22.3*	7.9	11.7	5.3	7.6	3.5	5.1			2.9	4.3	8.4
	2 pt. outr. + blade down 4 pt. outriggers down	22.3*	22.3*	13.1	14.2*	8.5	10.3*	5.8	8.0*			5.8*	5.8*	
-3.0	Stabilizers raised	14.1	23.2*	7.8	11.6	4.9	7.1	3.4	5.0			3.4	4.9	7.6
	2 pt. outr. + blade down 4 pt. outriggers down	23.3*	23.3*	13.3	14.6*	8.1	10.4*	5.4*	5.4*			5.1*	5.1*	
-4.5	Stabilizers raised	14.0	22.0*	7.4	11.1							4.9	5.9*	5.9
	2 pt. outr. + blade down 4 pt. outriggers down	22.0*	22.0*	12.2*	12.2*							5.9*	5.9*	

### Stick 3.05 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m		
		Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°			
9.0	Stabilizers raised											4.9*	4.9*	5.9
	2 pt. outr. + blade down 4 pt. outriggers down											4.9*	4.9*	
7.5	Stabilizers raised					6.0	6.4*	4.1	4.2*			4.1	4.2*	7.4
	2 pt. outr. + blade down 4 pt. outriggers down					6.4*	6.4*	4.2*	4.2*			4.2*	4.2*	
6.0	Stabilizers raised					6.0	6.6*	4.2	5.7			3.3	4.0	8.4
	2 pt. outr. + blade down 4 pt. outriggers down					6.6*	6.6*	6.2*	6.2*			4.0*	4.0*	
4.5	Stabilizers raised			7.6*	7.6*	5.9	7.8*	4.2	5.7	2.8	3.9*	2.8	3.9*	9.0
	2 pt. outr. + blade down 4 pt. outriggers down			7.6*	7.6*	7.8*	7.8*	7.1*	7.1*	3.9*	3.9*	3.9*	3.9*	
3.0	Stabilizers raised	15.3	17.9*	8.5	11.8	5.7	7.8	4.2	5.7	2.8	4.0	2.6	3.8	9.3
	2 pt. outr. + blade down 4 pt. outriggers down	17.9*	17.9*	12.1*	12.1*	8.6	9.1*	6.3	7.5*	4.6	5.6*	4.0*	4.0*	
1.5	Stabilizers raised	14.8	16.7*	8.3	11.5	5.6	7.6*	4.0	5.6	2.7	4.0	2.5	3.6	9.4
	2 pt. outr. + blade down 4 pt. outriggers down	16.7*	16.7*	12.8	13.7*	8.5	9.9*	6.2	7.8*	4.5	6.4*	4.1	4.2*	
0	Stabilizers raised	14.7	18.3*	8.2	11.5	5.6	7.6*	3.8	5.4	2.6	3.9	2.5	3.7	9.2
	2 pt. outr. + blade down 4 pt. outriggers down	18.3*	18.3*	12.8*	14.0*	10.1*	10.1*	7.5	7.9*	5.5	6.1*	4.5*	4.5*	
-1.5	Stabilizers raised	14.4	21.4*	8.0	11.6	5.3	7.6	3.6	5.2			2.7	3.9	8.8
	2 pt. outr. + blade down 4 pt. outriggers down	21.4*	21.4*	12.9	14.1*	8.6	10.2*	5.9	8.0*			4.5	5.2*	
-3.0	Stabilizers raised	14.1	22.9*	7.7	11.5	5.0	7.2	3.4	5.0			3.1	4.5	8.0
	2 pt. outr. + blade down 4 pt. outriggers down	23.0*	23.0*	13.2	14.4*	8.2	10.5*	5.7	6.9*			5.1*	5.1*	
-4.5	Stabilizers raised	14.1	23.5*	7.4	11.1	4.7	7.0					4.1	5.0*	6.6
	2 pt. outr. + blade down 4 pt. outriggers down	23.5*	23.5*	12.7	13.7*	7.7*	7.7*					5.0*	5.0*	

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

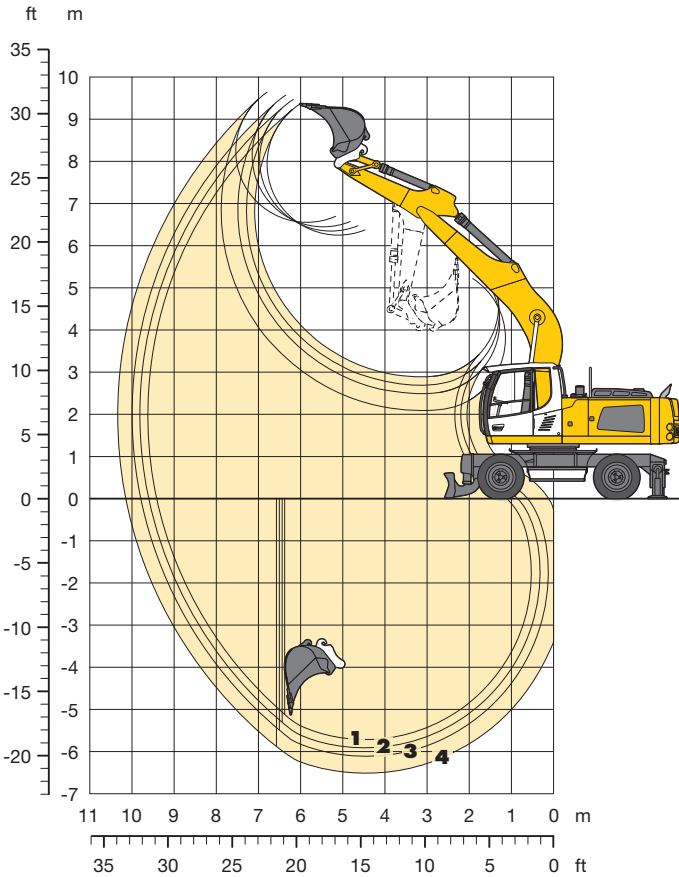
With PowerLift 380 bar the lift capacities on the load hook of the Liebherr quick coupler 48 without grab attachment are stated in metric tons (t) and are valid on a firm, level supporting surface with blocked oscillating axle. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (+/- 15°) are specified over the steering axle with the stabilizers raised and over the rigid axle with the stabilizers down. The values apply when the adjusting cylinder is in the optimal position. Indicated loads comply with the ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity, or are limited by the permissible load of the load hook on the quick coupler (max. 12 t). Without the quick coupler, lift capacities will increase by up to 226 kg.

In accordance with the harmonised European Standard EN 474-5, hydraulic excavators used for lifting operations must be equipped with pipe fracture safety valves, an overload warning device, a load hook and a lift capacity chart.



# Backhoe Bucket

with Mono Boom 5.65 m



## Digging Envelope with Quick Coupler

		1	2	3	4
Stick length	m	2.25	2.45	2.65	3.05
Max. digging depth	m	5.70	5.90	6.10	6.50
Max. reach at ground level	m	9.40	9.60	9.80	10.15
Max. dumping height	m	6.35	6.45	6.55	6.70
Max. teeth height	m	9.35	9.45	9.55	9.65
Min. attachment radius	m	3.90	3.70	3.45	3.15

## Digging Forces without Quick Coupler

		1	2	3	4
Max. digging force (ISO 6015)	kN	148.5	139.7	131.9	118.8
	t	15.1	14.2	13.4	12.1
Max. breakout force (ISO 6015)	kN	169.6	169.6	169.6	169.6
	t	17.3	17.3	17.3	17.3

Max. breakout force with ripper bucket 218.4 kN (22.3 t)  
 Max. possible digging force (stick 1.70 m) 180.1 kN (18.4 t)

## Operating Weight

The operating weight includes the basic machine with 8 tires plus intermediate rings, mono boom 5.65 m, stick 2.45 m, quick coupler 48 and bucket 1,400 mm/1.35 m<sup>3</sup>.

Undercarriage versions	Weight
A 928 Litronic <sup>®</sup> with 2 pt. outriggers + stabilizer blade	26,500 kg
A 928 Litronic <sup>®</sup> with 4 pt. outriggers	26,900 kg

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

Cutting width mm	Capacity ISO 7451 <sup>1)</sup> m <sup>3</sup>	Weight kg	Stabilizers raised				2 point outriggers + Stabilizer blade down				4 point outriggers down			
			Stick length (m)				Stick length (m)				Stick length (m)			
			2.25	2.45	2.65	3.05	2.25	2.45	2.65	3.05	2.25	2.45	2.65	3.05
850 <sup>2)</sup>	0.75	620	□	□	□	□	□	□	□	□	□	□	□	
1,050 <sup>2)</sup>	0.95	710	□	□	□	□	□	□	□	□	□	□	□	
1,250 <sup>2)</sup>	1.15	810	□	□	□	□	□	□	□	□	□	□	□	
1,400 <sup>2)</sup>	1.35	850	□	□	□	△	□	□	□	□	□	□	□	
1,500 <sup>2)</sup>	1.45	880	□	□	△	△	□	□	□	□	□	□	□	
1,600 <sup>2)</sup>	1.55	940	△	△	△	■	□	□	□	□	□	□	□	
850 <sup>3)</sup>	0.75	690	□	□	□	□	□	□	□	□	□	□	□	
1,050 <sup>3)</sup>	0.95	800	□	□	□	□	□	□	□	□	□	□	□	
1,250 <sup>3)</sup>	1.15	910	□	□	□	□	□	□	□	□	□	□	□	
1,400 <sup>3)</sup>	1.35	960	□	□	□	△	□	□	□	□	□	□	□	
1,500 <sup>3)</sup>	1.45	1,000	□	△	△	△	□	□	□	□	□	□	□	
1,600 <sup>3)</sup>	1.55	1,060	△	△	△	■	□	□	□	□	□	□	□	
850 <sup>4)</sup>	0.80	630	□	□	□	□	□	□	□	□	□	□	□	
1,050 <sup>4)</sup>	1.05	720	□	□	□	□	□	□	□	□	□	□	□	
1,250 <sup>4)</sup>	1.30	800	□	□	□	□	□	□	□	□	□	□	□	
1,400 <sup>4)</sup>	1.50	870	□	△	△	△	□	□	□	□	□	□	□	
1,500 <sup>4)</sup>	1.65	890	△	△	△	■	□	□	□	□	□	□	□	
1,600 <sup>4)</sup>	1.70	950	△	△	■	■	□	□	□	□	□	□	□	

\* Indicated loads are based on ISO 10567 and do not exceed 75% of tipping or 87% of hydraulic capacity, max. stick length without quick coupler, lifted 360° on firm with blocked oscillating axle

<sup>1)</sup> comparable with SAE (heaped)

<sup>2)</sup> Bucket with teeth    <sup>3)</sup> Bucket with teeth in HD-version    <sup>4)</sup> Bucket with cutting edge (also available in HD-version)

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 5.65 m

## Stick 2.25 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	
9.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down											
7.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down									5.6*	5.6*	6.0
6.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down					5.7	7.7*			4.3	5.3*	7.1
4.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down					5.5	7.8	3.9	5.4	3.6	5.1	7.8
3.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down			7.8	11.5	5.2	7.4	3.7	5.3	3.3	4.7	8.1
1.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down			12.7*	12.7*	8.4	9.7*	6.0	8.3*	5.3	5.6*	8.2
0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	7.1*	7.1*	6.9	10.4	4.7	6.8	3.5	5.0	3.2	4.5	8.0
-1.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	12.5	12.8*	6.8	10.3	4.6	6.8	3.5	5.1	3.5	5.1	7.4
-3.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	12.8	12.8*	12.0	15.5*	7.7	11.5*	5.8	8.8*	4.3	6.2	6.5
-4.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	12.8	19.4*	6.9	10.5	4.7	6.8	4.3	6.2	6.7	9.6*	4.8

## Stick 2.45 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	
9.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down											
7.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down									5.8	6.0*	6.2
6.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down					5.8	7.4*			5.8	7.4*	7.3
4.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down					5.5	7.8	3.9	5.5	3.5	4.9*	8.0
3.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down			7.8	11.5	5.2	7.4	3.7	5.3	3.2	4.5	8.3
1.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down			12.3*	12.3*	8.4	9.4*	6.0	8.1*	5.1	5.1*	8.4
0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	7.4*	7.4*	6.8	10.4	4.7	6.8	3.4	5.0	3.0	4.3	8.1
-1.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	12.3*	12.3*	6.7	10.3	4.6	6.7	3.4	4.9	3.3	4.8	7.6
-3.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	12.3*	12.3*	11.9	15.6*	7.7	11.5*	5.6	8.8*	5.5	7.8*	6.7
-4.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	12.6	19.0*	6.8	10.4	4.6	6.8	4.0	5.8	6.6	9.0*	6.7

## Stick 2.65 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	
9.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down											
7.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down									4.7*	4.7*	6.5
6.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down							4.0	4.7*	3.9	4.5*	7.5
4.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down					5.6	7.8	3.9	5.5	3.3	4.5*	8.2
3.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	12.0*	12.0*	7.9	11.6	5.2	7.4	3.7	5.3	3.0	4.3	8.5
1.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	12.0*	12.0*	11.8*	11.8*	8.4	9.2*	6.0	7.9*	4.7*	4.7*	8.6
0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	12.0*	12.0*	11.8*	11.8*	9.2*	9.2*	7.4	7.9*	4.5*	4.5*	8.3
-1.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	7.2	10.8	4.9	7.1	3.6	5.1	2.9	4.2	2.9	4.2	7.8
-3.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	12.5	14.3*	8.0	10.4*	5.8	8.5*	4.7	5.1*	4.5*	4.5*	8.3
-4.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	14.3*	14.3*	10.2	10.4*	7.2	8.5*	5.1*	5.1*	5.1*	5.1*	8.3

## Stick 3.05 m

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	
9.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down											
7.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down									4.1*	4.1*	6.9
6.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down							4.0	5.2*	3.6	3.9*	7.9
4.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down					5.6	7.4*	3.9	5.5	3.1	3.9*	8.5
3.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	14.6	17.2*	8.0	11.0*	5.3	7.5	3.7	5.3	2.8	4.0*	8.9
1.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	17.2*	17.2*	11.0*	11.0*	8.5	8.7*	6.0	7.6*	4.0*	4.0*	8.9
0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	17.2*	17.2*	11.0*	11.0*	8.7*	8.7*	7.5	7.6*	4.0*	4.0*	8.9
-1.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	7.1*	7.1*	7.3	10.9	4.9	7.1	3.5	5.1	2.7	3.9	8.2
-3.0	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	7.1*	7.1*	12.6	13.7*	8.1	10.1*	5.8	8.3*	4.4*	4.4*	8.7
-4.5	Stabilizers raised 2 pt. outr. + blade down 4 pt. outriggers down	7.1*	7.1*	13.7*	13.7*	10.1*	10.1*	7.3	8.3*	4.4*	4.4*	8.7

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

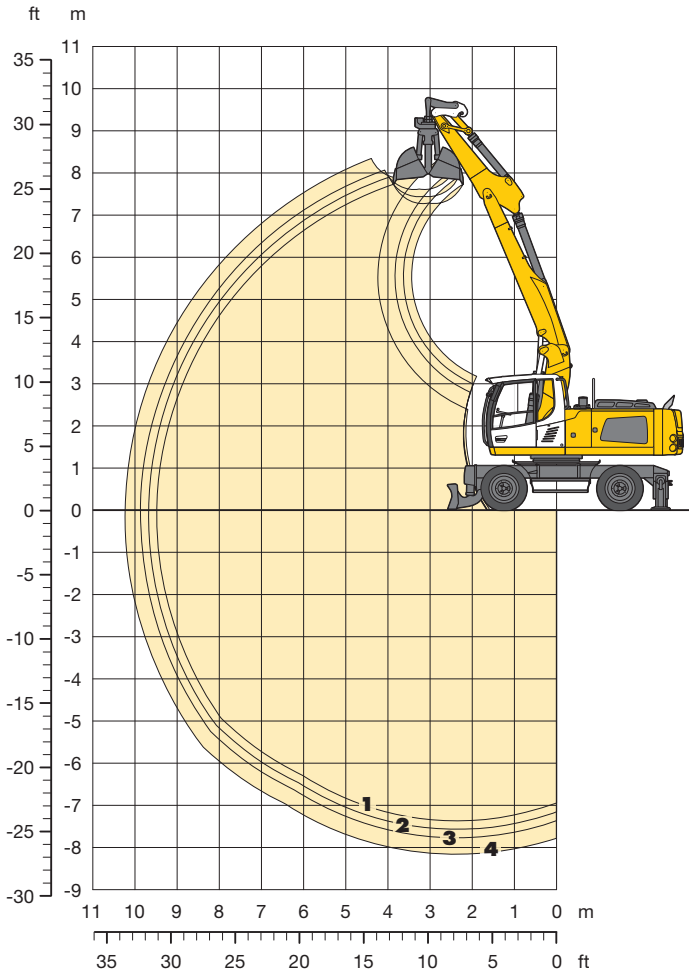
With PowerLift 380 bar the lift capacities on the load hook of the Liebherr quick coupler 48 without grab attachment are stated in metric tons (t) and are valid on a firm, level supporting surface with blocked oscillating axle. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (+/- 15°) are specified over the steering axle with the stabilizers raised and over the rigid axle with the stabilizers down. Indicated loads comply with the ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity, or are limited by the permissible load of the load hook on the quick coupler (max. 12 t). Without the quick coupler, lift capacities will increase by up to 226 kg.

In accordance with the harmonised European Standard EN 474-5, hydraulic excavators used for lifting operations must be equipped with pipe fracture safety valves, an overload warning device, a load hook and a lift capacity chart.



# Clamshell Grab

with Two-piece Boom 4.15 m



## Digging Envelope with Quick Coupler

		1	2	3	4
Stick length	m	2.25	2.45	2.65	3.05
Max. digging depth	m	7.35	7.55	7.75	8.15
Max. reach at ground level	m	9.50	9.65	9.85	10.25
Max. dumping height	m	7.30	7.45	7.60	7.90

## Clamshell Model

**GM 10B**

Max. tooth force	73 kN (7.4 t)
Max. torque of hydr. swivel	1.76 kNm

## Operating Weight

The operating weight includes the basic machine with 8 tires plus intermediate rings, two-piece boom 4.15 m, stick 2.45 m, quick coupler 48 and clamshell model GM 10B/1.00 m<sup>3</sup> (1,000 mm without ejector).

Undercarriage versions	Weight
A 928 Litronic with 2 pt. outriggers + stabilizer blade	27,200 kg
A 928 Litronic with 4 pt. outriggers	27,600 kg

## Clamshell Model GM 10B Machine stability per ISO 10567\* (75% of tipping capacity)

Width of shells mm	Capacity m <sup>3</sup>	Weight kg	Stabilizers raised				2 point outriggers + Stabilizer blade down				4 point outriggers down					
			Stick length (m)				Stick length (m)				Stick length (m)					
			2.25	2.45	2.65	3.05	2.25	2.45	2.65	3.05	2.25	2.45	2.65	3.05		
320 <sup>1)</sup>	0,17	770	□	□	□	□	□	□	□	□	□	□	□	□	□	□
400 <sup>1)</sup>	0,22	820	□	□	□	□	□	□	□	□	□	□	□	□	□	□
600 <sup>1)</sup>	0,35	860	□	□	□	□	□	□	□	□	□	□	□	□	□	□
800 <sup>1)</sup>	0,45	910	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1.000 <sup>1)</sup>	0,60	970	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1.000 <sup>1)3)</sup>	1,00	1.040	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1.500 <sup>1)3)</sup>	1,50	1.160	△	△	■	■	□	□	□	□	□	□	□	□	□	□
1.800 <sup>1)3)</sup>	1,80	1.280	■	■	▲	▲	□	□	□	□	□	□	□	□	□	□
320 <sup>2)</sup>	0,17	820	□	□	□	□	□	□	□	□	□	□	□	□	□	□
400 <sup>2)</sup>	0,22	880	□	□	□	□	□	□	□	□	□	□	□	□	□	□
600 <sup>2)</sup>	0,30	950	□	□	□	□	□	□	□	□	□	□	□	□	□	□
800 <sup>2)</sup>	0,45	1.010	□	□	□	□	□	□	□	□	□	□	□	□	□	□

\* Indicated loads are based on ISO 10567 and do not exceed 75% of tipping or 87% of hydraulic capacity, max. stick length without quick coupler, lifted 360° on firm with blocked oscillating axle

1) without ejector

2) with ejector

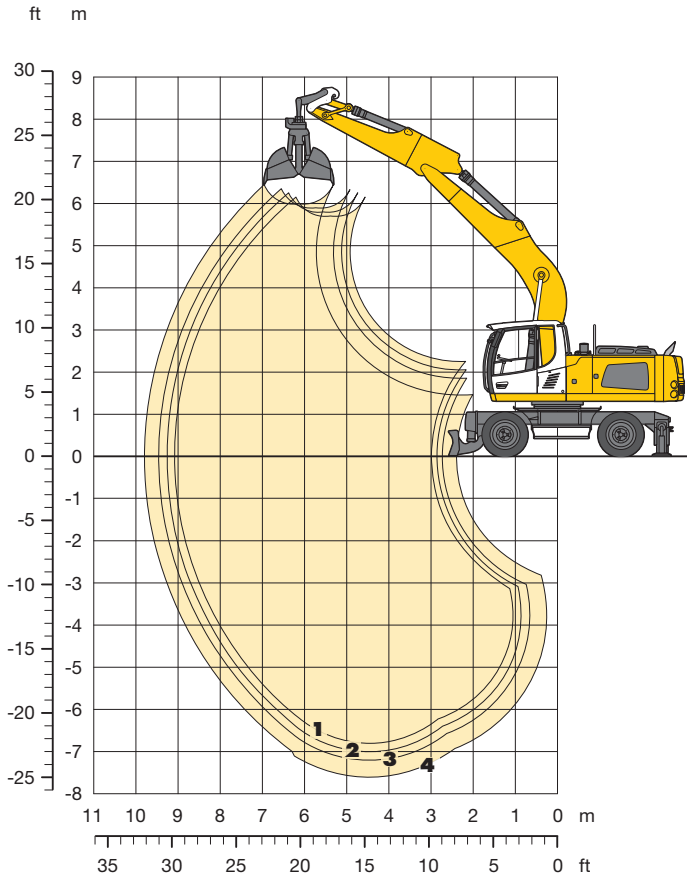
3) Shells for loose material

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



# Clamshell Grab

with Mono Boom 5.65 m



## Digging Envelope with Quick Coupler

		1	2	3	4
Stick length	m	2.25	2.45	2.65	3.05
Max. digging depth	m	6.80	7.00	7.20	7.60
Max. reach at ground level	m	9.10	9.25	9.45	9.80
Max. dumping height	m	5.70	5.80	5.90	6.00

## Clamshell Model

**GM 10B**

Max. tooth force	73 kN (7.4 t)
Max. torque of hydr. swivel	1.76 kNm

## Operating Weight

The operating weight includes the basic machine with 8 tires plus intermediate rings, mono boom 5.65 m, stick 2.45 m, quick coupler 48 and clamshell model GM 10B/1.00 m<sup>3</sup> (1,000 mm without ejector).

Undercarriage versions	Weight
A 928 Litronic with 2 pt. outriggers + stabilizer blade	26,700 kg
A 928 Litronic with 4 pt. outriggers	27,000 kg

## Clamshell Model GM 10B Machine stability per ISO 10567\* (75% of tipping capacity)

Width of shells mm	Capacity m <sup>3</sup>	Weight kg	Stabilizers raised				2 point outriggers + Stabilizer blade down				4 point outriggers down							
			Stick length (m)				Stick length (m)				Stick length (m)							
			2.25	2.45	2.65	3.05	2.25	2.45	2.65	3.05	2.25	2.45	2.65	3.05				
320 <sup>1)</sup>	0.17	770	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
400 <sup>1)</sup>	0.22	820	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
600 <sup>1)</sup>	0.35	860	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
800 <sup>1)</sup>	0.45	910	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,000 <sup>1)</sup>	0.60	970	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,000 <sup>1)3)</sup>	1.00	1,040	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1,500 <sup>1)3)</sup>	1.50	1,160	△	△	△	■	□	□	□	□	□	□	□	□	□	□	□	□
1,800 <sup>1)3)</sup>	1.80	1,280	■	■	■	▲	□	□	□	□	□	□	□	□	□	□	□	□
320 <sup>2)</sup>	0.17	820	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
400 <sup>2)</sup>	0.22	880	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
600 <sup>2)</sup>	0.30	950	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
800 <sup>2)</sup>	0.45	1,010	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□

\* Indicated loads are based on ISO 10567 and do not exceed 75% of tipping or 87% of hydraulic capacity, max. stick length without quick coupler, lifted 360° on firm with blocked oscillating axle

1) without ejector

2) with ejector

3) Shells for loose material

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



# Attachments

## Ditch Cleaning Buckets/Tilt Buckets

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

Cutting width mm	Capacity ISO 7451 <sup>1)</sup> m <sup>3</sup>	Weight kg	Stabilizers raised				2 point outriggers + Stabilizer blade down				4 point outriggers down			
			Stick length (m)				Stick length (m)				Stick length (m)			
			2.25	2.45	2.65	3.05	2.25	2.45	2.65	3.05	2.25	2.45	2.65	3.05
<b>Two-piece Boom 4.15 m</b>														
1,500 <sup>3)</sup>	0.50	430	□	□	□	□	□	□	□	□	□	□	□	□
1,600 <sup>2)</sup>	0.80	850	□	□	□	□	□	□	□	□	□	□	□	□
2,000 <sup>2)</sup>	0.50	690	□	□	□	□	□	□	□	□	□	□	□	□
2,000 <sup>3)</sup>	0.70	520	□	□	□	□	□	□	□	□	□	□	□	□
2,000 <sup>2)</sup>	0.70	880	□	□	□	□	□	□	□	□	□	□	□	□
2,000 <sup>3)</sup>	1.20	640	□	□	□	□	□	□	□	□	□	□	□	□
2,000 <sup>2)</sup>	1.00	940	□	□	□	□	□	□	□	□	□	□	□	□
2,200 <sup>2)</sup>	0.80	880	□	□	□	□	□	□	□	□	□	□	□	□
2,200 <sup>2)</sup>	1.15	980	□	□	□	□	□	□	□	□	□	□	□	□
2,200 <sup>2)</sup>	1.40	1,000	□	△	△	■	□	□	□	□	□	□	□	□
2,400 <sup>2)</sup>	0.85	890	□	□	□	□	□	□	□	□	□	□	□	□
2,400 <sup>3)</sup>	0.85	610	□	□	□	□	□	□	□	□	□	□	□	□
2,400 <sup>3)</sup>	1.25	1,000	□	□	□	□	□	□	□	□	□	□	□	□
<b>Mono Boom 5.65 m</b>														
1,500 <sup>3)</sup>	0.50	430	□	□	□	□	□	□	□	□	□	□	□	□
1,600 <sup>2)</sup>	0.80	850	□	□	□	□	□	□	□	□	□	□	□	□
2,000 <sup>2)</sup>	0.50	690	□	□	□	□	□	□	□	□	□	□	□	□
2,000 <sup>3)</sup>	0.70	520	□	□	□	□	□	□	□	□	□	□	□	□
2,000 <sup>2)</sup>	0.70	880	□	□	□	□	□	□	□	□	□	□	□	□
2,000 <sup>3)</sup>	1.20	640	□	□	□	□	□	□	□	□	□	□	□	□
2,000 <sup>2)</sup>	1.00	940	□	□	□	□	□	□	□	□	□	□	□	□
2,200 <sup>2)</sup>	0.80	880	□	□	□	□	□	□	□	□	□	□	□	□
2,200 <sup>2)</sup>	1.15	980	□	□	□	□	□	□	□	□	□	□	□	□
2,200 <sup>2)</sup>	1.40	1,000	□	□	△	△	□	□	□	□	□	□	□	□
2,400 <sup>2)</sup>	0.85	890	□	□	□	□	□	□	□	□	□	□	□	□
2,400 <sup>3)</sup>	0.85	610	□	□	□	□	□	□	□	□	□	□	□	□
2,400 <sup>3)</sup>	1.25	1,000	□	□	□	□	□	□	□	□	□	□	□	□

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

Cutting width mm	Capacity ISO 7451 <sup>1)</sup> m <sup>3</sup>	Weight kg	Stabilizers raised				2 point outriggers + Stabilizer blade down				4 point outriggers down			
			Stick length (m)				Stick length (m)				Stick length (m)			
			2.25	2.45	2.65	3.05	2.25	2.45	2.65	3.05	2.25	2.45	2.65	3.05
<b>Two-piece Boom 4.15 m</b>														
1,500 <sup>2)</sup>	1.20	970	□	□	□	△	□	□	□	□	□	□	□	□
1,600 <sup>2)</sup>	0.80	820	□	□	□	□	□	□	□	□	□	□	□	□
1,600 <sup>2)</sup>	1.00	890	□	□	□	□	□	□	□	□	□	□	□	□
1,600 <sup>2)</sup>	1.35	970	□	□	△	△	□	□	□	□	□	□	□	□
1,600 <sup>2)</sup>	1.55	1,030	△	△	■	■	□	□	□	□	□	□	□	□
<b>Mono Boom 5.65 m</b>														
1,500 <sup>2)</sup>	1.20	970	□	□	□	□	□	□	□	□	□	□	□	□
1,600 <sup>2)</sup>	0.80	820	□	□	□	□	□	□	□	□	□	□	□	□
1,600 <sup>2)</sup>	1.00	890	□	□	□	□	□	□	□	□	□	□	□	□
1,600 <sup>2)</sup>	1.35	970	□	□	□	△	□	□	□	□	□	□	□	□
1,600 <sup>2)</sup>	1.55	1,030	△	△	△	■	□	□	□	□	□	□	□	□

\* Indicated loads are based on ISO 10567 and do not exceed 75% of tipping or 87% of hydraulic capacity, max. stick length without quick coupler, lifted 360° on firm with blocked oscillating axle

<sup>1)</sup> comparable with SAE (heaped)

<sup>2)</sup> with 2 x 50° rotator

<sup>3)</sup> rigid ditch cleaning bucket

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



# Equipment



## Undercarriage

Dual-circuit braking system	•
Tyres (twin tyres) Mitas EM 22	•
Individual control outriggers	•
Travel speed levels (four)	+
Load holding valve on each stabilization cylinder	•
Powershift transmission, semiautomatic	•
Parking brake, maintenance-free	•
Tyres, variants	+
Protection for piston rods, stabilizer cylinder	•
Undercarriage EW 2.75 m/9'	•
Tool equipment, extended	+
Tool box left – lockable	•
Tool box right – lockable	+



## Uppercarriage

Uppercarriage right side light, 1 piece, LED 1300 lumen	+
Uppercarriage rear light, 2 pieces, halogen	+
Uppercarriage rear light, 2 pieces, LED 1300 lumen	+
Refuelling system with filling pump	•
Main battery switch for electrical system	•
Engine hood with gas spring	•
Warning beacon on uppercarriage	+
Service doors, lockable	•



## Hydraulics

Shut-off valve between hydraulic tank and pump(s)	•
Pressure test fittings	•
Accumulator for controlled lowering of the attachment with the engine shut down	•
Hydraulic oil filter with integrated microfilter	•
Liebherr hydraulic oil from –20 °C to +40 °C	•
Liebherr hydraulic oil, biologically degradable	+
Liebherr hydraulic oil, specially for warm or cold regions	+
Bypass filter	+
Switchover high pressure circuit and tipping cylinder	+
Switchover high pressure circuit and adjustment cylinder (two-piece boom)	+



## Engine

Fuel anti-theft device	+
Liebherr particle filter	•
Reversible fan drive, fully automatic	+
Air pre-filter with dust discharge	+
Preheating fuel	+



## Operator's Cab

Storage compartment	•
Cab lights rear, halogen	+
Cab lights rear, LED 1300 lumen	+
Cab lights front, halogen (above rain cover)	+
Cab lights front, halogen (under rain cover)	•
Cab lights front, LED 1300 lumen (above rain cover)	+
Cab lights front, LED 1300 lumen (under rain cover)	+
Mechanical hour meters, readable from outside the cab	•
Operator's seat Standard	•
Operator's seat Comfort	+
Operator's seat Premium	+
Driving alarm (acoustic signal is emitted during travel, can be switched ON/OFF)	+
Fire extinguisher	•
Windscreen retractable (including upper part)	•
Intermittent windscreen wiper with wiper washer	•
Rubber floor mat, removable	•
Dome light	•
Joystick steering	+
Coat hook	•
Automatic air conditioning*	•
Fuel consumption indicator	•
Electric cooler	+

Steering wheel, wide version (cost-neutral option)	+
Steering column adjustable horizontally	•
LiDAT Plus (extended Liebherr data transfer system)**	•
Automatic engine shut-down (time adjustable)	+
Emergency exit rear window	•
Bullet proof front screen – not adjustable	+
Bullet proof glass (top)	+
Positioning swing brake	+
Proportional control	+
Radio Comfort (control via display)	+
Preparation for radio installation	•
Rain cover over front window opening	•
ROPS cab protection	•
Back-up alarm (acoustic signal is emitted traveling backward, can not be switched off)	+
Warning beacon on cab	+
All tinted windows	•
Windscreen wiper, roof	+
Door with sliding window	•
Top guard	+
Front guard	+
Right side window and windshield made of laminated glass	•
Sun blind	•
Auxiliary heating, adjustable (week time switch)	+
Cruise control	•
Electronic immobilizer	+
Cigarette lighter and ashtray	•



## Attachment

Boom lights, 2 pieces, halogen	•
Boom lights, 2 pieces, LED 1300 lumen	+
Stick lights, 2 pieces, halogen	+
High pressure circuit incl. lines and Tool Control	+
Electronic lift limitation	+
Load hook on stick	+
Shackle on stick	+
Leak oil line, additional for working tools	+
Liebherr ditch cleaning bucket	+
Liebherr pipe laying tool	+
Liebherr quick coupler, hydraulic or mechanical	+
Liebherr tilt bucket	+
Liebherr tilt rotator	+
Liebherr sorting grapple	+
Liebherr backhoe bucket	+
Liebherr tooth system	+
Liebherr clamshell grab	+
Middle pressure circuit incl. lines	+
Mono boom	+
Pipe fracture safety valves hoist cylinders	•
Pipe fracture safety valve tipping cylinder	+
Pipe fracture safety valve stick cylinder	•
Return line, pressureless (in high pressure circuit option included)	+
Hose quick coupling at end of stick	•
Quick coupling system LIKUFIX	+
Protection for piston rod, tipping cylinder	+
Protection for piston rod, stick cylinder	+
Custom painting for tools	+
Tool Control, 10 tool adjustments selectable over the display	+
Tool Management, automatic tool recognition (in combination with LIKUFIX)	+
Overload warning device	•
Protection for stick	+
Two-piece boom	+



## Complete Machine

Lubrication	
Lubrication undercarriage, manually – decentralized (grease points)	•
Lubrication undercarriage, manually – centralized (one grease point)	+
Central lubrication system for uppercarriage and attachment, automatically (without quick coupler and connecting link)*	•
Central lubrication system, extension for quick coupler	+
Central lubrication system, extension for connecting link	+
Special coating	
Single-coloured, grey parts excepted	+
Single-coloured, grey parts included (except power train)	+
Multicoloured (except power train)	+
Monitoring	
Rear view monitoring with camera*	•
Side view monitoring with camera	•

• = Standard, + = Option

\* = country-dependent, \*\* = optionally extendable after one year

**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 38,000 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)