

R 948 Litronic

LIEBHERR

Crawler excavator



Generation
8

Operating weight
48,600–51,180 kg

Engine
280 kW / 381 HP
Stage V
Non-regulated only
for select markets

Bucket capacity
2.00–3.50 m³

Robustness, performance, innovation

R 948

① Maintenance

- Flat access platform for the engine compartment, without protrusions, fitted with non-slip studs
- Optional left and right catwalks
- Optional automatic central lubrication system with lubrication strategies fully integrated into the human-machine interface
- Optional shut-off valve on hydraulic tank outlet

② Equipment

- Wide choice of types and lengths of backhoe attachments
- Welded structure with cast steel components for improved stress-resistance and longer service life
- Safety check valves to prevent boom and stick cylinder pipes from bursting, with integrated regeneration system for lower fuel consumption
- New Liebherr Positive Control hydraulic control system for more rapid and efficient movements

③ Safety

- Completely unobstructed, best-on-the-market visibility and rear- and side-view monitoring cameras as standard
- Haptic display to ensure safer operation and prevent accidental activation
- Retractable console for safe, easy cab access
- Fully retractable or optional partially fixed windscreen and impact-resistant roof glass panel as standard
- Roll over protective structure ROPS
- Optional safe side cab access platform
- Optional retractable electric ladder

④ Undercarriage

- Welded undercarriage with more rigid X profile for increased robustness
- Double or triple grouser track pads depending on the application
- Track rollers with lifetime lubrication
- Forged one-tooth sprocket with material ejection

⑤ Comfort

- The latest and most innovative operator's cab on the market, quiet and very comfortable
- Heated seat with pneumatic multi-directional shock absorption (air conditioning optional)
- High-resolution 10" colour touchscreen
- Groundbreaking, intuitive INTUSI human-machine interface

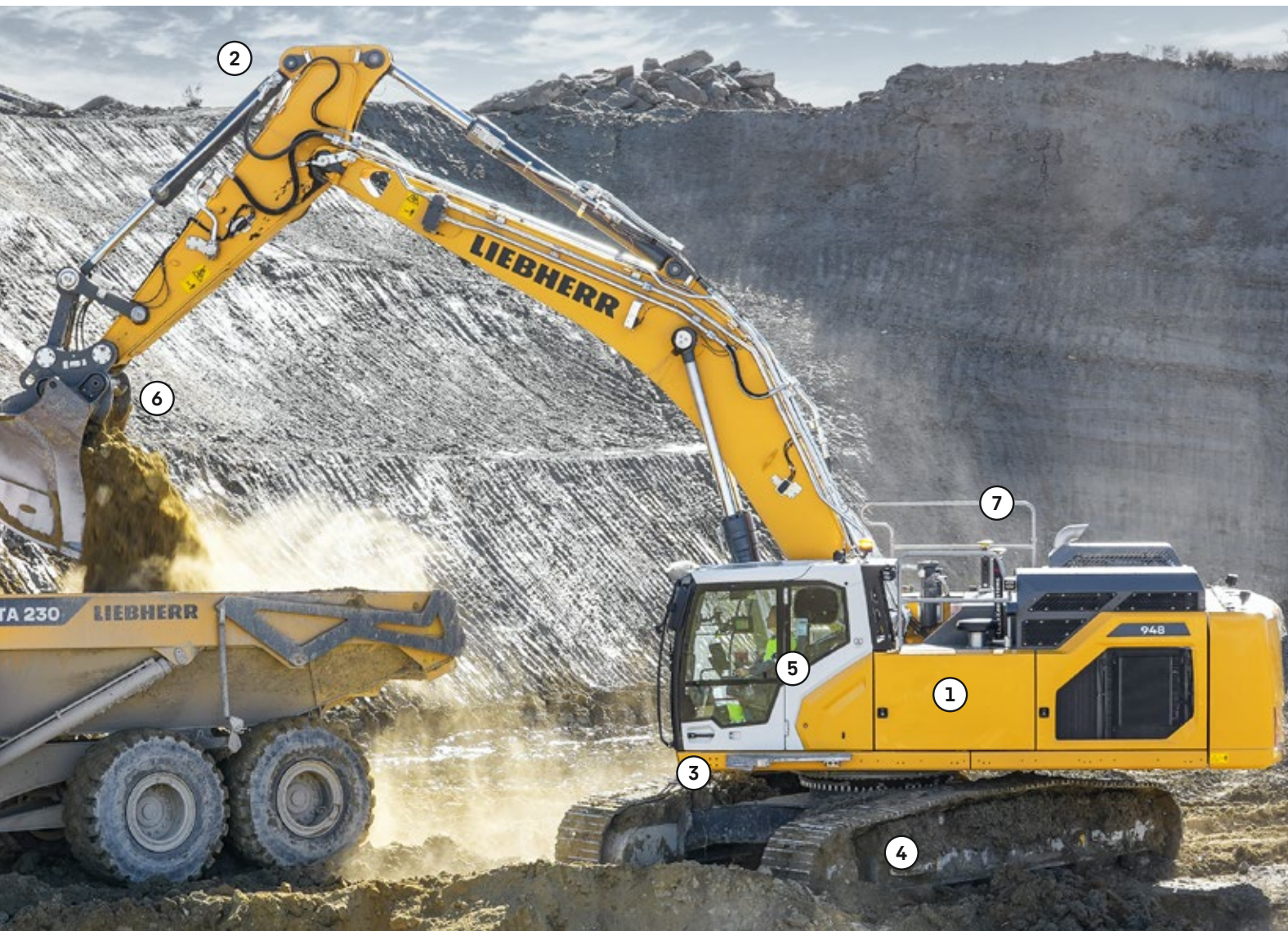


⑥ Buckets

- New design for bucket and teeth
- Different levels of protection to suit different areas of application:
 - HD for loose, minimally abrasive materials
 - HDR for hard-to-break, moderately abrasive materials
 - HDV for highly abrasive materials
- Different blade versions:
 - Straight (for earthmoving and grading)
 - Semi-delta (for hard-to-break, hard-to-extract materials)
 - Delta (for compacted or slightly cracked materials)

⑦ New technologies

- **Liebherr Power Efficiency (LPE)**
Up to 10% reduction in fuel consumption, as standard
- **Bucket Fill Assist (BFA)**
Automatic bucket-filling cycle for increased productivity, as standard with 500 machine hours included
- **Modetronic**
Customisable driving modes for optimised work cycles tailored to each type of application, as standard
- **Machine control**
2D passive machine control included as standard, with numerous other control options available (active, 3D, etc.)
- **Dynamic weighing**
Integrated dynamic weighing system as standard with 500 machine hours included
- **Liebherr Connect**
Latest-generation telemetry system, as standard
- **MyLiebherr**
Series customer portal with numerous downloadable applications (subscription required)



Maintenance & robustness

A machine designed to last

Intended for demanding earthmoving applications, the R 948 has been developed with particular attention to component robustness and ease of maintenance. With every detail, the aim is to maximise the availability of the machine and reduce downtime.



Easier maintenance

Flat and free from protrusions, the engine access platform is designed to enable quick, safe maintenance. Non-slip surfaces and fully unobstructed access platforms offer ideal conditions for maintenance operations, whatever the conditions on the job site.

The automatic central lubrication system, available as standard, is fully integrated into the human-machine interface. Lubrication strategies are adjusted automatically, ensuring optimal lubrication of key components while also limiting omissions and errors.

Robust structure

The welded structure combines high-strength steels and cast steel components for effective resistance to operational stresses. This tried and tested design guarantees high durability, even under continuous intensive use.

The sticks are dust-tight as standard and feature bearings with protective caps for the axles and enhanced lubrication for greater robustness and performance.



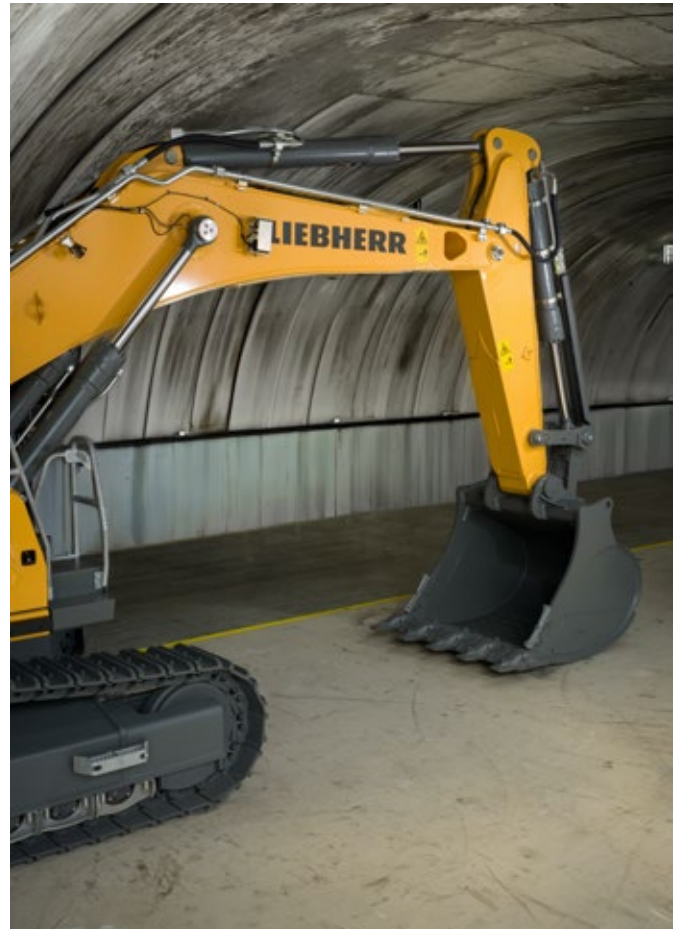
Working attachments & undercarriage

Versatility for all applications

Thanks to a wide range of working attachments and an undercarriage designed for stability and traction, the R 948 can adapt precisely to every job, from standard to complex earthmoving applications.

Custom attachments

The R 948 offers a vast choice of booms, sticks, and backhoe bucket configurations, allowing the machine to be optimised for each specific application. The new Liebherr Positive Control hydraulic control system ensures rapid, smooth and perfectly coordinated movements, along with maximum productivity.



High-strength undercarriage

The welded undercarriage features an extra-rigid X-shaped profile, guaranteeing stability and optimum load distribution.

The permanently lubricated track rollers and forged single-tooth sprocket with automatic material ejection ensure improved reliability and lower maintenance costs over the long term.

Double- or triple-grouser track pads are available as required, offering optimum traction on all types of ground.



New generation 8 TL 07 bucket

Buckets for all types of digging material

The new generation of Liebherr buckets and teeth is available with several levels of protection (HD, HDR and HDV), to cater precisely to the challenges of the digging mate-

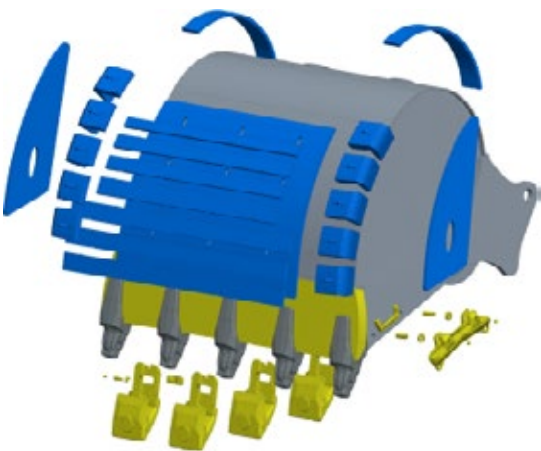
rials worked on. The different blade versions allow penetration and filling to be optimised for any type of ground whatsoever.

New model names

of wear kits HD, HDR and HDV

Many designs

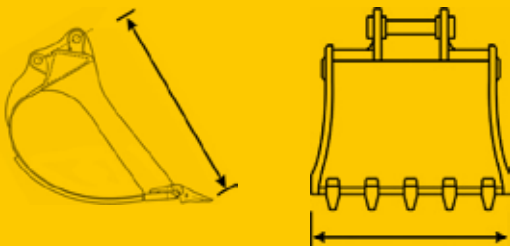
and configurable options



New range

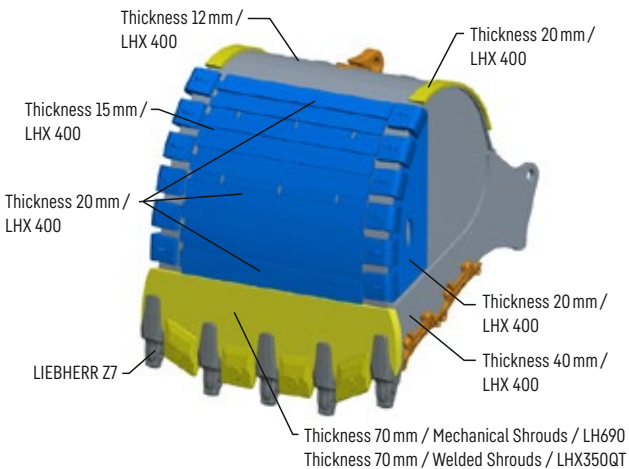
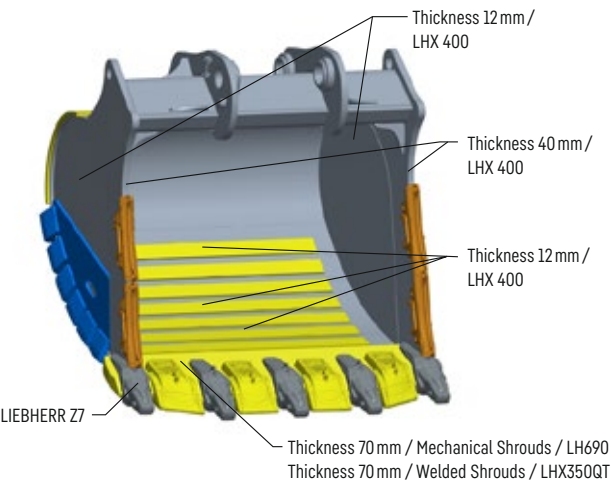
clear and well structured

**4 blade widths + 4 shapes
= 9 buckets**



	1,500 mm	1,700 mm	1,950 mm	2,150 mm
R	2.00 m³	2.30 m³	2.70 m³	–
S	–	2.50 m³	3.00 m³	3.50 m³
V	–	–	3.25 m³	3.70 m³
W	–	–	–	4.00 m³

Materials and thicknesses



New generation 3 tooth system

The new Liebherr Z G3 tooth system was designed to enhance the end-user experience and was optimised to provide even more performance than the previous system.

Improved tooth design

The tooth in the new Z G3 system has a self-sharpening design which means, as it wears down, the edge naturally becomes sharper to maintain optimal penetration, which in turn makes digging more efficient. Plus, the tooth has extra wear material in all the most important places to prevent premature wear while working in highly abrasive environments and ensure long-lasting performance. For even more durability, the retainer that secures the tooth to the adapters within the system is made of metal and so can handle long stretches in storage as well as extreme temperature while it's working. As a bonus, the retainer is also pre-installed onto the tooth to help speed up and simplify the installation process!



Advanced wear cap and adapter design

The updated design of both the adapter and the wear cap in the Z G3 system are full of new features. There are large contact surfaces on the adapter's nose that minimises plastic deformation, wear indicators so technicians confidently know when the wear cap needs to be replaced, and weld protection to prevent wear along the bottom and sides of the adapter. On top of all that, the new adapter is designed to evenly distribute both stress and load for better stability and performance.

Secure locking system

The Z G3 system's locking system can be installed and removed in two easy, hammerless steps for fast and simple maintenance. Supporting this easy installation is a locking hole in the tooth that has a poka-yoke mechanism, which guides the pin into the right position each and every time. And technicians can be certain installation has occurred correctly as the locking system makes an audible 'click' when the pin has been securely locked in place.



New technologies

Latest generation technologies

The R 948 includes as standard the **Liebherr Power Efficiency (LPE)** concept, allowing up to 10% lower fuel consumption.

The **Bucket Fill Assist (BFA)** system automates bucket filling for consistent productivity, while **Modetronic** allows machine behaviour to be adapted to each operator and each application.

2D passive machine control, integrated **dynamic weighing** and **Liebherr Connect** connectivity complete this set of technologies, delivering a precise, connected and performance-oriented machine.

On-board intelligence and maximum productivity

The Liebherr technologies included as standard in the R 948 optimise each work cycle while also reducing consumption and component wear.



The new emCAB operator's cab

The new operating system for a smarter job site

In today's construction industry, intuitive machine control is essential for maximising productivity and ease of use. INTUSI (Intuitive User Interface) integrates intelligent control logic with advanced machine learning capabilities, offering a highly customizable interface. This innovation significantly enhances operational efficiency and user comfort on the job site.



Ultra-ergonomic control with Liebherr joysticks

Central to the INTUSI experience are two joysticks designed and developed by Liebherr to the highest quality standards, ergonomically positioned on either side of the operator's seat. Designed for comfort at work, they offer a completely natural and very comfortable grip and reduce operator fatigue – even during extended shifts.

Intuitive operation thanks to uncluttered control units

A compact display to the right of the operator enables quick access to important functions. The optimised arrangement of the control elements on the right-hand console ensures intuitive operation and minimises fatigue. An operating system that adapts to your needs, not the other way around.



Technical data



Diesel engine

Rating per ISO 9249	280 kW (381 HP) at 1,800 RPM
Torque	2,280 Nm at 1,000 RPM
Model	Liebherr D956 A7-05
Type	6 cylinder in-line
Bore / Stroke	130 / 150 mm
Displacement	11.9 l
Engine operation	4-stroke diesel Common-Rail, monoturbo
Exhaust gas treatment	Certifications: EU Stage V / US Tier 4 Final / Non regulated DOC + SCR Filter (not applicable for Non regulated) Passive regeneration by thermo management
Air cleaner	Dry-type air cleaner with pre-cleaner, primary and safety elements
Fuel tank	900 l
Urea tank	90 l
Engine idling	Sensor controlled
Electrical system	
Voltage	24 V
Batteries	2 x 180 Ah / 12 V
Alternator	Three-phase current 28 V / 140 A



Cooling system

Diesel engine	Water-cooled and oil cooler, after-cooled and fuel cooled
----------------------	---



Hydraulic controls

Power distribution	Via control valves, simultaneous and independent actuation of undercarriage, swing drive and equipment
Electric servo circuit	Electro-hydraulic control
Equipment and swing	Proportional via joystick levers
Travel	– Proportional control via foot pedals or removable levers – Automatic or manual speed adjustment
Additional functions	Proportional regulation via foot pedals or mini-joystick



Hydraulic system

Hydraulic system	Positive Control hydraulic system. Demand-based, double independent pump flows Features high system dynamics and sensitivity provided by integrated system controlling Independent circuit for rotation with braking energy reutilisation
Hydraulic pumps	
For equipment and travel drive	Two Liebherr variable displacement, swashplate pumps
Max. flow	2 x 380 l/min.
Max. pressure	380 bar
For swing drive	Swashplate pump, closed-loop circuit
Max. flow	250 l/min.
Max. pressure	400 bar
Pump management	Electronic management synchronous to the control block
Hydraulic tank	365 l
Hydraulic system	max. 710 l
Filtration	2 full flow filters in return line with integrated fine filter area (10 µm)
Option	2 filters 200 µm upstream of the main distributor
MODE selection	Adjustment of engine and hydraulic performance via a mode pre-selector to match application, e.g. for especially economical operation or for maximum digging performance and heavy-duty jobs
E (Eco)	Mode for especially economical operation
P (Power)	Mode for high performance with low fuel consumption
P+ (Power-Plus)	Mode for highest performance and for very heavy duty applications, suitable for intensive continuous operation
Engine speed and performance setting	Stepless adjustment of engine output and hydraulic power via engine speed. LPE mode optimises the interaction between the diesel engine and the working hydraulics for maximum fuel efficiency
Option	Tool Control: 20 pre-adjustable pump flows and pressures for attachments supplied by the auxiliary high-pressure circuit



Swing drive

Drive	Liebherr axial piston motor
Transmission	Liebherr compact planetary reduction gears
Swing ring	Liebherr, sealed race ball bearing swing ring, internal teeth
Swing speed	0–6.7 RPM stepless
Swing torque	185 kNm
Holding brake	Wet multi-disc (spring applied, pressure released)



Cab

Cab	ROPS / TOPS safety cab structure (roll-over / tip-over protection system) with individual windscreens or featuring a slide-in subpart under the ceiling, headlights integrated in the ceiling, a door with a sliding window, large stowing and depositing possibilities, shock-absorbing suspension, sound damping insulating, laminated safety glass, separate window shades for the sunroof window and windscreen
Operator's seat Comfort	Air cushioned operator's seat with 3D-adjustable armrests, headrest, lap belt, seat heater (2-stage), adjustable seat cushion inclination and length, lockable horizontal suspension, automatic weight adjustment, pneumatic low frequency suspension, 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) and active seat climatisation with active coal and ventilator
Arm consoles	Joysticks with control consoles attached to the seat, folding left control console
Operation and displays	Large high-resolution operating unit, intuitive, colour display with touchscreen, haptic feedback, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine and attachment parameters
Air-conditioning	Automatic air-conditioning, recirculated air function, fast de-icing and demisting at the press of a button, air vents can be operated via a menu; recirculated air and fresh air filters can be easily replaced and are accessible from the outside; heating-cooling unit, designed for extreme outside temperatures, sensors for solar radiation, inside and outside temperatures (country-dependent) The air conditioning system contains fluorinated greenhouse gases
Refrigerant	R134a
Global warming potential	1,430
Quantity at 25 °C*	1,260 g
CO ₂ equivalent	1.80 t
Vibration emission**	
Hand / arm vibrations	< 2.5 m/s ²
Whole-body vibrations	< 0.5 m/s ²
Measuring inaccuracy	According with standard EN 12096:1997



Undercarriage

LC	Gauge 2,740 mm
Drive	Liebherr compact planetary reduction gear with Liebherr axial piston motor on both sides
Transmission	Liebherr compact planetary reduction gear
Maximum travel speed	3.1 km/h low range 5.2 km/h high range
Drawbar pull on crawler	383 kN
Track components	D7G, maintenance-free
Track rollers / Carrier rollers	9 / 2
Tracks	Sealed and greased
Track pads	Double or triple grouser
Holding brake	Wet multi-disc (spring applied, pressure released)
Brake valves	Integrated into travel motor
Lashing eyes	Integrated



Equipment

Type	Optimised combination of resistant steel plates and cast steel components
Hydraulic cylinders	Liebherr cylinders with special sealing and guide system and electronically controlled shock absorption
Bearings	Sealed, low maintenance
Backhoe buckets	New TL 07 design with the new Z G3 generation of teeth



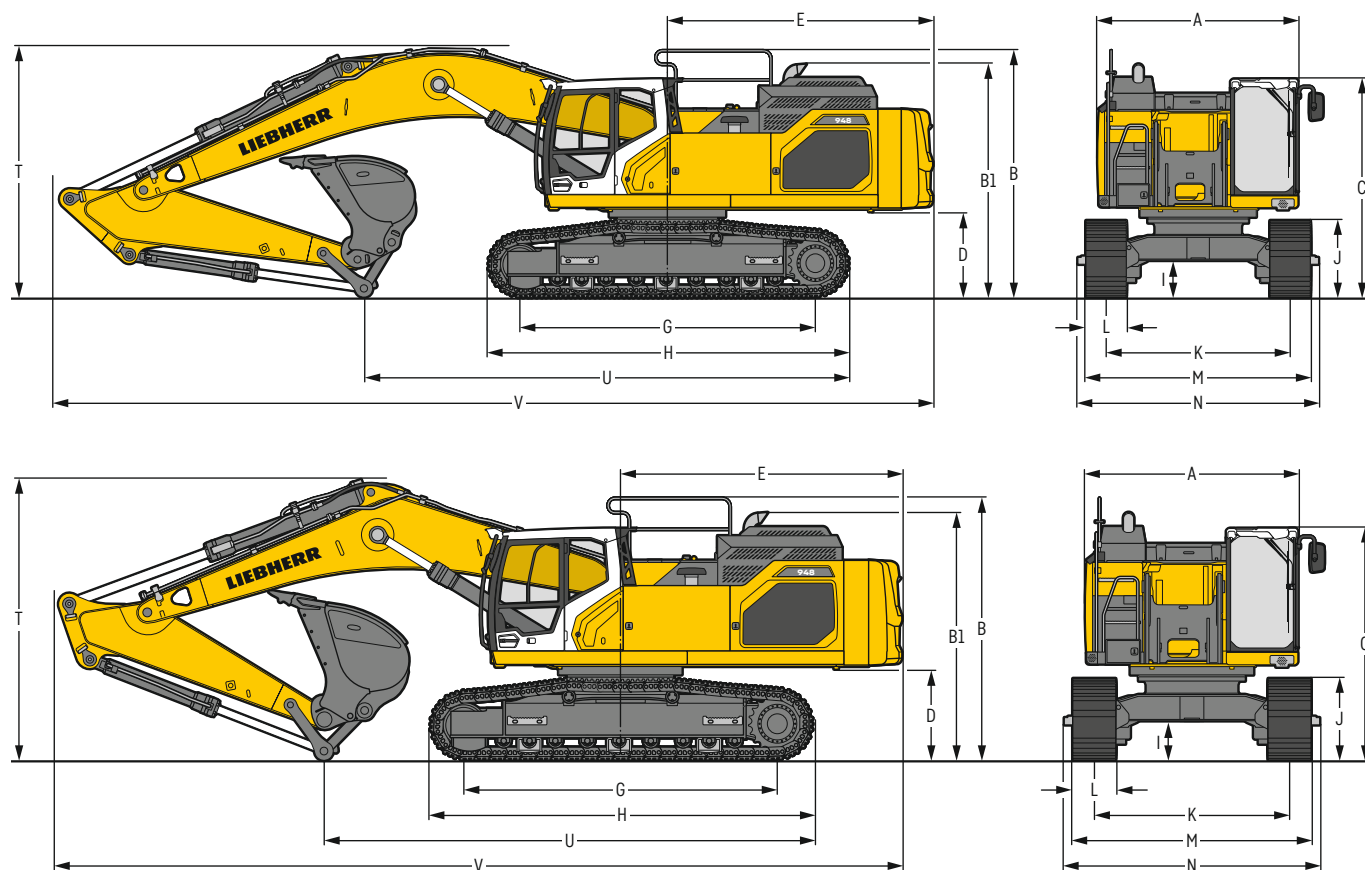
Complete machine

Lubrication	Liebherr central lubrication system
Hydraulic connections	Pipes and hoses equipped with SAE split-flange connections (standardised)
Noise emission	
ISO 6396	72 dB(A) = L _{PA} (inside cab)
2000/14/EC	107 dB(A) = L _{WA} (surround noise)

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

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

Dimensions



		LC			mm
A	Uppercarriage width				2,990
B	Uppercarriage height				3,690
B1	Uppercarriage height (handrails folded)				3,480
C	Cab height				3,260
D	Counterweight ground clearance				1,275
E	Rear-end length				3,950
G	Wheelbase				4,400
H	Undercarriage length				5,370
I	Undercarriage ground clearance				550
J	Track height				1,145
K	Track gauge				2,740
L	Track pad width			600 750 900	
M	Width over tracks			3,340 3,490 3,640	
N	Width over steps			3,585 ¹⁾ 3,585 ¹⁾ 3,585 ¹⁾	

¹⁾ width with removable steps

		Stick length	Mono boom 6.95 m	Mono boom 7.70 m	Mono boom ME 6.50 m
		m	direct mounting mm	direct mounting mm	direct mounting mm
T	Boom height	2.90	3,750	3,800	-
		3.35	3,700	3,750	-
		3.90	3,500	3,600	-
		2.50 ME	-	-	3,750
		2.90 ME	-	-	4,000
		2.90	7,250	8,000	-
U	Length on ground	3.35	6,550	7,250	-
		3.90	9,200	6,450	-
		2.50 ME	-	-	7,300
		2.90 ME	-	-	6,850
		2.90	12,400	13,100	-
		3.35	12,400	13,100	-
V	Overall length	3.90	12,400	13,100	-
		2.50 ME	-	-	11,900
		2.90 ME	-	-	11,900
		2.90	3.00 m ³	2.30 m ³	3.00 m ³
		3.00 m ³			
		2.30 m ³			

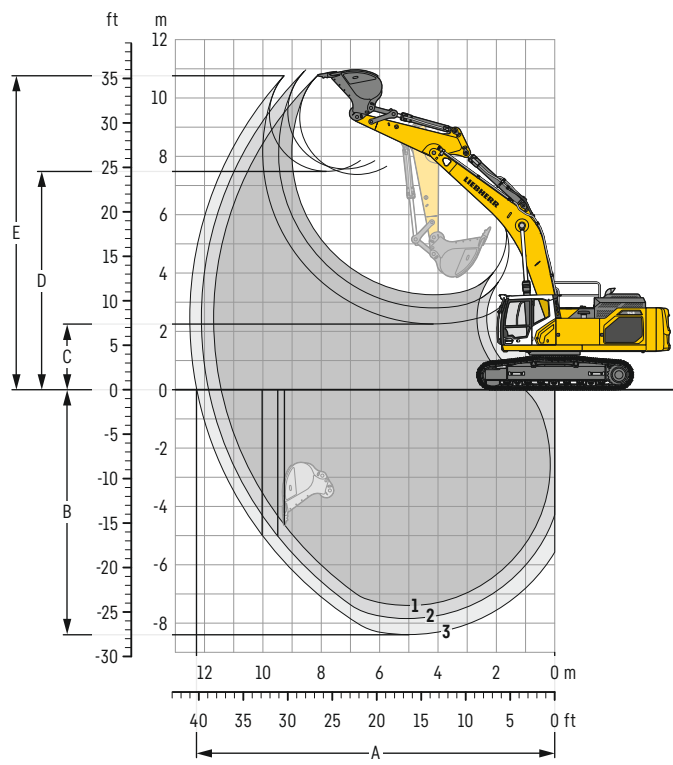
Transport dimensions

removable elements disassembled

		Mono boom 6.95 m			Mono boom 7.70 m			Mono boom ME 6.50 m		
		mm			mm			mm		
	Pad width	600	750	900	600	750	900	600	750	900
	Transport width	3,340	3,490	3,640	3,340	3,490	3,640	3,340	3,490	3,640
	Stick m	mm			mm			mm		
		mm			mm			mm		
	Transport length	12,400			13,100			11,900		
	Transport height	2.90	3,750		3,800			-		
		3.35	3,700		3,750			-		
		3.90	3,500		3,600			-		
		2.50 ME	-		-			3,750		
		2.90 ME	-		-			4,000		
	Bucket	3.00 m ³			2.30 m ³			3.00 m ³		

Backhoe bucket

with mono boom 6.95 m



Digging envelope

without quick coupler		1	2	3
Stick length	m	2.90	3.35	3.90
A Max. reach at ground level	m	11.43	11.86	12.26
B Max. digging depth	m	7.39	7.84	8.39
C Min. dumping height	m	3.25	2.81	2.26
D Max. dumping height	m	7.38	7.57	7.48
E Max. cutting height	m	10.77	10.96	10.76

Forces

without quick coupler		1	2	3
Stick digging force (ISO 6015)	kN	243	221	199
Bucket digging force (ISO 6015)	kN	298	298	298
Stick digging force (SAE J1179)	kN	238	217	197
Bucket digging force (SAE J1179)	kN	260	260	260

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 9.4 t, mono boom 6.95 m, stick 2.90 m and HD backhoe bucket 3.00 m³ (2,650 kg).

Undercarriage		LC		
Pad width	mm	600	750	900
Weight	kg	48,600	49,860	50,730
Ground pressure	kg/cm ²	0.85	0.70	0.59

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

	Cutting width mm	Capacity ISO 7451 m ³	Weight kg	LC undercarriage (with track pads 600 mm)		
				Stick length (m)		
				2.90	3.35	3.90
HD ¹⁾	1,500	2.00	2,050	▲	▲	▲
	1,700	2.30	2,250	▲	▲	▲
	1,700	2.50	2,400	▲	▲	■
	1,950	2.70	2,450	▲	■	▲
	1,950	3.00	2,650	■	▲	■
	1,950	3.25	2,750	▲	■	■
	1,500	2.00	2,400	▲	▲	▲
HDR ²⁾	1,700	2.30	2,600	▲	▲	▲
	1,700	2.50	2,750	▲	▲	■
	1,950	2.70	2,800	▲	■	▲
	1,950	3.00	2,950	■	■	■
	1,950	3.25	3,020	▲	■	■

* indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

¹⁾ HD backhoe bucket with Liebherr teeth Z 70

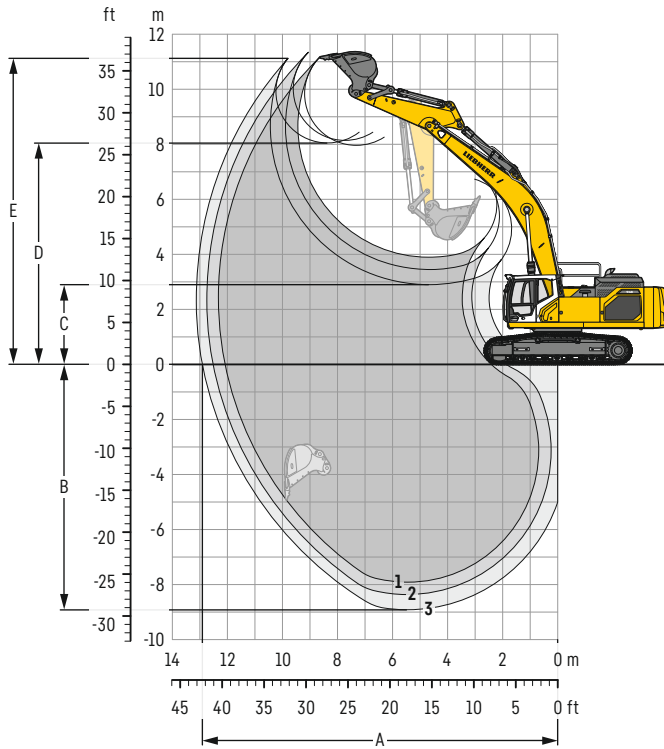
²⁾ HDR backhoe bucket with Liebherr teeth Z 70

Other backhoe buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.65 t/m³, ■ = ≤ 1.5 t/m³

Backhoe bucket

with mono boom 7.70 m



Digging envelope

without quick coupler		1	2	3
Stick length	m	2.90	3.35	3.90
A Max. reach at ground level	m	12.08	12.51	12.90
B Max. digging depth	m	7.91	8.36	8.91
C Min. dumping height	m	3.90	3.45	2.90
D Max. dumping height	m	8.14	7.96	8.04
E Max. cutting height	m	11.15	11.34	11.11

Forces

without quick coupler		1	2	3
Stick digging force (ISO 6015)	kN	243	221	199
Bucket digging force (ISO 6015)	kN	298	298	298
Stick digging force (SAE J1179)	kN	238	217	197
Bucket digging force (SAE J1179)	kN	260	260	260

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 9.4t, mono boom 7.70 m, stick 3.90 m and HD backhoe bucket 2.30 m³ (2,250 kg).

Undercarriage		LC		
Pad width	mm	600	750	900
Weight	kg	49,050	50,310	51,180
Ground pressure	kg/cm ²	0.86	0.71	0.60

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

	Cutting width mm	Capacity ISO 7451 m ³	Weight kg	LC undercarriage (with track pads 600 mm)		
				Stick length (m)		
				2.90	3.35	3.90
HD ¹⁾	1,500	2.00	2,050	▲	▲	▲
	1,700	2.30	2,250	▲	■	▲
	1,700	2.50	2,400	■	▲	■
	1,950	2.70	2,450	▲	■	■
	1,950	3.00	2,650	■	■	—
	1,950	3.25	2,750	■	—	—
HDR ²⁾	1,500	2.00	2,400	▲	▲	■
	1,700	2.30	2,600	▲	▲	■
	1,700	2.50	2,750	▲	■	■
	1,950	2.70	2,800	■	■	▲
	1,950	3.00	2,950	■	▲	—
	1,950	3.25	3,020	△	—	—

* indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

¹⁾ HD backhoe bucket with Liebherr teeth Z 70

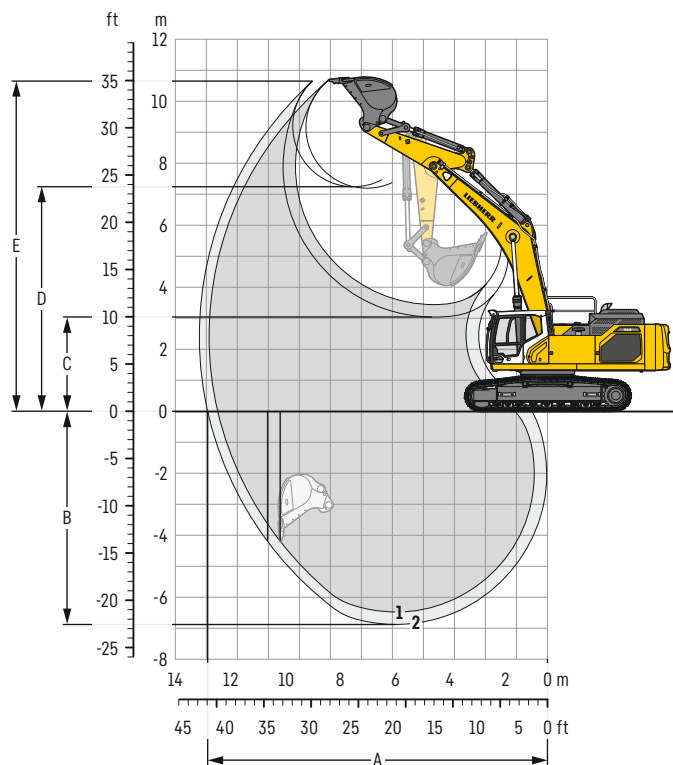
²⁾ HDR backhoe bucket with Liebherr teeth Z 70

Other backhoe buckets available upon request

Max. material weight ▲ = ≤ 2.0t/m³, ■ = ≤ 1.8t/m³, ▲ = ≤ 1.65t/m³, ■ = ≤ 1.5t/m³, △ = ≤ 1.2t/m³, — = not authorised

Backhoe bucket

with mono boom ME 6.50 m



Digging envelope

without quick coupler		1	2
Stick length	m	2.50	2.90
		ME	ME
A Max. reach at ground level	m	10.63	10.96
B Max. digging depth	m	6.48	6.88
C Min. dumping height	m	3.44	3.04
D Max. dumping height	m	7.20	7.24
E Max. cutting height	m	10.68	10.64

Forces

without quick coupler		1	2
Stick digging force (ISO 6015)	kN	261	239
Bucket digging force (ISO 6015)	kN	323	323
Stick digging force (SAE J1179)	kN	255	234
Bucket digging force (SAE J1179)	kN	284	284

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 9.4t, mono boom ME 6.50 m, stick ME 2.50 m and HD backhoe bucket 3.00 m³ (2,650 kg).

Undercarriage		LC		
Pad width	mm	600	750	900
Weight	kg	48,660	49,920	50,790
Ground pressure	kg/cm ²	0.86	0.70	0.60

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

	Cutting width mm	Capacity ISO 7451 m ³	Weight kg	LC undercarriage (with track pads 600 mm)	
				Stick length (m)	
				2.50	2.90
HD ¹⁾	1,500	2.00	2,050	▲	▲
	1,700	2.30	2,250	▲	▲
	1,700	2.50	2,400	▲	▲
	1,950	2.70	2,450	▲	▲
	1,950	3.00	2,650	▲	▲
	1,950	3.25	2,750	▲	■
	1,950	3.50	2,850	■	▲
	2,150	3.50	2,850	■	▲
HDR ²⁾	1,500	2.00	2,400	▲	▲
	1,700	2.30	2,600	▲	▲
	1,700	2.50	2,750	▲	▲
	1,950	2.70	2,800	▲	▲
	1,950	3.00	3,000	▲	▲
	1,950	3.25	3,070	■	■
	1,950	3.50	3,180	▲	▲
	2,150	3.50	3,180	▲	▲
HDV ³⁾	1,500	2.00	2,600	▲	▲
	1,700	2.30	2,800	▲	▲
	1,700	2.50	3,050	▲	▲
	1,950	2.70	3,100	▲	▲
	1,950	3.00	3,300	▲	■

* indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

¹⁾ HD backhoe bucket with Liebherr teeth Z 70

²⁾ HDR backhoe bucket with Liebherr teeth Z 70

³⁾ HDV backhoe bucket with Liebherr teeth Z 70

Other backhoe buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.65 t/m³

Lift capacities

with mono boom 6.95 m, counterweight 9.4 t and track pads 600 mm

Stick 2.90 m

Under-carriage	3.0m	4.5m	6.0m	7.5m	9.0m	10.5m		
m								m
9.0							11.8* 11.8*	7.1
7.5							9.2 11.0*	8.3
6.0							7.9 10.8*	9.0
4.5							7.1 10.9*	9.5
3.0							6.8 10.6	9.7
1.5							6.7 10.5	9.7
0							6.9 10.8	9.4
-1.5	14.0* 14.0*	18.9 27.3*	12.4 20.9	9.1 14.9			7.4 11.7	8.9
-3.0	26.2* 26.2*	19.2 24.5*	12.5 19.3*	9.3 15.0			8.6 13.5*	8.0
-4.5	24.4* 24.4*	19.8 19.8*	12.9 15.4*				11.1 12.9*	6.8
-6.0								

Stick 3.35 m

Under-carriage	3.0m	4.5m	6.0m	7.5m	9.0m	10.5m		
m								m
9.0							11.0 11.1*	7.7
7.5							11.0 12.1*	8.8
6.0							10.7 12.7*	9.5
4.5							8.0 12.0*	9.9
3.0							6.6 9.2*	10.1
1.5							6.3 9.5*	10.1
0							6.3 10.0	9.8
-1.5	13.8* 13.8*	18.7 27.1*	12.2 20.8	9.0 14.7	7.1 11.3		6.8 10.8	9.3
-3.0	23.4* 23.4*	18.9 25.6*	12.3 19.8*	9.1 14.8			7.7 12.3	8.5
-4.5	27.6* 27.6*	19.4 21.5*	12.6 16.8*				9.7 12.6*	7.3
-6.0								

Stick 3.90 m

Under-carriage	3.0m	4.5m	6.0m	7.5m	9.0m	10.5m		
m								m
9.0							8.0* 8.0*	8.2
7.5							7.6* 7.6*	9.2
6.0							6.8 7.5*	9.9
4.5							6.2 7.7*	10.3
3.0							5.8 8.0*	10.5
1.5							5.7 8.5*	10.5
0							5.8 9.3	10.2
-1.5	14.8* 14.8*	18.3 27.5*	12.0 20.5	8.8 14.5	6.9 11.1		6.2 9.9	9.8
-3.0	22.1* 22.1*	18.5 26.5*	12.0 20.3*	8.8 14.5	7.0 11.2		7.0 11.2	9.0
-4.5	31.0* 31.0*	18.9 23.2*	12.2 17.9*	9.0 13.8*			8.5 12.6*	7.9
-6.0							12.0* 12.0*	6.2

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

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 730 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

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

Lift capacities

with mono boom 7.70 m, counterweight 9.4 t and track pads 600 mm

Stick 2.90 m

Under-carriage	3.0m	4.5m	6.0m	7.5m	9.0m	10.5m		
m								m
9.0							9.6 11.4*	8.1
7.5							7.8 10.9*	9.1
6.0							6.7 10.5	9.8
4.5							6.1 9.7	10.2
3.0							5.8 9.2	10.4
1.5							5.7 9.1	10.4
0							5.9 9.4	10.2
-1.5							6.3 10.0	9.7
-3.0	19.2* 19.2*	18.4 23.3*	11.9 18.9*	8.7 14.4			7.1 11.4	8.9
-4.5	23.5* 23.5*	18.9 19.9*	12.2 16.2*	9.1 12.7*			8.7 11.9*	7.8
-6.0							10.8* 10.8*	6.0

Stick 3.35 m

Under-carriage	3.0m	4.5m	6.0m	7.5m	9.0m	10.5m		
m								m
9.0							8.6 9.6*	8.6
7.5							7.1 9.2*	9.6
6.0							6.2 9.1*	10.3
4.5							5.7 9.0	10.7
3.0							5.4 8.6	10.9
1.5							5.6 8.9	10.8
0							5.4 8.7	10.6
-1.5	8.6* 8.6*	17.8 17.8*	11.5 20.0	8.5 14.1	6.7 10.9		5.7 9.3	10.1
-3.0	17.7* 17.7*	18.1 24.4*	11.6 19.3*	8.5 14.2	6.7 11.0		6.4 10.4	9.4
-4.5	26.4* 26.4*	18.5 21.2*	11.9 17.1*	8.8 13.6*			7.7 11.5*	8.3
-6.0							10.6 10.7*	6.8

Stick 3.90 m

Under-carriage	3.0m	4.5m	6.0m	7.5m	9.0m	10.5m		
m								m
9.0							7.8* 7.8*	9.1
7.5							6.6 7.6*	10.0
6.0							5.8 7.6*	10.7
4.5							5.3 7.7*	11.1
3.0							5.0 8.0*	11.2
1.5							4.9 8.0	11.2
0							5.0 8.1	11.0
-1.5	10.8* 10.8*	17.4 19.1*	11.3 19.8	8.3 13.9	6.5 10.7	5.3 8.6	5.2 8.6	10.5
-3.0	17.4* 17.4*	17.6 25.3*	11.3 19.6*	8.3 13.9	6.5 10.7		5.8 9.5	9.8
-4.5	25.1* 25.1*	18.0 22.6*	11.5 17.8*	8.4 14.1			6.8 11.2	8.8
-6.0	23.1* 23.1*	18.3* 18.3*	12.0 14.5*				9.1 11.1*	7.4

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

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 730 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

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

Lift capacities

with mono boom ME 6.50 m, counterweight 9.4 t and track pads 600 mm

Stick ME 2.50 m

Under-carriage		3.0m		4.5m		6.0m		7.5m		9.0m		10.5m				
														m		
LC	9.0					14.8*	14.8*							14.7*	14.7*	6.0
	7.5													10.9	13.3*	7.3
	6.0					14.8	16.4*	10.5	14.8*					9.0	12.7*	8.2
	4.5			21.5	24.3*	14.1	18.3*	10.1	15.5*					8.1	12.6	8.7
	3.0					13.3	20.3*	9.7	15.5					7.6	11.9	8.9
	1.5			14.1*	14.1*	12.7	21.4	9.4	15.2					7.5	11.8	8.9
	0			19.0	23.2*	12.5	21.1	9.3	15.0					7.8	12.3	8.6
	-1.5	17.5*	17.5*	19.1	26.3*	12.5	20.5*	9.3	15.0					8.6	13.7	8.0
-3.0	27.0*	27.0*	19.5	22.4*	12.8	17.5*							10.4	13.7*	7.1	
-4.5													13.1*	13.1*	5.2	

Stick ME 2.90 m

Under-carriage 		3.0m	4.5m	6.0m	7.5m	9.0m	10.5m			m	
		 	 	 	 	 	 	 			
LC	9,0							12,0*	12,0*	6,5	
	7,5				10,7	13,1*		10,2	11,0*	7,7	
	6,0			15,0	15,6*	10,6	14,1*		8,5	10,7*	8,5
	4,5		21,9	22,9*	14,2	17,6*	10,2	15,0*	7,7	11,2*	
	3,0		20,1	27,4*	13,4	19,8*	9,8	15,6	7,5	11,8	
	1,5		19,2	20,7*	12,8	21,3*	9,4	15,2	7,3	11,6	
	0		18,9	26,0*	12,5	21,1	9,2	14,9			
	-1,5	18,4*	18,4*	19,0	27,3*	12,4	20,9*	9,2	14,9		
-3,0	30,2*	30,2*	19,3	23,8*	12,6	18,5*			8,0	12,8	8,4
-4,5		17,6*	17,6*	12,7*	12,7*				9,5	13,7*	7,5
								12,4*	12,4*	6,1	

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

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 810 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

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

Information & Sales



Downloads

All brochures for earthmoving and material handling at a glance.

Download now and find out more!



Configurator

Configure the perfect machine for your application.

Start now and choose the ideal solution!



Energy efficiency calculator

See how much fuel you can save with a Liebherr.

Calculate your consumption now and start saving!



Sales partner

Your local contacts.

Find your sales partner and get advice specific to your needs!



MyGuide app

Products, information and news – all in one app.

Download now and get started right away!



Contact form

We will take care of your request.

Get in touch now and we will work on your enquiry together!

Serial equipment



Undercarriage

Track components & tracks & steps

Lashing eyes
Sprocket with dirt ejector
Track and carrier rollers, sealed and lifetime-lubricated
Tracks, sealed and greased



Equipment

Boom

Anti-drift system boom cylinders
Anti-drift system stick cylinder
Boom cylinders regeneration
Pivot points made of cast steel
SAE split flanges on high pressure lines
Stick cylinder regeneration

Stick & attachment mounting

Priority setting between speed and force of the stick-in movement
Stick bottom protection



Uppercarriage

Hydraulic & engine

Air filter with automatic dust ejector
Common-Rail injection system
Dedicated swing circuit
DEF tank filling indicator²⁾
DEF tank lockable access hatch²⁾
Engine coolant level, visible from the cab
Engine hood with gas spring opening
Filter with integrated fine filters
Filters accessible from ground level
Fixed geometry turbocharger
Fuel fine filter
Fuel pre-filter and water separator
Fuel priming pump
Hydraulic oil level visible from ground level
Hydraulic pressure measuring ports
Intercooler
Liebherr Positive Control system with 2 independent circuits
Lockable fuel tank cap with padlock
Pressure accumulator for controlled lowering of equipment with engine turned off
Protection grid on radiator fan
Swing drive gearbox oil level, visible from the cab
Swing-out radiators

Counterweight & inspection

Counterweight standard 9.4 t

Options

Access platforms without protruding parts
Anti skid surfaces
Handrails
Lockable service doors
Lockable storage and accessories compartment
Magnetic rod
Main switch accessible from ground level
Main switch, electric, with timer
Main switch, manual, lockable
Sound insulation



Cab

Interior

Air-conditioned bottle holder
Air-conditioned storage compartment
Armrests adjustable in length, height and inclination
Automatic air conditioning
Coat hook
Consoles linked to the seat and adjustable
Diagnostic socket
Document holder behind seat
Emergency hammer with seat belt cutter
Emergency stop hydraulic and engine in cab
Hand free kit
Hour meters, accessible from ground level
Inner temperature sensor
Interior lighting LED
Key storage
Liebherr Connect Hard and Software; consider the Liebherr Connect-license customer terms of a license
Mood lighting LED
Outer temperature sensor
Radio Comfort
Roll-down sun blinds for windscreen and roof window
Rubber floor mat, fixed on floor and removable
Seat belt reminder
Socket in cab (24 V)
Sockets in cab (USB)
Solar radiation sensor
Storage nets
Storage space backpack
Storage tablet
Tiltable console left with safety lever

Exterior

Bottom windscreen wiper
Cab air filters, accessible from ground level
Cab door sliding windows
Integrated antenna
Laminated right hand side window
Preparation for top and front guard FOPS-FGPS
Rain hood over front window opening
Rear window emergency exit
Tinted windows
Windscreen wiper

Joystick

Handrests elevated for joysticks

Use & operation

DEF consumption on touchscreen ²⁾
Engine oil level on touchscreen
Fuel consumption on touchscreen
Independent travel ¹⁾
Liebherr Power Efficiency Engine Control
Movement priority setting between swing and boom
Power mode selector
Swing braking torque adjustable
Travel speed management ¹⁾



Control

Safety & operation

Automatic engine idling / speed increase
Horn
Modetronic
Positioning swing brake automatic

Hydraulic & control

10" colour touchscreen
DEF level on touchscreen ²⁾
Display controller button
Display with haptic feedback
Drive-by-joysticks ¹⁾
Fuel level on touchscreen
Hydraulic oil level on touchscreen
Machine settings personalised on display
Power modes
Start / Stop button
Touchpad 3.5"

Assistance systems

Inclinometer
Integrated sensors for assistance systems
Machine control 2D
Smartphone interface



Packages

Smart Travel

¹⁾ equipment not individually available, but only as predefined packages

²⁾ depending on the exhaust gas after-treatment system installed

Equipment standard / option

Undercarriage

Track components & tracks & steps

Chain guide 1 piece	•
Chain guide 3 pieces	+
Chain guide 4 pieces	+
Chain guide full length	+
Cover and base plate for undercarriage centre section	•
D7G chains 600 mm double grouser track pads 52 links	+
D7G chains 600 mm triple grouser track pads 52 links	•
D7G chains 750 mm triple grouser track pads 52 links	+
D7G chains 900 mm triple grouser track pads 52 links	+
Reinforced cover and base plate for undercarriage centre section	+
Steps	•
Travel drive gearbox protection	+
Travel motor housing protection	+
Undercarriage LC, track gauge 2,740 mm	•

Equipment

Boom

Boom bottom protection	+
Boom cylinders rod protection	+
Floating boom	+
Headlight guards on boom, right and left	+1)
Headlights on boom, LED, 2 pieces	+1)
Headlights on boom, LED+, 2 pieces	+1)
Main control valve block filters	+1)
Mono boom 6.95 m	+
Mono boom 7.70 m	+
Mono boom ME 6.50 m	+
Pipe fracture safety valve for stick cylinder	+
Pipe fracture safety valves for boom cylinders	+
Stick & attachment mounting	
Bucket cylinder rod protection	+
Centralised lubrication extended for connecting link	+
Quick coupler SWA 77 hydraulic for sealed stick	+
Stick ME sealed 2.50 m	+
Stick ME sealed 2.90 m	+
Stick sealed 2.90 m	+
Stick sealed 3.35 m	+
Stick sealed 3.90 m	+

Uppercarriage

Hydraulic & engine

Air pre-filter with cyclonical dust trap	+
Automatic engine shutdown after idling (with timer)	+
Automatic engine shutdown after idling (without timer)	+
Bypass filter for hydraulic oil	+
Declaration of conformity (spark arrester)	+
Electrical cabinet for pre-heating system (120V)	+
Engine shut-down with overrun	+
Exhaust gas after-treatment system – DOC + DPF + SCR	+
Hydraulic oil, Liebherr Hydraulic Basic 100 (0 to +55 °C)	+
Hydraulic oil, Liebherr Hydraulic HVI (-20 to +40 °C)	•
Hydraulic oil, Liebherr Hydraulic Plus 37 (-30 to +40 °C)	+
Hydraulic oil, Liebherr Hydraulic Plus, high performance oil (-30 to +45 °C)	+
Lighting for engine compartment	+1)
Power Pack EU Stage V + USA Tier 4 Final	•
Power Pack Non regulated countries	+
Preheating coolant	+
Preheating fuel	+
Preheating hydraulic oil	+
Radiator fine mesh protection grid	+
Reversible fan drive	+
Tank refilling pump DEF	+
Tank refilling pump fuel	+
Tropical execution	+
Uppercarriage side rubber bumpers	+
Wiggins coupling for engine oil	+
Wiggins coupling for fuel	+

Counterweight & inspection

Catwalk front left	+
Catwalk tiltable front left	+
Catwalks left and right	+
Motorised tiltable access ladder	+
Standard uppercarriage access	+
Uppercarriage platform guardrails	+
Uppercarriage side access platform with lockable storage	•
Warning beacons on uppercarriage, rear, LED, 2 pieces	+

Options

Centralised lubrication system (automatic)	•
Centralised lubrication system (manual)	+
Coming / Leaving Home	+1)
Extended tool set including tool box	+
Headlight on uppercarriage, lateral left, LED+, 1 piece	+1)
Headlight on uppercarriage, lateral right, LED+, 1 piece	+1)
Headlights on uppercarriage, front, LED, 2 pieces, protections included	+1)
Headlights on uppercarriage, front, LED+, 2 pieces, protections included	+1)
Headlights on uppercarriage, rear, LED+, 2 pieces	+1)
Hydraulic tank shut-off valve	+1)
Lighting for cab access	+1)
Lighting for tank area	+1)
Lighting for uppercarriage access	+1)
Luminosity control (LED+ headlights)	+1)
Preparation for fire protection system SBF 127	+
Rearview mirror on counterweight	•
Rearview mirror on front right hand side	•
Reflective warning stickers	+
Socket on uppercarriage (24 V)	+
Swing ring and lubrication hoses protection	+
Tool set	•
Uppercarriage bottom and side protection	+
Uppercarriage bottom closure sheets	•
Electro	
Batteries high capacity	+
Batteries standard capacity	•



Cab

Interior	
2-points seat belt, 2"	●
2-points seat belt, 3"	+
3-points seat belt, 2"	+
Auxiliary heater programmable	+
Cleaning air gun	+
Fire extinguisher	+
Footrest	+
Mobile phone holder with inductive charging	+
Multifunction mounting bracket	+
Operator's seat Comfort	●
Operator's seat cover	+
Operator's seat Premium	+
Remote cab lock	+ ¹⁾
Roll-down sun blinds for rear and side window, right	+
Travel alarm system standard switchable	+
Travel pedals with travel levers removable	+
Exterior	
Electrically adjustable and heated outside rear-view mirrors	+
FGPS front guard with side opening	+
FOPS top guard	+
Headlights on cab, front, LED, 2 pieces	+ ¹⁾
Headlights on cab, front, LED+, 2 pieces	+ ¹⁾
Impact resistant one-piece windscreen	+
Rearview mirror on cab	●
Retractable laminated two-piece windscreen	+
Roof window wiper	+
ROPS	+
TOPS	+
Warning beacon foldable on cab, LED, 1 piece	+
Use & operation	
Filter for hydraulic hammer return flow	+
High pressure circuit bypass	+
High pressure circuit flow summation	+ ¹⁾
Leak oil line for attachment	+
Lift chart	+
Movement restriction for boom	+
Movement restriction for stick	+
Switch between high pressure circuit and bucket cylinder	+



Control

Safety & operation	
Overload warning system	+
Hydraulic & control	
Control John Deere switchable (ISO / John Deere)	+
Double pedal, left	+
Double pedal, right	+
High pressure circuit with Tool Control	+
Joysticks Premium	●
Medium pressure circuit	+
Assistance systems	
Bucket Fill Assist	+
Bucket Fill Assist trial version 500 hrs	●
Electronic anti-theft protection with code	+
Electronic anti-theft protection with key	+
Machine control 3D Leica	+
Machine control 3D ready Leica	+
Machine control semi-automatic Leica	+
Preparation for external machine control system	+
Rear view and right hand side view monitoring cameras	+
Rear view monitoring camera	+
Skyview 360°	+
Weighing system Liebherr	+
Weighing system Liebherr trial version 500 hrs	●



General

Coating & transport	
Declaration of conformity for particulate filter for indoor applications (according to TRGS 554)	+
Export packaging	+
Protection for sea transportation	+
Special paint	+
Standard packaging	●



Packages

Light package Comfort	+
Light package Premium	+
Light package Service	+
Light package Standard	●
Light package Surround	+
Smart Key Comfort	+
Smart Key Standard	●

● = Standard, + = Option

¹⁾ equipment not individually available, but only as predefined packages

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

Options and / or special equipment, supplied by vendors other than Liebherr, are only to be installed with the knowledge and approval of Liebherr in order to retain warranty.

The Liebherr Group



Global and independent: more than 75 years of success

Liebherr was founded in 1949 when, with the development of the world's first mobile tower crane, Hans Liebherr laid the foundations for a family-run company which now has more than 55,000 employees and comprises over 150 companies across every continent. The holding company of the Group is Liebherr-International AG in Bulle, Switzerland, whose shareholders are exclusively members of the Liebherr family.

Technology leadership and pioneering spirit

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

Diversified product programme

Liebherr is one of the world's biggest construction machine manufacturers and provides high-quality, user-oriented products and services. Its product range includes the product segments earthmoving, material handling, deep foundation, mining, mobile and crawler cranes, tower cranes, concrete technology, maritime cranes, aerospace and transportation systems, gear technology and automation systems, refrigerators and freezers, components and hotels.

Customised solutions and maximum customer value

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

www.liebherr.com

Liebherr-France SAS

2 avenue Joseph Rey, B.P. 90287 • 68005 Colmar Cedex, France • Phone +33 389 213030
info.lfr@liebherr.com • www.liebherr.com • www.facebook.com/LiebherrConstruction