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# A 924 Heavy Lift Litronic

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## LIEBHERR

Wheeled excavator



**Generation**  
6

**Operating weight**  
26,700–27,500 kg

**Engine**  
160 kW / 217HP  
Stage V  
Tier 4 Final

**Bucket capacity**  
0.75–1.70 m<sup>3</sup>

# Technical data



## Diesel engine

<b>Rating per ISO 9249</b>	160kW (217 HP) at 1,700RPM
<b>Model</b>	Liebherr D934
<b>Type</b>	4 cylinder in-line
<b>Bore / Stroke</b>	122 / 150 mm
<b>Displacement</b>	7.0 l
<b>Engine operation</b>	4-stroke diesel Common-Rail Turbo-charged and after-cooled Reduced emissions
<b>Air cleaner</b>	Dry-type air cleaner with pre-cleaner, primary and safety elements
<b>Engine idling</b>	Sensor controlled
<b>Electrical system</b>	
<b>Voltage</b>	24 V
<b>Batteries</b>	2 x 135 Ah / 12 V
<b>Alternator</b>	Three-phase current 28 V / 140 A
<b>Stage V</b>	
<b>Harmful emissions values</b>	According to regulation (EU) 2016/1628
<b>Emission control</b>	Liebherr-SCRFilter technology
<b>Fuel tank</b>	330 l
<b>Urea tank</b>	46 l
<b>Tier 4 Final</b>	
<b>Harmful emissions values</b>	In accordance with 40CFR1039 (EPA) / 13CCR (CARB)
<b>Emission control</b>	Liebherr-SCR technology
<b>Option</b>	Liebherr particle filter
<b>Fuel tank</b>	330 l
<b>Urea tank</b>	46 l



## Cooling system

<b>Diesel engine</b>	Water-cooled Compact cooling system consisting cooling unit for water, hydraulic oil and charge air with stepless thermostatically controlled fan
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## Hydraulic controls

<b>Power distribution</b>	Via control valves in single block with integrated safety valves
<b>Servo circuit</b>	
<b>Equipment and swing</b>	With hydraulic pilot control and proportional joystick levers
<b>Chassis</b>	Electro-proportional via foot pedal
<b>Additional functions</b>	Via switch or electro-proportional foot pedals
<b>Proportional control</b>	Proportionally acting transmitters on the joysticks for additional hydraulic functions



## Hydraulic system

<b>Hydraulic pump</b>	For equipment and travel drive	2 Liebherr axial piston variable displacement pumps (double construction) 2 x 231 l/min.
<b>Max. flow</b>		350 bar, PowerLift 380 bar
<b>Max. pressure</b>		Reversible axial piston variable displacement pump, closed-loop circuit
<b>For swing drive</b>		140 l/min.
<b>Max. flow</b>		420 bar
<b>Max. pressure</b>		Liebherr-Synchron-Comfort-system (LSC) with electronic engine speed sensing regulation, pressure and flow compensation, torque controlled swing drive priority
<b>Hydraulic pump regulation and control</b>		175 l
<b>Hydraulic tank</b>		max. 430 l
<b>Hydraulic system</b>		1 main return filter with integrated partial micro filtration (5 µm)
<b>Filtration</b>		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
<b>MODE selection</b>		
<b>S (Sensitive)</b>		Mode for precision work and lifting through very sensitive movements
<b>E (Eco)</b>		Mode for especially economical and environmentally friendly operation
<b>P (Power)</b>		Mode for high performance with low fuel consumption
<b>P+ (Power-Plus)</b>		Mode for highest performance and for very heavy duty applications, suitable for continuous operation
<b>Engine speed and performance setting</b>		Stepless alignment of engine output and hydraulic power via engine speed
<b>Option</b>		Tool Control: 20 pre-adjustable pump flows and pressures for add-on attachments



## Swing drive

<b>Drive</b>	Liebherr axial piston motor in a closed system, Liebherr planetary reduction gear
<b>Swing ring</b>	Liebherr, sealed race ball bearing swing ring, internal teeth
<b>Swing speed</b>	0-10.0 RPM stepless
<b>Swing torque</b>	76 kNm
<b>Holding brake</b>	Wet multi-disc (spring applied, pressure released)
<b>Option</b>	Pedal controlled positioning swing brake Slewing gear brake Comfort



## Cab

<b>Cab</b>	ROPS safety cab structure (roll-over protection system) with individual windscreens or featuring a slide-in sub-part under the ceiling, work headlights integrated in the ceiling, a door with a sliding window (can be opened on both sides), large stowing and depositing possibilities, shock-absorbing suspension, sound damping insulating, tinted laminated safety glass, separate window shades for the sunroof window and windscreen
<b>Operator's seat Standard</b>	Air cushioned operator's seat with 3D-adjustable arm-rests, headrest, lap belt, seat heater, manual weight adjustment, adjustable seat cushion inclination and length and mechanical lumbar vertebrae support
<b>Operator's seat Comfort (Option)</b>	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
<b>Operator's seat Premium (Option)</b>	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
<b>Arm consoles</b>	Joysticks with control consoles and swivel seat, folding left control console
<b>Operation and displays</b>	Large high-resolution operating unit, self-explanatory, colour display with touchscreen, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine and attachment parameters
<b>Air-conditioning</b>	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
Refrigerant	R134a
Global warming potential	1,430
Quantity at 25 °C	1,300g
CO <sub>2</sub> equivalent	1.859t
<b>Vibration emission*</b>	
Hand / arm vibrations	< 2.5 m/s <sup>2</sup>
Whole-body vibrations	< 0.5 m/s <sup>2</sup>
Measuring inaccuracy	According with standard EN 12096:1997

## Undercarriage

<b>Drive</b>	Oversized two speed power shift transmission with additional creeper speed, Liebherr axial piston motor with functional brake valve on both sides
<b>Pulling force</b>	129 kN
<b>Travel speed</b>	0- 3.5 km/h stepless (creeper speed off-road) 0- 7.0 km/h stepless (off-road) 0-13.0 km/h stepless (creeper speed on-road) 0-20.0 km/h stepless (road travel)
<b>Driving operation</b>	Automotive driving using accelerator pedal, cruise control function: storage of variable accelerator pedal positions, both off-road and on-road
<b>Axles</b>	Manual or automatic hydraulically controlled front axle oscillation lock
<b>Service brake</b>	Two circuit travel brake system with accumulator; wet and backlash-free disc brake
<b>Automatic digging brake</b>	Works automatically when driving off (accelerator pedal actuation) and when the machine is stationary (engagement); the digging brake engages automatically - can be coupled with automatic swing axle lock
<b>Holding brake</b>	Wet multi-disc (spring applied, pressure released)
<b>Stabilization</b>	Rear stabilizer blade + front outriggers Rear outriggers + front stabilizer blade Rear + front outriggers
<b>EW undercarriage</b>	2.75 m / 9'



## Equipment

<b>Type</b>	High-strength steel plates at highly-stressed points for the toughest requirements. Complex and stable mountings of equipment and cylinders
<b>Hydraulic cylinders</b>	Liebherr cylinders with special sealing and guide system and, depending on cylinder type, shock absorption
<b>Bearings</b>	Sealed, low maintenance

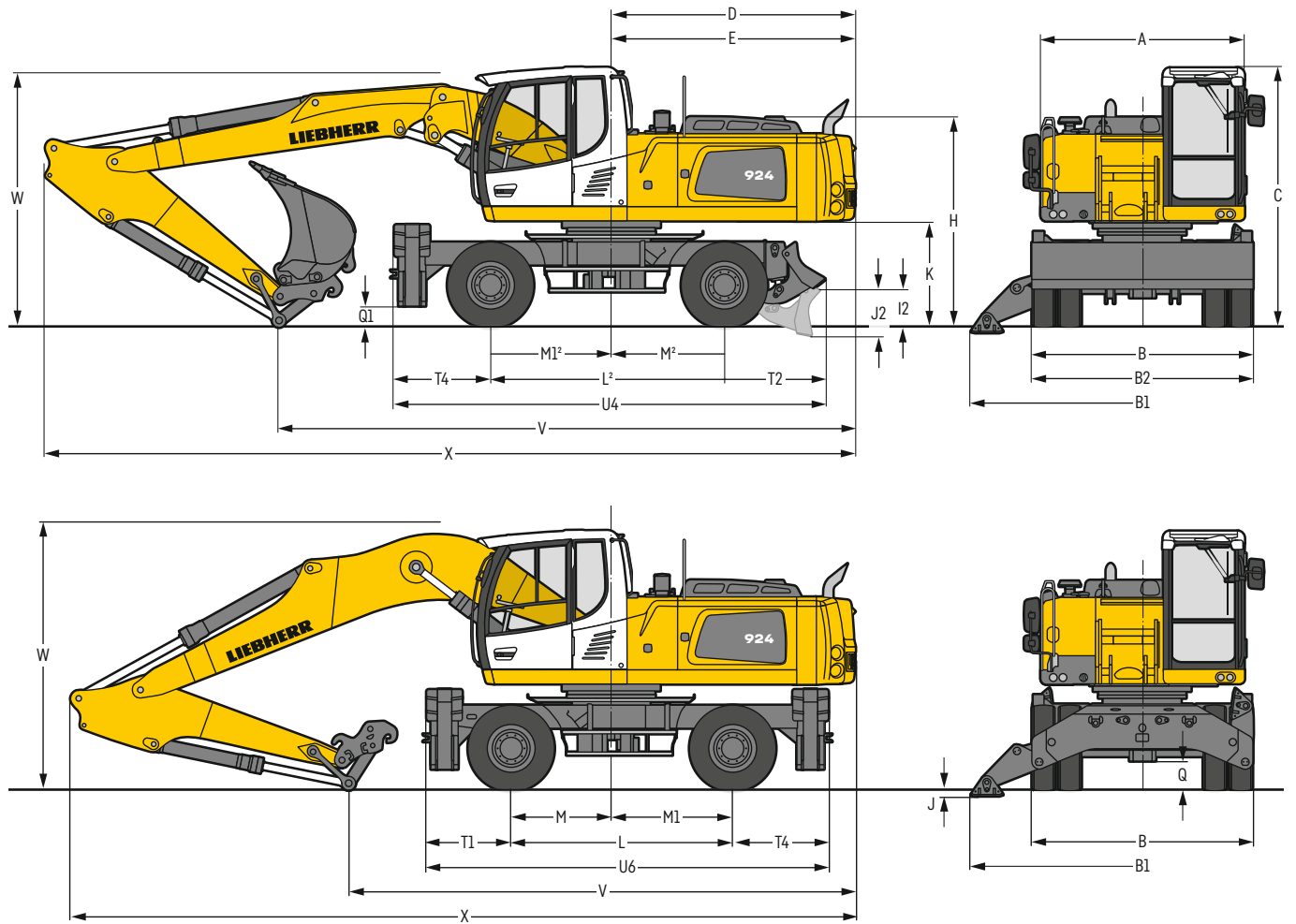


## Complete machine

<b>Lubrication</b>	Liebherr central lubrication system for uppercarriage and equipment, automatically
<b>Noise emission</b>	
ISO 6396	72 dB(A) = L <sub>pA</sub> (inside cab)
2000/14/EC	104 dB(A) = L <sub>WA</sub> (surround noise)

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

# Dimensions



	mm
A	2,525
B	2,750
B1	4,260
B2	2,750
C	3,220
D	3,030
E	3,030
H	2,605
I2	465
J	80
J2	590
K	1,280
L	2,750
L <sup>2)</sup>	2,900
M	1,250
M <sup>2)</sup>	1,400
M1	1,500
M1 <sup>2)</sup>	1,500
Q	350
Q1	250
T1	1,040
T2	1,260
T4	1,190
U4	5,350
U6	4,980

<sup>2)</sup> Undercarriage version stabilizer blade rear + front outriggers

E = Tail radius

Tyres 11.00-20

	Stick m	Two-piece boom 5.80 m HD	
		Rear blade + front outriggers mm	Rear + front outriggers mm
<b>V</b>	2.25	7,800	7,800
	2.45	7,450	7,450
	2.65	7,150	7,150
	3.05	6,850	6,850
<b>W</b>	2.25	3,150	3,150
	2.45	3,150	3,150
	2.65	3,150	3,150
	3.05	3,200	3,200
<b>X</b>	2.25	10,100	10,100
	2.45	10,100	10,100
	2.65	10,100	10,100
	3.05	10,050	10,050

	Stick m	Mono boom 5.65 m HD	
		Rear blade + front outriggers mm	Rear + front outriggers mm
<b>V</b>	2.25	6,600	6,600
	2.45	6,450	6,450
	2.65	6,300*	6,300*
	3.05	6,900 <sup>1)2)</sup>	6,900 <sup>1)2)</sup>
<b>W</b>	2.25	3,250	3,250
	2.45	3,300	3,300
	2.65	3,350*	3,350*
	3.05	3,350 <sup>1)</sup>	3,350 <sup>1)</sup>
<b>X</b>	2.25	9,750	9,750
	2.45	9,750	9,750
	2.65	9,750*	9,750*
	3.05	9,800 <sup>1)</sup>	9,800 <sup>1)</sup>

Dimensions are with equipment over steering axle

\* Equipment over digging axle for shorter transport dimensions

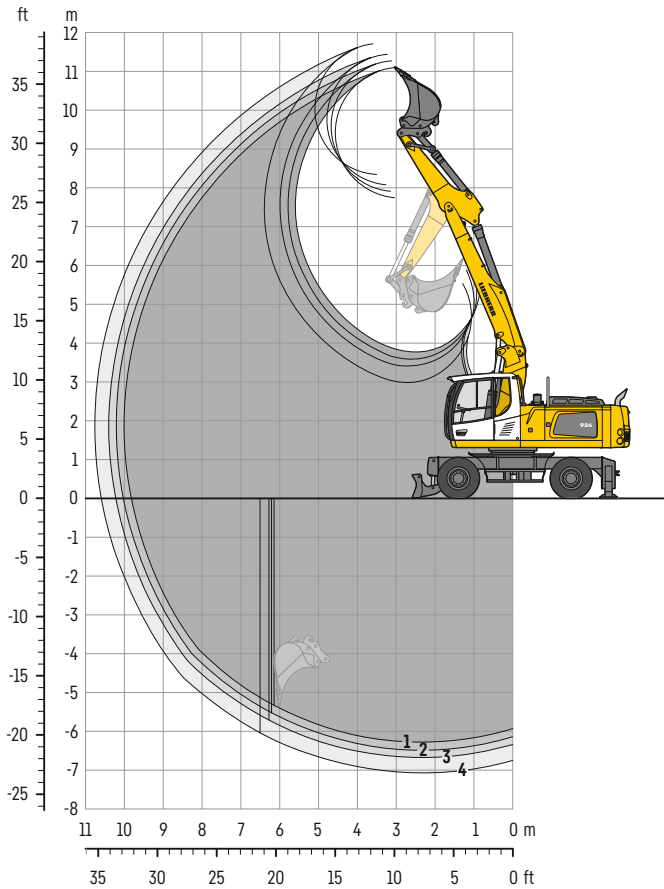
<sup>1)</sup> without quick coupler

<sup>2)</sup> tipping cylinder retracted

W = Max. ground clearance including approx. 150 mm piping

# Backhoe bucket

with two-piece boom 5.80 m HD



## 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. equipment 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)

## Operating weight

The operating weight includes the basic machine with 8 tyres plus intermediate rings, two-piece boom 5.80 m (HD), stick 2.45 m, quick coupler SWA 48 and bucket 1,400 mm / 1.35 m<sup>3</sup>.

Undercarriage versions	Weight (kg)
A 924 Heavy Lift Litronic with rear blade + front outriggers	27,100
A 924 Heavy Lift Litronic with rear + front outriggers	27,400

## 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				Rear blade + front outriggers down				Rear + front 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)

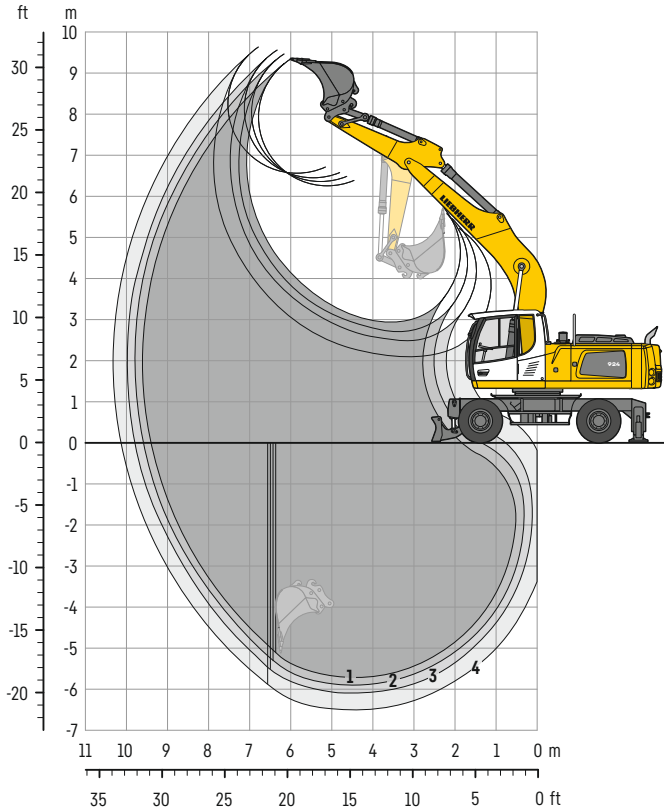
<sup>2)</sup> Bucket with teeth <sup>3)</sup> Bucket with teeth in HD version <sup>4)</sup> Bucket with cutting edge (also available in HD version)

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 authorised



# Backhoe bucket

with mono boom 5.65 m HD



## 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. equipment 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 (22.3t)

## Operating weight

The operating weight includes the basic machine with 8 tyres plus intermediate rings, mono boom 5.65 m (HD), stick 2.65 m, quick coupler SWA 48 and bucket 1,400 mm / 1.35 m<sup>3</sup>.

Undercarriage versions	Weight (kg)
A 924 Heavy Lift Litronic with rear blade + front outriggers	26,700
A 924 Heavy Lift Litronic with rear + front outriggers	27,000

## 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				Rear blade + front outriggers down				Rear + front 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 ■ = ≤ 1.8t/m<sup>3</sup>, ■ = ≤ 1.5t/m<sup>3</sup>, △ = ≤ 1.2t/m<sup>3</sup>, - = not authorised



# Lift capacities

## with mono boom 5.65 m HD

### Stick 2.25 m

m	Undercarriage stabilized		3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	m
	rear	front						
9.0	Blade	Outriggers						
	Outriggers	Outriggers						
7.5	Blade	Outriggers					5.6* 5.6*	6.0
	Outriggers	Outriggers					5.6* 5.6*	
6.0	Blade	Outriggers			5.8 7.7*		5.3* 5.3*	7.1
	Outriggers	Outriggers			7.7* 7.7*		5.3* 5.3*	
4.5	Blade	Outriggers		7.9 11.4	5.3 7.4	3.9 5.4	3.3 4.6	7.8
	Outriggers	Outriggers		12.7* 12.7*	8.5* 8.5*	6.1 7.0*	5.3* 5.3*	
3.0	Blade	Outriggers		14.9* 14.9*	6.0 8.3*	5.8 8.8*	5.3 5.6*	8.1
	Outriggers	Outriggers		10.3 10.8*	7.5 8.3*	5.8 8.8*	5.6* 5.6*	
1.5	Blade	Outriggers		7.3 10.7	3.6 5.1	3.2 4.5	3.2 4.5	8.2
	Outriggers	Outriggers		12.4 14.9*	8.1 10.8*	5.1 6.1*	5.1 6.1*	
0	Blade	Outriggers	7.1* 7.1*	7.0 10.4	4.8 6.8	3.3 4.6	6.1* 6.1*	7.9
	Outriggers	Outriggers	7.1* 7.1*	12.1 15.8*	7.8 11.5*	5.7 9.1*	6.6 7.0*	
-1.5	Blade	Outriggers	12.7 12.8*	6.9 10.3	4.7 6.7	3.6 5.0	3.6 5.0	7.4
	Outriggers	Outriggers	12.8* 12.8*	12.0 15.5*	7.7 11.5*	5.8 8.8*	5.8 8.8*	
-3.0	Blade	Outriggers	13.0 19.4*	7.0 10.4	4.7 6.8	4.3 6.2	4.3 6.2	6.5
	Outriggers	Outriggers	19.4* 19.4*	12.1 13.9*	7.8 10.3*	7.1 9.3*	9.0 9.3*	
-4.5	Blade	Outriggers		7.3 10.3*	10.0 10.3*	6.8 9.7*	6.8 9.7*	4.7
	Outriggers	Outriggers		10.3* 10.3*		9.7* 9.7*		

### Stick 2.45 m

m	Undercarriage stabilized		3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	m
	rear	front						
9.0	Blade	Outriggers						
	Outriggers	Outriggers						
7.5	Blade	Outriggers			5.9 6.0*			6.2
	Outriggers	Outriggers			6.0* 6.0*		5.1* 5.1*	
6.0	Blade	Outriggers			5.9 7.4*			7.3
	Outriggers	Outriggers			7.4* 7.4*		4.9* 4.9*	
4.5	Blade	Outriggers		7.9 11.5	5.3 7.4	3.9 5.4	3.5 4.9*	8.0
	Outriggers	Outriggers		12.3* 12.3*	9.4* 9.4*	7.5 8.1*	4.9* 4.9*	
3.0	Blade	Outriggers		7.3 10.7	5.0 7.0	3.6 5.1	3.1 4.3	8.3
	Outriggers	Outriggers		12.5 14.6*	8.1 10.6*	5.8 8.7*	4.9 5.5*	
1.5	Blade	Outriggers		14.6* 14.6*	10.2 10.6*	7.3 8.7*	5.5 5.5*	8.4
	Outriggers	Outriggers		7.4* 7.4*	4.7 6.8	3.5 4.9	3.1 4.4	
0	Blade	Outriggers	7.4* 7.4*	12.0 15.7*	7.8 11.4*	5.7 9.0*	5.1 6.3*	8.1
	Outriggers	Outriggers	7.4* 7.4*	15.7* 15.7*	10.0 11.4*	7.1 9.0*	6.3* 6.3*	
-1.5	Blade	Outriggers	12.3* 12.3*	6.8 10.2	4.6 6.7	3.5 4.9	3.4 4.8	7.6
	Outriggers	Outriggers	12.3* 12.3*	11.9 15.5*	7.7 11.5*	5.6 8.8*	5.5 7.8*	
-3.0	Blade	Outriggers	12.8 19.0*	6.9 10.3	4.7 6.7	4.1 5.8	4.1 5.8	6.7
	Outriggers	Outriggers	19.0* 19.0*	12.0 14.2*	7.7 10.5*	6.7 9.0*	6.7 9.0*	
-4.5	Blade	Outriggers		7.2 10.6	9.9 10.5*	5.9 8.6	5.9 8.6	5.2
	Outriggers	Outriggers		10.9* 10.9*		9.2* 9.2*	9.2* 9.2*	

### Stick 2.65 m

m	Undercarriage stabilized		3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	m
	rear	front						
9.0	Blade	Outriggers						
	Outriggers	Outriggers						
7.5	Blade	Outriggers					4.7* 4.7*	6.5
	Outriggers	Outriggers					4.7* 4.7*	
6.0	Blade	Outriggers				4.0 4.7*	4.5* 4.5*	7.5
	Outriggers	Outriggers				4.7* 4.7*	4.5* 4.5*	
4.5	Blade	Outriggers			5.6 7.8	3.9 5.4	3.4 4.5*	8.2
	Outriggers	Outriggers			7.9* 7.9*	6.2 7.2*	4.5* 4.5*	
3.0	Blade	Outriggers	11.9* 11.9*	8.0 11.5	5.3 7.4	3.8 5.3	3.1 4.3	8.5
	Outriggers	Outriggers	11.9* 11.9*	11.8* 11.8*	8.4 9.2*	6.0 7.9*	4.7* 4.7*	
1.5	Blade	Outriggers		7.3 10.8	4.9 7.0	3.6 5.1	3.0 4.2	8.6
	Outriggers	Outriggers		12.5 14.3*	8.1 10.4*	5.8 8.5*	4.8 5.1*	
0	Blade	Outriggers	7.5* 7.5*	6.9 10.3	4.7 6.8	3.5 4.9	3.0 4.2	8.3
	Outriggers	Outriggers	7.5* 7.5*	12.0 15.6*	7.8 11.3*	5.6 9.0*	4.9 5.7*	
-1.5	Blade	Outriggers	11.9* 11.9*	6.8 10.2	4.6 6.6	3.4 4.9	3.2 4.6	7.8
	Outriggers	Outriggers	11.9* 11.9*	11.9 15.6*	7.6 11.4*	5.6 8.9*	5.3 7.0*	
-3.0	Blade	Outriggers	12.7 17.9*	6.8 10.2	4.6 6.7	3.8 5.5	3.8 5.5	6.9
	Outriggers	Outriggers	17.9* 17.9*	11.9 14.4*	7.7 10.6*	6.3 8.8*	6.3 8.8*	
-4.5	Blade	Outriggers		7.1 10.5	9.8 10.6*	5.4 7.8	5.4 7.8	5.5
	Outriggers	Outriggers		16.1* 16.1*	11.5* 11.5*	9.0* 9.0*	9.0* 9.0*	

### Stick 3.05 m

m	Undercarriage stabilized		3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	m
	rear	front						
9.0	Blade	Outriggers						
	Outriggers	Outriggers						
7.5	Blade	Outriggers					4.1* 4.1*	6.9
	Outriggers	Outriggers					4.1* 4.1*	
6.0	Blade	Outriggers				4.1 5.2*	3.7 3.9*	7.9
	Outriggers	Outriggers				5.2* 5.2*	3.9* 3.9*	
4.5	Blade	Outriggers			5.7 7.4*	4.0 5.5	3.2 3.9*	8.5
	Outriggers	Outriggers			7.4* 7.4*	6.2 6.7*	3.9* 3.9*	
3.0	Blade	Outriggers	14.8 17.2*	8.1 11.0*	5.3 7.5	3.8 5.3	2.9 4.0	8.9
	Outriggers	Outriggers	17.2* 17.2*	11.0* 11.0*	8.5 8.7*	6.0 7.6*	4.0* 4.0*	
1.5	Blade	Outriggers		7.1* 7.1*	7.4 10.9	5.0 7.1	2.8 3.9	8.9
	Outriggers	Outriggers		13.7* 13.7*	10.0* 10.0*	7.3 8.3*	4.4* 4.4*	
0	Blade	Outriggers	8.1* 8.1*	6.9 10.3	4.7 6.7	3.4 4.9	2.8 4.0	8.7
	Outriggers	Outriggers	8.1* 8.1*	12.0 15.3*	7.8 11.0*	5.6 8.8*	4.5 4.9*	
-1.5	Blade	Outriggers	11.4* 11.4*	6.7 10.1	4.5 6.6	3.4 4.8	3.0 4.3	8.2
	Outriggers	Outriggers	11.4* 11.4*	15.6* 15.6*	9.8 11.4*	7.0 8.9*	4.9 5.9*	
-3.0	Blade	Outriggers	12.5 16.3*	6.7 10.1	4.5 6.6	3.5 5.0	3.5 5.0	7.3
	Outriggers	Outriggers	16.3* 16.3*	14.8* 14.8*	7.6 10.9*	5.7 7.9*	5.7 7.9*	
-4.5	Blade	Outriggers		6.9 10.3	4.7 6.7	4.7 6.7	4.7 6.7	6.0
	Outriggers	Outriggers		17.7* 17.7*	12.0 12.4*	7.8 8.8*	7.7 8.8*	

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 SWA 48 without 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 based on 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. 12t). 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.

# Equipments

## Ditch cleaning 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				Rear blade + front outriggers down				Rear + front 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 5.80 m HD</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 HD</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	■	■	■	■	■	■	■	■	■	■	■	■	■	■

\* 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 ■ = ≤ 1.8t/m<sup>3</sup>, ■ = ≤ 1.5t/m<sup>3</sup>, △ = ≤ 1.2t/m<sup>3</sup>, - = not authorised

# Equipments

## Tilt buckets

### 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				Rear blade + front outriggers down				Rear + front 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 5.80 m HD</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	1,130	■	■	△	△	■	■	■	■	■	■	■	
<b>Mono boom 5.65 m HD</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	1,130	■	■	■	△	■	■	■	■	■	■	■	

\* 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

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

# Equipment

## Undercarriage

Dual-circuit braking system	•
Rear stabilizer blade + front outriggers	+
Digging brake, automatic	•
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	•
Shuttle axle lock, automatic	•
Rear outriggers + front stabilizer blade	+
Rear + front outriggers	+
Tyres, variants	+
Protection for piston rods, stabilizer cylinder	+
Storage compartment left	•
Storage compartment right	+
Undercarriage EW 2.75 m / 9'	•
Tool equipment, extended	+

## Uppercarriage

Uppercarriage rear light, 2 pieces, LED	+
Uppercarriage right side light, 1 piece, LED	+
Refuelling system with filling pump	+
Main battery switch for electrical system	•
Engine hood with gas spring	•
Amber beacon, at uppercarriage, LED double flash	+
Service doors, lockable	•

## Hydraulic system

Shut-off valve between hydraulic tank and pump(s)	•
Pressure test fittings	•
Accumulator for controlled lowering of the equipment 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	+
PowerLift	•
Switchover high pressure circuit and tipping cylinder	+
Switchover high pressure circuit and two-piece boom	+

## Diesel engine

Fuel anti-theft device	+
Liebherr particle filter*	+
Reversible fan drive, fully automatic	+
Air pre-filter with dust discharge	+
Automatic engine shut-down (time adjustable)	+
Preheating fuel	+

## Cab

Storage compartment	•
Stabilizer, proportional control on left joystick	•
Cab lights rear, LED	+
Cab lights front, halogen (under rain cover)	•
Cab lights front, LED (above rain cover)	+
Cab lights front, LED (under rain cover)	+
Exterior mirror, electrical adjustable, with heating	+
Mechanical hour meters, readable from outside the cab	•
Roof window made from impact-resistant laminated safety glass	+
Slewing gear brake Comfort, button on the left or right joystick	+
Slewing gear brake, rocker switch in the right joystick	•
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	+
Front screen made from impact-resistant laminated safety glass - not adjustable	+
Windscreen retractable (including upper part)	•
Intermittent windscreen wiper with wiper washer	•
Cruise control	•
Rubber floor mat, removable	•
Dome light	•
Joystick steering	+
Joysticks Premium	+
Coat hook	•
Automatic air conditioning	•
Fuel consumption indicator	•
Electric cooler	+
Steering wheel, wide version (cost-neutral option)	+
Steering column adjustable horizontally	•
LiDAT, vehicle fleet management	•
Emergency exit rear window	•
Positioning swing brake	+
Proportional control	•
Radio Comfort, control via display with handsfree set	+
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)	+
Amber beacon, on cab, LED double flash	+
Tinted windows	•
Windscreen wiper, roof	+
Windshield wiper, entire windscreen	•
Door with sliding window	•
FOPS top guard	+
FGPS front guard	+
Right side window and windshield made from laminated safety glass	•
Sun visor	+
Sun blind	•
Auxiliary heating, adjustable (week time switch)	+
Left control console, folding	•
Electronic immobilizer	+
Cigarette lighter	•



## Equipment

Boom lights, 2 pieces, halogen	●
Boom lights, 2 pieces, LED	+
Stick lights, 2 pieces, LED	+
High pressure circuit incl. unpressurised return line and Tool Control	+
Electronic lift limitation	●
Security for hoist cylinder for hydraulic attachments	+
Load holding valve tipping cylinder	+
Load lug on stick	+
Leak oil line, additional for attachments	+
Liebherr ditch cleaning bucket	+
Liebherr quick coupler, hydraulic or mechanical	+
Liebherr tilt bucket	+
Liebherr tiltrotator	+
Liebherr sorting grab	+
Liebherr backhoe bucket	+
Liebherr tooth system	+
Liebherr clamshell grab	+
Medium pressure circuit incl. lines	+
Mono boom, HD version	+
Pipe fracture safety valves hoist cylinders	●
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 Solidlink	+
Protection for bottom side of stick	+
Tool Control, 20 attachment adjustments selectable over the display	+
Overload warning device	●
Two-piece boom, HD version	+



## Complete machine

<b>Lubrication</b>	
Lubrication undercarriage, manually - decentralised (grease points)	●
Lubrication undercarriage, manually - centralised (one grease point)	+
Central lubrication system for uppercarriage and equipment, automatically (without quick coupler and connecting link)*	●
Centralised lubrication extended for quick coupler	+
Centralised lubrication extended for connecting link	+
<b>Special coating</b>	
Custom painting for attachments	+
Special coating, variants	+
<b>Monitoring</b>	
Rear view monitoring with camera	●
Side view monitoring with camera	●
Skyview 360° (side camera not available)	+

● = Standard, + = Option

\* = country-dependent

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

# The Liebherr Group



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

Liebherr was founded in 1949 when, with the development of the world's first mobile tower crane, Hans Liebherr laid the foundations for a family-run company which now has more than 50,000 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 programme includes earthmoving machinery, material handling technology, deep foundation machines, 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](http://www.liebherr.com)

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