

---

# R 924 Litronic

---

## LIEBHERR

Crawler excavator



**Generation**

8

**Operating weight**

24,550 kg / 54,120 lb

**Engine**

173 HP / 129 kW

Tier 4 Final

**Bucket capacity**

0.55-1.65 m<sup>3</sup> /

0.72-2.16 yd<sup>3</sup>

# Experience the progress

## R 924

---

### ① Safety

- Panoramic visibility with no obstructions and camera on the rear and the right side equipment
- Lifiable console for easy and safe access to cab
- ROPS-certified cab structure: rollover protection
- Emergency exit via the rear cab window whatever the configuration of the excavator
- Right window and windshield in laminated and tinted glass

### ② Equipment

- Large choice of types and sizes of equipment
- Safety check valves for hoist and stick cylinders
- Guaranteed maintenance thanks to automatic centralized lubrication system (option)

### ③ Maintenance

- Innovative servicing concept, with service points accessible from ground level
- Lateral access to uppercarriage and large maintenance platform
- Engine oil, hydraulic oil, fuel and urea levels visible on the display

### ④ Comfort

- Spacious, air-conditioned work space
- Pneumatic seat with vertical and horizontal suspension
- Easy-to-use high resolution 9" color touchscreen
- Seat belt 3", orange color
- LED lighting as standard



## ⑤ Engine

- Liebherr engine that conforms with the US EPA Tier 4 Final exhaust emissions standard
- Automatic engine idling and engine stop

## ⑥ Undercarriage

- Robust, reliable X-frame undercarriage, easy to secure thanks to its integrated eyelets
- Easy maintenance
- Maintenance-free travel gear and track rollers with lifetime lubrication
- Extra storage as an option



# Technical data

## Engine

<b>Rating</b>	
per SAE J1349	173 HP (129 kW) at 1,800 rpm
per ISO 9249	175 HP (129 kW) at 1,800 rpm
<b>Torque</b>	682 Nm at 1,400 rpm / <b>503 lbf ft at 1,400 rpm</b>
<b>Model</b>	D924 A7-04 – FPT motor designed for Liebherr
<b>Type</b>	4 cylinder in-line
<b>Bore</b>	104 mm / <b>4.1 in</b>
<b>Stroke</b>	132 mm / <b>5.2 in</b>
<b>Displacement</b>	4.5 l / <b>275 in<sup>3</sup></b>
<b>Engine operation</b>	4-stroke diesel Common-Rail Turbo-charged and after-cooler
<b>Exhaust gas treatment</b>	Tier 4 Final DOC + SCR Passive regeneration by thermo management
<b>Cooling system</b>	Water-cooled and oil cooler, after-cooled and fuel cooled
<b>Air cleaner</b>	Dry-type air cleaner with pre-cleaner
<b>Fuel tank</b>	400 l / <b>106 gal</b>
<b>Urea tank</b>	46 l / <b>12 gal</b>
<b>Electrical system</b>	
Voltage	24 V
Batteries	2 x 135 Ah / 12 V
Alternator	Three-phase current 28 V / 140 A
Engine idling	Sensor controlled

## Hydraulic controls

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

## Hydraulic system

<b>Hydraulic system</b>	Positive Control hydraulic system. Demand-based, double independent pump flows Features high system dynamics and sensitivity provided by integrated system controlling
<b>Hydraulic pump</b>	
For equipment and travel drive	Liebherr, variable displacement, swashplate double pump
Max. flow	2 x 210 l/min. / <b>2 x 55 gpm</b>
Max. pressure	380 bar / <b>5,511 psi</b>
<b>Pump management</b>	Electronic management synchronous to the control block. Open circuit for the rotation
<b>Hydraulic tank</b>	155 l / <b>41 gal</b>
<b>Hydraulic system</b>	max. 320 l / <b>max. 85 gal</b>
<b>Filtration</b>	1 main return filter with integrated partial micro filtration (10 µm / <b>1,250 mesh</b> )
<b>Cooling system</b>	Compact cooler, consisting of a water cooler, sandwiched with hydraulic oil cooler and fuel and after-cooler cores and hydro-statically driven fan
<b>MODE selection</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>Engine speed and performance setting</b>	Stepless adjustment of engine output and hydraulic power via engine speed

## Swing drive

<b>Drive</b>	Liebherr swashplate motor with integrated brake valve and torque control
<b>Transmission</b>	Liebherr compact planetary reduction gears
<b>Swing ring</b>	Liebherr, sealed race ball bearing swing ring, internal teeth
<b>Swing speed</b>	0–12.9 rpm stepless
<b>Swing torque</b>	74.3 kNm / <b>54,801 lbf ft</b>
<b>Holding brake</b>	Wet multi-disc (spring applied, pressure released)



## Cab

<b>Cab</b>	ROPS safety cab structure (roll-over protection system according to ISO 12117-2:2008) with windscreen, totally or partially retractable (only upper part), under cab roof, LED headlights integrated in the ceiling, a door with a sliding window (can be opened on both sides), large storing box and several stowing possibilities, shock-absorbing suspension, laminated right hand side and roof windows, all windows tinted, separate extensible window shades for the sunroof window and windscreen, cigarette lighter and 24 V plug, 12 V plug, cup holder, mobile phone storage net
<b>Operator's seat</b>	Liebherr-Comfort seat, airsprung with automatic weight adjustment, vertical and longitudinal seat damping including consoles and joysticks. Seat and armrests adjustable separately and in combination (adjustable in length, height and inclination), seat heating as standard
<b>Arm consoles</b>	Oscillating consoles with seat, tiltable console left
<b>Operation and displays</b>	Large high-resolution operating unit, intuitive, color 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
<b>Noise emission</b>	
ISO 6396	70 dB(A) = $L_{pA}$ (inside cab)
2000/14/EC	102 dB(A) = $L_{WA}$ (surround noise)



## Undercarriage

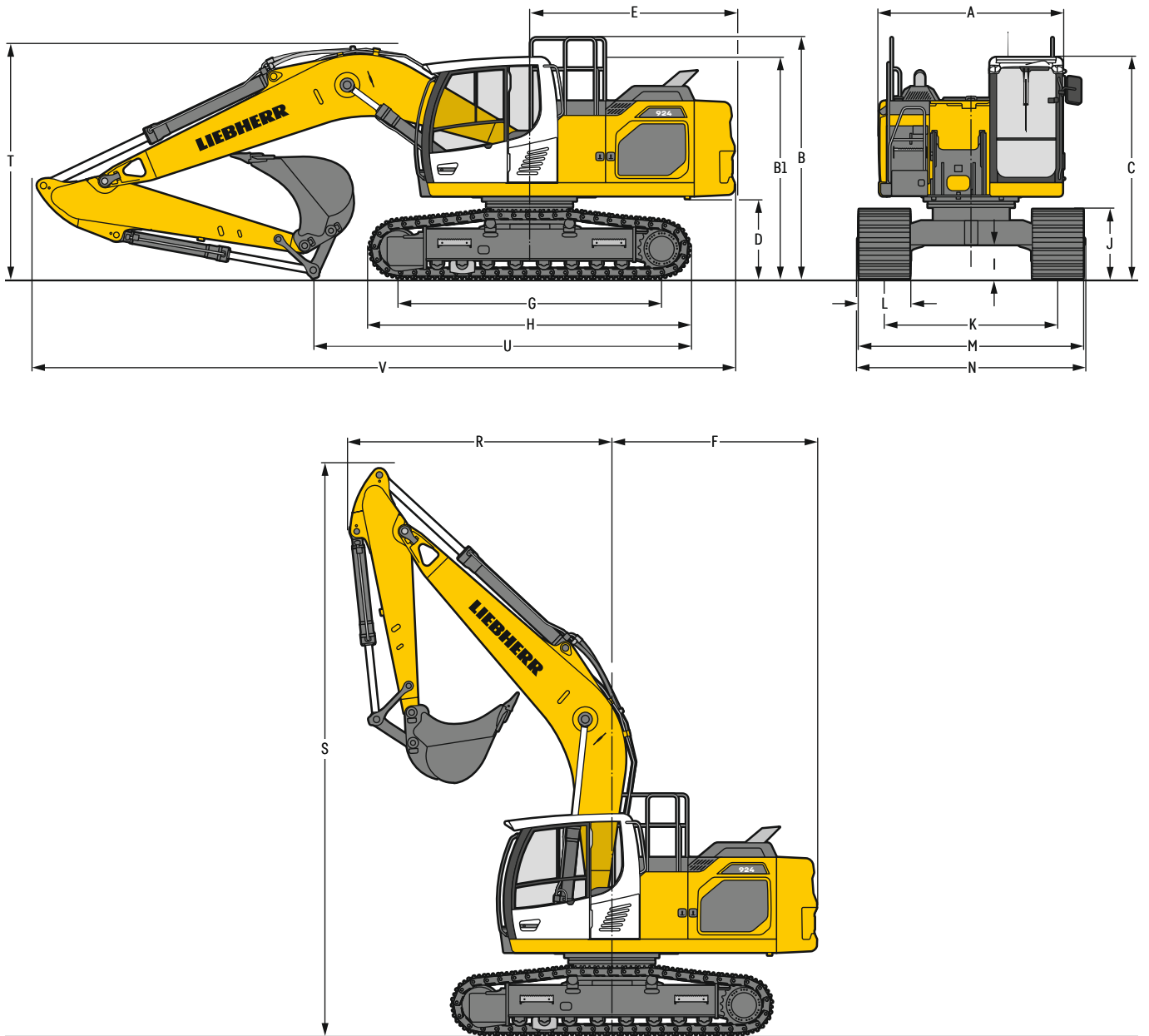
<b>LC</b>	Gauge 2,390 mm / 7'10"
<b>Drive</b>	Liebherr swashplate motor with brake valves on both sides
<b>Transmission</b>	Liebherr planetary reduction gear
<b>Maximum travel speed</b>	3.1 km/h / <b>1.9 mph</b> low range 5.9 km/h / <b>3.7 mph</b> high range
<b>Drawbar pull on crawler</b>	236 kN / <b>53,060 lbf</b>
<b>Track components</b>	B60, D6C, maintenance-free
<b>Track rollers / Carrier rollers</b>	8 / 2
<b>Tracks</b>	Sealed and greased
<b>Track pads</b>	Triple grouser
<b>Holding brake</b>	Wet multi-disc (spring applied, pressure released)
<b>Brake valves</b>	Integrated into travel motor
<b>Lashing eyes</b>	Integrated



## Equipment

<b>Type</b>	Combination of resistant steel plates and cast steel components
<b>Hydraulic cylinders</b>	Liebherr cylinders with seal and guidance systems
<b>Bearings</b>	Sealed, low maintenance
<b>Lubrication</b>	Liebherr central lubrication system
<b>Hydraulic connections</b>	Pipes and hoses equipped with SAE split-flange connections
<b>Buckets</b>	Standard equipped with Liebherr tooth system

# Dimensions



		LC				mm / ft in
<b>A</b>	Uppercarriage width					2,545 <sup>2)</sup> / 8' 4" <sup>2)</sup>
<b>B</b>	Uppercarriage height					3,335 / 10'11"
<b>B1</b>	Uppercarriage height (handrails folded)					3,060 / 10'
<b>C</b>	Cab height					3,060 / 10'
<b>D</b>	Counterweight ground clearance					1,100 / 3' 7"
<b>E</b>	Rear-end length					2,830 / 9' 3"
<b>F</b>	Tail swing radius					2,880 / 9' 5"
<b>G</b>	Wheelbase					3,640 / 11'11"
<b>H</b>	Undercarriage length					4,435 / 14' 7"
<b>I</b>	Undercarriage ground clearance					485 / 1' 7"
<b>J</b>	Track height					960 / 3' 2"
<b>K</b>	Track gauge					2,390 / 7'10"
<b>L</b>	Track pad width	600 / 24"	700 / 28"	800 / 31"	900 / 35"	
<b>M</b>	Width over tracks	2,990 / 9'10"	3,090 / 10' 2"	3,190 / 10' 6"	3,290 / 10'10"	
<b>N</b>	Width over steps	2,925 / 9' 7"	3,125 <sup>1)</sup> / 10' 3" <sup>1)</sup>	3,125 <sup>1)</sup> / 10' 3" <sup>1)</sup>	3,225 <sup>1)</sup> / 10' 7" <sup>1)</sup>	

<sup>1)</sup> width with removable steps

<sup>2)</sup> without door stop device and spacer

		Stick length	Mono boom 5.70 m / 18'8"	
		m / ft in	direct mounting	
			mm / ft in	
<b>R</b>	Front swing radius	2.50 / 8'2"	3,650 / 12'	
		2.90 / 9'6"	3,650 / 12'	
		3.50 / 11'6"	3,600 / 11'10"	
<b>S</b>	Height with boom up	7,900 / 25'11"		
<b>T</b>	Boom height	2.50 / 8'2"	3,250 / 10' 8"	
		2.90 / 9'6"	3,250 / 10' 8"	
		3.50 / 11'6"	3,150 / 10' 4"	
<b>U</b>	Length on ground	2.50 / 8'2"	6,200 / 20' 4"	
		2.90 / 9'6"	5,900 / 19' 4"	
		3.50 / 11'6"	4,450 / 14' 7"	
<b>V</b>	Overall length	9,700 / 31'10"		
	Bucket	1.25 m <sup>3</sup> / 1.63 yd <sup>3</sup>		

# Transport dimensions

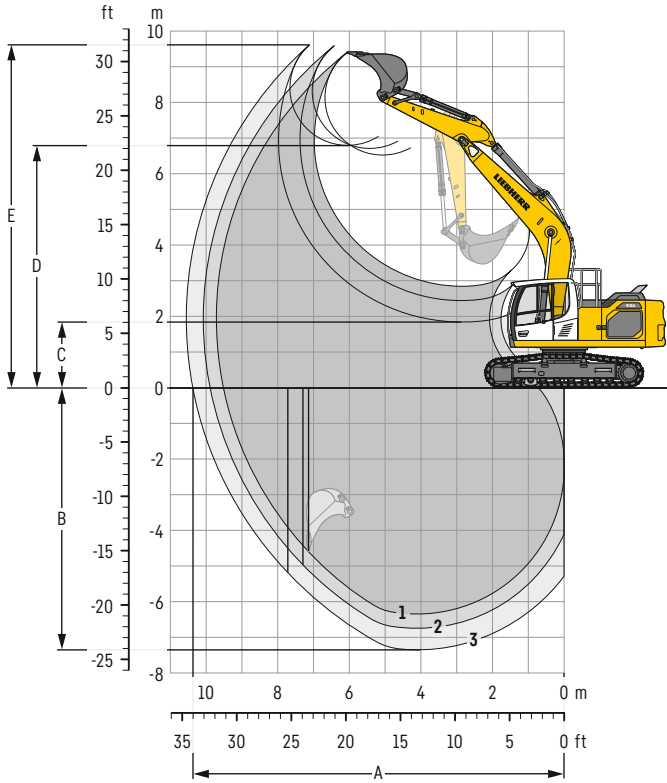
## removable elements disassembled

		Mono boom 5.70 m / 18'8"			
		mm / ft in			
Pad width		600 / 24"	700 / 28"	800 / 31"	900 / 35"
Transport width		2,990 / 9'10"	3,090 / 10' 2"	3,190 / 10' 6"	3,290 / 10'10"

		Stick	mm / ft in	
		m / ft in		
Transport length			9,700 / 31'10"	
Transport height	2.50 / 8'2"	3,250 / 10' 8"		
	2.90 / 9'6"	3,250 / 10' 8"		
	3.50 / 11'6"	3,150 / 10' 4"		
Bucket		1.25 m <sup>3</sup> / 1.63 yd <sup>3</sup>		

# Backhoe bucket

with mono boom 5.70 m / 18'8"



## Digging envelope

without quick coupler		1	2	3
Stick length	m / ft in	2.50 / 8' 2"	2.90 / 9'6"	3.50 / 11'6"
A Max. reach at ground level	m / ft in	9.51 / 31' 2"	9.89 / 32'5"	10.37 / 34'
B Max. digging depth	m / ft in	6.35 / 20'10"	6.75 / 22'2"	7.35 / 24'1"
C Min. dumping height	m / ft in	2.85 / 9' 4"	2.45 / 8'	1.85 / 6'1"
D Max. dumping height	m / ft in	6.53 / 21' 5"	6.71 / 22'	6.80 / 22'4"
E Max. cutting height	m / ft in	9.40 / 30'10"	9.59 / 31'6"	9.61 / 31'6"

## Forces

without quick coupler		1	2	3
Stick digging force (ISO 6015)	kN / lbf	135 / 30,350	122 / 27,430	106 / 23,830
Bucket digging force (ISO 6015)	kN / lbf	173 / 38,890	173 / 38,890	173 / 38,890
Stick digging force (SAE J1179)	kN / lbf	129 / 29,000	117 / 26,300	103 / 23,160
Bucket digging force (SAE J1179)	kN / lbf	151 / 33,950	151 / 33,950	151 / 33,950

## Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 5.0 t / 11,020 lb, mono boom 5.70 m / 18'8", stick 2.90 m / 9'6" and bucket 1.25 m<sup>3</sup> / 1.63 yd<sup>3</sup> (890 kg / 1,960 lb).

Undercarriage		LC			
Pad width	mm / in	600 / 24"	700 / 28"	800 / 31"	900 / 35"
Weight	kg / lb	23,600 / 52,030	23,850 / 52,580	24,250 / 53,460	24,550 / 54,120
Ground pressure	kg/cm <sup>2</sup> / psi	0.50 / 7.1	0.43 / 6.1	0.39 / 5.5	0.35 / 5.0

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

		LC undercarriage (with track pads 800 mm / 31")				Stick length (m / ft in)						
		Cutting width		Capacity ISO 7451		without quick coupler		with quick coupler				
		mm ft in	m <sup>3</sup> yd <sup>3</sup>	kg lb	Weight <sup>3)</sup> kg lb	2.50 8'2"	2.90 9'6"	2.50 8'2"	2.90 9'6"	3.50 11'6"	2.50 8'2"	2.90 9'6"
STD <sup>1)</sup>	650	0.55	580	590	▲	▲	▲	▲	▲	▲	▲	▲
	2'2"	0.72	1,280	1,300	▲	▲	▲	▲	▲	▲	▲	▲
	850	0.75	620	630	▲	▲	▲	▲	▲	▲	▲	▲
	2'9"	0.98	1,370	1,390	▲	▲	▲	▲	▲	▲	▲	▲
	1,050	0.95	700	710	▲	▲	▲	▲	▲	▲	▲	▲
	3'5"	1.24	1,540	1,570	▲	▲	▲	▲	▲	▲	▲	▲
	1,250	1.15	810	830	▲	▲	▲	▲	▲	▲	▲	▲
	4'1"	1.50	1,790	1,830	▲	▲	■	▲	▲	▲	▲	▲
	1,250	1.25	890	910	▲	▲	■	▲	▲	▲	▲	■
	4'1"	1.63	1,960	2,010	▲	▲	■	▲	▲	▲	▲	■
	1,400	1.35	850	880	▲	▲	▲	▲	▲	■	▲	▲
4'7"	1.77	1,870	1,940	▲	▲	▲	▲	▲	▲	■	▲	
1,400	1.50	950	980	■	▲	■	▲	▲	■	▲	△	
4'7"	1.96	2,090	2,160	▲	▲	■	▲	▲	▲	▲	△	
1,500	1.65	1,020	1,030	▲	■	▲	▲	▲	▲	▲	△	
4'11"	2.16	2,250	2,270	▲	■	▲	▲	▲	▲	▲	△	
HD <sup>2)</sup>	650	0.55	640	650	▲	▲	▲	▲	▲	▲	▲	▲
	2'2"	0.72	1,410	1,430	▲	▲	▲	▲	▲	▲	▲	▲
	850	0.75	695	705	▲	▲	▲	▲	▲	▲	▲	▲
	2'9"	0.98	1,530	1,550	▲	▲	▲	▲	▲	▲	▲	▲
	1,050	0.95	790	800	▲	▲	▲	▲	▲	▲	▲	▲
	3'5"	1.24	1,740	1,760	▲	▲	▲	▲	▲	▲	▲	▲
	1,250	1.15	910	940	▲	▲	▲	▲	▲	▲	▲	■
	4'1"	1.50	2,010	2,070	▲	▲	▲	▲	▲	▲	■	▲
	1,250	1.25	1,010	1,030	▲	▲	■	▲	▲	▲	■	▲
	4'1"	1.63	2,230	2,270	▲	▲	■	▲	▲	▲	■	▲
	1,400	1.35	970	990	▲	■	▲	▲	▲	▲	■	■
4'7"	1.77	2,140	2,180	▲	■	▲	▲	▲	▲	■	■	
1,400	1.50	1,090	1,120	■	▲	▲	▲	▲	■	■	△	
4'7"	1.96	2,400	2,470	▲	▲	▲	▲	▲	▲	▲	△	
1,500	1.65	1,160	1,160	▲	■	▲	▲	▲	■	▲	△	
4'11"	2.16	2,560	2,560	▲	■	▲	▲	▲	■	▲	△	

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

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

<sup>2)</sup> HD bucket with teeth Z 40

<sup>3)</sup> Bucket for direct mounting

<sup>4)</sup> Bucket for mounting to quick coupler SWA 48 (250 kg / 550 lb)

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m<sup>3</sup> / 3,400 lb/yd<sup>3</sup>, ■ = ≤ 1.8 t/m<sup>3</sup> / 3,000 lb/yd<sup>3</sup>, ▲ = ≤ 1.65 t/m<sup>3</sup> / 2,800 lb/yd<sup>3</sup>, ■ = ≤ 1.5 t/m<sup>3</sup> / 2,500 lb/yd<sup>3</sup>, △ = ≤ 1.2 t/m<sup>3</sup> / 2,000 lb/yd<sup>3</sup>

# Lift capacities

with mono boom 5.70 m / 18'8", counterweight 5.0 t / 11,020 lb and track pads 800 mm / 31"

## Stick 2.50 m / 8'2"

Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		m		
									ft	in	
7.5m t									6.0*	6.0*	5.8
25ft lb									13,3*	13,3*	18'7"
6.0m t					5.8	6.1*			4.5	5.6*	7.0
20ft lb					12,4	13,3*			10,1	12,3*	22'7"
4.5m t			7.8*	7.8*	5.6	6.7*	3.9	5.8	3.8	5.5*	7.7
15ft lb			16,9*	16,9*	12,0	14,5*	8,5	12,5*	8,5	12,1*	25'1"
3.0m t			8.0	10.0*	5.3	7.6*	3.8	5.7	3.5	5.1	8.0
10ft lb			17,2	21,5*	11,5	16,5*	8,3	12,3	7,7	11,3	26'4"
1.5m t			7.5	11.7*	5.1	7.7	3.7	5.6	3.4	5.0	8.1
5ft lb			16,1	25,3*	10,9	16,6	8,0	12,0	7,4	11,0	26'6"
0m t			7.3	11.9	4.9	7.5	3.6	5.5	3.4	5.1	7.9
0ft lb			15,7	25,5	10,6	16,3	7,9	11,8	7,6	11,3	25'10"
-1.5m t	12.0*	12.0*	7.2	11.8	4.9	7.5			3.8	5.7	7.3
-5ft lb	27,3*	27,3*	15,6	25,4	10,5	16,2			8,3	12,5	24'
-3.0m t	14.3	15.4*	7.4	11.1*	4.9	7.6			4.6	7.0	6.4
-10ft lb	30,6	33,4*	15,9	24,0*	10,7	16,4			10,2	15,5	20'10"
-4.5m t			7.7	8.2*					7.0	7.5*	4.8
-15ft lb			16,6	17,2*					16,0	16,5*	15'5"

## Stick 2.90 m / 9'6"

Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		m		
									ft	in	
7.5m t									5.6*	5.6*	6.3
25ft lb									11,8*	11,8*	20'4"
6.0m t					5.6*	5.6*			4.1	4.7*	7.4
20ft lb					12,2*	12,2*			9,2	10,4*	24'
4.5m t			7.1*	7.1*	5.6	6.2*	4.0	5.8*	3.5	4.6*	8.1
15ft lb			15,4*	15,4*	12,1	13,5*	8,5	12,5	7,8	10,2*	26'4"
3.0m t			8.1	9.3*	5.3	7.2*	3.8	5.7	3.2	4.8	8.4
10ft lb			17,4	20,0*	11,5	15,6*	8,2	12,2	7,1	10,5	27'6"
1.5m t			7.5	11.2*	5.0	7.7	3.7	5.5	3.1	4.6	8.5
5ft lb			16,2	24,2*	10,9	16,6	8,0	11,9	6,8	10,2	27'8"
0m t			6.1*	6.1*	7.2	11.8	4.8	7.5	3.6	5.4	8.2
0ft lb			14,1*	14,1*	15,5	25,4	10,5	16,2	7,7	11,7	27'
-1.5m t	11.3*	11.3*	7.1	11.7	4.8	7.4			3.4	5.2	7.7
-5ft lb	25,7*	25,7*	15,4	25,2	10,3	16,0			7,6	11,5	25'4"
-3.0m t	14.0	16.3*	7.2	11.5*	4.8	7.5			4.1	6.2	6.8
-10ft lb	30,1	35,3*	15,6	24,8*	10,4	16,1			9,1	13,8	22'4"
-4.5m t			7.5	9.2*					5.8	7.3*	5.4
-15ft lb			16,2	19,7*					13,1	16,2*	17'6"

## Stick 3.50 m / 11'6"

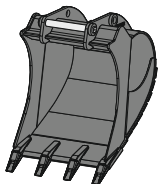
Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		m		
									ft	in	
7.5m t									3.9*	3.9*	6.9
25ft lb									8,6*	8,6*	22'4"
6.0m t							4.1	4.8*	3.7*	3.7*	7.9
20ft lb							8,7	9,7*	8,1*	8,1*	25'10"
4.5m t					5.5*	5.5*	4.0	5.3*	3.2	3.7*	8.5
15ft lb					12,1*	12,1*	8,6	11,5*	7,1	8,1*	27'11"
3.0m t	12.8*	12.8*	8.2*	8.2*	5.4	6.6*	3.8	5.7	2.9	3.8*	8.9
10ft lb	27,2*	27,2*	17,8*	17,8*	11,6	14,3*	8,2	12,3	6,5	8,4*	29'1"
1.5m t	6.7*	6.7*	7.6	10.4*	5.0	7.7*	3.7	5.5	2.8	4.1*	8.9
5ft lb	15,9*	15,9*	16,4	22,5*	10,9	16,7*	7,9	11,9	6,2	9,0*	29'4"
0m t	7.8*	7.8*	7.2	11.8*	4.8	7.5	3.5	5.4	2.9	4.3	8.7
0ft lb	17,7*	17,7*	15,5	25,3	10,4	16,1	7,6	11,6	6,3	9,5	28'7"
-1.5m t	11.2*	11.2*	7.0	11.6	4.7	7.3	3.5	5.3	3.1	4.7	8.2
-5ft lb	25,3*	25,3*	15,1	24,9	10,1	15,8	7,5	11,4	6,8	10,3	27'
-3.0m t	13.7	16.2*	7.0	11.6	4.7	7.3			3.6	5.4	7.4
-10ft lb	29,3	36,7*	15,2	25,0	10,1	15,8			7,9	12,0	24'2"
-4.5m t	14.1	14.7*	7.2	10.3*	4.8	7.4*			4.7	7.2*	6.1
-15ft lb	30,2	31,5*	15,6	22,0*					10,6	15,8*	19'10"

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) / lb x 1,000 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 800 mm / 31" 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 325 kg / 720 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

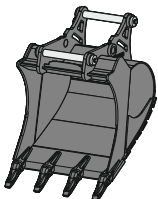
Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

# Attachments



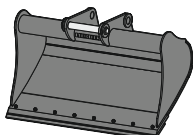
## Backhoe bucket TL 04-02

Mounting		direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink									
Cutting width	mm / ft in	650 / 2'2"	850 / 2'9"	1,050 / 3'5"	1,250 / 4'1"	1,400 / 4'7"	1,500 / 4'11"	1,600 / 5'3"	1,700 / 5'7"	1,800 / 5'11"	
Capacity	m <sup>3</sup> / yd <sup>3</sup>	0.55 / 0.72	0.75 / 0.98	0.95 / 1.24	1.15 / 1.50	1.35 / 1.77	1.45 / 1.90	1.55 / 2.03	1.85 / 2.42	2.00 / 2.62	
Weight <sup>1)</sup>	kg / lb	545 / 1,202	630 / 1,389	720 / 1,587	815 / 1,797	875 / 1,929	890 / 1,962	945 / 2,083	1,090 / 2,403	1,133 / 2,498	



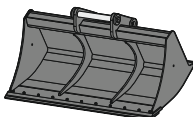
## 2in1 bucket HTL 04-02

Mounting		SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink									
Cutting width	mm / ft in	650 / 2'2"	850 / 2'9"	1,050 / 3'5"	1,250 / 4'1"	1,400 / 4'7"	1,500 / 4'11"	1,600 / 5'3"	1,700 / 5'7"	1,800 / 5'11"	
Capacity	m <sup>3</sup> / yd <sup>3</sup>	0.55 / 0.72	0.75 / 0.98	0.95 / 1.24	1.15 / 1.50	1.35 / 1.77	1.45 / 1.90	1.55 / 2.03	1.85 / 2.42	2.00 / 2.62	
Weight <sup>1)</sup>	kg / lb	612 / 1,349	697 / 1,537	787 / 1,735	882 / 1,944	942 / 2,077	978 / 2,156	1,016 / 2,240	1,179 / 2,599	1,223 / 2,696	



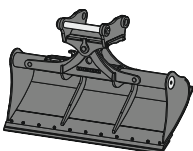
## Universal bucket UL 04

Mounting		SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink									
Cutting width	mm / ft in	1,600 / 5'3"								1,600 / 5'3"	
Capacity	m <sup>3</sup> / yd <sup>3</sup>	0.80 / 1.05								1.00 / 1.31	
Weight <sup>1)</sup>	kg / lb	473 / 1,043								496 / 1,093	



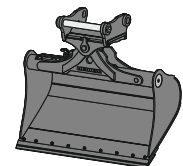
## Ditch cleaning bucket GRL rigid 04

Mounting		direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink									
Cutting width	mm / ft in	1,500 / 4'11"		2,000 / 6'7"		2,000 / 6'7"		2,000 / 6'7"		2,400 / 7'10"	
Capacity	m <sup>3</sup> / yd <sup>3</sup>	0.50 / 0.65		0.70 / 0.92		1.00 / 1.31		0.80 / 1.05		1.15 / 1.50	
Weight <sup>1)</sup>	kg / lb	425 / 937		522 / 1,151		637 / 1,404		605 / 1,334			



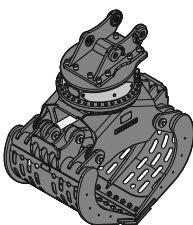
## Ditch cleaning bucket GRL 90

Mounting		direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink											
Cutting width	mm / ft in	1,600 / 5'3"	1,600 / 5'3"	2,000 / 6'7"	2,000 / 6'7"	2,000 / 6'7"	2,200 / 7'3"	2,200 / 7'3"	2,200 / 7'3"	2,400 / 7'10"	2,400 / 7'10"	2,800 / 9'2"	
Capacity	m <sup>3</sup> / yd <sup>3</sup>	0.55 / 0.72	0.80 / 1.05	0.50 / 0.65	0.70 / 0.92	1.00 / 1.31	0.80 / 1.05	1.15 / 1.50	1.40 / 1.83	0.85 / 1.11	1.25 / 1.63	1.85 / 2.42	
Weight <sup>1)</sup>	kg / lb	690 / 1,521	850 / 1,874	695 / 1,532	875 / 1,929	935 / 2,061	910 / 2,006	985 / 2,172	995 / 2,194	890 / 1,962	1,000 / 2,205	1,090 / 2,403	
Tilt angle		2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	



## Tilt bucket SL 90

Mounting		direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink							
Cutting width	mm / ft in	1,400 / 4'7"	1,500 / 4'11"	1,500 / 4'11"	1,600 / 5'3"	1,600 / 5'3"	1,600 / 5'3"	1,600 / 5'3"	
Capacity	m <sup>3</sup> / yd <sup>3</sup>	0.55 / 0.72	0.60 / 0.78	1.20 / 1.57	0.80 / 1.05	1.00 / 1.31	1.35 / 1.77	1.55 / 2.03	
Weight <sup>1)</sup>	kg / lb	715 / 1,576	738 / 1,627	970 / 2,138	820 / 1,808	890 / 1,962	970 / 2,138	1,030 / 2,271	
Tilt angle		2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	



## Sorting grab SG 30B

Mounting		direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink										
Shell type		perforated <sup>3)</sup>					ribbed <sup>3)</sup>			closed <sup>3)</sup>		Stone shell <sup>4)</sup>
Shell width	mm / ft in	1,000 / 3'3"	1,200 / 3'11"	1,400 / 4'7"	1,000 / 3'3"	1,200 / 3'11"	1,400 / 4'7"	1,000 / 3'3"	1,200 / 3'11"	1,400 / 4'7"	1,000 / 3'3"	1,020 / 3'4"
Capacity	m <sup>3</sup> / yd <sup>3</sup>	0.85 / 1.11	1.00 / 1.31	1.15 / 1.50	0.75 / 0.98	0.90 / 1.18	1.05 / 1.37	0.85 / 1.11	1.05 / 1.37	1.35 / 1.77	0.85 / 1.11	0.85 / 1.11
Max. closing force	kN / lbf	80 / 17,985	80 / 17,985	80 / 17,985	80 / 17,985	80 / 17,985	80 / 17,985	80 / 17,985	80 / 17,985	80 / 17,985	80 / 17,985	80 / 17,985
Weight <sup>2)</sup>	kg / lb	1,485 / 3,274	1,560 / 3,439	1,635 / 3,605	1,565 / 3,450	1,675 / 3,693	1,780 / 3,924	1,515 / 3,340	1,515 / 3,340	1,815 / 4,001		

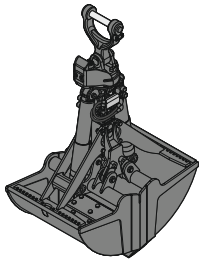
<sup>1)</sup> based on an attachment in a standard design with SWA 48 Solidlink quick coupler mounting

<sup>2)</sup> without quick coupler mounting

<sup>3)</sup> with standard bolt-on cutting edge

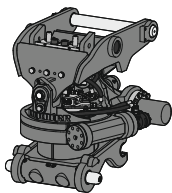
<sup>4)</sup> with Liebherr teeth Z 40 C

# Attachments



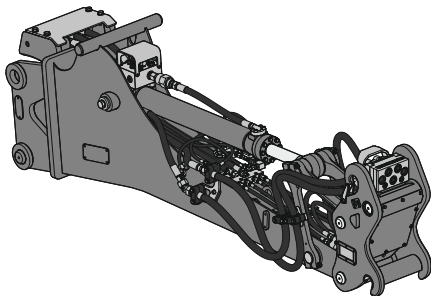
## Clamshell grab

Mounting	direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink					
<b>GMZ 30 Clamshell buckets</b>						
Shell width	mm / ft in	600 / 2'	800 / 2'7"	1,000 / 3'3"	1,200 / 3'11"	
Capacity <sup>1)</sup>	m <sup>3</sup> / yd <sup>3</sup>	0.38 / 0.50	0.52 / 0.68	0.65 / 0.85	0.80 / 1.05	
Opening width	mm / ft in	1,644 / 5'5"	1,644 / 5'5"	1,644 / 5'5"	1,644 / 5'5"	
Weight <sup>2)</sup>	kg / lb	1,050 / 2,315	1,130 / 2,491	1,210 / 2,668	1,290 / 2,844	
<b>GMZ 40 Clamshell buckets</b>						
Shell width	mm / ft in	800 / 2'7"	1,000 / 3'3"	1,200 / 3'11"	1,400 / 4'7"	1,600 / 5'3"
Capacity <sup>1)</sup>	m <sup>3</sup> / yd <sup>3</sup>	0.65 / 0.85	0.85 / 1.11	1.05 / 1.37	1.20 / 1.57	1.40 / 1.83
Opening width	mm / ft in	1,962 / 6'5"	1,962 / 6'5"	1,962 / 6'5"	1,962 / 6'5"	1,962 / 6'5"
Weight <sup>2)</sup>	kg / lb	1,345 / 2,965	1,430 / 3,153	1,520 / 3,351	1,605 / 3,538	1,695 / 3,737



## Tiltrotator TR 25

Mounting machine side	SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink	
Mounting attachment side	SWA 48 mechanical, SWA 48 hydraulic	
Weight <sup>3)</sup>	kg / lb	787 / 1,735
Rotation	360°	
Tilt	2 x 50°	



## Stick extension

Mounting machine side	SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink, SWA 48 Solidlink-10	
<b>LS 12</b>		
Mounting attachment side	direct mounting, SWA 33 mechanical, SWA 33 mechanical Solidlink <sup>6)</sup> , SWA 33 hydraulic <sup>7)</sup> , SWA 33 Solidlink <sup>6)</sup> 7) 8)	
Length	m / ft in	2.25 / 7'5"      2.70 / 8'10"
Weight <sup>4)</sup>	kg / lb	650 / 1,433      700 / 1,543
<b>LS 18</b>		
Mounting attachment side	direct mounting, SWA 33 mechanical, SWA 33 mechanical Solidlink <sup>6)</sup> , SWA 33 hydraulic <sup>7)</sup> , SWA 33 Solidlink <sup>6)</sup> 7) 8), SWA 48 mechanical, SWA 48 mechanical Solidlink <sup>6)</sup> , SWA 48 hydraulic <sup>7)</sup> , SWA 48 Solidlink <sup>6)</sup> 7) 8)	
Length	m / ft in	2.65 / 8'8"      3.05 / 10'
Weight <sup>4)</sup>	kg / lb	1,130 / 2,491      1,190 / 2,624

<sup>1)</sup> capacity specifications are theoretically determined values; fill level varies depending on the material being loaded

<sup>2)</sup> with XHD suspension

<sup>3)</sup> based on standard tiltrotator TR 25 with SWA 48 Solidlink quick coupler mounting machine side and SWA 48 hydraulic quick coupler mounting on the underside tiltrotator

<sup>4)</sup> based on standard stick extension LS 12/18 with SWA 33 / 48 Solidlink quick coupler mountings on both sides (underside of stick extension and machine side mounting) and electric switchover

<sup>5)</sup> attachment with high pressure circuit only possible with the manual switchover tipping cylinder or an extended hydraulic circuit on the carrier machine

<sup>6)</sup> attachment with high pressure circuit only possible with the electric / manual switchover tipping cylinder or an extended hydraulic circuit on the carrier machine

<sup>7)</sup> 14-pin signal contact strip is required, for example to control and monitor the hydraulic quick coupling system on the stick extension on the attachment side or to transfer electrical signals for the switchover

<sup>8)</sup> to use different hydraulic circuits, either Solidlink 33-9 / Solidlink 48-10 is required on the machine side, or a switchover system using the equipment power socket, controlled via the carrier machine's signal contact strip

# Serial equipment



## Undercarriage

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



## Uppercarriage

Access platforms without protruding parts  
Anti-skid surfaces  
Automatic swing brake lock  
DEF tank filling indicator  
DEF tank lockable access hatch  
Engine hood with gas spring opening  
Filters accessible from ground level  
Handrails  
Hydraulic oil level, visible from ground level  
Lockable service doors  
Lockable storage and accessories compartment  
Lockable storage box  
Main switch, accessible from ground level  
Main switch, electric, with timer  
Main switch, manual, lockable  
Positioning swing brake manual  
Protection grid on radiator fan  
Safe uppercarriage side access platform  
Sound insulation  
Swing-out radiators  
Windshield washer fluid tank, accessible from ground level



## Hydraulic system

Filter with integrated fine filters  
Hydraulic pressure measuring ports  
Liebherr Positive Control system with 2 independent circuits  
Magnetic rod  
Pressure accumulator for controlled lowering of equipment with engine turned off



## Engine

Air filter with automatic dust ejector  
Automatic engine idling / speed increase, controlled via joystick sensors  
Common-Rail injection system  
Engine oil level gauge  
Exhaust gas after-treatment system - DOC + SCR  
Fixed geometry turbocharger  
Fuel fine filter  
Fuel pre-filter and water separator  
Fuel priming pump  
Intercooler  
Power Pack US EPA Tier 4 Final



## Cab

9" multifunction color touchscreen  
Air conditioning, automatic, tri-zone, controlled via display  
Armrests adjustable in length, height and inclination  
Bottle holder  
Cab air filters housing, accessible from ground level  
Cab door sliding windows  
Cigarette lighter  
Coat hook  
DEF consumption on touchscreen  
DEF level on touchscreen  
Electric socket in cab (12V)  
Electric socket in cab (24V)  
Emergency hammer  
Engine coolant level, visible from the cab  
Engine oil level on touchscreen  
Fuel consumption on touchscreen  
Fuel level on touchscreen  
Hydraulic oil level on touchscreen  
Interior lighting  
Laminated right hand side window  
LiDAT Plus (Liebherr data transfer system)  
Mechanical hour meter, visible from ground level  
Mobile phone storage net  
Movement priority between swing and boom, adjustable via touchscreen  
Movement priority for stick-in, adjustable via touchscreen  
Operating modes  
Power modes  
Rain hood over front window opening  
Rearview mirror  
Rear view monitoring camera  
Rear window emergency exit  
Right hand side view monitoring camera  
Roll-down sun blinds for windscreen and roof window  
ROPS safety cab structure (ISO 12117-2)  
Rubber floor mat, fixed on floor and removable  
Shortcut buttons on joystick configurable  
Stepless adjustable engine speed  
Storage box  
Storage nets  
Storage spaces  
Swing braking torque adjustable via touchscreen  
Swing drive gearbox oil level, visible from the cab  
Tilttable console left  
Tinted windows  
Visco-elastic damping  
Windscreen wiper and washer



## Equipment

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

# Equipment standard / option

## Undercarriage

Chain guide 1 piece	●
Chain guide 3 pieces	+
Cover and base plate for undercarriage center section	●
Reinforced cover and base plate for undercarriage center section	+
Special painting	+
Steps	+
Steps wide	●
Track chains cleaner	+
Track pads triple grouser 600 mm / 24" / 700 mm / 28" / 900 mm / 35"	+
Track pads triple grouser 800 mm / 31"	●
Track pads triple grouser reinforced 600 mm / 24" / 700 mm / 28"	+
Tracks, sealed and greased	●
Tracks, sealed and greased, reinforced	+
Undercarriage LC	+
Undercarriage storage compartment	+

## Uppercarriage

Batteries high capacity	+
Batteries standard capacity	●
Boxing ring	+
Catwalk tiltable front left	+
Centralized lubrication system (automatic)	●
Centralized lubrication system (manual)	+
Counterweight standard 5.0t / 11,020 lb	●
Electric socket on uppercarriage (24 V)	+
Extended tool set including tool box	+
External starting aid (24 V)	+
Front right rearview mirror	+ <sup>1)</sup>
Fuel anti-theft protection	+
Headlight on uppercarriage, front left, LED+, 1 piece, protection included	+ <sup>1)</sup>
Headlight on uppercarriage, front right, LED, 1 piece, protection included	● <sup>1)</sup>
Headlight on uppercarriage, front right, LED+, 1 piece, protection included	+ <sup>1)</sup>
Headlight on uppercarriage, lateral left, LED+, 1 piece	+ <sup>1)</sup>
Headlight on uppercarriage, lateral right, LED+, 1 piece	+ <sup>1)</sup>
Headlights on uppercarriage, rear, LED+, 2 pieces	+ <sup>1)</sup>
Lighting for tank area	+ <sup>1)</sup>
Lighting for uppercarriage access	+ <sup>1)</sup>
Lockable fuel tank cap	●
Lockable fuel tank cap with padlock	+
Reflective warning stickers	+
Rotating beacons on uppercarriage, rear, LED, 2 pieces	+
Skyview 360°	+
Special painting	+
Tank refilling pump fuel	+
Tool set including storage case	●
Uppercarriage bottom and side protection	+
Uppercarriage bottom closure sheets	●

## Hydraulic system

Bypass filter for hydraulic oil	+
Filter for hydraulic hammer return flow	+
High pressure circuit bypass	+
High pressure circuit flow summation	+
High pressure circuit switchable on pedals or mini-joystick	+
High pressure circuit with Tool Control (20 attachment adjustments on display)	+
Leak oil line for attachment	+
Liebherr hydraulic oil	●
Liebherr hydraulic oil, adapted for extreme climate conditions	+
Liebherr hydraulic oil, biodegradable	+
Medium pressure circuit	+

## Engine

Air pre-filter with cyclonical dust trap	+
Automatic engine shutdown after idling	+
Engine shut-down with overrun	+
Lighting for engine compartment	+ <sup>1)</sup>
Preheating fuel	+
Radiator fine mesh protection grid	+
Reversible fan drive	+



## Cab

3" seat belt with retract, orange color	●
4-points seat belt	+
Acoustic travel alarm deactivatable	+
Auxiliary heater programmable	+
Bottom windscreen wiper	+
Coming / Leaving Home	+ <sup>1)</sup>
Cool box (12V)	+
Dark tinted windows	+
Electrically adjustable and heated outside rear-view mirrors	+ <sup>1)</sup>
Electronic immobilizer	+
Emergency stop in cab	+
FGPS front guard	+
FGPS front guard tiltable	+
Fire extinguisher	+
First-aid box	+
Footrest	+
FOPS top guard	+
FOPS top guard flat	+
Handrests elevated for joysticks	+
Headlights on cab, front, LED, 2 pieces	● <sup>1)</sup>
Headlights on cab, front, LED+, 2 pieces	+ <sup>1)</sup>
Headlights on cab roof, front, LED+, 2 pieces	+ <sup>1)</sup>
Impact resistant one-piece windscreen	+
Impact resistant roof window	+
Independent travel	+ <sup>1)</sup>
Integral protection guard	+
Laminated roof window	●
Lightbar on cab	+
Lighting for cab access	+ <sup>1)</sup>
Luminosity control (LED+ headlights)	+ <sup>1)</sup>
Mini-joystick proportional	●
Movement restriction for boom	+
Movement restriction for stick	+
Operator's seat Comfort	●
Operator's seat Premium	+
Overload warning system	+
Personalized operator profile	+
Preparation for tiltrotator	+
Radio Comfort	+
Radio pre-installation	●
Remote cab lock	+ <sup>1)</sup>
Retractable laminated two-piece windscreen	●
Roof sun shield	+
Roof window wiper	+
Rotating beacon on cab, LED, 1 piece	+
Seat belt reminder	+
Smart Key	+ <sup>1)</sup>
Special painting	+
Straight travel via mini-joystick	+ <sup>1)</sup>
Sun visor	+
Switch between high pressure and bucket cylinder controls	+
Travel speed management	+ <sup>1)</sup>
Windscreen bottom protection grid	+



## Equipment

Bucket cylinder rod protection	+
Centralized lubrication extended for connecting link	+
Floating boom	+
Grapple hydraulic lines (bucket cylinder inactive)	+
Headlight guard on boom, right	+
Headlight guards on boom, right and left	+
Headlight on boom, left, LED+, 1 piece	+ <sup>1)</sup>
Headlight on boom, right, LED, 1 piece	● <sup>1)</sup>
Headlight on boom, right, LED+, 1 piece	+ <sup>1)</sup>
Headlight on stick, bottom, LED+, 1 piece	+ <sup>1)</sup>
Hydraulic hose guard Solidlink	+
Liebherr bucket range	+
Liebherr tooth system	+
Load holding valve for bucket cylinder	+
Lubrication hoses protection on stick	+
Mono boom 5.70 m / 18'8"	+
Quick coupler SWA 48 hydraulic	+
Quick coupler SWA 48 mechanical	+
Solidlink electric signal plug	+
Solidlink for quick coupler SWA 48 hydraulic	+
Special painting	+
Stick 2.50 m / 8'2"	+
Stick 2.90 m / 9'6"	+
Stick 3.50 m / 11'6"	+
Stick bottom protection	+
Tool Management	+



## Assistance system

Machine guidance system Leica 2D passive - "3D ready"	+
Machine guidance system Leica 2D semi-automatic - "3D ready"	+
Machine guidance system Leica 3D passive	+
Machine guidance system Leica 3D semi-automatic	+
Preparation for machine guidance system	+
Preparation for weighing system	+

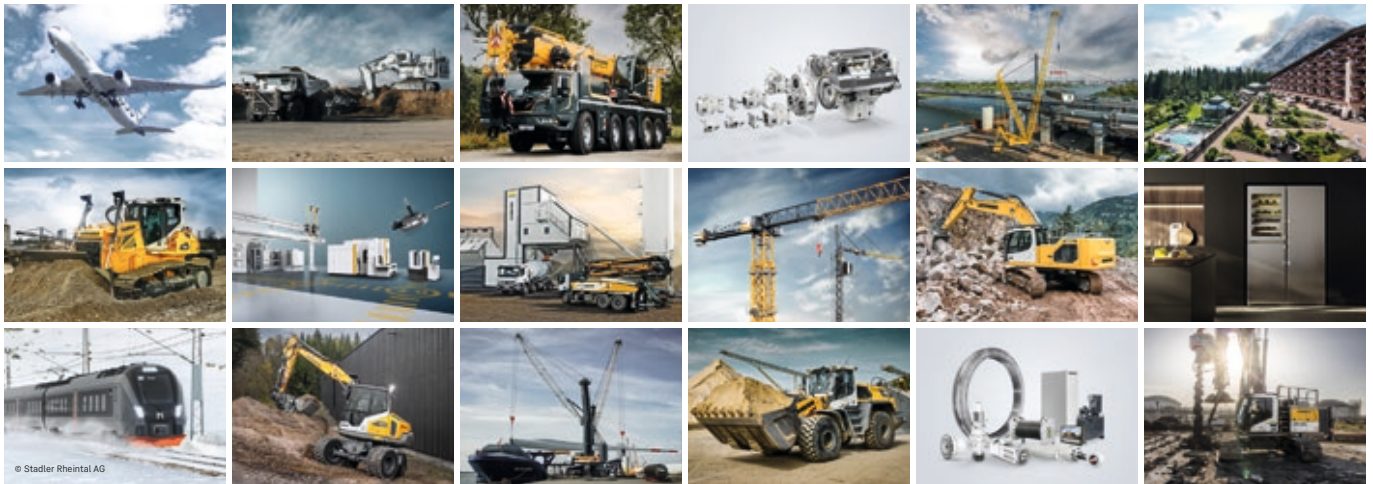
● = Standard, + = Option

<sup>1)</sup> 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. With the development of the world's first mobile tower crane, Hans Liebherr laid the foundations of a successful family-run company which today comprises more than 150 companies on all continents with over 50,000 employees. 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 regards itself as a pioneer. This spirit has enabled the company to make a decisive contribution to the technological history of many industries. Today, employees around the world still share the courage of the company founder to take new paths. They are all united by a passion for technology and fascinating products and the determination to perform outstanding work for their customers.

## Widely diversified product program

Not only is Liebherr one of the biggest construction machine manufacturers in the world, it also provides high-quality, user-oriented products and services in a wide range of other areas. The product range includes the 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.

## Customized solutions and maximum customer value

Liebherr solutions are characterized by maximum precision, outstanding implementation and exceptional longevity. Its mastery of key technologies enables the company to offer its customers customized solutions. For Liebherr, customer focus does not end with the product; it also encompasses a wide range of services that make a real difference.

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

## WARNING

Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with exhaust system.
- Do not idle the engine except as necessary.

For more information go to [www.P65warnings.ca.gov/diesel](http://www.P65warnings.ca.gov/diesel).

## WARNING

This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm.

For more information go to [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov).

## Liebherr USA, Co.

Construction Equipment Division • 4800 Chestnut Avenue • Newport News, VA 23607, USA • Phone +1 (757) 240 4250  
[construction.usa@liebherr.com](mailto:construction.usa@liebherr.com) • [www.liebherr.us](http://www.liebherr.us) • [www.facebook.com/LiebherrConstruction](https://www.facebook.com/LiebherrConstruction)