

# Product Information: Crawler Excavator

## R 930

Litronic®



### Generation

8

### Engine

180 kW/241 HP

Tier 4 Final

### Operating Weight

31,200 kg/68,780 lb

### Bucket Capacity

1,25 – 2,15 m<sup>3</sup>/1.63 – 2.81 yd<sup>3</sup>

# LIEBHERR



# Experience the Progress

## R 930

### Safety

- Panoramic visibility with no obstructions and camera on the rear and the right side for enhanced safety
- Tilttable console for easy and safe access to cab
- ROPS-certified cab structure
- Emergency exit via the rear cab window
- Right window and windshield in laminated and tinted glass

### Equipment

- Large choice of types and lengths of equipment
- Safety check valves for hoist and stick cylinders (option)
- Longer lifespan of components and higher productivity thanks to automatic centralised lubrication system

### Maintenance

- Innovative servicing concept, with service points accessible from ground level
- Engine oil, hydraulic oil, fuel and urea (diesel exhaust fluid) levels visible on the display
- New concept for lateral access to uppercarriage and large maintenance platform







### **Comfort**

- Spacious, air-conditioned work space
- Airsprung seat with vertical and longitudinal suspension
- Easy-to-use high resolution 7" colour touchscreen
- Completely retractable front cab window
- New LED lighting as standard

### **Engine**

- New engine that conforms with the US EPA Tier 4 Final exhaust emissions standard
- Automatic engine speed increase/decrease controlled by proximity sensors in the joysticks

### **Undercarriage**

- Robust, reliable X-frame undercarriage, easy to secure thanks to its integrated eyelets
- Easy maintenance
- Maintenance-free track chains and track rollers with lifetime lubrication
- Extra storage (option)

# Technical Data



## Engine

<b>Rating</b>	per SAE J1349 241 HP (180 kW) at 1,800 rpm
	per ISO 9249 245 HP (180 kW) at 1,800 rpm
<b>Torque</b>	1,255 Nm at 1,350 rpm / <b>926 lbf ft at 1,350 rpm</b>
<b>Model</b>	Liebherr D934 A7-25
<b>Type</b>	4 cylinder in-line
Bore	122 mm / <b>4.8 in</b>
Stroke	150 mm / <b>5.9 in</b>
Displacement	7.0 l / <b>427 in³</b>
<b>Engine operation</b>	4-stroke diesel Common-Rail Turbo-charged and after-cooler
<b>Exhaust gas treatment</b>	Tier 4 Final SCR Filter 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>	620 l / <b>164 gal</b>
<b>Urea tank</b>	90 l / <b>24 gal</b>
<b>Electrical system</b>	
Voltage	24 V
Batteries	2 x 135 Ah/ 12 V
Alternator	Three-phase current 24 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
Equipment and swing	Proportional via joystick levers
Travel	– 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 Independent circuit for rotation
<b>Hydraulic pumps</b>	
For equipment and travel drive	Liebherr, variable displacement, swashplate double pump
Max. flow	2 x 265 l/min. / <b>2 x 70 gpm</b>
Max. pressure	380 bar / <b>5,511 psi</b>
For swing drive	Swashplate pump, closed-loop circuit
Max. flow	200 l/min. / <b>53 gpm</b>
Max. pressure	400 bar / <b>5,802 psi</b>
<b>Pump management</b>	Electronic management synchronous to the control block
<b>Hydraulic tank</b>	239 l / <b>63 gal</b>
<b>Hydraulic system</b>	max. 475 l / <b>max. 126 gal</b>
<b>Hydraulic oil filter</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, with hydraulic oil cooler, gearbox oil cooler, fuel cooler and after-cooler cores and hydrostatically 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 – 10.1 rpm stepless
<b>Swing torque</b>	99 kNm / <b>73,019 lbf ft</b>
<b>Holding brake</b>	Wet multi-disc (spring applied, pressure released)



## Operator's 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 work 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 extendible 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 width, height and inclination), seat heating as standard
<b>Arm consoles</b>	Oscillating consoles with seat, tilttable 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	$L_{pA}$ (inside cab) = 71 dB(A)
2000/14/EC	$L_{WA}$ (surround noise) = 104 dB(A)



## Undercarriage

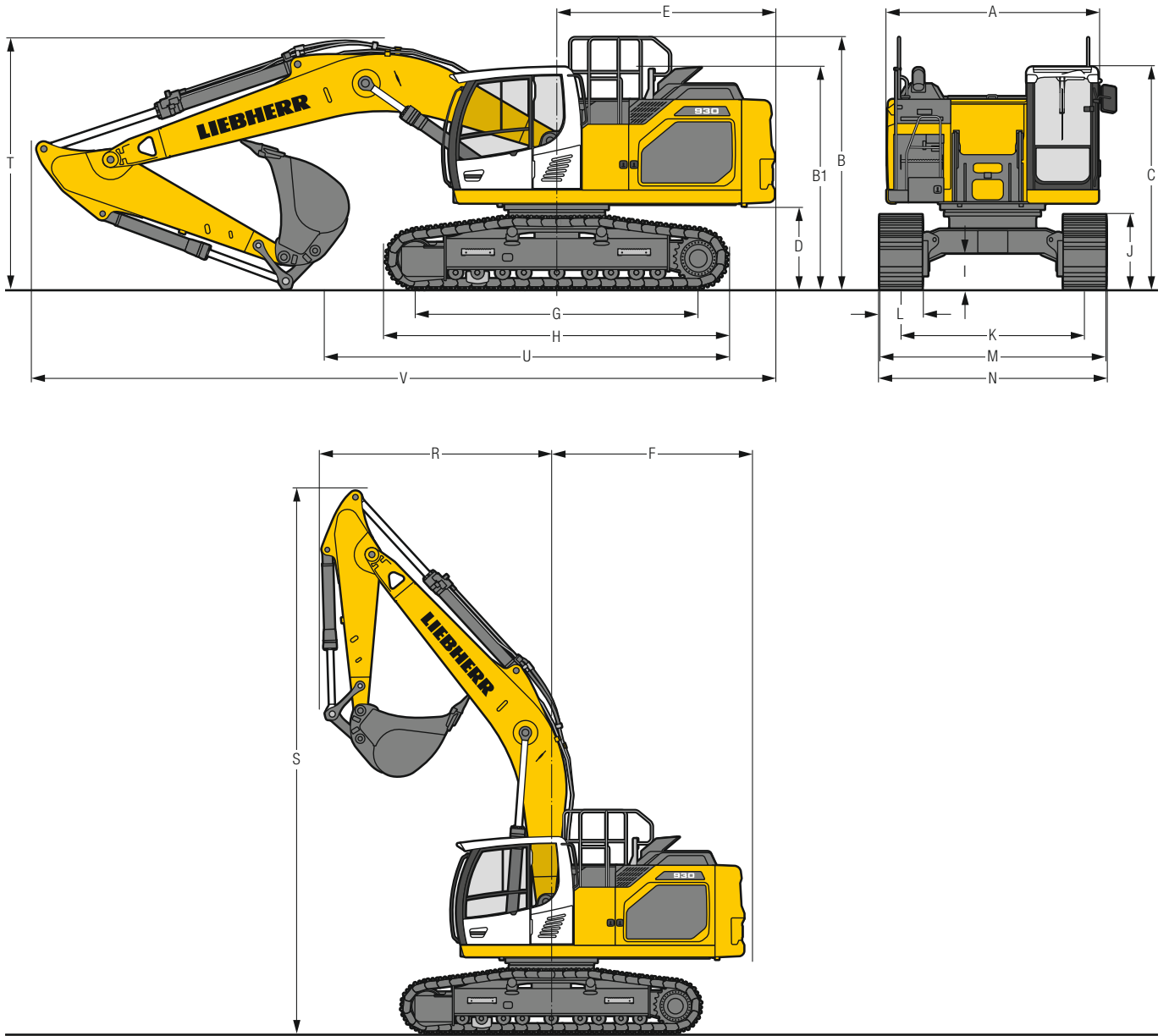
<b>LC</b>	Gauge 2,590 mm / <b>8'6"</b>
<b>Drive</b>	Liebherr swashplate motor with brake valves on both sides
<b>Transmission</b>	Liebherr planetary reduction gear
<b>Maximum travel speed</b>	Low range 3.5 km/h / <b>2.2 mph</b> High range 5.8 km/h / <b>3.6 mph</b>
<b>Drawbar pull on crawler</b>	261 kN / <b>58,680 lbf</b>
<b>Track components</b>	D7, D7G, maintenance-free
<b>Track rollers / Carrier rollers</b>	9/2
<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



		<b>LC</b>				mm/ft in	
<b>A</b>	Uppercarriage width					2,990**/ 9'10"***	
<b>B</b>	Uppercarriage height					3,130 /10' 3"	
<b>B1</b>	Uppercarriage height (handrails folded)					2,910 / 9' 7"	
<b>C</b>	Cab height					3,150 /10' 4"	
<b>D</b>	Counterweight ground clearance					1,175 / 3'10"	
<b>E</b>	Rear-end length					3,075 /10' 1"	
<b>F</b>	Tail swing radius					3,200 /11' 6"	
<b>G</b>	Wheelbase					3,990 /13' 1"	
<b>H</b>	Undercarriage length					4,840 /15'11"	
<b>I</b>	Undercarriage ground clearance					505 / 1' 8"	
<b>J</b>	Track height					1,055 / 3' 6"	
<b>K</b>	Track gauge					2,590 / 8' 6"	
<b>L</b>	Track pad width	600/ 24"	700/ 28"	800 / 31"	900 / 35"		
<b>M</b>	Width over tracks	3,190/10' 6"	3,290/10'10"	3,390 /11' 1"	3,490 /11' 5"		
<b>N</b>	Width over steps	3,190/10' 6"	3,190/10' 6"	3,390*/11' 1"*	3,390* /11' 1"*		

\* width with removable steps

\*\* without door stop device and spacer

		<b>Stick length</b>		<b>Mono boom 6.20 m/20'4"</b>			
		m/ft in		direct mounting			
				mm/ft in			
<b>R</b>	Front swing radius	2.50/ 8'2"		3,700 /12' 2"			
		2.80/ 9'2"		3,700 /12' 2"			
		3.20/10'6"		3,700 /12' 2"			
		3.70/12'2"		3,700 /12' 2"			
<b>S</b>	Height with boom up			8,700 /28' 7"			
<b>T</b>	Boom height	2.50/ 8'2"		3,250 /10' 8"			
		2.80/ 9'2"		3,550 /11' 8"			
		3.20/10'6"		3,400 /11' 2"			
		3.70/12'2"		3,200*/10' 6"*			
<b>U</b>	Length on ground	2.50/ 8'2"		6,400 /21'			
		2.80/ 9'2"		6,250 /20' 6"			
		3.20/10'6"		5,600 /18' 4"			
		3.70/12'2"		4,850*/15'11"*			
<b>V</b>	Overall length	2.50/ 8'2"		10,400 /34' 1"			
		2.80/ 9'2"		10,400 /34' 1"			
		3.20/10'6"		10,400 /34' 1"			
		3.70/12'2"		10,400*/34' 1"*			
	Bucket			1.75 m <sup>3</sup> /2.29 yd <sup>3</sup>			

\* without bucket

## Transport Dimensions

### removable elements disassembled

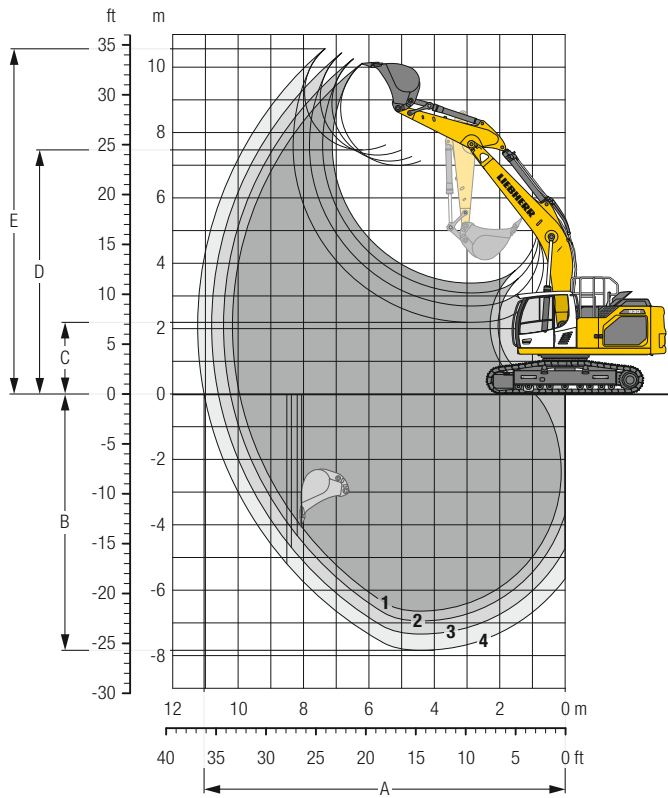
		<b>Stick</b>		<b>Mono boom 6.20 m/20'4"</b>			
		m/ft in		mm/ft in			
	Pad width			600/ 24"	700/ 28"	800/ 31"	900/ 35"
	Transport width			3,190/10' 6"	3,290/10'10"	3,390/11' 1"	3,490/11' 5"
	Transport length	2.50/ 8'2"		10,400 /34'1"			
		2.80/ 9'2"		10,400 /34'1"			
		3.20/10'6"		10,400 /34'1"			
		3.70/12'2"		10,400*/34'1"*			
	Transport height	2.50/ 8'2"		3,250 /10'8"			
		2.80/ 9'2"		3,550 /11'8"			
		3.20/10'6"		3,400 /11'2"			
		3.70/12'2"		3,200 /10'6"			
	Bucket			1.75 m <sup>3</sup> /2.29 yd <sup>3</sup>			

\* without bucket



# Backhoe Bucket

with Mono Boom 6.20 m/20'4" and Counterweight 5.1 t/11,240 lb



## Digging Envelope

without quick coupler	1	2	3	4
Stick length	m/ft in 2.50/ 8' 2"	2.80/ 9'2"	3.20/10' 6"	3.70/12'2"
A Max. reach at ground level	m/ft in 9.95/32' 8"	10.23/33'7"	10.60/34' 9"	11.04/36'3"
B Max. digging depth	m/ft in 6.64/21' 9"	6.94/22'9"	7.34/24' 1"	7.84/25'9"
C Min. dumping height	m/ft in 3.39/11' 1"	3.09/10'2"	2.69/ 8'10"	2.19/ 7'2"
D Max. dumping height	m/ft in 6.99/22'11"	7.13/23'5"	7.31/24'	7.47/24'6"
E Max. cutting height	m/ft in 10.10/33' 2"	10.23/33'7"	10.42/34' 2"	10.56/34'8"

## Forces

without quick coupler	1	2	3	4
Stick digging force (ISO 6015)	kN/lbf 168/37,770	156/35,070	142/31,920	128/28,780
Bucket digging force (ISO 6015)	kN/lbf 204/45,860	204/45,860	204/45,860	204/45,860
Stick digging force (SAE J1179)	kN/lbf 160/35,970	149/33,500	136/30,570	123/27,650
Bucket digging force (SAE J1179)	kN/lbf 178/40,020	178/40,020	178/40,020	178/40,020

## Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 5.1 t/11,240 lb, mono boom 6.20 m/20'4", stick 3.20 m/10'6" and bucket 1.75 m<sup>3</sup>/2.29 yd<sup>3</sup> (1,160 kg/2,560 lb).

Undercarriage	LC			
Pad width	mm/in 600/24"	700/28"	800/31"	900/35"
Weight	kg/lb 30,150/66,470	30,550/67,350	30,850/68,010	31,200/68,780
Ground pressure	kg/cm <sup>2</sup> /psi 0.59/8.4	0.51/7.3	0.45/6.4	0.40/5.7

Optional: counterweight 6.2 t/13,670 lb

(counterweight 6.2 t/13,670 lb increases the operating weight by 1,100 kg/2,430 lb and ground pressure by 0.02 kg/cm<sup>2</sup>/0.3 psi) see load tables on page 11



**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	Weight <sup>1)</sup>	Weight <sup>4)</sup>	without quick coupler			with quick coupler					
				2.50	2.80	3.20	2.50	2.80	3.20	3.70		
mm	m <sup>3</sup>	kg	kg	8'2"	9'2"	10'6"	8'2"	9'2"	10'6"	12'2"		
in	yd <sup>3</sup>	lb	lb									
<b>with counterweight 5.1 t/11,240 lb</b>												
STD <sup>1)</sup>	1,250	1.25	1,000	1,050	▲	▲	▲	▲	▲	▲	▲	▲
	<b>49"</b>	<b>1.63</b>	<b>2,210</b>	<b>2,320</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,400	1.45	1,070	1,130	▲	▲	▲	▲	▲	▲	▲	■
	<b>55"</b>	<b>1.90</b>	<b>2,360</b>	<b>2,490</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,550	1.60	1,110	1,170	▲	▲	▲	■	▲	▲	■	▲
	<b>61"</b>	<b>2.09</b>	<b>2,450</b>	<b>2,580</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,650	1.75	1,160	1,220	▲	▲	■	▲	▲	■	▲	■
	<b>65"</b>	<b>2.29</b>	<b>2,560</b>	<b>2,690</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,550	1.85	1,170	1,230	▲	■	▲	■	■	▲	▲	△
	<b>61"</b>	<b>2.42</b>	<b>2,580</b>	<b>2,710</b>	▲	▲	▲	▲	▲	▲	▲	▲
1,650	2.00	1,210	1,270	■	▲	■	△	■	▲	■	△	
<b>65"</b>	<b>2.62</b>	<b>2,670</b>	<b>2,800</b>	▲	▲	▲	▲	▲	▲	▲	▲	
1,750	2.15	1,260	1,320	▲	■	△	△	▲	■	△	△	
<b>69"</b>	<b>2.81</b>	<b>2,780</b>	<b>2,910</b>	▲	▲	▲	▲	▲	▲	▲	▲	
HD <sup>2)</sup>	1,250	1.25	1,140	1,200	▲	▲	▲	▲	▲	▲	▲	▲
	<b>49"</b>	<b>1.63</b>	<b>2,510</b>	<b>2,650</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,400	1.45	1,230	1,290	▲	▲	▲	▲	▲	▲	▲	■
	<b>55"</b>	<b>1.90</b>	<b>2,710</b>	<b>2,840</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,550	1.60	1,290	1,350	▲	▲	■	▲	▲	▲	■	■
	<b>61"</b>	<b>2.09</b>	<b>2,840</b>	<b>2,980</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,650	1.75	1,350	1,410	▲	■	▲	■	▲	■	▲	△
	<b>65"</b>	<b>2.29</b>	<b>2,980</b>	<b>3,110</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,550	1.85	1,340	1,400	▲	■	▲	■	■	▲	■	△
	<b>61"</b>	<b>2.42</b>	<b>2,950</b>	<b>3,090</b>	▲	▲	▲	▲	▲	▲	▲	▲
1,650	2.00	1,400	1,460	■	▲	■	△	▲	■	△	△	
<b>65"</b>	<b>2.62</b>	<b>3,090</b>	<b>3,220</b>	▲	▲	▲	▲	▲	▲	▲	▲	
1,750	2.15	1,450	1,510	▲	■	△	△	▲	■	△	-	
<b>69"</b>	<b>2.81</b>	<b>3,200</b>	<b>3,330</b>	▲	▲	▲	▲	▲	▲	▲	▲	
<b>with counterweight 6.2 t/13,670 lb</b>												
STD <sup>1)</sup>	1,250	1.25	1,000	1,050	▲	▲	▲	▲	▲	▲	▲	▲
	<b>49"</b>	<b>1.63</b>	<b>2,210</b>	<b>2,320</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,400	1.45	1,070	1,130	▲	▲	▲	▲	▲	▲	▲	▲
	<b>55"</b>	<b>1.90</b>	<b>2,360</b>	<b>2,490</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,550	1.60	1,110	1,170	▲	▲	▲	▲	▲	▲	▲	▲
	<b>61"</b>	<b>2.09</b>	<b>2,450</b>	<b>2,580</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,650	1.75	1,160	1,220	▲	▲	▲	■	▲	▲	▲	■
	<b>65"</b>	<b>2.29</b>	<b>2,560</b>	<b>2,690</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,550	1.85	1,170	1,230	▲	▲	▲	■	▲	▲	■	▲
	<b>61"</b>	<b>2.42</b>	<b>2,580</b>	<b>2,710</b>	▲	▲	▲	▲	▲	▲	▲	▲
1,650	2.00	1,210	1,270	▲	▲	■	▲	▲	■	▲	■	
<b>65"</b>	<b>2.62</b>	<b>2,670</b>	<b>2,800</b>	▲	▲	▲	▲	▲	▲	▲	▲	
1,750	2.15	1,260	1,320	▲	■	▲	■	■	▲	■	△	
<b>69"</b>	<b>2.81</b>	<b>2,780</b>	<b>2,910</b>	▲	▲	▲	▲	▲	▲	▲	▲	
HD <sup>2)</sup>	1,250	1.25	1,140	1,200	▲	▲	▲	▲	▲	▲	▲	▲
	<b>49"</b>	<b>1.63</b>	<b>2,510</b>	<b>2,650</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,400	1.45	1,230	1,290	▲	▲	▲	▲	▲	▲	▲	▲
	<b>55"</b>	<b>1.90</b>	<b>2,710</b>	<b>2,840</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,550	1.60	1,290	1,350	▲	▲	▲	▲	▲	▲	▲	■
	<b>61"</b>	<b>2.09</b>	<b>2,840</b>	<b>2,980</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,650	1.75	1,350	1,410	▲	▲	▲	■	▲	▲	■	▲
	<b>65"</b>	<b>2.29</b>	<b>2,980</b>	<b>3,110</b>	▲	▲	▲	▲	▲	▲	▲	▲
	1,550	1.85	1,340	1,400	▲	▲	■	▲	▲	■	▲	▲
	<b>61"</b>	<b>2.42</b>	<b>2,950</b>	<b>3,090</b>	▲	▲	▲	▲	▲	▲	▲	▲
1,650	2.00	1,400	1,460	▲	■	▲	■	▲	■	▲	■	
<b>65"</b>	<b>2.62</b>	<b>3,090</b>	<b>3,220</b>	▲	▲	▲	▲	▲	▲	▲	▲	
1,750	2.15	1,450	1,510	■	■	▲	△	■	▲	■	△	
<b>69"</b>	<b>2.81</b>	<b>3,200</b>	<b>3,330</b>	▲	▲	▲	▲	▲	▲	▲	▲	

\* 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 50
  - <sup>2)</sup> HD bucket with teeth Z 50
  - <sup>3)</sup> Bucket for direct mounting
  - <sup>4)</sup> Bucket for mounting to quick coupler
- 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>, - = not authorized





# Lift Capacities

with Mono Boom 6.20 m/20'4", Counterweight 6.2 t/13,670 lb and Track Pads 800 mm/31"

## Stick 2.50 m / 8'2"

Under-carriage	Height	3.0 m 10 ft		4.5 m 15 ft		6.0 m 20 ft		7.5 m 25 ft		9.0 m 30 ft		m ft in
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	
9.0 m t												
30 ft lb												
7.5 m t						8.9	9.0*			7.9	8.3*	6.4
25 ft lb						19.0	19.8*			17.9	18.5*	20'11"
6.0 m t						8.7	9.3*			6.2	8.1*	7.5
20 ft lb						18.8	20.2*			13.8	17.8*	24'4"
4.5 m t				12.8*	12.8*	8.4	10.2*	6.0	8.8*	5.4	8.0	8.1
15 ft lb				27.6*	27.6*	18.1	22.0*	13.0	19.3*	11.9	17.7	26'5"
3.0 m t				12.0	15.3*	8.0	11.2*	5.8	8.8	5.0	7.4	8.4
10 ft lb				25.8	32.9*	17.3	24.4*	12.6	18.9	11.0	16.4	27'6"
1.5 m t				11.4	16.5*	7.7	11.9	5.7	8.6	4.9	7.3	8.4
5 ft lb				24.6	35.6*	16.6	25.7	12.3	18.5	10.7	16.1	27'7"
0 m t				11.2	16.2*	7.5	11.7	5.6	8.5	5.0	7.5	8.2
0 ft lb				24.1	35.3*	16.2	25.3	12.0	18.2	11.0	16.6	26'8"
-1.5 m t	13.0*	13.0*	11.2	15.0*	7.5	11.6*		5.6	8.5	5.5	8.3	7.6
-5 ft lb	29.5*	29.5*	24.2	32.7*	16.1	21.5*				12.1	18.4	27'11"
-3.0 m t	15.9*	15.9*	11.4	12.8*	7.6	9.9*				6.6	8.5*	6.7
-10 ft lb	34.5*	34.5*	24.6	27.7*	16.4	21.2*				14.7	18.7*	21'10"
-4.5 m t			8.7*	8.7*						7.4*	7.4*	5.2
-15 ft lb			18.3*	18.3*						16.1*	16.1*	16'8"
-6.0 m t												
-20 ft lb												

## Stick 2.80 m / 9'2"

Under-carriage	Height	3.0 m 10 ft		4.5 m 15 ft		6.0 m 20 ft		7.5 m 25 ft		9.0 m 30 ft		m ft in
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	
9.0 m t												
30 ft lb												
7.5 m t						8.5*	8.5*					7.3
25 ft lb						18.8*	18.8*					16.2*
6.0 m t						8.8	8.9*	6.2	8.2*			7.3*
20 ft lb						18.9	19.3*	13.3	16.8*			16.2*
4.5 m t	18.5*	18.5*	12.2*	12.2*	8.4	9.8*	6.0	8.6*				5.8
15 ft lb	39.1*	39.1*	26.4*	26.4*	18.2	21.3*	13.0	18.7*				7.1*
3.0 m t			12.1	14.7*	8.0	11.0*	5.8	8.8				7.8
10 ft lb			26.0	31.7*	17.3	23.7*	12.6	18.9				7.8
1.5 m t			11.4	16.2*	7.7	11.8*	5.6	8.5				7.8
5 ft lb			24.6	35.1*	16.5	25.7*	12.2	18.4				7.9
0 m t			11.2	16.3*	7.4	11.7	5.5	8.4				8.4
0 ft lb			24.0	35.4*	16.1	25.2	11.9	18.1				8.4
-1.5 m t	12.5*	12.5*	11.1	15.3*	7.4	11.6	5.5	8.4				8.4
-5 ft lb	28.5*	28.5*	24.0	33.3*	15.9	25.0	11.9	18.1				8.7
-3.0 m t	17.1*	17.1*	11.3	13.4*	7.5	10.3*						8.7
-10 ft lb	37.1*	37.1*	24.3	28.9*	16.1	22.1*						8.7
-4.5 m t	12.1*	12.1*	9.7*	9.7*								8.7
-15 ft lb	25.9*	25.9*	20.6*	20.6*								8.7
-6.0 m t												
-20 ft lb												

## Stick 3.20 m / 10'6"

Under-carriage	Height	3.0 m 10 ft		4.5 m 15 ft		6.0 m 20 ft		7.5 m 25 ft		9.0 m 30 ft		m ft in
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	
9.0 m t												6.9*
30 ft lb												6.9*
7.5 m t												6.3*
25 ft lb						17.4*	17.4*					6.3*
6.0 m t						8.4*	8.4*	6.2	7.8*			5.4
20 ft lb						18.2*	18.2*	13.4	17.1*			6.1*
4.5 m t				11.4*	11.4*	8.5	9.3*	6.0	8.2*			8.2
15 ft lb				24.6*	24.6*	18.3	20.2*	13.0	17.9*			6.4*
3.0 m t				12.2	14.0*	8.0	10.5*	5.8	8.8	4.4	6.5*	9.0
10 ft lb				26.4	30.2*	17.4	22.8*	12.6	18.9			6.5*
1.5 m t				11.5	15.8*	7.7	11.6*	5.6	8.5	4.4	6.5	9.0
5 ft lb				24.7	34.3*	16.5	25.0*	12.1	18.4			9.0
0 m t	6.5*	6.5*	11.1	16.3*	7.4	11.7	5.5	8.4				8.8
0 ft lb	15.0*	15.0*	23.9	35.4*	16.0	25.1	11.8	18.0				8.8
-1.5 m t	12.0*	12.0*	11.0	15.7*	7.3	11.5	5.4	8.3				8.3
-5 ft lb	27.2*	27.2*	23.7	34.0*	15.8	24.8	11.7	17.9				8.3
-3.0 m t	18.6*	18.6*	11.1	14.0*	7.3	10.7*						8.3
-10 ft lb	40.3*	40.3*	24.0	30.2*	15.9	23.1*						7.5
-4.5 m t	14.0*	14.0*	10.9*	10.9*	7.6	8.0*						7.5
-15 ft lb	30.0*	30.0*	23.2*	23.2*								7.5
-6.0 m t												7.5
-20 ft lb												7.5

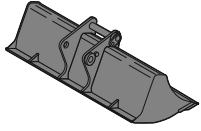
## Stick 3.70 m / 12'2"

Under-carriage	Height	3.0 m 10 ft		4.5 m 15 ft		6.0 m 20 ft		7.5 m 25 ft		9.0 m 30 ft		m ft in
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	
9.0 m t												5.7*
30 ft lb												5.7*
7.5 m t												5.7*
25 ft lb												5.7*
6.0 m t								6.0*	6.0*			5.3*
20 ft lb								12.2*	12.2*			5.3*
4.5 m t								6.3	7.3*			5.3*
15 ft lb								13.5	15.9*			5.1*
3.0 m t				11.4*	11.4*	12.5	13.1*	8.1	10.0*	4.4	6.6	8.6
10 ft lb				29.6*	29.6*	26.9	28.2*	17.5	21.7*	9.6	14.3	9.2
1.5 m t				11.5	15.8*	7.7	11.2*	5.6	8.5	4.3	6.5	9.2
5 ft lb				24.5*	33.0*	16.6	24.2*	12.1	18.4	9.3	14.0	9.2
0 m t	6.5*	6.5*	11.1	16.2*	7.4	11.7	5.4	8.3	4.2	6.4	4.1	9.5
0 ft lb	17.2*	17.2*	23.9	35.1*	15.9	25.1	11.7	18.0	9.1	13.8	9.0	9.5
-1.5 m t	11.6*	11.6*	10.9	15.9*	7.2	11.5	5.3	8.2				9.5
-5 ft lb	26.1*	26.1*	23.6	34.6*	15.6	24.7	11.5	17.7				9.5
-3.0 m t	17.0*	17.0*	11.0	14.6*	7.2	11.1*	5.4	8.3				9.5
-10 ft lb	38.5*	38.5*	23.7	31.7*	15.6	24.0*	11.6	17.8				9.5
-4.5 m t	16.1*	16.1*	11.2	12.1*	7.4	9.1*						9.5
-15 ft lb	34.6*	34.6*	24.2	25.9*	16.0	19.3*						9.5
-6.0 m t			7.1*	7.1*								9.5
-20 ft lb												9.5

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 410 kg/905 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

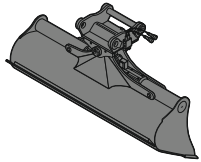
# Available Attachments



## Rigid Ditch Cleaning Bucket

**GRL 100, for mounting to quick coupler SWA 66**

Cutting width	mm/in	2,000/79"	2,400/95"	2,400/95"
Capacity	m <sup>3</sup> /yd <sup>3</sup>	0.70/0.92	0.85/1.11	1.25/1.63
Weight	kg/lb	546/1,200	635/1,400	685/1,510



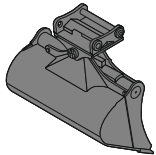
## Tiltable Ditch Cleaning Bucket

**GRL 100, 2 x 50° tiltable, for direct mounting**

Cutting width	mm/in	2,000/79"	2,000/79"	2,200/87"	2,400/95"	2,400/95"
Capacity	m <sup>3</sup> /yd <sup>3</sup>	1.20/1.57	1.45/1.90	1.65/2.16	0.85/1.11	1.45/1.90
Weight	kg/lb	1,520/3,350	1,600/3,530	1,680/3,700	1,475/3,250	1,620/3,570

**GRL 100, 2 x 50° tiltable, for mounting to quick coupler SWA 66**

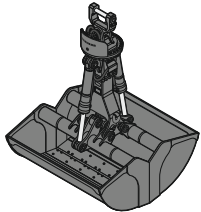
Cutting width	mm/in	2,000/79"	2,000/79"	2,200/87"	2,400/95"	2,400/95"
Capacity	m <sup>3</sup> /yd <sup>3</sup>	1.20/1.57	1.45/1.90	1.65/2.16	0.85/1.11	1.45/1.90
Weight	kg/lb	1,520/3,350	1,600/3,530	1,680/3,700	1,475/3,250	1,620/3,570



## Tilt Bucket

**SL 100, 2 x 50° tiltable, for mounting to quick coupler SWA 66**

Cutting width	mm/in	1,600/63"	1,600/63"	1,700/67"	1,800/71"
Capacity	m <sup>3</sup> /yd <sup>3</sup>	1.45/1.90	1.75/2.29	1.85/2.42	1.60/2.09
Weight	kg/lb	1,520/3,350	1,635/3,610	1,695/3,740	1,620/3,570
HD-version				X	



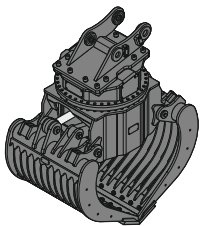
## Clamshells

**GM 20C, earthmoving shell, for mounting to quick coupler SWA 48**

Cutting width	mm/in	600/24"	800/31"	1,000/39"	1,200/47"
Capacity	m <sup>3</sup> /yd <sup>3</sup>	0.45/0.59	0.60/0.78	0.75/0.98	0.90/1.18
Weight	kg/lb	1,080/2,380	1,130/2,490	1,205/2,660	1,270/2,800

**GMZ 80, earthmoving shell, for mounting to quick coupler SWA 66**

Cutting width	mm/in	1,200/47"	1,400/55"		
Capacity	m <sup>3</sup> /yd <sup>3</sup>	1.40/1.83	1.60/2.09		
Weight	kg/lb	2,376/5,240	2,486/5,480		



## Sorting Grab

		perforated		ribbed		closed		stone tong		
<b>SG 30, for direct mounting</b>										
Cutting width	mm/in	1,000/39"	1,200/47"	1,400/55"	1,000/39"	1,200/47"	1,400/55"	1,000/39"	1,200/47"	1,400/55"
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	1.00/1.31	1.15/1.50
Weight	kg/lb	1,700/3,750	1,570/3,460	1,850/4,080	1,775/3,910	1,885/4,160	1,990/4,390	1,730/3,810	1,810/3,990	1,890/4,170
<b>SG 30, for mounting to quick coupler SWA 48</b>										
Cutting width	mm/in	1,000/39"	1,200/47"	1,400/55"	1,000/39"	1,200/47"	1,400/55"	1,000/39"	1,200/47"	1,400/55"
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	1.00/1.31	1.15/1.50
Weight	kg/lb	1,700/3,750	1,570/3,460	1,850/4,080	1,775/3,910	1,885/4,160	1,990/4,390	1,730/3,810	1,810/3,990	1,890/4,170
<b>SG 40, for mounting to quick coupler SWA 48 and SWA 66</b>										
Cutting width	mm/in	1,100/43"	1,300/51"		1,100/43"	1,300/51"				
Capacity	m <sup>3</sup> /yd <sup>3</sup>	1.30/1.70	1.60/2.09		1.10/1.44	1.40/1.83				
Weight	kg/lb	2,230/4,920	2,800/6,170		2,320/5,120	2,900/6,390				



# 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 coolant level, visible from the cab
- Engine hood with gas spring opening
- Filters accessible from ground level
- Handrails
- Hydraulic oil level, visible from ground level
- Lockable fuel tank cap
- Lockable service doors
- Lockable storage and accessories compartment
- Lockable storage box
- Main switch, electric, with timer
- Main switch, manual, lockable
- Protection grid on radiator fan
- Safe uppercarriage side access platform
- Sound insulation
- Swing drive gearbox oil level, visible from the cab
- Swing-out radiators
- Windshield washer fluid tank, accessible from ground level

## Hydraulic System

- Dedicated swing circuit
- 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
- Exhaust gas after-treatment system – SCR
- Fixed geometry turbocharger
- Fuel fine filter
- Fuel pre-filter and water separator
- Fuel priming pump
- Intercooler
- Power Pack US EPA Tier 4 Final
- Stepless adjustable engine speed

## Operator's Cab

- 7" multifunction color touchscreen
- Air conditioning, automatic, tri-zone, controlled via display
- Armrests adjustable in width, 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 cabin (12 V)
- Electric socket in cabin (24 V)
- Emergency hammer
- 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 meters, 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
- 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 windshield and roof window
- ROPS safety cab structure (ISO 12117-2)
- Rubber floor mat, fixed on floor and removable
- Shortcut button on joystick configurable
- Storage box
- Storage nets
- Storage spaces
- Swing braking torque adjustable via touchscreen
- Tilttable console left
- Tinted windows
- Visco-elastic damping
- Windscreen wiper and washer
- Work mode selector

## Equipment

- 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

\* optionally extendable after one year

# Equipment Standard/Option

## Undercarriage

Chain guide 1 piece	•
Chain guide 2 pieces	+
Chain guide 3 pieces	+
Chain guide 4 pieces	+
Cover and base plate for undercarriage center section	•
Reinforced cover and base plate for undercarriage center section	+
Special painting	+
Steps	•
Steps wide	+
Track pads triple grouser 600 mm / <b>24"</b> / 700 mm / <b>28"</b> / 900 mm / <b>35"</b>	+
Track pads triple grouser 800 mm / <b>31"</b>	•
Tracks, sealed and greased	•
Tracks, sealed and greased, reinforced	+
Undercarriage LC	•
Undercarriage storage compartment	+

## Upperstructure

Air pre-filter with cyclonical dust trap	+
Boxing ring	+
Centralized lubrication system (automatic)	•
Centralized lubrication system (manual)	+
Counterweight heavy 6.2 t / <b>13,670 lb</b>	+
Counterweight standard 5.1 t / <b>11,240 lb</b>	•
Electric socket on upperstructure (24 V)	+
Extended tool set including tool box	+
Fuel anti-theft protection	+
Headlight on upperstructure, front left, LED+, 1 piece, protection included	+1)
Headlight on upperstructure, front right, LED, 1 piece, protection included	•1)
Headlight on upperstructure, front right, LED+, 1 piece, protection included	+1)
Headlight on upperstructure, lateral left, LED+, 1 piece	+1)
Headlight on upperstructure, lateral right, LED+, 1 piece	+1)
Headlights on upperstructure, rear, LED+, 2 pieces	+1)
Lighting for tank area <sup>1)</sup>	+
Lighting for upperstructure access <sup>1)</sup>	+
Pre-heating system for fuel	+
Radiator fine mesh protection grid	+
Reflective warning stickers	+
Reversible fan drive	+
Rotating beacons on upperstructure, rear, LED, 2 pieces	+
Skyview 360°	+
Special painting	+
Tank refilling pump fuel	+
Tool set including storage case	•
Upperstructure bottom and side protection	+
Upperstructure bottom closure sheets	•

## Hydraulic System

Bypass filter for hydraulic oil	+
Liebherr hydraulic oil	•
Liebherr hydraulic oil, adapted for extreme climate conditions	+
Liebherr hydraulic oil, biodegradable	+

## Engine

Automatic engine shutdown after idling	+
Engine shut-down with overrun	+
Lighting for engine compartment <sup>1)</sup>	+





## Operator's Cab

3" seat belt with retractor, orange color	•
4-points seat belt	+
Acoustic travel alarm deactivatable	+
Auxiliary heater programmable	+
Bottom windscreen wiper	+
Cool box (12 V)	+
Dark tinted windows	+
Electrically adjustable and heated outside rear-view mirrors	+
Electronic immobilizer	+
Emergency stop in cab	+
FOPS top guard	+
FOPS top guard flat	+
Filter for hydraulic hammer return flow	+
Fire extinguisher	+
First-aid box	+
Footrest	+
FGPS front guard	+
FGPS front guard tiltable	+
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>
High pressure circuit bypass	+
High pressure circuit switchable on pedals or mini-joystick	+
High pressure circuit with Tool Control (20 attachment adjustments on display)	+
Impact resistant one-piece windscreen	+
Impact resistant roof window	+
Integral protection guard	+
Laminated roof window	•
Lightbar on cabin	+
Luminosity control (LED+ headlights) <sup>1)</sup>	+
Mini-joysticks proportional	•
Medium pressure circuit	+
Movement restriction for boom	+
Movement restriction for stick	+
Operator seat Comfort	•
Operator seat Premium	+
Overload warning system	+
Preparation for machine guidance system	+
Preparation for tiltrotator	+
Preparation for weighing system	+
Radio Comfort	+
Radio pre-installation	•
Retractable laminated two-piece windscreen	•
Roof sun shield	+
Roof window wiper	+
Rotating beacon on cabin, LED, 1 piece	+
Seat belt reminder	+
Special painting	+
Sun visor	+
Switch between high pressure and bucket cylinder controls	+
Windscreen bottom protection grid	+



## Equipment

Boom bottom protection	+
Bucket cylinder rod protection	+
Centralized lubrication extended for connecting link	+
Floating boom	+
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>
LIKUFIX electric signal plug	+
LIKUFIX for quick coupler SWA 48 hydraulic	+
LIKUFIX for quick coupler SWA 66 hydraulic	+
Load holding valve for bucket cylinder	+
Lubrication hoses protection on stick	+
Mono boom 6.20 m / <b>20'4"</b>	•
Pipe fracture safety valve for stick cylinder	+
Pipe fracture safety valves for boom cylinders	+
Quick coupler SWA 48 hydraulic	+
Quick coupler SWA 48 mechanical	+
Quick coupler SWA 66 hydraulic	+
Quick coupler SWA 66 mechanical	+
Special painting	+
Stick 2.50 m / <b>8'2"</b>	+
Stick 2.80 m / <b>9'2"</b>	+
Stick 3.20 m / <b>10'6"</b>	+
Stick 3.70 m / <b>12'2"</b>	+
Stick bottom protection	+
Tool Management	+

• = Standard, + = Option

<sup>1)</sup> Equipment not individually available, but only as predefined lighting packages  
Non-exhaustive list, please contact us for further information.

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

# The Liebherr Group of Companies



## Diverse Product Range

The Liebherr Group is one of the largest construction equipment manufacturers in the world. Liebherr's quality products and services hold a high reputation in many industries. The wide range includes domestic appliances, aerospace and transportation systems, machine tools and maritime cranes.

## Exceptional Customer Benefit

Every product line provides a complete range of models in many different versions. With both their technical excellence and superior quality, Liebherr products offer customers the highest benefits in practical applications.

## State-of-the-art Technology

Liebherr attributes great importance to the product areas of core technology and components, in order to achieve its consistent, top-quality products. Important modules and components are developed and manufactured in-house, for instance, the entire drive and control technology for the construction equipment and mining trucks.

## Worldwide and Family-Owned

Hans Liebherr founded the Liebherr family company in 1949. Since that time, the enterprise has steadily grown to a group of more than 130 companies with more than 46,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

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

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