

# Product Information: Crawler Excavator

## R 934

Litronic®

**Generation**

8

**Engine**

200 kW/272 HP  
Stage V

**Operating Weight**

34,800 – 37,200 kg

**Bucket Capacity**

1.00 – 2.50 m<sup>3</sup>

# LIEBHERR

# Experience the Progress

## R 934

### 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 Stage V European exhaust emissions standard
- Automatic engine idling / automatic engine shut-down after idling

### **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 per ISO 9249</b>	200 kW (272 HP) at 1,800 RPM
<b>Torque</b>	1,415 Nm at 1,350 RPM
<b>Model</b>	Liebherr D944 A7-25
<b>Type</b>	4 cylinder in-line
Bore	130 mm
Stroke	150 mm
Displacement	8.0 l
<b>Engine operation</b>	4-stroke diesel Common-Rail Turbo-charged and after-cooler
<b>Exhaust gas treatment</b>	Stage V DOC + 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>	729 l
<b>Urea tank</b>	90 l
<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
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 315 l/min.
Max. pressure	380 bar
For swing drive	Swashplate pump, closed-loop circuit
Max. flow	205 l/min.
Max. pressure	400 bar
<b>Pump management</b>	Electronic management synchronous to the control block
<b>Hydraulic tank</b>	239 l
<b>Hydraulic system</b>	max. 475 l
<b>Hydraulic oil filter</b>	1 main return filter with integrated partial micro filtration (10 µm)
<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 – 8.6 RPM stepless
<b>Swing torque</b>	117 kNm
<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, 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 extensible window shades for the sun-roof 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>	Tilttable console left, oscillating with seat
<b>Operation and displays</b>	Large high-resolution operating unit, intuitive, 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 The air conditioning system contains fluorinated greenhouse gases
Refrigerant	R134a
Global warming potential	1,430
Quantity at 25 °C*	1,260 g
CO <sub>2</sub> equivalent	1.80 t
<b>Vibration emission**</b>	
Hand/arm vibrations	< 2.5 m/s <sup>2</sup> , according with ISO 5349-1:2001
Whole-body vibrations	< 0.5 m/s <sup>2</sup>
Measuring inaccuracy	According with standard EN 12096:1997

## Undercarriage

<b>Versions</b>	
NLC	Gauge 2,390 mm
LC	Gauge 2,590 mm
<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 3.3 km/h High range 5.4 km/h
<b>Drawbar pull on crawler</b>	325 kN
<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



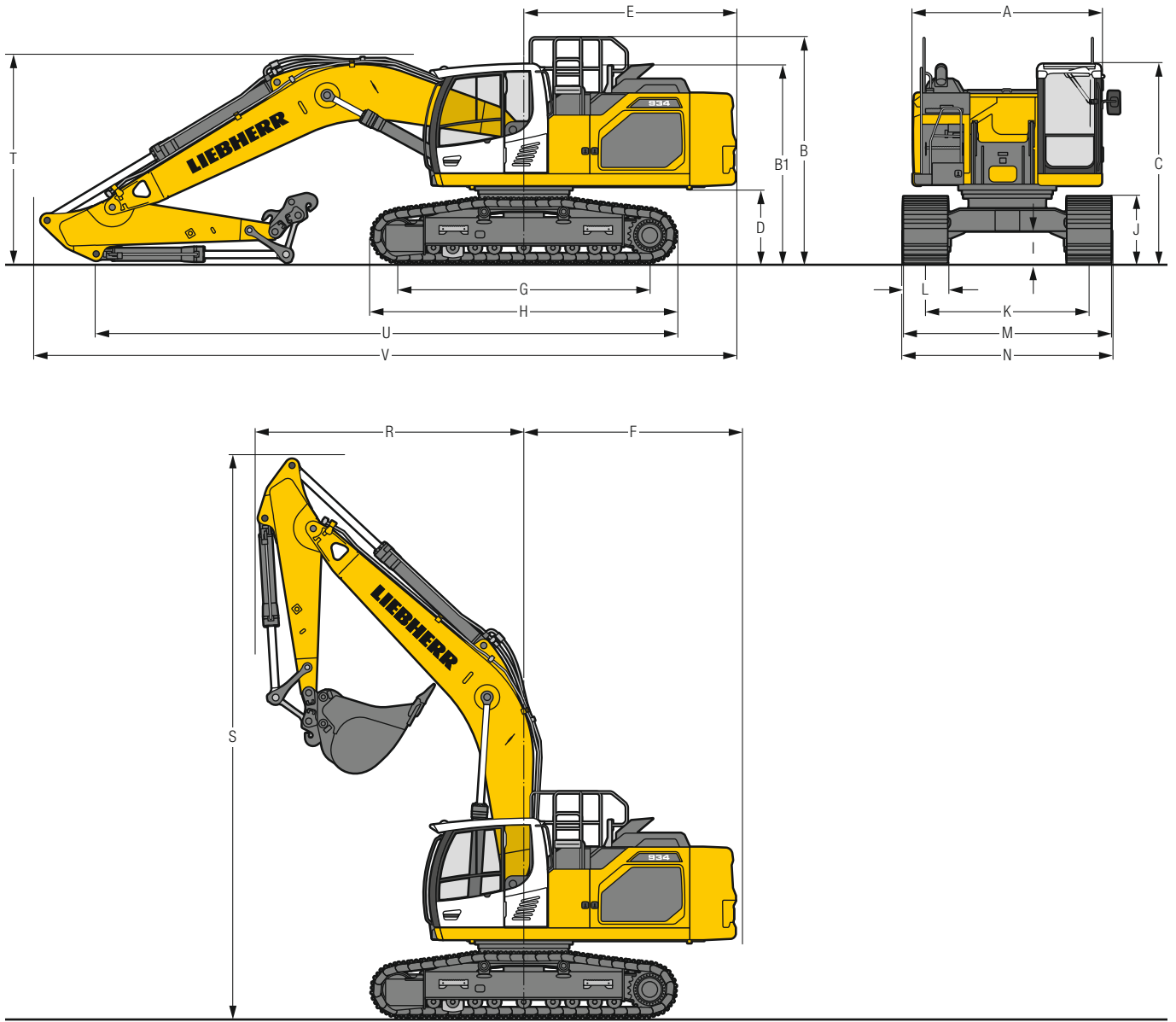
## Equipment

<b>Type</b>	Combination of resistant steel plates and cast steel components
<b>Hydraulic cylinders</b>	Liebherr cylinders with seal and guidance systems and shock protection
<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

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

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

# Dimensions



	NLC	mm	LC	mm
<b>A</b>	Upper-carriage width		2,990**	2,990**
<b>B</b>	Upper-carriage height		3,570	3,570
<b>B1</b>	Upper-carriage height (handrails folded)		3,130	3,130
<b>C</b>	Cab height		3,150	3,150
<b>D</b>	Counterweight ground clearance		1,175	1,175
<b>E</b>	Rear-end length		3,350	3,350
<b>F</b>	Tail swing radius		3,450	3,450
<b>G</b>	Wheelbase		3,990	3,990
<b>H</b>	Under-carriage length		4,840	4,840
<b>I</b>	Under-carriage ground clearance		495	495
<b>J</b>	Track height		1,055	1,055
<b>K</b>	Track gauge		2,390	2,590
<b>L</b>	Track pad width	600 700 800 900		600 700 800 900
<b>M</b>	Width over tracks	2,990 3,090 3,190 3,290		3,190 3,290 3,390 3,490
<b>N</b>	Width over steps	2,990 2,990 3,190* 3,190*		3,190 3,190 3,390* 3,390*

\* width with removable steps

\*\* without door stop device and spacer

	Stick length m	Mono boom 6.45 m with quick coupler mm	Mono boom straight 7.00 m with quick coupler mm	Two-piece boom 6.70 m with quick coupler mm
<b>R</b> Front swing radius	2.60	4,250	3,600	2,850
	2.90	4,250	3,600	2,950
	3.25	4,250	3,600	3,050
	3.95	4,250	3,500	3,050
<b>S</b> Height with boom up		8,900	10,000	9,950
<b>T</b> Boom height	2.60	3,300	3,150	3,050
	2.90	3,300	3,250	3,150
	3.25	3,350	3,350	3,300
	3.95	3,350	3,450	3,200
<b>U</b> Length on ground	2.60	9,200	7,150	6,800
	2.90	8,900	6,900	6,550
	3.25	8,600	6,650	6,650
	3.95	7,800	5,950	8,050
<b>V</b> Overall length	2.60	11,000	11,800	11,450
	2.90	11,000	11,800	11,450
	3.25	11,000	11,800	11,200
	3.95	11,000	11,800	11,200
Bucket		1,75 m <sup>3</sup>	1,25 m <sup>3</sup>	1,50 m <sup>3</sup>

## Transport Dimensions

### removable elements disassembled

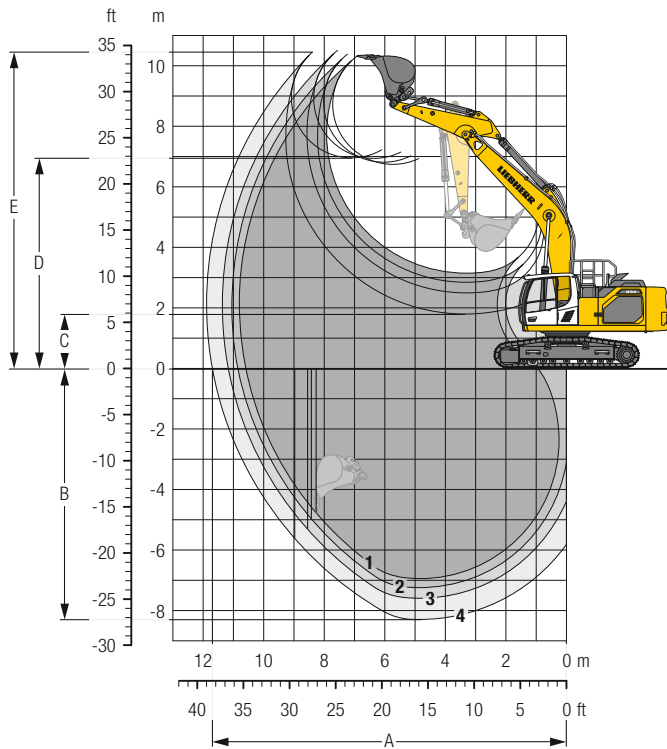
	Undercarriage / Stick mm	Mono boom 6.45 m				Mono boom straight 7.00 m				Two-piece boom 6.70 m			
		mm				mm				mm			
Pad width		600	700	800	900	600	700	800	900	600	700	800	900
Transport width	NLC	2,990	3,090	3,190	3,290	2,990	3,090	3,190	3,290	2,990	3,090	3,190	3,290
	LC	3,190	3,290	3,390	3,490	3,190	3,290	3,390	3,490	3,190	3,290	3,390	3,490
Transport length	NLC	11,000				11,800				11,450 <sup>1)</sup> /11,200 <sup>2)</sup>			
	LC	11,000				11,800				11,450 <sup>1)</sup> /11,200 <sup>2)</sup>			
Transport height	2.60	3,300				3,150				3,150			
	2.90	3,300				3,250				3,150			
	3.25	3,350				3,350				3,300			
	3.95	3,350				3,450				3,200			

<sup>1)</sup> with sticks 2,60 m and 2,90 m

<sup>2)</sup> with sticks 3,25 m and 3,95 m

# Backhoe Bucket

with Mono Boom 6.45 m and Counterweight 5.9 t



## Digging Envelope

with quick coupler		1	2	3	4
Stick length	m	2.60	2.90	3.25	3.95
A Max. reach at ground level	m	10.59	10.84	11.16	11.69
B Max. digging depth	m	6.95	7.25	7.60	8.29
C Min. dumping height	m	3.14	2.84	2.49	1.79
D Max. dumping height	m	6.74	6.81	6.94	6.95
E Max. cutting height	m	10.32	10.38	10.51	10.45

## Forces

without quick coupler		1	2	3	4
Stick digging force (ISO 6015)	kN	206	193	179	156
Bucket digging force (ISO 6015)	kN	223	223	223	223
Stick digging force (SAE J1179)	kN	196	183	171	150
Bucket digging force (SAE J1179)	kN	197	197	197	197

## Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 5.9 t, mono boom 6.45 m, stick 3.25 m, quick coupler SWA 66 and bucket 1.75 m<sup>3</sup> (1,590 kg).

Undercarriage		NLC			
Pad width	mm	600	700	800	900
Weight	kg	34,900	35,250	35,600	35,950
Ground pressure	kg/cm <sup>2</sup>	0.68	0.59	0.52	0.47

Undercarriage		LC			
Pad width	mm	600	700	800	900
Weight	kg	35,000	35,350	35,700	36,050
Ground pressure	kg/cm <sup>2</sup>	0.68	0.59	0.52	0.47

Optional: counterweight 7.1 t

(counterweight 7.1 t increases the operating weight by 1,200 kg and ground pressure by 0.02 kg/m<sup>2</sup>) see load tables on page 15



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

	Cutting width mm	Capacity ISO 7451 m <sup>3</sup>	Weight <sup>3)</sup> kg	Weight <sup>4)</sup> kg	NLC-Undercarriage (with track pads 600 mm)								LC-Undercarriage (with track pads 600 mm)							
					Stick length (m)								Stick length (m)							
					without quick coupler				with quick coupler				without quick coupler				with quick coupler			
	2.60	2.90	3.25	3.95	2.60	2.90	3.25	3.95	2.60	2.90	3.25	3.95	2.60	2.90	3.25	3.95				
<b>with counterweight 5.9 t</b>																				
STD <sup>1)</sup>	1,050	1.00	1,310	1,270	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		
	1,200	1.25	1,420	1,380	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	■	
	1,350	1.50	1,530	1,490	▲	■	▲	△	■	■	■	△	▲	▲	▲	▲	▲	■	■	
	1,500	1.75	1,630	1,590	▲	■	△	△	■	■	△	-	■	■	▲	△	■	▲	△	
	1,600	1.90	1,700	1,660	■	△	△	-	△	△	△	-	▲	▲	■	△	▲	■	△	-
	1,650	2.00	1,730	1,690	△	△	△	-	△	△	-	-	▲	■	△	△	■	△	△	-
	1,600	2.15	1,770	1,730	△	△	-	-	△	-	-	-	-	△	△	△	-	△	△	-
	1,650	2.25	1,810	1,770	△	△	-	-	△	-	-	-	-	△	△	△	-	△	△	-
	1,800	2.50	1,900	1,860	-	-	-	-	-	-	-	-	-	△	△	-	-	△	-	-
	HD <sup>2)</sup>	1,050	1.00	1,410	1,370	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
1,200		1.25	1,510	1,470	▲	▲	▲	▲	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲	■
1,350		1.50	1,620	1,580	▲	■	▲	△	■	▲	■	△	▲	▲	■	▲	▲	▲	■	■
1,500		1.75	1,730	1,690	▲	■	△	-	■	△	△	-	■	■	■	△	■	▲	■	△
1,600		1.90	1,800	1,760	■	△	△	-	△	△	-	-	▲	■	△	△	▲	■	△	-
1,650		2.00	1,830	1,790	△	△	△	-	△	△	-	-	▲	■	△	-	■	△	△	-
1,600		2.15	1,870	1,830	△	△	-	-	△	-	-	-	■	△	△	-	△	△	-	-
1,650		2.25	1,910	1,870	△	-	-	-	-	-	-	-	-	△	△	△	-	△	△	-
1,800		2.50	2,000	1,960	-	-	-	-	-	-	-	-	-	△	-	-	-	△	-	-
<b>with counterweight 7.1 t</b>																				
STD <sup>1)</sup>	1,050	1.00	1,310	1,270	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
	1,200	1.25	1,420	1,380	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	1,350	1.50	1,530	1,490	▲	▲	▲	■	▲	▲	■	▲	▲	▲	▲	▲	▲	▲	▲	■
	1,500	1.75	1,630	1,590	▲	■	▲	■	■	■	■	△	▲	▲	■	▲	▲	▲	■	■
	1,600	1.90	1,700	1,660	■	▲	■	△	▲	▲	△	△	▲	■	▲	■	▲	■	▲	△
	1,650	2.00	1,730	1,690	▲	▲	△	△	▲	▲	△	-	■	■	▲	△	■	▲	■	△
	1,600	2.15	1,770	1,730	■	■	△	-	■	△	△	-	■	▲	■	△	▲	■	△	△
	1,650	2.25	1,810	1,770	■	△	△	-	△	△	△	-	▲	■	△	△	△	■	△	-
	1,800	2.50	1,900	1,860	△	△	-	-	△	-	-	-	■	△	△	-	△	△	△	-
	HD <sup>2)</sup>	1,050	1.00	1,410	1,370	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
1,200		1.25	1,510	1,470	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
1,350		1.50	1,620	1,580	▲	▲	▲	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲	▲	■
1,500		1.75	1,730	1,690	▲	■	▲	△	■	▲	■	△	▲	▲	■	▲	▲	▲	■	■
1,600		1.90	1,800	1,760	■	▲	■	△	▲	■	△	△	▲	■	▲	■	■	■	▲	△
1,650		2.00	1,830	1,790	▲	■	△	△	■	■	△	-	■	■	▲	△	■	▲	■	△
1,600		2.15	1,870	1,830	■	△	△	-	■	△	△	-	▲	▲	■	△	▲	■	△	△
1,650		2.25	1,910	1,870	■	△	△	-	△	△	-	-	▲	■	△	△	■	■	△	-
1,800		2.50	2,000	1,960	△	△	-	-	△	-	-	-	■	△	△	-	△	△	△	-

\* 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

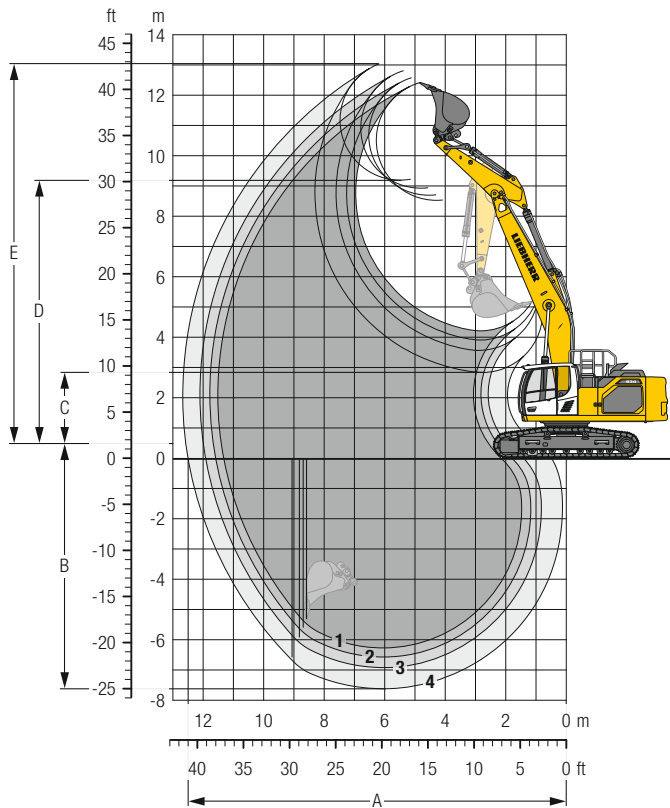
<sup>4)</sup> Bucket for mounting to quick coupler

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m<sup>3</sup>, ■ = ≤ 1.8 t/m<sup>3</sup>, ▲ = ≤ 1.65 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 Straight 7.00 m and Counterweight 5.9 t



## Digging Envelope

with quick coupler		1	2	3	4
Stick length	m	2.60	2.90	3.25	3.95
A Max. reach at ground level	m	11.32	11.59	11.92	12.49
B Max. digging depth	m	6.27	6.57	6.92	7.62
C Min. dumping height	m	4.21	3.91	3.56	2.84
D Max. dumping height	m	8.53	8.69	8.92	9.19
E Max. cutting height	m	12.41	12.57	12.81	13.03

## Forces

without quick coupler		1	2	3	4
Stick digging force (ISO 6015)	kN	206	193	179	156
Bucket digging force (ISO 6015)	kN	223	223	223	223
Stick digging force (SAE J1179)	kN	196	183	171	150
Bucket digging force (SAE J1179)	kN	197	197	197	197

## Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 5.9 t, mono boom straight 7.00 m, stick 3.25 m, quick coupler SWA 66 and bucket 1.25 m<sup>3</sup> (1,380 kg).

Undercarriage		NLC			
Pad width	mm	600	700	800	900
Weight	kg	34,800	35,150	35,500	35,850
Ground pressure	kg/cm <sup>2</sup>	0.68	0.59	0.52	0.47

Undercarriage		LC			
Pad width	mm	600	700	800	900
Weight	kg	34,900	35,250	35,600	35,950
Ground pressure	kg/cm <sup>2</sup>	0.68	0.59	0.52	0.47

Optional: counterweight 7.1 t

(counterweight 7.1 t increases the operating weight by 1,200 kg and ground pressure by 0.02 kg/m<sup>2</sup>) see load tables on page 17

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

	Cutting width mm	Capacity ISO 7451 m <sup>3</sup>	Weight <sup>3)</sup> kg	Weight <sup>4)</sup> kg	NLC-Undercarriage (with track pads 600 mm)								LC-Undercarriage (with track pads 600 mm)							
					Stick length (m)								Stick length (m)							
					without quick coupler				with quick coupler				without quick coupler				with quick coupler			
		2.60	2.90	3.25	3.95	2.60	2.90	3.25	3.95	2.60	2.90	3.25	3.95	2.60	2.90	3.25	3.95			
<b>with counterweight 5.9 t</b>																				
STD <sup>1)</sup>	1,050	1.00	1,310	1,270	▲	▲	▲	▲	▲	▲	■	■	▲	▲	▲	▲	▲	■		
	1,200	1.25	1,420	1,380	■	■	■	△	■	▲	△	-	▲	▲	■	■	▲	▲	△	
	1,350	1.50	1,530	1,490	■	△	△	-	△	△	-	-	■	▲	■	△	▲	■	△	-
	1,500	1.75	1,630	1,590	△	△	-	-	△	-	-	-	■	△	△	-	△	△	-	-
	1,600	1.90	1,700	1,660	△	-	-	-	-	-	-	-	-	△	△	-	-	△	-	-
	1,650	2.00	1,730	1,690	-	-	-	-	-	-	-	-	-	△	△	-	-	-	-	-
HD <sup>2)</sup>	1,050	1.00	1,410	1,370	▲	▲	▲	▲	▲	▲	■	■	▲	▲	▲	▲	▲	▲	▲	
	1,200	1.25	1,510	1,470	■	▲	■	△	▲	■	△	-	▲	▲	■	■	▲	■	▲	△
	1,350	1.50	1,620	1,580	■	△	△	-	△	△	-	-	■	▲	■	△	▲	■	△	-
	1,500	1.75	1,730	1,690	△	-	-	-	-	-	-	-	-	△	△	△	-	△	△	-
	1,600	1.90	1,800	1,760	-	-	-	-	-	-	-	-	-	△	△	-	-	△	-	-
	1,650	2.00	1,830	1,790	-	-	-	-	-	-	-	-	-	△	-	-	-	-	-	-
<b>with counterweight 7.1 t</b>																				
STD <sup>1)</sup>	1,050	1.00	1,310	1,270	▲	▲	▲	▲	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲	
	1,200	1.25	1,420	1,380	▲	▲	▲	▲	▲	▲	■	△	▲	▲	▲	■	▲	▲	▲	▲
	1,350	1.50	1,530	1,490	■	▲	■	△	▲	▲	△	-	▲	▲	■	■	▲	■	▲	△
	1,500	1.75	1,630	1,590	■	△	△	-	△	△	△	-	■	▲	■	△	▲	■	▲	-
	1,600	1.90	1,700	1,660	△	△	△	-	△	△	-	-	▲	■	△	-	■	△	△	-
	1,650	2.00	1,730	1,690	△	△	-	-	△	-	-	-	-	■	△	△	-	△	△	-
HD <sup>2)</sup>	1,050	1.00	1,410	1,370	▲	▲	▲	▲	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲	
	1,200	1.25	1,510	1,470	▲	▲	■	■	▲	■	△	-	▲	▲	▲	■	▲	▲	▲	▲
	1,350	1.50	1,620	1,580	■	▲	■	△	▲	■	△	-	▲	▲	■	■	▲	■	▲	△
	1,500	1.75	1,730	1,690	■	△	△	-	△	△	-	-	▲	▲	■	△	▲	■	△	-
	1,600	1.90	1,800	1,760	△	△	-	-	△	-	-	-	■	■	△	-	■	△	△	-
	1,650	2.00	1,830	1,790	△	△	-	-	△	-	-	-	■	△	△	-	△	△	-	-

\* 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

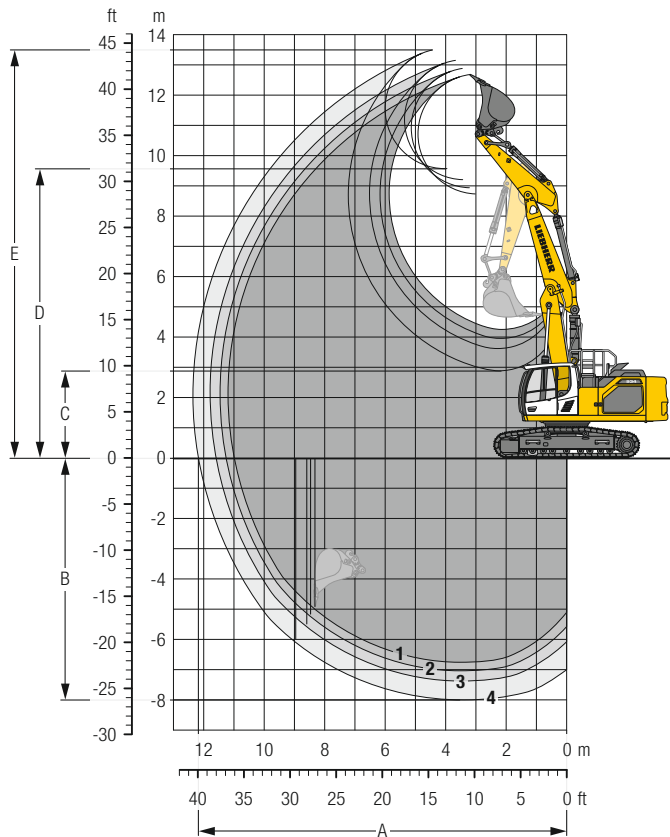
<sup>4)</sup> Bucket for mounting to quick coupler

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m<sup>3</sup>, ■ = ≤ 1.8 t/m<sup>3</sup>, ▲ = ≤ 1.65 t/m<sup>3</sup>, ■ = ≤ 1.5 t/m<sup>3</sup>, △ = ≤ 1.2 t/m<sup>3</sup>, - = not authorised

# Backhoe Bucket

## with Two-Piece Boom 6.70 m and Counterweight 5.9 t



### Digging Envelope

with quick coupler		1	2	3	4
Stick length	m	2.60	2.90	3.25	3.95
A Max. reach at ground level	m	10.99	11.26	11.60	12.17
B Max. digging depth	m	6.76	7.04	7.38	8.01
C Min. dumping height	m	4.25	3.95	3.62	2.88
D Max. dumping height	m	8.73	8.93	9.20	9.57
E Max. cutting height	m	12.68	12.88	13.15	13.49

### Forces

without quick coupler		1	2	3	4
Stick digging force (ISO 6015)	kN	206	193	179	156
Bucket digging force (ISO 6015)	kN	223	223	223	223
Stick digging force (SAE J1179)	kN	196	183	171	150
Bucket digging force (SAE J1179)	kN	197	197	197	197

### Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 5.9 t, two-piece boom 6.70 m, stick 3.25 m, quick coupler SWA 66 and bucket 1.50 m<sup>3</sup> (1,490 kg).

Undercarriage		NLC			
Pad width	mm	600	700	800	900
Weight	kg	36,050	36,400	36,750	37,100
Ground pressure	kg/cm <sup>2</sup>	0.70	0.61	0.54	0.48

Undercarriage		LC			
Pad width	mm	600	700	800	900
Weight	kg	36,150	36,500	36,850	37,200
Ground pressure	kg/cm <sup>2</sup>	0.70	0.61	0.54	0.48

Optional: counterweight 7.1 t  
(counterweight 7.1 t increases the operating weight by 1,200 kg and ground pressure by 0.02 kg/m<sup>2</sup>)  
see load tables on page 19

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

	Cutting width mm	Capacity ISO 7451 m <sup>3</sup>	Weight <sup>3)</sup> kg	Weight <sup>4)</sup> kg	NLC-Undercarriage (with track pads 600 mm)								LC-Undercarriage (with track pads 600 mm)							
					Stick length (m)								Stick length (m)							
					without quick coupler				with quick coupler				without quick coupler				with quick coupler			
	2.60	2.90	3.25	3.95	2.60	2.90	3.25	3.95	2.60	2.90	3.25	3.95	2.60	2.90	3.25	3.95				
<b>with counterweight 5.9 t</b>																				
STD <sup>1)</sup>	1,050	1.00	1,310	1,270	▲	▲	▲	■	▲	▲	▲	■	▲	▲	▲	▲	■			
	1,200	1.25	1,420	1,380	▲	■	▲	△	■	▲	■	△	▲	▲	▲	▲	■	■		
	1,350	1.50	1,530	1,490	▲	■	△	-	■	△	△	-	■	■	■	△	▲	△		
	1,500	1.75	1,630	1,590	△	△	-	-	△	-	-	-	■	■	△	-	■	△	-	
	1,600	1.90	1,700	1,660	△	-	-	-	-	-	-	-	-	△	△	△	-	△	-	
	1,650	2.00	1,730	1,690	-	-	-	-	-	-	-	-	-	△	△	-	-	△	-	
HD <sup>2)</sup>	1,050	1.00	1,410	1,370	▲	▲	▲	■	▲	▲	■	■	▲	▲	▲	▲	▲	■		
	1,200	1.25	1,510	1,470	▲	■	▲	△	■	▲	■	-	▲	▲	■	▲	▲	■	△	
	1,350	1.50	1,620	1,580	▲	■	△	-	■	△	-	-	■	▲	■	△	▲	■	△	
	1,500	1.75	1,730	1,690	△	△	-	-	△	-	-	-	■	△	△	-	△	△	-	
	1,600	1.90	1,800	1,760	△	-	-	-	-	-	-	-	-	△	△	-	-	△	-	
	1,650	2.00	1,830	1,790	-	-	-	-	-	-	-	-	-	△	△	-	-	△	-	
<b>with counterweight 7.1 t</b>																				
STD <sup>1)</sup>	1,050	1.00	1,310	1,270	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		
	1,200	1.25	1,420	1,380	▲	▲	▲	■	▲	▲	■	■	▲	▲	▲	▲	▲	■		
	1,350	1.50	1,530	1,490	▲	■	▲	△	■	▲	■	△	▲	▲	■	▲	▲	■	△	
	1,500	1.75	1,630	1,590	▲	■	△	-	■	△	△	-	■	■	■	△	■	■	△	
	1,600	1.90	1,700	1,660	■	△	△	-	△	△	-	-	▲	■	△	△	▲	■	△	
	1,650	2.00	1,730	1,690	△	△	△	-	△	△	-	-	▲	■	■	△	-	■	△	
HD <sup>2)</sup>	1,050	1.00	1,410	1,370	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		
	1,200	1.25	1,510	1,470	▲	▲	▲	▲	▲	▲	■	■	▲	▲	▲	▲	▲	■		
	1,350	1.50	1,620	1,580	▲	■	▲	△	■	▲	■	△	▲	▲	■	■	▲	■	△	
	1,500	1.75	1,730	1,690	▲	■	△	-	■	△	△	-	■	▲	■	△	▲	▲	△	
	1,600	1.90	1,800	1,760	■	△	△	-	△	△	-	-	▲	■	△	△	■	△	-	
	1,650	2.00	1,830	1,790	△	△	-	-	△	△	-	-	■	■	△	-	■	△	-	

\* 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>, ■ = ≤ 1.8 t/m<sup>3</sup>, ▲ = ≤ 1.65 t/m<sup>3</sup>, ■ = ≤ 1.5 t/m<sup>3</sup>, △ = ≤ 1.2 t/m<sup>3</sup>, - = not authorised

# Lift Capacities

with Mono Boom 6.45 m, Counterweight 5.9 t and Track Pads 600 mm

### Stick 2.60 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m	
		↕	↔	↕	↔	↕	↔	↕	↔	↕	↔	↕	↔		
NLC	7.5					8.4	9.2*						6.5	9.1*	6.9
	6.0					8.1	9.8*	5.6	8.9*				5.1	8.4	7.9
	4.5			11.6	14.0*	7.6	10.9*	5.4	9.0				4.4	7.3	8.5
	3.0			10.3	16.9*	7.0	12.2*	5.1	8.6				4.0	6.8	8.8
	1.5			9.6	16.5*	6.6	11.7	4.9	8.4				3.9	6.6	8.8
	0			9.4	18.0*	6.3	11.4	4.7	8.2				4.0	6.8	8.6
	-1.5	15.0*	15.0*	9.5	16.9*	6.3	11.3	4.7	8.1				4.3	7.4	8.0
LC	7.5					9.1	9.2*						7.1	9.1*	6.9
	6.0					8.8	9.8*	6.1	8.9*				5.6	8.4	7.9
	4.5			12.8	14.0*	8.3	10.9*	5.9	9.0				4.8	7.3	8.5
	3.0			11.4	16.9*	7.7	12.2*	5.6	8.7				4.4	6.8	8.8
	1.5			10.7	16.5*	7.2	11.7	5.3	8.4				4.3	6.6	8.8
	0			10.5	18.0*	7.0	11.4	5.2	8.2				4.4	6.8	8.6
	-1.5	15.0*	15.0*	10.5	16.9*	6.9	11.3	5.2	8.2				4.7	7.4	8.0
-3.0	18.4*	18.4*	10.8	14.8*	7.1	11.5						5.6	8.9	7.1	
-4.5			11.1*	11.1*								7.9	8.6*	5.7	
-6.0															

### Stick 2.90 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m	
		↕	↔	↕	↔	↕	↔	↕	↔	↕	↔	↕	↔		
NLC	7.5												6.1	8.6*	7.2
	6.0							8.2	9.3*	5.7	8.6*		4.9	8.0	8.2
	4.5			11.9	13.4*	7.7	10.5*	5.4	9.0				4.2	7.0	8.7
	3.0			10.5	16.3*	7.1	11.8*	5.1	8.7	3.9	6.5		3.9	6.5	9.0
	1.5			9.6	18.0*	6.6	11.7	4.9	8.3	3.7	6.4		3.7	6.3	9.0
	0			9.4	18.1*	6.3	11.3	4.7	8.1				3.8	6.5	8.8
	-1.5	15.0*	15.0*	9.3	17.2*	6.2	11.2	4.6	8.1				4.1	7.0	8.3
LC	7.5												6.6	8.6*	7.2
	6.0					8.9	9.3*	6.2	8.6*				5.3	8.0	8.2
	4.5			13.0	13.4*	8.4	10.5*	5.9	9.0				4.6	7.0	8.7
	3.0			11.6	16.3*	7.8	11.8*	5.6	8.7	4.2	6.5		4.2	6.5	9.0
	1.5			10.7	18.0*	7.3	11.7	5.3	8.4	4.1	6.4		4.1	6.3	9.0
	0			10.4	18.1*	7.0	11.4	5.1	8.2				4.1	6.5	8.8
	-1.5	15.0*	15.0*	10.4	17.2*	6.9	11.3	5.1	8.1				4.5	7.0	8.3
-3.0	19.7*	19.7*	10.6	15.3*	6.9	11.4						5.2	8.3	7.5	
-4.5	15.0*	15.0*	11.0	12.0*	7.3	9.0*						7.1	8.7*	6.1	
-6.0															

### Stick 3.25 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m	
		↕	↔	↕	↔	↕	↔	↕	↔	↕	↔	↕	↔		
NLC	7.5							5.8	8.0*				5.6	8.1*	7.6
	6.0							5.7	8.1*				4.5	7.4	8.5
	4.5			12.1	12.5*	7.7	10.0*	5.4	8.7*	4.0	6.6		3.9	6.6	9.1
	3.0			10.7	15.5*	7.1	11.4*	5.1	8.7	3.8	6.5		3.6	6.1	9.3
	1.5			9.7	17.5*	6.6	11.7	4.8	8.3	3.7	6.3		3.5	6.0	9.4
	0			9.3	18.0*	6.2	11.3	4.6	8.1	3.6	6.2		3.5	6.1	9.1
	-1.5	14.5*	14.5*	9.2	17.4*	6.1	11.1	4.5	8.0				3.8	6.5	8.6
LC	7.5							6.3	8.0*				6.1	8.1*	7.6
	6.0							6.2	8.1*				4.9	7.5	8.5
	4.5			12.5*	12.5*	8.4	10.0*	5.9	8.7*	4.4	6.7		4.3	6.6	9.1
	3.0			11.8	15.5*	7.8	11.4*	5.6	8.7	4.2	6.5		4.0	6.1	9.3
	1.5			10.8	17.5*	7.2	11.7	5.3	8.3	4.1	6.3		3.8	6.0	9.4
	0			10.3	18.0*	6.9	11.3	5.1	8.1	3.9	6.2		3.9	6.1	9.1
	-1.5	14.5*	14.5*	10.3	17.4*	6.7	11.2	5.0	8.0				4.1	6.6	8.6
-3.0	21.1*	21.1*	10.4	15.8*	6.8	11.2	5.0	8.1				4.8	7.6	7.8	
-4.5	16.6*	16.6*	10.8	12.9*	7.1	9.8*						6.3	8.6*	6.6	
-6.0															

### Stick 3.95 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m		
		↕	↔	↕	↔	↕	↔	↕	↔	↕	↔	↕	↔			
NLC	7.5							5.9	7.1*				4.9	6.4*	8.3	
	6.0							5.8	7.3*	4.1	6.7*		4.0	6.3*	9.1	
	4.5							7.9	9.0*	5.5	7.9*	4.0	6.7*	3.5	6.0	9.6
	3.0	14.0*	14.0*	11.1	13.9*	7.2	10.5*	5.1	8.7	3.8	6.5		3.2	5.6	9.9	
	1.5	7.0*	7.0*	9.9	16.4*	6.6	11.8	4.8	8.3	3.6	6.3		3.1	5.4	9.9	
	0	9.9*	9.9*	9.2	17.6*	6.2	11.2	4.5	8.0	3.5	6.1		3.1	5.5	9.7	
	-1.5	14.5*	14.5*	8.9	17.6*	5.9	11.0	4.3	7.8	3.4	6.0		3.3	5.8	9.2	
LC	7.5							6.4	7.1*				5.4	6.4*	8.3	
	6.0							6.3	7.3*	4.5	6.7*		4.4	6.3*	9.1	
	4.5					8.6	9.0*	6.0	7.9*	4.4	6.7*		3.9	6.0	9.6	
	3.0	14.0*	14.0*	12.3	13.9*	7.9	10.5*	5.6	8.7	4.2	6.5		3.6	5.6	9.9	
	1.5	7.0*	7.0*	11.0	16.4*	7.3	11.8	5.3	8.3	4.0	6.3		3.4	5.4	9.9	
	0	9.9*	9.9*	10.3	17.6*	6.8	11.3	5.0	8.0	3.8	6.1		3.4	5.5	9.7	
	-1.5	14.5*	14.5*	10.0	17.6*	6.6	11.0	4.8	7.8	3.7	6.0		3.6	5.8	9.2	
-3.0	20.4*	20.4*	10.1	16.5*	6.5	11.0	4.8	7.8				4.1	6.6	8.4		
-4.5	19.5*	19.5*	10.3	14.3*	6.7	10.9*						5.1	8.3	7.3		
-6.0			10.2*	10.2*								8.0	8.1*	5.5		

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) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Without bucket cylinder, link and lever the lift capacities will increase by 485 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

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



# Lift Capacities

with Mono Boom Straight 7.00 m, Counterweight 5.9 t and Track Pads 600 mm

## Stick 2.60 m

Under-carriage	Height	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		Max. reach
		LC	NLC	LC	NLC	LC	NLC	LC	NLC	LC	NLC	LC	NLC	
10.5														13.6*
9.0						8.2	10.7*							13.6*
7.5						8.2	10.6*	5.6	9.1					7.1
6.0						6.6	11.3*	5.4	9.0					5.1
4.5				12.2	14.2*	7.8	11.3*	5.4	9.0					4.2
3.0				10.7	16.5*	7.2	12.2*	5.2	8.7	3.8	6.5			3.7
1.5						6.1	11.2	4.6	8.1	3.6	6.2			3.4
0						6.0	11.0	4.5	7.9	3.5	6.1			3.4
-1.5				9.2	13.3*	6.0	11.0	4.4	7.9					3.7
-3.0				9.4	10.6*	6.1	9.3*	4.6	7.2*					4.3
-4.5														6.2*

## Stick 2.90 m

Under-carriage	Height	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		Max. reach
		LC	NLC	LC	NLC	LC	NLC	LC	NLC	LC	NLC	LC	NLC	
10.5														11.5
9.0														12.0*
7.5														12.0*
6.0						8.4	10.2*							7.1
4.5						8.3	10.3*	5.6	9.2*					6.5
3.0				12.4	13.6*	7.8	10.9*	5.5	9.0					4.8
1.5				11.0	16.0*	7.2	11.9*	5.2	8.7	3.8	6.5			4.0
0						6.6	11.7	4.8	8.3	3.7	6.3			3.5
-1.5				8.9	11.0*	5.9	10.9	4.4	7.8	3.5	6.1			3.2
-3.0				9.0	14.1*	5.9	10.9	4.4	7.8	3.5	6.1			3.2
-4.5				9.2	11.4*	6.0	9.7*	4.5	7.7*					6.0
						6.3	6.5*							6.2*

## Stick 3.25 m

Under-carriage	Height	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		Max. reach
		LC	NLC	LC	NLC	LC	NLC	LC	NLC	LC	NLC	LC	NLC	
10.5														9.5
9.0						8.5	9.7*							10.2*
7.5						8.3	9.9*	5.7	8.8*					8.8*
6.0				12.6	13.0*	7.9	10.5*	5.5	9.1*	4.0	6.6			7.3
4.5				11.2	15.3*	7.3	11.5*	5.2	8.7	3.8	6.5			6.2
3.0				9.7	16.0*	6.6	11.8	4.8	8.3	3.6	6.3			5.3
1.5						6.1	11.2	4.5	8.0	3.5	6.1			5.3
0				8.7	12.3*	5.8	10.8	4.3	7.8	3.4	6.0			5.3
-1.5	8.6*	8.6*		8.8	14.8*	5.8	10.7	4.3	7.7	3.4	6.0			5.6
-3.0				9.0	12.2*	5.9	10.1*	4.3	7.8					6.1*
-4.5				8.6*	8.6*	6.1	7.3*	4.6	5.1*					4.9*

## Stick 3.95 m

Under-carriage	Height	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		Max. reach
		LC	NLC	LC	NLC	LC	NLC	LC	NLC	LC	NLC	LC	NLC	
10.5														7.3
9.0						8.5	8.8*							7.6*
7.5								5.8	8.2*					8.8*
6.0						8.1	9.7*	5.6	8.4*	4.0	6.7			6.4*
4.5				11.8	13.9*	7.5	10.7*	5.2	8.8	3.8	6.5			5.6
3.0				10.2	16.2*	6.8	11.9*	4.8	8.4	3.6	6.3	2.7	4.9	4.7
1.5				9.0	16.2*	6.1	11.2	4.5	8.0	3.4	6.0	2.6	4.7	4.6
0				8.6	15.3*	5.7	10.7	4.2	7.7	3.2	5.9	2.6	4.7	4.7
-1.5	9.6*	9.6*		8.5	15.8*	5.6	10.5	4.1	7.5	3.2	5.8	2.7	5.0	5.0
-3.0	15.1*	15.1*		8.6	13.6*	5.6	10.6	4.1	7.5	3.2	5.8	3.1	5.5	5.4
-4.5				8.9	10.5*	5.8	8.6*	4.2	6.6*			3.7	5.2*	8.4

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

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Without bucket cylinder, link and lever the lift capacities will increase by 485 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

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





# Lift Capacities

with Two-Piece Boom 6.70 m, Counterweight 5.9 t and Track Pads 600 mm

## Stick 2.60 m

Under-carriage	3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m	m		
10.5							15.4*	15.4*	3.5
9.0		13.8 14.5*	8.2 12.0*				8.1 11.8*	6.0	
7.5		13.6 14.3*	8.7 12.0*				5.6 9.3	7.4	
6.0	21.1*	21.1*	13.2 15.7*	8.7 12.3*	5.7 9.4		4.5 7.5	8.3	
4.5	22.7*	22.9*	12.8*	17.3*	8.3 12.7	5.6 9.3		3.9 6.6	8.9
3.0			11.6 17.9*	7.7 12.4	5.4 9.0		3.7 6.4	9.2	
1.5			10.4 17.9*	7.0 12.3	5.1 8.7	3.6 6.3		3.4 6.1	9.2
0	18.2 20.0*	9.7 18.0*	6.6 11.8	4.7 8.3			3.5 6.2	9.0	
-1.5	18.2 25.6*	9.4 17.7*	6.3 11.5	4.5 8.1			3.8 5.8*	8.5	
-3.0	18.6 22.6*	9.5 16.1*	6.2 11.2*	4.6 5.1*			4.6 4.6*	7.6	
-4.5	16.4*	16.4*	9.8 10.0*				7.3*	7.3*	5.2
-6.0									

## Stick 2.90 m

Under-carriage	3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m	m			
10.5							15.4*	15.4*	3.5	
9.0			13.1*	13.1*	8.5 11.8*			8.1 11.8*	6.0	
7.5			12.9*	12.9*	8.8 11.7*	5.7 9.4		5.6 9.3	7.4	
6.0	15.0*	15.0*	13.3 15.1*	8.7 12.1*	5.8 9.4			4.2 7.1	8.6	
4.5	22.9 23.5*	12.8 16.9*	8.4 12.7*	5.7 9.2	3.8 6.6			3.7 6.3	9.2	
3.0	21.6 23.6*	11.9 18.0*	7.7 12.4	5.4 9.1	3.7 6.5			3.4 5.9	9.4	
1.5	14.6*	14.6*	10.5 17.8*	7.1 12.3	5.1 8.7	3.6 6.3		3.3 5.8	9.5	
0	18.2 20.5*	9.7 17.9*	6.6 11.8	4.8 8.4	3.5 6.1			3.3 5.9	9.2	
-1.5	18.1 26.3*	9.4 17.8*	6.3 11.5	4.5 8.1				3.6 5.8*	8.7	
-3.0	18.3 23.5*	9.4 16.5*	6.2 11.4	4.5 6.9*				4.2 4.3*	7.9	
-4.5	18.1*	18.1*	9.7 11.8*					6.1*	6.1*	6.0
-6.0										

## Stick 3.25 m

Under-carriage	3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m	m		
10.5		11.9*	11.9*				10.7*	10.7*	4.9
9.0			8.8 11.3*				6.5 9.0*	6.9	
7.5		10.9*	10.9*	8.9 11.3*	5.8 9.5		4.8 8.0	8.2	
6.0		13.2*	13.2*	8.7 11.7*	5.9 9.4		3.9 6.7	9.0	
4.5	23.1 23.6*	12.8 16.4*	8.5 12.4*	5.8 9.2	3.9 6.6		3.4 5.9	9.5	
3.0	22.2*	23.3*	12.1 17.7*	7.8 12.3 5.5 9.1	3.8 6.5		3.1 5.5	9.8	
1.5	18.0*	18.0*	10.7 17.7*	7.1 12.2 5.1 8.7	3.6 6.3		3.0 5.4	9.8	
0	18.1 20.7*	9.8 17.7*	6.6 11.8 4.8 8.4	3.4 6.1			3.1 5.5	9.6	
-1.5	17.9 26.8*	9.3 17.8*	6.2 11.4 4.5 8.1	3.3 6.0			3.3 5.6*	9.1	
-3.0	18.0 24.4*	9.2 16.8*	6.1 11.3 4.4 7.9				3.8 4.3*	8.3	
-4.5	18.7 19.8*	9.5 13.5*	6.1 8.0*				5.2*	5.2*	6.7
-6.0									

## Stick 3.95 m

Under-carriage	3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m	m		
10.5							10.7*	10.7*	4.9
9.0				9.0 9.2*	5.8 7.5*		7.8*	7.8*	6.0
7.5				9.0 9.4*	6.1 9.1*		5.5 6.9*	7.7	
6.0			9.3*	9.3*	8.7 10.3*	6.2 9.4*	4.1 6.9	3.4 5.9	9.6
4.5	22.6*	22.6*	12.9 15.2*	8.5 11.8*	6.0 9.1 4.0 6.8		3.0 5.3	10.1	
3.0	22.2*	23.6*	12.3 17.0*	8.1 12.3 5.6 9.0	3.9 6.6		2.8 5.0	10.3	
1.5	20.5 24.4*	11.1 17.6*	7.3 12.0 5.1 8.8	3.6 6.4			2.7 4.9	10.4	
0	18.4 22.4*	9.9 17.4*	6.6 11.9 4.8 8.4	3.4 6.1			2.7 5.0	10.1	
-1.5	17.7 25.4*	9.3 17.5*	6.2 11.4 4.5 8.1 3.2 5.9				2.8 5.3	9.7	
-3.0	17.6 25.8*	9.0 17.2*	6.0 11.2 4.2 7.8				3.2 4.6*	9.0	
-4.5	18.0 22.4*	9.1 15.4*	5.9 10.4*	4.2 5.4*			4.1 4.1*	7.8	
-6.0	13.4*	13.4*					9.5*	9.5*	4.0








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

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads with adjusting cylinder in optimal position. 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 485 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity. According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.








# Lift Capacities

with Two-Piece Boom 6.70 m, Counterweight 7.1 t and Track Pads 600 mm








## Stick 2.60 m

Under-carriage ↕ m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		 m		
	m		m		m		m		m		m			m	
10.5												15.4*	15.4*	<b>3.5</b>	
9.0				14.5*	14.5*		9.0	12.0*					8.9	11.8*	<b>6.0</b>
7.5				14.3*	14.3*		9.5	12.0*					6.2	10.1	<b>7.4</b>
6.0	21.1*	21.1*	14.1	15.7*	9.5	12.3*	6.3	10.0					5.0	8.2	<b>8.3</b>
4.5	22.9*	22.9*	13.6	17.3*	9.1	12.9*	6.2	9.9					4.4	7.3	<b>8.9</b>
3.0			12.9	17.9*	8.5	13.1	6.0	9.8	4.2	7.0			4.0	6.8	<b>9.2</b>
1.5			11.6	17.9*	7.8	13.0	5.7	9.5	4.1	6.9			3.9	6.7	<b>9.2</b>
0	20.0*	20.0*	10.9	18.0*	7.4	12.9	5.4	9.1					4.0	6.8*	<b>9.0</b>
-1.5	20.5	25.6*	10.7	17.7*	7.2	12.7	5.1	8.9					4.4	5.8*	<b>8.5</b>
-3.0	20.8	22.6*	10.7	16.1*	7.1	11.2*	5.1*	5.1*					4.6*	4.6*	<b>7.6</b>
-4.5	16.4*	16.4*	10.0*	10.0*									7.3*	7.3*	<b>5.2</b>
-6.0															








## Stick 2.90 m

Under-carriage ↕ m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		 m			
	m		m		m		m		m		m			m		
10.5													12.8*	12.8*	<b>4.2</b>	
9.0				13.1*	13.1*		9.3	11.8*						8.1	10.3*	<b>6.4</b>
7.5				12.9*	12.9*		9.6	11.7*	6.3	10.1				5.8	9.4*	<b>7.8</b>
6.0	15.0*	15.0*	14.2	15.1*	9.5	12.1*	6.4	10.0						4.7	7.8	<b>8.6</b>
4.5	23.5*	23.5*	13.7	16.9*	9.2	12.7*	6.3	9.8	4.3	7.2				4.2	6.9	<b>9.2</b>
3.0	23.6*	23.6*	13.1	18.0*	8.6	13.1	6.1	9.7	4.2	7.1				3.8	6.5	<b>9.4</b>
1.5	14.6*	14.6*	11.7	17.8*	7.9	12.9	5.7	9.5	4.1	6.9				3.7	6.4	<b>9.5</b>
0	20.4	20.5*	10.9	17.9*	7.4	12.9	5.4	9.2	4.0	6.8				3.8	6.5	<b>9.2</b>
-1.5	20.3	26.3*	10.6	17.8*	7.1	12.6	5.1	8.9						4.1	5.8*	<b>8.7</b>
-3.0	20.6	23.5*	10.6	16.5*	7.0	11.9*	5.1	6.9*						4.3*	4.3*	<b>7.9</b>
-4.5	18.1*	18.1*	10.9	11.8*										6.1*	6.1*	<b>6.0</b>
-6.0																

## Stick 3.25 m

Under-carriage ↕ m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		 m			
	m		m		m		m		m		m			m		
10.5			11.9*	11.9*									10.7*	10.7*	<b>4.9</b>	
9.0					9.5	11.3*							7.2	9.0*	<b>6.9</b>	
7.5			10.9*	10.9*	9.6	11.3*	6.5	9.8*					5.3	8.3*	<b>8.2</b>	
6.0			13.2*	13.2*	9.4	11.7*	6.5	9.9*					4.4	7.3	<b>9.0</b>	
4.5	23.6*	23.6*	13.7	16.4*	9.2	12.4*	6.4	9.8	4.4	7.3			3.9	6.5	<b>9.5</b>	
3.0	23.3*	23.3*	13.3	17.7*	8.7	13.0*	6.1	9.6	4.3	7.2			3.6	6.1	<b>9.8</b>	
1.5	18.0*	18.0*	11.9	17.7*	7.9	12.8	5.7	9.6	4.1	7.0			3.5	6.0	<b>9.8</b>	
0	20.4	20.7*	11.0	17.7*	7.4	12.8	5.4	9.2	3.9	6.8			3.5	6.1	<b>9.6</b>	
-1.5	20.1	26.8*	10.5	17.8*	7.0	12.6	5.1	8.9	3.8	6.2*			3.8	5.6*	<b>9.1</b>	
-3.0	20.3	24.4*	10.5	16.8*	7.0	12.4*	5.0	8.1*					4.3*	4.3*	<b>8.3</b>	
-4.5	19.8*	19.8*	10.7	13.5*	7.0	8.0*							5.2*	5.2*	<b>6.7</b>	
-6.0																

## Stick 3.95 m

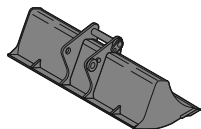
Under-carriage ↕ m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		 m			
	m		m		m		m		m		m			m		
10.5													7.8*	7.8*	<b>6.0</b>	
9.0					9.2*	9.2*	6.4	7.5*						6.1	6.9*	<b>7.7</b>
7.5					9.4*	9.4*	6.7	9.1*						4.7	6.5*	<b>8.8</b>
6.0					9.3*	9.3*	9.5	10.3*	6.8	9.4*	4.6	7.5		3.9	6.3*	<b>9.6</b>
4.5	22.6*	22.6*	13.8	15.2*	9.2	11.8*	6.6	9.7*	4.5	7.4				3.5	5.9	<b>10.1</b>
3.0	23.6*	23.6*	13.2	17.0*	8.9	12.5*	6.2	9.5	4.4	7.3				3.2	5.5	<b>10.3</b>
1.5	22.8	24.4*	12.3	17.6*	8.1	12.7	5.8	9.4	4.1	7.0				3.1	5.4	<b>10.4</b>
0	20.7	22.4*	11.1	17.4*	7.4	12.6	5.4	9.2	3.9	6.8				3.1	5.5	<b>10.1</b>
-1.5	19.9	25.4*	10.5	17.5*	7.0	12.5	5.1	8.9	3.7	6.5				3.3	5.6*	<b>9.7</b>
-3.0	19.8	25.8*	10.2	17.2*	6.8	12.3	4.8	8.6						3.7	4.6*	<b>9.0</b>
-4.5	20.2	22.4*	10.3	15.4*	6.7	10.4*	4.9	5.4*						4.1*	4.1*	<b>7.8</b>
-6.0	13.4*	13.4*												9.5*	9.5*	<b>4.0</b>

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

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads with adjusting cylinder in optimal position. 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 485 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

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

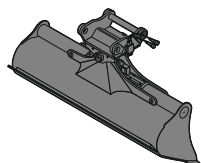
# Available Attachments



## Rigid Ditch Cleaning Bucket

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

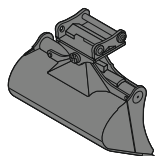
Cutting width	mm	2,200	2,400
Capacity	m <sup>3</sup>	1.65	1.50
Weight	kg	546	930



## Tilttable Ditch Cleaning Bucket

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

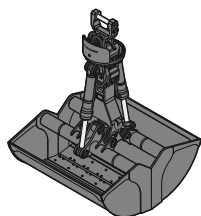
Cutting width	mm	2,000	2,000	2,200	2,400	2,400	
Capacity	m <sup>3</sup>	0.70	1.20	1.45	1.65	0.85	1.45
Weight	kg	1,375	1,520	1,595	1,660	1,475	1,610



## Tilt Bucket

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

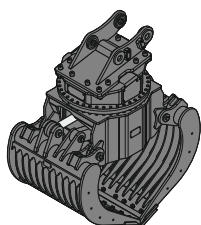
Cutting width	mm	1,600	1,600	1,700	1,800	1,800
Capacity	m <sup>3</sup>	1.45	1.75	1.85	1.60	1.60
Weight	kg	1,520	1,635	1,695	1,620	1,749
HD-version						X



## Clamshells

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

Cutting width	mm	1,200	1,400
Capacity	m <sup>3</sup>	1.40	1.70
Weight	kg	1,452	1,558



## Sorting Grab

**SG 40, for mounting to quick coupler SWA 66**

		ribbed		perforated	
Cutting width	mm	1,100	1,300	1,100	1,300
Capacity	m <sup>3</sup>	1.10	1.40	1.30	1.60
Weight	kg	2,320	2,895	2,230	2,800

# 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  
Centralised lubrication system (automatic)  
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 – DOC + SCR  
Fixed geometry turbocharger  
Fuel fine filter  
Fuel pre-filter and water separator  
Fuel priming pump  
Intercooler  
Power Pack EU Stage V  
Stepless adjustable engine speed

## Operator's Cab

7" multifunction colour 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 windscreen and roof window  
ROPS safety cab structure (ISO 12117-2)  
Rubber floor mat, fixed on floor and removable  
Shortkey 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	+
Chain guide full length	+
Cover and base plate for undercarriage centre section	•
Reinforced cover and base plate for undercarriage centre section	+
Special painting	+
Steps	•
Steps wide	+
Track pads triple grouser 600 mm	•
Track pads triple grouser 700/800/900 mm	+
Tracks, sealed and greased	•
Undercarriage LC	+
Undercarriage NLC	+
Undercarriage storage compartment	+

## Upper-carriage

Air pre-filter with cyclonical dust trap	+
Boxing ring	+
Counterweight heavy 7.1 t	+
Counterweight standard 5.9 t	•
Electric socket on uppercarriage (24 V)	+
Extended tool set including tool box	+
External starting aid (24 V)	+
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>	+
Pre-heating system for fuel	+
Radiator fine mesh protection grid	+
Reflective warning stickers	+
Reversible fan drive	+
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	+
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

2" seat belt with retractor	•
3" seat belt with retractor, orange colour	+
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 immobiliser	+
Emergency stop in cab	+
FGPS front guard	+
FGPS front guard tiltable	+
Filter for hydraulic hammer return flow	+
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>
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	•
Luminosity control (LED+ headlights) <sup>1)</sup>	+
Medium pressure circuit	+
Mini-joysticks proportional	+
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	+
Centralised 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 66 hydraulic	+
Mono boom 6.45 m	+
Mono boom straight 7.00 m	+
Pipe fracture safety valve for stick cylinder	+
Pipe fracture safety valves for boom cylinders	+
Quick coupler SWA 66 hydraulic	+
Quick coupler SWA 66 mechanical	+
Special painting	+
Stick 2.60 m	+
Stick 2.90 m	+
Stick 3.25 m	+
Stick 3.95 m	+
Stick bottom protection	+
Tool Management	+
Two-piece boom 6.70 m	+

• = 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



## Wide Product Range

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

## Exceptional Customer Benefit

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

## State-of-the-art Technology

To provide consistent, top quality products, Liebherr attaches great importance to each product area, its components and core technologies. Important modules and components are developed and manufactured in-house, for instance the entire drive and control technology for construction equipment.

## Worldwide and Independent

Hans Liebherr founded the Liebherr family company in 1949. Since then, the family business has steadily grown to a group of more than 130 companies with nearly 44,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

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

## Liebherr-France SAS

2 avenue Joseph Rey, B.P. 90287, FR-68005 Colmar Cedex  
☎ +33 389 21 30 30, Fax +33 389 21 37 93  
[www.liebherr.com](http://www.liebherr.com), E-Mail: [info.lfr@liebherr.com](mailto:info.lfr@liebherr.com)  
[www.facebook.com/LiebherrConstruction](https://www.facebook.com/LiebherrConstruction)