

Product Information Crawler Excavator

R 936 Compact

Litronic®



Generation

6.1

Engine

190 kW / 258 HP
Stage V

Operating Weight

33,800 – 38,250 kg

Bucket Capacity

0.55 – 2.15 m³

LIEBHERR

Experience the Progress

R 936 Compact

Maintenance

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

Equipment

- Large choice of types and lengths of equipment, including a two-piece boom
- Longer lifespan of components and higher productivity thanks to automatic centralised lubrication system
- Safety check valves for hoist and stick cylinders as standard

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





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 / speed increase, controlled via joystick sensors

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 for easy maintenance
- Extra storage as an option
- Dozer and stabilizer blade as an option

Technical Data



Engine

Rating per ISO 9249	190 kW (258 HP) at 1,800 RPM
Torque	1,337 Nm at 1,350 RPM
Model	Liebherr D944 A7-25
Type	4 cylinder in-line
Bore	130 mm
Stroke	150 mm
Displacement	8.0 l
Engine operation	4-stroke diesel Common-Rail Turbo-charged and after-cooler
Exhaust gas treatment	Stage V DOC + SCR Filter Passive regeneration by thermo management
Cooling system	Water-cooled and oil cooler, after-cooled and fuel cooled
Air cleaner	Dry-type air cleaner with pre-cleaner
Fuel tank	450 l
Urea tank	46 l
Electrical system	
Voltage	24 V
Batteries	2 x 180 Ah/ 12 V
Alternator	Three-phase current 28 V/140 A
Engine idling	Sensor controlled



Hydraulic Controls

Power distribution	Via control valves with integrated safety valves, simultaneous and independent actuation of undercarriage, swing drive and equipment
Servo circuit	
Equipment and swing	Proportional via joystick levers
Travel	– Proportional control via foot pedals or removable levers – Speed pre-selection
Additional functions	Proportional regulation via foot pedals or mini-joystick



Hydraulic System

Hydraulic system	Positive Control hydraulic system. Demand-based, double independent pump flows Features high system dynamics and sensitivity provided by integrated system controlling
Hydraulic pump	
For equipment and travel drive	Liebherr, variable displacement, swashplate double pump
Max. flow	2 x 245 l/min.
Max. pressure	380 bar
Pump management	Electronic pump management via the integrated system controlling (CAN-BUS) synchronous to the control block. Open circuit for the rotation
Hydraulic tank	290 l
Hydraulic system	max. 520 l
Hydraulic oil filter	1 main return filter with integrated partial micro filtration (10 µm)
Cooling system	Compact cooler, consisting of a water cooler, with hydraulic oil cooler, gearbox oil cooler, fuel cooler and after-cooler cores and hydrostatically driven fan
MODE selection	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
Engine speed and performance setting	Stepless adjustment of engine output and hydraulic power via engine speed



Swing Drive

Drive	Liebherr swashplate motor with integrated brake valve and torque control
Transmission	Liebherr compact planetary reduction gears
Swing ring	Liebherr, sealed race ball bearing swing ring, internal teeth
Swing speed	0 – 10.0 RPM stepless
Swing torque	106 kNm
Holding brake	Wet multi-disc (spring applied, pressure released)



Operator's Cab

Cab	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 extensible window shades for the sunroof window and windscreen, cigarette lighter and 24 V plug, 12 V plug, cup holder
Operator's seat	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
Arm consoles	Oscillating consoles with seat, tiltable console left
Operation and displays	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
Air-conditioning	Automatic air-conditioning, recirculated air function, fast de-icing and demisting at the press of a button, air vents can be operated via a menu. Recirculated air and fresh air filters can be easily replaced and are accessible from the outside. Heating-cooling unit, designed for extreme outside temperatures, sensors for solar radiation, inside and outside temperatures The air conditioning system contains fluorinated greenhouse gases
Refrigerant	R134a
Global warming potential	1,430
Quantity at 25 °C*	1,340 g
CO ₂ equivalent	1.92 t
Vibration emission**	
Hand/arm vibrations	< 2.5 m/s ² , according with ISO 5349-1:2001
Whole-body vibrations	< 0.5 m/s ²
Measuring inaccuracy	According with standard EN 12096:1997
Noise emission	
ISO 6396	L _{pA} (inside cab) = 71 dB(A)
2000/14/EC	L _{WA} (surround noise) = 105 dB(A)



Undercarriage

Versions	
NLC	Gauge 2,390 mm
SLC	Gauge 2,590 mm
LC	Gauge 2,740 mm
Drive	Liebherr swashplate motor with brake valves on both sides
Transmission	Liebherr compact planetary reduction gear
Maximum travel speed	Low range 2.6 km/h High range 4.2 km/h
Drawbar pull on crawler	325 kN
Track components	D7, maintenance-free
Track rollers/ Carrier rollers	9/2
Tracks	Sealed and greased
Track pads	Triple grouser
Holding brake	Wet multi-disc (spring applied, pressure released)
Brake valves	Integrated into travel motor
Lashing eyes	Integrated



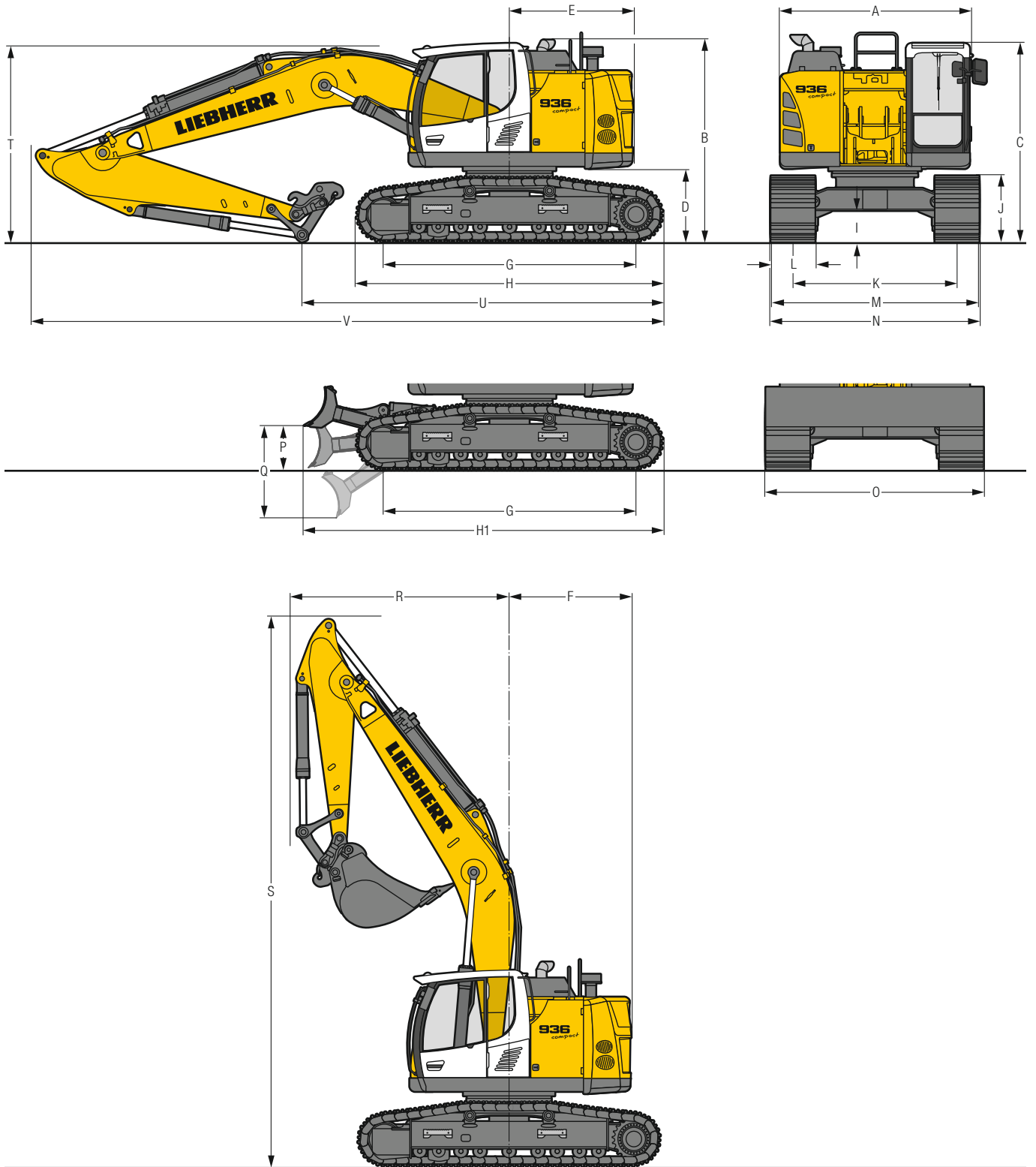
Equipment

Hydraulic cylinders	Liebherr cylinders with seal and guidance systems and shock protection
Bearings	Sealed, low maintenance
Lubrication	Liebherr central lubrication 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				NLC with blade				SLC				LC				LC with blade			
	mm				mm				mm				mm				mm			
A	Upper-carriage width																3,000**			
B	Upper-carriage height																3,200			
C	Cab height																3,155			
D	Counterweight ground clearance																1,160			
E	Rear-end length																1,975			
F	Tail swing radius																1,975			
G	Wheelbase																3,990			
H	Undercarriage length																4,845			
H1	Undercarriage length with blade																-			
I	Undercarriage ground clearance																500			
J	Track height																1,055			
K	Track gauge																2,390			
L	Track pad width				600				700				800				900			
M	Width over tracks																2,990			
N	Width over steps																2,990			
O	Blade width																3,000			
P	Max. blade height																-			
Q	Max. blade depth																-			

* width with removable steps

** without door stop device and spacer

	Stick length m	Mono boom 6.20 m with quick coupler mm				Two-piece boom 6.40 m with quick coupler mm						
R	Front swing radius	2.50	3,500				2,850					
		3.20	3,500				2,900					
		3.70	3,500				2,900					
S	Height with boom up			8,800				9,400				
		T	Boom height	2.50	2,950				2,950			
				3.20	3,100				3,050			
		3.70	3,150				3,200					
U	Length on ground	2.50	6,300				6,600					
		3.20	5,700				6,050					
		3.70	5,300				5,650					
V	Overall length	2.50	10,000/10,800*				10,150/10,950*					
		3.20	10,000/10,800*				10,150/10,950*					
		3.70	10,000/10,800*				10,150/10,950*					
	Bucket	1.45 m ³				1.45 m ³						

* with blade

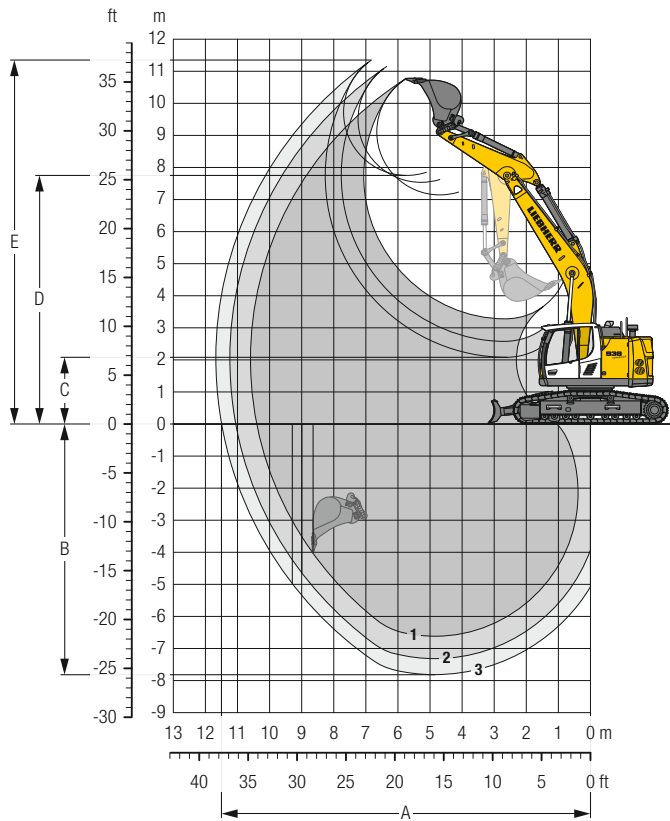
Transport Dimensions

removable elements disassembled

	Undercarriage / Stick m	Mono boom 6.20 m					Two-piece boom 6.40 m						
		mm					mm						
Pad width		600	700	800	900	600	700	800	900				
Transport width	NLC	3,000	3,090	3,190	3,290	3,000	3,090	3,190	3,290				
	NLC with blade	3,000	-	-	-	3,000	-	-	-				
	SLC	3,190	3,290	3,390	3,490	3,190	3,290	3,390	3,490				
	LC	3,340	3,440	3,540	3,640	3,340	3,440	3,540	3,640				
	LC with blade	3,340	-	-	-	3,340	-	-	-				
Transport length		NLC	NLC with blade	SLC	LC	LC with blade	NLC	NLC with blade	SLC	LC	LC with blade		
	2,50	10,000	10,800	10,000	10,000	10,800	10,150	10,950	10,150	10,150	10,950		
	3,20	10,000	10,800	10,000	10,000	10,800	10,150	10,950	10,150	10,150	10,950		
	3,70	10,000	10,800	10,000	10,000	10,800	10,150	10,950	10,150	10,150	10,950		
Transport height	2,50									3,200			
	3,20									3,200			
	3,70									3,200			

Backhoe Bucket

with Mono Boom 6.20 m and Counterweight 8.0 t



Digging Envelope

with quick coupler		1	2	3
Stick length	m	2.50	3.20	3.70
A Max. reach at ground level	m	10.40	11.06	11.50
B Max. digging depth	m	6.62	7.31	7.81
C Min. dumping height	m	3.28	2.58	2.08
D Max. dumping height	m	7.15	7.54	7.76
E Max. cutting height	m	10.76	11.15	11.35

Forces

without quick coupler		1	2	3
Stick digging force (ISO 6015)	kN	168	142	128
Bucket digging force (ISO 6015)	kN	204	204	204
Stick digging force (SAE J1179)	kN	160	136	123
Bucket digging force (SAE J1179)	kN	178	178	178

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 8.0 t, mono boom 6.20 m, stick 3.20 m, quick coupler SWA 66 and bucket 1.45 m³ (1,130 kg).

Undercarriage		NLC			
Pad width	mm	600	700	800	900
Weight	kg	33,800	34,150	34,500	34,850
Ground pressure	kg/cm ²	0.66	0.57	0.50	0.45

Undercarriage		NLC with blade			
Pad width	mm	600	700	800	900
Weight	kg	36,150	36,500	36,850	37,200
Ground pressure	kg/cm ²	0.70	0.61	0.54	0.48

Undercarriage		SLC			
Pad width	mm	600	700	800	900
Weight	kg	33,900	34,250	34,600	34,950
Ground pressure	kg/cm ²	0.66	0.57	0.50	0.45

Undercarriage		LC			
Pad width	mm	600	700	800	900
Weight	kg	34,000	34,350	34,700	35,050
Ground pressure	kg/cm ²	0.66	0.57	0.50	0.45

Undercarriage		LC with blade			
Pad width	mm	600	700	800	900
Weight	kg	36,400	36,750	37,100	37,450
Ground pressure	kg/cm ²	0.70	0.61	0.54	0.48

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

	Cutting width mm	Capacity ISO 7451 m ³	Weight ³⁾ kg	Weight ⁴⁾ kg	NLC-Undercarriage (with track pads 600 mm)									SLC-Undercarriage (with track pads 600 mm)									LC-Undercarriage (with track pads 600 mm)								
					Stick length (m)									Stick length (m)									Stick length (m)								
					without quick coupler			with quick coupler			without quick coupler			with quick coupler			without quick coupler			with quick coupler											
	2.50	3.20	3.70	2.50	3.20	3.70	2.50	3.20	3.70	2.50	3.20	3.70	2.50	3.20	3.70	2.50	3.20	3.70	2.50	3.20	3.70										
STD ¹⁾	650	0.55	810	820	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲									
	1,050	1.00	870	930	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲									
	1,250	1.25	1,000	1,050	▲	▲	■	▲	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲									
	1,400	1.45	1,070	1,130	▲	■	▲	▲	▲	△	▲	▲	■	▲	■	▲	▲	▲	▲	▲	▲	■									
	1,550	1.60	1,110	1,170	■	▲	△	■	△	△	▲	■	▲	▲	▲	■	▲	▲	■	▲	▲	▲									
	1,650	1.75	1,160	1,220	▲	△	△	■	△	-	▲	▲	■	■	■	△	▲	■	▲	▲	▲	■									
	1,550	1.85	1,170	1,230	▲	△	△	■	△	-	■	■	△	▲	△	△	▲	▲	■	■	■	△									
	1,650	2.00	1,210	1,270	■	△	-	△	-	-	▲	△	△	■	△	△	■	■	△	▲	■	△									
1,750	2.15	1,260	1,320	△	-	-	△	-	-	■	△	△	■	△	-	▲	■	△	▲	△	△										
HD ²⁾	650	0.55	940	960	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲									
	1,050	1.00	1,000	1,050	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲									
	1,250	1.25	1,140	1,200	▲	▲	■	▲	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲									
	1,400	1.45	1,230	1,290	▲	▲	■	■	■	△	▲	▲	■	▲	■	■	▲	▲	■	▲	▲	■									
	1,550	1.60	1,290	1,350	■	■	△	▲	△	△	▲	■	■	■	▲	△	▲	■	▲	■	■	■									
	1,650	1.75	1,350	1,410	▲	△	△	■	△	-	■	■	△	■	△	△	▲	▲	■	■	▲	△									
	1,550	1.85	1,340	1,400	■	△	-	△	△	-	■	■	△	▲	△	△	▲	▲	■	■	■	△									
	1,650	2.00	1,400	1,460	△	△	-	△	-	-	▲	△	△	■	△	-	■	■	△	▲	△	△									
1,750	2.15	1,450	1,510	△	-	-	△	-	-	■	△	-	△	-	-	▲	△	△	■	△	-										

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

¹⁾ Standard bucket with teeth Z 50

²⁾ HD bucket with teeth Z 50

³⁾ Bucket for direct mounting

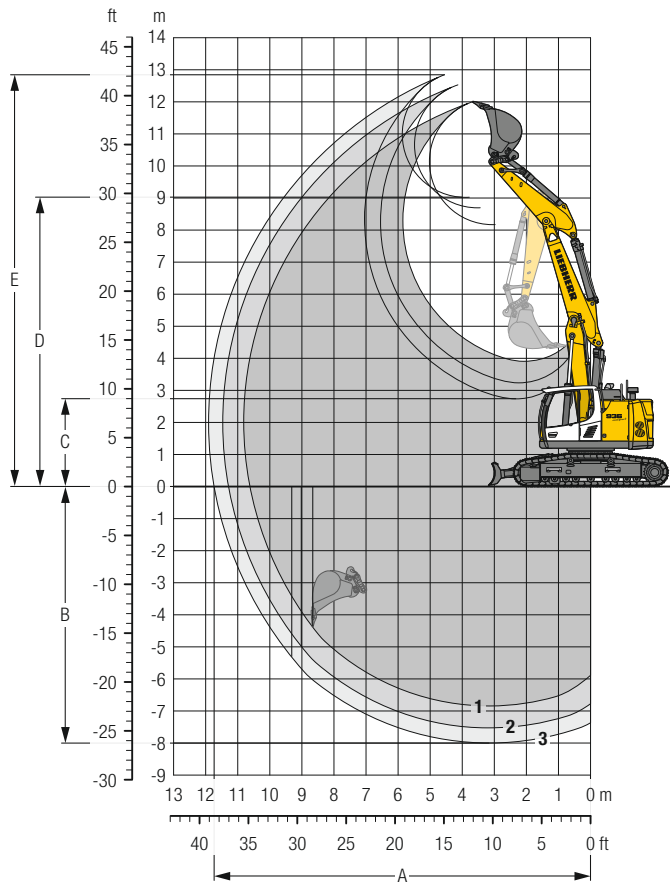
⁴⁾ Bucket for mounting to quick coupler

Other buckets available upon request

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

Backhoe Bucket

with Two-Piece Boom 6.40 m and Counterweight 8.0 t



Digging Envelope

with quick coupler		1	2	3
Stick length	m	2.50	3.20	3.70
A Max. reach at ground level	m	10.62	11.29	11.74
B Max. digging depth	m	6.84	7.52	8.00
C Min. dumping height	m	3.91	3.23	2.74
D Max. dumping height	m	8.17	8.70	9.02
E Max. cutting height	m	12.00	12.53	12.84

Forces

without quick coupler		1	2	3
Stick digging force (ISO 6015)	kN	168	142	128
Bucket digging force (ISO 6015)	kN	204	204	204
Stick digging force (SAE J1179)	kN	160	136	123
Bucket digging force (SAE J1179)	kN	178	178	178

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 8.0 t, two-piece boom 6.40 m, stick 3.20 m, quick coupler SWA 66 and bucket 1.45 m³ (1,130 kg).

Undercarriage		NLC			
Pad width	mm	600	700	800	900
Weight	kg	34.600	34.950	35.300	35.650
Ground pressure	kg/cm ²	0,67	0,58	0,52	0,46

Undercarriage		NLC with blade			
Pad width	mm	600	700	800	900
Weight	kg	36.950	37.300	37.650	38.000
Ground pressure	kg/cm ²	0,72	0,62	0,55	0,49

Undercarriage		SLC			
Pad width	mm	600	700	800	900
Weight	kg	34.700	35.050	35.400	35.750
Ground pressure	kg/cm ²	0,67	0,58	0,52	0,46

Undercarriage		LC			
Pad width	mm	600	700	800	900
Weight	kg	34.800	35.150	35.500	35.850
Ground pressure	kg/cm ²	0,67	0,58	0,52	0,46

Undercarriage		LC with blade			
Pad width	mm	600	700	800	900
Weight	kg	37.200	37.550	37.900	38.250
Ground pressure	kg/cm ²	0,72	0,62	0,55	0,49

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

	Cutting width mm	Capacity ISO 7451 m ³	Weight ²⁾ kg	Weight ⁴⁾ kg	NLC-Undercarriage (with track pads 600 mm)									SLC-Undercarriage (with track pads 600 mm)									LC-Undercarriage (with track pads 600 mm)								
					Stick length (m)									Stick length (m)									Stick length (m)								
					without quick coupler			with quick coupler			without quick coupler			with quick coupler			without quick coupler			with quick coupler											
	2.50	3.20	3.70	2.50	3.20	3.70	2.50	3.20	3.70	2.50	3.20	3.70	2.50	3.20	3.70	2.50	3.20	3.70	2.50	3.20	3.70										
STD ¹⁾	650	0.55	810	820	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲									
	1,050	1.00	870	930	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲									
	1,250	1.25	1,000	1,050	▲	■	▲	▲	▲	■	▲	▲	▲	▲	▲	■	▲	▲	▲	▲	▲	▲									
	1,400	1.45	1,070	1,130	■	▲	△	■	△	△	▲	■	▲	▲	■	▲	▲	■	▲	■	▲	▲									
	1,550	1.60	1,110	1,170	▲	■	△	■	△	-	▲	▲	■	■	△	▲	▲	■	▲	▲	▲	■									
	1,650	1.75	1,160	1,220	■	△	△	△	△	-	■	■	△	▲	△	△	▲	▲	■	■	■	△	△								
	1,650	1.85	1,170	1,230	■	△	-	△	-	-	▲	△	△	■	△	-	■	■	△	▲	■	△	△								
	1,750	2.00	1,210	1,270	△	-	-	△	-	-	■	△	△	△	△	-	▲	▲	△	▲	▲	△	△								
	1,750	2.15	1,260	1,320	△	-	-	-	-	-	△	△	-	△	-	-	▲	▲	△	▲	△	-									
HD ²⁾	650	0.55	940	960	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲									
	1,050	1.00	1,000	1,050	▲	▲	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲									
	1,250	1.25	1,140	1,200	▲	■	▲	▲	▲	△	▲	▲	■	▲	■	▲	▲	▲	▲	▲	▲	■									
	1,400	1.45	1,230	1,290	■	■	△	▲	△	△	▲	■	▲	▲	▲	△	▲	▲	■	▲	■	▲									
	1,550	1.60	1,290	1,350	▲	△	△	■	△	-	■	■	△	■	△	▲	▲	■	■	▲	▲	△	△								
	1,650	1.75	1,350	1,410	■	△	-	△	-	-	▲	△	△	■	△	-	■	■	△	▲	■	△	△								
	1,650	1.85	1,340	1,400	△	△	-	△	-	-	▲	△	△	■	△	-	■	■	△	▲	▲	△	△								
	1,650	2.00	1,400	1,460	△	-	-	△	-	-	■	△	-	△	-	-	▲	▲	△	■	△	△	-								
	1,750	2.15	1,450	1,510	△	-	-	-	-	-	△	-	-	△	-	-	■	△	-	△	△	-									

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

¹⁾ Standard bucket with teeth Z 50

²⁾ HD bucket with teeth Z 50

³⁾ Bucket for direct mounting

⁴⁾ Bucket for mounting to quick coupler

Other buckets available upon request

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

Lift Capacities

with Mono Boom 6.20 m, Counterweight 8.0 t and Track Pads 600 mm

Stick 2.50 m										Stick 3.20 m																		
Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m	Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m			
		↕	↔	↕	↔	↕	↔	↕	↔	↕	↔				↕	↔	↕	↔	↕	↔	↕	↔	↕	↔		↕	↔	
9.0												9.6*	9.6*	4.9										7.0*	7.0*	6.0		
7.5												6.0	8.4*	6.6										5.0	6.3*	7.4		
6.0												4.7	8.0	7.6										4.0	6.1*	8.4		
4.5					10.9	11.7*	6.9	9.9*	4.8	8.3						18.2*	18.2*	10.4	12.4*	6.7	10.0*	4.7	8.2			3.5	6.1*	8.9
3.0					10.1	13.9*	6.6	10.8*	4.7	8.1														3.4	6.0	3.2	5.7	9.2
1.5					9.1	16.2*	6.1	11.1	4.5	7.9														3.3	5.9	3.1	5.6	9.3
0					8.5	13.0*	5.8	10.8	4.3	7.7														3.2	5.8	3.2	5.7	9.0
-1.5	10.9*	10.9*			8.4	16.4*	5.6	10.5	4.2	7.6														3.2	5.7	3.0	5.6	8.6
-3.0	13.8*	13.8*			8.4	14.7*	5.6	10.5	4.2	7.6														3.2	5.8	3.4	6.2	8.6
-4.5					8.6	12.0*	5.7	9.5*																4.0	7.2	4.0	7.2	7.7
					7.5*	7.5*						5.8*	5.8*	7.0										5.2	6.4*	5.2	6.4*	6.5
												9.6*	9.6*	4.9										7.0*	7.0*	6.0		
												6.4	8.4*	6.6										5.3	6.3*	7.4		
												5.0	8.1*	7.6										4.3	6.1*	8.4		
												4.3	7.0	8.3										3.8	6.1*	8.9		
												3.9	6.5	8.6										3.7	6.0	3.5	5.8	9.2
												3.9	6.4	8.6										3.5	5.8	3.4	5.7	9.3
												4.0	6.6	8.4										3.5	5.8	3.5	5.8	9.0
												4.3	7.2	7.9										3.7	6.2	3.7	6.2	8.6
												5.2	7.6*	7.0										4.3	7.3	4.3	7.3	7.7
												5.8*	5.8*	5.5										5.6	6.4*	5.6	6.4*	6.5

Height
 Can be swung 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 410 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.

Stick 3.70 m

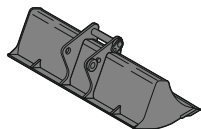
Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m			
	m	m	m	m	m	m	m	m	m	m				
MLC	9.0						5.0	6.5*			5.8*	5.8*	6.6	
	7.5										4.5	5.3*	8.0	
	6.0					7.1	7.7*	4.9	7.5*		3.7	5.1*	8.8	
	4.5			10.0*	10.0*	6.8	9.4*	4.7	8.2*	3.5	6.1	3.2	5.2*	9.4
	3.0			9.6	14.1*	6.3	10.6*	4.5	8.0	3.4	6.0	3.0	5.3	9.7
	1.5			8.7	16.2*	5.8	10.8	4.3	7.7	3.2	5.8	2.9	5.2	9.7
	0	6.1*	6.1*	8.3	16.8*	5.5	10.5	4.1	7.5	3.1	5.7	2.9	5.3	9.5
MLC Blade up	-1.5	10.1*	10.1*	8.1	16.1*	5.4	10.3	4.0	7.4	3.1	5.7	3.1	5.7	9.0
	-3.0	15.4*	15.4*	8.2	14.3*	5.4	10.3	4.0	7.4			3.5	6.5	8.3
	-4.5	14.5*	14.5*	8.4	11.3*	5.5	8.6*					4.5	6.5*	7.1
	9.0										5.8*	5.8*	6.6	
	7.5							5.4	6.5*			4.8	5.3*	8.0
MLC Blade down	6.0				7.6	7.7*	5.3	7.5*			4.0	5.1*	8.8	
	4.5			10.0*	10.0*	7.3	9.4*	5.1	8.2*	3.8	6.2	3.5	5.2*	9.4
	3.0			10.3	14.1*	6.8	10.6*	4.9	8.0	3.7	6.0	3.3	5.3*	9.7
	1.5			9.4	16.2*	6.3	10.9	4.6	7.7	3.5	5.9	3.2	5.3	9.7
	0	6.1*	6.1*	9.0	16.8*	6.0	10.6	4.4	7.5	3.4	5.8	3.2	5.4	9.5
MLC	-1.5	10.1*	10.1*	8.8	16.1*	5.9	10.4	4.3	7.4	3.4	5.7	3.4	5.7	9.0
	-3.0	15.4*	15.4*	8.9	14.3*	5.9	10.4	4.4	7.4			3.9	6.5	8.3
	-4.5	14.5*	14.5*	9.1	11.3*	6.0	8.6*					4.8	6.5*	7.1
	9.0											5.8*	5.8*	6.6
	7.5							5.6	6.5*			5.0	5.3*	8.0
MLC	6.0				7.7*	7.7*	5.5	7.5*			4.2	5.1*	8.8	
	4.5			10.0*	10.0*	7.6	9.4*	5.3	8.2*	4.0	6.6*	3.7	5.2*	9.4
	3.0			10.9	14.1*	7.1	10.6*	5.1	8.8*	3.8	7.7*	3.4	5.3*	9.7
	1.5			10.0	16.2*	6.7	11.7*	4.9	9.4*	3.7	7.9*	3.3	5.7*	9.7
	0	6.1*	6.1*	9.5	16.8*	6.3	12.3*	4.7	9.6*	3.6	7.8*	3.4	6.3*	9.5
MLC	-1.5	10.1*	10.1*	9.3	16.1*	6.2	12.0*	4.6	9.4*	3.6	7.3*	3.6	7.2*	9.0
	-3.0	15.4*	15.4*	9.4	14.3*	6.2	10.9*	4.6	8.4*			4.1	7.1*	8.3
	-4.5	14.5*	14.5*	9.6	11.3*	6.3	8.6*					5.1	6.5*	7.1
	9.0											5.8*	5.8*	6.6
	7.5							5.5	6.5*			4.9	5.3*	8.0
SLC	6.0				7.7*	7.7*	5.4	7.5*			4.0	5.1*	8.8	
	4.5			10.0*	10.0*	7.4	9.4*	5.2	8.2*	3.8	6.1	3.6	5.2*	9.4
	3.0			10.7	14.1*	7.0	10.6*	5.0	8.0	3.7	6.0	3.3	5.3*	9.7
	1.5			9.8	16.2*	6.5	10.9	4.7	7.7	3.6	5.9	3.2	5.2	9.7
	0	6.1*	6.1*	9.3	16.8*	6.2	10.5	4.5	7.5	3.5	5.7	3.3	5.3	9.5
SLC	-1.5	10.1*	10.1*	9.1	16.1*	6.0	10.3	4.4	7.4	3.5	5.7	3.5	5.7	9.0
	-3.0	15.4*	15.4*	9.2	14.3*	6.0	10.3	4.4	7.4			3.9	6.5	8.3
	-4.5	14.5*	14.5*	9.4	11.3*	6.2	8.6*					5.0	6.5*	7.1
	9.0											5.8*	5.8*	6.6
	7.5							5.8	6.5*			5.2	5.3*	8.0
LC	6.0				7.7*	7.7*	5.8	7.5*			4.3	5.1*	8.8	
	4.5			10.0*	10.0*	8.0	9.4*	5.6	8.2*	4.1	6.1	3.8	5.2*	9.4
	3.0			11.6	14.1*	7.5	10.6*	5.3	8.0	4.0	6.0	3.6	5.3*	9.7
	1.5			10.6	16.2*	7.0	10.9	5.1	7.7	3.9	5.9	3.5	5.2	9.7
	0	6.1*	6.1*	10.1	16.8*	6.7	10.5	4.9	7.5	3.8	5.8	3.5	5.3	9.5
LC	-1.5	10.1*	10.1*	10.0	16.1*	6.5	10.4	4.8	7.4	3.8	5.7	3.7	5.7	9.0
	-3.0	15.4*	15.4*	10.0	14.3*	6.5	10.4	4.8	7.4			4.2	6.5	8.3
	-4.5	14.5*	14.5*	10.3	11.3*	6.7	8.6*					5.3	6.5*	7.1
	9.0											5.8*	5.8*	6.6
	7.5							6.3	6.5*			5.3*	5.3*	8.0
LC Blade up	6.0				7.7*	7.7*	6.2	7.5*			4.7	5.1*	8.8	
	4.5			10.0*	10.0*	8.5	9.4*	6.0	8.2*	4.5	6.2	4.2	5.2*	9.4
	3.0			12.5	14.1*	8.1	10.6*	5.8	8.0	4.4	6.0	3.9	5.3*	9.7
	1.5			11.5	16.2*	7.6	10.9	5.5	7.8	4.2	5.9	3.8	5.3	9.7
	0	6.1*	6.1*	11.0	16.8*	7.3	10.6	5.3	7.6	4.1	5.8	3.8	5.4	9.5
LC Blade up	-1.5	10.1*	10.1*	10.8	16.1*	7.1	10.4	5.2	7.4	4.1	5.8	4.1	5.7	9.0
	-3.0	15.4*	15.4*	10.9	14.3*	7.1	10.4	5.2	7.5			4.6	6.5	8.3
	-4.5	14.5*	14.5*	11.2	11.3*	7.3	8.6*					5.8	6.5*	7.1
	9.0											5.8*	5.8*	6.6
	7.5							6.5*	6.5*			5.3*	5.3*	8.0
LC Blade down	6.0				7.7*	7.7*	6.4	7.5*			4.9	5.1*	8.8	
	4.5			10.0*	10.0*	8.9	9.4*	6.3	8.2*	4.7	6.6*	4.3	5.2*	9.4
	3.0			13.0	14.1*	8.4	10.6*	6.0	8.8*	4.5	7.7*	4.0	5.3*	9.7
	1.5			12.1	16.2*	7.9	11.7*	5.7	9.4*	4.4	7.9*	3.9	5.7*	9.7
	0	6.1*	6.1*	11.5	16.8*	7.6	12.3*	5.6	9.6*	4.3	7.8*	4.0	6.3*	9.5
LC Blade down	-1.5	10.1*	10.1*	11.4	16.1*	7.4	12.0*	5.5	9.4*	4.3	7.3*	4.3	7.2*	9.0
	-3.0	15.4*	15.4*	11.4	14.3*	7.4	10.9*	5.5	8.4*			4.8	7.1*	8.3
	-4.5	14.5*	14.5*	11.3*	11.3*	7.6	8.6*					6.1	6.5*	7.1

Height
 Can be swung 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 410 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

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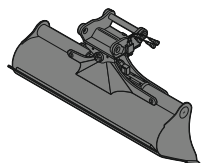
Available Attachments



Rigid Ditch Cleaning Bucket

GRL 100, for mounting to quick coupler SWA 66

Cutting width	mm	2,000	2,400	2,400
Capacity	m ³	0.70	0.85	1.25
Weight	kg	546	635	685



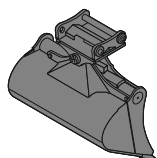
Tiltable Ditch Cleaning Bucket

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

Cutting width	mm	2,000	2,000	2,200	2,400	2,400
Capacity	m ³	1.20	1.45	1.65	0.85	1.45
Weight	kg	1,520	1,600	1,680	1,475	1,620

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

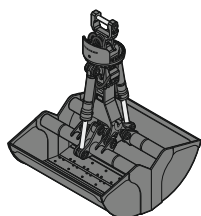
Cutting width	mm	2,000	2,000	2,200	2,400	2,400
Capacity	m ³	1.20	1.45	1.65	0.85	1.45
Weight	kg	1,520	1,600	1,680	1,475	1,620



Tilt Bucket

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

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



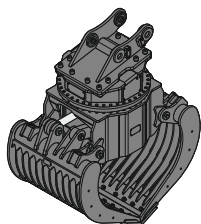
Clamshells

GMZ 30, earthmoving shell, for mounting to quick coupler SWA 48

Cutting width	mm	600	800	1,000
Capacity	m ³	0.38	0.52	0.65
Weight	kg	1,025	1,110	1,190

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

Cutting width	mm	1,200	1,400
Capacity	m ³	1.40	1.60
Weight	kg	2,376	2,486



Sorting Grab

SG 30, for direct mounting

		perforated			ribbed			closed			stone tong
Cutting width	mm	1,000	1,200	1,400	1,000	1,200	1,400	1,000	1,200	1,400	1,020
Capacity	m ³	0.85	1.00	1.15	0.75	0.90	1.05	0.85	1.00	1.15	0.85
Weight	kg	1,700	1,570	1,850	1,775	1,885	1,990	1,730	1,810	1,890	1,765

SG 30, for mounting to quick coupler SWA 48

Cutting width	mm	1,000	1,200	1,400	1,000	1,200	1,400	1,000	1,200	1,400	1,020
Capacity	m ³	0.85	1.00	1.15	0.75	0.90	1.05	0.85	1.00	1.15	0.85
Weight	kg	1,700	1,570	1,850	1,775	1,885	1,990	1,730	1,810	1,890	1,765

SG 40, for mounting to quick coupler SWA 48 and SWA 66

Cutting width	mm	1,100	1,300		1,100	1,300					
Capacity	m ³	1.30	1.60		1.10	1.40					
Weight	kg	2,230	2,800		2,320	2,900					

Serial Equipment

Undercarriage

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

Uppercarriage

- Anti-skid surfaces
- Automatic swing brake lock
- Centralised lubrication system (automatic)
- 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 fuel tank cap
- Lockable service doors
- Main switch, manual, lockable
- Protection grid on radiator fan
- Sound insulation
- Swing drive gearbox oil level, visible from the cab
- Swing-out radiators
- Windshield washer fluid tank

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
- Exhaust gas after-treatment system – DOC + DPF + 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
- 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
- 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 button on joystick configurable
- Storage box
- Storage nets
- Storage spaces
- Tilttable console left
- Tinted windows
- Visco-elastic damping
- Windscreen wiper and washer
- Work mode selector

Equipment

- 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

* optionally extendable after one year

Equipment Standard/Option

Undercarriage

Chain guide 1 piece	•
Chain guide 3 pieces	+
Chain guide 4 pieces	+
Cover and base plate for undercarriage centre section	•
Dozer and stabilizer blade 3,000 mm	+
Dozer and stabilizer blade 3,350 mm	+
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	+
Track pads triple grouser reinforced 600/700/800 mm	+
Tracks, sealed and greased	•
Tracks, sealed and greased, reinforced	+
Undercarriage LC	+
Undercarriage NLC	+
Undercarriage SLC	+
Undercarriage storage compartment	+

Uppercarriage

Air pre-filter with cyclonical dust trap	+
Counterweight standard 8.0 t	•
Electric socket on uppercarriage (24 V)	+
Extended tool set including tool box	+
Fuel anti-theft protection	+
Headlight on uppercarriage, front left, LED+, 1 piece, protection included	+ ¹⁾
Headlight on uppercarriage, front right, LED, 1 piece, protection included	• ¹⁾
Headlight on uppercarriage, front right, LED+, 1 piece, protection included	+ ¹⁾
Headlight on uppercarriage, lateral right, LED+, 1 piece	+ ¹⁾
Headlights on uppercarriage, rear, LED+, 2 pieces	+ ¹⁾
Lighting for tank area ¹⁾	+
Lighting for uppercarriage access ¹⁾	+
Pre-heating system for fuel	+
Reflective warning stickers	+
Reversible fan drive	+
Rotating beacons on uppercarriage, rear, LED, 2 pieces	+
Skyview 360°	+
Special painting	+
Tank refilling pump fuel	+
Tool set including storage case	•
Uppercarriage bottom protection	+



Hydraulic System

Bypass filter for hydraulic oil	+
Liebherr hydraulic oil	•
Liebherr hydraulic oil, adapted for extreme climate conditions	+
Liebherr hydraulic oil, biodegradable	+
High pressure circuit bypass	+
High pressure circuit flow summation	+



Engine

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



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	+
Electronic immobiliser	+
Emergency stop in cab	+
FGPS front guard	+
FGPS front guard tiltable	+
Filter for hydraulic hammer return flow	+
Fire extinguisher	+
First-aid box	+
Follow me home with lighting for cabin access ¹⁾	+
Footrest	+
FOPS top guard	+
FOPS top guard flat	+
Handrests elevated for joysticks	+
Headlights on cab, front, LED, 2 pieces	• ¹⁾
Headlights on cab, front, LED+, 2 pieces	+ ¹⁾
Headlights on cab roof, front, LED+, 2 pieces	+ ¹⁾
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) ¹⁾	+
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	+
Radio Comfort	+
Radio pre-installation	•
Retractable laminated two-piece windscreen	•
Right hand side view monitoring camera	•
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

Bucket cylinder rod protection	+
Centralised lubrication extended for connecting link	+
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	+ ¹⁾
Headlight on boom, right, LED, 1 piece	• ¹⁾
Headlight on boom, right, LED+, 1 piece	+ ¹⁾
Headlight on stick, bottom, LED+, 1 piece	+ ¹⁾
Leak oil line for attachment	+
Lifting eye on stick 16.0 t	+
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	+
Quick coupler SWA 48 hydraulic	+
Quick coupler SWA 48 mechanical	+
Quick coupler SWA 66 hydraulic	+
Quick coupler SWA 66 mechanical	+
Security for hoist cylinders	+
Special painting	+
Stick 2.50 m	+
Stick 3.20 m	+
Stick 3.70 m	+
Stick bottom protection	+
Tool Management	+
Two-piece boom 6.40 m	+

• = Standard, + = Option

¹⁾ 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 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.

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