
R 922 Litronic

LIEBHERR

Crawler excavator



Generation
8

Operating weight
23,350 kg / 51,480 lb

Engine
161 HP / 120 kW
Tier 4 Final

Bucket capacity
0.55–1.65 m³ /
0.72–2.16 yd³

Experience the progress R 922

① Safety

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

② Equipment

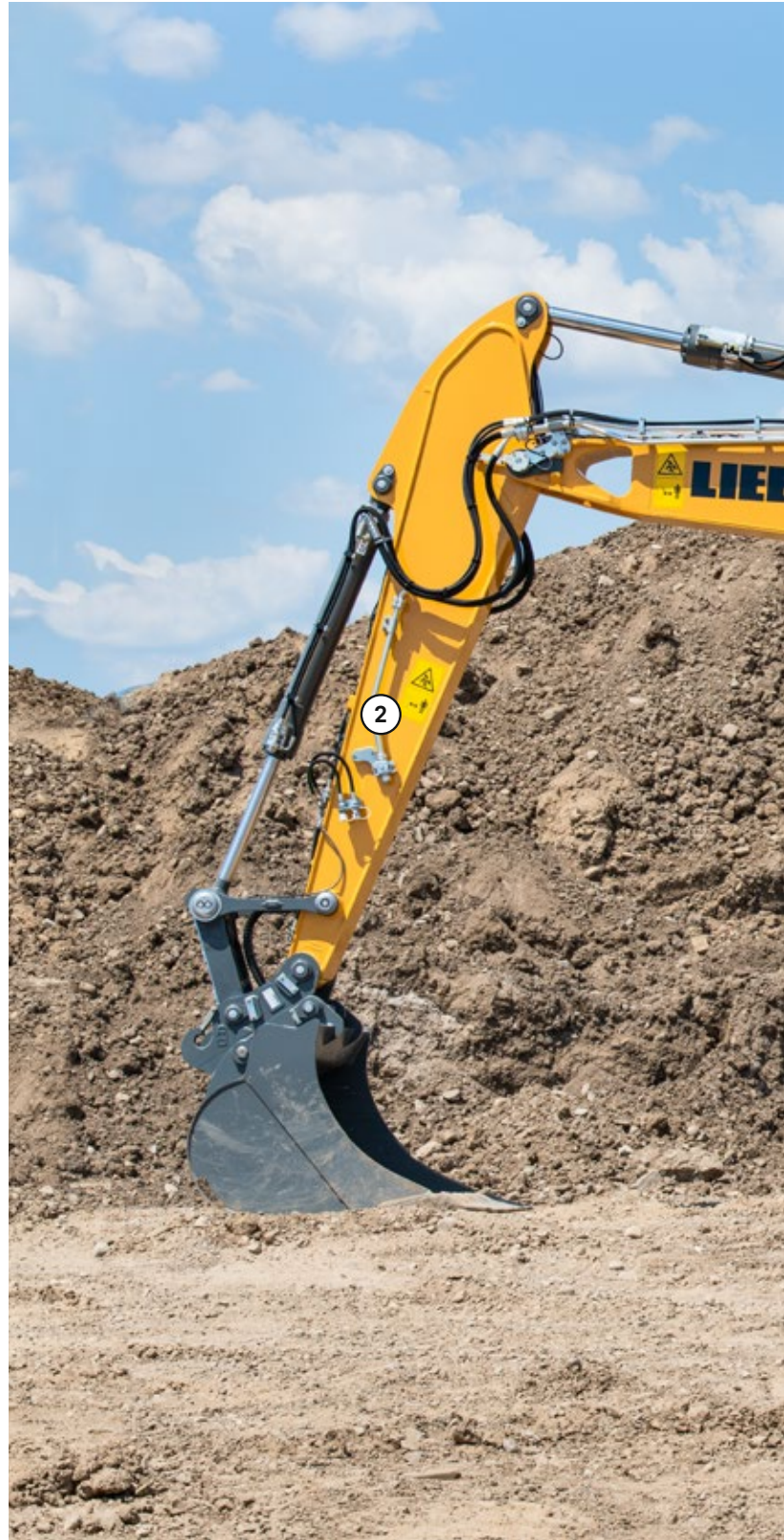
- Large choice of types and sizes of equipment
- Safety check valves for hoist and stick cylinders
- Guaranteed maintenance thanks to automatic centralized lubrication system (option)

③ Maintenance

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

④ Comfort

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



⑤ Engine

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

⑥ Undercarriage

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



Technical data



Diesel engine

Rating	
per SAE J1349	161 HP (120 kW) at 1,800 rpm
per ISO 9249	163 HP (120 kW) at 1,800 rpm
Torque	682 Nm at 1,400 rpm / 503 lbf ft at 1,400 rpm
Model	D924 A7-04 – FPT motor designed for Liebherr
Type	4 cylinder in-line
Bore	104 mm / 4.1 in
Stroke	132 mm / 5.2 in
Displacement	4.5 l / 275 in³
Engine operation	4-stroke diesel Common-Rail Turbo-charged and after-cooler
Exhaust gas treatment	Tier 4 Final DOC + SCR 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	400 l / 106 gal
Urea tank	46 l / 12 gal
Electrical system	
Voltage	24 V
Batteries	2 x 135 Ah / 12 V
Alternator	Three-phase current 28 V / 140 A
Engine idling	Sensor controlled



Hydraulic controls

Power distribution	Via control valves, simultaneous and independent actuation of undercarriage, swing drive and equipment
Electric servo circuit	Electro-hydraulic control
Equipment and swing	Proportional via joystick levers
Travel	– Proportional control via foot pedals or removable levers – Automatic or manual speed adjustment
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 210 l/min. / 2 x 55 gpm
Max. pressure	380 bar / 5,511 psi
Pump management	Electronic management synchronous to the control block. Open circuit for the rotation
Hydraulic tank	155 l / 41 gal
Hydraulic system	max. 320 l / max. 85 gal
Filtration	1 main return filter with integrated partial micro filtration (10 µm / 1,250 mesh)
Cooling system	Compact cooler, consisting of a water cooler, sandwiched with hydraulic oil cooler and fuel and after-cooler cores and hydro-statically 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	0–12.9 rpm stepless
Swing torque	74.3 kNm / 54,801 lbf ft
Holding brake	Wet multi-disc (spring applied, pressure released)



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 headlights integrated in the ceiling, a door with a sliding window (can be opened on both sides), large storing box and several stowing possibilities, shock-absorbing suspension, laminated right hand side and roof windows, all windows tinted, separate extensible window shades for the sunroof window and windscreen, cigarette lighter and 24 V plug, 12 V plug, cup holder, mobile phone storage net
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 length, 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, color 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
Noise emission	
ISO 6396	70 dB(A) = L _{pA} (inside cab)
2000/14/EC	102 dB(A) = L _{WA} (surround noise)



Undercarriage

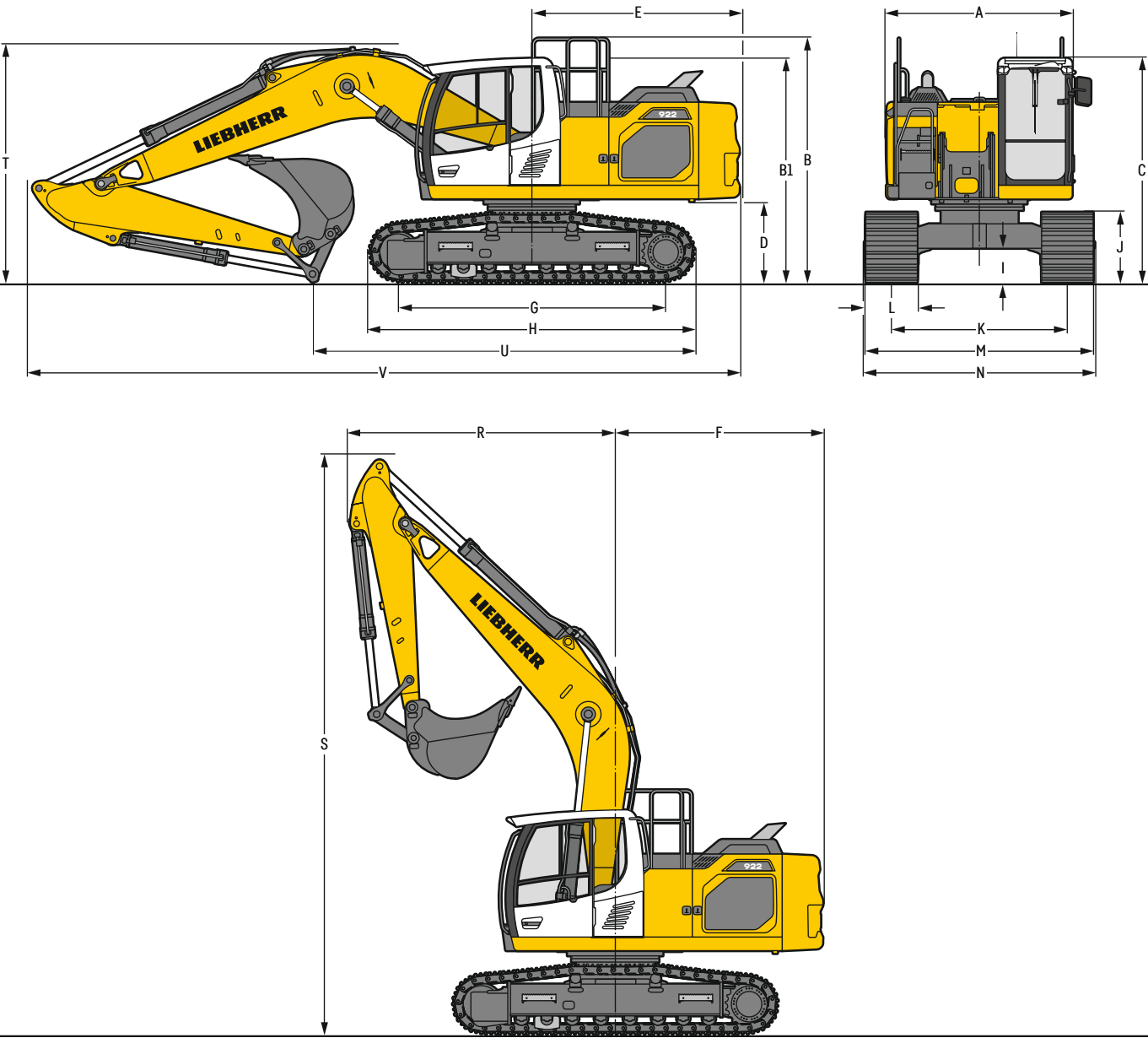
LC	Gauge 2,390 mm / 7'10"
Drive	Liebherr swashplate motor with brake valves on both sides
Transmission	Liebherr planetary reduction gear
Maximum travel speed	3.1 km/h / 1.9 mph low range 5.9 km/h / 3.7 mph high range
Drawbar pull on crawler	236 kN / 53,060 lbf
Track components	B60, D6C, maintenance-free
Track rollers / Carrier rollers	8/2
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

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

Dimensions



		LC				mm / ft in
A1	Uppercarriage width					2,555 ²⁾ / 8' 5" ²⁾
B	Uppercarriage height					3,335 / 10'11"
B1	Uppercarriage height (handrails folded)					3,060 / 10'
C	Cab height					3,060 / 10'
D	Counterweight ground clearance					1,100 / 3' 7"
E	Rear-end length					2,830 / 9' 3"
F	Tail swing radius					2,880 / 9' 5"
G	Wheelbase					3,640 / 11'11"
H	Undercarriage length					4,435 / 14' 7"
I	Undercarriage ground clearance					485 / 1' 7"
J	Track height					960 / 3' 2"
K	Track gauge					2,390 / 7'10"
L	Track pad width	600 / 24"	700 / 28"	800 / 31"	900 / 35"	
M	Width over tracks	2,990 / 9'10"	3,090 / 10' 2"	3,190 / 10' 6"	3,290 / 10'10"	
N	Width over steps	2,925 / 9' 7"	3,125 ¹⁾ / 10' 3" ¹⁾	3,125 ¹⁾ / 10' 3" ¹⁾	3,225 ¹⁾ / 10' 7" ¹⁾	

¹⁾ width with removable steps

²⁾ without door stop device and spacer

		Stick length	Mono boom 5.70 m / 18'8"			
		m / ft in	direct mounting			
			mm / ft in			
R	Front swing radius	2.50 / 8'2"	3,650 / 12'			
		2.90 / 9'6"	3,650 / 12'			
		3.50 / 11'6"	3,600 / 11'10"			
S	Height with boom up		7,900 / 25'11"			
T	Boom height	2.50 / 8'2"	3,250 / 10' 8"			
		2.90 / 9'6"	3,250 / 10' 8"			
		3.50 / 11'6"	3,150 / 10' 4"			
U	Length on ground	2.50 / 8'2"	6,200 / 20' 4"			
		2.90 / 9'6"	5,900 / 19' 4"			
		3.50 / 11'6"	4,450 / 14' 7"			
V	Overall length		9,700 / 31'10"			
	Bucket		1.15 m ³ / 1.50 yd ³			

Transport dimensions

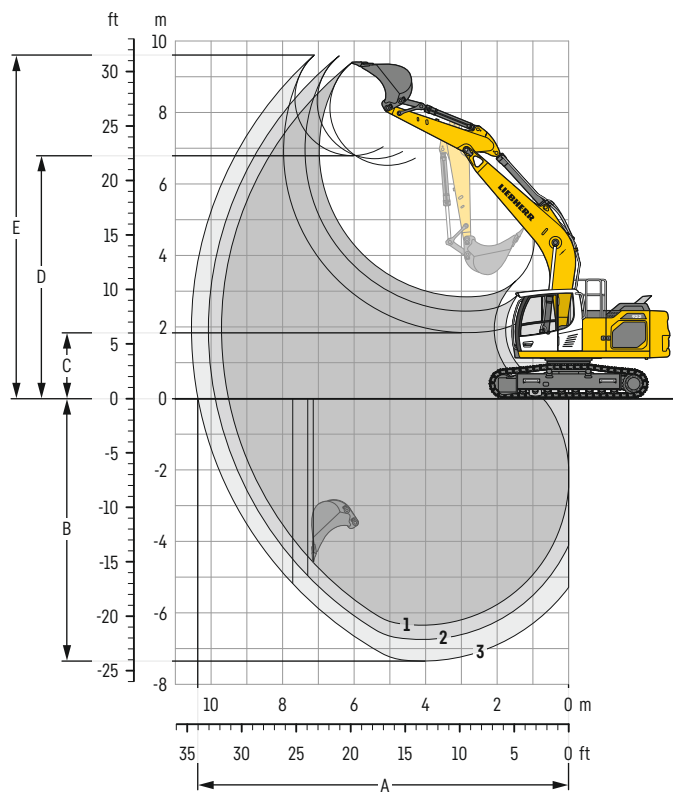
removable elements disassembled

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

	Stick	
	m / ft in	mm / ft in
Transport length		9,700 / 31'10"
	2.50 / 8'2"	3,250 / 10' 8"
Transport height		3,250 / 10' 8"
	2.90 / 9'6"	3,150 / 10' 4"
	3.50 / 11'6"	
Bucket		1.15 m ³ / 1.50 yd ³

Backhoe bucket

with mono boom 5.70 m / 18'8"



Digging envelope

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

Forces

without quick coupler		1	2	3
Stick digging force (ISO 6015)	kN / lbf	125 / 28,100	113 / 25,400	99 / 22,260
Bucket digging force (ISO 6015)	kN / lbf	160 / 35,970	160 / 35,970	160 / 35,970
Stick digging force (SAE J1179)	kN / lbf	120 / 26,980	109 / 24,500	95 / 21,360
Bucket digging force (SAE J1179)	kN / lbf	140 / 31,470	140 / 31,470	140 / 31,470

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 4.0 t / 8,820 lb, mono boom 5.70 m / 18'8", stick 2.90 m / 9'6" and backhoe bucket 1.15 m³ / 1.50 yd³ (810 kg / 1,760 lb).

Undercarriage		LC			
Pad width	mm / in	600 / 24"	700 / 28"	800 / 31"	900 / 35"
Weight	kg / lb	22,450 / 49,490	22,700 / 50,050	23,100 / 50,930	23,400 / 51,590
Ground pressure	kg/cm ² / psi	0.48 / 6.8	0.41 / 5.8	0.37 / 5.3	0.33 / 4.7

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

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

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

¹⁾ Standard backhoe bucket with teeth Z 40

²⁾ HD backhoe bucket with teeth Z 40

³⁾ backhoe bucket for direct mounting

⁴⁾ backhoe bucket for mounting to quick coupler SWA 48 (250 kg / 550 lb)

Other backhoe buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³ / 3,400 lb/yd³, ■ = ≤ 1.8 t/m³ / 3,000 lb/yd³, ▲ = ≤ 1.65 t/m³ / 2,800 lb/yd³, ■ = ≤ 1.5 t/m³ / 2,500 lb/yd³, △ = ≤ 1.2 t/m³ / 2,000 lb/yd³, — = not authorized

Lift capacities

with mono boom 5.70 m / 18'8", counterweight 4.0 t / 8,820 lb and track pads 800 mm / 31"

Stick 2.50 m / 8'2"

Under-carriage		3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft				m ft in
												
LC	7.5m t									5.5	5.7*	5.8
	25ft lb									12.5	12.7*	18'7"
	6.0m t					5.2	6.1*			4.0	5.3*	7.0
	20ft lb					11.1	13.3*			9.0	11.8*	22'7"
	4.5m t			7.7	7.8*	5.0	6.7*	3.5	5.2	3.4	5.1	7.7
	15ft lb			16.7	16.9*	10.7	14.5*	7.5	11.3	7.5	11.2	25'1"
	3.0m t			7.1	10.0*	4.7	7.2	3.4	5.1	3.1	4.6	8.0
	10ft lb			15.4	21.5*	10.2	15.6	7.3	11.0	6.8	10.2	26'4"
	1.5m t			6.6	10.9	4.5	7.0	3.3	5.0	2.9	4.5	8.1
	5ft lb			14.3	23.5	9.6	15.0	7.1	10.8	6.5	9.9	26'6"
	0m t			6.4	10.7	4.3	6.8	3.2	4.9	3.0	4.6	7.9
	0ft lb			13.8	22.9	9.3	14.6	6.9	10.6	6.6	10.2	25'10"
LC	-1.5m t	11.1*	11.1*	6.4	10.7	4.3	6.7			3.3	5.1	7.3
	-5ft lb	25.4*	25.4*	13.7	22.9	9.2	14.5			7.3	11.2	24'
	-3.0m t	12.7	15.4*	6.5	10.8	4.4	6.8			4.0	6.3	6.4
	-10ft lb	27.2	33.5*	14.0	23.2	9.4	14.8			9.0	14.0	20'10"
	-4.5m t			6.8	8.3*					6.2	7.5*	4.8
	-15ft lb			14.8	17.3*					14.2	16.6*	15'5"

Stick 2.90 m / 9'6"

Under-carriage		3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft				m ft in
												
LC	7.5m t									5.2	5.6*	
	25ft lb									11.2	11.3*	
	6.0m t									5.2	5.6*	
	20ft lb									11.2	12.2*	
	4.5m t			7.1*	7.1*	5.0	6.2*	3.5	5.3	3.1	4.4*	8.1
	15ft lb			15.4*	15.4*	10.8	13.5*	7.5	11.3	6.9	9.8*	26'4"
	3.0m t			7.2	9.3*	4.7	7.2*	3.4	5.1	2.8	4.3	8.4
	10ft lb			15.5	20.0*	10.2	15.6	7.3	11.0	6.2	9.5	27'6"
	1.5m t			6.6	11.0	4.4	7.0	3.2	5.0	2.7	4.2	8.5
	5ft lb			14.3	23.6	9.6	15.0	7.0	10.7	6.0	9.2	27'8"
	0m t			6.4	10.6	4.3	6.7	3.1	4.9	2.8	4.3	8.2
	0ft lb			13.1*	13.1*	9.2	14.5	6.8	10.5	6.1	9.4	27'
LC	-1.5m t	10.5*	10.5*	6.3	10.6	4.2	6.7	3.1	4.8	3.0	4.6	7.7
	-5ft lb	23.9*	23.9*	13.5	22.6	9.0	14.3	6.7	10.4	6.6	10.3	25'4"
	-3.0m t	12.4	16.3*	6.4	10.6	4.2	6.7			3.6	5.6	6.8
	-10ft lb	26.6	35.4*	13.7	22.9	9.2	14.5			8.0	12.4	22'4"
	-4.5m t			6.6	9.3*					5.1	7.4*	5.4
	-15ft lb			14.3	19.7*					11.6	16.2*	17'6"

Stick 3.50 m / 11'6"

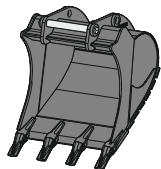
Under-carriage		3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft				m ft in
												
LC	7.5m t									3.7*	3.7*	6.9
	25ft lb									8.2*	8.2*	22'4"
	6.0m t							3.6	4.6*	3.3	3.5*	7.9
	20ft lb							7.8	9.3*	7.3	7.8*	25'10"
	4.5m t					5.1	5.5*	3.5	5.3*	2.8	3.5*	8.5
	15ft lb					10.9	12.1*	7.6	11.4	6.2	7.7*	27'11"
	3.0m t	12.8*	12.8*	7.4	8.3*	4.8	6.6*	3.4	5.1	2.6	3.6*	8.9
	10ft lb	27.3*	27.3*	15.9	17.8*	10.3	14.3*	7.3	11.0	5.7	8.0*	29'1"
	1.5m t	6.2*	6.2*	6.7	10.4*	4.5	7.0	3.2	5.0	2.5	3.8	8.9
	5ft lb	14.8*	14.8*	14.5	22.5*	9.6	15.0	6.9	10.7	5.4	8.4	29'4"
	0m t	7.2*	7.2*	6.3	10.6	4.2	6.7	3.1	4.8	2.5	3.9	8.7
	0ft lb	16.4*	16.4*	13.6	22.8	9.1	14.4	6.7	10.4	5.5	8.5	28'7"
LC	-1.5m t	10.4*	10.4*	6.2	10.4	4.1	6.6	3.0	4.7	2.7	4.2	8.2
	-5ft lb	23.5*	23.5*	13.3	22.4	8.8	14.1	6.5	10.2	5.9	9.2	27'
	-3.0m t	12.1	15.0*	6.2	10.5	4.1	6.6			3.1	4.9	7.4
	-10ft lb	25.9	34.1*	13.3	22.4	8.8	14.1			6.9	10.8	24'2"
	-4.5m t			6.4	10.3*	4.2	6.7			4.1	6.6	6.1
	-15ft lb			13.7	22.1*					9.3	14.8	19'10"

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

The load values are quoted in tons (t) / lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 300 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 320 kg / 710 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

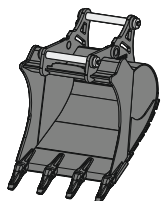
Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

Attachments



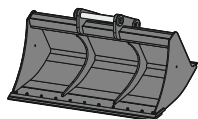
Backhoe bucket

Mounting	direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink									
TL 04-01										
Cutting width	mm / ft in	650 / 2'2"	850 / 2'9"	1,050 / 3'5"	1,250 / 4'1"	1,400 / 4'7"				
Capacity	m³ / yd³	0.55 / 0.72	0.60 / 0.78	0.80 / 1.05	1.00 / 1.31	1.15 / 1.50				
Weight ¹⁾	kg / lb	520 / 1,146	560 / 1,235	640 / 1,411	740 / 1,631	795 / 1,753				
TL 04-02										
Cutting width	mm / ft in	650 / 2'2"	850 / 2'9"	1,050 / 3'5"	1,250 / 4'1"	1,400 / 4'7"	1,500 / 4'11"	1,600 / 5'3"	1,700 / 5'7"	1,800 / 5'11"
Capacity	m³ / yd³	0.55 / 0.72	0.75 / 0.98	0.95 / 1.24	1.15 / 1.50	1.35 / 1.77	1.45 / 1.90	1.55 / 2.03	1.85 / 2.42	2.00 / 2.62
Weight ¹⁾	kg / lb	545 / 1,202	630 / 1,389	720 / 1,587	815 / 1,797	875 / 1,929	890 / 1,962	945 / 2,083	1,090 / 2,403	1,133 / 2,498



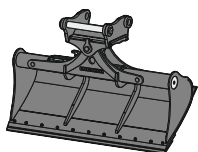
2in1 bucket

Mounting	SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink									
HTL 04-01										
Cutting width	mm / ft in	650 / 2'2"	850 / 2'9"	1,050 / 3'5"	1,250 / 4'1"	1,400 / 4'7"				
Capacity	m³ / yd³	0.55 / 0.72	0.60 / 0.78	0.80 / 1.05	1.00 / 1.31	1.15 / 1.50				
Weight ¹⁾	kg / lb	604 / 1,332	627 / 1,382	707 / 1,559	807 / 1,779	879 / 1,938				
HTL 04-02										
Cutting width	mm / ft in	650 / 2'2"	850 / 2'9"	1,050 / 3'5"	1,250 / 4'1"	1,400 / 4'7"	1,500 / 4'11"	1,600 / 5'3"	1,700 / 5'7"	1,800 / 5'11"
Capacity	m³ / yd³	0.55 / 0.72	0.75 / 0.98	0.95 / 1.24	1.15 / 1.50	1.35 / 1.77	1.45 / 1.90	1.55 / 2.03	1.85 / 2.42	2.00 / 2.62
Weight ¹⁾	kg / lb	612 / 1,349	697 / 1,537	787 / 1,735	882 / 1,944	942 / 2,077	978 / 2,156	1,016 / 2,240	1,179 / 2,599	1,223 / 2,696



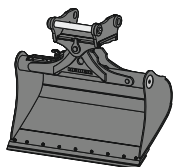
Ditch cleaning bucket GRL rigid 04

Mounting	direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink									
Cutting width	mm / ft in	1,500 / 4'11"	2,000 / 6'7"			2,000 / 6'7"		2,400 / 7'10"		
Capacity	m ³ / yd ³	0.50 / 0.65	0.70 / 0.92			1.20 / 1.57		0.85 / 1.11		
Weight ¹⁾	kg / lb	425 / 937	522 / 1,151			637 / 1,404		605 / 1,334		



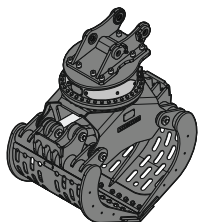
Ditch cleaning bucket with hydraulic cylinder GRL 90

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



Tilt bucket with hydraulic cylinder SL 90

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



Sorting grab SG 30B

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

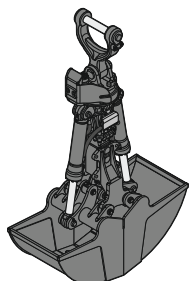
¹⁾ based on an attachment in a standard design with SWA 48 Solidlink quick coupler mounting

²⁾ without quick coupler mounting

³⁾ with standard bolt-on cutting edge

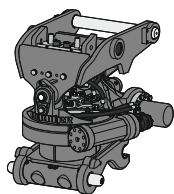
⁴⁾ with Liebherr teeth Z 40 C

Attachments



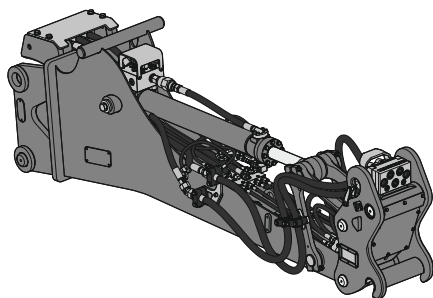
Clamshell grab

Mounting	direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink						
GMZ 24 Clamshell buckets							
Shell width	mm / ft in	320 / 1'1"	400 / 1'4"	500 / 1'8"	600 / 2'	800 / 2'7"	1,000 / 3'3"
Capacity ¹⁾	m³ / yd³	0.16 / 0.21	0.22 / 0.29	0.28 / 0.37	0.34 / 0.44	0.46 / 0.60	0.60 / 0.78
Opening width	mm / ft	1,515 / 5'	1,515 / 5'	1,515 / 5'	1,515 / 5'	1,515 / 5'	1,515 / 5'
Weight ²⁾	kg / lb	720 / 1,587	755 / 1,664	780 / 1,720	815 / 1,797	890 / 1,962	965 / 2,127
GMZ 30 Clamshell buckets							
Shell width	mm / ft in	600 / 2'	800 / 2'7"	1,000 / 3'3"	1,200 / 3'11"		
Capacity ¹⁾	m³ / yd³	0.38 / 0.50	0.52 / 0.68	0.65 / 0.85	0.80 / 1.05		
Opening width	mm / ft in	1,644 / 5'5"	1,644 / 5'5"	1,644 / 5'5"	1,644 / 5'5"		
Weight ²⁾	kg / lb	950 / 2,094	1,030 / 2,271	1,110 / 2,447	1,190 / 2,624		



Tiltrotator TR 25

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



Stick extension

Mounting machine side	SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink, SWA 48 Solidlink-10		
LS 12			
Mounting attachment side	direct mounting, SWA 33 mechanical, SWA 33 mechanical Solidlink ⁵⁾ , SWA 33 hydraulic ⁷⁾ , SWA 33 Solidlink ⁶⁾ 7) 8)		
Length	m / ft in	2.25 / 7'5"	2.70 / 8'10"
Weight ⁴⁾	kg / lb	650 / 1,433	700 / 1,543
LS 18			
Mounting attachment side	direct mounting, SWA 33 mechanical, SWA 33 mechanical Solidlink ⁵⁾ , SWA 33 hydraulic ⁷⁾ , SWA 33 Solidlink ⁶⁾ 7) 8), SWA 48 mechanical, SWA 48 mechanical Solidlink ⁵⁾ , SWA 48 hydraulic ⁷⁾ , SWA 48 Solidlink ⁶⁾ 7) 8)		
Length	m / ft in	2.65 / 8'8"	3.05 / 10'
Weight ⁴⁾	kg / lb	1.130 / 2,491	1.190 / 2,624

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

²⁾ without suspension

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

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

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

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

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

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

Serial equipment



Undercarriage

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



Uppercarriage

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



Hydraulic system

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



Diesel engine

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



Cab

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



Equipment

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

Equipment standard / option

Undercarriage

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

Uppercarriage

Batteries high capacity	+
Batteries standard capacity	●
Boxing ring	+
Catwalk tiltable front left	+
Centralized lubrication system (automatic)	●
Centralized lubrication system (manual)	+
Counterweight standard 4.0t / 8,820 lb	●
Electric socket on uppercarriage (24 V)	+
Extended tool set including tool box	+
External starting aid (24 V)	+
Front right rearview mirror	+ ¹⁾
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 left, LED+, 1 piece	+ 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⁾
Lockable fuel tank cap	●
Lockable fuel tank cap with padlock	+
Reflective warning stickers	+
Rotating beacons on uppercarriage, rear, LED, 2 pieces	+
Skyview 360°	+
Special painting	+
Tank refilling pump fuel	+
Tool set including storage case	●
Uppercarriage bottom and side protection	+
Uppercarriage bottom closure sheets	●

Hydraulic system

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

Diesel engine

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



Cab

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



Equipment

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



Assistance system

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

● = Standard, + = Option

¹⁾ equipment not individually available, but only as predefined packages

Non-exhaustive list, please contact us for further information.

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

The Liebherr Group



Global and independent: more than 75 years of success

Liebherr was founded in 1949. With the development of the world's first mobile tower crane, Hans Liebherr laid the foundations of a successful family-run company which today comprises more than 150 companies on all continents with over 55,000 employees. The holding company of the Group is Liebherr-International AG in Bulle (Switzerland), whose shareholders are exclusively members of the Liebherr family.

Technology leadership and pioneering spirit

Liebherr regards itself as a pioneer. This spirit has enabled the company to make a decisive contribution to the technological history of many industries. Today, employees around the world still share the courage of the company founder to take new paths. They are all united by a passion for technology and fascinating products and the determination to perform outstanding work for their customers.

Widely diversified product program

Not only is Liebherr one of the biggest construction machine manufacturers in the world, it also provides high-quality, user-oriented products and services in a wide range of other areas. The product range includes the segments earthmoving, material handling, deep foundation, mining, mobile and crawler cranes, tower cranes, concrete technology, maritime cranes, aerospace and transportation systems, gear technology and automation systems, refrigerators and freezers, components and hotels.

Customized solutions and maximum customer value

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

www.liebherr.us

WARNING

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

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

For more information go to www.P65warnings.ca.gov/diesel.

WARNING

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

For more information go to www.P65warnings.ca.gov.

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