

Machine for Industrial Applications

LH 24 M

Litronic®

Operating Weight: 23,700 – 24,200 kg
Engine Output: 105 kW / 143 HP



LIEBHERR

Technical Data



Engine

Rating per ISO 9249	105 kW (143 HP) at 1,800 RPM
Model	Liebherr D834 according to stage IIIB
Type	4 cylinder in-line
Bore/Stroke	108/125 mm
Displacement	4.6 l
Engine operation	4-stroke diesel Common-Rail turbo-charged and after-cooled reduced emissions
Harmful emissions values	in accordance with 97/68/EG stage IIIB
Emission control	oxidation catalyst
Option	Liebherr particle filter
Cooling	water-cooled with integrated motor oil cooler
Air cleaner	dry-type air cleaner with pre-cleaner, primary and safety elements
Fuel tank	410 l
Engine idling	sensor controlled
Electrical system	
Voltage	24 V
Batteries	2 x 135 Ah/12 V
Alternator	three phase current 28 V/110 A



Hydraulic System

Hydraulic pump for attachment and travel drive	Liebherr, variable displacement, swashplate pump
Max. flow	390 l/min.
Max. pressure	350 bar
Hydraulic pump regulation and control	Liebherr-Synchron-Comfort-system (LSC) with electronic engine speed sensing regulation, pressure and flow compensation, load sensing and torque controlled swing drive priority
Hydraulic tank	150 l
Hydraulic system	320 l
Hydraulic oil filter	1 main return filter with integrated partial micro filtration (5 µm)
Hydraulic oil cooler	compact cooling system consisting cooling unit for water, hydraulic oil and charge air with stepless thermostatically controlled 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 material handling and heavy-duty jobs
S (Sensitive)	for precision work and lifting through very sensitive movements
E (ECO)	for especially economical and environmentally friendly operation
P (Power)	for maximum digging power and heavy duty jobs
P+ (Power-Plus)	for highest performance and for very heavy duty applications, suitable for continuous operation
Engine speed and performance setting	stepless alignment of engine output and hydraulic power via engine speed
Tool Control (Option)	ten preadjustable pump flows and pressures for add on tools



Hydraulic Controls

Power distribution	via control valve with integrated safety valves, simultaneous and independent operation of travel drive, swing drive and work
Servo circuit	
Attachment and swing	with hydraulic pilot control and proportional joystick levers
Travel	electroproportional via foot pedal
Additional functions	via switch or electroproportional foot pedals
Option	proportional control, proportionally acting transmitters on the joysticks for additional hydraulic functions



Swing Drive

Drive	Liebherr swashplate motor with torque control and integrated brake valve
Transmission	Liebherr planetary reduction gear
Swing ring	Liebherr, sealed single race ball bearing swing ring, internal teeth
Swing speed	0 – 8 RPM stepless
Swing torque	50 kNm
Brake	holding brake (spring applied – pressure released)
Option	pedal controlled positioning swing brake



Uppercarriage

Type	slewing platform made from high-strength steel plate, designed for the toughest requirements
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Operator's Cab

Cab	safety cab structure with individual windscreens or featuring a slide-in subpart under the ceiling, work headlights integrated in the ceiling, a door with a side window (can be opened on both sides), large stowing and depositing possibilities, shock-absorbing suspension, sounddamping insulating, tinted laminated safety glass, separate shades for the sunroof window and windscreen
Operator's seat Standard	air cushioned operator's seat with headrest, lap belt, seat heater, manual weight adjustment, adjustable seat cushion inclination and length and mechanical lumbar vertebrae support
Operator's seat Comfort (Option)	in addition to operator's seat standard: lockable horizontal suspension, automatic weight adjustment, adjustable suspension stiffness, pneumatic lumbar vertebrae support and passive seat climatization with active coal
Operator's seat Premium (Option)	in addition to operator's seat comfort: active electronic weight adjustment (automatic readjustment), pneumatic low frequency suspension and active seat climatization with active coal and ventilator
Control system	joysticks with arm consoles and swivel seat
Operation and displays	large high-resolution operating unit, selfexplanatory, colour display with touchscreen, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine and tool 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 out-side temperatures, sensors for solar radiation, inside and outside temperatures

Noise emission	
ISO 6396	L _{PA} (inside cab) = 71 dB(A)
2000/14/EC	L _{WA} (surround noise) = 100 dB(A)



Undercarriage

Type	torsion-resistant box design made from high-strength steel plate, designed for the toughest requirements
Drive	Liebherr variable flow swashplate motor with automatic brake valve
Transmission	oversized two speed power shift transmission with additional creeper speed
Travel speed	0 – 3.5 km/h stepless (creeper speed + transmission stage 1) 0 – 7.0 km/h stepless (transmission stage 1) 0 – 13.0 km/h stepless (creeper speed + transmission stage 2) 0 – 20.0 km/h stepless (transmission stage 2)
Driving operation	automotive driving using accelerator pedal, cruise control function: storage of variable accelerator pedal positions
Axles	40 t drive axles; manual or automatic hydraulically controlled front axle oscillation lock
Service brake	two circuit travel brake system with accumulator; maintenance-free, wet and backlash-free disc brake
Holding brake	wet, maintenance-free multi disc brakes
Stabilization	4 point outriggers
Option	blade, at the front, for 4 point outriggers



Attachment

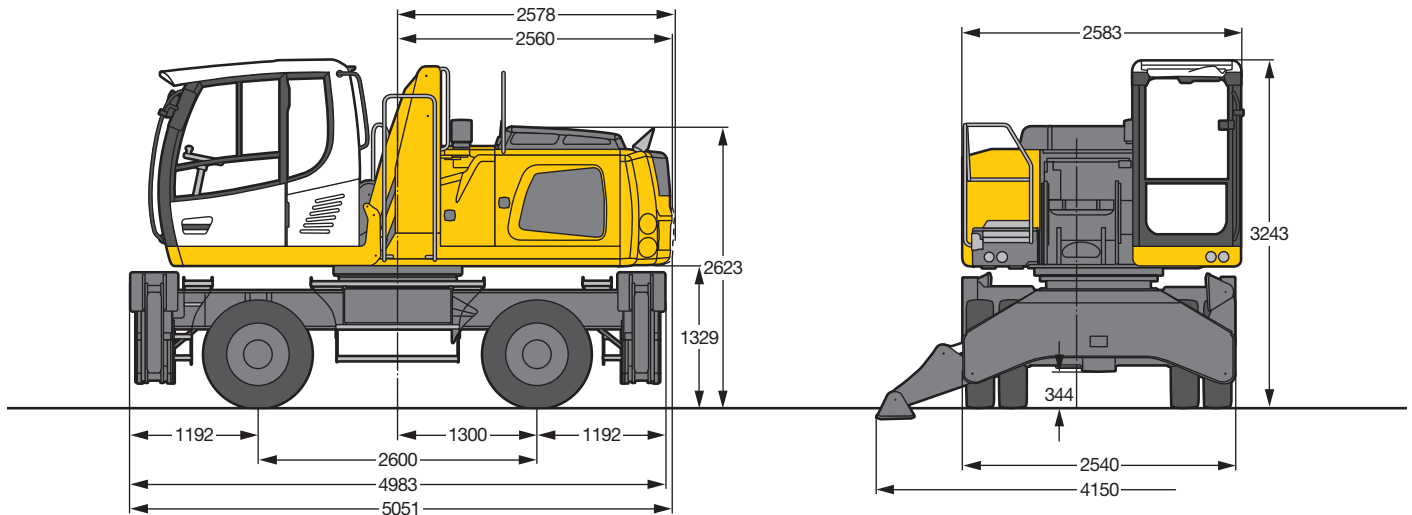
Type	high-strength steel plates at highlystressed points for the toughest requirements. Complex and stable mountings of attachment and cylinders.
Hydraulic cylinders	Liebherr cylinders with special seal system.
Bearings	Shock absorption sealed, low maintenance



Complete Machine

Lubrication	central lubrication system for uppercarriage and attachment, automatically
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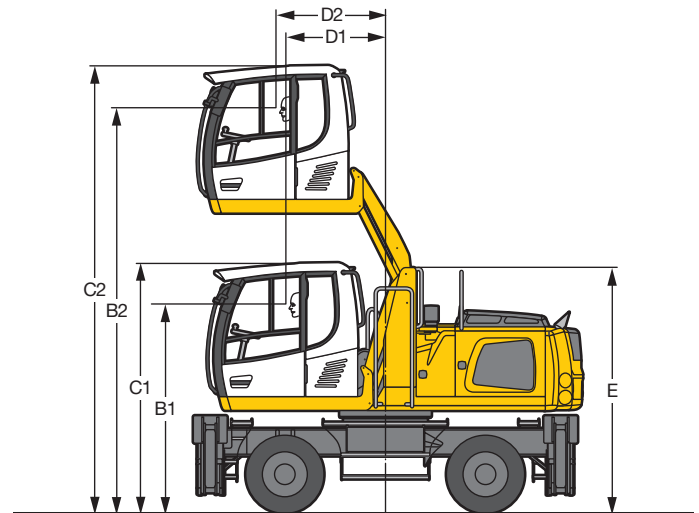
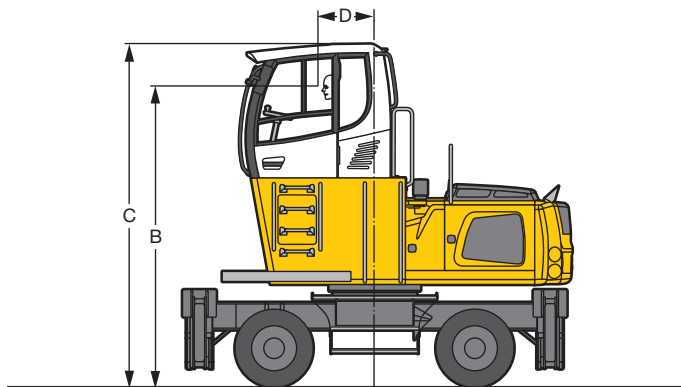
Dimensions



Choice of Cab Elevation

Cab Elevation LFC (Rigid Elevation)

Cab Elevation LHC (Hydraulic Elevation)



Increase Type		LFC 80	LFC 120	LFC 150
Height	mm	800	1,200	1,500
B	mm	3,501	3,901	4,201
C	mm	4,043	4,443	4,743
D	mm	731	731	731

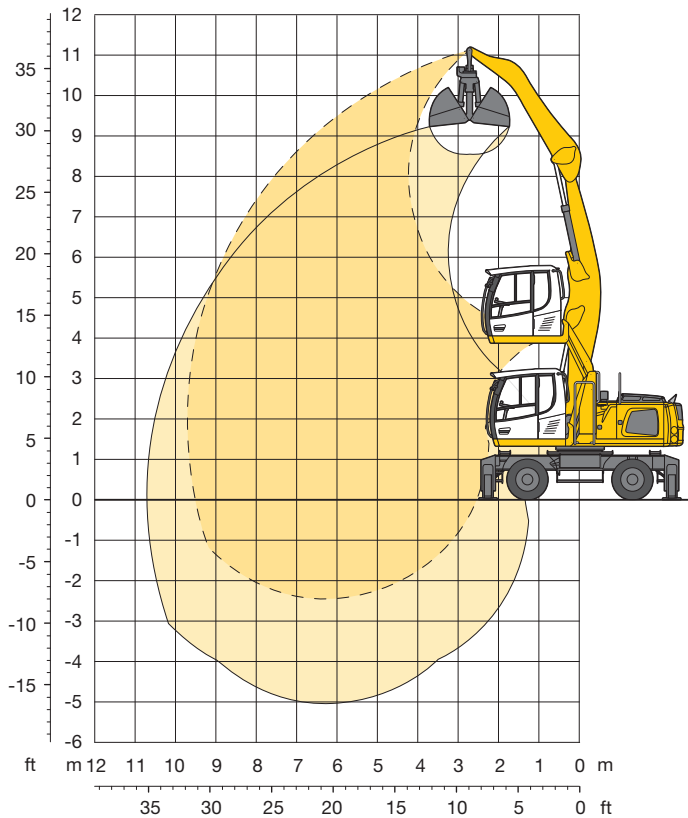
Increase Type	LHC 255
B1	2,700 mm
B2	5,247 mm
C1	3,243 mm
C2	5,790 mm
D1	1,286 mm
D2	1,412 mm
E	3,184 mm

A rigid cab elevation has a fixed eye level height. For a lower transport height, the shell of the cab can be removed and replaced by a transport device. The dimension C is in this machine design for all rigid cab elevations 3,547 mm.

The hydraulically adjustable cab allows the driver, that he can choose his field of view freely and at any time within the stroke.

Tires 10.00-20

Attachment AF10



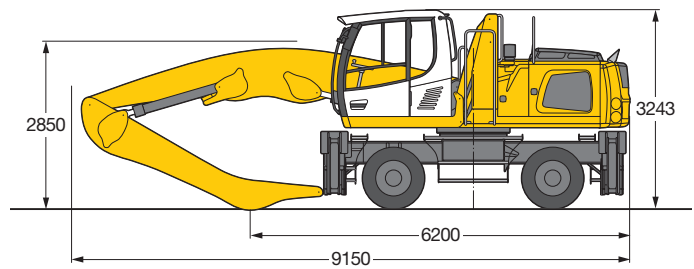
Operating Weight

The operating weight includes basic machine with 4 point outriggers, hydr. cab elevation, 8 solid tires plus intermediate rings, industrial-type angled mono boom 6.00 m and industrial-type flat angled stick 4.00 m.

with clamshell model GM 10B/1.00 m³
shells for loose material

23,700 kg

Dimensions



Industrial Stick 4.00 m

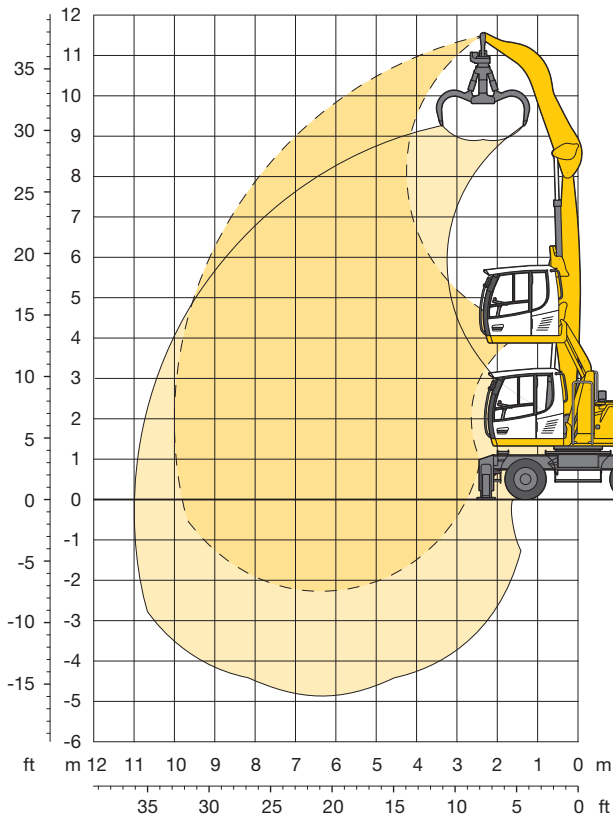
m	Undercarriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		Max. reach		m
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	
12.0	Stabilizers raised 4 pt. outriggers down															
10.5	Stabilizers raised 4 pt. outriggers down													5.7*	5.7*	4.2
9.0	Stabilizers raised 4 pt. outriggers down			6.0	7.5*	3.7	5.1							3.2	4.5	6.5
7.5	Stabilizers raised 4 pt. outriggers down			7.5*	7.5*	5.7*	5.7*							4.7*	4.7*	
6.0	Stabilizers raised 4 pt. outriggers down			6.0	8.0*	3.8	5.2	2.5	3.5					2.3	3.3	7.8
4.5	Stabilizers raised 4 pt. outriggers down			8.0*	8.0*	7.0*	7.0*	5.3*	5.3*					4.4*	4.4*	
3.0	Stabilizers raised 4 pt. outriggers down			5.8	8.1	3.7	5.1	2.5	3.5					1.9	2.7	8.7
1.5	Stabilizers raised 4 pt. outriggers down			8.5*	8.5*	7.2*	7.2*	5.8	6.3*					4.3*	4.3*	
0	Stabilizers raised 4 pt. outriggers down	10.2	13.3*	5.4	7.6	3.4	4.8	2.4	3.4	1.7	2.5			1.6	2.4	9.3
-1.5	Stabilizers raised 4 pt. outriggers down	13.3*	13.3*	9.6*	9.6*	7.7*	7.7*	5.7	6.5*	4.2	5.4*			4.0	4.4*	
-3.0	Stabilizers raised 4 pt. outriggers down	8.4	13.3	4.7	6.9	3.1	4.5	2.2	3.2	1.7	2.4			1.5	2.2	9.6
	Stabilizers raised 4 pt. outriggers down	17.2*	17.2*	11.0*	11.0*	7.8	8.3*	5.5	6.7*	4.1	5.6*			3.8	4.6*	
	Stabilizers raised 4 pt. outriggers down	4.3*	4.3*	4.2	6.3	2.8	4.2	2.1	3.1	1.6	2.4			1.4	2.1	9.6
	Stabilizers raised 4 pt. outriggers down	4.3*	4.3*	11.8*	11.8*	7.4	8.6*	5.3	6.8*	4.0	5.5*			3.7	4.9*	
	Stabilizers raised 4 pt. outriggers down	4.7*	4.7*	3.8	5.9	2.6	4.0	2.0	2.9	1.5	2.3			1.4	2.2	9.4
	Stabilizers raised 4 pt. outriggers down	4.7*	4.7*	11.4	11.4*	7.2	8.5*	5.2	6.6*	4.0	5.1*			3.7	4.7*	
	Stabilizers raised 4 pt. outriggers down			3.7	5.8	2.5	3.9	1.9	2.9					1.5	2.3	8.8
	Stabilizers raised 4 pt. outriggers down			9.9*	9.9*	7.0	7.6*	5.1	5.8*					4.1	4.4*	

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

The lift capacities on the stick end without attachment are stated in metric tons (t) and are valid on a firm, level supporting surface with blocked oscillating axle. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (+/- 15°) are specified over the steering axle with the stabilizers raised and over the rigid axle with the stabilizers down. Indicated loads comply with the ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity. The lift capacity of the unit is limited by its stability, the lifting capability of the hydraulic elements, or the maximum permissible lifting capacity of the load hook.

In accordance with the harmonised European Standard EN 474-5, hydraulic excavators used for lifting operations must be equipped with pipe fracture safety valves, an overload warning device, a load hook and a lift capacity chart.

Attachment GA10

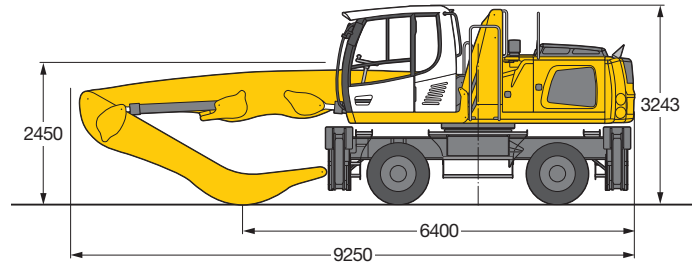


Operating Weight

The operating weight includes basic machine with 4 point outriggers, hydr. cab elevation, 8 solid tires plus intermediate rings, industrial-type straight mono boom 6.10 m and industrial-type angled stick 4.00 m.

with grapple model GM 65/0.60 m³ semi-closed tines | 24,000 kg

Dimensions



Industrial Stick 4.00 m

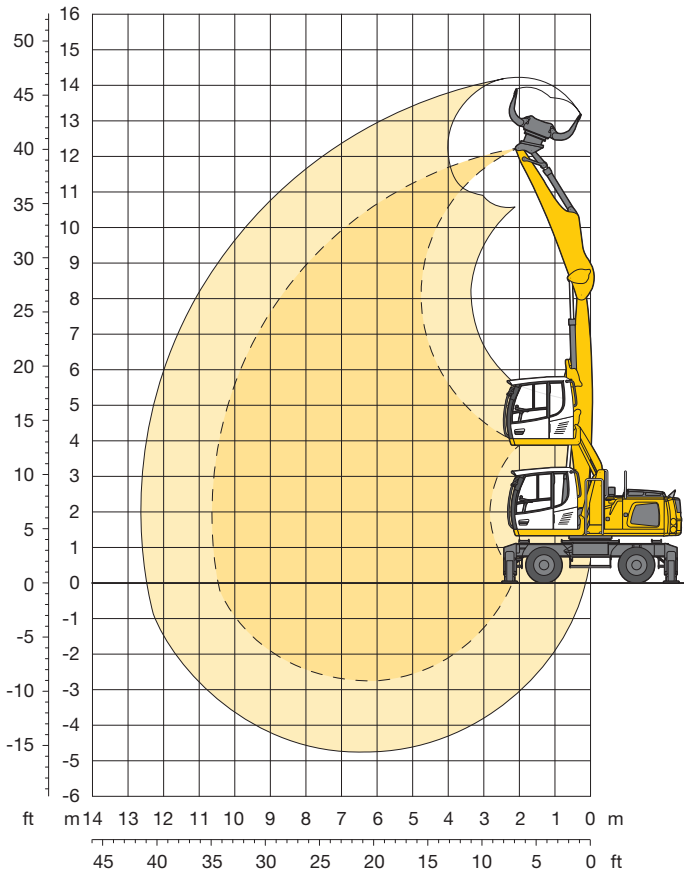
m	Undercarriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m	
12.0	Stabilizers raised 4 pt. outriggers down														
10.5	Stabilizers raised 4 pt. outriggers down			5.6 6.9*	6.9* 6.9*								4.7 5.9*	5.9* 5.9*	5.0
9.0	Stabilizers raised 4 pt. outriggers down			5.9 8.3*	8.2 8.3*	3.6 7.0*	5.1 7.0*						2.7 4.9*	3.8 4.9*	7.0
7.5	Stabilizers raised 4 pt. outriggers down			5.9 9.0*	8.2 9.0*	3.7 7.6*	5.1 7.6*	2.5 5.8	3.5 6.5*				2.0 4.5*	2.9 4.5*	8.3
6.0	Stabilizers raised 4 pt. outriggers down			5.6 9.6*	7.9 9.6*	3.6 7.8*	5.0 7.8*	2.4 5.7	3.4 6.6*	1.7 4.2	2.5 4.9*		1.7 4.1	2.4 4.3*	9.1
4.5	Stabilizers raised 4 pt. outriggers down	9.9 12.4*	12.4* 12.4*	5.2 10.5*	7.4 10.5*	3.3 8.0	4.7 8.2*	2.3 5.6	3.3 6.8*	1.7 4.2	2.5 5.6*		1.5 3.7	2.2 4.3*	9.7
3.0	Stabilizers raised 4 pt. outriggers down	8.1 9.4*	9.4* 9.4*	4.6 11.6*	6.8 11.6*	3.0 7.6	4.4 8.6*	2.2 5.4	3.2 6.9*	1.6 4.1	2.4 5.6*		1.4 3.5	2.0 4.4*	9.9
1.5	Stabilizers raised 4 pt. outriggers down	2.4* 2.4*	2.4* 2.4*	4.0 11.7	6.2 11.8*	2.8 7.3	4.1 8.7*	2.0 5.2	3.0 6.7*	1.6 4.0	2.3 5.3*		1.3 3.5	2.0 4.2*	10.0
0	Stabilizers raised 4 pt. outriggers down	3.3* 3.3*	3.3* 3.3*	3.8 10.7*	5.8 10.7*	2.6 7.1	3.9 8.1*	1.9 5.1	2.9 6.2*	1.5 4.0	2.3 4.7*		1.3 3.5	2.0 3.7*	9.8
-1.5	Stabilizers raised 4 pt. outriggers down			3.7 8.6*	5.8 8.6*	2.5 6.8*	3.8 6.8*	1.9 5.1	2.9 5.2*				1.6 3.9*	2.4 3.9*	8.7
-3.0	Stabilizers raised 4 pt. outriggers down														

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

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In accordance with the harmonised European Standard EN 474-5, hydraulic excavators used for lifting operations must be equipped with pipe fracture safety valves, an overload warning device, a load hook and a lift capacity chart.

Attachment GK10

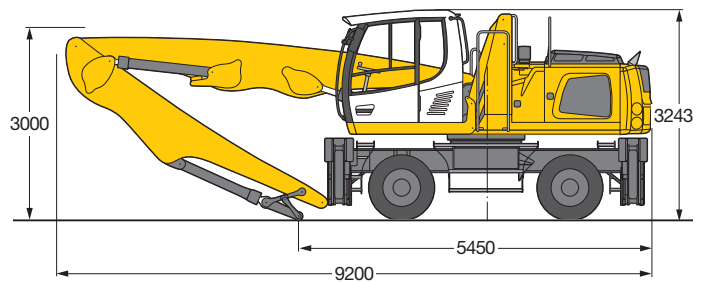


Operating Weight

The operating weight includes basic machine with 4 point outriggers, hydr. cab elevation, 8 solid tires plus intermediate rings, industrial-type straight mono boom 6.10 m and industrial-type stick with tipping kinematics 4.50 m.

with sorting grab SG 25/0.55 m³ tines | 24,100 kg

Dimensions



Industrial Stick 4.50 m

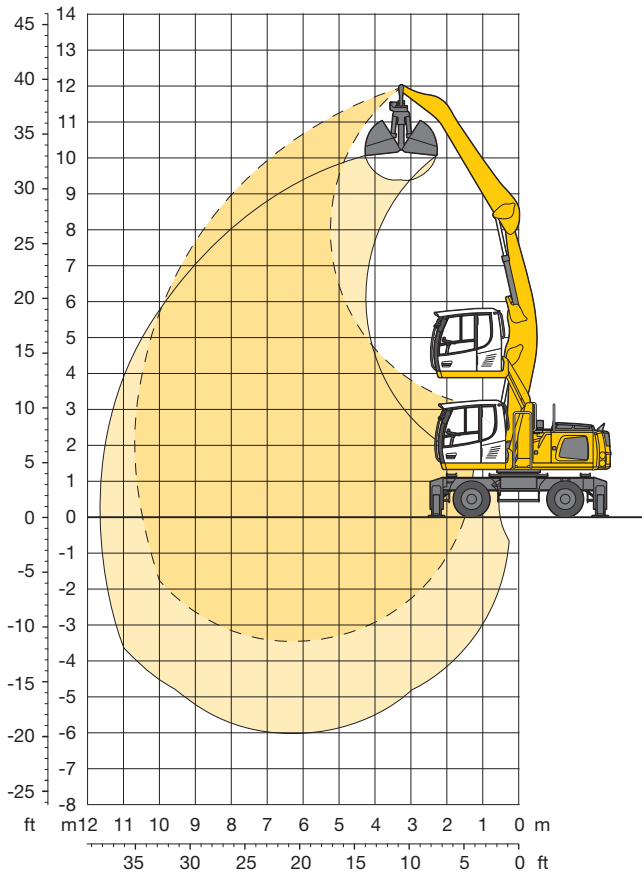
m	Undercarriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		Max. reach		m
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	
12.0	Stabilizers raised 4 pt. outriggers down	8.1*	8.1*											7.9*	7.9*	3.1
10.5	Stabilizers raised 4 pt. outriggers down			5.6	7.4*	3.3	4.7							3.0	4.3	6.2
9.0	Stabilizers raised 4 pt. outriggers down			7.4*	7.4*	5.5*	5.5*	2.2	3.2					1.9	2.8	7.9
7.5	Stabilizers raised 4 pt. outriggers down					3.5	4.9	7.0*	7.0*	5.3*	5.3*			4.1*	4.1*	
6.0	Stabilizers raised 4 pt. outriggers down					3.5	4.9	2.3	3.3	1.4	2.2			1.4	2.2	9.1
4.5	Stabilizers raised 4 pt. outriggers down	6.3*	6.3*	5.6	7.7*	3.4	4.8	2.2	3.2	1.5	2.3			3.7*	3.7*	9.9
3.0	Stabilizers raised 4 pt. outriggers down	8.3	13.2	7.7*	7.7*	7.2*	7.2*	5.5	6.1*	4.0	5.2*	0.9	1.6	1.1	1.8	10.3
1.5	Stabilizers raised 4 pt. outriggers down	16.8*	16.8*	7.7*	7.7*	7.2*	7.2*	5.5	6.1*	4.0	5.2*	2.9	4.0*	3.3	3.5*	10.6
0	Stabilizers raised 4 pt. outriggers down	1.7*	1.7*	10.8*	10.8*	7.4	8.1*	5.1	6.4*	3.8	5.2*	2.9	4.0*	2.9	3.5*	10.6
-1.5	Stabilizers raised 4 pt. outriggers down	1.7*	1.7*	11.4*	11.4*	7.0	8.3*	4.9	6.4*	3.7	5.0*	2.9	3.6*	2.8	3.4*	10.6
-3.0	Stabilizers raised 4 pt. outriggers down	2.2*	2.2*	10.3*	10.3*	6.7	7.9*	4.8	6.0*	3.6	4.6*			0.9	1.5	10.5
	Stabilizers raised 4 pt. outriggers down	2.2*	2.2*	10.3*	10.3*	6.7	7.9*	4.8	6.0*	3.6	4.6*			2.9*	2.9*	10.5
	Stabilizers raised 4 pt. outriggers down			3.2	5.3	2.1	3.4	1.5	2.5	1.1	1.9			1.0	1.8	9.5
	Stabilizers raised 4 pt. outriggers down			8.9*	8.9*	6.6	6.8*	4.7	5.2*	3.6	3.7*			3.1*	3.1*	9.5

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

The lift capacities on the stick end without attachment are stated in metric tons (t) and are valid on a firm, level supporting surface with blocked oscillating axle. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (+/- 15°) are specified over the steering axle with the stabilizers raised and over the rigid axle with the stabilizers down. Indicated loads comply with the ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity. The lift capacity of the unit is limited by its stability, the lifting capability of the hydraulic elements, or the maximum permissible lifting capacity of the load hook.

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Attachment AF11

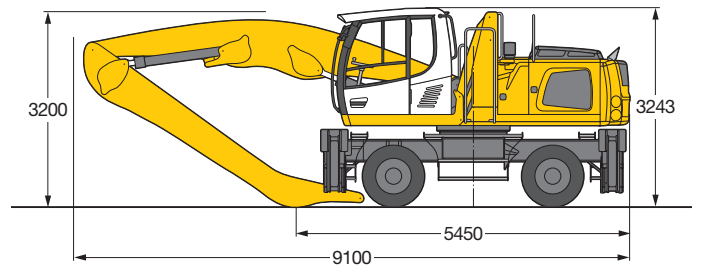


Operating Weight

The operating weight includes basic machine with 4 point outriggers, hydr. cab elevation, 8 solid tires plus intermediate rings, industrial-type angled mono boom 6.00 m and industrial-type flat angled stick 5.00 m.

with clamshell model GM 10B/1.00 m ³	
shells for loose material	23,800 kg

Dimensions



Industrial Stick 5.00 m

m	Undercarriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		m		
12.0	Stabilizers raised 4 pt. outriggers down															
10.5	Stabilizers raised 4 pt. outriggers down					3.8 4.3*	4.3* 4.3*							3.7 4.1*	4.1* 4.1*	6.1
9.0	Stabilizers raised 4 pt. outriggers down					4.0 5.8*	5.4 5.8*	2.7 4.2*	3.7 4.2*					2.4 3.6*	3.4 3.6*	7.9
7.5	Stabilizers raised 4 pt. outriggers down					4.0 6.2*	5.4 6.2*	2.7 5.6*	3.7 5.6*	1.9 3.4*	2.7 3.4*			1.9 3.4*	2.7 3.4*	9.0
6.0	Stabilizers raised 4 pt. outriggers down					3.9 6.5*	5.3 6.5*	2.6 5.8*	3.7 5.8*	1.9 4.4	2.7 4.9*			1.6 3.3*	2.3 3.3*	9.8
4.5	Stabilizers raised 4 pt. outriggers down			5.8 8.3*	8.1 8.3*	3.6 7.0*	5.1 7.0*	2.5 5.8	3.5 6.1*	1.8 4.3	2.6 5.3*			1.4 3.4*	2.0 3.4*	10.3
3.0	Stabilizers raised 4 pt. outriggers down	9.7 14.3*	14.3* 14.3*	5.1 9.9*	7.4 9.9*	3.3 7.7*	4.7 7.7*	2.3 5.6	3.3 6.4*	1.7 4.2	2.5 5.5*	1.3 3.3	1.9 3.6*	1.3 3.3	1.9 3.5*	10.5
1.5	Stabilizers raised 4 pt. outriggers down	7.7 9.1*	9.1* 9.1*	4.4 11.3*	6.6 11.3*	3.0 7.6	4.3 8.3*	2.1 5.4	3.1 6.7*	1.6 4.1	2.4 5.5*	1.2 3.2	1.8 4.0*	1.2 3.2	1.8 3.7*	10.6
0	Stabilizers raised 4 pt. outriggers down	5.3* 5.3*	5.3* 5.3*	3.9 11.5	6.0 11.7*	2.7 7.2	4.0 8.5*	2.0 5.2	2.9 6.7*	1.5 4.0	2.3 5.4*			1.2 3.2	1.8 4.0*	10.4
-1.5	Stabilizers raised 4 pt. outriggers down	5.6* 5.6*	5.6* 5.6*	3.6 10.9*	5.7 10.9*	2.5 7.0	3.8 8.1*	1.8 5.0	2.8 6.3*	1.4 3.9	2.2 4.9*			1.2 3.4	1.9 3.9*	10.0
-3.0	Stabilizers raised 4 pt. outriggers down			3.6 9.2*	5.6 9.2*	2.4 6.9	3.8 7.0*	1.8 5.0	2.8 5.4*					1.6 4.3	2.4 4.6*	8.3

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

The lift capacities on the stick end without attachment are stated in metric tons (t) and are valid on a firm, level supporting surface with blocked oscillating axle. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (+/- 15°) are specified over the steering axle with the stabilizers raised and over the rigid axle with the stabilizers down. Indicated loads comply with the ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity. The lift capacity of the unit is limited by its stability, the lifting capability of the hydraulic elements, or the maximum permissible lifting capacity of the load hook.

In accordance with the harmonised European Standard EN 474-5, hydraulic excavators used for lifting operations must be equipped with pipe fracture safety valves, an overload warning device, a load hook and a lift capacity chart.

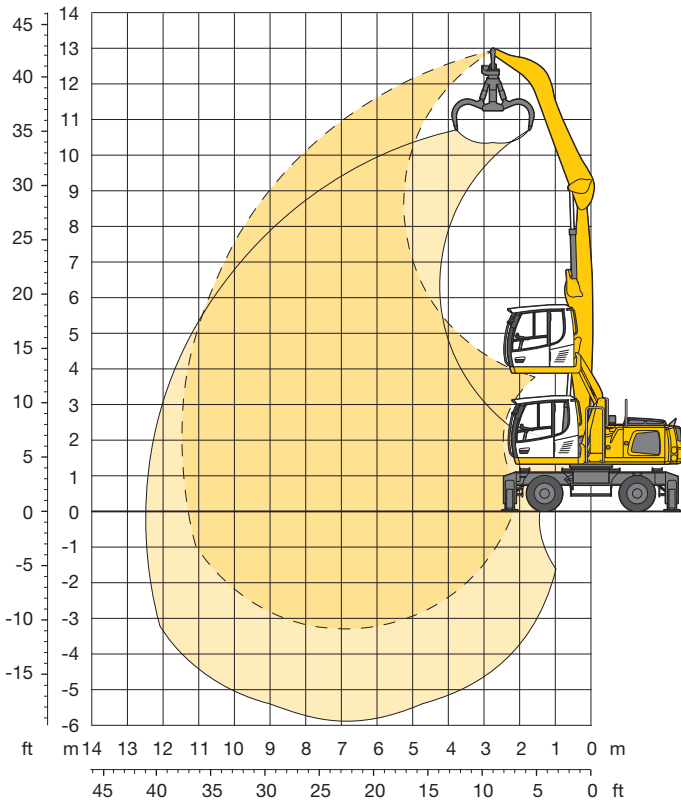
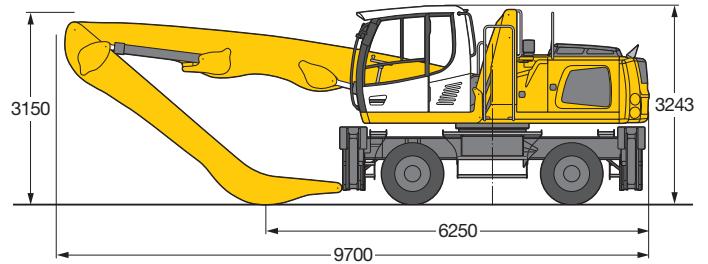
Attachment GA11

Operating Weight

The operating weight includes basic machine with 4 point outriggers, hydr. cab elevation, 8 solid tires plus intermediate rings, industrial-type straight mono boom 6.60 m and industrial-type angled stick 5.00 m.

with grapple model GM 65/0.60 m³ semi-closed tines | 24,200 kg

Dimensions



Industrial Stick 5.00 m

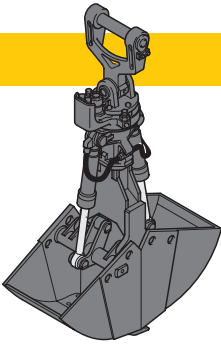
m	Undercarriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		Max. reach		m
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	
12.0	Stabilizers raised 4 pt. outriggers down			5.8 6.2*	6.2* 6.2*									4.3 5.0*	5.0* 5.0*	5.3
10.5	Stabilizers raised 4 pt. outriggers down					3.8 6.0*	5.2 6.0*	2.5 4.2*	3.5 4.2*					2.4 4.0*	3.4 4.0*	7.6
9.0	Stabilizers raised 4 pt. outriggers down					3.9 6.7*	5.3 6.7*	2.6 5.8*	3.6 5.8*	1.8 3.7*	2.6 3.7*			1.8 3.6*	2.5 3.6*	9.0
7.5	Stabilizers raised 4 pt. outriggers down					3.9 6.9*	5.3 6.9*	2.6 5.9	3.6 6.0*	1.8 4.3	2.6 5.3*			1.4 3.4*	2.1 3.4*	10.0
6.0	Stabilizers raised 4 pt. outriggers down					3.7 7.2*	5.1 7.2*	2.5 5.8	3.5 6.2*	1.8 4.3	2.6 5.4*	1.3 3.3	1.9 4.0*	1.2 3.2	1.8 3.4*	10.7
4.5	Stabilizers raised 4 pt. outriggers down			5.4 9.3*	7.7 9.3*	3.4 7.7*	4.8 7.7*	2.4 5.6	3.4 6.4*	1.7 4.2	2.5 5.4*	1.2 3.3	1.9 4.6*	1.1 2.9	1.7 3.4*	11.2
3.0	Stabilizers raised 4 pt. outriggers down	8.5 16.9*	13.4 16.9*	4.7 10.9*	6.9 10.9*	3.1 7.7	4.4 8.2*	2.2 5.4	3.1 6.6*	1.6 4.1	2.4 5.5*	1.2 3.2	1.8 4.5*	1.0 2.8	1.6 3.4*	11.4
1.5	Stabilizers raised 4 pt. outriggers down	2.5* 2.5*	2.5* 2.5*	4.0 11.6*	6.1 11.6*	2.7 7.2	4.0 8.5*	1.9 5.2	2.9 6.6*	1.5 3.9	2.2 5.4*	1.1 3.1	1.8 4.3*	1.0 2.7	1.5 3.5*	11.5
0	Stabilizers raised 4 pt. outriggers down	2.6* 2.6*	2.6* 2.6*	3.5 8.7*	5.6 8.7*	2.4 6.9	3.8 8.2*	1.8 5.0	2.8 6.4*	1.4 3.8	2.1 5.1*	1.1 3.1	1.7 3.9*	1.0 2.8	1.5 3.1*	11.3
-1.5	Stabilizers raised 4 pt. outriggers down			3.3 7.8*	5.4 7.8*	2.3 6.7	3.6 7.3*	1.7 4.9	2.7 5.7*	1.3 3.8	2.1 4.4*	1.1 3.1	1.7 3.1*	1.0 2.9*	1.7 2.9*	10.7
-3.0	Stabilizers raised 4 pt. outriggers down					2.2 5.8*	3.6 5.8*	1.7 4.6*	2.6 4.6*					1.4 3.8*	2.2 3.8*	8.5

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

The lift capacities on the stick end without attachment are stated in metric tons (t) and are valid on a firm, level supporting surface with blocked oscillating axle. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (+/- 15°) are specified over the steering axle with the stabilizers raised and over the rigid axle with the stabilizers down. Indicated loads comply with the ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity. The lift capacity of the unit is limited by its stability, the lifting capability of the hydraulic elements, or the maximum permissible lifting capacity of the load hook.

In accordance with the harmonised European Standard EN 474-5, hydraulic excavators used for lifting operations must be equipped with pipe fracture safety valves, an overload warning device, a load hook and a lift capacity chart.

Variety of Tools

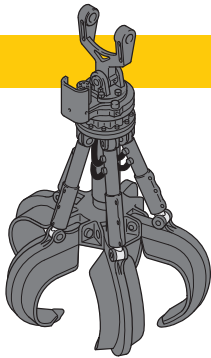


Shells for Loose Material

Shells for loose material with cutting edge (without teeth)

Clamshell Model GM 10B

Cutting width of shells	mm	1,000	1,500	1,800
Capacity	m ³	1.00	1.50	1.80
For loose material, specific weight up to	t/m ³	1.5	1.5	1.5
Weight	kg	1,040	1,180	1,425



Multiple Tine Grapples

open tines

semi-closed tines

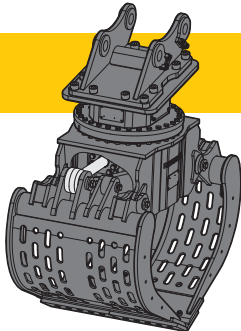
closed tines

Grapple Model GM 64 (4 tines)

Capacity	m ³	0.40	0.60	0.40	0.60	0.40	0.60
Weight	kg	845	1,130	1,055	1,330	1,060	1,520

Grapple Model GM 65 (5 tines)

Capacity	m ³	0.40	0.60	0.40	0.60	0.40	0.60
Weight	kg	1,150	1,230	1,285	1,415	1,325	1,520



Sorting Grapple

with ribbed shells

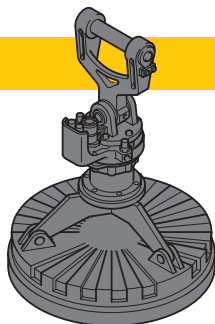
with perforated shells

with ribbed shells

with perforated shells

Grapple Model SG 25

Cutting width of shells	mm	800	800	1,000	1,000
Capacity	m ³	0.50	0.55	0.65	0.75
Max. closing force	t	6	6	6	6
Weight incl. adapter plate	kg	1,120	1,110	1,200	1,190



Magnet Devices/Lifting Magnets

Generator	kW	10	10
Electromagnets with Suspension			
Power	kW	5.5	8.8
Diameter of magnet	mm	1,150	1,250
Weight	kg	1,060	1,310

Equipment



Undercarriage

Support rocker, variants	+
Individual control outriggers	+
Shuttle axle lock, automatic	•
Dozer blade	+
Outrigger monitoring system	+
Tyres, variants	+
Protection for travel drive	+
Protection for piston rods, outriggers	+
Tool equipment, extended	+
Two lockable storage boxes	•



Uppercarriage

Refuelling system with filling pump	+
Railing on uppercarriage	+
Generator	+
Main battery switch for electrical system	•
Protection for headlights	+
Protection for rear lights	+



Hydraulics

Electronic pump regulation	•
Liebherr hydraulic oil from -20 °C to +40 °C	•
Liebherr hydraulic oil, biologically degradable	+
Magnetic rod in hydraulic tank	•
Bypass filter	+
Preheating hydraulic oil	+



Engine

Fuel anti-theft device	+
Liebherr particle filter	+
Reversible fan drive, fully automatic	+
Air pre-filter with dust discharge	+
Protective grid in front of cooler intake	•
Preheating fuel	+
Preheating coolant	+
Preheating engine oil	+



Operator's Cab

Cab lights rear, halogen	+
Cab lights rear, LED 1300 lumen	+
Cab lights front, halogen	•
Cab lights front, LED 1300 lumen	+
Operator's seat Standard	•
Operator's seat Comfort	+
Operator's seat Premium	+
Driving alarm (acoustic signal is emitted during travel, can be switched ON/OFF)	+
Fire extinguisher	+
Joystick steering	+
Cab elevation, hydraulic (LHC)	+
Cab elevation, rigid (LFC)	+

Automatic air conditioning	•
Electric cooler	+
LIDAT Plus (extended Liebherr data transfer system)*	•
Bullet proof glass	+
Positioning swing brake	+
Proportional control	+
Radio Comfort (control via display)	+
Preparation for radio installation	•
Back-up alarm (acoustic signal is emitted traveling backward, can not be switched off)	+
Warning beacon on cab	+
Windscreen wiper, roof	+
Top guard	+
Front guard	+
Sun visor	+
Auxiliary heating, adjustable (week time switch)	+
Flashing light (xenon)	+
Electronic immobilizer	+



Attachment

Boom lights, 2 pieces, halogen	•
Boom lights, 2 pieces, LED 1300 lumen	+
Stick lights, 2 pieces, halogen	•
Stick lights, 2 pieces, LED 1300 lumen, with protection	+
Boom shutoff, ascending	+
AutoLift	+
Height limitation and stick shutoff, electronically	+
Boom cylinder cushioning	+
Industrial stick with quick coupling	+
Stick camera (with separate monitor), bottom side, with protection	+
Liebherr multi coupling system	+
Liebherr quick coupler, hydraulic or mechanical	+
Pipe fracture safety valves hoist cylinders	•
Pipe fracture safety valve stick cylinder	•
Quick coupling system LIKUFIX	+
Quick coupling system MH40/MH110	+
Protection for piston rod, hoist cylinder	+
Overload warning device	+
Protection for stick	+



Complete Machine

Lubrication	
Lubrication undercarriage, manually – decentralized (grease points)	•
Central lubrication system for uppercarriage and attachment, automatically	•
Central lubrication system for undercarriage, automatically	+
Special coating	
Single-coloured, grey parts excepted	+
Single-coloured, grey parts included (except power train)	+
Multicoloured (except power train)	+
Monitoring	
Rear view monitoring with camera	•
Side view monitoring with camera	+

• = Standard, + = Option

* = optionally extendable after one year

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