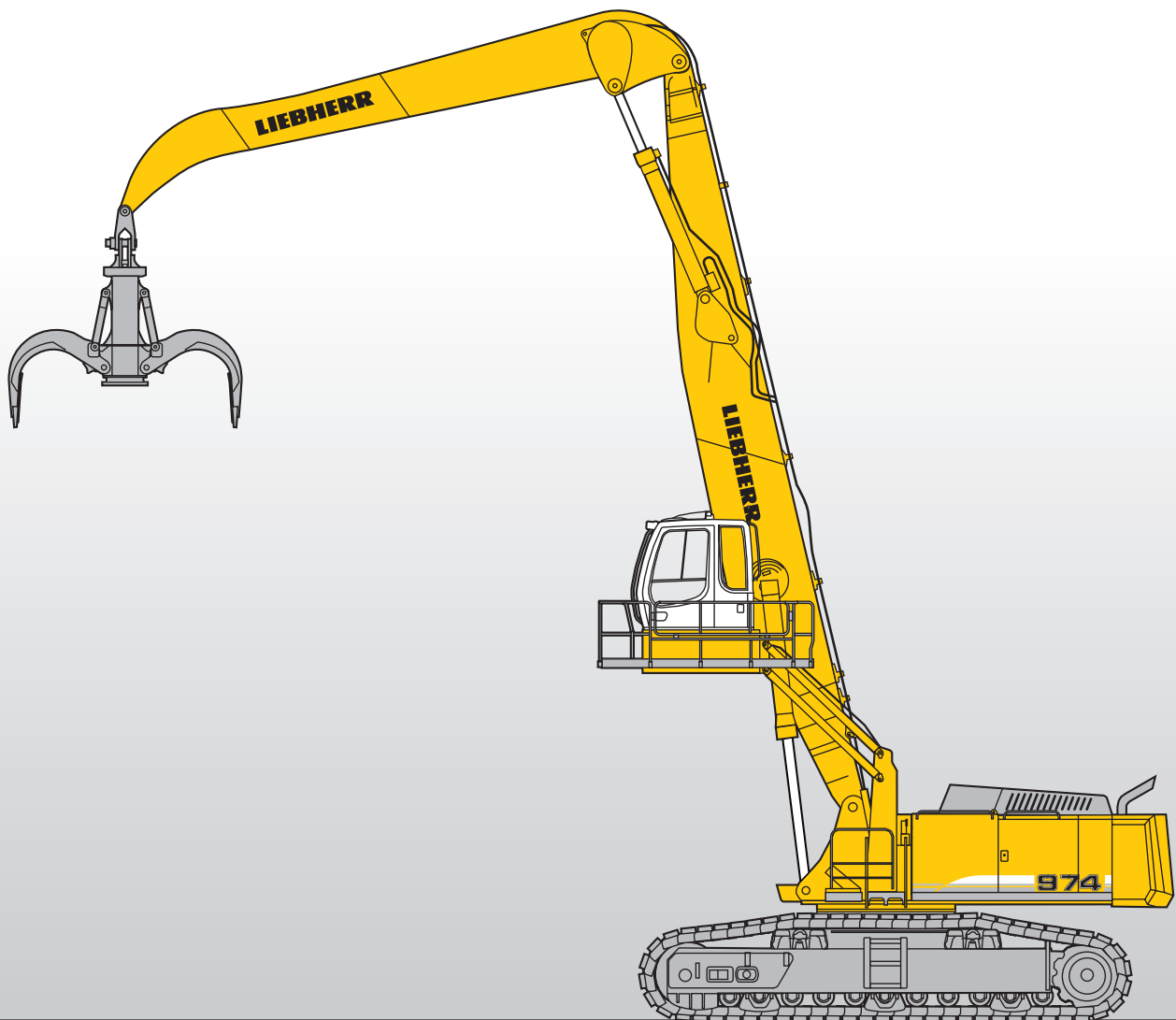


Machine for Industrial Applications R 974 C

Litronic®

Operating Weight: 110,300 – 120,600 kg
Engine Output: 400 kW/543 HP



LIEBHERR

Technical Data



Engine

Rating per ISO 9249	400 kW (543 HP) at 1,800 RPM
Model	Liebherr D 9508
Type	8 cylinder V-engine
Bore/Stroke	128/157 mm
Displacement	16.16 l
Engine operation	4-stroke diesel Common-rail-injection turbo-charged after-cooled reduced emissions
Cooling	water-cooled
Air cleaner	dry-type air cleaner with pre-cleaner, primary and safety elements, automatic dust discharge
Fuel tank	1,460 l
Electrical system	
Voltage	24 V
Batteries	2 x 170 Ah/12 V
Starter	24 V/7.8 kW
Alternator	three phase current 28 V/80 A



Hydraulic System

Hydraulic pumps for attachment and travel drive	2 Liebherr variable flow swash plate pumps
Max. flow	2 x 496 l/min.
Max. hydr. pressure	350 bar
Pump control	electro-hydraulic with electronic engine speed sensing regulation over entire RPM range, pressure compensation, flow compensation automatic oil flow optimizer, flow summation
Hydraulic pump for swing drive	1 reversible swash plate pump, closed-loop circuit
Max. flow	315 l/min.
Max. hydr. pressure	350 bar
Hydraulic tank	745 l
Hydraulic system	1,350 l
Hydraulic oil filter	2 full flow filters in return line with integrated fine filter area (5 µm), 1 high pressure filter for each main pump
Cooler	radiator, consisting of cooling unit for coolant and after-cooler as well as 2nd cooler for hydraulic oil with hydrostatically regulated fan drive
MODE selection	adjustment of machine performance and the hydraulics via a mode selector to match application
ECO	for especially economical and environmentally friendly operation
POWER	for maximum digging power and heavy duty jobs
LIFT	for lifting
FINE	for precision work and lifting through very sensitive movements
RPM adjustment	stepless adjustment of engine output via the rpm at each selected mode
Menu for auxiliary functions	4 fixed adjustable oil flow parameters for optional working tools



Hydraulic Controls

Power distribution	via control valves in single block with integrated safety valves
Flow summation	to boom stick and bucket cylinders
Closed-loop circuit	for uppercarriage swing drive
Activation	electro-hydraulic control
Attachment and swing	proportional via joystick levers
Travel	proportional via foot pedals or removable hand levers
Additional functions	via foot pedals or joystick toggle switch



Swing Drive

Drive by	Liebherr swash plate motor with integrated brake valves
Transmission	Liebherr compact planetary reduction gear
Swing ring	Liebherr, sealed single race ball bearing swing ring, internal teeth
Swing speed	0 – 5.9 RPM stepless
Swing torque	295 kNm
Holding brake	wet multi-disc (spring applied, pressure released)
Option	pedal controlled positioning brake



Uppercarriage

Design	torque resistant modular design upper frame
Attachment mounting	parallel length girders
Catwalks	on both sides



Operator's Cab

Cab	profiles and deep drawn technology, resiliently mounted, sound insulated, tinted windows. Front window armored glass, door with sliding window
Operator's seat	shock absorbing suspension, adjustable to operator's weight, 6-way adjustable seat
Joysticks	integrated into adjustable seat consoles
Monitoring	menu driven query of current operating conditions via the LCD display. Automatic monitoring, display, warning (acoustical and optical signal) and saving machine malfunction data, for example, engine overheating, low engine oil pressure or low hydraulic oil level
Heating system	standard automatic air conditioning, combined cooler/heater, additional dust filter in fresh air/recirculated
Noise emission	
ISO 6396	L_{pA} (inside cab) = 72 dB(A)
2000/14/EC	L_{WA} (surround noise) = 109 dB(A)



Undercarriage

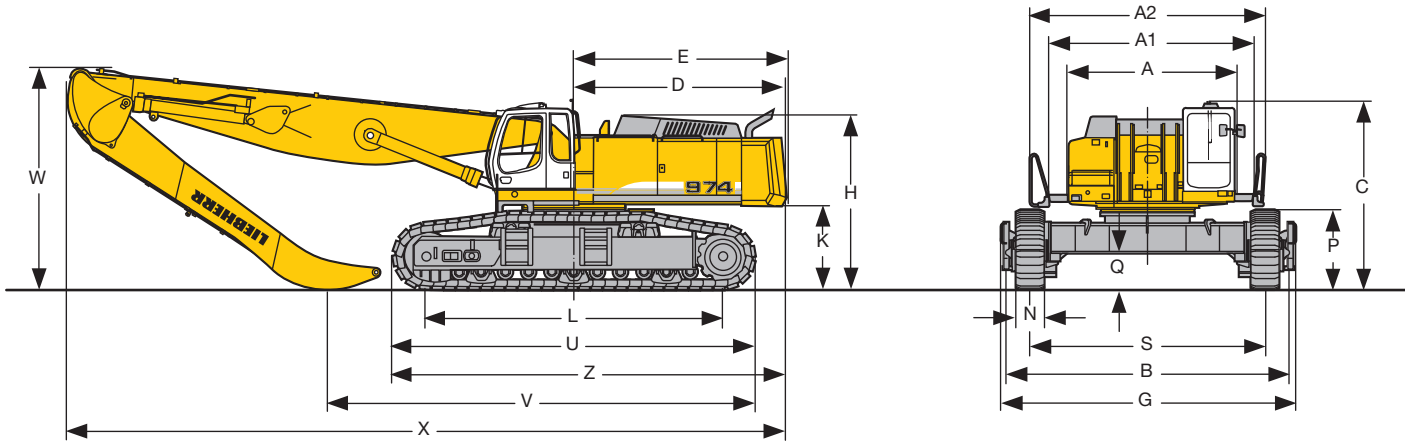
EW	heavy version, long undercarriage, extra wide
Drive	Liebherr swash plate motors with integrated brake valves on both sides
Transmission	Liebherr planetary reduction gears
Travel speed	low range – 2.1 km/h high range – 3.6 km/h
Drawbar pull max.	867 kN
Track components	D 9 G, maintenance-free
Track rollers/Carrier rollers	11/2
Track pads	double-grouser beveled or flat pads
Digging locks	wet multi-discs (spring applied, pressure released)
Brake valves	integrated into travel motor



Attachment

Type	box-type, combination of resistant steel plates and cast steel components
Hydraulic cylinders	Liebherr cylinders with special seal-system, shock absorbed
Pivots	sealed, low maintenance
Pivots bucket-to-stick	
bucket-to-link	O-ring sealed and completely enclosed
Lubrication	automatic central lubrication system
Hydraulic connections	pipes and hoses equipped with SAE split-flange connections

Dimensions



	mm		
A	3,605		
A1	4,365		
A2	5,000		
C	3,995		
D	4,500		
E	4,540		
H	3,710		
K	1,790		
L	6,320		
P	1,680		
Q	780		
S	5,000		
U	7,720		
N	600	750	1,000
B	6,000	6,000	6,000
G	6,290	6,290	6,290
Z	8,370		

Industrial-Type Straight Boom 10.00 m and Industrial Stick 7.50 m		mm
V		9,050
W		4,750
X		15,250

Industrial-Type Straight Boom 12.00 m and Industrial Stick 9.00 m		mm
V		10,000
W		6,250
X		17,100

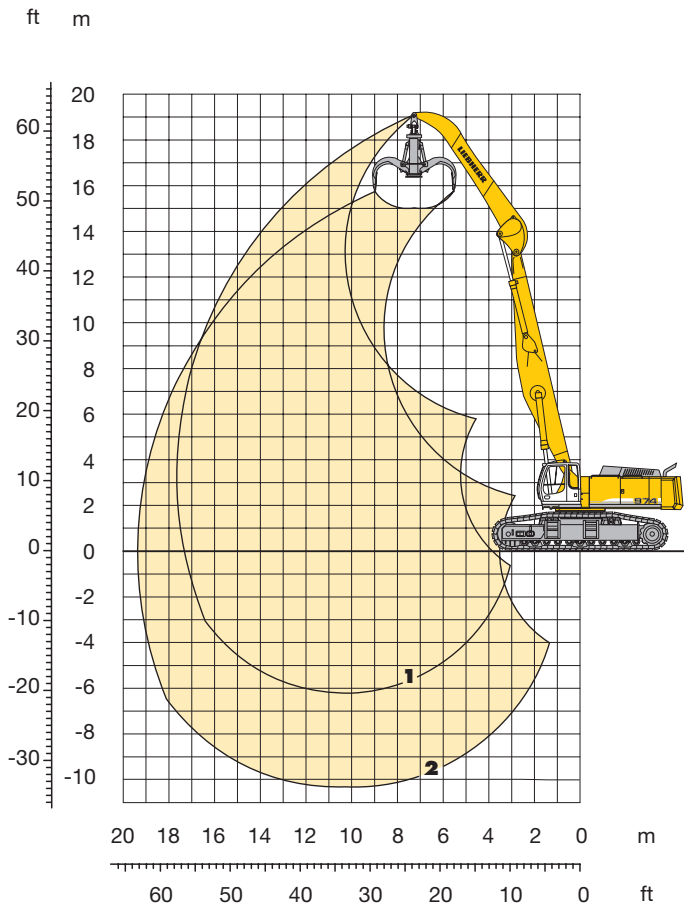
Industrial-Type Gooseneck Boom 12.00 m and Industrial Stick 9.00 m		mm
V		9,250
W		4,750
X		17,250

Industrial-Type Straight Boom 14.00 m and Industrial Stick 10.50 m		mm
V		10,900
W		7,700
X		18,850

Industrial-Type Gooseneck Boom 14.00 m and Industrial Stick 10.50 m		mm
V		10,000
W		5,450
X		19,200

Industrial Attachment

with Industrial-Type Straight Boom 10.00 m



Attachment Envelope

- 1 with industrial stick 7.50 m
- 2 with industrial stick 7.50 m and grapple model 75 B

Operating Weight and Ground Pressure

The operating weight includes basic machine with counterweight 18.0 t, industrial-type straight boom 10.00 m, industrial stick 7.50 m and grapple model 75 B with 5 open tines 3.00 m³.

Undercarriage		EW		
Pad width	mm	600	750	1,000*
Weight	kg	110,300	111,800	117,200
Ground pressure	kg/cm ²	1.45	1.18	0.93

* flat pads

Lift Capacities

with Industrial-Type Straight Boom 10.00 m

Industrial Stick 7.50 m

m	Under-carriage	4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		21.0 m		22.5 m		24.0 m		m	
		EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW		
24.0	EW																														
22.5	EW																														
21.0	EW																														
19.5	EW																														
18.0	EW							17.9*	17.9*																				16.0*	16.0*	9.42
16.5	EW									18.0*	18.0*																		13.8*	13.8*	11.52
15.0	EW									18.2*	18.2*	17.4*	17.4*																12.6*	12.6*	13.09
13.5	EW									17.8*	17.8*	17.2*	17.2*	16.1*	16.1*														11.8*	11.8*	14.33
12.0	EW									17.9*	17.9*	17.1*	17.1*	16.5*	16.5*	13.4*	13.4*												11.3*	11.3*	15.32
10.5	EW									18.3*	18.3*	17.4*	17.4*	16.6*	16.6*	16.0*	16.0*												10.9*	10.9*	16.10
9.0	EW									19.1*	19.1*	17.9*	17.9*	16.9*	16.9*	16.1*	16.1*	12.4*	12.4*										10.8*	10.8*	16.70
7.5	EW							22.2*	22.2*	20.2*	20.2*	18.6*	18.6*	17.4*	17.4*	16.2*	16.3*	13.8*	15.4*										10.7*	10.7*	17.15
6.0	EW			33.8*	33.8*	28.0*	28.0*	24.2*	24.2*	21.5*	21.5*	19.5*	19.5*	17.9*	17.9*	16.0*	16.7*	13.7*	15.6*										10.7*	10.7*	17.45
4.5	EW			39.6*	39.6*	31.4*	31.4*	26.3*	26.3*	22.9*	22.9*	20.4*	20.4*	18.4*	18.6*	15.7*	17.1*	13.6*	15.8*										10.8*	10.8*	17.62
3.0	EW			29.2*	29.2*	34.4*	34.4*	28.3*	28.3*	24.2*	24.2*	21.3*	21.3*	18.0*	19.1*	15.4*	17.4*	13.4*	15.9*										11.0*	11.0*	17.65
1.5	EW			16.4*	16.4*	36.7*	36.7*	29.9*	29.9*	25.3*	25.3*	20.9*	22.0*	17.7*	19.6*	15.2*	17.6*	13.3*	15.9*										11.3*	11.3*	17.56
0	EW	6.5*	6.5*	15.1*	15.1*	35.9*	35.9*	30.8*	30.8*	24.7*	26.0*	20.5*	22.5*	17.4*	19.8*	15.0*	17.7*	13.2*	15.6*										11.8*	11.8*	17.33
- 1.5	EW	9.4*	9.4*	16.5*	16.5*	31.8*	31.8*	30.2*	31.1*	24.3*	26.2*	20.2*	22.6*	17.2*	19.8*	14.9*	17.4*	13.2*	14.9*										12.4*	12.4*	16.96
- 3.0	EW	12.5*	12.5*	18.9*	18.9*	32.0*	32.0*	30.0*	30.5*	24.1*	25.8*	20.0*	22.2*	17.1*	19.2*	14.9*	16.6*												13.2*	13.2*	16.44
- 4.5	EW			21.8*	21.8*	34.4*	34.4*	29.0*	29.0*	24.1*	24.6*	20.0*	21.1*	17.2*	18.0*	14.9*	14.9*												14.7*	14.7*	15.07
- 6.0	EW							26.4*	26.4*	22.5*	22.5*	19.0*	19.0*																18.9*	18.9*	12.06
- 7.5	EW																														
- 9.0	EW																														
- 10.5	EW																														

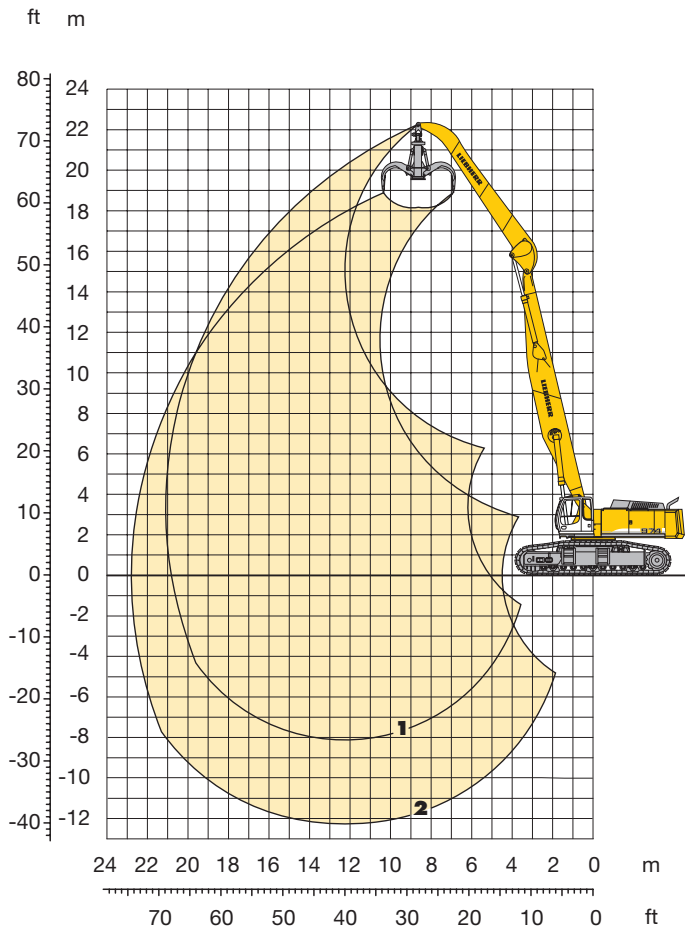
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach * Limited by hydr. capacity

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 600 mm wide double grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

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 check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

Industrial Attachment

with Industrial-Type Straight Boom 12.00 m



Attachment Envelope

- 1 with industrial stick 9.00 m
- 2 with industrial stick 9.00 m and grapple model 75 B

Operating Weight and Ground Pressure

The operating weight includes basic machine with counterweight 18.0 t, industrial-type straight boom 12.00 m, industrial stick 9.00 m and grapple model 75 B with 5 open tines 2.50 m³.

Undercarriage		EW		
Pad width	mm	600	750	1,000*
Weight	kg	111,900	113,400	118,800
Ground pressure	kg/cm ²	1.48	1.20	0.94

* flat pads

Lift Capacities

with Industrial-Type Straight Boom 12.00 m

Industrial Stick 9.00 m

m	Under-carriage	4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		21.0 m		22.5 m		24.0 m		m	
		EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	
24.0	EW																														
22.5	EW																														
21.0	EW																														
19.5	EW																														
18.0	EW																														
16.5	EW																														
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- 6.0	EW																														
- 7.5	EW																														
- 9.0	EW																														
- 10.5	EW																														

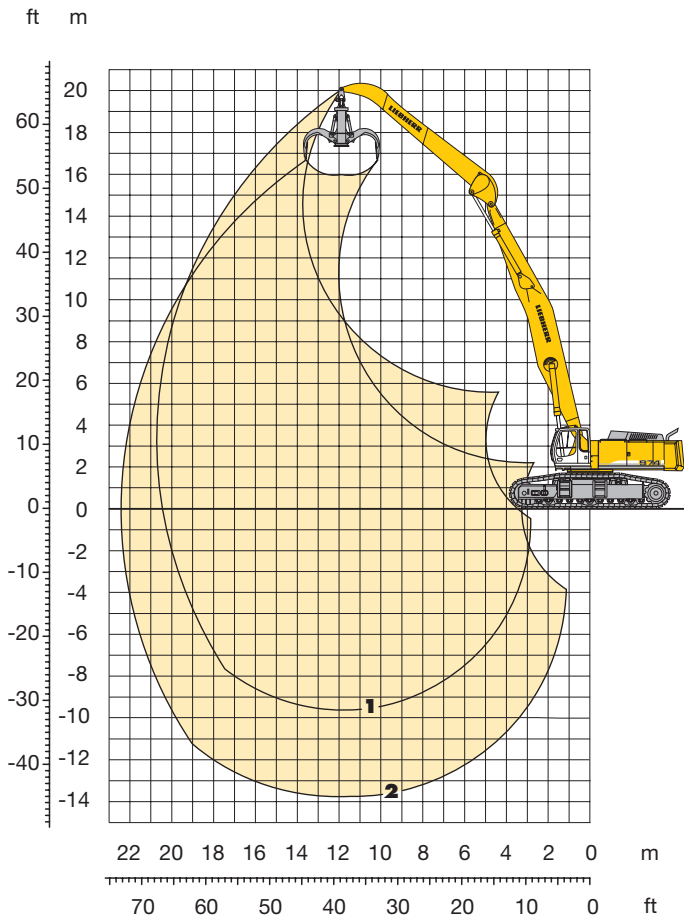
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach * Limited by hydr. capacity

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 600 mm wide double grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

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 check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

Industrial Attachment

with Industrial-Type Gooseneck Boom 12.00 m



Attachment Envelope

- 1 with industrial stick 9.00 m
- 2 with industrial stick 9.00 m and grapple model 75 B

Operating Weight and Ground Pressure

The operating weight includes basic machine with counterweight 18.0 t, industrial-type gooseneck boom 12.00 m, industrial stick 9.00 m and grapple model 75 B with 5 open tines 2.50 m³.

Undercarriage		EW		
Pad width	mm	600	750	1,000*
Weight	kg	112,200	113,700	119,100
Ground pressure	kg/cm ²	1.48	1.20	0.94

* flat pads

Lift Capacities

with Industrial-Type Gooseneck Boom 12.00 m

Industrial Stick 9.00 m

m	Under-carriage	4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		21.0 m		22.5 m		24.0 m		m		
		EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW		
24.0	EW																															
22.5	EW																															
21.0	EW																															
19.5	EW																															
18.0	EW													12.4*	12.4*														10.9*	10.9*	12.66	
16.5	EW															11.7*	11.7*												9.4*	9.4*	15.86	
15.0	EW															11.5*	11.5*	10.9*	10.9*										9.1*	9.1*	17.03	
13.5	EW															11.4*	11.4*	11.2*	11.2*										8.8*	8.8*	17.99	
12.0	EW																			11.0*	11.0*								8.7*	8.7*	18.78	
10.5	EW													11.9*	11.9*	11.5*	11.5*	11.2*	11.2*	11.0*	11.0*								8.6*	8.6*	19.42	
9.0	EW												13.7*	13.7*	12.8*	12.8*	12.1*	12.1*	11.6*	11.6*	11.1*	11.1*	10.3	10.4*					8.5*	8.5*	19.92	
7.5	EW									15.9*	15.9*	14.5*	14.5*	13.5*	13.5*	12.6*	12.6*	11.9*	11.9*	11.3*	11.3*	10.2	10.9*						8.6*	8.6*	20.29	
6.0	EW					23.1*	23.1*	19.7*	19.7*	17.3*	17.3*	15.5*	15.5*	14.2*	14.2*	13.1*	13.1*	12.3*	12.3*	11.6*	11.6*	10.1	11.1*						8.7*	8.7*	20.55	
4.5	EW			34.1*	34.1*	26.3*	26.3*	21.7*	21.7*	18.7*	18.7*	16.5*	16.5*	14.9*	14.9*	13.7*	13.7*	12.7*	12.7*	11.3	11.9*	9.9	11.2*						8.8*	8.8*	20.69	
3.0	EW			14.1*	14.1*	29.3*	29.3*	23.7*	23.7*	20.1*	20.1*	17.5*	17.5*	15.7*	15.7*	14.2*	14.2*	12.7	13.1*	11.1	12.2*	9.7	11.4*						8.8*	9.1*	20.72	
1.5	EW			9.9*	9.9*	24.0*	24.0*	25.4*	25.4*	21.3*	21.3*	18.4*	18.4*	16.3*	16.3*	14.3	14.7*	12.4	13.5*	10.8	12.4*	9.6	11.6*						8.8	9.4*	20.64	
0	EW	4.8*	4.8*	9.7*	9.7*	18.8*	18.8*	26.7*	26.7*	22.3*	22.3*	19.0	19.2*	16.1	16.9*	13.9	15.2*	12.1	13.8*	10.6	12.6*	9.5	11.6*						8.8	9.7*	20.44	
- 1.5	EW	6.7*	6.7*	10.6*	10.6*	17.6*	17.6*	27.5*	27.5*	22.2	23.0*	18.4	19.8*	15.7	17.4*	13.5	15.5*	11.9	14.0*	10.5	12.7*	9.4	11.6*						9.0	10.2*	20.13	
- 3.0	EW	8.6*	8.6*	12.0*	12.0*	18.0*	18.0*	27.0	27.8*	21.7	23.3*	18.1	20.1*	15.4	17.6*	13.3	15.6*	11.7	14.1*	10.4	12.7*	9.4	11.3*						9.3	10.9*	19.70	
- 4.5	EW	10.5*	10.5*	13.7*	13.7*	19.0*	19.0*	26.8	27.6*	21.5	23.3*	17.9	20.1*	15.2	17.6*	13.2	15.6*	11.6	13.9*	10.4	12.4*								9.7	11.2*	19.13	
- 6.0	EW			15.3*	15.3*	20.5*	20.5*	26.9	26.9*	21.5	22.9*	17.8	19.8*	15.2	17.3*	13.2	15.3*	11.7	13.5*	10.5	11.7*								10.2	11.1*	18.43	
- 7.5	EW					22.3*	22.3*	25.6*	25.6*	21.6	21.9*	17.9	19.0*	15.3	16.6*	13.3	14.5*	11.8	12.6*										11.0*	11.0*	17.56	
- 9.0	EW							23.6*	23.6*	20.4*	20.4*	17.6*	17.6*	15.3*	15.3*	13.1*	13.1*												13.0*	13.0*	15.13	
- 10.5	EW																															

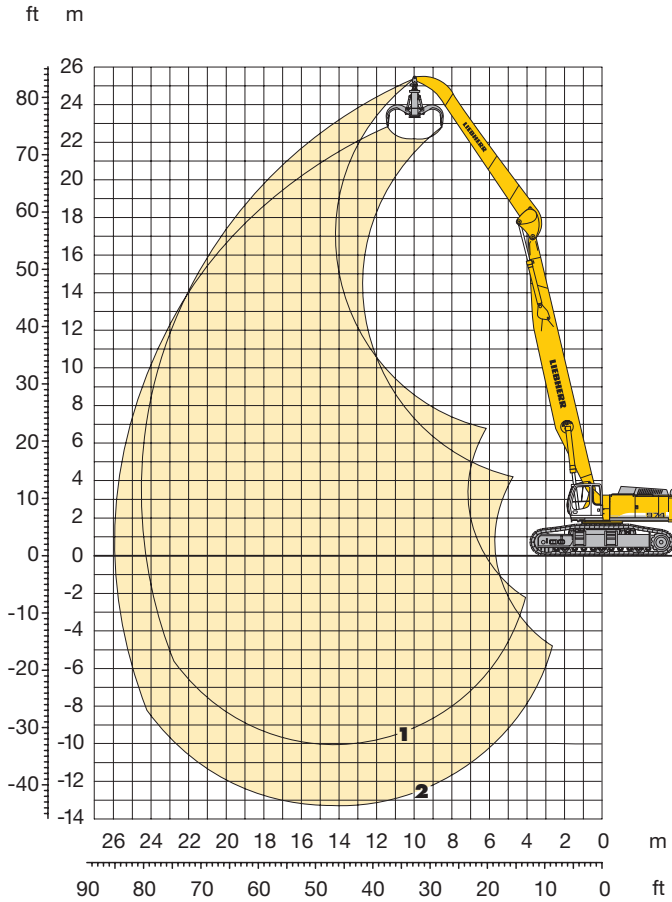
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach * Limited by hydr. capacity

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 600 mm wide double grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

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 check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

Industrial Attachment

with Industrial-Type Straight Boom 14.00 m



Attachment Envelope

- 1 with industrial stick 10.50 m
- 2 with industrial stick 10.50 m and grapple model 75 B

Operating Weight and Ground Pressure

The operating weight includes basic machine with counterweight 18.0 t, industrial-type straight boom 14.00 m, industrial stick 10.50 m and grapple model 75 B with 5 open tines 2.00 m³.

Undercarriage		EW		
Pad width	mm	600	750	1,000*
Weight	kg	113,400	114,900	120,300
Ground pressure	kg/cm ²	1.50	1.21	0.95

* flat pads

Lift Capacities

with Industrial-Type Straight Boom 14.00 m

Industrial Stick 10.50 m

m	Under-carriage	4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		21.0 m		22.5 m		24.0 m		m																		
		EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW																		
24.0	EW											12.6*	12.6*																11.0*	11.0*	12.75																	
22.5	EW													12.5*	12.5*															9.7*	9.7*	14.98																
21.0	EW													12.0*	12.0*	11.4*	11.4*	9.7*	9.7*											8.9*	8.9*	16.78																
19.5	EW															11.1*	11.1*	10.6*	10.6*	9.2*	9.2*										8.3*	8.3*	18.27															
18.0	EW															10.9*	10.9*	10.4*	10.4*	9.9*	9.9*	8.0*	8.0*									7.9*	7.9*	19.53														
16.5	EW															10.9*	10.9*	10.3*	10.3*	9.8*	9.8*	9.4*	9.4*									7.6*	7.6*	20.59														
15.0	EW															10.9*	10.9*	10.3*	10.3*	9.8*	9.8*	9.3*	9.3*	8.9	9.0*								7.4*	7.4*	21.50													
13.5	EW															11.0*	11.0*	10.4*	10.4*	9.8*	9.8*	9.3*	9.3*	8.9*	8.9*								7.2*	7.2*	22.26													
12.0	EW															12.1*	12.1*	11.2*	11.2*	10.5*	10.5*	9.9*	9.9*	9.4*	9.4*	8.9	8.9*	7.6	8.5*				7.1*	7.1*	22.90													
10.5	EW															13.6*	13.6*	12.4*	12.4*	11.5*	11.5*	10.7*	10.7*	10.0*	10.0*	9.4*	9.4*	8.8	9.0*	7.6	8.5*				6.8	7.0*	23.43											
9.0	EW															14.2*	14.2*	12.9*	12.9*	11.8*	11.8*	10.9*	10.9*	10.2*	10.2*	9.6*	9.6*	8.6	9.0*	7.5	8.5*				6.5	7.0*	23.84											
7.5	EW															19.2*	19.2*	16.7*	16.7*	14.8*	14.8*	13.3*	13.3*	12.2*	12.2*	11.2*	11.2*	10.4*	10.4*	9.7*	9.7*	8.5	9.1*	7.4	8.6*	6.4	7.7*	6.3	7.0*	24.15								
6.0	EW															25.0*	25.0*	20.7*	20.7*	17.7*	17.7*	15.5*	15.5*	13.9*	13.9*	12.5*	12.5*	11.5*	11.5*	10.6*	10.6*	9.5	9.8*	8.3	9.2*	7.2	8.6*	6.3	8.0*	6.1	7.0*	24.37						
4.5	EW															27.2*	27.2*	22.1*	22.1*	18.7*	18.7*	16.2*	16.2*	14.4*	14.4*	12.9*	12.9*	11.8*	11.8*	10.5	10.8*	9.2	10.0*	8.0	9.3*	7.1	8.7*	6.2	8.0*	6.0	7.1*	24.49						
3.0	EW															12.3*	12.3*	23.3*	23.3*	19.6*	19.6*	16.9*	16.9*	14.8*	14.8*	13.3*	13.3*	11.7	12.0*	10.2	11.0*	8.9	10.1*	7.8	9.4*	6.9	8.7*	6.2	8.0*	5.9	7.2*	24.51						
1.5	EW															8.0*	8.0*	21.2*	21.2*	20.3*	20.3*	17.4*	17.4*	15.1	15.2*	12.9	13.6*	11.2	12.2*	9.8	11.1*	8.6	10.2*	7.6	9.4*	6.8	8.7*	6.1	7.9*	5.9	7.4*	24.44						
0	EW															7.3*	7.3*	15.7*	15.7*	20.3	20.7*	16.9	17.8*	14.4	15.5*	12.4	13.8*	10.8	12.4*	9.5	11.2*	8.4	10.3*	7.5	9.4*	6.7	8.6*	6.1	7.7*	6.0	7.4*	24.28						
- 1.5	EW															4.0*	4.0*	7.8*	7.8*	14.2*	14.2*	19.5	20.9*	16.3	17.9*	13.9	15.7*	12.0	13.9*	10.5	12.5*	9.2	11.3*	8.2	10.2*	7.3	9.3*	6.6	8.4*	6.1	7.3*	6.1	7.3*	24.02				
- 3.0	EW	3.4*	3.4*													5.5*	5.5*	8.8*	8.8*	14.2*	14.2*	19.0	20.8*	15.8	17.9*	13.5	15.7*	11.7	13.9*	10.2	12.4*	9.0	11.2*	8.1	10.1*	7.3	9.1*	6.6	8.1*				6.2	7.1*	23.66			
- 4.5	EW															7.1*	7.1*	10.1*	10.1*	14.9*	14.9*	18.7	20.4*	15.6	17.6*	13.2	15.5*	11.5	13.7*	10.1	12.2*	8.9	11.0*	8.0	9.9*	7.2	8.8*	6.6	7.6*				6.4	6.9*	23.19			
- 6.0	EW															8.7*	8.7*	11.5*	11.5*	16.1*	16.1*	18.7	19.6*	15.4	17.1*	13.1	15.0*	11.4	13.3*	10.0	11.9*	8.9	10.6*	8.0	9.4*	7.3	8.3*								6.7*	6.7*	22.49	
- 7.5	EW															13.1*	13.1*	17.5*	17.5*	18.6*	18.6*	15.5	16.3*	13.1	14.3*	11.4	12.7*	10.0	11.3*	8.9	10.0*	8.1	8.8*	7.4*	7.4*								7.3*	7.3*	21.06			
- 9.0	EW															17.1*	17.1*	15.1*	15.1*	13.3	13.3*	11.5	11.8*	10.1	10.4*	9.1	9.1*																			8.4*	8.4*	18.76

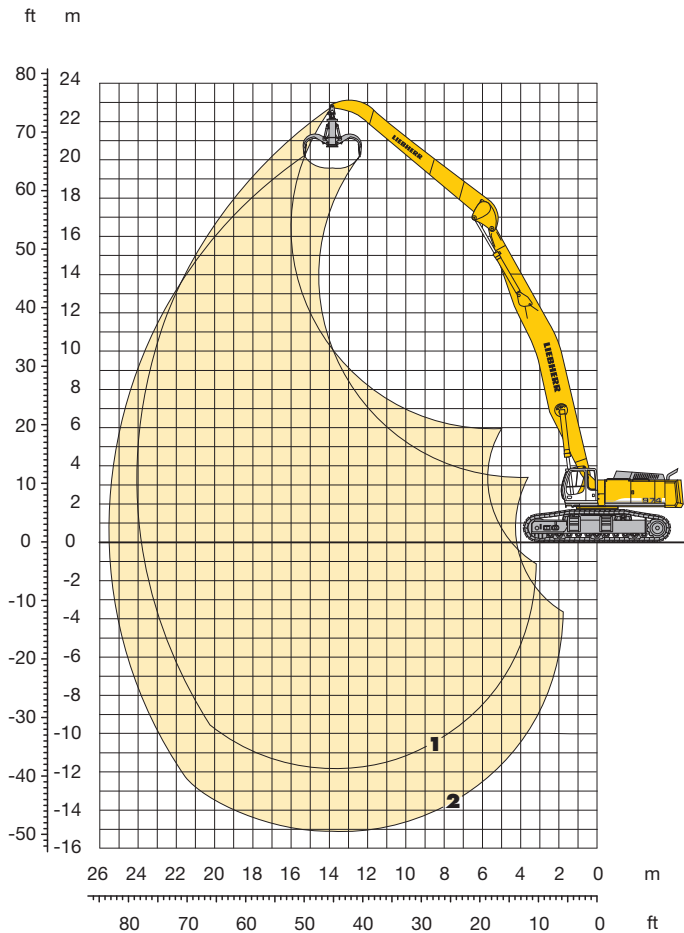
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach * Limited by hydr. capacity

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 600 mm wide double grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

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 check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

Industrial Attachment

with Industrial-Type Gooseneck Boom 14.00 m



Attachment Envelope

- 1** with industrial stick 10.50 m
- 2** with industrial stick 10.50 m and grapple model 75 B

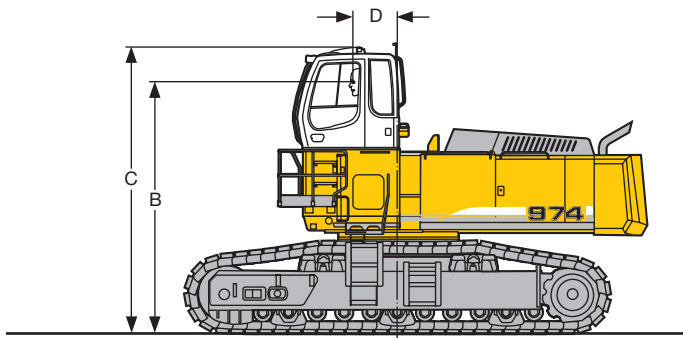
Operating Weight and Ground Pressure

The operating weight includes basic machine with counterweight 18.0 t, industrial-type gooseneck boom 14.00 m, industrial stick 10.50 m and grapple model 75 B with 5 open tines 2.00 m³.

Undercarriage		EW		
Pad width	mm	600	750	1,000*
Weight	kg	113,700	115,200	120,600
Ground pressure	kg/cm ²	1.50	1.22	0.95

* flat pads

Choice of Cab Elevations and Cab Protections



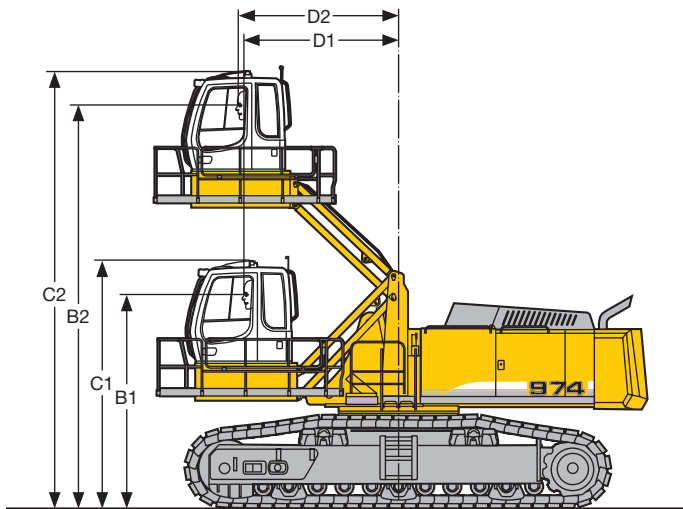
Rigid Cab Elevation

Height	mm	800	1,200	2,000
B	mm	4,160	4,560	5,360
C	mm	4,790	5,190	5,990
D	mm	817	817	817

Additional weight with rigid cab elevation 800 mm: 550 kg

Additional weight with rigid cab elevation 1,200 mm: 850 kg

Additional weight with rigid cab elevation 2,000 mm: 1,300 kg

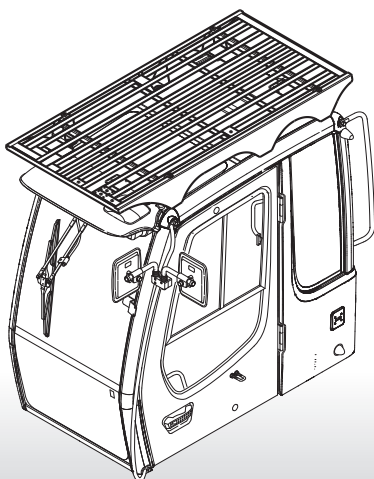


Hydraulic Cab Elevation Parallelogram

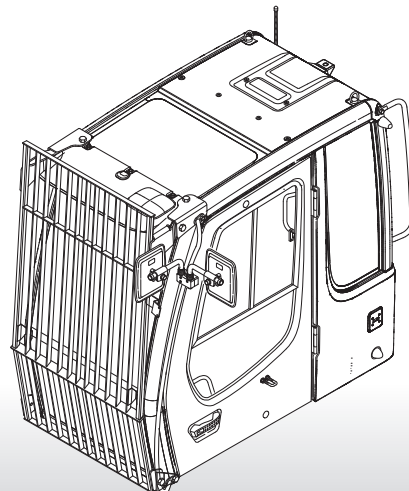
B1	3,809 mm
B2	7,375 mm
C1	4,441 mm
C2	8,007 mm
D1	2,791 mm
D2	2,941 mm

Additional weight with hydraulic cab elevation parallelogram: 2,700 kg

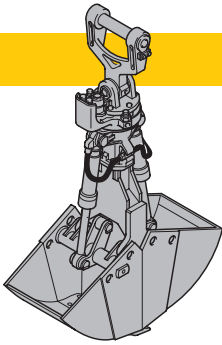
Upper Cab Guard



Front Cab Guard

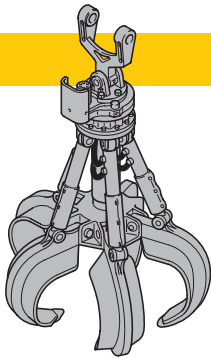


Variety of Tools



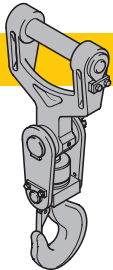
Shells for Loose Material **Clamshell Model 25 B (with suspension)**

Cutting width	mm	1,500	1,700	1,700	2,000
Capacity	m ³	2.00	2.30	2.80	3.00
Weight	kg	3,400	3,650	3,450	3,750



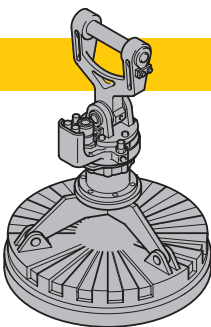
Multiple Tine Grapples

		open tines			semi-closed tines			closed tines			
Grapple Model 75 B (with suspension)	Capacity	m ³	2.00	2.50	3.00	2.00	2.50	3.00	2.00	2.50	3.00
	Weight	kg	3,800	3,900	4,000	4,350	4,500	4,650	4,700	4,850	5,000



Crane hook with suspension

Max. load	t	32
Weight	kg	180

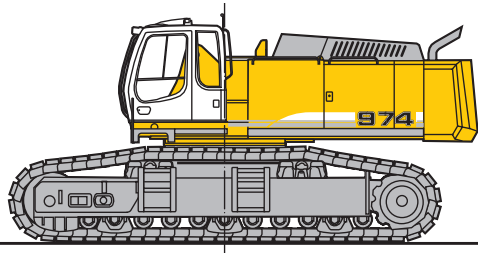


Electro-magnets with suspension

Generator up to 33 kW

For further information see color brochure "Add-on tools for material-handling technology". To operate a magnet the installation of a generator is required; please contact your Liebherr dealer or the factory for further information.

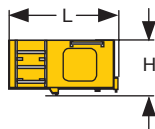
Component Dimensions and Weights



Basic Machine

Track pads	mm	600	750	1,000*
Weight with EW-Undercarriage	kg	88,100	89,600	95,000

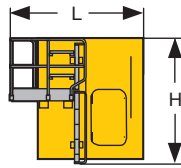
* flat pads



Rigid Cab Elevation

800 mm

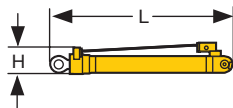
L Length	mm	1,820
H Height	mm	930
Width	mm	1,370
Weight	kg	550



Rigid Cab Elevation

1,200 mm 2,000 mm

L Length	mm	2,300	2,300
H Height	mm	1,350	2,150
Width	mm	1,800	1,800
Weight	kg	850	1,300



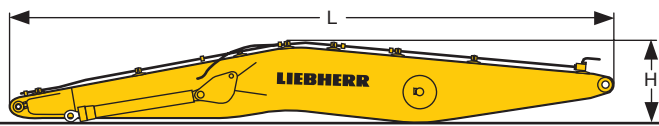
Hoist Cylinders (two)

L Length	mm	3,140
H Height	mm	550
Width	mm	400
Weight	kg	2 x 1,250



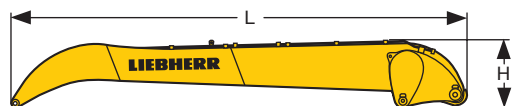
Industrial-Type Straight Boom

Stick length	m	10.00	12.00	14.00
L Length	mm	10,350	12,350	14,350
H Height	mm	1,850	1,750	1,700
Width	mm	1,550	1,550	1,550
Weight	kg	11,400	12,600	13,800



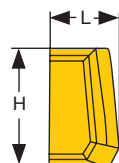
Industrial-Type Gooseneck Boom

Stick length	m	12.00	14.00
L Length	mm	12,350	14,350
H Height	mm	1,650	1,750
Width	mm	1,550	1,550
Weight	kg	12,900	14,100



Industrial Stick

Stick length	m	7.50	9.00	10.50
L Length	mm	7,850	9,350	10,850
H Height	mm	1,400	1,400	1,400
Width	mm	1,500	1,500	1,500
Weight	kg	4,300	4,750	5,200



Counterweight

L Length	mm	965
H Height	mm	1,445
Width	mm	3,360
Weight	kg	18,000

Equipment



Undercarriage

Three track guide per track	•
Integrated travel drive	•
Digging locks	•
Protection on idler end	•
Lubricated tracks	•
Different track pad width with double-grouser or flat pads	+



Uppercarriage

Engine hood with lift help	•
Lockable tool box	•
Handrails, non slip surfaces	•
Tool kit	•
Maintenance-free swing brake lock	•
Maintenance-free HD-batteries	•
Sound insulation	•
Electric fuel tank filler pump	+
Pedal controlled positioning swing brake	+
Customized paint – compl. machine	+
Protection for front working light	+



Hydraulics

Electronic pump regulation	•
Stepless work mode selector	•
Pressure storage for controlled lowering of attachments with engine turned off	•
Hydraulic tank shut-off valve	•
Pressure compensation	•
Flow compensation	•
Filter with integrated fine filter area (5 µm)	•
Pressure test ports	•
Bio-degradable hydraulic oils	+
Filter for secondary circuit	+
High lift circuit	+
Extra hydr. control for hydr. swivel	+
Hydraulic drive for generator	+



Engine

Common rail injection	•
Turbo charger	•
Air filter with pre-cleaner, main and safety element	•
Air filter with automatic dust ejector	•
Automatic idling	•
Main switch for electric circuit	•
Cold start aid	•
Conform with standard level IIIA/Tier 3	•
Fuel pre-heater	+
Reversible radiator fan	+



Operator's Cab

Profile and deep drawn component	•
Tinted side windows	•
Armored windshield	•
Door with sliding window	•
Washer-wiper for front and roof window	•
6-way adjustable cloth suspension seat	•
Seat and consoles independently adjustable	•
Coat hook	•
Air conditioning	•
Dome light	•
Sun blinds	•
Radio installation prep-kit	•
Removable handle for travel pedals	•
Cigar lighter and ashtray	•
Removable custom floor mat	•
Storage and literature tray	•
Digital instrumentation	•
Digital instruments for oil temp. engine RPM and oil pressure	•
Digital hour meter visible from outside	•
AM/FM stereo radio w/cassette	+
Electric cool box	+
Air power seat adjustment with heating	+
Warning beacon	+
Additional headlights on cabin roof (front and rear)	+
Upper protection screen (FOPS)	+
Front guard tiltable	+
Electric drive away lock	+
Extinguisher	+



Attachment

Cylinders with shock absorber	•
Sealed pivots	•
Two flood lights on the boom	•
Automatic central lubrication system	•
Regeneration plus	•
Safety check valves	•
Overload warning device	+
Hydraulic quick change tool adapter for grapple	+
Liebherr equipment program	+
Cylinder – rod protection	+

• = Standard, + = Option

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

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