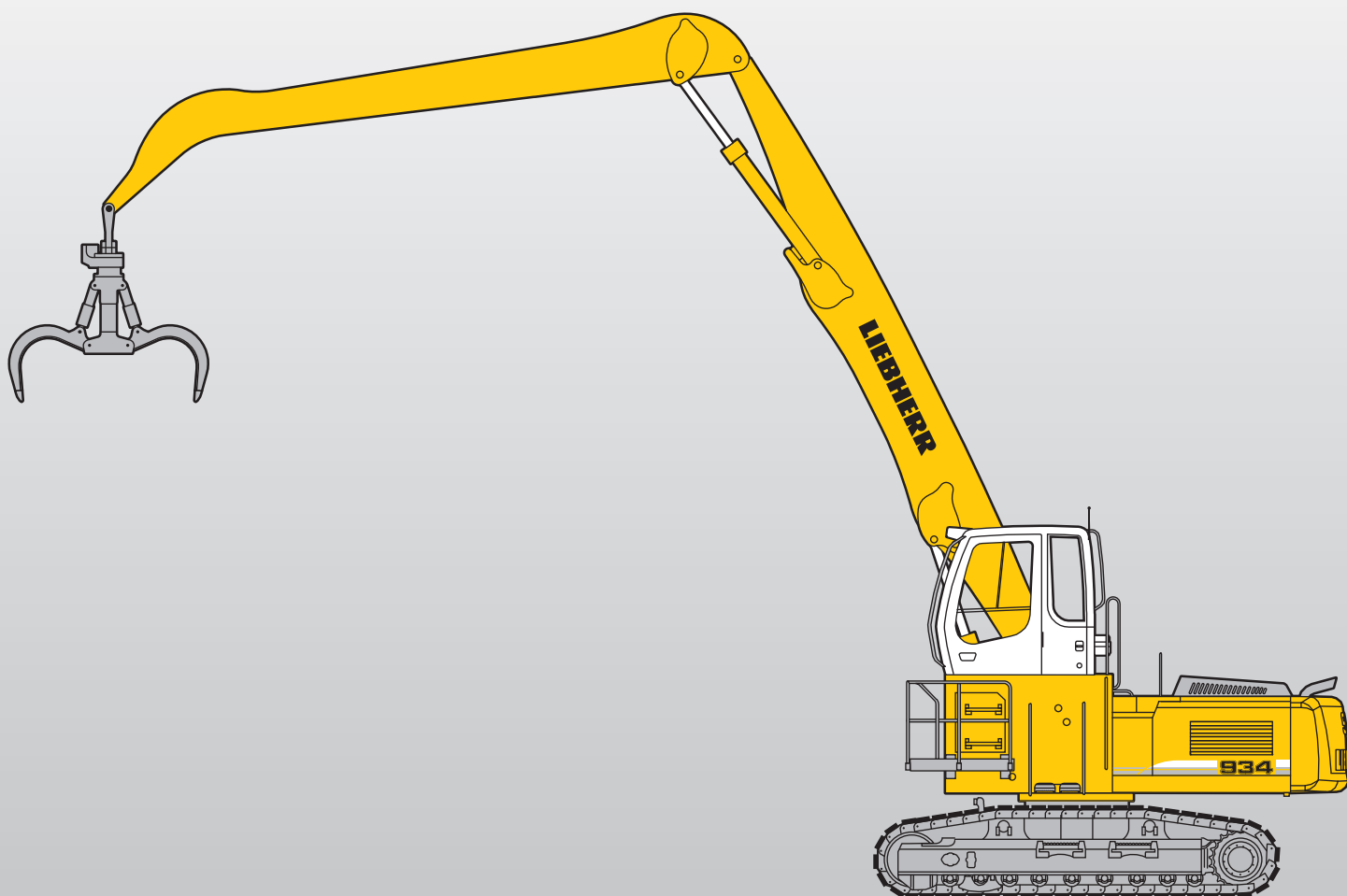


# Machine for Industrial Applications

**R 934 C**  
Litronic®

Operating Weight: 36,800 – 38,100 kg  
Engine Output: 150 kW / 204 HP



# LIEBHERR

# Technical Data



## Engine

Rating per ISO 9249	150 kW (204 HP) at 1,800 RPM
Model	Liebherr D 934 L
Type	4 cylinder in-line
Bore/Stroke	122/150 mm
Displacement	7.01 l
Engine operation	4-stroke diesel direct injection turbo-charged after-cooled reduced emissions
Cooling	water-cooled and integrated motor oil cooler
Air cleaner	dry-type air cleaner with pre-cleaner, primary and safety elements
Fuel tank	580 l
Standard	sensor controlled engine idling
Electrical system	
Voltage	24 V
Batteries	2 x 170 Ah/12 V
Starter	24 V/6.6 kW
Alternator	three phase current 28 V/80 A



## Hydraulic System

Hydraulic pump for attachment and travel drive	Liebherr variable flow, swash plate double pump
Max. flow	2 x 245 l/min.
Max. pressure	350 bar
Pump regulation	electro-hydraulic with electronic engine speed sensing regulation, pressure compensation, flow compensation, automatic oil flow optimizer
Hydraulic pump for swing drive	reversible, variable flow, swash plate pump, closed-loop circuit
Max. flow	149 l/min.
Max. pressure	350 bar
Hydraulic tank	340 l
Hydraulic system	550 l
Hydraulic oil filter	full flow filter in return line with integrated fine filter area (5 µm)
Hydraulic oil cooler	compact cooler, consisting of a water cooler, sandwiched with hydraulic oil cooler and fuel and after-cooler cores and hydrostatically driven fan
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



## Hydraulic Controls

Power distribution	via monoblock control valve with integrated safety valves
Flow summation	to boom and stick
Closed-loop circuit	for uppercarriage swing drive
Servo circuit	
Attachment and swing	proportional via joystick levers
Travel	– proportional via foot pedals or removable hand levers – speed pre-selection
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. Lubrication via a grease distributor and a grease nipple
Swing speed	0 – 8.2 RPM stepless
Swing torque	84 kNm
Holding brake	wet multi-disc (spring applied, pressure released)
Option	pedal controlled positioning brake



## Operator's Cab

Cab	built from deep drawn components, resiliently mounted, sound insulated, tinted windows, front window stores overhead, door with sliding window
Operator's seat	shock absorbing suspension, adjustable to operator's weight, 6-way adjustable seat integrated into adjustable seat consoles
Joysticks	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
Monitoring	standard air conditioning, combined cooler/heater, additional dust filter in fresh air/recirculated
Heating system	
Noise emission	
ISO 6396	L <sub>PA</sub> (inside cab) = 72 dB(A)
2000/14/EC	L <sub>WA</sub> (surround noise) = 103 dB(A)



## Undercarriage

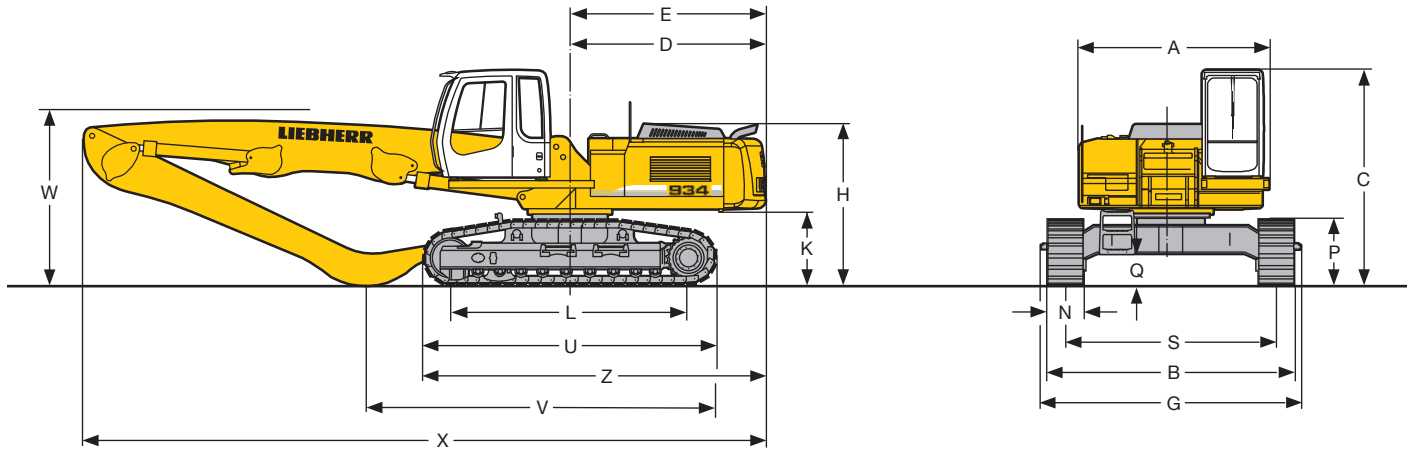
Versions	
LC	heavy duty, wide gauge
EW	special duty, extra wide gauge
Drive	Liebherr swash plate motors with integrated brake valves on both sides
Transmission	Liebherr planetary reduction gears
Travel speed	low range – 2.8 km/h high range – 5.1 km/h
Drawbar pull max.	323 kN
Track components	B 60, maintenance-free
Track rollers/Carrier rollers	9/2
Tracks	sealed and greased
Track pads	triple grouser
Digging locks	wet multi-discs (spring applied, pressure released)
Brake valves	integrated into travel motor



## Attachment

Type	high-strength steel plates at highlystressed points for the toughest requirements. Complex and stable mountings of attachment and cylinders. Unrivalled strength, even at high loads
Hydraulic cylinders	Liebherr cylinders with special seal system. Shock absorption
Pivots	sealed, low maintenance
Lubrication	Liebherr semi-automatic central lubrication system

# Dimensions



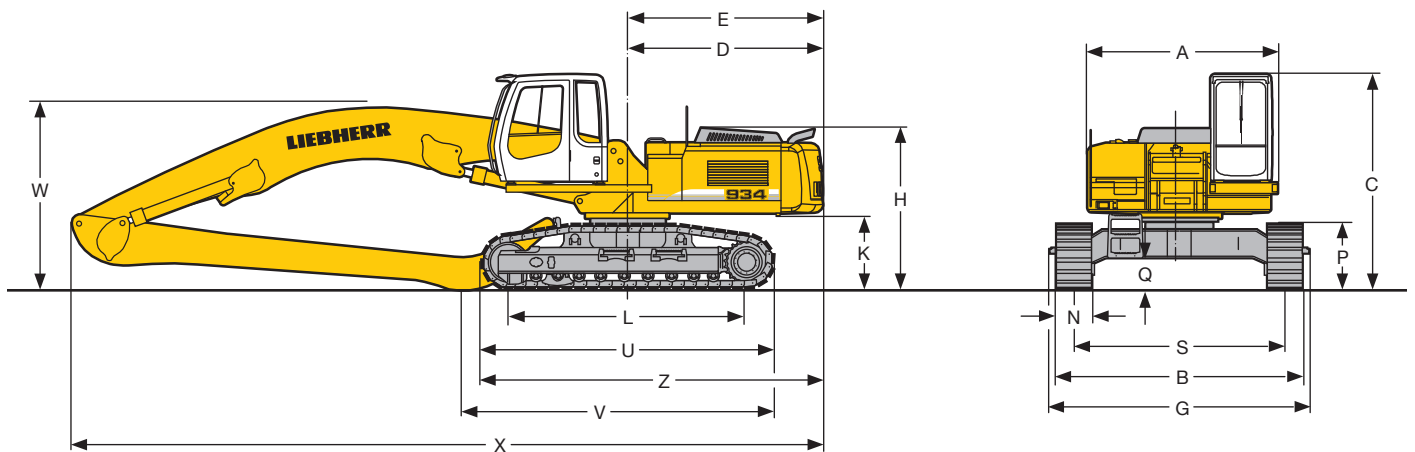
	LC			EW		
	mm			mm		
A	3,070			3,070		
C	3,435			3,480		
D	3,240			3,240		
E	3,240			3,240		
H	2,570			2,615		
K	1,155			1,200		
L	4,000			3,848		
P	1,046			1,056		
Q	496			468		
S	2,590			3,400		
U	4,920			4,720		
N	500	600	750	500	600	750
B	3,158	3,190	3,340	3,998	4,000	4,150
G	3,176	3,176	3,476	4,195	4,195	4,195
Z	5,530			5,530		

E = Tail radius

Industrial-Type Straight Boom 7.60 m with LC- and EW-Undercarriage and Industrial Stick			
	m	5.00	6.00
V	mm	6,750	5,700
W	mm	2,850	2,850
X	mm	11,150	11,150

Industrial-Type Straight Boom 8.60 m with EW-Undercarriage and Industrial Stick			
	m	6.00	7.50
V	mm	6,700	5,600
W	mm	2,800	4,200
X	mm	12,200	12,050

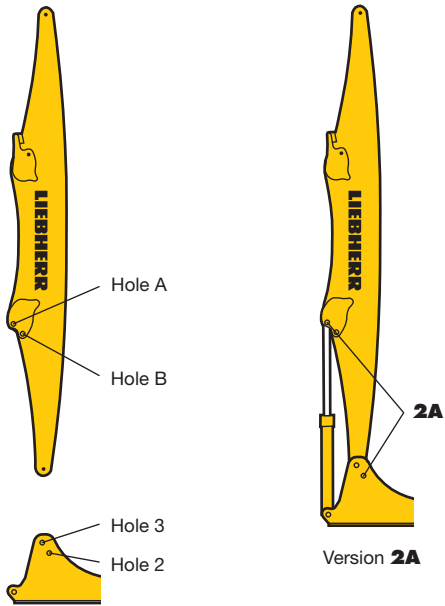
Industrial-Type Gooseneck Boom 8.60 m with EW-Undercarriage and Industrial Stick			
	m	6.00	7.50
V	mm	6,500	5,000
W	mm	3,150	3,150
X	mm	12,100	12,100



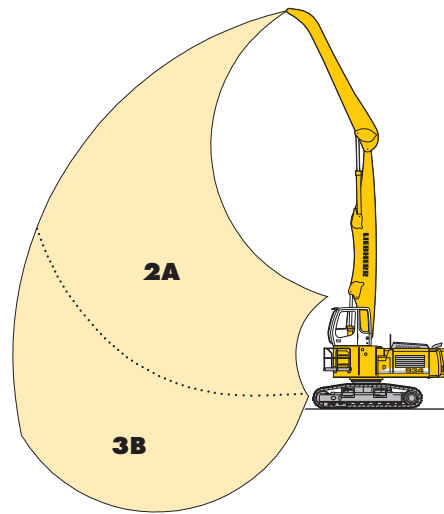
These dimensions are stated with cab carrier. This assembly is only valid for transportation.

# VarioLiftPlus

## Variable Boom Mounting Positions for Optimized Lift Capacities



with **the same** working range



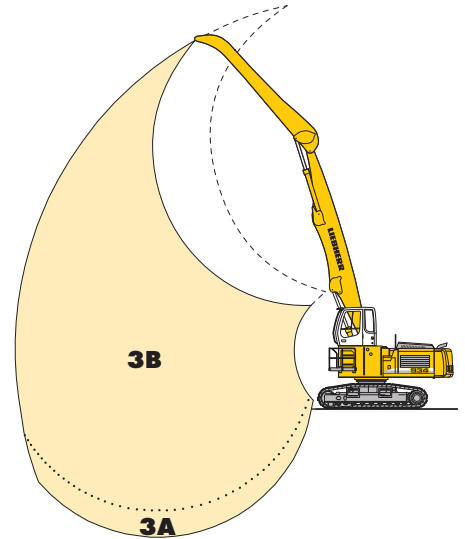
### Kinematic variant 2A:

Increased lift capacities above ground level

### Kinematic variant 3B:

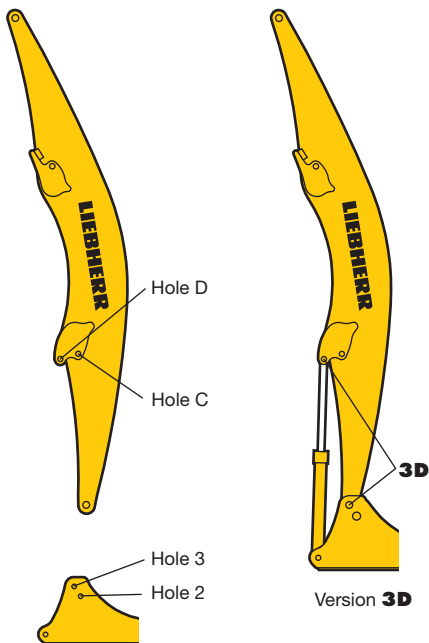
Increased lift capacities below ground level and when working at large outreach

with a **different** working range

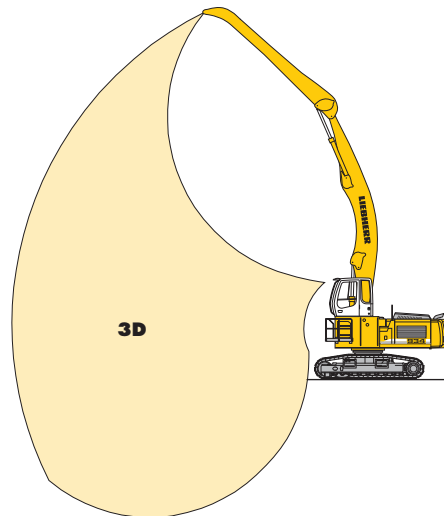


### Kinematic variant 3A:

Altered range curve with additional reach depth, e.g. for unloading from ships

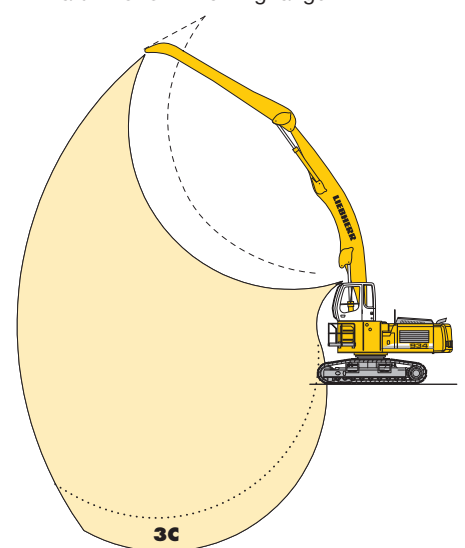


with a **different** working range



### Kinematic variant 3D:

Increased lift capacities below ground level and when working at large outreach

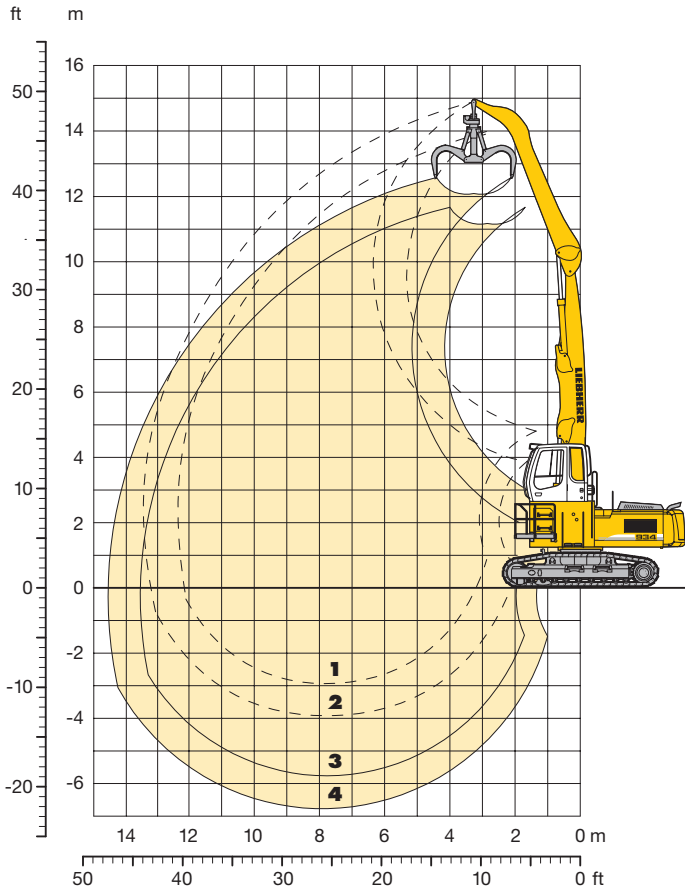


### Kinematic variant 3C:

Altered range curve with additional reach depth, e.g. for unloading from ships

# Industrial Attachment

## with Industrial-Type Straight Boom 7.60 m



### Attachment Envelope

Kinematic variant 2A

- 1** with industrial stick 5.00 m
- 2** with industrial stick 6.00 m
- 3** with industrial stick 5.00 m and grapple model 70 C
- 4** with industrial stick 6.00 m and grapple model 70 C

### Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 1.20 m, counterweight 7.5 t, industrial-type straight boom 7.60 m, industrial stick 5.00 m and grapple model 70 C with 5 semi-closed tines 0.80 m<sup>3</sup>.

Undercarriage	LC		EW	
	600	750	600	750
Pad width	mm		600	750
Weight	kg	36,800	37,700	37,050
Ground pressure	kg/cm <sup>2</sup>	0.77	0.63	0.80

Operating weight includes basic machine with rigid cab elevation 1.20 m, counterweight 7.5 t, industrial-type straight boom 7.60 m, industrial stick 6.00 m and grapple model 70 C with 5 semi-closed tines 0.80 m<sup>3</sup>.

Undercarriage	LC		EW	
	600	750	600	750
Pad width	mm		600	750
Weight	kg	36,950	37,850	37,200
Ground pressure	kg/cm <sup>2</sup>	0.77	0.63	0.81

# Lift Capacities

with Industrial-Type Straight Boom 7.60 m

## Industrial Stick 5.00 m (Variant 2A)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m		
15.0	LC EW																					
13.5	LC EW																			10.0* 9.9*	10.0* 9.9*	4.3
12.0	LC EW					10.3* 10.3*	10.3* 10.3*													7.6* 7.5*	7.6* 7.5*	7.2
10.5	LC EW					11.4 11.6*	11.6* 11.6*	7.9 10.1*	10.1* 10.1*											5.8 6.6*	6.7* 6.6*	8.9
9.0	LC EW					11.4 11.6*	11.6* 11.6*	8.0 10.0*	10.0* 10.0*	5.9 7.6	8.6 8.3									4.7 6.1	6.2* 6.2*	10.1
7.5	LC EW					11.2 11.9*	11.9* 11.9*	7.9 10.1*	10.1* 10.1*	5.8 7.6	8.5 8.2	4.5 5.9	6.6 6.4							4.1 5.3	6.0* 5.8	11.0
6.0	LC EW			15.6* 15.7*	15.6* 15.7*	10.8 12.5*	12.5* 12.5*	7.6 9.9	10.4* 10.4*	5.7 7.4	8.4 8.1	4.4 5.8	6.5 6.3							3.7 4.8	5.5 5.3	11.7
4.5	LC EW	25.4* 25.6*	25.4* 25.6*	15.8 17.3*	17.2* 17.3*	10.1 13.2*	13.2* 13.2*	7.3 9.5	10.7* 10.4	5.5 7.2	8.2 7.9	4.3 5.7	6.4 6.2	3.5 4.6	5.2 5.0					3.4 4.5	5.2 5.0	12.1
3.0	LC EW	2.3* 2.1*	2.3* 2.1*	14.2 18.6*	18.6* 18.6*	9.4 12.7	13.8* 13.8*	6.9 9.1	10.4 10.0	5.3 7.0	7.9 7.6	4.2 5.6	6.3 6.1	3.4 4.5	5.2 5.0					3.3 4.4	5.0 4.8	12.3
1.5	LC EW			10.0* 9.8*	10.0* 9.8*	8.8 12.0	13.8* 13.3	6.5 8.7	10.0 9.6	5.1 6.7	7.7 7.4	4.1 5.4	6.2 5.9	3.4 4.5	5.1 4.9					3.2 4.3	4.9 4.7	12.3
0	LC EW			7.9* 7.9*	7.9* 7.9*	8.3 11.5	13.0* 12.8	6.2 8.4	9.7 9.3	4.9 6.6	7.5 7.2	4.0 5.3	6.1 5.8	3.3 4.5	4.9* 4.9					3.3 4.4	4.6* 4.6*	12.2
-1.5	LC EW			8.7* 8.8*	8.7* 8.8*	8.1 11.2*	11.3* 11.2*	6.1 8.3	9.2* 9.1	4.8 6.5	7.4 7.1	3.9 5.3	5.7* 5.7*							3.6 4.8*	4.8* 4.8*	11.2
-3.0	LC EW																					
-4.5	LC EW																					

## Industrial Stick 6.00 m (Variant 2A)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m		
15.0	LC EW																					
13.5	LC EW					8.4* 8.5*	8.4* 8.5*													7.0* 7.0*	7.0* 7.0*	6.7
12.0	LC EW					9.8* 9.9*	9.8* 9.9*	8.1 8.4*	8.4* 8.4*											5.9* 5.9*	5.9* 5.9*	8.8
10.5	LC EW							8.3 9.4*	9.4* 9.4*	6.1 7.8	8.0* 8.1*									4.8 5.3*	5.3* 5.3*	10.2
9.0	LC EW							8.3 9.4*	9.4* 9.4*	6.1 7.9	8.4* 8.4*	4.7 6.1	6.8 6.6							4.0 5.0*	5.0* 5.0*	11.3
7.5	LC EW					11.0* 11.0*	11.0* 11.0*	8.2 9.6*	9.5* 9.6*	6.1 7.8	8.4* 8.4*	4.7 6.0	6.8 6.6	3.6 4.8	5.4 5.2					3.5 4.7	4.9* 4.9*	12.1
6.0	LC EW					11.3 11.6*	11.6* 11.6*	7.9 9.9*	9.9* 9.9*	5.9 7.6	8.6* 8.3	4.6 5.9	6.7 6.5	3.6 4.8	5.4 5.2					3.2 4.3	4.8* 4.7	12.7
4.5	LC EW			13.8* 14.0*	13.8* 14.0*	10.6 12.5*	12.4* 12.5*	7.5 9.8	10.3* 10.3*	5.7 7.4	8.4 8.0	4.4 5.8	6.6 6.3	3.5 4.7	5.3 5.1					3.0 4.0	4.6 4.4	13.1
3.0	LC EW	26.8* 26.9*	26.8* 26.9*	15.2 17.7*	17.6* 17.7*	9.8 13.2	13.3* 13.3*	7.1 9.4	10.7 10.2	5.4 7.1	8.1 7.8	4.3 5.6	6.4 6.1	3.5 4.6	5.2 5.0					2.9 3.9	4.4 4.3	13.3
1.5	LC EW	3.1* 3.1*	3.1* 3.1*	13.6 18.6*	18.6* 18.6*	9.1 12.3	13.8* 13.6	6.7 8.9	10.2 9.7	5.1 6.8	7.8 7.5	4.1 5.5	6.2 6.0	3.4 4.5	5.1 4.9					2.9 3.9	4.4 4.2	13.3
0	LC EW			3.2* 3.2*	3.2* 3.2*	9.9* 9.8*	9.9* 9.8*	8.5 11.7	13.5* 12.9	6.3 8.5	9.8 9.3	4.9 6.6	7.5 7.2	4.0 5.3	6.1 5.8	3.3 4.4	5.0 4.8			2.9 3.9	4.3* 4.3	13.2
-1.5	LC EW			4.4* 4.4*	4.4* 4.4*	9.0* 9.0*	9.0* 9.0*	8.1 11.3	12.4* 12.4*	6.0 8.2	9.5 9.1	4.8 6.4	7.4 7.1	3.9 5.2	6.0 5.7	3.2 4.4	4.9* 4.8			3.1 4.1	4.2* 4.2*	12.6
-3.0	LC EW					9.7* 9.7*	9.7* 9.7*	8.0 10.4*	10.5* 10.4*	5.9 8.1	8.5* 8.5*	4.7 6.3	6.9* 6.8*	3.8 5.2	5.3* 5.3*					3.6 4.9*	4.8* 4.9*	11.0
-4.5	LC EW																					

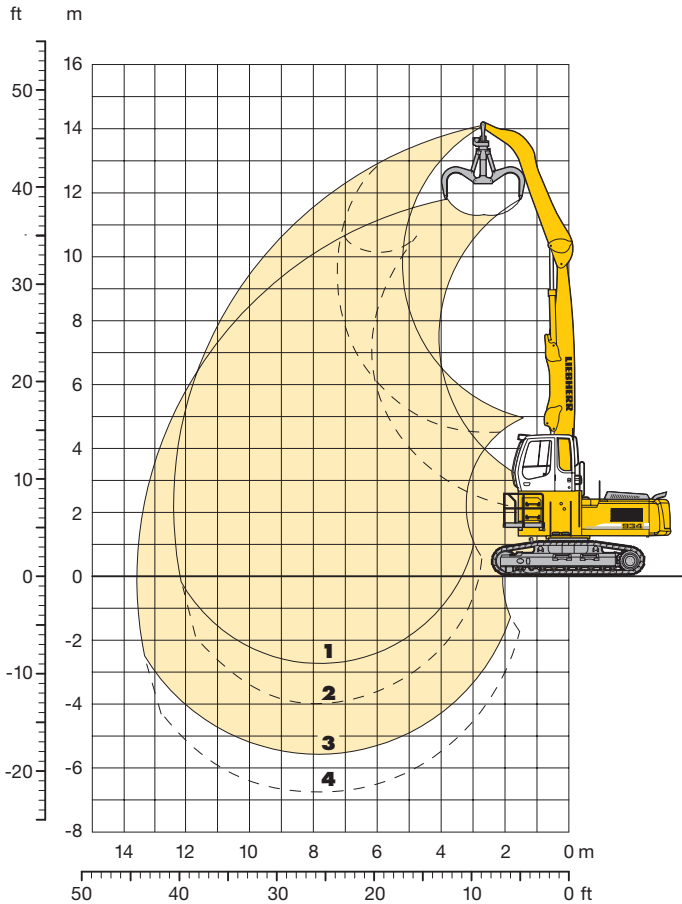
↑ Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

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 triple 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 7.60 m



### Attachment Envelope

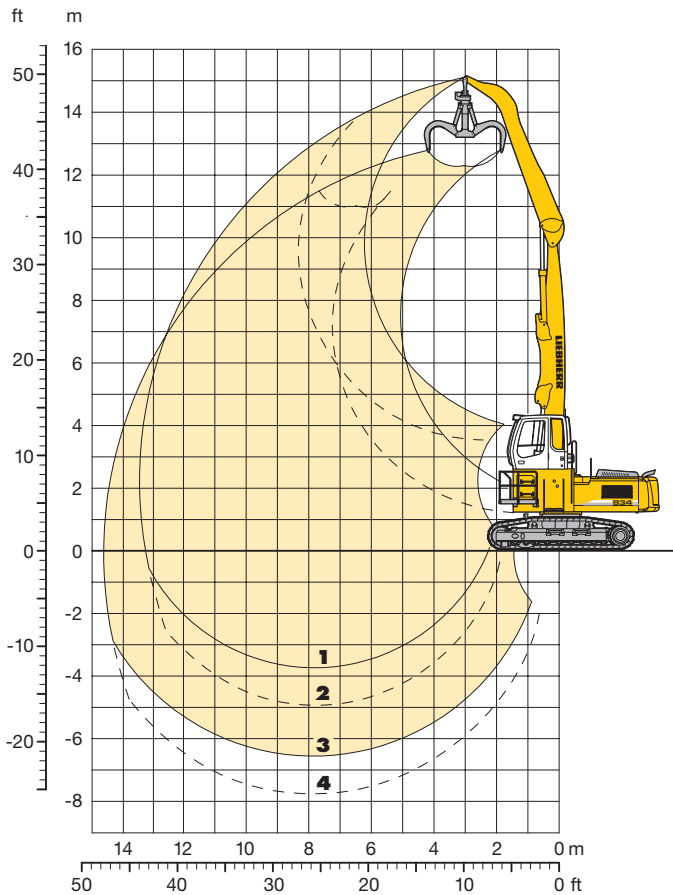
Kinematic variants 3A/3B

- 1** with industrial stick 5.00 m (3B)
- 2** with industrial stick 5.00 m (3A)
- 3** with industrial stick 5.00 m and grapple model 70 C (3B)
- 4** with industrial stick 5.00 m and grapple model 70 C (3A)

### Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 1.20 m, counterweight 7.5 t, industrial-type straight boom 7.60 m, industrial stick 5.00 m and grapple model 70 C with 5 semi-closed tines 0.80 m<sup>3</sup>.

Undercarriage	LC		EW	
	600	750	600	750
Pad width	mm		600	750
Weight	kg	36,800	37,700	37,050
Ground pressure	kg/cm <sup>2</sup>	0.77	0.63	0.80



### Attachment Envelope

Kinematic variants 3A/3B

- 1** with industrial stick 6.00 m (3B)
- 2** with industrial stick 6.00 m (3A)
- 3** with industrial stick 6.00 m and grapple model 70 C (3B)
- 4** with industrial stick 6.00 m and grapple model 70 C (3A)

### Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 1.20 m, counterweight 7.5 t, industrial-type straight boom 7.60 m, industrial stick 6.00 m and grapple model 70 C with 5 semi-closed tines 0.80 m<sup>3</sup>.

Undercarriage	LC		EW	
	600	750	600	750
Pad width	mm		600	750
Weight	kg	36,950	37,850	37,200
Ground pressure	kg/cm <sup>2</sup>	0.77	0.63	0.81

# Lift Capacities

with Industrial-Type Straight Boom 7.60 m

## Industrial Stick 5.00 m (Variant 3A)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m		
15.0	LC																					
	EW																					
13.5	LC																					
	EW																					
12.0	LC							7.5*	7.5*											7.4*	7.4*	7.5
	EW							7.7*	7.7*											7.4*	7.4*	
10.5	LC							7.9	9.3*	5.8	7.3*									5.6	6.6*	9.2
	EW							9.3*	9.3*	7.4*	7.4*									6.6*	6.6*	
9.0	LC							7.9	9.2*	5.9	8.4*									4.5	6.2*	10.4
	EW							9.2*	9.2*	7.6	8.2									5.9	6.2*	
7.5	LC							7.8	9.4*	5.8	8.5*	4.5	6.6							3.9	5.9	11.2
	EW							9.4*	9.4*	7.5	8.2	5.8	6.3							5.2	5.6	
6.0	LC					10.7	11.5*	7.5	9.9*	5.7	8.3	4.4	6.5							3.6	5.3	11.8
	EW					11.5*	11.5*	9.8	9.9*	7.4	8.0	5.8	6.3							4.7	5.1	
4.5	LC	24.4*	24.4*	15.5	16.4*	10.0	12.7*	7.2	10.5*	5.4	8.1	4.3	6.4	3.4	5.2					3.3	5.0	12.2
	EW	24.6*	24.6*	16.5*	16.5*	12.7*	12.7*	9.4	10.3	7.1	7.8	5.6	6.1	4.6	5.0					4.4	4.8	
3.0	LC			13.9	18.9*	9.3	13.9*	6.8	10.3	5.2	7.8	4.2	6.2	3.4	5.1					3.2	4.9	12.4
	EW			19.0*	19.0*	12.5	13.8	9.0	9.9	6.9	7.5	5.5	6.0	4.5	4.9					4.3	4.7	
1.5	LC			8.5*	8.5*	8.6	13.7	6.4	9.9	5.0	7.6	4.0	6.1	3.3	5.1					3.2	4.8	12.4
	EW			8.3*	8.3*	11.8	13.1	8.6	9.5	6.7	7.3	5.4	5.9	4.4	4.9					4.2	4.6	
0	LC	2.4*	2.4*	7.4*	7.4*	8.2	13.3	6.1	9.6	4.8	7.4	3.9	6.0	3.3	5.0					3.2	4.9	12.2
	EW	2.4*	2.4*	7.4*	7.4*	11.4	12.6	8.3	9.2	6.5	7.1	5.3	5.8	4.4	4.8					4.3	4.7	
-1.5	LC			8.4*	8.4*	8.0	13.1	6.0	9.4	4.7	7.3	3.9	5.9							3.3	5.1	11.9
	EW			8.5*	8.5*	11.2	12.4	8.2	9.0	6.4	7.0	5.2	5.7							4.5	4.9	
-3.0	LC					8.0	12.3*	6.0	9.4	4.7	7.3	3.9	6.0							3.8	5.8	10.7
	EW					11.2	12.2*	8.1	9.0	6.4	7.0	5.2	5.7							5.2	5.7	
-4.5	LC																					
	EW																					

## Industrial Stick 6.00 m (Variant 3A)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m		
15.0	LC																					
	EW																					
13.5	LC																					
	EW																					
12.0	LC									5.9	6.0*									6.8*	6.8*	7.0
	EW									6.1*	6.1*									5.8	5.8*	9.1
10.5	LC									6.1	7.9*									4.6	5.3*	10.5
	EW									7.8	7.9*	5.4*	5.4*							5.3*	5.3*	
9.0	LC									6.1	7.8*	4.7	6.8							3.9	5.0*	11.5
	EW									7.8*	7.8*	6.0	6.5							5.0*	5.0*	
7.5	LC									6.0	7.9*	4.6	6.8	3.6	5.4					3.4	4.9*	12.3
	EW									7.8	7.9*	6.0	6.5	4.8	5.2					4.5	4.9*	
6.0	LC							7.8	9.1*	5.9	8.2*	4.5	6.7	3.6	5.3					3.1	4.7	12.9
	EW							9.1*	9.1*	7.6	8.2*	5.9	6.4	4.7	5.1					4.2	4.5	
4.5	LC					10.5	11.6*	7.4	9.8*	5.6	8.3	4.4	6.5	3.5	5.3					3.0	4.5	13.2
	EW					11.6*	11.6*	9.7	9.8*	7.3	8.0	5.8	6.3	4.6	5.1					3.9	4.3	
3.0	LC	15.9*	15.9*	14.9	17.2*	9.7	13.0*	7.0	10.5	5.3	8.0	4.2	6.3	3.4	5.2					2.8	4.3	13.4
	EW	13.2*	13.2*	17.2*	17.2*	13.0	13.0*	9.2	10.1	7.0	7.7	5.6	6.1	4.5	5.0					3.8	4.2	
1.5	LC	2.5*	2.5*	13.3	16.1*	8.9	14.1*	6.6	10.1	5.1	7.7	4.1	6.2	3.3	5.1					2.8	4.3	13.4
	EW	2.5*	2.5*	15.5*	15.5*	12.1	13.4	8.8	9.6	6.8	7.4	5.4	5.9	4.4	4.9					3.8	4.1	
0	LC	3.0*	3.0*	8.9*	8.9*	8.3	13.4	6.2	9.7	4.8	7.5	3.9	6.0	3.2	5.0					2.8	4.3	13.2
	EW	3.0*	3.0*	8.8*	8.8*	11.5	12.8	8.4	9.2	6.5	7.1	5.3	5.8	4.4	4.8					3.8	4.2	
-1.5	LC	4.4*	4.4*	8.5*	8.5*	8.0	13.0	6.0	9.4	4.7	7.3	3.8	5.9	3.2	4.9					2.9	4.5	12.9
	EW	4.4*	4.4*	8.5*	8.5*	11.2	12.4	8.1	9.0	6.4	7.0	5.2	5.7	4.3	4.7					4.0	4.3	
-3.0	LC			9.4*	9.4*	7.9	12.9	5.8	9.3	4.6	7.2	3.8	5.9	3.2	4.9					3.2	4.9	12.2
	EW			9.4*	9.4*	11.0	12.3	8.0	8.9	6.3	6.9	5.1	5.6	4.3	4.8					4.3	4.7	
-4.5	LC					7.9	11.5*	5.8	9.3	4.6	7.2									4.0	6.2	10.1
	EW					11.1	11.4*	8.0	8.9	6.3	6.9									5.5	6.1	

↑ 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 triple 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.



# Lift Capacities

with Industrial-Type Straight Boom 7.60 m

## Industrial Stick 5.00 m (Variant 3B)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m		
15.0	LC																					
	EW																					
13.5	LC			10.4*	10.4*															9.5*	9.5*	4.8
	EW			10.6*	10.6*															9.4*	9.4*	
12.0	LC					9.8*	9.8*	7.5*	7.5*											7.4*	7.4*	7.5
	EW					9.8*	9.8*	7.7*	7.7*											7.4*	7.4*	
10.5	LC					9.3*	9.3*	7.9	8.6*	5.8	7.3*									5.6	6.6*	9.2
	EW					9.3*	9.3*	8.5*	8.5*	7.4*	7.4*									6.6*	6.6*	
9.0	LC					9.3*	9.3*	7.9	8.5*	5.9	7.9*									4.5	6.2*	10.4
	EW					9.3*	9.3*	8.5*	8.5*	7.6	7.9*									5.9	6.2*	
7.5	LC					9.7*	9.7*	7.8	8.7*	5.8	8.0*	4.5	6.6							3.9	5.9	11.2
	EW					9.7*	9.7*	8.7*	8.7*	7.5	8.0*	5.8	6.3							5.2	5.6	
6.0	LC			12.8*	12.8*	10.6*	10.6*	7.5	9.2*	5.7	8.2*	4.4	6.5							3.6	5.3	11.8
	EW			12.8*	12.8*	10.6*	10.6*	9.2*	9.2*	7.4	8.0	5.8	6.3							4.7	5.1	
4.5	LC	22.5*	22.5*	15.2*	15.2*	10.0	11.9*	7.2	9.9*	5.5	8.1	4.3	6.4	3.4	5.2					3.3	5.0	12.2
	EW	22.8*	22.8*	15.3*	15.3*	11.9*	11.9*	9.4	9.9*	7.2	7.8	5.7	6.2	4.6	5.0					4.4	4.8	
3.0	LC			13.9	18.0*	9.3	13.2*	6.8	10.3	5.2	7.9	4.2	6.3	3.4	5.1					3.2	4.9	12.4
	EW			18.1*	18.1*	12.5	13.3*	9.0	9.9	6.9	7.5	5.5	6.0	4.5	4.9					4.3	4.7	
1.5	LC			8.5*	8.5*	8.6	13.8	6.4	9.9	5.0	7.6	4.0	6.1	3.3	5.1					3.2	4.8	12.4
	EW			8.3*	8.3*	11.8	13.1	8.6	9.5	6.7	7.3	5.4	5.9	4.5	4.9					4.2	4.6	
0	LC			7.4*	7.4*	8.2	13.3	6.1	9.6	4.8	7.4	3.9	6.0	3.3	5.0					3.2	4.9	12.2
	EW			7.4*	7.4*	11.4	12.6	8.3	9.2	6.5	7.1	5.3	5.8	4.4	4.8					4.3	4.7	
-1.5	LC			8.4*	8.4*	8.0	13.1	6.0	9.4	4.7	7.3	3.9	6.0							3.6	5.5	11.2
	EW					11.2	12.4	8.2	9.0	6.4	7.0	5.2	5.7							4.8	5.3	
-3.0	LC																					
	EW																					
-4.5	LC																					
	EW																					

## Industrial Stick 6.00 m (Variant 3B)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m		
15.0	LC																			10.3*	10.3*	3.4
	EW																			10.0*	10.0*	
13.5	LC					8.8*	8.8*													6.8*	6.8*	7.0
	EW					8.9*	8.9*													6.8*	6.8*	
12.0	LC					8.6*	8.6*	8.0*	8.0*	5.9	6.0*									5.8	5.8*	9.1
	EW					8.5*	8.5*	8.0*	8.0*	6.1*	6.1*									5.8*	5.8*	
10.5	LC							7.6*	7.6*	6.1	7.3*									4.6	5.3*	10.5
	EW							7.6*	7.6*	7.3*	7.3*	5.4*	5.4*							5.3*	5.3*	
9.0	LC							7.6*	7.6*	6.1	7.2*	4.7	6.8							3.9	5.0*	11.5
	EW							7.6*	7.6*	7.2*	7.2*	6.0	6.6							5.0*	5.0*	
7.5	LC					8.5*	8.5*	7.9*	7.9*	6.0	7.3*	4.6	6.8	3.6	5.4					3.4	4.9*	12.3
	EW					8.6*	8.6*	7.9*	7.9*	7.3*	7.3*	6.0	6.5	4.8	5.2					4.5	4.9*	
6.0	LC					9.4*	9.4*	7.8	8.4*	5.9	7.6*	4.5	6.7	3.6	5.3					3.1	4.7	12.9
	EW					9.4*	9.4*	8.4*	8.4*	7.6	7.7*	5.9	6.4	4.7	5.1					4.2	4.5	
4.5	LC			13.1*	13.1*	10.5	10.7*	7.5	9.1*	5.6	8.1*	4.4	6.5	3.5	5.3					3.0	4.5	13.2
	EW	10.3*	10.3*	13.2*	13.2*	10.7*	10.7*	9.2*	9.2*	7.3	8.0	5.8	6.3	4.7	5.1					3.9	4.3	
3.0	LC	15.9*	15.9*	14.9	16.0*	9.7	12.2*	7.0	10.0*	5.3	8.0	4.2	6.3	3.4	5.2					2.9	4.3	13.4
	EW	13.2*	13.2*	16.1*	16.1*	12.2*	12.2*	9.3	10.0*	7.0	7.7	5.6	6.1	4.6	5.0					3.8	4.2	
1.5	LC	2.5*	2.5*	13.3	16.1*	8.9	13.5*	6.6	10.1	5.1	7.7	4.1	6.2	3.3	5.1					2.8	4.3	13.4
	EW	2.5*	2.5*	15.5*	15.5*	12.2	13.4	8.8	9.6	6.8	7.4	5.4	5.9	4.5	4.9					3.8	4.1	
0	LC	3.0*	3.0*	8.9*	8.9*	8.3	13.4	6.2	9.7	4.9	7.5	3.9	6.0	3.3	5.0					2.8	4.4	13.2
	EW	3.0*	3.0*	8.8*	8.8*	11.5	12.8	8.4	9.2	6.5	7.2	5.3	5.8	4.4	4.8					3.8	4.2	
-1.5	LC			8.5*	8.5*	8.0	13.1	6.0	9.4	4.7	7.3	3.8	5.9	3.2	4.9					3.0	4.7	12.5
	EW			8.5*	8.5*	11.2	12.4	8.2	9.0	6.4	7.0	5.2	5.7	4.3	4.7					4.1	4.5	
-3.0	LC					7.9	12.9	5.8	9.3	4.6	7.2	3.8	5.9							3.7	5.6	10.8
	EW					11.0	12.3	8.0	8.9	6.3	6.9	5.1	5.6							5.0	5.5	
-4.5	LC																					
	EW																					

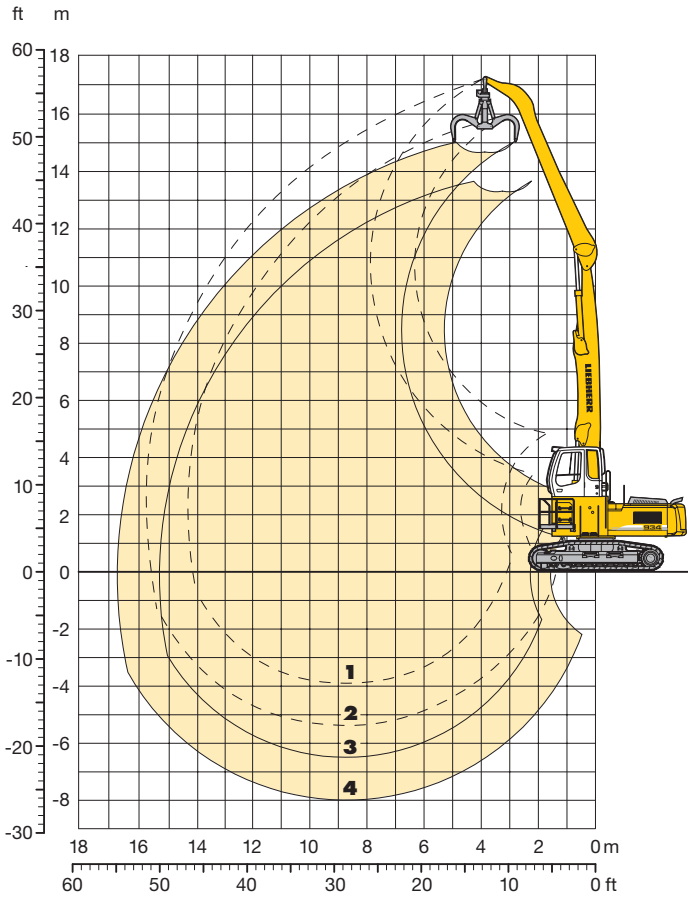
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

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 triple 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 8.60 m



## Attachment Envelope

Kinematic variant 2A

- 1** with industrial stick 6.00 m
- 2** with industrial stick 7.50 m
- 3** with industrial stick 6.00 m and grapple model 65
- 4** with industrial stick 7.50 m and grapple model 65

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 1.20 m, counterweight 7.5 t, industrial-type straight boom 8.60 m, industrial stick 6.00 m and grapple model 65 with 5 semi-closed tines 0.60 m<sup>3</sup>.

Undercarriage		EW	
Pad width	mm	600	750
Weight	kg	37,200	37,700
Ground pressure	kg/cm <sup>2</sup>	0.81	0.65

Operating weight includes basic machine with rigid cab elevation 1.20 m, counterweight 7.5 t, industrial-type straight boom 8.60 m, industrial stick 7.50 m and grapple model 65 with 5 semi-closed tines 0.60 m<sup>3</sup>.

Undercarriage		EW	
Pad width	mm	600	750
Weight	kg	37,450	37,950
Ground pressure	kg/cm <sup>2</sup>	0.81	0.66

# Lift Capacities

with Industrial-Type Straight Boom 8.60 m

## Industrial Stick 6.00 m (Variant 2A)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m			
16.5	EW																						
15.0	EW			9.9*	9.9*																7.7*	7.7*	6.0
13.5	EW					9.6*	9.6*	8.1*	8.1*												6.2*	6.2*	8.5
12.0	EW							9.3*	9.3*	7.8	8.0*										5.5*	5.5*	10.2
10.5	EW							9.2*	9.2*	7.9	8.1*	6.0	6.5								5.0	5.2*	11.5
9.0	EW							9.3*	9.3*	7.8	8.1*	6.0	6.5	4.7	5.2						4.4	4.8	12.5
7.5	EW					11.3*	11.3*	9.5*	9.5*	7.7	8.2*	5.9	6.5	4.7	5.1						3.9	4.3	13.2
6.0	EW			12.3*	12.3*	11.9*	11.9*	9.8*	9.8*	7.4	8.1	5.8	6.3	4.6	5.1	3.8	4.1				3.6	4.0	13.7
4.5	EW	24.9*	24.9*	16.7*	16.7*	12.6*	12.6*	9.4	10.2*	7.1	7.8	5.6	6.1	4.5	4.9	3.7	4.1				3.4	3.8	14.1
3.0	EW			17.9*	17.9*	12.4	13.2*	8.9	9.7	6.8	7.4	5.4	5.9	4.4	4.8	3.6	4.0				3.3	3.7	14.3
1.5	EW			5.8*	5.8*	11.5	12.7	8.4	9.2	6.5	7.1	5.2	5.7	4.3	4.7	3.6	3.9				3.3	3.6	14.3
0	EW			4.9*	4.9*	10.8	12.1	8.0	8.8	6.2	6.8	5.0	5.5	4.2	4.6	3.5	3.9				3.3	3.6	14.1
-1.5	EW			5.6*	5.6*	10.5	11.1*	7.7	8.5	6.0	6.6	4.9	5.4	4.1	4.5	3.5	3.6*				3.5	3.5*	13.5
-3.0	EW					9.0*	9.0*	7.6	7.7*	5.9	6.4*	4.8	5.2*								4.1*	4.1*	11.9
-4.5	EW																						
-6.0	EW																						
-7.5	EW																						

## Industrial Stick 7.50 m (Variant 2A)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m			
16.5	EW					6.8*	6.8*														6.5*	6.5*	6.2
15.0	EW							7.0*	7.0*												5.1*	5.1*	9.0
13.5	EW							7.8*	7.8*	6.8*	6.8*	5.1*	5.1*								4.5*	4.5*	10.8
12.0	EW									7.5*	7.5*	6.3	6.6*	4.6*	4.6*						4.1*	4.1*	12.2
10.5	EW									7.5*	7.5*	6.4	6.7*	5.0	5.4						3.9*	3.9*	13.3
9.0	EW									7.5*	7.5*	6.3	6.7*	5.0	5.4	4.0	4.3				3.6	3.8*	14.2
7.5	EW							8.7*	8.7*	7.6*	7.6*	6.2	6.7	4.9	5.3	3.9	4.3				3.3	3.6	14.8
6.0	EW							9.1*	9.1*	7.8	7.9*	6.0	6.6	4.8	5.2	3.9	4.2	3.2	3.5		3.0	3.3	15.3
4.5	EW					10.7*	10.7*	9.5*	9.5*	7.5	8.1	5.8	6.3	4.6	5.1	3.8	4.1	3.1	3.4		2.9	3.2	15.6
3.0	EW	19.2*	19.2*	16.4*	16.4*	12.4*	12.4*	9.4	10.0*	7.1	7.7	5.5	6.1	4.5	4.9	3.7	4.0	3.1	3.4		2.8	3.1	15.7
1.5	EW	2.7*	2.7*	17.6*	17.6*	12.2	13.0*	8.7	9.6	6.7	7.3	5.3	5.8	4.3	4.7	3.6	3.9	3.0	3.3		2.8	3.1	15.8
0	EW	2.2*	2.2*	7.2*	7.2*	11.2	12.5	8.2	9.0	6.3	6.9	5.0	5.5	4.1	4.6	3.5	3.8	2.9	3.3		2.8	3.1	15.6
-1.5	EW	2.9*	2.9*	6.1*	6.1*	10.6	11.8	7.7	8.6	6.0	6.6	4.8	5.3	4.0	4.4	3.4	3.7	2.9	3.2		2.8	2.9*	15.3
-3.0	EW			6.4*	6.4*	10.2	10.9*	7.5	8.3	5.8	6.4	4.7	5.2	3.9	4.3	3.3	3.7				3.1	3.2*	14.2
-4.5	EW					8.9*	8.9*	7.3	7.5*	5.7	6.2*	4.6	5.1*	3.9	4.0*						3.7*	3.7*	12.3
-6.0	EW																						
-7.5	EW																						

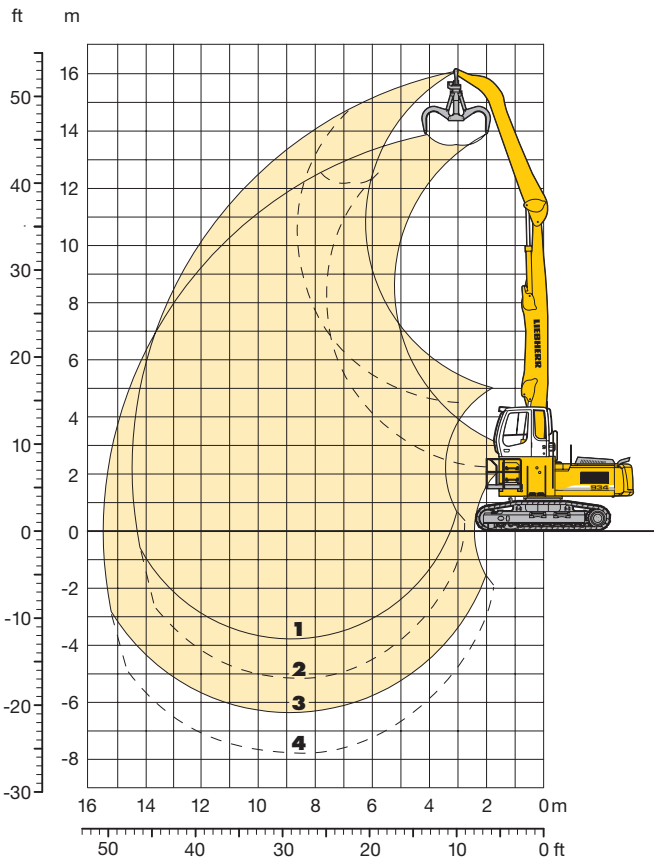
↑ Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

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 triple 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 8.60 m



## Attachment Envelope

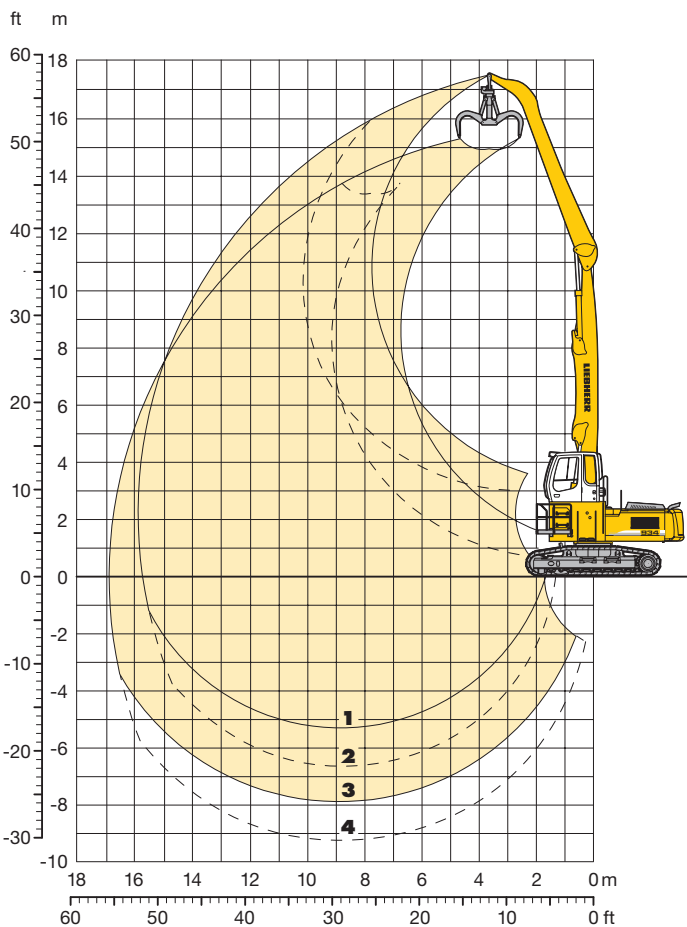
Kinematic variants 3A/3B

- 1** with industrial stick 6.00 m (3B)
- 2** with industrial stick 6.00 m (3A)
- 3** with industrial stick 6.00 m and grapple model 65 (3B)
- 4** with industrial stick 6.00 m and grapple model 65 (3A)

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 1.20 m, counterweight 7.5 t, industrial-type straight boom 8.60 m, industrial stick 6.00 m and grapple model 65 with 5 semi-closed tines 0.60 m<sup>3</sup>.

Undercarriage		EW	
Pad width	mm	600	750
Weight	kg	37,200	37,700
Ground pressure	kg/cm <sup>2</sup>	0.81	0.65



## Attachment Envelope

Kinematic variants 3A/3B

- 1** with industrial stick 7.50 m (3B)
- 2** with industrial stick 7.50 m (3A)
- 3** with industrial stick 7.50 m and grapple model 65 (3B)
- 4** with industrial stick 7.50 m and grapple model 65 (3A)

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 1.20 m, counterweight 7.5 t, industrial-type straight boom 8.60 m, industrial stick 7.50 m and grapple model 65 with 5 semi-closed tines 0.60 m<sup>3</sup>.

Undercarriage		EW	
Pad width	mm	600	750
Weight	kg	37,450	37,950
Ground pressure	kg/cm <sup>2</sup>	0.81	0.66

# Lift Capacities

with Industrial-Type Straight Boom 8.60 m

## Industrial Stick 6.00 m (Variant 3A)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m		
16.5	EW																					
15.0	EW																					
13.5	EW																					
12.0	EW									7.6*	7.6*	5.5*	5.5*							6.1*	6.1*	8.8
10.5	EW									7.4*	7.4*	6.0	6.5							5.5*	5.5*	10.5
9.0	EW									7.5*	7.5*	6.0	6.5	4.7	5.1					4.8	5.1*	11.8
7.5	EW									7.6	7.7*	5.9	6.4	4.7	5.1					4.2	4.6	12.7
6.0	EW							9.2*	9.2*	7.4	8.0*	5.7	6.3	4.6	5.0	3.7	4.1			3.8	4.2	13.4
4.5	EW	23.8*	23.8*	15.7*	15.7*	12.0*	12.0*	9.3	9.8*	7.0	7.7	5.5	6.1	4.5	4.9	3.7	4.0			3.5	3.9	13.9
3.0	EW			13.8*	13.8*	12.2	13.2*	8.7	9.6	6.7	7.3	5.3	5.8	4.3	4.8	3.6	4.0			3.4	3.7	14.2
1.5	EW			5.0*	5.0*	11.3	12.5	8.2	9.1	6.4	7.0	5.1	5.6	4.2	4.6	3.5	3.9			3.3	3.6	14.4
0	EW	1.3*	1.3*	4.6*	4.6*	10.7	11.9	8.2	8.7	6.1	6.7	5.0	5.4	4.1	4.5	3.5	3.8			3.2	3.5	14.4
-1.5	EW			5.4*	5.4*	10.4	11.1*	7.6	8.4	5.9	6.6	4.8	5.3	4.0	4.5	3.5	3.8			3.2	3.6	14.2
-3.0	EW			6.7*	6.7*	10.3	11.5*	7.5	8.3	5.9	6.5	4.8	5.3	4.0	4.4					3.3	3.7	13.9
-4.5	EW							7.5	8.4	5.9	6.5	4.8	5.3							3.6	3.9	13.3
-6.0	EW																			4.4	4.8	11.3
-7.5	EW																					

## Industrial Stick 7.50 m (Variant 3A)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m		
16.5	EW																					
15.0	EW									5.6*	5.6*									5.0*	5.0*	9.3
13.5	EW											5.5*	5.5*							4.4*	4.4*	11.1
12.0	EW											6.2*	6.2*	4.9	5.0*					4.1*	4.1*	12.5
10.5	EW											6.1*	6.1*	5.0	5.4	3.9	4.0*			3.9	3.9*	13.5
9.0	EW											6.2*	6.2*	5.0	5.4	3.9	4.3			3.4	3.7*	14.3
7.5	EW											6.2	6.3*	4.9	5.3	3.9	4.3			3.2	3.5	15.0
6.0	EW									7.2*	7.2*	6.0	6.5	4.8	5.2	3.8	4.2	3.1	3.4	3.0	3.3	15.4
4.5	EW							8.8*	8.8*	7.4	7.7*	5.7	6.3	4.6	5.0	3.7	4.1	3.1	3.4	2.8	3.1	15.7
3.0	EW	23.5*	23.5*	15.5*	15.5*	11.7*	11.7*	9.2	9.6*	7.0	7.6	5.5	6.0	4.4	4.8	3.6	4.0	3.0	3.3	2.7	3.0	15.9
1.5	EW	2.1*	2.1*	15.0*	15.0*	11.9	12.9*	8.6	9.4	6.6	7.2	5.2	5.7	4.2	4.7	3.5	3.9	3.0	3.3	2.7	3.0	15.9
0	EW	2.0*	2.0*	6.4*	6.4*	11.0	12.3	8.0	8.9	6.2	6.8	5.0	5.5	4.1	4.5	3.4	3.8	2.9	3.2	2.7	3.0	15.7
-1.5	EW	2.8*	2.8*	5.8*	5.8*	10.4	11.7	7.6	8.4	5.9	6.5	4.8	5.3	4.0	4.4	3.3	3.7	2.9	3.2	2.8	3.1	15.4
-3.0	EW	3.9*	3.9*	6.2*	6.2*	10.1	11.3	7.4	8.2	5.7	6.4	4.7	5.1	3.9	4.3	3.3	3.7			2.9	3.2	15.0
-4.5	EW			7.1*	7.1*	10.0	11.2	7.3	8.1	5.7	6.3	4.6	5.1	3.8	4.3	3.3	3.7			3.2	3.5	13.9
-6.0	EW					10.1	10.3*	7.3	8.1	5.7	6.3	4.6	5.1							4.1	4.5	11.6
-7.5	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 triple 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.

# Lift Capacities

with Industrial-Type Straight Boom 8.60 m

## Industrial Stick 6.00 m (Variant 3B)

↓ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m			
16.5	EW																						
15.0	EW					8.2*	8.2*														7.4*	7.4*	6.4
13.5	EW					8.7*	8.7*	7.9*	7.9*												6.1*	6.1*	8.8
12.0	EW							7.5*	7.5*	7.0*	7.0*	5.5*	5.5*								5.5*	5.5*	10.5
10.5	EW							7.4*	7.4*	6.8*	6.8*	6.0	6.4*								4.8	5.1*	11.8
9.0	EW					8.3*	8.3*	7.5*	7.5*	6.9*	6.9*	6.0	6.4*	4.7	5.1						4.2	4.6	12.7
7.5	EW					8.9*	8.9*	7.9*	7.9*	7.1*	7.1*	5.9	6.4	4.7	5.1						3.8	4.2	13.4
6.0	EW			12.1*	12.1*	9.9*	9.9*	8.5*	8.5*	7.4	7.5*	5.8	6.3	4.6	5.0	3.7	4.1				3.5	3.9	13.9
4.5	EW	21.9*	21.9*	14.5*	14.5*	11.2*	11.2*	9.2*	9.2*	7.1	7.7	5.6	6.1	4.5	4.9	3.7	4.0				3.4	3.7	14.2
3.0	EW			13.8*	13.8*	12.2	12.5*	8.8	9.6	6.7	7.3	5.3	5.8	4.4	4.8	3.6	4.0				3.3	3.6	14.4
1.5	EW			5.0*	5.0*	11.3	12.5	8.2	9.1	6.4	7.0	5.1	5.6	4.2	4.6	3.5	3.9				3.2	3.5	14.4
0	EW			4.6*	4.6*	10.7	11.9	7.8	8.7	6.1	6.8	5.0	5.5	4.1	4.5	3.5	3.8				3.3	3.6	14.2
-1.5	EW			5.4*	5.4*	10.4	11.1*	7.6	8.4	6.0	6.6	4.8	5.3	4.0	4.5	3.5	3.8				3.5	3.8	13.5
-3.0	EW					10.3	11.5*	7.5	8.3	5.9	6.5	4.8	5.3								4.1	4.6	11.7
-4.5	EW																						
-6.0	EW																						
-7.5	EW																						

## Industrial Stick 7.50 m (Variant 3B)

↓ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m			
16.5	EW					7.3*	7.3*														6.3*	6.3*	6.7
15.0	EW							7.2*	7.2*	5.6*	5.6*										5.0*	5.0*	9.3
13.5	EW							6.6*	6.6*	6.2*	6.2*	5.5*	5.5*								4.4*	4.4*	11.1
12.0	EW									6.0*	6.0*	5.7*	5.7*	4.9	5.0*						4.1*	4.1*	12.5
10.5	EW									5.9*	5.9*	5.6*	5.6*	5.0	5.4	3.9	4.0*				3.9	3.9*	13.5
9.0	EW							6.4*	6.4*	6.0*	6.0*	5.7*	5.7*	5.0	5.4	3.9	4.3				3.5	3.7*	14.3
7.5	EW							6.7*	6.7*	6.3*	6.3*	5.8*	5.8*	4.9	5.3	3.9	4.3				3.2	3.5	15.0
6.0	EW					8.2*	8.2*	7.3*	7.3*	6.6*	6.6*	6.0	6.1*	4.8	5.2	3.9	4.2	3.1	3.4		3.0	3.3	15.4
4.5	EW			8.6*	8.6*	9.4*	9.4*	8.1*	8.1*	7.1*	7.1*	5.8	6.3	4.6	5.0	3.8	4.1	3.1	3.4		2.8	3.1	15.7
3.0	EW	21.6*	21.6*	14.3*	14.3*	10.9*	10.9*	8.9*	8.9*	7.0	7.6*	5.5	6.0	4.4	4.8	3.6	4.0	3.0	3.3		2.7	3.0	15.9
1.5	EW	2.1*	2.1*	15.0*	15.0*	12.0	12.2*	8.6	9.5	6.6	7.2	5.2	5.7	4.3	4.7	3.5	3.9	3.0	3.3		2.7	3.0	15.9
0	EW	2.0*	2.0*	6.4*	6.4*	11.0	12.3	8.0	8.9	6.2	6.8	5.0	5.5	4.1	4.5	3.4	3.8	2.9	3.2		2.7	3.0	15.7
-1.5	EW	2.8*	2.8*	5.8*	5.8*	10.4	11.7	7.6	8.5	5.9	6.6	4.8	5.3	4.0	4.4	3.3	3.7	2.9	3.2		2.8	3.1	15.3
-3.0	EW			6.2*	6.2*	10.1	11.3	7.4	8.2	5.7	6.4	4.7	5.2	3.9	4.3	3.3	3.7				3.1	3.4	14.2
-4.5	EW					10.0	11.2	7.3	8.1	5.7	6.3	4.6	5.1	3.9	4.3						3.8	4.2	12.1
-6.0	EW																						
-7.5	EW																						

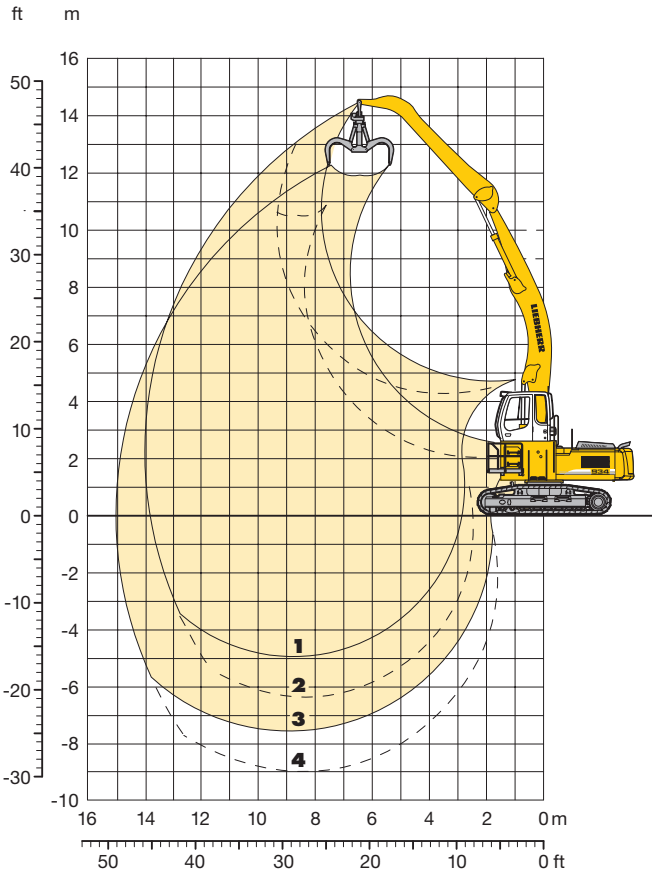
↓ Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

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 triple 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 8.60 m



## Attachment Envelope

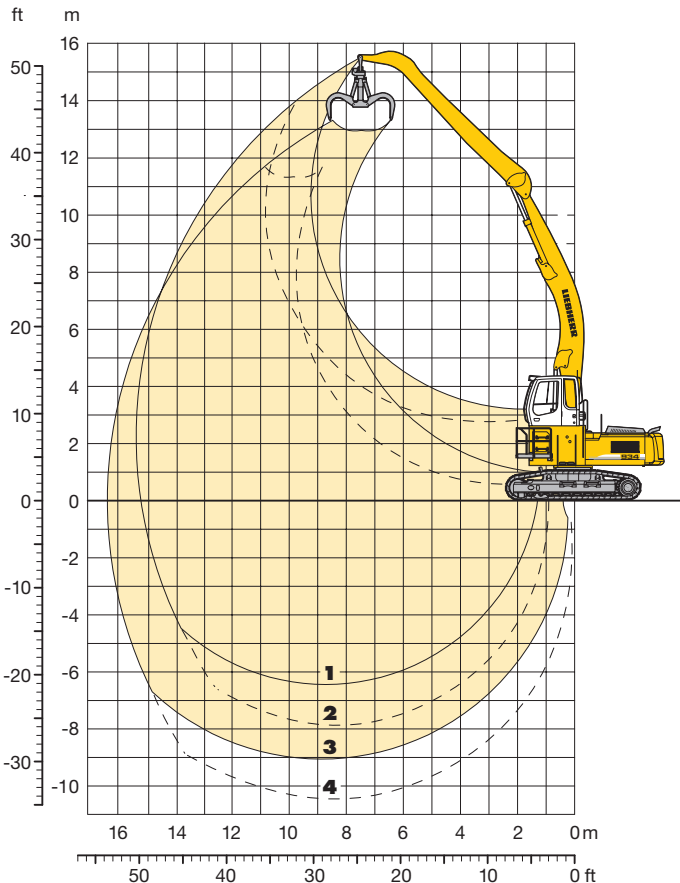
Kinematic variants 3C/3D

- 1** with industrial stick 6.00 m (3D)
- 2** with industrial stick 6.00 m (3C)
- 3** with industrial stick 6.00 m and grapple model 65 (3D)
- 4** with industrial stick 6.00 m and grapple model 65 (3C)

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 1.20 m, counterweight 7.5 t, industrial-type gooseneck boom 8.60 m, industrial stick 6.00 m and grapple model 65 with 5 semi-closed tines 0.60 m<sup>3</sup>.

Undercarriage		EW	
Pad width	mm	600	750
Weight	kg	37,350	37,850
Ground pressure	kg/cm <sup>2</sup>	0.81	0.66



## Attachment Envelope

Kinematic variants 3C/3D

- 1** with industrial stick 7.50 m (3D)
- 2** with industrial stick 7.50 m (3C)
- 3** with industrial stick 7.50 m and grapple model 65 (3D)
- 4** with industrial stick 7.50 m and grapple model 65 (3C)

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 1.20 m, counterweight 7.5 t, industrial-type gooseneck boom 8.60 m, industrial stick 7.50 m and grapple model 65 with 5 semi-closed tines 0.60 m<sup>3</sup>.

Undercarriage		EW	
Pad width	mm	600	750
Weight	kg	37,600	38,100
Ground pressure	kg/cm <sup>2</sup>	0.81	0.66



# Lift Capacities

with Industrial-Type Gooseneck Boom 8.60 m

## Industrial Stick 6.00 m (Variant 3C)

↕ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m			
16.5	EW																						
15.0	EW																						
13.5	EW																						
12.0	EW																						
10.5	EW											5.3*	5.3*								5.2*	5.2*	9.9
9.0	EW											5.3*	5.3*	4.8	5.2*						5.0*	5.0*	11.2
7.5	EW									5.7*	5.7*	5.4*	5.4*	4.8	5.2						4.7	4.8*	12.2
6.0	EW									6.1*	6.1*	5.7*	5.7*	4.7	5.1						3.8	4.2	13.4
4.5	EW					9.0*	9.0*	7.6*	7.6*	6.7*	6.7*	5.7	6.1*	4.6	5.0	3.7	4.1				3.6	4.0	13.8
3.0	EW	2.5*	2.5*	14.7*	14.7*	10.6*	10.6*	8.5*	8.5*	6.9	7.3*	5.4	6.0	4.4	4.8	3.7	4.0				3.5	3.8	13.9
1.5	EW	1.7*	1.7*	7.6*	7.6*	11.5	12.1*	8.4	9.2	6.5	7.1	5.2	5.7	4.3	4.7	3.6	3.9				3.4	3.7	13.9
0	EW	2.9*	2.9*	6.4*	6.4*	10.8	12.1	7.9	8.8	6.2	6.8	5.0	5.5	4.1	4.6	3.5	3.8				3.4	3.7	13.8
-1.5	EW	4.3*	4.3*	6.8*	6.8*	10.4	11.7	7.7	8.5	6.0	6.6	4.9	5.4	4.1	4.5						3.5	3.8	13.4
-3.0	EW			7.6*	7.6*	10.3	11.5	7.5	8.3	5.9	6.5	4.8	5.3	4.0	4.4						3.7	4.0	12.9
-4.5	EW			8.5*	8.5*	10.3	11.5	7.5	8.3	5.8	6.5	4.8	5.3	4.0	4.4						4.0	4.4	12.2
-6.0	EW							7.5	8.4	5.9	6.5										4.9	5.4	10.4
-7.5	EW																						

## Industrial Stick 7.50 m (Variant 3C)

↕ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m				
16.5	EW																							
15.0	EW																							
13.5	EW																					4.2*	4.2*	10.4
12.0	EW																					3.9*	3.9*	11.8
10.5	EW													4.4*	4.4*							3.8*	3.8*	12.9
9.0	EW													4.4*	4.4*	4.0	4.2*					3.7*	3.7*	13.8
7.5	EW											4.6*	4.6*	4.5*	4.5*	4.0	4.4					3.5	3.7*	14.4
6.0	EW											4.9*	4.9*	4.7*	4.7*	3.9	4.3					3.2	3.6	14.9
4.5	EW									5.7*	5.7*	5.3*	5.3*	4.7	5.0*	3.8	4.2	3.1	3.5			3.1	3.4	15.2
3.0	EW					8.7*	8.7*	7.3*	7.3*	6.4*	6.4*	5.6	5.7*	4.5	5.0	3.7	4.1	3.1	3.4			2.9	3.2	15.4
1.5	EW	4.9*	4.9*	14.4*	14.4*	10.4*	10.4*	8.3*	8.3*	6.7	7.0*	5.3	5.8	4.3	4.8	3.6	3.9	3.0	3.3			2.9	3.2	15.4
0	EW	3.7*	3.7*	8.9*	8.9*	11.2	11.8*	8.2	9.0	6.3	7.0	5.1	5.6	4.2	4.6	3.5	3.8	2.9	3.2			2.9	3.2	15.2
-1.5	EW	4.2*	4.2*	7.3*	7.3*	10.6	11.8	7.7	8.6	6.0	6.6	4.8	5.3	4.0	4.4	3.4	3.7					2.9	3.2	14.9
-3.0	EW	4.9*	4.9*	7.3*	7.3*	10.2	11.4	7.4	8.2	5.8	6.4	4.7	5.2	3.9	4.3	3.3	3.7					3.0	3.3	14.4
-4.5	EW	5.6*	5.6*	7.7*	7.7*	10.0	11.2	7.3	8.1	5.6	6.3	4.6	5.1	3.8	4.2	3.3	3.6					3.2	3.5	13.8
-6.0	EW			8.3*	8.3*	10.0	11.2	7.2	8.0	5.6	6.2	4.6	5.1	3.8	4.3							3.5	3.9	12.9
-7.5	EW							7.3	8.1	5.7	6.3	4.6	5.1									4.6	5.0	10.6

↕ 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 triple 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.



# Lift Capacities

with Industrial-Type Gooseneck Boom 8.60 m

## Industrial Stick 6.00 m (Variant 3D)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m		
16.5	EW																					
15.0	EW																					
13.5	EW							6.7*	6.7*											5.7*	5.7*	8.1
12.0	EW									6.5*	6.5*									5.2*	5.2*	9.9
10.5	EW									6.3*	6.3*	6.1*	6.1*							5.0*	5.0*	11.2
9.0	EW									6.4*	6.4*	6.0*	6.0*	4.8	5.3					4.7	4.8*	12.2
7.5	EW							7.3*	7.3*	6.7*	6.7*	6.1	6.2*	4.8	5.2					4.2	4.6	12.9
6.0	EW					9.1*	9.1*	7.9*	7.9*	7.0*	7.0*	5.9	6.4*	4.7	5.1					3.8	4.2	13.4
4.5	EW	20.3*	20.3*	13.5*	13.5*	10.4*	10.4*	8.7*	8.7*	7.2	7.5*	5.7	6.2	4.6	5.0	3.7	4.1			3.6	4.0	13.8
3.0	EW	2.5*	2.5*	16.3*	16.3*	11.9*	11.9*	9.0	9.5*	6.9	7.5	5.4	5.9	4.4	4.8	3.7	4.0			3.5	3.8	13.9
1.5	EW	1.7*	1.7*	7.6*	7.6*	11.5	12.7	8.4	9.2	6.5	7.1	5.2	5.7	4.3	4.7	3.6	3.9			3.4	3.7	13.9
0	EW	2.9*	2.9*	6.4*	6.4*	10.8	12.1	7.9	8.8	6.2	6.8	5.0	5.5	4.1	4.6	3.5	3.8			3.4	3.7	13.8
-1.5	EW			6.8*	6.8*	10.4	11.7	7.6	8.5	6.0	6.6	4.9	5.4	4.1	4.5					3.5	3.8	13.4
-3.0	EW			7.6*	7.6*	10.3	11.5	7.5	8.3	5.9	6.5	4.8	5.3	4.0	4.4					3.7	4.0	12.9
-4.5	EW							7.5	8.3	5.8	6.5	4.8	5.3							4.5	4.9	11.0
-6.0	EW																					
-7.5	EW																					

## Industrial Stick 7.50 m (Variant 3D)

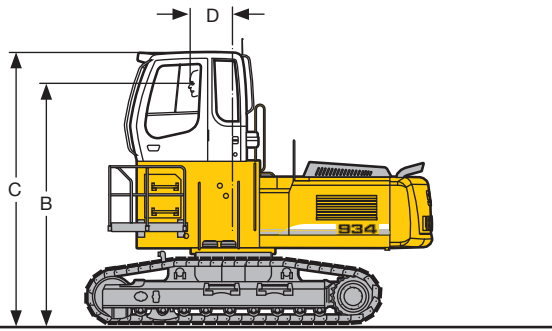
↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m		
16.5	EW																					
15.0	EW																					
13.5	EW									5.7*	5.7*									4.7*	4.7*	8.4
12.0	EW																			4.2*	4.2*	10.4
10.5	EW											5.3*	5.3*							3.9*	3.9*	11.8
9.0	EW											5.2*	5.2*	5.1*	5.1*					3.8*	3.8*	12.9
7.5	EW											5.3*	5.3*	5.1*	5.1*	4.0	4.2*			3.7*	3.7*	13.8
6.0	EW									5.7*	5.7*	5.4*	5.4*	5.0	5.2*	4.0	4.4			3.5	3.7*	14.4
4.5	EW					8.6*	8.6*	7.5*	7.5*	6.1*	6.1*	5.7*	5.7*	4.9	5.3	3.9	4.3			3.2	3.5	14.9
3.0	EW	20.0*	20.0*	13.3*	13.3*	10.1*	10.1*	8.4*	8.4*	6.6*	6.6*	5.9	6.0*	4.7	5.1	3.8	4.2	3.1	3.5	3.1	3.4	15.2
1.5	EW	4.9*	4.9*	16.0*	16.0*	11.6*	11.6*	8.8	9.2*	7.2	7.2*	5.6	6.1	4.5	4.9	3.7	4.1	3.1	3.4	2.9	3.2	15.4
0	EW	3.7*	3.7*	8.9*	8.9*	11.2	12.5	8.2	9.0	6.7	7.4	5.3	5.8	4.3	4.8	3.6	3.9	3.0	3.3	2.9	3.2	15.4
-1.5	EW	4.2*	4.2*	7.3*	7.3*	10.5	11.8	7.7	8.6	6.3	7.0	5.1	5.6	4.1	4.6	3.5	3.8	2.9	3.2	2.9	3.2	15.2
-3.0	EW	4.9*	4.9*	7.3*	7.3*	10.2	11.4	7.4	8.2	6.0	6.6	4.8	5.3	4.0	4.4	3.4	3.7			2.9	3.2	14.9
-4.5	EW			7.7*	7.7*	10.0	11.2	7.3	8.1	5.8	6.4	4.7	5.2	3.9	4.3	3.3	3.7			3.0	3.3	14.4
-6.0	EW							7.3	8.1	5.6	6.3	4.6	5.1	3.8	4.2	3.3	3.6			3.2	3.5	13.8
-7.5	EW							7.2	8.1	5.6	6.2	4.6	5.1							4.2	4.6	11.3

↑ 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 triple 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.

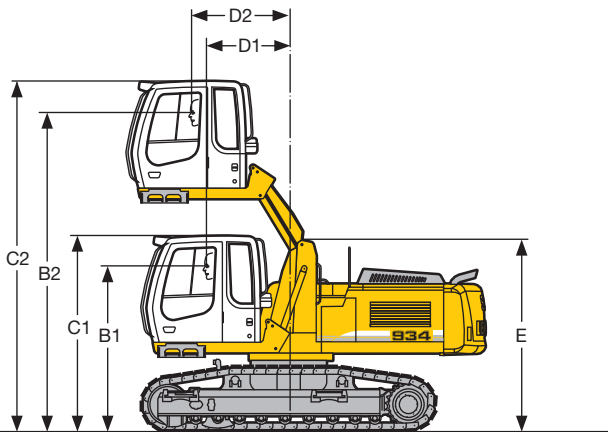
# Choice of Cab Elevation and Cab Protection



## Rigid Cab Elevation

	LC		EW	
Height	1,200 mm	2,000 mm	1,200 mm	2,000 mm
B	3,820 mm	4,620 mm	3,865 mm	4,665 mm
C	4,320 mm	5,120 mm	4,365 mm	5,165 mm
D	780 mm	780 mm	780 mm	780 mm

Additional weight with rigid cab elevation 2,000 mm in relation to cab elevation 1,200 mm: 400 kg

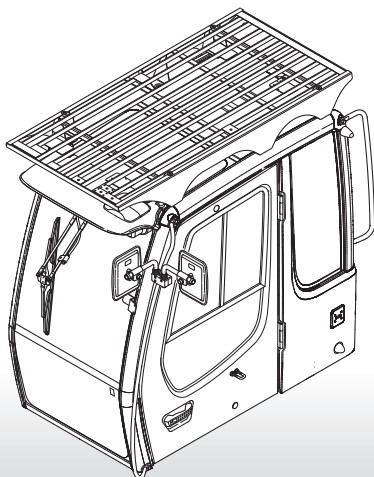


## Hydraulic Cab Elevation

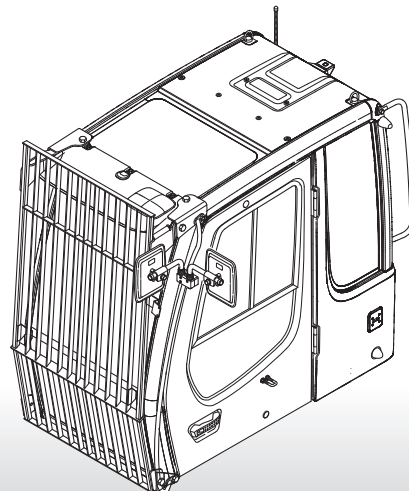
	LC	EW
B1	2,615 mm	2,660 mm
B2	5,115 mm	5,160 mm
C1	3,115 mm	3,160 mm
C2	5,615 mm	5,660 mm
D1	1,485 mm	1,485 mm
D2	1,730 mm	1,730 mm
E	3,035 mm	3,080 mm

Additional weight in relation to cab elevation 1,200 mm: 500 kg

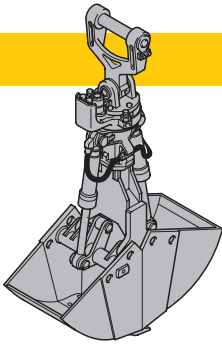
## FOPS Guard



## Front Guard



# Variety of Tools

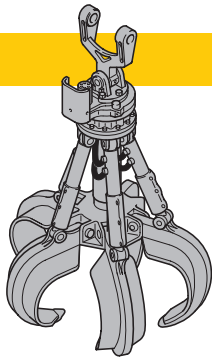


## Shells for Loose Material

### Clamshell Model 20 B

Shells for loose material with cutting edge (without teeth)

Cutting width of shells	mm	1,000	1,200	1,600
Capacity	m <sup>3</sup>	1.30	1.50	2.00
For loose material, specific weight up to	t/m <sup>3</sup>	1.5	1.5	1.5
Weight	kg	1,355	1,415	1,550



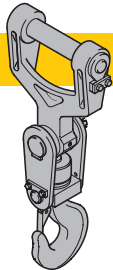
## Multiple Tine Grapples

open tines

semi-closed tines

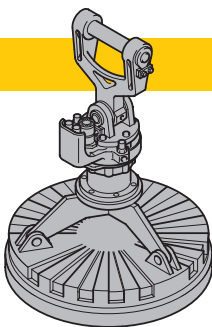
closed tines

<b>Grapple Model 64</b> (4 tines)	Capacity	m <sup>3</sup>	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
<b>Grapple Model 65</b> (5 tines)	Capacity	m <sup>3</sup>	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
<b>Grapple Model 69</b> (4 tines)	Capacity	m <sup>3</sup>	0.80	1.10	0.80	1.10	0.80	1.10
	Weight	kg	1,345	1,395	1,535	1,640	1,900	2,060
<b>Grapple Model 70 C</b> (5 tines)	Capacity	m <sup>3</sup>	0.80	1.10	0.80	1.10	0.80	1.10
	Weight	kg	1,485	1,590	1,705	1,860	1,950	1,995



## Crane Hook with Suspension

Max. load	t	12.5
Height with suspension	mm	930
Weight	kg	96



## Electromagnets with Suspension

Magnet information on request

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.

# Equipment



## Undercarriage

Lifetime lubricated track rollers	•
Track guide at each track frame	•
Tracks sealed and greased	•
Idler protection	•
Two-stage travel motors	•
Track guides front of sprocket and in center	+
B 60 or D 6 C sprocket with material ejector	+
Change kit track B 60 into D 6 C	+
Reinforced bottom plate of center-piece	+



## Uppercarriage

Handrails, non slip surfaces	•
Engine hood with lift help and mechanical locking	•
Sound insulation	•
Maintenance-free swing brake lock	•
Maintenance-free HD-batteries	•
Lockable tool box	•
Tool kit	•
Electric fuel tank filler pump	+
Foot pedal swing positioning brake	+
Customized colors	+



## Hydraulics

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



## Engine

Turbo-charged and after-cooled	•
Direct injection	•
Dry-type air cleaner w/pre-cleaner, main and safety element	•
Sensor controlled engine idling	•
Engine cold starting aid	+
Reversible radiator fan	+



## Operator's Cab

Storage tray	•
Automatic air conditioning with defroster	•
Mechanical hour meters, readable from outside the cab	•
Roof hatch	•
Removable handles for travel pedals	•
Seat and consoles independently adjustable (6-way adjustable seat)	•
Closed storage space – literature tray	•
Removable customized foot mat	•
Dome light	•
Inside rear mirror	•
Cloth hook	•
Displays for engine operating condition	•
Emergency exit rear window	•
Preparation for radio installation	•
Right window made of one piece (without post)	•
Rain hood over front window opening	•
All tinted windows	•
Door with sliding window	•
Seat belt	•
Sun roller blind	•
Wiper/washer	•
Cigarette lighter and ashtray	•
Air pressure operator seat with heating and head-rest	+
Extinguisher	+
Roof window wiper	+
Electric cool box	+
Bullet proof window (fixed installation – can not be opened)	+
Stereo radio	+
Beacon	+
Wiper in lower front windows	+
Auxiliary heating with clock timer	+
FOPS Protection	+
Electronic drive away lock	+
Additional flood lights (rear)	+
Additional flood lights (front)	+



## Attachment

Flood lights	•
Hydr. lines for clam operation in stick	•
Sealed pivots	•
Liebherr semi-automatic central lubrication system	•
Safety check valves on hoist cylinder, regenerative	•
Safety check valves on stick cylinder, regenerative	•
Hose quick connection	•
Cylinders with shock absorber	•
Safety lift hook	+
Liebherr line of clams	+
Liebherr fully-automatic central lubrication system	+
Customized colors	+
Overload warning device	+

• = 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 in order to retain warranty.**

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