

Machine for Industrial Applications A 934 C HD

Litronic® High Rise

Operating Weight: 45,500 – 46,400 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 according to level IIIA/Tier 3
Type	4 cylinder in-line
Bore/Stroke	122/150 mm
Displacement	7.0 l
Engine operation	4-stroke diesel unit pump system turbo-charged and 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, automatic dust discharge
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
Option	Liebherr particle filter



Hydraulic System

Hydraulic pump for attachment and travel drive	two Liebherr variable flow, swash plate pumps
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	148 l/min.
Max. pressure	380 bar
Hydraulic tank	350 l
Hydraulic system	590 l
Hydraulic oil filter	2 full flow filters 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, fuel cooler 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
Tool Control (Option)	ten preadjustable pump flows and pressures for add on tools



Hydraulic Controls

Power distribution	via control valves in single block 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 pedal
Additional functions	via foot pedals or joystick push buttons



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 – 4.5 RPM stepless
Swing torque	84 kNm
Holding brake	wet multi-disc (spring applied, pressure released), pedal controlled positioning brake



Operator's Cab

Cab	resiliently mounted, sound insulated, tinted windows, front window stores overhead, door with sliding window
Operator's seat	fully adjustable, shockabsorbing suspension, adjustable to operator's weight and size, 6-way adjustable Liebherr seat integrated into adjustable consoles
Joysticks	menu driven query of current operating conditions via the LCD display. Automatic monitoring, display, warning (acoustical and optical signal) and saving machine data, for example, engine overheating, low engine oil pressure or low hydraulic oil level standard air conditioning, combined cooler/heater, additional dust filter in fresh air/recirculated
Monitoring	
Air conditioning	



Undercarriage

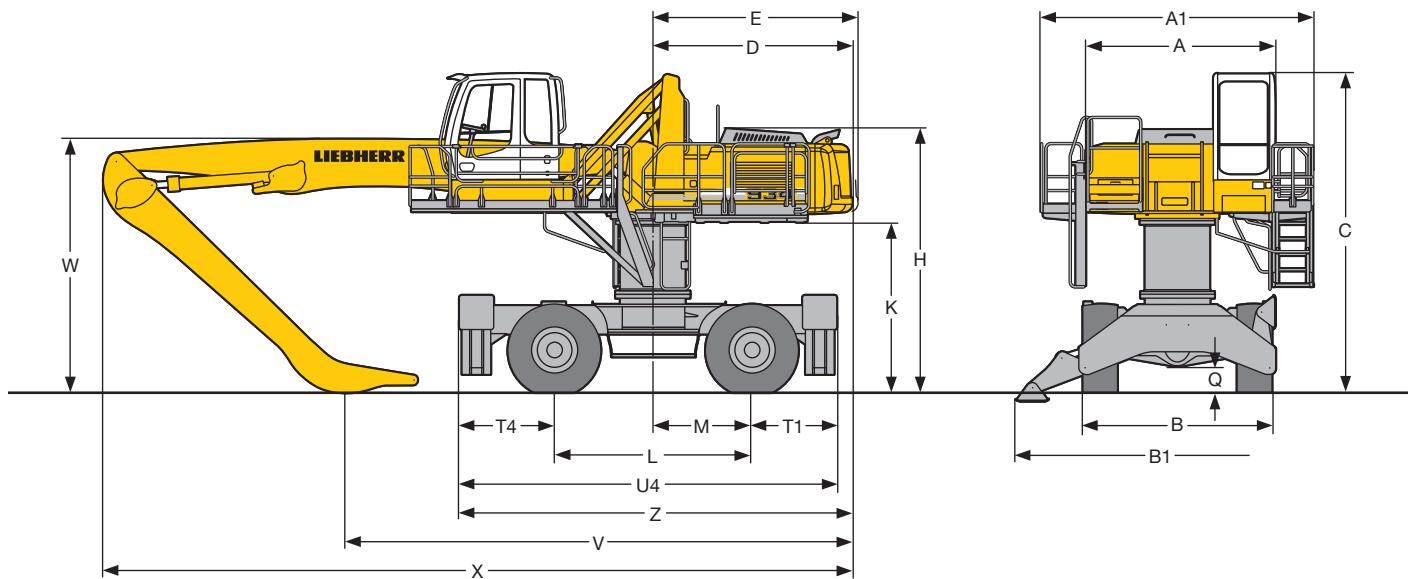
Drive	Liebherr variable flow swashplate motor with automatic brake valves
Transmission	oversized two speed power shift transmission with additional creeper speeds
Travel speed	0 – 2.5 km/h (creeper speed) 0 – 5.0 km/h (cross country) 0 – 9.0 km/h (creeper speed road) 0 – 18.0 km/h (road travel)
Axles	70 t excavator axles; automatic or operator controlled front axle oscillation lock
Service and holding brakes	multiple wet discs
Parking brake	multiple wet discs (spring applied – pressure released)
Stabilization	4-point outriggers with suspended rocker arm supports



Attachment

Type	high-strength steel plates at highly-stressed 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



	mm
A	3,075
A1	4,470
B	3,200
B1	5,250
C	5,185
D	3,235
E	3,235
H	4,290
K	2,770
L	3,200
M	1,600
Q	430
T1	1,385
T4	1,535
U4	6,120
Z	6,295

E = Tail radius

Tires 16.00-25

Industrial-Type Gooseneck Boom 8.60 m and Industrial Stick		m	6.00	7.50
V	mm	7,650	6,850	
W	mm	4,750	5,450	
X	mm	12,350	12,450	

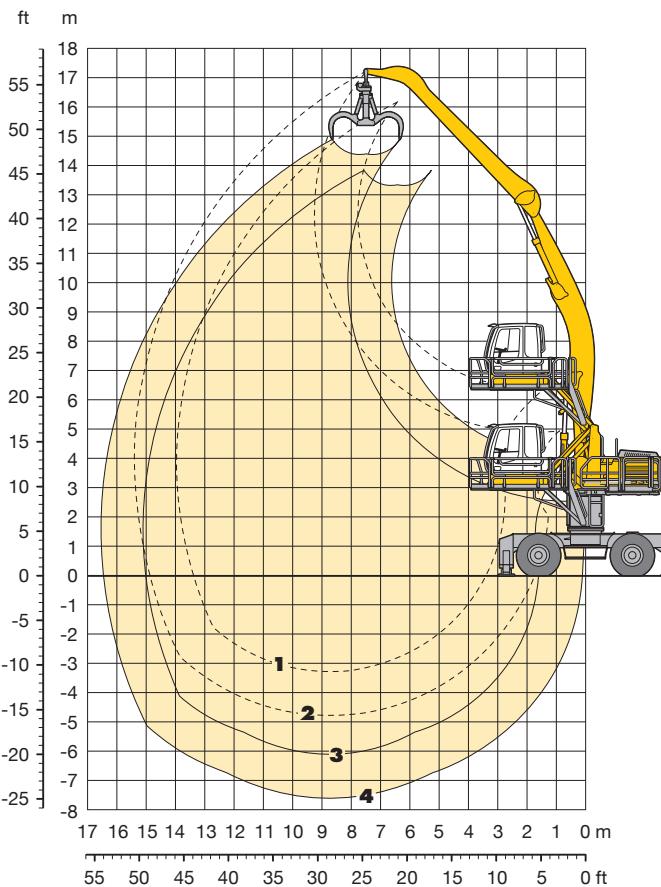
Industrial-Type Straight Boom 8.60 m and Industrial Stick		m	6.00	7.50
V	mm	8,250	6,750	
W	mm	4,300	4,600	
X	mm	12,350	12,350	

Industrial-Type Straight Boom 9.60 m and Industrial Stick		m	7.50	9.00
V	mm	7,500	6,500	
W	mm	4,300	5,600	
X	mm	13,350	13,250	

Dimensions are with attachment over steering axle

Industrial Attachment

with Industrial-Type Gooseneck Boom 8.60 m



Attachment Envelope

Kinematic variant 3D

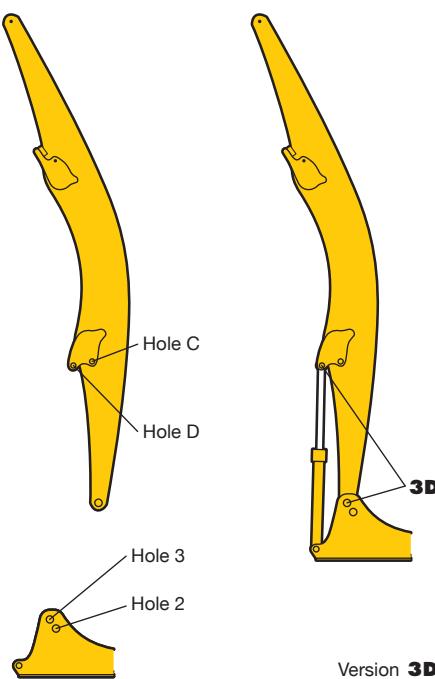
- 1 with industrial stick 6.00 m
- 2 with industrial stick 7.50 m
- 3 with industrial stick 6.00 m and grapple model 70 C
- 4 with industrial stick 7.50 m and grapple model 70 C

Operating Weight

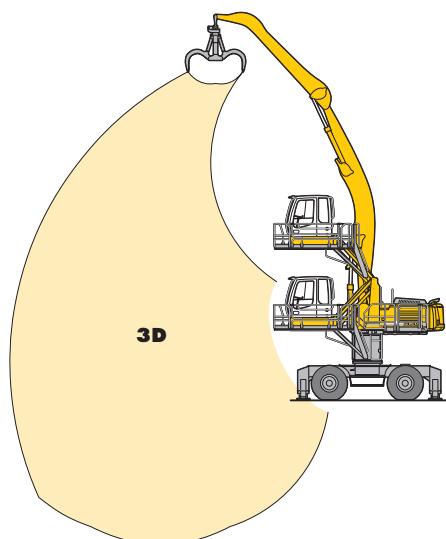
Operating weight includes basic machine A 934 C HD Litronic® High Rise with 4 point outriggers, hydraulic cab elevation, 4 solid tires and industrial application with industrial-type gooseneck boom 8.60 m.

	Weight
with grapple model 70 C/0.80 m ³ semi-closed tines	
industrial stick 6.00 m	45,900 kg
industrial stick 7.50 m	46,200 kg

VarioLiftPlus



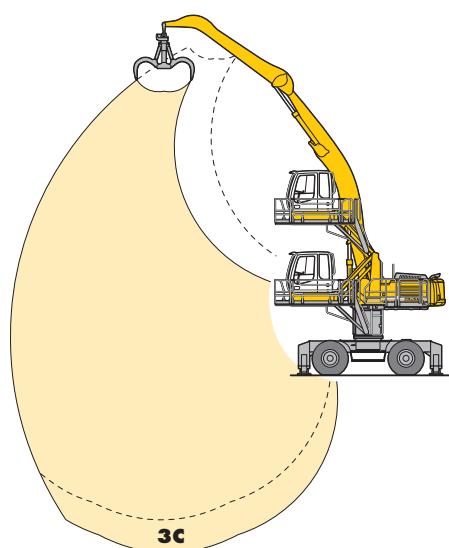
VarioLiftPlus: Variable boom mounting positions for optimized lift capacities
with a **different** working range



Version **3D**

Kinematic Variant 3D:

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

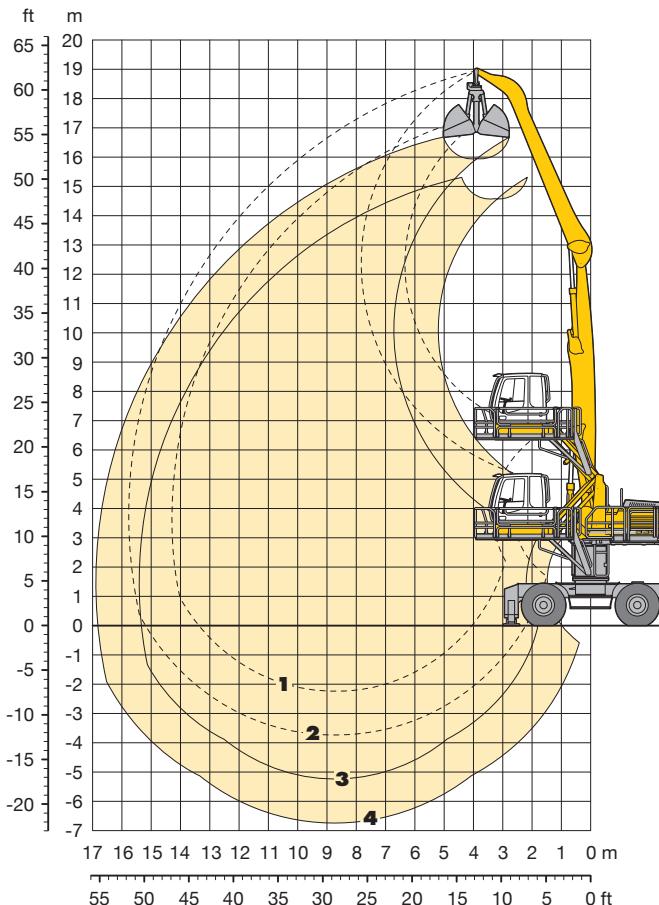


Kinematic Variant 3C:

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

Industrial Attachment

with Industrial-Type Straight Boom 8.60 m



Attachment Envelope

Kinematic variants 2A/3B

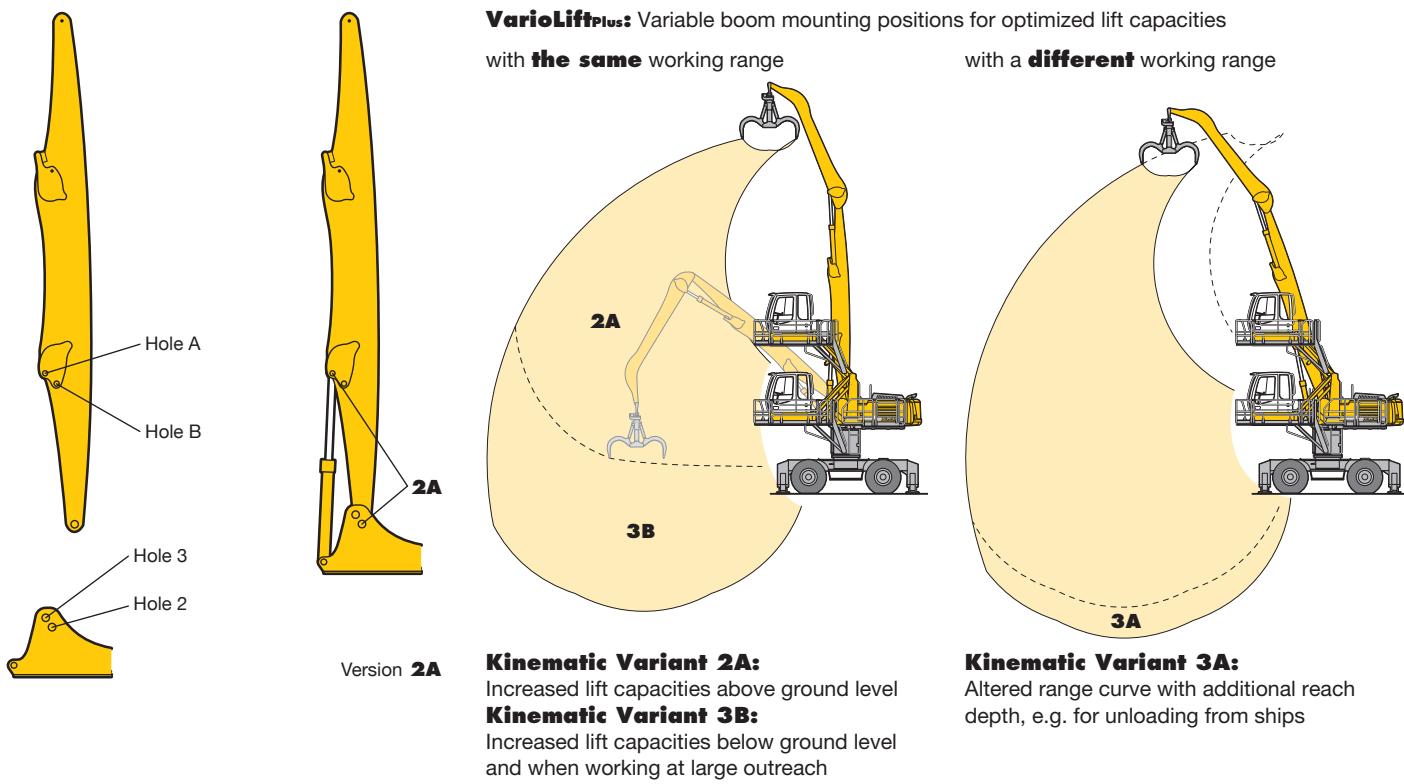
- 1** with industrial stick 6.00 m
- 2** with industrial stick 7.50 m
- 3** with industrial stick 6.00 m and clamshell model 20 B
- 4** with industrial stick 7.50 m and clamshell model 20 B

Operating Weight

Operating weight includes basic machine A 934 C HD Litronic® High Rise with 4 point outriggers, hydraulic cab elevation, 4 solid tires and industrial application with industrial-type straight boom 8.60 m.

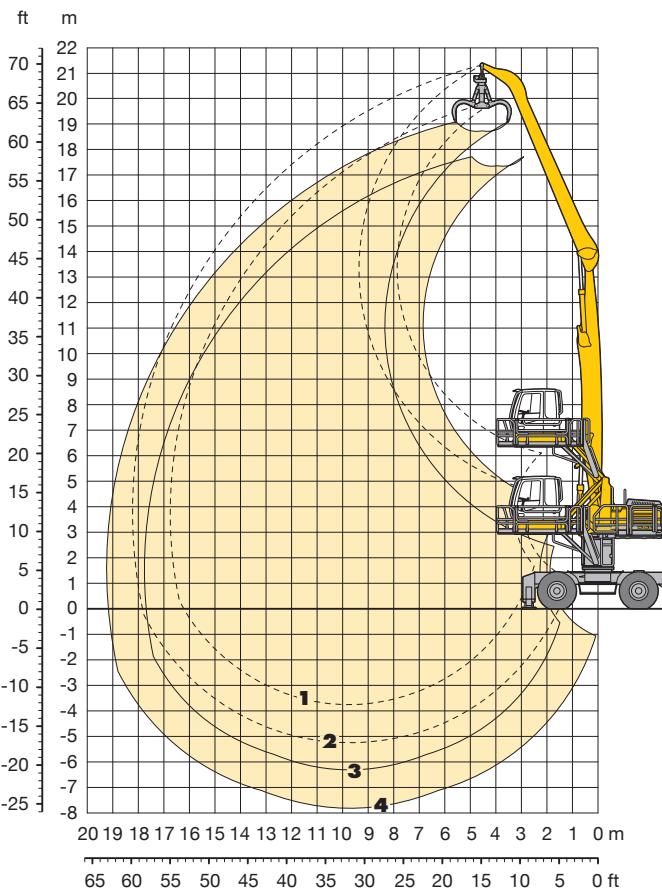
	Weight
with clamshell model 20 B/1.50 m ³ shells for loose material	
industrial stick 6.00 m	45,500 kg
industrial stick 7.50 m	45,700 kg

VarioLiftPlus



Industrial Attachment

with Industrial-Type Straight Boom 9.60 m



Attachment Envelope

Kinematic variants 2A/3B

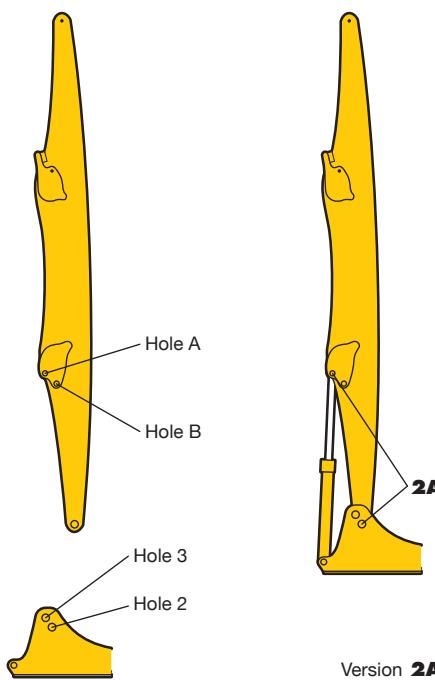
- 1** with industrial stick 7.50 m
- 2** with industrial stick 9.00 m
- 3** with industrial stick 7.50 m and grapple model 65
- 4** with industrial stick 9.00 m and grapple model 65

Operating Weight

Operating weight includes basic machine A 934 C HD **Litronic®** High Rise with 4 point outriggers, hydraulic cab elevation, 4 solid tires and industrial application with industrial-type straight boom 9.60 m.

	Weight
with grapple model 65/0.60 m ³ semi-closed tines	
industrial stick 7.50 m	46,100 kg
industrial stick 9.00 m	46,400 kg

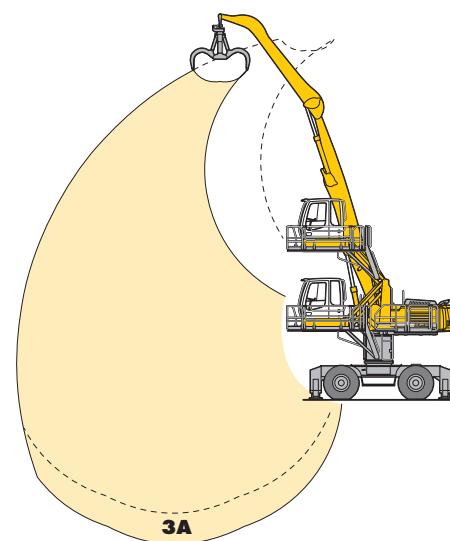
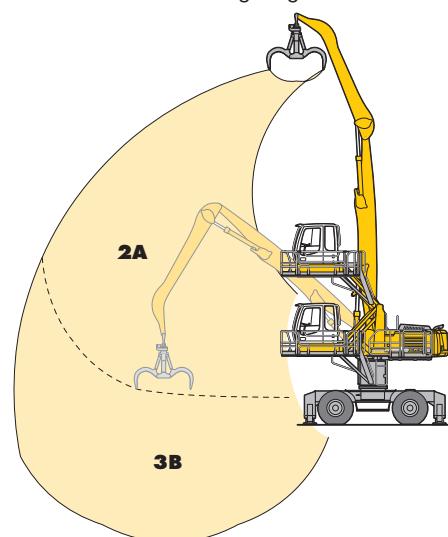
VarioLiftPlus



VarioLiftPlus: Variable boom mounting positions for optimized lift capacities

with **the same** working range

with a **different** 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

Kinematic Variant 3A:

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

Lift Capacities

with Industrial-Type Straight Boom 9.60 m (Kinematic Variant 2A)

Industrial Stick 7.50 m

 m Undercarriage	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	16.5 m	18.0 m	 m
21.0 4 pt. outriggers down												7.0* 7.0* 5.57
19.5 4 pt. outriggers down					6.9* 6.9*							5.3* 5.3* 8.76
18.0 4 pt. outriggers down					7.7* 7.7*	6.8* 6.8*	5.2* 5.2*					4.6* 4.6* 10.84
16.5 4 pt. outriggers down						7.4* 7.4*	6.6* 6.6*	5.0* 5.0*				4.2* 4.2* 12.40
15.0 4 pt. outriggers down						7.3* 7.3*	6.5* 6.5*	5.9* 5.9*	4.2* 4.2*			4.0* 4.0* 13.62
13.5 4 pt. outriggers down						7.3* 7.3*	6.5* 6.5*	5.8* 5.8*	5.2* 5.2*			3.8* 3.8* 14.58
12.0 4 pt. outriggers down						8.6* 8.6*	7.4* 7.4*	6.6* 6.6*	5.9* 5.9*	5.2* 5.2*	4.5* 4.5*	3.7* 3.7* 15.33
10.5 4 pt. outriggers down						8.8* 8.8*	7.6* 7.6*	6.7* 6.7*	5.9* 5.9*	5.2* 5.2*	4.6* 4.6*	3.7* 3.7* 15.91
9.0 4 pt. outriggers down						10.0* 10.0*	9.2* 9.2*	7.8* 7.8*	6.8* 6.8*	5.9* 5.9*	5.2* 5.2*	4.6* 4.6*
7.5 4 pt. outriggers down												3.7* 3.7* 16.33
6.0 4 pt. outriggers down	9.7* 9.7*	13.5* 13.5*	11.9* 11.9*	9.6* 9.6*	8.0* 8.0*	6.8* 6.8*	5.9* 5.9*	5.2* 5.2*	4.5* 4.5*	3.7* 3.7*		3.6* 3.6* 16.60
4.5 4 pt. outriggers down		16.8* 16.8*	12.4* 12.4*	9.8* 9.8*	8.1* 8.1*	6.9* 6.9*	5.9* 5.9*	5.1* 5.1*	4.4* 4.4*	3.5* 3.5*		3.3* 3.3* 16.74
3.0 4 pt. outriggers down		4.5* 4.5*	12.5* 12.5*	9.8* 9.8*	8.1* 8.1*	6.8* 6.8*	5.8* 5.8*	4.9* 4.9*	4.2* 4.2*	3.2* 3.2*		3.0* 3.0* 16.73
1.5 4 pt. outriggers down	1.0* 1.0*	3.5* 3.5*	9.8* 9.8*	9.5* 9.5*	7.8* 7.8*	6.6* 6.6*	5.5* 5.5*	4.7* 4.7*	3.8* 3.8*	2.8* 2.8*		2.7* 2.7* 16.59
0 4 pt. outriggers down		3.9* 3.9*	8.0* 8.0*	8.8* 8.8*	7.3* 7.3*	6.1* 6.1*	5.1* 5.1*	4.3* 4.3*	3.4* 3.4*			2.4* 2.4* 16.19
-1.5 4 pt. outriggers down		4.7* 4.7*	8.0* 8.0*	7.8* 7.8*	6.5* 6.5*	5.5* 5.5*	4.6* 4.6*	3.7* 3.7*	2.7* 2.7*			2.6* 2.6* 15.04
-3.0 4 pt. outriggers down					6.3* 6.3*	5.4* 5.4*	4.6* 4.6*	3.7* 3.7*				3.2* 3.2* 12.91
-4.5 4 pt. outriggers down												

Industrial Stick 9.00 m

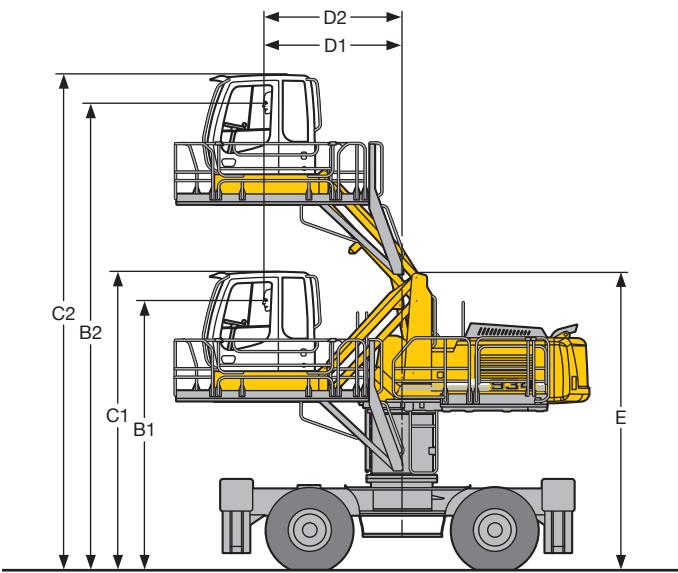
 m Undercarriage	3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m	12.0 m	13.5 m	15.0 m	16.5 m	18.0 m	 m
21.0 4 pt. outriggers down												6.2* 6.2* 5.71
19.5 4 pt. outriggers down					6.1* 6.1*	4.7* 4.7*						4.6* 4.6* 9.10
18.0 4 pt. outriggers down						5.9* 5.9*	4.9* 4.9*					3.9* 3.9* 11.32
16.5 4 pt. outriggers down						6.4* 6.4*	5.7* 5.7*	4.7* 4.7*				3.5* 3.5* 13.00
15.0 4 pt. outriggers down							6.1* 6.1*	5.5* 5.5*	4.4* 4.4*			3.3* 3.3* 14.32
13.5 4 pt. outriggers down								6.1* 6.1*	5.5* 5.5*	5.0* 5.0*	3.8* 3.8*	3.1* 3.1* 15.39
12.0 4 pt. outriggers down								6.1* 6.1*	5.5* 5.5*	5.0* 5.0*	4.5* 4.5*	3.0* 3.0* 16.25
10.5 4 pt. outriggers down						6.9* 6.9*	6.1* 6.1*	5.5* 5.5*	5.0* 5.0*	4.5* 4.5*	3.7* 3.7*	2.9* 2.9* 16.93
9.0 4 pt. outriggers down						7.1* 7.1*	6.3* 6.3*	5.6* 5.6*	5.0* 5.0*	4.5* 4.5*	4.0* 4.0*	2.9* 2.9* 17.45
7.5 4 pt. outriggers down					7.4* 7.4*	7.3* 7.3*	6.4* 6.4*	5.7* 5.7*	5.0* 5.0*	4.5* 4.5*	3.9* 3.9*	2.9* 2.9* 17.83
6.0 4 pt. outriggers down				7.5* 7.5*	8.9* 8.9*	7.6* 7.6*	6.5* 6.5*	5.7* 5.7*	5.0* 5.0*	4.4* 4.4*	3.9* 3.9*	3.1* 3.1* 18.08
4.5 4 pt. outriggers down	3.1* 3.1*	10.6* 10.6*	11.6* 11.6*	9.3* 9.3*	7.8* 7.8*	6.6* 6.6*	5.8* 5.8*	5.0* 5.0*	4.4* 4.4*	3.8* 3.8*	3.0* 3.0*	2.9* 2.9* 18.20
3.0 4 pt. outriggers down	4.7* 4.7*	16.6* 16.6*	12.2* 12.2*	9.6* 9.6*	7.9* 7.9*	6.7* 6.7*	5.7* 5.7*	5.0* 5.0*	4.3* 4.3*	3.6* 3.6*	2.8* 2.8*	2.6* 2.6* 18.20
1.5 4 pt. outriggers down	1.5* 1.5*	5.5* 5.5*	12.2* 12.2*	9.6* 9.6*	7.9* 7.9*	6.6* 6.6*	5.6* 5.6*	4.8* 4.8*	4.1* 4.1*	3.4* 3.4*	2.4* 2.4*	2.4* 2.4* 18.07
0 4 pt. outriggers down	2.0* 2.0*	4.4* 4.4*	10.5* 10.5*	9.3* 9.3*	7.6* 7.6*	6.3* 6.3*	5.4* 5.4*	4.5* 4.5*	3.8* 3.8*	3.0* 3.0*		2.0* 2.0* 17.82
-1.5 4 pt. outriggers down	2.7* 2.7*	4.6* 4.6*	8.6* 8.6*	8.6* 8.6*	7.1* 7.1*	5.9* 5.9*	5.0* 5.0*	4.1* 4.1*	3.4* 3.4*	2.5* 2.5*		2.1* 2.1* 17.00
-3.0 4 pt. outriggers down		5.1* 5.1*	8.4* 8.4*	7.5* 7.5*	6.3* 6.3*	5.3* 5.3*	4.4* 4.4*	3.6* 3.6*	2.7* 2.7*			2.3* 2.3* 15.63
-4.5 4 pt. outriggers down					6.1* 6.1*	5.2* 5.2*	4.3* 4.3*	3.5* 3.5*				2.9* 2.9* 13.23

 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 stabilisers raised and over the rigid axle with the stabilisers down. Indicated loads comply with the ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity.

In accordance with the harmonised EU Standard EN 474-5, hydraulic excavators used for lifting operations must be equipped with pipe rupture protection devices on the hoist cylinders and an overload warning device.

Choice of Cab Elevation and Cab Protection



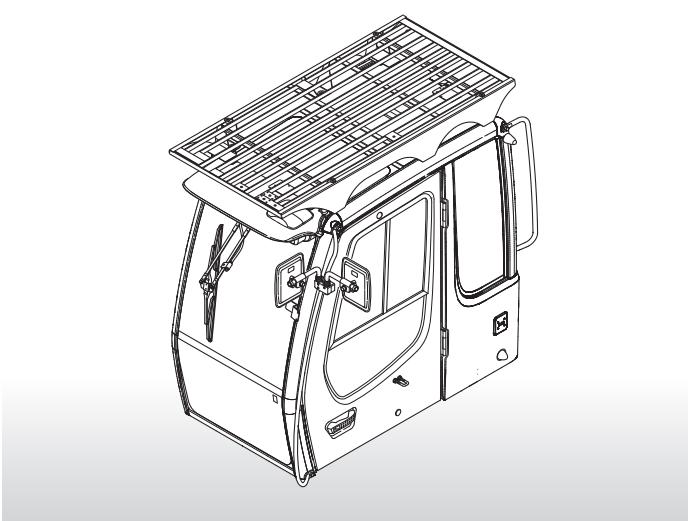
Hydraulic Cab Elevation (Parallelogram) + Intermediate Piece 0.35 m

B1	4,690 mm
B2	8,110 mm
C1	5,185 mm
C2	8,610 mm
D1	2,400 mm
D2	2,395 mm
E	5,175 mm

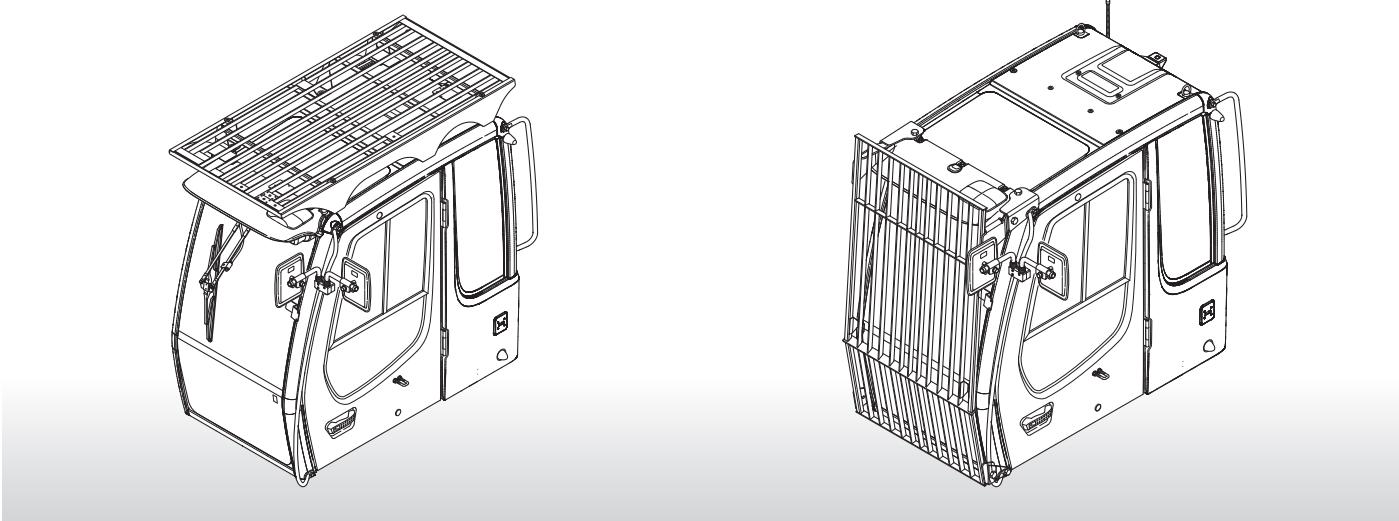
The parallelogram cab raiser allows the operator to choose his field of view between dimensions B1 and B2. For a transport height lower than C1 the shell of the cab can be removed. The overall height is then E.

As cab protection a front window screen can be installed.

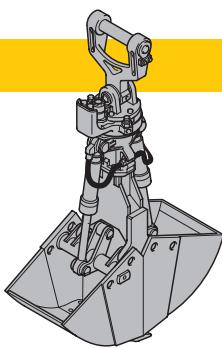
Grille above



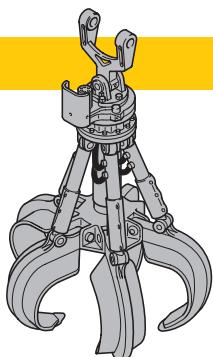
Grilles in front



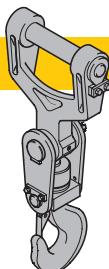
Variety of Tools



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	1,200	1,600
Capacity	m³	1.30	1.50	2.00	
For loose material, specific weight up to	t/m³	1.5	1.5	1.5	
Weight	kg	1,355	1,415	1,550	

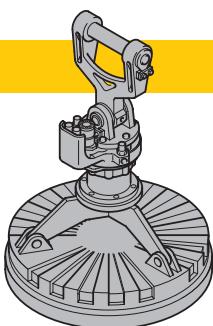


Multiple Tine Grapples		open tines	semi-closed tines	closed tines	
Grapple Model 64 (4 tines)	Capacity m³	0.40	0.60	0.40	0.60
	Weight kg	845	1,130	1,055	1,330
Grapple Model 65 (5 tines)	Capacity m³	0.40	0.60	0.40	0.60
	Weight kg	1,150	1,230	1,285	1,415
Grapple Model 69 (4 tines)	Capacity m³	0.80	1.10	0.80	1.10
	Weight kg	1,345	1,395	1,535	1,640
Grapple Model 70 C (5 tines)	Capacity m³	0.80	1.10	0.80	1.10
	Weight kg	1,485	1,590	1,705	1,860



Crane Hook with Suspension

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



Magnet Devices/Lifting Magnets

Generator	kW	13	20
Electromagnets with Suspension			
Power	kW	8.5	10
Dia of magnet	mm	1,300	1,400
Height with suspension	mm	1,100	1,100
Weight	kg	1,350	1,830

Equipment

 Undercarriage	
Two circuit travel brake with accumulator	•
Travel motor protection	+
Outrigger cylinder rod guards	+
Creeper speed electrically switchable from cab	•
New tires	•
Service free parking brake	•
Independent outrigger control	•
Choice of tires	+
Auto check valve directly on each stabilizer cylinder	•
Proportional power steering	•
Customized colors	+
Two lockable storage boxes	•
Two-speed power shift transmission	•

 Operator's Cab	
Storage tray	•
Displays for engine operating condition	•
Mechanical hour meters, readable from outside the cab	•
Roof hatch	•
6-way adjustable seat	•
Airpressure operator seat with heating and head-rest	+
Seat and consoles independently adjustable	•
Extinguisher	+
Removable customized foot mat	•
Dome light	•
Hydraulic cab elevation	+
Rigid cab elevation	+
Cab heater with defroster	•
Cloth hook	•
Air conditioning	•
Electric cool box	+
Steering wheel adjustable	•
Bullet proof window (fixed installation – can not be opened)	+
Stereo radio	+
Preparation for radio installation	+
Rain hood over front window opening	•
Beacon	+
All tinted windows	•
Door with sliding window	•
Optical warning if outriggers are not fully retracted	+
Auxiliary heating	+
Sun shade	+
Sun roller blind	•
Electronic drive away lock	+
Wiper/washer	•
Cigarette lighter and ashtray	•
Additional flood lights	+

 Hydraulics	
Hydraulic tank shut-off valve	•
Extra hydr. control for hydr. swivel	+
Pressure compensation	•
Hook up for pressure checks	•
Pressure storage for controlled lowering of attachments with engine turned off	•
Filter with partial micro filtration (5 µm)	•
Electronic pump regulation	•
Stepless mode system (ECO)	•
Flow compensation	•
Four mixed modes, can also be adjusted	•
Full flow micro filtration	+
Bio degradable hydraulic oil	+
Tool Control	+
Additional hydraulic circuits	+

 Attachment	
Flood lights	•
Hydr. lines for clam operation in sticks	•
Industrial-type gooseneck sticks with remote hydraulic pin puller	+
Sealed pivots	•
Safety lift hook	+
Liebherr line of clams	+
Liebherr semi-automatic central lubrication system	•
Liebherr fully-automatic central lubrication system	+
Likufix	+
Safety check valves on hoist cylinder	•
Safety check valves on stick cylinder	•
Hose quick connection	•
Hydraulic or manual quick change tool adapter	+
Customized colors	+
Special buckets and other tools	+
Overload warning device	+
Two way valves for bucket/clam use	+
Locking of connections for clam operation	+
Cylinders with shock absorber	•

• = 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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