

Machine for Industrial Applications

A 954 C HD
Litronic®

Operating weight: 75,300 - 77,400 kg
Engine output: 240 kW / 326 HP



LIEBHERR

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Performance

Liebherr material handling equipment is developed for the highest productivity. A high lifting capacity and rapid work cycles form the prerequisites of a powerful industrial material handling operation. Numerous attachment options optimise machine performance.

Reliability

Liebherr hydraulic excavators are designed and built to operate in the harshest material handling environments. Their rugged design, high-tensile materials and individual components ensure maximum availability and long life expectancy.

Comfort

Largely dimensioned and ergonomically designed, the Liebherr excavator cab features an operator's seat which can be individually adjusted, as well as clearly arranged control instruments and ideal all round view. Automatic air conditioning guarantees an optimum temperature in the Liebherr Feel-Good cab at all times.

Economy

The Liebherr-Litronic-System increases machine performance, reduces fuel consumption and minimises service and maintenance costs. Due to Liebherr's well-balanced range, the ideal machine can always be selected to suit every application.



Liebherr diesel engine

- Long life expectancy, expansive cylinder capacity and increased weight
- According to level IIIA / Tier 3
- Specially developed for construction and industrial machinery operation
- Oil supply even with 100 % tilt angle
- Excellent torque



Performance

The A 954 C HD Litronic has been designed for maximum production. Perfectly harmonized, the Liebherr-developed and Liebherr-manufactured components including diesel engine, hydraulic pump and motor, as well as swing gear and cylinders, guarantee maximum performance. This results in a high lifting capacity with rapid work and travel movements.

Innovative solutions

Multitude of attachments

Liebherr provide an individual, application-related range of diverse attachments. A straight or angled industrial mono boom can be combined with various industrial sticks to suit any application.

High lifting capacities

The efficient handling of materials of differing consistencies, e.g. scrap metal, wood or bulk solids, is everyday demands on material handler equipment. This is ensured by the most efficient use of kinematics.

Rapid work cycles

A separate hydraulic circuit with a maximum hydraulic pressure of 380 bar makes a high swing torque possible. Rapid work cycles are achieved through an independent control system.

Performance without compromise

Maximum performance and maximum forces are available to the operator at all times.

ReGenerationPlus

The new ReGenerationPlus system on the hoist and stick cylinders saves energy and quickly lowers the attachment.

VarioLiftPlus

Variable boom mounting positions for optimized lift capacities.



Robust undercarriage

- The box-type construction of the undercarriage with securely-welded supports provides a solid base, the greatest stability and a long service life in every application



Litronic-System

- Increases productivity of the excavator
- Reduces fuel consumption
- Reduces service costs and eases operation
- Allows maximum sensitivity and as many overlapping movements as are required



Features

- High-strength steel plates at highly-stressed points for the toughest requirements
- Stable storage of attachments and cylinders
- Maximum resistance, even when lifting heavy loads
- VarioLiftPlus System



Reliability

Liebherr material handlers prove themselves day in, day out in the most varied industrial applications all over the world. Many years of experience as the world's largest manufacturer of wheeled excavators, continuous development and the introduction of the latest technology are evident in every machine, guaranteeing absolute safety during applications. With its rugged design, and featuring Liebherr components, the A 954 C HD Litronic has been designed for extremely long life expectancy.

Quality in detail

Liebherr components

Liebherr develops, tests and manufactures components such as diesel engines, slewing gear, hydraulic cylinders and electronics specifically for industrial machinery. Parts including engines and pumps for example, are already being synchronized with each other as early as the construction phase, yielding a constant standard of quality.

Functional safety

Safety-orientated components, fitted as standard, allow high availability. The operator can thus concentrate fully on the task at hand, due to the integrated on-board electronics performing a constant balancing of pre-defined set data.

The magnet bar, fitted as standard in the hydraulic system, increases the operating life of the hydraulic components and serves as a service indicator.

Rugged attachments

Working attachment

The stable attachments are designed for the harshest applications and have a long service life. All components have been optimised using the FE method. Stress-reducing two-sided cylinder bearings on mono and stick connections. Integrated large diameter torsion tube for the best possible force absorption by the attachment components.

Piping

Routing the hydraulic lines in the arm offers the best protection against damage. The electric cabling is made with high-grade materials, thus guaranteeing a reliable supply to the consumer.



Liebherr hydraulic cylinders

- Specific size for each machine
- High-grade surface coating of the piston rods
- All Liebherr cylinders feature special long-life sealing systems
- Shock absorption in the working cylinders



Functional safety

- Essential operating data is stored and can be recalled at any time
- Control and monitoring functions increase functional safety of the machine
- Four fixed working modes for output discharge facilitate an effective and efficient operation:
 - ECO-Mode: High handling and loading performance coupled with low fuel consumption
 - POWER-Mode: For maximum handling and loading performance under severe conditions
 - LIFT-Mode: For precise handling of heavy loads
 - FINE-Mode: For fine control at precision work



Large-sized cab

- Adjustable steering column
- Operator's seat, adjustable in height and can also be adapted to the individual weight of the operator
- Consoles with or without possibility of horizontal adjustment
- Large roof window
- Sun blinds



Comfort

The excavator operator is provided with an ergonomically-arranged working area within Liebherr hydraulic excavator cabs. All switches and functions are logically laid out, and operator's seat, steering column and consoles can be adjusted individually. Conditioning and concentration can thus be maintained throughout the entire working day, guaranteeing constant, maximum productivity of the operator.

Mobile comfort

Easy access

Wide steps, ergonomically-positioned handles and adjustable steering column allow an easy access into the Liebherr operator's cab.

Optimum visibility

A well-thought-out design of the uppercarriage, featuring large glass panels and rounded edges, increase overall visibility and guarantees a safe overview of the entire working area. The best field of vision in all directions and from any cab position.

Pleasant surroundings

Reduced engine speed together with elaborate sound insulation, as well as optimised hydraulic components, allow a comfortable noise level both inside and out. The noise level is comparable with that of modern cars.

Maintenance features

Simple maintenance

Liebherr semi-automatic central lubrication system for slewing gear and main parts of the attachment.

Ease of operation

A shut-off valve, fitted to the hydraulic tank as standard, disconnects the system and guarantees ease of maintenance to the hydraulic system.

Easy access

Large, self-locking maintenance hatches allow easy and safe access to all maintenance points.



Storage compartment – Everything has its place

- Sufficient storage space for a commercially-approved cooler box behind the operator's seat
- Drinks holder and storage compartment in operator's cab
- Large storage box behind the operator's cab
- Two standard tool boxes in the undercarriage



Fully-automatic air-conditioning system

- The air-conditioning system, fitted as standard, offers the same comfort as that of a regular car
- Two sensors for precise temperature regulation
- Ventilation flaps are controlled via keys
- Reheat function for quick dehumidifying / defrosting of the windshield



Hydrostatic fan drive

- Accelerated warm-up period
- Guaranteed constant oil quality as a result of constant oil temperature
- Increased life expectancy of drive components
- The fan only runs at the output required, thus conserving fuel and reducing the noise level considerably
- Thermostatic control



Economy

Liebherr offer a wide range of models, guaranteeing optimum suitability for every application. Easy access to components, as well as the proven service offer allows maintenance tasks to be performed in the shortest of times, thus reducing operating costs considerably.

Low operating costs

Liebherr engine

Full engine power is available even at low speeds. This means that unrestricted power is available when it is really required. Therefore high levels of productivity and low fuel consumption are reached.

Automatic idle

If no working or travel movements are being performed, the shiftable function reduces the engine speed to idle, which in turn reduces fuel consumption and emission levels.

Intelligent hydraulic management

The state-of-the-art hydraulic system allows conversion of the maximum engine output into high force or speed, as required. The maximum possible forces are available at all times.

Hydraulically-adjustable cab

The hydraulically-adjustable cab allows the driver to optimise his field of view to increase material-handling performance.

Investment for the future

Extensive service offer

Proven service offers assured by our service personnel trained directly at the manufacturing plants, and endorsed by our tight-knit network of dealers, provide services in all required areas. Direct contact to Liebherr is guaranteed via complete integration of all service points in our own Liebherr logistics system. Electronic access to our global spare-parts management allows a 98 % availability of spare parts 24 hours a day.

High resale values

Liebherr excavators are built with high-grade materials and quality production to provide a long term operational life-span, thus guaranteeing maximum resale values.

Service oriented

- Engine service points - such as the filter or capacity displays - easily to access and reach via a catwalk
- The magnet bar in the hydraulic oil tank acts as a service indicator and increases the service life of the oil
- Liebherr semi-automatic central lubricating systems for the slewing gear and main attachment components fitted as standard for quick and targeted maintenance



A wide range

- Modular quick connection system
- Liebherr hydraulic quick connection for efficient changing of working tools
- Comprehensive Liebherr grab program
- Wide range of Liebherr grabs for different applications

Technical Data



Engine

Rating per ISO 9249	240 kW (326 HP) at 1800 RPM
Model	Liebherr D 936 L according to level IIIA/Tier 3
Type	6 cylinder in-line
Bore/Stroke	122/150 mm
Displacement	10,5 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	700 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 350 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	211 l/min.
Max. pressure	384 bar
Hydraulic tank	450 l
Hydraulic system	880 l
Hydraulic oil filter	2 full flow filters in return line with integrated fine filter area (5 µm)
Hydraulic oil cooler	cooler unit, consisting of radiator for engine coolant with after-cooler core, sandwiched with cooler for hydraulic fluid and fuel, with hydrostatically controlled fan drives
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 – 6,6 RPM stepless
Swing torque	154 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
Joysticks	integrated into adjustable consoles
Monitoring	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
Air conditioning	standard air conditioning, combined cooler/heater, additional dust filter in fresh air/recirculated
Noise emission	ISO 6396 L _{pA} (inside cab) = 75 dB(A) 2000/14/EC L _{WA} (surround noise) = 105 dB(A)



Undercarriage

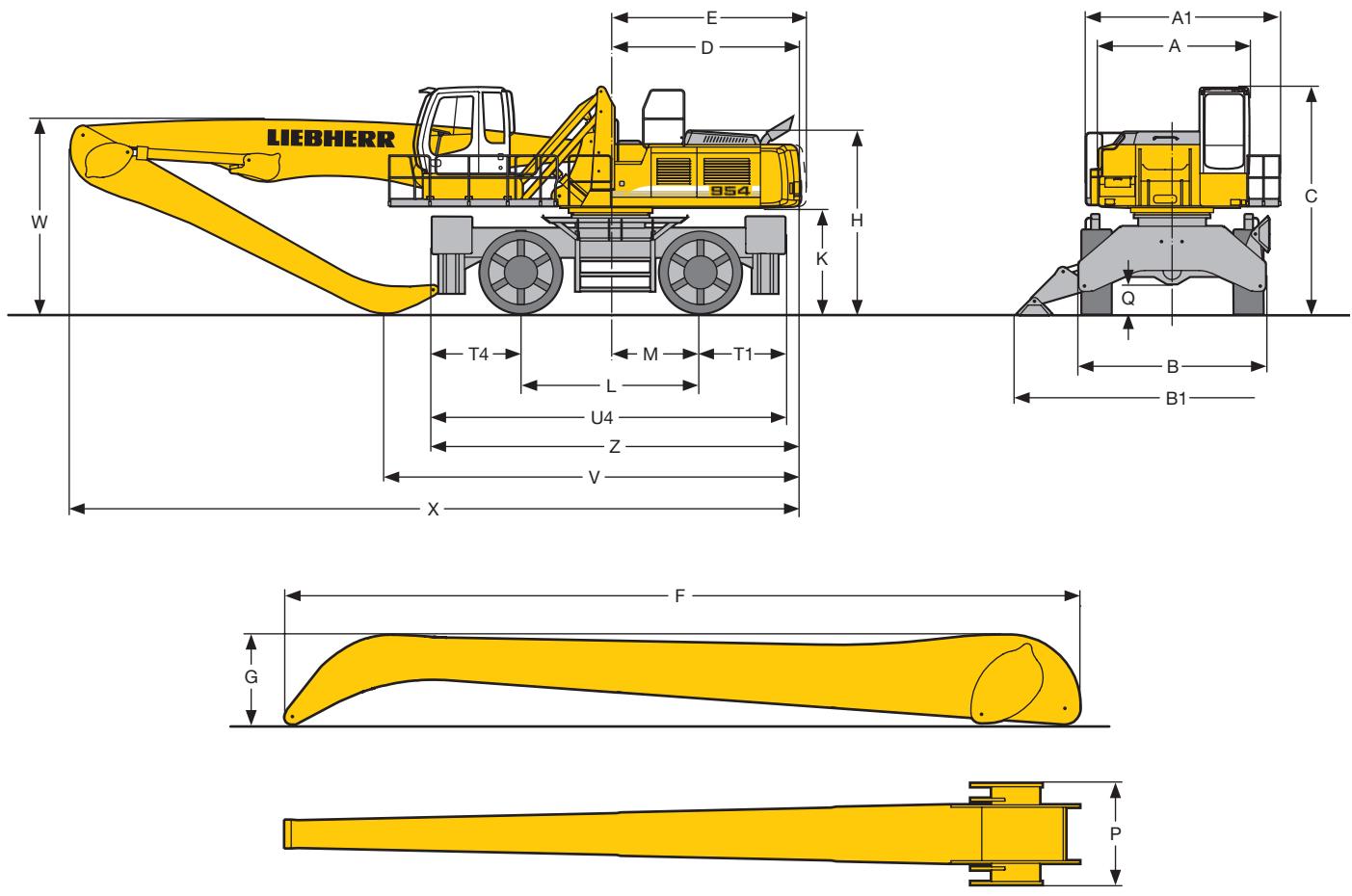
Drive	axial piston motor with brake valves
Travel speed	0 – 10,0 km/h stepless
Axes	90 t excavator axles; oscillating steering axle with hydraulic lock (in any position)
Brakes	wet, maintenance-free multi disc brakes, hydraulically actuated travel and parking brake
Stabilization	4-point outriggers with 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



Hydraulic Cab Elevation		mm
A		3060
A ¹⁾		3000
A1		3970
A1 ¹⁾		3505
B		3800
B1		6350
C		4530
D		3825
E		3825
H		3640
K		2100
L		3600
M		1800
Q		540
T1		1700
T4		1775
U4		7075
Z		7325

¹⁾ Rigid cab elevation

E = Tail radius

Tires Ø 1660 mm, width 600 mm

Industrial-Type Straight Boom 10,50 m and Industrial Stick		m	7,80	9,00
V		mm	8450	7350
W		mm	4000	4500
X		mm	15000	14950

Industrial-Type Straight Boom 11,50 m and Industrial Stick		m	9,00	10,00
V		mm	8050	7300
W		mm	4000	4500
X		mm	15950	15950

Industrial-Type Gooseneck Boom 11,50 m and Industrial Stick		m	9,00	10,00
V		mm	—	—
W		mm	4530	4530
X		mm	16000	16000

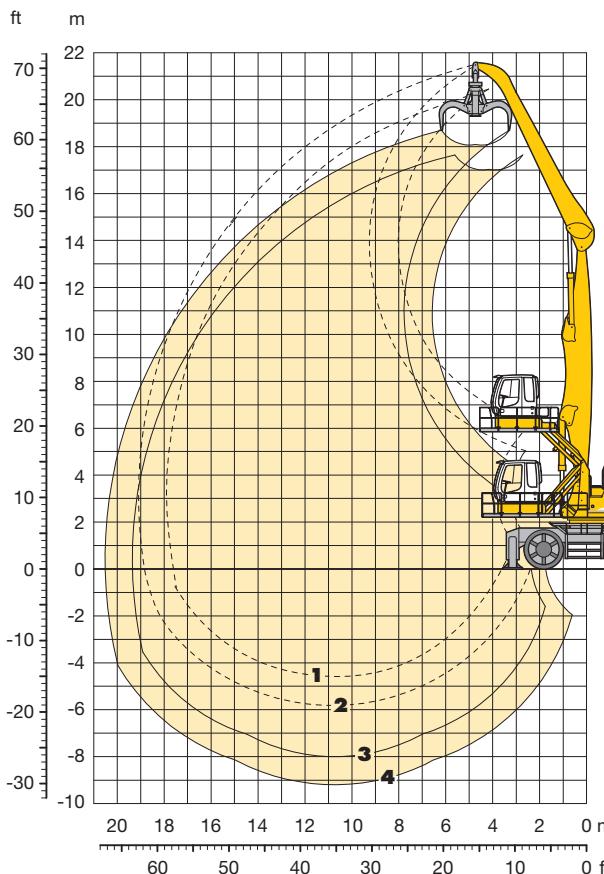
Industrial-Type Straight Boom 12,50 m and Industrial Stick		m	9,00	10,00
V		mm	9050	8250
W		mm	4000	4500
X		mm	16950	16950

Industrial Stick		m	7,80	9,00	10,00
F		mm	8150	9350	10350
G		mm	1100	1100	1100
P		mm	1250	1250	1250

Dimensions are with attachment over steering axle

Industrial Attachment

with Industrial-Type Straight Boom 10,50 m



Attachment Envelope

Kinematic variants 2A/3B

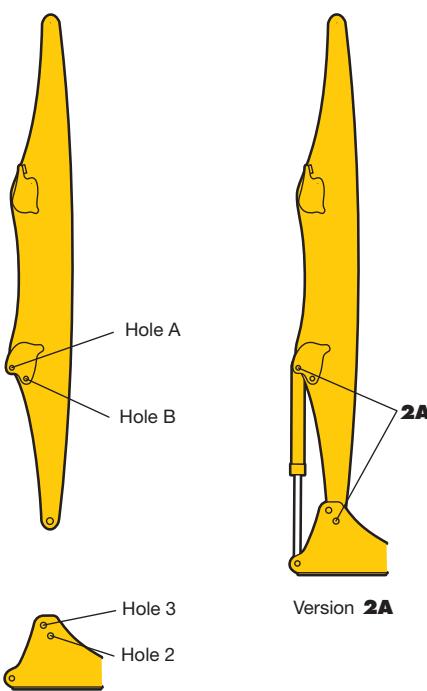
- 1 with industrial stick 7,80 m
- 2 with industrial stick 9,00 m
- 3 with industrial stick 7,80 m and grapple model 72 C
- 4 with industrial stick 9,00 m and grapple model 72 C

Operating Weight

Operating weight includes basic machine and industrial attachment with:

	Weight
Industrial-type straight boom 10,50 m	
Industrial stick 7,80 m	
Grapple model 72 C/1,40 m ³	
with 5 semi-closed tines	
75300 kg	
Industrial-type straight boom 10,50 m	
Industrial stick 9,00 m	
Grapple model 72 C/1,40 m ³	
with 5 semi-closed tines	
75700 kg	

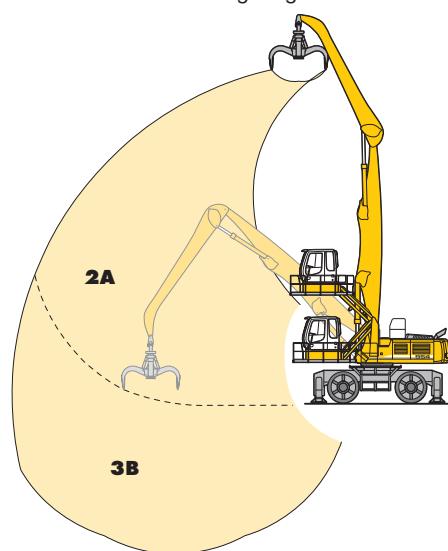
VarioLiftPlus



VarioLiftPlus: Variable boom mounting positions for optimized lift capacities

with **the same** working range

with a **different** working range

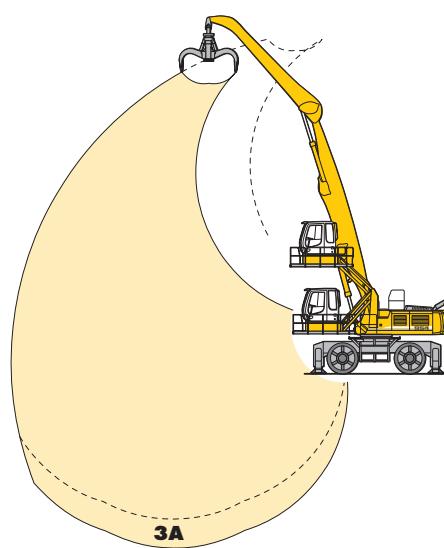


Kinematic Variant 2A:

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 10,50 m (Kinematic Variant 2A)

Industrial Stick 7,80 m

Height 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	16,5 m	18,0 m	19,5 m	21,0 m	m				
24,0	Stabilizers raised 4 pt. outriggers down														13,0° 13,0° 13,0°				
22,5	Stabilizers raised 4 pt. outriggers down														10,6° 10,6° 10,6°				
21,0	Stabilizers raised 4 pt. outriggers down														9,0 9,5° 9,5°				
19,5	Stabilizers raised 4 pt. outriggers down														7,3 8,8° 8,8°				
18,0	Stabilizers raised 4 pt. outriggers down				14,8° 14,8°	14,8° 12,6°	12,6° 12,6°								13,0° 13,0° 13,0°				
16,5	Stabilizers raised 4 pt. outriggers down				15,7° 15,7°	15,7° 14,4°	14,4° 14,4°	11,6 12,5°							10,6° 10,6° 10,6°				
15,0	Stabilizers raised 4 pt. outriggers down				15,4° 15,4°	15,4° 14,0°	11,9 14,0°	13,1 12,5°	9,2 12,2°	10,2 12,2°					9,0 9,5° 9,5°				
13,5	Stabilizers raised 4 pt. outriggers down				15,6° 15,6°	15,6° 13,9°	11,9 13,9°	13,1 12,5°	9,3 12,5°	10,3 12,5°	7,4 12,5°	8,2 12,5°			7,3 8,4° 8,4°				
12,0	Stabilizers raised 4 pt. outriggers down				15,4 15,4°	15,7° 13,9°	11,8 13,9°	13,0 13,9°	9,3 12,5°	10,3 12,5°	7,4 12,5°	8,2 12,5°	5,9 12,5°	6,6 12,5°	5,4 6,1 8,1°				
10,5	Stabilizers raised 4 pt. outriggers down				17,3° 17,3°	15,1 15,9°	15,9° 14,0°	11,6 14,0°	12,8 12,5°	9,2 12,5°	10,1 12,5°	7,3 12,5°	8,2 12,5°	5,9 12,5°	6,6 12,5°	4,9 5,5 8,0°			
9,0	Stabilizers raised 4 pt. outriggers down				18,6° 18,6°	14,5 16,3°	16,1 14,2°	11,2 14,2°	12,4 12,6°	8,9 12,6°	9,9 11,3°	7,2 11,3°	8,0 11,3°	5,8 11,3°	6,5 11,3°	4,7 10,1°	5,4 10,1°	4,5 7,9° 16,93	
7,5	Stabilizers raised 4 pt. outriggers down				19,4° 19,4°	19,4° 19,8°	19,8° 19,8°	13,8 16,7°	15,3 16,7°	10,7 16,7°	11,9 16,7°	8,6 16,7°	9,5 16,7°	6,9 16,7°	7,7 16,7°	5,7 16,7°	6,4 16,7°	4,7 8,8° 8,8°	
6,0	Stabilizers raised 4 pt. outriggers down	18,1° 18,1°	18,1° 26,3°	26,3° 26,3°	24,3 25,7°	25,7° 20,6°	17,2 17,2°	19,2 17,2°	12,9 17,2°	14,4 17,2°	10,1 14,7°	11,3 14,7°	8,1 12,8°	9,1 12,8°	5,5 11,3°	6,2 11,3°	4,6 9,9° 8,6°	5,2 9,9° 8,6°	3,9 7,4° 17,69
4,5	Stabilizers raised 4 pt. outriggers down	18,9° 18,9°	21,7 26,9°	24,6 21,2°	15,7 21,2°	17,6 17,5°	12,0 17,5°	13,4 17,5°	9,5 17,5°	14,0° 17,5°	10,7 17,5°	7,7 17,5°	6,4 17,5°	7,2 17,5°	5,3 17,5°	6,0 17,5°	4,4 9,8° 8,4°	5,1 6,9° 17,86	
3,0	Stabilizers raised 4 pt. outriggers down	3,9° 3,9°	19,2 20,2°	19,2 21,4°	14,2 21,4°	16,2 21,2°	11,1 21,2°	12,5 21,2°	8,9 21,2°	9,0 21,2°	8,0 21,2°	7,3 21,2°	8,2 21,2°	6,1 21,2°	6,9 21,2°	5,1 21,2°	4,3 21,2°	6,4° 6,4° 17,91	
1,5	Stabilizers raised 4 pt. outriggers down	3,2° 3,2°	10,5° 10,5°	13,1 20,8°	15,0 20,8°	10,3 17,1°	11,7 17,1°	8,3 14,4°	9,5 14,4°	10,7 14,4°	7,7 14,4°	6,4 14,4°	7,7 14,4°	5,8 14,4°	6,6 14,4°	4,2 9,0°	4,8 9,0°	3,7 7,5° 17,83	
0	Stabilizers raised 4 pt. outriggers down	4,0° 4,0°	9,1° 9,1°	12,3 19,5°	14,1 16,2°	9,7 16,2°	11,1 16,2°	7,9 16,2°	9,0 16,2°	6,6 16,2°	7,5 16,2°	5,6 16,2°	6,5 16,2°	5,6 16,2°	4,1 6,7°	4,7 6,7°	3,7 5,1° 17,62		
-1,5	Stabilizers raised 4 pt. outriggers down	9,4° 9,4°	11,8 14,7°	11,8 17,4°	13,7 17,4°	9,3 17,4°	10,7 17,4°	10,7 17,4°	9,7 17,4°	10,7 17,4°	8,7 17,4°	8,7 17,4°	7,3 17,4°	8,7 17,4°	5,4 17,4°	4,1 5,6°	3,9 4,9° 16,96		
-3,0	Stabilizers raised 4 pt. outriggers down	11,6 14,6°	13,5 14,6°	9,1 12,7°	10,5 12,7°	7,4 12,7°	8,5 12,7°	8,5 12,7°	6,2 12,7°	7,1 12,7°	5,3 12,7°	6,1 12,7°	4,6 12,7°	5,3 12,7°	4,6 12,7°	5,3 12,7°	4,4 5,5° 15,47		
-4,5	Stabilizers raised 4 pt. outriggers down															6,2 7,4°	7,1 11,98		
-6,0	Stabilizers raised 4 pt. outriggers down																		
-7,5	Stabilizers raised 4 pt. outriggers down																		

Industrial Stick 9,00 m

Height 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	16,5 m	18,0 m	19,5 m	21,0 m	m				
24,0	Stabilizers raised 4 pt. outriggers down														12,5° 12,5° 12,5°				
22,5	Stabilizers raised 4 pt. outriggers down														9,7° 9,7° 9,7°				
21,0	Stabilizers raised 4 pt. outriggers down				13,2° 13,2°	13,2° 13,2°	11,0° 11,0°	12,5° 12,5° 12,5°											
19,5	Stabilizers raised 4 pt. outriggers down				13,0° 13,0°	13,0° 13,0°	11,0° 11,0°	9,7° 9,7° 9,7°											
18,0	Stabilizers raised 4 pt. outriggers down				12,6° 12,6°	12,6° 11,0°	11,0° 11,0°	8,5° 8,5° 8,5°											
16,5	Stabilizers raised 4 pt. outriggers down				13,3° 13,3°	13,3° 13,3°	12,3° 12,3°	12,3° 12,3°	9,5 12,3°	10,5 12,0°	7,4 10,7°	7,9° 10,7°	7,9° 10,7°	7,9° 10,7°	7,9° 10,7°	7,9° 10,7°			
15,0	Stabilizers raised 4 pt. outriggers down				12,5 12,5°	13,1° 13,1°	9,8 12,0°	10,8 12,0°	7,7 10,2°	8,5 10,2°	7,7 10,2°	8,5 10,2°	7,7 10,2°	8,5 10,2°	7,7 10,2°	8,5 10,2°			
13,5	Stabilizers raised 4 pt. outriggers down				12,5 12,5°	13,2° 13,2°	9,8 11,9°	10,8 11,9°	7,8 10,9°	8,6 10,9°	6,2 9,4°	6,9 9,4°	6,2 9,4°	6,9 9,4°	6,2 9,4°	6,9 9,4°	5,3 7,0° 16,00		
12,0	Stabilizers raised 4 pt. outriggers down				12,4 12,4°	13,2° 13,2°	9,8 11,9°	10,8 11,9°	7,8 10,8°	8,6 10,8°	6,2 9,8°	6,9 9,8°	6,2 9,8°	6,9 9,8°	5,0 6,6°	5,6 6,6°	4,7 6,8° 16,88		
10,5	Stabilizers raised 4 pt. outriggers down				14,7° 14,7°	12,2 13,4°	9,6 13,4°	10,6 13,4°	7,7 13,4°	8,5 13,4°	7,7 13,4°	8,5 13,4°	7,7 13,4°	6,2 9,8°	6,9 9,8°	5,0 6,7°	5,6 6,7°	4,2 6,7° 17,59	
9,0	Stabilizers raised 4 pt. outriggers down				14,7° 14,7°	13,4° 13,4°	12,2 13,4°	13,4° 13,4°	10,6 13,4°	10,9° 13,4°	9,8° 13,4°	9,8° 13,4°	9,8° 13,4°	9,8° 13,4°	8,9° 13,4°	8,9° 13,4°	4,0 6,6°	4,4 6,6°	3,9 6,6° 18,15
7,5	Stabilizers raised 4 pt. outriggers down				15,9° 15,9°	14,6° 16,0°	16,0° 16,0°	13,5 16,0°	13,5 16,0°	12,8 16,0°	13,5 16,0°	12,8 16,0°	13,5 16,0°	12,8 16,0°	13,5 16,0°	12,8 16,0°	13,5 16,0°	3,4 6,7°	
6,0	Stabilizers raised 4 pt. outriggers down	16,7° 16,7°	16,7° 19,5°	18,4 19,5°	15,7 19,5°	15,2 19,5°	15,2 19,5°	10,6 19,5°	8,5 19,5°	9,4 19,5°	6,9 19,5°	7,7 19,5°	5,6 19,5°	6,4 19,5°	4,7 19,5°	5,3 19,5°	3,4 6,7°		
4,5	Stabilizers raised 4 pt. outriggers down	34,0° 34,0°	34,0° 30,6°	30,6° 23,7°	25,7° 18,8°	16,8 18,8°	12,7 18,8°	14,2 18,8°	9,9 18,8°	10,6 18,8°	8,5 18,8°	9,4 18,8°	6,9 18,8°	6,4 18,8°	4,7 18,8°	5,3 19,02			
3,0	Stabilizers raised 4 pt. outriggers down	12,6° 12,6°	12,6° 26,8°	20,9 26,8°	23,8 21,0°	15,2 17,1°	11,6 17,1°	13,1 17,1°	9,2 17,1°	10,4 17,1°	7,5 17,1°	8,4 17,1°	6,5 17,1°	7,3 17,1°	5,1 17,1°	5,8 17,1°	3,2 6,3°		
1,5	Stabilizers raised 4 pt. outriggers down	0,8° 0,8°	5,2° 5,2°	5,2° 17,8°	17,8° 17,8°	13,7 17,8°	15,6 17,8°	10,7 17,8°	8,6 17,8°	9,7 17,8°	7,0 17,8°	8,0 17,8°	5,8 17,8°	6,6 17,8°	4,9 17,8°	5,3 5,3°	3,2 5,3° 18,99		
0	Stabilizers raised 4 pt. outriggers down	1,8° 1,8°	4,8° 4,8°	4,8° 11,2°	11,2° 11,2°	12,6 11,2°	14,4 11,2°	9,9 11,2°	8,0 11,2°	9,1 11,2°	7,0 11,2°	8,6 11,2°	6,5 11,2°	7,6 11,2°	4,9 11,2°	5,6 11,2°	3,2 6,6°		
-1,5	Stabilizers raised 4 pt. outriggers down	5,5° 5,5°	10,1° 10,1°	10,1° 18,8°	11,8 18,8°	13,7 18,8°	9,3 18,8°	10,7 18,8°	7,6 18,8°	8,7 18,8°	6,3 18,8°	7,2 18,8°	5,2 18,8°	6,9 18,8°	4,5 18,8°	5,2 4,9°	3,3 4,2°		
-3,0	Stabilizers raised 4 pt. outriggers down	6,5° 6,5°	10,3° 10,3°	10,3° 16,6°	11,4 16,6°	11,4 16,6°	11,4 16,6°	14,1 16,6°	11,9 16,6°	10,7 16,6°	10,7 16,6°	7,3 16,6°	7,3 16,6°	5,1 16,6°	5,1 16,6°	4,5 4,5°	3,6 4,5°		
-4,5	Stabilizers raised 4 pt. outriggers down				11,2 13,7°	13,1 13,7°	8,8 13,7°	10,1 13,7°	7,1 13,7°	8,2 13,7°	6,0 13,7°	6,9 13,7°	5,1 13,7°	5,9 13,7°	4,4 13,7°		4,2 4,2°		
-6,0	Stabilizers raised 4 pt. outriggers down				13,7° 13,7°	13,7° 13,7°	11,9° 13,7°	11,9° 13,7°	10,2° 13,7°	10,2° 13,7°	8,6° 13,7°	7,2° 13,7°	5,7° 13,7°	5,7° 13,7°			4,2 4,2°		
-7,5	Stabilizers raised 4 pt. outriggers																		

Lift Capacities

with Industrial-Type Straight Boom 10,50 m (Kinematic Variant 3B)

Industrial Stick 7,80 m

 Height 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	16,5 m	18,0 m	19,5 m	21,0 m	 m	
24,0	Stabilizers raised 4 pt. outriggers down															
22,5	Stabilizers raised 4 pt. outriggers down															
21,0	Stabilizers raised 4 pt. outriggers down															
19,5	Stabilizers raised 4 pt. outriggers down															
18,0	Stabilizers raised 4 pt. outriggers down															
16,5	Stabilizers raised 4 pt. outriggers down															
15,0	Stabilizers raised 4 pt. outriggers down															
13,5	Stabilizers raised 4 pt. outriggers down															
12,0	Stabilizers raised 4 pt. outriggers down															
10,5	Stabilizers raised 4 pt. outriggers down															
9,0	Stabilizers raised 4 pt. outriggers down															
7,5	Stabilizers raised 4 pt. outriggers down															
6,0	Stabilizers raised 4 pt. outriggers down	28,6*	28,6*	29,3*	29,3*	22,1*	16,8	18,0*	12,7	14,2	10,0	11,1	8,0	9,0	6,6	
4,5	Stabilizers raised 4 pt. outriggers down	9,8*	9,8*	21,0	23,9	15,3	17,2	11,7	13,2	9,3	10,5	7,6	8,5	6,2	7,0	5,9
3,0	Stabilizers raised 4 pt. outriggers down	9,8*	9,8*	25,0*	25,0*	19,6*	19,6*	16,3*	16,3*	14,1*	14,1*	12,4*	12,4*	11,2*	10,9*	10,0*
1,5	Stabilizers raised 4 pt. outriggers down	2,9*	2,9*	14,9*	14,9*	13,9	15,8	10,8	12,2	8,7	9,8	7,1	8,1	5,9	6,7	5,5
0	Stabilizers raised 4 pt. outriggers down	3,9*	3,9*	8,4*	8,4*	12,0	13,8	9,5	10,9	7,7	8,8	6,4	7,4	5,4	6,2	4,7
-1,5	Stabilizers raised 4 pt. outriggers down	3,9*	3,9*	18,5*	18,5*	18,4*	18,4*	15,5*	15,5*	13,4*	13,4*	11,7*	11,7*	10,4	10,4*	9,1
-3,0	Stabilizers raised 4 pt. outriggers down	9,0*	9,0*	11,6	13,4	9,1	10,5	7,4	8,6	6,2	7,1	5,3	6,1	4,6	5,2	4,0
-4,5	Stabilizers raised 4 pt. outriggers down	9,0*	9,0*	16,5*	16,5*	16,3*	18,3*	15,5*	15,5*	13,3*	13,3*	11,6*	11,6*	10,2*	10,2*	8,9*
-6,0	Stabilizers raised 4 pt. outriggers down															
-7,5	Stabilizers raised 4 pt. outriggers down															

Industrial Stick 9,00 m

 Height 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	16,5 m	18,0 m	19,5 m	21,0 m	 m	
24,0	Stabilizers raised 4 pt. outriggers down															
22,5	Stabilizers raised 4 pt. outriggers down															
21,0	Stabilizers raised 4 pt. outriggers down															
19,5	Stabilizers raised 4 pt. outriggers down															
18,0	Stabilizers raised 4 pt. outriggers down															
16,5	Stabilizers raised 4 pt. outriggers down															
15,0	Stabilizers raised 4 pt. outriggers down															
13,5	Stabilizers raised 4 pt. outriggers down															
12,0	Stabilizers raised 4 pt. outriggers down															
10,5	Stabilizers raised 4 pt. outriggers down															
9,0	Stabilizers raised 4 pt. outriggers down															
7,5	Stabilizers raised 4 pt. outriggers down															
6,0	Stabilizers raised 4 pt. outriggers down															
4,5	Stabilizers raised 4 pt. outriggers down	30,1*	30,1*	22,4*	22,4*	18,0*	18,0*	15,2*	15,2*	13,2*	13,2*	11,7*	11,7*	10,2*	10,2*	
3,0	Stabilizers raised 4 pt. outriggers down	8,3*	8,3*	20,2	23,1	14,7	16,7	11,4	12,8	9,0	10,2	7,3	8,3	6,1	6,9	5,0
1,5	Stabilizers raised 4 pt. outriggers down	0,7*	0,7*	4,4*	4,4*	14,1*	14,1*	13,5	15,2	10,4	10,5	7,8	8,8	6,4	7,2	5,6
0	Stabilizers raised 4 pt. outriggers down	1,8*	1,8*	4,4*	4,4*	10,0*	10,0*	12,2	14,1	9,6	11,0	7,8	8,9	6,5	7,4	5,3
-1,5	Stabilizers raised 4 pt. outriggers down	5,3*	5,3*	4,4*	4,4*	10,0*	10,0*	21,9*	21,9*	17,8*	15,0*	15,0*	13,0*	11,4*	11,4*	7,9*
-3,0	Stabilizers raised 4 pt. outriggers down															
-4,5	Stabilizers raised 4 pt. outriggers down															
-6,0	Stabilizers raised 4 pt. outriggers down															
-7,5	Stabilizers raised 4 pt. outriggers down															

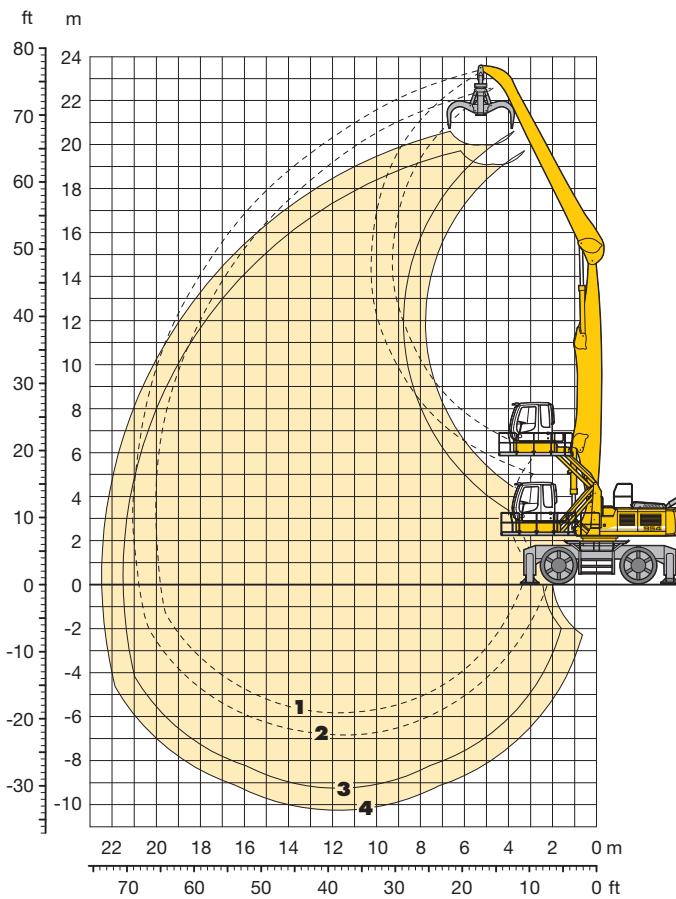
 Height  Can be slewed through 360°  In longitudinal position of undercarriage  Max. reach * Limited by hydr. capacity

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.

Industrial Attachment

with Industrial-Type Straight Boom 11,50 m



Attachment Envelope

Kinematic variants 2A/3B

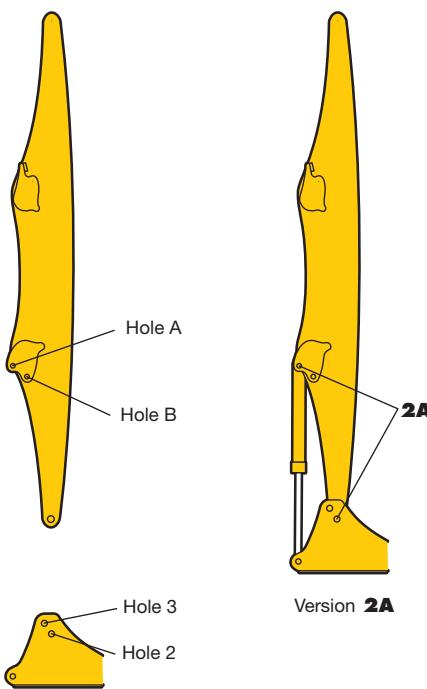
- 1** with industrial stick 9,00 m
- 2** with industrial stick 10,00 m
- 3** with industrial stick 9,00 m and grapple model 72 C
- 4** with industrial stick 10,00 m and grapple model 72 C

Operating Weight

Operating weight includes basic machine and industrial attachment with:

	Weight
Industrial-type straight boom 11,50 m Industrial stick 9,00 m Grapple model 72 C/1,40 m ³ with 5 semi-closed tines	76400 kg
Industrial-type straight boom 11,50 m Industrial stick 10,00 m Grapple model 72 C/1,40 m ³ with 5 semi-closed tines	76800 kg

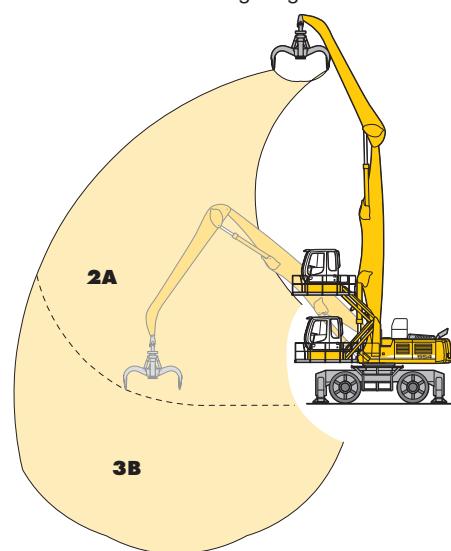
VarioLiftPlus



VarioLiftPlus: Variable boom mounting positions for optimized lift capacities

with **the same** working range

with a **different** working range

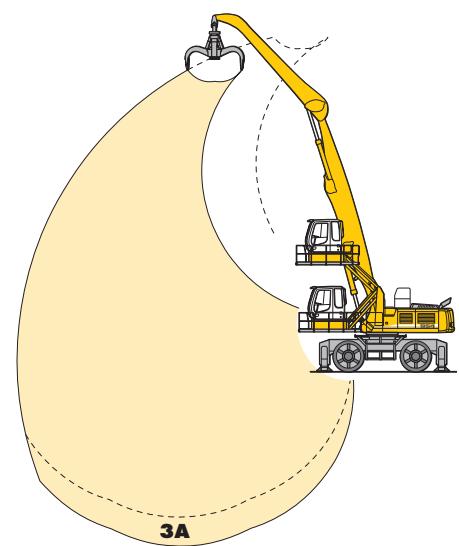


Kinematic Variant 2A:

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 11,50 m (Kinematic Variant 2A)

Industrial Stick 9,00 m

Height 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	16,5 m	18,0 m	19,5 m	21,0 m	m
24,0	Stabilizers raised 4 pt. outriggers down														
22,5	Stabilizers raised 4 pt. outriggers down														
21,0	Stabilizers raised 4 pt. outriggers down														
19,5	Stabilizers raised 4 pt. outriggers down														
18,0	Stabilizers raised 4 pt. outriggers down														
16,5	Stabilizers raised 4 pt. outriggers down														
15,0	Stabilizers raised 4 pt. outriggers down														
13,5	Stabilizers raised 4 pt. outriggers down														
12,0	Stabilizers raised 4 pt. outriggers down														
10,5	Stabilizers raised 4 pt. outriggers down														
9,0	Stabilizers raised 4 pt. outriggers down														
7,5	Stabilizers raised 4 pt. outriggers down														
6,0	Stabilizers raised 4 pt. outriggers down														
4,5	Stabilizers raised 4 pt. outriggers down														
3,0	Stabilizers raised 4 pt. outriggers down														
1,5	Stabilizers raised 4 pt. outriggers down														
0	Stabilizers raised 4 pt. outriggers down														
-1,5	Stabilizers raised 4 pt. outriggers down														
-3,0	Stabilizers raised 4 pt. outriggers down														
-4,5	Stabilizers raised 4 pt. outriggers down														
-6,0	Stabilizers raised 4 pt. outriggers down														
-7,5	Stabilizers raised 4 pt. outriggers down														

Industrial Stick 10,00 m

Height 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	16,5 m	18,0 m	19,5 m	21,0 m	m
24,0	Stabilizers raised 4 pt. outriggers down														
22,5	Stabilizers raised 4 pt. outriggers down														
21,0	Stabilizers raised 4 pt. outriggers down														
19,5	Stabilizers raised 4 pt. outriggers down														
18,0	Stabilizers raised 4 pt. outriggers down														
16,5	Stabilizers raised 4 pt. outriggers down														
15,0	Stabilizers raised 4 pt. outriggers down														
13,5	Stabilizers raised 4 pt. outriggers down														
12,0	Stabilizers raised 4 pt. outriggers down														
10,5	Stabilizers raised 4 pt. outriggers down														
9,0	Stabilizers raised 4 pt. outriggers down														
7,5	Stabilizers raised 4 pt. outriggers down														
6,0	Stabilizers raised 4 pt. outriggers down														
4,5	Stabilizers raised 4 pt. outriggers down														
3,0	Stabilizers raised 4 pt. outriggers down														
1,5	Stabilizers raised 4 pt. outriggers down														
0	Stabilizers raised 4 pt. outriggers down														
-1,5	Stabilizers raised 4 pt. outriggers down														
-3,0	Stabilizers raised 4 pt. outriggers down														
-4,5	Stabilizers raised 4 pt. outriggers down														
-6,0	Stabilizers raised 4 pt. outriggers down														
-7,5	Stabilizers raised 4 pt. outriggers down														

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.

Lift Capacities

with Industrial-Type Straight Boom 11,50 m (Kinematic Variant 3B)

Industrial Stick 9,00 m

	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	19,5 m	21,0 m	 m	
Under-carriage															
24,0	Stabilizers raised 4 pt. outriggers down														13,5* 13,5*
22,5	Stabilizers raised 4 pt. outriggers down														13,5* 13,5*
21,0	Stabilizers raised 4 pt. outriggers down														10,1* 10,1*
19,5	Stabilizers raised 4 pt. outriggers down														9,5* 9,5*
18,0	Stabilizers raised 4 pt. outriggers down														8,7* 8,7*
16,5	Stabilizers raised 4 pt. outriggers down														7,4* 7,4*
15,0	Stabilizers raised 4 pt. outriggers down														4,7* 4,7*
13,5	Stabilizers raised 4 pt. outriggers down														4,1* 4,1*
12,0	Stabilizers raised 4 pt. outriggers down														3,6* 3,6*
10,5	Stabilizers raised 4 pt. outriggers down														6,7* 6,7*
9,0	Stabilizers raised 4 pt. outriggers down														3,0* 3,0*
7,5	Stabilizers raised 4 pt. outriggers down														2,8* 2,8*
6,0	Stabilizers raised 4 pt. outriggers down														2,6* 2,6*
4,5	Stabilizers raised 4 pt. outriggers down														2,5* 2,5*
3,0	Stabilizers raised 4 pt. outriggers down														2,5* 2,5*
1,5	Stabilizers raised 4 pt. outriggers down														2,4* 2,4*
0	Stabilizers raised 4 pt. outriggers down														2,5* 2,5*
-1,5	Stabilizers raised 4 pt. outriggers down														6,4* 6,4*
-3,0	Stabilizers raised 4 pt. outriggers down														2,8* 2,8*
-4,5	Stabilizers raised 4 pt. outriggers down														3,3* 3,3*
-6,0	Stabilizers raised 4 pt. outriggers down														8,0* 8,0*
-7,5	Stabilizers raised 4 pt. outriggers down														16,15* 16,15*

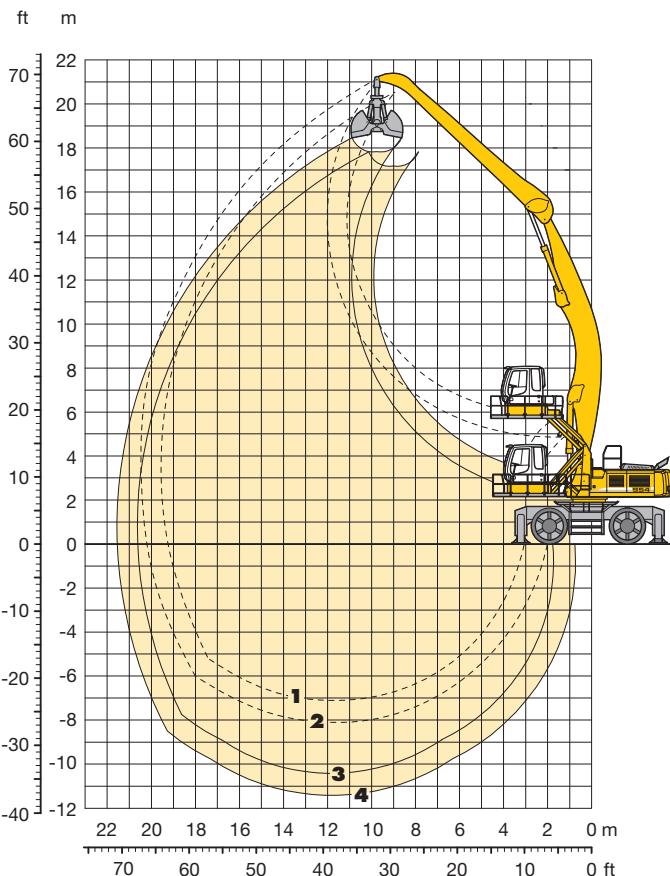
Industrial Stick 10,00 m

 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.

Industrial Attachment

with Industrial-Type Gooseneck Boom 11,50 m



Attachment Envelope

Kinematic variant 3D

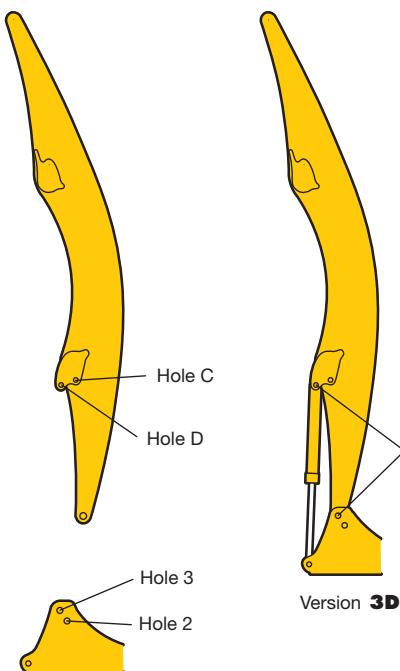
- 1 with industrial stick 9,00 m
- 2 with industrial stick 10,00 m
- 3 with industrial stick 9,00 m and clamshell model 22 B
- 4 with industrial stick 10,00 m and clamshell model 22 B

Operating Weight

Operating weight includes basic machine and industrial attachment with:

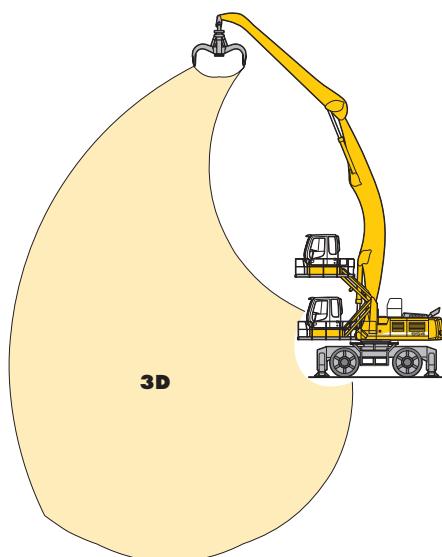
	Weight
Industrial-type gooseneck boom 11,50 m	
Industrial stick 9,00 m	
Clamshell model 22 B/2,50 m ³	77100 kg
Industrial-type gooseneck boom 11,50 m	
Industrial stick 10,00 m	
Clamshell model 22 B/2,50 m ³	77400 kg

VarioLiftPlus



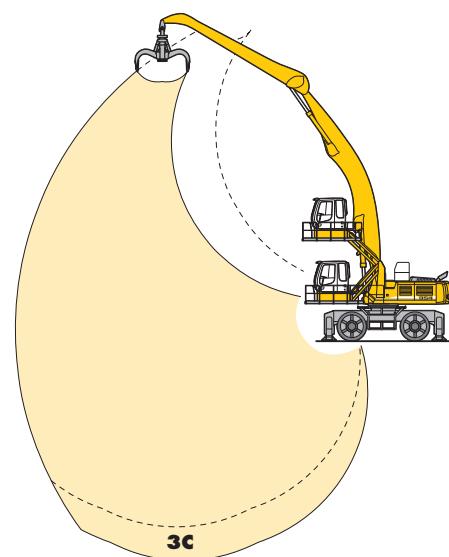
VarioLiftPlus: Variable boom mounting positions for optimized lift capacities

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

Lift Capacities

with Industrial-Type Gooseneck Boom 11,50 m (Kinematic Variant 3D)

Industrial Stick 9,00 m

Height 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	16,5 m	18,0 m	19,5 m	21,0 m	m		
24,0	Stabilizers raised 4 pt. outriggers down														8,2* 8,2*		
22,5	Stabilizers raised 4 pt. outriggers down														8,2* 8,2*		
21,0	Stabilizers raised 4 pt. outriggers down														7,5* 7,5*		
19,5	Stabilizers raised 4 pt. outriggers down														7,5* 7,5*		
18,0	Stabilizers raised 4 pt. outriggers down														6,5 6,7*		
16,5	Stabilizers raised 4 pt. outriggers down														7,1* 7,1*		
15,0	Stabilizers raised 4 pt. outriggers down														5,4 5,4		
13,5	Stabilizers raised 4 pt. outriggers down														6,0* 6,0*		
12,0	Stabilizers raised 4 pt. outriggers down														15,59 15,59		
10,5	Stabilizers raised 4 pt. outriggers down														3,5 3,5		
9,0	Stabilizers raised 4 pt. outriggers down														18,14 18,14		
7,5	Stabilizers raised 4 pt. outriggers down														3,2 3,2		
6,0	Stabilizers raised 4 pt. outriggers down	23,9* 23,9*	23,9* 23,9*	18,1* 18,1*	18,1* 18,1*	14,8* 14,8*	14,8* 14,8*	12,4 12,4	12,5* 11,0*	9,6 10,8	7,6 7,6	6,1 6,1	6,9 5,0	5,0 5,7	4,0 4,0		
4,5	Stabilizers raised 4 pt. outriggers down	18,8* 18,8*	18,8* 18,8*	20,1 20,9*	20,9*	14,6 16,4*	14,6 16,4*	11,1 13,6*	12,5 13,6*	8,7 9,7	7,0 7,8	5,7 6,0	6,5 6,9	4,6 5,1	3,8 4,1		
3,0	Stabilizers raised 4 pt. outriggers down	5,6* 5,6*	5,6* 5,6*	16,8 17,5*	17,5*	12,6 17,9*	17,9*	9,8 14,6*	14,6*	7,8 12,4	6,4 10,8*	7,3 10,8*	5,2 6,0	4,3 4,3	2,9 3,4		
1,5	Stabilizers raised 4 pt. outriggers down	4,4* 4,4*	4,4* 4,4*	10,0* 10,0*	10,0*	11,0 19,1*	19,1*	14,5 15,5*	15,5*	12,5 13,0*	8,7 11,0*	7,1 10,3*	6,2 9,3*	5,2 9,3*	3,7 4,1		
0	Stabilizers raised 4 pt. outriggers down	4,7* 4,7*	4,7* 4,7*	8,5* 8,5*	8,5* 8,5*	9,9 16,1*	11,7* <td>11,7*</td> <td>11,7*<td>11,7*</td><td>9,7*<td>10,3*</td><td>8,9*<td>10,3*</td><td>8,3*<td>8,3*</td></td></td></td></td>	11,7*	11,7* <td>11,7*</td> <td>9,7*<td>10,3*</td><td>8,9*<td>10,3*</td><td>8,3*<td>8,3*</td></td></td></td>	11,7*	9,7* <td>10,3*</td> <td>8,9*<td>10,3*</td><td>8,3*<td>8,3*</td></td></td>	10,3*	8,9* <td>10,3*</td> <td>8,3*<td>8,3*</td></td>	10,3*	8,3* <td>8,3*</td>	8,3*	
-1,5	Stabilizers raised 4 pt. outriggers down	5,5* 5,5*	5,5* 5,5*	8,4* 8,4*	8,4* <td>9,1</td> <td>10,9*<td>10,9*</td><td>7,2*<td>10,3*</td><td>8,6*<td>9,7*</td><td>5,8*<td>9,7*</td><td>4,1*<td>5,8*</td></td></td></td></td></td>	9,1	10,9* <td>10,9*</td> <td>7,2*<td>10,3*</td><td>8,6*<td>9,7*</td><td>5,8*<td>9,7*</td><td>4,1*<td>5,8*</td></td></td></td></td>	10,9*	7,2* <td>10,3*</td> <td>8,6*<td>9,7*</td><td>5,8*<td>9,7*</td><td>4,1*<td>5,8*</td></td></td></td>	10,3*	8,6* <td>9,7*</td> <td>5,8*<td>9,7*</td><td>4,1*<td>5,8*</td></td></td>	9,7*	5,8* <td>9,7*</td> <td>4,1*<td>5,8*</td></td>	9,7*	4,1* <td>5,8*</td>	5,8*	
-3,0	Stabilizers raised 4 pt. outriggers down	6,3* 6,3*	6,3* 6,3*	8,8* <td>8,8*</td> <td>13,2*<td>13,2*</td><td>16,6*<td>16,6*</td><td>14,0*<td>14,0*</td><td>12,0*<td>12,0*</td><td>10,5*<td>10,5*</td><td>9,0*<td>9,0*</td></td></td></td></td></td></td>	8,8*	13,2* <td>13,2*</td> <td>16,6*<td>16,6*</td><td>14,0*<td>14,0*</td><td>12,0*<td>12,0*</td><td>10,5*<td>10,5*</td><td>9,0*<td>9,0*</td></td></td></td></td></td>	13,2*	16,6* <td>16,6*</td> <td>14,0*<td>14,0*</td><td>12,0*<td>12,0*</td><td>10,5*<td>10,5*</td><td>9,0*<td>9,0*</td></td></td></td></td>	16,6*	14,0* <td>14,0*</td> <td>12,0*<td>12,0*</td><td>10,5*<td>10,5*</td><td>9,0*<td>9,0*</td></td></td></td>	14,0*	12,0* <td>12,0*</td> <td>10,5*<td>10,5*</td><td>9,0*<td>9,0*</td></td></td>	12,0*	10,5* <td>10,5*</td> <td>9,0*<td>9,0*</td></td>	10,5*	9,0* <td>9,0*</td>	9,0*
-4,5	Stabilizers raised 4 pt. outriggers down	9,4* <td>9,4*</td> <td>8,5*<td>8,5*</td><td>10,5*<td>10,5*</td><td>10,5*<td>10,5*</td><td>10,5*<td>10,5*</td><td>10,5*<td>10,5*</td><td>10,4*<td>10,4*</td><td>9,2*<td>9,2*</td></td></td></td></td></td></td></td>	9,4*	8,5* <td>8,5*</td> <td>10,5*<td>10,5*</td><td>10,5*<td>10,5*</td><td>10,5*<td>10,5*</td><td>10,5*<td>10,5*</td><td>10,4*<td>10,4*</td><td>9,2*<td>9,2*</td></td></td></td></td></td></td>	8,5*	10,5* <td>10,5*</td> <td>10,5*<td>10,5*</td><td>10,5*<td>10,5*</td><td>10,5*<td>10,5*</td><td>10,4*<td>10,4*</td><td>9,2*<td>9,2*</td></td></td></td></td></td>	10,5*	10,5* <td>10,5*</td> <td>10,5*<td>10,5*</td><td>10,5*<td>10,5*</td><td>10,4*<td>10,4*</td><td>9,2*<td>9,2*</td></td></td></td></td>	10,5*	10,5* <td>10,5*</td> <td>10,5*<td>10,5*</td><td>10,4*<td>10,4*</td><td>9,2*<td>9,2*</td></td></td></td>	10,5*	10,5* <td>10,5*</td> <td>10,4*<td>10,4*</td><td>9,2*<td>9,2*</td></td></td>	10,5*	10,4* <td>10,4*</td> <td>9,2*<td>9,2*</td></td>	10,4*	9,2* <td>9,2*</td>	9,2*
-6,0	Stabilizers raised 4 pt. outriggers down														17,78 17,78		
-7,5	Stabilizers raised 4 pt. outriggers down														16,22 16,22		

Industrial Stick 10,00 m

Height 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	16,5 m	18,0 m	19,5 m	21,0 m	m		
24,0	Stabilizers raised 4 pt. outriggers down														7,8* 7,8*		
22,5	Stabilizers raised 4 pt. outriggers down														6,9* 6,9*		
21,0	Stabilizers raised 4 pt. outriggers down														12,36 12,36		
19,5	Stabilizers raised 4 pt. outriggers down														6,4* 6,4*		
18,0	Stabilizers raised 4 pt. outriggers down														14,15 14,15		
16,5	Stabilizers raised 4 pt. outriggers down														5,5 5,5		
15,0	Stabilizers raised 4 pt. outriggers down														15,58 15,58		
13,5	Stabilizers raised 4 pt. outriggers down														4,6 4,6		
12,0	Stabilizers raised 4 pt. outriggers down														16,75 16,75		
10,5	Stabilizers raised 4 pt. outriggers down														4,0 4,0		
9,0	Stabilizers raised 4 pt. outriggers down														17,71 17,71		
7,5	Stabilizers raised 4 pt. outriggers down														5,7* 5,7*		
6,0	Stabilizers raised 4 pt. outriggers down														19,14 19,14		
4,5	Stabilizers raised 4 pt. outriggers down	25,4* <td>25,4*</td> <td>18,7*<td>18,7*</td><td>18,7*<td>18,7*</td><td>15,0*<td>15,0*</td><td>11,8*<td>12,6*</td><td>9,2*<td>10,4*</td><td>7,3*<td>8,3*</td><td>5,9*<td>6,4*</td></td></td></td></td></td></td></td>	25,4*	18,7* <td>18,7*</td> <td>18,7*<td>18,7*</td><td>15,0*<td>15,0*</td><td>11,8*<td>12,6*</td><td>9,2*<td>10,4*</td><td>7,3*<td>8,3*</td><td>5,9*<td>6,4*</td></td></td></td></td></td></td>	18,7*	18,7* <td>18,7*</td> <td>15,0*<td>15,0*</td><td>11,8*<td>12,6*</td><td>9,2*<td>10,4*</td><td>7,3*<td>8,3*</td><td>5,9*<td>6,4*</td></td></td></td></td></td>	18,7*	15,0* <td>15,0*</td> <td>11,8*<td>12,6*</td><td>9,2*<td>10,4*</td><td>7,3*<td>8,3*</td><td>5,9*<td>6,4*</td></td></td></td></td>	15,0*	11,8* <td>12,6*</td> <td>9,2*<td>10,4*</td><td>7,3*<td>8,3*</td><td>5,9*<td>6,4*</td></td></td></td>	12,6*	9,2* <td>10,4*</td> <td>7,3*<td>8,3*</td><td>5,9*<td>6,4*</td></td></td>	10,4*	7,3* <td>8,3*</td> <td>5,9*<td>6,4*</td></td>	8,3*	5,9* <td>6,4*</td>	6,4*
3,0	Stabilizers raised 4 pt. outriggers down	11,4* <td>11,4*</td> <td>21,4*<td>21,4*</td><td>13,6*<td>13,6*</td><td>10,4*<td>10,4*</td><td>11,9*<td>8,2</td><td>9,4*<td>6,6</td><td>7,6*<td>5,4</td><td>5,1*<td>4,4*</td></td></td></td></td></td></td></td>	11,4*	21,4* <td>21,4*</td> <td>13,6*<td>13,6*</td><td>10,4*<td>10,4*</td><td>11,9*<td>8,2</td><td>9,4*<td>6,6</td><td>7,6*<td>5,4</td><td>5,1*<td>4,4*</td></td></td></td></td></td></td>	21,4*	13,6* <td>13,6*</td> <td>10,4*<td>10,4*</td><td>11,9*<td>8,2</td><td>9,4*<td>6,6</td><td>7,6*<td>5,4</td><td>5,1*<td>4,4*</td></td></td></td></td></td>	13,6*	10,4* <td>10,4*</td> <td>11,9*<td>8,2</td><td>9,4*<td>6,6</td><td>7,6*<td>5,4</td><td>5,1*<td>4,4*</td></td></td></td></td>	10,4*	11,9* <td>8,2</td> <td>9,4*<td>6,6</td><td>7,6*<td>5,4</td><td>5,1*<td>4,4*</td></td></td></td>	8,2	9,4* <td>6,6</td> <td>7,6*<td>5,4</td><td>5,1*<td>4,4*</td></td></td>	6,6	7,6* <td>5,4</td> <td>5,1*<td>4,4*</td></td>	5,4	5,1* <td>4,4*</td>	4,4*
1,5	Stabilizers raised 4 pt. outriggers down	5,9* <td>5,9*</td> <td>14,3*<td>14,3*</td><td>11,7*<td>13,6</td><td>9,1*<td>10,6</td><td>7,3*<td>8,5</td><td>5,9*<td>6,4</td><td>5,7*<td>5,7</td><td>4,2*<td>4,2*</td></td></td></td></td></td></td></td>	5,9*	14,3* <td>14,3*</td> <td>11,7*<td>13,6</td><td>9,1*<td>10,6</td><td>7,3*<td>8,5</td><td>5,9*<td>6,4</td><td>5,7*<td>5,7</td><td>4,2*<td>4,2*</td></td></td></td></td></td></td>	14,3*	11,7* <td>13,6</td> <td>9,1*<td>10,6</td><td>7,3*<td>8,5</td><td>5,9*<td>6,4</td><td>5,7*<td>5,7</td><td>4,2*<td>4,2*</td></td></td></td></td></td>	13,6	9,1* <td>10,6</td> <td>7,3*<td>8,5</td><td>5,9*<td>6,4</td><td>5,7*<td>5,7</td><td>4,2*<td>4,2*</td></td></td></td></td>	10,6	7,3* <td>8,5</td> <td>5,9*<td>6,4</td><td>5,7*<td>5,7</td><td>4,2*<td>4,2*</td></td></td></td>	8,5	5,9* <td>6,4</td> <td>5,7*<td>5,7</td><td>4,2*<td>4,2*</td></td></td>	6,4	5,7* <td>5,7</td> <td>4,2*<td>4,2*</td></td>	5,7	4,2* <td>4,2*</td>	4,2*
0	Stabilizers raised 4 pt. outriggers down	5,2* <td>5,2*</td> <td>9,9*<td>9,9*</td><td>10,2*<td>12,1</td><td>8,1*<td>9,5</td><td>6,5*<td>7,7</td><td>5,4*<td>6,4</td><td>5,2*<td>5,7</td><td>3,7*<td>3,7</td></td></td></td></td></td></td></td>	5,2*	9,9* <td>9,9*</td> <td>10,2*<td>12,1</td><td>8,1*<td>9,5</td><td>6,5*<td>7,7</td><td>5,4*<td>6,4</td><td>5,2*<td>5,7</td><td>3,7*<td>3,7</td></td></td></td></td></td></td>	9,9*	10,2* <td>12,1</td> <td>8,1*<td>9,5</td><td>6,5*<td>7,7</td><td>5,4*<td>6,4</td><td>5,2*<td>5,7</td><td>3,7*<td>3,7</td></td></td></td></td></td>	12,1	8,1* <td>9,5</td> <td>6,5*<td>7,7</td><td>5,4*<td>6,4</td><td>5,2*<td>5,7</td><td>3,7*<td>3,7</td></td></td></td></td>	9,5	6,5* <td>7,7</td> <td>5,4*<td>6,4</td><td>5,2*<td>5,7</td><td>3,7*<td>3,7</td></td></td></td>	7,7	5,4* <td>6,4</td> <td>5,2*<td>5,7</td><td>3,7*<td>3,7</td></td></td>	6,4	5,2* <td>5,7</td> <td>3,7*<td>3,7</td></td>	5,7	3,7* <td>3,7</td>	3,7
-1,5	Stabilizers raised 4 pt. outriggers down	5,5* <td>5,5*</td> <td>8,9*<td>8,9*</td><td>9,2*<td>11,0</td><td>7,3*<td>8,7</td><td>5,9*<td>6,9</td><td>4,9*<td>5,8</td><td>4,1*<td>4,9</td><td>3,4*<td>3,4</td></td></td></td></td></td></td></td>	5,5*	8,9* <td>8,9*</td> <td>9,2*<td>11,0</td><td>7,3*<td>8,7</td><td>5,9*<td>6,9</td><td>4,9*<td>5,8</td><td>4,1*<td>4,9</td><td>3,4*<td>3,4</td></td></td></td></td></td></td>	8,9*	9,2* <td>11,0</td> <td>7,3*<td>8,7</td><td>5,9*<td>6,9</td><td>4,9*<td>5,8</td><td>4,1*<td>4,9</td><td>3,4*<td>3,4</td></td></td></td></td></td>	11,0	7,3* <td>8,7</td> <td>5,9*<td>6,9</td><td>4,9*<td>5,8</td><td>4,1*<td>4,9</td><td>3,4*<td>3,4</td></td></td></td></td>	8,7	5,9* <td>6,9</td> <td>4,9*<td>5,8</td><td>4,1*<td>4,9</td><td>3,4*<td>3,4</td></td></td></td>	6,9	4,9* <td>5,8</td> <td>4,1*<td>4,9</td><td>3,4*<td>3,4</td></td></td>	5,8	4,1* <td>4,9</td> <td>3,4*<td>3,4</td></td>	4,9	3,4* <td>3,4</td>	3,4
-3,0	Stabilizers raised 4 pt. outriggers down	6,1* <td>6,1*</td> <td>8,8*<td>8,8*</td><td>13,7*<td>13,7*</td><td>16,2*<td>16,2*</td><td>13,6*<td>11,6*</td><td>11,6*<td>10,2*</td><td>8,9*<td>8,0*</td><td>7,8*<td>7,8*</td></td></td></td></td></td></td></td>	6,1*	8,8* <td>8,8*</td> <td>13,7*<td>13,7*</td><td>16,2*<td>16,2*</td><td>13,6*<td>11,6*</td><td>11,6*<td>10,2*</td><td>8,9*<td>8,0*</td><td>7,8*<td>7,8*</td></td></td></td></td></td></td>	8,8*	13,7* <td>13,7*</td> <td>16,2*<td>16,2*</td><td>13,6*<td>11,6*</td><td>11,6*<td>10,2*</td><td>8,9*<td>8,0*</td><td>7,8*<td>7,8*</td></td></td></td></td></td>	13,7*	16,2* <td>16,2*</td> <td>13,6*<td>11,6*</td><td>11,6*<td>10,2*</td><td>8,9*<td>8,0*</td><td>7,8*<td>7,8*</td></td></td></td></td>	16,2*	13,6* <td>11,6*</td> <td>11,6*<td>10,2*</td><td>8,9*<td>8,0*</td><td>7,8*<td>7,8*</td></td></td></td>	11,6*	11,6* <td>10,2*</td> <td>8,9*<td>8,0*</td><td>7,8*<td>7,8*</td></td></td>	10,2*	8,9* <td>8,0*</td> <td>7,8*<td>7,8*</td></td>	8,0*	7,8* <td>7,8*</td>	7,8*
-4,5	Stabilizers raised 4 pt. outriggers down	6,8* <td>6,8*</td> <td>9,1*<td>9,1*</td><td>8,2*<td>10,0</td><td>6,4*<td>7,7</td><td>5,2*<td>6,3</td><td>4,4*<td>5,0</td><td>3,7*<td>4,4</td><td>3,2*<td>3,2</td></td></td></td></td></td></td></td>	6,8*	9,1* <td>9,1*</td> <td>8,2*<td>10,0</td><td>6,4*<td>7,7</td><td>5,2*<td>6,3</td><td>4,4*<td>5,0</td><td>3,7*<td>4,4</td><td>3,2*<td>3,2</td></td></td></td></td></td></td>	9,1*	8,2* <td>10,0</td> <td>6,4*<td>7,7</td><td>5,2*<td>6,3</td><td>4,4*<td>5,0</td><td>3,7*<td>4,4</td><td>3,2*<td>3,2</td></td></td></td></td></td>	10,0	6,4* <td>7,7</td> <td>5,2*<td>6,3</td><td>4,4*<td>5,0</td><td>3,7*<td>4,4</td><td>3,2*<td>3,2</td></td></td></td></td>	7,7	5,2* <td>6,3</td> <td>4,4*<td>5,0</td><td>3,7*<td>4,4</td><td>3,2*<td>3,2</td></td></td></td>	6,3	4,4* <td>5,0</td> <td>3,7*<td>4,4</td><td>3,2*<td>3,2</td></td></td>	5,0	3,7* <td>4,4</td> <td>3,2*<td>3,2</td></td>	4,4	3,2* <td>3,2</td>	3,2
-6,0	Stabilizers raised 4 pt. outriggers down														20,26 20,26		
-7,5	Stabilizers raised 4 pt. outriggers down														19,39 19,39		

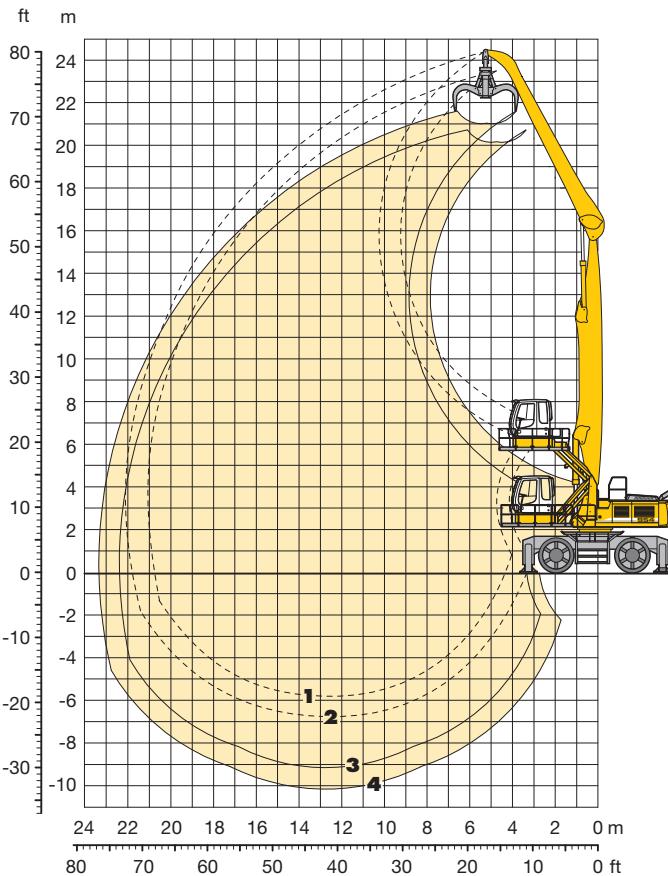
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach * Limited by hydr. capacity

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.

Industrial Attachment

with Industrial-Type Straight Boom 12,50 m



Attachment Envelope

Kinematic variants 2A/3B

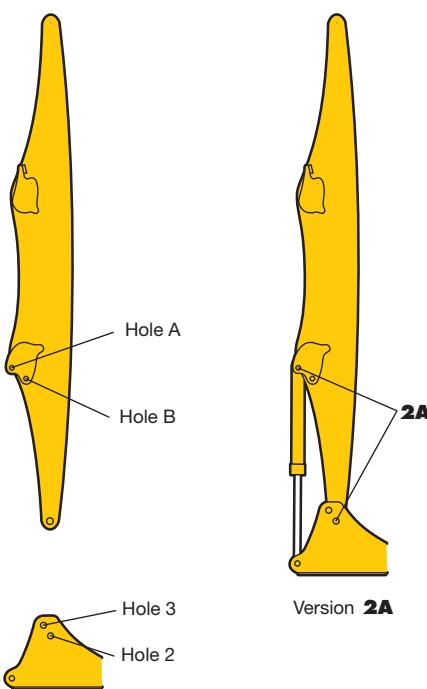
- 1** with industrial stick 9,00 m
- 2** with industrial stick 10,00 m
- 3** with industrial stick 9,00 m and grapple model 72 C
- 4** with industrial stick 10,00 m and grapple model 72 C

Operating Weight

Operating weight includes basic machine and industrial attachment with:

	Weight
Industrial-type straight boom 12,50 m	
Industrial stick 9,00 m	
Grapple model 72 C/1,20 m ³ with 5 semi-closed tines	76850 kg
Industrial-type straight boom 12,50 m	
Industrial stick 10,00 m	
Grapple model 72 C/1,20 m ³ with 5 semi-closed tines	77250 kg

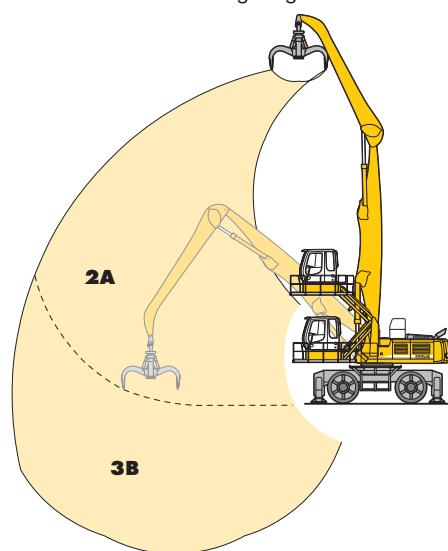
VarioLiftPlus



VarioLiftPlus: Variable boom mounting positions for optimized lift capacities

with **the same** working range

with a **different** working range

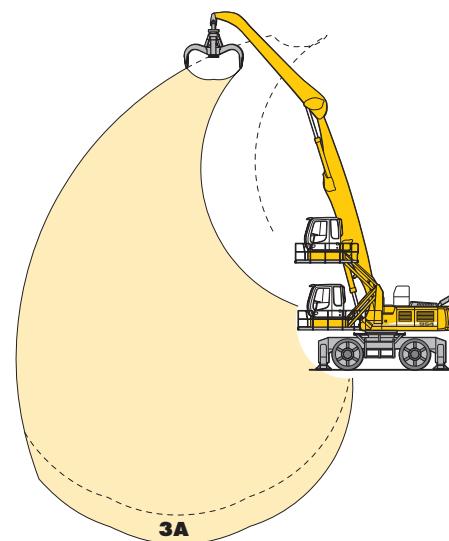


Kinematic Variant 2A:

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 12,50 m (Kinematic Variant 2A)

Industrial Stick 9,00 m

 Height 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	16,5 m	18,0 m	19,5 m	21,0 m	 m		
24,0	Stabilizers raised 4 pt. outriggers down														11,3* 11,3*		
22,5	Stabilizers raised 4 pt. outriggers down					11,9* 11,9*	11,9* 11,9*								11,3* 11,3*		
21,0	Stabilizers raised 4 pt. outriggers down				13,4* 13,4*	13,4* 13,4*	12,0* 12,0*	12,0* 12,0*	10,1* 10,1*	10,1* 10,1*					9,3* 9,3*		
19,5	Stabilizers raised 4 pt. outriggers down					13,0* 13,0*	13,0* 13,0*	11,9* 11,9*	11,9* 11,9*	9,2 10,2					7,5* 8,3*		
18,0	Stabilizers raised 4 pt. outriggers down					13,5* 13,5*	13,5* 13,5*	12,4 12,8*	12,8* 11,5*	9,6 11,5*	10,6 11,5*	7,5 8,3			5,9 6,6		
16,5	Stabilizers raised 4 pt. outriggers down							12,6 12,9*	9,8 11,4*	10,8 11,4*	7,7 8,5	6,0 6,7	4,8 5,4		4,8 5,5		
15,0	Stabilizers raised 4 pt. outriggers down							12,6 12,9*	9,8 11,4*	10,8 11,4*	7,7 8,5	6,1 6,7	4,8 5,4		4,7 5,5		
13,5	Stabilizers raised 4 pt. outriggers down					14,4* 14,4*	14,4* 14,4*	12,4 12,9*	9,7 11,4*	10,7 11,4*	7,6 10,2*	6,1 8,1*	4,8 5,4		3,5 6,8*		
12,0	Stabilizers raised 4 pt. outriggers down					14,9* 14,9*	14,9* 14,9*	12,1 13,0*	9,4 10,5*	10,4 11,5*	7,5 10,2*	6,0 8,1*	4,8 5,4		3,1 6,5*		
10,5	Stabilizers raised 4 pt. outriggers down					15,2 15,2*	15,2* 13,1*	11,6 11,5*	12,8 11,5*	9,1 11,5*	10,1 11,5*	7,2 10,2*	5,8 9,1*	4,6 8,1*		2,8 6,1*	
9,0	Stabilizers raised 4 pt. outriggers down					16,4* 16,4*	16,4* 15,5*	10,9 15,5*	12,1 15,3*	8,6 11,6*	9,6 10,2*	6,9 10,2*	5,5 9,0*	4,6 8,0*		2,5 5,7*	
7,5	Stabilizers raised 4 pt. outriggers down	14,0* 14,0*	14,0* 14,0*	18,3* 18,3*	17,8 19,0*	18,3* 19,0*	13,2 19,0*	13,2 19,0*	10,2 15,8*	11,3 15,8*	8,0 13,4*	9,6 11,4*	6,4 10,2*	5,2 9,0*	4,3 8,0*		2,3 5,3*
6,0	Stabilizers raised 4 pt. outriggers down	33,7* 33,7*	33,7* 33,7*	22,2 24,7*	15,8 17,8	17,8 19,0*	11,9 13,4*	13,4 13,9*	9,3 10,4	7,4 8,4	8,4 9,0*	6,0 7,5	4,9 6,7	4,0 4,8		2,2 5,9*	
4,5	Stabilizers raised 4 pt. outriggers down					16,6* 16,6*	13,7 19,5*	15,6 15,9*	10,5 13,4*	8,4 11,5*	6,8 11,5*	7,7 10,2*	5,5 9,0*	3,8 7,0*		2,1 4,5*	
3,0	Stabilizers raised 4 pt. outriggers down					16,6* 16,6*	13,7 19,5*	15,6 15,9*	10,5 13,4*	8,4 11,5*	6,8 11,5*	7,7 10,2*	5,5 9,0*	3,8 7,0*		2,0 4,1*	
1,5	Stabilizers raised 4 pt. outriggers down	0,3* 0,3*	0,3* 0,3*	3,8* 3,8*	10,3 10,7*	10,7* 10,7*	14,9* 14,9*	12,6* 12,6*	10,8* 10,8*	9,4* 11,1*	8,4* 11,1*	7,4* 10,0*	5,6* 8,5*	4,3* 7,0*		2,0 3,7*	
0	Stabilizers raised 4 pt. outriggers down	1,3* 1,3*	1,3* 1,3*	4,0* 4,0*	4,0* 4,0*	8,7* 8,7*	7,5* 13,9*	8,9* 11,9*	6,2* 10,2*	7,3* 9,8*	8,4* 10,1*	6,0* 10,1*	4,9* 8,9*	3,6* 7,8*		2,0 3,2*	
-1,5	Stabilizers raised 4 pt. outriggers down					4,7* 4,7*	8,4* 8,4*	8,4* 12,4*	7,0* 10,8*	5,7* 9,3*	6,8* 10,0*	4,0* 7,0*	4,8* 7,7*	3,1* 6,7*		2,2 4,5*	
-3,0	Stabilizers raised 4 pt. outriggers down					8,6* 8,9*	8,6* 10,6*	8,1* 10,6*	5,5* 9,4*	6,6* 9,2*	5,5* 8,2*	3,9* 7,1*	4,6* 6,1*	3,0* 5,1*		2,2 3,9*	
-4,5	Stabilizers raised 4 pt. outriggers down															2,6 3,3*	
-6,0	Stabilizers raised 4 pt. outriggers down															3,1 17,40	
-7,5	Stabilizers raised 4 pt. outriggers down																

Industrial Stick 10,00 m

 Height 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	16,5 m	18,0 m	19,5 m	21,0 m	 m
24,0	Stabilizers raised 4 pt. outriggers down														11,5* 11,5*
22,5	Stabilizers raised 4 pt. outriggers down														8,9* 8,9*
21,0	Stabilizers raised 4 pt. outriggers down														7,7* 7,7*
19,5	Stabilizers raised 4 pt. outriggers down														6,1* 7,0*
18,0	Stabilizers raised 4 pt. outriggers down														4,9* 6,6*
16,5	Stabilizers raised 4 pt. outriggers down														4,1* 6,3*
15,0	Stabilizers raised 4 pt. outriggers down														3,5* 6,0*
13,5	Stabilizers raised 4 pt. outriggers down														3,0* 3,6*
12,0	Stabilizers raised 4 pt. outriggers down														5,9* 5,9*
10,5	Stabilizers raised 4 pt. outriggers down														2,4* 2,9*
9,0	Stabilizers raised 4 pt. outriggers down														2,0* 2,5*
7,5	Stabilizers raised 4 pt. outriggers down														2,0* 2,5*
6,0	Stabilizers raised 4 pt. outriggers down	7,2* 7,2*	7,2* 14,6*	14,6* 14,6*	19,0* 19,0*	19,0* 19,0*	17,1 18,9*	12,7 18,9*	14,2 18,9*	9,8 15,6*	10,3* 13,2*	7,6 10,3*	8,4* 9,9*	4,8* 9,9*	11,5* 11,5*
4,5	Stabilizers raised 4 pt. outriggers down	12,1* 12,1*	20,6 23,6	14,8 16,8	11,2 12,7	12,7 14,6	8,8 9,11	8,0 9,0	7,0 6,3	8,0 7,3	5,7 6,3	6,0 6,7	5,6 6,3	4,6 5,3	3,8* 4,4*
3,0	Stabilizers raised 4 pt. outriggers down	1,8* 1,8*	10,6* 10,6*	12,7* 14,6*	14,6* 16,0*	19,0* 19,0*	15,6* 15,6*	15,6* 15,6*	13,1* 13,1*	11,2* 11,2*	9,9* 11,4*	9,9* 11,4*	8,9* 9,9*	8,8* 9,9*	7,7* 8,7*
1,5	Stabilizers raised 4 pt. outriggers down	1,2* 1,2*	12,7* 12,7*	10,9* 12,7	5,4* 6,8*	12,7* 14,6*	8,6* 9,11	10,0* 11,2*	7,0* 8,1	5,7* 6,1	6,6* 7,1	4,7* 5,1	4,6* 5,1	3,2* 3,7*	3,2* 3,7*
0	Stabilizers raised 4 pt. outriggers down	1,7* 1,7*	4,7* 4,7*	4,7* 4,7*	4,7* 4,7*	9,6* 10,5*	7,5* 10,5*	7,5* 10,5*	7,5* 10,5*	7,5* 10,5*	7,5* 10,5*	7,5* 10,5*	7,5* 10,5*	7,5* 10,5*	3,0* 3,6*
-1,5	Stabilizers raised 4 pt. outriggers down	2,6* 2,6*	4,9* 4,9*	4,9* 4,9*	8,8* 9,1*	9,1* 13,1*	7,0* 11,2*	5,3* 9,6*	5,7* 6,9*	5,6* 6,8*	4,0* 5,6*	4,7* 5,2	3,4* 4,1	2,8* 3,5	2,0* 2,4*
-3,0	Stabilizers raised 4 pt. outriggers down					5,6* 9,0*	5,6* 11,5*	9,0* 10,0*	8,7* 8,7*	7,5* 7,5*	6,4* 6,4*	5,4* 5,4*	4,8* 4,8*	3,2* 3,4*	2,0* 2,4*
-4,5	Stabilizers raised 4 pt. outriggers down					8,1* 9,4*	6,3* 9,6*	6,3* 9,6*	5,1* 8,5*	5,2* 7,4*	4,5* 6,4*	3,5* 4,5*	3,0* 3,5*	2,6* 3,5*	2,0* 2,7*
-6,0	Stabilizers raised 4 pt. outriggers down					6,2* 7,3*	5,0* 6,7*	6,1* 7,3*	4,1* 5,9*	5,0* 5,9*	3,5* 5,1*	2,9* 4,3*	2,5* 3,4*	2,2* 3,4*	2,0* 2,4*
-7,5	Stabilizers raised 4 pt. outriggers down														

 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.

Lift Capacities

with Industrial-Type Straight Boom 12,50 m (Kinematic Variant 3B)

Industrial Stick 9,00 m

Height 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	16,5 m	18,0 m	19,5 m	21,0 m	m
24,0	Stabilizers raised 4 pt. outriggers down														10,9* 10,9*
22,5	Stabilizers raised 4 pt. outriggers down														10,9* 10,9*
21,0	Stabilizers raised 4 pt. outriggers down														8,62
19,5	Stabilizers raised 4 pt. outriggers down														9,1* 9,1*
18,0	Stabilizers raised 4 pt. outriggers down														11,46
16,5	Stabilizers raised 4 pt. outriggers down														5,5 7,6* 15,19
15,0	Stabilizers raised 4 pt. outriggers down														4,6 5,2 16,53
13,5	Stabilizers raised 4 pt. outriggers down														3,9 4,4 17,64
12,0	Stabilizers raised 4 pt. outriggers down														3,0 3,5 19,31
10,5	Stabilizers raised 4 pt. outriggers down														2,6 3,1 19,92
9,0	Stabilizers raised 4 pt. outriggers down														2,4 2,9 20,40
7,5	Stabilizers raised 4 pt. outriggers down	14,7* 14,7*	19,3* 19,3*	19,3* 19,3*	15,7* 15,7*	12,9* 12,9*	13,2* 13,2*	9,9* 10,1*	7,9* 9,1*	8,8* 8,8*	6,0* 6,1*	5,4* 5,4*	4,8* 4,8*	4,3* 4,3*	10,9* 10,9*
6,0	Stabilizers raised 4 pt. outriggers down	22,3* 22,3*	21,4* 21,4*	15,3* 15,3*	16,9* 16,9*	11,6* 11,9*	13,0* 13,2*	9,0* 10,2*	7,2* 8,2*	5,9* 5,9*	6,7* 6,7*	4,8* 4,8*	3,2* 3,2*	3,8* 3,8*	2,6* 2,6*
4,5	Stabilizers raised 4 pt. outriggers down														2,1* 2,5* 21,00
3,0	Stabilizers raised 4 pt. outriggers down														2,2* 2,7* 20,76
1,5	Stabilizers raised 4 pt. outriggers down	0,2* 0,2*	3,3* 3,3*	9,3* 9,3*	8,0* 8,0*	9,3* 15,8*	6,5* 15,8*	7,6* 13,2*	5,4* 11,4*	6,3* 11,4*	4,5* 10,0*	3,8* 10,0*	3,2* 8,9*	3,0* 8,0*	2,7* 7,2*
0	Stabilizers raised 4 pt. outriggers down														1,9* 2,4* 20,88
-1,5	Stabilizers raised 4 pt. outriggers down														5,6* 5,6* 20,42
-3,0	Stabilizers raised 4 pt. outriggers down														2,0* 2,4* 19,19
-4,5	Stabilizers raised 4 pt. outriggers down														2,5* 3,1* 17,15
-6,0	Stabilizers raised 4 pt. outriggers down														
-7,5	Stabilizers raised 4 pt. outriggers down														

Industrial Stick 10,00 m

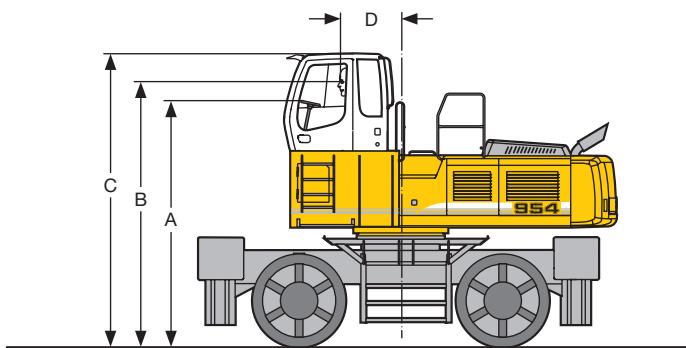
Height m	Under-carriage	3,0 m	4,5 m	6,0 m	7,5 m	9,0 m	10,5 m	12,0 m	13,5 m	15,0 m	16,5 m	18,0 m	19,5 m	21,0 m	m	
24,0	Stabilizers raised 4 pt. outriggers down														10,9* 10,9*	
22,5	Stabilizers raised 4 pt. outriggers down														7,41	
21,0	Stabilizers raised 4 pt. outriggers down														8,7* 8,7* 10,82	
19,5	Stabilizers raised 4 pt. outriggers down														7,5* 7,6* 13,19	
18,0	Stabilizers raised 4 pt. outriggers down														5,8* 6,9* 15,03	
16,5	Stabilizers raised 4 pt. outriggers down														4,6* 6,5* 16,52	
15,0	Stabilizers raised 4 pt. outriggers down														3,9* 4,5* 17,76	
13,5	Stabilizers raised 4 pt. outriggers down														3,3* 3,8* 18,79	
12,0	Stabilizers raised 4 pt. outriggers down														6,0* 6,0* 18,79	
10,5	Stabilizers raised 4 pt. outriggers down															
9,0	Stabilizers raised 4 pt. outriggers down															
7,5	Stabilizers raised 4 pt. outriggers down	12,6* 12,6*	12,6* 12,6*	14,6* 14,6*	14,6* 14,6*	12,4* 12,4*	12,4* 12,4*	10,5* 10,5*	10,8* 10,8*	8,2* 9,6*	9,6* <td>6,6*</td> <td>7,9*<td>7,9*</td><td>4,7*<td>7,0*</td></td></td>	6,6*	7,9* <td>7,9*</td> <td>4,7*<td>7,0*</td></td>	7,9*	4,7* <td>7,0*</td>	7,0*
6,0	Stabilizers raised 4 pt. outriggers down	17,1* 17,1*	19,7* 19,7*	19,7* 19,7*	15,8* 15,8*	12,4* 12,4*	13,2* 13,2*	9,6* <td>10,7*</td> <td>7,6*<td>8,3*</td><td>8,3*<td>8,3*</td><td>5,8*<td>6,5*</td></td></td></td>	10,7*	7,6* <td>8,3*</td> <td>8,3*<td>8,3*</td><td>5,8*<td>6,5*</td></td></td>	8,3*	8,3* <td>8,3*</td> <td>5,8*<td>6,5*</td></td>	8,3*	5,8* <td>6,5*</td>	6,5*	
4,5	Stabilizers raised 4 pt. outriggers down	5,8* 5,8*	19,7* 19,7*	21,8* 21,8*	14,3* 14,3*	10,9* 10,9*	12,4* 12,4*	8,5* <td>9,7*</td> <td>6,8*<td>7,8*</td><td>6,6*<td>7,6*</td><td>4,7*<td>5,3*</td></td></td></td>	9,7*	6,8* <td>7,8*</td> <td>6,6*<td>7,6*</td><td>4,7*<td>5,3*</td></td></td>	7,8*	6,6* <td>7,6*</td> <td>4,7*<td>5,3*</td></td>	7,6*	4,7* <td>5,3*</td>	5,3*	
3,0	Stabilizers raised 4 pt. outriggers down														2,9* 3,4* 19,65	
1,5	Stabilizers raised 4 pt. outriggers down														2,5* 3,0* 20,37	
0	Stabilizers raised 4 pt. outriggers down														5,8* 5,8* 21,40	
-1,5	Stabilizers raised 4 pt. outriggers down														2,3* 2,7* 20,95	
-3,0	Stabilizers raised 4 pt. outriggers down														5,7* 5,7* 21,40	
-4,5	Stabilizers raised 4 pt. outriggers down														2,2* 2,5* 21,98	
-6,0	Stabilizers raised 4 pt. outriggers down														5,9* 5,9* 22,10	
-7,5	Stabilizers raised 4 pt. outriggers down														2,0* 2,4* 22,13	

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.

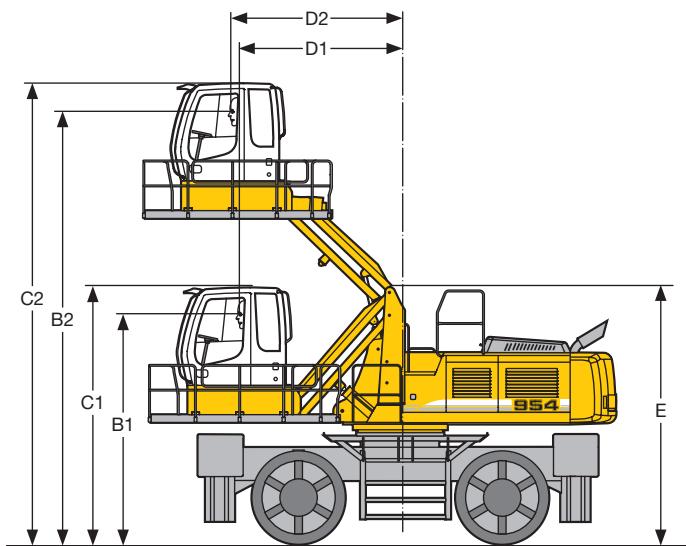
Choice of Cab Elevation and Cab Protection



Rigid Cab Elevation

Height	mm	1200	1500	2000
A	mm	4395	4695	5195
B	mm	4735	5035	5535
C	mm	5230	5530	6030
D	mm	1105	1105	1105

A rigid cab elevation has a fixed eye level height. For a lower transport height the shell of the cab can be removed. The overall height is then dimension A.

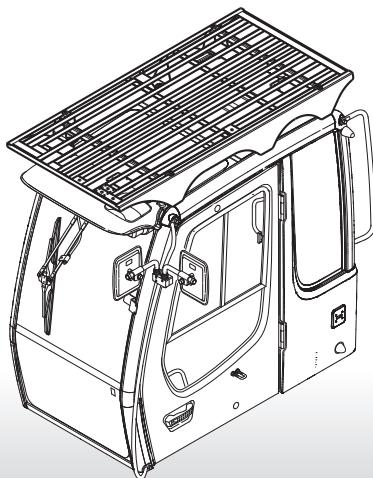


Hydraulic Cab Elevation Parallelogram + Intermediate Piece 0,5 m

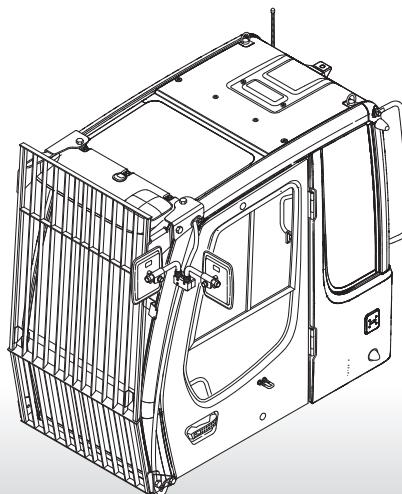
B1	4035 mm
B2	7605 mm
C1	4530 mm
C2	8100 mm
D1	2890 mm
D2	3040 mm
E	4515 mm

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.

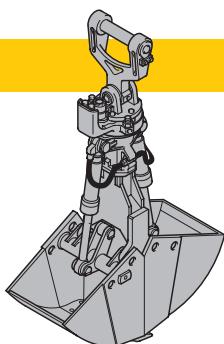
Grille above



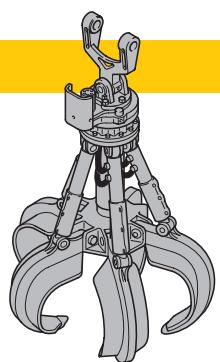
Grilles in front



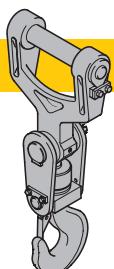
Variety of Tools



Shells for Loose Material		Clamshell Model 22				Shells for loose material with cutting edge (without teeth)			
Cutting width of shells	mm	1500		1500		2000			
Capacity	m³	1,85		2,20		2,50			
For loose material, specific weight up to	t/m³	1,5		1,2		1,0			
Total weight	kg	2350		2750		2525			

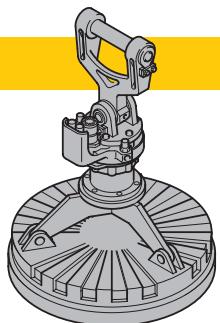


Multiple Tine Grapples		open tines			semi-closed tines			closed tines			
Grapple Model 72 C	Capacity	m³	1,20	1,40	1,60	1,20	1,40	1,60	1,20	1,40	1,60
(4 tines)	Weight	kg	1970	2000	2005	2290	2325	2385	2590	2675	2705
Grapple Model 72 C	Capacity	m³	1,20	1,40	1,60	1,20	1,40	1,60	1,20	1,40	1,60
(5 tines)	Weight	kg	2370	2410	2420	2750	2815	2885	2865	2945	2990



Crane Hook with Suspension

Max. load	t	25
Height with suspension	mm	1200
Total weight	kg	410



Magnet Devices/Lifting Magnets

Generator	kW	20	20
Electromagnets with Suspension			
Power	kW	12,5	17,5
Dia of magnet	mm	1550	1700
Height with suspension	mm	1100	1550
Weight	kg	2550	3300

Equipment



Undercarriage

Two circuit travel brake with accumulator	•
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	•



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	+



Uppercarriage

Electric fuel tank filler pump	+
Maintenance-free swing brake lock	•
Handrails, Non slip surfaces	•
Main switch for electric circuit	•
Engine hood with lift help	•
Pedal controlled positioning swing brake	•
Reverse travel warning system	+
Sound insulation	•
Customized colors	+
Maintenance-free HD-batteries	•
Lockable tool box	•
Tool kit	•



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	+



Engine

Turbo charger	•
After-cooled	•
Sensor controlled engine idling	•
Liebherr particle filter	+
Unit pump system	•
Air filter with pre-cleaner main- and safety element	•



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.

All illustrations and data may differ from standard equipment. Subject to change without notice.

The Liebherr Group of Companies

Wide product range

The Liebherr Group is one of the largest construction equipment manufacturers in the world. Liebherr's high-value products and services enjoy a high reputation in many other fields, too. The wide range includes domestic appliances, aerospace and transportation systems, machine tools and maritime cranes.

Exceptional customer benefit

Every product line provides a complete range of models in many different versions. With both its technical excellence and acknowledged quality, Liebherr products offer a maximum of customer benefits in practical application.

State-of-the-art technology

To provide consistent, top quality products, Liebherr attaches great importance to each product area, its components and core technologies. Important modules and components are developed and manufactured in-house, for instance the entire drive and control technology for construction equipment.

Worldwide and independent

Hans Liebherr founded the Liebherr family company in 1949. Since that time, the enterprise has steadily grown to a Group of 100 companies with over 32,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

www.liebherr.com



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