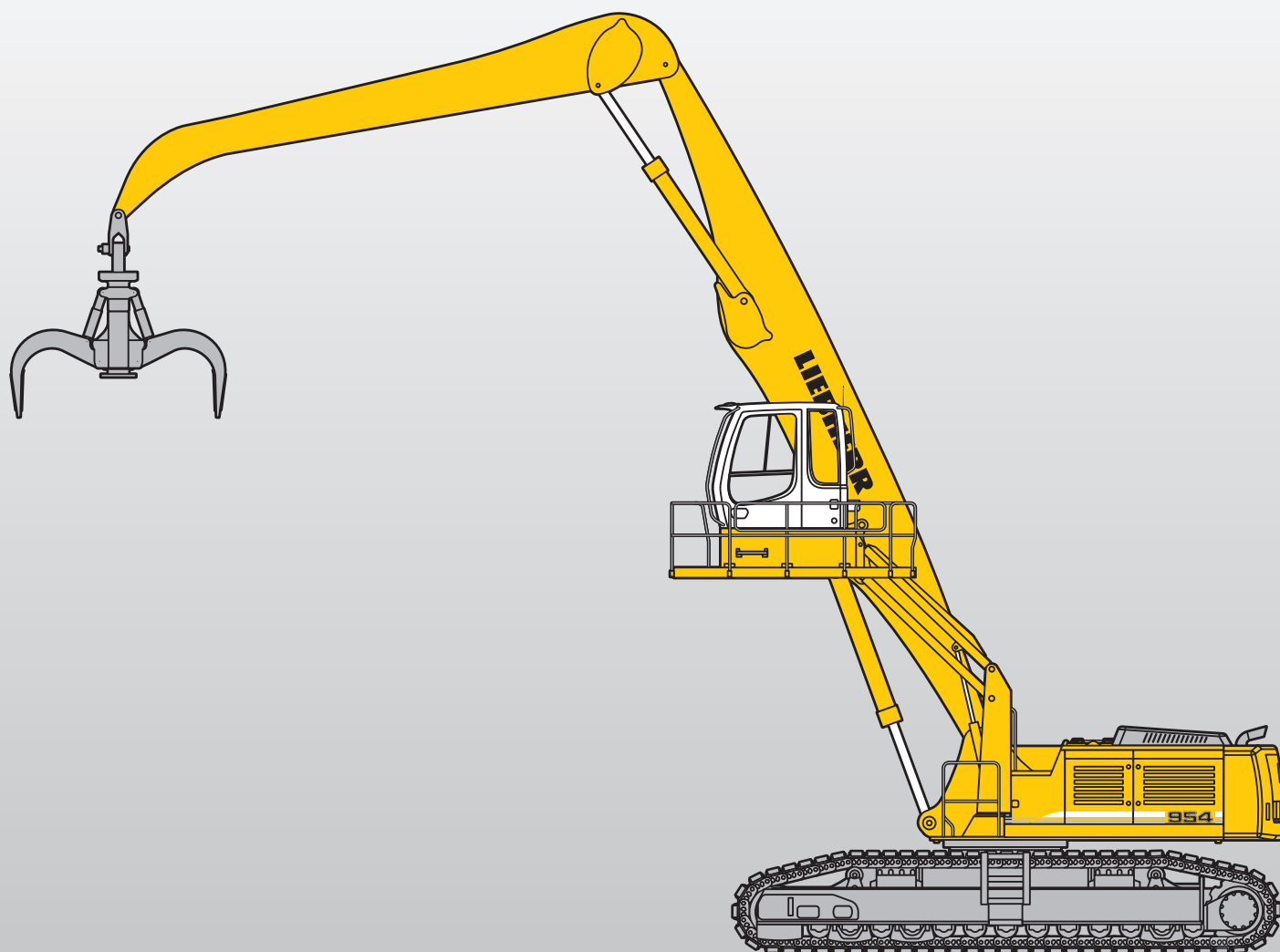


# Machine for Industrial Applications

**R 954 C**  
Litronic®

Operating Weight: 62,700 – 87,000 kg  
Engine Output: 240 kW / 326 HP



# LIEBHERR

# Technical Data



## Engine

Rating per ISO 9249	240 kW (326 HP) at 1,800 RPM
Model	Liebherr D 936 L
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
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/7.8 kW
Alternator	three phase current 28 V/80 A



## 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	440 l
Hydraulic system	790 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 hydro-statically 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



## 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 – 6.0 RPM stepless
Swing torque	154 kNm
Holding brake	wet multi-disc (spring applied, pressure released)
Option	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
Air conditioning	standard air conditioning, combined cooler/heater, additional dust filter in fresh air/recirculated
Noise emission	
ISO 6396	$L_{PA}$ (inside cab) = 77 dB(A)
2000/14/EC	$L_{WA}$ (surround noise) = 105 dB(A)



## Undercarriage

Versions	
HD-W	special duty, wide gauge
EW	heavy duty, very wide gauge
S-EW	removable side frames, extra wide gauge
S-EW HD	heavy duty, removable side frames, extra wide gauge
Drive	Liebherr swash plate motors with integrated brake valves on both sides
Transmission	Liebherr planetary reduction gears
Travel speed	HD-W: low range – 3.3 km/h high range – 4.8 km/h EW: low range – 2.6 km/h high range – 3.6 km/h S-EW: low range – 3.0 km/h high range – 4.8 km/h S-EW HD: low range – 2.6 km/h high range – 3.6 km/h
Drawbar pull max.	HD-W: 429 kN EW: 553 kN S-EW: 478 kN S-EW HD: 553 kN
Track components	HD-W/S-EW: D 7 G, maintenance-free EW/S-EW HD: D 8 K, maintenance-free
Track rollers/Carrier rollers	HD-W: 10/2 EW: 9/2 S-EW HD: 13/3
Tracks	sealed and greased
Track pads	HD-W/S-EW: triple grouser EW: double grouser S-EW HD: flat pad
Digging locks	wet multi-discs (spring applied, pressure released)
Brake valves	integrated into travel motor



## 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

# Version with Electric Motor



## Electric Motor

Motor	asynchronous three-phase, cage rotor enclosed in cast iron envelope, special Liebherr design
Power rating (as per CEI 34-1)	250 kW (340 HP) at 1,489 RPM
Rated voltage	400 V – 50 Hz*
Number of poles	4
Design type	horizontal axle B35 axle height 315 mm painting: RAL 7031
Standard degree of protection	IP55 – steel flange FF600
Insulation	class F, thermal loading: Class B, ambient temperature 40 °C
Starter star/delta	
Heat protection for windings	
Heat protection for bearings	
Anti-condensation heating system resistors	



## Electric System

The 400 V electrical cabinet provides a degree of protection to IP55. This houses the following components:

- Main motorised isolator, controlled from the cab
- Star/delta starter for motor
- Outlets for supplying auxiliary elements: heating, climate control
- Various heat protection devices
- Resistors for controlling the temperature of the cabinet
- Booster pump integrated in the cabinet: Cabinet air filtered (option)
- Transformers – rectifier for 24 V control circuit
- Motor protection attachment
- Auxiliary batteries: 2 x 135 Ah/12 V: secured functions: lighting for excavator/attachment position (option)



## Hydraulic System

Hydraulic pump for attachment and travel drive	two Liebherr variable flow, swash plate pumps
Max. flow	2 x 340 l/min.
Max. pressure	350 bar
Pump regulation	electro-hydraulic with electronic engine speed sensing regulation, pressure compensation, automatic oil flow optimizer
Hydraulic pump for swing drive	reversible, variable flow, swash plate pump, closed-loop circuit
Max. flow	205 l/min.
Max. pressure	370 bar
Hydraulic tank	460 l
Hydraulic system	710 l
Hydraulic oil filter	2 full flow filters in return line with integrated fine filter area (5 µm)
Hydraulic oil cooler	radiator equipped with hydrostatic drive fan for cooling the hydraulic oil and climate control condenser
Liebherr Tool-Control	ten preadjustable pump flows and pressures for add on tools (option)



## Hydraulic Controls

Power distribution	via monoblock control valve with integrated safety valves
Flow summation	to boom and stick
Closed-loop circuit	for uppercarriage swing drive
Servo circuit	
Attachment and swing	proportional via joystick levers
Travel	– proportional via foot pedals or removable hand levers – speed pre-selection
Additional functions	via foot pedals or joystick toggle switch



## Swing Drive

Drive by	Liebherr swash plate motor with integrated brake valves
Transmission	Liebherr compact planetary reduction gear
Swing ring	Liebherr, sealed single race ball bearing swing ring, internal teeth
Swing speed	0 – 6.0 RPM stepless
Swing torque	154 kNm
Holding brake	wet multi-disc (spring applied, pressure released)
Option	pedal controlled positioning brake



## Operator's Cab

Cab	built from deep drawn components, resiliently mounted, sound insulated, tinted windows, front window stores overhead, door with sliding window
Operator's seat	shock absorbing suspension, adjustable to operator's weight, 6-way adjustable seat integrated into adjustable seat consoles
Joysticks	integrated into adjustable seat consoles
Monitoring	menu driven digital display of current operating conditions. Automatic monitoring, display, warning (audible and visual signal) and saving of machine malfunction data, such as overheating of windings, motor bearings, or low hydraulic oil level
Heating system	standard air conditioning, combined cooler/heater, additional dust filter in fresh air/recirculated



## Undercarriage

Version HR	
Drive	Liebherr swash plate motors with integrated brake valves on both sides
Transmission	Liebherr planetary reduction gears
Travel speed	low range – 2.5 km/h high range – 3.6 km/h
Drawbar pull max.	553 kN
Track components	D 8 K, maintenance-free
Track rollers/Carrier rollers	13/3
Tracks	sealed and greased
Track pads	flat pad
Digging locks	wet multi-discs (spring applied, pressure released)
Brake valves	integrated into travel motor

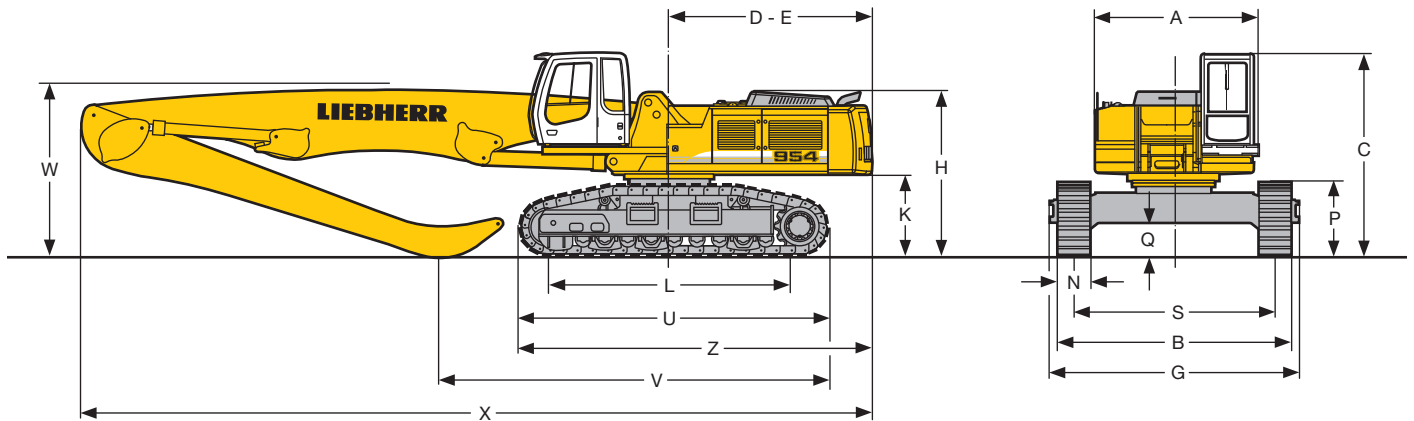


## Attachment

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
VarioLiftPlus	variable boom mounting positions for optimized lift capacities

\* Other voltages and frequencies possible on request.

# Dimensions



	HD-W	mm	EW	mm	S-EW	mm	S-EW HD	mm
A		3,070		3,070		3,070		3,070
C		3,660		3,805		4,055		4,135
D		3,825		3,825		3,825		3,825
E		3,825		3,825		3,825		3,825
H		2,930		3,075		3,310		3,400
K		1,345		1,490		1,730		1,810
L		4,400		4,565		6,000		6,400
P		1,170		1,355		1,280		1,401
Q		477		604		560		640
S		3,400		3,800		5,000		5,000
U		5,380		5,680		7,000		7,542
N	600	750	600	750		750		750
B	4,012	4,150	4,490	4,550		5,830		5,836
G	4,209	4,209	4,717	4,717		5,860		6,186
Z		6,500		6,675		7,310		7,590

E = Tail radius

Industrial-Type Straight Boom 11.50 m and Industrial Stick with Undercarriage							9.00 m		
							EW	S-EW	S-EW HD
V		mm	7,150	7,650	7,950				
W		mm	4,050	3,750	3,750				
X		mm	15,850	15,850	15,850				

Industrial-Type Straight Boom 12.50 m and Industrial Stick with Undercarriage							9.00 m	10.00 m
							S-EW HD	S-EW HD
V		mm	9,000	8,150				
W		mm	3,650	4,350				
X		mm	16,850	16,850				

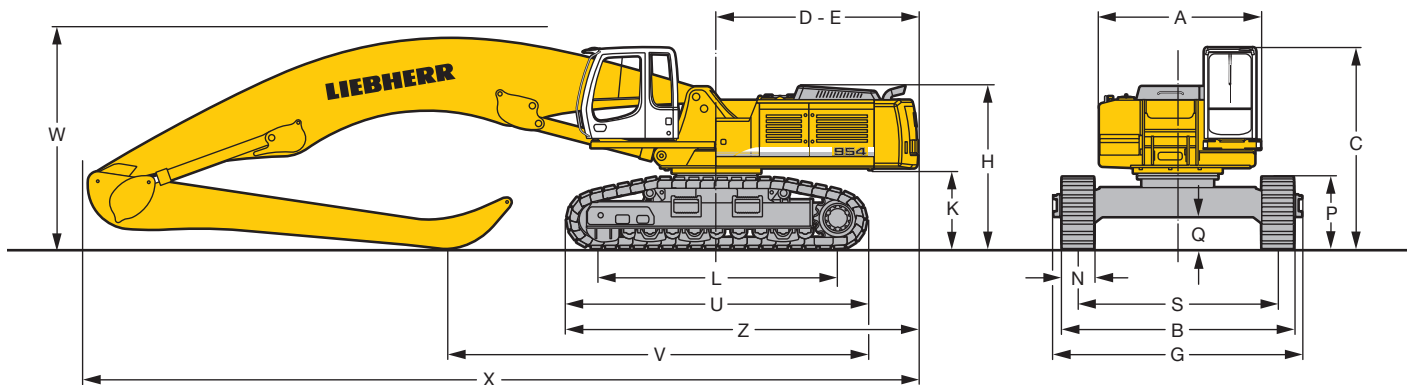
Industrial-Type Gooseneck Boom 10.50 m and Industrial Stick with Undercarriage							7.80 m	9.00 m	
							HD-W	EW	S-EW
V		mm	6,950	7,100	7,760	5,650	5,850	7,000	
W		mm	3,800	3,950	4,200	3,800	3,950	4,200	
X		mm	14,950	14,900	14,900	14,950	14,900	14,900	

Industrial-Type Straight Boom 8.50 m and Industrial Stick with Undercarriage					7.80 m	
					HD-W	EW
V		mm	-	-		
W		mm	3,550	3,300		
X		mm	12,850	12,850		

Industrial-Type Gooseneck Boom 11.50 m and Industrial Stick with Undercarriage					9.00 m		
					EW	S-EW	S-EW HD
V		mm	6,800	7,500	7,800		
W		mm	4,200	4,450	4,500		
X		mm	15,950	15,900	15,900		

Industrial-Type Straight Boom 10.50 m and Industrial Stick with Undercarriage							7.80 m	9.00 m	
							HD-W	EW	S-EW
V		mm	7,050	7,200	7,750	6,150	6,150	6,750	
W		mm	3,400	3,300	3,550	4,500	4,250	3,850	
X		mm	14,950	14,900	14,900	14,950	14,900	14,900	

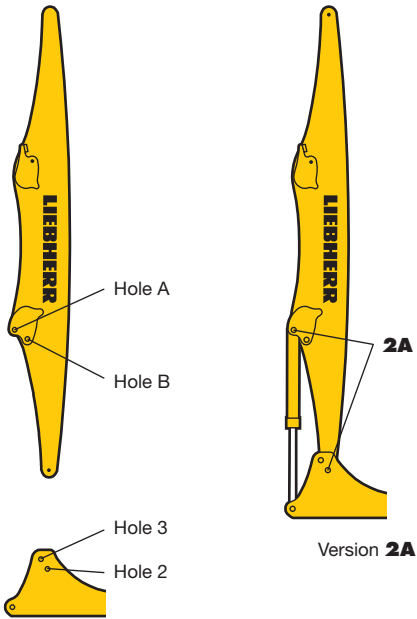
Industrial-Type Gooseneck Boom 12.50 m and Industrial Stick with Undercarriage					9.00 m	10.00 m
					S-EW HD	S-EW HD
V		mm	8,700	7,700		
W		mm	4,300	4,300		
X		mm	16,900	16,900		



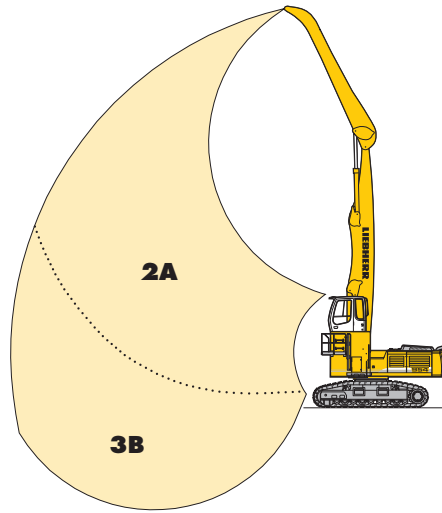
These dimensions are stated with cab carrier. This assembly is only valid for transportation.

# VarioLiftPlus

## Variable Boom Mounting Positions for Optimized Lift Capacities

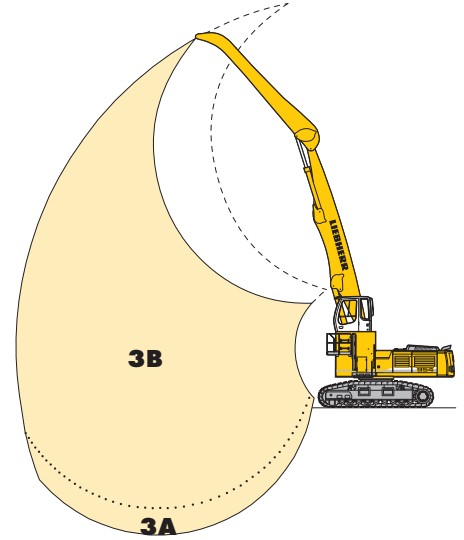


with **the same** working range

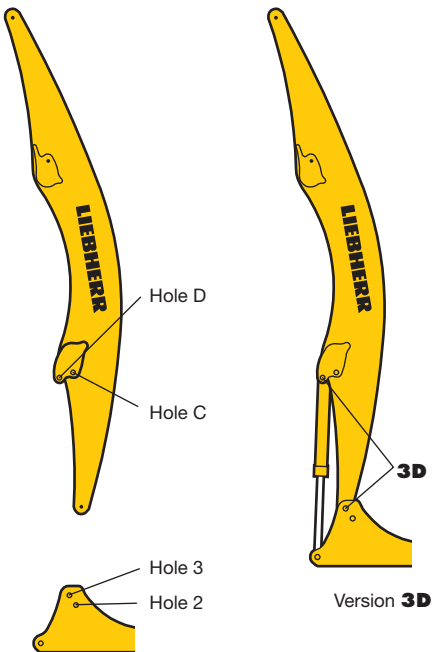


**Kinematic variant 2A:**  
Increased lift capacities above ground level  
**Kinematic variant 3B:**  
Increased lift capacities below ground level  
and when working at large outreach

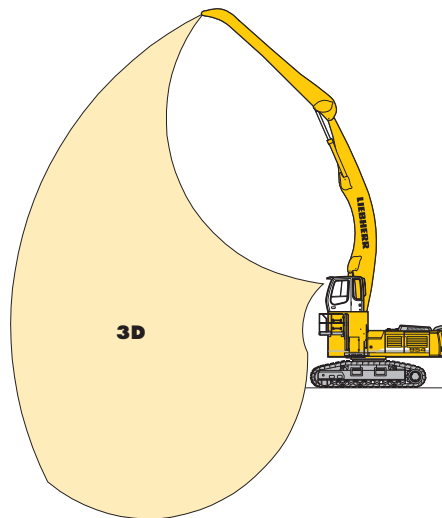
with a **different** working range



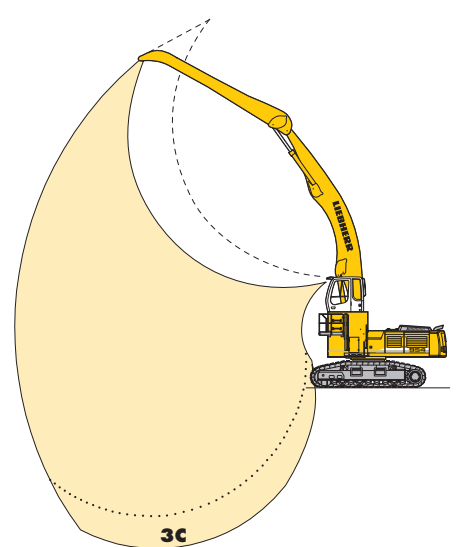
**Kinematic variant 3A:**  
Altered range curve with additional reach  
depth, e.g. for unloading from ships



with a **different** working range



**Kinematic variant 3D:**  
Increased lift capacities below ground level  
and when working at large outreach



**Kinematic variant 3C:**  
Altered range curve with additional reach  
depth, e.g. for unloading from ships

# Industrial Attachment

with Industrial-Type Straight Boom 8.50 m

## Attachment Envelope

Kinematic variant 2A

- 1** with industrial stick 7.80 m
- 2** with industrial stick 7.80 m and grapple model 72 C

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type straight boom 8.50 m, industrial stick 7.80 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage		HD-W		EW	
Pad width	mm	600	750	600	750
Weight	kg	62,700	64,000	69,100	70,100
Ground pressure	kg/cm <sup>2</sup>	1.19	0.97	1.26	1.02

## Attachment Envelope

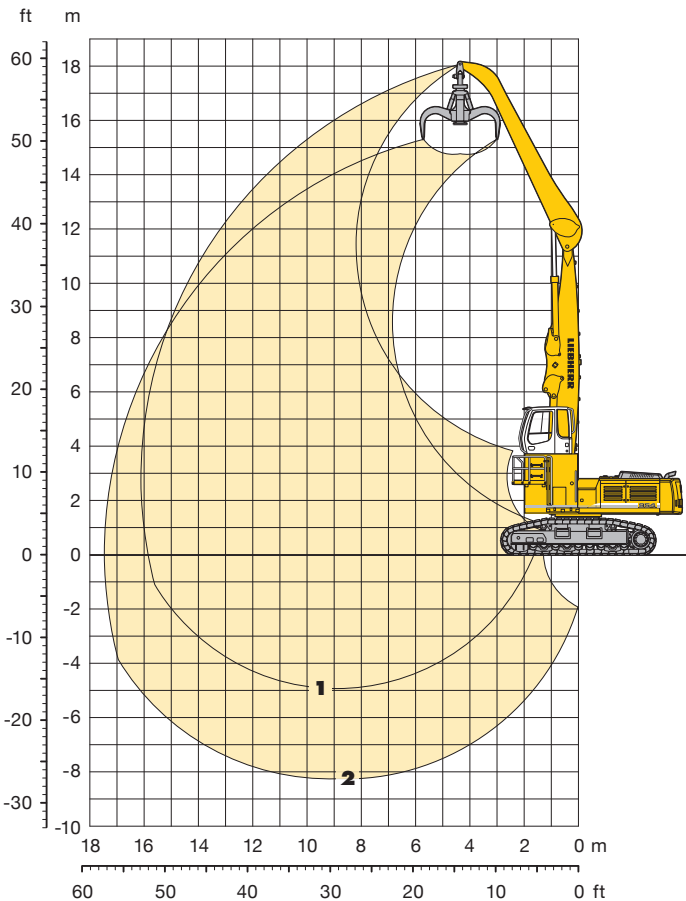
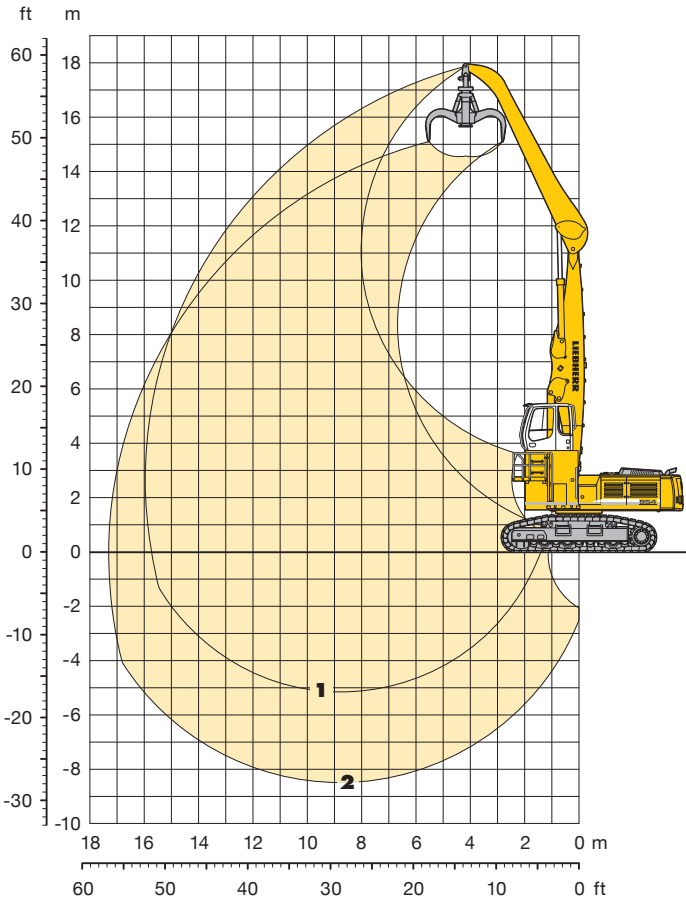
Kinematic variant 3B

- 1** with industrial stick 7.80 m
- 2** with industrial stick 7.80 m and grapple model 72 C

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type straight boom 8.50 m, industrial stick 7.80 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage		HD-W		EW	
Pad width	mm	600	750	600	750
Weight	kg	62,700	64,000	69,100	70,100
Ground pressure	kg/cm <sup>2</sup>	1.19	0.97	1.26	1.02



# Lift Capacities

with Industrial-Type Straight Boom 8.50 m

## Industrial Stick 7.80 m (Variant 2A)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m				
		HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	
18.0	HD-W EW					15.4*	15.4*	12.5*	12.5*												12.2*	12.2*	7.4	
16.5	HD-W EW							14.9*	14.9*	12.3*	12.3*										10.2*	10.2*	9.8	
15.0	HD-W EW									14.3*	14.3*	11.2	11.9*								9.2*	9.2*	11.5	
13.5	HD-W EW									14.1*	14.1*	11.5	12.8*	8.9	11.0						7.8	8.6*	12.8	
12.0	HD-W EW									14.1*	14.1*	11.5	12.7*	9.0	11.1	7.1	8.8				6.7	8.2*	13.8	
10.5	HD-W EW									14.2*	14.2*	11.4	12.8*	8.9	11.1	7.1	8.9				6.0	7.6	14.6	
9.0	HD-W EW							16.5*	16.5*	14.5*	14.5*	11.2	12.9*	8.8	10.9	7.0	8.8	5.7	7.2	7.2	5.5	7.0	15.1	
7.5	HD-W EW							17.3*	17.3*	14.0	15.0*	10.8	13.2*	8.5	10.6	6.9	8.7	5.6	7.1	7.1	5.2	6.6	15.6	
6.0	HD-W EW			17.0*	17.0*	21.1*	21.1*	17.9	18.3*	13.3	15.5*	10.3	12.9	8.2	10.3	6.7	8.5	5.5	7.0	8.1	4.9	6.4	15.8	
4.5	HD-W EW	41.2*	41.2*	31.9*	31.9*	23.8	23.9*	16.7	19.2*	12.5	15.8	9.8	12.4	7.9	10.0	6.5	8.2	5.4	6.9	8.0	4.8	6.2	16.0	
3.0	HD-W EW	5.0*	5.0*	34.0	34.2*	21.6	25.0*	15.4	19.7*	11.8	15.0	9.3	11.8	7.6	9.6	6.3	8.0	5.3	6.8	7.8	4.7	6.1	15.9	
1.5	HD-W EW	4.3*	4.3*	12.8*	12.8*	19.8	24.9*	14.4	18.7	11.1	14.3	8.9	11.4	7.3	9.3	6.1	7.8	5.1	6.7	7.3*	4.8	6.0*	15.8	
0	HD-W EW	5.5*	5.5*	11.0*	11.0*	18.7	23.4*	13.6	17.9	10.6	13.7	8.5	11.0	7.0	9.1	5.9	7.7	5.1	6.2*	6.0*	4.9	5.3*	15.4	
-1.5	HD-W EW			11.6*	11.6*	18.1	20.6*	13.1	16.7*	10.2	13.3	8.3	10.7	6.9	8.9	5.8	7.1*	6.0*	6.0*		5.4	5.8*	14.3	
-3.0	HD-W EW					16.6*	16.6*	13.0	13.9*	10.1	11.5*	8.2	9.3*	6.8	7.2*						6.7	6.9*	12.2	
-4.5	HD-W EW																							

## Industrial Stick 7.80 m (Variant 3B)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m			
		HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW	HD-W	EW
18.0	HD-W EW																				16.2*	16.2*	
16.5	HD-W EW							13.0*	13.0*												11.8*	11.8*	7.9
15.0	HD-W EW							12.9*	12.9*	12.2*	12.2*										10.0*	10.0*	10.2
13.5	HD-W EW									11.4*	11.4*	11.0*	11.0*								8.8	9.1*	11.8
12.0	HD-W EW									11.0*	11.0*	10.6*	10.6*	8.9	10.3*						7.4	8.5*	13.1
10.5	HD-W EW									11.0*	11.0*	10.5*	10.5*	9.0	10.1*	7.1	8.8				6.4	8.1	14.0
9.0	HD-W EW									11.0*	11.0*	10.5*	10.5*	10.1*	10.1*	8.8	9.8*				8.0	8.1*	
7.5	HD-W EW									11.3*	11.3*	10.7*	10.7*	8.9	10.2*	7.1	8.8				5.8	7.3	14.8
6.0	HD-W EW							13.9*	13.9*	12.6*	12.6*	10.7	11.6*	8.5	10.6	6.8	8.6	5.6	7.1		5.0	6.4	15.8
4.5	HD-W EW			16.7*	16.7*	18.3*	18.3*	15.6*	15.6*	13.1	13.7*	10.2	12.2*	8.1	10.2	6.6	8.4	5.4	7.0	8.0	4.8	6.2	16.0
3.0	HD-W EW	44.4*	44.4*	28.4*	28.4*	21.3*	21.3*	16.4	17.3*	12.3	14.8*	9.7	12.2	7.8	9.9	6.4	8.1	5.3	6.8		4.7	6.0	16.1
1.5	HD-W EW	3.7*	3.7*	21.8*	21.8*	21.0	24.1*	15.1	19.0*	11.5	14.7	9.2	11.7	7.4	9.5	6.2	7.9	5.2	6.7		4.6	6.0	16.1
0	HD-W EW	4.0*	4.0*	11.0*	11.0*	19.4	25.9	14.1	18.4	10.9	14.0	8.7	11.2	7.1	9.2	6.0	7.7	5.1	6.6		4.7	6.0	15.9
-1.5	HD-W EW	5.4*	5.4*	10.3*	10.3*	18.3	22.7*	13.3	17.6	10.4	13.5	8.3	10.8	6.9	8.9	5.8	7.6	5.0	6.5		4.8	6.3	15.5
-3.0	HD-W EW			11.1*	11.1*	17.8	20.2*	12.9	17.1	10.0	13.2	8.1	10.6	6.8	8.8	5.8	7.5				5.4	7.0	14.2
-4.5	HD-W EW					17.7	20.4*	12.8	17.0	9.9	13.0	8.0	10.5	6.8	8.8	5.8	7.5				6.8	8.9	11.9

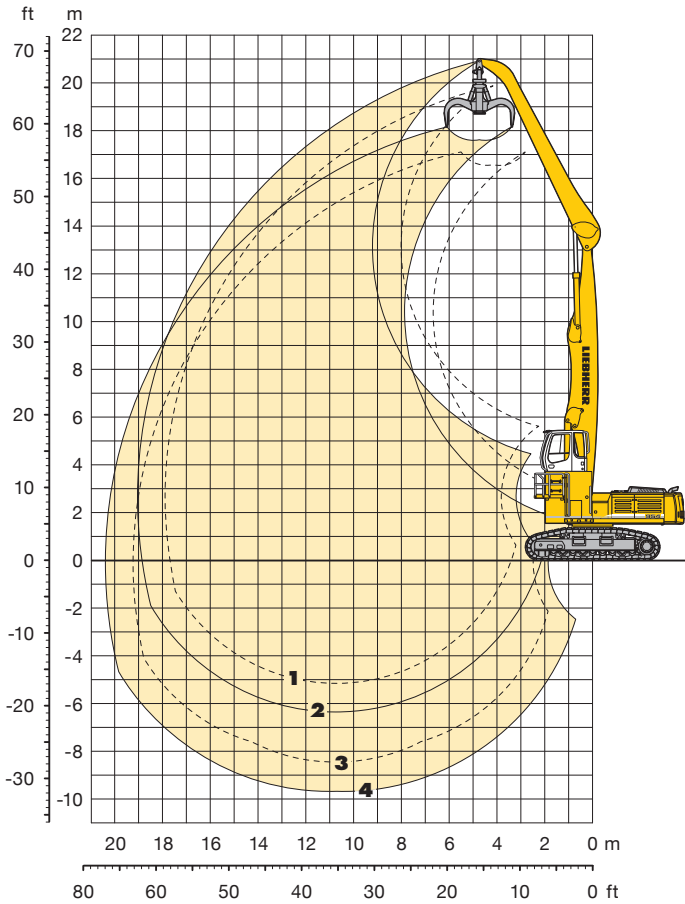
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

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

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

# Industrial Attachment

with Industrial-Type Straight Boom 10.50 m



## Attachment Envelope

Kinematic variant 2A

- 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 and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type straight boom 10.50 m, industrial stick 7.80 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage		HD-W		EW		S-EW
Pad width	mm	600	750	600	750	750
Weight	kg	63,700	65,000	70,100	71,100	75,200
Ground pressure	kg/cm <sup>2</sup>	1.21	0.98	1.28	1.04	0.84

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type straight boom 10.50 m, industrial stick 9.00 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage		HD-W		EW		S-EW
Pad width	mm	600	750	600	750	750
Weight	kg	64,100	65,400	70,500	71,500	75,600
Ground pressure	kg/cm <sup>2</sup>	1.21	0.99	1.29	1.04	0.84



# Lift Capacities

with Industrial-Type Straight Boom 10.50 m

## Industrial Stick 7.80 m (Variant 2A)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m				
		HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	
21.0																														
19.5																											15.5'	15.5'	5.0	
18.0						14.3'	14.3'	13.9'	13.9'	14.1'	14.1'	13.9'	13.9'	14.1'	14.1'	13.9'	13.9'	14.1'	14.1'	13.9'	13.9'	14.1'	14.1'	13.9'	13.9'	14.1'	14.1'	13.9'	13.9'	8.7
16.5								15.4'	15.4'	15.4'	15.4'	13.9'	13.9'	11.6'	11.6'	12.0'	12.0'	11.5'	12.1'	8.9'	10.8'						9.9'	9.9'	11.0	
15.0										13.9'	13.9'	12.2'	12.2'	10.8'	10.8'	10.8'	10.8'	8.7'	9.6'								9.0'	9.0'	12.7	
13.5										13.8'	13.8'	12.1'	12.1'	10.8'	10.8'	10.8'	10.8'	8.7'	9.6'								8.5'	8.5'	14.1	
12.0										13.8'	13.8'	12.1'	12.1'	10.8'	10.8'	10.8'	10.8'	8.7'	9.6'								8.2'	8.2'	15.1	
10.5										13.9'	13.9'	12.1'	12.1'	10.8'	10.8'	10.8'	10.8'	8.7'	9.6'								8.0'	8.0'	16.0	
9.0								17.1'	17.1'	15.8'	15.8'	13.9'	13.9'	12.4'	12.4'	11.1'	11.1'	9.9'	9.9'								7.9'	7.9'	16.7	
7.5								17.8'	17.8'	17.0'	17.0'	13.8'	14.4'	10.5'	12.4'	8.3'	10.4'	6.6'	8.4'	5.3'	6.9'	4.3'	5.6'				3.9'	5.1'	17.2	
6.0		13.4'	13.4'	18.4'	18.4'	21.9'	21.9'	17.4'	17.6'	12.9'	14.7'	9.9'	12.5'	7.9'	10.0'	6.3'	8.1'	5.2'	6.7'	4.2'	5.5'						3.6'	4.9'	17.6	
4.5				31.2'	31.2'	22.5'	22.5'	15.9'	18.1'	11.9'	14.9'	9.3'	11.8'	7.4'	9.5'	6.0'	7.8'	4.9'	6.5'	4.1'	5.4'						3.4'	4.7'	17.8	
3.0				5.5'	5.5'	23.3'	23.3'	18.1'	18.3'	13.9'	14.9'	11.0'	12.6'	9.0'	10.4'	7.4'	8.7'	6.3'	7.3'	5.3'	6.2'						3.3'	4.5'	17.9	
1.5				3.2'	3.2'	13.0'	13.0'	12.9'	17.1'	10.0'	13.1'	8.0'	10.5'	7.5'	8.5'	6.0'	7.1'	4.5'	6.0'	3.8'	5.1'						4.5'	4.8'	17.9	
0				3.1'	3.1'	11.4'	11.4'	20.7'	20.7'	17.0'	17.0'	14.3'	14.3'	12.2'	12.2'	10.5'	10.5'	9.0'	9.0'	7.5'	7.5'						5.8'	5.8'	17.7	
-1.5				3.5'	3.5'	9.4'	9.4'	11.8'	16.0'	9.2'	12.4'	7.5'	9.2'	5.1'	6.9'	4.3'	5.8'	3.7'	5.0'	3.5'	4.9'						4.2'	4.2'	17.7	
-3.0				3.7'	3.7'	9.2'	9.2'	19.5'	19.5'	16.2'	16.2'	13.6'	13.6'	11.6'	11.6'	9.9'	9.9'	8.3'	8.3'	6.7'	6.7'						5.1'	5.1'	17.4	
-4.5				4.7'	4.7'	9.1'	9.1'	11.2'	15.3'	8.7'	11.9'	9.3'	11.4'	7.1'	9.5'	4.8'	6.7'	4.8'	6.5'	4.1'	5.3'						3.6'	3.6'	17.4	
-6.0				5.0'	5.0'	9.2'	9.2'	17.5'	17.5'	14.8'	14.8'	12.6'	12.6'	10.7'	10.7'	9.0'	9.0'	7.4'	7.4'	5.7'	5.7'						4.6'	4.6'	16.3	

## Industrial Stick 9.00 m (Variant 2A)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m			
		HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW
21.0																													
19.5																											13.8'	13.8'	8.3
18.0								12.1'	12.1'	12.2'	12.2'	10.1'	10.1'	12.0'	12.0'	9.8'	9.8'										9.0'	9.0'	10.9
16.5								12.6'	12.6'	10.2'	10.2'																8.8'	8.8'	12.8
15.0										13.0'	13.0'	11.7'	11.7'	8.9'	8.9'												8.0'	8.0'	14.3
13.5										13.1'	13.1'	11.9'	11.9'	10.0'	10.0'	9.3'	9.3'	7.2'	9.0'								7.7'	7.7'	15.5
12.0										13.2'	13.2'	11.7'	11.7'	10.0'	10.0'	9.4'	9.4'	7.2'	9.0'								7.0'	7.0'	16.5
10.5										13.2'	13.2'	11.6'	11.6'	10.4'	10.4'	9.1'	9.3'	7.4'	8.3'	5.9'	6.9'						6.8'	6.8'	17.3
9.0										14.6'	14.6'	13.3'	13.3'	11.9'	11.9'	10.7'	10.7'	9.7'	8.7'	8.7'	8.7'						6.7'	6.7'	17.9
7.5										15.0'	15.0'	13.8'	13.8'	11.1'	12.0'	8.7'	10.5'	6.9'	8.7'	5.5'	7.1'	4.5'	5.8'	3.6'	4.8'		3.3'	4.5'	18.4
6.0										15.2'	15.2'	14.2'	14.2'	12.2'	12.2'	10.3'	10.6'	8.3'	9.3'	6.9'	7.9'	5.7'	6.6'	4.7'	5.6'		6.6'	6.6'	18.7
4.5		9.9'	9.9'	16.4'	16.4'	21.1'	21.1'	17.1'	17.4'	12.7'	14.5'	9.8'	12.3'	7.7'	9.9'	6.2'	8.0'	5.1'	6.6'	4.1'	5.5'	3.4'	4.6'			4.1'	4.9'	19.0	
3.0										15.4'	15.4'	13.7'	13.7'	11.4'	12.4'	9.2'	10.6'	7.6'	8.8'	6.3'	7.4'	5.3'	6.3'				4.0'	4.7'	19.1
1.5		0.6'	0.6'	6.1'	6.1'	22.8'	22.8'	17.5'	17.9'	13.4'	14.6'	10.7'	12.2'	8.7'	10.2'	7.2'	8.4'	6.1'	7.1'	5.1'	6.1'	4.4'	5.2'			4.0'	4.3'	19.0	
0		1.2'	1.2'	4.7'	4.7'	12.5'	12.5'	16.1'	17.3'	12.5'	14.2'	10.0'	11.8'	8.2'	9.7'	6.9'	8.1'	5.8'	6.9'	5.0'	5.9'	4.3'	4.8'			3.8'	3.8'	18.9	
-1.5		2.6'	2.6'	5.1'	5.1'	10.2'	10.2'	15.1'	16.1'	11.8'	13.3'	9.5'	11.2'	7.9'	9.3'	6.6'	7.8'	5.6'	6.7'	4.9'	5.5'	4.1'	4.1'			3.2'	3.2'	18.6	
-3.0		2.8'	2.8'	5.2'	5.2'	10.1'	10.1'	18.8'	18.8'	15.6'	15.6'	13.1'	13.1'	11.2'	11.2'	9.5'	9.5'	8.0'	8.0'	6.6'	6.6'	4.9'	4.9'			4.1'	4.1'	18.6	
-4.5										16.7'	16.7'	14.1'	14.1'	12.0'	12.0'	10.1'	10.1'	8.6'	8.6'	7.1'	7.1'	5.6'	5.6'				3.3'	3.3'	17.9
-6.0										10.6'	10.6'	10.4'	12.2'	8.0'	10.4'	6.5'	8.9'	5.4'	7.4'	4.5'	6.2'	3.9'	4.9'				3.4'	3.6'	16.4

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

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid with 600 mm wide triple grouser pads for HD-W-Undercarriage, 600 mm wide double grouser pads for EW-Undercarriage and with 750 mm wide triple grouser pads for S-EW-Undercarriage. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

# Industrial Attachment

with Industrial-Type Straight Boom 10.50 m

## Attachment Envelope

Kinematic variants 3A/3B

- 1** with industrial stick 7.80 m (3B)
- 2** with industrial stick 7.80 m and grapple model 72 C (3B)
- 3** with industrial stick 7.80 m (3A)
- 4** with industrial stick 7.80 m and grapple model 72 C (3A)

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type straight boom 10.50 m, industrial stick 7.80 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage		HD-W		EW		S-EW
Pad width	mm	600	750	600	750	750
Weight	kg	63,700	65,000	70,100	71,100	75,200
Ground pressure	kg/cm <sup>2</sup>	1.21	0.98	1.28	1.04	0.84

## Attachment Envelope

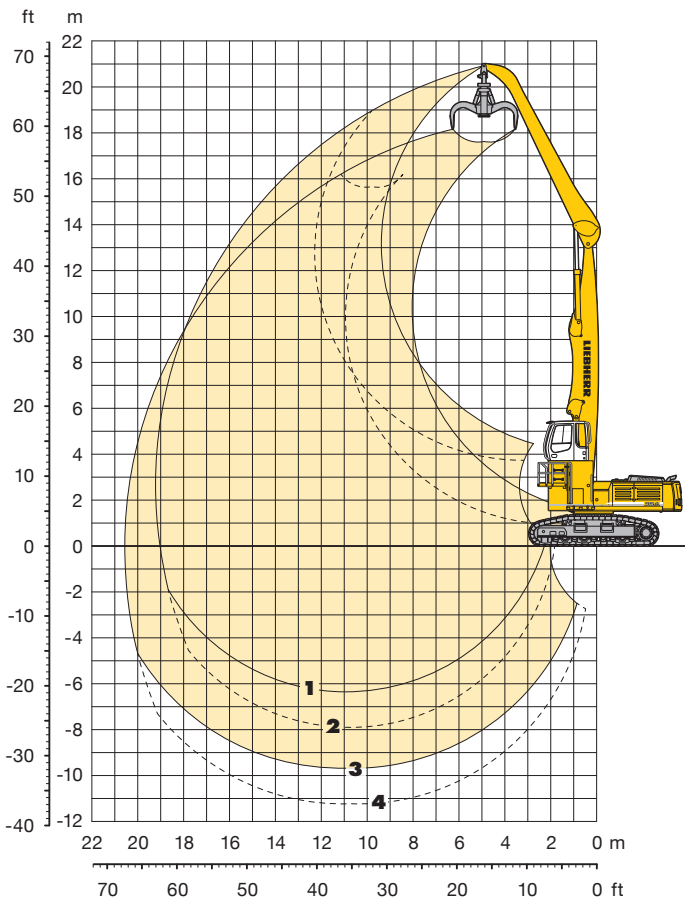
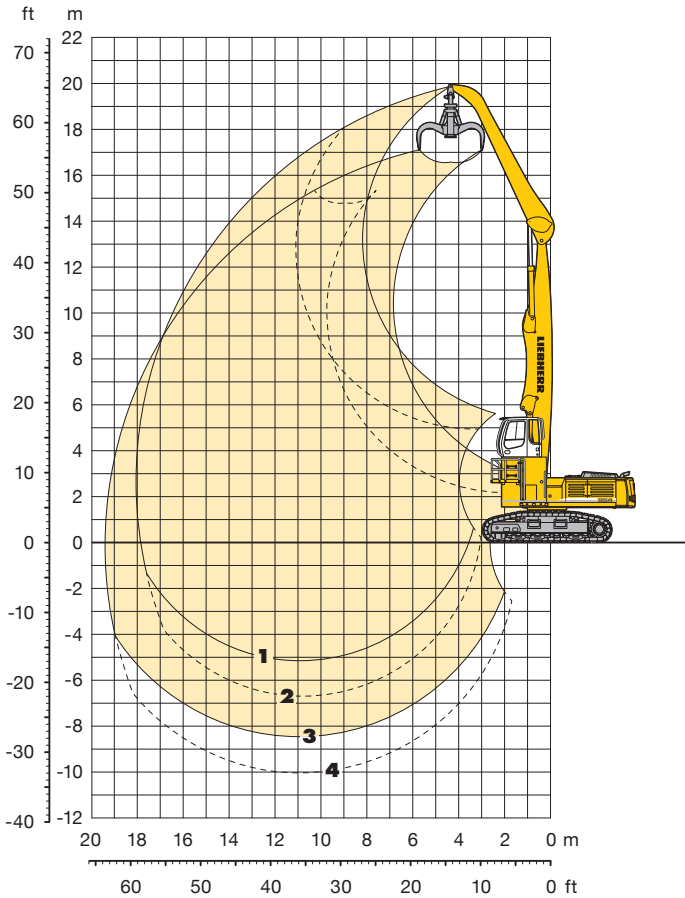
Kinematic variants 3A/3B

- 1** with industrial stick 9.00 m (3B)
- 2** with industrial stick 9.00 m and grapple model 72 C (3B)
- 3** with industrial stick 9.00 m (3A)
- 4** with industrial stick 9.00 m and grapple model 72 C (3A)

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type straight boom 10.50 m, industrial stick 9.00 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage		HD-W		EW		S-EW
Pad width	mm	600	750	600	750	750
Weight	kg	64,100	65,400	70,500	71,500	75,600
Ground pressure	kg/cm <sup>2</sup>	1.21	0.99	1.29	1.04	0.84



# Lift Capacities

## with Industrial-Type Straight Boom 10.50 m

### Industrial Stick 7.80 m (Variant 3A)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m		
		HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W
19.5																												
18.0																												
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-1.5																												
-3.0																												
-4.5																												
-6.0																												
-7.5																												

### Industrial Stick 9.00 m (Variant 3A)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m		
		HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W
19.5																												
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-7.5																												

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

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid with 600 mm wide triple grouser pads for HD-W-Undercarriage, 600 mm wide double grouser pads for EW-Undercarriage and with 750 mm wide triple grouser pads for S-EW-Undercarriage. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

# Lift Capacities

## with Industrial-Type Straight Boom 10.50 m

### Industrial Stick 7.80 m (Variant 3B)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m			
		HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW
21.0																													
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### Industrial Stick 9.00 m (Variant 3B)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m			
		HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW
21.0																													
19.5																													
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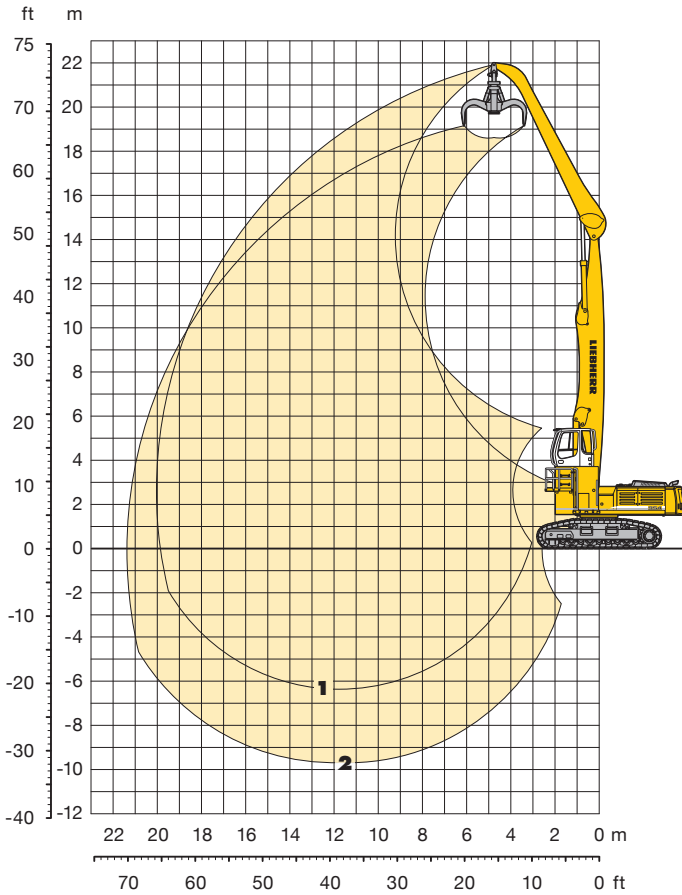
↑ Height    Can be slewed through 360°    In longitudinal position of undercarriage    Max. reach    \* Limited by hydr. capacity

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid with 600 mm wide triple grouser pads for HD-W-Undercarriage, 600 mm wide double grouser pads for EW-Undercarriage and with 750 mm wide triple grouser pads for S-EW-Undercarriage. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

# Industrial Attachment

with Industrial-Type Straight Boom 11.50 m



## Attachment Envelope

Kinematic variant 2A

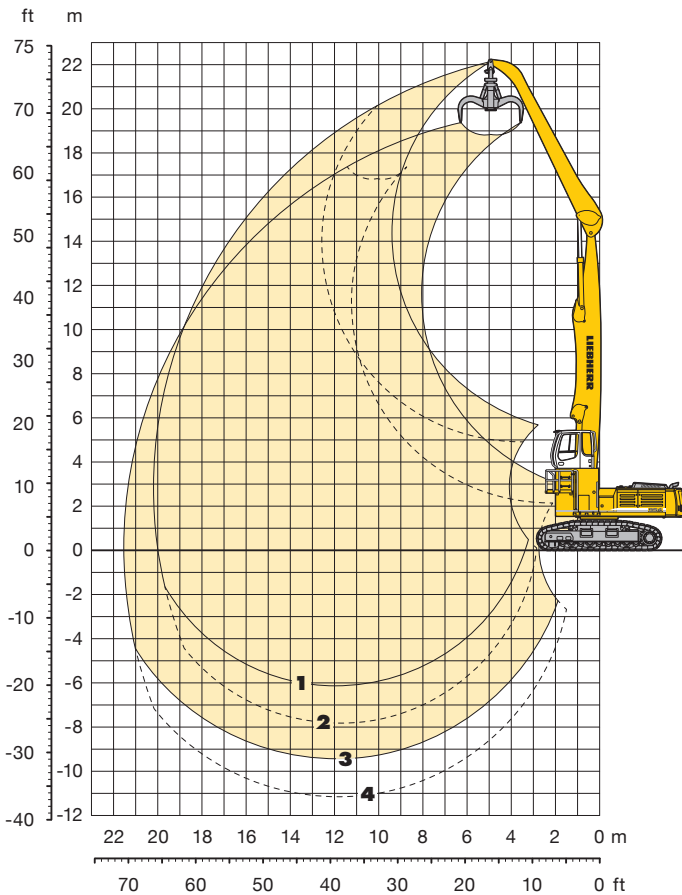
- 1** with industrial stick 9.00 m
- 2** with industrial stick 9.00 m and grapple model 72 C

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type straight boom 11.50 m, industrial stick 9.00 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage		EW		S-EW	S-EW HD
Pad width	mm	600	750	750	750*
Weight	kg	71,000	72,000	76,100	85,700
Ground pressure	kg/cm <sup>2</sup>	1.30	1.05	0.85	0.89

\* flat pads



## Attachment Envelope

Kinematic variants 3A/3B

- 1** with industrial stick 9.00 m (3B)
- 2** with industrial stick 9.00 m and grapple model 72 C (3B)
- 3** with industrial stick 9.00 m (3A)
- 4** with industrial stick 9.00 m and grapple model 72 C (3A)

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type straight boom 11.50 m, industrial stick 9.00 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage		EW		S-EW	S-EW HD
Pad width	mm	600	750	750	750*
Weight	kg	71,000	72,000	76,100	85,700
Ground pressure	kg/cm <sup>2</sup>	1.30	1.05	0.85	0.89

\* flat pads

# Lift Capacities

## with Industrial-Type Straight Boom 11.50 m

### Industrial Stick 9.00 m (Variant 2A)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m		
		EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW
21.0									11.6*	11.6*																11.3*	11.3*	7.7
19.5									12.0*	12.0*																10.7*	10.7*	10.6
18.0									12.2*	12.2*																10.0*	10.0*	12.7
16.5									13.3*	13.3*																8.3*	8.3*	14.4
15.0									13.5*	13.5*																7.6*	7.6*	15.7
13.5									13.5*	13.5*																7.2*	7.2*	16.8
12.0									13.5*	13.5*																6.9*	6.9*	17.7
10.5									14.4*	14.4*																6.7*	6.7*	18.4
9.0									14.4*	14.4*																6.6*	6.6*	19.0
7.5									14.9*	14.9*																6.5*	6.5*	19.4
6.0									15.0*	15.0*																6.4*	6.4*	19.8
4.5									15.0*	15.0*																6.3*	6.3*	19.9
3.0									15.0*	15.0*																6.2*	6.2*	20.0
1.5									15.0*	15.0*																6.1*	6.1*	20.0
0									15.0*	15.0*																6.0*	6.0*	19.9
-1.5									15.0*	15.0*																5.9*	5.9*	19.6
-3.0									15.0*	15.0*																5.8*	5.8*	18.7
-4.5									15.0*	15.0*																5.7*	5.7*	17.2
-6.0									15.0*	15.0*																5.6*	5.6*	14.2

### Industrial Stick 9.00 m (Variant 3A)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m		
		EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW
19.5																										8.9*	8.9*	11.1
18.0																										8.2*	8.2*	13.2
16.5																										7.2*	7.2*	14.7
15.0																										6.1*	6.1*	16.0
13.5																										5.3*	5.3*	17.1
12.0																										4.7*	4.7*	18.0
10.5																										4.4*	4.4*	18.7
9.0																										4.2*	4.2*	19.2
7.5																										4.1*	4.1*	19.6
6.0																										4.0*	4.0*	19.9
4.5																										3.9*	3.9*	20.1
3.0																										3.8*	3.8*	20.2
1.5																										3.7*	3.7*	20.1
0																										3.6*	3.6*	20.0
-1.5																										3.5*	3.5*	19.7
-3.0																										3.4*	3.4*	19.3
-4.5																										3.3*	3.3*	18.7
-6.0																										3.2*	3.2*	17.2
-7.5																										3.1*	3.1*	14.1

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

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid with 750 mm wide triple grouser pads for S-EW-Undercarriage, 750 mm wide flat pads for S-EW HD-Undercarriage and with 600 mm wide double grouser pads for EW-Undercarriage. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook. According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

# Lift Capacities

with Industrial-Type Straight Boom 11.50 m

## Industrial Stick 9.00 m (Variant 3B)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m	
		EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD		
21.0	EW							12.3°	12.3°																10.9°	10.9°	8.3
19.5	S-EW HD							12.7°	12.7°	10.5°	10.5°														10.4°	10.4°	11.1
18.0	EW									10.7°	10.7°	9.7°	9.7°												9.1°	9.1°	13.2
16.5	S-EW HD									12.1°	12.1°	10.6°	10.6°	8.5°	8.5°										8.9°	8.9°	14.7
15.0	EW									10.3°	10.3°	9.3°	9.3°	8.1°	8.1°										7.3°	7.3°	16.0
13.5	S-EW HD									11.5°	11.5°	10.5°	10.5°	9.0°	9.0°										7.5°	7.5°	17.1
12.0	EW									10.2°	10.2°	9.2°	9.2°	8.9°	8.9°	8.1°	8.1°								6.1°	6.8°	18.0
10.5	S-EW HD									10.2°	10.2°	9.2°	9.2°	8.9°	8.9°	8.1°	8.1°								7.1°	7.1°	18.7
9.0	EW									10.1°	10.1°	9.1°	9.1°	8.8°	8.8°	8.3°	8.3°								5.9	6.6°	19.2
7.5	S-EW HD									10.1°	10.1°	9.1°	9.1°	8.8°	8.8°	8.3°	8.3°								7.8°	7.8°	19.6
6.0	EW									11.6°	11.6°	10.6°	10.6°	9.6°	9.6°	9.3°	9.3°								7.8°	7.8°	20.1
4.5	S-EW HD									11.6°	11.6°	10.6°	10.6°	9.6°	9.6°	9.3°	9.3°								7.4°	7.4°	20.1
3.0	EW									15.0°	15.0°	14.0°	14.0°	13.0°	13.0°	12.0°	12.0°								6.9°	6.9°	20.2
1.5	S-EW HD									15.0°	15.0°	14.0°	14.0°	13.0°	13.0°	12.0°	12.0°								6.9°	6.9°	20.2
0	EW									2.9°	2.9°	18.2°	18.2°	16.1°	16.1°	13.1°	13.1°								5.8	5.8	20.0
-1.5	S-EW HD									2.5°	2.5°	14.9°	14.9°	19.0°	19.0°	15.5°	15.5°								7.8	7.8	20.0
-3.0	EW									2.3°	2.3°	13.5°	13.5°	19.1°	19.1°	15.6°	15.6°								8.3°	8.3°	19.7
-4.5	S-EW HD									1.8°	1.8°	7.6°	7.6°	15.4°	15.4°	12.0°	12.0°								6.6	6.6	19.7
-6.0	EW									2.4°	2.4°	6.1°	6.1°	13.9°	13.9°	10.6°	10.6°								8.4	8.4	17.0
	S-EW HD									2.5°	2.5°	6.1°	6.1°	13.6°	13.6°	10.4°	10.4°								7.5°	7.5°	17.0
	EW									3.3°	3.3°	6.3°	6.3°	12.0°	12.0°	10.4	10.4								5.3	5.3	13.4
	S-EW HD									3.4°	3.4°	6.3°	6.3°	11.9°	11.9°	10.3°	10.3°								5.3	5.3	13.4
	EW									3.5°	3.5°	6.4°	6.4°	11.8°	11.8°	10.2°	10.2°								5.3	5.3	13.4
	S-EW HD									7.0°	7.0°	11.6°	11.6°	10.0	10.0	8.1	8.1								4.2	4.2	13.4
	EW									7.1°	7.1°	11.7°	11.7°	10.1°	10.1°	8.2	8.2								4.2	4.2	13.4
	S-EW HD									7.2°	7.2°	11.7°	11.7°	10.1°	10.1°	8.2	8.2								4.2	4.2	13.4
	EW									12.1°	12.1°	9.8	9.8	11.9	11.9	9.6	9.6								5.1	5.1	13.4
	S-EW HD									12.2°	12.2°	9.9	9.9	12.0°	12.0°	9.7	9.7								5.1	5.1	13.4
	EW									15.9°	15.9°	13.5°	13.5°	11.6°	11.6°	10.1°	10.1°								7.7°	7.7°	13.4
	S-EW HD									15.9°	15.9°	13.5°	13.5°	11.6°	11.6°	10.1°	10.1°								7.7°	7.7°	13.4

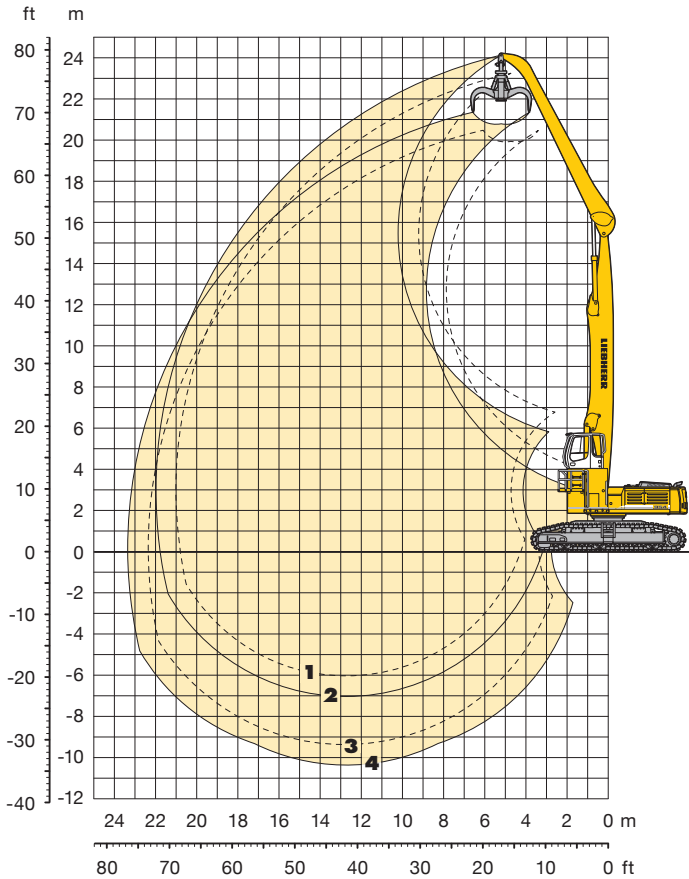
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid with 750 mm wide triple grouser pads for S-EW-Undercarriage, 750 mm wide flat pads for S-EW HD-Undercarriage and with 600 mm wide double grouser pads for EW-Undercarriage. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

# Industrial Attachment

with Industrial-Type Straight Boom 12.50 m



## Attachment Envelope

Kinematic variant 2A

- 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 and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type straight boom 12.50 m, industrial stick 9.00 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage	S-EW HD
Pad width	mm 750*
Weight	kg 86,200
Ground pressure	kg/cm <sup>2</sup> 0.90

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type straight boom 12.50 m, industrial stick 10.00 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage	S-EW HD
Pad width	mm 750*
Weight	kg 86,600
Ground pressure	kg/cm <sup>2</sup> 0.90

\* flat pads



# Lift Capacities

with Industrial-Type Straight Boom 12.50 m

## Industrial Stick 9.00 m (Variant 2A)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		21.0 m		m		
24.0	S-EW HD																													
22.5	S-EW HD					13.6*	13.6*																					11.8*	11.8*	7.3
21.0	S-EW HD							13.2*	13.2*	11.8*	11.8*	9.6*	9.6*															9.5*	9.5*	10.5
19.5	S-EW HD									12.9*	12.9*	11.7*	11.7*	9.9*	9.9*													8.4*	8.4*	12.8
18.0	S-EW HD									13.4*	13.4*	12.6*	12.6*	11.4*	11.4*	9.8*	9.8*											7.8*	7.8*	14.6
16.5	S-EW HD											12.9*	12.9*	11.4*	11.4*	10.1*	10.1*	9.1*	9.1*									7.3*	7.3*	16.0
15.0	S-EW HD											12.8*	12.8*	11.3*	11.3*	10.1*	10.1*	9.0*	9.0*	8.1*	8.1*							7.0*	7.0*	17.2
13.5	S-EW HD									14.3*	14.3*	12.9*	12.9*	11.3*	11.3*	10.1*	10.1*	9.0*	9.0*	8.1*	8.1*	7.1*	7.1*					6.8*	6.8*	18.1
12.0	S-EW HD									14.8*	14.8*	12.9*	12.9*	11.4*	11.4*	10.1*	10.1*	9.0*	9.0*	8.0*	8.0*	7.1*	7.1*					6.5*	6.5*	18.9
10.5	S-EW HD									15.1*	15.1*	13.1*	13.1*	11.4*	11.4*	10.1*	10.1*	9.0*	9.0*	8.0*	8.0*	7.1*	7.1*	6.1*	6.1*			6.1*	6.1*	19.6
9.0	S-EW HD							16.1*	16.1*	15.4*	15.4*	13.2*	13.2*	11.5*	11.5*	10.1*	10.1*	9.0*	9.0*	8.0*	8.0*	7.0*	7.0*	6.1*	6.1*			5.7*	5.7*	20.1
7.5	S-EW HD					13.2*	13.2*	17.2*	17.2*	18.9*	18.9*	15.7*	15.7*	13.3*	13.3*	11.5*	11.5*	10.1*	10.1*	8.9*	8.9*	7.9*	7.9*	7.0*	7.0*	6.0*	6.0*	5.3*	5.3*	20.5
6.0	S-EW HD					33.3*	33.3*	24.5*	24.5*	19.3*	19.3*	15.8*	15.8*	13.4*	13.4*	11.5*	11.5*	10.0*	10.0*	8.8*	8.8*	7.8*	7.8*	6.8*	6.8*	5.9*	5.9*	4.9*	4.9*	20.8
4.5	S-EW HD					2.2*	2.2*	24.3*	24.3*	19.4*	19.4*	15.8*	15.8*	13.3*	13.3*	11.4*	11.4*	9.9*	9.9*	8.7*	8.7*	7.6*	7.6*	6.6*	6.6*	5.7*	5.7*	4.5*	4.5*	21.0
3.0	S-EW HD							5.8*	5.8*	19.0*	19.0*	15.5*	15.5*	13.1*	13.1*	11.2*	11.2*	9.7*	9.7*	8.4*	8.4*	7.3*	7.3*	6.4*	6.4*	5.4*	5.4*	4.1*	4.1*	21.0
1.5	S-EW HD							3.9*	3.9*	11.4*	11.4*	14.9*	14.9*	12.6*	12.6*	10.8*	10.8*	9.3*	9.3*	8.1*	8.1*	7.0*	7.0*	6.0*	6.0*	5.0*	5.0*	3.6*	3.6*	21.0
0	S-EW HD					1.1*	1.1*	3.9*	3.9*	8.8*	8.8*	13.9*	13.9*	11.8*	11.8*	10.2*	10.2*	8.8*	8.8*	7.6*	7.6*	6.5*	6.5*	5.5*	5.5*	4.4*	4.4*	3.2*	3.2*	20.8
-1.5	S-EW HD							4.5*	4.5*	8.4*	8.4*	12.5*	12.5*	10.8*	10.8*	9.3*	9.3*	8.1*	8.1*	7.0*	7.0*	5.9*	5.9*	4.9*	4.9*	3.7*	3.7*	2.6*	2.6*	20.5
-3.0	S-EW HD									8.8*	8.8*	10.7*	10.7*	9.5*	9.5*	8.3*	8.3*	7.1*	7.1*	6.1*	6.1*	5.1*	5.1*	4.0*	4.0*			2.8*	2.8*	19.5
-4.5	S-EW HD									8.6*	8.6*	7.8*	7.8*	6.9*	6.9*	6.0*	6.0*	5.0*	5.0*	4.1*	4.1*							3.1*	3.1*	17.8
-6.0	S-EW HD											5.2*	5.2*	4.5*	4.5*													4.5*	4.5*	13.5

## Industrial Stick 10.00 m (Variant 2A)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		21.0 m		m				
24.0	S-EW HD																															
22.5	S-EW HD									11.8*	11.8*	10.2*	10.2*															9.1*	9.1*	9.8		
21.0	S-EW HD											11.5*	11.5*	10.3*	10.3*	8.5*	8.5*											7.8*	7.8*	12.4		
19.5	S-EW HD													11.2*	11.2*	10.1*	10.1*	8.5*	8.5*									7.1*	7.1*	14.3		
18.0	S-EW HD													11.7*	11.7*	10.9*	10.9*	9.9*	9.9*	8.2*	8.2*							6.6*	6.6*	15.9		
16.5	S-EW HD													12.0*	12.0*	11.0*	11.0*	9.8*	9.8*	8.8*	8.8*	7.7*	7.7*					6.3*	6.3*	17.2		
15.0	S-EW HD													12.3*	12.3*	11.0*	11.0*	9.8*	9.8*	8.8*	8.8*	7.9*	7.9*	6.8*	6.8*			6.0*	6.0*	18.3		
13.5	S-EW HD													12.5*	12.5*	11.0*	11.0*	9.8*	9.8*	8.8*	8.8*	7.9*	7.9*	7.0*	7.0*			5.9*	5.9*	19.3		
12.0	S-EW HD													12.5*	12.5*	11.0*	11.0*	9.8*	9.8*	8.8*	8.8*	7.9*	7.9*	7.0*	7.0*	6.2*	6.2*	5.8*	5.8*	20.0		
10.5	S-EW HD									13.1*	13.1*	12.7*	12.7*	11.1*	11.1*	9.8*	9.8*	8.8*	8.8*	7.8*	7.8*	7.0*	7.0*	6.2*	6.2*			5.4*	5.4*	20.6		
9.0	S-EW HD									14.1*	14.1*	12.8*	12.8*	11.2*	11.2*	9.9*	9.9*	8.8*	8.8*	7.8*	7.8*	6.9*	6.9*	6.1*	6.1*	5.2*	5.2*	5.1*	5.1*	21.1		
7.5	S-EW HD							14.5*	14.5*	15.2*	15.2*	13.0*	13.0*	11.3*	11.3*	9.9*	9.9*	8.7*	8.7*	7.7*	7.7*	6.9*	6.9*	6.0*	6.0*	5.1*	5.1*	4.7*	4.7*	21.5		
6.0	S-EW HD					12.6*	12.6*	17.1*	17.1*	18.8*	18.8*	15.5*	15.5*	13.1*	13.1*	11.3*	11.3*	9.8*	9.8*	8.7*	8.7*	7.6*	7.6*	6.7*	6.7*	5.9*	5.9*	5.0*	5.0*	21.8		
4.5	S-EW HD					27.7*	27.7*	24.3*	24.3*	19.0*	19.0*	15.6*	15.6*	13.1*	13.1*	11.2*	11.2*	9.8*	9.8*	8.5*	8.5*	7.5*	7.5*	6.6*	6.6*	5.7*	5.7*	4.8*	4.8*	21.9		
3.0	S-EW HD					2.1*	2.1*	13.0*	13.0*	18.9*	18.9*	15.4*	15.4*	12.9*	12.9*	11.1*	11.1*	9.6*	9.6*	8.4*	8.4*	7.3*	7.3*	6.4*	6.4*	5.5*	5.5*	4.5*	4.5*	22.0		
1.5	S-EW HD					1.2*	1.2*	5.7*	5.7*	17.8*	17.8*	15.0*	15.0*	12.6*	12.6*	10.8*	10.8*	9.3*	9.3*	8.1*	8.1*	7.0*	7.0*	6.1*	6.1*	5.1*	5.1*	4.1*	4.1*	3.3*	3.3*	21.9
0	S-EW HD					1.6*	1.6*	4.7*	4.7*	10.9*	10.9*	14.2*	14.2*	12.0*	12.0*	10.3*	10.3*	8.9*	8.9*	7.7*	7.7*	6.6*	6.6*	5.7*	5.7*	4.7*	4.7*	3.6*	3.6*	2.8*	2.8*	21.8
-1.5	S-EW HD					2.4*	2.4*	4.8*	4.8*	9.2*	9.2*	13.1*	13.1*	11.1*	11.1*	9.6*	9.6*	8.3*	8.3*	7.1*	7.1*	6.1*	6.1*	5.1*	5.1*	4.1*	4.1*	2.9*	2.9*	2.3*	2.3*	21.5
-3.0	S-EW HD							5.4*	5.4*	9.0*	9.0*	11.5*	11.5*	10.0*	10.0*	8.7*	8.7*	7.5*	7.5*	6.4*	6.4*	5.4*	5.4*	4.4*	4.4*	3.4*	3.4*			2.3*	2.3*	20.8
-4.5	S-EW HD									9.3*	9.3*	9.7*	9.7*	8.6*	8.6*	7.5*	7.5*	6.4*	6.4*	5.5*	5.5*	4.5*	4.5*	3.5*	3.5*			2.5*	2.5*	19.4		
-6.0	S-EW HD									7.5*	7.5*	6.8*	6.8*	6.0*	6.0*	5.2*	5.2*	4.3*	4.3*	3.4*	3.4*							3.0*	3.0*	17.2		

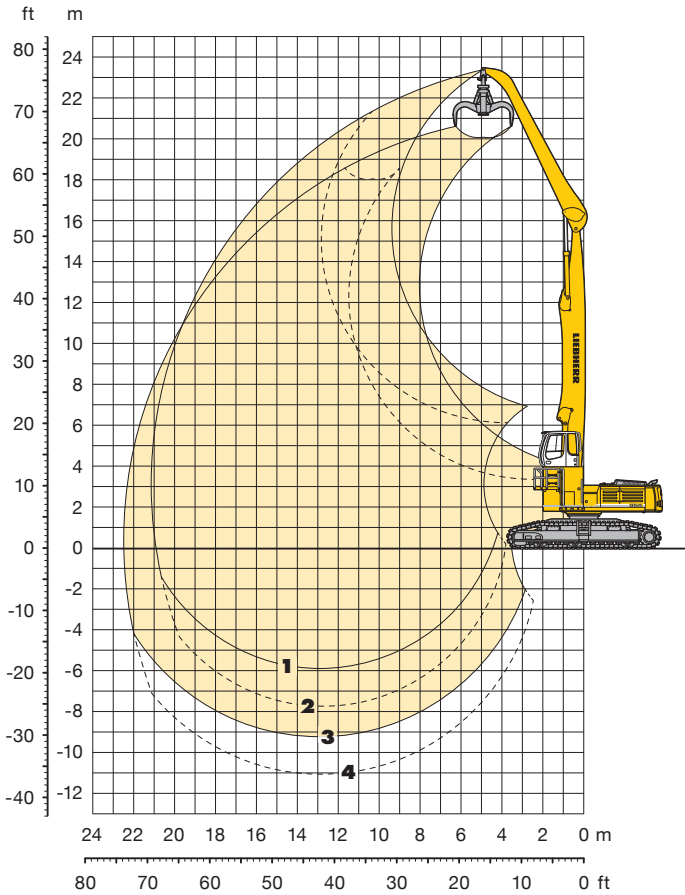
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 750 mm wide flat pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

# Industrial Attachment

with Industrial-Type Straight Boom 12.50 m



## Attachment Envelope

Kinematic variants 3A/3B

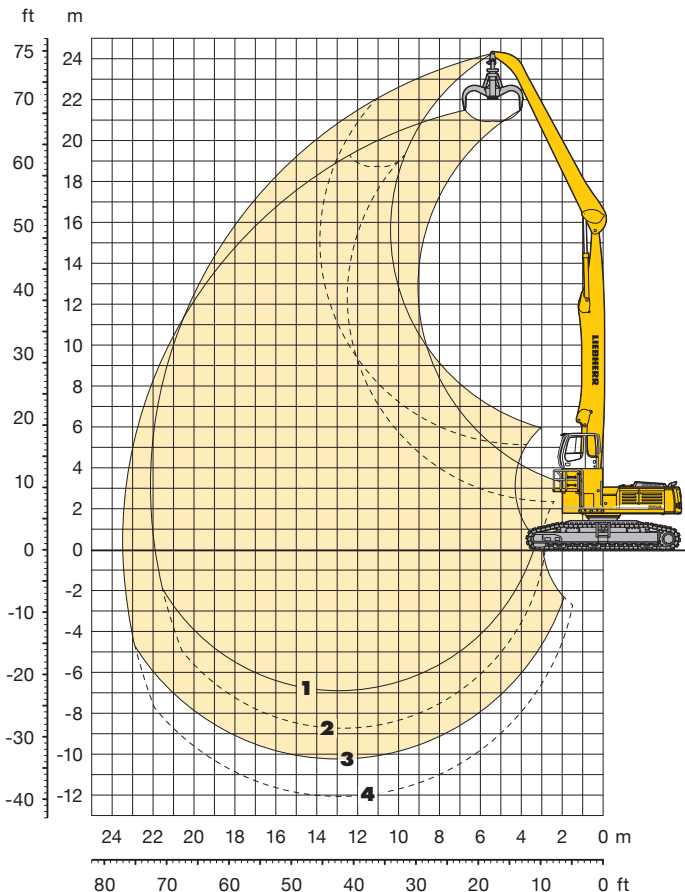
- 1 with industrial stick 9.00 m (3B)
- 2 with industrial stick 9.00 m and grapple model 72 C (3B)
- 3 with industrial stick 9.00 m (3A)
- 4 with industrial stick 9.00 m and grapple model 72 C (3A)

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type straight boom 12.50 m, industrial stick 9.00 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage	S-EW HD	
Pad width	mm	750*
Weight	kg	86,200
Ground pressure	kg/cm <sup>2</sup>	0.90

\* flat pads



## Attachment Envelope

Kinematic variants 3A/3B

- 1 with industrial stick 10.00 m (3B)
- 2 with industrial stick 10.00 m and grapple model 72 C (3B)
- 3 with industrial stick 10.00 m (3A)
- 4 with industrial stick 10.00 m and grapple model 72 C (3A)

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type straight boom 12.50 m, industrial stick 10.00 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage	S-EW HD	
Pad width	mm	750*
Weight	kg	86,600
Ground pressure	kg/cm <sup>2</sup>	0.90

\* flat pads

# Lift Capacities

with Industrial-Type Straight Boom 12.50 m

## Industrial Stick 9.00 m (Variant 3A)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		21.0 m		m		
22.5	S-EW HD																													
21.0	S-EW HD																											9.3*	9.3*	11.1
19.5	S-EW HD												10.4*	10.4*														8.3*	8.3*	13.2
18.0	S-EW HD														9.5*	9.5*												7.7*	7.7*	14.9
16.5	S-EW HD														9.4*	9.4*	8.7*	8.7*										7.3*	7.3*	16.3
15.0	S-EW HD														9.3*	9.3*	8.6*	8.6*	8.0*	8.0*								7.0*	7.0*	17.5
13.5	S-EW HD														9.3*	9.3*	8.6*	8.6*	7.9*	7.9*	7.4*	7.4*						6.8*	6.8*	18.4
12.0	S-EW HD														9.4*	9.4*	8.6*	8.6*	7.9*	7.9*	7.3*	7.3*						6.7*	6.7*	19.2
10.5	S-EW HD												10.5*	10.5*	9.5*	9.5*	8.7*	8.7*	8.0*	8.0*	7.3*	7.3*	6.8*	6.8*				6.6*	6.6*	19.8
9.0	S-EW HD											12.1*	12.1*	10.8*	10.8*	9.7*	9.7*	8.8*	8.8*	8.0*	8.0*	7.4*	7.4*	6.7*	6.7*			6.4*	6.4*	20.3
7.5	S-EW HD									14.5*	14.5*	12.5*	12.5*	11.0*	11.0*	9.9*	9.9*	8.9*	8.9*	8.1*	8.1*	7.4*	7.4*	6.7*	6.7*			6.2*	6.2*	20.7
6.0	S-EW HD			31.9*	31.9*	23.2*	23.2*	18.3*	18.3*	15.2*	15.2*	13.0*	13.0*	11.3*	11.3*	10.0*	10.0*	9.0*	9.0*	8.1*	8.1*	7.4*	7.4*	6.7*	6.7*			6.0*	6.0*	21.0
4.5	S-EW HD					13.8*	13.8*	10.3*	10.3*	8.5*	8.5*	7.3*	7.3*	6.5*	6.5*	5.8*	5.8*	5.2*	5.2*	4.7*	4.7*	4.3*	4.3*	5.9*	5.9*			5.8*	5.8*	21.1
3.0	S-EW HD					4.5*	4.5*	3.3*	3.3*	2.8*	2.8*	2.4*	2.4*	2.1*	2.1*	1.8*	1.8*	1.6*	1.6*	1.4*	1.4*	1.2*	1.2*	1.1*	1.1*			5.6*	5.6*	21.2
1.5	S-EW HD					3.3*	3.3*	2.4*	2.4*	2.0*	2.0*	1.7*	1.7*	1.5*	1.5*	1.3*	1.3*	1.1*	1.1*	1.0*	1.0*	0.9*	0.9*	0.8*	0.8*			5.5*	5.5*	21.1
0	S-EW HD			1.1*	1.1*	0.8*	0.8*	0.6*	0.6*	0.5*	0.5*	0.4*	0.4*	0.3*	0.3*	0.3*	0.3*	0.2*	0.2*	0.2*	0.2*	0.2*	0.2*	0.2*	0.2*			5.1*	5.1*	20.9
-1.5	S-EW HD			2.3*	2.3*	1.7*	1.7*	1.3*	1.3*	1.1*	1.1*	0.9*	0.9*	0.8*	0.8*	0.7*	0.7*	0.6*	0.6*	0.5*	0.5*	0.5*	0.5*	0.5*	0.5*			4.9*	4.9*	20.6
-3.0	S-EW HD					5.4*	5.4*	4.0*	4.0*	3.2*	3.2*	2.7*	2.7*	2.3*	2.3*	2.0*	2.0*	1.7*	1.7*	1.5*	1.5*	1.3*	1.3*	1.2*	1.2*			4.5*	4.5*	20.2
-4.5	S-EW HD					6.5*	6.5*	4.8*	4.8*	3.8*	3.8*	3.2*	3.2*	2.7*	2.7*	2.3*	2.3*	2.0*	2.0*	1.7*	1.7*	1.5*	1.5*	1.4*	1.4*			4.2*	4.2*	19.6
-6.0	S-EW HD							11.9*	11.9*	8.8*	8.8*	7.3*	7.3*	6.3*	6.3*	5.5*	5.5*	4.8*	4.8*	4.3*	4.3*	4.0*	4.0*	3.8*	3.8*			4.7*	4.7*	17.9
-7.5	S-EW HD									7.8*	7.8*	6.5*	6.5*	5.5*	5.5*	4.8*	4.8*	4.3*	4.3*	4.0*	4.0*	3.8*	3.8*	3.6*	3.6*			6.2*	6.2*	14.4

## Industrial Stick 10.00 m (Variant 3A)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		21.0 m		m			
22.5	S-EW HD																														
21.0	S-EW HD													9.0*	9.0*													7.7*	7.7*	12.8	
19.5	S-EW HD														8.9*	8.9*												7.0*	7.0*	14.8	
18.0	S-EW HD														9.0*	9.0*	8.3*	8.3*										6.5*	6.5*	16.3	
16.5	S-EW HD															8.2*	8.2*	7.6*	7.6*									6.2*	6.2*	17.6	
15.0	S-EW HD															8.2*	8.2*	7.6*	7.6*	7.0*	7.0*							6.0*	6.0*	18.6	
13.5	S-EW HD															8.2*	8.2*	7.5*	7.5*	7.0*	7.0*	5.9*	5.9*				5.8*	5.8*	19.5		
12.0	S-EW HD														9.0*	9.0*	8.2*	8.2*	7.6*	7.6*	7.0*	7.0*	6.5*	6.5*				5.7*	5.7*	20.3	
10.5	S-EW HD															9.1*	9.1*	8.3*	8.3*	7.6*	7.6*	7.0*	7.0*	6.5*	6.5*				5.7*	5.7*	20.9
9.0	S-EW HD													10.3*	10.3*	9.2*	9.2*	8.4*	8.4*	7.7*	7.7*	7.0*	7.0*	6.5*	6.5*	5.9*	5.9*	5.7*	5.7*	21.3	
7.5	S-EW HD												11.9*	11.9*	10.5*	10.5*	9.4*	9.4*	8.5*	8.5*	7.7*	7.7*	7.1*	7.1*	6.5*	6.5*	5.9*	5.9*	5.6*	5.6*	21.7
6.0	S-EW HD									14.4*	14.4*	12.4*	12.4*	10.8*	10.8*	9.6*	9.6*	8.6*	8.6*	7.8*	7.8*	7.1*	7.1*	6.5*	6.5*	5.9*	5.9*	5.4*	5.4*	21.9	
4.5	S-EW HD			9.5*	9.5*	23.5*	23.5*	18.3*	18.3*	15.1*	15.1*	12.8*	12.8*	11.1*	11.1*	9.8*	9.8*	8.7*	8.7*	7.9*	7.9*	7.1*	7.1*	6.5*	6.5*	5.8*	5.8*	5.2*	5.2*	22.1	
3.0	S-EW HD			1.3*	1.3*	0.9*	0.9*	0.7*	0.7*	0.6*	0.6*	0.5*	0.5*	0.4*	0.4*	0.4*	0.4*	0.3*	0.3*	0.3*	0.3*	0.3*	0.3*	0.3*	0.3*			5.1*	5.1*	22.1	
1.5	S-EW HD			0.9*	0.9*	0.7*	0.7*	0.5*	0.5*	0.4*	0.4*	0.3*	0.3*	0.3*	0.3*	0.3*	0.3*	0.3*	0.3*	0.3*	0.3*	0.3*	0.3*	0.3*	0.3*			4.9*	4.9*	22.1	
0	S-EW HD			1.5*	1.5*	1.1*	1.1*	0.8*	0.8*	0.7*	0.7*	0.6*	0.6*	0.5*	0.5*	0.5*	0.5*	0.4*	0.4*	0.4*	0.4*	0.4*	0.4*	0.4*	0.4*			4.7*	4.7*	21.9	
-1.5	S-EW HD			2.4*	2.4*	1.7*	1.7*	1.3*	1.3*	1.1*	1.1*	0.9*	0.9*	0.8*	0.8*	0.7*	0.7*	0.6*	0.6*	0.5*	0.5*	0.5*	0.5*	0.5*	0.5*			4.4*	4.4*	21.6	
-3.0	S-EW HD			3.4*	3.4*	2.5*	2.5*	1.9*	1.9*	1.5*	1.5*	1.3*	1.3*	1.1*	1.1*	1.0*	1.0*	0.9*	0.9*	0.8*	0.8*	0.7*	0.7*	0.7*	0.7*			4.2*	4.2*	21.2	
-4.5	S-EW HD					6.1*	6.1*	4.5*	4.5*	3.5*	3.5*	3.0*	3.0*	2.6*	2.6*	2.2*	2.2*	1.9*	1.9*	1.7*	1.7*	1.5*	1.5*	1.4*	1.4*			3.8*	3.8*	20.7	
-6.0	S-EW HD					7.0*	7.0*	5.2*	5.2*	4.0*	4.0*	3.4*	3.4*	3.0*	3.0*	2.6*	2.6*	2.2*	2.2*	2.0*	2.0*	1.7*	1.7*	1.6*	1.6*			4.0*	4.0*	19.5	
-7.5	S-EW HD							10.9*	10.9*	8.1*	8.1*	6.8*	6.8*	5.8*	5.8*	5.0*	5.0*	4.3*	4.3*	3.8*	3.8*	3.5*	3.5*	3.3*	3.3*			4.6*	4.6*	17.4	

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

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 750 mm wide flat pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

# Lift Capacities

with Industrial-Type Straight Boom 12.50 m

## Industrial Stick 9.00 m (Variant 3B)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		21.0 m		m						
24.0	S-EW HD																																	
22.5	S-EW HD							12.1*	12.1*																			11.3*	11.3*	8.0				
21.0	S-EW HD									12.1*	12.1*	10.3*	10.3*																9.3*	9.3*	11.1			
19.5	S-EW HD									11.6*	11.6*	10.4*	10.4*	9.5*	9.5*															8.3*	8.3*	13.2		
18.0	S-EW HD											10.1*	10.1*	9.2*	9.2*	8.6*	8.6*														7.7*	7.7*	14.9	
16.5	S-EW HD											10.0*	10.0*	9.1*	9.1*	8.4*	8.4*	7.9*	7.9*												7.3*	7.3*	16.3	
15.0	S-EW HD											9.9*	9.9*	9.1*	9.1*	8.4*	8.4*	7.8*	7.8*	7.3*	7.3*										7.0*	7.0*	17.5	
13.5	S-EW HD											10.0*	10.0*	9.1*	9.1*	8.4*	8.4*	7.8*	7.8*	7.3*	7.3*	6.9*	6.9*								6.8*	6.8*	18.4	
12.0	S-EW HD									11.4*	11.4*	10.2*	10.2*	9.2*	9.2*	8.5*	8.5*	7.8*	7.8*	7.3*	7.3*	6.8*	6.8*								6.5*	6.5*	19.2	
10.5	S-EW HD									11.8*	11.8*	10.5*	10.5*	9.4*	9.4*	8.6*	8.6*	7.9*	7.9*	7.3*	7.3*	6.8*	6.8*	6.4*	6.4*						6.3*	6.3*	19.8	
9.0	S-EW HD						14.4*	14.4*	12.4*	12.4*	10.9*	10.9*	9.7*	9.7*	8.8*	8.8*	8.0*	8.0*	7.4*	7.4*	6.9*	6.9*	6.4*	6.4*							6.2*	6.2*	20.3	
7.5	S-EW HD		13.5*	13.5*	17.9*	17.9*	15.5*	15.5*	13.1*	13.1*	11.3*	11.3*	10.0*	10.0*	9.0*	9.0*	8.2*	8.2*	7.5*	7.5*	6.9*	6.9*	6.4*	6.4*						6.1*	6.1*	20.7		
6.0	S-EW HD		28.9*	28.9*	21.0*	21.0*	16.6*	16.6*	13.8*	13.8*	11.8*	11.8*	10.4*	10.4*	9.2*	9.2*	8.4*	8.4*	7.6*	7.6*	7.0*	7.0*	6.5*	6.5*						5.9*	5.9*	21.0		
4.5	S-EW HD				13.8*	13.8*	17.8*	17.8*	14.5*	14.5*	12.3*	12.3*	10.7*	10.7*	9.5*	9.5*	8.5*	8.5*	7.7*	7.7*	7.1*	7.1*	6.5*	6.5*	5.9*	5.9*				5.8*	5.8*	21.1		
3.0	S-EW HD				4.5*	4.5*	17.6*	17.6*	15.1*	15.1*	12.7*	12.7*	11.0*	11.0*	9.7*	9.7*	8.7*	8.7*	7.8*	7.8*	7.1*	7.1*	6.5*	6.5*	5.8*	5.8*				5.7*	5.7*	21.2		
1.5	S-EW HD				3.3*	3.3*	9.7*	9.7*	15.6*	15.6*	13.1*	13.1*	11.2*	11.2*	9.9*	9.9*	8.8*	8.8*	7.9*	7.9*	7.1*	7.1*	6.4*	6.4*	5.7*	5.7*				5.6*	5.6*	21.1		
0	S-EW HD		1.1*	1.1*	3.6*	3.6*	8.1*	8.1*	15.8*	15.8*	13.2*	13.2*	11.4*	11.4*	9.9*	9.9*	8.8*	8.8*	7.9*	7.9*	7.1*	7.1*	6.3*	6.3*						5.5*	5.5*	20.9		
-1.5	S-EW HD				4.4*	4.4*	7.9*	7.9*	14.8*	14.8*	13.2*	13.2*	11.3*	11.3*	9.9*	9.9*	8.8*	8.8*	7.8*	7.8*	6.9*	6.9*	6.1*	6.1*						5.4*	5.4*	20.8		
-3.0	S-EW HD						8.4*	8.4*	14.1*	14.1*	12.9*	12.9*	11.2*	11.2*	9.7*	9.7*	8.6*	8.6*	7.6*	7.6*	6.7*	6.7*								5.8*	5.8*	19.4		
-4.5	S-EW HD								14.3*	14.3*	12.4*	12.4*	10.8*	10.8*	9.4*	9.4*	8.3*	8.3*	7.2*	7.2*											6.6*	6.6*	17.6	
-6.0	S-EW HD																																	

## Industrial Stick 10.00 m (Variant 3B)

↑ m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		21.0 m		m					
24.0	S-EW HD					12.5*	12.5*																							11.6*	11.6*	6.7	
22.5	S-EW HD									10.7*	10.7*																				8.9*	8.9*	10.4
21.0	S-EW HD									11.3*	11.3*	10.1*	10.1*	9.0*	9.0*																7.7*	7.7*	12.8
19.5	S-EW HD									9.7*	9.7*	8.9*	8.9*	8.2*	8.2*																7.0*	7.0*	14.8
18.0	S-EW HD									9.5*	9.5*	8.7*	8.7*	8.0*	8.0*	7.5*	7.5*														6.5*	6.5*	16.3
16.5	S-EW HD									9.4*	9.4*	8.6*	8.6*	7.9*	7.9*	7.4*	7.4*	6.9*	6.9*												6.2*	6.2*	17.6
15.0	S-EW HD									9.3*	9.3*	8.5*	8.5*	7.9*	7.9*	7.3*	7.3*	6.9*	6.9*	6.5*	6.5*										6.0*	6.0*	18.6
13.5	S-EW HD									9.4*	9.4*	8.6*	8.6*	7.9*	7.9*	7.3*	7.3*	6.8*	6.8*	6.4*	6.4*	5.9*	5.9*								5.8*	5.8*	19.5
12.0	S-EW HD									9.6*	9.6*	8.7*	8.7*	8.0*	8.0*	7.4*	7.4*	6.9*	6.9*	6.4*	6.4*	6.1*	6.1*								5.7*	5.7*	20.3
10.5	S-EW HD									11.1*	11.1*	9.9*	9.9*	8.9*	8.9*	8.1*	8.1*	7.5*	7.5*	6.9*	6.9*	6.5*	6.5*	6.1*	6.1*						5.7*	5.7*	20.9
9.0	S-EW HD									11.6*	11.6*	10.2*	10.2*	9.2*	9.2*	8.3*	8.3*	7.6*	7.6*	7.0*	7.0*	6.5*	6.5*	6.1*	6.1*	5.7*	5.7*				5.6*	5.6*	21.3
7.5	S-EW HD						14.4*	14.4*	12.2*	12.2*	10.7*	10.7*	9.5*	9.5*	8.5*	8.5*	7.8*	7.8*	7.1*	7.1*	6.6*	6.6*	6.1*	6.1*	5.7*	5.7*				5.5*	5.5*	21.7	
6.0	S-EW HD		13.9*	13.9*	18.6*	18.6*	15.5*	15.5*	13.0*	13.0*	11.2*	11.2*	9.8*	9.8*	8.8*	8.8*	7.9*	7.9*	7.2*	7.2*	6.7*	6.7*	6.2*	6.2*	5.7*	5.7*				5.4*	5.4*	21.9	
4.5	S-EW HD		9.5*	9.5*	21.3*	21.3*	16.7*	16.7*	13.7*	13.7*	11.7*	11.7*	10.2*	10.2*	9.0*	9.0*	8.1*	8.1*	7.4*	7.4*	6.7*	6.7*	6.2*	6.2*	5.7*	5.7*				5.3*	5.3*	22.1	
3.0	S-EW HD		1.3*	1.3*	9.2*	9.2*	17.7*	17.7*	14.4*	14.4*	12.1*	12.1*	10.5*	10.5*	9.3*	9.3*	8.3*	8.3*	7.5*	7.5*	6.8*	6.8*	6.2*	6.2*	5.7*	5.7*				5.2*	5.2*	22.1	
1.5	S-EW HD		0.9*	0.9*	4.8*	4.8*	14.3*	14.3*	14.9*	14.9*	12.5*	12.5*	10.8*	10.8*	9.4*	9.4*	8.4*	8.4*	7.6*	7.6*	6.8*	6.8*	6.2*	6.2*	5.6*	5.6*				5.1*	5.1*	22.1	
0	S-EW HD		1.5*	1.5*	4.3*	4.3*	9.7*	9.7*	15.2*	15.2*	12.8*	12.8*	11.0*	11.0*	9.6*	9.6*	8.5*	8.5*	7.6*	7.6*	6.8*	6.8*	6.2*	6.2*	5.5*	5.5*				5.0*	5.0*	21.9	
-1.5	S-EW HD		2.4*	2.4*	4.6*	4.6*	8.5*	8.5*	15.3*	15.3*	12.9*	12.9*	11.0*	11.0*	9.6*	9.6*	8.5*	8.5*	7.6*	7.6*	6.8*	6.8*	6.0*	6.0*	5.3*	5.3*				4.9*	4.9*	21.6	
-3.0	S-EW HD				5.3*	5.3*	8.5*	8.5*	14.8*	14.8*	12.7*	12.7*	10.9*	10.9*	9.5*	9.5*	8.4*	8.4*	7.4*	7.4*	6.6*	6.6*	5.8*	5.8*						5.1*	5.1*	20.7	
-4.5	S-EW HD						9.0*	9.0*	14.3*	14.3*	12.4*	12.4*	10.7*	10.7*	9.3*	9.3*	8.2*	8.2*	7.2*	7.2*	6.3*	6.3*								5.6*	5.6*	19.3	
-6.0	S-EW HD								13.8*	13.8*	11.8*	11.8*	10.2*	10.2*	8.9*	8.9*	7.8*	7.8*	6.8*	6.8*											6.6*	6.6*	16.8

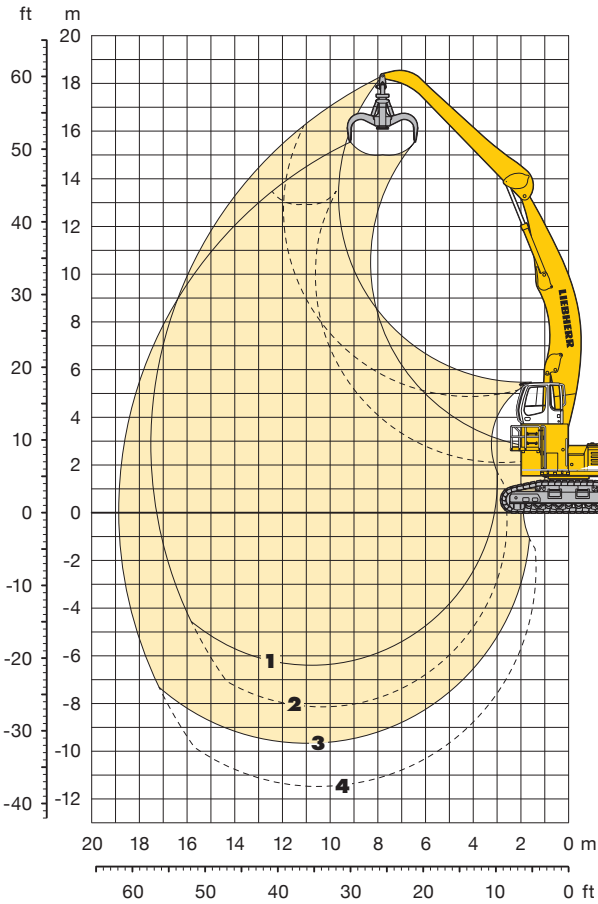
↑ Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 750 mm wide flat pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

# Industrial Attachment

with Industrial-Type Gooseneck Boom 10.50 m



## Attachment Envelope

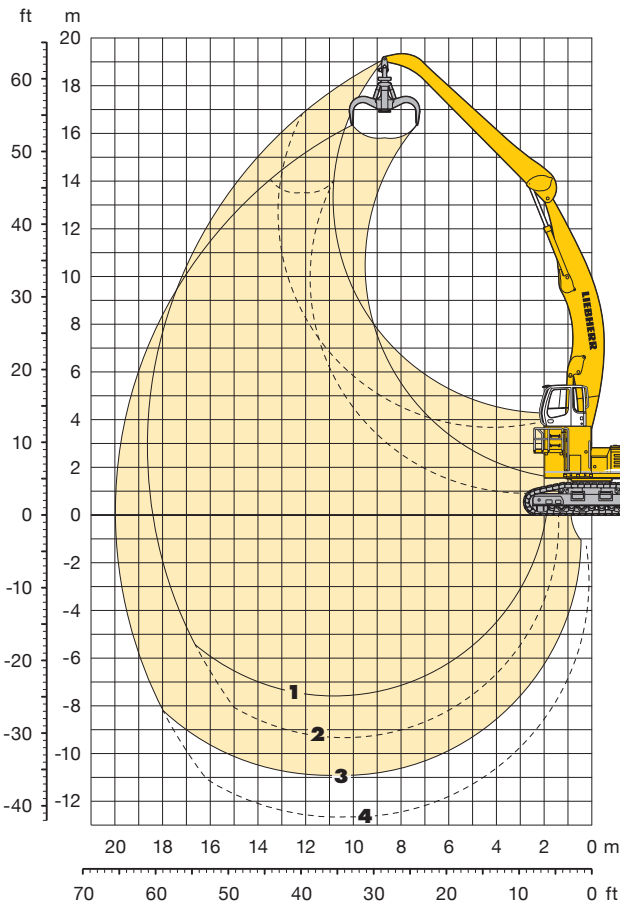
Kinematic variants 3C/3D

- 1** with industrial stick 7.80 m (3D)
- 2** with industrial stick 7.80 m and grapple model 72 C (3D)
- 3** with industrial stick 7.80 m (3C)
- 4** with industrial stick 7.80 m and grapple model 72 C (3C)

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type gooseneck boom 10.50 m, industrial stick 7.80 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage		HD-W		EW		S-EW
Pad width	mm	600	750	600	750	750
Weight	kg	64,100	65,400	70,500	71,500	75,600
Ground pressure	kg/cm <sup>2</sup>	1.21	0.99	1.29	1.04	0.84



## Attachment Envelope

Kinematic variants 3C/3D

- 1** with industrial stick 9.00 m (3D)
- 2** with industrial stick 9.00 m and grapple model 72 C (3D)
- 3** with industrial stick 9.00 m (3C)
- 4** with industrial stick 9.00 m and grapple model 72 C (3C)

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type gooseneck boom 10.50 m, industrial stick 9.00 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage		HD-W		EW		S-EW
Pad width	mm	600	750	600	750	750
Weight	kg	64,500	65,800	70,900	71,900	76,000
Ground pressure	kg/cm <sup>2</sup>	1.22	1.00	1.29	1.05	0.84

# Lift Capacities

with Industrial-Type Gooseneck Boom 10.50 m

## Industrial Stick 7.80 m (Variant 3C)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m	
		HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW
18.0	HD-W																										
16.5	S-EW																										
15.0	HD-W																										
13.5	S-EW																										
12.0	HD-W																										
10.5	S-EW																										
9.0	HD-W																										
7.5	S-EW																										
6.0	HD-W																										
4.5	S-EW																										
3.0	HD-W																										
1.5	S-EW																										
0	HD-W																										
-1.5	S-EW																										
-3.0	HD-W																										
-4.5	S-EW																										
-6.0	HD-W																										
-7.5	S-EW																										
-9.0	HD-W																										

## Industrial Stick 9.00 m (Variant 3C)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m	
		HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW
18.0	HD-W																										
16.5	S-EW																										
15.0	HD-W																										
13.5	S-EW																										
12.0	HD-W																										
10.5	S-EW																										
9.0	HD-W																										
7.5	S-EW																										
6.0	HD-W																										
4.5	S-EW																										
3.0	HD-W																										
1.5	S-EW																										
0	HD-W																										
-1.5	S-EW																										
-3.0	HD-W																										
-4.5	S-EW																										
-6.0	HD-W																										
-7.5	S-EW																										
-9.0	HD-W																										

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

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid with 600 mm wide triple grouser pads for HD-W-Undercarriage, 600 mm wide double grouser pads for EW-Undercarriage and with 750 mm wide triple grouser pads for S-EW-Undercarriage. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

# Lift Capacities

## with Industrial-Type Gooseneck Boom 10.50 m

### Industrial Stick 7.80 m (Variant 3D)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m		
		HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW			
18.0																									10.5*	10.5*	7.9	
16.5										9.7*	9.7*															10.1*	10.1*	10.4
15.0										8.7*	8.7*	9.1*	9.1*													9.2*	9.2*	12.2
13.5										8.7*	8.7*	8.7*	8.7*	8.3*	8.3*											9.0*	9.0*	13.6
12.0										8.5*	8.5*	8.5*	8.5*	8.1*	8.1*	7.2	7.8*									8.2*	8.2*	14.7
10.5										8.5*	8.5*	8.5*	8.5*	8.1*	8.1*	8.0*	7.3	7.7*								7.7*	7.7*	15.6
9.0										8.7*	8.7*	8.7*	8.7*	8.1*	8.1*	9.0*	8.6*	8.6*	5.7	7.2						7.4*	7.4*	16.2
7.5										9.9*	9.9*	9.9*	9.9*	9.0*	9.0*	8.4*	7.8*	7.8*								7.9*	7.9*	16.8
6.0										11.9*	11.9*	11.4*	11.4*	10.5*	10.5*	9.7*	9.1*	9.1*	4.4	5.7						5.5*	5.5*	17.1
4.5										13.8*	13.8*	12.2*	12.2*	11.1*	11.1*	10.1*	9.4*	9.4*	8.9*	8.9*	8.4*					8.0*	8.0*	17.4
3.0										15.4*	15.4*	13.3*	13.3*	11.8*	11.8*	10.6*	9.8*	9.8*	9.1*	9.1*	8.5*					8.0*	8.0*	17.4
1.5										17.2*	17.2*	14.4*	14.4*	12.5*	12.5*	11.2*	10.1*	10.1*	9.3*	9.3*	8.4*	8.7*				7.6*	7.6*	17.4
0										19.6*	19.6*	14.3	15.9*	11.0	13.1*	8.7	11.2*									7.3*	7.3*	17.4
-1.5										20.8*	20.8*	16.1*	16.1*	13.2*	13.2*	11.1*	11.3*									7.5*	7.5*	17.4
-3.0										24.5*	24.5*	18.9*	18.9*	15.5*	15.5*	14.0*	14.0*									7.5*	7.5*	16.9
-4.5										28.2*	28.2*	21.7*	21.7*	17.2*	17.2*	15.5*	15.5*									7.6*	7.6*	16.5
-6.0										32.0*	32.0*	25.5*	25.5*	20.3*	20.3*	18.5*	18.5*									7.8*	7.8*	16.5
-7.5										36.0*	36.0*	30.3*	30.3*	24.5*	24.5*	22.5*	22.5*									8.1*	8.1*	15.8
-9.0										40.0*	40.0*	35.1*	35.1*	29.3*	29.3*	27.0*	27.0*									8.4*	8.4*	13.7

### Industrial Stick 9.00 m (Industrial Stick 3D)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m		
		HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW	HD-W	S-EW			
18.0																										8.3*	8.3*	10.2
16.5																										8.2*	8.2*	12.2
15.0																										8.1*	8.1*	13.8
13.5																										8.0*	8.0*	15.0
12.0																										7.9*	7.9*	16.0
10.5																										7.8*	7.8*	16.8
9.0																										7.7*	7.7*	17.4
7.5																										7.6*	7.6*	17.9
6.0																										7.5*	7.5*	18.3
4.5																										7.4*	7.4*	18.6
3.0																										7.3*	7.3*	18.5
1.5																										7.2*	7.2*	18.4
0																										7.1*	7.1*	18.1
-1.5																										7.0*	7.0*	17.1
-3.0																										6.9*	6.9*	17.1
-4.5																										6.8*	6.8*	16.1
-6.0																										6.7*	6.7*	16.1
-7.5																										6.6*	6.6*	12.9
-9.0																										6.5*	6.5*	

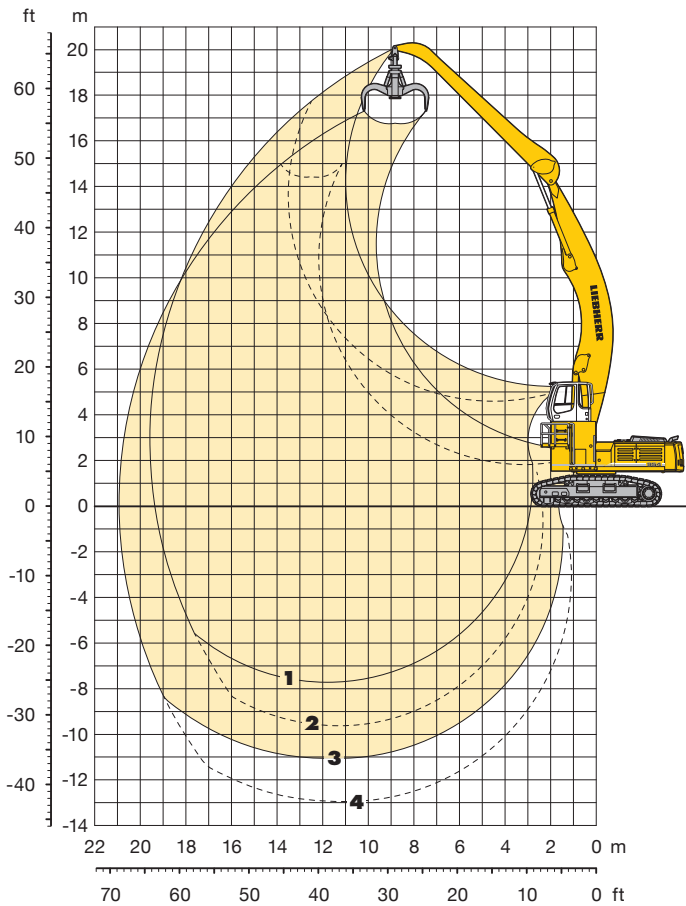
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid with 600 mm wide triple grouser pads for HD-W-Undercarriage, 600 mm wide double grouser pads for EW-Undercarriage and with 750 mm wide triple grouser pads for S-EW-Undercarriage. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

# Industrial Attachment

with Industrial-Type Gooseneck Boom 11.50 m



## Attachment Envelope

Kinematic variants 3C/3D

- 1** with industrial stick 9.00 m (3D)
- 2** with industrial stick 9.00 m and grapple model 72 C (3D)
- 3** with industrial stick 9.00 m (3C)
- 4** with industrial stick 9.00 m and grapple model 72 C (3C)

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type gooseneck boom 11.50 m, industrial stick 9.00 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage		EW		S-EW	S-EW HD
Pad width	mm	600	750	750	750*
Weight	kg	71,400	72,400	76,500	86,100
Ground pressure	kg/cm <sup>2</sup>	1.30	1.06	0.85	0.90

\* flat pads



# Lift Capacities

## with Industrial-Type Gooseneck Boom 11.50 m

### Industrial Stick 9.00 m (Variant 3C)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m
		EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	
18.0																										13.8
16.5																	5.9'	5.9'								15.2
15.0																	5.7'	5.7'	5.5'	5.5'						16.3
13.5																	6.7'	6.7'	6.6'	6.6'						17.2
12.0																	6.6'	6.6'	6.5'	6.5'						17.9
10.5																	5.9'	5.9'	5.8'	5.8'						18.5
9.0																	7.1'	7.1'	7.0'	7.0'						19.2
7.5																	7.9'	7.9'	7.8'	7.8'						19.4
6.0																	8.0'	8.0'	7.9'	7.9'						19.5
4.5																	7.2'	7.2'	7.1'	7.1'						19.6
3.0																	7.2'	7.2'	7.1'	7.1'						19.7
1.5																	7.2'	7.2'	7.1'	7.1'						19.8
0																	7.2'	7.2'	7.1'	7.1'						19.9
-1.5																	7.2'	7.2'	7.1'	7.1'						20.0
-3.0																	7.2'	7.2'	7.1'	7.1'						20.1
-4.5																	7.2'	7.2'	7.1'	7.1'						20.2
-6.0																	7.2'	7.2'	7.1'	7.1'						20.3
-7.5																	7.2'	7.2'	7.1'	7.1'						20.4
-9.0																	7.2'	7.2'	7.1'	7.1'						20.5

### Industrial Stick 9.00 m (Variant 3D)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		m
		EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD	EW	S-EW HD			
19.5																									9.8	
18.0																									12.1	
16.5																									13.8	
15.0																									15.2	
13.5																									16.3	
12.0																									17.2	
10.5																									17.9	
9.0																									18.5	
7.5																									18.9	
6.0																									19.2	
4.5																									19.4	
3.0																									19.5	
1.5																									19.6	
0																									19.7	
-1.5																									19.8	
-3.0																									19.9	
-4.5																									20.0	
-6.0																									20.1	
-7.5																									20.2	

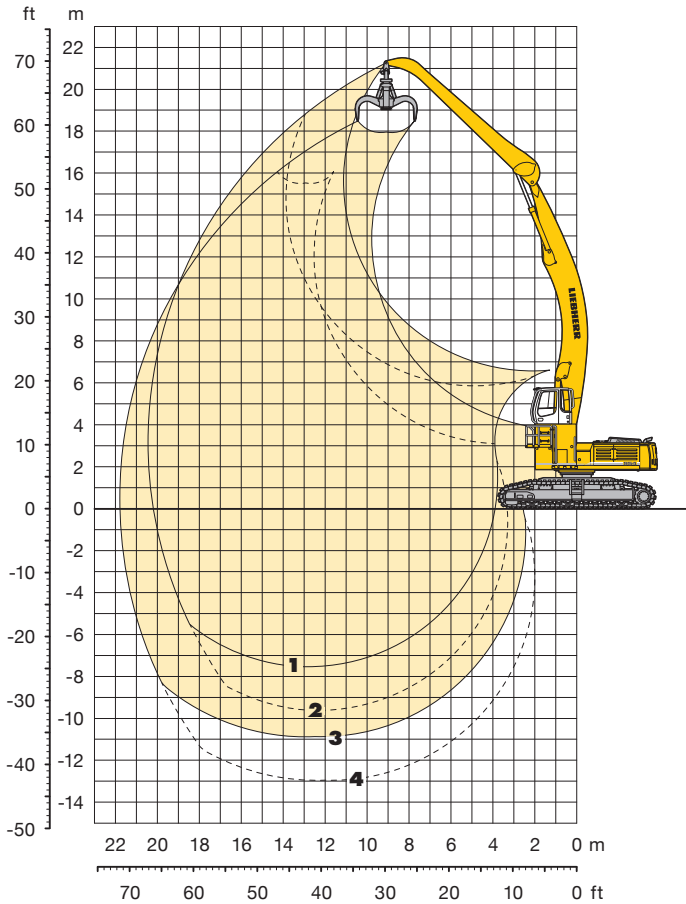
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid with 750 mm wide triple grouser pads for S-EW-Undercarriage, 750 mm wide flat pads for S-EW HD-Undercarriage and with 600 mm wide double grouser pads for EW-Undercarriage. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

# Industrial Attachment

with Industrial-Type Gooseneck Boom 12.50 m



## Attachment Envelope

Kinematic variants 3C/3D

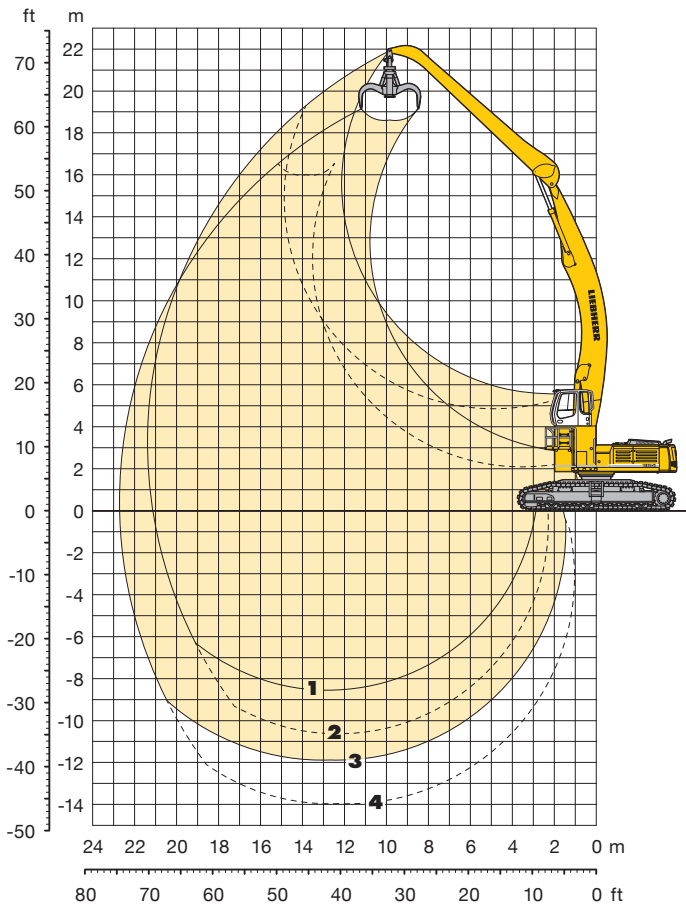
- 1** with industrial stick 9.00 m (3D)
- 2** with industrial stick 9.00 m and grapple model 72 C (3D)
- 3** with industrial stick 9.00 m (3C)
- 4** with industrial stick 9.00 m and grapple model 72 C (3C)

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type gooseneck boom 12.50 m, industrial stick 9.00 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage	S-EW HD	
Pad width	mm	750*
Weight	kg	86,600
Ground pressure	kg/cm <sup>2</sup>	0.90

\* flat pads



## Attachment Envelope

Kinematic variants 3C/3D

- 1** with industrial stick 10.00 m (3D)
- 2** with industrial stick 10.00 m and grapple model 72 C (3D)
- 3** with industrial stick 10.00 m (3C)
- 4** with industrial stick 10.00 m and grapple model 72 C (3C)

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 2.00 m, counterweight 14.5 t, industrial-type gooseneck boom 12.50 m, industrial stick 10.00 m and grapple model 72 C with 5 semi-closed tines 1.20 m<sup>3</sup>.

Undercarriage	S-EW HD	
Pad width	mm	750*
Weight	kg	87,000
Ground pressure	kg/cm <sup>2</sup>	0.91

\* flat pads



# Lift Capacities

with Industrial-Type Gooseneck Boom 12.50 m

## Industrial Stick 9.00 m (Variant 3D)

m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		21.0 m		m			
21.0	S-EW HD																											8.7*	8.7*	9.6	
19.5	S-EW HD											9.0*	9.0*	7.9*	7.9*														7.8*	7.8*	12.1
18.0	S-EW HD													8.1*	8.1*	7.6*	7.6*												7.3*	7.3*	13.9
16.5	S-EW HD													7.9*	7.9*	7.4*	7.4*												6.9*	6.9*	15.4
15.0	S-EW HD													7.9*	7.9*	7.3*	7.3*			7.0*	7.0*								6.6*	6.6*	16.6
13.5	S-EW HD													7.9*	7.9*	7.4*	7.4*			6.9*	6.9*	6.5*	6.5*						6.3*	6.3*	17.6
12.0	S-EW HD												8.8*	8.8*	8.1*	8.1*	7.5*	7.5*			7.0*	7.0*	6.6*	6.6*		6.2*	6.2*		6.2*	6.2*	18.4
10.5	S-EW HD												9.1*	9.1*	8.3*	8.3*	7.6*	7.6*			7.1*	7.1*	6.6*	6.6*		6.3*	6.3*		6.0*	6.0*	19.1
9.0	S-EW HD									10.8*	10.8*	9.5*	9.5*	8.6*	8.6*	7.8*	7.8*	7.2*	7.2*	6.7*	6.7*	6.3*	6.3*		6.0*	6.0*		6.0*	6.0*	19.6	
7.5	S-EW HD											10.0*	10.0*	8.9*	8.9*	8.1*	8.1*	7.4*	7.4*	6.9*	6.9*	6.4*	6.4*		6.0*	6.0*		5.9*	5.9*	20.0	
6.0	S-EW HD	7.8*	7.8*	25.6*	25.6*	18.7*	18.7*	14.8*	14.8*	12.3*	12.3*	10.6*	10.6*	9.3*	9.3*	8.4*	8.4*	7.6*	7.6*	7.0*	7.0*	6.5*	6.5*		6.1*	6.1*		5.9*	5.9*	20.2	
4.5	S-EW HD			4.9*	4.9*	20.9*	20.9*	16.1*	16.1*	13.2*	13.2*	11.2*	11.2*	9.8*	9.8*	8.7*	8.7*	7.8*	7.8*	7.2*	7.2*	6.6*	6.6*		6.2*	6.2*		5.9*	5.9*	20.4	
3.0	S-EW HD			2.1*	2.1*	8.3*	8.3*	17.3*	17.3*	14.0*	14.0*	11.7*	11.7*	10.2*	10.2*	9.0*	9.0*	8.1*	8.1*	7.3*	7.3*	6.7*	6.7*		6.2*	6.2*		5.9*	5.9*	20.4	
1.5	S-EW HD			2.2*	2.2*	6.0*	6.0*	13.3*	13.3*	14.6*	14.6*	12.2*	12.2*	10.5*	10.5*	9.2*	9.2*	8.3*	8.3*	7.5*	7.5*	6.8*	6.8*		6.3*	6.3*		5.9*	5.9*	20.4	
0	S-EW HD			3.0*	3.0*	5.8*	5.8*	10.6*	10.6*	15.0*	15.0*	12.6*	12.6*	10.8*	10.8*	9.4*	9.4*	8.4*	8.4*	7.6*	7.6*	6.9*	6.9*		6.3*	6.3*		6.0*	6.0*	20.2	
-1.5	S-EW HD			4.0*	4.0*	6.2*	6.2*	9.9*	9.9*	15.3*	15.3*	12.8*	12.8*	11.0*	11.0*	9.6*	9.6*	8.5*	8.5*	7.6*	7.6*	6.9*	6.9*		6.2*	6.2*		6.0*	6.0*	19.9	
-3.0	S-EW HD					6.8*	6.8*	9.9*	9.9*	15.2*	15.2*	12.8*	12.8*	11.0*	11.0*	9.6*	9.6*	8.5*	8.5*	7.6*	7.6*	6.8*	6.8*					6.1*	6.1*	19.5	
-4.5	S-EW HD							10.3*	10.3*	15.0*	15.0*	12.7*	12.7*	10.9*	10.9*	9.5*	9.5*	8.4*	8.4*	7.5*	7.5*	6.6*	6.6*					6.1*	6.1*	18.9	
-6.0	S-EW HD									14.4*	14.4*	12.3*	12.3*	10.6*	10.6*	9.3*	9.3*	8.2*	8.2*	7.2*	7.2*								6.4*	6.4*	17.8
-7.5	S-EW HD													10.1*	10.1*	8.8*	8.8*												8.7*	8.7*	13.7

## Industrial Stick 10.00 m (Variant 3D)

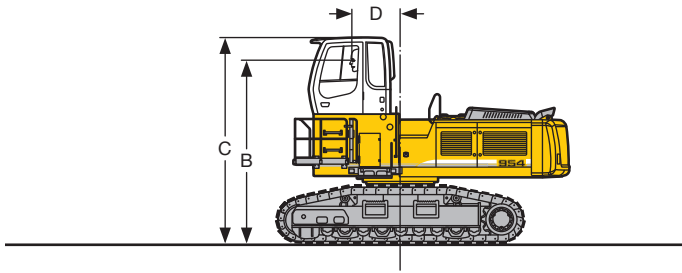
m	Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		18.0 m		19.5 m		21.0 m		m			
21.0	S-EW HD																												7.2*	7.2*	11.5
19.5	S-EW HD													7.7*	7.7*	6.7*	6.7*												6.6*	6.6*	13.6
18.0	S-EW HD													7.5*	7.5*	7.0*	7.0*			6.6*	6.6*								6.2*	6.2*	15.3
16.5	S-EW HD															6.9*	6.9*			6.5*	6.5*	6.2*	6.2*						6.0*	6.0*	16.6
15.0	S-EW HD															6.8*	6.8*			6.4*	6.4*	6.1*	6.1*						5.8*	5.8*	17.7
13.5	S-EW HD													7.4*	7.4*	6.9*	6.9*			6.4*	6.4*	6.1*	6.1*		5.8*	5.8*			5.7*	5.7*	18.7
12.0	S-EW HD													7.5*	7.5*	6.9*	6.9*			6.5*	6.5*	6.1*	6.1*		5.8*	5.8*			5.5*	5.5*	19.4
10.5	S-EW HD													7.7*	7.7*	7.1*	7.1*			6.6*	6.6*	6.2*	6.2*		5.8*	5.8*		5.5*	5.5*	20.1	
9.0	S-EW HD												8.9*	8.9*	8.0*	8.0*			7.3*	7.3*	6.8*	6.8*		5.9*	5.9*		5.6*	5.6*	20.6		
7.5	S-EW HD									10.6*	10.6*	9.3*	9.3*	8.4*	8.4*	7.6*	7.6*			6.9*	6.9*	6.4*	6.4*		6.0*	6.0*		5.6*	5.6*	20.9	
6.0	S-EW HD					16.9*	16.9*	13.6*	13.6*	11.4*	11.4*	9.9*	9.9*	8.8*	8.8*	7.9*	7.9*	7.2*	7.2*	6.6*	6.6*	6.1*	6.1*		5.7*	5.7*		5.4*	5.4*	21.2	
4.5	S-EW HD	2.6*	2.6*	21.6*	21.6*	19.1*	19.1*	14.9*	14.9*	12.3*	12.3*	10.5*	10.5*	9.2*	9.2*	8.2*	8.2*	7.4*	7.4*	6.7*	6.7*	6.2*	6.2*		5.8*	5.8*		5.4*	5.4*	21.3	
3.0	S-EW HD			4.7*	4.7*	15.3*	15.3*	16.1*	16.1*	13.1*	13.1*	11.0*	11.0*	9.6*	9.6*	8.5*	8.5*	7.6*	7.6*	6.9*	6.9*	6.3*	6.3*		5.9*	5.9*		5.4*	5.4*	21.4	
1.5	S-EW HD	0.7*	0.7*	3.3*	3.3*	8.1*	8.1*	17.1*	17.1*	13.8*	13.8*	11.6*	11.6*	10.0*	10.0*	8.8*	8.8*	7.8*	7.8*	7.1*	7.1*	6.5*	6.5*		5.9*	5.9*		5.5*	5.5*	21.3	
0	S-EW HD	1.7*	1.7*	3.5*	3.5*	6.6*	6.6*	12.6*	12.6*	14.3*	14.3*	12.0*	12.0*	10.3*	10.3*	9.0*	9.0*	8.0*	8.0*	7.2*	7.2*	6.5*	6.5*		6.0*	6.0*		5.5*	5.5*	21.1	
-1.5	S-EW HD			4.1*	4.1*	6.5*	6.5*	10.7*	10.7*	14.7*	14.7*	12.3*	12.3*	10.5*	10.5*	9.2*	9.2*	8.1*	8.1*	7.3*	7.3*	6.6*	6.6*		6.0*	6.0*		5.5*	5.5*	20.8	
-3.0	S-EW HD			4.8*	4.8*	6.8*	6.8*	10.1*	10.1*	14.8*	14.8*	12.4*	12.4*	10.6*	10.6*	9.3*	9.3*	8.2*	8.2*	7.3*	7.3*	6.6*	6.6*		5.9*	5.9*		5.5*	5.5*	20.4	
-4.5	S-EW HD					7.3*	7.3*	10.2*	10.2*	14.7*	14.7*	12.4*	12.4*	10.6*	10.6*	9.3*	9.3*	8.2*	8.2*	7.3*	7.3*	6.5*	6.5*		5.7*	5.7*		5.5*	5.5*	19.9	
-6.0	S-EW HD							10.5*	10.5*	14.4*	14.4*	12.2*	12.2*	10.5*	10.5*	9.1*	9.1*	8.0*	8.0*	7.1*	7.1*	6.3*	6.3*					5.6*	5.6*	19.3	
-7.5	S-EW HD									13.8*	13.8*	11.7*	11.7*	10.1*	10.1*	8.8*	8.8*	7.7*	7.7*	6.8*	6.8*								6.3*	6.3*	17.2

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

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 750 mm wide flat pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

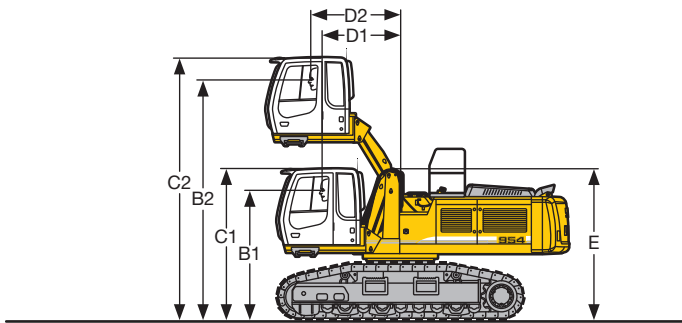
# Choice of Cab Elevation and Cab Protection



## Rigid Cab Elevation

	HD-W	EW	S-EW	S-EW HD	HD-W	EW	S-EW	S-EW HD
	mm	mm	mm	mm	mm	mm	mm	mm
Height	1,200	1,200	1,200	1,200	2,000	2,000	2,000	2,000
B	4,020	4,165	4,405	4,485	4,820	4,965	5,205	5,285
C	4,515	4,660	4,900	4,980	5,315	5,460	5,700	5,780
D	1,105	1,105	1,105	1,105	1,105	1,105	1,105	1,105

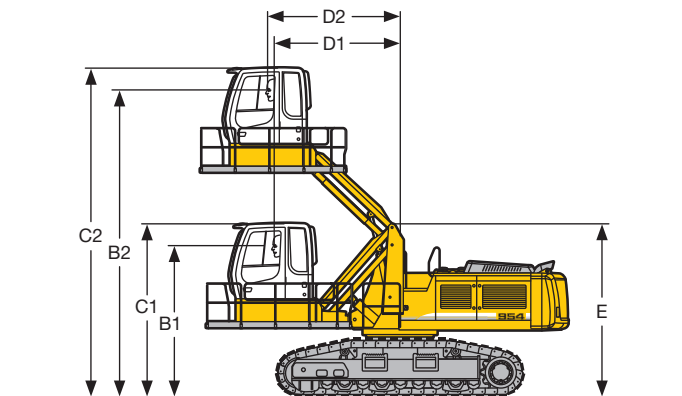
Additional weight with fixed cab elevation 2,000 mm in relation to cab elevation 1,200 mm: 400 kg



## Hydraulic Cab Elevation

	HD-W	EW	S-EW	S-EW HD
	mm	mm	mm	mm
B1	2,815	2,960	3,200	3,280
B2	5,315	5,460	5,700	5,780
C1	3,315	3,460	3,700	3,780
C2	5,815	5,960	6,200	6,280
D1	1,800	1,800	1,800	1,800
D2	2,050	2,050	2,050	2,050
E	3,255	3,400	3,640	3,720

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

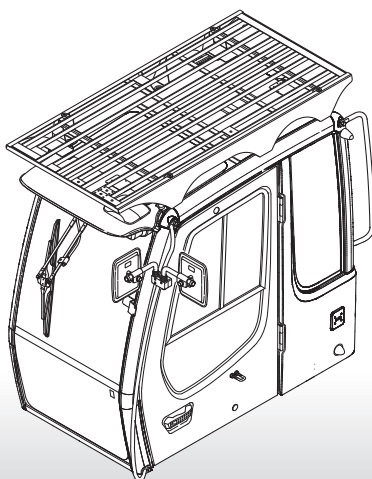


## Hydraulic Cab Elevation (Parallelogram) + Intermediate Piece 0.5 m

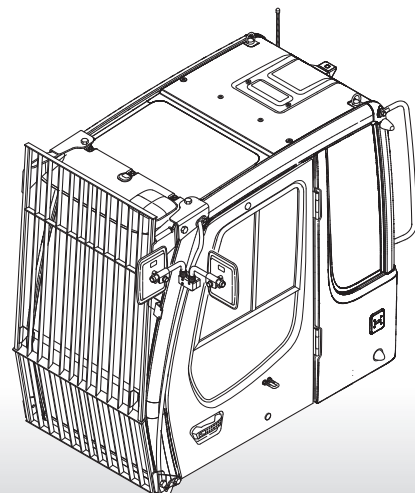
	HD-W	EW	S-EW	S-EW HD
	mm	mm	mm	mm
B1	3,320	3,465	3,705	3,785
B2	6,890	7,035	7,275	7,355
C1	3,815	3,960	4,200	4,280
C2	7,385	7,530	7,770	7,850
D1	2,890	2,890	2,890	2,890
D2	3,040	3,040	3,040	3,040
E	3,805	3,950	4,160	4,240

Additional weight in relation to cab elevation 1,200 mm: 1,600 kg

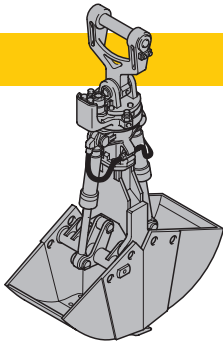
## FOPS Guard



## Front Guard



# Variety of Tools



## Shells for Loose Material

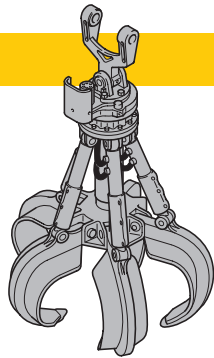
Shells for loose material with cutting edge (without teeth)

### Clamshell Model 22 C

Cutting width of shells	mm	1,500	1,500	2,000
Capacity	m <sup>3</sup>	1.85	2.20	3.00
Total weight	kg	2,500	2,600	3,050

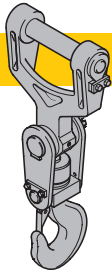
### Clamshell Model GMZ 50

Cutting width of shells	mm	1,400
Capacity	m <sup>3</sup>	3.50
Total weight	kg	2,670



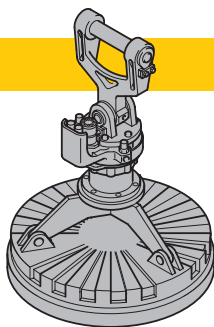
## Multiple Tine Grapples

		open tines			semi-closed tines			closed tines			
<b>Grapple Model 72 C</b> (4 tines)	Capacity	m <sup>3</sup>	1.20	1.40	1.60	1.20	1.40	1.60	1.20	1.40	1.60
	Weight	kg	2,090	2,140	2,160	2,410	2,470	2,510	2,700	2,760	2,810
<b>Grapple Model 72 C</b> (5 tines)	Capacity	m <sup>3</sup>	1.20	1.40	1.60	1.20	1.40	1.60	1.20	1.40	1.60
	Weight	kg	2,520	2,570	2,590	2,920	2,990	3,040	3,020	3,100	3,160
<b>Grapple Model GMM 80</b> (4 tines)	Capacity	m <sup>3</sup>	1.10	1.40	1.70	1.10	1.40	1.70	–	–	–
	Weight	kg	1,950	1,990	2,050	2,130	2,195	2,250	–	–	–
<b>Grapple Model GMM 80</b> (5 tines)	Capacity	m <sup>3</sup>	1.10	1.40	1.70	1.10	1.40	1.70	1.10	1.40	1.70
	Weight	kg	2,190	2,240	2,310	2,400	2,480	2,550	2,550	2,600	2,720



## Crane Hook with Suspension

Max. load	t	32
Total weight	kg	180



## Electro Magnets with Suspension

Magnet information on request

# Equipment



## Undercarriage

Lifetime lubricated track rollers	•
Tracks sealed and greased	•
Track guide at each track frame (three pieces)	•
Idler protection	•
Hydraulic hose protection	•
Two-stage travel motors	•
Track guide at each track frame (four pieces) only HD-W	+
Different undercarriage versions EW + HD-W	+
Different track pad width	+
Reinforced cover only EW	+
Streng. bottom sheet center part	+



## Uppercarriage

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



## Hydraulics

Hydraulic tank shut-off valve	•
Pressure compensation	•
Hook up for pressure checks	•
Pressure storage for controlled lowering of attachments with engine turned off	•
Filter with partial micro filtration	•
Electronic pump regulation	•
Stepless mode system (ECO)	•
Flow compensation	•
Four different power modes adjustable	•
Extra hydr. control for hydr. swivel	+
Hydraulic drive for generator	+
Full flow micro filtration	+
Bio degradable hydraulic oil	+



## Engine

Turbo charger	•
After-cooled	•
Sensor controlled engine idling	•
Air filter with automatic dust ejector	•
Unit pump system	•
Dry-type air cleaner w/pre-cleaner, main and safety element	•
Engine cold starting aid	+
Reversible radiator fan	+



## Operator's Cab

Storage tray	•
Automatic air conditioning with defroster	•
Mechanical hour meters, readable from outside the cab	•
Roof hatch	•
All-round adjustable roof vent	•
Removable handles for travel pedals	•
Seat and consoles independently adjustable (6-way adjustable seat)	•
Removable customized foot mat	•
Dome light	•
Cloth hook	•
Displays for engine operating condition	•
Preparation for radio installation	•
Rain hood over front window opening	•
All tinted windows	•
Door with sliding window	•
Sun roller blind	•
Wiper/washer	•
Cigarette lighter and ashtray	•
Airpressure operator seat with heating and head-rest	+
Extinguisher	+
Electric cool box	+
Bullet proof window (fixed installation – can not be opened)	+
Stereo radio	+
Beacon	+
Auxiliary heating with clock timer	+
Electronic drive away lock	+
Additional flood lights (back)	+
Additional flood lights (front)	+



## Attachment

Flood lights	•
Hydr. lines for clam operation in stick	•
Sealed pivots	•
Liebherr semi-automatic central lubrication system	•
Safety check valves on hoist cylinder, regenerative	•
Safety check valves on stick cylinder, regenerative	•
Hose quick connection	•
Cylinders with shock absorber	•
Hydraulic or manual quick change tool adapter	+
Industrial-type gooseneck sticks with remote hydraulic pin puller	+
Safety lift hook	+
Liebherr line of clams	+
Liebherr fully-automatic central lubrication system	+
Customized colors	+
Overload warning device	+

• = Standard, + = Option

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

**Liebherr-France SAS**

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