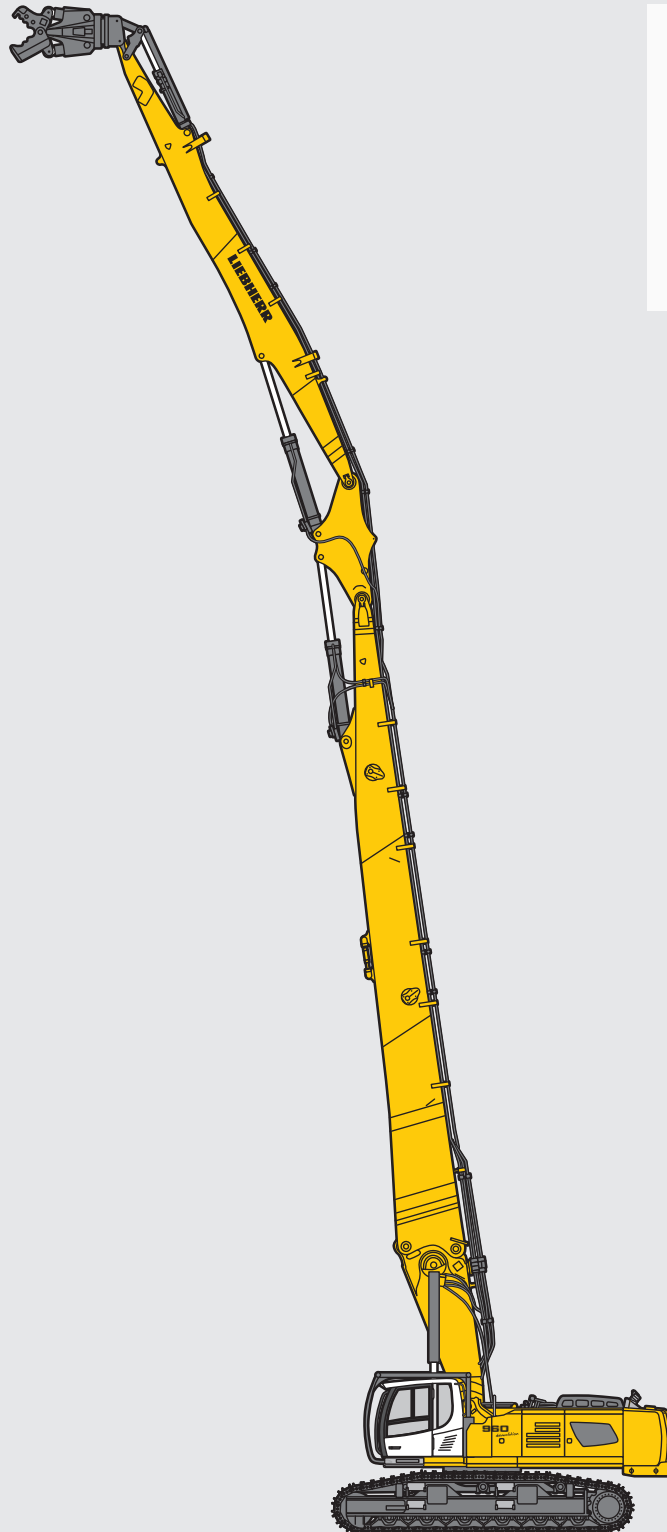


Attachment Information

Demolition Excavator

R 960

Litronic®



Engine:
240 kW / 326 HP

Stage IV

Operating Weight:
77,300 – 93,500 kg

Working Height:
33 m

LIEBHERR

Technical Data



Engine

Rating per ISO 9249	240 kW (326 HP) at 1,800 RPM
Model	Liebherr D946 A7
Type	6 cylinder in-line
Bore/Stroke	130/150 mm
Displacement	11.946 l
Engine operation	4-stroke diesel Common-Rail, monoturbo
Exhaust gas treatment	SCR with urea injection emission standard stage IV/ Tier 4f
Cooling system	water-cooled and integrated motor oil cooler, after-cooled and fuel cooled
Air cleaner	dry-type air cleaner with pre-cleaner, primary and safety elements
Fuel tank	770 l
Electrical system	
Voltage	24 V
Batteries	2 x 180 Ah/12 V
Starter	24 V/7.8 kW
Alternator	three phase current 28 V/140 A
Engine idling	sensor controlled
Motor management	connection to the integrated excavator system controlling via CAN-BUS to the economical utilisation of the service that is available



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	pilotage proportionnel par manipulateur en croix
Travel	– proportional via foot pedals or removable hand levers – speed pre-selection
Additional functions	proportional regulation via foot pedals or rocker



Hydraulic System

Hydraulic pump	
for attachment and travel drive	Liebherr, variable displacement, swashplate double pump
Max. flow	2 x 380 l/min.
Max. pressure	350 bar
for swing drive	reversible, variable flow, swashplate pump, closed-loop circuit
Max. flow	201 l/min.
Max. pressure	375 bar
Pump regulation	electro-hydraulic with electronic engine speed sensing regulation, pressure compensation, flow compensation, automatic oil flow optimizer
Hydraulic tank	394 l
Hydraulic system	1,350 l with demolition attachment
Hydraulic oil filter	2 full flow filters in return line with integrated fine filter area (5 µm)
Cooling system	compact cooler for water cooler, after-cooler, fuel cooler and transmission pump oil, sandwiched with cooler for oil and condenser of air-conditioning with hydrostatically controlled fan drives
MODE selection	adjustment of engine and hydraulic performance via a mode pre-selector to match application, e.g. for especially economical and environmentally friendly operation or for maximum digging performance and heavy-duty jobs
RPM adjustment	stepless adjustment of engine output via RPM at each selected mode
Tool Control	10 preadjustable pump flows and pressures for add-on tools
Tool system	
Flow	380 l/min.
Pressure	350 bar
Tool rotation system	
Flow	30 l/min.
Pressure	180 bar



Swing Drive

Drive	Liebherr swashplate motor with integrated brake valves
Transmission	Liebherr compact planetary reduction gear
Swing ring	Liebherr, sealed single race ball bearing swing ring, internal teeth
Swing speed	0 – 5.8 RPM stepless
Swing torque	160 kNm
Holding brake	wet multi-disc (spring applied, pressure released)



Operator's Cab

Cab	safety cab structure, headlight integrated under the protection, a door with a side window (can be opened on both sides), large stowing and depositing possibilities, shock-absorbing suspension, sounddamping insulating, tinted laminated safety glass, separate window shades for the sunroof window and wind-screen, 12 V plug, storage bins, lunchbox, cup holder, polycarbonate windows on right side
Operator's seat	Liebherr-Comfort seat, airsprung with automatic weight adjustment, vertical and horizontal seat damping including consoles and joysticks. Seat and armrests adjustable separately and in combination, seat heating as standard
Control system	arm consoles, swinging with the seat
Operation and displays	large high-resolution colour display with selfexplanatory operation via touchscreen, video, versatile adjusting, control and monitoring facilities, e.g. climate control, implement and tool parameters, specific demolition display
Air-conditioning	standard automatic air-conditioning, ambient air function, fast de-icing and demisting at the press of a button, air vents can be operated via a menu; ambient air and fresh air filters can be easily replaced and are accessible from the outside; heating-cooling unit, designed for extreme outside temperatures, sensors for solar radiation, inside and outside temperatures
Noise emission	
ISO 6396	L_{pA} (inside cab) = 72 dB(A)
2000/14/EC	L_{WA} (surround noise) = 106 dB(A)



Undercarriage

Versions	
VH-HD	variable gauge
HD-EW	removable side frames
Drive	Liebherr swashplate motor with integrated brake valves
Transmission	Liebherr planetary reduction gears
Travel speed	VH-HD: low range – 2.0 km/h high range – 3.2 km/h HD-EW: low range – 2.0 km/h high range – 3.2 km/h
Net drawbar pull on crawler	563 kN
Track components	D 8 K, maintenance-free
Track rollers/Carrier rollers	11/2
Tracks	sealed and greased
Track pads	double grouser
Holding brake	wet multi-discs (spring applied, pressure released)

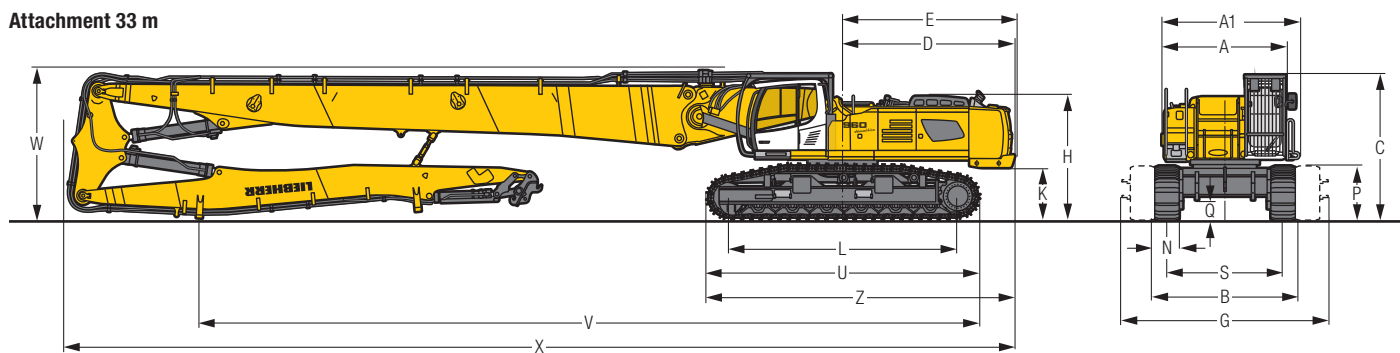


Attachment

Type	combination of resistant steel plates and cast steel components
Hydraulic cylinders	Liebherr cylinders with special seal-system, shock absorbed
Bearings	sealed, low maintenance
Lubrication	automatic central lubrication system (except link and tilt geometry)
Hydraulic connections	pipes and hoses equipped with SAE split-flange connections
Bucket	standard equipped with Liebherr tooth system

Dimensions

Attachment 33 m

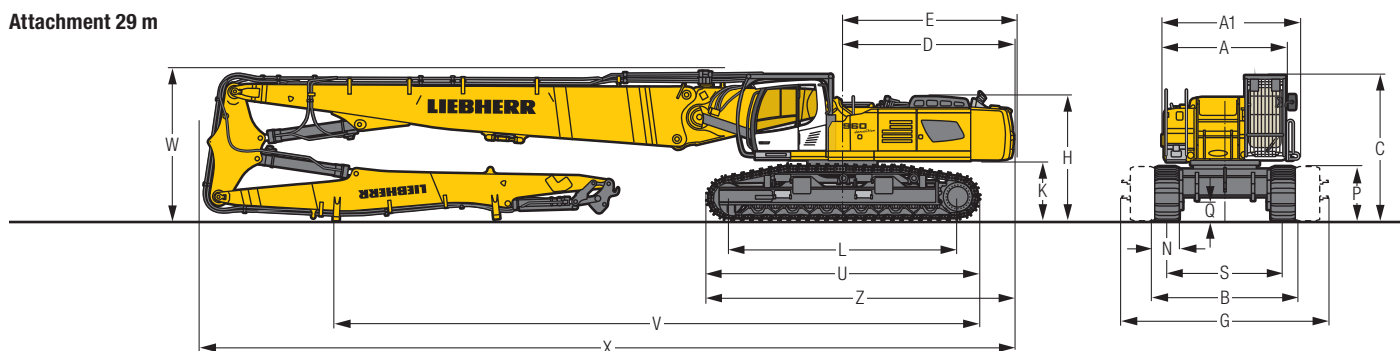


	VH-HD	mm	HD-EW	mm
A		2,985		2,985
A1		3,380		3,380
C		3,600		3,660
D		4,235		4,235
E		4,280		4,280
H		3,055		3,115
K		1,275		1,335
L		5,610		5,605
P		1,340		1,380
Q		490		635

	VH-HD	mm	HD-EW	mm
S		2,850 – 4,050		4,000
U		6,725		6,725
Z		7,600		7,600
N		600		500 600 750
B		3,620 – 4,820		4,630 4,630 4,750
G*		3,885 – 5,085		5,050 5,050 5,050
V		19,200		19,200
W		3,750		3,800
X		23,400		23,400

* Width with access steps

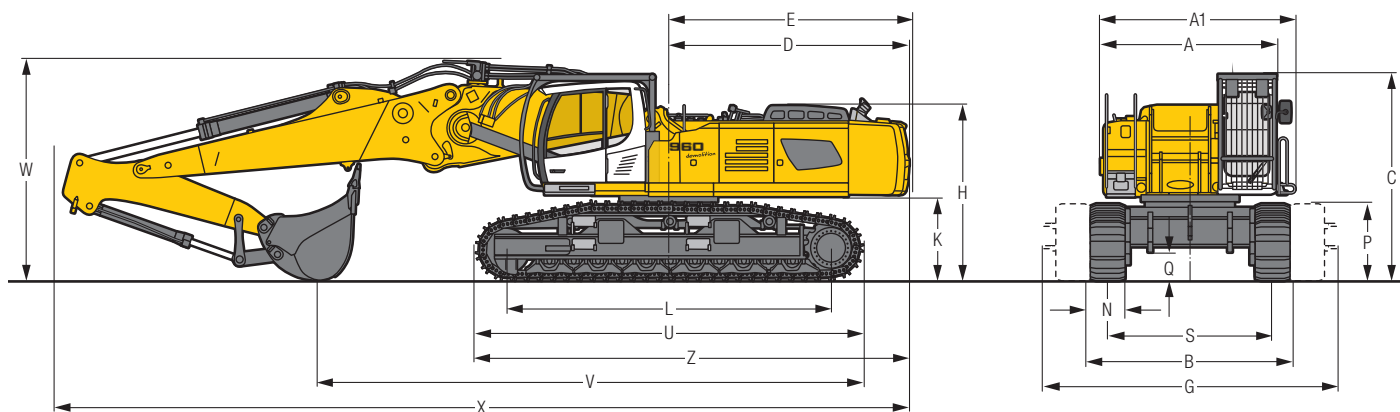
Attachment 29 m



	VH-HD	mm	HD-EW	mm
A		2,985		2,985
A1		3,380		3,380
C		3,600		3,660
D		4,155		4,155
E		4,200		4,200
H		3,055		3,115
K		1,445		1,505
L		5,610		5,605
P		1,340		1,380
Q		490		635

	VH-HD	mm	HD-EW	mm
S		2,850 – 4,050		4,000
U		6,725		6,725
Z		7,600		7,600
N		600		500 600 750
B		3,620 – 4,820		4,630 4,630 4,750
G*		3,885 – 5,085		5,050 5,050 5,050
V		15,750		15,750
W		3,750		3,800
X		19,850		19,850

* Width with access steps

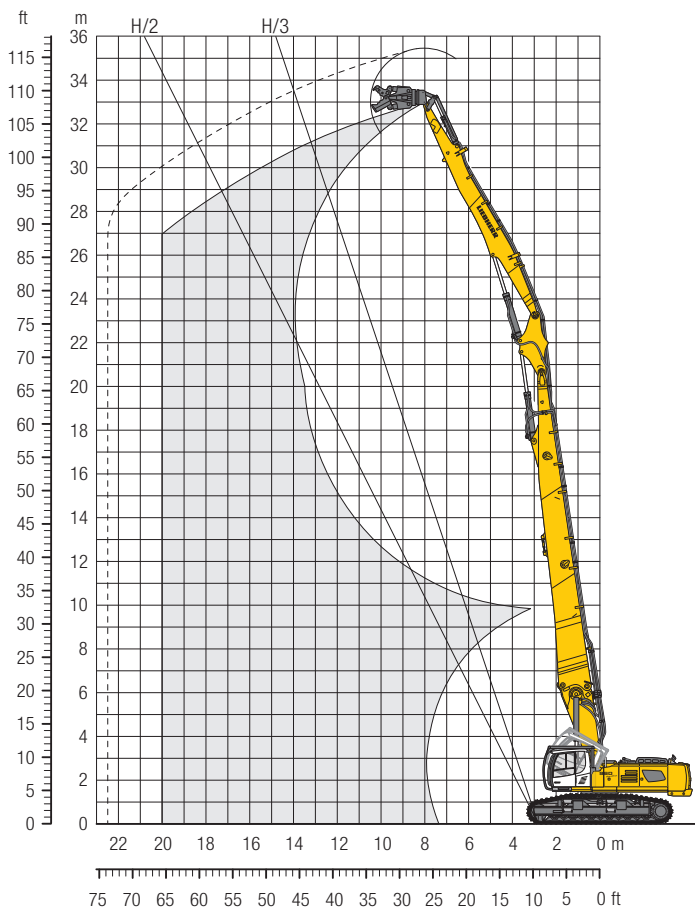


	VH-HD	mm	HD-EW	mm
A		2,985		2,985
A1		3,380		3,380
C		3,600		3,660
D		4,155		4,155
E		4,200		4,200
H		3,055		3,115
K		1,445		1,505
L		5,610		5,605
P		1,340		1,380
Q		490		635
S		2,850 – 4,050		4,000
U		6,725		6,725
Z		7,520		7,520
N		600	500	600 750
B		3,620 – 4,820	4,630	4,630 4,750
G*		3,885 – 5,085	5,050	5,050 5,050

* Width with access steps

	Stick length mm	Main boom 5.50 m mm
V	2.35	9,450
	2.90	9,000
W	2.35	3,950
	2.90	4,050
X	2.35	14,800
	2.90	14,800

Demolition Attachment 33.00 m



Reach Limitation

		14 m	16 m	18 m	20 m
Demolition boom 14.50 m + Intermediate boom + Demolition stick 11.00 m		Tool weight* in t			
VH-HD-Undercarriage	lengthwise	3.50	3.50	3.50	3.50
	transverse	3.50	3.50	3.00	2.50
HD-EW-Undercarriage	lengthwise	3.50	3.50	3.50	3.50
	transverse	3.50	3.50	3.00	2.25

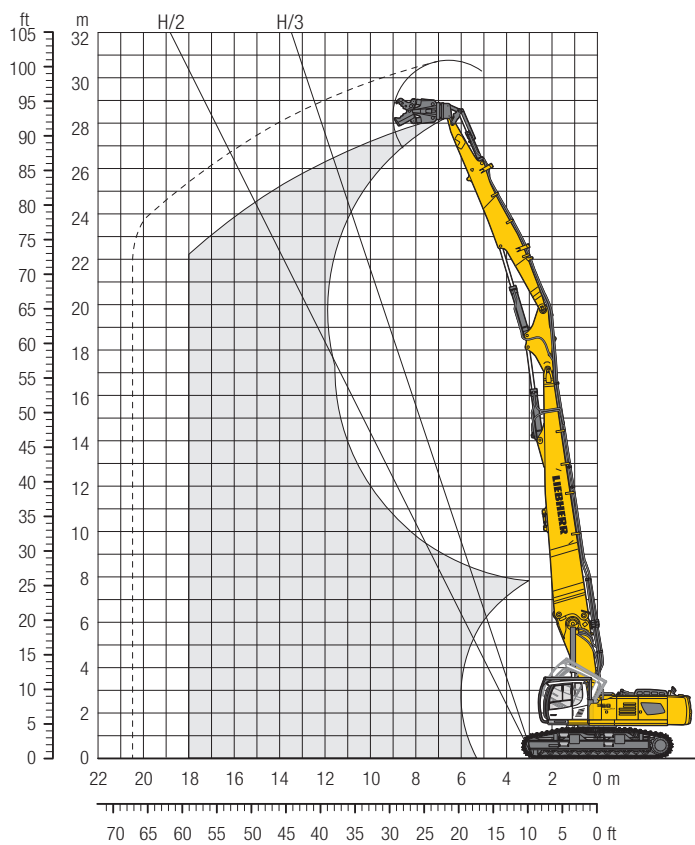
* included quick coupler, adapter plate and tool

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 17.5 t including 4 t removable, demolition boom 14.50 m, intermediate boom 2.60 m, demolition stick 11.00 m and working tool 3.5 t.

Undercarriage		VH-HD	HD-EW
Pad width	mm	600	600
Weight	kg	93,500	88,600
Ground pressure	kg/cm²	1.30	1.23

Demolition Attachment 29.00 m



Reach Limitation

		12 m	14 m	16 m	18 m
Demolition boom 11.00 m + Intermediate boom + Demolition stick 9.50 m		Tool weight* in t			
VH-HD-Undercarriage	lengthwise	3.50	3.50	3.50	3.50
	transverse	3.50	3.50	3.50	2.75
HD-EW-Undercarriage	lengthwise	3.50	3.50	3.50	3.50
	transverse	3.50	3.50	3.50	2.50

* included quick coupler, adapter plate and tool

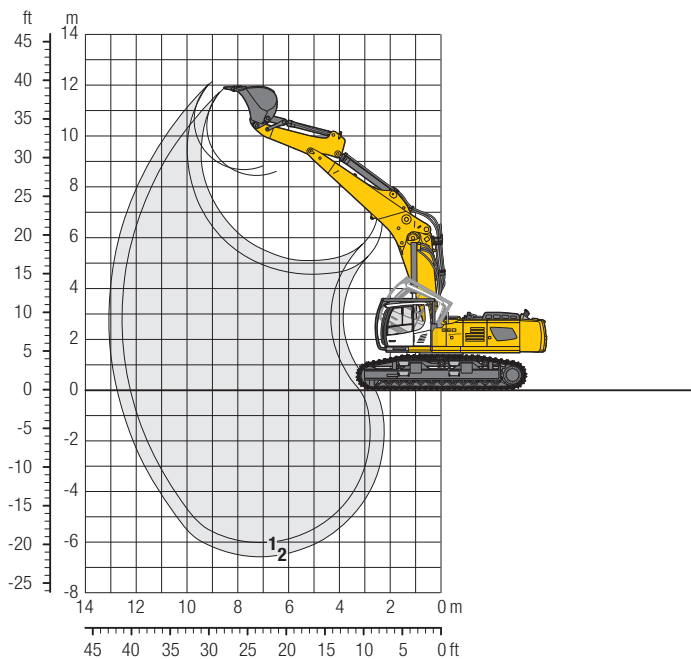
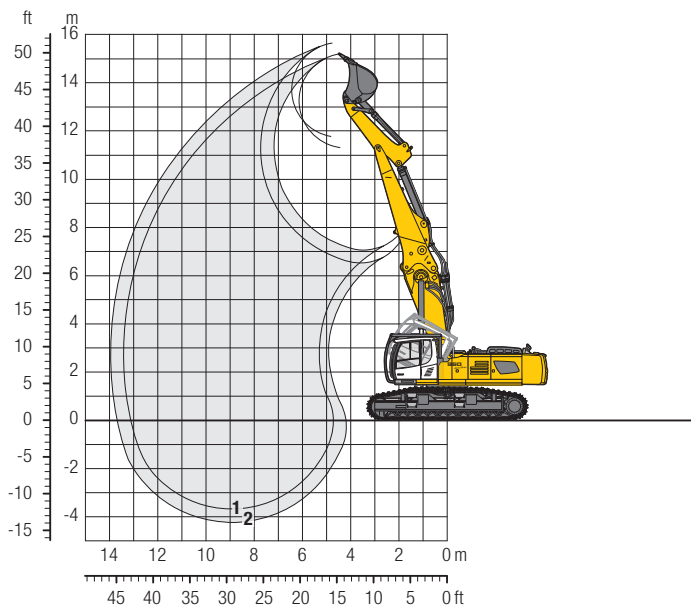
Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 13.5 t, demolition boom 11.00 m, intermediate boom 2.60 m, demolition stick 9.50 m and working tool 3.5 t.

Undercarriage		VH-HD	HD-EW
Pad width	mm	600	600
Weight	kg	87,100	82,200
Ground pressure	kg/cm ²	1.21	1.14

Backhoe Bucket

with Main Boom 5.50 m



Digging Envelope

Main Boom pinned in upper (in lower) bearing

		1	2
Stick length	m	2.35	2.90
Max. digging depth	m	3.70 (6.20)	4.25 (6.75)
Max. reach at ground level	m	13.10 (12.10)	13.65 (12.65)
Max. dumping height	m	11.30 (8.10)	11.80 (8.30)
Max. teeth height	m	15.20 (11.45)	15.65 (11.70)
Digging force SAE	kN/t	233/23.8	206/21.0
Digging force ISO	kN/t	248/25.8	217/22.1
Breakout force SAE	kN/t	269/27.4	269/27.4
Breakout force ISO	kN/t	313/31.9	313/31.9

Max. breakout force ISO

345 kN (35.2 t)

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 13.5 t, main boom 5.50 m, HD stick 2.35 m and HD bucket 2.35 m³ (3,050 kg).

Undercarriage		VH-HD	HD-EW
Pad width	mm	600	600
Weight	kg	82,200	77,300
Ground pressure	kg/cm ²	1.14	1.07

Buckets Machine stability per ISO 10567* (75% of tipping capacity)

				VH-HD-/HD-EW-Undercarriage	
Cutting width	Capacity ISO 7451	Weight		Stick length (m)	
mm	m ³	kg		2.35	2.90
1,550	2.00	2,800	▲		▲
1,750	2.35	3,050	▲		▲
1,950	2.70	3,300	▲		■
2,100	3.00	3,450	■		▲

* Indicated loads are based on ISO 10567 max. stick length, lifted 360° on firm

Max. material weight ▲ = ≤ 2.2 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.5 t/m³

Lift Capacities

with Main Boom 5.50 m (pinned in upper bearing) and Counterweight 13.5 t

Stick 2.35 m

Stick m	Under- carriage	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m	Max. reach m
13.5	VH-HD HD-EW						12.5* 12.5* 12.5* 12.5*
12.0	VH-HD HD-EW		17.4* 17.4* 17.4* 17.4*				12.5* 12.5* 12.5* 12.5*
10.5	VH-HD HD-EW		18.1* 18.1* 18.1* 18.1*	17.3* 17.3* 17.3* 17.3*			10.6* 10.6* 10.6* 10.6*
9.0	VH-HD HD-EW	21.5* 21.5* 21.5* 21.5*	20.5* 20.5* 20.5* 20.5*	19.7* 19.7* 19.7* 19.7*	16.3* 16.3* 16.3* 16.3*		9.6* 9.6* 9.6* 9.6*
7.5	VH-HD HD-EW		28.6* 28.6* 28.6* 28.6*	23.3* 23.3* 23.3* 23.3*	19.3* 20.3* 17.8* 20.3*		9.1* 9.1* 9.1* 9.1*
6.0	VH-HD HD-EW			24.4 25.0* 22.6 25.0*	18.7 17.3 21.1* 13.7	14.9 17.0* 14.3 19.4*	8.9* 8.9* 8.9* 8.9*
4.5	VH-HD HD-EW			23.3 26.7* 21.5 26.7*	18.1 16.7 22.0* 13.4	14.6 19.1* 14.3 19.1*	8.8* 8.8* 8.8* 8.8*
3.0	VH-HD HD-EW			22.6 26.3* 20.7 26.3*	17.7 16.2 22.6* 13.2	14.3 19.3 14.1 19.3*	9.0* 9.0* 9.0* 9.0*
1.5	VH-HD HD-EW			22.3 24.7* 20.4 24.7*	17.4 15.9 22.8* 13.0	14.1 19.3* 14.1 19.3*	9.3* 9.3* 9.3* 9.3*
0	VH-HD HD-EW			22.3 26.4* 20.4 26.4*	17.3 15.8 22.2* 12.9	14.1 18.6* 14.1 18.6*	9.9* 9.9* 9.9* 9.9*
-1.5	VH-HD HD-EW				17.3 20.8* 15.9 20.8*		15.3 18.5* 14.0 18.5*

Stick 2.90 m

Stick m	Under- carriage	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m	Max. reach m
13.5	VH-HD HD-EW						12.5* 12.5* 12.5* 12.5*
12.0	VH-HD HD-EW		14.6* 14.6* 14.6* 14.6*				9.3* 9.3* 9.3* 9.3*
10.5	VH-HD HD-EW		14.2* 14.2* 14.2* 14.2*	14.3* 14.3* 14.3* 14.3*	9.4* 9.4* 9.4* 9.4*		8.1* 8.1* 8.1* 8.1*
9.0	VH-HD HD-EW		15.2* 15.2* 15.2* 15.2*	15.4* 15.4* 15.4* 15.4*	14.3* 14.3* 14.3* 14.3*		7.4* 7.4* 7.4* 7.4*
7.5	VH-HD HD-EW		27.1* 27.1* 27.1* 27.1*	19.6* 19.6* 19.6* 19.6*	16.8* 16.8* 16.8* 16.8*	12.5* 12.5* 12.5* 12.5*	7.0* 7.0* 7.0* 7.0*
6.0	VH-HD HD-EW			24.2* 24.2* 22.9 24.2*	18.9 17.4 20.5* 13.8	15.0 15.9* 15.9* 13.8	6.9* 6.9* 6.9* 6.9*
4.5	VH-HD HD-EW			23.6 26.0* 21.8 26.0*	18.2 16.8 21.5* 13.5	14.6 18.7* 18.7* 13.5	6.8* 6.8* 6.8* 6.8*
3.0	VH-HD HD-EW			22.7 27.3* 20.9 27.3*	17.7 16.3 22.3* 13.1	14.3 19.1* 19.1* 13.1	6.9* 6.9* 6.9* 6.9*
1.5	VH-HD HD-EW			22.3 27.6* 20.4 27.6*	17.3 15.9 22.7* 12.9	14.1 19.2* 19.2* 12.9	7.2* 7.2* 7.2* 7.2*
0	VH-HD HD-EW			22.1 26.9* 20.3 26.9*	17.2 15.7 22.4* 12.8	14.0 18.9* 18.9* 12.8	7.6* 7.6* 7.6* 7.6*
-1.5	VH-HD HD-EW			22.2 25.3* 20.4 25.3*	17.2 15.8 21.3* 12.9	14.0 17.7* 17.7* 12.9	13.4 16.0* 13.4 16.0*

with Main Boom 5.50 m (pinned in lower bearing) and Counterweight 13.5 t

Stick 2.35 m

Stick m	Under- carriage	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m	Max. reach m
10.5	VH-HD HD-EW						9.1* 9.1* 9.1* 9.1*
9.0	VH-HD HD-EW			16.7* 16.7* 16.7* 16.7*			8.5* 8.5* 8.5* 8.5*
7.5	VH-HD HD-EW			17.9* 17.9* 17.9* 17.9*	14.8* 14.8* 14.8* 14.8*		8.7* 8.7* 8.7* 8.7*
6.0	VH-HD HD-EW		24.8* 24.8* 24.8* 24.8*	20.0* 20.0* 20.0* 20.0*	17.8* 17.8* 17.8* 17.8*		8.7* 8.7* 8.7* 8.7*
4.5	VH-HD HD-EW			22.5* 22.5* 22.5* 22.5*	19.1 17.7 19.2* 13.4		8.8* 8.8* 8.8* 8.8*
3.0	VH-HD HD-EW			23.9 25.0* 22.1 25.0*	18.5 17.1 20.7* 11.6*	11.6* 11.6* 11.6* 11.6*	9.2* 9.2* 9.2* 9.2*
1.5	VH-HD HD-EW			23.3 26.8* 21.5 26.8*	18.1 16.7 22.0* 10.2*	10.2* 10.2* 10.2* 10.2*	9.9* 9.9* 9.9* 9.9*
0	VH-HD HD-EW		19.7* 19.7* 19.7* 19.7*	23.0 27.9* 21.2 27.9*	17.9 16.4 22.9* 13.2*		10.9* 10.9* 10.9* 10.9*
-1.5	VH-HD HD-EW		32.3 33.6* 29.7 33.6*	23.0 28.2* 21.1 28.2*	17.8 16.4 23.2* 13.2*		12.7* 12.7* 12.7* 12.7*
-3.0	VH-HD HD-EW		32.6 34.1* 30.0 34.1*	23.2 27.4* 21.3 27.4*			15.8* 15.8* 15.8* 15.8*
-4.5	VH-HD HD-EW						

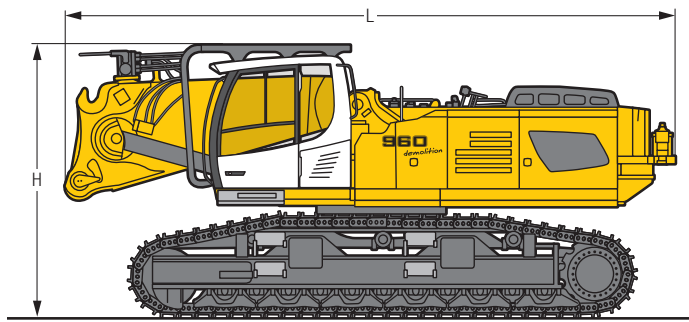
Stick 2.90 m

Stick m	Under- carriage	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m	Max. reach m
10.5	VH-HD HD-EW						7.6* 7.6* 7.6* 7.6*
9.0	VH-HD HD-EW				8.6* 8.6* 8.6* 8.6*		7.0* 7.0* 7.0* 7.0*
7.5	VH-HD HD-EW			16.7* 16.7* 16.7* 16.7*	14.0* 14.0* 14.0* 14.0*		6.7* 6.7* 6.7* 6.7*
6.0	VH-HD HD-EW		22.8* 22.8* 22.8* 22.8*	18.8* 18.8* 18.8* 18.8*	16.8* 16.8* 16.8* 16.8*	8.4* 8.4* 8.4* 8.4*	6.7* 6.7* 6.7* 6.7*
4.5	VH-HD HD-EW		27.9* 27.9* 27.9* 27.9*	21.4* 21.4* 21.4* 21.4*	18.3* 18.3* 18.3* 18.3*	12.8* 12.8* 12.8* 12.8*	6.8* 6.8* 6.8* 6.8*
3.0	VH-HD HD-EW		16.1* 16.1* 16.1* 16.1*	24.0* 24.0* 24.0* 24.0*	18.6 19.9* 19.9* 14.9	15.6* 15.6* 15.6* 15.6*	7.1* 7.1* 7.1* 7.1*
1.5	VH-HD HD-EW		16.0* 16.0* 16.0* 16.0*	23.4 26.1* 21.6 26.1*	18.1 16.7 21.4* 13.5	14.6 16.7* 16.7* 13.5	7.6* 7.6* 7.6* 7.6*
0	VH-HD HD-EW		21.7* 21.7* 21.7* 21.7*	23.0 27.4* 21.2 27.4*	17.8 16.4 22.5* 13.3	13.5* 13.5* 13.5* 13.5*	8.3* 8.3* 8.3* 8.3*
-1.5	VH-HD HD-EW	14.9* 14.9* 14.9* 14.9*	31.1* 31.1* 29.5 31.1*	22.9 28.0* 21.0 28.0*	17.7 16.3 23.0* 16.3		9.5* 9.5* 9.5* 9.5*
-3.0	VH-HD HD-EW	25.3* 25.3* 25.3* 25.3*	32.3 34.8* 29.7 34.8*	23.0 27.7* 21.1 27.7*	17.8 16.4 22.7* 16.4		11.5* 11.5* 11.5* 11.5*
-4.5	VH-HD HD-EW			23.4 25.9* 21.5 25.9*			21.6 24.2* 19.9 24.2*

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

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 825 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity. 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 safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

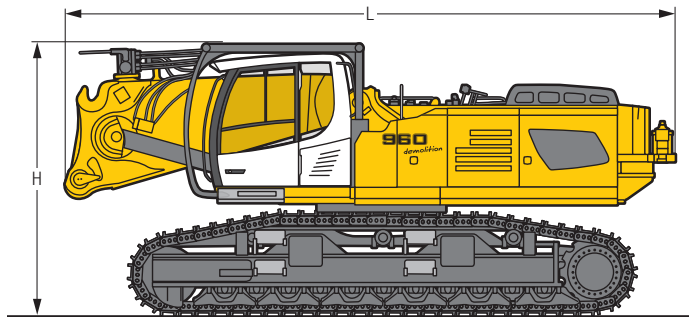
Dimensions and Weights



Basic Machine

without counterweight with cab tiltable 30° and integral protection grid

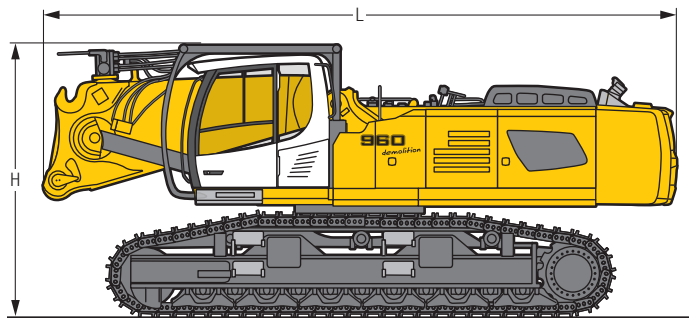
		VH-HD	HD-EW
L	mm	8,100	8,100
H	mm	3,600	3,660
Weight	kg	59,100	54,100



Basic Machine

without counterweight with cab tiltable 30° and integral protection grid on tilting device

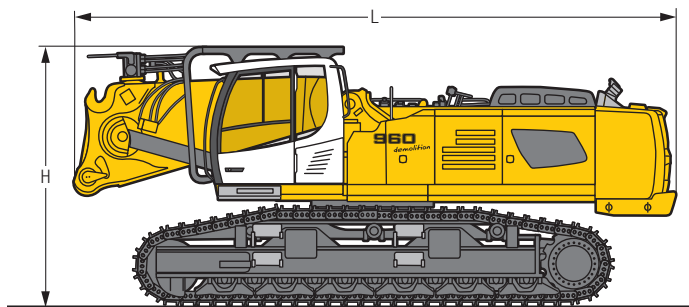
		VH-HD	HD-EW
L	mm	8,100	8,100
H	mm	3,600	3,660
Weight	kg	59,500	54,500



Basic Machine

with counterweight 13.5 t, cab tiltable 30° and integral protection grid on tilting device

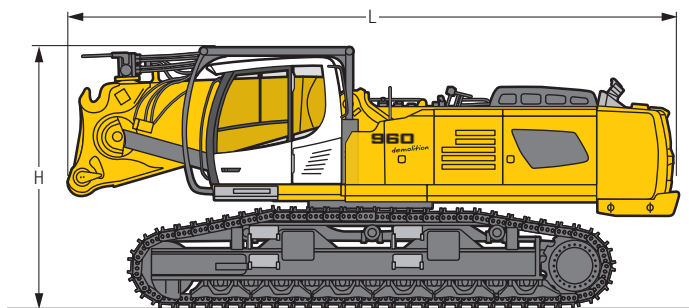
		VH-HD	HD-EW
L	mm	8,400	8,400
H	mm	3,600	3,660
Weight	kg	71,450	66,450



Pelle de base

with counterweight 17.5 t including 4 t removable, cab tiltable 30° and integral protection grid

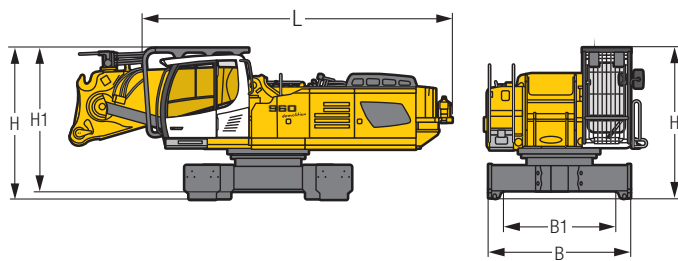
		VH-HD	HD-EW
L	mm	8,450	8,450
H	mm	3,600	3,660
Weight	kg	75,100	70,100



Pelle de base

with counterweight 17.5 t including 4 t removable, cab tiltable 30° and integral protection grid on tilting device

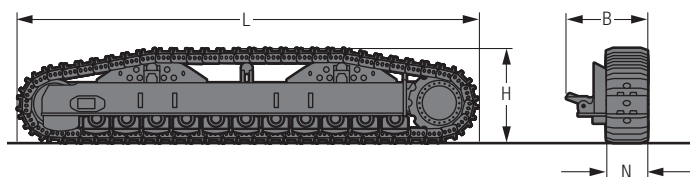
		VH-HD	HD-EW
L	mm	8,450	8,450
H	mm	3,600	3,660
Weight	kg	75,500	70,500



Basic Machine

without side frames

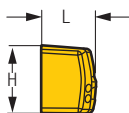
B	mm	3,200
B1	mm	3,035
L Length	mm	6,550
H Height	mm	2,990
H1 Height	mm	2,360
Weight	kg	30,100



Side Frame

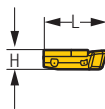
for HD-EW Undercarriage

L Length	mm	6,725		
H Height	mm	1,380		
N	mm	500	600	750
B	mm	1,200	1,200	1,260
Weight	kg	11,200	11,700	12,300



Counterweight

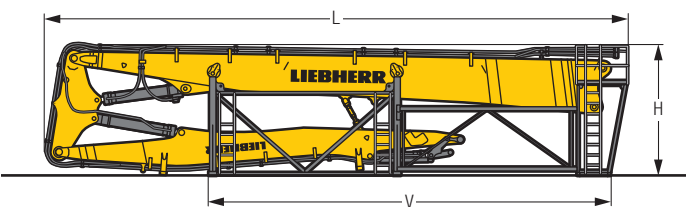
L Length	mm	1,035
H Height	mm	1,290
Width	mm	2,970
Weight	kg	11,760



Additional Counterweight

L Length	mm	1,115
H Height	mm	350
Width	mm	2,990
Weight	kg	4,020

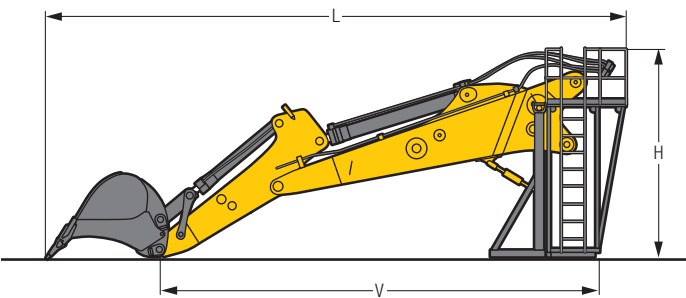
Dimensions and Weights



Demolition Attachment

with storage rack with catwalks

		29 m	33 m
L Length	mm	12,500	16,000
H Height	mm	3,600	3,600
V	mm	8,450	11,050
Width	mm	2,500	2,500
Weight without working tool	kg	15,000	18,050

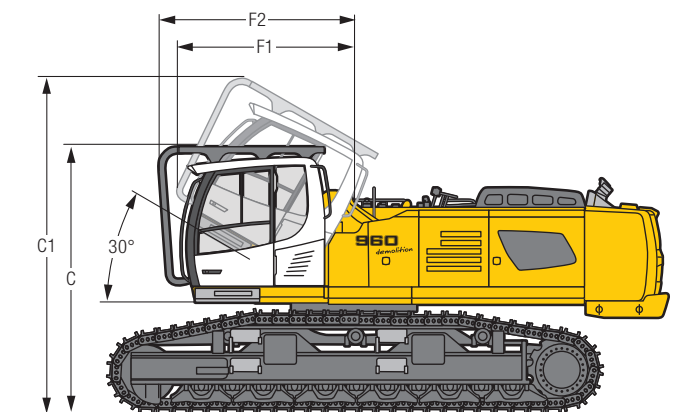


Backhoe Attachment

with storage rack with catwalks

Main boom length	m	5.50	
Stick length	m	2.35	2.90
L Length	mm	9,700	10,300
H Height	mm	3,650	3,650
V	mm	7,850	8,450
Width	mm	2,500	2,500
Weight without bucket	kg	8,760	8,920

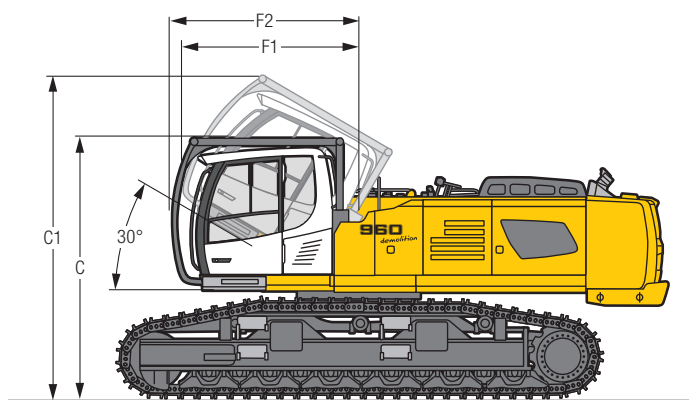
Choice of Cab Elevations



Version

with cab tiltable 30° and integral protection grid

		VH-HD	HD-EW
C	mm	3,600	3,660
C1	mm	4,520	4,580
F1	mm	2,415	2,415
F2	mm	2,650	2,650



Version

with cab tiltable 30° and integral protection grid on tilting device

		VH-HD	HD-EW
C	mm	3,600	3,660
C1	mm	4,440	4,580
F1	mm	2,450	2,415
F2	mm	2,605	2,650

Standard Equipment

Undercarriage

Double-toothed sprockets
Lashing eyelets
Lifetime-lubricated track rollers
Track guide at each track frame
Tracks sealed and greased

Uppercarriage

Engine hood with lift help
Extended tool kit
Fuel tank cap, lockable
Handrails, non slip surfaces
Liebherr full-automatic central lubrication system (except connecting link for bucket kinematics)
Maintenance-free swing brake lock
Rear view monitoring camera
Removable counterweight
Sound insulation
Toolbox lockable

Hydraulic System

Filter with integrated fine filter area
High pressure circuit with Tool Control and LDC
Hydraulic tank shut-off valve and pumps
Liebherr hydraulic oil
Middle pressure circuit
Pressure storage for controlled lowering of equipment with engine turned off
Pressure test ports for hydraulic
Stepless work mode selector

Engine

After-cooled
Common-Rail system injection
Conform with stage IV / Tier 4f emission standard
Dual-stage turbo charger
Fuel filter and water separator
SCR exhaust gas after-treatment system
Sensor controlled automatic engine idling

Operator's Cab

7" colour multifunction display with touchscreen + demolition display for LDC
All tinted windows
Automatic air conditioning
Cigarette lighter and ashtray
Coat hook
Cup holder
Dome light
Door with sliding windows
Emergency exit rear window
Engine oil level visible on display
Fuel consumption indicator
Headlights front under protection (two pieces, Halogen)
Hydro mounts
Impact resistant front window (one piece)
Impact resistant glass panel in roof
Integral front window
Integral front wiper
Integral protection guard
LiDAT Plus (enhanced Liebherr data transfer system)*
Mechanical hour meters, readable from outside the cab
Operator seat Liebherr-Comfort
Polycarbonate windows on right side
Preparation for radio installation
Proportional controls Liebherr
Roll-down sun blind
Roof wiper
Rubber floor mat
Seat belt
Storage bin
Storage space
Wiper/washer

Attachment

Headlights on boom (both-sided, halogen)
Safety check valves hoist cylinder
Standard boom with multicouplers and quick coupler

* optionally extendable after one year

Options

Undercarriage

Chain scrapers
Track guide at each track frame (four pieces)

Uppercarriage

Air compressor
Camera for side area monitoring
Customized colors
Fogging system
Lighting engine compartment
Refuelling pump (electrical)
Reversible fan drive
Rock protection (swing gear and lubrication pipes)
Socket (24 V) for urea filling station
Transport device for the counterweight
Uppercarriage protection
Walkway, foldable (both-sided)
Wiggins diesel fuel

Hydraulic System

Bypass filter
Filter for hammer
Hydraulic for counterweight
Liebherr hydraulic oil, biodegradable
Liebherr hydraulic oil, specially for warm and cold regions
Preheating for hydraulic oil (240 V)

Engine

Air pre-filter with dust trap
Automatic engine shut-down (adjustable time-period)
Liebherr particle filter
Preheating for fuel, coolant or engine oil (240 V)

Operator's Cab

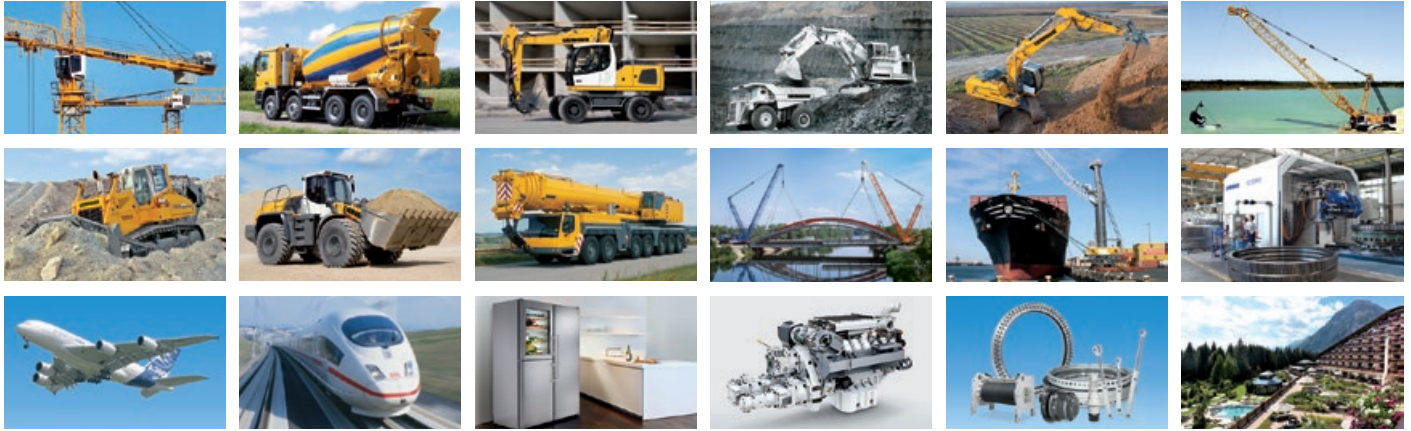
Additional air filtration
Additional headlights rear (Halogen or LED)
Air system for roof window cleaning
Amber beacon
Auxiliary heater (programmable timer)
Electric cool box (12 V)
Electronic drive away lock
Engine shut-down (emergency stop) in cab
Fire extinguisher
Follow me home (headlight cutoff delay)
Footrest
Headlights front under protection (two pieces, LED)
Headlights with adjustable intensity (LED)
Operator seat Liebherr-Premium
Radio Comfort controllable from the display
Seat belt 4 points
Sun visor
Travel alarm system

Attachment

Bottom boom protection for mono boom or stick
Camera for attachment
Headlights on boom (LED)
High pressure circuit for backhoe attachment
Hydraulic or mechanical quick coupler
Liebherr automatic lubrication system for link geometry
Liebherr line of buckets
Liebherr tooth system
LIKUFIX
Middle pressure circuit for backhoe attachment
Overload warning device
Piston rod guard for bucket cylinders for backhoe attachment
Piston rod guard for hoist cylinder
Safety check valves stick cylinder for backhoe attachment
Storage rack with catwalks
Tool Management

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.

The Liebherr Group of Companies



Wide Product Range

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

Exceptional Customer Benefit

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

State-of-the-art Technology

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

Worldwide and Independent

Hans Liebherr founded the Liebherr family company in 1949. Since that time, the enterprise has steadily grown to a group of more than 130 companies with over 41,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

www.liebherr.com

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