

R 950 Litronic

LIEBHERR

Demolition excavator

Generation
6

Operating weight
53,100–77,100 kg

Engine
220 kW / 299 HP
Stage V
Tier 4 Final

Working height
29.00 m
H/2: 25.50 m



Technical data



Engine

Rating per ISO 9249	220kW (299HP) at 1,800RPM
Torque	1,450Nm at 1,100RPM
Model	Liebherr D944 A7-25 (Stage V) or Liebherr D944 A7-24 (Tier 4 Final)
Type	4 cylinder in-line
Bore	130mm
Stroke	150mm
Displacement	7.964l
Engine operation	4-stroke diesel Common-Rail, monoturbo
Exhaust gas treatment	DOC + SCR Filter (Stage V) or SCR (Tier 4 Final)
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	770l
Urea tank	90l
Electrical system	
Voltage	24V
Batteries	2 x 180Ah / 12V
Starter	24V / 7.8kW
Alternator	Three-phase current 28V / 140A
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	
Equipment and swing	Proportional via joystick levers
Travel	– Proportional control via foot pedals or removable levers – Speed pre-selection
Additional functions	Proportional regulation via foot pedals or mini-joystick



Hydraulic system

Hydraulic system	Positive Control hydraulic system. Demand-based, double independent pump flows Features high system dynamics and sensitivity provided by integrated system controlling Independent circuit for rotation
Hydraulic pumps	
For equipment and travel drive	Liebherr, variable displacement, swashplate double pump
Max. flow	2 x 305l/min.
Max. pressure	380bar
For swing drive	Reversible, variable displacement, swashplate pump, closed-loop circuit
Max. flow	205l/min.
Max. pressure	400bar
Pump management	Electronic pump management via the integrated system controlling (CAN-BUS) synchronous to the control block
Hydraulic tank	380l
Hydraulic system	1,150l with demolition equipment
Filtration	1 full flow filter (10µm) in return line with integrated fine filter area (5µm)
Cooling system	Compact cooler, consisting of a water cooler, with hydraulic oil cooler, gearbox oil cooler, fuel cooler and after-cooler cores and hydrostatically driven fan
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	20 pre-adjustable pump flows and pressures for add-on attachments
Attachment system	
Flow	305l/min.
Pressure	380bar
Attachment rotation system	
Flow	30l/min.
Pressure	140bar
Max. pressure	180bar



Swing drive

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



Cab

Cab	Safety cab structure, headlight integrated under the protection, a door with a sliding window (can be opened on both sides), large storing box and several stowing possibilities, shock-absorbing suspension, sound damping insulating, tinted laminated safety glass, separate window shades for the sunroof window and windscreen, cigarette lighter and 12V plug, storage bins, lunchbox, cup holder, polycarbonate windows on right side
Operator's seat	Liebherr-Comfort seat, airsprung with automatic weight adjustment, vertical and longitudinal seat damping including consoles and joysticks. Seat and armrests adjustable separately and in combination, seat heating as standard
Arm consoles	Oscillating consoles with seat, tiltable console left
Operation and displays	Large high-resolution colour display with intuitive operation via touchscreen, video, additional colour display for front and side camera, versatile adjusting, control and monitoring facilities, e.g. climate control, implement and attachment 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
	The air conditioning system contains fluorinated greenhouse gases
Refrigerant	R134a
Global warming potential	1,430
Quantity at 25 °C*	1,260 g
CO ₂ equivalent	1.80 t
Vibration emission**	
Hand / arm vibrations	< 2.5 m/s ² , according with ISO 5349-1:2001
Whole-body vibrations	< 0.5 m/s ²
Measuring inaccuracy	According with standard EN 12096:1997
Noise emission	
ISO 6396	71 dB(A) = L _{PA} (inside cab)
2000/14/EC	105 dB(A) = L _{WA} (surround noise)



Undercarriage

Versions	
VH-HD	Hydraulic variable gauge
LC-V	Mechanical variable gauge
HD	Standard
Drive	Liebherr swashplate motor with integrated brake valve
Transmission	Liebherr compact planetary reduction gear
Maximum travel speed	2.2 km/h low range 3.1 km/h high range
Drawbar pull on crawler	488 kN (VH-HD) 457 kN (LC-V/HD)
Track components	D8L, maintenance-free
Track rollers / Carrier rollers	11 / 3 (VH-HD) 10 / 3 (LC-V) 9 / 2 (HD)
Tracks	Sealed and greased
Track pads	Triple grouser
Holding brake	Wet multi-disc (spring applied, pressure released)



Equipment

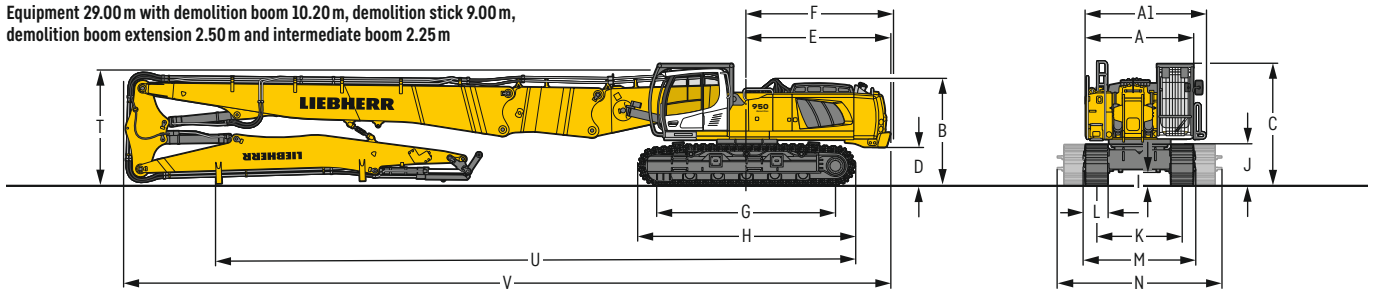
Type	Combination of resistant steel plates and cast steel components
Hydraulic cylinders	Liebherr cylinders with seal and guidance systems
Bearings	Sealed, low maintenance
Lubrication	Automatic central lubrication system (except link and tilt geometry)
Hydraulic connections	Pipes and hoses equipped with SAE split-flange connections
Buckets	Standard equipped with Liebherr tooth system

* Valid for standard machine without operator's cab elevation and without height adjustable cab

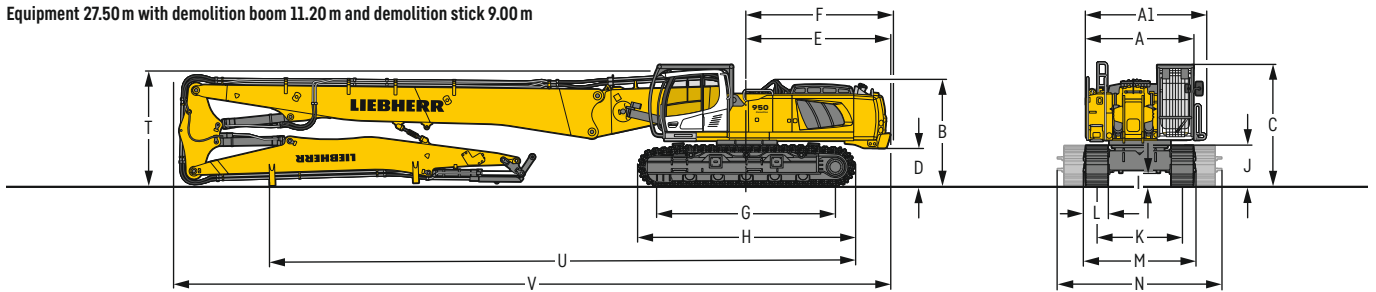
** For the risk assessment according to 2002/44/EC see ISO/TR 25398:2006

Dimensions

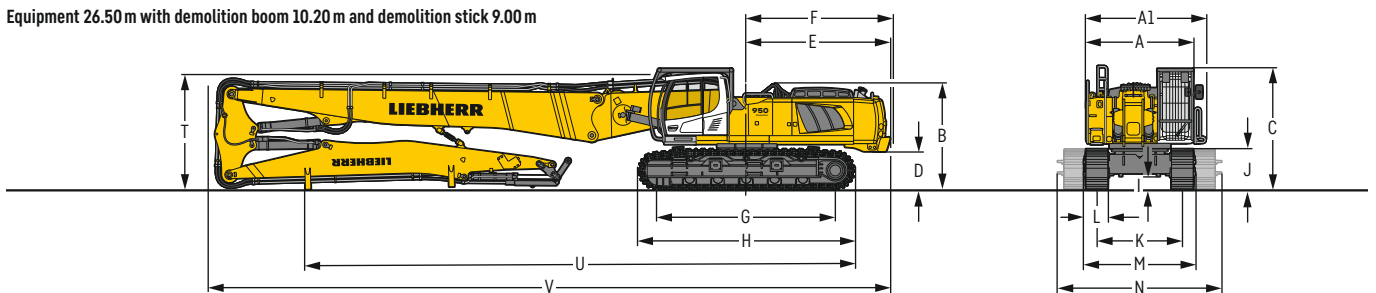
Equipment 29.00 m with demolition boom 10.20 m, demolition stick 9.00 m, demolition boom extension 2.50 m and intermediate boom 2.25 m



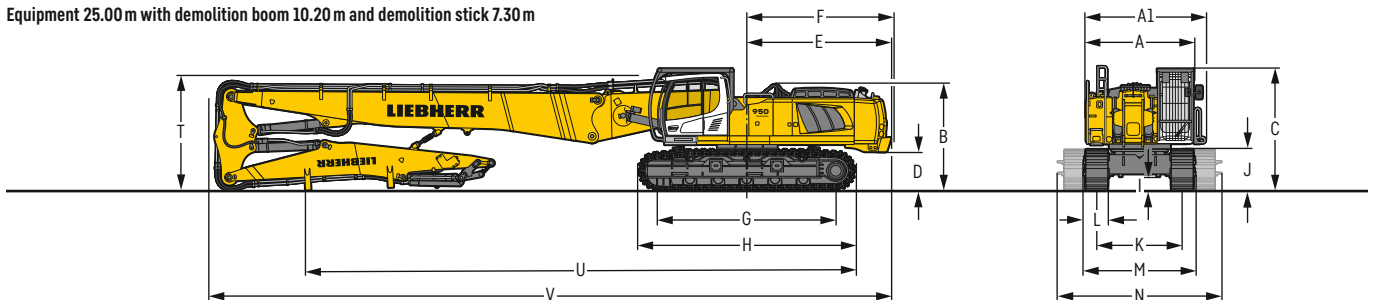
Equipment 27.50 m with demolition boom 11.20 m and demolition stick 9.00 m



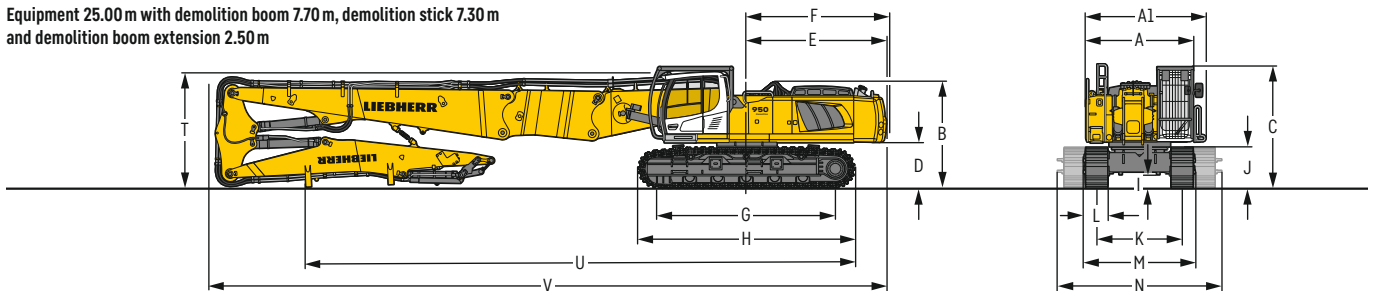
Equipment 26.50 m with demolition boom 10.20 m and demolition stick 9.00 m



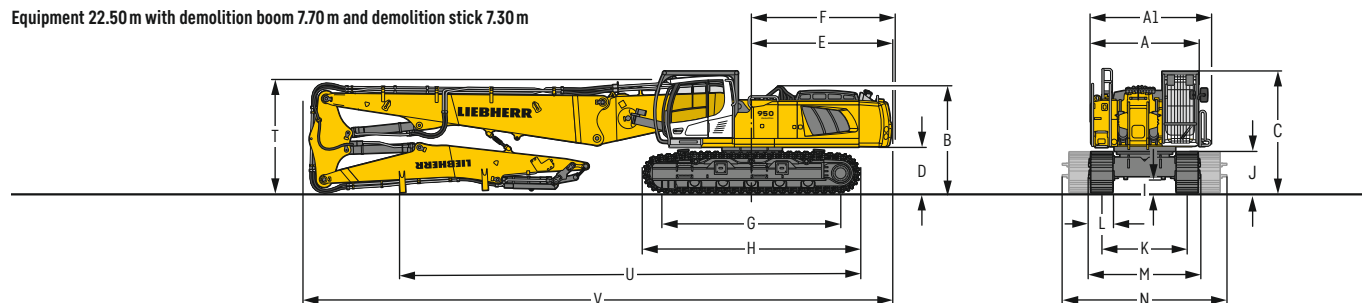
Equipment 25.00 m with demolition boom 10.20 m and demolition stick 7.30 m



Equipment 25.00 m with demolition boom 7.70 m, demolition stick 7.30 m and demolition boom extension 2.50 m



Equipment 22.50 m with demolition boom 7.70 m and demolition stick 7.30 m



		VH-HD	mm	LC-V	mm	HD	mm
A	Uppercarriage width		2,985 ²⁾		2,985 ²⁾		2,985 ²⁾
A1	Uppercarriage width with catwalks		3,325		3,325		3,325
B	Uppercarriage height		2,970		3,180		3,075
C	Cab height		3,395		3,605		3,500
D	Counterweight ground clearance		1,070		1,280		1,175
E	Rear-end length		4,015		4,015		4,015
F	Tail swing radius		4,060		4,060		4,060
G	Wheelbase		4,640		4,500		4,500
H	Undercarriage length		5,700		5,555		5,550
I	Undercarriage ground clearance		350		800		570
J	Track height		1,135		1,175		1,225
K	Track gauge		2,380-3,430 ³⁾		2,390-2,890 ³⁾		2,900
L	Track pad width		600		600		600
M	Width over tracks		2,980-4,030 ³⁾		2,990-3,490 ³⁾		3,500
N	Width over steps		3,365-4,415 ^{1) 3)}		3,200-3,700 ^{1) 3)}		3,715

¹⁾ width with removable steps

²⁾ without door stop device and spacer

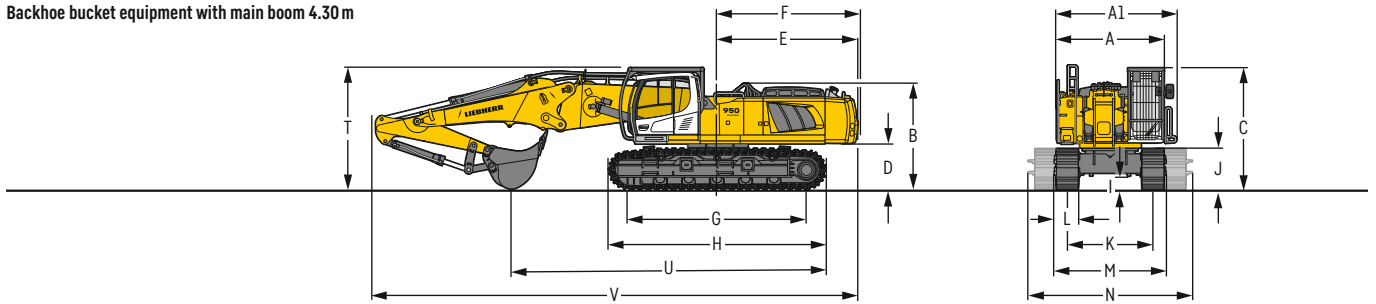
³⁾ work position

		Equipment 29.00 m		Equipment 27.50 m			Equipment 26.50 m		
		mm		mm			mm		
		VH-HD		VH-HD	LC-V	HD	VH-HD	LC-V	HD
T	Boom height	3,200		3,200	3,400	3,300	3,200	3,400	3,300
U	Length on ground	17,450		15,050	15,100	15,100	14,950	15,000	15,000
V	Overall length	21,500		20,000	20,000	20,000	19,000	19,000	19,000

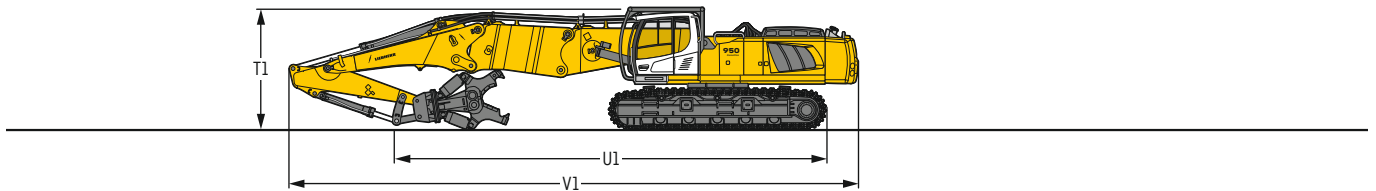
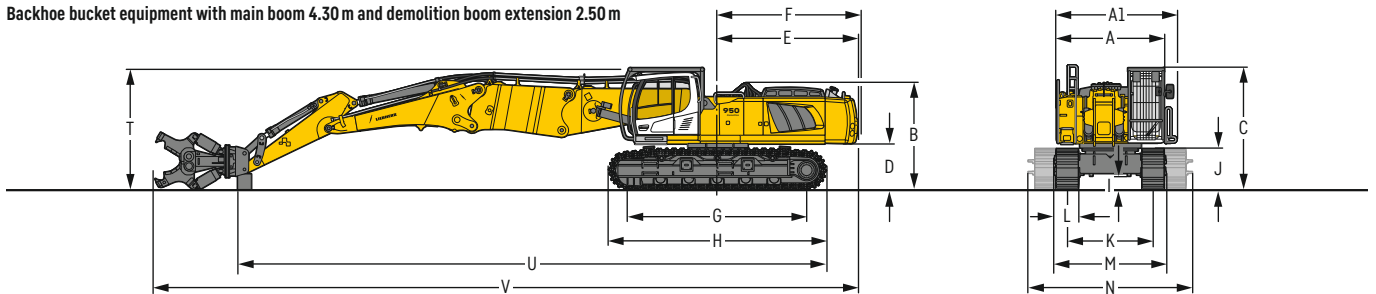
		Equipment 25.00 m with demolition boom 10.20 m			Equipment 25.00 m with demolition boom 7.70 m			Equipment 22.50 m		
		mm			mm			mm		
		VH-HD	LC-V	HD	VH-HD	LC-V	HD	VH-HD	LC-V	HD
T	Boom height	3,200	3,400	3,300	3,200	3,400	3,300	3,200	3,400	3,300
U	Length on ground	12,450	12,500	12,500	14,950	15,000	15,000	12,450	12,500	12,500
V	Overall length	19,000	19,000	19,000	18,900	18,900	18,900	16,400	16,400	16,400

Dimensions

Backhoe bucket equipment with main boom 4.30 m

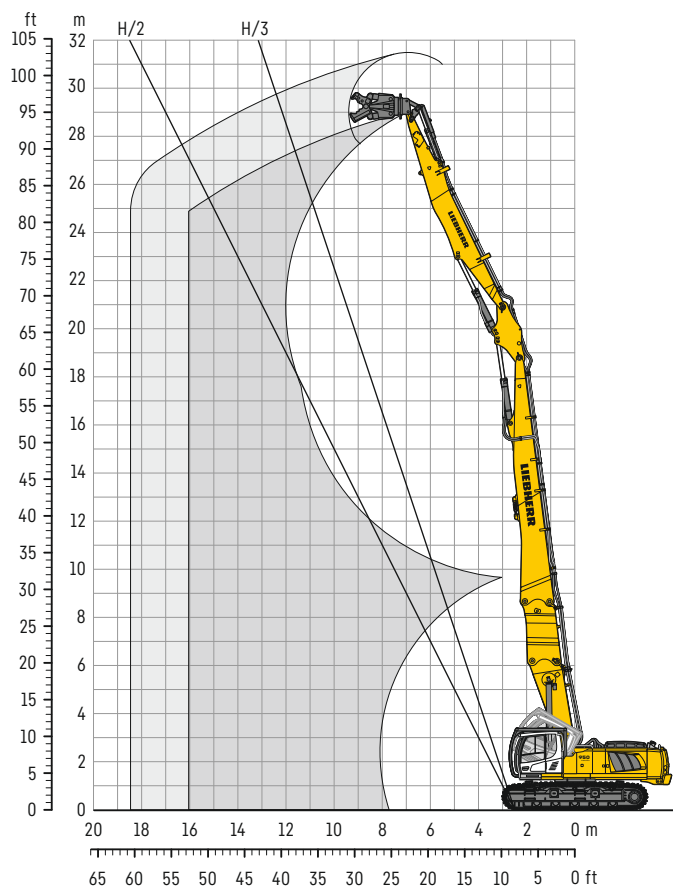


Backhoe bucket equipment with main boom 4.30 m and demolition boom extension 2.50 m



		Stick length m	Backhoe bucket equipment			Backhoe bucket equipment with demolition boom extension		
			VH-HD	mm LC-V	HD	VH-HD	mm LC-V	HD
T	Boom height	2.10	3,400	3,500	3,450	-	-	-
		2.60	3,450	3,550	3,500	3,350	3,450	3,400
T1	Length on ground	2.60	-	-	-	3,350	3,450	3,400
		2.10	8,400	8,450	8,500	-	-	-
U	Overall length	2.60	7,950	7,950	8,050	16,350	16,150	16,200
		2.60	-	-	-	12,000	11,750	11,800
U1	Overall length	2.10	13,500	13,500	13,500	-	-	-
		2.60	13,500	13,500	13,500	19,600	19,600	19,600
V	Overall length	2.10	13,500	13,500	13,500	-	-	-
		2.60	13,500	13,500	13,500	19,600	19,600	19,600
V1	Overall length	2.10	13,500	13,500	13,500	-	-	-
		2.60	-	-	-	16,000	16,000	16,000

Demolition equipment 29.00 m



Reach limitation

		13 m	14 m	16 m	18 m
Demolition boom 10.20 m + Demolition boom extension 2.50 m + Intermediate boom 2.25 m + Demolition stick 9.00 m VH-HD undercarriage		Attachment weight* t			
lengthwise		3.00	3.00	3.00	2.25
transverse		3.00	2.75	2.25	1.75

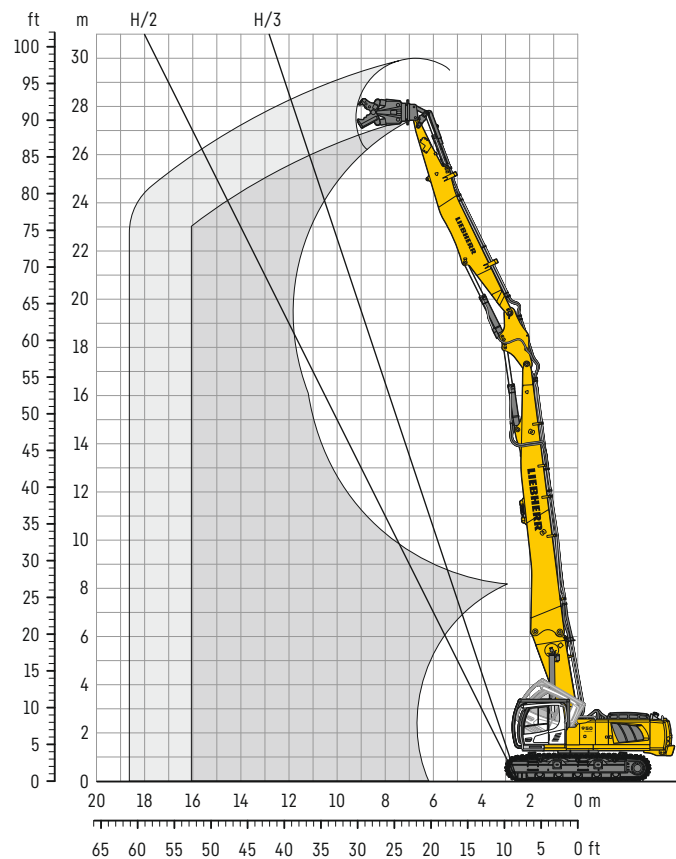
* included quick coupler, adapter plate and attachment

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 13.1t including 3.9t removable, demolition boom 10.20 m, demolition boom extension 2.50 m, intermediate boom 2.25 m, demolition stick 9.00 m and attachment 3.0 t.

Undercarriage	VH-HD	
Pad width	mm	600
Weight	kg	77,100
Ground pressure	kg/cm ²	1.28

Demolition equipment 27.50 m



Reach limitation

		12 m	14 m	16 m
Demolition boom 11.20 m + Intermediate boom 2.25 m + Demolition stick 9.00 m VH-HD undercarriage		Attachment weight* t		
	lengthwise	3.00	3.00	3.00
	transverse	3.00	3.00	2.25
LC-V undercarriage				
	lengthwise	3.00	3.00	2.50
	transverse	3.00	2.00	1.50
HD undercarriage				
	lengthwise	-	-	-
	transverse	-	-	-

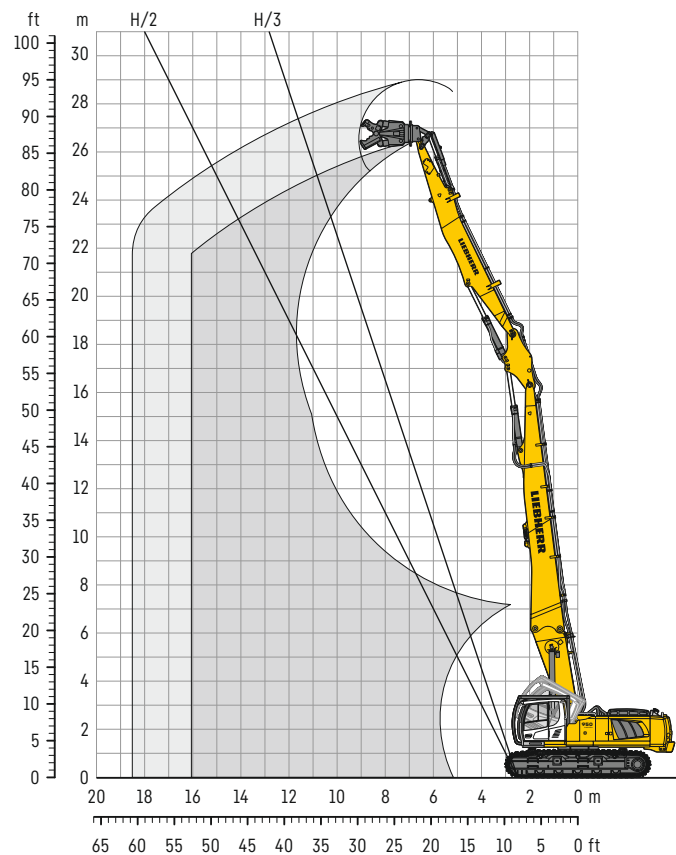
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Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 13.1t including 3.9t removable, demolition boom 11.20 m, intermediate boom 2.25 m, demolition stick 9.00 m and attachment 3.0 t.

Undercarriage		VH-HD	LC-V	HD
Pad width	mm	600	600	600
Weight	kg	75,550	68,050	65,050
Ground pressure	kg/cm²	1.26	1.16	1.11

Demolition equipment 26.50 m



Reach limitation

		12 m	14 m	16 m
		Attachment weight*		
		t		
Demolition boom 10.20 m + Intermediate boom 2.25 m + Demolition stick 9.00 m VH-HD undercarriage	lengthwise	3.00	3.00	3.00
	transverse	3.00	3.00	2.50
LC-V undercarriage	lengthwise	3.00	3.00	2.50
	transverse	3.00	2.00	1.50
HD undercarriage	lengthwise	3.00	3.00	2.25
	transverse	2.75	2.00	-

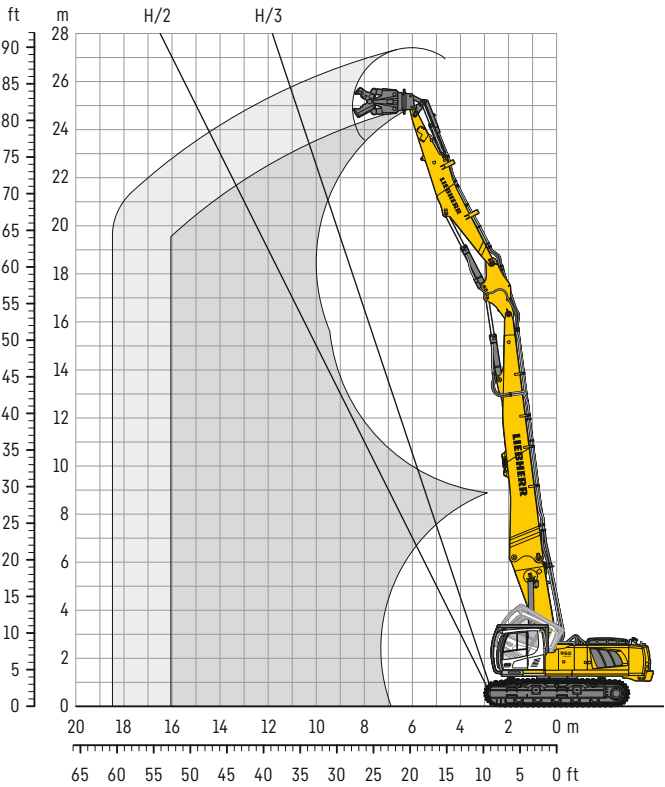
* included quick coupler, adapter plate and attachment

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 13.1t including 3.9t removable, demolition boom 10.20 m, intermediate boom 2.25 m, demolition stick 9.00 m and attachment 3.0 t.

Undercarriage		VH-HD	LC-V	HD
Pad width	mm	600	600	600
Weight	kg	73,900	66,400	63,400
Ground pressure	kg/cm²	1.23	1.14	1.08

Demolition equipment 25.00 m



Reach limitation

		12 m	14 m	16 m
		Attachment weight*		
		t		
Demolition boom 10.20 m + Intermediate boom 2.25 m + Demolition stick 7.30 m VH-HD undercarriage	lengthwise	3.50	3.50	3.50
	transverse	3.50	3.00	2.25
LC-V undercarriage	lengthwise	3.50	3.50	2.75
	transverse	3.00	2.25	1.50
HD undercarriage	lengthwise	3.50	3.50	2.75
	transverse	2.75	2.00	1.50

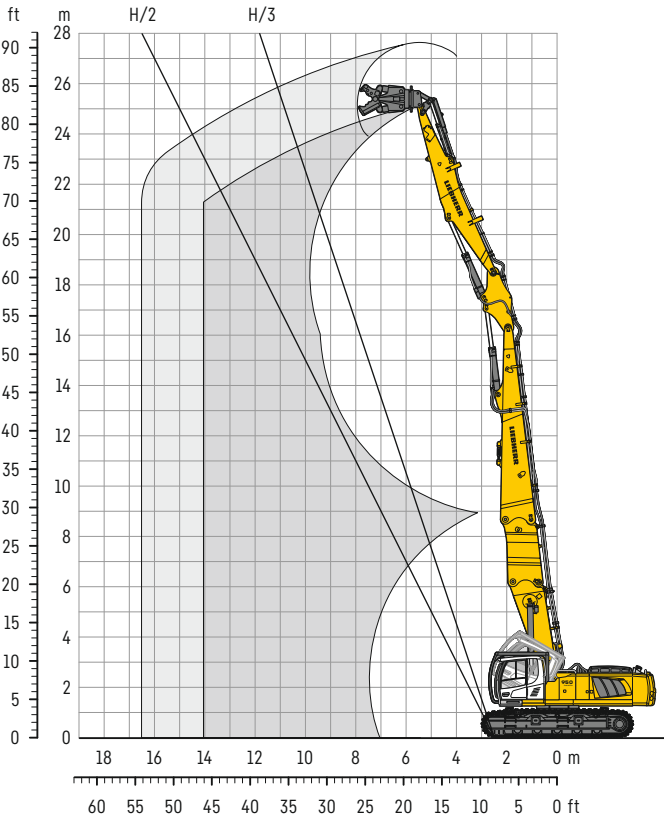
* included quick coupler, adapter plate and attachment

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 13.1t including 3.9t removable, demolition boom 10.20 m, intermediate boom 2.25 m, demolition stick 7.30 m and attachment 3.5 t.

Undercarriage		VH-HD	LC-V	HD
Pad width	mm	600	600	600
Weight	kg	74,100	66,600	63,600
Ground pressure	kg/cm²	1.23	1.14	1.09

Demolition equipment 25.00 m



Reach limitation

		12 m	14 m	16 m
Demolition boom 7.70 m + Demolition boom extension 2.50 m + Intermediate boom 2.25 m + Demolition stick 7.30 m VH-HD undercarriage		Attachment weight* t		
	lengthwise	3.50	3.50	3.25
	transverse	3.50	2.75	2.00
LC-V undercarriage	lengthwise	3.50	3.25	2.25
	transverse	2.25	1.50	-
HD undercarriage	lengthwise	3.50	3.00	2.25
	transverse	2.50	1.75	-

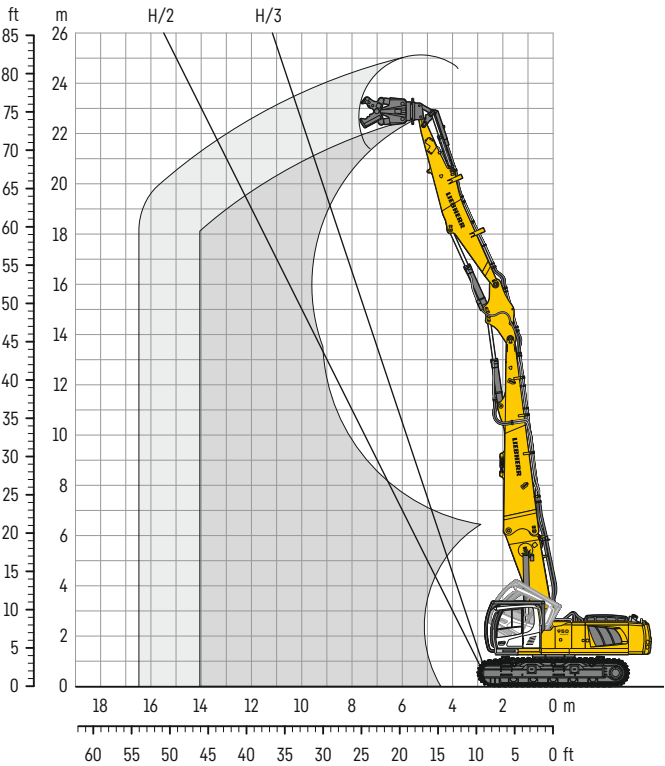
* included quick coupler, adapter plate and attachment

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 13.1t including 3.9t removable, demolition boom 7.70 m, demolition boom extension 2.50 m, intermediate boom 2.25 m, demolition stick 7.30 m and attachment 3.25 t.

Undercarriage		VH-HD	LC-V	HD
Pad width	mm	600	600	600
Weight	kg	75,850	68,350	65,350
Ground pressure	kg/cm ²	1.26	1.17	1.12

Demolition equipment 22.50 m



Reach limitation

		10 m	12 m	14 m
Demolition boom 7.70 m + Intermediate boom 2.25 m + Demolition stick 7.30 m VH-HD undercarriage		Attachment weight* t		
	lengthwise	3.50	3.50	3.50
	transverse	3.50	3.50	2.25
LC-V undercarriage				
	lengthwise	3.50	3.50	2.75
	transverse	3.50	2.50	1.50
HD undercarriage				
	lengthwise	3.50	3.50	2.50
	transverse	3.25	2.50	1.50

* included quick coupler, adapter plate and attachment

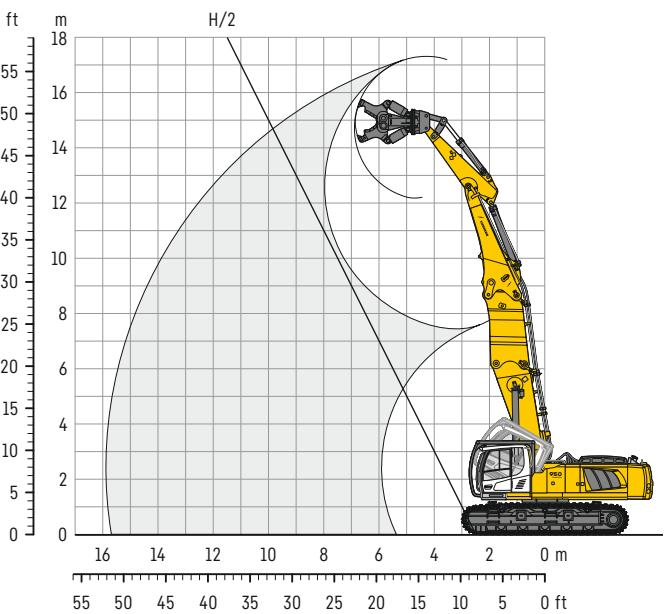
Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 9.2t, demolition boom 7.70 m, intermediate boom 2.25 m, demolition stick 7.30 m and attachment 3.5t.

Undercarriage		VH-HD	LC-V	HD
Pad width	mm	600	600	600
Weight	kg	69,300	61,800	58,800
Ground pressure	kg/cm ²	1.15	1.06	1.00

Backhoe bucket

with main boom 4.30 m and demolition boom extension 2.50 m



Operating weight and ground pressure

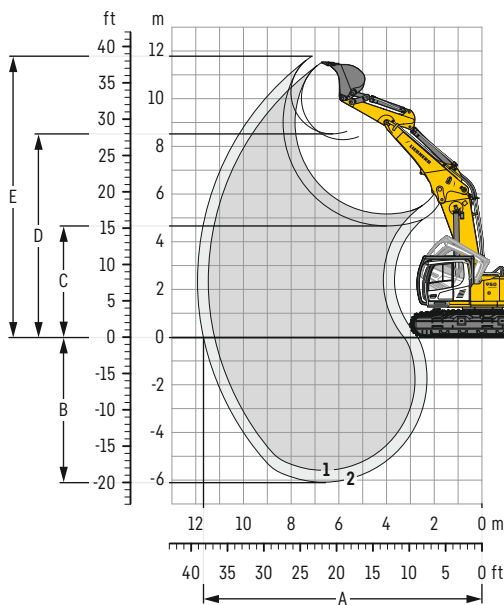
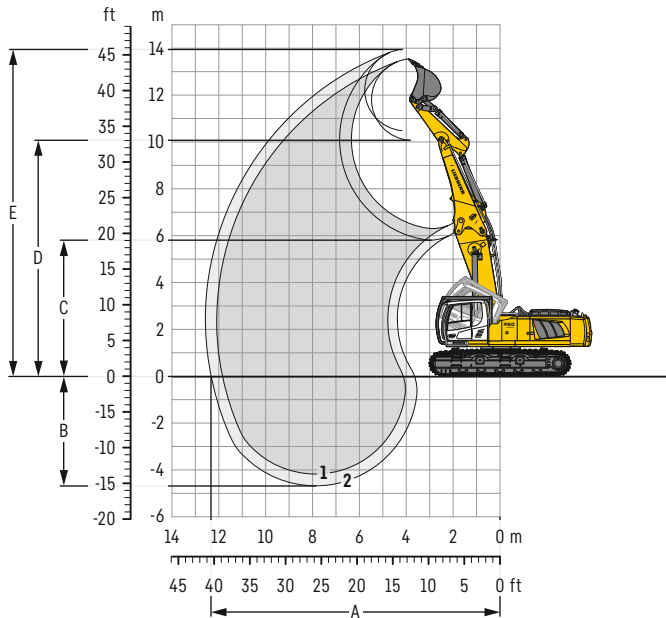
The operating weight includes the basic machine with counterweight 9.2t, main boom 4.30 m, demolition boom extension 2.50 m, HD stick 2.60 m and attachment* 4.5 t.

Undercarriage	VH-HD	LC-V	HD	
Pad width	mm	600	600	600
Weight	kg	69,925	62,425	59,425
Ground pressure	kg/cm²	1.16	1.07	1.01

* included quick coupler, adapter plate and attachment

Backhoe bucket

with main boom 4.30 m



Digging envelope

Main boom pinned in upper (in lower) bearing

		1	2
Stick length	m	2.10	2.60
A Max. reach at ground level	m	11.85 (11.20)	12.35 (11.70)
B Max. digging depth	m	4.20 (5.60)	4.70 (6.10)
C Min. dumping height	m	6.30 (5.15)	5.80 (4.65)
D Max. dumping height	m	10.05 (8.30)	10.50 (8.50)
E Max. cutting height	m	13.55 (11.50)	13.95 (11.80)

Forces

		1	2
Stick digging force (ISO 6015)	kN	229	201
Bucket digging force (ISO 6015)	kN	237	237
Stick digging force (SAE J1179)	kN	218	193
Bucket digging force (SAE J1179)	kN	212	212

Max. bucket digging force ISO

300 kN

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 9.2t, main boom 4.30 m, HD stick 2.10 m and HD bucket 1.25 m³ (1,380 kg).

Undercarriage		VH-HD	LC-V	HD
Pad width	mm	600	600	600
Weight	kg	63,600	56,100	53,100
Ground pressure	kg/cm ²	1.06	0.96	0.91

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

Cutting width mm	Capacity ISO 7451 m ³	Weight kg	VH-HD undercarriage (with track pads 600 mm)		LC-V undercarriage (with track pads 600 mm)		HD undercarriage (with track pads 600 mm)	
			Stick length (m)		Stick length (m)		Stick length (m)	
			2.10	2.60	2.10	2.60	2.10	2.60
1,350	1.50	1,470	▲	▲	▲	▲	▲	▲
1,500	1.75	1,560	▲	▲	▲	▲	▲	▲
1,650	2.00	1,700	▲	▲	▲	▲	▲	▲
1,650	2.25	1,820	▲	▲	▲	▲	▲	■
1,850	2.50	1,990	▲	▲	▲	■	■	■

* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

Max. material weight ▲ = ≤ 2.0t/m³, ■ = ≤ 1.8t/m³, ■ = ≤ 1.5t/m³

Lift capacities

with main boom 4.30 m (pinned in upper bearing), counterweight 9.2 t and track pads 600 mm

Stick 2.10 m

Under-carriage	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m	Max. reach	m
Height							
12.0						12.1*	6.2
10.5						10.4*	7.9
9.0	16.9*	17.6*	14.8*			9.7*	9.0
7.5	28.7*	22.1*	15.2			9.4*	9.7
6.0		21.0	14.5			9.3*	10.1
4.5			13.9			9.0	10.3
3.0			13.6			9.0	10.3
1.5			13.5			9.3	10.0
0			13.6			10.1	9.5
-1.5							
12.0						11.8*	6.2
10.5						10.3*	7.9
9.0	17.1*	17.3	11.9			8.5	9.0
7.5	25.8	16.5	8.6			7.4	9.7
6.0		15.1	10.4			6.8	10.1
4.5			9.9			6.5	10.3
3.0			9.6			6.4	10.3
1.5			9.5			6.7	10.0
0		10.8*	9.7			7.3	9.5
-1.5							
12.0						11.9*	6.2
10.5						10.1	7.9
9.0	17.0*	16.6	11.1			8.1	9.0
7.5	24.9	15.8	8.1			7.0	9.7
6.0		14.5	10.6			6.4	10.1
4.5			9.9			6.1	10.3
3.0			9.4			6.1	10.3
1.5			9.1			6.3	10.0
0		10.2*	9.0			6.9	9.5
-1.5			9.1				

Stick 2.60 m

Under-carriage	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m	Max. reach	m
Height							
12.0	12.9*					12.1*	4.6
10.5		13.6*				9.2*	7.0
9.0		13.9*	13.3*			8.2*	8.5
7.5	17.7*	16.4*	15.4*	11.9		7.6*	9.5
6.0		21.4	15.3	11.6		7.4*	10.2
4.5		19.9	14.6	11.3	9.0	7.4*	10.6
3.0			14.0	10.9	8.8	7.5*	10.8
1.5			13.6	10.7	8.7	7.8*	10.8
0		13.9*	13.4	10.5	8.7	8.3*	10.5
-1.5		18.6	13.5	10.6		9.2*	10.1
12.0	14.0*					11.6*	4.6
10.5		13.7*				9.1*	7.0
9.0		14.0*	12.2			8.1*	8.5
7.5	19.6*	16.8	11.8	8.8		7.6*	9.5
6.0		15.5	11.2	8.5		6.8	10.2
4.5		14.1	10.6	8.2	6.5	6.3	10.6
3.0			10.0	7.8	6.3	6.0	10.8
1.5			9.6	7.6	6.2	6.0	10.8
0		12.9	9.5	7.5	6.2	6.2	10.5
-1.5		13.0	9.5	7.5		6.7	10.1
12.0	13.7*					11.8*	4.6
10.5		13.6*				9.2*	7.0
9.0		14.0*	11.6			8.1*	8.5
7.5	18.7*	16.2	11.3	8.3		7.4	9.5
6.0		14.9	10.7	8.1		6.5	10.2
4.5		13.5	10.1	7.8	6.1	6.0	10.6
3.0			9.5	7.4	6.0	5.7	10.8
1.5			9.1	7.2	5.9	5.7	10.8
0		12.2	8.9	7.1	5.9	5.9	10.5
-1.5		12.3	9.0	7.1		6.3	10.1

with main boom 4.30 m (pinned in upper bearing), counterweight 9.2 t and track pads 600 mm

Stick 2.10 m

Under-carriage	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m	Max. reach	m
Height							
9.0						10.0*	7.0
7.5						9.4*	8.2
6.0		18.5*	16.3			9.3*	9.0
4.5		20.8*	15.8	9.8*		9.5*	9.5
3.0		20.7	15.1	11.6		9.9*	9.7
1.5		18.2*	14.5	11.3		10.0	9.7
0		16.9*	14.0	11.0		10.3	9.4
-1.5		18.8	13.8	10.9		11.1	8.9
-3.0		18.9	13.8	12.9		12.9	8.0
9.0		19.2	17.6*			9.9*	7.0
7.5						9.4*	8.2
6.0		17.5	12.2			8.6	9.0
4.5		16.3	11.7	8.8		7.7	9.5
3.0		14.8	10.4	8.5		7.3	9.7
1.5		13.7	10.4	8.2		7.2	9.7
0		13.3	10.0	7.9		7.4	9.4
-1.5		13.2	9.8	7.8		8.1	8.9
-3.0		13.3	9.8	9.5		9.5	8.0
9.0		13.6	10.1			9.9*	7.0
7.5						9.4*	8.2
6.0		16.8	11.7			8.2	9.0
4.5		15.6	11.2	8.3		7.4	9.5
3.0		14.2	10.6	8.1		6.9	9.7
1.5		13.1	9.9	7.8		6.8	9.7
0		12.6	9.5	7.5		7.0	9.4
-1.5		12.5	9.3	7.4		7.6	8.9
-3.0		12.6	9.3	8.9		8.9	8.0

Stick 2.60 m

Under-carriage	4.5 m	6.0 m	7.5 m	9.0 m	10.5 m	Max. reach	m
Height							
9.0						9.3*	7.7
7.5						14.2*	8.8
6.0	26.1*	19.7*	16.1	12.1		7.8*	9.5
4.5		21.1	15.3	11.7		7.5*	10.0
3.0		19.8	14.6	11.3		7.8*	10.2
1.5		19.0	14.1	11.0		8.4*	10.1
0		18.8	13.8	10.8		9.3*	9.9
-1.5	16.2*	18.8	13.7	10.8		10.3	9.4
-3.0	27.3*	19.0	13.8			11.7	8.6
9.0						9.8*	7.7
7.5		16.9*	12.5			7.4*	8.8
6.0	25.6	16.7	11.9	8.9		7.4*	9.5
4.5		15.3	11.2	8.6		7.2	10.0
3.0		14.0	10.6	8.2		6.8	10.2
1.5		13.4	10.1	7.9		6.7	10.1
0		13.2	9.8	7.7		6.9	9.9
-1.5	17.2*	13.2	9.7	7.7		7.4	9.4
-3.0		13.4	9.9			8.5	8.6
9.0						9.8*	7.7
7.5		16.7*	11.9			7.4*	8.8
6.0	24.7	16.0	11.4	8.5		7.4*	9.5
4.5		14.6	10.7	8.2		6.9	10.0
3.0		13.4	10.1	7.8		6.5	10.2
1.5		12.7	9.5	7.5		6.4	10.1
0		12.5	9.3	7.3		6.5	9.9
-1.5	16.8*	12.5	9.2	7.3		7.0	9.4
-3.0	19.9	12.7	9.3			8.0	8.6

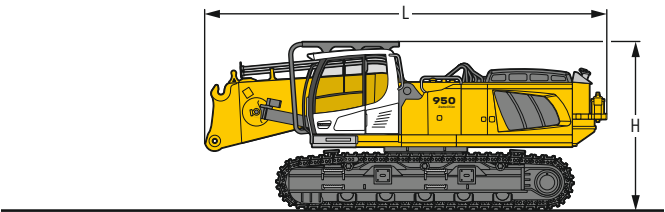
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach * Limited by hydr. capacity

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 625 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.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

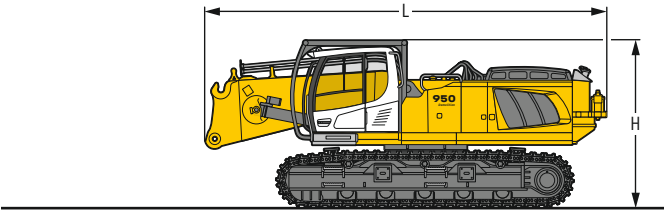
Dimensions and weights



Basic machine

without counterweight with cab tiltable 30° and integral protection grid

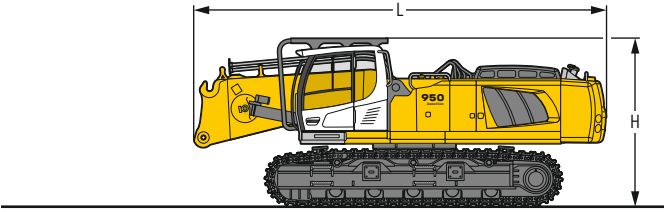
		VH-HD	LC-V	HD
L	mm	8,150	8,150	8,150
H	mm	3,395	3,605	3,500
Weight	kg	48,100	40,600	37,600



Basic machine

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

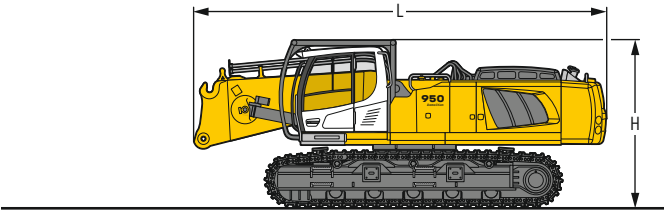
		VH-HD	LC-V	HD
L	mm	8,150	8,150	8,150
H	mm	3,395	3,605	3,500
Weight	kg	48,500	41,000	38,000



Basic machine

with counterweight 9.2t, cab tiltable 30° and integral protection grid

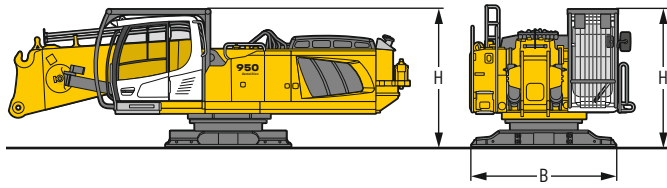
		VH-HD	LC-V	HD
L	mm	8,400	8,400	8,400
H	mm	3,395	3,605	3,500
Weight	kg	56,000	48,500	45,500



Basic machine

with counterweight 9.2t, cab tiltable 30° and integral protection grid on tilting device

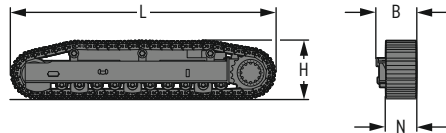
		VH-HD	LC-V	HD
L	mm	8,400	8,400	8,400
H	mm	3,395	3,605	3,500
Weight	kg	56,400	48,900	45,900



Basic machine

without side frames

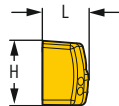
B	mm	2,995
H Height	mm	2,810
Weight	kg	26,100



Side frame

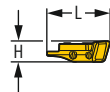
for LC-V undercarriage

L Length	mm	5,555
H Height	mm	1,175
N	mm	600
B	mm	795
Weight	kg	7,400



Counterweight

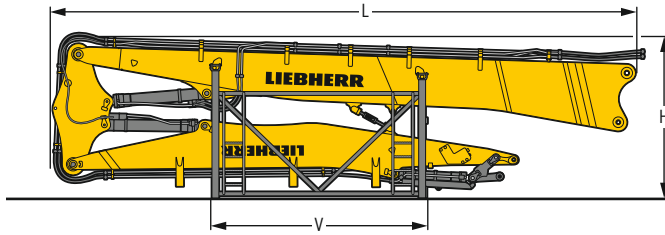
L Length	mm	910
H Height	mm	1,290
Width	mm	2,970
Weight	kg	7,900



Additional counterweight

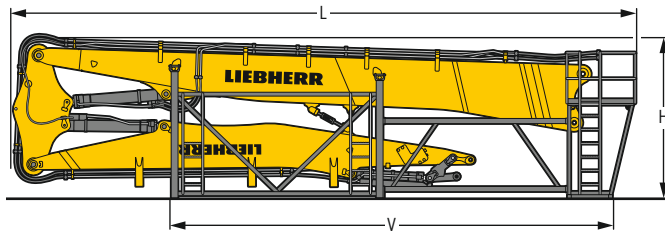
L Length	mm	1,260
H Height	mm	400
Width	mm	2,990
Weight	kg	3,900

Dimensions and weights



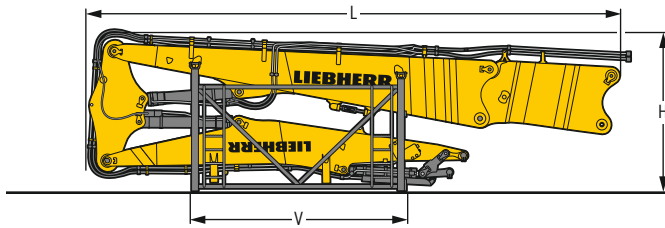
Demolition equipment with storage rack

		22.50m	25.00m	26.50m	27.50m	
L	Length	mm	8,450	10,950	10,920	11,930
H	Height	mm	3,300	3,300	3,300	3,300
V		mm	4,450	4,450	4,445	4,445
	Width	mm	2,200	2,200	2,200	2,200
Weight without attachment		kg	10,100	11,200	11,400	13,050



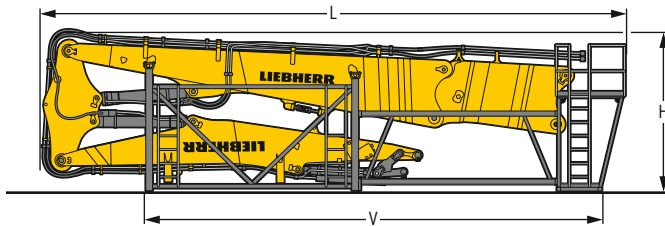
Demolition equipment with storage rack with catwalks

		22.50m	25.00m	26.50m	27.50m	
L	Length	mm	9,500	11,850	11,830	12,840
H	Height	mm	3,300	3,300	3,300	3,300
V		mm	6,200	9,150	4,445	4,445
	Width	mm	2,500	2,500	2,485	2,485
Weight without attachment		kg	10,700	12,000	12,200	13,850



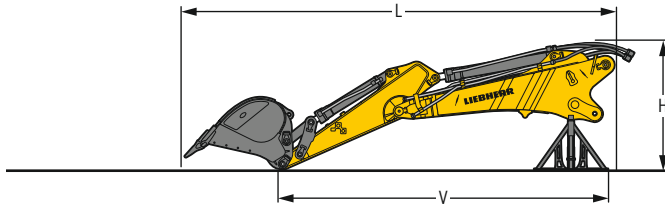
Demolition equipment with demolition boom extension with storage rack

			25.00 m	29.00 m
L	Length	mm	10,950	13,450
H	Height	mm	3,250	3,300
V		mm	4,450	7,700
	Width	mm	2,200	2,200
	Weight without attachment	kg	13,190	14,450



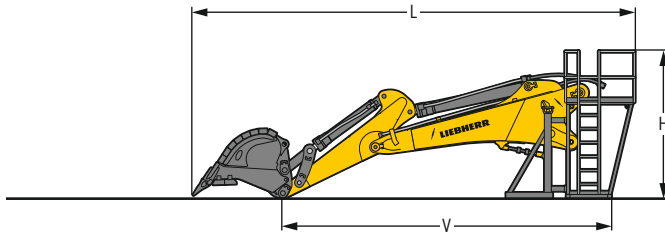
Demolition equipment with demolition boom extension with storage rack with catwalks

			25.00 m	29.00 m
L	Length	mm	12,000	14,100
H	Height	mm	3,250	3,300
V		mm	8,700	10,350
	Width	mm	2,500	2,500
	Weight without attachment	kg	14,110	15,550



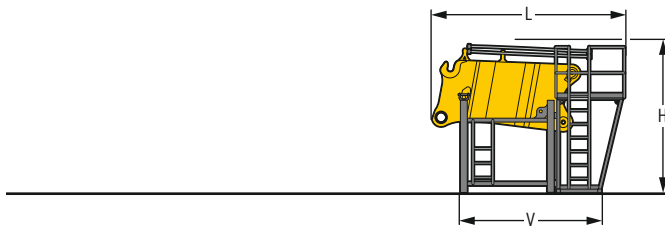
Backhoe equipment with storage rack

Main boom length	m	4.30
Stick length	m	2.10 2.60
L Length	mm	8,400 8,900
H Height	mm	2,600 2,600
V	mm	6,100 6,600
Width	mm	1,800 1,800
Weight without bucket	kg	6,050 6,150



Backhoe equipment with storage rack with catwalks

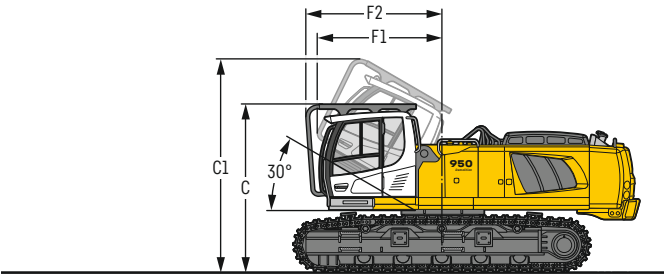
Main boom length	m	4.30
Stick length	m	2.10 2.60
L Length	mm	9,000 9,520
H Height	mm	3,020 3,020
V	mm	6,700 7,220
Width	mm	2,500 2,500
Weight without bucket	kg	6,185 6,300



Demolition boom extension with storage rack with catwalks

L Length	mm	3,950
H Height	mm	3,150
V	mm	2,925
Width	mm	2,485
Weight	kg	4,160

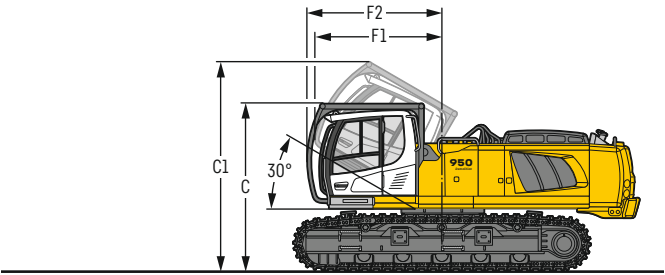
Choice of cab elevations



Version

with cab tilttable 30° and integral protection grid

		VH-HD	LC-V	HD
C	mm	3,395	3,605	3,500
C1	mm	4,240	4,450	4,345
F1	mm	2,540	2,540	2,540
F2	mm	2,770	2,770	2,770



Version

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

		VH-HD	LC-V	HD
C	mm	3,395	3,605	3,500
C1	mm	4,240	4,450	4,345
F1	mm	2,570	2,570	2,570
F2	mm	2,730	2,730	2,730

Serial equipment



Undercarriage

Lashing eyes
Sprocket double-toothed
Track rollers, lifetime-lubricated



Uppercarriage

Anti-skid surfaces
Automatic swing brake lock
Centralised lubrication system (automatic)
Engine hood with gas spring opening
Handrails
Lockable fuel tank cap
Lockable tool box
Removable counterweight
Sound insulation



Hydraulic system

Filter with integrated fine filters
High pressure circuit with Tool Control and LDC
Hydraulic pressure measuring ports
Medium pressure circuit
Pressure accumulator for controlled lowering of equipment with engine turned off
Shut-off valve between hydraulic tank and pumps



Engine

Air filter with automatic dust ejector
Automatic engine idling / speed increase, controlled via joystick sensors
Common-Rail injection system
Exhaust gas after-treatment system – DOC + SCR
Fixed geometry turbocharger
Fuel pre-filter and water separator
Intercooler
Power Pack EU Stage V



Cab

7" multifunction colour touchscreen + demolition display for LDC
Air conditioning, automatic, tri-zone, controlled via display
Bottle holder
Cab door sliding windows
Cigarette lighter
Coat hook
DEF level on touchscreen
Engine oil level on touchscreen
Fuel level on touchscreen
Hydraulic oil level on touchscreen
Impact resistant one-piece windscreen
Impact resistant roof window
Integral front wiper and washer
Integral protection guard
Interior lighting
Left hand side view monitoring camera
LiDAT Plus (Liebherr data transfer system)*
Mechanical hour meter, visible from ground level
Rear view monitoring camera
Rear window emergency exit
Right hand side view monitoring camera
Roll-down sun blinds for windscreen and roof window
Roof wiper and washer
Rubber floor mat, fixed on floor and removable
Storage spaces
Visco-elastic damping
Work mode selector



Equipment

Pipe fracture safety valves for boom cylinders
Standard boom with quick change coupling

* optionally extendable after one year

Equipment standard / option

Undercarriage

Chain guide 1 piece	●
Chain guide 4 pieces	+
Chain guide full length	+
Chain scrapers	+
Special painting	+
Steps	●
Steps wide	+
Tracks, sealed and greased	●
Undercarriage HD	+
Undercarriage LC-V	+
Undercarriage VH-HD	+

Uppercarriage

Air compressor	+
Boxing ring	+
Catwalks tiltable left and right	+
Electric socket on uppercarriage (24 V)	+
Extended tool set including tool box	+
Fogging system	+
Headlight on uppercarriage, front right, LED, 1 piece, protection included	● ¹⁾
Headlight on uppercarriage, front right, LED+, 1 piece, protection included	+ ¹⁾
Headlight on uppercarriage, lateral left, LED+, 1 piece	+ ¹⁾
Headlights on uppercarriage, rear, LED+, 2 pieces	+ ¹⁾
Lighting for tank area	+ ¹⁾
Lighting for uppercarriage access	+ ¹⁾
Radiator fine mesh protection grid	+
Reversible fan drive	+
Rock protection (swing gear and lubrication pipes)	+
Special painting	+
Tank refilling pump fuel	+
Tool set including storage case	●
Transport device for the counterweight	+
Uppercarriage bottom and side protection	+

Hydraulic system

Bypass filter for hydraulic oil	+
Filter for hydraulic hammer return flow	+
High flow	+
Hydraulic for counterweight	+
Liebherr hydraulic oil	●
Liebherr hydraulic oil, adapted for extreme climate conditions	+
Liebherr hydraulic oil, biodegradable	+
Pre-heating system for hydraulic oil (240V)	+

Engine

Automatic engine shutdown after idling	+
Pre-heating system for fuel, coolant and engine oil (240 V)	+

Cab

2" seat belt with retractor	●
3" seat belt with retractor, orange colour	+
4-points seat belt	+
Acoustic travel alarm deactivatable	+
Additional air filtration	+
Air system for roof window cleaning	+
Auxiliary heater programmable	+
Coming / Leaving Home with lighting for cabin access	+
Cool box (12 V)	+
Dark tinted windows	+
Electrically adjustable and heated outside rear-view mirrors	+
Electronic immobiliser	+
Emergency stop in cab	+
Fire extinguisher	+
Footrest	+
Headlights on cab, front, LED, 2 pieces	● ¹⁾
Headlights on cab, front, LED+, 2 pieces	+ ¹⁾
Luminosity control (LED+ headlights)	+ ¹⁾
Operator seat Comfort	●
Operator seat Premium	+
Radio Comfort	+
Radio pre-installation	●
Rotating beacon on cabin, LED, 1 piece	+
Sun visor	+

Equipment

Boom bottom protection	+
Boom cylinders rod protection	+
Bucket cylinder rod protection for backhoe equipment	+
Camera for equipment	+
Centralised lubrication extended for connecting link for backhoe equipment	+
Fogging system for backhoe equipment	+
Fogging system for demolition equipment	+
Headlight on boom, on each side, LED, 1 piece, protection included	● ¹⁾
Headlight on boom, on each side, LED+, 1 piece, protection included	+ ¹⁾
Headlights on equipment, LED, 4 pieces, protections included	●
Headlights on equipment, LED+, 4 pieces, protections included	+
High pressure circuit for backhoe equipment	+
Medium pressure circuit for backhoe equipment	+
Overload warning system	+
Pipe fracture safety valve for stick cylinder for backhoe equipment	+
Quick coupler for standard boom	+
Quick coupler SWA 66 hydraulic	+
Quick coupler SWA 66 mechanical	+
Solidlink for quick coupler SWA 66 hydraulic	+
Standard boom with multicouplers for demolition boom and backhoe equipment	+
Stick bottom protection	+
Storage rack with catwalks	+
Tool Management	+

● = Standard, + = Option

¹⁾ Equipment not individually available, but only as predefined packages

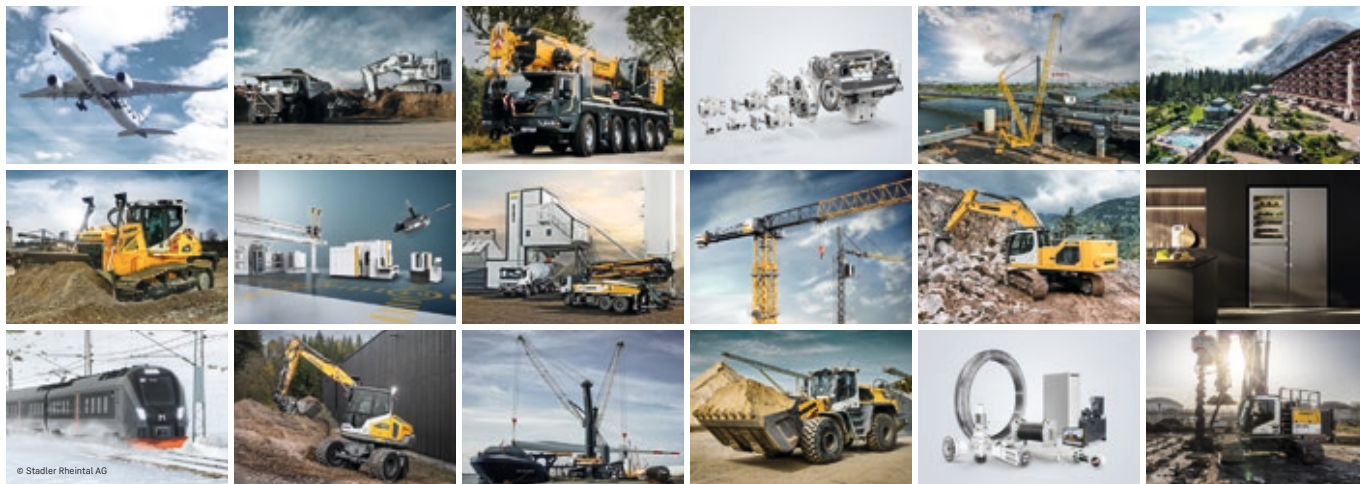
Non-exhaustive list, please contact us for further information.

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

Notes

[illegible]

The Liebherr Group



Global and independent: more than 75 years of success

Liebherr was founded in 1949 when, with the development of the world's first mobile tower crane, Hans Liebherr laid the foundations for a family-run company which now has more than 50,000 employees and comprises over 150 companies across every continent. The holding company of the Group is Liebherr-International AG in Bulle, Switzerland, whose shareholders are exclusively members of the Liebherr family.

Technology leadership and pioneering spirit

Liebherr is a pioneer and its forward-looking approach has seen it make important contributions to technology history over a wide variety of industries. Employees throughout the world continue to share the courage of the company founder, sharing a passion to produce innovative products and a determination to provide world-leading equipment and machinery.

Diversified product programme

Liebherr is one of the world's biggest construction machine manufacturers and provides high-quality, user-oriented products and services. Its product range includes the product segments earthmoving, material handling, deep foundation, mining, mobile and crawler cranes, tower cranes, concrete technology, maritime cranes, aerospace and transportation systems, gear technology and automation systems, refrigerators and freezers, components and hotels.

Customised solutions and maximum customer value

Liebherr solutions are characterised by precision, implementation and longevity. The company is committed to technological excellence and to providing customers with solutions that match their needs exactly. For Liebherr, customer focus does not end with delivery of a product but continues through a comprehensive range of back-up and support services.

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