

Product Information Crawler Excavator

R 970 SME

Litronic®



Generation

6.1

Engine

330 kW/449 HP

Stage V

Operating Weight

Backhoe: 78,350 – 80,150 kg

Shovel: 79,100 – 81,000 kg

Bucket Capacity

Backhoe: 3.00 – 5.00 m³

Shovel: 3.50 – 5.00 m³

LIEBHERR

Crawler Excavator R 970 SME

Super Mass Excavation

Resized Attachments

- Reinforced welded structure
- Larger kinematics components
- Integrated bottom boom and stick protection as standard
- Additional protection available (bucket cylinders)

Increased Productivity

- HD bucket, up to 5 m³ for density of 1.8 t/m³
- Digging and breakout forces increased to over 15 %

Robust Undercarriage

- Fitted with excavator components from the next size up machine
- Track pads with double grouser chamfered for improved manoeuvrability on rough terrain
- Cast sprocket wheel with double tooth segment for longer life
- Double sided bearings on carrier rollers for increased reliability and long-term durability
- Reinforced protection of travel drive for increased resistance against wear on hard and abrasive rock





Silent and Comfortable Cab

- To date, the largest and quietest cab in its category
- Mounted on visco-elastic elements to absorb vibrations
- Impact-resistant front window and roof window
- Pneumatic suspension seat, heated, multidirectional (air-conditioned optional)
- Large colour touch screen with high resolution display
- Elevated cab for improved visibility of loading area (option)

Accessible and Protected Uppercarriage

- Left and right walkways as standard and large walkways with guardrails in option
- Platform with access to engine and hydraulic compartments for ergonomic and safe servicing
- Refined design for extended visibility
- New engine which conforms to Stage V
- Heavy counterweight for enhanced stability and better performance

Crawler Excavator R 970 SME Shovel

Super Mass Excavation

Attachments with No Compromises

- Cast steel components
- Parallel kinematics for powerful and constant penetration
- Bucket cylinders positioned under the attachments for better protection
- Safety valves for hose ruptures of boom cylinders
- Front shovel flap closure semi-automatic

Robust Undercarriage

- Fitted with excavator components from the next size up machine
- Track pads with 2 chamfered ribs for improved manoeuvrability on rough terrain
- Cast sprocket wheel with double tooth segment for longer life
- Dual-pivot carrier rollers for increased reliability and long-term durability
- Reinforced protection of travel drive for increased resistance against wear on hard and abrasive rock





Silent and Comfortable Cab

- Elevated cab for improved visibility of loading area
- To date, the largest and quietest cab in its category
- Mounted on visco-elastic elements to absorb vibrations
- Impact-resistant front window and roof window
- Pneumatic suspension seat, heated, multidirectional (air-conditioned optional)
- Large colour touch screen with high resolution display

Accessible and Protected Uppercarriage

- Left and right walkways as standard and large walkways with optional guardrails
- Platform with access to engine and hydraulic compartments for ergonomic and safe servicing
- Refined design for extended visibility
- New engine which conforms to Stage V
- Heavy counterweight for enhanced stability and better performance

Technical Data



Engine

Rating per ISO 9249	330 kW (449 HP) at 1,800 RPM
Torque	2,750 Nm at 1,100 RPM
Model	Liebherr D9508 A7 SCR
Type	8 cylinder V engine
Bore	128 mm
Stroke	157 mm
Displacement	16.16 l
Engine operation	4-stroke diesel Common-Rail
Exhaust gas treatment	Stage V DOC + DPF + SCR Passive regeneration by thermo management
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	1,140 l
Urea tank	180 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	Electro-hydraulic control
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 joystick toggle switch



Hydraulic System

Hydraulic pumps	
For equipment and travel drive	Two Liebherr variable displacement, swashplate pumps
Max. flow	2 x 410 l/min.
Max. pressure	350 bar
For swing drive	Reversible, variable displacement, swashplate pump, closed-loop circuit
Max. flow	245 l/min.
Max. pressure	370 bar
Pump regulation	Electro-hydraulic with electronic engine speed sensing regulation, pressure compensation, flow compensation, high flow
Hydraulic tank	435 l
Hydraulic system	920 l
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	20 preadjustable pump flows and pressures for add-on attachments



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 – 5.6 RPM stepless
Swing torque	233 kNm
Holding brake	Wet multi-disc (spring applied, pressure released)



Operator's Cab

Cab	LED work headlights integrated in the ceiling, a door with a sliding window (can be opened on both sides), large storing box and several stowing possibilities, shock-absorbing suspension, sounddamping insulating, tinted laminated safety glass, separate window shades for the sunroof window and windscreen, cigarette lighter and 12 V plug, storage bins, lunchbox, cup holder
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 (adjustable in width, height and inclination), seat heating as standard
Arm consoles	Oscillating consoles with seat, tiltable console left
Operation and displays	Large high-resolution operating unit, intuitive, colour display with touchscreen, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine and attachment parameters
Air-conditioning	Automatic air-conditioning, recirculated air function, fast de-icing and demisting at the press of a button, air vents can be operated via a menu. Recirculated 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	L _{pA} (inside cab) = 70 dB(A)
2000/14/EC	L _{WA} (surround noise) = 108 dB(A)



Undercarriage

S-HD	Gauge 3,350 mm
Drive	Liebherr swashplate motor with brake valves on both sides
Transmission	Liebherr compact planetary reduction gear
Maximum travel speed	Low range 2.2 km/h High range 3.5 km/h
Drawbar pull on crawler	568 kN
Track components	D9G, maintenance-free
Track rollers/ Carrier rollers	8/2
Tracks	Sealed and greased
Track pads	Double grouser
Holding brake	Wet multi-disc (spring applied, pressure released)
Brake valves	Outside the travel motor
Lashing eyes	Integrated



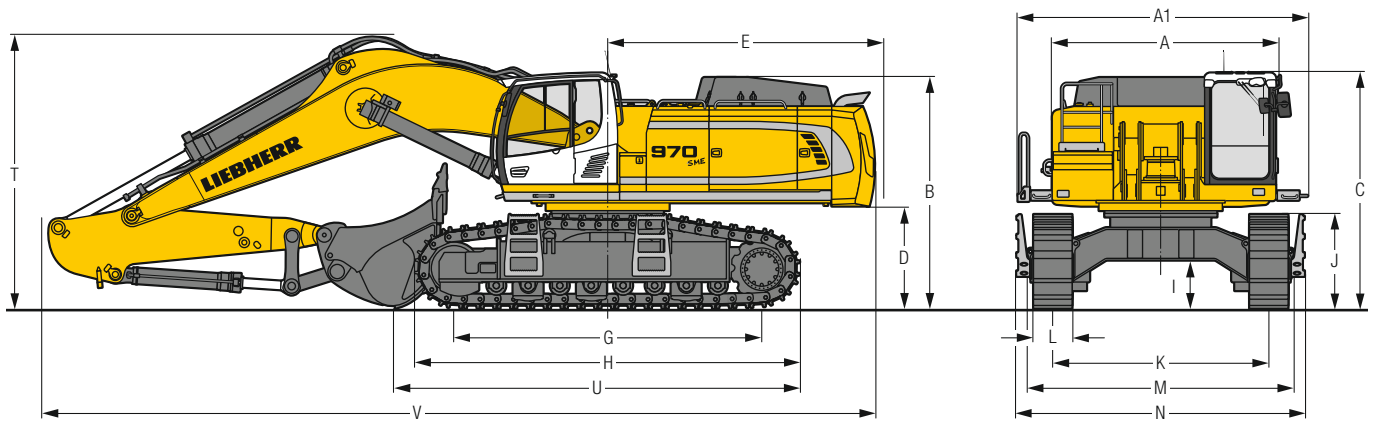
Equipment

Type	Combination of resistant steel plates and cast steel components
Hydraulic cylinders	Liebherr cylinders with seal and guidance systems and shock protection
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



		mm		
A	Uppercarriage width	3,515		
A1	Uppercarriage width with catwalks	4,495		
B	Uppercarriage height	3,585		
C	Cab height	3,665/3,860*		
D	Counterweight ground clearance	1,585		
E	Rear-end length	4,270		
G	Wheelbase	4,770		
H	Undercarriage length	5,960		
I	Undercarriage ground clearance	745		
J	Track height	1,460		
K	Track gauge	3,350		
L	Track pad width	500	600	750
M	Width over tracks	4,130	4,130	4,130
N	Width over steps	4,460	4,460	4,460

* with FOPS top guard

		Stick length m	Mono boom SME 7.00 m direct mounting mm	
T	Boom height	2.60 SME	4,200	
		3.00 SME	4,250	
U	Length on ground	2.60 SME	11,500	
		3.00 SME	6,300	
V	Overall length	2.60 SME	12,800	
		3.00 SME	12,900	
	Bucket		4,50 m ³	

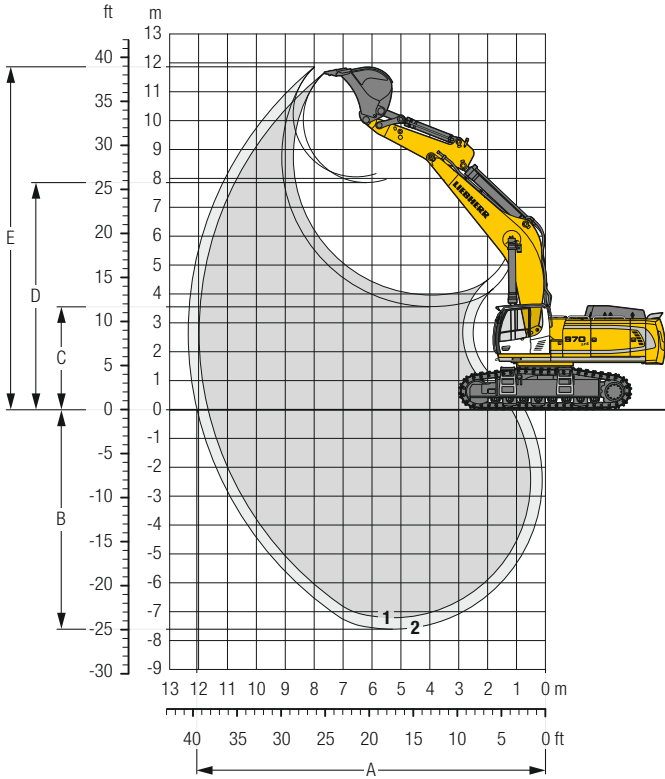
Transport Dimensions

removable elements disassembled

	Stick m	Mono boom SME 7.00 m mm	
Transport width		4,495	
Transport length	2.60 SME	12,800	
	3.00 SME	12,900	
Transport height	2.60 SME	4,200	
	3.00 SME	4,250	
Bucket		4,50 m ³	

Backhoe Bucket

with Mono Boom SME 7.00 m and Counterweight 14.5 t



Digging Envelope

without quick coupler		1	2
Stick length	m	2.60	3.00
		SME	SME
A Max. reach at ground level	m	11.65	12.05
B Max. digging depth	m	7.20	7.60
C Min. dumping height	m	3.95	3.55
D Max. dumping height	m	7.85	8.05
E Max. cutting height	m	11.65	11.85

Forces

without quick coupler		1	2
Stick digging force (ISO 6015)	kN	357	328
Bucket digging force (ISO 6015)	kN	392	392
Stick digging force (SAE J1179)	kN	335	309
Bucket digging force (SAE J1179)	kN	339	339

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 14.5 t, mono boom SME 7.00 m, stick SME 2.60 m and HD bucket 4.50 m³ (4,850 kg).

Undercarriage	S-HD			
Pad width	mm	500	600	750
Weight	kg	78,350	79,050	80,150
Ground pressure	kg/cm ²	1.54	1.30	1.05

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

	Cutting width mm	Capacity ISO 7451 m ³	Weight kg	S-HD-Undercarriage SME-Equipment (with track pads 600 mm)	
				Stick length (m)	Stick length (m)
HD ¹⁾	2,200	4.50	4,850	2.60	3.00
	2,300	5.00	5,050	▲	▲
HD ²⁾	2,200	4.50	4,950	▲	▲
	2,300	5.00	5,200	▲	▲
HDV ³⁾	2,000	4.00	5,000	▲	▲
	2,200	4.50	5,350	▲	▲
HDV ⁴⁾	2,300	5.00	5,600	▲	▲
	2,000	4.00	5,100	▲	▲
	2,200	4.50	5,450	▲	▲
	2,300	5.00	5,700	▲	■

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

¹⁾ HD bucket with teeth Z 90 (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

²⁾ HD bucket with delta cutting edge and teeth Z 90 (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

³⁾ HDV bucket with teeth Z 90 (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

⁴⁾ HDV bucket with delta cutting edge and teeth Z 90 (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

Other buckets available upon request

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

Lift Capacities

with Mono Boom SME 7.00 m, Counterweight 14.5 t and Track Pads 600 mm

Stick SME 2.60 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		Height	360°	Height	360°	Height	360°	Height	360°	Height	360°	
S-HD	9.0									13.5*	13.5*	7.3
	7.5							14.6*	14.6*	12.7*	12.7*	8.5
	6.0			23.5*	23.5*	18.1*	18.1*	15.4*	15.4*	14.1*	14.1*	9.2
	4.5					20.8*	20.8*	16.7*	16.7*	14.6*	14.6*	9.6
	3.0					23.3*	23.3*	18.0*	18.0*	15.2*	15.2*	9.8
	1.5					24.5*	24.5*	18.9*	18.9*	15.0*	15.6*	9.7
	0			24.6*	24.6*	24.3*	24.3*	18.9*	19.1*	14.8*	15.5*	9.4
	-1.5	26.2*	26.2*	29.1*	29.1*	23.1*	23.1*	18.2*	18.2*			8.8
-3.0	29.8*	29.8*	25.4*	25.4*	20.4*	20.4*	15.8*	15.8*			7.9	
-4.5			19.0*	19.0*	14.8*	14.8*					6.5	

Stick SME 3.00 m

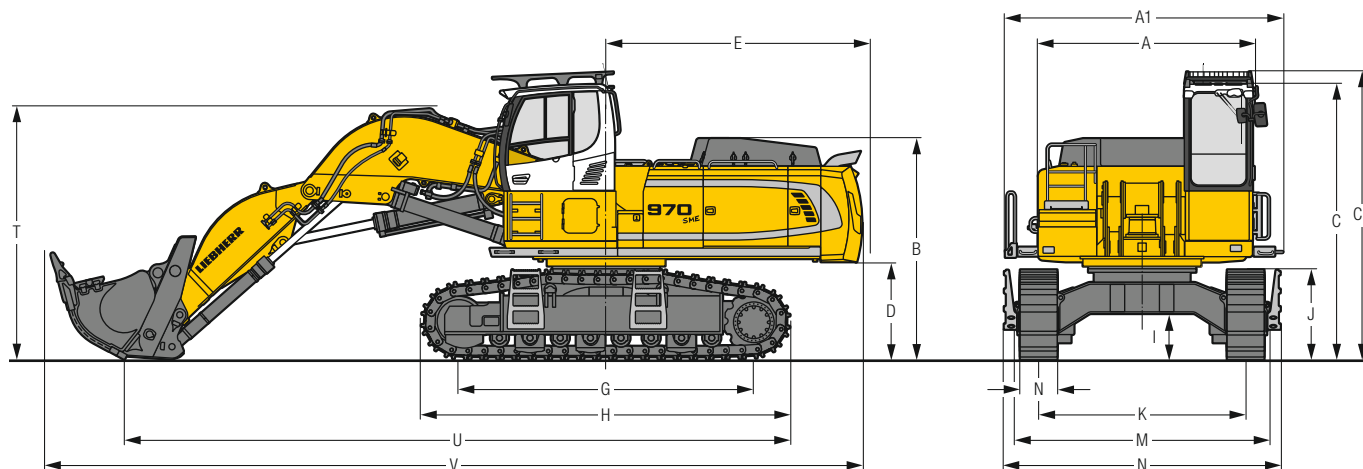
Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		m
		Height	360°	Height	360°	Height	360°	Height	360°	Height	360°	
S-HD	9.0									13.8*	13.8*	7.8
	7.5							13.8*	13.8*			8.9
	6.0							17.0*	17.0*	14.7*	14.7*	9.6
	4.5			28.4*	28.4*	19.8*	19.8*	16.0*	16.0*	14.0*	14.0*	10.0
	3.0					22.4*	22.4*	17.5*	17.5*	14.7*	14.7*	10.2
	1.5					24.0*	24.0*	18.5*	18.5*	14.9*	15.3*	10.1
	0			26.9*	26.9*	24.2*	24.2*	18.7*	18.9*	14.6*	15.4*	9.8
	-1.5	25.4*	25.4*	30.2*	30.2*	23.3*	23.3*	18.3*	18.3*	14.6*	14.6*	9.2
-3.0	33.6*	33.6*	26.8*	26.8*	21.0*	21.0*	16.5*	16.5*			8.4	
-4.5			21.1*	21.1*	16.6*	16.6*					7.0	

 **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 1,220 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 Front Shovel



		mm
A	Uppercarriage width	3,515
A1	Uppercarriage width with catwalks	4,495
B	Uppercarriage height	3,585
C	Cab height	4,465
C1	Cab height with FOPS top guard	4,660
D	Counterweight ground clearance	1,585
E	Rear-end length	4,270
G	Wheelbase	4,770
H	Undercarriage length	5,960

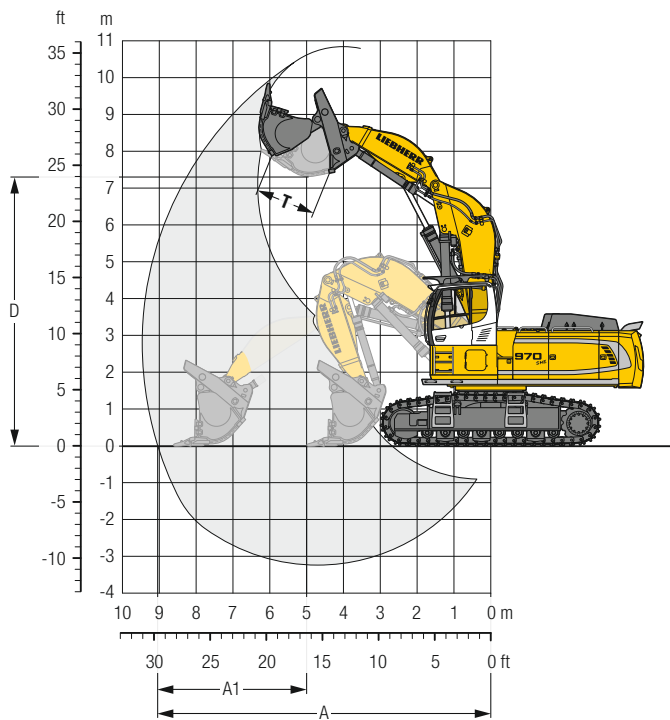
		mm		
I	Undercarriage ground clearance	745		
J	Track height	1,460		
K	Track gauge	3,350		
L	Track pad width	500	600	750
M	Width over tracks	4,130	4,130	4,130
N	Width over steps	4,460	4,460	4,460
T	Boom height	4,100		
U	Length on ground	10,750		
V	Overall length	13,200		

Transport Dimensions

removable elements disassembled

	Shovel equipment
	mm
Transport width	4,495
Transport length	13,200
Transport height	4,465
Shovel	4.50 m ³

Front Shovel



Digging Envelope

A Max. reach at ground level	m	9.05
A1 Max. crowd length	m	3.60
D Max. dumping height	m	7.30
T Bucket opening width	mm	1,650

Forces

Max. crowd force	kN	500
Max. crowd force at ground level	kN	410
Max. breakout force	kN	370

Operating Weight and Ground Pressure

The operating weight includes the basic machine with cab elevation 800 mm, shovel equipment SME and front shovel 4.50 m³ (7,200 kg), level II.

Undercarriage		S-HD		
		500	600	750
Pad width	mm	500	600	750
Weight	kg	79,100	79,900	81,000
Ground pressure	kg/cm²	1.55	1.31	1.06

Front Shovels

Cutting width mm	Capacity ISO 7451 m ³	Weight kg	Wear kit level	S-HD-Undercarriage		
				Shovel equipment		
2,600	4.00	7,900	III	▲		
2,600	4.50	6,700	I	■		
2,600	4.50	7,200	II	■		
2,600	4.50	7,800	III	■		
2,600	5.00	6,800	I	▲		
2,600	5.00	7,500	II	▲		

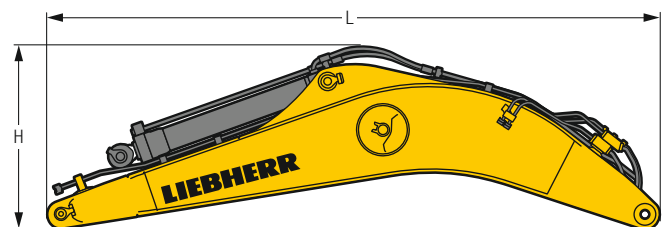
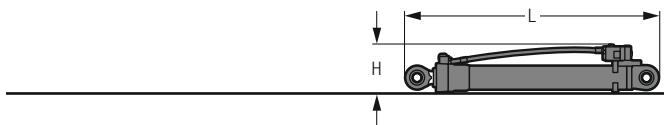
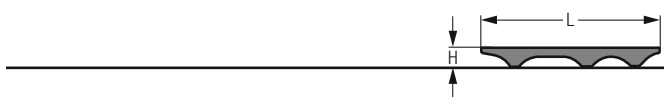
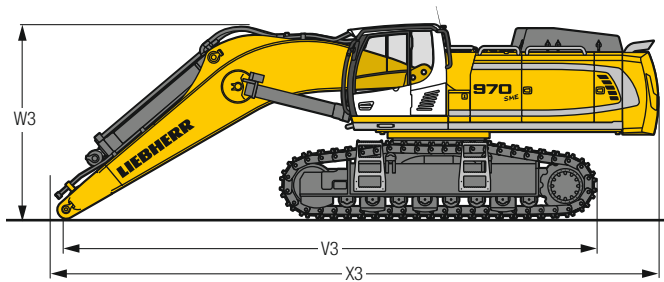
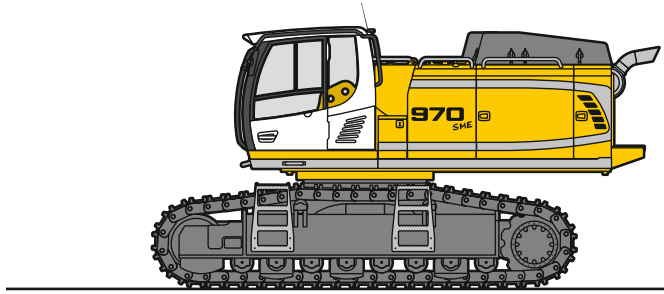
Level I: For non-abrasive materials, such as limestone without flint inclusion, shot material or easily breakable rock, i.e., deteriorated rock, soft limestone, shale, etc.

Level II: For pre-blasted heavy rock, or deteriorated, cracked material (classification 3 to 4, according to DIN 18300)

Level III: For highly-abrasive materials such as rock with a high silica content, sandstone etc.

Max. material weight ▲ = ≤ 2.0 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.65 t/m³

Dimensions and Weights



Basic Machine

Track pads	mm	500	600	750
Weight with backhoe equipment and S-HD-undercarriage without counterweight	kg	46,200	46,950	48,050
Weight with shovel equipment and S-HD-undercarriage without counterweight	kg	46,200	46,950	48,050

Machine without Stick

V3	mm	10,050
W3	mm	3,650
X3	mm	11,450

Cab Elevation

		800 mm
L Length	mm	1,890
H Height	mm	930
Width	mm	1,370
Weight	kg	600

Counterweight

L Length	mm	770
H Height	mm	1,550
Width	mm	3,360
Weight	kg	14,500

Upper Protection Screen

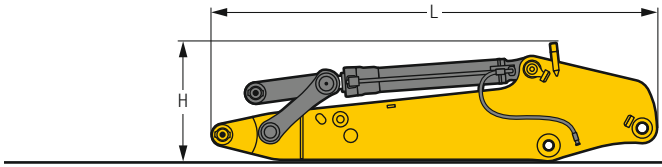
L Length	mm	1,960
H Height	mm	190
Width	mm	1,110
Weight	kg	75

Hoist Cylinders (two)

L Length	mm	2,650
H Height	mm	490
Width	mm	360
Weight	kg	2 x 750

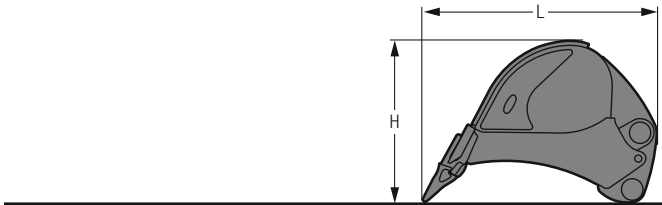
Mono Boom with Stick Cylinder

Boom length	m	7.00
L Length	mm	7,350
H Height	mm	2,250
Width	mm	1,450
Weight	kg	7,350



Stick with Bucket Cylinder

Stick length	m	2,60	3,00
L Length	mm	4,000	4,400
H Height	mm	1,350	1,350
Width	mm	950	950
Weight	kg	3,900	4,150

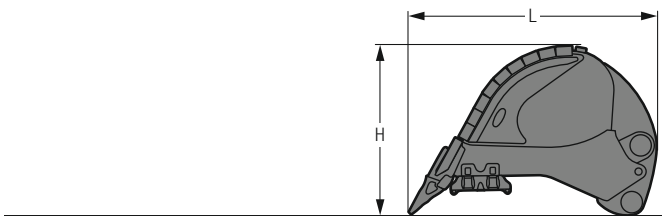


Backhoe Buckets

HD

Cutting width	mm	2,200	2,300	2,200*	2,300*
Capacity	m ³	4,50	5,00	4,50	5,00
L Length	mm	2,650	2,650	2,750	2,750
H Height	mm	1,800	1,800	1,850	1,850
Width	mm	2,250	2,350	2,250	2,350
Weight	kg	4,850	5,050	4,950	5,200

* with delta cutting edge

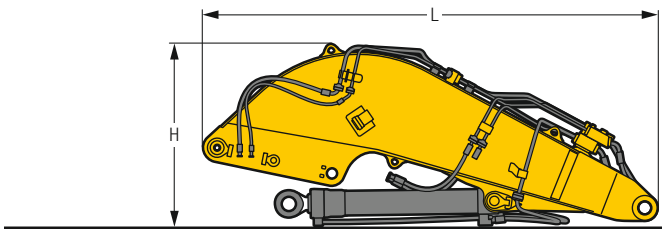


Backhoe Buckets

HDV

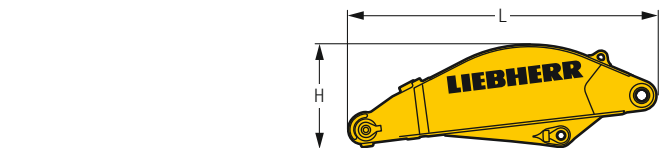
Cutting width	mm	2,000	2,200	2,300	2,000*	2,200*	2,300*
Capacity	m ³	4,00	4,50	5,00	4,00	4,50	5,00
L Length	mm	2,650	2,650	2,650	2,750	2,750	2,750
H Height	mm	1,800	1,800	1,800	1,850	1,850	1,850
Width	mm	2,050	2,250	2,350	2,050	2,250	2,350
Weight	kg	5,000	5,350	5,600	5,100	5,450	5,700

* with delta cutting edge



Shovel Boom

L Length	mm	4,750
H Height	mm	1,950
Width	mm	1,900
Weight without crowd cylinder	kg	5,050
Weight crowd cylinder	kg	650



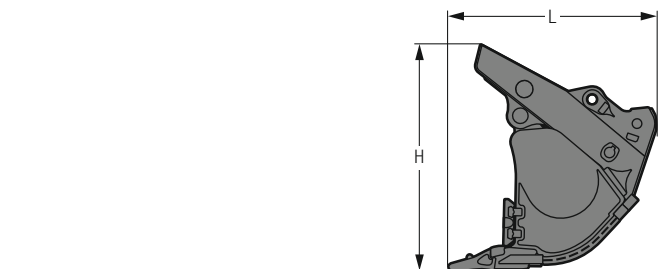
Shovel Stick

L Length	mm	3,250
H Height	mm	1,100
Width	mm	1,500
Weight	kg	2,500



Shovel Bucket Cylinders (two)

L Length	mm	2,550
H Height	mm	350
Width	mm	500
Weight	kg	2 x 400



Front Shovels

Cutting width	mm	2,600	2,600	2,600
Capacity	m ³	4,00	4,50	5,00
L Length	mm	2,200	2,200	2,300
H Height	mm	2,400	2,400	2,500
Width	mm	2,650	2,650	2,650
Weight				
Level I	kg	–	6,700	6,800
Level II	kg	–	7,200	7,500
Level III	kg	7,900	7,800	–

Serial Equipment

Undercarriage

- Lashing eyes
- Sprocket with dirt ejector
- Track and carrier rollers, sealed and lifetime-lubricated
- Travel motor housing protection
- Undercarriage S-HD

Uppercarriage

- Access platforms without protruding parts
- Anti-skid surfaces
- Automatic swing brake lock
- Centralised lubrication system (automatic)
- Counterweight heavy 14.5 t
- DEF tank lockable access hatch
- Engine hood with gas spring opening
- Extended tool set including tool box
- Handrails
- Lockable fuel tank cap with padlock
- Lockable service doors
- Lockable storage box
- Main switch, accessible from ground level
- Pre-heating system for fuel
- Protection grid on radiator fan
- Sound insulation
- Swing-out radiators
- Windshield washer fluid tank

Hydraulic System

- Dedicated swing circuit
- Filter with integrated fine filters
- Hydraulic pressure measuring ports
- Hydraulic tank shut-off valve
- Magnetic rod
- Pressure accumulator for controlled lowering of equipment with engine turned off

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 + DPF + SCR
- Fixed geometry turbocharger
- Fuel fine filter
- Fuel pre-filter and water separator
- Fuel priming pump
- Intercooler
- Power Pack EU Stage V
- Stepless adjustable engine speed

Operator's Cab

- 7" multifunction colour touchscreen
- Air conditioning, automatic, tri-zone, controlled via display
- Armrests adjustable in width, height and inclination
- Bottle holder
- Cab door sliding windows
- Cigarette lighter
- Coat hook
- DEF consumption on touchscreen
- DEF level on touchscreen
- Electric socket in cabin (12 V)
- Electric socket in cabin (24 V)
- Emergency hammer
- Engine oil level on touchscreen
- Footrest
- Fuel consumption on touchscreen
- Fuel level on touchscreen
- Impact resistant roof window
- Impact resistant two-piece windscreen
- Interior lighting
- Laminated right hand side window
- LiDAT Plus (Liebherr data transfer system) *
- Movement priority between swing and boom, adjustable via touchscreen
- Rain hood over front window opening
- Rearview mirror
- Rear view monitoring camera
- Rear window emergency exit
- Right hand side view monitoring camera
- Roll-down sun blinds for windscreen and roof window
- Rubber floor mat, fixed on floor and removable
- Storage box
- Storage nets
- Storage spaces
- Tilttable console left
- Tinted windows
- Visco-elastic damping
- Windscreen wiper and washer
- Work mode selector

Equipment

- Anti-drift system boom cylinders
- Anti-drift system stick cylinder
- Boom bottom protection
- Boom cylinders regeneration
- Pivot points made of cast steel
- SAE split flanges on high pressure lines
- Stick bottom protection
- Stick cylinder regeneration

* optionally extendable after one year

Equipment Standard/Option

Undercarriage

Chain guide 3 pieces	•
Chain guide 4 pieces	+
Reinforced cover and base plate for undercarriage centre section	+
Special painting	+
Track pads double grouser 500 mm, chamfered	+
Track pads double grouser 600 mm, chamfered	•
Track pads double grouser 750 mm, chamfered	+
Travel drive gearbox protection	+
Undercarriage protection plate for drop-ball application	+

Uppercarriage

Air pre-filter with cyclonical dust trap	+
Boxing ring	+
Catwalks left and right	•
Catwalk wide with railing	+
Electric socket on uppercarriage (24 V)	+
Filter for hydraulic hammer return flow	+
Fixed cab riser 800 mm	+
Headlight on uppercarriage, lateral left, LED+, 1 piece	+ ¹⁾
Headlight on uppercarriage, lateral right, LED+, 1 piece	+ ¹⁾
Headlights on uppercarriage, front, LED, 2 pieces, protections included	+ ¹⁾
Headlights on uppercarriage, front, LED+, 2 pieces, protections included	+ ¹⁾
Headlights on uppercarriage, rear, LED+, 2 pieces	+ ¹⁾
Lighting for tank area ¹⁾	+
Lighting for uppercarriage access ¹⁾	+
Motorised tiltable access ladder	+
Radiator fine mesh protection grid	+
Reversible fan drive	+
Skyview 360°	+
Special painting	+
Swing ring and lubrication hoses protection	+
Tank refilling pump fuel	+
Wiggins coupling for fuel	+

Hydraulic System

Bypass filter for hydraulic oil	+
Liebherr hydraulic oil	•
Liebherr hydraulic oil, adapted for extreme climate conditions	+
Liebherr hydraulic oil, biodegradable	+

Engine

Automatic engine shutdown after idling	+
Engine shut-down with overrun	+
Lighting for engine compartment ¹⁾	+

Operator's Cab

2" seat belt with retractor	•
3" seat belt with retractor, orange colour	+
4-points seat belt	+
Acoustic travel alarm deactivatable	+
Auxiliary heater programmable	+
Bottom windscreen wiper	+
Cool box (12 V)	+
Dark tinted windows	+
Electrically adjustable and heated outside rear-view mirrors	+
Electronic immobiliser	+
Emergency stop in cab	+
FGPS front guard tiltable	+
Fire extinguisher	+
First-aid box	+
Follow me home	+
FOPS top guard	+
Handrests elevated for joysticks	+
Headlights on cab, front, LED, 2 pieces	• ¹⁾
Headlights on cab, front, LED+, 2 pieces	+ ¹⁾
Headlights on cab roof, front, LED+, 2 pieces	+ ¹⁾
High pressure circuit switchable on pedals or mini-joystick	+
High pressure circuit with Tool Control (20 attachment adjustments on display)	+
Lighting for cabin access ¹⁾	+
Luminosity control (LED+ headlights) ¹⁾	+
Medium pressure circuit	+
Mini-joysticks proportional	+
Operator seat Comfort	•
Operator seat Premium	+
Overload warning system	+
Radio Comfort	+
Radio pre-installation	•
Roof sun shield	+
Roof window wiper	+
Rotating beacon on cabin, LED, 1 piece	+
Shortcut button on joystick configurable	•
Special painting	+
Sun visor	+

Equipment

Boom cylinder rods protection	+
Bucket cylinder rod protection	+
Centralised lubrication extended for connecting link	+
Floating boom	+
Headlights on boom, LED, 2 pieces, protections included	+ ¹⁾
Headlights on boom, LED+, 2 pieces, protections included	+ ¹⁾
Mono boom SME 7.00 m	+
Pipe fracture safety valve for stick cylinder	+
Pipe fracture safety valves for boom cylinders	+
Preparation for ripper tooth	+
Shovel boom 4.50 m	+
Shovel stick 2.90 m	+
Special painting	+
Stick SME 2.60 m	+
Stick SME 3.00 m	+

• = Standard, + = Option

¹⁾ Equipment not individually available, but only as predefined lighting packages
Non-exhaustive list, please contact us for further information.

Options and/or special equipments, 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 applications.

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 then, the family business has steadily grown to a group of more than 130 companies with more than 46,000 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

Liebherr-France SAS

2 avenue Joseph Rey, B.P. 90287, FR-68005 Colmar Cedex
☎ +33 389 21 30 30, Fax +33 389 21 37 93
www.liebherr.com, E-Mail: info.lfr@liebherr.com
www.facebook.com/LiebherrConstruction