

Equipment Information Demolition Excavator

R 950

Litronic®

Engine

220 kW/299 HP

Stage V

Stage IV

Non-regulated only for select markets

Operating Weight

53,100 – 75,850 kg

Working Height

27.50 m

H/2: 24.25 m



LIEBHERR

Technical Data



Engine

| | |
|------------------------------|--|
| Rating per ISO 9249 | 220 kW (299 HP) at 1,800 RPM |
| Torque | 1,450 Nm at 1,100 RPM |
| Model | Liebherr D944 A7-25 (Stage V) or Liebherr D944 A7-24 (Stage IV) or Liebherr D944 A7-20 (non-regulated only for select markets) |
| Type | 4 cylinder in-line |
| Bore | 130 mm |
| Stroke | 150 mm |
| Displacement | 7.964 l |
| Engine operation | 4-stroke diesel Common-Rail, monoturbo |
| Exhaust gas treatment | DOC + DPF + SCR (Stage V) or SCR (Stage IV) or without EGR (non-regulated only for select markets) |
| 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 |
| Urea tank | 90 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 | |
| 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 305 l/min. |
| Max. pressure | 380 bar |
| For swing drive | Reversible, variable displacement, swashplate pump, closed-loop circuit |
| Max. flow | 205 l/min. |
| Max. pressure | 400 bar |
| Pump management | Electronic pump management via the integrated system controlling (CAN-BUS) synchronous to the control block |
| Hydraulic tank | 380 l |
| Hydraulic system | 1,150 l with demolition equipment |
| Hydraulic oil filter | 1 full flow filter (10 µm) in return line with integrated fine filter area (5 µm) |
| 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 preadjustable pump flows and pressures for add-on attachments |
| Attachment system | |
| Flow | 305 l/min. |
| Pressure | 380 bar |
| Attachment rotation system | |
| Flow | 30 l/min. |
| Pressure | 140 bar |
| Max. pressure | 180 bar |



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 – 5,8 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 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, 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 |
| CO2 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) = 72 dB(A) |
| 2000/14/EC | L _{WA} (surround noise) = 106 dB(A) |



Undercarriage

| | |
|---|---|
| Variantes | |
| 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 | Low range 2.2 km/h High range 3.1 km/h |
| Drawbar pull on crawler | VH-HD: 488 kN LC-V/HD: 457 kN |
| Track components | D8L, maintenance-free |
| Track rollers/ Carrier rollers | VH-HD: 11/3 HD: 9/2 LC-V: 10/3 |
| Tracks | Sealed and greased |
| Track pads | Triple grouser |
| Holding brake | Wet multi-disc (spring applied, pressure released) |



Equipment

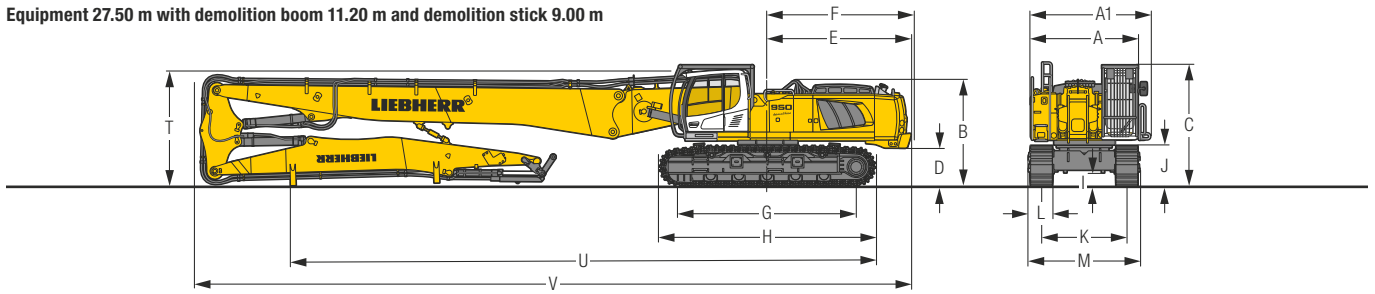
| | |
|------------------------------|--|
| Type | Combination of resistant steel plates and cast steel components |
| Hydraulic cylinders | Liebherr cylinders with seal and guidance systems |
| Bearings | Sealed, low maintenance |
| Lubrication | Automatic central lubrication system (except link and 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

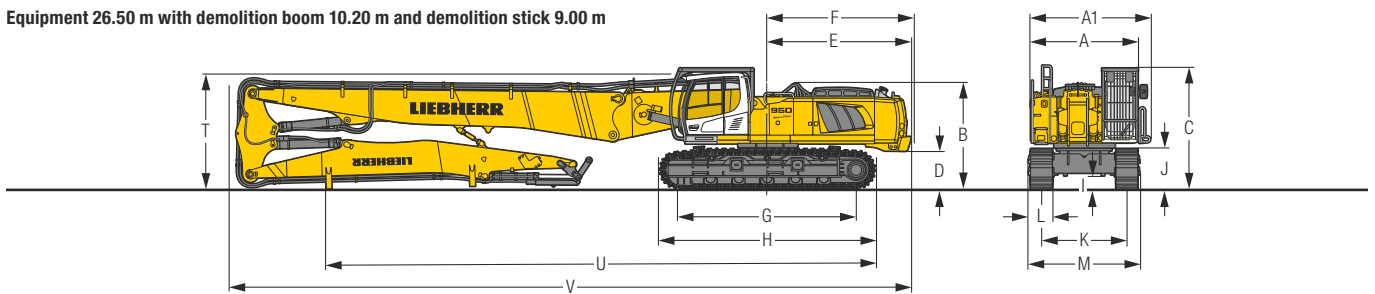
** For the risk assessment according to 2002/44/EC see ISO/TR 25398:2006

Dimensions

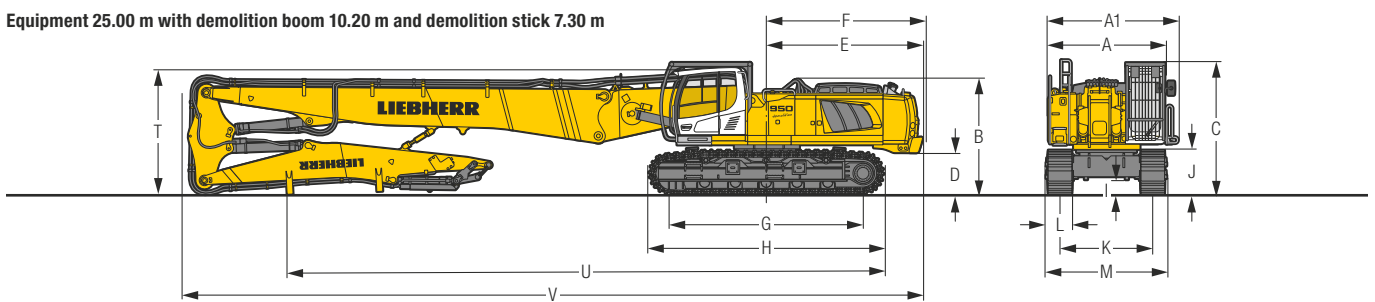
Equipment 27.50 m with demolition boom 11.20 m and demolition stick 9.00 m



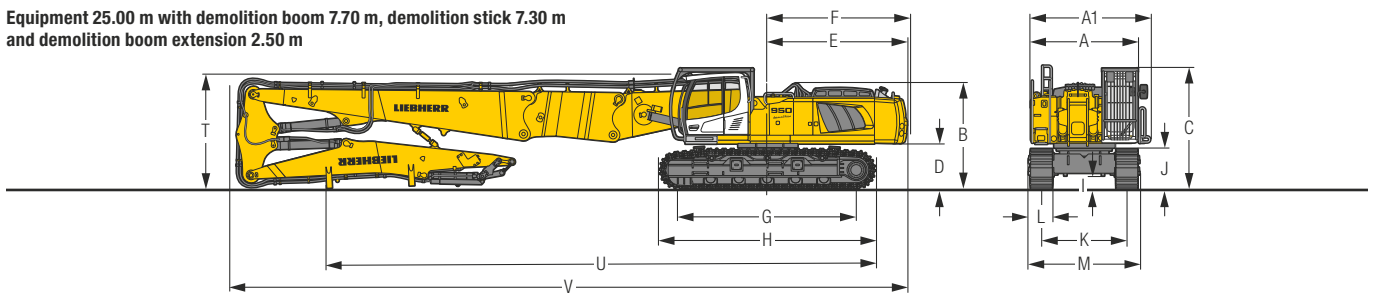
Equipment 26.50 m with demolition boom 10.20 m and demolition stick 9.00 m



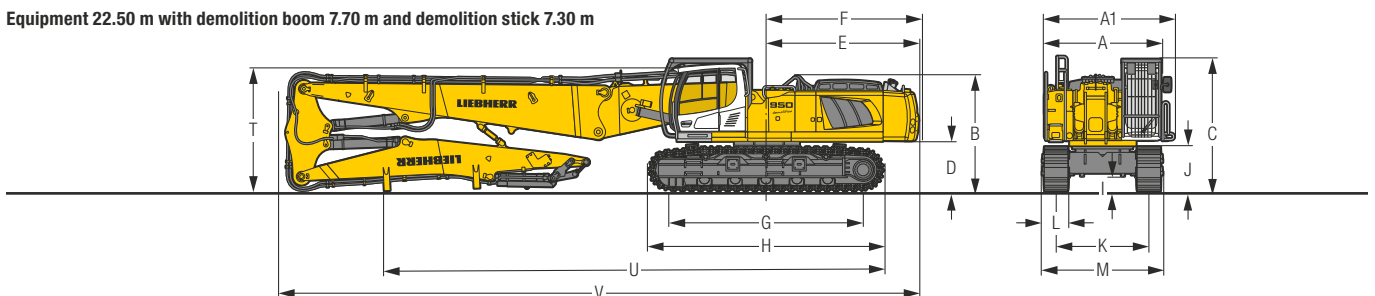
Equipment 25.00 m with demolition boom 10.20 m and demolition stick 7.30 m



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 | Upper-carriage width | 2,985** | | 2,985** | | 2,985** |
| A1 | Upper-carriage width with catwalks | 3,325 | | 3,325 | | 3,325 |
| B | Upper-carriage 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 | 4,980 | | 4,500 | | 4,500 |
| H | Undercarriage length | 6,040 | | 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 | | 2,390 – 2,890 | | 2,900 |
| L | Track pad width | 600 | | 600 | | 600 |
| M | Width over tracks | 3,100 – 4,150 | | 2,990 – 3,490 | | 3,500 |
| N | Width over steps | 3,370 – 4,420* | | 3,200 – 3,700* | | 3,715 |

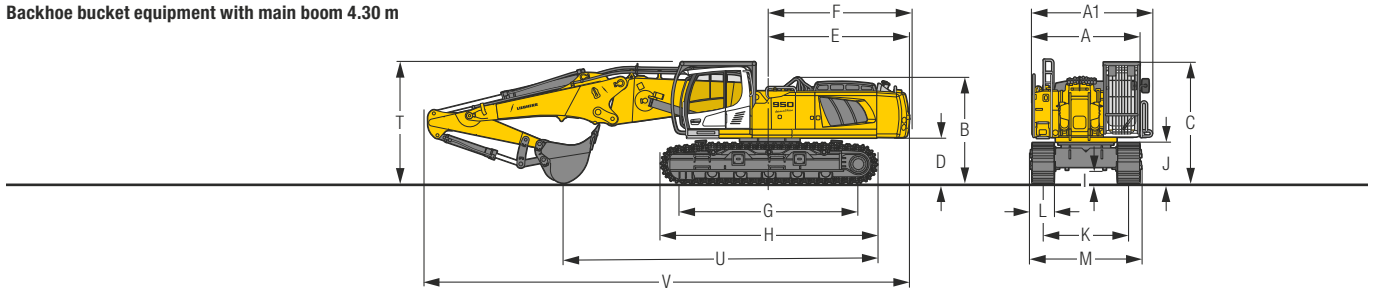
* width with removable steps

** without door stop device and spacer

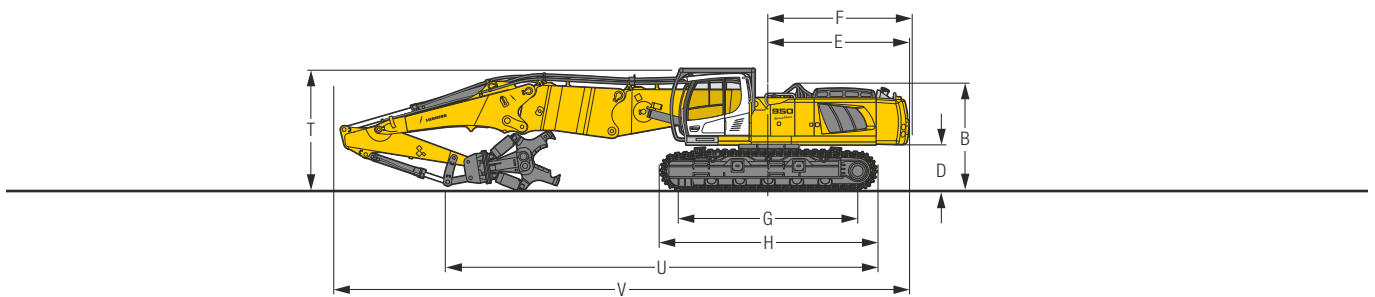
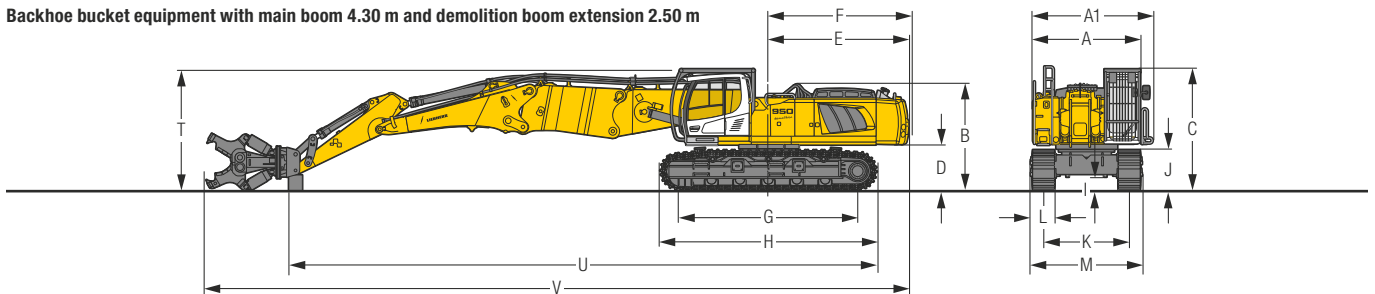
| | Demolition equipment 27.50 m | | | Demolition equipment 26.50 m | | | Demolition equipment 25.00 m with demolition boom 10.20 m | | | Demolition equipment 25.00 m with demolition boom 7.70 m | | | Demolition equipment 22.50 m | | | |
|----------|---------------------------------|--------|--------|---------------------------------|--------|--------|---|--------|--------|--|--------|--------|---------------------------------|--------|--------|--------|
| | VH-HD | LC-V | HD | VH-HD | LC-V | HD | 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 | 3,200 | 3,400 | 3,300 | 3,200 | 3,400 | 3,300 |
| U | Length on ground | 15,400 | 15,100 | 15,100 | 15,300 | 15,000 | 15,000 | 12,800 | 12,500 | 12,500 | 15,300 | 15,000 | 15,000 | 12,800 | 12,500 | 12,500 |
| V | Overall length | 20,000 | 20,000 | 20,000 | 19,000 | 19,000 | 19,000 | 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

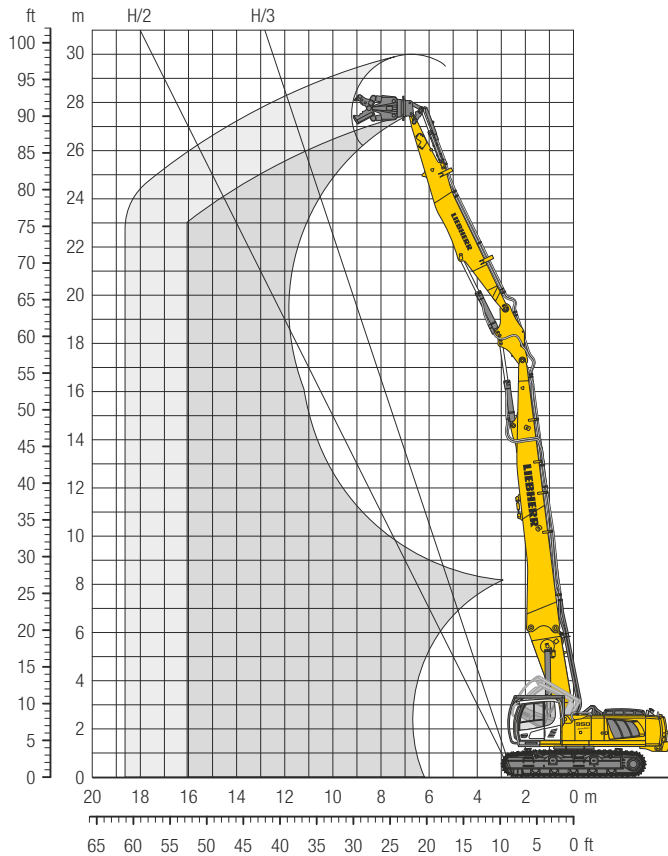


Backhoe bucket equipment with main boom 4.30 m and demolition boom extension 2.50 m



| | 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 | 3,400 | 3,500 | 3,450 |
| | 2.60 | 3,450 | 3,550 | 3,500 | 3,350 | 3,450 | 3,400 |
| U Length on ground | 2.10 | 8,750 | 8,450 | 8,500 | 11,250 | 10,950 | 11,000 |
| | 2.60 | 8,300 | 7,950 | 8,050 | 12,000 | 11,750 | 11,800 |
| U1 | 2.10 | – | – | – | – | – | – |
| | 2.60 | – | – | – | 16,350 | 16,150 | 16,200 |
| V Overall length | 2.10 | 13,500 | 13,500 | 13,500 | 16,000 | 16,000 | 16,000 |
| | 2.60 | 13,500 | 13,500 | 13,500 | 16,000 | 11,600 | 16,000 |
| V1 | 2.10 | – | – | – | – | – | – |
| | 2.60 | – | – | – | 19,600 | 19,600 | 19,600 |

Demolition Equipment 27.50 m



Reach Limitation

| | | 12 m | 14 m | 16 m |
|--|-------------------|---------------------------|------|------|
| Demolition boom 11.20 m + Intermediate boom + Demolition stick 9.00 m VH-HD-Undercarriage | | Attachment weight* | | |
| | 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 | – | – | – |

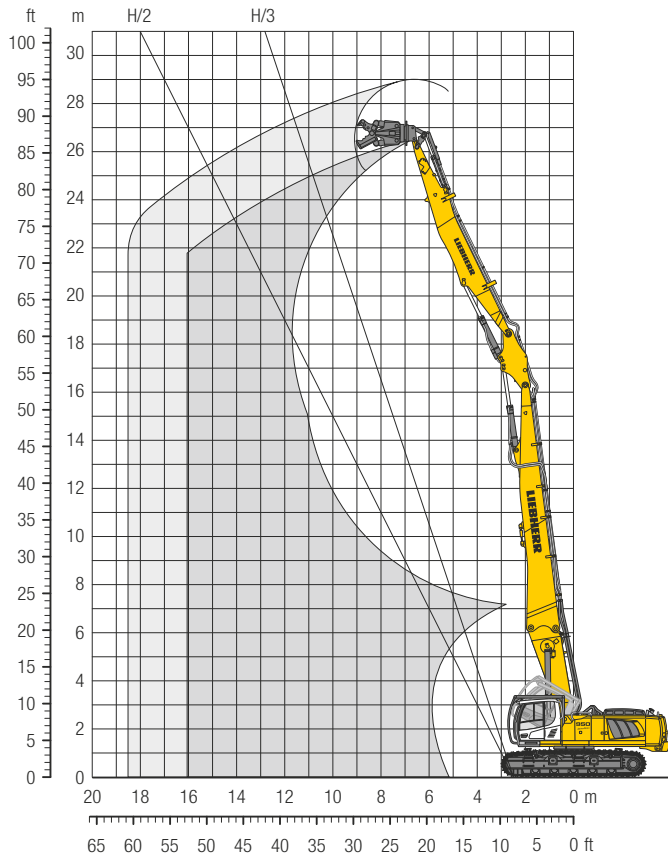
* included quick coupler, adapter plate and attachment

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 13.1 t including 3.9 t 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 | 1.18 | 1.16 | 1.11 |

Demolition Equipment 26.50 m



Reach Limitation

| | | 12 m | 14 m | 16 m |
|--|---------------------------|-------------|------|------|
| Demolition boom 10.20 m + Intermediate boom + Demolition stick 9.00 m VH-HD-Undercarriage | Attachment weight* | in t | | |
| | lengthwise | 3.00 | 3.00 | 3.00 |
| 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 | – |

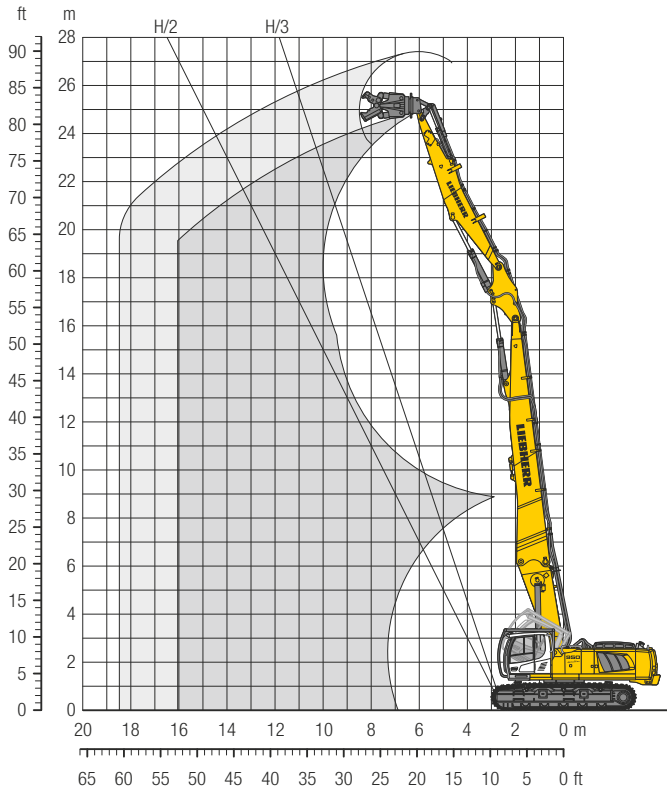
* included quick coupler, adapter plate and attachment

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 13.1 t including 3.9 t 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 | 1.15 | 1.14 | 1.08 |

Demolition Equipment 25.00 m



Reach Limitation

| | | 12 m | 14 m | 16 m |
|--|------------|---------------------------|------|------|
| Demolition boom 10.20 m + Intermediate boom + Demolition stick 7.30 m VH-HD-Undercarriage | | Attachment weight* | | |
| | | in t | | |
| | 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 |

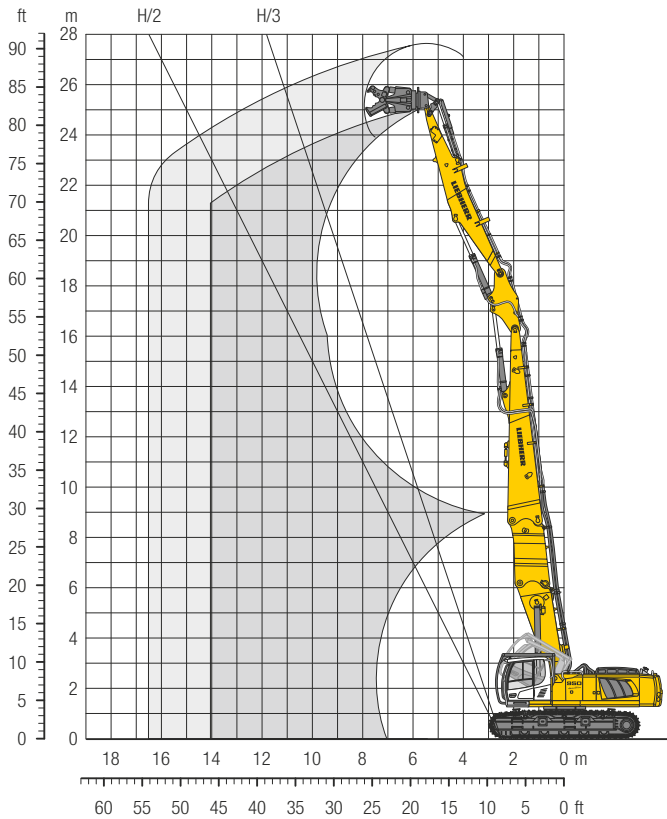
* included quick coupler, adapter plate and attachment

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 13.1 t including 3.9 t 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/cm ² | 1.15 | 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 + Demolition stick 7.30 m | | Attachment weight* in t | | |
| VH-HD-Undercarriage | 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 | – |

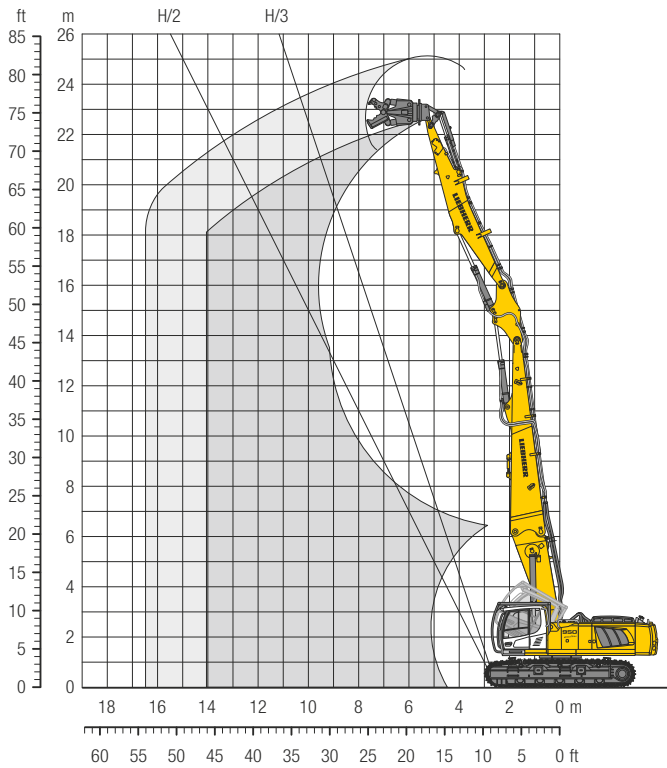
* included quick coupler, adapter plate and attachment

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 13.1 t including 3.9 t 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/cm² | 1.18 | 1.17 | 1.12 |

Demolition Equipment 22.50 m



Reach Limitation

| | | 10 m | 12 m | 14 m |
|---|-------------------|---------------------------|------|------|
| Demolition boom 7.70 m + Intermediate boom + Demolition stick 7.30 m VH-HD-Undercarriage | | Attachment weight* | | |
| | 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

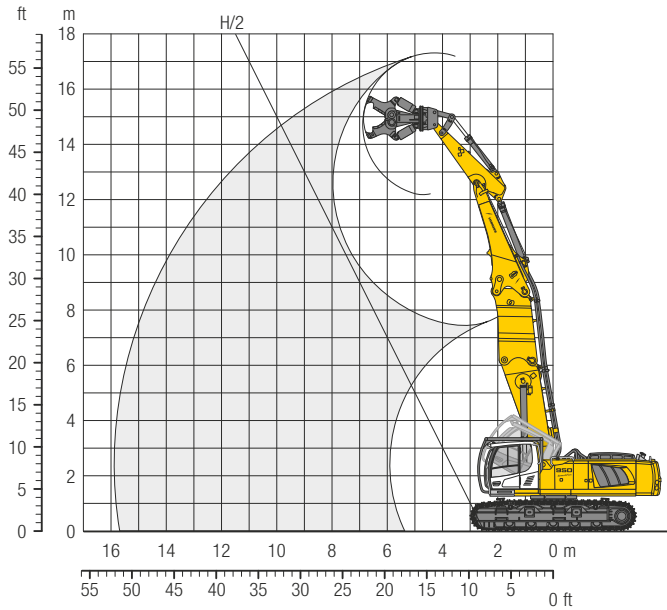
Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 9.2 t, demolition boom 7.70 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 | 69,300 | 61,800 | 58,800 |
| Ground pressure | kg/cm² | 1.08 | 1.06 | 1.00 |

Backhoe Bucket

with Main Boom 4.30 m and Demolition Boom Extension 2.50 m



Operating Weight and Ground Pressure

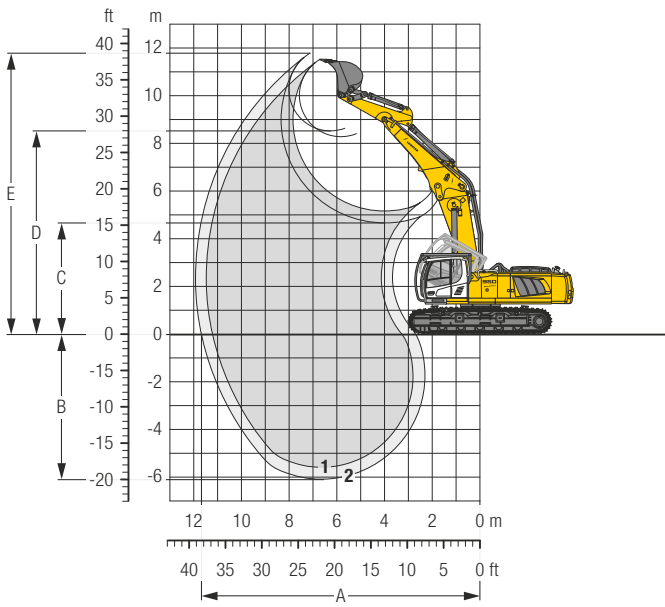
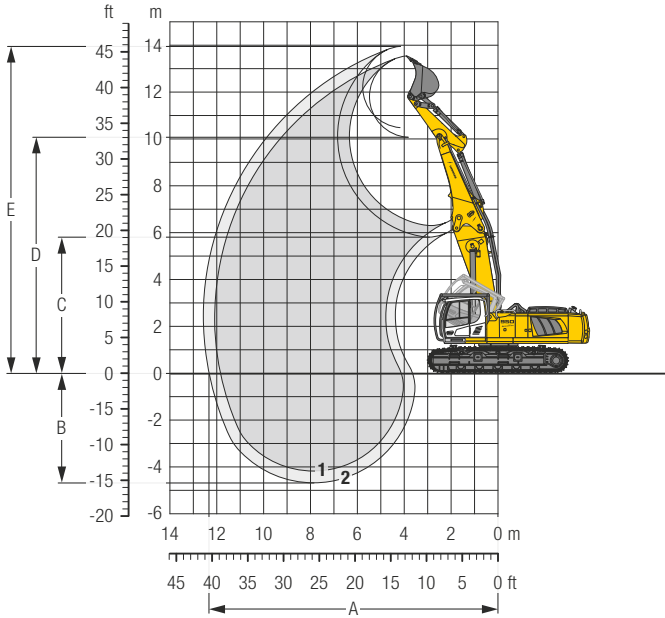
The operating weight includes the basic machine with counterweight 9.2 t, main boom 4.30 m, demolition boom extension 2.50 m, HD stick 2.60 m and attachment* 4.5 t.

| Undercarriage | | VH-HD | LC-V | HD |
|-----------------|--------------------|--------|--------|--------|
| Pad width | mm | 600 | 600 | 600 |
| Weight | kg | 69,925 | 62,425 | 59,425 |
| Ground pressure | kg/cm ² | 1.09 | 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 9.2 t, 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 0.99 | 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 ▲ = ≤ 2.0 t/m³, ■ = ≤ 1.8 t/m³, ■ = ≤ 1.5 t/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 | m | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | 10.5 m | | m | m | |
| | | ↕ | ↔ | ↕ | ↔ | ↕ | ↔ | ↕ | ↔ | ↕ | ↔ | | | |
| WH-HD | 12.0 | | | | | | | | | | | 12.1* | 12.1* | 6.2 |
| | 10.5 | | | | | | | | | | | 10.4* | 10.4* | 7.9 |
| | 9.0 | 16.9* | 16.9* | 17.6* | 17.6* | 14.8* | 14.8* | | | | | 9.7* | 9.7* | 9.0 |
| | 7.5 | 28.7* | 28.7* | 22.1* | 22.1* | 15.7 | 18.6* | | | | | 9.4* | 9.4* | 9.7 |
| | 6.0 | | | 21.0 | 24.2* | 15.2 | 19.4* | 11.5 | 16.7* | | | 9.3* | 9.3* | 10.1 |
| | 4.5 | | | | | 14.5 | 20.3* | 11.2 | 17.0* | | | 9.0 | 9.5* | 10.3 |
| | 3.0 | | | | | 13.9 | 20.8* | 10.9 | 16.7 | | | 9.0 | 9.9* | 10.3 |
| | 1.5 | | | | | 13.6 | 20.4* | 10.7 | 16.4 | | | 9.3 | 10.6* | 10.0 |
| | 0 | | | | | 13.5 | 19.2* | 10.6 | 15.9* | | | 10.1 | 11.9* | 9.5 |
| | -1.5 | | | | | 13.6 | 17.0* | 10.7 | 13.8* | | | | | |
| LC-V | 12.0 | | | 15.8* | 15.8* | | | | | | | 11.8* | 11.8* | 6.2 |
| | 10.5 | | | | | | | | | | | 10.3* | 10.3* | 7.9 |
| | 9.0 | 17.1* | 17.1* | 17.3 | 17.8* | 11.9 | 15.5* | | | | | 8.5 | 9.6* | 9.0 |
| | 7.5 | 25.8 | 29.1* | 16.5 | 22.3* | 11.6 | 18.0 | 8.6 | 10.7* | | | 7.4 | 9.4* | 9.7 |
| | 6.0 | | | 15.1 | 24.4* | 11.1 | 17.4 | 8.4 | 13.1 | | | 6.8 | 9.3* | 10.1 |
| | 4.5 | | | | | 10.4 | 16.7 | 8.1 | 12.8 | | | 6.5 | 9.5* | 10.3 |
| | 3.0 | | | | | 9.9 | 16.1 | 7.8 | 12.4 | | | 6.4 | 10.0* | 10.3 |
| | 1.5 | | | | | 9.6 | 15.8 | 7.6 | 12.2 | | | 6.7 | 10.6* | 10.0 |
| | 0 | | | 10.8* | 10.8* | 9.5 | 15.7 | 7.6 | 12.2 | | | 7.3 | 11.6 | 9.5 |
| | -1.5 | | | | | 9.7 | 15.8 | 7.7 | 12.3 | | | | | |
| HD | 12.0 | | | 15.4* | 15.4* | | | | | | | 11.9* | 11.9* | 6.2 |
| | 10.5 | | | | | | | | | | | 10.1 | 10.4* | 7.9 |
| | 9.0 | 17.0* | 17.0* | 16.6 | 17.7* | 11.4 | 15.2* | | | | | 8.1 | 9.7* | 9.0 |
| | 7.5 | 24.9 | 28.9* | 15.8 | 22.2* | 11.1 | 17.5 | 8.1 | 9.9* | | | 7.0 | 9.4* | 9.7 |
| | 6.0 | | | 14.5 | 24.1 | 10.6 | 16.9 | 8.0 | 12.7 | | | 6.4 | 9.3* | 10.1 |
| | 4.5 | | | | | 9.9 | 16.1 | 7.7 | 12.3 | | | 6.1 | 9.5* | 10.3 |
| | 3.0 | | | | | 9.4 | 15.5 | 7.4 | 12.0 | | | 6.1 | 9.8 | 10.3 |
| | 1.5 | | | | | 9.1 | 15.2 | 7.2 | 11.8 | | | 6.3 | 10.2 | 10.0 |
| | 0 | | | 10.2* | 10.2* | 9.0 | 15.1 | 7.1 | 11.7 | | | 6.9 | 11.1 | 9.5 |
| | -1.5 | | | | | 9.1 | 15.2 | 7.3 | 11.8 | | | | | |

with Main Boom 4.30 m (pinned in lower bearing), Counterweight 9.2 t and Track Pads 600 mm

| Stick 2.10 m | | | | | | | | | | | | | | |
|----------------|------|-------|---|-------|-------|-------|-------|-------|-------|--------|---|-------|-------|------|
| Under-carriage | m | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | 10.5 m | | m | m | |
| | | ↕ | ↔ | ↕ | ↔ | ↕ | ↔ | ↕ | ↔ | ↕ | ↔ | | | |
| WH-HD | 9.0 | | | | | | | | | | | 10.0* | 10.0* | 7.0 |
| | 7.5 | | | | | | | | | | | 9.4* | 9.4* | 8.2 |
| | 6.0 | | | 18.5* | 18.5* | 16.3 | 16.4* | | | | | 9.3* | 9.3* | 9.0 |
| | 4.5 | | | 20.7 | 23.7* | 15.1 | 18.7* | 11.6 | 16.2* | | | 9.5* | 9.5* | 9.5 |
| | 3.0 | | | 18.2* | 18.2* | 14.5 | 20.0* | 11.3 | 16.8* | | | 9.9* | 9.9* | 9.7 |
| | 1.5 | | | 16.9* | 16.9* | 14.0 | 20.8* | 11.0 | 16.8 | | | 10.0 | 10.7* | 9.7 |
| | 0 | | | 18.8 | 25.7* | 13.8 | 20.8* | 10.9 | 16.6 | | | 10.3 | 12.0* | 9.4 |
| | -1.5 | | | 18.9 | 24.4* | 13.8 | 19.9* | | | | | 11.1 | 14.3* | 8.9 |
| | -3.0 | | | 19.2 | 21.7* | 14.0 | 17.6* | | | | | 12.9 | 15.9* | 8.0 |
| | LC-V | 9.0 | | | | | | | | | | | 9.9* | 9.9* |
| 7.5 | | | | | | | | | | | | 9.4* | 9.4* | 8.2 |
| 6.0 | | | | 17.5 | 18.7* | 12.2 | 16.6* | | | | | 8.6 | 9.3* | 9.0 |
| 4.5 | | | | 16.3 | 21.0* | 11.7 | 17.5* | 8.8 | 10.9* | | | 7.7 | 9.5* | 9.5 |
| 3.0 | | | | 14.8 | 24.0* | 11.1 | 17.4 | 8.5 | 13.2 | | | 7.3 | 10.0* | 9.7 |
| 1.5 | | | | 13.3 | 17.3* | 10.4 | 16.7 | 8.2 | 12.8 | | | 7.2 | 10.8* | 9.7 |
| 0 | | | | 13.2 | 17.5* | 10.0 | 16.2 | 7.9 | 12.6 | | | 7.4 | 11.8 | 9.4 |
| -1.5 | | | | 13.3 | 22.6 | 9.8 | 16.0 | | | | | 8.1 | 12.9 | 8.9 |
| -3.0 | | | | 13.6 | 21.4* | 10.1 | 16.3 | | | | | 9.5 | 15.2 | 8.0 |
| HD | | 9.0 | | | | | | | | | | | 9.9* | 9.9* |
| | 7.5 | | | | | | | | | | | 9.4* | 9.4* | 8.2 |
| | 6.0 | | | 16.8 | 18.6* | 11.7 | 16.5* | | | | | 8.2 | 9.3* | 9.0 |
| | 4.5 | | | 15.6 | 20.9* | 11.2 | 17.5* | 8.3 | 10.5* | | | 7.4 | 9.5* | 9.5 |
| | 3.0 | | | 14.2 | 23.7 | 10.6 | 16.9 | 8.1 | 12.7 | | | 6.9 | 10.0* | 9.7 |
| | 1.5 | | | 12.6 | 17.2* | 9.5 | 15.7 | 7.5 | 12.1 | | | 6.8 | 10.8* | 9.7 |
| | 0 | | | 12.5 | 21.7 | 9.3 | 15.4 | 7.4 | 12.0 | | | 7.0 | 11.3 | 9.4 |
| | -1.5 | | | 12.6 | 21.9 | 9.3 | 15.4 | | | | | 7.6 | 12.3 | 8.9 |
| | -3.0 | | | 12.9 | 21.5* | 9.5 | 15.7 | | | | | 8.9 | 14.5 | 8.0 |

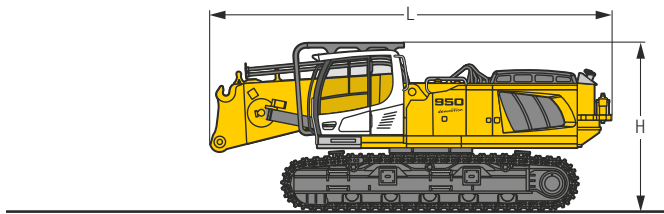
| Stick 2.60 m | | | | | | | | | | | | | | |
|----------------|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|
| Under-carriage | m | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | 10.5 m | | m | m | |
| | | ↕ | ↔ | ↕ | ↔ | ↕ | ↔ | ↕ | ↔ | ↕ | ↔ | | | |
| WH-HD | 9.0 | | | | | | | | | | | 9.3* | 9.3* | 7.7 |
| | 7.5 | | | | | | | | | | | 14.2* | 14.2* | 8.8 |
| | 6.0 | 26.1* | 26.1* | 19.7* | 19.7* | 16.1 | 16.7* | 12.1 | 12.2* | | | 7.8* | 7.8* | 9.5 |
| | 4.5 | | | 21.1 | 22.6* | 15.3 | 18.1* | 11.7 | 15.7* | | | 7.4* | 7.4* | 10.0 |
| | 3.0 | | | 19.8 | 25.2* | 14.6 | 19.5* | 11.3 | 16.4* | | | 7.5* | 7.5* | 10.2 |
| | 1.5 | | | 19.0 | 23.1* | 14.1 | 20.5* | 11.0 | 16.8 | | | 8.4* | 8.4* | 10.1 |
| | 0 | | | 18.8 | 26.2* | 13.8 | 20.8* | 10.8 | 16.6 | | | 9.3* | 9.3* | 9.9 |
| | -1.5 | | | 16.2* | 16.2* | 18.8 | 25.1* | 13.7 | 20.2* | 10.8 | 16.4* | 10.3 | 10.8* | 9.4 |
| | -3.0 | | | 27.3* | 27.3* | 19.0 | 22.9* | 13.8 | 18.5* | | | 11.7 | 13.6* | 8.6 |
| | LC-V | 9.0 | | | | | | | | | | | 10.2* | 10.2* |
| 7.5 | | | | | | | | | | | | 7.8* | 7.8* | 8.8 |
| 6.0 | | 25.6 | 26.8* | 16.9* | 16.9* | 12.5 | 14.6* | | | | | 7.4* | 7.4* | 9.5 |
| 4.5 | | | | 16.7 | 20.0* | 11.9 | 16.8* | 8.9 | 12.7* | | | 7.2 | 7.5* | 10.0 |
| 3.0 | | | | 15.3 | 22.9* | 11.2 | 17.6 | 8.6 | 13.3 | | | 6.8 | 7.8* | 10.2 |
| 1.5 | | | | 14.0 | 23.4 | 10.6 | 16.8 | 8.2 | 12.9 | | | 6.7 | 8.4* | 10.1 |
| 0 | | | | 13.4 | 22.6 | 10.1 | 16.3 | 7.9 | 12.6 | | | 6.9 | 9.4* | 9.9 |
| -1.5 | | | | 13.2 | 22.4 | 9.8 | 16.0 | 7.7 | 12.4 | | | 7.4 | 11.0* | 9.4 |
| -3.0 | | | | 13.4 | 22.6* | 9.9 | 16.1 | | | | | 8.5 | 13.7 | 8.6 |
| HD | | 9.0 | | | | | | | | | | | 9.8* | 9.8* |
| | 7.5 | | | | | | | | | | | 11.9 | 14.4* | 8.8 |
| | 6.0 | 24.7 | 26.5* | 16.7* | 16.7* | 11.4 | 16.8* | 8.5 | 12.5* | | | 7.4* | 7.4* | 9.5 |
| | 4.5 | | | 14.6 | 22.8* | 10.7 | 17.1 | 8.2 | 12.9 | | | 6.9 | 7.5* | 10.0 |
| | 3.0 | | | 13.4 | 22.7 | 10.1 | 16.3 | 7.8 | 12.5 | | | 6.5 | 7.8* | 10.2 |
| | 1.5 | | | 12.7 | 21.9 | 9.5 | 15.7 | 7.5 | 12.1 | | | 6.4 | 8.4* | 10.1 |
| | 0 | | | 12.5 | 21.7 | 9.3 | 15.4 | 7.3 | 11.9 | | | 6.5 | 9.4* | 9.9 |
| | -1.5 | | | 16.8* | 16.8* | 12.5 | 21.7 | 9.2 | 15.3 | 7.3 | 11.9 | 7.0 | 10.9* | 9.4 |
| | -3.0 | | | 19.9 | 27.3* | 12.7 | 22.0 | 9.3 | 15.5 | | | 8.0 | 13.1 | 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.

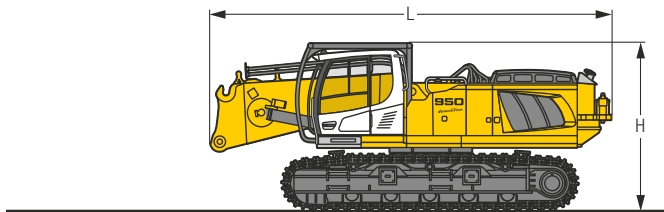
Dimensions and Weights



Basic Machine

without counterweight with cab tiltable 30° and integral protection grid

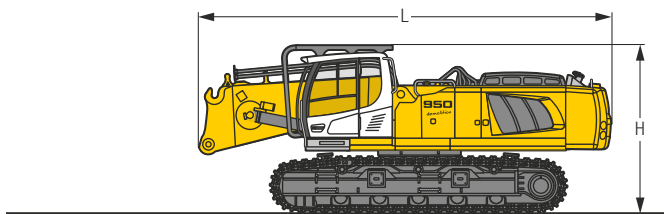
| | | VH-HD | LC-V | HD |
|--------|----|--------|--------|--------|
| L | mm | 8,150 | 8,150 | 8,150 |
| H | mm | 3,395 | 3,605 | 3,500 |
| Weight | kg | 48,100 | 40,600 | 37,600 |



Basic Machine

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

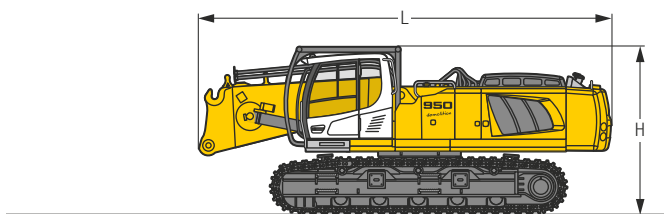
| | | VH-HD | LC-V | HD |
|--------|----|--------|--------|--------|
| L | mm | 8,150 | 8,150 | 8,150 |
| H | mm | 3,395 | 3,605 | 3,500 |
| Weight | kg | 48,500 | 41,000 | 38,000 |



Basic Machine

with counterweight 9.2 t, 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 |

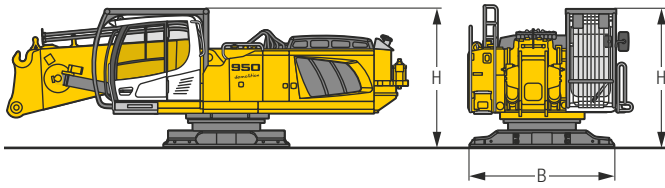


Basic Machine

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

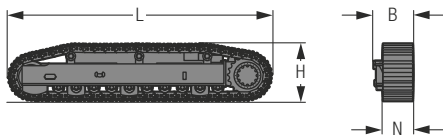
| | | VH-HD | LC-V | HD |
|--------|----|--------|--------|--------|
| L | mm | 8,400 | 8,400 | 8,400 |
| H | mm | 3,395 | 3,605 | 3,500 |
| Weight | kg | 56,400 | 48,900 | 45,900 |

Dimensions and Weights



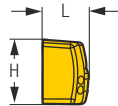
Basic Machine without side frames

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



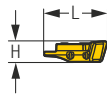
Side Frame for LC-V-Undercarriage

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



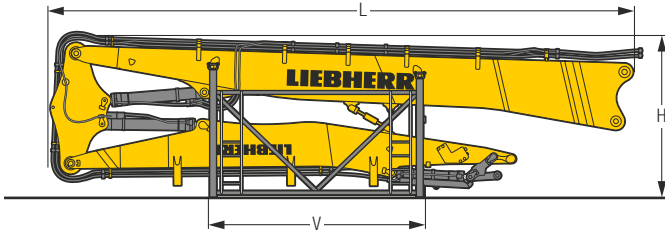
Counterweight

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



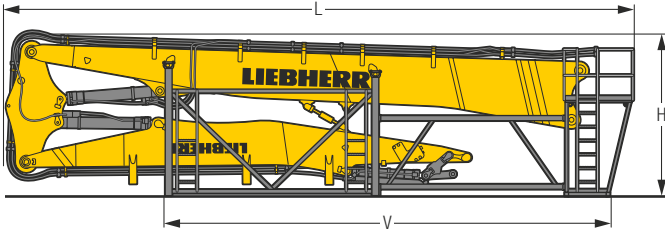
Additional Counterweight

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



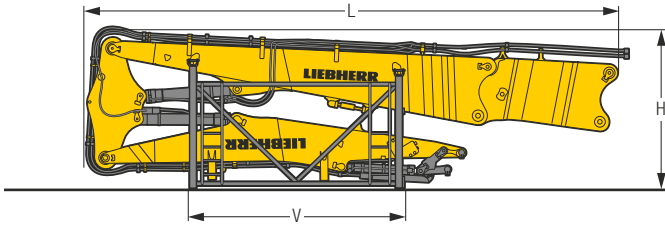
Demolition Equipment with storage rack

| | | 22.50 m | 25.00 m | 26.50 m | 27.50 m |
|---------------------------|----|---------|---------|---------|---------|
| 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 |



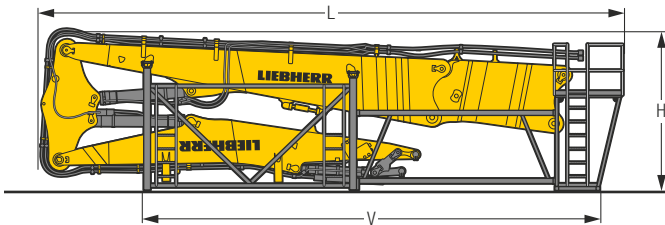
Demolition Equipment with storage rack with catwalks

| | | 22.50 m | 25.00 m | 26.50 m | 27.50 m |
|---------------------------|----|---------|---------|---------|---------|
| 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 |



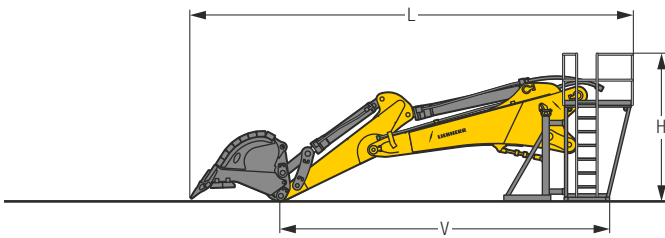
Demolition Equipment with Demolition Boom Extension with storage rack

| | | | 25.00 m |
|---------------------------|----|--|---------|
| L Length | mm | | 10,950 |
| H Height | mm | | 3,250 |
| V | mm | | 4,450 |
| Width | mm | | 2,200 |
| Weight without attachment | kg | | 13,190 |



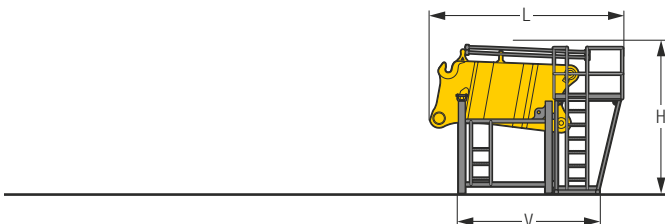
Demolition Equipment with Demolition Boom Extension with storage rack with catwalks

| | | | 25.00 m |
|---------------------------|----|--|---------|
| L Length | mm | | 12,000 |
| H Height | mm | | 3,250 |
| V | mm | | 8,700 |
| Width | mm | | 2,500 |
| Weight without attachment | kg | | 14,110 |



Backhoe Equipment with storage rack with catwalks

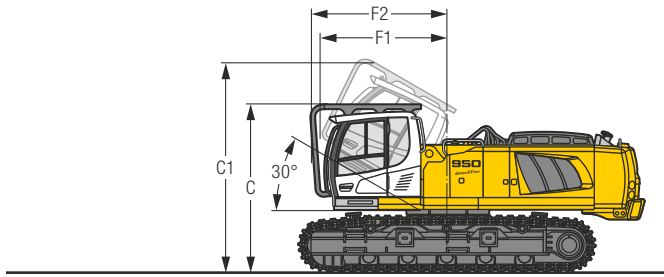
| | | | |
|-----------------------|----|-------|-------|
| Main boom length | m | 4.30 | |
| Stick length | m | 2.10 | 2.60 |
| L Length | mm | 9,000 | 9,520 |
| H Height | mm | 3,020 | 3,020 |
| V | mm | 6,700 | 7,220 |
| Width | mm | 2,500 | 2,500 |
| Weight without bucket | kg | 6,185 | 6,300 |



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 |

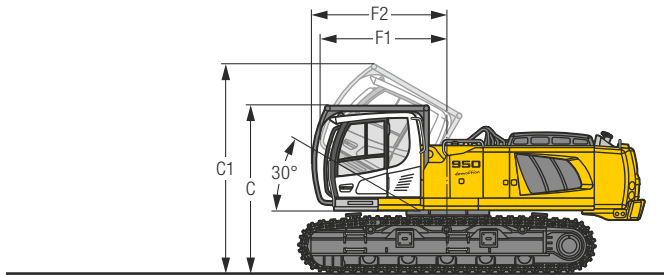
Choice of Cab Elevations



Version

with cab tiltable 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 tiltable 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 + DPF + SCR
Fixed geometry turbocharger
Fuel pre-filter and water separator
Intercooler
Power Pack EU Stage V
Power Pack non-regulated countries (for select markets)

Operator's 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 meters, 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 right, 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 (240 V) | + |

Engine

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

• = Standard, + = Option

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

Operator's 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 | + |
| 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 | + |
| Boom cylinder rods protection | + |
| LIKUFIX for quick coupler SWA 66 hydraulic | + |
| 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 | + |
| Standard boom with multicouplers for demolition boom and backhoe equipment | + |
| Stick bottom protection | + |
| Storage rack with catwalks | + |
| Tool Management | + |

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.

Liebherr-France SAS

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