

---

# R 940 Litronic

---

## LIEBHERR

Demolition excavator

### Generation

6

### Engine

200 kW / 272 HP  
Stage V  
Tier 4 Final  
Non-regulated only  
for select markets

### Operating weight

48,700–63,900 kg

### Working height

23 m  
H/2: 20 m



# Technical data



## Engine

|                              |  |
|------------------------------|--|
| <b>Rating per ISO 9249</b>   | 200kW (272HP) at 1,800RPM  |
| <b>Torque</b>                | 1,400Nm at 1,100RPM  |
| <b>Model</b>                 | Liebherr D944 A7-25 (Stage V)<br>or<br>Liebherr D944 A7-24 (Tier 4 Final)<br>or<br>Liebherr D944 A7-20 (non-regulated only for select markets) |
| <b>Type</b>                  | 4 cylinder in-line   |
| <b>Bore</b>                  | 130mm  |
| <b>Stroke</b>                | 150mm  |
| <b>Displacement</b>          | 7.964l   |
| <b>Engine operation</b>      | 4-stroke diesel<br>Common-Rail, monoturbo  |
| <b>Exhaust gas treatment</b> | DOC + SCR Filter (Stage V)<br>or<br>SCR (Tier 4 Final)<br>or<br>without EGR (non-regulated only for select markets)                            |
| <b>Cooling system</b>        | Water-cooled and integrated motor oil cooler, after-cooled and fuel cooled   |
| <b>Air cleaner</b>           | Dry-type air cleaner with pre-cleaner, primary and safety elements   |
| <b>Fuel tank</b>             | 770l   |
| <b>Urea tank</b>             | 90l  |
| <b>Electrical system</b>     |  |
| <b>Voltage</b>               | 24V  |
| <b>Batteries</b>             | 2 x 180Ah/12V  |
| <b>Starter</b>               | 24V/7.8kW  |
| <b>Alternator</b>            | Three-phase current 28V/140A   |
| <b>Engine idling</b>         | Sensor controlled  |
| <b>Motor management</b>      | Connection to the integrated excavator system controlling via CAN-BUS to the economical utilisation of the service that is available           |



## Hydraulic controls

|                             |   |
|-----------------------------|---|
| <b>Power distribution</b>   | Via control valves in single block with integrated safety valves                    |
| <b>Flow summation</b>       | To boom and stick   |
| <b>Closed-loop circuit</b>  | For uppercarriage swing drive   |
| <b>Servo circuit</b>        |   |
| <b>Equipment and swing</b>  | Proportional via joystick levers  |
| <b>Travel</b>               | - Proportional control via foot pedals or removable levers<br>- Speed pre-selection |
| <b>Additional functions</b> | Proportional regulation via foot pedals or mini-joystick                            |



## Hydraulic system

|                                       |   |
|---------------------------------------|---|
| <b>Hydraulic system</b>               | Positive Control hydraulic system. Demand-based, double independent pump flows<br>Features high system dynamics and sensitivity provided by integrated system controlling<br>Independent circuit for rotation             |
| <b>Hydraulic pumps</b>                |   |
| <b>For equipment and travel drive</b> | Liebherr, variable displacement, swashplate double pump   |
| <b>Max. flow</b>                      | 2 x 315l/min.   |
| <b>Max. pressure</b>                  | 380bar  |
| <b>For swing drive</b>                | Reversible, variable displacement, swashplate pump, closed-loop circuit   |
| <b>Max. flow</b>                      | 205l/min.   |
| <b>Max. pressure</b>                  | 400bar  |
| <b>Pump management</b>                | Electronic pump management via the integrated system controlling (CAN-BUS) synchronous to the control block   |
| <b>Hydraulic tank</b>                 | 380l  |
| <b>Hydraulic system</b>               | 1,100l with demolition equipment  |
| <b>Filtration</b>                     | 1 full flow filter (10µm) in return line with integrated fine filter area (5µm)   |
| <b>Cooling system</b>                 | Compact cooler, consisting of a water cooler, with hydraulic oil cooler, gearbox oil cooler, fuel cooler and after-cooler cores and hydrostatically driven fan  |
| <b>MODE selection</b>                 | 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 |
| <b>RPM adjustment</b>                 | Stepless adjustment of engine output via RPM at each selected mode  |
| <b>Tool Control</b>                   | 20 pre-adjustable pump flows and pressures for add-on attachments   |
| <b>Attachment system</b>              |   |
| <b>Flow</b>                           | 315l/min.   |
| <b>Pressure</b>                       | 380bar  |
| <b>Attachment rotation system</b>     |   |
| <b>Flow</b>                           | 30l/min.  |
| <b>Pressure</b>                       | 140bar  |
| <b>Max. pressure</b>                  | 180bar  |



## Swing drive

|                      |   |
|----------------------|---|
| <b>Drive</b>         | Liebherr swashplate motor with integrated brake valve         |
| <b>Transmission</b>  | Liebherr compact planetary reduction gears                    |
| <b>Swing ring</b>    | Liebherr, sealed race ball bearing swing ring, internal teeth |
| <b>Swing speed</b>   | 0-7.5 min <sup>-1</sup> stepless                              |
| <b>Swing torque</b>  | 115.2kNm  |
| <b>Holding brake</b> | Wet multi-disc (spring applied, pressure released)            |


**Cab**

|                               |   |
|-------------------------------|---|
| <b>Cab</b>                    | 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            |
| <b>Operator's seat</b>        | 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  |
| <b>Arm consoles</b>           | Oscillating consoles with seat, tiltable console left   |
| <b>Operation and displays</b> | 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   |
| <b>Air-conditioning</b>       | 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<br>The air conditioning system contains fluorinated greenhouse gases |
| Refrigerant                   | R134a   |
| Global warming potential      | 1,430   |
| Quantity at 25 °C*            | 1,260 g   |
| CO <sub>2</sub> equivalent    | 1.80t   |
| <b>Vibration emission**</b>   |   |
| Hand / arm vibrations         | < 2.5 m/s <sup>2</sup> , according with ISO 5349-1:2001   |
| Whole-body vibrations         | < 0.5 m/s <sup>2</sup>  |
| Measuring inaccuracy          | According with standard EN 12096:1997   |
| <b>Noise emission</b>         |   |
| ISO 6396                      | 71 dB(A) = L <sub>PA</sub> (inside cab)   |
| 2000/14/EC                    | 105 dB(A) = L <sub>WA</sub> (surround noise)  |


**Undercarriage**

|  |   |
|--|---|
| <b>Versions</b>                        |   |
| VH-HD                                  | Hydraulic variable gauge                              |
| LC-V                                   | Mechanical variable gauge                             |
| LC / NLC                               | Standard  |
| <b>Drive</b>                           | Liebherr swashplate motor with integrated brake valve |
| <b>Transmission</b>                    | Liebherr compact planetary reduction gear             |
| <b>Maximum travel speed</b>            | 2.2 km/h low range<br>3.1 km/h high range             |
| <b>Drawbar pull on crawler</b>         | 400 kN (VH-HD)<br>347 kN (LC-V)<br>296 kN (LC / NLC)  |
| <b>Track components</b>                | D7, D7G, maintenance-free                             |
| <b>Track rollers / Carrier rollers</b> | 10 / 3 (VH-HD)<br>10 / 3 (LC-V)<br>9 / 2 (LC / NLC)   |
| <b>Tracks</b>                          | Sealed and greased                                    |
| <b>Track pads</b>                      | Triple grouser  |
| <b>Holding brake</b>                   | Wet multi-disc (spring applied, pressure released)    |


**Equipment**

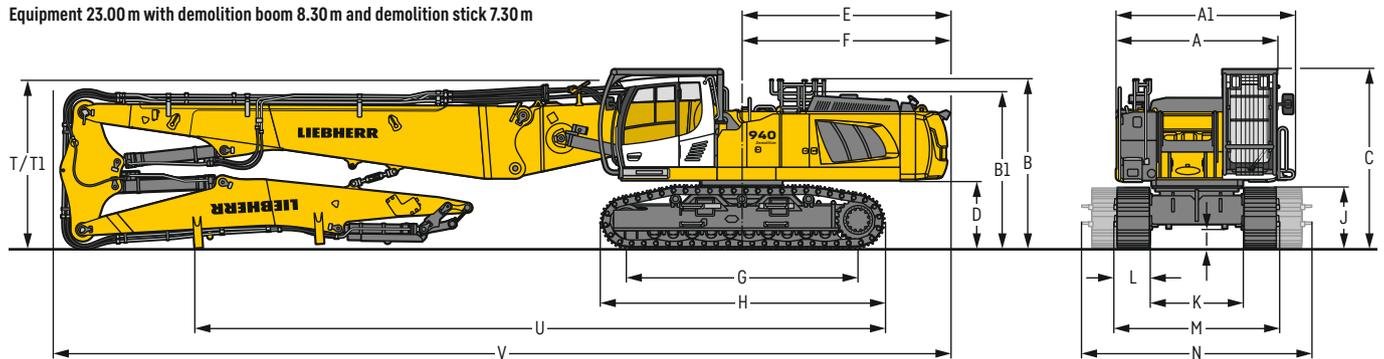
|                              |  |
|------------------------------|--|
| <b>Type</b>                  | Combination of resistant steel plates and cast steel components      |
| <b>Hydraulic cylinders</b>   | Liebherr cylinders with seal and guidance systems                    |
| <b>Bearings</b>   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

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

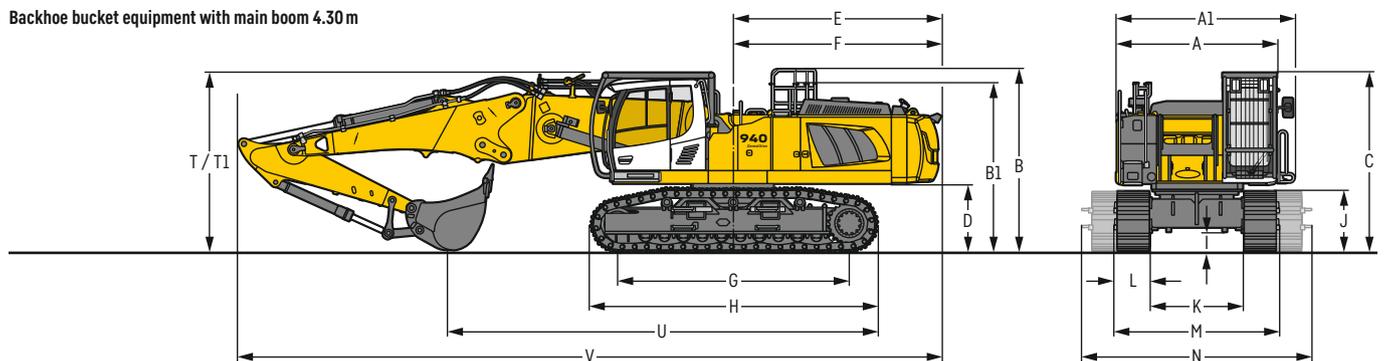
\*\* For the risk assessment according to 2002/44/EC see ISO/TR 25398:2006

# Dimensions

Equipment 23.00 m with demolition boom 8.30 m and demolition stick 7.30 m



Backhoe bucket equipment with main boom 4.30 m



|           | VH-HD                                    | mm                           | LC-V                         | mm                  | LC                  | mm                  | NLC                 | mm                  |
|-----------|--|------------------------------|------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>A</b>  | Upper-carriage width                     | 2,985 <sup>2)</sup>          | 2,985 <sup>2)</sup>          | 2,985 <sup>2)</sup> | 2,985 <sup>2)</sup> | 2,985 <sup>2)</sup> | 2,985 <sup>2)</sup> | 2,985 <sup>2)</sup> |
| <b>A1</b> | Upper-carriage width with catwalks       | 3,325                        | 3,325                        | 3,325               | 3,325               | 3,325               | 3,325               | 3,325               |
| <b>B</b>  | Upper-carriage height                    | 3,450                        | 3,560                        | 3,405               | 3,405               | 3,405               | 3,405               | 3,405               |
| <b>B1</b> | Upper-carriage height (handrails folded) | 3,190                        | 3,300                        | 3,145               | 3,145               | 3,145               | 3,145               | 3,145               |
| <b>C</b>  | Cab height                               | 3,400                        | 3,510                        | 3,355               | 3,355               | 3,355               | 3,355               | 3,355               |
| <b>D</b>  | Counterweight ground clearance           | 1,250                        | 1,360                        | 1,205               | 1,205               | 1,205               | 1,205               | 1,205               |
| <b>E</b>  | Rear-end length                          | 3,945                        | 3,945                        | 3,945               | 3,945               | 3,945               | 3,945               | 3,945               |
| <b>F</b>  | Tail swing radius                        | 3,945                        | 3,945                        | 3,945               | 3,945               | 3,945               | 3,945               | 3,945               |
| <b>G</b>  | Wheelbase                                | 4,390                        | 4,400                        | 4,108               | 4,108               | 4,108               | 4,108               | 4,108               |
| <b>H</b>  | Under-carriage length                    | 5,370                        | 5,365                        | 5,030               | 5,030               | 5,030               | 5,030               | 5,030               |
| <b>I</b>  | Under-carriage ground clearance          | 440                          | 760                          | 535                 | 535                 | 535                 | 535                 | 535                 |
| <b>J</b>  | Track height                             | 1,140                        | 1,165                        | 1,070               | 1,070               | 1,070               | 1,070               | 1,070               |
| <b>K</b>  | Track gauge                              | 2,380-3,300 <sup>3)</sup>    | 2,390-2,890 <sup>3)</sup>    | 2,590               | 2,590               | 2,590               | 2,590               | 2,590               |
| <b>L</b>  | Track pad width                          | 600                          | 600                          | 600                 | 600                 | 600                 | 600                 | 600                 |
| <b>M</b>  | Width over tracks                        | 2,980-3,930 <sup>3)</sup>    | 2,990-3,490 <sup>3)</sup>    | 3,190               | 3,190               | 3,190               | 3,190               | 3,190               |
| <b>N</b>  | Width over steps                         | 3,090-4,310 <sup>1) 3)</sup> | 3,240-3,740 <sup>1) 3)</sup> | 3,180               | 3,180               | 3,180               | 3,180               | 3,180               |

<sup>1)</sup> width with removable steps

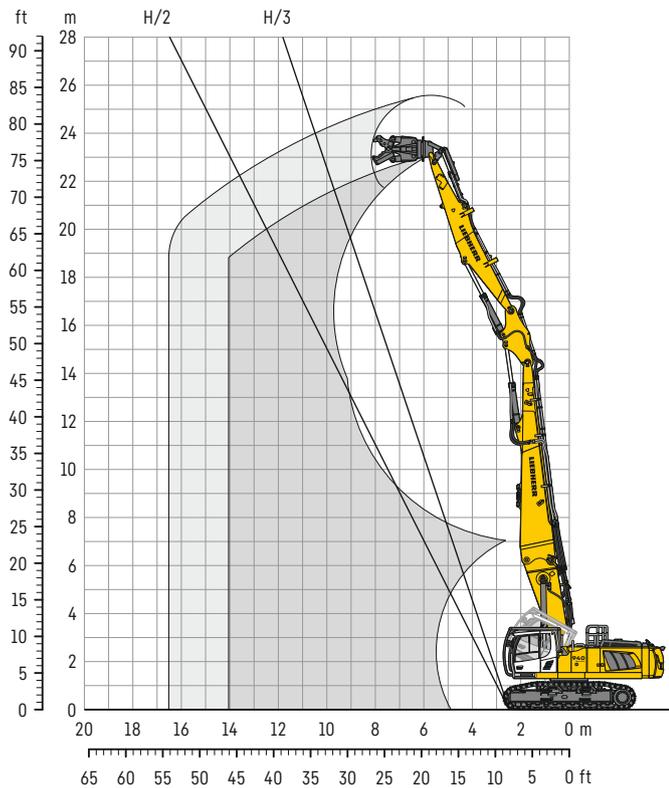
<sup>2)</sup> without door stop device and spacer

<sup>3)</sup> work position

|           |  | Demolition equipment 23.00 m |        |        |        |
|-----------|--|------------------------------|--------|--------|--------|
|           |  | VH-HD                        | LC-V   | LC     | NLC    |
|           |  | mm                           |        |        |        |
| <b>T</b>  | Boom height  | 3,200                        | 3,300  | 3,150  | 3,150  |
| <b>T1</b> | Boom height with automatic hydraulic coupling system | 3,650                        | 3,750  | 3,600  | 3,600  |
| <b>U</b>  | Length on ground                                     | 13,100                       | 13,050 | 12,900 | 12,900 |
| <b>V</b>  | Overall length                                       | 16,950                       | 16,950 | 16,950 | 16,950 |

|           |  | Stick length | Backhoe bucket equipment |        |        |        |
|-----------|--|--------------|--------------------------|--------|--------|--------|
|           |  | m            | VH-HD                    | LC-V   | LC     | NLC    |
|           |  | mm           |                          |        |        |        |
| <b>T</b>  | Boom height  | 2.50         | 3,400                    | 3,450  | 3,400  | 3,400  |
|           |  | 2.80         | 3,450                    | 3,500  | 3,450  | 3,450  |
| <b>T1</b> | Boom height with automatic hydraulic coupling system | 2.50         | 3,850                    | 3,900  | 3,850  | 3,850  |
|           |  | 2.80         | 3,900                    | 3,950  | 3,900  | 3,900  |
| <b>U</b>  | Length on ground                                     | 2.50         | 8,150                    | 8,000  | 7,800  | 7,800  |
|           |  | 2.80         | 7,950                    | 7,800  | 7,600  | 7,600  |
| <b>V</b>  | Overall length                                       | 2.50         | 13,400                   | 13,400 | 13,400 | 13,400 |
|           |  | 2.80         | 13,400                   | 13,400 | 13,400 | 13,400 |

# Demolition equipment 23.00 m



## Reach limitation

|   |                   | 10 m                          | 12 m | 14 m |
|---|-------------------|-------------------------------|------|------|
| <b>Demolition boom 8.30 m<br/>+ Intermediate boom<br/>+ Demolition stick 7.30 m<br/>VH-HD undercarriage</b> |                   | <b>Attachment<br/>weight*</b> |      |      |
|   | <b>lengthwise</b> | 3.00                          | 3.00 | 3.00 |
|   | <b>transverse</b> | 3.00                          | 2.75 | 2.50 |
| <b>LC-V undercarriage</b>   |                   |                               |      |      |
|   | <b>lengthwise</b> | 3.00                          | 3.00 | 2.75 |
|   | <b>transverse</b> | 3.00                          | 2.25 | 1.75 |
| <b>LC undercarriage</b>   |                   |                               |      |      |
|   | <b>lengthwise</b> | 3.00                          | 3.00 | 2.75 |
|   | <b>transverse</b> | 2.00                          | 1.75 | -    |
| <b>NLC undercarriage</b>  |                   |                               |      |      |
|   | <b>lengthwise</b> | 3.00                          | 3.00 | 2.50 |
|   | <b>transverse</b> | 1.50                          | 1.25 | -    |

\* included quick coupler, adapter plate and attachment

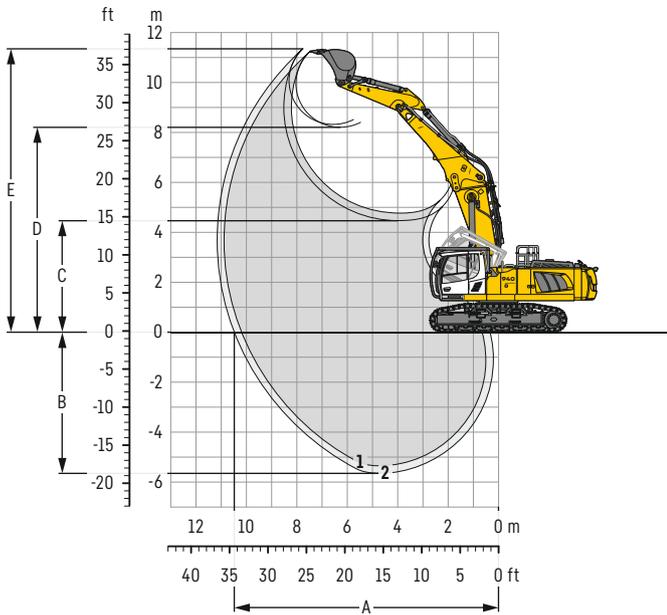
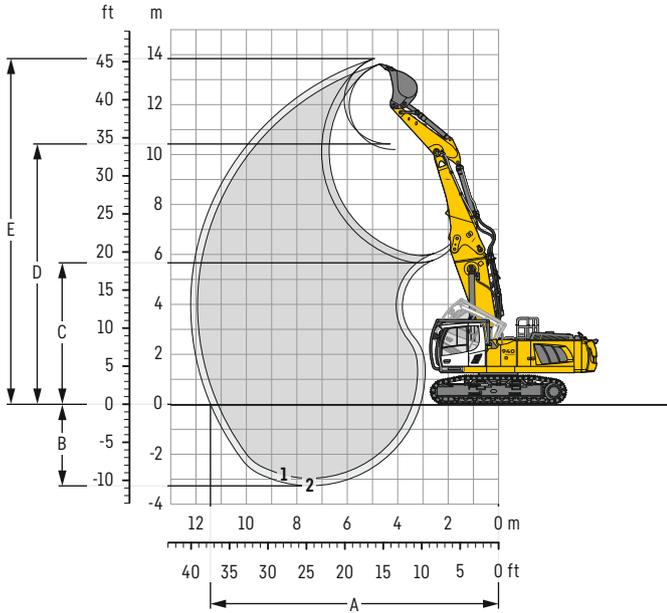
## Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 11.0 t, demolition boom 8.30 m, intermediate boom 2.25 m, demolition stick 7.30 m and attachment 3.0 t.

| Undercarriage   |                    | VH-HD  | LC-V   | LC     | NLC    |
|-----------------|--------------------|--------|--------|--------|--------|
| Pad width       | mm                 | 600    | 600    | 600    | 600    |
| Weight          | kg                 | 63,900 | 59,800 | 54,700 | 54,600 |
| Ground pressure | kg/cm <sup>2</sup> | 1.13   | 1.05   | 1.03   | 1.03   |

# Backhoe bucket

with main boom 4.30 m



## Digging envelope

Main boom pinned in upper (in lower) bearing

|                              |   | 1             | 2             |
|------------------------------|---|---------------|---------------|
| Stick length                 | m | 2.50          | 2.80          |
| A Max. reach at ground level | m | 11.13 (10.19) | 11.41 (10.48) |
| B Max. digging depth         | m | 2.96 ( 5.35)  | 3.26 ( 5.65)  |
| C Min. dumping height        | m | 5.95 ( 4.77)  | 5.66 ( 4.47)  |
| D Max. dumping height        | m | 10.20 ( 8.21) | 10.42 ( 8.21) |
| E Max. cutting height        | m | 13.61 (11.23) | 13.84 (11.35) |

## Forces

|                                  |    | 1   | 2   |
|----------------------------------|----|-----|-----|
| Stick digging force (ISO 6015)   | kN | 168 | 156 |
| Bucket digging force (ISO 6015)  | kN | 204 | 204 |
| Stick digging force (SAE J1179)  | kN | 160 | 149 |
| Bucket digging force (SAE J1179) | kN | 178 | 178 |

## Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 11.0 t, main boom 4.30 m, stick 2.50 m and bucket 2.00 m<sup>3</sup> (1,210 kg).

| Undercarriage   |                    | VH-HD  | LC-V   | LC     | NLC    |
|-----------------|--------------------|--------|--------|--------|--------|
| Pad width       | mm                 | 600    | 600    | 600    | 600    |
| Weight          | kg                 | 58,000 | 53,900 | 48,800 | 48,700 |
| Ground pressure | kg/cm <sup>2</sup> | 1.02   | 0.95   | 0.92   | 0.92   |

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

| Cutting width<br>mm | Capacity<br>ISO 7451<br>m <sup>3</sup> | Weight<br>kg | VH-HD undercarriage<br>(with track pads 600 mm) |      | LC-V undercarriage<br>(with track pads 600 mm) |      | LC undercarriage<br>(with track pads 600 mm) |      | NLC undercarriage<br>(with track pads 600 mm) |      |
|---------------------|--|--------------|---|------|--|------|--|------|---|------|
|                     |  |              | Stick length (m)                                |      | Stick length (m)                               |      | Stick length (m)                             |      | Stick length (m)                              |      |
|                     |  |              | 2.50  | 2.80 | 2.50   | 2.80 | 2.50   | 2.80 | 2.50  | 2.80 |
| 1,550               | 1.60                                   | 1,110        | ▲   | ▲    | ▲  | ▲    | ▲  | ▲    | ▲   | ▲    |
| 1,650               | 1.75                                   | 1,160        | ▲   | ▲    | ▲  | ▲    | ▲  | ▲    | ▲   | ▲    |
| 1,550               | 1.85                                   | 1,170        | ▲   | ▲    | ▲  | ▲    | ▲  | ▲    | ▲   | ▲    |
| 1,650               | 2.00                                   | 1,210        | ▲   | ▲    | ▲  | ▲    | ▲  | ▲    | ▲   | ▲    |
| 1,750               | 2.15                                   | 1,260        | ▲   | ▲    | ▲  | ▲    | ▲  | ▲    | ▲   | ■    |

\* 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/m<sup>3</sup>, ■ = ≤ 1.8t/m<sup>3</sup>

# Lift capacities

with main boom 4.30 m (pinned in upper bearing), counterweight 11.0 t and track pads 600 mm

## Stick 2.50 m

| Under-carriage<br>m | 4.5m  |       | 6.0m  |       | 7.5m  |       | 9.0m  |       | 10.5m |       | m     |      |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
|                     |       |       |       |       |       |       |       |       |       |       |       |      |
| 12.0                |       |       |       |       |       |       |       |       |       |       |       |      |
| 10.5                |       |       |       |       |       |       |       |       |       |       |       |      |
| 9.0                 |       |       | 11.2* | 11.2* |       |       |       |       |       | 9.5*  | 9.5*  |      |
| 7.5                 | 14.5* | 14.5* | 11.2* | 11.2* | 10.9* | 10.9* |       |       |       | 8.6*  | 8.6*  |      |
| 6.0                 |       |       | 13.1* | 13.1* | 12.4* | 12.4* | 10.0* | 10.0* |       | 8.2*  | 8.2*  |      |
| 4.5                 |       |       | 17.0* | 17.0* | 13.8* | 13.8* | 11.0  | 12.1* |       | 8.1*  | 8.1*  |      |
| 3.0                 |       |       | 17.8* | 17.8* | 14.2  | 14.5* | 11.0  | 12.1* |       | 8.1*  | 8.1*  |      |
| 1.5                 |       |       |       |       | 13.7  | 14.9* | 10.8  | 12.3* | 8.7   | 9.9*  | 8.4*  | 8.4* |
| 0                   |       |       |       |       | 13.4  | 14.8* | 10.6  | 12.2* | 8.7   | 10.0* | 8.6   | 8.9* |
| -1.5                |       |       | 9.7*  | 9.7*  | 13.3  | 14.1* | 10.5  | 11.6* |       |       | 8.8   | 9.4* |
| -3.0                |       |       | 14.4* | 14.4* | 12.6* | 12.6* | 10.4* | 10.4* |       |       | 8.7*  | 8.7* |
| 12.0                |       |       |       |       |       |       |       |       |       | 11.9* | 11.9* |      |
| 10.5                |       |       | 11.3* | 11.3* |       |       |       |       |       | 9.4*  | 9.4*  |      |
| 9.0                 |       |       | 11.3* | 11.3* | 11.0* | 11.0* |       |       |       | 8.5*  | 8.5*  |      |
| 7.5                 | 15.5* | 15.5* | 13.4* | 13.4* | 12.4  | 12.5* | 9.3   | 10.2* |       | 8.2*  | 8.2*  |      |
| 6.0                 |       |       | 16.3  | 17.1* | 11.9  | 13.8* | 9.1   | 11.9* |       | 7.7   | 8.1*  |      |
| 4.5                 |       |       | 15.2  | 16.0* | 11.4  | 14.5* | 8.9   | 12.1* |       | 7.2   | 8.2*  |      |
| 3.0                 |       |       |       |       | 10.9  | 14.9* | 8.6   | 12.3* | 7.0   | 10.0* | 6.9   | 8.5* |
| 1.5                 |       |       |       |       | 10.6  | 14.8* | 8.4   | 12.2* | 6.9   | 10.0* | 6.9   | 9.0* |
| 0                   |       |       | 10.1* | 10.1* | 10.5  | 14.0* | 8.3   | 11.5* |       |       | 7.1   | 9.4* |
| -1.5                |       |       | 14.3* | 14.3* | 10.6  | 12.5* | 8.4   | 10.3* |       |       | 7.6   | 8.7* |
| -3.0                |       |       |       |       |       |       |       |       |       |       |       |      |
| 12.0                |       |       |       |       |       |       |       |       |       |       |       |      |
| 10.5                |       |       | 11.2* | 11.2* |       |       |       |       |       | 9.6*  | 9.6*  |      |
| 9.0                 |       |       | 11.2* | 11.2* | 10.6  | 10.9* |       |       |       | 8.6*  | 8.6*  |      |
| 7.5                 | 13.9* | 13.9* | 13.0* | 13.0* | 10.4  | 12.3* | 7.7   | 9.8*  |       | 7.3   | 8.2*  |      |
| 6.0                 |       |       | 13.6  | 17.0* | 9.9   | 13.8* | 7.6   | 11.5  |       | 6.4   | 8.1*  |      |
| 4.5                 |       |       | 12.5  | 18.5* | 9.4   | 14.5* | 7.3   | 11.2  |       | 5.9   | 8.1*  |      |
| 3.0                 |       |       |       |       | 8.9   | 14.1  | 7.1   | 10.9  | 5.7   | 8.8   | 5.6   | 8.4* |
| 1.5                 |       |       |       |       | 8.6   | 13.7  | 6.9   | 10.7  | 5.7   | 8.7   | 5.6   | 8.6* |
| 0                   |       |       | 9.5*  | 9.5*  | 8.5   | 13.6  | 6.8   | 10.6  |       |       | 5.8   | 8.9  |
| -1.5                |       |       | 11.6  | 14.5* | 8.6   | 12.7* | 6.8   | 10.4* |       |       | 6.2   | 8.7* |
| -3.0                |       |       |       |       |       |       |       |       |       |       |       |      |
| 12.0                |       |       |       |       |       |       |       |       |       |       |       |      |
| 10.5                |       |       | 11.2* | 11.2* |       |       |       |       |       | 9.6*  | 9.6*  |      |
| 9.0                 |       |       | 11.2* | 11.2* | 9.9   | 10.9* |       |       |       | 8.4   | 8.6*  |      |
| 7.5                 | 13.9* | 13.9* | 13.0* | 13.0* | 9.7   | 12.3* | 7.2   | 9.8*  |       | 6.8   | 8.2*  |      |
| 6.0                 |       |       | 12.6  | 17.0* | 9.2   | 13.8* | 7.0   | 11.5  |       | 6.0   | 8.1*  |      |
| 4.5                 |       |       | 11.5  | 18.5* | 8.7   | 14.5* | 6.8   | 11.2  |       | 5.5   | 8.1*  |      |
| 3.0                 |       |       |       |       | 8.2   | 14.0  | 6.5   | 10.9  | 5.3   | 8.8   | 5.2   | 8.4* |
| 1.5                 |       |       |       |       | 7.9   | 13.7  | 6.3   | 10.7  | 5.2   | 8.7   | 5.2   | 8.6* |
| 0                   |       |       | 9.5*  | 9.5*  | 7.8   | 13.6  | 6.3   | 10.6  |       |       | 5.3   | 8.8  |
| -1.5                |       |       | 10.6  | 14.5* | 7.9   | 12.7* | 6.3   | 10.4* |       |       | 5.7   | 8.7* |
| -3.0                |       |       |       |       |       |       |       |       |       |       |       |      |

## Stick 2.80 m

| Under-carriage<br>m | 4.5m  |       | 6.0m  |       | 7.5m  |       | 9.0m |       | 10.5m |       | m     |       |
|---------------------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
|                     |       |       |       |       |       |       |      |       |       |       |       |       |
| 12.0                |       |       |       |       |       |       |      |       |       |       |       |       |
| 10.5                |       |       |       |       |       |       |      |       |       |       |       |       |
| 9.0                 |       |       | 10.1* | 10.1* |       |       |      |       |       |       | 10.2* | 10.2* |
| 7.5                 |       |       | 9.8*  | 9.8*  | 9.9*  | 9.9*  |      |       |       |       | 8.3*  | 8.3*  |
| 6.0                 | 11.1* | 11.1* | 11.1* | 11.1* | 10.9* | 10.9* | 9.6* | 9.6*  |       |       | 7.5*  | 7.5*  |
| 4.5                 |       |       | 16.6* | 16.6* | 13.5* | 13.5* | 11.4 | 11.5* |       |       | 7.2*  | 7.2*  |
| 3.0                 |       |       | 18.2* | 18.2* | 14.3* | 14.3* | 11.1 | 12.0* |       |       | 7.1*  | 7.1*  |
| 1.5                 |       |       |       |       | 13.7  | 14.8* | 10.8 | 12.2* | 8.8*  | 8.8*  | 7.4*  | 7.4*  |
| 0                   |       |       |       |       | 13.4  | 14.8* | 10.5 | 12.2* | 8.7   | 10.4* | 7.4*  | 7.4*  |
| -1.5                |       |       | 10.8* | 10.8* | 13.2  | 14.2* | 10.4 | 11.7* | 8.6   | 10.1* | 7.8*  | 7.8*  |
| -3.0                |       |       | 15.1* | 15.1* | 12.9  | 12.9* | 10.5 | 10.6* | 8.6   | 9.4*  | 8.5*  | 8.5*  |
| 12.0                |       |       |       |       |       |       |      |       |       |       |       |       |
| 10.5                |       |       | 10.0* | 10.0* |       |       |      |       |       |       | 10.0* | 10.0* |
| 9.0                 |       |       | 9.8*  | 9.8*  | 9.9*  | 9.9*  |      |       |       |       | 8.2*  | 8.2*  |
| 7.5                 | 11.5* | 11.5* | 11.3* | 11.3* | 11.0* | 11.0* | 9.4  | 9.7*  |       |       | 7.5*  | 7.5*  |
| 6.0                 |       |       | 16.5  | 16.7* | 12.0  | 13.6* | 9.2  | 11.7* |       |       | 7.2*  | 7.2*  |
| 4.5                 |       |       | 15.3  | 18.2* | 11.4  | 14.3* | 8.9  | 12.0* | 7.1   | 9.0*  | 7.1*  | 7.1*  |
| 3.0                 |       |       |       |       | 10.9  | 14.8* | 8.6  | 12.2* | 7.0   | 10.3  | 6.6   | 7.4*  |
| 1.5                 |       |       |       |       | 10.6  | 14.8* | 8.4  | 12.1* | 6.9   | 10.1* | 6.6   | 7.9*  |
| 0                   |       |       | 11.1* | 11.1* | 10.5  | 14.1* | 8.3  | 11.6* | 6.9   | 9.3*  | 6.8   | 8.6*  |
| -1.5                |       |       | 14.3  | 14.9* | 10.5  | 12.8* | 8.3  | 10.5* |       |       | 7.3   | 8.5*  |
| -3.0                |       |       |       |       |       |       |      |       |       |       |       |       |
| 12.0                |       |       |       |       |       |       |      |       |       |       |       |       |
| 10.5                |       |       | 10.1* | 10.1* |       |       |      |       |       |       | 10.4* | 10.4* |
| 9.0                 |       |       | 9.8*  | 9.8*  | 9.9*  | 9.9*  |      |       |       |       | 8.3*  | 8.3*  |
| 7.5                 | 10.8* | 10.8* | 11.0* | 11.0* | 10.5  | 10.8* | 7.8  | 9.5*  |       |       | 7.5*  | 7.5*  |
| 6.0                 |       |       | 13.8  | 16.6* | 10.0  | 13.5* | 7.6  | 11.4* |       |       | 7.0   | 7.2*  |
| 4.5                 |       |       | 12.7  | 18.1* | 9.5   | 14.2* | 7.4  | 11.2  | 5.8   | 8.7*  | 6.1   | 7.1*  |
| 3.0                 |       |       |       |       | 9.0   | 14.1  | 7.1  | 10.9  | 5.7   | 8.8   | 5.7   | 7.2*  |
| 1.5                 |       |       |       |       | 8.6   | 13.7  | 6.9  | 10.7  | 5.7   | 8.8   | 5.4   | 7.4*  |
| 0                   |       |       | 10.6* | 10.6* | 8.5   | 13.5  | 6.7  | 10.6  | 5.6   | 8.6   | 5.5   | 8.5*  |
| -1.5                |       |       | 11.5  | 15.2* | 8.5   | 13.0* | 6.8  | 10.6  |       |       | 5.9   | 8.6*  |
| -3.0                |       |       |       |       | 8.7   | 10.9* |      |       |       |       | 7.2   | 9.1*  |
| 12.0                |       |       |       |       |       |       |      |       |       |       |       |       |
| 10.5                |       |       | 10.1* | 10.1* |       |       |      |       |       |       | 10.4* | 10.4* |
| 9.0                 |       |       | 9.8*  | 9.8*  | 9.9*  | 9.9*  |      |       |       |       | 8.3*  | 8.3*  |
| 7.5                 | 10.8* | 10.8* | 11.0* | 11.0* | 9.7   | 10.8* | 7.3  | 9.5*  |       |       | 7.5*  | 7.5*  |
| 6.0                 |       |       | 12.8  | 16.6* | 9.3   | 13.5* | 7.1  | 11.4* |       |       | 6.5   | 7.2*  |
| 4.5                 |       |       | 11.6  | 18.1* | 8.7   | 14.2* | 6.8  | 11.2  | 5.4   | 8.7*  | 5.7   | 7.1*  |
| 3.0                 |       |       |       |       | 8.2   | 14.1  | 6.5  | 10.9  | 5.3   | 8.8   | 5.0   | 7.4*  |
| 1.5                 |       |       |       |       | 7.9   | 13.7  | 6.3  | 10.7  | 5.2   | 8.6   | 4.9   | 7.8*  |
| 0                   |       |       | 10.4  | 10.6* | 7.8   | 13.5  | 6.2  | 10.5  | 5.1   | 8.6   | 5.1   | 8.5   |
| -1.5                |       |       | 10.5  | 15.2* | 7.8   | 13.0* | 6.2  | 10.5  |       |       | 5.4   | 8.6*  |
| -3.0                |       |       |       |       | 8.0   | 10.9* |      |       |       |       | 6.6   | 9.1*  |

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 600mm 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 410 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.

# Lift capacities

with main boom 4.30 m (pinned in lower bearing), counterweight 11.0 t and track pads 600 mm

## Stick 2.50 m

| Under-carriage<br>m | 4.5 m |       | 6.0 m |       | 7.5 m |       | 9.0 m |       | 10.5 m |       | m     |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|
|                     |       |       |       |       |       |       |       |       |        |       |       |
| 10.5                |       |       |       |       |       |       |       |       |        |       |       |
| 9.0                 |       |       |       |       |       |       |       |       |        | 8.3*  | 8.3*  |
| 7.5                 |       |       |       |       |       |       |       |       |        | 8.1*  | 8.1*  |
| 6.0                 | 19.5* | 19.5* | 14.5* | 14.5* | 12.9* | 12.9* | 10.0* | 10.0* |        | 8.1*  | 8.1*  |
| 4.5                 |       |       | 16.6* | 16.6* | 13.2* | 13.2* | 11.4  | 11.4* |        | 8.4*  | 8.4*  |
| 3.0                 |       |       | 18.4* | 18.4* | 14.2* | 14.2* | 11.1  | 11.9* |        | 9.0*  | 9.0*  |
| 1.5                 |       |       | 16.4* | 16.4* | 13.8  | 14.8* | 10.9  | 12.3* |        | 9.5   | 9.8*  |
| 0                   |       |       | 18.4  | 18.9* | 13.6  | 15.0* | 10.7  | 12.3* |        | 9.8   | 11.3* |
| -1.5                | 12.0* | 12.0* | 18.0* | 18.0* | 13.5  | 14.5* | 10.7  | 11.7* |        | 10.5  | 11.5* |
| -3.0                |       |       | 16.2* | 16.2* | 13.2* | 13.2* |       |       |        | 11.6* | 11.6* |
| -4.5                |       |       |       |       |       |       |       |       |        |       |       |
| 10.5                |       |       |       |       |       |       |       |       |        | 8.3*  | 8.3*  |
| 9.0                 |       |       |       |       |       |       |       |       |        | 8.1*  | 8.1*  |
| 7.5                 |       |       | 13.0* | 13.0* | 11.5* | 11.5* |       |       |        | 8.1*  | 8.1*  |
| 6.0                 | 19.8* | 19.8* | 14.6* | 14.6* | 12.3* | 12.3* | 9.5   | 10.2* |        | 8.1*  | 8.1*  |
| 4.5                 |       |       | 16.2  | 16.7* | 11.9  | 13.3* | 9.2   | 11.5* |        | 8.2   | 8.4*  |
| 3.0                 |       |       | 15.1  | 18.4* | 11.4  | 14.2* | 8.9   | 11.9* |        | 7.8   | 9.0*  |
| 1.5                 |       |       | 14.6  | 16.4* | 11.0  | 14.9* | 8.7   | 12.3* |        | 7.7   | 9.9*  |
| 0                   |       |       | 14.5  | 18.8* | 10.8  | 15.0* | 8.5   | 12.3* |        | 7.9   | 11.4* |
| -1.5                | 12.5* | 12.5* | 14.5  | 17.9* | 10.7  | 14.5* | 8.5   | 11.7* |        | 8.5   | 11.5* |
| -3.0                |       |       | 14.7  | 16.1* | 10.9  | 13.0* |       |       |        | 9.7   | 11.5* |
| -4.5                |       |       |       |       |       |       |       |       |        |       |       |
| 10.5                |       |       |       |       |       |       |       |       |        | 8.3*  | 8.3*  |
| 9.0                 |       |       |       |       |       |       |       |       |        | 8.1*  | 8.1*  |
| 7.5                 |       |       | 12.9* | 12.9* | 10.9  | 11.5* |       |       |        | 7.6   | 8.1*  |
| 6.0                 | 19.3* | 19.3* | 14.5* | 14.5* | 10.5  | 12.2* | 7.9   | 9.8*  |        | 6.8   | 8.4*  |
| 4.5                 |       |       | 13.4  | 16.5* | 10.0  | 13.2* | 7.7   | 11.4* |        | 6.4   | 8.9*  |
| 3.0                 |       |       | 12.4  | 18.3* | 9.4   | 14.2* | 7.4   | 11.3  |        | 6.3   | 9.6   |
| 1.5                 |       |       | 11.9  | 16.4* | 9.0   | 14.2  | 7.2   | 11.0  |        | 6.4   | 9.9   |
| 0                   |       |       | 11.7  | 18.9* | 8.8   | 13.9  | 7.0   | 10.8  |        | 6.9   | 10.6  |
| -1.5                | 11.7* | 11.7* | 11.7  | 18.0* | 8.7   | 13.8  | 7.0   | 10.8  |        | 7.8   | 11.6* |
| -3.0                |       |       | 11.9  | 16.3* | 8.9   | 13.2* |       |       |        |       |       |
| -4.5                |       |       |       |       |       |       |       |       |        |       |       |
| 10.5                |       |       |       |       |       |       |       |       |        | 8.3*  | 8.3*  |
| 9.0                 |       |       |       |       |       |       |       |       |        | 8.1*  | 8.1*  |
| 7.5                 |       |       | 12.9* | 12.9* | 10.2  | 11.5* |       |       |        | 7.0   | 8.1*  |
| 6.0                 | 19.3* | 19.3* | 13.5  | 14.5* | 9.8   | 12.2* | 7.4   | 9.8*  |        | 6.3   | 8.4*  |
| 4.5                 |       |       | 12.4  | 16.5* | 9.3   | 13.2* | 7.1   | 11.4* |        | 5.9   | 8.9*  |
| 3.0                 |       |       | 11.4  | 18.3* | 8.7   | 14.2* | 6.8   | 11.2  |        | 5.8   | 9.6   |
| 1.5                 |       |       | 10.9  | 16.4* | 8.3   | 14.1  | 6.6   | 11.0  |        | 5.9   | 9.8   |
| 0                   |       |       | 10.7  | 18.9* | 8.1   | 13.9  | 6.5   | 10.8  |        | 7.2   | 11.6* |
| -1.5                | 11.7* | 11.7* | 10.7  | 18.0* | 8.0   | 13.8  | 6.4   | 10.8  |        |       |       |
| -3.0                |       |       | 10.9  | 16.3* | 8.1   | 13.2* |       |       |        |       |       |
| -4.5                |       |       |       |       |       |       |       |       |        |       |       |

## Stick 2.80 m

| Under-carriage<br>m | 4.5 m |       | 6.0 m |       | 7.5 m |       | 9.0 m |       | 10.5 m |       | m     |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|
|                     |       |       |       |       |       |       |       |       |        |       |       |
| 10.5                |       |       |       |       |       |       |       |       |        |       |       |
| 9.0                 |       |       |       |       |       |       |       |       |        | 8.2*  | 8.2*  |
| 7.5                 |       |       |       |       |       |       |       |       |        | 10.5* | 10.5* |
| 6.0                 | 18.4* | 18.4* | 14.0* | 14.0* | 11.9* | 11.9* | 9.8*  | 9.8*  |        | 7.3*  | 7.3*  |
| 4.5                 |       |       | 16.1* | 16.1* | 12.9* | 12.9* | 11.2* | 11.2* |        | 7.1*  | 7.1*  |
| 3.0                 |       |       | 18.0* | 18.0* | 13.9* | 13.9* | 11.1  | 11.7* |        | 7.8*  | 7.8*  |
| 1.5                 |       |       | 18.5* | 18.5* | 13.8  | 14.7* | 10.8  | 12.1* |        | 8.6*  | 8.6*  |
| 0                   |       |       | 18.4  | 18.9* | 13.6  | 14.9* | 10.7  | 12.3* |        | 9.4   | 9.7*  |
| -1.5                | 12.0* | 12.0* | 18.2* | 18.2* | 13.5  | 14.6* | 10.6  | 11.9* |        | 10.0  | 11.2* |
| -3.0                | 19.9* | 19.9* | 16.7* | 16.7* | 13.5* | 13.5* |       |       |        | 11.3* | 11.3* |
| -4.5                |       |       |       |       |       |       |       |       |        |       |       |
| 10.5                |       |       |       |       |       |       |       |       |        | 8.4*  | 8.4*  |
| 9.0                 |       |       |       |       |       |       |       |       |        | 7.3*  | 7.3*  |
| 7.5                 |       |       | 10.6* | 10.6* |       |       |       |       |        | 7.1*  | 7.1*  |
| 6.0                 | 18.7* | 18.7* | 14.1* | 14.1* | 11.9* | 11.9* | 9.5   | 9.9*  |        | 7.2*  | 7.2*  |
| 4.5                 |       |       | 16.2* | 16.2* | 12.0  | 13.0* | 9.3   | 11.2* |        | 7.4*  | 7.4*  |
| 3.0                 |       |       | 15.3  | 18.0* | 11.4  | 14.0* | 8.9   | 11.8* |        | 7.5   | 7.9*  |
| 1.5                 |       |       | 14.6  | 18.5* | 11.0  | 14.7* | 8.7   | 12.2* |        | 7.4   | 8.6*  |
| 0                   |       |       | 14.4  | 18.9* | 10.7  | 14.9* | 8.5   | 12.3* |        | 7.5   | 9.8*  |
| -1.5                | 12.4* | 12.4* | 14.4  | 18.1* | 10.7  | 14.5* | 8.5   | 11.8* |        | 8.1   | 11.2* |
| -3.0                | 20.1* | 20.1* | 14.5  | 16.5* | 10.8  | 13.4* |       |       |        | 9.2   | 11.3* |
| -4.5                |       |       |       |       |       |       |       |       |        |       |       |
| 10.5                |       |       |       |       |       |       |       |       |        | 8.0*  | 8.0*  |
| 9.0                 |       |       |       |       |       |       |       |       |        | 7.3*  | 7.3*  |
| 7.5                 |       |       | 10.5* | 10.5* |       |       |       |       |        | 7.1*  | 7.1*  |
| 6.0                 | 18.2* | 18.2* | 14.0* | 14.0* | 10.6  | 11.9* | 8.0   | 9.7*  |        | 7.1*  | 7.1*  |
| 4.5                 |       |       | 13.6  | 16.0* | 10.0  | 12.9* | 7.7   | 11.2* |        | 6.6   | 7.4*  |
| 3.0                 |       |       | 12.6  | 17.9* | 9.5   | 13.9* | 7.4   | 11.3  |        | 6.2   | 7.8*  |
| 1.5                 |       |       | 11.9  | 18.5* | 9.0   | 14.2  | 7.1   | 11.0  |        | 6.0   | 8.5*  |
| 0                   |       |       | 11.7  | 18.9* | 8.8   | 13.9  | 7.0   | 10.8  |        | 6.1   | 9.5*  |
| -1.5                | 11.8* | 11.8* | 11.6  | 18.2* | 8.7   | 13.8  | 6.9   | 10.7  |        | 6.5   | 10.1  |
| -3.0                | 18.0  | 19.5* | 11.8  | 16.7* | 8.7   | 13.5* |       |       |        | 7.4   | 11.3* |
| -4.5                |       |       |       |       |       |       |       |       |        | 9.6   | 11.7* |
| 10.5                |       |       |       |       |       |       |       |       |        | 8.0*  | 8.0*  |
| 9.0                 |       |       |       |       |       |       |       |       |        | 7.3*  | 7.3*  |
| 7.5                 |       |       | 10.3  | 10.5* |       |       |       |       |        | 7.1*  | 7.1*  |
| 6.0                 | 18.2* | 18.2* | 13.7  | 14.0* | 9.9   | 11.9* | 7.4   | 9.7*  |        | 6.7   | 7.1*  |
| 4.5                 |       |       | 12.6  | 16.0* | 9.3   | 12.9* | 7.2   | 11.2* |        | 6.1   | 7.4*  |
| 3.0                 |       |       | 11.6  | 17.9* | 8.8   | 13.9* | 6.9   | 11.3  |        | 5.7   | 7.8*  |
| 1.5                 |       |       | 10.9  | 18.5* | 8.3   | 14.1  | 6.6   | 11.0  |        | 5.6   | 8.5*  |
| 0                   |       |       | 10.7  | 18.9* | 8.1   | 13.8  | 6.4   | 10.8  |        | 5.7   | 9.4   |
| -1.5                | 11.8* | 11.8* | 10.6  | 18.2* | 8.0   | 13.7  | 6.4   | 10.7  |        | 6.0   | 10.1  |
| -3.0                | 16.3  | 19.5* | 10.8  | 16.7* | 8.0   | 13.5* |       |       |        | 6.8   | 11.3* |
| -4.5                |       |       |       |       |       |       |       |       |        | 8.9   | 11.7* |

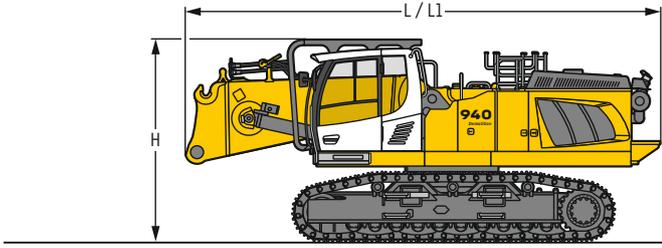
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

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 410 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.

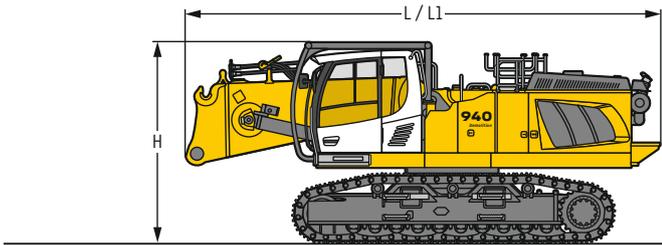
# Dimensions and weights



## Basic machine

without counterweight with cab tiltable 30° and integral protection grid

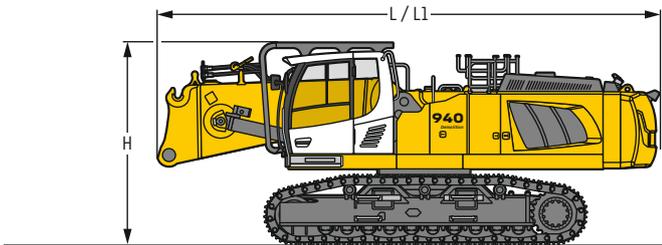
|   | VH-HD | LC-V   | LC     | NLC    |        |
|---|-------|--------|--------|--------|--------|
| L   | mm    | 8,000  | 8,000  | 8,000  | 8,000  |
| L1 with automatic hydraulic coupling system     | mm    | 8,250  | 8,250  | 8,250  | 8,250  |
| H   | mm    | 3,400  | 3,510  | 3,355  | 3,355  |
| Weight  | kg    | 40,900 | 36,800 | 31,700 | 31,600 |
| Weight with automatic hydraulic coupling system | kg    | 41,800 | 37,700 | 32,600 | 32,500 |



## Basic machine

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

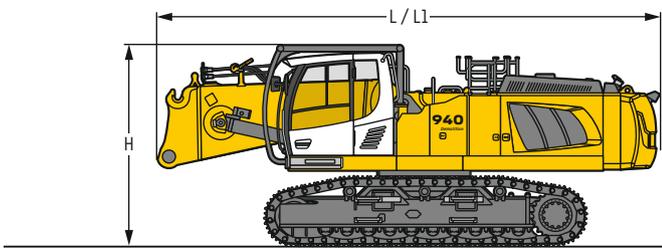
|   | VH-HD | LC-V   | LC     | NLC    |        |
|---|-------|--------|--------|--------|--------|
| L   | mm    | 8,000  | 8,000  | 8,000  | 8,000  |
| L1 with automatic hydraulic coupling system     | mm    | 8,250  | 8,250  | 8,250  | 8,250  |
| H   | mm    | 3,400  | 3,510  | 3,355  | 3,355  |
| Weight  | kg    | 41,300 | 37,200 | 32,100 | 32,000 |
| Weight with automatic hydraulic coupling system | kg    | 42,200 | 38,100 | 33,000 | 32,900 |



## Basic machine

with counterweight 11.0t, cab tiltable 30° and integral protection grid

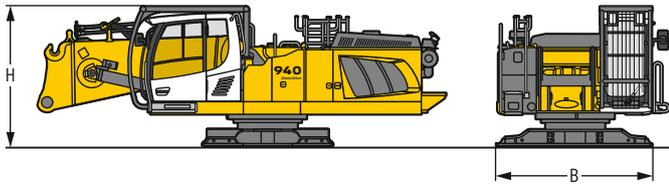
|   | VH-HD | LC-V   | LC     | NLC    |        |
|---|-------|--------|--------|--------|--------|
| L   | mm    | 8,450  | 8,450  | 8,450  | 8,450  |
| L1 with automatic hydraulic coupling system     | mm    | 8,700  | 8,700  | 8,700  | 8,700  |
| H   | mm    | 3,400  | 3,510  | 3,355  | 3,355  |
| Weight  | kg    | 51,900 | 47,800 | 42,700 | 42,600 |
| Weight with automatic hydraulic coupling system | kg    | 52,800 | 48,700 | 43,600 | 43,500 |



## Basic machine

with counterweight 11.0t, cab tiltable 30° and integral protection grid on tilting device

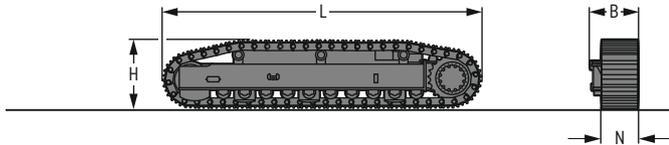
|   | VH-HD | LC-V   | LC     | NLC    |        |
|---|-------|--------|--------|--------|--------|
| L   | mm    | 8,450  | 8,450  | 8,450  | 8,450  |
| L1 with automatic hydraulic coupling system     | mm    | 8,700  | 8,700  | 8,700  | 8,700  |
| H   | mm    | 3,400  | 3,510  | 3,355  | 3,355  |
| Weight  | kg    | 52,300 | 48,200 | 43,100 | 43,000 |
| Weight with automatic hydraulic coupling system | kg    | 53,200 | 49,100 | 44,000 | 43,900 |



### Basic machine

without side frames

|   |    |        |
|---|----|--------|
| B   | mm | 2,995  |
| H   | mm | 2,750  |
| Weight  | kg | 24,700 |
| Weight with automatic hydraulic coupling system | kg | 25,600 |



### Side frame

for LC-V undercarriage

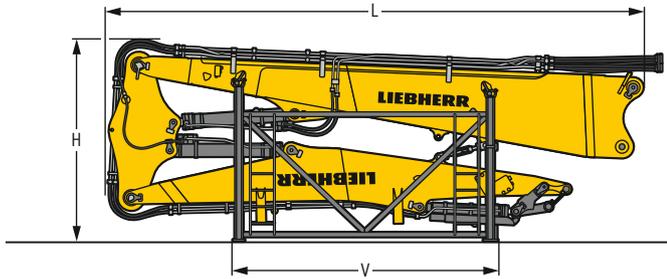
|        |        |    |       |
|--------|--------|----|-------|
| L      | Length | mm | 5,555 |
| H      | Height | mm | 1,175 |
| N      |        | mm | 600   |
| B      |        | mm | 795   |
| Weight | kg     |    | 6,250 |



### Counterweight

|        |        |    |        |
|--------|--------|----|--------|
| L      | Length | mm | 940    |
| H      | Height | mm | 1,420  |
| Width  | mm     |    | 2,970  |
| Weight | kg     |    | 11,000 |

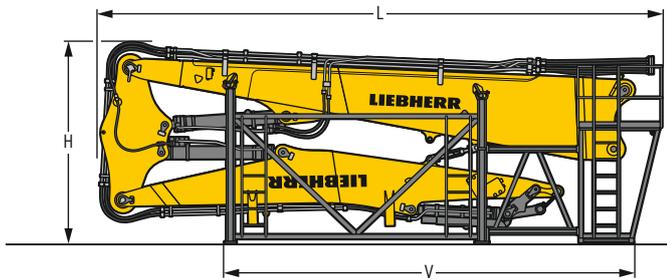
# Dimensions and weights



## Demolition equipment

with storage rack

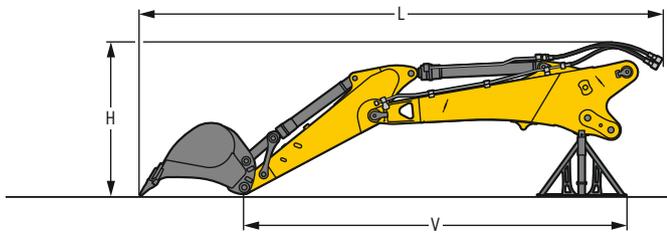
|   |   |           |
|---|---|-----------|
|   |   | 23,00 m   |
| L | Length  | mm 9,050  |
| H | Height  | mm 3,400  |
| V |   | mm 4,450  |
|   | Width   | mm 2,500  |
|   | Weight without attachment                       | kg 10,100 |
|   | Weight with automatic hydraulic coupling system | kg 10,500 |



## Demolition equipment

with storage rack with catwalks

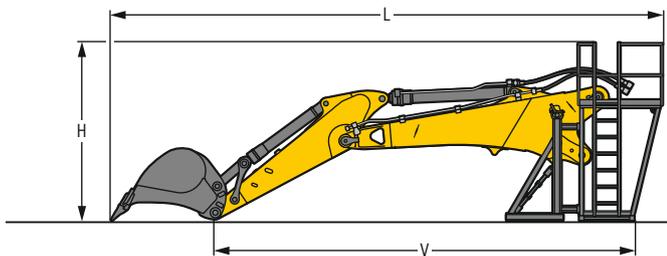
|   |   |           |
|---|---|-----------|
|   |   | 23,00 m   |
| L | Length  | mm 9,500  |
| H | Height  | mm 3,400  |
| V |   | mm 6,900  |
|   | Width   | mm 2,500  |
|   | Weight without attachment                       | kg 10,900 |
|   | Weight with automatic hydraulic coupling system | kg 11,300 |



## Backhoe equipment

with storage rack

|   |   |                |
|---|---|----------------|
|   | Main boom length                                | m 4,30         |
|   | Stick length                                    | m 2,50 2,80    |
| L | Length  | mm 8,800 9,100 |
| H | Height  | mm 2,600 2,600 |
| V |   | mm 6,450 6,750 |
|   | Width   | mm 2,500 2,500 |
|   | Weight without bucket                           | kg 5,100 5,200 |
|   | Weight with automatic hydraulic coupling system | kg 5,500 5,600 |

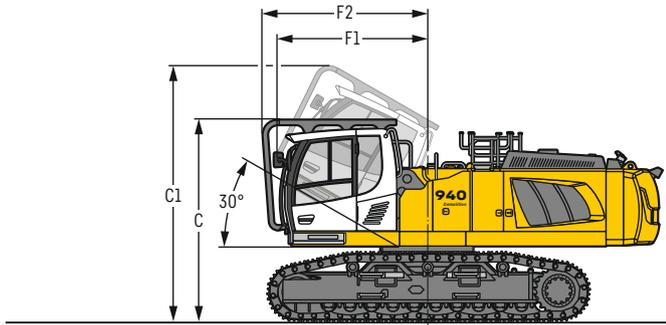


## Backhoe equipment

with storage rack with catwalks

|   |   |                |
|---|---|----------------|
|   | Main boom length                                | m 4,30         |
|   | Stick length                                    | m 2,50 2,80    |
| L | Length  | mm 9,300 9,600 |
| H | Height  | mm 3,020 3,020 |
| V |   | mm 7,050 7,350 |
|   | Width   | mm 2,500 2,500 |
|   | Weight without bucket                           | kg 5,700 5,800 |
|   | Weight with automatic hydraulic coupling system | kg 6,100 6,200 |

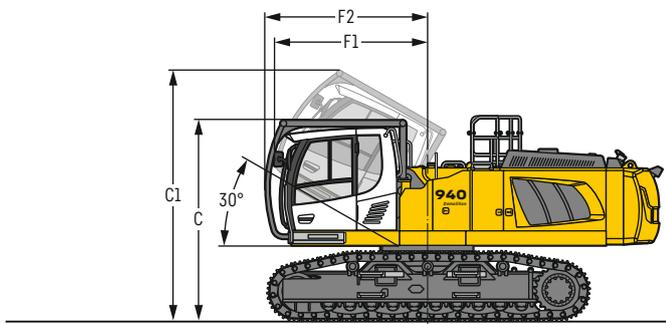
# Choice of cab elevations



## Version

with cab tiltable 30° and integral protection grid

|    | VH-HD    | LC-V  | LC    | NLC   |
|----|----------|-------|-------|-------|
| C  | mm 3,400 | 3,510 | 3,365 | 3,365 |
| C1 | mm 4,325 | 4,435 | 4,290 | 4,290 |
| F1 | mm 2,530 | 2,530 | 2,530 | 2,530 |
| F2 | mm 2,770 | 2,770 | 2,770 | 2,770 |



## Version

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

|    | VH-HD    | LC-V  | LC    | NLC   |
|----|----------|-------|-------|-------|
| C  | mm 3,400 | 3,510 | 3,355 | 3,355 |
| C1 | mm 4,245 | 4,355 | 4,210 | 4,210 |
| F1 | mm 2,570 | 2,570 | 2,570 | 2,570 |
| F2 | mm 2,730 | 2,730 | 2,730 | 2,730 |

# Serial equipment



## Undercarriage

- Lashing eyes
- Sprocket with dirt ejector
- Track rollers, lifetime-lubricated
- Tracks, sealed and greased



## 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
- 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
- Power Pack non-regulated countries (for select markets)



## Cab

- 9" 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
- Emergency stop in cab
- 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           | + |
| Tracks, sealed and greased | ● |
| Undercarriage LC           | + |
| Undercarriage LC-V         | + |
| Undercarriage NLC          | + |
| Undercarriage VH-HD        | + |

## Uppercarriage

|   |                 |
|---|-----------------|
| Air compressor  | +               |
| Boxing ring   | +               |
| Catwalks tiltable left and right  | +               |
| Electric socket on uppercarriage (24 V)                                     | +               |
| Fogging system  | +               |
| Headlight on uppercarriage, front right, LED, 1 piece, protection included  | ● <sup>1)</sup> |
| Headlight on uppercarriage, front right, LED+, 1 piece, protection included | + <sup>1)</sup> |
| Headlight on uppercarriage, lateral left, LED+, 1 piece                     | + <sup>1)</sup> |
| Headlights on uppercarriage, rear, LED+, 2 pieces                           | + <sup>1)</sup> |
| Lighting for tank area  | + <sup>1)</sup> |
| Lighting for uppercarriage access   | + <sup>1)</sup> |
| 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  | + |
| 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 (240V) | + |

## 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                                       | +               |
| Fire extinguisher  | +               |
| Footrest   | +               |
| Headlights on cab, front, LED, 2 pieces                      | ● <sup>1)</sup> |
| Headlights on cab, front, LED+, 2 pieces                     | + <sup>1)</sup> |
| Luminosity control (LED+ headlights)                         | + <sup>1)</sup> |
| Operator seat Comfort  | ●               |
| Operator seat Premium  | +               |
| Radio Comfort  | +               |
| Radio pre-installation                                       | ●               |
| Rotating beacon on cabin, LED, 1 piece                       | +               |
| Sun visor  | +               |

## Equipment

|  |                 |
|--|-----------------|
| Automatic hydraulic coupling system  | +               |
| 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         | ● <sup>1)</sup> |
| Headlight on boom, on each side, LED+, 1 piece, protection included        | + <sup>1)</sup> |
| Headlights on equipment, LED, 4 pieces, protections included               | ●               |
| Headlights on equipment, LED+, 4 pieces, protections included              | + <sup>1)</sup> |
| 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  | +               |

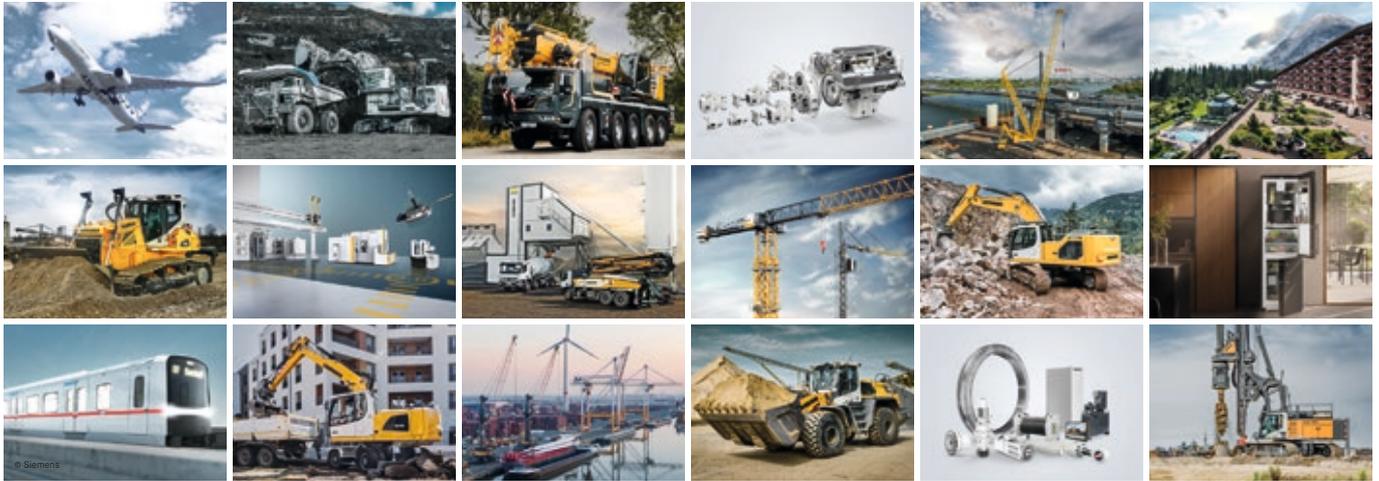
● = Standard, + = Option

<sup>1)</sup> 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.

# The Liebherr Group



## Global and independent: more than 70 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 programme includes earthmoving machinery, material handling technology, deep foundation machines, 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.

[www.liebherr.com](http://www.liebherr.com)

## Liebherr-France SAS

2 avenue Joseph Rey, B.P. 90287 • 68005 Colmar Cedex, France • Phone +33 389 213030  
info.lfr@liebherr.com • [www.liebherr.com](http://www.liebherr.com) • [www.facebook.com/LiebherrConstruction](https://www.facebook.com/LiebherrConstruction)