

EN-US



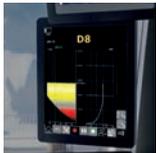
LRH 100.1

LRH 3001.07
www.liebherr.com

LIEBHERR

Piling rigs

Concept and characteristics



PDE[®]
Process Data Recording



MyJobsite



LIPOS[®]
Positioning System



LiDAT[®]
Data Transmission



The robust universal machine

- Hydraulic hammer
- Pre-drill

Assistance systems

- Joystick control for all machine functions
- Leader inclination memory
- Positioning system
- Free-fall winches with slack rope monitoring and prevention

Technical description



Diesel engine

Power rating according to ISO 9249	250 kW (335 hp) at 1700 rpm
Engine type	Liebherr D 936 A7-04
Fuel tank capacity	185 gal with continuous level indicator and reserve warning
Exhaust certification	EU 2016/1628 Stage V; EPA/CARB Tier 4f ECE-R.96 Power Band H non-certified emission standard



Hydraulic system

Pump for working tools	2x 72 gal/min
Separate pump for kinematics	34 gal/min
Hydraulic oil tank capacity	159 gal
Max. working pressure	5,076 PSI
Hydraulic oil	electronic monitoring of all filters use of synthetic environmentally friendly oil possible



Crawlers

Drive system	with fixed axial piston hydraulic motors
Crawler side frames	maintenance-free, with hydraulic chain tensioning device
Brake	hydraulically released, spring-loaded multi-disc holding brake
Drive speed	0-1.23 mph
Track force	98,916 lbf
Grousers	width 35.4 inch



Swing gear

Drive system	with fixed axial piston hydraulic motors, planetary gearbox, pinion
Swing ring	roller bearing with external teeth
Brake	hydraulically released, spring-loaded multi-disc holding brake
Swing speed	0-3.75 rpm continuously variable



Hammer winch with free fall

Line pull (effective)	24,279 lbf
Rope diameter	24 mm
Rope speed	0-217 ft/min

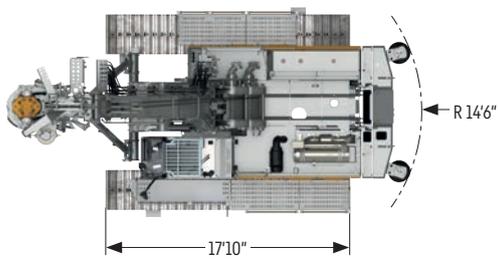
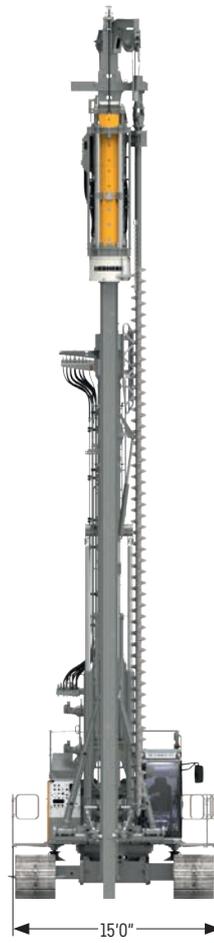
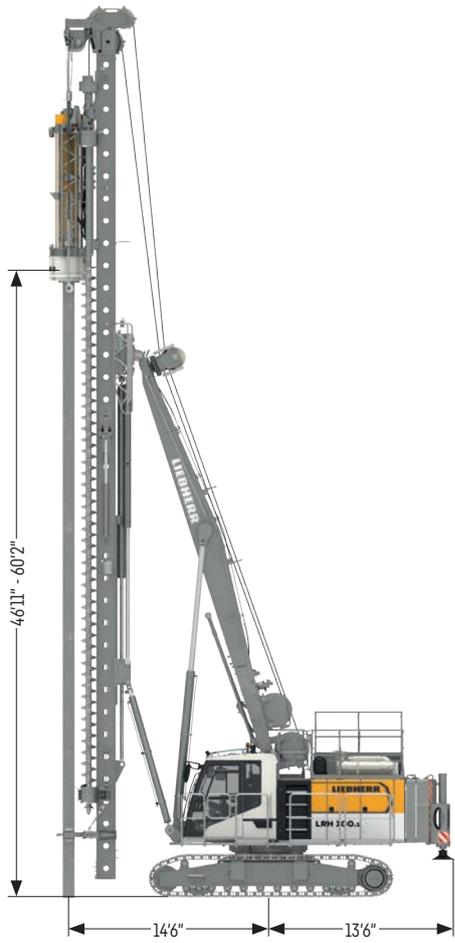


Pile winch with free fall

Line pull (effective)	17,985 lbf
Rope diameter	20 mm
Rope speed	0-217 ft/min

Remarks:

- Illustrations showing the types of application (e.g. hydraulic hammer, pre-drill etc.) are examples only.
- Weights and transport dimensions can vary with the final configuration of the machine. The figures in this brochure may include options which are not within the standard scope of supply of the machine.

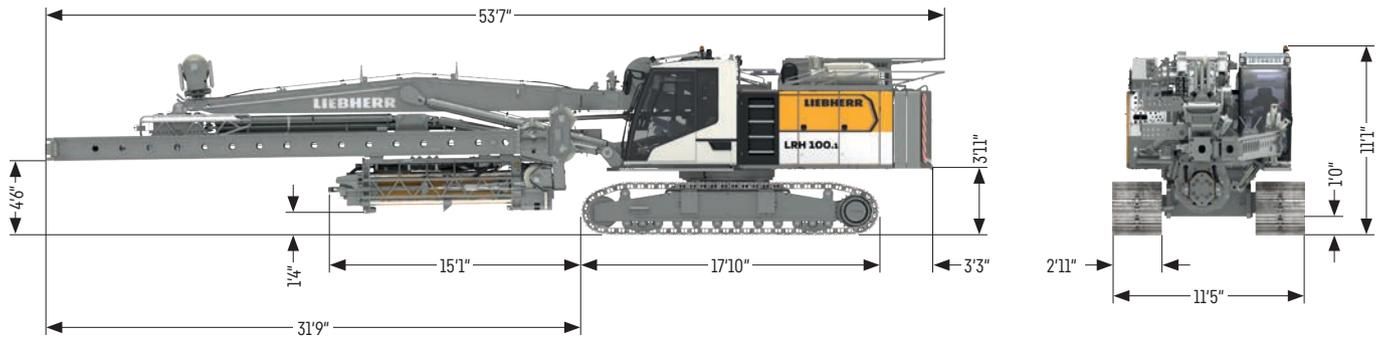


Operating weight

Total weight with 35.4 inch 3-web grousers	lbs 159,173
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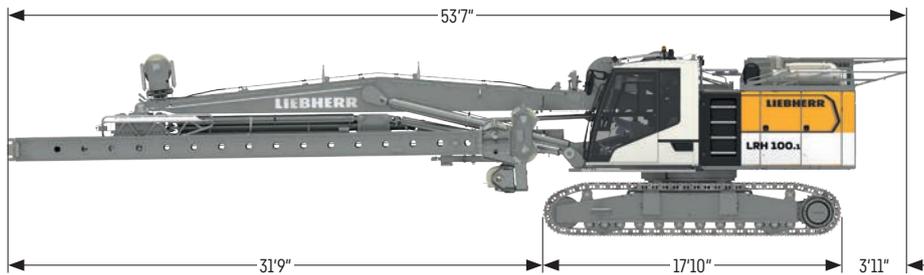
The operating weight includes the basic machine LRH 100.1 incl. hammer H 6-6, rotary BA 12 and 28,660 lbs counterweight.

Transport dimensions and weights



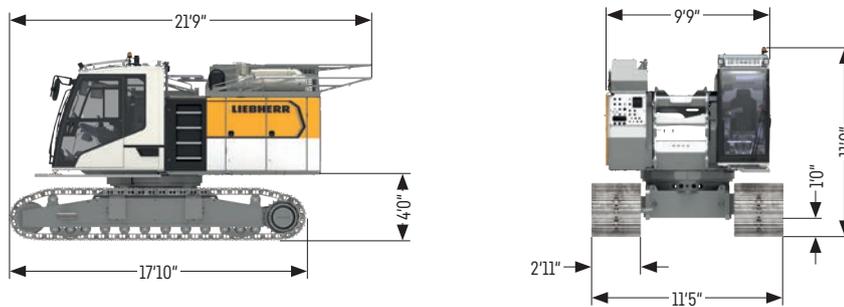
Transport with hydraulic hammer

includes the basic machine (fully tanked and ready for operation) with leader, hydraulic hammer H 6-6 and 28,660 lbs counterweight	lbs 157,190
Weight hydraulic hammer H 6-6	lbs 21,164



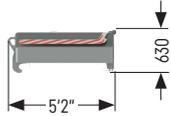
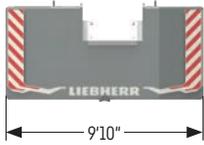
Transport without hydraulic hammer

includes the basic machine (fully tanked and ready for operation) with leader, without hydraulic hammer and without counterweight	lbs 107,365
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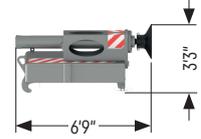
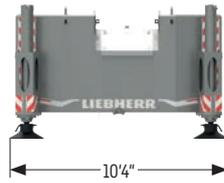
Basic machine

fully tanked and ready for operation, without counterweight	lbs 68,564
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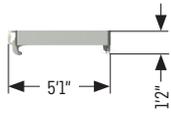
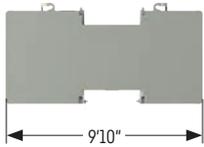
Counterweight

Weight lbs 17,637



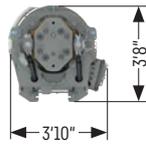
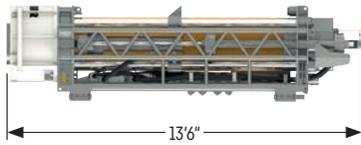
Counterweight with rear support unit

Weight lbs 17,637



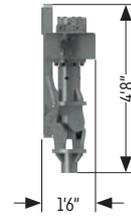
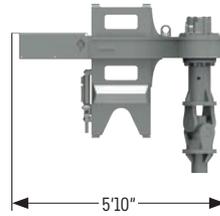
Intermediate slab

Weight lbs 11,023



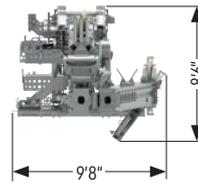
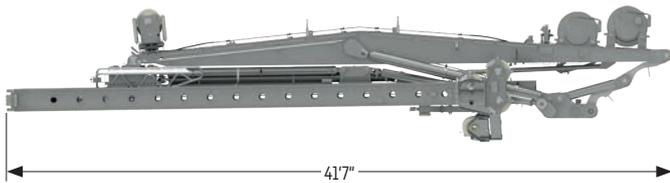
H 6-6

Weight incl. 13,228 lbs drop weight lbs 21,164



BA 12

Weight lbs 1,366



Leader

Weight lbs 38,801

Hydraulic hammer H 6

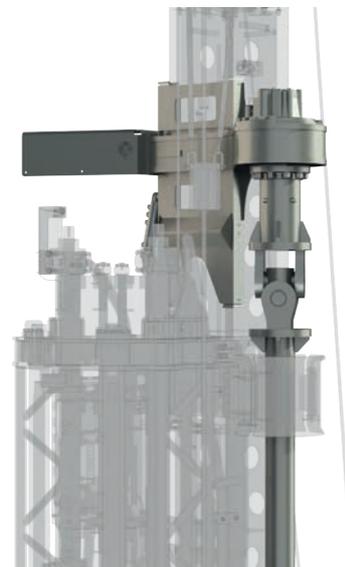


Performance data

Hammer type		H 6-3	H 6-4	H 6-5	H 6-6
Drop weight	lbs	6,614	8,818	11,023	13,228
Max. rated energy	lbf-ft	26,552	35,403	44,254	53,104
Blow rate	blows/min	50-150	50-150	50-150	40-150
Max. pile length	ft	64.0	64.0	64.0	64.0
Hammer weight incl. pile helmet and dolly	lbs	14,551	16,755	18,960	21,164

Various pile helmet sizes up to diameters of 2.1 ft or in square design available on request

Pre-drill BA 12



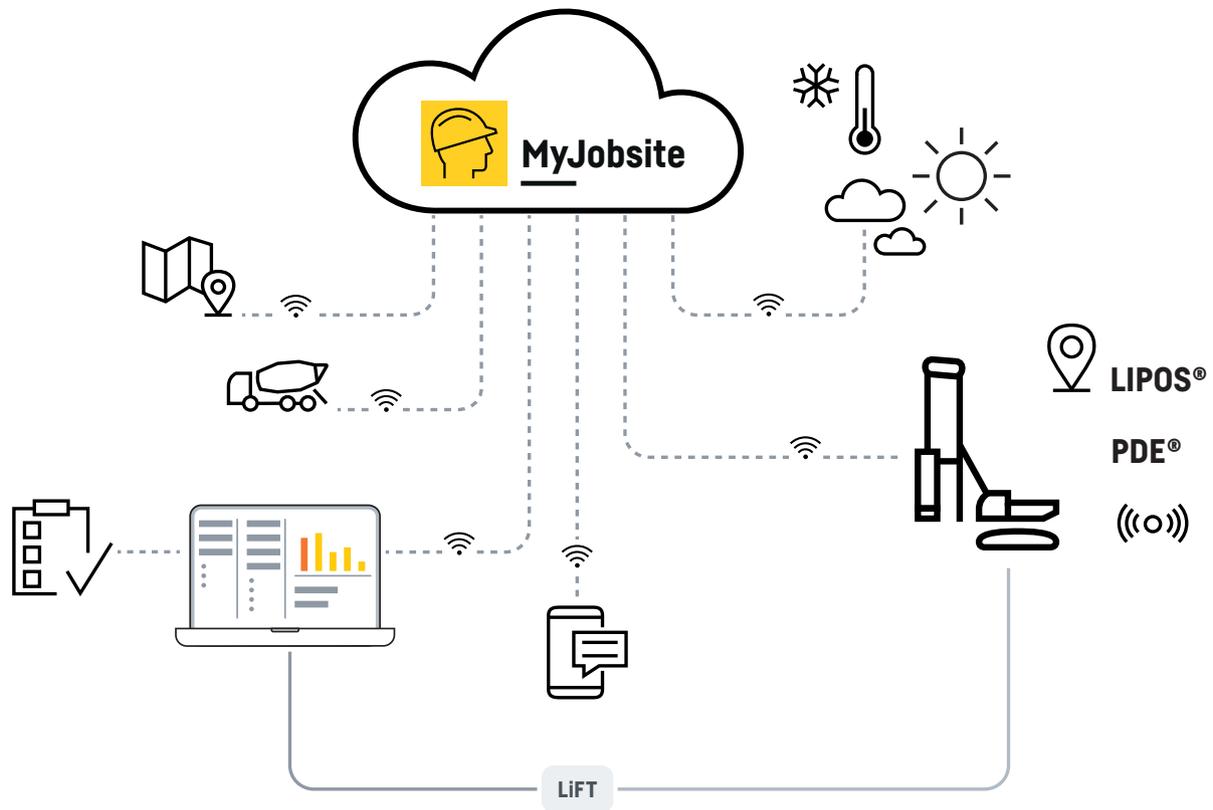
Performance data

Rotary drive - torque	lbf-ft	8,850
Rotary drive - speed	rpm	0 - 65
Max. drilling diameter	ft	1.1
Max. pile length	ft	60.0
Max. drilling depth	ft	39.4

Other drilling diameters available on request

Digitalization in deep foundation work

As deep foundation expert, Liebherr has created a combination of the most diverse assistance systems and software solutions in order to record and evaluate complex processes and to be able to provide the corresponding evidence.



LIPOS – Liebherr Positioning System

Using pre-installed components, LIPOS enables the direct integration of machine control systems from Trimble and Leica. These systems are based on modern DGNSS technology (Differential Global Navigation Satellite System) and so achieve the best possible conditions for a precise and efficient positioning of Liebherr machines and their attachment tools.

PDE

All working processes can be electronically recorded and visualized using the process data recording system PDE. The system is operated and displayed on the PDE touchscreen in the operator's cab. PDE records operating data from the Litronic control system, as well as data from external sensors.

MyJobsite

Using the MyJobsite software solution all relevant process, machine, construction site and positioning data (LIPOS) can be recorded, displayed, analysed, managed

and evaluated in one central location. The collected data can be accessed via a web browser when an internet connection is active.

With the recorded PDE data, such as the driving progress of the pile per blow, the total number of blows, or the impact frequency per minute, a driving protocol is automatically generated as proof of quality directly after completion of a work process. The parameters of the driving protocol can be defined and assigned in advance. Using the templates saves a lot of time when creating the protocols.

MyJobsite is THE tool for quality control and documentation. The deluge of data, which is accrued each day from a wide variety of sources on the jobsite, can be recorded precisely and processed in an informative manner. Unpopular bureaucratic work is kept to a minimum and the amount of time required for it is significantly reduced. At the same time, the quality of administration work is maximised.



Download datasheet



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