

Piling rig with fixed leader system

LRH 600
Litronic®

enUS

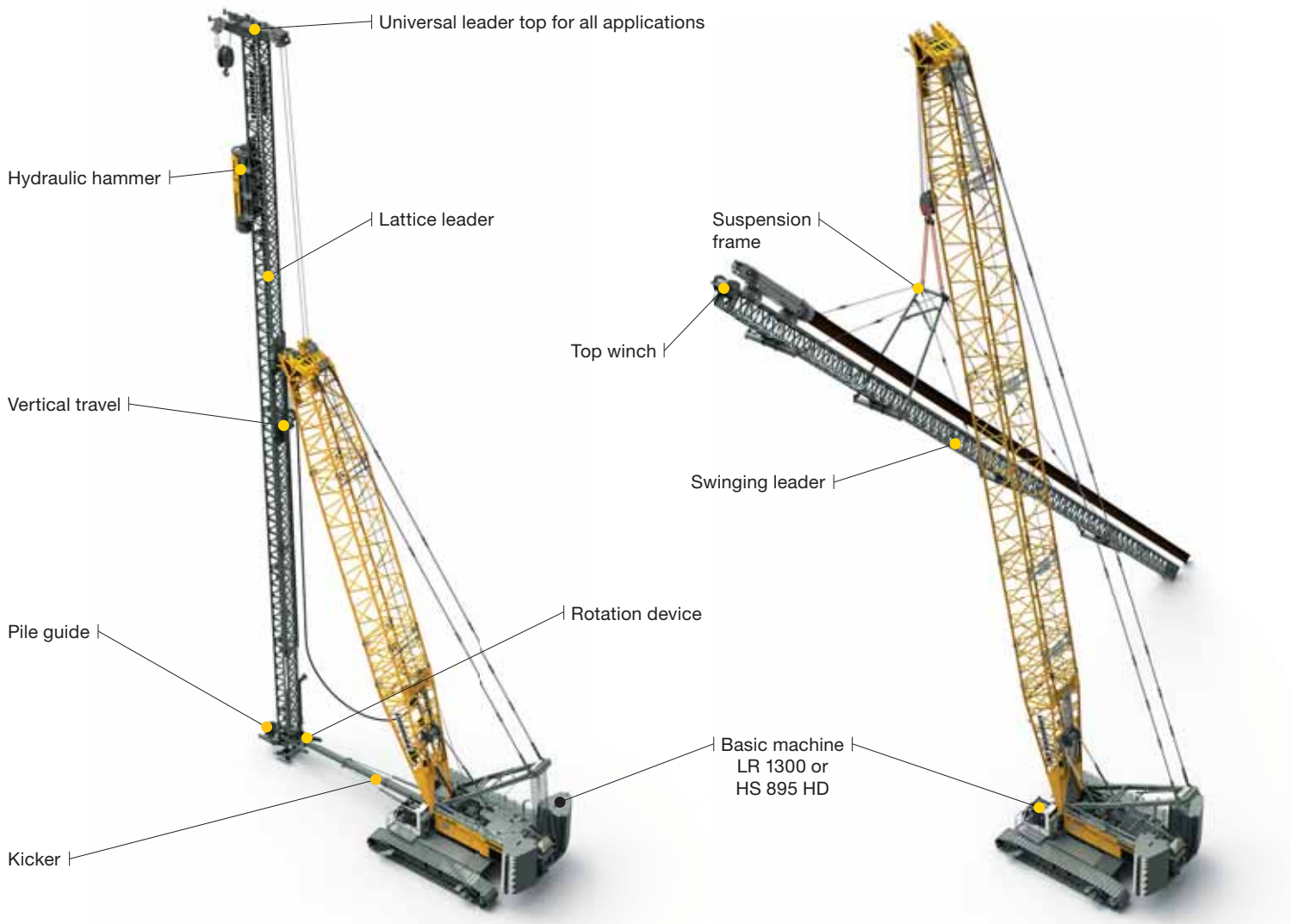
LRH 0108.03



LIEBHERR

Concept and characteristics

LRH 600



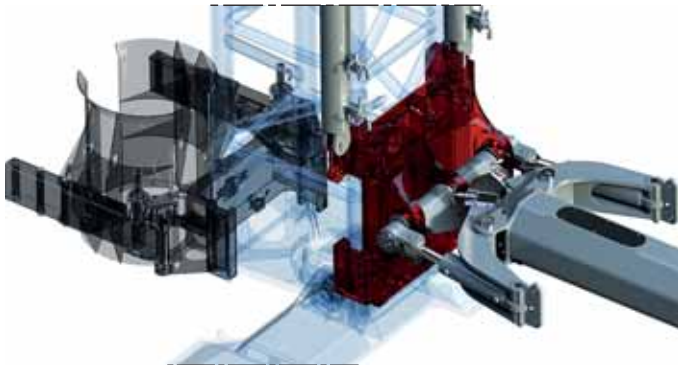
- Depending on the requirements basic machines of the crawler crane series (LR 1300) or duty cycle crawler crane series (HS 895 HD) are used. Combined with solid leaders this high-performance construction machinery convinces with its high level of efficiency and flexibility.
- Thanks to the special leader kinematics a radius of max. 49.2 ft (fixed leader) as well as a continuous inclination adjustment are achieved.
- Hydraulic supply through carrier machine
- All adjustment functions and their control completely integrated in the carrier machine
- Equipment design according to latest European regulations and standards
- High stability through lattice structure

Special features

Connection of leader sections



Automatic rotation device



Leader inclination device



Vertical travel

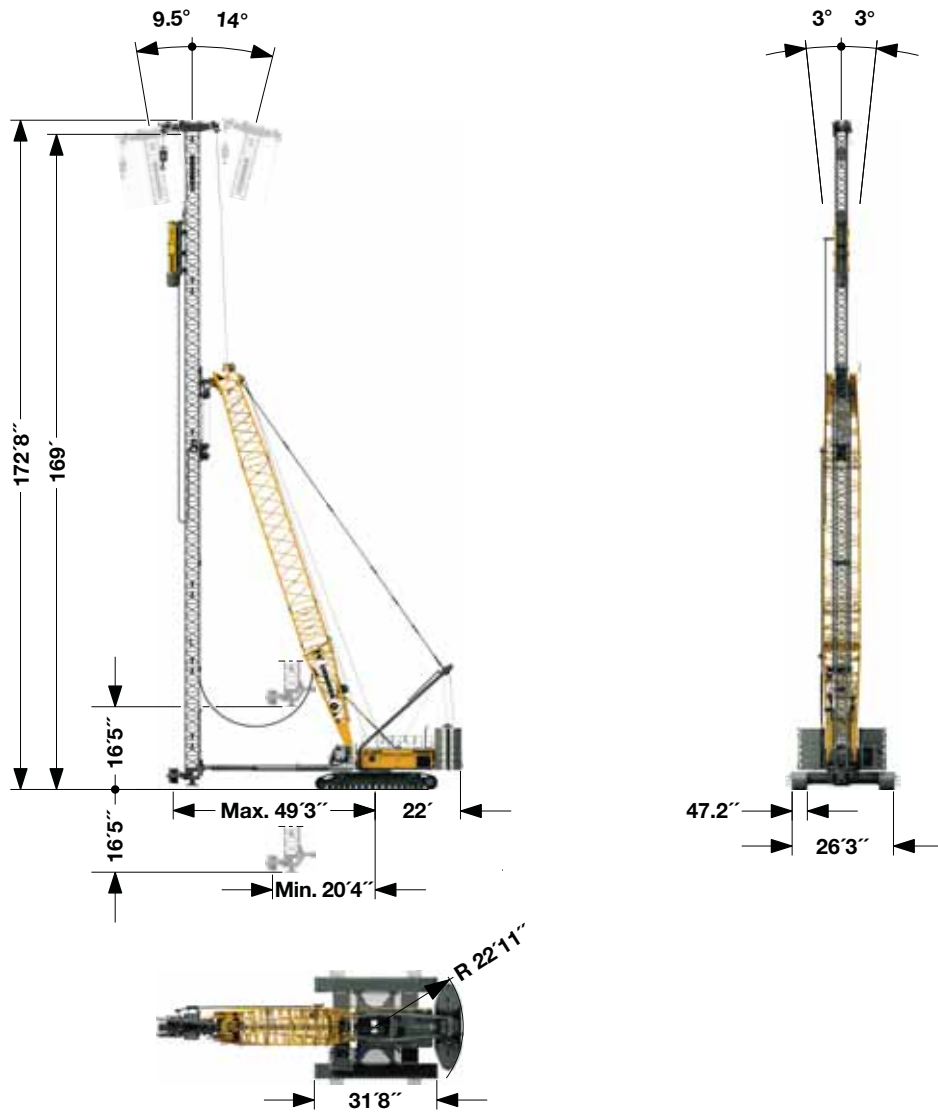


- Structure and connection of leader sections:
Easy and quick assembly thanks to pin connection, high stability through lattice structure.
- Vertical travel:
In order to provide maximum stability, the kicker is connected to the boom head via supporting tubes. This allows to change the leader height without influencing the leader inclination.

- Kicker:
Two compensation cylinders always keep the leader parallel to the uppercarriage. This allows for maximum torque transmission. Radius and inclination are adjusted using only one pair of cylinders.

Dimensions and weights

LRH 600 fixed leader

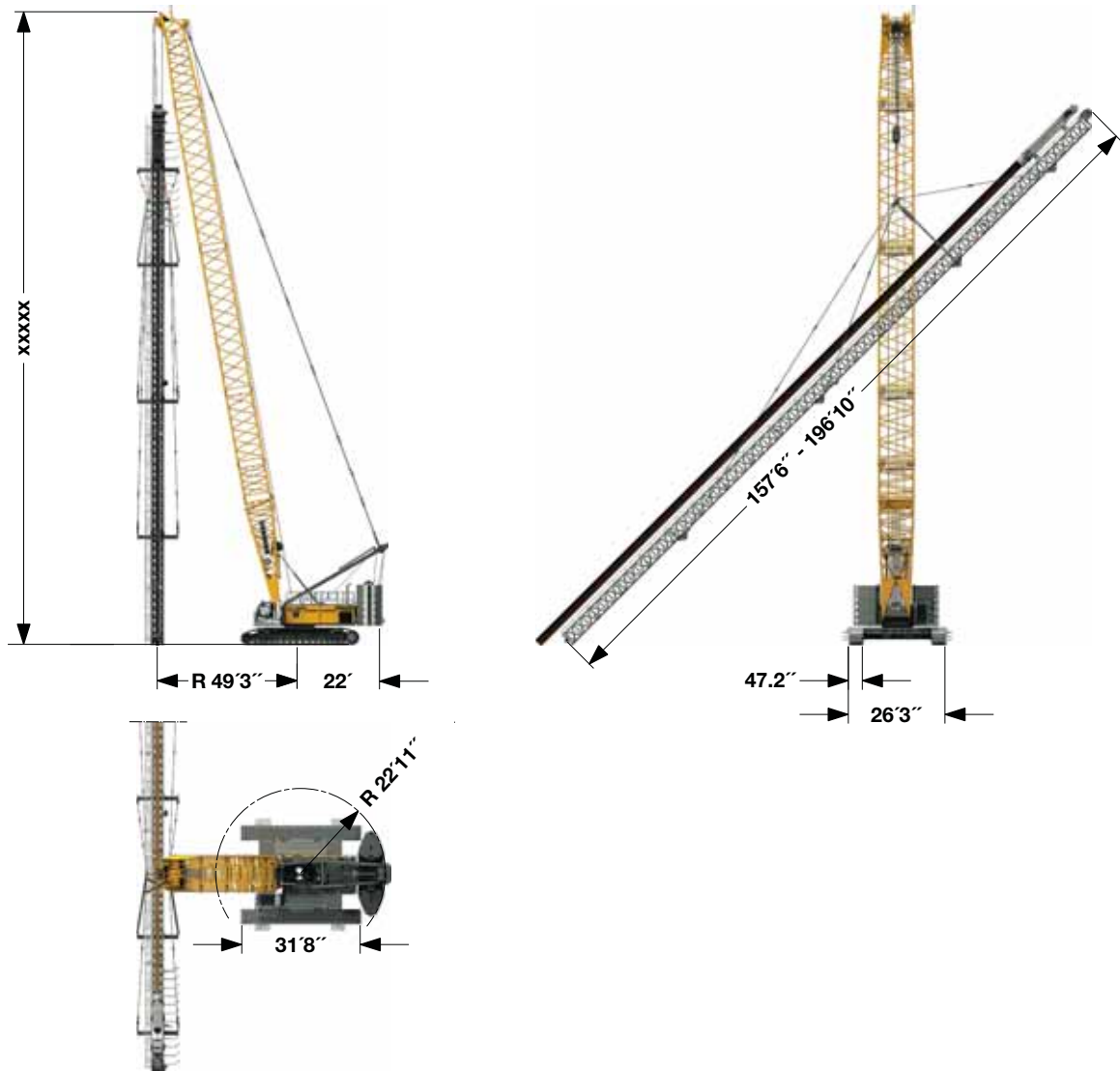


Technical data – fixed leader

Leader length	128/147.7/167.3 ft
Weight without carrier machine	66,139/71,650/77,162 lbs
Min. radius	20.4 ft
Max. radius	49.2 ft
Leader inclination continuously variable*	
Lateral inclination	± 3.0°
Forward inclination	1:6 — 9.5°
Backward inclination	1:4 — 14.0°
Max. pile weight	88,185 lbs
Max. hammer weight	77,162 lbs
Pull force	max. 269,771 lbf
Max. torque (effective over complete leader length)	236,020 lbf-ft
Vertical travel	± 16.4 ft

*) Other inclinations on request

LRH 600 swinging leader



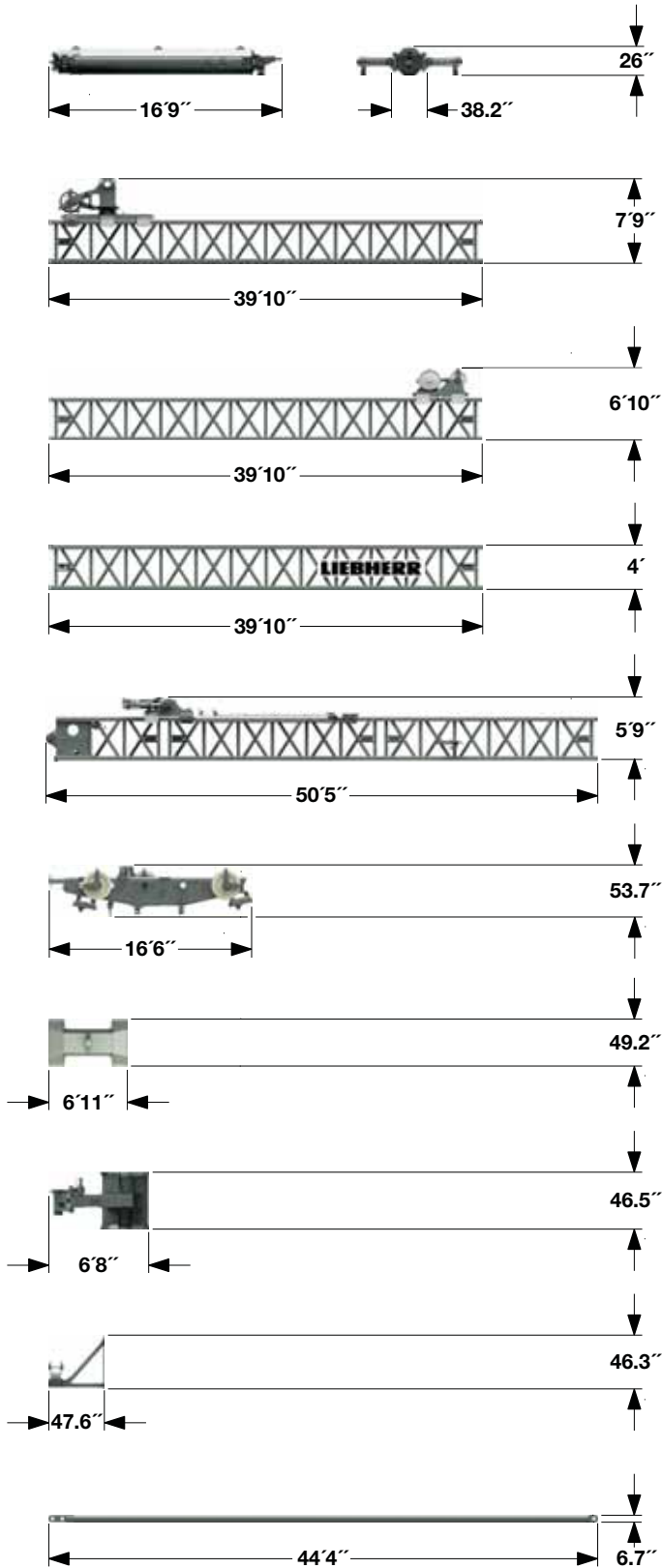
Technical data – swinging leader

Leader length	157.5/196.9 ft
Weight without carrier machine	55,116/63,934 lbs
Leader inclination*	1:1
Max. pile weight	44,093 lbs
Max. hammer weight	44,093 lbs

*) Other inclinations on request

Transport dimensions and weights

LRH 600 fixed leader



Kicker

Width	7.9 ft
Weight	10,098 lbs

Leader extension incl. guiding sledge

40 ft

Width	57.1 inch
Weight	13,052 lbs

Leader extension incl. vertical travel sledge

40 ft

Width	62.4 inch
Weight	10,968 lbs

Leader extension

40 ft

Width	39.4 inch
Weight	7,783 lbs

Leader extension incl. sledge

10 ft + 20 ft + 20 ft

Width	7.2 ft
Weight	15,190 lbs

Leader top with pulley kit hammer

Width	58.3 inch
Weight	7,022 lbs

Support plate

Width	19.1 inch
Weight	1,367 lbs

Pile guide

Width	66.1 inch
Weight	1,588 lbs

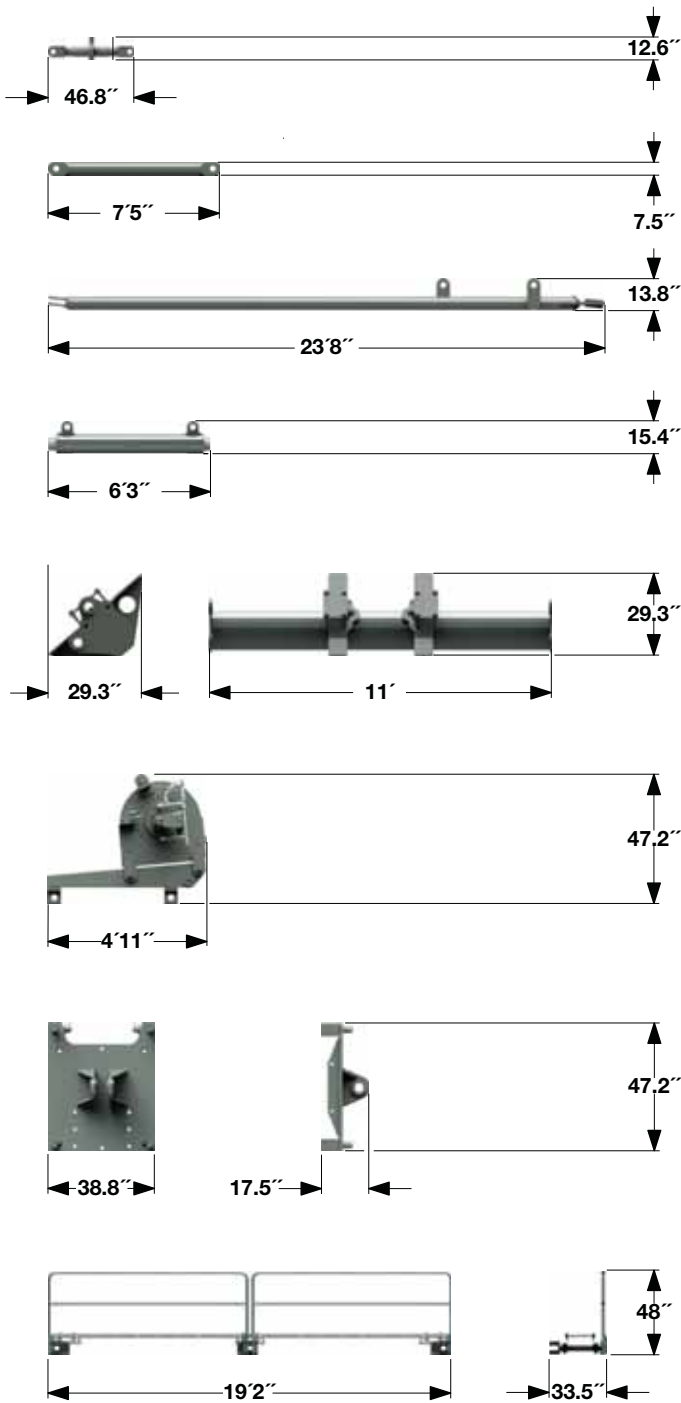
Hose guide

Width	42.1 inch
Weight	375 lbs

Supporting tubes

Supporting tubes 167.3 ft	2 x 750 lbs
Supporting tubes 147.7 ft	2 x 353 lbs
Supporting tubes 128 ft	2 x 188 lbs

Additional equipment for swinging leader



Turnbuckle 8x

Width	9.1 inch
Weight	287 lbs

Brace 2x

Width	7.5 inch
Weight	210 lbs

A-frame bar 2x

Width	23.2 inch
Weight	885 lbs

A-frame spacer

Width	9.5 inch
Weight	665 lbs

Traverse 4x

Width	29.3 inch
Weight	1370 lbs

Top winch

Width	52.7 inch
Weight	2515 lbs

Leader foot

Width	17.5 inch
Weight	885 lbs

Walkway 10x

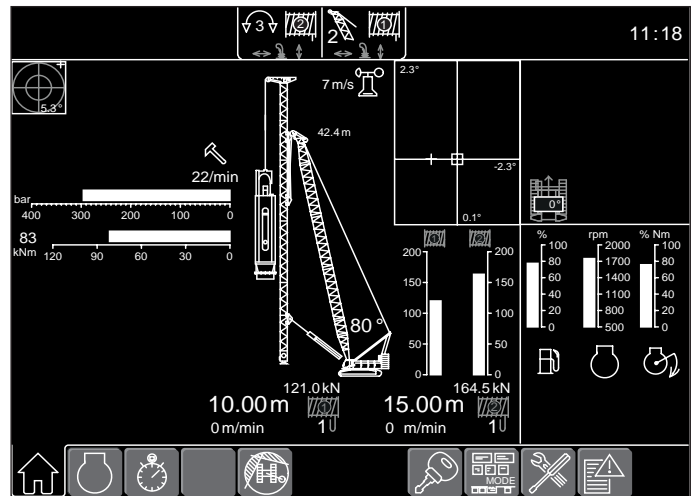
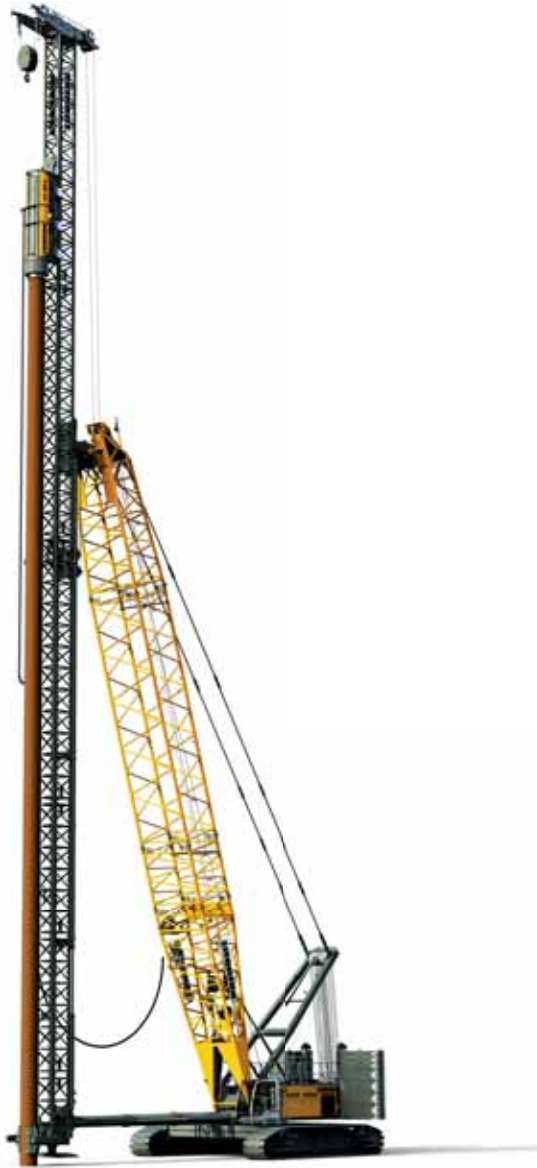
Width	5'6"
Weight	730 lbs

Suspension rope 14x

Weight	3750 lbs
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Hydraulic hammer

H 15 L



Display for impact driving

Technical data

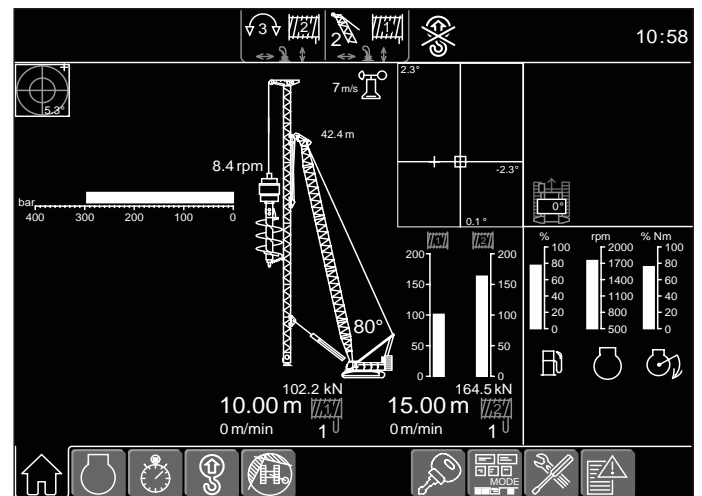
Drop weight	22,046 + 5,512 + 5,512 lbs
Max. rated energy	165,952 lbf-ft
Blow rate max. energy	30 blows/min
Max. blow rate	80 blows/min
Total weight	50,707 lbs

Performance data for 167.3 ft leader

Max. pile length	164 ft
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Continuous flight auger drilling

BAT 320



Display for continuous flight auger drilling

Technical data

Rotary drive - torque	0 – 236,020 lbf-ft
Rotary drive - speed	0 – 47 rpm

*) Other drilling diameters available on request

Performance data for 167.3 ft leader and auger cleaner

Drilling depth	167.3 ft
Max. drilling diameter*	47.2 inch

Hydraulic hammer

Swinging leader



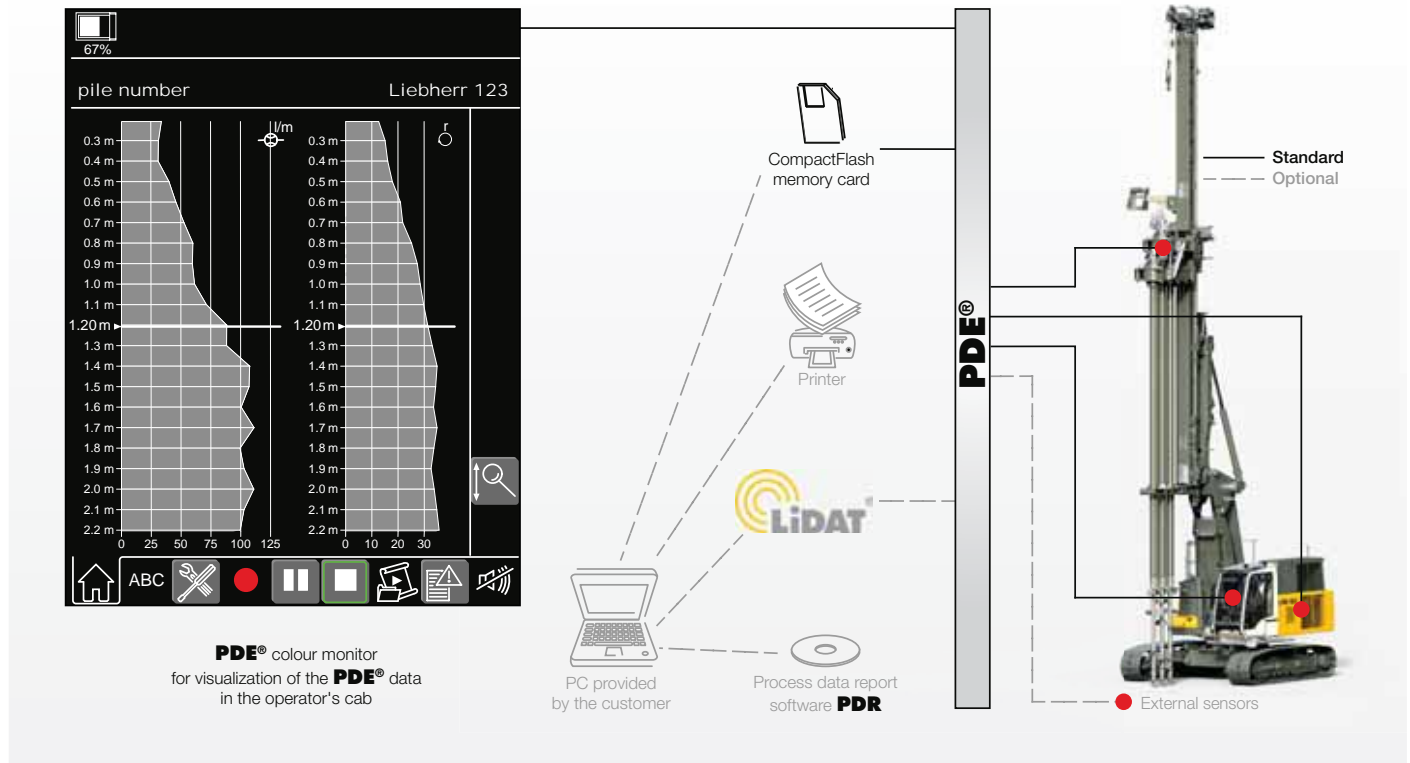
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Process data recording system - PDE® (additional equipment)

The Liebherr process data recording system PDE® constantly records the relevant process data during the working process.



Depending on the application the recorded and processed data are displayed on the PDE® touchscreen in the operator's cab, e.g. in the form of an online cast-in-place pile.

At the same time the PDE® is operated using this touchscreen. The operator can enter various details (e.g. jobsite name, pile number, etc.) and start and stop recordings. A recording of every start-stop cycle carried out in the PDE® is established on a CompactFlash memory card.

The PDE® can be configured in a number of ways, e.g. for the connection of external sensors, for the generation of a simple protocol as graphic file and/or for a printout directly in the operator's cab.

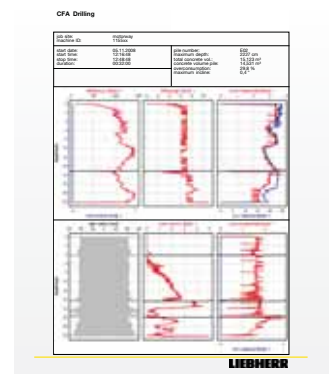
Process data reporting - PDR (additional equipment)

Comprehensive data evaluation and generation of reports on a PC is possible using the software PDR.

Recordings management - The recordings generated by the PDE® system can be imported and managed in PDR. The data can be imported directly from the CompactFlash card or via the Liebherr telematics system LiDAT. Certain recordings, e.g. for a particular day or jobsite, can be found using filter functions.

Viewing data - The data in each record is displayed tabularly. Combining several recordings provides results, for example, regarding the total concrete consumption or the average depth. Furthermore, a diagram editor is available for quick analysis.

Generating reports - A vital element of PDR is the report generator, which allows for the generation of individual reports. These can be printed out directly or stored as pdf files. In the process the size, colour, line thickness or even the desired logo can be configured. Moreover, the reports can be displayed in different languages, e.g. in English and in the national language.



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