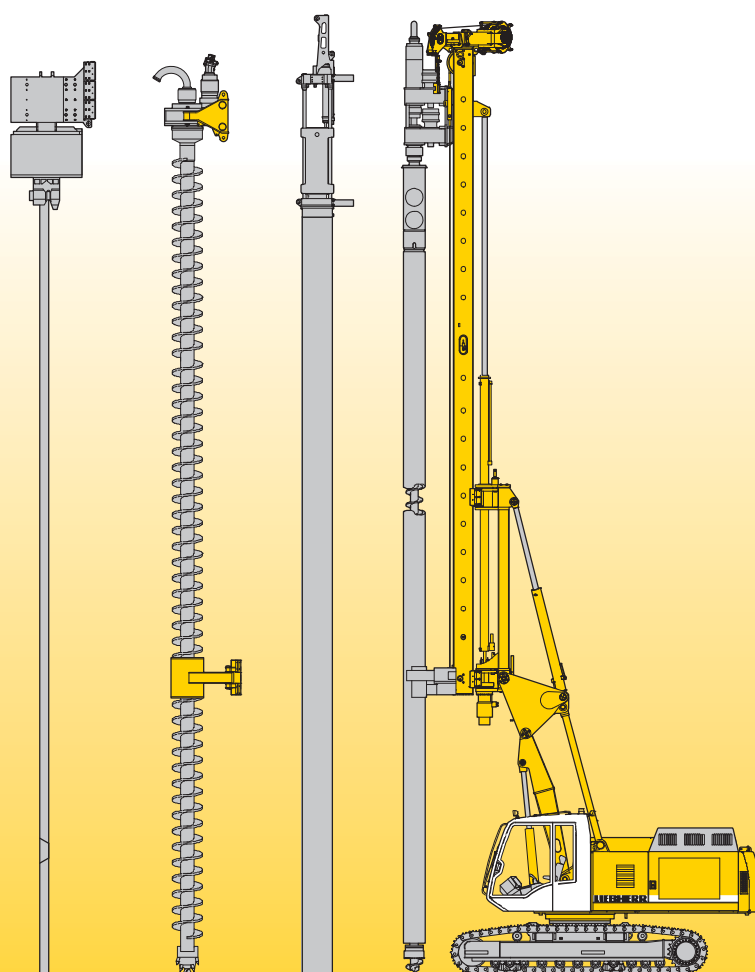


Technical data

Piling and drilling rig

LRB 125

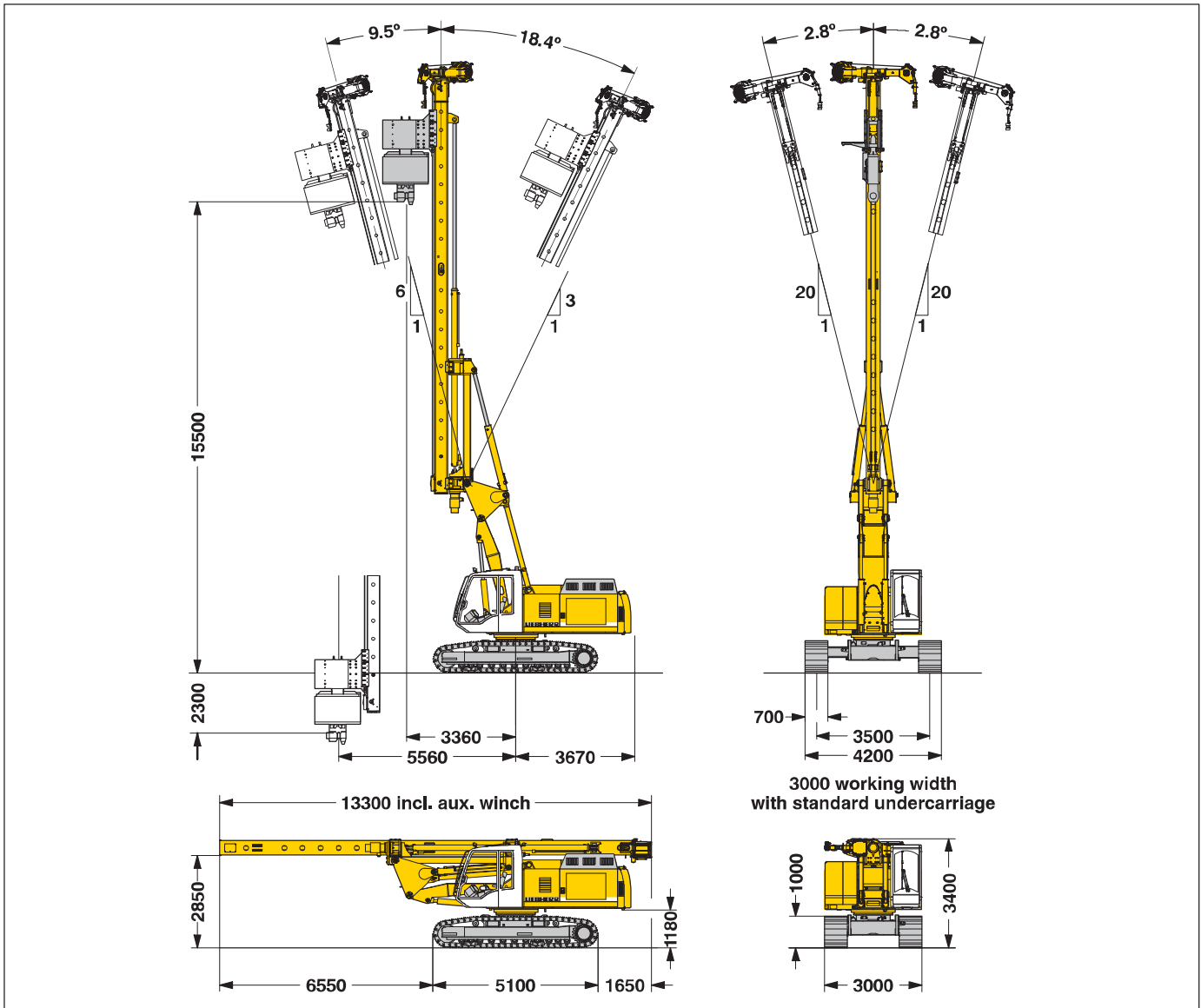
Litronic®



LIEBHERR

Dimensions

Basic machine LRB 125



Technical Data

Leader length	12.8 m
Capacity: hammer including cap plus pile	12 t
Max. hammer weight	6 t
Max. pile weight	6 t
Max. pull	20 t
Max. torque	120 kNm
Working radius machine	
Center of rotation – center pile	3.36 – 5.56 m
Stepless rig inclination adjustment	
Lateral inclination	+/-1:20
Forward inclination	1:6
Backward inclination	1:3
Vertical leader adjustment above ground level (depending on radius)	
	5 m
Leader swing range	+/-90°

Operating weight and ground pressure

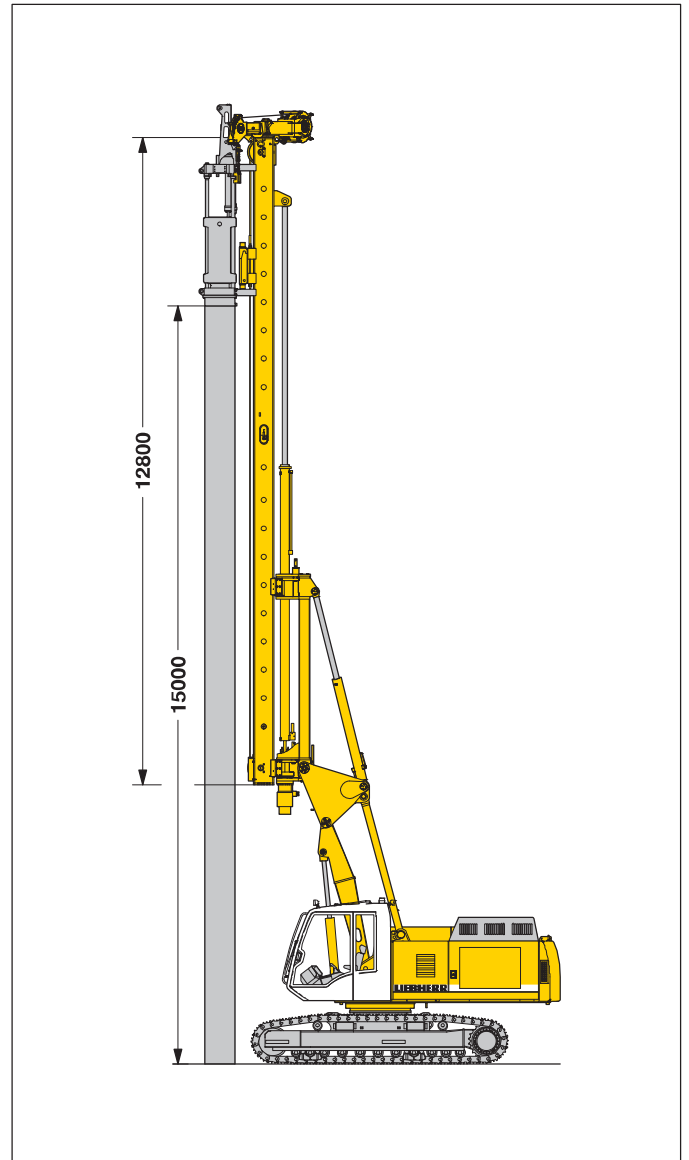
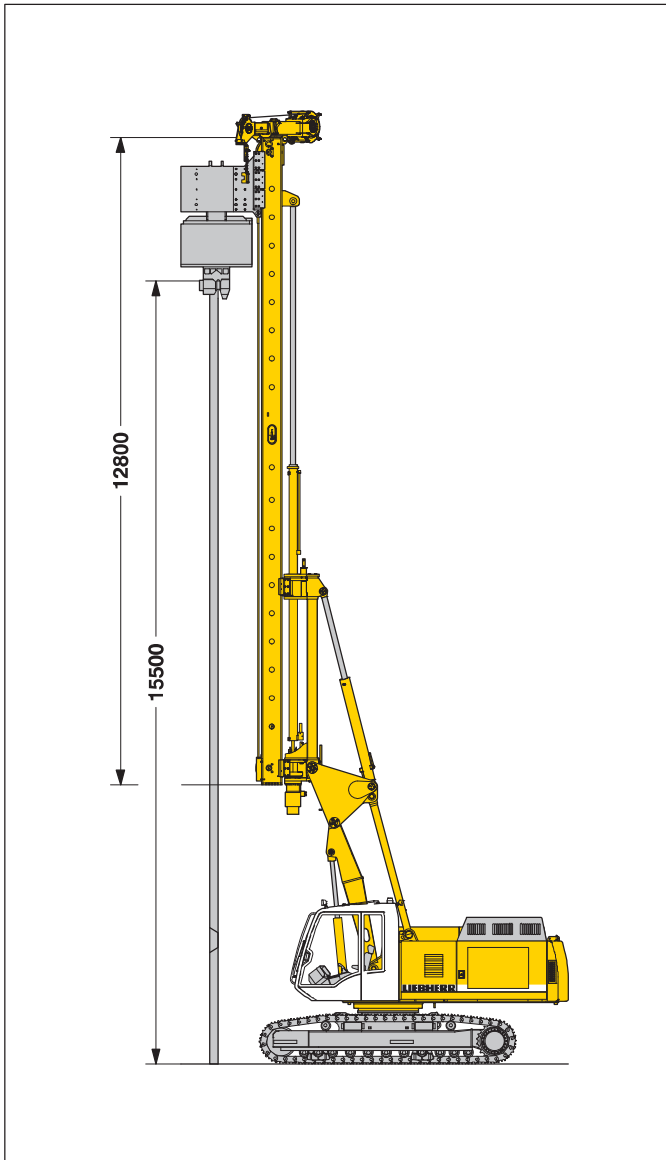
Standard undercarriage with	
600 mm 3–web shoes	44.0 t – 0.95 kg/cm ²
Telescopic undercarriage with	
700 mm 3–web shoes	48.0 t – 0.81 kg/cm ²
The operating weight includes the basic machine LRB 125 (leader length 12.8 m, with attachment). Weights can vary depending on the final configuration of the machine.	

Transport weight

Without attachment	39.0 t
Without attachment, with telescopic undercarriage	43.0 t

Pile driving equipment

Technical data



Vibrator variable moment

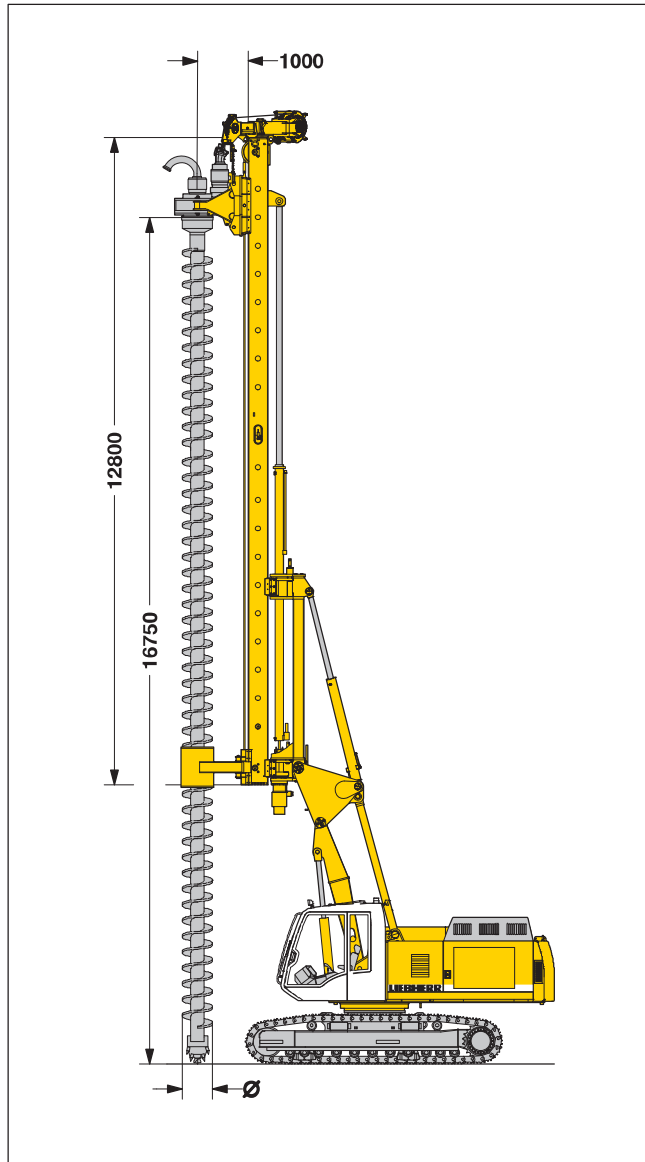
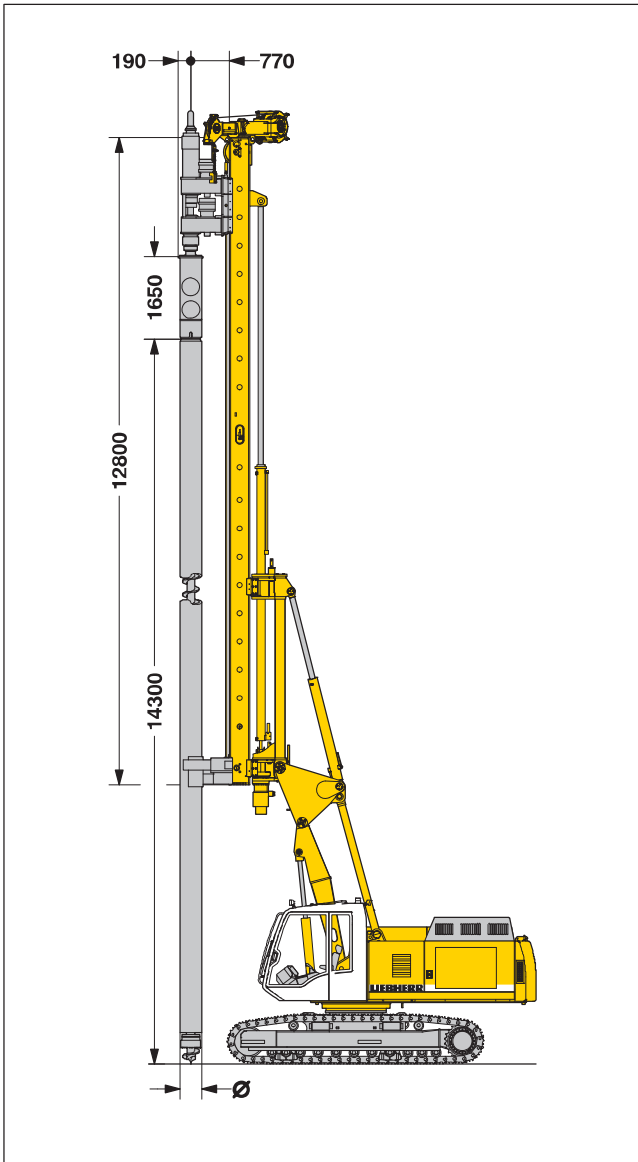
Static moment	0 – 19 kgm
Max. speed	2300 rpm
Max. centrifugal force	1100 kN
Weight without clamp	3100 kg
Dynamic weight incl. clamp	3900 kg
Max. amplitude	0 – 19 mm

Hydraulic hammer

Max. rated energy free fall	40 kNm
Max. rated energy with acceleration	50 kNm
Min. energy	4 kNm
Blow rate max. energy: 50 blows/min	
Max. blow rate: 85 blows/min	

Drilling equipment

Technical data



Double rotary drilling

Drilling drive I – torque	1 st gear	79 kNm
	2 nd gear	39.5 kNm
Drilling drive I – speed	1 st gear	18 rpm
	2 nd gear	36 rpm
Drilling drive II – torque	1 st gear	59 kNm
	2 nd gear	29.5 kNm
Drilling drive II – speed	1 st gear	25 rpm
	2 nd gear	50 rpm
Max. drilling diameter		700 mm

Continuous flight auger drilling

Drilling drive – torque	1 st gear	123 kNm
Drilling drive – speed	1 st gear	45 rpm
Max. drilling diameter		800 mm

Technical description



Engine

Water-cooled, V 8 cylinder Liebherr diesel engine, model D 9408 TI-E, turbocharged with intercooler, power rating according to ISO 9249 : 400 kW (544 HP) at 1900 rpm.

The automatic limiting load control adapts perfectly the power of the main users to the present engine speed.

Fuel tank: 870 l capacity with continuous level indicator and reserve warning.



Swing

Consists of single row ballbearing, fixed axial piston hydraulic motor, spring loaded and hydraulically released multi-disc holding brake, planetary gearbox and pinion.

Free swing with hydraulic moment control reduces wear to a minimum, because rotation moment is sustained through the hydraulic system by the diesel engine.

Swing speed from 0 – 4.5 rpm is continuously variable.



Hydraulic system

The main pumps are operated by a distributor gearbox. Axial piston displacement pumps work in open circuits supplying oil only when needed (flow control on demand).

The hydraulic pressure peaks are absorbed by the integrated automatic pressure compensation, which relieves the pump and saves fuel.

Pump for working tools: _____ 2x 300 l/min

Separate pump for kinematics: _____ 330 l/min

Hydraulic oil tank: _____ 825 l

Max. working pressure: _____ 350 bar

No auxiliary power packs are required as application specific hydraulics supply power to all components.

The cleaning of the hydraulic oils occurs via an electronically monitored pressure and return filter.

Any clogging is shown on the display in the cab.

The use of synthetic environmentally friendly oil is also possible.



Control

The control system – developed and manufactured by Liebherr – is designed to withstand extreme temperatures and the many heavy-duty construction tasks for which this machine has been designed. Complete machine operating data are displayed on a high resolution monitor screen.

To ensure clarity of the information on display, different levels of data are shown in enlarged lettering and symbols. Control and monitoring of the sensors are also handled by this high technology system.

Error indications are automatically displayed on the monitor in clear text. The crane is equipped with proportional control for all movements, which can be carried out simultaneously.

The “Redundant” control system allows restricted operation of the machine in the event of a failure on the electronic base control or its sensors.

Two joysticks are required for operation. Pedal control can be changed to hand control.

Options :

- PDE : Process data recording
- GSM modem



Crawlers

Propulsion through axial piston motor, hydraulically released spring loaded multi-disc brake, maintenance free crawler tracks, hydraulic chain tensioning device.

Standard undercarriage: _____ 0 – 1,8 km/h

3-web track shoes: _____ 600 mm

Track force: _____ 336 kN

Telescopic undercarriage: _____ 0 – 2,3 km/h

3-web track shoes: _____ 700 mm

Track force: _____ 400 kN



Auxiliary winch

Line pull (nominal load): _____ 50 kN

Rope diameter: _____ 17 mm

Drum diameter: _____ 420 mm

The winches are noted for their compact, easily mounted design.

Propulsion is via a maintenance free planetary gearbox in oil bath.

Load support by the hydraulic system; additional safety factor by a spring-loaded, multi-disc holding brake.



Noise emission

Noise emissions correspond with 2000/14/EC directive on noise emission by equipment used outdoors.



Rope Crowd System

Crowd force push/pull: _____ 150/200 kN

Line pull (nominal load): _____ 100 kN

Rope diameter: _____ 20 mm

The ropes are actuated by a powerful hydraulic cylinder.

PDE - Process data recording (Additional equipment)

This module constantly calculates and stores the current working processes.

Measurements

Measurements are constantly calculated during the working process.
No special measuring process is required. External systems can also be connected to the system.

Display of measurement data

Measurement data relevant to the working process is displayed on the monitor in the cab.
The operator can then control the process and, if necessary, correct it.

Working process interruption

The working process and the measurement can be interrupted at any time.
The measurements are automatically continued upon resumption of work.

Storage of measurement and machine data

All data is stored on a memory card. This can be read via a PC. Thereby an evaluation and processing of data can also be performed at a later time. For example, for:

- client certifications
- conveying daily production data, down time, etc.
- Soil condition report

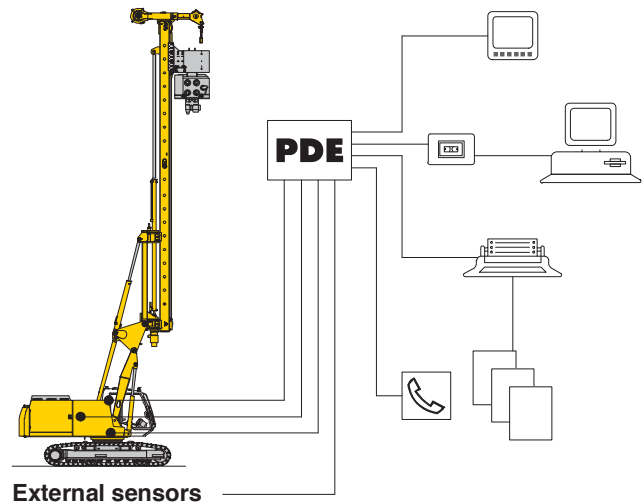
Printing data

A protocol can be printed out from the cab printer after each working process.

Data transmission

A GSM modem can be connected to the PDE making long distance data transmission possible.

PDE - diagram



Example of a protocol (in required language):

Spundwand Protokoll auf Bagger

Startzeit	16:03:56	Endzeit	16:14:41
Datum	02.02.1995	Zeit gesamt	10:45
Bohle/Stich	270	maximale Tiefe [m]	13.93
Suspension gesamt [l]	2609		

