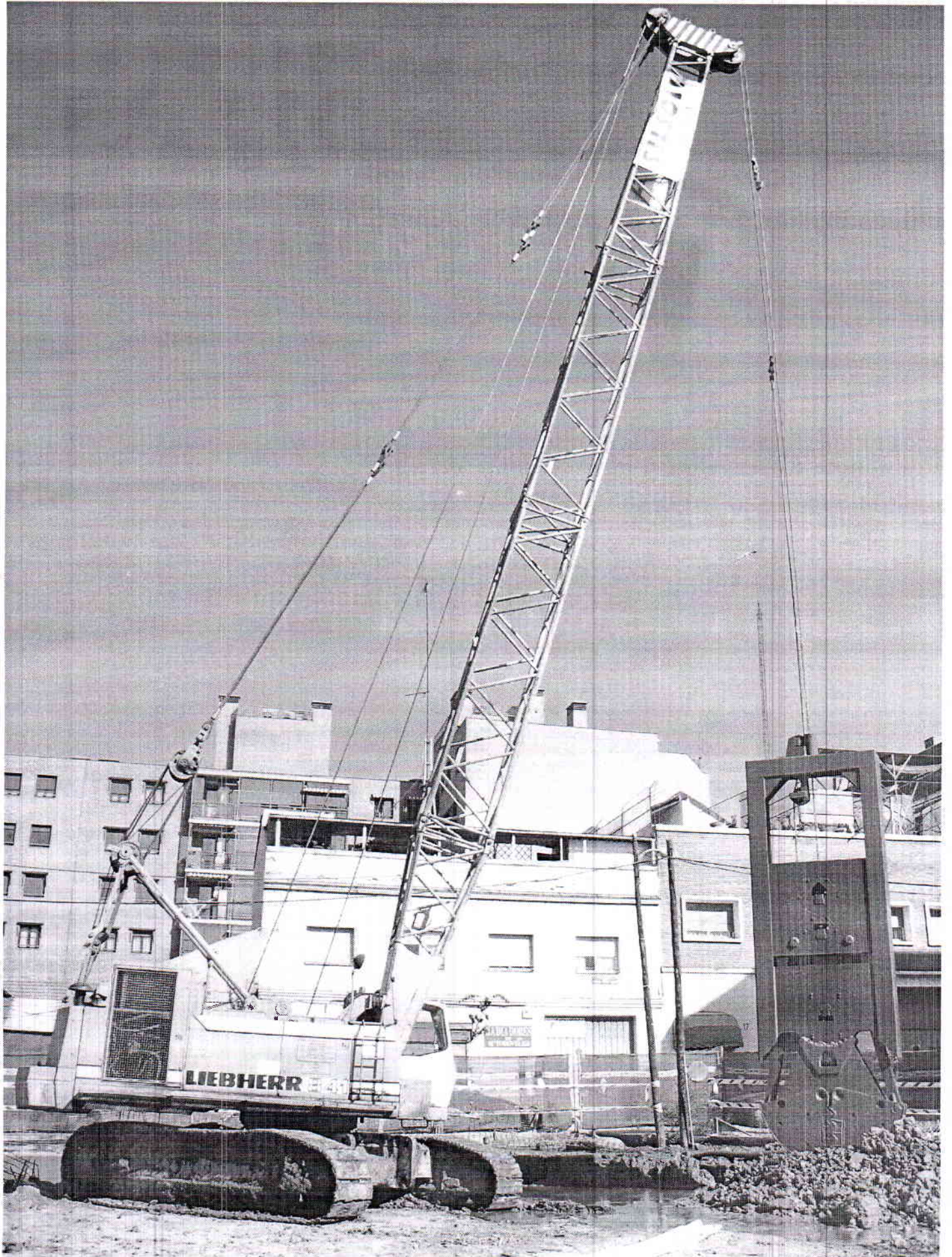


TECNOGRAB

LIEBHERR HS 841 HD



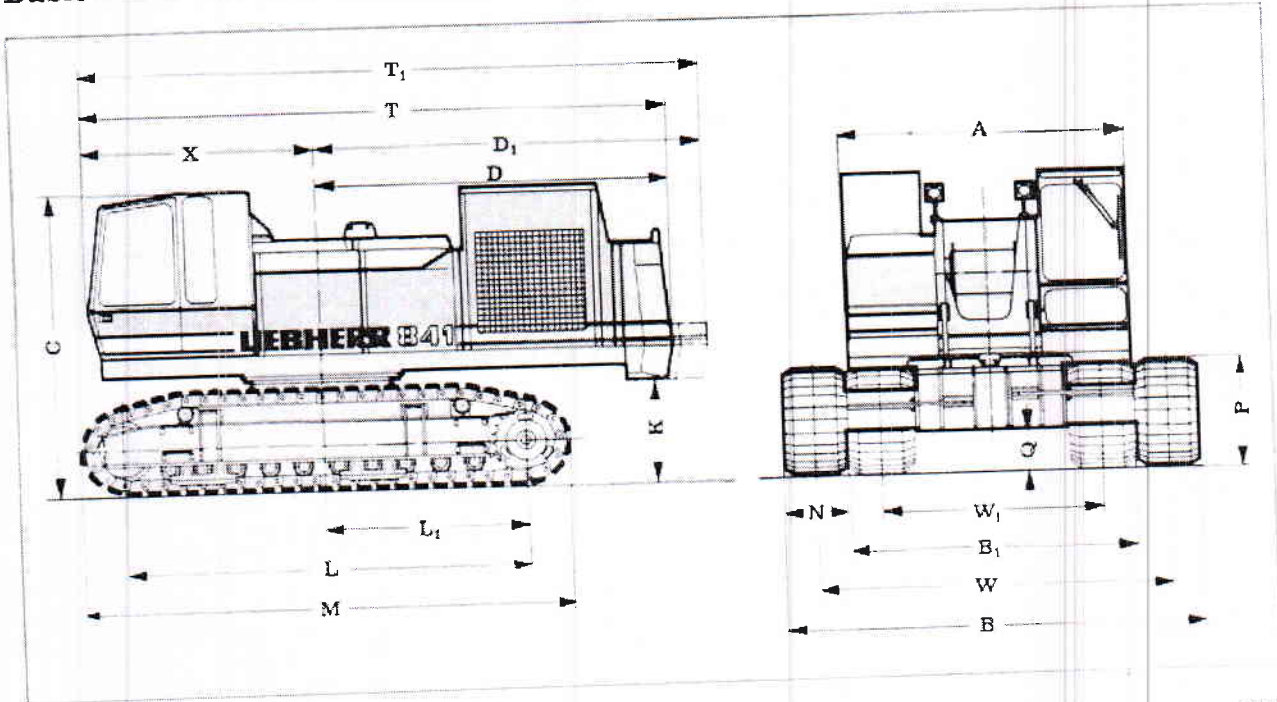
Technical Data

Cable excavator

HS 841 HD

Litronic®

Basic machine with HD-Undercarriage



Dimensions

| | mm | | mm |
|----------------|-----------|----------------|---------------------|
| A | 3000/3300 | M | 5242 |
| C | 3340 | P | 1155 |
| D | 3715 | Q | 422 |
| D ₁ | 3785 | T | 6180 |
| K | 4145 | T ₁ | 6540 |
| L | 4230 | X | 2465 |
| L ₁ | 2100 | N | 700 800 900 1000 |
| | | W | 3700 3700 3700 3700 |
| | | W ₁ | 2300 2600 2600 2600 |
| | | B | 4400 4500 4600 4700 |
| | | B ₁ | 3000 3400 3500 3600 |

Scope of delivery

- Basic machine without track shoes
- Track shoe options

700 mm flat track shoes
 800 mm flat track shoes
 900 mm flat track shoes
 1000 mm flat track shoes
 700 mm 3-web shoes
 800 mm 3-web shoes
 900 mm 3-web shoes
 1000 mm 3-web shoes

Operating weight and ground pressure

The operating weights include the basic machine with B6-tracks, 2 main winches, and 11 m HD-boom consisting of A-frame, lower boom section (4 m), boom head section (6.5 m), boom head (0.5 m), and 7,6 t counterweight.

| | |
|-------------------------------|----------------------------------|
| mit 700 mm flat track shoes: | 44.4 t - 0.70 kg/cm ² |
| mit 800 mm flat track shoes: | 44.8 t - 0.62 kg/cm ² |
| mit 900 mm flat track shoes: | 45.2 t - 0.55 kg/cm ² |
| mit 1000 mm flat track shoes: | 45.5 t - 0.50 kg/cm ² |
| mit 700 mm 3-web shoes: | 44.7 t - 0.70 kg/cm ² |
| mit 800 mm 3-web shoes: | 45.2 t - 0.62 kg/cm ² |
| mit 900 mm 3-web shoes: | 45.6 t - 0.56 kg/cm ² |
| mit 1000 mm 3-web shoes: | 46.2 t - 0.51 kg/cm ² |

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How to build Cranes.

Technical Description

Engine

Watercooled Mercedes Benz V8 Diesel engine, type OM 442 A Turbo charged, output (DIN 6271) 267 kW at 1900 rpm. Fuel tank capacity: 440 l, continuous fuel consumption indication, with reserve indicator at approx. 40 l. Dry air filter with pre-cleaner main and safety element, AC-generator 28 V/95 A, dust and water protected, to supply the 24 V electrical equipment with 2 high performance cold start batteries. Amply dimensioned water and oil coolers, designed to work under tropical conditions.

Hydraulic system

Extended distribution gear box with 8 terminals, directly flanged variable displacement pumps (swash plate design) for the main drives and variable axial piston pumps for the additional consumers adjustable from zero to max. Additional circuits for cooling, control and boost pressure.

Main drives

Winches 1 and 2 : Variable displacement pump (swash plate design) A4 V90 with 240 l/min each, can be switched over to drive the travelling gear.

Slewing mechanism

: Variable displacement pump (swash plate design) A4 V90 with 240 l/min.

Luffing mechanism

: Variable displacement pump (swash plate design) A4 V56 with 150 l/min.

Additional hydraulic system for casing oscillator, feed cylinder, bentonite pump, vibrator mechanism, pile driver, hydro grab.

Hydro grab : Variable displacement axial piston pump
2 pumps with 200 l/min each.

Working pressure : 310 bar.

Oil flow and working pressures are adjustable. Maximum load control and low-loss pressure limitation. Oilcooler with thermostatically controlled flow.

Hydraulic fluid tank capacity

: approx. 660 l.

Control

Closed hydraulic circuits with electrical proportional control from zero to maximum for the main working movements, microprocessor control for the working and control functions as well as for all supplementary mechanism, independent of their make and type.

Standard equipment

: Maximum load sensing and control, maximum speed control for engine, preselection of R. P. M., free-wheel of slewing gear, preselectable speed ranges of friction moved slewing gear, free-fall device and power load lowering system for main winch.

Options available

- Electronic control for diaphragm wall grab
 - Interlock control for dragline operation
 - Automatic control for casing oscillator (protected by patent)
 - Control for hydraulic Kelly-grab, drilling machine, hydro-mill, pile driver, vibrator mechanism.
 - Torque limitation with indications for load and reach
- For all applications the required control panels are available.

Winches 1 and 2

Hydrostatic internal planetary gears with pressure dependent stepless variable oil motors, combined clutch and braking function, band and lamella disc design, additional holding brake.

Both alternatives of the free-fall brakes guarantee absolutely accurate and fine braking due to their ingenious design.

The following winches are available:

| | 8 t | 12 t | 16 t | 20 t |
|------------------------|-----------|----------|----------|----------|
| Line pull | 80 kN | 120 kN | 160 kN | 200 kN |
| Rope diameter | 20 mm | 24 mm | 26 mm | 30 mm |
| Rope drum diameter | 390 mm | 500 mm | 550 mm | 640 mm |
| Rope speed first layer | | | | |
| Empty hook m/min | 0-150 | 0-100 | 0-80 | 0-75 |
| Load at t/m/min | 2,7/0-140 | 4,4/0-87 | 5,4/0-72 | 8,6/0-71 |
| Nominal load m/min | 0-53 | 0-39 | 0-30 | 0-39 |

All winches can be equipped with half shell and the rope diameter can be varied.

Swing mechanism

Rotating speed 0 - 3,8 rpm, variable in closed hydraulic circuit or electronic free-wheel, pinion for slewing gear, outer toothing, single row roller bearing with detachable protecting cover, planetary gear designed for the attachment of a drilling machine of 30 m.

Boom hoist mechanism

Max. line pull 50 kN with max. 10 rope reevings, rope diameter 18 mm, rope speed 30 m/min. The boom hoist winch is used for mounting the additional counterweight and together with A-frame, lower boom section, rope and pulley block as an auxiliary crane.

Superstructure

The center of gravity of the superstructure including the external equipment is close to the axis of rotation of the machine. The load distribution on the roller bearing is ideal. Counterweight total 11,8 t.

Undercarriage

Lifetime lubricated B6 tracks with integrated travelling mechanism. The hydrostatic travelling mechanism with spring loaded holding brake is operated in closed hydraulic circuit, counter-rotation possible.

The crawler displacement up to the maximum of 1400 mm is achieved by 2 double-acting cylinders.