

Product advantages

Mobile crane 1090/2



Max. lifting capacity: 90 t at 3 m radius

Max. height under hook: 72 m with biparted swing-away jib

Max. radius: 56 m with biparted swing-away jib

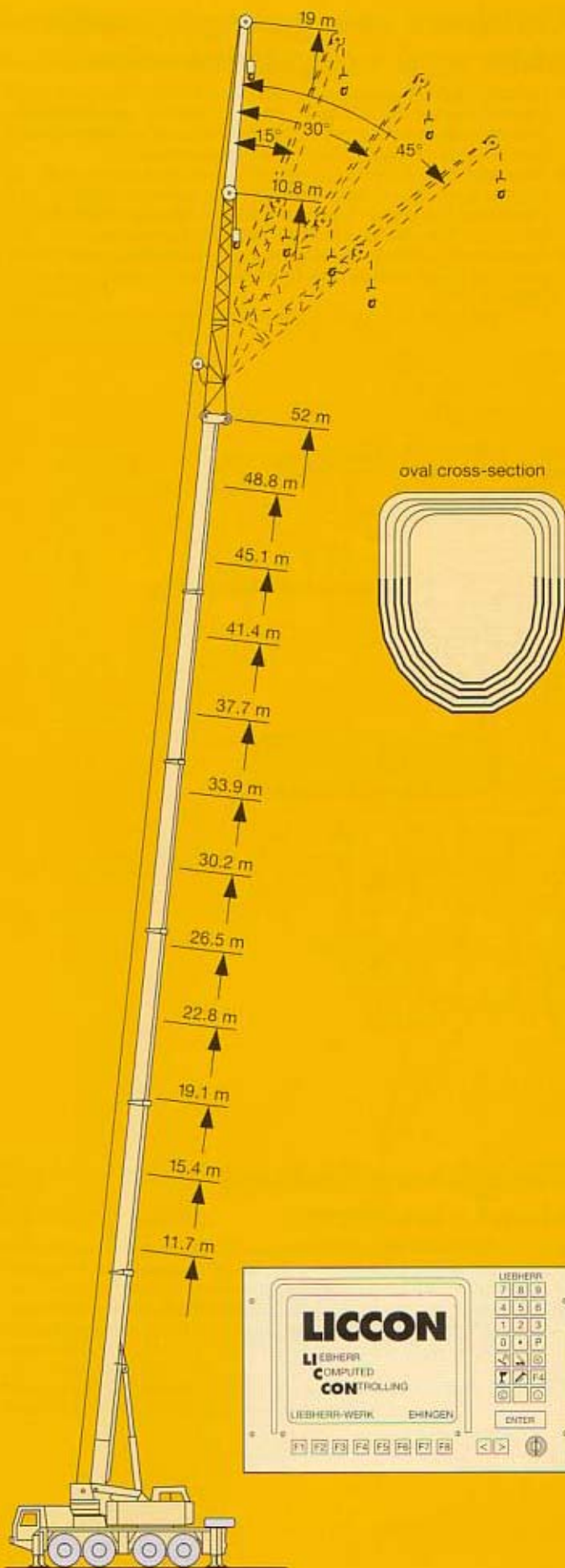


Performance profile of the LTM 1090/2 at a glance.

- Outstanding range of lifting capacities; counterweight versions 1.2 t, 3 t, 7 t, 12.2 t and 20 t
- Robust 300 kW/408 h.p. Liebherr turbo-charged Diesel engine (Euro II)
- Compact and manoeuvrable due to all-wheel steering, smallest turning radius 7.8 m
- Travel control and setting on outriggers from crane cab (optional)
- Convenient electric/electronic crane control with integrated LICCON system
- 6-section telescopic boom of utmost stability, length 11.7 m - 52 m and 10.8 m - 19 m long biparted swing-away jib
- New rapid-cycle telescoping system "Telematik" with one telescopic ram interlocking laterally the telescope end sections. The end sections of the telescopes are interlocked with one another by pins. Automatic and manual telescoping practicable.
- LICCON, the most modern crane computer system world-wide, with informative, monitoring and control functions
- Diesel engine, slewing rim, slewing gear, winches and hydraulic pump are self-manufactured, quality checked components
- The LTM 1090/2 is manufactured by Liebherr within the scope of a quality assurance system according to DIN ISO 9001

LIEBHERR

The better crane.

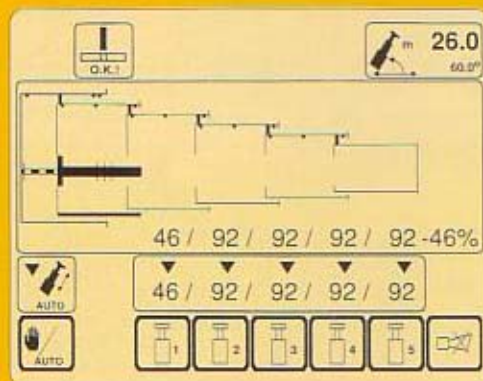


Lifting loads - precise and safe.

- 6-section, 52 m long telescopic boom and 19 m biparted swing-away jib for 72 m height under hook and 56 m radius
- Rigging of swing-away jib practicable at 0°, 15°, 30° or 45°, hydraulic rigging aid
- Optimal utilization of telescopic boom through 23 different telescoping options
- The LICCON system calculates the optimal load curve at any boom length
- Simple and quick rereaving of hoist rope through modern self-locking rope dead end connection

LICCON assisted telescoping system.

- Telescoping by means of a single action hydraulic ram with a pneumatic driving pin
- Telescoping procedure controllable on the LICCON monitor, assisted by a convenient operator's guide, precise approach of interlocking positions
- Loads telescopable are indicated on the operating display
- Rapid cycle telescoping system with "automatic mode", i.e. automatic telescoping to the boom length desired
- Particularly light-weight telescoping system, thus increase of lifting capacities, especially with long booms and at large radii
- Automatic cushioning in end positions during telescoping and retracting for preserving structural members



LICCON computer with SLI, test system and PLC control.

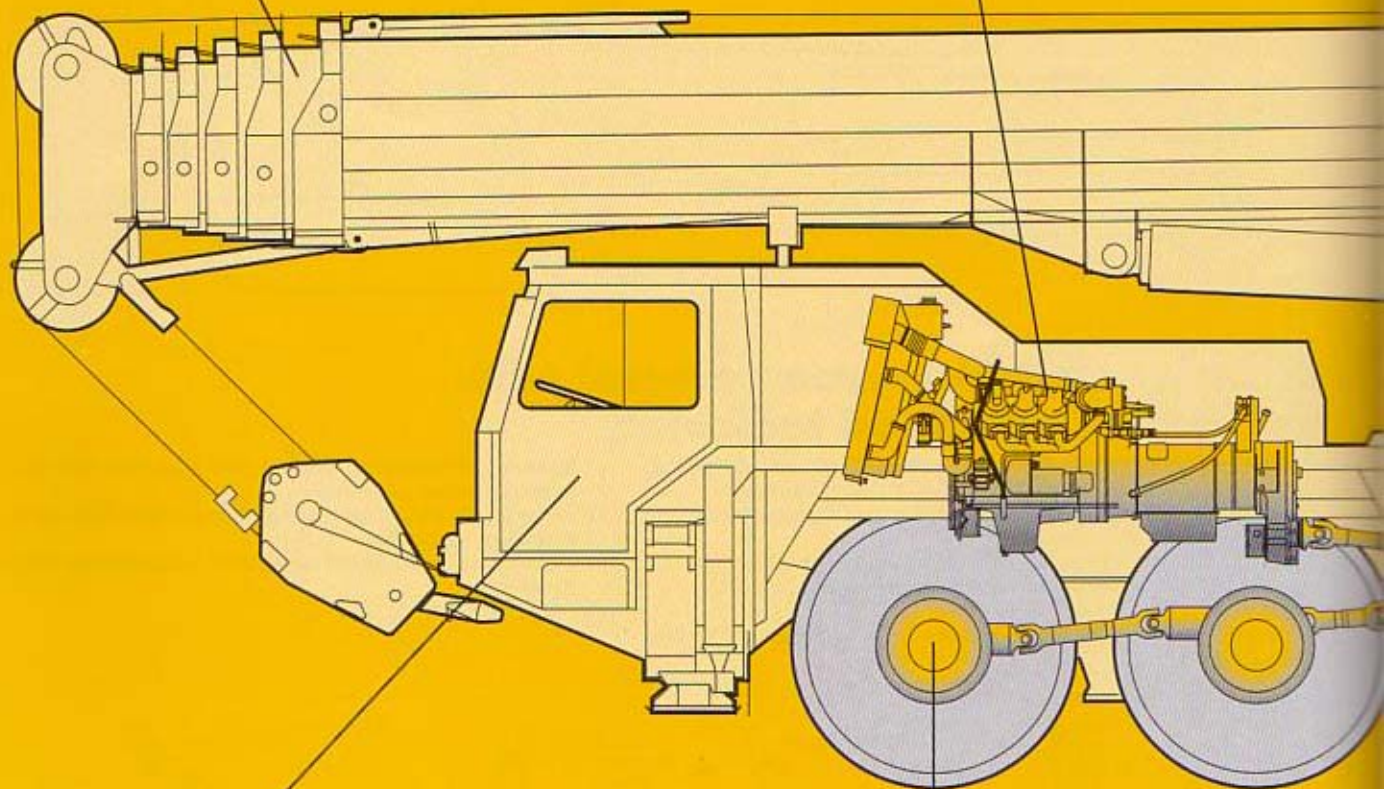
- Setting of crane configuration by convenient conversational mode functions
- Reliable acknowledgement of crane configuration set
- Representation of all essential data by graphic symbols within the operating display
- Integrated wind speed control (optional)
- Reliable cut-off device in the event of exceeding the permissible load moments
- Indication of lifting capacities for any boom intermediate length
- Winch indications for load hook course with zero adjuster for ultra-precise lifting/lowering
- Test system for servicing, providing the facility of checking all sensors and consumers within the system on the monitor
- Convenient programmable logical control (PLC) for winches, slewing gear, luffing and telescoping motions

Torsional rigid telescopic boom.

- New oviform boom cross-section of particular inherent stability
- Maintenance-free polyamide slide pads of telescopes
- First-rate lifting capacities, e.g.
 - 25.6 t at 10 m radius
 - 9.4 t at 20 m radius
 - 4.7 t at 30 m radius
 - 2.4 t at 40 m radius
 - 1.4 t at 50 m radius
- Telescoping with approx. 20 % of rated load practicable
- Telescoping by rapid cycle approx. 300 s for boom length 11.7 m - 52 m

Modern and powerful carrier drive.

- 6-cylinder Liebherr turbo-charged Diesel engine of 300 kW/408 h.p. (Euro II), robust and reliable
- Entire exhaust gas system of stainless steel
- Allison automatic transmission with torque converter, electronic control, proved and well tested serial transmission, 5 forward and 1 reverse speed, rough-terrain ratio
- Wear resisting TELMA-type eddy current brake, standard equipment
- Max. driving speed 77 km/h, max. gradability approx. 60 %



Highly comfortable driving cab.

- Galvanized driving cab over width of vehicle, with internal sound and heat insulating panelling, comfortably equipped
- Air-cushioned driver's seat with pneumatic lumbar support
- Standardized and ergonomically located operating and control elements
- Steering wheel adjustable in height and inclination
- Heatable exterior mirrors

Outstanding carrier technology for road and off-road application.

- Weight-optimized axles, almost maintenance-free, made of high-tensile steel, perfect track keeping and lateral stability due to special control linkage arrangement
- The maintenance-free steering knuckles are steel and rubber mounted
- The perfected and robust axles are manufactured in large series and are troublefree components
- The cardan shafts are maintenance-free; easy and quick fitting of the cardan shafts due to 70° diagonal toothing and 4 fixing screws

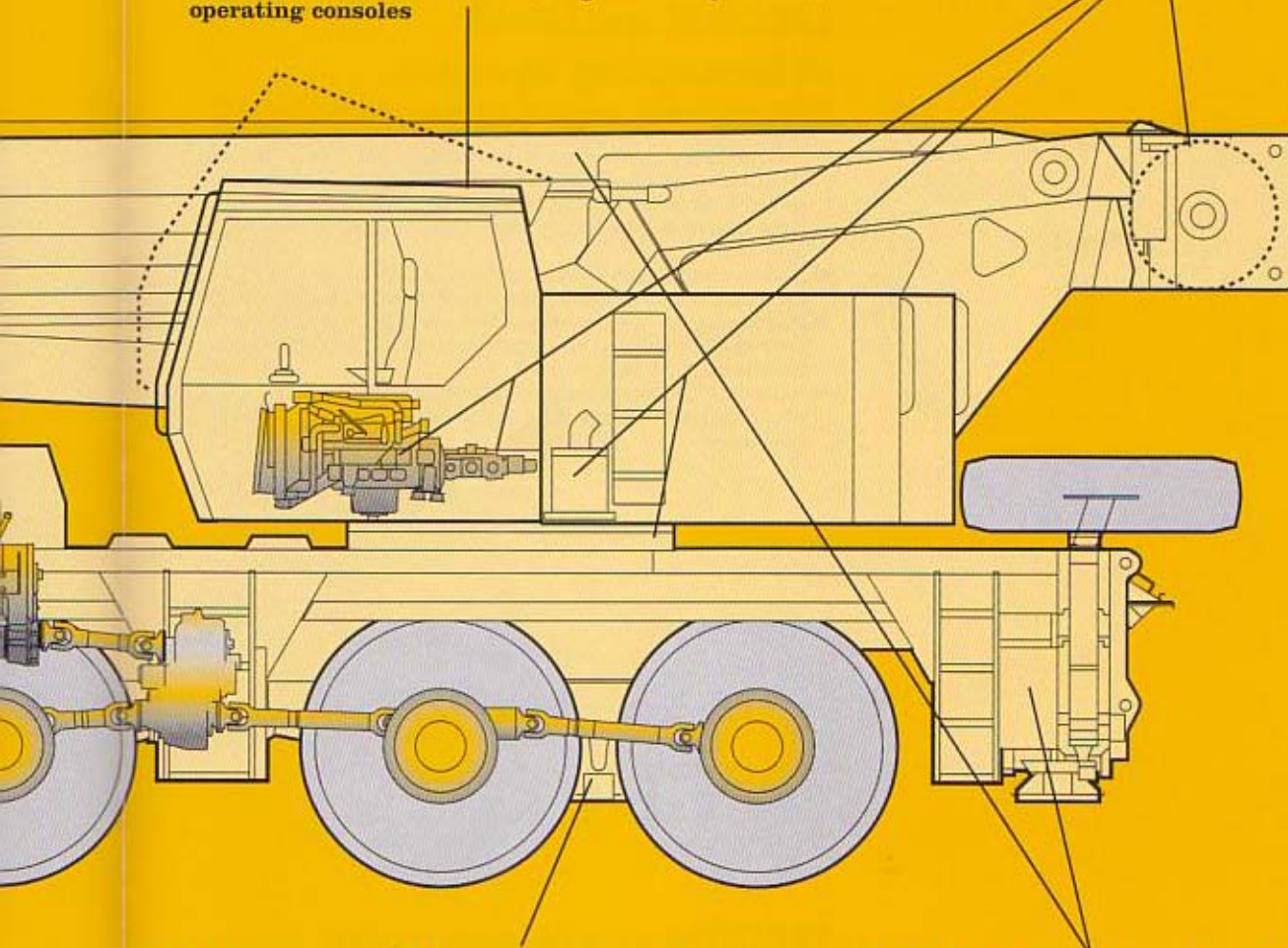
ough advanced technology.

Spacious crane cab with armrest-integrated control levers.

- Galvanized crane cab with internal sound and heat insulating panelling, tinted panes allround, front knockout window with large parallel windscreen wiper, large skylight of bullet-proof glass with large parallel windscreen wiper, roller blind on front window and skylight, space saving sliding door
- Cab tiltable backwards by 20°
- Operator's seat with pneumatic lumbar support
- Convenient armrest-integrated controls, horizontally and vertically adjustable and inclinable master switch consoles and armrests, ergonomically inclined operating consoles

Liebherr components, reliable and easy-to-service.

- Crane engine: 4-cylinder Liebherr turbo-charged Diesel engine of 125 kW/170 h.p., robust and reliable, located adjacent to crane cab, thus less noise pollution; exhaust gas system of stainless steel
- Slewing rim, slewing ring, winches and the axial piston variable displacement twin pump are self-produced Liebherr components and are specifically matched for the application on mobile cranes
- Centralized lubricating system for slewing rim, boom bearing application and bearings of winches and luffing ram



Niveaumatik suspension - preserving crane and roads.

- Maintenance-free suspension rams, free of lateral forces; protected by synthetic tubes
- Level adjustment (suspension on "travelling mode") can be activated automatically by push-button from any position
- Stable cornering ability due to cross mounting of the hydropneumatic suspension
- Axle locking system (locking of suspension for travelling with load) integrated into suspension ram and controllable from driving cab
- Travel of suspension system +150 mm and -100 mm respectively

Weight-optimized steel structure.

- Carrier, superstructure and telescopic boom in light-gauge design, calculated by the FEM method, weight-optimized and of outstanding torsional rigidity
- Tensile property of material with high safety factor through the application of STE 960 (960 N/mm²) for all supporting members