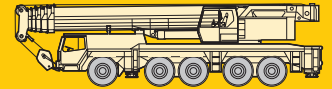


Product advantages

Mobile crane LTM 1160/2



Max. lifting capacity: 160 t at 3 m radius

Max. height under hook: 96 m with swing-away jib

Max. radius: 74 m with swing-away jib



Performance profile of the LTM 1160/2 at a glance.

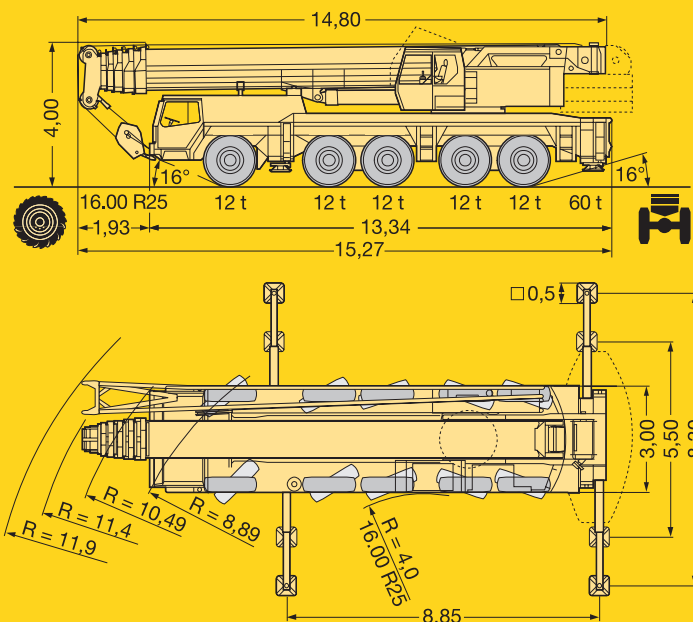
- Outstanding range of lifting capacities, counterweight variants 0 t, 11 t, 23 t, 35 t and 50 t
- Robust 400 kW/544 h.p. Liebherr turbo-charged Diesel engine, conform to EURO 2
- Compact and manoeuvrable due to 5-axle steering, smallest turning radius 10.3 m
- Electric/electronic crane control with integrated LICCON system
- 6-section telescopic boom of utmost stability and with a new oviform cross-section of outstanding torsional resistance, 13.2 m to 60 m long, rapid cycle telescoping system
- 3-section, 12.2 m to 36 m long swing-away jib, to be rigged at offset angles of 0°, 15°, 30° or 45°
- LICCON, the most modern crane computer system world-wide, for informative, monitoring and control functions
- Diesel engines, slewing rim, slewing gear, winches and hydraulic pumps are self-manufactured, quality checked components
- The LTM 1160/2 is manufactured by Liebherr within the scope of a quality assurance system according to DIN ISO 9001 certified by TÜV CERT

LIEBHERR

The better crane.

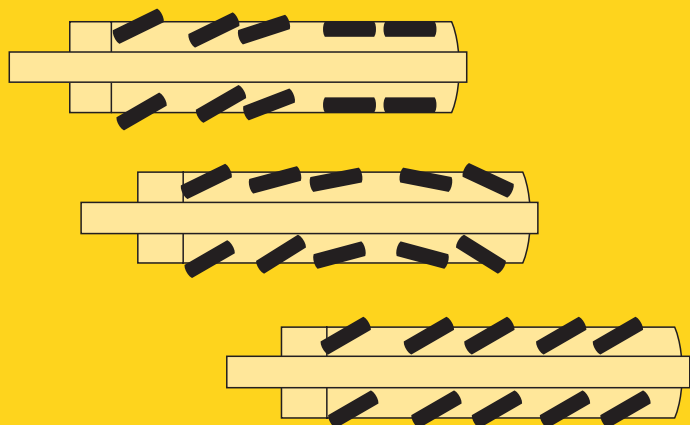
Compact, manoeuvrable and weight-optimized.

- Overall length 15,3 m only, length of carrier just 13,34 m
- Large overhang angles up to 23° at vehicle front and rear
- Small turning radius of 10.5 m at all-wheel steering
- 60 t total weight, incl. drive 10 x 8, 16.00 tyres, TELMA type eddy current brake, 30 t hook block (axle load 5 x 12 t)
- 2 optional tyre sizes
 - 14.00 R 25 - vehicle width 3 m
 - 16.00 R 25 - vehicle width 3 m



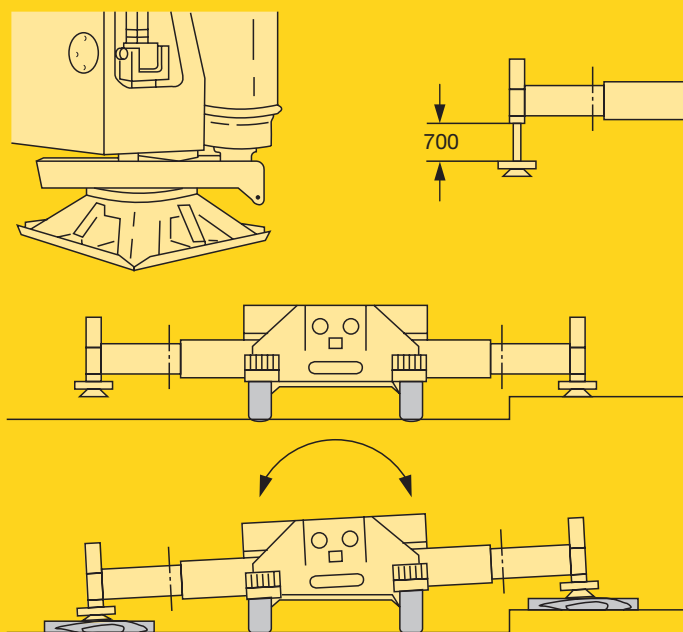
Variable drive and steering concept.

- Drive 10 x 6, axles 1, 4 and 5 driven, 4th and 5th axle driven at road travel, 1st axle activatable for rough-terrain operation
- Drive 10 x 8 (optional), axles 1, 2, 4 and 5 driven; axles 4 and 5 driven at road travel, 1st and 2nd axle activatable for rough-terrain operation
- Standard steering, 1st, 2nd and 3rd axle steerable
- All-wheel steering, 4th and 5th axle steerable independent of axles 1, 2 and 3 (crab steering), the additional hydraulic steering is locked for road travel



Setting crane on outriggers - quick, convenient and safe.

- Variable supporting basis
 - Supporting basis 5.5 m x 8.85 m
 - Supporting basis 8.3 m x 8.85 m
- Supporting pads remain fixed on the rams and are protected by splash guards
- Travel of supporting rams 700 mm
- 2 x 8° lateral inclination of carrier and crane superstructure
- Illuminated and dirt-protected reflecting levels
- Operation of outrigger system in accordance with the rules for the prevention of accidents
- Supporting force control by LICCON system (optional)
- Automatic control of sliding outriggers (optional)
- Inclinometer (optional)



The LTM 1160/2 - more efficient through advanced technology.

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.
 - 51 t at 10 m radius
 - 19.7 t at 20 m radius
 - 10.8 t at 30 m radius
 - 6.7 t at 40 m radius
 - 4 t at 50 m radius
 - 2.4 t at 60 m radius
 - 1.2 t at 74 m radius
- Telescoping with approx. 50% of rated load practicable
- Telescoping by rapid cycle approx. 500 s of telescopic boom from 13.3 m to 60 m

Modern and powerful carrier drive.

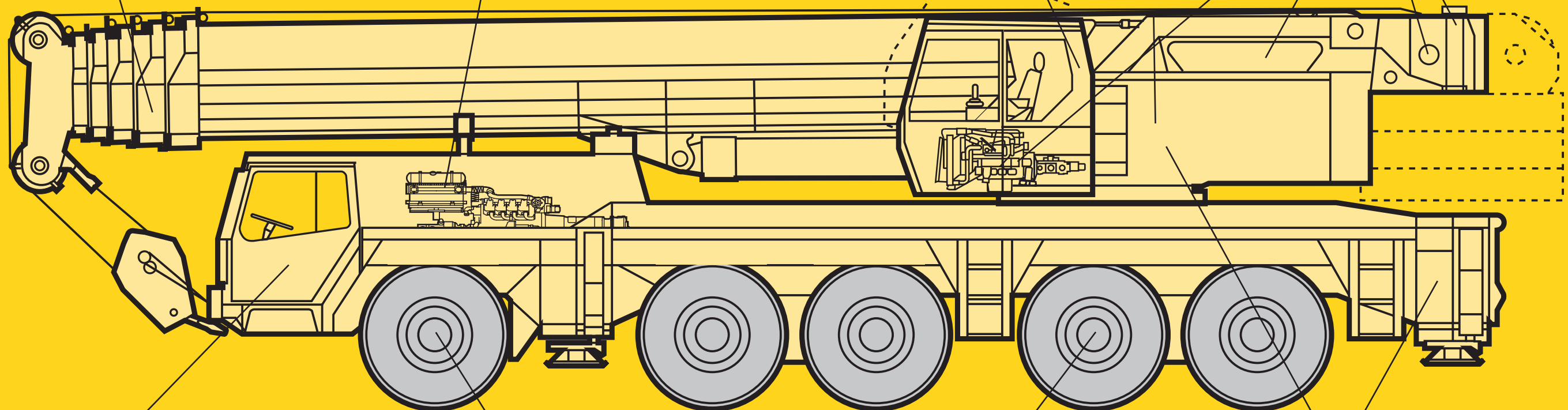
- Carrier engine: 8-cylinder Liebherr turbo-charged Diesel engine D 9408 TI of 400 kW/544 h.p., conform to EURO 2, robust and reliable
- Allison automatic transmission CLBT 755 with torque converter and hydrodynamic brake, electronic control, proved and well tested serial transmission, 5 forward and 1 reverse speed, rough-terrain ratio
- Max. driving speed 76 km/h, max. gradability 50%

Spacious crane cab with convenient armrest-integrated control levers.

- Galvanized crane cab with tinted panes all-round, front knockout window with large parallel windscreen wiper, large skylight of bullet-proof glass with large parallel windscreen wiper, roller blinds on front window and skylight, space saving sliding door
- Cab tiltable backwards hydraulically by 20°
- Operator's seat with pneumatic lumbar support
- Convenient armrest-integrated controls, vertically and horizontally adjustable and inclinable master switch consoles and armrests
- Heat and sound insulated internal panelling
- LICCON computer with test system

Liebherr components - reliable and easy-to-service.

- Crane engine: 4-cylinder Liebherr turbo-charged Diesel engine D 914 TI of 125 kW/170 h.p., robust and reliable, located adjacent to crane cab, thus less noise pollution
- Slewing rim, slewing gear, winches and the axial piston variable displacement twin pumps are self-manufactured Liebherr components and are specifically matched for the application in mobile cranes
- Centralized lubricating system for slewing rim, boom bearing application and bearings of winches and luffing ram



Highly comfortable driving cab.

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

Outstanding carrier technology for road and rough-terrain.

- Weight-optimized, 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 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

"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 control from any position
- Stable cornering ability due to cross mounting of the hydropneumatic suspension
- Axle locking system (locking of the suspension for travelling with working equipment) controllable from driving cab

Weight-optimized steel structure.

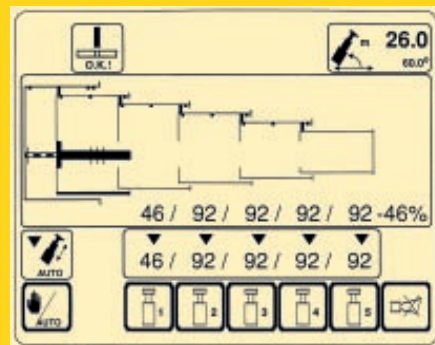
- Carrier, crane superstructure, telescopic boom and swing-away jib in light-gauge design, calculated by the FEM method, weight-optimized and of utmost torsional rigidity
- Tensile property of material with high safety factor through the application of STE 960 (960 N/mm²) for all supporting members
-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

Lifting loads - precise and safe.

- 6-section, 60 m long telescopic boom for 60 m height under hook and 54 m radius
- Optimal utilization of telescopic boom through 26 different telescoping options
- Swing-away jib, 12.2 m to 36 long, for 96 m lifting height and 72 m radius, to be rigged at offset angles of 0°, 15°, 30° or 45°, hydraulic rigging aid for swinging of the jib
- Easy and quick rereiving of hoist rope through modern self-locking rope dead end connection

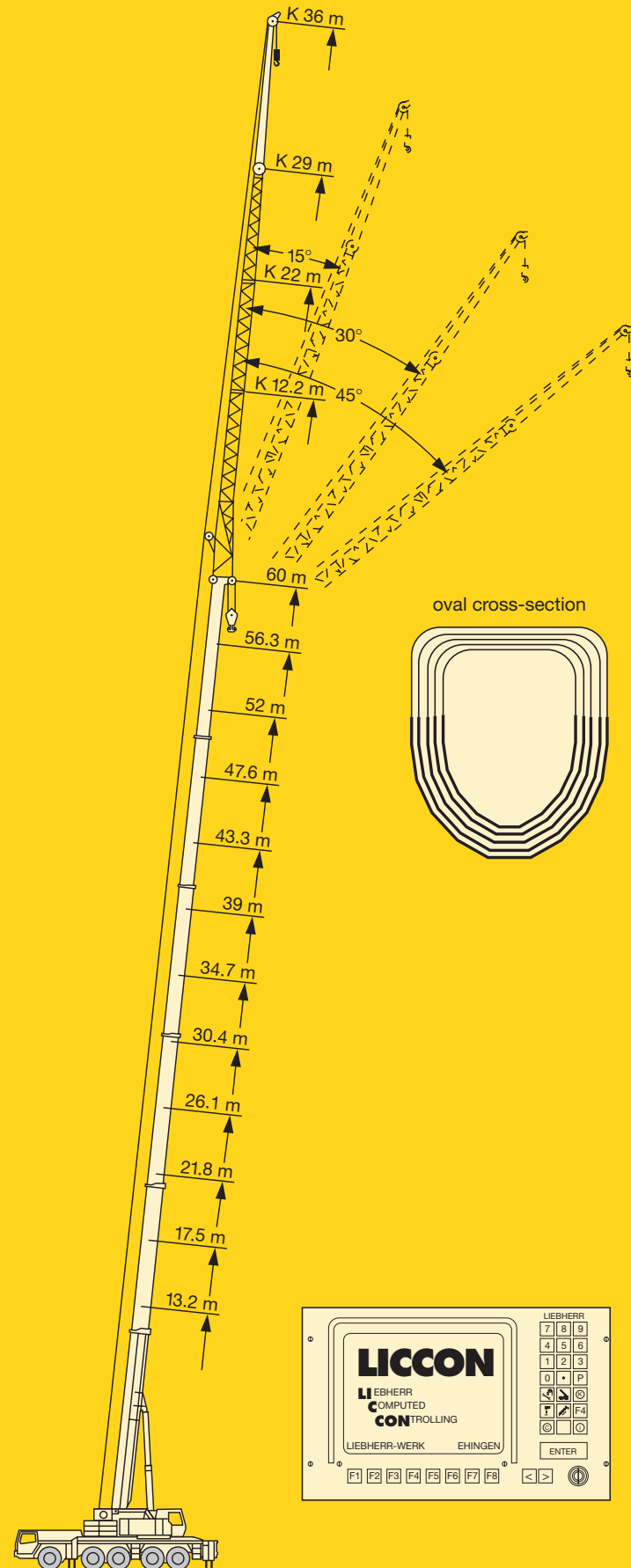
LICCON assisted telescoping system.

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



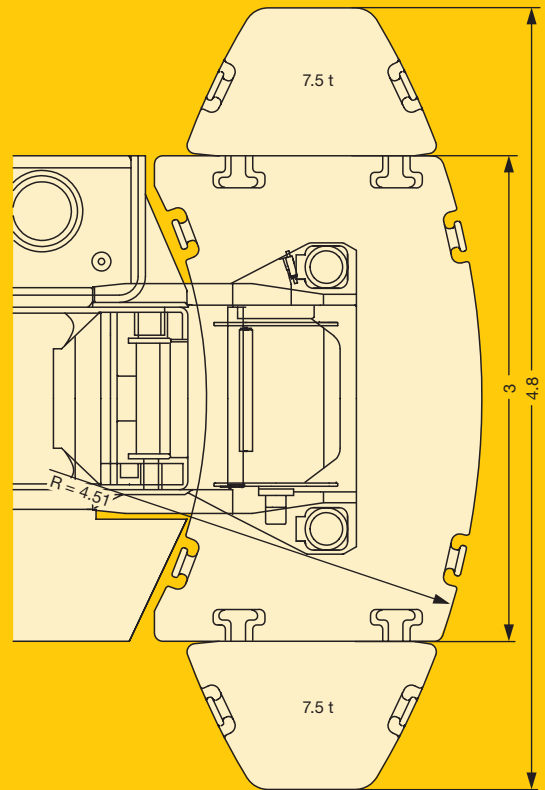
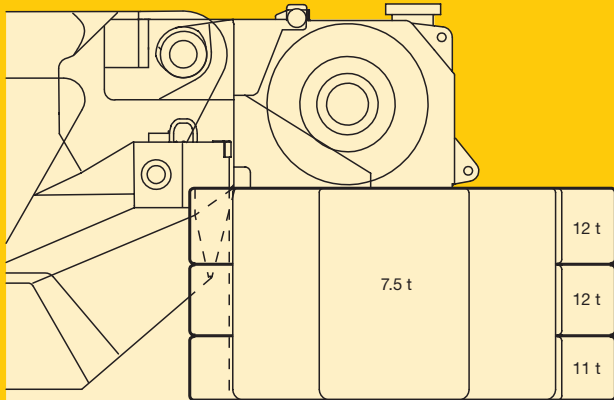
LICCON computer with SLI, test system and PLC control.

- 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
- Winch indications for load hook course with zero adjuster for ultra-precise lifting/lowering
- Test system for servicing, offering the facility to check all sensors and consumers within the system on the monitor
- Convenient programmable logical control (PLC) for lifting/lowering, slewing, luffing and telescoping



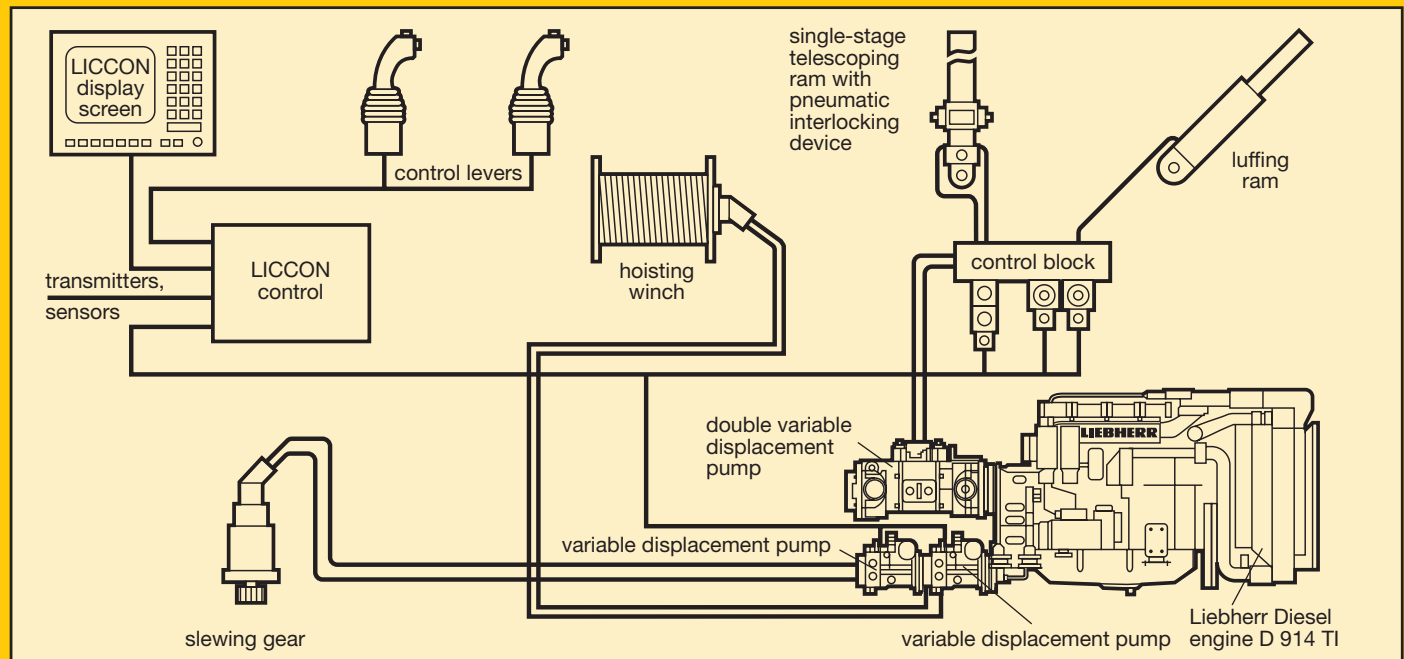
The counterweight system for more flexibility.

- Counterweight variants 0 t, 11 t, 23 t, 35 t and 50 t, thus a wider range of application facilities
- Control of ballasting from the crane cab without the assistance of an auxiliary crane
- Compact counterweight dimensions, e.g. 35 t counterweight have a width of 3 m only
- Additional counterweight 2 x 7.5 t, attachable at the side, counterweight width 4.8 m



Electric/electronic crane control with integrated safe load indicator.

- Control of winches, slewing gear as well as luffing and telescoping motions via LICCON system (PLC control)
- Four working motions can be performed independent from one another
- Speeds of lifting/lowering, slewing and luffing preselectable in 5 steps
- Luffing speed controlled automatically depending on the boom length
- Extremely short reaction times at initiating the working speeds
- Hoisting and slewing gear controlled by oil circuit, thus optimal energy management (lower fuel consumption)



Subject to modifications.

TP 230d. 6.97

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