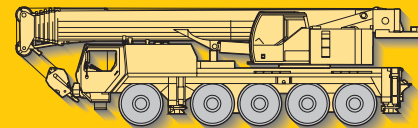


Product advantages

Mobile crane LTM 1100/2



Max. lifting capacity: 100 t

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

Max. radius: 64 m with biparted swing-away jib



Performance profile of the LTM 1100/2 at a glance.

- Operative weight 60 t, incl. 15 t counterweight, drive 10 x 6, tyres 14.00 R 25
- Powerful, energy-saving and emission-optimized Liebherr Diesel engines, carrier engine of 400 kW output (EURO 3) and with fully electronic engine management, crane engine of 149 kW output.
- Ultramodern data bus technique with CAN bus and 3 Liebherr system busses
- Travel control and outrigger actuation from the crane cabin, a standard feature
- Comfortable electric/electronic crane control with integrated LICCON system
- Compact, 6-section telescopic boom of 11.5 m ñ 52 m length, with oviform boom profile of high lateral stability
- Rapid-cycle telescoping system ì Telematikî with patented internal interlocking system, fully automatic or manually controlled telescoping is practicable
- 10.8 m ñ 19 m long biparted swing-away jib, mountable at 0°, 20° and 40°, hydraulic erection aid
- LICCON, the most modern crane computer system worldwide with comprehensive informative, monitoring and control functions
- Diesel engine, slewing rim, slewing gear and winches are self-manufactured and quality-checked components
- The LTM 1100/2 is manufactured by Liebherr within the scope of a quality assurance system acc. to DIN ISO 9001

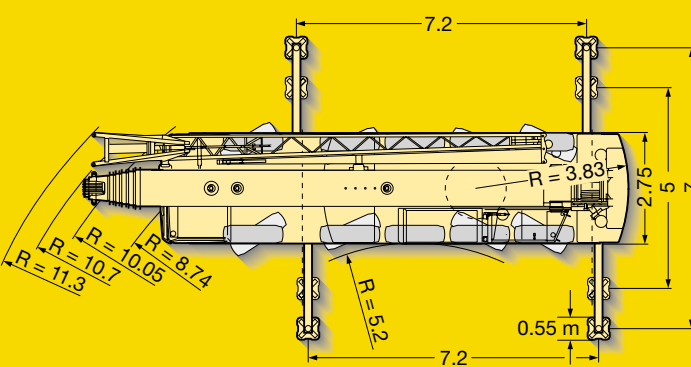
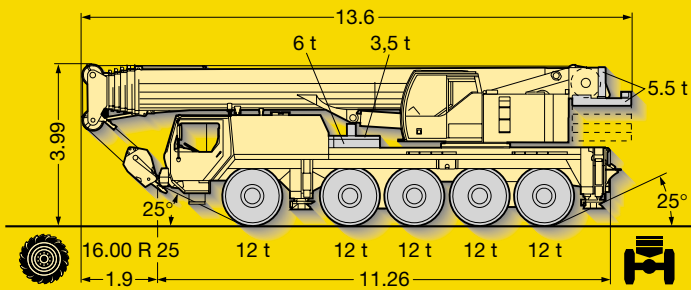
LIEBHERR

The better crane.



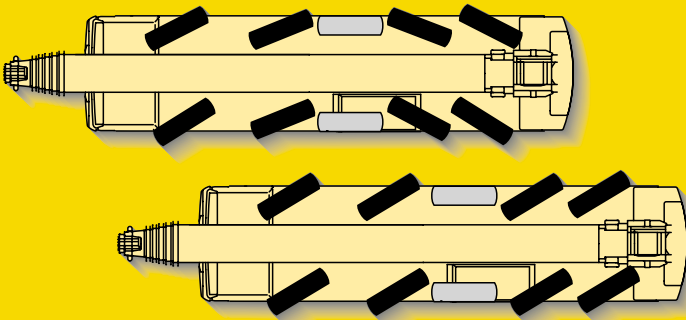
Compact, manoeuvrable and weight-optimized.

- Overall length 13.6 m, length of carrier 11.26 m
- Large front and rear overhang angles of up to 25°
- Small turning radius of 10.05 m with all-wheel steering
- Just 3.84 m tail radius of counterweight
- 60 t total weight, incl. 15 t counterweight, drive 10 x 6, tyre size 14, 8.8 t load hook (axle load 5 x 12 t)
- 2 optional tyre sizes
 - 14.00 R 25 – vehicle width 2.75 m
 - 16.00 R 25 – vehicle width 2.75 m



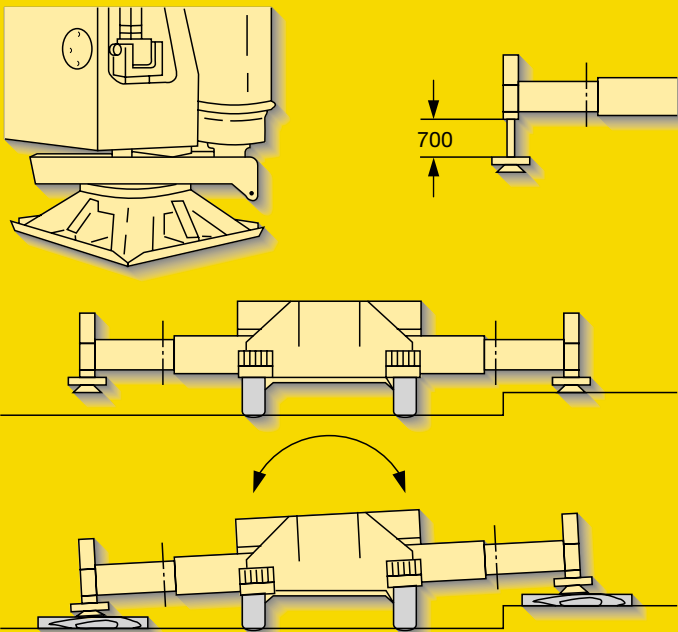
Variable drive and steering concept.

- Drive 10 x 6, axles 1, 4 and 5 are driven
- Drive 10 x 8 (optional), axles 1, 2, 4 and 5 are driven, for road travel 1st, 4th and 5th axle are driven, 2nd axle activatable for off-road travel
- Axles 1, 2, 4 and 5 are steered, the 4th and 5th axle are also steerable independent of axles 1 and 2 (for crab steering/diagonal displacement, the 3rd axle is raised hydraulically for that purpose); all steering modes are also controllable from the crane cabin.



Setting crane on outriggers - quick, convenient and safe

- Variable supporting basis
 - Outriggers retracted
 - Supporting basis 5 m x 7.2 m
 - Supporting basis 7 m x 7.2 m
- Fix-mounted supporting pads, protected by splash guards
- Supporting ram travel up to 700 mm
- Levelling control for outrigger system, fully automatic levelling of the crane during the supporting procedure by "pushbutton"
- 2 x 8° lateral inclination of carrier and crane superstructure
- The control panels on either side of the carrier, with membrane keyboard and electronic inclinometer as well as keyboard for ENGINE/START/STOP and engine control, are illuminated and lockable
- Operation of the outrigger system can equally be performed from the crane cabin (standard)
- Operation of the outrigger system in accordance with the rules for the prevention of accidents



The LTM 1100/2 - more benefit through advanced technology.

Torsional rigid telescopic boom.

- Oviform boom profile of particular inherent stability
- Telescopes mounted on maintenance-free polyamide slide pads
- First-rate lifting capacities, e.g.
 - 31.5 t at 10 m radius
 - 12.7 t at 20 m radius
 - 6.9 t at 30 m radius
 - 3.8 t at 40 m radius
 - 2.7 t at 50 m radius
 - 1.4 t at 60 m radius
- Telescoping by rapid cycle, approx. 360 s for boom length 11.5 m – 52 m

Crane cabin of modern design.

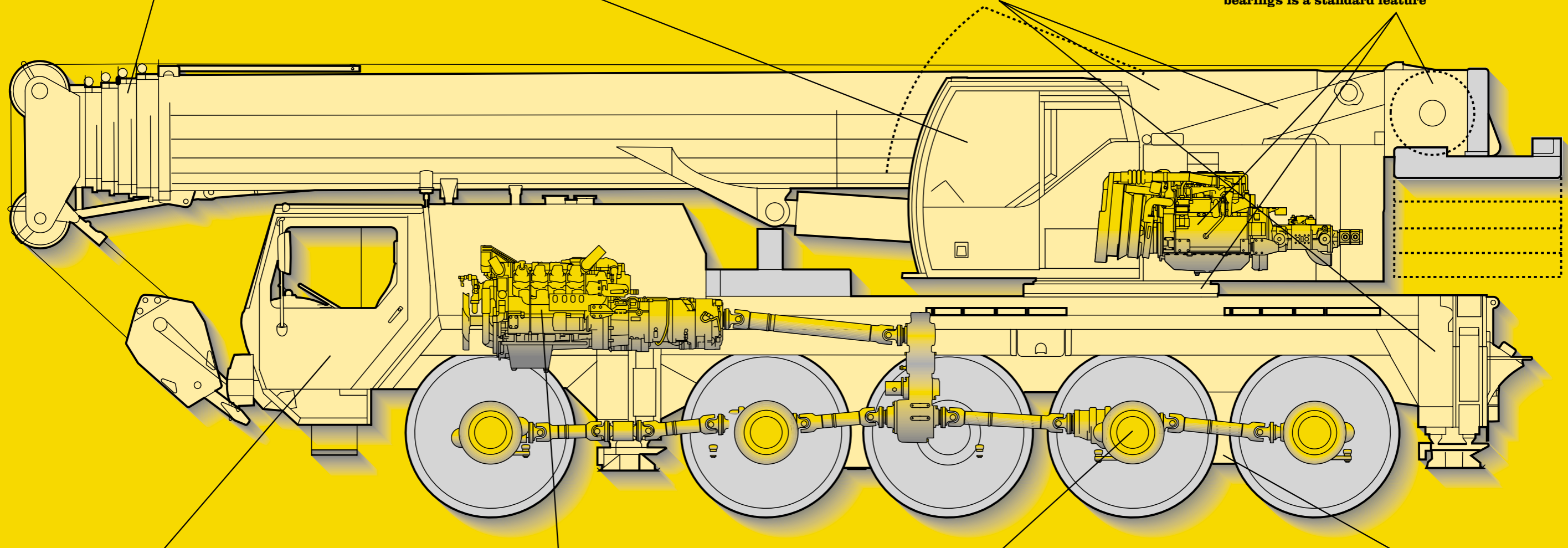
- Steel-fabricated and corrosion-resistant crane cabin, powder-coated, with internal sound and heat absorbing panelling, modern interior design, tinted panes all-round, front knockout window with large windscreen wiper and washer, skylight of bullet-proof glass with large parallel windscreen wiper, roller blinds on front window and skylight, space saving sliding door
- Hydraulic operated footboard for save access to the carrier
- Crane cabin tiltable backwards by 20°
- Travel control and outrigger actuation from the crane cabin, a standard feature

Weight-optimized steel structure.

- Steel structure of the carrier, superstructure and telescopic boom in light-gauge design, calculated by the F.E.M method, weight-optimized and of outstanding torsional rigidity
- Tensile property of the material with high safety factors through the application of STE 960 (960 N/mm²) for all supporting members. Telescopic boom consisting partially of ultrahigh-tensile steel S 1100 (1100 N/mm²)
- Weldment joints of outstanding quality are performed by computer-aided welding machines
- The weld quality is documented by ultrasonic test

Crane drive with field-proven components.

- Crane engine: 4-cylinder Liebherr turbo-charged Diesel engine type D 924 TI-E of 149 kW/202 h.p. (IMO 1), robust and reliable, located opposite to the crane cabin, thus reduced noise pollution; exhaust gas system of stainless steel, very efficient noise abatement of engine and gear compartment as standard feature
- Slewing rim, slewing gear and the winches are self-manufactured components specially matched for the application on mobile cranes
- The centralized lubricating system for slewing rim, boom bearing application, luffing ram and winch bearings is a standard feature



Modern comfortable driving cabin.

- Steel-made, corrosion resistant driving cab, cataphoretic dip-primed, front section mounted on rubber shock absorbers, rear section on hydraulic dampers, internal sound and heat absorbing panelling, modern interior design of outstanding functionality
- Safety glass all-round, heat-isolating tinted panes, electric window lifters
- Standardized digital operating and control elements arranged in an operator-friendly halfround shape

Modern and powerful carrier drive.

- Carrier engine: 8-cylinder Liebherr turbo-charged Diesel engine type D 9408 TI-E of 400 kW/544 h.p. (EURO III), robust and reliable, with electronic engine management
- Entire exhaust gas system of stainless steel
- ZF power shift gear type with automatic shifting system AS-Tronic, 16 forward speeds, 2 reverse speeds, electronic gear management
- Max. driving speed 80 km/h, max. gradability 60 %

Outstanding carrier technology for on-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

Niveaumatik suspension - preserving crane and roads.

- Maintenance-free suspension rams, free of lateral forces, protected against damage by synthetic tubes
- Level position (suspension on "travelling mode") can be automatically adjusted by pushbutton control from the driving cabin
- Stable cornering ability due to cross mounting of the hydropneumatic suspension
- Axle locking system (locking of the suspension for the displacement with loads) controlled from the driving cab
- Suspension travel +100 mm/-150 mm

Comfortable driving cabin of outstanding functionality.

- Modern and comfortable driver's cab of high functionality and convincing design
- Ergonomically arranged operating and display elements for safe and convenient handling at continuous operation
- Digital display and keyboard units interconnected with the function blocks by data bus technique
- Air-cushioned driver's and co-driver's seats, headrests, driver's seat with pneumatic lumbar support
- Height and inclination adjustable steering wheel
- Heated and electrically adjustable rear mirrors
- Side panes with electric window lifters
- Safety belts for driver and co-driver
- 3 automatic windscreen wipers/washers with intermittent control
- Delayed disconnection of interior lighting
- Various racks and boxes
- Radio preparation

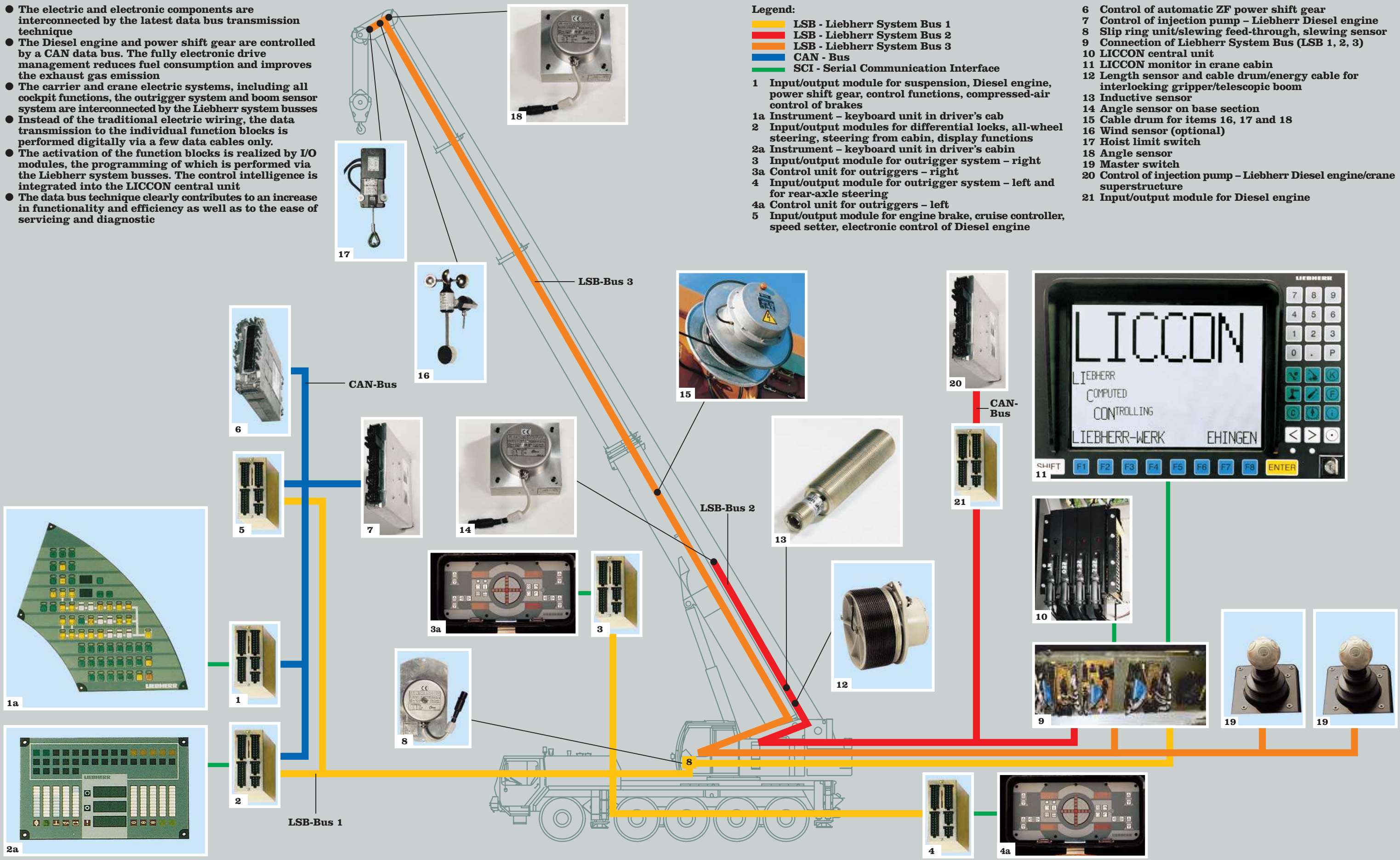


Comfortable crane cabin of outstanding functionality.

- Spring-mounted and hydraulically cushioned crane operator's seat with pneumatic lumbar support and headrest
- Operator-friendly armrest-integrated controls, vertically and horizontally adjustable master switch consoles and armrests, individually adjustable operating consoles
- Ergonomic control levers with integrated winch rotation and slewing gear signalling device
- Modern supporting base with integrated LICCON monitor, display of all essential operating data on the LICCON screen
- Windscreen wiper/washer system for front window and skylight
- Various racks and boxes
- Radio preparation



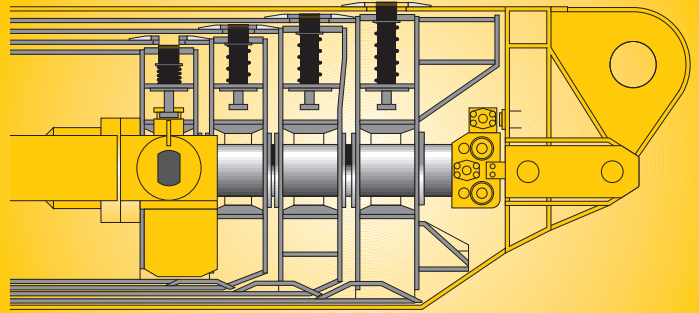
- The electric and electronic components are interconnected by the latest data bus transmission technique
- The Diesel engine and power shift gear are controlled by a CAN data bus. The fully electronic drive management reduces fuel consumption and improves the exhaust gas emission
- The carrier and crane electric systems, including all cockpit functions, the outrigger system and boom sensor system are interconnected by the Liebherr system busses
- Instead of the traditional electric wiring, the data transmission to the individual function blocks is performed digitally via a few data cables only.
- The activation of the function blocks is realized by I/O modules, the programming of which is performed via the Liebherr system busses. The control intelligence is integrated into the LICCON central unit
- The data bus technique clearly contributes to an increase in functionality and efficiency as well as to the ease of servicing and diagnostic



Data bus technique revolutionizes crane electric system.

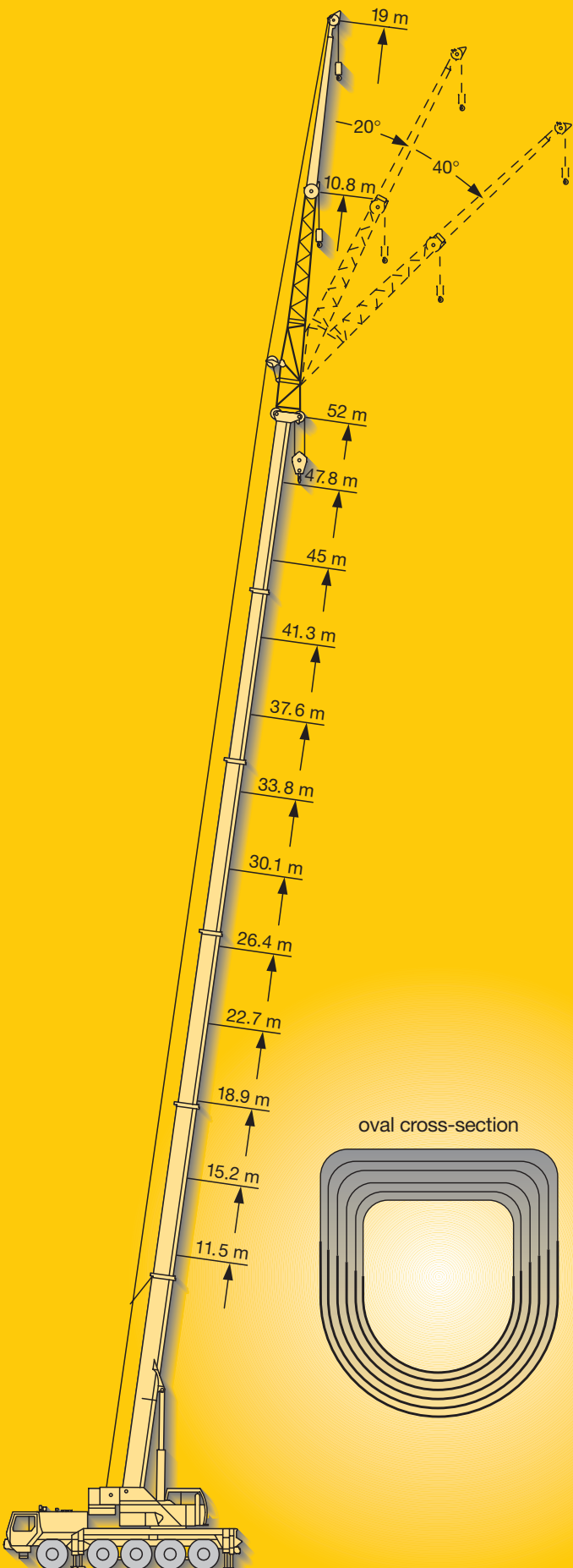
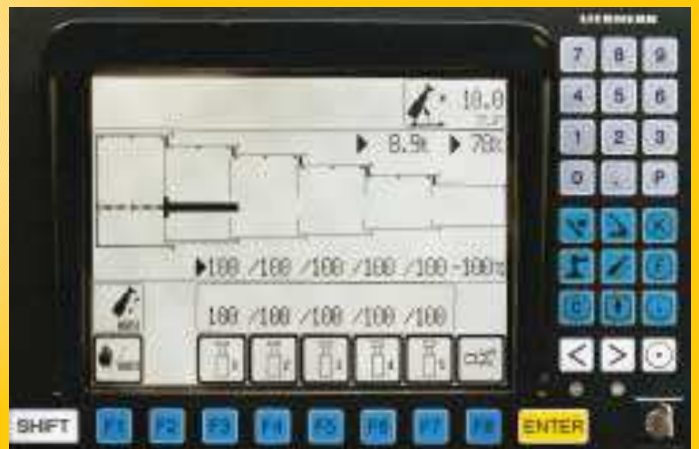
Lifting loads - precise and safe.

- 6-section, 52 m long telescopic boom and biparted swing-away jib of 10.8 m – 19 m for 72 m height under hook and 64 m radius
- Telescopic boom with rounded, oviform bottom shell, thus maximum lateral stability
- Optimal utilization of the telescopic boom through a multitude of telescoping variants
- Swing-away jib mountable at 0°, 20° and 40°, hydraulic fitting aid
- Easy and quick re-reeving of the hoist rope due to self-locking rope dead end connection
- Load hook with self-locking rope dead end connection, cylindrically shaped hook for easy displacement by rolling on hard surface



LICCON-assisted telescoping system.

- Telescoping by single-stage hydraulic ram with hydraulic driving tenons (patented internal interlocking system)
- Telescoping procedure controllable by convenient operator's guide on the monitor, precise approach of interlocking positions
- Telescopic loads are displayed on the LICCON operating image
- Rapid-cycle telescoping system with "automatic mode", i.e. fully automatic telescoping of the boom to the desired length
- Particularly compact and light-weight telescoping system, thus increased lifting capacities specially with long booms at large radii
- Automatic cushioning in end positions during telescoping and retracting for the preservation of the structural members



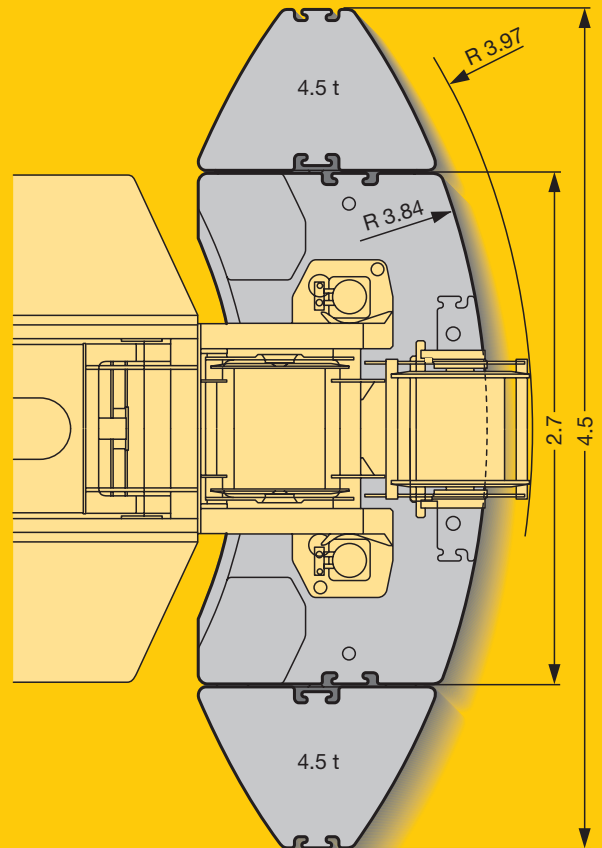
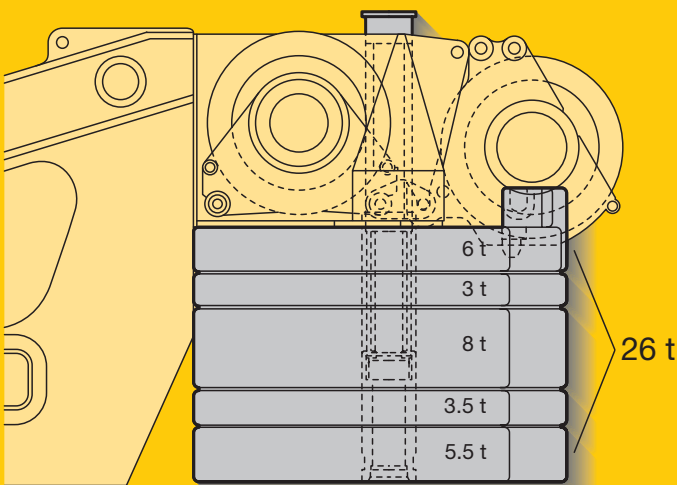
LICCON computer system with safe load indicator and test system.

- Setting of crane configuration by convenient interactive functions
- Safe and reliable acknowledgement of the crane configuration set
- Representation of all essential data by graphic symbols on the operating image
- Integrated wind speed control (optional)
- Reliable cut-off device in the event of exceeding the permissible load moments
- Indication of safe working loads for any intermediate boom length
- Winch indications for ultra-precise lifting and lowering of the load
- Test system for servicing, providing the facility of checking all sensors within the system on the monitor
- The service and diagnostic system LiSSy enables the data base assisted administration of the errors programmed in the crane control, including error text, description and cause of error as well as the measures to be taken for the elimination of the error
- The system enables a remote diagnostic analysis due to the rapid online access to the service documentation such as the electric circuit diagram and workshop manual



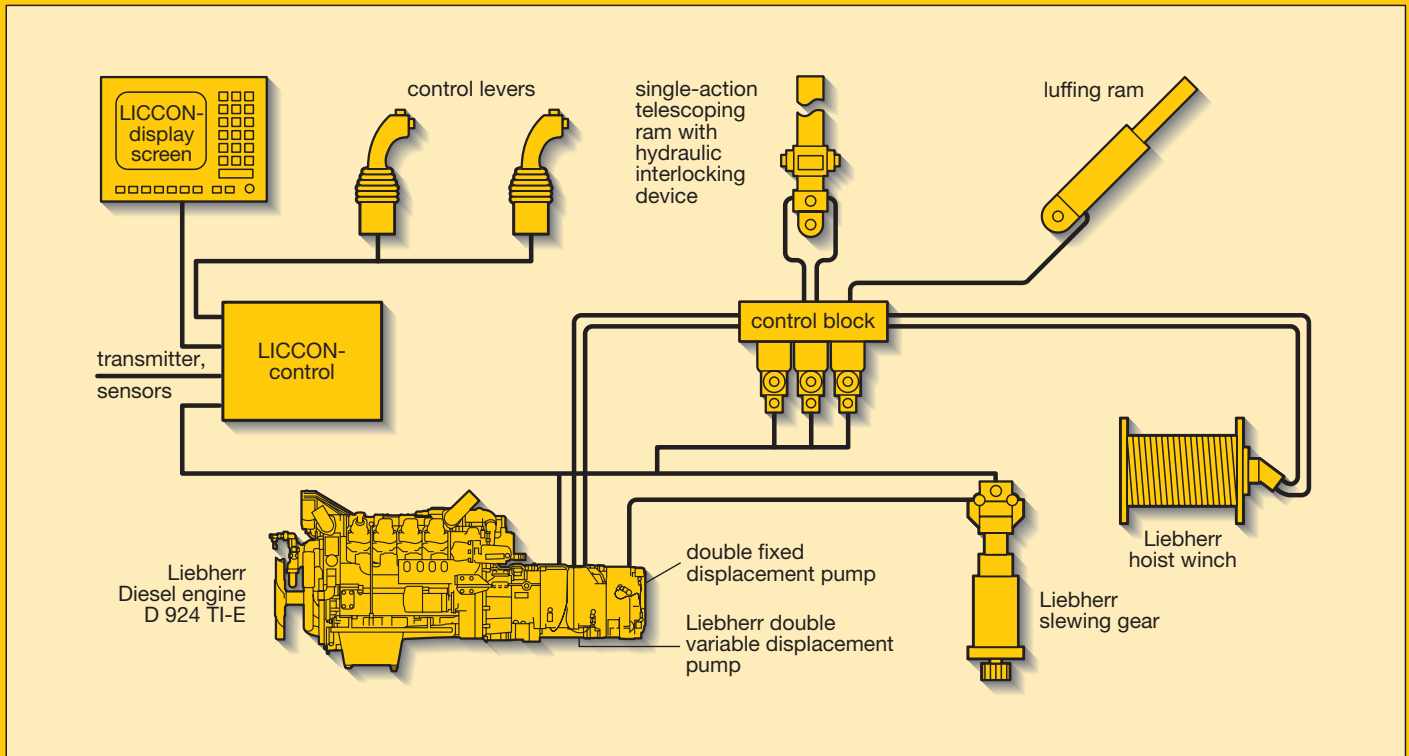
Mounting of counterweight - just a matter of minutes.

- Counterweight variants of 11.5 t, 15 t, 26 t and 35 t
- Ballasting controlled from the crane cabin
- Quick ballasting due to a new "keyhole" system
- Compact counterweight dimensions, e.g. 26 t counterweight of 2.7 m width only



Electric/electronic PLC crane control and test system.

- Control of the winches, slewing gear as well as luffing and telescoping motions by the LICCON computer system (PLC control)
- Summated displacement control, i.e. both pumps can be switched to one single consumer
- Electric load sensing, open oil circuits with displacement control
- Four working motions can be performed independent of one another
- High-speed activation even during a working motion
- Speeds of hoisting/lowering, luffing and slewing preselectable by 6 steps
- Extremely short response times when initiating crane motions
- Functional test of all essential components by the LICCON test system



Optional features extend the application spectrum and increase comfort and safety.

On the carrier

- Auxiliary heater Thermo 90 S with engine pre-heating
- Eddy-current-brake
- Supporting pressure indication on carrier and in crane operator's cabin
- Rope box
- Air-conditioning system
- Trailer coupling D12/D19
- Radio preparation
- Seat heating for driver's and co-driver's seat
- Cassette radio set

On crane superstructure

- Auxiliary heater Thermo 90 S with engine pre-heating
- 2nd hoist gear
- Air-conditioning system
- Seat heating
- Work area limitation
- Anemometer – telescopic boom/swing-away jib
- Aircraft warning light
- Work projector 2 x 150 W on base section, electrically adjustable
- Twist absorber
- Remote diagnostic by GSM module
- Cassette radio set

Further optional features by request.

Subject to modification.

TP 297. 3.00

Please contact

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Courtesy of Crane.Market