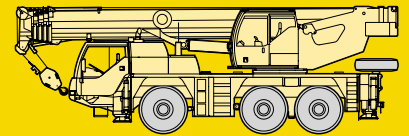




Product advantages

Mobile crane LTM 1055/1



Max. lifting capacity: 55 t

Max. height under hook: 56 m with biparted swing-away jib

Max. radius: 48 m with biparted swing-away jib

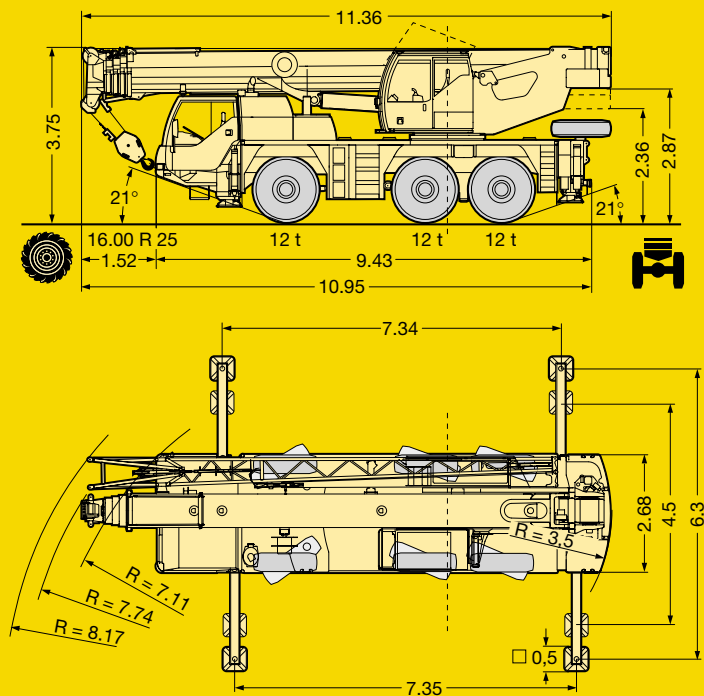


Performance profile of the LTM 1055/1 at a glance.

- Outstanding load values within the entire working range
- Operative weight 36 t, incl. 5.5 t counterweight, biparted swing-away jib, drive 6 x 6, tyre equipment 16.00 R 25
- Liebherr turbo-charged Diesel engine type D 926 TI-E A5 of 270 kW/367 h.p., exhaust emission values according to EURO III, fully electronic engine management, hydraulic pump activatable for crane drive
- ZF powershift gear AS-TRONIC with automatic or manual 12-speed control
- Data bus technique with CAN bus and Liebherr System Bus (LSB 1, 2, 3) for carrier, crane superstructure and telescopic boom
- Comfortable electric/electronic crane control with integrated LICCON system
- Tiltable crane cabin with laterally extendable footboard
- Compact 5-section, telescopic boom 10.2 m – 40 long, with oviform profile for high lateral stability
- Rapid-cycle telescoping system "Telematik" with patented internal locking system, fully automatic and manual telescoping practicable
- 9.5 m – 16 m long biparted swing-away jib, mountable at 0°, 20° or 40°, hydraulic fitting aid
- LICCON, the most modern crane computer system worldwide, with comprehensive informative, monitoring and control functions
- The LTM 1055/1 is manufactured by Liebherr within the scope of a quality assurance system acc. to ISO 9001

LIEBHERR

The better crane.



Compact, manoeuvrable and weight-optimized.

- Overall length only 11.36 m, carrier length just 9.43 m
- Large overhang angles up to 21°
- Smallest turning radius of 7.1 m with all-wheel steering
- 36 t total weight, incl. 5.5 t counterweight, drive 6 x 6, tyre size 16, 13 t hook block, biparted swing-away jib (axle load 3 x 12 t)
- 3 optional tyre sizes:
 - 14.00 R 25 – vehicle width 2.54 m
 - 16.00 R 25 – vehicle width 2.68 m
 - 20.50 R 25 – vehicle width 2.82 m

Variable drive and steering concept.

- Drive 6 x 4, axles 2 and 3 are driven
- Drive 6 x 6 (optional), axles 1, 2 and 3 are driven, 1st axle activatable for off-road travel, max. speed in off-road ratio: 20 km/h
- All-wheel steering, 2nd and 3rd axle also steerable independent of axle 1 (crab steering)
- All travel motions can equally be controlled from the crane cabin

Setting crane on outriggers – quick, convenient and safe.

- Variable supporting basis:
 - Outriggers retracted
 - Supporting basis 4.5 m x 7.3 m longitudinally, partly extended
 - Supporting basis 6.3 m x 7.3 m longitudinally, entirely extended
- 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 supporting procedure by “pushbutton”
- 2 x 7.5° lateral inclination of carrier and crane superstructure
- The outrigger system can be controlled either from the side of the carrier or from the crane cabin
- Control panels with membrane keyboard and reflecting level as well as with keys for ENGINE/START/STOP and engine speed control are illuminated and lockable
- Operation of the outrigger system in accordance with the rules for the prevention of accidents

The LTM 1055/1 – more benefit through advanced technology.

orsional rigid telescopic boom.

Oviform boom profile of particular inherent stability
Telescopes mounted on maintenance-free polyamide
slide pads

First-rate load capacities, e.g.

- 15.2 t at 10 m radius
- 5.5 t at 20 m radius
- 2.9 t at 30 m radius
- 1.6 t at 40 m radius
- 0.6 t at 48 m radius

Telescoping by rapid cycle, approx. 200 s for boom length
10.2 m – 40 m

Modern and powerful carrier and crane drive.

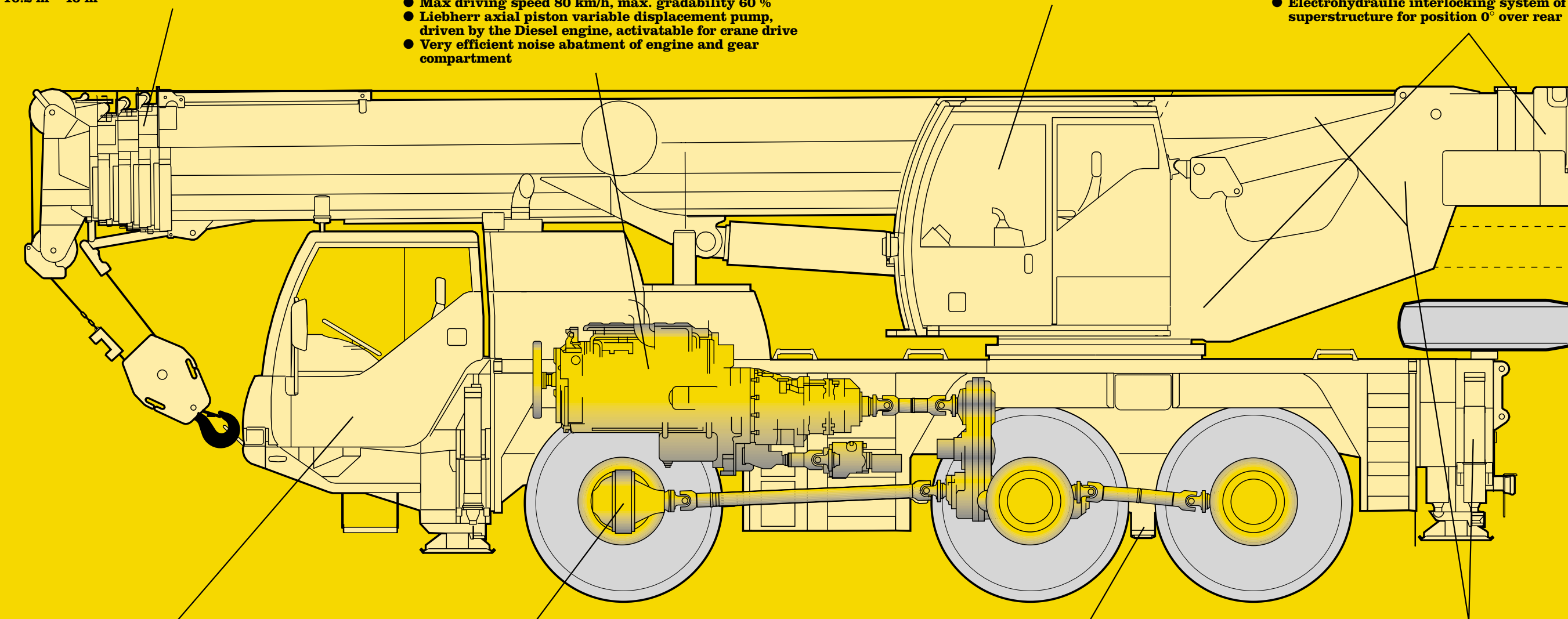
- 6-cylinder Liebherr turbo-charged Diesel engine of 270 kW/367 h.p. (EURO III), robust and reliable, with electronic engine management, optimized fuel consumption
- Entire exhaust gas system of stainless steel
- ZF powershift gear with automated control system AS-TRONIC, electronic gear management, 12 forward speeds, 1 reverse speed, integrated off-road ratio
- Max driving speed 80 km/h, max. gradability 60 %
- Liebherr axial piston variable displacement pump, driven by the Diesel engine, activatable for crane drive
- Very efficient noise abatement of engine and gear compartment

Crane cabin of modern design.

- Steel-fabricated and corrosion-resistant crane cabin, entirely powder-coated, with internal sound and heat absorbing panelling, tinted panes all-round, front knockout window with large windscreen wiper, skylight of bullet-proof glass with parallel windscreen wiper, roller blinds on front window and skylight, space saving sliding door
- Crane cabin tiltable backwards by 20°
- Laterally extendable footboard for safe access to the carrier

Liebherr drive components, reliable and easy-to-service.

- Diesel engine, slewing rim and the winches are self-manufactured components, specially matched for the application on mobile cranes
- All components proved their reliability during tough fatigue tests
- Standard centralized lubricating system for slewing rim, boom bearing application, luffing ram and winch bearings
- Electrohydraulic interlocking system of the superstructure for position 0° over rear



spacious, comfortable driver's cabin.

Cabin of vehicle width, steel-fabricated and corrosion resistant design, 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
Standardized digital operating and control elements arranged in an operator-friendly halfround shape

Outstanding carrier technology for on-road and off-road travel.

- Weight-optimized and maintenance-free axles of high-tensile steel, perfect track keeping and lateral stability due to special control linkage arrangement
- The almost maintenance-free steering knuckles are steel- and rubber-mounted
- The perfected and robust axles are manufactured in large series and are troublefree components
- The axle drive shafts are maintenance-free; easy and 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 from lateral forces, protected against damage by synthetic tubes
- Level position (suspension on "travelling mode") can be automatically adjusted by pushbutton from the driver's cabin
- Stable cornering ability due to cross mounting of the hydropneumatic suspension
- Axle locking system (locking of the suspension for displacement with loads) controlled from the driver's cabin
- Suspension travel +/-100 mm

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. Telescoping boom consisting partially of ultrahigh-tensile steel S 1100 (1100 N/mm²)
- The weld quality is documented by ultrasonic test



Comfortable driver's cabin of outstanding functionality.

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

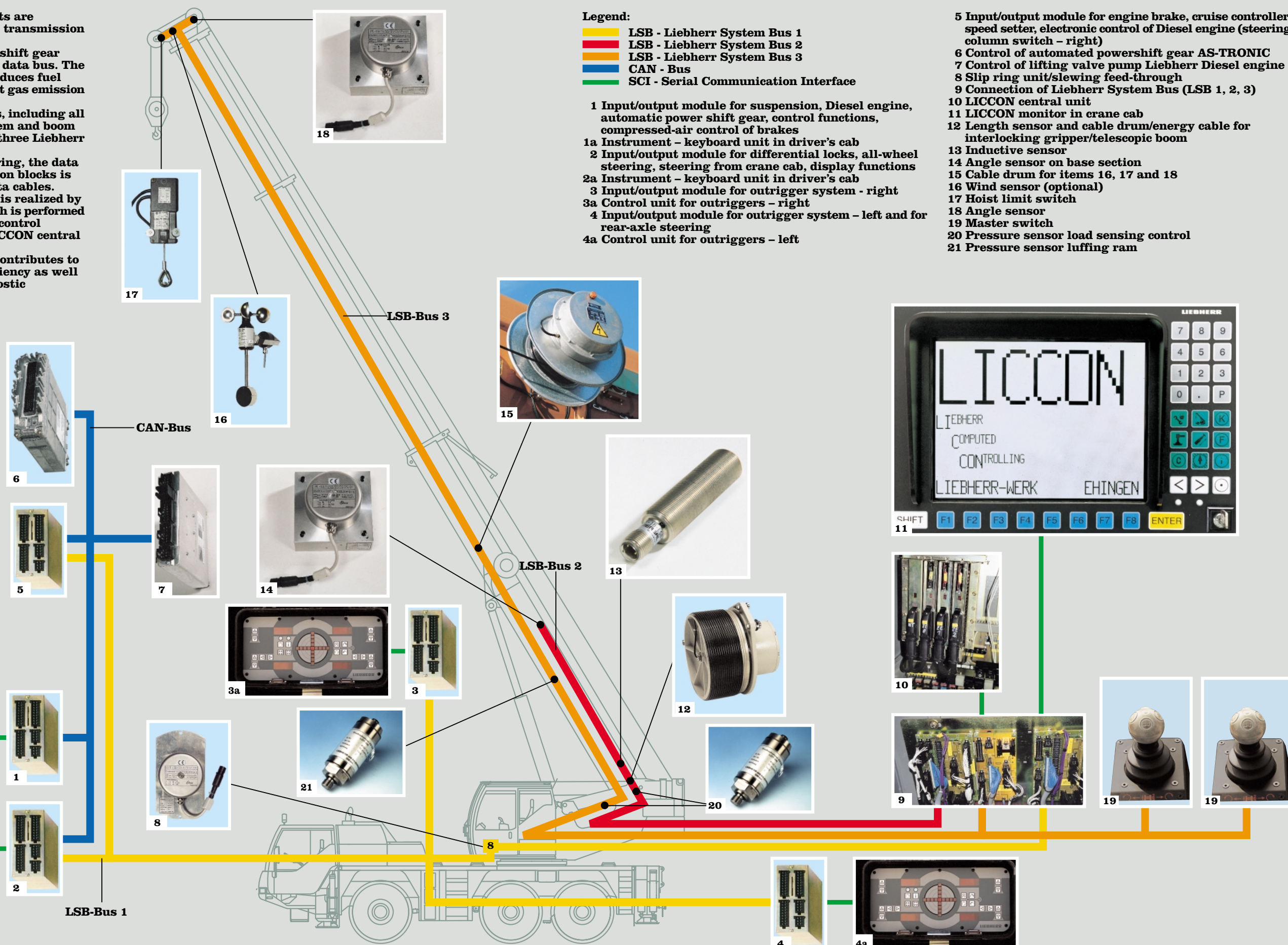
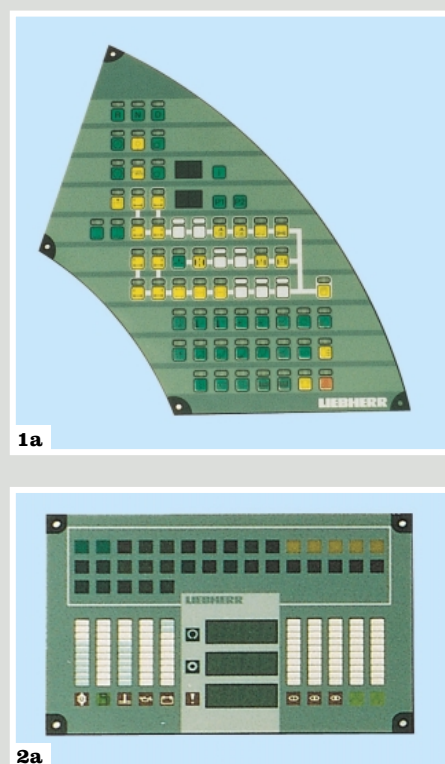


Comfortable crane cabin of outstanding functionality.

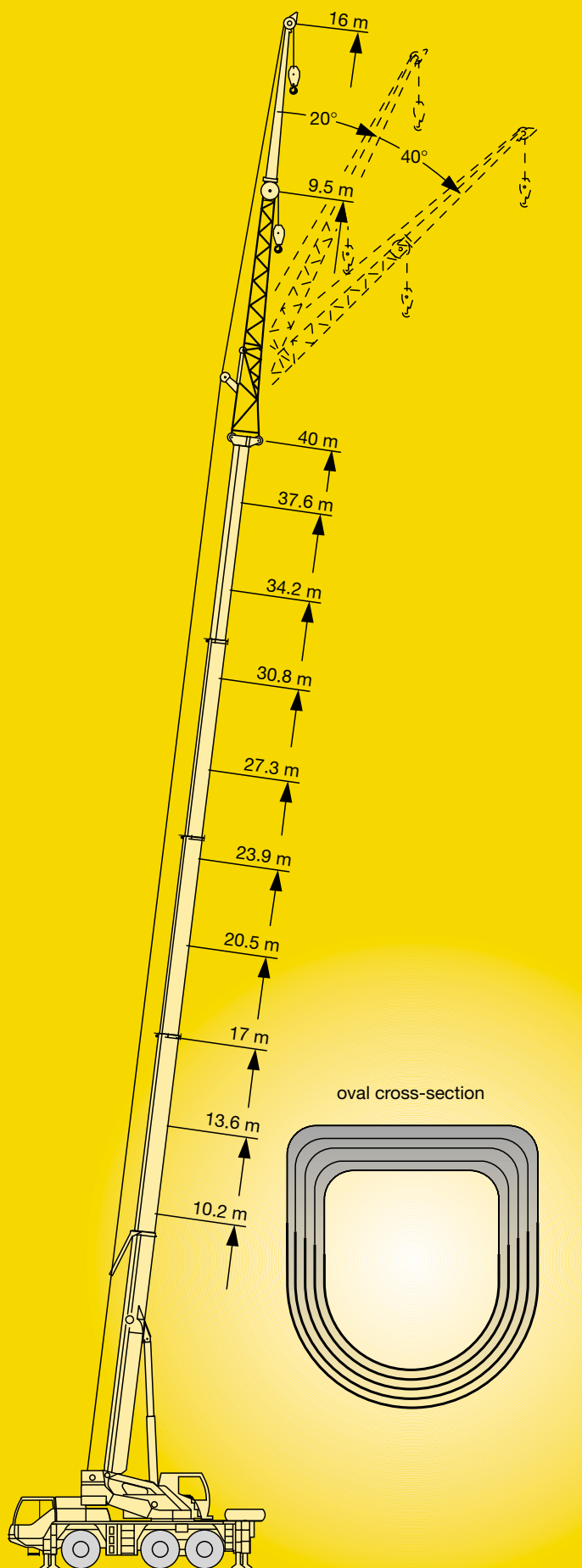
- Tilttable crane cab
- Spring-mounted and hydraulically cushioned crane operator's seat with pneumatic lumbar support and headrest
- Operator-friendly armrest-integrated controls, vertically and horizontally adjustable master switch consoles and armrests, ergonomically inclined operating consoles
- Display of the operation relevant data on the LICCON monitor
- Windscreen wiper/washer system for front window and skylight
- Self-contained supplementary warm water heating "Thermo 90 S"
- Radio preparation



- The electric and electronic components are interconnected by the latest data bus transmission technique
- Liebherr Diesel engine and ZF powershift gear AS-TRONIC are controlled via a CAN data bus. The fully electronic drive management reduces fuel consumption and improves the exhaust gas emission (EURO III)
- The carrier and crane electric systems, including all cockpit functions, the outrigger system and boom sensor system are interconnected by three Liebherr System Busses (LSB 1, 2, 3)
- Instead of the traditional electric wiring, the data transmission to the individual function blocks is performed digitally via just a few data cables.
- 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 new data bus technique clearly contributes to an increase in functionality and efficiency as well as to the ease of servicing and diagnostic

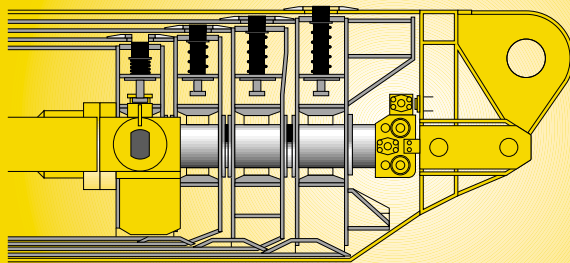


Data bus technique revolutionizes crane electric system.



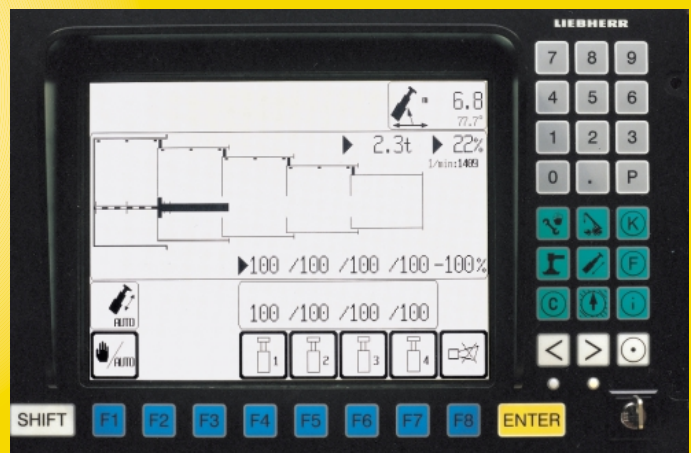
Lifting loads - precise and safe.

- 5-section, 40 m long telescopic boom and biparted swing-away jib for 56 m height under hook and 48 m radius
- Telescopic boom with rounded, oviform bottom shell of ultra-high tensile steel S 1100, high lateral stability
- Optimal utilization of the telescopic boom through a multitude of telescoping variants
- Winch and slewing gear indicators integrated into the master switch
- Slewing gear reversible to "restraint" or "free-wheeling"
- Swing-away jib mountable at 0°, 20° and 40°, hydraulic fitting aid, remote control by means of control panel for swing-in ram of swing-away jib
- Easy and quick re-reeving of the hoist rope due to self-locking rope dead end connection
- Load hook with integrated self-locking roped dead end connection, cylindrically shaped hook for easy displacement by rolling on hard surface



LICCON-assisted telescoping system.

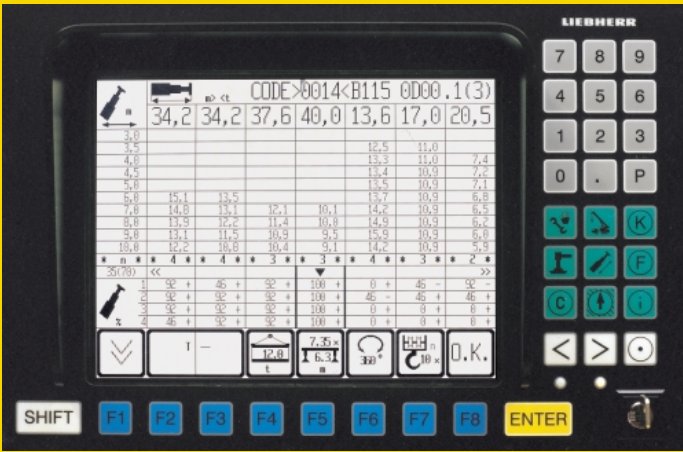
- Telescoping by single-stage hydraulic ram with hydraulic driving tenons (patented internal interlocking system)
- Telescoping process controllable by convenient operator's guide on the monitor, precise approach of interlocking positions
- Telescopic loads are displayed on the LICCON operating image
- 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 and at large radii
- Automatic cushioning in end position during telescoping and retracting for the preservation of the structural members





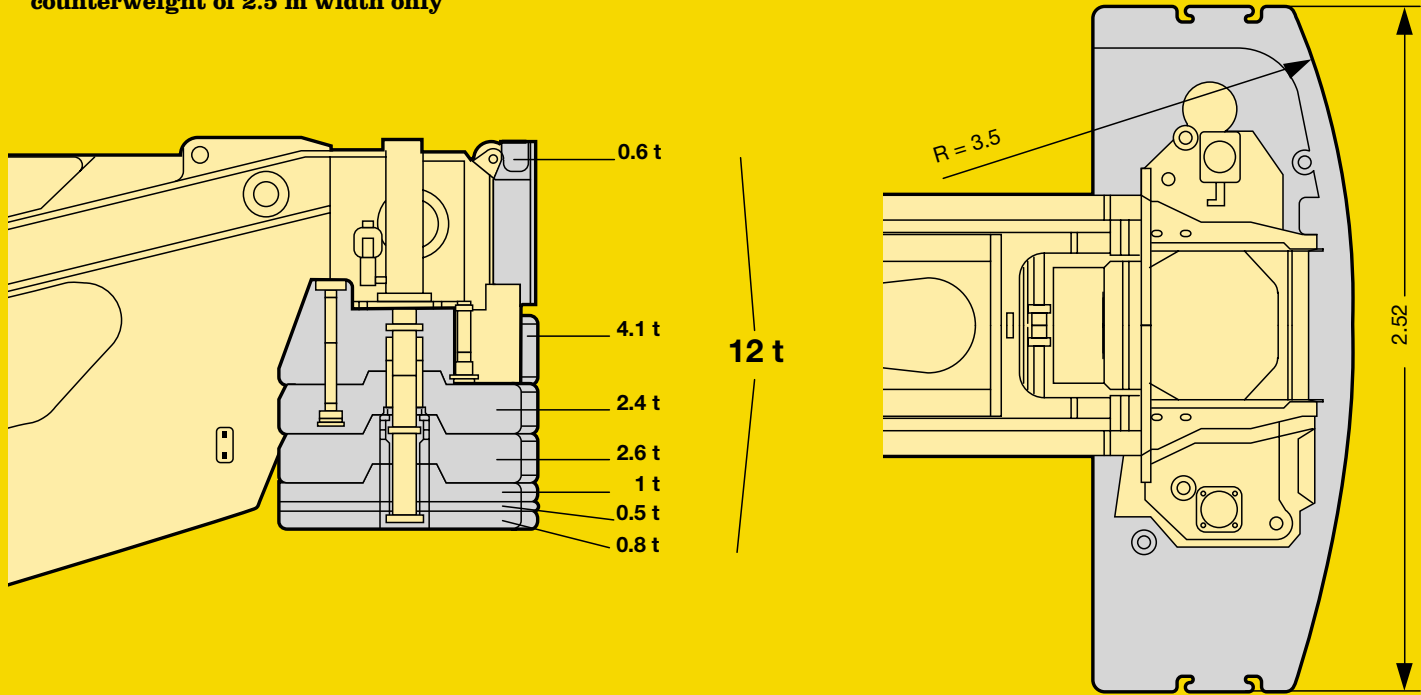
LICCON computer system with safe load indicator and test system.

- Setting of the 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 when 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



Mounting of counterweight – just a matter of minutes.

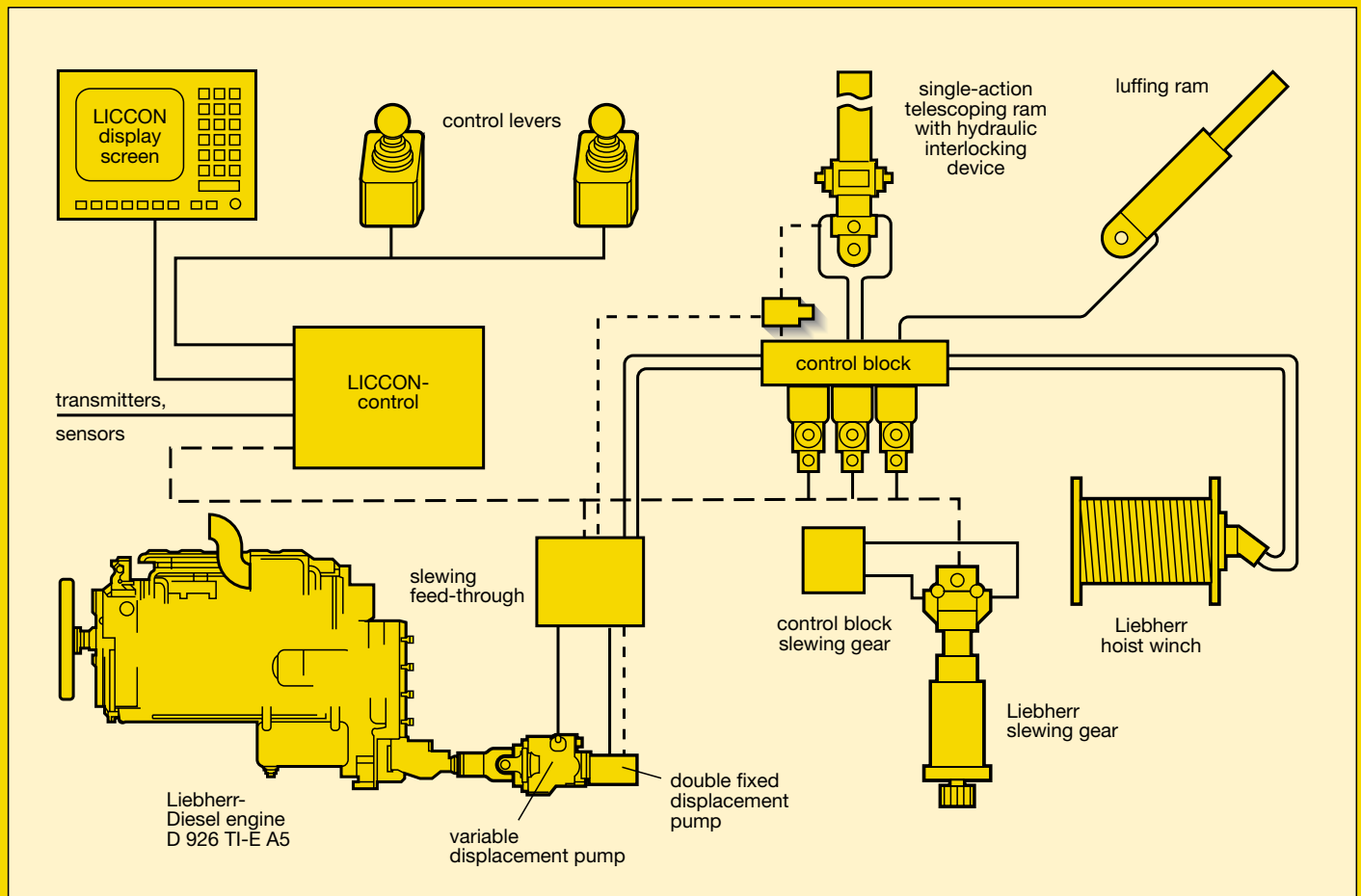
- Ballasting controlled from the crane cab
- Quick ballasting due to a new “keyhole” system
- Compact counterweight dimensions, e.g. 12 t maximum counterweight of 2.5 m width only





Electric/electronic PLC crane control and test system.

- Control of the winches, slewing gear as well as of luffing and telescoping motions by the LICCON computer system (PLC control)
- 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
- Luffing and slewing speeds preselectable by 5 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 the crane operator's cab
- Stow away box
- Air conditioning system
- Trailer coupling "normal" or "heavy-duty"
- Radio preparation
- Seat heating for driver's and co-driver's seats
- Cassette radio set

On crane superstructure

- 2nd hoist gear
- Air conditioning system
- Seat heating
- LICCON work area limitation
- Wind warning telescopic boom/swing-away jib
- Aircraft warning light
- Work projector on crane cab roof, 70 W
- Remote diagnostic by installed GSM module
- Cassette radio set
- Radio remote control

Further optional features by request.

Please contact

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