Electric/electronic PLC crane control and test system.
- Control of the winches, slewing gear as well as lifting and telescoping motions via the LIECON computer system (PLC control).
- Four working motions can be performed independently of one another.
- Speeds of hoisting/lowering, slewing and slewing preselectable by 5 steps.
- Very short response time when initiating the crane motions.

- Hoist gear and slewing gear are operating within a 'closed oil circuit'. This enables particular pressure hoisting, lowering or slewing of the load. Moreover, the potential energy generated during the lowering of a load is not converted into heat but can be re-employed for a second motion. This offers the particular advantage in saving fuel and reducing thermal exposure of the oil to an open circuit.
- Functional test of all essential components by the LIECON 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
  - Incliner with crane and cab
  - Slow-away box for crane, lifting and standing timber
  - Air-conditioning system
  - Trailer coupling D12/D13
  - Radiator preparation
  - Seat heating for driver's and co-driver's seat
  - Fog lamps
  - Cassette radio set

- On crane superstructure/telescopic boom:
  - 2nd hoist gear
  - Auxiliary heater Thermo 90 S with engine pre-heating
  - Air-conditioning system
  - Seat heating
  - Work area limitation
  - Air warning light
  - Work project 1 x 70 W on cabin roof
  - Work project 2 x 130 W on boom base section, electrically adjustable
  - Whip line
  - E-seal
  - GSM module for remote diagnosis
  - Radio preparation
  - Cassette radio set

Further optional features by request.

Product advantages
Mobile Crane LTM 1200/1

Max. lifting capacity: 200 t
Max. height under hook: 100 m
Max. radius: 84 m

Performance profile of the LTM 1200/1 at a glance.
- Operators weight 60 t, with drive 10 x 8 and tyre equipment: 16.00 R25
- Powerful, emission-optimized Liebherr diesel engines, carrier engine of 400 kW output (EURO 3) and with fully electronic engine management, crane engine of 180 kW output (acc. to directive 97/68/EU) and fully electronic engine management
- Ultramodern data bus technique with 3 CAN busses and 3 Liebherr system busses
- Credible electronic crane control with integrated LIECON system
- Compact, torsionless telescopic boom 13.3 m - 60 m long with uniform boom profile for high lateral stability
- Rapid-cycle telescopic system "Telenax" with patented internal interlocking system, fully automatic or manually controlled telescopic pretensional
- 13.3 m - 86 m long swing-away jib, mountable at 90, 60 and 40°, hydraulic erection aid
- Telescopic boom extension with 7 m long lattice section, max. height under hook with swing-away jib 100 m
- LIECON, the most modern crane computer system worldwide, with comprehensive informative, monitoring and control functions
- Diesel engine, slew ring, slewing gear and winches are self-manufactured and quality-tested components
- The LTM 1200/1 is manufactured by Liebherr within the scope of a quality assurance system acc. to DIN ISO 9001
Data bus technique improves functionality and efficiency.
Torsional rigid telescopic boom.
- Uniform boom profile of particular inherent stability
- Telescopes mounted on maintenance-free polyamide slider pads
- First-rate lifting capacities, e.g.:
  - 61.0 t at 10 m radius
  - 27.0 t at 40 m radius
  - 19.9 t at 60 m radius
  - 9.9 t at 90 m radius
  - 5.8 t at 50 m radius
  - 4.1 t at 60 m radius
  - 2.4 t at 70 m radius
  - 1.0 t at 94 m radius
- Telecranging by rapid cycle, approx. 340 s far-boom length 12.3 m – 60 m

Modern and powerful carrier drive.
- Carrier engine: 8-cylinder Liebherr turbo-charged Diesel engine type D 966 V324 of 400 kW / 544 hp (EURO III), robust and reliable, electronic engine management, optimized fuel consumption
- Entire exhaust gas system of stainless steel
- ZIP power shift gear with automatic shifting system AUTRONIC, 18 forward speeds, 2 reverse speeds, electronic gear management
- Max. driving speed 80 km/h, max. gradability 60 %
- Very efficient noise abatement of engine and gear compartment as a standard feature

Crane cabin of modern design.
- Steel-fabricated and corrosion-resistant crane cabin, powder-coated, with internal sound and heat absorbing paneling, modern interior design, tinted panels all-round, front knockout window with large windscreen wiper and washer, skylight of bullet-proof glass with large parallel windscreen wiper and washer, roller blind on front window and skylight, space-saving sliding door
- Pneumatic operated footboard for safe access to the cab
- Cab room tiltable backwards by 20°

Crane drive with field-proven components.
- Crane engine 4-cylinder Liebherr turbo-charged Diesel engine type D 614 T 112 140 kW / 188 hp (acc. to directive 97/68 EC), robust and reliable, located opposite the cab, thus reduced noise pollution; electronic engine management, optimized fuel consumption, exhaust gas system of stainless steel, very efficient noise abatement of the diesel-hydraulic crane drive
- Showing rim, steering gear and the winches are self-manufactured components specially matched for the application on mobile cranes
- The centralized lubricating system for steering rim, boom bearing application, lifting rams and winch bearings is a standard feature

Modern comfortable driving cabin.
- Steel-fabricated, corrosion resistant driving cab, cataphoretic dip-coated, front section on rubber shock absorbers, rear section on hydraulic dampers, internal sound and heat absorbing paneling, modern interior design of outstanding functionality
- Safety glass all-round, green tinted heat-isolating front and side window panes, electric window lifters
- Standardized digital operating and control elements arranged in an operator-friendly halfround shape

Outstanding carrier technology for on-road and off-road operation.
- Weight-optimized axles, almost maintenance-free made of high-grade 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 trouble-free components
- The cardan shafts are maintenance-free; easy and quick fitting of the cardan shafts due to 70° diagonal tooling and 4 fixing screws

Niveautatik suspension – preserving crane and road.
- Maintenance-free suspension runs, free from lateral forces, protected against damage by synthetic tubes
- Level position (suspension on "travelling mode") can be automatically adjusted by pushbutton control from the driving cab
- Stable swaying ability due to cross mounting of the hydraulic suspension
- Axle locking system (locking of the suspension for the displacement with loads) controlled from the driving cab
- Suspension travel +100 mm / -150 mm

Weight-optimized steel structure.
- Steel structure of the carrier, superstructure and telescopic boom in high-gauge design, calculated by the F.E.M. method, weight-optimized and of outstanding torsional rigidity
- Tensile properties of the material with high safety factors through the application of STE 960 (860 N/mm²) for all supporting members. Telescopic boom bottom shell 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
Lifting loads - precise and safe.

- 6-section, 60 m long telescopic boom with rounded, ovalform bottom shell for maximum lateral stability
- Optimal utilization of the telescopic boom through a multitude of telescoping variants
- 12.3 m to 25 m long, biparted swing-away jib, extendable to 29 m and 30 m
- Swing-away jib mountable at 0°, 20° and 40°, hydraulically fitting and
- Telescopic boom extension 7 m, thus base section fixing point of swing-away jib higher by 7 m
- Easy and quick re-receiving of the hoist rope due to the 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

The LICCON work planner.

- The LICCON work planner consists of a software program on diskettes for planning, simulation and documentation of crane applications on the monitor
- The 3-D planner allows to draw buildings, to write texts and to represent a crane model true to scale including its entire motions within a fictional construction site
- The work planner enables the preparation of more transparent offers, it facilitates the briefing of the crane operators and it can be run on a laptop at the construction site

Mounting of counterweight - just a matter of minutes.

- Counterweight variants of 12 t, 34 t, 56 t, 45 t, 57 t and 69 t
- Ballasting controlled from the crane cab
- Quick ballasting due to a new "keyhole" system
- Ballast runs fixed-mounted to the superstructure
- Compact counterweight dimensions, e.g. 45 t counterweight of 3 m width only
Compact, manoeuvrable and weight-optimized.
- Overall length 12.95 m, length of carrier 10.16 m
- Large front and rear overhang angles, front up to 21°, rear up to 17°
- Smallest turning radius of 11.25 m with all-wheel steering
- 4.99 m tail radius of counterweight
- 60 t total weight with drive 10 x 8 and tyre type 16
- Axle load 6 x 12 t
- Axle load regulation due to hydropneumatic suspension
- *Vorneckform* 2 optional tyre sizes
  - 16.00 R 20 - vehicle width 3 m
  - 20.5 R 20 - vehicle width 3.25 m

Variable drive and steering concept.
- Drive (10 x 6), axles 1, 2 and 3 are driven
- Drive (12 x 8), axles 1, 2, 4 and 5 are driven
- Axles 1, 4 and 5 are driven for road travel; 2nd axle actuated for off-road travel
- Axles 1, 2, 3 and 5 are permanently steered during road travel; axles 4 and 5 are steerable independently of axles 1 and 2 (for crab steering/diagonal displacement, the 3rd axle is utilized for that purpose)
- Driving axles with differential lock for longitudinal and transverse look during off-road displacement

Setting crane on outriggers - quick, convenient and safe.
- Variable supporting basis
  - Outriggers retracted
  - Supporting basis 8.5 x 8.5 m
  - Fixed-mounted, square supporting pads protected by splash guards, weight 40 kg
  - Supporting ram travel of up to 750 mm
  - Levelling control for outriggers, fully automatic levelling of the crane during the supporting procedure by "pushbutton"
  - 90° lateral inclination of carrier and crane superstructure
  - The control panels on either side of the carrier with membrane keyboard, with electronic inclination display as well as keyboard for ENGINE/START/STOP and engine control are illuminated and lockable
  - 4 projectors for the illumination of the supporting area
  - Operation of the outrigger system in accordance with the rules for the prevention of accidents

Comfortable driving cabin of outstanding functionality.
- Modern and comfortable driver's cab of high functionality and convenient 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-conditioned driver's and co-driver's seats, headrests, 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 panels with electric window lifter
- 2 windshield wipers with automatic wiper/washer system and intermittent control
- Delayed disconnection of interior lighting
- Various seats 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, ergonomically adjustable operating consoles
- Ergonomic control levers with integrated switch and steering signalling device
- Modern supporting basis with integrated LIConn monitor, display of all essential operating data on the LIConn screen
- Green-tinted, sound-isolating front and side window panes
- 3 windscreen wipers with automatic wiper/washer system and intermittent control
- Delayed disconnection of interior lighting
- Various seats and boxes
- Radio preparation
- 1 work projector 70 Watt on the cabin front

The LTM 1200/1 - more benefit through