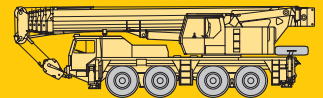




Product advantages

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

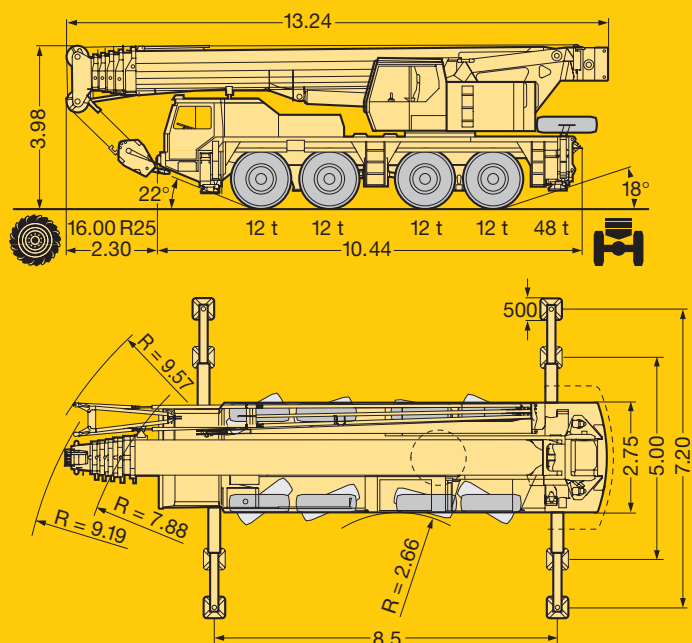


Performance profile of the LTM 1090/2 at a glance.

- 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

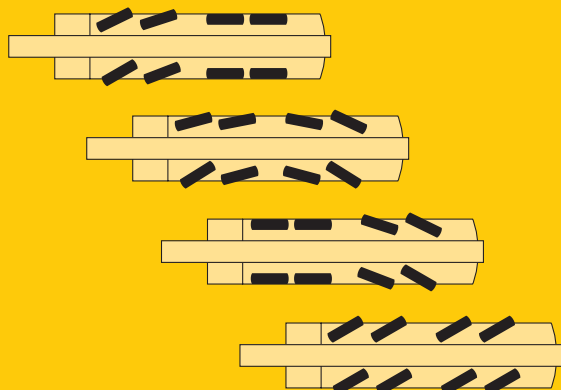
LIEBHERR

The better crane.



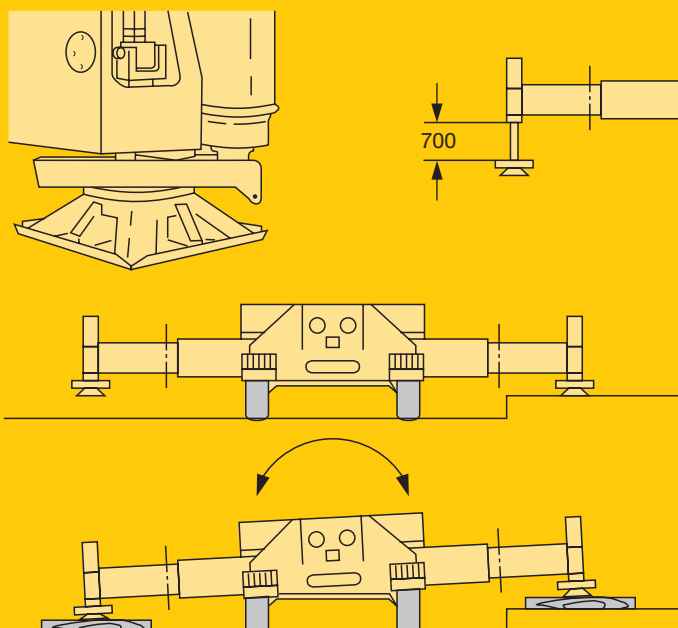
Compact, manoeuvrable and weight-optimized.

- Overall length just 13.24 m, length of carrier 10.44 m only
- Large overhang angles, up to 22°
- Small turning radius of 7.88 m with all-wheel steering
- 48 t total weight, incl. 1.2 t counterweight, drive 8 x 8, TELMA-type eddy current brake, 16.00 tyres, biparted swing-away jib of 19 m, 50 t hook block (axle load 4 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 8 x 6: axles 1, 3 and 4 driven; 3rd and 4th axles are driven for road travel, 1st axle activatable for rough-terrain operation
- Drive 8 x 8: all axles driven; axles 3 and 4 driven for road travel, 1st and 2nd axle activatable for rough-terrain operation
- Standard all-wheel steering, 3rd and 4th axle also steerable independent of axles 1 and 2 (crab steering), the additional hydraulic steering is mechanically locked for road travel. All steering versions can also be controlled from the crane cab (optional).



Setting crane on outriggers - quick, convenient and safe.

- Variable supporting basis
 - Outriggers retracted
 - Supporting basis 5 m x 8.5 m
 - Supporting basis 7.2 m x 8.5 m
- Supporting pads remain on rams and are protected by splash guards
- Travel of supporting rams 700 mm
- 2 x 8° lateral inclination of carrier and crane superstructure
- Electronic inclination display
- Supporting pressure display and automatic sliding outrigger control (optional)
- Outrigger control from crane cab (optional)
- Illuminated and dirt-protected reflecting levels
- Operation of outrigger system in accordance with the rules for the prevention of accidents

The LTM 1090/2 - more efficient through advanced technology.

id oom.

cross-section of particular inher-
nyamide slide pads of telescopes
acities, e.g.

rox. 20 % of rated load

cycle approx. 300 s for boom

Modern and powerful car- rier drive.

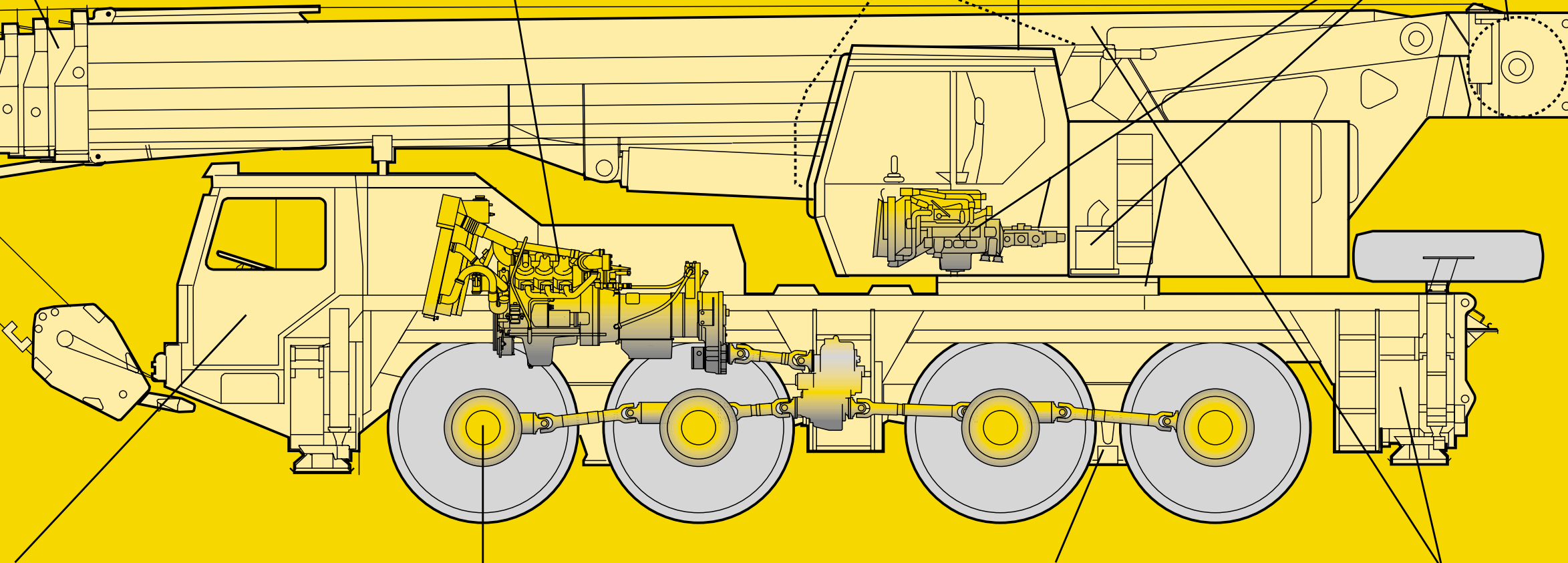
- 6-cylinder Liebherr turbo-charged Diesel engine of 300 kW/408 h.p. (Euro II), robust and reliable
- Entire exhaust gas system of stainless steel
- Allison automatic transmission with torque converter, electronic control, proved and well tested serial transmission, 5 forward and 1 reverse speed, rough-terrain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

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 tilttable 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, reli- able 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



portable

b over width of vehicle, with
eat insulating panelling, com-
s seat with pneumatic lumbar
onomically located operating
table in height and inclination
rors

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 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 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.

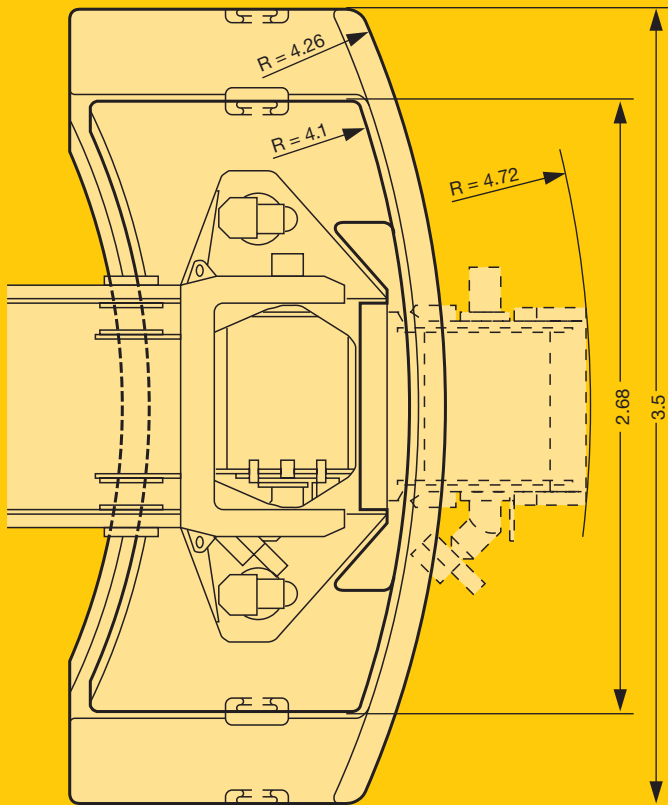
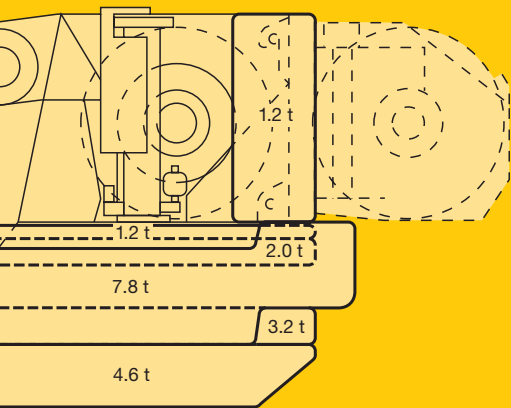
- Carrier, superstructure and telescopic boom in light-gauge design, calculated by the FEM method, weight-optimized and of outstanding torsional rigidity
- Tensile property of material with high safety factor through the application of STE 960 (960 N/mm²) for all supporting members





lasting system re flexibility.

ght variants: 1.2 t, 3 t, 7 t, 12.2 t, and 20 t,
r range of application facilities
counterweight controlled from crane cab;
g the assistance of an auxiliary crane
interweight dimensions; e.g. 12.2 t coun-
ave a width of 2.68 m only



/electronic crane control with ted safe load indicator.

inches, slewing gear as well as of luffing
ing motions via LICCON system
regulated control, i.e. both pumps can be
one consumer
g system with electrical activation, four
tions can be performed independently
other
activation also possible during a working

- Hoisting/lowering, luffing and slewing speeds preselectable in 6 steps
- Extremely short response times when initiating working motions
- Functional test of all essential components by test system

