

Mobile Crane

LTM 1300-6.2

Lifting capacity:
300 t

Telescopic boom length:
78 m

Hoist height:
114 m



LIEBHERR

Courtesy of Crane.Market

LTM 1300-6.2 mobile crane

Ready for use quickly and flexibly





The LTM 1300-6.2 sets standards in the 300-tonne class in terms of lifting capacity and boom length. On the one hand it is a simple, classic folding jib crane whilst on the other it is the smallest luffing jib crane on the market providing crane operators with a low cost entry point into the luffing jib crane class.

Telescopic boom:

78 m

Double folding jib:

12.5 m to 35 m

Hydraulically adjustable as an option

Lattice booms:

70 m luffing jib

42 m fixed jib (0°, 20°, 40°)

Single-Engine Concept:

Greater economy and higher lifting capacity

Can be readied for use quickly:

User-friendly set-up functions

VarioBase®:

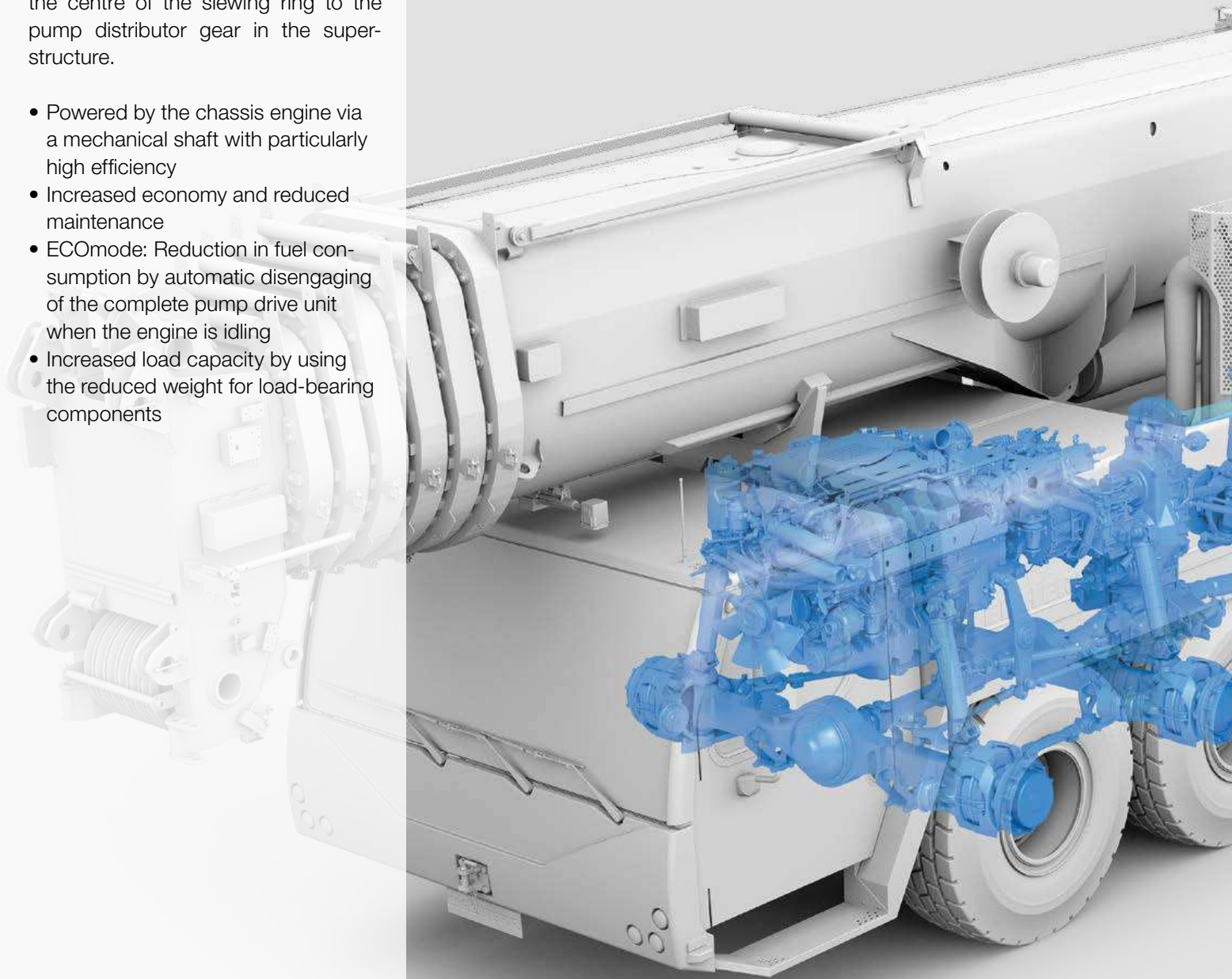
Higher safety and performance

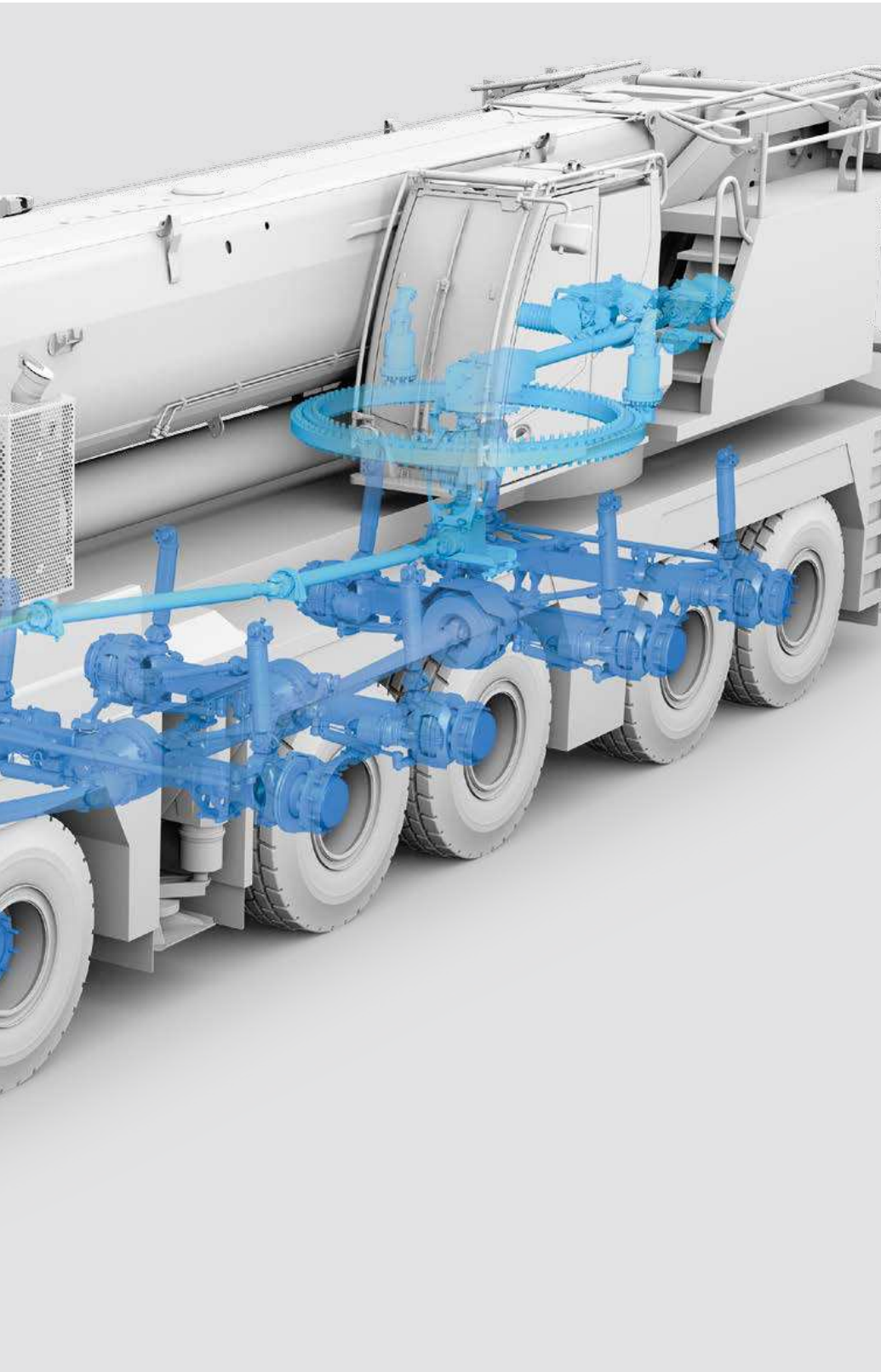
Efficient chassis and drive technology

Innovative Single-Engine Concept

The crane is powered by the engine in the chassis. Gear shafts are routed from the distributor gear in the sub-structure via two mitre gears through the centre of the slewing ring to the pump distributor gear in the super-structure.

- Powered by the chassis engine via a mechanical shaft with particularly high efficiency
- Increased economy and reduced maintenance
- ECOmode: Reduction in fuel consumption by automatic disengaging of the complete pump drive unit when the engine is idling
- Increased load capacity by using the reduced weight for load-bearing components





Drive train

- 8-cylinder Liebherr turbo diesel engine, 455 kW/619 bhp, max. torque 3,068 Nm
- Automatic ZF-TC Tronic gearbox, 12 forwards and two reverse speeds
- Torque converter
- ZF interarder directly at gearbox
- Axles 1, 3 and 5 are driven, axle 4 as an option

"Niveaumatik"

hydro-pneumatic axle suspension

- Suspension cylinders require zero maintenance
- Designed for high axle loads
- Spring travel +125/-125 mm
- Great lateral stability when cornering
- Drive states selected using fixed programs

Pneumatic disk brakes

- Improved braking performance, better control
- Improved lane stability
- No reduction in braking effect with high brake temperatures (fading)
- Longer service lives
- Shorter working times for changing the pads
- Brake pads with wear indicators

Telma eddy current brake (option)

- No wear, low maintenance system
- Enhanced safety by very fast activation in milliseconds
- Reduction in running costs
- High comfort level due to completely smooth braking
- Green braking system, zero emissions or particulates

Variable steering concept



High safety and economy levels with active rear axle steering

The LTM 1300-6.2 is easy to manoeuvre with its five steering programs. Its handling is stable even at high speed. Its active rear axle steering significantly reduces tyre wear.

Active rear axle steering

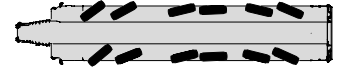
The front axles are steered mechanically using the steering wheel. The rear axles are actively steered by an electro-hydraulic system depending on the steering angle and speed. All six axles on the LTM 1300-6.2 are steerable.

High safety standards – all Liebherr's expertise

- Centring cylinder for automatically straightening the rear axles in the event of a fault
- Two independent hydraulic systems with wheel-powered and engine-powered hydraulic pump
- Two independent control computers

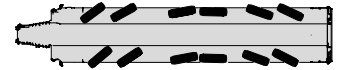
P1 Road steering

The rear axles are steered on a speed-dependent basis. At speeds of 30 km/h and over, axles 3 and 4 are set to straight ahead and fixed. At speeds of 60 km/h and over, axles 5 and 6 are set to straight ahead and fixed.



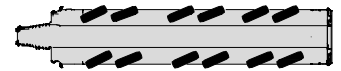
P2 All-wheel steering

The rear axles are turned to produce minimum turning circles.



P3 Crab steering

All axles are steering in the same direction.



P4 Reduced swing-out

The rear axles are turned to minimise the amount that the rear of the vehicle swings out.



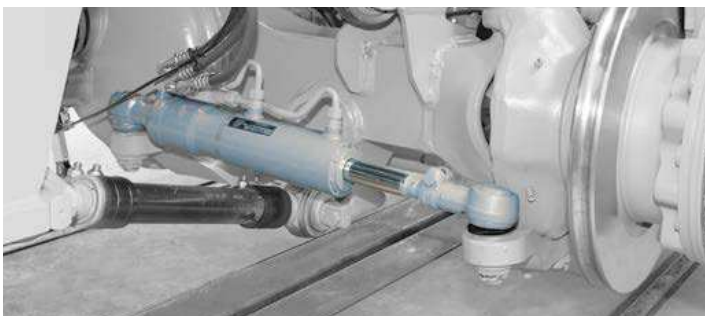
P5 Independent rear axle steering

The rear axles are steered independently from the steering angle of the front axles using a button.



Centring cylinder

- Automatically straightens the rear axles in the event of a fault



5 steering programs

- Program selection by simply pressing a key
- Clear layout of the controls and indicators
- Programs can be changed whilst moving
- Crab easily controlled using the steering wheel



Comfort and safety



Ergonomics and work safety for improved performance

High quality cabins with ergonomically arranged operating controls and display panels all have a single aim: Efficient operation.

Modern driver's cab and crane cab

- All-round safety glass, tinted windows, extended field of view through large windows
- Intelligent heating and ventilation system, additional heating system independent of the engine
- Optional air-conditioning system
- Pneumatic driver's seat with lumbar support in the driver's cab, with multiple adjustment options
- Heated, electrically adjustable exterior mirrors on the driver's cab
- Front and roof windows on the operator's cab can be opened
- Crane cab can be tilted 20° backwards
- Electrically extending side platform at the crane cab

Supporting the crane – fast, convenient and safe

The supports are extended fully hydraulically. They are controlled using the BTT Bluetooth Terminal out of the crane cab.

A large cylinder stroke of 620 mm enables the crane to be raised by up to 400 mm depending on the tyre size.

Four integral lights provide excellent lighting of the support area. The extension system requires very little maintenance.



Fast, safe set-up process

The processes to extend the supports, install the ballast and mount additional equipment have been designed for speed, safety and convenience. Access ladders, handles, railings and personal protective equipment ensure the safety of the operating personnel.

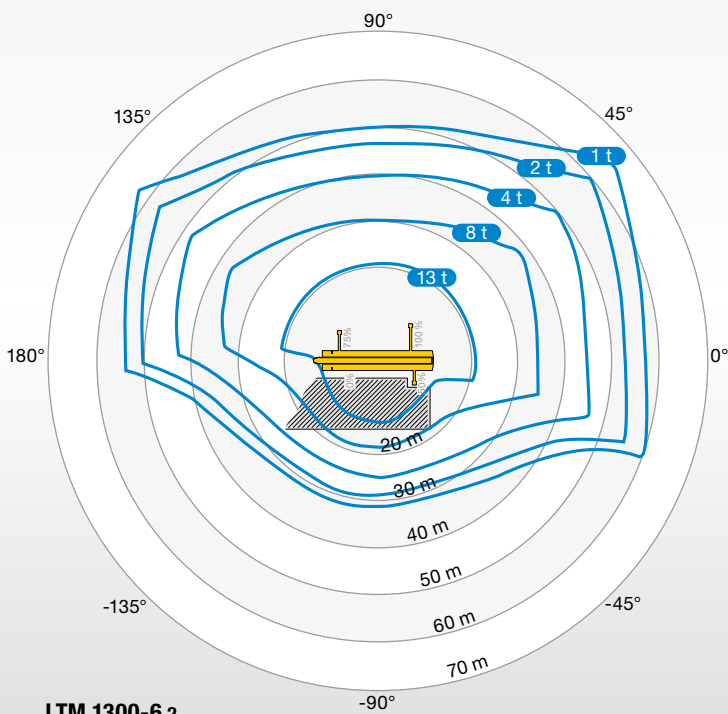


VarioBase®



Variable Supporting Base for greater safety and higher lifting capacity

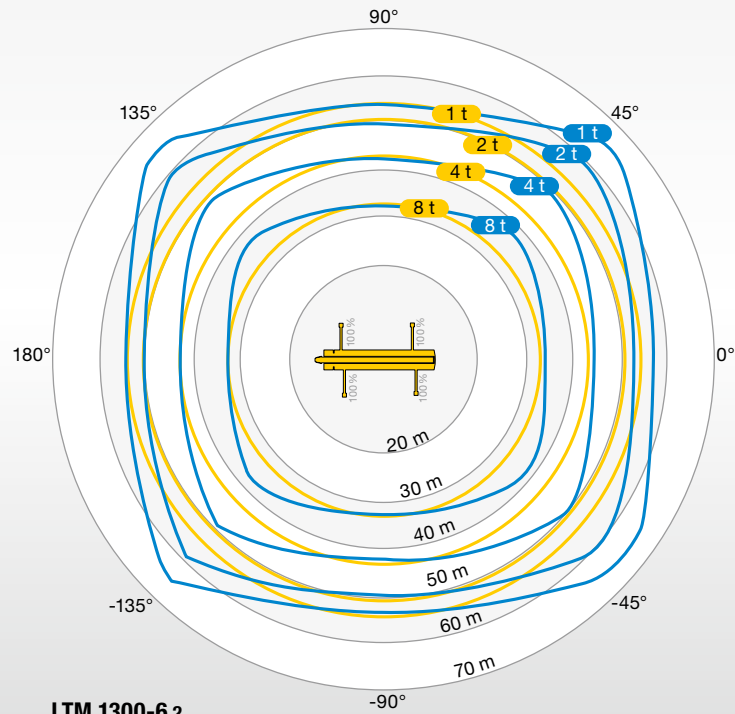
VarioBase® allows each individual crane support to be extended to variable lengths. At the same time, the crane's work is secured by the LICCON controlled load moment limiter. The extension length and support force of each outrigger is measured and the maximum load capacities for exactly this situation are calculated by the crane control.



LTM 1300-6.2



Greater safety in constricted working conditions



LTM 1300-6.2



Higher lifting capacity and larger working range

Greater safety

VarioBase® ensures safe operation in constricted working conditions. The maximum lifting capacities are calculated individually and precisely for every situation. This ensures safe working practice with any chosen support base. The LTM 1300-6.2 has securing positions at 0%, 50%, 75% and 100%.

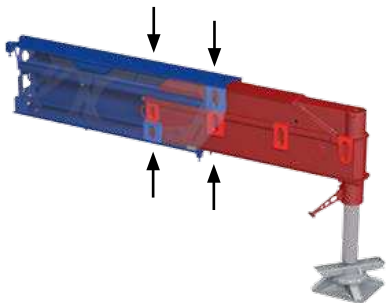
Higher lifting capacity and larger working range

Even with the maximum support base VarioBase® delivers higher load capacities and a larger working area. The greatest advantages are made in the operating ranges directly above the supports. The Variable Supporting Base also makes improvements for hoisting to the front and rear.

The greatest increases are achieved when partial ballast is on the crane. With just a little ballast the LTM 1300-6.2 can almost achieve the lifting capacity values from the standard table with high ballast. This reduces the amount of ballast that has to be transported for crane jobs.

LICCON work planner in the crane cab

The VarioBase® system is integrated in the LICCON work planner. Dispatchers can plan jobs using the Variable Supporting Base in advance. The work planner is also integrated in the LICCON control in the crane cab to ensure that hoists can be simulated on the site.



Intelligent crane control



The LICCON computer system for functional, safe crane operations

Liebherr has developed in house software and hardware for its mobile crane controller. The heart of the system is the computer system LICCON (Liebherr Computed Control). Its ongoing development by Liebherr specialists and its modern and future-oriented control architecture enable it to adjust to the continually growing needs of the market.

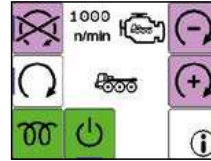
Specially developed for cranes

- Integral LML load moment limiter
- The key components are manufactured by Liebherr
- Guaranteed availability of spare parts
- Proven all over the world in a wide variety of climatic conditions
- User friendly
- Highly reliable due to the use of data bus technology



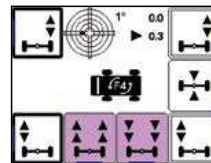
Remote crane control

The mobile control and display unit BTT Bluetooth Terminal enables set-up processes to be completed quickly, conveniently and safely.



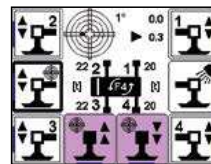
Diesel engine

- Engine start/stop
- Engine speed control



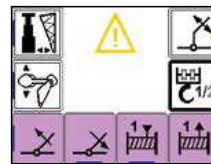
Axle suspension

- Raise/Lower the vehicle
- Axle blocking



Supporting

- Electronic angle indicator
- Fully automatic levelling

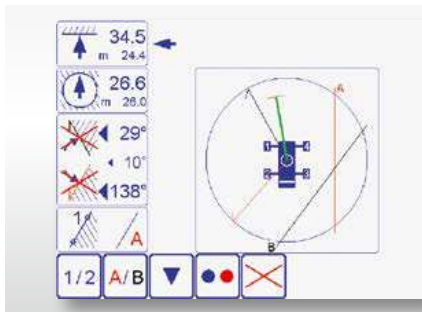


Hook block installation

- The hook block is attached and detached with direct sight contact
- Operation of winch and telescopic boom

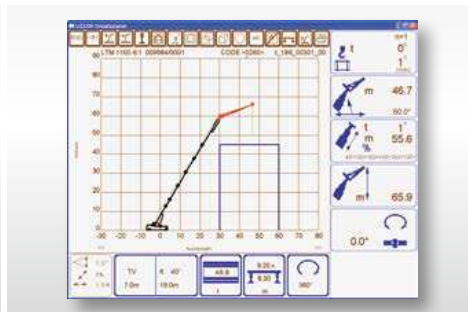
The LICCON working range limiting system

- Assists the crane driver by automatically monitoring the working range limits such as bridges, roofs, etc.
- Simple programming



The LICCON work planner

- Computer program for planning, simulation and documenting crane work
- Search for a suitable crane
- Calculation of maximum support forces and wind speed

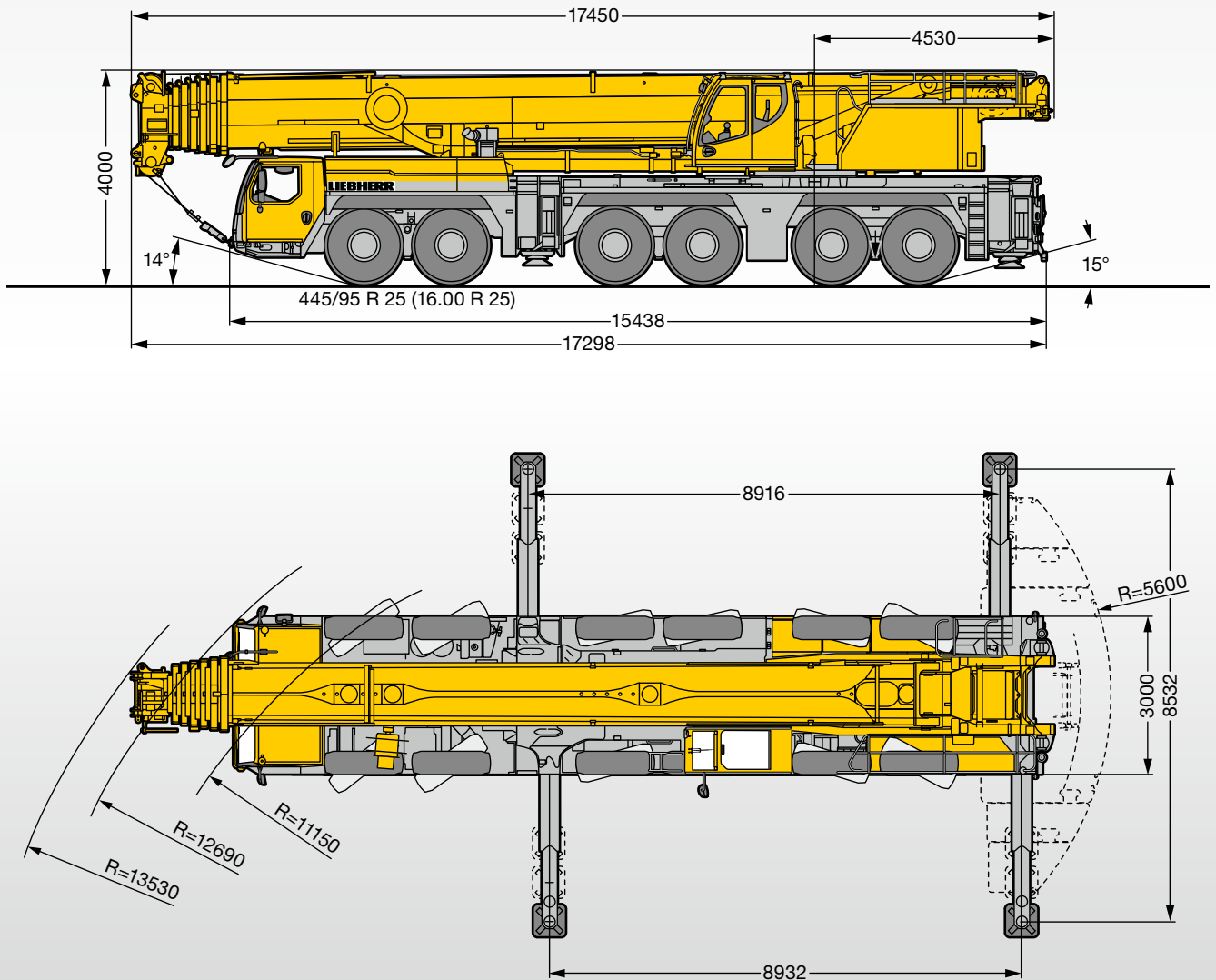


Complete remote control

- All crane movements can be controlled from outside the crane cab
- Greater economy
- Clear lines of vision and proximity to the load



Optimized dimensions



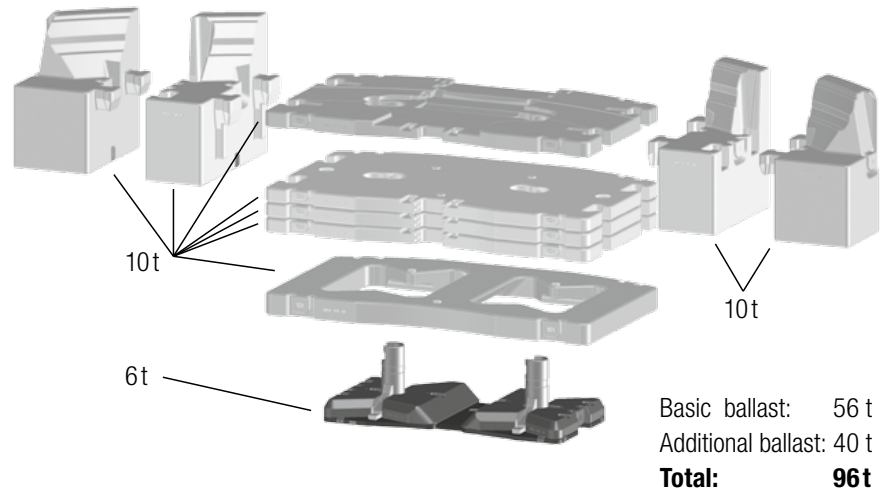
Compact and manoeuvrable for small sites

Its extremely compact design means that the LTM 1300-6.2 can be manoeuvred easily even on small sites. The chassis length is 15.4 metres. Its active rear axle steering system makes the LTM 1300-6.2 extremely manoeuvrable. The minimum turning circle over the chassis is just 12.7 metres. Even when fitted with 445/95 R 25 (16.00 R 25) tyres, the width of the LTM 1300-6.2 is within 3 metres.

Variable counterweight

The maximum counterweight of the LTM 1300-6.2 at 96 tonnes consists of 56 tonnes of basic ballast and 40 tonnes of additional ballast. The ballasting process can be performed quickly and easily from the crane cab using keyhole technology.

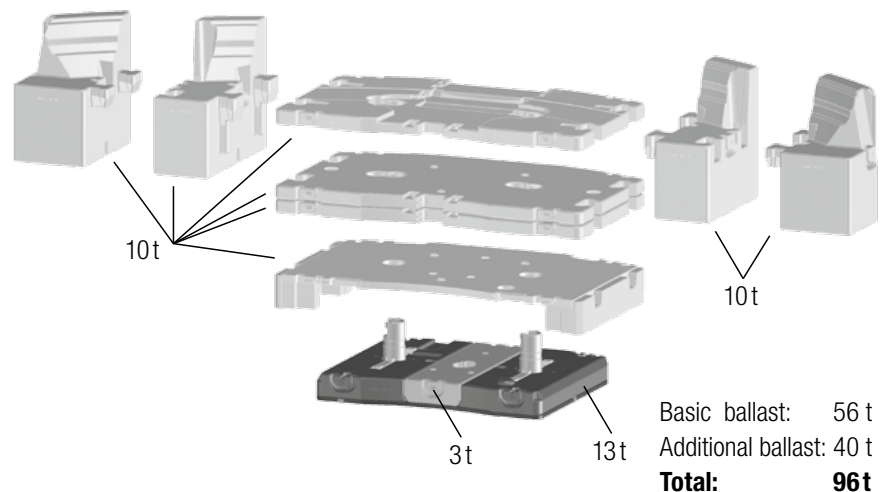
The ballast plates were designed to ensure compact dimensions. The ballast radius even when fully ballasted is just 5.6 metres. The base plate with a weight of 6 tonnes is the same width as the vehicle.



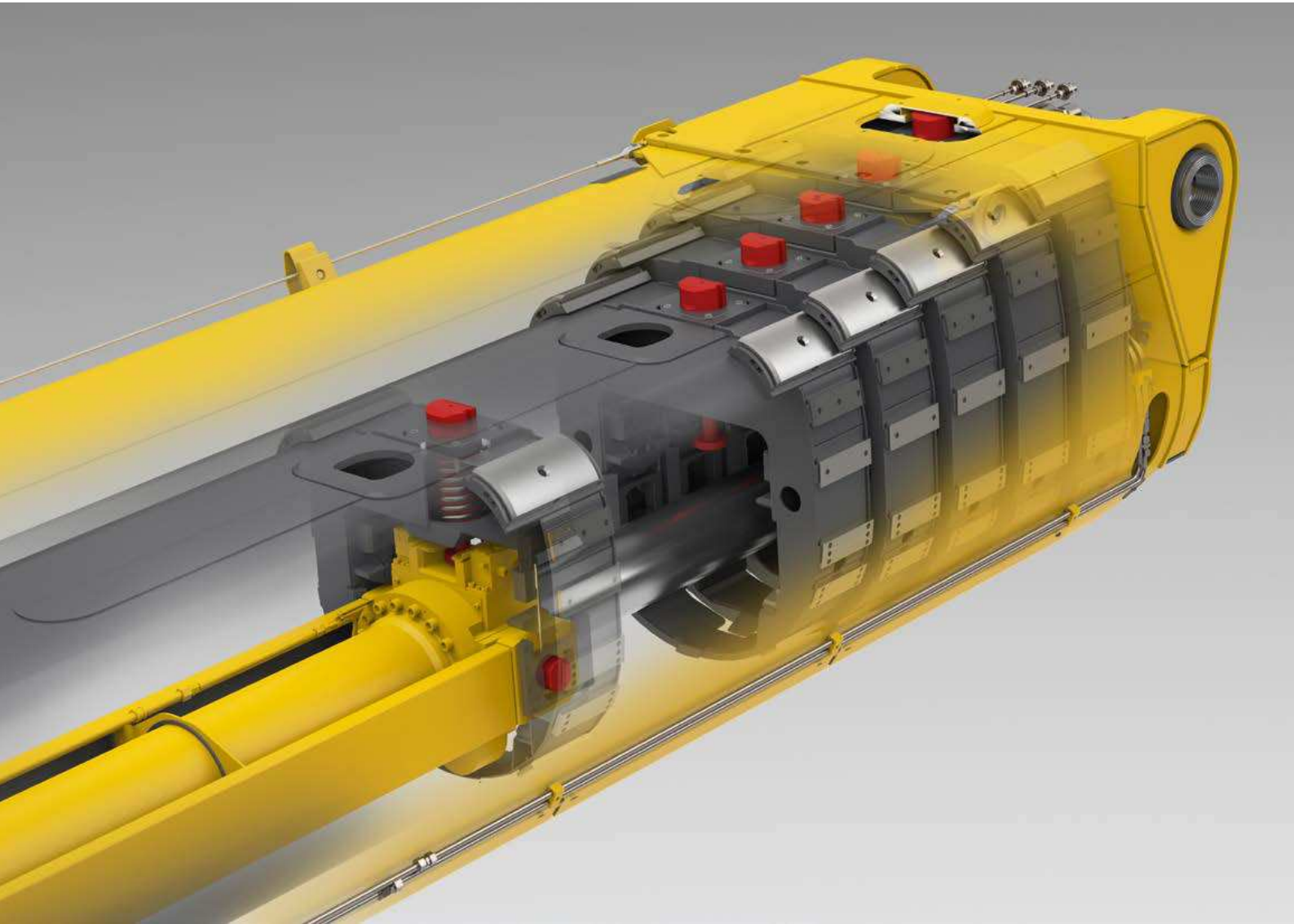
UK ballast

Liebherr can also supply a second ballast version for the LTM 1300-6.2 with a different distribution of the counterweight plates.

The weight of the mounting plate for the UK ballast is 13 tonnes and it is the same width as the vehicle. In addition an insert plate of 3 tonnes is available.



High lifting capacities with long boom



Time-tested technology from Liebherr

The automatic rapid action TELEMATIK telescoping system makes Liebherr cranes more powerful and more efficient. It operates using just one hydraulic cylinder and an internal locking system for the individual telescoping sections. It delivers excellent load capacity properties since the various telescopes can be extended in any order and completely independently of each other.

Powerful, long telescopic boom

The telescopic boom consists of a pivot section and 6 telescopic sections which can be extended to the required lengths and pinned conveniently and automatically using the proven TELEMATIK one-cylinder telescoping system.

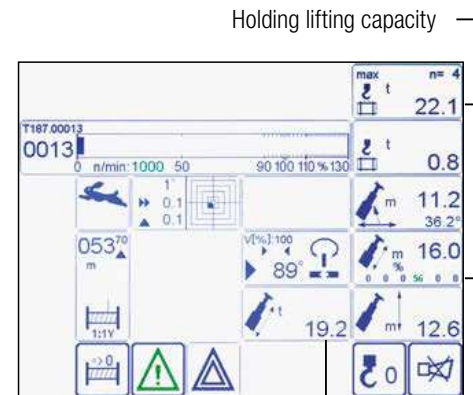
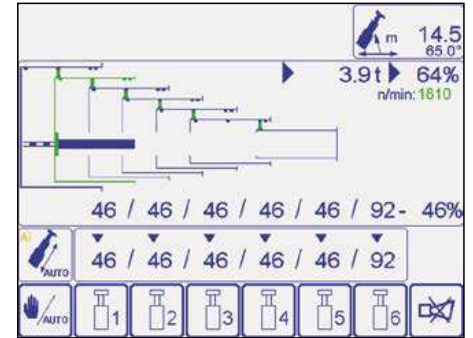
- 78 m telescopic boom
- Improved lifting capacities with a wide range of extension variants
- High lateral stability due to the oval boom section

The "TELEMATIK" fully automatic telescoping system

- Increased load capacities for long booms and large radii with the "lightweight" telescoping system
- One-stage hydraulic cylinder with hydraulic drive pin
- Telescoping system requires zero maintenance
- Fully automatic telescoping
- Very easy to operate, the telescoping process is controlled using the LICCON monitor

High lifting capacities with unbolted boom

- High telescoping load capacities
- Separate lifting capacity tables to hold loads with unpinned booms
- Display on the LICCON monitor



Holding lifting capacity

Telescopic lifting capacity

Unpinned telescope length

Hoist gear

- Liebherr winch with integral planetary gear and spring-loaded multi-disk brake
- 122 kN hoist at the outer layer
- Max. rope speed 128 m/min
- 2nd hoist gear optional

Slewing gear

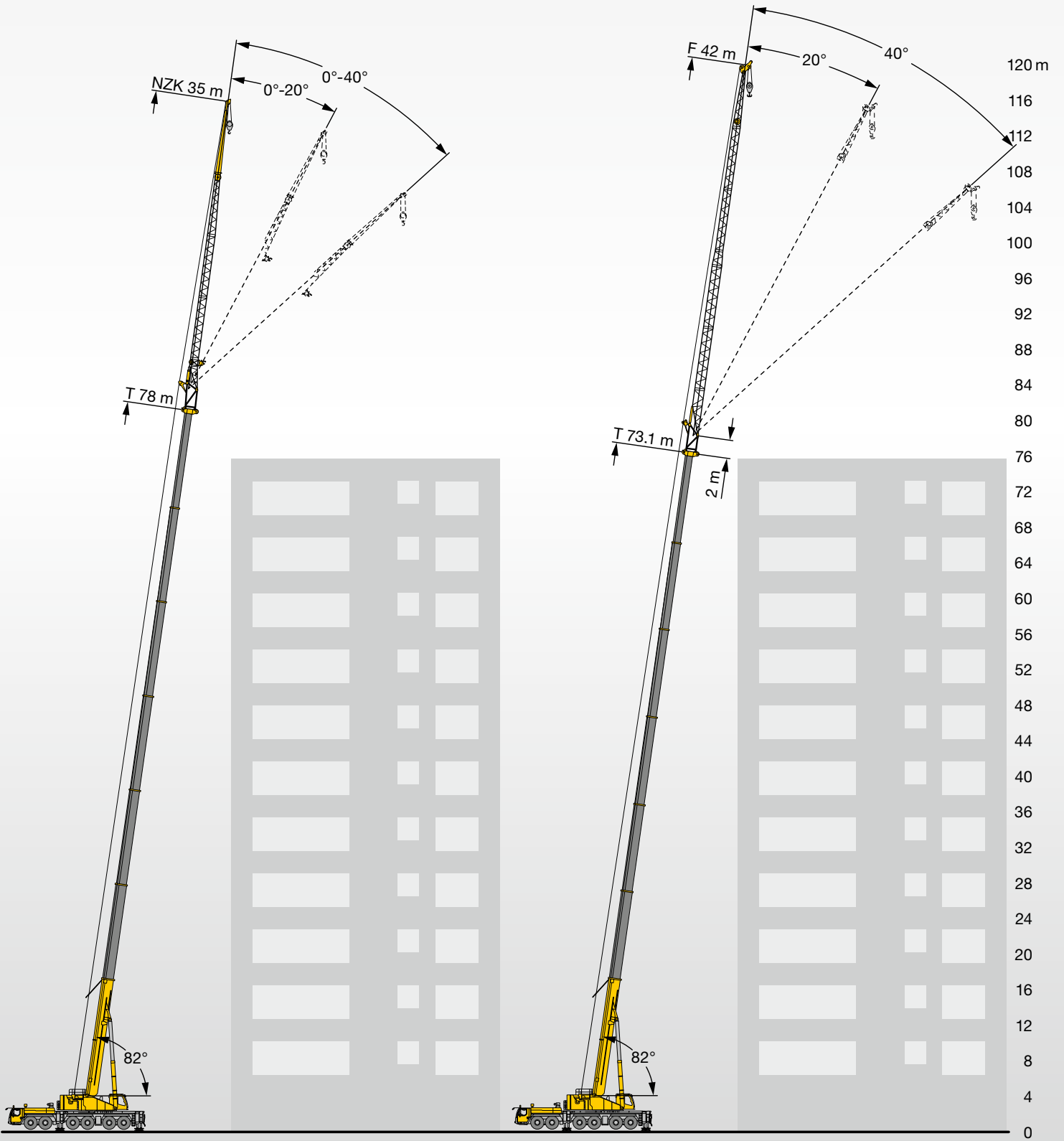
- Liebherr planetary gear, spring-loaded multi-disk brake
- Sensitive movements in closed hydraulic circuit
- Slewing speed from 0 to 1.6 rpm, infinitely adjustable

Central lubrication

- Standard central lubrication system for slewing bearing, boom bearing, luffing cylinder and winch bearing
- Uniform supply with lubricant
- Level can be seen at any time in a transparent reservoir



Variable boom systems: folding jib and fixed jib



Ready for operation quickly with folding jib

A double folding jib 12.5 m to 21 m in length is available for the LTM 1300-6.2. This enables the 300-tonne machine to reach enormous hoist heights quickly and flexibly.

- Maximum overall length 35 m with two intermediate sections
- Working angles 0°, 20° or 40°
- With hydraulic adjustment change of the working angle under full load between 0° and 40°
- 5.5 m adapter for the folding jib can be used as heavy duty erection jib with a lifting capacity of 58 t

Powerful with fixed jib

The LTM 1300-6.2 can deliver increased lifting capacities with a fixed lattice jib. This can be erected to a length of up to 42 m. The fixed jib is particularly helpful when working at projecting edges, such as on high buildings.

- Divided into 3.5-metre lattice sections for improved hoist heights and load capacities
- Working angles 0°, 20° and 40°
- Great economy due to self-erection of the fixed jib

Hydraulic assistance to mount the folding jib with BTT



Hose drum for hydraulic cylinder



5.5 m integral erection jib, hydraulically adjustable



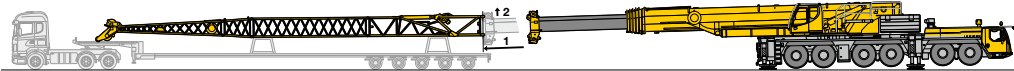
Hydraulically adjustable folding jib (0° to 40°)



Rooster sheave, foldable sidewise



Self-assembly of the fixed jib

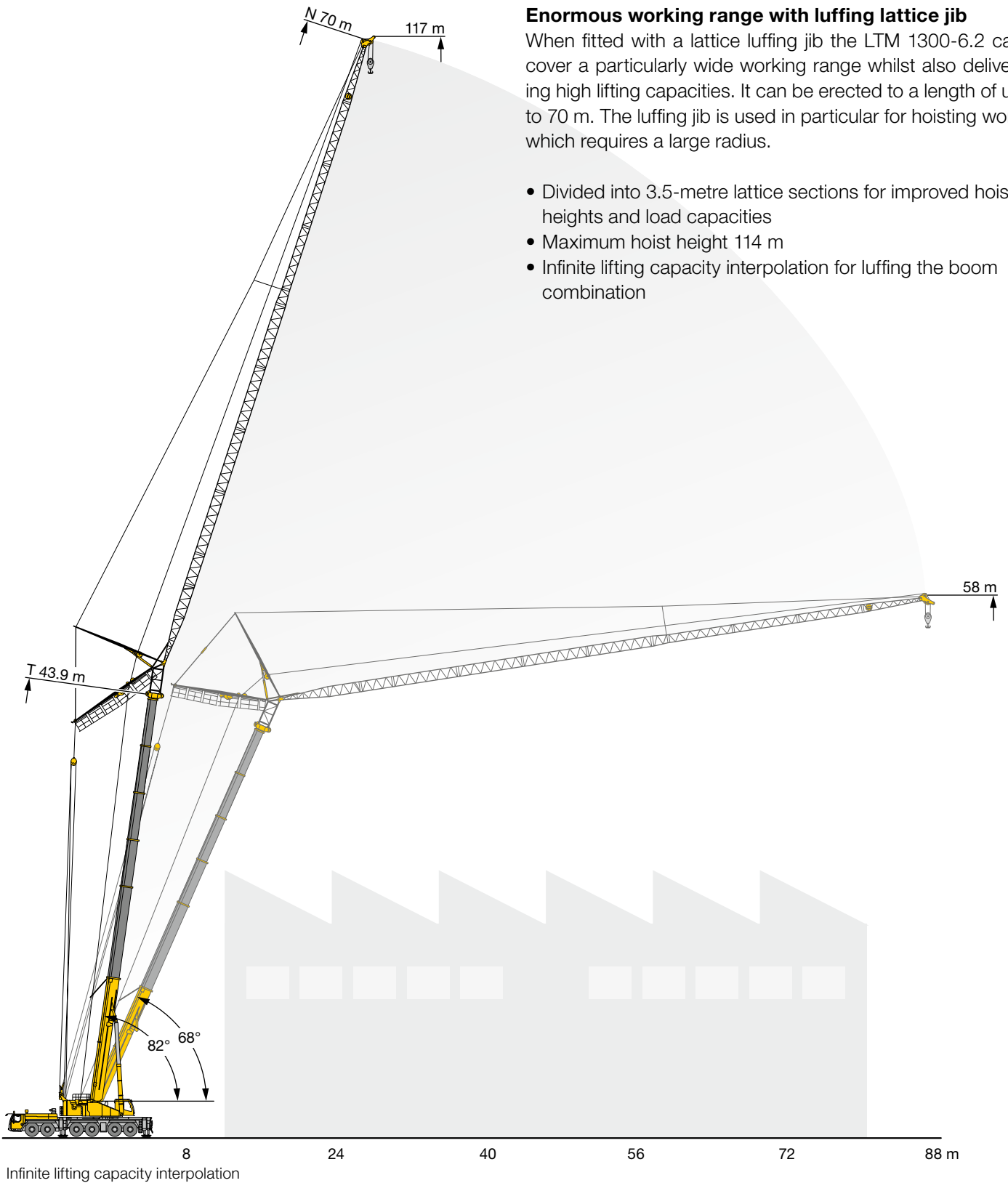


Variable boom systems: luffing jib



Perfect entry level luffing jib crane

The LTM 1300-6.2 is the smallest crane on the market to be available with a luffing lattice jib. The Liebherr crane is therefore ideal as an entry level luffing jib crane.



Enormous working range with luffing lattice jib

When fitted with a lattice luffing jib the LTM 1300-6.2 can cover a particularly wide working range whilst also delivering high lifting capacities. It can be erected to a length of up to 70 m. The luffing jib is used in particular for hoisting work which requires a large radius.

- Divided into 3.5-metre lattice sections for improved hoist heights and load capacities
- Maximum hoist height 114 m
- Infinite lifting capacity interpolation for luffing the boom combination

Fast, efficient set-up process

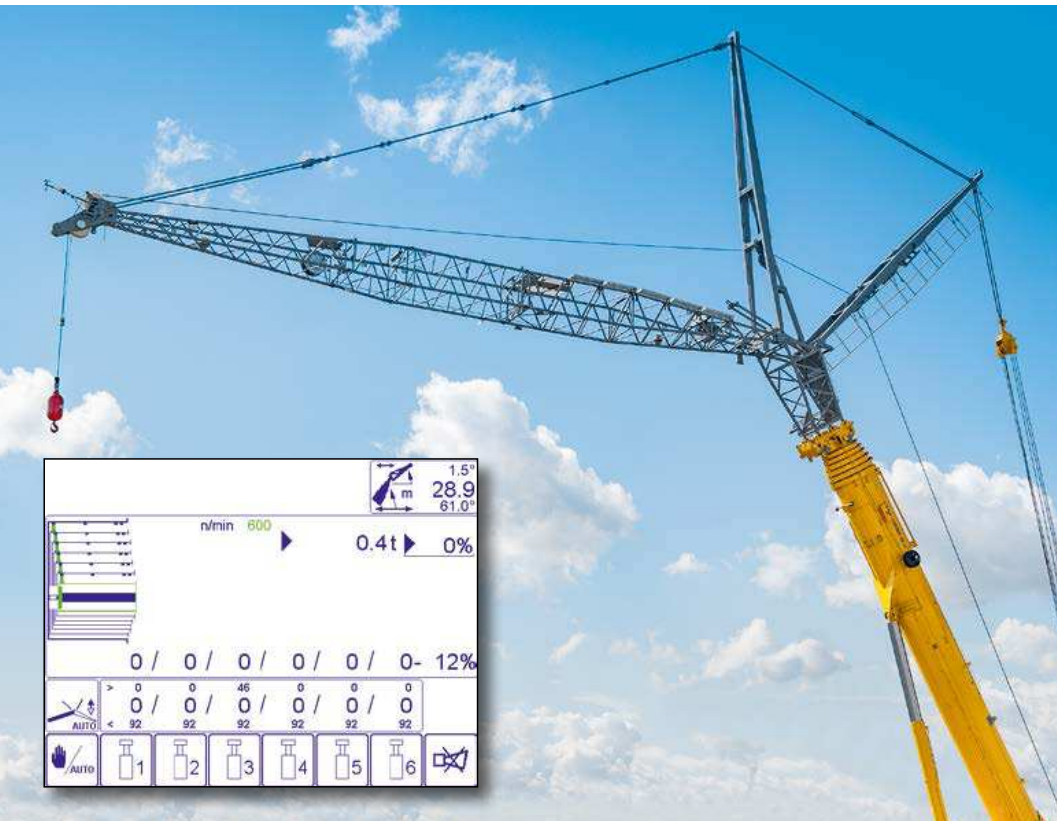


1 Winch 2 secured to the ballast plate 2 Winch 2 is moved hydraulically towards the turntable frame
3 The pulley block is moved towards winch 2 using BTT 4 Winch 2 is installed

Self-assembly of winch 2

The self-installation device on winch 2 ensures high efficiency. The winch can be installed without an additional crane in a matter of minutes. The remote control using the BTT Bluetooth Terminal is extremely convenient and provides clear lines of sight for the installation process.





Semi-automatic raising of luffing jib

A user-friendly automatic system allows the luffing lattice jib to be erected easily. The straightforward handling takes the strain off the crane driver and enhances safety. The crane driver only has to luff the telescopic boom. The control winch is operated by the crane control.

Automatic ballast

The ballasting process for the LTM 1300-6.2 is performed automatically at the touch of a button, making it simple and fast.

Mobile and crawler cranes from Liebherr-Werk Ehingen GmbH

Liebherr-Werk Ehingen GmbH develops and manufactures highly modern telescopic and lattice boom cranes on mobile and crawler chassis. Its services also include the design and project completion of large parasols. The company is the global market leader in mobile cranes. The keys to this success are its innovative products, high quality and committed workforce. As the company attaches a great deal of value to high technological standards, Liebherr-Werk Ehingen GmbH invests heavily in research and development. The needs of the customer are

the primary focus from development to service. The objective is to set standards in quality, functionality and safety and ensure that the machines are highly reliable in use. Liebherr-Werk Ehingen GmbH is part of the global Liebherr Group of Companies. This family-run company is one of the largest manufacturers of construction machinery in the world and is also renowned as a supplier of technically advanced, user-focussed products and services in many other industries.



LTM mobile cranes



LTC compact cranes



LTF telescopic truck-mounted cranes



LG lattice boom mobile cranes



LTR telescopic crawler cranes



LR crawler cranes

LTM mobile cranes

The range of LTM cranes extends from the twin-axle 35-tonne model to a heavy duty crane with a load capacity of 1,200 tonnes. The all-terrain chassis is ideal for combined on-road and off-road use. The powerful, long telescopic booms can reach great working heights quickly and easily.

LTC compact cranes

Compact cranes are all-terrain cranes with a particularly compact design. They are ideal for use on extremely constricted sites.

LTF telescopic truck-mounted cranes

LTF truck-mounted cranes are a low cost alternative in the taxi crane class. Mounted on standard truck chassis, they cost very little to drive around to jobs.

LG lattice boom mobile cranes

LG mobile cranes with lattice booms can handle particularly heavy loads, enormous working heights and radii.

LTR telescopic crawler cranes

Telescopic cranes on crawler chassis deliver short set-up times and excellent off-road manoeuvrability. They are particularly flexible to use.

LR crawler cranes

LR crawler cranes are used all over the world, wherever very heavy loads need to be moved safely and economically. With extremely variable boom systems and lifting capacities of up to 3,000 tonnes they can cover a particularly wide range of uses.

www.liebherr.com

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