

The successful boom technology of Liebherr.



LIEBHERR

The better crane.

CD-

The new boom technology.

Liebherr has developed entirely new 5/6/7-section telescopic booms for the LTM mobile cranes of the 60, 80, 90, 100, 120, 160, 300 and 500 t class. The technology's focal points are the new **oviform boom profile** and the **automatic telescoping system "Telematik"**.

The oviform boom profile.

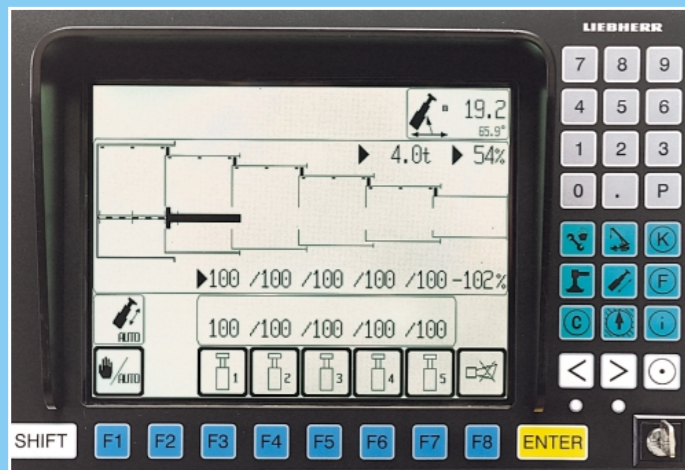
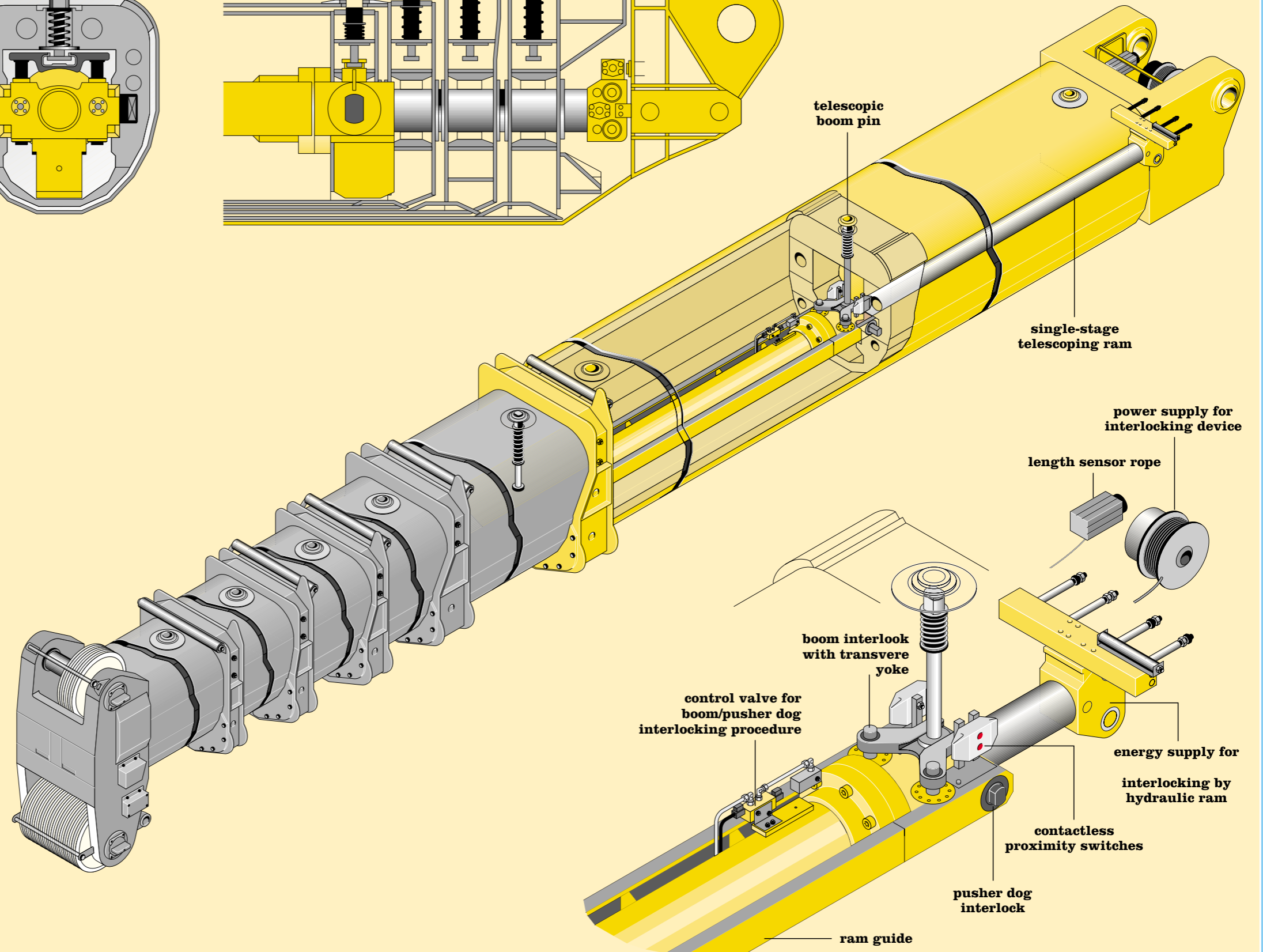
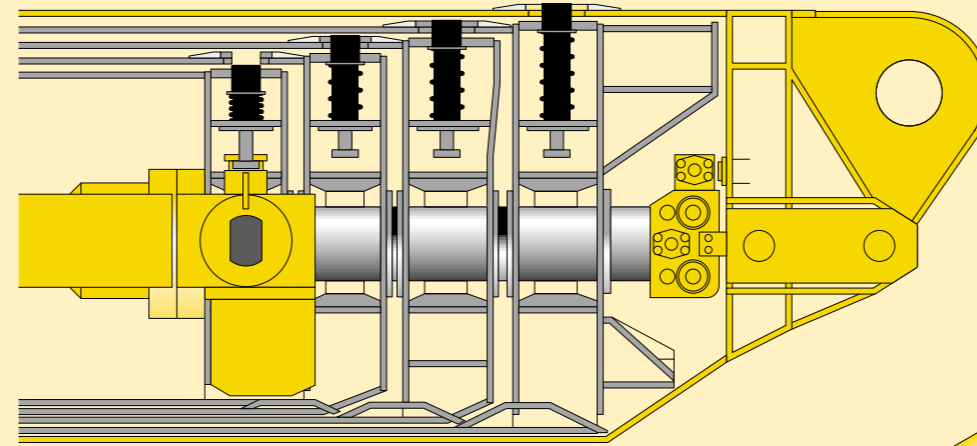
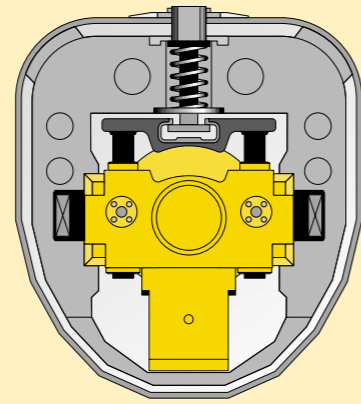
It provides particular inherent stability against deflection and torsion. Since the telescopes do no longer need to be equipped with buckling resistance gussets nor with material doublings, a considerable cross-section enlargement of the structural components can be realized by reducing the distance between the individual telescopes. At steep boom position as well as at wider radii, the new oviform boom profile offers optimal lifting capacities.

The automatic rapid-cycle telescoping system "Telematik".

In essence, it consists of the following:

- the double-action telescoping ram
- the hydraulic gripper interlocking system at the base of the hydraulic ram
- the hydraulic boom pins for interlocking the boom sections with one another, and
- the electric/electronic sensorial system, an additional module of the LICCON crane control.

The gripper and boom interlocking systems are coupled with one another, i.e. a boom section can only be released at the upper shell if the gripper is interlocked with this particular boom section at the same time. This also guarantees mechanical reliability of the telescoping system. With the exception of the electrical supply line to the hoist limit switch, no electric, hydraulic nor pneumatic components are located in or on the telescopic boom. The **automatic telescope control** – part of the LICCON crane control – offers more than 1000 different extension conditions of the telescopic boom. The saving of time during telescoping due to the automatic operation and thus the combinatorial variety determine the outstanding functionality of the new boom technology. With their long telescopic booms, the Liebherr mobile cranes of the 60, 80, 90, 100, 120, 160, 300 and 500 t class offer entirely new application facilities.



The new 60-tonner with highlights offered by Liebherr.



5-section, 42 m long telescopic boom for 42 m height under hook



biparted, 9.5 - 17 m long swing-away jib for 60 m height under hook, mountable at 0°, 20° or 40°



10.1 t safe working load on the 42 m long telescopic boom



oviform, extremely rigid boom profile for high lifting capacities



proved rapid-cycle telescoping system "Telematik" for the automatic extension of the boom to the desired length



high lifting capacities with 12 t total counterweight, rapid ballasting procedure with "keyhole" system



electrically pilot-controlled load sensing system, 4 superimposable working motions, working speeds preselectable by steps



comfortable crane cab of modern design, steering and outrigger actuation from the crane cab is part of the standard equipment



self-manufactured hoist winches with 57 kN line pull and 130 m/min line speed



LICCON system - a Liebherr design - the most modern programmable computer system world-wide for the control and monitoring of mobile cranes



outstandingly compact, 4-axle carrier with 8 x 6 drive (optional) and all wheel-steering included in the standard equipment



operative weight 48 t (4 x 12 t axle load), incl. 12 t total counterweight and biparted swing-away jib



"Niveaumatik", the crane and road preserving suspension



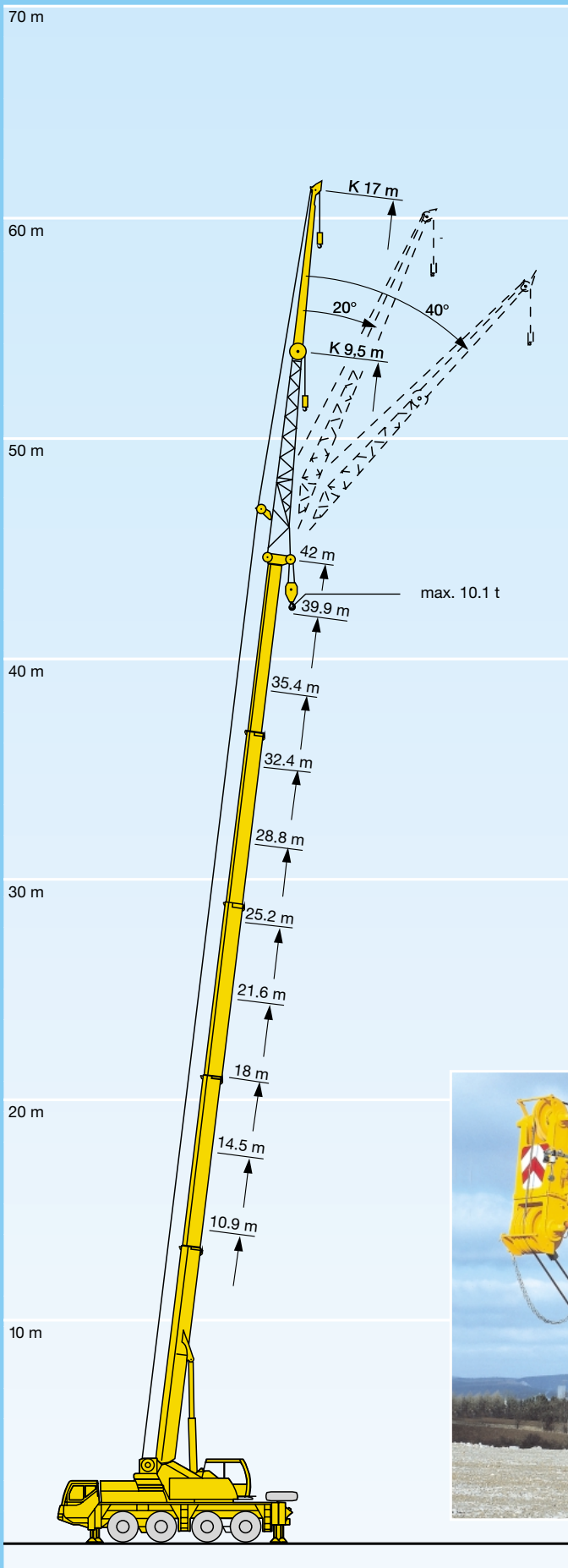
electric and electronic components interlinked by the most modern data bus transmission technique which distinctively contributes to an increase in functionality and efficiency (LSB = Liebherr System Bus)



Liebherr turbo-charged Diesel engine of 270 kW, exhaust emission acc. to EURO 2, fully electronic engine management, single-engine concept



driving cab with ergonomical cockpit and functional design



Mobile crane type LTM 1060/2

The new 80-tonner with highlights offered by Liebherr.



6-section, 48 m long telescopic boom for 48 m height under hook



biparted, 10.5 - 19 m long swing-away jib for 68 m height under hook, mountable at 0°, 20° or 40°



8.7 t safe working load on the 48 m long telescopic boom



oviform, extremely rigid boom profile for high lifting capacities



proved rapid-cycle telescoping system "Telematik" for the automatic extension of the boom to the desired length



high lifting capacities with 16 t total counterweight, rapid ballasting procedure with "keyhole" system



electrically pilot-controlled load sensing system, 4 superimposable working motions, working speeds preselectable by steps



comfortable crane cab, tiltable backwards by 20°, steering and outrigger actuation from the crane cab is part of the standard equipment



self-manufactured hoist winches with 57 kN line pull and 130 m/min line speed



LICCON system – a Liebherr design – the most modern programmable computer system world-wide for the control and monitoring of mobile cranes



outstandingly compact, 4-axle carrier with 8 x 8 drive (optional) and all wheel-steering included in the standard equipment



operative weight 48 t (4 x 12 t axle load), incl. 6.6 t counterweight and biparted swing-away jib



"Niveumatik", the crane and road preserving suspension system



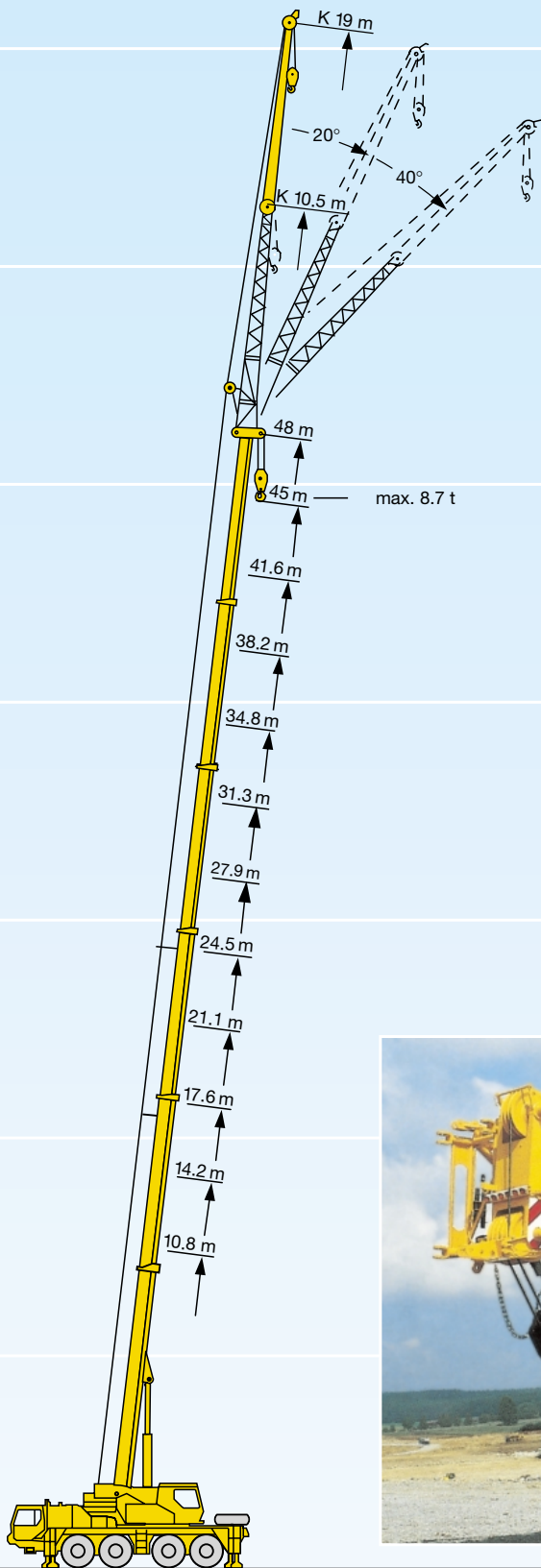
linkage of the electric and electronic components by most modern data bus transfer technique, distinctive increase of functionality and efficiency (LSB = Liebherr System Bus)



Liebherr turbo-charged Diesel engine of 320 kW output, exhaust emission acc. to EURO 2, fully electronic engine management, single-engine concept



driving cab with ergonomical cockpit and functional design



Mobile crane type LTM 1080/1

The 90-tonner with highlights offered by Liebherr.



6-section, 52 m long telescopic boom for 52 m height under hook



biparted, 10.8 - 19 m long swing-away jib for 72 m height under hook, mountable at 0°, 15°, 30° or 45°



10.2 t or 8.8 t safe working load on the 52 m long telescopic boom (with 20 t / 1.2 t counterweight)



oviform, extremely rigid boom profile for high lifting capacities



proved rapid-cycle telescoping system "Telematik" for the automatic extension of the boom to the desired length



variable application spectrum with 20 t, 12.2 t, 7 t, 3 t or 1.2 t counterweight



electrically pilot-controlled load sensing system, 4 superimposable working motions, working speeds preselectable by steps



comfortable crane cab, tiltable backwards by 20°



LICCON system - a Liebherr design - the most modern, programmable computer system world-wide for the control and monitoring of mobile cranes



extremely compact, 4-axle carrier with all-wheel steering



operative weight 48 t (4 x 12 t axle load), incl. 1.2 t counterweight



"Niveaumatik", the crane and road preserving suspension system



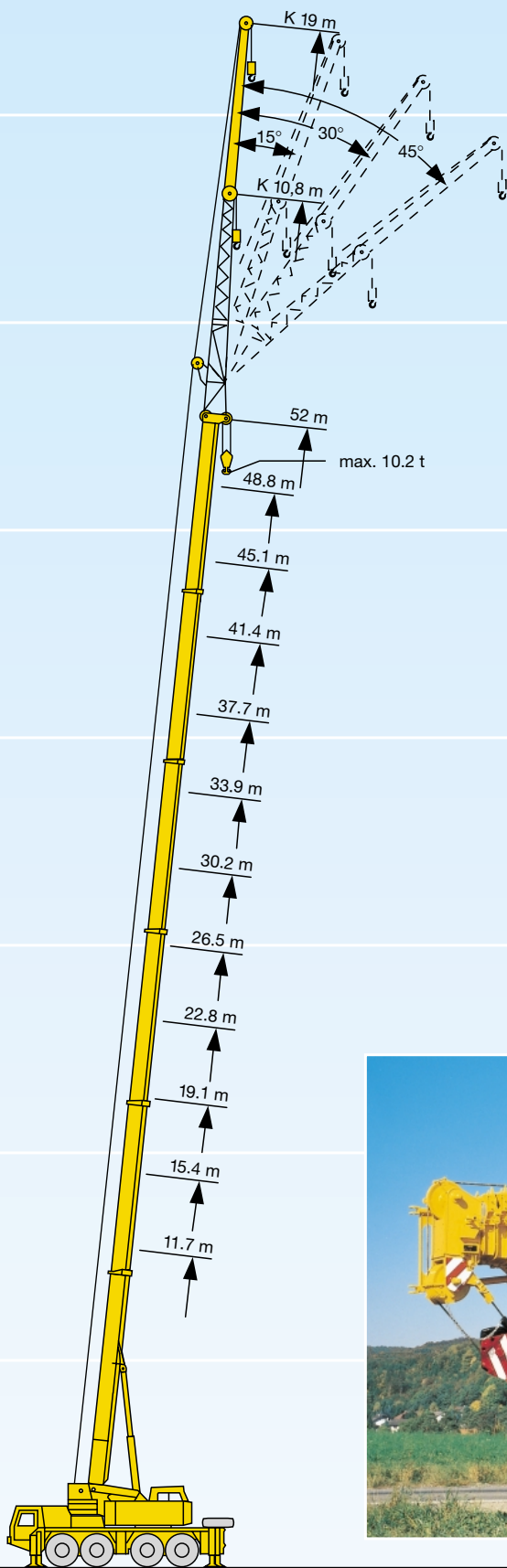
variable supporting basis with LICCON supporting force indication and inclinometer (optional)



for the carrier drive:
Liebherr turbo-charged Diesel engine of 300 kW output, exhaust emission acc. to EURO 2, Allison automatic transmission
for the crane drive:
Liebherr turbo-charged Diesel engine of 120 kW output



driving cab with ergonomical cockpit and functional design



Mobile crane type LTM 1090/2

The new 100-tonner with highlights offered by Liebherr.



6-section, 52 m long telescopic boom for 52 m height under hook



biparted, 10.8 m - 19 m long swing-away jib for 72 m height under hook, mountable at 0°, 20° or 40°



11.4 t safe working load on the 52 m long telescopic boom (with 35 t counterweight)



oviform, extremely rigid boom profile for high lifting capacities



proved rapid-cycle telescoping system "Telematik" for the automatic extension of the boom to the desired length



high lifting capacities with 35 t total counterweight, rapid ballasting procedure with "keyhole" system



electrically pilot-controlled load sensing system, 4 superimposable working motions, working speeds preselectable by steps



comfortable crane cab, tiltable backwards by 20°



self-manufactured hoist winches with 88 kN line pull and 130 m/min line speed



LICCON system - a Liebherr design - the most modern, programmable computer system world-wide for the control and monitoring of mobile cranes



outstandingly compact, 5-axle carrier with 10 x 8 drive (optional) and 4 axles steered



operative weight 60 t (5 x 12 t axle load) incl. 11 t - 15 t counterweight



"Niveaumatik", the crane and road preserving suspension system



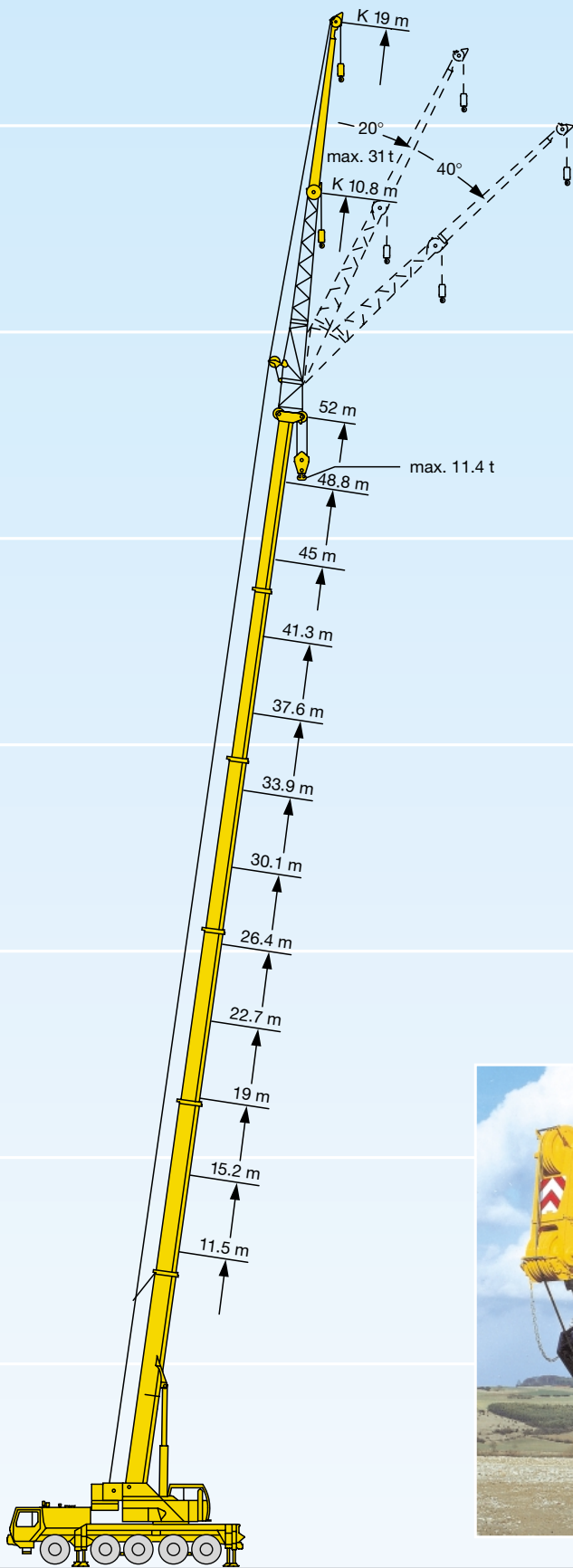
electric and electronic components interlinked by the most modern data bus transmission technique which distinctively contributes to an increase in functionality and efficiency (LSB = Liebherr System Bus)



for the carrier drive:
Liebherr turbo-charged Diesel engine of 400 kW output, exhaust emission acc. to EURO 3, ZF 16-speed gear box with AS-TRONIC
for the crane drive:
Liebherr turbo-charged Diesel engine of 149 kW output



driving cab with ergonomical cockpit and functional design



Mobile crane type Typ LTM 1100/2

The 120-tonner with highlights offered by Liebherr.



6-section, 56 m long telescopic boom for 56 m height under hook



3-section, 11.2 - 28 m long swing-away jib for 84 m height under hook, mountable at 0°, 15°, 30° or 45°



12.6 t safe working load on the 56 m long telescopic boom



oviform, extremely rigid boom profile for high lifting capacities



proved rapid-cycle telescoping system "Telematik" for the automatic extension of the boom to the desired length



variable application spectrum with 35 t, 25 t, 15 t or 7 t counterweight



electrically pilot-controlled load sensing system, 4 superimposable working motions, working speeds preselectable by steps



comfortable crane cab, tiltable backwards by 20°



LICCON system - a Liebherr design - the most modern, programmable computer system world-wide for the control and monitoring of mobile cranes



extremely compact, 5-axle carrier with all-wheel steering



operative weight 60 t (5 x 12 t axle load), incl. 7 t counterweight



"Niveaumatik", the crane and road preserving suspension system



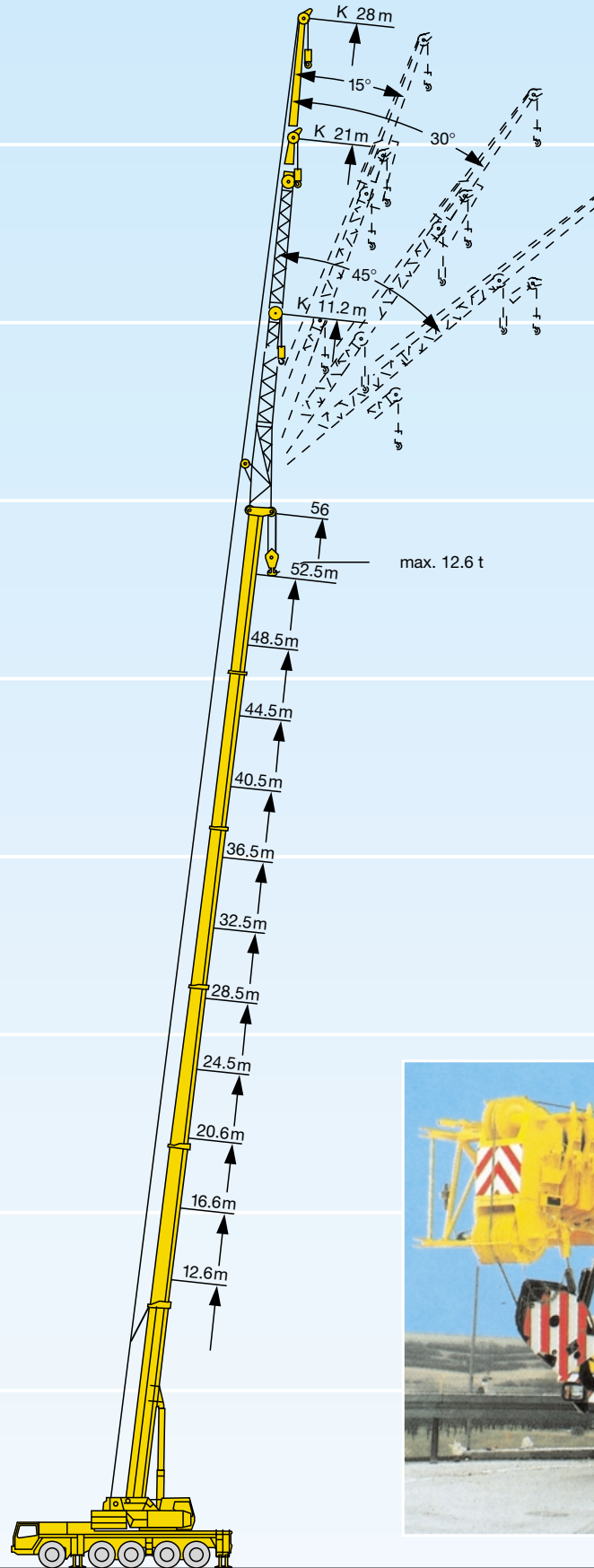
variable supporting basis with LICCON supporting force indication and inclinometer (optional)



for the carrier drive:
Liebherr turbo-charged Diesel engine of 400 kW output, exhaust emission acc. to EURO 2,
Allison automatic transmission
for the crane drive:
Liebherr turbo-charged Diesel engine of 120 kW output



driving cab with ergonomical cockpit and functional design



Mobile crane type LTM 1120/1


The 160-tonner with highlights offered by Liebherr.


 6-section, 60 m long telescopic boom for 60 m height under hook


 4-section, 12.2 - 36 m long swing-away jib for 96 m height under hook, mountable at 0°, 15°, 30° or 45°


 15 t or 13.9 t safe working load on the 60 m long telescopic boom (with 50 t / 0 t counterweight)


 **oviform, extremely rigid boom profile for high lifting capacities**


 **proved rapid-cycle telescoping system "Telematik" for the automatic extension of the boom to the desired length**

 variable application spectrum with 50 t, 35 t, 23 t, 11 t or 0 t counterweight

 diesel-hydraulic crane drive with 2 variable displacement pumps, closed oil circuits for hoist gear and slewing gear, open oil circuits for luffing and telescoping, electronic crane control

 comfortable crane cab, tiltable backwards by 20°


 LICCON system – a Liebherr design – the most modern, programmable computer system world-wide for the control and monitoring of mobile cranes

 extremely compact, 5-axle carrier with all-wheel steering

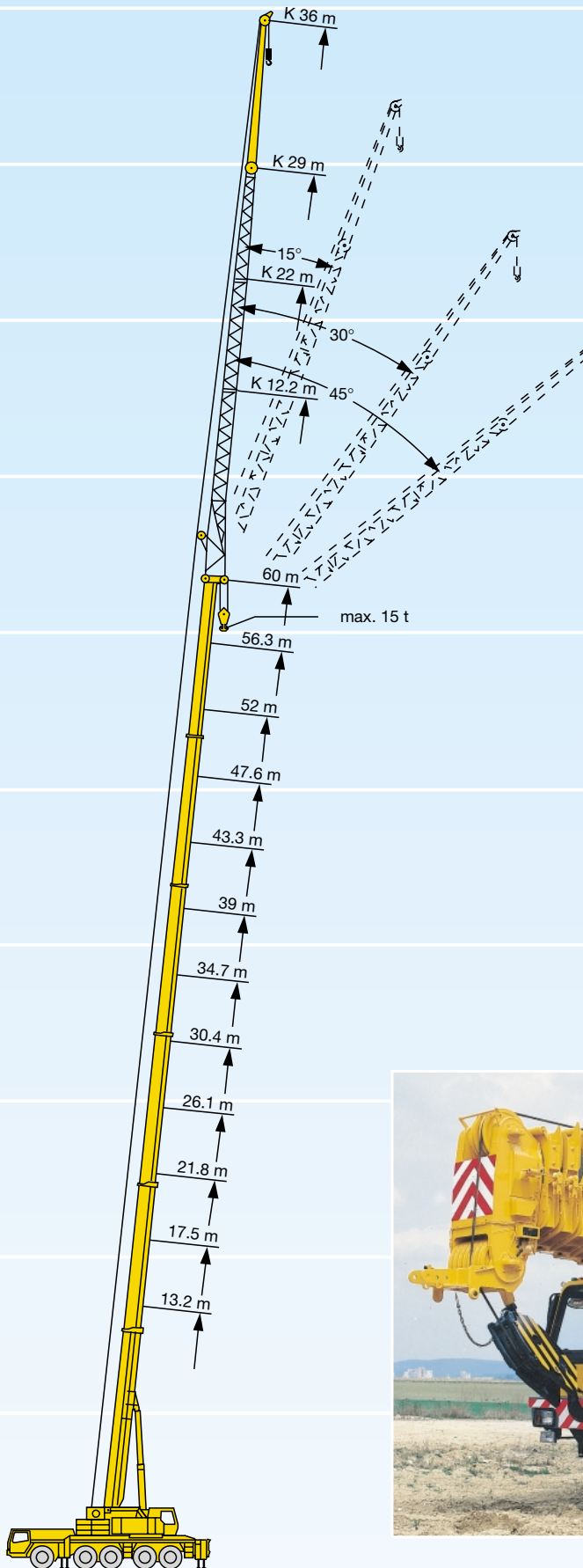
 operative weight 60 t (5 x 12 t axle load)

 "Niveaumatik", the crane and road preserving suspension system

 variable supporting basis with LICCON supporting force indication and inclinometer (optional)

 or the carrier drive:
Liebherr turbo-charged Diesel engine of 400 kW output, exhaust emission acc. to EURO 2,
Allison automatic transmission
for the crane drive:
Liebherr turbo-charged Diesel engine of 120 kW output

 driving cab with ergonomical cockpit and functional design



Mobile crane type Typ LTM 1160/2

The new 300-tonner with highlights offered by Liebherr.



5-section, 60 m long telescopic boom for 60 m height under hook



31 t safe working load on the 60 m long telescopic boom



21 m long biparted swing-away jib, 10.5 m - 70 m long, fixed or luffing jib, auxiliary jibs also in conjunction with the guyed telescopic boom for increased lifting capacity



optimized, oviform boom profile with continuous curvatures of the lower shell, improved buckling resistance, particular high stability, also in the lateral neutral axis, extremely torsion-resistant system, particularly designed for long auxiliary jibs



proved rapid-cycle telescoping system "Telematik" for the automatic extension of the boom to the desired length



variable application spectrum with 112.5, 87.5, 75 t, 50 or 25 t counterweight, hoist gear 2 and 3 pinned to the counterweight base frame, very easy mounting procedure



diesel-hydraulic crane drive with 3/4 variable displacement pumps, closed oil circuits for hoist gear, slewing gear and jib luffing winch, open oil circuits for luffing and telescoping, electronic crane control



spacious, comfortable crane cab, tiltable backwards by 20°, modern interior design, crane cab is swivelled to the rear for road transport



up to 3 self-manufactured hoist winches of 105 kN line pull and 130 m/min rope speed



LICCON computer system with new high-performance central unit (32 bit computer)



compact, 6-axle carrier, variable drive/steering concept 12 x 8 x 10 (optional)



operative weight 72 t (6 x 12 t axle load)



"Niveautomatik", the crane and road preserving suspension system, fully automatic levelling of the crane during the supporting procedure by means of push-button control



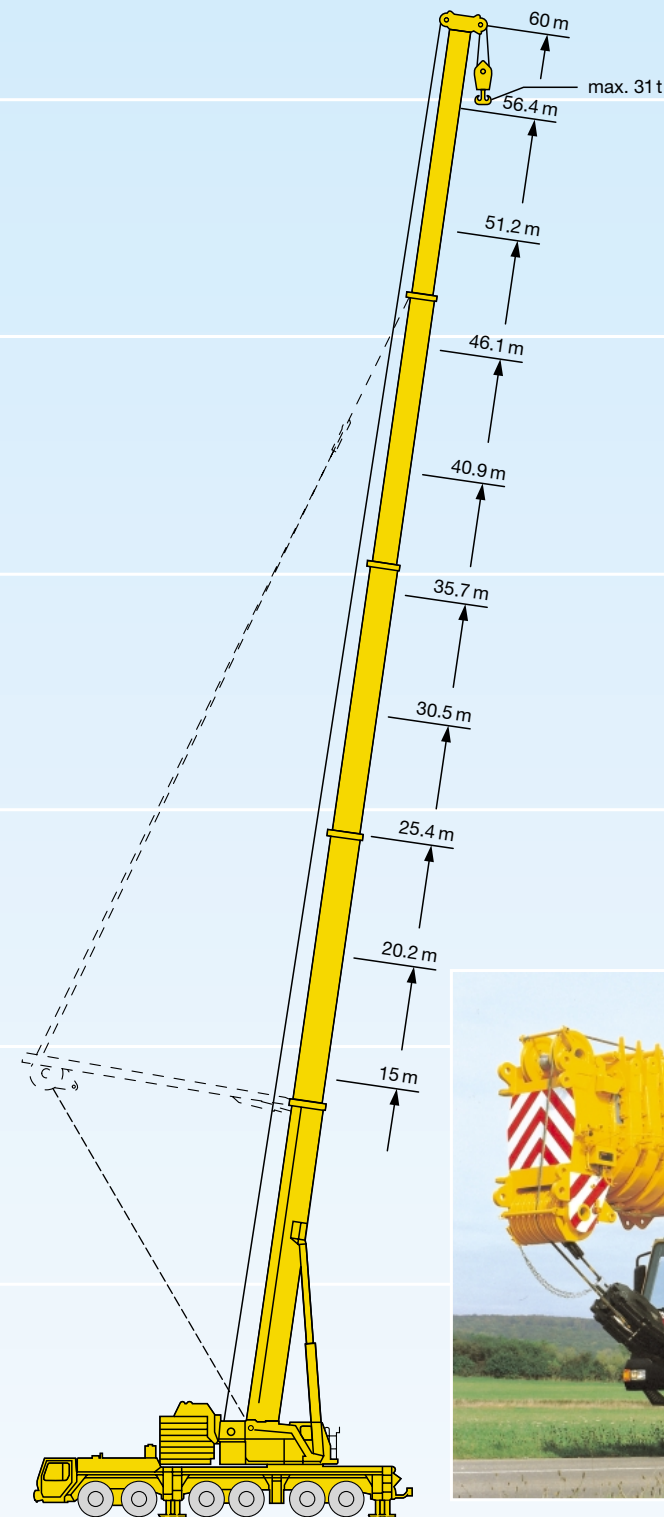
interlinkage of the electric and electronic components of the carrier and crane by most modern data bus transfer technique (LSB = Liebherr System Bus), distinctive increase of functionality and efficiency



for the carrier drive Liebherr turbo-charged Diesel engine of 440 kW output, exhaust emission acc. to EURO 2, electronic engine management with data bus technique, Allison automatic transmission with electronic transmission management for the crane drive: Liebherr turbo-charged Diesel engine of 180 kW output (IMO 1), installed crossways to the driving direction, electronic engine management by data bus technique

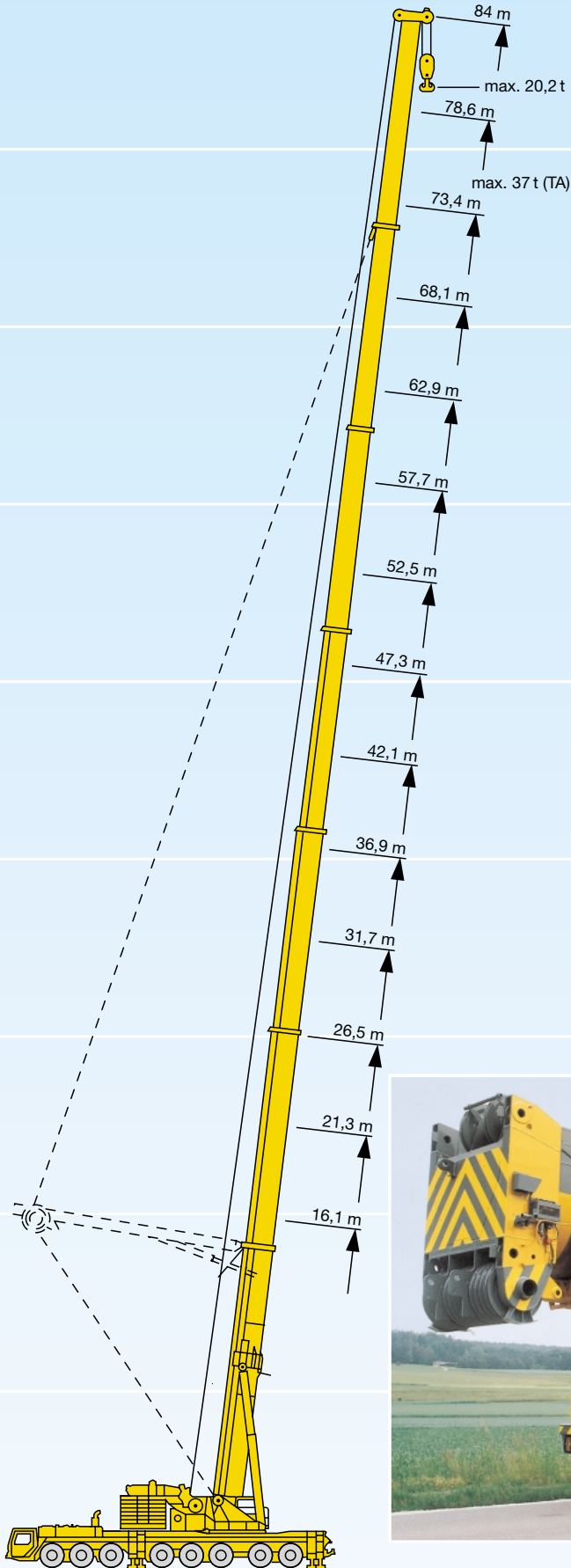


driving cab with ergonomical and functional design



Mobile crane type LTM 1300/1

The 500-tonner with highlights offered by Liebherr.



7-section, 84 m long telescopic boom for 84 m height under hook

4-section, 50 m long telescopic boom for 50 m height under hook



fixed or luffing jib of 14 m - 91 m, also in conjunction with the guyed telescopic boom for increased lifting capacity, max. under-hook height 140 m



20,2 t safe working load on the 84 m long telescopic boom
37 t safe working load on the 78,6 m long, guyed telescopic boom



oviform, wide boom profile of outstanding stability, also in the neutral axis; system of extreme torsional rigidity, particularly designed for long auxiliary jibs, internal interlocking system of telescopes



proved rapid-cycle telescoping system "Telematik" for the automatic extension of the boom to the desired length



variable application spectrum with 180 t, 150 t, 120 t, 90 t, 60 t or 30 t counterweight



diesel-hydraulic crane drive with 8 variable displacement pumps, electronic control, closed oil circuits for hoist gear, slewing gear and jib luffing winch, open oil circuits for luffing and telescoping



spacious, comfortable crane cab with new interior design, tiltable backwards by 20°, the crane cab must be swivelled to the rear for road transport



3 self-manufactured hoist winches of 126 kN linepull and 130 or 145 m/min rope speed



LICCON system - a Liebherr design - the most modern, programmable computer system world-wide for the control and monitoring of mobile cranes



compact, 8-axle carrier, drive/steering 16 x 8 x 14 (optional)



operative weight 96 t (8 x 12 t axle load), incl. 50 m long telescopic boom



"Niveaumatik", the crane and road preserving suspension system



interlinkage of the electric and electronic components of the carrier and superstructure by modern data bus transfer technique (LSB = Liebherr System Bus), distinctive increase of functionality and efficiency



for the carrier drive:
Liebherr turbo-charged Diesel engine of 440 kW output, exhaust emission acc. to EURO 2, electronic engine management with data bus technique

for the crane drive:
Liebherr turbo-charged Diesel engine of 240 kW output, electronic engine management by data bus technique



driving cab with ergonomical and functional design



Mobile crane type LTM 1500

Subject to modification.

TP 248 d. 6.00

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