The successful boom technology of Liebherr.
The new boom technology.
Liesbohr has developed entirely new 8x8-section telescopic booms for the 17m mobile cranes of the 60, 80, 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 twisting. Since the telescope 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 system
- the hydraulic boom pins for interlocking the boom sections with each other; and
- the electronic/automatic sensing 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. The exception is 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 considerable variety determine the outstanding functionality of the new boom technology. With their long telescopic booms, the Liesbohr mobile cranes of the 60, 80, 100, 120, 160, 300 and 500 t class offer entirely new application facilities.
The new 60-tonner with highlights offered by Liebherr.

- 6-section, 48 m long telescopic boom for 48 m height under hook
- biparted, 9.5 - 17 m long swing-away jib for 60 m height under hook, mountable at 0°, 20°, 40°
- 10.1 t safely working load on the 48 m long telescopic boom
- novel, extremely rigid boom profile for high lifting capacities
- proved rapid-cycle telescoping system "Tematic" 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 actuations from the crane cab in part of the standard equipment
- self-manufactured hoist winches with 67 kN line pull and 100 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 46 t (4 x 10 t axle load), incl. 10 t total counterweight and biparted swing-away jib
- "Niveoautomatic", the crane and road preserving suspension

- electric and electronic components interlinked by the most modern data bus transmission techniques which distinctively contributes to an increase in functionality and efficiency (LSB = Liebherr System Bus)
- Liebherr turbocharged Diesel engine of 270 kW exhaust emissions acc. to EURO 0, fully electronic engine management, single-engine concept
- driving cab with ergonomical cockpit and functional design

Mobile crane type LTM 1060/2

Data bus technique revolutionizes crane
The new 80-tonner with highlights offered by Liebherr.

- 6-section, 45 m long telescopic boom for 48 m height under hook
- Bi-parted, 10.5 - 15 m long swing-away jib for 65 m height under hook, mountable at 0°, 20° or 40°
- 8.7 t safe working load on the 48 m long telescopic boom
- Swiveling, extremely rigid boom profile for high lifting capacities
- Proced 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 balancing procedure with "keyhole" system
- Electrically piloted-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 control system worldwide 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 bi-parted swing-away jib
- "Niveumatic", the crane and road preserving suspension system
- Image of the electric and electronic components by most modern data bus transfer technique, interactive increase of functionality and efficiency (LSR = Liebherr System Bus)

Liebherr: turbocharged Diesel engine of 320 kW output, exhaust emission ace, to EURO 2, fully electronic engine management, single-engine concept.

Mobile crane type LTM 1080/1

Electrical system.
The 90-tonner with highlights offered by Liebherr.

- 6-section, 50 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 90 t / 13 t counterweight)
- oval form, extremely rigid boom profile for high lifting capacities
- proved rigid-cycle telescoping system "Telesatik" for the automatic extension of the boom to the desired length
- variable application spectrum with 30 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 90°
- LICCON system - a Liebherr design - the most modern, programmable computer system worldwide for the control and monitoring of mobile cranes
- extremely compact, 4-axle carrier with all-wheel steering
- operational weight 48 t (4 x 12 t axle load), incl. 1.2 t counterweight
- "Niveaustabil", the crane and road preserving suspension system
- variable supporting basis with LICCON supporting force indication and inclinometer (optional)
- for the carrier drive:
  - Liebherr turbocharged Diesel engine of 300 kW output, exhaust emission acc. to EURO II, Allison automatic transmission
- for the crane drive:
  - Liebherr turbocharged Diesel engine of 180 kW output
- driving cab with ergonomic cockpit and functional design

Mobile crane type LTM 1090/2

Internal interlocking system of the telescopic Liebherr boom technology.