

World Premiere in Bern: The Liebherr 53 K Fast-Erecting Crane

- World premiere of the 53 K fast-erecting crane
- Versatile configurations with seven hook heights
- Flexible radius between 28 m and 40 m
- Micromove: Positioning the load with millimetre precision
- Infinitely adjustable frequency converter drive units for performance-based operation

March 2014 – The 53 K fast-erecting crane will be unveiled to the public for the first time at the Bern 2014 Construction Machinery Exhibition. The new design of the 50 mt class crane is based on the successful K series concept and closes the gap between the 42 K.1 and the 65 K. The new fast-erecting crane with a truss construction and improved erection kinematics delivers more power, variability and safety on site.

The 53 K achieves a maximum hook height of 31 m which is the top value in the 50 mt crane class. With the rapid climbing system, up to three complete tower sections can be inserted practically and safely. This means that the hook height can be adjusted to suit the site situation. With the 20° jib luffed position, the maximum hook height can also be increased to 43.1 m.

With a horizontal jib, the 53 K can be configured with seven different hook heights between 15.8 m and 31 m. This makes the new K crane ideal for use on multi-occupancy residential buildings with up to eight storeys.

At the maximum radius of 40.0 m, the 53 K can hoist 1,100 kg in 2-line mode and 1,000 kg in 2/4-line mode. The maximum lifting capacity at the tip can be increased to 2,000 kg by simply reducing the length of the jib to 28 m. The 53 K is extremely flexible with its four possible jib lengths of 28 m, 34 m, 37 m and 40 m.

With its maximum lifting capacity of 4,200 kg, this crane was designed for classic construction work. Its 2/4-line automatic reeving system makes it possible to select the perfect reeving for maximum hoist speeds.

Innovative, low cost solutions for crane transport mean that the 53 K can be moved to the site in full, including ballast, by just two trucks. Its short wheelbase of 6 m and compact slewing platform design with a short overhang enables the crane to be manoeuvred easily in constricted sites. The new 53 K really comes to the fore in densely built-up areas with limited space. The crane can also be erected close to existing buildings on constricted sites and around obstacles using its high jib erection in the air feature.

The low support width of 4.2 m x 4.2 m is perfectly coordinated to the compact slewing radius of 2.50 m ensuring very few adverse effects for traffic, particularly for jobs on inner city sites.

The new 53 K features Liebherr's successful drive and controller technology. Its infinitely adjustable, energy-efficient frequency converter drive units coupled with the current collector which allows unrestricted slewing also make a valuable contribution to ensuring that loads can be handled economically. It also features MICROMOVE fine positioning mode which can be activated at the touch of a button. This enables heavy loads to be positioned sensitively and with millimetre precision without engaging the hoist unit brake. In turn this ensures loads can be manoeuvred carefully and very safely.

53 K performance data at a glance

Max. hook height:	30.4/31.0 m
Hook height at 20° luffed position:	up to 43.1 m

Radius:	28.0 / 34.0 / 37.0 / 40.0 m
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	2-line / 2/4-line
Lifting capacity at a radius of 40.0 m:	1,100 / 1,000 kg
Lifting capacity at a radius of 37.0 m:	1,300 / 1,200 kg
Lifting capacity at a radius of 34.0 m:	1,500 / 1,400 kg
Lifting capacity at a radius of 28.0 m:	2,000 kg
Maximum lifting capacity:	4.200 kg

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