

A large yellow Liebherr 35 K crane is the central focus, extending its long lattice boom from the top left towards the right. It is lifting a dark, cylindrical object. The crane is positioned on a construction site with a large pile of earth in the foreground. In the background, there are several houses on a hillside and a larger building under construction. Another crane is visible in the distance. The sky is clear and blue.

**The 35 K. The crane
that does more.**

LIEBHERR

The better crane.

LIEBHERR presents the 35 K, the crane that does more. Its superior design and convincing performance make it the ideal machine for small- and medium-scale construction work. Other features are high mobility and fast erection.

The complete crane in ready-to-erect form, together with its ballast, can be transported from one site to another in one single journey: part of the ballast is carried on the crane, the remaining 11.5 tons on a suitable truck. This saves transportation costs, the cost of loading the ballast – and above all, it saves time.

The basic version of the 35 K has hook heights of 11.7 m and 20 m; additional tower sections provide hook heights of 22, 24 or 26 m.

A vital feature for very difficult building sites is that the 35 K can also be transported without ballast – and then weighs only 13 tons.

A further advantage of the 35 K is its high manoeuvrability, thanks to good ground clearance, 90° turning angle of the front axle, favourable wheelbase and low transit weight.

The 35 K can be transported as a trailer, semi-trailer or with a high-speed axle (allowing a speed of up to 80 km/h). The front and rear axles are interchangeable, allowing the 35 K to be driven in either direction for added convenience. When in transit, the tower does not project beyond the tow bar, so that the crane can be propelled into the most restricted of sites by a forward control truck.



**All in one journey – crane
and ballast. The 35 K.**

Mounting the Liebherr 35 K on a rail track is easy, rapid and economical. The crane is driven between the rails and can be raised onto the track from the transit axles; no other supports are necessary, which means that the crane is independent of ground surface conditions. Wherever the 35 K can be driven, it can also be mounted on the track and supported without any further necessary aids - on rails up to 500 mm high. All operations are conducted from the control panel. This means that you already start to save time and money when erecting (and likewise when dismantling, of course).



Stationary or railborne

With folding outrigger arms for stationary position or outrigger arms suitable for combined

operation - stationary and railborne - the 35 K is a highly versatile crane.

Vertically folding outrigger arms

The outrigger arms are equipped with a weight equalisation device and are therefore extremely easy to move: it takes only one person - and little effort - to fold the arms in or out.



**Automatic railing.
The 35 K.**



By virtue of its novel mid-air jib erecting system, the 35 K can adapt perfectly to conditions on the building site. While it is being erected, the front part of the jib can be controlled independently, for instance raised steeply in narrow working areas, and lowered only when at a sufficient height - flexible assembly for the narrowest of spaces. An additional equipment variant allows tower sections to be added before the jib is folded out - an important feature for narrow building sites where the jib can only be folded out at height because of obstructions.

The crane can be erected in any position in relation to the undercarriage, through full 360°.



Mid-air erection. For flexibility in every situation. The 35 K.

Higher, faster, stronger and more economical – the Liebherr 35 K with variable jib: it can be operated with the jib in a horizontal position, at an angle of 30° with trolley travel and with the front jib section raised at up to 45° – even with a suspended load on the inner section of the jib.

The result of this construction principle is a genuine all-purpose crane. Where there are obstructions, the front section of the 35 K's jib (even with its maximum suspended load) can be raised and slewed past the obstruction – whether operating or off-load. The 35 K can therefore perform tasks for which a larger crane would normally be necessary.

The jib can be raised to the 45° position from the control panel at any stage of operations.

The 35 K is a crane which really can do more: whether in transit, while being railed or ballasted, during mid-air jib erection, re-reeling, climbing or its highly automated erection procedure. It sets new standards which others have yet to equal.

Not even counting the different steep-angle positions, the 35 K offers a range of five different hook heights, and the high-speed climbing device allows a retracted hook height of 11.7 m and further hook heights of 20 m, 22 m, 24 m and 26 m to be obtained rapidly at any time.

The 35 K's special features

Its tight-welded, enclosed sections give it greater strength, increased rigidity and a longer operational life. It is equipped with a twin-drum winch with easy, rapid drum switching and a specially grooved hoisting drum. Hoisting drum spooling is fully automatic for both erection and dismantling, with no slack rope. The slewing gear is driven by a slipring motor, with a fluid coupling for smooth, jolt-free slewing movements independent of building-site conditions.

There are roller tower guides between the upper and lower tower sections, for jolt-free, smooth telescoping movements to prevent damage to the paintwork. A fully-automatic device locks together the upper and lower tower sections – additional operations are unnecessary. Other features: telescoping limit switch for added safety, conical connections between the tower and the slewing platform – worn holes are a thing of the past.

The 35 K can now be operated in greater comfort: it is supplied with an upholstered seat and adjustable control panel support.

The 35 K also leads the field where maintenance is concerned: maintenance intervals are much longer than normal. Galvanized ropes and small components, and chromium-plated, ground brake-lining contact surfaces provide good protection against corrosion and moisture ... to ensure a lengthy operating life.



**The 35 K. The crane that does more.
Much more!**



High-speed mechanism for climbing from ground level.

The jib is raised from ground level with the high-speed climbing system. Four or five hook heights - depending on equipment mode - together with the hook heights possible in the 30° position make the 35 K supremely adaptable and flexible.

The basic version with telescopic tower allows a retracted hook height of 11.7 m or 20 m when extended. The addition of further 2 m tower sections permits hook heights of 22, 24 and 26 m. The tower sections are complete units with ladder and platform included.

The climbing process is very simple and can be completed in next to no time: the trolley brings the tower section to its assembly position, the inner tower is pinned to the new tower section, the rope cross-beam on the assembly mechanism is attached to the new tower section to be assembled and the tower extended in one movement. The generous number of guide rollers of ample size ensures perfect telescoping movement: without jolts, noise or damage to the paintwork.



**Variable hook heights.
The 35 K.**



Crane travel: by two spur gear braked motors at diagonally-opposed corners. The spur gears are provided with long-life lubrication. The single-disc brake provides increased corrosion protection.



The outrigger arms can be folded in and out, and are equipped with a load equalisation device for easy folding during erection and dismantling. These folding arms can be supplied in various versions for the 35 K: for stationary operation alone or for combined stationary/railborne operation.



The 35 K has a twin-drum winch. The special grooving on the large-diameter hoisting drum ensures precision rope spooling and rope protection. The easily-accessible driving pins make switching over from the hoisting to the erecting drum a quick, straightforward procedure. The hoisting drum is equipped with a slipping clutch for automatic rope tensioning during erection or dismantling.



The slewing gear features a slipping motor, spur and planetary gear trains, a fluid coupling and an electromagnetic disc brake for superior performance and a decisive lead in operating efficiency. Slewing movements are smooth and jolt-free. All loads can be moved according to the principle "Precision, Accuracy, Safety". The ball slewing ring is specially suited to the operating needs of the 35 K. Maintenance intervals have been increased.



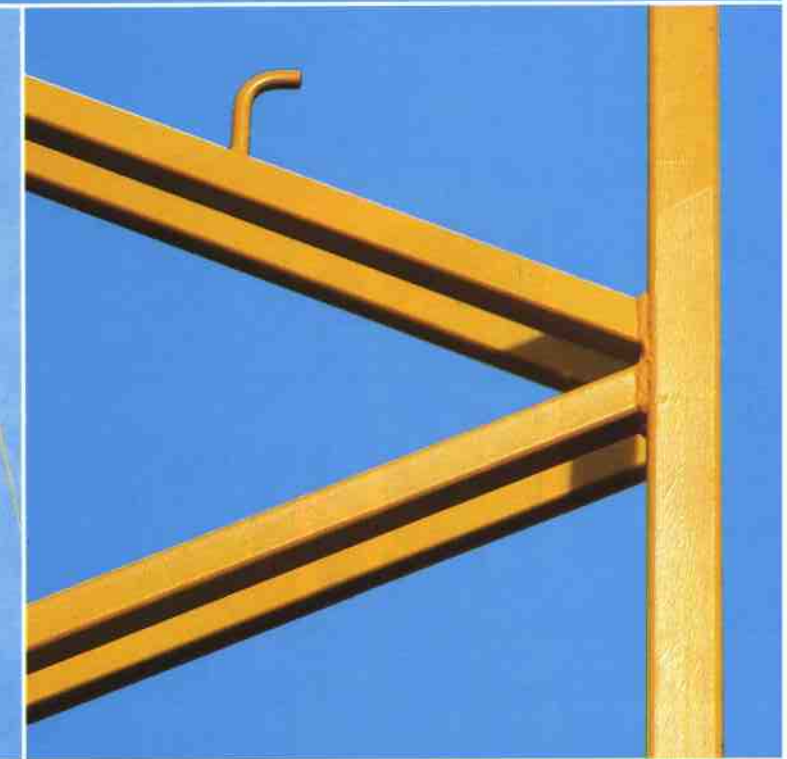
The trolley travel gear has two speeds. The trolley runs smoothly and jolt-free on its lateral guide and "Zellamid" support rollers. The worm gear transmission and the brakes have a high standard of corrosion and moisture protection.



The 35 K has an automatic hoisting rope re-reeving system. The crane driver can re-reeve from the control panel without any further aids being necessary - changing from two rope runs to four or back. This means increased performance, with the correct and most economical speed always available for each load holding cycle.



The inner and outer towers are locked together automatically and positively. For dismantling, unlocking is also automatic. A telescoping limit switch provides extra safety by switching off at the end of the telescoping movement. Telescoping guide rollers ensure rapid, jolt-free telescoping movements without damage to paintwork.



The corner posts and diagonals have tight-welded, enclosed sections; the diagonals intersect at the centre of the sections so that the force lines meet in the middle of the structure, preventing the corner posts from being subjected to additional moments. Advantages of this construction principle are its favourable design and transport weight and its longer lifespan; the crane also has less area exposed to the wind and requires correspondingly less ballast.

Unique technology. The 35 K.



Operating the 35 K: from the control point on the lower tower section, now raised to allow a good view of the building site; from the operator's cab or from a remote position on site.

Optional: a second operator's cab at the level of the connecting point between the two telescoping sections of the tower.

The operator's cab is ergonomically designed for comfort: upholstered seat, adjustable control panel support, frameless windscreen and all-round glazing for optimum vision and rapid, safe, effortless working.

Because even the cleverest of crane designs loses half its value if it is too difficult to operate.

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