

Pointing the way: 20 K, 22 K, 26 K and 32 K fast-erecting cranes.



LIEBHERR

How to build cranes.

A crane must be straightforward to transport, fast to erect, adaptable to a wide range of tasks and able to operate both effectively and reliably. These are decisive factors for on-site quality and economy – and also determine how competitive a contracting company is.

Liebherr is an efficient partner when it comes to lifting and moving loads. Liebherr cranes meet supreme standards of utility and progressive design.

These fast-erecting cranes are designed for use on small- and medium-scale projects: they are exceptionally mobile and efficient, uncomplicated and highly versatile.

Their mere silhouette reveals the difference: instead of open angles, the telescopic tower consists of fully-enclosed box-sections and the jib of tight-welded, fully-enclosed sections, for extra strength and durability.

Low-height tower construction means that the jib does not need to be folded to one side in transit. As a consequence, the jib sections do not have to be folded out and pinned in place during erection.

The 32 K has four raised-jib positions of 10°, 15°, 20° and 25° as standard (the 26 K has it as an option) – with trolley travel and progressive load capacity. In addition there are extended and retracted hook heights. The 20 K and 22 K are also available with a 20° raised jib angle as an option. The two bigger cranes also have a 45° clearance position for slewing past high obstacles, even with a load suspended from the pivoted section – all operated from the control desk. If needed, the load can also be moved in the pivot section zone.

The construction of the ropes already meets the machinery guidelines of the European Community.

These cranes have it all – advanced technology that benefits the user.



**Pointing the way
in technical progress.**

As their name implies, Liebherr 20 K, 22 K, 26 K and 32 K fast-erecting cranes can be put into operation very rapidly, as complete, ready-to-erect units. They can be transported with or without ballast. The 20 K and 22 K can remain fully ballasted. Dependent on truck size, the 26 K and 32 K too can be moved in a single operation from one site to another with their complete ballast: part of the ballast remains on the crane (it is best located above the rear axle), the remainder on the truck.

With the steered axle capable of turning through 90° and no crane section protruding beyond the towbar, they are fully manoeuvrable on site.

When in transit, the crane tower rests only on the slewing platform, another factor which enhances manoeuvrability, especially if the truck has to pass through restricted site entrances.



When mounted on a high-speed axle, the 20 K and 22 K can be transported together with their entire ballast.

For transport as a trailer, only one ballast slab need be removed. This slab can be removed by the crane's own hook.

The 26 K and 32 K can also travel as a semitrailer, with high-speed axle they can travel at up to 80 km/h on motorways.



**Pointing the way:
transportation.**

With their ingenious erecting kinematics that are incredibly easy to operate, these Liebherr cranes raise themselves on to the rails or outriggers from their transport axles - in any surface conditions.

No auxiliary supports such as jacks, air bags or timbers are needed.

The well-planned Liebherr erecting concept, in conjunction with a special axle connecting combination, is used for both raising and lowering operations. Even on uneven surfaces the axles can be pinned or unpinned easily. The amount of lift is 410 mm at the front, on the 26 K even 507 mm, and 135 mm at the rear. The axles can be interchanged (at either front or rear).

Summary: the superior design of Liebherr fast-erecting cranes becomes evident the moment they reach the site, saving you considerable expense.



**Pointing the way:
mounting on outriggers or rails.**



The 26 K and 32 K offer further innovations when it comes to ballasting: using the tower erecting mechanism and a special hoist, ballast slabs can be transferred from the truck to the slewing platform from any point, at an outreach of up to 5.0 m on the 26 K and 6.5 m on the 32 K. The ballasting device is always ready for use. It can also be used for loading the transport axles and pinning them into position.

This feature does not apply to the 20 K and 22 K, as the entire ballast can be transported by semi-trailer. For transport as a trailer, only one ballast slab need be removed. This slab can be removed by the 20 K's and 22 K's own hook.

Summary: the patented Liebherr ballasting device puts the crane to work more rapidly, straightforwardly and reliably.

**Pointing the way:
ballasting.**



Erecting procedure for these Liebherr cranes is based on practical experience and is therefore straightforward and efficient. Thanks to their automated erecting procedure, these Liebherr cranes are ready for use in next to no time: preparatory work regarded as unavoidable elsewhere, such as folding out the jib and manual rope tensioning, is no longer necessary.

The jib folds out without coming into contact with the ground. As the erecting procedure after transportation by road can be performed at any angle through a range of 360°, even very restricted sites present no problems. The front jib section of the 26 K and 32 K can be moved independently of the pivot section while the jib is being unfolded, so that it can slew past any obstacles. These cranes adapt perfectly to prevailing site conditions. They can also be folded out over building excavations.

When the jib is erected in the air, it describes a very steep course – of particular benefit in restricted conditions.

The inner and outer tower sections are pinned rigidly together automatically.

Trolley travel rope and hoist rope are automatically tensioned throughout the entire erecting procedure.

Upper guying on the jib is by telescopic rod, to simplify the assembly procedure and enhance safety.

Summary: Liebherr 20 K, 22 K, 26 K and 32 K self-erecting cranes can even be set up in conditions where crane operation would normally be impossible without the assistance of a truck crane.

**Pointing the way:
erecting.**



The outrigger undercarriage of these cranes, fabricated from welded and sealed sheet-metal sections, is fitted with horizontally pivoted outriggers. The crane can be levelled effortlessly and reliably via the outrigger jacks with their trapezoidal-pattern fine threads.

The dual-drum winch gear is driven by a three-phase pole-changing winch motor fitted with a separate cooling fan as standard, in addition to the customary impeller fan. The thermistor-type motor protection and separate fan prevent operating interruptions. An easily



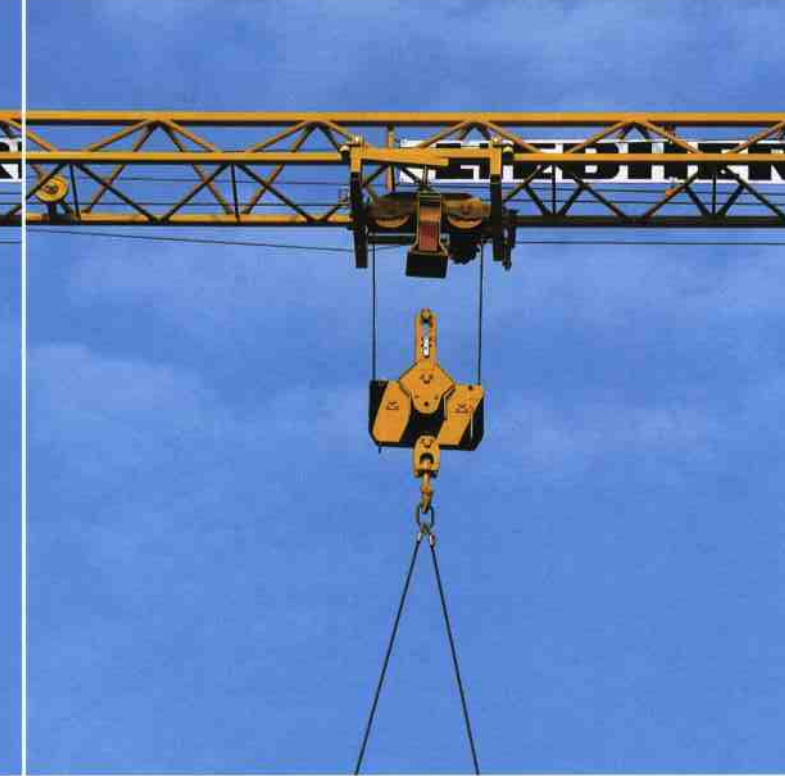
The rail wheels are flangeless. They have track guide rollers, and therefore incur no wear.

accessible pin is used for rapid changeover from the hoisting to erecting winch. A slipping clutch automatically tensions the hoist rope during erecting and dismantling.



The 20 K, 22 K and 26 K achieve their maximum load capacity with two rope runs; the 32 K can operate with 2/4 rope runs. On the 32 K, an automatic system, operated from the control desk, enables re-reeving at any point along the jib, on or off load. This function ensures that the crane

The special drive unit with slipping motor, three resistance stages in each direction and fluid coupling permits gentle, stepless, jerk-free slewing movements. The crane operator can apply slewing power in the opposite direction at any time as a form of corrective action. The slipping unit permits unlimited slewing.

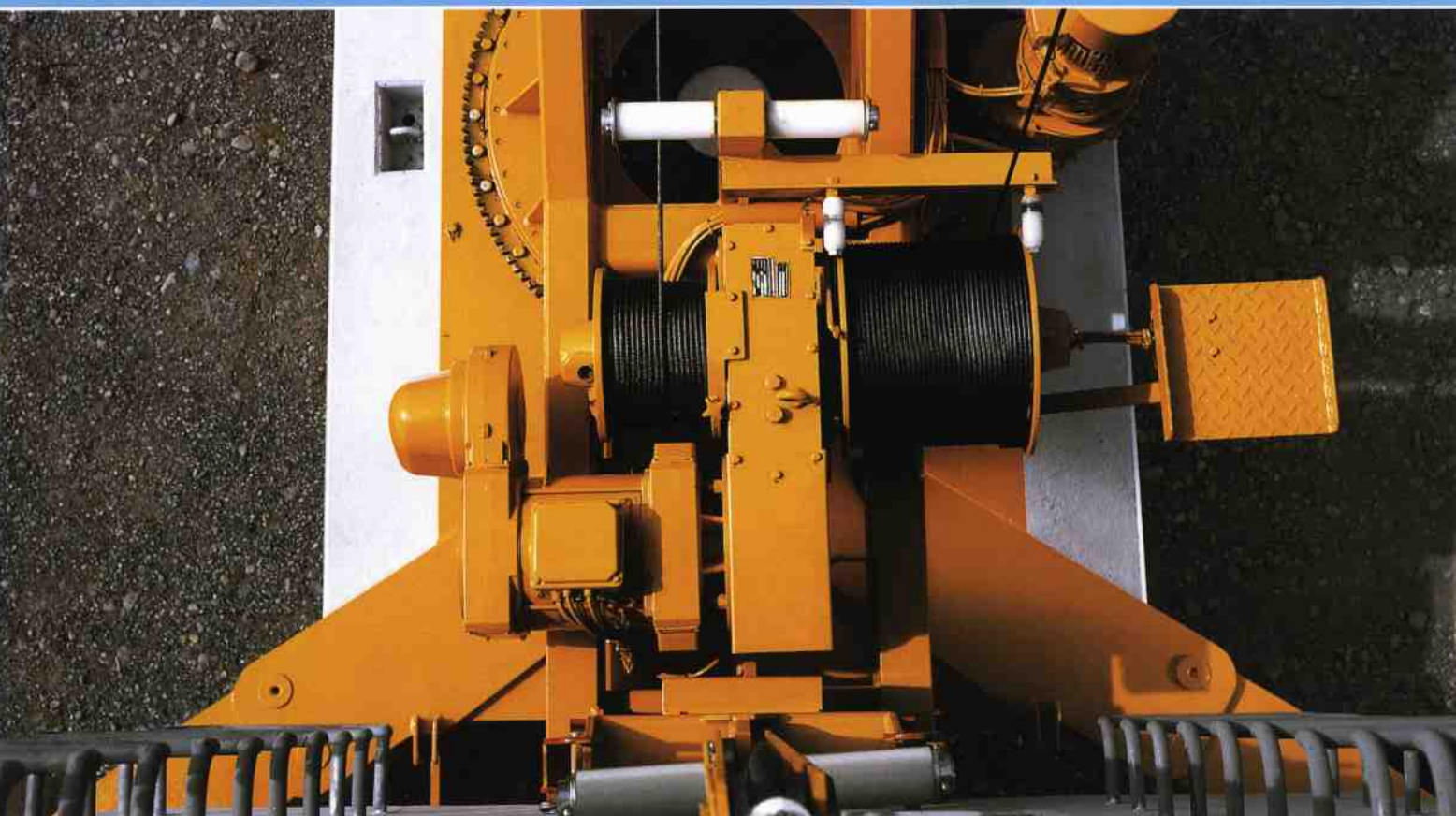


always operates at its most economical hoisting power and speed, for maximum efficiency.

The trolley's lateral guide and Zellamid support rollers guarantee smooth, jerk-free movement.

The trolley gear of the 26 K and 32 K has two speed stages, with advance slowdown as standard to prevent the trolley from reaching the jib end at an excessive speed.

The drive for the patented ballasting system and the 45° elevated jib position is located above the trolley drive on the 26 K and 32 K.



**Pointing the way:
performance.**



Pointing the way: controls.

The lower control panel (standard) is mounted in a raised position. At extra charge, a variable-height elevating cabin can be supplied, affording a good all-round view, being designed in accordance with the latest ergonomic research. A weather protection enclosure is also available as an option for the lower control stand.



Printed in Germany by Eberl LBC-400-01.93-4.e

Subject to modification.

Please contact us

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