

Time-tested with a fresh approach

The K series

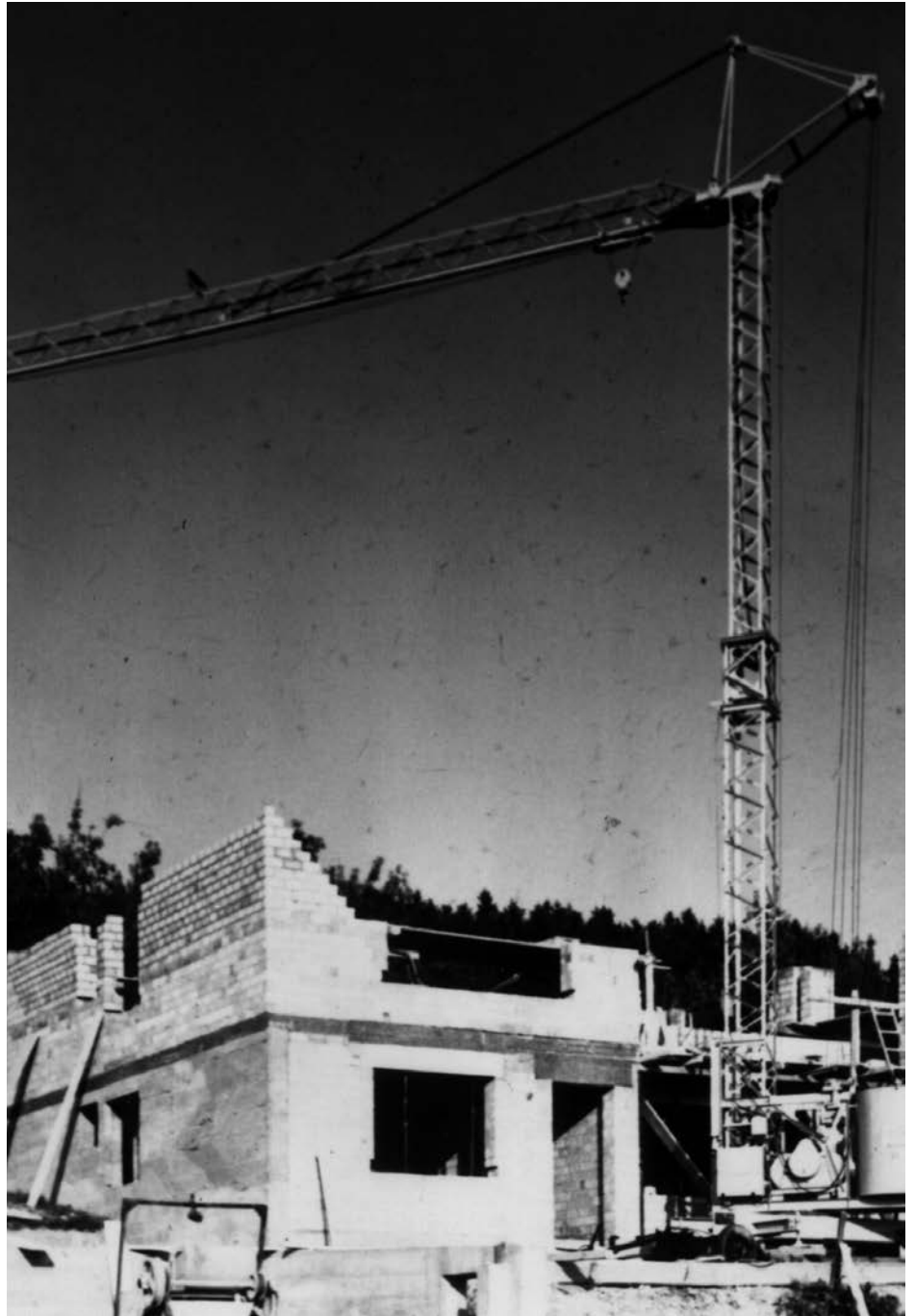
Whether it's more hook height or larger load capacities, a tight assembly space or obstacles on site, K cranes are designed to adapt. Their telescoping lattice tower concept and jib with adjustable radius deliver optimal flexibility.

www.liebherr.com

LIEBHERR

Fast-erecting cranes





A long tradition...

The first K-series crane was delivered in 1961. The construction world has changed a lot since then, but the basic premise behind fast-erecting cranes is still the same. Your construction sites require particular flexibility, high lifting capacities and a crane that is low-maintenance as well as quick and easy to transport and assemble.

K series



... with a modern approach.

Ever since they were launched, Liebherr's K cranes have provided you with the lifting solutions you need, for everything from single family homes to large industrial projects.



Equipped with modern drive units, an intelligent control system and a wide range of assistance systems, the current K series is still based on the time-tested principle of the fast-erecting crane. Their smart erection process and lots

of different options for adjusting hook height and jib length make them easy to use. And thanks to their optimised external dimensions, they will fit in almost any gap.

K cranes at a glance

External cabin

for optional use, can be installed without additional equipment

Low maintenance

trolley drive in the jib with easy rope movement

Intelligent control system

PLC system, graphic display, remote diagnostics, etc.

Climbable tower sections

Zero-play tower connection

Fully automatic, rigid connection of the inserted tower sections

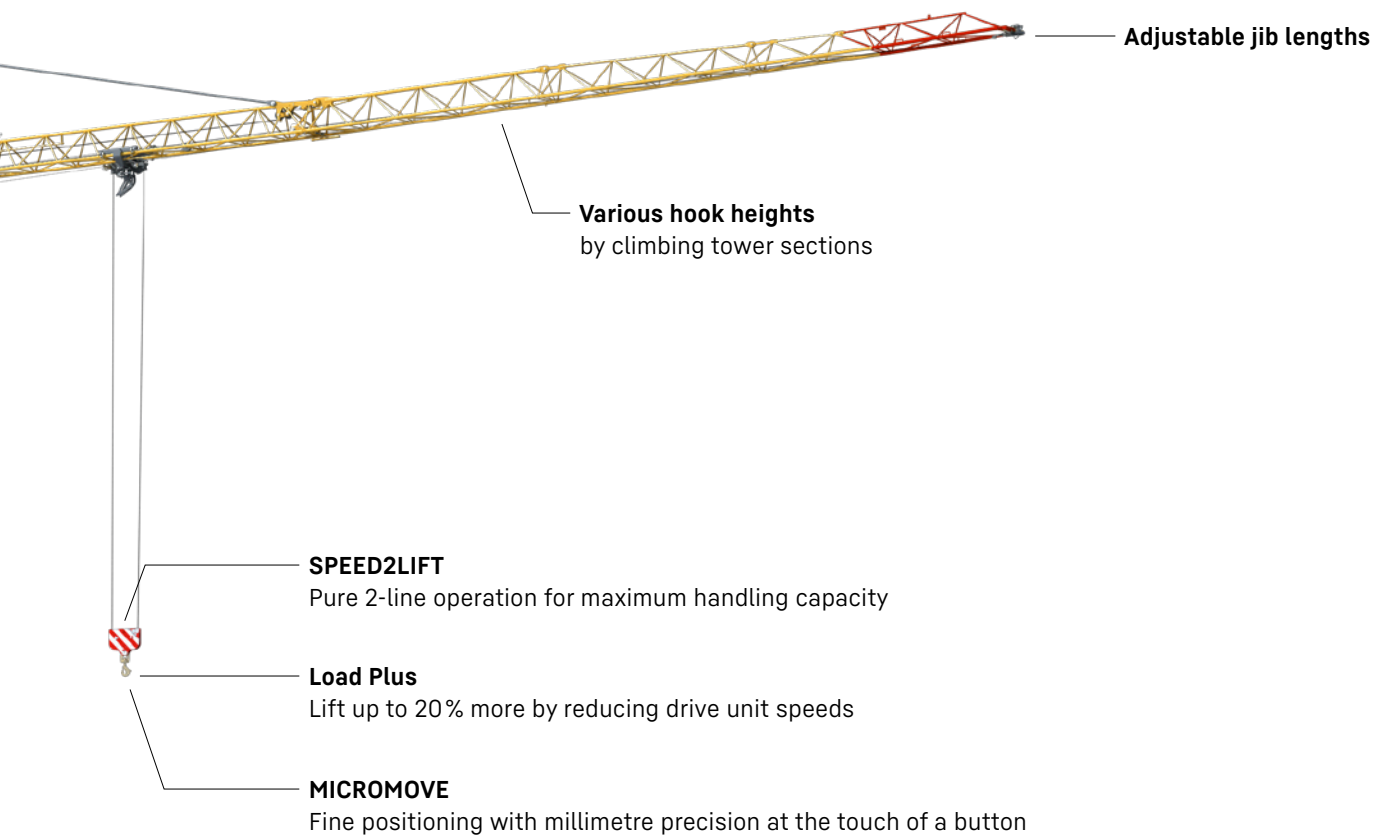
Ballast with centring device

Integrated intermediate hook heights

Variable slewing radii

Quick connection

for zero-play connection of the tower to the slewing platform



A coordinated concept

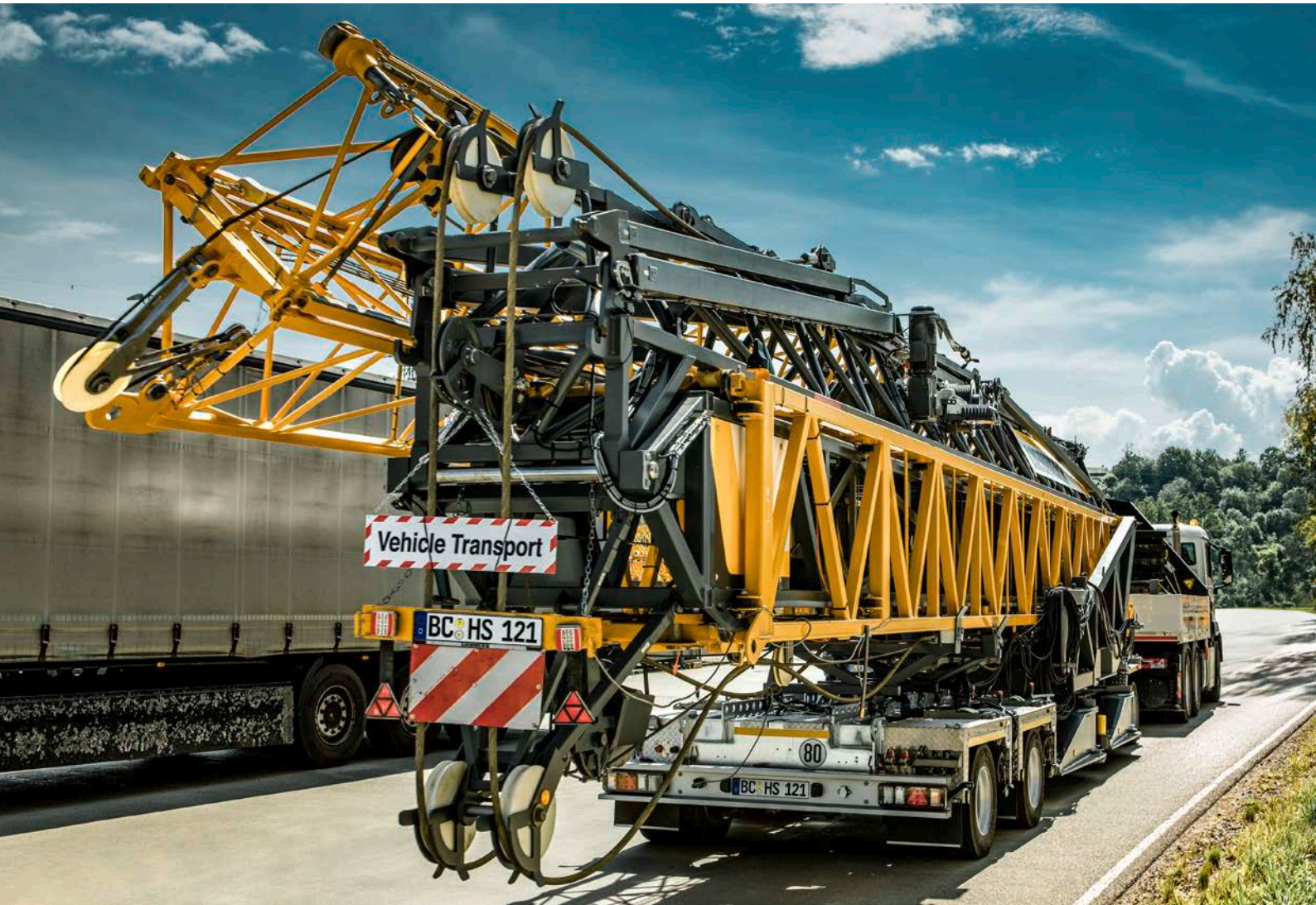
Reducing time and costs without comprising on quality is a constant challenge for building contractors. The K series of fast-erecting cranes, which really do live up to their name, will help you to meet this challenge.

The cranes are transported onto site as a ready-to-erect unit and can then be assembled quickly using their smart erection concept. Low personnel and logistics requirements ensure that your costs and time plans can be met.





Transport



Compact and fast from A to B

Lifting capacity, hook height and jib length are the key features that spring to mind as essential to the success of a construction site. But your crane also has to get to where it is needed. To ensure that your journey doesn't come to an abrupt end, all K series cranes are optimised for transport. This not only applies to transport to the construction site, but also to manoeuvring on the site itself. Long journeys are not a problem and neither are those tight construction sites with lots of uneven ground that you so often have to deal with.



The choice is yours

The modular axle portfolio of high-speed and low-speed axles, and a semi-trailer option, offers the right transport solution for every location. Existing axles can also be used.



For uneven sites

The K series features high embankment angles, meaning that you can negotiate narrow roads and constricted sites with ease.



Tower sections on truck

The external dimensions are optimised for transport by truck.



Twin tyres

Twin tyres prevent sinking when the road doesn't go as far as the construction site.



Crane transport via semi-trailer

For short transport length requirements.



Mobile crane attachment points

For when it's not possible to drive onto site.

LiTRAX modular axle system

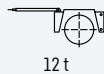

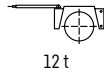
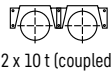

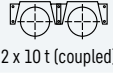


The new LiTRAX axle system is designed for modular use and offers various combination options. All sizes of Liebherr fast-erecting cranes can be transported using a semi-trailer or a truck and trailer combination.

And thanks to a top speed of 80 km/h, cranes can be delivered to site in no time at all.

LiTRAX axles also feature lots of practical functions for everyday use.

LiTRAX axle combinations

Combination	Axle 1	Axle 2	Axle 3
2-axle trailer	 12 t	 12 t	-
3-axle trailer	 12 t	 2 x 10 t (coupled)	
Semi-trailer	 12 t	 2 x 10 t (coupled)	



Into the smallest gap

LiTRAX makes manoeuvring on site even more comfortable. The LITRAX HS-123 rear steering axle makes sure you can position your crane in even the tightest of gaps. This applies to use as a twin axle for larger cranes and as a single axle for smaller machines.



Always safe on the road

Truck and trailer combinations with fast-erecting cranes are generally long and therefore difficult to control. Newly developed driver assistance systems for more stable cornering and braking help drivers and make the crane's journey to site safe. That means that your crane is always safe on the road on LiTRAX axles.



When faced with major unevenness

Height differences on sites are often substantial and must be compensated for when removing the crane from the axles. The special air suspension levels the axles by up to 26 cm. This allows the crane to be removed without having to improvise.



Built to last

The corrosion-free construction made of hot-galvanised steel and aluminium delivers a long service life.



LED lights

The axle lights are fitted with bright, long-lasting LEDs.



Low design

Ample distance between the crane and axle allows the axle to be installed easily.



For tight corners

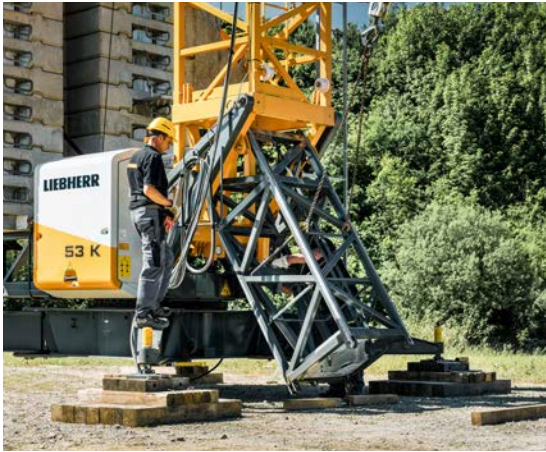
The 180° angle lock of the steering axle ensures outstanding manoeuvrability on site.

Erection



Getting ready for action

Low-maintenance rope kinematics allow the crane to be assembled without need for extra equipment. A choice of various erection curves means you can tailor assembly to suite site conditions. This means that even the largest K crane can fit the smallest of gaps. And if there just isn't enough room on site, all cranes can be assembled by mobile crane.



Climbing

K cranes allow tower sections to be climbed. Together with various telescoping steps, this means that each crane has up to eleven intermediate hook heights. As a result, K cranes can be used on lots of different sites and grow as the building rises.



Full use of reach

Thanks to their short overhang, K cranes can be positioned close to existing obstructions on sites. This means that the full reach can be utilized after erection.



Jib tie rods

Guying the jib using tie rods ensures safe erection and high stability in operation.



Without additional equipment

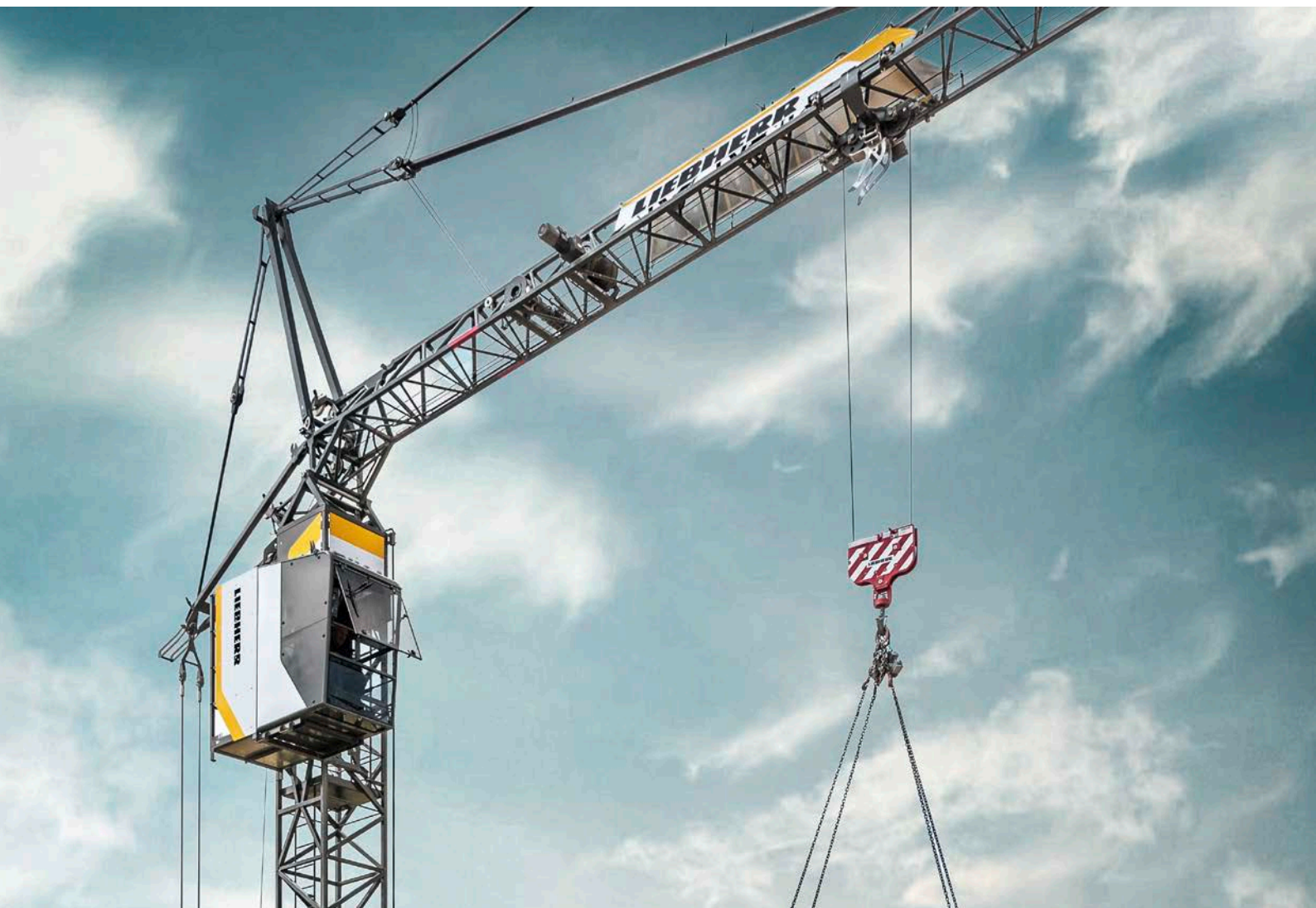
The interplay between the hoist and assembly winches allows fast, easy self-ballasting.



Quick connection

Simple interlocking of the tower and slewing platform with just one strike of a hammer.

Cabin



Keeping an eye on things

Not every site needs a cabin. But the external cabin developed for all modern K cranes can be used whenever the need for one arises. The cabin can be installed without additional equipment. An integrated control stand and display ensure an excellent overview of the working area.



Safety at great height

Climbing into the cabin is easy and safe thanks to an internal access ladder and a series-standard passage opening. Installation on the outside of the tower means that the crane operator can be rescued easily in an emergency situation.



Clear view

The new cabin with ergonomic controls ensures the crane operator has space and enables efficient working without fatigue. The external cabin also provides the crane operator with a clear overview of their site. This cabin fits all newer models of our K series.



Cabin installation

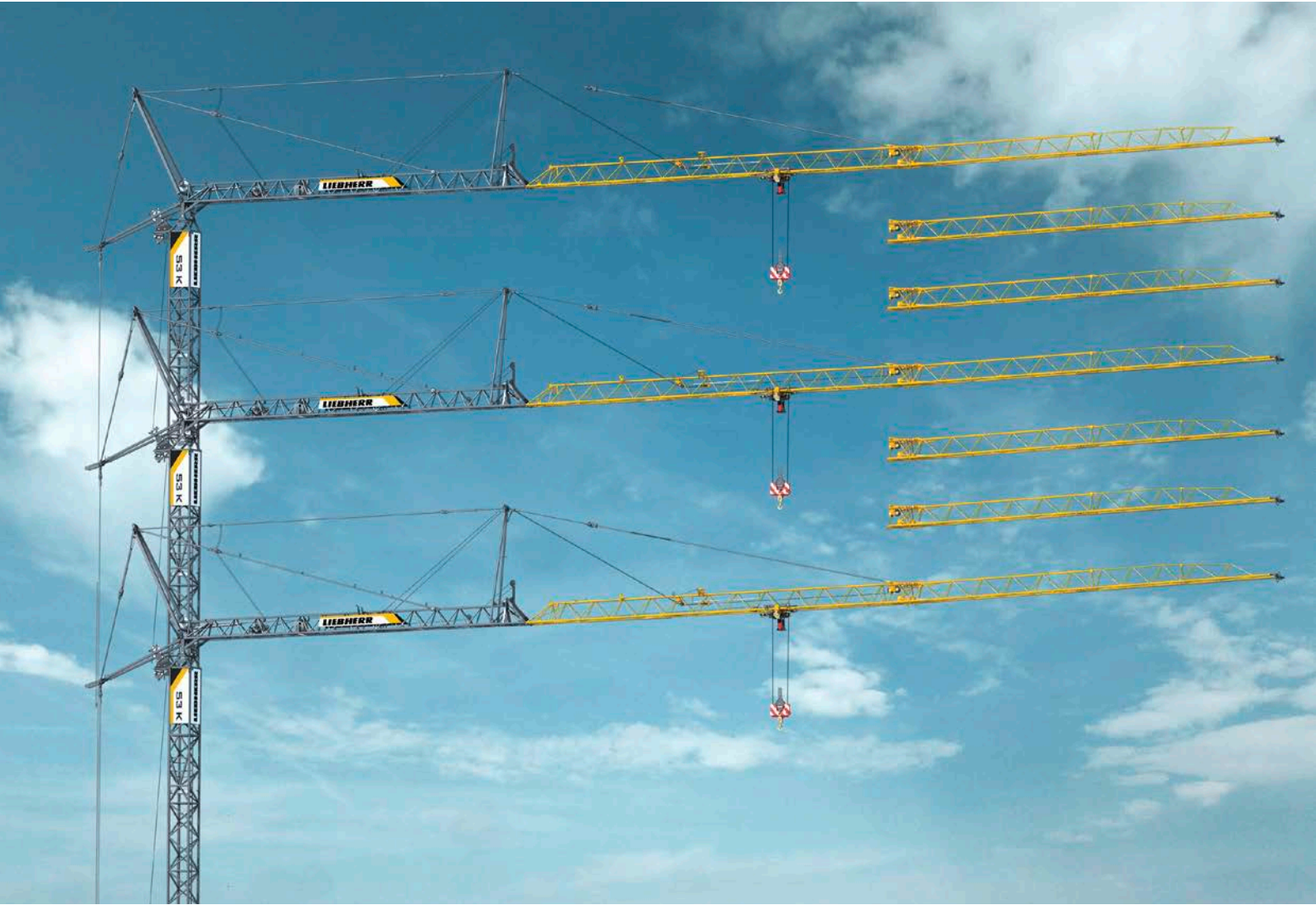
Safe and easy by the crane itself.



Ergonomically arranged operating elements

For working without fatigue.

K cranes in operation



K cranes are used for everything from building single-family houses to large industrial projects. Their exceptional adaptability with precisely graduated hook heights, and luffed and obstacle-avoidance jib positions, make fast-erecting cranes the perfect choice for any building site. Jobs under high voltage cables or inside buildings are also possible thanks to the telescoping tower. You get to decide what your site needs!



Obstacles or high destinations

Any obstacles in and around the construction site can be avoided by means of an obstacle avoidance position. The jib can also be luffed on K series cranes. Such extensive flexibility means that your crane will always adapt to wherever it is needed.



Reach with load capacity

K series jibs can be adjusted to different lengths, giving you the flexibility you need for construction sites of all sizes. The load curves are adapted to the jib lengths, making the crane a versatile construction machine.



Variable slewing radius

By reducing the slewing radius, the crane's footprint can be reduced by more than 35%. This enables the crane to be positioned closer to buildings and to tackle jobs on constricted sites. Choose between a reduced footprint or less ballast.

* Using the example of the 81 K.1



Extreme situations

Working under obstacles such as voltage cables with the tower retracted.



Control stand

Operation from the raised control stand.

Litronic – The Smart Assistant



**Technology that equals
larger cranes**

The K series features the modern assistance systems you are already familiar with from our top-slewing crane series. This makes work productive and safe.



Modern construction in the 21st century is characterised by ever greater complexity in less space, coupled with time and cost pressure. The demands on construction machinery and its operators are growing, especially in the tower cranes sector. To support crane operators in their work while boosting handling capacity, reliability and safety, our control system features a series of modern assistance systems.

The programmable logic control system increases safety during crane operation. The central computer compares the values received from installed sensors with calculated values. In the event of significant deviations, crane operations are stopped.

Control system



Load Plus

A tower crane works at the limit of its lifting capacity for very little time. The Litronic control system provides additional power for occasional individual lifts of heavy loads. The lifting load can be increased by up to 20% at the push of a button.



Micromove

Building brick by brick is increasingly becoming a thing of the past on today's construction sites. Prefabricated components, such as filigree concrete slabs, have long since become commonplace. Both cost and time pressure along with increasing safety requirements mean loads have to be handled with particular care.



ABB

Inner city construction sites in particular are often tight and adjacent to existing buildings, which cannot be swung over when carrying a load. Traffic routes such as railway lines and motorways, as well as public facilities like pre-schools, have to be kept out of the working range. As every metre counts for you, the Litronic operating-range limiting system now offers even more teaching points. This means you can define your working range with extra precision.



SPEED2LIFT

The time and effort needed for re-reeving from 4 to 2-line operation is no longer a problem with a K crane. The cranes operate exclusively in two-line mode and therefore always deliver maximum performance at full speed. As the lifting speed adapts to the load attached, the crane always operates at maximum speed.



Wind force moment control and oscillation-damping system

The wind and suspended loads play a major role during crane operation. Litronic cranes feature the relevant equipment needed to deliver maximum safety. The control system uses high resolution sensors to register movement of the jib and automatically adjusts for it.



Slewing gear modes

Every manufacturer has their own approach to crane control systems. This becomes particularly evident when a crane operator changes crane type and needs extra time to get used to the system. The Litronic makes this problem a thing of the past. Every crane operator can opt for one of three slewing modes and adjust these to their situation, without requiring a service technician. This allows crane operators to adapt the slewing behaviour of the cranes to personal preferences.



Operation that makes sense

The Liebherr remote control ensures you have the crane under complete control from anywhere on site. Two displays provide feedback on current operating data. The remote control therefore enables you to be close to the action whilst having everything important in view. This makes working on site safer and more convenient.



Simple scaling

The crane can be scaled in a matter of minutes with just one weight. This saves time and money.



Access to full control lever range at all times

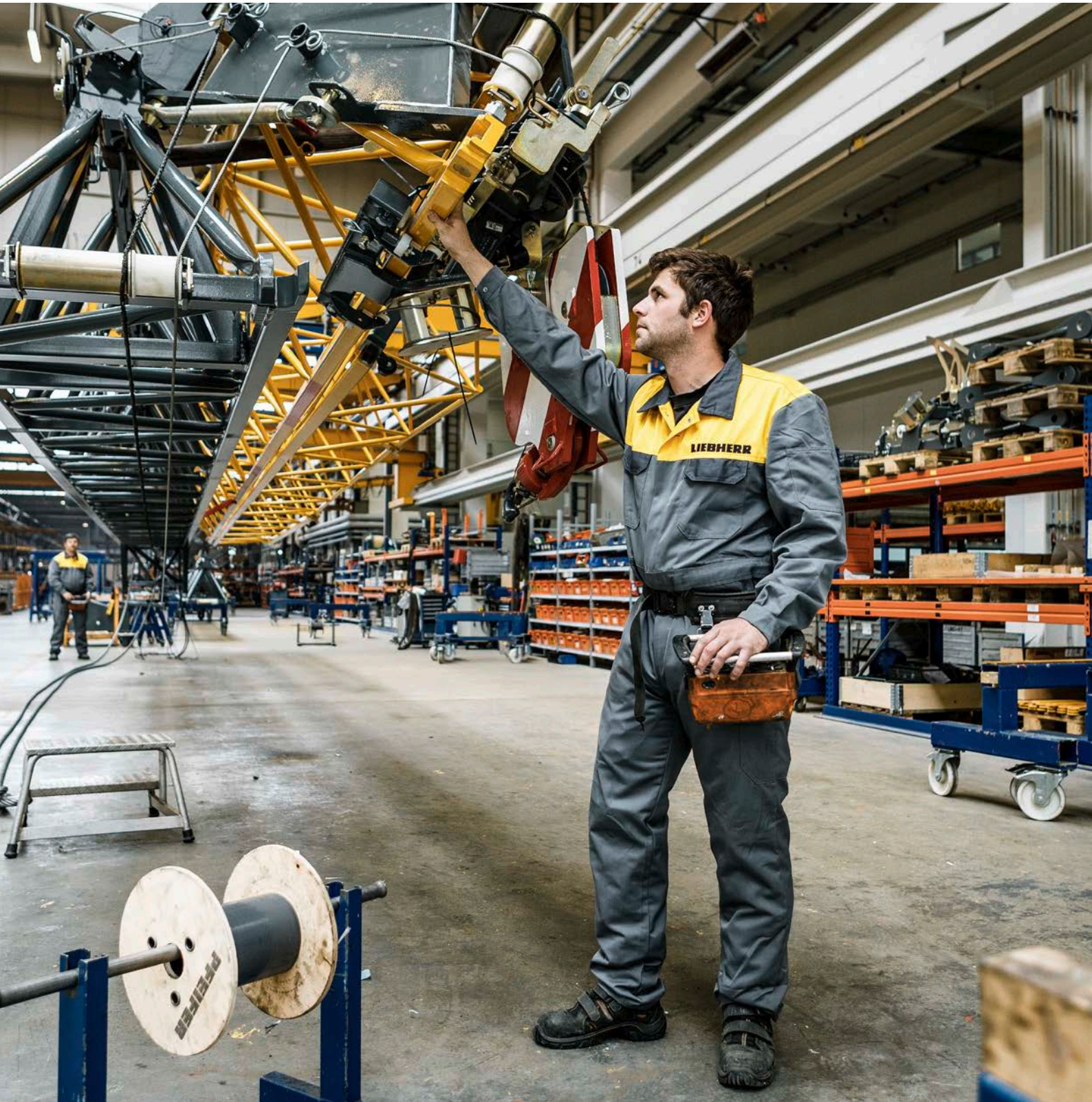
The K cranes' modern control system ensures that the full control lever range is always available, meaning that you can position heavy loads with millimetre precision.

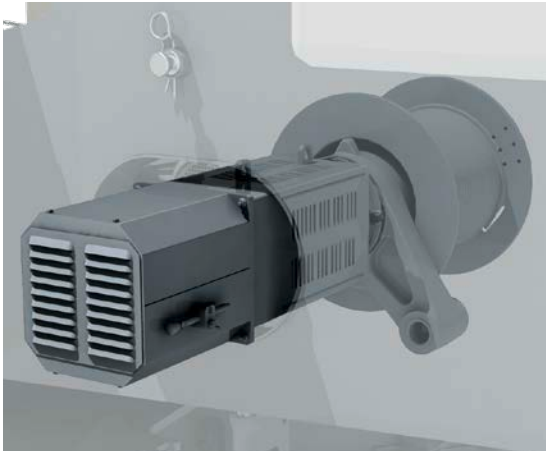


Adjustable power connection

Operating voltage adjusts to the situation in individual countries.

Quality in detail



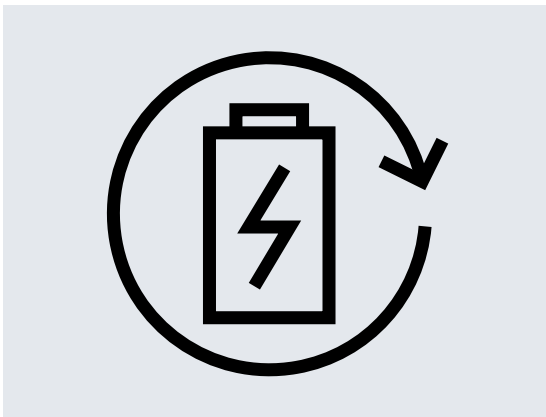


Fast, powerful and extra precise control

The drive units installed in the K series are manufactured in-house by Liebherr. This guarantees uniform high quality. The drive components used are infinitely adjustable thanks to frequency converters, feature an intelligent ventilation system and are low maintenance.



A simple rule of thumb is that the longer a product can be used, the more cost-effective it is. This is why Liebherr is absolutely uncompromising when it comes to durability. In addition to high quality materials, processing work is also subject to the highest possible standards. This is why all exposed components on K series cranes are welded to form a seal. This prevents the ingress of water, reducing the risk of corrosion. Our cranes are renowned for their long service life and operating time.



When the crane is not in operation, it needs to be put in free slewing mode. K cranes are fitted with current collectors as standard to ensure that multiple rotations don't cause any damage. This minimises maintenance costs and prevents unexpected down times.



Zero-play tower connection

Automatic tower locking ensures a zero-play connection for telescoping.



Designed with the assembly engineer in mind

Easily accessible power connection on the undercarriage.

Superbly equipped



Site lighting

The use of up to four 154 W LED spotlights means you can decide when to finish your working day. They are immediately ready for use, extremely reliable, very durable and remain on the crane during transport.



Rail travel gear

For larger projects, the crane can also be used with rail travel gear. This even allows the crane to be moved with a load.



Custom paintwork

The crane can be custom painted in your corporate colours as an advertising feature and means of company recognition.



Control desk

As an alternative to the remote control, the crane can also be operated via a small control desk with 10 metres of cable available.



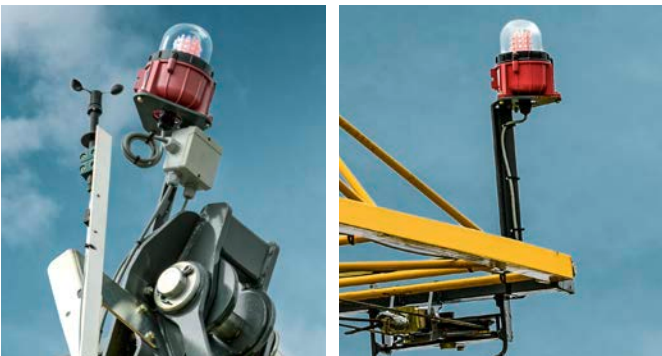
Central lubrication system

A central lubrication system makes it easy to maintain the ball slewing ring, ensuring your crane has a long service life. We also offer an electric central lubrication system should you prefer not to concern yourself with the crane's lubrication at all. This ensures automatic lubrication of the slewing ring.



Anemometer

So you are always aware when stormy weather is approaching.



Aircraft warning lights

Aircraft warning lights are required when your crane is located near an airport. These lights can be left mounted on the crane, ready for use whenever you need them.



LiDAT

The data transfer and location system from Liebherr ensures that you always have the latest operating data for the crane in view. This enables efficient crane management, and effective operation and service planning. The LiTEL teleservice also makes remote maintenance possible to minimise downtimes on site.

K cranes at a glance





34 K

Max. radius	33.0 m
Lifting capacity at the jib head	1,100 kg
Max. lifting capacity	4,000 kg
Hook height	27.0 m

42 K.1

Max. radius	36.0 m
Lifting capacity at the jib head	1,200 kg
Max. lifting capacity	4,000 kg
Hook height	28.0 m

53 K

Max. radius	40.0 m
Lifting capacity at the jib head	1,100 kg
Max. lifting capacity	4,000 kg
Hook height	31.0 m

65 K.1

Max. radius	43.0 m
Lifting capacity at the jib head	1,350 kg
Max. lifting capacity	4,500 kg
Hook height	34.6 m

81 K.1

Max. radius	48.0 m
Lifting capacity at the jib head	1,350 kg
Max. lifting capacity	6,000 kg
Hook height	40.4 m

125 K

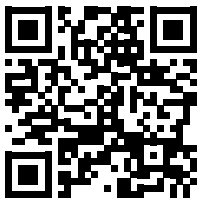
Max. radius	55.0 m
Lifting capacity at the jib head	1,300 kg
Max. lifting capacity	8,000 kg
Hook height	41.5 m

And tomorrow?

Since the development of the first tower crane more than six decades ago, we have been working with passion on innovations to help people move forward. These include fast, accommodating service options and a broad network of competent partners.

Contact your local dealer for individual advice about the K series.

www.liebherr.com/tc/K





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