

Fast-erecting crane

81 K

Max. lifting capacity: 6.000 kg

Max. radius: 45,0 m

Lifting capacity with max. radius: 1.400 kg

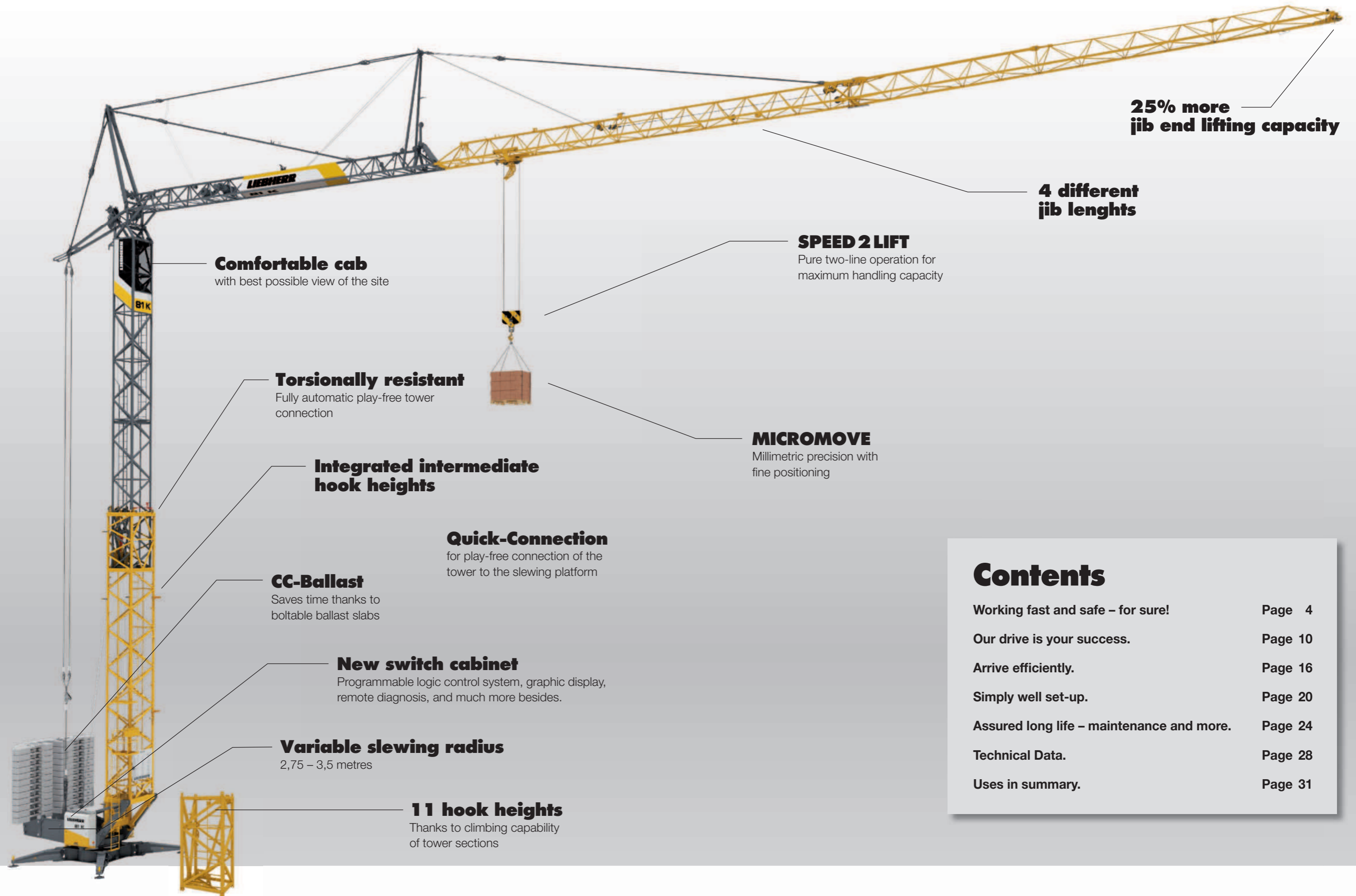


**Works efficiently
and looks good.**

LIEBHERR

Courtesy of Crane.Market

The 81 K fast-erecting crane.



25% more jib end lifting capacity

4 different jib lengths

SPEED 2 LIFT
Pure two-line operation for maximum handling capacity

MICROMOVE
Millimetric precision with fine positioning

Comfortable cab
with best possible view of the site

Torsionally resistant
Fully automatic play-free tower connection

Integrated intermediate hook heights

Quick-Connection
for play-free connection of the tower to the slewing platform

CC-Ballast
Saves time thanks to bolttable ballast slabs

New switch cabinet
Programmable logic control system, graphic display, remote diagnosis, and much more besides.

Variable slewing radius
2,75 – 3,5 metres

11 hook heights
Thanks to climbing capability of tower sections

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45,0 m / 1.400 kg

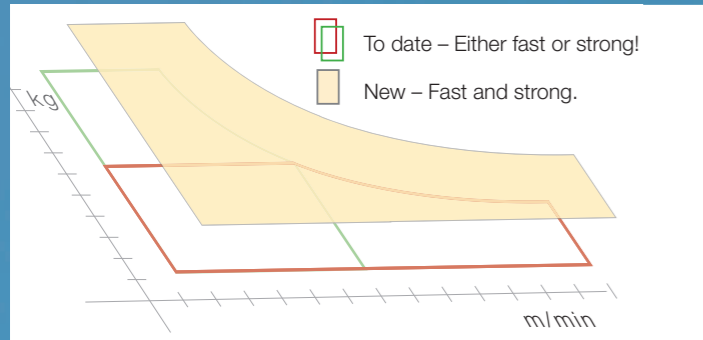
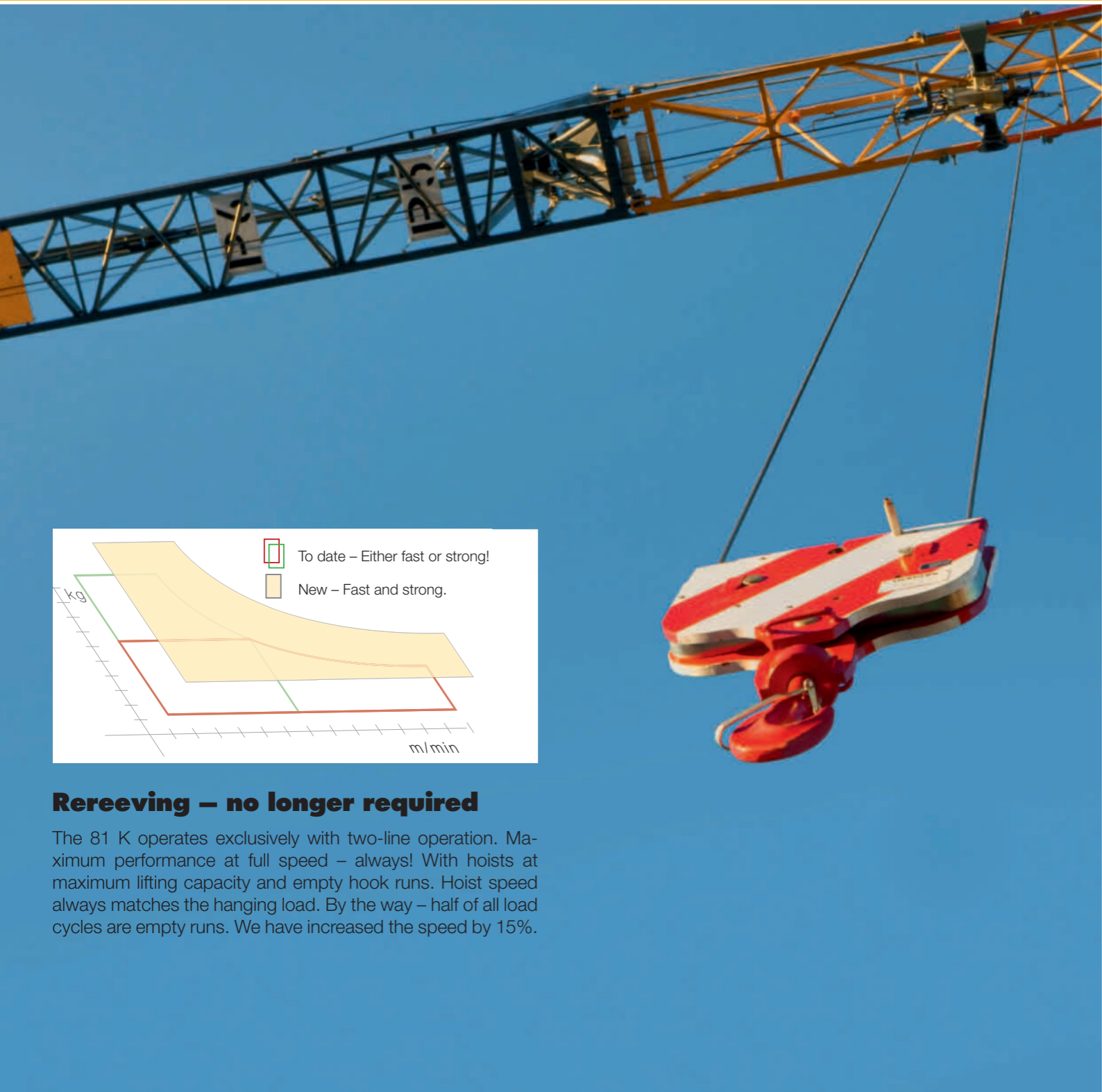
SPEED 2 LIFT

Always max. load and full speed with two-line operation

Working fast and safe – for sure!

- + **SPEED 2 LIFT:** two-line operation for maximum performance at full speed
- + **Unrivalled maximum lifting capacity**
- + **MICROMOVE:** precision mode for millimetre precision positioning at the push of a button
- + **Secure working movements** with load swing damping and wind load control

Working fast and safe – for sure!



Rereeving – no longer required

The 81 K operates exclusively with two-line operation. Maximum performance at full speed – always! With hoists at maximum lifting capacity and empty hook runs. Hoist speed always matches the hanging load. By the way – half of all load cycles are empty runs. We have increased the speed by 15%.

+ 25 %

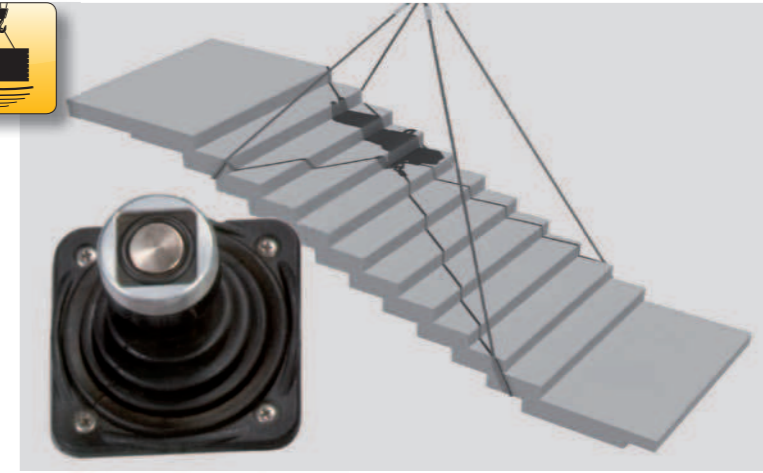
Strong matter

Currently up to 25% more lifting capacity.



Loads precisely positioned

With MICROMOVE, at the push of a button on the control lever, lowering speed is reduced to micro levels. Even the heaviest loads can be precisely suspended and positioned without using the hoist gear brakes.



Accurate against the wind

Wind influences the movement of the jib! With the wind load control, the jib position is regulated automatically. Counter measures are not necessary. Large-scale loads (i.e. form panels) can be moved and suspended precisely even in wind.



Steady handling

Fast turning movements can lead to swinging loads. The integrated load swing damping automatically compensates for this. A significant step for safety on the building site!



Standard current collector

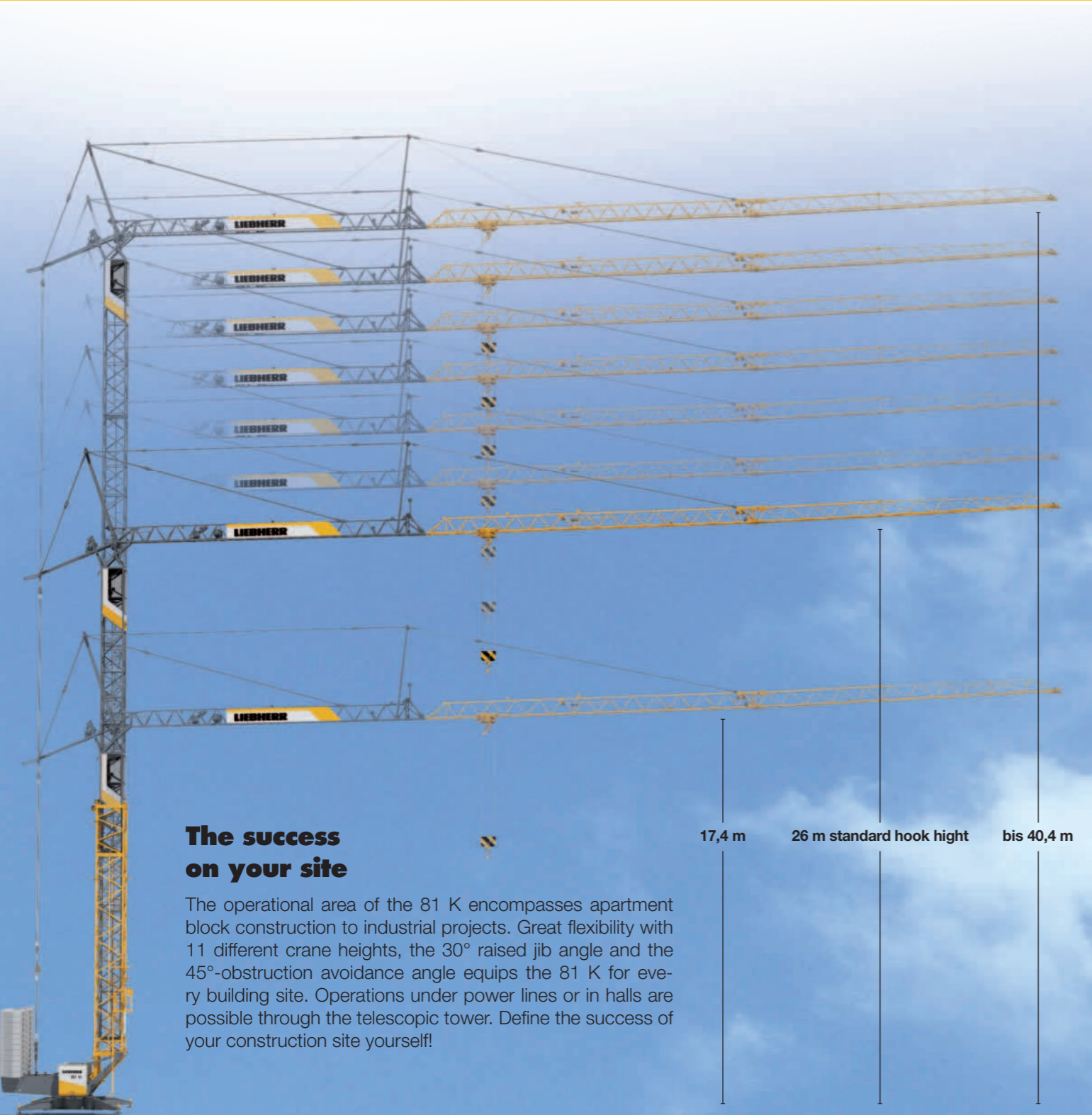
No restrictions with slewing and no wound cables.



Always full lever control

The bigger the load, the more precise the control.

Flexible is efficient.



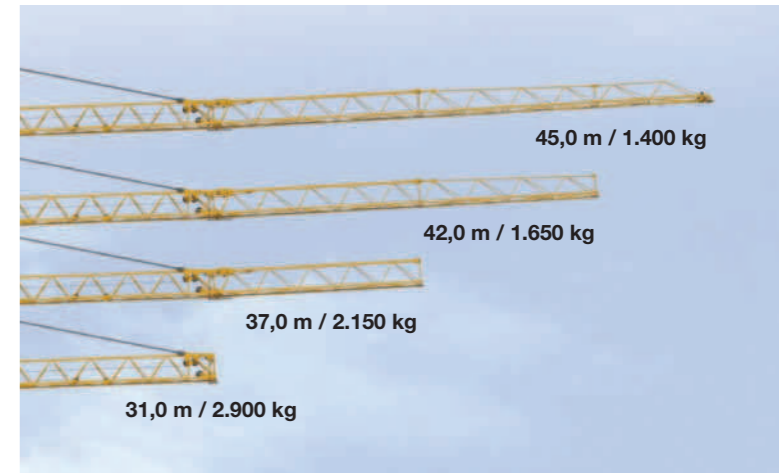
The success on your site

The operational area of the 81 K encompasses apartment block construction to industrial projects. Great flexibility with 11 different crane heights, the 30° raised jib angle and the 45°-obstruction avoidance angle equips the 81 K for every building site. Operations under power lines or in halls are possible through the telescopic tower. Define the success of your construction site yourself!

17,4 m 26 m standard hook height bis 40,4 m

Range with lifting capacity

Adjustable jib in 4 lengths to meet individual requirements – between 31.0 and 45.0 metres. You profit from customised lifting curves.



45,0 m / 1.400 kg

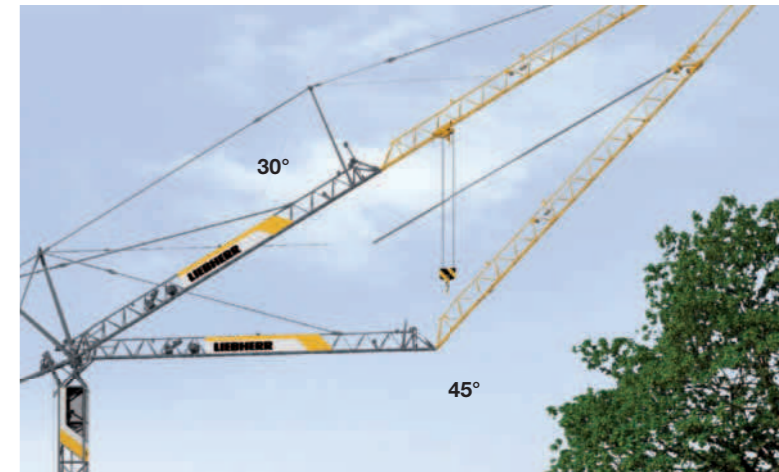
42,0 m / 1.650 kg

37,0 m / 2.150 kg

31,0 m / 2.900 kg

Obstructions or high reaches

With the 30° raised jib position and the 45° jib obstruction avoidance position you can match the crane to every operation – and reach hook heights of up to 55.0 metres.

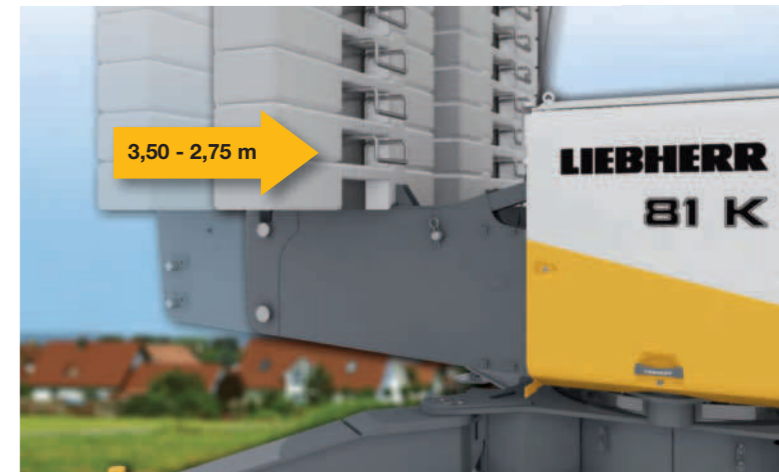


30°

45°

Variable slewing radius

Save more than 35% space requirements through reduced slewing radius. The crane can be set up nearer buildings or during operations with limited building site space. Choose between reduced space requirements or less ballast.



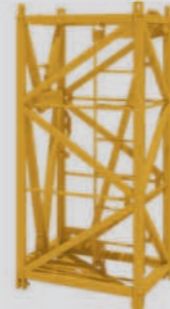
3,50 - 2,75 m

LIEBHERR
81 K



Short projection

You can use the full radius also with limited building site space.



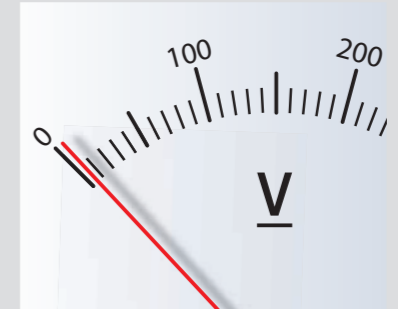
Fast climbing

Up to 6 inserted tower sections enable 11 hook heights.



Extreme situations

Also work with obstructions i.e. under power lines with retracted tower.



Multi-volt

Adjustment of operating voltage to local conditions (380 - 500 v / 50-60 Hz).



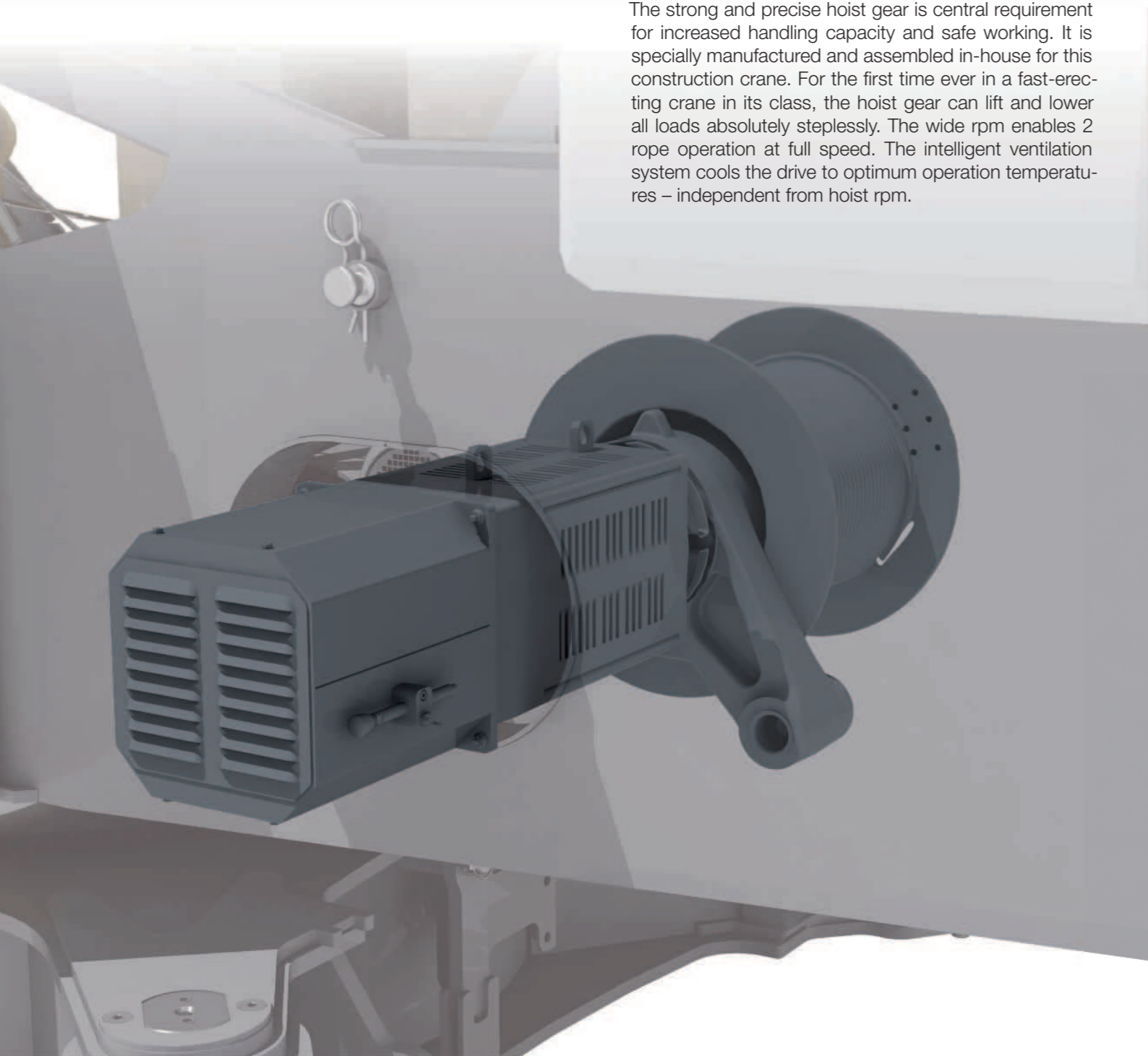
Our drive to your success.

- + Powerful drives manufactured in-house ensuring the highest quality – for decades
- + PLC-control for increased safety and user comfort
- + Steel construction resistant to torsion for durability and precise working
- + Comfortable cabin with optimum view for maximum working comfort

Unrivalled drives.

Strong and sensitive

The strong and precise hoist gear is central requirement for increased handling capacity and safe working. It is specially manufactured and assembled in-house for this construction crane. For the first time ever in a fast-erecting crane in its class, the hoist gear can lift and lower all loads absolutely steplessly. The wide rpm enables 2 rope operation at full speed. The intelligent ventilation system cools the drive to optimum operation temperatures – independent from hoist rpm.



Like the big ones

Due the stepless speeds of all to FC drives the driving performance corresponds to the top slewer and guarantees maximum handling capacity.



Slewing just as you want

Choose between absolutely sensitive slewing with low rpm and high torque and high handling capacity with high rpm and low torque. The ratio is freely adjustable.



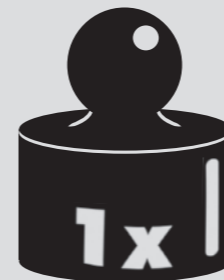
Safe Control

The modern and safety orientated PLC control includes operating-range limiting system ABB, the interface to the anti-collision system AKS or machine data recording MDE. The graphic display offers a simple menu guide and shows all important operational data in one view. LiDAT offers additional possibilities for remote diagnosis and data evaluation.



Power connection

Energy supply through easy access connection at the undercarriage.



Simple scaling

With one weight the crane is scaled in minutes. This saves time and money!

Exceptionally equipped.



New design for efficient operation

In addition to the technical innovations the 81K was completely redesigned. Optimum arrangement of controls in the new cabin enables efficient and exhaustion free work. The optimised field of vision maximises the view of building site. Tinted glass reduces heat and protects against glare.

Clear information

With the electronic monitoring system (EMS) the crane driver has all the important parameters in one view. The display gives extensive information on loads, driving modes and many other operational functions.



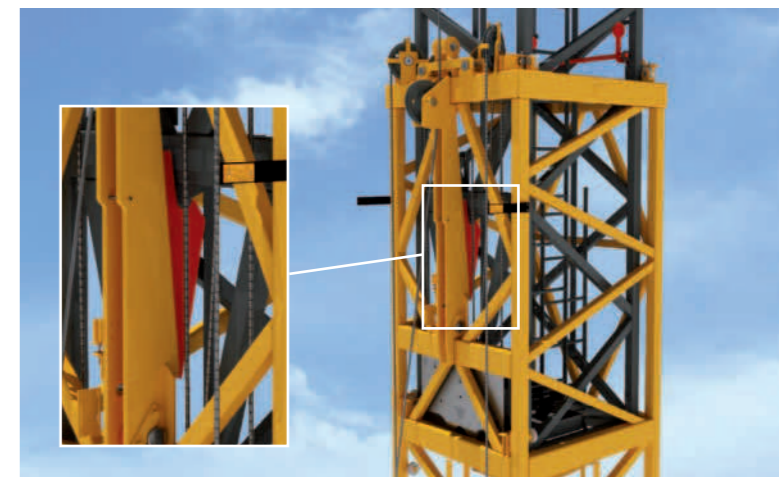
Safe guying

The jib is mounted with rods. Above all, increased safety and low maintenance are aimed for in assembly.



Play-free tower connection

After the tower is extended, it is tensed at 3 defined points with the automatic tower locking device. Through the clearance free tower connection the whole steel structure is torsion resistant and stable. Equipped as standard, the intermediate hook heights can now be used quickly and easily.



Large tool compartment

and extra space for radio control with 220 v socket for re-charger.



New radio remote control

with feedback. All the important information is shown on the display.



Centrally positioned jib

distributes the forces equally and care-fully through the tower.



Increased control stand height

for a better view.



Arrive efficiently.

- + Compact and flexible when transporting
- + Modular axle system – use your existing fleet
- + Maximum speed – up to 80 km/h to destination
- + Foldable A frame enables increased slope angle

Arrive efficiently.

Sleak dimensions

Despite the unique standard hook height of the 81 K is compact and flexible to transport. Moved as complete, ready assembly unit. Fast into operation.



You have the choice

The modular high-speed and slow-speed axle system or semi-trailer offers the best transport possibility for every operational area. Existing axles can also be used.



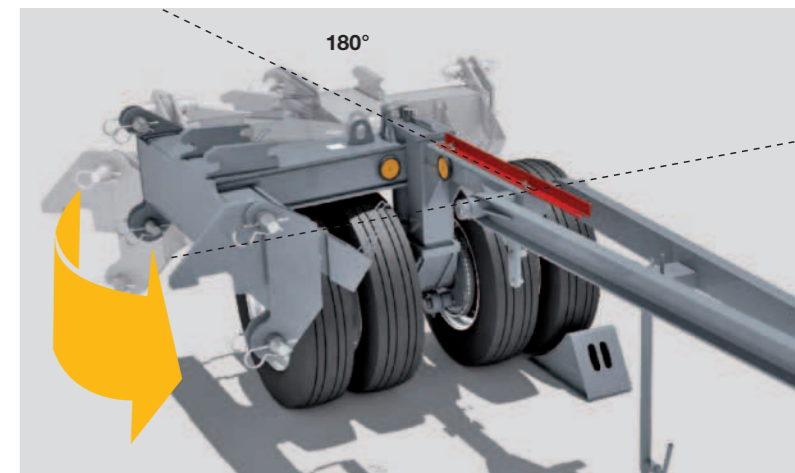
Increased slope angle

With the foldable A frame, the 81 K reaches an angle of 15° – that means: approx. 1.4 metre ground clearance.



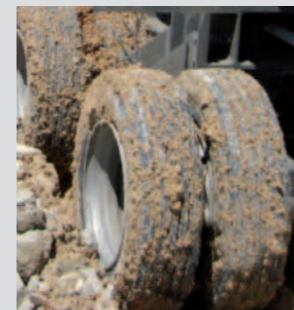
Good to manoeuvre

With its steering angle of 180°, the steering axle guarantees best manoeuvrability.



Maximum speed

At up to 80 km/h you get your crane to its destination.



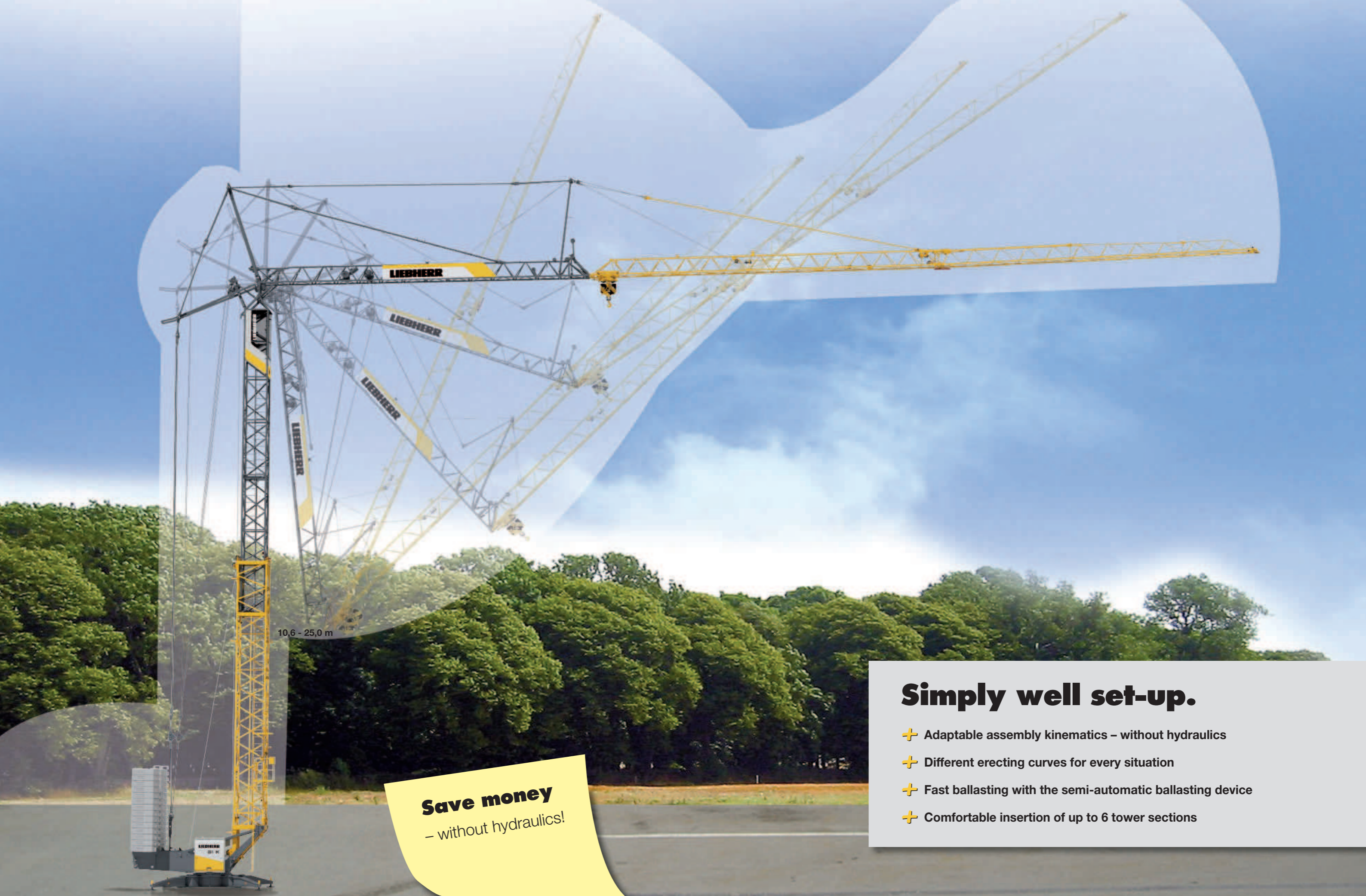
Twin tyres

If the road doesn't go all the way to the building site, twin tyres prevent sinking.



Tower sections

Easily transported on a lorry with an ideal packing size of 2,40 m x 1,10 m.



10,6 - 25,0 m

Save money
– without hydraulics!

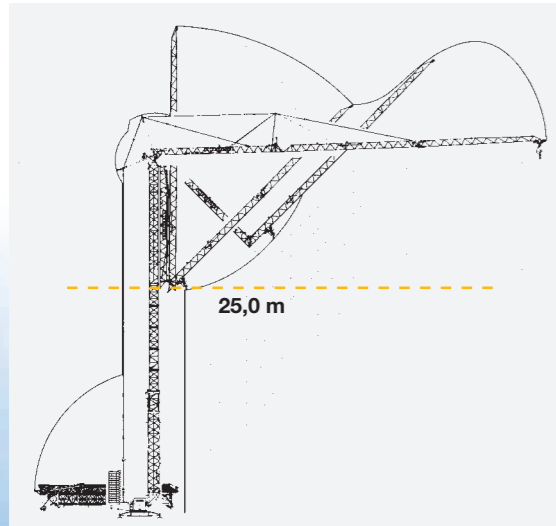
Simply well set-up.

- + Adaptable assembly kinematics – without hydraulics
- + Different erecting curves for every situation
- + Fast ballasting with the semi-automatic ballasting device
- + Comfortable insertion of up to 6 tower sections

Simply well set-up.

Get ready for work

Proceeds through thought out installation kinematics with rope. Assembly is also possible at extremely low temperatures. The narrow air assembly requires little installation space and can be carried out with obstructions of up to 25 metres.



Choose the right erecting curve depending on your operation



The better ballasting

The interplay of hoist and assembly winches enables fast and comfortable mounting of the counterweight. With the assembly winch, the tower moves up to 5 metres when unloading the counterweight. Ballast plates are quickly mounted with the hoist winch.



CC-Ballast

Bolted ballast plates reduce the time for mounting of counterweights by up to 50%. Only 8 hoists are required. Save time and money!



Fast climbing

Up to 6 tower sections can be inserted comfortably and without ground contact.



Screw jacks

Thanks to the trapeze thread, the erected crane can be levelled and readjusted with little effort.



Quick-Connection

Simple interlocking between tower and slewing platform with only one hammer blow.



One-Man-Assembly

Patented, semi-automatic ballasting tongs and the ballast centring enable one-man assembly.



**CABLE
BOX**

Assured long life – maintenance and more.

- + Remote diagnosis with LiDAT
- + Replacement parts available quickly and long-term
- + Service network of authorized Liebherr dealers
- + Skilled personnel

Assured long life – maintenance and more.

All information at a glance: always and everywhere

LiDAT is a data transmission and positioning system for Liebherr machines and the machines of other manufacturers. Based on state-of-the-art data transmission technology, LiDAT provides information on the location and operation of your machines, enabling their efficient management, optimal operation scheduling and remote supervision.



Original spare parts

Our spare parts are optimally tailored to every Liebherr crane. The quality and functionality is of the highest standard across the range. For a long life and high operational readiness of your machines.



Smooth operation

With the central lubricating system the slewing ring is automatically lubricated. Care is never forgotten.



Worldwide service network

Liebherr is represented worldwide. You can profit from this network.



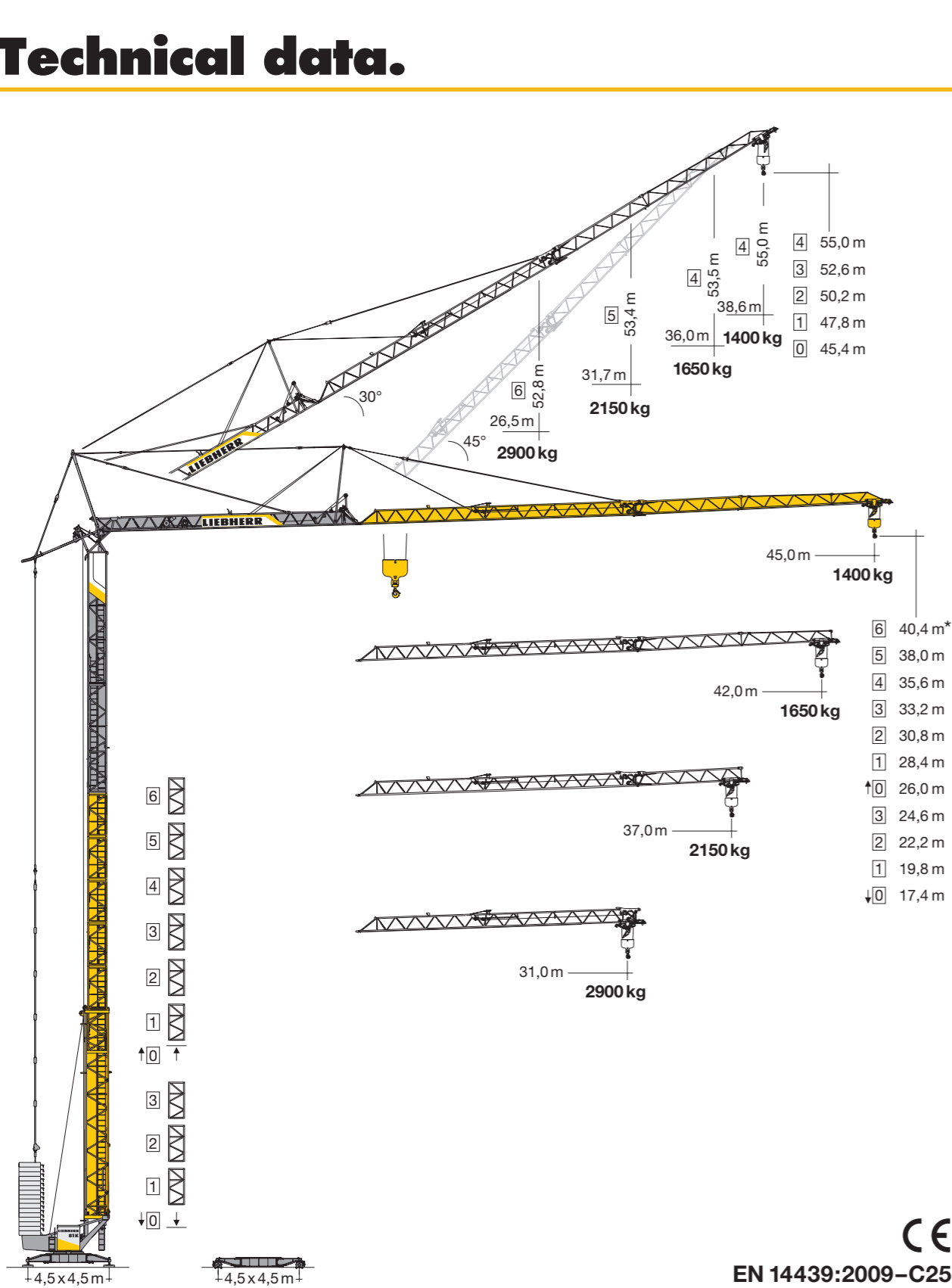
Delivery

A large network of notable forwarding agencies guarantee fast and secure transportation.

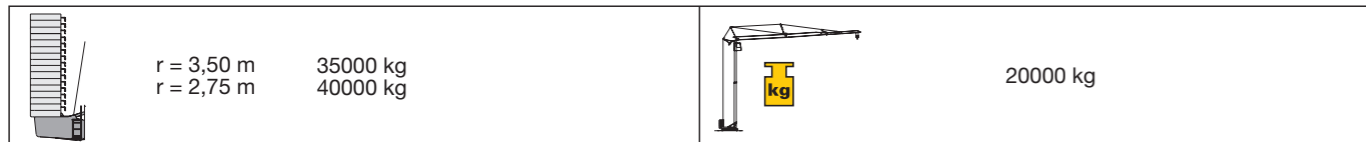
Liebherr construction cranes.

The development of the first quickly transportable and simple assembly crane over sixty years ago characterises the start of Liebherr's company history. The Liebherr construction crane programme is multifaceted like no other. It encompasses machines of all systems and sizes and offers the right lifting technology for high rise building. The flexible fast-erecting cranes and powerful top-slewing models prove themselves in residential construction, industrial or large projects throughout the world. Liebherr is an owner-managed company with long-term organisation. You can profit from this continuity.

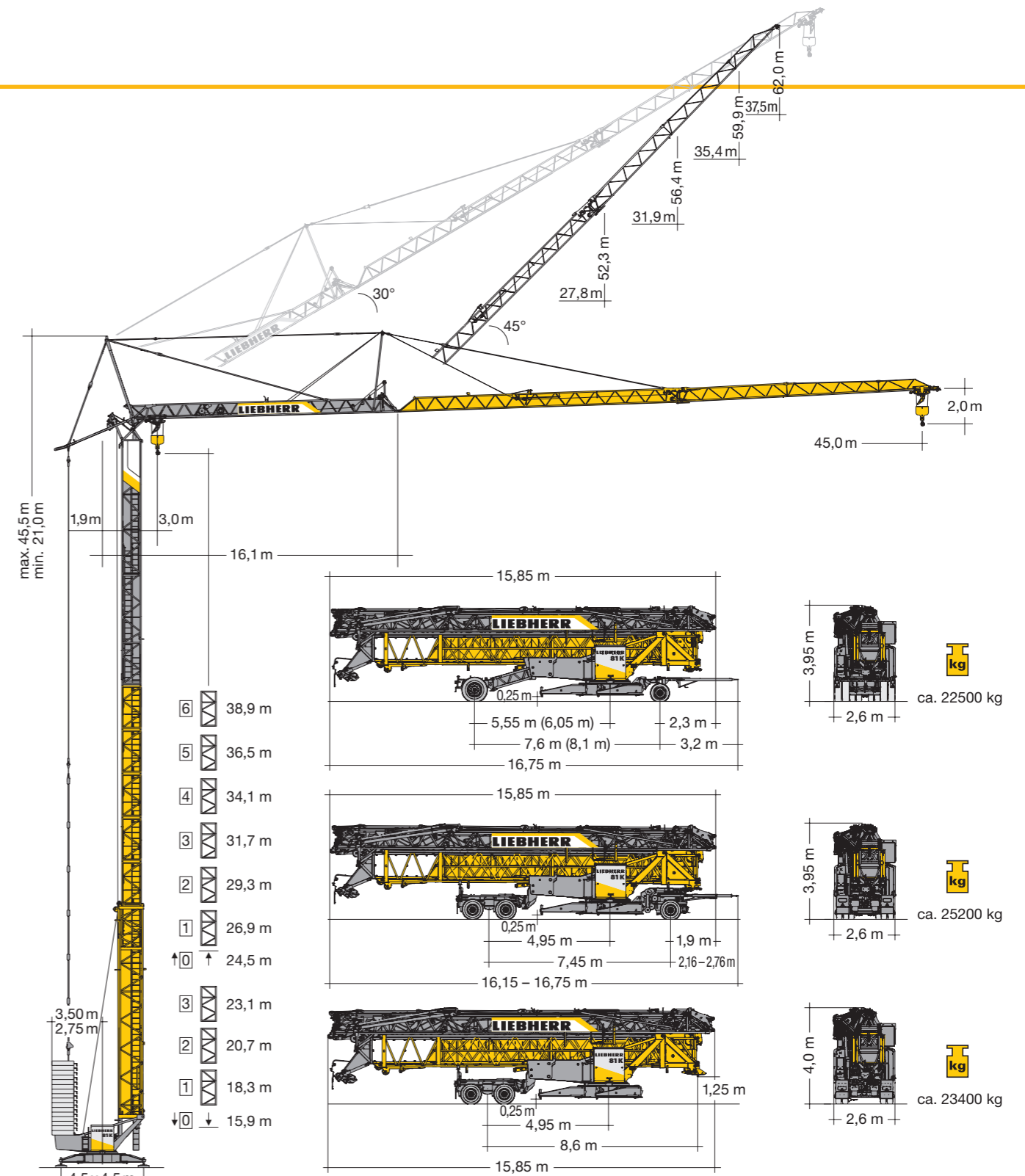
Technical data.



Gewicht Weight / Poids / Peso / Peso / Pesos / Macca



* siehe Betriebsanleitung. / see instruction manual. / voir manuel de service. / vedi manuale d'istruzione. / ver manual de instrucción. / ver manual de instruções. / см. инструкцию по эксплуатации.



Ausladung und Tragfähigkeit Radius and capacity / Portée et charge / Sbraccio e portata / Alcances y cargas / Alcance e capacidade de carga / Вылет и грузоподъемность

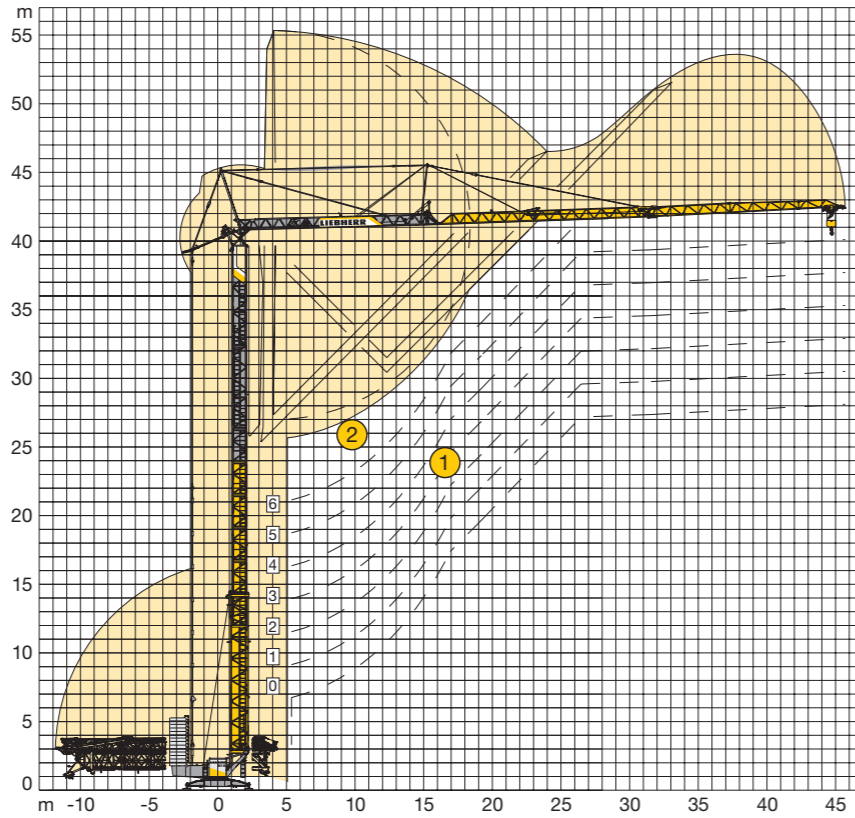
m	m/kg	m/kg																
		13,0	15,0	18,0	21,0	24,0	27,0	29,0	31,0	33,0	35,0	37,0	39,0	41,0	42,0	44,0	45,0	
45,0	3,0 - 13,3 6000	6000	5220	4230	3540	3030	2640	2420	2230	2070	1920	1800	1680	1580	1530	1440	1400	
42,0	3,0 - 14,1 6000	6000	5570	4520	3790	3240	2820	2590	2400	2220	2070	1930	1810	1700	1650			
37,0	3,0 - 15,1 6000	6000	6000	4930	4150	3560	3110	2870	2650	2460	2300	2150						
31,0	3,0 - 16,3 6000	6000	6000	5370	4520	3890	3400	3130	2900									

Technical data.

Aufstellvorgang

Erection procedure / Déroulement de montage / Procedimento di montaggio
Procedimiento de montaje / Sistema de montagem / Процесс развертывания

- 1 **Standard Aufstellkurven von 0 bis 6 Turmstücken** / Standard erecting curves from 0 to 6 tower sections / Courbes de montage standard de 0 à 6 éléments de mât / Curve di montaggio standard con 0 fino a 6 elementi torre / Curvas de montaje estándar (0-6 tramos de torre) / Curvas padrão de montagem de 0 até 6 segmentos de torre / Стандартная монтажная высота с 0-6 башенными секциями
- 2 **Erhöhte Aufstellkurve (+4,5 m) am Beispiel von 6 Turmstücken** / Elevated erecting curve (+4.5 m) using the example of 6 tower sections / Courbe de montage élevée (+4,5 m) en prenant pour exemple 6 éléments de mât / Elevata curva di montaggio (+4,5 m), come per esempio con 6 elementi di torre / Curva de montaje elevada (+4,5 m): ejemplo con 6 tramos / Curva elevada de montagem (+4,5 m) como exemplo para 6 segmentos de torre / Увеличенная монтажная высота (+4,5 м) на примере 6-ти башенных секций



Antriebe

Driving units / Mécanismes d'entraînement / Meccanismi / Mecanismos / Mecanismos / Приводы

	U/min. 0 ↔ 0,8 st./min tr./min	5,0 kW FU
	0 ↔ 60,0 m/min	3,0 kW FU
	0 ↔ 25,0 m/min	2 x 2,2 kW FU
	0 – 45°, 110 sec.	3,0 kW FU

stufenlos / stepless / régl. continu
regl. progressiva / sin escalones
sem degraus / бесступенчатый

15,0 kW FU
WIW 210 MZ 404

Gang
Speed
Vitesse
Marcia
Velocidad
Velocidade
Передача

1	6000	0 ↔ 12,0
	400	0 ↔ 70,0

Gang / Speed / Vitesse
Marcia / Velocidad
Versnelling / Передача

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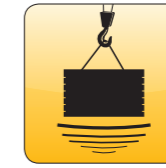
	380 – 500 V	Hz	kVA
87,0 m	4 x 6 mm ²	50/60	21,0 FU

Uses in summary.



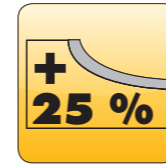
Pure two-line operation

Always maximum performance at full speed.



MICROMOVE

Millimetre precise positioning at the touch of a button.



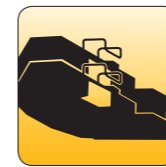
25% more lifting capacity

In comparison to series precursors.



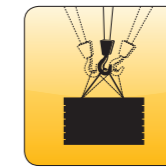
Wind load control

The control reacts automatically to the counter torque on the jib.



CC-Ballast

Save assembly time through bolted ballast plates and heavy ballast.



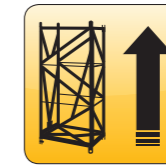
Load swing damping

Automatic compensation of jib movements for static load.



Simple scaling

With only one weight the crane is scaled in a few minutes.



Fast climbing

Up to 6 tower sections can be inserted. Hook heights of up to 55 metres can be reached.



Low maintenance assembly kinematics

Reliable assembly with ropes even at low temperatures.



Electronic load moment limitation

Secure transport of load until end stop.



Variable slewing radius

35% less space requirements through decrease of the slewing platform.



Display on switch cabinet

with simple menu guide.



Operating data recording / evaluation

Recording of all operating and performance data of the crane for evaluation and optimum servicing and maintenance.

Don't hang on...



Go for it!

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Liebherr-Great Britain Ltd.

Normandy Lane, Stratton Business Park

Biggleswade, SG18 8QB

Phone: (01767) 60 21 67, E-mail: info.lgb@liebherr.com

www.liebherr.com

Courtesy of Crane.Market