

# MK 88 mobile construction crane

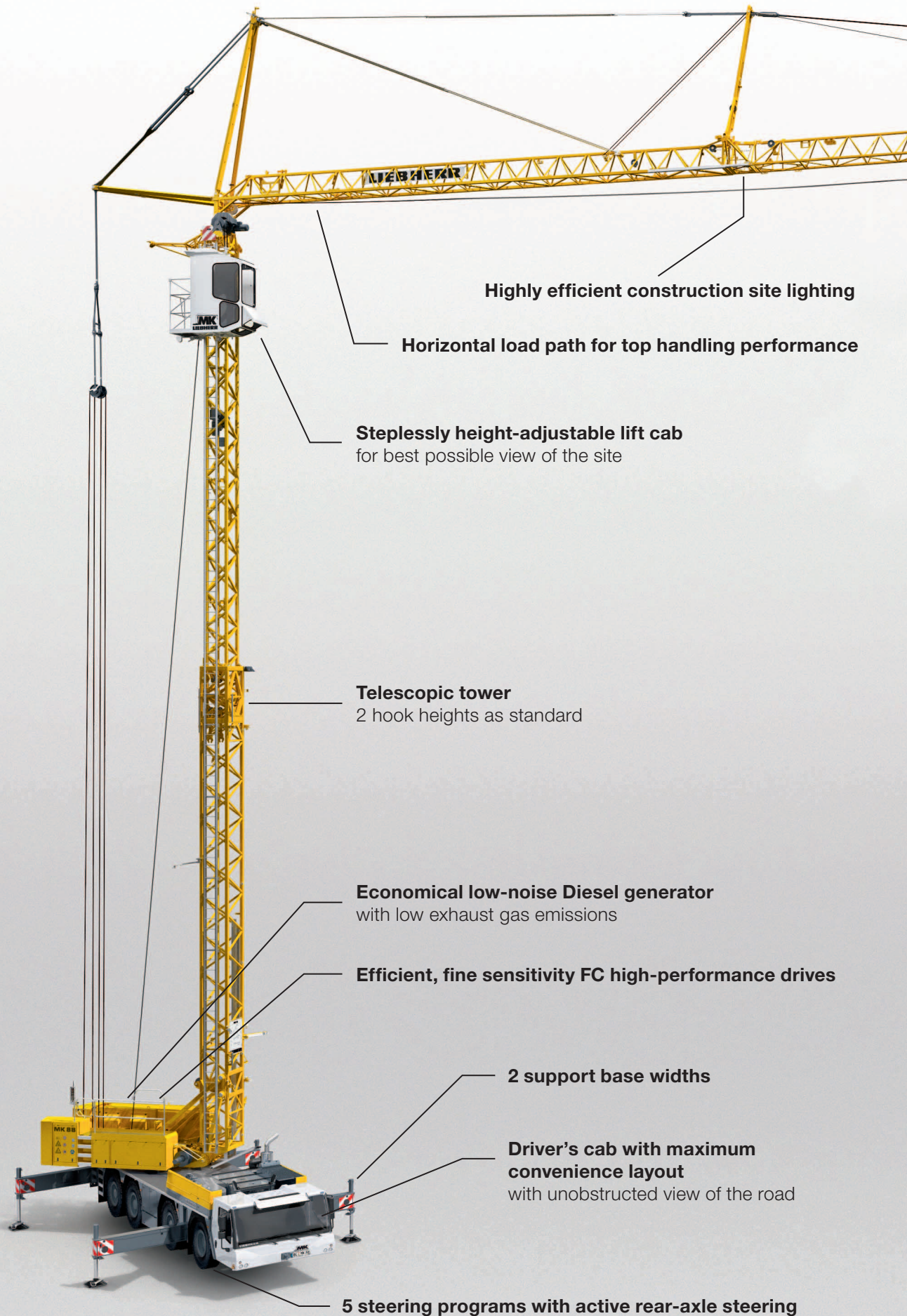


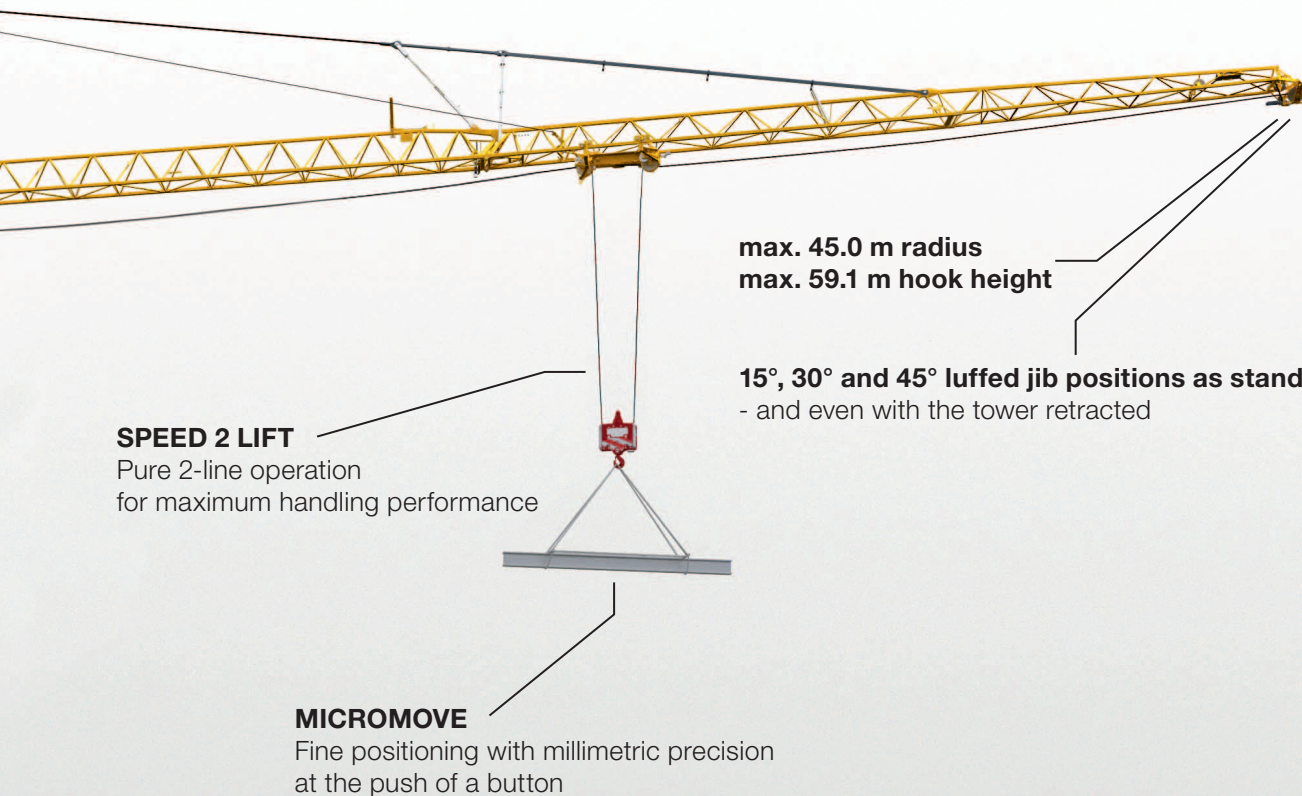
Lifting capacity (max.):	8,000 kg
Reach (max.):	45 m
Lifting capacity at jib head:	2,050 kg



# LIEBHERR

# MK 88 mobile construction crane





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# Versatility of operation - that means



## Just some of the possible operational situations

- Inner city and night-time sites
- Timber, steel, and hall construction
- Refineries and chemical plants
- Antenna construction
- Roof refurbishment and greenery
- Placement of solar panels
- Window and facade construction
- High-level storage bay units
- Bridge and highway construction
- Maintenance and repair work
- Prefabricated component and prefabricated building construction
- Demolition and installation work
- Site preparation work
- and much more besides



## **Liebherr mobile construction cranes – so many advantages**

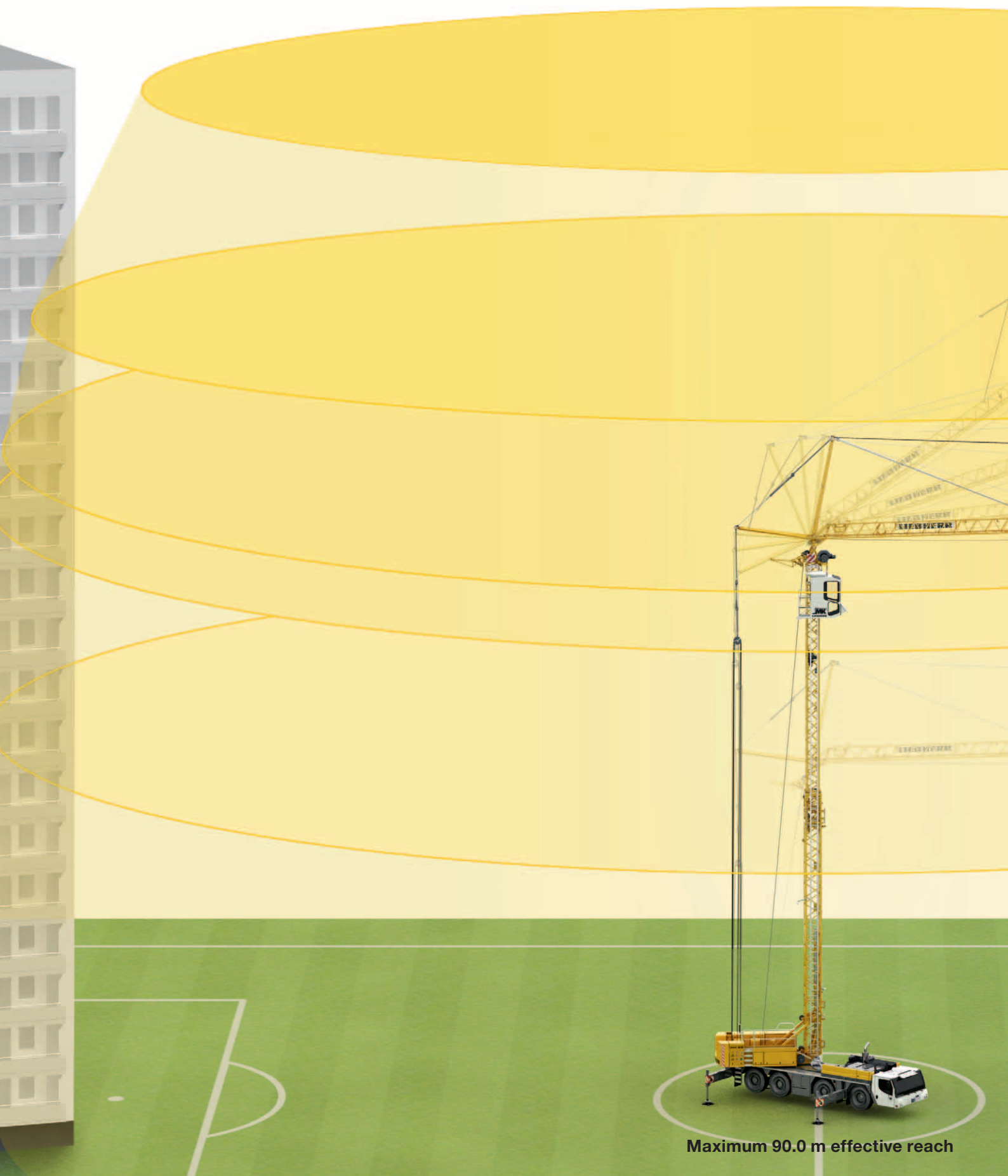
**Operation with interfering edges:** The vertical tower allows for Liebherr mobile construction cranes to be erected and operated directly at the building. Take advantage of the full jib length, with high lifting performance at maximum radius.

**Taxi crane concept:** High mobility without any major logistical effort needed – arrive, lift, move on, without any extra transport involved.

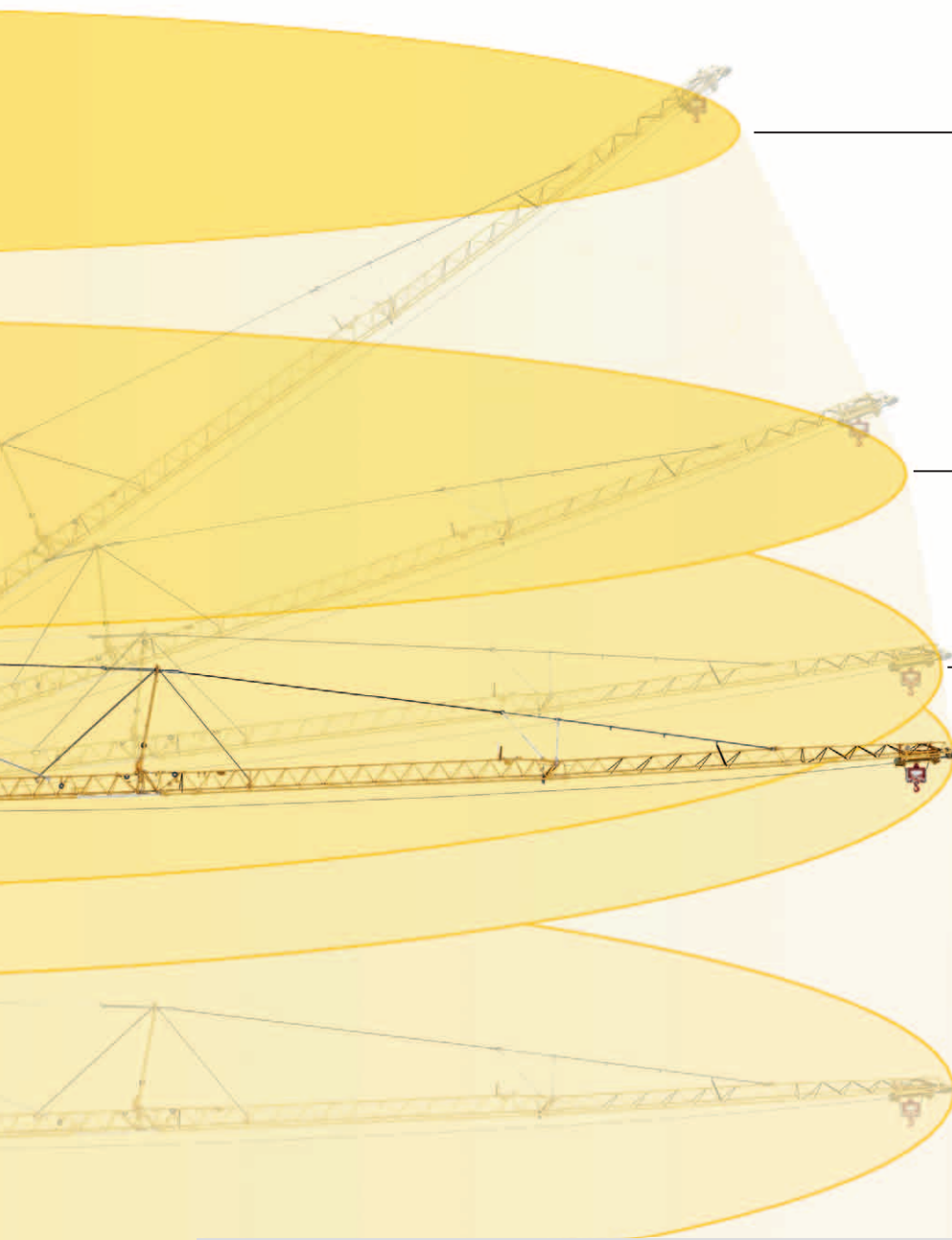
**Incredible manoeuvrability:** Thanks to the active rear axle steering, Liebherr mobile construction cranes can slip into any gap between buildings.

**One-man operation:** Transport, erection, and the entire operation of the crane – and only one person required. No need for expensive extra transport or additional erection and assembly personnel.

**Small space requirement:** When things get tight - that's when the mobile construction crane really shows off its strengths. The crane needs only a very small amount of space for erection and operation.



Maximum 90.0 m effective reach



**59.1 m hook height**  
31.9 m radius  
45° super steep angle position

50.4 m hook height  
38.9 m radius  
30° steep angle position

40.2 m hook height  
43.3 m radius  
15° steep angle position

**30.2 m hook height**  
45.0 m radius  
Horizontal jib position

17.9 m hook height  
45.0 m radius  
Tower telescoped inwards

## Versatility of operation – that means economy

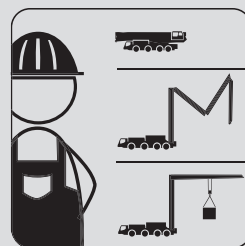
- Large outreach thanks to horizontal jib
- Flexible jib settings and impressive hook heights
- Several operational engagements per day – no problem at all
- One-man operation – no extra equipment needed

# Versatility of operation - that means



## Arrive, lift, move on

With the taxi crane concept, you can handle multiple operations in a single day.



## One man, one crane

No need for extra personnel or extra transport.



## Turn night into day

Thanks to the quiet, low-emission electrical drive units, the MK 88 is ideally suited for night-time operations in inner-city situations. And thanks to the lighting system integrated in the jib, the area of operations is excellently illuminated.



## Half height with full load capacity

In areas with restricted height clearances, or under high-voltage cables, the MK 88 can still be used with full outreach and full lifting capacity.



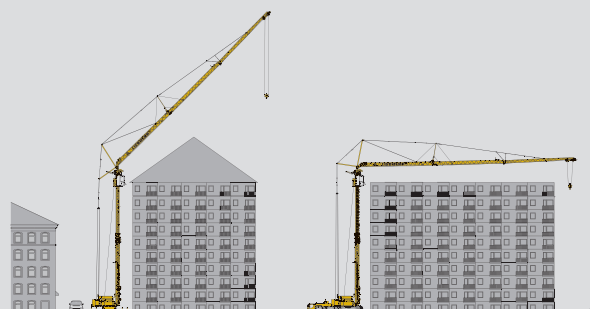
## Autonomous operation

The Diesel generator is economical, but very powerful too, and that makes the mobile crane independent in operation, with low noise, and minimal effect on the environment. Operation with the site power supply is possible as well. And there's enough electrical energy to power other consuming components as well.



## Get in close

The crane can be positioned directly at the building itself.





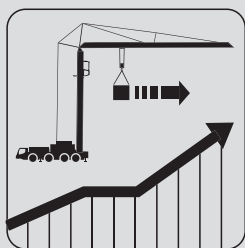


## **Our drive to your success**

- Powerful and economical drive concept
- FC high-performance drives are emission-free and very environmentally friendly
- Quiet, economical operation with the site power supply or integrated Diesel generator
- Even safer operation with intelligent PLC programmable control system

# Our drive to your success

The high-performance electric drives developed and manufactured by Liebherr are specially matched to the requirements of crane operation. The integrated Diesel generator in the superstructure makes completely independent operation possible, while the engine in the undercarriage is not needed for erection and site operations. This saves you fuel and helps safeguard the environment.



## Horizontal load path

The horizontal movement of the load means that high working speeds can be reached, which means high handling performance.

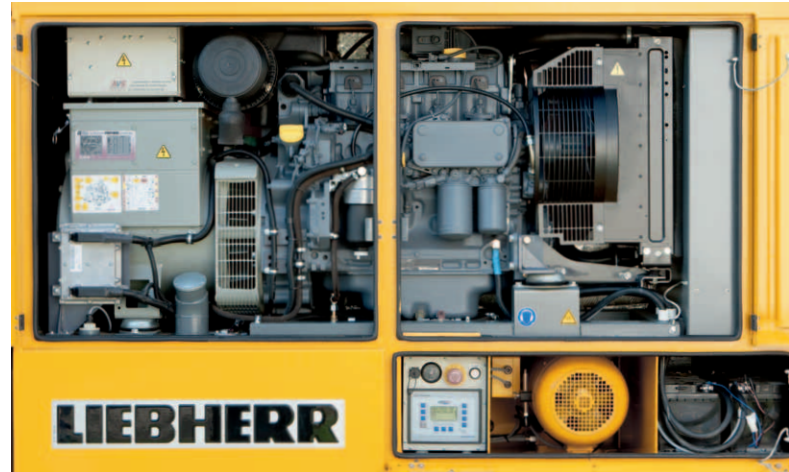


## Quiet

Low noise emission for night-time working or in noise-sensitive locations.

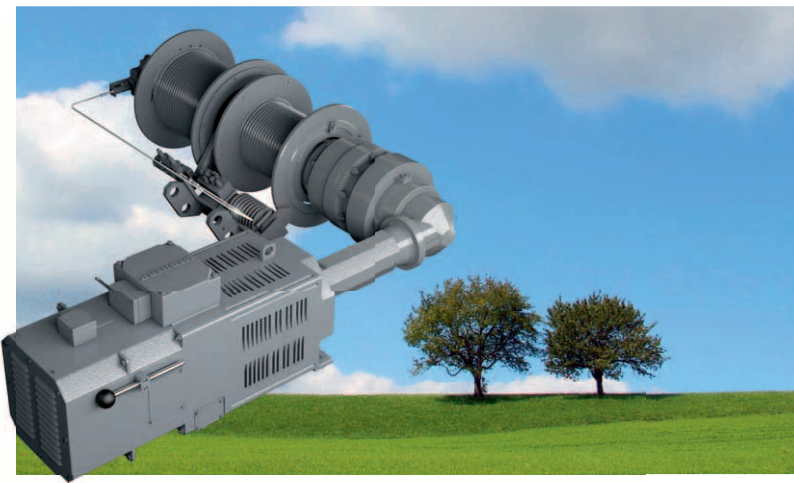
## Integrated Diesel generator

The compact and powerful generator, producing 48 kVA, provides current for the electric drives and, if necessary, for other machinery as well. The Diesel engine always runs in the optimum range, which makes it extremely economical in consumption.



## Stepless FC high-performance drives

Liebherr high-performance drives produce no emissions, provide fine sensitivity and precision, use little current, and at the same time are particularly high performers. The slewing gear can be adjusted to suit the needs of the crane driver.



## Programmable controller system - PLC

Easier and more convenient operation, greater safety in erection and operation. Features such as work area limitation, load moment limitation, or lowering level limitation, all contribute to even safer crane operation. And Teleservice increases crane availability.



## Distribute electric power

Power takeoff connections provide current for other machinery as well.



## Easy overview

Easy crane operation, easy overview, and rapid information for the driver.





## **Get right where you want**

- See a lot and drive safely – unobstructed view of the road
- Five steering programs with active rear axle steering for maximum mobility
- High ground clearance for difficult offroad conditions
- Very latest undercarriage technology available

# Get right where you want

## Unobstructed view

A good view is essential for being safe on the road and on site as well. With mobile construction cranes from Liebherr there is nothing to obstruct the view. Short projections and compact transport dimensions mean safe arrival at the destination. The modern cab is ergonomically designed and provides the driver with maximum comfort even on long journeys.



### Tyres

Tyres size 14.00 R 25 ensures low wear and high traction.



### Brakes – total reliability

Disk brakes mean safe deceleration with low wear. Telma is available as an option.



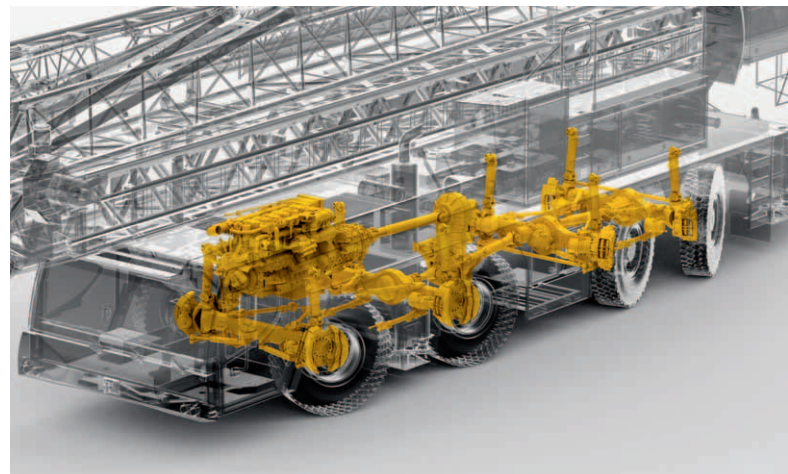
## Mobility off the road as well

The high ground clearance and the modern drive concept mean safe driving even under difficult off-road conditions.



## Engine capacity

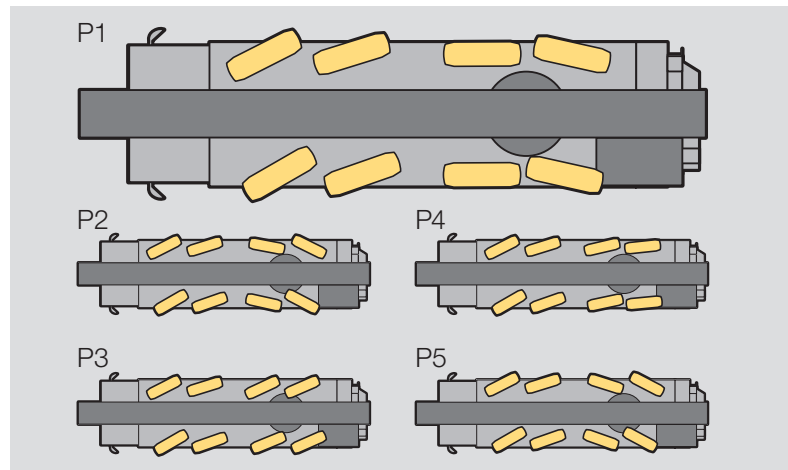
A powerful 6-cylinder turbo-Diesel engine from Liebherr, producing 300 kW (408 h.p.) guarantees top drive performance. The 12-speed ZF transmission with the AS-TRONIC automated gear change system makes operation even more economical and driving even more convenient.



## Really manoeuvrable

The turning radius is only 11.88 metres, which means that the MK 88 needs less room to manoeuvre than a conventional mid-range vehicle. And with the five steering programs you are best equipped to deal with any situation.

- P1 Road steering
- P2 All-wheel steering
- P3 Crab steering
- P4 Reduced swing-out
- P5 Independent rear-axle steering



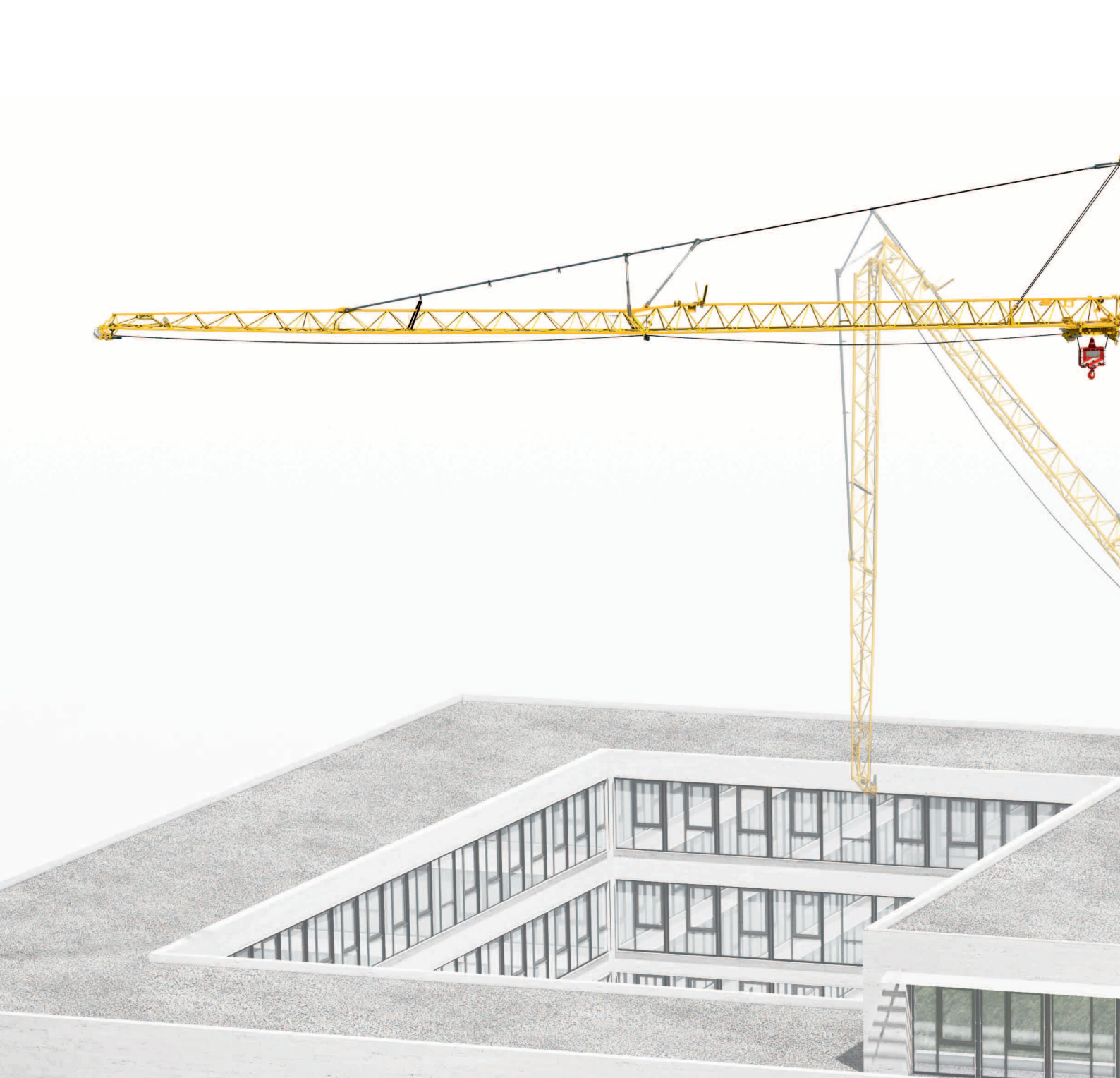
## Reversing camera

Safe manoeuvring on the construction site.



## Extra ballast

To provide more lifting capacity, the extra ballast is simply brought along in a 3.5 tonne trailer.



## **Simply well set-up**

- Small space requirement thanks to high jib erection in the air
- Highly adaptable thanks to three different set-up curves
- Erected complete in 11 minutes from the supported state
- Safety-monitored erection by one man alone



# Simply well set-up

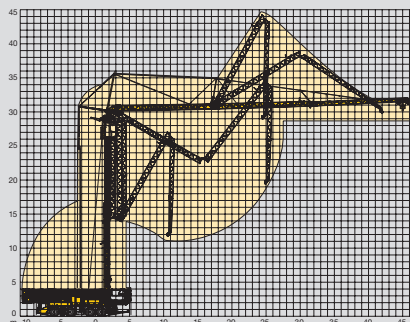


The crane can be rotated by 360° during erection. Combined with the different set-up curves, this makes the MK 88 extraordinarily adaptable. The program-controlled erection procedure provides the greatest possible degree of safety. The crane driver can intervene at any time and change the speed and direction of erection. And for engagements lasting several days there is no need for disassembly, with the crane being allowed to weathervane.



## Rapid erection

Ready for operation in only 11 minutes from the supported state.



## Genuine jib erection in the air

Can be erected even over obstacles up to 11 metres high.

## Wireless movement

Radio remote control with check-back allows for all the erection and operational functions of the MK 88 to be carried out. The crane driver has all the information needed, at his fingertips. Crane, site, and load are always in view.



## Flexible support

The Bluetooth BTT unit allows the undercarriage supports to be selected and operated individually. The standard support width is 7.0 metres and can be reduced to 5.75 metres if required – and still with low corner pressures.



## Even more powerful

With the extra ballast, the load curve of the MK 88 is increased still further – up to a capacity at maximum radius of 2,050 kg. And the self-ballasting device enables the crane to load the extra ballast by itself.

1. Place the ballast
2. Slew the crane
3. Lower the ballast – finished.



## Safe

The slewing radius remains within the supports.



## Simply flexible

Erection switch for the 0°, 15°, 30°, 45° jib positions.



## **Working fast and safe - for sure**

- **No problem with working around interfering edges: Make full use of the whole outreach**
- **SPEED 2 LIFT: Pure 2-line operation**
- **MICROMOVE: Fine positioning with millimetric precision**
- **Everything in view: Steplessly height-adjustable lift cab**



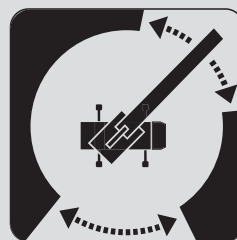
# Working fast and safe - for sure

With the EMS electronic monitor system in the lift cab of the crane, the driver has all the crane functions fully in view. Likewise, the support pressure of each individual jack unit and the total inclination are displayed and monitored. Yet another safety bonus.



## SPEED 2 LIFT

Pure 2-line operation for maximum performance at full speed.



## Operating-range limiting system

Limits to work areas are set by simple teach-in techniques on the EMS display – more safety for everyone.



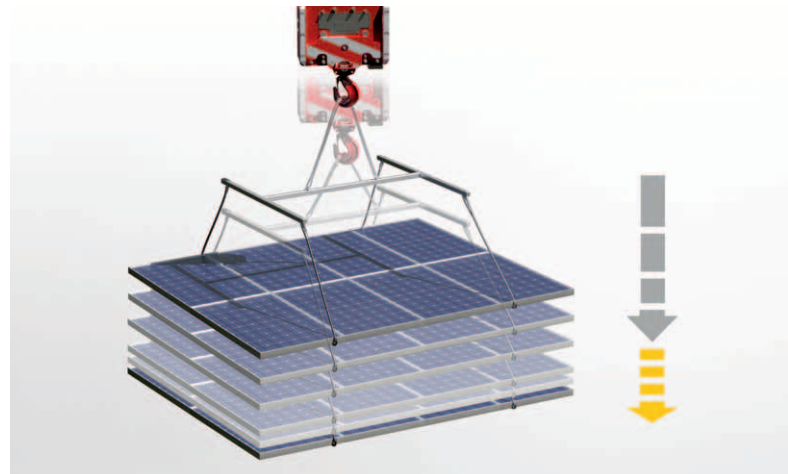
## Keep the load calm

With the wind load control the jib is automatically held in place if the wind gets up. No need to counter-steer. This means that loads which present large surface areas (such as formwork panels) can be moved, held, and positioned with absolute precision. Rapid slewing movements can lead to loads starting to swing; the integrated load oscillation damping compensates for this automatically.



## Position loads with millimetric precision

At the press of a button on the control lever, MICROMOVE comes into action, and reduces lowering to micro-speed. This means that even the heaviest loads can be floated, held, and positioned with extremely fine sensitivity, and without engaging the hoist gear brake.



## Horizontal load path – at the press of a button

With the MK 88 loads can be moved rapidly horizontally, with the jib set at a steep angle. The intelligent control system automatically levels the height of the load, depending on the movement of the trolley. You can work with the jib at an angle just as if it were horizontal.



## Mobile – and everything in view

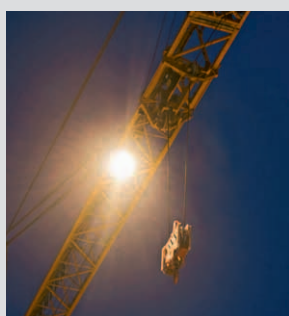
The radio remote control with check-back shows all the operational data on two easily readable displays.

# Excellently equipped



## The lift cab

The steplessly height adjustable lift cab is fitted with safety glass all round, and is one of the main features of the mobile construction crane. It includes a comfortable heated seat with armrest control, including integrated master switches, an EMS electronic monitor system, and a radio/CD player.



## And a light comes on

A site lighting system integrated into the jib makes it possible to work even after dark.



## Access

The integrated ladder provides the driver with safe access to the slewing platform and the lift cab.

## Everything in view

The lift cab provides a perfect view of the load and the site, at any height. With the EMS and the trolley camera, you have all the information needed, at a glance. And that means fatigue-free and efficient working – guaranteed, day in, day out.



## Stay at eye level with your load

The lift cab can be moved to the same height as the load, which means that the driver maintains best possible eye contact with the assembly personnel.



## Strut plates always where they're needed

Tough, strong strut plates made of top quality materials are easy to access in the stowage compartments provided, with pull-out shelf elements.



## Good access

Safe, easy entry to the cab thanks to flat access ways.



## Easy to work means efficient work

All operating elements are arranged ergonomically and designed for easy overview.

# Excellently equipped



## Trolley camera

Thanks to autofocus and zoom, the load is constantly in view on the screen in the lift cab. The batteries are charged automatically, which means that the camera system is always available.



## Tool / stowage locker

The spacious locker has plenty of room for personal items and tools.



## Climate control system

The climate control system on the lift cab ensures that the cab always has pleasantly fresh air, even when the temperature outside gets high.



## Hand-operated spotlight

Mobile light for all situations.



## Cable control console

As an alternative to remote radio control, operation is also possible by way of the cable control console.

## Equipment carrier

So that you always have the most important things close at hand. The large storage space means that crane accessories can be carried safely on board. The equipment carrier is raised and lowered hydraulically, and can be tilted up when on site.



## Combi-box

The Combi-box is the easy way to stow guying cables, straps, Diesel canisters, and underlay timbers, and have them immediately available whenever they are needed, protected against the weather and theft.



## Safety equipment

The safety package in the lift cab means that in an emergency the crane driver can lower himself out of the cab.



## Engine shutoff with Emergency Stop

Engine overspeed protection and Emergency Stop switch for the undercarriage engine and the Diesel generator.



## Teleservice

Easy evaluation of the machine data and remote maintenance on the office PC, to increase the crane availability even further.

# More than just a crane



## There for you 24/7

We can help you at every possible time of operation. Talk to our experienced and skilled mobile construction crane specialists.

**+49 7351 41-4000 (Mon.-Fri. from 8.00 – 17.00)**  
**+49 176 178 922 48 (on-call service)**



### Service network

Take advantage of the universal Liebherr Service network, worldwide.



### Transport

A broad network of well-known forwarding companies guarantees fast and reliable transport.

## Training

Experienced instructors to provide training in theory and practice, comprehensive training resources, and a training centre with the highest technical standards, guarantee that basic and advanced training can be provided in all matters associated with the crane. Our aim is to prepare well-trained service technicians and crane drivers, who will contribute to ensuring that construction sites run smoothly, economically, and safely.



## Original spare parts

Our original spare parts are ideally matched to every Liebherr crane, and meet the very highest standards with regard to quality and functional performance. And whenever our products are optimized even further, we pass the benefits on to our spare parts as well.



## Service and guarantee

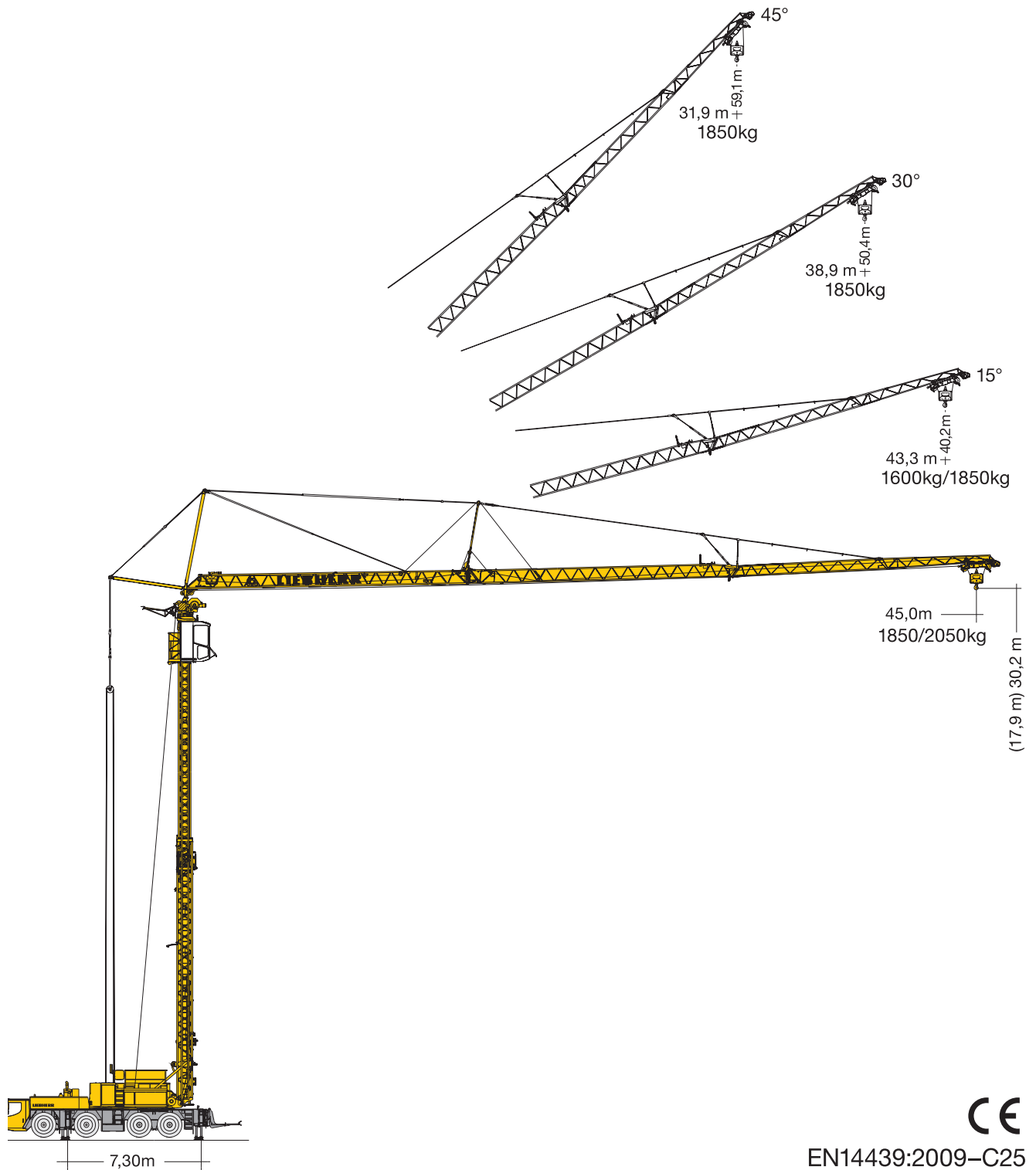
Consistent maintenance contributes to a long and successful service life for your crane. Repairs, maintenance, and overhaul of used machines are carried out by experts at the Liebherr repair centre.



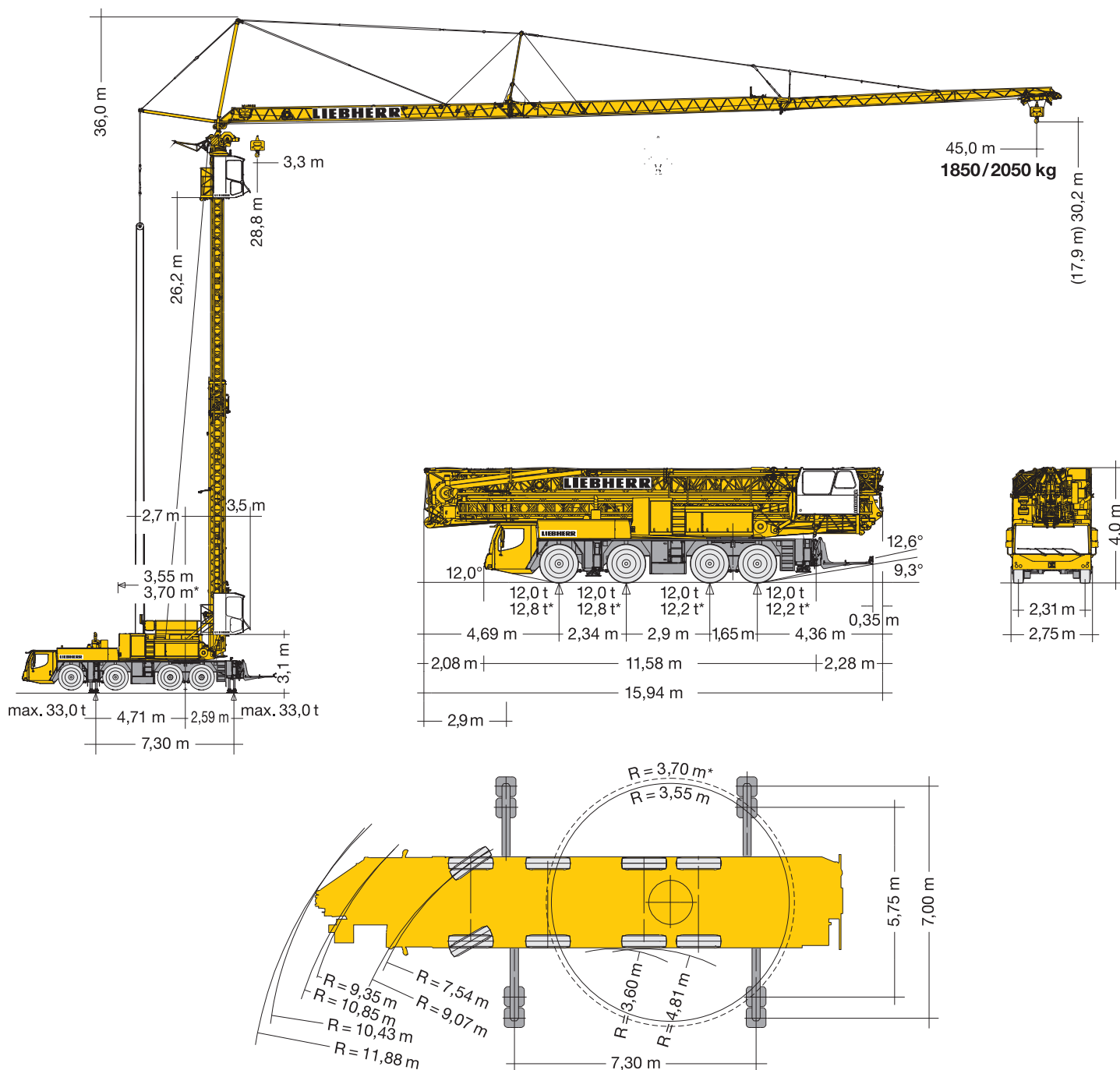
## Why mobile construction cranes from Liebherr?

Liebherr have more than 60 years experience in the construction of cranes, and provide you with development, production, and service all from one source. The unique depth of manufacturing skill, combined with features such as the in-house production of winches and electric motors, guarantees that all the components of the crane are matched perfectly to one another. Every equipment unit is a creation of top quality, with extremely long service life. And after you have bought your crane, Liebherr will always still be there to offer you best possible after-sales service with fast spare parts supply.

# Technical data MK 88







## Gewicht



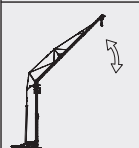
Weight / Poids / Peso / Peso / Gewicht / Macca


<b>Gesamtgewicht</b>	<b>48 000 kg</b>	<b>* mit 2,0 t Zusatzballast</b> / with 2.0 t additional ballast / avec lest additionnel de 2,0 t	<b>48 000 kg</b>
Total weight		con zavorra addizionale da 2,0 t / con contrapeso adicional de 2,0 t / met 2,0 t extra ballast	<b>+ 2 000 kg</b>
Poids total		с дополнительным балластом 2,0 т	
Peso totale			
Peso total			
Totaalgewicht			
Общая масса			
		<b>Achslasten</b>	<b>&gt; 12,0 t</b>
		Loads per axle / Charges par essieu / Carichi per asse / Peso por eje / Aslasten / Нагрузка на мосты	
		<b>Zusatzballast für Straßentransport demontieren, Ländervorschriften beachten.</b>	
		Remove additional ballast for road transport, observe country-specific regulations.	
		Démonter le lest additionnel pour le transport sur route, respecter les spécifications des pays individuels.	
		Smontare la zavorra aggiuntiva per il trasporto su strada, rispettare le norme nazionali.	
		Desmontar contrapesos adicionales para tránsito en carretera, véase condiciones en cada país.	
		Extra ballast dient voor wegtransport gedemonteerd te worden, landvoorschriften navolgen.	
		Для транспортировки по дорогам демонтировать дополнительный балласт, учитывать предписания, действующие для данной страны.	

# Technical data MK 88

## Antriebe


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

	0 ↔ 1,0 U/min	5,0 kW FU
	0 ↔ 70,0 m/min	4,0 kW FU
	0 – 15° 0 – 30° 0 – 45°	55 sec. 100 sec. 120 sec.

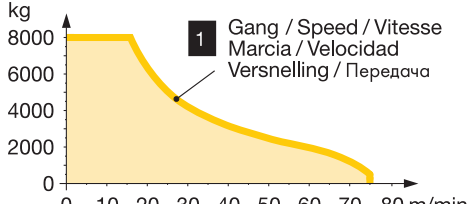


↔ stufenlos / stepless / régl. continu  
régl. progressive / sin escalones / traploos  
Бесступенчатый kg m/min

24 kW FU  
WIW 230 KY 005



1	8000 0 ↔ 16
	500 0 ↔ 75








kg


8000  
6000  
4000  
2000  
0

0 10 20 30 40 50 60 70 80 m/min

1 Gang / Speed / Vitesse  
Marcia / Velocidad  
Vernelling / Передача

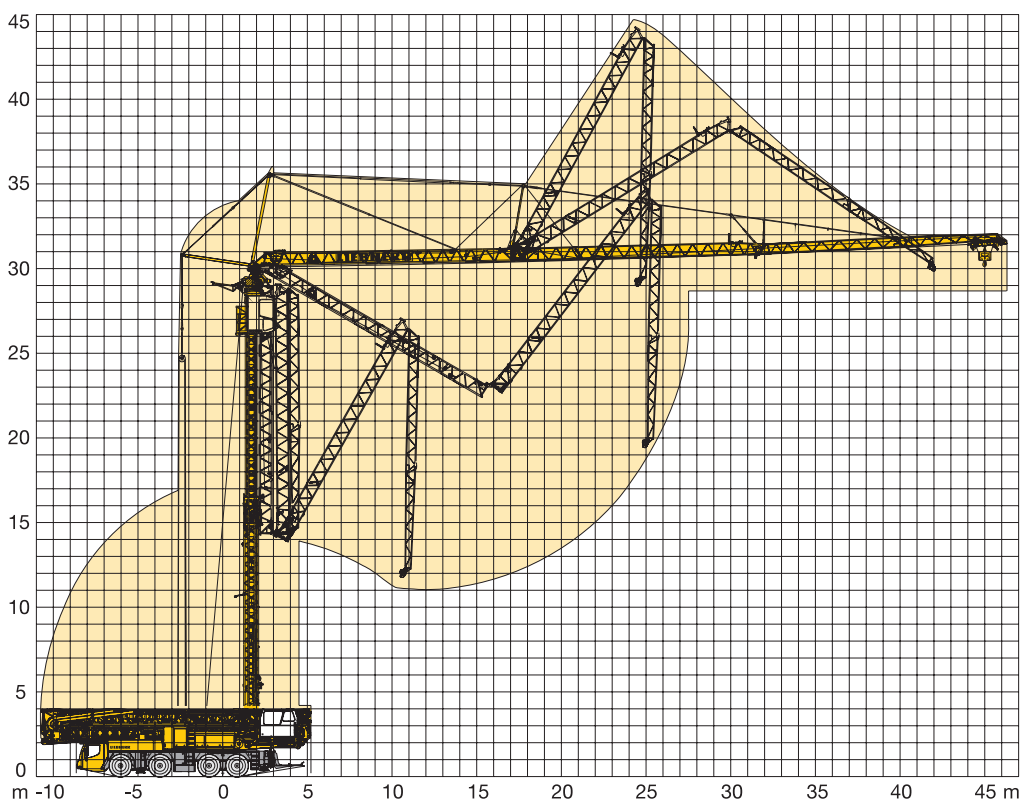
		1	2	3	4	5	6	7	8	9	10	11	12	R1	R2	
	km/h	5,5	7,1	9,2	11,8	14,9	19,2	25,2	32,4	41,8	53,6	68,1	75,0	5,9	7,7	43,1%
	km/h 	1,3	1,7	2,2	2,9	3,6	4,6	6,1	7,8	10,1	13,0	16,5	–	1,4	1,9	> 69,5%

	14.00 R 25	BGL		C.0.08.0090
-------------------------------------------------------------------------------------	------------	-----	-------------------------------------------------------------------------------------	-------------

	63 A, 400 V	Hz	kVA
	111,0 m 5 x 16 mm <sup>2</sup>	50	37,0

## Aufstellvorgang

Erection procedure / Déroulement de montage / Procedimento di montaggio  
Procedimiento de montaje / Opstelling van de mobiele torenkraan / Процесс развёртывания

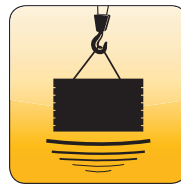


# The advantages - at a glance



## Pure 2-line operation

Maximum performance at full speed – always.



## MICROMOVE

Fine positioning with millimetric precision at the push of a button.



## Extra ballast

for even more lifting capacity over the entire moment range.



## Wind load control

The control system reacts automatically to the counter-moment on the jib.



## One man, one crane

No extra personnel or transport needed.



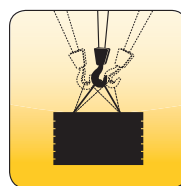
## Load oscillation damping

Automatic compensation for jib movements, to keep the load steady.



## Taxi crane concept

Deal with multiple operations in one day.



## Electronic load moment limitation

Move the load safely right to the stop.



## Low noise emission

for working at night or in noise-sensitive areas.



## Operating-range limiting system

Work areas are limited by simple teach-in techniques on the EMS display



Ready to go into action – in only 11 minutes from the supported state.



The horizontal load path of the crane allows for high working speeds, and that means high handling capacities.



## Operating data acquisition and evaluation

Acquisition of all operating and performance data from the crane, for evaluation and optimum maintenance and repair.

# Der einzige Haken an der Sache...



**... hängt am Hubseil.**



## Bleiben wir in Kontakt.

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Änderungen vorbehalten.

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