

MK 88-4.1 mobile construction crane

# Great things come in small packages

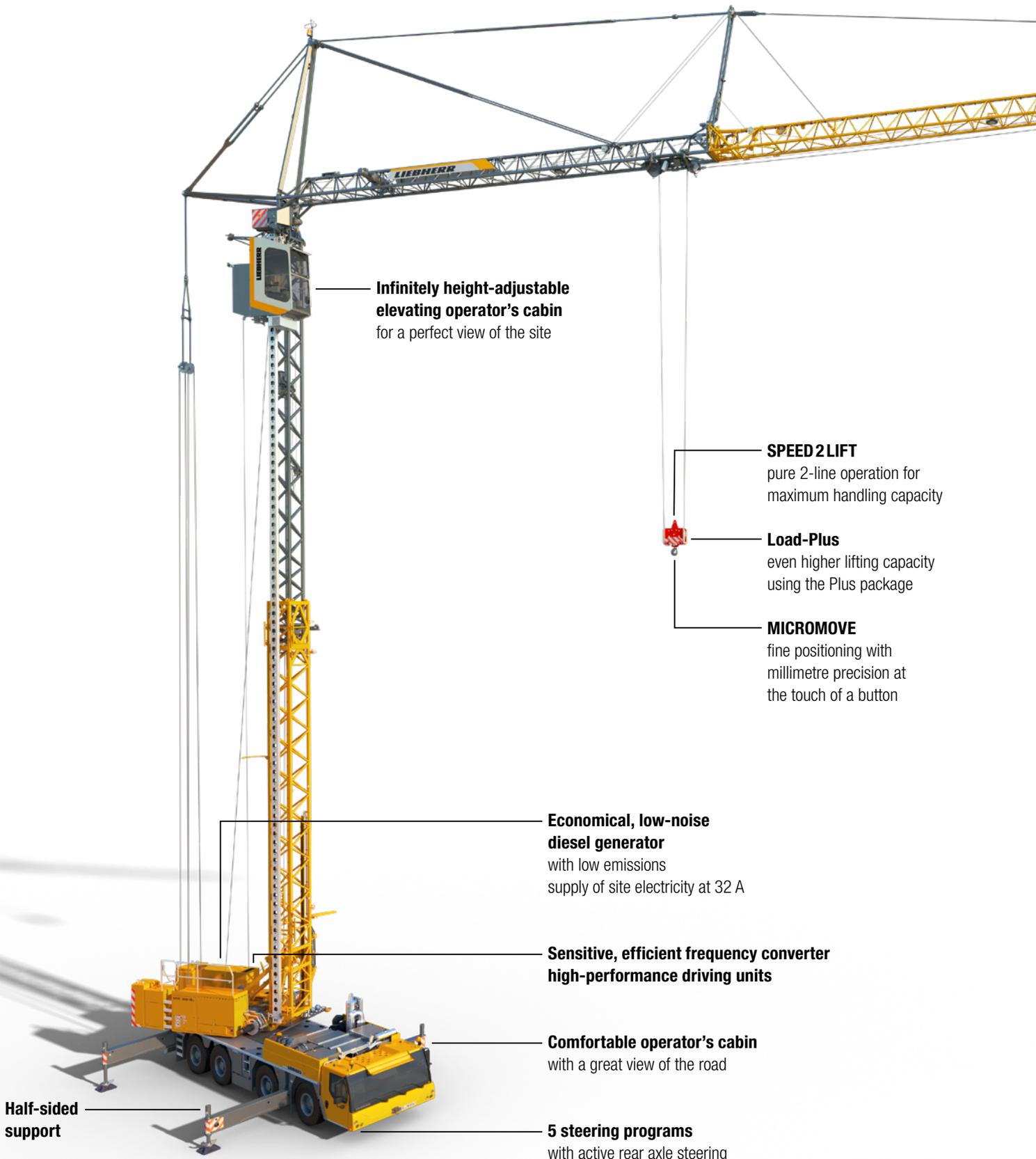
**Technical data**

Max. lifting capacity	8,000 kg
Max. radius	45 m
Max. lifting capacity at the jib head	2,200 kg



# LIEBHERR

# MK 88-4.1 mobile construction crane



**Infinitely height-adjustable elevating operator's cabin**  
for a perfect view of the site

**SPEED 2 LIFT**

pure 2-line operation for maximum handling capacity

**Load-Plus**

even higher lifting capacity using the Plus package

**MICROMOVE**

fine positioning with millimetre precision at the touch of a button

**Economical, low-noise diesel generator**

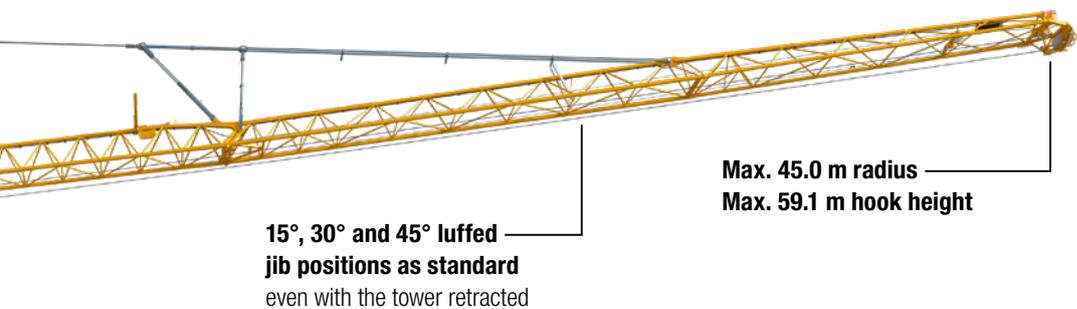
with low emissions  
supply of site electricity at 32 A

**Sensitive, efficient frequency converter high-performance driving units**

**Comfortable operator's cabin**  
with a great view of the road

**5 steering programs**  
with active rear axle steering

**Half-sided support**



**15°, 30° and 45° luffed  
jib positions as standard**  
even with the tower retracted

**Max. 45.0 m radius**  
**Max. 59.1 m hook height**

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# Mobile construction cranes in action



## Areas of use

- Urban and night sites
- Wood, steel and hall construction
- Refineries and chemical plants
- Antenna construction
- Roof refurbishment and greening
- Installation of solar panels
- Window and facade construction
- High-bay shelving construction
- Bridge and road building
- Maintenance and repair work
- Prefabricated component and house construction
- Erection work
- Site preparations
- etc.

## The benefits of mobile construction cranes

**Use on projecting edges:** The vertical tower allows Liebherr mobile construction cranes to be used right next to the building. Use the full jib length with high lifting capacities at the jib head.

**Taxi crane concept:** High mobility without massive logistics – arrive, hoist, move on, with no additional transport.

**Selectable drive unit –** Depending on the site situation, you can operate Liebherr mobile construction cranes with the efficient diesel generator or site electricity. That makes them independent or free from noise and CO<sub>2</sub> emissions – depending on what the situation requires.

**Extreme manoeuvrability:** The active rear axle steering enables Liebherr mobile construction cranes to get into any gap.

**One-man operation:** Only one person is required to transport, erect and operate the crane. No expensive additional transport and extra erection personnel are required.

**Small footprint:** The MK really shows its strengths when space is at a premium. The MK requires very little space for assembly and operation.





# The highlights of the MK 88-4.1

## The new Plus package



### Load-Plus

The intelligent control system on the MK 88-4.1 allows lifting capacities to be increased automatically by up to 10%. The system detects the weight of the load and, by adjusting the driving units, makes special hoists possible, which are actually above the maximum load.

### Powerful luffing

The various luffed positions of 15°, 30° and 45° combined with the telescoping tower make hook heights of 17.9 to 59.1 m possible. The new, more powerful trolley drive enables you to handle even heavier load cycles and achieve up to 50% more lifting capacity in some situations.



### Additional ballast

Its two tonnes of additional ballast take the MK 88-4.1 into the next capacity class. Increase the crane's lifting capacities up to 2.2 t at the jib head.



### **Comfortable elevating operator's cab**

To ensure that crane operators have the best possible view from the cabin of the MK 88-4.1, it has been fitted with the new elevating operator's cab. The infinitely variable height adjustment, enlarged window areas and the ergonomic control stand provide the basis for an effective working day.



### **Conquering the world**

The new ballast concept enables you to access areas which were previously completely out of reach. Splitting and detachable ballast means that minimum axle loads of 10 t can be achieved. This means that the crane can satisfy many national regulations and an adjusted load diagram also makes it possible that the crane can continue to operate with all its power.

### **Operation with zero emissions**

The intelligent energy management not only means the crane can operate at 63 Amperes, but that it can also consume just 32 Amperes as the control system calculates the perfect power distribution.



### **Half-sided support**

For flexible use on constricted sites with unrestricted lifting capacity in the fully supported zone.



# Work quickly and safely



## Comfortable cabin level with the load

The infinitely height-adjustable elevating operator's cabin provides an excellent all-round view of the site due to its large glass surfaces. The crane operator can keep his eye on the load and the site personnel at all times. That ensures a smooth process for transporting the load and enhances safety for the personnel, load and crane. The cabin has an ergonomic control stand with a comfortable, heated operator's seat and displays for the control system and camera systems. The combined heating and air conditioning system allows the temperature in the cabin to be controlled perfectly.

This wide range of equipment allows the crane driver to work efficiently without fatigue.



### Camera systems

You can keep the load and slewing platform on the screen in the elevating operator's cabin in view at all times. Depending on the camera system, autofocus and zoom can help you monitor operations. The batteries are charged automatically to ensure that the camera systems are always available.



### Turn night into day

Good site lighting can be guaranteed by powerful LED floodlights. Seven well positioned light sources illuminate the entire working area, even during the erection process.



### Level luffing

The MK 88-4.1 allows high-speed horizontal movement of the load with a luffed jib. The intelligent control system automatically levels the height of the load – depending on the movement of the trolley. You use the luffed jib in exactly the same way as a horizontal jib.

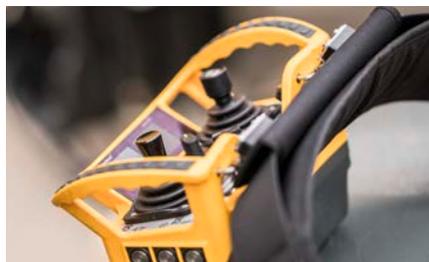
### Access equipment

Safe access equipment makes reaching the slewing platform and elevating operator's cab easy.



### Move wirelessly

The radio control enables the operator to keep the crane, site and load in view at all times.



### Safe

The slewing radius remains inside the supports.



# Your success is our driving force



## For the sake of the environment

The MK 88-4.1 is designed to prevent noise and CO<sub>2</sub> emissions wherever possible. The engine on the undercarriage is only required for the journey to the site. Either an efficient diesel generator or an external power connection is available for the erection process and crane operations. This means that the crane can be operated autarchically as well as being green and emitting low levels of noise.



### **Automatic set-up status registration**

The intelligent control system monitors safety aspects of the crane configuration such as the support width, ballasting and erection height. The crane operator is given suggestions on the current configuration of the crane and must then confirm them. That ensures enhanced safety on site and a good feeling when operating the crane.



### **Set speeds by hand or foot**

Change between fine positioning and high-speed operation to the collection position without taking your hands off the control levers. The foot pedal enables you to override the set slewing speeds temporarily. That enables you to operate at high or low speed – but always using the full control lever distance.



### **Liebherr-Litronic: the smart assistant**

When equipped with the programmable logic controller, the MK 88-4.1 is perfectly prepared for a safe, successful working day. The crane operators are supported by smart assistance systems.

- **Micromove fine positioning mode**  
Allows the load to be lowered at micro-speed and stopped without the hoist gear break engaging. Can be activated at the touch of a button on the control lever.
- **Keep your load under control**  
The wind force moment control and oscillation-damping system enable loads to be moved and positioned precisely. They reduce the influence of the wind and damp swinging motion after high-speed slewing movements.
- **ABB operating-range limiting system**  
Keep out of no-go areas using a simple teach-in process in the cabin – enhancing safety for everybody.
- **Full control lever distance**  
The modern control system on the MK 88-4.1 ensures that you always have the full control lever distance so that you can position heavy loads with millimetre precision.





# Get there safely



## Clear view

Good visibility is a basic requirement for safety in road traffic and on site. The MK cranes from Liebherr put nothing in the way to obstruct your view. The short overhangs and compact transport dimensions ensure that you get to the site safely. The modern driver's cabin has an ergonomic design and provides the driver with maximum comfort even on long journeys.



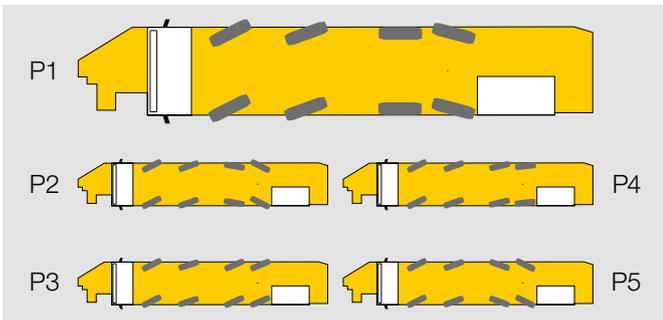
### Great to drive

A powerful 6-cylinder Liebherr turbo diesel engine developing 330 kW makes the crane great to drive. The 12-speed ZF TraXon transmission with automated gearshift improves the economy of the job and makes driving the crane a real pleasure.



### Mobility in the city and elsewhere

The 4-axle chassis and compact transport dimensions enable the crane to work in tight urban areas. The high ground clearance and modern drive concept mean that the crane can also drive safely in difficult terrain. Furthermore, the hill start aid ensures smooth starting, even on steep gradients.



### Fantastic manoeuvrability

The turning circle of the MK 88-4.1 is just 11.88 metres and its five steering programs make it ready to tackle any situation.

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

### Reversing camera

For safe manoeuvring on site.



### Tyres

Large 14.00 R 25 crane tyres ensure low tyre wear and high traction.



### Intarder

Brake with zero wear using the standard intarder.



# Simply well set up



## One-person assembly

The crane can be turned through 360° during assembly. Combined with the various erection curves, the MK 88-4.1 is extremely adaptable. The program-controlled erection process is extremely safe. The crane driver can intervene at any time and change the assembly speed and direction. For jobs lasting several days, no dismantling is required with the crane being allowed to weathervane.



### Half-sided support

The standard support width is 7.0 m and can be reduced to 5.75 m if necessary – and all with low corner pressures. If the job takes place on a road, for example, it can also be completed with half-sided support. On the side towards the site, the full load diagram can be used, whilst the road is kept open to vehicles.



### Particularly flexible

The ballast can be adjusted in four versions, depending on the maximum axle loads. The crane can be driven on roads with a 10 t maximum axle load without ballast and can achieve an outstanding lifting capacity diagram with the additional ballast.



### Half the height with full performance

The MK 88-4.1 can be used with full radius and lifting capacity in areas with height restrictions and under high-tension cables.

### Simply flexible

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



### Always there

Sturdy base plates are stowed within easy reach in practical storage lockers.



### BTT unit

Individual selection and operation of the supports using the BTT Bluetooth unit.



# Superbly equipped



## Passenger transport

Transporting passengers using mobile construction cranes is often unavoidable, but can only be done safely if it is strictly controlled.

As a result of its particularly mobile concept and various additional safety features, the MK 88-4.1 provides a safe solution for transporting passengers which can be readied quickly. That makes licensing easier in certain countries.



## Ergonomics for the crane operator

Heated and air-conditioned seats in both cabins create the perfect climate – just as the combined heating and air conditioning system creates the perfect cabin temperature.

Facilities such as a mobile phone holder with USB charging interface and a bottle cooler mean that the operator can concentrate fully on the job in hand.



## Plate placement program

The new operating mode helps to position the heavy plates for supporting the MK 88-4.1. This means that the supports can be placed easily by one person without risking a back injury.



## MK planner

For easy crane job planning: Calculate the corner pressures, display the lifting capacity curves and export 2-D/3-D drawings.



### **Equipment carrier**

So that you always have what you need with you. The crane accessories can be carried safely on the large storage area. The equipment carrier can be raised and lowered hydraulically and can be tilted up when on site. There is an additional locking storage locker beneath the storage area surface.



### **Combination box**

The combination box can carry tie ropes, belts or chocks so that they are always available and protected from weather and theft.



### **Safety equipment**

The safety package in the elevating operator's cabin enables the crane driver to lower himself out of the cabin in an emergency.

### **Hand-held light**

Mobile light whenever it is required.



### **LiDAT**

The data transfer and location system from Liebherr ensures that you always have the latest operating data for the crane in view. That enables you to manage the crane efficiently and plan its jobs and servicing perfectly. The LITEL teleservice also makes remote maintenance possible to minimise down-times on site.

# Tower Crane Customer Service



## Well trained

Experienced trainers for theoretical and practical training, extensive courses and a training centre with the latest technical facilities enable us to provide a wide-ranging programme of basic and advanced courses relating to cranes. Our aim is to ensure well-trained service technicians and crane operators to help make site work cost-effective and safe.



### **Genuine spare parts**

Genuine spare parts are perfectly tailored to every Liebherr crane. They meet very high standards in terms of quality and functionality. We transfer every improvement of our products immediately to our genuine spare parts.



### **Service and warranty**

Consistent maintenance helps to ensure a long and successful crane service life. Repair, maintenance and renovation work on used machines is carried out expertly at our Liebherr repair centre.



### **Our 24/7 hotline**

We can help you at any time. Talk to our experienced and competent MK specialists.

**+49 7351 41-4000 (Mon – Fri from 7.30 am to 5 pm)**  
**+49 176 178 922 48 (on-call service)**



# Mobile construction cranes from Liebherr **Building the future!**