

A COMBINATION OF POWER AND FUNCTIONALITY

# Electric Model 6 Mobile Harbor Cranes





## For tough applications in terminals

Konecranes Gottwald Model 6 Mobile Harbor Cranes are extremely robust, electrically powered cranes for applications demanding high performance. As part of the large crane family from Konecranes, they offer:

- powerful lifting capacity curves with lifting capacities of up to 125 t
- · working radii ranging to 51 m
- · hoisting speeds of up to 120 m/min.

Combining power and functionality, our Model 6 mobile harbor cranes provide all you expect of cargo-handling equipment in terms of productivity, safety and durability. These cranes are:

- self-contained
- versatile
- · eco-efficient and · easy to maintain. Model 7 Model 8 Barges / coasters ≤ 5,000 DWT Barges / coasters 80 - 500 TEUs Handysize ≤ 30,000 DWT 300 - 1,200 TEUs Handymax 1,000 - 2,500 TEUs ≤ 50,000 DWT 3,000 - 4,500 TEUs ≤ 80,000 DWT Capesize bulker Post-Panamax ≤ 170,000 DWT 6,000 - 9,600 TEUs Super post-Panamax 10,000 - 11,000 TEUs

Konecranes Gottwald Model 6 Mobile Harbor Cranes load and unload vessels up to post-Panamax and Capesize bulker class

#### Four variants for dedicated applications

With Model 6 mobile harbor cranes, you can choose from dedicated 2-rope and 4-rope grab variants and profit from a wide working radius for efficient container twin-lift operation. With high tower variants, your crane operator can handle container stacks high on deck.

For continuous-duty bulk handling, Konecranes Gottwald Model 6 Mobile Harbor Cranes feature a 50-t grab curve.

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# The right crane for every application and site

Konecranes Gottwald Model 6 Mobile Harbor Cranes are designed for a particularly broad range of applications and are therefore universally applicable by changing lifting gear quickly and easily.

In your universal or special-purpose terminal, they help you on vessels up to post-Panamax and Capesize bulker class to handle:

- containers
- · general cargo
- · bulk materials and
- · project cargo.

#### Modular cranes from the pioneer

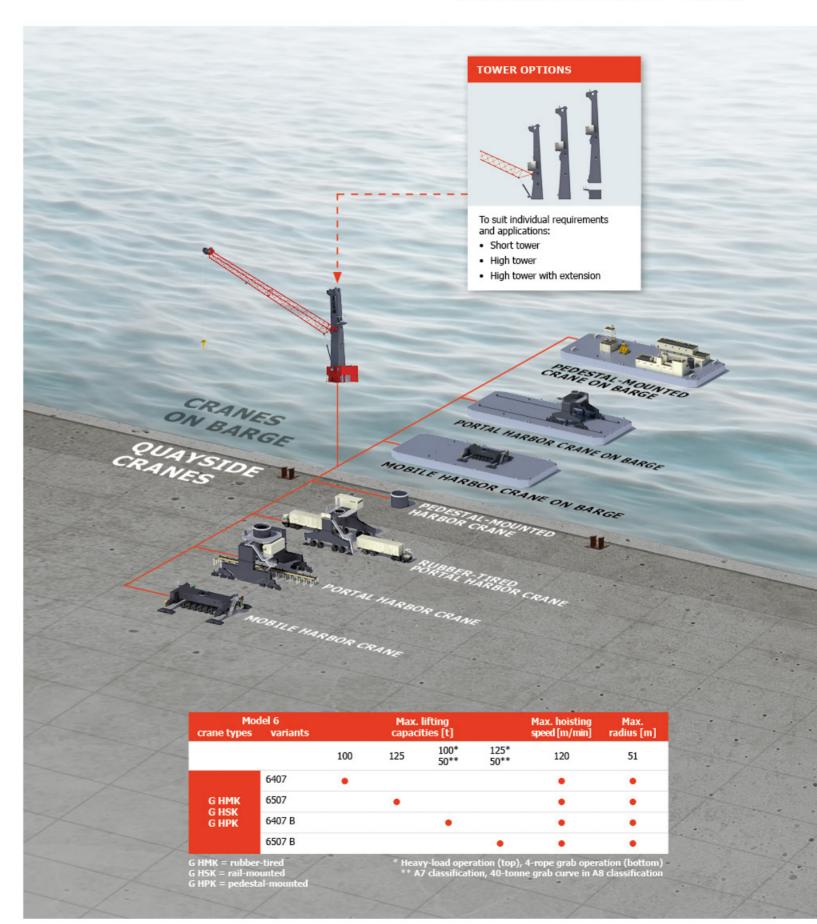
As the industry's pioneer, Konecranes created modular cranes for quayside and waterways based on mobile harbor crane technology to suit a wide variety of applications in ports and terminals, mid-stream and on the open sea.





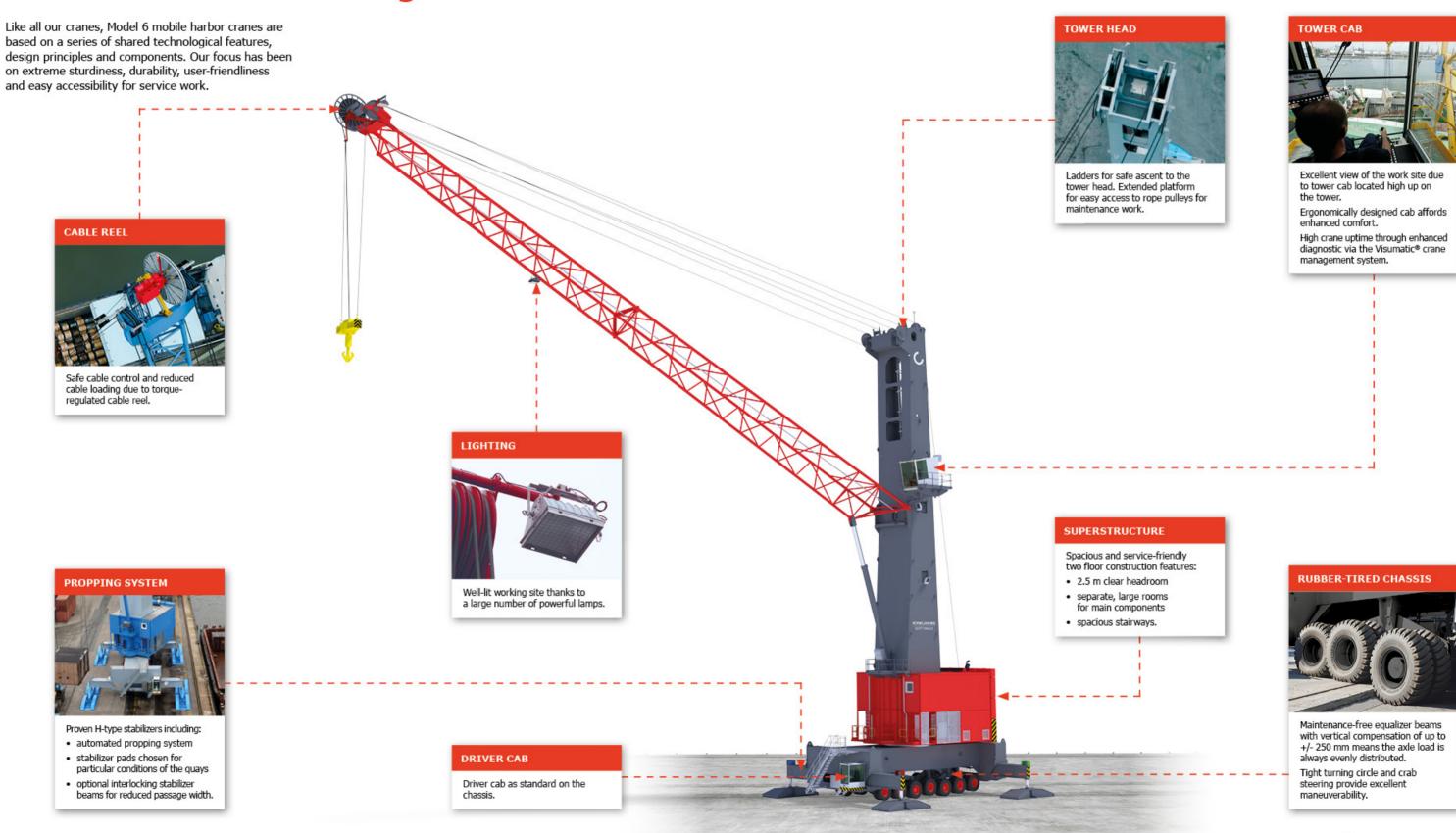






KONECRANES GOTTWALD

## All-round excellent design



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# Superstructure – top level

Model 6 mobile harbor cranes have a two-level superstructure. The two levels are connected to one another via a spacious stairway. All the machinery, drive units and electrical equipment are grouped accordingly in separate, large rooms throughout the two levels.



Proven planetary gear integrated in the drum with oil cooler. 3-phase drive, smooth acceleration and deceleration of the lifting motion.

Second hoist for 4-rope grab cranes.

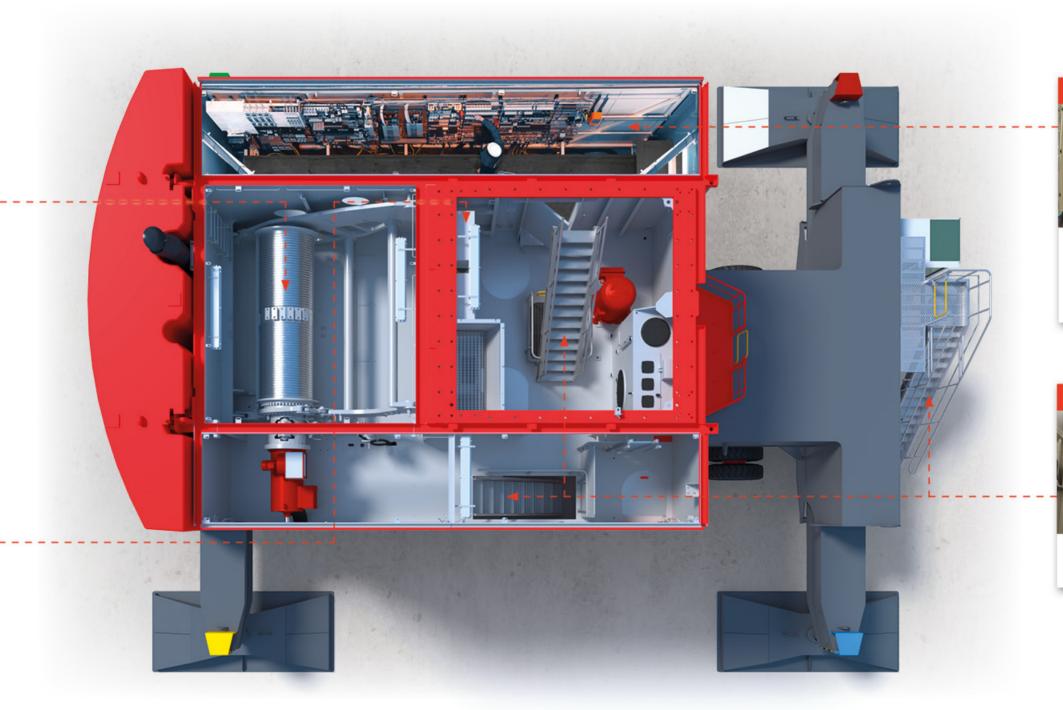
### CENTRAL LUBRICATION



Provides regular and proper lubrication of slew ring, boom root and luffing cylinder bearings.

Optionally extendable to include chassis and rope pulleys.

Pinion lubrication using special-purpose, high-performance grease via separate central lubrication system.







Weatherproof and air-conditioned. Contains electrical equipment and control system. Clearly divided into function groups.

Features diagnostics panel to facilitate troubleshooting.





Provide easy access to the tower cab. Feature an ergonomic design with 50° inclination.

# Superstructure – lower level

As on the top level, the components have ample space on the lower level. This also applies to our drive system with its numerous variants.



Mounted on a slide for easy replacement.

Features drive power based on crane variants and application. Provides sufficient power for all crane functions to be performed simultaneously and independently of each other.

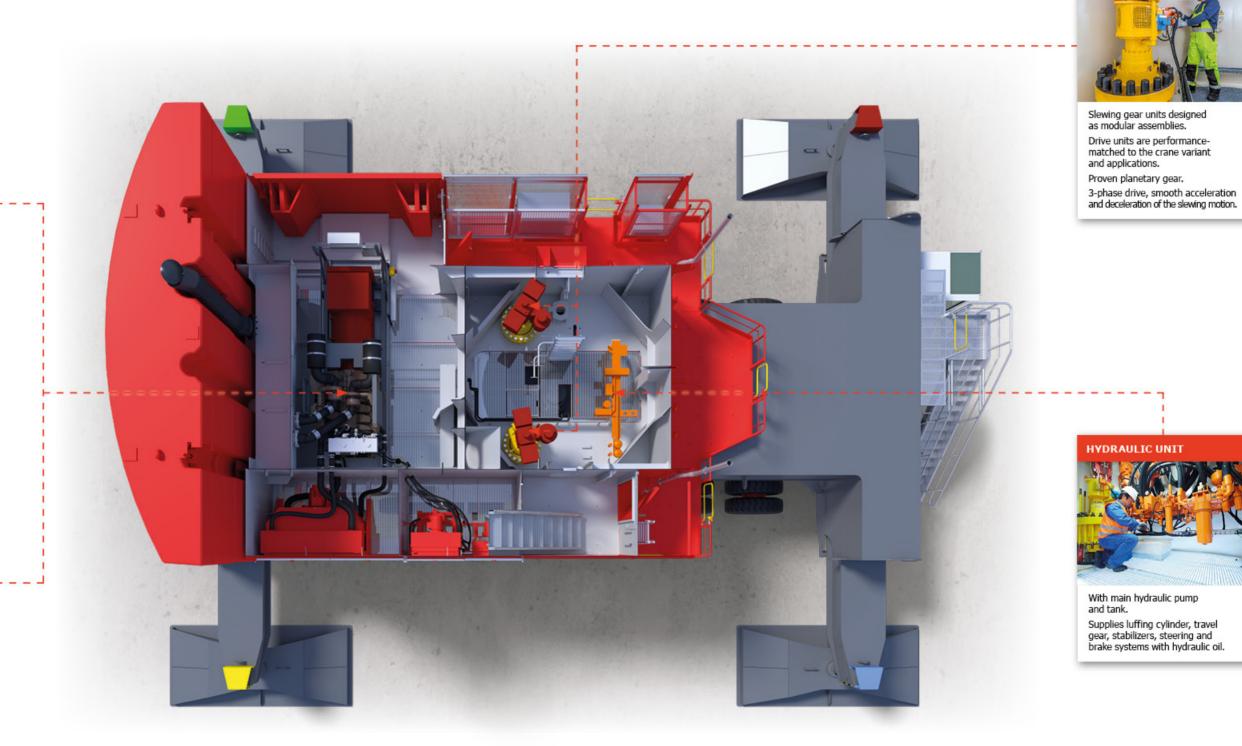




Cutting-edge optional drive. Energy-saving hybrid drive with downsized diesel engines and robust ultracaps.

Configuration based on crane variant chosen.

Meets all performance requirements.



SLEWING GEAR UNITS

### Unsurpassed eco-efficiency

Our drive system is eco-efficient as it is powerful, cost-effective and environmentally compatible. This is because Konecranes Gottwald Model 6 Mobile Harbor Cranes are operated with the most favorable energy for the future: electrical power.

#### Diesel-generator drive

Model 6 mobile harbor cranes use highly efficient diesel engines for on-board power generation. These include diesel engines fitted with SCR exhaust technology, which meet the requirements of EPA Tier 4f and EU Stage V standards.

#### **Hybrid drive**

The hybrid drive makes the crane's on-board diesel-electric drive even more cost-effective by saving the energy recovered during the crane's lowering and braking motions in an intermediate storage media and making it available to the crane's power grid for the next work cycle.

#### **External power supply**

You can achieve even greater eco-efficiency from Model 6 cranes when their electric drives are supplied with power from your shore grid – an ideal match as the power does not need to be converted between the power connection and the crane. Energy recovered from the crane's lowering and braking motions can be fed back into the on-shore grid.

#### **OUR OFFERING**

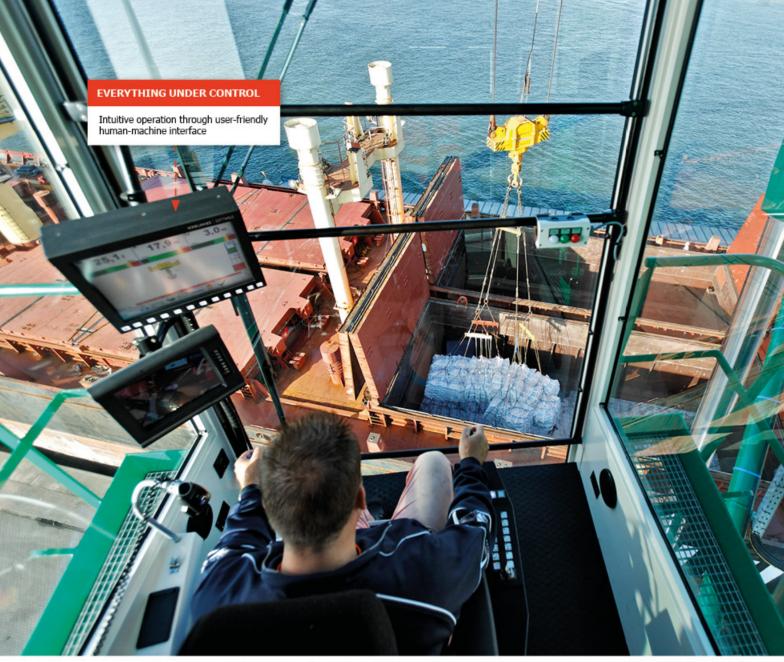
- State-of-the-art, eco-efficient 3-phase drive technology
- Diesel-generator set, hybrid technology, external power supply
- External power supply equipment for all grids
- Surplus energy can be fed back into the on-shore grid
- Preparation of the crane for operating with external power from the grid at a later point in time



External power from the terminal's electricity supply increases the efficiency of the drive and eliminates local exhaust and noise emissions from the terminal. Surplus energy can be fed back into the on-shore grid.



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## Smart and thus user-friendly

Konecranes Gottwald Model 6 Mobile Harbor Cranes are packed with smart technology. This is why terminal operators can significantly improve productivity and also safety for both the crane operator and the machine.

#### Ergonomic, top-of-the-range equipment

Our Model 6 mobile harbor crane includes user-friendly equipment and functions:

- comfortable, air-conditioned tower cab, with optional air-suspension seat for safe, comfortable work
- Visumatic® crane management system with clearly arranged graphic symbols for intuitive operator guidance
- a camera on the boom head for a close-up view of the work site via the monitor screen in the cab
- radio remote control to avoid repeated ascent to the tower cab during complex crane maneuvers.

### MORE CONTROL - MORE EFFICIENCY

Many optional features enable operators to adapt their Model 6 crane to the exact conditions of use. These features include:

- smart crane features to enhance productivity and safety
- web-based information and diagnostics systems to record operating data and provide access to service data.

		Cargo			Benefits	
	Container	Bulk	General/ project cargo	Efficiency	Safety	Ergonomics
Smart crane features						
Load anti-sway	•	•	•	•	•	•
Semi-automatic point-to-point control	•	•	•	•	•	•
XY-path assistant	•		•	•	•	•
Hoisting-height assistant	•	•	•	•	•	•
Working-range assistants	•	•	•		•	•
Vertical-lift assistant			•	•	•	:●
Tandem-lift assistant			•	•	•	•
Auto-adaptive grab control		•		•	•	
Cargo-hold totalizer		•		•	•	
Verifiable weighing system		•		•		
Web reporting	•	•	•	•	•	
Remote desktop	•	•	•	•	•	

For productive and save cargo handling, Konecranes offers a variety of standard and optional smart crane features for its complete range of mobile harbor cranes

### Perfectly integrated handling

Konecranes has the widest and deepest offering in container handling and therefore can provide integrated handling solutions from a single source including mobile harbor cranes, horizontal container transport and storage equipment. As an experienced port solutions provider, we meet the needs of logistic chains and its interfaces in bulk handling and general and project cargo, too.

#### The right choice - from the start

We also offer planning and advisory services on all aspects of terminal investments and expansion projects. To help you, we employ state-of-the-art software solutions including simulation and emulation specifically for container handling.

Konecranes also enhances bulk handling capability by offering:

- · consultancy services and
- · software designed specifically for bulk terminals.

Our Model 6 mobile harbor cranes are suitable for a complete range of cargo handling applications and are adapted to specific quay infrastructures. Our Konecranes' ever-expanding product range also includes the Commtrac® bulk TOS.



Solutions for terminals with rail infrastructure: Model 6 portal harbor cranes with customized portals in regards to height, span and quay loading.



Solutions for limited or missing quay infrastructures: We have made a name for ourselves as a manufacturer of sophisticated cranes on barge.

#### **OUR OFFERING**

- Widest and deepest portfolio in container handling
- Integrated handling solutions
- Application-specific consultancy service
- Simulation and emulation software, Commtrac® bulk TOS



### Model 6 cranes in the best hands

We have placed the highest value on ease of service and maintenance when engineering Model 6 mobile harbor cranes for you. Thanks to easily accessible maintenance points, our robust cargo-handling equipment is user-friendly. Our expertise is complemented by the use of components from globally renowned manufacturers.

#### We maintain availabilty

We help to ensure that the availability and productivity of Konecranes Gottwald Model 6 Mobile Harbor Cranes do not diminish. Our global service organization is close to the customer in all time zones and language regions and offers maintenance and repair expertise combined with fast spare parts supply.

### We preserve your crane's value over many years

Because we build your Konecranes Gottwald Model 6 Mobile Harbor Crane and know it best, it goes without saying that we are the ideal partner for your crane throughout its entire life cycle. With our comprehensive Service portfolio, your crane remains state of the art, its service life increases and its value is preserved over many years.



All machinery and components in Konecranes Gottwald Mobile Harbor Cranes are easy to access



We adapt your mobile harbor cranes to new cargo-handling requirements. For instance, we increased the height of the towers on existing cranes so that vessels with more container layers can be loaded or unloaded on deck.

#### **OUR OFFERING**

- Life cycle support
- Global service organization
- Fast provision of spare parts
- Retrofits and upgrades
- Crane operator training, also using a simulator, training programs for service staff





Konecranes is a world-leading group of Lifting Businesses™, serving a broad range of customers, including manufacturing and process industries, shipyards, ports and terminals. Konecranes provides productivity enhancing lifting solutions as well as services for lifting equipment of all makes. In 2018, Group sales totaled EUR 3.16 billion. The Group has 16,100 employees in 50 countries. Konecranes shares are listed on the Nasdaq Helsinki (symbol: KCR).

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