UNCOMPROMISING HANDLING PERFORMANCE

DIESEL-ELECTRIC

MODEL 7 MOBILE HARBOR CRANES
Konecranes Gottwald Model 7 Mobile Harbor Cranes are extremely robust, diesel-electrically driven cranes for high-performance applications. As representatives of the large crane family from Konecranes, they offer powerful lifting capacity curves with lifting capacities of up to 150 tonnes, maximum working radii of 54 metres and lifting speeds of up to 120 m/min.

Konecranes Gottwald Model 7 Mobile Harbor Cranes are designed for a particularly broad range of applications. In your universal or special-purpose terminal, they help you on vessels up to post-Panamax class to handle:

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

VARIANTS FOR DEDICATED APPLICATIONS

With Model 7 mobile harbor cranes, you profit from a number of dedicated two-rope and four-rope grab variants with a wide working radius for efficient container twillift operation. High towers also permit the handling of high container stacks on deck. For the professional handling of bulk materials, a 50-tonne grab curve is also available.

Model 7 mobile harbor cranes offer uncompromising handling performance with the features you expect in a handling machine for productive and durable operation. Model 7 cranes are:

- versatile,
- easy to maintain,
- ergonomic and
- environmentally friendly.
As the industry’s pioneer, Konecranes created modular quayside and floating crane types based on mobile harbor crane technology to suit a wide variety of applications on quay, mid-stream and on the open sea.

FOR FAST, EFFICIENT CARGO HANDLING
Available in different crane types and variants, the Model 7 crane is a universally applicable machine which can quickly and efficiently handle cargo with a broad range of lifting gear.

Crane types | Variants | Max. lifting capacities [t] | Max. hoisting speeds [m/min] | Max. radii [m] |
---|---|---|---|---|
G HMK | | | | |
G HSM | | ✔ | | |
G HMR | ✔ | ✔ | | |
G HPK | ✔ | ✔ | ✔ | | |
7608 | | | | |
7408 standard variant | ✔ | ✔ | ✔ | |
7408 high-speed variant | ✔ | ✔ | ✔ | |
7608 B | | | | |
7408 B | | | | |

* Heavy-load operation (top), four-rope grab operation (bottom)  ** A7 classification, 50-tonne grab curve in A8 classification.
CABLE REEL
Safe cable control and reduced cable loading due to torque-regulated cable reel.

DRIVER CAB
Driver cab as standard on the chassis.

PROPPING SYSTEM
Proven H-type stabilizers including:
- automated propping system,
- stabilizer pads chosen for the particular conditions of the quay,
- optional interlocking stabilizer beams for reduced passage width.

SUPERSTRUCTURE
Spacious and service-friendly two floor construction:
- 2.5 m clear headroom,
- separate, large rooms for main components,
- spacious stairways.

LIGHTING
Well-lit working site thanks to powerful lamps.

TOWER HEAD
Ladders for safe ascent to the tower head. Extended platform for easy access to rope pulleys for maintenance work.

TOWER CAB
Ergonomically designed cab affords enhanced comfort.
High crane uptime through enhanced diagnostics via the Visumatic® crane management system.
Excellent view of the work site due to tower cab located high up on the tower. Even better view thanks to the forward-mounted cab (optional).

RUBBER-TIRED CHASSIS
Maintenance-free equalizer beams with vertical compensation of up to +/- 200 mm means the axle load is always evenly distributed.
Tight turning circle and crab steering provide excellent maneuverability.

MODEL 7 MOBILE HARBOR CRANES AT A GLANCE
ALL-ROUND EXCELLENT DESIGN
SPACIOUSLY ARRANGED AND EASILY ACCESSIBLE
SUPERSTRUCTURE – TOP FLOOR

HOISTS
- Easily accessible
  - Helical gear in a U-shape arrangement
  - DC drive, smooth acceleration and deceleration of the hoisting motion
  - Second hoist for heavy lifting and four-rope grab machines

CENTRAL LUBRICATION SYSTEM
- 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

ELECTRICS ROOM
- Weatherproof and air-conditioned
- Contains electrical equipment and control system
- Clearly divided into function groups
- Features diagnostics panel to facilitate troubleshooting

HYDRAULIC UNIT
- With main hydraulic pump and tank
- Supplies luffing cylinder, travel gear, stabilizers, steering and brake systems with hydraulic oil

Konecranes Gottwald Mobile Harbor Cranes
SUPERSTRUCTURE – LOWER FLOOR

SERVICE-FRIENDLY AND COMPACT

**DIESEL GENERATOR**
- Mounted on slide for easy replacement
- Features drive power based on crane variants and applications
- Provides sufficient power for all crane functions to be performed simultaneously and independently of each other

**SLEWING GEAR UNITS**
- Slewing gear units designed as modular assemblies
- Drive units are performance-matched to the crane variant and applications
- Proven planetary gear
- DC drive for smooth acceleration and deceleration of the slewing motion

**STAIRWAYS**
- Provide easy access to the tower cab
- Feature an ergonomic design – with 50° inclination
The Model 7 mobile harbor crane is powered by electricity. The crane draws its power from the on-board diesel-powered generator or from the quayside mains supplying low or medium-voltage electricity.

**GENERATING ELECTRICITY ON BOARD**
The diesel-powered generator features low fuel consumption thanks to its outstanding efficiency. Use of state-of-the-art dynamic brake resistors – standard on Konecranes Gottwald cranes – can provide savings in primary energy of up to 15% depending on operating conditions and crane capacity.

**EXTERNAL POWER SUPPLY**
If used with electricity from the harbor mains, your Konecranes Gottwald crane offers:

- enhanced efficiency throughout the drive train,
- the opportunity to return electricity to the mains,
- help in reducing overhead costs,
- zero exhaust emissions in the terminal,
- reduced noise emissions,
- reduced servicing costs.

**HYBRID DRIVE**
When generating power on-board, the crane is more efficient with the Konecranes Gottwald hybrid drive – a combination of the diesel-powered generator and electrostatic short-term storage media. The energy recovered from lowering and braking motions is stored in ultracaps, and is then available to the crane’s electric circuits for the next work cycle. The result is a potential reduction in fuel consumption of up to 23% depending on operating conditions and crane capacity.
MORE CONTROL – MORE EFFICIENCY

Many optional features enable customers to adapt their Konecranes Gottwald Model 7 crane to the exact conditions of use, these features include:

- radio remote control – to avoid repeated ascent to the tower cab during complex crane maneuvers,
- automatic point-to-point handling mode to provide efficient support for repetitive load moves,
- vertical lift assistant to stop the load swinging after being raised and prevent horizontal loads on the boom,
- tandem lift assistant permits use of full lifting capacities and control of two cranes by only one operator,
- grab fill level control to reduce overload cut-outs and to improve the bulk handling performance,
- hold totalization feature for register and record bulk handling rates per hold and in total,
- web-based information and diagnostics system to record operating data and provide access to service data.
**HIGHLY EFFICIENT SOLUTIONS**

**PERFECTLY INTEGRATED HANDLING**

Konecranes offers a comprehensive range of equipment for all points along the logistics chain – to provide integrated handling solutions from a single source.

As an experienced port solutions provider, we meet the needs of the entire logistics chain and its interfaces – whether in container, general cargo or bulk handling.

**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.

**BULK HANDLING**

Konecranes also enhances bulk handling capability by offering:

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

Konecranes Gottwald Mobile Harbor Cranes are suitable for a complete range of cargo handling applications and are adapted to specific quay infrastructures. Our ever-expanding product range also includes software developed specifically for bulk terminals.

**SOLUTIONS FOR LIMITED OR MISSING QUAY INFRASTRUCTURES**

We have made a name for ourselves as a manufacturer of sophisticated, complete floating crane solutions including the barge and the maritime classification.

**SOLUTIONS FOR TERMINALS WITH RAIL INFRASTRUCTURE**

Model 7 portal harbor crane with customized portals in regards to height, span and quay loading.
YOUR MODEL 7 MOBILE HARBOR CRANE IS IN THE BEST HANDS WITH US

COMPREHENSIVE SERVICE

During the development of our Model 7 mobile harbor cranes and their variants we were already thinking about ease of maintenance. The robust machines are user-friendly thanks to easily accessible maintenance points. Our expertise is complemented by the use of components from globally renowned manufacturers.

WE MAINTAIN AVAILABILITY
We contribute to maintaining the availability of your Model 7 mobile harbor crane. Our global service organization is local to you in all time zones, and offers you expertise in maintenance and repair in combination with fast delivery of spare parts.

WE KEEP THE VALUE OVER MANY YEARS
We are the right choice to provide support for your Model 7 mobile harbor crane because we built it and therefore know it best. With our comprehensive service portfolio, your crane remains state of the art, its service life increases and it maintains its value over many years.
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. The Group has 18,000 employees at 600 locations in 50 countries. Konecranes is listed on Nasdaq Helsinki (symbol: KCR).

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