A GREAT MATE FOR SMALL PORTS
QUAYMATE M50 MOBILE HARBOR CRANE
The Konecranes Gottwald Quaymate M50 crane is a diesel-electric mobile harbor crane for continuous operation and therefore conceived for a sufficient number of load cycles. It is designed as an entry model for both small maritime and river ports, aiming to professionalize and increase their cargo handling performance.

For new and replacement investments, the Quaymate M50 mobile harbor crane outperforms conventional telescopic, crawler and stationary cranes, excavators or other cargo handling equipment that is often found in terminals, but cannot, or cannot adequately, cope with the harsh conditions found in ports.

**UNLOCKING TERMINAL POTENTIAL …**

With the Quaymate M50 crane, terminals can thus unlock their potential, making their cargo handling more cost-effective and developing new applications.

The member of the small crane family from Konecranes therefore offers good technical and cost-effective features. It provides powerful lifting capacities across the entire working area and is easy to maneuver and position alongside the vessel. Moreover, operators benefit from a high drive output, efficient electrical main drives and eco-efficient operation.

**QUAYMATE PRODUCT DESIGNATIONS**

<table>
<thead>
<tr>
<th>QUAYMATE M50</th>
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<tbody>
<tr>
<td>Crane name</td>
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<tr>
<td>Maximum lifting capacity in t</td>
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</table>

Crane type  
M = mobile harbor crane  
P = portal harbor crane

**THE BENEFITS OF THE QUAYMATE M50:**

- For virtually all types of cargo
- Mobile, robust & compact
- Powerful lifting capacities across the entire working area
- Electrically driven and therefore eco-efficient
- Cost-effective working speeds
- Life-cycle rating to match the application
- Also suitable for limited investment budgets
- Easy to service

KONECRANES GOTTWALD QUAYMATE M50 MOBILE HARBOR CRANE

A BREAKTHROUGH FOR TERMINALS

... WITH ONLY A LIMITED INVESTMENT

The Quaymate M50 crane, which is also available as a rail-mounted portal harbor crane, is designed for light to medium duty handling at economically viable working speeds and with a service life appropriate to the application. It is suitable for limited investment budgets and keeps ship lay-up times short when performing continuous-shift handling of:

- containers with automatic or semi-automatic spreaders,
- bulk and scrap with motor grabs and
- general cargo on inland barges and coasters. The crane also handles various project cargoes.

The Quaymate M50 crane impresses by virtue of its functional, robust and service-friendly construction and offers operators:

- 50 t maximum lifting capacity,
- an impressive lifting capacity curve,
- 36 m maximum radius,
- 50 m/min maximum hoisting speed.
The basis for the Quaymate M50 crane is another member of Konecranes’ small crane family: the Model 2 mobile harbor crane. Crane geometry and design of the Quaymate M50 crane are based on this 80-t mobile harbor crane developed and manufactured by Konecranes in Germany.

According to the principle of functionality driven by German engineering, engineers from Germany, P.R. China and India have adapted the proven Konecranes Gottwald design philosophy to develop a cargo handling crane that meets the particular needs of small, but growing terminals around the world.

A SOLID AND RELIABLE MATE WITH OPTIONS

The Quaymate M50 crane, manufactured in Konecranes’ Xiamen factory, uses quality products and components from Asia and Europe. Compact design, well-conceived dimensioning and the comparably low weight of its preassembled components simplify both transport to the terminal and assembly of the crane in the terminal. The crane can also be shipped fully erected from our own deep-water jetty.

FUNCTIONALITY DRIVEN BY GERMAN ENGINEERING

The Quaymate M50 crane is based on Konecranes Gottwald Mobile Harbor Crane technology – in addition to German and international engineering expertise. Konecranes transferred this globally successful technology to the Quaymate M50 crane for all kinds of ports and terminals.

Terminal operators will achieve excellent results with the Quaymate M50 crane. The machine is not only reliable, versatile and simple to operate but also well-equipped, too. Option packages improve the equipment capabilities to increase productivity and professionalize cargo handling.

The 50-t Konecranes Gottwald Quaymate M50 Mobile Harbor Crane is manufactured in the Konecranes plant in Xiamen, P.R. China.
**MEET YOUR MATE – AND ITS FULL SCOPE**

**BOOM**
- Robust and torsionally stiff lattice construction
- One upper chord, two lower chords
- Manufactured as one component

**LIGHTING**
- High-intensity lamps illuminate the entire working area
- Optional lateral tower lamps can provide additional illumination

**TOWER**
- Robust box-girder construction
- Weatherproof stairway to tower cab
- Good view of the working area thanks to heightened position of the tower cab
- Ergonomically designed steps for ease of ascent

**TOWER CAB**
- Ergonomically designed and equipped
- Visumatic® crane management system for simple and intuitive operation

**MAIN MACHINERY HOUSE**
- Located on the base platform at the rear of the tower
- Clearly arranged layout, thanks to separate rooms, providing easy access for maintenance and service

**DIESEL GENERATOR**
- Soundproof
- Self-contained and independent of the terminal infrastructure

**ELECTRIC HOOK ROTATOR**
Quaymate M50 crane equipped with cable reel and electric hook rotator

**RUBBER-TIRED CHASSIS**
- Two steered axles, one driven
- Can be easily maneuvered for positioning alongside the ship
- Large wheels and vertical mechanical axle compensation (+/- 250 mm) for traveling over uneven ground on the quay
- Fourth axle (optional)

**QUAYMATE P50 CRANE WITH INDIVIDUAL PORTAL**
In addition to the conventional Quaymate M50 mobile harbor crane with rubber-tired chassis, Konecranes also supplies a portal harbor crane with the designation Quaymate P50. Its range of applications has been extended to include quays, whose infrastructures require rail-mounted solutions with a portal for various rail gauges and loadings in addition to clearance heights.
With the Konecranes Gottwald Quaymate M50 Mobile Harbor Crane, all important function groups are structured as service-friendly modules forming a harmonious whole.

**HOIST**
- Easily accessible
- Proven planetary gear integrated in the drum with oil cooler
- 3-phase drive, smooth acceleration and deceleration of the hoisting motion
- Protective enclosure for drive unit (option)

**ELECTRICAL DRIVE SYSTEM**
Efficient and sustainable
Like all Konecranes Gottwald Mobile Harbor Cranes, the Quaymate M50 crane is electrically driven. Power supply is via the on-board diesel generator or via power from the harbor mains with low or medium voltage.

**External power supply**
When connected to the existing harbor mains, our cranes provide the following benefits:
- a greater level of efficiency for the whole drive train
- saves operating costs
- zero exhaust gas emission in the terminal
- reduced sound emissions
- reduced diesel engine maintenance costs

**SLEWING GEAR UNIT**
- Slewing gear units designed as modular assemblies
- Proven planetary gear
- 3-phase drive, smooth acceleration and deceleration of the slewing motion

**ELECTRIC GENERATOR**
- Housed in weatherproof, soundproofed container
- Has sufficient power for all crane functions to be performed simultaneously and independently of each other

**HYDRAULICS UNIT**
- With main hydraulic pump and tank
- Supplies luffing cylinder, travel gear, stabilizers, steering and brake systems with hydraulic oil
- In a separate room on a platform at the rear of the tower

**ELECTRIC CRANE ROOM**
- Housed in weatherproof, air-conditioned container
- Contains electrical equipment and control system
- Clearly divided into function groups
- Features diagnostics panel to facilitate troubleshooting
Equipped with cable reel and electrical hook rotator, the Quaymate M50 crane moves a wide range of cargo.

Fitted with professional load handling attachments such as an automatic spreader or motor grab, the Quaymate M50 mobile harbor crane is a high-performance machine that can handle containers, bulk goods or scrap in a cost effective way.

**KONECRANES GOTTDWALD QUAYMATE M50 MOBILE HARBOR CRANE**

**PROPERLY CONFIGURED FOR ALL APPLICATIONS**

Illustration shows configuration of the Quaymate M50 crane with 3 axles. The 4-axle version may differ from those given above.

All dimensions in mm.

*With optional fourth axle*
KONECRANES GOTTWALD QUAYMATE M50 MOBILE HARBOR CRANE

LIFTING CAPACITIES & EQUIPMENT

<table>
<thead>
<tr>
<th>Radius [m]</th>
<th>Heavy load</th>
<th>General cargo</th>
<th>Container*</th>
<th>Motor grab</th>
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Heavy load, general cargo and motor grab mode on hook. Container operation below spreader. All dimensions in 1t.

* Spreaders 1 = Semi-automatic 40’ spreader (2.3 t)
* Spreaders 2 = Bromma EH 12U Single-lift spreader (7.8 t)
Other Spreaders on request.

Operational modes

- Heavy load
- General cargo
- Container
- Motor grab

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YOUR QUAYMATE M50 MOBILE HARBOR CRANE IS IN THE BEST OF HANDS WITH US

COMPREHENSIVE SERVICE

During the development of our Quaymate M50 mobile harbor crane, we were already thinking about ease of maintenance. The robust machines are user-friendly thanks to easily accessible maintenance points.

WE ENSURE AVAILABILITY
We contribute to ensuring the availability of your Quaymate M50 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 PRESERVE THE VALUE OF YOUR MACHINE OVER MANY YEARS
We are the right choice to provide support for your Quaymate M50 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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