

A GREAT MATE FOR SMALL PORTS

QUAYMATE M50 MOBILE HARBOR CRANE



KONECRANES GOTTWALD QUAYMATE M50 MOBILE HARBOR CRANE

A BREAKTHROUGH FOR TERMINALS

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.

... 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:

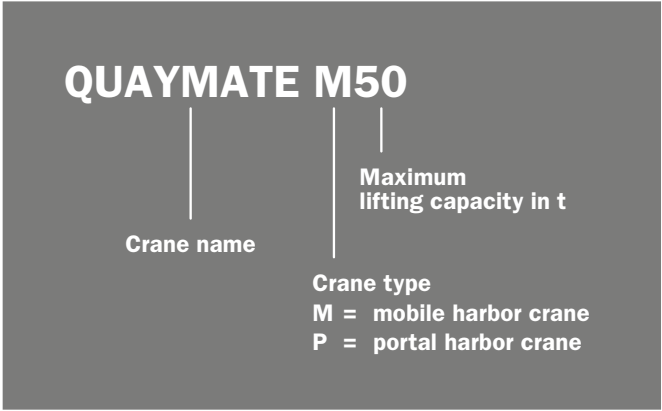
- containers with automatic or semi-automatic spreaders,
- bulk and scrap with motor grabs and
- general cargo

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.

QUAYMATE PRODUCT DESIGNATIONS



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 VIGOROUS MEMBER OF A RENOWNED FAMILY

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.



The Quaymate M50 crane is a member of Konecranes' small crane family and is based on the Konecranes Gottwald Model 2 Mobile Harbor Crane handling fruit in the photo

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.

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.



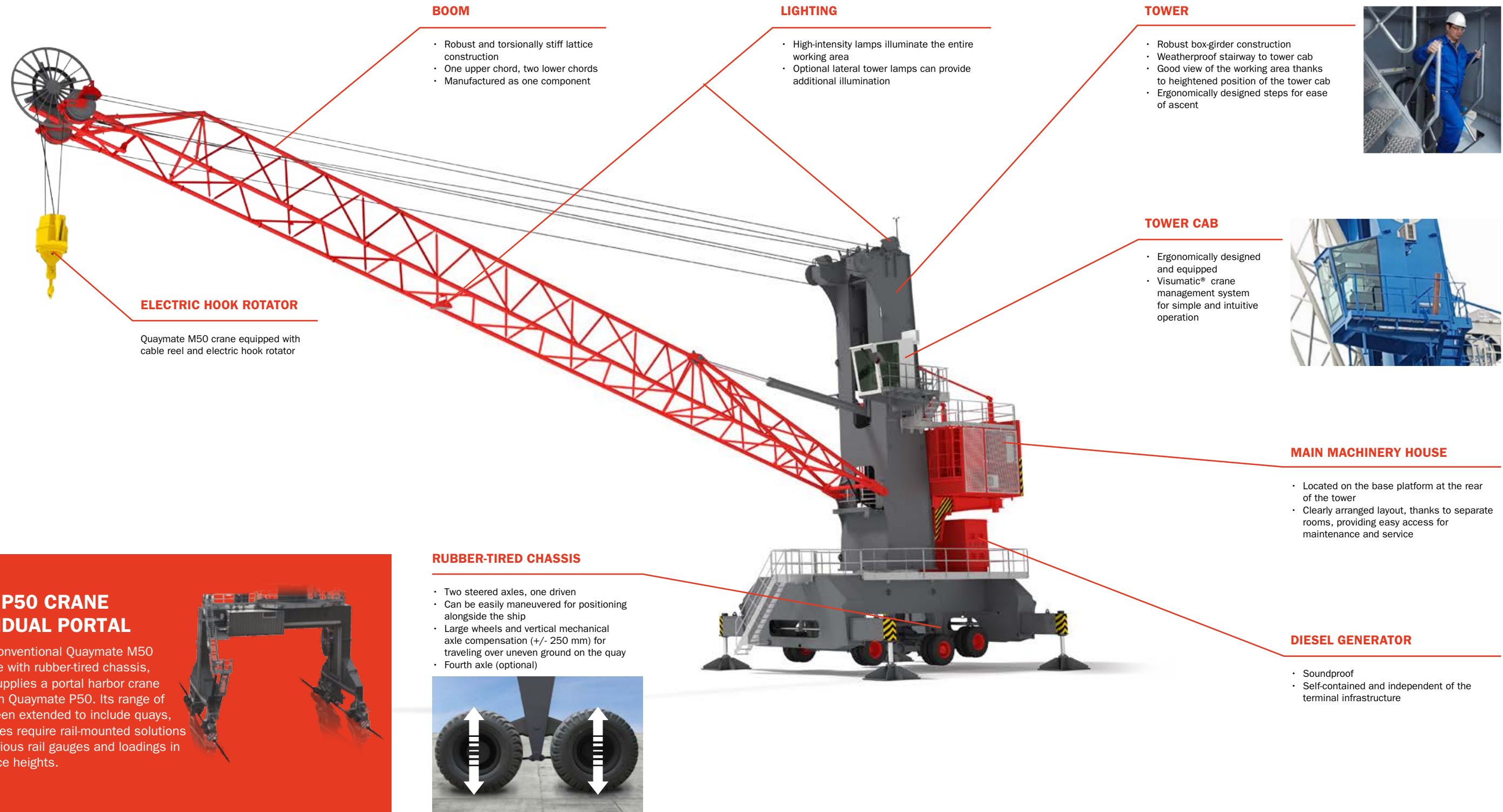
The 50-t Konecranes Gottwald Quaymate M50 Mobile Harbor Crane is manufactured in the Konecranes plant in Xiamen, P.R. China



Shipping Quaymate M50 cranes from the company's own deep-water jetty fully assembled enables short delivery lead times

KONECRANES GOTTWALD QUAYMATE M50 MOBILE HARBOR CRANE

MEET YOUR MATE – AND ITS FULL SCOPE



KONECRANES GOTTWALD QUAYMATE M50 MOBILE HARBOR CRANE

... IMPRESSIVE TECHNOLOGY

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)



ELECTRICS ROOM

- Housed in weatherproof, air-conditioned container
- Contains electrical equipment and control system
- Clearly divided into function groups
- Features diagnostics panel to facilitate troubleshooting



DIESEL-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



SLEWING GEAR UNIT

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



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

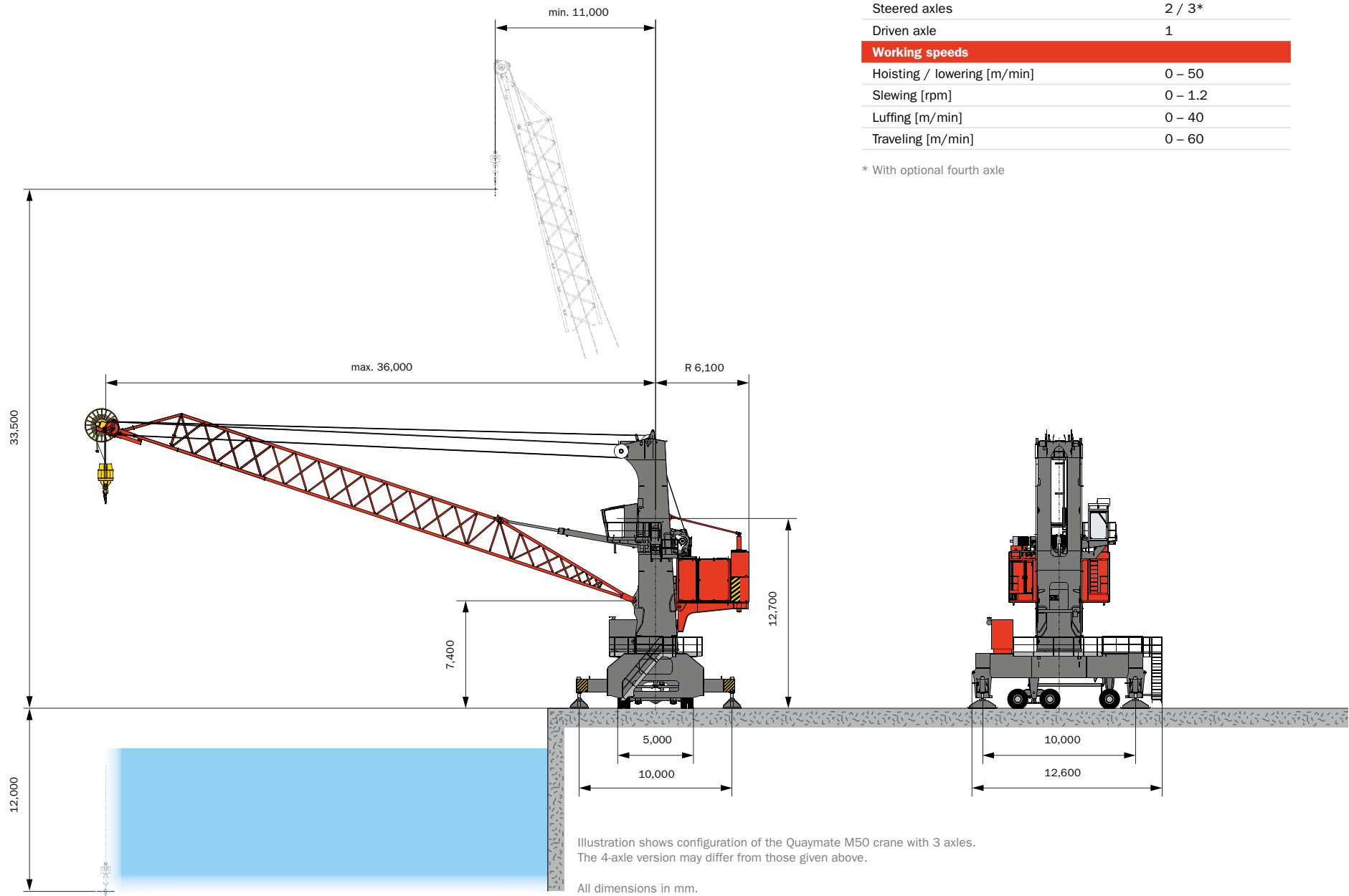


KONECRANES GOTTWALD QUAYMATE M50 MOBILE HARBOR CRANE

PROPERLY CONFIGURED
FOR ALL APPLICATIONS

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.



| Crane type | Quaymate M50 |
|--|--------------|
| Capacities [t] | |
| Maximum lifting capacity | 50 |
| Dimensions and weights | |
| Radius [m] | 11 – 36 |
| Boom pivot point [m] | 7.4 m |
| Tower cab (crane operator eye level) [m] | 12.7 |
| Propping base [m] | 10.0 x 10.0 |
| Chassis in travel mode [m] | 12.6 x 8.1 |
| Weight (approx.) [t] | 180 / 185* |
| Hoisting heights [m] | |
| Above quay level | 33.5 |
| Below quay level | 12.0 |
| Travel gear | |
| Axles | 3 / 4* |
| Steered axles | 2 / 3* |
| Driven axle | 1 |
| Working speeds | |
| Hoisting / lowering [m/min] | 0 – 50 |
| Slewing [rpm] | 0 – 1.2 |
| Luffing [m/min] | 0 – 40 |
| Traveling [m/min] | 0 – 60 |

* With optional fourth axle

KONECRANES GOTTWALD QUAYMATE M50 MOBILE HARBOR CRANE

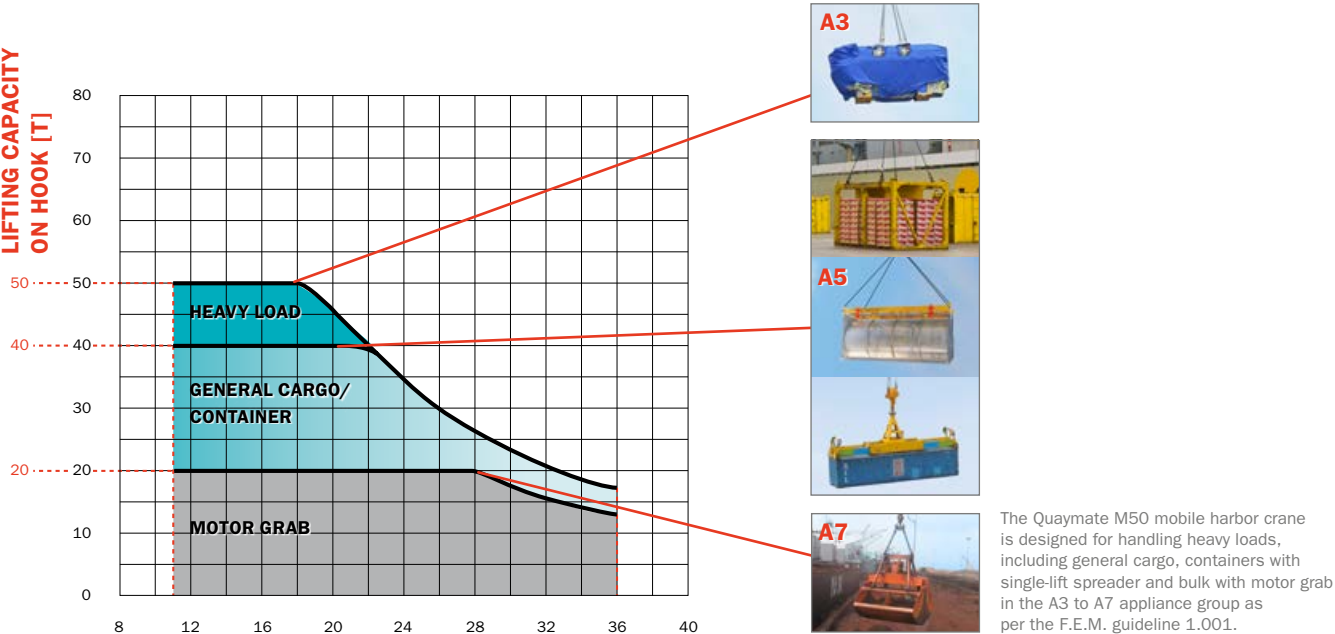
LIFTING CAPACITIES & EQUIPMENT

| Operating modes | Heavy load | General cargo | Container* | | Motor grab |
|-----------------|------------|---------------|------------|------------|------------|
| | | | Spreader 1 | Spreader 2 | |
| Radius [m] | | | | | |
| 11 – 18 | 50.0 | 40.0 | 35.0 | 32.2 | 20.0 |
| 19 | 49.0 | 40.0 | 35.0 | 32.2 | 20.0 |
| 20 | 45.5 | 40.0 | 35.0 | 32.2 | 20.0 |
| 21 | 42.0 | 40.0 | 35.0 | 32.2 | 20.0 |
| 22 | 39.0 | 39.0 | 35.0 | 31.2 | 20.0 |
| 23 | 36.6 | 36.6 | 34.3 | 28.8 | 20.0 |
| 24 | 34.3 | 34.3 | 32.0 | 26.5 | 20.0 |
| 25 | 32.2 | 32.2 | 29.9 | 24.4 | 20.0 |
| 26 | 30.2 | 30.2 | 27.9 | 22.4 | 20.0 |
| 27 | 28.5 | 28.5 | 26.2 | 20.7 | 20.0 |
| 28 | 27.0 | 27.0 | 24.7 | 19.2 | 20.0 |
| 29 | 25.5 | 25.5 | 23.2 | 17.7 | 18.8 |
| 30 | 24.2 | 24.2 | 21.9 | 16.4 | 17.8 |
| 31 | 22.9 | 22.9 | 20.6 | 15.1 | 16.9 |
| 32 | 21.8 | 21.8 | 19.5 | 14.0 | 16.1 |
| 33 | 20.7 | 20.7 | 18.4 | 12.9 | 15.3 |
| 34 | 19.7 | 19.7 | 17.4 | 11.9 | 14.5 |
| 35 | 18.8 | 18.8 | 16.5 | 11.0 | 14.0 |
| 36 | 17.9 | 17.9 | 15.6 | 10.1 | 13.5 |

Heavy load, general cargo and motor grab mode on hook. Container operation below spreader.

All dimensions in t

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



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| Section | Standard | Option |
|---|----------|--------|
| Drive systems | | |
| Diesel generator drive | | |
| – Diesel engine nominal output (PRP, ISO 8528) 414 kW | ✓ | |
| – Diesel engine nominal output (PRP, ISO 8528) 507 kW | | ✓ |
| External power supply | | |
| – Preparation for external power supply | | ✓* |
| – Low-voltage mains power equipment | | ✓* |
| – Medium-voltage mains power equipment | | ✓* |
| Dynamic brake resistors | ✓* | |
| Controls | | |
| Visumatic® crane management system | ✓ | |
| Remote control (all functions) | | |
| – Wired rigging | | ✓ |
| – Radio (all functions) | | ✓ |
| Camera at the boom top | ✓ | |
| Cabs | | |
| Tower cab | | |
| – Air conditioner | ✓ | |
| Additional design features | | |
| 4 th axle | | ✓ |
| Cover for hoist | | ✓ |
| Smoke detector | | ✓ |
| Automatic lubrication system | | ✓ |
| Lighting | | |
| – On boom head, boom mid-section, front and rear of tower | ✓ | |
| – On tower side | | ✓ |
| Surface treatment | | |
| Customer-specific livery | | ✓ |
| Customer logo | | ✓ |

* With its products and drive technologies, Konecranes is focused on offering alternative, environmentally compatible solutions.

More information about additional options on request.

Based on individual needs, we can supply lifting gear, such as spreaders and grabs.



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.

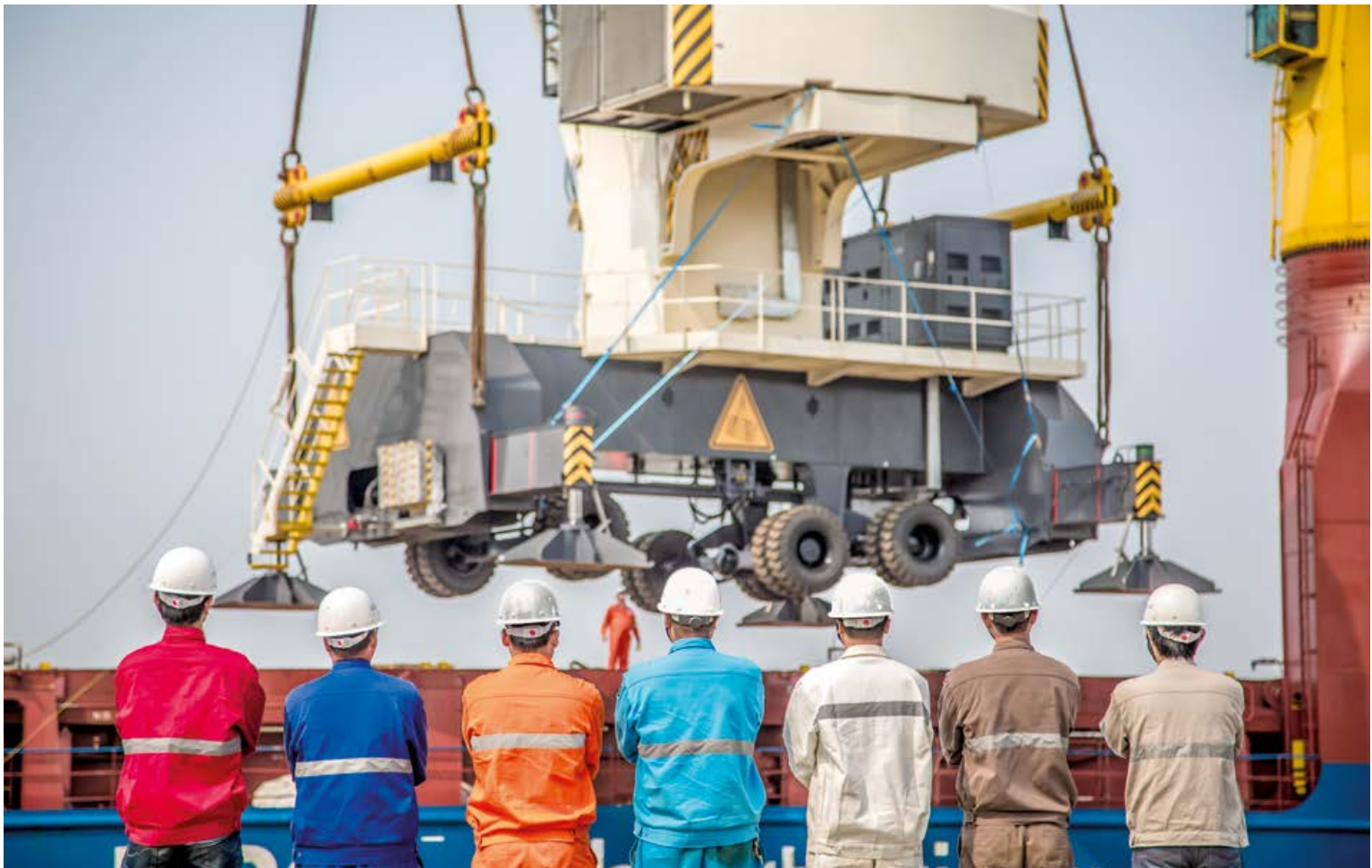


Service to meet your particular needs:
full life cycle support by Konecranes



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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