

A FLEXIBLE ALL-ROUNDER

DIESEL-ELECTRIC MODEL 4 MOBILE HARBOR CRANES



MODEL 4 MOBILE HARBOR CRANES

AS VERSATILE AS IT IS COMPACT

Konecranes Gottwald Model 4 Mobile Harbor Cranes are compact, electrically driven universal cranes. As representatives of the medium-sized crane family from Konecranes, they offer powerful lifting capacity curves with lifting capacities of up to 100 t, maximum radii of 46 m and lifting speeds of up to 100 m/min.

Konecranes Gottwald Model 4 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 Panamax class to handle:

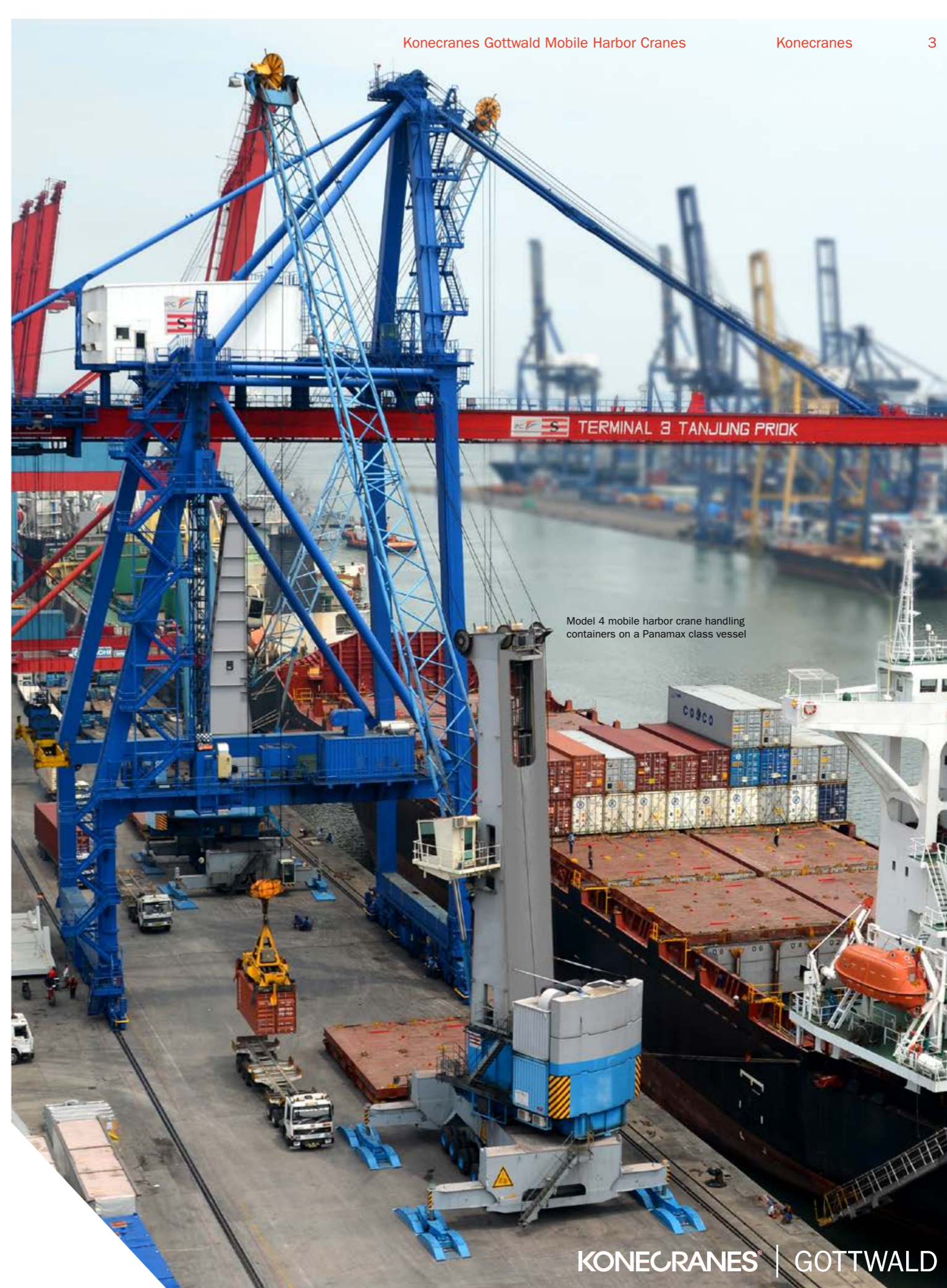
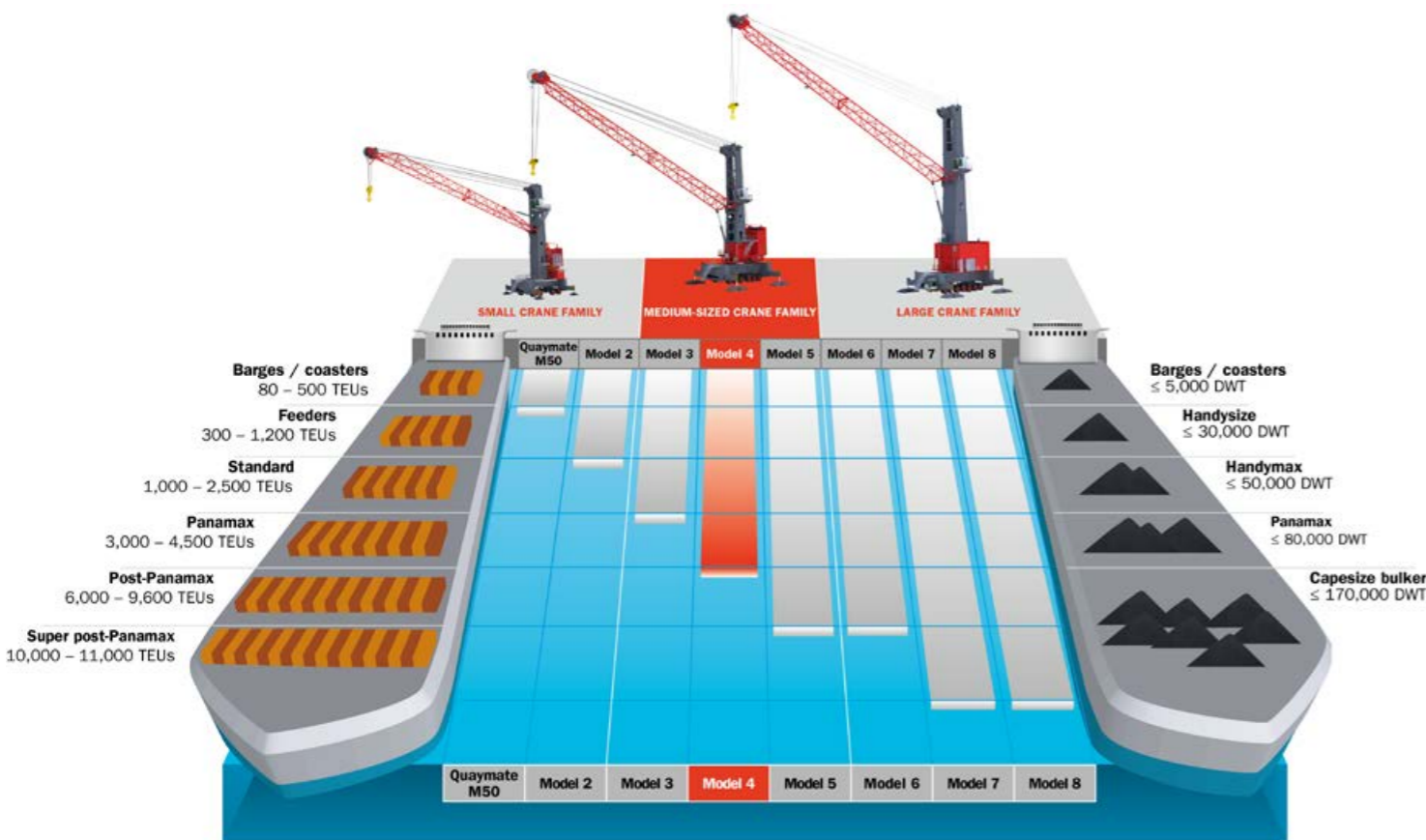
- containers,
- general cargo,
- bulk materials and
- project cargo.

VARIANTS FOR DEDICATED APPLICATIONS

With Model 4 mobile harbor cranes, you profit from a number of high-performance two-rope and four-rope grab variants with a wide working radius for dedicated operation. For the professional handling of bulk materials, a 40-t grab curve is available for you.

Model 4 mobile harbor cranes are flexible all-rounders and possess all the features you expect in a handling machine for productive and durable operation. Model 4 cranes are:

- versatile,
- easy to maintain,
- ergonomic and
- environmentally friendly.



Model 4 mobile harbor crane handling containers on a Panamax class vessel

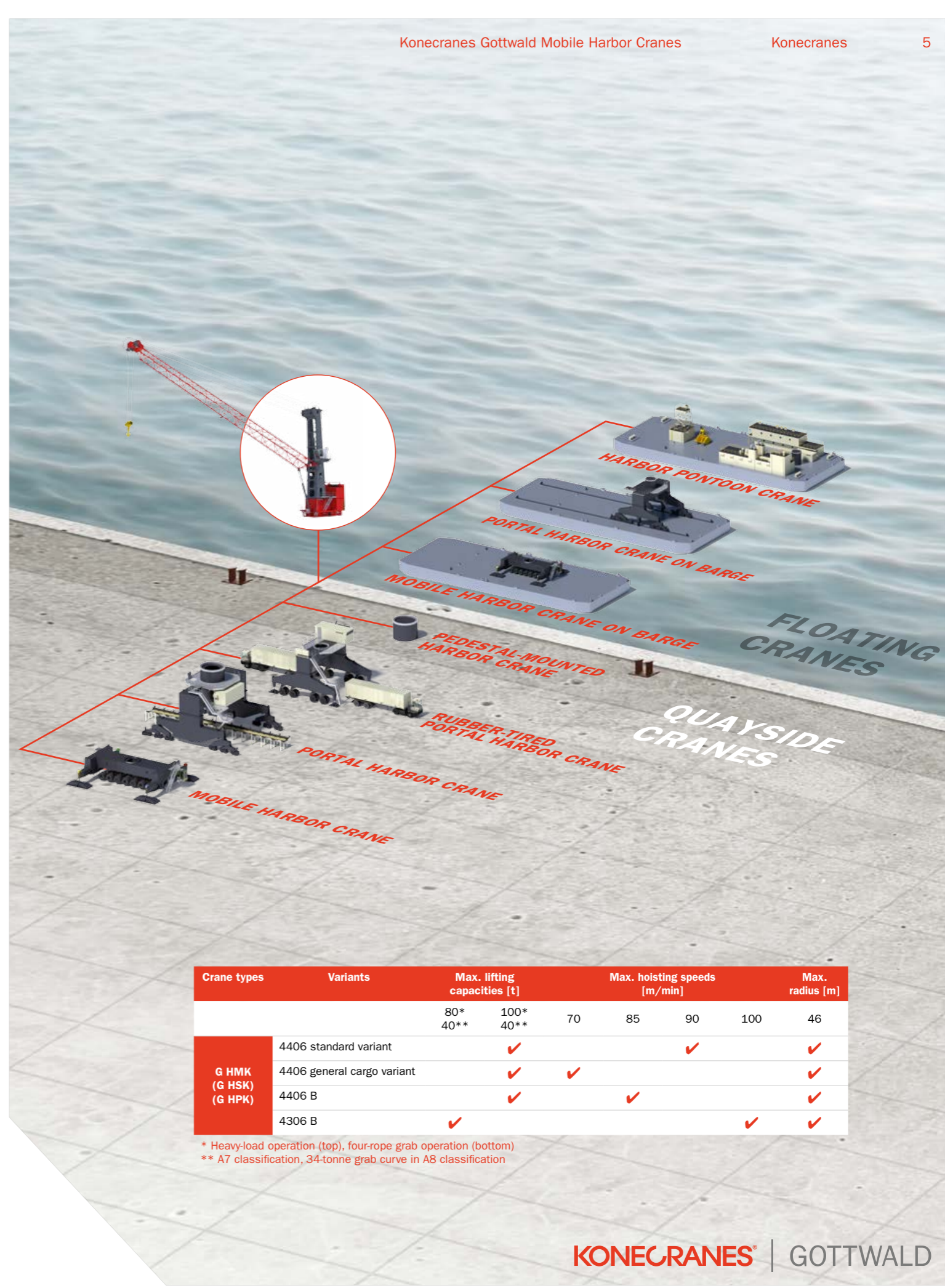
MODEL 4 CRANE TYPES – HARD TO BEAT

THE RIGHT CRANE FOR EVERY SITE

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 4 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. radius [m]
		80* 40**	100* 40**	70	85	90	100	
G HMK (G HSK) (G HPK)	4406 standard variant		✓			✓		✓
	4406 general cargo variant		✓	✓				✓
	4406 B		✓		✓			✓
	4306 B	✓					✓	✓

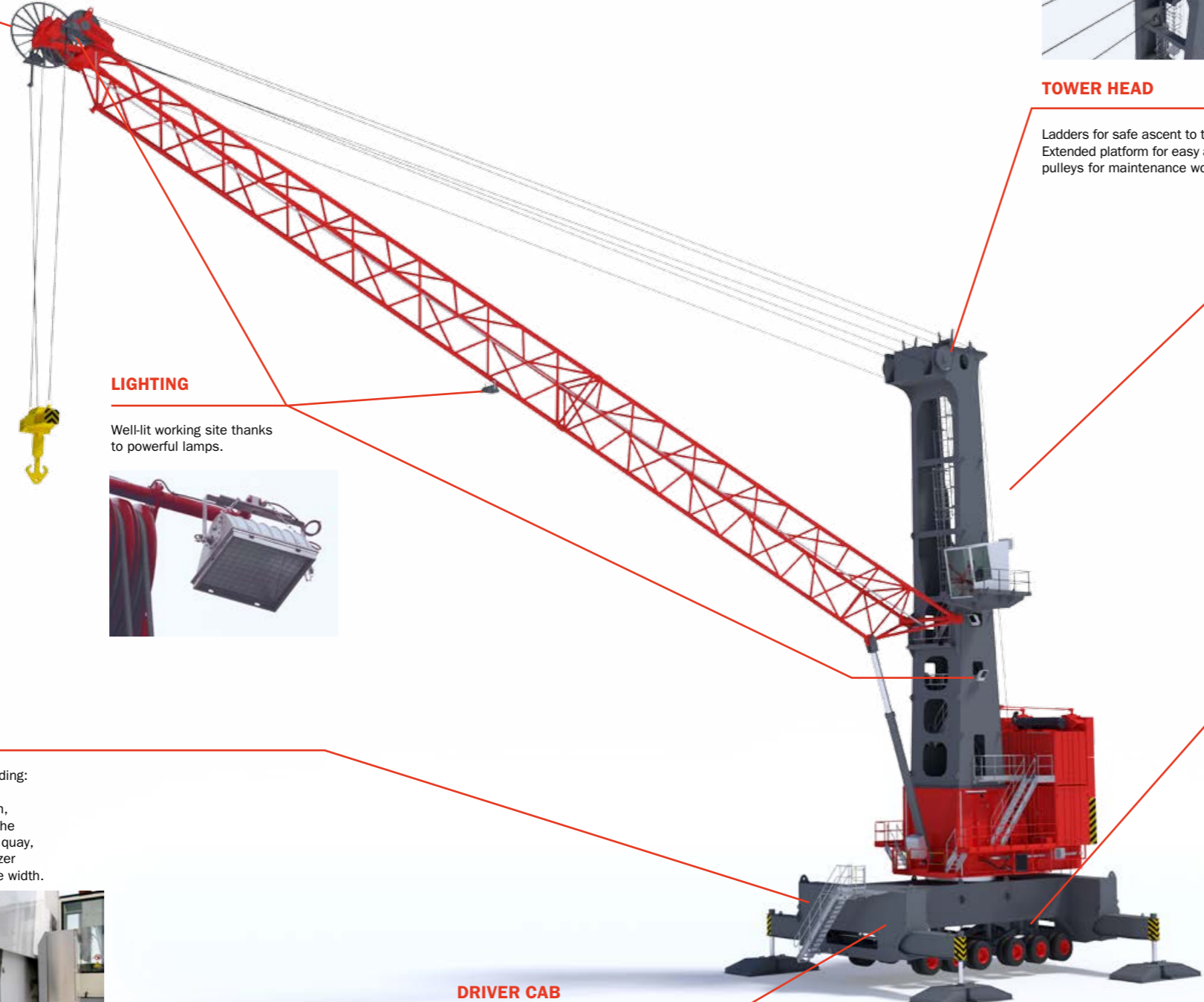
* Heavy-load operation (top), four-rope grab operation (bottom)
 ** A7 classification, 34-tonne grab curve in A8 classification

MODEL 4 MOBILE HARBOR CRANES AT A GLANCE

ALL-ROUND EXCELLENT DESIGN

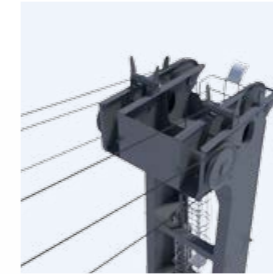
CABLE REEL

Safe cable control and reduced cable loading due to torque-regulated cable reel.



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 diagnostic 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).



LIGHTING

Well-lit working site thanks to powerful lamps.



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.



RUBBER-TIRED CHASSIS

Maintenance-free equalizer beams with vertical compensation of up to +/- 250 mm means the axle load is always evenly distributed.

Tight turning circle and crab steering provide excellent maneuverability.



DRIVER CAB

Driver cab on the chassis (optional).

CLEARLY ARRANGED AND EASILY ACCESSIBLE

A CLOSER LOOK AT OUR INNOVATIVE TECHNOLOGY

HOISTS

- Easily accessible
- Helical gear in a U-shape arrangement
- DC drive, smooth acceleration and deceleration of the hoisting motion
- Second hoist for four-rope grab machine
- Protective enclosure for drive unit and optional for hoists



SLEWING GEAR UNITS

- Slewing gear units designed as modular assemblies
- The number of units as required for the crane variant and application
- DC drive for smooth acceleration and deceleration of the slewing motion



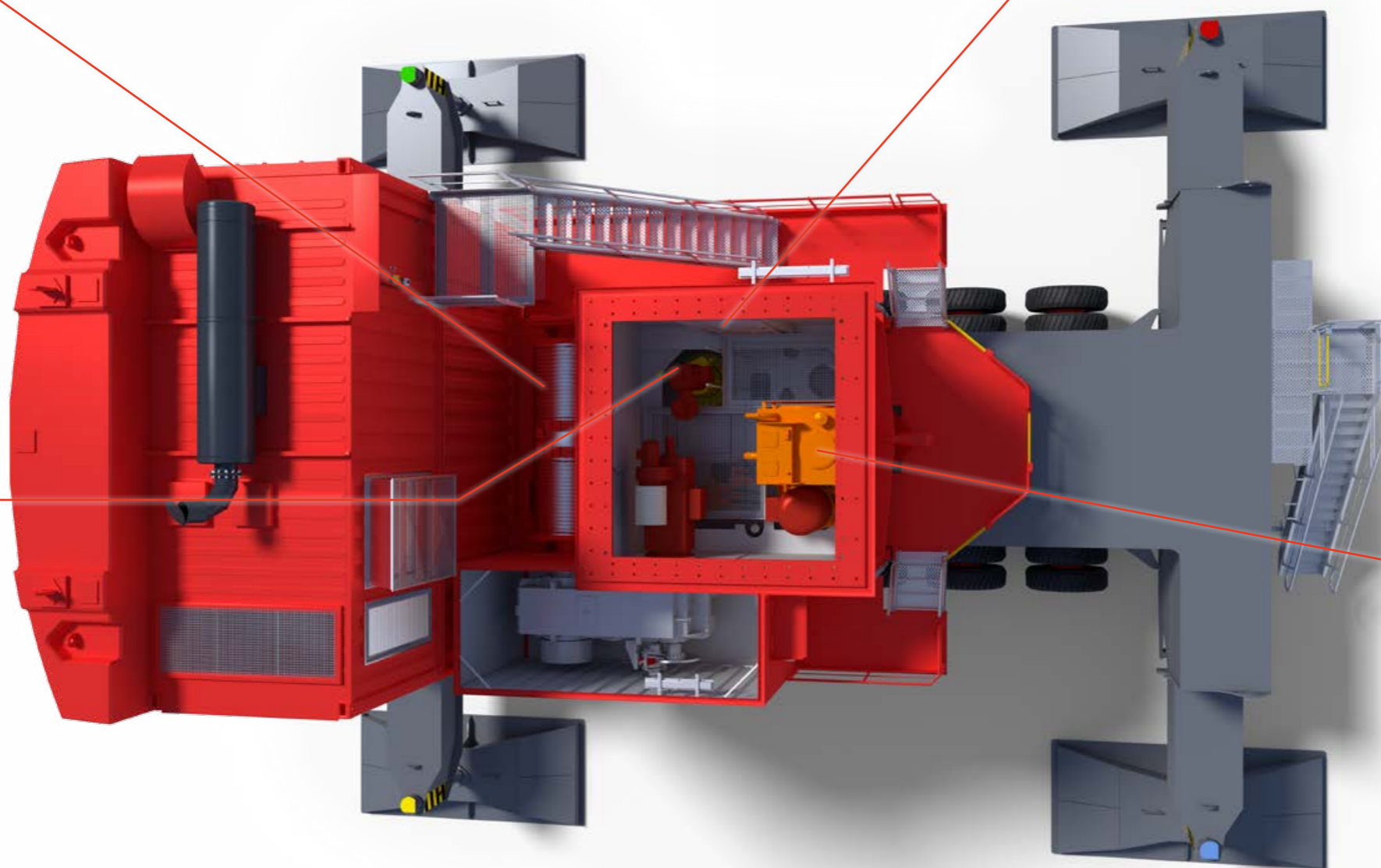
CENTRAL LUBRICATION SYSTEM

- 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



HYDRAULIC UNIT

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



SERVICE-FRIENDLY AND COMPACT

WELL-ENGINEERED CONSTRUCTION

STAIRWAYS

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



PRACTICAL DESIGN

- For oil cooler and air conditioning
- Easy component maintenance
- Space for additional/optional components

DIESEL GENERATOR

- Housed in weatherproof, soundproofed container
- Features drive power based on crane variants and application
- Has sufficient power for all crane functions to be performed simultaneously and independently of each other



ELECTRICS ROOM

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

EXTERNAL POWER SUPPLY

Our cranes can make use of low or medium-voltage mains supplies. They may be equipped with the necessary units ex works or upgraded at a later date.

DRIVE**ELECTRICAL, EFFICIENT AND ECO-FRIENDLY**

The Model 4 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.



Electrostatic short-term storage media

KONECRANES GOTTWALD MOBILE HARBOR CRANES

SMART, USER-FRIENDLY, SAFE

The Model 4 mobile harbor crane is packed with smart technology. Konecranes focuses on safety and productivity for both the machine and the crane driver.

AS STANDARD: ERGONOMIC, TOP-OF-THE-RANGE EQUIPMENT

The Model 4 mobile harbor crane includes user-friendly 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,
- camera on the boom tip for a close-up view of the work site via the monitor screen in the cab,
- ergonomically designed stairways with an inclination of 50° for comfortable, easy access to tower cab, machinery rooms and service points.

MORE CONTROL – MORE EFFICIENCY

Many optional features enable customers to adapt their Konecranes Gottwald Model 4 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.



EVERYTHING UNDER CONTROL

Intuitive operation through user-friendly human-machine interface.

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 CONTAINER TERMINALS

We offer a comprehensive range of container handling equipment for the entire logistic chain.



SOLUTIONS FOR GENERAL AND PROJECT CARGO

Model 4 mobile harbor cranes feature lifting capacities of up to 100 t with strong lifting capacity curves.



For limited and missing quay infrastructures Konecranes offers floating cranes.



SOLUTIONS FOR LIMITED OR MISSING QUAY INFRASTRUCTURES

Model 4 is available as portal harbor crane with customized portals in regards to height, span and quay loading.

YOUR MODEL 4 MOBILE HARBOR CRANE IS IN THE BEST HANDS WITH US
COMPREHENSIVE SERVICE

During the development of our Model 4 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 4 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 4 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.



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