

MODEL 7 HARBOUR CRANE

UNCOMPRISING HANDLING PERFORMANCE



WORKS FOR YOU.™

OUTSTANDING PERFORMANCE FOR TOUGH APPLICATIONS

MODEL 7 HARBOUR CRANE

Terex® Gottwald Model 7 harbour cranes are robust electrically driven cranes for high-performance applications. As representatives of the large crane family from Terex Port Solutions (TPS), they offer you powerful lifting capacity curves with lifting capacities of up to 150 t, impressive working radii of up to a maximum of 54 m and lifting speeds of up to 120 m/min.

Terex® Gottwald Model 7 harbour 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.

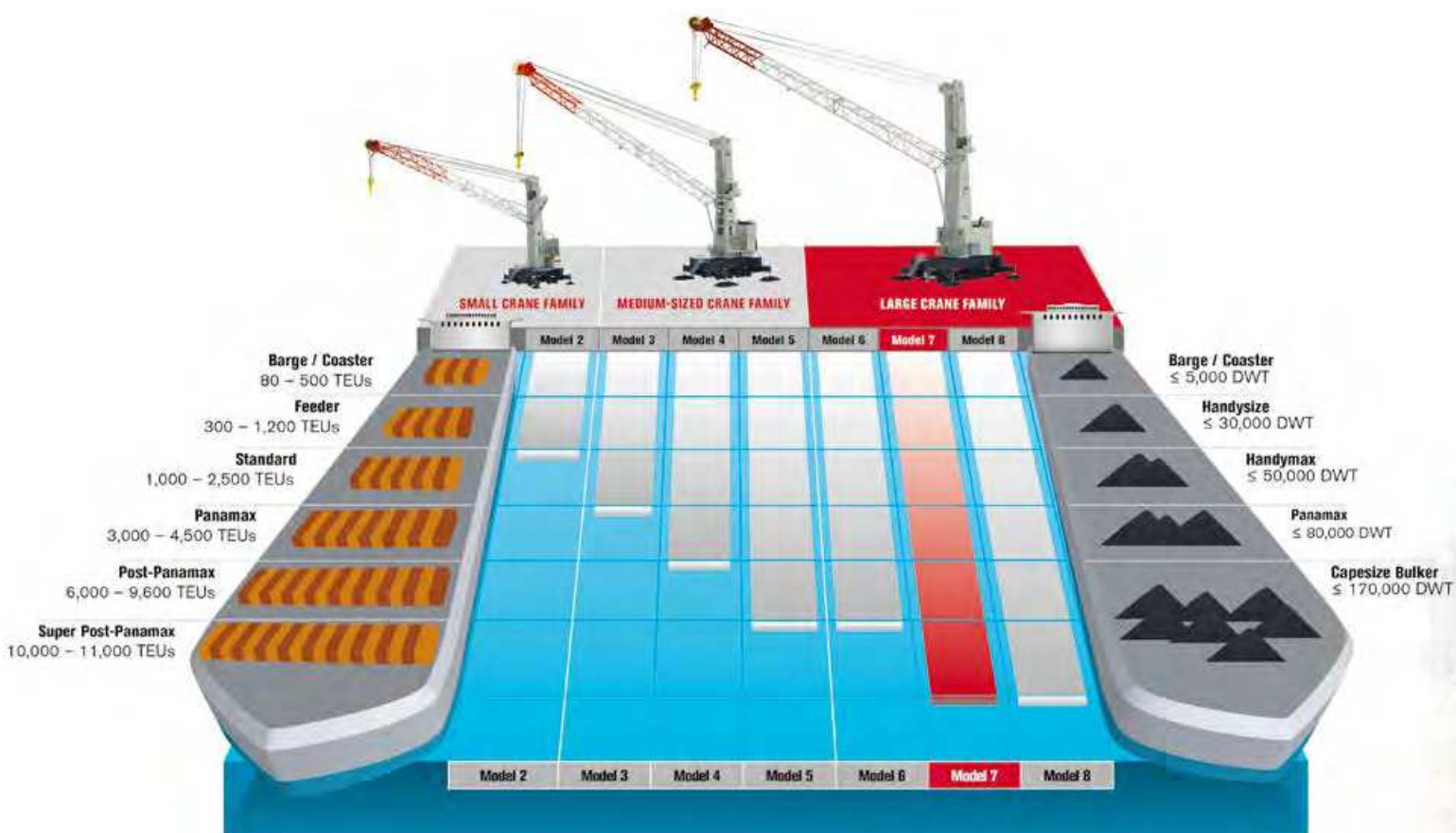
Variants for dedicated applications

With Model 7 harbour cranes, you benefit from a number of dedicated two-rope and four-rope grab variants with a wide working radius, e.g. for intensive container handling, also in twin-lift operation. High towers permit handling of high container stacks on deck. At the same time, outstanding lifting capacities make the handling of heavy loads easy. For the professional handling of bulk materials, a 50-t grab curve is also available.

Model 7 harbour 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.





With a maximum lifting capacity of 150 t and an impressive lifting curve Model 7 is the right crane for multi-purpose terminals

THE RIGHT CRANE FOR EVERY

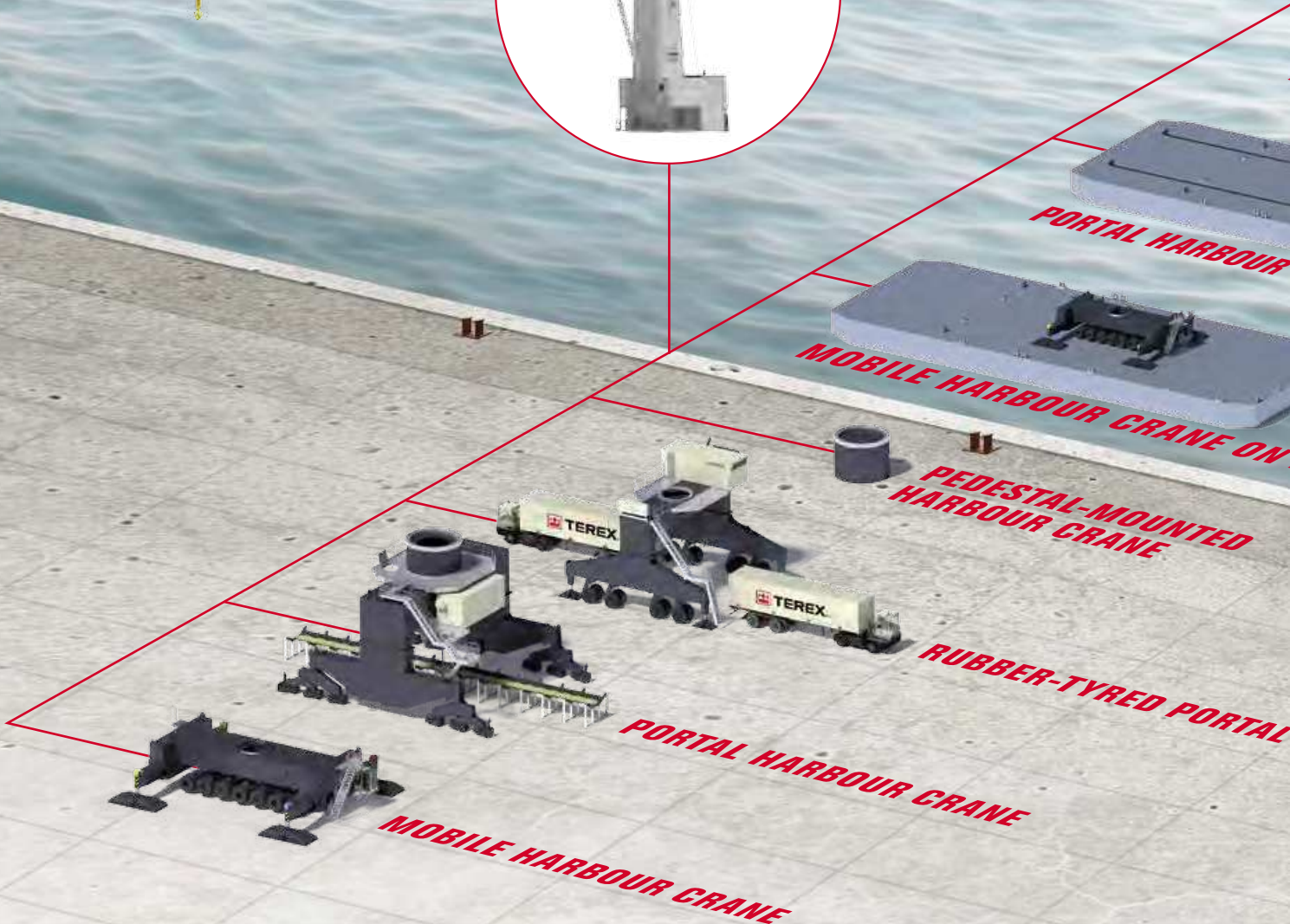
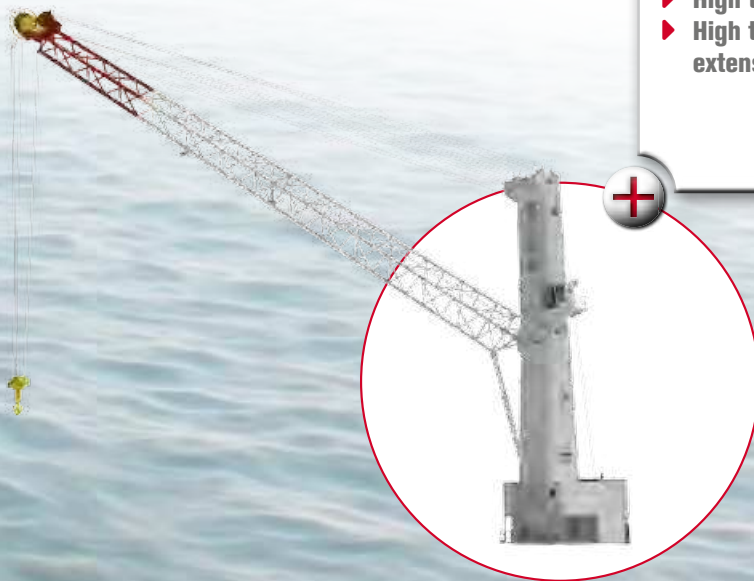
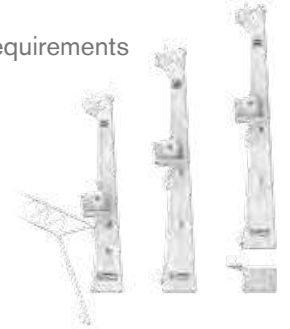
MODEL 7 TYPES – HARD TO BEAT

The mobile harbour crane technology available from TPS is not restricted to the mobile harbour crane. As the industry's pioneer we create a modular system of harbour crane types on quays, rivers and on the open sea.

Tower options

To suit individual requirements and applications:

- ▶ Short tower
- ▶ High tower
- ▶ High tower with extension



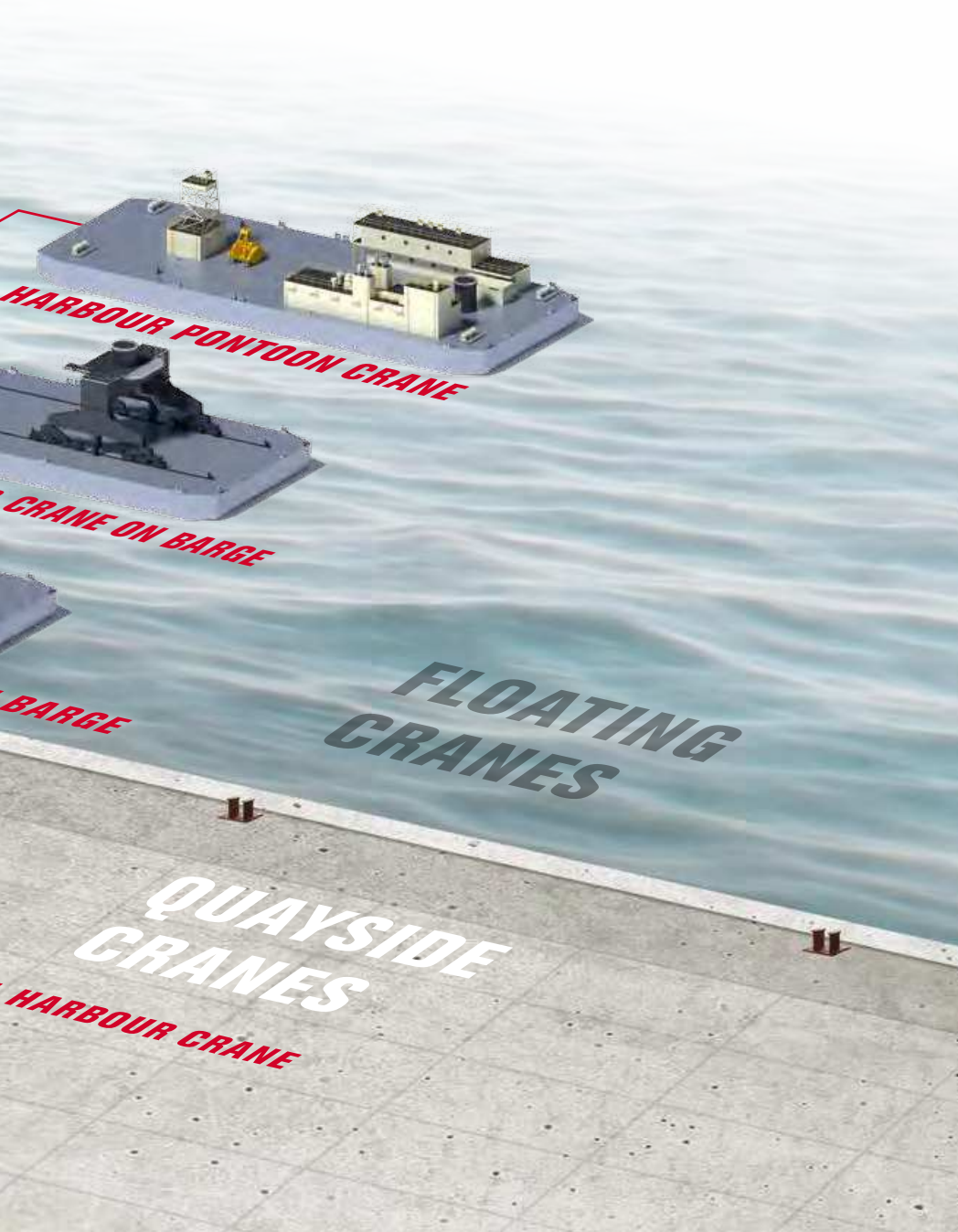
SITE

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. radius [m]	
		100	150	100* 57**	140* 57**	90	100	110	120	51	54
G HMK (G HSK) (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



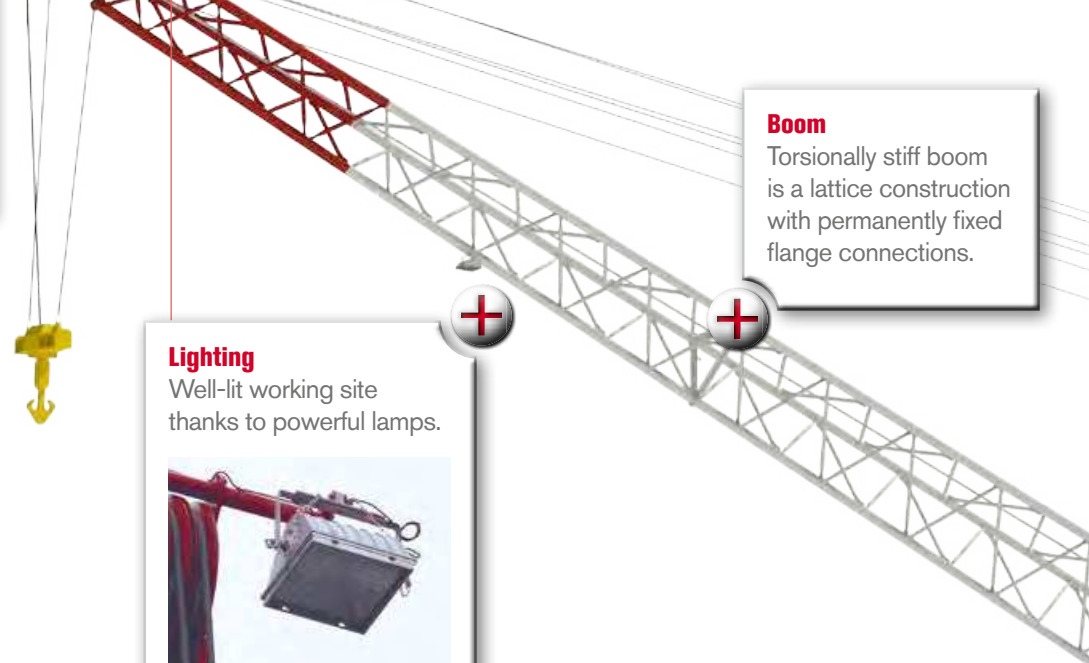
REX
WALD

ALL-ROUND EXCELLENT DESIGN

MODEL 7 HARBOUR CRANES AT A GLANCE

Cable reel

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



Boom

Torsionally stiff boom is a lattice construction with permanently fixed flange connections.



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.



Superstructure

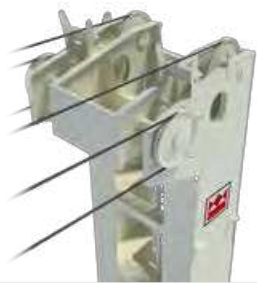
Spacious and service-friendly two floor construction:

- ▶ 2.5 m clear headroom,
- ▶ separate, large rooms for main components,
- ▶ spacious stairways.



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).



Rubber-tyred chassis

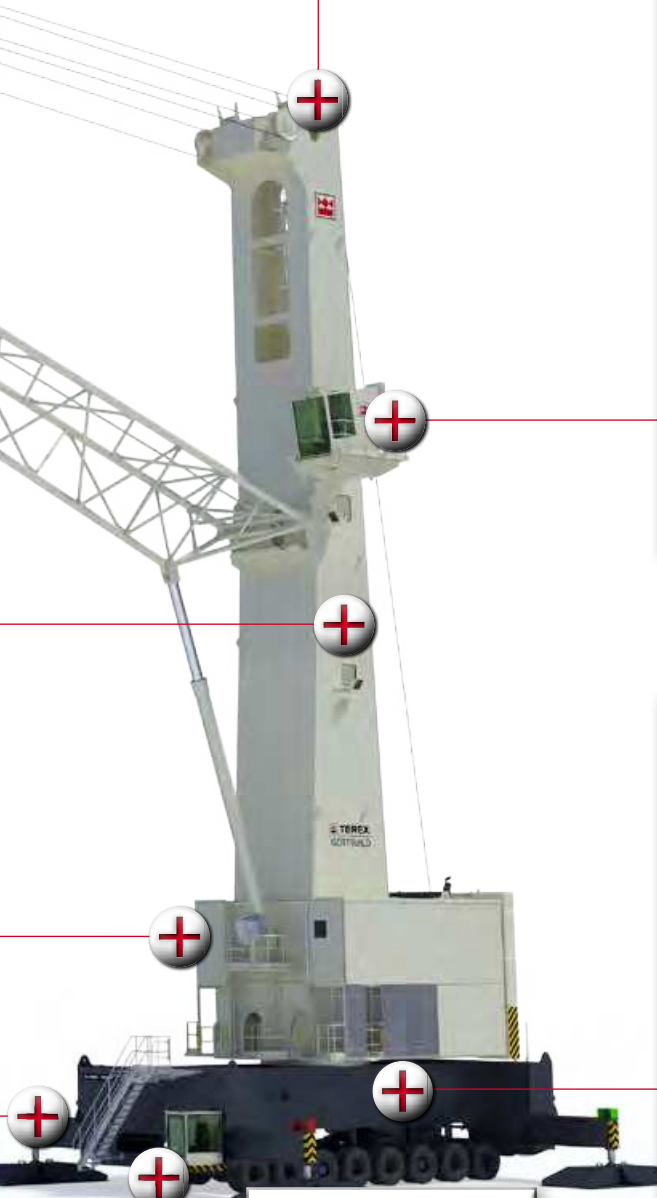
Maintenance-free equalizer beams with vertical compensation of up to +/- 250 mm means the axle load is always evenly distributed.

Tight turning circle and crab steering provide excellent maneuverability.



Driver cab

Driver cab as standard on the chassis.



SUPERSTRUCTURE – TOP FLOOR

SPACIOUSLY ARRANGED AND EASILY ACCESSIBLE

Electrics room

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



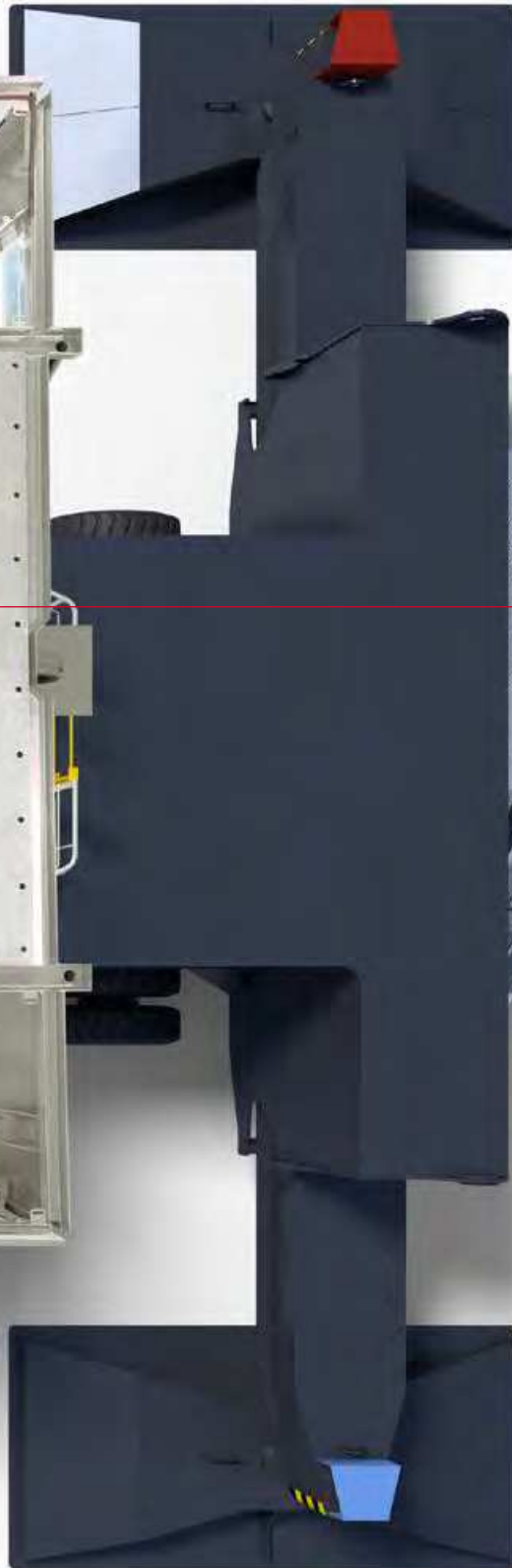
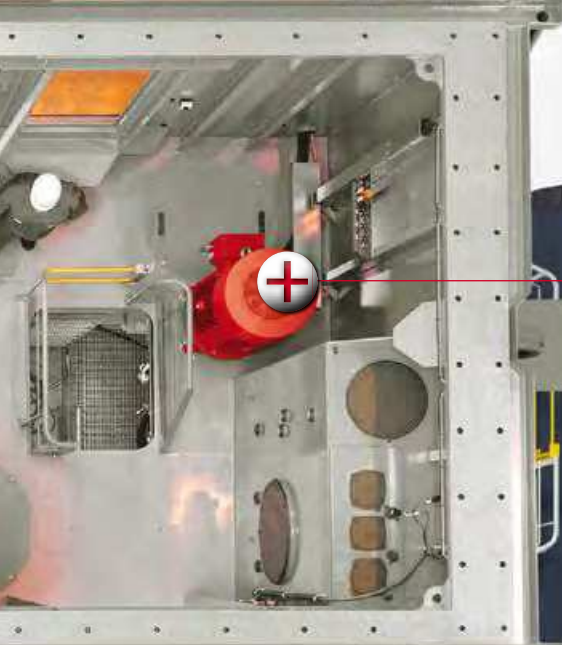
Hoists

- ▶ 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



Hydraulic unit

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



SUPERSTRUCTURE – LOWER FLOOR

SERVICE-FRIENDLY AND COMPACT

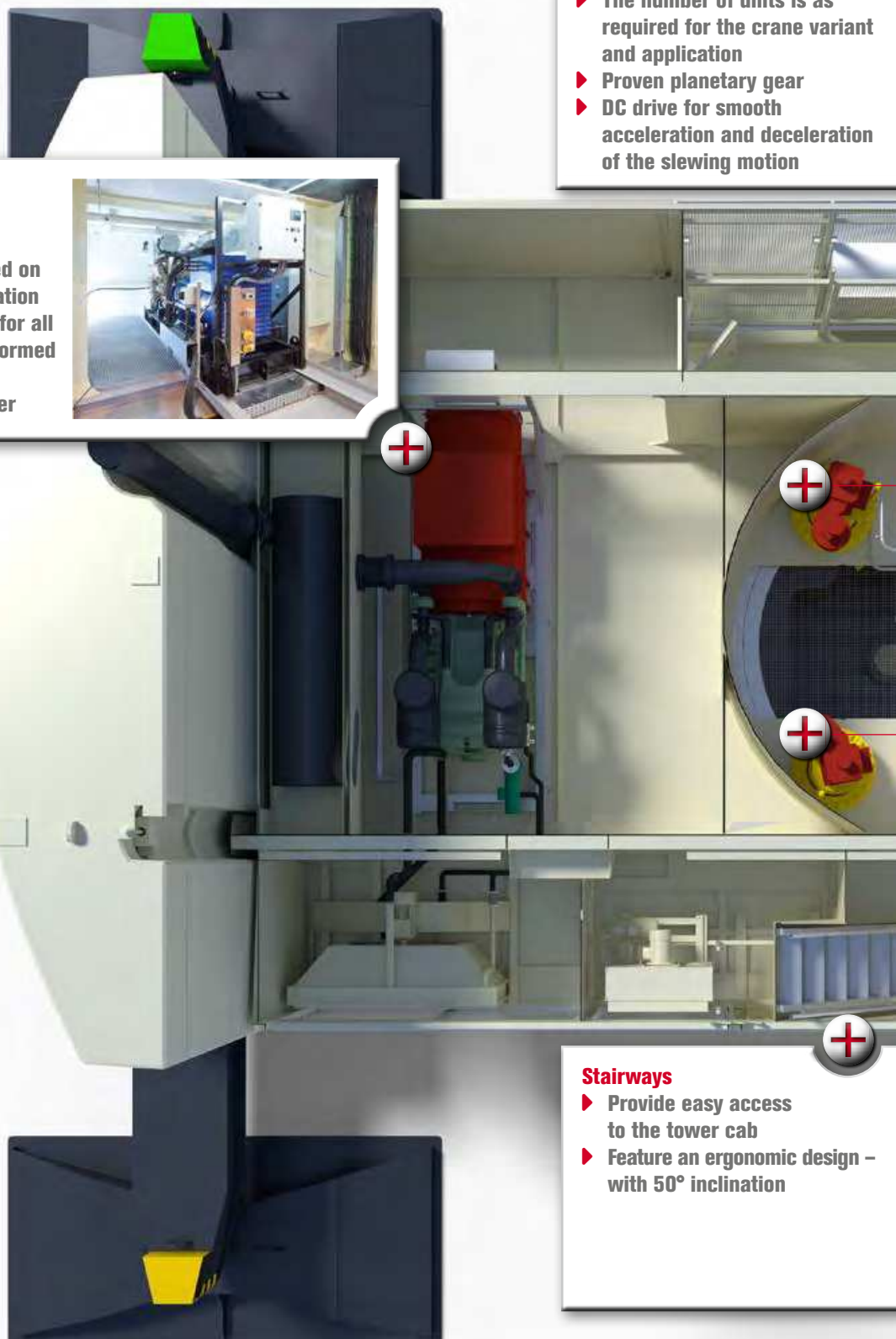
Diesel generator

- ▶ Mounted on 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



Slewing gear units

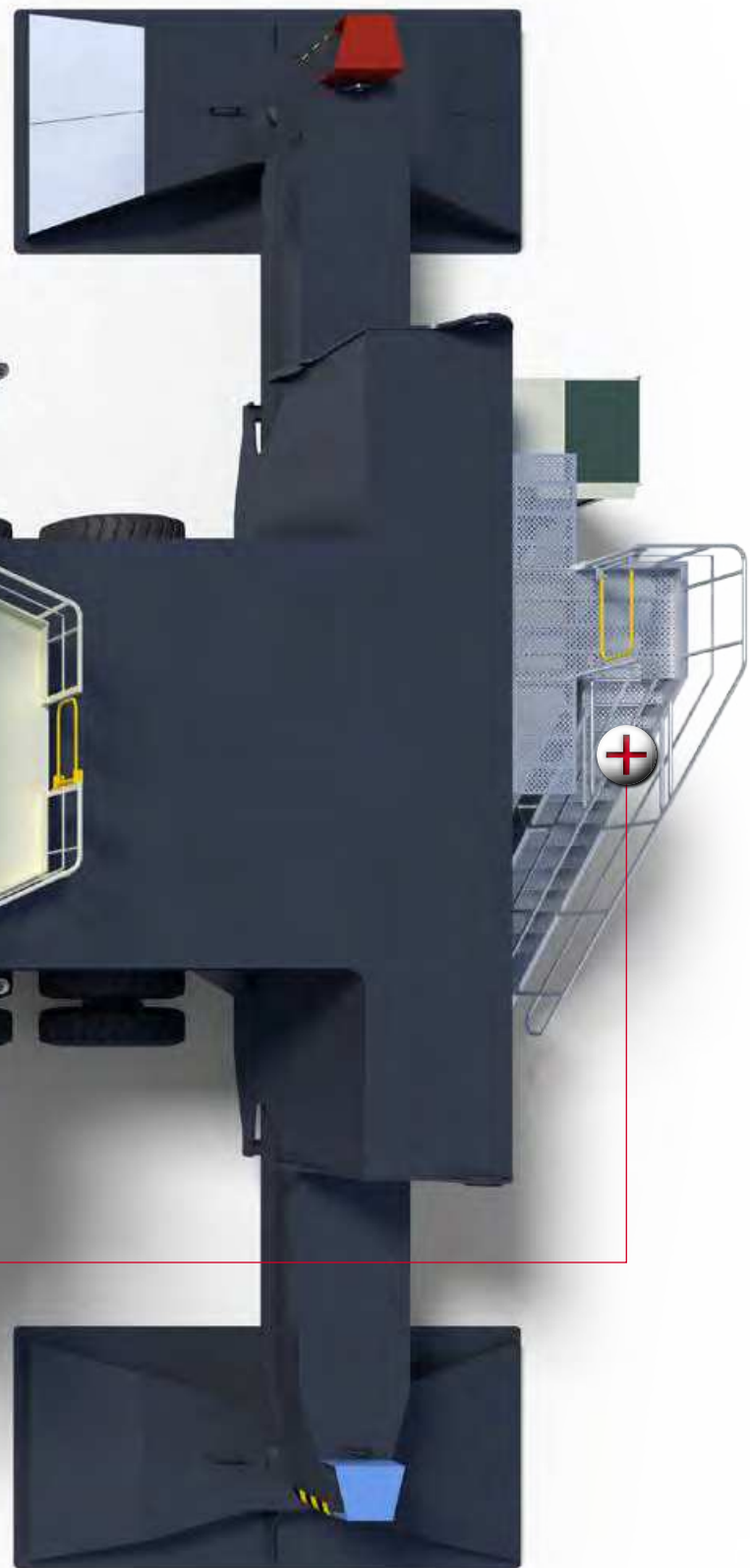
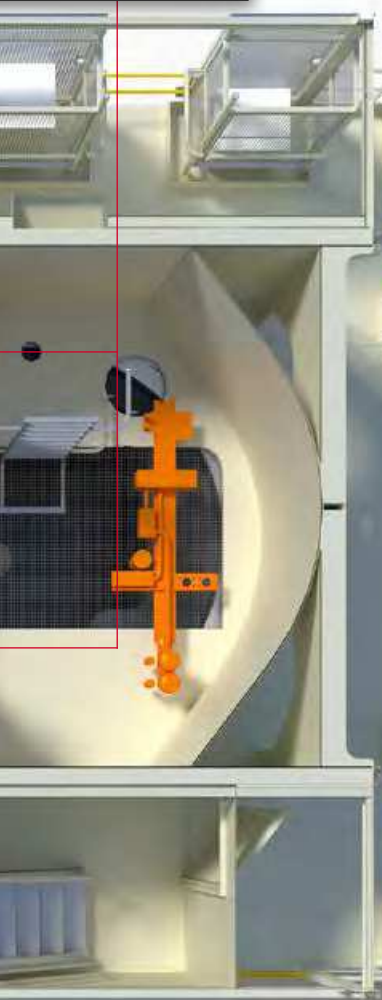
- ▶ Slewing gear units designed as modular assemblies
- ▶ The number of units is as required for the crane variant and application
- ▶ Proven planetary gear
- ▶ DC drive for smooth acceleration and deceleration of the slewing motion



Stairways

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

OR



EFFICIENT, ECO-FRIENDLY AND DURABLE

ELECTRIC DRIVES

The Model 7 harbour 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 Terex® 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 harbour mains, your Terex® Gottwald crane offers:

- ▶ **enhanced efficiency throughout the drive train,**
- ▶ **the opportunity to return electricity to the mains,**
- ▶ **savings in overheads,**
- ▶ **zero exhaust emissions in the terminal,**
- ▶ **reduced noise emissions,**
- ▶ **reduced servicing costs.**

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.





HYBRID DRIVE

When generating power on-board, the crane is more efficient with the Terex® 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.



Everything under control

Intuitive operation through user-friendly human-machine interface.



SMART, USER-FRIENDLY, SAFE

TEREX® GOTTWALD HARBOUR CRANES

The Model 7 harbour crane is packed with smart technology. TPS focuses on safety and productivity for both the machine and the crane driver.

As standard: ergonomic, top-of-the-range equipment

The Model 7 harbour crane includes user-friendly functions as standard. These features include:

- ▶ 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 Terex® 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.

PERFECTLY INTEGRATED HANDL

HIGHLY EFFICIENT SOLUTIONS

TPS 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 new 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

We offer comprehensive packages for the quayside infrastructure of bulk terminals, including:

- ▶ cranes,
- ▶ hoppers and
- ▶ conveyor belts.

TPS enhances bulk handling capability by offering:

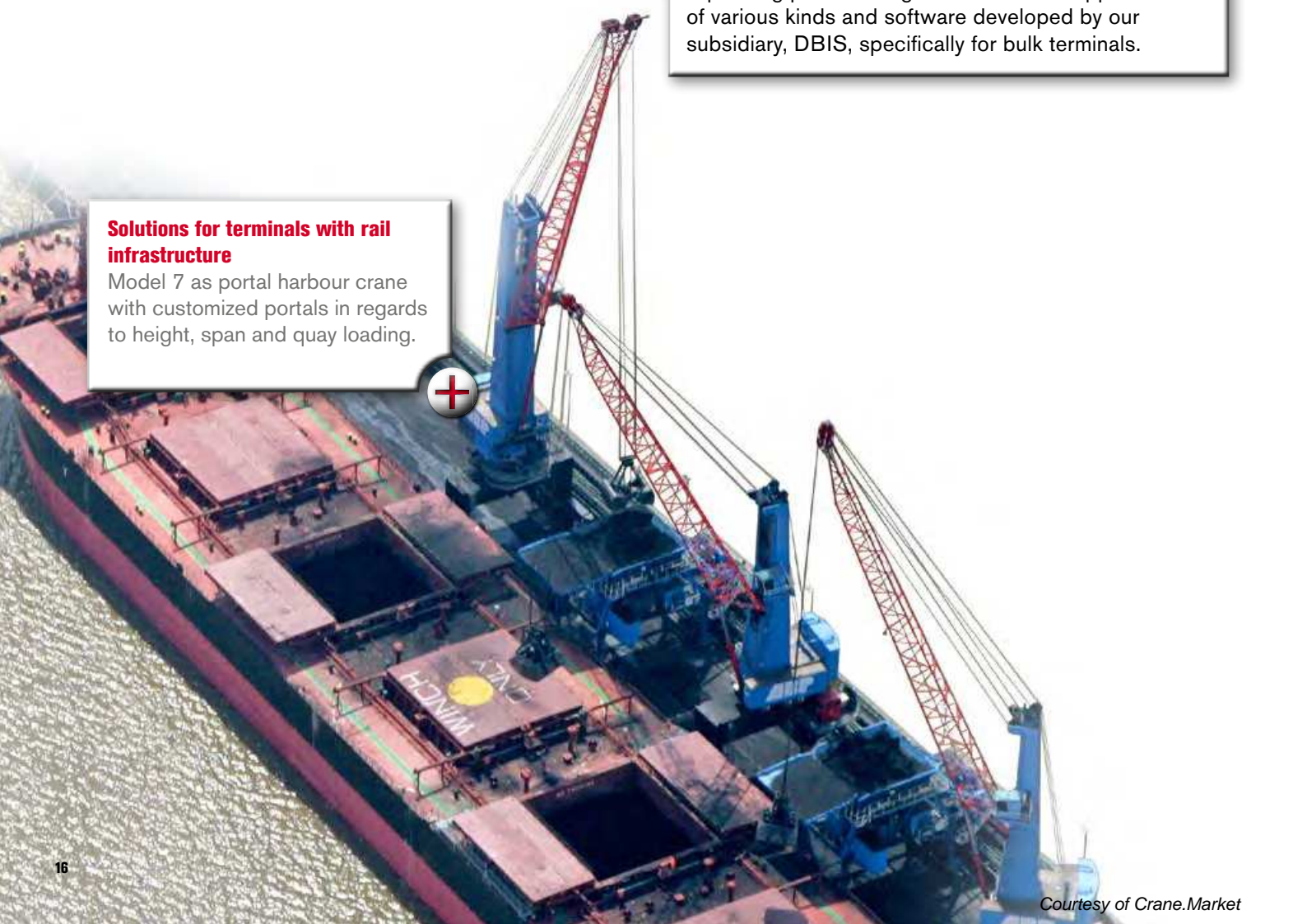
- ▶ consultancy services and
- ▶ software designed specifically for bulk terminals, developed by our subsidiary DBIS.



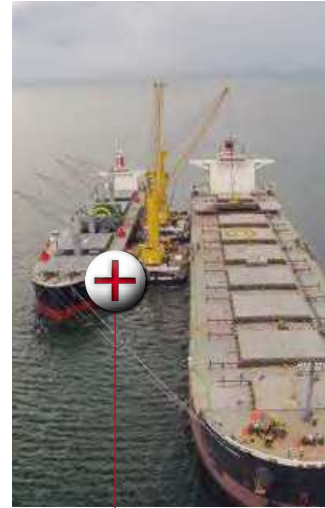
Terex® Gottwald harbour cranes are suitable for a complete range of cargo handling applications and are adapted to specific quay infrastructures. Our ever-expanding product range also includes hoppers of various kinds and software developed by our subsidiary, DBIS, specifically for bulk terminals.

Solutions for terminals with rail infrastructure

Model 7 as portal harbour crane with customized portals in regards to height, span and quay loading.



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Terex® Gottwald Model 7 harbour cranes: handling containers, general and project cargo as well as bulk materials with motor or four-rope grab.

Solutions for limited or missing quay infrastructures

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

Efficient Teamwork

Model 7 mobile harbour crane works hand-in-hand with a Terex® reach stacker.



IN THE BEST OF HANDS

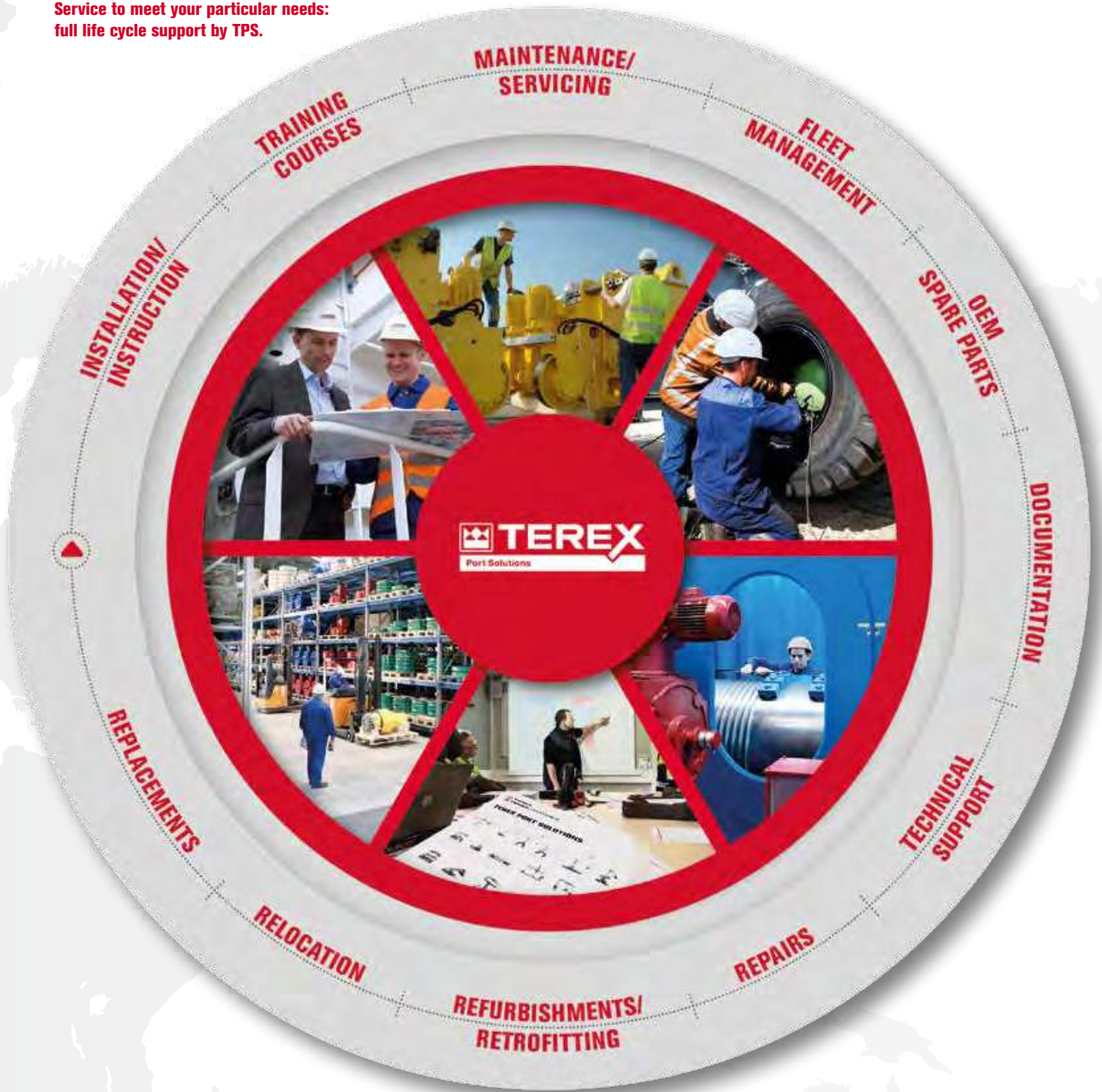
FULL LIFE CYCLE SUPPORT

For all its port technology products, TPS offers reliable, worldwide, customer-oriented service. This means that your Terex® Gottwald machines have excellent availability while securing the value of your investments.

We have a dedicated, integrated, reliable service network that provides professional troubleshooting to support you efficiently. When you purchase a product bearing the Terex® or Terex® Gottwald brand, we provide a contact responsible in your region. This helps overcome language barriers and time zones and provides help quickly whenever needed.



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



www.terexportsolutions.com

TEREX PORT SOLUTIONS

THE BROADEST RANGE OF CARGO HANDLING EQUIPMENT FOR PORTS AND TERMINALS

From ship-to-shore cranes and mobile harbour cranes to reach stackers through to integrated systems for fully automated container handling or professional bulk handling – TPS offers you the right solution from a single source.

With our broad portfolio of products, services and software, sound planning and advisory expertise and a global network, we are your expert for efficient, safe and environmentally aware cargo handling in ports and terminals.



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