

# The new Kalmar RMG.



# A world of experience.

## Our ASCs now come with wings.

Kalmar's new range of RMG cranes, benefit from the cumulative experience of Nelcon, who delivered the world's first RMG in 1971 and Kalmar, with 30 years of delivering innovative ASC systems to terminals around the world. Which is why we say our ASCs now come with wings.

### **Designed to your specifications.**

Kalmar RMGs are built on a platform that can be designed to meet your exact requirements, making them the most adaptable in the market. With a lightweight steel design, they are ideal for ports, for high density stacking in container terminals, or for demanding intermodal rail or barge applications. Kalmar RMGs will provide your business with a highly reliable and efficient crane that will continually meet your operational requirements.

Kalmar can also offer complete end-to-end solutions for your operations, with our extensive range of mobile equipment, automation solutions and global service and support network.





**Enhanced visibility.**

With Kalmar SmartView your crane operator is able to handle each load with ease. Externally mounted cameras and a large in-cabin display allow your operator to move containers more efficiently without having to look down through the floor of the cabin, making it safer and easier.



# Eco-efficient, safer and more productive.



## Reducing your emissions.

Kalmar RMGs are powered by an electric drive system, making them emission-free at source, with many features fitted as standard to reduce your energy consumption. Intelligent hibernation modes and a regenerative power system return power to the grid, using less power, reducing your costs and emissions even further. Each crane can also be adapted to meet local electricity supply requirements, reducing commissioning time and costs and making them cheaper and easier to maintain.



## Safer to operate.

The main girder geometry, with a low-profile trolley, allows for a streamlined design that lowers wind resistance, reducing the overall wheel load, allowing the crane to stop quickly in storms or emergency situations. In extreme conditions, your crane can be secured using our advanced storm anchoring system.

With its stiff rope reeving system, your operators will be able to handle their loads easily and with accuracy. With a stiff rope reeving systems in place, your RMG will also be ready to be retro-fitted to handle remotely controlled or automated operations.



## More productive.

You can choose either a rotating or non-rotating trolley fitted with either a single lift, twin lift or piggyback spreader. A rotating trolley will allow you to align container doors when placed on rail or trucks beds for extra security. It can also rotate containers up to 45 degrees for placement on trucks that may be angled to the rail-line in intermodal operations. A non-rotating trolley is ideal when you only need to pick and place containers without rotation, they are also lighter and easier to service.



## Easier and cheaper to maintain.

Our electrically powered drive system, trolley and spreader have less moving parts than traditional cranes with mechanical hydraulic systems, making it easier and cheaper to service and maintain your RMG.

## Monitor and optimise.

## Kalmar Insight.

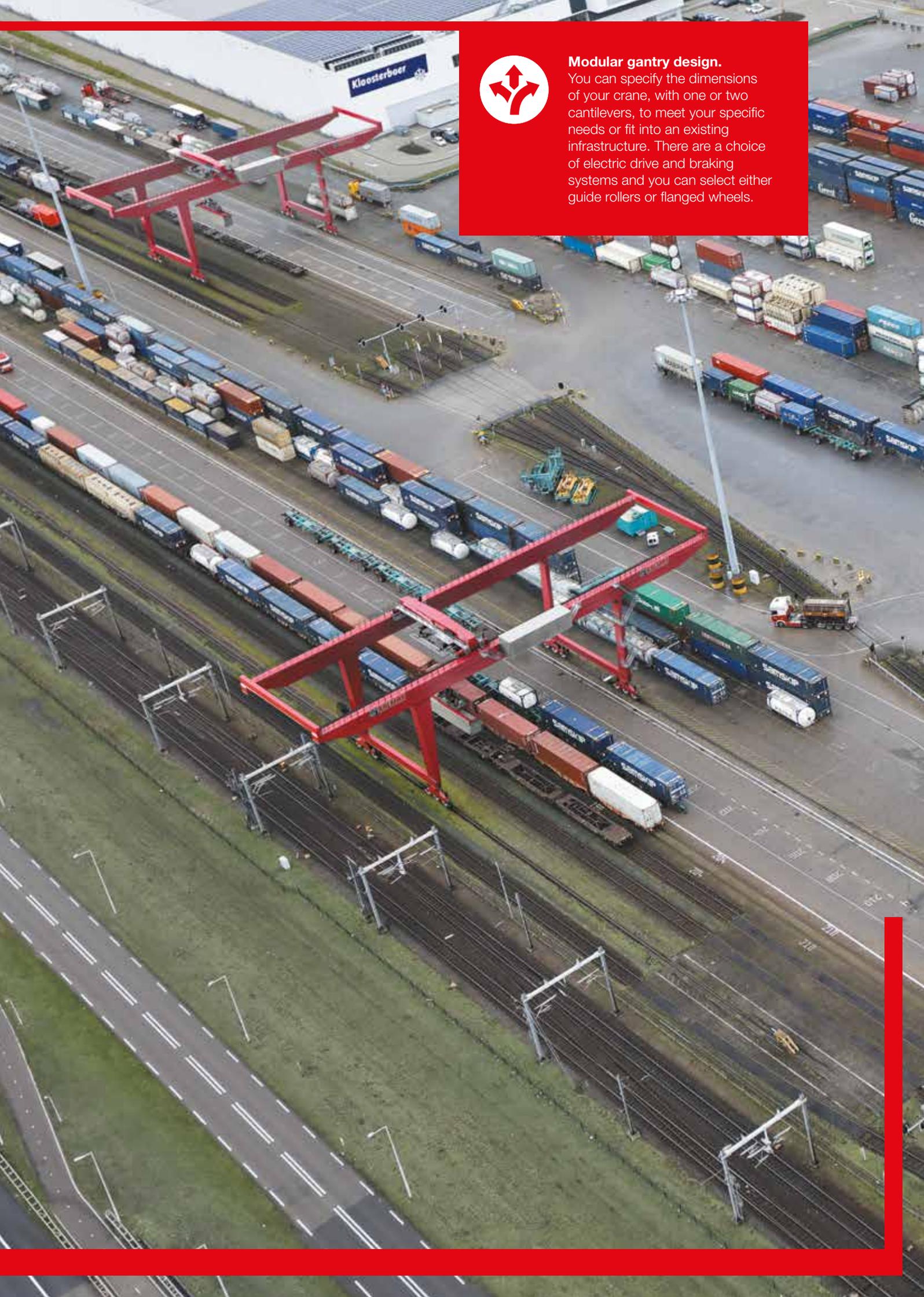
Kalmar Insight aggregates operational and performance data from your equipment, Terminal Operating System (TOS) and Maintenance Management Systems (MMS) into an accessible and understandable format, for a holistic view of your entire operations at all times. Giving you the ability to make instant decisions that will have a positive impact on your on-going operations.

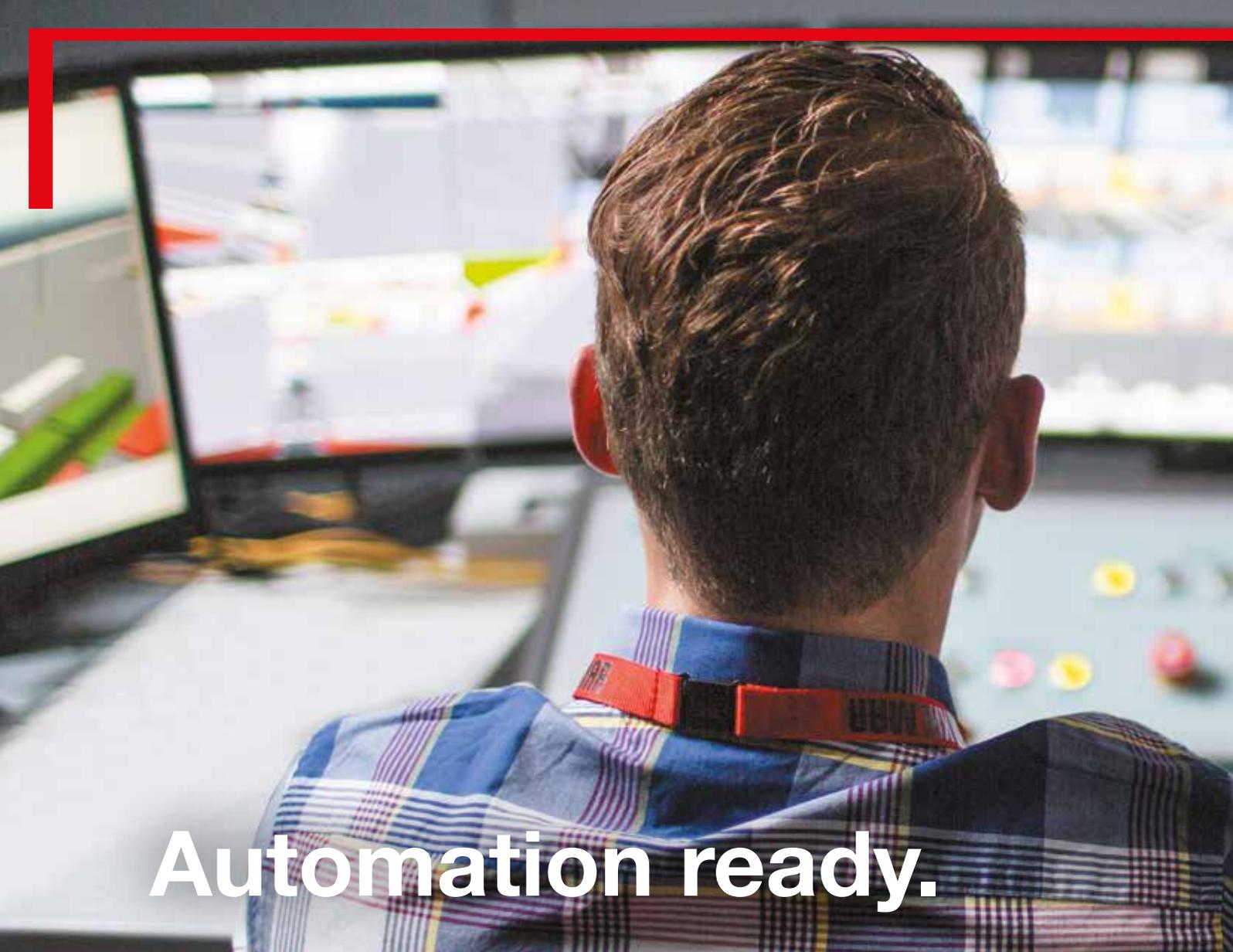




### **Modular gantry design.**

You can specify the dimensions of your crane, with one or two cantilevers, to meet your specific needs or fit into an existing infrastructure. There are a choice of electric drive and braking systems and you can select either guide rollers or flanged wheels.





# Automation ready.

All Kalmar RMGs can be manually or remotely operated or automated to a level that fits with your operational needs.

With Kalmar's integration capabilities and experience, we can work with you to integrate our TLS system with your operating system, making the whole process as seamless and efficient as possible, and reducing the time-to-value of your investments.

Kalmar RMGs can be equipped for remote control or automated operations across all transport modes, including trains, trucks, barges, ships and horizontal transport. The crane's operating system can also be integrated with OCR and other tracking systems, to help build a single, seamless operating system.

#### **Higher levels of safety built in.**

By removing personnel from the crane and having them safely located in your operations centre, you will reduce the risk of them being put in dangerous situations while handling containers in the yard. Each crane comes fitted with anti-collision software so it can operate safely with other manual or automated horizontal transportation. Safety can be heightened further by integrating the crane's operating systems with people and equipment vehicle tracking systems.

#### **Upgrade in the future.**

Even if you choose a manually operated crane today, it can be retrofitted in the future for remote control or various levels of automation when you are ready. No matter what type of RMG you operate, Kalmar will continually upgrade the crane's operating system to make sure it is always running at optimal levels.



## Levels of RMG operation.



### **Manual.**

When your operator is managing all of the crane's moves from the crane itself.



### **Remote control.**

With remotely controlled container moves, your operator will be safely housed in your operations centre and control all movements of the crane and trolley.



### **Supervised operations.**

With supervised operations, your operator will supervise all moves by the gantry, trolley and hoist along the stack. Picking and placing in the interchange lane will be remotely controlled by your operator.



### **Automated operations.**

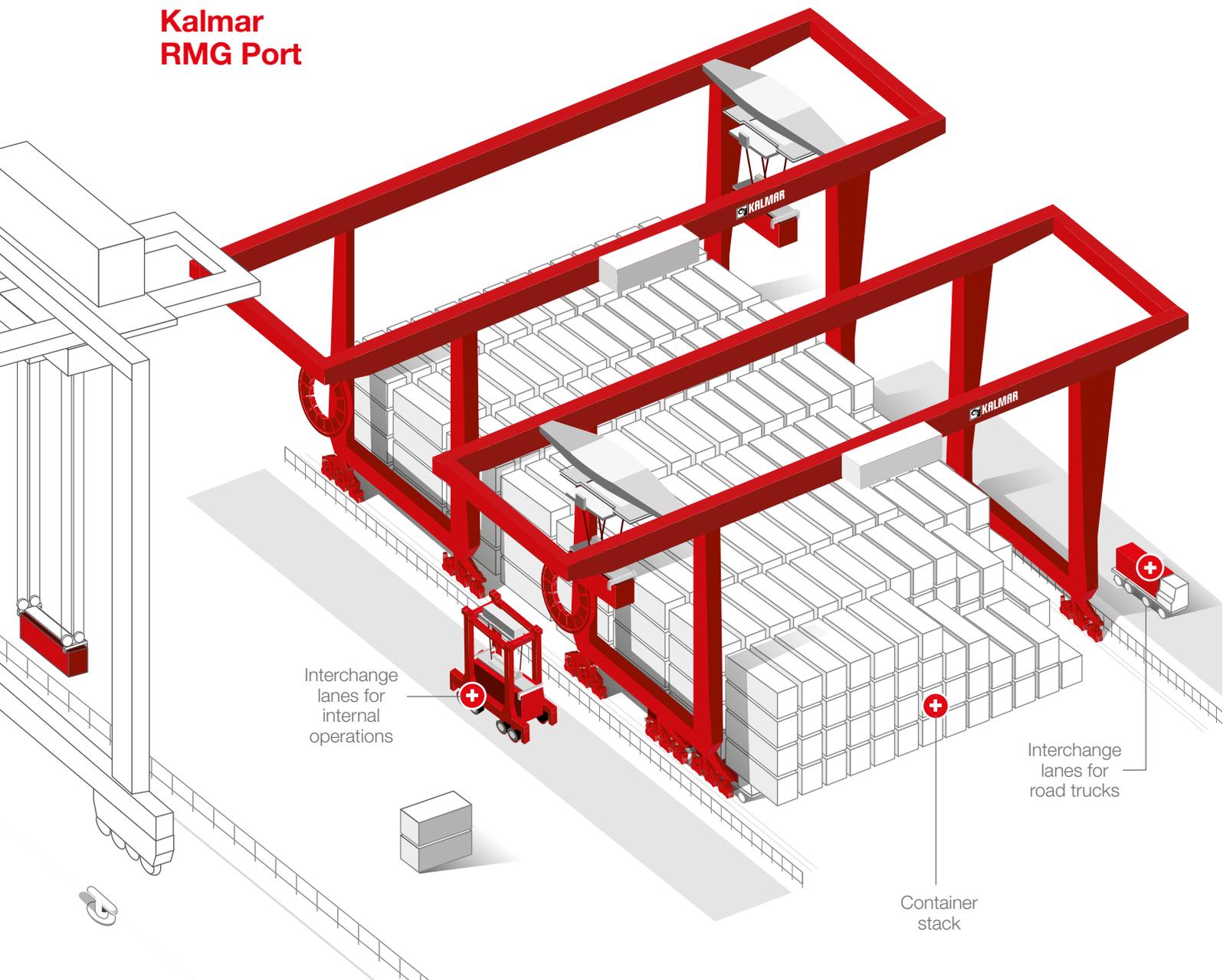
All gantry, trolley and hoist moves will be fully automated along the stack and in the interchange lane.



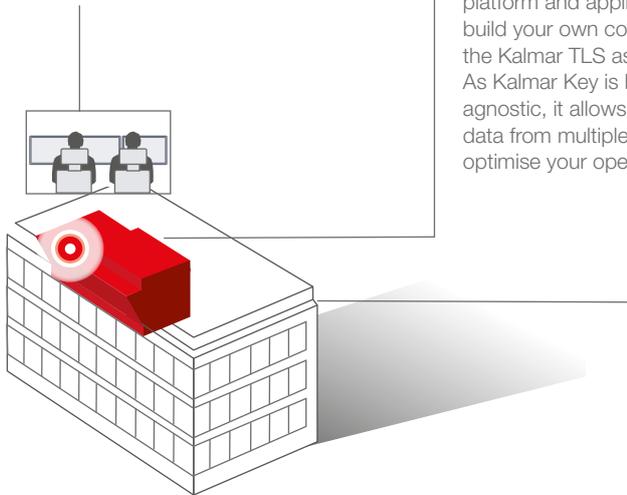
# Automated systems.

Kalmar's new automated RMG crane can work in either a terminal or intermodal operation in collaboration with your other equipment.

## Kalmar RMG Port



## Kalmar TLS Navis TOS



## Kalmar Key

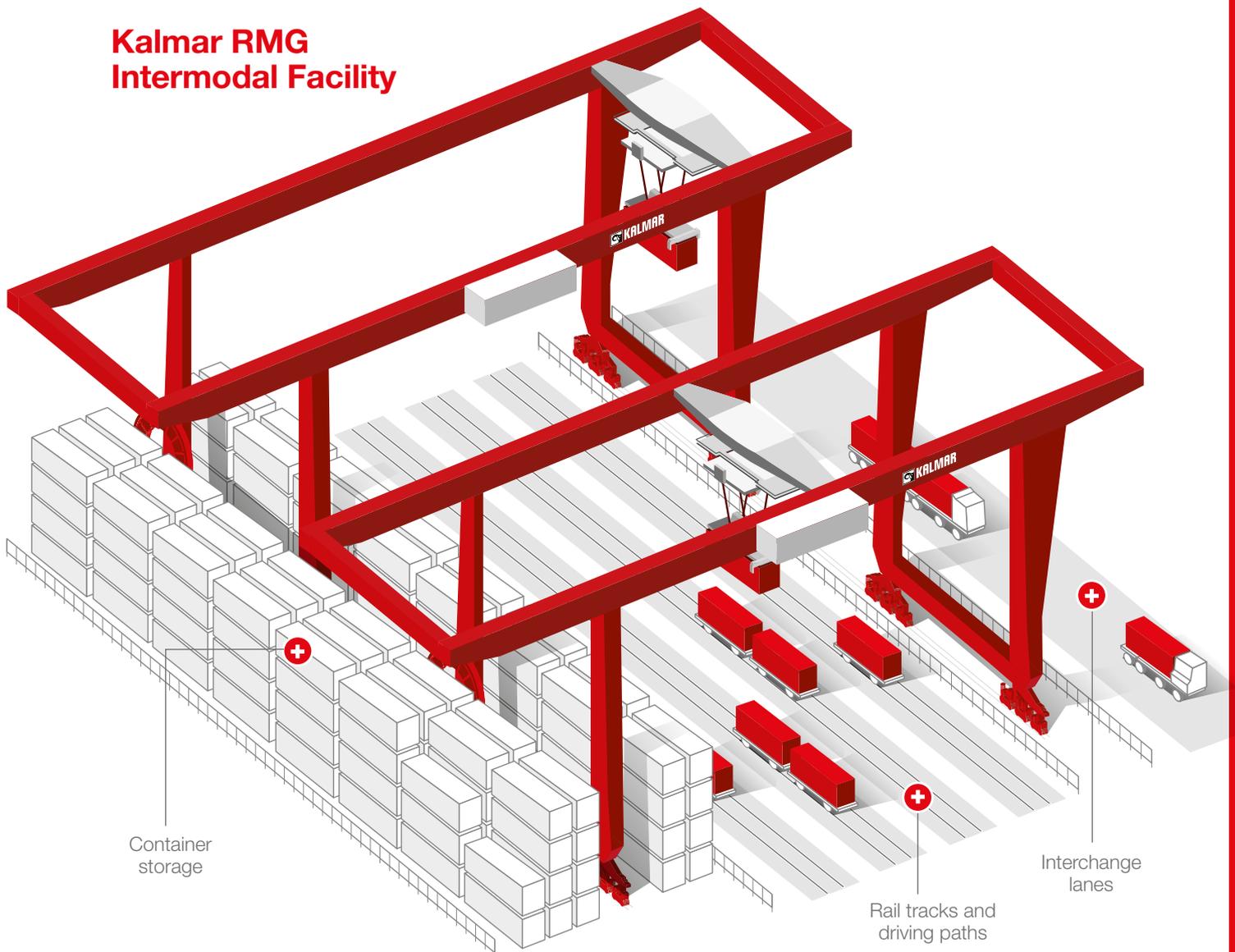
Unlock your future with an open automation platform. Kalmar Key gives you a set of open platform and application interfaces that allow you to build your own complete end-to-end solution, using the Kalmar TLS as the common central platform. As Kalmar Key is both equipment and system agnostic, it allows you to build a holistic view of your data from multiple sources, giving you the ability to optimise your operations continually and with ease.

## Kalmar Insight

**Turn your data into actionable insights.**

Data is by far the most valuable asset when it comes to optimising your operations. Kalmar Insight takes the vast quantities of data you produce from multiple sources and turns it into actionable insights. With a real-time overview of your terminal's productivity and performance, you can take instant action that delivers instant impact.

## Kalmar RMG Intermodal Facility





# More support.

Our job doesn't stop once we deliver your new system. We also offer a range of support services that help keep your new RMG crane and equipment running at its optimal best. With a global network of over 1,500 service and support staff in over 100 countries, we will always have someone nearby to give you the support you need.

## Kalmar Care.

### **Making sure your business never stops.**

Kalmar offers four different types of service and maintenance contracts, for any brand of equipment. Each is designed to help you improve your operational efficiency, drive productivity and secure financial predictability.

Each contract type includes a set of standardised service modules that can be matched to meet your business needs. You just need to choose the one that is right for you and your day-to-day operations.

### **The four flexible types of service contracts.**

#### **Kalmar Support Care**

We support your maintenance processes on demand.

- Availability of competent people with the right tools and parts
- Addition of skills to existing maintenance organisation

#### **Kalmar Essential Care**

We perform your agreed maintenance tasks proactively.

- Availability of competent people with the right tools and parts
- Higher degree of financial predictability
- Reduced operational risk for customer
- Improved availability of machines

#### **Kalmar Complete Care**

We meet your complete maintenance requirements.

- Improved predictive maintenance
- Low operational risk for customer
- Reduced equipment downtime
- Reduced total cost of operation
- Increased operational predictability

#### **Kalmar Optimal Care**

We optimise your business performance.

- Guaranteed availability
- Reduced tied-in capital
- Improved business performance
- Increased peace of mind



## Kalmar Genuine Parts.

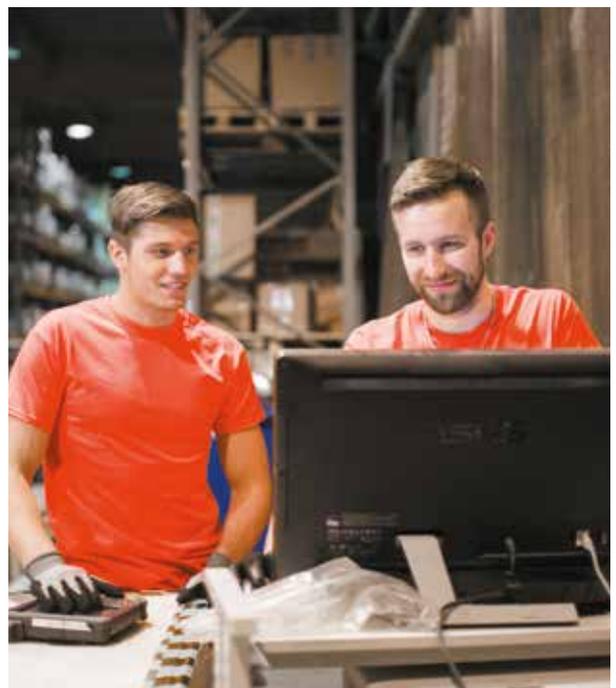
### **When the right part matters.**

When something needs to be replaced urgently, you need a spare part that meets your exact needs – immediately. Kalmar offers a rapid delivery service for over 50,000 premium-quality genuine parts to anywhere in the world, with installation support if needed.

You may also want to consider outsourcing all or part of your parts management and inventory control. Kalmar Parts Care ensures you can do just that. Kalmar Parts Care can make sure that critical spare parts are always on hand so your equipment downtime is kept to a minimum. Each Kalmar Parts Care plan is based on your individual needs, so talk to us today and see how we can improve your parts availability, while reducing your inventory holding costs.

## Open 24/7.

Kalmar MyParts allows you to order genuine Kalmar parts online 24/7. You can also access information on your Kalmar equipment to ensure that you ordering exactly the right part. Contact your local sales support to register for Kalmar MyParts.





# KALMAR

Making your every move count

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