

# Kalmar Shuttle Carriers.

From quayside  
to the stack  
in a moment.



# When speed is of the essence.

Kalmar Shuttle Carriers™ enable you to decouple your container movements from quayside to landside, allowing your cranes to operate at their optimal best at all times. Kalmar Shuttle Carriers are able to pick and place containers directly on the ground, so other cranes are never kept waiting and are free to get on with their main job, moving containers.

Kalmar's range of shuttle carriers are also extremely agile. Our electric and hybrid models feature a drive and steering system that controls each wheel individually. This gives our shuttle carriers the ability to move diagonally in a "crab" mode, or even pirouette on the spot around its vertical axis. This high level of manoeuvrability enables much shorter work cycles and can help reduce terminal congestion.

Our range of shuttle carriers are built on 70 years of experience working with terminal operators around the world and feature three different power sources, advanced safety features and one of the best operator experiences available.



## A flexible range for you.

Every Kalmar Shuttle Carrier features a modular design that can be tailored to meet the needs of your business. You have three different shuttle carrier models to choose from:

### **Kalmar FastCharge™ Shuttle Carrier.**

The Kalmar FastCharge Shuttle Carrier uses electric drive units with the latest battery technology, which can be charged on the go. You may include a small diesel engine which will allow you to move your machine around your yard when it isn't charged.



### **Kalmar Hybrid Shuttle Carrier.**

The Kalmar Hybrid Shuttle Carrier delivers all the power you're used to, with up to 40% reduction in fuel consumption and up to 50 tons less CO<sub>2</sub> emissions per annum than a traditional diesel-electric machine. A regenerative energy system, captures electrical braking and spreader-lowering energy and stores this for re-use in Lithium-ion batteries.



### **Kalmar Shuttle Carrier.**

The Kalmar Shuttle Carrier offers high performance, excellent fuel efficiency and low noise. Featuring a diesel-electric drive, this shuttle carrier complies with the latest exhaust emission regulations.



## Thinking of automating?

Kalmar AutoShuttles™ is a proven automation solution for container terminals. All Kalmar Shuttle Carriers can be delivered automation ready or can be retrofitted for automation at a later date.



# Why choose a Kalmar Shuttle Carrier?

Kalmar Shuttle Carriers are highly efficient, productive, safe and comfortable to operate. They are the best choice of horizontal transport to work in partnership with your ASCs, driving even greater efficiencies from quayside to landside.

## Extremely efficient.

All of our shuttle carriers offer the most efficient drive units, with our electric and hybrid machines exceeding the most stringent carbon emissions standards globally. In fact, our hybrid machine can reduce your carbon emissions by up to 40% and our fully electric Kalmar FastCharge Shuttle Carrier has zero emissions at source. Automated stop-start technology helps drive greater efficiencies when you are coupling an electric power source with a diesel one. Our electric and hybrid range features a rope hoist system with only six pulleys, making it highly efficient, safer and easier to maintain than other systems.



## Highly productive.

Our range of shuttle carriers offers you the highest levels of productivity, as you can handle a full range of containers from 20ft to 53ft and, when fitted with an extendable twin-lift spreader, two 20ft containers can be handled simultaneously.

All of our shuttle carriers are easy to operate and have servicing intervals of up to 1000 hours, keeping your machine's downtime to a minimum. Plus, all servicing points are easily accessible from the top of the frame.

## Safer.

Kalmar Shuttle Carriers feature the strongest frame in the industry, with a streamlined yet extremely rigid design with no external bracing. The structure enables easy access to all key components, which are well protected within the frame. Coupled with superior cabin visibility, your operators will stay safe and be in control at all times.

Our entire range of shuttle carriers feature active stability control. This system continually monitors the speed, turning radius and spreader position and will slow the machine down automatically when needed. This helps the driver operate the shuttle carrier in a safe manner.



## Ergonomic cabin design.

The cabin was designed in cooperation with our customers. It features a spacious interior, window shaping to reduce night time reflections, and low cabin noise. Ergonomically designed with an intuitive user interface, dimmable LED lighting and an optional 180 degree electrically adjustable seat, puts everything in easy reach for your operators.



# Lower your emissions without compromising on performance.

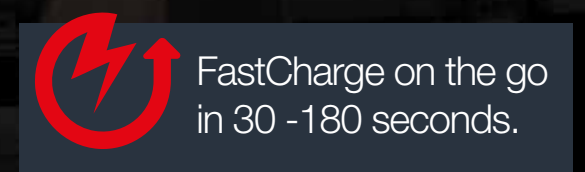
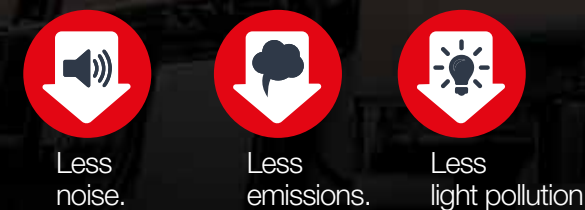
Lowering your carbon emissions often means compromising on power, but that doesn't need to be the case. Our hybrid shuttle carrier is able to reduce your emission by up to 40% by using a regenerative power system coupled with a highly efficient diesel engine that uses less fuel.

You will benefit from lower noise levels as both our electric and hybrid machines are incredibly quiet. Any light pollution can also be dramatically reduced if operating one of our Kalmar AutoShuttles, as they do not require lights to operate in the dark.

## Clean power on the go.

The Kalmar FastCharge system allows you to charge your fully electric Kalmar FastCharge Shuttle Carriers while they are hard at work in the yard. No more exchanging batteries, or lengthy re-charging times, as your shuttle carriers can now connect with strategically placed fast charging stations that allow you to recharge during normal operations when your machine is idling. Typical recharging time is just 30 to 180 seconds at 600kW.

The result? You get faster turnaround times, increased productivity with as high as 90% utility rates, less noise and zero emissions at source.





# Ready for the future.

When you decide to start automating container movements in your terminal, you can be sure that our shuttle carriers are ready to take on the challenge. Kalmar Shuttle Carriers can be factory fitted to your desired level of automation, ready for a smoother transition to automated operations in the future. Existing machines can be retrofitted when you are ready for the change to automated container movements. Or you may decide to update your fleet with a new Kalmar AutoShuttle for fully automated container movements.

Either way, Kalmar can work with you to make sure you are ready to reap the full benefits of automating your terminal in the best and most efficient way possible.

## Remotely connect and monitor your shuttle carriers.

All Kalmar Shuttle Carriers can be remotely connected and monitored through Kalmar Insight or you can seamlessly integrate diagnostic, performance and location data into other systems like your TOS.

# The right support.

Our job doesn't stop once we deliver your new shuttle carrier. We can also offer a range of support services that help keep your new equipment running at its optimal best. With a global network of over 1500 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 which one is right for you and your day-to-day operations.

## 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 spare parts management and inventory control, and with Kalmar Parts Care 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 at a minimum. Each Kalmar Parts Care plan is based on your individual needs, so talk to us today and see how we can lift your parts availability, while reducing your inventory holding costs.

## Upgrades and retrofits.

Kalmar may be able to upgrade your existing shuttle carrier fleet to help prepare them for future automation. We can upgrade and work on your shuttle carrier fleet, however the best starting place is to talk to us so we can make a full assessment of your needs and equipment first.





# KALMAR

Making your every move count

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