



# Kalmar Shuttle Carrier

Data sheet



# The fastest way between ship and stack

The Kalmar shuttle carrier improves terminal throughput by decoupling ship-to-shore and yard operations. It is the ideal horizontal transportation system for terminals designed around automated stacking cranes. The shuttle carriers ability to pick and place containers on the ground, creates buffer areas from which containers can be picked up. In this way, each type of equipment can operate at its own optimum speed and best performance.

## **Modular design for superior versatility**

The latest generation of Kalmar shuttle carriers offers unprecedented gains in manoeuvrability and efficiency, translating directly into improved productivity and thus as cost savings in your terminal operations. Our three shuttle carrier models are products responding directly to your needs and featuring state-of-the-art drive technology, significantly lower fuel consumption, advanced safety features as well as superior operator ergonomics.

## **All ready for automation**

Automation is the key element in keeping future terminals competitive. All Kalmar shuttle carriers are ready to take advantage of the major benefits offered by port and process automation, from supporting the efficiency achieved by manually operated models to the fully automated AutoShuttles.

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

Kalmar Care is our flexible and scalable maintenance portfolio, designed to reduce our customers' operational risks. It enables you to focus your resources to your core business by providing flexibility to peak handling, improved internal cost transparency and maximised fleet availability. At Kalmar, we are committed to provide lifetime care to contribute to your long-term success.

## **Key benefits**

- Superior versatility for every need
- Decreased fuel consumption, up to 40%
- Lower emissions
- Increased manoeuvrability
- Advanced safety
- Superior ergonomics
- Longer service intervals
- Secure and fast container handling with Bromma spreaders
- Automation ready

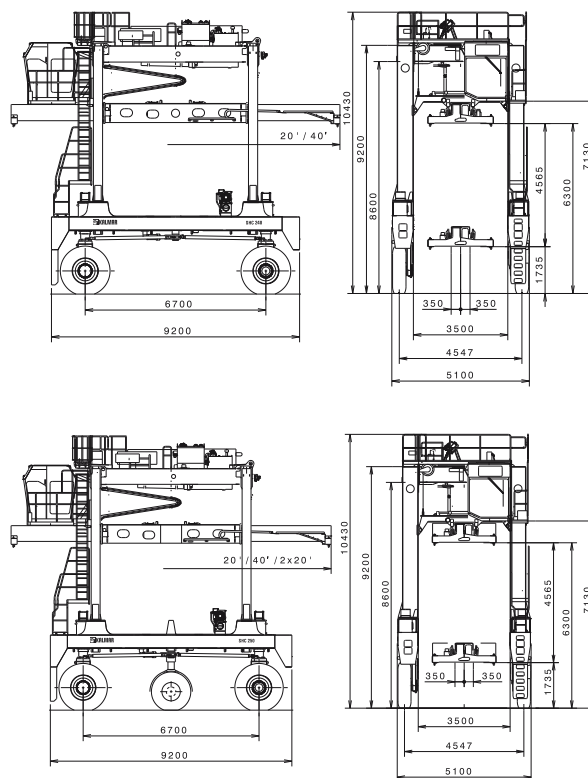
# Kalmar Classic Shuttle Carriers

## Technical Data

		SHC 240	SHC 250
<b>OPERATING DATA</b>			
Capacity under spreader	ton	40	50
Service weight	ton	48	51
Wheel load fully loaded	ton	22	21.4 / 7.7
<b>DIMENSIONS</b>			
Lifting height	mm	6300	
Pick-up height	mm	1735	
Inside clear width	mm	3500	
Turning radius, inside	mm	4450	
Turning radius, outside	mm	10500	
<b>SPREADER</b>			
Twistlocks		ISO	
Positions	ft	20, 40	20, 40/2x20*
Side shift	mm	± 350	
Slew angle	deg.	± 6	
<b>SPEEDS</b>			
Travel speed, empty	km/h	30	
Travel speed, loaded	km/h	30	25
Lifting speed, empty	m/min	20	
Lifting speed, loaded	m/min	13	9
Lowering speed, empty	m/min	18	
Lowering speed, loaded	m/min	18	
<b>POWER UNIT</b>			
Type		Diesel hydraulic pump set	
No. of units		1	
<b>DRIVE SYSTEM</b>			
Type		Hydrostatic	
		2-wheel drive	
Pressure	bar	380	
<b>TYRES</b>			
Size		18.00-33	18.00-33 / 16.00-25
<b>BRAKES</b>			
Service brakes		Wet disc in four wheels	
Parking brakes		Spring actuated, wet disc in two wheels	
<b>HOIST SYSTEM</b>			
Type		Smoothlift™ rope hoist with single cylinder	
Pressure	bar	260	280
Pilot control		Electrical	
<b>CONTROL SYSTEM</b>			
Type		PLC	
Voltage		24 V	

<b>ENGINE OPTIONS FOR BOTH MODELS</b>			
Power	kW	272	280
Torque	Nm	1540	1898
Displacement	dm <sup>3</sup>	8.4	10.8
Emission level		Non-regulated / EU stage IIIB / US Tier 4i	EU stage IIIA / US Tier 3

\*Also available extendable twinlift 45 ft  
Subject to change without notice



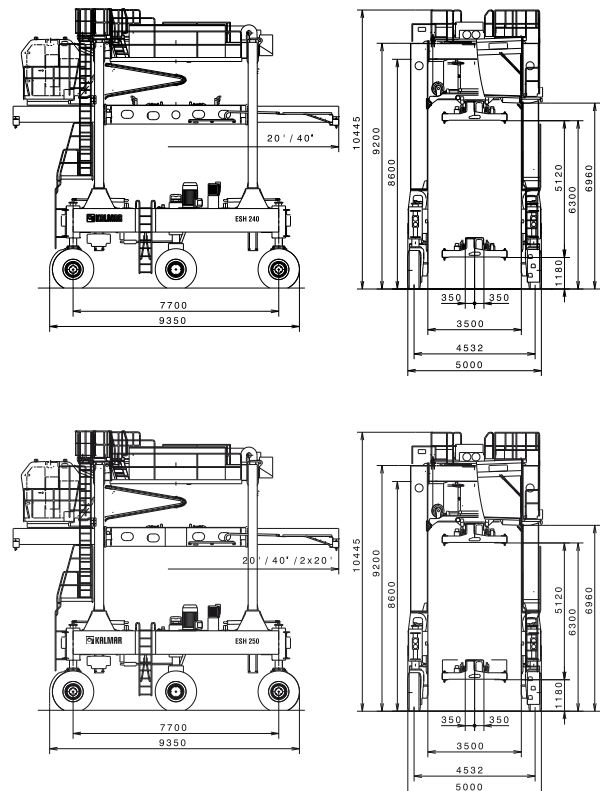
# Kalmar Electric Shuttle Carriers

## Technical Data

		ESH 240	ESH 250
<b>OPERATING DATA</b>			
Capacity under spreader	ton	40	50
Service weight	ton	51	52
Wheel load fully loaded	ton	15.2	17.0
<b>DIMENSIONS</b>			
Lifting height, max.	mm	6300	
Pick-up height, min.	mm	1180	
Inside clear width	mm	3500	
Turning radius, inside	mm	3550	
Turning radius, outside	mm	9500	
<b>SPREADER</b>			
Twistlocks		ISO	
Positions	ft	20, 40	20, 40/2x20*
Side shift	mm	± 350	
Slew angle	deg.	± 6	
<b>SPEEDS</b>			
Max. travel speed, empty	km/h	30	
Max. travel speed, loaded	km/h	30	25
Max. lifting speed, empty	m/min	20	
Max. lifting speed, loaded	m/min	13	9
Max. lowering speed, empty	m/min	18	
Max. lowering speed, loaded	m/min	13	9
<b>POWER UNIT</b>			
Type		Diesel generator set	
No. of units		1	
<b>DRIVE SYSTEM</b>			
Type		2-wheel drive	
Control		AC-frequency control	
Electric motors		2	
<b>TYRES</b>			
Size		480/95-25	
<b>BRAKES</b>			
Service brakes		Wet disc in four wheels	
Parking brakes		Spring actuated, wet disc in two wheels	
<b>HOIST SYSTEM</b>			
Type		Winch rope hoist	
Control		AC-frequency control	
Electric motor		1	
<b>CONTROL SYSTEM</b>			
Type		PLC	
Voltage		24 V	

<b>ENGINE OPTIONS FOR BOTH MODELS</b>			
Power	kW	272	285
Torque	Nm	1540	1938
Displacement	dm <sup>3</sup>	8.4	10.8
Emission level		Non-regulated / EU stage IIIB / US Tier 4i	EU stage IV / US Tier 4f

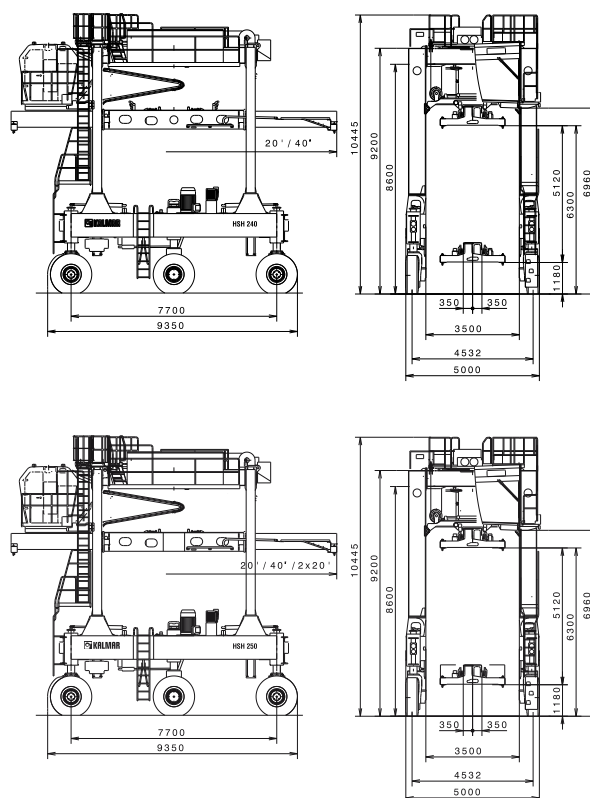
\*Also available extendable twinlift 45 ft  
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# Kalmar Hybrid Shuttle Carriers

## Technical Data

2-HIGH MODELS		HSH 240	HSH 250
<b>OPERATING DATA</b>			
Capacity under spreader	ton	40	50
Service weight	ton	51	52
Wheel load fully loaded	ton	15.2	17.0
<b>DIMENSIONS</b>			
Lifting height, max.	mm	6300	
Pick-up height, min.	mm	1180	
Inside clear width	mm	3500	
Turning radius, inside	mm	3550	
Turning radius, outside	mm	10500	
<b>SPREADER</b>			
Twistlocks		ISO	
Positions	ft	20, 40	20, 40/2x20*
Side shift	mm	± 350	
Slew angle	deg.	± 6	
<b>SPEEDS</b>			
Max. travel speed, empty	km/h	30	
Max. travel speed, loaded	km/h	30	25
Max. lifting speed, empty	m/min	20	
Max. lifting speed, loaded	m/min	13	9
Max. lowering speed, empty	m/min	18	
Max. lowering speed, loaded	m/min	13	9
<b>POWER UNIT</b>			
Type		Diesel generator set, hybrid	
No. of units		1	
Energy storage		Lithium battery	
<b>ENGINE</b>			
Power	kW	77	
Torque	Nm	425	
Displacement	dm <sup>3</sup>	4.4	
Emission level		EU stage IIIB / US Tier4i	
<b>DRIVE SYSTEM</b>			
Type		2-wheel drive	
Control		AC-frequency control	
Electric motors		2	
<b>TYRES</b>			
Size		480/95-25	
<b>BRAKES</b>			
Service brakes		Wet disc in four wheels	
Parking brakes		Spring actuated, wet disc in two wheels	
<b>HOIST SYSTEM</b>			
Type		Winch rope hoist	
Control		AC-frequency control	
Electric motor		1	
<b>CONTROL SYSTEM</b>			
Type		PLC	
Voltage		24 V	



\*Also available extendable twinlift 45 ft  
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Kalmar, part of Cargotec, offers the widest range of cargo handling solutions and services to ports, terminals, distribution centres and to heavy industry. Kalmar is the industry forerunner in terminal automation and in energy efficient container handling, with one in four container movements around the globe being handled by a Kalmar solution. Through its extensive product portfolio, global service network and ability to enable a seamless integration of different terminal processes, Kalmar improves the efficiency of every move. [www.kalmarglobal.com](http://www.kalmarglobal.com)

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