

Kalmar DRT450 Reachstackers 45 tonnes

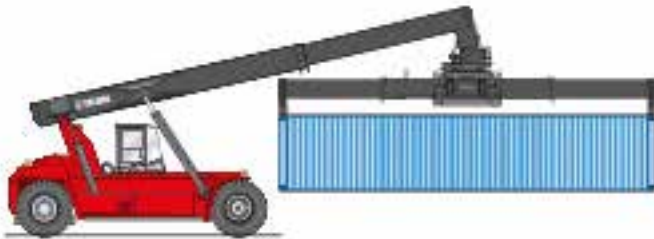


Flexible container handling

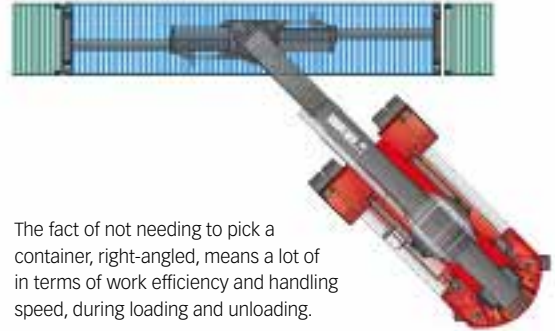
Kalmar Reachstackers combine performance, comfort and reliability.

Container handling with a reachstacker is one of the most flexible handling solutions whether to operate a smaller one-unit terminal or a medium sized port. A reachstacker can handle loaded containers quickly and efficiently in narrow spaces, while still ensuring the driver has optimum visibility.

The Kalmar DRT offers a safe container handling with a high level of productivity together with the renowned Kalmar quality.



Containers can be lifted lengthwise making it possible to deliver the container into and through workshop doors, port shed gates, etc in then low, longitudinal position.



The fact of not needing to pick a container, right-angled, means a lot of in terms of work efficiency and handling speed, during loading and unloading.

Instead, the container can be picked or dropped-off by the unit approaching from any angle <90 degree. And by rotating the spreader and reaching the boom to suitable length, the driver can handle the container from any position. As an additional advantage, the aisle width – driving space depth, needed – can be squeezed, as well.

Containers can also be lifted and transported lengthwise, making it possible to deliver the container into and through workshop doors, port shed gates, etc in then low, longitudinal position. This can be a vital ability for the possibility of container stripping and stuffing inside the sheds.

With the Kalmar DRT model you can count on low energy consumption and low maintenance costs. Any driver with the ability to take advantage of the machine's capacity and technical benefits will find this reachstacker a powerful, flexible tool for handling containers with the lowest possible operating and maintenance costs.

Drive train		Standard	Option
Engine	Manufacturer Model	Yuchai YC6M360	Cummins QSM11
	Power	243 kW at 2000 rpm	224 kW at 2000 rpm
	Peak torque	1550 Nm at 1100 rpm	1575 Nm at 1400 rpm
Transmission		Dana – 15.SHR36000	Dana – 15.SHR36000
Driving axle		Kalmar WDB	Kalmar WDB



Yuchai YC6M360

Performance	Lifting speed (m/s)		Lowering speed (m/s)		Driving speed (km/h)		Gradeability (%)		Draw pull (kN)	
	unloaded	at 70% of rated load	unloaded	at rated load	unloaded (F/R)	at rated load (F/R)	at 2 km/h, unloaded	at 2 km/h, at rated load	max, unloaded	max
DRT450	0,42	0,25	0,36	0,36	25/25	21/21	36	20	40	314

Maximum lifting capacity in confined spaces

The chassis and lifting equipment have been developed to ensure the best possible performance, strength and user-friendliness.

Lifting boom

The lifting boom carries the load. The design has been optimised using computer simulations and extensive tests. The powerful execution in high-tensile steel has a minimal number of welds for maximum strength. The lifting cylinders are fitted with spherical plane thrust bearings. The width of the rear fixture (boom suspension) increases the overall rigidity and the good rearward visibility.

The boom has two sections, the inner and outer boom. The sliding plates between the inner and outer boom require no con-

tinuously lubrication. The cable-chain which leads hydraulic hoses and cabling to the attachment is made of maintenance-free plastic.

Lifting boom hydraulics

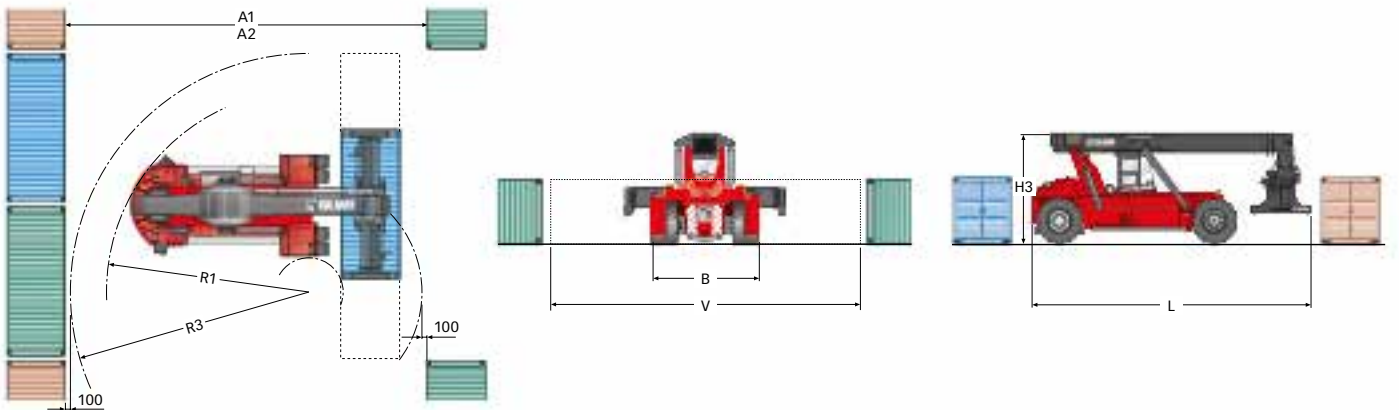
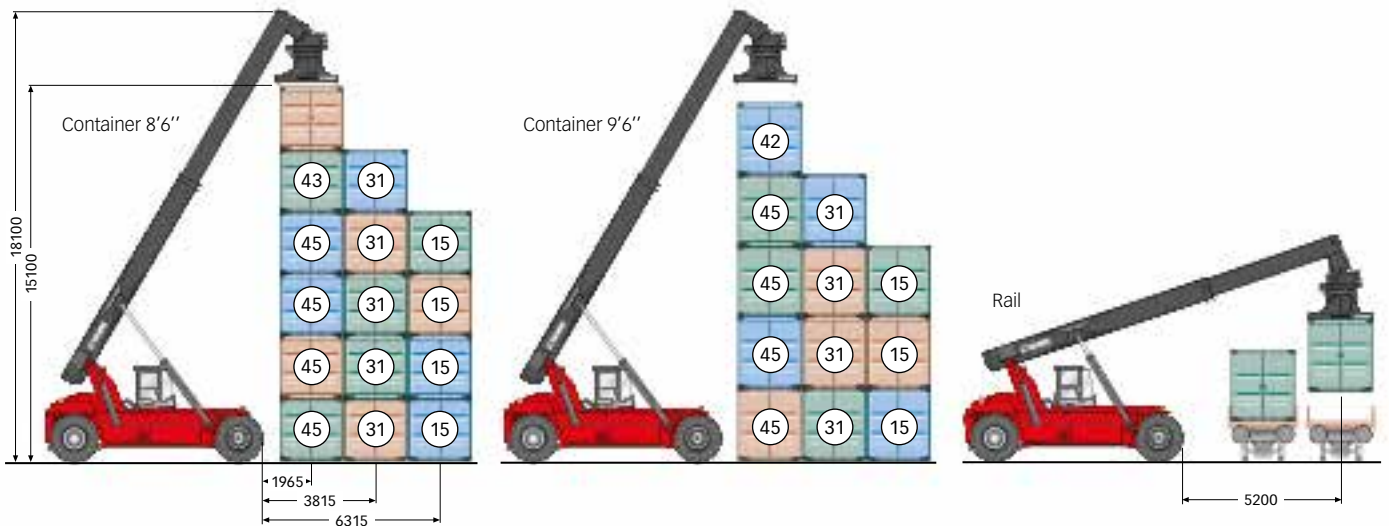
Oil is fed to the boom functions by load sensing pumps which gives power only when is needed and is therefor fuel saving. To reduce pressure drops, wide hydraulic hoses have been used for the boom functions. A wider hose produces a lower flow rate with the same volume, thereby reducing friction and heat development. The blocking valves on the lifting and extension cylinders block the oil flow when the boom functions are not in use, which secures the boom position.

The boom's lifting and extension func-

tion is damped in the end positions for reduced wear and greater comfort and increased stability.

Rotator

The rotator is fixed in the inner boom and enables the container to be rotated. The rotator consists of an upper and a lower yoke joined with a powerful bearing. Rotation is enabled by two hydraulic motors, which drive a gear-ring. Two hydraulic dampers help prevent the container from swinging lengthwise.



Dimensions	Aisle width (mm)		Turning radius (mm)		Main dimensions (mm)			Ground clearance	Wheels	Service weight (kg)	
	A1 - 20 ft	A2 - 40 ft	R1 - 20 ft	R3 - 40 ft	B	V	L				
DRT450	11400	13600	8300	9400	4150	6055-12185	11450	4600	250	18.00x25/40	69600

Global presence and local service bring
our products and solutions closer to our customer.



Kalmar offers the widest range of cargo handling solutions and services to ports, terminals, distribution centres and to the 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

Kalmar is part of Cargotec. Cargotec's sales totalled EUR 3.3 billion in 2012 and it employs approximately 10,000 people. Cargotec's class B shares are quoted on NASDAQ OMX Helsinki under symbol CGCBV.

www.cargotec.com



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