

RAM **SPREADERS**

2900 series

**Telescopic Twinlift Spreaders with CenterSpread
for Container Lifting Cranes**



Performance Through Innovation



The RAM 2900 series Twinlift CenterSpread has been developed to provide productive, safe and cost-effective container handling for both ship-to-shore cranes and yard stacking cranes. The versatile Twinlift concept allows the crane operator to lift a 20', 40' or 45' container, or two 20' containers at once, all with the same spreader unit.

The RAM 2900 spreader is fitted with hydraulically retractable twistlock housings mounted in the main centre section. When the additional twistlock housings are deployed the spreader can handle two 20' containers.

The CenterSpread function of the RAM 2900 spreader is designed for handling two containers where the operator can adjust the space between the two containers from 0mm to 1600mm* for faster lifting and placing.

* Dependent upon model

Quality Design and Construction

All RAM spreaders are designed to DIN 15018 and to other applicable international standards. Twin double box centre section, internally stiffened telescoping beams and steel wear plates on end beams are just some of the reasons why the 2900 series is built to last and minimise downtime. Automated welding ensures consistent quality and all RAM spreaders are tested to 125% of designed load before delivery.

Twinlift CenterSpread

Designed to assist faster, more precise twin container handling, the spreader can adjust the gap between the two 20' containers. Positioning sensors guide the operator by detecting the zero, 76mm and 1600mm gap distances, and with linear transducers, the gap can be adjusted automatically to any position between the minimum and maximum spacing.

Flipper / Gather Guides

The 2900 series spreaders for ship-to-shore cranes are fitted with hydraulically retractable flippers on each corner as standard. The flipper design helps gather the container smoothly and absorb the impact between the spreader and container. The yard stacking models are fitted with four fixed guides as standard.

Twistlocks

The floating twistlocks allow the operator to quickly locate and lock the spreader onto a container. Proximity switches indicate the locked and unlocked condition of the twistlocks.

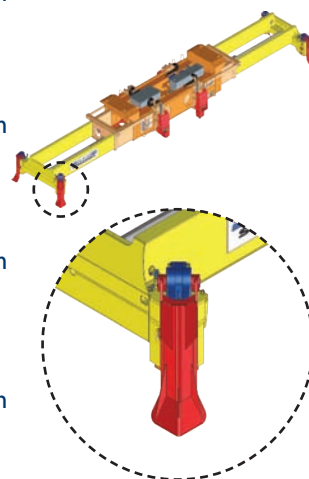
Electrical System

The spreader electrical system is designed to operate at the same voltage as the crane and is in accordance with IEC/IEEE Regulations, and is fitted with an on-board logic control system. An enclosure is fitted to the centre section from where cables run to the various electrical components on the spreader. A multi-pin electrical socket is fitted to one side of the enclosure to accept the multi-pin plug from the headblock.

TECHNICAL DATA

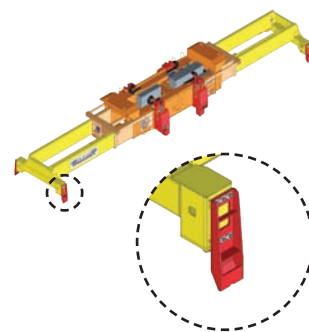
For ship-to-shore cranes with flipper arms

Model	Container Size	Capacities	Tare Weight	CenterSpread
2910	1 x 20ft / 40ft / 45ft	40t SWL	13.5t	0 ~ 1600mm
	2 x 20ft	2 x 30t SWL		
2920	1 x 20ft / 40ft / 45ft	40t SWL	13.2t	0 ~ 1600mm
	2 x 20ft	2 x 25t SWL		
2930	1 x 20ft / 40ft / 45ft	40t SWL	13.5t	0 ~ 1600mm
	2 x 20ft	2 x 32.5t SWL		
2940	1 x 20ft / 40ft / 45ft	50t SWL	13.7t	0 ~ 1600mm
	2 x 20ft	2 x 32.5t SWL		



For yard stacking cranes with fixed guides

Model	Container Size	Capacities	Tare Weight	CenterSpread
2950	1 x 20ft / 40ft	40t SWL	12.8t	0 ~ 800mm
	2 x 20ft	2 x 25t SWL		
2960	1 x 20ft / 40ft	40t SWL	13.0t	0 ~ 800mm
	2 x 20ft	2 x 32.5t SWL		
2970	1 x 20ft / 40ft / 45ft	50t SWL	13.2t	0 ~ 800mm
	2 x 20ft	2 x 32.5t SWL		



Operational Speeds

Function

Twistlock	1.5 sec	Power	7.5 kW or 11.0 kW
Flipper	5 sec	- depending on spreader model	
Telescopic - 20ft ~ 40ft	20 sec		
Telescopic - 40ft ~ 45ft	22 sec		
CenterSpread - 0 ~ 1600mm	35 sec		



OPTION FEATURES

RAM Spreaders offers a wide range of options to provide the most productive spreader specifications, including:

ASi Communications

All spreader functions are controlled by ASi communications. The ASi system simplifies the installation of electrical components, provides efficient diagnostics and makes it easy to feed data to the crane's control system. It can be fitted with a controller on the spreader or can be extended back to the crane.

On-Board PLC

RAM Spreaders can be fitted with an on-board PLC for logic control and a simplified control system.

Twin Twenty Container Detection System

Ensures that the operation cannot handle two 20ft container instead of a 40ft container.

Height Monitoring System

A valuable safety and productivity feature, signalling to the crane operator when the spreader is approaching the top of the container.

RAM Spreaders continues to develop its product range, both in response to customer expectations and in anticipating future developments. With such a wide range of spreader models and options we can meet the needs of most terminal operators but we're always happy to develop bespoke solutions to deliver the most effective and practical container handling solution.

RAM Spreaders is the world's leading independent, dedicated specialist spreader manufacturer. The company has manufacturing facilities in China; service and repair centres in Singapore, UK and Germany; and sales and after-sales service support throughout Asia, Americas, Europe, Middle East and Africa.

PRODUCT RANGE

A comprehensive range of product for:

- Ship-to-Shore Cranes
- Yard Stacking Cranes
- Mobile Harbour Cranes
- Straddle Carrier

Product range includes:

- Electro-Hydraulic Spreaders (Single and Twinlift)
- All-Electric Spreaders (Single and Twinlift)
- Light Weight Spreaders
- Overheight Spreaders
- Twin40 Headblock
- Revolver® / Rotating Spreaders
- PinSmart (Automated Twistlock Handling Machine)

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