

**TCM**

# Reachstacker **MR450** 45 tons



Reachstacker  
**MR450**

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Manufactured by

**TCM**  
TCM CORPORATION

1-15-5, Nishi-Shimbashi, Minato-ku,  
Tokyo, 105-0003, Japan  
TEL: +81-3-3591-8582  
FAX: +81-3-3591-8225  
<http://www.tcmglobal.net>

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# Reliable workhorse!

Reachstacker **New**

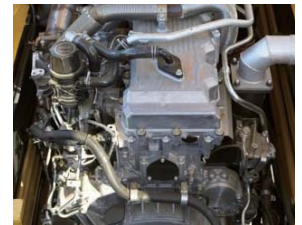
# MR450

From TCM, comes a new 5-high reachstacker!



TCM, a company which has developed and manufactured a variety of container handling equipment for use in container yards, has launched the model MR450 reachstacker, equipped with a Tier 3 compliant engine for clean operation. With increased rated load and lifting height, the MR450 provides improved work efficiency in container handling operations. The standard touch-panel display shows the status of the load and the machine, including the weight of the container being handled, the rated load of the machine, and the boom angle, to ensure safe container handling operations.

- Tier 3 compliant engine
- Low overall height allows the machine to carry containers, even in places where the overhead clearance is quite limited.
- Rotating spreader provides versatile container handling.
- Power-slide cab assures optimum visibility, especially when stacking containers 3 to 5 high.
- Multifunction lever allows for speedy and efficient container handling.
- Touch-panel display provides safe, simple operation.





# HIGH PERFORMANCE

The rotating spreader combines with a telescopic boom to provide powerful and speedy container handling in a flexible fashion.



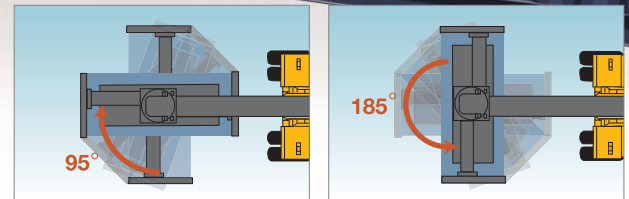
Increased rated load and lift height for improved work efficiency	
Rated load:	<b>45 tons</b>
Max. lifting height:	<b>15100 mm</b>
Lifting speed (unloaded):	<b>410 mm/s</b>
Traveling speed (unloaded):	<b>27 km/h</b>

### An efficient way to handle containers, even those in the second or third row.

The telescopic boom allows you to move containers quickly from the first row to the second or third, improving utilization of the space available.

### Rotating spreader

The rotating spreader can tilt to hold a container at an angle, allowing a variety of stacking layouts.



### Low overall height

Without a mast installed, the MR450 has such a low overall height that it can carry containers in places where the overhead clearance is very limited.

Overall height: **4790mm**



### Powered sliding pillar-less cab

The operator's cab can be moved over 2150 mm, to various positions forward and backward for optimum visibility in a variety of operating conditions, for safe, efficient container handling.



#### Fully forward cab position

When the cab is in the fully forward position, the operator can easily see the twist locks at four corners of the trailer chaise and the loading and unloading of the container become easy, quick and safe.

#### Fully backward cab position

When the cab is the fully backward position, the operator can easily see the high positioned spreader and the loading and unloading of the container at a high position become easy, quick and safe.



State-of-the-art technology provides reliable performance and easy maintenance.



## Comfortable operator cabin for increased productivity and greater safety.

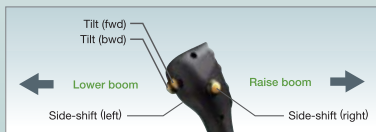
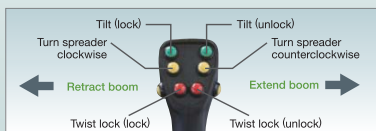
Spacious interior provides a relaxed work area with an interior height of 1590 mm. The pressurized cabin keeps dust and other particles out, for a cleaner operator environment.

### A pillar-less cabin for wider visibility

The operator's cab with a wide pillar-less glass windshield and the boom configuration without a mast provide unobstructed visibility for safe and efficient container handling.

### Multifunction control lever

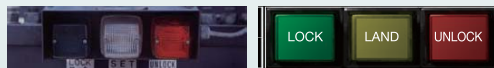
The multifunction control lever allows the operator to raise, lower, rotate, extend, and retract the boom, and to side-shift, rotate and twist lock the spreader with a single lever.



### Adjustable control lever position

The control lever position can be moved forward and backward, to provide easier container handling.

### Twist lock indicators



The operator can read the "landing", "locked" and "unlocked" positions of the twist locks with two sets of three-color indicator lights, one inside the cab and the other on the spreader.

### Auto twist lock system

When all of the four twist locks are inserted completely into the corner castings of the container being handled, they will be locked automatically to save the trouble of locking them manually.



### Deluxe, multi-function operator's seat

A deluxe, suspension seat is standard equipment providing the operator with a range of comfort features including a reclining backrest, a forward and backward sliding seat, and functional armrests with height adjustable on the right-side and tilt function on the left-side.

### Adjustable steering wheel for better operability

The tilting and telescoping steering column allows the operator to adjust the steering wheel height and angle freely, to suit individual operator physique and preference.

## Touch panel display provides safe, efficient management of the status of the load and the machine

The touch panel display shows a variety of information about the status of the load and the machine, including the weight of a loaded container, allowable load and boom angle. It also has warning lights and other indicators to allow the operator to check the operating status of the vehicle at a glance. While the interlock system is activated, advisory messages will also appear on the display. And, the display can record such information as maintenance performed in the past and maintain an error history.



## Comprehensive safety system

### Interlock system

**Lifting interlock** A container cannot be lifted unless all four twist locks are completely locked.

**Mechanical interlock** The twist locks cannot be unlocked while the container is being lifted.

**Door sensor** You cannot perform container handling operations nor slide the cab forward or backward while the cabin door is open.

### Boom drop prevention valve

### Travel speed limiter

## Easy maintenance

The sliding cab allows the engine room to be opened fully, for easier daily maintenance.



### Clustered electrical control system

The control components for the electric system are in a cluster on one side of the vehicle, for easier inspection and maintenance.



# Reachstacker MR450

## SPECIFICATIONS



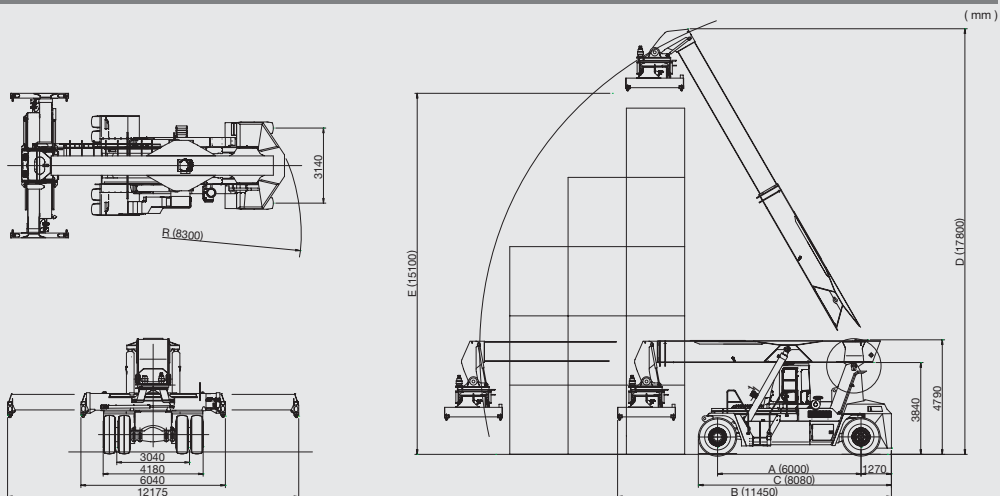
# TCM

### Main specifications

Leading particulars		MR450/5		
Stacking capacity			5 high	
Allowable load	1st row	kg	45000	
	2nd row	kg	27000	
	3rd row	kg	13000	
Load center	1st row	mm	2190	
	2nd row	mm	3840	
	3rd row	mm	6280	
Total service weight	kg		71000	
Wheelbase	mm	A	6000	
Overall length	Boom retracted	mm	B	11450
	Truck body	mm	C	8080
Overall height	Boom horizontal	mm		4790
	Boom raised to top	mm	D	17800
Overall width	mm		4180	
Tread, front	mm		3040	
Tread, rear	mm		3140	
Lift height (under twist locks)	mm	E	15100	
Minimum ground clearance	mm		250	
Min. turning radius	mm	R	8300	
Gradeability (no load)	%		32(2km/h)	
Boom angle	deg		0~60	
Lifting speed (no load/loaded)	mm/s		410/260	
Lowering speed (no load/loaded)	mm/s		400/400	
Engine	Model		Mitsubishi 6M70	
	Output	kW/PS	250/340	
	Rated speed	rpm	2000	
	Total displacement	ℓ	12.88	
Tire size			18.00-25-40PR	
Transmission			4 speeds fwd/4 speeds rev	
Brake			Wet multiple disc	
Spreader	Sideshift	mm	800 mm to each side	
	Rotation	deg	+95~-185	
Battery	V/AH		12V/120AH x2	

●The specifications are subject to change without notice.

### Dimensions



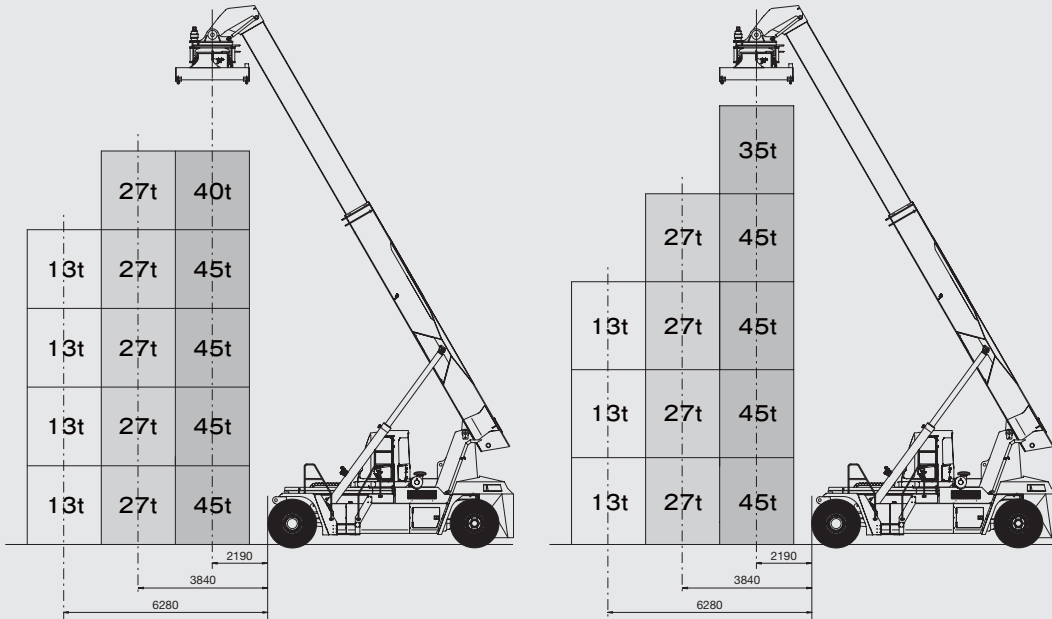
## Reachstacker *MR450*

### Rated load

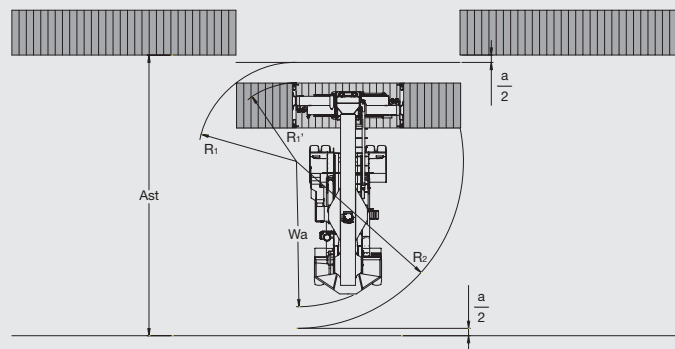
Container height 8'6"

Container height 9'6"

(mm)



Right angle stacking aisle  $a = 400$  mm clearance



	Model	MR450
20' container	R1	4300
	Wa (Wa > R2)	8300
	Ast	13000
40' container	R1	5400
	R2 (Wa < R2)	9100
	Ast	14900