



## RS-9977R Reach Stacker

### Preliminary Specifications

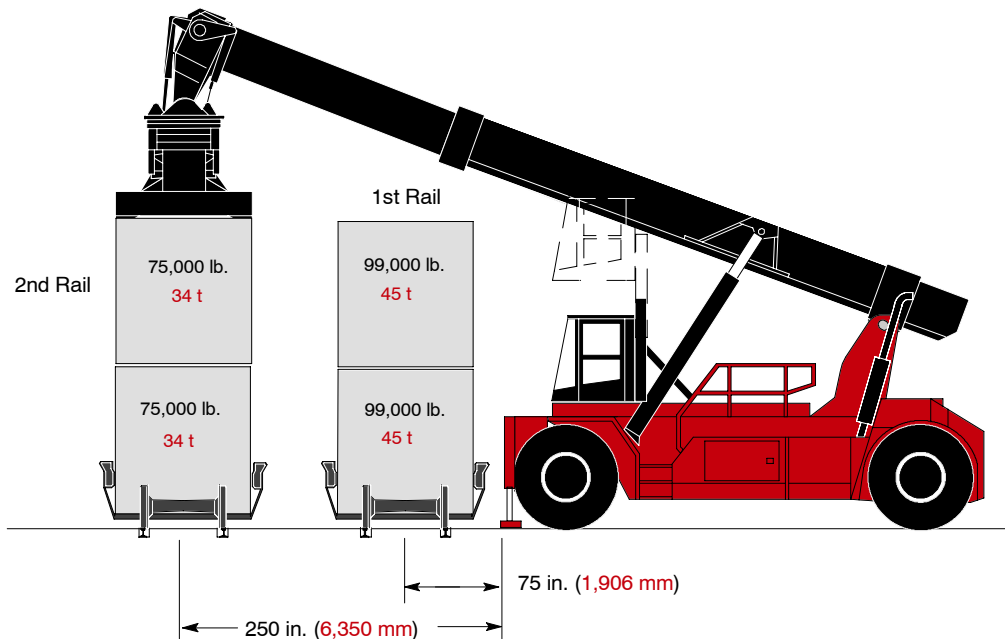
Rated Container Capacity 99,000-lbs. (45 t)

First Row / 5-high Stacking 9.5-ft. (2.9 m)

Rated Container Capacity 99,000-lbs. (45 t)

First Rail / 2-high Stacking 9.5-ft. (2.9 m)

295-in. (7,500 mm) Wheelbase



#### Rail Stacking - Stabilizers Down

\* 1st Rail Capacity With Stabilizers Up Is 99,000 lb. (45 t)

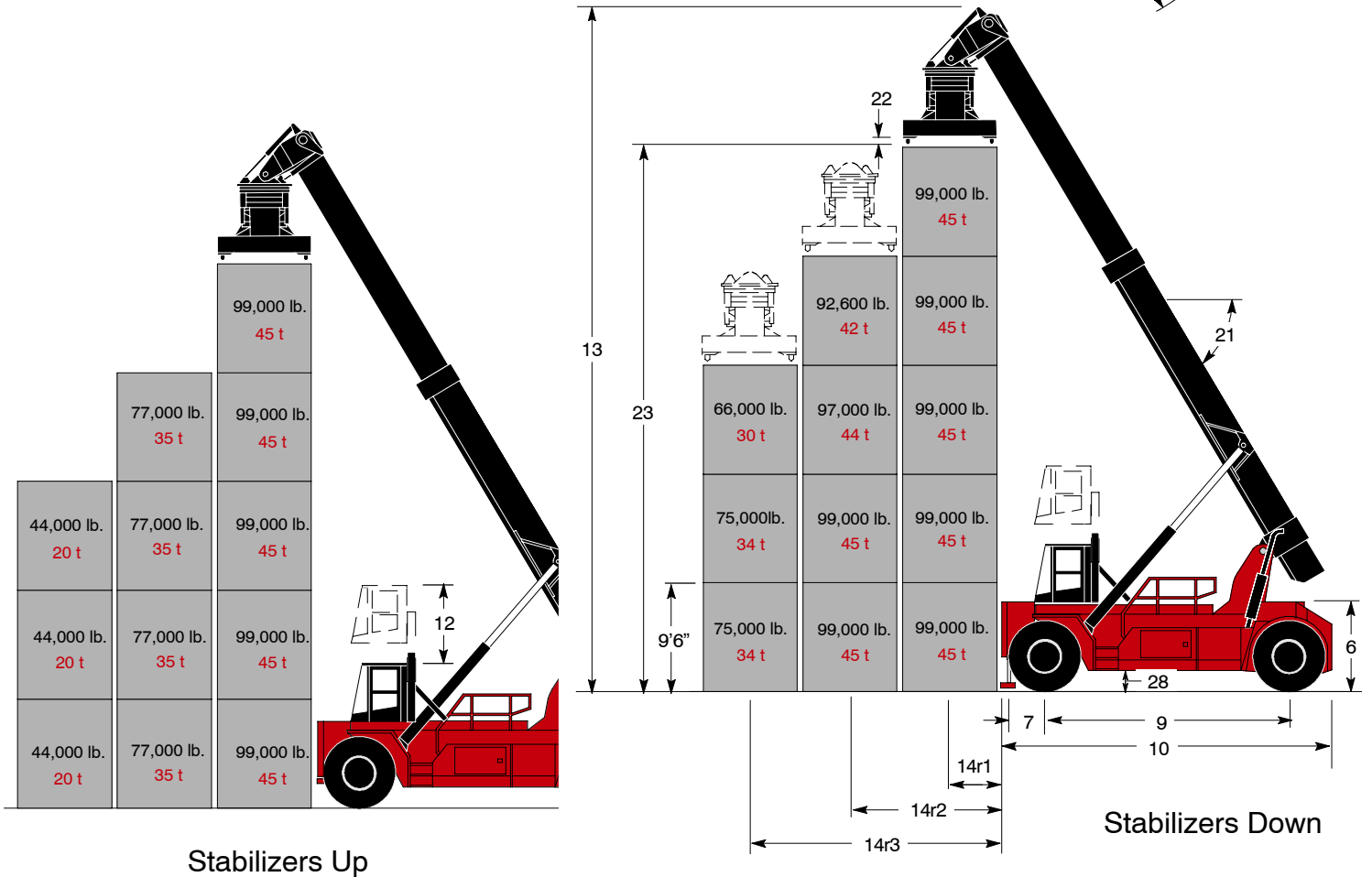
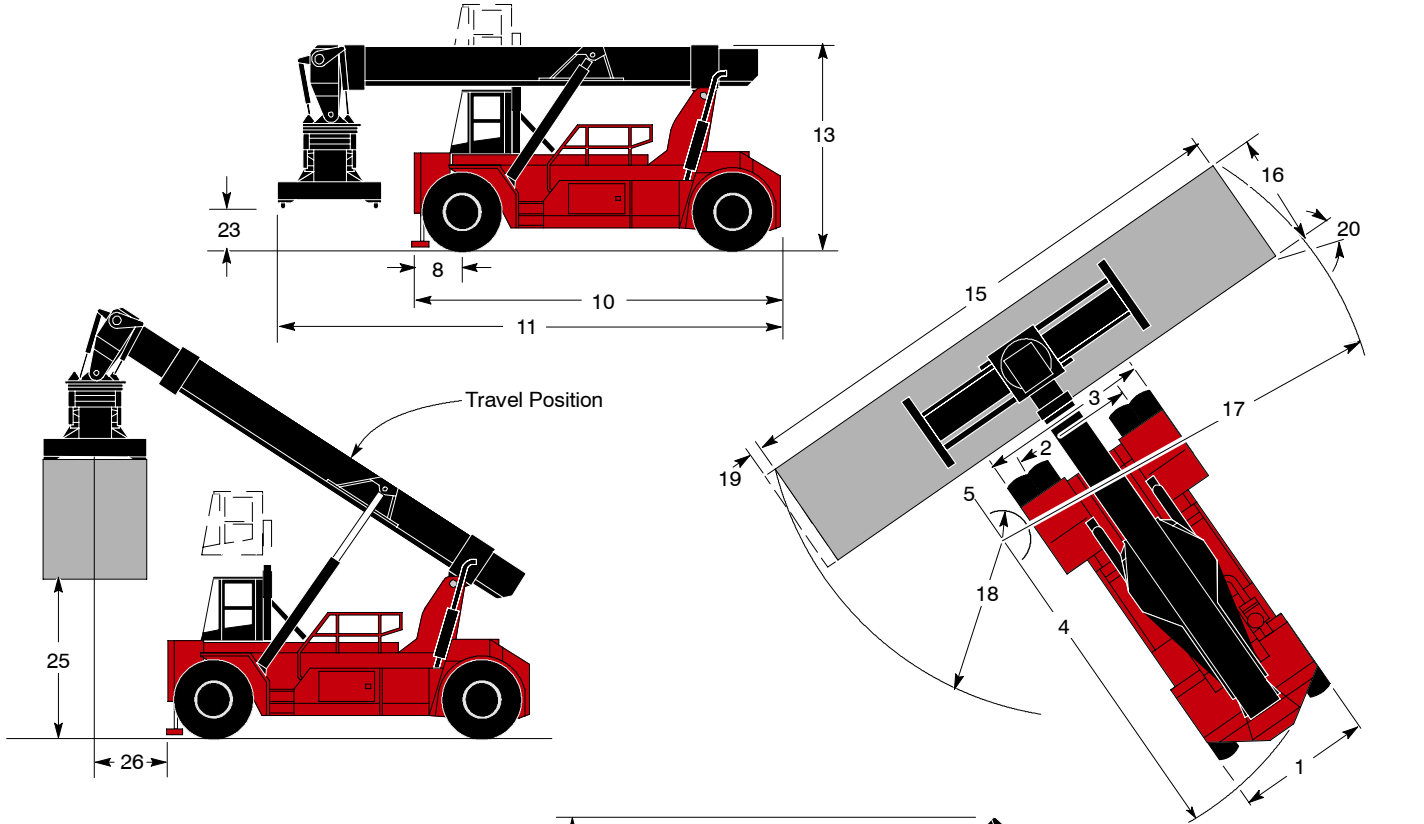
\* 2nd Rail Capacity With Stabilizers Up Is 44,000 lb. (20 t)

# RS-9977R Reach Stacker

Manufacturer's Name		TAYLOR				
Manufacturer's Designation		RS-9977R Reach Stacker				
		English		Metric		
Rated 9.5-ft. (2.9 m) Container Capacity with stabilizers up	1st Row 5-High 9.5-ft. (2.9 m) Stack Capacity At 53-in. (1,350 mm) Cent. Of Grav	lb (t)	99,000		45	
	2nd Row 4-High 9.5-ft. (2.9 m) Stack Capacity At 152-in. (3,850 mm) Cent. Of Grav.	lb (t)	77,000		35	
	3rd Row 3-High 9.5-ft. (2.9 m) Stack Capacity At 250-in. (6,350 mm) Cent. Of Grav.	lb (t)	44,000		20	
Rated 9.5-ft. (2.9 m) Container Capacity with stabilizers down	1st Row 5-High 9.5-ft. (2.9 m) Stack Capacity At 53-in. (1,350 mm) Cent. Of Grav	lb (t)	99,000		45	
	2nd Row 3-High 9.5-ft. (2.9 m) Stack Capacity At 152-in. (3,850 mm) Cent. Of Grav.	lb (t)	99,000		45	
	2nd Row 4-High 9.5-ft. (2.9 m) Stack Capacity At 152-in. (3,850 mm) Cent. Of Grav.	lb (t)	97,000		40	
	3rd Row 2-High 9.5-ft. (2.9 m) Stack Capacity At 250-in. (6,350 mm) Cent. Of Grav.	lb (t)	75,000		34	
	3rd Row 3-High 9.5-ft. (2.9 m) Stack Capacity At 250-in. (6,350 mm) Cent. Of Grav.	lb (t)	66,000		30	
Rail Capacity with stabilizers up	1st Rail 2-High Stack Capacity At 75-in. (1,906 mm) Cent. Of Grav	lb (t)	99,000		45	
	2nd Rail 2-High Stack Capacity At 250-in. (6,350 mm) Cent. Of Grav	lb (t)	44,100		20	
	Container Over Chassis To Rail At 210-in. (5,333 mm) Cent. Of Grav	lb (t)	55,100		25	
Rail Capacity with stabilizers down	1st Rail 2-High Stack Capacity At 75-in. (1,906 mm) Cent. Of Grav	lb (t)	99,000		45	
	2nd Rail 2-High Stack Capacity At 250-in. (6,350 mm) Cent. Of Grav	lb (t)	75,000		34	
	Container Over Chassis To Rail At 210-in. (5,333 mm) Cent. Of Grav	lb (t)	88,200		40	
Nominal Load Moment With Attachment 1st Row And 99,000-lbs. (45 t) Load		in-lb (m-kg)	11,880,000		136,874	
Tractive Effort At Stall		lb (kN)	66,740		297	
Vehicle Weight - Empty	Drive Axle	lb (kg)	99,225		45,000	
	Steer Axle	lb (kg)	89,302		40,500	
Vehicle Weight - Loaded With 99,000-lbs. (45 t) Load	Drive Axle	lb (kg)	241,447		109,500	
	Steer Axle	lb (kg)	46,305		21,000	
Tires - Drive And Steer			18.00 x 33 36 PR E4			
Tire Inflation Pressure (Contact Pressure)		psi (Bar)	145		10	
<b>Machine Dimensions</b>						
1 - Width Across Counterweight		in (mm)	132.8		3,375	
2 - Tread Width, Drive Axle		in (mm)	119.4		3,033	
3 - Width Over Drive Tires		in (mm)	163.8		4,160	
4 - Outside Turn Radius (Tailswing)		in (mm)	374		9,500	
5 - Inside Turn Radius		in (mm)	59		1,500	
6 - Height To Top Of Counterweight		in (mm)	93.3		2,370	
7 - Drive Axle CL To Center Of Stabilizers (Nominal)		in (mm)	49.2		1,250	
8 - Drive Axle CL To Front Edge Of Stabilizer Pad		in (mm)	67		1,700	
9 - Wheelbase		in (mm)	295		7,500	
10 - Overall Length Of Chassis To Front Edge Of Stabilizer Pad		in (mm)	406.7		10,330	
11 - Overall Length Of Complete Unit (Boom Down and Retracted)		in (mm)	512.4		13,015	
12 - Vertical Movement Of Cab		in (mm)	85.8		2,180	
13 - Height To Top Of Boom	Fully Lowered	in (mm)	193.7		4,920	
	Fully Raised	in (mm)	712.3		18,090	
Operator Eye To Ground Approximate (Cab Lowered / Raised)		in (mm)	143	3,632	229	5,815
Height To Top Of Cab (Cab Lowered / Raised)		in (mm)	155.5	3,950	241.3	6,130
<b>Attachment Dimensions</b>						
14 - Center Of Gravity* Distance To Front Edge Of Stabilizer Pad (Container Stacking)	1st Row (r1)	in (mm)	53		1,350	
	2nd Row (r2)	in (mm)	152		3,850	
	3rd Row (r3)	in (mm)	250		6,350	
15 - Length Of Attachment (Nominal)	Expanded	in (mm)	479.7		12,184	
	Retracted	in (mm)	238.3		6,052	
16 - Width Of Attachment (Nominal)		in (mm)	96		2,438	
17 - Turn Radius, Far Corner Of Container (Retracted)		in (mm)		384.3	9,760	
18 - Turn Radius, Near Corner Of Container (Retracted)		in (mm)		111	2,820	
19 - Sideshift ±		in (mm)	31.5		800	
20 - Attachment Rotation (CCW / CW)		deg. °	95 / 185			
21 - Boom Angle (Max)		deg. °	59			
22 - Length Of Twistlock Below Attachment (Nominal)		in (mm)	4		102	
23 - Height To Tip Of Twistlock - Min. / Max.		in (mm)	68.3	1,735	632.3	16,060
24 - Minimum Aisle For 90° Stacking (Per FEM STD TN01 With Clearance)		ft-in (m)	437	11,100	504	12,800
25 - Bottom Of 9.5-ft. (2.9 m) Container To Ground At Travel Position		in (mm)	139.7		3,550	
26 - Center Of Gravity Distance At Travel Position		in (mm)	39.3		1,000	
27 - Hydraulic Pile Slope ± 4° end to end		in (mm)	7.8		200	
28 - Underclearance midway along the wheelbase		in (mm)	16.5		420	
<b>Travel And Lift Speeds</b>						
Travel Speed (Max) - Forward And Reverse		mph (km/h)	15.5	25	13	21
Lift Speed (Max)		fpm (m/s)	45	.23	43.2	.22
Lowering Speed (Max)		fpm (m/s)	92.4	.47	78.6	.40

**NOTE:** Performance specifications are for machines equipped as described on the back page of this specification sheet. Performance specifications are affected by the condition of the vehicle, its components, and the nature and condition of the operating area. If these specifications are critical, the proposed application should be discussed with your Taylor sales representative.

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## Engine

Cummins QSM11-C335 electronic turbocharged, charged air aftercooled (air to air) diesel engine. Rated power of 335-hp (250 kW) at 2100 rpm. Maximum power of 365-hp (272 kW) at 1800 rpm. The 4-cycle in-line 6 cylinder engine has 660 cubic in. (10.8 liter) displacement. The bore is 4.92 in. (125 mm) x 5.79 in. (147 mm) stroke. Peak torque is 1235 ft.-lbs (1674 N-m) at 1400 rpm (SAE J1349). This peak torque is maintained from 1000 to 1400 rpm. Emission certification: US EPA Tier III, Carb Tier III, EU Stage III.

Equipped with engine and transmission protection systems which include engine kill for high coolant temperature, high or low oil pressure, low coolant level, and transmission high oil temperature (engine will be reduced to idle and engine will be killed after 5 minutes).

The fuel tank capacity is 140 gallons (530 L).

## Air Cleaner

The 2-stage heavy-duty, dry type air cleaner has a built-in pre-cleaner, safety element, and a restriction warning light.

## Cooling System

The deaeration tanks location allows the coolant level to be checked from the ground and provides optimum engine cooling.

## Electrical, Instrumentation, and Accessories

Electric / electronic control of the machine is based on CANBUS technology.

The instrument panel is pre-wired to accommodate heavy-duty accessories. All wiring is number coded.

The unit has a 24-volt electrical system. Standard equipment includes a key-type anti-restart ignition system, two 200 amp-hour batteries, (1) 100-amp alternator, a main battery disconnect switch, indicator lights, thermal reset circuit breakers, back-lighted instruments.

Ten worklights, 4 on Boom (controlled by one switch), 2 on each side approximately at mid point of outer boom. 4 on chassis (controlled by one switch), 1 on each side of counterweight, 2 on front of chassis, 1 on each side at front fenders, 2 on attachment, 1 each end to illuminate rear twistlock housing and container casting approach. The amber rotating lights, forward-actuated warning alarm, reverse-actuated warning alarm, are all key-switch actuated. The inside and outside rear view mirrors are standard.

Tail lights, stop lights, turn signal lights, electrical horn, and tilt steering are standard.

Gauges and indicators include air filter restriction indicator, brake oil filter restriction indicator, transmission oil filter restriction indicator, hydraulic oil filter restriction indicator, transmission oil high temperature indicator, brake oil low pressure and high temperature indicator, engine oil low pressure indicator, low battery indicator, parking brake applied indicator, fuel low level indicator, engine coolant temperature indicator, engine oil pressure gauge, transmission oil temperature gauge, fuel gauge, hourmeter, and engine RPM indicator.

Tier III engine electronic diagnostic light package.

**A rear visibility aid camera system, a load moment indicator system, diagnostic board for attachment, and air conditioning are standard.**

## Transmission

The four-speed, fully reversing, modulated, powershift transmission has declutch with brakes behind the declutch feature and an electric shift control. An Automatic Powershift Control feature is standard. The filler pipe dipstick and large, heavy-duty, oil filter are easily accessible. Separate coolant to-oil cooler. The integrally built torque converter has constant-mesh gear sets actuated by hydraulic clutch packs.

## Drive Axle

The high-stability, wide stance, planetary drive axle's housing is bolted to the frame.

## Steer Axle

The single-cylinder design steer axle with tapered wheel bearings is fully sealed and never needs adjusting. Axle is equipped with lateral rubber shock absorbers.

## Brake System

The internal force-cooled, hydraulic-actuated, wet disc, service brakes (and the hydraulic oil) are cooled by a cooler separate from the transmission cooler. The drive-axle mounted disc brake is spring applied for parking.

## Power Steering

The hydrostatic steering with priority valve system provides constant response at all engine speeds.

## Chassis

The all-welded frame has an integral, contoured, counterweight. Hinged doors and bolt-out covers provide easy access to all service points.

Right hand, front mounted, hydraulic elevating cab with skyview window can be hydraulically moved 85.8-in. (2,180 mm) for improved visibility. The standard cab is shock mounted and has a tinted and laminated front windshield; all other glass is safety glass. The standard cab also has electric front, rear and top wipers, and a heater/defroster with front and side window defrosting. The adjustable, air suspension seat has flip-down, adjustable angle arm rest and an operator seat belt.

## Hydraulic System

The large capacity hydraulic tank has a spin-on tank breather, return line filters with replaceable elements in the tank, and an external sight gauge. An air-to-oil cooler, separate from the transmission cooler, cools the hydraulic system oil (and service brakes). The variable displacement type pumps are converter driven. The system has load sensing with proportional distribution controls for the boom lifting and extension controls. The dual, double-acting lift cylinders are pinned to the boom and must be powered down, providing additional safety when lowering the boom. All cylinders have chrome-plated rods, and self-adjusting packing. The valves are controlled by a conveniently located multifunctional "joystick" control lever. The service capacity is 166 gallons (628 L).

Lift and boom extension are hydraulic over hydraulic. All other functions are electric over hydraulic.

Load stabilizers are standard.

## Boom and Container Attachment

The telescopic boom is high-strength steel. Double-acting hydraulic cylinders provide precise boom movements. The expandable attachment has standard ISO twistlocks for 20-ft. (6.1 m) and 40-ft. (12.2 m) positions. The hydraulic motor and gear reduction system permit 95° CCW and 185° CW attachment rotation. The attachment has ±31.5" (±800 mm) sideshift, and ±6° hydraulic pileslope. Electrical safety sensors prevent twistlocks from being locked or unlocked when not "seated," and prevent attachment extension or retraction when twistlocks are "locked" or "seated." A twistlock safety interlocking system ensures correct locking procedure. Signal lights are amber, green and red. Two worklights are standard. Guide arms are adjustable for 8' and 8'6" (2.44 m and 2.60 m) wide containers.

This vehicle is certified to meet the applicable design and performance criteria required for Powered Industrial Trucks in OSHA Safety and Health Standards, Title 29 CFR, Part 1910.178, and the applicable design and performance requirements in ANSI B56.1 that were in effect at the time of manufacture. These standards also apply to the user and should be adhered to while operating this vehicle.

This vehicle is also certified to meet the applicable design and performance criteria required by F.E.M. 4.001q stability standard for freight container handling variable reach industrial trucks.

All specifications are subject to change without notice. Some operating data may be affected by the condition of the operating area. If these specifications are critical, contact the factory.

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