



# TS-9972 Reach Stacker

## Specifications

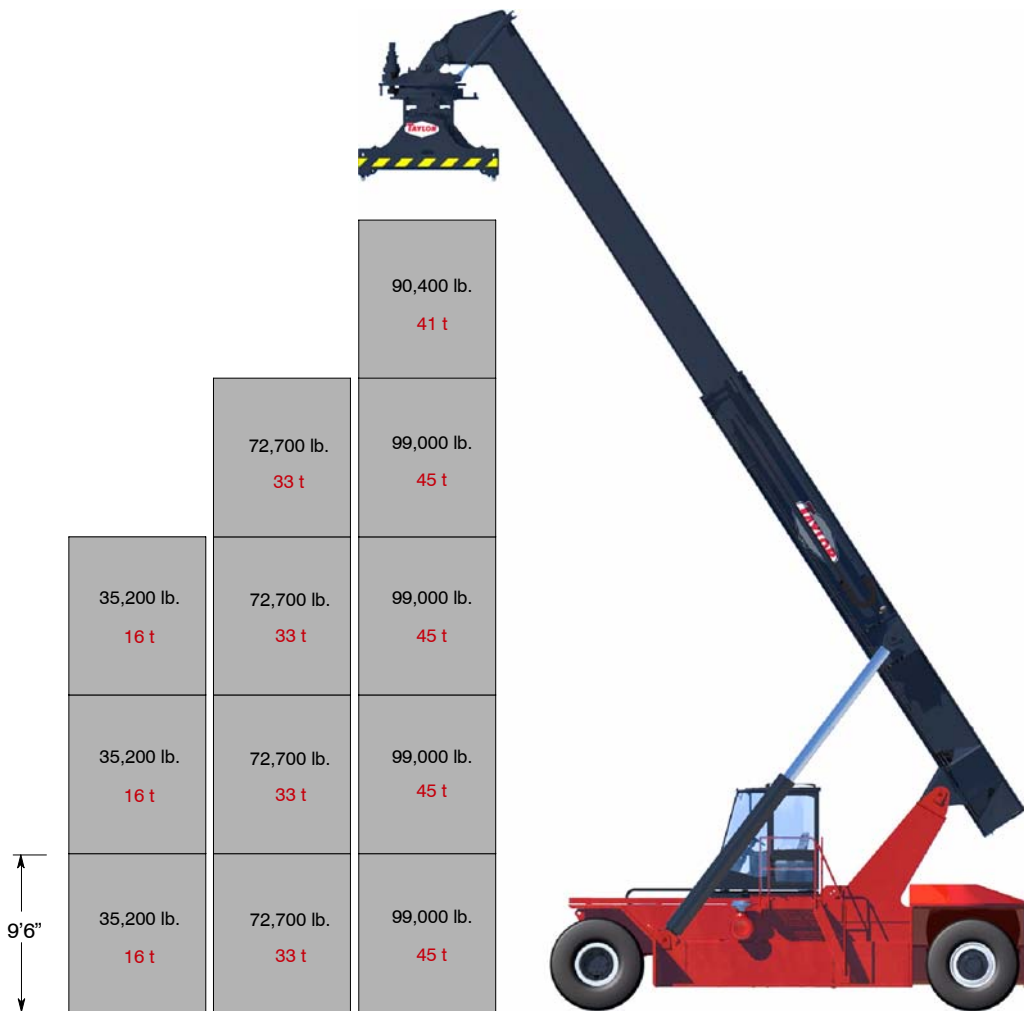
Rated Container Capacity 99,000-lbs. (45 t)

First Row / 4-high Stacking 9.5-ft. (2.9 m)

Rated Container Capacity 90,400-lbs. (41 t)

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

256-in. (6,500 mm) Wheelbase



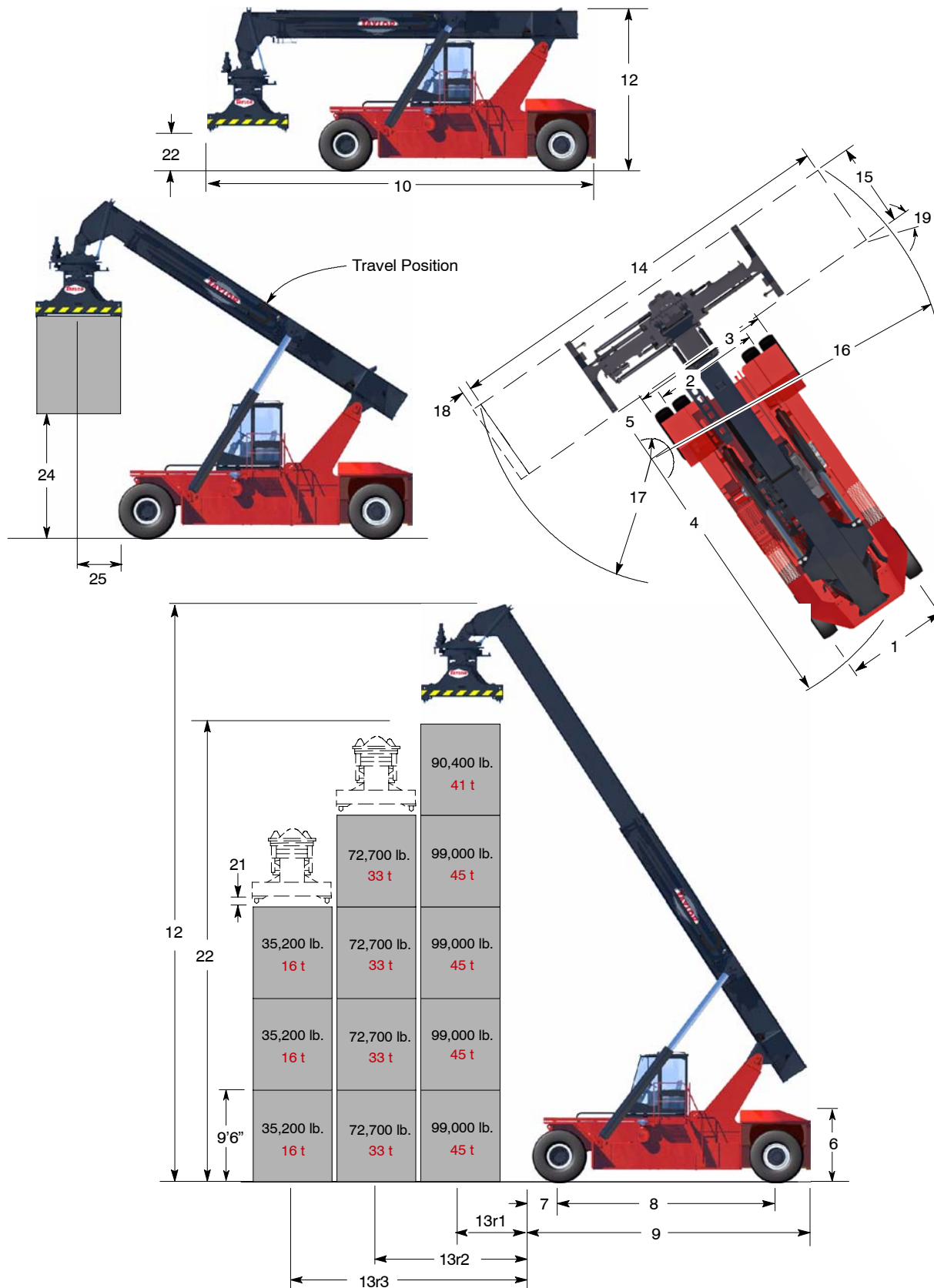
# TS-9972 Reach Stacker

Manufacturer's Name		TAYLOR			
Manufacturer's Designation		TS-9972 Reach Stacker			
		English		Metric	
Rated 9.5-ft. (2.9 m) Container Capacity	1st Row 4-High 9.5-ft. (2.9 m) Stack Capacity At 81*-in. (2,057 mm) Cent. Of Grav.	lb (t)	99,000		45
	1st Row 5-High 9.5-ft. (2.9 m) Stack Capacity At 81*-in. (2,057 mm) Cent. Of Grav.	lb (t)	90,400		41
	2nd Row 4-High 9.5-ft. (2.9 m) Stack Capacity At 157*-in. (3,988 mm) Cent. Of Grav.	lb (t)	72,700		33
	3rd Row 3-High 9.5-ft. (2.9 m) Stack Capacity At 257*-in. (6,528 mm) Cent. Of Grav.	lb (t)	35,200		16
Nominal Load Moment With Attachment 1st Row And 99,000-lbs. (45 t) Load		in-lb (m-kg)	11,246,400		129,581
Tractive Effort At Stall		lb (kN)			
Vehicle Weight - Empty	Drive Axle	lb (kg)	78,850		35,766
	Steer Axle	lb (kg)	79,550		36,084
Vehicle Weight - Loaded With 99,000-lbs. (45 t) Load	Drive Axle	lb (kg)	220,550		100,042
	Steer Axle	lb (kg)	36,850		16,715
Tires - Drive And Steer			18.00 x 25 - 40 PR E4		
Tire Inflation Pressure (Contact Pressure)		psi (Bar)	145		10
<b>Machine Dimensions</b>					
1 - Width Across Counterweight		in (mm)	136		3,454
2 - Tread Width, Drive Axle		in (mm)	120		3,048
3 - Width Over Drive Tires		in (mm)	165		4,191
4 - Outside Turn Radius (Tailswing)		in (mm)	330		8,382
5 - Inside Turn Radius		in (mm)	32		813
6 - Height To Top Of Counterweight		in (mm)	84.5		2,146
7 - Drive Axle CL To Face Of Tires (Nominal)		in (mm)	32.6		830
8 - Wheelbase		in (mm)	256		6,500
9 - Overall Length Of Chassis		in (mm)	328		8,331
10 - Overall Length Of Complete Unit (Boom Down and Retracted)		in (mm)	460		11,684
11 - Overall Manual Movement Of Cab Forward for Servicing		in (mm)	96		2,438
12 - Height To Top Of Boom	Fully Lowered	in (mm)	188		4,775
	Fully Raised	in (mm)	710		18,034
Operator Eye To Ground Approximate		in (mm)	132		3,353
<b>Attachment Dimensions</b>			<b>20-ft. (6.1 m) Container</b>		<b>40-ft. (12.2 m) Container</b>
13 - Center Of Gravity Distance From Tire Face (Container Stacking)	1st Row (r1)	in (mm)	81		2,057
	2nd Row (r2)	in (mm)	157		3,988
	3rd Row (r3)	in (mm)	257		6,528
14 - Length Of Attachment (Nominal)	Expanded	in (mm)	480		12,192
	Retracted	in (mm)	240		6,096
15 - Width Of Attachment (Nominal)		in (mm)	96		2,438
16 - Turn Radius, Far Corner Of Container (Retracted)		in (mm)	285	7,239	389
17 - Turn Radius, Near Corner Of Container (Retracted)		in (mm)	164	4,166	207
18 - Sideshift ±		in (mm)	31.5		800
19 - Attachment Rotation (CW / CCW)		deg.°	95 / 185		
20 - Boom Angle (Max)		deg.°	58.5		
21 - Length Of Twistlock Below Attachment (Nominal)		in (mm)	4		102
22 - Height To Tip Of Twistlock - Min. / Max		in (mm)	44	1,118	594
23 - Minimum Aisle For 90° Stacking (Per FEM STD TN01 With Clearance)		ft-in (m)	544	13,818	624
24 - Bottom Of 9.5-ft. (2.9 m) Container To Ground At Travel Position		in (mm)	139		3,531
25 - Center Of Gravity Distance At Travel Position		in (mm)	35		889
26 - Mechanical Pile Slope end to end (non-powered 3°)		in (mm)	12	305	24
27 - Underclearance midway along the wheelbase		in (mm)	14		356
Travel And Lift Speeds			<b>Empty</b>		<b>Loaded</b>
Travel Speed (Max) - Forward And Reverse		mph (km/h)	14.0	22.5	13.3
Lift Speed (Max)		fpm (m/s)	42	.21	40
Lowering Speed (Max)		fpm (m/s)	60	.31	60

**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.

Contact factory for capacities, stack heights, and unit weights if optional pile slope is added.

# TS-9972 Reach Stacker



# TS-9972 Reach Stacker

## 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. 180 gal. (681 L) fuel tank.

Standard features are electronic diagnostic and maintenance monitor, fuel/water separator and engine/transmission protection systems. 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.

## 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 ground and provides optimum engine cooling.

## Electrical, Instrumentation, and Accessories

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

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

Standard equipment includes a key-type anti-restart ignition system, 24 volt two 200 amp-hour batteries, a main battery disconnect switch, indicator lights, thermal reset circuit breakers, back-lighted instruments.

Ten work lights, 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, air horn, and tilt steering are standard.

The load moment indicator includes digital gauges, indicators, and warning lights including load messages, in cab twistlock indicator lights, transmission messages and gear indicator, voltmeter / ammeter gauge, fuel low level indicator, engine coolant temperature gauge, engine oil pressure gauge, transmission oil temperature gauge, fuel gauge, hour meter and speedometer indicator, and engine RPM gauge. Tier III engine electronic diagnostic light package.

A rear visibility aid camera system, diagnostic through display for attachment, and air conditioning are standard.

## Transmission

The four-speed, electronic, 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.

## Brake System

The internal force-cooled, 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 and air actuated for parking brake off.

## Power Steering

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

## Chassis

The all-welded frame has a bolt-on, contoured, counterweight. Hinged doors and bolt-on covers provide easy access to all service points. Center mounted cab with skyview window can be hydraulically moved to access components. 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, a heater/defroster with front and side window defrosting and air conditioning. The adjustable, air suspension seat has flip-down, adjustable angle arm rest and an orange operator seat belt.

## Hydraulic System

The large capacity hydraulic tank has a 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, powered up and not powered down (gravity only), when lowering the boom. All cylinders have chrome-plated rods, and self-adjusting packing. The valves are controlled by a conveniently located multifunctional arm rest mounted "joystick" control lever.

Lift and boom extension are electric over hydraulic. All other functions are electric over hydraulic. 150 gal. (568 L) hydraulic tank.

## 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-in. (800 mm) sideshift. 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. In cab signal lights are amber, green and red. Two twistlock work lights are standard.

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.