

# VULCAN 475

**Leading Railcar Mobility Since 1948** 



8 Heavy Duty Pivoting Guide Wheels

Comfortable and Spacious Cab



60,000 lbf. of Tractive Effort

# INNOVATIVE RELIABLE EFFICIENT

Tractive Effort*			
Tractive Effort		60,000 lbf	[267 kN]
Dimensions / Perform	ance**		
Wheel Base	142" [3,607 mm]		
Rail & Road Clearance	11.5" [292 mm]		
Rail & Road Height	152" [3,860 mm]		
Length	340" [8,636 mm]		
Width	120" [3,048 mm]		
Weight	103,000 lbs [46,818 kg]		
Rail Gauge	AAR Standard 56.5" [1,435 mm]		
Speeds (Forward & Re	verse)**	*	
		On Rail	On Road
Low	2.4 n	nph [3.9 km/h]	2.4 mph [3.9 km/h]
2nd Gear	4.7 n	nph [7.6 km/h]	4.7 mph [7.6 km/h]
3rd Gear	9.5 m	ph [15.3 km/h]	9.5 mph [15.3 km/h]
4th Gear	15 n	nph [24 km/h]	N/A on Road
Engine			
Cummins electronic turbo-charged 8.9 Liter [543 In³] engine: In-line 6 cylinder, 4 valves per cylinder, 350 hp [261 kW] @ 2,100 rpm, Max torque 990 ft-lb [1,342 N-m] @ 1,900 rpm			
Fuel Tank - Steel	One hur	ndred twenty (120)	gallon [454 liter] capacity
Air Intake <sup>1</sup>			
Intake Air heater	Preheats	incoming combust	tion air prior to start.
Air Filtration Tier IV		iltration, High-effic Primary and Safety	
Powertrain			
Transmission	Funk, DF 250-series, constant mesh spur gearing. Four-speed forward and reverse with selectable power-shift manual or automatic with 4 <sup>th</sup> gear or 3 <sup>rd</sup> and 4 <sup>th</sup> gear lock-out for rail, road, or both.		
Axles	Two (2) out-board internal planetary type with high strength ductile iron axle housing.		
Differential	Two (2) Rigid, outboard planetary, air actuated, auto-control differential locking.		
Safety Features			
Automatic shutdown as a result of:	High engine temperature; Low engine coolant level; High compressor temperature; High hydraulic system oil temperature; (Optional low hydraulic system oil level)		
Brake System			
Machine Braking			kes with Dual Front Rear Calipers (19" rotors)
Machine Parking Brake			ssion mounted, self- g-activated wet disc park
Train Air Brakes			ter] capacity train air d hand connections

Train Air Compressors		
100 cfm Rotary Screw Air Compressor	STANDARD	

NOTE: All Train Air System options feature in-cab train air valves.

## Hydraulic System

- Constant pressure hydraulic system, piston pump and o-ring face seal fittings and oil filtered below ISO 18/16/13.
- Provides on-road and on-rail braking power.
- Provides hydraulic steering on road.

Electrical System	
Alternator	HD 12-Volt DC, 160 AMP
Batteries	Two (2) - 925 CCA
Digital Instrumentation	SAE-J1939 CAN-Bus Control System
Digital Control Display	10" display for real-time machine statistics and diagnostic data.
Cameras	Guide wheel railing cameras with 10" color monitor
Additional Cameras	Safe-T-View camera/monitor setup included with two (2) additional outputs for extra camera locations
Alarms	<ul> <li>Automatic backup road mode alarm</li> <li>Selectable electronic warble type alarm</li> <li>Blast type air horn</li> <li>Amber strobe warning lights</li> </ul>

Wheels / Tires	
On Road	Four (4), Michelin XZM 32 PLY 14.00 x 24 rated rubber tires
On Rail	Eight (8), 15.75" [400 mm], heat-treated, cast steel guide wheels manufactured to AAR M107/M-208.
5 116 1	

### Rail Sander

Eight (8) individual, air-operated, electronically-controlled sanders and track cleaning system.

Chassis / Frames	
Main Frame	Heavy-duty, high-strength welded 3" [76.2 mm] structural plates
Pivoting Guide Wheels	Heavy-duty, pivoting guide wheels with 3 axes of rotation that pivot up to 10°, assuring all guide wheels contact the rail at all times.
Body Frame	Heavy-duty, all-welded construction using preformed steel plates and structural forms.
Suspension	

Air-ride suspension, four (4) Firestone airbags and shock absorbers between body frame and fully suspended cab with leveling adjustment capability.

Couplers / Coupler Beams		
Couplers	Two (2) heavy-duty cast steel positive coupling and uncoupling with AAR contour coupler and locking knuckles.	
Coupler Beams	Two (2) coupler beams (descriptor, graphic infused, forged, reinforced) with hydraulic coupler positioning	

### Note:

- <sup>1</sup> Not to be used in conjunction with Ether starting fluid. Additional variations may occur due to options selected.
- \* Maximum Tractive Effort can be affected by grades and adverse track conditions.
- \*\* Subject to change without notice
- \*\*\* Actual speeds obtained will depend on grade, load, altitude, and other factors.

