

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**	00,000 151	[207 KIV]
Wheel Base		142" [3,6	07 mml
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	5.5" [1,435 mm]
Speeds (Forward & Re	everse)**	*	
		On Rail	On Road
Low	2.4 m	nph [3.9 km/h]	2.4 mph [3.9 km/h]
2nd Gear	4.7 m	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 m	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 hun	dred twenty (120)	gallon [454 liter] capacity
Air Intake ¹			
Intake Air heater	Preheats	Preheats incoming combustion air prior to start.	
Air Filtration Tier IV	3-stage filtration, High-efficiency Pre- cleaner, Primary and Safety Filter		
Powertrain			
Transmission	Funk, DF 250-series, constant mesh spur gearing. Four-speed forward and reverse with selectable power-shift manual or automatic with 4 th gear or 3 rd and 4 th 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- ig-activated wet disc park
Train Air Brakes		100 gallon [378 lit reservoir with gla	ter] capacity train air d hand connections

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	 Automatic backup road mode alarm Selectable electronic warble type alarm Blast type air horn Amber strobe warning lights

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.
Rail Sanders	

 $\label{lem:eq:controlled} \mbox{Eight (8) individual, air-operated, electronically-controlled sanders and track cleaning system.}$

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 pre- formed 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:

- ¹ 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.



Train Air Compressors