

## Hale Trailer Brake & Wheel 710971-710973



		Product Sand Hauled:	
SPEC CHG		A. VESSEL	
	1)	Capacity	1040 Cu. Ft. Pneumatic - 3 Hoppers
	2)	Tank Construction	Smooth exterior, internal rings.
			5454-H32 aluminum vessel. Hydro tested at 22.5 P.S.I. 45 degree hopper slope with weld on spun cones.
	3)	Baffles	None
	4)	End Frame	High strength stainless steel frame rails with aluminum crossbracing, and Heil aluminum pinned struts.
	5)	Internal weld finish	W-1; Smoke and Discoloration Removed (Class I)
	6)	Shell finish	Mill finish bulk trailer sheet
	7)	Manholes	(3) 20" cast aluminum manholes, centered over each hopper.
			Front and rear manlids are Civacon MM with aluminum cam handles and nylon wear plates, replaceable wear plates under hold downs. White neoprene gaskets in manhole covers. Manholes hinge on curbside.
			Center manlid is RMC automatic with controls mounted near rear streetside fender.
	8)	Documentation	Unit tested with water. Professional cleaning is recommended prior to initial loading to avoid possible contamination of cargo.  Maximum commodity temperature 180 degrees F.
	9)	Product Information	Sand



10)	Misc. Vessel	All U-bolts to have protecting tubing applied
	B. TANK FITTINGS AND	
	PIPING	
1)	Air Line Inlet	3" Sch. 10 aluminum line with welded 3" adapter streetside front of tank.  One (1) BTI check valve with high temp gasket near P.T.O. inlet.  One (1) BTI check valve with high temp gasket upstream of front hopper discharge.
2)	Aeration	(3) BTI SpinFlo <sup>™</sup> aerators per hopper, with hopper saver wear plates included. 3" Aluminum air manifold, 2" hoses supplying air to aeration system. Air manifold located on curbside of trailer.
3)	Aeration Control Valve	3" BTI BlackMaxx butterfly valve (ductile disc, black rubber seat), with color coded steel handle. Located streetside to regulate airflow to air manifold line.
4)	Proportioning/Pressure Control Valve	3" BTI BlackMaxx butterfly valve (ductile disc, black rubber seat), with color coded steel handle. Located streetside to regulate airflow to product discharge line.
5)	Blow-Down Line	3" Sch. 10 aluminum line with 3" BTI BlackMaxx butterfly valve (ductile disc, black rubber seat), with powder coated steel handle. Located streetside front of tank, with outlet terminating between the frame rails. Includes cam-on style pressure relief valve, factory tested and wire sealed.
6)	Top Air Line	3" BTI BlackMaxx <sup>TM</sup> butterfly valve (ductile disc, black rubber seat), with color coded steel handle.
7)	Product Valve	5" BTI BlackMaxx butterfly valve (ductile disc, black rubber seat), with the BTI heavy duty HD aluminum handle.
8)	Product Tee	BTI SiphonFlow $^{\text{IM}}$ 5" x 4" heat treat alloy steel gravity tees. Zinc plated body and aluminum gravity door.
9)	Product Line	4" Sch. 40 zinc plated steel line between hoppers. Rubber hose with stainless steel screw band clamp connectors between hoppers.



10)	Rear Discharge Line	4" Sch 40 zinc plated cam-on under axle (straight pipe) with threaded steel couple and aluminum dust plug
12)	Load Line	Not available
13)	Gauges	Two (2) liquid filled illuminated gauges, one tank pressure and one line pressure. Gauge pressure range 0-30 PSI. Located on streetside between number one and two hopper.
14)	Miscellaneous	None
	C. ACCESSORIES	
1)	Ladder	Aluminum with serrated rungs and top step. Mounted at the center rear over the chassis frame. Ladder rails protrude up and over the rear of the vessel. Grab handle at located on chassis frame.
2)	Walkway	Adhesive backed skid-resistant tape between toe rails.
3)	Hose Tubes	<ul> <li>(1) 8" x 21' long aluminum hose tube located streetside rear of tank.</li> <li>Cast aluminum door at rear.</li> <li>(1) 8" x 21' long aluminum hose tube located curbside rear of tank.</li> <li>Cast aluminum door at rear.</li> </ul>
4)	Tire Carrier	Not available
5)	Cabinet	Not available
6)	Hose Holder	P.T.O. hose holder with mandrel located on roadside, just forward of the lower front strut pin.
7)	Fenders	(2) Aluminum single contour front fenders. (2) Aluminum double contour rear fenders.
8)	Splash Guard	Anti-sail and anti-spray for front. Anti-sail and anti-spray for rear.
9)	Lights	12 Volt Truck Lite grommet mount LED lamp system complying to FMVSS with conspicuity markings each side and rear.
		<ul><li>(2) Combination mid-tank clearance and turn signals, one each side.</li><li>(1) Oval third stop light, located rear center of trailer.</li></ul>
		(2) LED Work lights. (1) mounted on curbside rear strut area between the struts and (1) mounted streetside on rear of front fender to illuminate product valves.



10)	Wiring	12-volt system, 7-wire, molded harness throughout. "Plug-together" modular style harness. 7-way SAE J560 connector.
11)	Document Holder	Truck-Lite mounted roadside at landing gear, below pressure gauges.
12)	Miscellaneous	None
	D. CHASSIS	
1)	Upper Fifth Wheel	Hi-tensile steel, bolted and adjustable with 2" forged kingpin.
2)	Landing Gear	SAF-Holland Atlas 55, load bearing, two-speed leg assembly; includes streetside crank handle. Five year no lube performance guarantee, rated from -65°F to 225°F. Lift capacity of 55,000 pounds with 10" x 10" low profile sand shoes.
		SAF-Holland Black Armour™ corrosion protection coating Cross bracing and back bracing will be stainless steel (all parts will be black except for the bracing) Back not to exceed 23"±2" from the landing leg (see image below).
3	Suspension	Hendrickson Intraax raised center axle AAT23K-RC air ride suspension & brake system, 71.5" track, parallel spindle, 23,000 lb. beam rating, 49" spacing, with single leveling valve.
		Generic suspension load scale mounted on vessel framing streetside above rear chassis frame.
		Stainless steel hangers and bracing
		Axles painted with black soft-coat and prepped for axle vent only.
4)	Brake System	WABCO 4S/2M ABS (4 wheel sensors – 2 modulator valves). Constant power is standard on auxiliary (blue) center pin of SAE J560 7-way. Glad-hands with serviceable in line filters. One (1) aluminum 2850 cu.
		in. air tank with rubber saddles and stainless steel U-bolt mount. System designed to meet FMVSS requirements.
5)	Brake Chamber	OEM brake chambers.
6)	Brake Lining	OEM HXS 20,000 lb. brake lining.
7)	Slack Adjuster	OEM slack adjusters.
8)	Axles	(2) Integral with air ride.



9)	Oil Seals	OEM oil seals and solid hub caps.
10)	Paint	Imron black polyurethane paint on steel parts only.
11)	Miscellaneous	Reinforced steel tow hook at rear of trailer frame.
	E. HUBS AND DRUMS	
1)	Hubs	(4) 10-stud, "Hub Pilot" (single nut mount) Ductile Iron hubs for outboard drums, parallel spindle and dual aluminum wheel-compatible stud length. Two-piece flanged wheel nuts.
2)	Drums	(4) Cast - outboard mounted brake drums (16.5" x 7").
	F. WHEELS	
1)	Wheels	(8) 10 Stud aluminum machine finish 24.5" x 8.25" (Hub Pilot - single nut mount) wheels
	G. TIRES	nut mount) wheels
1)	Tires	(8) Marathon 11R24.5
	H. MISCELLANEOUS	
1)	Customer Supplied Parts	None
2)	Warranty	See Polar Warranty document
3)	Other Notes	This Polar pneumatic tank trailer is designed and constructed for the highway transportation of dry granule and pulverized bulk commodities. It is not designed for hauling any type liquid or semi liquid (slurry) which may damage the unit and potentially cause personal injuries.
4)	Miscellaneous	Operational manual and informational CD is included and shipped with each trailer.