



Quote Number	XOMX 310301 - 310314	File / Rev / Date / Engineer	T07000/4/9-24-2007/SEW
Model Number	10499R3	RFQ Date / Engineer	11/28/2006 / REW
Customer		Number of Cars	14

Capacities	Comp. 1	Comp. 2	Comp. 3		
Shell Capacity	8,823 Gal.	8,823 Gal.	8,823 Gal.	Commodity	Lube Oils / Waxes
Outage - 2%	176 Gal.	176 Gal.	176 Gal.	Tank Specification	DOT 111A100W1
Effective Capacity	8,647 Gal.	8,647 Gal.	8,647 Gal.	Stenciled Specification	AAR 211A100W1
Allowable Weight/Gal.	7.52#			Est. Light weight	88,200#
Clearance Diagram	Plate C			Maximum Gross Weight	286,000#

Notes - Cars are constructed in accordance with all applicable AAR and DOT requirements, including S-286-2002 and MSRP C-III, Section 2.5 for 286,000 lb. gross rail load. Some rail lines have weight restrictions that could limit use of these cars. DOT specification tank cars require a federal exemption if loaded to more than 263,000 lb.

Car Dimensions					
Tank	110 1/4" I.D. X 53'-8 7/8" Tan To Tan	Head Material & Thickness	7/16" ASTM A516 Gr.70		
Length OCPF	63'-3 1/4"	Shell Material & Thickness	7/16" ASTM A516 Gr.70		
Truck Centers	50'-6 3/4"	Vacuum Rating	Full		
Slope	0.2181 in/ft	Design / Test Pressure	100 psig / 165 psig		
Note - Shell material requires MTR's with transverse tensile test. Head material requires MTR's in the heat treat condition with transverse tensile test. Girth seams are to be ground flush 6" either side of the longitudinal center line.					

Top Fittings					
Manway	20" I.D. CS Flued Nozzle	Fittings Nozzle	15" Flued Nozzle with Bolted CS Cover Plate w/3 Lift Lugs		
Manway Cover	Hinged 8-Bolt CS Casting w/Lift Assist	Protective Housing	11 Ga Hinged		
Vacuum Relief	3/4# Midland A 220-W-NS w/ Carolina Seal Material's 4273 O'Ring	Discharge Connection	3" Ellcon National Flanged X Screwed 32920 Ball Valve w/SS Body, SS Trim, and 3" CS hex head plug		
Safety Relief	'Valve, 75# Midland A-1075 Modified w/Carolina Seal Material 4273 O'Ring Mounted On A Separate CS Nozzle Mounted inside the Top Platform Area	Discharge Pipe	3" Sch 40 304L SS Pipe (PBE) Welded To The Cover Plate w/ 316L/304L SS Guide And Pads		
Outage Scale	Visual Gauge, 316L SS, Markings In Inches, Crossbar at 2% for 286 GRL	Air / Vapor Connection	1" Jamesbury Screwed 6FR2200MT Ball Valve w/ CS Body, SS Trim, And CS hex head Plug Mounted On A 2" X 1" CS Flanged by Screwed Adapter w/2"-150# RF Flange & 1" Sch 80 CS Pipe Bolted To The Cover Plate		
Gage Device	None	Thermowell	None		
Sample Line	None				
Note - All gasket surfaces are to be between 125 and 500 RMS. Manway eyebolts to be 7/8" J429 Gr. 5 w/hvy. hex nut & F436 hardened washers supplied by Salco. Eyebolts to be secured using pivot pin & cotter pin. Fittings fasteners are to be A193 B7 w A194 2H nuts. No lock washers allowed on fittings fasteners. Fittings fasteners to be lubricated with Jet-Lube 550 anti-seize grease.					

Bottom Fittings					
Outlet Valve	Midland A520 4" Low Profile Ball Valve w/CS Body & SS Trim & std handle	Outlet Saddle	Universal Design		
Outlet Fittings	4" CS Nozzle, w/ Salco Aluminum Cap & Plug	Sump	None		

Note - Bottom valve is not steam jacketed. Handle is located at the side of the skid. Valve can be operated while under the car.

Gaskets/O-Rings					
Manway Cover	VSP Cycletight (ePTFE/SS).	Safety Relief Gasket/O-ring	Gylon 3545 / Carolina Seal 4273		
Fittings Nozzle	Garlock Gylon 3545	Outlet Valve	Garlock Gylon 3545		
Air / Discharge	Gylon 3545 / Gylon 3545	Outlet Nozzle / Cap	Gylon 3545 / Gylon 3545		
Vacuum Relief/O-ring	Gylon 3545 / Carolina Seal 4273	Thermowell / Sample / Gage	None/None/None		

Note - Compatibility of the sealing materials is the responsibility of the shipper and are supplied here without any representations of any kind, Either expressed or implied. Use of said materials is at shippers own risk and without any liability to Trinity Tank Car Inc.

Coils					
Size, Type, # of Lines	8" Half Oval, 12 Line Exterior Serpentine	Inlets / Outlets	One 2" Inlet, One 2" Outlet		
Note - Coil inlets/outlets include welded directional arrows & replaceable coil nipples.					

Insulation Jacket					
Insulation Type	4" Fiberglass	Jacket Head & Shell	11 Ga. Carbon Steel		
Note - Flashings to clear coil inlets & outlets 1" all around. Jacket interior & Tank Under Insulation Coating to be Williams-Hayward 62-6932NVHT.					



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Platforms

Top	Divided Type w/ 9 1/2" Wide X 34' Long Galvanized CS Plank Grating, Shipping papers Holder, Side Ladders @ Center Of Car (Anti-Skid Applied To Tank Shell Between Grating)	End	Single 11 1/2" Wide X Full Width Long Galvanized CS Plank Grating
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Note - Cars are equipped with two brass grounding studs at each of the three manway openings of top platform handrail and one stud on the support at the bottom of each side ladder. Ladder wells are required. Anti-skid is to enclose the safety relief valve. Openings at manway locations of compartments 1 & 3 are to be closed with swing gates. Galvanized boards are not removed for blast or paint.

Underframe

Type & Section	Type 23 Stub Sill	Draft Gear	M-901-G (ASF Twin Pack E325G)
Brakes	Saddle Mount Ellcon 8500 / TMB 231-L Truck Mounted Brakes	Couplers & Yokes	SE60EE / None (Manganese Coupler Carrier Wear Plate)
Center Plate	16" Forged	Empty Load Brakes	Yes
Note - Inside of draft sill to be primed. Stencil reporting marks on bolsters, sideframes and axles.			

Trucks

Capacity/Type	ASF Motion Control with Bolted-Only Column Wear Plates, SS Vert. Wear Rings, And Manganese Horiz. Wear Plates	Wheels / Bearings	36" 1 Wear Class C Wheels 6-1/2 X 9 Brenco Roller Bearings
Springs	3-11/16" Travel D-5	Roller Bearing Adapters	Pennsy Adapter Plus w/ Hardened Shoulders
Side Bearings	Stucki CCB4500XT Constant Contact	Brake Beams	#24 Unit Type (Miner 2000) w/CS Brake Beam Guides

Note - Brenco Gold roller bearings with Mobilith Synthetic Grease (SHC221).

Surface Prep

Interior Prep For Lining, SP-7 (brush off) blast, Mineral Oil Wipe w/Trinity Supplied Oil

Note - Girth seams to be ground flush 6 " each side of the longitudinal centerline.

Paint, Stencil, Lining

Paint	Black DTM Epoxy (Strathmore)	Stencil	AAR / DOT / Yellow Reflector Decals Chemtrec
Lining	None		

Note - Apply black RTV silicone caulk around route cardholder, placard holder, hand rail, and ladder connections.

Stencil top flange gasket, o-ring information and BOV model and gasket information in 2 inch letters.

Apply gasket / o'ring material / top valve / safety valve and BOV decals on both sides of car @ each compartment.

Exceptions

1. Welding to be in compliance with Trinity welding standards.
2. Weld Procedures are not shown on drawings. Weld procedures are available for review at the facility performing the weld.
3. AZFRL valve does not allow for full drainage around the valve.
- 4.