



MAC LTT, Inc
1400 Fairchild Ave
Kent, Ohio 44240

MAC LTT Manufacturing, Inc
1430 US Highway 87 E
Billings, MT 59101

MAC LTT Stainless Division
2253 Enterprise Drive
Mt Pleasant, MI 48858

SPECIFICATIONS

MAC LTT Model:	ATE-950-1-2-406	Date:	11/23/2021
	9500 Gallon DOT406	Date Revised:	
	Double Taper	Revision:	1
	One Compartment	Quote Number:	
	Tandem Axle	Year Model:	2023
		Number of Units	1
		Serial Number(s):	TBD
		Sales Contact:	
		Reference Unit:	
		End User:	<i>End user</i>
SALES ORDER NUMBER:	TBD	ESTIMATED WEIGHT:	TBD

A General

1 Trailer Type	Aluminum
2 Code	DOT-406
3 Overall Length in Feet	45
4 Shape	<i>Double Taper Elliptical with Slope to Center</i>
5 Operating Pressure	3.3 PSI with 5 PSI Test Pressure
6 Max. Product Density	7.5 lbs./ U.S. Gallon
7 Max. Loading Temp.	150° F max. Operating Temperature
8 Product(s)	Refined Fuels, Gasoline, Diesel, and Etc.
9 Warranty	Standard Three (3) Year Limited Warranty
10 Fifth Wheel Height	Standard 49"
11 Additional Regulation	None-Optional
12 Wheelbase	Engineering to Design to Optimize Payload
13 Road Design Application	Designed for on-road use only

B Barrel

1 Compartment(s)	<i>One (1) compartment</i> 9500 US Gallons
2 Capacity	<i>9,500 Gallons +3% Overage in Each Compartment with 60 Gallon Minimum Overage.</i>
3 Baffles	0.25" Load Bearing & 0.19" Non-Load Bearing 5454 OT Aluminum with large center hole, 3" holes at 9, 12, & 3 o'clock positions and Bottom Drain Tunnel
4 Shell	Two Section Aluminum 5454-H32 Barrel 0.205" Bottom, 0.179" Top and Sides
4a Shell Finish	Mechanical Buffed Sides with Enhanced Finished Top and Bottom
5 End Heads	0.249" Nominal 5454 0 Temper AL Flanged & Dished Heads
5a Head Finish	Polished Finish (Standard)
6 Bulkheads	Double 0.19" or Single 0.25" Bulkheads Nominal 5454 AL Flanged & Dished Heads-Mill Finish
7 Manway(s)	One (1) 16" Diameter with 10" offset fill manhole per compartment.
8 Weld Finish	W-0 Inside and Outside - Free of Weld Spatter and Weld Smoke
11 Insulation	None-Optional
12 Jacketing	None-Optional
13 Underlayment	N/A
14 Thermometer	None-Optional

C Structure

1 Reinforcing Rings	None - Smooth Exterior with Internal Baffles
2 Frame	Extruded Aluminum Full Length Frame Design
3 Barrel Supports	Aluminum Outriggers and Crossmembers at Load Bearing Areas
4 Overturn Protection	DOT-406 Aluminum "V" Extrusion on Top Both Curbside and Roadside. Curbside Rail Doubles for Vapor. Dam Plates at Each End with 1/2" Coupler and Plug
5 Overturn Drain(s)	3" Walkway drain through tank at Rear

D Running Gear		
1	Suspension	Hendrickson Intraxx AANT23K, 23,000 lb.
1a	Axle Spacing (inches)	49"
1b	ZMD Ride Bags	None-Optional
2	Axles	71 1/2" Track with 5.75" diameter; HP Spindles with Same Inner and Outer Bearings.
3	Number of Axles	Two (2)
4	Lift Axle(s)	None-Optional
4a	Ride Height Control	Standard Hendrickson Height Control Valve
5	Hub(s)	Hendrickson MAXX22T Disc Brakes include DuraLite Hubs
6	Drum(s)	N/A
7	Dump Valve	Push/Pull Valve with Auto Reset mounted in Control Cabinet
8	Brakes/Brake Chambers	Hendrickson MAXX22T Disc Brakes with Wabco 18/24 Brake Chambers
9	Dust Shields	Sealed Dust Shield (Standard Disc Brakes)
10	Slack Adjusters	N/A - Integral with Disc Brake Option
11	Warranty	Hendrickson Extended Life System "HXL5" with Federal Mogul Hub Seals
12	Gladhands	Phillips or Equivalent
13	ABS	Wabco 4S/2M System Wired to Blue Wire with Rear Malfunction Warning Light
14	Roll Stability System	ABS with Roll Stability System
14a	Diagnostic Cable	None-Optional
15	Air System	Aluminum Air Tanks
16	Tank Drain/Dryer	Petcock Valve at bottom of each Tank
17	Suspension Frame	Aluminum
18	Bumper	Aluminum Extruded
19	Bumper Overlay	Full width Aluminum Buffed Cosmetic Bumper Overlay.
20	Underride Protection	None when DOT 12" Wheels Back Exemption Applies
21	Rear Closeout	Rear Tank Frame Closeout Panel
E Tires/Wheels		
1	Wheels	Accuride Accu-Lite with Extra Polish
2	Tires	Goodyear Marathon RSS 11R22.5 16 Ply
3	Number of Tires	Eight (8)
4	Tire Inflation System	None-Optional
5	Hubodometer	None-Optional
6	Load Gauge	None-Optional
F Fenders		
1	Fenders-Front	Roadside Aluminum Contour Fender. Hose Tray on Curbside Doubles as Fender
1a	Closure Plate	None-Optional
2	Fenders-Rear	Roadside Aluminum Contour Fender. Hose Tray on Curbside Doubles as Fender.
3	Mudflaps	MAC LTT Mudflaps on Rear of Fenders and Front Curbside of Rear Tires
3a	Anti-Sail	Standard MAC LTT Fabricated Anti-Sails installed where necessary
4	Spray Guard	None-Optional
G Landing Gear		
1	Landing Gear	Jost AX150 Alumilight Landing Gear
2	Crank Location	Roadside
H Upper Fifth Wheel		
1	King Pin Plate	5/16" Upper Plate with Hubbed Kingpin.
2	Pick-Up-Plate	Aluminum Pick-Up-Plate Installed if necessary
I Ladder/Platform/Walkway		
1	Ladder(s)	Rear Bolt-On Aluminum at Center of Head. Rails to have Rolled Radius at Top of Ladder and Top Deck plate Step
2	Safety Hand Rails	None-Optional
3	Top Walkway	Non-Skid Tape Between Top Vapor Rails
4	Fall Protection	None-Optional
J Cabinet(s) & Components		
1	Tool Cabinet(s)	One (1) Aluminum Cabinet, 36" Wide x 30" High x 27" Deep with Two Aluminum Side Hinged Doors. Mounted curbside forward of suspension. *Install MAC preferred Shelving and Partitions for Petroleum Units
2	EVO Cabinet(s)	One (1) 30" High Single Door Box with Overfill System and Emergency Valve Controls mounted at Front flush with top of Curbside Equipment Cabinet.

K Hose Carrier(s)		
1	Hose Carrier(s)	One (1) 3.5" x 22"W x Full Length Aluminum Extruded Tray functions as Curbside fenders. Includes drain at rear and tarp straps to retain hoses.
2	Trough Cover(s)	None-Optional
3	Gauge Stick	16 Foot Gauge Stick and Holder on Curbside at Rear with Tension Pin at Front
L Venting & Vapor Recovery System		
1	Relief Vent(s)	One (1) 10" Pressure/Vacuum Relief Valve with Set Pressure at 3.63 PSI Installed in Each Manhole Cover. One (1) BETTS #3686-AL Vent in the Vapor Line Under the Belly of the Tank.
3	Discharge Vent	Inward opening Sequential Vent with Viton seals in each manhole cover.
4	Recovery Piping	Vents connected to nipples in curbside flashing rail with 3½" I.D. hose. Internal Vapor Pipe Through Tank with connections at the following locations: (1) 4" outlet Curbside 15" to rear of last discharge valves (1) 4" outlet to extreme rear facing Curbside sloped down 15 degree
5	Adapter & Cap	Vapor outlet(s) equipped with 4" flanged poppeted vapor adapter & 4" orange cap.
6	Vapor Drain	None-Optional
N Valving/Piping/Hose		
1	Outlet(s)	One (1) 4" Aluminum Drain Pocket at Bottom each compartment
2	Splash Deflector	Bolt-on Splash Deflector above each Emergency Valve
3	Extra Drain Troughs	None-Optional
4	Equipment Warranty	5 Year Component Warranty with either Betts/Dixon-Bayco SuperTanker or Civacon System V
5	Discharge Valve(s)	Elbow or Straight Air Operated Emergency Valves with Flanged Outlet and AL Body
6	Dicharge Controls	Installed in EVO Cabinet with Air Tank Pressure Gauge
7	Emergency Valve Closure	Emergency Closure located at Front Head Roadside
8	Piping	4" Sch 10 Aluminum discharge piping with formed long radius sweeps from Emergency Valves to Curbside of tank, per API standards.
9	Manifold	None-Optional
10	Front Pump-off Line	None-Optional
11	Outlet Valve(s)	API Valves with Aluminum Handle and Viton seals per compartment.
12	Sight Glass	Sight Bubble on API Valves
13	Adapter(s)/Cap(s)	4" Aluminum Male Gravity Drop Adapter with 4" Aluminum Dust Cap
14	Secondary Discharge(s)	None-Optional
15	Security Seal Provisions	None-Optional
16	Product Indicators	8-sided commodity tags on bracket over each API valve with Compartment Capacity.
17	Flanged Gaskets	Cork-N-Buna Gaskets on all flanged connections.
18	Grooved Gaskets	Baylast or Equivalent Gaskets used on all Grooved Connections
21	Brake Interlock Valve(s)	One (1) Brake Interlock Valve Mounted on Each Vapor and Discharge Outlet(s)
O Pump		
1	Pump	None-Optional
2	Pump Piping	None-Optional
3	Hydraulic Lines	None-Optional
4	Flow Control	None-Optional
5	Platform	None-Optional

P Capacity Controls		
1	Overfill System	Overfill System with a Top Probe in each manhole
2	Sockets	Dual Optic and Thermistor sockets with vinyl caps in Curbside Control Cabinet
3	Top Sensor Settings	Top sensors set to provide a 60 gallon minimum vapor space in each compartment.
4	Bottom Retain	None-Optional
5	Overfill Operation	Pressure switch to allow permit when all vapor vents are open
6	Identification Module	Installed in Dual Socket Assembly
7	Static Studs	Two (2) Brass Studs on 1-3/16" centers installed at Landing Gear on Curbside
8	Ground Bolt/Ball	Ground Wire Installed in Each Socket Assembly
Q Wiring		
1	Nose Box	Nose Box with J560 7-Way Plug and Circuit Breakers Located Low Roadside at Front
2	Light System	Truck-Lite LED Junction Box Lighting System with Front Markers, Combination Side Center Turn/Marker Lights, and Three (3) Upper Clearance/Stop
2a	End Dam Turn Lights	None-Optional
3	Lamp Mounting	Grommet Mounted
4	Light Boxes	Two (2) Aluminum Light Boxes on the Rear of the Trailer with Two (2) Red Stop/Marker Lamps and One (1) Amber Turn with Rear Side Marker Lights.
5	Wide-Turn Light(s)	None-Optional
6	Work Light(s)	Two (2) Grote LED work lamp, Mounted at Curbside Discharge Area with switch in Cabinet. MAC Extreme LED Lighting Assembly to Illuminate Discharge Valves
6a	Work Light(s) Operator	All work lights operated by switch in EVO Cabinet
7	Cabinet Light(s)	Install One (1) LED Strip Light in each Cabinet
8	Backup Lights	None-Optional
9	Backup Alarm	None-Optional
10	Extra Light(s)	None-Optional
11	Closeout Light Panels	None-Optional
R T.A.L.K- Total Area Lighting Kit		
1	T.A.L.K- SAFETY ARMS	No
2	T.A.L.K- INTERLOCK BAR	Yes
3	T.A.L.K- LIGHTED HOSE GUARD	No
4	T.A.L.K- LIGHTED REAR HEAD	No
5	T.A.L.K- LIGHTED LADDER	No
6	T.A.L.K- Complete System	No
S Paint/Decals		
1	Corrosion Resistance	Electrolysis barrier between all dissimilar metals.
2	Conspicuity	DOT 3M Tape per N.H.T.S.A. Requirements.
3	Decals	Standard Safety/DOT-406 Warning and Safety Decals
4	Customer Decals	None-Optional
5	Emergency Drain Decals	Four (4) 3" diameter round DOT decals, (1) curbside and (1) roadside on horizontal centerline on each end head.
6	MAC Logo	Standard MAC Logo Placards on Vapor Rails and Rear Bumper
7	Pin Striping	Black or Selected from Color Options

T Other/Options

1	Document Holder	Document Holder installed on Roadside, near landing gear frame.
2	Static Cable	1/8" Stainless Steel Static Cables, Double Looped, One (1) Each Compartment.
3	Placards	Four (4) Aluminum Slide-in Placard Holders. One (1) per side
4	Safety Cone/Bucket Holder	<i>Dual Safety Cone and Bucket Holder Installed Forward of Discharge Area</i>
5	Fire Extinguisher	None-Optional
12	Calibration	Theoretical Calibration Chart - 1/4" Increments
14	Bicycle Guard	None-Optional
17	Standard Inspections	Initial Annual DOT Inspection, EPA Method 27, External Visual, Internal Visual, Pressure, and Leakage Tests.
18	Additional Inspections	None-Optional
20	Backup Camera	None-Optional
21	Approvals	3D Model and Design Review available upon Customer Request