

SPECIFICATIONS

Model Year - 2013

MODEL ATAFT(1) TRIDEM 407 SEMI TRAILER (Crude/Condensate)

HILITES

- o 42,000 liter TC407 Hardshell aluminum
- o 1 –comp Tridem Semi Trailer c/w:
 - Intraxx air ride Suspension
 - Bendix Disc Brakes
 - Aluminum 22.5" wheels
 - Titan gauge w/ Display
 - Yak lift axle system
 - 36" aluminum fittings cabinet
 - Delete internal piping & front manifold
 - Delete bottom loading system and external piping
 - 72" aluminum belly cabinet with access on both sides
 - Four work lights
 - One 4" stainless steel internal valve in tank belly and piped forward into belly box
 - Viton gaskets for all manholes & internal valves

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TRIDEM TRAILER DESCRIPTION

1. Model: ATAFT(1) 440HP
 - Aluminum semi trailer tank for refined crude products
 - Three (3) axles
2. Code:
 - TC 407, 25 PSI MAWP;
 - CSA B-620 - 2003;
 - Conforms to all applicable Canadian Motor Vehicle Safety standards and regulations;
3. Service:
 - Intended for crude oil & condensate hauling;
4. Capacity:
 - 44,000 liters:
 - 3% expansion allowance
5. Number of Compartments:

	Compartment #	1	2	Total
STANDARD	1 Compt	44,000L	N/A	44,000 L
OPTION	2 Compt	19,000L	25,000L	44,000 L

6. Axle Spacing:
 - Tridem 1.52 m (60");
7. Coupler Height:
 - 1.27 m (50") unloaded;
8. Slope:
 - 127 mm (5") on the length of the tank (toward rear of trailer);
9. Pattern:
 - Round, 84" diameter; ASME spun pressure heads;



TRIDEM TRAILER DESCRIPTION (continued)

10. Shell:

- Material:
 - aluminum 5454 H32;
 - Mill finish;
- Thickness:
 - bottom:..... 6 mm (0.236") mill finish;
 - top:..... 6 mm (0.236") mill finish;
 - sides: 6 mm (0.236") mill finish;

11. Bulkheads and Baffles

- End bulkheads (2) spun finished, flanged and dished to ASME code;
- Combination of internal "T" ring supports & dished, flangeless baffles that are fully welded both sides. Baffles have 20" flared offset manways, large re-inforced mouseholes & re-inforced sides and top vent / drain holes - welding spatter & all sharp edges removed.
- Material:
 - aluminum 5454-0;
 - Mill finish;
- Bulkheads: thickness:
 - all: 9.5 mm (0.375");
- Baffles: thickness
 - all: 6 mm (0.236");

12. Overturn Protection:

- Double leg aluminum extrusion meeting required code;
- Full length of tank with center walkway;
- Vapor tight; Couplings and plugs at both ends for steam cleaning;

13. Manholes:

- Model;
 - (3) Knappco # LM 1110, 40 PSI, with Buna gaskets;
- 508 mm (20") diameter;
- Aluminum domed construction with 6 cam arm latching closure;
- Opens toward rear of tank;

14. Walkway:

- 610 mm (24") wide full length;
- Aluminum expanded metal mesh;

15. Drains:

- The walkway is drained through the aluminum hand rail pipes of the rear ladder;



DISCHARGE EQUIPMENT

16. Piping: Internal and External:
- 115 mm (4 1/2") diameter, schedule 40, aluminum piping;
 - 4" pipe size bolted tank truck flanges and Durlon 8500 gaskets;
 - Cast aluminum, schedule 40 elbows and Tee's, as necessary;
 - Internal piping anchored using 1/2" stainless steel u-bolts with double nuts and Loctite;
17. Emergency Valves:
- Model;
 - • Betts 4" Model # EV46428ALB, flanged outlet with Buna flat seat disc;
 - Pneumatic operation;
 - Individual selectors, located in enclosure cabinet over driver side front fender;
 - 4" aluminum sump mounting at rear of compartment outlet and in front head;
 - Emergency shut-off valve;
 - • One (1) rear curb side on fender bracket
 - 6.3 mm (1/4") nylon tubing;
18. Discharge System: Gravity
- Dixon/Bayco # 5204NGC;
 - 100 mm (4") aluminum openable, load / unload adaptor with # 4500 cap ring, site glass, and 4" male adaptor/cap at curb side in front of tridem suspension;
 - 4" steel gate valve installed upstream of API adapter
 - Line Tee'd to driver side, fitted with 4" steel gate valve, male adaptor/cap
 - Durlon 8500 mounting gaskets at all locations;
19. Pump-off Lines:
- • 115 mm (4 1/2") aluminum schedule 40 piping with cast elbow into rear trough.
 - (1) internal line from rear of compartment offset to driver side; (1) 2' stub line offset to curb side.
 - Both internal lines exit barrel through the front head with 4" aluminum pneumatic internal valves that are oriented towards each other, followed by 4" steel gate valves.
 - These lines join together and tee upward terminating in 4" male adaptor & cap.
20. Venting:
- 90 mm (3 1/2") aluminum schedule 40 pipe, running internally through tank, from burp box to driver side exit, into 3" sump/pot and air emergency Tee valve, for vent lines. Vent lines reduced to 60mm (2 3/8") aluminum pipe, running forward and to rear, with cross-over to curbside rear, ending with ball valves and adaptors. Front portion of vent line runs to landing gear area turned outward at 45 degrees.
 - Vent "master" switch prevents opening of emergency valves until placed in "open" position;



DISCHARGE EQUIPMENT (continued)

21. Level Gauges:
- Not included in standard. Supply & install a 1" aluminum coupling for future installation of electronic gauge.
22. Overfill Protection System:
- Model:
 - Scully 5 wire #08687 "Load Anywhere" system
 - Receptacles: One (1) each; SAE J560 7 – way female, # 07716 thermister socket, and # 07973 optic socket, located in curbside enclosure. Additional set of receptacles in lower aluminum enclosure on driver side.
 - "GroundHog" studs and ball grounds included with receptacles.

UNDER CARRIAGE HENDRICKSON INTRAXX

23. Frame
- Fabricated high tensile steel construction.
 - 16 mm (5/8"), Grade 8 zinc plated bolt and locknut attachment to tank sills;
 - Steel "hat type" rear bumper with rear under ride impact protection; meets 407 code.
 - Install Premier # 10 tow eye centered on bumper.
 - Provision for base components of Yak's Empty Air Assist Lift, for future installation (2);
24. Suspension (Tridem):
- Model;
 - • Hendrickson AAT-250-TA, 25,000 lb. capacity (INTRAAX); 60" axle spacings
 - Pneumatic suspension with enclosed dump valve and air pressure weighing gauge located in 20" cabinet on driver's side sill;
 - Integral with axles and welded to chassis frame;
25. Axle:
- INTRAAX 25,000 lb. capacity, integral with suspension;
- Welded spider, quick change premium linings;
 - 196 cm (77-1/2") track; 8'-6" nominal tire width
 - 10 spline camshaft with cam enclosure;
 - Inner HM218248 and outer HM212049 bearings;
 - SAE 50 weight synthetic oil lubrication.
26. Brakes:
- Compliant with CMVSS-121;
 - 420 mm x 180 mm (16-1/2" x 7") quick change brake shoes;
 - ABS Wabco 4S / 2M premium system;
 - Heavy Duty dust shields;
 - Brake boosters TSE 3030 spring brake; "Hostler" brake release valve on driver side.
 - Haldex automatic slack adjusters;
 - Air brake lines color coded (SAE STD); • RED: Supply • GREEN: Service



UNDER CARRIAGE (continued)

27. Hub/Wheel/Drum

- Aluminum wheels, 22.5 x 8.25, machine finished 10 stud Unimount;
- Walther "Dura Lite" 10 stud hub pilot steel hubs, single cone lock wheel nuts;
- Centrifuse outboard brake drums, Stemco "Discover" oil seals and hub caps;

28. Tires:

- Michelin 11R22.5 14 ply (G) XZE-2 tread pattern tubeless radials;

29. Hubodometer:

- Model:
 - Engler;
- Metric recording (Km)
- Mounted on rear axle, curbside.

30. Kingpin Plate:

- 86 mm (3-3/8") high, heavy duty assembly;
- 9.5 mm (3/8") HSLA steel apron plate;
- 50 mm (2") SAE king pin;
- Adjustable in 76 mm (3") increments;
- Bolted installation;

31. Landing Gear:

- Model:
 - Holland Mark V;
- Two (2) speeds with non-removable roadside handle;
- Landing gear with square weight saver skid foot;
- Bolted installation;

ACCESSORIES

32. Fenders:

- Stainless steel contoured trailer fenders;
- One set (2) from front of tank to the landing gear support bracket, for over tractor tires.
- Six (6) half round, single bicycle style over each set of trailer dual tires;
- Installed on rubber mounting washers; Fender joiner bracket splash plates
- Bolted installation on full width pipe mounts & formed frame mounted brackets;
- Leading edges of front fenders cut back 22 degrees to offer additional swing clearance.



ACCESSORIES (continued)

33. Mudguard:

- Installed at rear of fenders of the tridem group and at the rear of front fenders;
- Quarter flaps at the front of front fenders;
- Mud flaps installed full width of trailer in front of tridem suspension with anti-sail brackets in front of wheels.

34. Ladder:

- Centered at rear of trailer;
- 38 mm (1-1/2") diameter, schedule 40 aluminum pipe;
- Top "platform" step made of anti-slip aluminum Gripstrut;
- Anti-slip aluminum extruded rungs, 50mm (2") x 355mm (14") spaced out to 305 mm (12");
- Bolted installation and catwalk drain design; Top grab handle pipes, welded to tunnel.

35. Cabinet Enclosures:

- Three (3) aluminum enclosures for air actuators & sensor monitor.
- One (1) 33 mm (13") x 40 mm (16") x 18 mm (7") at front driver side for air actuators
- Two (2) 50mm (20") x 50mm (20") x 20mm (8"); One at driver side sill for additional set of receptacles, electronic float gauge, dump valve, and one at curbside sill for sensor monitor and rack receptacles.
- All have single swing forward doors with slam lock latches, stainless hinge & bolted installation;

36. Hose Tray:

- One (1) aluminum hose storage tray;
- 30 cm (12") wide x 10mm (4") high sides x 6.1 m (20') length, with 30cm (12") caps;
- Attached on channel supports tight to tank sill, above fenders, curbside;
- One 5mm (2") pipe drain stub at rear, with selected mesh floor cutouts for cleaning.

37. Relief Valve:

- Model:
 - Fort Vale F29-13020
- Combination 30 psi pressure relief and 10" Hg vacuum breaker;
- Compound gauge with 60 psi x 30" Hg vacuum readings located in 13" cabinet at driver's side front;
- Secondary Fort Vale F29-13000 emergency vent valve.

38. Hose Support:

- Front hose swivel bracket mounted off front dam with grease fitting.



ACCESSORIES (continued)

39. Grounding Studs:

- Two (2) brass, mounted inside of roadside overturn protection;
- Five (5) others as follows:
 - On each rear outrigger;
 - On curbside at discharge area;
 - On each front outrigger;
- One (1) neoprene grounding strap attached to steel frame at rear;

40. Electrical Systems:

- 12 volts, meets CMVSS 108 requirements (Canadian Motor Vehicle Safety Standard);
- Seven (7) way female connector SAE J560B with dedicated power on the blue wire for ABS;
- 12, 10 and 8 gauge HD wiring, running in air and electrical extrusion on driver side.
- LED lighting components mounted in rubber grommets, with wiring harness;
- Vapor proof PVC junction boxes;
- Columbia nose box with one SAE J560 tractor/trailer connector and air glad hands;
- Clear illuminating lights are located inside enclosure cabinets;
- Rear brake lights, "beehive" marker and signal lights installed in PVC boxes bolted to frame;
- Six (6) stop, tail, turn lights are installed at the rear of running gear frame; red / amber / red.
- Midship marker and turn signal;

41. Placard Holder Bracket:

- Four (4) aluminum, open face, two clip style holders;
- Bolted installation on aluminum brackets;
- Located on each face of trailer;

42. Registration Holder:

- Two (2) Tite Seal, tubular registration and TDG holders;
- Mounted on roadside front fender;

43. Painting:

- All steel parts are sandblasted before application of primer and paint;
 - Paint: Silver Metallic finish topcoat
- All aluminum tank and structures, including fenders, left as natural finish;



ACCESSORIES (continued)

44. Reflective Tape:
- Strips of 51 mm (2") width, conspicuity decals to be provided in conformity with the C.M.V.S.S. standards;
45. Documents:
- New vehicle information statement;
 - Vehicle identification number;
 - TC-407 compliance certificate;
 - Tank inspection documents (PVIK) to B-620-1998/2003;