



Work order number 50853
Project Manager
Authorized contact
Company name
Mailing address
Phone
E mail address
Work order start date
Projected delivery date
Tank serial number

Round Aluminum Truck Tank TC407AL - Full spec

Specifications

Approximate overall dimensions: 25' 5" Long, 8' 8" Tall.
Maximum allowable working pressure: (MAWP) 25 PSI.
On-Highway use. All federal and provincial regulations will be observed.
This truck will be working in Alberta only.
This tank will be mounted on a single steer, tridem drive truck.
This tank will be hauling chemicals

Barrel

80" I.D., 23' 0" Long (Seam to Seam)
Two (2) compartment tank. Approximate capacity = 22650 Liters
3/8" Thick formed aluminum heads.
Back to back flanged and dished bulkheads with void.
1/4" Thick 5454-H32 rolled aluminum shell.
Multi course shell with circumferential weld seams.
Long seams located at the top of the tank
3/8" Thick flangless aluminum baffles QTY: 4
As welded, smoke and discoloration removed.

Notes: 11 / 11 split (EQUAL SPLIT)

Rollover Protection

3/16" Thick, 12" tall aluminum rollover trough with 3/16" end plates
Trough drains down front of tank.
1/2" Thick aluminum lift lugs welded to the hull of the tank and trough end plate.
Expanded metal walkway between trough rails, entire length of tank.

Subframe

12 x 3 x 3/8" Extruded subframe, 34" wide, flange in.
3/8" Thick crossmembers and end plates.
Heavy duty 1/4" broke outriggers.
1/2" Thick aluminum lift lugs welded to the hull of the tank and subframe end plate.
Rubber track channel starting 16" back from the front, and ending at the rear of the subframe.

Pressure / Vacuum breaker

3" Fort Vale pressure / vacuum relief valve. QTY: 2
30 PSI Pressure relief setting
2" Hg vacuum relief setting
Relief valve will be mounted on a TTMA studded connection

Manways and washports

18" Wabash full opening manway with easy access bolts. QTY: 2
12" Wabash wash port with easy access wing bolts QTY: 2

Fluid level indicator

Wabash side float, stainless rod, stainless ball.

QTY: 2

Stainless steel body and rod. Stainless steel float ball. Indicator will be on the drivers side facing forward.

No Titan gauges.

Fenders

8' 9" Track Aluminium Subframe mounted, 14' 6" Long.

Flat top fenders with two "v" breaks, 12" end plates and two center gussets.

The fenders will be mounted at 0" from the front head seam to the fender center line.

Ladder

High hoop front corner ladder, offset to the drivers side with eight 15" wide rungs.

An 18" wide checker plate landing will be mounted for easy access to the trough.

No fall arrest equipment required.

Drivers side cabinet

60" Wide tank mounted side cabinet.

Heavy duty 3/16" aluminum construction.

Spill containment floor with drain plug in the corner.

3/16" Aluminum flat style doors.

Two heavy duty stainless steel hinges on each door.

Stainless steel refer door latch.

The front clearance light will be mounted in the top door jam, close to the front of the cabinet.

Passengers side cabinet

60" Wide tank mounted side cabinet.

Heavy duty 3/16" aluminum construction.

Spill containment floor with drain plug in the corner.

3/16" Aluminum flat style doors.

Two heavy duty stainless steel hinges on each door.

Stainless steel refer door latch.

The front clearance light will be mounted in the top door jam, close to the front of the cabinet.

Cabinet heater

The drivers side cabinet will be heated using a 12 Volt Red Dot bus heater, single fan (model # R254-0P).

5/8" Heater hoses will be run from the heater to the engine where we will connect to dealer installed engine taps.

No booster pump.

Light bars

No front light bars.

Full width 4x6" rear light bar mounted above the bumper.

4 x 6" High mounted rear light bars will be attached to the sides of the rollover trough.

Venting

Each compartment will be equipped with a 3" Vent line with an air operated 3" Dover (Buna seal, Stainless steel disc).The downcommer will extend to the passenger side rear.The bottom of the downcommer will have a male NPT threads and aluminum camlock with dust cap.

Pump & drive system

4000 Series T&E pump with steel helical cut gears.

Power input required = 23 Hp, Max speed = 750 RPM, Theoretical capacity = 1814.2 LPM

The pump will be mounted to the floor of the cabinet on an aluminum channel.

3/8" Pump drain valve through cabinet floor.

Grease manifold connected to four points on the pump. Use 1/4" hydraulic hoses with crimped ends.

A hydraulic system will be installed that will turn the pump

Chelsea 680 PTO, with control in truck cab.

13 GPM Muncie hydraulic pump direct coupled to the PTO.

Variable speed, friction detent reversible hydraulic control valve with 0-3000 PSI pressure gauge.
Four bolt hydraulic motor, Danfoss
1310 Series H-yolk coupler 1-1/8"x1-1/4" c/w polished stainless steel safety shield.
Drum hydraulic oil cooler, model # MH3 with internal filter.
No inline return filter required.
THF Hydraulic Oil

Notes: WIRELESS REMOTE CONTROL TO OPERATE T AND E PUMP

Sump

8" Sump with 4" ANSI flange with an air operated 4" Dover valve (Buna seal, s.s. disc).
Each sump will be mounted as close to the front of the compartment as possible.
A 4" aluminum shear section will be installed between the belly valve and piping.

Plumbing

4" Line from each belly valve through the drivers side of the tank subframe.
Connect each plumbing line together with a single line will connected to the pump inlet.
4" Line from the pump through the top of the cabinet with a manually operated valve. A 3" Chicksan hose swivel will be mounted on top of the cabinet. A 3" aluminum camlock will be installed on the swivel outlet.
2" line beside the three inch line for metering, c/w 2" turbine meter, alum. 2" camlock remote display will be inside the cabinet
No pupline
All plumbing valves will be Dover valves with Buna seals and stainless steel discs.
Plumbing material will be Schd 40 steel with stainless weld material.

Notes: INSTALL APRESSURE GAUGE IN PLUMBING LINE

Air Controls

Four air toggle switches will be installed. The switches will be identified as:
Compartment 1-Sump, Compartment 1-Vent, Compartment 2-Sump, Compartment 2-Vent
All switches will be mounted on the PTO control bracket next to the drivers seat.
An emergency shutoff switch will be installed at the passenger side rear of the vehicle.

Hose Retainment

Passenger side fender will have 4 flat bar hose holders.
Driver side fender will have 4 single 3" bolt on steel hose hooks.

Trailer Hitch

None.

Bumper

4 x 6" Rear impact device with 12" bumper braces

Chain Hangers

Square tube style chain hanger c/w retainment bar. QTY: 2

Accessories

No gauge stick.
4 Pin fitting bar QTY: 1
Wabash ground reel QTY: 1

Notes: 100 ft. of cable and clamp

Paint and Coatings

No internal coating.
The tank will be sandblasted prior to painting.
The tank will be painted two colours with Endura paint. (Up to and including Tier 1)
Paint Code:

Truck mounted accessories (Bumper, Rear Light Bar, Cabinets) painted.

Insulation

Spray foam insulate the inside walls and doors of the cabinet as well as below the floor.

Decals

Hydro / visual decals will be installed on both sides of the tank, near the front.

Railroad crossing decal with reflective backing. QTY: 1

White conspicuity tape will be installed at 10 o'clock and 2 o'clock on the rear head of the tank.

Red and white conspicuity tape will be installed across the rear bumper.

Mounting

The tank will be mounted to the truck chassis on a 1" thick rubber pad. B.C. style tie downs will secure the tank to the truck chassis. Rubber encased springs will be used to keep the tie down bolts under tension.

Guides will be installed on the truck chassis, near the front of the tank. These guides will keep the tank centered over the truck frame while allowing the truck frame to flex.

Completion

Cast aluminum Wabash ribbons will be mounted on each side of the rollover trough.

Four 30 x 36" Wabash logo mudflaps will be installed - two on each fender.

Two anti sail bar will be installed.

Plastic trough drain tubes will be installed with bolt on stainless steel clamps.

An engraved stainless steel TDG nameplate will be installed on the drivers side, close to the front of the tank.

Wiring & Lighting

A wiring kit will be installed including the following:

2.5" Red LED identification lights (trimarker) mounted in a plastic box at the rear of the rollover trough.

2.5" Amber LED intermediate clearance lights.

Betts junction box on the drivers side of the rear light bar.

Two round 4" socket mounted red LED tail / signal / brake lights in each rear light bar.

A flush mount clear license plate light will be mounted on the bottom of the rear light bar.

2.5" Red LED identification light mounted on each side of the rear light bars.

4" Clear backup light will be installed in the passenger side rear light bar c/w switch to the transmission.

All electrical connections will be soldered with heat shrink cover.

4" Round LED brake and signal light (no clearance) will be mounted in each high light bar.

No strobe light required.

Work Lights

Work lights will be installed in the following locations:

One 4" round LED work light on top of the tank facing forward.

One 4" LED round tractor work light on each side of the rear light bar.

One 4" round LED work light on each side of the tank, close to the front.

One 4" round LED work light will be installed on the front wall of each cabinet.

No work lights under the high light bars.

Placard Holders

Fender mount clip style placard holder. QTY: 4

Overflow mount clip style placard holder. QTY: 4

Testing

The tank will be leak tested upon completion of all welding.

A final hydro test and certification will be performed prior to leaving Wabash premises.

Note: all testing will be performed using tap water only.





Revision Date July 21, 2021
 Authorized contact
 Company name
 Address

Phone
 Cell
 Email

Description	Operation
1 <u>Change Steel belly plumbing to Stainless steel. As per Blaine</u>	309
2 <u>Frame extension</u> <u>Omit frame extension</u> <u>Upgrade hydraulic system to variable speed remote system</u> <u>Parts only</u>	851
3 <u>Add addition wash port to each compartment.</u>	852
4 <u>Change 2" ball valve to a 2" cover.</u>	403
5 <u>Inset barrel pressure gauges</u>	853
6 <u>Change manual ground reel to a self retracting ground reel</u> <u>Add 1 X 4 pin fitting bar in the passenger side cabinet.</u> <u>Change Driver side hose holder from single hose hooks to double hose hook holder.</u>	600
7 <u>Supply and install Stinger mount on the back side of the passenger</u>	854
8 <u>Supply and install camlock plate on the passenger side front of fuel</u> <u>and 2 X 2" male and 1 X 2" female camlock connections.</u>	855
9 <u>Supply and install heat trace on belly plumbing</u>	856
10 <u>Install additional 2 chain hanger at the rear of the unit.</u>	406
11 <u>Supply and install a red dot heater in the sleeper, ensure it will heat</u>	857
12 <u>Supply and install 3" composite hose 40'0" c/w mild steel inserts and</u> <u>camlocks and cover</u> <u>1 X 2" artic flex hose to wrap from d/s cabinet connection to the p/</u> <u>mild steel inserts and aluminum camlocks 45'-0"</u> <u>2 X 2" artic flex hose 15'0" c/w mild steel inserts and aluminum ca</u>	858
13 <u>Armor guard (Blue) the 2 fuel tanks. This will be done on the truck</u>	859
14 <u>Install a work light off the driver side ladder landing.</u>	860
15 <u>Supply and install polished aluminum doors</u>	861
16 <u>Meter water on to each compartment, label each cube with reflect</u>	862