

Technical Specification –

7,000 Gallon Stainless Steel Non-Code Tank Trailer (Grease Trailer)

A. General Requirements (Each Section) compliance box – note section at bottom of each if they can't comply

- **Trailer Type:** Stainless steel construction
- **Design Code:** Non-code atmospheric vessel
- **Overall Length:** To be determined by engineering to optimize payload capacity
- **Tank Shape:** Double-conical with slope to center for drainage
- **Operating Pressure:** Atmospheric
- **Maximum Product Density:** 13 lb/gal
- **Maximum Operating Temperature:** 150°F
- **Fifth Wheel Height:** 49 inches (standard)
- **Road Application:** Designed for on-road use only
- **Warranty:** Minimum one-year limited warranty

B. Tank Barrel

- **Compartments:** Single compartment
- **Capacity:** 7,000 gallons $\pm 1\%$
- **Baffles:** None
- **Shell Material:** 10-gauge 304L stainless steel, 2B finish interior and exterior
- **End Heads:** 10-gauge 304L stainless steel, 2B finish
- **Manways:** Three (3) 20-inch top-center manway assemblies
- **Manway Hinges:** Hinged toward front
- **Interior Weld Finish:** Conforming to TTMA RP-24 W-2 standard
- **Insulation:** 4" polyisocyanurate on shell, 6" fiberglass on heads
- **Jacketing:** Stainless steel jacket, 22-gauge sides and 18-gauge heads
- **Underlayment:** Installed 6 ft - fore and aft of spill dam
- **Thermometer:** One clip-on type, 0–300°F, curbside at eye level
- **Heating System:** Full-length steam/in-transit heat channels with front inlet/outlet and rear steam trap

C. Structural Components

- **Reinforcing Rings:** External rings fully welded to shell
- **Frame:** Frameless design
- **Barrel Supports:** Outriggers at all load-bearing locations
- **Spill Dams:** Three stainless steel spill dams (non-code), one per manway
- **Spill Dam Drains:** Polyethylene drain hoses on each side

D. Running Gear

- **Suspension:** Heavy-duty spring suspension with corrosion-resistant hangers and equalizers
- **Axle Spacing:** 49 inches
- **Axles:** Two axles, 71.5" track, heavy-duty spindles with matched bearings
- **Lift Axle:** None
- **Hubs:** 10-stud hub-piloted aluminum or steel hubs
- **Brake Drums:** 16.5" × 7" outboard-mount drums
- **Brakes:** S-cam brakes, 23,000-lb rating, 2.5" stroke, 30/30 chambers, non-asbestos linings
- **Slack Adjusters:** Automatic
- **ABS:** 4S/2M ABS system with malfunction indicator light
- **Air Tanks:** Aluminum
- **Reservoir Drains:** Cable-operated drains routed to roadside
- **Suspension Frame:** Stainless steel
- **Rear Bumper:** Bolt-on bumper matching exterior finish
- **DOT Rear Impact Guard:** Not required when 12" wheels-back exemption applies

E. Tires & Wheels

- **Wheels:** Hub-piloted aluminum disc wheels
- **Tires:** 11R22.5
- **Quantity:** Eight (8) tires

F. Fenders

- **Front Fenders:** Two aluminum contour fenders
- **Rear Fenders:** Two aluminum contour fenders
- **Mudflaps:** Installed at rear hose trough

G. Landing Gear

- **Landing Gear:** Heavy-duty aluminum or steel landing gear with dual-speed crank
- **Crank Location:** Roadside

H. Upper Fifth Wheel

- **Kingpin Plate:** 5/16" external upper coupler plate with hubbed kingpin
- **Pickup Plate:** Stainless steel pickup plate if required

I. Access Equipment

- **Ladder:** Bolt-on curbside ladder
- **Handrails:** Safety handrails outside ladder rails
- **Walkway:** 12" wide anti-slip walkway curbside and between manways

J. Hose Carrier

- **Hose Tray:** One aluminum hose tray, approx. 5.5" × 5.5" × 21' ft, curbside rear

K. Venting & Vapor Recovery

- **Pressure/Vacuum Relief Vents:** Two 5-psi pressure/vacuum relief vents mounted in manway covers (generic equivalent acceptable)

- **Atmospheric Vent:** Located in spill dam with internal baffles

L. Valving, Piping & Hose

- **Outlet:** One 4" stainless steel drain sump at tank center
- **Piping:** 4" piping routed to curbside
- **Outlet Valve:** One 4" stainless steel gate valve with metal seat
- **Adapters/Caps:** 4" male camlock adapter and dust cap

M. Electrical System

- **Nose Box:** Standard 7-way electrical connector
- **Lighting System:** LED lighting meeting FMVSS requirements, including:
 - Front markers
 - Side turn/marker lamps
 - Upper clearance lamps
- **Lamp Mounting:** Grommet-mounted
- **Rear Light Boxes:** Stainless steel spring-loaded boxes with stop/marker/turn lamps
- **Work Lights:** Two rear-mounted LED work lights with curbside switch
- **Backup Lights/Alarm**

N. Paint & Decals

- **Corrosion Protection:** Electrolysis barrier between dissimilar metals
- **Conspicuity:** DOT-compliant reflective tape
- **Safety Decals:** Standard safety and warning decals

O. Additional Options

- **Document Holder:** Installed roadside near landing gear