



# Bituminous Transport

## The Asphalt Tank



This book depicts both standard and optional equipment and features both aluminum and steel construction

Specifications and design are subject to change due to continuous improvement

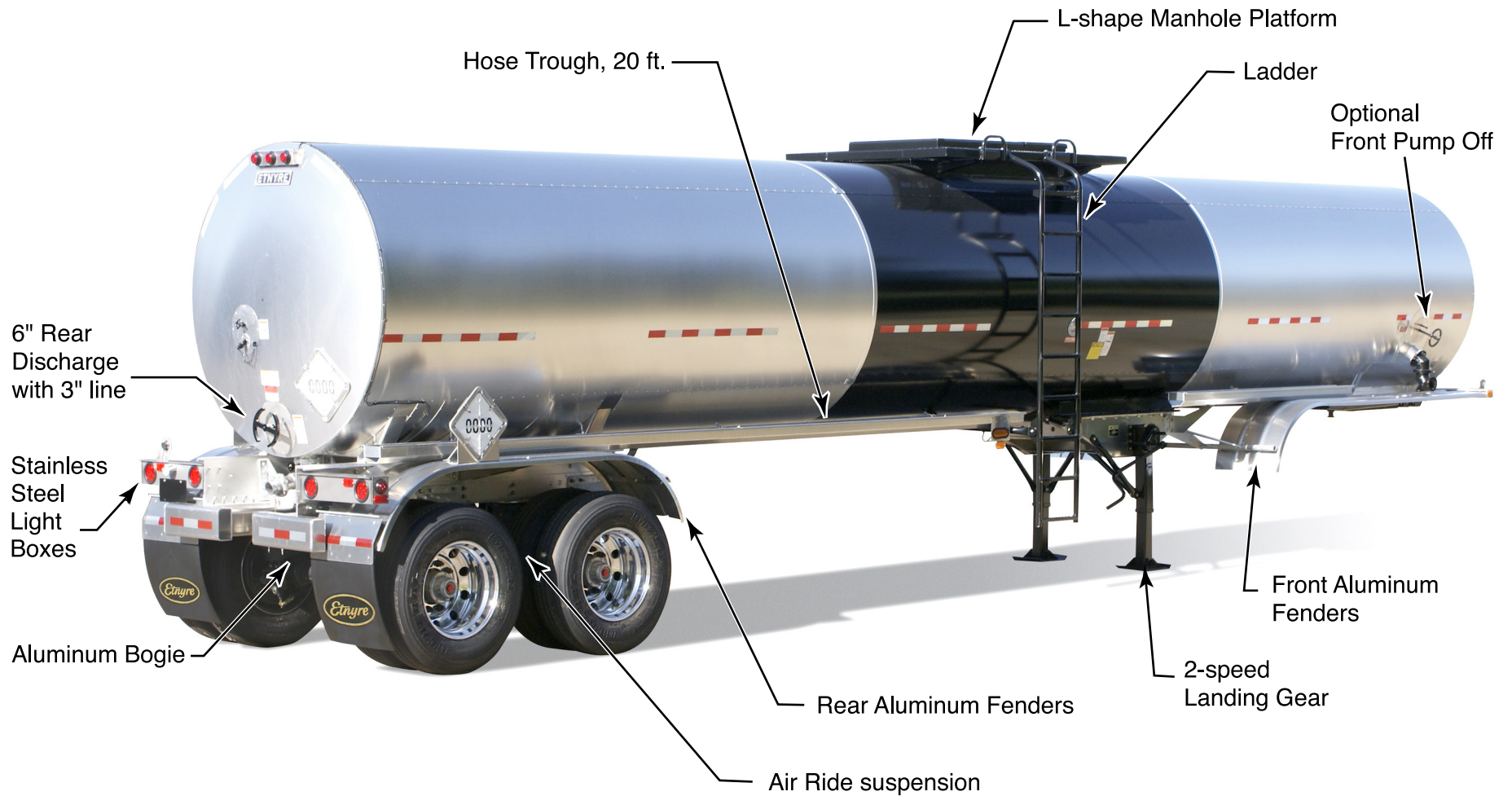


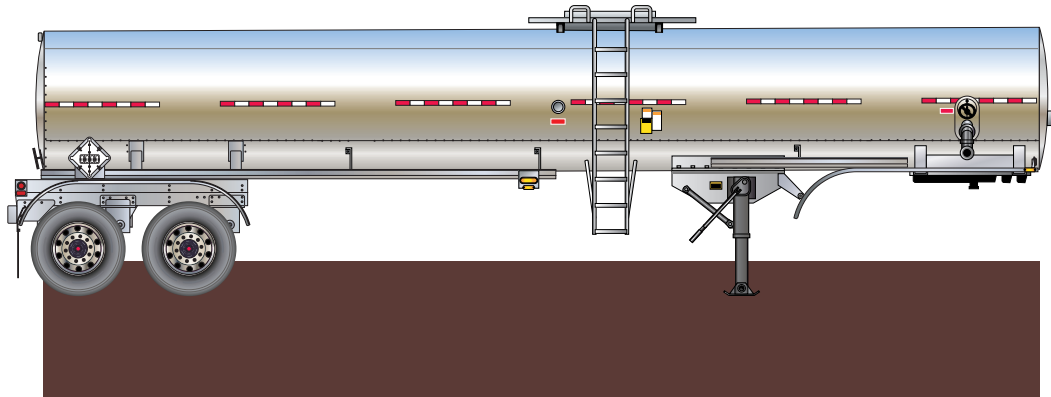
# The Asphalt Tank

Built for Hot Products

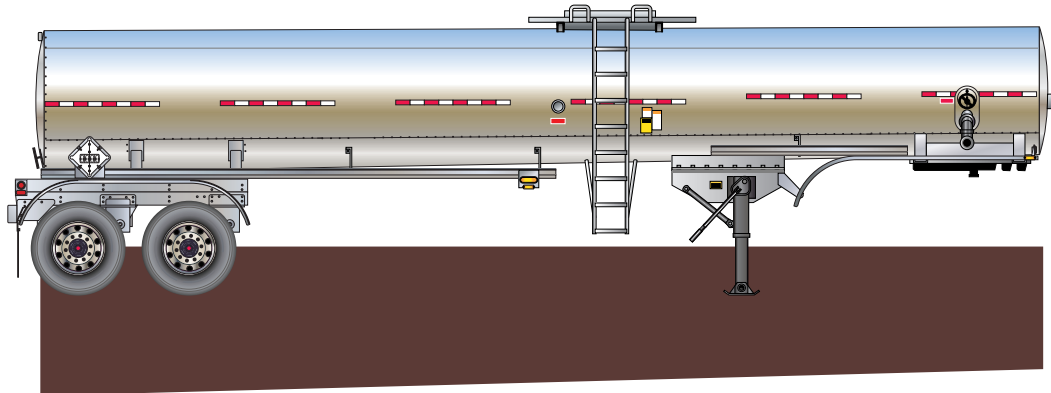


# ARA Aluminum Round Asphalt

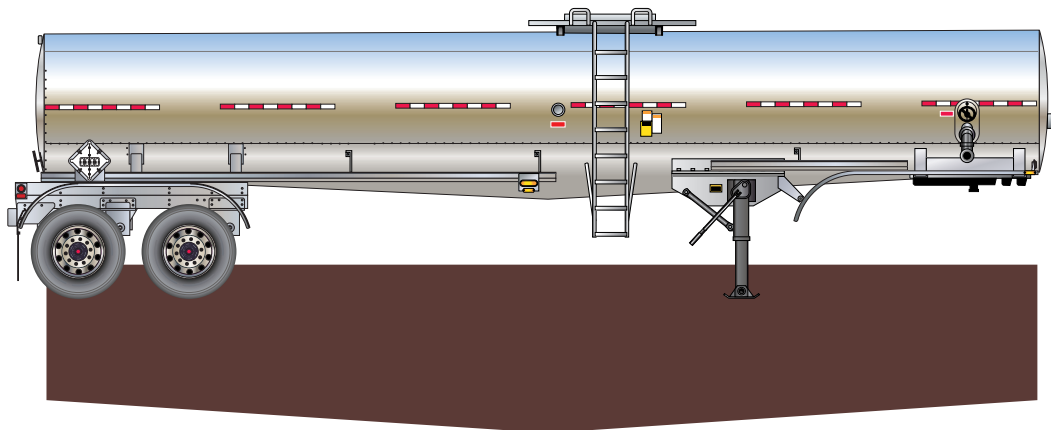




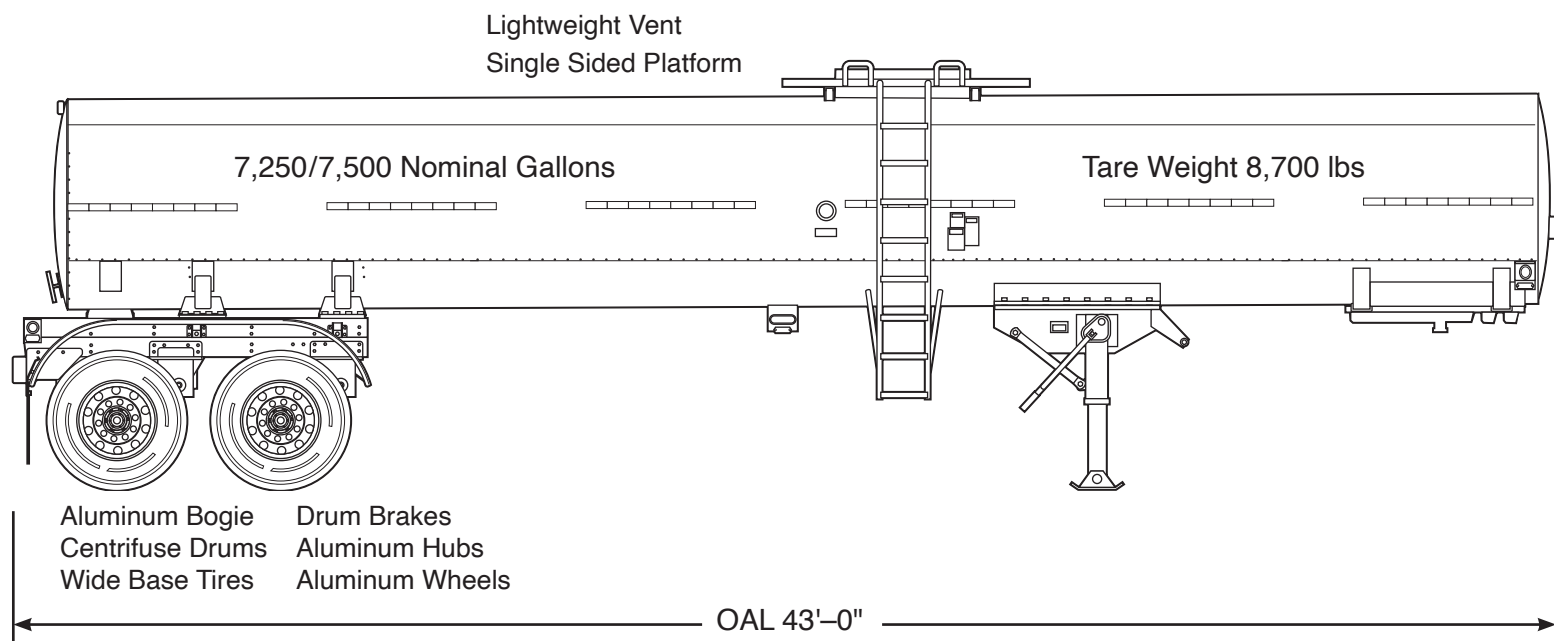
**ARA**  
Straight Round



**T-ARA**  
Tapered Round



**ADTR**  
Double Taper Round



## 49 CFR 173.247

Asphalt tanks are designed and manufactured to comply with the DOT 406 specifications but with an exception to the venting and the discharge valve. Asphalt tanks are allowed atmospheric venting in lieu of 'smart vents' and manual discharge valves in lieu of spring loaded closure devices with remote actuators.

Do to the allowed and recognized exceptions to the full 406 specifications Asphalt tanks are classified as 49 CFR 173.247.

Code	Description	Product
Non Code	49 CFR 173.247	Hot AC, Emulsion, Calcium Chloride, Diesel Fuel, Biodiesel, Hot Wax
DOT 406	Smart Vent, Internal Valves, Emergency Shutdown	Gasoline, Fuel Oil, Alcohol, Flamables
DOT 407	25psi, Vapor Recovery	Crude Oil, Solvents, Plasticizers, Chemical

General description, check regulations

## Tank Construction



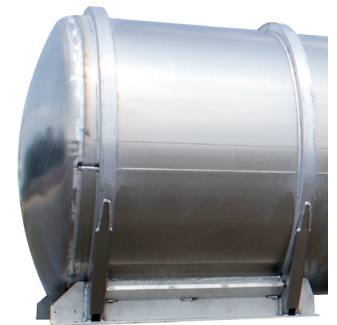
- 375<sup>º</sup> Tank Rating.  
or
- 400<sup>º</sup> Tank Rating (adds 400 lbs.)

Rings



- 3" and 5" channel.
- Rings continuous weld.

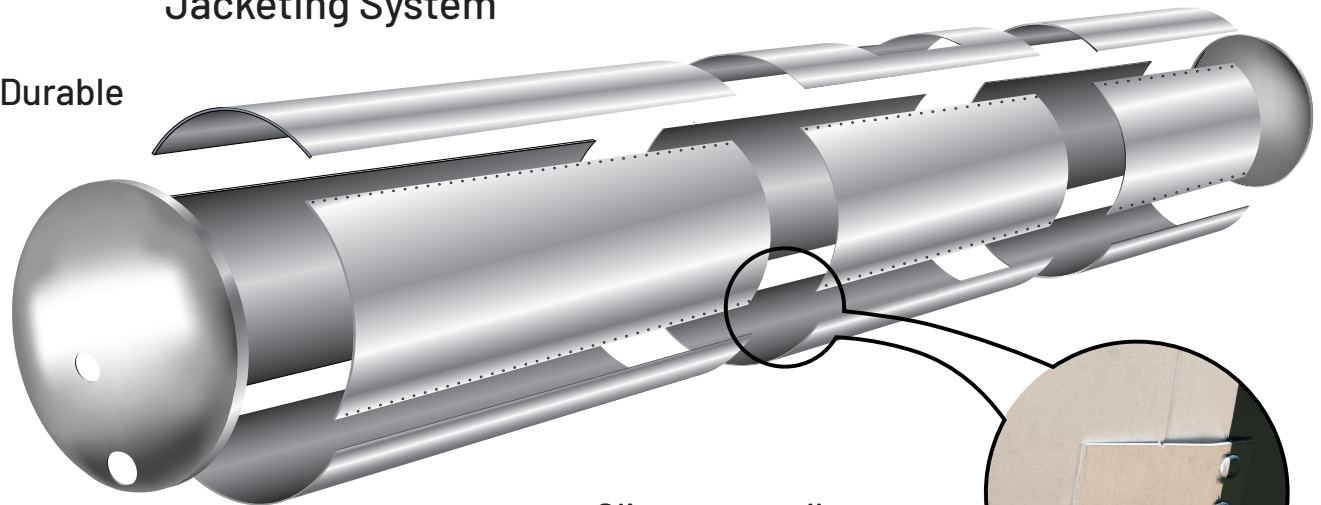
Head



- Deep dish heads.

## Jacketing System

- Exclusive 0.04" aluminum jacketing. Durable to withstand years of service.
- Exclusive system reduces the circumference seams.
- Superior heat retention.
- 0.08" jacket heads.

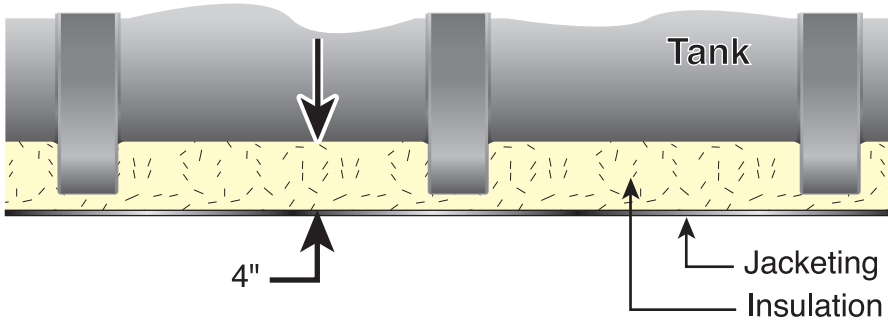


- Clip system allows for expansion and contraction.

## Bright Finish Jacketing (side sheets only)



## Insulation

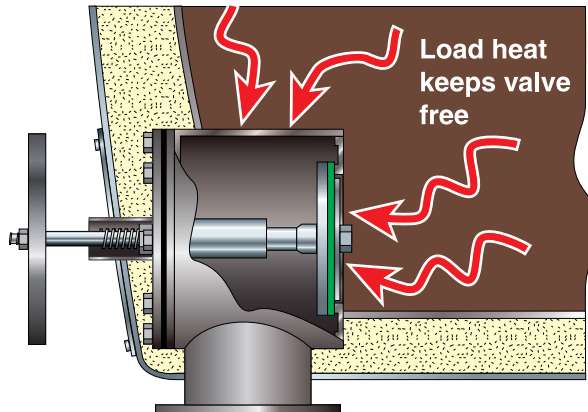


- Insulation 1# density.
- 4" standard.
- 5" optional (adds 290 lbs.).
- 6" optional (adds 390 lbs.).

## Black Band optional



## Rear Discharge Valve



- 6" valve, complete drainage.

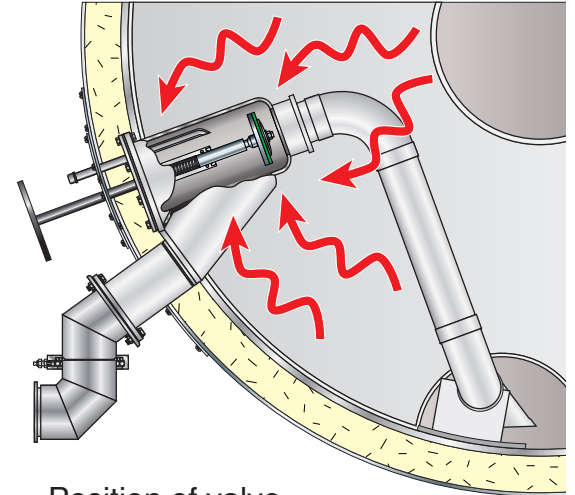


- Split rear bumper with sloping discharge line.
- Optional 4" discharge lines.
- Optional 3" or 4" gate valves.
- Optional washout and sample valve.

## Front Pump Off (optional)

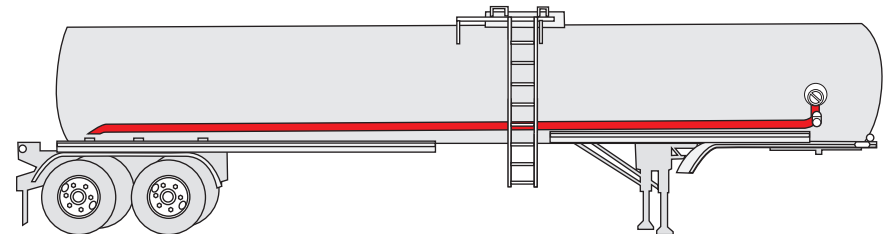


- Includes 8' front hose trough.



Position of valve body insures drainage

Load heat keeps valve free



3" line to rear (adds 120 lbs)  
4" line optional

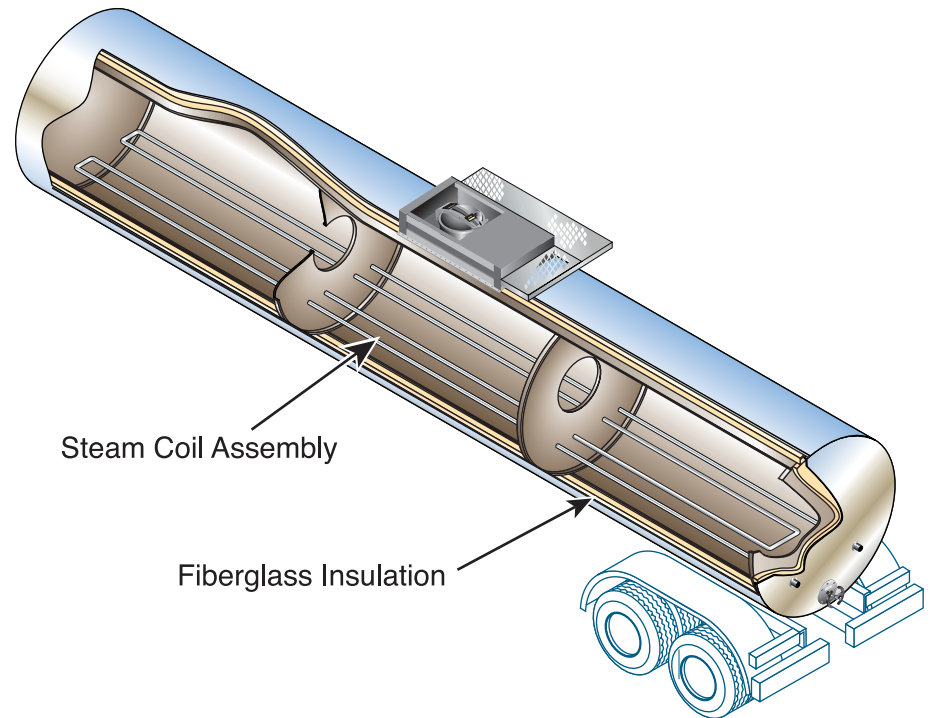
- Internal valve with "shear" design – meets federal regulations without rollover protection.
- Hose swivel standard.

## Wash Out System (optional)



- 20 gallon.
- Pressurized with truck air.
- Optional line to front and rear discharge.
- Optional stainless steel tank.

## Steam Coils (optional)

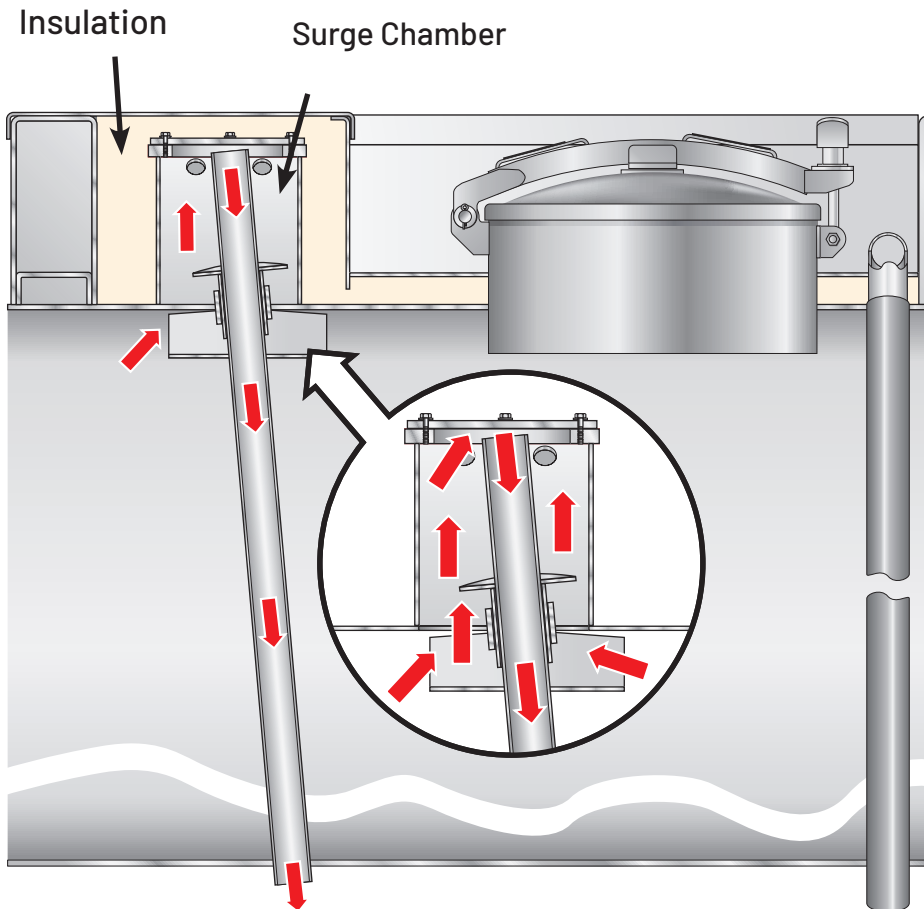


Options: Aluminum Construction

- Steam coils. 1 1/2" pipe aluminum.
  - Two pass
  - Four pass
  - Eight pass

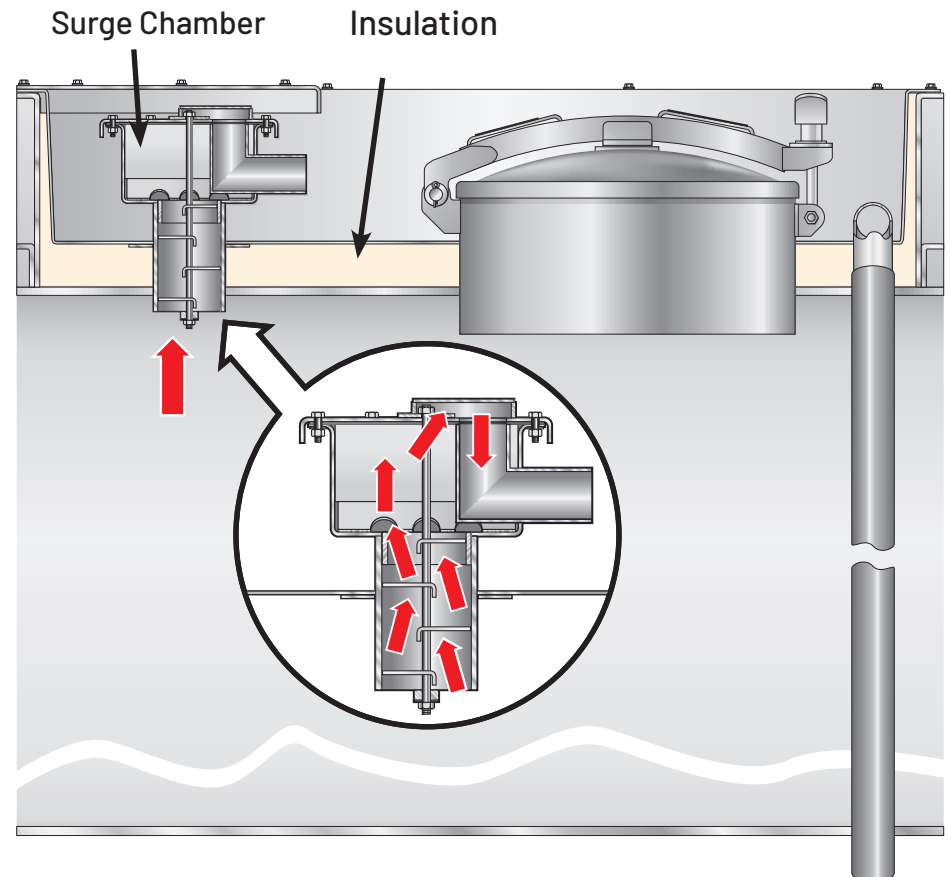
# Vent System

## Etnyre Style Vent



- Large surge chamber with vent.
- Insulated.
- Internal vent and external drain line.

## Light Weight Style Vent



- Vents into spillbox area.
- 35 lbs lighter than Etnyre Style.
- External drain line.

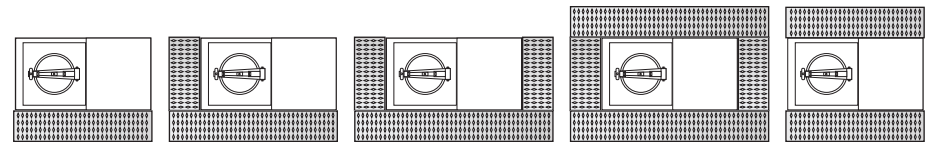
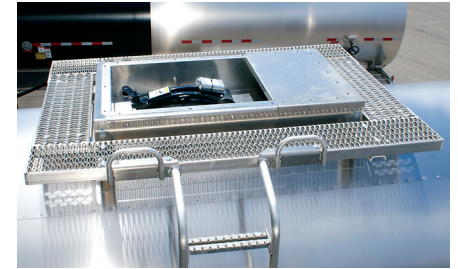
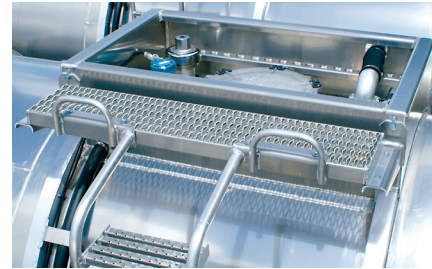
## Manhole Area



- 20" quick opening manhole.
- Single hold down cover.
- Manufactured by Etnyre.
- DOT 406 compliant.

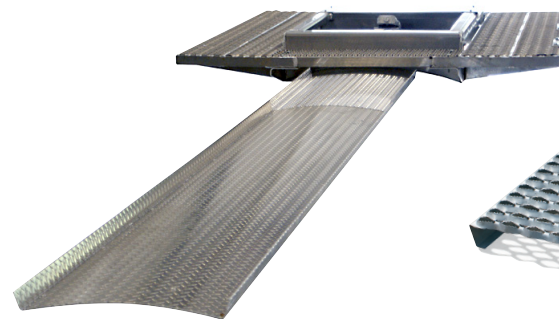


## Platforms

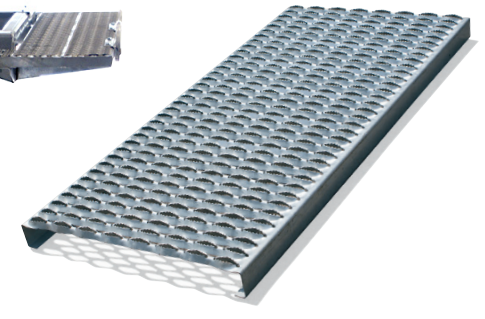


- Large L shape catwalk standard.  
Options for 1, 3 & 4 sided.

## Walkways

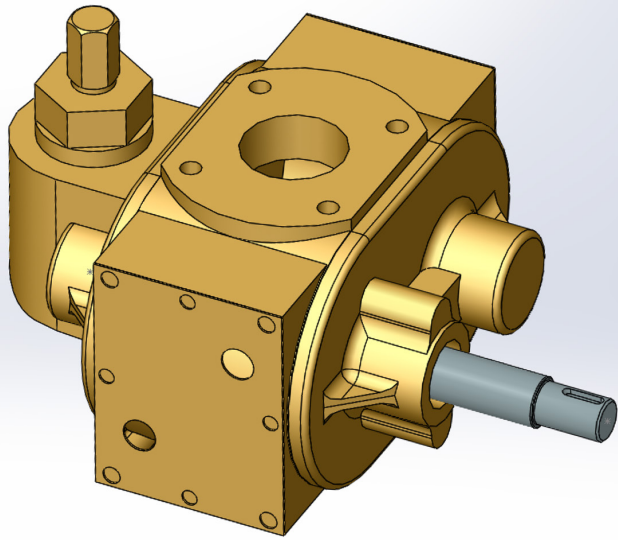


Aluminum Walkway

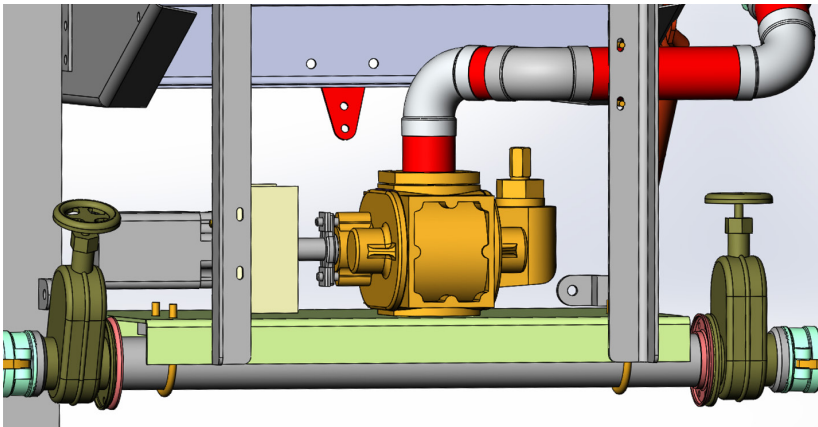


Open Grated

## Asphalt Pump (optional)



- Manufactured by Etnyre especially for asphalt.
- 200 GPM capacity.
- No low spots to trap asphalt.



## Toolboxes



## Upper Coupler



- Total adjustment 24".
- Adjustable in 2" increments.
- 5/16" high strength steel construction.  
3/8" and 1/2" optional.

## Thermometer



- 2" Dial Type.
- Enclosed Well.
- 50° to 550°.

## Sample Valve



- Internal valve.
- Custom locations.

## Fenders



### Aluminum Ladder



### Landing Gear

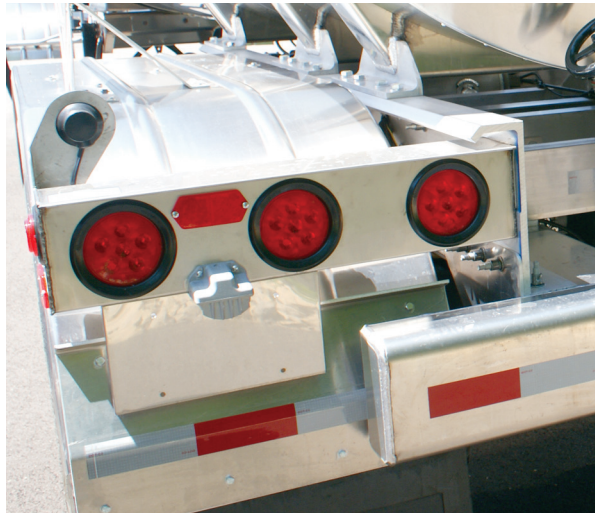


2 Speed



10 x 12 x 4  
10 x 12 x 2

### Light Box Stainless Steel



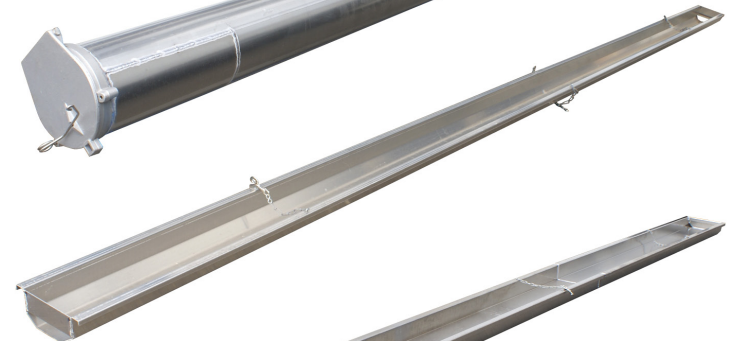
Options available for 2, 3 or 4 lights

### Hose Trough / Tube

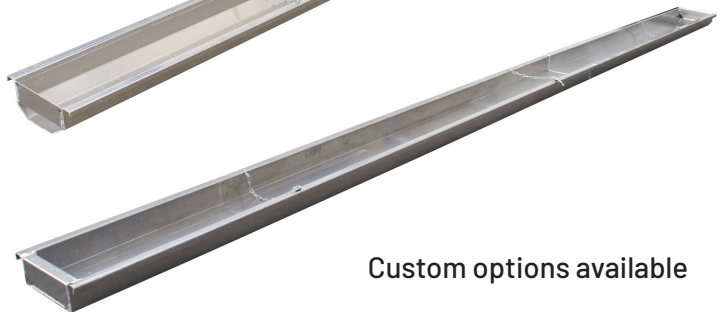
20' x 8" Dia.



Single - 6" x 20'



Double - 12" x 20'



Custom options available



Standard



Inset marker lights and  
center stop lamp



Inset marker lights and extra  
set of stop/turn/tail lights



Red marker lights,  
horseshoe in rear head



Amber marker lights,  
horseshoe in front head



(5) Amber marker lights,  
down each side of tank

## Suspension



Steel



Stainless Steel

## Lift Axle

### Auto or Manual Lift

Auto lowers axle when loaded and lifts axle when empty.



Aluminum (-240 lbs)

Custom axle combinations available

## Tires



## Disc Wheels



Aluminum  
Durabrite  
Mirror

Aluminum  
Polish  
Mirror

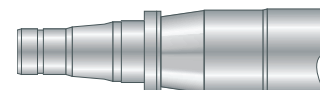
Aluminum  
Machine  
Clean & Buff  
Gray

Steel  
+130 lbs  
per axle

## Tire Inflation System

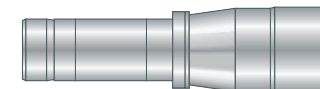


HD

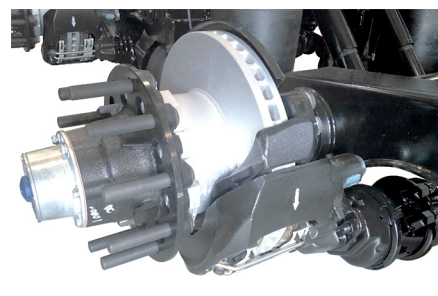


Axle  
Ends

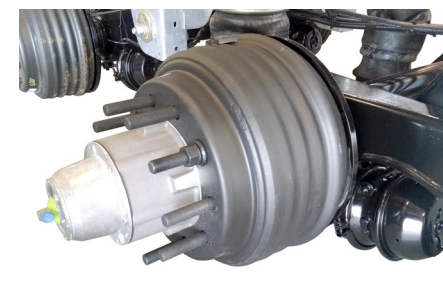
TP



## Brake



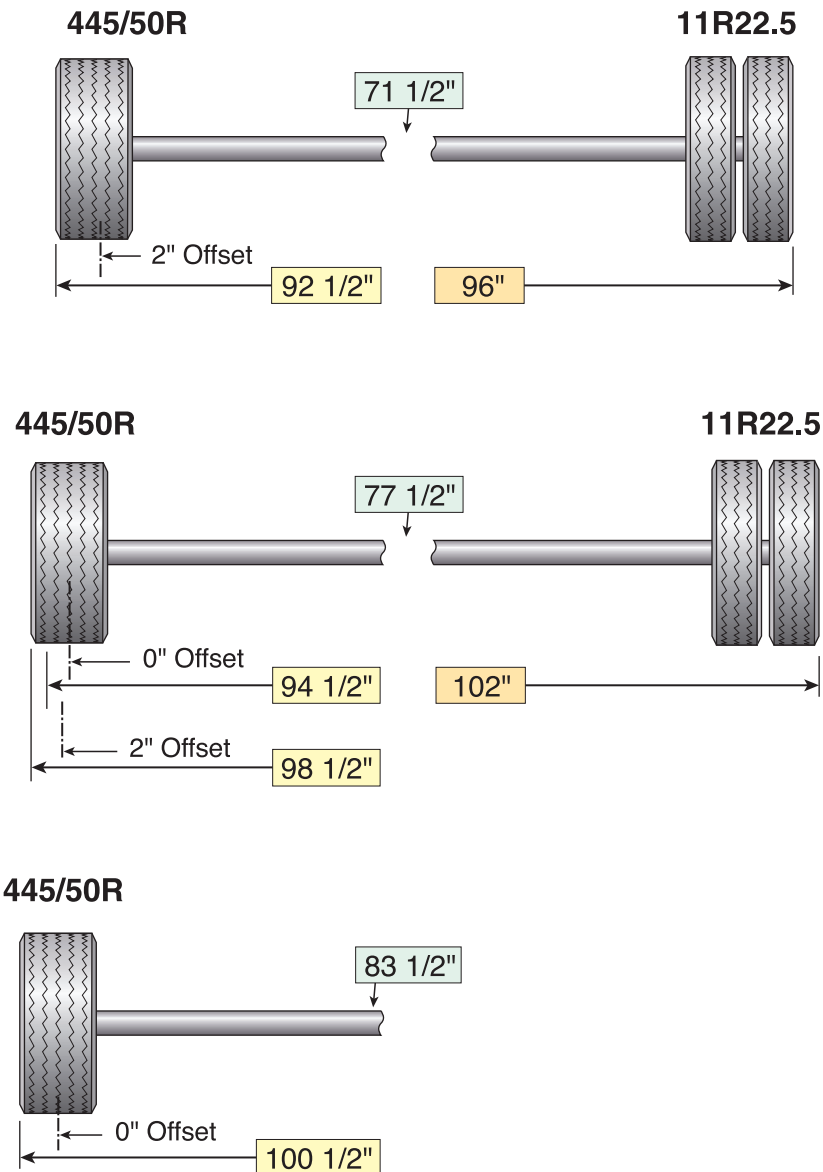
Disc



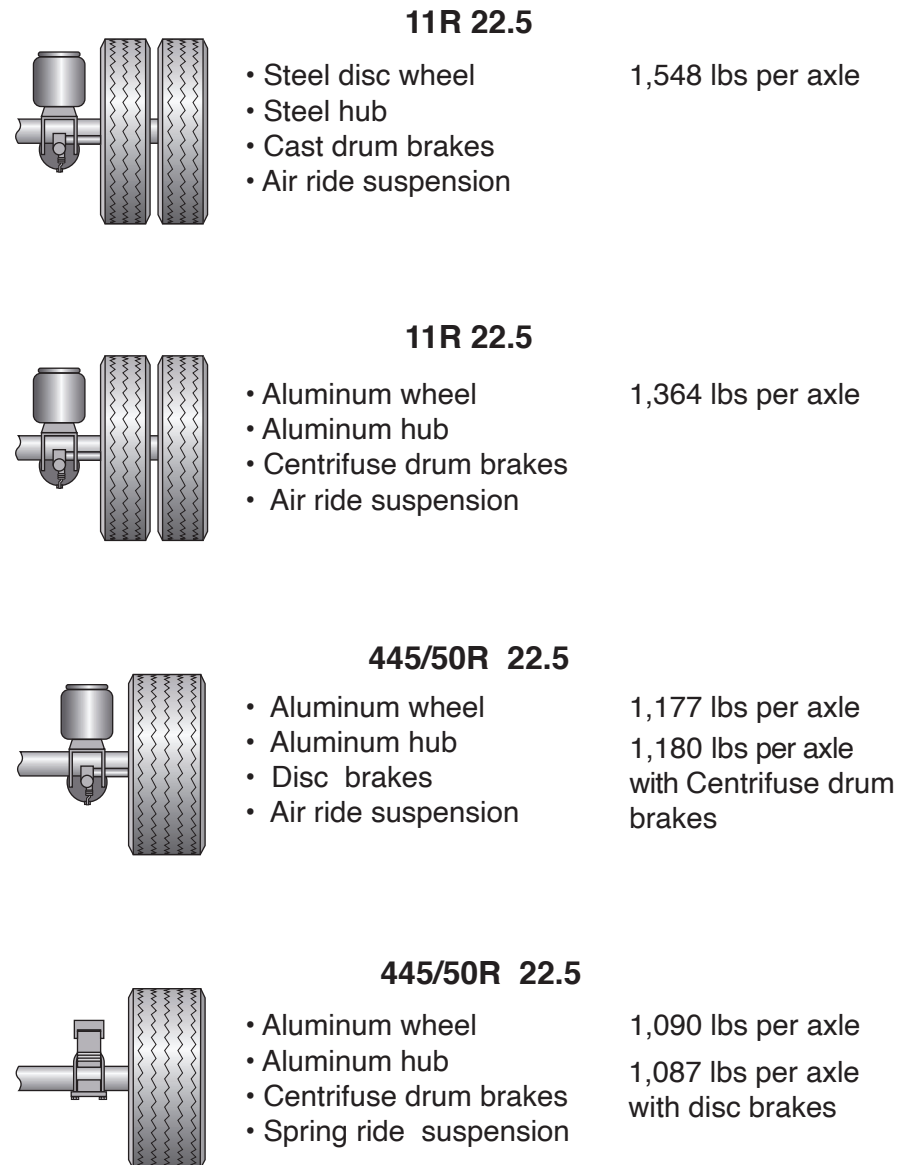
Drum

## Axle and Tire Combinations

Outside to outside tire dimension



## Axle Weights – Approximate



## Anti Lock &

The trailer anti-lock system (ABS) is an electronic system that monitors and controls wheel speed on trailers during braking. The system works with standard air brake systems.

The different versions of the system are commonly identified by the number of sensors (S) and valves (M = modular relay valve) in the system. For example:

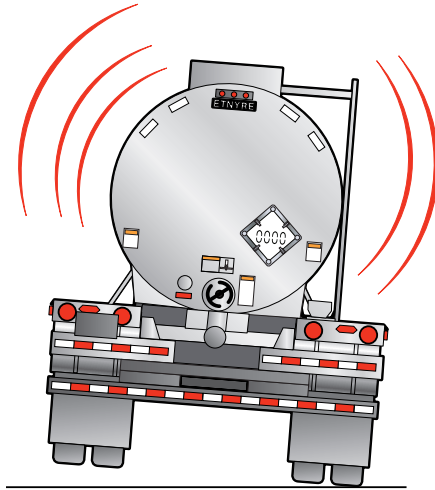
2S/1M = 2 sensors and 1 valve  
(Minimum required by FMVSS121)

2S/2M = 2 sensors and 2 valves  
(standard)

4S/2M = 4 sensors and 2 valves

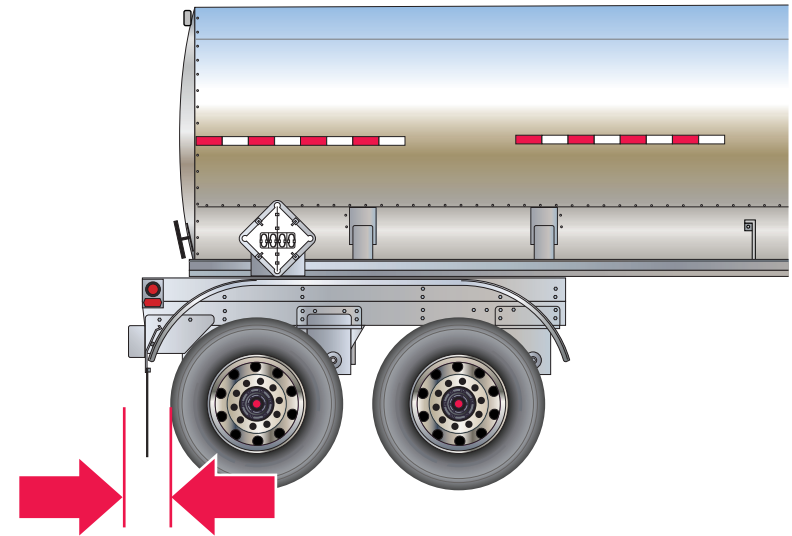
Signals from the wheel speed sensors are received and processed by the electronic control unit (ECU). As long as none of the wheels begin to lock, the ABS lets the normal air brake system control the braking. But, if a wheel starts to lock, the ECU activates the ABS relay for that wheel. The ABS relay valve can then apply and release air chamber pressure up to five times a second. This reduces wheel lock-ups and helps the driver complete a controlled stop.

## Roll Stability



Roll stability control (RSC) is an active vehicle safety system that automatically intervenes if a high rollover risk is detected while driving. If a rollover threat is occurring, the system intervenes and applies trailer brakes to reduce vehicle speed.

## Underride



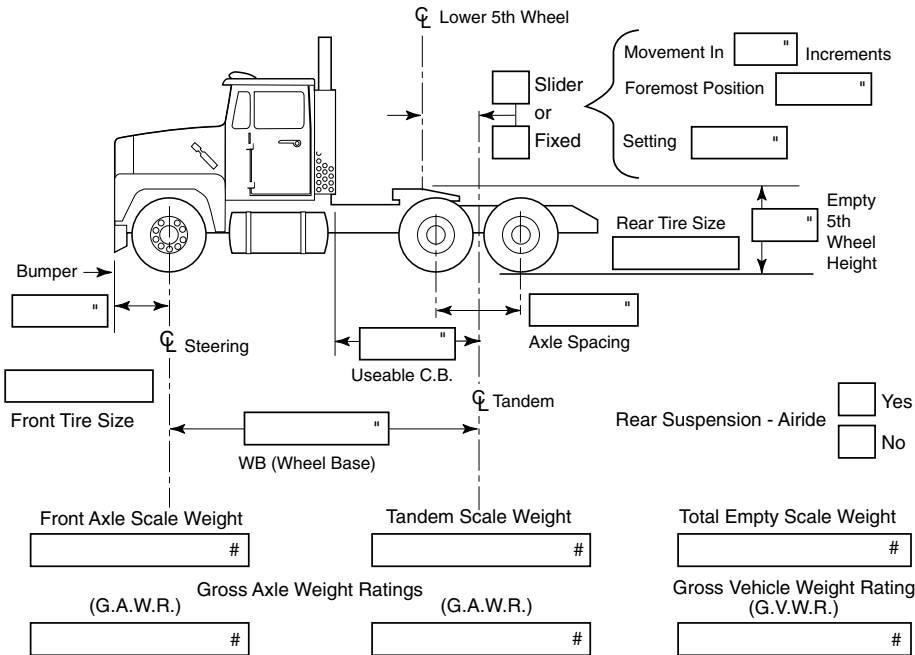
Underride required when bumper is 12" or more from rear tire.

## Tractor Weight and Dimension Data Sheet

The following information is vital in the design of your new Transport. The correct weight factors will enable us to prepare a weight analysis for your approval prior to the actual assembly of this unit.

Please Return this form with information on these items as soon as possible.

Truck Make \_\_\_\_\_ Model \_\_\_\_\_ Year \_\_\_\_\_



Lower 5th Wheel

Slider or Fixed

Movement In \_\_\_\_\_" Increments

Foremost Position \_\_\_\_\_"

Setting \_\_\_\_\_"

Rear Tire Size \_\_\_\_\_"

Empty 5th Wheel Height \_\_\_\_\_"

Bumper \_\_\_\_\_"

Steering \_\_\_\_\_"

Useable C.B. \_\_\_\_\_"

Axle Spacing \_\_\_\_\_"

Front Tire Size \_\_\_\_\_"

WB (Wheel Base) \_\_\_\_\_"

Tandem \_\_\_\_\_"

Rear Suspension - Airride ☐ Yes ☐ No

Front Axle Scale Weight \_\_\_\_\_#

Tandem Scale Weight \_\_\_\_\_#

Total Empty Scale Weight \_\_\_\_\_#

Gross Axle Weight Ratings (G.A.W.R.) \_\_\_\_\_#

Gross Vehicle Weight Rating (G.V.W.R.) \_\_\_\_\_#

Note: Tractor weights to be scale weight with driver and fuel.

States of Operation \_\_\_\_\_

Comply with Federal D.O.T. 80,000# Gross Weight Limits? ☐ Yes ☐ No

Type of Product to be Transported \_\_\_\_\_

Temperature of Product When Loaded \_\_\_\_\_

Weight Per Gallon of Product When Loaded \_\_\_\_\_#

E-306-96

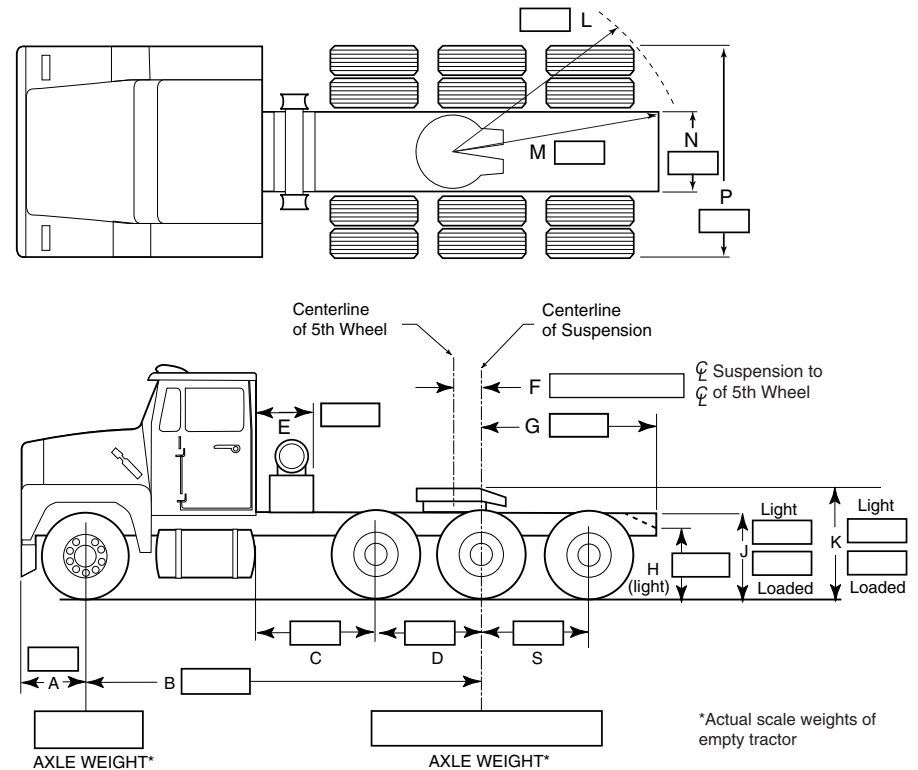
## Truck Tractor Dimensions Tri Axle

Make \_\_\_\_\_

Model \_\_\_\_\_

Tire Size \_\_\_\_\_

NOTE: "L" is farthest point from center of fifth wheel (edge of tire, fender, corner of frame, etc.)



L

M

N

P

Centerline of 5th Wheel

Centerline of Suspension

F

G

E

H (light)

J

K

A

B

C

D

S

AXLE WEIGHT\*

AXLE WEIGHT\*

\*Actual scale weights of empty tractor

All dimension boxes must be filled in.  
For weight distribution drawings, axle weights must be filled in.



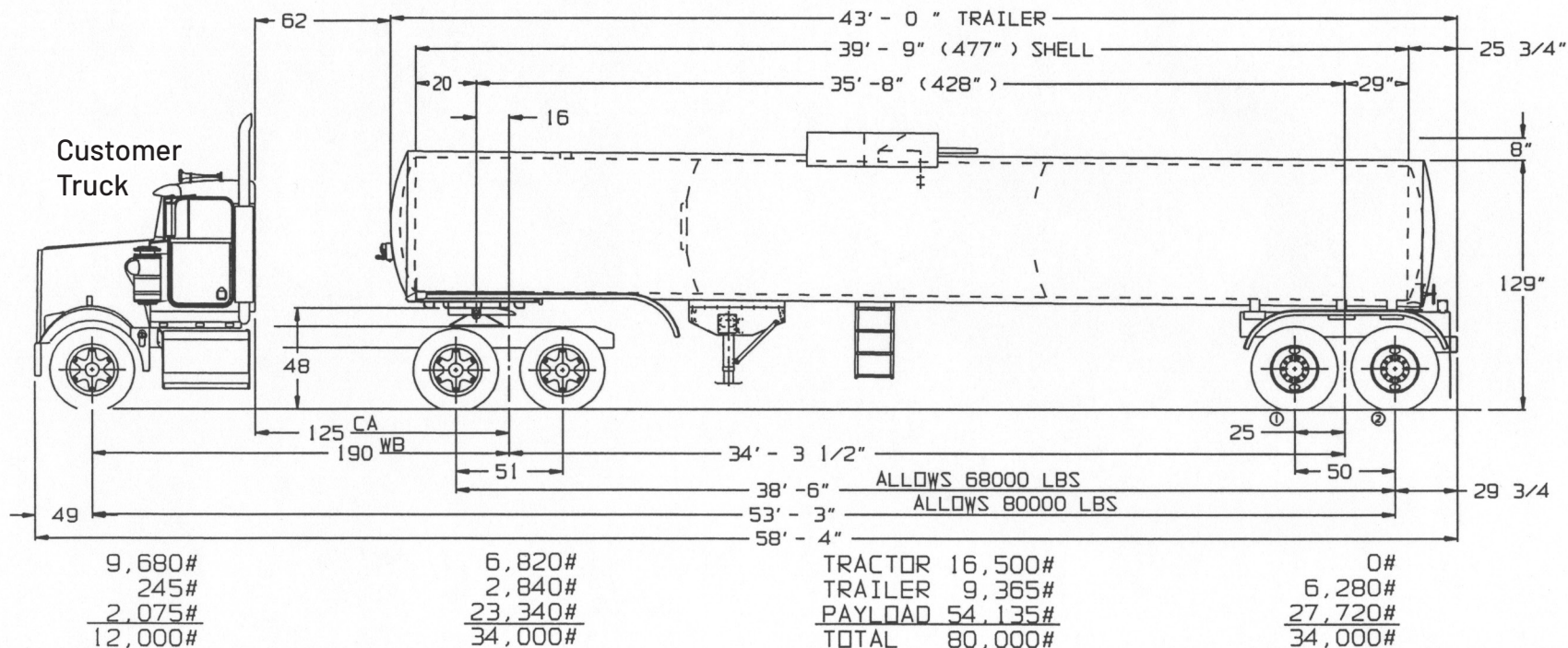
**E. D. ETNYRE & CO.**  
1333 South Daysville Road, Oregon, Illinois 61061  
Phone: 1-815-732-2116 Fax: 1-815-732-7400

E-677-01

CUSTOMER APPROVAL \_\_\_\_\_ DATE \_\_\_\_\_

ANTI-LOCK BRAKE SYSTEM		
AXLE	1	2
SENSORS	-	X
MODULATED	X	X

# SAMPLE WEIGHT ANALYSIS

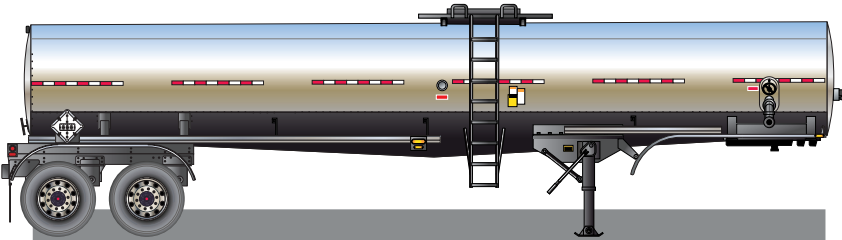
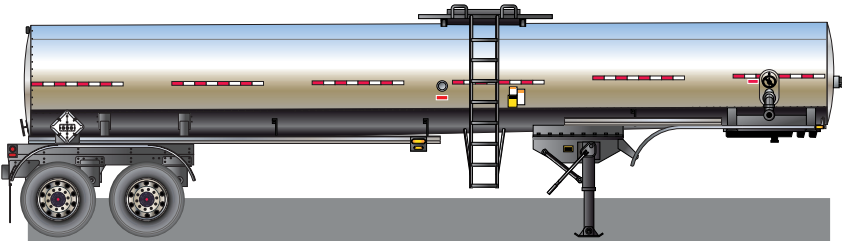
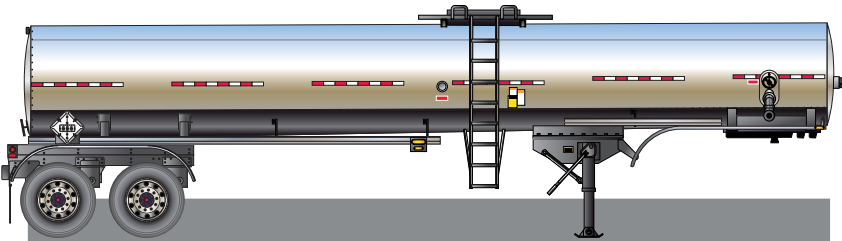
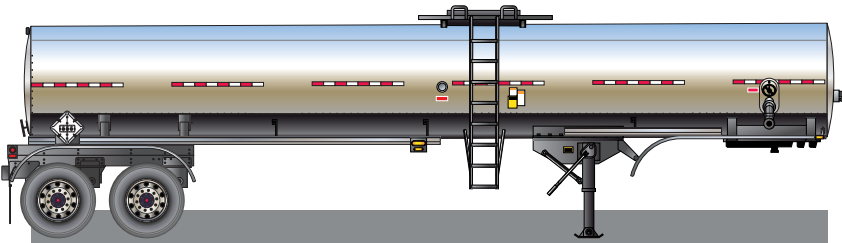


7250 GALLON (7,500 SHELL FULL)  
67 11/16" DIA. FRONT TO REAR  
68,000# GVWR  
400 °F. MAXIMUM LADING TEMP.  
DESIGNED TO 49CFR173.247

DRAWING IS FOR ILLUSTRATIVE PURPOSES ONLY.  
ALL WEIGHTS AND DIMENTIONS ARE APPROXIMATE.



E.D. ETNYRE & CO		
OREGON IL 61061		
ALL DIMENSIONS IN INCHES DO NOT SCALE DWG		
DRAWING TITLE		
ARA 7250		
INTRAAX AIR RIDE		
DWG SIZE A	DRAWING NO. AD00678	REV
SCALE NONE	DATE 1/30/13	SHEET 1 OF 1



## Steel Construction

**LWR**

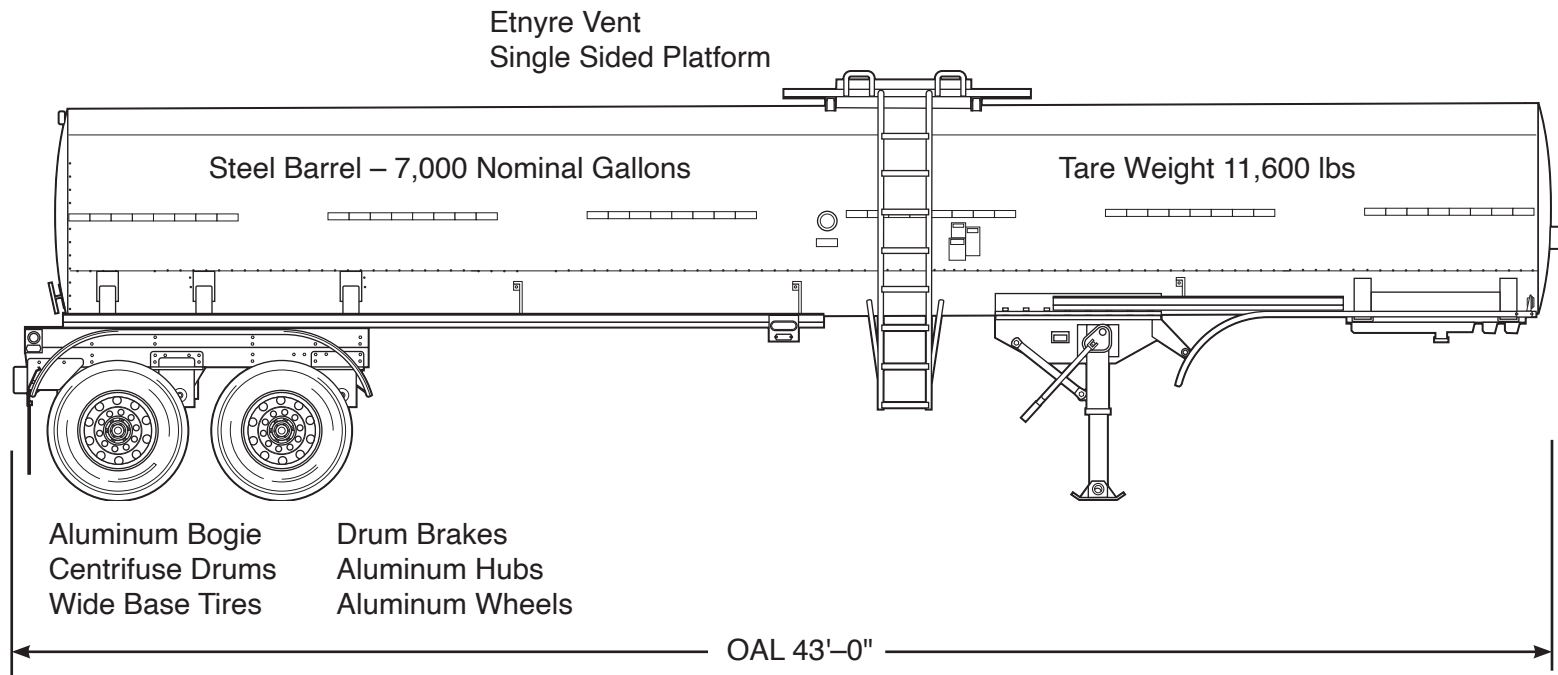
**TR-6**  
Tapered Round, 6"

**TR-10**  
Tapered Round, 10"

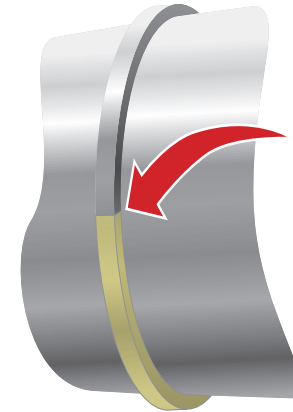
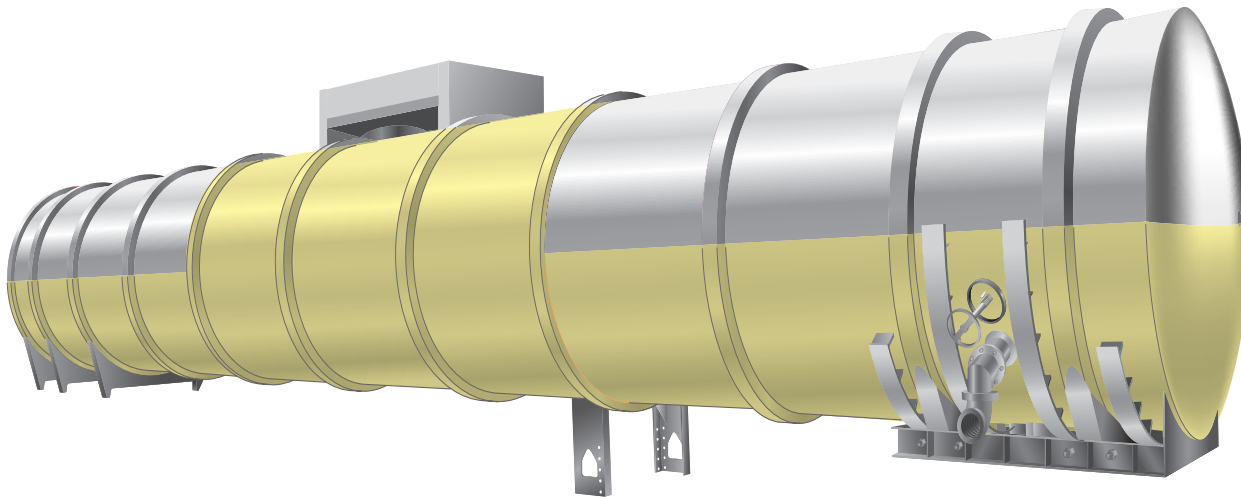
**DTR**  
Double Taper Round

## Options unique to Steel Construction

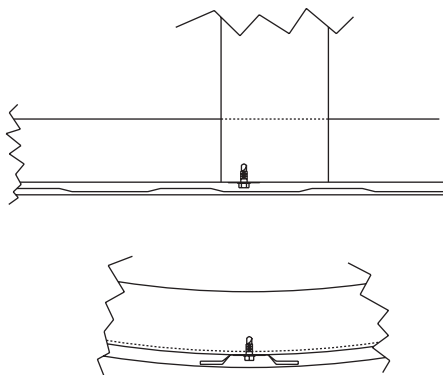
- 600° F. Construction
- 5" or 6" Insulation (3" standard)
- Heating Flues(s)
- LPG or Fuel Oil Burner(s)
- Stainless Steel Heat Box - RD valve
- Etnyre 200 GPM Hot Products Pump



## Rust Inhibitor



- Bottom 1/2 of steel tanks undercoated with high temp paint.
- Undercoating is pumped into rings to coat inside.



- Exclusive moisture drain built into bottom of jacketing to assist in removal of condensation.

## Rings



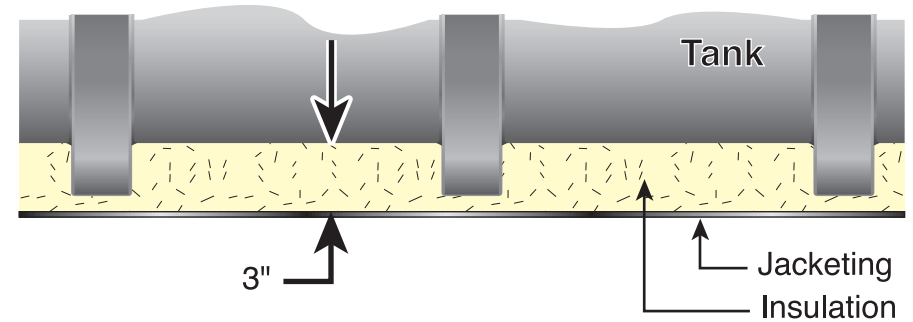
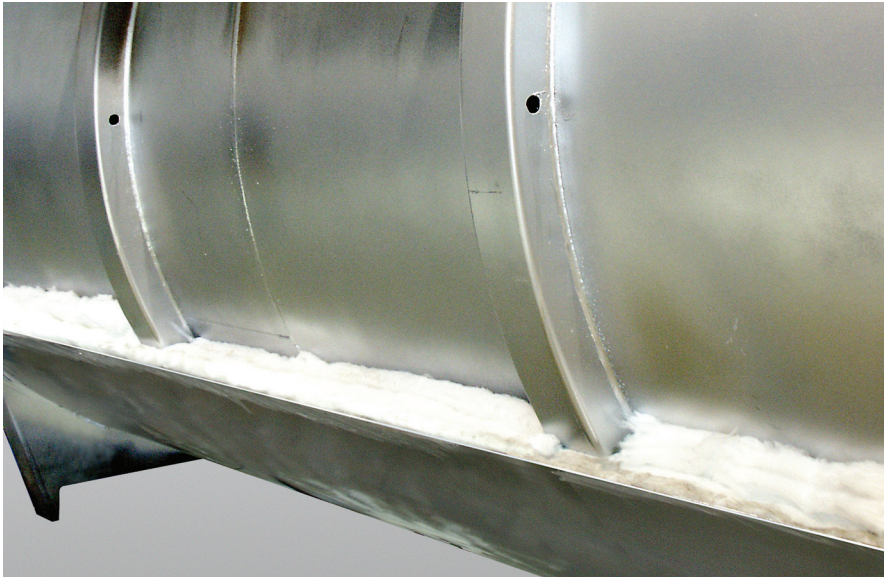
- Full 4" channel.
- Rings continuous weld.

## Head



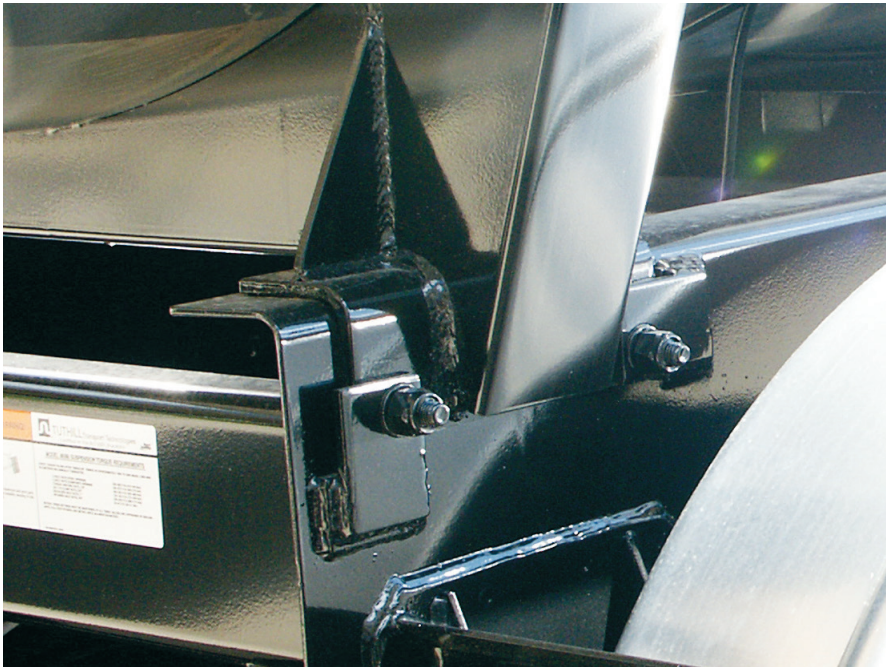
- Deep dish heads.

## Insulation



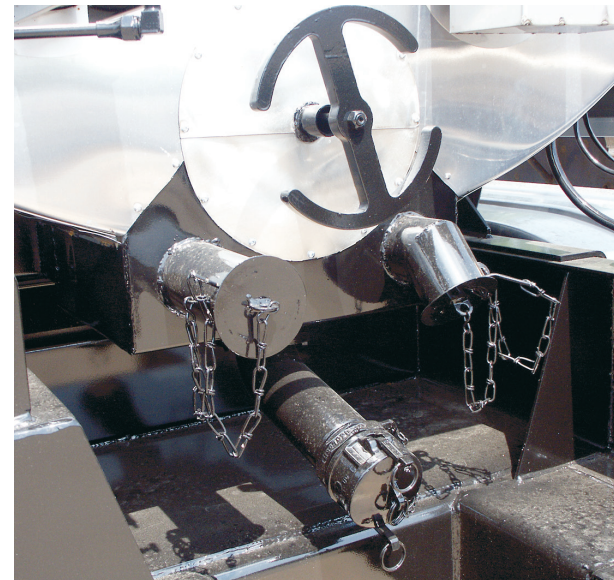
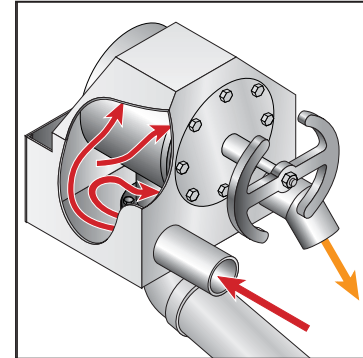
- Insulation 1# density.
- 3" standard.
- 4", 5" and 6" optional.

### Thermal Expansion Mounting



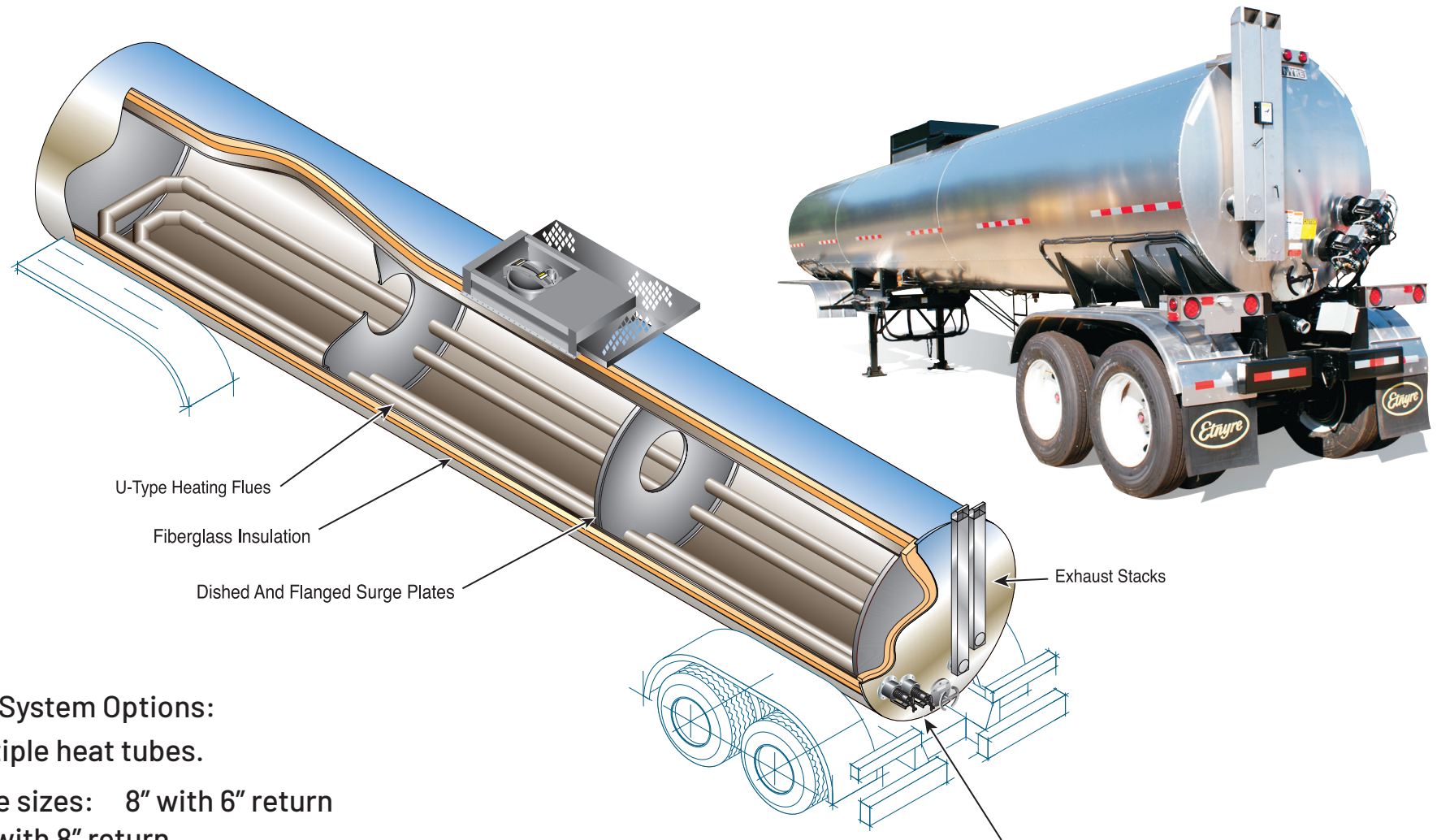
- Tank is bolted to bogie.
- Bolting system is designed to allow expansion and contraction.

### Optional Heat Box For Rear Discharge Valve



- Stainless steel construction.
- Holds heat around valve.
- Allows for safe, uniform heating of valve.

## Optional Heat System



### Heat System Options:

- Multiple heat tubes.
- Tube sizes: 8" with 6" return  
8" with 8" return  
10" with 10" return
- Stainless steel flue liners.
- Burners: Liquid Propane  
Fuel Oil

Diesel and  
LPG Burners available  
Steam Heat available













# Etnyre Bituminous Transports The Asphalt Tank



1333 South Daysville Road, Oregon, Illinois 61061  
Phone: 800-995-2116 or 815-732-2116 • Fax 815-732-7400  
Web Site: [www.etnyre.com](http://www.etnyre.com) • E Mail: [sales@etnyre.com](mailto:sales@etnyre.com)

A-312-24