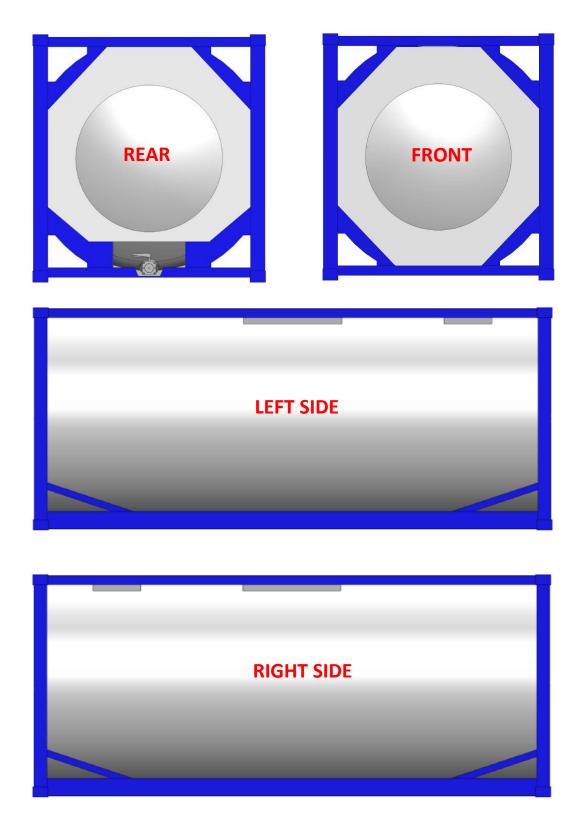


Quick Reference Guide to ISO Tanks

# Introduction to ISO Tanks: Locations





## **FRONT**



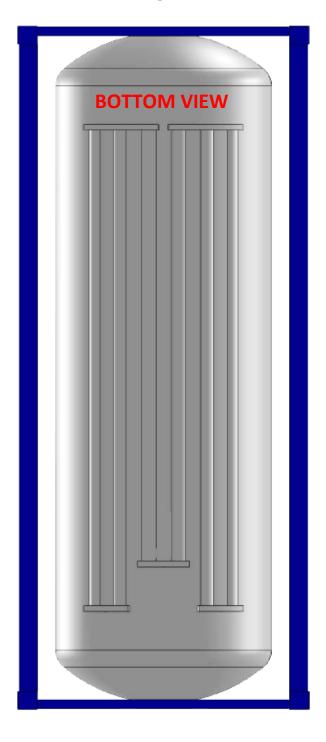
**RIGHT SIDE** 

**REAR** 



**LEFT SIDE** 

## **FRONT**



**LEFT SIDE** 

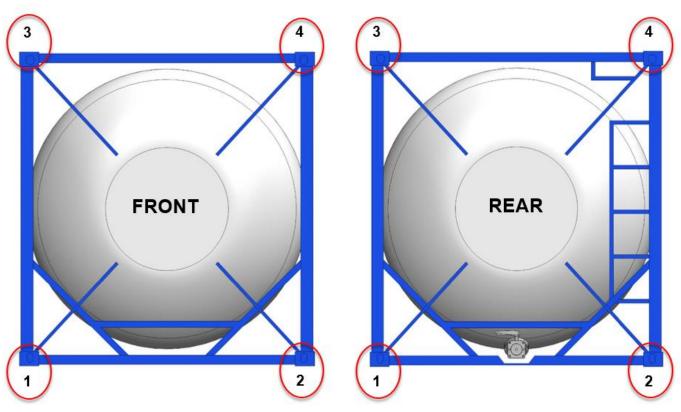
**REAR** 



**RIGHT SIDE** 

# Introduction to ISO Tanks: Frame

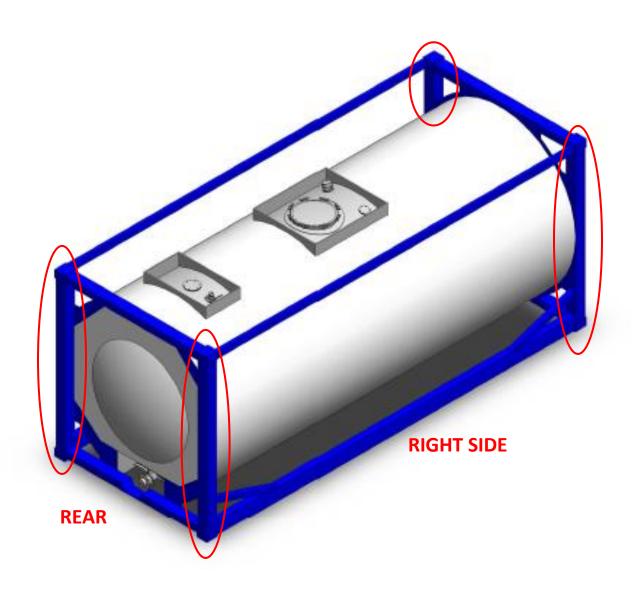
# **CORNER CASTINGS**



ltem		Description
1		BOTTOM LEFT CORNER CASTING
2		BOTTOM RIGHT CORNER CASTING
3	0/0	TOP LEFT CORNER CASTING
4		TOP RIGHT CORNER CASTING

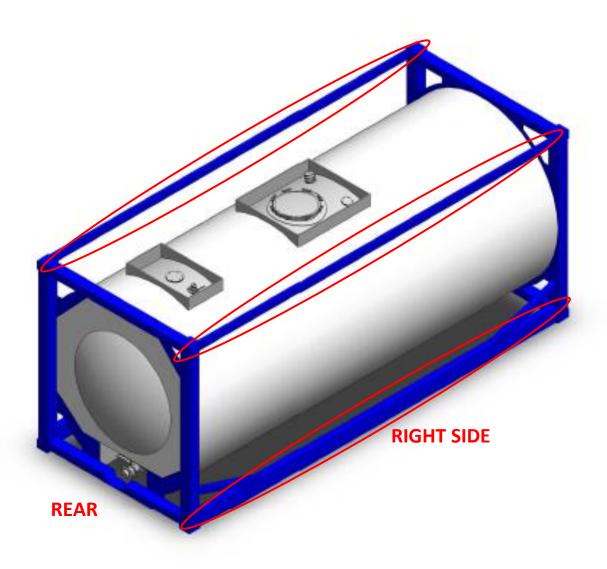


# **CORNER POST**



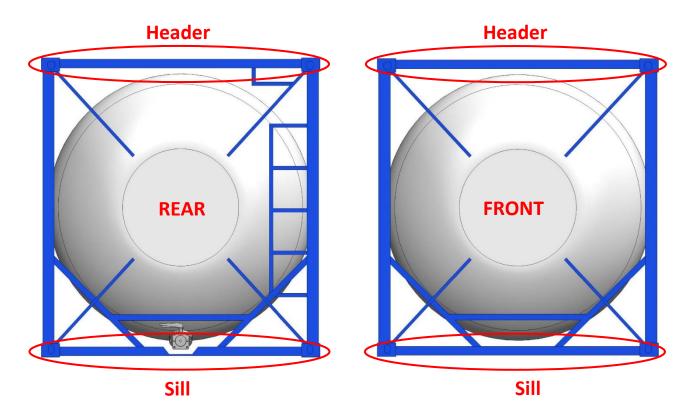


# SIDE RAILS

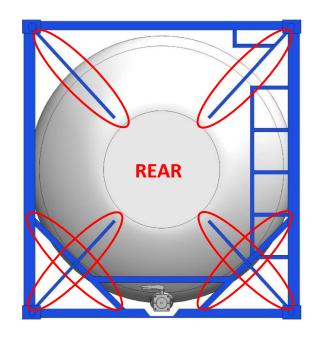


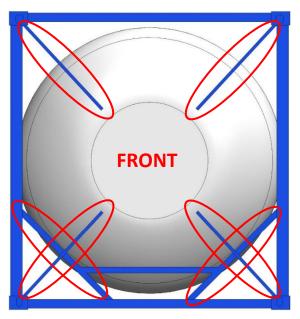


# **END RAILS**



# **DIAGONAL BRACING**

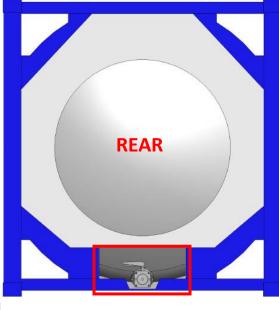






# **SPILL BOXES**





**BOTTOM DISCHARGE SPILLBOX** 

**RIGHT SIDE** 

**REAR** 



## **FRONT**



REAR

## **RIGHT SIDE**

## **Decals:**

- 1) Tank Unit #
- 2) No Foot
- 3) Danger Under Nitrogen



**LEFT SIDE** 

## **RIGHT SIDE**

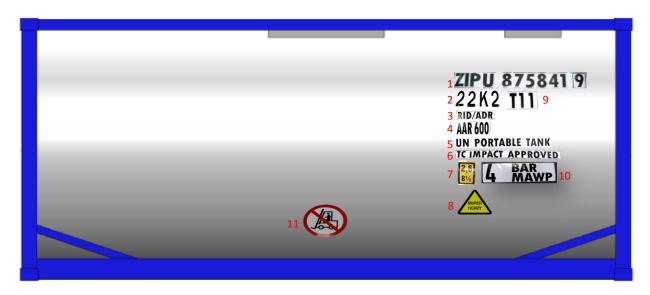


#### **Decals:**

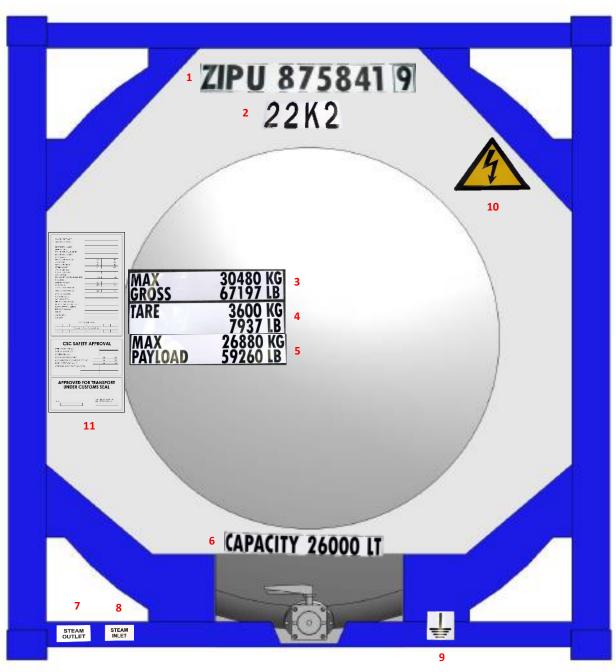
- 1) Tank Unit #
- 2) Size & Type
- 3) Rail/Road Europe Transport
- 4) American Railroad

- 5) UN Portable Tank
- 6) TC Impact Approved
- 7) Height
- 8) Super Heavy
- 9) T-Code
- 10) Working Bar Pressure
- 11) No Forklift
- 12) Emergency Remote Cable

## **LEFT SIDE**







## **REAR**

## **Decals:**

- 1) Tank Unit #
- 2) Size & Type
- 3) Max Gross
- 4) Tare Weight
- 5) Max Payload
- 6) Capacity
- 7) Steam Outlet
- 8) Steam Inlet
- 9) Ground Lug
- 10) Overhead (Lightning)

11) Data Plate





## **FRONT**

## **Decals:**

1) Tank Unit #

2) Size & Type



## Tank Unit #s:

ISO6346 International Shipping Container Standard



7

OWNER CODE

#### SERIAL NUMBER

**CHECK DIGIT** 

CATEGORY IDENTIFIER:

J: detachable freight container related equipment

R: reefer (refrigerated) containers

U: freight containers

Z: trailers and chassis

# Size & Type:

ISO6346 International Shipping Container Standard



LENGTH HEIGHT TYPE\*

2: 20' 0: 8' T0-2 Non Dangerous Liquids

4: 40' 2: 8' 6" T3-6 Dangerous Liquids

L: 45' 4: 9' T7-9 Gases

M: 48' 5: 9' 6" T11 Non-Hazardous Chemicals

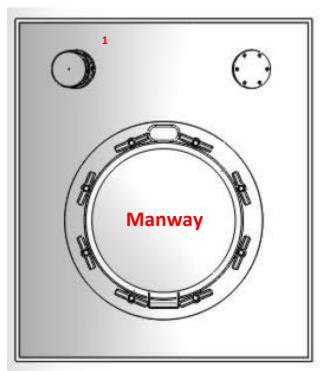
T50 LPG and Ammonia Gas

\* Please refer to Federal Register / Vol. 66, No. 120 / Thursday, June 21, 2001 / Rules and Regulations



## TANK SPILL BOX COMPONENTS

## **MANWAY SPILLBOX**

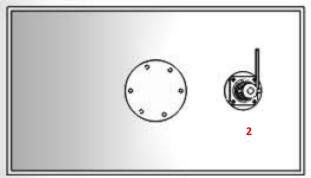


## Valves:

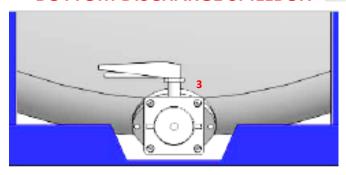
- 1) Safety Relief Valve –
- 2.5" BSP or Flanged Tank Connection
- 2) Airline Ball Valve -
- 1.5" BSP or Flanged Inlet Connection
- 3) Bottom Discharge-
- 3" Foot Valve to Tank,
- 3" Butterfly Valve to Foot Valve
- 3" BSP Spigot to Butterfly Valve

Tank Valve combinations vary from Types, Brands, and Locations.

## **REAR SPILLBOX**

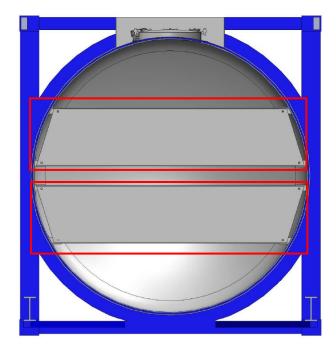


## **BOTTOM DISCHARGE SPILLBOX**





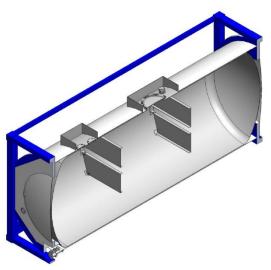
# **TANK BAFFLES**

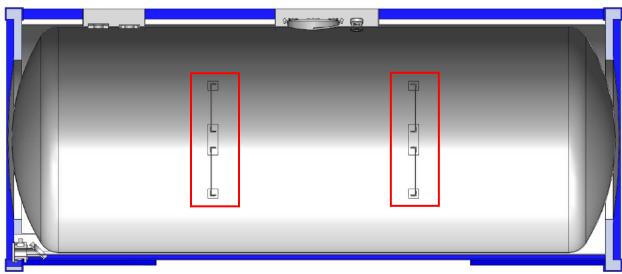


**FRONT VIEW** 

## **BAFFLES:**

Are large set of corrugated plates that are bolted to the inside of the tank horizontally. They are used to provide stability during transportation of liquids when the tank is filled between 20 to 80%.

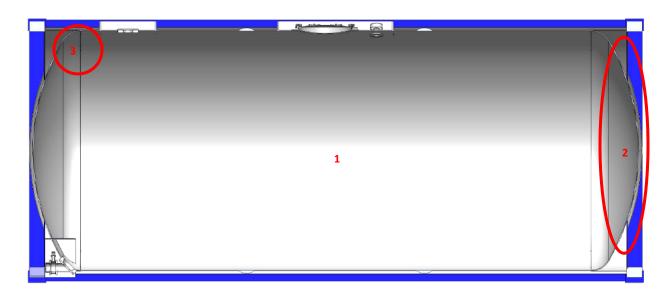




**SIDE VIEW** 

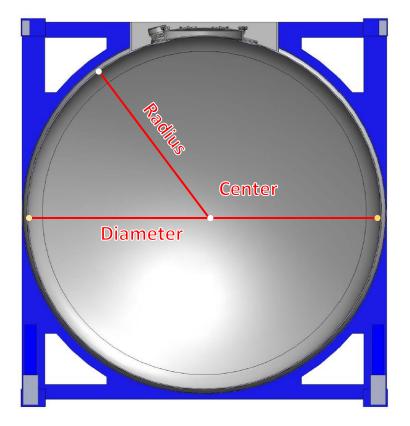


# TANK SHELL INTERIOR



## **Shell:**

- 1) Barrel (shell)
- 2) Shell End Cap (Head)
- 3) Head Knuckle



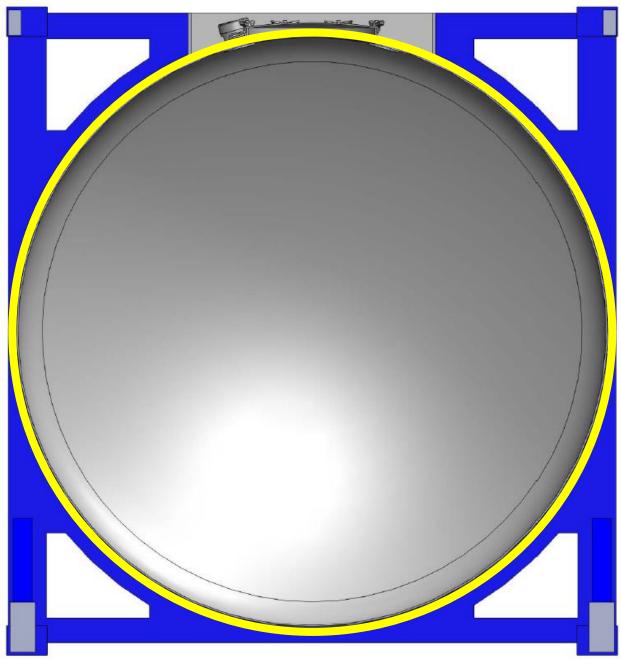
## **How to Measure the Shell:**

The radius is the distance from the center of the circle to its edge.

To find the radius of the barrel measure the interior wall to the opposite wall and divide the measurement in half.



# TANK SHELL EXTERIOR



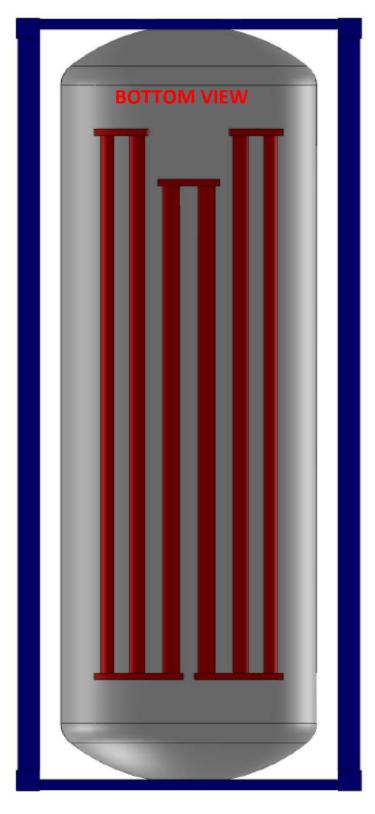
## **FRONT VIEW**

## **Shell Exterior Components:**

The Shell is wrapped in 2" **Insulation** highlighted in yellow. Cladding wraps over the insulation and is composed from either GRP, Aluminum or Stainless Steel material.



# **TANK STEAM CHANNELS**



## **Steam Channels:**

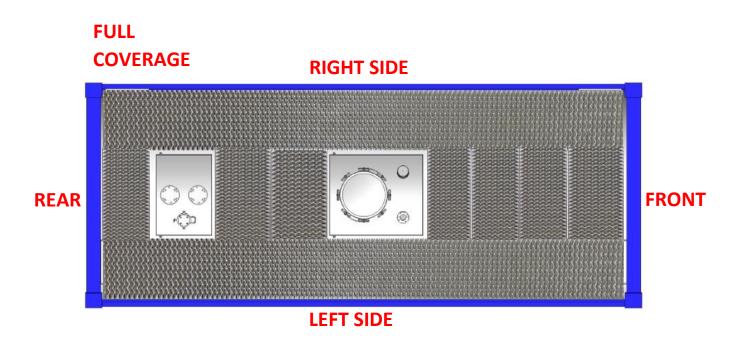
They are made up of channels welded in a continuous loop on the outside of the lower half of the tank.

The connections can be fitted with a relief valve and closed with threaded caps.

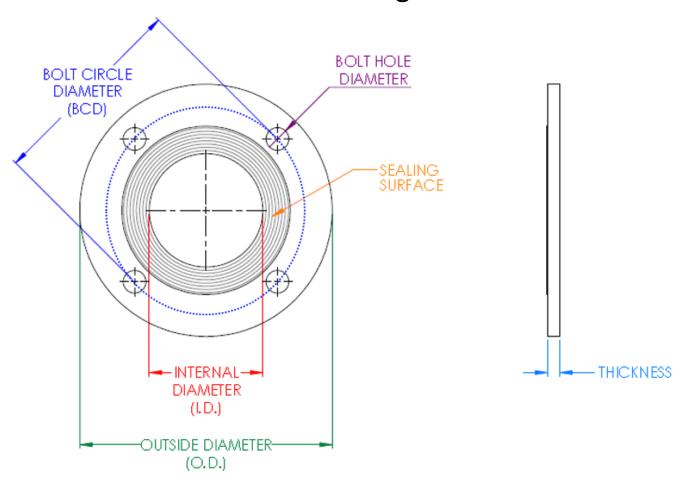


# **TANK CATWALK**

# PARTIAL COVERAGE RIGHT SIDE REAR LEFT SIDE



# How to Measure Flanges & Gaskets



The measuring principles apply to both flanges and gaskets.

\*Above is a drawing of a Flange.

The **Bolt Circle** is the measurement (diameter) of an imaginary circle passing through the centers of all the bolts in a round pattern. This is represented by the **Blue Dashed Circle** in the drawing. To measure such circle measure from the center of one bolt directly across to the center of the other bolt.

The **Outside Diameter** is the measurement of the outside of the Flange or Gasket.

The **Inside Diameter** is the measurement of the inside of the hole of a Flange or Gasket.

The **Sealing Surface** is the area of contact the gasket is placed to seal between two flange connections.

All measurements should be made across the center of the flange or gasket.

