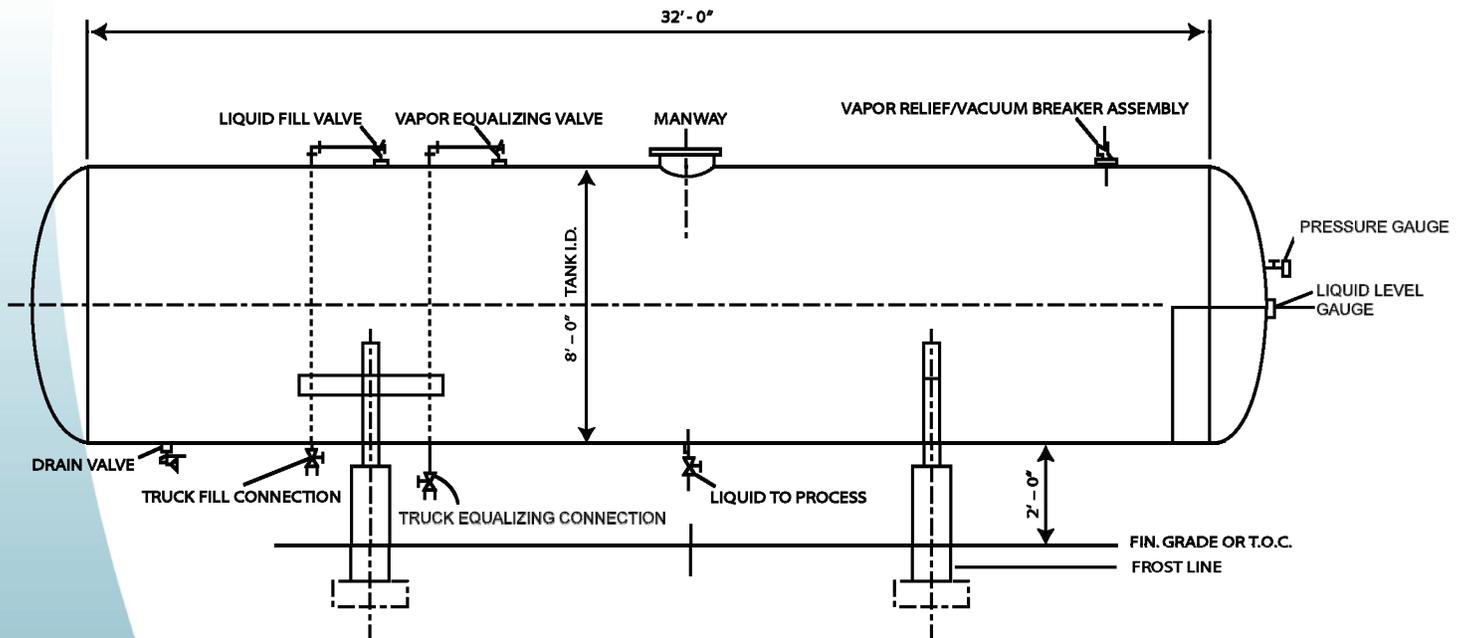


## TYPICAL HORIZONTAL AQUA AMMONIA STORAGE TANK



The 12,000 gallon aqua ammonia storage tank shown above can store approximately 85,000 lbs of 26 degree Be (29.4%) aqua ammonia. Although vented atmospheric pressure tanks are used by some aqua ammonia consumers, Airgas Specialty Products recommends the use of a minimum 25 PSIG design working pressure storage vessel build in accordance with the ASME Code for Unified Pressure Vessels (Section VIII). The vessel can be fabricated from carbon steel, aluminum or stainless steel.

A typical arrangement of tank openings which is suitable for most storage system requirements is shown in the drawing. See reverse side for additional information. It is possible to order tanks with size dimensions and schedules of openings to meet any specific user requirement.

### Functions of Storage Tank Components

#### Liquid Fill Line

The liquid fill line allows the transfer of product from the delivering cargo tank. It consists of a quick disconnect fitting and shutoff valve at the truck liquid fill connection point, fill line piping, and shutoff valve located on the top of the tank.

#### Equalizing Line

The vapor equalizing line allows equalization of pressure to occur between the vapor space of the storage tank and the vapor space of the delivering cargo tank. It consists of a quick disconnect fitting and shutoff valve at the truck vapor equalizing connection point, equalizing line piping and a shutoff valve located on the top of the tank.

**Vapor Pressure Relief/Vacuum Breaker Valve**

A combination pressure relief valve and vacuum breaker protects the storage vessel from pressures in excess of the design working pressure and from sub-atmospheric pressures.

**Liquid Level Float Gauge**

The dial on this float gauge is calibrated in percentage of total tank volume of aqua ammonia in the storage tank. A metal bulb floating on the surface of the aqua ammonia actuates an indicator pointer on the dial.

**Pressure Gauge**

The pressure gauge indicates the internal pressure in the storage tank. A pressure gauge calibrated from 30 degree vacuum to about 50 PSIG can be used if an indication of sub-atmospheric pressure is desired.

**Liquid to Process Valve**

Piping from this valve is connected to the consumer's process.

**Drain Valve**

This valve is used to remove product from the storage tank for the performance of some maintenance procedures or for the removal of the tank from service.