

# Specification: Diesel Fuel Sub base Tank (Generator Base Tank)



Tramont Corporation  
3701 N. Humboldt Blvd.  
Milwaukee, WI 53212  
Ph: 414.967.8800  
Fx: 414.967.8811  
[www.tramont.com](http://www.tramont.com)

## Specification: Diesel Fuel Sub Base Tank (Generator Base Tank)

### A. Manufacturer Qualifications

Manufacturer shall have a minimum ten years' experience in the design and construction of Underwriters Laboratories (UL) listed sub base tank systems.

### B. Sub Base Tank Construction

Sub base tank shall:

- Be Tramont or approved equivalent.
- Be constructed in accordance with Underwriters Laboratories Standard UL-142.
- Be constructed in accordance with Flammable and Combustible Liquids Code, NFPA 30; The Standard for Installation and use of Stationary Combustible Engine and Gas Turbines, NFPA 37; and The Standard for Emergency and Standby Power Systems, NFPA 110.
- Be rectangular in shape. Include reinforced steel box channel for generator support, with load rating of 5,000 lbs. per gen-set mounting hole location. Full height gussets shall be provided at gen-set mounting holes.
- Be pressure washed with an iron phosphate solution. Interior shall be coated with a solvent-based film rust preventative, providing inter-operational protection.

### C. Sub Base Tank Testing

- Primary Tank and Secondary Containment Basin shall be pressurized at 3-5 psi and leak-checked to ensure integrity of sub base weld seams per UL -142 standards.
- Closed Top Dike Primary tank sections shall be pressurized at 3-5 psi and leak-checked to ensure integrity of sub base weld seams per UL -142 standards. Containment basin shall be leak-checked by means of weld penetrant and ultraviolet light.

### D. Sub Base Tank Fittings

The sub base tank shall include the following fittings:

- Appropriately sized NPT fuel supply
- Fuel return fitting
- 2" NPT for normal vent
- NPT for emergency vent, sized as appropriate
- 2" NPT for manual fill
- NPT for level gauge, sized as appropriate
- 3/8" NPT basin drain (tank drain if single wall)
- 2" NPT for level alarm
- NPT fitting for leak detection alarm

### E. Fuel Level Gauge

The sub base tank shall include a direct-reading fuel level gauge.

# Specification: Diesel Fuel Sub base Tank (Generator Base Tank)



Tramont Corporation  
3701 N. Humboldt Blvd.  
Milwaukee, WI 53212  
Ph: 414.967.8800  
Fx: 414.967.8811  
[www.tramont.com](http://www.tramont.com)

## F. Fuel Containment Basin

Sub base tank shall include a welded steel containment basin, sized at a minimum of 110% of the tank capacity to prevent escape of fuel into the environment in the event of a tank rupture.

## G. Leak Detection System

A fuel containment basin leak detector switch shall be provided.

## H. Sub Base Tank Venting

**Normal venting:** Normal venting shall be sized at 2" NPT through 10,000 gallons in accordance with The American Petroleum Institute Standard No. 2000, for venting atmospheric and low pressure storage tanks. Tank shall be provided with atmospheric (normal) vent cap with screen.

**Emergency venting:** The emergency vent NPT fitting shall be sized to accommodate the total capacity of both normal and emergency vents, and is not less than that derived from NFPA 30, Table 2-8, based on wetted surface area of the tank (calculated based on 100% of primary tank). A zinc-plated emergency pressure relief vent cap shall be furnished. The vent shall be spring-pressure operated. Opening pressure shall be .5 psig; full opening pressure shall be 2.5 psig. Limits shall be marked on top of each vent. A second emergency vent fitting shall be provided for the secondary containment portion of the tank if applicable.