

## 1. IMPORTANT INFORMATION

- 1.1. Proper installation of each tank is essential:
  - To ensure the safety of all the individuals involved in the installation.
  - To prevent tank damage and/or failure, which could lead to product loss and environmental contamination.
  - To validate the tank warranty.
- 1.2. In addition to these instructions, the installation must comply with NFPA (30, 30A, and 31), and all applicable Federal, State, Local or Provincial, construction, safety and environmental codes and regulations.
- 1.3. Any variances or deviations which are in direct conflict with these published installation instructions must be approved in writing prior to the installation by Containment Solutions.
- 1.4. The presence of any Containment Solutions representative at the job site does not relieve the installer of responsibility to follow these instructions.

## 2. TANK TESTING

- 2.1. Handle tank carefully. Use cables or chains of adequate length (not more than 90 degrees between the chains) attached to lifting lugs provided. Oversize hooks will tear the lift lugs--use shackles, if necessary.

### **⚠ WARNING**

**To avoid damage to the tank, do not apply air pressure to the interstitial space between the walls of a double wall tank without pressure in the primary tank. Never apply air pressure to the interstitial space that is higher than the air pressure in the primary tank**

- 2.2. For compliance with model fire and building codes, the tank must be tested in the field before filling or use. The inner tank should be pressurized with air to a maximum of 3 psig. If the tank is a double-wall tank, the inner tank should be pressurized to a maximum of 3 psig, then the outer tank should be pressurized to a maximum of 2psig. The test pressure should be held for 1 hour. Use a gauge with a 0 to 15 psig dial span. Set pressure relief valve in test air supply line at 3 psig. While the tank is holding pressure, brush a water and soap solution on the weld seams.
- 2.3. Do not leave pressurized tank unattended.
- 2.4. Do not stand in front of tank heads or fittings when pressurizing tank.
- 2.5. Be sure all drain plugs are secure by applying suitable thread sealant or pipe dope around plugs.
- 2.6. Model fire codes require the installation of emergency and normal vents on the top of the tank. Consult with the local Authority Having Jurisdiction (AHJ) and the fire codes for the proper installation.

### **⚠ WARNING**

**Do not cut or weld on any tank that contains flammable or combustible liquids, or vapors. Fire or an explosion may result**



- 2.7. All installation of aboveground tanks must be approved and inspected by the local AHJ. Contact the local AHJ for the required permits.
- 2.8. If a facility has an aboveground oil storage tank that has a capacity greater than 660 gallons, or if the facility has aboveground oil storage tanks with a total capacity greater than 1,320 gallons, the facility must have a Spill Prevention Control and Countermeasure (SPCC) plan. This plan is required by the Code of Federal Regulations, Section 40 Part 112. Consult 40 CFR 112 for the required regulations.

## 3. TANK PLACEMENT AND ANCHORING

- 3.1. The tank is designed for lifting and positioning with the use of a fork lift or crane. If a crane is used, the straps must be positioned underneath the bottom of the system's cabinet.
- 3.2. Local codes may require the system to be protected by 4" x 7" steel, concrete-filled barrier poles. The barrier poles should be installed around the tank. The poles should be installed on center at 18" - 24" (or according to local codes). The barrier poles must be buried in concrete 3' deep with 4' above the ground level. The poles must be painted safety yellow in color.
- 3.3. NOTE: Poles must not impede the normal operation of the system access door which, when completely open, will rest parallel with the side of the system cabinet.
- 3.4. Ground the tank according to local code and National electrical code requirements.
- 3.5. The tank is designed to be anchored to a concrete foundation with ¾" concrete anchor bolts. If the tank will be installed in a seismic zone, consult the factory for the specific design of the concrete pad and anchoring system.

## 4. AIR LINE CONNECTION

- 4.1. Use ½" galvanized steel air lines to connect the system to the nearest compressed air source.
- 4.2. The ½" air line is connected to the ½" couple located on the left hand side of the system enclosure cabinet. The line is to be anchored securely in accordance with local plumbing codes.
- 4.3. Install a ½" Ball Valve within 3' of the of the discharge area of the oil drain caddie.
- 4.4. All fire wall penetrations should be made in accordance with local codes. Seal all voids with a UL approved fire wall penetration sealant.
- 4.5. An in-line water filter or air dryer must be installed between the air source and the ball valve to prevent water from clogging the diaphragm pump and shut-off valve.
- 4.6. Coat all iron pipe fittings and joints with a rust resistive primer.
- 4.7. Check and adjust the air/filter regulator (included with the system) to 50 psig. This pressure setting is the optimum setting for the system. Maximum pressure limit is 100 psig.

## 5. SUCTION LINE CONNECTION

- 5.1. The system comes with a ¾" x 8' UL listed hardwall suction hose and a dry-break quick connect coupler. The female coupler remains attached to the suction hose, and the male coupler is attached to the pipe connection on the top of the oil collection caddie.
- 5.2. At tank Caddie Discharge: If caddie will be emptied at the tank, connect the ¾" male swivel end of the suction hose to the coupler that is located on the left hand side of the system's cabinet.

- 5.2.1. A (Y) Screen Filter (supplied with the system) shall be attached in line, before the hose.
- 5.2.2. Mount the hose hanging bracket (provided) on the system's cabinet, at 18" from the top of the primary tank. Do not penetrate the system's cabinet anywhere below the level of the primary tank.
- 5.3. Remote Caddie Discharge: A ¾" galvanized pipe for suction line may be installed parallel with the air line, if a remote caddie discharge location is desired. A maximum 40 feet of horizontal pipe is recommended to provide optimum pumping rate. Actual pumping rate may vary due to distance and size of piping.
  - 5.3.1. The 8' suction hose must be installed at the end of the piping, and within 3' of the air line on/off valve location. The line must be anchored securely in accordance with local plumbing codes.
  - 5.3.2. A (Y) Screen Filter (supplied with the system) shall be attached in line, before the hose.
  - 5.3.3. The suction hose hanging bracket (provided) is permanently mounted at a workable point near the site where the hardwall suction hose connects to the galvanized suction line.
  - 5.3.4. All wall penetrations must be sealed according to building standards and/or local codes.
  - 5.3.5. Coat all iron pipe fittings and joints with a rust resistive primer.

## 6. WORKING VENT INSTALLATION

- 6.1. A 2" galvanized steel pipe shall be extended from the primary tank through the back side of the secondary containment cabinet enclosure. It should extend vertically to a point 18" above the roof line, or per local code.
  - 6.1.1. Install the working vent mushroom cap (provided) at the top of the vent riser pipe.
  - 6.1.2. All wall and roof penetrations must be sealed according to building standards and or local codes.

## 7. MAINTENANCE

- 7.1. Aboveground UL 142 tanks require basic maintenance during the service life. The tank vessel is subject to accidental damage, vandalism, and atmospheric degradation of the coating.
- 7.2. Failure to adhere to and provide proof of proper maintenance may void your warranty.
- 7.3. For procedures on how to check for the presence of water and removal of water, refer to API Recommended Practice 1621 and API Standard 2610.
- 7.4. The tank operator should perform weekly visual inspections to identify areas of damage to the vessel or the coating itself. Such damage should be repaired.

## 8. ADDITIONAL REQUIREMENTS:

- 8.1. This tank must be installed in accordance with NFPA 30, NFPA 30A, Uniform Fire Code or International Fire Code.
- 8.2. The product stored within the tank is compatible with steel and meets ASTM standards. Any fluid which does not meet ASTM standards must be compatible with steel and approved for storage in writing by CSI. Storing any fluid in the tank which is either not compatible with steel or not approved for storage by CSI will void the tank warranty.

