

#6000 Gallon Emulsion Storage Tank

SPECIFICATIONS

- #6,000 gallon tank manufactured of 1/4" carbon steel oriented to be mounted vertically.
- Tank to be insulated with 3" thick foil backed foam, and then covered with aluminum sheeting for weather protection. Bottom of tank to be flat with 1 inch slope away from the 24" manhole for easy clean out. Tank shall include a 24" insulated manway in the side of the tank at the bottom to provide access into the tank if necessary. Manway shall be double punched and secured with Grade 8 hardware.
- Tank is attached to a steel support stand, which is included, that places the tank loading valves at the proper height (8' for truck mounted unit) above the concrete pad for gravity flow loading of the equipment. Tank is to have 9 legs for the stand.
- Access ladder which gives easy access to the top of the tank. Top of tank is fitted with an inspection door with hasp that can be secured using a padlock. Ladder must be caged for safety and tank will have safety railing around the top.
- Tank to be equipped with a quantity of six (6)1000 watt 240 volt heater blankets, which will be controlled by an adjustable thermostat that is accessible from ground level. The number of blankets is dependent upon size of tank. All electrical components are compatible for indoor or outdoor service. Tank shall have a removable panel that is insulated to allow easy access to service the heater blankets.
- Thermostat is to be a digital model with displays for present tank temperature and desired tank temperature. Temperature adjustments shall be made without having to open any enclosures. Heating activation shall be directed through mercury contactors rated for millions of cycles. The use of definite purpose contactors to control heating is not acceptable.
- Thermostat will get temperature readings from tank via a dedicated thermocouple mounted in a dry well inside the tank.
- Tank shall feature a 20A GFCI rated convenience outlet mounted onto the control panel.
- Tank is equipped with two 3" ball valves with quick couplers for loading and unloading the tank. These valves are to be wrapped with 240 volt heat tape and then insulated to aid in cold weather operations. Insulation on the valves shall be silicon design and made to fit the valves. They will be held on by buckles and are easily removable for servicing the valves if necessary. Valve insulation using wool type insulation, covered with aluminum sheeting and held on with hose clamps will not be accepted. Valves also have provision to accept a padlock for added security. Shall also include a 3" insulated ball valve in the bottom of the tank on the low side of the slope to aid in cleanout.
- Tank to include a 8' long 3" diameter heavy duty rubber loader hose fitted on one end with a quick coupler which mates to the loading /un-loading valves, and the other end to be fitted with a steel 90 degree elbow fitting.
- Tank includes a top mounted mechanical paddle type agitation system, which is automatically controlled by a programmable agitation timer, which is included in this

proposal. Timer will be pre-programmed at the factory. Manual activation of the agitator shall be done without having to open electrical panel. The agitator speed shall not exceed 6 rpms to avoid whipping the emulsion and causing separation. Agitator drive shall be greasable from ground level. No tank that personnel have to climb to the top of the tank to grease will be accepted.

- Tank includes a material quantity gauge that is easily viewed from ground level. Graduations on tank shall be marked in 100 gallon increments.
- Tank and its components to have a one year warranty; excluding the concrete pad, incoming electrical service installation, and components which are supplied by independent contractors hired by the user agency (customer). Damages as a result of lightning strikes are not covered under warranty.
- Seller to provide a factory trained representative to assist in the installation and final operational preparations to ready the tank for operation. This representative will also provide complete operation and maintenance training to the customer.
- Foundation preparation, installation and wiring of the asphalt emulsion storage tank are not included and would be the responsibility of the customer. Any requirements necessary to meet ADEM or EPA regulations would also be the responsibility of the customer.

ITEMS TO BE SUPPLIED BY THE CUSTOMER FOR TANK INSTALLATION

- **Concrete pad as per the following specifications:**
Pad to be 12' square, 10" thick concrete, reinforced with 1/2" rebar on 1' centers. Four lag plates are to be installed in the concrete pad at the time of the pouring and shall be 1/2" thick steel and 14 inches square. A complete foundation description, including diagram is included on an attached page.
- **Mobile crane or other lifting device** This lifting device will be needed to lift the tank and its stand off of the delivery trailer, move the tank into position over the pre-prepared concrete mounting pad, and finally lower the tank and stand into position on that pad.
- **A welding machine and welder** to weld the tank stand mounting legs to the weld flanges which have been installed into the concrete stand.
- **An electrical service line or cable** to be installed and run to the tank pad site capable of delivering 100 amps at 240 volts. This service line must meet all local codes and standards. This service line will be connected to the tank, at the appropriate time, by a qualified electrician.

TANK OPTIONS

- Probe Heating Package – Features three 4kW ceramic heating probes in lieu of heating blankets. Heating probes are to be housed in a dry well for easy servicing. 3” fiberglass insulation in lieu of Styrofoam.
- 200 GPM Pump Package – A 200 GPM gear type pump will be mounted below the tank inside the stand. Pump shall be fed from 3” valve on bottom of tank. All piping leading to and including the pump shall be heated using 240V heat tape and insulated with silicone blankets that can be removed for service. Pump shall be powered by and controlled from the tank electrical cabinet. Requires 200A electrical service.
- Northern Heating Package – Adds two additional 1000W heating blankets to the tank. For use in colder climates.
- Lightning Protection Package – Protects against incoming voltage surges & spikes. Features a surge suppressor to guard against spikes in supply voltage. Includes lightning arrester to protect control panel components. Also includes a solid copper lightning rod attached to cage on top of tank and braided copper grounding wire from lightning rod to ground rod. Damages as a result of lightning strikes are not covered under warranty.
- Level Alarm Package – Includes sensors that trigger an audible alarm when the tank reaches full capacity or is empty. Alarm is housed inside the control panel and can be manually deactivated.
- UL Panel – Tank control panel includes certification from Underwriter’s Laboratories.
- NEMA4 Panel – Tank control panel is housed in a NEMA4 enclosure.