



MISSOURI DEPARTMENT OF TRANSPORTATION

PAINT TANK, BULK BEAD CAPACITY SPECIFICATIONS.

PAINT TANK

Anything that comes in contact with paint, tanks, valves, fittings, piping, etc. shall be stainless steel.

There are to be two 800-gallon tanks, **or** two 400-gallon and one 800-gallon tank, depending on the option taken. See options on Pricing Sheet(s).

Paint tanks to be baffled to prevent the splashing of paint. The tanks shall be designed for accessibility and easy cleaning. Tank(s) shall be constructed of no less than 8 gauge stainless steel and shall have bracing and gussets to strengthen and prevent flexing. All bracing shall be external. The bottom of each compartment shall be constructed of no less than 3/16" stainless steel plate sloped to a center mounted discharge pipe, so that the compartments may be pumped completely empty. Ball valves must be provided at the bottom of the tank and at the quick couplers to shut off each paint tank. The valves on the bottom of the tank shall be easily shut off from the driver's side without climbing under the truck. Each tank shall have a baffle plate (described below) over the discharge pipe to deflect the flow of paint being loaded into the tank.

Baffle plate to be stainless steel, approximately 12" x 12" x 12", with a solid top, with 1" mesh sides, and easily removable for cleaning.

Each paint compartment shall be equipped with a slow speed stainless steel paint agitator. Agitators shall be top supported with Teflon bushings. The agitators may be driven by either hydraulic or air. If hydraulics are used, a complete hydraulic system with pumps, reservoir, filters and valves shall be provided for operation of unit. Power source for the hydraulic system will be from the truck engine crankshaft via a hydraulic pump with an electric clutch. Vendor may provide option for transmission hookup and subject to MoDOT review.

Valves and plumbing shall be provided so that any compartment may be used for white or yellow paint, or all compartments may be used for either white or yellow paint.

The top of each paint tank shall have a fixed brace across the front to back width of the tank wide enough to mount agitators and vents. Each tank shall have two (2) removable lids on both sides of the agitator support. Lids are to be minimum 1/4" stainless steel with one (1) lifting loop at center. The tanks shall have 1/2" stainless steel studs which will secure the lids utilizing stainless steel nuts and washers. The lids shall have 9/16" holes to accept the 1/2" studs and a tight gasket seal to prevent leakage. Each tank shall have one (1) minimum 10" quick release connection inspection port on the top on the curbside.



A minimum ½” vent tube or breather with shut off valve shall be provided for each color and vent assembly shall be raised 6” above top of tank.

All valves shall have the same on-off positions. They shall be Teflon seated stainless steel full flow ball-type valves and shall be color-coded for identification.

The tank plumbing shall have a two-inch stainless steel plumbing assembly for each compartment. Paint will be transferred from the right or left side. Compatible, quick-connect valve hose connections that will facilitate the transfer of the paint in a minimum amount of time from either side of truck will be furnished. All valves should have the same on-off positions and all valves shall be full flow valves. All pipe connections must be threaded. NO WELDED JOINTS.

The front of the paint tank(s) should be 17” from the back of cab.

BULK BEAD CAPACITY

Each truck shall be able to handle the transportation of glass beads in bulk form based on the option selected. The options are described as:

Option 4: 14,000 pound bead tank. The bulk bead tank shall be approximately 80” long x 96” wide x 60” high for storage of approximately 14,000 lbs. of glass beads.

Option 5: 8,000 pound bead tank. The bulk bead tank shall be approximately 42” long x 96” wide x 60” high for storage of approximately 8,000 lbs of glass beads.

If bead tanks are used the following requirements shall be met:

Bead tank shall extend across the width of the truck platform so as to equalize the load as the compartment is emptied. The fill opening shall be 18” x 48” with a 2” raised lip around the entire opening to prevent water from entering the tank. The lid shall be hinged to open forward and should lay flat when open. The lid should have a positive latch system. The lid shall extend down and overlap the outside of the fill opening by at least 1” to prevent water from entering the tank. The lid shall have a high quality air/water tight rubber seal. The tank shall have a ¾” vent with ball valve that eliminates all possibility of water entering when raining.

The tank shall be constructed of no less than 11 gauge aluminum or steel and shall have bracing and gussets to strengthen and prevent flexing. All bracing shall be external. Tank(s) shall be mounted on 4 or more rubber bushings to prevent tank flexing and cracking. The top of the tank shall have a skid resistant diamond plate surface. The

bottom of the compartment shall be sloped from all sides to a center mounted 2’ in length 2” diameter horizontal perforated discharge pipe. The steel discharge pipe shall have three rows of ¼” holes along it’s length, the holes will be spaced 1” apart with one row



along the top of the pipe and one row along each side. The steel discharge pipe shall also extend from the bottom of the tank to each side of the truck to provide easy access and will have valves and 2" male quick couplers on both ends.

The Missouri Department of Transportation Commission reserves the right to waive technicalities and to reject any or all bids and no bid is final until formally accepted by the Commission.