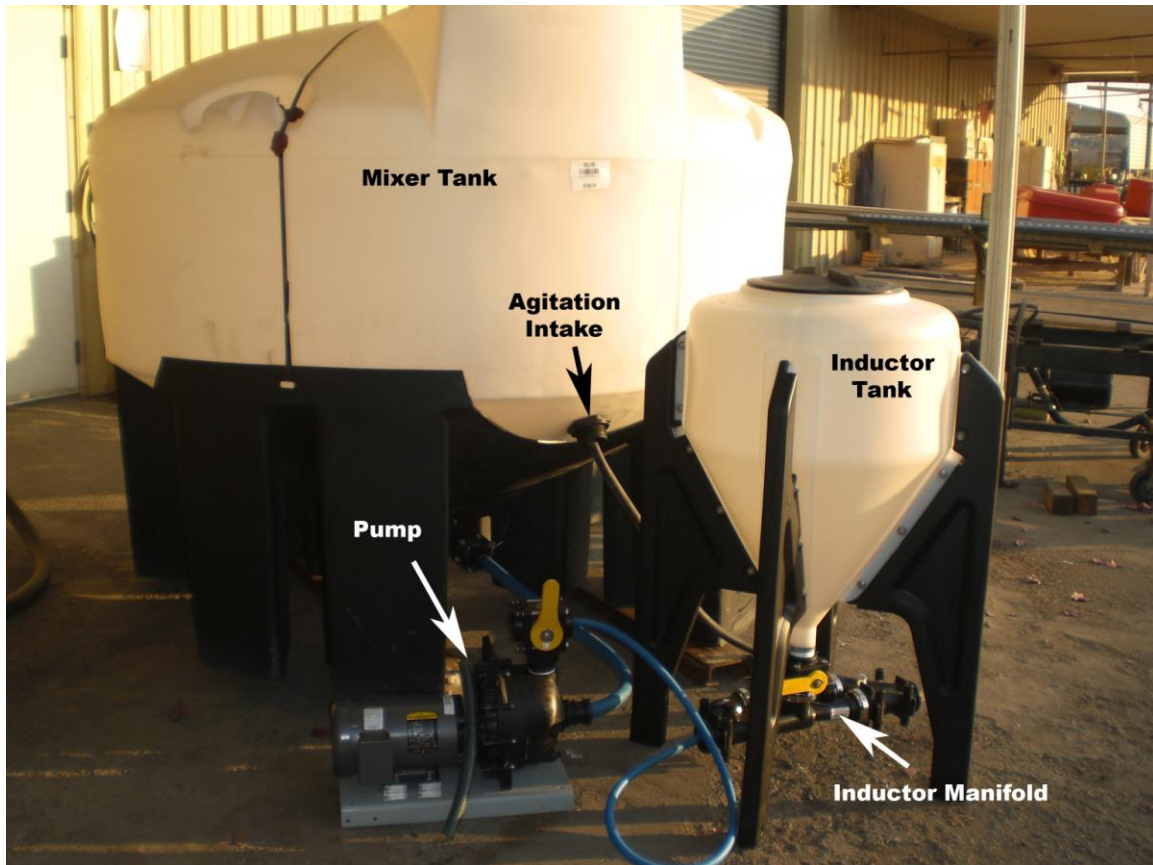


SDI 1000 Gallon Mix Tank With Manifold Induction System



Congratulations on your purchase of an SDI 1000 gallon mixing tank with manifold induction system. These pages are meant to give you an understanding of how the mixing system works and how to operate it.

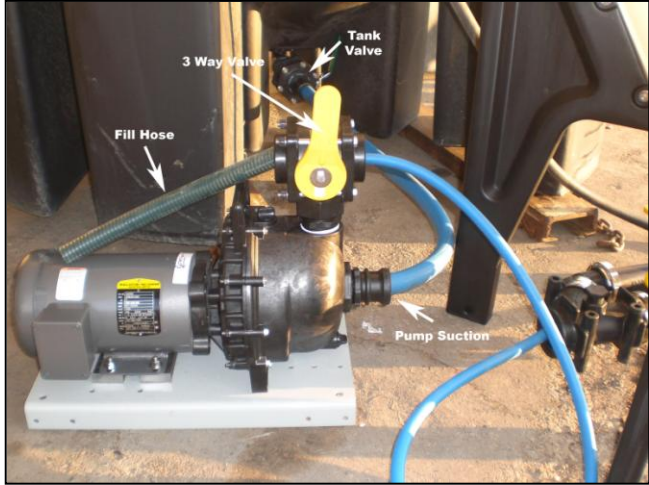
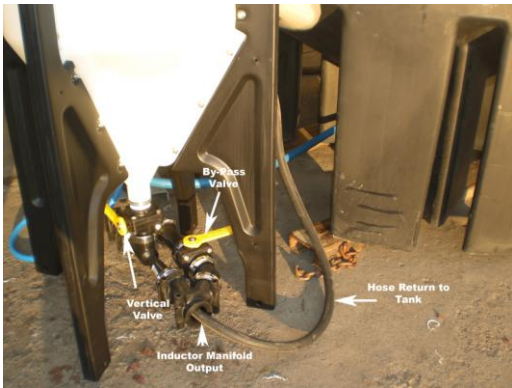
This system is designed to allow you to completely and efficiently mix spray materials into a homogenous solution for application through your sprayer. Use of the SDI mixing system gives you a consistently blended mix of spray materials ready to apply. Mixing in large quantities helps make your operation more efficient by not having to stop and remix each time your application rig is empty.

Your mixer uses a 2 inch polypropylene self-priming pump to circulate liquid through the system. The tank eductor nozzles mounted inside the mix tank circulates and mixes the fluid in the tank. The addition of the inductor tank and manifold helps you easily and safely introduce the spray material into the mix tank. How long you need to agitate to achieve a complete mix depends upon the materials being mixed.

Normal operation of the system is to add the desired volume of fresh water to the mix tank and introduce your spray materials (powders, liquids) into the mix tank using the inductor tank. After a period of time spent in the mixer, your spray materials should be completely mixed and ready for transfer to your application rig.

We've mocked up the hose connections in the following pictures to better illustrate the connections needed to hook up the pump, inductor tank and manifold induction system to the large mixer tank.

The hoses in the picture on the right and below are an exaggeration shown for illustration purposes. They only represent the hoses supplied with the mixing system.

1. Locate the pump close to mixer and have your electrician make the proper electrical connection for the pump motor. We've shipped your unit with the hose fittings and camlocks preinstalled so there is only one way to properly connect everything.
 2. Connect pump suction to the tank valve using the hose and camlocks provided (represented by the large blue hose in above picture).
 3. Connect hose from the side of the 3-way valve on top of the pump to the intake side of inductor manifold (represented by the small blue hose in above picture).
- 
4. Connect sprayer fill hose to the opposite side of the 3-way valve on top of the pump (represented by the green hose in above picture).
 5. Connect hose between inductor manifold output and the tank agitation eductor nozzle system (represented by the black hose in the picture on left).
- 

At this point your mixing system should be connected and ready for operation. We suggest you partially fill the large mixing tank with fresh water and check for leaks in any of the fittings or connections before operating the system.

Mixer/Inductor Operation

1. Partially fill the mixer tank with 200-300 gallons of fresh water. Open the tank valve at bottom of the mixer tank to allow water to flow to the pump. **Caution – be sure that the tank valve is open when operating pump to prevent damage to pump seal.**



2. Turn the 3-way valve on top of the pump so the handle is pointing to allow flow to the induction manifold. If you look carefully at the yellow handle there is an arrow that indicates the directional flow on the three way valve (see picture on left).

There are two valves on the induction manifold. One is mounted vertically at the bottom of the inductor tank and the second is mounted horizontally on the by-pass at the back of the tank. When introducing materials from the inductor tank to the large mix tank the vertical valve will be open and the horizontal valve will be closed. This allows suction to occur from the venturi at the bottom of the inductor tank, drawing the liquid or dry material from the tank into the large mix tank.



3. **Open** the by-pass valve on the back of the manifold to allow flow to the mixer tank circulation system.
4. **Close** the vertical valve on the inductor manifold to prevent backflow into the inductor tank.



Agitation Eductors

5. Start the pump and check for leaks at all the fittings and connections.
6. The material will flow from the bottom of the large tank through the pump, inductor manifold and back into the large tank through the tank eductors which provide mixing in the large tank.
7. At this time open the lid on the inductor tank and add about 5-10 gallons of water to the inductor tank.
8. **Open** the vertical valve and **close** the by-pass valve. The water in the Inductor tank will be drawn out into the mixer tank. When done introducing material into the system, the vertical valve must be closed when the by-pass valve is open to prevent liquid from back filling into the inductor tank.

That is all there is to it! Happy mixing and thank you for buying an SDI mixing System!