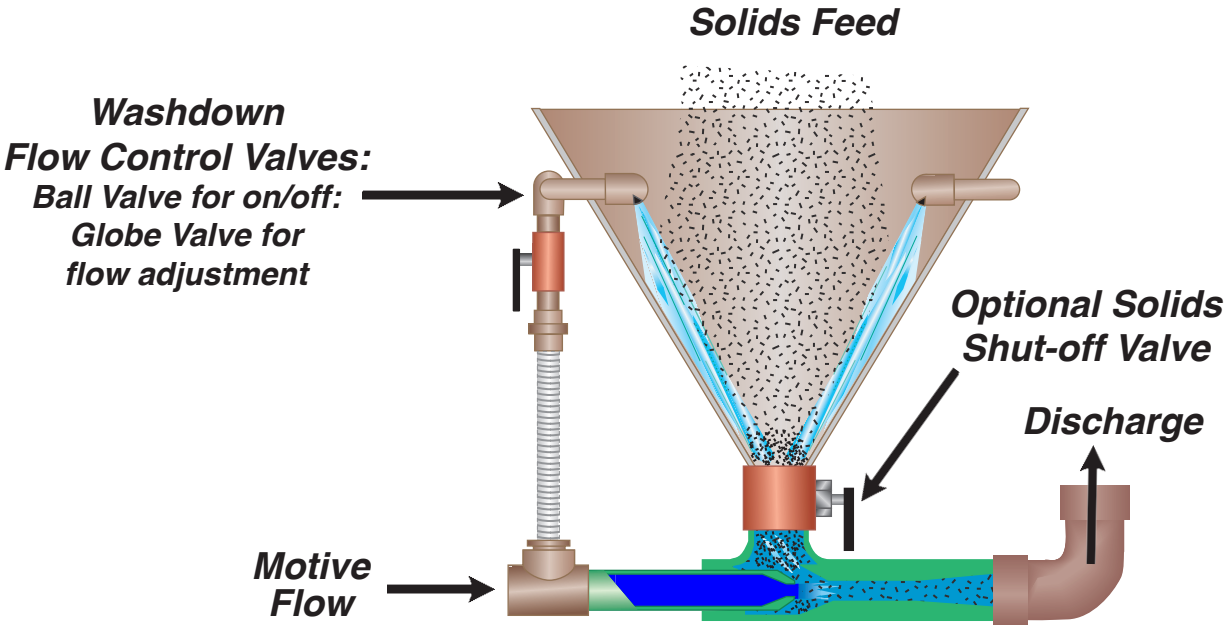
Installation Instructions
Fox Slurry Eductors
with Washdown Hopper for High Discharge Pressure Applications



Fox Slurry Eductors are a simple, reliable way to mix, dissolve and/or transport many solid materials. The ***Fox Series 154 Slurry Eductor*** *has high discharge head capability.*

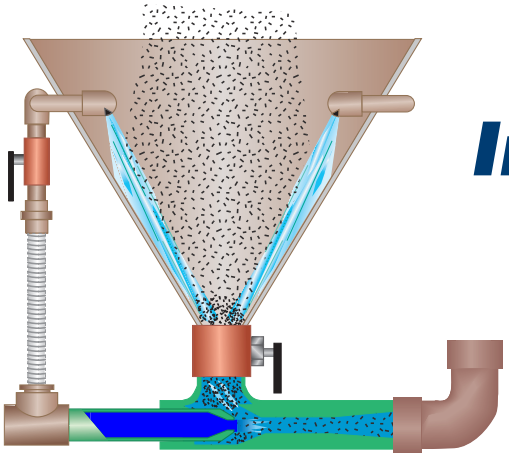
Installation

Fox Series 154 Slurry Eductors must be installed horizontally. A shutoff valve and pressure gauge are recommended on the motive liquid line. The motive nozzle is held into the eductor body with set screws. These screws are located at the back (motive) end of the eductor body. It is recommended to use a short length of flex hose to enable removal of the nozzle to provide access to eductor internals if foreign objects, clumps or debris cause clogging. When connecting the motive nozzle (if NPT threads), care must be taken to prevent the nozzle from being twisted loose.

Since discharge pressure has the greatest effect on the suction capacity of the slurry eductor, all eductors should be installed with the minimum length of discharge line and vertical piping to reach the destination. Fittings, valves and bends should be minimized. Discharge line size must match the eductor discharge connection size. Discharge line can never be reduced, and no restrictions or spray nozzles can be installed.

Recirculation: The output of a Slurry Eductor should not be recirculated back through the eductor, unless specifically approved in the Fox Valves' original quotation. Only solutions (i.e. liquids with fully dissolved solids), or non-abrasive suspensions may be recirculated.

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Operation

Flood feeding of the hopper above a slurry eductor, such as from a bag dump, can work well but only with free flowing solids. Certain solids may cause bridging in the hopper above the hopper. The best results are obtained when solids are continuously fed at a controlled rate from a screw, belt or vibratory feeder with adjustable rate control. This allows the eductor to be fed at it's maximum capacity. Motive liquid flow rate needs to remain fixed and constant even as solids flow rate is varied.

Start-Up Procedure

1. If the eductor is equipped with a solids shut-off valve under the feed hopper, close this valve before continuing.
2. To start the eductor, begin motive liquid flow. It is best to start with an empty discharge line.
3. When motive flow is fully established after 30 - 60 seconds at the proper motive pressure, open the solids feed valve. The eductor will now start sucking in air.
4. Slowly open the washdown valve until the hopper walls are wetted with a sheet of liquid. If necessary, redirect the spray nozzles for full coverage of the hopper side walls.
5. Begin solids feed. Adjust washdown liquid flow rate as necessary to prevent hopper overflow. Always feed solids at a rate consistent with the eductor's capacity. Do not allow solids to build up in the feed hopper.
6. Allow the eductor to clear all solids before shutting off the motive water flow rate. Allow additional time (30 to 60 seconds) to clear the discharge piping so the system is purged and ready for the next batch/run.

Maintenance

Fox slurry eductors have no moving parts and require no maintenance. When re-assembling, be careful not to pinch the O-ring that seals the nozzle in the body.

The most common sources of operating problems result from: a) insufficient motive liquid pressure that does not match the original design value or b) increase discharge pressure due to extra bends, additional vertical piping, valves or restrictions.

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