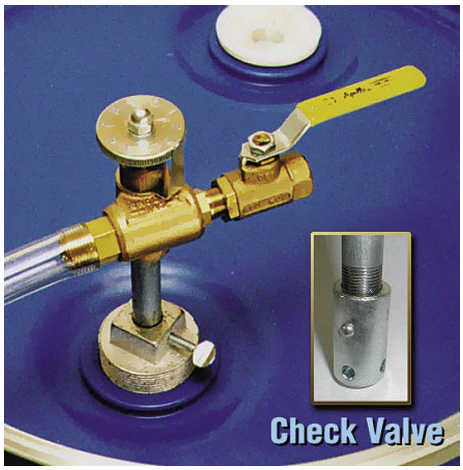
Zebra® Machinist Mixer Manual

Requirements

- Minimum of 25 psi continuous operating water pressure
- Maximum 500 SUS coolant concentrate viscosity
- USE DISCHARGE HOSE PROVIDED. Longer lengths will lessen concentration or provide none at all.
- Use proper fittings for water input and output. Restriction of either will reduce vacuum pressure. Required fitting sizes are noted below.
- Keep drum upright



Installation Instructions

1. Configure the standpipe to fit your concentrate container type. Use both standpipes and the coupler for tote applications. You may need to re- move and reattach the check valve to the lower end of the standpipe configuration.
2. Remove the bung cap from the concentrate container.
3. Insert the required length standpipe into the container and screw bushing into the 2" female thread in drum. Tighten the set screw.
4. Unfasten the breather cap from the concentrate lid.
5. Connect the included shut-off valve to the mixer head.
6. Connect the water line to the shut-off valve using the proper sized fitting (see chart below).
7. Attach the 40" discharge hose, provided. Longer lengths will lessen concentration output. If delivering mix through a garden hose, for instance, a proportioning pump is required.
8. Open the water valve, and after emulsion is dispensed, check the proportion with a refractometer, then adjust the dial as necessary. Once the dial setting has been determined, secure with the locknut located below the dial.
   - Dial settings are for reference only. Varying water pressure and fluid viscosities will produce different mixing ratios.
   - Turning the dial clockwise (right) will bottom out the needle valve onto its seat in the mixer body, preventing coolant concentrate from entering the mixing chamber. At this point, the number zero should be in-line with the pointer.
   - Turning the dial counter-clockwise (left) will open the inlet orifice permitting increasing amounts of cool- ant concentrate to enter the mixing chamber.
   - Maximum ratio delivered with four full turns of the dial.

Part#	Ratio Range	% Range	GPM	Fitting In	Fitting Out	Application
MIX0327	15:1 - 45:1	0-7%	3	3/8"	1/2"	Pail, Barrel or Tote
MIX03725	8:1 - 35:1	0-25%	3	3/8"	1/2"	Pail, Barrel or Tote
MIX03725SS	8:1 - 35:1	0-25%	3	3/8"	1/2"	Pail, Barrel or Tote
MIX1027	15:1 - 45:1	0-7%	10	1/2"	3/4"	Pail, Barrel or Tote
MIX10725	8:1 - 35:1	0-25%	10	1/2"	3/4"	Pail, Barrel or Tote
MIX10725SS	8:1 - 35:1	0-25%	10	1/2"	3/4"	Pail, Barrel or Tote

SS models for caustic concentrate

Troubleshooting

Low Concentrations or None at All

1. Check the discharge hose. If you are NOT using the hose we provided, make sure you are using NO MORE than 40" of discharge hose, with a minimum UNINTERRUPTED ID of 1/2" for 3 gpm models, and 3/4" for 10 gpm models. Make sure that the hose has no kinks or other obstructions. If delivering mix through a garden hose, for instance, a proportioning pump is required.
2. Examine the check valve at the bottom of the standpipe. Debris can keep it open, allowing concentrate to drain back into the drum. The check ball should be below the valve's set screw.
3. Check the water pressure. Our equipment requires a minimum pressure of 25 psi. TEST: Using the mixer with needle valve closed, fill a pail of known volume and time it. If you can fill a 1 gallon pail in 20 seconds there is enough pressure for our 3 gpm unit. If you can fill a 1 gallon pail in 6 seconds there is enough pressure for our 10 gpm unit.
4. The needle-valve (dial) is numbered as a guide only. It does not indicate proportions. Turning the dial clockwise reduces coolant concentrate ratio.
5. Check the coolant concentrate level in the drum. You may be running out.
6. Check the viscosity of the coolant concentrate. Our equipment is designed for up to 500 SUS at 100° F. (SUS=saybolt universal seconds). 500 SUS is about the same as SAE30 motor oil.

Water Draining into Concentrate Container

1. Shut water ball valve off (check valve on end of standpipe is not rated to hold fluid under pressure).
2. Check water ball valve for cracks or damage.
3. If using a solenoid valve, install it on inlet before water supply (check valve on end of standpipe is not rated to hold fluid under pressure).

Concentrate Siphoning from Container

1. Remove discharge hose from output holding container or sump.
2. Verify concentrate container's breather hole is open.
3. Verify that the check valve is free of debris.

Warranty

- Lifetime warranty on all parts.
- Any use of this product outside the suggested parameters will void all warranties.

If you have any questions or require product support,

please contact 888-249-4855

Visit
www.CoolantMaintenance.com
for clean coolant tips

Zebra Skimmers Corporation