

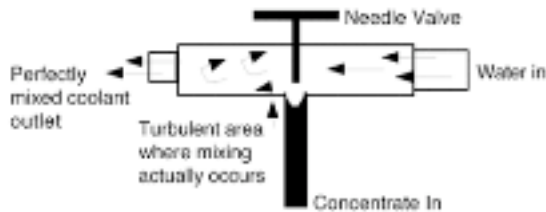


Zebra® Coolant Mixer Selection Guide

Distance of Mixture Delivery

All coolant mixers were not created the same!

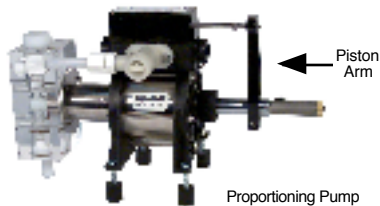
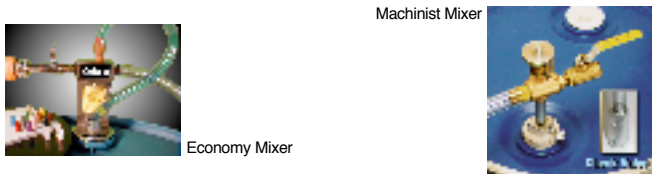
The venturi type, as our Economy and Machinist Mixer, utilize water pressure to create a vacuum in the mixing chamber. This vacuum is what pulls the concentrate through the intake hose or pipe to then be mixed with the incoming water.



Venturi mixers can deliver mixtures through only short lengths of discharge hose, and NOT garden hose or conduit. Putting a longer than recommended hose on the venturi mixer makes the water pressure push that long column of fluid instead of pulling up the concentrate. Insufficient concentrations are always the result.

When you need to deliver the mix right to the use site or to a central tank, a Proportioning Pump is necessary.

It also works off water pressure, but utilizes a process called positive displacement. For every stroke of the piston arm, it draws in an exact amount of concentrate to then be mixed with the incoming water. Due to this process, it is able to then pump the mixed fluid through long hose or conduit without affecting the output concentration.



Flowrate Preference

Once you have established your delivery requirement, you will then have to decide what flow rate you will need the mixed coolant to be dispensed at. The Economy Mixer has a max flow rate of 4.8 gpm. We offer the Machinist Mixer in a 3 gpm or 10 gpm capacity. The Proportioning Pumps have 7 gpm, 12 gpm, or 25 gpm capacities.

Concentration & Accuracy Range Requirement

The last step in choosing the right mixing unit is to determine the concentration and accuracy range you will need the mixture at.

You will need to know the standard use concentration of the fluid to be mixed (such as 5% for a metalworking application).

You will also need to know what the “make-up” percentage is, if any. If this is a metalworking application and you want to fill the sump at the end of the shift, a lower concentration is required, in almost every case. See our Refractometer Selection Guide for more information on determining what that make percentage is.

Venturi type mixers are not as accurate as proportioning pumps due to possible variances in incoming water pressure. As the pressure changes, so will the outgoing mixture concentration. That is, unless you incorporate a water limiter on the incoming water so it stays constant. The positive displacement process utilized on the proportioning pump is unaffected by pressure variances, so it is always more accurate.

Accessory Selection

Lockout for Machinist Mixer

This lockout will prevent tampering or mistaken readjustment of the dial so you will always be mixing the correct concentration.

Water Filter and Water Limiter

The water filter will trap any particles in your water supply that would damage the small internal components of a proportioning pump, but is not required for a venturi type mixer.

The water limiter will limit the incoming water pressure so small internal components of a proportioning pump may not be damaged by overpressurization. It will also help to ensure better accuracy of a venturi type mixer.



QUESTIONS

Please contact us for further assistance:

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