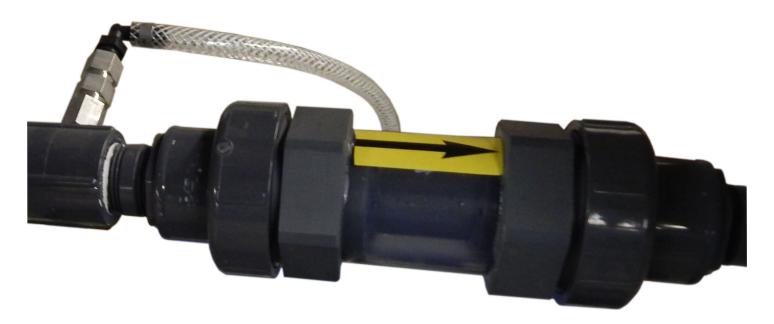
Blue River Technologies

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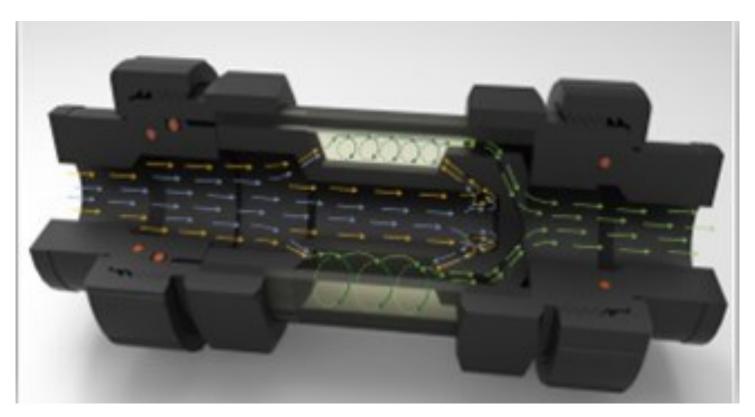
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Blue River Technology Inline Polymer Mixer

TECHNICAL INFORMATION



The Blue River polymer mixer is designed to completely invert most cationic or anionic liquid emulsion flocculants. This specially designed static mixer is an inline design that utilizes the hydraulic force of water streams to break down and invert the polymer. The liquid polymer is introduced into the flow stream of water just before it enters into the inlet of the mixer. The water/polymer mixture is then passed through two separate sets of nozzle holes where the water is increased in velocity and the streams of water/polymer are directed into each other. This creates a high intensity zone of turbulence that will completely invert the polymer and mix it with the water. The force of the collision of water streams will mix the solution without forming angle hair and will invert the polymer much more guickly than agitators or other mechanical mixing devices. This mixer is available in a 2" model with nozzles sized for flow rates of 5, 10, 15, and 20 gallons per minute. The 4" model can be fitted with nozzles sizes for flow rates of 20, 25, 30 and 50 gallons per minute. These mixers are manufactured from Black Delrin and Stainless Steel. They have no moving parts and are easily disassembled for cleaning or changing nozzles.



• This cutaway shows how this mixer works. The mixer will mix liquid to liquid, gas to liquid and small particles to liquid. The primary liquid stream is piped to the mixer from the left side. Just before the primary fluid enters the mixer body the fluid to be mixed is injected and the two fluids enter the mixing chamber from two directions thru a set of 8 holes in the front of the chamber and 8 holes at the rear of the chamber. These "jets" of fluid collide in the clear mixing chamber. This collision results in an intense mixing zone that instantly mixes the two fluids uniformly and then the combined mixture exits out the right hand side of the mixer.

