

"The Leader In Geotextile Sludge Dewatering Systems"

TECHNICAL INFORMATION

- The Blue River Technologies Series III liquid make-down systems are designed to operate as a fully automatic system usually in concert with a SCADA or PLC-based control system. The PLC-based control can be linked to other PLCs in the system by Ethernet connection or with 24-vdc signal cables.
- These units will make down emulsion polymer at a rate of from 5 to 20 gpm. The *BlueWhite* A2 series pump can deliver up to 7 gallons per hour of emulsion polymer

allowing a solution concentration of up to 0.6% at 20 gpm flow rate. (Optional A3 pump will allow higher solution.)

- These emulsion polymer make-down systems are low cost and light weight. They operate on standard 110VAC power requirement. The Series III machine includes flow sensors for water flow and polymer flow that will shut down the unit if either of these critical functions falls below a set point. If the unit goes into a fault condition due to low water or low polymer condition, it can signal the main control panel to shut down the wasting process until the problem can be corrected.
- When the unit is turned on, the electric operated solenoid valve opens. The poly pump turns on and begins pumping emulsion polymer thru a check valve and into the injection tee located above the mixing head. The diluted polymer then goes thru the mixing chamber, thru a static mixer located on the side of the unit, then discharged out to the side of the unit and into the process
- A disc style check valve is in the polymer line at the point of injection. When the unit is turned off, the polymer injection pump is shut down and water can continue to flow for a timed delay period of up to 60 seconds to flush out the mixing head and lines.

Series III Polymer Make-Down Unit with *Blue-White* A2 Peristaltic Pump



www.blueriverdewater.com

1302 GARNER ST, NEW CASTLE, IN 47362 | 765-388-2181 | MCONWELL@NTLC.NET

- The Blue River Technologies mixing head is specifically designed for mixing emulsion polymers. The head utilizes low pressure, high kinetic energy mixing nozzles that will thoroughly mix difficult to invert polymers.
- A secondary static mixer is used to provide additional mixing to help prevent angel hair and agglomerations. Both mixing heads utilize a clear PVC mixing chamber allowing visual confirmation of the mixing process.
- The base and stand are constructed from 1" X 1" X 16 ga. Stainless Steel Tubing. All Pipe and fittings are SCH 80 PVC to provide the user years of trouble-free service.

BLUE RIVER TECHNOLOGIES

1302 Garner St New Castle, IN 47362 <u>mconwell@nltc.net</u>

765-388-2161

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