## BLUE RIVER TECHNOLOGIES ECONODRY SYSTEM™



## The Power of High Efficiency and Precision

Our ECONODRY system is designed to make down up to 500 lbs. of dry polymer per day. The Stainless Steel Hopper/Feeder will precisely meter out the dry polymer into the Disperser/Eductor on top of the mix tank. The dry polymer will be wetted out with a high velocity water stream that minimizes fisheyes and kick starts the mixing process. The system is high quality, simple and low cost.



"The Leader in Geotextile Sludge Dewatering Systems."

www.blueriverdewater.com

SIMPLE DESIGN WITH PRECISE TECHNOLOGY

- Low cost
- High efficiency disperser/eductor polymer wetting
- Fewer Fisheyes
- Fully manual or automatic operation
- Precise solution concentration
- Automatic shutdown in fault condition: Low water flow, low polymer in hopper; No polymer flow, high tank level
- System components easily adapted to larger tanks

## BLUE RIVER TECHNOLOGIES

1302 Garner St New Castle, Indiana brtsales@nltc.net

765.388.2161

## **TECHNICAL INFORMATION**

- The Blue River Technologies Econo-Dry Polymer System is designed to make down up to 18 lbs per hour of cationic or anionic dry polymer at a concentration of .5% (.005). This system will operate in either manual or fully automatic mode. (Rates are based on a 225-gallon batch size and a 30-minute agitation cycle.)
- The mix tank is a standard 275- gallon ICB Tank. This Top tank (mix tank) is positioned over the bottom tank (storage tank) with a 2" square tubing frame. The top tank will mix 225 gallons of solution per batch. Both tanks include capacitive type liquid level probe systems. An independent float style switch is installed at the top of the tank to shut down the system in the event of an overflow condition.
- The Econo-Dry mix system is a batch process system. The mix tank is filled with water and polymer is added in the proper amount during the fill cycle to produce the desired solution concentration. After the fill cycle the water shuts off and tank agitation begins and continues for a set amount of time. After the agitation period expires the system goes into a "Standby" mode until the storage tank is at a sufficient level to accept the batch. At this point the control will initiate the transfer cycle actuating a valve and gravity draining the mixed batch into the holding or "Day Tank'.
- The control system is a PLC based system. The control interface allows the operator to quickly change the feeder run time to increase or decrease the solution concentration percentage. The interface is also used to set agitation time to reduce product shearing. The interface will also provide the operator with alarm or fault condition information. Standard alarms or fault conditions are "Low water pressure", "Hopper Low on Polymer", "Tank High Level", "No Polymer Flow". (See control/interface drawing)
- The system includes a 1/2 hp agitator with a gear reducer drive running at 250 rpm. The agitator can be set up with dual props.
- The Econo-Dry System comes standard with the 3.0 cubic foot Hopper/Feeder Assembly. An optional 6.0 cu foot hopper is available. (See product Tech sheet for feeder specs)
- Polymer is initially hydrated and dispersed into the mix tank with the Blue River Technologies 50 GPM Eductor Disperser. (See product Tech sheet) This stainless steel eductor/disperser uses high energy water pressure to provide faster hydration and uniform wetting of the polymer particles. This helps to prevent fish eyes and agglomerations from forming in the mix tank. A teflon nozzle provides a non-stick surface for trouble free operation. A sanitary type clamp connects the powder hose to the disperser for quick inspection and cleaning operations.
- The water tree includes a full port, pneumatic operated ball valve. (An electric operated Ball Valve is available as an option.)



"The Leader in Geotextile Sludge Dewatering Systems."

www.blueriverdewater.com

BLUE RIVER TECHNOLOGIES 1302 Garner St New Castle, IN 47362 brtsales@nltc.net

765.388.2161