PolyBlend® Dry Polymer Feed System
Model DP2000

The PolyBlend® DP2000 system is a reliable dry polymer feed system for use in water and wastewater applications. The DP2000 is an integrated equipment package capable of automatically preparing a homogeneous polymer solution.

The DP2000 consists of the DD4 dry polymer disperser, and two stainless steel mix tanks, operating in an alternate sequence.

The DP2000 is specifically designed to provide uniform mixing. Dry polymer and water are initially mixed in the DD4 polymer disperser exposing the solution to a high shear agitation via mechanical mixing. The high shear agitation ensures proper activation of the polymer and prevents unwanted agglomerations. After brief exposure, the solution exits the high shear mixer and flows into the mix tanks.

The second stage mix is a longer, low shear mix. The rotating impeller in the secondary mix tank is a U.S. patented “hollow-wing” design and covers over half the width of the tank. The low shear mixing continuously and uniformly moves the solution vertically and horizontally resulting in no agglomerations or broken polymer chains.

When a low level is sensed in one of the mix tanks, a three-way valve directs flow to the empty tank and the empty tank discharge valve closes simultaneously to isolate the empty tank from the polymer solution.

The DD4 disperser begins a make down sequence and fills the empty tank. After the tank fill and mixing sequence is complete and the alternate tank reaches low level, the full tank discharge valve is opened and flow is directed to the polymer solution feed pumps. The three-way valve then directs flow to the empty tank, the discharge valve on the empty tank closes and the sequence repeats.

Key Benefits
- Reliable performance
- Field proven
- Reduced polymer consumption
- Fully automated operation
- Operator interface controls
- Improved safety features

The DP2000 is controlled through an easy-to-use microprocessor-based operator interface. The LCD display enables complete operation of all functions including component status, timers, counters, etc.

Specifications

| Electrical          | 480 VAC/50-60 Hz/3 Ph |
|                    | 575 VAC/50-60 Hz/3 Ph |
| Water Supply        | 113.6 LPM (30 GPM)    |
| Tank Size           | 2839.1 L (750 USG)    |
| *Polymer Feed       | Up to 14.1 kg (31 lbs)/hr dry polymer based on a 0.5% solution |
| Control Panel       | NEMA 4X PLC based     |
| Options             | See back              |

*Note: Consult Water Process Solutions, Ltd. with regards to dosing amount and your application.
Available Options

- Diaphragm metering pump
- Progressive cavity metering pump
- Batch tanks / single or tandem
- Integral compressor
- 0.07 m³ (2.5 ft³) hopper
- 0.57 m³ (20 ft³) hopper
- Bulk bag frame
- Bulk bag frame with hoist
- Bag dump hopper
- Low powder level indication
- Supply water pressure reducing valve
- Final feed pumps
- Final feed post dilution
- Large hold tanks
- Transfer pumps