



USFilter

A Siemens Business

POLYBLEND[®]

POLYMER FEED SYSTEMS

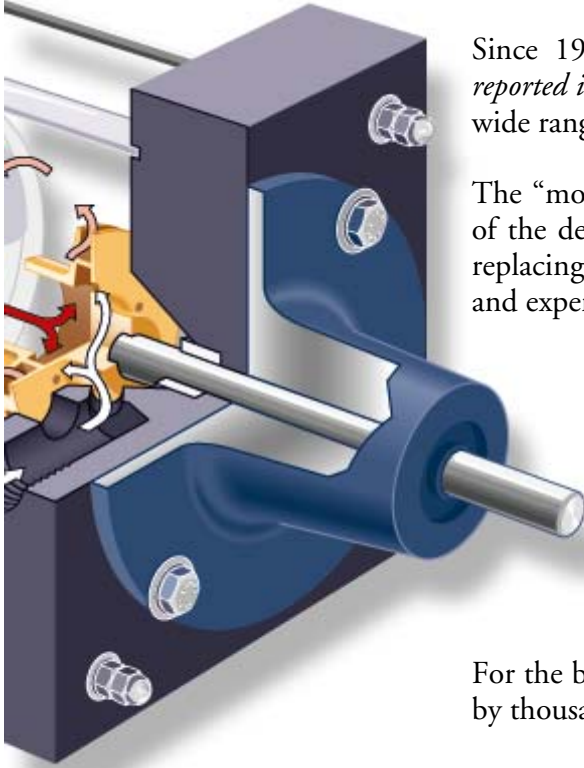
USFilter Stranco Products is pleased to offer our customers the premier polymer feed system in the industry. The PolyBlend® polymer feed systems combines patented mix designs with years of application expertise to provide you the best systems in the market. We offer a wide range of polymer feed systems to meet municipal water, wastewater or industrial process application requirements.

Since 1972 owners and operators of the PolyBlend Series have consistently reported improved polymer performance at reduced levels of polymer consumption in a wide range of applications.

The “more for less” phenomenon is easily explained when we consider the basis of the design of the PolyBlend Series and compare it to the system it has been replacing. This design is an outgrowth of years of polymer activation research and experience in polymer preparation. PolyBlend systems feature:

- *Innovative Designs*
- *Reliable & Proven Performance*
- *Improved Polymer Efficiency*
- *Simple or Advanced Controls*
- *Patented Mixing Technology*
- *Maximum Polymer Activation*

For the best polymer activation system available, look to the name that is trusted by thousands of satisfied customers, PolyBlend.



POLYBLEND PB SERIES



Improved and refined over 15 years, the PolyBlend PB Series is the most popular liquid polymer feeder ever offered, with over 10,000 units at work around the world. Various models cover a polymer solution flow range from 0.1 to 20 USGPM. Unlike most polymer feeders, the PB Series works equally well at very low flow rates.

The PB Series is compact. Its footprint is only 1 to 1.5 square feet depending on frame size. It is lighter than most other polymer feeders, making it ideal for portable use or where intermittent use requires the system to be stored in one location and used in another.

The patented multi-zone mix chamber provides uniform dispersion energy at the moment of initial polymer wetting. This high energy mixing prevents agglomerations, eliminating the need for

extended mixing and aging time. The partially swollen polymer then enters a low energy zone where activation continues without the destruction associated with batch mixing.

Replacing a batch mixing or static mixer system with a PB Series results in reduced polymer consumption (20-50%) and improved performance. Polymer use is reduced by eliminating agglomerations (wasted polymer) and fractures (broken molecules). Improved performance is realized by exposing more charge sites.

Polymer Output Range	Flowmeter Range
0.4 GPH to 2.5 GPH	1-100 GPH to 120-1200 GPH

The PolyBlend M Series liquid polymer feed system is the best product available to handle your liquid/solid separation needs. The M Series combines USFilter's proven motorized mixing technology with precise controls, a variety of pump offerings and an easy-to-service, open-frame design. Then USFilter adds two unique options: variable speed mixing and automatic dosage control with constant solution strength.

The M Series comes standard with a constant speed motor ideal for today's liquid polymers. But as polymer needs change and as new polymers are developed, the M Series can be quickly field adapted. Specify the optional variable speed drive right from the beginning or add it later. Upgrading to the variable speed design can be done in the field.

The M Series uses USFilter's patented multi-zone mixing. The first zone exposes the polymer to a high energy

environment to minimize agglomeration. Reduced mixing energy in the second zone protects the fragile polymer chains from fracturing, making more polymer available for work. The baffling is designed to create a tapered mixing regime. The optional variable speed mixing optimizes the hydration process within each zone regardless of the type of polymer in use.

Whether you adjust the M Series output remotely via 4 - 20 mA signal or right at the unit, water flow and polymer feed increase and decrease together, automatically maintaining a constant solution strength. Even primary and secondary dilution water are kept at the same ratio as output is adjusted. See separate Controls Data Sheet for more

Polymer Output Range	Flowmeter Range
0.4 GPH to 600 GPH	12 GPH to 12000 GPH

information on the three control options.

The PolyBlend M-Lo Series polymer feed system offers all of the benefits of the best available polymer preparation technology at a new competitive price. The ready-to-install system provides consistent and accurate dosage and improves polymer efficiency.

The PolyBlend M-Lo is engineered for easy installation and maintenance. The compact size of the feeder allows trouble-free installation in confined spaces and the open-frame design facilitates easy component access.

The Stranco REM-1D controller is included to provide speed control for the neat polymer pump. The easy-to-read LCD display indicates strokes per minute (SPM) or strokes per hour

(SPH). The microprocessor-based controller is housed in a NEMA 4X enclosure.

The PolyBlend M-Lo Series polymer feed system is available in several models. The versatility of the PolyBlend M-Lo provides a choice of systems

Polymer Output Range	Flowmeter Range
0.4 GPH to 2.5 GPH	3 GPH to 120 GPH



The M Series PolyBlend systems are available with three control strategy options.

A Controls: The economical A Controls use an on-off-remote circuit controlled by a three-position switch. In the remote position, the unit accepts a remote start contact. The A Controls also accept a 4-20 mA analog signal to pace the polymer metering pump.

B Controls: B Controls operate using a programmable micro-controller. The micro-controller paces the polymer metering pump based on operator programmed data or based on a 4-20 mA analog input signal. The operator determines the mode of operation at touchpad.

C Controls: C Controls maintain constant solution strength. The controller senses change in incoming make-up water flow and automatically responds to these flow changes via a motor-driven flow control valve. This assures consistent dosage rates by automatically compensating for changes in dilution water flows.



POLYBLEND DP SERIES



The PolyBlend DP Series is without question the finest dry polymer feed system available. It outperforms all other designs in head-to-head trials. The DP Series typically reduces polymer consumption 25% or more while substantially improving polymer performance in terms of sludge dryness, solids capture, water clarity, drainage/retention, or any other measure. Moreover, the PolyBlend DP Series has an unmatched reputation for reliability. While dry polymer feed systems are notoriously high maintenance items, the PolyBlend DP Series requires the least maintenance and operates unattended for longer intervals than any other dry polymer feed system.

Dissolving dry polymer in water for use in a clarifier or dewatering device is one of the most difficult tasks in chemical feed technology. Dry polymer particles are typically 100 times larger than the particles of polymer suspended in liquid polymers. Consequently, dry polymer has a greater tendency to agglomerate and requires far more mixing time than liquid polymer. During the extended mixing time, the polymer is subject to damage from the rotating mixer. In most systems, 1/4 of the polymer is wasted in the form of “fisheyes” or broken into useless fragments.

In addition, most dry polymer feed systems are housekeeping nightmares. They are not only unsightly, but can be very dangerous as spilled dry polymer can become a safety hazard.

The PolyBlend DP Series overcomes all these difficulties with several patented innovations. The high energy disperser, low energy mix tank, and dry disperser skid provide unmatched performance in the industry. Polymer and water come together in the disperser; the solution then moves to the mix tank. From the mix tank, the polymer is sent to a holding tank and from there, through the final feed skid to the point of application. The operation is fully automatic – all the operator has to do is keep polymer in the hopper.

The control system for the DP Series is unmatched in simplicity. A single LCD display enables complete operation of all functions. Troubleshooting is also streamlined, with all alarm conditions described on the display. In field trials and start-ups, operators are interfacing with the system worry-free within a half-day of installation.

Dry Polymer Range

0.1 - 180 lbs per hour

To find out more about how to put USFilter to work for you, contact us at

USFilter

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