

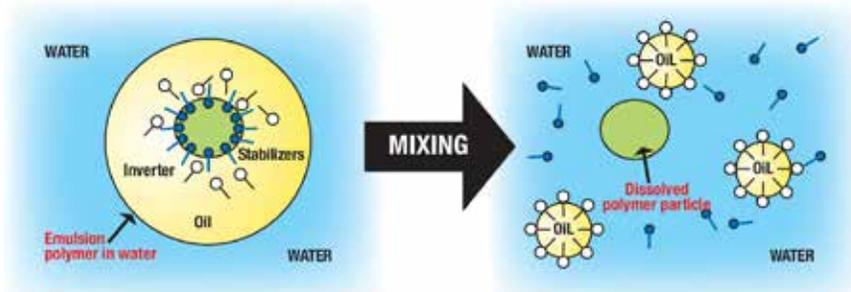
# PrimeBlend Polymer Preparation System

- Quality systems with considerable cost savings.
- 100% BABA compliant.
- Proven performance and reliability.

## EMULSION POLYMER FEED/BLEND SYSTEM.

When the correct polymer emulsion is determined by careful evaluation, maximum activation must be achieved. Our PrimeBlend system provides a compact self-contained emulsion polymer preparation system that minimizes your polymer requirements. The high mixing energy that is required by emulsion polymer activation is achieved through our mixing chamber blade and orifice design. In the preparation of a emulsion polymer solution, two reactions must occur for the maximum activation.

### Polymer Inversion



### INVERSION PHASE

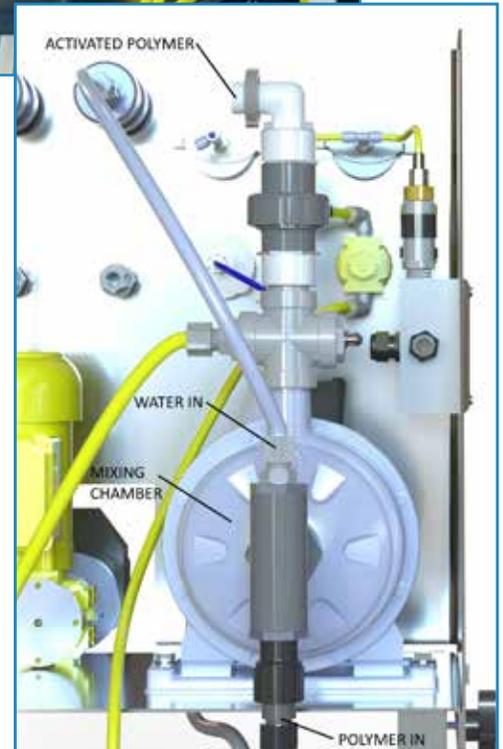
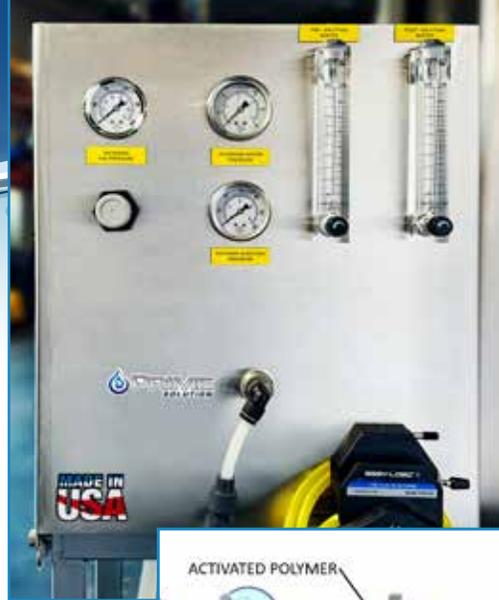
Where the polymer passes from a continuous oil phase to a continuous water phase (breaking the oil solvents and washing of the surfactants).

### DISSOLUTION PHASE

Reaction is fast and complete.

The quality of polymer inversion/dissolution depends on the following:

1. The emulsion must be added to water and not the reverse.
2. High mixing/shear energy should be applied when the emulsion comes in contact with the water.
3. The only ingredients required are fresh water and polymer.



## ADVANTAGES

- Manual or Automatic Operation
- Customizable
- Easy Integration
- Stand Alone, Wall Mount, or Skid System
- Allows for Low Pressure Drop Mixing
- Adjustable to Varying Flows and Viscosities
- Stainless Steel Construction
- Reduced Chemical Costs
- No Overshearing
- Single or 3 Phase Voltage
- Option of Stainless Steel or PVC Plumbing

## PRIMEBLEND MODEL OPTIONS

The PrimeBlend Polymer System is sized by gallons per hour using the typical industry average of 0.5% polymer solution.

### Two systems available, in multiple sizes:

**M-Series** | **P-Series**  
Manual Logic | PLC Controlled

- Dilution water range is 0.5 to 40%
- Average polymer usage see chart below

### Typical Results for PrimeBlend and Rotary Fan Press

Typical Application	Avg. Feed (% TS)	Avg. Polymer (lbs/d.t.)	Avg. Capture (% TSS)	Avg. Cake (% TS)
Primary 100%	2 - 6	4-8	95 - 98	28 - 38
Anaerobic	1 - 4	8-12	95 - 98	18 - 26
Aerobic	1 - 3	10-14	95 - 98	15 - 22
Primary/Sec. Mix	1 - 4	8-10	95 - 98	20 - 32
WAS	1 - 3	9-15	92 - 98	15 - 22
SBR	0.75 - 2	9-15	92 - 98	15 - 20
Alum Treated WAS	1 - 3	8-14	92 - 96	12 - 16
PAC Treated WAS	1 - 3	8-14	92 - 96	12 - 16
Lime Sludge	5 - 9	8-14	95 - 98	28 - 45
Septage	3 - 7	7-10	95 - 98	28 - 38
Grease Trap (lime treated)	1 - 5	9-15	92 - 96	28 - 40
DAF	3 - 6	8-14	92 - 96	20 - 28
Coal Refuse	3 - 5	4-8	95 - 98	28 - 45
Concrete Reclaim	5 - 15	7-10	95 - 98	28 - 45
Swine	1 - 4	7-10	94 - 97	18 - 24



### Build America, Buy America Act

In compliance with the requirements of The "Build America, Buy America Act," treatment plants seek straightforward mechanical dewatering solutions that deliver optimal performance, without the need for waiver applications or additional expenses. Prime Solution's PrimeBlend Polymer Preparation System has consistently met these standards, even predating the Act.

## PRIME SOLUTION FAMILY OF PRODUCTS

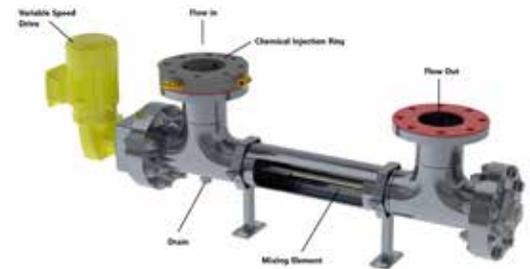
### Rotary Fan Press

The only dewatering equipment with patented screen technology that uses simple pressure differential and friction resistance to provide superior dewatering performance at a lower cost and prolonged service life.



### Variable Speed Blender/Mixer.

Better results with bigger cost savings.



### Static Mixing plates & injection Rings

Superior yet simple mixing resulting in efficiency and a low amount of head loss.



### Conveyors

Customized cake solids transference. We offer multiple sizes and styles of conveyors to fit your application.

