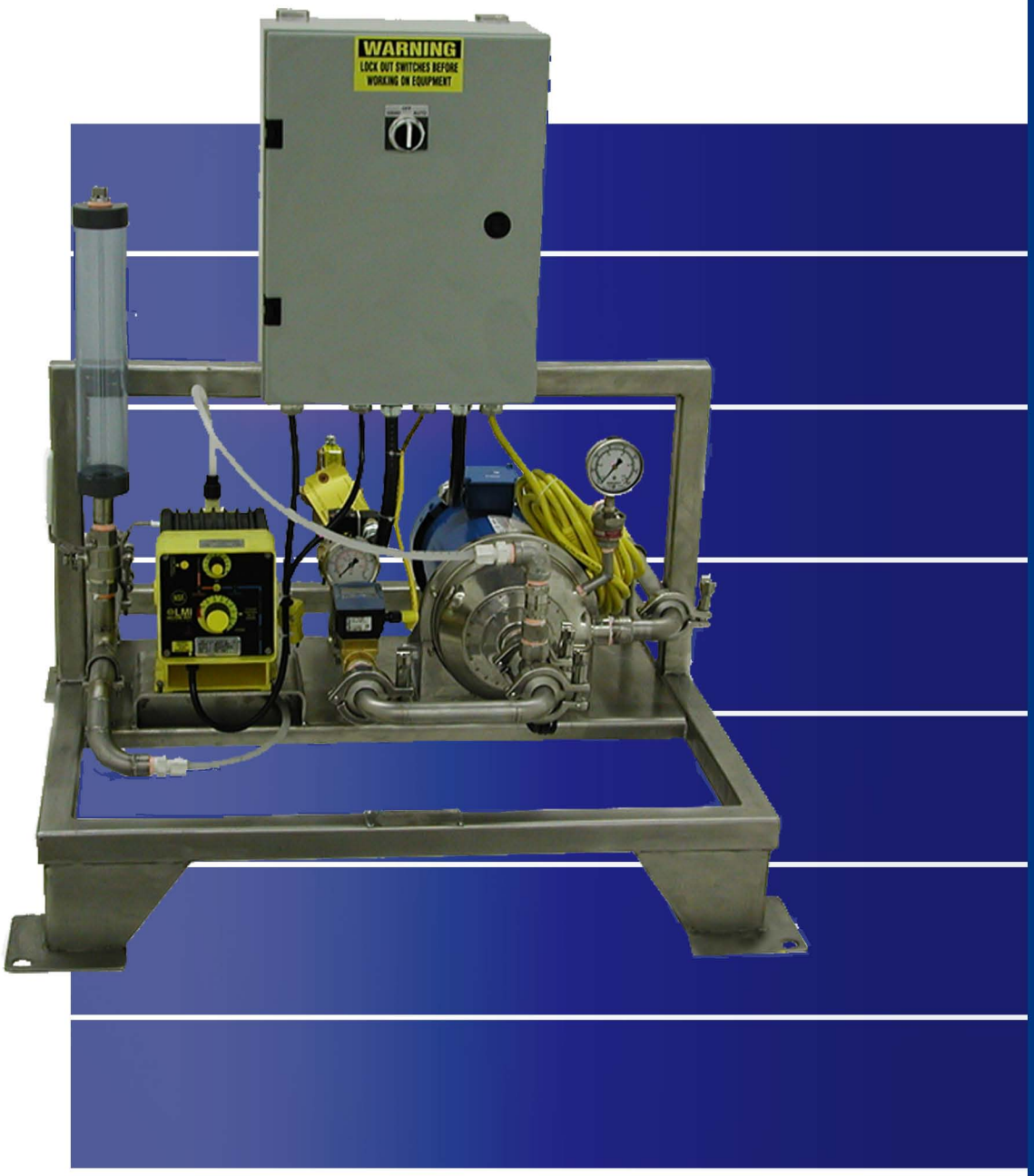
Hayward Gordon

Pumps • Mixers • Strainers

Engineered Systems & Controls



Mini Activator Polymer System

www.haywardgordon.com

POLYMER PROCESSING

The *Hayward Gordon Mini-Activator*® is a unique system designed to completely mix and activate a wide range of liquid synthetic Polymers. It is a continuous and batch Polymer system incorporating high-energy mixing and includes instrumentation to maintain optimum product quality and consistency.

Typically, concentrated Polymer is drawn from a storage container or tote to the Mini-Activator® by the Neat Polymer Dosing Pump. The product is then injected into the dilution water at the suction side of the Mix Pump. This system provides intensive blending in a high-energy mixing stage, followed by a final blending stage using a static mixer. This combined mixing process will produce a fully activated homogeneous product. An optional Flowmeter indicates the dilution water flow. Once the Polymer flow rate is manually pre-set with the draw-down cylinder, a precise mix ratio can be maintained.

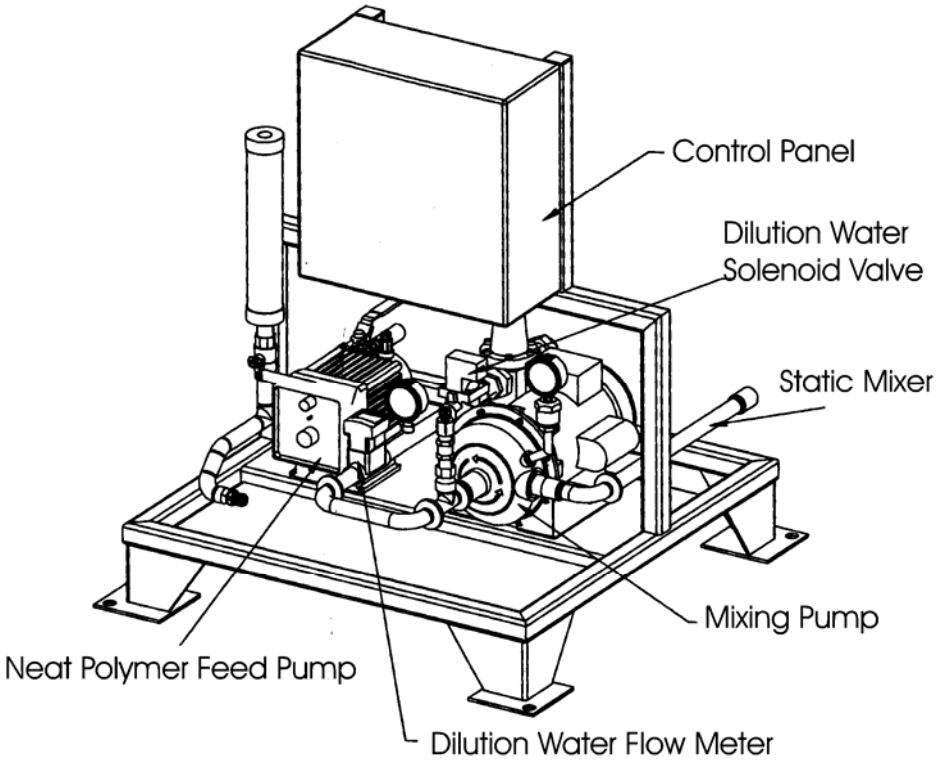


Figure 1: Mini-Activator

The process of activation involves the stripping of the oil that surrounds the polymer capsule, allowing the hydration process to begin in the presence of water. Once this procedure is complete, the polymer starts to swell and elongate (uncoil), rendering a useable solution.

The finished Polymer emulsion is transferred to a Mix Tank and then fed to the process by chemical feed pumps through perforated stainless steel cage filters (optional). These optional chemical feed pumps can be controlled manually or by a process feed signal (optional).

In some applications, emulsions prepared by the Mini-Activator® Polymer system may be fed directly to the process, such as clarifiers, DAF (Dissolved Air Flotation) systems or similar equipment. Consult with Hayward Gordon and your chemical supplier to design a system which best suits your needs.

Specifications

This *Hayward Gordon Mini-Activator®* and its supporting accessories are custom fabricated. The final design is based on our standard model, but modified to meet the specifications and local requirements of the customer. Other models with varying degrees of system automation and flow capacity are available, please contact Hayward Gordon.

NOTE - ***The design of this system is proprietary to Hayward Gordon.. It may not be copied, imitated or duplicated in whole or in part without the written permission of Hayward Gordon***

Table 1: Specifications

Item	Description		Specification
Neat Polymer Pump			
	Variable Speed Controller		1.5 Amp, TEFC, 120V, 60 Hz
	Polymer dosing Pump	Plunger Type	1.8 USgph @ 100psia 0.11 lpm @ 6.8 ata
Mix Pump and Drive			
	Motor	1/2 H.P.	TEFC,3450 rpm
	Type	Centrifugal	5 USgpm, 19 Lpm
	Power Supply		120V, 1ph, 60 Hz
Water Control			
	Pressure Regulator	Size & Pressure	3/4"∅ - 150 psi
	Flowmeter	Type	Burkert
		Range	8 USgpm, 0 - 30 Lpm.
	Control Valve	Type	Electrical Solenoid
		Voltage	110 VAC
Control Panel			
		Class	NEMA 4,
	Power Supply		15 Amp, 120 V, 1ph, 60 Hz
	Polymer Pump	Speed Control	Stroke and Speed Adjustment
Mix Tank			
	251 US gal / 950 L	Covered Poly-Tank with Level Control	
	Agitator	Optional	

Notes: 1. All wetted parts 316 Stainless Steel

Table 2: Motor Load Chart

Drive Motor	Motor Controller	H.P.	Full Load Amps	O/L Trip Setting	Record Initial Reading
Mix Pump	AC Starter Relay	1/2	9.0	6.2	……
Polymer Feed Pump	Var Speed Control	n.a.	1.5	n.a.	……
Mix Tank Agitator	AC Starter Relay				……