4660 136<sup>th</sup> Avenue, Holland, MI 49424 www.mwwatermark.com

Office 616.399.8850 Fax 616.399.8860

## **AUTOMATIC FEED PUMP CONTROL SYSTEM**

The M.W. Watermark™ Automatic Feed Pump Control System (AFPCS) is used in conjunction with air-operated diaphragm feed pumps to automatically increase the feed pump pressure during the filtration cycle. High initial feed pump pressures can build a very tightly packed, impermeable layer of solids on the filter cloth, restricting the flow of slurry, increasing filtration cycle times, and ultimately the density of the cake. Reduced initial feed pressure allows a soft layer of slurry particles to be deposited on the filter cloth. Because this layer becomes the filtering media, the filterability of the incoming slurry is enhanced.

The AFPCS automatically increases the feed pressure in four stages throughout the fill cycle. These stages and pressures are fully adjustable to suit the type of slurry and the solids concentration. Cycle completion is determined either by adjustable times (feed by time) or by monitoring the feed pump flow sensor (feed by flow), located at the feed pump, during the final pressure stage.

The AFPCS also incorporates a low hydraulic pressure safety shut down device. If insufficient hydraulic clamping pressure is present, the AFPCS system will not start, or shuts down, eliminating possible leaking from between the filter plates and the potential to start the feed pump when the press is not fully closed and clamped. The AFPCS features power ON, START cycle and STOP cycle functions. The controller also indicates when the cycle is complete.

The pump kit includes the pump pressure regulator, pump flow sensor, 20-meter cables, 5-foot pump connection hose, and 1/2" & 3/4" NPT pump connection adapters.

Automatic Feed-Pump Controls allow your filter press to run at its optimum efficiency creating dryer filter cakes, reducing disposal costs, reducing filtration time, and increasing the life of your filter cloths and feed pumps. Typical payback is less than one year.

## Features:

- Optional on New Filter Presses
- Retro-Fit to any Filter Press
- Feed by Flow or Time
- Digitally Programmable Controller
- Start, Stop and Cycle Complete
- Pre-wired and Tested
- Pump Air Pressure Regulator
- Pump Flow Sensor
- Cycle counter
- 16" x 16" x 8" NEMA 4 Enclosure
- 120VAC / 1Φ / 60 Hz / 1 Amp



M.W. Watermark Filter Press with AFPCS



AFPCS Pump Control Kit - Part Number: 40031272



Digitally Programmable Controller



AFPCS Pump Control Mounted to Filter Press

M.W. WATERMARK – Resources For All of Your Water & Wastewater Needs Service • Experience • Expertise • Savings