

SVENMIX PLUS APDFM **SPECIFICATIONS**

General

- 1] A) The entire mixing system shall be mounted on a Stainless Steel or Powder Coated steel support frame.
- B) The mixing system shall operate on 120v 1ph AC power.
- C) The mixing system shall be capable of operating at up to 75psi water pressure.
- D) The unit shall produce a thoroughly diluted, mixed and activated Polymer solution.
- E) The mixing system shall have an integral neat polymer day tank with calibrations (Gal.s or Liters) which will supply the neat polymer by flooded suction to the neat polymer pump.
- F) The system shall be operated by a digital controller with touch pad control, and Graphic Display. Controller is capable of accepting external digital or analog signal, and capable of operating neat polymer pump in SPM or SPH mode. Controller can operate in Local or Remote Mode. Controller has programmable “Washdown” mode for cleaning purposes.

Water Piping

- 2] A) Water flow through the system shall be initiated by energizing a normally closed solenoid valve. The solenoid valve is brass, all other piping in the unit is PVC, P.E. or Stainless Steel.
- B) Water flow through the system is controlled by needle valves (or gate valves) connected to two flow meters (GPM or LPM) one flowmeter shall be for mixing water and one flowmeter for post-dilution water.
- C) Piping connections are NPT.

Polymer Mixing

- 3] A) The neat polymer pump shall be an electrically actuated

diaphragm pump with speed and stroke length adjustment of 0-100%. A progressive cavity pump or gear pump are options on larger capacity systems. Proportional control by 4-20mA signal is available.

- B) The neat polymer day tank shall be a calibrated, 5 or 10 U.S. Gal. Polyethylene tank with cover. The tank shall be mounted on the unit to provide a flooded suction to the neat polymer pump. The neat polymer pump can also be connected directly to a drum, tote or bulk storage tank.
- C) Polymer mixing and blending shall be accomplished by the neat polymer pump injecting polymer into the water flow in the mixing tee followed by 4 passes through inline static mixers. The primary and final static mixers are housed in clear PVC for visual observation of the mixing process.
- D) Homogenization and activation is accomplished in the final section. As the solution passes through the outlet port it is ready to be delivered to the point of application.
- E) Loss of water flow, detected by a pressure transducer, will turn off power to the neat polymer pump. The neat polymer pump will not restart until the water flow resumes.

SVENMIX PLUS DIGITAL PROGRAMMABLE CONTROLLER

- 4] A) The Controller shall include:One (1) Polymer Feed Control Panel UL Type 4X Non-Metallic Enclosure Wall Mountable with Quick Release Latches
- B) Circuit Breakers
 - 1: Control
- C) Pilot devices
 - 1: On-Off-Remote Switches
- D) Contacts for Remote Monitoring and Alarms
 - 1: Loss of Flow
 - 2: Polymer System On/Off
 - 3: Polymer System Fail Status
 - 4: Polymer System Local/Remote Status
- E) Micro V-PAC II Programmable Controller
 - 1: 128 x 64 Graphic Backlit LCD Display

- 2: (12) Discrete Inputs**
- 3: (12) Discrete Outputs**
- 4: (2) Analog Inputs**
- 5: (2) Analog Outputs**
- F) Circular Plastic Receptacle and Plug for Signal Input**
- G) Terminal Blocks for All I/O**
- H) Provisions To Mount and Wire**
 - 1: Mini CAS Relay**
 - 2: Telephone Dialer**

Optional Equipment

- A) Analog Control**
- B) Extended Aging Chambers.**
- C) Calibration Column.**
- D) Low Flow cut off switch.**
- E) Backflow Preventer.**
- F) Post-Dilution water system.**

Requirements

- A) All electrical components shall be UL listed.**
- B) All plumbing components shall be Schedule 40 min.**
- C) Frame shall be 304 SS or Powder Coated Steel min.**
- D) Housing shall be 1/4" PolyPropylene min.**

Warranty

The SVENMIX PLUS is warranted against defects in material and workmanship for 1 full year from date of installation. Damage caused by mishandling, improper installation or lack of maintenance will not be covered. Damage due to sediment or debris in the water supply will not be covered in this warranty.