

Engineered and built in the United Kingdom by long serving experienced water treatment and manufacturing engineers.



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SYSTEM EM

Emulsion Polymer Preparation & Dosing System

System EM Liquid Polymer Preparation and Dosing Unit

The System EM is a very compact and rugged self contained unit designed to mix and age liquid polyelectrolyte instantaneously without the need for ageing tanks and solution metering pump sets. It delivers optimum results through the precise control of metered polymer, water flow and the unique dual zone mixing chamber. With control of these variables you can ensure your polymers have the ideal and most economic mixing environment.

All controls are front mounted for easy operation and visual monitoring. The pump head and “EasyClean” polymer injector are fully accessible at the side of the unit. For servicing, the unit incorporates a removable dual zone chamber module.

The System EM is designed for easy installation and set up, all that is required is a clean water supply, neat chemical storage space, and a single phase power supply (230/1/50hz or 110/1/50hz).

The System EM is designed for long life and continual operation with repeatable results.

-  Stainless steel and polypropylene dual zone mixing chamber
-  High energy initial mixing zone & low energy inversion zone
-  110/1/50hz or 230/1/50hz
-  Neat polymer pump with manual or optional 4-20mA control
-  High flow EasyClean injector
-  Static mixer with removable stainless steel element
-  Low pressure drop through unit

System EM Models

Model Number	Primary Dilution Water litres/hour	Secondary Dilution Water litres/hour	Polymer Metering Pump litres/hour
EM 150-3.8	0 - 150	0	0 - 3.8
EM 375-3.8	50 - 375	0	0 - 3.8
EM 875-3.8	50 - 375	40 - 500	0 - 3.8
EM 875-7.6	50 - 375	40 - 500	0 - 7.6
EM 2400-7.6	240 - 2400	0	0 - 7.6
EM 4800-17	240 - 2400	240 - 2400	0 - 17
EM 4800-30	240 - 2400	240 - 2400	0 - 30

System EM Dual Zone Mixing Chamber

-  Stainless steel and polypropylene for durability
-  High energy initial mixing zone & low energy inversion zone



System EM EasyClean Injector



-  Easy to disassemble for cleaning
-  No adjustment or calibration required

System EM Clear Static Mixer with Stainless Steel Element

-  Clear for visual check of process
-  Removable element for easy cleaning during servicing
-  No moving parts



System EM Process

Incoming water is fed into the dual zone mixing chamber through a solenoid valve and regulated by a variable area flowmeter with low flow alarm.

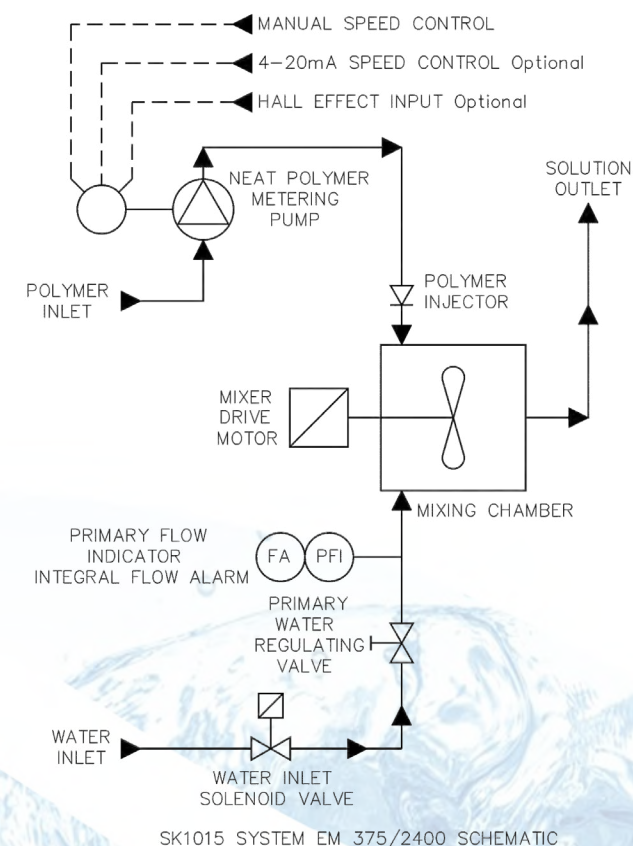
The liquid polyelectrolyte is fed into the mixing chamber through the EasyClean injector by a high viscosity electronic metering pump. The pump output is fully programmable for precise chemical metering and can be externally controlled by 4-20mA input, hall effect flowmeter or remote on/off as an option.

The incoming water and liquid polyelectrolyte are initially mixed in the first zone of the mixing chamber by the high energy impeller before passing to the second zone to be fully inverted by the low energy elliptical rotor without shearing or damage.

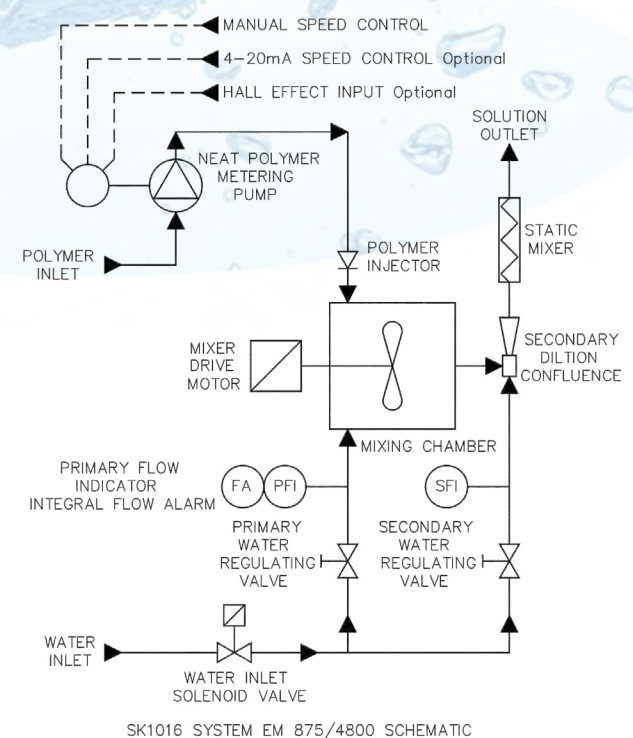
The polymer solution exits the chamber for delivery to the required process.

Secondary dilution is provided on the EM 875 and EM 4800 models where a further water feed is controlled through a second variable area flowmeter to dilute the solution within a clear PVC static mixer with removable stainless steel element.

System EM 375/2400 Schematic

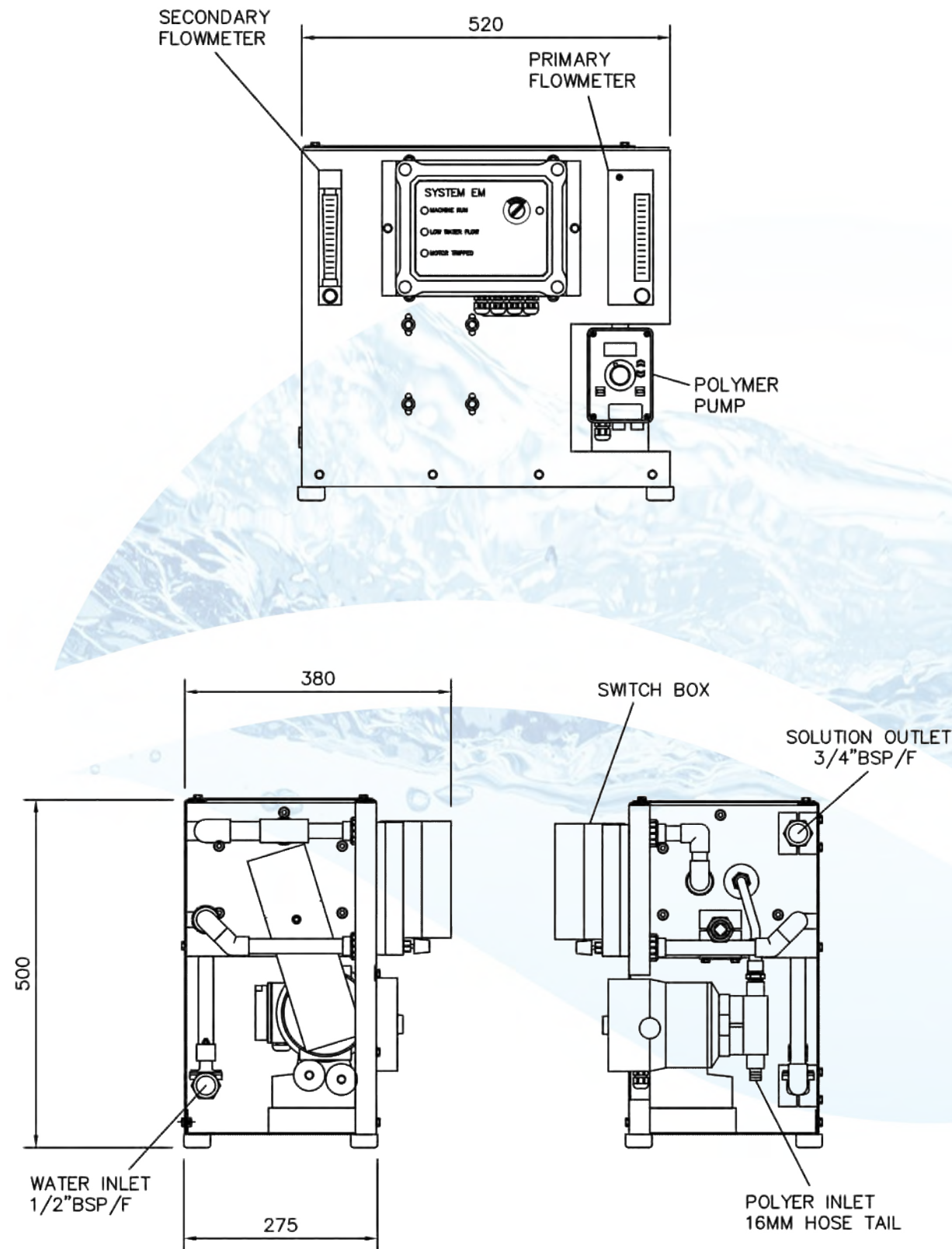


System EM 875/4800 Schematic



-  Variable area flowmeter(s) for precise control
-  Low flow alarm to shut off chamber drive and metering pump
-  Fully programmable chemical metering pump
-  Optional external 4-20mA input, hall effect flowmeter or remote on/off
-  Stainless steel and polypropylene dual zone mixing chamber
-  Initial high energy mixing with low energy zone for inversion of chemical
-  Precise secondary dilution within a clear static mixer with removable stainless steel element

System EM 875 Small Frame General Arrangement



System EM 4800 Large Frame General Arrangement

