

# **PULSAFEEDER®**

## Polymer Makedown Systems



PT Indosol Water Solutions  
Address: Menara Jamsostek,  
Menara Utara lantai 22, Jakarta Selatan  
DKI Jakarta

Mobile/WA : (+62) 812-9936-9445  
Office : (+62) 21 5296 2135  
Email : ask@pulsafeeder.co.id

website : [www.pulsafeeder.co.id](http://www.pulsafeeder.co.id)



**PULSAblend** 

## Pulsafeeder Expertise

Technology is the key to delivering responsible products to the markets that we serve. Leading the way in the development of metering technologies, Pulsafeeder continues to set the standard for accuracy, reliability and safety.

Innovation is another hallmark of Pulsafeeder. Helping customers find a new approach to an old problem is what we do best.



## Model Specific QR Code

**From the Company that truly cares about your technical service needs.** Pulsafeeder assists everyone in the field with information for **THAT SPECIFIC PRODUCT**, quickly and easily. No dedicated app needed. Simply use your QR Reader on your smart phone or tablet and scan the QR Code located on the Pulsafeeder product label, either Pump or Controller.

- Identify - Model Number, Serial number, KOPkit (Repair Kit)
- View - Quickly find product information such as parts list, IOM, tech sheet and more
- Contact - Call or email Tech Support immediately to assist you
- Email - Send this information to yourself or someone else, to save or even view later



## PULSAblend Polymer Makedown System Technology

The Pulsafeeder PULSAblend Polymer Makedown Systems feature a Static Blending System which provides excellent dilution without harming the polymer chains. Different polymers require different levels of agitation. PULSAblend does not have a motor driven mixer and is as effective (or even more effective) than other makedown systems.

These rugged fabricated assemblies offer turn-key simplicity and industrial-grade durability. The UV stabilized, high grade HDPE frame is lightweight, corrosion resistant and offers structural rigidity. Each system is factory assembled and hydrostatically tested prior to shipment.

## Features & Benefits

### Static Blending System

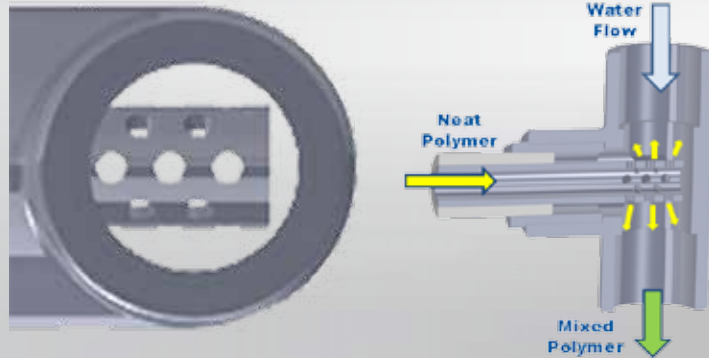
#### 3 Step Static Blending Systems Means

- Complete makedown of any liquid polymer
- No motor driven mixing chamber means:
  - No over-processing to fracture fragile polymer chains
  - Full length chains maximize the polymer's efficacy
  - More robust system with fewer maintenance items
  - Less Polymer, Less Energy, Less Maintenance
- Lower Cost to Purchase, Operate & Maintain = Value!

## Step 1

### Multi-Port Neat Polymer Dispersion Injector

- Neat Polymer is injected directly into the water flow path
- Multi-orifice 360° nozzle injects polymer into water flow for excellent dispersion
- Compact Injection Nozzle minimizes area to hold partially mixed polymer
- Complete cleaning of nozzle during flush mode; ready for the next cycle



## Step 2

### Controlled Acceleration Orifice

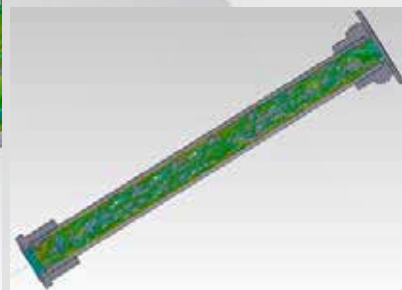
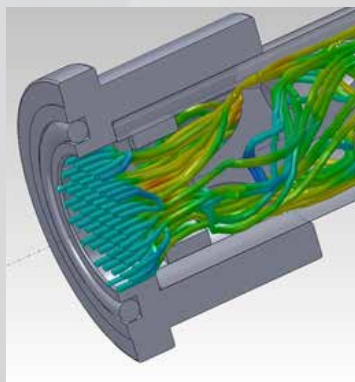
- Computer modeled for optimum solution velocity
- Maximizes energy addition and inversion of emulsion polymers
- 3 sizes to match desired flow rates:
  - 0-5 GPM
  - 5-10 GPM
  - >10 GPM



## Step 3

### Disruptive Flow Static Mixing Chamber

- Multi-Vane mixer provides final agitation for complete make-down
- Does not over-process or break the polymer chains like active mixers
- Union ends are staggered to prevent reverse installation
- Clear body provides visual verification of makedown & flush
- Complete cleaning during Flush Cycle



# Features & Benefits

## Open Access System



### Common Pipe Runs

- 1/2" Schedule 80 PVC
- Fixture built for exact dimensions end-to-end for easy replacement

### Unions In Key Locations

- Easy disassembly for cleaning or replacement



### HPDE Frame

- Welded UV stabilized 1/2" material
- Strong and lightweight

### Small Footprint

- Same footprint on all systems: 16" by 21"



## Proprietary Mixing



### Interchangeable Static Mixer

- Can change to any of the 3 mixer flow elements to maximize the polymer inversion

## Consistent Control



### Adjustable Flow Meter

- Exact control of incoming water flow

### Neat Polymer Inlet Strainer

- Eliminates chunks and fish-eyes in polymer



### Back Pressure Valve

- Keeps neat polymer pump at exact flow rate

### Auto-Fill Calibration Column

- Never touch the polymer to calibrate



# System Configuration Options



## Manual Control

A single three position control switch provides for automated polymer makedown in “Run” mode and allows the operator to select “Flush” mode to run only clean water along with the “Off” position. A “Prime” button activates only the neat polymer pump.



## Dry Contact Control

The Dry Contact remote control option allows for “Run/Stop” function with automatic flush cycle from a simple contact closure.

## Automatic Control

Controls include main power “on/Off” and “HOA” switches for the neat polymer feed pump and the inlet water solenoid valve. Optional controls for mixer “HOA” and mixer timing included with the mixer option. Day tank “Batch” level control has optional ultrasonic or conductivity rod level sensors.

# Performance Protection - Optional Equipment



## Inlet Pressure Regulator

- Used where inlet water pressure varies greatly; i.e. 30-80 PSI
- Regulator can be set to lowest pressure (30 PSI) and the flow into the system will not increase as pressure increases



## Inlet Water Flow Switch

- Turns off the pump and closes alarm relay at 0.5 GPM
  - Standard on Automatic Control system
- FSW Suffix**
- Optional on Manual and Dry Contact systems
  - Turns off pump below 1.0 GPM; no alarm

## PULSAtron Series Pumps

For over 20 years, the PULSAtron product line has evolved into philosophy of design that continues to set the standards for the entire industry. Our engineers have developed a guided check valve system with a proven 'seat and ball' design that ensures reliable and accurate metering year after year.

Our fin cooled Solenoid enclosure dissipates heat ensuring that the pressure handling capability of the pump can be maintained. The thermally protected Solenoid protects the pump from seizing up in extreme heat conditions with an automatic reset feature allowing the pump to resume operation upon cool-down. All PULSAtrons are tested and rated under hot conditions guaranteeing that the flow and pressure ratings meet the specifications.



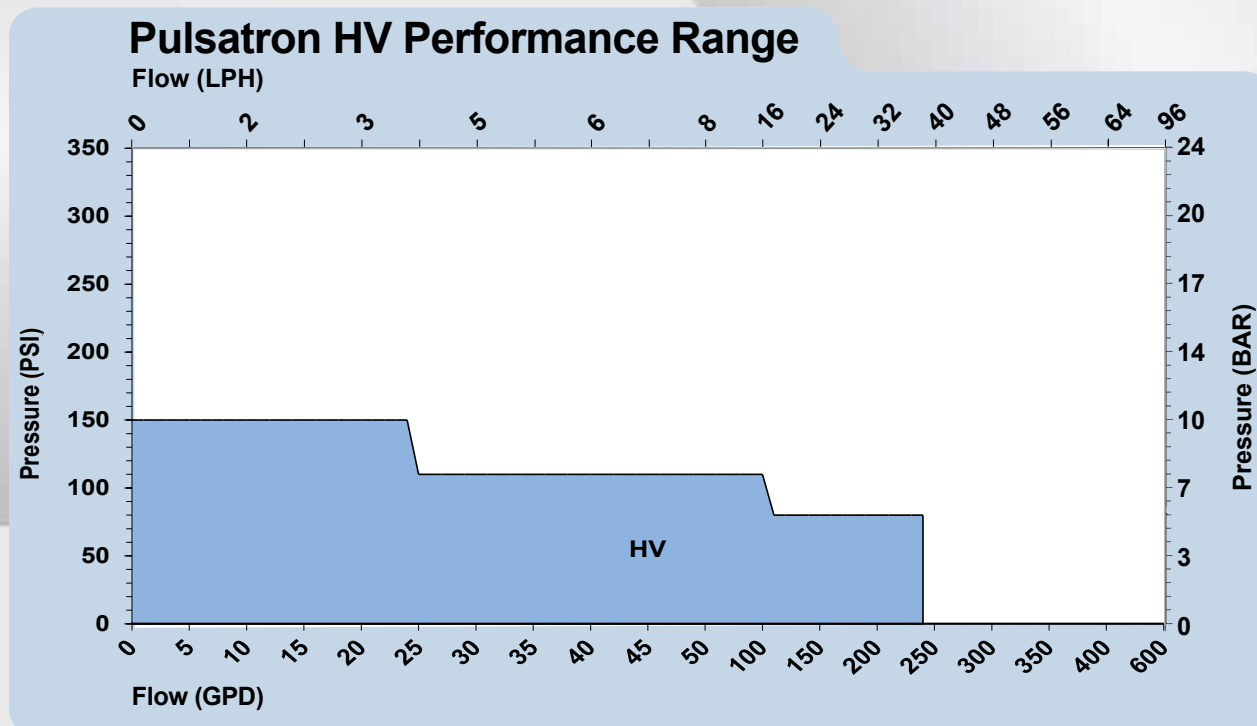
### Neat Polymer Injection Pumps

- Five sizes from 0.5 to 10 GPH
- 20,000 CPS
- PVC pump heads with GFPPL valves
- Silicone Free option available for paint system application
- Visible flow connected to system with clear, braided PVC hose
- Low flow cutoff option: 'External Stop' pump used with FSW suffix code



## Diaphragm Metering Pump Technology

The PULSAtron family are solenoid powered diaphragm metering pumps. The key element which differentiates these pumps from other types is the TFE lined elastomer diaphragm. This diaphragm is sealed against the reagent head forming a seal-less, leak free pumping chamber. The solenoid driver is connected to the diaphragm to create the pumping motion. As the diaphragm moves away from the face of the reagent head, it creates a vacuum which closes the discharge check valve and opens the suction check valve, drawing the pumped fluid into the pumping chamber. As the solenoid forces the diaphragm toward the face of the reagent head, the suction check valve closes and the discharge check valve opens allowing the liquid to flow out the discharge valve.



# Day Tanks, Level Control & Mixers



## Day Tank

Required on Automatic Systems, optional for Manual & Dry Contact

- Conical Bottom w/ Stand available in 6 sizes:
  - 15 Gallon
  - 30 Gallon
  - 40 Gallon
  - 60 Gallon
  - 85 Gallon
  - 110 Gallon



## Level Control

Required on Automatic Systems, N/A on Manual & Dry Contact

- Conductivity Rod is Standard; lengths are sized to tank option
- Ultrasonic is Optional: Seen as less reliable in the industry



## Tank Mixer

Optional on Automatic Systems, N/A on Manual & Dry Contact

- 75 RPM is standard, VFD drive is optional
- Choice of Propeller or Paddlewheel blades



## KOPkits

When you need a part, you've got it. A KOPkit can help you cut downtime and put you back in business fast.



## Calibration Kit

Calibration columns are used on the supply side of the pump to permit flow calibration.



## Pump Shelf

Designed to safely and securely mount your metering pumps on a wall or level surface and contain any potential spills.



**Pulsation Dampeners** improve pump system efficiency by removing pulsating flows from positive displacement pumps.



## Corporation Stop

Pulsafeeder's high quality brass corporation stop and nozzle assembly disperses chemical into the center of a line for even mixing.



**Pressure Relief Valves** prevent an over pressurization situation from ever damaging your pumps or pipes. Over pressurization can occur when a valve is closed or a blockage occurs. They are always recommended equipment for any pump or skid system.



## Solution Tanks

Available in sizes from 15 to 500 gallon.



**Solenoid Valves** are used to permit and shut off fluid flow.

Contact your local  
Pulsafeeder Distributor or  
Pulsafeeder Technical Services  
at 800-333-6677

