IMPROVED PROCESS CONTROL
BRAVO CHEMICAL METERING SYSTEMS
Experience whole process control, complete reliability and reduced chemical consumption with SEEPEX's BRAVO Chemical Metering Systems. These innovative, plug-and-play, pre-engineered chemical feed systems are the culmination of over three decades of SEEPEX’s experience in optimizing progressive cavity pumps, systems and controls.

**BRAVO CHEMICAL METERING SYSTEMS**

**TRUE-UNION VALVES**
Provides easier serviceability.

**CALIBRATION COLUMN**
Quickly calibrates flow rates.

**INTELLIGENT METERING PUMPS**
With an integrated process control board for superior metering capabilities. Optionally available with a dry running device to alert operators about the presence or absence of fluid.

**Vent lines**
For easy suction-side degassing.

**Liquid-filled pressure gauge**
2.5" diameter, 160 psi gauge provides 1.5% full scale accuracy with integral isolation.

**Pressure-relief valves**
Protects pumps and piping from overpressure.

**Pipe unions**
Allow for targeted repairs.

**Modular System Options**

- **Floor mounted triplex**
- **Wall mounted triplex**
- **Floor mounted duplex**
- **Wall mounted duplex**
- **Floor mounted simplex**
- **Wall mounted simplex**

**BRAVO** is a complete, integrated, modular and scalable solution used in a variety of industries for disinfection, pH control, Resuspension, corrosion inhibitors, oxygen scavengers and containment elimination.

**Benefits**
- Simplified system design reduces initial and operating costs while increasing process dependability
- Single source for pumps and controls
- Standardized modules for system expansion to meet future demands
- Less chemical use

Multiple systems are offered to accommodate your current flow demands. Modular panels are also scalable to accommodate future requirements.

**IMPROVED EXPERIENCE:**

- **Intelligent controls** for simplified flow rate adjustment
- **Simplified system design** reduces initial and operating costs while increasing process dependability
- **Single source for pumps and controls**
- **Standardized modules for system expansion** to meet future demands
- **Less chemical use**

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**ACURATE, REPEATABLE FLOW.**

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Pictured: Floor mounted triplex system
INTELLIGENT METERING PUMPS (IMP)

Complete process control starts with the pump. The unique design of a progressive cavity pump offers several advantages compared to traditional chemical metering pumps due to its precise, consistent, repeatable dosing with low shear, minimal pulsation and no vapor lock. Slip is minimized even when fluid temperature, viscosity or discharge pressure fluctuates.

The pump design incorporates an Electronic Programming Module (EPM) memory chip on which parameters can be pre-configured. This makes replacement of a drive simple, quick and accurate. Simply insert the EPM chip from a previous drive into the new one for no downtime between stop and startups.

Each unit has a keypad on the controller lid equipped with operator elements for H-O-A selection, manual speed control, display of pump speed/RPM or flow/fault indication and the ability to change factory settings. Various accessories can easily be connected to the drive via the control terminals on the terminal strip inside the controller.

IMP are optionally available with a cost-effective solution for dry running protection. The device senses the presence/absence of fluid within the pipe, stops the pump and alerts the operator.

**Benefits**
- NSF/ANSI 61 certified pumps with accurate, repeatable metering eliminate over and underfeeding
- Low shear ensures chemical potency
- Minimal pulsation eliminates dampeners and regulating valves
- No vapor lock
- Predictive maintenance, no risk for catastrophic failure
- Less slip

**Key Facts**
- Conveying capacity: 1.05 – 250 USGPH (950 l/h)
- Pressure: 175 psi (12 bar)