



Powdered Chemical Feed Systems

Potassium Permanganate (KMnO_4)

NPI's Potassium Permanganate Feed Systems provide semi-automatic blending and feeding of KMnO_4 solution beginning with a free-flowing grade of KMnO_4 and a suitable water source. These systems are used to prepare solutions that recharge filtration media in potable water applications or for odor control applications in wastewater treatment plants. In either case, these systems offer the ability to generate KMnO_4 solutions without dust and without back strain on the part of the operators.



A wide range of flow rates and injection pressures are available to meet a range of chemical feed needs. A core offering of standard features are built into the product line to cover most needs and to minimize the need for costly completely custom engineered systems to fit your requirements.

Complete documentation including CAD files (DXF, DWG or PDF formats) along with

Engineering Specifications are available for integration into project work.

KMnO_4 SYSTEM FEATURES:

- ◆ Input voltage: 480 VAC—3 ph—60 Hz
- ◆ Chemical Blending cap: 22 lbs of KMnO_4 /minute
- ◆ Solution Feed rates: depends on pumps selected
- ◆ Feed pump (metering pump) pacing: by 4-20mA signal
- ◆ Control panel: provided with indicator lights, controls and switches for a functions NEMA 4-rated
- ◆ Skid size— 4.5' square x 6' high
- ◆ Output signals standard: 4-20mA output for motor driven metering pump units, incoming water flow rates & solution liquid level
- ◆ Level Sensing: ultrasonic
- ◆ Modular construction for ease of maintenance

800-378-1500

Northeast Pump & Instrument

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Specifications

Input Voltage: 480 VAC - 3-phase - 60 Hz

Power Consumption: Dependent upon flow requirements

Chemical Pickup Rate: 22 Pounds per minutes

Input Signal Isolation: Transformer

Output Signal Connects: Fully insulated terminal strips

Input Connections: Terminal Strips

Agitator Controls: Manual control and high-level cutoff; Programmable 24-hour timer included

Indicator Lights: Oil-tight rated lights and switches

Audible Alarm: Piezo-electric module

Connections: Incoming water - 1 1/2" NPT female
Solution feed - female NPT thread - pump dependent (related to flow requirements)

Tank Equipment: Shall be provided with agitator suitable for tank size. In addition, all necessary bulkhead fittings, shutoff valves, and flexible PVC hoses. Ultrasonic level sensing unit shall be mounted and calibrated to tank size.

Solution Level Control: Ultrasonic - interfaced to shut-off solution blending process at high tank level setting and shut-off feed pumps and agitator at low level setting.

Dimensions

4.5' wide X 4.5' wide X 6' height (see CAD diagrams)

Ordering Information

1. Indicate flow requirements and pressure in water system
2. Select tank size (LDPE tank provided)
3. Indicate distance from tank to skid
4. Review tank and skid sizes when sizing entrances to the installation area.

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