



PDS

PERMANGANATE DOSING SYSTEM

cod. 20211280



EMEC S.r.l. Via Donatori di Sangue, 1 - 02100 Rieti - Italia
T. +39 0746 2284 1 F. +39 0746 2284 2
info@emecpumps.com - www.emecpumps.com

PDS

PERMANGANATE DOSING SYSTEM

PDS (Permanganate Dosing System) is a **compact, fully automatic system** designed for the preparation and continuous dosing of **Sodium Permanganate (NaMnO₄)** and **Potassium Permanganate (KMnO₄)** solutions, starting from **liquid solutions**, in drinking water or for industrial applications.

It is intended for applications where **reliability, dosing accuracy**, and **operational continuity** are required. The system allows **flow-proportional control** and automatic management of the oxidizing agent via a touchscreen panel.

The system can be integrated with **PermaTest**, a solution for continuous residual analysis, ensuring complete control of the oxidation process.

APPLICATION FIELDS

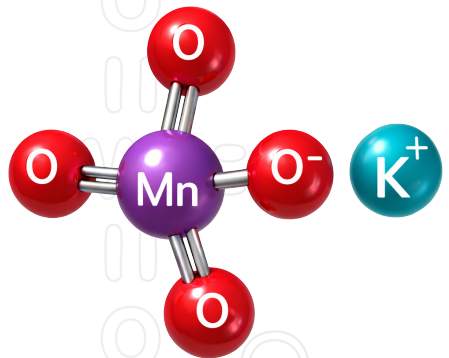


MAIN FEATURES

- Permanganate dosing setpoint in mg/L
- Automatic flow-proportional dosing
- Automatic calibration of dosing pumps
- Manual mode with preset flow rate
- Flow-proportional control via 4-20 mA signal
- PID control with integrated flow meter
- PID control of dosing pumps
- Flow monitoring and process alarms

AVAILABLE CONFIGURATIONS

POTASSIUM PERMANGANATE



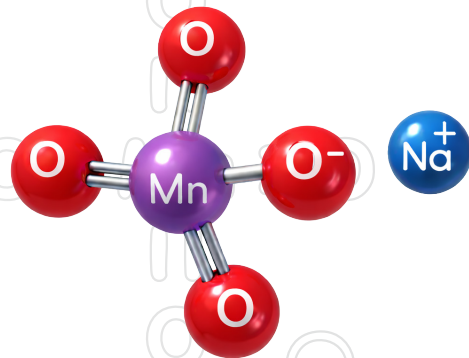
WHERE

- ✓ Removal of iron and manganese
- ✓ Oxidation of hydrogen sulfide (H₂S)
- ✓ Odor control and organic compound oxidation
- ✓ Pre-oxidation in drinking water treatment

WHY

- ✓ High chemical stability of the solution
- ✓ Lower aggressiveness toward certain materials
- ✓ Good long-term storage stability
- ✓ Lower maximum concentration in solution

SODIUM PERMANGANATE



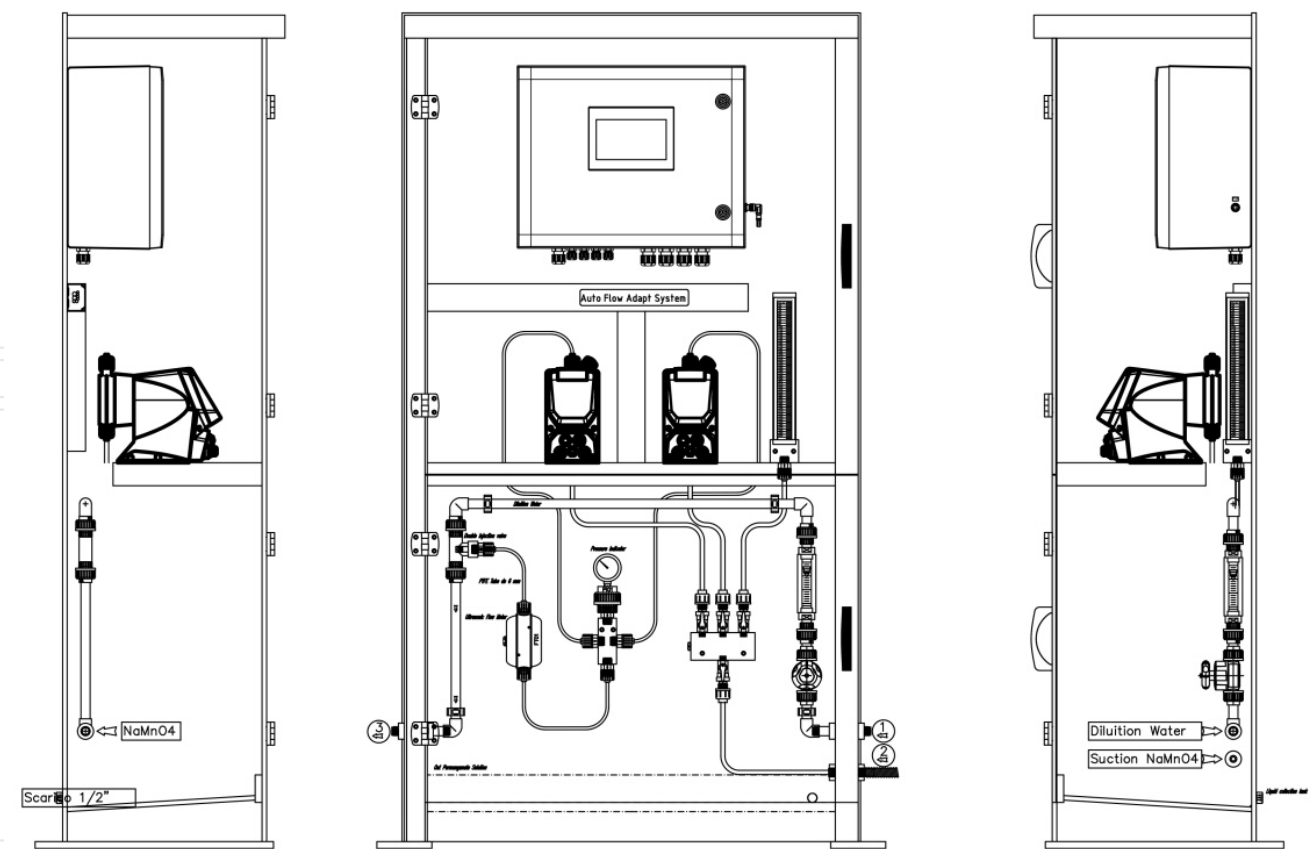
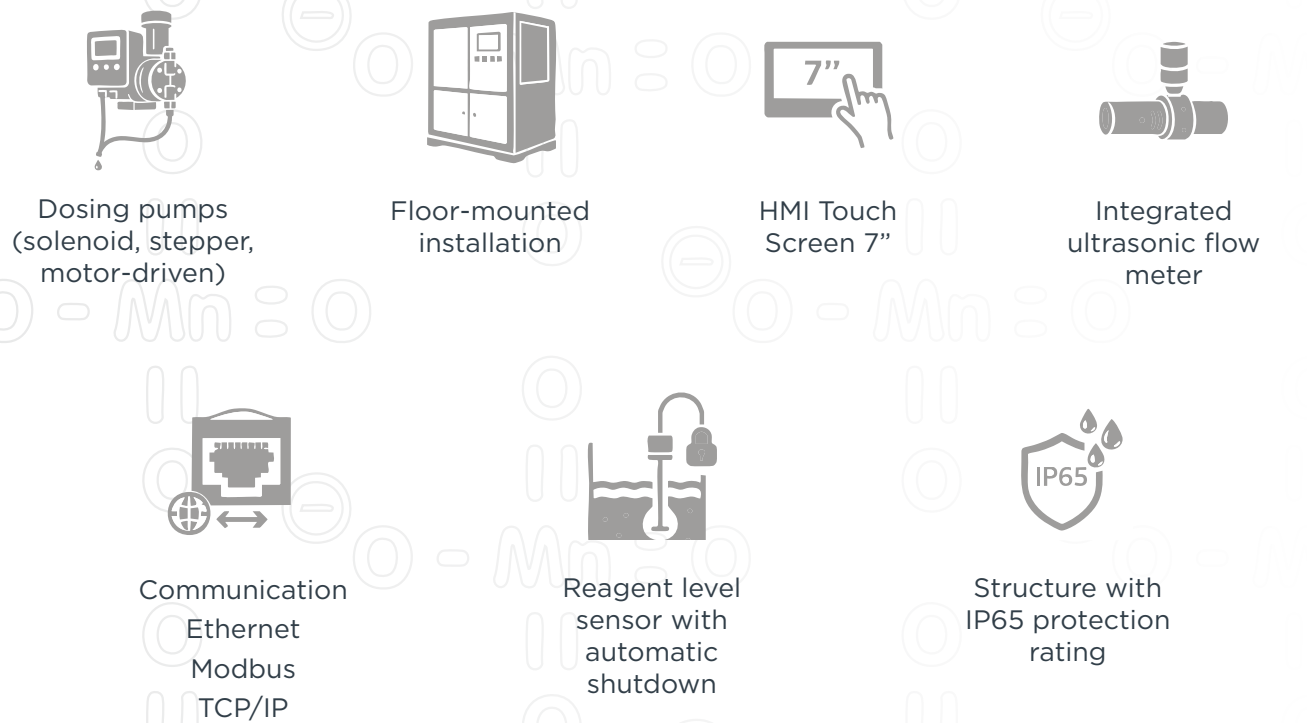
WHERE

- ✓ Industrial water treatment
- ✓ Environmental remediation and contaminated soil treatment
- ✓ Oxidation of complex organic compounds
- ✓ Systems with continuous and controlled dosing

WHY

- ✓ Much higher solubility
- ✓ Higher operating concentrations
- ✓ Greater fluidity and ease of pumping
- ✓ Higher oxidizing reactivity
- ✓ Particularly suitable for continuous systems

SYSTEM COMPONENTS



TECHNICAL SPECIFICATIONS

Power supply	230 Vac ±10% - 50/60 Hz
Power consumption	Approx. 100 W
Protection rating	IP65 / NEMA 4
HMI display	7" touchscreen
Inputs	• 4-20 mA analog signal (flow rate) • Remote Start/Stop • Level alarm
Operating temperature	0 ÷ 40 °C