







#### **BG08 Series - Chlorine Dioxide Generators**







STEIEL manufactures an advanced system for water disinfection with chlorine dioxide, designed to produce chlorine dioxide (CIO<sub>2</sub>) in aqueous solution from the chemical reaction between hydrochloric acid (HCI) and sodium chlorite (NaClO<sub>2</sub>), and then dose it directly in-line or store it in a tank for a subsequent controlled dosage.

A PLC equipped with touch-screen display controls the entire system. The touch-screen unit allows a simple and user-friendly interaction for all configuration, system start/ stop, working mode selection, and error management operations. The PLC also allows software upgrading to have your system always at top performance, and is provided with a LAN port for the connection to a router and remote monitoring through RealVNC software.

The system is equipped with several security controls, as level and flow sensors, and chlorine dioxide gas detector.

The BG08 series includes several configurations, to better satisfy all application needs:

- Production rate: 10, 20 or 40 g/h
- Models for direct in-line injection, complete with pressure relief valve
- Models with tank and external dosing pumps (1, 2 or 3)
- Dosage triggered by an external consent (e.g. water meter) or through an integrated CIO, measure system
  - Integrated measure system including controller and CAC or CLE12 amperometric cell (for cold water, up to 45°C)
  - Integrated measure system including controller and CAC/HT cell for hot water (up to 70°C)

# Anti Legionella System



This panel has been designed for the constant and full disinfection of the water. Supplied ready-to-use, assembled and prewired at the factory.

The electronic unit continuously monitors the disinfectant concentration in water by analysing it with proper cell and controls operations of pump 3 accordingly.

Pumps 1 and 2 are instead controlled by a pulse-emitting water meter and respectively inject disinfectant and an anticorrosion product in case of water replenishment in the circuit.

The RW14 remote control system is connected through RS232 serial line to the electronic unit, allowing the remote management of the system.

The panel is equipped with measurement cell, probe-holder and filter for the use up to 70°C and, therefore, suitable for the control of sanitary hot water.

# Products for Industrial Application THE 2019/2020 OVERVIEW







#### **Assembled and Prewired Control Panels**

STEIEL Elettronica offers a wide range of pre-assembled control panels for industrial applications, complete with measure sensor, and with or without dosing pump. Here below you can see some standard panels, but any modification or customized unit can be required to satisfy all application needs.

### Chlorine or Chlorine Dioxide Control, both in Cold and Hot Water



#### **Panels for Cooling Towers**

Automatic blow-down system for cooling towers, complete with electronic controller, conductivity cell, pump for biocide dosage, motorized valve and assembled hydraulic kit.

A budget version is also available, including an EF164S pump with built-in conductivity meter, and solenoid valve.



# Multiparametric Control Unit



The MC14 digital unit features multiple inputs for 5 simultaneous readings (pH, ORP, chlorine, conductivity, turbidity; also double input for CAC cells; temperature always provided).

Main technical characteristics include two configuration levels (with password), relays for ON/OFF or proportional control, two analogic outputs (0/4-20 mA), OFF input, water flow control input, downloadable data log via serial line, optional RS485 port with Modbus RTU communication

Designed for wall installation.



#### S504 Series



Microprocessor-based, digital, single parametric units. Designed for installation on DIN slot. Models with input for pH/ORP electrode, amperometric cell, conductivity probe, standardized input (indicator).

Temperature input for Pt100 sensor. LCD with backlight.

#### **Measurement Sensors**

STEIEL offers a wide range of measurement sensors for monitoring the main parameters of water:

- pH and ORP electrodes, with glass or plastic body, threaded head or soldered cable and BNC connector
- Full range of closed and open amperometric cells for chlorine and chlorine dioxide analyses
- Conductivity probes also with built-in temperature sensor, and models for inductive measurements

# **Programmer for Reverse Osmosis Plants**



The PRG11 electronic unit is designed for the control of reverse osmosis plants. Can be mounted on the frame of the osmosis equipment, or wall installed.

Equipped with an internal clock that allows to schedule filter cleaning at set times, and features two inputs for conductivity probes

for measuring water both entering and exiting the osmosis unit. The PRG11 can communicate via a (optional) serial line with PC or PLC, or with the RW14 web interface to remotely view the status of the plant.

# *S503 / S508 Series*

Microprocessor-based, digital, single parametric units. Designed for panel installation in electrical cabinets.

Models with input for pH/ORP electrode, amperometric cell, conductivity probe, standardized input (indicator). Temperature input for Pt100 sensor. Alphanumeric LCD with backlight.



The S508 series also features models with input for CAC probe or turbidity cell, RS232 port, and multilingual menu.



# **Dosing Pumps**

# PROXIMA PSP - Professional Line

Series of electromagnetic pumps, designed for horizontal installation, with mechanical adjustment of stroke, digital electronics and high performance hydraulics. Wide range of options available for pump head and flow rate, large backlit LCD display, inputs for level sensor and external consent, models for dosage of viscous liquids. Main features:

- Multi-voltage power supply (100 ... 240 V~)
- Multilingual interface
- Two configuration levels, standard and advanced
- Built-in counter of injected litres, that can be used for maintenance requests
- Separate inputs for level sensor and injection flow sensor
- Optional output, to be chosen among alarm relay, mA output, "Repetition" output for sending remotely a magnet pulse to other pumps equipped with pulse input, RS232C serial port for communication with a supervisor (RW14), or RS485 port with Modbus communication protocol.
- Dosing head with FDA certification can be requested.

Available models:

**PSP161**: Multifunctional pump with pulse and 0/4-20 mA inputs

PSP162: Pump with built-in pH/RX meter and electrode input on BNC connector

PSP163: Pump with built-in chlorine meter, available in two versions (with input for CLE12 or CLE16 cell)

PSP164: Pump with built-in conductivity meter, also available with software for automatic purge of cooling towers

#### **EF160 EVO Series - Professional Line**

Professional digital electromagnetic dosing pumps, with backlit LCD and multilingual interface. Internal clock for daily or weekly schedules. Separate inputs for level sensor and injection flow sensor (optional). Options upon request: RS232 port, alarm output, mA output, pulse repetition output (SSR). PVDF or PP pump head, also available with auto-drain. Multifunctional pump (EF161) with pulse and mA inputs; models with built-in pH/RX meter (EF162), residual chlorine meter (EF163) or conductivity meter (EF164). Designed for wall installation and pre-assembled panels.



**Modbus** PA

#### EF155 Series - Semi-Professional Line

Electromagnetic dosing pumps, with flow rate adjustment trough keyboard and display, input for level sensor and optional external consent, LED display.

Basic ON/OFF model (EF155), version with two timers for setting pause/work times (EF156), model featuring pulse input for water meter (EF157), and version with built-in pH/RX meter and electrode input on BNC connector (EF158). PVDF or PP pump head, also available with auto-drain.

Designed for wall installation and pre-assembled panels.

#### EF150 Pump - Basic Line

ON/OFF pump with flow rate adjustment via front key and display, input for level sensor, LED display. Designed for mounting on pre-assembled panels. PVDF or PP dosing head; three flow rate curves are available.



# **Multifunctional Valves**

**Level Probes** 

Useful accessory for protecting the metering line against overpressure generated by the dosing pump when a stopcock in the metering line is closed.

PVDF valve body, FPM or EPDM seals, PTFE-coated diaphragms.

Models with different size and relief opening pressure, are available.

# **Dosing Accessories**



# Rotatina Bracket

Exclusive STEIEL bracket with 360° rotating support, for easy operations on the pump dosing head. Provided with slots for suction and drain hoses.

Used for wall-mounting the PROXIMA PSP pumps, or for horizontal installation of wall pumps (for example, on tanks).





