



Irrigation and Fertilization Water

The water used in agriculture for irrigation and administration of fertilizers requires continuous monitoring and regulation of the pH and conductivity levels.

STEIEL provides electromagnetic pumps with integrated pH or conductivity meter, and digital single or multi parametric instruments featuring proportional control and outputs for driving dosing pumps.



Control Units

S507 single-parameter instrument, models for pH or conductivity measurement, with watertight housing.



MC14 multiparametric instrument, for the simultaneous measurement of pH, conductivity and temperature.

Provided with RS232 port for communication with a PC or remote control system. Multi-language interface.

Wall installation.

Can be also supplied mounted on a panel, with measurement sensor(s) and dosing pump(s).

Wastewater

The wastewater of industrial processes requires controls for the presence of pollutants and contaminants of both chemical and biological origin.

For chemical analysis, STEIEL offers a series of professional photometers, S7000 Plus, which provide easy and fast measurements of a wide range of parameters. They feature automatic selection of wavelength, internal memory and USB port for data transfer. Supplied in a carrying case, for transport and use on the field, complete with accessories and reagents.



INSTRUMENTS FOR THE AGRI-FOOD SECTOR

Control and Treatment of the Process, Washing and Waste Water





Process and Washing Water

Mineral Water and Beverages

In the industry of mineral water bottling, the control of the characteristics of the water is of fundamental importance. In addition to the microbiological purity, spring water and groundwater is constantly analysed to keep under control the levels of pH, conductivity, turbidity and temperature.

Also in the production of soft drinks and beer is crucial the control over the water used, both for pH value and turbidity, which may also provide guidance on the effectiveness of the filtering processes.

Washing Fresh Fruits and Vegetables

In the preparation and packaging of fresh vegetables, washing is the treatment used to remove impurities and reduce the microbial load without damaging the product. Also slows the degradation processes when practiced with cold water. The water for washing must therefore be drinkable and adequately refrigerated (2-4°C).

Furthermore it is necessary to adjust the concentration of disinfectant additives used, such as chlorine and chlorine dioxide



Chlorine Dioxide Generators - BG08 Series

Advanced system for water disinfection, designed to produce "in situ" an aqueous solution of chlorine dioxide, which is then dosed directly in-line or store it in a tank for a subsequent controlled dosage. A PLC 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 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; provided with tank and external dosing pumps (up to 3); models with integrated measure system (controller and cell).



Control of pH, Conductivity, Turbidity, Temperature, Chlorine and Chlorine Dioxide



STEIEL Elettronica provides a complete range of assembled panels for applications in the food industry, complete with control unit and measurement sensors, which allow the control and adjustment of various parameters (for example, levels of pH, redox potential, free chlorine, turbidity and temperature).

The pictures show some examples of standard solutions, but changes or achievements tailored to specific application needs can also be requested.

Steel Cabinets

Stainless steel panels suitable for the food industry, complete with electronic unit, measurement sensor and dosing pumps. Optional: system for remote control.

The pictures show two installations for pH and chlorine control.



Professional Dosing Pumps

PROXIMA PSPS Series

Series of electromagnetic pumps, designed for horizontal installation, with mechanical adjustment of stroke, digital electronics and high performance hydraulics. Wide range of available flow rates, large backlit LCD display, inputs for level sensor and external consent. Multi-voltage power supply, optional serial port (RS232 or RS485, also with Modbus protocol).

Dosing head with FDA certification upon request.



Data Recording / Management Systems



RW14 - Remote Control System via Internet

Control via Web of the connected instrument, with remote interaction through PC, Tablet or Smartphone provided with an Internet connection.

Internet access via LAN port or WiFi module. DHCP system for the automatic acquisition of the network addresses and the quick installation of the device.

Remote access to the device through the web site www.rw14.it, and data displayed by a common Web browser.

Measurement Sensors

pH Electrodes

STEIEL offers a wide range of pH electrodes, with glass or plastic body, high-quality electrodes, models with threaded head or with soldered cable and BNC connector.



Conductivity Probes

Two-electrode probes are available, suitable for food application, with PVDF body and steel electrodes, with built-in temperature sensor.



Cells for Chlorine and Chlorine Dioxide Measurements

Complete range of amperometric cells for measurements of chlorine and chlorine dioxide, to be installed in proper flow type probe-holder with flow sensor and housings for pH electrode and temperature sensor.