

Water Treatment Systems Agriculture Sector | Fish Farming



Proper Water Treatment Solutions lead to Efficiency & Economy

In the agricultural and fish farming sectors, it is necessary to invest in water treatment solutions to increase overall production, improve product quality and reduce the operating costs so as to be competitive.

Water Desalination by Reverse Osmosis Method

Irrigation process efficiency of used water depends on both the quantity and quality of using water. There are two water quality parameters that are taken into account for the characterization of water quality - electrical conductivity and SAR (sodium concentration). High conductivity value, combined with high SAR value in irrigation water, can reduce or even inhibit plant growth and yield.

When the soil is irrigated with water with high sodium concentration, it clogs the soil resources causing problems in plant growth. Floriculture and hydroponics require low salt water ($<800 \mu S/cm$, even desalinated water in some applications).

TEMAK water treatment systems cover the water requirements for irrigation in floriculture, hydroponics and crops sectors including fish farms for production and packaging needs.



Brackish Water Reverse Osmosis System 700m³/day



TEMAK supports agricultural and fish companies with its appropriate water treatment solutions, enhancing their benefits qualitatively and economically, ensuring the lowest environmental footprint

Filtration

Filtered water reduces damage to the irrigation network, making greenhouses and nurseries more efficient, maximizing the life of dripper, mist system, and all hydraulic equipment.

In addition, filtration systems are necessary in the fattening units of fisheries for water recirculation



UV - OZONE Dosing Instruments

TEMAK's product range offers solutions in greenhouse and nursery applications for dosing fertilizers in cultivation and chemical additives in the greenhouse boiler. In fish farming sector, it is necessary to disinfect water with UV in recirculation water and in ice production. In some aquaculture applications, the ozone disinfection method is also applied.









Metering Controlers & Dosing Pumps



Benefits

Qualitative:

- 1) The use of high quality water in agricultural crops and fish farms results in increased production, products of excellent quality and a competitive advantage over competition.
- 2) Reduction of wastage due to poor quality of products.
- 3) Minimizing the maintenance cost of hydraulic equipment.
- 4) Providing water of best quality and low cost for 24 hours per day.
- **5)** Reduction in production cost due to the transfer of water to remote installations.

Environmental:

- 1) Minimum environmental footprint due to low power consumption and high recovery of TEMAK system.
- 2) Water treatment by desalination method for drilling, municipal or seawater.

Economic:

- 1) Ability to subsidize equipment through funded programs.
- 2) Low operating cost.
- 3) Short time of depreciation of investment capital.
- 4) Leasing.



Benefits of cooperating with TEMAK Excellent quality of produced water regardless of raw water quality (seawater, high-brackish, brackish water) Protection of high value equipment (cooling-heating systems) and reduction of hydraulic equipment damage and replacement works Custom systems design according to the specificity of each application. Integrated water treatment packages (system-chemical treatment- maintenance/monitoring-network)

- ✓ Integrated water treatment packages (system-chemical treatment- maintenance/monitoring-network equipment)
- ✓ Water-fuel cost reduction, damage reduction, operating cost reduction
- \checkmark Specialized key monitoring and control systems for every company (pH, chlorine, electrical conductivity, etc.)
- ✓ Hydraulic equipment from leading companies abroad
- Design of containerized solutions for economical operation and easy installation
- ✓Immediate technical support and response to any issue arising
- ✓ Ability to connect systems with remote monitoring via PC and mobile phone





Since 1980, TEMAK has been at the side of companies and local communities covering their needs with reliability and consistency, having a full range of certified water treatment products.

Thanks to the systems manufacture in Greece and the high expertise of its specialized personnel, TEMAK is able to offer integrated water treatment solutions, from study and design to manufacture and installation of required systems.

The 650.000 m³/day of clean potable water or water for general uses, produced daily from TEMAK's installed systems in Greece and 26 abroad countries, constitute the proof of our experience and know-how in water treatment.



WATER VALUE AMBASSADOR

• ATHENS 1980 •

