



CASE STUDY (074-H-En) **GREECE – RESIDENCE**

Sea Water Reverse Osmosis System with a capacity of 22 m³ / day potable water

Project Implementation Date
August 2021

PROJECT DESCRIPTION

In a 5-star hotel in Mykonos, a seawater desalination system with a quality of 42,000 ppm and a capacity of 22 m³ / day was put into operation in July 2022, covering the drinking water needs of its customers.

CHALLENGES

TEMAK undertook to adapt and install the complete solution in the hotel, in a new space of the client, to cooperate and to train the maintenance staff for the operation and to monitor the equipment. The seawater is stored in a tank and is pumped through the 2.5 m³/h flow feed pump to the turbidity filters to remove turbidity and to the activated carbon filter to remove.

Dosage is performed with anti-inflammatory fluid to protect the reverse osmosis membranes. The water then enters the reverse osmosis system producing 22m³/h desalinated water with a recovery of 36.8%.

The system is equipped with a CIP device for rinsing the membranes, so that the chemical cleaning can be performed, when necessary. Caustic soda is dosed into water to regulate the pH and water is collected in the produced water tank, where it is chlorinated before being sent for consumption. The design temperature is 18 - 22 degC (annual sea water temperature variation in the Aegean).

Since 1980, TEMAK has been at the side of Tourism sector and 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 staff, TEMAK is able to offer total water treatment solutions, from study and design to manufacture and installation of required systems.

The 750.000 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.