CASE STUDY (076-H-En)
GREECE – RESIDENCE

**Brackish Water Reverse Osmosis System
with a capacity of 13,9 m³ / day of potable water**

Project Implementation Date
March 2021

PROJECT DESCRIPTION

In a 4-star hotel in Sifnos, a brackish water desalination system with a quality of 2,000 ppm and a capacity of 13.9 km / day was put into operation in March 2021, covering the needs for drinking water.

CHALLENGES

TEMAK undertook to adapt and install the complete solution in the hotel, in a prefabricated area of the customer, to cooperate and train the maintenance staff for the operation and monitoring of the equipment. The brackish water is stored in a tank and through the feed pump 2 km / h is passed to the turbidity filter to remove turbidity and to the activated carbon filter to remove the organic charge.

Dosage is performed with anti-inflammatory fluid to protect the reverse osmosis membranes. The water then enters the reverse osmosis system producing 13.9 m²/h desalinated water with a 50% recovery. The system is equipped with a membrane clean in place system to perform dry cleaning 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 - 25^{0}C.

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