

Location: California



Applied Membranes builds innovative SWRO pilot plant for city

Pilot plants provide an environment to test new technologies and processes for cutting-edge applications.

Challenge

An internationally recognized consulting engineering firm focused on advanced processes for water and wastewater treatment needed a custom-engineered pilot plant for the city.

The custom pilot seawater plant had a strict project timeline.

The project involved complex engineering requirements, including reconfiguration for various testing scenarios, installation, commissioning, and ongoing support.

Applied Membranes was selected for this project.



Solution

Applied Membranes designed, built, and commissioned a **20 GPM (5 m3/h)** highly customized seawater RO (SWRO) pilot plant for the city.

AMI collaborated closely with the client and engineering firm to understand specific requirements and built a robust, flexible, and custom solution.

The AMI system includes intricate electrical programming and instrumentation such as conductivity monitors, flow sensors, and pressure transmitters.

AMI also provided refurbishments and modifications over the years, reconfiguring the system as needed to accommodate different operational scenarios.

In addition to installing and reconfiguring the equipment as needed, AMI conducted thorough tests to ensure the functionality and integrity of the system.

Key Features:

- Antiscalant
- Chemical injection system
- Flow sensors, conductivity monitors, pressure transmitters

Results

This project highlights Applied Membranes' ability to undertake complex projects, its engineering expertise, and its commitment to meeting urgent timelines.

Innovation and execution: With innovative and custom engineering capabilities, AMI tackles complex challenges and delivers cutting-edge solutions across a wide range of industries and applications.

Flexible and scalable: AMI system was built and commissioned within specified timelines and serves as a critical pilot system for the city. System was built to be flexible and scalable.

Installation and support: AMI completed startup and commissioning of the pilot plant, ensuring it operated smoothly and met performance criteria. AMI also provided comprehensive training to the client's personnel to operate and maintain the system effectively.

By providing support, including installation, reconfiguration, startup, and training, AMI empowered the client to conduct advanced research studies and address various water treatment challenges effectively.