

Location: United States



AMI RO system
elevates
automotive
manufacturing
facility

The automotive manufacturing industry faces challenges regarding water usage, quality, and management due to high-volume production processes.

Challenge

The manufacturing process in the automotive industry demands a substantial amount of water for various applications such as cooling, cleaning, and component production.

The client, a multinational automotive company, is one of the largest automobile manufacturers in the world, producing approximately 10 million vehicles annually.

With a commitment to innovation, efficiency, and sustainability in the face of growing demand, the client wanted to enhance manufacturing operations at its North American plant.

To ensure uninterrupted operations and adhere to stringent quality standards, the client needed a reliable and efficient water treatment solution.

They reached out to Applied Membranes for a solution.

Solution

Applied Membranes designed, built, and commissioned a robust Reverse Osmosis (RO) system capable of producing **30 GPM (7 m3/h)** of high-quality water tailored to the specific needs of the client's manufacturing processes.

Advanced membrane technology was incorporated to maximize efficiency and minimize waste.

Prior to commissioning the system, AMI technicians conducted rigorous testing and performance tests to ensure adherence to design specifications and regulatory standards.

Upon successful testing, AMI commissioned the system and provided training to the client's staff to facilitate smooth transition and ongoing maintenance.

Key Components:

- Antiscalant
- Clean-in-place system
- Chemical injection system
- Programmable Logic Controller (PLC)

Results

Applied Membranes engineering expertise was a key success factor for seamless integration with the client's existing infrastructure.

Reliability: By providing a consistent supply of high-quality water, AMI system optimized the plant's operational efficiency and productivity.

Efficiency: The minimized downtime and maintenance costs resulted in substantial cost savings for the client.

Installation and support: AMI provided start-up services and training to ensure optimal performance and minimal disruption to operations.

Scalability: The design of the AMI system offers scalability to meet evolving production demands.

