

Location: Mexico



Major automotive company implements AMI water reuse system and significantly reduces water wastage

Inefficient water usage can contribute to water scarcity, operational costs, and wastage.

Challenge

Automotive manufacturing processes require high volumes of water for various applications such as cleaning, cooling, and lubrication.

The feed water sources available may contain impurities, suspended solids, bacteria, and other contaminants that could impact the quality of the manufacturing processes and the finished products.

Additionally, the industry faces challenges with optimizing water usage while minimizing environmental impact.

A leading global automotive manufacturer operates multiple production plants worldwide, including in Mexico, where they manufacture and assemble vehicles.

The company needed an innovative and reliable solution to reuse plant wastewater.

Applied Membranes was selected for the project.

Solution

Applied Membranes engineered and built a state-of-the-art custom **500 GPM (115 m3/h)** Microfiltration (MF) followed by Reverse Osmosis (RO) system.

AMI MF/RO system is fully skid-mounted for ease of installation, transportation, and maintenance.

The system is thoughtfully designed to fit inside the customer's facility and built with high quality components.

AMI MF/RO system includes equipment such as temperature gauges, pressure switches, flow meters, and sensors to offer precise control and monitoring of the water treatment process.

Applied Membranes worked closely with local partners to install and commission the system at the client's production plant.

Key Features:

- Media filter
- Antiscalant
- UV disinfection
- Programmable Logic Controller (PLC)

Results

AMI system transforms wastewater into valuable water for automotive manufacturing processes.

Water reuse: AMI water reuse system enabled the client to minimize water wastage and conserve valuable water resources. The client achieved significant cost savings with AMI system by reusing plant wastewater.

Custom design: AMI system was custom-built to fit inside available footprint. The advanced monitoring and control features of the AMI system optimize water usage and reduce downtime.

Training and support: Applied Membranes provided comprehensive training to the client's personnel for proper usage and maintenance of the system. Training empowered plant operators with knowledge and skills to operate the system effectively.

With AMI water reuse technologies, the automotive plant reduced operational costs and minimized environmental footprint.

