

Location: Chile



AMI system elevates cooling tower performance and efficiency for tire manufacturer

Manufacturing facilities need efficient water treatment solutions that meet stringent criteria.

Challenge

A global tire manufacturing company with facilities around the world embarked on a project for its cooling tower system in Chile.

The primary goal was to install a customized Reverse Osmosis (RO) unit with a capacity of 75 GPM to optimize the cooling process for its tire manufacturing operations.

The system needed to be designed with specific dimensions and meet stringent criteria.

The customer required an industrial-grade water treatment system with a 20-year usable life and high availability. The system needed to treat water hardness and iron content to a level less than 0.1 ppm.

Solution

Applied Membranes engineered and built a custom **75 GPM (17 m³/h)** water treatment solution that aligned with the customer's criteria, ensuring seamless integration into its facility.

The skid-mounted AMI system was pre-piped and pre-wired, adhering to specific dimensions, layout, and operational conditions.

Designed for intermittent flow rates, the system included redundancy to account for potential outages, ensuring uninterrupted production. Energy-efficient motors were integrated to promote sustainability and cost-effectiveness.

Key Features:

- Booster pump
- Clean-in-place system
- Twin water softener
- Media filters
- Carbon filters
- Chemical injection system

Results

Applied Membranes' system design facilitated seamless and efficient installation, aligning with the client's layout and specifications.

Custom design: AMI system was engineered to meet specific dimensions and production needs. The robust design incorporates redundancy, reliability, and automatic control.

Reliability: AMI system converts feed water to softened water, meeting the specified water quality and quantity requirements. The system includes equipment and controls for reliable and efficient operation.

Installation and start up: Applied Membranes provided on-site installation services, including field service visits to optimize system performance.

Training: Applied Membranes also delivered comprehensive training to the customer to keep the system running effectively as long as possible.

