

Location: LATAM



AMI system produces high resistivity ultrapure water for company in technology sector

Semiconductor fabrication and electronics manufacturing companies demand ultrapure water. Applied Membranes provides reliable solutions for this application.

Challenge

The customer, a global provider of memory solutions and flash storage products for various applications, needed a water treatment solution for its South American operations.

The customer needed a system capable of producing high resistivity water for stringent chemical sanitization requirements.

The system needed to meet technical specifications and comply with standards of ultrapure water.

Customer specified 11-18 Megaohms/cm resistivity in accordance with ASTM D5127-13.

Requirement also included mandatory fumigation of wooden pallet or plastic pallet for shipment.

Solution

Applied Membranes designed and built a state-of-the-art **2-pass RO + EDI system** producing 30 GPM (7 m3/h) ultrapure water.

The second pass RO included sanitary piping, vessels, and membranes, plus injection ports for disinfection.

The sanitary permeate line was designed to maintain the integrity and purity of the water for the customer's application.

AMI system included degas system, media filters, and mixed bed system for polishing DI water. The system was completely assembled, wired, piped, and thoroughly tested before shipment.

Key Features:

- Mixed bed polishing system
- FRP holding tanks
- Carbon filters
- Multimedia filters
- Chemical injection
- Antiscalant



Results

Applied Membranes built a cost-effective, bespoke solution for the customer that met all technical specifications.

- **Quality:** AMI system consistently produces high-quality ultrapure water that meets the customer's demand for high resistivity water.
- **Timely delivery:** Applied Membranes was able to meet the customer's project timelines.
- **Reliable engineering:** AMI system complies with regulations and produces water critical for sanitization application.

AMI system was thoughtfully engineered to address the customer's technical requirements and ensure high-water ultrapure quality.

