Customer Success Story

Location: China

AMI system revolutionizes ultrapure water for microelectronics company

Ensuring the consistent quality of ultrapure water (UPW) is crucial for microelectronics manufacturing.

Challenge

A company in China is a leading manufacturer in the microelectronics industry, specializing in the production of integrated circuits, acoustic surface devices, and various other electronic components.

With operations spanning across China, Japan, America, and other regions, their products are widely utilized in mobile phones, household appliances, computers, automobiles, communication networks, new energy solutions, and more.

The client had a critical need for an ultrapure water system capable of meeting stringent purity standards required for microelectronics manufacturing.

Additionally, the system needed to facilitate efficient rinse and blowdown processes to minimize contamination risks during manufacturing operations.

Solution

Applied Membranes engineered, built, and commissioned a state-of-the-art ultrapure water system including 2-pass Reverse Osmosis (RO) system with a **300 GPM (70 m3/h)** capacity.

Key Features:

- Ozone
- Hydrocyclone
- Media filters
- Carbon filter
- Membrane degassifiers
- Mixed bed DI
- UV disinfection
- Microfiltration
- PVDF piping

Results

AMI system delivered ultra-pure water exceeding the client's expectations with the below results:

- Resistivity = 17.5 megaohms/cm
- Total Organic Carbon (TOC) < 100 ppb
- Dissolved Oxygen (DO2) < 100 ppb
- Silicon Dioxide (SiO2) < 5 ppb
- Microorganisms < 50/100 mL

By delivering exceptional purity water, AMI system has enabled the production of high-quality electronic components used in a wide array of applications.

The client leveraged this advanced water purification system to stay competitive and meet the demands of the microelectronics market.

2450 Business Park Dr, Vista, CA 92081 | www.appliedmembranes.com | sales@appliedmembranes.com | 760-727-3711