

Location: Brazil



AMI builds custom UF system to treat and reuse wastewater from electronics manufacturing

The electronics industry faces significant challenges related to water usage including responsible dispose of wastewater.

Challenge

The client is a global leader in the design, development, and advanced packaging of specialty memory solutions.

With a diverse portfolio ranging from standard to custom memory and storage solutions, they serve a wide array of applications in high-growth markets.

The client had previously purchased a system from Applied Membranes. The AMI system has been working well since it was commissioned in 2005.

As the client expanded its operations, it reached out to Applied Membranes for another system with additional capacity.

The client required a custom-built ultrafiltration (UF) system to treat and reuse wastewater generated from their electronics manufacturing processes.

They had very limited footprint at their manufacturing facility. Of particular concern is the small footprint of the facility entrance and the tight turns necessary to transport equipment into the factory.

They needed a customized solution that could be easily transported and assembled inside their facility.



Solution

Applied Membranes designed, built, and commissioned an advanced custom-engineered **70 GPM (16 m3/h) hollow fiber ultrafiltration (UF) system** to treat and reuse wastewater from electronics manufacturing processing.

The modular AMI system features a frame divided into three sections to facilitate transportation through the narrow entrance and tight turns within the facility.

Applied Membranes ensured that each section of the system was optimized for easy assembly and integration once inside the factory. Detailed layout drawings were provided to the client, illustrating the arrangement of components both separately and together.

Key Components:

- Carbon filter
- Chemical injection system
- Programmable Logic Controller (PLC)



Results

Applied Membranes' attention to detail and customer satisfaction was evident throughout the process, earning praise from the client.

Engineering excellence: Custom-engineered AMI system optimized use of space without compromising the effectiveness of the system.

Start-up and support: Despite the complexity of the project, the startup phase went smoothly, minimizing disruption to operations.

Performance: AMI system was custom-engineered to meet water quality standards of electronics manufacturing. The system operates efficiently, providing consistent and reliable water quality.

"This is what makes me feel comfortable working with Applied Membranes. They give a lot of attention to their customers and project details."

– Supervisor, Utilities Process & Maintenance at Client Company