

Semiconductor



SAMCO

Separation from the ordinary

PROJECT BRIEF

A Semiconductor Manufacturing Facility Gets HERO™ Upgrade to Standard RO System and Meets Municipal Water Usage Guidelines

PROJECT OVERVIEW

In San Jose, California, new water usage regulations mandated that a local, high-profile semiconductor manufacturing facility decrease both their water consumption and waste. The client upgraded their existing system, improving their water quality and saving thousands of gallons of water despite an extremely tight time frame and space constraints.

OBJECTIVE

Improve the client's water recovery and quality while increasing production volume and meeting local water usage regulations.

SCOPE OF SERVICE

The client worked with SAMCO to develop an effective solution that comprised a feasibility study, system component fabrication, field installation, controls integration, and startup.

CHALLENGES

- High water conductivity
- Extremely tight footprint
- Critical uptime to maintain client's production schedule

SOLUTION

Expanding upon the client's existing double-pass reverse osmosis (RO) system with a High-Efficiency Reverse Osmosis (HERO™) system, SAMCO helped the client increase their water recovery from 65% to 95%. In collaboration with the standard RO process, a high-purity DI polishing treatment yielded superior improvement in ionic purity and organic removal, allowing for higher production capacity and less wastewater—saving the client over 28,000 gallons of water per day and winning the client an award from the local municipality for savings realized.

TECHNOLOGY

Project deliverables and equipment included:

- 8" Diameter RO system upgrade to HERO™
- Electrical/Instrumentation modifications
- Addition of chemical feed and control systems

OVERVIEW

Industry
Semiconductor

Location
San Jose, CA

Objective
Improve water usage efficiency to allow for increased production volume within municipal guidelines

Solution
76 GPM HERO™ RO System

Need help bringing your water to industry compliance standards? Is water usage efficiency an issue? Contact us today at SamcoTech.com • askengineers@samcotech.com • (716) 743 9000