

# Food & Beverage



# SAMCO

Separation from the ordinary

## PROJECT BRIEF

**Aluminum Can Manufacturer Boosts Production Capacity with Custom Ion Exchange System Upgrades by SAMCO**

### PROJECT OVERVIEW

When a New York aluminum can manufacturer needed to upgrade its deionization systems to handle expanded production, it looked to SAMCO for a compact ion exchange (IX) system to augment the capacity of existing rinse line equipment.

### OBJECTIVE

Increase supply of demineralized water to support expanded production. Project specifications:

- Reduce minerals to less than 20 micromhos per centimeter
- 100 GPM line capacity

### SCOPE OF SERVICE

SAMCO designed and delivered a two-bed IX system to supplement existing trains, as well as upgrading the client's control system. Services entailed engineering, system fabrication, controls integration, commissioning, startup training and support.

### CHALLENGES

- Integration with existing customer IX and control systems
- Limited available space
- Tight project timeline

### SOLUTION

In line with the client's production expansion plans, SAMCO delivered a supplemental 100 GPM IX line to work in concert with existing lines in supplying additional demineralized water for new aluminum can washing lines. Designed to support continuous production, the 100 GPM system consisted of a concurrent regeneration cation/anion exchange train, as well as a duplex carbon filter train, and internals. SAMCO also upgraded the existing system controls and operator interface, providing full integration services for new programmable logic controllers (PLC) that minimized operational demands by enabling automated process monitoring for all IX trains. Leveraging signature prepackaged technology, SAMCO produced a solution that both fulfilled rapid delivery expectations, and conformed to a small footprint.

### TECHNOLOGY

SAMCO delivered a supplementary deionized water train, including:

- 100 GPM IX pressure vessels
- Duplex carbon filter train
- Chemical storage and metering equipment
- Rinse and recycle pump
- Instruments and valves
- PLC controls

## OVERVIEW

### Industry

Food & Beverage

### Location

New Windsor, NY

### Objective

Demineralize rinse water to  $<20 \mu\Omega/\text{cm}$

### Solution

100 GPM Ion Exchange System

Looking to demineralize water for rinse lines? Is purity an issue?

Contact us today at [www.SamcoTech.com](http://www.SamcoTech.com) • [askengineers@samcotech.com](mailto:askengineers@samcotech.com) • (716) 743 9000