

## **PROJECT BRIEF**

Major Food Manufacturer In Buffalo, NY, Works With SAMCO to Produce High-Purity Boiler Makeup Water

### **PROJECT OVERVIEW**

In order to minimize boiler blowdown requirements at a prominent food manufacturer/ plant in Buffalo, NY, SAMCO helped the client engineer, design, and implement a high-purity reverse osmosis (RO) system for maximum efficiency.

#### **OBJECTIVE**

Devise, build, and implement highpurity RO to meet stringent boiler feedwater quality requirements for the food and beverage industry.

20 micromho/cm

### **SCOPE OF SERVICE**

SAMCO delivered a detailed process, mechanical and electrical design and engineering, controls integration, system fabrication, commissioning. startup, and training.

#### **CHALLENGES**

- High-quality boiler feedwater required for the food and beverage industry
- Low total dissolved solids (TDS)
- Stringent feedwater quality requirements for minimal blowdown

#### **SOLUTION**

When the client approached SAMCO for solution to their blowdown requirement needs, SAMCO helped them devise a custom-engineered, multifaceted solution to purify the client's sourcewater. Utilizing a brackish RO system, carbon filters, and high pressure pumps, the client experience marked improvement in their boiler feedwater purity and blowdown volume. SAMCO also installed programmable logic controllers (PLC) to automate flow, temperature, pressure, and resistivity monitoring with an operator interface for ease of use.

#### **TECHNOLOGY**

Project deliverables and equipment included:

- RO System
- Carbon filter
- High-pressure pump
- UV Sterilizer
- Treated water storage and pumping equipment
- PLC Controls
- Operator interface

# **OVERVIEW**

**Industry**Food & Beverage

**Location** Buffalo, NY

Objective
Reduce TDS to minimize
boiler blowdown
requirement

**Solution** 60 GPM RO System

Looking to purify your boiler feedwater and minimize blowdown? Is contamination an issue? Contact us today at www.SamcoTech.com • askengineers@samcotech.com • (716) 743 9000