

Automotive



SAMCO

Separation from the ordinary

PROJECT BRIEF

Automotive Manufacturer Cuts Wastewater Disposal, Grows Production by Improving Reuse Rates to 95% with SAMCO Ultrafiltration Technology

PROJECT OVERVIEW

When expanded production at a leading automotive company in Georgia caused a rapid escalation in wastewater volume, the facility consulted SAMCO for an innovative solution for treating contaminated rinse water without overburdening limited discharge outlets.

OBJECTIVE

Greatly reduce wastewater discharge despite rapid increases in production volume.

SCOPE OF SERVICE

The client worked with SAMCO to develop an effective solution that comprised a treatability/pilot studies, detailed design/engineering, system fabrication, controls integration, field installation, commission/startup, and ongoing support.

CHALLENGES

- Rapid increases in wastewater volume
- No available discharge sewers
- Current evaporator operating at capacity
- Fast-track time line to maintain production
- Minimal operator availability

SOLUTION

With no sewer available for disposal of wastewater, and an evaporator already operating at full capacity, the client needed a wastewater treatment solution to allow for rapid growth in production volume. With SAMCO's state-of-the-art ultrafiltration (UF) system, the automotive plant was able to recycle and reuse up to 95% of wastewater resulting from metal parts rinsing processes. By replacing the ordinary evaporator with SAMCO's UF evaporator, the plant could accommodate increased production volume while realizing a one-year investment payback through energy savings. Additionally, the modular design enabled quick and easy installation with guaranteed performance and future add-on capabilities, while clean-in-place technology facilitated efficient membrane maintenance for additional time and cost savings. To compensate for minimal operator availability, SAMCO included programmable logic controllers (PLC) to automate monitoring of flow, temperature, pressure, and resistivity.

TECHNOLOGY

Project deliverables and equipment included:

- UF Membrane system
- Influent pumps and bag filter
- Process/concrete tank
- PLC Controls

OVERVIEW

Industry

Automotive

Location

Georgia, US

Objective

Efficiently reduce wastewater despite a rapid increase in production volume

Solution

3 GPM Ultrafiltration Rinse Wastewater Recycle/Reuse System

Need help reducing your wastewater volume? Is wastewater purity an issue?
Contact us today at SamcoTech.com • askengineers@samcotech.com • (716) 743 9000