

## INDUSTRIAL WASTEWATER RECYCLING

# Recycle System for Automotive Industry

Industry: Automotive/Metals Working  
System: 3 gpm Rinse Wastewater Recycle/Reuse System  
Location: Georgia  
Goals: Remove Oil & Grease and Colloidal Solids

### Project Overview:

SAMCO's state-of-the-art Recycle/Reuse System at a leading company utilizes an Ultrafiltration System (UF) to treat metal parts rinse wastewater. It is designed to achieve up to 95% recycle/reuse in the Automotive/Metals Working industry. A modular add-on capability is built-in for future dissolved solids removal with Reverse Osmosis (RO) System.

### Critical Issues:

Plant expansion w/ added rinse wastewater load  
Current evaporator operating at capacity

No sewer discharge available  
Fast-track, concept to completion

### Vision for Solution:

- UF-Evaporator in lieu of only Evaporator for recycle/reuse, reduce load on existing evaporator, and handle added plant expansion load
- UF-Evaporator maximizes ROI with a one year payback through energy savings
- Utilize our standard products & pre-packaged system design for fast-track turnkey project delivery and performance guarantee
- PLC controlled system for minimum operator attention
- Modular design with expansion capability for future needs

### Project Scope:

Treatability/Pilot Study  
System Fabrication  
Field Installation  
Ongoing Service

Detailed Design/Engineering  
Controls Integration  
Commission/Startup

### Equipment Description:

Influent Pumps  
Process/Conc. Tank  
UF Membrane System  
Clean-in-place System

Influent Bag Filter  
UF Recirculation Pumps  
UF Recirculation Bag Filter  
PLC Controls



### Special Features:

- PLC controlled system enables automation for minimal operator attention
- Process monitoring include flow, level, pressure, etc
- Clean-in-place system enables easy cleaning of membranes, for time and costs saving
- Modular expandability and future RO add-on capability for changing needs