

INDUSTRIAL WASTEWATER

WWTS for Drum Cleaning/Recycling

Industry:	Petroleum Oil Drum Cleaning/Recycling
System:	50 gpm Waste Water Treatment System
Location:	South Carolina
Goals:	Remove Oil & Grease, Suspended Solids, BOD, COD

Project Overview:

SAMCO's state-of-the-art Wastewater Treatment System for the new Petroleum Oil Drum Cleaning/Recycling Line of a leading company's utilizes Oil-Water Separation (OWS) to treat the segregated oily rinse wastewater. It is designed for up to 70% recycle/reuse of wastewater and recovery of waste oil for recycle/resale in the Petroleum Oil Drum Cleaning/Recycling industry.

Critical Issues:

Complex & varied contaminants
Plant expansion w/ added water & wastewater load
Long equipment life & high durability

Stringent discharge limits
Fast-track, concept to completion
Reduced O&M costs

Vision for Solution:

- OWS in lieu of discharge to existing WWTS to recover oily waste resources, achieve recycle/reuse quality, reduce WWTS O&M costs and handle added expansion load
- OWS maximizes ROI with one year payback through chemicals savings & resource recovery
- Design Oily Drum Pre-Rinse Washer Station for recycle/reuse of treated wastewater
- Utilize our standard products & pre-packaged system design for fast-track turnkey project delivery and performance guarantee
- 304 SS Fabrication on OWS & Pre-Rinse Washer Station for long life & high durability
- PLC controlled system for minimum operator attention

Project Scope:

Treatability/Pilot Study
System Fabrication

Detailed Design/Engineering
Controls Integration

Equipment Description:

Equalization Tank
Chemical Feeds
304 SS OWS System
Oil Transfer Pumps
High Pressure Pumps

Influent Transfer Pumps
De-emulsification Reactor Tank
pH Neutralization Reactor Tank
Oil Handling & Collection Tank
304 SS Drum Washer



Special Features:

- PLC controlled system enables automation for minimal operator attention
- Process monitoring include flow, level, temperature, pressure, etc
- 304 SS OWS with 304 SS Coalescing Pack Media for high temperature operation
- Emulsion Breaking System design with post pH neutralization capability
- 304 SS Pre-Rinse Washer with Double Wall Cabinet, Counterbalanced Drop Door, Removable SS Debris Screen, Hydraulic Rotating High Pressure Spray Arms, Make-up Water Heater, Internal Heating Coil for Recycled Water, Booster/Transfer Pumps, & Control Panel
- Modular expandability and future add-on capability for changing needs