



PROJECT BRIEF

Crude Oil Storage and Distribution Facility Optimizes Boiler Feed Systems with SAMCO Inclined Plate Clarifier Filtration

PROJECT OVERVIEW

When a Texas crude oil distributor needed a boiler feedwater treatment solution, the facility looked to SAMCO for an inclined plate clarifier system to keep its boiler operations in optimal running order.

OBJECTIVE

Treat surface water for use in boiler feeds. Project specifications:

- 200 GPM filtered water production rate

SCOPE OF SERVICE

SAMCO delivered a 200 GPM inclined plate clarifier, with services comprising basic and detailed process, mechanical, and electrical design and engineering, system fabrication, controls integration, commissioning, startup, and training support.

CHALLENGES

- Low threshold for total dissolved solids (TDS) and acidity
- Limited operator availability

SOLUTION

In line with the client's goal for protecting and optimizing boiler equipment, SAMCO designed and delivered an inclined plate clarification system to treat surface water source feeds. The system also included duplex multimedia and carbon filters to remove the broadest range of contaminants, and auxiliary tanks to deliver reliability. Aiming to minimize operational demands, SAMCO provided integrated programmable logic controllers (PLC) and an operator interface to simplify control and support automated process monitoring. At project completion, SAMCO provided full training and support to ensure smooth startup.

TECHNOLOGY

SAMCO delivered a 200 GPM inclined plate clarifier system, including:

- Chemical addition and mixing tanks
- Sludge dewatering filter press
- Duplex multimedia filter
- Duplex carbon filter
- Chemical metering equipment
- Auxiliary tanks and pumps
- PLC controls

OVERVIEW

Industry

Oil & Gas

Location

LaPorte, TX

Objective

Clarify & filter surface water to supply boiler feed

Solution

200 GPM Inclined Plate Clarifier System