

HF ALKYLATION RAD CONTROLS SYSTEM UPGRADE

CLIENT: CONFIDENTIAL
MARKET: Petrochemical | Refinery
LOCATION: Trainer, PA
TAI SERVICES:

- Project Management
- Design Engineering & Programming
- Controls Integration
- Commissioning

COMPLETED: 2018
VALUE CLASS: \$380,000



ABOUT: *The Client specializes in the production of jet fuel, as well as other products, such as gasoline, diesel, and home heating oil.*

VALUE PROPOSITION: System upgrades to provide efficient and effective process for control of existing and new devices/instruments including new safety detection devices to provide automatic activation of the RAD system without operator intervention.

CHALLENGE

The Client needed upgrades to their HF Alkylation Rapid Acid Dump (RAD) system to comply with API Recommended Practices for the Safe Operations of Hydraulic Acid Alkylation Units.

SOLUTION

TAI modified the existing manually-operated RAD system, which was managed through Siemens 505 PLC system, by adding key instrumentation and installing a new state-of-the-art control system controller. The newly upgraded control system utilizes all existing I/O devices and control of all existing dump operations. The new system included the addition of new safety detection devices, provided automatic activation of the RAD system controlled devices (without requiring control room operator intervention), and allowing manual activation capability by the control room operator.

RESULTS

The existing Siemens PLC system was replaced with a Triconex Tri-GP modular redundant PLC system to provide a more efficient and effective process for control of all existing and new devices / instruments.

