Emerson’s Roxar Corrosion Monitoring Solutions Reduce Refinery Costs While Maintaining Plant Integrity

RESULTS
• Reduced feed costs through the controlled increase of opportunity crude
• Crucial input to Risk-Based Inspections (RBI) and an optimizing of inspection intervals
• Increased corrosion inhibitor efficiencies
• Highly tuned production processes for maximum plant availability
• WirelessHART communications, allowing on-line monitoring in previously inaccessible locations at an affordable cost.

APPLICATION
• Naphthenic acid corrosion in high temperature distillation processes.
• Side streams
• Cooling systems
• Increased corrosion triggered by high velocity and temperatures, malfunctioning desalting units and high sulfur content

CUSTOMER
Refinery operators (greenfields & brownfields), Corrosion inhibitor suppliers, EPC Contractors, Inspection and integrity management contractors

CHALLENGES
• Aging plants require an increased focus on safety and environmental regulations
• Opportunity crudes are more corrosive and require a more proactive corrosion management strategy.
• Inhibitors are costly and environmentally unfriendly with their impact needing to be managed and documented.
• Extended operating window programs can overload critical equipment capacity (desalters, heat exchangers etc) and lead to severe corrosion.
• Unscheduled shutdowns and slowdowns can impact refinery capacity by 4-7% (Source: Data Compiled From Multiple Industry Sources).
• Old refineries often have outdated monitoring solutions with no integrated data management, thereby limiting data quality and access.

For more information:
www.EmersonProcess.com/Roxar

Roxar Refinery instruments
SOLUTIONS

- One stop shop: Roxar’s Integrated fast response (intrusive ER & LPR probes) and long-term integrity (non-intrusive FSM) solutions.
- Roxar WirelessHART capabilities that provide a seamless fit with Emerson’s PlantWeb® architecture for integrated wireless corrosion monitoring.
- WirelessHART technology, making upgrades to on-line monitoring more affordable without the costs of cabling.
- Flexible data management options via Roxar Fieldwatch and the direct transmission of corrosion data to almost any application/ control system.

And the results? Reduced downtime and unplanned maintenance, optimized production processes, and a complete wireless-based corrosion monitoring solution with fast response times, continuous measurements and installation in the plant’s most critical sections.

RESOURCES

Roxar Field Signature Method

Roxar CorrLog Wireless

FSM Data has helped the customer in the refinery to optimize blending of opportunity crude in the feed mix, significantly reducing cost while maintaining integrity with respect to corrosion in piping and vessels.