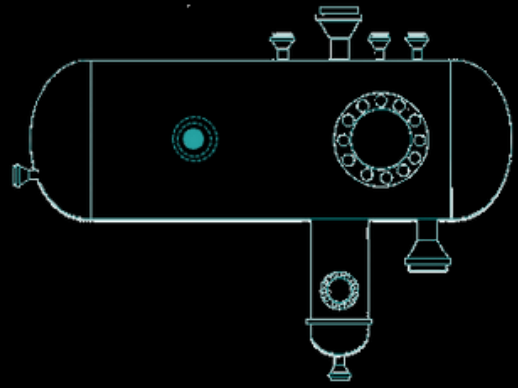




Early Corrosion Detection in Alkylation Depropanizer

Accurate Corrosion Insights Extend Equipment Life and Defer Costly Replacements



PROBLEM

High corrosion rates in the Depropanizer Receiver of the Refinery Alkylation System threaten equipment longevity and disrupt operations, potentially requiring immediate replacement to ensure safety.



ASSET

The Depropanizer Receiver in the Refinery Alkylation System faced elevated corrosion rates of around 30 mils per year based on historical manual inspection trends, prompting a planned replacement in the next turnaround (TAR).



ALERT

The mCluez™ solution showed no significant corrosion in the monitored asset. The fixed equipment team used its dashboard to analyze trend data.



INVESTIGATION

- mCluez™ insights showed corrosion rates under 10 mils per year, compared to the projected 30 mils per year based on historical trends.
- Automated Ultrasonic Testing (AUT) confirmed the accuracy of the mCluez™ solution.



RESULT

mCluez™ insights showed low corrosion rates, removing the need for replacement during the next turnaround. The solution provided stable, accurate data, allowing deferral of replacement to the next turnaround and **anticipated savings of \$1 million.**

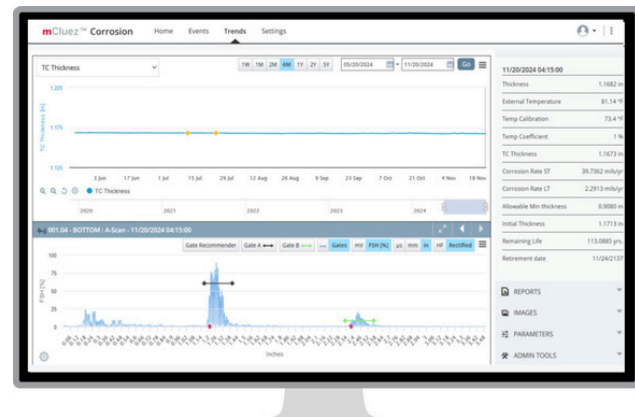


Figure: Thickness trends indicate stability of the asset



TRANSFORMATION

Implementing the mCluez™ corrosion monitoring solution ensured continuous operations by preventing process interruptions and unplanned downtime during lineup changes. It empowered the fixed equipment team with reliable corrosion rate insights, enabling timely decision-making.