

Identified CUI Susceptible Locations by Applying the AI Predictive Models

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Keywords: Time-, risk-, and consequence-based strategies, CUI susceptible location(s), AI predictive models.

Corrosion Under Insulation (CUI) is a major concern in the petrochemical industry, causing safety issues, unplanned shutdowns, and significant financial losses. It occurs on the exterior surface of insulated metal components (such as pipes, tanks, or equipment). Water trapped between the insulation material and the metal surface can produce an environment and lead corrosion problems.

This talk will elucidate a holistic approach to manage CUI, focusing on time-, risk-, and consequence-based strategies. In addition, the integration of AI predictive models can be used to enhance CUI susceptible location(s) identification. This model utilizes historical data, environmental factors, and operating conditions to predict potential CUI locations. The implementation of AI predictive models contributes to the optimization of inspection and maintenance activities.