

# **How to Address Corrosion Under Insulation (CUI) Issues in Petrochemical Plants? – A Systematic Approach**

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Corrosion under insulation (CUI) is one of the most well-known phenomenon and major concern in petrochemical plants. It has undoubtedly been occurring for as long as piping and equipment have been insulated for thermal conservation or process control. Normally, CUI is defined as the external corrosion occurring when water trapped beneath the insulation. The forms of damage include localized loss of thickness in carbon and low alloy steels and chloride stress corrosion cracking in austenitic and duplex stainless steels.

This talk will elucidate the systematic approach to address CUI issues. The CUI inspection methodology is developed to assess the likelihood, determine the susceptible areas and recommend the proper inspection and/or monitoring methods. Besides, the optimum qualitative assessment parameters and rating score will also be introduced. This methodology benefits to plants in terms of to increase the integrity and reliability, and to reduce the cost for inspection and monitoring.