

MATERIALS & CORROSION IN REFINERIES

This course addresses generic corrosion and materials degradation for several refinery units; desalter; crude distillation; hydro-treater-sand hydro-desulphurization and amine units that is applicable to both the design of new units and the operation of existing ones.

The course provides strategies for corrosion and material degradation control and for materials selection. It also provides the background information needed for risk-based inspection activities, such as the division of the unit into corrosion loops, the key process parameters that should be monitored, the locations for inspection, etc.

The course will cover:

- A basic process description of several refinery units starting from the desalter to amine units
- Materials and Process Challenges of refinery units when there is a need to process “Opportunity Crudes”
- Introduction to High Temperature degradation mechanisms; caustic corrosion; Naphthenic Acid; High Temperature Sulfidations; Ammonium Biosulphide Corrosion; etc.

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