Wet Hydrogen Sulfide Corrosion Control for Top of Distillation Column

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One of the damage mechanisms, wet hydrogen sulfide (H2S) corrosion is the most important issue in refining industry.
This study focuses on techniques of improving refinery reliability, profitability and availability in top of distillation column. Internal corrosion of mild steel in the presence of hydrogen sulfide (H2S) also represents a significant problem for the oil and gas industry. Increasingly more fields are being developed that in addition to CO2 have high concentrations of H2S. Studies have demonstrated that sulfide layer formation is one of the important factors governing the H2S corrosion rate. Despite the relative abundance of experimental data on H2S corrosion of steel, most of the literature is still confusing and somewhat contradictory. Therefore the mechanism of H2S corrosion remains much less understood when compared to that of CO2 corrosion. This uncertainty makes it more difficult to develop a model to predict the corrosion rate of mild steel in H2S saturated aqueous solution.
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