Corrosion Risk Monitoring System in CDU Process

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This study develops a corrosion risk monitoring system for improving refinery reliability, availability and profitability in CDU process. This system includes a method for defining and measuring the component risk and it also provides a powerful tool for managing many of the important elements of a refinery plant. The simulation has been applied for this system to find the critical component without direct measurement and experiment. It is possible to expect the risk parts of the refinery process.

PCOM™ (process corrosion optimization module) has been applied in corrosion risk monitoring system. The PCOM™ reliably optimize acidic crude throughput, minimize burn and fire risk, increase probe data reliability, evaluate multiple alloys at once and data extrapolates to whole unit. Using regression techniques described elsewhere, the temperature vs. corrosion rate relationship can then be determined and further extrapolated to predict the severity of corrosion throughout most of the process unit. The corrosion risk monitoring system improves the safety of refinery process and reduces the cost of corrosion greatly.