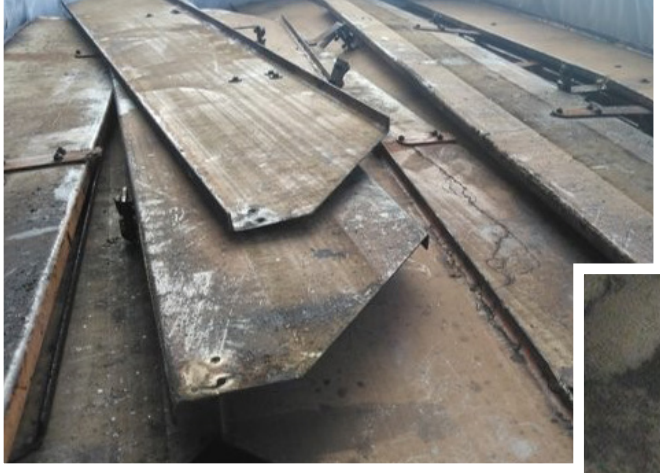
RTI upstream

CASE STUDY

Offshore Equipment Crude Treater & LP Separator



THE CHALLENGE

The client asked RTI to help with expediting the vessel entry on the Crude Treater, LP Separator, and the Recovered Oil Tank. The goal was to have a side-by-side comparison, one using RTI's Vapor Phase technology and the other the client's legacy methods. Historically, they purged vessels with N_2 to 50 LEL for entry, vented the vessel to atmosphere with air movers, then manually cleaned to prepare the vessel for inspections or mechanical work. Many challenges arise when preparing a vessel for entry. POB space is often limited and legacy methods require a high headcount. Could chemical cleaning reduce the timeline, POB, hazardous waste accumulation and eliminate CSE?

THE SOLUTION

RTI's solution was to introduce Vapor Phase Cleaning to the offshore space. In this process, steam is used to vaporize our chemistry, which in turn contacts all internal surfaces removing hydrocarbons from the process.

THE CHEMISTRY

UpTime is a chemistry designed to increase the efficiency of operations while online, clean vessel internals for maintenance/inspection activities, and/or expedite confined-space entry. It is a hydrocarbon-based formula that is easy to apply, safe for the environment, exhibits excellent metallurgy properties, and will not cause problems with chemical or offshore products and waste treatment facilities. UpTime is one of many chemistries used by RTI Upstream to improve process operations while lowering total costs.

CONTACT

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THE RESULTS

Chemical cleaning proved to be an effective and efficient process in the offshore space. RTI's process eliminated CSE on the Recovered Oil Tank completely and inspections were done using a camera. While entry was still required on the Crude Treater and LP Separator, the time needed to complete internal cleaning was drastically reduced. RTI's process resulted in a timeline savings of 3–4 days and a reduction in POB. Additionally, the need for venting to the atmosphere was eliminated as all vessels tested 0% LEL prior to opening.

4 DAYS SAVED

Offshore Vapor Phase Cleaning resulted in a 4-day timeline savings compared to historical methods

ELIMINATED LEL AND CSE

All LEL was eliminated within 12 hours of steam initiation on each vessel ROT CSE scope removed

POB REDUCED

Reduced POB due to shortened timeline and manpower requirements