Ceramic Lining Prevents Corrosion

USE OF A NEW COMBINED SOLUTION FOR THE INSIDE OF TANKS

he PCM/PPROG-II Department (Project, Construction and Assembly Management of Planned Production Stops II) has successfully applied a combined solution that uses a ceramic lining on the inside of tanks, after treating the surface with a recyclable abrasive sponge. This new technology that will replace grit blasting and a fiber lining was implemented during the last partial production stop of the P-35, Ativo Marlim, in April of last year.

These tanks are metal compartments that receive the oil extracted from wells and that conduct the primary separation of water and gas from oil. Attached to the interior surface of the tanks, the ceramic lining acts as a protective cover that prevents the corrosion of the equipment. Leonardo Yoshihara Miano, a Project, Construction and Assembly technician who coordinated the unit's production stop, explained that the ceramic lining increases the durability of the tanks, as it offers a better adhesion to the surface than fiber lining. "By using the ceramic lining, we ensure the reliability of the equipment and increase the safety of the production process."

According to Miano, the use of the abrasive recyclable sponge to treat the interior tank surfaces has also improved the process for opening up the anchoring profile, a procedure that roughens the surface, thus facilitating the adhesion of the ceramic lining to the surface. "In the past, with the grit blasting, we were unable to reuse the metal shavings used to create the anchoring profile. As a result, we generated a lot of waste and increased the risk. With the use of the recyclable sponge we did not only significantly reduce the worker's exposure to risk, but we are also able to reuse the product up to four times.

APPLICATION

This combined technology was first used in an offshore environment during the production stop of P-37, in 2007. The success of the first operation led to the development of similar applications on the P-19 and P-26. "We see the application on the P-35 as the final and definitive test of this methodology, because of the complexity of the internal components of the production separator. This new success confirms this methodology as a recommended and proven practice," said Miano.

For the Operation Managers of P-35, Dálgio de Barros Filho, and the PCM/ PPROG-II manager, Márcio Magalhães, the safety benefits, the reduction in waste generation and the decreased intervention time are significant and decisive in using the combined solution in future interventions that have been scheduled for the UN-BC maritime units.

