

CORROCOAT

HESS EQUATORIAL GUINEA - FINE FILTER VESSELS – OFF-SHORE

‘Breathing New Life into Off-Shore Equipment’

CLIENT

HESS EQUATORIAL GUINEA INC. On-board the *Sendje- Ceiba* F.P.S.O. (Floating Production Storage & Off-loading) facility, 50 Km off The coast of Equatorial Guinea, West Africa.

APPLICATION DATE

November 2009 – Completed in 6 weeks.

SCOPE OF WORK

To perform internal rubber lining repairs where the rubber bond to the steel substrate had failed and; To abrasive blast clean to ISO 8501-1, Sa 2½ and coat the externals of 5 off Fine Filter Vessels with **PLASMET ECP, ZIP-E** and recoatable polyurethane topcoat, utilising positive displacement high pressure airless spray equipment, to an average Dry Film Thickness Of 700 µm and a minimum thickness of 550 µm DFT.

DESCRIPTION

Each filter vessel comprises three sections bolted together with an internal stainless steel filter plate and diffuser. The filters are dosed with sulphuric acid and are rubber lined internally. The filters were originally manufactured by ABB Thailand in 2001. For the refurbishment, labour & project management from South Africa were used, because their rates are relatively low cost by World standards.

HISTORY

Corrocoat South Africa were commissioned to conduct an inspection of the fine filter vessels in 2007 owing to internal rubber lining failure. The rubber on the flanged faces had suffered cold flow and was replaced. Each vessel section (15 in all) was blast cleaned and metallic salts removed using **Corrocoat Chlor*rid** decontamination solution. Each section was blast cleaned and decontaminated three times in order to bring the metallic salts to acceptable levels. The location is a high temperature-humidity and rainfall, severe marine industrial environment which rates as a C5 on the Corrosivity Index.

CLIENT : COATING SELECTION CRITERIA

Longest possible anti-corrosion life expectancy with the lowest risk of failure.

- **PLASMET ECP** was used owing to the high humidity conditions.
- **CORROCOAT ZIP-E** was used in order to offer outstanding performance in terms of long-term anti-corrosion ability in extreme marine industrial environments.
- A recoatable polyurethane topcoat was applied to offer aesthetic appeal and UV protection.

CONCLUSION

All work was completed and 100% inspected and passed 4 days ahead of schedule, under arduous climatic conditions. This was owing to a combination of excellent teamwork, forward planning and the use of the World's best coating products.

The following references were written about the fine filter rehabilitation:-

“ Corrocoat provided an excellent service, the work was provided ahead of schedule in a very challenging environment. I would have no hesitation in using this Company again (and will do)” – Sandy Buchan (Operations Specialist Production).

“Corrocoat performed an excellent job both in terms of product supply and performance. During the recent campaign they were able to finish 4 days ahead of schedule without any compromise to safety and quality..... I would have no hesitation in considering Corrocoat to return to Ceiba for any future topside coating work”. – Graham Collins OIM - (Off-shore Installation Manager)

