INDUSTRIAL CASE STUDY



ANTI-CORROSION COATING EXPLOSIVES ARMING BOOTH & POWDER MAGAZINES







SITUATION

The Halliburton Powder Magazines area in Ciudad del Carmen Campeche is used for the temporary storage of explosive materials, such as explosive charges, igniters, detonating cord, SOP, among others. PEMEX service utilises these explosives for work-related activities. The storage containers are shielded and delimited.

Assembly booths, where the assembly work of pipes loaded with explosives, used in oil well logs, are also shielded. The metal Magazines and the booths had a high level of corrosion that was weakening the structure. The corrosion was due to the high level of saltpetre in the environment. High levels of saltpetre are typical for locations close to the coast.

SOLUTION

Mexican contractors, ETM, treated the areas of corrosion and sandblasted the metal substrate to provide a suitable key for applying 3mm coating of LINE-X XS-350.

XS-350 is a pure polyurea which is proven to provide exceptional protection against corrosion.

Halliburton requested specific colours for each of the areas needing treating with XS-350. As requested, ETM sprayed the Powder Magazines in white, the interior of the assembly booth in black and the exterior of the booth in grey.

RESULTS

The LINE-X application has significantly improved the look of magazines and booth whilst also providing a longterm solution to prevent future corrosion and weakening of the substrate.

The resistance to saltpetre, water-ingress and chemical contact will ensure the previous issues of corrosion will not return for many years to come, giving Halliburton the peace of mind by reducing maintenance costs.

PROJECT OVERVIEW: Corrosion resistant coatings

PRODUCTS USED: XS-350

CERTIFICATIONS: MIL-STD-810F - Fungus Resistance, ASTM B117 Salt Spray, ASTM G95 Cathodic Disbondment

