

Project Profile - Coastal Structures



PROJECT

Seawater/intake tanks & pump house refurbishment, Dubai, UAE

SUMMARY

Repair and chloride protection of seawater intake tanks and pumping chambers

PRODUCTS

Cemprotec E942
Marine Mortar S
Steel Reinforcement Protector 841

CLIENT

Dubai Aluminium Co., Dubai, UAE

CONTRACTOR

Mott MacDonald / Al Futtaim
Carillion, Dubai, UAE

BACKGROUND ▶

The largest aluminium smelting operation in Asia relies on the supply of cooling water produced from a desalination unit.

After 20 years service, the concrete seawater intake tanks and associated pumping chambers were suffering from extensive corrosion of the steel reinforcement, leading to cracking and spalling of the concrete substrate. The highly aggressive conditions determined the use of a specialist repair and protection system to ensure future durability.

THE SOLUTION ▶

The Flexcrete approach was adopted as a complete range of products was available to meet all the demands of this project. After cleaning of the exposed bars, **Steel Reinforcement Protector 841** was applied, followed by **Marine Mortar S** to complete the repairs. As a unique chloride barrier coating was to be used overall, the general surfaces were levelled to a standard suitable for treating with **Monolevel 844SP** and the work was completed with a 2mm layer of **Cemprotec E942**, providing a tough, chemical resistant finish with very low water permeability and proven performance in similar exposure conditions.



FM 41091
EMS 597350
OHS 597351

Quality
Environmental
Health & Safety

Flexcrete Technologies Limited
Tomlinson Road • Leyland
Lancashire • United Kingdom
PR25 2DY

Tel: +44 (0) 845 260 7005 • **Fax:** +44 (0) 845 260 7006
Email: web@flexcrete.com • **Web:** www.flexcrete.com

