



King Fahad Port, Jubail Saudi Arabia

CUSTOMER

Saudi Ports Authority

SECTOR

Marine

DATE

2008

PRODUCTS

- Fosroc Marine Jacket
- Renderoc LAXtra & TGXtra
- Nitocote EPU
- Nitocote ET550
- Galvashield XP & CC65
- Dekguard PU & E2000

THE PROJECT

Like many industrial ports, the King Fahad industrial Port in Jubail was suffering from the effects of chloride induced corrosion on the steel reinforcement to the jetties and their steel piles. Mechanical damage caused by shipping and cranes had also taken its toll. The Port authority needed a repair system that could not only replace broken and deteriorated concrete, but provide a long term and durable solution to the corrosion problem.

THE SOLUTION

Protecting the steel piles below water was undertaken using 1,682 Fosroc Marine Jackets. This Cathodic Protection solution provides a protective fibreglass jacket to protect a zinc anode within. This is connected to the reinforcement and grouted to create the correct resistivity. Areas of reinforced concrete subject to chloride attack were protected using Galvashield CC and XP anodes.

As part of the project, the specialist contractor applied Renderoc concrete repair mortars and heavy duty Dekguard and Nitocote protective coatings to ensure that the structure remained integrally sound and was protected from further chloride ingress.

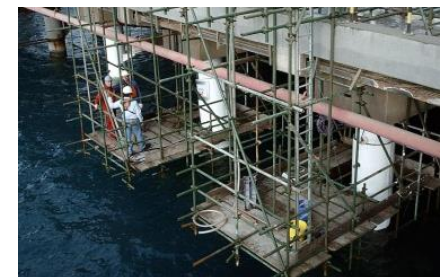
THE BENEFITS

Fosroc's Marine Jacket provides cathodic protection for up to 35 years service life without maintenance. This means that the use of the jetties will rarely be interrupted by maintenance issues. The grout and the jacket provide robust support from mechanical damage. The jackets are purpose made for each project and therefore the desired fit is easy to obtain and the level of anode used can be matched to the client's requirements.

Protection rather than repair is normally the most economic long term solution, and in adopting a holistic approach to remediation Fosroc have assisted the designer and contractor in providing the client with the best solution to this technically challenging problem.



Divers installing Fosroc Marine Jackets



Surface installation of Fosroc Marine Jackets.



Steels coated with Dekguard PU