



Type of project:

Brownfield

Location:

Offshore Sarawak
East Malaysia

Materials:

8Mt Nax® Q110
5Mt Nax® B190

Client:

Sarawak Shell Berhad

Project date:

Sept - Oct 2018

**PROVISION OF GROUTING
EQUIPMENT AND SERVICES
FOR CONDUCTOR REPAIR &
CORROSION PROTECTION**

DISCIPLINES:

- Subsea repair and strengthening
- Well integrity services
- Conductor Grouting

The Client engaged Nautec to carry out repair and strengthening of one conductor casing and corrosion protection using grouting method for two conductor casings.

SERVICES

- Conduct structural inspection of F23 and F06 Platforms and obtain relevant data for repair and corrosion protection
- Design of rebar cage, seat collar and light weight form work for WH114 conductor repair
- Supply and provision of grout material, grouting equipment and grouting crew
- Cleaning and grouting of WH 104 conductor casing on F23 DP-A for corrosion protection
- Cleaning and grouting of WH 110 conductor casing on F06 for corrosion protection

CHALLENGES

- With the water level being only 1.5 m to spider deck, the cleaning of casing and installation of moulds was difficult due to limited working access.
- Using specialized water jet, light weight moulds and exclusive locking mechanism for seat collar enabled diver-less installation and demoulding.





UHPC, or Ultra High Performance Concrete and Composites are our business. We develop and produce UHPC products and we offer UHPC based solutions for multiple industries including the Renewable, Civil Construction, Ports, Offshore and Energy Industries.

We have documented the technical performance of our UHPC products through a large test program at MPA (Germany) which included creep and fatigue testing and we have carried out large-scale trials at low (European conditions) and high temperatures (Tropical conditions) to demonstrate the performance of our materials under severe weather conditions.

Our NaX® Premix Grouts are a portfolio of ultra high performance concrete and composites with strength and durability 10 times better than that of ordinary cement products.

PROJECT HIGHLIGHT

- The repair and strengthening work was carried out for a good length of the conductor above and below sea level and without divers throughout the operation.

CLIENT BENEFITS

- The repair work has improved the service life of the casing and stopped it from further deterioration by arresting the corrosion.
- Increasing the structural capacity by deploying UHPC grouted sleeves.
- For this type of corrosion challenge a UHPC solution is the most cost effective and technically efficient option available.

