



SIKA AT WORK

EXTERNAL CONDUCTOR STRENGTHENING PILOT PROGRAM, MIDDLE EAST

OFFSHORE & MARINE CONSTRUCTION
CONVENTIONAL ENERGY

BUILDING TRUST



EXTERNAL CONDUCTOR STRENGTHENING PILOT PROGRAM, MIDDLE EAST



PROJECT DESCRIPTION

In the fourth quarter of 2015, a major operator in the Middle East initiated a pilot program to evaluate solutions for conductor repair across nine offshore wells. Sika was engaged to deliver a full-service well integrity campaign focused on external strengthening and structural remediation using ultra-high performance cementitious (UHPC) grout. The project took place in the Arabian Gulf and aimed to validate a diverless repair methodology as a scalable alternative to traditional intervention techniques.

Project name: External Conductor Strengthening Pilot Program
Location: Arabian Gulf, Middle East
Year: 2015
Application: Well integrity
Product: A predecessor of SikaGrout®-9550

PROJECT REQUIREMENTS

The client required a robust, diverless repair solution to address severe corrosion and wall thinning at mean sea level (MSL) across multiple conductors. During inspection, it was discovered that large cavities had formed in the original grout, with exposed steel rebars observed at elevations of -4.0 meters and -5.0 meters. Previous attempts to repair these defects using divers, chemical patching, and cover plates had failed due to the extent of the cavity enlargement and inaccessibility.

A permanent structural solution was needed to restore full load-bearing capacity of the conductors, extend their operational life and eliminate the need for diver-assisted intervention.

Any product name or reference reflects the Sika product name at the time of creation of this document and may differ from the product name or reference during past events.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.



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SIKA SOLUTIONS

Sika managed the project from start to finish, supplying materials, equipment, technical personnel and oversight under a fully engineered repair program. The process began with the supervised erection of scaffolding around each well's conductor, followed by the removal of old grout, cleaning of exposed steel and external inspection.

Once the surface was prepared, a prefabricated mould was installed around each conductor and filled with Sika's high-performance UHPC mix specifically selected for its superior strength, bonding capability and durability in offshore environments. The grouting operation was carefully executed and monitored by Sika's technicians, with all work performed from the platform without diver involvement.

Following grout curing, the moulds were removed and a visual inspection was carried out to verify integrity. Throughout the campaign, Sika provided project management services including general arrangement (GA), quality control and HSE compliance reporting.

CUSTOMER BENEFITS

Sika's engineered grouting solution enabled the client to restore structural integrity to the damaged conductor sections without diver involvement. The high-strength UHPC material provided immediate mechanical reinforcement, allowing the full load of 87 kips to be reliably transferred across the weakened wall sections.

The pilot program demonstrated that Sika's diverless grouted repair system is a viable long-term strategy for external conductor strengthening, offering operational efficiency, reduced risk, and minimal offshore disruption. The campaign was completed in full alignment with the client's technical requirements and to the satisfaction of both the engineering team and project management team.