

# SIKA AT WORK SERVICE LIFE EXTENSION PROGRAMME ON 12 PLATFORMS IN INDIA

OFFSHORE & MARINE CONSTRUCTION CONVENTIONAL ENERGY



## SIKA SEBVICES AC / DEESHODE & MADINE CONSTRICTION / D8 20

### SERVICE LIFE EXTENSION PROGRAMME ON 12 PLATFORMS IN INDIA



### PROJECT DESCRIPTION

Between April and June 2017, Sika successfully completed a major service life extension program for Oil and Natural Gas Corporation Limited (ONGC), India's national oil company. The program covered 12 offshore platforms located in the Arabian Sea, offshore Mumbai, and aimed to extend the operational life of ageing infrastructure to ensure safe and continued production from existing hydrocarbon reserves.

Sika served as the technical collaborator to Carlton Industrial Engineers, delivering comprehensive engineering, material supply, and offshore execution services for the project.

Project name: Service Life Extension Programme on 12 Platforms

in India

Location: Offshore Mumbai, India

Year: 2017

Application: Repair and maintenance

Product: A predecessor of SikaGrout®-9550

### PROJECT REQUIREMENTS

With many of ONGC's offshore platforms operating beyond their original design life, structural strengthening and repair were essential to ensure continued production and operational safety. The project required advanced solutions for underwater repairs, especially on complex structural joints such as X-braces, while minimizing operational disruptions.

ONGC needed a cost-effective approach capable of delivering reliable performance under offshore conditions without the need for hot work, shutdowns, or major replacement of existing structures.

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.

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### PROJECT PARTICIPANTS

Customer: Carlton Industrial Engineers
End Client: Oil and Natural Gas Corporation Limited (ONGC)

### SIKA SOLUTIONS

Sika began the project with a pre-engineering survey of the IA platform to gather structural data and inform repair strategies. The engineering team then performed detailed design work for underwater structural repairs, including the development of custom grouted clamp solutions for strengthening X-brace joints.

The grouted clamp design was tailored to avoid clashes with adjacent members while providing adequate structural encasement. Two grouted clamps were installed on X-brace joints of the IA platform, reinstating load transfer capabilities.

In addition to clamp installations, structural strengthening was carried out on 22 members across 11 platforms using infill grouting methods. Sika supplied a total of 467 tonnes of its proprietary ultra-high-performance cementitious (UHPC) grouting material renowned for its exceptional strength, low permeability, and durability in offshore environments

Sika also supervised the onshore fabrication of clamps and managed all aspects of offshore execution, including grouting operations and quality control.

### **CUSTOMER BENEFITS**

The grouted clamp technology offered significant advantages for this application, providing flexibility during installation and accommodating construction tolerances. By using Sika's proprietary UHPC grout for both clamp encasement and infill grouting, ONGC achieved durable repairs without the need for hot work or production shutdowns.

The service life extension works enabled ONGC to maintain safe operations and continue production, maximizing the recovery of hydrocarbon reserves while minimizing capital expenditure. Sika's integrated approach, from engineering design to offshore execution, ensured high-quality results and cost-effective delivery for India's national oil and gas infrastructure.

