



# SIKA AT WORK

## STRENGTHENING OF FOUR HORIZONTAL MEMBERS - NWIS-R PROJECT

OFFSHORE & MARINE CONSTRUCTION  
CONVENTIONAL ENERGY

BUILDING TRUST



# STRENGTHENING OF FOUR HORIZONTAL MEMBERS – NWIS-R PROJECT



## PROJECT DESCRIPTION

Located in the western offshore region of Mumbai, India, the NWIS-R platform required structural strengthening of four horizontal members as part of a brownfield upgrade. The platform, operated by Larsen & Toubro Hydrocarbon Engineering Limited, showed signs of aging in specific areas, including deteriorating components on the spider deck. In February 2021, Sika was engaged to supply high-performance offshore grouting solutions to restore the structural integrity of the identified members. The project was executed entirely above water using a grout infill methodology, eliminating the need for diving operations and extensive structural intervention.

Project name: NWIS-R Project  
Location: Western Offshore, Mumbai, India  
Year: 2021  
Application: Repair and maintenance  
Product: SikaGrout®-9610, SikaGrout®-9550

## PROJECT REQUIREMENTS

The client sought a reliable and time-efficient method to reinforce the weakened horizontal members without resorting to traditional removal and welding procedures. The goal was to ensure long-term durability and load-bearing performance while minimizing disruption, offshore personnel time, and vessel usage.

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 supplied 25 metric tons of SikaGrout®-9610 and 9 metric tons of SikaGrout®-9550 for the infill grouting. The scope of work included supplying all necessary materials, equipment, and skilled manpower, along with performing on-site quality control checks and producing a comprehensive close-out report.

Given the poor condition of the spider deck and limited access for inlet and outlet positioning, Sika adapted the strategy in real time. Inlet and outlet assemblies were fabricated on-site based on actual conditions, and a safe and efficient hose routing layout was developed to support the grouting operation. Despite these constraints, the strengthening of all four members was completed efficiently and without incident.

## CUSTOMER BENEFITS

The grout infill method allowed for rapid reinforcement of the structural members without the need for hot work or welding, which would have significantly extended the schedule. The entire operation was completed in just two days, compared to the months typically required for full member replacement. This resulted in substantial savings in offshore vessel time, manpower requirements, and operational complexity.