



**Location:**  
Offshore India  
**Client:**  
ONGC,  
Main contractor:  
SWIBER  
**Project date:**  
2016

## C-26 JACKET SUBSEA REPAIR WORK

### DISCIPLINES:

- Offshore Contracting
- Strengthening and Repair of Subsea Structures
- Structural Subsea Engineering



Nautec has completed the underwater strengthening work for 2 platforms as part of C-26 Cluster Pipeline Project for SWIBER in India.

### SCOPE

- Underwater strengthening of Structural Members and Joints was carried out at C24P1 and BB Platforms without removal of existing structural members. The scope of work included pre-engineering survey assistance, detailed engineering using FEM, installation supervision & grouting services.

### CHALLENGES

- With both platforms being in low water visibility, the gathering of data during pre-engineering survey and utilising it to effectively design an operation friendly solution was the biggest challenge. The strengthening work for BB platform was near mudline and in nearly zero visibility. Nautec's past experience in handling similar cases in Indian water helped the designers and execution team substantially.

### SERVICES

- The detail engineering of the two platforms included tubular joint design, finite element analysis and detail engineering using Global In place analysis and grouted clamp design using FEM. Nautec's engineering team carried out the engineering services in-house.
- Strengthening of structural members/joints was carried out by infill grouting/grouted clamps.
- Our services included pre-engineering; survey assistance; fabrication supervision; installation supervision; deployment of spread for carrying out grouting work; and provision of grouting crew.