



## ESSAR BERTH Vizag (India)

### CUSTOMER

Essar Ports GCB

### SECTOR

Ports & Harbours

### DATE

2016

### PRODUCTS

- Renderoc SP40 & DS40
- Lokfix, Nitocote PE135
- Nitozinc Primer & Nitobond AR

### THE PROJECT

Essar Steel's Jetty berth is a deep water terminal located in the outer harbor of Vizag Port, with a length of 360m and width of 20m, capable of berthing 150,000 DWT vessels. The Berth facility handles heavy cargo of major industries. Due to aggressive sea water exposure, the structural components such as girder beams were corroded, with severe spalling, badly exposing reinforcement. The structure was in a severely distressed condition and hence necessitated structural rehabilitation.

### THE SOLUTION

After the appropriate non-destructive tests were carried out to assess the condition of the structure, scaffolding had to be suspended from the top of the berth by drilling holes and connecting them with T-joints to get a stable platform for workers to carry out the rehab work. Nitozinc Primer was used as an anti-corrosive primer coating on the damaged steel reinforcements. Lokfix was used to anchor new reinforcements. Renderoc SP40 wet spray mortar and Renderoc DS40 dry spray mortar were used as structural grade reinstating mortars to repair all the damaged areas of the berth. Nitobond AR was used as bonding agent cum curing compound. Nitocote PE 135, a chemical resistant cum waterproofing protective coating, was used over the reinstated berth area.

### THE BENEFITS

Renderoc SP40 & DS40, non-shrink, polymer modified, fiber-reinforced cementitious repair mortar offered:

- Mass Reinstatement to large areas and irregular profiles. High built up thickness in single application and very low rebound loss, thereby saving material and cost.

Nitocote PE 135 – Eco-friendly, hydrophobic polyester-based waterproofing cum protective coating offered:

- Excellent U.V resistance, dual performance as both protective coating and waterproofing, hence saving costs on waterproofing



Severely spalled and distressed structural members (underside of the berth)



Scaffolding suspended from the top using T-joint connections



A reinstated structural members finished with Nitocote PE 135