



## IDCO World Skill Center

### Bhubneshwar (India)

#### CUSTOMER

IDCO - Bhubaneshwar

#### SECTOR

Buildings

#### DATE

2020

#### PRODUCTS

- Nitowrap 30
- Nitowrap 410
- Nitowrap CWS600
- Nitoplate CPS 1014
- Nitoplate CPS1030

#### THE PROJECT

The World Skill Center (WSC) is India's first and one-of-a-kind skill center. WSC has planned an 18-story building constructed by IDCO at Mancheswar. A state-of-the-art glass and steel facility spanning 500,000 sq ft including a helipad, this WSC building will offer young people opportunities to learn advanced skills in leading sectors, including the manufacturing and services sectors. Since the existing structure was to be converted into a skill center, with installation of various equipment related to training, the loading conditions had changed and some of the structural members were found to be deficient.

#### THE SOLUTION

Fosroc being pioneers in structural strengthening systems was consulted and after due consideration to design requirements and specifications, Fosroc proposed carbon fiber FRP systems for strengthening of structurally deficient elements:

**Nitowrap CWS** – for RCC columns & beams for axial load capacity enhancement & shear strengthening

**Nitoplate CPS** - for RCC beams for flexural strengthening.

#### THE BENEFITS

Nitowrap CWS is a system of high-quality carbon fibre fabric used with epoxy saturating resin Nitowrap 410. Nitoplate CPS – Carbon Fiber Laminates

- High tensile strength and modulus.
- Lightweight system reduces requirement for heavy supporting equipment and adds negligible additional load.
- Rapid installation provides cost savings, rapid return to service and minimal disruption to surrounding works.



CFRP wrapped RCC Columns for enhanced load capacity



U wrap Scheme of CFRP for Shear Strengthening



Flexural Strengthening of RCC beams with Nitoplate CPS