

# Value Engineering With World-Class Safety

Tata BlueScope's PEB roofing solution for Hitech Corporation gives the building a global edge in terms of design, protection, and durability

**H**itech Corporation is a leading rigid plastic packaging manufacturer with 13 manufacturing facilities in India, catering to a sizeable customer base across various industries. To further strengthen their foothold in the Indian sub-continent, with a portfolio of innovative and sustainable products, Hitech Corporation decided to set up a next facility in Mysore using the most advanced construction materials and methods, and as per international standards.

## Scope of Work

Tata BlueScope Steel's contribution in the PEB industry numbers more than 1500 structures, developed with over 8 million safe hours. The company's forte includes design, manufacture, supply and installation— all of which services are provided by its Building Solutions vertical. Hitech Corporation opted for Tata BlueScope Steel's BUTLER® Building System – an obvious choice given its global recognition for providing timely construction with superior results such as leak-proof performance and world-class safety standards.



*Safe erection practices at Hitech Corporation facility in Mysore*



### Solution Offered

BUTLER® Building System with MR-24® roof system made from high strength COLORBOND® Steel was an ideal solution. The MR24 roof system provides 10 years of leak proof performance warranty and guaranteed superior functionalities such as higher column-free space, and a mezzanine floor along with Smartdek® decking profile. Value engineering helped in optimizing the overall design with improved economics. Around 126 Rotary Vents were provided on the roof as an effective and environment-friendly solution to meet the building's natural ventilation requirement.

### Design Challenges

- The structure was complex in nature as there were three different areas in the building. The main building had two lean areas connecting on the sides; which made design and detailing challenging.
- There were mezzanines in the building, planned for present and future use, with heavy loads, which resulted in all the frames being designed separately.



### Fact File

**Project:** Hitech Corporation Ltd  
**Project Size:** Over 8,000 sq.m  
**Location:** Mysore  
**Roof System:** MR-24® Roof System with 126 Rotary Vents  
**Building Solution:** BUTLER® Building Systems  
**Consultants:** Shah & Shah Consulting Engineers, Rajesh Shah Engineers & Consultants

- The building had to be designed using the latest Indian building bylaws as per the stringent clauses mentioned in Chapter 12.
- There were multiple cranes in the building with provisions for future crane loads, which further increased the design complexity.

### Construction Challenges

Due to dependency on various external parameters, the team faced a number of challenges on site.

- Interference from locals was resolved by the client but resulted in loss of time.
- The finishing work of framed opening took longer due to delayed front release from the civil agency.

### Erection Methodology

- In line with the client's requirements for civil work priorities, erection work against change of priorities was well managed by our construction team in three different areas of the building.
- Execution of erection in the peak monsoon period was possible due to advance planning by our construction team and the support extended by the client and the civil agency.
- Our construction team saved significant time by making rafter assembly on ground as per the sequential manner prior to erection.

### Outcome

The outcome of our consolidated efforts was a successful delivery of the Hitech Corporation project with best-in-class products and construction methodologies. Team work, collaboration, an effective planning methodology were the main catalysts for completion of the project. This resulted in repeat orders by Hitech Vizag that steered a patronage for multiple job orders, which Tata BlueScope bagged in a row. **MGSA**