

# B2B PURCHASE

for Project Procurement



## INNOVATIVE SOIL COMPACTORS FOR HIGH-QUALITY CONSTRUCTION

How backhoes  
**buoy productivity,**  
reduce cost

Geosynthetics **give**  
**long-lasting roads,**  
cut maintenance cost

Pre-engineered  
warehouses: for **fast,**  
**accurate construction**

Paints that keep  
**surfaces safe and**  
**durable**

Solutions for  
**effective waste**  
**water management**

Zincalume®

Colorbond®

# Green Solutions for Sustainable Future

ZINCALUME® steel and COLORBOND® steel are recognised by  
CII Indian Green Building Council (IGBC) as Green Products under Green Building Ratings



**1800 2708333**

TOLL FREE

[www.tatabluescopesteel.com](http://www.tatabluescopesteel.com)  
[coatedsteel@tatabluescopesteel.com](mailto:coatedsteel@tatabluescopesteel.com)

Tata BlueScope Steel Pvt. Ltd., CIN : U45209PN2005PLC020270, Regd. Office: The Metropolitan, Final Plot No. 27, Survey No. 21, Wakdevwadi, Shivaji Nagar, Pune - 411005, INDIA.

ZINCALUME® steel and COLORBOND® steel are registered trademarks of BlueScope Steel Limited under license to Tata BlueScope Steel Pvt. Ltd.

TBSL/B2B/0619

**TATA BLUESCOPE  
STEEL**

# Tata BlueScope Steel enables setting up state-of-the-art plant



Tata BlueScope Steel handed over new manufacturing facility at Sanand Gujarat which started commercial production of toothpaste in May 2014 by Colgate-Palmolive (India). The expansion of this building was awarded back to Tata BlueScope Steel in September 2016.

Tata BlueScope Steel's scope involved design, manufacture, supply and installation of the pre-engineered steel building structure with an approximate area of 13,500 sq.m. BUTLER Building Systems was an obvious recommendation due to expansion of Phase 1 building.

## Construction challenges

- Due to dependency on various external parameters, the team faced numerous challenges on site.
- Erection of main structure of making area above RCC building was the main challenge executed safely by advance planning.
- Being Brown field project and strict statutory obligation, manpower continuity was a big challenge during erection phase.
- Material storage and movement throughout the project was always a big task.
- Multiple agency interface was another challenge faced by execution team at the end of the project to deliver the project on time.

## Design challenges

The project had a few inherent design challenges that varied in complexities.

- The structure had four different areas with diverse elevations, with a few parts resting on RCC columns,

thus increasing the dependability on civil party for design and detailing. The new building was an expansion of the existing structure both from end wall and side wall.

- FM criteria was a pre-requisite for design of roof panels. Irregular building shape, changed FM ratings from previously designed, moreover the high wind zone increased the design complexity.
- Heavy collateral load on purlins with irregular and scattered pipe rack, cable tray and other utilities on rafter increased the design effort.
- Hanging mezzanine with heavy load also added to complexity.
- The loadings on the proposed structure was higher than it was planned during previous expansion.
- Making is complicated in design to check the existing members and connections.

## Erection methodology

- Executing the erection work against change of priorities in four areas of buildings was well managed by the company's construction team in line with client's requirements.
- Execution of erection in the peak monsoon period was hampered progress as ground condition gets worst for movement due to muddy and uncompact soil surfaces.
- On request to client, challenges of equipment movements and erection was toned down to some extent due to metalling work done by civil contractor.
- Sideways erection of rafter above RCC mezzanine in making area was challenging task in terms of safety which our construction team has executed safely by advance planning.
- Construction team has saved significant time by erecting pre-assembled header frames to avoid delay.
- Without affecting existing building production work, connection between exiting and new plant was executed safely and without any difficulty due to proper planning by construction team.

## Result

The outcome of our consolidated efforts was a successful delivery of the Colgate – Palmolive expansion project with best-in-class products and construction methodologies. Team work, collaboration, an effective planning methodology act as a catalyst for completion of this project. ■

For any further information, please visit [www.tatabluescopesteel.com](http://www.tatabluescopesteel.com)