

INDUSTRIAL CASE STUDY

Location: Telangana
Area: 49 Acres



Introduction

When the Client decided to venture into a new product line, they envisioned a state-of-the-art manufacturing facility. However, this was a high-stakes "greenfield" project starting entirely from scratch, with an immovable deadline that would challenge any conventional design and construction process. Besten was engaged to turn this ambitious vision into a functional reality within a critically short timeframe.



The project presented a unique and formidable set of challenges right from the outset.

1. No Land: The most fundamental hurdle was that the client had not yet acquired the industrial land for the 49-acre facility. The entire project timeline was contingent on identifying, evaluating, and finalising a suitable site before any design work could commence.

2. New Product, New Process: The Client was entering a new market segment. This meant they had no prior experience with the manufacturing process or the specific equipment required. The facility's design depended on a production layout that was still undefined, adding a significant layer of complexity to the architectural, structural, and MEP planning.

The Challenge:
A Trifecta of Complexities

The Challenge: A Trifecta of Complexities



3. An Immovable Deadline: Compounding the first two challenges was a hard deadline imposed by our Client's end-customer. The first product dispatch date was already fixed, creating immense pressure to compress the project lifecycle—from land acquisition to full-scale operational readiness—into an exceptionally tight window.

A traditional, sequential approach to design and engineering would have made it impossible to meet this deadline. The project demanded a radical, integrated strategy to run multiple complex workstreams in parallel.

The 'Total Design' Solution: ● ● ↑ ●

Integrated Planning for Unprecedented Speed

Besten's "Total Design" philosophy was the key to unlocking this puzzle. Instead of treating land acquisition, process finalisation, and facility design as separate, consecutive phases, we took up all disciplines at one go, especially during the critical conceptualisation stage.

BESTEN[®]

Our multi-disciplinary team worked concurrently. While potential sites were being evaluated, our process and industrial engineers collaborated with the Client and their equipment vendors to conceptualise the manufacturing layout. This allowed our Architectural, Civil, and MEP teams to develop flexible, modular designs that could be adapted once the final site and equipment specifications were locked in.



By integrating all design disciplines from day one, we created a seamless, agile workflow. This eliminated the typical delays found between stages, allowing for real-time problem-solving and decision-making. Using advanced BIM (Building Information Modeling), we could simulate and coordinate every aspect of the facility, ensuring that all systems were perfectly integrated long before construction began.

Outcome: From Zero to Inauguration, Right on Time

The result of this integrated "Total Design" approach was a remarkable success. The project moved swiftly from concept to completion, overcoming every initial challenge. Timelines were not just met; they were mastered.



The factory's inauguration took place exactly on schedule, enabling the Client to meet its commitment to its client without delay. By tackling all challenges simultaneously through a unified design strategy, Besten transformed a high-risk, time-critical project into a benchmark of efficiency and a testament to the power of integrated planning.

BESTEN®



ABOUT BESTEN:

Besten has over **29 years of experience** in designing and consulting for industrial infrastructure projects. The design solutions are sustainable and suited for green certification-targeted factories. Besten believes in incorporating sustainable design concepts in all projects. Besten provides optimised design solutions for both **greenfield and brownfield projects** while ensuring compliance with statutory regulations and project requirements.

For more information - roshini@besten.in

<https://www.besten.in>