

ONE WINDOW SOLUTION PROVIDER FOR ENGINEERING & CONSTRUCTION



InSteel Engineers Private Limited www.insteelengg.com

### **INSTEEL ENGINEERS PVT LTD**

One Window Solution Provider For Engineering & Construction

### **INSTEEL Soch:**

Constantly Building Capabilities of Self and People to Create Value for Ecosystem
By Providing Engineering and Construction Platform of Innovative and
Simplified Solutions to the Structural Projects Globally.

# **INSTEEL Spiritual Foundations**



- Always have collaborative approach
- ✓ It is better to be fair than being Nice
- ✓ Growth without capability is liability
- ✓ Only Good Business will lead to BIG business







50 TEKLA LICENCES 200 CLIENTS SERVED 24X7
WORKING

30+ FACTORIES PAN INDIA

5000+ MT CAPACITY 1000+ WORKFORCE 15+ COUNTRIES GLOBAL PRESENCE

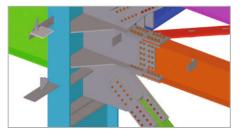
Socially Associated With:



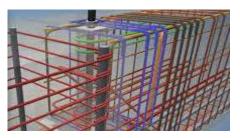


Steel/RCC Design

#### **ENGINEERING AND BIM**



Connection Design and Steel Detailing



Rebar Detailing



**Building Information Modeling** 



**Technical Manpower Supply** 



Steel Fabrication

#### **CONSTRUCTION**



Fire Proofing and Painting



**Steel Erection** 



Roof & Wall Cladding System:



Civil & RCC Work

## **Building Information Modeling (BIM)**

With the team of experts, we are focused on delivering intelligent models with innovation (innovative digital solutions)

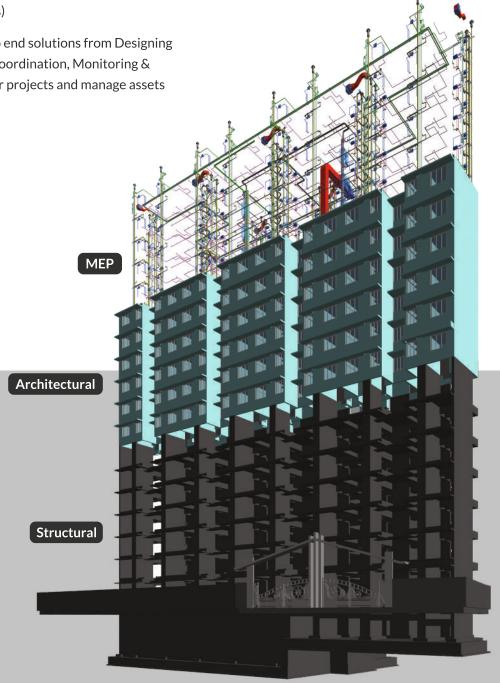
Our core services focus on delivering end to end solutions from Designing BIM Strategy to Process Implementation, Coordination, Monitoring & Evaluation, which enables our clients deliver projects and manage assets efficiently and with lowest risk.

#### Softwares Used

- Revit & NavisWork (AutoDesk)
- Solibri (Solibri)
- Tekla Precast
- Tekla Steel Structures
- Tekla CIP
- AutoDesk BIM 360

### Highlights of Services:

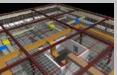
- Mobile Application for Project Tracking & Dashboard Reports Synced with BIM Model and Project Schedule
- Integration of BIM Model with Project Schedule made in Primavera P6
- 3. SSD-Rebar, Steel, RCC, MEP
- 4. Construction Support
- Onsite Coordination for BIM and Project Planning





Core Services:

Advance Services:





MEP Coordinated Drawings BOQ (Tendering & Billing)



Integration with Mobile Application "Intento Projects"





SSD Rebar/Steel/MEP

Integration with Project Planning Schedule for Delay & Cost Analysis





Onsite Coordination for BIM and Project Planning

As-Built / Maintenance Model for Facility Management

### BIM -ROI (Return On Investment)



**Price** 5 - 8% Cost Reduction



**Schedule** 5 - 20% Cycle Time Reduction



**Data Management** 60 - 70 % Saving in Time



Coordination 75 - 80% Time Saving in Coordination





18 - 20% **Cost Saving** 



Waste Reduced Resulting in Savings



#### As-Built/Commissioning

Final 'As-Built Digital Model' with Handover Drawings, Construction & Maintenance Information



#### **Project Control**

Project Head, Management Team, on & off Site Team are able to Control Project Efficiently



#### **Constructability Analysis**

Finds & Fixes Errors Saves Time & Cost

## Project Planning Using Primavera

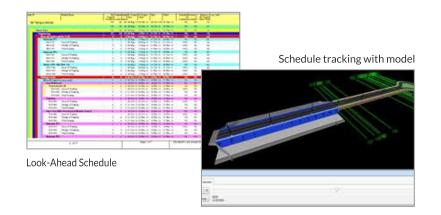
With the team of project planning experts, we focus on providing maximum benefit to the clients by effectively planning their projects for "On-Time" completion of the projects enabling clients to save on project cost.

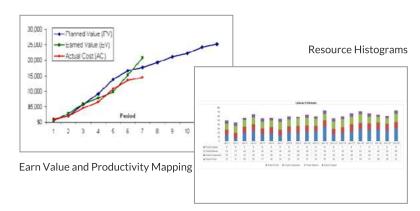
#### **Core Services:**

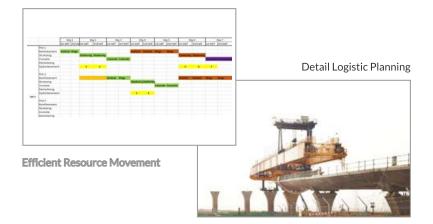
From designing strategy to monitor and track project with use of our unique mobile application "Intento Projects" for on-time completion and cost saving, our services includes, preparing detailed project schedule with macro, micro detailing, resource loading, cost loading and risk identification.

#### Highlights of Services:

- Preparation of detailed realistic project plan using Primavera P6
- Project Forecasting with Look Ahead Schedules
- Project Schedule Integrated with BIM Model
- Mobile Application synced with Project Schedule and BIM Model, for monitoring and tracking of the project progress
- Delay Analysis using mobile App Window analysis for root cause analysis of the project events keeping in mind validation of EOT with / without cost implication
- Various Dashboard representation for clear progress understanding for higher management





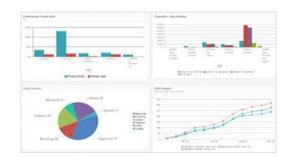




### Project Tracking & Monitoring using "Intento-Projects" Mobile Application

Intento Projects mobile app is an unique addition to the construction industry to get the analyzed site information in a simplest form. Includes health chart with progress, billing, resources details, requirements and performance across various window sections.

Realtime Project Health Monitor



#### **Integrated Reasult**



- The state of the s
- Project progress status in one window, with model and schedule synced together
- Simplified dashboards for project progress. synced with primavera
- Ease of control of your projects for timely completion or EOT



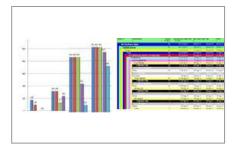
Development of Dynamic

Monitoring System & Dashboard

### Integrated Approach: BIM + Project Planning + Mobile App



MODELING (3D-5D) - BIM



PLANNING - Primavera



**MONITORING - App** 

## Structural Design



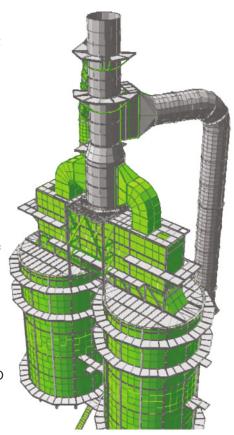
INSTEEL ENGINEERS is a qualified ISO 9001:2015 Certified Structural Design consultant for STEEL and RCC Structures. We partner with Architects, Project Managers, Contractors and Building Owners to make their projects a success.

We deliver reliable, and innovative structural design solutions that work both aesthetically & functionally enabling our clients to save a substantial construction cost. Being part of the wider team, we play our role in finding ways to complete projects, as quickly and cost-effectively as possible without compromising on quality or integrity.

So, if you are looking for a complete EPC solution, considering not only Structural Design know-how but expertise in Connection Design, Fabrication Details, actual Construction, Logistic and Erection from a team having deep understanding of related expertise, then INSTEEL ENGINEERS is your definite destination.

#### Softwares Used

- DEVELOPED EXCEL SHEETS IDEA STATICA STAAD PRO ETABS
- TEKLA STRUCTURES CADS RC TEKLA PRECAST REVIT AUTOCAD

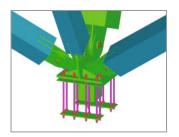


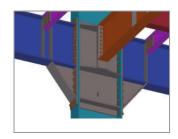
### Connection Design

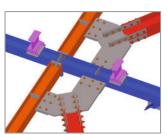
INSTEEL ENGINEERS understands requirements of Detailing, Fabrication, Logistics and Erection; and hence, we develop & deliver feasible and quality connections according to the project requirements.

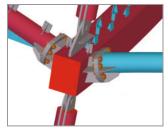
We provide accurate, detailed, concise and clear calculation reports for each connection. With our years of designing experience, using internally developed Excel sheets for various codes and IDEA StatiCa (finite element analysis) software, we simplify and resolve even the most complex connections and make sure that our clients get optimal solutions concerning thickness of the plates, number of the bolts and size of the welds. We constantly think about the process of installation in order to achieve fast and easy installation onsite.

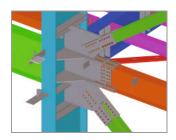
Codes: LRFD, ASD, BS, EURO, Egyptian and ISO 800:2007

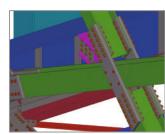










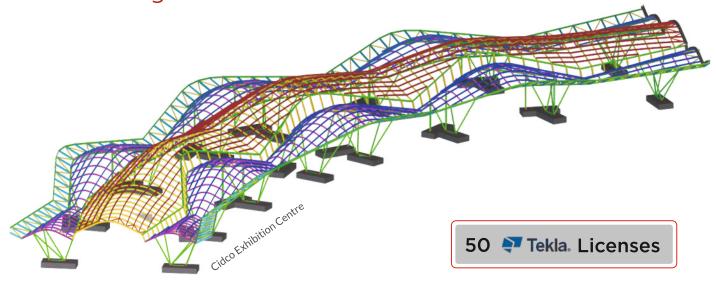


#### **Our Expert Solutions for Connection Detailing**

- Base Plate connections
- Embed plate connections
- Moment connections
- Shear connections
- Steel Beam to Beam connections
- Steel Beam to Column connections
- Steel Column to Column connections
- Truss connections.
- Steel Beam to Slab connections
- Column to Slab connections

- Vertical Brace connections
- Horizontal Brace connections
- Cantilever Connections
- Hollow sections connections

### Steel Detailing



Quality steel detailing is vital for highest levels of accuracy at each construction stage and we are well-equipped with **50 TEKLA** licenses. It is a link to connect Architect, Structural Designer, Contractor, Fabricators, Erectors and other stake holders of project together, who all are individually and collectively responsible for the success of project.

Understanding the requirements of Fabricators and Erectors, with vast experience of domestic and international projects detailing using various country codes, we take utmost care to provide quality and accurate fabrication/shop & Erection drawings.

#### We deliver:

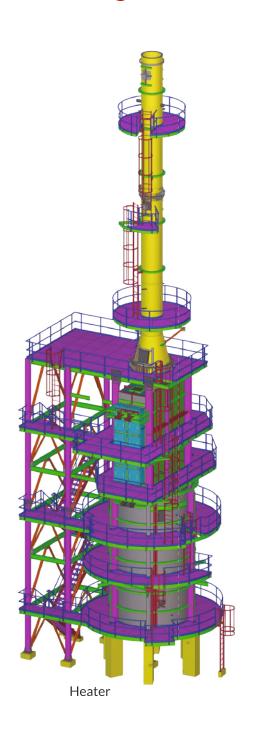
- Connection Design
- 3D Modeling
- Advanced B.O.Q Planning & Procurement
- AB Plans, Embeds & Miscellaneous Detailing
- Shop/Fabrication Drawings, Single Part Drawing
- Erection Drawings

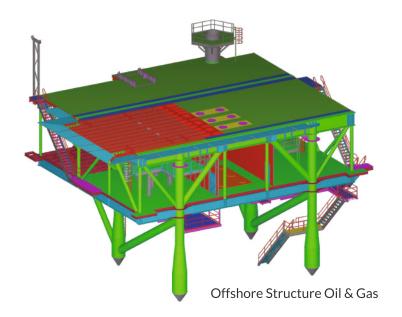
- Assembly List, Part List, Bolt List, Bolt Summary
- Total Surface Area for Painting & Shot Blasting
- C.O.G. Reports of assemblies for lifting & transportation
- Segregation of assemblies and parts as per erection sequence & priorities
- Comments incorporation from Clients/Consultants

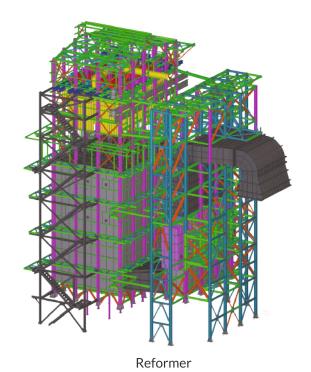
#### **Sectors Served**

• Commercial • Refinery • Oil & Gas • Power • Cement • PEB • Infra

# Connection Design And Steel Detailing





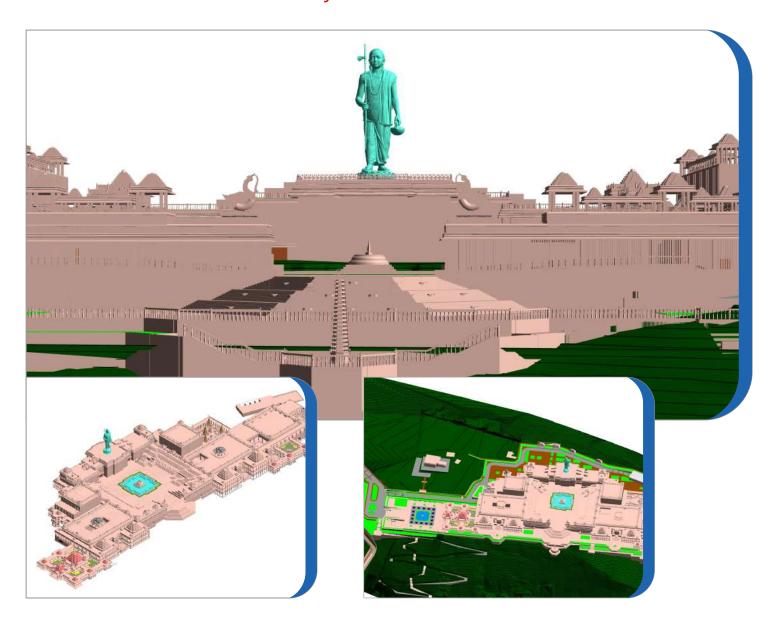


## Tata Steel Limited



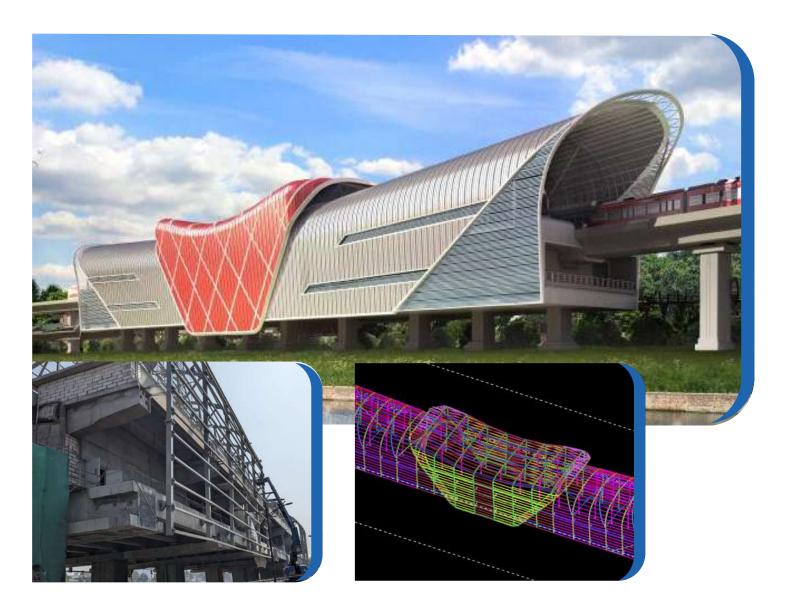
This unique project we have undertaken for the LOD 200 BIM Development under the famous architecture firm "Somayya & Kalappa Associates". The area is 3 Lac Sq. Ft. & our scope was to deliver the Architecture BIM Model.

# Statue of Oneness - Madhya Pradesh



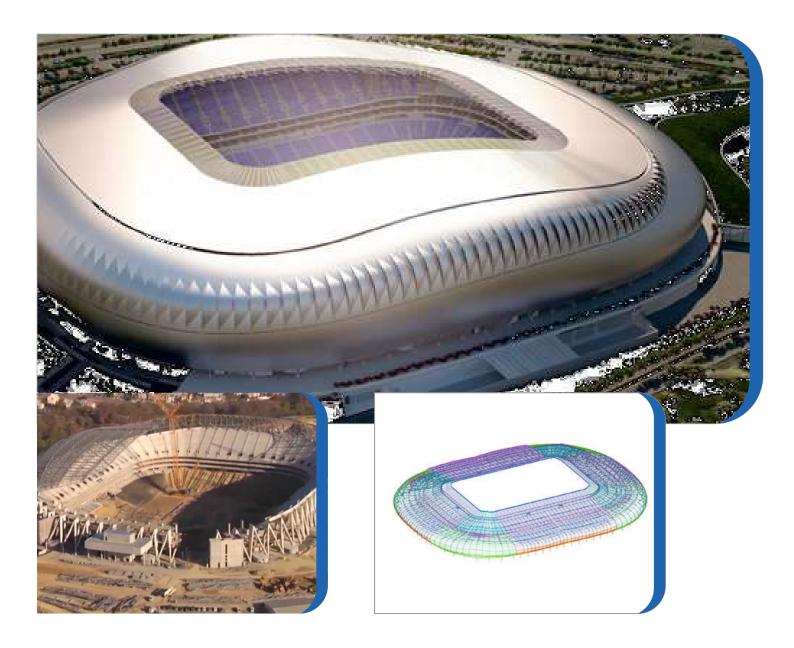
This iconic project is on Bank of River Narmada with 108 Mt Height Statue of Adya Shankaracharya with Museums & Art Centre. The landscpae area is 40 Acres & The building area is 15 Lakh Sq Ft. Our Scope was to deliever the LOD 350 level BIM model.

### Deccan Station - Pune Metro



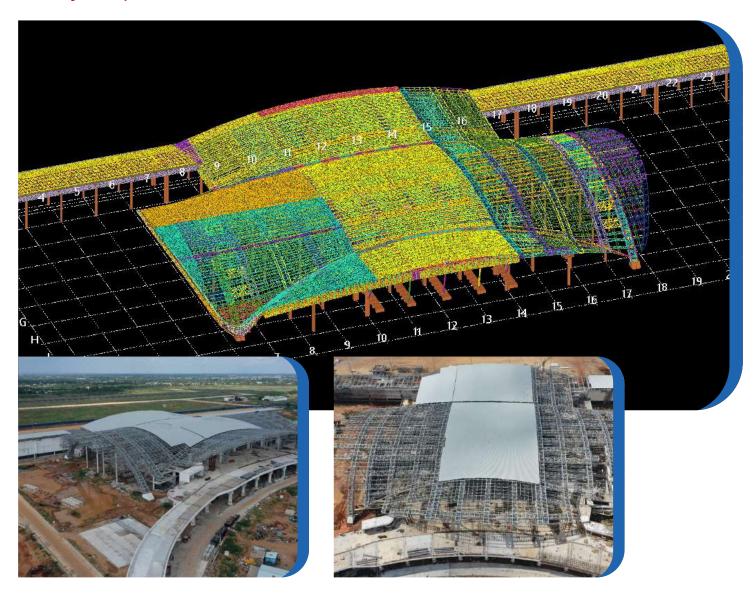
Deccan Gymkhana is an elevated metro station on the east-west corridor of the Aqua Line of Pune Metro. It draws inspiration from the paradigmatic history of the city. A symbol of pride, Pagdi, becomes an icon of imposing structure. It depicts the valour of warriors from the past and is visualised on the station elevation. The entire station elevation reflects the amalgamation of the city's culture along with a contemporary approach.

# Mexico Football Stadium



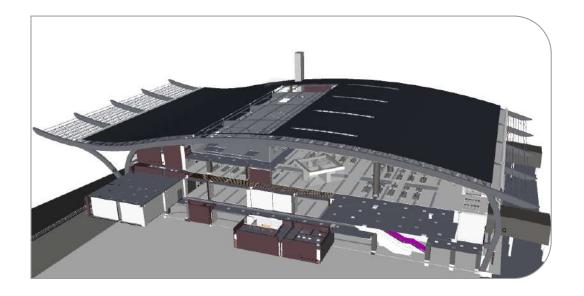
Estadio Azteca is a multi-purpose stadium located in Mexico City. The stadium sits at an altitude of 2,200 m above sea level. With an official capacity of 87,523, it is the largest stadium in Mexico. Detailing of a part was Insteel's scope which included sitting area to roof structure.

# Trichy Airport



Tiruchirapalli International Airport (IATA: TRZ) is located in Tiruchirapalli, Tamil Nadu, India, approximately 325km away from Chennai. Also referred to as the Trichy International Airport, it is state-owned and operated by the Airports Authority of India (AAI). This steel structure weighs 8800 Metric Tonns and the beautiful shape of structure inevitably involved complex member arrangemnts and unique manual connections.

## Dabolim Airport Goa



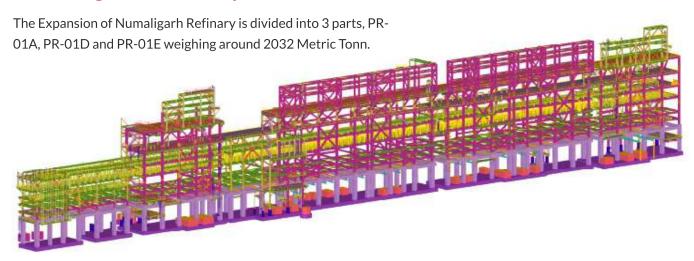
Insteel was the partner for the General Contracting Team Vasconforthis project, Where we have delievered LOD 350 Level Architecture & MEP Model for the Dabolim Goa Airport of 2.5 Lakh Sq Ft

### Thal Sena Bhavan



Indian Army is known for the Bravery & Courage. We are proud to be the partner in the process of Making the Head Quarter of Indian Army - Thal Sena Bhavan. The Principal Architect is CP Kukreja & Associate & Under them we have delivered LOD 350 BIM Model for 20 Lakh Sq Ft Buildup with 45 Acres of landscape.

# Numaligarh Refinery



### Renaissance Hotel



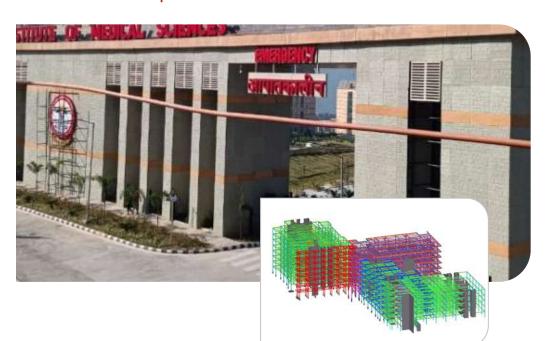
Located on the banks of Powai Lake, Renaissance Hotel Mumbai Powai Lake, a Marriott Luxury & Lifestyle Hotel offers luxurious rooms. Around 10,000 MT steel has been used to build this structure

### Mahatma Gandhi Setu



The project was given to Afcons Infrastructure, with Submit OJSC as a joint venture at an estimated cost of 1,742 Crore rupees. The work began in 2017. Around 66,360 metric tonnes of steel is used in the reconstruction of the whole superstructure

# AIIMS - Bilaspur



The hospital building comprises of a total construction of appx. 157500 sqm, including basement services like laundry, mortuary etc. This is a multispecialty hospital. We are proud to complete engineering forthis in record time frame.















































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