

Precision Precast Solutions (PPS)



Introduction

- Technology Driven Organization
- Established in 2004
- Total Strength of ~ 300
- Provides services to Domestic and International clients/projects
- Sister Companies: PPS Energy Solutions, Pune PPS Tech LLP EC LLP AEC LLP





- Architectural Design
- Civil / Structural Design

Precast/ Prestressed Concrete

Reinforced/Post Tensioned Concrete

Structural Steel

- MEP Services
- Project Management Consultancy Services
- BIM & Clash Detection Services
- Statutory (Government) Approvals



Architectural Design

- Concept Design
- Design Basis Report
- Coordination with Civil/Structural, Mechanical, Electrical etc. disciplines
- Government Approval Drawings/documents
- Tender Drawings
- Specifications
- Construction Drawings
- BOQ
- Site coordination and checking
- Final Certification and project closure



Civil / Structural Design

- Feasibility Study
- Concept Design / Technology assessment, review, finalization
- Structural configuration alternatives / comparisons during
- Architectural planning to finalization stages
- Design Basis Report
- Preliminary Design
- Interaction with Architect and MEP for design finalization
- Preparation of Structural 3D models using state of the art software
- Detailed design as per appropriate Indian, BS or ACI etc. codes
- Structural specifications and Detailed Engineering drawings
- BOQ / Tender specifications as per client's requirement
- Technical site supervision
- Stability Certification



MEP Design

- Need based Concept Design of FF, HVAC, Electricals etc.
- Design Basis Report
- Coordination with architectural and other Disciplines
- Tender Drawings
- Specifications
- Construction Drawings
- BOQ
- Review and approval of vendor items
- Site coordination and checking
- Commissioning
- As built drawings



Government Approvals

Pre Construction Stage

- Industrial Registration –IEM -I
- Consent to Establish
- Provisional Fire NOC
- Building Plan Approval
- Building Plan/ Machine Layout DISH (Directorate of Industrial Safety and Health)
- > Approval to storage of explosives/Petroleum product (HSD) CCOE (Chief Controller of Explosives)

Post construction (Final) Stage

- Industrial Registration –IEM -II
- Consent to Operate
- Final Fire NOC
- Registration and License
- Building Completion /Occupancy Certificate MIDC
- > NOC from various Local authority and Final License for CCOE storage

All required approval drawings, liasioning for approvals ...

PMC Services

Study Project documents and Scheduling of Project Activities

Pre-tender activities

Estimation Statutory requirements Tendering

Monitoring

Construction Supervision Progress of Work with Respect to schedule Field and laboratory Tests Valuation of Completed Work

Reporting

Inception Daily, Weekly, Monthly, Occasionally Project Closure



BIM Services

Preconstruction Phase:

- Design Authoring
- Multi disciplinary Trade Coordination
- Constructability Review

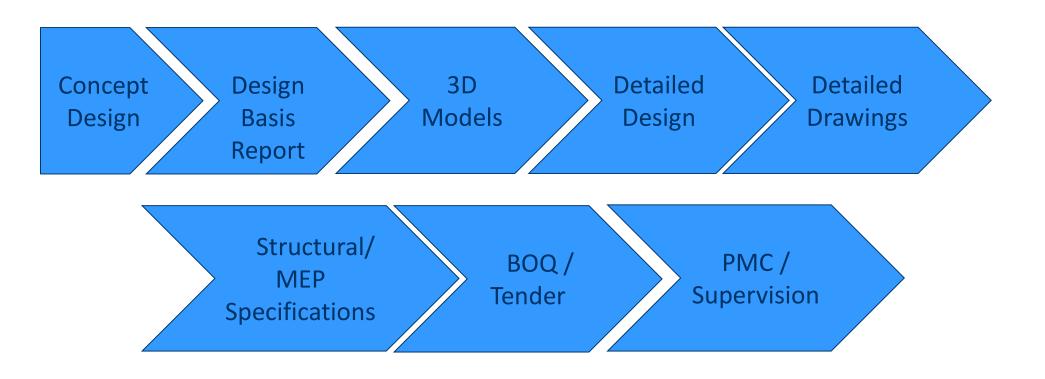
Construction Phase:

- Erection Drawings
- Shop Drawings
- Supply Chain Management
- Quality Assurance
- Facilities Management
- Laser Scanning





PPS expertise during project lifecycle





Analysis & Design Software

- STAAD.Pro v8i
- E-TABS
- RISA 3D
- Presto 8.6.1
- RAM Concept
- LecWALL
- Robot
- RCDC
- DIALux
- In-house programs for Analysis and Design





BuildMaster







3D Modeling & Detailing Software

- Tekla Structures
- Revit Structure
- Revit Architecture
- Sketch up
- Revit MEP
- Navisworks
- 3D Max
- AutoCAD
- FabCAD
- CADWorx



Code Competency

- American Steel: AISC ASD and LRFD codes including seismic detailing per AISC 341
- American Concrete: ACI 318 and others like ACI 301, ACI 307 etc
- National Building Code (NBC), International Building Code (IBC)
- ASCE 7-05, ASCE 7-10
- Indian Standard Codes
- British Codes, Euro Code EC2
- Metal Building Codes and Design Manuals
- ASHRAE, NFPA, FM
- IEC
- Legal Requirements



Infrastructure

- Office area @ 8,000Sqft
- Dedicated High Speed Internet Connection
- Secure RAID Server
- Managed Switches and Firewall
- Plotters, Printers and Scanners
- Up to date Tools for Secure Systems
- Dedicated Workstations
- Licensed Software only
- 24 hour Power backup



Infrastructure









PPS

Quality Assurance

- Maintain error logs
- Error and cause tracking systems
- Quality Assurance Workshop for employees
- Corrective Actions
- Preventive Actions
- Customer Feedback and Satisfaction forms



Quality Policy

We shall,

- Always aim to have technological superiority through continuous R & D.
- Strive to have satisfied clients.
- Strive to ensure happy employees.
- Work towards environmentally sustainable solutions.
- Support social cause.

Quality Objectives

We shall,

- Aim to have technological superiority through continuous R & D.
- Install confidence in customer through dependability, transparency and quality of service.
- Provide opportunities for personal development for employees.
- Aim to promote environmentally sustainable solutions.
- Aim to contribute towards social cause.
- Create quality consciousness in employees by conduct of training and generating awareness in them about QMS. To aim for continual improvement.
- Aim to increase client base.



- **Project: Optic Fiber and Cable Project**
- Location: Pune
 - Client: Hengtong India Pvt. Ltd.
- Scope of Engineering of all disciplines, Tender preparation, coordination Work: during construction, statutory approval drawings etc.
 - Project This is optic fiber and cable manufacturing facility being built on Brief: a plot of about 40000 Sqm. It comprises of main plant building, three storied admin building, Utilities, Guard House etc. (built up area 30000sqm). There are tall retaining walls using RE



- **Project: Hyosung Pune Plant**
- Location: Pune
 - Client: Hyosung/HTI
- Scope of Civil/structural Engineering. Work: Quality Supervision



- Project This is switchgear manufacturing facility built on a plot of about
 - Brief: 57844 Sqm. It comprises of factory, three storied office building, Canteen, Utilities, Guard House etc (built up area 17835sqm). There are tall retaining walls using RE construction.



Project: Warehouse at Lote

- Location: Lote, Chiplun
 - Client: Dow AgroSciences, Lote
- Scope of Architectural, Engineering, Statutory Approval Support and As Work: built drawings etc.
 - Project This is new Warehouse facility constructed in Dow Agro Brief: sciences existing premises, at Lote near Chiplun, Maharashtra. This is about 3500sqmt construction comprising of two dock levelers and canopies above.



PPS

Project: Project Fabrication Facility at Barmer

- Location: Barmer, India
 - Client: Cairn India Ltd.
- Scope of Plot plan Development, civil, structural, electrical and mechanical Work: design, Bill of Materials, Tender preparation and coordination.
 - Project This is @ 60000 sqm facility developed by Cairn for Fabrication, Brief: storage of pipes and structural steel sections for their captive use. This site is in desert place and have pipe fabrication shop, steel fabrication yard, painting facility and other supporting buildings such as laboratories, canteen, pump house, substation etc.

Design Indian Standard Codes and OISD Codes:



Project: Central Logistics Center

- Location: Pune
 - Client: Volkswagen India Pvt. Ltd
- Scope of Planning, Complete Engineering Work: and As Built



- Project Brief: This is about 27,000 sqm Central Logistic Center facility comprising of Warehouse, Offices, Utilities, Security Building etc. There are 23 dock levelers in this facility for loading/unloading/ material handling. The main warehouse building is PEB structure. The Fire fighting system is designed using NFPA and NBC F
 - Design Indian Standard Codes: Codes, NFPA etc.



Project: Polymer Storage Yard at Barmer

- Location: Barmer, India
 - Client: Cairn India Ltd.
- Scope of Planning, Engineering of all disciplines, Tender preparation, Work: vendor/contractor evaluation, coordination during construction.
- Project Brief: This site is in desert place and includes development of loading/ unloading area, buildings such as Admin Building, drivers rest room, electrical substation, etc. This is @ 80000 sqm facility developed by Cairn for intermediate storage of polymer for use in Mangala Process Terminal and other EOR projects.

Design Indian Standard Codes and OISD Codes:



- **Project: Hyosung SPANDEX**
- Location: Aurangabad
 - Client: Hyosung/HTI
- Scope of Government Approvals, Civil/structural Engineering and Work: Stability Certification
 - Project This is SPANDEX fiber manufacturing facility at Shendra,
 Brief: Aurangabad. It consist of main plant building, utilities,
 substation, tank farms, pipe racks etc. Total Construction area
 @ 40,000sqm on plot of 23Acres as a phase -1.



PPS

- **Project: AutoGen Pune Plant**
- Location: Pune, India
 - Client: AutoGen India /HTI
- Scope of Statutory approvals, Detail Engineering Work: and stability Certification



Project This is about 10000 sqm facility developed on 17000 sqm plot for Brief: manufacturing of automobile parts. This comprises of main production hall, three storied office and utilities etc.





Representative Projects - Special

- **Project: 3.6M Optical Telescope Facility**
- Location: Devathal, Nainital
 - Client: ARIES
- Scope of Conceptualization, Planning, Engineering, Procurement Work: Assistance, Inspection, Preparation of tender specifications, Technical scrutiny of tenders, Vendor selection, Technical/ Quality Supervision, Testing and Commissioning
- Facilities: Telescope Enclosure Building, Extension Building, Roads, site development
 - Design Indian Standard Codes:



PPS

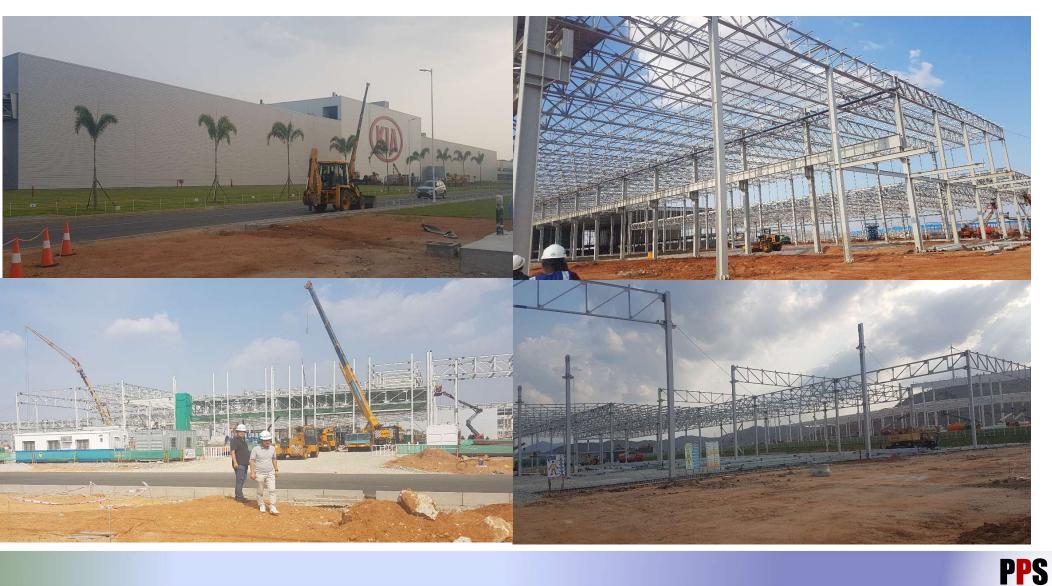
3.6M Telescope Facility, Nainital

- **Project: KIA Motors Plant and KIA Affiliates**
- Location: Penukonda, Anantpur District Andhra Pradesh
 - Client: HEC/ HTI Engineering
- Scope of Civil and Structural Design, Stability Certification Work:
 - Project This is a new car manufacturing facility by KIA Motors. It Brief: consist of KIA main production unit and affiliate/vendor companies. PPS scope of work is design review of facility done by other company. Affiliate units design has been done by PPS. The overall stability certification is in the scope of



PPS

KIA Motors Plant and KIA Affiliates



- **Project: Turbine Manufacturing Facility**
- Location: Mundra, Gujarat, India
 - Client: Tata Consulting Engineers/ ABFPL
- Scope of Conceptualization, review, checking of PEB vendor's STAAD Work: files for superstructure design, Foundation Design and Drawings, Checking of detailed drawings, Stability Certificate, got approval from IISc Bangalore
 - Project Steel Buildings JV-A and JV –B in total comprising @ 8.0Lac Brief: sq ft, housing overhead Gantry Cranes ranging from 5MT to 500MT. Maximum height of building 38m and span of 36m. The site is near sea coast and in high seismic zone.
 - Design Indian Standard Codes Codes:



PPS

Project: 1.0 MW Roof Top Solar Power Project

Location: Ranjangaon, near Pune, India

Client: Whirpool of India Ltd.

- Scope of Conceptualization, Design and Stability Certification Work:
 - Project This is existing facility in which client wanted to install 1MW Brief: capacity roof top solar unit. The initial feasibility study, design, stability certification has been done by PPS



- **Project: Multilevel Mechanized Car Park**
- Location: Gujarat, India
 - Client: Sopan O and M
- Scope of Conceptualization, Detail Engineering Work:
 - Project This is Ground +3 level parking structure for housing 34 cars.
 - Brief: The framework is using structural steel and on pile foundations. The car parking operations are automated.



Project: Mangala Terminal Facility

Location: Barmer, Rajasthan - India

Client: Cairn India Ltd.

- Scope of Conceptualization of modular pit, design, Work: design drawings, Erection and Fabrication drawings with BOQ.
- Description: For easing site construction, it is proposed to construct a modular framework which will be transported at site and only concreting will be done at site. The size of module is 15mx 4.0x 5.5m tall

10111X 4.0X 0.0111 la

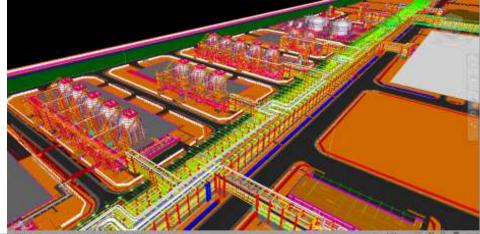
Design • Indian Standards Codes:





PPS

- **Project: Dahej Petrochemical Complex**
- Location: Dahej, Gujarat
 - Client: ONGC / SNC Lavalin India
- Scope of Planning, Engineering Work:
 - Project This is petrochemical complex comprises of process plant and non-Brief: plant buildings. The non-plant buildings include Central Warehouse, Central Workshop, Admin Building, Substation, Fire station, Drivers Rest building, Central Control Building, Utility Control Building, Training Center etc. The overall area of non plant buildings is approx. 43,000Sqm
 - Design Indian Standard Codes Codes:



Project: Substation Container

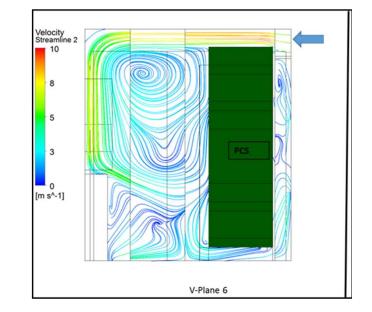
Location: Australia

Client: ABB Ltd, End Client-Alinta Energy

Scope of Structural Design and CFD analysis Work: Of 40' modified substation container

Project These are containers in which high Brief: sensitivity equipment's are placed. The structural analysis is done using ANSYS/STAAD software's. The CFD analysis is done using ANSYS Fluent and post-processing was carried out using ANSYS CFD Post to confirm suitability of proposed HVAC arrangement in the container.

Velocity Streamine 1 0 5 3 0 [m s^-1]



Design ISO Codes:



Project: MOBIS Warehouse

- Location: Chennai
 - Client: Mobis/HTI
- Scope of Civil/Structural Engineering and stability Certification Work:
 - Project This is about 45000 sqm facility. The overall size of the Brief: Warehouse is 281m long x 144m wide and 10.6m clear height at eaves. Large area for dock levelers without columns is provided. In addition to Warehouse, Utility Building, Office Building, Inbound/ outbound office, STP, etc. are part of the facility.

Design Indian Standard Codes Codes:



Representative Projects – Precast Concrete

LTU Research Park – Tenant Building

Name of Job:	LTU Research Park Tenant Building
Location:	Ruston, Louisiana, USA
Type of Job:	Steel Building with concrete deck floors
Area:	42,000 Sq. Ft. Approximately
Client:	Consultant in USA
Architect:	Michael Walpole Architect, L.L.C Ruston LA
Scope of PPS:	Design of Foundations, Structural Steel Members, Floors, Staircase, Block walls, Mechanical Room & Preparation of Structural drawings along with Design Report.
Project Brief:	This is three storied steel building with floors using slab on metal deck. The structural framework consist of bar joists as secondary members and rolled sections for main framework.
Design Codes:	American Steel and Concrete



Representative Projects – Indian Precast Hospitality

OMR Combo Hotels Chennai, India

Area:300,000 Sq. Ft.Client:Accor HotelsScope of PPS:Structural Design & DetailingStructuralPrecast Hollow Core Slabs with Precast Beams &System:Column Frame with Precast claddingEarthquake Zone: III



Representative Projects – Indian Precast Commercial

Client : Mercedes Benz India Ltd. \ Shapoorji Pallonji & Co Ltd.

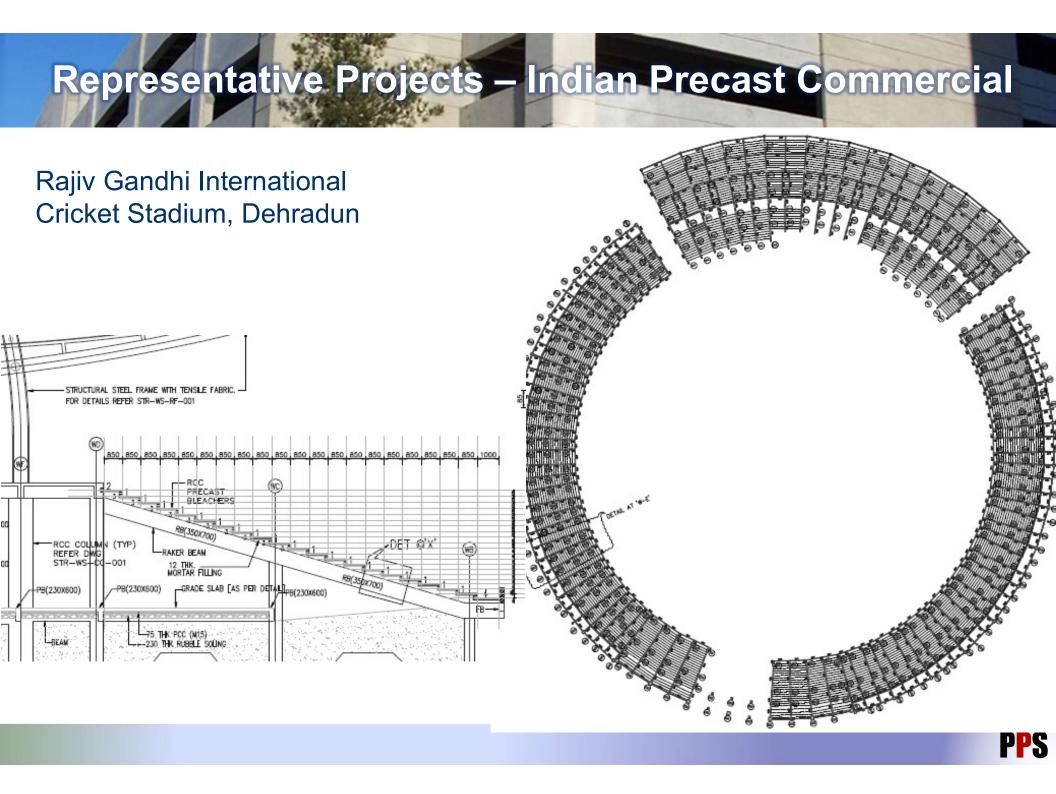
Project : Multilevel Precast Parking Garage at Chakan Plant, Pune

Area: 1.6 Million sq Ft.

Project Duration : 12 Months

PPS Scope : Plant Design, PMC and Detailed Engineering with preparation of Erection and shop drawings





Representative Projects – Commercial Project: The North Country Mall, Mohali

- ----



Representative Projects – Commercial

Project: North Country Mall, Mohali, Punjab

Client : Sun-Gumberg

- Scope : Principal structural consultant of the project
- Project cost : 500 Crore
- Mixed use development project having Basement Parking, Retail, Commercial, Food Court, Restaurant, Gaming zone, Multiplex, Energy Center spaces of around 17,00,000 sft area
- Type of structure : RC Shear walls with Beam column frames.



Other Clients

- Toyo Engineering
- ThyssenKrupp
- SNC Lavalin
- KBR
- Tecnimont Pvt. Ltd.
- Mahindra Automotive
- Fabcon Inc.
- Godrej Group
- Old Castle
- High Concrete
- Vedanta Group (Cairn India)
- ABB Ltd.
- Schneider Electric India
- Whirlpool of India Ltd
- Dow Agro sciences
- Demag Cranes and Components
- Hengtong
- CCTEB
- And many others....





- In business for more than 15 Years
- Work with domestic and international clients/ projects
- Industrial, Oil and Gas, Process, Infrastructure, Mixed use development, Institutional, special projects..
- Exposure to international codes and standards
- Client First Philosophy
- Turnkey Engineering Services under one roof
- Optimized solutions in timely manner
- Focus on innovative solutions
- Commitment towards the project
-



Communication

- FTP: <u>ftp.pprecast.com</u>
- Web : <u>www.ppspl.in</u>
- E mail : design@ppspl.in
- Tel: +91-20-2523 2858,
- Postal : First Floor, Service Building, BAIF Bhavan, Dr. Manibhai Desai Nagar, Warje, Pune – 411 058 (INDIA)



Put OUF team on your project & feel the difference!

Thank you!

