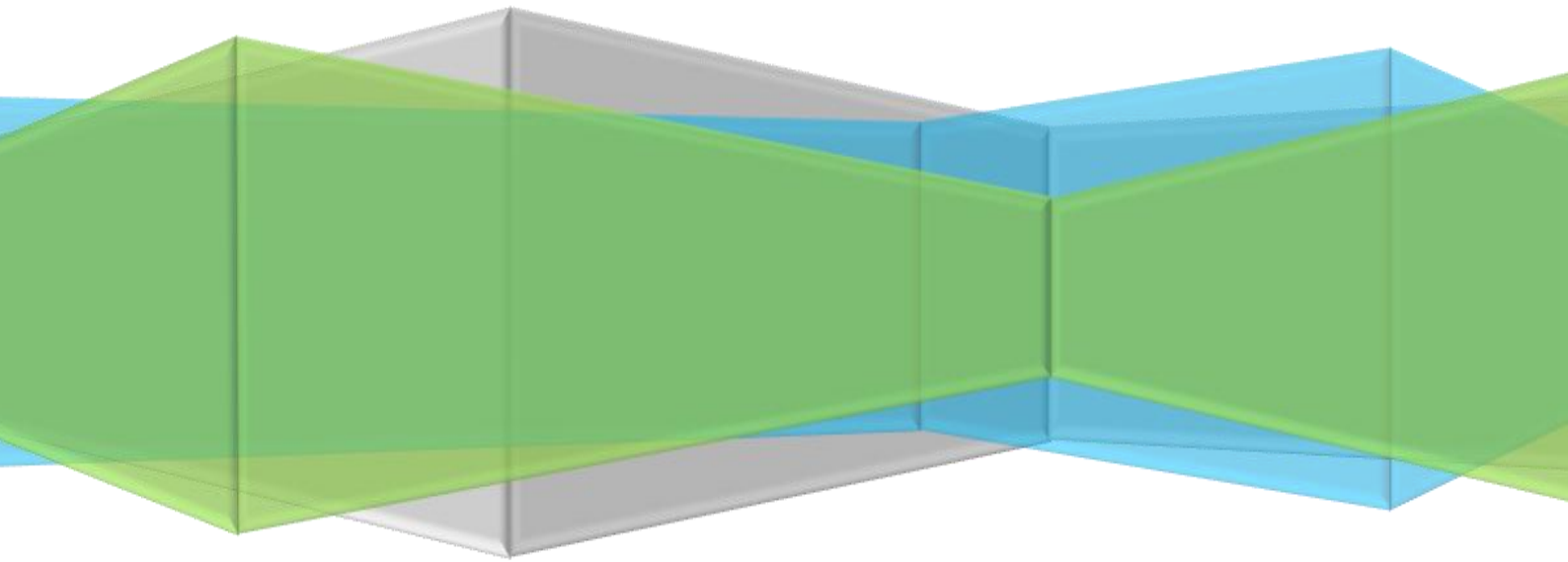
PRECA™
PRE-STRESSED CONCRETE SOLUTIONS
An ISO 9001:2008 COMPANY

TÜV SÜD ISO 9001
NABCB QM011

Preca Solutions India Private Limited

COMPANY PROFILE



PRECA INTRODUCTION

BUSINESS

PRECA is engaged in the business of designing, detailing, manufacturing supplying, and erection of Prestressed Precast Concrete building structures of all ranges. Preca provide turnkey solutions for executing various challenging structures using advanced and proven engineering technologies.

PRESTRESSED PRECAST CONSTRUCTION

The conventional construction involves mobilizing sand, cement, aggregates, bricks, steel, and other materials to the site, mixing of the concrete at site and pouring of concrete at site, usage of huge scaffolding materials at site, curing of construction at site for 30 days, usage of hundreds of skilled and unskilled manpower at site, huge labor camps, disturbance within and around the site in terms of dust, materials, activity, wastage etc., uncertain quality, lack of uniformity in composition / construction, long delays, and resultant cost overruns etc.

World-wide and in particular in developed and fast developing countries, Prestressed Precast Concrete Construction is widely in practice. Precast and Prestressed concrete technology involves the industrial process of casting structural and architectural concrete elements, effectively using pretensioned tendons in a stationary profile mold & long casting bed - under a controlled environment with strict quality standards, cured with steam or hot water, dispatched to the construction site and installed into place using carefully designed and structurally efficient connections.

Prestressed concrete is combining the versatility of concrete with high strength prestressing steel. Prestressed tendons are used to provide a clamping load which produces a compressive stress that offsets the tensile stress that the concrete compression member would otherwise experience due to a bending load. This method produces a good bond between the tendon and concrete, which both protects the tendon from corrosion and allows for direct transfer of tension. The cured concrete adheres and bonds to the bars and when the tension is released it is transferred to the concrete as compression by static friction.

This is a method for overcoming concrete’s natural weakness in tension. Prestressed concrete, due to the internal structural mechanics resulting from prestressing greatly enhances the structural resilience and load bearing capacity of precast elements. Prestressing also helps to reduce steel corrosion, increase durability, utilization of full section of concrete, produce lighter weight sections with higher stiffness, less deformation, increased shear capacity, crack control and overall improved performance under dynamic and fatigue loading which makes them highly suitable for any type of structures.

Precast Construction technology eliminates number of problems associated with conventional construction, including quality issues, uncertainties, lack of uniformities, time overruns, cost overruns, shortage of skilled manpower, unreliable construction methodology, etc. This technology enables building construction in less than 1/3rd of the usual construction time and increases the life of the buildings by 25% while also reducing the material wastage in construction very significantly. Further, Green category buildings and long floor spans required by global companies for designing suitable interiors and

workspaces can be provided effectively by Prestressed Precast Construction.

Prestressed Technology helps to produce beams, floor slabs like T-slabs, Hollow core slabs and Solid slabs with longer spans at the required depths than traditional reinforced concrete method. This technology is now considered a revolutionary method in construction.

This technology is widely applied in the construction of Buildings, Metro rail, Tunnels, Bridges/ Flyovers and Underpasses Projects. And not limited to these areas, it is getting introduced and gaining prominence in civil engineering projects across all the segments of construction viz., Commercial, Health, Industrial, Residential, Sports and Parking Infrastructure.

ADVANTAGES OF PRECAST PRESTRESSED TECHNOLOGY

High Quality & Durability - Precast technology, by virtue of the industrial process involvement of casting under controlled circumstances, adheres to the highest standards of quality control. Precast concrete reinforces the quality of construction. Use of higher grade concrete and steel increases the structural strength and extends life span of the structure.

Rapid Construction - Precast concrete construction does jobs sooner. Depending on size and site conditions, flooring for a number of units can be laid in a single day. Precast concrete products are arrive on -site ready to be installed and require minimum manpower to do so. Installation is quick and accurate, making the process more efficient and effective. The manufacturing of prestressed elements and site preparation can proceed simultaneously. Early occupancy provides benefits to the client along with saving in Interest costs.

Long life and Low maintenance - Research has proven that precast elements can ensure more than a 100 year life cycle which reduces the life cycle cost of projects. Precast technology assures uniform quality and eliminates leakage and cracks thereby reducing maintenance costs.

Cost-effective - The long spans, columns & beams, minimize costs. With hollow core prestressed elements, structure weight will be reduced and thereby reducing foundation requirement & costs.

Weather and Fire resistant- Precast concrete is an all-weather construction material - equally effective in regions with freezing or scorching temperatures. It is also non-combustible, does not melt, and therefore, does not require additional fire proofing applications. Also, the cement mortar used with non-shrink chemicals makes the precast structure water tight.

Energy efficient - Prestressed concrete components can improve the thermal storage potential of a building. It effectively conserves energy required for heating and cooling.

Long spans - Precast concrete allows designer to create longer spans using less material that is concrete and steel than conventional design. A typical 300 mm Hollow core Slab can cover a span of 16 m and T slabs up to 22m without intermediate columns and beams.

Versatility of Design - Precast provides a structural platform which will give the architects and structural engineers greater freedom in designing virtually any layout.

Acoustic Performance - High thermal mass of Precast combined with sound insulation reduces noise and provides an effective sound barrier between roads and urban noises

Green Technology - Precast technology is a proven environment friendly method of construction. A there is minimal to no application of manual labour, there is nominal wastage of materials as well as the resources involved. It is recognized and recommended by several international environmental agencies as well as the Ministry of Environment and Forestry, GoI which calls for compliance with ECBC which are readily provide by precast elements. Precast Structures gains 23 Potential points of Green Building LEED Certification under the categories of

- Innovation & Design
- Sustainable sites
- Material & Resources
- Indoor Environmental Quality &
- Energy & Atmosphere

which make it ideal choice for green buildings.

KEY AREAS OF USAGE OF PRECAST ELEMENTS

Urban Infrastructure incl. Real estate

Rapid urbanization needs quick creation of infrastructure. Precast with quality & time merits is ideal choice:

Residential

Commercial & Retail

Hospitality

Institutes & Hospitals

Metro Rail

Stadiums

Office Towers

Factories&Warehouse

Infrastructure

PRECAst proved to be effective solution in executing large scale projects. Some key sectors below:

Airports

Sea Ports

Bridges

Roads

PRECA, AN INTERNATIONAL JOINT VENTURE

PRECA Solutions India Private Ltd, Hyderabad, is one of the pioneers to introduce Precast Prestressed Concrete Construction technology to India. PRECA is an International Joint Venture between Indian, Israeli and African techno-commercial partners.

PRECA is engaged in the business of providing turnkey civil engineering solutions across all segments of construction including Residential, Commercial, Hospitals, Industrial, Institutional, Multiplex theatres, Multilevel Parking and Infrastructure.

PRECA has its State-of-the Art European technology equipped precast factories at Hyderabad and Bhubaneshwar and over last 3 years has successfully delivered 35 challenging projects serving reputed clients such as Infosys, NetApp, Cadbury India, IIT Hyderabad, GMR, Apollo, Emerson and many others. PRECA has the unique capabilities for civil engineering projects by offering Quality, Innovative & Economic solutions at faster timelines in comparison to traditional construction methods.

PRECAST TURNKEY SOLUTIONS FROM PRECA

The turnkey solution from PRECA includes assuming the responsibility of the entire Prestressed Precast concrete construction right from initial assessment, designing and drawings up to erection. The following are the major components of the turnkey solution:

- Designing to suit the specific functional requirement
- Standard design products and bespoke designs and products
- Integration of cast-in-situ designs with precast designs
- Assisting in design finalization
- Manufacturing elements to suit the architectural requirement
- Supplying elements as per the time requirements
- Coordination with the other agencies involved in the project
- Erecting as per the preparedness of other fronts
- Advice regarding post precast construction
- Coordinating, where required, for the matching and corresponding activities.

GENERAL CONTRACTING & CUSTOM BUILDING

In addition to our turnkey solutions, PRECA is also undertaking the general contracting projects. PRECA has successfully delivered a few projects as a general contractor. PRECA is well equipped to undertake any component of construction and integrate it with a conventional cast-in-situ structure, viz. Providing the design of foundations and construction of cast-in-situ works as a part of our turnkey solution as per the request of the clients, who have expressed their desire to have a single point of contact. This has proven very beneficial to the client as well as the entire construction process would be more efficient if the precaster is included right from the foundation stages to create cost efficient options.

As a custom building specialist, PRECA has also experience with hybrid construction projects in which successfully integrated precast concrete products with steel and PEB structures. This type of construction is often used in the building of structures using spans longer than those that can be achieved by

concrete elements such as industrial warehouses, high-rise buildings or to reduce the self-weight of the structure. Whatever the reason may be, precast can be combined with any other structural systems very flexibly.

PRECAST PLANT

PRECA has State of the Art Prestressed Precast factories at Hyderabad and Bhubaneshwar.

PRECA's facilities are run by the best-in-class technology from Europe. Our main technology partnership is with Prensoland (Spain), Bianchi (Italy) and Moldtech (Spain), which are internationally reputed manufactures of precast equipment and automated moulds.




Pilot Automated Precast Plant at Shankarpally, Hyderabad

PRECA's Hyderabad automated factory sprawls over 16 Acres of land and has 1,20,000 sq. ft. of built up area. It includes our in-house fabrication unit, mechanized bar bending system and stockyard with 100% power backup. The project specific production factory in Bhubaneshwar has helped us in expanding our reach and catering to a wider area. PRECA's cumulative building production capacity amounts to over 12,000 sq.ft. per day

PRECA's third upcoming facility in Vijayawada, near the new capital region of Andhra Pradesh will be automated and will further boost our capability and mark us as one of the leaders in our industry.

Pilot Automated Precast Plant near Infosys Campus, Bhubaneswar.

DEPARTMENTS OF FACTORY UNIT

The Factory unit has the following departments:

- Planning
- Fabrication
- Reinforcement
- Concrete Mixing
- Hollow Core Slab (HCS) production
- Prestressed precast production
- Quality Laboratory
- Stores
- Dispatch
- Maintenance

PLANT MACHINERY & EQUIPMENT

The plant machinery and equipment includes the following:

Hollow Core Slab Extruder Machine and HCS Finishing Moulds, Spain

Computerized automated Concrete Mixing Batching Plant, Germany

Tensyland Casting Machine, Spain

Automatic Cutting Saw Machine, Spain

45m long Self-reacting Beam Mould from Bianchi, Italy

67m long Self-supporting TT Mould from Moldtech, Spain

Cranes and Fork Lifts, USA

Hydraulic Jacks, Anchor Grips and Wedges, Italy

Wire Hauling (pulling) Machine, Spain

Hydraulic unit cap Press, Bed Equipment with hydraulic detensioning, Italy

The major plant / equipment / machinery have been of imported technology from Europe, USA, Italy, and Germany.

ISO 9001:2008

PRECA has established and is implementing Quality Management System (QMS) for Design, Manufacture and Supply of Precast & Prestressed Concrete Products of all ranges, and Turnkey execution, Project Contracting, and Construction of Various Structures. The QMS has been certified for ISO 9001:2008 by TUV SUD South Asia Private Limited (TUV SUD). The Certification is valid for three years i.e., up to September 2018.


CERTIFICATE

The Certification Body
of TÜV SÜD South Asia Private Limited
certifies that

PRECA

Preca Solutions India Private Limited
Plot No.6, D No.2-8/5/6, Venkat Sai Gatrway, Greenland Colony,
Gachibowli, Hyderabad – 500 032, INDIA

including the sites and scope of application see enclosure

has implemented a Quality Management System
in accordance with ISO 9001:2008
For Scope of

Central Functions for Management System along with Design of
Precast & Prestressed Concrete Products

The certificate is valid From 2015-09-15 until 2018-09-14
Subject to successful completion of follow up audit before 2018-08-25

Certificate Registration No. 99 100 13833
Date of initial certification : 2012-09-15

ZERTIFIKAT ◆ CERTIFICATE ◆ 認証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

LEADERSHIP

G.V.V. SATISH

Satish is a qualified Chartered Accountant and a qualified Cost Accountant. He has more than Fifteen years of business experience in the field of manufacturing, infrastructure, real estate and Investment sectors. He served many organizations, ranging from medium to large size listed companies and Indian outfits of foreign companies. He has been Board member of Israel & Indian JV involved in property development and has been Board member of financial advisory company to foreign investors. He travelled several countries and has personally observed the setting up, planning, production and delivery of various precast plants during his visits abroad. He is a regular invitee as a speaker in various fora on entrepreneurship, investment / financial management, SME sector and economic related topics.

Satish has been a member of many professional and industrial bodies. Currently, he is the Vice President, FISME-India, Central Council member and also Head of FISME – Andhra Pradesh.

DR. TUNJI OLOWOLAFE

Dr. Tunji is an MBBS Doctor by qualification. Tunji is the Chairman of GZ Industries Limited, Nigeria (GZI), one of the largest aluminum beverage cans manufacturers. He is also the promoter Managing Director of Duex Group of Companies, Nigeria. Duex is the Nigeria's premier and foremost EPC company with strong focus on social infrastructure with assets accommodating health, education, housing, civic & utilities, transport etc. Duex is a 20 years old Group and has been the leader in the infrastructure segments such as large-scale excavation, asphalt & concrete paving, piling operations and foundations, bridges & walls, underground & utilities construction, storm & concrete drainage structures.

Tunji is one of the leading and pioneering entrepreneurs in Nigeria to have executed huge projects across various sectors. He has been director for many organizations / groups including Deux, GZI, WPG., ELMAC, and PRECA.

URIEL KERTESZ

Uri is a Hungarian-Israeli, and is a Civil Engineer by qualification and profession. He has been an entrepreneur and an accomplished administrator of international repute. He has over 33 years of experience in managing, supervising and executing various building/civil engineering projects, ranging from residential to commercial and industrial buildings, roads and other infrastructure development projects in Israel, Hungary, Cameroon and Nigeria. He has been a Board / Committee member of infrastructure organizations and manufacturing organizations.

Uri has hands-on experience in executing huge infrastructure and construction works and has successfully delivered construction projects of various kinds and sizes.

TECHNICAL HEADS

Our technical heads are Foreign Returned Indians or Foreign Expats with considerable experience in the same work and on much bigger projects. Brief details of select technical heads are as follows:

NADAV SHACHAF

Nadav is from Israeli and a qualified engineer. An Ex-Army man, he is associated with prestressed concrete products manufacturing industry since 1976. He held several Board level and senior positions in leading prestressed concrete element manufacturing companies such as Spancrete Palmachim Limited, Spancrete Cellenbeton and Spancrete Limited, Israel. He was the Managing Director of Spancrete Cellenbeton during 2002 to 2003 and Managing Director of Spancrete Limited during 2004 to 2007.

Nadav advised, guided and assisted Shay Gil Project Building and Marketing Limited, a leading Israel company in setting up a new prestressed concrete elements manufacturing facility. He travelled various countries and has seen the evolution, development and stabilization of operations of precast construction. He has the World's best experience in manufacturing precast prestressed concrete elements and in managing precast industries.

SRIDHAR C N

Sridhar is a qualified civil engineer with Master's Degree in prestressed concrete structures. He has over 15 years of experience in designing and detailing of large scale project structures. He has substantial experience in designing various major projects in Dubai and Saudi Arabia. He served at several levels of design process in various large scale organizations in the Gulf Region. He has firm knowledge of various international design codes and applicable international and industry specific design, planning, and implementation standards.

Sridhar shouldered various responsibilities and has a proven track record in providing solutions to clients, consultants and municipal authorities in precast design benefits. He has good experience in the design aspects of setting up and expansions of precast factories and in implementing the production and operational plans for the plants. He is abreast of all the developments in precast technology and adopts and implements the same in practice.

OTHER TEAM MEMBERS

PRECA has qualified and experienced members in its Departments / Teams including foreign technicians, and foreign returned Indian experts who are able to deliver higher performance and consistent contribution to the organizational growth and development. The technical team members have long experience abroad in Gulf, Africa, Israel etc., precast engineering technology and construction.

Prestressed Precast Concrete Products from PRECA

HOLLOW CORE SLABS

Hollow Core Slabs (HCS) are prestressed (pre-tensioned) precast concrete slabs and are typically used in commercial, industrial, multi-story apartments, hospitals, hotels, hostels, parking complexes, office blocks, factories, townhouses, schools, shopping malls, culverts and reservoir roofs etc.

HCS has tubular voids extending the full length of the slab. HCS have smooth finished underside. The longitudinal joints will be caulked. Only a 40 mm leveling screed is required over the slab with a steel mesh. This makes the slab much lighter than the cast-in-situ / conventional concrete slab. The weight saving of up to one-third or more, use of high strength concrete, and pre-stressing (pre-tensioning) achieves longer spans. Further, like other Prestressed Precast Concrete Products, HCS are manufactured under closely controlled plant conditions.

HCS provide several advantages over cast-in-situ floor casting including speed of erection, lower building costs, and consistent quality levels. The provision of voids provides good thermal insulation properties. HCS are more suitable for any building which requires suspended floors or roofs with minimum columns.

PRECA has 10 HCS beds, each of 163 meters. HCS of spans up to 15 meters can be expediently supplied. However, subject to the transport possibility, any longer spans also can be supplied. HCS manufactured by **PRECA** are with international width standard of 1200 mm (1.2 meters), and in thicknesses of 150 mm, 200 mm, 250 mm, 300 mm etc. However, higher thickness hollow core slabs will also be undertaken by **PRECA** as per the specific requirements of the project if required.

HCS Beds

Strands fixed

Pre-stressing

HCS Cast

HCS being cut

Lifting of HCS

HCS Stacked

On to Truck

Erection

Erected HCS

PRECA has a dedicated and experienced in-house Erection Team for carrying out erection activity. The erection is done employing a mobile crane or a tower crane depending on the site conditions. The HCS panels will be lifted off the delivery trucks and placed onto their supports directly so that speedy construction is ensured.

However, PRECA is flexible to stack the HCS at the construction site and carry out the erection as per the special sequence, if any required for the specific project.

PRESTRESSED (PRE-TENSIONED) PRECAST DOUBLE TEE SLABS

Precast and prestressed Double Tee (TT) Slabs are manufactured using specially procured moulds to suit the length requirements of the project. Double Tee slabs are useful for structures requiring long and uninterrupted spans and heavy load carrying capabilities.

Double Tee Slabs provide better space planning, lower floor-floor height, good lighting and ventilation etc., which are not possible with any other solution.

Double Tee Slabs offer the most advanced solution for commercial complexes, parking garages, factories, industrial buildings, sewage plants, water treatment plants, gymnasiums and other heavy structures.

Single Tee Slab – Logistics

Single Tee Slab Under Erection

Single Tee Slab – Logistics

Single Tee Slab Under Erection

PRESTRESSED (PRE-TENSIONED) PRECAST BEAMS

Prestressed Precast Structural Beams are manufactured in PRECA as per the specifications for the building. These Beams are manufactured at Factory of PRECA using pre-tensioning technology and precast under closely controlled conditions within the plant.

Longer span beams require depth as well. Therefore, to keep the weight to the possible lower extent, the width of the web and flanges will be reduced. The beams possess maximum durability and greater structural strength.

High strength concrete is used apart from the steel reinforcement. For the prestressing (pre-tensioning), superior quality 7-ply strands are used. The strands with dia of 12.7 mm and 9.53 mm are widely used. But dia of the required strength will be used as per the specific requirement. The concrete of the beam will achieve 28-day cube strength depending on the specific requirement. M Beams, T Beams, U Beams, I Beams, Box Girder Beams, Inverted T Beams, and Double T Beams are manufactured ensuring improved material properties. Further, customized beam shapes will be manufactured as per the design, building and

Beam Casting

Beam Erection

Beam Connection

Erected Position

project requirement.

Various lengths of beams are manufactured depending upon the design and project requirement. However, the transport factor will influence the size and weight of the beams that are manufactured in Factory. These Prestressed Precast Concrete Structural Beams enable fast-track construction even during inclement weather. They provide superior loading and clear spans and finally reduce overall construction costs.

PRECAST COLUMNS

Precast Columns are manufactured by PRECA at its factory with own molds which ensure accuracy of dimensions, load levels and other specifications. Typically precast columns are cast as 2-storey or 3-storey in height providing base plate connections at every alternate floor and pin-ends are provided at the ultimate limit state. The base plate mechanism designed with appropriate capacity enable the column to serve as a 2-storey or 3-storey cantilever. This facilitates carrying out of floor installation works for 2-floors or 3-floors in advance. Each column will be manufactured with the required corbels and dowel bars for beams.

Precast columns make use of concrete and steel more efficiently and require a smaller amount of longitudinal reinforcement. Various shapes of precast columns are manufactured as per the specifications of the design and the project. Further, either solid or hollow columns are manufactured as per the design and load requirement.

PRECA’s Columns enables speedy construction and reduces the construction costs. These columns are useful as fully structural columns, permanent formwork or as self-supporting permanent formwork. These columns take heavy loads and provide solid and steady foundations to cast-in-situ or precast rib beams,

Columns Cast

Column connection

Erection

Erected Position

floorings and walls. These columns are easy to erect and reduces the requirement of plastering on the outer surface since the precast finish yields soffit on three sides.

PRECA columns are suitable for all applications including high-rise, commercial, industrial and residential constructions as have already proven by using in heavy built industrial structures.

Prestressed (pre-tensioned) / Precast stair cases are manufactured by PRECA as per the design load specifications of the client and the project. Precast stairs facilitate accuracy in the programming and delivery at the site which will enable speedy construction of further stories and increases site safety and efficiency.

PRESTRESSED (PRE-TENSIONED) / PRECAST STAIR FLIGHTS

Precast Stairs offer rigidity of construction and are free from movement thus eliminating the possibility of creeks. Precast stairs are also incombustible and have greater fire resistance and allows means of escape in the event of fire.

Precast stairs are suitable to the construction of high traffic stairwells such as commercial and industrial structures. The high quality finish gives a durable concrete staircase for long maintenance-free life. The dense precast concrete gives good acoustic properties reducing the transfer of sounds of movements over the stairs. The resistance levels of precast stairs are more in terms of fire resistance, maintenance-free, etc besides having strength to bear heavy loads.

Precast Staircase cast

Under Erection

After Erection

PRECA has expertise in designing, manufacturing and erecting precast concrete stairs in various configurations from exclusive stair flights to complete precast stair wells with landings.

PRESTRESSED (PRE-TENSIONED) PRECAST SOLID SLABS

PRECA has specially designed and formulated moulds to manufacture Prestressed (Pre-tensioned) Precast Solid Slabs.

Multi-storied buildings, commercial malls, industrial constructions, plant buildings, etc which need heavy load bearing ability and huge human traffic will find the precast solid slabs as an efficient option.

Prestressed Solid slabs are useful for composite flooring system consisting of solid prestressed concrete units with a structural concrete topping which is placed after the solid slabs are erected in position. The combination of prestressed precast concrete and reinforced structural topping gives both practical and design benefits as the requirement of shuttering is eliminated and reduction of time in construction. Further, the structural performance and load bearing ability, resistance, durability, etc are far greater for a

prestressed precast solid slab than for a similar depth reinforced concrete slab.

PRECA has high quality solid slab moulds and solid slab bed for manufacturing prestressed (pre-tensioned) precast concrete solid slabs as per the specific requirements of the design. These precast solid

Precast Solid Slab Casting

Erection

After Erection

slabs provide longer spans with reduced number of joints, reduced construction depth, structural efficiency and excellent fire resistance.

PRESTRESSED PRECAST WALL PANELS

PRECA has the experience, expertise and facility to design, manufacture, supply and erect wall panels of various sizes as per the specifications of the design and the project. The panels are usually designed and

Walls Panels under erection

Walls Panels after erection

Walls Panels under erection

Walls Panels after erection

manufactured to have tongue and groove fitting on the top and bottom edges to enable fast construction of multiple panels while ensuring strong and clean finish.

The panels are designed to suit the specific requirement such as for normal wall purposes, retaining walls etc and can be manufactured in various dimensions including height, width, length, etc.

PRESTRESSED PRECAST STADIUM SEATING

PRECA has the expertise and facility to design, manufacture, supply and erect stadium seating of various sizes as per the requirements of each of the stadia projects. Design and construction of any stadium need to ensure vibration control, durability and speedy construction. These requirements are best met by prestressed precast concrete stadium seating solutions. Pre-tensioning of seat riser sections provides a stiff and crack free member. Construction will be swifter since the elements are precast and mobilized to the site for erection.

Stadium Seating Sections Before Erection

Stadium Seating Sections After Erection

OTHER PRESTRESSED PRECAST MEMBERS

PRECA has expertise and facility to design, manufacture, supply and erect other Prestressed Precast Concrete members such as Fins, Purlins, Beam Girders, Structural Panels and other members as per the specifications of the client and project.

Precast Gate Frame

Precast Service Ducts & Elevation Profile

Precast Fins

Precast Boundary walls

Crematorium Fascia

Precast Ramps

PRECAST MARKET IN INDIA

MARKET SIZE AND OPPORTUNITIES FOR PRECAST IN INDIA

Indian construction industry, being second largest after agriculture, accounts for about 11% of India's GDP. Its present market size is estimated at Rs. 250,000 crores and is expected to continue to grow at 15%. As of now, India's precast concrete market size is estimated to be about Rs. 2,500 crores. On a very conservative estimate the precast market is expected to grow multifold in the next 5 years to reach a minimum of Rs. 50,000 crores.

The age-old conventional construction methodology is facing many shortcomings including time delays, shortage of skilled manpower, cost overruns, quality issues etc and since Precast construction avoids all these shortcomings, the shift towards precast is gradually increasing. In future, most of the constructions will be executed in precast methodology.

Considering the natural advantages of Precast and the long persisting shortcomings of cast-in-situ construction, major construction companies such as L&T, Supertech, Simplex, Marvel, Jindal, Shapoorji Pallonji, Survi, Brigade, Amrapali, etc have started to adopt precast construction for their projects.

As there are many natural entry barriers for establishing new precast prestressed concrete plant, the existing and experienced plants are much better placed to undertake more projects and of higher values. To cater to the increasing demand, existing precast plants need to enhance their operating capacity and add new product-lines.

PROJECTS COMPLETED:

S.No	Client	Project Description	Floors	Value Addition by PRECA	Rs.Lacs
1	Phoenix Infocity Pvt. Ltd	Design, Manufacture, Supply and Erection of Prestressed Pretensioned Solid Slabs, Beams, and Hollow Core Slabs for aVance SEZ, Hitec City, Hyd	11 levels	After 80% of time was spent on 50% work, with precast technology, PRECA completed balance 50% work in 20% time meeting highest quality standards.	663
2	K. Raheja Corporation	Design, Manufacture, Supply and Erection of Precast Stair Flights and Landing Slabs in Building No. 12B, Mindspace, Madhapur, Hyderabad	3 levels	After building completion, client required stairs which would have been difficult causing disturbance and delay. PRECA delivered the project within 7 days.	3
3	Phoenix Infrastructure	Precast Construction of Commercial Complex on turnkey basis in Jubilee Hills, Hyderabad	7 levels	Site located amidst high-rise rocks and on the main road. Project delivered within tight timelines and superior quality.	973
4	Ambitus World School	Construction of School Building involving Design, Manufacture, Transport and Erection of Precast Prestressed Hollow Core Slabs, Beams & Staircase at Bachupally, Hyderabad.	2 levels	Client required construction within 1 month for the international school by opening time. PRECA delivered the precast construction ahead of time and with superior quality.	48
5	VRK LG Showroom	Construction of Complex with Design, Supply, Manufacture, Transport and Erection of Precast elements opp Shilparamam, Hyd	6 levels	Site located on main road between 2 existing showrooms in Hitec City. Project delivered with superior quality, finishes and in time.	68
6	Delhi Public School	Construction of Delhi Public School Expansion with Design, Manufacture, Transport and Erection of Precast Prestressed Hollow Core Slabs, Beams and Staircase at Khajaguda, Hyderabad	2 levels	Client required expansion of the school building within 1 month without disturbing the functioning and office located in ground floor. PRECA delivered project with highest standards and in time.	60

7	M/s Venkatesh	Precast Construction of Commercial Complex on turnkey basis in Kavuri Hills, Hyderabad	6 levels	Long span Tee Slabs, shorter timelines, and robust strength to meet client's requirements	138
8	Ramky Group	Construction of Model Unit & Office with Design, Manufacture, Supply and Erection of precast elements at Nallagandla, Hyderabad	1 level	Client required the Model Unit cum Office to be ready with superior quality and within shorter timelines as per their bookings.	25
9	Larsen & Toubro (L&T) Limited	Design, Manufacture, Supply and Erection of Precast vertical fins for IIT Hyderabad Building in Kandi, Medak, Hyderabad	5 Levels (10 Buildings)	Client required aesthetic light and shadow facilitating precast fins which are practically impossible in cast-in-situ. PRECA work is as per timelines.	126
10	BSCPL Promoter	Precast Construction of Residential Villa on turnkey basis in Shamshabad, Hyderabad	3 levels	Precision and superior quality required within shortest timelines, which was duly delivered.	70
11	Phoenix Motors	Design, manufacture, supply and erection of prestressed solid slabs, retaining walls and retailing wall columns for Hero Honda show room, at Hitech City, Hyderabad.	2 levels		23
12	HEI, LV Prasad Eye Institute	Turnkey Full Precast Construction of Hospital Building in Banjara Hills, Hyderabad	5 Levels	Superior strength, zero onsite work and site amidst operating Hospitals	955
13	Kavuri Hills Developers P Ltd	Construction of commercial complex on turnkey precast basis at Madhapur, Hyderabad	7 levels	Long spans, shorter timelines, superior quality	441
14	Nizam Club – Car Parking & Banquet Hall	Construction of multilevel Car Parking Complex on turnkey precast basis opp. to Assembly, Hyderabad	5 Levels	Adjoining main road, shorter timelines, robust strength	680
15	Sagar Cements Limited	Construction of Wagon Shed on turnkey precast basis in Nalgonda, AP	2 Levels	Robust strength to meet the loading shed vibrations	453
16	Navira	Turnkey Full Precast construction of entrance pavilion and Villa	2 Levels		59

17	MW High Tech Projects P Ltd	Construction of Cadbury Chocolate Plant in Sri City, Tada, Chittoor	2 Levels	Food Regulations compliant and superior strength are critical	883
18	S.SURESH REDDY	Construction of Commercial Structure involving Design, Supply, Manufacture, Transport and Erection of Precast / Prestressed Concrete elements with G+4 floors at Mehboobnagar	5 Levels		106
19	L & W Constructio n Pvt Ltd	Turnkey Full Precast construction of Retaining Walls	-	Retaining walls were transported from Hyderabad to Bangalore for this endeavor	579
20	Infosys Ltd	External Civil works at Compound Wall , SEZ Campus	-		61
21	Apollo Hospitals Research & Foundation	Turnkey Full Precast Construction of Medical College G+2 at Apollo Knowledge City Chittoor	3 Levels		452
22	Turbo Aviation Group	Precast Construction of Office Building at Aero Space SEZ, Hyderabad International Airport, Shamshabad, Hyderabad	5 levels	Swift completion of laboratory Building in 20 days time	95
23	L & T Constructio n	Design, supply and erection of the Precast Roof slab works, with all necessary accessories as per Design drawings & specifications	-	Erection of roof slabs of a Multiplex theatre while integrating with cast-in-situ structure	65
24	Brahma Kumaris educational society	Construction of Inner Space Building at Bramha Kumaris Educational Society, Shanti Sarovar, Gachibowli includes Foundation, Design, Manufacture, transport and Erection of Precast Columns, Beams, slabs, wall panel, Screeding & terrace waterproofing	-	A unique architectural endeavor for a spiritual building with exposed concrete works	308
25	Vemula Ravi Kumar - Yes Mart	Commercial Complex - Gachibowli	5 Levels		301

26	Infosys Ltd	Turnkey Full Precast Construction of Multi Level Vehicle Parking Structures of Infosys Ltd, Gachibowli Campus, Hyderabad	5 Levels	A 1,50, 000 sq. ft. structure erected in 6 months time	1734
27	Nizam Club	Turnkey Full Precast Construction of Sports Complex at Nampally, Hyderabad	4 Levels	A uniquely constructed sports infrastructure with an indoor court	443
28	SS Green Project	Turnkey Full Precast Construction of Club House Building, Khajaguda, Hyderbad	3 Levels	A pioneering venture with a precast swimming pool	142
29	KMV Projects	Turnkey Full Precast Construction of Water Tank for GMR, RGAI, Shamshabad	-		133
30	Sri Krishna Pharmaceuticals	Design, supply and erection of the Precast frame works	2 levels	Swift completion of laboratory Building in 20 days time	58
31	Hari Priya Convention Centre Pvt Ltd	Turnkey Full Precast Construction of Convention Centre, Gachibowli	-	-	60
32	RV Consulting Services Pvt Ltd	Turnkey Full Precast construction with Beams & T-Slabs for TG Building	-	-	41
33	Mr.Syed Bashrath Ali	Turnkey Full Precast Construction of Commercial Complex, Banjara Hills, Hyderabad	3 Levels	-	225
34	Emerson Power Networks	Turnkey Full Precast Construction of Data Centre for ICICI Hyderabad	3 Levels	World's first precast Data Centre	463
35	Balajee Arun Educational Society	Turnkey Full Precast Construction of Ramp near Main Building, DPS, Nacharam	-	-	75
36	KMV Projects	Turnkey Full Precast Construction of R&B Office Building, Vijayawada	7 Levels	-	2200
Total in Rs. lakhs					**12549**

PROJECTS UNDER EXECUTION:

Sl.No.	Client	Project Description	Floors
1	NATCO Pharma	Turnkey Full Precast Construction of Proposed Township, Warehouses & Production Blocks, Kollur	-
2	Infosys Limited	Turnkey Full Precast Construction of Multi Level Vehicle Parking Structures in Bhubaneswar, Odisha	7 Levels
3	APCRDA, Vijayawada	Turnkey Full Precast Construction of Office Building , Guntur	-
4	Infosys Limited	Turnkey Full Precast Installation of Service Trenches	-
5	Mr.Agarwal & Mr.Nagori	Turnkey Full Precast Construction of Convention Centre, Narsingi	-
6	ECIL Hyderabad	Turnkey Precast Construction of RCC building including electrical works, provision of AC works for RPD	-
7	CPWD	Turnkey Precast Construction of Multi Level Car Parking including water supply, sanitary installation, drainage, internal electrical installation and fans, telephone conduits , Automatic fire alarm system, fire fighting with wet riser sand sprinkler system, passenger lifts and car lifts for SBI Data Center at Gachibowli, Hyderabad	-

* Information supplied is for reference only. Subject to change.

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BIANCHI
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Equipment for precast concrete elements

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