



# SCON INFRA PRESTRESS LLP



## EXPERTISE IN

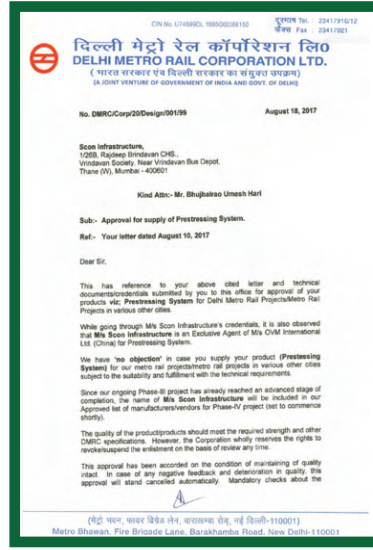
- ▶ POST TENSIONING
- ▶ ROCK ANCHORING
- ▶ ARCHITECTURAL EXPANSION JOINT
- ▶ REPAIR & REHABILITATION
- ▶ CABLE STAY
- ▶ BRIDGE BEARINGS
- ▶ PRESTRESSING ACHORAGE SYSTEM
- ▶ BRIDGES EXPANSION JOINT



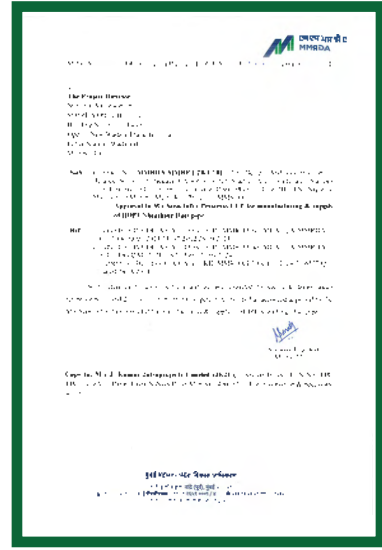
# OUR CERTIFICATES & APPROVALS



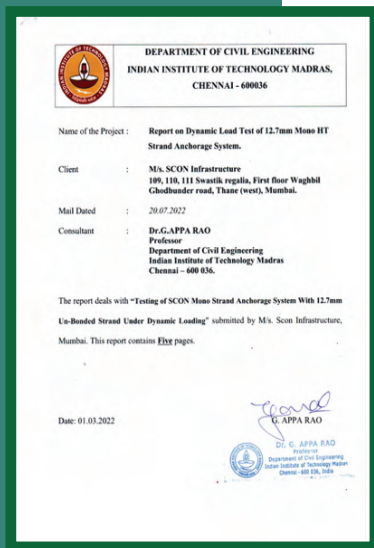
## ISO CERTIFICATE



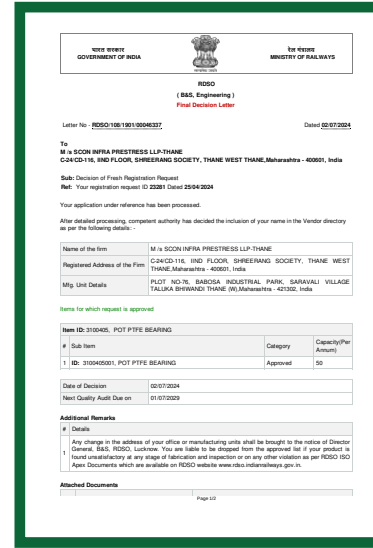
## DMRC APPROVAL CERTIFICATE



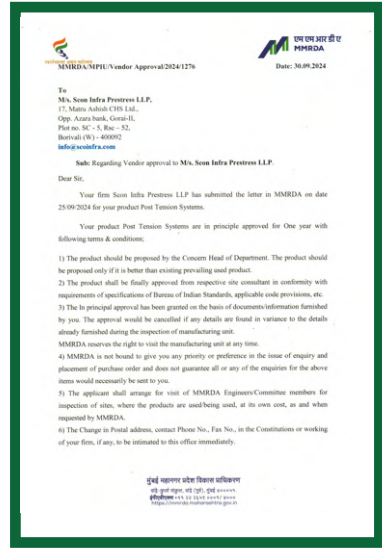
## MMRDA PPROVAL



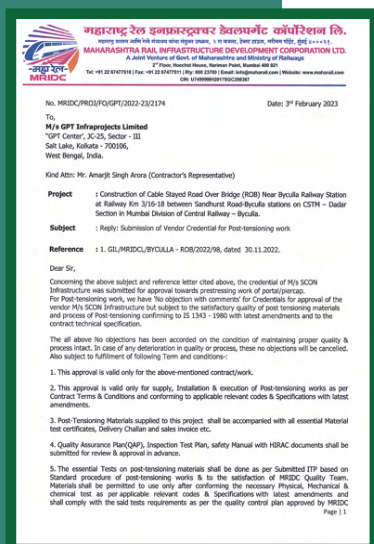
## IIT MADRAS CERTIFICATION FOR ANCHORAGE SYSTEM APPROVAL



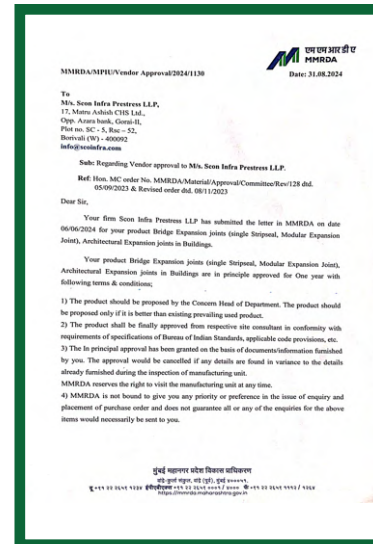
## RDSO CERTIFICATION



## MMRDA APPROVAL FOR POST TENSIONING SYSTEM



## MRIDC 2174 - VENDOR CREDENTIAL APPROVAL OF SCON INFRASTRUCTURE



## MMRDA APPROVAL FOR EXPANSION JOINTS



## FATIGUE TEST CERTIFICATE FOR CABLE STAY ANCHORAGE CHICAGO, USA



## OUR COMPANY PROFILE



Scon Infra Prestress LLP, formerly known as Scon Infrastructure, began its operations in 2009, with its dedication to provide top-notch services and contribute its expertise in India's Infrastructure Sector for future development. Our team of highly qualified engineers holds their specialization in multi-disciplinary engineering, bringing a combination of extensive knowledge and experience right on your field.

With a strong focus on design and construction technologies, we have successfully completed a variety of projects, showcasing innovative skills and techniques in Civil Engineering and Building industries. Our executive team boasts over 50 years of combined experience, leading the way in Prestressing within the Indian construction industry, supported by certifications from renowned institutions like IIT Bombay, IIT Chennai, CIL USA, and EMPA Switzerland.

Specializing in all aspects of Post Tensioning design and execution, Scon has an impressive portfolio; which includes commercial and residential buildings, bungalows, retail centers, malls, hospitals, schools, institutional buildings, water tanks, parking structures, and more. Our equal dedication towards managing projects of any and every size, speaks volumes about the values of our brand.

Today, Scon Infra Prestress LLP sets a benchmark in the industry with its high quality products and reliable services with an exceptional safety record. Our professional and experienced staff is fully committed to meet and exceed every expectation.

# SCON ORGANISATION STRUCTURE

## BUILDINGS

- Post Tensioning using
  - ▶ BONDED SYSTEM and UNBONDED SYSTEM
  - Rock Anchoring
  - ▶ External Prestressing
  - ▶ Repair and Rehabilitation
  - ▶ Supply and Installation of Architectural
  - ▶ Expansion Joints



## Manufacturing, Supply & Installation with state of the Art Factory

- Prestressing System [HDPE Corrugated
  - ▶ Sheathing, Anchorage Cone, Anchorage Heads, Wedges]
  - Bridge Bearings (POT - PTFE Bearing, Elastomeric Bearing, PIN metal Bearing, Spherical Bearing)
  - Structural Expansion Joints
    - ▶ (Stripseal, Seal, Modular)
  - Prestressing Equipment
    - ▶ [Hydraulic Jacks (2 TON to 1000 TON capacity), Hydraulic Pump, Grouting Pump, etc.]
    - ▶ Rehabilitation & lifting of Heavy spans



## BRIDGES

## Supply & Installation of Prestressing System

- Cable Stay Bridges
  - ▶ Extradosed Bridges
  - ▶ Sky Walks
  - ▶ Suspension Bridges
  - ▶ Arch Bridges
  - ▶ Cable Health Monitoring System



## CABLE STAY



# STRENGTH OF SCON

Our dedicated design team of more than 30 experts, having over a decade of experience have designed and delivered countless small to large scale projects all over India and in gulf countries. SCON design Team believes in designing structures from the conceptual journey of the projects so as to provide optimized structural solutions.

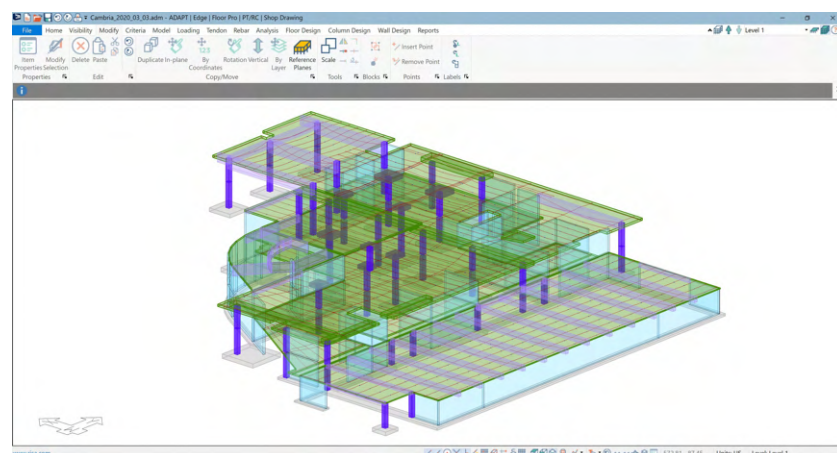
SCON's strength is derived from both its robust fixed and dynamic growing assets. Our fixed assets include a state-of-the-art manufacturing facility, strategic location, extensive industry experience, and established relationships with key government bodies such as NHAI, MORTH, NPCIL, BHEL, and other regulatory and infrastructure agencies. On the growing assets front, our highly skilled team of designers, project managers, and production specialists, under the visionary leadership of our management, forms the cornerstone of our continued innovation and success.



**FACTORY**  
(MANUFACTURING UNIT)



**INSTALLATION TEAM**



**DEDICATED DESIGN TEAM**

## OUR DESIGN TEAM

Our dedicated design team of more than 30 experts, having over a decade of experience have designed and delivered countless small to large scale projects all over India and in gulf countries. SCON design Team believes in designing structures from the conceptual journey of the projects so as to provide optimized structural solutions. While endeavoring to maintain Indian as well as International standards in quality, we strive to reduce product design cycle time as well as ensure cost effectiveness. Working with SCON proves to be a value addition for our customers. Highly qualified design engineers with vast and rich experience with hands on latest software, having to their credit design of some really complex and award-winning structures forms an indispensable part of SCON.





## OUR DESIGN TOOL

DESIGN TOOL Team SCON is passionate to adopt Progressive and Advanced Technologies that results in delivering a Precise Design which helps it to remain highlighted in the group of competitors.

Manpower backed with state-of-the-art operating machines and latest cutting- edge software keeps SCON always ahead of time in providing optimized and best tailor-made solutions for each project.



**SIMULIA**  
**ABAQUS**



## SCON MANUFACTURING UNIT

SCON's advanced manufacturing facility is strategically located for enhanced transportation accessibility across different regions of the state, facilitating timely material delivery.

Our in-house production capabilities not only guarantee the superior quality of materials but also ensure punctual production and delivery, eliminating dependence on third-party vendors.

The entire production process, from raw material procurement to dimension control, is meticulously managed in-house, mitigating the risks associated with inferior quality materials and delayed deliveries.

### SCON INFRA PRESTRESS LLP manufactures:

- HDPE PIPES
- ANCHOR CONE
- ANCHOR HEAD
- WEDGES
- PRESTRESSING EQUIPMENTS AND JACKS
- BRIDGE BEARINGS
- BRIDGE EXPANSION JOINTS

**HDPE PIPES**



**ANCHOR CONE**

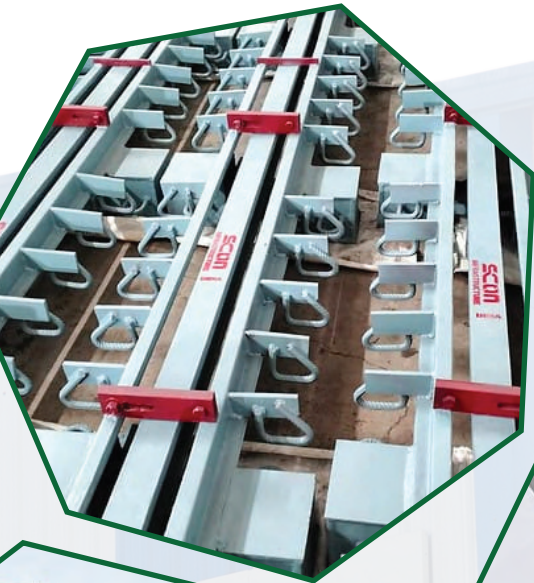


**ANCHOR HEAD**

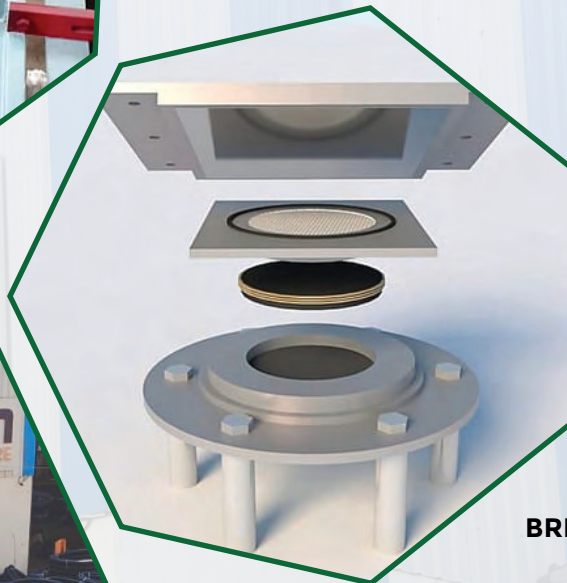
**UNBONDED ANCHORAGES SYSTEM**







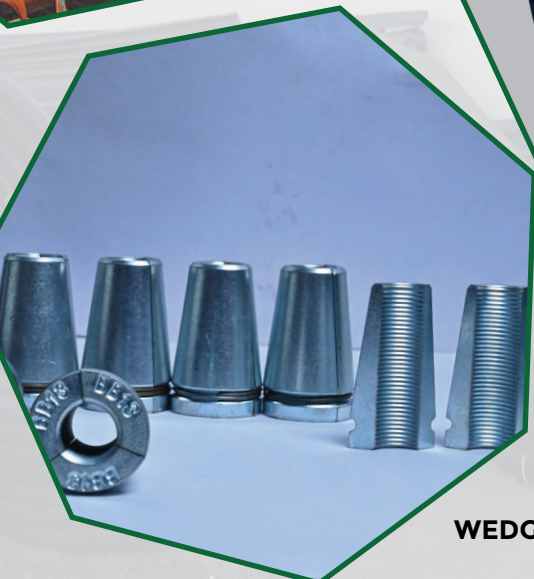
**BRIDGE EXPANSION JOINTS**



**BRIDGE BEARINGS**



**PRESTRESSING EQUIPMENTS  
AND JACKS**



**WEDGES**

SCON Unbonded PT System consists of High Tensile Strand, 12.9 mm/15.2 mm diameter, grease filled, with PE coating, manufactured in-house, as per ACI 423.7-14

IIT CHENNAI CERTIFICATION FOR :  
FATIGUE TEST ANCHORAGE EFFICIENCY TEST LOAD  
TRANSFER TEST



WE SOURCE BASIC STRAND FROM  
OUR RENOWNED SUPPLIERS



CARRIED OUT AS PER PTI :  
ACCEPTANCE STANDARDS FOR POST TENSIONING  
SYSTEM



American Concrete Institute  
Always advancing

ACI 423.7-14

ASTM A 416



SCON is the first company in India which manufactures wedges with cold forging method. Raw Material used 20 MnCr5

## KEY BENEFITS OF UNBONDED SYSTEMS

- ▶ **COST REDUCTION**
- ▶ **REDUCTION IN THICKNESS OF PT SLABS**
- ▶ **UNIFORM LOAD DISTRIBUTION**
- ▶ **ELIMINATION OF GROUTING ACTIVITY WHICH SAVES TIME AND REDUCES COST**
- ▶ **RESTRESSING IS POSSIBLE FOR UNBONDED STRANDS ANY TIME DURING THE LIFE SPAN OF THE STRUCTURE**



## WE ARE SPECIALIZED IN DESIGNING, MANUFACTURING AND INSTALLATION OF BONDED AND UNBONDED PT SLAB SYSTEM

### H.T. STRAND

LOW RELAXATION 7 WIRED STRAND FOR PRESTRESSED CONCRETE, WHICH SATISFY REQUIREMENTS OF IS: 14268:2022

### GREASE

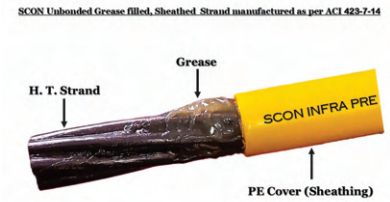
2 NLGI CLASSIFICATION GREASE. IT ACTS AS A LUBRICANT AND MOISTURE BARRIER AND IS AUTOMATICALLY APPLIED IN PRECISE QUANTITIES ON STRAND SURFACE TO ENSURE OPTIMAL PERFORMANCE

### PE SHEATH

POLYETHYLENE COATED SHEATHING IS APPLIED ON STRAND BY CONTINUOUS EXTRUSION PROCESS. SPECIFIC THICKNESS PROTECTIVE LAYER COVERS STRAND UNIFORMLY TO ENHANCE THE DURABILITY AND PROVIDED RESISTANCE TO CORROSION

**ENCAPSULATED MONO BOND ANCHOR WITH COVER CAP,** AS PER ACI 318 OR ACI 350, WHICH PROTECT THE ANCHORAGE, WEDGES AND PRESTRESSING STEEL, AGAINST CORROSION

**TWO PIECE WEDGE** GIVING STRONG AND SECURED GRIP, IS PROVIDED WITH GALVANIZED COATING FOR DURABILITY



UNBONDED STRANDS PROVIDES EXCELLENT PROTECTION AGAINST HEAT AND MOISTURE

IT MINIMISES THE RISK OF CORROSION, ENSURING LONG TERM INTEGRITY AND DURABILITY

### THESE STRANDS ARE PREFERRED IN:

- ▶ PT SLABS - RESIDENTIAL AND COMMERCIAL BUILDINGS
- ▶ METRO RAILWAY STATION BUILDINGS
- ▶ EXTERNAL PRESTRESSING
- ▶ ROCK ANCHORING
- ▶ RADIAL GATES, ATOMIC REACTORS, WIND MILLS



## HDPE SHEATING PIPE

HDPE sheathing pipes are employed for the purpose of creating a void within concrete structures to facilitate the installation of strands, allowing them to remain free for stress application.

Our state-of-the-art production facility, equipped with three advanced HDPE pipe production machines, consistently produces high-quality pipes in various sizes as per specific requirements.



### Advantages

- Corrosion Resistance
- Reduced Friction
- Flexibility
- Lightweight
- Cost-Effective
- Easy Installation
- Abrasion Resistance
- Environmentally Friendly

### Applications

- Bridge Construction
- Highways/Tunnels
- Railway Tracks
- Nuclear Plants
- Silos
- Building Structures
- Underground Utilities

### Technical Specification

Wobble Coefficient : 0.0020  
 Friction Coefficient : 0.17  
 Material Density : 0.94 - 0.96 gm/cm<sup>2</sup> at 23oC  
 Grade of Material : P5200 Grade  
 Standard Code : IRC 112: 2020  
 Factory Output : < 1,50,000 rmt. per month

## ANCHOR CONE



Prestressing anchor cones are vital components in prestressed concrete systems, serving to anchor tendons or strands and transfer applied forces to the concrete. Proper installation and quality control are paramount to ensure the optimal performance and durability of prestressed concrete structures

- Grade of Material : FG 260  
SG 500/7
- HARDNESS : 190-230 BHN
- Standard Code : IS 1343: 2012

### TYPES

FOR 12.7/12.9 mm STRANDS	FOR 15.2/15.7 MM STRANDS	TYPE
2S13	2S15	FLAT
3S13	3S15	FLAT
4S13	4S15	FLAT
5S13	5S15	FLAT
7S13	7S15	ROUND
12S13	12S15	ROUND
19S13	19S15	ROUND
22S13	22S15	ROUND
27S13	27S15	ROUND



## ANCHOR HEAD



### MULTI STRANDS ANCHORS:

The specially forged bearing plates anchors the cable and transfers the prestressing force to the Anchor Cone.

Required no. of holes are accurately drilled the plate for anchoring individual strands

Anchor Heads are accurately drilled on VMC machines to achieve high accuracy and high quality.

- Grade of Material : EN 8  
EN 24
- Standard Code : IS 1343: 2012
- Factory Output : Approx. 2000 nos. per month

FOR 12.7/12.9 mm STRANDS	FOR 15.2/15.7 MM STRANDS	TYPE
2S13	2S15	SQUARE
3S13	3S15	SQUARE
4S13	4S15	SQUARE
5S13	5S15	SQUARE
7S13	7S15	ROUND
12S13	12S15	ROUND
19S13	19S15	ROUND
22S13	22S15	ROUND
27S13	27S15	ROUND

## WEDGES

Individual strands are anchored by means of three segment conical grips.

These grips are made of case hardened and tempered carbon steel to ensure superior gripping.

Advanced CNC Machines are used for precise production of 2 Piece and 3 Piece wedges.

SCON INFRA PRESTRESS LLP is unique in utilizing raw materials produced through cold forging, preserving their original physical properties. This distinctive approach provides a significant advantage, enabling the reuse of materials multiple times, contributing to sustainability and cost-effectiveness.

Grade of Material : 20MnCr5

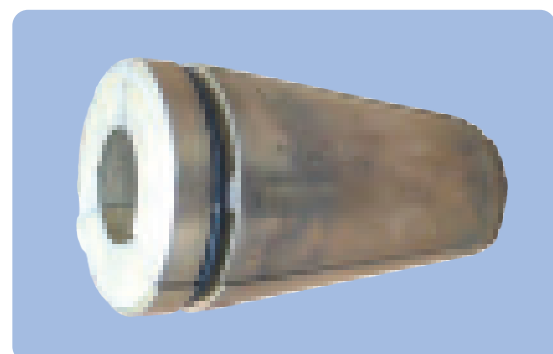
EN 343

Standard Code : IS 1343: 2012

Factory Output : Approx. 80,000 wedges per month



LIVE WEDGES



MASTER WEDGE

## ENCAPSULATED MONO STRAND ANCHOR



Mono anchor plates are integral to Unbonded Post Tensioning in flat slabs, facilitating the direct placement of polyethylene-coated Unbonded HT Strand cables without HDPE sheathing ducts. Following strand stressing, the mono strand anchor is employed for precise locking and fixation of the unbonded strand in the designated position within the slab.



### Technical Specifications:

Material Grade : SG 500/7 Grade 1865

ASTM A 536 Grade 85-55-06

Hardness : 170-230 BHN

## POST TENSIONING STEEL

Low - Relaxation 7 wire Strand of class II ( Grade 270 ) with 12.9 / 15.2 mm nominal diameter used in bonded post tensioning shall confirm to the requirements of IS 14268 - 1995 (Reafgirmed 2013)



Nominal Diameter	12.9mm	15.2mm
Nominal Area	98.7mm <sup>2</sup>	140 mm <sup>2</sup>
Nominal Weight	0.778 kg/m	1.102 kg/m
Tensile Strength	1860N/mm <sup>2</sup>	1860N/mm <sup>2</sup>
Modulus of Elasticity	196.5 KN/ mm <sup>2</sup>	196.5 KN/ mm <sup>2</sup>
Min breaking load of strand	183.7 KN	260.7 KN





## POST TENSIONING EQUIPMENTS

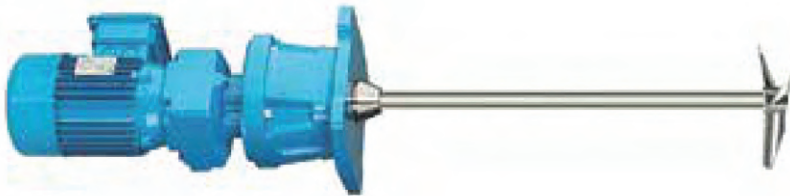


Stressing Pump



Stressing Jack

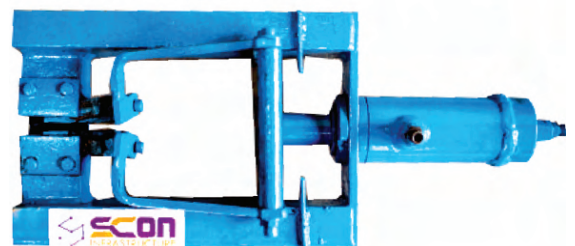
## ELECTRICALLY OPERATED HIGH PRESSURE GROUTING PUMP WITH AGITATOR



## POST TENSIONING EQUIPMENT



Locking Jack



Balooning Jack

# WORKING SEQUENCE



1 Decoiling of Cable



2 Material Fabrication & Dispatch



3 Shuttering and Reinforcement



4 PT Cable Laying



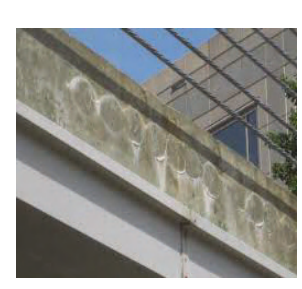
5 Top Reinforcement



6 Concreting



7 Stressing



8 Cutting of Excess Cable & Pocket Filing



9 Grouting ( In Case of Bonded System )

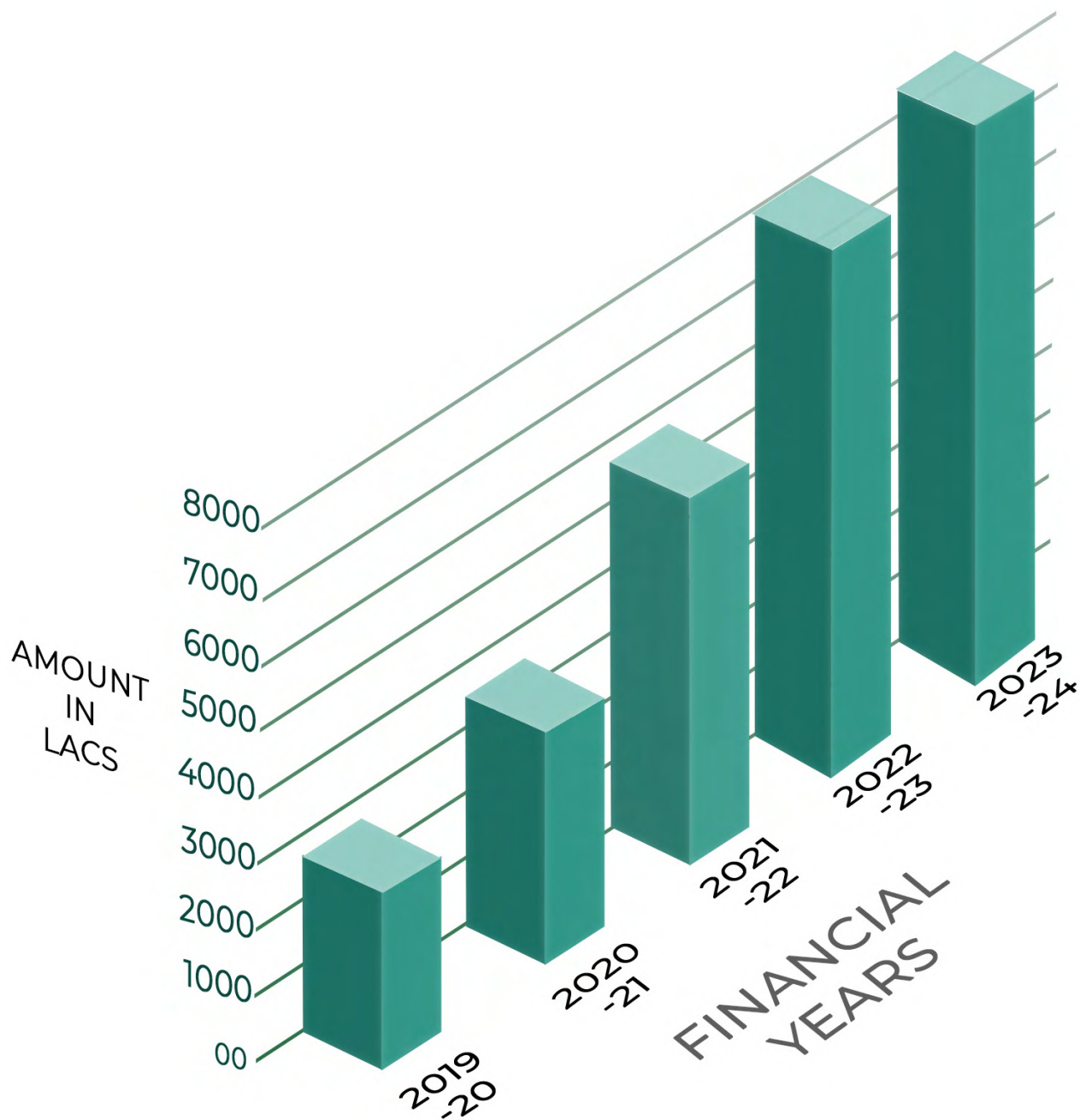


10 Painting ( In Case of Bonded System )





## GROWTH CHART



## TRANSPORT



To provide fast and intime reliable services we have our own fleet of transport system. This gives us an upper hand in delivering materials round the clock hence eliminating the risk of running late or even indefinite delays in case of COVID wave thus keeping SCON as always the fastest service provider.

## TEAM OF TECHNICIANS

Having more than 50 plus experienced qualified and senior technicians on field prove an important and great asset for SCON to overcome critical and practical problems on site with great ease. It is these ground level technicians who actually mater-ialize the whole task done in designing the structure by executing the work exactly and precisely as per provided drawings.





## TEAM OF LABOUR

Outsourcing the ground force has never been an ideology of SCON. We have our own Out-sourcing the ground force has never trained and dedicated task force of more than 300 plus laborers who form an important factor to deliver our projects in time to clients.

We keep them motivated by providing different training sessions along with all statutory compliance like PF, ESIC, Workman's compensation policy, travelling allowances, fooding allowances and most importantly hygienic and safe accommodation arrangements in permanent structures only.



## OFFICE ADMINISTRATION

Finally for managing and running such a huge growing organization you require an efficient administrative staff so as to keep all the things from material procurement till final submission of documents after completion of project is done non erroneously an efficiently nabling to fall all things in the right place at the right time. With our Head Office centrally located in Thane our dexterous office staff of more than 30 plus administrative team ensures to keep the organization on track.

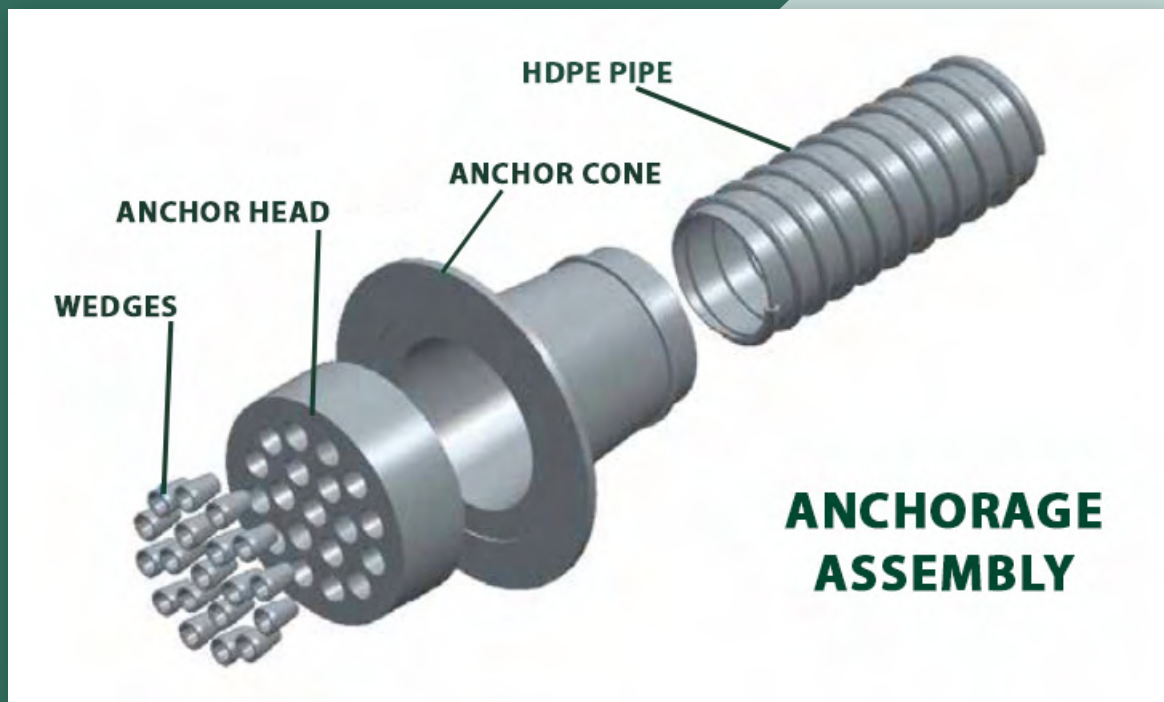


## TEAM OF ENGINEERS

To monitor such an exponentially growing organization we have experienced and dynamic engineers with minimum educational qualification of graduation in civil engineering. It is their vigilance and dedication that helps us achieve best quality work along with problem solving and immediate on-site solutions to practical problems by coordinating with our design team experts.



# POST TENSIONING SYSTEM





## POST TENSIONING SYSTEM

The post-tensioning system commonly used in building and Bridge Construction are grouped in to two principal categories. These are the namely bonded and the unbonded system.

### BONDED POST TENSIONING SYSTEM

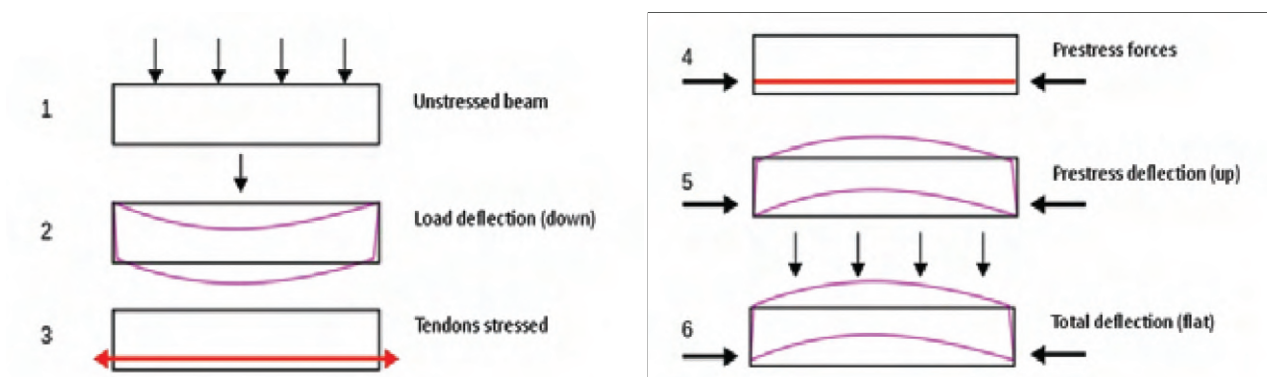
The characteristic feature of a bonded tendon is that, by design, the tendon forms a continuous bond along its length with the concrete surrounding to it. The bond is achieved through a cementitious matrix which surrounds the strands, commonly referred to as grout. It acts with the duct which is encased in the concrete member to complete the bond path between the prestressing strands and the concrete member. After stressing of a tendon, the grout is injected into the void of the tendon duct which houses the prestressing strands. When the grout hardens, through its bond to the strand, it locks the movement of the strand within the duct to that of the concrete surrounding it. Hence, the force in a bonded strand becomes a function of the deformation of the concrete surrounding it. Shows two examples from the many variations of bonded tendons. The flat duct tendon shown is for use in thin members, such as slabs. It houses up to either 2,3,4 or 5 strands placed side by side. The strands generally Share a common anchor piece each end, but are stressed and locked off individually. For sheathing Corrugated HDPE plastic ducts are strictly used by SCON as GI metal ducts are more prone to corrosion and grouting creates grouting problem because of thin wall and large no of joint. The larger round ducts are for application in beams and deep members. the strands in these are stressed and locked off simultaneously using a specially designed multistrand stressing jack or individually with mono strand jack. in this system,

The function of the grout is;

- (i) To provide a continuous bond between the strand and the duct,
- (ii) To increase protection against corrosion by acting as a physical barrier to moisture penetration
- (iii) Through its alkalinity, provide an environment non-conductive for corrosion.

The function of the duct is:

- (i) To maintain avoided path for the strands in the concrete member during construction,
- (ii) To transfer the bond between the grout within the duct and the concrete surrounding,
- (iii) To act as additional protection against penetration of moisture and chemicals into the interior of the duct.

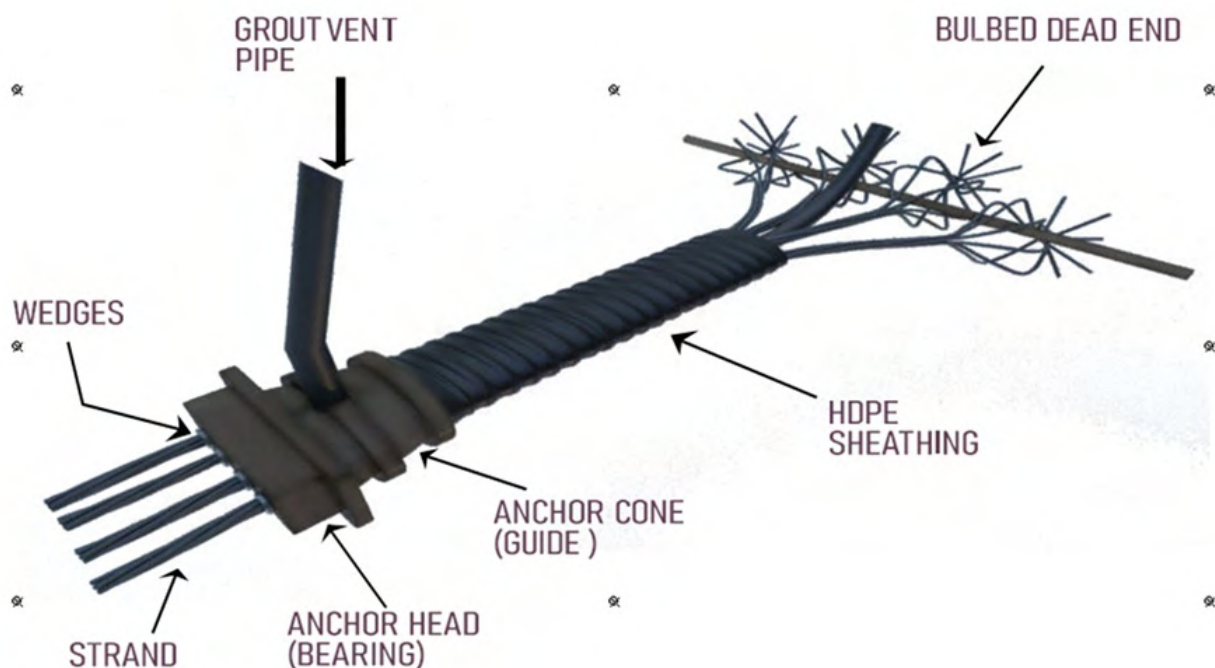


## KEY FEATURES



The principal function of the anchor assemblies at the ends is to hold the forces generated in the tendon at stressing, until the grout is introduced, hardened and cured. Bonded tendons are generally multi-strands. Tendons of up to 24 strands in one duct are not uncommon. Traditional the principal application of bonded tendons has been in bridge construction.

- Time proven system
- Similar to conventional system used in bridges
- Ideal for large span slab
- Multiple Group of strands can be accommodated in minimum available space.





## UN-BONDED POST TENSION SYSTEM

The distinguishing characteristic of an unbonded tendon is that, by design, it does not form a bond along its length with the concrete. Unbonded tendons are generally made of single strand high strength Steel, covered with a corrosion inhibiting coating and encased in a plastic sheathing.

The force in the stressed tendon is transferred to the concrete primarily by the anchors provided at its ends. Variations in force along the tendon are affected by the friction between the strand and the tendon profile in the concrete member. Since the force in an unbonded tendon is transferred primarily by the anchors at its ends, therefore SCON introduced a completely encapsulated anchor system to provide the long-term integrity of anchors throughout the service life of an unbonded tendon.

## THE FUNCTION OF THE PLASTIC SHEATHING

(i) To act as a bond breaker

(i1) To provide protection against damage by mechanical handling

(ii) To form a barrier against intrusion of moisture and chemicals.

The strand coating, commonly referred to as grease, reduces friction between the strand and the plastic sheathing.

(IT) Provides the added protection against corrosion.

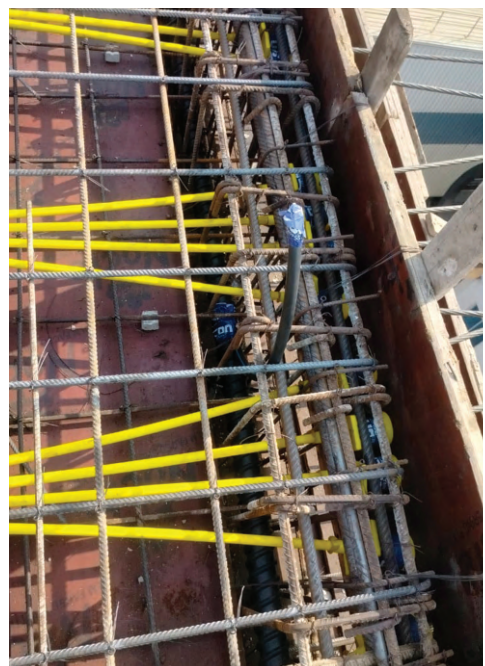
Unbonded tendons are typically employed as mono-strands, with each tendon having dedicated end anchors. Also, tendons are stressed individually.



## KEY BENEFITS OF UNBONDED SYSTEM



- ▶ **COST REDUCTION**
- ▶ **REDUCTION IN THICKNESS OF PT SLABS**
- ▶ **UNIFORM STRESS DISTRIBUTION**
- ▶ **ELIMINATION OF GROUTING ACTIVITY WHICH SAVES TIME AND REDUCES COST**
- ▶ **RESTRESSING IS POSSIBLE FOR UNBONDED STRANDS AT ANY TIME DURING THE LIFE SPAN OF THE STRUCTURE**



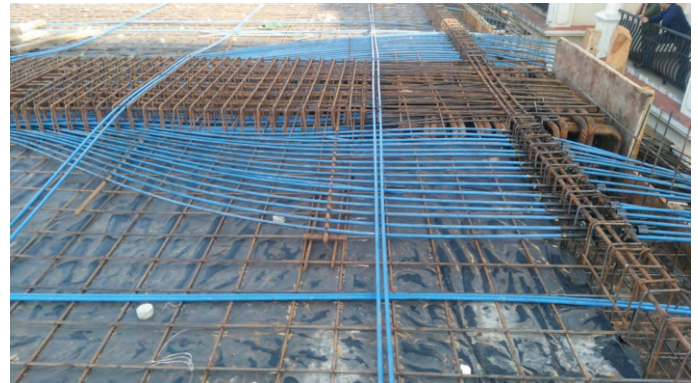


## HYBRID POST TENSION SYSTEM (BONDED + UN-BONDED)

Hybrid Bonded and Un-Bonded system can be mixed within a single structure. This PT system is specifically required to achieve flexibility and economy in construction of structure. With the help of this system, we can achieve most compact sizes of Post Tension element. The Un-Bonded PT System can be used in slab, while the Bonded PT system can be specified for transfer girder/ Plate and PT Beams to provide optimum crack and deflection control feature, essential for transfer girder require to carry the load from multi-storey structure. Hence because of this system, with the optimized use of each material, we can achieve most economical product.

### KEY FEATURES

- EXTRACTS ADVANTAGES OF BOTH SYSTEMS
- ECONOMICAL DESIGN AND CONSTRUCTION MADE
- TAILOR MADE CUSTOMISED SOLUTION.



## DESCRIPTION

After many years of research and development SCON provide advance materials and hardware, so that owners and engineers can fully realise the advantages of prestressing in their building projects., If needed, both systems are capable to reach beyond the minimums stipulated in codes and produce a user-defined level of performance, in particular with respect to durability.

The merits of each, and the selection of a system depends on the its own application area, it is the skill of design engineer to use these systems in accordance to structural requirement to deliver the maximum benefits to the client. None is blessed to be categorically superior to the other.

### CLIENT NAME : LOTUS EMPIRE

PROJECT NAME : Midtown Square Project - Ambernath

ARCHITECT : R.A.T. Consultant

STRUCTURAL CONSULTANT : Pentancon Structural Consultants Pvt. Ltd.





# SPECIAL PROJECT BY SCON

## 1) PT RAFT

### PT RAFT is feasible under following conditions :

- ▶ If safe bearing capacity (SBC) is very low
- ▶ If depth of RCC raft is more
- ▶ If RCC raft construction is non-economical
- ▶ Non-uniform SBC, Hard rock strata in major portion
- ▶ High cost of excavation to maintain uniform level
- ▶ High water resistance

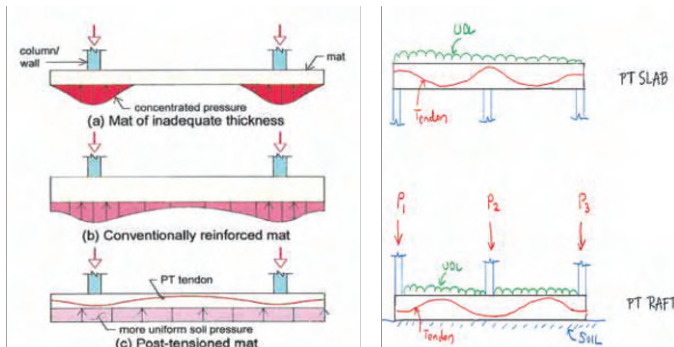
### ADVANTAGES OF PT RAFT

- ▶ Reduction in raft depth
- ▶ Resistance to water pressure
- ▶ saving in concrete cost
- ▶ saving in reinforcement cost
- ▶ High cost of excavation to maintain uniform level
- ▶ High water pressure
- ▶ Saving in excavation cost and support cost

### BASIC DESIGN CONCEPT

Project Name (Area, sq mtr)	RCC			PT		
	RAFT thk (mm)	STEEL (Ton)	CONCRETE (Cub meter)	RAFT thk (mm)	STEEL (Ton)	CONCRETE (Cub meter)
Navaras (11150)	1300	892	14500	800	446	9000
CBFS (6700)	1250	536	8375	800	268	5360
Plot 2650 (2000)	1400	100	2800	800	80	1600
Plot 1779 (650)	1200	32.5	780	800	26	520

**TOTAL SAVING 50% STEEL**



**NAVRAS COMMERCIAL CENTER, OMAN, MUSCAT**



# PT RAFT CONSTRUCTION STAGES



**1. EXCAVATION**



**2. RUBBLE SOLING**



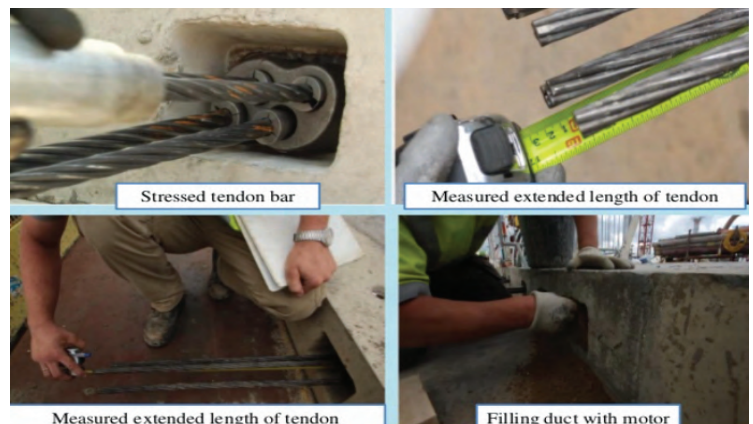
**3. PLASTIC SHEET PLACING**



**4. CABLE PROFILING**



**5. POUR STRIP ARRANGEMENT & CONCRETING**



**6. STRESSING & GROUTING**



## 2) VOIDED PT SLAB

### NEED FOR VOIDED PT SLAB

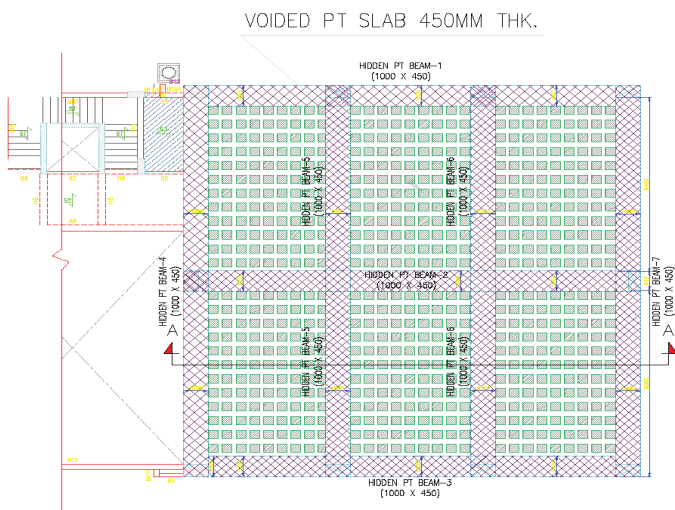
A) Flat Slab Requirements by Clients

B) High thickness of RCC Flat Slab

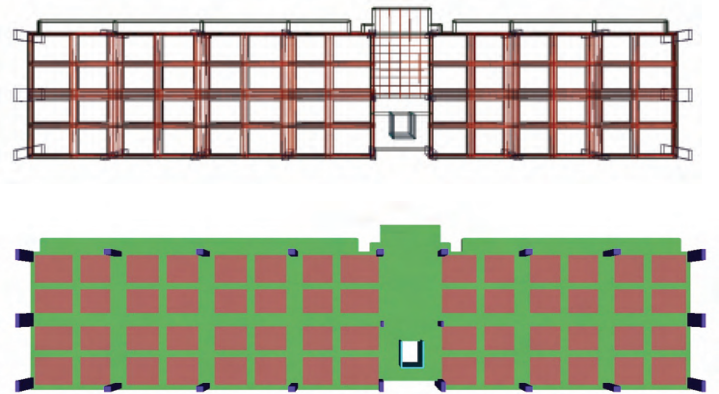
### BASIC CONCEPT OF VOIDED SLAB

Calculate Section Change	Calculate Volume Change	Calculate Stiffness Change
• $\text{Net A} = \text{Solid A} - \text{Void A}$	• $\text{Net V} = \text{Solid V} - \text{Void V}$	• $\text{Net I} = \text{Solid I} - \text{Void I}$
• $\% \text{ Reduction A} = \text{Net A} / \text{Solid A}$	• $\% \text{ Reduction V} = \text{Net V} / \text{Solid V}$	• $\% \text{ Reduction I} = \text{Net I} / \text{Solid I}$

### NEED FOR VOIDED PT SLAB



### VOIDED SLAB 3D MODEL



### REGENCY SERVEM AT TITWALA





## VOIDED PT SLAB CONSTRUCTION PHOTOS



## VOIDED PT SLAB



## SWARGATE METRO STATION, PUNE



### 3) TRANSFER GIRDER WITH DOOR OPENING AT CENTER

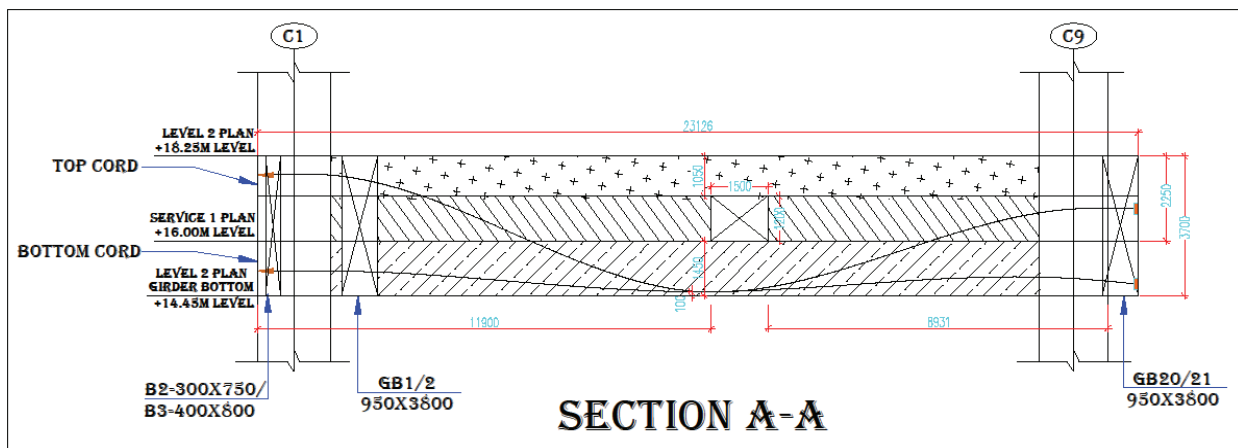
#### NEED FOR TRANSFER PT GIRDER

- ▶ Desired Size Of Rcc Beam With 23m Span & Opening Is Not Feasible
- ▶ Unonomical

#### ADVANTAGES TRANSFER GRINDER

- ▶ Required Size Achived With Door Opening To Provide Access Between Girders
- ▶ Economical As Compared To Rcc Girder

#### TRANSFER GIRDER WITH OPENING- SCHEMATIC DRAWING 23m SPAN



### APCO HOTEL PROJECT AT LUCKNOW



## 4) EXTERNAL PRESTRESSING

### NEED FOR EXTERNAL PRESTRESSING

Deflection Or Cracks Observed Due To  
Deficiency In Design Or Execution  
Additional Load Requirement  
External Prestressing - External  
Prestress Schematic Drawing

### ADVANTAGES EXTERNAL PRESTRESSING

Desired Strength Achieved  
Further Deflection Prevented  
Economical As Compared To  
Conventional Strengthening  
Actual Load Transferred To Column



Inclined Drill to slab

END PROFILE



END BLOCK



REACTION FRAME INSTALLATION



EXTERNAL PROFILE

## LOAD TEST AFTER EXTERNAL PRESTRESSING



PONDING

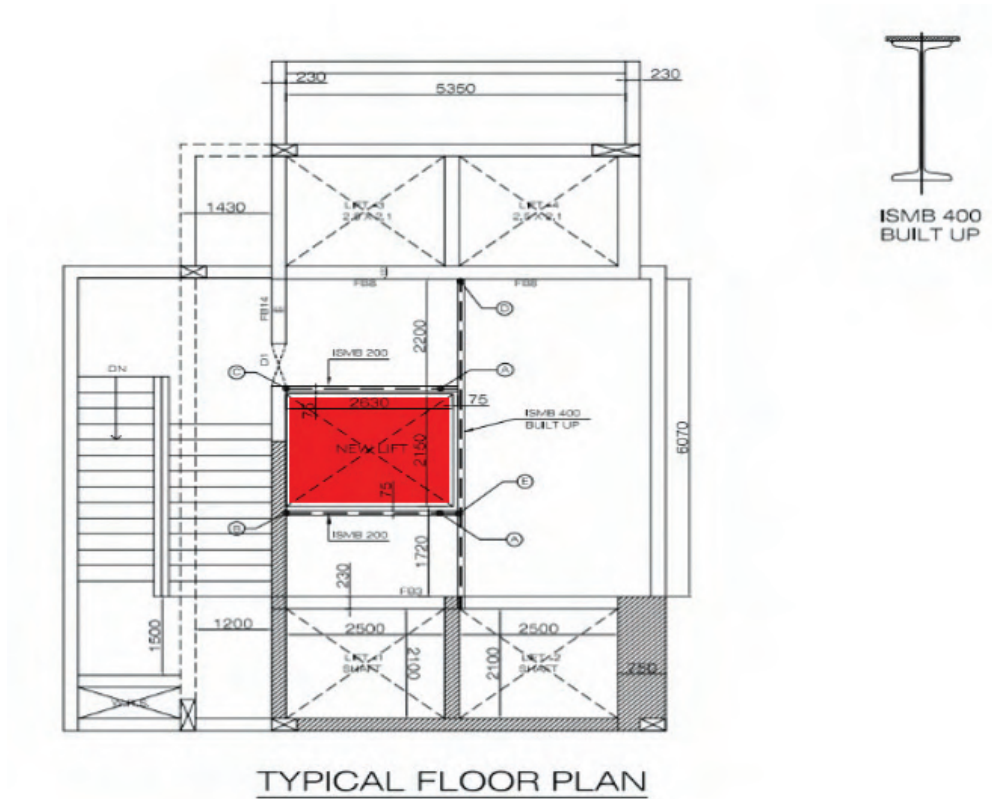


WATER FILLED UPTO LEVEL



## 5) CUTOUT IN PT SLAB

CUTOUT IN PT SLAB FOR INSTALLATION OF NEW STAIRCASE OR LIFT



## EMPIRE PLAZA VIKROLI







1. SLAB STRENGTHENING



2. CUTOUT MARKING



3. DRILLING



4. CUTTING



5. CUT PIECE LOWERING



6. CUT PIECE REMOVED



# ROCK ANCHORS

## INTRODUCTION

ROCK ANCHORING PLAYS A CRUCIAL ROLE IN MODERN CONSTRUCTION AND GEO-TECHNICAL ENGINEERING. IT ENSURES STABILITY IN CHALLENGING TERRAINS, PROVIDING ESSENTIAL SUPPORT FOR STRUCTURES LIKE BRIDGES, TUNNELS, AND SLOPES. TWO POPULAR TECHNIQUES IN THIS FIELD ARE PRESTRESSING ROCK ANCHORS AND PASSIVE ROCK ANCHORS. LET'S DELVE DEEPER INTO WHAT THEY ARE AND HOW SCON INFRA SPECIALIZES IN THEIR DESIGN, SUPPLY, AND INSTALLATION.

## WHAT ARE ROCK ANCHORS ?

ROCK ANCHORS ARE STRUCTURAL ELEMENTS DESIGNED TO STABILIZE AND REINFORCE GEOLOGICAL FORMATIONS. THEY ARE INSTALLED IN ROCK OR SOIL TO BEAR LOADS, PREVENT MOVEMENT, AND ENSURE STRUCTURAL INTEGRITY. COMMONLY USED IN RETAINING WALLS, DAMS, AND FOUNDATION SYSTEMS, ROCK ANCHORS ARE INDISPENSABLE IN PROJECTS REQUIRING ENHANCED STABILITY.

## TYPE OF ROCK ANCHOR

- 1) PRESTRESSING ROCK ANCHORS
- 2) PASSIVE ROCK ANCHORS
- 3) SELF DRILL ANCHORS

## PRESTRESSING ROCK ANCHORS

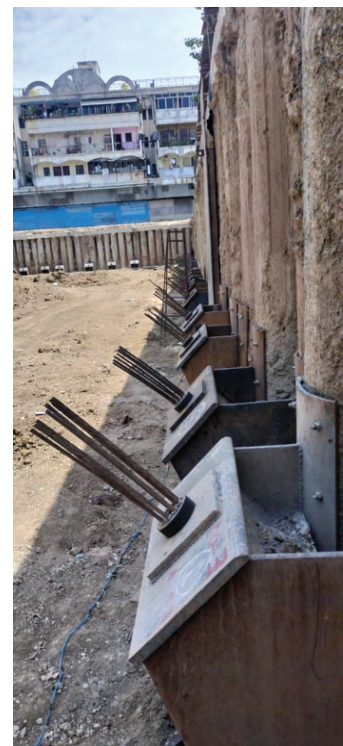
PRESTRESSING ROCK ANCHORS ARE PRE-TENSIONED STRUCTURAL ELEMENTS INSTALLED TO ACTIVELY BEAR LOADS. THIS MEANS THEY APPLY FORCE TO THE ROCK OR SOIL EVEN BEFORE EXTERNAL LOADS ARE APPLIED, ENSURING MAXIMUM STABILITY.

## KEY FEATURES AND MATERIALS USED

1. HIGH-STRENGTH STEEL TENDONS.
2. CORROSION-RESISTANT COATINGS FOR DURABILITY.
3. CEMENT GROUT FOR ANCHORAGE.

## INSTALLATION PROCESS

1. DRILL A HOLE INTO THE ROCK OR SOIL
2. INSERT THE ANCHOR AND GROUT IT IN PLACE
3. APPLY TENSION USING SPECIALIZED HYDRAULIC JACKS
4. LOCK THE ANCHOR IN A PRE-TENSIONED STATE



## COMMON APPLICATIONS

1. SLOPE STABILIZATION.
2. RETAINING WALL SUPPORT.
3. FOUNDATIONS FOR HIGH-RISE BUILDINGS.
4. DAM REINFORCEMENT.

## ADVANTAGES OF PRESTRESSING ROCK ANCHORS

1. IMMEDIATE STABILIZATION UPON INSTALLATION.
2. HIGHER LOAD-BEARING CAPACITY.
3. REDUCED STRUCTURAL DISPLACEMENT





## PASSIVE ROCK ANCHORS

### DEFINITION AND WORKING PRINCIPLE

UNLIKE PRESTRESSING ANCHORS, PASSIVE ROCK ANCHORS ONLY BECOME ACTIVE UNDER EXTERNAL LOADS. THEY WORK BY RESISTING MOVEMENT PASSIVELY WHEN LOADS ARE APPLIED TO THE STRUCTURE.

### INSTALLATION PROCESS

1. DRILL A HOLE AND INSERT THE ANCHOR.
2. GROUT THE ANCHOR IN PLACE TO ENSURE FIRM BONDING.
3. ALLOW THE GROUT TO SET BEFORE APPLYING LOADS.

### TYPICAL APPLICATIONS

1. STABILIZING LOW-LOAD STRUCTURES
2. SLOPE AND EMBANKMENT REINFORCEMENT
3. TEMPORARY SUPPORT SYSTEMS

### BENEFITS OF PASSIVE ROCK ANCHORS

1. COST-EFFECTIVE FOR SMALLER PROJECTS
2. EASY INSTALLATION PROCESS
3. MINIMAL MAINTENANCE REQUIREMENTS



## KEY BENEFITS OF ROCK ANCHORING

### ENHANCED STRUCTURAL STABILITY

ROCK ANCHORS ENSURE THAT STRUCTURES REMAIN FIRM, EVEN IN UNSTABLE TERRAIN.

### COST-EFFECTIVENESS

BOTH PRESTRESSING AND PASSIVE ROCK ANCHORS PROVIDE A COST-EFFICIENT SOLUTION COMPARED TO ALTERNATIVE STABILIZATION METHODS.

### VERSATILITY

THESE SYSTEMS CAN ADAPT TO VARIOUS GEOLOGICAL CONDITIONS, MAKING THEM SUITABLE FOR DIVERSE PROJECTS.

### DURABILITY

WITH PROPER INSTALLATION AND MATERIALS, ROCK ANCHORS CAN LAST FOR DECADES, PROVIDING LONG-TERM RELIABILITY.



## SCON INFRA'S EXPERTISE IN ROCK ANCHORING

### DESIGN CAPABILITIES

SCON INFRA LEVERAGES ADVANCED DESIGN TOOLS AND EXPERIENCED ENGINEERS TO CREATE EFFICIENT AND TAILORED SOLUTIONS.

### HIGH-QUALITY SUPPLY

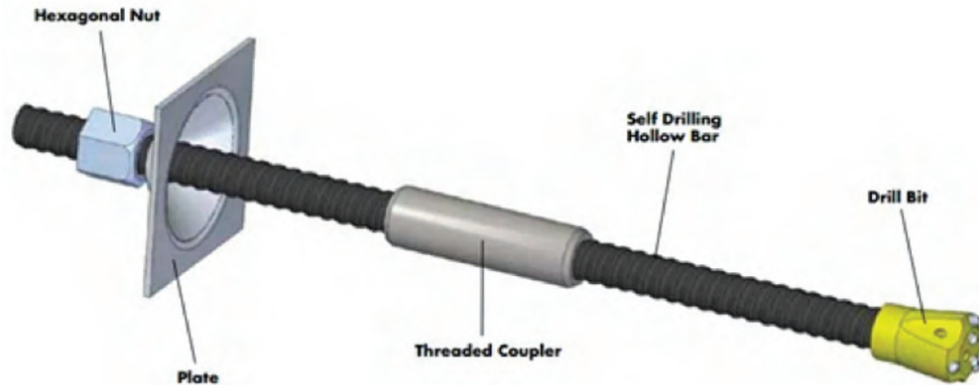
THE COMPANY ENSURES THE DELIVERY OF PREMIUM MATERIALS, INCLUDING HIGH-STRENGTH STEEL AND CORROSION-RESISTANT COATINGS.

### PROFESSIONAL INSTALLATION SERVICES

WITH OVER 15 YEARS OF EXPERIENCE, SCON INFRA EXCELS IN INSTALLING ROCK ANCHORING SYSTEMS, ENSURING PRECISION AND DURABILITY.

## SELF-DRILL ANCHORS

SELF-DRILL ANCHORS (SDAS) ARE A WIDELY USED TECHNIQUE IN GROUND STABILIZATION, OFFERING EFFICIENT AND RELIABLE SUPPORT FOR A VARIETY OF CONSTRUCTION PROJECTS. THESE ANCHORS ARE INSTALLED USING A SPECIALIZED DRILLING RIG THAT SIMULTANEOUSLY DRILLS A HOLE AND INJECTS GROUT OR RESIN INTO THE SURROUNDING SOIL OR ROCK. THE ANCHOR, TYPICALLY MADE OF STEEL, IS INSERTED INTO THE DRILLED HOLE AND SECURELY GROUTED INTO PLACE. THIS UNIQUE COMBINATION OF DRILLING AND GROUTING PROVIDES SEVERAL ADVANTAGES OVER TRADITIONAL ANCHORING METHODS.



### BENEFITS OF SELF-DRILL ANCHORS

**EFFICIENCY:** SELF-DRILL ANCHORS COMBINE THE DRILLING AND GROUTING STEPS, WHICH SPEEDS UP THE INSTALLATION PROCESS.

**VERSATILITY:** SUITABLE FOR USE IN A RANGE OF SOIL AND ROCK CONDITIONS, FROM SOFT SOILS TO HARD ROCK FORMATIONS.

**COST-EFFECTIVENESS:** THE SIMPLIFIED PROCESS REDUCES THE NEED FOR SEPARATE EQUIPMENT AND LABOR, MAKING IT A MORE AFFORDABLE SOLUTION.

**CORROSION RESISTANCE:** THE ANCHORS ARE COATED WITH MATERIALS THAT PROTECT THEM FROM CORROSION, ENSURING LONG-TERM PERFORMANCE.

**HIGH LOAD CAPACITY:** THESE ANCHORS CAN BE DESIGNED TO BEAR HEAVY LOADS, MAKING THEM IDEAL FOR LARGE-SCALE CONSTRUCTION PROJECTS.



## APPLICATIONS OF SELF-DRILL ANCHORS

**SLOPE STABILIZATION:** PREVENTING LANDSLIDES AND SOIL EROSION BY SECURING UNSTABLE SLOPES, ESPECIALLY IN HILLSIDE AND MOUNTAIN REGIONS.

**RETAINING WALLS:** PROVIDING LATERAL SUPPORT FOR RETAINING WALLS THAT PREVENT SOIL MOVEMENT AND PROVIDE STABILITY TO THE STRUCTURE.

**EXCAVATION AND TUNNEL SUPPORT:** ENSURING THE STABILITY OF EXCAVATION SITES AND UNDERGROUND STRUCTURES BY SECURING THE SURROUNDING SOIL OR ROCK.

**BRIDGE AND HIGHWAY INFRASTRUCTURE:** STABILIZING THE GROUND AROUND BRIDGES AND HIGHWAYS TO PREVENT SHIFTING AND MAINTAIN THE INTEGRITY OF THE STRUCTURE.

## SCON INFRA'S EXPERTISE IN ROCK ANCHORING

SCON INFRA, WITH OVER 15 YEARS OF EXPERIENCE, SPECIALIZES IN THE DESIGN, SUPPLY, AND INSTALLATION OF ROCK ANCHORING SYSTEMS, INCLUDING SELF-DRILL ANCHORS AND ROCK BOLTS. THEIR TEAM OF SKILLED ENGINEERS AND TECHNICIANS ENSURES THAT EACH PROJECT IS HANDLED WITH PRECISION, PROVIDING TAILORED SOLUTIONS TO MEET THE SPECIFIC NEEDS OF EACH CLIENT. WHETHER IT'S STABILIZING SLOPES, SUPPORTING UNDERGROUND STRUCTURES, OR REINFORCING RETAINING WALLS, SCON INFRA DELIVERS HIGH-QUALITY ROCK ANCHORING WORK DESIGNED TO LAST.

### END-TO-END SERVICE PROVISION

**DESIGN:** CUSTOMIZED SOLUTIONS BASED ON THE SPECIFIC PROJECT REQUIREMENTS AND GROUND CONDITIONS.

**SUPPLY:** HIGH-QUALITY MATERIALS, INCLUDING CORROSION-RESISTANT ANCHORS AND STEEL CABLES, TO ENSURE LONGEVITY.

**INSTALLATION:** EXPERT INSTALLATION SERVICES ENSURING PRECISE AND SECURE ANCHORING SYSTEMS THAT MEET INDUSTRY STANDARDS.



## LANDMARK PROJECTS - NAVI MUMBAI



**43 METER COLUMN  
FREE STRUCTURE**

Navi Mumbai Municipal Corporation HO building is not only an office complex but an Icon which reflects the spirit of Navi Mumbai. Its Longest Post Tensioned beam slab system which is done by SCON INFRA PRESTRESS LLP.

### **NMMC HEAD OFFICE BUILDING**

Client Name : Navi Mumbai Municipal Corporation

Architect: HSA Hiten Sethi and Associates

Structural Consultant: SACPL - Shanghvi and Associates

Consultant Pvt. Ltd.



## 24 HIGH BUILDING AT NERUL

**Client Name: Ccc Infra Project**

Architect: Soyuz Talib Architect

Structural Consultant : Associated  
Structural Consultants LLP.



## BELIMO FACTORY AT TTC INDUSTRIAL AREA

**Client Name: Belimo Actuators India Pvt Ltd**

Architect: Jayant Sinari Architect

Structural Consultant : Epicons CONS. Pvt. Ltd.

## BHARTI VIDYAPEETH, KHARGHAR

**Client Name: Shubham Civil Projects Pvt Ltd**

Architect: Swapnil Prtners + Partners

Structural Consultant :

Berl Urban & Environment Planners LLP



### **HONESTY PROJECT, PANVEL**

**Client Name: Shree Sahayya Group(SSG)**

Architect : Abhinay Jogi & Associates

Structural Consultant: Adharshila Consultants

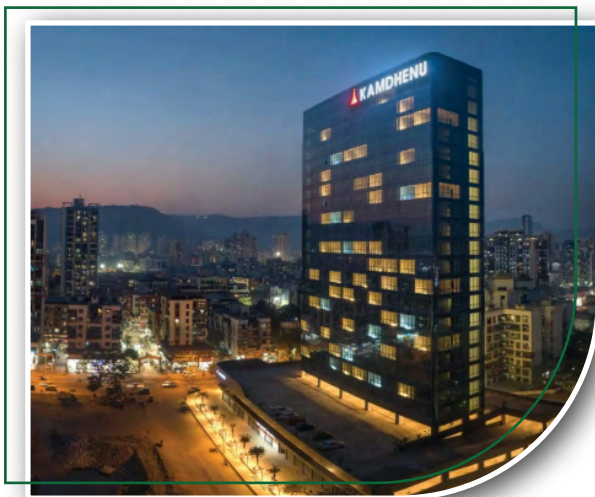


### **KAMDHENU PROJECT AT KHARGHAR**

**Client Name : kamdhenu Builders  
& Developers**

Architect: Creations Architects

Structural Consultant : Associated Structural



### **INDUSTRIAL & COMMERCIAL BUILDING PROJECT AT TURBHE**

**Client Name: Mantech Counting & System LLP**

Architect : K.Thomas Architect

Structural Consultant : Vinit Consultant





## **GEE CEE EMERALD PROJECT AT KHARGHAR**

**Client Name: Gee Cee Ventures Limited**  
Architect: Sathish Ahuja Architects  
Structural Consultant : Epicons Consultants  
Pvt. Ltd.



## **PROPOSED HOTEL FOR CREATIVE PLASTICS INDUSTRIES**

**Client Name: Creative Plastics Industries**  
Architect: Dalal Joshi & Associates  
Structural Consultant : Raje Structural  
Consultants

## **PROPOSED INDUSTRIAL BUILDING AT MIDC RABALE**

**Client Name: Campak India Services**  
Architect: Apices Studio Pvt. Ltd  
Structural Consultant :  
Epicons consultants Pvt.Ltd.



## LANDMARK PROJECTS - MUMBAI



### THE ROYAL KREST AT DADAR

**Client Name: Karwa & Kewal Kiran Realtors**

**Architect: Talathi & Panthaki Associated Pvt. Ltd.**

**Structural Consultant: Tavse & Associates**



## **OPUS PRIME IT PARK, ANDHERI**

**Client Name : Unique Buildwell**

Architect: Positron Architects

Structural Consultant: Tech Line Consultants



## **NORTHAN HILL BUILDING PROJECT, MUMBAI**

**Client Name: N Rose Developers Pvt Ltd**

Architect : K Arch Architect

Structural Consultant: SACPL -Shanghvi and Associates Consultants Pvt. Ltd.

## **I C COLONY, CHEMBUR**

**Client Name: Vasuprada Developers Pvt Ltd**

Architect: VV & Associates Architects, Interior Designers

Structural Consultant : Vinayak Chopdekar &



### **ELMER PROJECT FOR MR. VOHRA, CHEMBUR**

**Client Name: P J Vohra and sons**

Architect: Associated Architect

Structural Consultant: Associated Structural  
Consultants LLP.



### **SUVIDHA SQUARE, ANDHERI**

**Client Name: Suvidha Milind Business  
Venture**

Architect: Tiwaskar & Associates

Structural Consultant: Associated  
Structural Consultant LLP

### **MINAKSHI WILLOWS SHADES – (CHRIS LOBO) AT BANDRA**

**Client Name: Calvin Group**

Architect : S.V. & Associates

Structural Consultant : Associated Structural  
Engineers LLP





### **TW GARDENS - PROJECT AT THAKUR VILLAGE, KANDIVALI EAST**

**Client Name : Wadhwa Group**

Architect : Design Cell - The Wadhwa Group

Structural Consultant : Ira Structural CONS.



### **VISHAL PREMISES CHS AT KANDIVALI WEST**

**Client Name: Mahaveer land developers**

Architect : P.R. Consultant

Structural Consultant : Satish Jain

Consulting Engineers Pvt. Ltd.

### **OM MAHESHWARI PROJECT AT BORIVALI WEST**

**Client Name: Mahaveer land developers**

Architect: P.R. Consultant

Structural Consultant : Satish Jain

Consulting Engineers Pvt. Ltd.



## THAKUR INSTITUTE BUILDING AT VASAI,MUMBAI

**Client Name : Thakur educational trust**

Architect: ARK Reza Kabul Architects Pvt.Ltd

Structural Consultant: AVP Structural CONS.



## 63 GMA-NANDWANA PROJECT AT GOREGAON, MUMBAI

**Client Name: Rishabraj Estate developers**

Architect : Ar. Nilesh Makhwana

Structural Consultant: Unistep CONS



## DATA CENTER 04 BUILDING AT MUMBAI

**Client Name: Ctris**

Architect : P. G. PATKI ARCHITECTS

Structural Consultant : Sterling Engineering  
Consultancy Services Pvt. Ltd.





## LANDMARK PROJECTS - PUNE



### SWARGATE METRO STATION, PUNE

**Main Client Name : Maharashtra Metro Rail Corp. Ltd.**

Client Name : J. Kumar Infra Project Ltd

Architect : Sankalp Designers

Structural Consultant : G A Bhilare Consultants Pvt. Ltd.

## **IASYS HEADQUARTERS OFFICE, HINJEWADI**

**Client Name: Shubham civil project Pvt. Ltd**

Architect: Swapnil Patil & partners

Structural Consultant : Beri Architects &  
Engineers Pvt. Ltd.



## **BUILDING FOR MR. KISHOR DESAI, AT AUNDH**

**Client Name: Impact Infra Height Pvt. Ltd**

Architect: Swapnil Pati & partners

Structural Consultant : Beri Architects &  
Engineers Pvt. Ltd.



## **MN LANDMARK, TATHAWADE**

**Client Name : Manav Group**

Architect: Neelesh Chopda Architecture

Structural Consultant : Structures.





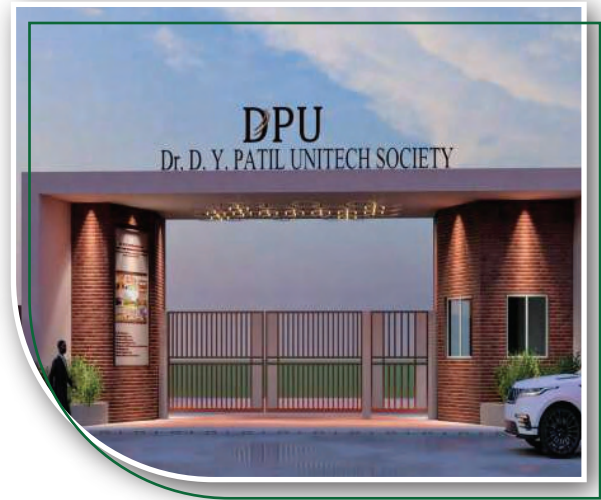
## DR. D.Y. PATIL UNITECH SOCIETY

**Client Name: Dr. D.Y. Patil Unitech Society**

Architect: Ar. Rajeev Vishwasrao

Structural Consultant: G.A. Bhilare

Consultants Pvt. Ltd.



## THE SPACE PROJECT AT KHARDI

**Client Name: M S Associates**

Architect: Ar. Dhananjay Deshmukh

Structural Consultant :Sagar Jagdale &  
Associates

## EIFEL TOWER AT BALEWADI

**Client Name: Nahar Homes LLP**

Architect: Sanjay Puri Architects

Consultant : J.W. Consultants LLP



### **ATHALYE BUNGLOW PUNE**

**Client Name: Mr. Ritwik Athalye**

Structural Consultant : S.S. Pathane  
Associates, Pune



### **BUILDING FOR SATSANG VIHAR, MAHLUNGE, PUNE**

**Client Name: Satsang Vihar**

Architect: Ar. Nitin Joshi  
Structural Consultant: Sagar Jagdale  
& Association

### **RESIDENTIAL BUILDING AT AKURDI, PUNE**

**Client Name: Shri Manik Katarlya**

Architect: Ar. Ashok Pawar  
Structural Consultant : Mr. Rejeshkumar  
Chaudhari





## STT-DC05, DATA CENTER AT PUNE

**Client Name : Shubham EPC Pvt. Ltd.**

Architect: AECOM Structural Consultants

Structural Consultant : AECOM Structural CONS



## STT-DC04, DATA CENTER AT PUNE

**Client Name : Shubham EPC Pvt. Ltd.**

Architect: AECOM Structural Consultants

Structural Consultant : AECOM Structural  
Construction Pvt. Ltd.



## ESMERLDA COMMERCIAL BUILDING PUNE

**Client Name: Pankaj Electricals & Engineering  
Service**

Architect: Ar. G. H. Naiknavare

Structural Consultant : Naiknavare Developers



## LANDMARK PROJECTS - GOA



### RIO RESORT PROJECT

**Client Name: Reverston Resort & Holidays Pvt Ltd**

**Architect: Ulysis Architectural Interior & Landscape Consultants**

**Structural Consultant : Rajesh Mahambrey & Associates**



### **TIPPING POINT HOTEL AT CANDOLIM**

**Client Name: Tipping Point Hospitality Pvt Ltd**

Architect: Ulysis Architectural Interior  
& Landscape Consultants

Structural Consultant : Rajesh Mahambrey &  
Associates



### **GINGER HOTEL AT CANDOLIM,GOA**

**Client Name: Calvin Trade & Developers**

Architect: Incubis Cosultants + Architects

Structural Consultant : Paresh Gaitonde &  
Associates

### **HOTEL BUILDING FOR MR. SAMSON KARI, CALANGUTE**

**Client Name : Mr. Samson Kari**

Architect : Ulysis Architectural Interior  
& Landscape Consultants

Consultant Name: Rajesh Mahambrey



## **SAAD INFRA PROJECT AT PONDA, GOA**

**Client Name: Saad Infrastructure India  
Pvt.Ltd**

Architect: Ar. Jeetendra D. Devarl

Structural Consultant :

Associated Structural Consultant LLP



## **BUNGLOW OF VICKY HARMALKAR AT GOA**

**Client Name: Mr. Vicky Harmalkar**

Architect : Studio Arche' Type

Architecture + Interiors

Structural Consultant : Rajesh Mahambrey  
& Associates



## **HOTEL BUILDING FOR MR. KOKRA, CALANGUTE**

**Client Name : Mr. Kokra**

Architect: Studio Arche' Type

Architecture + Interiors

Structural Consultant: Rajesh Mahambrey  
& Associates





## **BUNGLOW AT ANJUNA, GOA**

**Client Name: M/s. Anjuna**

Architect: The Gcharge Architect

Structural Consultant: Mr. Paresh Gaitonde



## **RICHARD COMMERCIAL BUILDING AT MAPUS**

**Client Name: Mendonca Richard Estavio**

Architect: Studio Arche\* Type

Architecture + Interiors

Structural Consultant : Rajesh Mahambrey  
& Associates

## **SCHOOL BUILDING AT SANGOLDA, GOA**

**Client Name : Ardee Foundation**

Architect: Mahesh Naik Architects

Structural Consultant :

Rajesh Mahambrey & Associates



## LANDMARK PROJECTS - SATARA



### MALKAPUR NAGAR PANCHAYAT BUILDING

**Client Name: Shwetayan Construction**

Architect : Telekar & Associates.

Structural Consultant : Mr. Shreeram Kulkarni



### KANGRAALKAR LANDMARK PROJECT, AT SATARA

**Client Name: Kangaralkar Infrastructure**

Architect : Ar.Sumit Bagade

Structural Consultant : Vijay Devi Associated  
Engineers



## **BUNGLOW PROJECT FOR RADHE SHYAM BHANDARI**

**Client Name: Mr. Radhe Shyam Bhandari**

Architect: Ar. Plyush Bhattad

Structural Consultant: Mr. Shreeram



## **MAHAJANI HOMES AT SADAR BAZAR**

**Client Name: Sudir Shinde & Shree Mahajani**

Architect: Shree Mahajani

Structural Consultant: Mr. Shreeram Kulkarni

## **MENAKABABY CARE COMMERCIAL BUILDING**

**Client Name : Rathi Family**

Architect : Ar. Mayur Gandhi

Consultant Name: Mr. Shreeram Kulkarni



## RAYAT SEVAK CO. OP BANK BUILDING

**Client Name:** The Rayat Sevak Co.op bank

**Architect:** Talekar & Associates

**Structural Consultant:** Mr. Ramdas Jagtap



## BUNGALOW FOR MR. ROHIT PATIL

**Client Name:** Dr. Rohit Patil

**Architect :** Mulick Associates

**Structural Consultant :** Mr. Shreeram Kulkarni



## GOVIND LEELA BUILDING PROJECT

**Client Name:** Niketan Construction

**Architect :** Design Enclave

**Structural Consultant:** Mr. Shreeram Kulkarni





## KRISHNA INSTITUTE OF MEDICAL SCIENCES AT KARAD

**Client Name: Synergy Ski Infradeviopment**

Architect & Consultant : Berl Urban & Environmental Planners LLP



## MORE MANGAL KARAYALAYA

**Client Name: Mr. Santosh More**

Architect: Talekar & Associates.

Structural Consultant : Mr. Shreeram Kulkarni

## RUTURAJ KANSE BUNGLOW PROJECT

**Client Name : Siddhivinayak Construction**

Architect : Ar. Nitin Tawal

Structural Consultant : Mr. Shreeram Kulkarni



## **BUILDING FOR MR. SAGAR LAHOTI AT SATARA**

**Client Name: Mr. Sagar Lohati**

Architect: Mayur Gandhi & Associates

Structural Consultant : Shreeram Kulkarni



## **Y C COLLEGE AT SATARA**

**Client Name : JJ Construction**

Architect: Origin Studio

Structural Consultant: Shreeram Kulkarni



## **SITARAM JEWELLERS AT RAJPATH, SATARA**

**Client Name : M/s Sitaram Jewellers**

Architect : Ar. Kasture

Structural Consultant : Mr. Shreeram Kulkarni





## LANDMARK PROJECTS - KOLHAPUR

### AMEY HI LIFE PROJECT, KOLHAPUR

**Client Name : Unique Buildwell**

Architect: Positron Architects

Structural Consultant: Tech Line Consultant



### HOTEL FOR DHIRAJ TAKKEKAR AT KOLHAPUR

**Client Name: Nrose Developers Pvt Ltd**

Architect : K Arch Architect

Structural Consultant: SACPL -Shanghvi and  
Associates Consultants Pyt. Ltd

### BACHHANI COMMERCIAL BUILDING AT KOLHAPUR

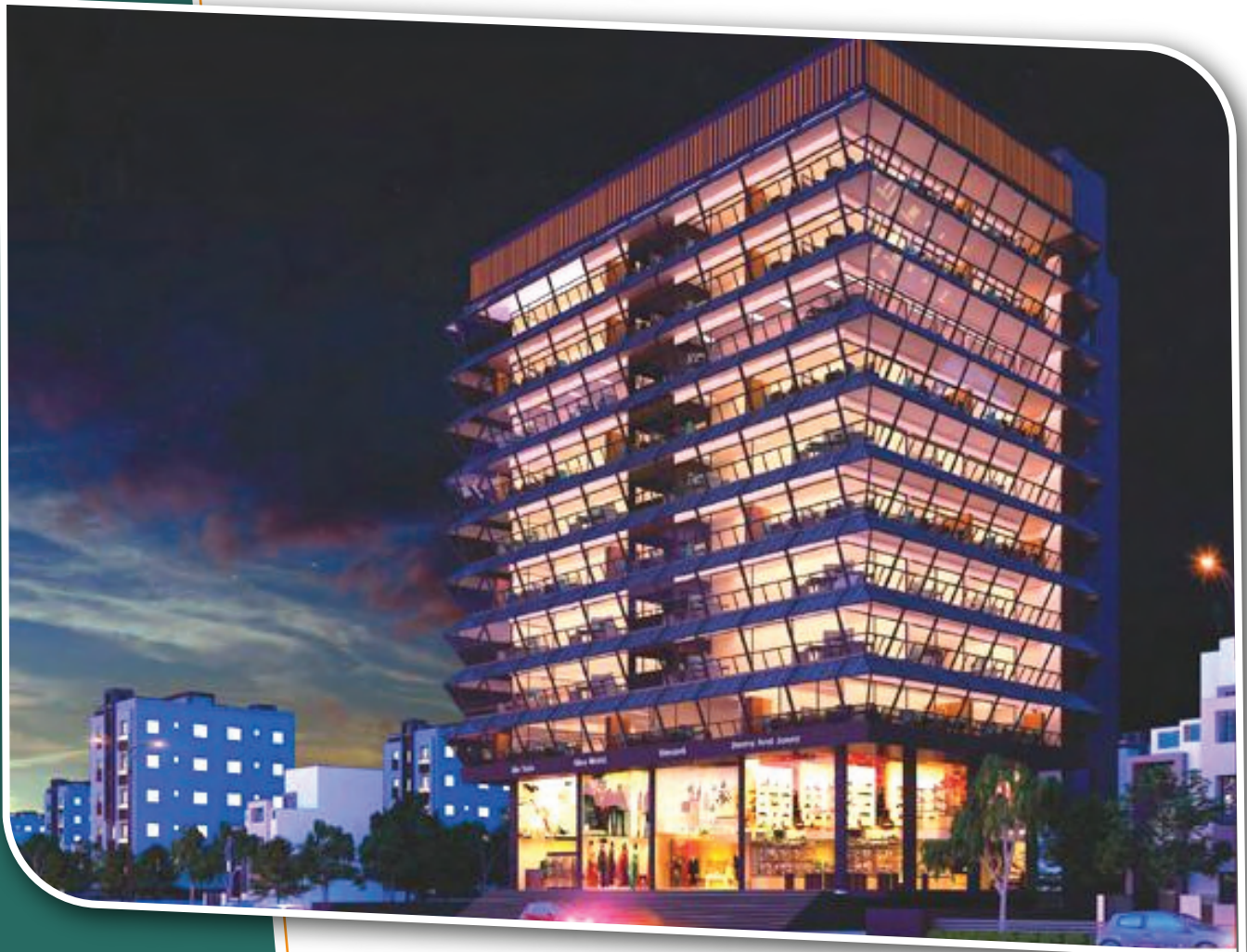
**Client Name: Vasuprada Developers Pvt Ltd**

Architect: VV & Associates Architects, Interior  
Designers

Structural Consultant : Vinayak Chopdekar &  
Associates



## LANDMARK PROJECTS - NASHIK



### ROYAL AVAAN AVENUE COMPLEX AT NASHIK

**Client Name: Royal Group**

Architect: Ar. Dhiraj Walunj

Structural Consultant: Structures



## **BOUTIQUE HOTEL AT NASHIK, VIRIDIAN VALLEY**

**Client Name: Viridian Valley**

Architect: A For Architect

Structural Consultant: Structures



## **AAKAR PRISTINE PROJECT**

**Client Name: Aakar Buildcon**

Architect: Ar. Priyanka Gupta

Structural Consultant : Structures



## **AVEN VISTA PROJECT AT NASHIK**

**Client Name: MSK Developers**

Architect: Ar, Yogesh Galkwad

Consultant Name: Structures



### **RUSHIRAJ ZODIAC AT NASHIK**

**Client Name: Jhala Infratech**

Architect: Ar. Yogesh Galkwad

Structural Consultant : Structures



### **GAJRAJI AVIGHNAM, AT NASHIK**

**Client Name: Mr. R.S. Dhadiwal**

Architect: Ar. Nikhil Dhadiwal

Structural Consultant: Structures



### **ISHWAR PRATISHTA- 3 PROJECT AT NASHIK**

**Client Name: Casa Developers**

Architect : Ar. Ashok Shenghani

Structural Consultant : Structures





## SHWAR SANKALPAN PROJECT AT NASHIK

**Client Name: Tarun Developers**

Architect: Ar. Sumit Kumath

Architect: Structures



## MANGO ESTATE AT NASHIK

**Client Name: Fortune Constrotech LLP**

Architect: Ar. Sumit Kumath

Structural Consultant : structures



## ISHWAR PRATIK GRAND AT NASHIK

**Client Name: Kanak Developers**

Architect: Ar. Sumit Kumath

Structural Consultant: Structures



### **RUSHIRAJ ZODIAC AT NASHIK**

**Client Name: Jhala Infratech**

Architect: Ar. Yogesh Galkwad

Structural Consultant: Structures



### **ISHWAR PRATISHTHA - 1 PROJECT AT NASHIK**

**Client Name: Param Developers**

Architect: Ar. Ashok Shenghani

Structural Consultant : Structures



### **ISHWAR PRATISHTHA- 2 PROJECT AT NASHIK**

**Client Name: Space Developers**

Architect: Ar. Ashok Shenghani

Structural Consultant : Structures



## LANDMARK PROJECTS - DHULE

### CANOSSA CONVENT SCHOOL PROJECT DHULE

**Client Name: Canossa convent School**

Architect : Shree Prakash Bhandari

Structural Consultant : AB Structural Consultant



### BUILDING FOR MR. AJAY SONAWANE AT DHULE

**Client Name : Ajay Sonawane**

Architect: Bhavsar & Associates

Structural Consultant : AB Structural  
Consultant



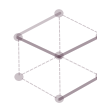
### HOTEL BUILDING AT DHULE

**Client Name: Shubham Civil Projects  
Put Ltd**

Architect: Swapnil Patil & Partners

Structural Consultant : AB Structural





## LANDMARK PROJECTS - AMALNER

### SEVA MANDAL PROJECT AT AMALNER

**Client Name: Canossa convent School**

Architect : Shree Prakash Bhandari

Structural Consultant : AB Structural Consultant



### KALAGURU TOWER AT AMALNER

**Client Name : Ajay Sonawane**

Architect: Bhavsar & Associates

Structural Consultant : AB Structural Consultant

### NARMADA LAWNS PUBLIC BUILDING AT AMALNER

**Client Name: Shubham Civil Projects Put Ltd**

Architect: Swapnil Patil & Partners

Structural Consultant : AB Structural





## LANDMARK PROJECTS - JALGAON



### NANYANTARA ARCADE CITY PROJECT

**Client Name:** Nanyantara Developers

**Architect:** Ar. Yash Seth

## **JAI BHAI DOSHI RESIDENTIAL BUILDING AT JALGAON**

**Client Name : Rajesh Construction &  
Bullders**

Architect: Ar. Yash Seth

Structural Consultant : Structures



## **HEALING TOUCH HOSPITAL AT JALGAON**

**Client Name: Beeta Associates**

Architect: Maverick Architects

Structural Consultant : Vastech Consultants  
and Engineers LLP



## **BUILDING FOR JAIN IRRIGATION AT JALGAON**

**Client Name: Jain Irrigation**

Structural Consultant: Structures





### **RESIDENTIAL TOWER FOR SHRI ADREJA AT JALGAON**

**Client Name: Mr. Surendra Adreja**

Architect: T- Square design Studio

Structural Consultant: AV Consultants



### **BUILDING FOR SURESH COLLECTION AT JALGAON**

**Client Name: Suresh Collection & Creation**

Architect: Ar. Hitesh Prakash

Structural Consultant: AV Consultants



### **VASUKAMAL MEHARAN PROJECT. AT JALGAON**

**Client Name: Vasukamal infra builders**

Architect : Ar. Abhijit Kothari

Structural Consultant : Structures



## **BUILDING PROJECT FOR MR. SAGAR TADE**

**Client Name: Mr. Sagar Tade**

Architect: Ar. Abhishek Patil

Structural Consultant : AV Consultants



## **BUILDING FOR SHRI. SHAKHALJI AT JALGAON**

**Client Name : Mr. Rajkumar Sathiya**

Architect: T- square Design Studio

Structural Consultant : AV Consultants

## **BUILDING FOR MR. SAGAR MANDHAN**

**Client Name : Mr. Sagar Mandhan**

Architect: T- square Design Studio

Structural Consultant: AV Consultants







## LANDMARK PROJECTS - NAGPUR

### LATTITUDE INFRA VENTURES, VOIDED SLAB PROJECT AT NAGPUR

**Client Name: Latitude Infra Ventures Private Ltd**

Architect : Ar. Lokesh Kadu

Structural Consultant :

Techture Virtual Design & Construction



### BAJAJ STEEL INDUSTRIES LTD. NAGPUR

**Client Name : Bajaj steel Industries limited**

Architect : Ar. Shivam Bagdia

Structural Consultant :

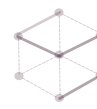
Techture Virtual Design & Construction

### IT PARK PROJECT AT PARSODI, NAGPUR

**Client Name : GLS Infotech Put.Ltd**

Structural Consultant : Techture Virtual Design & Construction





## LANDMARK PROJECTS - KARNATAKA



### JOLLE- BANQUET HALL, HOTEL & CLUBHOUSE BUILDING

**Client Name: Jolle Hospitality Group**

Architect : Ar. G. H. Naiknavare

Structural Consultant : Naiknavare Developers



### LT & M PROJECT AT YELAHANKA, BANGALORE

**Client Name: Consolidated Construction Consortium Ltd.**

Architect: Kareker & Associates

Structural Consultant : Kareker & Associates



## MILLENIUM MALL AT BELGAUM

**Client Name: siddhagangappa R**  
 Architect: Design Synthesis + architecture (DS+A)  
 Structural Consultant : Dileep Kulkarni  
 Consulting Structural Engineer



## LAXMINAYRAYAN ARCADE AT BELGAUM

**Client Name: Shri Laxminarayan Alias Balaji Devasthan**  
 Architect : State Design Union  
 Structural Consultant : Dileep Kulkarni  
 Consulting Structural Engineer

## MP FILTRI PVT.LTD AT BANGALORE

**Client Name: Kareker & Associates**  
 Architect: Kareker & Associates  
 Structural Consultant:  
 Anagha Engineering Consultant





## LANDMARK PROJECTS - KALYAN/DOMBIVALI



### MOHAN ALTEZZA, HELIPAD PROJECT, KALYAN

**Client Name: Mohan Altezza**

Architect : Howework Architect's

Structural Consultant: Vinayak Chopdekar & Associates Pvt.



## THE 23 AVENUE, DOMBIVALI

**Client Name: Parisparsh**

Architect: Mrs. Dhanashree Bhosale

Structural Consultant : Entech Consultant



## MHAISKAR SPORTS COMPLEX, DOMBIVALI

**Client Name : Dombivali Gymkhana**

Architect: Mhaiskar Sport Complex

## MOHAN ALTEZZA AT KALYAN

**Client Name: Mohan Altezza**

Architect: Howework Architect's

Structural Consultant: Vinayak Chopdekar & Associatespvt. Ltd



## TRIVENI MAJESTA, KALYAN

**Client Name: Generic Engineering Construction & Projects Ltd.**  
Architect: Creations Architects  
Structural Consultant : Khasnis & Associates



## HOTEL PROJECT FOR BHALACHANDRA SHETTY, KALYAN

**Client Name: Gurudev Darshan Hotel**  
Architect: Creations Architects  
Structural Consultant :  
Pentacon Structural Consultant Pvt.Ltd

## LOTUS HONEST BUILDING, KALYAN

**Client Name : Lotus Projects**  
Architect: Creations Architects  
Structural Consultant :  
Pentacon Structural Consultant Pvt. Ltd.





### **DREAM AVENUE BUILDING, KALYAN**

**Client Name: Dream Maruti Realtors**

Architect : Emerge Architect & Associates

Structural Consultant :

Pentacon Structural Consultants Pvt.Ltd



### **DURGA IMPERIAL, KALYAN**

**Client Name : G.K. mall & C.K, mali**

Architect: Ar. Vijay Pandey

Structural Consultant :

Pentacon Structural Consultant Pvt.Ltd

### **SEASON HOUSE PROJECT, KALYAN**

**Client Name : Hitesh Nehlani**

Architect: VITAN Consultants

Structural Consultant: Khasnis & Associates



### **SHREEJI TANGLE ARCADE, KALYAN**

**Client Name: Shreeji Buildcon**

Architect: Creations Architects

Structural Consultant: Khasnis & Associates



### **TULSI LAND DEVELOPERS, KALYAN**

**Client Name: Tulsi land Developers**

Architect: Creations Architects

Structural Consultant :

Majid Dokale Structural Engineers

### **SEASON HOUSE PROJECT, KALYAN**

**Client Name: Season Group**

Architect: FSND Architect

Structural Consultant :

Associated Structural Consultant LLP





## LANDMARK PROJECTS OF THANE



### 022 BUSINESS PARK AT THANE

**Client Name : Midas Touch**

**Architect : Alpine Architects**

**Structural Consultant : Ajay Mahale & Associates**

## LANDMARK PROJECTS OF THANE



### ORIANA BUSINESS PARK AT THANE

**Client Name : Dream Buisness Park**

Architect : Positron Architects

Structural Consultant : Epicons Consultant Pvt.Ltd.



### ANAND BHAVAN PROJECT THANE

**Client Name : Shree Swami Samarth Developers**

Architect : Innovative Design

Structural Consultant : Pentacon Structural Consultant  
Pvt. Ltd.



## **BUILDING FOR RAMKRISHNA NIKETAN AT THANE**

**Client Name: Arha Buidpro LLP**

Architect: Positron Architects

Structural Consultant:

Pentacon Structural Consultants Pvt. Ltd.



## **BUILDING OF PRASHANT CORNER, THANE**

**Client Name: Prashant Corner**

Architect: Positron Architects

Structural Consultant :

Associates Structural Consultant LLP

## **MEET BUSINESS PARK AT THANE**

**Client Name: Meet Intra**

Architect : Apices Studio Pvt. Ltd.

Structural Consultant :

Pentacon Structural Consultants Pvt Ltd



## LANDMARK PROJECTS OF BHIWANDI



### HOTEL FERN AT PIMPLAS, BHIWANDI

**Client Name : WAS Construction**

Architect : Congent Architects

Structural Consultant : Majid Dhokle & Associates



### NAMAN INDUSTRIAL PARK AT BHIWANDI

**Client Name: Swayam Infra**

Architect : Ar. Atul Charat

Structural Consultant : Entech Consultant



## **INDUSTRIAL BUILDING AT KALHER, BHIWANDI**

**Client Name: Mr. Prabhakar Pati**

Architect: Ar. Atul Charat

Structural Consultant : Entech Consultant



## **SWARUP TOWER AT GOVE NAKA BHIWANDI**

**Client Name: Swayam Infra**

Architect : Ar. Atul Charat

Structural Consultant : Entech Consultant



## **OASIS CORPORATE PARK AT SONALE BHIWANDI**

**Client Name: Mr. Hemang Parekh**

Architect: Ar. Ganesh Patil

Structural Consultant: Entech Consultant



## LANDMARK PROJECTS - AMBERNATH

### MIDTOWN SQUARE PROJECT, AMBERNATH

**Client Name: Lotus Empire**

Architect: R.A.T. Consultants

Structural Consultant : Pentacon Structural  
Consultants Pvt. Ltd.



### MOHAN NANO CLUB HOUSE PROJECT AT AMBERNATH

**Client Name: Mohan Lifespaces LLP**

Architect : Homework Architects Interior

Designer

structural Consultant: Vinayak Chopdekar  
& Associates Pvt. Ltd

### MOHAN SUBURBAI MARKET BUILDING AT AMBERNATH

**Client Name: Mohan Life Space LLP**

Architect: Thorat Mathews & Associates

Structural Consultant :

Vinayak Chopdekar & Associates Pvt. Ltd.





## LANDMARK PROJECTS - BADLAPUR

### RESIDENTIAL BUILDING FOR MR. NIMSAKHARE, BADLAPUR

**Client Name: Dr. Nimsakhare**

Architect : ECO Design Architect

Structural Consultant: Chandwadkar Consultants



### MOHAN WILLOWS PROJECT AT BADLAPUR

**Client Name: Mohan Group**

Architect : Architects Inc

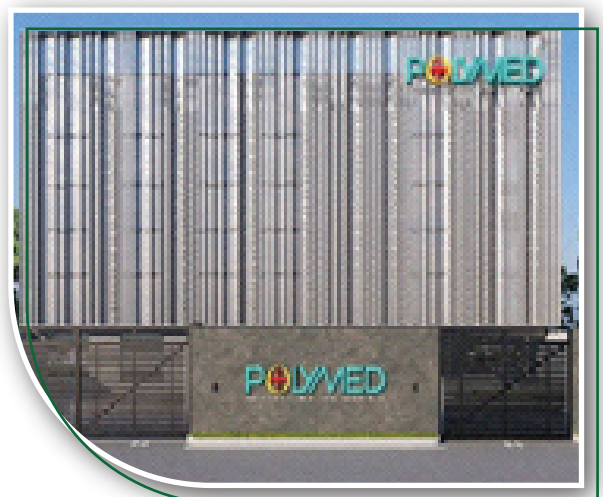
Structural Consultant : Vinayak Chopdekar  
& Associates

### POLYMED PROJECT, FARIDABAD

**Client Name: Poly Medicure Limited**

Architect: Neelesh Chopda Architecture

Structural Consultant: Structures



## POLYMED FACTORY PROJECT, JAIPUR

**Client Name: Poly Medicure Ltd**  
 Architect a Neelesh Chopda Architecture  
 Structural Coneuliant : Sctuctires

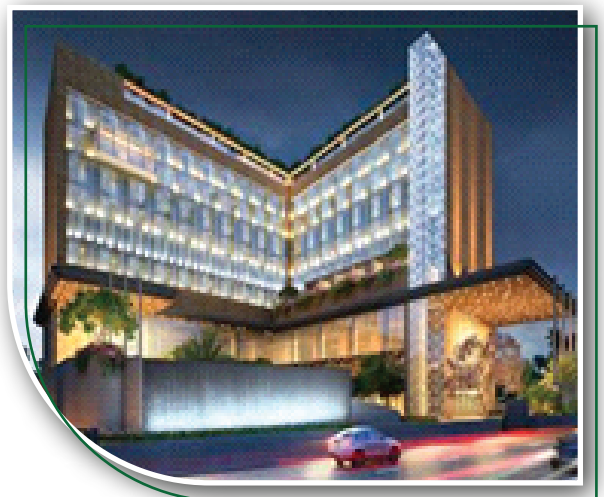


## INDUSTRIAL BUILDING, SILVASA

**Cient Name: Ami Polymer Pvt. Ltd**  
 Architect & Sarang Archibuild  
 Structural Consultant a Structures

## APCO HOTEL, LUCKNOW

**Client Names : Apoo Inirastrueture Put Lid**  
 Architect: Search Studio For environment &  
 Architecture  
 Structural Consultant : Sterling Engineering





## **BUILDING FOR MR. SUDHIR SHAH NANDURBAR**

**Client Name : Shah Enterprises**

Architect : Shri, rajesh Thakkar

Structural Consultant Structures



## **GANGOTRI VHAR APPARTMENT AT AURANGABAD**

**Client Name: Gangetri Vihar**

Architect : Nadkarni Mhaian & Associates

Structural Consultant i strucures

## **PUSHKAR RESORT AT AJMER, RAJASTHAN**

**Client Name : A mer Food Proouet Pvt Ltd**

Architect: Z Z . Archilects

Structural Consultant :

Associated Structural Consultan LLP



## **SCHOOL BUILDING AT BETUL**

**Client Name: Satpuda Valley Public School**

Architect: Neelesh Chopda Architecture

Structural Consultant : Structure



## **YAZDANI BUNGLOW, BHUBHNEHWAR**

**Client Name: Meral Tusha**

Architect : Z.Z. Architects

Structural Consultant: a Associated Structural  
Consultant LLP

## **CARO PROJECT AT HYDARABAD**

**Client Name: Dee Vee Projects Ltd**

Architect: Design Architects Inc.

Structural Consultant : Hiten Sethi &  
Associates

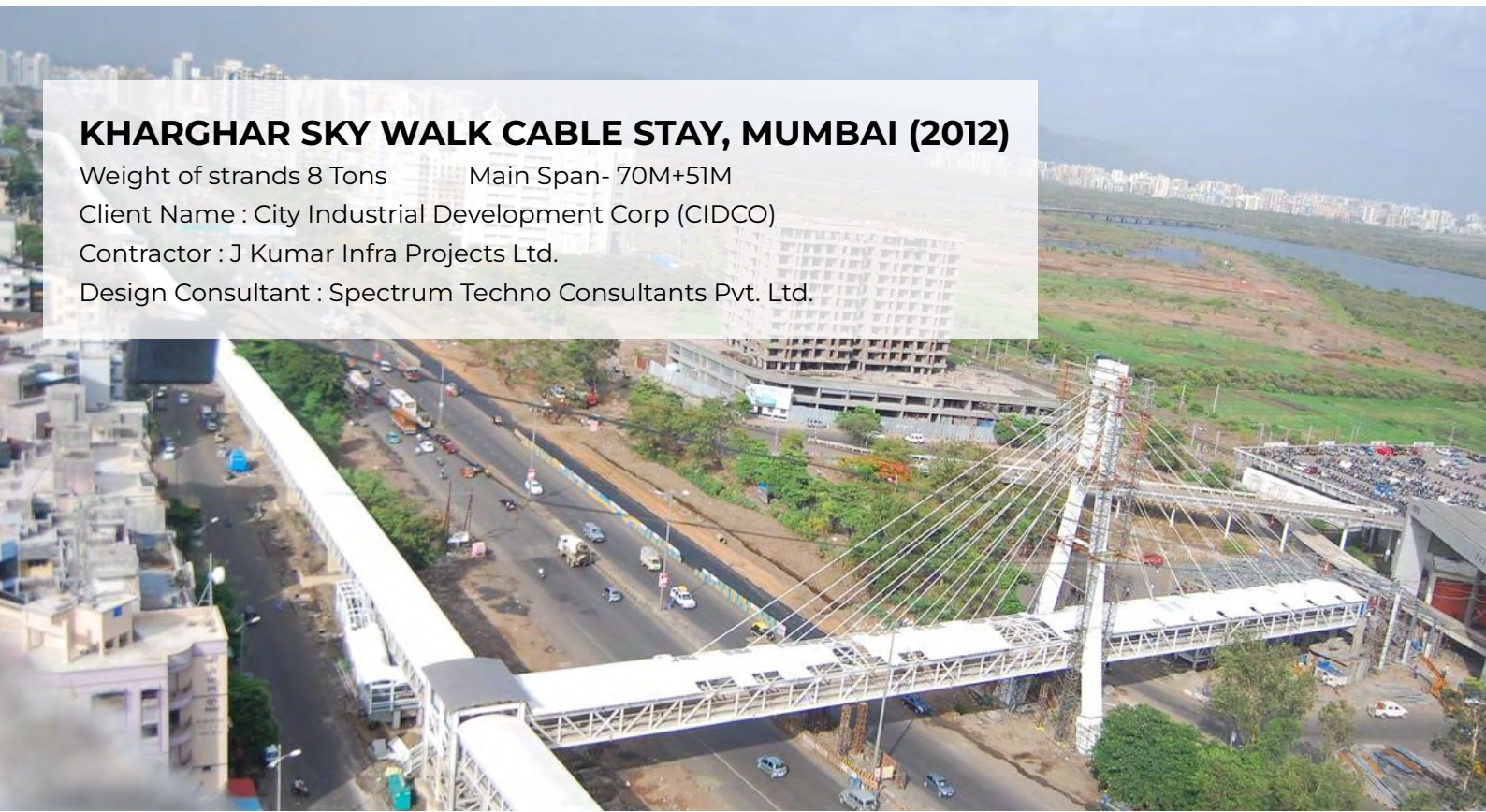




# CABLE STAY BRIDGES

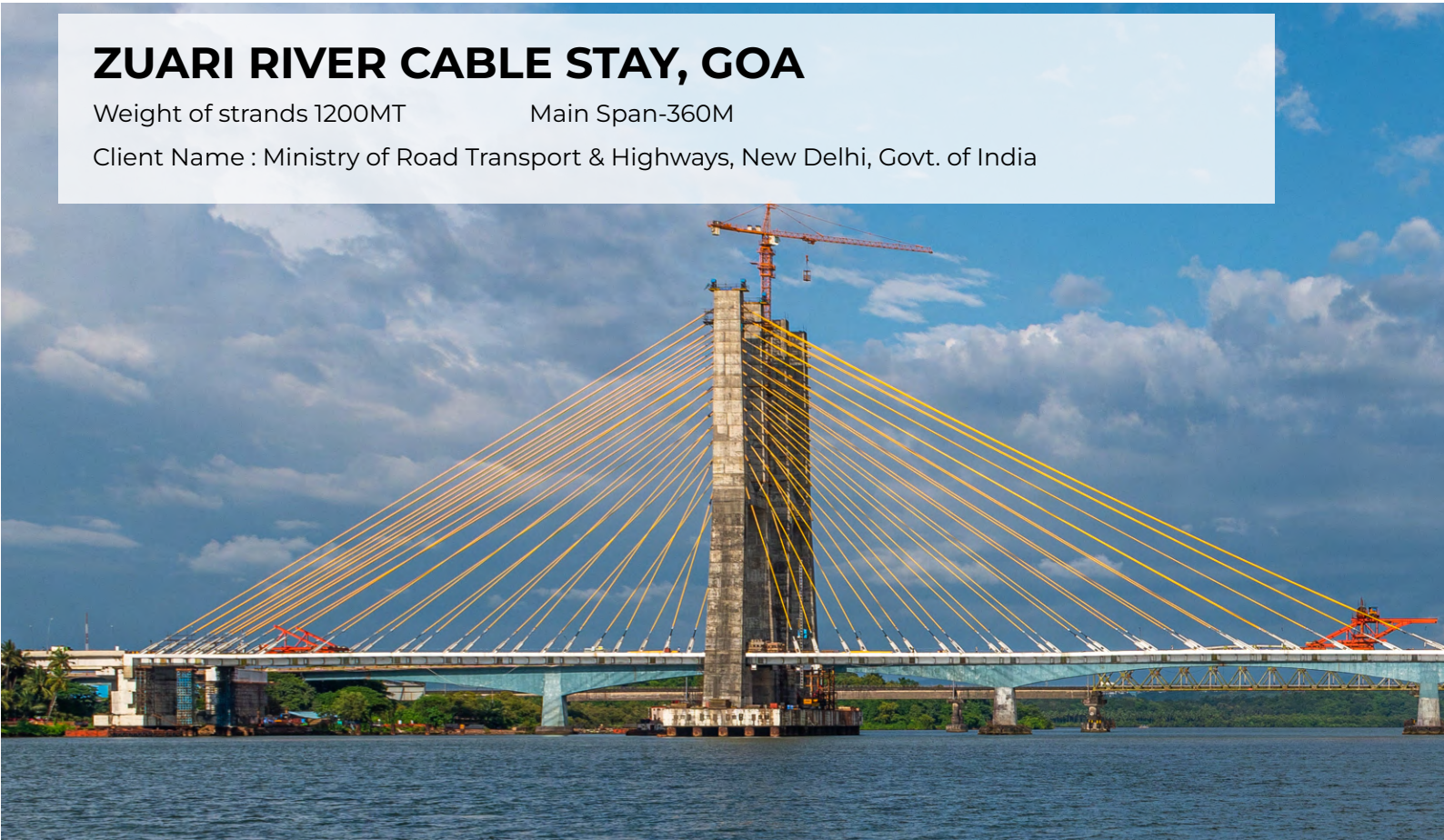
## **KHARGHAR SKY WALK CABLE STAY, MUMBAI (2012)**

Weight of strands 8 Tons      Main Span- 70M+51M  
Client Name : City Industrial Development Corp (CIDCO)  
Contractor : J Kumar Infra Projects Ltd.  
Design Consultant : Spectrum Techno Consultants Pvt. Ltd.



## **ZUARI RIVER CABLE STAY, GOA**

Weight of strands 1200MT      Main Span-360M  
Client Name : Ministry of Road Transport & Highways, New Delhi, Govt. of India







## **BHOPAL ARCH BRIDGE**

Client Name : Bhopal Municipal Corporation

Contractor : Rajkamal Builder Infrastructure Pvt. Ltd.

Design Consultant : Multimedia Consultant Ahmedabad

**Contractor :** Dilip Buildcon Ltd. Mostobudivelnule Zahin No (DBL - MBZ (J.V.))

**Design Consultant :** Ingerop Consultant, FracelInfinite Civil Solutions Pvt. Ltd.

**Multimedia Consultants :** S.N. Bhobe & Associates







## **MAHATMA MANDIR CABLE STAY GANDHINAGAR, GUJRAT (2016)**

Weight of strands 15 Tons

Main Span-150M+90M

Client Name: Government of Gujrat, Road & Building Dept.

Design Consultant Contractor: SPCL & AFCONS

## **MITHAPUR CABLE STAY BRIDGE, PATNA, BIHAR**

Weight of strands 50 Tons

Main Span-37M+74M+37M

Client Name: Bihar Rajya Pul Nirman Nigam Limited, Patna

Design Consultant: Spectrum Techno Consuilants Put Lid

Contractor: S.P. Singla Construction Pvt. Ltd.



## **GIFT CITY STAY BRIDGE, GUJRAT**

MAIN SPAN - 20+41.8+41.8+20 Mtr

Client Name : Gandhinagar Municipal Corporation

Contractor : Ajay engineering Infrastructure Pvt. Ltd.

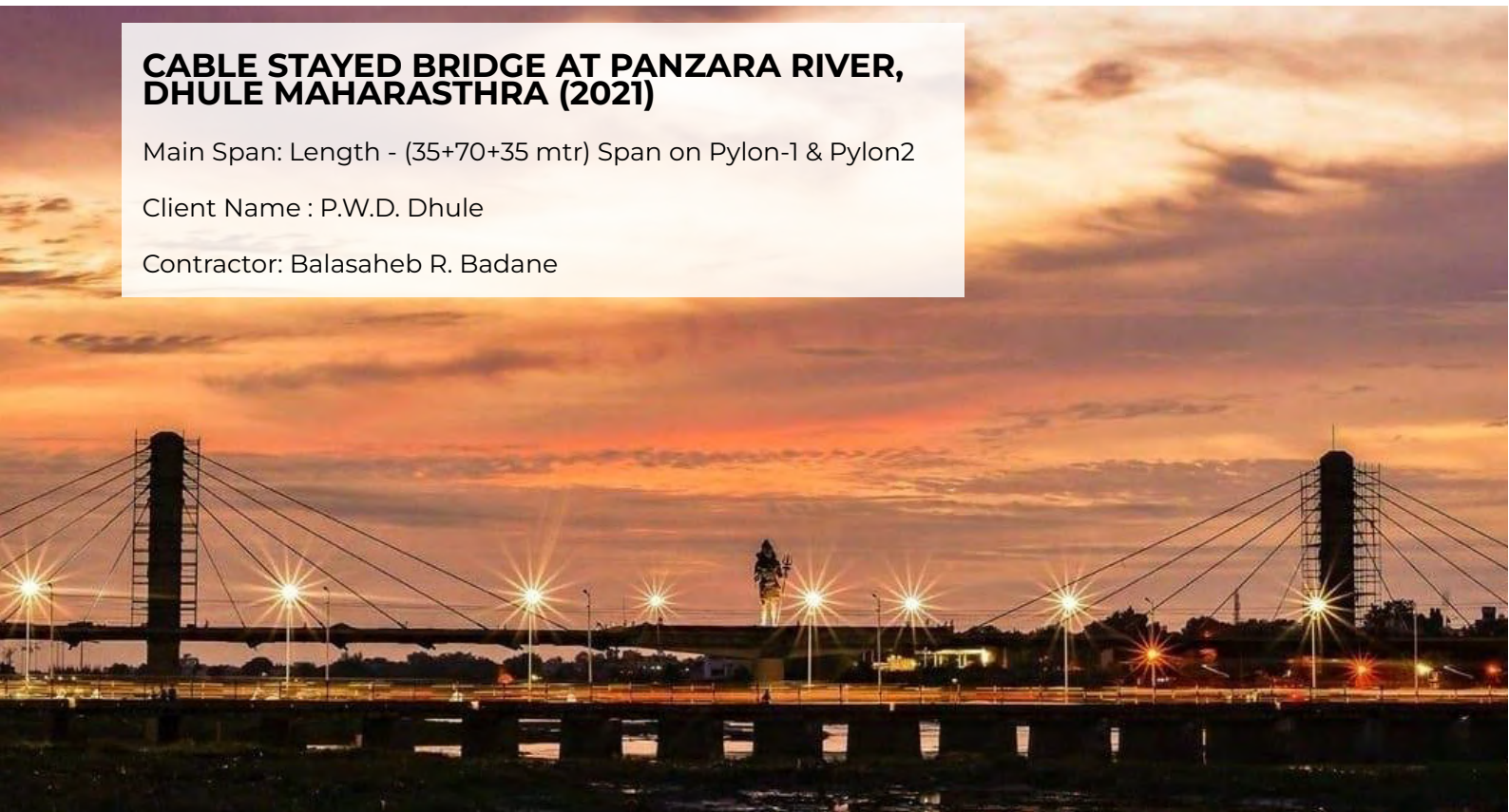


## **CABLE STAYED BRIDGE AT PANZARA RIVER, DHULE MAHARASTHRA (2021)**

Main Span: Length - (35+70+35 mtr) Span on Pylon-1 & Pylon2

Client Name : P.W.D. Dhule

Contractor: Balasaheb R. Badane







## **HANOI CABLE STAYED BRIDGE AT MANDI, HIMACHAL (2022)**

Main Span-95m span cantilever 20m pylon ht.

Client Name: HIMACHAL PRADESH P.W.D. (SERAJ DIVISION)

Design Consultant : Spectrum Techno Consultants Pvt.Ltd

Contractor: AJAY KUMAR SHARMA CONTRACTOR



## **GIFT CITY STAY BRIDGE, GUJRAT**

MAIN SPAN - 20+41.8+41.8+20 Mtr

Client Name : Gandhinagar Municipal Corporation

Contractor : Ajay engineering Infrastructure Pvt. Ltd.





### **NH-17B ROB2 CABLE STAY, GOA**

Main Contractor : Gammon Engineers & Contractors

Client - Public Works Department, Goa

Details- Cable Quantity : 55 MT

OVMAT 250 Cable Stay System

Extra-Dosed Cable Stay



### **NALUCHIRA BRIDGE, KERALA**

MAIN SPAN - 75+150+75

Contractor name : K.V. Joseph & Sons Pvt. Ltd.

Client Name : Kerala Road Fund Board (K.R.F.B.)

Details : Quantity - 20 M.T.



## **STAR BAZAAR CABLE STAY, SURAJ GUJRAT (2014)**

Weight of strands 50 tons

main Span - 92M

Client name : Surat Municipal Corporation

Design Consultant Contractor : S. N. Bhole Associates Pvt. Ltd.

Contractor : Vijay M. Mistry Construction Pvt. Ltd.



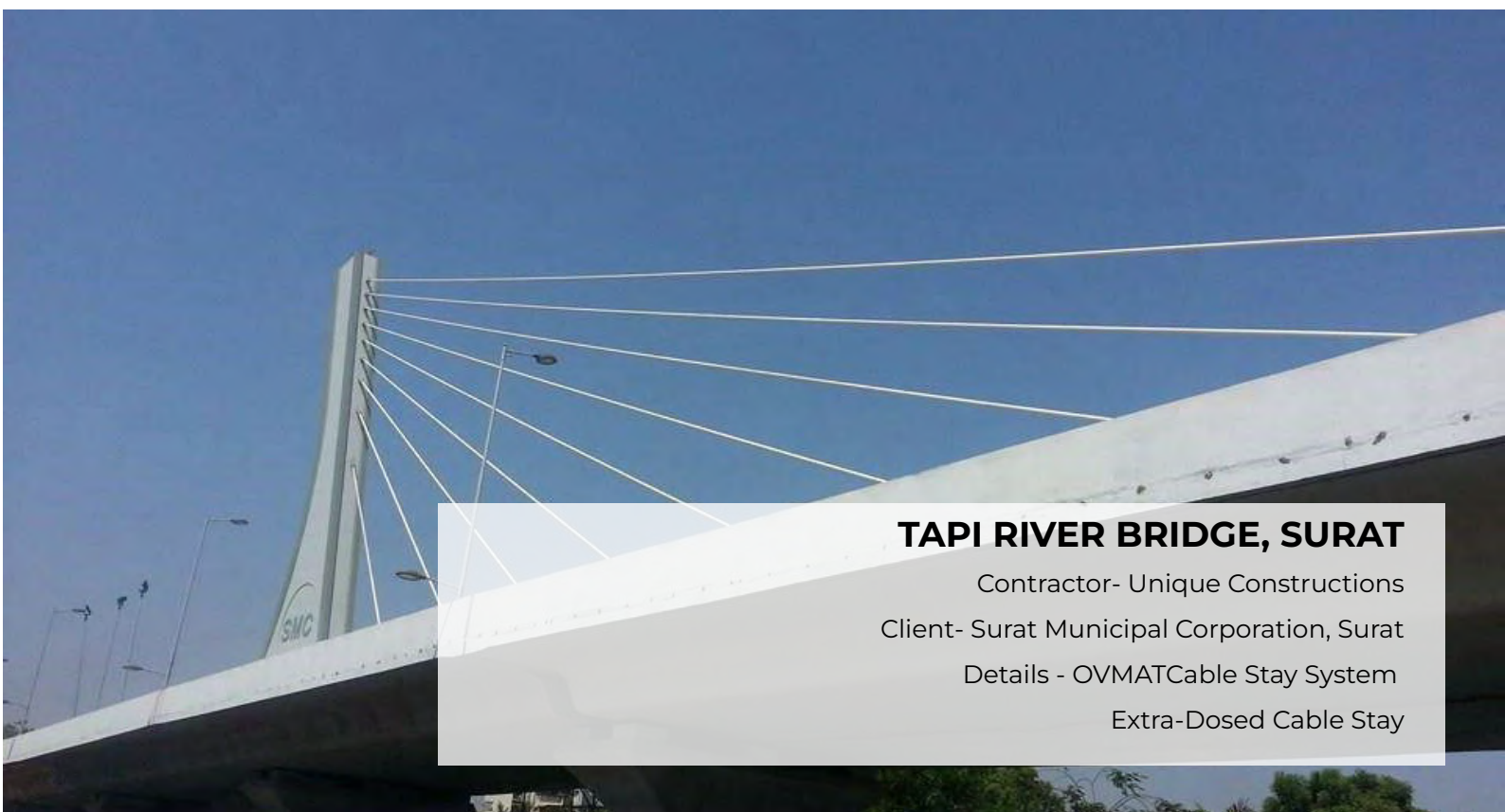
## **TAPI RIVER BRIDGE, SURAT**

Contractor- Unique Constructions

Client- Surat Municipal Corporation, Surat

Details - OVMATCable Stay System

Extra-Dosed Cable Stay







**SCON**  
INFRA PRESTRESS LLP

### Head Office :

111 - 113, R Plazzia, Swastik Regalia Tower, Kavesar,  
Waghbil Road, Off Ghodbunder Road,  
Thane (W) - 400607.

+91 - 9503000278 | 9324516701  
9619330511 | 022-49708782

info@sconinfra.com

www.sconinfra.com

### Factory Office :

Plot No. 76, Babosa Industrial Park, Sarwali village,  
Nashik highway, Bhiwandi - 421311

factory@sconinfra.com

