TRIDENT
SERVICES

We Provide Post Tension Shop Drawing Services

Quality with in time is our Priority

TRIDENT
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CONTENT

INTRODUCTION

Trident Services established in 2021 including one year for Research and development of our working frame strong enough to provide our services in better way.

Trident services having an expert skills and excellency in presentation skills of shop detailDrawings.

Our office is located at D-153 Sahas Park Kamlanagr Ajwa Road Vadodara – 390019, Gujarat.

We have sufficient number of team members including detailing team, checkers, project managers, marketing team etc.

Our aim is to build trust worthy working environment as well as to provide sufficient flexible services to our respective clients.

We believe our services will help reducing time aspect for the important and complicated Post Tension work with ‘’Quality in Detailing and with Consistency’’

”Quality within time is our priority, supplying shop drawing on time and within budget compare to market rates. Shop drawing in matric unit is our key skill.”

Once you select Trident Services, we give surety that any company will trust our services definitely and will have better pleasing pleasureful experience in shop Drawing Detailing-Field.

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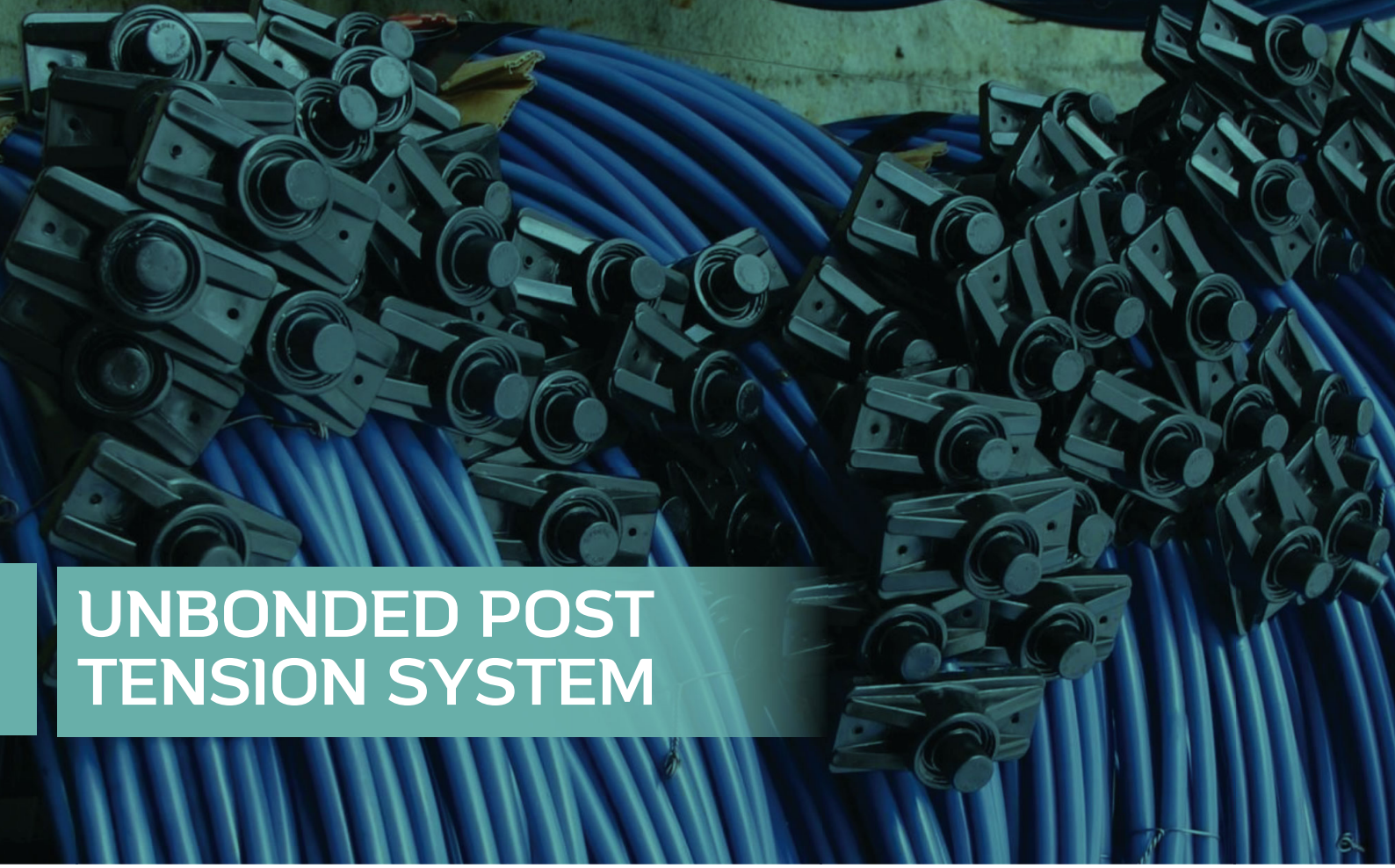
WORK FORCE


CEO
Project Manger
Marketing Manger
Project Manger
Invigilator
Invigilator
Invigilator
Invigilator
Draughtsman
Draughtsman
Draughtsman
Draughtsman
Draughtsman
Draughtsman



UNBONDED POST TENSION SYSTEM

What is post tensioning ?

Post-tensioning is a method of prestressing in which the tendons are tensioned after the concrete has hardened and the prestressing force is primarily transferred to the concrete through the end anchorages.

Advantages of Post tensioning...

The function of post-tensioning is to place the concrete structure under compression in those regions where load causes tensile stress. Post□tensioning applies a compressive stress on the material, which offsets the tensile stress the concrete might face under loading.

There are mainly two types of post tensioning.

I. Bonded PT System

II. Unbonded PT Systemder

Short Description About Unbonded PT System

Unbonded post tensioning is a way to reinforce concrete with high-strength steel strands known as tendons or cables. An unbonded tendon is one in which the pre-stressing steel is bonded to the concrete at the Anchorage. The most common unbonded PT System are mono-strand tendons, which are used in slab and beams for buildings, Parking structures, and slab-on-grade.

A mono-strand tendon consists of a 7-wire strand, coated with a corrosion-inhibiting grease and encased in extruded plastic protective sheathing. The anchorage consists of an iron casting and a Conical 2- piece of wedge that grips the strand.

Tendons are used to provide compressive strength and concrete decks. This is achieved by laying out a network of tendons and then pouring the concrete over them. When the concrete hardens and meets strength requirements, the cables are pulled by a hydraulic jack to hold the anchor plates in p

COMPONENTS OF P-T SYSTEM

Sheathing (Ducts) :

Thin sheet metal pipes with claw clopping or welded over-lapped seam supplied in length of 5mt and 6mt respectively are used as a slandered. Ducts are connected to each other by an external screw coupling and sealed with PE tape plas-tic ducts are also available in the market these days. Which are water tight, frictionless and fatigue resistant.

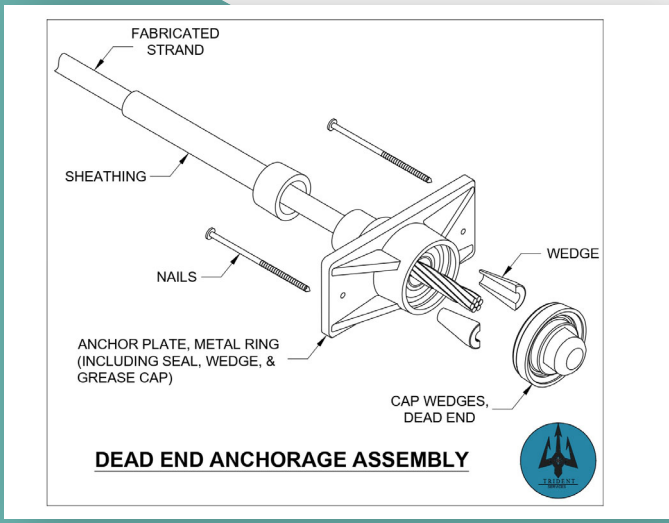
Tendons :

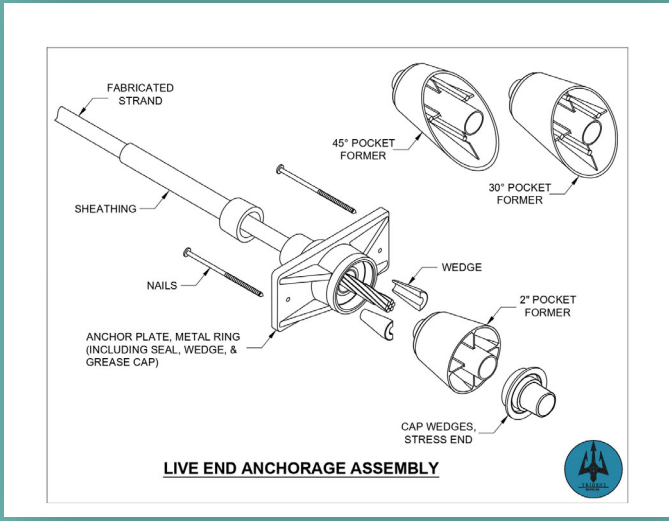
The basic elements of a post tensioning systemis called a tendon. A post tensioning tendon is made up of one or more pieces of prestressing steel, coated with a protective coating and housed inside a duct or sheathing. The prestressing steel is manufactured as per The Recruitment of ASTM A-416And Typical Strand sizes are 1/2” and 5/8” in Diameter

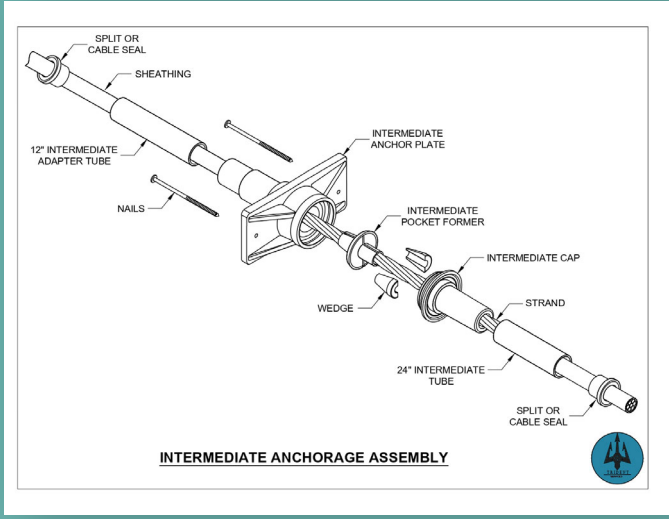
Anchor :

Anchors are used to anchor the tendons into the concrete while terminating or joining two tendons. Main function of anchorage is to transfer the stressing force to the concrete once the stressing process is completed.

”Quality is The Priority of What We Do in Our Business Through the Process”







Pocket Former :

A device that forms a temporary recess in the concrete to allow access for stressing. These pocket formers are generally made from carbon steel And can be reused when required they offer cost effective method to form pockets at the perimeter of concrete slabs where Unistrut is required for a curtain wall system.

Wadges :

Post-tensioning Wadges are normally used in the production of post tension concrete elements these anchor grips remain in the concrete unit apart from the need for good quality, economy also play a role.

GreaseCap :

Grease cap is provided to prevent moisture intrusion into the tendon ends, It is a grease filled plastic sheathing that protects the tendons from corrosion and damage. Grease cap can be applied after pocket former is removed and the cable is stressed , And the cable cutting process is completed.

KEY FEATURES

TIME

- Self-made Program for fast results with higher Accuracy
- Provision of submittal schedule of project in advance

TRUST

***"TRUST"*, The most important term in business.**

- For Gettingmore details about our working abilities, please review our Case studies in details.

QUALITY

- Shop drawings will go through three quality checks
- Initial Stage : Draught'smen present shop drawing at initial level after observing all the minorsection provided byhigher authority
- Intermediate Stage : Invigilator investigate & confirm the shop drawing with relevant codes and standards
- FinalStage : Project Manager Finalizedthe shop drawing with all respect

WHY US ?

Variety of Services

- UnbondedPost-TensioningShopdrawing of any complex structure
- All kind of Rebar calculation - Frictionloss Calculation (FELT)
- BarrierCable ShopDrawing - Shear Rail & Stud ShopDrawing (SRS)
- Estimation of Post-TensionShop Drawing & All the above.

We will provide“ONE LEVEL DETAILED SHOP DRAWING WITHOUT ANY COST” to our Newly Business Partner for Building Trust Level & to get more idea about our working pattern we will also issue

JOB INFORMATION SHEET, which confirming all the standards with respect to Project

We are supplying Shop Drawings at “AFFORDABLE & LOWEST RATE”as compare to Market rate.

Our key skills are also including that we are providing the shop Drawing in Metric Unit also.

CASE STUDIES

POST TENSION GIRDER

There are two different force holders, post tension girders with Longitudinal Section. Profiles are separated and detailed into two and three layers. The most Engrossing part of these profiles is separation of stages of stressing into two and three parts. According to force, Anchor Plates, Tendon grouping and other details are configured. There are two different force holders, post tension girders with Longitudinal Section. Profiles are separated and detailed into two and three layers. The most Engrossing part of these profiles is separation of stages of stressing into two and three parts. According to force, Anchor Plates, Tendon grouping and other details are configured.

ONE-WAY POST TENSION SLAB

There are 3- sheets for tendon layout details, 2- sheets for support details, and 2- sheets for beam details (total 7- sheets.) Tendon layout detail sheets are namely,

ONE-WAY POST TENSION SLAB

Uniform tendons layout, Beam tendon layout, temperature tendon layout. In which you will find placements of tendons and tagging of tendons (i.e. Grouping, color code, numbering, etc) excluding tendon schedule.

Further in tendon support layout sheets are detailed in such a way that chair height & CGStexts are configured in well manner (easy to read). In Beam End View Details with backup bars you will find anchor placement is clear and well positioned. In this part, we have placed great emphasis on profile And End Views details of multiple married beams with section details. There are 3- sheets for tendon layout details, 2- sheets for support details, and 2- sheets for beam details (total 7- sheets.) Tendon layout detail sheets are namely, Uniform tendons layout, Beam tendon layout, temperature tendon layout. In which you will find placements of tendons and tagging of tendons (i.e. Grouping, color code, numbering, etc) excluding tendon schedule.

TWO-WAY POST TENSION SLAB

In this part, there are 2-sheets for tendon layout & 2- sheets for support layout (excluding tendon schedule).Here you will find two way post tension complex structure including post tension beam slab fold, Drop Cap, Ramp etc. are configured in detail.In this our aim is for presenting following Flaring of Beam Tendons into slab, Longitudinal & Cross-sectional Details, Anchor Placements, and Beam Tendon Profile at Slab Fold with End Views.

REBAR CALCULATION OF TWO-WAY POST TENSIONSLAB

In Rebar calculation, we have taken or considered 3-base sheets from Two-way Post tension Slab (previous case study). Details are described below;

Calculations Of backup bars for banded tendons & uniform tendons with summary of Anchorage Hairpin are shown in 1st sheet.

Banded Tendons support bar & uniform tendons support bar computation are shown in 2nd & 3rd Sheet respectively.

In this portion our main aim is to present our Depth of Detailing and Types of Backup bar we have used (L or C shape) Lap length Determination, Chair Take off & Other Details.

For More Details Visit : www.tridentservices.co

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