

## ITD Cementation India Limited

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## **OVERVIEW**

India is recognised as one of the world's major emerging superpowers. More than 50% of its population is in the age group of 25 giving it the natural advantage for its growth story. While the Government is trying its best to provide the much-needed infrastructure, it's common knowledge that it cannot change all at once, given the complexities of the existing community facilities. No wonder how much ever investments go into transportation systems, power generation & other infrastructure projects, they still leave much to be desired. Indian ports too are scheduled for upgradation. With such a large coastline, India's geographical advantage is an accepted norm.

In contrast to the post-independence approach, over the past few years, as part of the economic liberalization process, the Government opened the infrastructure sector to private investment. Worldwide, as global knowledge & funds came into play, results were phenomenal. And the same is happening in India now.

Way back in 1931 when Cementation Piling and Foundation Company Limited, UK, started its operations in India, it started with specialized civil, mining and foundation engineering which continued till the Eighties.Subsequent decades saw it change hands to Trafalgar House of UK, and to Kvaerner of Norway, followed by Skanska of Sweden. As a result, the technology changes brought about in the company were considerable. In 2004, Skanska Cementation India Ltd. was bought over by Italian Thai Development Public Company Limited (ITD), Thailand, which is well conversant with the infrastructure needs of South East Asia. Today ITD Cem is able to leverage this access to knowledge base in delivering key technical solutions that giants in the field can seldom offer.

ITD Cementation India Limited (ITD Cem) has been a silent contributor to the infrastructure growth in the country for over eight decades. ITD Cem has won the confidence & respect of their clients, employees, stakeholders & all those whose lives are bettered in the process. Exploring new and innovative methods of solving present day construction challenges is an integral part of the Company's philosophy. ITD Cem has pioneered the art of integrating engineering and innovation with construction practices to maximize social benefits.

Over the years, ITD Cem diversified into core infrastructure segments developing expertise in design and construction of large infrastructure projects. And with their skilled human resources, expertise and state-of-the-art equipment at work, world-class projects are standing tall. ITD Cem's accreditation with ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 Certifications is a definitive assurance of the ITD Cem commitment.





- 1 Delhi Metro underground work
- 2 Noida Flyover
- 3 Tuticorin port, Tamil Nadu

## **CORPORATE OBJECTIVES**

#### MISSION

To make ITD Cementation India Limited, country's leading construction company in customer choice, quality and safety.

#### ΑΙΜ

ITD Cem aims to have a satisfied client-base, a strong and proactive workforce and to deliver a quality product finished on time and to budget.



#### CORE PRINCIPLES

- Customers come first.
- Employees are ITD Cem's most important assets.
   Working conditions and training must enable them to give their best.
- ITD Cem's quality, health and safety standards are second to none.
- ITD Cem strives to ensure timely commencement and completion of projects.
- Good plants and machinery is ITD Cem's wealth. They are always well maintained and in good working order.
- Well developed MIS systems and state-of-the art technology is ITD Cem's priority.
- Environmental awareness and care for the world in which we live, is a part of ITD Cem's business philosophy.
- ITD Cem's competitive edge is maintained through specialist skills and commitment to both Training and R&D.



- 1 Delhi Metro
- 2 Kolkata Airport: Departure Junction
- 3 Thrust bed construction, Bhatinda

## **BOARD OF DIRECTORS**



#### Mr. Premchai Karnasuta Chairman

Mr. Premchai Karnasuta is a Director and Chairman of the Company since 2004 and he also serves as the President and Director of Italian-Thai Development Public Company Limited, Thailand, the promoter of the Company. He has more than three decades of experience in infrastructure construction industry and has been the guiding force for the Company's progress over the years.

He is a graduate in B.Sc. in Mining Engineering and also holds an MBA degree.



#### Mr. Pathai Chakornbundit Vice Chairman

Mr. Pathai Chakornbundit is a Director of the Company since 2004. He is also the Vice Chairman of the Company. He holds huge experience of more than four decades in the construction industry. He is also a Director and Senior Executive Vice President of Italian-Thai Development Public Company Limited, Thailand, the promoter of the Company.

He is a B.Eng. graduate.



#### Mr. Adun Saraban Managing Director

He has been a Director of the company since 2009 and the Managing Director of the company since 2010. He holds a rich experience of more than three decades in Civil Engineering and Construction Project Management and also brings in vast exposure to global best modern construction methodologies.

## Independent Director



## Mr. Darius Erach Udwadia

He has been a Director of the company since 1983. He is a Solicitor and Advocate of the Bombay High Court and a Solicitor of the Supreme Court of England. He is founder partner of M/s. Udwadia & Udeshi, Solicitors and Advocates, Mumbai since July 1997. Udwadia & Udeshi, which was reconstituted in 2012 under the firm name of Udwadia Udeshi & Argus Partners where he continues to be a Senior Partner. Mr. Udwadia has spent over 50 years in active law practice and has significant experience and expertise in areas like Corporate Law, joint ventures, merger acquisitions and takeovers, corporate restructuring, foreign collaboration, project and infrastructure finance, intellectual property, telecommunications, international loan and finance-related transactions and instruments, mutual funds, real estate and conveyancing.

## **BOARD OF DIRECTORS**



#### Mr. Piyachai Karnasuta Additional Director

Mr. Piyachai Karnasuta is an Additional Director of the Company appointed in August 2015. He has experience and knowledge in Civil Engineering and Construction of over 13 years. He is an Executive Vice President of Italian-Thai Development Public Company Limited, Thailand, and the promoter of the Company.

He holds a Bachelor's Degree in Civil Engineering from Waseda University, Japan. Mr. Per Ebbe Hofvander Independent Director

Mr. PerHofvander is a Director of the Company since 2005. He has more than four decades of experience in civil engineering and has huge exposure in many overseas projects and international businesses. In his earlier stint he has held many senior positions, the last being as the President of Skanska International AB.

He holds a degree in M.Sc. Civil Engineering.

#### Mr. Deba Prasad Roy Independent Director

Mr. D.P. Roy is a Director of the Company since 2007. He was the Ex- Chairman of SBI Capital Markets Limited and has rich and wide experience in Corporate, International and Investment Banking Sectors of over 40 years. He held various senior executive and managerial posts in State Bank of India like Deputy Managing **Director and Group Executive** (International Banking), President and CEO New York and Country Manager USA, Deputy Managing Director and Group Executive (Associates and Subsidiaries), Manager in SBI London, etc. He is also a certified Associate of the Indian Institute of Bankers and Fellow of India Council of Arbitration and he is actively engaged in Arbitration in NSE, BSE, MCX-SX, NCDEX, MCX and ICA and is also on the advisory committee of Central Bank of India. He is holding the position of Independent Director in other companies.

He holds a Degree in M.Sc. Chemistry from Jadavpur University Calcutta.

#### Mrs. Ramola Mahajani Independent Director

Company since 2014. She has Employee Selection, Training, well as external customers.

Associate Fellow of the British Psychological Society.



Mrs. Ramola Mahajani is a Director of the considerable knowledge and experience in Human Resources Development and Management of over 40 years. Her areas of expertise include application of the principles of Occupational Psychology in Management Development and HR Planning, excellent project management and leadership skills, ability to work in team environments and extensive experience interacting with internal as

She holds M.Sc. (UK), and M.A. degrees in Advanced Applied Psychology. She is a Chartered Occupational Psychologist and

## **AREAS OF OPERATION**

ITD Cem, together with the expertise of the parent Company, Italian-Thai Development Public Company Limited Thailand, has successfully maintained its position as a market leader in the field of Maritime Structures and Foundations. ITD Cem is a preferred contractor for Highways, Bridges, Flyovers, Industrial Structures and has established a strong presence in Tunnels, Dams and other Infrastructure projects. With its eight-decade reputation of constructing some of the most prestigious & vital projects, ITD Cem has an array of Infrastructure projects to showcase. They include large commercial and institutional buildings, elevated highways, viaducts, railways, elevated and underground metro rail, airports, water and waste water treatment plants, pumping stations, water conveying piping and utilities.

ITD Cem has a work force of dedicated employees, comprising qualified engineers, skilled operators and workmen; a fleet of modern construction plant and equipment and a strategic network of offices in Mumbai, Kolkata, Delhi and Chennai. Furthermore, ITD Cem maintains a strong relationship with various consulting, construction and manufacturing companies whose expertise supplements and augments its capabilities.





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Maritime

Structures

Airports



Hydroelectric Power, Dams & Irrigation

Microtunelling

& Tube Heading

Highways,

Bridges

& Flyovers



Foundation & Specialist Engineering





1 Piling work for Indian Oil, Paradip 2 Foundation work for Opal, Dahej, Gujarat







Mass Rapid Transit Systems



Industrial Structures & Building



TBM & NATM Tunnels



Water & Waste Water

## The company has many firsts to its credit

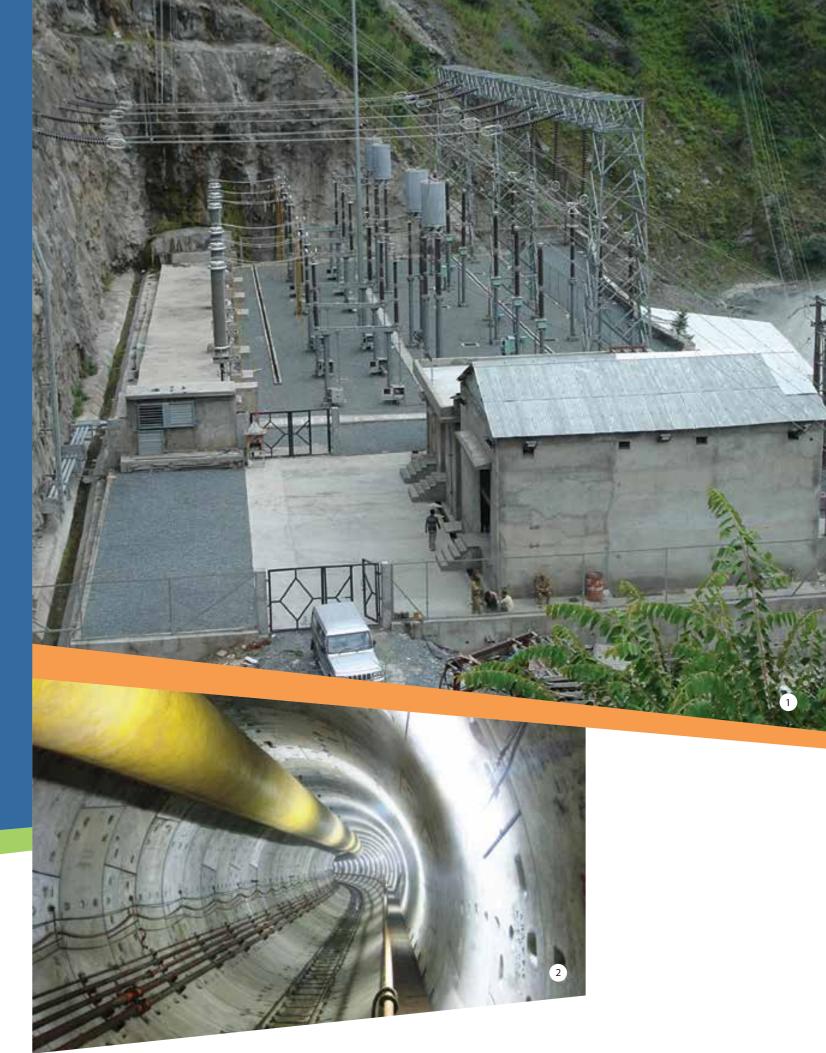
For the first time in the history of Delhi Metro we have constructed an elevated track segment over another operational metro line, at a record height of 21 meters above the ground.

37.5 m of tunneling in a day with installation of 25 rings using TBM

1.7 Km long tunnel completion using TBM in 152 days Installation of 211 driven cast in-situ piles in a single day at a site Installation of more than 40 driven cast in-situ piles in a single day by a rig Deep top hammer drilling in drainage gallery under 2m headroom 12.5 Km construction of diaphragm wall by a single agency First Shiplift Facility for Indian Navy Ground Improvement by Vibro Compaction Technique Marine Piling from both ends of Gantry **Contiguous Precast Driven Pile** First Private sector Container Terminal Marine band drain from Spuded pontoon Marine piling from Jack up platform Quick grout for sealing of heavy leaks Heavy deadman anchors, using steel tie rod Jacking of Rectangular RCC boxes Tube Heading Technique under Railway tracks Jacked down steel piles Pipe Jacking under Rail/Road embankments Sand wicks for accelerated soil consolidation Control of underground subsidence Marine investigation from Jack-up-rigs Small dia bore piling Soil densification by Vibroflot method

- DMRC, Delhi 2009 An Asian Record - DMRC, Delhi 2009 - Mundra, Kutch 2008 - Mundra, Kutch 2008 - Sripada Yallampalli (A.P.) 2006 - Sabarmati, Ahmedabad 2005 - Sea Bird, Karwar 2005 - Sea Bird, Karwar 2003 - JNPT, Mumbai 2000 - Haldia Port, WB 1999 - JNPT, Mumbai 1999 - Kakinada Port 1993 - Tuticorin 1991 - Kolkata 1985 - Paradip 1984 - Kolkata 1981 - Kolkata 1977 - Kolkata 1976 - Howrah 1971 - Kolkata 1968 - Kulti 1968 - Chennai 1967 - Bokaro Steel 1966 - Chennai 1961

- DMRC, Delhi 2014

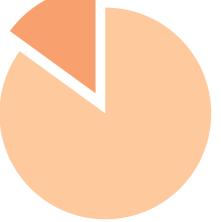


1 Power evacuation system

2 Underground Metro, Kolkata

## **ICONIC PROJECTS**





15% White collar workers

Blue collar workers







Sripadsagar Dam in Andhra Pradesh

2010



Haj Tower at Kolkata 2015



Gateway Terminal & Yard at Mumbai 2015

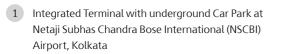


Water Treatment Plant at Agartala

2015

## AIRPORTS

In the past, air travel was not a popular mode of transport in India for various reasons, the major reason being, the lack of aviation infrastructure. But privatization of airports in 2006 considerably changed the scenario of the Indian Aviation Industry. Also, rapid commercialization has led to the need for more airports & that too in tier 2 & tier 3 cities of India. The potential for airport infrastructure is huge. Hence ITD Cem has decided to expand their horizons into this field.



2 Aerobridge in operation at Netaji Subhas Chandra Bose International (NSCBI) Airport, Kolkata



A I R P O R T S

ITD Cem undertook the modernization & construction of Integrated Passenger Terminal at Netaji Subhash Chandra Bose International (NSCBI) Airport, Kolkata for Airports Authority of India. This involved RCC multi-storied frame structure and steel trusses for the steel roof structure and aerobridge boarding facilities. Additionally, all architectural finishing, ceiling/roofing works and building services like HVAC, fire fighting, plumbing, lifts, elevated road in front of passenger terminal building, car parking basement, service yard with DG installation, electrical substation and AC plant room, storm water drainage system, internal aluminum glazing work, construction of relocated substation, departure at junction, arrival lounge and departure inside was also covered. The Airport was inaugurated by His Excellency, The President of India Pranab Mukherjee in Jan 2013. NSCBI has been awarded The Vishwakarma Award for The Best Construction Project in Airport Category for the year 2014 by Construction Industry Development Council (CIDC). NSCBI has also been awarded 2nd Best Engineering Marvel and 2nd Most Impactful Engineering Marvel by Engineering

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Excellence Awards 2013.

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1 Departure - Inside 2 Departure at Junction



India's external trade is handled by thirteen major ports and sixty smaller ports. ITD Cem, with its specialist skills in Maritime Structures has become a leader in the field and has worked in all the small & big ports of the country. ITD Cem's portfolio includes jetties for handling liquid and solid cargo, berths, wharves and quays for handling

- general cargo / containers in Chennai, Dahej, Ennore, Gangavaram, Haldia, JNPT, Kakinada, Kandla, Karwar, Mormugoa, Mumbai, Mundra, Nhava Sheva, Pipavav, Paradip, Tuticorin & Visakhapatnam.
- ITD Cem has the experience, capability and equipment to provide quality workmanship on a variety of Maritime Structures including Engineering, Procurement and Construction Services for Public, Private and Defence Organisations.



- 1 Coal Berth and Approach at Ennore Port for Chettinad
- 2 Impounded Wet Basin at Mumbai
- 3 Light Tower at Karanja creek, Mumbai
- 4 Dry Dock and shipway at Kolkata



#### Typical Maritime Structures ITD Cem has undertaken are:

12.3

- Construction of Jetties, Dolphins, Service platforms
- Construction of Quay, Berths on concrete and steel piles, solid gravity type wharf structures
- Construction of Shiplift, Dry dock, Wet basin and Inclined Berth
- Breakwater and piled approach trestles
- Steel Pile (vertical and raker), bored cast in situ pile
- Undersea ground improvement
- Coastal erosion protection and rock bund
- Dredging and land reclamation

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1 SICAL Iron Ore Terminal at Ennore Port

4 Gangavaram Port Expansion at Vizag, Andhra Pradesh



2 Container Terminal for MPSEZ at South Port, Mundra 3 Gujarat Chemical & Port Terminal, Dahej, Gujarat.





1 Shiplift Facility in south India

4 Adani, Tuna Jetty, Gujarat

3

2 Construction of Liquid Terminal at Ennore Port, Chennai Construction of North Cargo Berth II at Tuticorin Port

First Indian Construction Company to be accredited with Quality Management System in Ports & Harbour domain







Maritime structures built by us are spread over India's entire 7,500 kms of coast line and exist in all major ports and majority of the minor ports.



- 1 Terminal-12 (T-12) at Mundra Port
- 2 Integrated Cargo Terminal Facility at Jaigad Port, Maharashtra
- 3 Second Container Terminal at Chennai
- 4 Container Berth & Bulk Liquid Jetty at Pipavav Port, Gujarat



- 1 Coal Berth No. 3 at Karaikal Port
- 2 Second Coal Jetty with Coal Bunkers at Tuticorin Port

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- 3 Third Oil Jetty at Kandla Port
- 4 Container Terminal for P&O Ports at Jawaharlal Nehru Port Trust, Mumbai





Preferred Marine Contractors for Port Trust,
Government, Private Developers
More than 30 satisfied customers
55 Flagship Maritime Works



Delhi Metro

## MASS RAPID TRANSIT SYSTEM

Mass Rapid Transit Systems are ideal for fast growing cities & metros where traffic congestion is a challenge. Also, working staff staying on the periphery of the city / metro is able to commute easily. Different types of MRTS include Busways, Light Rail Transport, Metros & Suburban Rail.

ITD Cem has been associated with Delhi MRTS right from the very beginning of Phase 1 when the work commenced in 1998 and has been continuously contributing to the growth of the MRTS in Delhi & Nation Capital Region (NCR). Meeting time bound targets set by the Delhi Metro Rail Corporation (DMRC), the first project awarded to ITD Cem by DMRC was the foundation package comprising of large diameter piles for the elevated Kashmere Gate Station and diaphragm walling for the underground Line 2. It was for the first time in India that ITD Cem with support from Cementation, UK introduced peel off stop end pipes for placing water bars between diaphragm wall panel joints. Also desanders were used for the first time for recycling Bentonite and thus keeping the environment clean. For the first time in Delhi Metro history ITD Cem has constructed an Elevated track segment over another operational line, at a record height of 21 meters above the ground.







- 1 Construction of Elevated Road & Metro Viaduct for Stage I of Jaipur Metro and Ajmer Road BRTS Corridor.
- 2 Gurgaon extension corridor of Delhi MRTS Project
- 3 Jaipur Metro Tunnel & Station

### MASS RAPID TRANSIT SYSTEMS





- 1 Bangalore Metro track
- 2 Mukundpur Yamuna Vihar corridor
- 3 Vivekanad Puri Metro Station, Delhi



Link tunnel to JLN Stadium New Delhi completed two months ahead of schedule to meet Commonwealth Games deadlines 2010

## TBM & NATM TUNNELS

Tunnel Boring Machines (TBM) are used in various situations. Open Face TBM - is a mechanised tunneling method in which slurry is used to balance the pressure at the face of the TBM. Slurry Pressure Balance (SPB) method TBM - it maintains the face pressure during the excavation phase by filling the working chamber with slurry. Earth Pressure Balance (EPB) method TBM – here, excavated earth is admitted into the TBM via a screw conveyor arrangement which balances the pressure at the face of the TBM. Hard Rock TBM – here, the Tunnelling machine is armed with a shield and cutter head suitable for hard rock.

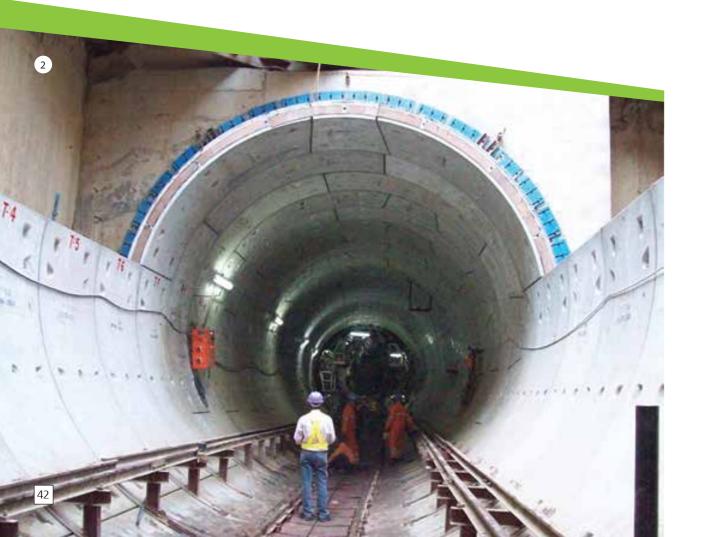
NATM is also known as the New Austrian Tunnelling Method was developed between 1957 and 1965 in Austria. It is also known as Sprayed Concrete Lining (SCL) or Sequential Excavation Method (SEM). NATM involves lining the walls of an excavated tunnel with wire mesh, then spraying them with quick-drying concrete. A second concrete lining can be installed later. The main idea is to use the geological stress of the surrounding soil mass to stabilize the tunnel itself. NATM is ideal for a country like India which is geographically diverse since it is suitable for shafts, junctions, non-circular tunnels, tunnels with variable shapes & also eliminates the need of the expensive TBM for excavation. The disadvantages being, in softer ground it can subside when excavated & it is not suitable below water table in highly permeable soils.



#### NATM TUNNELS TBM &



- 1 Udhampur Railway Tunnels T2/T3
- 2 Delhi Metro Jangpura to Jawaharlal Nehru Stadium
- 3 Kolkata Metro underground
- 4 Railway Tunnels for Jammu Shrinagar rail link



An Asian Record of 37.5 m of tunneling in a day by Tunnel Boring Machine - Delhi Metro 2009







## HYDROELECTRIC POWER, DAMS & IRRIGATION

India, primarily an agrarian economy, is rich in natural resources. Obviously the need & potential to produce electric power is tremendous. And irrigation is an integral part of it.

ITD Cem has contributed substantially and creditably in providing expertise in construction of earth fill, rock fill and concrete dams and tunnels, thus fulfilling India's ever-increasing need for hydroelectric power and irrigation systems. The projects executed in the past and those being undertaken by ITD Cem are complex in nature -they demand large-scale land acquisitions & resettlement of project-affected people and call for working in difficult and remote areas. ITD Cem takes immense care during execution of such projects with safety, security & keeping public interests in mind.

ITD Cem has in their portfolio a number of large, medium and small hydroelectric & irrigation projects like Dams, Barrages, Spillways, Weirs, Canals, Tunnels &



Penstocks for Water Conduction, Main Power House Shafts, Head Race Tunnel, Tail Race Tunnel, Cable Shafts, Pressure Shafts, Adit etc. and Semi Underground & Surface Power House superstructure for Hydro-electric projects. Hydro-mechanical systems including radial gates, tunnel by open face, drill & blast method with conventional / NATM technique. Looking at the massive potential of this infrastructure wing, ITD Cem has planned to aggressively participate in this sector.

### HYDROELECTRIC POWER, DAMS & IRRIGATION



Tunelling through water charged & weakly formed rock strata in the invincible terrain of Jammu & Kashmir





1 Sripada Yellampally Concrete Dam Project across River Godavari

2 Thotapalli Earth Dam and Canal Project

3 Umtru Dam, Meghalaya

## HIGHWAYS, BRIDGES & FLYOVERS

Today as the world is progressing fast, movement of goods & people demands an effective & intricate network of quality roads, highways etc. ITD Cem has implemented five road projects under the Government's Golden Quadrilateral project connecting four major metro cities with four lane highways undertaken by National Highways Authority of India. ITD Cem has constructed around 365 km of road network in the states of Maharashtra, Andhra Pradesh, Karnataka, Punjab, Rajasthan, Madhya Pradesh and J&K. Apart from the Golden Quadrilateral project, the Company has also undertaken other four-laning road projects both in rigid and flexible pavements under National Highway Development Scheme. Out of these, one project is in Madhya Pradesh and the other four in the states of J&K, Punjab and Rajasthan. ITD Cem has also completed major river bridges and flyovers in cities having high traffic density without affecting the traffic flow.

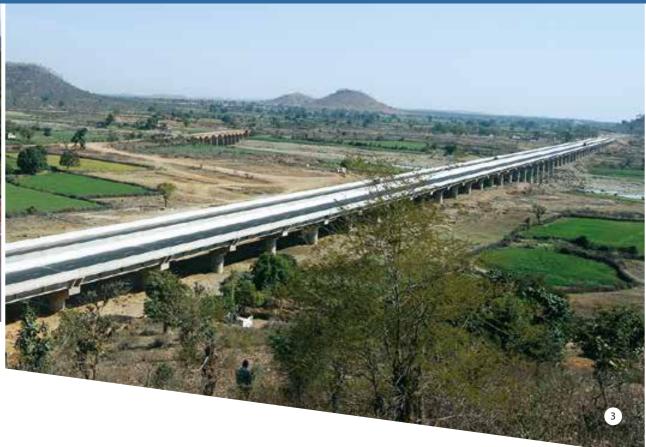


## HIGHWAYS, BRIDGES & FLYOVERS



One of the Major Contributors to National Highway Development Program.

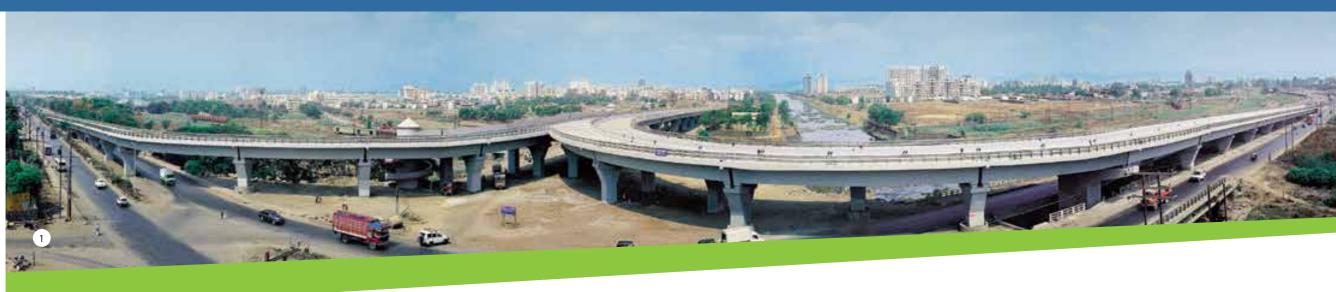




- 1 Pathankot-Jammu Section
- 2 Pune Satara Road
- 3 Jhansi-Shivpuri Section Road Sind bridge
- 4 Vaniyambadi Pallikonda Ranipet Road



## HIGHWAYS, BRIDGES & FLYOVERS



- 1 ROB Over Thane Turbhe Nerul Railway Line, Kopar Khairane, Navi Mumbai
- 2 Ambala-Chandigarh Project
- 3 River bridge in West Bengal, West Bengal 1 road package
- 4 Flyover at Ludhiana









## HIGHWAYS, BRIDGES & FLYOVERS





- 1 Flyover and Bridges for NHAI Road on NH-31 in Bihar
- 2 Major Bridges of National Highway East-West Corridor (WB 1)
- 3 Construction of Railway Bridges at Tuna, Kandla
- 4 Flyover at Ghaziabad
- 5 Flyover at Dadar TT, Mumbai
- 6 Road Bridge over River Mandovi, Goa





## INDUSTRIAL STRUCTURES AND BUILDINGS

Industrial structures are those that fulfill the needs of an industry like structures to house machinery, raw materials, communication lines etc.

ITD Cem has to its credit foundation & civil works for power plants like main plant buildings, foundation for Boiler Turbo Generator (BTG), Power house building, Mill bunker building, plant buildings like ESP Control, Compressor building, Switchyard, Water pump houses, Fly ash silo etc. Also, civil works for ash handling system and coal handling systems involving conveyors, stacker reclaimers, reclaim hoppers, wagon tipplers etc., water treatment and water intake systems. Additionally, heavy equipment foundations like rolling mills, steel melting shop etc. and pipe racks for steel plants, civil works in fertilizer plant for urea & ammonia, silo foundation for cement plants, oil & gas tank foundations, polymer plant foundations in refineries & petrochemicals.

> As technology & science progresses, the needs for newer structures like Shopping malls, Metro & Rail stations, IT parks, R & D labs, Hospitals, Hotels etc, have to be met with. ITD Cem, with their experience, have a distinct advantage to take up these new world challenges. ITD Cem designs, supplies, installs, constructs Buildings as a fully functional and operative unit by employing Civil, Architectural, Structural, HVAC, Electrical, Plumbing, Fire Fighting & all necessary and skilled resources.

## INDUSTRIAL STRUCTURES & BUILDINGS





LNG Tank at Mundra
 New Secretariat Complex at Tashiling, Gangtok
 Silo at Tiroda Thermal Power Project
 Haj Tower at New Town, Kolkata

Building Division wins accolades - a national Award for Best Construction Project (CIDC) 2014



### INDUSTRIAL STRUCTURES & BUILDINGS



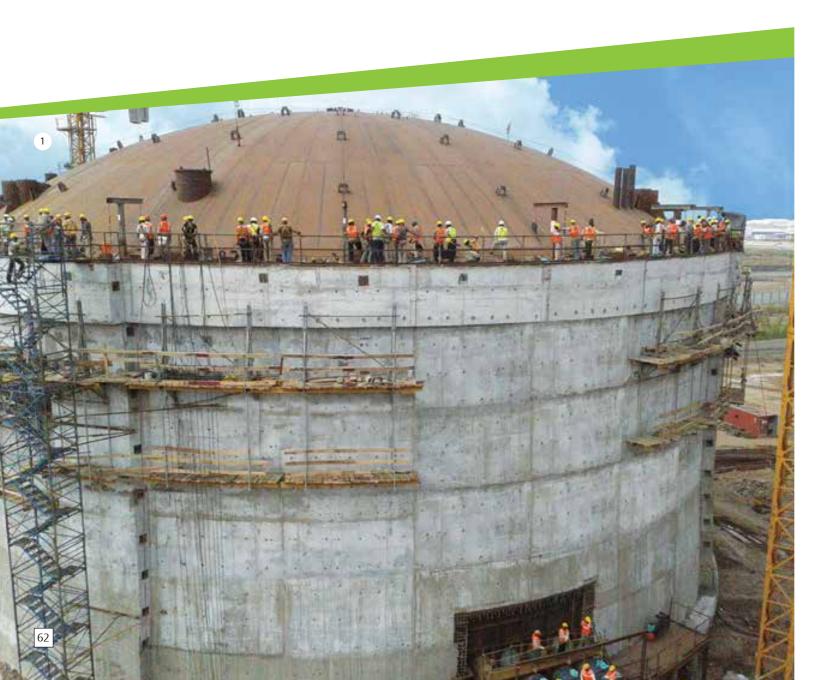
- 1 Bored Cast-in-situ Piling & Pile Cap Works for 2 X 600 MW Thermal Power Project at Hisar, Haryana
- 2 210 MW Feroze Gandhi Unchahar Thermal Power Plant, U.P.
- 3 General Civil works including Turbo Generator Foundations for Reliance Sasan 6 X 660 MW Power plant.
- 4 Piling & Pile Cap & General Civil Works 1 Work for 2 x 300 MW Rosa Thermal Power Project Ph-2
- 5 2 x 210 MW Bakreshwar Thermal Power Project in West Bengal
- 6 Shed at Wadi





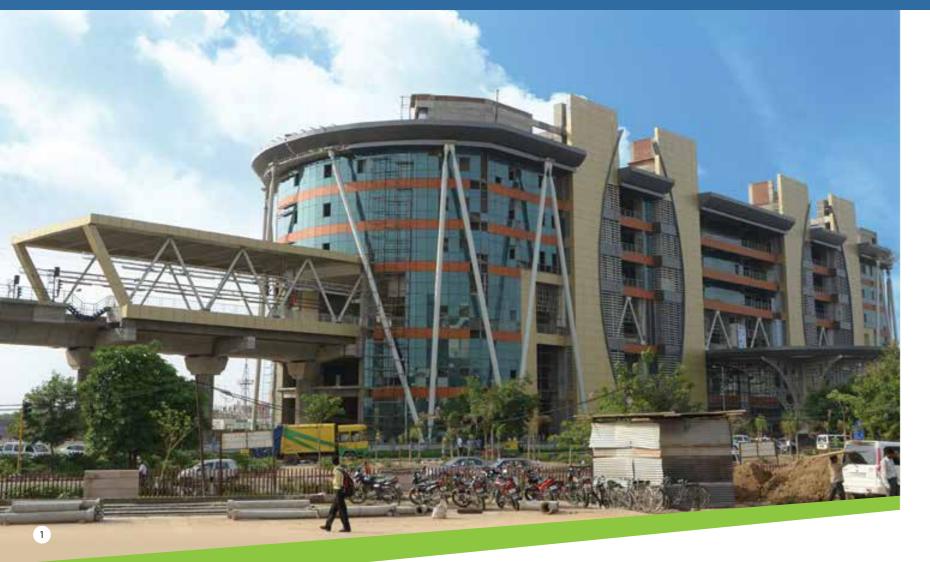
- 1 Cryogenic Ethylene Storage System for OPAL Dahej Project
- 2 Civil Works for Bakreshwar Thermal Power Plant
- 3 OPAL Dahej Petrochemical Project for SAMSUNG
- 4 Ammonia Expansion Project at Phulpur, U.P.







## INDUSTRIAL STRUCTURES & BUILDINGS





- 1 Sushant Lok Station Building with Commercial Complex at New Delhi 2 Conventional Buildings Works for GIR Project of BASF India Ltd: Boiler facility
- 4 Jawaharlal Nehru Station at Delhi for Delhi Metro
- 5 Conventional Buildings Works for GIR Project of BASF India Ltd: Admin building



- 3 Conventional Buildings Works for GIR Project of BASF India Ltd: Central control building
- 6 A modern press building for Bennett Coleman & Company at Sahibabad near Delhi

## WATER & WASTE WATER

Rapid urbanization & industrialization has led to the need of waste water treatment – a process in which water that is no longer usable, to be returned to water cycle after treatment. The need to transport & supply water from lakes & rivers to human settlements.

through micro-tunneling / pipe jacking / trenchless technology with laser guided, earth pressure balanced micro tunnel boring machines (m TBM) using state-of-the-art aids like CCTV and by launching the m TBM in the driving shaft and retrieving from the receiving shaft constructed in the bare minimum space available in the highly congested urbanized area at times without disturbing the normal life on the surface.





Laying of Tallah Palta Dedicated Water Transmission Main for KMC





1 Waste water treatment plant at GIR, Dahej

Agartala Water Treatment Plant Project

- 2 AMC Zonal site
- 3 GWTP Aralia II site
- 4 Dindayal site
- 5 Sadhutilla site



Major contribution through Treatment  ${\mathcal S}$ Trenchless Technology in modern cities of Bangkok, Ho Chi Minh & Kolkata.





## MICROTUNELLING & TUBE HEADING

As towns and cities grow, they need matching infrastructure facilities. However, creating new or additional infrastructure facilities is not easy as they can conflict with the existing facilities such as Rail-lines, roads, sewer lines, water lines, electric cables etc. ITD Cem has developed technologies of Pipe Jacking and Box Jacking to eliminate the problems that would otherwise occur when new roads, rail lines, etc. are being constructed in busy cities and towns. Use of this unique technology ensures that the normal flow of traffic continues even as new construction activities are in progress. This gives flexibility to town planners and developers to keep on upgrading and improving the infrastructure facilities of growing cities and towns. A large number of such projects have been executed by ITD Cem.

## MICROTUNELLING & TUBE HEADING



- 1 Laying of Water Trunk Main from Garden Reach Water Works to Taratala Valve Station and laying of sewer line along Diamond Harbour Road by Microtunneling Method
- 2 Laying of Tallah Palta Dedicated Water Transmission Main for Kolkata
- 3 RUB at Naini, Allahabad
- 4 RUB at Krishnagar, WB







### MICROTUNELLING & TUBE HEADING





- 1 RUB at Bally, West Bengal
- 2 Underpass at Bediapara, Kolkata
- 3 Underpass at Shanti Path, Delhi
- 4 RUB at Bhatinda, Punjab
- 5 Railway Underpass at Patipukur, Kolkata

## Pioneer in Tube Heading Technique under Live Railway tracks since 1971



gal a, Kolkata th, Delhi b





ITD Cem was founded on the strength of Ground Engineering expertise and till date, it continues to lead the industry in this field. For the last eight decades, ITD Cem has been offering the most modern and comprehensive range of construction techniques for the construction of Piles and Diaphragm Walls, Ground Improvement, Drilling, Grouting Works, Rock Anchors, Slope Stabilization and Rehabilitation Work.

An in-house design capability helps it offer practical and economical solutions to meet most ground conditions and structural requirements likely to arise in the construction industry. ITD Cem has repeatedly demonstrated leadership by introducing new and improved technologies in India & has thus earned itself a special status of being the customer's first choice for any Geotechnical Engineering application.

# **SPECIALIST ENGINEERING**

ITD Cem's range of services include Geotechnical Investigations, Diaphragm Walling, Piling, Sandwicks / Band Drains, Vibrofloatation Stone-Columns / Vibro Compaction, Drilling and Grouting, Rock / Soil Anchors, Colcrete, Gunite / Shotcrete, Grouted Mattress, Repairs / Rehabilitation / Underpinning.

A notable project executed by ITD Cem is the Sabarmati riverfront development in Ahmedabad.

1 Piling work at Bulk Terminal, Tuna jetty - Gujarat



## Development Project, Ahmedabad

Sabarmati Riverfront

The Sabarmati Riverfront has added vibrancy to the urban landscape of Ahmedabad with its open spaces, walkways, well-designed gardens along with activities which contribute to economic growth. Several other benefits of this project like recharging of ground water owing to the continuous presence of water in the river and decongestion of the major north – south road (Ashram road) by providing additional road linkages to the parallel roads running along the river front are available to the citizens.

The Sabarmati riverfront project is truly multi-dimensional. But the inclusive development model that the project attempted to achieve has been truly unique. Never before has an urban infrastructure mega project, by a unique inclusive development model, covered all sections of the city and created world class facilities for the entire city to enjoy.

## Built a 13.60 km Diaphragm Wall in a single project for Sabarmati River Front Development, Ahmedabad





## FOUNDATION & SPECIALIST ENGINEERING



- 4 Shoring Pile works for Commercial Complex at Worli, Mumbai
- 5 Diaphragm wall for Delhi Metro Rail Project
- 6 Raft foundation for LNG Tank, Mundra

- Rock Anchor at Lodha, Wadala Mumbai 1
- Quaywall, Shiplift and Slip dock facility at Dahej, Gujarat 2
  - Tuna Jetty, Gujarat 3





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## FOUNDATION & SPECIALIST ENGINEERING



- 1 Piling Works for Integrated Passenger building at NSCBI Airport, Kolkata
- 2 Piling on hard rock at Tuna Jetty, Gujarat
- 3 Piling work at Bulk Terminal, Tuna Jetty Gujarat
- 4 Steel Piling at Project Seabird, Karwar
- 5 Piling work at Jaigad Cargo Terminal
- 6 Steel Pile at Dahej for Gujarat Chemical









## AWARDS, RECOGNITION **AND CERTIFICATES**

ITD Cem has a dedicated Technical Services Department, a Safety, Health and Environment Department consisting of experienced Training staff responsible for maintaining a high level of construction skills and safety throughout the Company. Safety is our core value and it is accorded top priority in executing projects. ITD Cem has an Integrated Management System conforming to ISO9001:2008, ISO 14001:2004 and OHSAS 18001:2007.

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#### ITD Cem has won a large number of awards for Technical excellence and Safety in Construction:

#### **Technical Awards**

- CIDC Vishwakarma Award 2014: Best Professionally Managed Company
- CIDC Vishwakarma Award 2014: Best Construction Project for Sabarmati Riverfront Park, Ahmedabad
- CIDC Vishwakarma Award 2014: Best Construction Project for Integrated Passenger Terminal Building, Kolkata
- Certification of Recognition: Model making Competition during Construction Week 2013 FLUOR
- Indian Concrete Institute, Karnataka Hubli Dharwad Centre: ICI (KHDC) Birla Plus Endowment Award for the ship lift facility, an outstanding concrete structure of North Karnataka 2005
- Tamil Nadu and Kerala Mine Safety Association: Best Quarry Award, 2004 at KR3 Road Project.
- Samsung Engineering: Award for Excellence IOCL Barauni Refinery 2001.
- ACCE INSWAREB Award 2001 for Effective Use of Blended Cements in the Design and Construction of Liquid Cargo jetty at Jawaharlal Nehru Port, Navi Mumbai.
- ACCE SARVAMANGALA Award 2000 for Excellence in Construction in Civil Engineering for the Construction of Nhava Sheva International Container Terminal, Navi Mumbai.
- Indian Institute of Bridge Engineers: 6th Outstanding Award for Koparkhairane Road Over Bridge, 1999.
- Indian Institute of Bridge Engineers: 6th Outstanding Award for Dadar Khodadad Circle Flyover, 1999.

Asia Pacific Excellence Award 2015 for Outstanding & Exemplary Achievements in Entrepreneurship



- 1 CIDC Vishwarkama Award 2015: Best Construction Project for Dry Bulk Terminal at Tuna, Kandla
- 2 EPC World Awards 2014 for Outstanding contribution of in Specialized Construction (EPC Category) for Dry Bulk Terminal at Tuna, Kandla

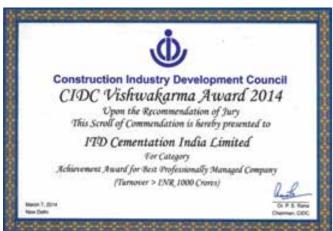


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#### Safety Awards

- National Safety Council of India, Safety Award (Shreshtha Suraksha Puraskar) for Wet Basin at Mazagon Dock for 2012.
- Best Safety Practices Award 2012 for Adani Project.
- National Safety Council of India, Safety Award (Suraksha Puraskar) for ABG Shipyard Ltd. in 2011
- National Safety Council of India, Safety Award (Suraksha Puraskar) for TATA Power in 2011
- Best Safety Performance at PTA/PET construction site at DMD for 2011-12.
- Excellent Performance in HSE for Design & Construction of Container Terminal at South Port, Mundra for 2010-11.
- Best Safety Conscious Contractor Award Trophy 2007 for Pipavav Port.
- National Safety Council of India, Safety Award (Bronze Trophy) for construction of sea wall Hazira Project for 2008.
- National Safety Council of India, Safety Award (Prashansa Patra) for DMRC BC21 Project for 2008.
- National Safety Council of India, Safety Award (Prashansa Patra) for 12th Cargo Berth, Kandla Port for 2007.

- Safety Award for Trombay Thermal Power Plant, TATA Power for 2007-08.
- National Safety Council of India, Safety Award (Prashansa Patra) for 3C 44 & 45 DMRC Dwarka Elevated Station Building for 2006.
- National Safety Council of India, Safety Award (Prashansa Patra) for Sabarmati River Front Development Project for 2006.
- National Safety council of India, Safety Award (Bronze Trophy) for Goa Bridge Project for 2005.
- Safety Excellence Award 2014 by BASF for Project GIR for Ten Million Safe Work Hours with zero lost time incident
- Excellent Performance in Safety for 2013-14 for the Birla Copper Site by Hindalco Industries Ltd.
- Safety Awards 2014 for achieving good performance in OSH at Adani Power Project at Tirora, Maharashtra
- Safety Awards 2013 for Gangavaram Port Expansion 2011 Package 1
- Best Safety Performance Certificate from DMRC for Jaipur Metro Project (C3) in 2011-12





CIDC Vishwakarma Award 2015 for Underground Metro Tunneling, Kolkata under HSE Category







## 1 Nam Theun 2 Hydroelectric Project, Lao PDR

2 Suvarnabhumi Airport, Bangkok

## Italian-Thai Development Public Company Limited

Italian-Thai Development Public Company Limited (ITD), the parent company of ITD Cem, is truly a global engineering and construction company with vision and expertise to create innovative solutions. In spite of increasing financial and environment pressures in the infrastructure market, ITD fulfills the role of a parent company very effectively.

A major contributor in Thailand's infrastructure for over 50 years, ITD has been known as the leading infrastructure company in the country and one of the largest civil engineering contractors in South East Asia. ITD's eventual expansion internationally has met with tremendous success in numerous countries viz: India, Bangladesh, Cambodia, Indonesia, Lao PDR, Indonesia, Taiwan, Maldives, Myanmar, Philippines and Madagascar etc.

ITD has a long successful record of the construction of mass transit projects, starting with the 23.5 km elevated Bangkok Transit System (BTS). ITD, in joint venture with two Japanese companies, completed the construction of the (MRT) project, which was about half the length of the whole project. The project comprised of the construction of 10.5 km long, 5.7 m diameter, twin tunnels, 9 underground stations, and associated buildings (car parks etc.). Other projects completed by ITD are the double-track railways from Huamark to Chachoengsao and from Bann Pachi to Lopburi, the Baan Uea Arthorn (low-cost housing) projects of the National Housing Authority, the tunnel for the underground high-voltage transmission line between Ladprao and Vibhavadi substations of the Metropolitan Electricity Authority, the Mae Moh Lignite Mining project, the Rama V Bridge, and the High-speed Railway project in Taiwan (a 27.3 km section).

One of the notable projects which ITD is proud of, is the construction of the Suvarnabhumi International Airport, approximately 25 km east of Bangkok. The construction period for the project was five years and ITD successfully completed it in 2006.

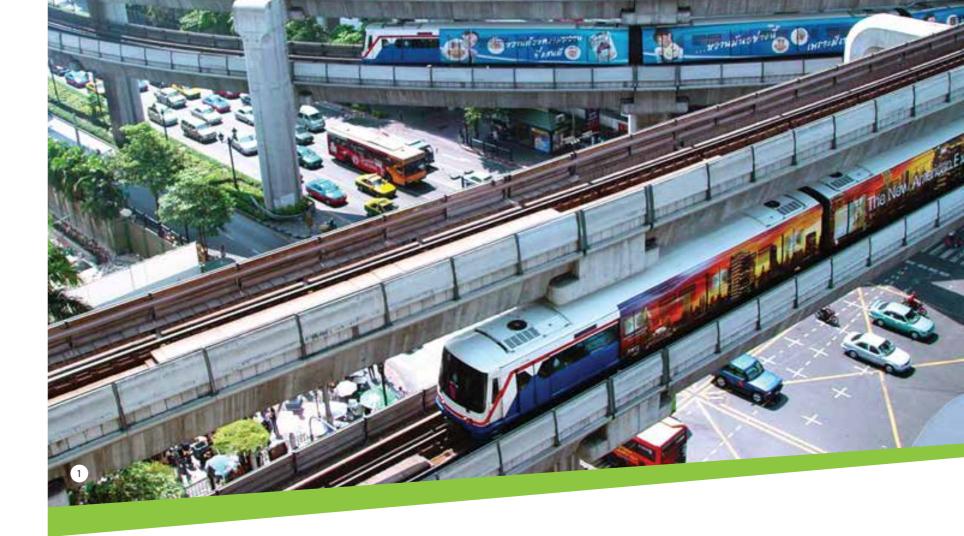
ITD Cem can leverage the knowledge-base of ITD to take on greater challenges to execute even more complex projects with quality, safety and environmental friendly measures in place.



- ITD's main activity areas are:
- Airports
- Buildings
- Dams and Tunnels
- Highways, Expressways
- Railways and Bridges
- Industrial Plants
- Mining
- Pipelines and Utility Works
- Marine Construction Services
- Rapid Transit Systems
- Steel Structures
- Telecommunications



Recipient of The Royal Seal of Garuda, a prestigious award presented by His Majesty The King of Thailand – a symbol of exemplary service 1985



- 1 Elevated Corridor, Bangkok MRTS
- 2 Ital-Thai Tower ITD Head Office, Bangkok
- 3 Map Ta Phut Port, Phase 2, Thailand
- 5 Friendship Bridge III, Thailand



4 Head Office of Thai Farmers Bank Bangkok, Thailand

#### **Regional Offices**

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"Godrej Waterside", Tower No. 1, Office # 803, 8th floor, Plot No. 5, Block-DP, Sector-V, Salt Lake City, Kolkata 700 091 Tel.: +91 33 2341 2400 Fax: +91 33 2341 2410

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301 & 302, Sagar Tower District Centr Janakpuri New Delhi 11 058 Tel.: +91 11 25 59 0 5 4 1 / 4 2 Fax: 4986

#### Pearl Glow building, 1st Floor, No. 3, Vijayaragava road, T. Nagar, Chennai 600 017 Tel.: +91 44 4359 6660 / 2851 0996 Fax: +91 44 2815 0216

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