

# BRIDGE AND ROOF CO. (INDIA) LTD.

*(A Government of India Enterprise)  
Ministry of Heavy Industries and Public Enterprises  
Government of India*

*A Miniratna Company – Category I*

## COMPANY PROFILE

*September 2018*



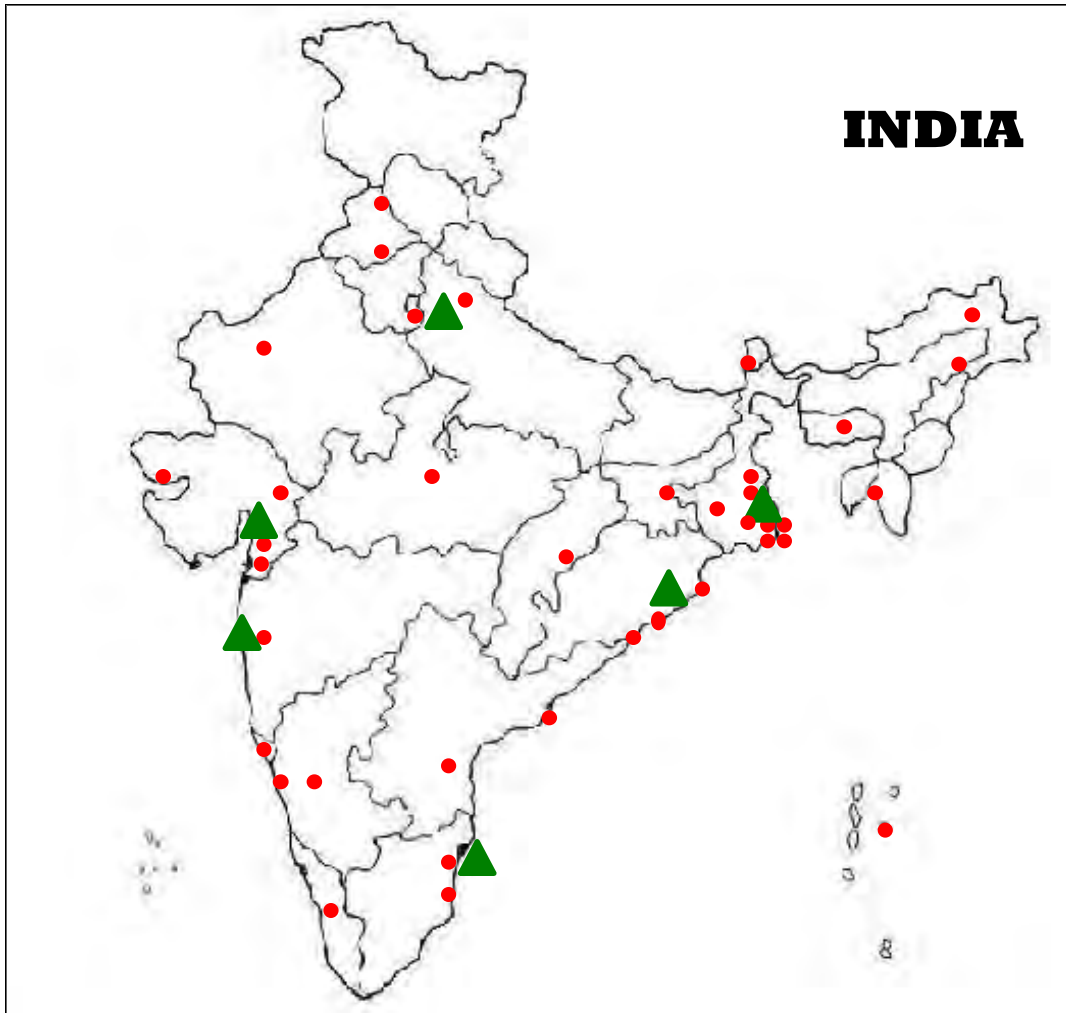


## THE COMPANY

- **Bridge and Roof Company (India) Limited (B&R)**, a Company under Department of Heavy Industry (DHI), Ministry of Heavy Industries and Public Enterprises, Government of India, is a one source multi-disciplinary premier engineering and Construction Company.
- B&R, established in 1920, has grown into a premier Engineering and Construction organisation in the country, committed to serve all types of Project Implementation in the country both in Public and Private Sectors.
- The Company is in possession of highly qualified and experienced team of Professionals and a fleet of all modern Plant and Machineries required for timely and effective Project Management.



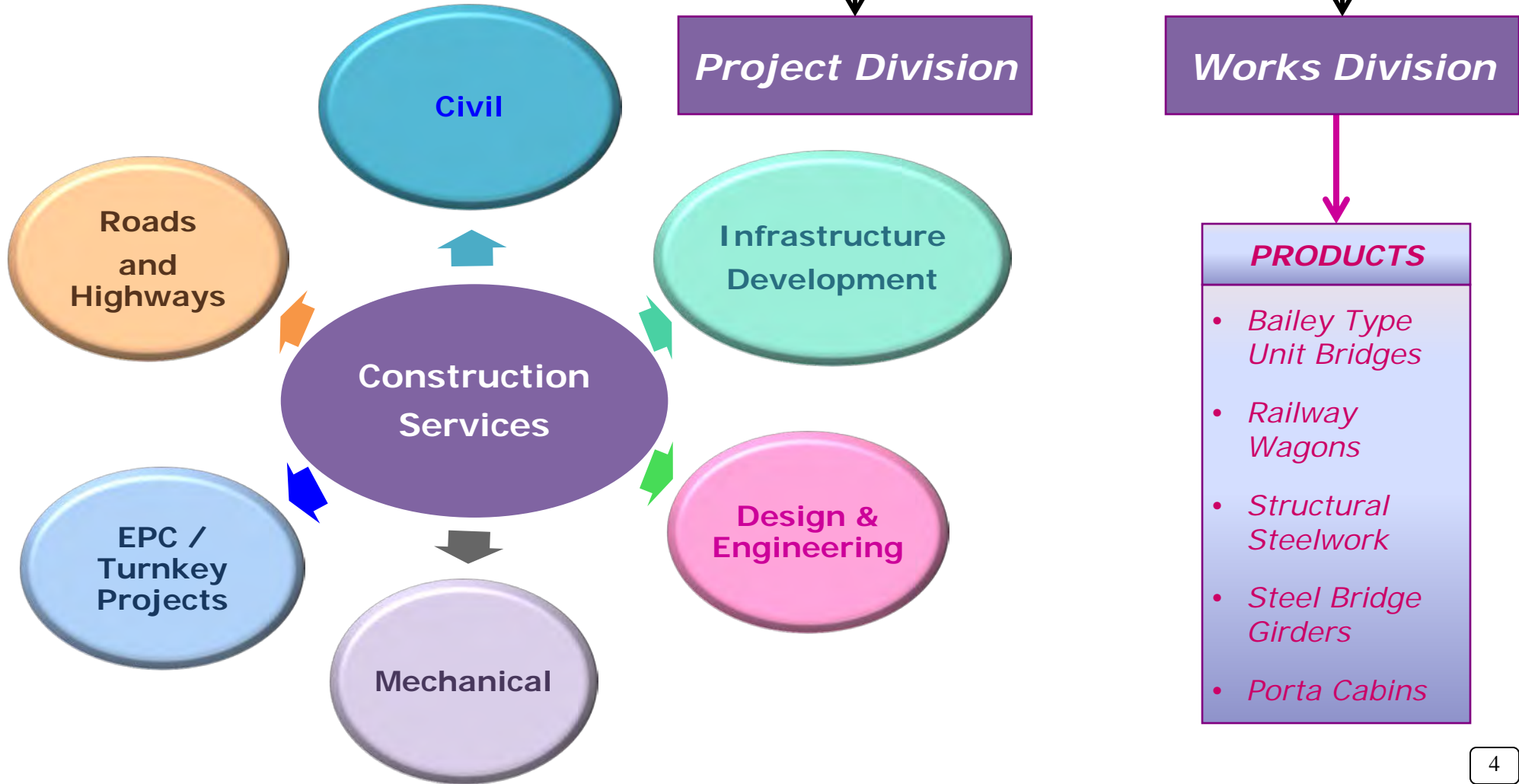
## PRESENCE OF THE COMPANY



● Project Sites      ▲ Offices

- The Head Quarters of the company is at Kolkata, West Bengal.
- B&R's project sites in various sectors are located all over the country and abroad. At present the Company is executing 156 orders at 128 locations in India.
- The company also has sophisticated workshop facilities at Howrah near Kolkata.
- Zonal Offices are at Mumbai, Delhi and Chennai and Regional Offices at Vadodara and Bhubaneshwar.

# AREAS OF BUSINESS



# AREAS OF BUSINESS – CONSTRUCTION SERVICES



## Civil

- Area Grading
- Piling, Soil Densification
- Buildings
- Stadiums and Sports Complex
- Industrial Buildings
- Chimneys
- Prilling Towers
- Silos
- Concrete Bridges & Flyovers
- Rail Linking
- Airport Terminals
- Ports and Jetties



## Mechanical

- Blast Furnace
- Piping
- Equipment Erection
- Storage Tanks
- Heaters and Reformers
- Stainless Steel Silo
- Structural Steel Work
  - Boiler
  - Flare Stack
  - Steel Chimney
- Loading Gantry
- Steel Bridge



## EPC / Turnkey Projects

- Oil Terminals and Depots
- Group Gathering Station
- Cross Country Piping
- Ports and Jetties
- Environmental Projects
- Fire Fighting / Protection System
- Heaters and Reformers



## Roads and Highways

- New Highways
- Widening & Strengthening
- In-Plant Roads



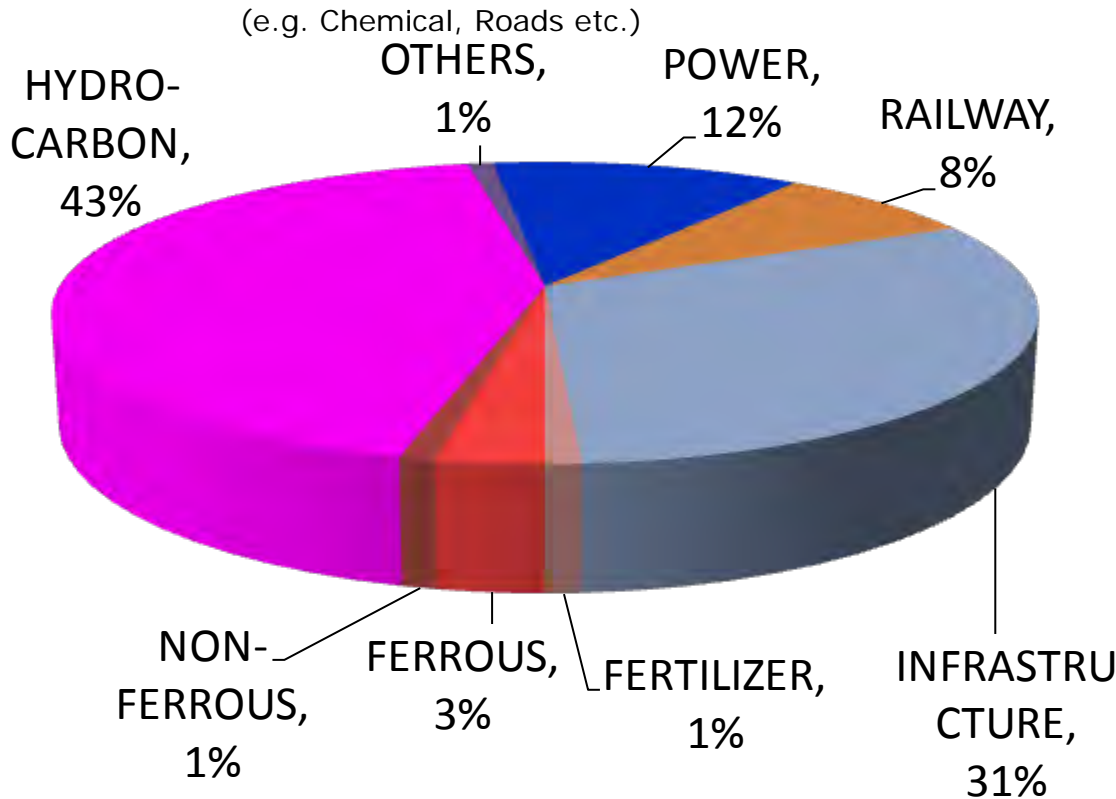
## Plant Turnaround & Inspection Jobs

- Shut-down / Maintenance jobs in
- Steel Plant
- Refinery
- Petrochemical
- Oil & Gas



## OPERATING AREAS

### Major Sectors of Business Operations



### Areas of Specialization

- High quality RCC Structures
- Higher dia. Pile Foundation and Soil Densification
- Infrastructure development
- Steel and Concrete Bridges
- Heavy Equipment Erection
- Tankage upto 79m dia.
- Unit / Offsite Piping

**Turnover : Rs. 2056.00 Crores  
2017-2018**

## Public Sector

- *Bharat Heavy Electricals Ltd.*
- *Bharat Petroleum Corpn. Ltd.*
- *Central Agricultural University*
- *Chennai Petroleum Corpn. Ltd.*
- *Damodar Valley Corpn.*
- *Delhi Metro Rail Corporation Ltd.*
- *Directorate General Border Roads*
- *Engineers India Limited*
- *Gas Authority of India Ltd.*
- *Gujarat State Petronet Limited*
- *Government of Gujarat*
- *Government of Odisha*
- *Government of West Bengal*
- *Government of Uttarakhand*
- *Hindustan Petroleum Corpn. Ltd.*
- *Hindustan Salts Ltd.*
- *Indian Institute of Technology*
- *Indian Oil Corpn. Ltd.*
- *Indian Railways*
- *Kochi Refineries Ltd.*
- *Mangalore Refineries & Petrochemicals Ltd.*
- *National Aluminium Co. Ltd.*
- *National Highways Authority of India*
- *National Institute of Technology*
- *National Thermal Power Corporation*
- *Numaligarh Refinery Ltd.*
- *Oil & Natural Gas Corpn. Ltd.*
- *Kolkata Port Trust*
- *Power Grid Corporation India Ltd.*
- *Rashtriya Ispat Nigam Ltd.*
- *Software Technology Parks of India*
- *Steel Authority of India Ltd.*
- *West Bengal Joint Entrance Examination Board*
- *West Bengal Medical Services Corpn Ltd.*

## Private Sector

- *Adani Group*
- *ABB AB*
- *Aditya Aluminium*
- *Bharat Oman Refineries Ltd.*
- *Bhushan Group*
- *Dodsal Enterprises Pvt. Ltd.*
- *Haldia Petrochemicals Ltd.*
- *HPCL-Mittal Energy Ltd.*
- *Jindal Steel and Power Ltd.*
- *Meja Urja Nigam Pvt. Ltd.*
- *Mumbai Aviation Fuel Farm Facility Pvt. Ltd.*
- *Reliance Group*
- *SMS Siemag / SMS India*
- *Vedanta Alumina Ltd.*

At present the Company's business is 95% from Public Sector / Government and 5% from Private Sector

# OPERATING RESULTS AND FINANCIAL PERFORMANCE FOR LAST FIVE YEARS



Rs./Crores

PARAMETERS	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Gross Turnover	1384.65	1434.03	1710.18	1751.33	2056.00
Gross Margin (PBDIT)	50.44	40.10	26.54	46.02	51.75
Profit Before Tax (PBT)	16.96	17.89	5.03	27.25	26.07
Net Profit (PAT)	10.61	12.00	2.65	16.37	16.00
Net Worth	299.78	309.98	312.63	323.09	338.37
Order Booking	2491.69	1704.59	2249.48	2290.85	4740.79
Orders in Hand at end of year	3450.88	3212.22	3701.37	4127.07	6609.15

# FINANCIAL STANDING

The Company has been sanctioned Working Capital Limits of Rs. 1500 Crores to be availed from Consortium Banks namely State Bank of India, Bank of Baroda, Indian Bank, Bank of Maharashtra, Bank of India, ICICI Bank Ltd., Yes Bank, Punjab National Bank and HDFC Bank.

The details of the facilities are as follows :

*(IRs./Crores)*

<b><u>Fund Based</u></b>	
Cash Credit	175
<b><u>Non Fund Based</u></b>	
Bank Guarantee	1290
Letter of Credit	35
<b>Total</b>	<b>1500</b>

# CAPITAL BASE

*Rs./Crores*

	As on 31-03-2014	As on 31-03-2015	As on 31-03-2016	As on 31-03-2017	As on 31-03-2018
Authorized Capital	60.00	60.00	60.00	60.00	60.00
Paid-up Capital	54.99	54.99	54.99	54.99	54.99
Reserves & Surplus	244.79	254.99	257.64	268.10	283.38
Net Worth	299.78	309.98	312.63	323.09	338.37

# EMPLOYEE STRENGTH

The Company is executing projects at different work locations all over India. During the execution of specific projects, the company hires services of skilled and unskilled workforce, depending on the nature and duration of the project

## *Technical Manpower*

	<i>Category</i>	<i>Nos.</i>
i	Engineers on Company's Roll	650
ii	Engineers on Contract	406
	<b>Total Engineers</b>	<b>1056</b>
iii	Other Technical Supervisory Staff	128
	<b>Total Technical Manpower</b>	<b>1181</b>

## *Permanent Employees as on 30<sup>th</sup> Sep'18*

<i>Category</i>	<i>Nos.</i>
Officers / Executives	686
Staff & Workmen	549
Assistant / Supervisors	16
<b>Total</b>	<b>1251</b>

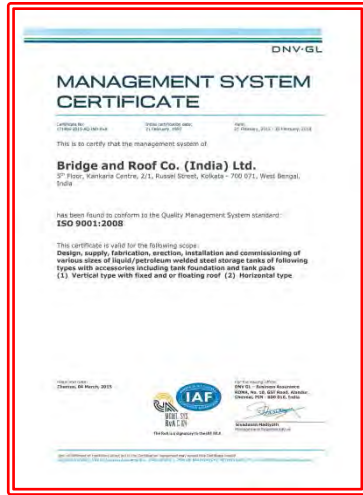
## Quality Policy

It is the policy of B&R to identify customer needs and to ensure “Total Customer Satisfaction” through sustained endeavor by maintaining quality, delivery schedule and trouble free services.

## Quality Objectives

- Maintain control check points for all activities
- Monitoring of the effectiveness of the total quality effort and to identify the areas requiring remedial quality planning and action.
- Encourage a continuing communication with the clients.
- Exchange of quality experiences and recommendations between field and Head Office / Zonal Office operations.
- Maintain and motivate quality consciousness among all employees of the company through training programs.
- Ensure necessary environment and infrastructure at all required levels.

# ISO – 9001:2008



Bridge & Roof Co. (India) Ltd. is one of the very few construction companies whose storage tank construction has been accredited with ISO-9001:2008 certificate from M/s DNV, Holland With this high level of quality in tank construction, B&R can easily be placed at par with any international company so far as quality is concerned.

*ISO Certificate*



B&R has also been accredited with an ISO-9001:2008 Certificate for Design, Manufacture and Supply of Bailey Bridge, Manufacture and Supply of Railways Wagons and Bunk Houses being manufactured at its Howrah Workshop.

# HEALTH, SAFETY AND ENVIRONMENT MANAGEMENT

The Company is accredited with Occupation Health and Safety Assessment Series **OHSAS 18001:2007**

- ❖ Promotion and Development of Consciousness for Health, Safety, Environment and Fire Protection among all personnel.
- ❖ Implementation of HSE System through extensive and regular training and periodic compliance checks.
- ❖ Regular safety meetings at project sites and offices.
- ❖ To continuously check and improve upon the safety standards.
- ❖ Maintaining all Documents and Records of Safety Meetings, Training and Implementation as per Construction Safety manual.
- ❖ Ensuring safety during Design Engineering



Project Planning and Reviewing is a priority area of Project Implementation in the company. Time, Quality and Cost are the primary targets during execution of projects.

## Planning

- Work Breakdown Structure
- Inter dependency between tasks
- Preparing work schedules
- Assigning and allocating resources to the activities
- Project Costing and developing an acceptable cost budget

## Controlling

- Monitor physical progress vis-à-vis baseline
- Variance between planned and actual cost
- Optimum utilization of resources
- Analyze data
- Timely corrective measure to prevent time and cost overrun
- Readjust the work schedule and resource allocation as required

## Managing

- Keep the project on target
- Interaction with the client is of primary importance
- Communication between project team, controlling managers and management of the company
- Presenting timely and accurate information for remedial measures.

Bridge & Roof Co. (I) Ltd. have wide variety of experience and specialization in designing, engineering and construction of buildings, industrial structures, soil densification including preparation of detailed engineering drawings. The Company also designs and manufactures different types of Crude and Product Oil Steel Storage Tanks, Bailey Type Unit Bridges, Concrete and Steel Bridges for Railways and Roadways, Railway Wagons, Porta-Cabins, Pressure Vessels and Heat Exchangers, Technological Structures including Heaters, Reformers, Gas Collection Mains / Ducts for Steel Plants. The Design and Engineering Department is fully equipped with latest computers and design software such as AutoCAD for Engineering Drawing, STAAD Pro for Structural Design and in-house Software for Tankage Design. B&R's design engineers are highly qualified and experienced and up-to-date with the latest technologies.



MAJOR  
PROJECTS  
EXECUTED /  
UNDER  
EXECUTION



Ash Disposal at 2X500 MW Unit # 1 & 2  
at **Durgapur Steel Thermal Power  
Station of Damodar Valley Corpn.**



Area Grading Work at **MRPL Mangalore**



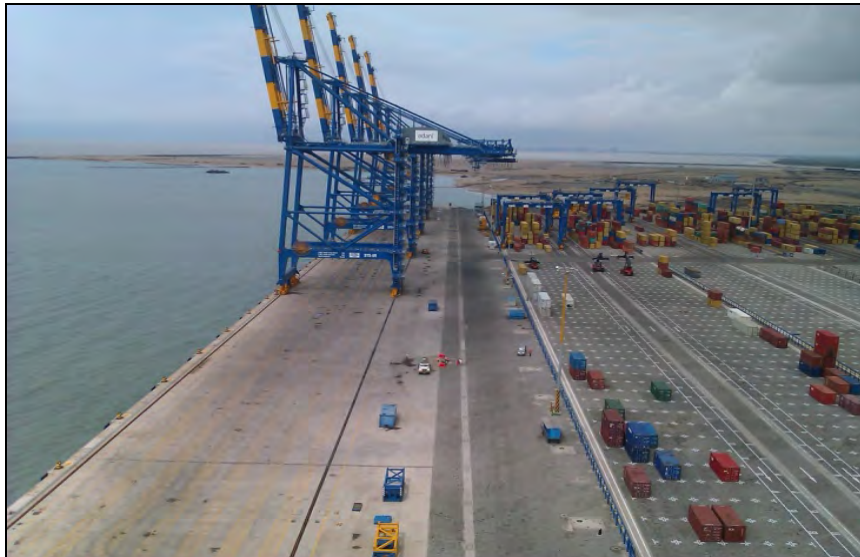
Area Grading and Construction of in plant  
Roads for 2 X 800 MW Unit at  
**Gadarwara STPP of NTPC**



Construction Of Bailey Type Unit Bridge for **Government of Odisha** at various locations



**Salt Lake Stadium** for 1,20,000 Spectators at Kolkata for **Society for Sports & Stadium**



Civil Work at South Port Container Terminal Backup Yard at **Mundra**, Gujarat for **M/s. Mundra Port & Special Economic Zone Ltd. of Adani Group**



Construction of **RCC Finger Jetty with Approach** at **Junglight** in **Port Blair** for **Andaman Harbour Works**



Construction of **RCC Deck Slab** supported on **RCC MS lined Bored Pile** of **1000mm dia., beam** including pavement for **Hooghly River Front Development Work** of **Kolkata Municipal Corporation**



Construction and Commissioning of **Khyber Pass Depot** and workshop including property development deck work for **Delhi Metro Railway Corporation**



Civil & Structural Steel Work for Balance of Turbine Island Package for 2 X 700 MW **Kakrapar Atomic Power Project (Unit 3&4)** of Nuclear Power Corpn. of India Ltd. for Dodsai Enterprises Pvt. Ltd.



Civil Works for Power Block Package for 2 x 660 MW **Krishnapatnam Thermal Power Project** at Nellore of Thermal Powertech Corpn. India Ltd. for **BGR Energy Systems Ltd.**

CW Pump House at **Sagardighi STPP** of West Bengal Power Development Corpn. Ltd.



# BUILDING WORK



Construction of Computer Centre and Central Library at **NIT, Agartala**, Tripura



Construction of 2000 capacity Boys Hostels including 1000 capacity Dining Hall at **IIT Kharagpur**, West Bengal.



Construction of Hostel Building and Transit Quarter Complex for **Satyendra Nath Bose National Centre for Basic Sciences**, Kolkata



**Tertiary Healthcare Hospitals** at Purulia, Islampur, Falakata, Onda and Chatna for **West Bengal Medical Services Corpn. Ltd.**



Construction of Administrative Block (G+3), Library Block (G+2) and 5 Nos. Academic Block (G+6) at **Guru Gobind Singh Indraprastha University, Delhi.**

**This Building was designed by Architect following GRIHA concept.**



Construction of **WB National University of Juridical Sciences** at Salt Lake City, **Kolkata**



Construction of Auditorium and allied work at **Indian Institute of Management, Joka, Kolkata**



Construction of Office Building at **Bandra-Kurla Complex** for **MMTC, Mumbai**



General Building work & Sanitary & Plumbing work including Fire Fighting Arrangement for **IOCL Office Block at Kolkata**



Construction of B+G+10 Storied Residential cum Office Building at **Kolkata** for **Visa International Ltd.**



16 Storied Senior Officers Flat & Guest House for **Reserve Bank of India at Mumbai**



Construction of Convention Centre Complex Building including Piling Work at Science City for **National Council of Science Museums at Kolkata** (Height of Dome – 42 m)



Construction of Super Structure including Electrical & Fire Fighting for Indian Council for Cultural Relations at **Kolkata** for **Ministry of External Affairs**



Civil, Sanitary & Land Scaping work of **Golden Jubilee Building of Indian National Science Academy, New Delhi**



National Science Centre at **Pragati Maidan, New Delhi** complete sub-structure i/c Piling, Basement, Super Structure work, Sanitary, Plumbing & Fire Fighting work



Construction of **Airport Terminal** Complex Building including Structural, Electrification and Finishing Item at **Kolkata**



# SPORTS COMPLEX



Salt Lake Stadium for 1,20,000 Spectators at Calcutta



Planning, Design, Detail Engineering & Construction of Indoor & Outdoor Stadium, Auditorium & Other Services including Land Development, Roads & Pavements, Water Supply Network, Drains, Sewer Lines, External & Internal Electrification & Air Conditioning for **Visakhapatnam Port Trust Sports Complex**



# TREATMENT PLANT

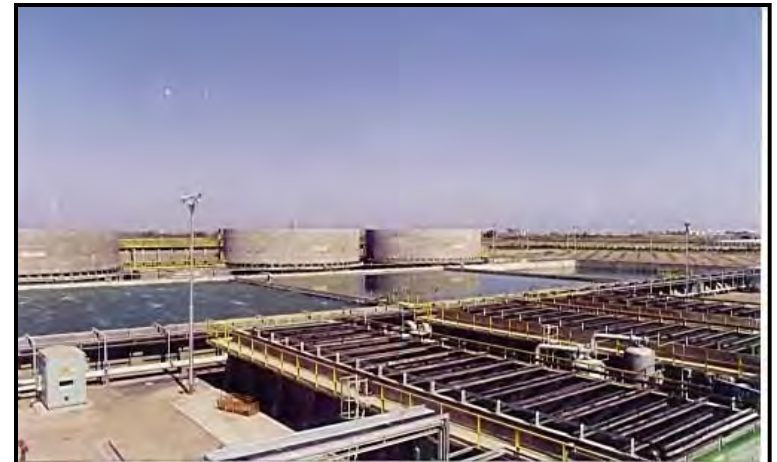


**Pre-Treatment Plant, Raw and CW Make-up Water System Package for Rihand Super Thermal Power Project Stage-II of National Thermal Power Corporation Ltd.**



**Clariflocculator with Bridge at Raw Water Treatment Plant for IPCL at Dahej**

**Effluent Treatment Plant at Jamnagar Refinery Project of RIL**





***Sonauli-Gorakhpur Road Project for UP, PWD  
(Under Loan Assistance from World Bank).***

***Strengthening and Paving  
of shoulders : Dholka to  
Bagodara (Km. 0.000 to  
Km. 23.000) and Wataman  
to Pipri (Km. 69.600 to  
Km. 94.000) for  
Government of Gujarat***





Strengthening and Four Laning of NH-9 from **Nandigama To Vijayawada** (Km 217 To Km 265) in Andhra Pradesh (Under Loan Assistance of ADB) for **National Highways Authority of India**



Construction of 2 lanes **Durgapur Expressway** with grade intersections & repairing of minor bridges & culverts, toll plaza & service road at Dankuni, W.B.) for **P.W. (Roads), West Bengal**



**Hetauda-Birgunj Road** over 56 KM in Nepal (Under Loan Assistance from ADB) for **Govt. of Nepal**

# CONCRETE BRIDGES



*PSC Bridge 4 Lane Bridge at Karnal on NH-1 including Design For PWD/Haryana*



*Construction of Flyover across NH-2 at DSP Main Gate Junction*



*2 Nos. PSC Bridges on 2 Lane Highway of NH-9 at Vijayawada, A.P.*



*Construction of Dhutikhola Bridge at Phuentsholing, Bhutan*

# STRUCTURAL STEEL BRIDGES



*Bridge over Sheonath River at Bialspur for  
**South Eastern Railway***



*2x50m & 1x100m, **2 lane Road**  
**Bridge over River Tamur in Nepal***



*Bridge over  
Mahananda River for  
**Indian Railway***



*Regirdering of 7 spans X 45.70  
metre each of Diana Bridge for  
**Northeast Frontier Railway***



*Regirdering of **Railway Bridge**  
at Majhi Ghat, Bihar for  
**Northeast Frontier Railway***

# TANKAGE



*Double Deck Floating Roof Tank, 79 Mtr. Dia. X 13.5 Mtr. Ht. at Mundra of M/s. IOCL*



*Steel Storage Tanks at Kanpur Terminal of HPCL*



*Product Storage Tanks with connecting pipeline at IOCL Panipat*



*Automatic Rim Seal Fire Protection System for External Floating Roof Tanks for IOCL, BPCL & HPCL at various locations*

# PIPING



*Offsite Piping at Mangalore Refinery & Petrochemicals Ltd.*



*Dahej SEZ Network Pipeline Network Project - 12" dia. Cross Country Pipeline across 23 km for GSPL*



*Unit Piping Work at Panipat Refinery Project for IOCL*



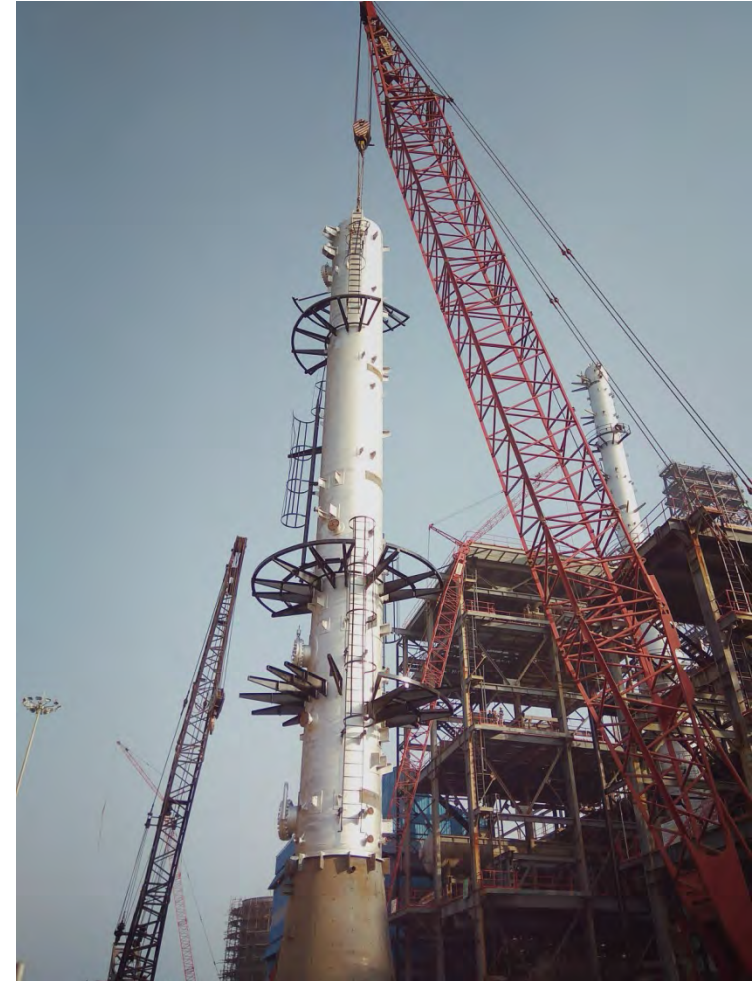
*Cross-Country Pipeline for transportation of Black & White Oil for Oil Terminal of Indian Oiltanking Ltd.*



*Yard Piping at Panipat Refinery Project for IOCL*



*Erection of Two Coke Drums of 575 MT at DCU, **CPCL, Chennai** Site by Main crane 1250 MT capacity and tailing crane 550 MT*



*Erection of Column at Aishwarya Project, **Haldia Refinery of IOCL***



*RA Stripper ( 6.40 Mtr Dia 35.20 Mtr Long 75 MT weight ) being erected at LLDPE unit of **IOCL, Panipat** with 450 MT Crane and 250 MT Trailing Crane*



*CDU / VDU - II Revamp Project in **Chennai Petroleum Corpn. Ltd.***



*Civil & Structural work for Power Block Unit at  
2X500 MW Unit # 1 & 2 at **Durgapur Steel  
Thermal Power Station of Damodar Valley  
Corpn. at Andal***



*Power House Building 2X500 MW  
**Simhadri Thermal Power  
Station of NTPC***

# THERMAL POWER PROJECTS



ESP, Boiler & its Auxiliaries, etc, of 500 MW Unit-6 for **NTPC Rihand Super Thermal Power Project**  
2X500 MW for BHEL



Boiler, Air Pre-Heater & Piping of 2 x 210 MW, Unit - 4 & 5, **Bakreswar of West Bengal Power Development Corpn. Ltd.**



Construction of 220 M high RCC single flue brick lined chimney for 1 X 250 MW Unit at **Durgapur Projects Ltd.** for **BHEL**



*LD Converters for  
Visakhapatnam  
Steel Plant 6.3 MTPA  
Expansion Project of  
Rashtirya Ispat  
Nigam Ltd.*



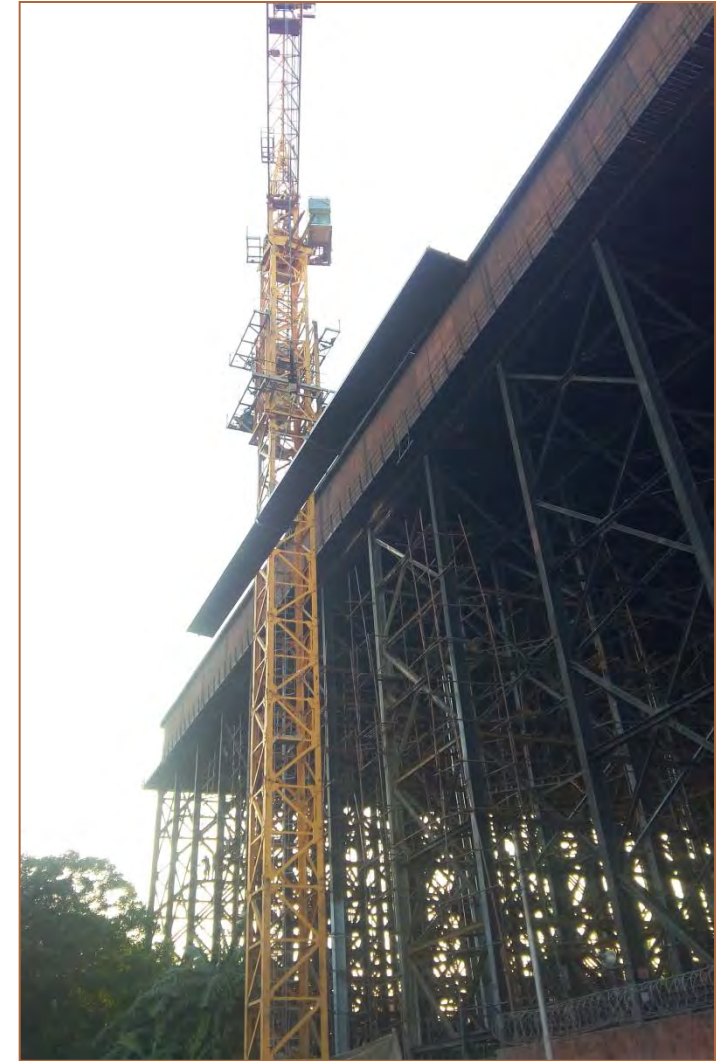
*Civil & Structural  
Works in Potline Area  
at **BALCO Korba***



*VDU Furnace at **IOCL, Haldia***



*Repair of  
Swing  
Bridge at  
Kolkata  
Dock  
System for  
Kolkata Port  
Trust*



*Renewing of 9.0 MG Capacity Century Old Over Head Balancing Steel Reservoir (Tallah Tank)  
of Kolkata Municipal Corporation at Kolkata, WB*

# RAIL LINKING PROJECTS



Railway Linking Project, at Durgapur Steel Thermal Power Plant at Andal, W.B.



Railway Linking Project n connection with doubling between Sargachi( Km 177.8) and Jiaganj (Km 202.94) for **Eastern Railway**



# EPC / TURNKEY PROJECTS



Storage Tanks at **Numaligarh Refinery Ltd., Siliguri**



Station Piping Package for **NTPC Solapur Super Thermal Power Project (2X660 MW)**



Turnkey Construction of 3 Nos. Non-IFP Heater in **Panipat Refinery Project of IOCL**, for Hydrotreater Reactor, Reboiler & Stabilizer Reboiler



Turnkey Execution of 42,850 KL Oil Terminal for HSD, MS & SKO for **IBP at Panipat**



3000 m<sup>3</sup>/hr Mist Cooling Water System for Gas Cracker Unit on Turnkey Basis at **GAIL Pata**

# HOWRAH WORKSHOP



10 X 61m span Rivetted Type Through Bridge Girders on Bareilly Kasganj section for North Eastern Railway



BOXN-HL Type SS Railway Wagon



Porta-Cabins



Asia's 2nd Longest Bailey Type Unit Bridge (3 X 200FT.) AT NEEPCO LTD., Nagaland



Howrah Works Fabrication Shop

# COMPANY OWNED MAJOR EQUIPMENT



*Excavator-cum-Loader and Dumper*



*Batching Plant and Transit Mixer*



*Concrete Placer Boom Pump*



*Paver Finisher with Sensor*

*Tractor Mounted Crane*



*Crawler Crane*

*Vibratory Road Roller*





# COMPANY OWNED MAJOR EQUIPMENT



NAME OF EQUIPMENT	NOS.
BATCHING PLANT (15/20/30/60 cum per hr.)	34
AIR COMPRESSOR (MOBILE-DIESEL / ELECTRIC) (140 TO 500 Cfm)	26
TRANSIT MIXER	91
CONCRETE PUMP	35
CONCRETE PUMP - BOOM TYPE TRUCK MOUNTED	16
CRANE (TOWER) (2 TO 5 T)	4
CRANE (CRAWLER MOUNTED) (18 TO 100 T)	40
CRANE (GANTRY) (1.5 TO 20 T)	3
CRANE (TRACTOR MOUNTED) – (8/10/12/14 T)	174
EXCAVATOR-CUM-LOADER (TYRE MOUNTED) (1.00 / 0.32 cum)	35
DUMPER	18
HOIST WINCH (DIESEL / ELECTRIC)	78
DIESEL – ELECTRIC WINCH	232
ELEVATOR	6
GENERATOR-DIESEL (CAPTIVE-POWER) (2 Kva to 500 Kva)	158
HOT MIX PLANT (ELECTRONICALLY OPERATED)	1
MOTOR GRADER	4

NAME OF EQUIPMENT	NOS.
BAR BENDING MACHINE	137
PILING RIG (BORED/DRIVEN/PRE-CAST)	50
PILING RIG (VIBROFLOT)	2
PILING RIG (ROTARY)	2
LEVELLING INSTRUMENT – AUTO / DIGITAL / DUMPY	175
THEODOLITE MACHINE	78
TOTAL STATION SURVEY INSTRUMENT	68
ROAD ROLLER (SMOOTH WHEEL / VIBRATORY / PNEUMATIC)	18
PAVER FINISHER (WITH AUTOMATIC SENSOR DEVICE)	4
TRUCK/LORRY (DIESEL)	24
WATER TANKER(TRAILER)	22
WELDING SET	3096
WHEEL LOADER	3
COMPACTOR	48
WET MIX PLANT	2
CONCRETE MIXER MACHINE (DIESEL / ELECTRIC)	122

## **WHY BRIDGE & ROOF**

- ⇒ **PIONEER IN THE FIELD OF CONSTRUCTION IN VARIOUS INDUSTRIAL AND INFRASTRUCTURE SECTORS.**
- ⇒ **OWN DESIGN DEPARTMENT FOR PREPARING, CHECKING AND MONITORING OF DRAWING & DESIGN WITH SPECIALIZED ASSOCIATES FOR PLANNING AND ARCHITECTURAL SERVICES .**
- ⇒ **HIGHLY QUALIFIED AND EXPERIENCED TEAM OF ENGINEERS AND PROFESSIONALS REQUIRED FOR IMPLEMENTING LARGE SCALE PROJECTS.**
- ⇒ **ENSURING TIMELY AND QUALITY CONSTRUCTION.**
- ⇒ **LARGE CONSTRUCTION EQUIPMENT BASE.**
- ⇒ **PAN INDIA PRESENCE**



*THANK YOU !*