

RELIABLE PARTNER

ENGINEERING & CONSTRUCTION



Power



Transmission & Distribution

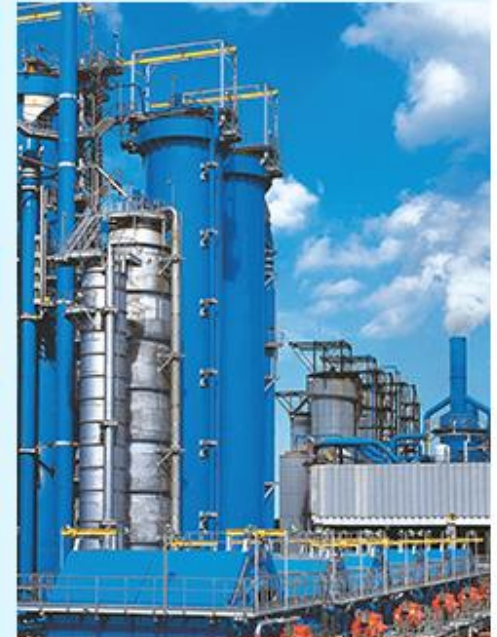


Water

CAPITAL GOODS

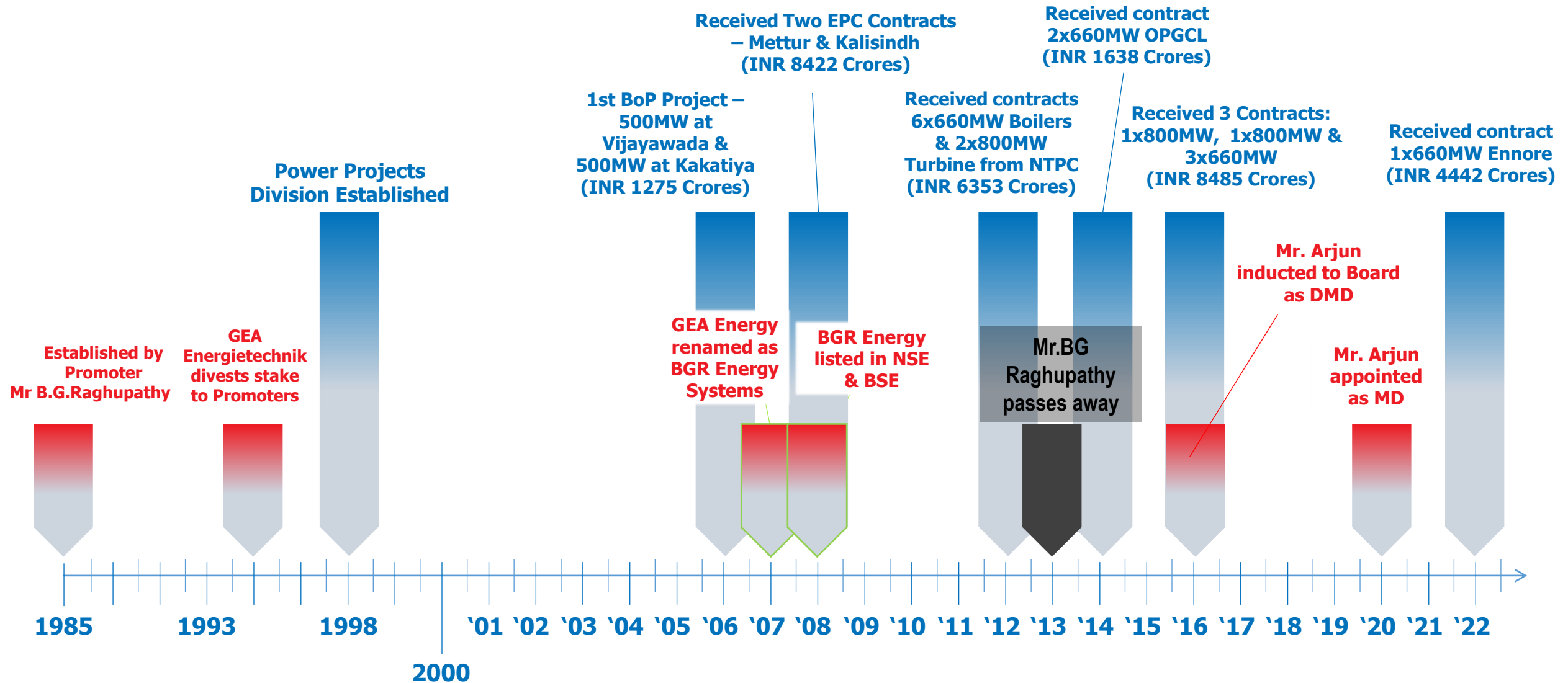


Air Fin Cooler



Oil & Gas

GROWTH TIMELINE





“

My dream had been to build an organization like Bechtel.

Because people have so much confidence in Bechtel, that they will be fair in all their dealings, they will commission the plant on time with highest quality possible.

*This is how I want **BGR Energy** to be built.*

”

*B G Raghupathy
Founder Chairman*

Engineering and Construction

- ❖ EPC, BoP, LSTK Construction for Power, Water, Infrastructure, Transmission & Distribution, Oil & Gas Projects in India

Capital Goods

- ❖ Design & Manufacture of high-tech equipment for Power, Process Industries and Core Industries for global markets

DOMAIN EXPERTISE – ENGINEERING & CONSTRUCTION



Executing turnkey EPC & BoP contracts for Thermal Power Plants

'DESIGN AND BUILD' structure, where the entire Design & Engineering is done under one roof

Deep domain expertise in design, detailed engineering, manufacturing, installation, & commissioning; efficient & seamless interfacing of BoP systems with Boiler, Turbine & Generator

Expertise in civil and tall structures, mechanical, Electrical C&I works enables 'MADE TO FIT DESIGN' from proposal stage to delivery

TURNKEY EXECUTION EXPERTISE – POWER



Balance of Plant

- Civil, Electrical & Mechanical Systems
- Tall Structures – Chimney & Cooling Tower
- Coal Handling Plant
- Ash Handling System
- Stacker Reclaimer
- Substation & Switchyard
- Induced Draft Cooling Tower

- Plant Piping System
- Deaerator
- Condensate Polishing Plant
- Desalination Plant including RO System
- Demineralisation Plant
- Pre-Treatment Plant
- Effluent Treatment Plant
- Sewage Treatment Plant

- Air Cooled Condenser
- Air Fin Cooler
- Gas Conditioning & Metering Skid
- COLTCS & Debris Filter
- Fire Protection System
- AC & Ventilation System
- Control & Instrumentation

Electrical Projects

- Turnkey contracts for Transmission and Distribution (T&D) network
- EHV AIS & GIS Substations
- Turnkey Contracts for Optical Fibre Communication Network – OPGW, ADSS & OLTE including Live Line Stringing.
- Electrical Balance of Plant for Thermal, & Hydro Power Projects
- Leading Provider of Electrical Balance of Plant Solutions for Nuclear Power Projects
- EHV Transmission Line

TURNKEY EXECUTION EXPERTISE – WATER TREATMENT



Environmental Engineering

- Effluent Treatment & Recycling Plants leading to zero discharge
- Water Treatment Plants (Pre-Treatment & DM Plant)
- RO based Desalination Plants
- Municipal Water Treatment & Supply Systems
- Common Effluent Treatment Plants
- Sewage Tertiary Treatment Plants (TTRO)

TURNKEY EXECUTION EXPERIENCE



OVERALL

- More than **22 years** of experience in execution of **turnkey EPC Projects**
- More than **35 years** of experience in manufacturing of Products for Power and Process Industries
- Operations span Power, Oil & Gas, Water / Wastewater Treatment, Power Transmission & Distribution, Civil Construction, Industrial and Infrastructure sectors.
- Manufacturing Facilities near Chennai

POWER

- EPC of Coal based Super Critical Power plants of unit capacities ranging from 660 MW to 1000 MW.
- EPC of Balance of Plant of coal-based power plants of unit capacities ranging from 500 MW to 800 MW.
- Combined cycle power plants of various capacities using Advanced Class Gas turbines.
- EPC of Balance of plant islands for Nuclear plants of unit capacity upto 1000 MW.

TURNKEY EXECUTION EXPERIENCE



WATER & WASTEWATER

- EPC of Sea Water based Desalination plants of capacities ranging from 50 to 400 MLD.
- Demineralisation Plants for Industrial plants.
- Recycling Projects TTRO, ETP, ZLD of capacities ranging from 15 to 100 MLD and above.
- EPC of Municipal water distribution system and Cross-country piping

MINERALS & MATERIAL HANDLING WORKS

- Minerals & material handling system of maximum 6000 TPH with capability to handle minerals such as iron ore, copper, etc.
- Manufacture and supply of large capacity stacker-reclaimers (4000 TPH), Wagon tippers, Track hoppers.
- Pipe conveyors
- Cross country conveyors

TURNKEY EXECUTION EXPERIENCE



OIL & GAS

- Gas compression stations.
- On shore Gas processing station and surface facilities.
- Gas Gathering Systems
- Gas Conditioning, Regulating & Metering Systems
- Storage Tanks

MEP WORKS

For Power, Refineries, Infrastructure Projects, etc.

- Fire Protection & Detection Systems
- Heat ventilation & Air conditioning systems
- Hydrogen generation systems
- Compressed Air systems
- Elevators, cranes & hoists
- Integrated piping works

TURNKEY EXECUTION EXPERIENCE



ELECTRICAL

- Substations Up to 765 kV (Both AIS & GIS) including Interconnecting transformers of 500 MVA including Civil, Fire Protection & HVAC
- EPC of Transmission Lines Up to 765 kV.
- EHV Cable Laying Up to 400 kV
- Plant Electrical Works for Nuclear & Hydro Projects.
- Control & Instrumentation Package Works for Nuclear Power Plants
- OPGW, ADSS & OLTE Based Communication Networks

TURNKEY EXECUTION EXPERIENCE



CIVIL & INFRASTRUCTURE WORKS

- Construction of large industrial and other building works for Power and Process Industries.
- Spring supported foundations for large turbines & generators and heavy machinery in steel plants
- Road works of various sizes and lengths both bitumen and RCC.
- Construction of bridges.
- Construction of townships.
- Tall structures including Natural Draft Cooling Towers and 275 Mtr tall Chimneys.
- Viaducts for Metros and above ground stations.

TURNKEY EXECUTION EXPERIENCE



PORTS

- Breakwater Structures
- Dredging
- Off-shore Piling works
- Berthing Platforms
- On-shore Platforms
- Storage Sheds

SOLAR

- Install and operate ground mounted Solar Plants ranging from 10 MW to 600 MW
- Roof-top Solar Plants
- Direct Solar Hydrogen Generation Systems
- Solar Linked Battery Energy Storage Systems

POWER SECTOR PERFORMANCE



Particulars	Capacity (MW)
Projects Completed	
❖ Sub Critical Plants	6,448
❖ Super Critical Plants	6,880
❖ Combined Cycle Power Plants	637
TOTAL	13,965
Projects In Progress	
❖ Super Critical Plants	4,240

EXPERIENCE – GAS BASED PROJECTS (COMPLETED)



S.NO	PROJECT	Capacity (MW)	Scope	DATE OF	
				Award	Completion
1	RRVUNL - CCPP, Dholpur, Rajasthan	330	BOP	Oct-2005	Dec-2007
2	TNEB - CCPP, Valathur (Phase I), Tamil Nadu	95	BOP	Sep-2000	Mar-2003
3	TNEB - CCPP, Valathur (Phase II), Tamil Nadu	92	EPC	May-2006	Aug-2008

EXPERIENCE – COAL BASED PROJECTS (COMPLETED)



S.NO	PROJECT	Capacity (MW)	Fuel	Scope	DATE OF	
					Award	Completion
1	BHEL – Aditya Cement Captive TPP, Rajasthan	1 x 23	Coal	BOP	Jul-2001	Feb-2003
2	MALCO – Captive Power Plant, Tamil Nadu	1 x 25	Coal	EPC	Mar-2007	Jan-2009
3	APGENCO – Vijaywada TPS, Andhra Pradesh	1 x 500	Coal	BOP	May-2006	Apr-2009
4	APGENCO - Kakatiya TPS, Andhra Pradesh	1 x 500	Coal	BOP	Sep-2006	Mar-2010
5	MAHAGENCO - Khaperkheda TPS, Maharashtra	1 x 500	Coal	BOP	Jul-2007	Mar-2011
6	APGENCO - Kothagudem TPS, Andhra Pradesh	1 x 500	Coal	BOP	Feb-2008	Oct-2011
7	TNEB - Mettur TPS, Tamil Nadu	1 x 600	Coal	EPC	Jun-2008	Oct-2013
8	RRVUNL – Kalisindh TPS, Rajasthan	2 x 600	Coal	EPC	Jul-2008	Jul-2014
9	MAHAGENCO - Chandrapur STPS, Maharashtra	2 x 500	Coal	BOP	Jun-2009	Jun-2016
10	CSEB - Marwa TPS, Chhattisgarh	2 x 500	Coal	BOP	Aug-2009	Mar-2016
11	Thermal Powertech Corporation India Ltd.	2 x 660	Coal	BOP	Oct-2010	Feb-2015
12	TRN Energy Pvt. Ltd.	2 x 300	Coal	EPC	Nov-2011	Aug-2016

EXPERIENCE – COAL BASED PROJECTS (COMPLETED)



S.NO	PROJECT	Capacity (MW)	Fuel	Scope	DATE OF	
					Award	Completion
13	NTPC Ltd. – Solapur TPP, Maharashtra	2 x 660	Coal	SG	Apr-2012	Mar-2019
14	NTPC Ltd. – Meja TPP, Uttar Pradesh	2 x 660	Coal	SG	Apr-2012	Jun-2021
15	NTPC Ltd. – Lara, Chattisgarh	2 x 800	Coal	STG	Dec-2012	Nov-2020
16	OPGCL – Ib valley TPS, Odisha	2 x 660	Coal	BOP	Mar-2014	Aug-2019

EXPERIENCE – COAL BASED PROJECTS (UNDER EXECUTION)



S.NO	PROJECT	Capacity (MW)	Fuel	Scope	DATE OF	
					Award	Completion
17	APGENCO – Dr.Narla Tata Rao TPS, Andhra Pradesh	1 x 800	Coal	BOP	Jul-2016	In Progress
18	TANGEDCO – North Chennai TPS, Tamil Nadu	1 x 800	Coal	BOP	Oct-2016	In Progress
19	NUPPL – Ghatampur TPP, Uttar Pradesh	3 x 660	Coal	BOP	Nov-2016	In Progress
20	TANGEDCO – Ennore Expansion TPP, Tamil Nadu	1 x 660	Coal	EPC	Dec-2019	In Progress

STEAM GENERATOR EXPERIENCE



2 X 660 MW SOLAPUR SUPER CRITICAL TPS, MAHARASHTRA



STEAM GENERATOR EXPERIENCE



2 X 660 MW SOLAPUR SUPER CRITICAL TPS, MAHARASHTRA



STEAM GENERATOR EXPERIENCE



2 X 660 MW MEJA SUPER CRITICAL TPS, UTTAR PRADESH



STEAM TURBINE GENERATOR EXPERIENCE



2 X 800 MW LARA SUPER CRITICAL TPS, CHHATTISGARH



STEAM TURBINE GENERATOR EXPERIENCE



2 X 800 MW LARA SUPER CRITICAL TPS, CHHATTISGARH



PROJECTS SHOWCASE



92.2 MW COMBINED CYCLE POWER PLANT – TANGEDCO VALUTHUR, PHASE -II



SCOPE

• TURNKEY EPC

COMMISSIONED ON

• MAY 2008

500 MW THERMAL POWER STATION - VIJAYAWADA



SCOPE

• EPC OF COMPLETE BALANCE OF PLANT

COMMISSIONED ON

• APRIL 2009

PROJECTS SHOWCASE



500 MW THERMAL POWER STATION - KOTHAGUEM

PROJECTS SHOWCASE

600 MW THERMAL POWER STATION – TNEB, METTUR



SCOPE

• TURNKEY EPC

COMMISSIONED ON

• MAY 2012

PROJECTS SHOWCASE

2 x 660 MW – THERMAL POWERTECH CORPORATION INDIA LTD. - KRISHNAPATNAM



SCOPE

• EPC OF COMPLETE BALANCE OF PLANT

COMMISSIONED ON

• JULY 2015

DIVERSIFICATION – INTO STEEL, OIL & GAS SECTORS (UNDER EXECUTION)



S.NO	PROJECT	Sector	DATE OF	
			Award	Completion
1	TATA STEEL – CIVIL WORKS FOR BOP & RELATED STRUCTURES, KALINGANAGAR, ODISHA	STEEL	Oct-2021	In Progress
2	TATA STEEL - CIVIL WORKS FOR 1800 TPD ASU PLANT, JAMSHEDPUR, JHARKHAND	STEEL	May-2022	In Progress
3	TATA STEEL - CIVIL WORKS (SUBSTRUCTURE) FOR 1X120 MW PHASE #7 UNIT OF CPP, JAMSHEDPUR, JHARKHAND	STEEL	Jul-2022	In Progress
4	IEL - CIVIL WORKS, STRUCTURAL STEEL WORKS, CHIMNEY, ARCHITECTURAL WORKS (SUPERSTRUCTURE) FOR 1X120 MW PHASE #7 UNIT OF CPP, JAMSHEDPUR, JHARKHAND	STEEL	Aug-2022	In Progress
5	IOCL - PILING, UG & CIVIL, STRUCTURAL WORKS FOR OFFSITES IN EXISTING PANIPET REFINERY (PR) AND PANIPET NAPHTHA CRACKER COMPLEX (PNCC) OF PANIPET REFINERY EXPANSION PROJECT (P25), PANIPET, HARYANA	OIL & GAS	Dec-2022	In Progress

PROJECTS COMPLETED - WATER



PROJECT	CAPACITY
TERTIARY TREATMENT REVERSE OSMOSIS PLANT (TTRO)	45 MLD
WATER TREATMENT PLANT PACKAGE FOR 3 X 800 MW PROJECT	55 MLD
INDIA'S LARGEST TEXTILE COMBINED EFFLUENT RECYCLING PLANTS IN TAMIL NADU ACHIEVING ZERO LIQUID DISCHARGE	21 MLD

ENVIRONMENTAL ENGINEERING



55 MLD Desalination Plant, AP



30 MLD WTP, Puri, Odisha



45 MLD TTRO PLANT, CHENNAI

PROJECTS COMPLETED – TRANSMISSION & DISTRIBUTION



PROJECT	SCOPE
SUPPLY, ERECTION, TESTING AND COMMISSIONING OF 220 KV SWITCHYARD FOR TEESTA-2 HYDRO ELECTRIC PROJECT	E-BOP
SUPPLY, ERECTION AND COMMISSIONING OF 6.6 KV SWITCHGEAR, 415 V MCC, CABLING IN POWER ISLAND AND NUCLEAR ISLAND	PLANT ELECTRICALS
SUPPLY, INSPECTION AND LIVE LINE STRINGING OF OPGW INCLUDING COMMISSIONING OF FIBRE OPTIC NETWORK TOTALING 6070 KM	OPGW – LIVE LINE STRINGING
DESIGN, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 400 KV AIS SUBSTATION WITH 315 MVA POWER TRANSFORMERS, 125 MVAR REACTOR	AIS SUB-STATION
DESIGN, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 130 KV GIS SUB-STATION WITH POWER TRANSFORMERS AND ASSOCIATED 33 KV GIS SUB-STATION	GIS SUB-STATION

PORTFOLIO OF EQUIPMENT FOR POWER & PROCESS INDUSTRIES

- Air Cooled Heat Exchanger
- Water and Oil Cooler
- Deaerators
- Water Treatment Plants
- Effluent & Sewage Treatment & Recycling Plants
- RO based Desalination Plants
- Condensate Polishing Units
- 2/3 Phase Production/Test Separators
- Oil & Gas Separator
- Indirect Water Bath Heaters
- Gas Dehydration, Regeneration & Gas Sweetening Systems
- Heater-Treater
- Fuel Gas Conditioning Skids
- Storage Tanks
- Pipeline Equipment-Pig Launchers/Receivers/Flow Tee's & Barred Tee's

QUALITY CERTIFICATIONS AND ACCREDITATIONS



ISO Certification for
Power Projects Division &
Electrical Projects Division



Approved by
INDIAN BOILER REGULATIONS (IBR)



ASME 'U' Stamp for two
Manufacturing Units

ISO:9001 Certification for
three Manufacturing Units



ASME 'S' certification for one
Manufacturing Unit



14 Prestigious Awards for
Export Performance

BOARD OF DIRECTORS



S/N	Name	Occupation	Exp.	Designation
1	Mr Gnana Rajasekaran	Retd. IAS	30	Independent Director
2	Mr M. Gopalakrishna	Retd. IAS	56	Independent Director
3	Mr S.A. Bohra	Ex. Sr. Exec. Director, Nuclear Power Corporation	51	Independent Director
4	Mr S.R. Tagat	Practicing Chartered Accountant	36	Independent Director
5	Mr Arjun Govind Raghupathy	Company Executive	10	Managing Director
6	Mrs Sasikala Raghupathy	Business	43	Chairperson

PROJECTS PAN INDIA



KEY CUSTOMERS



HUMAN RESOURCES



Department	Count
Design & Engineering	192
Procurement & Commercial, Project Management	222
Manufacturing, Construction Management & Quality Control	545
Business Development, Marketing & Proposals	22
Finance and Accounts, Human resource, Legal, Secretarial and other supported systems	114
Others	32
Total Employees (as on 30.11.2022)	1127

CURRENT ORDER BOOK



Current order book profile

The company's current order book as of 31.12.2022 is as below :

Particulars	Order Book (Rs. Crs.)
Capital Goods / Manufacturing	443
Environmental Engineering	239
Electrical Projects	1085
Power Projects	4606
Civil & Infrastructural Projects	187
Total	6,560