

Company Profile



ASTHA ENERGY SERVICES PVT. LTD.

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The Company

About Us

Beginning in 2004, Astha has completed a journey over two decades winning a place in Indian Engineering Industry as a reliable house for execution of projects – large & small – and in various fields like Power Generation & Distribution, Water Treatment, Long Distance Piping & Pumping Network, Bulk Material Handling and recently in Renewable Energy. It boasts of a rich list of satisfied customers as the **Experience** List testifies.

The [Promoters](#) & the [Team](#) believe the following core principles embodied in the name Astha (which, in Indian language, stands for “Confidence”):

- **Assured Quality**
- **Satisfied Customers**
- **Technical Excellence**
- **High Ethics**
- **Agile & Adoptive**

Mission

To build robust projects and institutions for a sustainable and environment friendly world using proven wisdom and supplemented by trending technological innovations.

Vision

To be recognized as one of the top-class organizations in its class for professional quality, commitment & ethics

Core Competence

As Energy professionals, the primary focus of the company is in energy related projects – mostly power generation. Since beginning Astha has participated in several fossil fuel-based power generation projects – both large & small. The expertise in the field helped the company to participate and successfully complete other stand-alone projects involving only portions of the complete power plant, e.g., **Pumping Stations, Substations & Industrial Power Distribution, Water Treatment Plants including Desalination, Effluent Treatment Plants, Bulk Material Handling, Fire Protection**, etc. (see [list](#))

Following the industry trend, the company now focuses on renewable energy generation using biomass, solid waste as well as solar generation. The company has entered into a license agreement with Indian Institute of Science (IISc), Bangalore for extraction and collection of Sulfur from biogas generated by sewage treatment plant and takes up proprietary equipment design & supply services for such application. The company is also

exploring possibility of partnering with organizations holding similar, unique equipment/process design so that a total engineering solution can be provided to end user. As a responsible environment conscious organization, the company offers services for energy audit, water usage audit and remedial solutions for operating plants.

It may not be out of place to mention that Astha's sister organization, **BTIT Engineering Solutions Pvt Ltd.**, which started its journey simultaneously with Astha is well entrenched in renewable energy with biogas from the very beginning. BTIT is a licensee Of IISc for their patented biogas generation from wood, rice husk or similar biomass for combustion in a gas engine or a conventional steam generator. The company has tied up with reputed Japanese companies like **Satake, Fujita** and supplied on EPC basis such plants in **Thailand, Myanmar** and other South East Asian countries like Vietnam, Malaysia etc. The list of such installations is appended. The company is also exploring another patented technology from IISc. of silica extraction as part of downstream integration with biomass power plants. Since silica has a ready market for various uses in chemicals, rubber & adhesive industries, the company is pursuing with offers of design and design cum supply of equipment for silica extraction projects within India and other countries with the Japanese partners. The combined strength of the two companies will definitely be an added advantage for our valued clients.

The experienced & dedicated professionals of **Astha Energy Services** will help the Client to get an innovative, economical, and value-added solution to any critical technical issues within a given time frame. Rich experience in execution of many complex Projects on a tight schedule will also help any EPC Organizations during execution of their various Projects and also the End Users/ Clients to monitor the execution of Projects in a time bound manner. "Astha Energy Services" is committed to extend the services to all clients, both EPC Organizations & End Users, in their execution of Projects both during Pre-bid or Pre-ordering Engineering, Post Ordering Detail Engineering, Project Management Consultancy during execution of Project, etc as partner in critical areas / stages of work to overcome the difficulties for smooth execution / completion of projects.

Astha team provided the most cost-effective designs and effective Project Management practices in completing various prestigious Projects in India & abroad which had finally brought laurels to their respective Organizations.

The core areas of competence of Astha Energy Services are (but not limited to) the following:

- Basic & Detail Engineering (Civil & Structural, Mechanical, Electrical, C & I assignments) of both Green field & Brown field Engineering Construction projects.

- Pre-Bid and Post Order Engineering Services & supports (Civil & Structural, Mechanical, Electrical, C & I assignments) to any EPC Organization or any Main Plant User for their new projects or Expansion Projects.
- Detail study for De-bottle necking of plants & solutions with value added Engineering.
- Revival study of Brown field projects & Engineering solutions.
- Experience of accessing competition level & suggestion of most Competitive Pricing.
- Project Management Consultancy Services

Service Model

Technical

The company offers multi-discipline services for above mentioned infrastructure projects starting from concept to commissioning. The roles could be for total multi-discipline engagements, for the project owner or the project vendor. We are equally comfortable in all cases. The scope is broadly but not limited to the following key areas:

Design Engineering Services

- Project feasibility and financial viability study
- Conceptual design outline including FEED if desired
- System design, optimization studies, mass & energy balances
- Construction ready detail engineering
- Equipment selection and procurement services
- Technical quality assurance and inspection

Project Management Services

- Guide the Project Teams in preparing Base Line Schedule and subsequently in regular updating of the Schedule for proper project monitoring.
- Periodic Project Reviews to monitor progress and to identify " Critical Areas " requiring immediate / urgent attention.
- Monthly Progress Synopsis for reporting to Top Management in terms of Engineering, Ordering/Procurement, Manufacturing, Supplies, Site Erection Work identifying the status, criticality for various corrective actions
- Guide the Project Teams on Techno-commercial issues and resolution of disputes during project execution, wherever required.
- Participation in negotiation on extra claims & change order management and also in settlement of commercial disputes, if any, with stakeholders
- Provide solutions to the Project Teams, wherever required, to ensure completion of projects without cost & time overrun and render support, wherever required, to remove any project blockage in order to ensure project deliverables.

Commercial

Depending on customer preference, the company can work in any of the following basis:

- Engineering (E), Procurement (P) and Construction Management (EPCM) or any combination of them (E, P or CM)

- Engineering and Procurement cum Delivery only (for small projects with limited financial liability and sulfur removal projects, biomass generation projects, silica extraction plants)
- Independent assignments for planning, inspection or deputation

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The Promoters

P.S. Mitra

Mechanical Engineer– 50 years of experience in the field of Power Project Management & Engineering ranging up to the capacity of 700 MW Plant & served organizations like Development Consultants Pvt. Ltd., Kuljian Corporation, Philadelphia, SCECO (KSA) & Mitsubishi Heavy Industries (Japan).



B.C. Bose

Mechanical - 42 years of experience in the Design. Engineering, Erection, Commissioning & Operation of Power Plant ranging up to 650 MW capacity based on fossil fired boiler, biomass fired boiler & also Gasification Plant & served organizations like WBSEB, DCPL, Kuljian Corporation, Philadelphia, SCECO (KSA), Mitsui Babcock, Satake Corporation (Japan).



Key Personnel

Biman K Dasgupta



An astute professional and result-oriented, judicious leader with over **43 years'** experience in Business Operation of EPC Organization with main focus on all aspects of Project Management for various **Domestic & Overseas Turnkey Projects**. Starting career with Andrew Yule in Air Pollution Control, served Alstom Projects as Director (Projects) of Environment Division, Senior VP (Power Division), McNally Bharat and as COO of F. Harley & Co (a company specializing in dust suppression/extraction of large industrial projects); successfully steered large infrastructure projects in Power, Steel, Cement etc. motivating working team and maintaining good relations with project stakeholders

S. Mallick



Senior **Mechanical Engineer** with extensive experience in engineering design, procurement and project management for Boiler Plant with Mitsui Babcock;

I. Ray



Senior **Mechanical Engineer** with over 25 years of extensive experience in engineering design and project management for Power Projects, Steel Plant, Water Treatment & Transportation; worked with BOC, INOX, M N Dasturco, My Home Power

P. R. Das



Senior **Civil & Structural Engineer** with over three decades of experience in design (both concrete and steel) for Thermal Power Plants, Bulk Material Handling Plant, Urea Handling Plant for Fertilizer project and other Industrial projects; worked with DCPL, McNally Bharat Engg. Co.(MBE) Ltd.

P. Chakraborty



Senior **Electrical Engineer** with over three decades of Design experience in Power Generation & Distribution, Petrochemical industry, Utility, Substation, etc. for various projects in India & abroad; worked with DCPL, Tebodin, Oman, Jacobs & Partner, Oman

Swati Bose



Senior **Control & Instrumentation Engineer** with more than two decades of Design experience in Power, Chemical, Petrochemical, Water Treatment, Utility, Substation Automation, etc. for various projects in India & abroad including Dubai, Qatar, Muscat; worked with DCPL

Advisory Panel

P.K. Mukherjee



A veteran **Civil & Structural Engineer** with special acumen for solving complex design problems and site execution issues for tall structures, heavy equipment foundations, coal bunkers/hoppers and the like. Worked extensively in Indian and Oversea projects with The Kuljian Corporation, Development Consultants Pvt. Ltd. and Consulting Engineering Services.

S. S. Biswas



An astute **Civil & Structural Engineer** with analytical mind for solving complex design issues for heavy industrial structures and foundations. Worked for Fertilizer, Power (Gas Turbine, 500/210MW Thermal & Nuclear), Oil-Gas & Petrochemical Projects industries on behalf of FPDIL, M.N.Dastur, DCPL, Kuljian Corporation, Petrofac Intl. Ltd, (UAE)

P.K. Ghosh



An accomplished **Electrical Engineer** with experience in both design and site oriented services of HV, MV & LV equipment like transformers, switchgears, motor control centers, switchyard equipment. Worked for projects for Power Generation, Desalination Plant, Fertilizer Projects, Captive Power Plant, Utility systems for Petrochemical plant & Loading berth, Material Handling System on behalf of WBSEB, MAMC, DCPL, Kuljian Corporation, Consulting Engineering Services.

S. Pal



An experienced **Mechanical Engineer** for design engineering of Power Projects (Both Thermal and Hydel) and Fertilizer offsites with special emphasis on piping engineering and stress analysis; served organizations like DCPL, Kuljian Corporation, Philadelphia, and Riau Andalan Pulp & Paper Plant, Kerinci, Sumatra, Indonesia.

Few of Our Important Customers

 <p>Larsen & Toubro Limited</p>	 <p>Doosan Babcock Limited</p>	 <p>McNally Bharat Engg. Co. Limited</p>
 <p>Bhushan Power & Steel Limited</p>	 <p>SEPCO Electric Power Constn. Corpn., China</p>	 <p>West Bengal Power Development Corpn. Ltd.</p>
 <p>My Home Power Consultancy Services Ltd.</p>	 <p>Alstom Projects Ltd.</p>	 <p>WPIL Limited</p>
 <p>Dongfang Electric Co. China</p>	 <p>DPSC Limited</p>	 <p>South Asian Petrochem Ltd.</p>
 <p>Himadri Chemical & Industries Ltd.</p>	 <p>Ramkey Infrastructure Limited</p>	 <p>India Power Corporation Limited</p>

Experience List

Power Generation

OWNER	CLIENT	DESCRIPTION OF JOB
DPR & FEASIBILITY REPORT		
Zuari Cement Ltd / Sri Vishnu Cement Ltd.	Zuari Cement Ltd / Sri Vishnu Cement Ltd.	Preparation of Feasibility report of 77 MW & 50 MW at Nalgonda, A.P.
Himachal Emta Limited	Fitchner Consulting Engineers	Preparation of DPR for 2x250 MW TPS at Raniganj, W.B
Orissa Thermal Power Corporation Ltd.	Visiontek Consultancy	Preparation of Feasibility report for 2000 MW TPS at Rengali.
India Power Corporation (Haldia) Ltd	India Power Corporation (Haldia) Ltd	Preparation of DPR for 3x135 MW TPS at Haldia, W.B
OWNER'S ENGINEERING		
Sterlite Industries Limited	Fitchner Consulting Engineers	Project concept, EPC specification / Evaluation of 2x60 MW TPS at Tuticorin , Tamil Nadu.
Grace Industries Limited	Grace Industries Limited	Engineering services for 1x25 MW TPS at Chandrapur, Maharashtra.
South Asian Petrochem Ltd.	South Asian Petrochem Ltd.	Engineering services for 1x8 MW TPS at Haldia, W.B.
My Home Industries Limited	My Home Power Consultancy Services Limited	Review engineering for 1x60 MW Captive power plant at Nalgonda A.P
Sew Infrastructure Ltd	My Home Power Consultancy Services Limited	Engineering services for 2x25 MW GTG for NOCL Cuddalore , T.N.
South Asian Petrochem Ltd.	South Asian Petrochem Ltd.	Engineering services for 1x10 MW TPS at Haldia , W.B.
Lanco Power	Lanco Infratech Ltd	Mechanical, Electrical, C&I basic & detail consultancy Services for 2x600 MW Anpara'C

OWNER	CLIENT	DESCRIPTION OF JOB
Nova Iron & Steel Ltd	Nova Iron & Steel Ltd.	Owner's Consultant for 2x12 MW WHRB based CPP at Bilaspur
DETAIL ENGINEERING		
Electric Generation Company of Bangladesh	Bengal Electric	Detail Engineering for 2x120 MW GTG at Siddhirganj, Bangladesh.
Bengal Energy	Techno Electric	Detail Engineering for 2x40 MW CPP at Kharagpur.
KSK Energy	Sepco- China	Detail Engineering for 6x600 MW TPS at Champa, CG.
Ideal Energy	Mcnally Bharat Engineering Co. Ltd.	Detail Engineering for 1x270 MW TPS near Bela, Nagpur with 400 kV Switchyard
WBPDC	Doosan Power Systems (I) Pvt. Ltd.	EE R&M of Unit # 5 (210 MW) , Bandel Power Station.
ASH HANDLING		
WBPDC	WBPDC	Engineering for 2X210 MW Bakreswar TPS New Ash dyke & its Recovery system
MP Power Generation Co. Ltd.	Mcnally Bharat Engineering Co. Ltd.	Detail Engineering for 2X250 MW Satpura TPS Ash dyke & its Recovery system
NALCO, Angul	Usha Projects	Detail Engineering for Ash Slurry Disposal System for mine void filling for 6x135 MW
DVC	Mcnally Bharat Engineering Co. Ltd.	Engineering work for AHP of 2X500 MW DVC Mejia TPS
WBPDC	WBPDC	Capacity augmentation for Ash pond for Santaldih TPS
Bhusan Power & Steel Ltd.	Bhusan Power & Steel Ltd.	Owner's Consultant for High Dense Ash Slurry management system at Rengali, Orissa.

OWNER	CLIENT	DESCRIPTION OF JOB
COAL HANDLING		
MP Power Generation Co. Ltd.	Mcnally Bharat Engineering Co. Ltd.	Detail Engineering for 2X250 MW Satpura TPS Coal Handling Plant.
CW SYSTEM		
MP Power Generation Co. Ltd.	Mcnally Bharat Engineering Co. Ltd.	Detail Engineering for CW system for 2x250 MW Satpura TPS.
KWPCL	WPIL	Detail Engineering for CW system for 2x600 MW KWPCL TPS at Raigad with 11kV transmission lines

Water & Effluent Treatment

OWNER	CLIENT	DESCRIPTION OF JOB
<i>WATER PRE-TREATMENT & DM PLANT.</i>		
MSEB	Ion Exchange (I) Ltd.	Pre & post treatment for 2x500 MW Bhusawal TPS.
Bhusan Power & Steel	Ion Exchange (I) Ltd.	Pre & post treatment for Steel Plant at Rengali.
Reliance Energy	Ion Exchange (I) Ltd.	Pre & post treatment for 2x300 MW TPS at Rosa, UP.
Reliance Energy	Ion Exchange (I) Ltd.	Pre & post treatment for 2x250 MW TPS at Paricha, UP.
<i>DESALINATION PLANT</i>		
CPCL- Chennai	Ion Exchange (I) Ltd.	5.8 MGD Sea Water Desalination plant for CPCL , Manali.
NTPC	Ion Exchange (I) Ltd.	18 MLD Sea Water Desalination Plant for NTPC Vallur.
Adani Power	Ion Exchange (I) Ltd.	7 MLD Sea Water Desalination Plant for Adani Power at Mundra
Gujrat Anjan Cement Ltd.	Ion Exchange (I) Ltd.	7 MLD Sea Water Desalination Plant for GACL Near Katch.
<i>EFFLUENT TREATMENT PLANT</i>		
Reliance Industries	Ion Exchange (I) Ltd.	Effluent Treatment plant for Jamnagar Refinery
Essar Steel	Ion Exchange (I) Ltd.	Effluent Treatment Plant for Essar Steel at
Crescent Power Limited	Crescent Power Limited	Engineering, procurement & construction of complete effluent Management system for 40 MW power plant at Asansol.

Pumping & Long-Distance Pipeline Transportation

OWNER	CLIENT	DESCRIPTION OF JOB
<i>Pump Houses & Pipe Network</i>		
ADITYA ALUMINIUM LIMITED	RAMKEY INFRASTRUCTURE LIMITED	Detail engineering for Intake water system 5X 150 MW CPP
IISCO - BURNPUR	ION EXCHANGE INFRASTRUCTURE LIMITED.	Detail engineering for Intake water system, Make up water & Drinking water system for Issco Burnpur.
WBPDCL	SUBHASH PROJECTS	Raw water makeup system from Panchet Dam to Santaldih TPS for 25 KM with 33kV transmission line.
KWPCL	WPIL	Raw water intake system with Transportation up to 7 KM with 11kV Transmission line for 2x600 MW At Korba
DPSC Limited	DPSC Limited	Detail Project Report for 2x250 MW TPS at Kulti, WB
IMFA	WPIL	Raw water intake system with Transportation up to 7 KM for 2x60 MW Chowder, Orissa.

Utility & Chemicals

OWNER	CLIENT	DESCRIPTION OF JOB
UTILITY.		
Bhusan Steel Ltd	L&T ECC	Detail Engineering work for Blast Furnace & Coke Oven Plant
GM, India	Ion Exchange Infrastructure	GM Car manufacturing facility in Talegaon.
Jindal Steel & Power Ltd	Ion Exchange Infrastructure	Engineering Services Cooling Water Treatment and Distribution System of JSPL Patratu
Tata Steel, Kalinganagar	L&T ECC	Detail Engineering work for Blast Furnace.
Bhilai Steel Plant	Mcnally Bharat Engineering Co. Ltd.	Engineering for Plant external water & Fire fighting system.
CHEMICAL		
Sterlite Industries	Sterlite Industries	Detail Engg for Bismuth Recovery Plant - Tuticorin & Sylvassa
Himadri Chemicals	Himadri Chemicals	Naphthalene Extraction Project near Singur.
Himadri Chemicals	Himadri Chemicals	Construction Chemical Plant
Hindustan Zinc Ltd.	Larsen & Toubro Ltd.	Engg Services for Hindustan Zinc Ltd. Phase III Smelter Project
UCIL	Ion Exchange	Detail Engg for Uranium Ore Enrichment Plant

Other Projects

OWNER	CLIENT	DESCRIPTION OF JOB
Waste To Energy		
Howrah Municipal Corporation	SWEPL	Feasibility Study for Waste To Energy Project for HMC
Sulfur Removal from Sewer Gas		
Firojabad UP Jal Nigam Ltd.	Lakshya Powertech Pvt Ltd.	H ₂ S Scrubbing System for Biogas – Complete Engineering & Supply
FGD System		
Hindalco Renusagar Unit 5	Smartluth Solutions	Engineering for new Gore System of Sulphur Removal from Power Station Flue Gas

BTIT Projects

OWNER	CLIENT	DESCRIPTION OF JOB
Biogas Related System		
Zen Noh, Japan		500 KW Gasification Plant with Rice Husk Ash in Briquette form
Satake Corporation, Japan		125KW Gasification Plant with Cummins Gas Engine
Felda-Itochu, Malaysia		24000tpa Pellet Plant from EFB (empty fruit bunches)
Fujita Corporation		1.8MW gross Rice Husk Fired BTG Power Plant, Myanmar

Project Photographs



220 M Chimney at
IEPL Bela 1x270MW

TP 6 with Mill Bay
IEPL Bela 270MW



Gas Turbine
Project

400 kV Switchyard





**POWER HOUSE at
IEPL Bela 1x270MW**

**COOLING TOWER
IEPL Bela 270MW**



**SERVICE BUILD. at
IEPL Bela 1x270MW**



1x60MW CPP for Myhome Cement

2x25 MW GTG for NOCL, Cuddalore

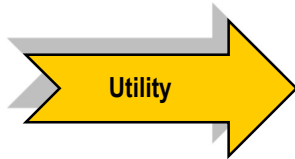
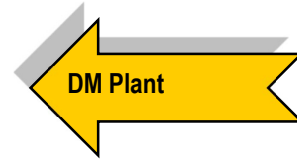


1x60MW CPP Switchyard



2x25 MW GTG for NOCL, Cuddalore







ETP AT CPL



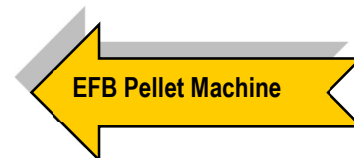
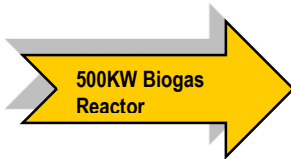
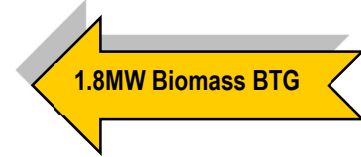
SETTLING TANK



GUARD POND AT CPL BEFORE

GUARD POND NOW





Thank You