

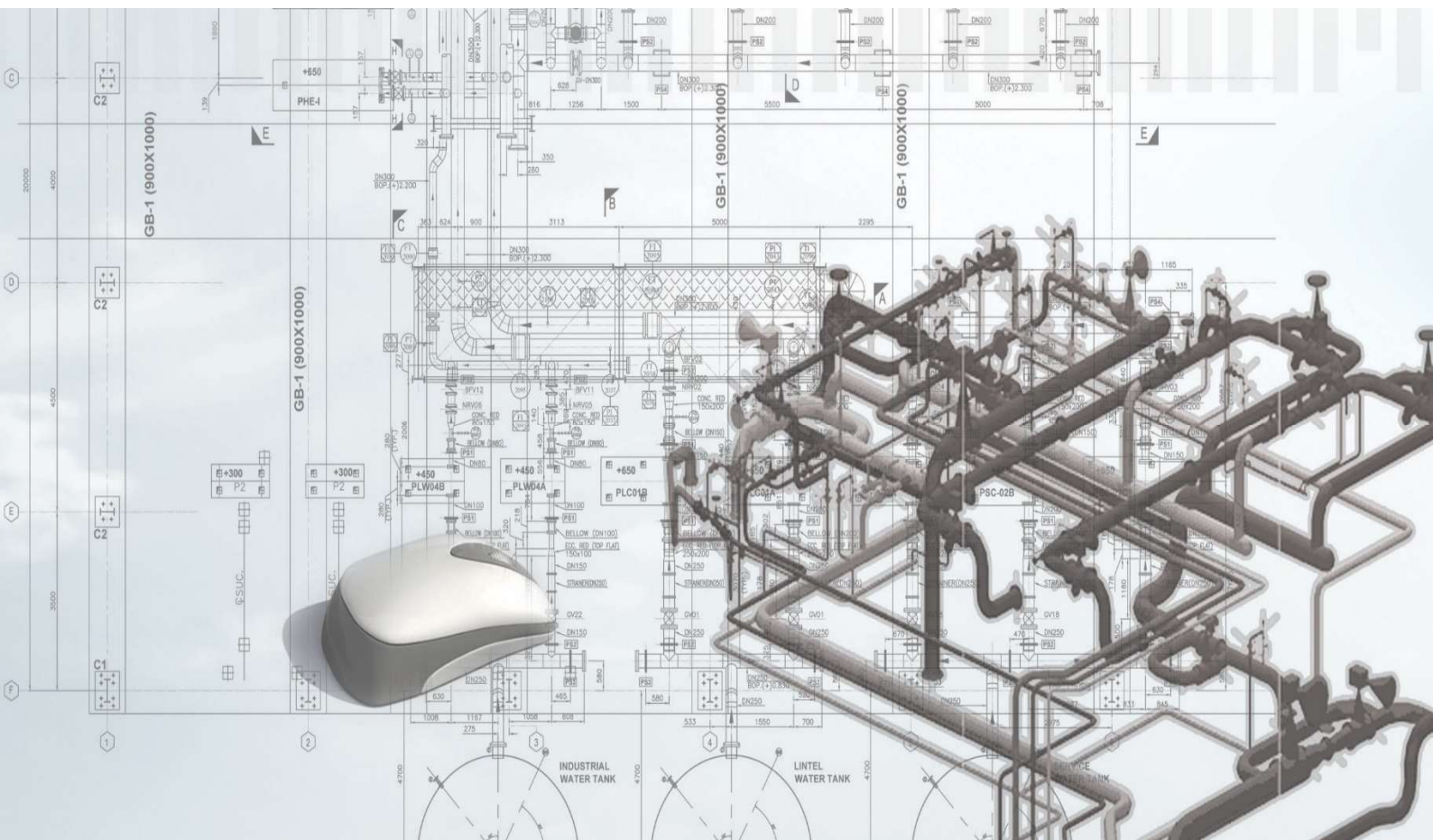


SPET DESIGN AND ENGINEERING SERVICES CO. (P) LTD

**SPET DESIGN AND ENGINEERING SERVICES COMPANY PRIVATE LIMITED
164/21 LAKE GARDENS, KOLKATA - 700 045, WEST BENGAL, INDIA**

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***Flagship Initiative of Technocrats
Committed to Innovation towards Engineering Excellence***



सत्यमेव जयते

Government of India
Ministry of Commerce & Industry
Department for Promotion of Industry and Internal Trade

#startupindia





SPET DESIGN AND ENGINEERING SERVICES CO. (P) LTD

Flagship Initiative of SPET Technocrats
Recognised by Government of India for START UP INDIA



Our Team

SPET's team of professionals represent a diverse workforce of industry specialists and support teams, with spirit of innovation and record for delivery across our length of services. The Company has an adequate pool of talented and qualified individuals with work varied experiences in **M.N. DASTUR, SHOUGANG, BABCOCK, GE / ALSTOM, ABB FLAKT, DOOSAN, TOSHIBA, PRIMETALS, ARCELOR MITTAL, ESSAR ENGINEERING etc. to name a few.**

SPET and its team have extensive experiences in working overseas, such as **EGYPT, GERMANY, BANGKOK, ITALY, CHINA etc.**

The experiences gained by the workforce of **SPET** from overseas markets, together with the continual development of skills and training, has ensured that we are up to date with the latest developments in the technical arena. The projects undertaken by us are not only obtaining highly skilled partners but also offer more creativity towards Customers satisfaction.



From the Desk of the Technocrats of SPET

Founded in 2022, SPET DESIGN AND ENGINEERING SERVICES COMPANY (P) LIMITED (SPET) is a Flagship initiative of Technocrats with [Certificate of Recognition under START UP INDIA by The Department for Promotion of Industry and Internal Trade, Government of India .](#)

SPET represents a strategic drive in creating a Global Engineering Services Company specializing in Consultancy and Engineering, from Concept to Commissioning benchmarked to international standards, powered by a potent mix of seasoned wisdom, youthful dynamism and state of the art infrastructure. The vision of SPET is to provide its Global customers with international quality services at the most competitive prices.

We at SPET, channelize the potential of technology and streamlined business processes to the fullest by offering single umbrella solutions to all kinds of Engineering Designs, meeting out the requirements to help leverage existing investments, improve operations, reduce costs and maximize business values.

In order to achieve the highest degree of productivity and efficiency, our engineers combine the leading edge technologies with effective management skills. It is our goal to develop long-term relationships through client satisfaction, paving way towards growth and prosperity.

Vision of SPET

SINGLE WINDOW SOLUTION to Customers with aspiration to be the most trusted technological partner with value additions and cost effective solutions...

We put “Innovation towards Engineering Excellence” in the fore front for our Customers.



**ON GOING PROJECTS FROM THE DATE OF INCORPORATION
UNDER THE START UP INDIA**

Sl. No.	CLIENT	DESCRIPTION	STATUS
1	BCE DESIGN SERVICES LLP	Design Engineering of Piping, Chimney for Hot Blast Stove, WGHRS and Dry GCP with 3D Modelling for Danieli Corus.	On-going
2	BCE DESIGN SERVICES LLP	TEFR for Instrumentation and Automation for 25.5 MVA Ferro Silicon project for TMPL , Bhutan	On-going
3	BCE DESIGN SERVICES LLP	TEFR for Instrumentation and Automation for 25.5 MVA Ferro Silicon project for BCCL , Bhutan	On-going

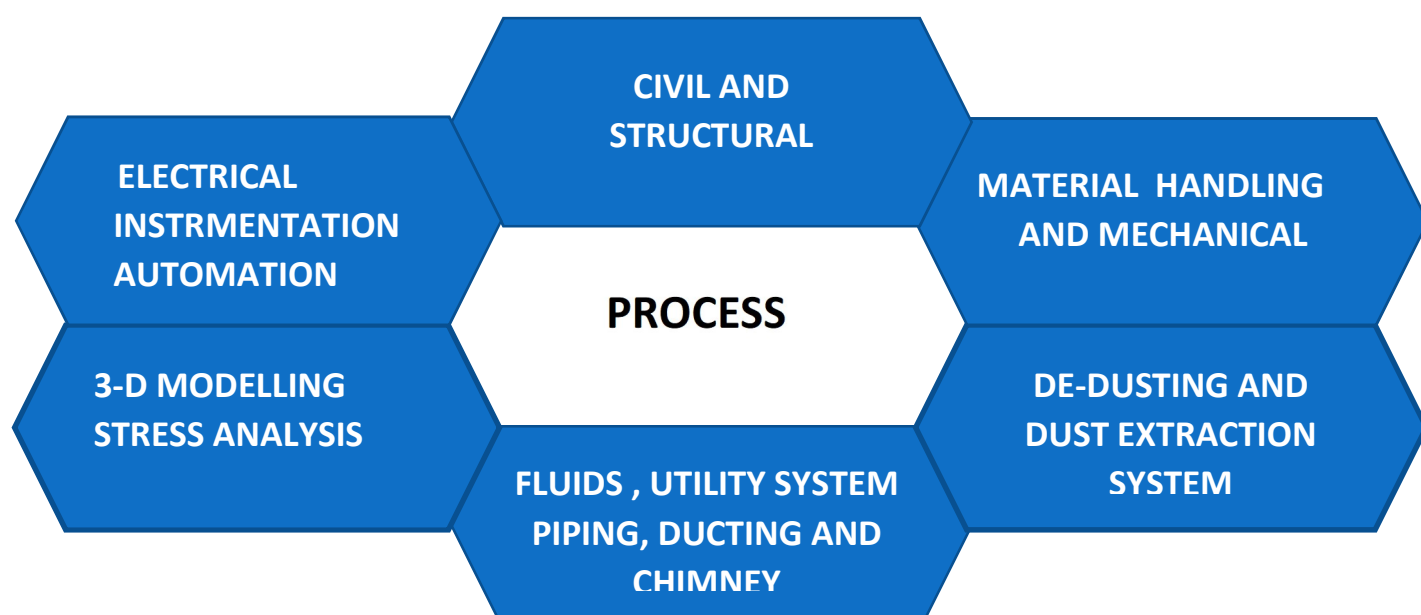


**SPET TECHNOCRATS EXCELLENCE
TO DESIGN PULVERISED COAL INJECTION SYSTEM
UNDER MAKE IN INDIA**





SEAMLESS INTEGRATED DESIGN AND ENGINEERING SERVICES



PLANT UNITS

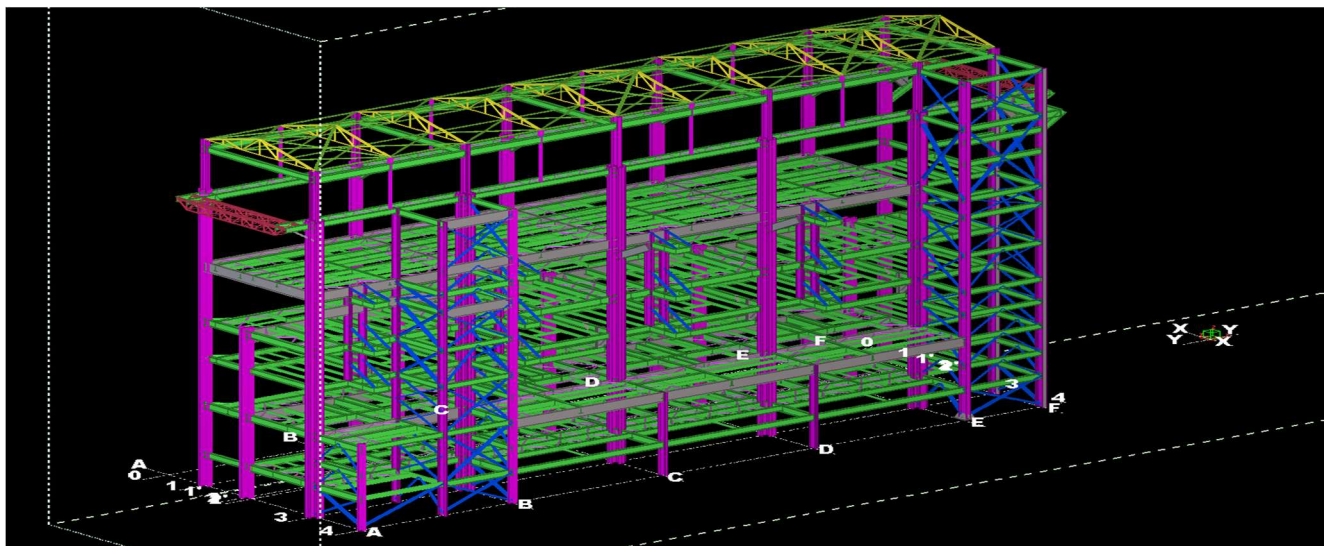
- Raw Material Handling System
- Blast Furnace
- Pulverised Coal Injection
- Stock House and Cast House Fume Extraction
- Induction Furnace
- Electric Arc Furnace
- Sinter Plant
- Pellet and Beneficiation Plant
- Coke Oven
- Gas Cleaning
- Hot Metal Desulphurisation
- Gas Holder and Gas Export system
- Dedusting and Dust Extraction system
- Lime Calcining Plant



3D MODELLING



BLAST FURNACE - HOT BLAST STOVE PIPING



BLAST FURNACE - HOT BLAST STOVE STRUCTURAL BUILDING

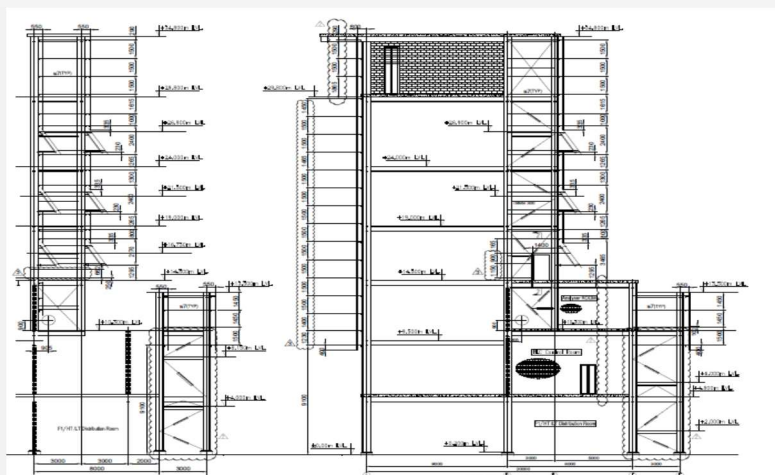


BASIC ENGINEERING

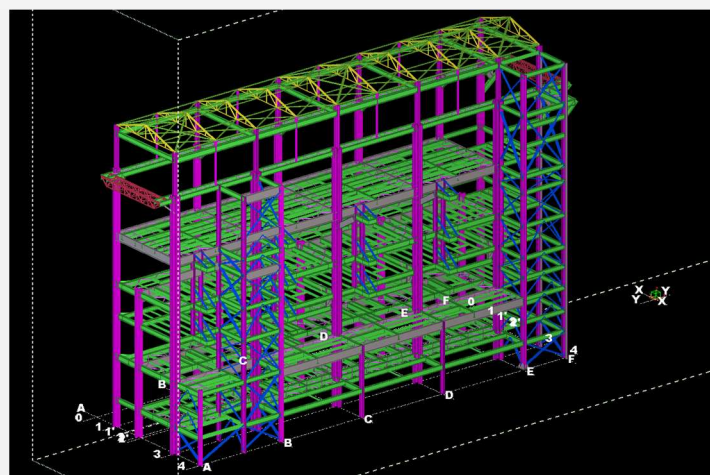
- Process Flow, Equipment List, Equipment Capacities
- Preliminary Drive List, SLD, PFD and P&ID.
- Automation system architecture with I/O List.
- List & Size of Buildings, Utilities & TOP
- Layout and Assignment Drawings, Building GA, Floor Plans, elevations.
- Motor List and Load data
- Civil load data
- Finalisation of approved vendor list for all packages of the project.

CIVIL AND STRUCTURAL – DETAIL ENGINEERING

- 3-D Modelling
- Piling, Building and equipment foundation, Civil building, Erection drawings for Civil.
- Structural Design basis, General Arrangement including Fabrication drawings.
- Structural STAAD Analysis report of the Structural Engineering
- Structural Steel and Rebar take off & Quantity Estimation
- Design of Steel, R.C.C and Steel-Concrete Composite framed elements
- Equipment Civil foundation



PULVERISED COAL INJECTION STRUCTURAL BUILDING



BLAST FURNACE – 3D MODEL OF HOT BLAST STOVE STRUCTURAL BUILDING

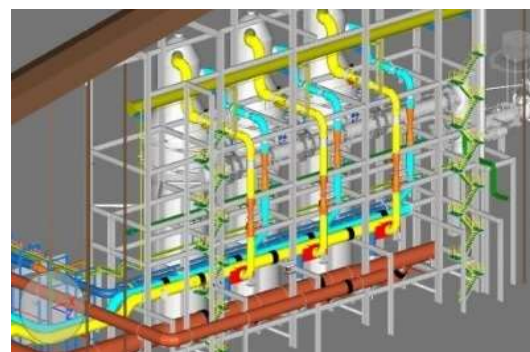


PROCESS – DETAIL ENGINEERING

- Preparation of the General Layout of the Plant.
- Process design and calculation
- Process Flow Diagram and P&ID
- Equipment list , Load list and Instrument list
- Bill of Quantities (as applicable) for Equipment Disposition, Technological Structures, Pipes
- Erection drawings for mechanical, technological etc. which are not provided by vendors but required for execution of the work.

UTILITY SYSTEM, PIPING AND DUCTING – DETAIL ENGINEERING

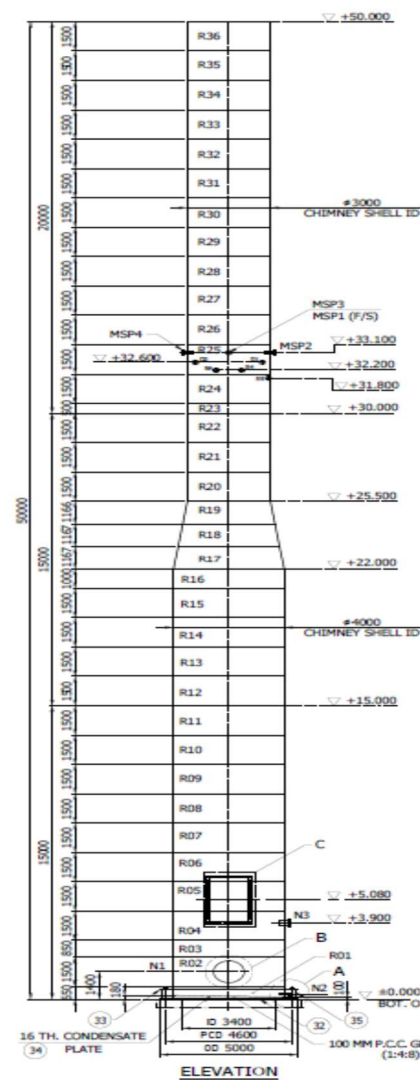
- 3-D Modelling
- Design Engineering and calculation and Utility consumers list
- In-shop piping drawings (scheme and detailed with BOQ) up to connection to the equipment.
- Piping Isometric drawings
- Piping BOQ
- Duct stress analysis and fabrication drawings
- Detailed drawings; plans, elevations & sections.
- Pipe Support detail drawings.
- Piping material specification with MOC and BOQ
- Flexible Hose and Expansion joints.
- TBA for valves & components.
- Line list and Valve list
- Thermal insulation specifications
- Painting / Coating requirements
- Erection drawings



**BLAST FURNACE
3D MODEL OF HOT BLAST STOVE PIPING**



- 3-D Modelling
- Chimney sizing calculation
- GA and Fabrication drawings
- Bill of Materials
- Civil Load data along with base plate details



BLAST FURNACE
HOT BLAST STOVE WASTE GAS CHIMNEY

WATER – DETAIL ENGINEERING

- Water Audit.
- Augmentation of existing water system.
- Debottlenecking of existing water system.
- Zero or Near Zero Liquid Discharge.
- Raw and Waste Water Treatment systems
- Plant recirculation water system.
- WTP, STP and ETP

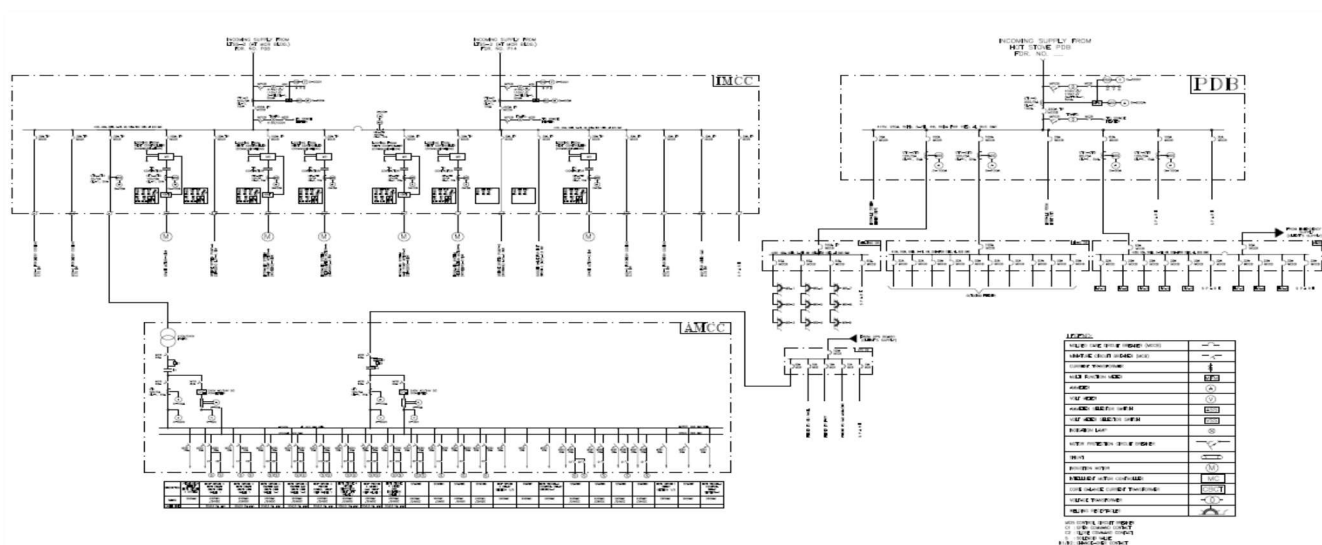


MATERIAL HANDLING AND MECHANICAL – DETAIL ENGINEERING

- 3-D Modelling
- System Layout
- Process Flow diagram
- Sizing of Mechanical and Material handling equipment
- Technical specifications and scrutiny of Vendors drawings
- Conveyor profile
- Equipment BOQ
- Sizing of silos and vessels along with GA and Fabrication drawings
- Erection drawings for Material handling system

ELECTRICAL – DETAIL ENGINEERING

- Detailed SLD
- Engineering with Bill of Quantities for HT and LT Electrical system.
- Electrical interlocking scheme
- Transformers, power distribution system.
- Plant illumination system
- Interfacing with Plant Automation system and preparation of Interlocking schemes
- Cable schedules, cable routing, cable termination, earthing
- Bill of Quantities for cables, cable trays, supports, etc. as required.
- Erection drawings for electrical systems as required for execution of the work.

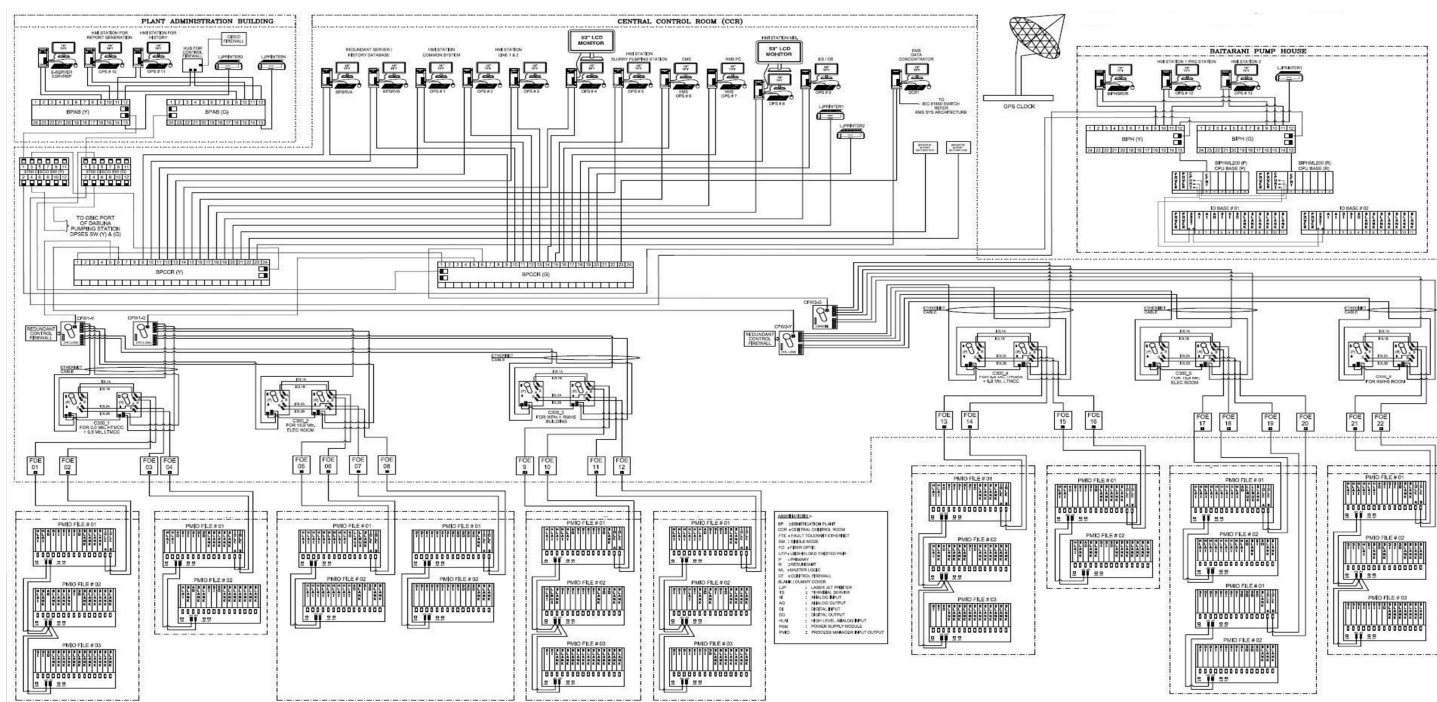


ELECTRICAL – SINGLE LINE DIAGRAM



INSTRUMENTATION AND PLANT AUTOMATION – DETAIL ENGINEERING

- Control and measurement loop schemes
- Instrument list
- Instrument data sheet and BOQ and Instrument hook up drawings
- Engineering and preparation of drawings with Bill of Quantities (as applicable) for Instrumentation & Automation Systems.
- Control room and PLC/DCS room layout
- IO List with IO address
- Automation system architecture and detail engineering of the Automation system.
- Sequential control logic of the plant and participation in the FAT and SAT of the Automation system software.
- Automation Panel and hardware engineering and software development
- Cable schedules, cable routing, cable termination and earthing.
- Erection drawings for instrumentation system which are required for execution of the work.



PLANT AUTOMATION – SYSTEM ARCHITECTURE



PROCUREMENT ASSISTANCE SERVICES

- Preparation of technical specifications and tender drawings.
- Scrutiny of offers against tender documents, preparation of Techno-Commercial Appraisal Report and Estimated Package Cost.
- Assisting Customers for inviting tenders, receiving tenders, price negotiation, placement of orders, Order specification manufacture, follow up with suppliers / contractors for timely delivery / erection of plant and equipment.

SYSTEM INTEGRATION

- Scrutiny and Approval of Vendor Drawings and accordingly take care of any impact on the technological and building structures and foundations. In case, any inter-connecting of pipes are left out, the drawings of the same shall be prepared by SPET to make the system complete in all respects.
- System Integration between different packages to plug any gap in order to make the system complete in all respects.
- Civil drawings and Building Structural drawings for clash checking.
- Integration of the Level-1 Automation system engineered by SPET with the main Process and Balance of Plant.

PROJECT MANAGEMENT SERVICES

- Procurement Schedule (MS Project).
- Project Management and Planning of activities.
- Overall monitoring and Control along with subject area experts & Quality Review.
- Delay analysis and Optimisation of completion time.
- Equipment & Manpower Deployment Schedule.

