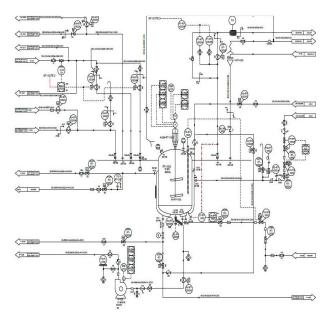
DETAIL ENGINEERING

(1) PROCESS ENGINEERING WITH INTELLIGENT P&ID



- We provide complete Process Engineering for all types of Chemical, Oil and Natural Gas, Petrochemical, Food, Pharmaceutical, Paint, Pulp & Paper and Industrial Projects.
- We use intelligent P&ID software which is integrated with every aspect of Detail Engineering.
- This helps in quick and intuitive P&ID creation.
- The P&ID can be effortlessly published so that they can be viewed using various platforms.
- Revision marking and tracking of P&ID is extremely easy.
- Smart PDF booklet is generated which contains all the deliverables.
- Process Datasheets are generated with the help of software which has bi-directional connectivity to P&ID
- P&ID has a bi-directional connectivity with Electrical and Instrumentation Engineering

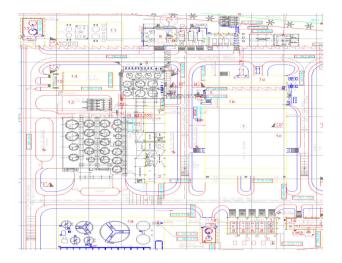
(2) 3D MODELING



- 3D Modelling provides a realistic and efficient output within a short amount of time.
- Flexibility and ability to change design or angles with quicker rendering of the changes.
- Ease of rendering, automatic calculation and rendering photorealistic effects rather than mentally visualizing or estimating.
- Accurate photorealism, less chance of human error in Layout and detection of fouling or incorrect placement of equipment as soon as they are designed.
- You can review the 3D model and can suggest any changes or other requirements that can be incorporated before the construction starts.
- We use high end 3D Modelling Software
- Walkthrough Model enables viewing of all technical and ergonometric details of the plant.

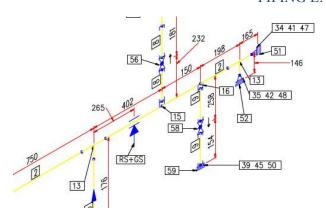
(3) PLOT PLAN & LAYOUT, PIPING ENGINEERING & STRESS ANALYSIS

PLOT PLAN AND LAYOUT ENGINEERING



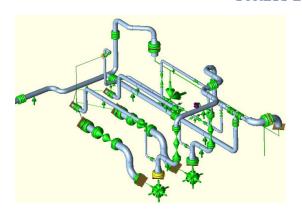
- We have expertise in development of Plot Plan which aims to improve efficiency by arranging units/equipment as per its function with man and material movement.
- We maximize plant productivity and develop a Plot Plan to eliminate waste in material flows, inventory handling and management.
- Based on Layout Design, scaled 3D model is developed.
- Equipment Layout is interlinked with 3D Model. Plan and Elevation are auto generated.

PIPING ENGINEERING



- We provide excellent Piping Engineering services for all Process Industries.
- We have an experience of more than 20 years in this area of work.
- As all Piping is developed in 3D models it enables checking of actual Pipe Routing.
- With use of advance software Piping Isometrics are extracted directly from 3D Model which assists fabrication.

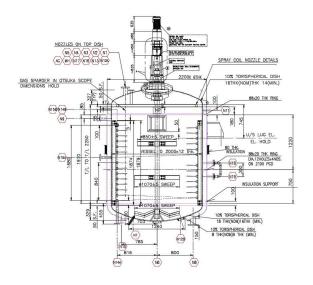
STRESS ENGINEERING



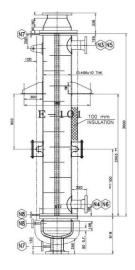
- We provide Piping Stress Analysis for Process and Power Piping.
- Our stress team is powerful with more than 10 years of experience.
- We have experience of Analysis of various critical lines up to 750°C

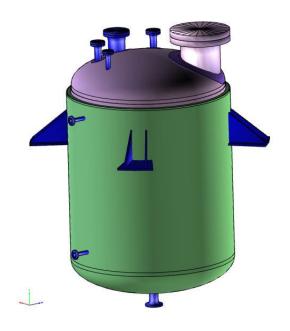
An ISO 9001-2008 Certified Company

(4) MECHANICAL AND VESSEL ENGINEERING



- We design all types of equipment such as Reactors, Pressure Vessels, Heat Exchangers, Distillation Columns, Storage Tanks etc.
- They are designed as per latest versions of International Codes and Standards as per the client's requirements.
- We do comprehensive error checking and analysis of these equipment so that they are 100% safe and pass all inspections and meet the Code specifications.
- We also offer
- ➤ Preparation of GA drawings
- ➤ Preparation of data sheets/ tenders for rotary and package items.
- ➤ Review and approval of vendor fabrication drawings.
- ➤ Review and approval of vendor details of Package items

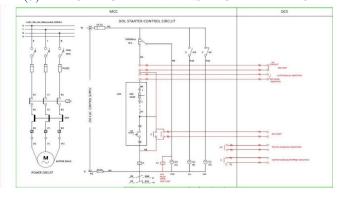


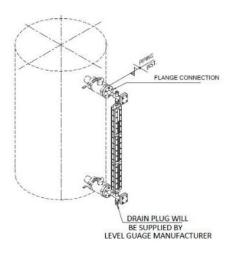




An ISO 9001-2008 Certified Company

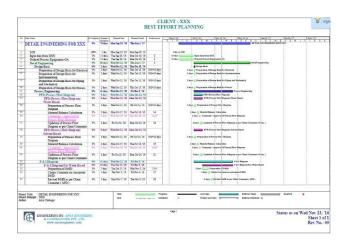
(5) ELECTRICAL AND INSTRUMENTATION ENGINEERING





- We have a highly skilled team to design the best electrical and instrumentation requirements of any project.
- Preparation of Engineering Deliverables are done with the help of intelligent software which has bi-directional connectivity with P&ID.
- Preparation of Electrical Detailed Engineering deliverables as follows but not limited to Load List, SLD, Control Schematics, Cable Schedule, Cable Tray Layout, Lighting Layout, Earthing & Lightning Protection Layout, Electrical BOQ, etc.
- Preparation of Instrumentation Detailed Engineering deliverables as follows but not limited to Instrument List, I/O List, Interlock & Functional Logic Diagrams, Specs preparation, Preparation of Cable Schedule, Junction Box Schedule, Control Room Layout, Pneumatic Hook-ups, Piping/Instrument Hook-ups, Preparation of MCC DCS interface, Instrument Power Supply and Distribution, Trip and Alarm Schedules, Control System Configuration Diagram, Cable Tray Layout, Instrument Location Layout, Loop Diagrams, etc.

(6) PROJECT MANAGEMENT



- We Offer excellent Project Management and Construction Management services.
- We have the discipline of Planning, Organizing, Directing and Controlling a Project from start to finish achieving specific goals.
- Our team is ever ready and able to handle all kinds of circumstances in any conditions.
- Our Project Management Team clearly defines Project Conception and Initiation, Project Definition and Planning, Project Launch or Execution, Project Performance and Control with Project Closing by MS Projects & S Curve.

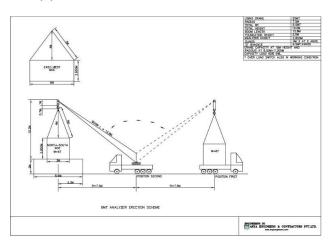
An ISO 9001-2008 Certified Company

(7) PROCUREMENT MANAGEMENT

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- Procurement assistance is provided by preparing Enquiry specification, Vender coordination, offer evaluation by making TBA, then a commercial bid analysis and order finalization.
- Our team is highly skilled and does a customer requirement specific Technical Bid Analysis.

(8) CONSTRUCTION MANAGEMENT



 Our Construction Team ideally works together from Project Initiation to Project Completion, with the common objective of best serving the Client's interests. Our Team carefully examines interactions between Project Cost, Quality and Completion schedule so that a Project of maximum value to the Client is realized in the economic time frame.

(9) INSPECTION

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 Inspection for all disciplines like Vessel, Piping, Mechanical package items, etc. are done as per the various International Codes and Standards.