

ENGINEERING | PLANNING | CONSULTANCY | PROJECT MANAGEMENT MANUFACTURING | CONSTRUCTION



At RA-Tech
We strive for MODEST solutions



DESIGN AND DETAILED ENGINEERING

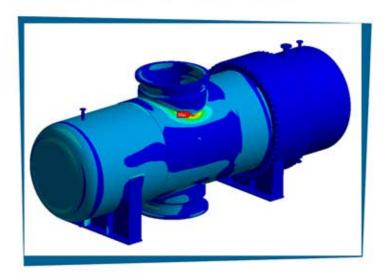
- Conceptual / Feed Design / Residual Engineering
- · Preparation of PIDS / Data Sheet etc
- Flare / Relief / Blowdown Network Study & Design
- Pumps / Compressors / Columns / Separators / Tank / Boilers / Pig Launcher - Receivers / Loading Arms

PROCESS DETAIL ENGINEERING SERVICES

- · Developments of PFD / PID / Process Data Sheets
- · Operating, Control & Shutdown Philosophy
- · Cause & Effect Diagram / Safeguarding Philosophy
- Operating / Commissioning Manual
- HAZOP / HAZIP / Preparation & Participation
- · Fire Water System Design
- · Surge Analysis / Prepare Process Design Basis
- Technical Bid Evaluation / Vendor document Assessment
- · Hydraulic Calculation / Specification
- · Power / Energy Requirement

MECHANICAL ENGINEERING

- Design Parameters
- Design & drawing for intricate Fabrication and Manufacture
- Preparation of Data Sheet and Detailed Engineering
- · Analysis of Fatigue / Elastic / Plastic etc



PROJECT MANAGEMENT

- · Project Planning / Process reporting
- · Activity Scheduling and Monitoring
- · Progress Reporting, Change Management
- Project Cost Monitoring and Control
- Customer Feedback and Lessons Learnt

PIPING LAYOUTS

- . Develop Conceptual, Plot Plan, Equipment Layout
- Develop 3D Modelling of Plants and Skids
- · Prepare Piping Layout, Plans and Sections
- Pipeline Alignment Drawings
- · Isometrics, Special Support and Support Standards
- Material Take Off
- Stress Analysis





ELECTRICAL ENGINEERING

- Load Estimation, Transformer Sizing, Cabling and Back Up Storage
- Emergency Power Back Up Generator Sizing & Neutral Grouding Resistor Sizing
- . Earthing Resistivity, Lighting Calculation and Layouts
- Lighting Lux Level Calculation and Layouts
- . Load Flow Studies and Relay Coordination
- . Short Circuit / Trouble Shooting
- Motor Starting Studies and MTO Preparation
- System Power Factor and Capacitor Bank Sizing
- . Single Line Diagram with Protection Scheme
- · Grid Synchronizing, Cable Tray Sizing & Layout
- · Switchgear and Control room Layout
- Hazardous Area Calculation

INSTRUMENTATION

- · Feed Document Preparation / Review
- · Preparation of Instrument Index
- Functional Specifications for Control System and Field Instruments [DCS/PLC/ESD/F&G/HIPPS]
- RPQ and BOM Preparation
- · Instrument Sizing
- · GA Drawings for Field Instruments and Controllers
- System Architecture Development
- · Instrument Cable and JB Schedule
- Instrument Loop Drawings
- Cable Tray Sizing and Cable Tray Routing
- · HAZOP and SIL review and participation





CIVIL & STRUCTRAL

- Preparation of Specification for Geo Technical Investigation and Topographical Survey
- Site Visit & Understanding of Geo Technical Conditions
- · Preparation of Project Specification
- Foundation Design including Piles, Heavy Equipment, Rotary Equipment Dynamic Analysis
- Large Diameter Tank Foundation
- Design of Tall Structure like Self Supported Chimney, Stacks/Flares, Externally Supported Stack
- RCC & Steel Structure Design & Drawing, Including large Technological Structure
- Pipe Racks, Warehouse, Airport Hangers Design and Drawings
- Dynamic Analysis of TG Deck and Pump Foundation
- Skids Structural Design and Drawings, Lifting and Transportation Analysis
- Design and Drawing of Control Room, Substation & all Types of Buildings
- Roads, Pavement, Drainage, Process Drains, Sewer System Design and Drawings
- · Culverts/Trenches, Fencing and Site Grading
- · Offshore and Well head Platform Drawings
- Development of Construction / Shop Drawings and Bill of Quantities.
- FEM Analysis

ABOUT US

RA-Tech Engineering LLP is professionally managed and progressing company having its Registered Office at Mumbai-India. The company has a dedicated team with rich experience in the field of engineering and services.

With the backing of an excellent Design and Engineering team, we have successfully executed various projects in India and across the globe.

With our rich content and experience we can effectively deliver to customer needs in the following areas;

- 1) Civil & Structural Engineering
- 2) Process Equipment Design & Engineering
- 3) Piping Layouts and Engineering

We are a Motivated bunch of Experienced professionals with special skills in specific areas of service, and are supported by a state of art infrastructure, enabling us to achieve Quality Services in Time to meet with customer requirements. Our team of engineers and detailers are conversant with Indian and International engineering standards. We as a team can provide variety of services and customized solutions to our customers around the globe.



ENGINEERING STANDARDS

We adhere to the Indian Standards/International Standards as per the customer requirement. We can also customize and deliver to the standards as per the customer requirement without compromising on quality.

MISSION STATEMENT

Our mission is to extend cost effective & quality services to our customers adhering to the Contractual Schedule. Improvement of services is achieved through timely upgardation of Software and Hardware infrastructure with enhancement of Quality Management Procedure, targeting Total customer Satisfaction in every aspects of Engineering and service provided.



SECTORS SERVED BY US

- · Refineries and Oil & Gas Sector
- · Petrochemicals Projects
- Chemical & Fertilizer Projects
- Cement Plant Projects
- Steel and Aluminum Plant Projects
- Cross Country Pipeline projects
- Commercial Port Structural Work
- Infrastructural Development Projects such as Power plants, Bridges etc.
- Commercial Projects such as Office Complex, Airports, Exhibition Centers, Shopping Malls, Schools, Sports Complex, Hotels etc.
- Thermal Power Plants
- · Heater Structure



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