



“We engineer your needs”



CORE PURPOSE

“TO PROACTIVELY SEEK AND HELP PEOPLE LEAD A BETTER LIFE”

SPIRITUAL FOUNDATIONS

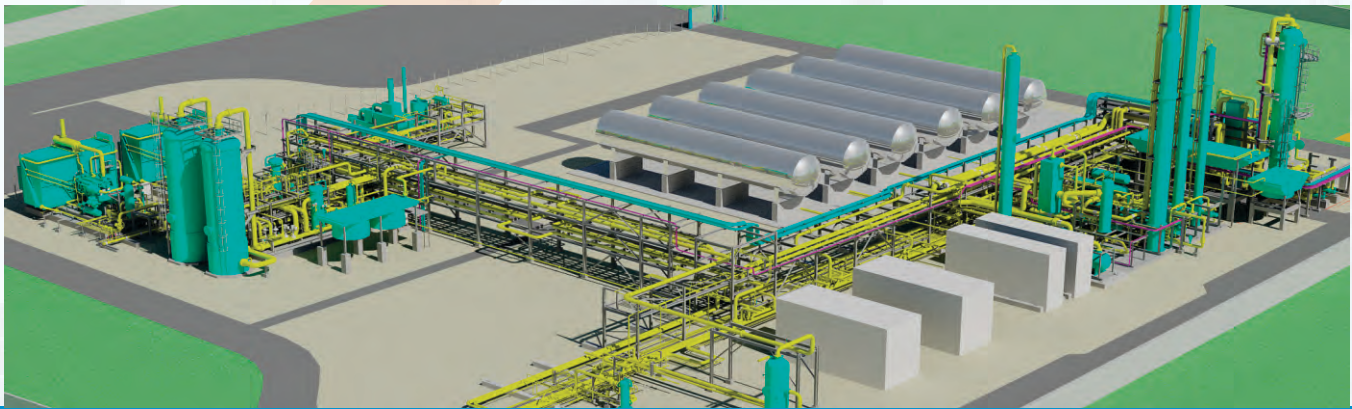
**Holistic Approach
Companionship & Collaboration**

**Provide Solution not mere Engineering
Stay United and Grow Together**

Repeat customer symbolizes of high quality, delivery and competitive edge

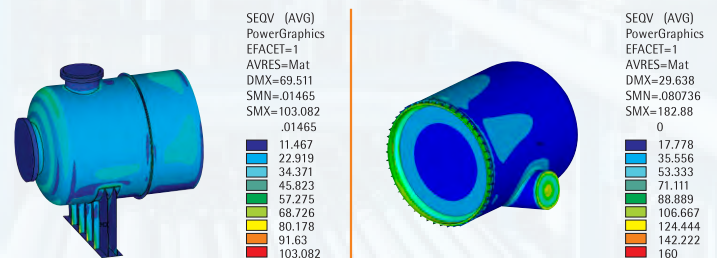
PROCESS ENGINEERING SERVICES

- Conceptual / FEED design / FEED verification / Basic / Detail Engineering / Residual Engineering
- Steady State & Dynamic Simulations/Transient Analysis
- Flare / Relief / Blowdown Network Study & Design / Depressurization Study / PSV Sizing / KOD Sizing / Flare Network Analysis
- Pumps / Compressors / Columns / Separators / Tanks / Boilers / Pig Launchers-Receivers / Loading Arms / Heat Exchangers
- Central Processing Units : Riser/Production Lines/ Prod.Separators / Gas Dehydration/ Gas Sweetning / Gas Compressors/HC DewPoint Control/Oil Stabilization/Produced Water Treatment Design Services
- Design of Early Production Facility (EPF)
- Tank Terminals / Tank Internals & Design Services
- Development of PFDs / PIDs / Utility Diagrams / Utility Consumption Summary / Process Data Sheets / Material Balance (HMB)
- Design Basics, Operating, Control & Shutdown Philosophy
- Cause & Effect Diagram / Safeguarding Philosophy / PSFS
- Operating / Commissioning Manual
- HAZOP / HAZID / SIL / IPF Preparation, Participation & Close-out
- Fire Water System Design
- CFD / Surge Analysis / Pipeline Hydraulics
- Technical Bid Evaluation / Vendor Doc. Review
- Pumps / Lines Hydraulic Calculation / Specification
- Equipment sizing / Line List / Electrical Load Lis



MECHANICAL

- Preparation of design basis
- Shop / Site Fabricated Equipment Design & Drawings including large diameter FR tanks, Pressure vessels, Tanks (floating roof, cone roof, dome roof) Double wall tanks, Silos, Sphere mounded bullet, Chimney Design & Dwg Heat EXH design and drawings
- Detail Engineering & Datasheet Preparation
- Finite element analysis (FEA), Fatigue analysis, Thermal analysis, Elastic plastic analysis etc.



PROJECT MANAGEMENT

- Project Planning & Scheduling
- Activity Scheduling & Monitoring
- Progress Reporting, Change Management
- Project Cost Monitoring & Control
- Risk identification, analysis & mitigation
- Customers Feedback & Lessons Learnt



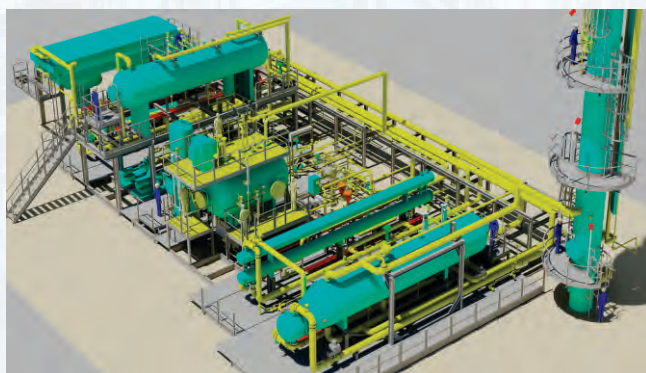
PIPING

- Plot Plan, Equipment Layout
- 3D Modelling of Plants & Skids
- Piping Layout, Plans and Sections
- Pipeline Alignment Drawings
- Isometrics, Special Support & Support Standards
- Material Take Off
- Bill of Material
- Surge Analysis
- 30%, 60%, 90% Model Review
- Stress Analysis
- Piping Specification



ELECTRICAL

- Load Estimation & Transformer Sizing
- Cable Sizing, UPS & Battery Sizing
- Emerg. DG and Neutral Grounding Resistor Sizing
- Earthing Resistivity & Lightning Calc + Layouts
- Lighting Lux Level Calculation + Layouts
- Load Flow Studies & Relay Coordination
- Short Circuit / Fault Level Calculation
- Motor Starting Studies & MTO Preparation
- System Power Factor & Capacitor Bank Sizing
- Single-Line Diagram with Protection Scheme
- Grid Synchronizing & Cable Tray Sizing & Layout
- Switchgear and Control Room Layout
- Hazardous Area Classifications
- Telecommunication



INSTRUMENTATION

- FEED document Preparation / Review
- Preparation of instrument index
- Functional Specifications for field Inst.
- Functional Specifications for Control System (DCS / PLC/ ESD / F&G / HIPPS / SCADA)
- RFQ and BOM Preparation
- Instruments Sizing, IO Count
- Instrument Datasheets
- GA Drawings for Field Instruments & Controllers
- System Architecture development
- Instrument Cable & JB Schedule
- Instrument Loop Drawings
- Instrument Hook up & Installation Drawings
- Instrument, JB and F&G Location Layout Drawings
- Cable tray sizing and Cable Tray routing Layout
- HAZOP / SIL / IPF participation and close-out
- Preparation of MR, Technical bid evaluation, vendor document review

CIVIL / STRUCTURAL

- Preparation of Specifications for Geo Technical Investigation and Topographical Survey
- Preparation of Design Basis
- Foundation Design including Piles, Heavy Equipment, Rotary Equipment Dynamic Analysis
- Large Diameter Tank Foundations, Preparation of Report
- Design of Tall Structure like Self Supported Chimney, Stacks / Flares, Externally Supported Stack
- RCC and Steel Structure Design & Drawings including Large Technological Structure
- Pipe Racks, Warehouse, Airport Hangers Design and Drawings, FEM Analysis
- Skids Structural Design and Drawings, Lifting and Transportation Analysis
- Design and Drawings of Control Room, Substation and all types of Buildings including Blast resistance building Design
- Roads, Pavement, Drainage, Process Drains, Sewer System Design and Drawings
- Culverts / Trenches, Fencing and Site Grading
- Offshore and Wellhead Platform Drawings
- Development of Construction / Shop Drawings and Bill of Quantities
- Design and Engineering of sheds



About Us.....

P-Mech group founded by Mr. Maheshkumar Nirmal, has been successfully serving various industries since 1988, providing turnkey plants engineering solutions to a very large satisfied customer base all around the globe.

We provide innovative and optimum solutions to our clients through quality design and consulting services with the use of skillful resources and computer software within the agreed time schedule.

HIGHLY CUSTOMER CENTRIC COMPANY



P-MECH CAPABILITIES

- FEASIBILITY/CONCEPTUAL STUDY SERVICES
- FEED/FEED VERIFICATION/BASIC
- PROCESS ENGINEERING
- PIPING ENGINEERING
- MECHANICAL ENGINEERING
- CIVIL/ STRUCTURAL ENGINEERING
- INSTRUMENTATION ENGINEERING
- ELECTRICAL ENGINEERING
- DETAIL ENGINEERING
- PROJECT MANAGEMENT SERVICES
- PROCUREMENT ASSISTANCE
- PROJECT TURNKEY SOLUTIONS
- FEASIBILITY & OPTIMISATION STUDY
- TECHNO - COMMERCIAL STUDY SERVICES
- INSPECTION SERVICES
- RESIDUAL ENGINEERING

INDUSTRIES SERVED

- OIL & GAS (ONSHORE/ OFFSHORE/ SUBSEA)
- REFINERY & PETROCHEMICALS
- POWER PLANTS
- TANK TERMINALS
- PLANT OPTIMIZATION
- PLANT DIGITALIZATION
- FERTILIZER PLANT
- AMMONIA PLANT ENGINEERING
- GAS PLANTS
- FLARE & INCINERATOR PLANTS
- CHEMICAL PLANTS
- WATER & INFRASTRUCTURE

SERVICE PROCEDURES & STANDARDS

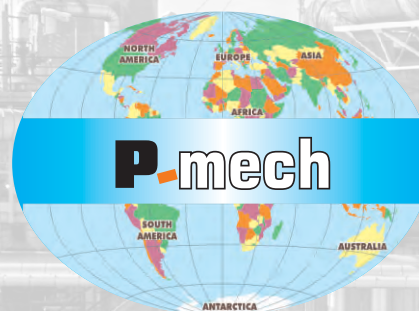
We adhere to stringent internal quality standards and procedures to ensure delivery of the highest quality work. We provide extended support all through process till construction of plants. Our dedicated project team allows for smooth working process and efficient communication apart from a single point contact for customer.

ENGINEERING STANDARDS

We are open to using customer standards as provided by the customers. In the absence of customer standards we use all in-house developed internationally accepted standards and procedure.

SOFTWARE & HARDWARE CAPABILITY

We use industry's best software applications in our design and engineering work. P-Mech has invested Sizable funds in software to help us do right engineering in shortest possible time with highest accuracy.



ISO 9001:2015 COMPANY



DESIGNERS • ENGINEERS • PROJECT CONSULTANTS

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