

Engineering & design services





Nemi Techmech FZE L.L.C, established by qualified and experienced professionals takes pride in offering a combination of services in both engineering and management segments

Nemi Techmech FZE L.L.C based in UAE providing services to clients globally, In a very short span of time, Nemi has gained recognition and reputation among the clients in the field of Design and Detailed Engineering, Project Management and QMS Services related to ASME/ISO/API.

Primary function is to provide complete Engineering Solutions to the EPC Companies, Process Technologists and Package Vendors, Fabrication Companies for the Oil and Gas, Petrochemical, Water Treatment Systems and Power Generation Systems.

Apart from the above services, We have qualified and experienced team of professionals to establish Quality Management System (QMS) as per ASME, ISO, API Spec Q1

Engineering Solutions and Services for:

- Process Engineering.
- Steel/Civil Structure Engineering.
- DNV Skids, Onshore and Offshore structures,
- Acoustics Enclosures.
- Equipment's for Early Production Facilities.
- Waste Heat Recovery Boilers Package .
- Heat Exchangers Design
- Rectangular Tanks Design.
- P&ID Preparation/Pipe Support Design
- Project Management& Expediting.
- Static Equipment Engineering
- Piping Design And Analysis.
- Skid Packaged Equipment's.
- Finite Element Analysis.
- Tank Farm/Storage Tank Design.
- E& I Engineering.
- Procurement/Vendor Management
- Inspection Services

Certification and Training Consultancy Services

- API Specification Q1, ASME
- Certification Consultancy. API
- Monogram consultancy service.ISO
- 9001:2015 Consultancy.
- Technical Proposals Review.

Vision

To be the preferred partners with our clients delivering the most challenging projects and complete engineering solutions achieving highest levels of Satisfaction for our clients & stakeholders with focus on continuous improvement to innovate, grow and diversify the business.

Mission

To provide our customers with quality engineering solutions and project management services to the Oil & Gas, Petrochemicals and allied Industries that is reliable, competitive, sustainable, flexible and customized to client needs, promoting long-term business relationship and utmost levels of client satisfaction.

Our Software Expertise and Services:

- Pv elite.
- Feed Engineering.
- HTRI
- Thermal Engineering
- Nozzle Pro.
- Pre-Bid Engineering.
- TANK.
- Design and Detailed Engineering.
- CAESARII.
- 3D Modeling.
- CADWorx3-D Modeling
- Review Engineering.
- Rivet3-D Modeling.
- Procurement Support.
- ISOGEN/Piping Isometric.
- Construction Support.
- Tekla Structures.
- Project Management.

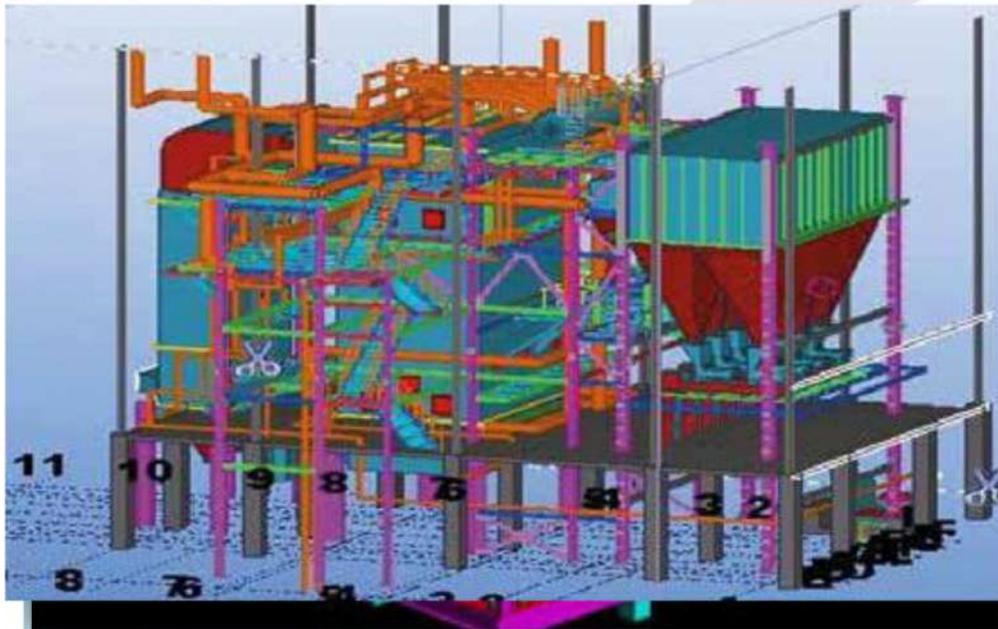


SKID PACKAGED EQUIPMENTS



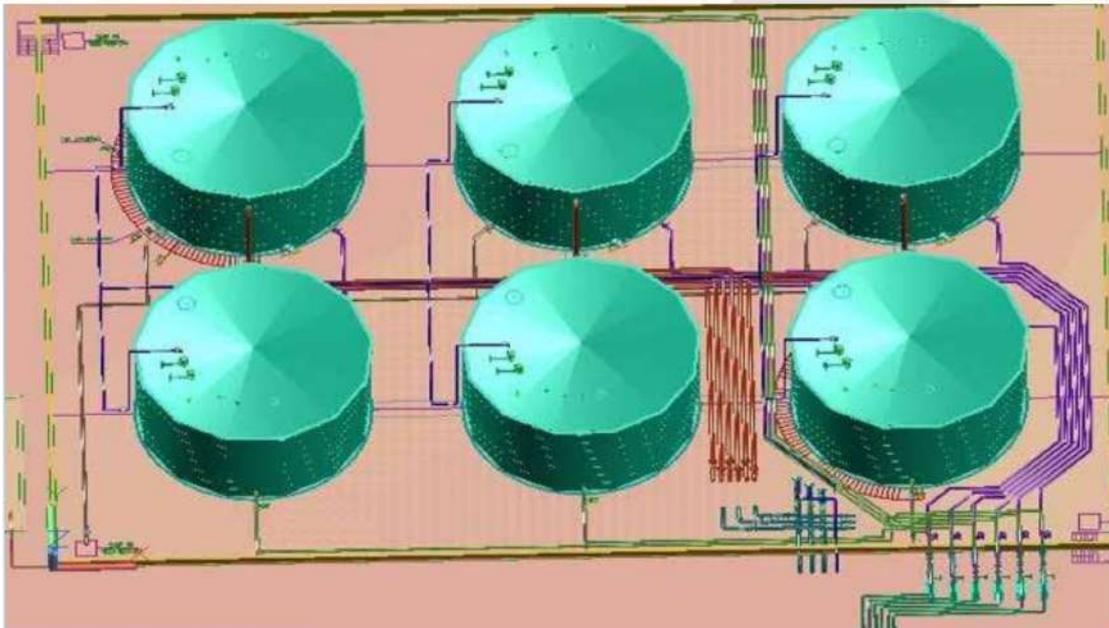
- Preliminary Design & Bill of Qtys.
- Process Detail Engineering Process Flow Diagram- P & ID
- Design of Pressure Vessel & Drawings.
- Design of Access Platform & Drawings.
- 3D modelling of complete package.
- Piping ISO metric Drawing & BOQ.
- Piping Stress Analysis.
- Piping Support design & drawings.
- 2D piping Drawings & COG calculations.
- Tie-in Schedule- STAAD Analysis of the Base Skid & Lifting Lug calculations.
- Instrumentation Data sheets & hook up drawings.
- Procurement Engineering & Management support.
- Fabrication & Construction support. Inspections at Vendor location.
- Expediting support.
- As Built Engineering – Drawings.

WASTE HEAT RECOVERY BOILERS PACKAGE.



- Preparation of Process Flow Diagram, P&ID, PLOT plan of WHB(CFBC, AFBC, Piggy Type Boilers with Steam Drum and Risers and Down comers) For SRU, Coke Oven,
- Sponge Iron, Sulphuric acid Plants
- Preliminary Design & Bill of Quantity.
- Thermal Engineering(Sizing) & preparation of Process Flow Diagram - P & ID, PFD
- Mechanical Design & Detail Drawings of WHB (Super Heater, Economizer, Evaporator) as Per Sec.I
- Piping Stress Analysis, routing.
- 3D modelling of complete WHB package.
- Piping ISO metric Drawing & BOQ.
- Piping Support design & drawings.
- 2D piping Drawings & COG calculations.
- Tie-in Schedule- STAAD Analysis of the WHB Structure& Lifting Lug calculations.
- Instrumentation Data sheets & hook up drawings.
- Procurement Engineering & Management support.
- Fabrication & Construction support. Inspections at Vendor location.
- Expediting support, Attending Site Query.
- As Built Engineering – Drawings.
- Vendor Document Review.
- Compilation of QA / QC Dossier & Close out.

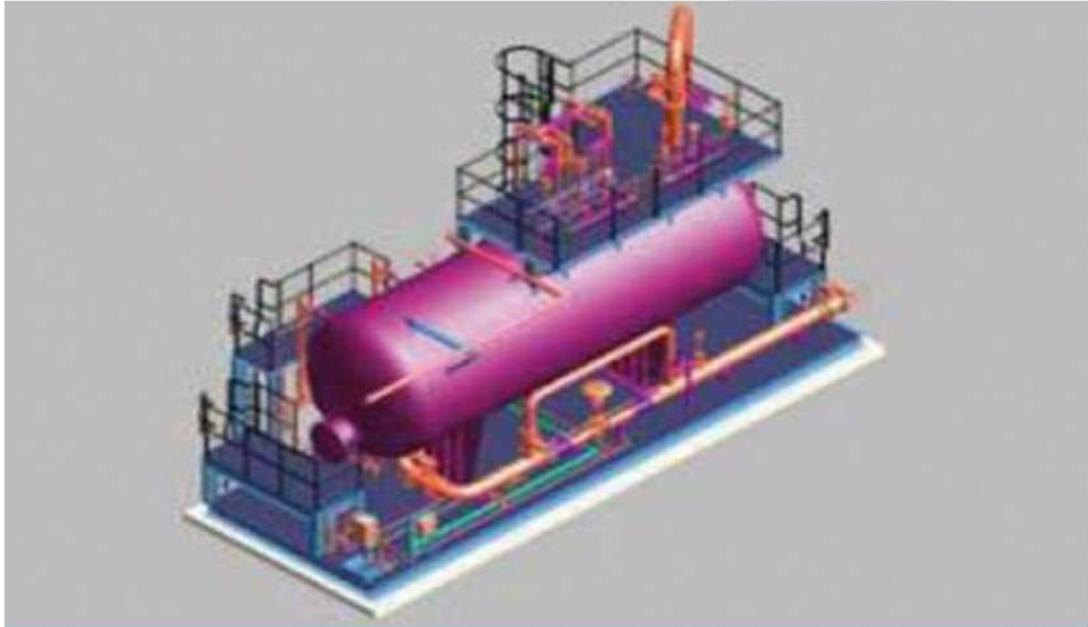
TANK FARMS AND STORAGE TANKS



Preparation of Process Flow Diagram, P&ID, PLOT plan

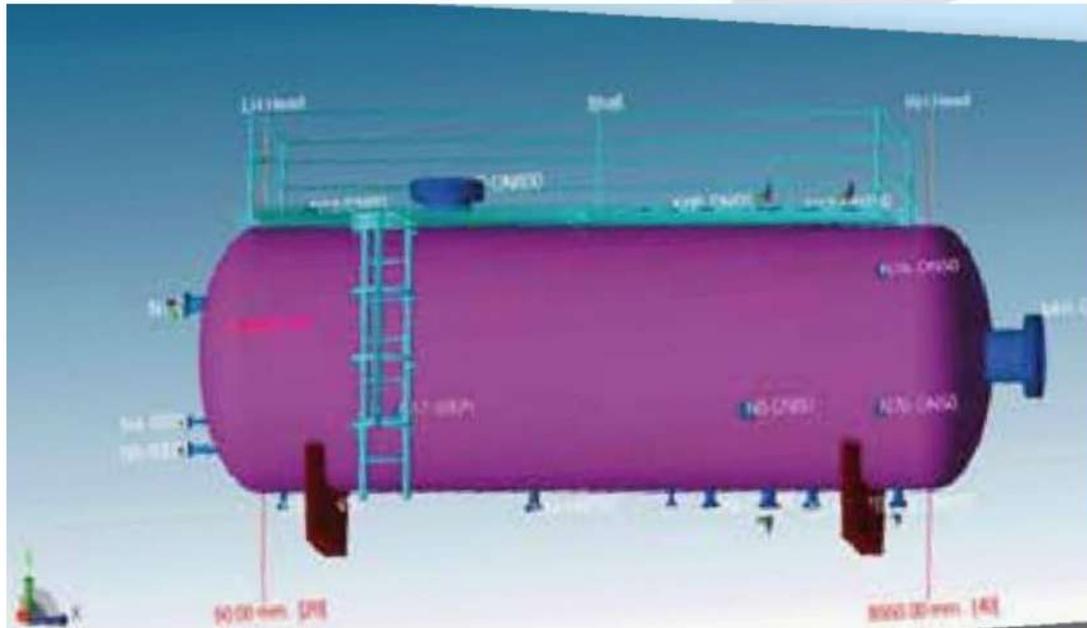
- Preparation of Tank Datasheets in accordance with API 650 & Pig Receiver & pig Launcher datasheets, Valve datasheets & piping material specifications.
- Design Calculations of Storage Tanks
- Venting Calculations
- General Arrangement drawing of storage tank & Detailed Drawings
- Design Calculations of the Pig Receiver & Pig Launcher as per B31.4, B31.8
- General Arrangement & detail drawings for Pig Receiver & Launcher.
- Hydraulic Calculation of Piping with respect to Pump Specifications.
- Stress Analysis & flexibility analysis of the pipe line.
- Complete -3D Plant Model with clash detection, walk- through & animation

EQUIPMENTS FOR EARLY PRODUCTION FACILITIES



- Design & Detail Engineering for Inlet Choke Manifold.
- Indirect Water Bath Heater.
- 1440 PSI Test Separators.
- Production Separators.
- Metering Skids.
- Poor Boy degasser as per API 12J.
- Skid Mounted Surge Tanks.
- Mud Tanks/Handling System.
- Export Metering Skid.
- Flare Gas KO vessel .
- Flare Stack.
- Skid Mounted Cement Silos.
- Fired Heaters
- Pump Skids.
- Degassing Units, Slug catchers
- Desalters, Stripping Columns etc

STATIC EQUIPMENT/PRESSURE VESSELS ENGINEERING

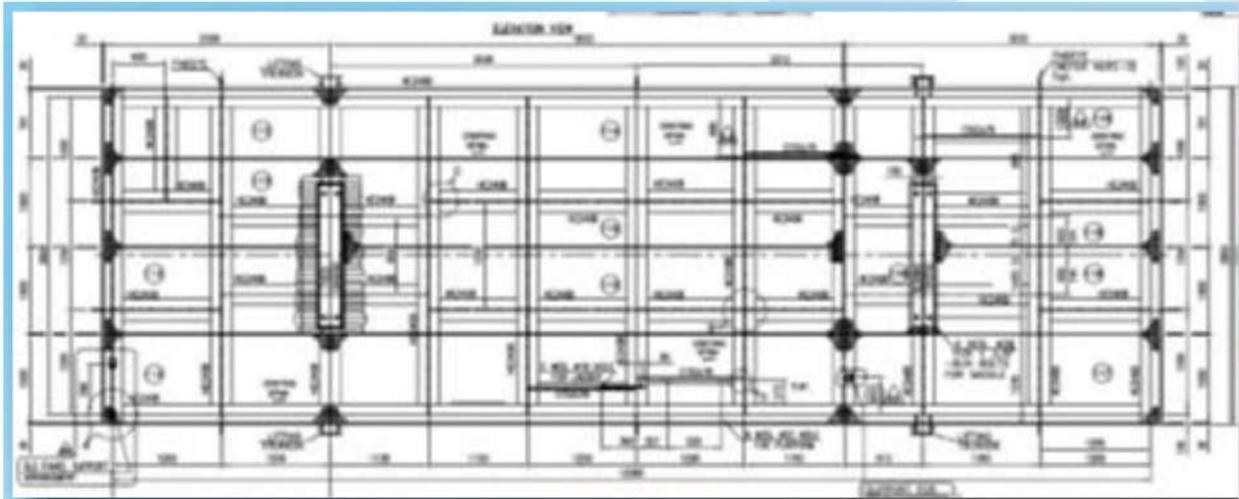


- Preparation of Mechanical Data Sheets.
- Pre-Bid Engineering and BOQ for Estimation.
- Mechanical Design and Detailed Engineering.
- Technical Delivery Condition (TDC).
- Technical Proposals Review & Cost Estimation.
- Local Load Analysis as per WRC537/PD 5500
- Seismic and Wind Load Analysis.
- Liaising With Authorized Inspector

Design Codes:

- ASME SEC VII DIV 1 /DIV2.
- IS 2825.
- PD 5500.
- EN13445.
- PED 23/97/EC.

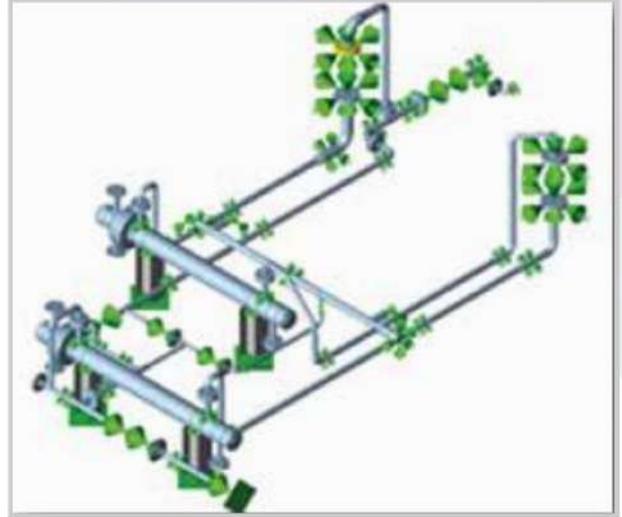
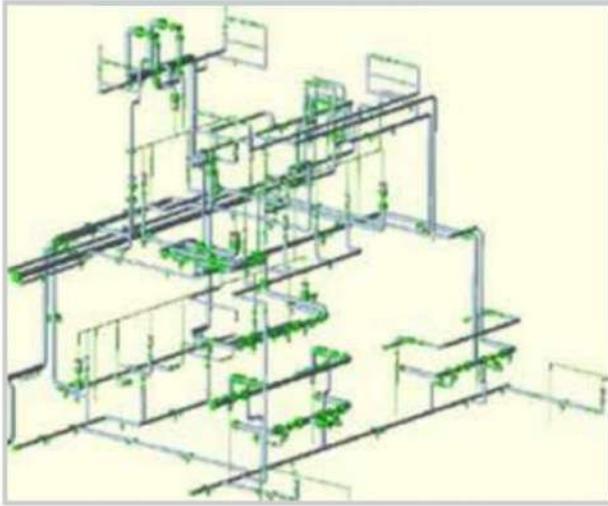
STRUCTURAL DESIGN SERVICES.



Type of Structure:-

- Industrial steel structure
- Civil foundation Design.
- Pipe Rack Structures.
- Package Module structure.
- EOT Crane structure design as per code.
- Commercial /Industrial Warehouse structure.
- Design and detailed engineering services
- For support and service structures for WHB..
- DNV1-2.1 Skids/ISO Skid Modules.
- Platforms, Pipe Supports.
- In-Place analysis, Lifting and
- Transportation analysis.
- Sheds
- Connection design in RAM software

PIPING ENGINEERING & STRESS ANALYSIS SERVICES.



Development of Plot Plans

- Equipment layouts
- Piping Calculations
- Flexibility analysis/Stress Analysis
- Plant 3-D Modeling and clash detection
- Piping material Specification
- Support specifications
- Isometrics and Bill of Materials
- Advanced dynamic analysis
- Pipe stress analysis
- Support design in Staad pro
- Fatigue Analysis
- Fluid hammer Analysis

Code /Book :

- ASME B31.3 & ASME 31.1
- International Standards

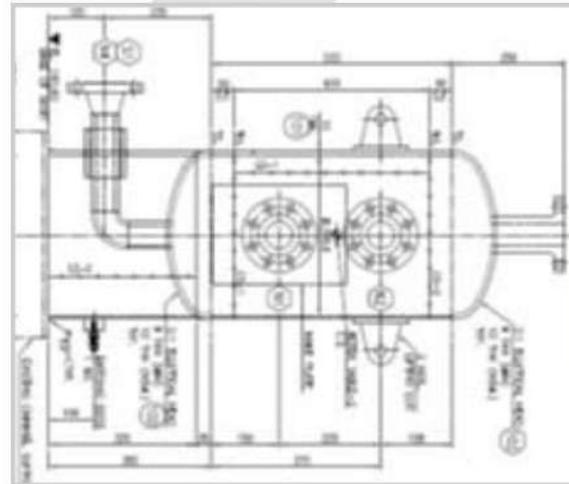
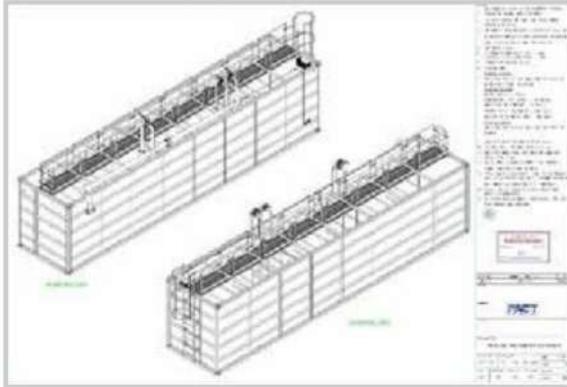
FINITE ELEMENT / CFD ANALYSIS (FEA).



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- Transportation analysis.
- Sheds

CAD MODELLING/DRAFTING SERVICES



Type of Services:-

- CADworx 3D model.
- Fabrication drawings.
- P&ID diagrams
- Process flow diagrams.
- Plot/Equipment layout.
- General Arrangement drawings.
- Piping Plans.
- Isometric drawing.
- Pipe support detail.
- Equipment drawing.
- Material Take off (MTO).

Software:

- Auto cad
- Solid works.
- CADWorks.



THANK YOU



NEMI TECHMECH_{FZE}

 **+971542818034**

 **info@nemitechmech.com**

 **Dubai - United Arab Emirates**

www.nemitechmech.com