





- **Chandan Ventures**  
Commercial and Residential Construction.
- **Chandan Industries**  
Specialist in Manufacturing and Precision Machining for DRDO, ARDE (Indian Defence Sector) and Valve Parts Using Advance CNCs, VMCs.
- **Chandan Tech Solutions Pvt. Ltd.**  
**Engineering Services, 3D Plant Design & Modeling Services, Training -SP3D, PDS, PDMS, Laser Scanning, Automation & Instrumentation Services and Manpower Supply for EPC Industry.**

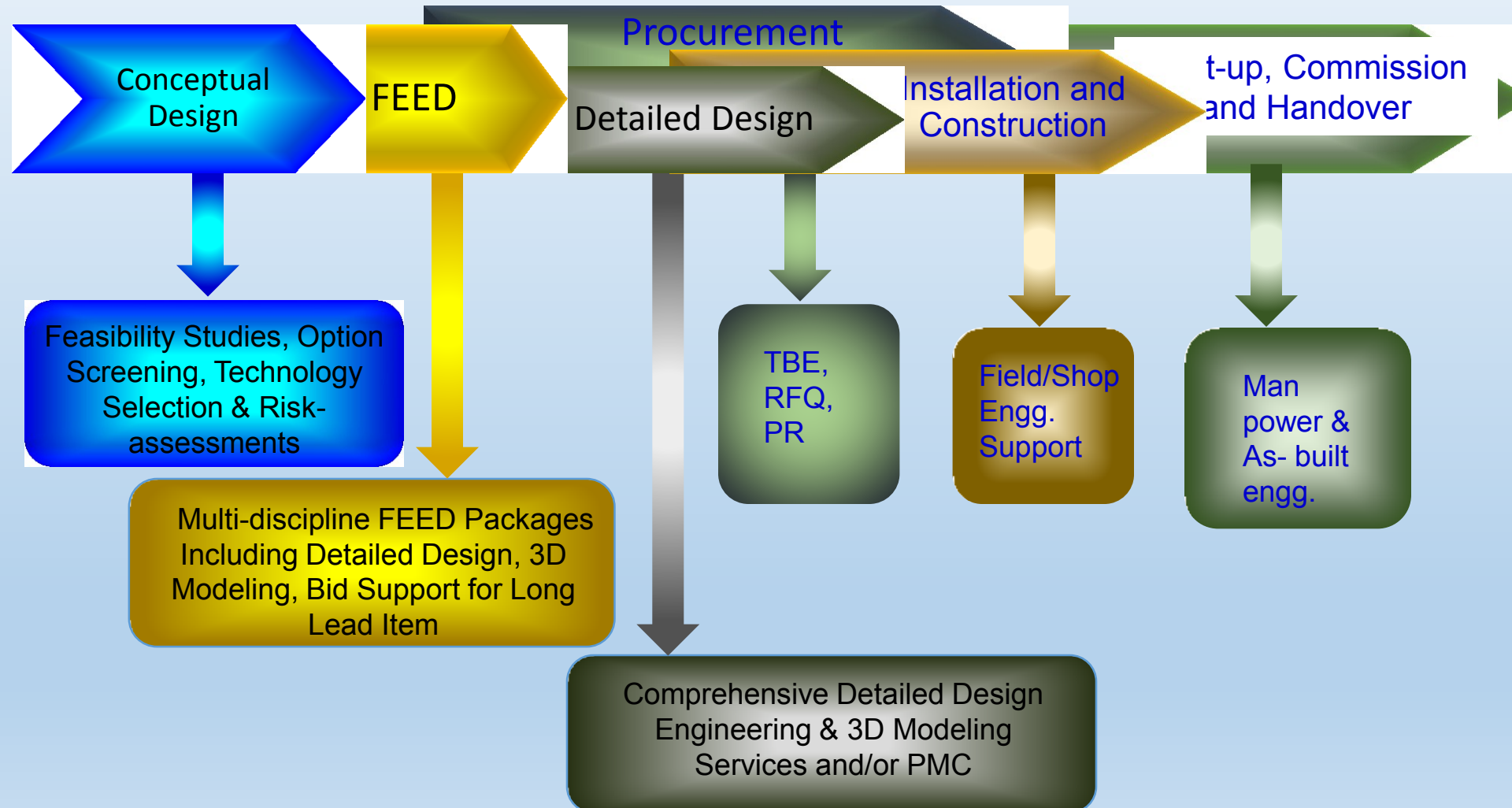


# Industry Served

- Oil and Gas
- Upstream- Facilities , Offshore & Onshore
- Mid Stream-Terminals, Tank Farm & Pipelines
- Downstream-Refinery & Petrochemicals
- Power – Thermal, Combined cycle & Co-Generation
- Chemical & Other Allied Process Industries
- Water & Waste Management
- Metals and Mining



- Engineering Services

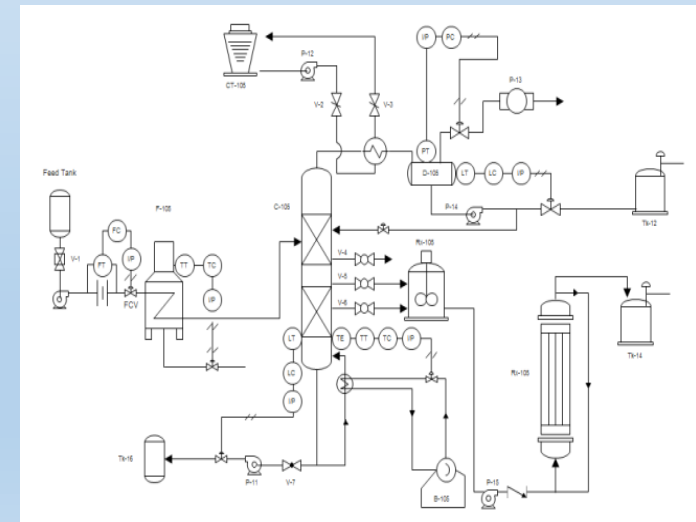
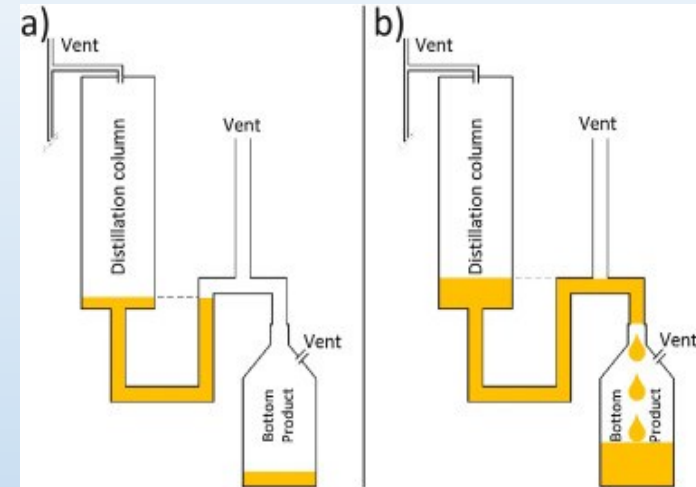




- PMC and Project Expediting Services
- EPC Manpower Deputation to Support EPC Project - Client Office/ Project Site.
- Technical and Software Trainings

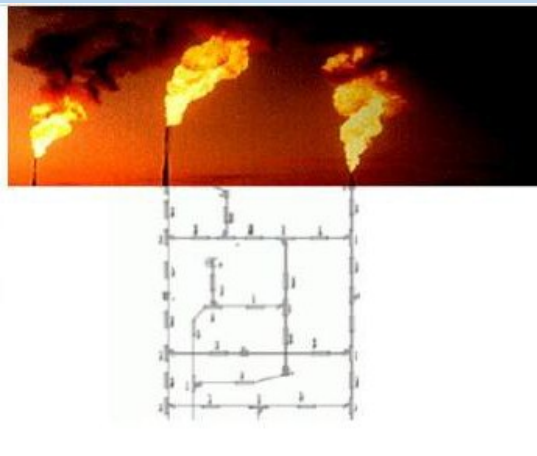


- Concept Identification, Selection & Conceptual Engineering.
- PFD /Mass and Energy Balance Calculations
- Process Design Philosophies
- Process Data Sheets
- Process System Design & Sizing Calculations
- Piping and Instrumentation Diagram
- Static and Dynamic / Engineering Simulation
- SP P&ID, AVEVA P&ID- As-Built / Intelligent Data Conversion.



# Safety & Risk Assessment Studies

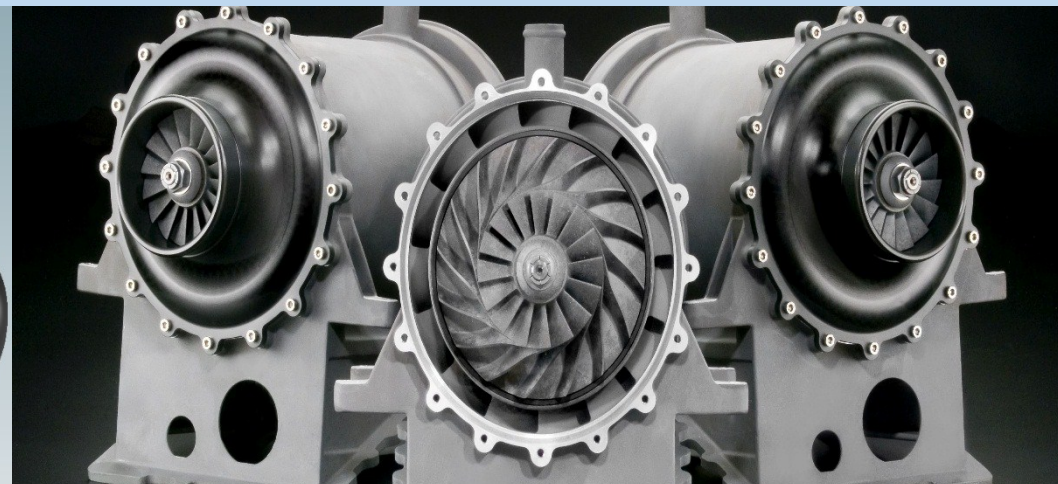
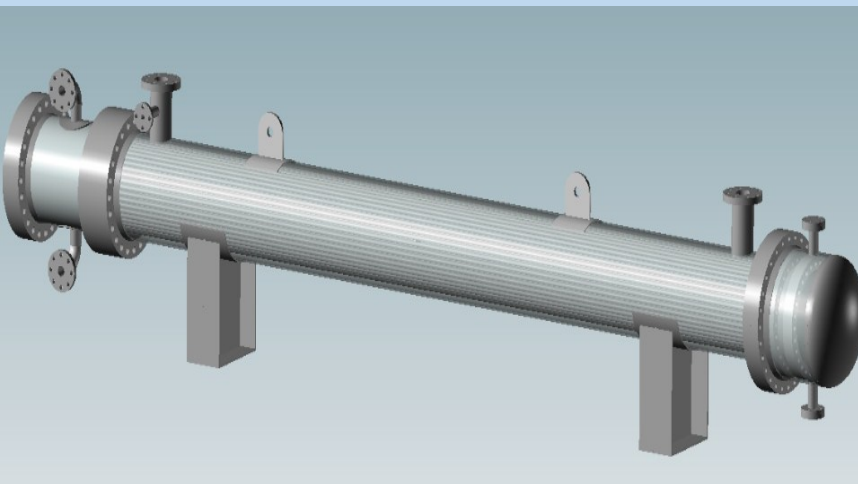
- Sizing of Safety Valves
- Safeguarding Philosophy
- Relief, Vent, Flare Network Modelling
- Dispersion and Radiations Studies
- HAC Drawings
- Quantitative Risk Assessment (QRA) Including Fire Explosion Analysis (FEA)
- Thermal Radiation, Gas Dispersion and Plume Study
- Smoke and Gas Ingress Analysis (SGIA)
- Emergency System and Survivability Analysis (ESSA)
- Evacuation, Escape and Rescue Analysis (EERA)
- Temporary Refuge Impairment Analysis (TRIA)
- Acoustically Induced Vibration (AIV) & FIV
- Fire and Gas Mapping (FGS)
- Fire Safety Assessment (FSA)
- Firewater Demand Analysis
- Firewater Hydraulic Study
- Transient Surge Analysis of Fire Water System.
- Hydrant, Monitor, Deluge Sprinkler & Foam System.



- WORKSHOP/ Brainstorming Sessions Facilitator
  - Hazard Identification (HAZID)
  - Hazard and Operability Study (HAZOP)
  - Instrumented Protective Function (IPF)



- Mechanical Datasheet and Specifications for Static and Rotating Equipment.
- GA Drawings/Detailed Fabrication Drawings with Nozzle Orientations.
- Material Handling Study with Inventory Management Plot Plan for Warehouse.
- HVAC Design Calculations, Equipment Sizing Specifications, Duct Fabrication Drawings.
- RFQ and BID Evaluations for All Skids, Static, Rotating & HVAC.
- PV Elite, Compress, E-Tank, HVAC Solutions/Carmel Software Tools are Used.
- Field Engineering Support for Static Equipment Fabrication & Commissioning.





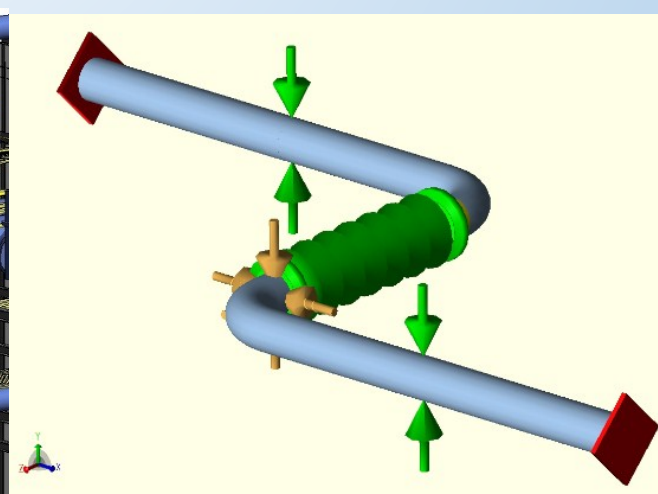
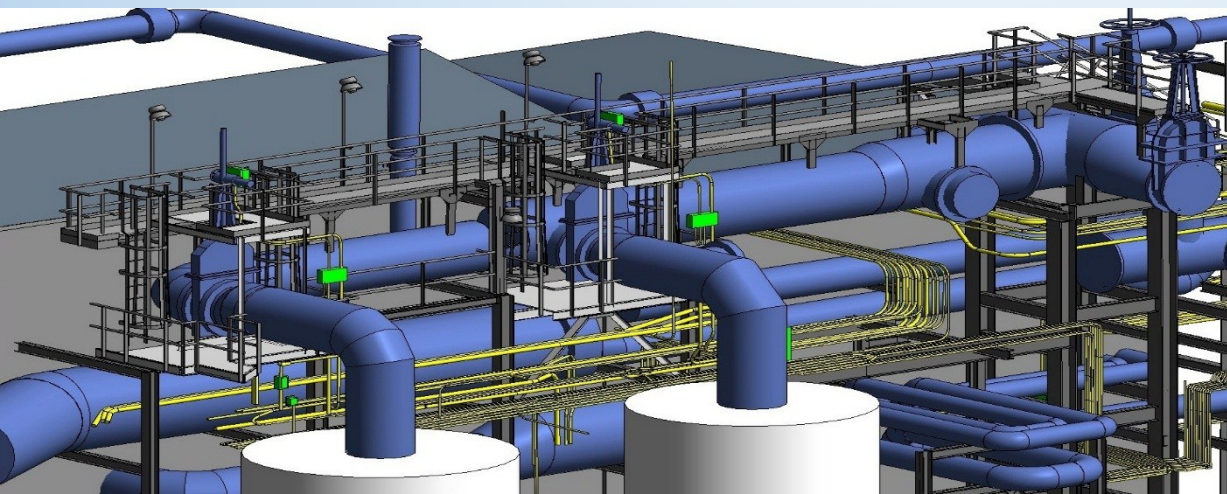
# Pipeline Engineering

- Site Surveys
- Optimizing Layout Route
- Preparation of Alignment Sheets & Design Manual
- Perform/Review Installation Design Analysis
- Static and Dynamic/Engineering Simulation
- Study of Thermo-Hydrodynamic and Fluid Behavior of Pipeline Transportation Systems (Surge and Water Hammer)
- Complete Engineering & Erection Support for Underground Pipelines (GRE, FRP, HDPE, etc....)



# Piping Engineering

- Piping Design Basis, Engineering Specifications & Piping Calculation Reports
- Piping Materials & Valve Materials Specifications/Datasheets
- RFQ/PR for Piping, Valves & Piping Specialty Materials
- Technical Bid Evaluations for Piping & Special Piping Components
- Development of Equipment-GAD
- Piping Layout- GAD, Pipe Rack Study and Design Layout
- MTO (With / Without Procurement Allowances)
- Piping Supports Design and Detail Drawings (with Fabrication and Material Handling Philosophy)
- Detailed Fabrication Drawings/Spool Isometrics
- Piping Expert Supports for Procurement/ Construction, Shop Supervision and Pre-Commissioning
- Pipe Stress Analysis using CEASAR-2, Triflex, AUTOPIPE Software



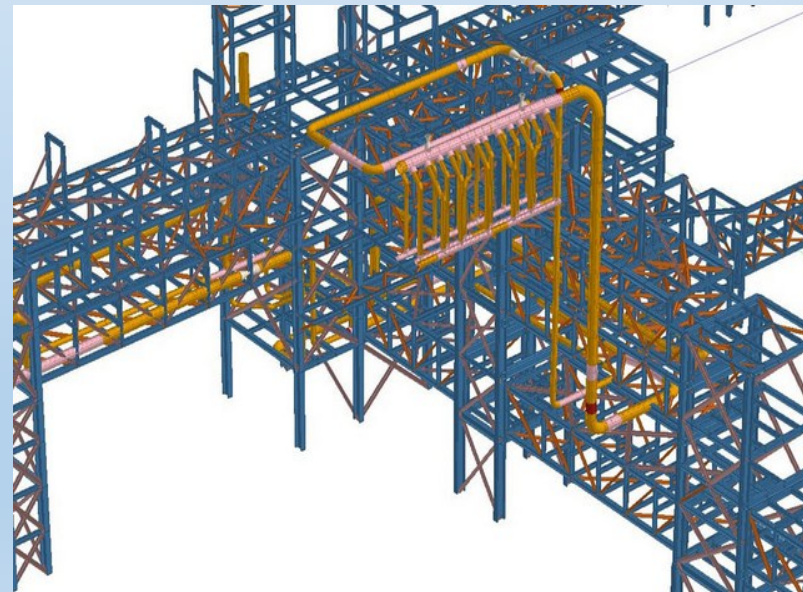


## Civil Engineering

- Piling & Foundation Details.
- Box Culvert and Thrust Block Design.
- Trench layout Design

## Structural Engineering

- Structural Specifications
- Detailed Calculations on Loads & Stresses.
- Design & Analysis using STAADPRO of Plant Facility Structures
- Structural Analysis Detailing & Fabrication Drawings
- 3D Structural Modeling using PDMS, SP3D.
- Advanced Analysis for Major Modifications & Life Extension of Existing Structures And Process Plant
- Ensuring The Project Structure to Meet Local Statutory Conditions





## Electrical Engineering

- Design Basis, Electrical Equipment Sizing, Datasheet & Specifications
- Load Calculations, Fault Analysis, Cable Sizing & Scheduling, Tray Sizing, Tower Design, Transformer Sizing.
- Power System Simulation Calculations using ETAP/EDSA Software
- SLD, Wiring Diagram, Lighting & Cable Tray Layouts
- 3D Modeling – Cable Tray, Lighting & Electrical Equipment



## Instrumentation Engineering

- Instrument Design Basis & Components Specification
- Flow Elements, Control Valve Sizing Specification & Datasheets
- P & ID'S Review, Logic Diagrams & Loop Diagrams
- Control System Design, Specifications & Hardware Selection.
- Wiring Drawings & Instrumentation Hook-ups



# Field Instrumentation, Control & Automation



## Services

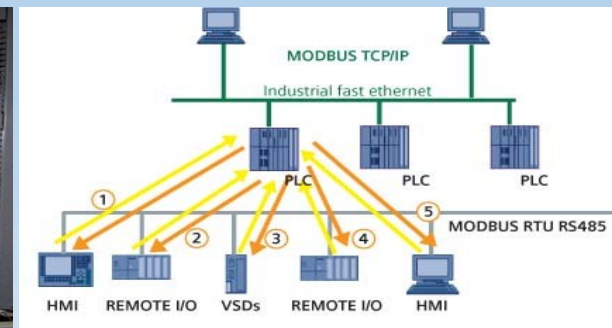
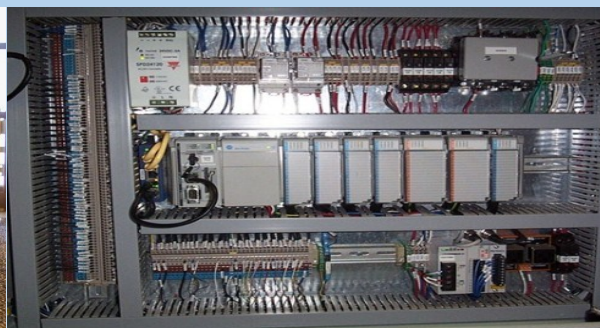
- Complete Instrumentation & Automation Services which Includes Procurement, Erection, Installation, Commissioning, Software Development, AMC Services, 24x7 Support and Operator Training

## Erection, Installation & Commissioning Offerings

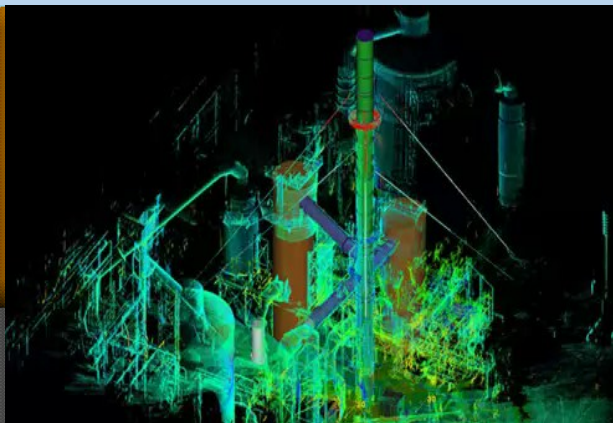
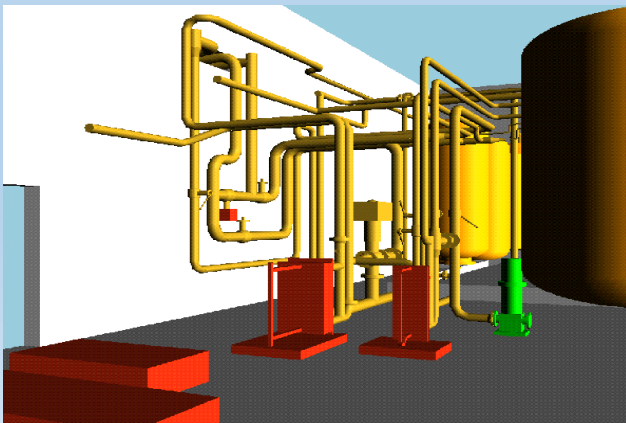
- Erection & Installation of Cable Tray, Cabling, Termination, Loop Testing, Tubing, Field Instruments, Panels and AC/DC Drives

## Software Development Activities

- PLC/DCS Logic and SCADA/ HMI Development & Troubleshooting
- Integration of AC / DC, Servo Drives with PLC/DCS
- We dealt with –HART, MODbus, Profibus, ASibus, DeviceNet, ControlNet, Foundation Fieldbus, Wireless, Ethernet etc.
- Third party interfaces



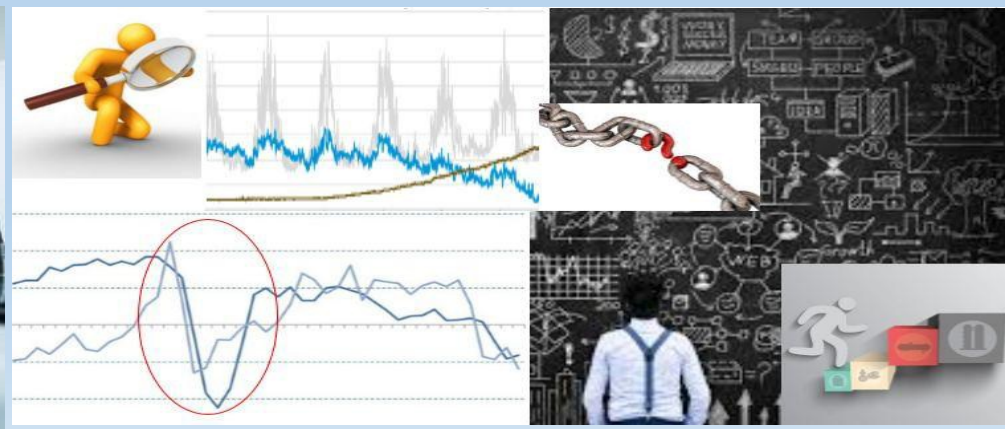
- Multi-Discipline 3D Modeling Services
  - Intergraph PPM tools – PDS/ SP3D/S3D/CADWORKS
  - AVEVA PDMS/E3D
  - AUTODESK-Plant 3D Data
  - 3D Model Data Conversion tools like CADWORKS, AUTOPLANT, CADPIPE, PROCAD, CADMATIC, PLANT4D to PDS/PDMS/E3D/SP3D/S3D or Vice Versa.
- Laser Scanning and Conversion to Intelligent 3D Model
- As-built Engineering and Data Incorporation into 2D Drawings & 3D Models





# Specialty Engineering Services

- Process Debottleneck & Optimization Studies for Owner/Operators
- Piping Sizing & Optimization using AFT Mercury/Titan Software
- Flow Assurance Studies for Upstream & Pipeline Projects
- Benchmarking, Root Cause Analysis & Optimization of Performance.
- Piping Stress Analysis for Non-Metallic Piping Systems.
- Dynamic Stress Analysis of Piping (CEASAR-2/TRIFLEX)
- Acoustic and Flow Induced vibrations (AIV/FIV)
- Pulsation and Vibration Analysis
- Piping Integrity Assessment & Risk Based Inspection
- Offshore Floating Facility Structural Analysis using SACS Software.
- Offshore Structure Integrity Assessment.
- F&G Mapping for Oil & Gas Facilities (Offshore/Onshore)
- Value Engineering Services



- Manpower
  - Regular Employee – 75+ (Detailed Organization Chart in the PDF)
  - Contract Staff – 20+
  - Registered Senior Independent Consultants= 12+
- Facilities
  - Well Equipped Office with 100+ Employee Seating Arrangement & Expandable to 150 packs/ Conference Rooms with Video and Tele-Conferencing Facility
- Engineering Software Licenses
  - SP3D, PDMS, CEASAR-2, SP-PID, SP-Instrumentation, SP Electricals, AutoCAD, Inventor, AutoCAD Plant 3D REVIT, STADPRO, RAM Structure, ETAP, COMOS
- Time bound Lease Licenses
  - HYSYS, HTRI, FLARENET, PHAST, PV ELITE, COMPRESS, TRIFLEX, PIPENET, AFT IMPUSLE, TEKLA, PDS, E3D & Many More can be Arranged Depends on Project Requirement



- Manpower Supply for
  - Engineering- All Discipline Support- Process, Instrumentation Mechanical, Piping, Structural & Electrical Engineering
  - 3D Modeling Services
  - Procurement
  - Construction, Shop & Field Engineering Support
  - Project Expediting Services.
- PMC Services for EPC project
- QA/QC professional
  - Project Site and Vendor Facilities.
- Attending Prototype Testing / TAT / FET / FAT / SAT for Valves
- Attending Field Testing Including Hydro Test, Reinstatement Testing for Piping/Static Equipment





- Technical training
  - All Engineering Discipline & Specialized Subjects in Association with Asian Academy. (Outside India Only)

## • Software Training

### Process Engineering

- Aspen Plus
- HYSYS
- PIPENET
- HTRI
- FIRENET
- OLGA
- SP PID
- FLARESIM
- AFT Fathom
- AFT Impulse
- AFT Arrow

### Piping Engineering

- SP3D/S3D
- PDMS/E3D
- AUTOPLANT
- CADWorx
- CAESAR -2
- TRIFLEX

### Structural Engineering

- STADPRO
- Tekla Structure
- REVIT

### Instrumentation Engineering

- SP Instrumentation

### Electrical Engineering

- SP Electrical
- ETAP



# Partial Client List





**SEM Solutions,  
Texas, USA**

**Armada Dinamik Resources  
Sdn Bhd, Malaysia**



## Contact Us

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