






CHEMDESIGN SERVICES PVT LTD

“Your Process Engineer”



 ChemDesign Services Pvt Ltd
 Plot No. 136/L, Beside Sadhwi Auto Cable, 2nd Phase G.I.D.C., Vapi 396 195
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 project@chemdesign.in | mechanical@chemdesign.in | process@chemdesign.in
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INTRODUCTION

ChemDesign Services headquartered in Vapi, commenced its operations in 2014 with the intent of delivering highest quality of services at competitive prices and commitment to customer service and satisfaction. Through constant dedication to these principles for more than **9 years**, Chemdesign has earned a glowing reputation as a specialist in the field of Plant establishment, Product establishment, Trouble shooting and Process improvement.

ChemDesign is a reliable partner in offering innovative and sustainable product solutions for performance critical operations and adds value and strengthens the competitive position of our customers. We hold key positions in several industries including Specialty chemicals, Polymers, Petrochemicals, Pharmaceuticals, Water treatment and Food & Beverage. We are dedicated to provide sustainable solutions and long-term value for our customers.


We offer a complete range of state-of-the-art product solutions including


Basic engineering, Detailed engineering, Automation, Optimization, Yield improvement and Troubleshooting, Fabrication of Process Equipments for chemical process industry.

 Jignesh Patel

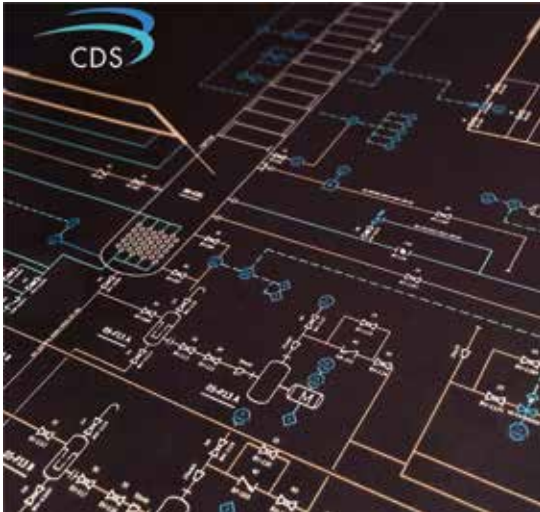
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BASIC ENGINEERING



- Process Flow Diagrams
- Material and Energy Balance
- Conceptual Layout
- Conceptual P&ID
- Equipment List / Specification
- Instrument Specification
- Relieving Systems and Flare Networks

Feasibility Studies

Cost Estimation Payback, ROI and Financial Analysis

DETAIL ENGINEERING



- Mechanical Engineering
- Piping Engineering
- Civil / Structural Engineering
- Electrical Engineering
- Instrumentation Engineering
- Safety & Fire Protection
- Procurement Engineering
- PMC Service

MECHANICAL ENGINEERING

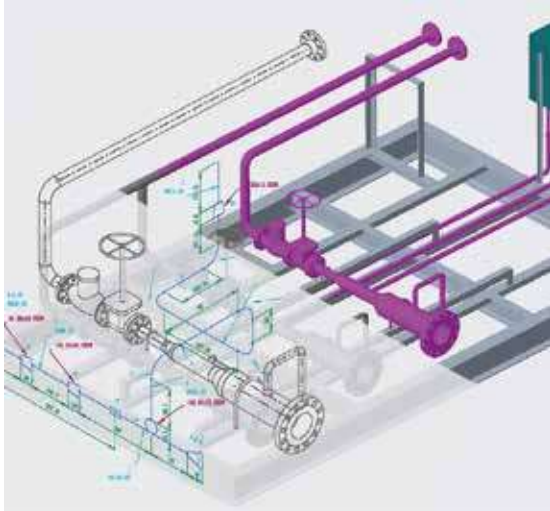


- Equipment Data Sheets
- Design of Static & Rotating Equipment
- Design Validation
- Load Calculations (WRC 107/537) for Equipment Nozzles
- Nozzle orientation drawing
- Equipment GA Drawings, Layout, Detailed
- Fabrication Drawings, Pipe Support Clip
- Drawings, Assembly Drawings
- MTO/BOM

Industry Code and Standards adhered to by our Designers:

API 650, API 579, API 620, API 653, ASME Boiler & Pressure Vessel Code, Section VIII, Div. - 1 & Div. - 2, PD 5500, TEMA

PIPING ENGINEERING



- 3D Model Development
- Equipment Layout, Plot Plans
- Piping Plans & Isometrics
- Stress Analysis
- Piping Support Design & Calculation
- MTO/BOM

Industry Code and Standards adhered to by our Designers:
ASME B31.1, B31.3, B31.4, B31.8, B31.11, BS EN 13480, BS EN 14364, Shell DEP

CIVIL / STRUCTURAL ENGINEERING



- Site Preparation, Site grading & Fence Details
- Equipment foundations -Static & Dynamic
- Foundation Layouts & Design Reports
- Design of Non-plant buildings such as Admin building, Canteen, Utility Block, etc.
- Drainage, Road and Paving Layouts
- MTO & BOM
- Structure Stress Analysis
- Fabrication Drawings
- Process structures / Technological structures, Pipe racks
- Pipe support, Platform, Shelters, Platforms, Cross-overs & Sleepers
- 3D Model, Procurement MTO & As-Built Drawings
- Structural Calculation reports

Industry Code and Standards adhered to by our Designers: AISI, AISC, UBS, IBC, ASCE, ACI, BS, IS

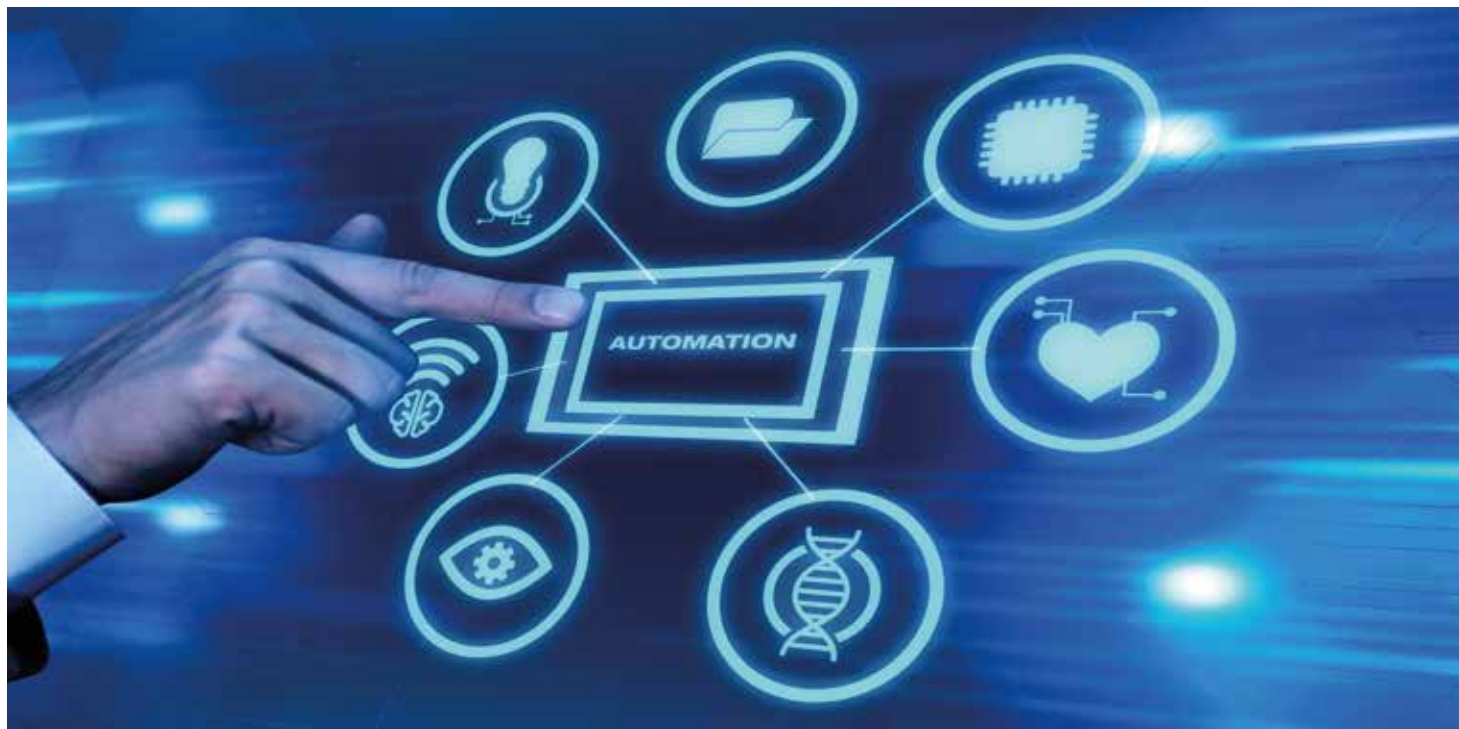
ELECTRICAL & INSTRUMENTATION



- Specs for Field Instruments and Control Panel
- Instrument Location Panel
- Cable Location Plans
- Cable Layouts
- Load List, Single Line Diagram
- Specification for Transformer, PCC, MCC
- Earthing & Lighting Layout, Cable Sizing & Cable Layouts
- Instrument Index with I/O List
- Cause and Effect Diagram

Industry Code and Standards adhered to by our Designers:
IS, ISO, ISA, IEC, BS, API, ANSI, NFPA, NEMA, OISD, UL, IP NEC, CENELEC, IEEE, OSHA, NACE

AUTOMATION & MECHANISATION



HELPING TO ACHIEVE OPERATIONAL EXCELLENCE.

Explosive substances, aggressive media, and extreme temperatures make numerous processes in the chemical industry extremely risky. ChemDesign services not only help you to make processes more productive, but also supports you in your goal of ensuring that people and the environment remain safe. But we also know how important it is to cut costs and save energy. This can be achieved through innovative components and system solutions to safely automate your processes in the petrochemical, polymer, basic, specialty, and consumer chemical industries.

FEATURES

- Reliable and Efficient Systems
- Integrated automation and information management systems
- Safety interlocking systems interfaced to the automation system
- Process history data, process operation and product tracking
- Logic sequence for operations to streamline the processes avoiding the manual errors

BENEFITS

- Plant and peoples' safety minimising breakdowns caused due to catastrophic incidents
- Human error will be minimized
- Increased production capacity
- Improved operational efficiency
- Optimize product quality and consistency
- Yield Improvement
- Repeatability with reliability of process operations
- Improve worker's morale with increased safety and superior operability

PROCESS AUTOMATION TECHNOLOGIES:

- DCS (Distributed Control System)
- SCADA (Supervisory Control and Data Acquisition)
- PLC (Programmable Logic Control)
- HMI (Human Machine Interface)

Entire processes can be automated, ranging from process control systems to weighing technology to batch requirements. Further, automation can be customized to the needs of an individual plant.

DESIGN SOFTWARES



PROJECT MANAGEMENT & CONSULTING

ESTABLISH PROJECT CO-ORDINATION PROCEDURE AND PROJECT DESIGN BASIS:

- Project Planning & monitoring
- Project progress reporting & Tracking
- Co-ordination with client on technical, commercial & timeline related matters
- Co-ordination with construction site and site manager

TECHNICAL SUPPORT:

We continue to work for you after plant handover

- We ensure optimal operation
- Recognize potential for enhancement



PROCESS IMPROVEMENT

- Troubleshooting of existing processes
- Yield Improvement
- Batch Cycle reduction for increasing productivity
- Quality Improvement
- Process Development/ Process scale-up
- Rating of Heat exchangers
- Debottlenecking projects
- Optimization
- Implementation of process changes, changes in unit operations



OTHER SERVICES



PMC SERVICES

- Project Planning, Scheduling & Monitoring
- Engineering Management
- Procurement, VDR, Inspection and Expediting
- Construction Planning & Management

PROCUREMENT ENGINEERING

- TBA & TR Development
- PR Development
- MR Preparation & Floating of Enquiries

SAFETY SERVICES

- HAZOP
- HAZID
- PSSR



INDUSTRIES WE SERVE



OUR CLIENTS

