



## + ABOUT



"We adhere to simple core principles of success; Innovative, economiccal solution, on-time delivery, adherence to Compliance. Zero compromise in Safety, Integrity and Quality regardless of any size/scope of project".

"Directors - Inherent Engineering"

### Inherent Engineering

Inherent is a growing organization with an objective to provide a cost efffecti e services for process Industries based in India and across the Globe.

We offer services in Engineering & Design as-built documentation, Project Management Services, Procurement Services, Specialized Studies, Risk Management Services and Training on various topics through our consulting experts.

Inherent has a team of young, talented and dynamic professionals with strong background of various industrial sector experience gained from domestic and International market to cater the services to meet industry needs.

We at Inherent aim to provide services of world class quality and 'Fit for purpose' solution and meeting the Safety regulatory norms adhered in the design, procurement and implementation phase.

### + VALUES



Safety: Safety is more than policies, procedures, rules, business; it is being part of our culture all time.



Quality Assurance: Our Unique Quality Management (UQM) system emphasizes fact based decision making, systematic approach, and planning for project execution. The unique Quality Management system is the combination of otal Quality Management system, Quality Assurance (QA) and Quality Control (QA).



In a shifting business landsape Inherent has the capacity to capitalize on the latest industry advances and help our customers to gain a competitive edge



Integrity: Without compromising on Integrity, our capabilities ae enhanced by implementing the innovative ideas which will help to execute the project faster and more efficiently. Design integrity starts with a thorough project analysis including client objectives, codes & Standards, project constraints, Regulatory compliance etc



# **+MARKETS**

Inherent successfully delivers Integrated engineering, procurement assistance, fabrication support, construction management and maintenance solution to our clients globally.

Our integrated solutions appoach spans the entire project life cycle and delivers capital efficiency. Clients trust us an industry leader to design and build projects safely, cost effectively and on-schedule.



**Oil and Gas:** With our finger on the pulse of field development and offshore production, Inherent sets as high potential player in the upstream market offering unbiased evaluation of technology options and results oriented solutions which satify client demands for greenfield & brownfield projects.





**Power Plant:** In a shifting business landsape Inherent has the capacity to capitalize on the latest industry advances and help our customers to gain a competitive edge





**Refining:** Refinery operations continue to confront many challenges - volatile stock prices, varying global fuel demand, a challenging regulatory landscape and global competition. We deliver leading edge, cost effective solutions or diverse refining needs in every market and every day.





**Chemical & Petrochemicals:** Inherent provides process technology solutions for chemical projects while exceeding all safety and quality objectives and minimizing cost





# + SERVICES

Inherent can meet Client's project needs anywhere. Engineering disciplines include: Process, Mechanical, Piping Instrumentation & Control, Civil & Structural and Safety as well as advanced specialities such as simulation, enterprise integration, integrated automation processes and interactive 3D modeling.

Inherent Engineering services include the entire range of services from Conceptualization to Commissioning as follows:

- Conceptual Study
- Pre-FEED study
- Front End Engineering Design (FEED)
- FEED verification
- Independent Verification & validation
- Commercial Tender Preparations and offer evaluation
- Pre-bid Engineering
- Detail Engineering
- Planning & Scheduling
- EPC support, Consultant, vendor management
- Technical Queries & vendor Meetings
- FAT & SAT supports
- Support in pre-commissioning and commissioning
- Preparation of As built Documentation

Inherent Engineering experts and resources are capable of handling, Integrated Project Management System, project portals, Standards, Technical Work-practice, Lessons Learned, value Engineering Techniques. This will help to execute the project with proper engineering solution, Technology, on schedule and zero Hazards. Our PMC services include:

- Plan the bidding process for contractors
- Execute the bidding process including bid tabs
- Manage the site(s) for all contractors
- Support in detail engineering services & ensure that the project is inline with project codes & standards compliance.
- Reside in Client or Contractor location to serve all time
- Handle contractor inquiries and claim analysis
- Provide the Interface management
- Monitor and report on progress of work and budgets.





## SERVICES

Customized Technical Services





Specialized Engineering Studies



Inherent offers studies which help you optimize operations and improve reliability and safety. Inherent also offers comprehensive studies in various areas of the Process Engineering, Electrical and HSE & Safety.

#### **Process Engineering**

- Process Steady State Simulations
- Process Dynamic Analysis
- Hydraulic Analysis Study
- Flow Assurance Analysis
- Pipeline Transient Analysis
- Surge Analysis
- Flare system network analysis

#### Mechanical/Piping

- Stress Analysis
- Finite Element Analysis
- Computation Fluid Dynamics
- Vibration Analysis (AIV/FIV Studies)
- Pulsation Study
- Equipment Adequacy Study
- Pipeline Integrity Management (PIM)

#### Civil

- Structural Analysis

#### **Electrical**

- LUX Study
- Power system Analysis
- E-HAZOP

Inherent offers comprehensive Risk management & Engineering solutions in the field of safety, Health and Environment. Inherent Risk Engineering, guides our clients with a practical, not prescriptive approach. Our team consists of experts in refining, oil and gas, chemical and hazardous process operations. We assist clients in development, implementation and on going evaluation of process safety and risk management programs and services.



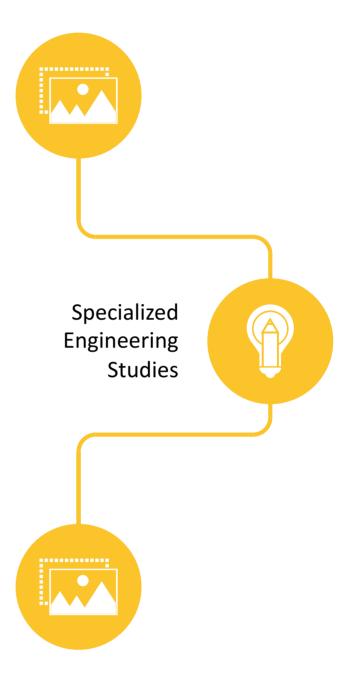
## + SERVICES

#### **HSE & Safety**

- Fire and Gas Mapping Study
- Flare Radiation & Dispersion Study
- Firewater network analysis
- Hazardous area classification study
- Fire Protection System Analysis
- Debottlenecking Analysis
- Root Cause Analysis
- Dispersion and Consequence Modeling
- Explosion Proof Systems Analysis
- Fireproofing Study
- Fire and Blast Study
- Noise Study and Noise Mapping

#### **Risk Assessment**

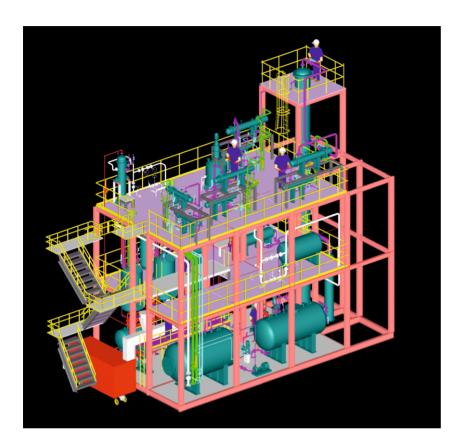
- Hazard & Operability (HAZOP) Study
- Hazard Identification (HAZID)
- Electrical Systems Safe Operability Review (SAFOP /E-HAZOP)Simultaneous Operations (SIMOPS / MOPO)
- Bow Tie Analysis Escape, Evacuation, And Rescue Analysis (EERA)
- Hazard Identification And Risk Assessment (HIRA)
- Emergency Response and Disaster Management Plan (ERDMP)
- Hazard Identification And Vulnerability Analysis (SHIVA)
- Quantitative Risk Assessment (QRA)
- Safety Integrity Level (SIL) Analysis
- Layers Of Protection Analysis Study (LOPA)
- Asset Integrity Inspection And Management
- Corrosion Management Study
- Remaining Life Calculation





# + PROJECT REFERENCES

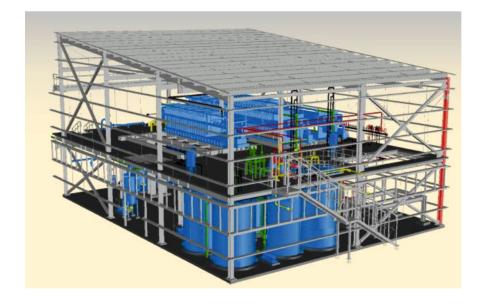
### A. Modularized Skid- Extraction and Solvent recovery Unit



#### **ACTIVITIES INVOLVED**

- Basic Engineering Package
- Detail Engineering
- Procurement
- Fabrication
- Assembly
- Inspection
- Testing
- IFAT
- CRN Stamping

#### **B. FATTY ACID FRACTIONATION**



### **Detail Engineering**

- Pipe routing and layouts
- 3D Modeling of Equipment and Piping Layouts
- Isometrics
- Structural Instrument detail
- Cable Tray routing
- Clash checking
- Model review
- Preparation of BOQ



## + OUR CLIENTS









































## + CONTACT US



044-42648835



+91 95662 22037, +91 97424 89608



enquiry@inherentengineering.com



No:2/9 (21/9), Nathan's Arcade, First Floor Malaviya Avenue, Thiruvanmiyur Chennai - 600 041