

39, RKB Building, Dr. Radhakrishnan Nagar,  
(Opp. D.G Vaishnav College), Arumbakkam, Chennai – 600106.  
email: [enquiry@innovationengineering.co.in](mailto:enquiry@innovationengineering.co.in)  
web: [www.innovationengineering.co.in](http://www.innovationengineering.co.in)  
Ph: 044-45535566



**INNOVATION ENGINEERING (IE)** is a multi-disciplinary Engineering design and detailing Services Company offering its professional services to EPC companies, Engineering companies, and Independent consultants all over the Global.

IE provide design and detail-engineering services in the field of Piping, Pressure Vessels, HVAC, and Structural design and detailing with an exclusive domain focus on plant engineering for the past 3 years. Also IE have well Experience in end to end design/detail-engineering solutions for **Chemical Injection Skids**.

## VISION

To be a Global leader in the field of engineering industries and to provide one stop solution for all the types of engineering Designs, Procurements & Constructions.

## MISSION

IE gives values to its employees, partners, customers and their mutual trust and respect. Also we are enhancing our capabilities to provide the necessary resources to achieve the vision.

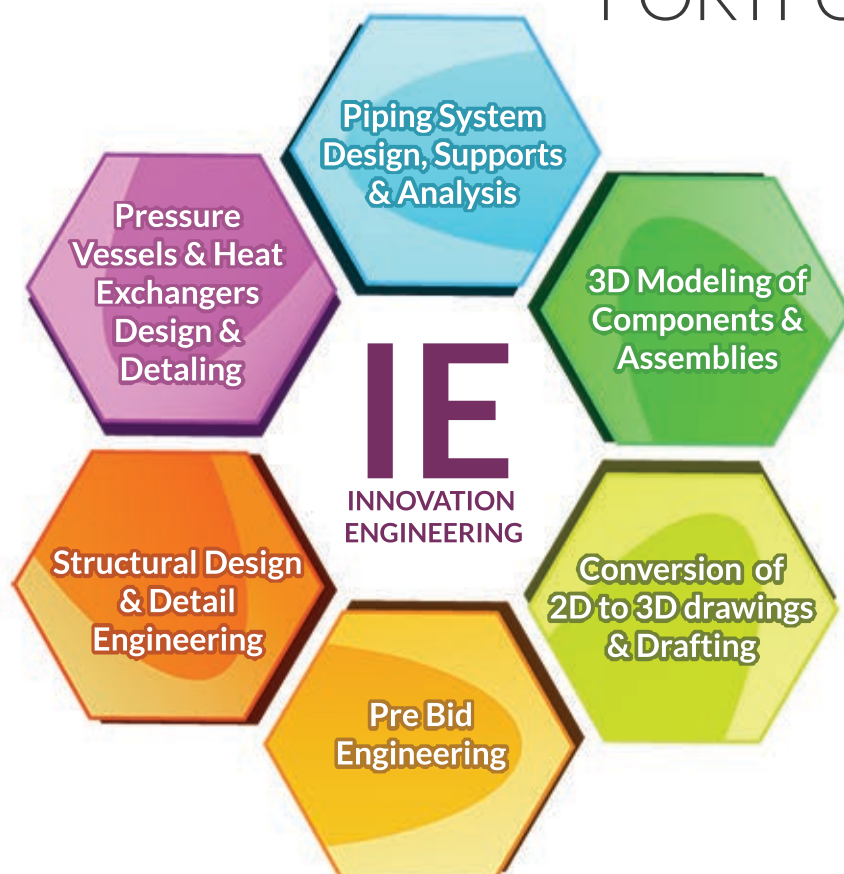
## OBJECTIVES

- Providing reliable quality services at a competitive price. And Fundamental belief in learning client needs, interests and circumstances at a deep and detailed level.
- Execution of a systematic and procedural business flow to give each project a seamless work environment and instill client confidence.
- Implementation of a continuous improvement program through research and development, competence assessment, assurance systems and employee - training in skill enhancement.
- Insistence on adopting leading edge engineering and design technologies to achieve operational excellence.

## DESIGN ENGINEERING SERVICES

We have a well-equipped office facility with latest hardware and software; the facilities include individual work stations for engineers, net worked to a centralized system, latest design tools, power generation back up, etc. All our services are targeted towards completing the job on time to ensure cost under control by eliminating over runs. An overview of our service in the design engineering service are as follows

# INNOVATION ENGINEERING PORTFOLIO





## FOLLOWING DESIGN TOOLS (SOFTWARE) AVAILABLE

Analysis	Layout & Piping (2D design)	Layout & Piping (3D design)
<ul style="list-style-type: none"> <li>■ STAAD PRO</li> <li>■ X-Steel (Tekla Structure)</li> <li>■ CAESAR II for Pipe Stress / Flexibility analysis</li> </ul>	<ul style="list-style-type: none"> <li>■ AutoCAD</li> <li>■ Micro station</li> <li>■ ACorn Pipe Spool</li> </ul>	<ul style="list-style-type: none"> <li>■ Autodesk Plant Design Suite Premium</li> <li>■ PDS (Designer Plus)</li> <li>■ PDMS (AVEVA PDMS 12.0)</li> <li>■ CADWorx (Plant Professional)</li> </ul>
Solid Equipment Modeling/ Components / Assembly (3D Design)	Heat exchangers, Pressure Vessels & Tanks	Instrumentation
<ul style="list-style-type: none"> <li>■ SOLID WORKS (Professional)</li> <li>■ INVENTOR (Professional)</li> <li>■ Pro/E (incl. Piping &amp; tubing module)</li> </ul>	<ul style="list-style-type: none"> <li>■ PV Elite</li> <li>■ Tank</li> <li>■ HTRI</li> </ul>	<ul style="list-style-type: none"> <li>■ AutoDesk Intelligent PID</li> <li>■ SmartPlant P&amp;ID</li> <li>■ CADWorx P&amp;ID</li> </ul>

## DETAIL ENGINEERING

### Pre Bid Engineering

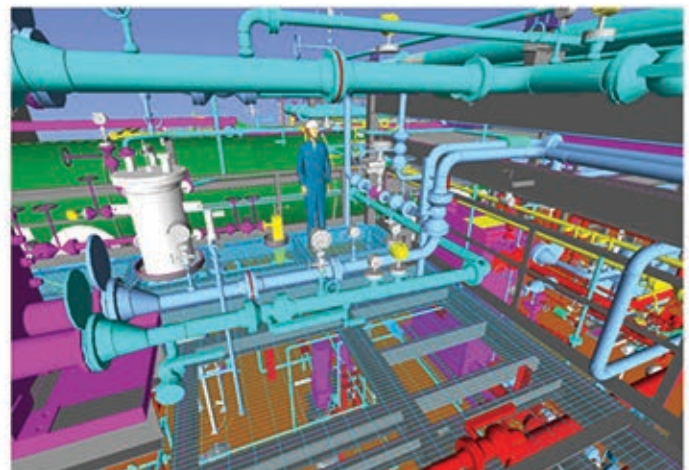
- Material take off lists for pipes, pipe fittings, supports
- Material take off lists for valves
- Material take off lists for insulation
- Material take off list for tanks and vessels
- Material take off lists for Structures
- Material take off list for Instruments and control systems
- Material take off list for Instrument cables and erection consumable items
- Estimating costs of all material take off lists
- Developing CAD documents to form part of bid submission viz general layouts, general arrangements, lists, schedules

### Piping Engineering

- 3D Modeling (PDS/PDMS/CADWorx)
- Pipe flexibility (Stress) Analysis (Caesar II)
- Piping Layouts- plans & sections
- Piping Isometrics
- Pipe Spool Drawings
- Pipe supports
- Drawings for Platforms and Stairs for operation & maintenance
- Material Take off (MTO) list for pipes
- Material Take off (MTO) list for supports
- Design and detailing of pipe racks
- 2D Drafting (AutoCAD, Micro station, etc)

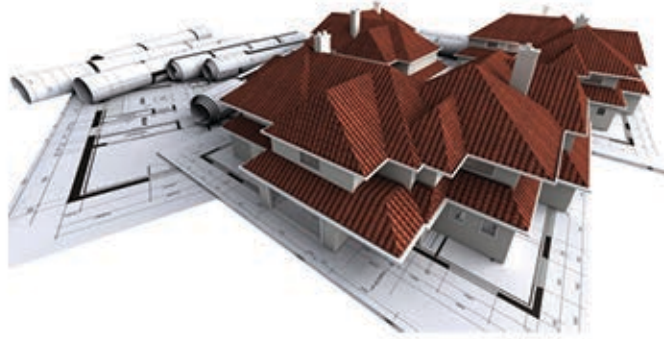
### Mechanical Engineering

- Analysis, Design & Specifications for all types of Industrial Buildings & Structures
- Dynamic Analysis
- Seismic and wind Analysis and Design
- Modeling, Analysis & Structural Design of Plant Structures
- Boiler Support Structure (Utilities and Industrial Boilers)
- Analysis & Design of Ductings



## Drafting & 3D Modeling

- Paper drawings to any CAD format
- AutoCAD to Micro station
- 2D drawings to 3D models
- Reverse Engineering
- Automation & Customization
- Animated Product Presentation

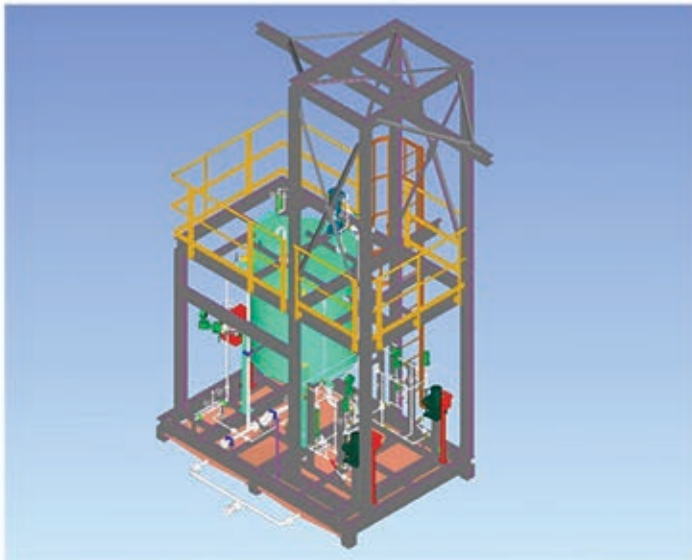


## CHEMICAL INJECTION SKIDS

Chemical Injection Skids serve the purpose of injecting a precise and accurate amount of chemical into a system at a required pressure either continuously or intermittently.

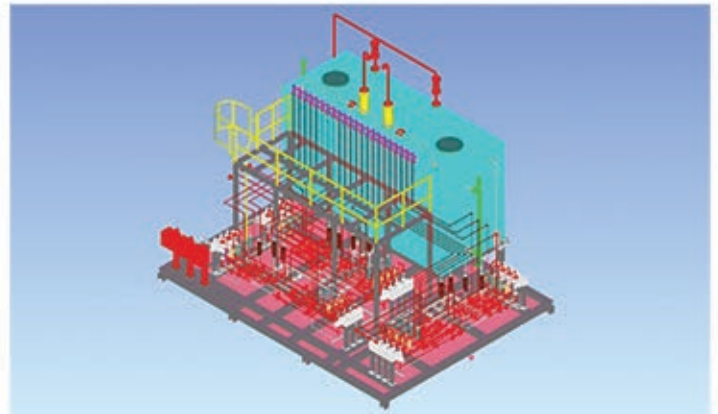
Chemical Injection Skids are designed with the following components together.

- Skid Structure
- Tank
- Pump
- Valves and Instrumentation
- Electrical



IE have Designed the following types of Injection Skids.

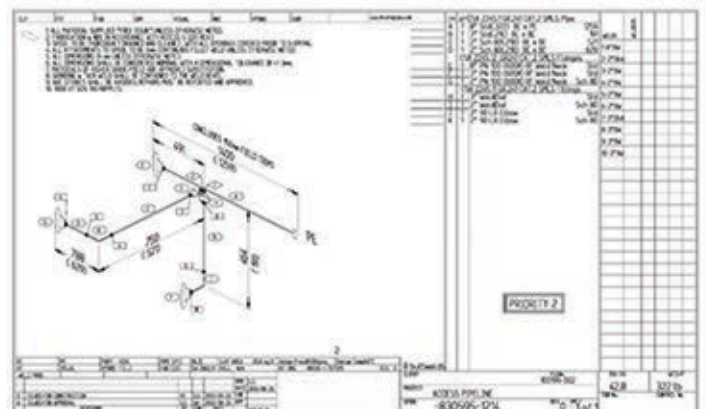
- Conventional Injection
- Multipoint Injection
- Multi-compartmental
- Solar Powered
- Mobile Skids
- Odorization System
- Multi-Head Pump
- Heat and Electric Tracing
- Pneumatic/Gas Operated



## ACORN PIPE SPOOL SHOP DRAWINGS

IE has diversified Interest in Acorn pipe spool shop drawings. We have done plenty of spool drawings for the Canadian Consultants as a subcontractor. Now IE Interested to do jobs for the direct Clients.

IE delivers APF & PDF files of the Spool drawings as well as the overall material take off Excel sheet which includes Labor Costs.



Please contact us for a special pricing for AcornPipe drawings.

## PROJECT REFERENCE FOR CADWORX PIPING MODEL:

### Project Name

300 TPD Board Project.

### Consultant

Alpan Consultant Engineers, Chennai.

### Client

Saradha Papers & Boards Pvt Ltd.



## PROJECT REFERENCE FOR CHEMICAL INJECTION SKIDS:

### Project Name

TAKREER Carbon Black & Delayed Coker Project.

### Consultant

SEKO, Middle East.

### Client

Samsung Engineering Co.Ltd.



### Project Name

Ebocha Oil Center Revised EOC Revamping Phase 2 Project.

### Consultant

SEKO, Middle East.

### Client

Sudelettra Nigeria Ltd.



## PROJECT REFERENCE FOR ACORN SPOOL DRAWINGS:

### Project Name

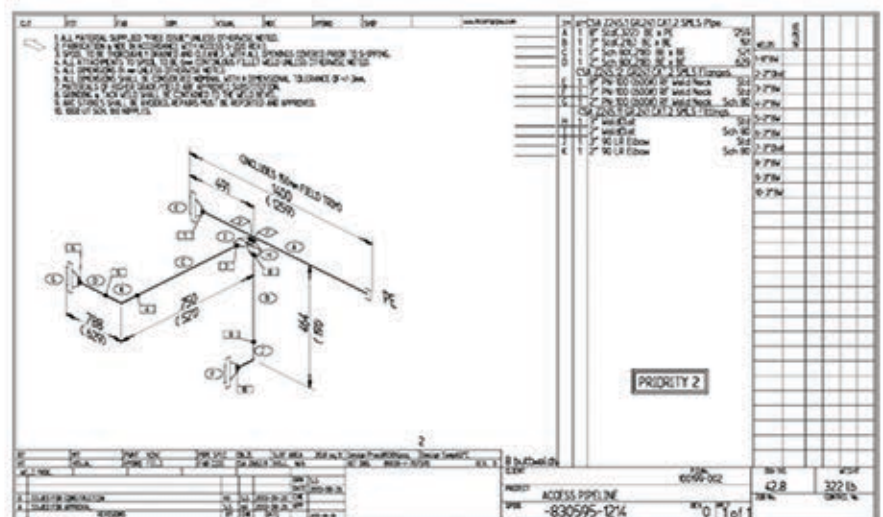
Access Pipeline JF3 Lact.

### Consultant

Procyon Canada Inc.

### Client

Rambler Fabrication Inc.







**IE INNOVATION  
ENGINEERING**

39, RKB Building,  
Dr. Radhakrishnan Nagar,  
(Opp. D.G Vaishnav college),  
Arumbakkam, Chennai – 600106.  
email: [enquiry@innovationengineering.co.in](mailto:enquiry@innovationengineering.co.in)  
web: [www.innovationengineering.co.in](http://www.innovationengineering.co.in)  
Ph: 044-45535566

