Process Equipment for the Chemical Processing and Pharmaceutical Industry.







KALINA ENGINEERING PVT. LTD.

An ISO 9001:2008 certified company



"To chemical and pharmaceutical companies with distillation needs, Kalina Engineering Pvt. Ltd. are technology driven fabricators that provide turn-key solutions for specialised distillation systems from designing to developing and commissioning for hassle free performance"

Fabricators of Engineering Equipments for Chemical and Pharmaceutical Industry



Incepted in the year 1997, **Kalina Engineering Pvt. Ltd.** has established itself as a leading company for fabrication of chemical, pharmaceutical process plants and distillation systems on turnkey basis.

Kalina Engineering Pvt. Ltd. fabricates highly corrosion resistant equipment for the chemical, petrochemical and pharmaceutical industries.



Our expertise lies in our proven abilities to fabricate cost effective process equipments using state of the art facilities for fabrication and polishing of stainless steel and higher alloys which enables us to offer effective services to our esteemed clients.

We have the experience to make sure everything comes together-budget, fabrication and schedule to yield the most trouble free installation possible.



Manufacturing facility

Kalina Engineering Pvt. Ltd. has two manufacturing units which are well connected by highways and ports.

In the view of our stringent policies for quality conformance, all the manufacturing facilities are equipped with the latest and modern metal working equipments which are as follows:

- Semi- automatic radial drilling machines
- Plasma cutting machine
- Argon welding sets for stainless steel and mild steel
- Polishing machine (to provide finish upto 440 grit)
- In-house plate bending machine
- EOT cranes for faster and efficient material handling.

Qualified teams govern manufacturing facilities and are equipped with modern instruments to shape up the equipment and vessel in accordance with the set standards and codes.

Our Quality Assurance Division follows "prevention is better than cure", which ensures stringent quality checks at the procurement stages and at all stages of production.

Renowned Third Party Inspection agencies have appreciated our quality consciousness during the successful certification and inspection process.

Engineering Services we offer:

- Engineering of fabricated equipment.
- Piping engineering from plot plan to isometrics using latest 3D software's
- Piping Installation.

We fabricate equipments using profile plates exclusively from reputed companies like Jindal, Essar, Arcelor-Mittal etc.

We arrange Heat Treatment, Radiography, Check Testing of Raw material for Chemical & mechanical properties form the Govt. Approved Laboratories.



Design Codes and standards:

- ASME
- TEMA
- Defined local code regulations
- Ability to manufacture vessels as per CE
 (European Conformity) Standards on demand.

Material Handling capabilities.

Austenitic Steels

- O SS 304/304L
- SS316/ SS 316L
- SS 316 Ti
- O SS904 & 347

Carbon Steel

- SA 515/516 Grade
- SA 60-70
- IS 2062 A/B

Process Equipments



Heat Exchangers and evaporators

- Fixed tube-sheet
- U-bundle
- Kettle Re-boilers
- Falling film evaporators
- Immersion coil
- Thin Film evaporators

Solvent Recovery Systems

- Extractive Distillation
- Liquid-Liquid separation



Reactors

- Limpet/ Jacketed Reactors
- Pressure Vessels
- TanksColumns
- Distillation Columns
- Solvent recovery systems
- Separation system



Columns

- Distillation Columns
- Solvent recovery systems
- Separation system



- Fabricated for reliable and fool proof performance
- Bringing you experience of over 100 plants of varying capacities



Evaporators

- Integrated Evaporation technology
- Combination of pressure ad vacuum system

Comprehensive Piping Solutions:

In yet another milestone for creating value for customers, we now provide comprehensive piping solutions - EPC (Engineering, Procurement, Construction) + PMC (Project, Management, Consultant) basis, for process industries (e.g. chemical, pharmaceutical) conforming to the set functioning and quality, as per Indian & International standards.

In the same vein, we also provide pipes, valves & pipe fittings for entire plant along with the fabricated vessels.

Our sophisticated piping software (PDS, PDMS, Auto-Plant) provides detailed piping drawing layouts, complete 3D models of the plant. Hence, giving the customer a virtual experience of plant after completion.

These software's help provide accurate estimation for the quantities of the pipes, valves, pumps and other accessories required.









100 Sq. metre M S Shell - SS Tube type condenser

Seamless Limpet Coils for Reactors & Vessels









A Top dish of a reactor depicting nozzle orientation (20" man-hole, 14" vapour outlet) In centre base plate for drive assembly

Design Expertise

Our project management staff analyses all of these issues on every project. We have experience in all of these critical areas:

- Material Selection
- Corrosion Allowance
- Thin wall Tubing
- Vibration Analysis
- Tube Expansion
- Nozzle Design
- Expansion Joint Selection
- NDT procedures
- Welding and Purge Procedures
- Heat Treat Requirements

Applicable Processes

Our dedication to only the reactive metals has led us to become experts in process equipments applications for the following chemical and pharmaceutical processes:

- All types of Resin Plants (Polyster, Alkaid, Phenolic, Epoxy, Amino, Ketone, Acrylic, PVC, Polyamide)
- Synthetic Adhesives (Paint, Tape), water based emulsion / homo-polymer/co-polymer plants
- Vinyl Acetate
- Acrylic Emulsions
- Acetic Acid
- Agricultural Chemicals
- Ammonium Nitrate
- Multi-Purpose pharmaceutical plants
- Silicone Production
- Purified terephthalic Acid
- Vinyl Chloride Monomer
- Active pharmaceutical ingredients

Limpet Coil Reactor (with Internal Coil & External Limpet)





Why KEPL?

- Outside-in-approach
- Creation of value for customers
- Experience of fabrication developed over the last 13 years
- Proven track record in terms of cost and delivery time
- ISO 9001:2008 quality management system
- Competitive manufacturing cost
- Providing highly polished and finished equipment.

Customized Engineering & Manufacturing Services for the following Sectors : Chemicals, Petrochemicals & Pharmaceuticals



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