S. S. ENGINEERING

COMPANY PROFILE

S. S. ENGINEERING is in the field of Manufacturing & Exporting of Chemical Processing equipments for the past three decades providing innovative & cost effective solutions to the Machinery & Equipment needs of various industries viz.

- **BULK DRUGS**
- **PLASTICS**
- **FOOD PROCESSING**
- **POLYMERS**
- **CHEMICALS**
- **ADHESIVES & COATINGS**

Our product range includes

- REACTION VESSEL (JACKETED & LIMPET)
- HEAT EXCHANGERS (CONDENSOR)
- STORAGE TANKS
- MIXERS
- BLENDERS
- FILTERS
- EVAPORATORS
- DRYERS (DRUM DRYERS)
- CENTRIFUGES (HYDRO EXTRACTOR)
- DISTILLATION PLANTS
- DISTEMPER PAINT PLANT

We undertake turnkey project for

BULK DRUG PLANT, POLYESTER RESIN PLANT, PHENOL FORMALDEHYDE RESIN PLANT.
DISTEMPER PAINT PLANT, CATIONIC BITUMEN EMULSION PLANT, PVA/ALKYD RESIN PLANT

We also undertake development of various equipments as per Customers drawings, design and or Specifications.

We have full fledged production set-up comprising of Pyramid type Plate & Pipe Bending machines, Coil forming Hydraulic Press, Center Lathes, Drill, Air Plasma, TIG/MIG Welding Rectifiers, Hydraulic Testing Machine etc.

We have good teams of qualified production personnel comprising of qualified X-ray welders, fitters, engineers, working under quality concious skilled supervisor.

We assure timely execution of work entrusted to us maintaining optimum quality of workmanship giving reliable and trouble free performance of the Machines manufactured by us.

Factory & Office : C 1-B, Hatkesh Udyog Nagar, Kashimira - Bhayander Road , Mumbai - 401 104.
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HEAT EXCHANGER
TYPE :SHELL AND TUBE HEAT EXCHANGER

Shell and tube heat exchangers consist of a series of tubes. One set of these tubes contains the fluid that must be either heated or cooled. The second fluid runs over the tubes that are being heated or cooled so that it can either provide the heat or absorb the heat required. A set of tubes is called the tube bundle and can be made up of several types of tubes: plain, longitudinally finned etc. Shell and Tube heat exchangers are typically used for high pressure applications (with pressures greater than 30 bar and temperatures greater than 260°C. This is because the shell and tube heat exchangers are robust due to their shape.

There are several thermal design features that are to be taken into account when designing the tubes in the shell and tube heat exchangers. These include:

TUBE DIAMETER:

Using a small tube diameter makes the heat exchanger both economical and compact. However, it is more likely for the heat exchanger to foul up faster and the small size makes mechanical cleaning of the fouling difficult. To prevail over the fouling and cleaning problems, larger tube diameters can be used. Thus to determine the tube diameter, the available space, cost and the fouling nature of the fluids must be considered.

TUBE THICKNESS:

The thickness of the wall of the tubes is usually determined to ensure: - There is enough room for corrosion - That flow-induced vibration has resistance - Axial strength - Ability to easily stock spare parts cost - Sometimes the wall thickness is determined by the maximum pressure differential across the wall. Tube pitch: When designing the tubes, it is practical to ensure that the tube pitch (i.e. the centre-centre distance of adjoining tubes) is not less than 1.25 times the tubes' outside diameter

In systems involving heat transfer, a condenser is a heat exchanger which condenses a substance from its gaseous to its liquid state. In so doing, the latent heat is given up by the substance, and will transfer to the condenser coolant. Condensers are used in industrial chemical processes such as distillation, steam power plants and other heat-exchange systems. Use of cooling water as the coolant

WELDING

Welding work is performed by Argon Arc process using Good Characteristic Filler rods on all S. S. Parts. M. S. Parts welding is performed by D. C. Arc welding process using suitable electrodes of Advani Oerlikon make.

MATERIAL OF CONSTRUCTION

The Heat exchanger Material of Construction is Carbon Steel and Stainless Steel.

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