

Engineering Solutions for Chemical, Pharma & Biotech Industry



Over 25 years, PRAJ has established itself as a leading company for design & execution of turnkey plants for fermentation & distillation systems, worldwide. The expertise in Process equipments, design & manufacturing, along with state of the art facilities for fabrication & polishing of stainless steel & higher alloys enables us to offer our services to process industries, especially Pharmaceutical & Biotech Industry. A number of projects for Pharmaceuticals & Chemical industry have been implemented successfully.



Manufacturing Facility

Praj has 2 own manufacturing units which are connected by highways and ports. All the three facilities are well equipped with modern metalworking machines such as :

- Pulse TIG and Microprocessor controlled Orbital Welding Machines
- CNC Plasma Cutting Machines
- Column & Boom Automatic Plasma Arc Welding Machines
- Automatic Polishing Machine (finish upto 400 Grit)
- Inhouse Pressing facility for Dishends
- CNC Drilling Machine & VTL

The qualified teams at these locations are geared up with modern instruments to shape up your equipment and vessels in accordance with International Standards and Codes. Facility in Special Economic Zone in Gujrat near Port of Kandla is in operation since the last two years.

Quality Assurance Division at Praj pursues stringent testing at various stages of procurement and production.

All the three manufacturing facilities are already accredited with ISO 9001-2008, ASME H, U & U2 stamp and CE marking certifications.

Renowned Third Party inspection agencies such as Lloyds, Intertek, TUV, SGS, Jacob H&G, BV and ChemPro have appreciated our quality consciousness during the successful certification/inspection process.

Detailed Engineering Services

- Design and engineering of fabricated equipment
- Piping engineering from plot plan to isometrics
- Detail engineering: boughtout/package units
- Electrical engineering upto Layouts/MTO

- Instrumentation engineering upto PLC/SCADA based control system

Global Standards and Codes followed :

- ASME Sec. VIII Div.I
- ASME BPE
- IS 2825
- Ad Merkblatter
- PD 5500
- TEMA
- DIN
- BS 5500
- Pressure Equipment Directive
- Defined local code regulations

Software in use :

- AutoCAD
- PVElite
- Code Calc
- ChemCAD
- CCTherm
- Plant 4D
- PDMS
- ProPipe

Manufacturing Capacity :

- 13000 MT/annum
- Maximum Dimensions handled :
Dia 5.5 m x length 40 m x weight 200 MT

Material Handling Capabilities :

- Austenitic Steels (SS 304, 304L, 316, 316L, 316Ti, 904 & 347)
- DOW Copper / Brass
- Carbon Steel (SA 515/516 Gr. 60-70)
- Titanium
- Nickel
- Hastelloy (B2/B3)
- Monel 400
- Incoloy
- Inconel



CNC Plasma Cutting Machine



Column & Boom Automatic Plasma Arc Welding Machine



CNC Drilling Machine



Dish end pressing



Automatic Polishing Machine



Process Equipment

Heat Exchangers & Evaporators



- Floating Head
- Fixed Tube Sheets
- Heat Exchangers with Expansion Bellow
- Twin Heat Exchangers



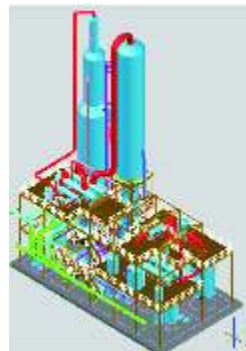
- Falling Film
- Forced Circulation
- Thin Film Evaporator
- Self-Cleaning Flubex Evaporator

- Reactors / Fermentors
 - Pressure Vessels
 - Jacketed Vessels
 - Tanks



- Distillation Column
- Solvent Recovery System
- Separation System

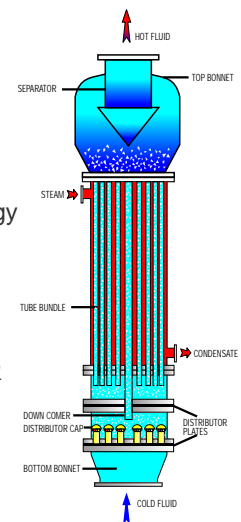
ECOFINE Solvent Recovery Systems



- Azeotropic Distillation
- Extractive Distillation
- Liquid-Liquid Separation

ECOVAP Evaporators

- Integrated Evaporation technology
- Combination of Pressure & vacuum System
- Combination of Concentration & LP steam generation
- High Steam Economy using TVR & MVR
- Advanced automation systems with PLC/Scada
- Proven Designs for waste water treatment



ECOMOL Dehydration Plants



- Pressure swing adsorption based molecular sieve dehydration
- Designed for reliable and foolproof performance
- Bringing you experience of over 100 plants of varying capacities.

Equipment for Biotech applications



- Expertise in Fermentation technology
- Manufacturing as per ASME BPE & cGMP standards
- Sterile & hygienic process equipments
- Complete Skid Mounted systems with CIP/SIP.
- Expertise in orbital welding for critical applications.
- Documentation & validation support.

Advantage Praj :

- Mechanical Engineering & Manufacturing Capability developed over 25 years.
- Competitive manufacturing cost
- Locations : Proximity to Ports (Mumbai & Kandla)
- Experience of fabrication in variety of metals and its polishing
- ASME 'H', 'U' & 'U2' certification
- Equipment supplied as per 'CE' certification
- ISO 9001-2008 Quality Management System
- Well established HSE Policy
- Proven track record in terms of cost, quality and delivery time
- Satisfied customer references in more than 55 countries across 5 continents

Our Valued Customers :

- Aarti Industries Ltd. ● Alvin Caramel Colours India (P) Ltd. ● Alok Industries Ltd. ● Associated Capsules
- Atul Ltd. ● BARC ● BASF India Ltd. ● Biocon Ltd. ● BHEL ● Cadbury's India Ltd ● Cargill India (P) Ltd.
- Cadila Pharmaceuticals Ltd. ● Cipla Ltd ● Clariant ● Crecent Biotech ● Coca Cola India Ltd.
- Deepak Nitrite Ltd ● Dr. Reddy's Labs Ltd. ● Emmellen Biotech Ltd. ● Fermenta Biotech Ltd.
- GE Oil & Gas ● GE Energy ● Gharda Chemicals Ltd. ● Gujarat Insecticides Ltd ● Gujarat Ambuja Ltd.
- Gujarat Fluorochemicals Ltd. ● HEMRL ● Hikal Ltd. ● HJI- Orient Paper Mills ● Indo Gulf Fertilizers Ltd.
- India Glycol Ltd ● JBF Industries Ltd. ● Jubail Chemical Industries ● Jubilant Organosys Ltd.
- Laxmi Organics Ltd. ● Lupin Ltd ● Nestle India Ltd ● Nirvana Biosys Pvt. Ltd.
- Occidental of Oman ● Orchid Chemicals & Pharmaceuticals Ltd ● Riddhi Siddhi Gluco Biols Ltd. ● RCF Ltd.
- SRF Ltd. ● Solvay Specialities India (P) Ltd. ● Sun Pharmaceuticals Ltd. ● Syngenta Pharma Ltd.
- SJS Plastibends Ltd. ● Voltas India Ltd.

Customized Engineering & Manufacturing Services for following sectors

- Chemicals ● Pharmaceuticals ● Petro-chemicals ● Oil & Gas
- Biotech ● Food & Beverages

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