

Reactors

Description



AMAR design and manufacture high pressure reactors / high pressure vessels / systems / stirred pressure reactors / laboratory pressure reactors / chemical reactors / autoclaves / benchtop reactors / hydrothermal reactors upto 700bar (10000 psi) and temperatures upto 600°C in various material of constructions like SS-316/316L, hastelloy B/C, monel, inconel, nickel, titanium, tantalum, zirconium etc. from laboratory to pilot-plant scale for various applications. With the evolving needs of the industry for enhanced productivity and lower cost of production; Amar offers these reactor systems in batch and continuous manner for various applications with system integration and automation which maximizes the efficiency and accuracy of research and production operations.

Multi-Phase Reactor Systems / Fixed Bed Reactors (FBR) / Fixed Bed Catalytic Tubular Reactors / catalytic reactor / table top reactor system / benchtop reactor system / tubular flow reactor/ fluidized bed reactor/ plug flow reactor / parallel tubular reactor / continuous flow tubular reactor / automated reactors are widely used in fine chemicals, oil and gas, petrochemical refineries, pharmaceutical, pesticides and in research centers.

Supercritical Fluid Extraction (SCFE/SFE) Systems extract chemical compounds using supercritical carbon dioxide instead of an organic solvent. The supercritical fluid state occurs when a fluid is above its critical temperature and critical pressure, when it is between the typical gas and liquid state. Varying the temperature and pressure combination of the fluid can solubilize the material of interest and selectively extract it. These systems (SCFE) have their own advantages such as one can get high potency of active components, longer shelf life of extract, high yields compare to solvent extracted products.

Autoclave For Corrosion Testing.

Application

This equipment is used for various applications such as chemical reactions like alkylation, amination, bromination, carboxylation, catalytic reduction, chlorination, dehydrogenation etc., also for production of chemical in small quantity, soaking of diamonds/precious stones, corrosion testing, reaction calorimetry, testing of chemicals, Laboratory testing/experiments in chemical / Pharmaceutical industries.

FBR is used for various applications such as Catalyst testing, oxidation, reforming, hydrogenation, Liquefaction, Fischer-Tropsch process, hydro-cracking, carboxylation etc.



Products Covered

- Autoclaves / Reactors
- Magnetic Drives / Stirrer
- Fixed Bed Reactors
- Continuous Flow Micro Reactors
- Supercritical Fluid Extraction
- Autoclaves For Corrosion Testing
- Bio Reactors

