

# **Hi-Tech Engineering**

Plot # B- 62, Road # 5, NICE Area, MIDC Satpur, Nashik – 422 007 (India) Phone :+ 91-9420692850/40 Telefax :+ 91-2532352913 Email : info@hitech-engg.com

## . . . -

## **Hi-Tech's Product Range**

## Laboratory Pilot Plants & High Pressure Reactor Systems

- Bench Top Reactors for Catalyst Testing: Micro level / Lab level / Pilot Level. (1 cc to 500 cc capacity)
- Micro Gas Reactors: Liquid Micro Reactors / Gride Micro Reactors / Micro level / Lab level
- Corrosion Research Equipments: Corrosion autoclaves, 25 ml upto 8 liter / Fixed and batch coupon holders / Rotating disc apparatus / Sample cutting machines / Electron microscope / Coupon grinding machines
- High Pressure Fixed Bed Reactor Systems: Fixed bed Micro Reactor / VLE Setup/ Vapor Phase Reactor / Biodiesel Reactor / Mini Reactor Systems / Hydrotreaters / Hydrocrackers / Reformers / GTL systems / FT Unit / Vapor Phase Reactor / Pressure Swing Adsorption Systems / Bench Top Reactor Systems
- Stirred Reactors: Laboratory Autoclaves/ CSTR's/ Batch Reactors/ Solvent Screening System/ Pressure Vessels / Corrosion Autoclaves: 25 ml to 4 liter (custom designed upto 100 liter), Press: 400 bar, Temp.: 510 °C, Gas/Liquid, Gas/Liquid/Solid, Gas/ Liquid/Solid/ Vapor, Gas/Gas, Liquid/Liquid, Catalyst Basket, Material of Construction: SS 316 / HC276 / Glass / Inconel / Titanium / Teflon Lined
- Academic Products: Technical Training Kits, Engineering Educational Systems & Pilot Plants

#### Laboratory Instrumentation

- High Temperature Heating Tapes: Length 2 ft to 16 ft, Temp:1400 °F, for 1/8" to 2" OD metal surface
- Pressure Regulators (forward & back pressure): 4 bar/16 bar/200 bar, Regulator for CO2/NH3/O2 gas
- Mass Flow Controllers: Pressure range 0.5 bar to 400 bar, Flow Rangeability 1: 50 ratio, all gases.
- Pressure Gages & Pressure Transmitters: Ranges: 1 bar to 400 bar, vacuum gages: upto 760 mm hg
- Thermocouples: Type 'K', from 1/32" OD to ¼" OD in all lengths, PT 100, J type & connectors
- **Control Instrumentation:** Programmable Temperature Controllers, RPM Indicators, SCR regulators, power controllers etc.
- **Liquid Metering Pumps:** Pressure 750/1500/2500/6000 psig, Flow (ml/min): 0.002-2.5 / 0.003-5.0 / 0.02-40 / 0.04 80.0 / 0.01-9.90 / 0.1-39.9 with PC interface & RS 232 communication.
- Laboratory Tubular Split Furnaces: Single zone to Five zone & temp 900 °C / 1200 °C, ¼" ID to 2" ID
- Valves, Fittings & Tubing: Swagelok, Parker & Autoclave range in stock. 1/16" to 1"size, SS316
- Circulators & Cryostat: -70 °C to 30 °C / -40 °C to 100 °C / -15 °C to 100 °C /0 °C to 200 °C
- **Tubular Reactor Tubes :** 5cc to 500 cc, SS316 / HC276 / Inconel, Pressure 50 bar / 100 bar / 400 bar, Temp: upto 900 °C, available in all lengths & diameters along with high pressure metal to metal seal, thermowell ¼" or 1/8"
- Special Valves: Multiport Stream Selection Valve, Sampling Valve, 2/3 way Ball Valve 260 °C /300 bar
- Chromatography Products: GS MSD, GC Columns/Accessories, HPLC Pumps, HPLC Gradient Systems
- Process Analyzer: Surface Area Analyzers for Powders / Particle Size Analyzers / Automatic Distillation Analyzer
  D86 Automation & Services

#### **Automation & Services**

• **Control Panel & Automation:** From bench top to floor mounted, manually operated to fully PC interfaced using GE Fanuc's Ifix Intelletuion SCADA.

#### <u>Services</u>

- Service Contracts for Repair, Refurbishment & Retrofitting of all types Laboratory Reactors
- System Design and Engineering Support
- Manufacturing, Sales & Service Support
- Maintenance & Training Contract Management
- Spares & Inventory Management
- · Control System Engineering
- Electrical Assembly and Installation
- Stocking & Logistic Support
- Project Management and Consulting
- Exclusive business tie up with worldwide reputed manufacturers for various products

### Foreign Representation & Distributorship

- Autoclave Engineers (www.autoclaveengineers.com) Stirred Reactors, Pressure Vessels, BTRS & VFT
- Dr.-Ing. Ritter Apparatebau GmbH & Co KG. (www.ritter.de) Ritter Germany Wet & dry gas test meters
- Eldex USA (www.eldex.com) HPLC Pumps, Reciprocating pumps, Column Heaters, Fraction Collector
- Laballiance (www.laballiance.com) Analytical HPLC Systems, HPLC Pumps, CO2 Pumps etc.