

AutoClaves

High Pressure Reactors

CYBERLAB™



Autoclave Trolley Model



Glass Body Reactor



Multiple Autoclave System



Rocker Hydrogenator

Features:

- 50ml-100Liters capacity
- Stirred & non stirred
- Max Pressure upto 5000 psi & temperatures upto 500°C
- MOC SS316, 316L, Hastelloy B/C, Monel, Inconel, Nickel, Titanium
- Complete pilot plant with automatic temperature, pressure, RPM, gas & liquid flow control
- PC controlled autoclaves with datalogging
- Ideal for Hydrogenation
- Glass autoclave upto 6 bar pressure & 150°C & size upto 2 ltrs.
- Interchangeable SS & Glass autoclaves
- Hydrogenation 100 ml - 5 ltrs. SS316 & glass interchangeable vessels

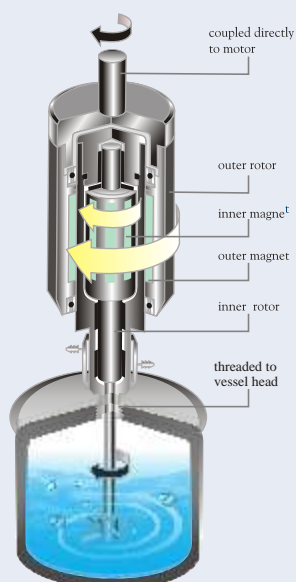
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Zero Leakage Magnetic Drive Coupling

It is a zero leakage maintenance free coupling directly driven by the motor. It consists of external magnet rotor, which is driven by the motor. A stationary shell is threaded to autoclave head & completely isolates the external rotor from the inner rotor. As the external rotor rotates, the internal also rotates in synchronism. The autoclave's shaft is threaded to the inner rotor. High energy permanent (rare earth) magnets are fixed inside the inner & outer rotors. A water cooling jacket protects the magnets and other components from excessive temperature arising from the reactor.



In R&D centers & manufacturing facilities of chemical Pharmaceutical, Dyes, Paints, Oils, Agrochemical, Petrochemical etc. industries & also in educational / research institutes / defence organisations.

- To invent new chemicals
- To produce chemicals in small quantity
- For pilot plant purpose
- For quality control & process improvements
- To study reaction parameters
- For heterogeneous mixing
- To carry out catalytic reactions
- For electrochemical corrosion studies
- To carry out exothermic or endothermic reactions

Applications

It is used for reactions like Alkylation, Amination, Carboxylation, Catalytic reduction, Chlorination, Dehydrogenation, Esterification, Ethoxylation, Halogenation, Hydrogenation, Methylation, Nitration, Oxidation, Polymerization, Sulfonation etc. at high pressure & temperature.

Technical Specifications

Autoclave Size	Minimum Stirrable Volume	Vessel I/D mm	Vessel Height mm	Motor h.p.	Heater KW
50ml	20ml	40	60	1/4	0.3
100ml	25ml	45	80	1/4	0.7
400ml	60ml	75	115	1/4	0.7
700ml	60ml	75	190	1/4	1
1 Ltr.	130ml	101.6	160	1/4	1.5
2 Ltrs.	130ml	101.6	300	1/4	1.75
5 Ltrs.	360ml	152.4	305	1/4	2.5
10 Ltrs.	1 Ltr.	210	315	1/2	3.5
20 Ltrs.	1.6 Ltr.	260	450	1/2	9
25 Ltrs.	1.6 Ltr.	260	550	1/2	9
50 Ltrs.	3 Ltrs.	335	620	1	15
100 Ltrs.	6 Ltrs.	435	700	1	21



Optional Accessories



Gas Pressure Regulator



Gas Mass Flow Meter / Controller



Auto Cooling



Liquid / Gas Charging High Pressure Pot



PC Control Autoclave software



Oil Heating System



Condensor / Reflux Condenser

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