

High Pressure Glass Reactor (Autoclave)

Ablaze has successfully designed and manufactured high pressure glass reactors (Hy-Press) for laboratory scale usage. Scale-up studies often require high pressure to be applied and that is now possible with the other additional benefits of a glass reactor.

The modern high-pressure reactors designed by Ablaze are safe, reliable, easy to operate and provide the advantage of interchangeability. Use of superior quality raw material combined with modular and sturdy configuration options are the key highlights of the product.

This series of stirred reactors have been designed for users who need higher operating pressures than that offered by the General Purpose Reactors, along with visibility of reaction. These reactors offer working pressures up to 6 bar at temperatures up to 200 °C.

The glass reactors ensure high resistance against acids, while allowing visual process control and monitoring. Various low to high torque magnetic drives provides high RPM up to 1200, ensuring efficient mixing and stirring of low to high viscosity process media as well as excellent heat transfer.

Complete, one-piece, jacketed flask with bottom outlet, pressure reactor systems designed to perform low to moderate positive pressure reactions, synthesis and catalysis. These reactors can be used in the bench top mountings and it is too compact and light weight to be handled comfortably on a standard height bench top.

Salient Features:

1. Modular and interchangeable construction
2. Multi-port Lid for maximum customization
3. RPM up to 1200, making it suitable for highly viscous reactions
4. Compact Bench-top design
5. Zero hold-up Flush bottom valve
6. Triple wall reactor for Cryogenic (-90°C) chemistry

Reactor volume : 0.25 - 2.0 liter
Pressure : -1 (FV) to + 6 (12)bar
Temperature : - 20 °C to +200 °C
Reactor MoC : Borosilicate glass 3.3

Chemical reactions, applications :

1. Chemical research
2. Catalytic reactor
3. Polymerization reactor
4. Synthesis reactor
5. Crystallization
6. Biofuels research
7. Hydrogenation reactor
8. Nanoparticle synthesis

* Custom sizes and designs available on request



Inter-changable High Pressure Stirred Lab glass Autoclave
(Hy-Press)