## Condensation Polymerization Set-Up



**Product Categories**: Chemical Reaction Engineering Lab, Engineering Equipment **Product Page**:

https://www.labappara.com/product/condensation-polymerization-set/

## **Product Description**

Condensation Polymerization Set-Up

## **Technical Description:**

Condensation Polymerization kettle is used to carry out a condensation polymerization reaction under batch condition. Polymerization reaction can be acid catalyzed or self-catalyzed. The set-up can be used to measure the extent of reaction & also the reaction rate constant. The set-up consists of jacketed type SS reactor fitted with variable speed agitator & baffles. Reactor is fitted with Ni-chrome wire heaters and temperature is controlled by digital temperature controller. Metered quantity of nitrogen gas from a cylinder, allowed entering in the reactor. Set-up is complete & self-contained with sampling ports.

The top cover can be removed for cleaning purpose. Feed is fed from top through a funnel provided with S.S. Ball Valve. Vapours are allowed to enter in the shell of condenser and cooling water is allowed to pass through the tube and condensate is collected.

## **Technical Specifications:**

Condenser: 18 long 1., Concentric tube type

Reactor: Material Stainless Steel, Volume- 1 Ltrs. (Approx.)

Water Bath: Material Stainless Steel, Double wall, insulated with Ceramic Wool.

Heater: Ni-chrome wire Heater

Stirrer (2 Nos.): Stainless Steel Impeller and shaft coupled with FHP motor.

Stop Watch: Electronic

Temp. Sensor: RTD PT-100 type