

Recycled Bed Reactor



Product Categories: [Chemical Reaction Engineering Lab](#), [Engineering Equipment](#)

Product Page: <https://www.labappara.com/product/recycled-bed-reactor/>

Product Description

Recycled Bed Reactor

Technical Description:

The setup consists of catalyst packed column of Stainless Steel. Reactant from a fed tank is fed to the reactor through liquid distributor, fitted at one end of the column. Some part of product is recycled to the reactor using a low capacity sophisticated pump or by over head tank system. Rota-meters are provided to measure the flow of feed & recycled product. The feed rate and recycle product ratio can be manipulated by the respective needle valves of the rota-meter.

Samples can be taken periodically from the top outlet of reactor at another end. An arrangement is made to carryout the reaction at Iso-thermal conditions by circulating the hot water in the outer jacket of the packed bed reactor. Special care is taken for proper mixing of feed & recycle product before its entry to the reactor. A magnetic drive pump made up of polypropylene is used for circulation of feed

Technical Specifications:

Reactor Column: Material Stainless Steel Diameter 1"□, Length: 500 mm (approx).

Packing : Catalyst (Fluid Bed Type)

Feed Tank (1 Nos.): Material Stainless Steel, Capacity - 20 Ltrs.

Flow Measurement: Rota meter 2 Nos.(One each for feed & recycled product).

Piping: Stainless Steel and PVC. Size 1/4"

Feed Circulation: Magnetic Pump of Polypropylene.

Hot water tank: Made of Stainless steel, Double wall, insulated with Ceramic Wool.

Capacity 10- 15 ltrs.

Hot water Circulation: Magnetic Pump of Polypropylene to circulate hot (in outer Jacket) Water maximum working temp. 850 C