

## **CRE-002 ISO THERMAL BATCH REACTOR**



**DESCRIPTION :** Batch reactor is simple, needs little supporting equipment and therefore ideal for small scale experimental studies on reaction kinetics. Industrially it is used when relatively small amounts of material are to be treated.

### **RANGE OF EXPERIMENTS**

1. Study of Isothermal Batch Reactor.
2. To calculate the reaction rate constant  $k$  for given reaction in isothermal batch reactor

### **EXPERIMENTAL SETUP:**

Reactor	:	Material Stainless steel (SS) ,
Water Bath	:	Material SS, Double Wall, Insulated with glass Wool
Heater	:	Nichrome wire heater
Stirrer	:	1 No.SS impeller and shaft coupled to
Digital Temp Indicator:		OF H-P 2 0M0o 0t oCr, Indicator cum Controller
Temp Sensor	:	CR /AL Type
Piping	:	SS, PVC
Setup Mounting:		On sturdy MS stand with powder coated

**CHEMICALS REQUIRED:** NaOH, Ethyl Acetate, HCL,  
Phenolphthalein indicator, Distilled water

**SERVICE REQUIRED:** Water Supply: @ 2 lpm  
Power Supply: 230 V, 50 Hz, A.C.

**SPACE REQUIRED** : 1 m. ( L ) x 1.0 m ( W ) X 1 m ( H ).

**WEIGHT** : @ 45 Kg