

CRE-6 PLUG FLOW REACTOR



DESCRIPTION : Plug flow reactor is characterized by the fact that the flow of fluid through the reactor is orderly no element of fluid overtaking or mixing with any other element ahead or behind . Actually there may be lateral mixing of fluid in plug flow reactor . However , there must be no mixing or diffusion along the flow path. In a plug flow reactor composition of fluid varies from point to point along the flow path.

RANGE OF EXPERIMENTS

1. To study of Plug flow reactor.
2. To calculate the reaction rate constant k for given reaction in Plug flow reactor

EXPERIMENTAL SETUP :

Reactor	:	Material Stainless steel (SS) ,
Flow Measurement	:	2 No. Pre calibrated Rota meter
Feed Tank	:	2 No. of stainless steel feed tank
Feed Circulation	:	By Compressed Air
Pressure Regulator	:	0-2 kgf / cm ²
Pressure Gauge	:	Bourdon type 0 – 2 kgf / cm ²
Piping	:	SS , PVC
Product receiver	:	1 No. SS tank
Setup Mounting	:	On sturdy MS stand with powder coated

SERVICE REQUIRED : Air Supply : @ 6 CFM at 4 Kg /cm²
Power Supply : 230 V, 50 Hz, A.C.

SPACE REQUIRED : 1.5 m. (L) x 1.0 m (W) X 1.0 m (H).

WEIGHT : @ 50 Kg