



**Product Name:** 

Stirred Tank Reactors in Series

**Product Code:** 

ALABS-A174-007



## **Description:**

### **Stirred Tank Reactors in Series**

- A self-contained bench mounted small-scale unit fitted with three continuous stirred reactors in series, which are fed from two 5 litre tanks. Each reactor is fitted with a conductivity probe.
- There are two independant, variable speed feed pumps.
- A dead-time residence coil can also be attached to the exit of the last reactor in the series.

#### Demonstration Capabilities:

- Investigation of dynamic behaviour of stirred tank reactors in series
- Influence of flow rate and step input change
- Investigation of chemical reaction in a three tank system
- Investigation of time constant using a dead-time coil

#### **Technical Description:**

- The Stirred Tank Reactors in Series
  unit is designed to follow the dynamics of the perfectly mixed
  multi-stage process. Dynamic behaviour can be studied as can multi-stage
  chemical reaction. Bench mounted and self-contained, the unit requires
  only to be connected to a single phase electrical supply for operation.
- There are three reactor vessels connected in series, each containing a propellor agitator driven by a variable speed electric motor.
- Two reagent vessels and two variable speed feed pumps feed reagents into the first reactor in line.
- For certain experiments the feed can be connected to the third reactor and a dead-time coil, also positioned on the vacuum formed plinth.
- Each reactor and the exit port of the dead-time coil are fitted with accurate conductivity probes for monitoring the process.
- Conductivity is displayed on a digital meter on the console through a selector switch and all four probes



# **Equipments Exporters**

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