Email : sales@equipmentsexporters.com
Phone: +91-9311469084

Product Name :	Product Code :
Heat Transfer In Agitated Vessel	ALABS-A104-357

Description :

Heat Transfer In Agitated Vessel

In most industrial processes including reactors, heat is to be added or extracted to control the process. The addition and removal of heat is done by passing steam in jacket fitted to the outside of the vessel or passing cold. Water in helical coil inside the vessel. For effective heat transfer and even distribution of heat, the liquid inside is continuously agitated. The present set-up offers us. A comparative study of Jacket & Helical coil, which can be operated simultaneously. It is a stainless steel jacketed vessel inside which, a helical coil of copper is fitted. A variable speed stirrer is fitted in vessel. The system is such designed that either steam or water is allowed to enter inside anyone of the jacket and helical coil by an arrangement of control valves. Variation in temperature of inside water is measured and is noted. Set-up is fitted with steam traps for condensate collection.

Flow rate of water can be controlled and measured using valve and Rotameter. Temperature of inlet and outlet of both hot & cold fluids are measured by temperature sensors.

Experiment:

- To determine the overall heat transfer co-efficient for various degree of agitation
- To make a comparative study of Heat Transfer through Jacket & Coil in an agitated vessel

Utilities Required:

- Water supply 20 lit/min (approx.) and Drain.
- Electricity Supply: 1 Phase, 220 V AC, 5.kW.
- Floor area of 1.5m x 1.5m