

HT-010 **UN-STEADY STATE OF HEAT TRANSFER**



RANGE OF EXPERIMENTS TO BE CARRIED OUT :

1. To determine film heat transfer coefficient between the medium in which body is heated.
2. To determine film heat transfer coefficient between the medium in which body is cooled.

TECHNICAL DESCRIPTION :

The apparatus consists of hot water bath totally insulated with “PUF” insulation in between the two chambers. An electric heater is provided to heat water up to desired temperature. A test piece with the thermocouple at the center is immersed in hot water bath and its temperature is measured fixed interval of time. i.e. 10 seconds. The hot test piece is then cooled in atmospheric air.

Heat transfer coefficient in both the heating and cooling is calculated.

DIMENSIONS AND WEIGHT :

Size : 1.5 m.(L)x 1.0 m(W) X 0.7m (H) , Table Top

Weight : Approx. 70 Kg

SERVICE REQUIRED : 230 v Ac Supply 50 Hz , Water : 10 ltr

SCOPE OF DELIVERY:

1. Experimental Setup
2. Instructional Manual

OPTIONAL FACILITY: Data logging Facility