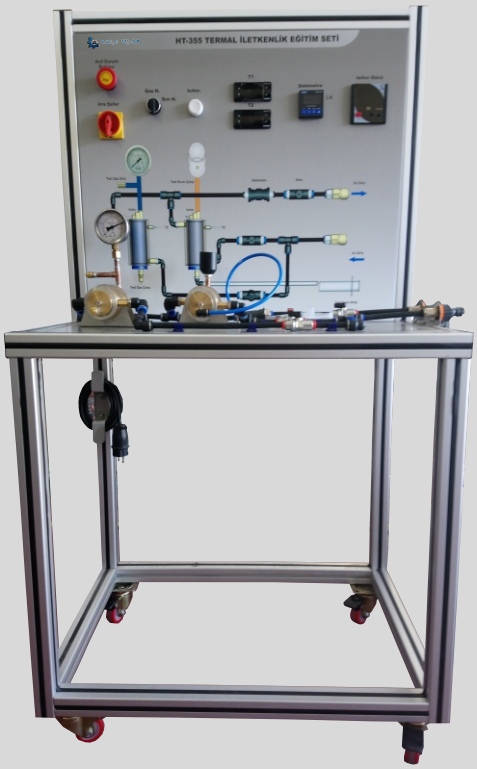
HEAT TRANSFER

HT-355 THERMAL CONDUCTIVITY IN FLUIDS AND GASES TRAINING SET



GENERAL EXPLANATION

This training set is a guide to the students in measuring the thermal conductivities of gases and liquids, and thermal conductivity tests of many different fluids and gases can be made.

EXPERIMENTS

1. Determination of thermal conductivity coefficient in liquids
2. Determination of thermal conductivity coefficient in gas

DIMENSIONS

A x B x H : 750 x 520 x 1280 mm

OPTIONAL FEATURES

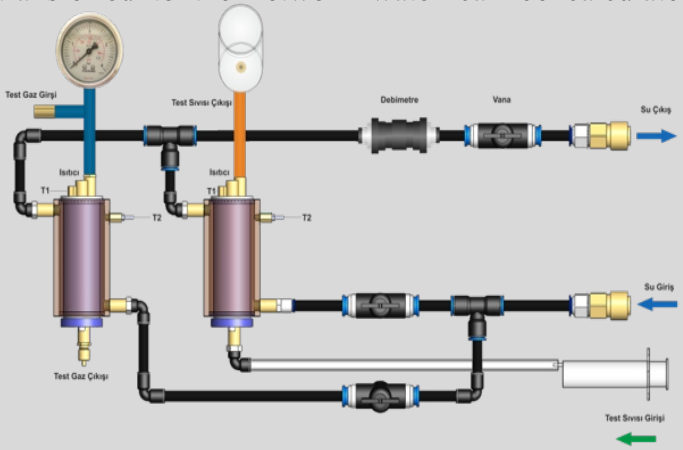
- Touch LCD Display
- USB Computer Connection
- Computer Control

PACKAGE INCLUDED

Device, device cover, 1 printed experiment report, circuit diagram and product catalog

TECHNICAL SPECIFICATION

Materials tend to have a homogeneous distribution by transferring the heat energy within the heterogeneous temperature differences on the whole or in contact with atomic vibrations, convection and radiation. The unit has 2 types of heat transfer units. In these units the test fluid and the network water are subjected to heat exchange. The resistances in the units give the required heat energy to the test fluid. The temperature increase in the units is monitored instantaneously through temperature sensors connected by direct contact. This heat energy is transferred to the units through the network water and the heat transfer is ensured. The network water flow and inlet and outlet temperatures are measured and calculated by sensors so that the energy transferred to the network water can be calculated.



TECHNICAL DETAILS

- One cylindrical test device for gas and liquid
- Test fixtures heaters
- Temperature measurement from 2 different points
- Water cooling system
- Refrigeration flow setting and measurement
- Digital measurement of electrical data