HEAT TRANSFER

HT-356 HEAT TRANSFER IN METALS TRAINING SET



GENERAL EXPLANATION

This training set is designed to calculate the heat conduction coefficient in metals in a practical way.

EXPERIMENTS

1. Calculation of thermal conductivity coefficient of different materials

2. Calculation of thermal resistance of different materials

3. Heat transfer with different samples connected in series

4. Effect of length on heat conduction

DIMENSIONS

A x B x H : 700 x 350 x 480 mm

OPTIONAL FEATURES

- Touch LCD Display
- USB Computer Connection
- Computer Control

TECHNICAL SPECIFICATION

There are different metal samples in the heart of the unit. Samples are placed in a heater and heated on the one hand. Heat is passed through the sample and spread to the environment. The sample used acts as a cooling fin. Also there are fans under the sample. The flow rate of the fans can be adjusted continuously to influence convective heat transfer. The air flow is carried evenly around the sample. As a result, in addition to performing the experiment with stationary air (free convection), it is also possible to perform experiments with flowing air (forced convection). The effect of different materials on heat conduction has been shown by comparing different samples.



TECHNICAL DETAILS

- 5-point temperature measurement
- 57 W Peltier cooler
- 10 different test samples
- Adjustable temperature

PACKAGE INCLUDED

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

