

Order Code - 23246610.4 Thermal Conductivity of Metal Bar With **Data Acquisition and calculation Software**



The apparatus consists of a metal bar whose one end is heated by an electric heater & the other end is kept in a cooling water chamber, which acts as heat sink. The test section, i.e. middle portion of bar is provided with thermocouples. Test section is well insulated to minimise radial heat loss.

FEATURES:

- Test section is completely enclosed.
- Control and measurement of electrical input by complete panelised instruments.
- Digital temperature indicator for temperature measurements

RANGE OF EXPERIMENTS:

- Determination of temperature distribution along the length of given bar.
- Determination of thermal conductivity of given bar at different temperatures
- Determination of thermal conductivity of any metal bar other than the supplied one by proper fitting of bar in the unit.

SPECIFICATION:

- Heating Section of copper 25 x 50 mm length (approx.)
- Thermal Insulation for bar of Nylon 70 mm Dia.
- Cooling chamber 25 mm dia , 50 mm length.
- Sample test specimen 25 Dia X 30 mm L with Nylon insulation.
- Heater- 400 watts (Cartridge Type)12.5 Dia X 50 mm L
- Seven thermocouples on bar at equidistant points.
- Sample test piece of Brass / Aluminum / M.S.
- Side clamps for holding test specimen both heating and cooling chamber.
- Digital Control Panel
 - a) LCD Display.
 - b) Thyristor based power control.
 - c) Power Measurement using power meter
 - d) RTD (PT 100) for temperature measurement 08 channel .
 - e) Data Acquisition and Calculation software (Optional at Extra cost)
 - f) PC interface on RS 232 / 485 (Optional at Extra cost)

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.



Export Sales: +91-9829132777 India Sales: +91-9588842361



IT-2013, Ramchandrapura Industrial Area, Sitapura Extension, Jaipur-302022, India.













Tesca Technologies Pvt. Ltd.



Order Code - 23246610.4 **Thermal Conductivity of Metal Bar With Data Acquisition and calculation Software**

INSTRUCTION MANUAL:

A manual is supplied which gives details of the apparatus and procedure of experiments along with sample calculations.

SERVICES REQUIRED:

- A.C. 230 V single phase stabilised supply with earthing connection.
- Constant temperature cooling water supply constant head at the rate of about 1-2
- 2 mtr x 1.5 mtr approximately

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.



Export Sales: +91-9829132777 India Sales: +91-9588842361



IT-2013, Ramchandrapura Industrial Area, Sitapura Extension, Jaipur-302022, India.

















