

Transient thermal analyzers detail specification

- (a) Transient thermal analyzers for measurement of thermal conductivity, specific heat and diffusivity of wide range of materials
- Thermal conductivity range: 0.01 to 400W/m/K or higher.
 - Thermal diffusivity range: 0.1 to 100 mm²/s or higher.
 - Specific heat capacity range: 0 to 5 MJ/m³K or higher.
 - Minimum sample dimensions: at least 3 mm thick × 13 mm diameter solid cylinders or preferably square shaped 3 mm × 13 mm × 13 mm for bulk testing.
 - Maximum sample size: 150 mm × 150 mm × 150 mm.
 - Actual testing range: Ambient to 750 °C.
 - Precision: Better than 1%
 - Accuracy: Better than 5%
 - Input power: Adjusted to the line of voltage in the region of use.
 - Material testing capability: Solids, Powders, Foam, Pastes, liquid, Anisotropy samples.
 - Suitable sensors and testing accessories as per temperature range for required sample size.
 - Necessary accessories for testing of solid samples.
 - Machine should be capable of independent analysis of specific heat capacity and direct measurement of thermal conductivity.
 - System should be factory calibrated and provide a certificate.
 - Warranty - 1 year.
 - Verification samples for data validation.
 - Software for material testing and should be Windows-7 based or higher with the facility to export data at MS EXCEL.
 - Onsite installation & training
- (b) All necessary accessories, sample holders, etc., for testing of powder, foam, paste, and liquid.
- (c) Recalibration of the unit, accessories or any spares/sensor is required then cost should be included for next five year.