

TE-08 Radiant Heat Exposure Tester

Purpose:

Apparatus is intended for determining of heat transmission through materials or material assemblies used in protective equipment when exposed to radiant heat.

Apparatus is made according to the requirements and apply for the tests according to the following standard:

EN ISO 6942 Protective clothing – Protection against heat and fire – Method of test: Evaluation of materials and material assemblies when exposed to a source of radiant heat

Description of the device:

The device consists of Inox metal chassis, armour cage for protection of direct contact with heating source, 6 pieces of silicon carbide heating rods (1.100 °C) – with automatic electronically controlled power compensation due to ageing of rods and line voltage variations – mounted on moving support with automatic positioning, central unit for auto-calibration from 5 to 80 kW/m² and fully automatic measuring process (times to achieve temperature rise of 12, 24 and 30 °C), specimen holders for test A and test B with calorimeter, LCD display for adjustments and results, built-in printer, USB output for data storage and safety power overload turn-off.

Dimension: (L) 600 x (W) 1600 x (H) 600 mm;

Weight: 80 kg

Power supply: 3 x 230 V (400 V) ~ 50 Hz; 6 kW



Operating principle:

In test method A specimen is exposed to a specific level of radiant heat for a specific time. Following the exposure, the specimen (individual layers or multi-layer) are examined for visible changes.

In test method B specimen is exposed to a specific level of radiant heat and the times for temperature rises of 12 °C and 24 °C in calorimeter are recorded and are expressed as radiant heat transfer indexes.

