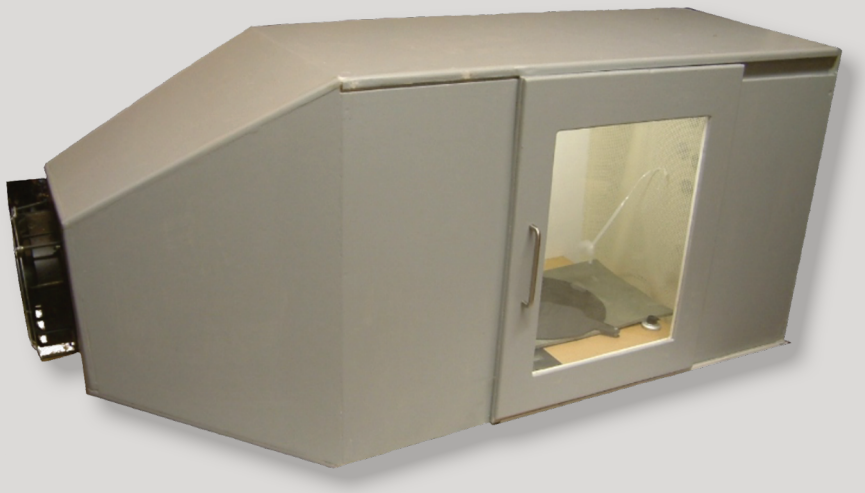
WIRA INSTRUMENTATION Tog Tester



Accurately assess the tog value of textiles

An instrument to measure the thermal resistance of textiles from 0.5 to 25mm thick.

The Wira Tog Tester uses the comparator hot plate principle, in accordance with BS 4745 and ISO 5085. The equipment consists of a forced air cabinet, a circular hot plate and a cold plate. An electronic controller controls the temperature of the hotplate and displays the measured tog value. An alternative cold plate designed to lie on top of the material and apply an known pressure is also available.

Test Procedure

Cut a 330mm diameter sample of the material and condition it for 24 hours at 20°C (+/-2) and 65% RN (+/-5). Place the conditioned sample on the hot plate.

Plug one of the cold plate units into the socket.

- For open test, place the cold plate away from the test area.
- For fixed pressure test, choose the fixed-pressure (lightweight) cold plate and place it on top of the product.
- For a fixed opening test, choose the fixed-opening (metal) cold plate.

Measure the thickness of the material and dial this value into the thickness control, then place the cold plate over the top with its legs through the holes in the cover.

Close the door of the instrument.

Key Features

- ✔ *Hot plate 33°C +/- 0.1*
- ✔ *Heater over-temperature protection*
- ✔ *Absolute temperature sensing by chopper stabilised platinum resistance sensor with 0.001K precision*
- ✔ *Differential temperature sensing by chopper stabilised differential thermocouples*
- ✔ *Digital processing of thermal Resistance calculation*

This is a precision instrument requiring minimal calibration and capable of 1% accuracy given suitable environmental controls.

Order Code: TGT:002

WIRA INSTRUMENTATION
Tested to be Trusted

For further info call:
+44 (0) 1274 733145
Email: sales@wira.com or visit: www.wira.com

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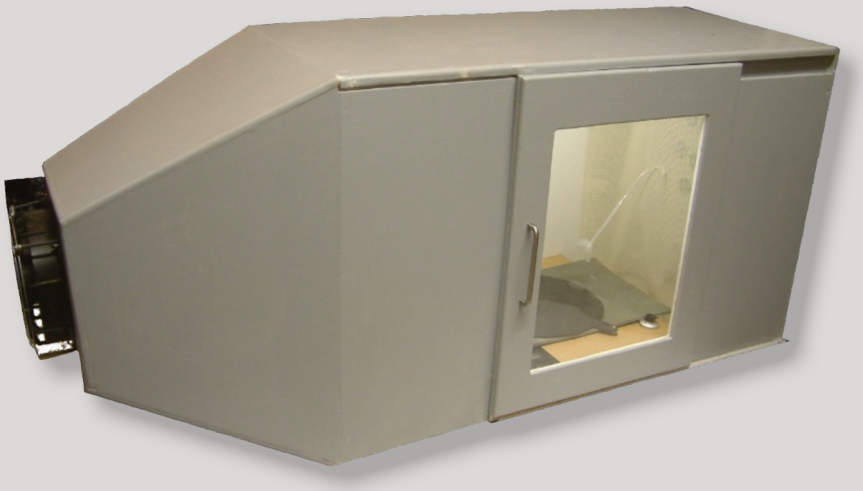


Accurately assess the tog value of textiles

An instrument to measure the thermal resistance of textiles from 0.5 to 25mm thick.

The display will indicate the hot plate temperature as the rig comes to equilibrium, then will switch to displaying the measured tog value. In the case of an open test, it is necessary to subtract an 'air tog' value (determined by a bare-plate run) from the result to get the net tog of the product. Each test will take approximately 3 hours.

Air Conditioning

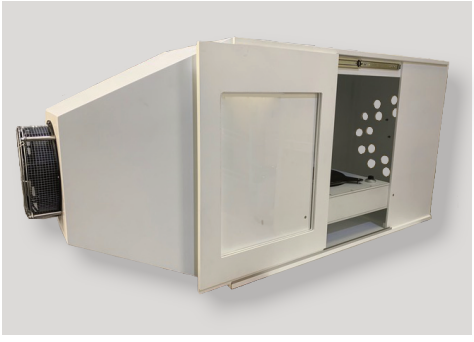
BS4745 requires that the environment meets the general conditions of temperature and humidity for testing textiles.

Variations in the room temperature during the test can affect the result, and it is important that the temperature remains stable during the test. If the room temperature varies cyclically due to the operation of a thermostat, then the indicated tog value should be observed over at least one full cycle, the assess the range of variation this is causing.

Hot plate is powered from a stabilised 12 Vdc supply.

All system temperatures over the entire measurement cycle can be recorded for validation.

Compliant with CE regulations for electrical safety and EMC.



Hot plate: 33cm diameter
Instrument size 180cm x 53cm x 78cm high
Heater power 60W
Air velocity 0.25-1.0m/s

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