

TNB 912 – Non-Combustibility Test Device

Measurement method	Non-combustibility tests on building products in accordance with DIN EN ISO 1182
Furnace rack	<ul style="list-style-type: none"> ▪ Stainless steel, profile welded with bottom plate ▪ Dimensions (H x W x D): 2050 mm x 400 mm x 400 mm ▪ Insulated furnace shell with MgO powder filling ▪ Setup for sample feed and mirror holder ▪ Mirror, 300 mm x 320 mm, pitch 30°
Heating element	<ul style="list-style-type: none"> ▪ Heating element support pipe: Al₂O₃ C799 ▪ H = 150 mm ±1 mm, Ø = 75 mm ±1 mm, DW = 10 mm ±1 mm ▪ Heating element: Kanthal A1, Ø = 1.0 mm - Fast heating according to predefined curve for quick test start
Sample holder	<ul style="list-style-type: none"> ▪ 2-piece, basket of CrNi wire, H = 57 mm, Ø = 49 mm ▪ Rod holder CrNi tube, L = 300 mm, Ø = 6 mm
Sensors	6 mantle thermocouples for sample and furnace temperature
Measuring and control unit	<ul style="list-style-type: none"> ▪ Single Board Computer with 32-GB SSD data storage ▪ 6 inputs for thermoelectric voltage ▪ Measuring range to 1300°C, resolution 0.1 K ▪ Cold-junction compensation
Operation/display touchscreen	<ul style="list-style-type: none"> ▪ 7", 1024 x 800 color touchscreen ▪ Temperature display ▪ Voltage and power display for the heating element
Dimensions	<ul style="list-style-type: none"> ▪ Furnace (H x W x D): 250.0 cm x 42.0 cm x 42.0 cm ▪ Measuring and control unit (H x W x D): 13.2 cm x 45.0 cm x 43.6 cm
Power supply	100 V – 230 V, 50/60 Hz, max. 1 kW
Weight	63.0 kg (furnace)/10.0 kg (measuring and control unit)

TNB Software

SBC, Windows 10 IoT, TNB SBC, for the recording, processing and presentation of measured values for testing devices in accordance with DIN EN ISO 1182 under Windows 7/8.1/10 operating systems

Graphical and numeric presentation of all measured values

User guidance for test procedure

Configuration of measurement points for each thermocouple

User-friendly calibration functions

Creation of test reports

Additional features:

- Shutdown when individual values exceed critical thresholds
- Storage of all test data in raw format (binary) with interface to EXCEL, or WORD via clipboard
 - Storage of all measurement data in CS format