

## 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"> <li>Stainless steel, profile welded with bottom plate</li> <li>Dimensions (H x W x D): 2050 mm x 400 mm x 400 mm</li> <li>Insulated furnace shell with MgO powder filling</li> <li>Setup for sample feed and mirror holder</li> <li>Mirror, 300 mm x 320 mm, pitch 30°</li> </ul> |
| Heating element               | <ul style="list-style-type: none"> <li>Heating element support pipe: Al<sub>2</sub>O<sub>3</sub> C799</li> <li>H = 150 mm ± 1 mm, ØI = 75 mm ± 1 mm, DW = 10 mm ± 1 mm</li> <li>Heating element: Kanthal A1, Ø = 1.0 mm</li> <li>- Fast heating according to predefined curve for quick test start</li> </ul>        |
| Sample holder                 | <ul style="list-style-type: none"> <li>2-piece, basket of CrNi wire, H = 57 mm, Ø = 49 mm</li> <li>Rod holder CrNi tube, L = 300 mm, Ø = 6 mm</li> </ul>                                                                                                                                                             |
| Sensors                       | 6 mantle thermocouples for sample and furnace temperature                                                                                                                                                                                                                                                            |
| Measuring and control unit    | <ul style="list-style-type: none"> <li>Single Board Computer with 32-GB SSD data storage</li> <li>6 inputs for thermoelectric voltage</li> <li>Measuring range to 1300°C, resolution 0.1 K</li> <li>Cold-junction compensation</li> </ul>                                                                            |
| Operation/display touchscreen | <ul style="list-style-type: none"> <li>7", 1024 x 800 color touchscreen</li> <li>Temperature display</li> <li>Voltage and power display for the heating element</li> </ul>                                                                                                                                           |
| Dimensions                    | <ul style="list-style-type: none"> <li>Furnace (H x W x D): 250.0 cm x 42.0 cm x 42.0 cm</li> <li>Measuring and control unit (H x W x D): 13.2 cm x 45.0 cm x 43.6 cm</li> </ul>                                                                                                                                     |
| 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