Benchtop TM range

Useful volume : 55 or 80 litres
Temperature range : from -65°C to +150°C

Benchtops enable a product to be put through temperature tests in order to reveal its possible defects or to determine its life length.

They can be used at any stage – from research to production – and are particularly valued in quality control because of the tests easy reproducibility. Their self sufficiency in use (an electrical socket is enough) and their dimensions grant them a great mobility: they can be installed on a table or a laboratory bench or, when on the cart (optional), be at working level.

Each model offers different characteristics:

- **TM**: full door, single-stage compressor (viewing window and cart as options)
  - from -30°C to +150°C (+200°C as an option)

- **TMX**: full door, cascade compressors (viewing window and cart as options)
  - from -60°C to +150°C (+200°C as an option)

- **TMT**: viewing window and light, cart, cascade compressors
  - from -65°C to +150°C (+200°C as an option)

Temperature rate : 3°C/min* within the range**

*depending on the use conditions **calculation according to the NFX 15-140 standard

<table>
<thead>
<tr>
<th>Dimensions (mm)</th>
<th>Chamber useful</th>
<th>Chamber overall</th>
<th>Cart</th>
<th>Grinding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W</td>
<td>D</td>
<td>H</td>
<td>W</td>
</tr>
<tr>
<td>TM / TMX / TMT 55</td>
<td>420</td>
<td>380</td>
<td>350</td>
<td>670</td>
</tr>
<tr>
<td>TM / TMX / TMT 80</td>
<td>500</td>
<td>400</td>
<td>400</td>
<td>705</td>
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</tbody>
</table>
Functioning principles

A double air flow ventilation ensures a perfect homogeneity in the cabinet and allows a heating / cooling so that the set temperature is reached faster.

Construction

The **TM benchtop** consists of a stainless steel cabinet and of a removable gridding on racks where the samples can be put onto.

A 50x60mm notch on the left side makes it easier for the cables to go through and the right side (hinges side) is cut by a 80mm Ø hole.

The safety is optimized by an external thermostat that can be adjusted by the user. The benchtop is also equipped with a 220V safety socket and a timer.

Various options are offered, such as a cart with pivoting and braking casters (as standard on the TMT model), a multiglass viewing window with light (as standard on the TMT model), extra gridings or port holes, a high and low temperature safety controller, a temperature portable recorder, etc.

Regulation

TM benchtops are equipped in standard with PID regulator that has an accuracy of ±0.15% within the range.

It allows the cabinet temperature to be regulated on a set point and/or a dwell and to be digitally displayed.

Data are transmitted by RS 232 (protocol modbus) and RS 485 connections.

**Options:**
- F4 type regulator-programmer
  - RS 232 and RS 485 cables
  - Possibility of PC piloting (via RS 232, protocol modbus).