

Minis ...

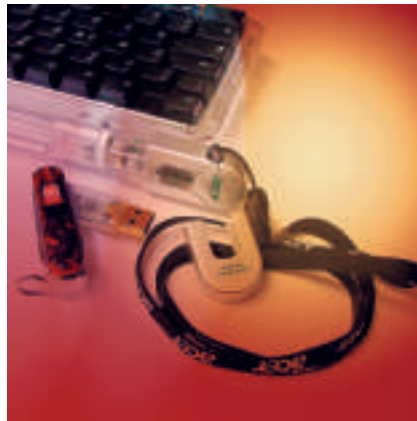
Vötsch
Industrietechnik



... VT & VTM

Temperature Test Chambers

Test Systems for Small Test Specimens ...



Limited laboratory space and the necessity of installing testing systems directly at the workspace are factors demanding compact and silent running equipment. Temperature testing chambers of the mini-series fulfil these requirements.

The aim of a temperature test is to verify the resistance of a specimen to the environmental influence of temperature. The tests are aimed at the suitability for use and storage at low and high temperatures.

In research and development laboratories functionality and usability of a product are determined at a very early stage.

With its mini-series Vötsch Industrietechnik offers the development engineer and quality assurance specialist high efficiency in limited space.

The test chambers VT 4002, VTM 4004 and VTM 7004 - our "minis" - offer an optimum solution with a test space volume of 16 and/or 37 l when limited space is available.

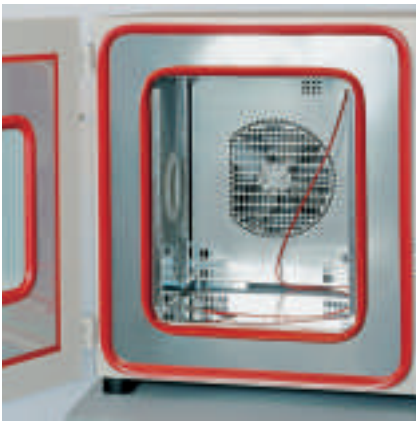
The temperature range of the VT 4002 chamber is -40 °C to +130 °C and the range of the VTM chamber is -40 or -70 °C to +180 °C.

Temperature conditioning efficiency renders (see technical data) this compact and yet very quiet series of systems suitable for universal applications.

The test systems VTM 4004 and VTM 7004 have been totally upgraded, i.e. technical and optical improvements have been made.



... Mini Test Chambers VT & VTM



The major characteristics of the new minis VTM

- Optical conformity and the assignment of reliable materials and well-proven features
- For monitoring and controlling the test chamber is equipped with a powerful 32-bit control system **MINCON/32**
- The terminal with LCD-display "MINCONTROL" offers input and display of values and states

| Type | | VT 4002 | VTM 4004 | VTM 7004 |
|--|--------|------------------------------|-------------|-------------|
| Test space volume | L | 16 | 37 | 37 |
| Temperature range | °C | -40 / +130 | -40 / +180 | -70 / +180 |
| Temperature fluctuation ¹⁾ | K | ±1 | ±0.2 - ±0.5 | ±0.2 - ±0.5 |
| Deviation in space | K | ±2,0 | ±0.5 - ±1.5 | ±0.5 - ±1,5 |
| Temperature gradient ¹⁾ | K | 4 | 1-3 | 1-3 |
| Temperature rate of change ¹⁾ | | | | |
| Heating | K/min | 5.0 | 5.3 | 5.3 |
| Cooling | K/min | 3.5 | 6.0 | 4.7 |
| Heat compensation max. | W | 350 | 550 | 500 |
| Work space dimensions | Width | mm | 310 | 320 |
| | Depth | mm | 230 | 290 |
| | Height | mm | 205 | 400 |
| External dimensions | Width | mm | 465 | 1000 |
| | Depth | mm | 505 | 780 |
| | Height | mm | 625 | 630 |
| Sound pressure level ²⁾ | dB(A) | <55 | <54 | <55 |
| Electrical connection | | 1/N/PE AC 230 V ±10 %, 50 Hz | | |
| Rated power | kW | 0.7 | 0.7 | 0.9 |

Performance values refer to +25 °C ambient temperature - ¹⁾ In accordance with IEC 60068-3-5. ²⁾ free field, 1 m distance from the front, as per DIN 45635, part 1, accuracy class 2. We reserve the right of changes in construction resulting from technical progress.

- IP54 certified switch cabinet
- Enhanced performance temperature fluctuations
- Enhanced performance temperature changing rates
- Extremely quiet

The mini test chamber **VT 4002** is also equipped with **MINCON/32** and LCD-display **MINCONTROL**.



Standard equipment and options



MINCONTROL terminal and independent adjustable temperature limiter



Laboratory table, mobile with drawers (option)

Standard equipment

- 32-bit MINCON with MINCONTROL terminal
- Potential-free contact for switching-off of test specimens
- Independent adjustable temperature limiter
- Adjustable software temperature limiter min./max.
- Interface RS 232
- Observation window with test space illumination ¹⁾
- 1 Entry port ²⁾
- Holders for shelf ³⁾
- Air-cooled refrigeration unit
- Calibration of 2 temperature values ³⁾

¹⁾ For VTM option

²⁾ VT 25 mm Ø, VTM 80 mm Ø

³⁾ Only for VTM ...

Options

- Touchpanel ⁴⁾
- Software SIMPATI*
- Digital I/O ⁴⁾
- Temperature measuring on test specimen ⁴⁾
- Interface IEEE 488
- Networking (RS 485 interface)
- Dehumidification during heating cycle ³⁾
- Various printers
- Additional entry ports
- Shelves ³⁾
- Door with window and lighting⁵⁾
- Laboratory table, mobile WxDxH 1000 x 750 x 720 mm
- Special voltage

³⁾ Only for VTM ...

⁴⁾ For VT modification

⁵⁾ For VT standard

**Subject to technical alterations.
Some of the illustrated systems
contain optional extras.**

Special designs ...

We plan and manufacture tailor-made solutions to meet all requirements.

Other brochures for laboratory applications ...



Vötsch

Industrietechnik

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