



# High Performances - Compact Design

Temperature Test Chambers WT  
– perfect for application in factories and laboratories

# From cold to hot ...

## No compromises regarding temperature tests

The test chambers of the WT series are both highly effective and economical. They are equipped with everything which is required to perform cold-heat tests in extreme ranges complying with the relevant standards.

Due to their compact dimensions these chambers are perfectly suitable where space is limited in factories and laboratories.

## The 6 main advantages ...

- compact design
- easy operation
- low sound level
- beneficial price/performance ratio
- plug-in design (single-phase connection)
- low connected load

## Application ...

The test chambers allow reproducible temperature tests to be performed in all areas of research, development, production and quality control.

Regardless of the form and composition of the test specimen, efficient, even temperature control and climatisation in the test space guarantee high temperature constancy, which in turn ensures accurate test results.

## Construction features ...

The high-quality insulation between test space and external housing guarantee highest insulation values and lowest possible operating costs. The test space is made of stainless steel, welded steam-tight.

All unit sizes have one access port made of low thermal conductivity material. It is positioned in the right hand side of the chamber, and may be used for inserting measuring and control cables, other supply connections or supplementary equipment.

## Functional principle ...

An airstream conditioned to precisely the required set value is passed constantly through the test space. Components for processing the air are located in the circulating air duct installed in the rear wall of the test chamber. The symmetrical air circulation system guarantees optimum circulation.

The circulating air is returned above and below the test space and flows through a heat exchanger in which it may be cooled if necessary.

An electric heater warms the circulating air. An axial fan with external motor, mounted centrally in the rear test chamber wall, blows conditioned air back into the test space, providing intensive air circulation.

A platinum resistance thermometer Pt 100 (DIN IEC 751) measures the temperature in the test space.

The special program controller guarantees the highest temperature constancy possible.

Each electric circuit is fitted with its own safety device which cuts off the affected circuit, or the whole test cabinet, in the event of a fault.

The unit is wired according to accepted standards, the accident prevention regulations "Electrical Equipment and Means of Production" (BGV A2) and the relevant VDE/EN regulations and EC guidelines.

The refrigeration systems use environmentally friendly refrigerants.



# ... The complete temperature spectrum



## Standard design ...

- 32 bit MINCON control with operating panel MINCONTROL\*
- adjustable temperature limiter  $t_{max}$
- interface RS 232 C
- voltage-free contact for switching off test item
- refrigeration cycle air-cooled
- 1 access port 50 mm
- calibration of 2 temperature values



Control panel MINCONTROL\*

## Options ...

- observation window with test space illumination
- colour touch panel
- software SIMPATI\*
- temperature measurement on specimen
- interface IEEE 488
- networking (RS 485 interface)
- Compressed air drier
- Centronics interface
- ethernet interface
- additional access ports
- rack with shelf
- additional shelves
- laboratory trolley for WT 64, 120 and 240

## Technical data ...

Series WT				WT 64/75	WT 120/70	WT 240/70	WT 450/70
Test space volume	litres	approx.		64	120	240	450
Test space dimensions	Height	mm approx.		400	400	800	800
	Width	mm approx.		500	500	500	800
	Depth	mm approx.		330	600	600	700
Overall dimensions	Height	mm approx.		1.200	1.200	1.600	1.950
	Width	mm approx.		800	800	800	1.100
	Depth <sup>1)</sup>	mm approx.		740	1.010	1.010	1.110
	Design			← table-top units →			free-standing units
Temperature range	°C			-75 ... +180	-70 ... +180	-70 ... +180	-70 ... +180
Temperature constancy, in time in space	K			← ±0,2 ... ±0,7 →			
				← ±0,5 ... ±2,0 →			
Cooling-down rate <sup>2)</sup>	K/min	approx.		2,5	2,0	1,5	1,0
Heating-up rate <sup>2)</sup>	K/min	approx.		3,0	2,3	1,8	1,0
Power supply	← 1/N/PE AC 230 V ±10 %, 50 Hz, 16 A →						
Connected load	← 1,5 kW →						
Condenser	← air-cooled →						
Weight	kg	approx.		180	210	260	310

The performance data refer to an ambient temperature of +25 °C

1) +150 mm for fan motor

2) according to IEC 600 68-3-5

Subject to technical modifications. The units are partially shown with optional accessories.

# Test systems for professionals. Test the best ...

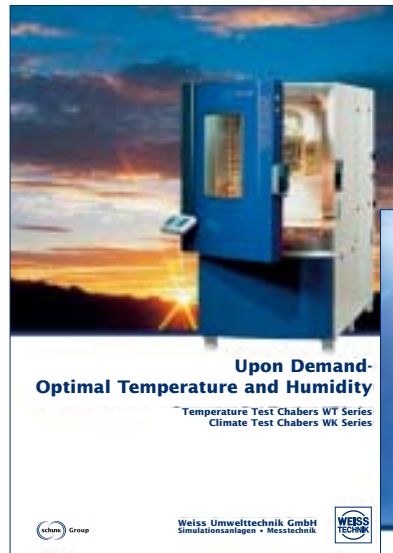
A complete line of standard systems is available offering test space volumes ranging from approx. 34 l to 1,500 l, a working range from -75 ... +180 °C and relative humidity values ranging from 10 ... 98 % r.h.

We also offer an extensive line of field-proven test systems specially for simulating exposure to weather, temperature shock, corrosion and long-time tests for application in research, development, quality control and production.

Of course, Weiss - as one of the leading producers of environmental simulation systems world-wide - offers the entire spectrum of high-tech test systems starting from a series of cost-effective test systems up to customised walk-in chambers and in-line systems.

If it's know-how, service and reliability that you are looking for - contact Weiss Umwelttechnik.

**Please contact us for more brochures covering the subject area ...**



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