

Measuring and testing instrument

TT-1'000

Comparison measuring unit for Temperature Control Units

Simple and reliable checking of temperature, pressure and flow rate

The measuring and testing instrument TT-1'000 has been designed for a reliable examination of Temperature Control Units all arts. It makes possible to check the temperature controller and temperature probe without removing these components of the Temperature Control Unit. The measuring instrument works within the temperature range of -20°C up to $+360^{\circ}\text{C}$. The controller - adjusted with a calibrator - guarantees a precision of $\pm 0.5^{\circ}\text{C}$ in the comparison measurements.

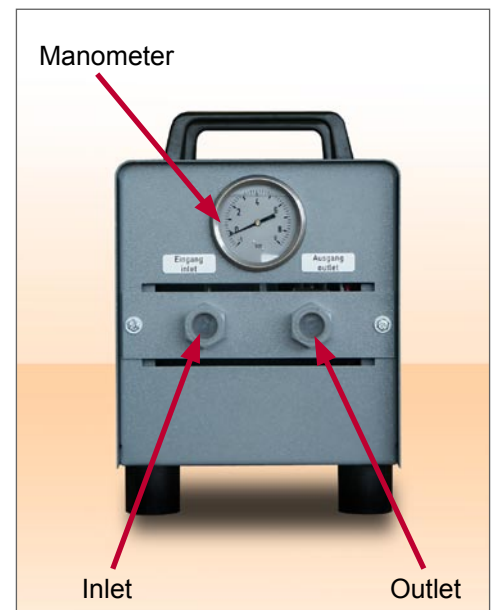
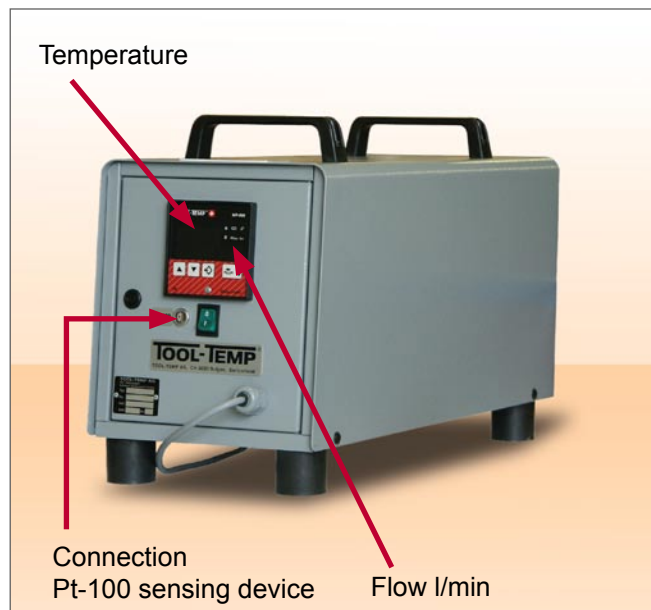
The pressure measurement is made thanks to a precision manometer which shows values in the pressure range as well as in the vacuum range. The integrated flow control displays the effective flow rate by several pressures and temperatures. With this information the function and state of the pump can be easily checked.

To record the measurements, an additional precision sensing device Pt-100 or a 0-10 V output of the controller for an actual value indication are available. To protocol the temperature measurements, it is possible to connect a writer device to one of these two outputs.

It is possible to check all Temperature Control Units which have connections from $3/8''$ up to $3/4''$. Water, pressurised water, heat transfer oil or synthetic heat transfer liquid can be used as circulating medium with the measuring instrument.

Domain of use:

The main domain of use of the measuring instrument is the precision check in the sense of a function check (ISO - 9000). In addition, the measuring and testing instrument is a reliable help to check that a Temperature Control Unit has been efficiently and correctly repaired.



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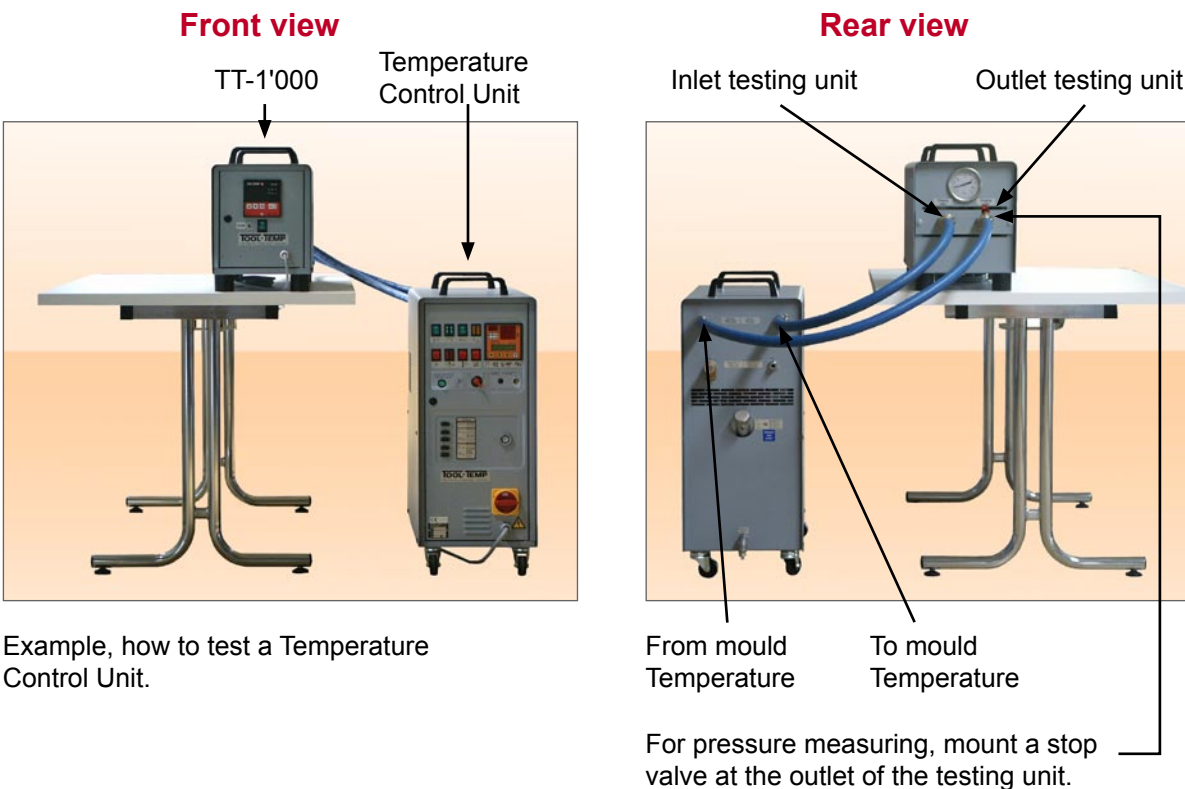
Internet: www.tool-temp.ch



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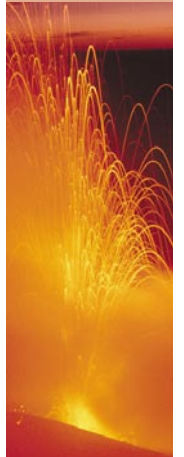
Technical Data

Operational use:	For Temperature Control Units with 3/8", 1/2" and 3/4" - connections
Connections:	3/4" female thread (inside diameter 19 mm)
Temperature range:	-20°C up to +360°C
Pressure indication:	-1 bar up to +9 bar
Flow range:	5 litres up to 80 litres/minute (if required 1 up to 35 l/min also possible)
Medium:	Water, pressurised water, heat transfer oil or synthetic heat transfer liquid
Precision:	
<i>Temperature:</i>	+/- 0,5°C, respectively according to enclosed test report
<i>Pressure:</i>	accuracy class 1
<i>Flow control:</i>	4 - 10 l/min +/- 1,5 l/min 10 - 30 l/min +/- 1,0 l/min 30 - 70 l/min +/- 1,5 l/min
Output:	Separate Pt-100 for the connection of a temperature-writer or 0-10 V as output of the temperature indication
Electrical connection:	230 V, 50/60 Hz - standard 110 - 120 V, 50/60 Hz - on requirement
Dimensions:	Length: 580 mm x Width: 255 mm x Height: 370 mm
Weight:	approx. 22 kg
Colour:	Silver grey RAL 7001



Example, how to test a Temperature Control Unit.

* Connecting hoses and stop valves are excluded from scope delivery.



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