

Product Information

Vicat Dry

CTA: 46268 46231



Vicat Dry 2-300-D

Applications

Determination of Vicat softening temperature (VST)
• of thermoplastics as per ISO 306

No more irritating oil fumes!

Advantages and features

Vicat Dry instruments feature easy, convenient operation. Particular areas of use include research and development, goods inwards checks and production monitoring. The oil-free measuring principle ensures clean, odor-free working conditions.

The test sequence is completely automatic. Different versions of the instrument are available, with two or six testing stations according to requirements. Test-sequence parameterization and measured-value display can be performed conveniently on a connected PC.

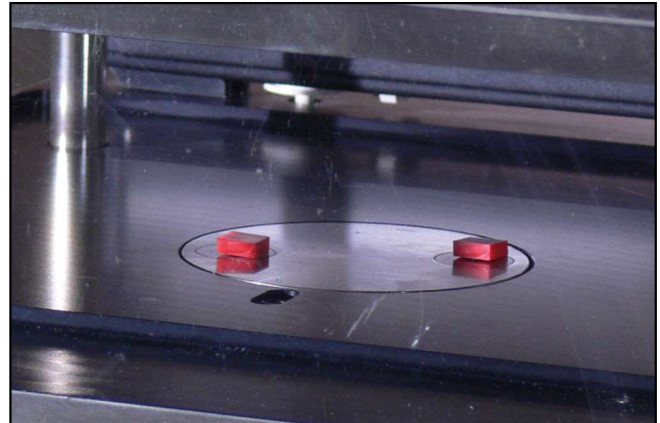
The results of the Vicat Dry test display excellent agreement with those obtained using a conventional oil-bath instrument. The same is true of test-result consistency.

Automatic test sequence

Function description

Once the heating block has reached the starting temperature, the specimens are positioned in the measuring stations, the instrument is closed pneumatically and the test weight specified in the standards is automatically applied.

On completion of preheating under the influence of force, the displacement signals are zeroed (program-



Vicat specimens are simply placed on the measuring station

controlled) and warming of the heating block at the preset rate is started. As soon as the required penetration is attained at all stations, the heating is switched off and the test is ended.

Re-cooling is started automatically; the specimens can afterwards be removed.

Functions, elements and interfaces

- built-in microprocessor-controlled electronics for temperature control and measured-value acquisition
- fully automatic test-sequence
- automatically controlled compressed-air re-cooling
- connection for fluid cooling
- safety thermostat
- low heating of housing
- safety switch prevents crush risk
- serial interface for connecting a PC for test-control and data acquisition via ZwickRoell Roell testing software
- integrated compensation for heat expansion
- integrated weight sets, 10N and 50N

Re-cooling the heat-transfer liquid

The instruments are equipped with compressed-air cooling as standard. If sufficiently cool compressed air is not available, the instruments can be cooled with water.

Product Information

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Technical data

Description	Value	
General technical data for Vicat Dry		
Display accuracy at 250 °C	±0.5	°C
Spatial temperature gradient	±0.2	°C
Temperature measurement resolution	0.1	°C
Temperature sensor	2x measurement of heating-block temperature, 1 additional specimen-adjacent sensor per measuring station	
Heating rate	50, 120 or freely adjustable	K/h
Displacement measurement with inductive LVDT measuring transducers		
Displacement measurement range, approx.	2.5	mm
Display accuracy	±0.01	mm
Re-cooling times (dependent on temperature-conditioning medium):		
with water, from 200°C to 25°C at water temperature of 12°C, approx.	15	min.
with air, from 200°C to approx. 35°C, approx.	25	min.
Connection:		
mains voltage	230/240	P
mains supply frequency	50/60	Hz
power rating	550	W
compressed-air supply ¹⁾	6 to 10	bar
water supply, max. ²⁾	10	bar
PC interfaces required	RS232 interface	
Scope of delivery	weights and needles included in delivery	
Specimen data		
VST specimen dimensions, max.	10 x 6.5 x 10	mm

1) Compressed-air supply required for compressed-air cooling

2) Water supply required for water-cooling

Item no.	326068	325987	
Type	Vicat 2-300 D	Vicat 6-300 D	
No. of measuring stations	2	6	
Temperature range	+20 to +300	+20 to +300	°C
Height x width x depth	610 x 750 x 400	610 x 750 x 400	mm
Weight (without accessories), approx.	75	95	kg

Optional accessories

Specimen cutters for Vicat

Description	Item number
Vicat specimen cutters for dimensioning Vicat specimens, with stop for specimen length of 10 mm	750485