

Zwick Materials Testing

Product Information

Vicat Dry



Applications area

Determination of the Vicat Softening Temperature (VST) on thermoplastics according to ISO 306

No more bothersome oil fumes !

The Vicat Dry instruments are very comfortable for testing and are especially used in research and development, but they are also used in incoming goods control and product monitoring. The oil free testing principle allows clean working without bothersome fumes.

The test is performed fully automatically. According to requirements, there are instruments available with 2 or 6 testing stations. Set-up of the test sequence and test data representation are performed comfortably with connected PC (Option).

Automatic test sequence

As soon as the heating block has reached the starting temperature, the specimens are placed in the testing station, the instrument is pneumatically closed and the test weight prescribed by the standard is automatically placed.

After pre-tempering while under load, the travel signals are set to zero by the program, and the heating of the



heating block at the pre-set rate is started. When the required penetration is reached at all stations, the heating is switched off and the test is ended.

The cooling is started automatically and the specimens can be taken out.

Specimen data

VST specimen dimensions, max.: 10 x 6.5 x 10 mm

Cooling of the immersion liquid

The instruments are equipped with compressed air cooling as standard. If cool, compressed air is not available in sufficient quantity, the instrument can be equipped with an optional circulation-cryostat.

Functions, elements and interfaces

- Built-in microprocessor controlled electronics for temperature regulation and test data acquisition
- Fully automatic test sequence
- Automatic control of the compressed air cooling
- Connection for liquid cooling
- Safety thermostat
- Very little warming of the casing
- Safety switch against squashing danger
- Serial interface for connection of a PC for test control and data acquisition with *testXpert*[®] II
- Integrated compensation of the thermal expansion



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Instrument	Vicat 2-300 Dry	Vicat 6-300 Dry
Number of testing stations	2	6
Temperature range	+20+300 °C	+20+300 °C
Dimensions		
Height	620 mm	730 mm
Width	400 mm	400 mm
Depth	750 mm	680 mm
Weight (without accessories)	approx. 62 kg	approx. 90 kg
Item number	VI-2300DRY	VI-6300DRY
Technical data for all instru	ments	
Indicated accuracy at 250 °C		± 0.5 °C
Ambient temperature curve		± 0.2 °C
Resolution of temperature measurement		0.1 °C
Temperature sensors: 2 x measurem. of the heating block temp., in addition, 1 sensor near the specimen for each testing station.		
Heating time: 50 K/h, 120 K/h or freely adjustable.		
Travel measurement by inductive LVDT penetration transducers:		
Travel measurement range		approx. 2.5 mm
Indicated accuracy		± 0.01 mm
Supply:		
Supply voltage		230/240 V
Mains frequency		50/60 Hz
Power		550 VA

Compressed air connection

6-10 bar