

UMF Equipment – Thermomechanical Analysis System

Mettler Toledo TMA/SDTA1

Thermomechanical analysis (TMA) measures the deformation of a sample as it is heated or cooled in a defined atmosphere. The sample length is measured as a function of temperature or time at a certain load. The load can be compression, tension, flexure or torsion. Mettler Toledo TMA/SDTA1 measures the sample temperature very close to the sample in all operating modes. High-precision quartz glass measuring probes and sample holders are available for different measuring mode and allow user to choose most suitable mode for a particular application, depending on the nature and properties of the particular sample. The mechanical measuring cell is accommodated in a thermostated housing which guarantees excellent temperature accuracy. Example of applications: softening point determination, glass transition determination, expansivity, recrystallization, phase transitions (solid-liquid, solid-solid), creep behavior, thermal stability studies etc.

Features:

- Temperature Range: -150 - 1100°C
- Temperature Accuracy: +/-0.25°C
- Temperature Precision: +/-0.25°C
- Maximum Sample Length: 20mm
- Measuring Range: +/-5mm
- Resolution: 0.5nm
- Force Range: -0.1 - 1.0N
- Dynamic load TMA (DLTMA) Frequency: 0.01 - 1Hz (Linear or Sinusoidal)
- Simultaneous SDTA Resolution: 0.005°C
- Sample support set: Probe Ball Point, Film Attachment Set, 3-Point Bending Device, Fiber Attachment

Please refer to supplier information page for further details of the system:

https://www.mt.com/hk/en/home/products/Laboratory_Analytics_Browse/TA_Family_Browse/TMA_SDTA_1.html

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