DYNAMIC MECHANICAL THERMAL ANALYSIS (DMTA)

Manufacturer: Rheometric Scientific

Type/Model: DMTA V

Temperature Range: Ambient to 500°C (without LN2) /-150°C to 500°C (with)

Frequency Range: 1.0×10^{-6} to 200 Hz

Displacement: +/- $2.5E^{-4}$ to +/- 0.128 mm with a total force of 15N

The DMTA V will test solid and semi-solid materials, determining properties related to use and wear modulus, temperature-dependent behavior, and frequency dependent behavior. The DMTA is a mechanical spectrometer that measures the stress/strain relationship of the material being tested. The DMTA can be used to test curing cycles and efficiency for thermosets and elastomers. It can be used for quality control of plastics and molded parts, coatings, paint, ink on substrates, thin films, and fiber testing. Current use is to test the properties of carbon fiber.