

## THERMO MECHANICAL ANALYZER

Sr#	Description	Qty. Required
1.	<p><b><u>Thermo Mechanical Analyzer</u></b>  <b><u>Specifications</u></b>            1. Mechanical testing Analyzer            Make: TA instruments or NETZSCH, Germany, Japan, USA            For polymers, metals &amp; ceramics etc.            Measure: Mechanical testing (Tensile, Compression, bending, Impact Strength, toughness etc.), Rheology of materials, Tg, Creep and Stress Relaxation, flexibility test and Dielectric Thermal Analysis            Minimum Force: 0.005 N            Maximum Force: 100 N            Resolution: 0.00001 N            Dynamic Displacement Range: <math>\pm 0.00005</math> to <math>\pm 1.5</math> mm            Displacement Resolution: 1 Nanometer            Modulus Range: <math>10^3</math> to <math>3 \times 10^{12}</math>            Modulus Precision: <math>\pm 1\%</math>            Frequency Range <math>2 \times 10^5</math> to 100 Hz            Fixtures for: Three-point Bending, Tension, Dual and Single Cantilever, Shear Sandwich, Compression, Contact lens, Immersion testing etc.            Temperature Control: Forced Convection Oven            Temperature Range: -50 to 1800 °C            Heating Rate: 0.1 to 60 °C/min.            Cooling Rate 0.1 to 60°C/min.            Isothermal Stability: <math>\pm 0,1</math>            Sample Size: minimum 50 mm            Viscoelastic properties should measure as a function of time.            Standard sample clamps are for use to a maximum temperature of 1800°C            Touch-Screen and Keypad            Digital Camera: For real-time images            Software, hard copies of operation and service manuals.            Spares and Accessories: For smooth running of 5 years, including fixtures and standards (Metal alloys, ceramics and polymers)  <b>Make: UK, USA, Europe, Japan</b>  <b>Quantity: 01 No.</b></p>	01