**Measurement of:** Heat treatment up to a Temperature of 2500°C in an inert atmosphere

**Equipment:** High Temperature Graphite Furnace Model No. 1000-3560-FP20, Thermal Technology, USA

**Property Measured:** Only for Heat Treatment up to 2500°C.

**Photograph (small size)**

![High Temperature Graphite Furnace](image)

**Basic Principle:** The Heating principle is based on Joule heating, also known as ohmic heating and resistive heating, is the process by which the passage of an electric current through a conductor releases heat. The amount of heat released is proportional to the square of the current. This relationship is known as Joule's first law or Joule–Lenz law. Joule heating is independent of the direction of current. The furnace temperature increases by resistive heating and heating elements are made of graphite.

**Capabilities:** Samples can be heat treated up to a Temperature of 2500°C in an inert atmosphere.

**Sample Requirement:** Sample requirement is (Maximum) 3 Inches (dia) x 6 Inches (L).