

# High Temperature Rotating Viscometers for Slag, Coal Ash and Metal: Rheotronic® II



## Introduction

The last three decades have witnessed continuously increasing activity in the various fields of material science, particularly in the area of thermophysical property measurements. Thermal expansion and thermal viscosity measurements are especially predominant.

Theta high temperature viscometers are used to measure the viscosity of slags, fluxes, coal ash, mold powder (ASTM Standard), molten salts and metals.

Only Theta, with over 30 years of experience in the field, offers many models to choose from, covering various measuring techniques. Patented details ensure unsurpassed accuracy and convenience of operation.

A family of thermal instruments you can trust.

## Features

- Designed for vacuum and controlled atmosphere operation
- Temperature range: typically 1600°C or 1700°C
- Wide viscosity range: 2.5 to 10<sup>8</sup> centipoise
- Designed to enable accurate system calibration with NIST and other certified reference materials
- Available with low, medium and high viscosity sensors
- Available with rotor and beakers of alumina, platinum, graphite and molybdenum in various sizes

## Other Viscosity Techniques From Theta

- Parallel-Plate Viscometer: Rheotronic III 10<sup>8</sup> to 10<sup>12</sup> centipoise, 1000°C and 1600°C
- Bending-Beam Viscometer: Rheotronic IV 10<sup>12</sup> to 10<sup>15</sup> centipoise, 1000°C and 1400°C



Rheotronic II Vacuum Viscometer



Vacuum/Controlled Atmosphere Measuring Head



Beaker and Rotor In Specimen Loading Position

## Standard Reference Material

Viscosity measurements are very complex, therefore, the use of NIST reference material for instrument calibration is strongly suggested. Theta offers NIST

borosilicate glass for high temperature calibration. Certified oil is provided with rotating viscometers for calibration at room temperature.

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