Viscosity

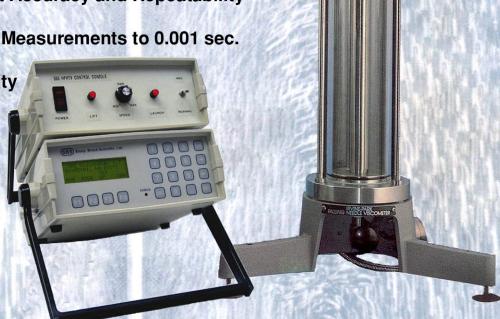
High Pressure High Temperature

VISCOMETER

HPHTV - 100

A New Instrument for the Rapid and Accurate **Determination of the Viscous Properties of** Newtonian and Non-Newtonian Fluids at High Pressures.

- Absolute Viscosity Measurements without Instrment Calibraion at Pressures up to 2000 psi
- Large Temperatrue Range of Fluids
- Better than One Percent Accuracy and Repeatability
- Automatic Falling Time Measurements to 0.001 sec.
- Low Shear Rate Viscosity Measurements
- Automatic Needle Lifting and Dropping
- Data Output to PC and Printer
- Automatic Cleaning Available





STONY BROOK SCIENTIFIC, LTD (SBS)

1055 W. Germantown Pike, Norristown, PA 19403

For brochure or further information

Call: (610) 635-1740 or (888) 889-7764

Fax: (610) 635-1780

Web Site: www.stonybrooksci.com E-Mail: info@stonybrooksci.com

HPHTV - 100

The High Pressure & High Temperature Viscometer (HPHTV) consists of a metal or Teflon needle with hemispherical ends falling vertically in a fluid with its longitudinal axis along the axis of a cylindrical container. A measurement of the needle terminal velocity allows a determination of the viscous properties of the test fluid. With the HPHTV the needle falling time is measured automatically by means of Hall sensors and a magnet in the needle.

SPECIFICATIONS

- •Viscosity Range: 0.5 to 10⁶ mPa•s (cP) outside this range consult SBS
- •Pressure Range: up to 2000 psi-more than 2000 psi consult SBS
- •Temperature Range: -40°C to 150°C
- •Accuracy and Repeatability: better than one percent
- •Test Sample volume: Approx. 15 cm³ outside this range consult SBS
- Needles: Metal, Teflon or Glass
- •Needle Densities: 1.5 to 8 g/cm³
- •Total Instrument Weight: 18.2kg (40 lbs)
- •Size-HPHTV: O.A. Height 77cm (30.31")xO.A. Width 36.2cm (14.25")

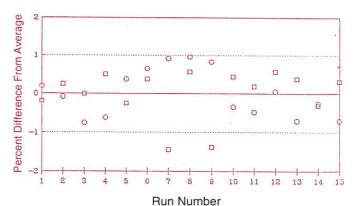
SPECIAL FEATURES

- Simple Instrument Cleaning and Maintenance -Automatic Cleaning Available
- Minimal Disturbance of Sample's Mechanical Structure and Particle Size Distribution with Gentle Needle Passage
- Closed System to Prevent Sample Evaporation

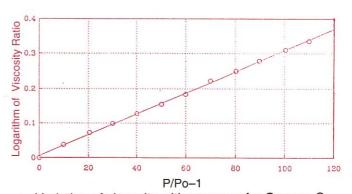
APPLICATIONS

Adhesives, Aerosols, Automobile Fluids, Biomaterials, Coal Slurries, Coatings, Colloids, Cosmetics, Creams, Dairy Products, Detergents, Dispersions, Emulsions, Fertilizers, Foams, Fuels, Gels, Grease, Honey, Inks, Ketchup, Latex, Lubricants, Mayonnaise, Milk, Oils, Ointments, Paints, Petroleum, Polymers, Proteins, Pulp, Resins, Shampoos, Slurries, Soaps, Solutions, Surfactants, Suspensions, Varnish and many more at atmospheric pressure and high pressures.

Typical High Pressure High Temperature Viscometer Measurements



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Variation of viscosity with pressure for Cannon S-600 oil: P=pressure and P_O =one atmosphere

Schematic of HPHTV

