

The viscosity of coatings, such as paint, show typical changes when applied with brush, roller or spray gun under high shear rates.

This standard test for dynamic viscosity measurements is now faster and more accurate by use of new high precision microprocessor controls.

As non-Newtonian fluids exhibit different viscosities relative to the shear rate applied, the Cone and Plate Viscometer tightly controls it to the standard test methods; $10,000\text{S}^{-1}$ (B.S./ISO requirements) or to $12,000\text{S}^{-1}$ (ASTM).

These are generally accepted to be representative of paint application via a roller or brush and so reflect 'real world' application. As most viscosity measurements are highly temperature sensitive the samples are placed on a temperature controlled plate which can be set from 5 to 65°C.

The combination of the instrument's two standard speeds and the choice of five viscosity ranges allow precise testing of a wide range of products in compliance with national test methodologies.



Key features

- Interchangeable cones, simple to install with quick release chuck for easy cleaning
- Reading in P, cP, Pa.s, or mPa.s
- Pre-selected or adjustable run-times 5–59 seconds, with manual or automatic start
- Rapid temperature control with adjustable pre-heating time 0–59 seconds
- Adjustable limit/tolerances setting with warning
- Calibration by user: viscosity (for any cone used with certified oils), and temperature
- Memory for 100 readings, with 3-digit adjustable sample identification, RS232 PC/printer data output
- Easy menu-guided/soft-key operation: cone range, parameter setting, reading, set point and plate temperature, speed, viscosity, sample identification, calibration, date
- Selectable modes: fully functional or simplified routine, security protected.

Note: Suitable cone kit for your application (including 5 certified calibration oils) to be ordered as a separated accessory.

Viscosity: Cone and Plate Viscometer (SH1693 - SHCP1)

Specifications

Function	Description
Dual speed (standard):	750rpm = 10,000 s ⁻¹ 900 rpm = 12,000 s ⁻¹
Viscosity	5 cone/measuring ranges: 0-5, 0-10, 0-20, 5-50, 10-100 P
Resolution	0.001 P / 0.1°C
Accuracy	<± 2%
Repeatability	<± 0.5%
Temperature control	Built-in. 5° to 65°C
Electrical supply	90-240V AC – 50/60 Hz

Standards

Complies to BS 3900;A7, ASTM D 4287, ISO 2884.

Standard supply includes:

Cone and plate Viscometer, electrical power cable, PC/printer cable, Manual, Cone kits of your choice (to be ordered separately)
Calibration Certificate (subject to cost)

Ordering information

Art. Nr.	Description
SH1693 (SHCP1)	Cone and Plate Viscometer Base Unit (cone not included)
	Accessories and consumables
SH1432 (SH490/1/CK)	Cone 0-10 poise (SH490/754/D1 - SH1464 * ¹) with 5 certified oils (SH490/166/D1 - SH1439 * ²)
SH1428 (SH490/2/CK)	Cone 0-20 poise (SH490/754/D2 - SH1520 * ¹) with 5 certified oils (SH490/166/D2 - SH1480 * ²)
SH1427 (SH490/3/CK)	Cone 5-50 poise (SH490/754/D3 - SH1568 * ¹) with 5 certified oils (SH490/166/D3 - SH1551 * ²)
SH1434 (SH490/4/CK)	Cone 10-100 poise (SH490/754/D4 - SH1579 * ¹) with 5 certified oils (SH490/166/D4 - SH1575 * ²)
SH1429 (SH490/5/CK)	Cone 0-5 poise (SH490/754/D5 - SH1589 * ¹) with 5 certified oils (SH490/166/D5 - SH1584 * ²)

*¹ Art. Nr. Cone (without Calibration Oil Kit)

*² Art. Nr. Calibration Oil Kit (without Cone)