

Viscosity - Rotational Viscometer Method - RV (automatic)

ASTM D 4402, EN 13302, AASHTO T316, AASHTO TP48 (obs.), SHRP 1006, Superpave®

Product group(s): Bitumen, Viscosity

User group(s): Asphalt, Bitumen

Scope: Used to determine the flow resistance, the dynamic & apparent viscosity, at elevated temperatures. (e.g. +38 to +260°C). Suitable for bituminous binders.

The torque on a spindle rotating in a special thermostatically controlled sample holder containing a small sample of asphalt is used to measure the relative resistance to rotation.

A factor is applied to the torque dial reading to yield the viscosity of the asphalt in millipascal seconds.

- Brookfield Thermosel
- Display of torque, viscosity, shear rate, shear stress
- Carry case



Digital Rotational Viscometer Test Equipment

to be composed of:

- RV - Digital Rotational Viscometer
- Spindle Extension, including link and coupling nut
- Spindle
- Tempering Unit - RV
- Tempering Controller - RV
- PC-Software - RV
- Viscosity Standard

Technical Data

<u>Measuring range:</u>	depending on spindle from 50 up to 3.3 million mPa • s
<u>Display of:</u>	torque, viscosity, shear rate, shear stress and temperature
<u>Serial RS232 interface:</u>	for data transfer to PC
<u>Parallel output:</u>	for printer
<u>Analog output:</u>	for torque (0-1 V) and temperature (0-4 V)

Main Unit

10-0600

RV - Digital Rotational Viscometer

Superpave®: ASTM D 4402 - AASHTO T316 - SHRP 1006
EN 13 302

Consisting of:

measuring head (without spindle), temperature probe (Pt-100), digital display, RS232, parallel and analog output, stadia material.

Supplied with: 1 carry case

Note: Spindle, Viscosity Standard, Tempering Unit (& Controller for 115 V) are required. The application PC-Software is recommended.

Power supply: 230 V, 50 Hz

10-1600	RV - Digital Rotational Viscometer Like 10-0600 but: Power supply: 115 V, 60 Hz
10-0604	Spindle Extension, including link and coupling nut (only for test without Tempering Unit - RV)
10-0602	Spindle (Viscosity range: 50 to 170 000 mPa•s)

Options & Accessories

10-0601	Tempering Unit - RV (temperature controller with thermo-container) Temperature range: ambient to 300 °C Power supply: 230 V, 50 Hz
10-1601	Tempering Unit - RV Like 10-0601 but: without temperature controller Power supply: 115 V, 60 Hz
10-1602	Tempering Controller - RV (for 115 V -Tempering Unit)
10-0603	PC-Software - RV provides automatic data collection and instant flow curves (rheograms), for Windows®, data transfer cable included.
10-0605	Viscosity Standard 1000 cPs, 500 ml (for calibration at 10, 20, 30 rpm)

Order Guideline

Minimum equipment: 10-0600, 1x 10-0602, 1x 10-0604 and 10-0601
10-1600, 1x 10-0602, 1x 10-0604, 10-1601 and 10-1602

Additional requirements: