

**ASPHALT IN-HOUSE CALIBRATION PROCEDURE # 20
ROTATIONAL VISCOMETER**

EQUIPMENT CHECKED: ROTATIONAL VISCOMETER (AASHTO T 316)

1. SCOPE

- 1.1 This procedure provides instructions for checking the equipment used to perform the rotational viscosity test.
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2. APPARATUS

Inspection Equipment Required:

1. Thermometer, calibrated and readable to 0.1°C (0.2°F), at 77°F, 200°F, and 300°F
2. Ruler, readable to 1 mm
3. Timer, readable to 0.1 sec
4. Certified Reference Material HT 30,000
5. Thermometers, calibrated and readable to 0.2°F

Tolerance:

Equipment shall meet the tolerances specified in test method T 316.

3. PROCEDURE

- 3.1 Turn on the viscometer.
- 3.2 Set the desired temperature using a temperature controller +/- 1.0°C.
- 3.3 Preheat the chamber.
- 3.4 Add the required amount of certified reference material to the testing chamber.
- 3.5 Set a thermometer inside the testing chamber avoiding touching the bottom and sides of the chamber. Hold this thermometer with a cork over the lid of the testing chamber.
- 3.6 Let it equilibrate for at least 30 minutes at the desired temperature.
- 3.7 Take a reading and record the temperature at 77°F, 200°F, and 300°F.
- 3.8 Compare these results with the certified reference material.
- 3.9 The difference between readings should be within +/- 2 percent.
- 3.10 If not, send the device for recalibration.
- 3.11 Record the CRM HT 30 000, lot number, at the different temperatures.
- 3.12 Replace CRM as necessary (check Brookfield CRM).