

PROCEDURE FOR THE VERIFICATION OF THE DYNAMIC SHEAR RHEOMETER (AASHTO TP 5)

A. PURPOSE

The purpose of this procedure is to verify critical temperatures and torque motor response of the instrument used in the above method.

B. APPARATUS REQUESTED

1. Platinum Reference Temperature Detector (RTD) to fit between the Dynamic Shear Rheometer (DSR) plates
2. Certified Mercury in glass thermometer.
3. Cannon viscosity reference fluid.

C. PROCEDURE

1. Calibrate the RTD and readout device against a certified mercury in glass thermometer in the 60 C viscometer oil bath.
2. Verify and record the temperature of an asphalt sample between the plates of the DSR using the RTD inserted into the asphalt sample.
3. Measure and record the complex modulus and compare to the viscosity of the Cannon standard.

D. TOLERANCE

Equipment shall meet the tolerance specified in the AASHTO TP5.

