



WSDOT SOP 728

Method for Determining the Ignition Furnace Calibration Factor (IFCF) for Hot Mix Asphalt (HMA)

1. SCOPE

This method may be affected by the type of aggregate in the mixture. Accordingly, to optimize accuracy, a calibration factor will be established with the testing of a set of HMA calibration samples for each mix type. This procedure must be performed before any acceptance testing is completed. The calibration process should be repeated each time there is a significant change in the mix ingredients or design.

2. APPARATUS

- a. Equipment as described to perform FOP for AASHTO T 308 Method A.

3. SAMPLE PREPARATION

- a. Prepare a minimum of two HMA calibration samples in accordance with WSDOT Test Method No. 724 and No. 726 or use previously prepared HMA calibration samples.
- b. If the HMA calibration samples are not sufficiently soft to separate for testing, carefully heat the samples in an oven until sufficiently soft. Dry sample to a constant mass, not to exceed $325 \pm 25^{\circ}\text{F}$ ($163 \pm 14^{\circ}\text{C}$). Do not heat the sample basket assemblies.

4. PROCEDURE

- a. Test two HMA calibration samples in accordance with WSDOT FOP for AASHTO T 308.
- b. Determine the measured asphalt binder contents for each sample from the printed tickets.
- c. If the difference between the measured asphalt binder contents of the two samples exceeds 0.15 percent, test two additional HMA calibration samples. From the four tests, discard the high and low results and determine the IFCF from the two remaining results. Calculate the difference between the actual and measured asphalt binder contents for each sample. The IFCF is the average of the differences expressed in percent by mass of the HMA.

