

MECHANICAL SHAKERS (AASHTO T 27, ASTM C 136)

1. SCOPE

- 1.1 Use this procedure to check the sieving thoroughness of mechanical shakers. The following [TxDOT test procedures](#), Bituminous (200-F Series), require the use of mechanical shakers: Tex-200-F, 217-F, 224-F, 229-F, and 230-F
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2. APPARATUS

- 2.1 *Balance*, readable to 0.1 g, with accuracy to 0.5 g.
- 2.2 *Set of standard U. S. sieves*, meeting the requirements of Tex-907-K.
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3. PROCEDURE

- 3.1 Verify that pulleys and belts are tight as possible.
- 3.2 Check the thoroughness of sieving in accordance with Section 7.7 and 7.5 of ASTM C136.
- 3.3 Select the sieve or sieves and the aggregate so that a minimum of ten percent of the total sample weight is retained on each sieve.
- 3.4 Sieve the aggregate on the mechanical shaker for 15 minutes.
- 3.5 Weigh each size on a balance and record the weight.
- 3.6 After weighing, hand sieving each sieve by means of a lateral and vertical motion, accompanied by a jarring action to keep the material moving continuously over the sieve.
- 3.7 Continue hand sieving until, by the visual observation, no material passes through the sieve.
- 3.8 Weigh the additional material passing during the hand sieving.
- 3.9 If the amount of the additional passing any given sieve exceeds one percent by weight of the amount on that sieve, the time of sieving shall be increased and the check repeated until all the screens show less than one percent by weight of additional material when subjected to the prescribed additional hand sieving.