

Oklahoma Department of Transportation

STANDARD OPERATING PROCEDURES

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Sand Equivalent Apparatus (AASHTO T 176)

Purpose:

This procedure provides instructions for checking the critical dimensions of the Sand Equivalent Apparatus

Equipment Required:

1. Caliper, readable to the nearest 0.01 mm
2. Clock or stop watch reading in minutes and seconds to verify cycles per minute of mechanical shaker.
3. Balance with a 1 kg minimum capacity, readable to 1 g.

Tolerance:

Equipment shall meet the accuracy requirements specified in the applicable test methods listed above.

Procedure:

1. Weighted Foot Assembly
 - a. Verify weight dimensions 50.8 mm diameter x 52.78 mm
 - b. Measure and record the mass of the assembly to the nearest 1 g (tolerance 1000g \pm 5g)
2. Mechanical Shaker
 - a. Verify that shaker is securely fastened to a firm and level mount.
 - b. Measure exposed operating length of shaft to verify throw of 203.2 mm \pm 1.0 mm.
 - c. Use the stopwatch to verify the shaker operates at 175 \pm 2 cycles per minute.
3. After the initial verification, a visual inspection will be made each year in order to determine whether any change have occurred which would require part replacement or measurement. The Weighted Foot Assembly and Mechanical Shaker which will be thoroughly inspected and the values record once per year.