

## IN-HOUSE PROCEDURE # \_\_\_\_\_

### PROCEDURE FOR VERIFYING L. A. ABRASION MACHINE

Item:

L. A. Abrasion Machine

Purpose:

This method provides instructions for checking the critical dimensions and rotational speed of the L. A. abrasion machine and the mass of the steel balls used as charges.

Inspection Equipment Required:

1. Steel rule readable to 1 mm
2. Stopwatch readable to at least 0.1 second
3. Scale readable to at least 1 g

Tolerance:

Equipment shall meet the dimensional tolerances specified in AASHTO T 96.

Procedure:

L.A. ABRASION MACHINE

1. Determine if the drum is horizontal using a steel ball to check left-to-right roll.
2. Measure the inside diameter of the drum at the left and right edges to the nearest 1 mm.
3. Measure the width of the opening to the nearest 1 mm.
4. Measure the wall thickness at the left and right edge to the nearest 1 mm.
5. Measure the shelf width inside the drum to the nearest 1 mm.
6. Reset the counter to zero. Using the stopwatch, measure the number of revolutions in a 5 minute time period. Determine the revolutions per minute (RPM's).

STEEL SPHERES

1. Measure the mass of each individual sphere to the nearest 1 g.
2. Measure the mass of the collective charges to the nearest 1 g.