

L. A. Abrasion Machine Calibration Worksheet

Equipment ID: _____	Date: _____
Manufacturer: _____	Performed By: _____
Model #: _____	Last Calibration: _____
Serial #: _____	Next Calibration Due: _____
Storage Location: _____	

Calibration Item: Verify critical dimensions and rotational speed of the L.A. Abrasion machine

Verify individual mass of steel balls and collective charge mass

Calibration Procedure: In-House Procedure for Verifying L.A. Abrasion Machine

Calibration Equipment: Steel rule readable to 1 mm

Stopwatch readable to at least 0.1 second

Scale readable to at least 1 g

Item	Measurement		Tolerance	Pass / Fail	
Is the drum horizontal?	☐ Yes	☐ No	slope less than 1:100	☐ Pass	☐ Fail
Inside Diameter of Drum			710 ± 5 mm	☐ Pass	☐ Fail
Height of Opening			150 mm	☐ Pass	☐ Fail
Wall Thickness			12.7 ± 3.2 mm	☐ Pass	☐ Fail
Shelf Width			89 ± 2 mm	☐ Pass	☐ Fail
Number of Revolutions in 5 min.			150 to 165	☐ Pass	☐ Fail
Revolutions per Minute (RPM)			30 to 33	☐ Pass	☐ Fail
Individual Mass of Steel Balls			390 to 445 g	☐ Pass	☐ Fail
				☐ Pass	☐ Fail
				☐ Pass	☐ Fail
				☐ Pass	☐ Fail
				☐ Pass	☐ Fail
				☐ Pass	☐ Fail
Collective Charge Mass				☐ Pass	☐ Fail

Number of
Spheres

12

11

8

6

Mass of
Charge, g

5000 ± 25

4580 ± 25

3330 ± 20

2500 ± 15

Pass / Fail _____

Initial By _____