

APPARATUS:

1. Los Angeles Machine:
 - (a) AMRL No.: _____ (if available)
 - (b) Hollow steel cylinder sealed at both ends?..... _____
 - (c) Inside diameter **711** ± 5 mm?..... _____
 - (d) Inside length **508** ± 5 mm?..... _____
 - (e) Wall thickness 12.7 ± 2 mm? _____
 - (f) Stub shafts fastened to ends?..... _____
 - (g) Cylinder horizontal? _____
 - (h) Cover has a dust-tight gasket?..... _____
 - (i) Cover securely fastened to drum?..... _____
 - (j) Shelf 89 ± 2 mm?..... _____
 - (k) Shelf firm, rigid, and in good physical condition?..... _____
 - (l) Shelf mounted radially and extends the full length of cylinder? _____
 - (m) Shelf located so that the charge will not fall on cover? _____
 - (n) Cylinder rotates at 30 to 33 revolutions per minute over 15 minutes period? _____
 Counter reading at start: _____ Counter reading at end: _____
 Elapsed time: _____ minutes and _____ seconds
 Average speed = 60 x rev/time in seconds = _____ RPM
 - (o) Uniform peripheral speed?..... _____

2. Charge: **LS-603 , Clause 4.2**
 - (a) Number of balls tested: _____ Number of balls weighing 390-445 g _____
 - (b) Weight of charge: A - 12 balls 4975-5025 g? _____

 B - 11 balls **4555-4605** g? _____

 C - 8 balls 3310-3350 g? _____

 D - 9 balls 3720-3760 g? _____
 - (c) All grading charges possible? _____

3. Sieves, 1.70 mm and other sizes as needed? _____
4. Balance, accurate to 0.1% of test load? _____
5. Oven, maintains 110 ± 5°C? _____

COMMENTS:

PROCEDURE

1. Sample obtained by LS-600?..... _____
2. Aggregate inspected and/or washed to ensure it is clean?..... _____
3. Clean aggregate dried to constant weight at 110 ± 5°C?..... _____
4. Weighed to nearest 1 g?..... _____
5. Weights of samples as follows: **LS-603** _____

SIEVE SIZE	GRADING A	GRADING B	GRADING C	GRADING D
37.5 mm - 26.5 mm	1250 ± 25 g			
26.5 mm - 19 mm	1250 ± 25 g			
19 mm - 13.2 mm	1250 ± 10 g	2500 ± 10 g		2500 ± 10 g
13.2 mm - 9.5 mm	1250 ± 10 g	2500 ± 10 g		1250 ± 10 g
9.5 mm - 4.75 mm				1250 ± 10 g
9.5 mm - 6.7 mm			2500 ± 10 g	
6.7 mm - 4.75 mm			2500 ± 10 g	
Total Mass	5000 ± 10 g	5000 ± 10 g	5000 ± 10 g	5000 ± 10 g

6. Sample and balls put in machine and tumbled 500 times?..... _____
7. Contents of drum separated on a sieve coarser than a 1.70 mm? _____
8. Finer materials separated on a 1.70 mm sieve?..... _____
9. (Optional) Material coarser than 1.70 mm washed and dried to constant wgt. at 110 ± 5°C? _____
10. Material coarser than 1.70 mm weighed to nearest 1 g? _____
11. Percentage of wear calculated by dividing original weight into difference between the original weight and final weights?..... _____

Use of Laboratory Control Aggregate

1. Laboratory has a supply of Brechin control aggregate?..... _____
2. Control sample tested every 10 samples or at least every week when samples tested?..... _____
3. Control sample mean loss is 23.0%, range of results is 21.2 to 24.8%?..... _____
4. Control chart showing data for last 20 samples of reference material?..... _____
 - Mean for last 20 samples..... _____
 - Low for last 20 samples _____
 - High for last 20 samples _____

Comments: