

Australian Standard[®]

Methods for sampling and testing aggregates

Method 23: Los Angeles value

AS 1141.23—2009

1 SCOPE

This Standard sets out the procedure for the determination of the loss, on abrasion, of aggregate particles by means of the Los Angeles abrasion testing machine. The test is applied to aggregate particles from crushed rock, gravel or crushed slag, or to crushings derived from rock spalls or drill cores.

NOTE: This method is a modification of ASTM C131.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- 1141 Methods for sampling and testing aggregates
- 1141.2 Method 2: Basic testing equipment
- 1141.3.1 Method 3.1: Aggregates
- 1141.15 Method 15: Flakiness index

- 1152 Specification for test sieves

ASTM

- C131 Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine

3 APPARATUS

The following apparatus, complying with the relevant provisions of AS 1141.2, is required:

- (a) *Balance*—of at least 16 kg capacity with a limit of performance not exceeding ± 0.5 g.
- (b) *Brushes*—suitable for cleaning sieves, containers and machine.
- (c) *Crusher* (or other suitable equipment)—for reducing the spalls and cores to the required sizes.
- (d) *Los Angeles machine*—as specified in Appendix A.
- (e) *Mechanical sieve shaker* (optional)—suitable for 300 mm sieves.
- (f) *Oven*—thermostatically controlled, to operate at a temperature within the range 105°C to 110°C.
- (g) *Sample dividers (riffle boxes)*.
- (h) *Sieves*—53.0, 37.5, 26.5, 19.0, 13.2, 9.50, 6.70, 4.75 mm (perforated plate), 1.70 mm (wire cloth) and pan, complying with AS 1152.