

Australian Standard™

AS 1141.20.1

Methods for sampling and testing aggregates

Method 20.1: Average least dimension—Direct measurement (nominal size 10 mm and greater)

This Standard incorporates Amendment No. 1 (August 2019). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

1 SCOPE

This Standard sets out the counting method for determining the average least dimension of aggregate particles by the use of vernier callipers or dial gauge or a slotted gauge. The method is applicable to aggregate of nominal size 10 mm and greater for sprayed bituminous surfacing.

NOTE: The first use of the term ‘average least dimension’ is attributed to F.M. Hanson, MM, in the paper ‘Bituminous Surface Treatment of Rural Highways’ published by the New Zealand Society of Civil Engineers (Incorporated in 1935).

Present practice is outlined in the AUSTROADS publication (AP2/90), *Design of sprayed seals*, 1990.

2 REFERENCED DOCUMENTS

The following Standards are referred to in this Standard:

AS

1141 Methods for sampling and testing aggregates

1141.2 Method 2: Basic testing equipment

A1 | 1141.11.1 Method 11.1: Particle size distribution—Sieving method

A1 | [Text deleted]

3 APPARATUS

A1 | The following apparatus, conforming to the relevant provisions of AS 1141.2 and the requirements given below, is required:

- (a) Dial gauge or vernier callipers or slotted gauge (see Item (b) below).
- (b) A metal slotted gauge having slots of 2 mm, 4 mm, 6 mm, 8 mm, 10 mm, 12 mm, 14 mm, 16 mm, and 18 mm in height arranged consecutively in a suitable frame. The tolerance for all sized slots shall be ± 0.2 mm.
- (c) Quartering equipment or riffle box.
- (d) Containers that are metal dishes of sufficient size to contain the various portions of the test sample during testing.