Technical Brochure



Los Angeles Abrasion Machine



The most common test method used to indicate aggregate toughness and abrasion characteristics.

Principle

Abrasion test is carried out to test the hardness property of aggregates and to decide whether they are suitable as railway Track Ballast. The principle of Los Angeles abrasion test is to find the percentage wear due to relative rubbing action between the aggregate and steel balls used as abrasive charge.

The machine consists of an electronic control unit and a rolled steel drum having an inside diameter of 711 mm and internal length 508 mm.

The drum is rotated at a speed of between 31 and 33r.p.m. The internal shelf is provided with the machine is conforming to ASTM and EN standards. The machine is equipped with automatic counter, which allows stopping when the preset number of revolutions is completed.

There is a steel tray supplied with machine for easy discharge of specimen. Safety Cabinet model are installed with electronic control unit and electric safety device which automatically stops the rotation of drum when the door is opened, conforming to CE directives.

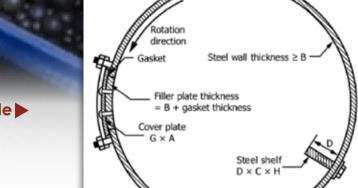


Demonstration

Prepared sample is placed in the abrasion-testing machine. A specified number of steel spheres are then placed in the machine and the drum is rotated for 500 revolutions at a speed of 30 - 33 revolutions per minute (RPM). The material is then separated into material passing the 1.70 mm sieve and material retained on the 1.70 mm sieve

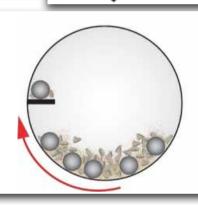
Dry the sample in an oven.

Calculate %age loss due to Abrasion by calculating the difference between the retained material (larger particles) compared to the original sample weight. The difference in weight is eported as a percent of the original weight and called the "percent los"



Schematic Guide







Main Features

- A steel tray is supplied with the machine foreasy discharge of specimen and abrasive charges.
- Equipped with an electric safety device which automatically stops the rotation

Ordering

AG 0121 Los Angeles Abrasion Machine 220V, 50-60 HZ AG 0122 Los Angeles Abrasion Machine with safety cabinet, 220V, 50-60 HZ

Accessories

AG 0123 Set of 11 abrasive charges conforming to EN
AG 0124 Set of 12 abrasive charges conforming to ASTM

Technical Specifications

	Dimensions	Weight approx
AG 0121	850x1000x1100 mm	350 kg
AG 0122	1100x1150x1250 mm	505 kg



Geotechnical Testing Equipment UK Ltd Grange Farm, Milton Keynes England, Great Britain MK8 0PJ

info@Geotechnical-equipment.com www.Geotechnical-equipment.com Tel: +441908 766 400, 401

Standards and Guidelines

EN 1097-2, 12697-17, 13450; ASTM C131, C535; AASHTO T96