Technical Brochure



Aggregate Crushing Value and Ten Percent Finess Value (ACV/TFV)



A relative measure of the resistance of an aggregate to crushing under a gradually applied compressive load.

Principle

The principale mechanical properties required in stones are satisfactory resistance to crushing under the roller suring construction and adequate resistance to surface abrasion under traffic,

Aggregate used in road construction, should be string enough to resist crushing under traffic wheel loads. If the aggregate are weak, the satbility of the pavement structure is likely to be adversly affected.

The strength of coarse aggregates is assessed by aggregates crushing test. The aggregate crushing value provides a relative measure of resistance to crushing under a grafuslly applied compressive loadd. To achieve a high quality of pavement, aggregate possessing low aggregate crushing value should be preferred.



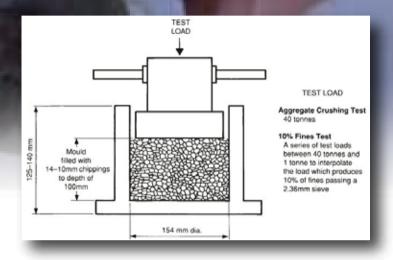
Demonstration

The aggregate passing 12.5mm IS sieve and retained on 10mm IS sieve is selected for standard test. The aggregate should be in surface dry condition before testing, the aggregate may be dried by heating at a temperature 100°C to 110°C for a period of 4 hours and is tested after being cooled to room temperature.

The cylindrical measure is fille by the test sample of aggregate in three layers of approximately equal depth, each layer being tamped 25 times by the rounded end of the tamping rod. after the third layer is tamped, using the tamping rod as a straight edge levels off the aggregate at the top of the cylinfrical measure. About 6.5kg of aggregate is required for preparing two test samples. The test sample thus taken is then weighed. The same weight of the sample is taken in the repeat test.

Schematic Guide

The cylinder of the test apparatus is placed in position on the base plate; one third of the test sample is placed in this cylinder and tamped 25 times by the tamoing rod. Similarly, the other two parts of the test specimen are added, each layer being subjected to 25 blows. The total depth of the material in the cylinder after tamping shall however be 100mm. The surface of the aggregates is leveled and the plunger inserted so that it rests on this surface in level position.



Technical Specifications

	Dimensions	Weight
AG 0115	120x120x350 mm	6 Kg
AG 0116	250x250x600 mm	29 Kg

Main Features

All parts are powder coated or galvanized.

Ordering

AG 0115 Aggregate Crushing Value Apparatus 150 mm dia.

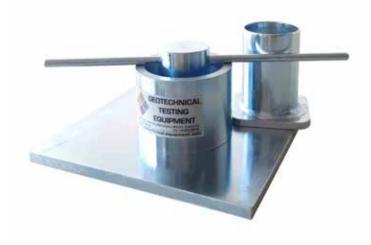
AG 0116 Aggregate Crushing Value Apparatus,75 mm dia.

Accessories

AG 0117 Metal Measure 115 mm diameter x 180 mm deep.

AG 0118 Metal Measure 57 mm diameter x 90 mm deep.

AG 0119 Tamping Rod 8 mm diameter x 300 mm long



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