



**Compliance Standards:**

- IS:2386 (Part IV), BS 812-110, BS 812-111, BS 812:110, BS 812:111

**Available Variants:**

- Aggregate Crushing Value Test Apparatus - 7.5 cm - Without Measuring Cylinder
- Aggregate Crushing Value Test Apparatus - 15 cm - With Measuring Cylinder
- Aggregate Crushing Value Test Apparatus - 7.5 cm - Without Measuring Cylinder - BS 812
- Aggregate Crushing Value Test Apparatus - 15 cm - Without Measuring Cylinder - BS 812
- Aggregate Crushing Value Test Apparatus - 7.5 cm - With Measuring Cylinder

**Description:**

- The Aggregate Crushing Value Test Apparatus provides a relative measure of the resistance of aggregate to crushing under a gradually applied compressive load. The oven-dried and accurately weighed aggregates are subjected to a crushing test on a Compression Testing Machine. The weight of the resultant fines passing the specified IS sieve, expressed as a percentage of the total weight of the sample, is defined as the Aggregate Crushing Value.
- The Aggregate Crushing Value provides a relative measure of the resistance of an aggregate to crushing under a gradually applied compressive load. A lesser Aggregate Crushing Value indicates that the given sample of aggregate is stronger.
- The apparatus is also used for the Ten Percent Fines Value test, which measures the load required to produce 10% fines under gradual compression. A Compression Testing Machine is required for this test.
- The apparatus consists of a cylindrical container, base plate, plunger and tamping rod. The cylinder, plunger and base plate are made from special alloy steel, hardened to 650 HV (57.8 HRC), and protected against corrosion.
- The apparatus can be supplied with a cylindrical metal measure as specified.

**Applications:**

- Determination of Aggregate Crushing Value.
- Determination of the relative resistance of aggregate to crushing under a gradually applied compressive load.
- Determination of aggregate strength based on Aggregate Crushing Value.
- Determination of Ten Percent Fines Value.
- Determination of the load required to produce 10% fines under gradual compression.
- Aggregate crushing testing using a Compression Testing Machine.

**Aggregate Size Guidance:**

- 75 mm diameter for 1/8" to 1/4" size aggregate.
- 150 mm diameter for 3/8" to 3/4" aggregate (standard).

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GST TIN No. : 24AABCE4018L1ZU  
I.T. PAN No. : AABCE 4018L  
IEC No. : 0813026598 Dt. 04/03/2014  
CIN No. : U29199GJ2004PTC045078  
TAN No. : AHME00572F



- 300 mm diameter for 150 mm diameter for 3/8" to 3/4" aggregate (standard).
- 300 mm diameter for 1" to 2" aggregate.

**Apparatus Details:**

1. Cylindrical container made from M.S. / special alloy steel.
2. Base plate suitable for the cylindrical container.
3. Plunger for applying the compressive load.
4. Tamping rod with one end rounded.
5. Cylinder, plunger and base plate are made from special alloy steel.
6. Components are hardened to 650 HV (57.8 HRC).
7. Components are protected against corrosion.
8. Cylindrical metal measure can be supplied as specified.
9. The apparatus is suitable for testing under gradually applied compressive load.

**Technical Details:**

1. The source specifies the cylindrical container as 150 mm  $\pm$  0.5 mm diameter  $\times$  130 mm to 140 mm high in one apparatus-details section.
2. Another supplied specification gives the cylindrical container as 75 mm  $\pm$  0.5 mm  $\times$  130 mm–140 mm high.
3. Another supplied section gives the cylindrical container as 152 mm  $\pm$  0.5 mm  $\times$  130 mm–140 mm high.
4. The base plate is specified as 200–230 mm square  $\times$  6 mm thick.
5. The plunger is specified as 148 mm  $\pm$  0.5 mm diameter  $\times$  100–115 mm high.
6. Tamping rods are specified in the source as both 8 mm diameter  $\times$  300 mm long and 16 mm diameter  $\times$  600 mm long, with one end rounded.
7. The source gives weights of 18 kg, 16 kg and 15.800 kg in different technical sections.
8. The source gives an overall dimension of 8.5  $\times$  8.5  $\times$  6 inches (L  $\times$  W  $\times$  H).
9. A cylindrical measuring cylinder is specified as having an internal diameter of 60 mm and height of 90 mm.
10. The source states that the cylinder, plunger and base plate are made from special alloy steel, hardened to 650 HV (57.8 HRC) and protected against corrosion.
11. The source states that the apparatus can be supplied complete with a cylindrical metal measure.
12. The source specifies the aggregate-size guidance of 75 mm, 150 mm and 300 mm diameter for the respective aggregate size ranges listed above.

**Technical Specifications:**

| Specification         | Details                                                                                                                                          |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Cylindrical Container | 75 mm $\pm$ 0.5 mm $\times$ 130–140 mm high; 150 mm $\pm$ 0.5 mm diameter $\times$ 130–140 mm high; 152 mm $\pm$ 0.5 mm $\times$ 130–140 mm high |
| Base Plate            | 200–230 mm square $\times$ 6 mm thick                                                                                                            |
| Plunger               | 148 mm $\pm$ 0.5 mm diameter $\times$ 100–115 mm high                                                                                            |

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| Specification               | Details                                                                                     |
|-----------------------------|---------------------------------------------------------------------------------------------|
| Tamping Rod                 | 8 mm diameter × 300 mm long, one end rounded; 16 mm diameter × 600 mm long, one end rounded |
| Measuring Cylinder          | Internal diameter 60 mm × 90 mm height                                                      |
| Overall Dimensions          | 8.5 × 8.5 × 6 inches (L × W × H)                                                            |
| Approx. Weight              | 18 kg; 16 kg; 15.800 kg                                                                     |
| Material                    | M.S. / Special Alloy Steel                                                                  |
| Hardness                    | 650 HV (57.8 HRC)                                                                           |
| Corrosion Protection        | Protected Against Corrosion                                                                 |
| Standard Supply Accessories | Cylindrical container, base plate, plunger and tamping rod                                  |
| Cylindrical Metal Measure   | Supplied where specified                                                                    |
| Compression Testing Machine | Required for the test                                                                       |
| Ten Percent Fines Test      | Load required to produce 10% fines under gradual compression                                |

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