



Available Variants

1. Abrasion Testing Machine For Glazed Tiles – 1 Sample – BIS 13630-11, EN ISO 10545-7
2. Abrasion Testing Machine For Glazed Tiles – 4 Samples – BIS 13630-11, EN ISO 10545-7
3. Abrasion Testing Machine For Glazed Tiles – 8 Samples – BIS 13630-11, EN ISO 10545-7

Compliance Standards

- IS: 13630 (Part 11), ISO: 10545 (Part 7) – Matching the Standard with Deviations

Operating Principle

- The ability of glazed tiles to resist surface abrasion encountered in everyday use is determined by abrading the glazed surface either with wet abrasive media consisting of steel balls of 1 to 5 mm diameter, aluminum oxide abrasive powder and distilled water, or with dry abrasive media consisting of porcelain cylinders and Aluminum Oxide Abrasive Powder.
- The test is conducted by holding test specimens on a flat horizontal disc. The disc is rotated at 300 rpm with the axis of rotation displaced by 22.5 mm. The abrasive load placed above the test specimen rubs over the test surface in a circle of 45 cm diameter. The abrasive load is held in place inside a rubber-lined cylindrical metallic ring, which also keeps the test specimen firmly pressed against the metallic disc.

Construction Details

- Fabricated horizontal metal disc with motorized arrangement for rotation.
- Mild steel rotating disc with vertical axis displaced by 22.5 mm from the centre.
- Counterweight provided on the lower face of the disc to balance vibrations caused by eccentricity.
- Motor and V-belt and pulley arrangement for disc rotation.
- Pre-set electronic counter with key-lock reset and memory backup to record disc rotations and switch off the motor after the desired number of rotations.
- Rubber-lined circular specimen holding rings and holding plates with covers for holding test specimens and abrasive loads.
- Rigid metallic base construction.
- Attractive powder-coated and bright chrome/Zinc-plated finish for corrosion resistance.
- Supplied with steel balls of 1 mm, 2 mm, 3 mm and 5 mm diameter and White Fused Alumina Oxide 80 Grit.
- Other grinding media available at extra cost.

Standard Abrasive Load

A. For Wet Abrasion Load

1. Steel Balls – 5, 3, 2 and 1 mm diameter

Corporate Office:

A-1301, BVR Ek, Opp. Hotel Inder Residency,
Near Gujarat College, Ellisbridge,
Ahmedabad-380 006.
Phone : (079) 6621 1234
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Calibration Laboratory:

Survey No. 1098, Nr. Mahakali Temple,
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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



2. White Fused Alumina Oxide – 80 Grit

B. For Dry Abrasion Load – At Extra Cost

1. Porcelain Cylinders:
 - a. Set of 50 cylinders, 20 mm length × 20 mm diameter
 - b. Set of 50 cylinders, 15 mm length × 15 mm diameter
2. Silicon Carbide Powder – 30 Grit
3. Float Glass – 100 × 100 × 10 mm, set of 100 Nos.

Technical Specification

- Diameter of Rotating Disc: 580 mm
- Eccentricity of Axis of Rotation: 22.5 mm
- Speed of Rotation of Disc: 300 ± 10 rpm
- Maximum Test Specimens at a Time: 1 / 4 / 8 Numbers (Variant Dependent)
- Inside Diameter of Specimen Holding Ring: 83 mm
- Inside Height of Specimen Holding Ring: 25.5 mm (Where Applicable)
- Distance of Centre of Test Area from Centre of Disc: 195 mm
- Electric Motor Power: 1/4 HP, Single Phase, 230 Volts, 50 Hz, AC Supply
- Digital Counter: 4-Digit Pre-Set Type Electronic Counter with Memory Backup and Key-Lock Reset
- Overall Dimensions: 1100 × 760 × 630 mm (L × W × D)
- Weight (Approx.): 125 kg / 177 kg (Variant Dependent)

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