AGGREGATE > PHYSICAL PROPERTIES

MICRO-DEVAL TESTING MACHINE

Code : R195



- The Micro-Deval Tester is used to evaluate the abrasion resistance and durability of coarse and fine aggregates by simulating wear through wet grinding with steel spheres.
- This method provides a reliable assessment of aggregate quality, particularly for materials used in road construction and surface treatments, where resistance to wear is critical.
- The apparatus consists of a robust steel frame supporting rotating stainless steel drums, each filled with a specified quantity of aggregate, water, and steel spheres to perform the abrasion test.
- Unlike conventional Micro-Deval machines that rely on friction to rotate the drums, ALFA's design employs a direct-drive system with three vertical rods that secure and rotate the entire drum platform as a single unit. This eliminates slippage and ensures consistent rotation throughout the test. This robust drive mechanism guarantees full compliance with the standard's required speed tolerance, even under extended testing cycles, making it more reliable than friction-based designs.
- Equipped with an automatic digital counter, the machine allows precise control over the number of revolutions, ensuring consistent and repeatable test results.

- A transparent safety guard encloses the rotating drums, providing protection for the operator while allowing visual monitoring of the test process.
- The Micro-Deval test is recognized for its efficiency and accuracy in determining the degradation of aggregates, offering advantages over traditional methods in terms of sample preparation and testing time.

STANDARDS

ASTM D6928 • ASTM D7428 • EN 1097-1 • EN 13450 • AASHTO T327

TECHNICAL SPECIFICATIONS

- Rotation Speed: 100 rpm
- Drive System: Direct coupling of drum platform with 3-rod locking mechanism for slip-free rotation
- Drum Capacity: Up to 4 drums (Ø 200 x 154 mm) or 2 drums (Ø 200 x 400 mm)
- Power Supply: 220 – 240 V / 50 or 60 Hz

EQUIPPED WITH

- Digital Counter with auto-shut off
- Safety Transparent Guard with safety switch

SUPPLIED WITH

- Stainless steel drums: Ø 200 mm x 154 mm (2 pcs)
- Stainless steel spheres: Ø 10 mm (5 kg per drum)

ORDERING INFORMATION

Item Name	Item Code
STAINLESS STEEL DRUM (Ø 194-202 x 170-177 mm) - ASTM	R195P001H
STAINLESS STEEL DRUM (Ø 200 x 154 mm) - EN	R195P002H
STAINLESS STEEL DRUM (Ø 200 x 400 mm) - EN	R195P003H
STAINLESS STEEL SPHERES (Ø 9.5 - 10 mm)	R195P004H
CHARGE COLLECTING MAGNET for R195	R195P005H
MICRO-DEVAL TESTING MACHINE - Compact	R195X021U
MICRO-DEVAL TESTING MACHINE (Without Drums)	R195X040U
MICRO-DEVAL TESTING MACHINE	R195X042U