SLAKE DURABILITY

Code : K130



- The Slake Durability Apparatus is used to assess the resistance of weak and soft rocks, such as shale and mudstone, to disintegration when subjected to cycles of wetting and drying, simulating natural weathering processes.
- The apparatus comprises a motorized drive unit mounted on a sturdy baseplate, capable of rotating two wire mesh drums at a constant speed of 20 revolutions per minute (rpm) within water tanks.
- Each drum is constructed from 2.00 mm mesh, with dimensions of 140 mm in diameter and 100 mm in length, allowing for standardized sample preparation and testing.
- The water tanks are designed to submerge the drums to a level 20 mm below their axis, ensuring consistent exposure of the rock samples to the slaking medium during rotation.
- After a specified number of wetting and drying cycles, the percentage loss of mass from the rock samples is calculated, providing the Slake Durability Index, a quantitative measure of rock durability.
- The apparatus is suitable for both laboratory and field applications, offering a reliable method for evaluating the long-term stability of rock materials in construction and geotechnical projects.

STANDARDS

ASTM D4644

TECHNICAL SPECIFICATIONS

- Drum Dimensions: Ø 140 mm x 100 mm
- Drum Mesh Size: 2.00 mm
- Rotation Speed: 20 rpm
- Drive Unit: Motorized, mounted on baseplate
- Water Tank Material: Acrylic
- Water Level: 20 mm below drum axis
- Sample Capacity per Drum: 10 rock fragments, each 40–60 g
- Power Supply: 220 – 240 V / 50 – 60 Hz

EQUIPPED WITH

- Motorized drive unit
- Two stainless steel wire mesh drums
- Two acrylic water tanks

SUPPLIED WITH

- Set of two drums with tanks

ORDERING INFORMATION

Item Name	Item Code
SLAKE DURABILITY - 2 Drums	K130M02AU
SLAKE DURABILITY - 4 Drums	K130M04AU
DRUM for SLAKE DURABILITY	K130P001H
TANK for SLAKE DURABILITY	K130P002H