AUTOMATIC GRINDING MACHINE AZA1001

The AZA1001 Automatic Grinding Machine is a high-precision laboratory system engineered for accurate end-face preparation of cylindrical rock and concrete core samples. Designed for geotechnical, mining, civil engineering, and material testing laboratories, this fully automated unit ensures superior flatness, parallelism, and repeatability required for reliable strength testing. The system is essential for specimen preparation in Uniaxial Compressive Strength (UCS), triaxial, Brazilian tensile, and point load tests, where precise end conditions are critical to test accuracy. With programmable controls and a rigid, vibration-dampened structure, the AZA1001 enables consistent, hands-free grinding with minimal operator intervention.

Key Features

- Fully automatic grinding operation with programmable parameters
- Designed for rock and concrete cylindrical core samples
- Dual-sample grinding capability for increased productivity
- Adjustable grinding speed, feed rate, and cycle time
- Diamond-bonded grinding wheel for high-precision surface finishing
- Rigid, vibration-dampened steel construction
- User-friendly control panel with automated cycle settings
- Fully enclosed safety system with interlock protection
- High repeatability and minimal operator dependency

Standard Compliance

- ASTM D4543 – Preparation of Rock Core Specimens
- ISRM Suggested Methods – Rock Testing Standards

AZA LAB UNIVERSE

TECHNICAL SPECIFICATION

Parameter	Specification
Model	AZA1001
Sample Type	Rock & Concrete Cylindrical Cores
Maximum Core Diameter	Up to 100 mm
Maximum Sample Length	Up to 200 mm
Grinding Method	Fully Automatic Diamond Wheel Grinding
Number of Samples	2 Cores Simultaneously
Control System	Programmable Automatic Control Panel
Grinding Wheel	Industrial Diamond-Bonded Disc
Safety System	Full Enclosure with Safety Interlocks
Power Supply	220 V, 50 Hz
Machine Weight	Approx. 100 – 120 kg
Standards Compliance	ASTM D4543, ISRM Suggested Methods