AZA LAB / MATERIAL TESTING EQUIPMENT

AUTOMATIC GRINDING MACHINE

AZA1001 | TECHNICAL DATASHEET



PRODUCT OVERVIEW

The AZA1001 Automatic Grinding Machine is designed for rapid preparation of flat, parallel ends on concrete cylinder specimens and drilled cores prior to compressive strength testing, in accordance with applicable EN and ASTM requirements.

With suitable specimen cradles and water restraint panels, it can grind three cylinders of Ø38–100 mm or two cylinders of Ø150–160 mm simultaneously. Automatic bidirectional radial cradle movement and selectable grinding cycles support consistent specimen preparation.

KEY CAPABILITIES

- Simultaneous grinding of two or three cylindrical specimens
- Selectable grinding duration: 50–400 seconds
- Typical grinding time: 90–120 seconds per end
- Flatness accuracy: 0.05 mm
- Automatic bidirectional radial cradle movement
- Wheeled design with accessible maintenance components

TECHNICAL SPECIFICATIONS

01 / GRINDING SYSTEM

Parameter	Specification
Model	AZA1001
Specimen capacity	3 cylinders (Ø38–100 mm) or 2 cylinders (Ø150–160 mm)
Minimum specimen length	More than 70 mm
Surface flatness accuracy	0.05 mm
Perpendicularity deviation	0.5° (see verification note)
Selectable grinding time	50–400 seconds
Typical grinding time per end	90–120 seconds
Cradle movement	Automatic bidirectional radial displacement
Dimensions (W × D × H)	730 × 1080 × 1510 mm
Approximate weight	280 kg
Rated power	1850 W
Frame / exterior	Aluminium frame / stainless steel exterior shell
Mobility	Integral wheels

02 / REFERENCED STANDARDS

Concrete cylinders: EN 12390-1, EN 12390-3; ASTM C31, C39, C192, C617.

Drilled concrete cores: EN 12504-1, EN 12390-1, EN 12390-3; ASTM C42. ASTM C397 is listed in the supplied source but requires verification.

03 / ACCESSORIES & OPERATION

Suitable specimen cradles and water restraint panels are required for different specimen sizes. Water restraint panels for cubic specimens or other cylinder sizes are to be ordered separately. The design provides access to water inlet/outlet and maintenance points.

CONTACT

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