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LATERAL EXTENSOMETER AZA1171

The AZA-LAB Lateral Extensometer (AZA1171) is a precision mechanical instrument designed for accurate measurement of lateral (transverse) strain in concrete specimens during compressive testing.

Specifically developed for 150 mm diameter × 300 mm height concrete cylinders, the device measures diameter expansion under load, enabling the determination of Poisson's Ratio, modulus of elasticity, and deformation characteristics of concrete and other rigid materials.

Unlike axial measurement devices, the AZA1171 captures transverse deformation with high resolution, providing critical data for advanced material analysis. Its non-destructive clamp-on design ensures repeatable measurements without altering the specimen.

Key Applications

- Concrete and rock deformation testing
- Structural strain monitoring (bridges, dams, tunnels)
- Geotechnical and underground instrumentation
- Steel tensile and compression testing
- Uniaxial and triaxial test setups



Compliance & Standards

ASTM D5335 – Standard Test Method for Determination of Deformation Using Mechanical Strain Gauges



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TECHNICAL SPECIFICATIONS

Parameter	Specification
Model No.	AZA1171
Product Type	Lateral Extensometer
Specimen Size	150 mm dia × 300 mm height cylinder
Dial Gauge Range	0 – 5 mm
Resolution	0.002 mm
Measurement Type	Mechanical (Dial Gauge)
Mounting Method	Clamp-based with tightening screws
Frame Material	Corrosion-resistant steel / alloy
Zero Adjustment	Anvil screw mechanism
Compatibility	Compression & Universal Testing Machines
Supply	Wooden carrying case included
Application	Lateral strain measurement