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FATIGUE TESTING MACHINE AZA1014

The AZA1014 Fatigue Testing Machine is a high-precision system engineered to evaluate the fatigue behavior of materials under cyclic and repeated loading conditions. It is designed to determine fatigue life, endurance limits, and failure characteristics, making it critical for applications where components are subjected to fluctuating stresses over time. With advanced closed-loop digital control, high-frequency operation, and intelligent data acquisition software, the AZA1014 delivers accurate, repeatable, and standards-compliant results for industrial quality control, research, and product development.



Key Features

- Precision cyclic load application system
- High-frequency testing capability for accelerated life testing
- Closed-loop digital control for load, displacement, and strain
- Advanced software for real-time monitoring and S-N curve generation
- Automatic cycle counter with failure detection and shutdown
- Interchangeable grips for axial, bending, and torsion testing
- Heavy-duty rigid load frame for vibration-free operation
- User-friendly interface with automated test sequencing

Compliance & Certification

- ASTM E466 – Axial Fatigue Testing of Metals
- ASTM E606 – Strain-Controlled Fatigue Testing
- ISO 1143 – Rotating Bending Fatigue Testing



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TECHNICAL SPECIFICATION

Parameter	Specification
Model	AZA1014
Machine Type	Fatigue Testing Machine
Load Capacity	5 kN – 100 kN (Model Dependent)
Frequency Range	1 Hz – 100 Hz (or Higher Options Available)
Control Modes	Load / Displacement / Strain
Load Measurement	High-Precision Electronic Load Cell
Displacement Measurement	LVDT / Encoder
Test Modes	Axial, Bending, Torsion
Cycle Counter	High-Speed Digital Counter
Software	Real-Time Graphing, S–N Curves, Reporting
Power Supply	230 V AC, Single Phase
Standards Compliance	ASTM E466, ASTM E606, ISO 1143