MTS Fundamental™ Automatic Extensometer (FAX)

Accurate axial strain measurement

Benefits

- High-resolution strain measurement up to 0.05 µm
- Compliant to ISO 9513 Accuracy Class 0.5
- Synchronized axial movement with specimen
- Ability to track to failure
- Designed for longevity and high-volume testing

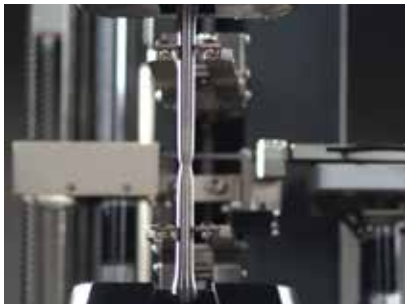
Reduce inconsistencies and improve the accuracy of test results with an MTS Fundamental™ Automatic Extensometer (FAX). The high-resolution automatic extensometer is suitable for a wide variety of applications that require linear strain measurement. The FAX can determine a variety of calculations including modulus, offset yield and plastic elongation to failure.

FAX offers a fast and highly accurate contact measurement for tensile testing on a wide range of materials such as plastics, composites, metals and rebar. Designed to automatically trace and measure specimen deformation, the MTS FAX performs standard axial measurement. Improve lab productivity with the automatic self-adjusting gage length positioning to ensure test consistency.

The FAX enables higher accuracy and greater versatility of axial deformation measurements. The innovative design of the support can keep the extensometer moving along the center of the specimen synchronously to ensure measurement precision. It is designed with a high precision measure up to 0.05 µm in resolution and meets the requirements of ISO and ASTM test methods.

Tensile testing for the following materials:

- Metals
- Plastics
- Composites
- Rebar



Round specimen

Sheet metal

Rebar

Two Mounting Options

Intuitive design allows operators to quickly position the extensometer out of the test area.

FIXED MOUNT
Used to prop up the FAX and keep it moving with the main units' crossbeam simultaneously within the test area.

PIVOTAL MOUNT
Allows the operator to quickly withdraw the device from the test area from two positions.

Testing Results

E (elastic modulus)
Rt (specified total elongation intensity)
n (strain hardening index)
At (total elongation at break)
Agt (total elongation at maximum force)
μ (Poisson's ratio)
Rp (specified plastic elongation length)
r (plastic strain ratio)
Ae (yield point elongation)
Ag (plastic elongation at maximum force)
A (percentage elongation after fracture)

Fixed Mount

Pivotal Mounts

Axial Model Specifications

Model	FAX1352	FAX1452
Arm Length	350 mm	450 mm
Gage Length	100-200 mm (3.9-7.9 in)	100-200 mm (3.9-7.9 in)
Relative Error	±0.5%	±0.5%
Measuring Range	0-80 mm (0-3.1 in)	0-100 mm
Axial Resolution	≤0.2 μm	≤0.5 μm
Thickness or Diameter Range	Flat: 0.2-40 mm (0.0008-1.57 in) Round: 0.2-40 mm (0.0008-1.57 in)	Flat: 0.2-40 mm (0.0008-1.57 in) Round: 0.2-40 mm (0.0008-1.57 in)

Learn More Today

Contact your MTS representative to learn more about how the MTS Fundamental Automatic Extensometer can meet your contact extensometry needs, easily and affordably.

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