

ASTM E345 Specimen Cutter

Precision Specimen Cutter for Metallic Foil Tensile Strips

Built to ASTM E345 — Standard Test Methods of Tension Testing of Metallic Foil



OVERVIEW

Precision cutter for preparing tensile specimens from thin metallic foil. Parallel blades produce clean, straight-edged strips of consistent width with minimal edge damage, which is critical because burrs and nicks in thin foil can cause premature failure and scatter in measured tensile properties.

KEY FEATURES

- Parallel cutting edges produce strips of consistent, uniform width
- Clean shearing action minimizes burrs and edge micro-cracks
- Hold-down plate keeps foil flat and square during cutting
- Guide stop for repeatable specimen length
- Bench-mounted, manually operated; no power required

TECHNICAL SPECIFICATIONS

Function	Specimen preparation for foil tension testing
Specimen type	Rectangular strip specimens, per ASTM E345
Material range	Thin metallic foils
Strip width	Fixed per cutter; specify width when ordering
Blade material	Hardened tool steel, replaceable
Operation	Manual, bench-mounted
Hold-down	Clamping plate to keep foil flat
Companion items	Foil tensile grips available separately

APPLICATIONS

- Aluminum and copper foil
- Battery electrode current collectors
- Packaging foil quality control
- Thin-gauge metal R&D

ABOUT THE STANDARD

ASTM E345 covers tension testing of metallic foil, typically material too thin for conventional sheet methods. It determines properties such as tensile strength, yield strength and elongation using rectangular or reduced-section specimens. Because foil is easily damaged, careful specimen preparation and gripping are emphasized to obtain valid, repeatable results.

Ordering & customization: Specify specimen width, foil thickness range and alloy type when ordering. Custom widths available.

Specifications are typical and may vary by configuration; confirm at time of quote. Users should refer to the current edition of the standard for test procedures.
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