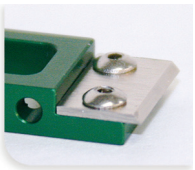
Knife Edges for Extensometers

All of the following knife edges will fit all models of Epsilon extensometers that use knife edges. The exceptions are high temperature extensometers that use ceramic rods, specialty extensometers that require conical point contacts, asphalt extensometers, clip-on gages, and deflectometers.



Standard Knife Edges

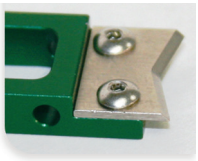
PART NO. 350210-01

Produced from hardened tool steel, these knife edges are used for a wide range of applications and can be used on both round and rectangular shaped specimens. These are the standard knife edges supplied with most Epsilon extensometers.

Wear-Resistant Carbide Knife Edges

PART NO. 9903-05-02

Designed as an alternative for customers who experience slipping or regularly wear out the standard knife edges when testing hard metals and ceramics, these ultra-hard, dual-bevel knife edges will retain a sharp edge and last much longer. They are extremely sharp and not suitable for specimens that are sensitive to stress concentrations such as soft plastics.



Vee Knife Edges

PART NO. 9903-01-01

Designed for use on round specimens, these knife edges will self-center the extensometer on the specimen. Due to the contact point variation that can occur between specimens of different diameters, units with these knife edges must be calibrated with posts of equal diameter. On extensometers with longer arms, errors created by this variation are not so pronounced, but on units with shorter arms lengths, this must be taken into consideration.

Corrosion-Resistant Stainless Steel Knife Edges

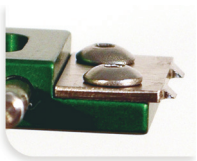
PART NO. 350210-02

These hardened knife edges are designed to be used in environments where corrosion resistance is required. Primary applications are in biomedical testing where the knife edges may be exposed to saline solutions.

Rounded Knife Edges

PART NO. 350210-BLUNT

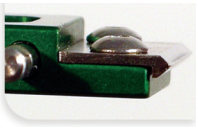
Knife edges designed for use on transverse extensometers and applications where blunt edges are required. These are primarily used on transverse extensometers such as model 3575.



Three-Point Contact Knife Edges

PART NO. 354299

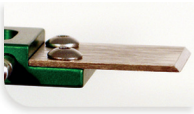
These knife edges are recommended for flat specimens. They ensure stable contact on flat test samples due to 3-point contact. For flat specimens <10 mm wide, one standard and one single-point knife edge may be used.



Knife Edges for Notch-Sensitive Materials

PART NO. 350210V2-01

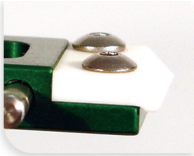
The dual-bevel design and robust tool steel construction of these knife edges make them an ideal choice for applications that tend to cause chipping damage to standard or wear-resistant knife edges at failure. As they are not as sharp as their counterparts, these knife edges are also well-suited for working with notch-sensitive applications.



Extended Knife Edges

PART NO. 350210EXT-01

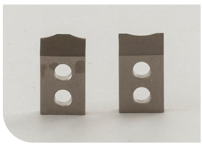
Knife edges for applications where the additional length is required, such as where the grips are very close together. Only available by special order. Requires recalibration when retrofitting an existing extensometer.



Ceramic Knife Edges

PART NO. 350210C2-01

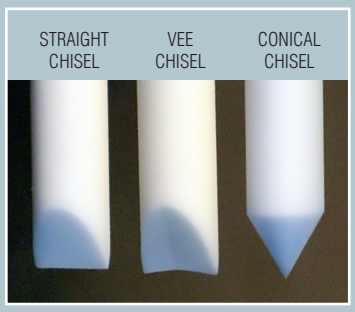
These knife edges are typically used in low cycle fatigue applications on hard metals where metallic knife edges would likely experience undue wear. They are also used on the submersible Model 4030 extensometer to prevent galvanic corrosion between the extensometer and the test specimen.



Bolt-On Knife Edges for Fracture Mechanics

PART NO. BOKE

Reusable bolt-on knife edges for attaching COD gages to fracture mechanics and fatigue crack growth specimens. Sold in sets of two. 30° knife edge angle. Made of nickel-plated tool steel. Rated to 500 °C.



Available Ceramic Rod Tip Styles

Specify rod tip style desired.

Straight chisel tips are the most versatile, since they can be used with round or flat specimens.