

# Knife edges available for Epsilon extensometers.

All of the following knife edges will fit all models of Epsilon extensometers that use knife edges. The exceptions are high temperature units 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.



## Dual Bevel Knife Edges

PART NO. 350210V2-01

Produced from high toughness tool steel. These knife edges are used in applications where the standard knife edges may experience excessive chipping, such as on very hard metals. They are also ideal for high modulus composites. The dual bevel design and tougher material of construction provides a greater resistance to damage during testing. These knife edges are also recommended for biomedical testing (especially bone) where stability of the contact point can be compromised due to the softness of the test specimen. The dual bevel edge prevents slight output shifts on the sample that can result from the standard knife edges biting into the sample.



## 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.



## Hardened Stainless Steel

PART NO. 350210-02

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



Shown left to right are straight chisel, vee chisel, conical point.

## Ceramic Rods and Tips

Ceramic rods are made in whatever length is required to fit the customer's furnace or test setup, provided the configuration is valid with the

gage length and measuring range requested. There are three styles of rod tips available: straight chisel tips, vee chisel tips, and conical point. Straight chisel tipped rods are the standard style provided, and they can be used on both flat and round specimens. Vee chisel tipped rods are used on round samples only, and the conical point rods are primarily for rectangular test samples. A spare set of rods of whichever style is selected by the customer is included with the extensometer.

# Option



## Three-Point Contact Knife Edges

PART NO. 354299

These knife edges are designed for use on flat specimens. They ensure stable contact on flat test samples due to 3-point contact.



## 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. Longer lengths are available on special order.



## 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 or diametral extensometers, such as the 3575, 3575AVG and 3675.



## Vee Knife Edges

PART NO. 352610-01

Designed for use on round specimens. 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. The primary advantage is self-centering on the test sample.