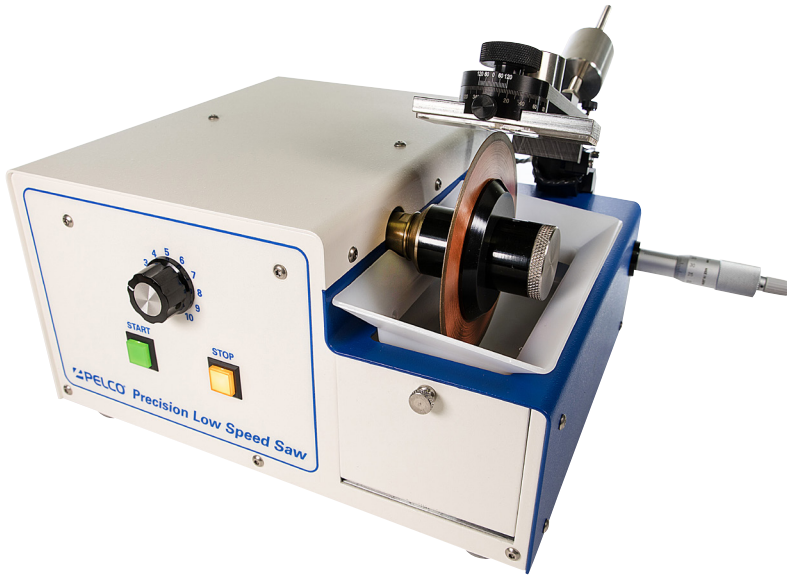


PELCO® PRECISION LOW SPEED SAW

Multipurpose, low-damage cutting for all specimen types



The PELCO® Precision Low Speed Saw is a compact, multipurpose, precision saw designed to cut a wide variety of materials with minimal subsurface damage. Its low speed makes it possible to cut fragile materials that would otherwise fracture as well as soft materials that would load the diamond wheel on a higher speed saw. A variety of sample holders are available, providing a means for mounting any shape of sample, while multi-axis goniometer adaptability simplifies cutting oriented crystals.

FEATURES

- The belt drive system eliminates gear breakage which is common with less reliable fiber gear driven designs.
- Coolant reservoir is lowered and easily removed by opening an access door located on the front panel.
- Both coarse and fine sample position adjustments allow rapid and accurate sample positioning.
- Polyethylene coolant reservoir enables the use of both water soluble and oil based coolants.
- Automatic termination of the cutting process is controlled by an electromechanical downstop which minimizes supervision.
- Cutting arm pivots on a set of precision bearings rather than on the micrometer shaft which ensures accurate and repeatable sample positioning.
- Multiple diamond wheels can be used to gang slice materials up to 2" in length.
- Utilizes a high torque 1/15 HP DC motor to provide sufficient power for difficult materials.
- Automatic overload protection shuts down the motor if the blade binds while cutting.
- A wide variety of sample holders allow mounting of virtually any shape of sample.

75000 PELCO® Precision Low Speed Saw.....each

OPERATION

A sample is mounted to a sample holder and attached to the arm. An appropriate load is applied by adjusting the counterbalancing weight, and the automatic stop switch is set to define the end of the cut. The sample is positioned in any starting position relative to the diamond blade and then a micrometer is used for precise sample positioning. With the diamond blade rotating slowly and coolant in the reservoir, the arm is gently lowered until the sample touches the diamond blade. Cutting will continue until the automatic cutoff switch is triggered.

CUTTING WHEELS

The PELCO® Precision Low Speed Saw is designed to cut with diamond, CBN and abrasive blades. Diamond blades are used for most applications while CBN blades are primarily used for cutting ferrous based materials. Abrasive blades (Al_2O_3 , SiC) can be used for cutting both ferrous and nonferrous materials and have also been used for dry cutting of superconductor materials. Ted Pella, Inc. provides a wide selection of cutting blades and our catalog of consumables provides details on selecting the proper cutting blade for your application.

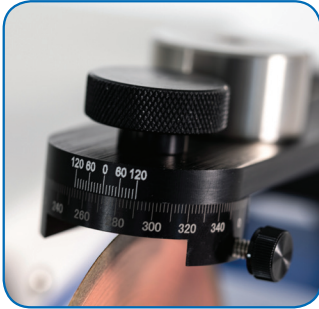
 **TED PELLA, INC.**
Microscopy Products for Science and Industry

www.tedpella.com sales@tedpella.com 800-237-3526

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AVAILABLE ACCESSORIES:



Single-Axis Goniometer

The Single-Axis Goniometer has a graduated scale with a 0.2° vernier and can be rotated 360°. This rotational capability makes it ideal for precisely slicing single crystals. The sample is mounted to a block using a low melting point wax and the block is subsequently

clamped into the PELCO® Precision Low Speed Saw. Wax mounting of the sample ensures that the cut piece will remain attached to the holder and will not be damaged due to falling after being cut.

75001 Single-Axis Goniometer each

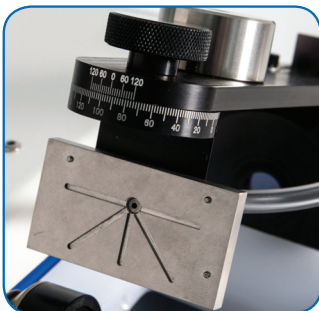


Double Clamp Sample Holder

The Double Clamp Sample Holder is designed to clamp both ends of a round or rectangular rod while cutting between the two clamped positions. The Double Clamp Sample Holder can also be used as a single clamp

holder to hold encapsulated metallurgical samples up to 1.25" in diameter.

75003 Double Clamp Sample Holder each

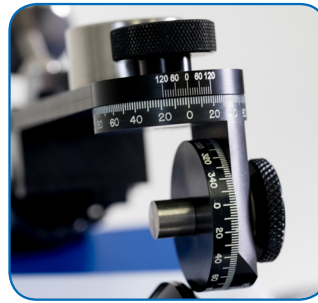


Petrographic Vacuum Sample Holder

The Petrographic Vacuum Sample Holder is designed to use a vacuum to hold a 2.5 x 5.0cm (1 x 2") glass slide, onto which petrographic or other samples are mounted, while making saw cuts parallel to the glass slide. The glass slide is held against

a stainless steel support plate with vacuum and is placed firmly against three locating pins to maintain its position.

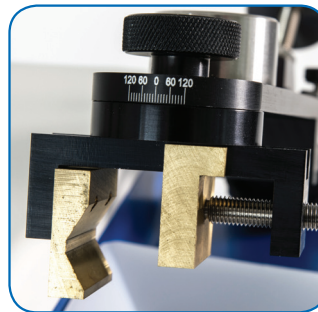
75004 Petrographic Vacuum Sample Holder each



2-Axis Goniometer

The 2-Axis Goniometer is used for orienting and cutting single crystals. With the sample mounted to the goniometer, the vertical axis can be rotated +/- 50° from the 0.2° vernier on the arm.

75005 2-Axis Goniometer each



Vise Sample Holder

The Vise is designed to hold flat, round and irregularly shaped samples without the need for mounting wax. The entire vise can rotate 360° in the horizontal plane. An extended v-notch jaw enables the mounting of cylindrical samples up to 1.25" in diameter including

encapsulated metallurgical samples.

75006 Vise Sample Holder each



The Bone Chuck

The 'bone chuck' allows you to hold the sample utilizing a series of ten independently adjustable mounting screws. These mounting screws make it possible to hold irregularly shaped specimens and rotate them 360° in a horizontal plane. The Bone Chuck attaches to the

standard work arm in place of the standard sample holders.

75019 The Bone Chuck each