

We hope the information in this booklet has been of assistance, either in educating or reinforcing your knowledge of tungsten carbide knives' use. The work in our laboratories is not the only source for the information contained here. Our satisfied customers have contributed to the contents of this manual.

Your contributions regarding applications, techniques and care of the tungsten carbide knives are welcome also.

We take special pride in the results you get with our products. If we can ever assist in improving your results, please use our toll free number to call and be sure to look for additional Applied Diamond products in the future.



We maximize the physical properties of diamond and tungsten carbide to produce precise edges through exceptional craftsmanship, sophisticated equipment and customized engineering.

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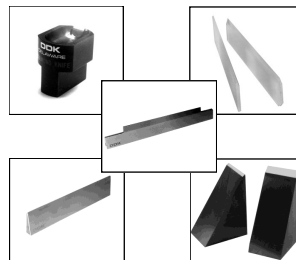
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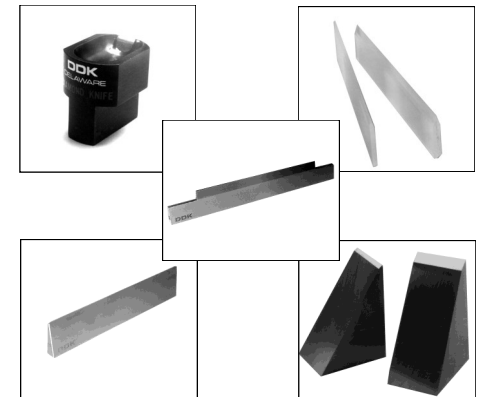
Applied Diamond, Inc.

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**A Care & Use Guide
For Microtome
Knives**



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Please Be Careful!!

Before Using Your Microtome Knife

Your microtome knife has been coated with an oil mixture to prevent rust and corrosion when not in use.

Before using your knife, take a lint-free facial tissue saturated in either xylene, benzene, or acetone to remove the protective oil coating on the knife.

Use a dry, lint-free facial tissue to wipe

Hints for Using Your Microtome Knife

To maximize the sharpness of your knife's edge, use an old knife to trim your first block, or use the extreme end of your new or reconditioned knife.

Continuously remove the paraffin or other embedding medium on the front and back of your knife to maximize your cutting performance.

Depending on the texture of the tissue you have been cutting, you may be able to use the other side of your knife for extended use.

Setting your knife at the proper clearance angle will extend the life of your knife's edge.

Maintain a sharp edge on your knife. Even the most lightly skilled technologist cannot overcome handicaps created from using a dull or bruised knife.

Based on the facet/bevel angle created in our reconditioning process we recommend a clearance angle of between 6 and 8 degrees.

When your knife is reaching its dimensional maturity, i.e., the width of the knife's surface is less than 7/8 of an inch, proper knife stability is difficult to achieve in the holder. Placing a hexagonal pencil at the base of the knife within the holder will act as a filler and provides it with the support required.

Caring For Your Microtome Knife

- Keep the edge of your knife clean at all times.
- Spray or brush any household oil on your knife to prevent rust when not in use.
- Store your knife in its case to prevent oxidation from occurring.
- If you are using a lab sharpener, periodically send your knife out to be professionally reconditioned.

Extremely wide facets result from continuous use of a lab sharpener. The optimum bevel angle becomes distorted as a result of the facet changes. This diminishes your cutting performance. Double facets may develop on your knife's edge, creating distorted sections.

Please contact us with any questions or suggestions you may have.

Contact Applied Diamond at 1-800-222-5143 or services@applieddiamond.com

