

DiATOME Diamond Knives

the incomparable Diamond Knife for all fields of research...

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ultra semi

ultra 35°

Perfect for sectioning relatively soft materials research specimens including metals and polymers, as well as mixed specimens such as polymers filled with nanoparticles, brittle materials such as catalysts, crystals, semiconductors, etc. The ultra 35° knife has demonstrated its usefulness as a standard knife for a majority of applications in both biological and materials research.



ultra-semi 35°

Similar to our ultra 35° 3.0 mm with a greater thickness range (50-200nm). Ideal for alternating sectioning from ultrathin to semithin.

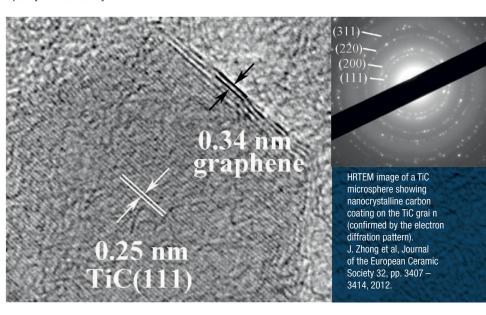
ultra 35° (dry)

The ultra 35° knife (in the triangular holder) with a thickness range of 30-200nm is used for dry sectioning of epoxy or acrylic resin embedded biological samples, which need to be investigated by element analysis (Ref. Edelmann) and SIMS (Ref.

Guerquin-Kern). The gliding of the sections on the dry knife surface is facilitated with the use of our Static Line II ionizer.

ultra 45°

Acknowledged as the appropriate knife angle for routine sectioning of both biological and materials research specimens, it represents a balanced compromise between section quality and durability.



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1841

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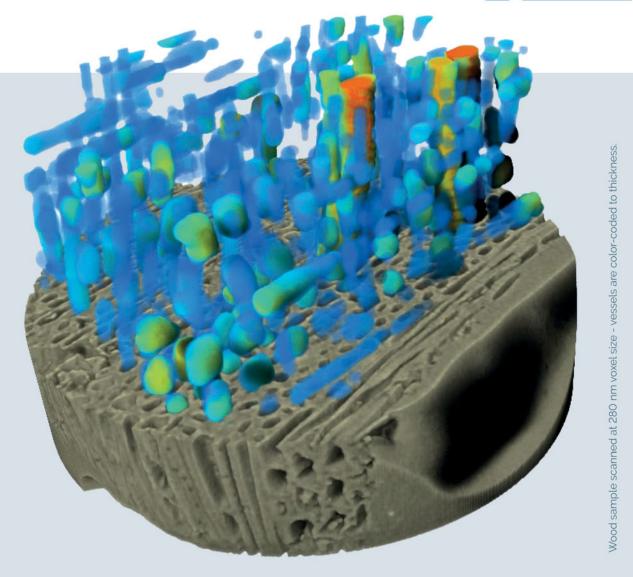


On the Cover: Light microscopy image of Glycyrrhiza inflata rhizome, one of the source materials of the botanical licorice root. The image depicts a part of the secondary wood and pith in a transverse section obtained by freehand sectioning of the dried and softened rhizome using a razor. The tissue was double-stained in astra blue and basic fuchsin and imaged using an Olympus BX53 microscope with a DP74 camera system. The image is part of the illustrations in "Application of Microscopy in the Quality Control of Licorice Roots: Comparative Anatomy of the Roots and Rhizomes of Five Species of Glycyrrhiza" by Vijayasankar Raman et al., page 2150.

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