

DiATOME

at the forefront of innovation

Diamond Knives for CEMOVIS

For the cryo Electron Microscopist, we are pleased to present the DiATOME knives for sectioning vitrified cells and tissues.

Our application specialist is at your disposal for any further information or assistance you might require.

CEMOVIS 25° and 35°

The CEMOVIS 25° and 35° knife is designed for sectioning frozen hydrated specimens. The 25° and 35° angles result in the least possible compression and the best structure preservation (H.M. Han et al., Journal of Microscopy, Vol. 230, Pt. 2, pp. 167 – 171, 2007).

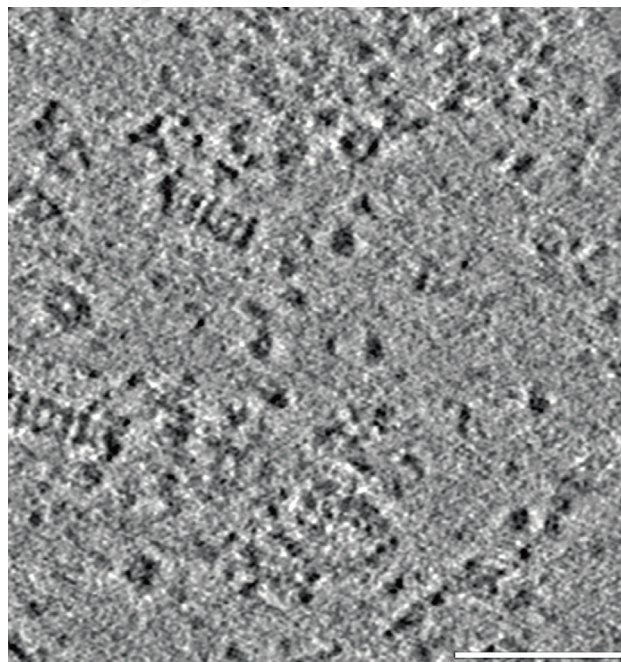
Please note: best results are achieved at low humidity, when the cryo-ultramicrotome is placed in a glovebox and the sections attached by electrostatic force (J. Pierson et al., Journal of Structural Biology 169, pp. 219 – 225, 2010).

trim 45

A well trimmed sample is a precondition for perfect section ribbons. Due to the extreme sharpness of our diamond blades, less mechanical damage is applied to the sample during trimming.

Very shiny sample faces and precise sides are the result.

The trim 45 produces pyramidal sides with an inclined angle of 45°.



▲ 26S proteasomes within cell nucleus of a *Drosophila melanogaster* neuron. M. Eltsov, IGBMC, Strasbourg, Scale bar: 50nm

Knife Type	Knife Angle	Size [mm]	Thickness Range	Boat Type	Code (new knife)*	Application
CEMOVIS 35°	35°	3.0mm	30–150	Triangular holder	DCEM3530	• Frozen hydrated samples (CEMOVIS)
CEMOVIS 25°	25°	3.0mm	30–150	Triangular holder	DCEM2530	• Frozen hydrated samples (CEMOVIS)
trim 45°	45°			Triangular holder	TT-45	• Trimming biological and materials science samples

*** Product Codes shown are for new knives.**

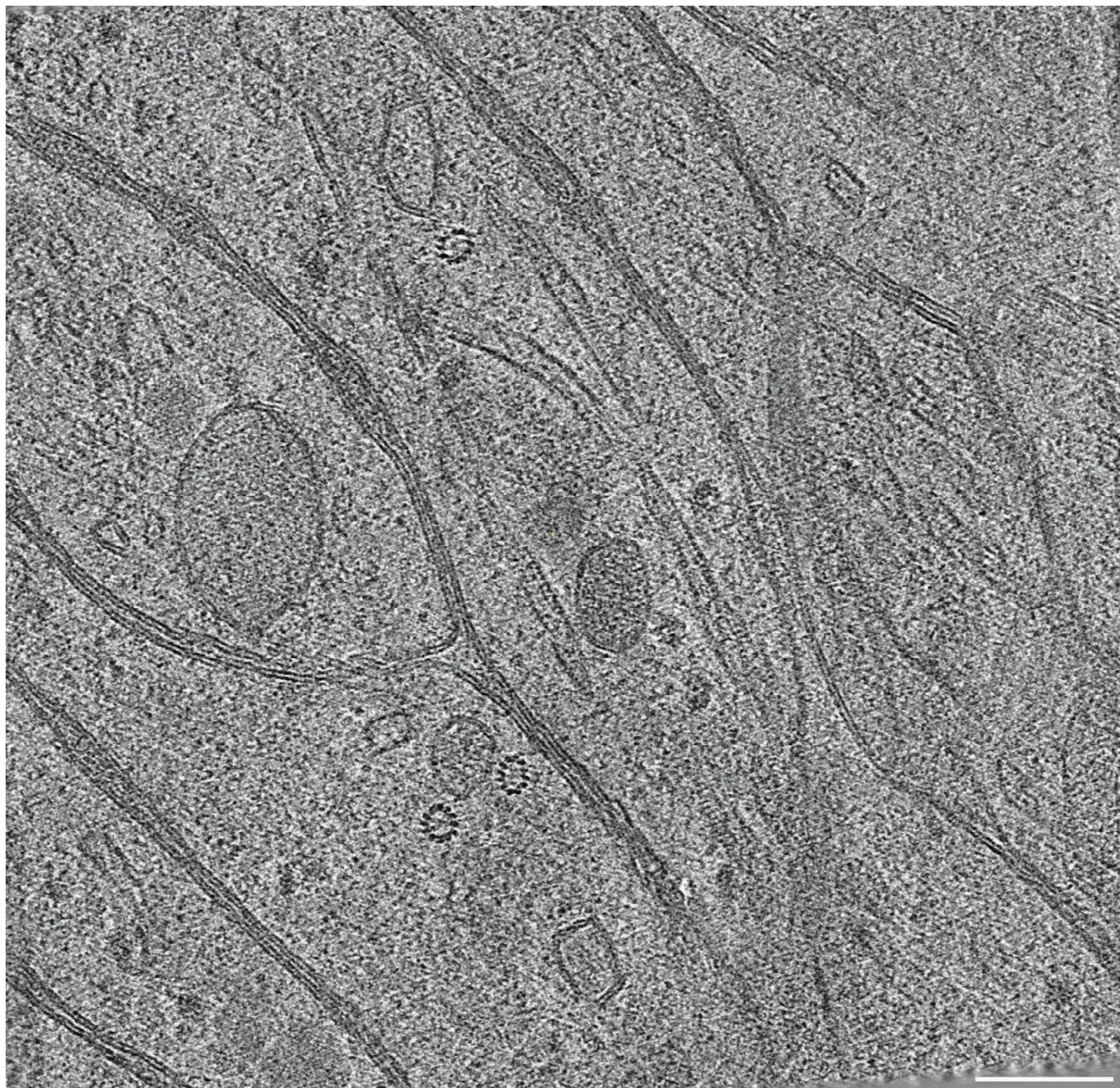
To order a resharpened knife, add “-R” to the Product Code that corresponds to your knife.

Example: Product Code DCEM3530-R = Resharpened CEMOVIS 35° Knife.

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▲
Drosophila embryonic brain axons.
Defocus -4 μ m, no phase plate
tomographic reconstruction,
computational 5nm slice.
M. Eltsov, IGBMC, Strasbourg
Scale bar: 100nm.
Knife used: **CEMOVIS 25⁺**.



[**www.diatomeknives.com**](http://www.diatomeknives.com)