

DiATOME

at the forefront of innovation

Perfect Loop

For picking up your ultrathin sections you deserve the best loop!

The Perfect Loop allows you to pick up sections consistently, without causing them any damage.

It is the only loop currently available where the external diameter is the same as the grid and the internal diameter slightly larger than the observed area in the electron microscope.

The thickness is about 40 microns. Due to the fact that the loop and the grid are of the same diameter they are attracted to one

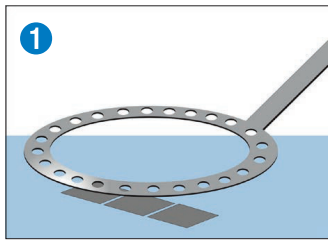
another when in water and are drawn together by the surface tension of the water.

Even if the section touches the inside of the grid during blotting the area of contact is minor and, therefore, the section is not damaged.

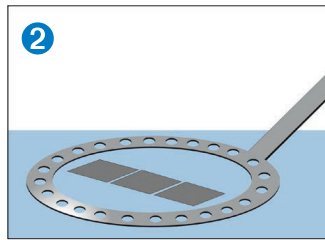
When the grid is removed from the loop the sections always remain in place – on the grid.

For easy section pick up and mounting on EM grids:

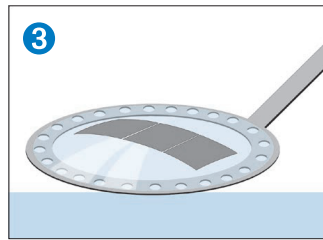
Have your cleaned grids sitting on clean filter paper in a Petri dish. Ensure the ribbon of sections is short enough to fit inside the loop.



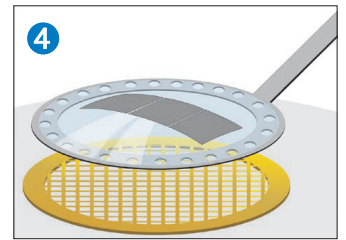
Center the loop above the sections.



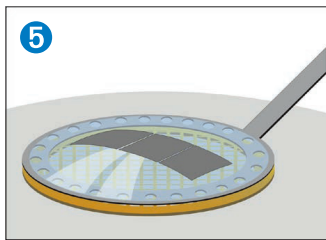
Slowly lower the loop and touch the water.



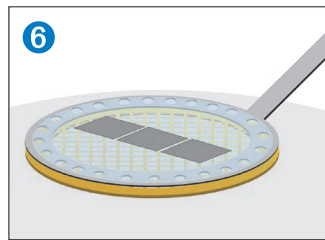
Gently lift up the loop with the sections.



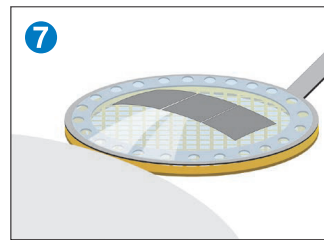
Bring the loop above the grid on the filter paper.



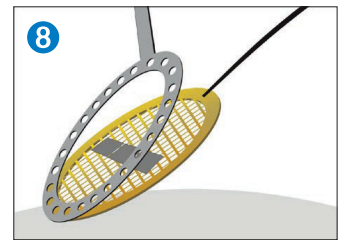
The grid sticks to the loop by surface tension.



Lower the loop to the filter paper to remove water.



For coated grids, touch with filter paper to remove water.



Separate the grid from the loop with an eyelash.

See reverse side for cryo sectioning

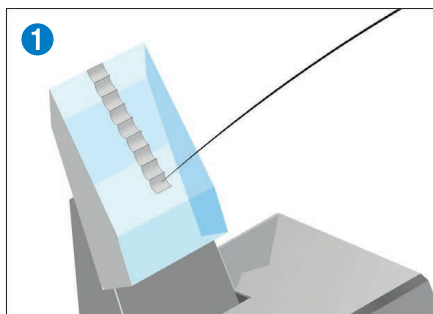
DiATOME

at the forefront of innovation

Perfect Loop

Cryo-sectioning:

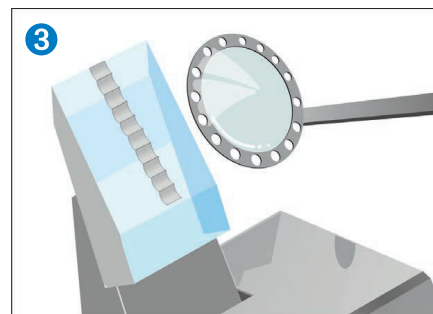
Pick up and mounting on grids with sucrose or sucrose/methyl-cellulose.



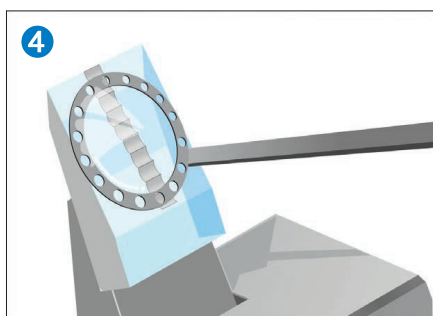
1 Guide the section ribbon with an eyelash.



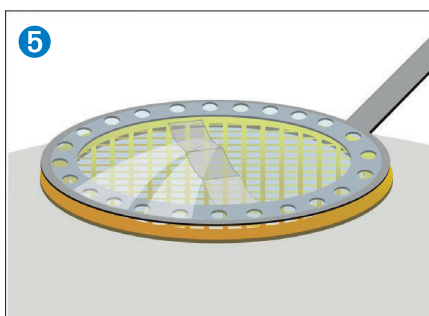
2 Dip the loop in sucrose or sucrose/methyl-cellulose.



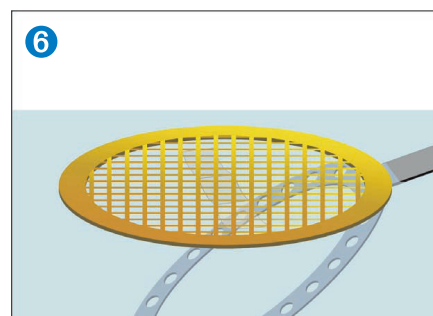
3 Hold the loop above the section ribbon.



4 Touch the sections with the almost frozen droplet. Lift up the loop and bring back to room-temperature.



5 Place the loop above the grid, touch it and gently lift up.



6 Place the loop with the grid upside-down on a buffer drop or on gelatine and gently remove the loop.

DiATOME U.S.

314 West Broad Street, Suite 203
Quakertown, PA 18951
Tel: (215) 412-8390 or 215-646-1478
Fax: (267)-730-6091
email: info@diatomeknives.com



www.diatomeknives.com