### **postnova** analytics

# Shortix<sup>TM</sup> Tubing Cutter for Fused Silica Capillary



#### Comparision of Cutting Edges

Figures show enlargements of cutted column ends produced by a Shortix<sup>TM</sup> tubing cutter, a tungsten carbide tipped scoring tool, a ceramic wafer and a sapphire blade. The cut from the Shortix tubing cutter is the only one that is clean and accurate;

the other cuts show jagged fused silica edges and torn flaps of polyimide - sources of chromatographic problems.



Sapphire Blade



Tungsten Carbide Scoring Tool



Postnova Analytics GmbH Max-Planck-Str. 14 86899 Landsberg, GER T: +49 8191 985 688 0 F: +49 8191 985 688 99

Postnova Analytics Inc. 230 S, 500 E, Suite 120 84102 Salt Lake City, USA T: +1 801 521 2004 F: +1 801 521 2884

info@postnova.com www.postnova.com

## **Fused Silica Capillary Cutter**

#### A revolution in precise Fused Silica Capillary Cutting:

- Cuts 100 500 μm ID Capillaries, 780 μm OD maximum
- Built-in lense to verify square cut
- Improved reproducibility of analytical results
- A perfect cut with diamond blade
- Easy and fast to use, saves time and money
- The black Shortix is usually recommended for GC, as there the wall thickness is thinner
- The 2 cutter versions differ in the load of the internal spring pressing the diamond on the capillary

The cutting of Fused Silica Capillary is the most sensitive part in chromatography. These capillaries are complex, technically sophisticated devices composed of up to three layers (fused silica tubing, polyimide coating and sometimes a stationary phase material).

Each layer has unique properties and is important for the performance of the column. Uneven cuts through these layers can cause unwanted chemical interactions of the sample with one of the 2 layers on the outside. Furthermore polyimide fragments and fused-silica particles can block the flow through the column.

A perfect cut of Fused Silica Tubing is essential in gas chromatography and probably even more so in CE and CEC. As in chromatography separations, in CE and CEC the column may be a source for poor peak shape and plate numbers.

The Shortix<sup>™</sup> is very simple to use. When the column is inserted into the cutter, it is immobilized by tightening a locking wheel on the top of the device. With the rotation of the cutter wheel, the surface of the column is cut precisely with a diamond blade. The blade cuts through the polyimide coating and scores the fused silica layer of the column. The tool creates a clean, straight cut that is 90° to the axis of the column.

A replacement kit includes a diamond cutting wheel and a tool to open the capillary column cutter.

Available Parts:

Z-UC-FS-315 Z-UC-FS-315-01 Z-UC-FS-315-02 Z-UC-FS-315-03 Shortix Cutter for GC (black) Shortix Cutter for CE (blue) Maintenance Kit for Shortix GC Maintenance Kit for Shortix CE

All Shortix cutters are encased in a wooden box.

<sup>™</sup> - The Shortix is a trademark of SGT Ltd.

www.postnova.com