## HANDLING AND CUTTING ULTIMETAL PLUS STAINLESS STEEL TUBING

The Measure of Confidence



## **Instruction Guide**

## **Safety**



Wear safety glasses.



Metal tubing can conduct electricity. Be careful not to contact a power socket to prevent an electric shock.



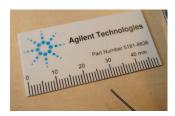
Install UltiMetal Plus stainless steel tubing according to the installation manual and the operating manual of your instrument. Always take into account the specific column insertion lengths. Never force the column through the jet of a detector.

Congratulations on your purchase of Agilent UltiMetal Plus stainless steel capillary tubing. Proper handling and cutting technique is important for optimum results.

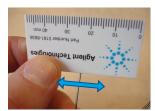
## Capillary tubing (id 0.25-0.53 mm, od 0.5-0.8 mm)

**Handling:** Capillary stainless steel tubing is easily kinked if not handled carefully when preparing for installation (uncoiling, straightening, etc.).

**Cutting:** Before cutting, please make sure the septa (if used, to measure the column depth for installation), column nut, and ferrule are placed on the tubing. For best chromatographic results, use ceramic tubing column cutter (p/n 5181-8836) to carefully score the metal tubing as shown. The ceramic cutter has a smooth and a rough side to it. The smooth side is used to cut both fused silica and capillary metal tubing.



Score the outside surface and wipe off the outside with a (ethanol) wetted tissue to remove any filings. To get a proper cut it is necessary to slide the column cutter over the same area multiple times.









Break the tubing at the point of the score. When bending the tubing, use the column cutter to keep the tubing straight: apply force (1), stop and apply force in the opposite direction (2). Tubing should break cleanly and the bore of the tubing should be preserved (3).







Inspect the freshly cut end. If burrs are present or a jagged cut is created, re-cut the tubing until a good cut is observed. It's also important to check if the bore is unchanged.





Please find below a table of ferrules advised for use with UltiMetal Plus stainless steel tubing.

ld, od	Flexible Metal ferrule
0.25mm, 0.5mm	G3188-27505
0.32mm, 0.5mm	G3188-27505
0.53mm, 0.8mm	G3188-27506

