

## Sizes of Detection Windows in CE Capillaries - Tech Information

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### Overview

This article explains how users of the MICROSOLV Window Maker™ can create larger-than-standard detection windows on CE capillaries. Because the device produces window lengths that are approximate rather than exact, users seeking extended detection areas must apply a practical workaround. The method involves sequentially burning multiple adjacent windows using a smaller heating module when a larger dedicated module is not available.

This approach maintains proper polyimide removal while providing a wider detection zone to meet method or instrument requirements.

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### Understanding Window Size Variability

The detection window lengths produced by the MICROSOLV Window Maker™ are inherently approximate, not exact. Several factors influence the final window size, including:

- How steadily the operator holds the capillary
- Minor variations in heat distribution
- Capillary thickness and coating consistency
- Ambient conditions during operation

While the device is engineered to produce uniform and reliable windows, exact dimensional tolerances cannot be guaranteed. For most CE applications, this level of precision is more than sufficient and does not affect analytical results.

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### Creating Larger Windows When No Large Module Exists

Some users require larger detection windows than those produced by the available heating modules. If the desired width is not offered as a dedicated module option, there is a straightforward and effective method:

#### Use Multiple Adjacent Burns

To create a larger optical window:

1. Use a smaller heating module (e.g., 1 mm, 2 mm, or 4 mm).
2. Burn a window section as usual.
3. Move the capillary slightly to extend the previous window.
4. Burn an adjacent section, overlapping slightly to avoid gaps.
5. Repeat until the total desired length is achieved.

This technique:

- Maintains consistency in removal quality
- Preserves the integrity of the fused silica
- Provides flexibility when larger module sizes are not available
- Works well for detectors that require a longer viewing region

As long as care is taken to maintain alignment, the combined sections form a clean, unified optical window.

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## Ordering Information

For MICROSOLV Window Maker product details, module options, and photographs: **Click [HERE](#)**

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**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

Tel: (732) 380-8900

Fax: (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)