

# Niagara CM Rapid Rinse

## Saves Time & Money

The Niagara CM begins rinsing the nebulizer and spray chamber the instant the sample measurement is completed, and continues to rinse until the next sample is ready.



- Faster sample turnaround
- Reduced operating costs
- Inert sample path, minimum carryover
- Easily interfaces to most ICP and autosampler models
- Faster washout
- Ability to handle complex samples

A summary of the method time per sample with and without the Niagara CM Rapid Rinse is shown in the table below. The addition of the Niagara reduced the analysis by 71sec per sample, roughly a 35% improvement. This reduction in time allows an additional 10 samples per hour with the Niagara.

### Comparison of ICP-MS lab without and with the Niagara CM Rapid Rinse

	Without Niagara CM	With Niagara CM
Uptake Delay (sec)	50	23
Stabilization (sec)	30	15
Total Read (sec)	90	90
Rinse (sec)	30	1
Total (sec)	200	129
Sample per hour	18	28

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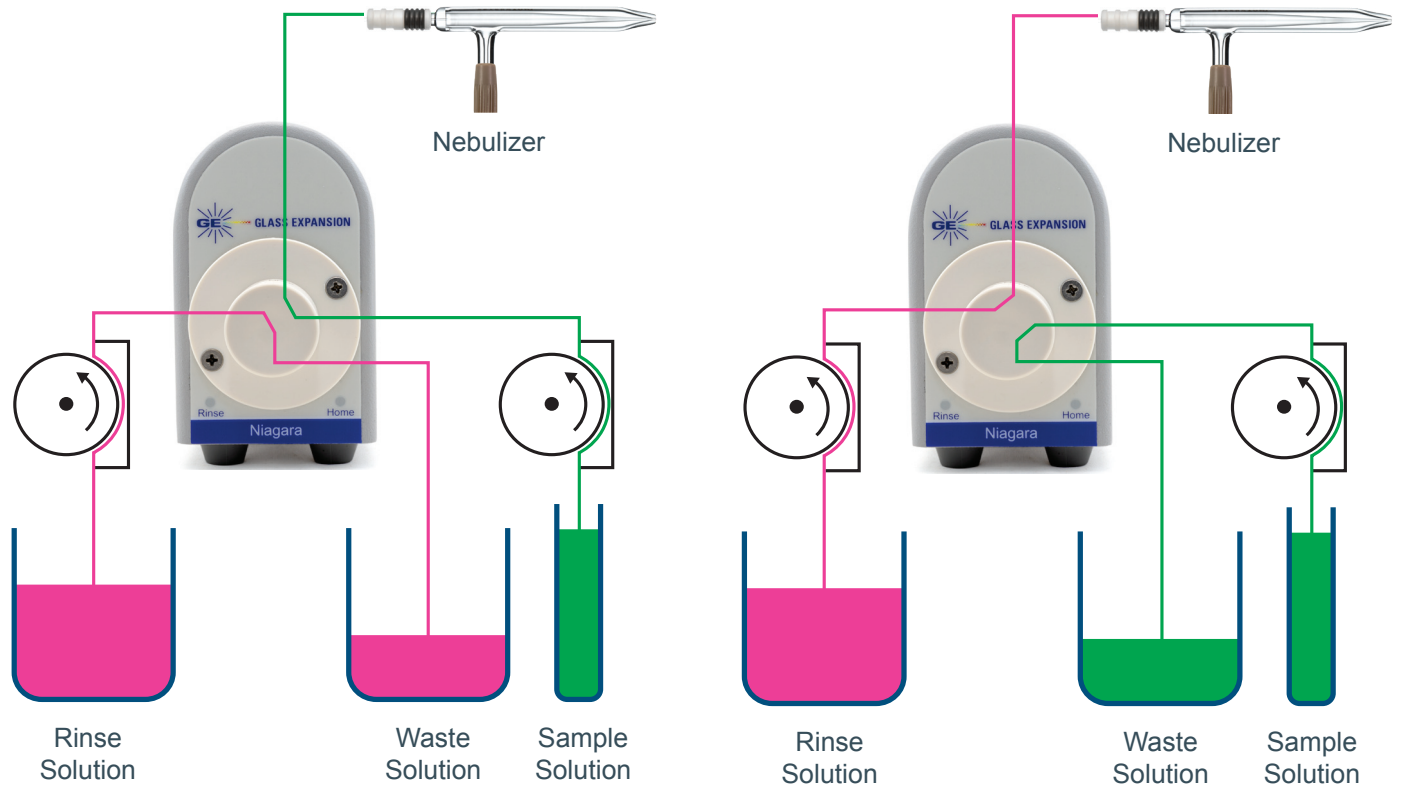
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The Niagara CM incorporates an electronically controlled switching valve made entirely of Teflon and PEEK (where sample contact is made) for maximum chemical resistance and reduced carryover.

Figure 1. Sample to Nebulizer, Rinse to Waste

Figure 2. Rinse to Nebulizer, Sample to Waste



During the read time (**Figure 1**) the rinse solution is pumped through the valve to waste.

At the completion of the measurement, the valve switches instantly and the rinse solution is directed to the nebulizer (**Figure 2**).

The Niagara CM Rapid Rinse provides a simple, low cost approach to improving ICP-OES and ICP-MS productivity. Typical time saved with the Niagara is approximately 30%, with little to no changes to the current ICP-OES or ICP-MS method settings and no degradation in performance.

The new software with Method Wizard facilitates easy optimization and self-installation. A unique post-wash, adding a series of bubbles, significantly improves washout and reduces rinse time. Also noteworthy, the initial financial investment of the Niagara is 60% to 70% less than other commercially available switching valve systems.

**Learn more at: [www.geicp.com](http://www.geicp.com)**