

Nickel-Plated Sampler Cones Last Longer



Nickel plating extends cone lifetime and reduces cone maintenance

Customers using ICP-MS sampler cones with a copper base can suffer corrosion of the copper, particularly with food and environmental samples where strong acid matrices such as hydrochloric acid or aqua regia are used for sample preparation.

This copper base corrosion:

- Reduces cone lifetime
- Increases cleaning frequency and duration
- Degrades analytical performance

Nickel plating solves corrosion problems

Our nickel-plated platinum-tipped and nickel-tipped sampler cones reduce copper corrosion that shortens sampler cone lifetime, and can help you improve analytical performance.

- Use **G3280-67142** or **G3280-67061** for Agilent ICP-MS 7700/7800/7850/7900/8800/8900.
- Use **M5150-67003** or **M5150-67001** for Agilent ICP-MS 9500

Highlights

- Greater than two times longer cone life in testing Pt-tipped Ni-plated cone in comparison with Pt-tipped with copper base with 10% Aqua Regia matrix
- Cleaning frequency reduced by more than three times
- Simpler one-step cleaning routine using only water sonication

The Ni-plated sampler cones are recommended for users running food and environmental samples and using aggressive acid matrices for sample preparation.

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From Insight to Outcome



Why you need genuine OEM Interface Cones?

Only Agilent interface cones are designed and tested on Agilent ICP-MS systems to ensure sensitivity and stability with real-world applications. We compared genuine Agilent interface cones (sampler and skimmer) with cones from other suppliers. See our results which confirm that using non-Agilent cones compromises performance

Read our Technical Overview on ICP-MS Interface Cone Comparison.

Corrosion problems



The standard platinum-tipped sampler cone (without nickel plating) after 1,090 hours of run time with a 10% aqua regia matrix. This demonstrates the copper base corrosion problem. Black coating is copper oxide and surrounding the tip the copper is worn away.

No copper corrosion



Our new nickel-plated platinum-tipped sampler cone shows almost no copper corrosion (front and back) after 1,090 hours of run time with a 10% aqua regia matrix.

Cleaning is simplified and 3-times faster

Eliminating the copper base corrosion enables simple one-step cleaning so your nickel-plated cone is back in use faster using a simpler cleaning method.

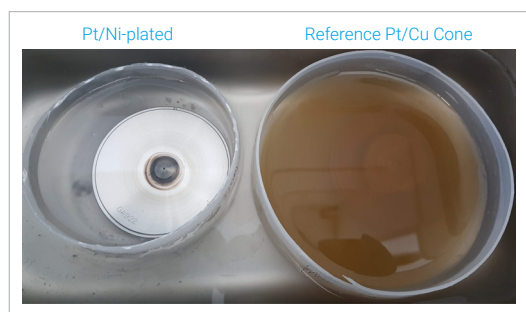


Photo after an 18 hour run time with only 30 hours total run time with a 10% Aqua Regia solution. Pt/Ni-plated (left) Cleaning Cycle: 1 x 25 min water cycle in the ultrasonic bath, Swabbing. Reference Pt/Cu Cone (Right) Cleaning Cycle: 1 x 25 min water cycle in the ultrasonic bath, 5 min in 2% Citranox after the first water cycle, 2 x 25 min water cycle in the ultrasonic bath, Swabbing.

Included in cone care packages

We also offer these cones as part of our all-in-one cone care kit.

Agilent cone care package provide all the supplies users need to replace and maintain their interface cones. The kits include an LED measuring magnifier and allow to save up to 10% over buying each item in the kit separately. Buy online:

ICP-MS Sampler Cones and Care Packages

Learn more about the role, selection and maintenance of the interface cones.

www.agilent.com/chem/cones-faqs

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This information is subject to change without notice.

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