



Free your ICP-MS Workflow From Common Time Traps

The Agilent 7850 ICP-MS

1	Sample/standard preparation	72%
2	Developing new methods	65%
3	Daily checks, cleaning, and tuning	63%
4	Instrument maintenance and downtime	63%
5	Learning a new instrument	59%
6	Reviewing and reporting results	52%
7	Remeasuring samples	51%
8	Setting up sample sequence	44%
9	Screening samples before analysis	43%
10	Monitoring sample analysis	37%

The average ranking of ten common ICP-MS time traps, as ranked by laboratories participating in an online poll¹. The Agilent 7850 ICP-MS addresses these time traps to minimize their impact on your workflow.

The Smart Way to Reduce Time Traps in ICP-MS Analysis

We understand the pressures that come with running a productive and profitable laboratory. Daily instrument checks, time-consuming and often unnecessary sample preparation steps, manual data reviews, and sample reanalysis, all contribute to lost time and revenue. These unproductive activities—time traps—place your analysts under increased pressure. This pressure can even lead to a compromise in the quality of the results you report, potentially putting your lab's reputation at risk.

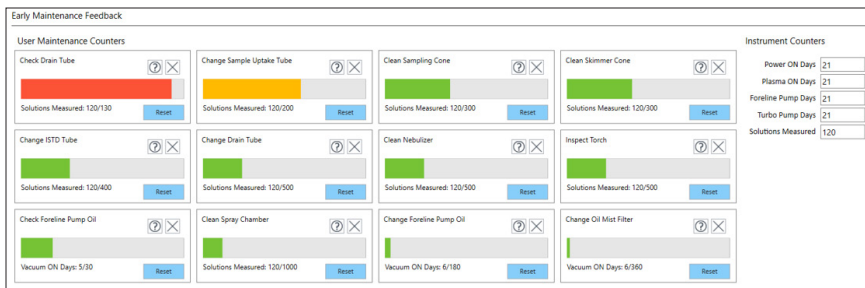
What if there was a better, more efficient way to perform your analysis? A smarter way to avoid common time traps and reduce wasted time so busy staff can focus on tasks that bring more value to the lab.

Meet the Agilent 7850 ICP-MS. It addresses the critical time traps of ICP-MS analysis. It will make your life easier, your employees happier and more productive, and your results more reliable.

Key features of the Agilent 7850 ICP-MS

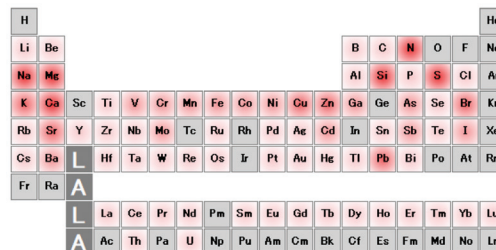
- Ready to go methods for regulated and routine analyses, plus prewritten standard operating procedures will save you weeks of method development and documentation time.
- The Agilent Ultra High Matrix Introduction (UHMI) system reduces sample preparation time by allowing the analysis of samples containing up to 25% total dissolved solids without dilution.
- Helium collision cell and half-mass correction remove troublesome polyatomic and doubly charged interferences. By easily controlling these common interferences, the 7850 improves data quality, eliminates complicated separation chemistry, simplifies method development, and avoids the need for costly sample remeasurements.

1. Poll conducted in September 2020 by Agilent. A ranking of 100% represents all respondents ranking that time trap as the most significant.



The 7850 uses early maintenance feedback (EMF) sensors and counters to determine when maintenance is needed, based on operation time or number of samples measured. The traffic light color-coded alerts indicate when maintenance tasks are required.

- IntelliQuant feature that quickly captures a full mass spectrum to create a profile of each sample's composition. You can then identify abnormal levels of major elements and unexpected analytes. Sample preparation mistakes can also be spotted, such as no Cl due to HCl being left out. IntelliQuant also calculates the level of solids in a sample so you can determine the dilution factor to use for a new or unknown sample type.
- Measure variable, high matrix samples without having to batch sample types or matrix-match calibration standards. Hydrochloric acid can also be added to stabilize important elements including Hg, Ag, Mo with standard He mode reliably handling any Cl-based interferences.
- Pre- and post run performance checks provide confidence in results and prevent unplanned downtime. A post run check at the end of the day flags potential issues, so you can address them—before they impact your work the next day.
- Outlier conditional formatting highlights results that are outside a nominated range or that fail a test requirement. Color-coding makes it easy to spot problematic results when reviewing data.
- An early maintenance feedback function monitors instrument status and notifies you when maintenance is needed, based on operation time or number of samples measured. The traffic light color-coded alerts mean that tasks—such as changing pump tubing, or cleaning the cones—are never missed. Using the alerts also ensures the tasks are not performed more frequently than necessary.
- ICP Go, an optional, browser-based user-interface for desktop or mobile devices, offers simplified control of routine sample batches and is great for analysts on the move.
- Video guides for common installation, maintenance, and troubleshooting tasks are provided in an extensive Help and Learning Center. It's all designed to equip the analyst with the knowledge to keep the instrument up and running flawlessly.



Spot unexpected major elements, unusual levels of analytes, and sample preparation mistakes just by looking at the heat map periodic table produced by the IntelliQuant function.

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