FOUR Qs ARE BETTER THAN QQQ

GREAT DETECTION FOR TOUGH MATRICES – LIKE YOURS

In the fast-paced analytical world, accurate and reproducible results are essential to guaranteeing quality and ensuring safety. What many industries have in common is the need for trace-element analysis with superior interference removal, extremely low detection limits, and outstanding background equivalent concentrations (BECs).

That's the thinking behind the NexION® 5000, the industry's first multi-quadrupole ICP-MS instrument. This cutting-edge system delivers performance beyond high-resolution ICP-MS and traditional triple quad technology, with:

Superior Interference Removal

In this four-quadrupole system, the ion beam is shaped and directed within Q0 (Quadrupole Ion Deflector) and filtered in Q1 (first Transmission Analyzer Quadrupole). The reaction is controlled in Q2 (Quadrupole Universal Cell), and the resulting ions are separated in Q3 (second Transmission Analyzer Quadrupole). This multi-quadrupole setup, in combination with triple quad technology, allows the system to deliver less than 1 ppt BECs in hot plasma.

Excellent Stability

Our free-running 34-MHz RF generator delivers fast impedance matching to rapidly adjust to changing sample matrices, while the wide-aperture cones of the Triple Cone Interface offer unparalleled resistance to clogging. And you can use pure gases, such as pure NH_3, for predictable and reproducible reactions.

Unmatched Matrix Tolerance

The NexION 5000 ICP-MS is perfect for laboratories that need low detection limits and BECs in a variety of different matrices, from aqueous to organic, from ultrapure water (UPW) to high total dissolved solids (TDS).

Lowest Maintenance

Whatever your industry, uptime is key to keeping your lab running at peak performance. That's why our NexION 5000 system eliminates virtually all maintenance requirements, for unsurpassed instrument uptime.

PerkinElmer®
For the Better

Nothing Interferes with Accuracy

Perfect for industries ranging from semiconductors to geosciences to biomonitoring, the cutting-edge NexION 5000 ICP-MS combines the simplicity of a reaction/collision cell with multi-quadrupole technology that transcends traditional triple quad.

- **Four Quadrupoles**
  Provide the best ion beam control, capable of suppressing and eliminating the spectral interferences found in complex samples.
- **Quadrupole Ion Deflector (QID)**
  Optimizes the range of masses transmitted into the first transmission quadrupole, improving sensitivity and eliminating photons and neutral species.
- **Transmission Analyzer Quadrupoles (Q1 and Q3)**
  Provide equal mass resolving capabilities and can work in MS/MS, Mass Shift or Scanning modes.
- **Universal Cell Technology (UCT)**
  Actively discriminates between analyte ions and reaction byproducts, creating a controlled reaction for the best interference removal.
- **Triple Cone Interface with OmniRing™**
  Operates in extraction, focusing, or cold plasma modes for outstanding detection limits.
- **34-MHz RF Plasma Generator**
  This unique technology can handle the toughest matrices and solvents.

A COMPLETE ICP-MS SOLUTION

The multi-quadrupole NexION 5000 ICP-MS transcends current market offerings and delivers solutions to address even the most demanding trace-element analysis challenges. Plus, the NexION 5000 system offers:

- User-friendly Syngistix™ software (with built-in methods) that makes complex triple-quad workflows simpler
- Consumables and supplies that are interlaboratory tested to meet the highest performance standards
- OneSource® Laboratory Services, with teams of trained scientists and engineers who bring their real-life knowledge to you, plus compliance and education services

The NexION 5000 multi-quadrupole ICP-MS: Performance to the power of four

For more information, visit www.perkinelmer.com/nexion5000

PerkinElmer, Inc.
940 Winter Street
Waltham, MA 02451 USA
P: (800) 762-4000 or
(+1) 203-925-4602
www.perkinelmer.com

PerkinElmer®

For a complete listing of our global offices, visit www.perkinelmer.com/ContactUs

65083 PKI