

Waters Arc Premier System Delivers Increased Precision and Certainty in Chromatographic Results

6/15/2021

Liquid Chromatography System Provides Reproducibility and Ruggedness Without Sacrificing Speed and Performance for Broad Set of Applications

News Summary:

- New system sharpens chromatographic peaks for metal-sensitive compounds by eliminating secondary interactions, maximizing reproducibility and efficiency of separations without compromising performance.
- System and column chemistries work together to eliminate time-consuming and costly passivation, delivering high quality, accurate sample data from the first analysis.
- 5x improvement in detector sensitivity and 10x improvement in assay-to-assay precision† helps labs accelerate time-to-market providing greater confidence in separation results.

MILFORD, Mass.--(BUSINESS WIRE)-- Waters Corporation (NYSE:WAT) today introduced the **Waters™ Arc™ Premier System**, the first liquid chromatography system optimized for chromatographic separations on 2.5 – 3.5 micron columns to also feature Waters' novel MaxPeak™ High Performance Surface (HPS) technology. The new system complements Waters' best-selling **MaxPeak Premier Columns** to virtually eliminate the surface interactions that occur between sample analytes and instrument and column hardware, saving laboratories time wasted on costly passivation and providing greater confidence in separations results.

This press release features multimedia. View the full release here:

<https://www.businesswire.com/news/home/20210615005317/en/>

The Waters Arc Premier System is the first liquid chromatography system optimized for chromatographic separations on 2.5 – 3.5 micron columns to also feature Waters' novel MaxPeak High Performance Surface (HPS) technology. (Photo: Business Wire)

Analytical scientists working in method development and quality control laboratories can

typically waste hours and days

re-running or troubleshooting analytical methods that fail to reproduce an expected test result, such as missing low concentrations of a target analyte known to be in the sample or that fail to detect an impurity. The Waters Arc Premier System and Columns are designed to help increase speed, consistency and confidence in analytical results for scientists working to develop, transfer and run chromatographic assays that are central to business and laboratory operations.

“With liquid chromatography results, there is no room for error. Laboratories cannot afford to overlook or under-report an impurity in a drug formulation for example, or miss product release timelines because of assay variations,” said Udit Batra, President and CEO, Waters Corporation. “Laboratories both big and small have long suffered the frustrations of analyte/surface interactions, which degrade sensitivity, reproducibility, and of separations methods that can require several days for passivation. The combination of the Arc Premier System and Columns sets a new standard for pharmaceutical analysis, giving scientists the confidence they need while reducing the cost and time to market.”

The Arc Premier System delivers reproducibility and repeatability for scientists developing methods for stability testing, impurity profiling and product release data in compliance with regulatory requirements. The combined solution provides reproducibility without sacrificing performance along with system ruggedness for delivering consistently accurate chromatographic results in test after test.

“Mitigation of deleterious analyte interactions with chromatographic columns and systems has always plagued separations scientists striving for perfect peak shapes and recoveries,” says Jonathan Shackman, Associate Scientific Director, Bristol Meyers Squibb. “Material modifications that maintain all the best properties of stainless steel while reducing or even eliminating these secondary binding events will be transformative. Removal of internal passivation procedures and skipping mobile phase additives to address chelation is exciting and very promising!”

Removing Analyte-to-Metal Interactions for Improved Results

MaxPeak HPS technology is a unique hybrid organic/inorganic surface technology exclusive to Waters' MaxPeak Premier Systems and Columns. It forms a barrier between the sample and the metal surfaces of both the system and column, mitigating, or eliminating altogether, non-specific adsorption. It offers many benefits including:

- Increased analyte recovery for more accurate and precise quantification†
- Up to a 5X increase in detector sensitivity depending upon the degree of metal sensitivity†
- Up to a 10X improvement in system-to-system reproducibility†
- Up to a 100X improvement in user-to-user reproducibility†
- Potential savings of 2–3 days/assay by eliminating system passivation and column conditioning, increasing productivity and profitability

MaxPeak Premier Columns – Stop Looking and Start Seeing

MaxPeak Premier Columns are designed to be the most universal column platform for chromatographers who need to reduce variability risks and save time, while increasing recovery and sensitivity. The column offerings now available for the Arc Premier System include MaxPeak Premier 2.5 µm columns in the [Atlantis™ Premier](#), [XBridge™ Premier](#) and [XSelect™ Premier](#) Product families.

The Arc Premier System and MaxPeak Premier Columns are now available worldwide from Waters.

Additional Resources

- Read the blog: [Arc Premier Solution Improves Data Quality for Challenging Compounds](#)
- Join our [June 16 Arc Premier System launch webinar](#) or watch on-demand
- Learn more about the [Arc Premier System](#)
- Connect with Waters via [LinkedIn](#), [Twitter](#), and [Facebook](#)

About Waters Corporation (www.waters.com)

Waters Corporation (NYSE:WAT), the world's leading specialty measurement company, has pioneered chromatography, mass spectrometry, and thermal analysis innovations serving the life, materials, food and environmental sciences for more than 60 years. With more than 7,400 employees worldwide, Waters operates directly in 35 countries, including 14 manufacturing facilities, and with products available in more than 100 countries.

Waters, Atlantis, XSelect, XBridge, Arc and MaxPeak are trademarks of Waters Corporation.

† Results based on Waters lab tests with samples containing metal-sensitive compounds using standard UHPLC systems and columns compared with the Arc Premier system and columns featuring MaxPeak HPS. Results for analyte recovery, detector sensitivity, assay-to-assay precision, system-to-system reproducibility, and user-to-user reproducibility are assay, analyte and operator dependent.

View source version on [businesswire.com](https://www.businesswire.com/news/home/20210615005317/en/): <https://www.businesswire.com/news/home/20210615005317/en/>

Brian J. Murphy
PR Manager, Corporate Communications
Waters Corporation
brian_j_murphy@waters.com
+1 508-482-2614

Source: Waters Corporation

