

## Apex: For Trace Element Analysis At The Peak Of Performance.

Introducing Apex – the ICP-MS/AES sample introduction system that takes sensitivity, efficiency and precision to new heights!

Today's ICP-MS applications require unprecedented sensitivity, often requiring determination of parts per quadrillion or quintillion. Now you can keep pace with these changing standards using your existing instrumentation. The answer is Apex – a breakthrough in ICP sample introduction from CPI International!

Apex allows analysis of corrosive samples, organic solvents and high-TDS samples while delivering up to a 15-fold increase in raw sensitivity. With its o-ring-free PFA Teflon and quartz sample path, Apex generates lower BECs, resulting in the best signal-to-noise ratio you've ever seen on your instrument. All with nearly 100% sample transport efficiency!

## Tackle new applications with your existing instrumentation.

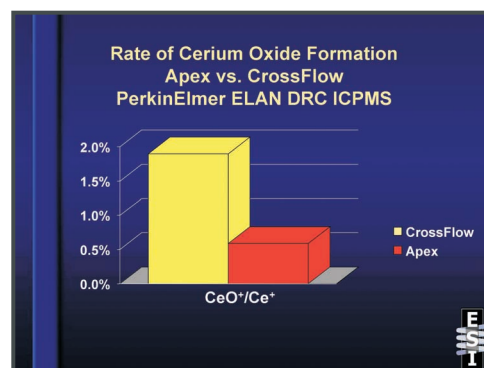
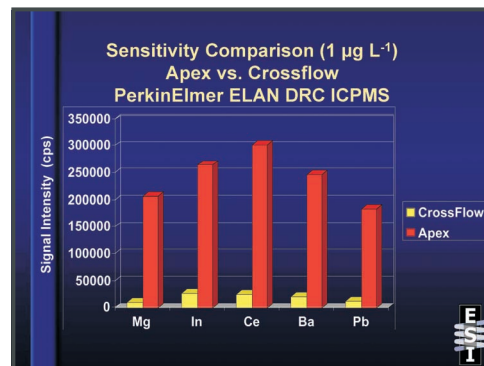
Apex is a fully-integrated inlet system that connects directly to the torch injector and incorporates CPI's revolutionary MicroFlow PFA nebulizer technology-- the same proven MicroFlow nebulizer that's now OEM equipment on instruments from Agilent, PerkinElmer, Seiko and other leading manufacturers. The Apex system allows for self-aspiration at rates from 20  $\mu\text{L}/\text{min}$  to 1000  $\mu\text{L}/\text{min}$ , and can be configured to pump 1 to 2 mL/min for OES applications. The standard Apex configuration is a MicroFlow PFA-ST nebulizer operating at 300  $\mu\text{L}/\text{min}$ . The uniform aerosol produced by the PFA-ST nebulizer is further conditioned to minimize interferences and stabilize the signal, while delivering analytes to the plasma in optimum usable form. Additionally, Apex's patented geometry and reduced memory effects produce faster rinse-out times and allows the inlet to be cleaned quickly and easily between applications.



Apex - The ICP-MS/AES High Sensitivity Inlet System

## Get The Apex Advantage.

- Patent-pending technology increases instrument sensitivity more than 10 times over the standard inlet, even for challenging elements such as Na, Al, K, Ca, Fe, Ni and Zn.
- Excellent transport efficiency; delivers nearly 100% of sample in usable form to the ICP.
- Utilizes proven MicroFlow PFA nebulizer technology for self-aspiration of 20  $\mu\text{L}/\text{min}$  to 1000  $\mu\text{L}/\text{min}$  with improved stability.
- Non-contaminating inlet; utilizes an o-ring-free PFA Teflon and quartz sample path to achieve maximum chemical resistance and minimize BEC's (also available with a complete PFA sample path for samples containing hydrofluoric acid).
- Patented geometry and reduced sample adhesion produce faster rinse-out times; cleans quickly and easily between applications without concentrated acids or solvents.
- Reduces oxide formation and interferences; ideal for isotope ratio analyses.
- Installs on popular ICP-MS/OES instruments in minutes; connects directly to torch injector.
- 12 volt operation for reliability and simplicity.
- Allows existing instrumentation to be leveraged into new applications with Apex's significantly improved sensitivity and reduced backgrounds.



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