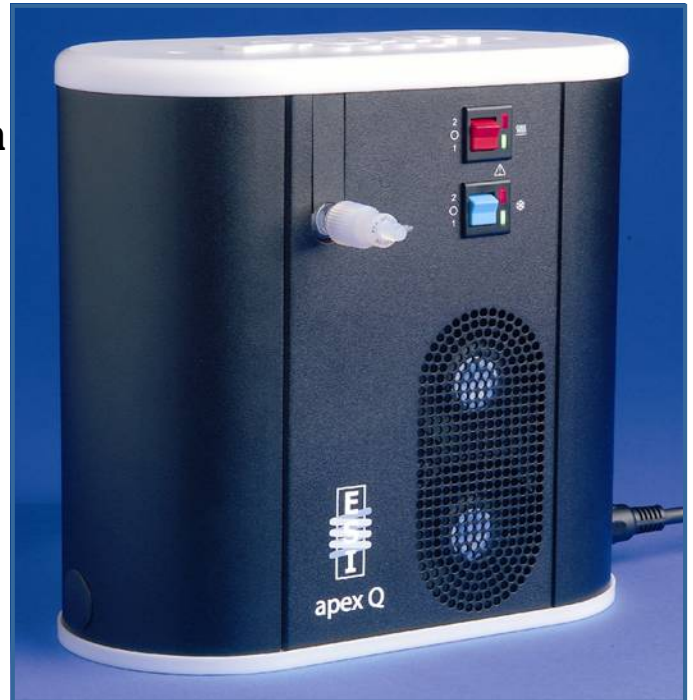


apex

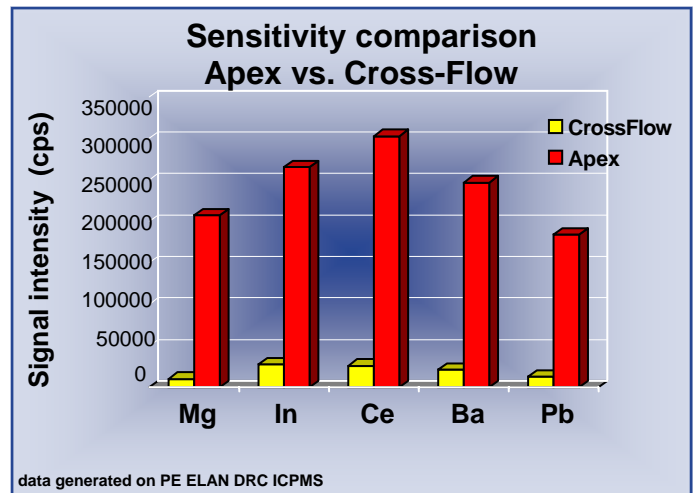
High Sensitivity Inlet System Enhances Sensitivity and Improves BECs for ICPMS and ICPAES

The **apex** is a compact, flexible, high-performance fully-integrated inlet system for ICP spectroscop systems.

- ▲ **Increase sensitivity**
by 3x to 15x, depending upon sample flow rate
- ▲ **ppq BECs**
 - self-aspirating PFA nebulizer
 - inert, o-ring-free flow path
- ▲ **Fast rinse out enables high sample throughput**
- ▲ **Couples with nebulizers having a wide range of liquid flow rated**
(10-1000 $\mu\text{L}/\text{min}$)
- ▲ **High Signal Stability**
- ▲ **Low memory effects**
- ▲ **Quartz or HF resistant**



apex Q: Standard version made of Quartz
apex HF: Version made of Teflon[®] PFA
apex IR: for Isotope ratios



Teflon[®] is a registered trademark of DuPont

AHF analysentechnik AG
Kohlplattenweg 18
D-72074 Tuebingen, Germany

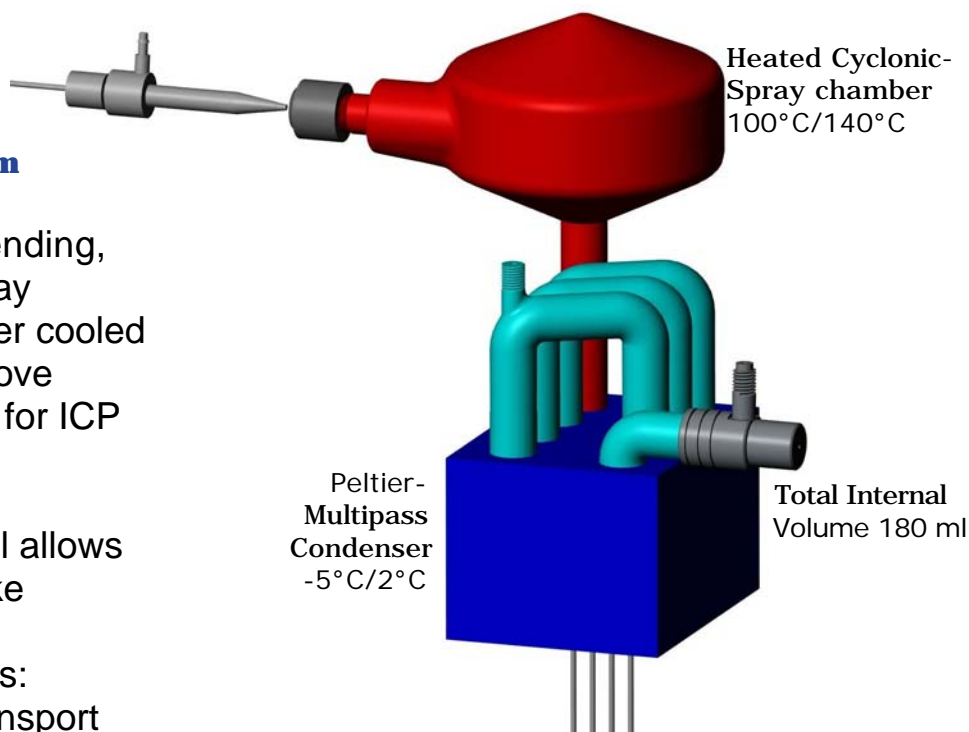
Tel: +49(0)7071-970901-0
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Email: info@ahf.de

apex

High Sensitivity Inlet System

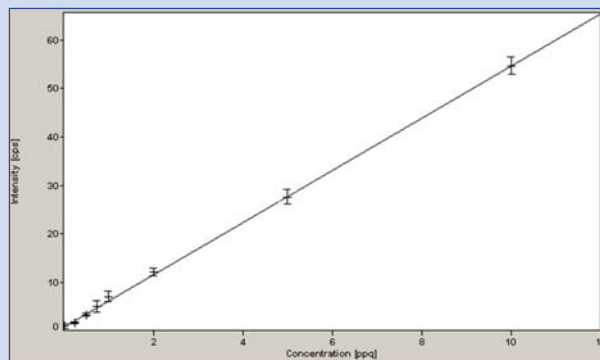
The apex uses a patent pending, high efficiency cyclonic spray chamber coupled to a Peltier cooled desolvation system to improve sample transport efficiency for ICP spectroscopy.

- ▲ Dual temperature control allows low & high sample uptake
- ▲ Low-flow PFA nebulizers: 10-100 $\mu\text{L}/\text{min}$ - high transport efficiency
- ▲ High-flow PFA nebulizers: 300-1000 $\mu\text{L}/\text{min}$ - maximum sensitivity
- ▲ O-ring free flow path reduces maintenance and eliminates a source of contamination.



Apex Internal Flow Diagram

Sub ppq calibration of $^{165}\text{Ho}^+$



Calibration window of an Element 2 ICP-MS with Apex Q

SPECIFICATIONS

Standard Nebulizer

PFA-100 $\mu\text{L}/\text{min}$
PFA-300 $\mu\text{L}/\text{min}$
Other nebulizers may be specified

Drain Pump

4-channel Peristaltic Pump
(included)

Operation environment

Temperature: 15 – 30°C
Humidity: 35 – 85% RH
Non-condensing

Power requirements

12V DC power supply (included)
100-240VAC, 3.2A (included)
Input delivery VDC, 10A to instrument

Dimensions

12.1cm B x 24.1cm L x 23cm H
(5.75"B x 9.5"L x 9"H)

Weight

3.2kg (7lbs)

Mechanical Performance

Heater Temperature Settings:
1 = 100°C; 2 = 140°C

Chiller Temperature Settings:
1 = -5°C; 2 = 2°C

Sample Uptake Rate:
10-1000 $\mu\text{L}/\text{min}$

Nebulizer Gas Flow Rate:
0.6—1.1 L/min

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