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ICP-MS-2000

Inductively Coupled Plasma Mass Spectrometer

Introduction：

- Inductively coupled plasma mass spectrometer (abbreviated ICP-MS), was developed in the 1980s, a new micro (10-6) trace (10-9) and ultra-trace (10-12) elemental analysis technology. Most of the periodic table of elements can be determined , very low detection limit , a very wide dynamic range , simple lines , less interference , high precision, fast speed , can provide isotopic analysis .
- This product is the first domestic industrial inductively coupled plasma mass spectrometer , the instrument of the performance reached the national standard , to meet the needs of user applications , cost-effective ; the products are mainly used in environmental , food , semiconductor, medical and physiological analysis , nuclear industrial fields.

Features：

- **Injection System:** open- injection system architecture, using nebulizer externally mounted , self-positioning, without adjustment .
- **Torch position adjustment system :** full control of the computer x, y, z torch accurate three-dimensional position , all adjustment parameters stored in the analysis.

  Plasma shielding technology : greatly improved sensitivity , improve the detection limit of the number of elements of low quality , to ppt level
- **Activities valves:** computer control, protection equipment vacuum , easy disassembly and cleaning sampling and skimmer cones work in the vacuum system .
- **Ion lens system :** with a high efficiency hexapole ion guide system , ion transmission efficiency to get the best quality in the whole range of ion focusing automatic tuning process , the vacuum chamber of the lens using asymmetric installation , easy disassembly positioning.
- **Detector :** ETP dual mode detector , without digital / analog switch .
- **The new vacuum chamber structure :** the cavity without any wires , each component asymmetric installation and plug-in installation .
- **Power protection systems:** power outage occurred in the accident , security itself off without damaging the instrument system .
- **Software:** Provides automatic control instruments and their accessories abilities, software encompasses a variety of analytical methods, including special isotope ratio determination and isotope dilution method .

Parameters

Quality Quantity Range :	2 ~ 255 amu
Measuring range :	≥108
Sensitivity :	Be≥2 × 106; In≥35 × 106; U≥30 × 106 units (cps / mg / L)
The detection limit :	Be≤10; In ≤2; U≤2 units (ng / L)
Resolution :	0.6 ~ 0.8 amu
SNR :	≥50 × 106
Background noise :	≤2 cps (full mass range)
Mass axis stability :	≤0.05 amu / 24 h
Stability RSD:	short-term ≤3%; long ≤4%
Oxide ions :	CeO + / Ce + ≤3%
Bivalent ions :	69Ba2 + / 138Ba + ≤3%
Isotope ratio :	(107Ag / 109Ag) ≤0.3%
Abundance sensitivity :	≤1 × 10-6 low quality end ; ≤5 × 10-7 high mass