

Heavy Metal on-line Analyzer

Anodic Stripping method applies to : As, Hg, Pb, Cd, Cu, Sb, Fe, Ni, Zn, Mn, Ag, Tl, Sulfide, Bromate, Hexavalent Chromium, etc.

Application Area : Surface water, Tap water, Electroplating, Chemicals, Smelting, Batteries, Leather.



Analysis Principle

This heavy metal analyzer adopts improved anodic dissolution method, using special electrodes and patented electrolytic cell, which can detect many kinds of metal elements and non-metallic elements. The analysis includes two steps:

1. Predeposition of the analyte in the analysis solution under certain conditions, so that the analyte is deposited on the working electrode in a reduced state: $Me^{n++} + ne \rightarrow Me$;
2. The object to be detected deposited on the working electrode is electrolyzed and dissolved in the electrolyte in an oxidized state: $Me \rightarrow Me^{n++} + ne$. The potential change on the working electrode in this process is recorded and detected.

Technical Parameters

Analysis Unit	Modular design, Combine freely and work independently. Max 6 units in a analyzer.
Analysis Principle	ASV
Measuring Range	Customizable
Detection limit	0.1µg/L
Repeatability	5%
Accuracy	±5%
Analysis duration	5-20min
Calibration	Automatic, Manual
Cycle time	Settable
Measuring cell	Patented cell
Working Electrode	Golden or porous electrode
Reference Electrode	Ag/AgCl/Sat. KCl
Auxiliary Electrode	Pt(Maintenance free)

Control system	Touch screen, English/Chinese interface
Remote control	Start/ Stop/ Calibration/ Activation/ Filling
Start-on mode	Clock, Delay, External trigger
Reagents replacement	3Months
Maintenance Cycle time	2Months
Output	4-20mA, RS232/RS485
Power supply	198~242VAC, 50 ± 0.1Hz
Dimension	600mm(W)*550mm(D)*1740mm(H)
Weight	130kg
Standard Check	Automatic
Pretreatment unit	Optional unit. Customized design. Automatic flush the tubes, Filter particals and suspended substance. Replaceable filter.