

# **AFS310** Atomic Fluorescence Spectrometer

## **Arsenic And Mercury Detection Experts**

#### Introduction

The dual channel atomic fluorescence spectrometer is a carefully crafted precision analytical instrument. Widely used for trace and ultra trace analysis of 11 elements such as mercury (Hg),arsenic(As),antimony(Sb),bismuth (Bi),selenium (Se), tellurium(Te),cadmium (Cd),germanium (Ge),lead (Pb),tin (Sn), zinc (Zn),etc.,with compact volume,stable performance, and simple operation.

### **Performance advantages**

#### • Injection system

Adopting a dual peristaltic pump intermittent flow injection system, the peristaltic pump injection device has s table injection, simple operation, convenient maintenance and use, and long service life.

#### • Real time observation of flames

The instrument is equipped with a real-time flame observation device, eliminating the old-fashioned design of flame observation windows, making flame observation automated. During the measurement process, the flame status can be observed without operating the instrument, reducing the probability of introducing external interference and greatly facilitating user use.

#### Gas flow control system

The instrument adopts a fully automatic gas flow control system, which is fast and stable in gas flow control. At the same time, it has an abnormal diagnosis function. When the instrument is not working, it automatically cuts off the gas source to save gas consumption. Adopting a dual mass flow controller gas flow control system, the control accuracy can reach 1ml/min.

#### Intelligent high-performance hollow cathode lamp

The instrument light source equipment is an intelligent high-performance hollow cathode lamp developed by our company. The instrument can automatically identify the type of element lamp, factory number, record the working life of the light source, and provide instrument working conditions.







#### • Dual channel design

It can perform simultaneous analysis of two elements and has a single channel enhancement function, significantly improving testing sensitivity and element detection limit.

#### • Single point standard solution production standard curve

To create a standard curve, only the highest concentration point standard solution needs to be prepared, which greatly saves the preparation time of standard samples and has functions such as automatic dilution of high concentration samples and automatic cleaning of pipelines.

#### • Efficient secondary gas-liquid separation

Effectively perform gas-liquid separation to minimize the impact of water vapor on test results.

#### Operating software

Switching between Chinese and English Windows interface operating system, fully automatic qualitative and quantitative analysis, automatic calculation of sample content, automatic generation of test reports, and other functions.

## **Application field**

Atomic fluorescence spectrometer has a wide range of applications, including environmental testing, hygiene and epidemic prevention, drug testing, urban drainage testing, cosmetic testing, soil, feed and fertilizer testing, clinical medical sample testing, agricultural product testing, geological survey, metallurgical sample testing, food hygiene testing, teaching and research, etc.













## **Specifications**

<b>Detection element range</b>	Hg. As. Sb. Bi. Se. Te. Cd. Ge. Pb. Sn. Zn Eleven chemical elements, etc
Element detection limit (D.L)	$\begin{array}{lll} Hg \cdot As \cdot Sb \cdot Bi \cdot Se \cdot Te \cdot Pb \cdot Sn \leq 0.01 \mu g/L; \\ Hg(Cold\ mercury) \cdot Cd \leq 0.001 \mu g/L; Zn \leq 1.0 \mu g/L; Ge \leq 0.05 \mu g/L. \end{array}$
Precision(RSD)	RSD≤1%
Linear range	Greater than three orders of magnitude