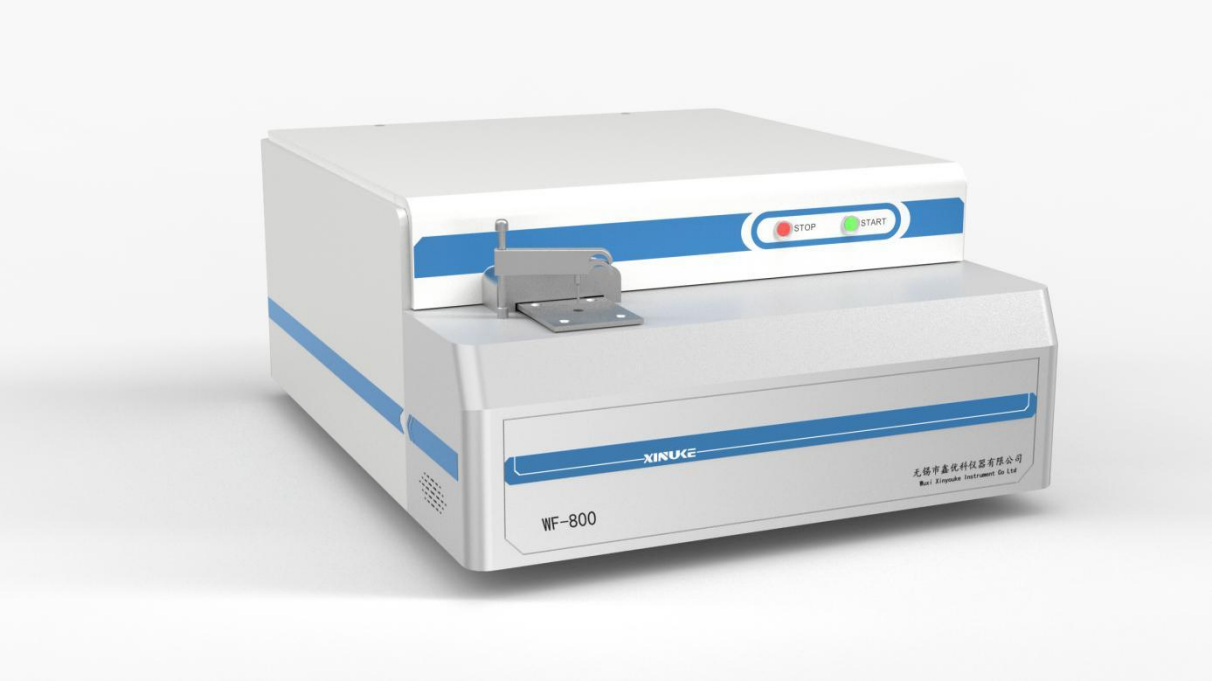
WF-800 Direct-reading spectrometer



➢ Product Overview

WF-800 Direct-Reading Spectrometer employs the most advanced, internationally recognised second-generation CCD spectrometer technology. It finds extensive application in production process control, furnace-side analysis, and central laboratory product inspection across metallurgy, foundry, machinery, automotive manufacturing, aerospace, armaments, and metal processing sectors. Featuring a compact form factor, high integration, excellent detection accuracy, stable performance, low operating costs, and straightforward operation and maintenance, it represents an ideal choice for controlling product quality.

➢ Product Features

1、Full-spectrum spectrometer technology, replacing traditional photomultiplier tube analogue technology, with no channel limitations;

2、High-end STM processor with high-speed synchronous data acquisition and processing, completing a single test in 20 seconds. Analysing the same sample at different time points yields excellent data consistency ;

3、The HEPS digital spark light source significantly enhances the discharge stability of the light source system, accommodating the analytical requirements of diverse materials

4、The arc flame generated during excitation is directly guided into the vacuum optical chamber via a lens, achieving a direct optical path and eliminating optical energy loss;

5、Core components sourced from renowned suppliers ensure the instrument's stable and reliable performance;

5、The specialised optical chamber design features a compact cavity, thereby reducing the time required for vacuum pumping;

6、Specially designed solid-state adsorption trap, providing effective protection for optical systems with long-term maintenance-free operation;

7、Changes or additions to channels within the base unit incur no additional cost. Extending the curve or adding a base unit requires no hardware modification;

8、Low-energy design, minimal power consumption, low argon gas usage。

- **Product Specifications**

Full Spectrum Technology	**Covering the full range of elemental analysis**
Test substrate	Iron-based, aluminium-based, copper-based, zinc-based, nickel-based, magnesium-based, lead-based, cobalt-based, tin-based, titanium-based, etc.
Optical structure	Parens-Runge structure
Light chamber temperature	34℃±0.1℃（automatic control）
Light chamber type	Vacuum chamber
Vacuum level	6-16Pa（automatic control）
Light source type	HEPS Digital Solid-State Light Source
Excitation frequency	100-1000Hz
Excitation current	1-400A
Excitation voltage	>8000V
Argon purity	99.999%
Argon pressure	atmospheric pressure≥1MPa
Argon flow rate	5 litres per minute during operation; no flow required during standby.

Data Acquisition System	
Processor	High-end STM processor, high-speed synchronous data acquisition and processing
Interface	Ethernet Data Transmission Based on DM9000A
Power Supply and Environmental Requirements	
Input	220VAC 50Hz
Power	700W output, 40W standby
Operating temperature	10-30℃（Recommended23℃±2℃）
Operating humidity	20-80%