

海 昱 科

Product Specification

实 业 有 限 公 司



FOUNDRY-MASTER PRO S D B 5 2 1



I. SDB521 introduction

SDB 521 international standard design and manufacturing technology, Adopt full digital technology, Synchronize with international spectrometer technology, the design of vacuum optical chamber and fully digital excitation light source are adopted. Leading CCD detector. High speed data readout system, the instrument has very high performance, very low detection line, long-term stability and repeatability. It is one of the main equipment for the research and development of quality control material grade identification material in metal manufacturing processing industry and metal smelting industry.

II. Scope of supply

2.1 supply list

NO	Accessory Name	Unit	Amount	Remarks
1	SDB521 FOUNDRY-MASTER PRO	SET	1	
	quality certificate, specification, warranty			
2	card	Pieces	1	
3	pressure reducing valve	Pieces	1	
4	Copper tubes	Meter	3	
5	Union nut	Pieces	2	
6	hex wrench	Pieces	1	
7	Tool box	Pieces	1	
8	PTFE Tape	Pieces	1	
9	Electrode brush	Pieces	2	
10	A gauge	Pieces	1	
11	Spark table seal ring	Pieces	3	
12	Wooden case	Pieces	1	

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13	standard sample	Pieces	1	
14	Ground wire	Pieces	1	
15	Serial port cable	Pieces	1	
16	·	Pieces	1	
10	Voltage stabilizing power cord component	Pieces	1	
17	Printer	SET	1	
18	Fuse	Pieces	4	
19	filter assembly	Pieces	1	
20	T-type wrenches	Pieces	1	

Specia I statement: in case of change of production and supplier of the above instrument parts and spare parts caused by technological progress, product upgrade, market change and other reasons, the actual shipment shall prevail.

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III. Technical configuration

3.1 Specifications and technical parameters

Items	Details
Detection of substrate	Fe/Al/Cu /Zn
detection time	(15-40) s
optical system	Par-runguelan circular full spectrum vacuum optical system
wavelength coverage	139∼800nm
Focal length	402mm
detector	High performance CCD array
electrode	Tungsten jet electrode
grating line	Holographic concave grating: 2400gr/mm
Analysis gap	Sample stand analysis gap: 2.5mm
Operation Temperature	(15∼30)℃
Operating humidity	20%~50%
Storage Temperature	(0∼45)℃
Argon purity requirements	99.999%
Vacuum range of light	2-10Pa
Argon flow rates	Excited flow approximate 6L/min, Maintenance flow 0.1L/min
Maximum excitation power	1000VA
Lamp Specifications	New adjustable digital light source, high energy precombustion technology(HEPS)
discharge frequency	100-1000 Hz
discharge current	Maximum 100A
unit aperture	12mm
vacuum system	Vacuum software automatically control and monitor
Woek power	220V AC, (50±1) Hz, Single-phase power supply with protective grounding

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Items	Details
Overall Dimension	870*550*420
Net Weight	70kg(Vacuum system not included)

3.2 Optical system

- Full spectrum optical system with Par-Runge structure.
- Maximum wavelength range (139~800)nm.
- Multiple high-performance CCD detectors.
- Integrated optical chamber processing molding, dynamic luoyuan installation, resistance to environmental temperature changes.
- Vacuum light chamber design, ensure that C, S, P and N can achieve the best performance.
- Light room constant temperature control, constant temperature of 38.
- Direct optical technology and lens MgF2 material, ensure the best energy of C S P N uv wavelength.

3.3 Sample excitation unit

- Integrated gas path injection electrode technology.
- The optimized argon gas path design ensures the effective cooling of the excitation table and the metal dust generated during the excitation process enters the filter effectively. The sample excitation is more stable, and the intake of metal dust is greatly reduced, which is conducive to the protection of the health and safety of operators.
- The smaller excitation space makes argon gas consumption less.
- Easy to use sample fixture.
- With self-purging function of the electrode, it makes the electrode life longer and easier to clean the electrode.
- 12 mm diameter excitation hole is better for sample analysis
- Open sample excitation table can be used for the analysis of various sizes and more shapes of samples (including wire).
- The design of SLR lens device makes it convenient for the general personnel to maintain the excitation station and clean the lens.

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3.4 Excitation light source

- New adjustable digital light source with the highest frequency up to 1000Hz.
- High Energy prediction technology (HEPS).
- Optimized design of control and power circuit, perfect excitation safety protection function.

Discharge current: maximum 100 A.

3.5 Data acquisition system

- High-performance ARM data processor, with ultra-high speed data acquisition and control functions.
- High performance CCD solid state detection technology, the spectrum line in the band full spectrum reception.
- External computer (user option).
- FPGA, High-speed data communication technology, powerful data reading function, detection data overall reading time is short.

3.6 Analysis software

- Based on Windows system multi-language CCD full spectrum graphic analysis software, convenient and practical.
- Comprehensive management of the control of the entire measurement process and provide users with powerful data processing and test report output capabilities.
- The instrument can be configured with multiple factory calibration curves and more material analysis and advanced solutions.
- The software realizes full spectrum detection algorithm of intelligent link interference link dark current background and noise, and improves the analysis ability of the instrument.
- Complete automatic system diagnosis function.
- Perfect database management function, can easily query summary data.
- Intelligent correction algorithm ensures the stability and reliability of the instrument.
- Complete spectral line information and interference deduction algorithm to ensure more accurate instrument analysis.
- Adapt to the latest Windows operating system.

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IV. Product pictures

