

DF-200 OES



Introduction

- 1) The DF-200 OES is mainly used for the analysis of multiple metal matrix composites, including that of Nitrogen with super low content with the help of maximum 80 optical channels.
- 2) Digital-controlled light source with customizable excitation parameters is applied to different metals. The resultant analysis is more stable and can meet the analytical demand for trace elements and elements with super-high content.
- 3) Brand-new standardized module design; highly-integrated circuit; independent

charging system;

- 4) All exit slits are on one belt with easy addition if needed.
- 5) Parts with high quality: core parts from the world well-known manufacturers.
- 6) Self-protection for optical system is in place through a built-in thermostat system.
- 7) Multi-elemental analysis is available for Fe, Al, Cu, Ni, Pb, Zn, Mg, Co, Sn, Ti.
- 8) Oil back-streaming prevention is achieved by creating a vacuum environment in the optical chamber, making no vaporized oil come through. A computer-managed vacuum pump enables its working time less than 5% of the total DF-170 working time, largely extending the pump life.
- 9) Highly-precise thermostatic system can keep the range of temperature fluctuation between -0.2°C and +0.2°C.
- 10) Automatic plotting technology is applied to optical calibration to position smartly the entrance slit.
- 11) 10-20s of analytical process
- 12) User-friendly operational software with multiple language versions under WINDOWS operating system.
- 13) The multipurpose operational software can meet your various needs by displaying elemental data in a flexible way and supporting various printing formats.
- 14) SSA can make happen the analysis of acid-soluble and acid-insoluble substances.

Specifications

optical system	structure	Paschen-Runge
	focal length	750mm
	low-noise holographic original blaze grating	3600 ruled lines/mm
	wavelength range	120-800nm
	dispersive power	first order 0.37nm/mm
	vacuum optical chamber with auto thermostatic system	30±0.2°C vacuum range: 1.2-2.5 Pa
light source system	light source	multifrequency digital controlled light source SSA
	discharge current	10-400A
	excitation frequency	100-1000Hz
	discharge duration	10-10000µs
spark stand	excitation chamber with minimum argon use	
	easily-changeable foundation(lid)	
	mobile hold-down pin	
data collection and control	dynamic integration technology	

system	highly-sensitive PMT detector	
	high-speed 16-bit A/D conversion	
	real-time control on temperature and vacuum state	
	SSA	
	ethernet, serial port, USB	
others	matrices	Fe, Cu, Al, Ni, Zn, Mg, Pb, Co, Sn, Ti, etc.
	application	trace, micro and macro elements, N element pure metals
	channel configuration	6 matrices and 80 channels at most
	dimensions(mm)	1388*910*1210
	environmental requirement	T 10°C-35°C H 20%-80%
	weight	400Kg (net weight), 470Kg (gross weight)
	V/F	AC220V±10%/50Hz
	power	Max 1500VA, standby 300VA
	argon	purity≥99.994% press≥0.3MPa