书豪仪器
SOOHOW INSTRUMENT

INNOVATE CCD PO100

Kunshan Soohow Instrument Technology Co.,Ltd

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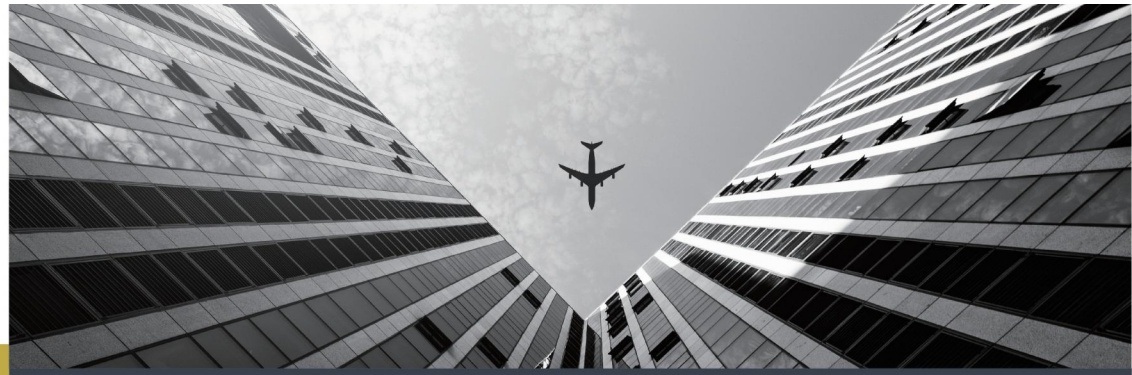
Company profile



Kunshan Soohow Instrument Technology Co., LTD. is a state-level high-tech enterprise leading in the research and development, production and sales of laboratory instruments, optical analytical instruments and their software.

Soohow Instrument was established in 2012, covering an area of about 12,300 square meters, with a R&D center of about 3,000 square meters, intelligent production workshop, and in 2022, suzhou Engineering technology R&D Center was established.

Since its establishment, Soohow instrument has always adhered to scientific and technological innovation, and has passed jiangsu Provincial enterprise credit management standards, Jiangsu Provincial intellectual property standards, ISO9001 quality management system certification, ISO14001 environmental management system certification, and won the national high-tech enterprise, Kunshan CITY RESEARCH and development institutions and other honors. The company has 47 intellectual property rights, including 4 invention patents.

The company will, as always, adhere to the independent innovation of high-end scientific analysis instruments, achieve the curve overtaking in the segmented field, achieve the milestone process of replacing imported equipment, avoid being "stuck in the neck" in key technologies, so that the national brand instruments have more "places to use".

Enterprise honor

PO100 oil analysis spectrometer is a rotating graphite disc electrode atomic emission spectrometer designed for oil analysis based on the principle of atomic emission spectroscopy. It is mainly composed of high performance arc excitation light source system rotating disc and rod electrode excitation device system, Pashen-Runge holographic concave diffraction grating splitting system, high precision CCD electronic measurement and control system computer analysis software system. It is widely used in industrial plants commercial oil laboratories, on-site or trailer labs, as a proven means of precisely determining elemental composition in lubricating oil, coolant, light or heavy fuels, grease, and process water. It is also a key component of on-site (point of care) oil analysis systems in addition to production, QC, race team support and tribology laboratories.
PO100 oil analysis spectrometer products have a strong structure, stable optical system, 30 seconds time can complete up to 32 elements of PPM detection, can quickly analyze the wear metal, pollutants and additives in lubricating oil. Simple operation, no sample preparation, no solvent, no auxiliary equipment or gas required. Fully meet ASTM D6595, NB\SH\T 0865 and ASTM D6728 standards. High detection accuracy, suitable for all kinds of oil analysis laboratory, using the original imported high purity graphite electrode, the use of high precision CCD detector, detection limit up to sub-ppm level of excited arc energy can achieve the suspension particles and dissolved elements within 10 microns in the oil sample complete plasma excitation, suitable for various industrial oil sample testing requirements.

Performance characteristics

1. Patented digital arc light source, solid-state source excitation, to ensure constant current source frequency output, no need to periodically clean or clean excitation source error
2. Adopt high resolution solid state CCD detector optical system, single pixel 3648 bits, pixel size 8*200μm, higher pixel, can detect more effective spectral intensity
3. Spectral analysis application software based on Windows system can run on Windows7, Windows10 and other systems, integrating instrument control, data management, qualitative and quantitative analysis functions
4. Single desktop instrument, computer system is built in the instrument, the machine size is small, easy to transport
5. Short heat engine time, high reliability, suitable for ship environment
6. Accurately identify elements in a wide variety of substances without sample preparation or dilution.
7. Built-in scanning gun, Bluetooth communication module and 485 communication interface, no additional configuration required
8. Built-in electrode grinding device, easy to operate

Technical parameters

- Power supply: AC220V+ 10%, 50/60Hz
- Test time: 30 seconds
- Optical structure: Paschen-Runge structure, Roland circle device
- Optical focal length :500mm
- Spectrum line range :190~800nm
- Detector: CCD
- Detection limit: less than 1ppm
- Size: 770mm*360mm*540mm (length * width * height)
- Instrument weight: 78 kg
- Detection elements: conventional 24 elements, can be extended to 32
- Measuring range: 0 ~ 6000ppm

APPLICATION FIELDS:

Military, army, aviation, railway, ocean fleet, mining, oil refinery, power plant, oil recovery, manufacturing plant, commercial laboratory, racing team and any other use of lubricating oil, and high precision requirements of the industry, extensible determination objects include: antifreeze, water and fuel oil, hydraulic oil, gear oil

Number	Element	Symbol	Range of detection
1	Aluminum	Al	0-1000
2	Barium	Ba	0-6000
3	Boron	B	0-1000
4	Calcium	Ca	0-6000
5	Cadmium	Cd	0-1000
6	Chromium	Cr	0-1000
7	Copper	Cu	0-1000
8	Lead	Pb	0-1000
9	Magnesium	Mg	0-6000
10	Manganese	Mn	0-1000
11	Molybdenum	Mo	0-1000
12	Nickel	Ni	0-1000
13	Phosphorus	P	0-6000
14	Silicon	Si	0-1000
15	Silver	Ag	0-1000
16	Sodium	Na	0-1000
17	Stannum	Sn	0-1000
18	Titanium	Ti	0-1000
19	Vanadium	V	0-1000
20	Zinc	Zn	0-6000
21	Iron	Fe	0-1000
22	Potassium	K	0-1000
23	Lithium	Li	0-1000
24	Stibium	Sb	0-1000