

LWT-2A Benchtop Oil Particle Counter



LWT-2A oil particle counter is based on GB/T 18854-2002 (ISO11171-1999) and other standards. It is developed by adopting the counting principle of photoresist (shading) method, which is in full compliance with the corresponding national military standard, national standard and international standard. It can provide fast, accurate, reliable and repeatable test results and complete pollution monitoring and analysis report, which is applicable to the detection of particle contamination of hydraulic oil, lubricating oil, anti-fuel oil, insulating oil and turbine oil. It can be widely used in aviation, aerospace, electric power, petroleum, chemical industry, transport, harbour, metallurgy, machinery, automobile manufacturing and other fields.

Main features

- Adopts the counting principle of the photoresist (shading) method developed by the International Hydraulic Standards Committee
- High-precision laser sensor with wide testing range, stable performance, low noise and high resolution.
- Adopt high pressure syringe pump sampling method, can set the sampling volume, stable sampling speed, high sampling accuracy.
- Combination of positive and negative pressure sampling system, sample degassing can be achieved, suitable for different viscosity of the test product testing.
- Built-in pressure sensor, you can directly set the pressure value, and automatically determine the air pressure in the chamber to ensure safety.
- Built-in air purification system in the host to ensure that the test is not contaminated, and a high degree of integration to avoid secondary contamination caused by the air tightness of the air pump and test system connection
- Built-in multiple calibration curves, compatible with all common domestic and foreign standards for calibration.
- Built-in GJB-420A, GJB-420B, NAS1638, GB/T14039, ISO4406, SAE4059cpc, SAE4059F, SAE749D, GOCT17216, QC/T29104, JB/T9737, DLT432, HH005-2018, and other commonly used standards.
- Support customised standard testing, naming and rating of customised

standards.

- According to customer requirements, up to 64 testing channels can be set up at the same time.
- Built-in data analysis system, a test can give all the standards of the test data and pollution levels
- Cleaning detection, pre-set target cleaning requirements particle concentration, cleaning process real-time display of the cleaning status, and automatically stop when the requirements are met.
- Built-in Viscosity, Moisture and Temperature Sensor Module provides viscosity, moisture content saturation and ppm values and temperature reference values while accurately measuring particle distribution (optional).
- Particle sizes can be set at will, with nearly 10,000 built-in particle sizes for easy granulometry analysis.
- A variety of sampling containers such as standard sampling bottles or sampling cups can be used to meet the testing requirements of different industries
- Full-featured 7-inch colour touch screen operation, folding key design, support for Chinese and English dual interface, easy to operate.
- Manual, automatic, half-count calibration is available
- With RS232 interface, support 485 communication, can be connected to the computer or laboratory platform for data processing.
- With massive data storage, printing function, and support for U-disk storage, the machine has stored data can be exported to U-disk
- With more than 5 account settings, and the operator rights to set up separate

Technical parameters

- Light source: Semiconductor laser
- Particle size range: 0.8 μ m~600 μ m (calibrated according to ACFTD calibration 1~100 μ m or ISO MTD calibration 4~70 μ m(c))
- Detection channels: 8~64 channels optional (factory default 64), any set particle size size
- Sensitivity: 0.8 μ m (ISO4402) or 3 μ m (c) (GB/T18854, ISO11171)
- Resolution: <10% (GB/T18854, ISO11171)
- Repeatability: RSD<2%
- Sample detection viscosity: \leq 650cSt (viscosity is too large can be combined

with heating or dilution method detection)

- Sampling volume: 0.2~6000mL, interval 0.1mL
- Sampling accuracy: better than $\pm 0.5\%$
- Sampling speed: 5 ~80mL/min
- Barometric chamber: Positive and negative barometric chamber devices, to achieve sample degassing and high viscosity sample detection
- Maximum vacuum of barometric chamber: -0.08Mpa
- Maximum positive pressure of air pressure chamber: 0.8 Mpa
- Maximum particle concentration: 12000~40000 particles/mL
- Temperature (paid optional): collection range: 1 ~ 100 °C; collection accuracy: 1 °C.
- Water activity (paid optional): collection range: 1 ~ 100% RH; collection accuracy: 1% RH
- Water content (paid optional): collection range: 1 ~ 360ppm; collection accuracy: 1ppm
- Testing sample temperature: 0 °C ~ 80 °C
- Working temperature: -20 °C ~ 60 °C
- Storage temperature: -30 °C ~ 80 °C
- Power supply: 110~245V AC, 50/60Hz, 70W
- Main unit size: 340mm×410mm×650mm
- Air pump size: 180mm×160mm×220mm
- Net weight of main unit: ≥23kg
- Net weight of air pump: ≥5.5kg

Configuration list

NO	Name	Norm	Unit	Amount
1	LWT-2A Oil Particle Counter		Pcs	1
2	Pneumatic Pump		Pcs	1
3	Positive Pressure Tube	red	Pcs	1
4	Vacuum Tube	blue	Pcs	1
5	Air Pump Power Cord		Pcs	1
6	Power Cord		Pcs	1
7	Data Cable		Pcs	1
8	Drain Tube		Pcs	2
9	Magnetic stir bar		Pcs	2
10	Insurance tubing	2A	Pcs	1
11	Thermal printout		Pcs	1
12	Seal ring		Pcs	1
13	Specialised tools		Pcs	1
14	Instruction booklet		Pcs	1
15	Certificate of Compliance		Pcs	1
16	Calibration certificate		Pcs	1
17	USB memory stick 8G		Pcs	1
18	Product manual		Pcs	1
19	Warranty		Pcs	1
20	Instrument installation and training acceptance form		Pcs	1
21	Certificate of Conformity		Pcs	1
22	Factory calibration certificate		Pcs	1
23	Packing list		pcs	1
Note				

After-sales service commitment

Based on the principles of equality, friendship and mutual respect. Our company is willing to make the following commitments for the purchase of our products and provide the following services:

I. Installation, commissioning and acceptance of the acceptance of the instrument in the demand side of the premises, the goods arrive at the designated location after receiving the installation notice within 3 working days, the supply side to the demand side of the site for installation, commissioning and acceptance of the work. After the installation and acceptance, the supplier's engineer will carry out the practical use and operation training for the personnel of the demand side.

After installation, commissioning and acceptance, the supplier's engineers will train the personnel of the demand side on the actual use and operation of the instrument to ensure that the operators of the demand side can independently carry out the operation of the instrument, maintenance, simple troubleshooting, experimental data processing.

Warranty period:

Calculated from the date of acceptance, our company on the product of the whole machine free of charge warranty 12 months; on the core components (laser sensor) free of charge warranty 24 months;

Outside the warranty period is responsible for lifelong maintenance.

Third, technical services:

During the warranty period, any equipment failure caused by the quality of the equipment (instrument) itself, the supplier is responsible for free repair or replacement parts, the cost of which is borne by the supplier. Normal instrument consumables are not included in the warranty. Outside the warranty period, the supplier shall guarantee the long-term provision of spare parts and high-quality maintenance services to protect the production needs of the demander.

The supplier shall guarantee to provide spare parts and high-quality maintenance service for a long time outside the warranty period, so as to guarantee the production demand of the demander.

The supplier is responsible for the lifelong maintenance of the equipment (instrument), when the equipment (instrument) fails, the supplier will make a reply within 24 hours after receiving the notice of maintenance; if it is necessary to send someone to do the maintenance, the maintenance personnel will arrive at the site of the demander within 3 working days and solve the problem. If the instrument can not be returned to normal use within 10 working days, the supplier will reply within 24 hours after receiving the maintenance notice.

If the instrument can not be returned to normal use within 10 working days, our company will provide one instrument of the same kind and model for the user, and exchange the original instrument back after it is normal.

The supplier will visit the demand side from time to time to understand the demand side of the use of the instrument, and in the application of communication, to ensure that the instrument is used normally for a long time. During the warranty period or outside the warranty period of the equipment (instrument), the supplier can provide lifelong preferential technical support for the equipment (instrument). The technical maintenance personnel of the supplier shall visit the user at least twice a year (the form can be in the form of

The technical maintenance personnel of the supplier shall visit the user at least twice a year (the form can be taken on site, by phone, etc.).

The supplier shall provide the latest information on the instrument and its application to the user in time, and help the user to improve and upgrade the software related to the instrument, so as to keep the user in the advanced level of the instrument and technical information.

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Particle Counter Specialist Supplier