Multiplelabs
Turnkey Laboratories Solutions

Analytical®
Technologies Limited

SIZER-3002

Wet and Dry Laser Particle Size Analyzer

EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

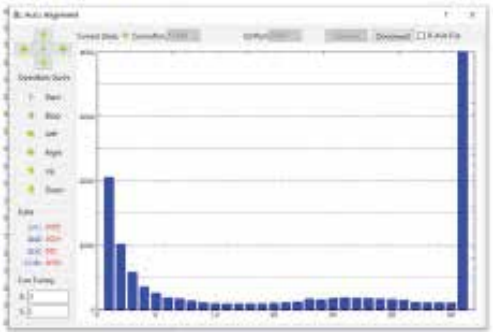
www.analyticalgroup.net

Sizer- 3002 is intelligent full automatic laser particle size analyzer, adopt the most advanced International MIE scatter-ing principle and Fraunhofer diffraction principle, which is integrated model of wet and dry dispersion system,High sen-sitive and High-resolution photoelectric probe system and imported Canon lens optical path ensure the good accuracy and repeatability of particle size distribution,It's widely used in industrial production quality control departments and re-search institutions

Advantages:

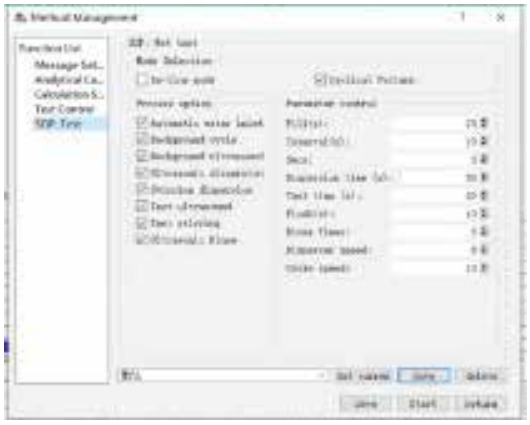
Automatic Optical path alignment System:

which is composed of precise four phase hybrid stepper motor, Its inching precision is reach to micron level, make optimum optical paths to ensure accurate and stable test.



Automatic sample dispersion system

The modular design of dry and wet dispersion shortens the circulation pipeline and prevents the precipitation of large particles. It is not only conducive to the uniform dispersion of samples, but also reduces maintenance costs and is conducive to the cleaning and maintenance of equipment.

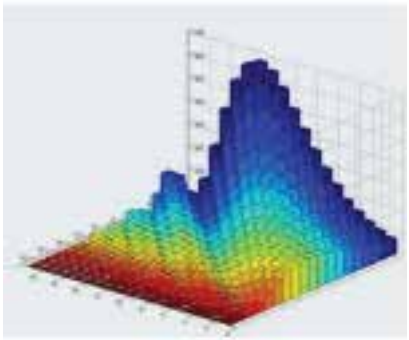


Wet and dry, unique separated dispersion module

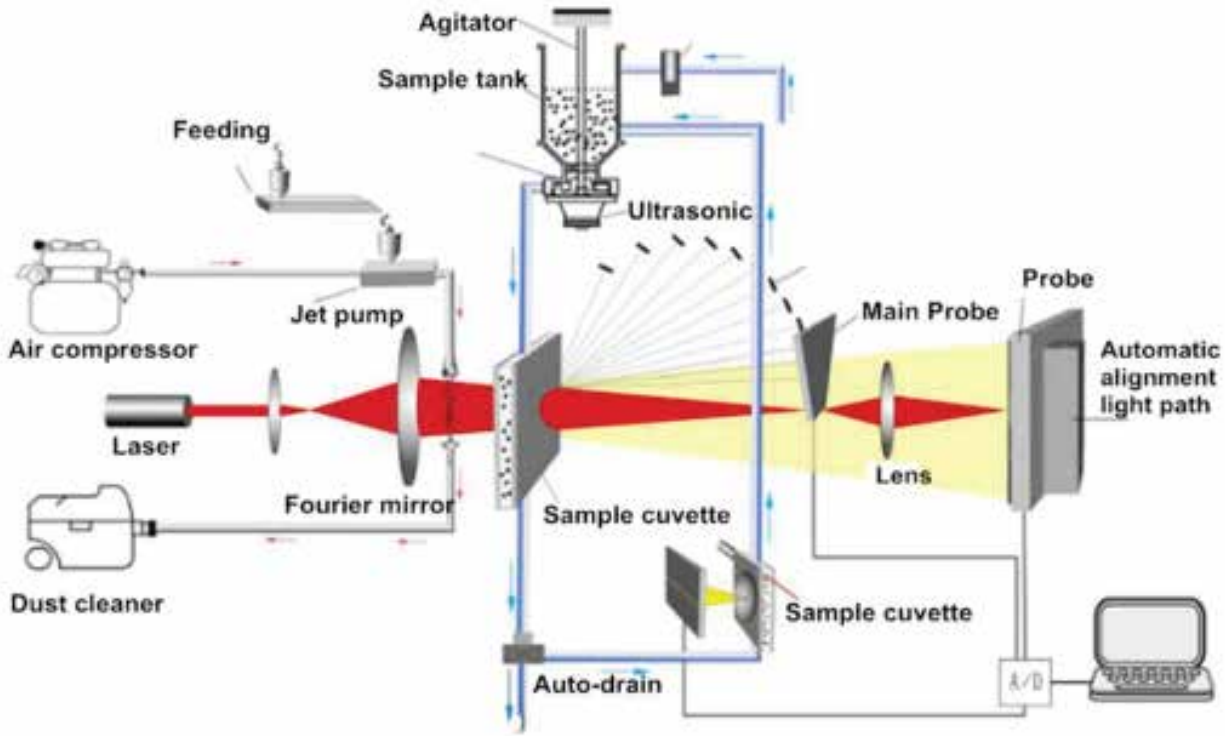
The instrument adopts a modular design for automatic dry and wet dispersion.Customers can freely assemble it according to the test requirements of sample characteristics. It is simple, convenient and fast.

Instrument Software:

The unique unconstrained free fitting technology collects scattering data during the measurement process and has the ability to automatically analyze multi-modal particle groups. It is not constrained by any function. Particles below 2μm are tested in 12 particle size grades with extremely high physical resolution



Test principle:



Application:

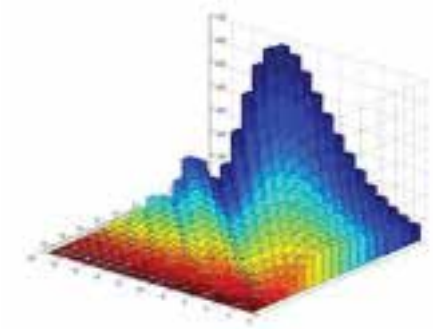
Instrument Software:

The unique unconstrained free fitting technology collects scattering data during the measurement process and has the ability to automatically analyze multi-modal particle groups. It is not constrained by any function. Particles below 2μm are tested in 12 particle size grades with extremely high physical resolution

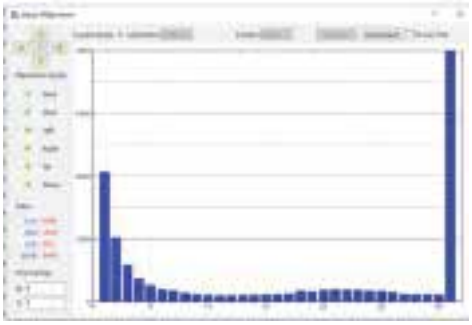
Long service time

Laser particle size analyzer,as an analysis instrument,it doesn't have consumable parts excpe for the stirring parts, it has no transmission parts and no wearing parts; high performance laser, with a long service time of more than 25000 hours, high sensitive photodetectors is a core part,it will not be easy damaged if operate normally;the photodetector array is a key part, as long as it is used properly, it will not be automatically dam-aged. Therefore, users do not have to worry about the service time of winner instruments at all.

1.Unconstrained free fitting technology can truly reflect the particle distribution

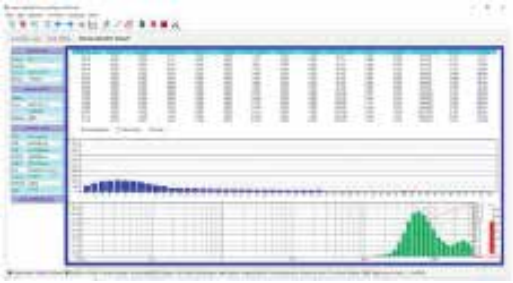


2.Accurate and convenient automatic alignment function.



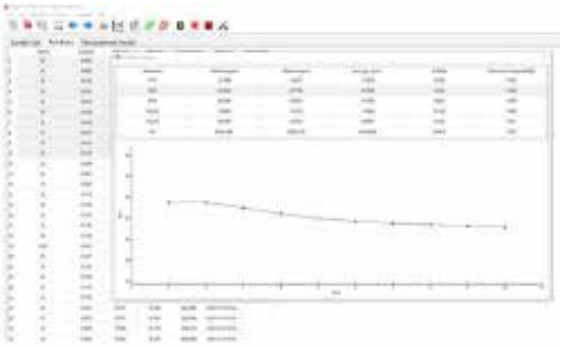
3. Different refractive index models can be established to make the measurement results more accurate and reliable

4. Automatically memorize the last sample test information and display the current test process in real time.Freely customize the display mode and switch between energy spectrum and data display.

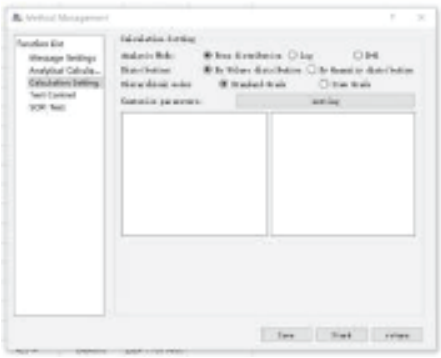


5.User-defined analysis parameters,calculating the percentage according to the particle size,calculating the particle size according to the percentage,or calculating the percentage according to the particle size range, so as to meet the characterization methods of particle size testing in different industries

6.Statistical comparative analysis can be carried out for multiple test results, and the difference between different batches of samples,samples before and after processing, and test results at different times can be clearly compared, which has strong practical significance for the quality control of industrial raw materials.



7. Multiple distribution modes: free distribution (closer to the real data of the sample), Rosin-Ramier distribution, logarithmic normal distribution and original data conversion mode (according to the real and accurate measurement of abrasive and flake particles)



8. English language interfaces are supported, and other language interfaces can also be embedded according to user require-ments.Multiple formats can be set for file printing and exporting,and BMP image files,Txt documents,Word documents,and Excel docu-

Hardware Future:

1. Dual laser orthogonal beam patented technology

2.All built-in dispersion systems

It avoids the problem of test data distortion caused by long optical path, uneven dispersion,and large particles settling in the pipeline caused by the external dispersion system

3.Omnidirectional Scattered Light Detection Technology

Adding multiple auxiliary integrated photodetectors can effectively collect scattered light at various angles corresponding to the test range, and achieve test accuracy and reliability in the full range

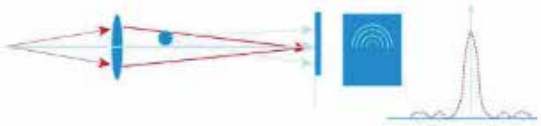
4.Spectrum Amplification Technology

The sensitivity of the probe to the signal is enhanced,and the test range is greatly improved.

5.Converging light Fourier transform patented technology

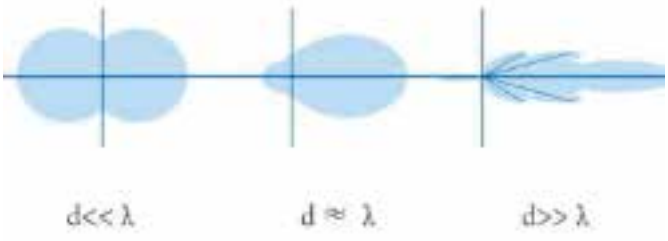
The large-angle scattered light is not limited by the aperture of the Fourier lens.The optical path is shortened to the shortest, effectively improving the resolution of the instrument;

The optical path design principle belongs to the international leading technology.



6.MIE scattering theory

The full range adopts the most advanced MIE scattering theory.



7.Fully automatic alignment system

The precision four-phase hybrid stepping motor is used to auto-matically adjust the optical path and calibrate the optical path at any time, eliminating the deviation caused by manual alignment, and improving the accuracy and stability of the test results from an optical point of view.

Parameter :

Measurement Range		Wet: 0.01-2000μm Dry: 0.1-2000μm.
Sample Injector		Wet Wirmodule-201 Dry: Winmodule-301
Number of Channels		106ров
Accuracy Ertor		Wet <0.5%, Dry. <1.0% (CRM D50)
Repeatability Error		Wet: <0.5%, Dry: <1.0% (CRM D50)
Light Source		Main laser: High-performance laser X-639mm. P>2mW Auxillary laser. Blue laser A405nm. P>2mW Service life: >50000h
Optical Bench Alignment System		Automatic alignment
Operation Mode		SOP Fully automated operation mode
Dispersion	Ultrasonic	Frequency: f=40KHz, Power p=50W (Time adjustable)
	Str	Revolutione speed: 0-3000rpm (Adjustable)
	Circulate	Rated flow: 1L-BL/min; Rated power: 120W
	Dry Method	Turbulent dispersion, automatic sample introduction, one-click testing
	Wet Method	Ultrasonic, mechanical stiming, and bult-in circulating dispersion
Sample Tank Volume		600ml
Test Speed		Fastest 10 seconds
Retractive index		A wide range of refractive indices are available,any refractive index can be entered.
Sampling Frequency		Fastest data acquisition rate of 10kHz
Retractive index		A wide range of refractive indices are available,any refractive index can be entered.
Sampling Frequency		Fastest data acquisition rate of 10kHz
Dispersion	Analysis Pattern	Free distribution,R-R distribution,log-normal distribution,and statistical models by category
	Statistical Comparison	Statistical comparison of multiple test results. Users can compare and analyze feet data from different batches of samples, before and after sample processing or at different processing times,effectively guiding product quality and cost control
	Custom Analysis	The system can customize the output of any characteristic particie size between Di and D100,the cumulative percentage of particles larger or smaller than a certain particle size,and the cumulative percentage of a certain particle size range,so as to meet the different requir-ements of different ndustites for particle size testing and characterization methods
	Output	Typical particle size values, interval particle size distribution (Le differential distribution) data and graphe(histograms or curves)cumulative particle size distribution(le.,integral distribution) data and curves, etc.
	Test Report	Test reports can be exported in various formats such as Word, Excel, Image (bmp),text (txt), and PDF,meeting different requirements for viewing test reports,data reprocessing,and article citation in any situation
	One-click operation	Wet method:Activate the automatic operation mode and complete all operations such as water intake,air bubble removal,dispersion testing cleaning,and data processing with a single button. Dry method: Activate the sutomatic operation mode to complete all operations such as dust collection, air supply, feeding, testing, and data processing with a single click
	GMP	GMP (Optional)
Outer Dimension		Main unit: 870mm*340mm*380mm
		Wet module: 415mm*280mm*335mm Dry module: 260mm*245mm*296mm
Net weight		Main unit: 32kg. Wet module 15kg; Dry module: 7kg

Analytical®
Technologies Limited

HPLC Servicing, Validation, Trainings and Preventive Maintenance :

HPLC Servicing :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

Trainings :We also take up preventive Maintenace to reduce downtime of HPLC's Trainings.

AMC's/CMC :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-shooting.

Validations :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

Instruments :Instruments :We offer instruments/Renting Services Modules like pumps,detector etc. on Rent.

About Analytical Technologies

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufaturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

Our Products & Technologies

LCMS

Automated Prep-Flash Chromatography system

Maldi TOF

Optima Gas Chromatograph

Flash Chromatograph

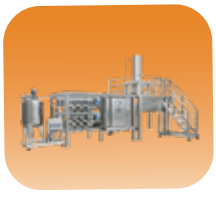
DAC Column

GCMS 3068

UHPLC

HPTLC

Ion Chromatograph



Production HPLC

Helium Mass Spectrometer Leak Detector

Column

DLS

Water purification system

Regulatory compliances

Corporate Social Responsibility

Analytical Foundation

ANALYTICAL FOUNDATION is a Nonprofit Organization (NGO) for the purpose of:

1. Research & Innovation **Scientist's awards & International Conferance visit sponsership / QC Professional Awards**: Quality life is possible by innovation only and the innovation is possible by research only, hence **ANALYTICAL FOUNDATION** is committed to identify such personallities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research /testing/ publication at info@analyticalfoundation.org

2. Improving quality of life by offering **YOGA Training courses, Work shops / Seminars** etc.

3.**ANALYTICAL FOUNDATION** aims to DETOXIFY human minds, souls and body by means of Yoga, Meditation, Ayurveda,Naturecure, Health Care, Ara, Events, Camps etc.

- A portion of profit of **ANALYTICAL GROUP** Company's goes into **ANALYTICAL FOUNDATION** for the aboce noble cause.

Reach us @

Analytical® Technologies Limited

Subsidiaries

USA Australia UK Malaysia Dubai

SCAN ME

Note : Company reserves rights to add/delete/modify the contents / technical specifications of the catalogue without prior notice

HPLC Solutions | MultipleLabs | Infinite Multiplelabs LLP | Analytical Bio-Med | Analytical Foundation (Trust)

Corporate & Regd. Office:
Analytical House, # E67 & E68,
Ravi Park, Vasna Road, Baroda,
Gujarat 390 015. INDIA

T: +91 265 2253620
+91 265 2252839
+91 265 2252370
F: +91 265 2254395

E :- info@analyticalgroup.net
info@hplctechnologies.com
info@multiplelabs.com

W:- www.analyticalgroup.net
www.hplctechnologies.com
www.multiplelabs.com

Sales & Support Offices:
across the country :
Distributors & Channel
partners World Wide
USA| UK| Australia| Dubai| Malaysia