



Winner-2006A Intelligent Laser Particle Size Analyzer



Overview:

Winner2006A intelligent full automatic laser diffraction particle size analyzer with MIE scattering theory to precisely test the particle size distribution from 0.01 μ m to 1000 μ m. It adopts dual laser beam and built-in sample preparation system, Intelligent operation, very simple to use for engineer, offer accurate and reliable data.

It enables you understand materials well, such as abrasives, adhesives, agrochemical, barite, Batteries, Bentonite, Boron Carbide, Brucite, Bubble, Calcite, Calcium Carbonate, Carbon Black, Catalysts, Cement, Ceramics, Chemicals, Clay, Coal, Coatings, Corundum, Cosmetics, Diamond Powder, Dolomite, Diatomite, Emulsion, Environmental, Explosives, Ferrite, Flour, Fluorescent, Fluorite, Food & Beverage, Food Additive, Graphite, Grinding, Inks, Kaolin, Medicine, Metal Powder, Mica, Milling, Minerals, Oxides, Paints, Paper, Petrochemical, Pharmaceuticals, Pigments, Plaster, Plastics, Polymers, Quartz, Refractory, Resins, Silica, slurry, Soil Sediments, Starch, Sulfur, Synthetics, Talc, Toners, Tourmaline, Wollastonite, Zeolite, Zirconium Silicate etc etc. Industry.

Main Specifications:

Model Name	Winner2006A
Standard	ISO13320-1:1999, GB/T19077.1-2008, Q/0100JWN001-2013
Principle	MIE scattering theory
Size range	0.01 μ m-1000 μ m
Detector Channels	90 pcs



Accuracy error		<0.5% (Deviation of D50 on national standard sample)
Repeatability error		<0.5% (Deviation of D50 on national standard sample)
Laser		He-Ne Laser $\lambda = 632.8\text{nm}$, $p > 2\text{mW}$ Auxiliary Laser: semiconductor $\lambda = 532\text{nm}$, power 1-40W
Wet dispersion	Ultrasonic	Frequency:40KHz Power:60W, Time: $\geq 1\text{S}$
	Agitator	Revolutions Speed: 0-3000RPM (Adjustable)
	Circulation	Rated Flow:17L/min Rated Power:15W
	Sample pool	Volume: 450mL
Operation mode		Manual and Full automatic, 2 mode, freely choose
Optical alignment system		Full automatic optical path alignment system
Software function	Analysis mode	Free Distribution, R-R Distribution, Logarithm Normal Distribution, Mesh number classification etc.
	Statistic Method	Volume Distribution, Quantity Distribution
	Statistic Comparison	Several Testing Results of samples Different batches of samples testing result, Samples before and after processing, Test result of samples in different time.
	User-defined Analysis	Figure out percentage according to the particle size Figure out particle size according to the percentage Figure out percentage according to the particle size range Meet demands of representation of particle test in different industries
	Test Report	Word, Excel, Photo(Bmp), Text etc
	Multiple-language Support	Multiple language Support
	Intelligent operation	Automatically control water inflow, dispersion, test and analysis. Better Repeatability after remove human-factor
Testing speed		<2min/time
Outer dimension		L85cm*W39cm*H45cm
Net weight		40Kg

Main Features:

1) Unique Converging Light Fourier Transform Light Path, For better to test sub-micron particles, Adopt orthogonal double laser beam patented technology, measure range expanded from 0.01 μm -1000 μm .

2) Intelligent operation mode realize one key test, automatically supply-water, ultrasonic dispersion, circulate and drain off water, so it not only could decrease workload, but also get better repeatability



after remove human-factors errors.

3) Automatic optical light alignment system is composed of precise four phase hybrid stepper motor, Its inching precision is reach to micron level,make light path be always in a good state.

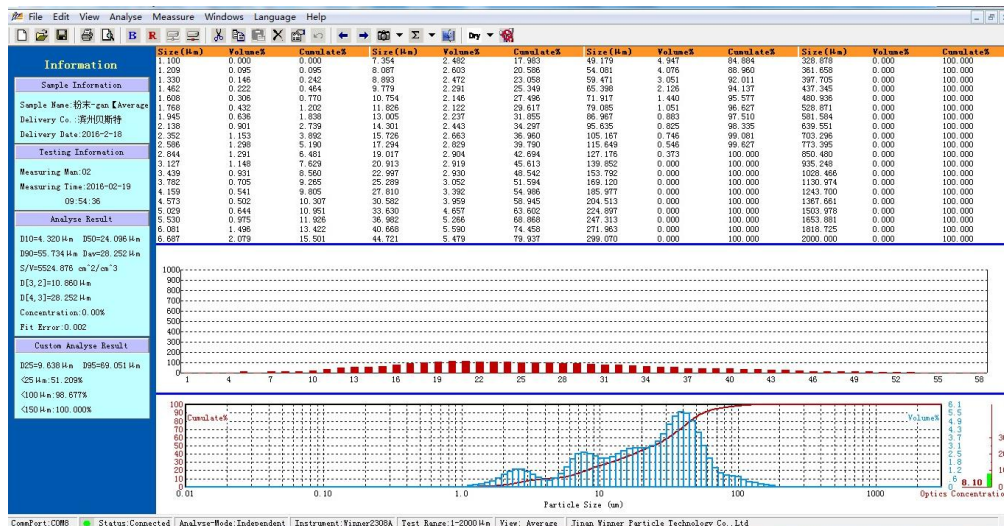
4)Liquid sample dispersion/preparation system: Full built-in setting mechanical stirring, ultrasonic dispersion, and circulation path in one, Big power-circulating pump and Optimization design of pipeline,effectively prevent large particle sediment.

5)Software support: Original patent unconstrained free fitting technology make particle analysis not be restricted by any functions, truly reflect particles distribution.

6) Output parameters:(D50, D03, D06, D10, D16, D25, D75, D84, D90, D97,D98,set any value, S/V, D[3,2],D[4,3])

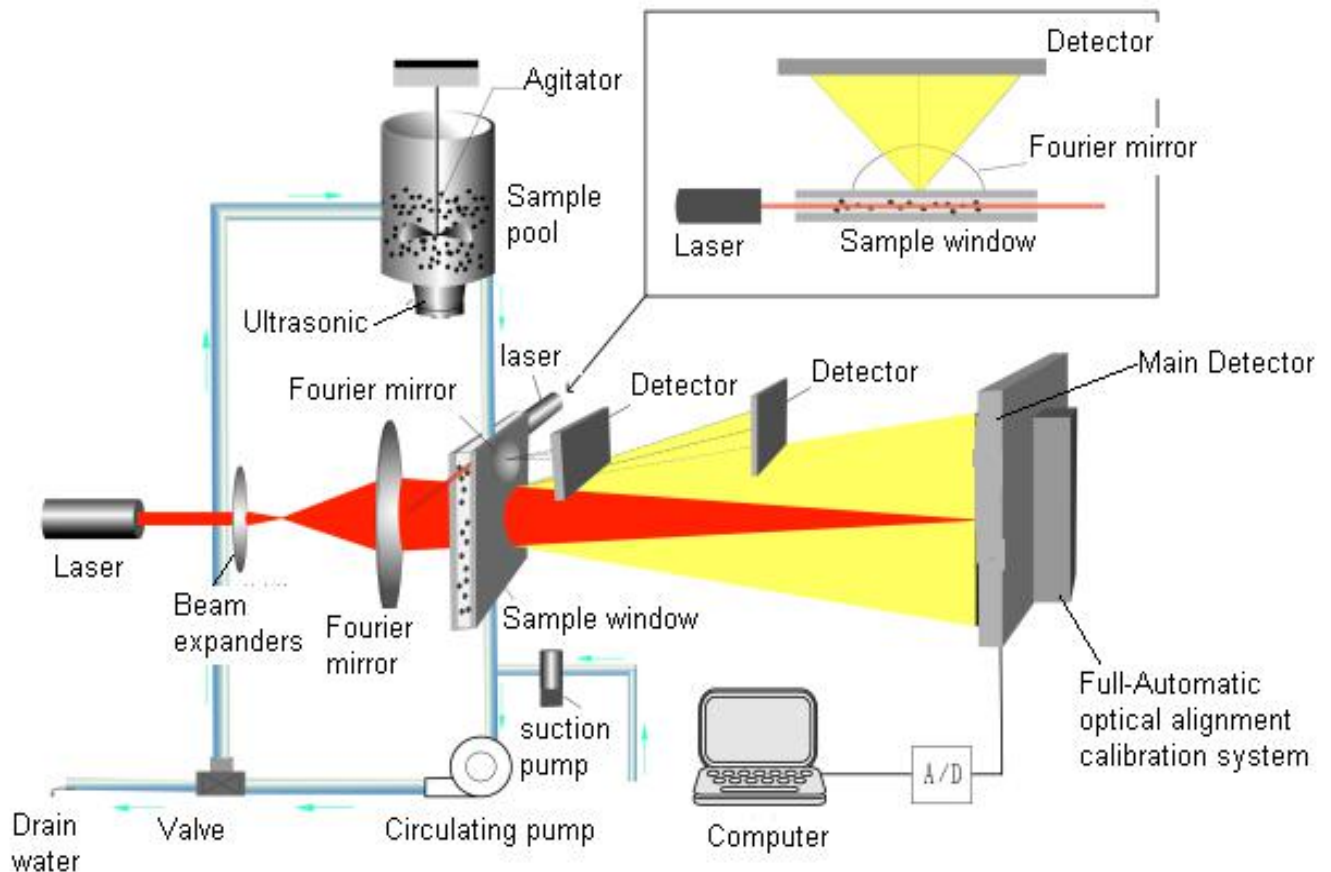
II Test analysis view

After testing, if necessary, to select records generated an average result, the system analyzes the formation of the recording. When the automatic mode test, without data processing, forming and maintaining a comprehensive system automatically analyzed test records.



Scheme:





Adopt Patents Technology:

- Optical bench design is protected by patent No.- ZL 2014 2 0378380.8,
- Three dimensional-optical bench alignment system is protected by patent No.- ZL 2013 2 0835882.4.
- MIE scattering principle application patent No.- ZL 2013 2 0812021.4.
- Dual laser beam orthogonal application is protected by patent No.-ZL 2007 2 0025702.0
- Wet circulation installation is protected by patent No.-ZL2010 2 0593526.2

