

LASER DIFFRACTION PARTICLE SIZE ANALYZER

# SALD<sup>®</sup>-201V



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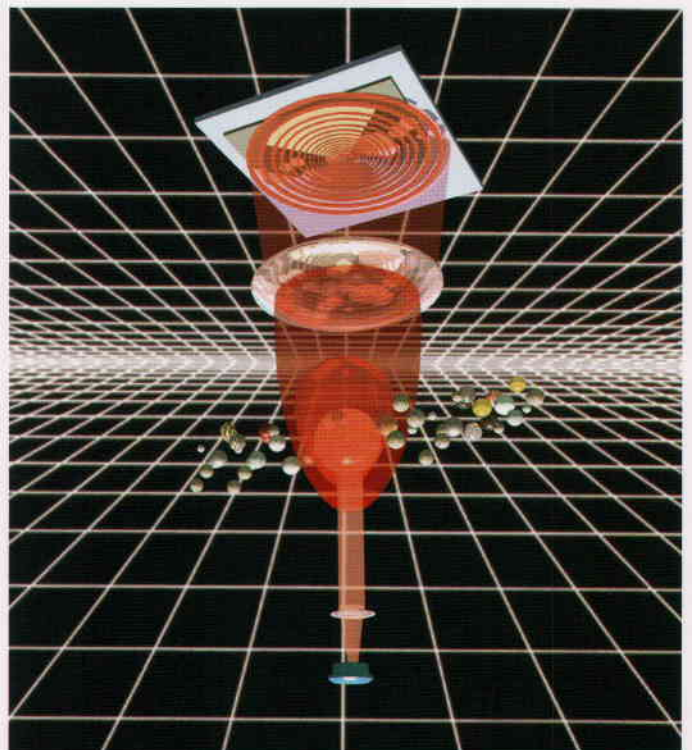
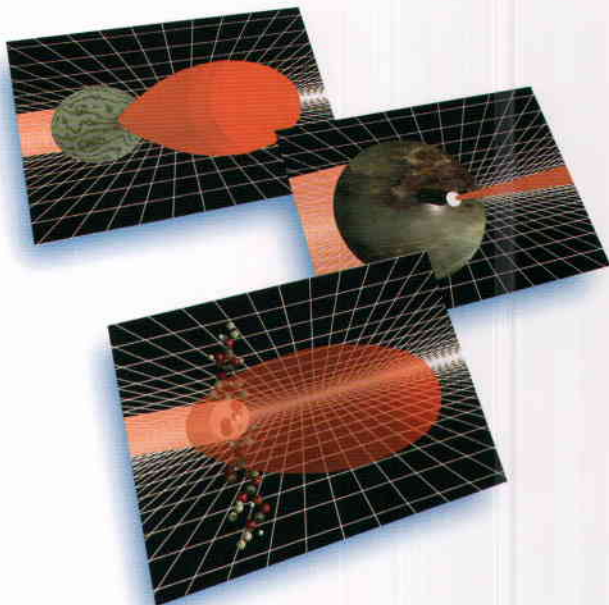
# SALD<sup>®</sup>-201 V

a compact instrument with all for particle size measurement



*SALD-201 V is ideal for analysis of foods, drinks, cosmetics, and pharmaceuticals.*

The laser beam is diffracted and scattered by the sample particles and forms light intensity distribution patterns, depending on the particle size.



Vertical optical system

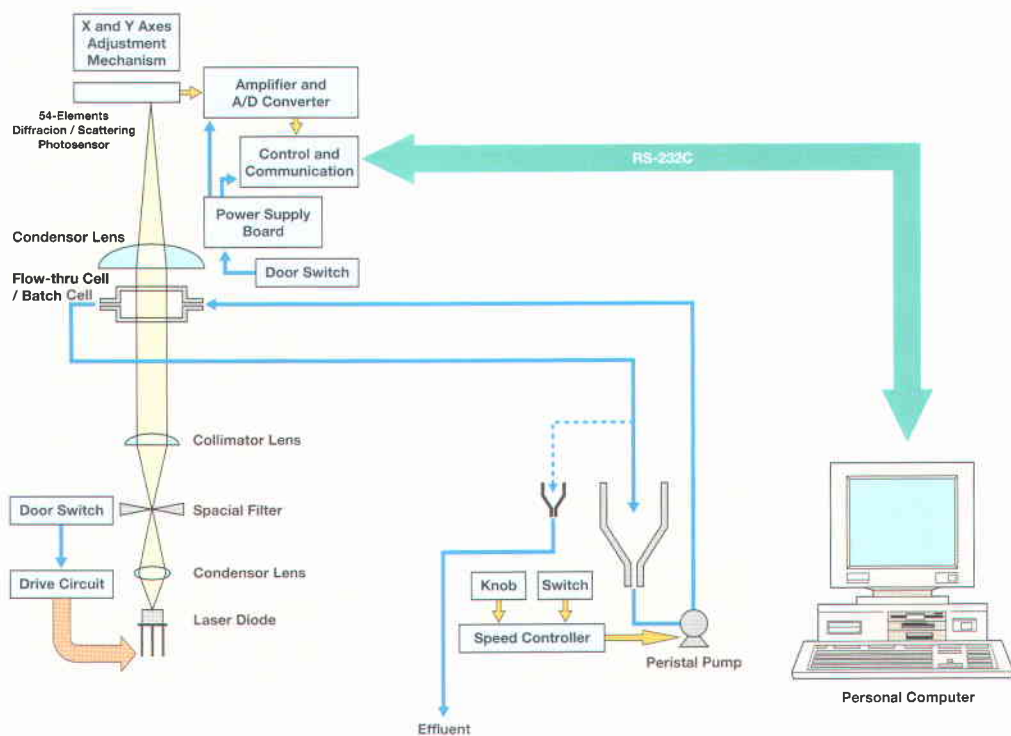


the necessary functions



- *High performance !!*
- *High accuracy !!*
- *High reliability !!*
- *Compact body !!*
- *Reasonable price !!*
- *New design with vertical optical system !!*

## Block diagram



You can choose two models for your needs.

# Model-1

## Batch cell model

This simple model, consisting only of the analyzer unit and a batch cell, is recommended for analysis of light particles.

**Measuring range:**  
0.25 - 50 micrometers

### Feature:

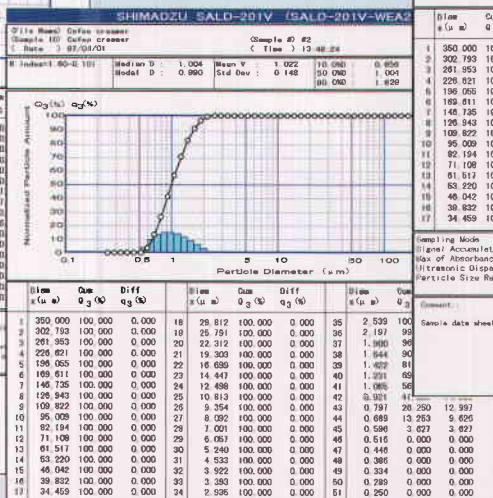
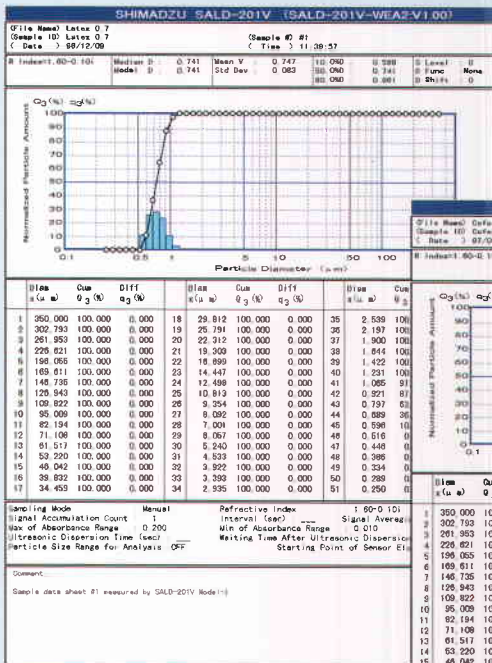
Reliable analysis with small samples  
(The minimum volume of dispersant is about 2 cm<sup>3</sup>)



Batch cell



## Examples:



Latex  
(0.7 micrometers)

Coffee creamer

Milk

They can cover 75% of all the needs for particle size analysis !!

# Model-2

## Batch cell and flow-thru cell model

Consisting of the analyzer unit, a batch cell, a sampler, and a flow-thru cell, this model provides a wider measuring range than Model-1.

**Measuring range:**  
0.25 - 350 micrometers

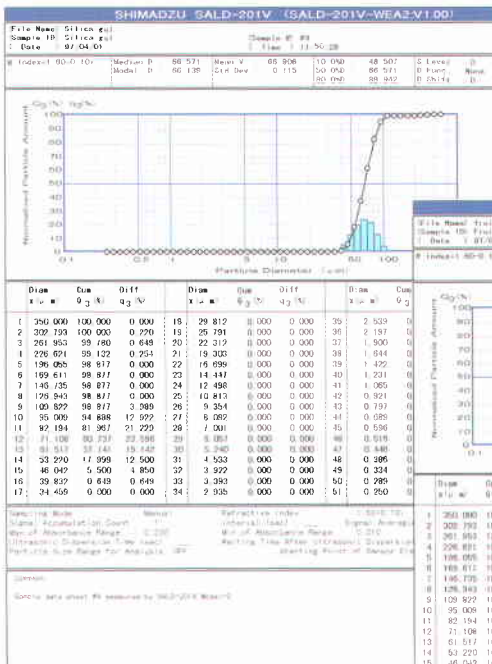
### Feature:

Reliable analysis of various types of particles and emulsions

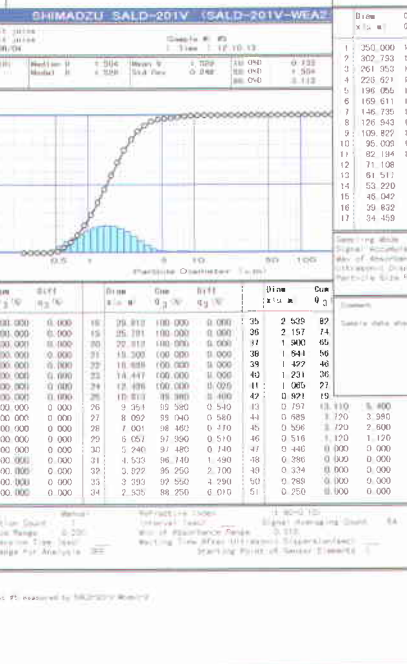
Flow-thru cell



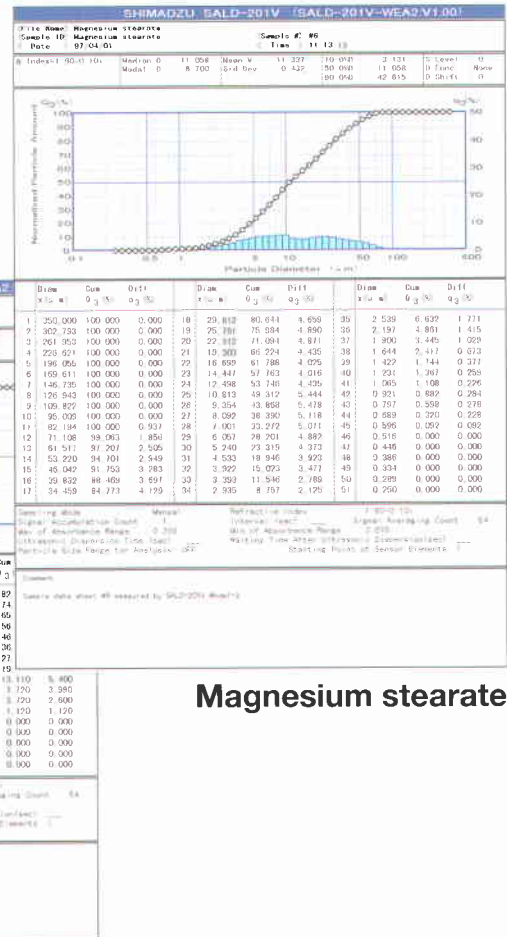
## Examples:



Silica gel



Fruit juice



Magnesium stearate



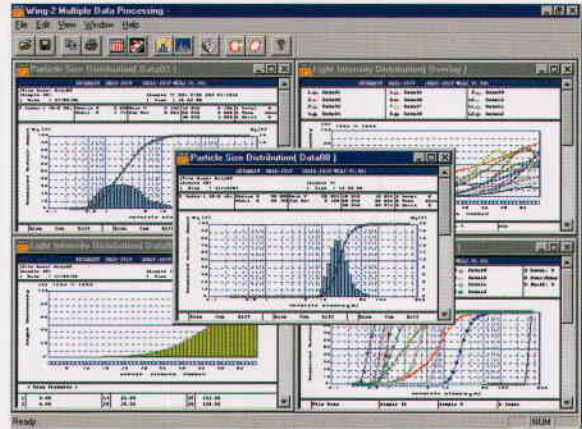
# WingSALD

(Software for measurement and data processing)

WingSALD software is a 32-bit program designed for Windows® 95/98/NT4.0

Strong points of **WingSALD**:

- Easy operation
- Various data processing
- Presentation of a large amount of particle size distribution data and light intensity distribution data by using **MDI**(multiple document interfase)
- Recalculation of maximum 12 data at one time changing refractive index
- WingSALD software consists of 3 **Wing** sub programs.



## Powerful "Copy" function

You can insert the **WingSALD** data sheets into other wordprocessing programs in metafile type. Also you can insert the numerical text data into other spreadsheet programs for customised data processing.

The laser beam (narrow beam of coherent, powerful, and nearly monochromatic radiation), made incident on sample particles, is diffracted (scattered) by the particles and forms light intensity patterns, peculiar to the particle sizes.

**Powerful "Copy" function**  
You can insert the WingSALD data sheets into other word-processing programs metafile type. Also you can insert the numerical text data into other spreadsheet programs for customised data processing.

	A	B	C	D	E	F	G
1	Diameter	sample-1	sample-2	sample-3	1000.0	sample-1	sample-2
2	1000.0	100	100	100	1000.0	0	0
3	316.2	100	100	100	316.2	0	0
4	100.0	84.833	91.6	100	100.0	0	0
5	31.6	32.804	44.6	100	31.6	0	0
6	10.0	14.857	19.9	100	10.0	0	0
7	3.2	6.654	7.9	100	3.2	0	0
8	1.0	3.165	0.9	100	1.0	0	0
9	0.3	0.81	0.9	100	0.3	0	0
10	0.1	0	0	100	0.1	0	0

## Real-time monitoring of sample dispersion

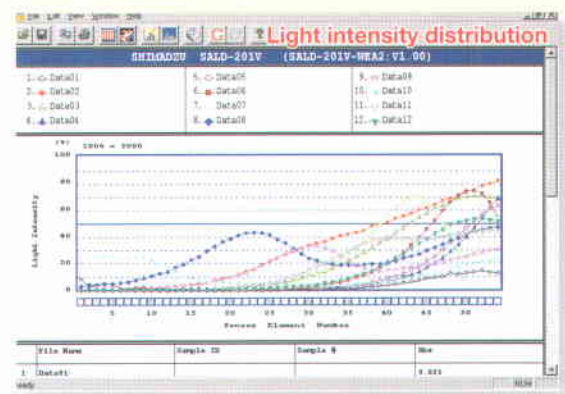
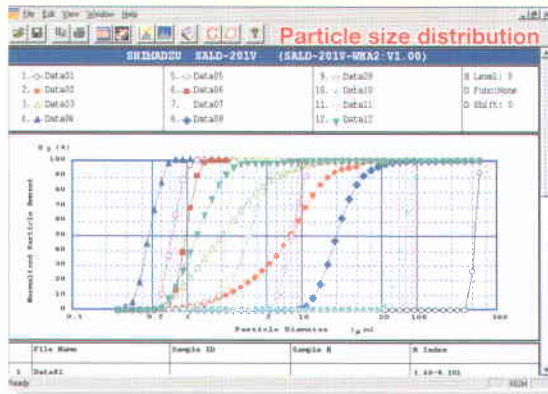
Wing 1

You can monitor sample dispersion by using real-time display of particle size distribution as well as light intensity distribution.

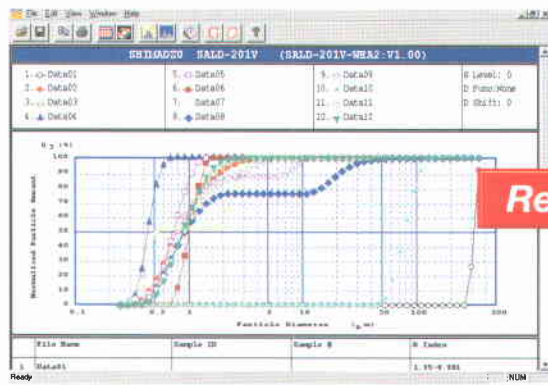
**Particle size distribution**

**Light intensity distribution**

# Overlay graph of maximum 12 data



# Recalculation of maximum 12 data at one time changing refractive index



# Statistical data processing, time series analysis, 3-dimensional graph in simple operation

