

Cyclone Injection Type Dry Measurement Unit

SALD-DS5



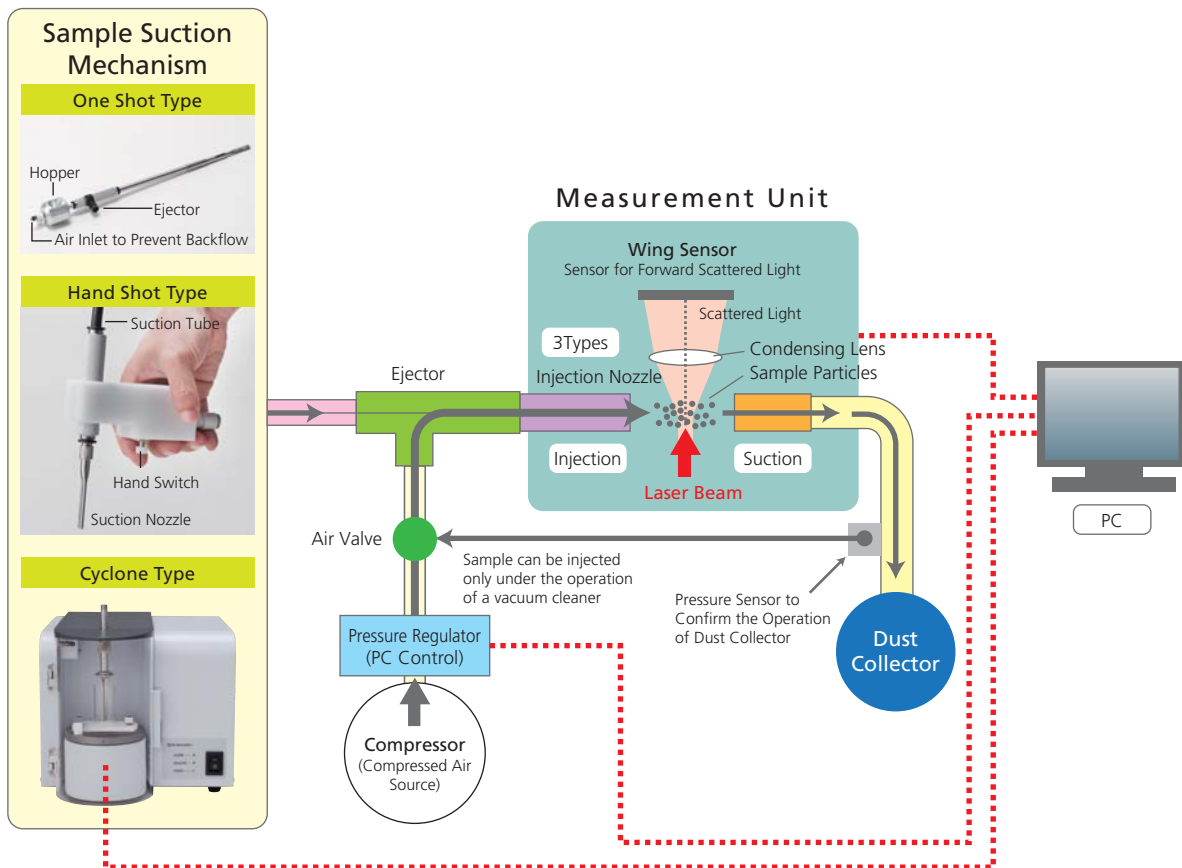
Cyclone type sample suction mechanism has been developed.
 Strong double dispersion process of suction and injection can be used.
 Measurement with high precision, high sensitivity,
 high reproducibility and high resolution

■ **Strong points**

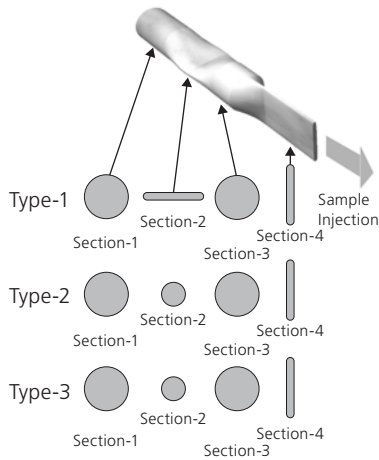
- SALD-DS5 can be used with SALD-2201 and SALD-3101.
- Optimum combination can be selected from 3 types of sample suction mechanisms (cyclone type, one shot type and hand shot type) and 3 type of injection nozzles, considering property and amount of sample particles.
- When the cyclone type is used, sample is sucked from the vial, which is rotated and moved upward, injected from the injection nozzle, and measured. The double dispersion process of suction and injection enables the measurement with good reproducibility, whenever samples contain many agglomerates. Use of the vial can prevent the scattering of sample and dirt from the operator's hands.
- When the one shot type is used, putting the sample into a small hopper is the only operation required for measuring. This type is suitable for a small sample amount.
- When the hand shot type is used, sample can be sucked from the beaker or chartula directly to measure it.

■ **Samples to be applied**

- Sample easily dissolved (medicine, powder foods)
- Sample easily agglomerated (magnetized particles)

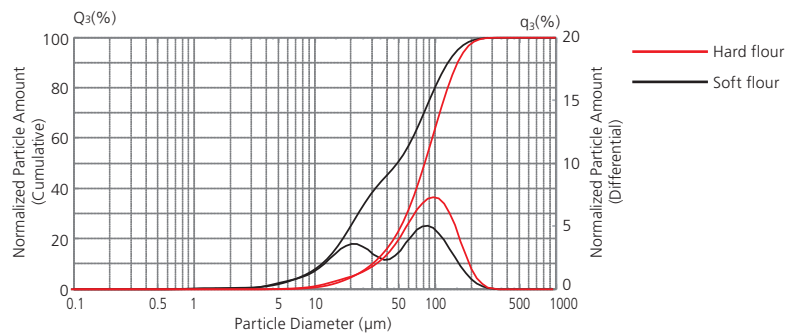


■ 3 types of injection nozzles can be selected

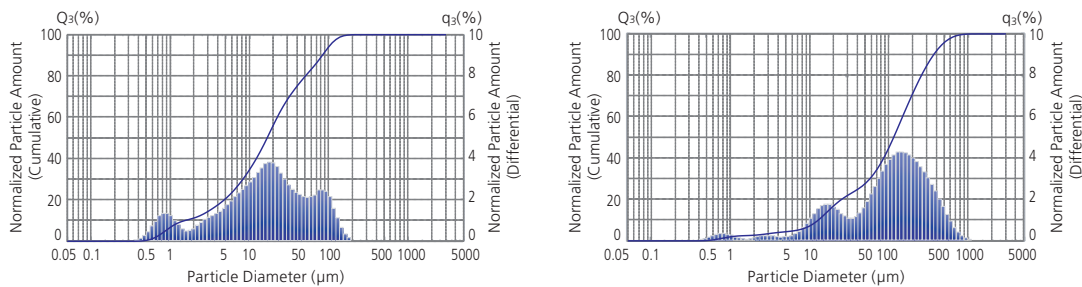


- When compressed air, including the sample, flows through the injection nozzle, the shape, area, and direction of the cross section is changed to obtain the large changes in volume, pressure and direction of air flow. Therefore, agglomerates can be strongly dispersed into air.
- An injection nozzle to obtain optimum dispersion can be selected from the 3 types of injection nozzles, depending on the sample property.
- Magnetized particles, which are easy to cohere in liquid, can be strongly dispersed into air using the type-1 injection nozzle. Therefore, accurate measurement results can be obtained.
- When the cyclone type is used, the double dispersion process of suction and injection enables measurement with good reproducibility.

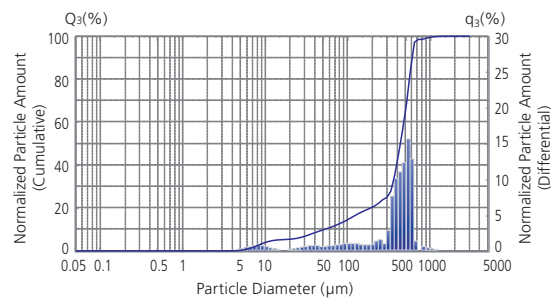
■ Measurement Data



Soft flour and hard flour ; SALD-2201 with Cyclone mechanism is used.



2 types of gastrointestinal medicine ; SALD-3101 with Cyclone mechanism is used.



Herbal medicine ; SALD-3101 with Cyclone mechanism is used.

■ Specifications

Measurement Principle	Laser Diffraction and scattering
Measuring Type	Cyclone Injection Type Dry Measurement
Measurement Range (Cyclone injection type dry measurement)	0.8 to 1000 μ m (SALD-2201) 0.8 to 2000 μ m (SALD-3101) (Measurement range depends on property and shape of sample particles.)
Operating Environment	Temperature: 10 to 30 °C; humidity: 20 to 80 % (no condensation)

(1) Sampling unit and dispersion device

Sample suction types	·Cyclone type ·One shot type ·Hand shot type
Suction nozzle	Can be selected from 3 types
Dimensions & weight	Approx. W 240 x D 210 x H 210 mm, 10kg
Communication method	USB (PC control)
Power requirements	115V or 230V (\pm 10%), 100 VA AC, 50/60 Hz (excluding dust collector and compressor)

(2) Pressure regulator (with filter)

Secondary pressure	0.05 to 0.5 MPa
Filtration rating	Removing particles of 5 μ m or larger
Connection to air source	Tube of 6 mm outside diameter
Dimensions & weight	W 130 x D 223 x H 233 mm, 3 kg
Communication method	USB (PC control)
Power requirements	115V or 230V (\pm 10%), 100 VA AC, 50/60 Hz (excluding dust collector and compressor)
Primary pressure	0.6 to 0.8 MPa

Notes:

- * The combined dry/wet detector case is required to use the dry measurement unit. Be careful, as the Part No. differs with the model.
- * A compressor (compressed air source) and dust collector (vacuum cleaner) are required to use the SALD-DS5.

(3) Combined Dry/Wet Detector Case

P/N	Description
347-60704-21	Detector case, 2201DRY (for SALD-2201)
347-60010-21	Detector case, 3101DRY (for SALD-3101)

Requirements for compressor and dust collector

Compressor		Dust collector	
Output	: 0.4 kW	Type	: Vacuum cleaner (Paper pack type)
Minimum pressure	: Approx. 7 kgf/cm ² (approx. 0.69 MPa)	Dust collecting efficiency	: More than 99% for 0.3 μ m particles
Air discharge	: 45 L/min	Capacity	: 2.0 m ³ /min or more
Tank volume	: Approx. 30 L	Vacuum	: Approx. 2000 mm Aq or lower
		Suction hose diameter	: Approx. 32 mm

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