



Pulverizer

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**SUPER JET MILL**

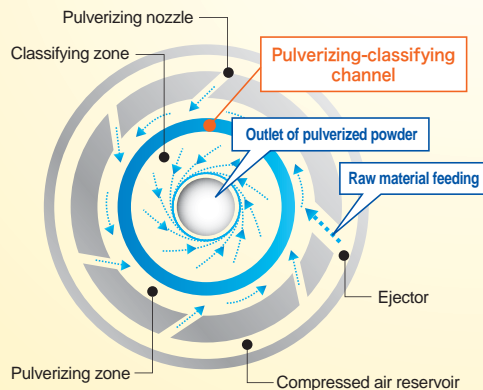
# Narrow Particle Size Distribution achieved Super Jet Mill

## with limited coarse powder existence

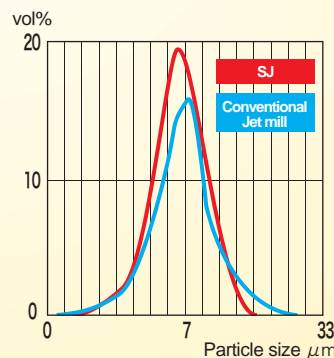
Super Jet Mill has no driving parts. Only compressed air is used for pulverization.

Fine powder are produced by mutual collision and friction using high-speed compressed air injected from the multiple nozzles arranged on the circumference.

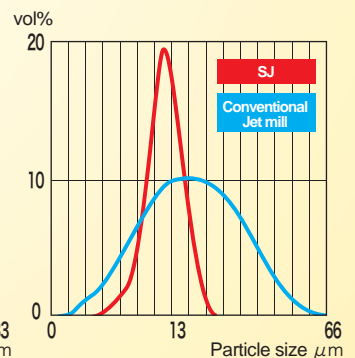
Through analysis of air turbulence inside the machine, products having narrow particle size distribution is achieved with only a limited amount of coarse powder persisting.



■ Pulverization Example of Color toner



■ Pulverization Example of Silk



## SUPER JET MILL Feature

### Very narrow particle size distribution

Two stage classification system achieved by special internal structure efficiently produces only fine powder with sharp distribution. It is suitable for materials requiring not only fine average diameter but also a sharp distribution powder such as color toners.

### Abrasion proof and contamination proof specifications

For powder having abrasion, Ceramics sintered body is used at powder contacting surfaces to promote high durability. Because metal surface is not exposed, it is applicable to contamination-less applications also. SiAlON (standard),  $Al_2O_3$ ,  $ZrO_2$ , SiC can be used as the ceramics sintered body, furthermore it is possible to select the appropriate material suited to the type of pulverized material.

### Easy disassembly and cleaning

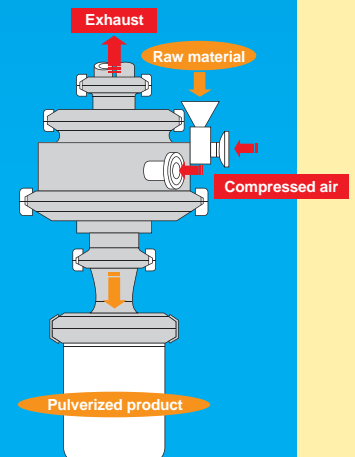
No drive mechanism inside the machine facilitates easy disassembly and cleaning. Furthermore the ability to clean all parts with water prevents cross contamination between different lots.

### No heat processing

Pulverization only using compressed air does not produce heat during the process. It is applicable to pulverize heat sensitive material for example food, resin, and pharmaceutical material, etc.

### Cyclone combined specifications

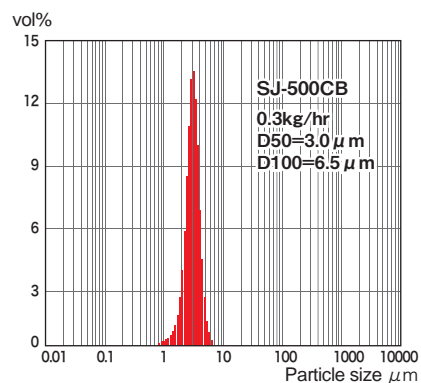
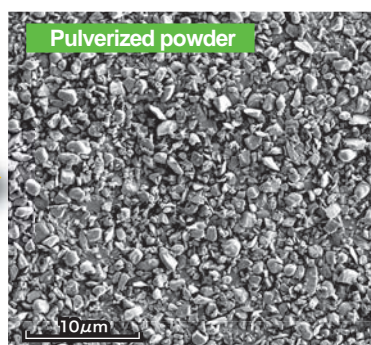
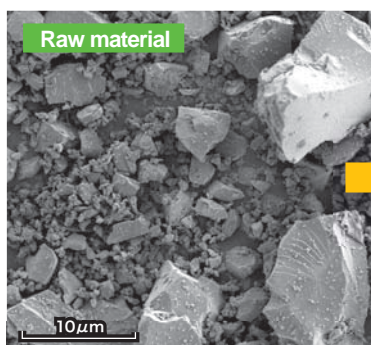
The special collection mechanism, cyclone combined specification system, effectively collects powder even if it has a high adhesion ratio. There is no need to install a collection part separately and it is possible to configure a simple designed system.



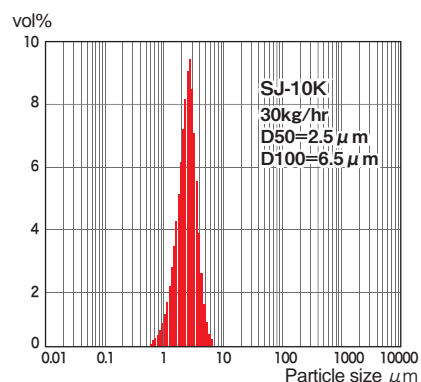
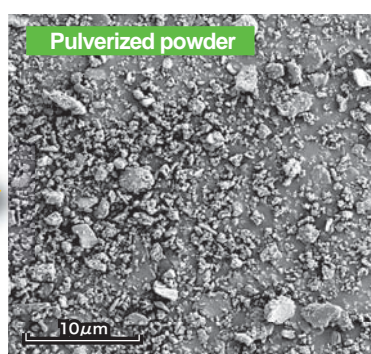
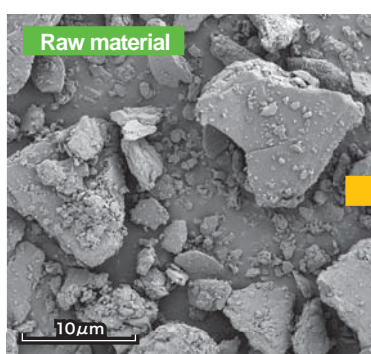


## EXAMPLES

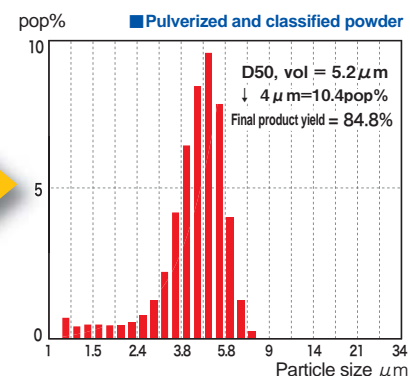
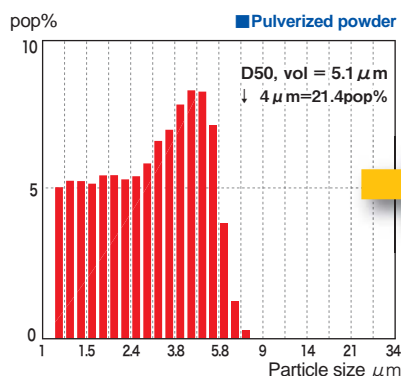
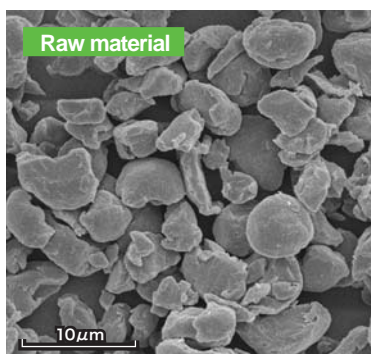
### Example 1 Glass powder



### Example 2 Pharmaceutical material



### Example 3 Polyester color toner



## SUPER JET MILL Other Pulverizing examples

Material	Models	Feed capacity [kg/hr]	Material grain size		Product grain size	
			D50 [µm]	D100 [µm]	D50 [µm]	D100 [µm]
Talc	SJ-100C-CB	0.2	15.7	104.7	2.74	7.78
Amino acid	SJ-100GMP	0.3	49.9	1600	3.12	10.0
Ceramic powder	SJ-500CB	1	2.36	37.0	1.00	6.54
Nickel powder (loosening agglomeration)	SJ-500CB	1	0.74	44.0	0.38	1.38
Metal silicon	SJ-500CB	1.5	24.1	209.3	3.95	18.5
Zinc oxide	SJ-500CB	6	1000	—	0.94	3.89
Anhydrous sodium sulfate	SJ-5000	100	297.1	709.6	6.26	25.2
Indium oxide	SJ-10KCB	15	2.91	22.0	0.17	0.49

## Special Specifications / Application Systems

### SJ-100GMP



#### GMP/pharmaceutical applicable models

SJ Series for pharmaceutical specifications which have a high precision classification mechanism. The simple disassembly and cleaning performance is improved while maintaining high performance. Because no heat is generated during pulverizing, it is efficiently applicable to various medical powder pulverizations.

### SJ-500+TC-15



#### Coupling system with Air Classifier

This system is coupled with the air classifier. Because the pulverizing unit is directly connected to the classifier, high efficient pulverizing and classifying operation is possible. It efficiently pulverizes material within a few millimeter size powder into sub-micron size powder.

## SUPER JET MILL Lineup

Models	Air consumption [m <sup>3</sup> /min]	Feed capacity [kg/hr]	Size(main body) D×H[mm]	Weight [kg]	Compressor [kW]
SJ-100	0.2~0.3	0.05~0.3	Φ160×140	5	2.2
SJ-100GMP	0.2~0.3	0.05~0.3	L720×W370×H600 (System size)	50 (System weight)	2.2
SJ-500	0.8~1.2	0.5~10	Φ320×180	27	7.5~11
SJ-1500	2.0~3.0	2.0~30	Φ400×180	45	15~22
SJ-1500GMP	2.0~3.0	2.0~30	L900×W950×H1550 (System size)	250 (System weight)	15~22
SJ-2500	3.0~4.5	3.0~50	Φ500×180	65	22~37
SJ-5000	6.0~9.0	5.0~150	Φ600×350	120	45~75
SJ-10K	12.0~18.0	10~300	Φ700×350	180	75~110

#### SJ-100



#### SJ-500



#### SJ-5000



#### SJ-10K



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