

Table Top Device for Precision Dispersion and Composites Formation of Dry Powders

# NOB-MINI

[NOBILTA®]

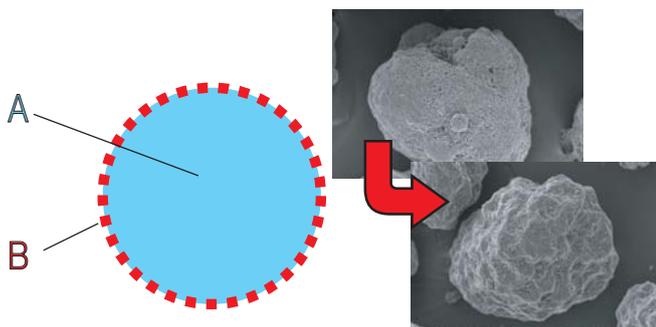
Applying mechanical energy to generate a mechano-chemical reaction between particles to produce new materials - New lab-scale model



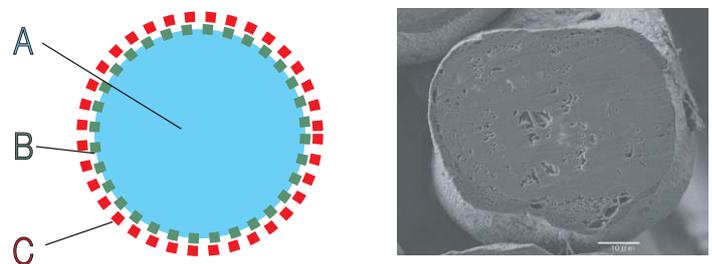
- Most suitable for dispersion and composition of nano or micron sized particles
- Eliminates the need of drying process
- Provides higher bonding energy than the MECHANO FUSION® on particles for more precise coating
- Table-top model for processing small samples in the range of 20 to 40ml
- Equipped with a cooling jacket for temperature control
- Ready to use – by simply connecting electric power, cooling water and compressed air (for shaft cooling)

## What the “NOBILTA®” can do

### Particle Composition



**Mono-layer Composites**  
Excipient Coated with API



**Multi-layer Composites**  
Excipient Coated with API and Wax

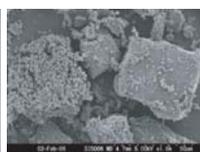
### Precision Mixing

#### Examples of Precision Mixing

Photos at right show a mixture of lactose and iron oxides processed by the NOBILTA®. Note there is no iron oxide agglomerates. They are uniformly dispersed and coated on the surfaces of the lactose particles. Thus, the powder mixture exhibits superior iron oxide color.



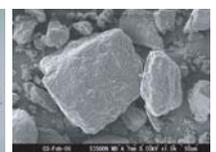
High speed agitation-type mixer



Visible iron oxide agglomerates



NOBILTA®



No iron oxide agglomerates

# Dry Precise Powder Dispersion and Particle Composition Systems are actively applied in the following applications.

## 【Electric】

Improvement of filling property and electrode conductivity of rechargeable batteries and reactivity of fuel cells

## 【Information Technology】

Improvement of flowability of toner and density of memory devices

## 【Pharmaceuticals】

Drug Delivery System (controlled release and improvement of dissolution rate)

## 【Biotechnology】

Prevention of deterioration and improvement of anti-weatherability

## 【Chemicals】

Improvement of reactivity and moisture-proof property.

## 【Cosmetics】

UV cut and superb intensive dispersion

## 【Pigments】

Improvement of color intensity by precision mixing

## 【Machines】

Prevention of deterioration, improvement of anti-weatherability, and production of high-temperature high-strength materials and functionally gradient materials

## 【Environment】

Improvement of the characteristics, sintering, and anti-wetherability of catalysts

## NOB-MINI Specifications

Dimensions and Weight	Width 300mm, height 360mm, depth 290mm, weight 23kgs (excluding the controller)
Motor Power	0.75kW
Rotor Speed	1000 - 9000 rpm
Casing	Powder contact area #200 buffed (except machined surfaces) with cooling jacket
Material of Construction	Powder contact area in stainless steel 304

Do you have questions on the scale-up of the table top model?



From small to large, 0.5, 10, 30, 100 and 300 liters, 5 models are available to meet customer's demand.

Toll processing service is also available on request.



Process Technologies for Tomorrow

## HOSOKAWA MICRON CORPORATION

Hosokawa Micron Corporation is a member of the Hosokawa Micron Group, responding to global needs through emphasis on materials equipment and systems for powder processing, thermal processing, environmental protection, and plastics processing.

The Group maintains facilities for research, engineering, manufacturing, and service in each of the world's industrial markets.



## HOSOKAWA GROUP ASIAN NETWORK

- **Hosokawa Micron Corporation**  
1-9, Shoudai Tajika, Hirakata Shi, Osaka 573-1132, Japan  
Phone: 81-72-855-2224, Email: info@hmc.hosokawa.com
- **Hosokawa Micron (Korea) Ltd.**  
Phone: 82-2-420-5691, Email: hmkorea@hosokawakorea.co.kr
- **Hosokawa Micron (Shanghai) Powder Machinery Co., Ltd**  
Phone: 86-21-5306-8031, Email: shanghai@hosokawa.com.cn
- **Hosokawa Micron (Malaysia) Sdn. Bhd.**  
Phone: 60-3-5634-0391, Email: admin@hmm-hosokawa.com.my
- **Hosokawa Micron (India) Pvt. Ltd.**  
Phone: 91-44-26211-257, Email: mail@hmindia.hosokawa.com