

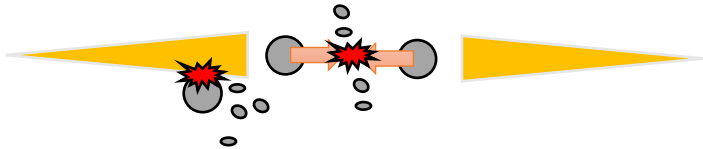
# Cross Jet Mill/Fluidized Bed Type Mill

## Solution

- Grinding in **inert gas atmosphere** ( $N_2$ , Ar gas)
- **Reducing contamination** of the product
- Distribution of **sharp-peaked particle size**
- Grinding of **agglomerates**
- Usable as testing machine for product development and research purposes

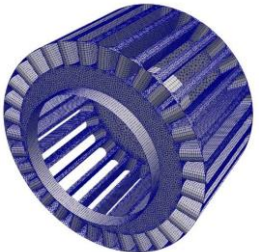
## Grinding mechanism

「Pulverization by high-speed jet flow」+「Collisions of raw material particles」



## Classifier

「Centripetal force of air currents」 VS 「Centrifugal force of classification rotor」



Analytical model



Image of classification rotor

Pocket Jet Mill KJ25

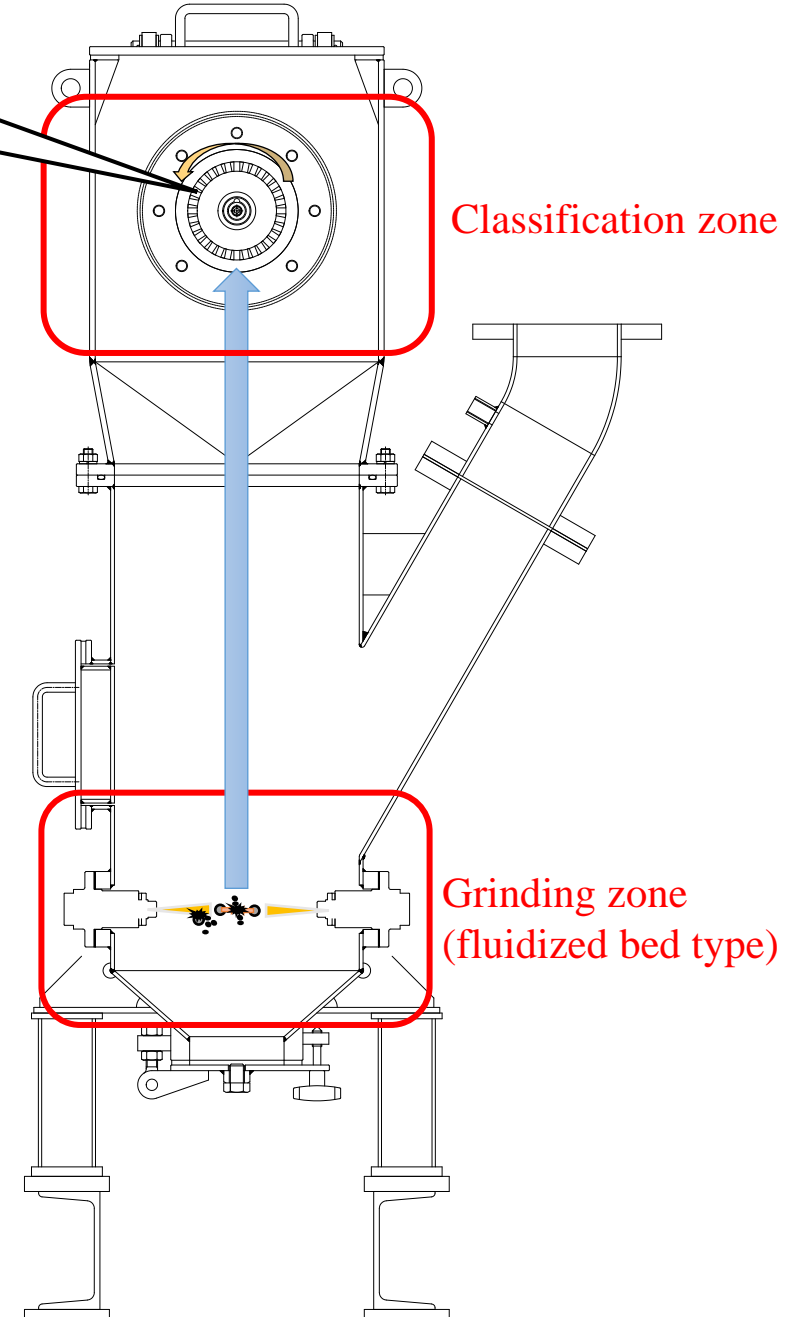
Less contamination during grinding process

Particle size can be adjusted by changing the rotation speed of the classification rotor

Built-in classifier

Classification zone

Grinding zone (fluidized bed type)



Line-up of testing equipment  
(Co-LAB test center)

Laboratory  
size

Small  
size

Production  
size

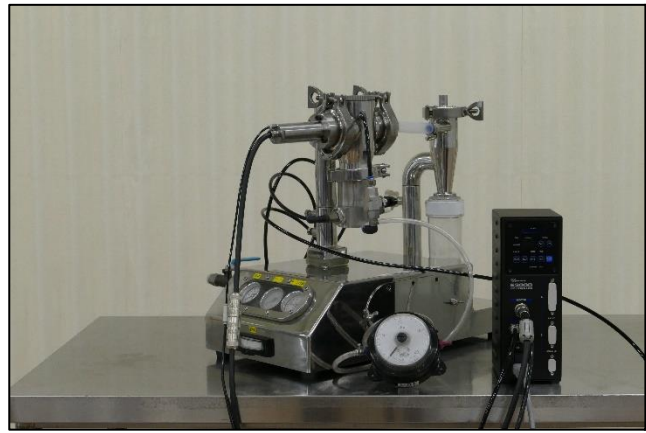
Type	PJ6	KJ25	KJ50	KJ200	KJ5000	Largest Manufactured size
Air consumption [Nm <sup>3</sup> /min]	0.2	0.5	0.9	3.6	80	
Required raw material amount	approx. 10mL~	200g~	1kg~	3kg~	—	
Process	Batch	Batch (Continuous)	Continuous	Continuous	—	

PJ6 / Junior Pocket Jet Mill

KJ25 / Pocket Jet Mill

KJ50 / Cross Jet Mill

KJ200 / Cross Jet Mill



Testing machinery from laboratory (PJ6) to production (KJ200) size is available

# Why to choose the KJ25 Pocket Jet Mill for product development and research purposes?

- Classifier for mounted for **easy particle size adjustment**
- **Low product contamination**
- Grinding in **inert gas atmosphere possible**
- Feasibility tests with **small material amount** possible
- **Short-time continous** operation is possible and sample production is easy

Appropriate for product development and research purposes

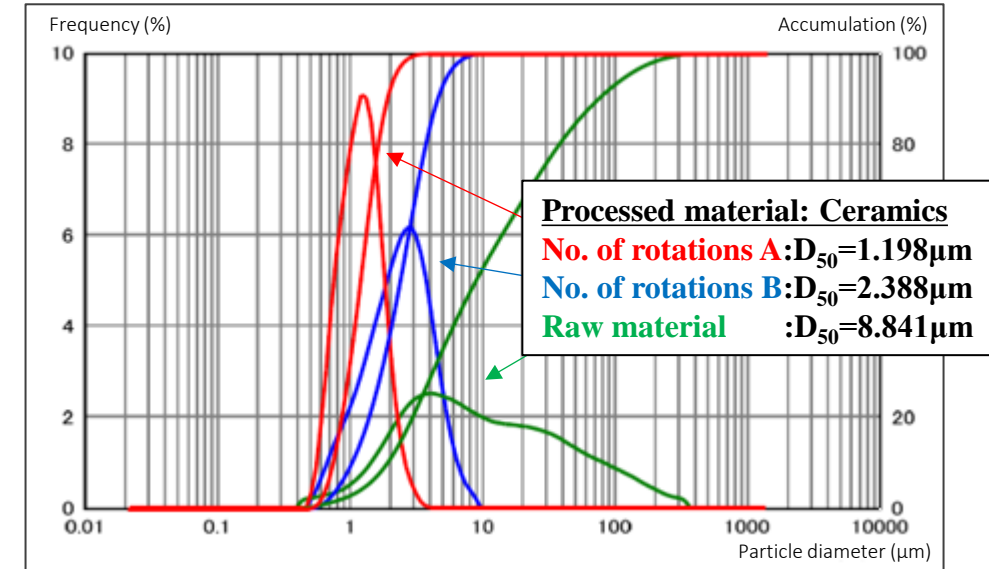
- **Compact installation size**
- **Easy assembly, disassembly and cleaning**

Short-term rental possible

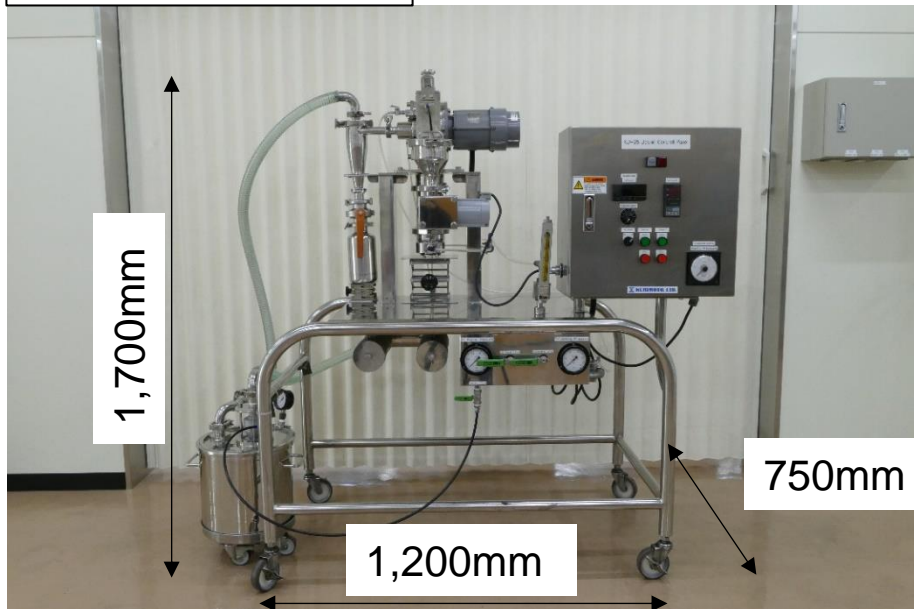
「Conditions」

AC200V and compressed air only

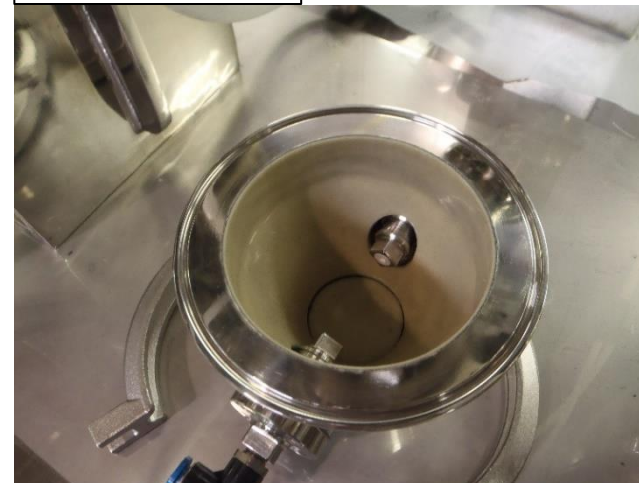
Processing example: Particle size adjustment by change of rotation speed



KJ25 / Dimensions



Grinding Area



Classification Area

