



# Synthetic/biopolymer grinding applications

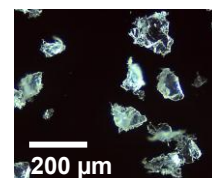
Some of the grinding applications and a list of application examples are shown below.

## Polyethylene (LDPE) 0.48 g

A hard-to-grind sample

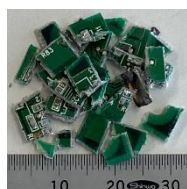


3000 rpm x 30 sec  
**Cryogenic grinding**  
x 2 cycles

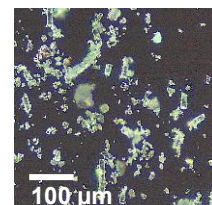


## Electronic circuit board 2.1 g

A sample that can be ground  
at room temperature



2500 rpm x 30 sec  
**Room temp. grinding**  
x 10 cycles

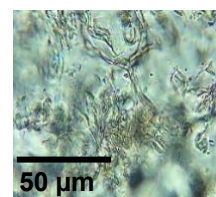


## Bark of moso bamboo

Hard-to-grind sample



2000 rpm x 10 sec  
**Room temp. wet\* grinding**  
x 2 cycles  
\* Buffer solution used



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## Specifications

Grinding method	Cryogenic grinding, Room temperature dry grinding, Room temperature wet grinding	
Parameter settings	Rotation speed (rpm)	50 to 3000 (stepless)
	Rotation time (sec)	10 to 60 (10 sec steps)
	Inter-cycle pause time (sec)	0 to 600 (10 sec steps)
	Cycle count (number of repetitions)	1 to 20 (1 cycle step)
	Programmable parameters	Up to 10 sets of rotation time, inter-cycle pause time, and cycle count (number of repetitions) can be stored.
Safety function	Hazardous operation prevention by magnetic microswitch.	
Main unit dimensions and weight	Width 270 x Depth 340 x Height 300 (mm), 12 kg	
Power (50/60 Hz)	100/120 VAC or 200/240 VAC (450 VA)	
Standard accessories	Sample container (Stainless steel), Insulation container, Cooling container, Tongs, Cooling holder, Sieve set, Grinding Rod 12 (Carbide stainless steel and Zirconia), etc.	

\* Noise level during grinding (a reference) : 55 dB (when grinding PS pellets with a 12 mm diameter zirconia grinding ball at a rotation speed of 3,000 rpm)



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