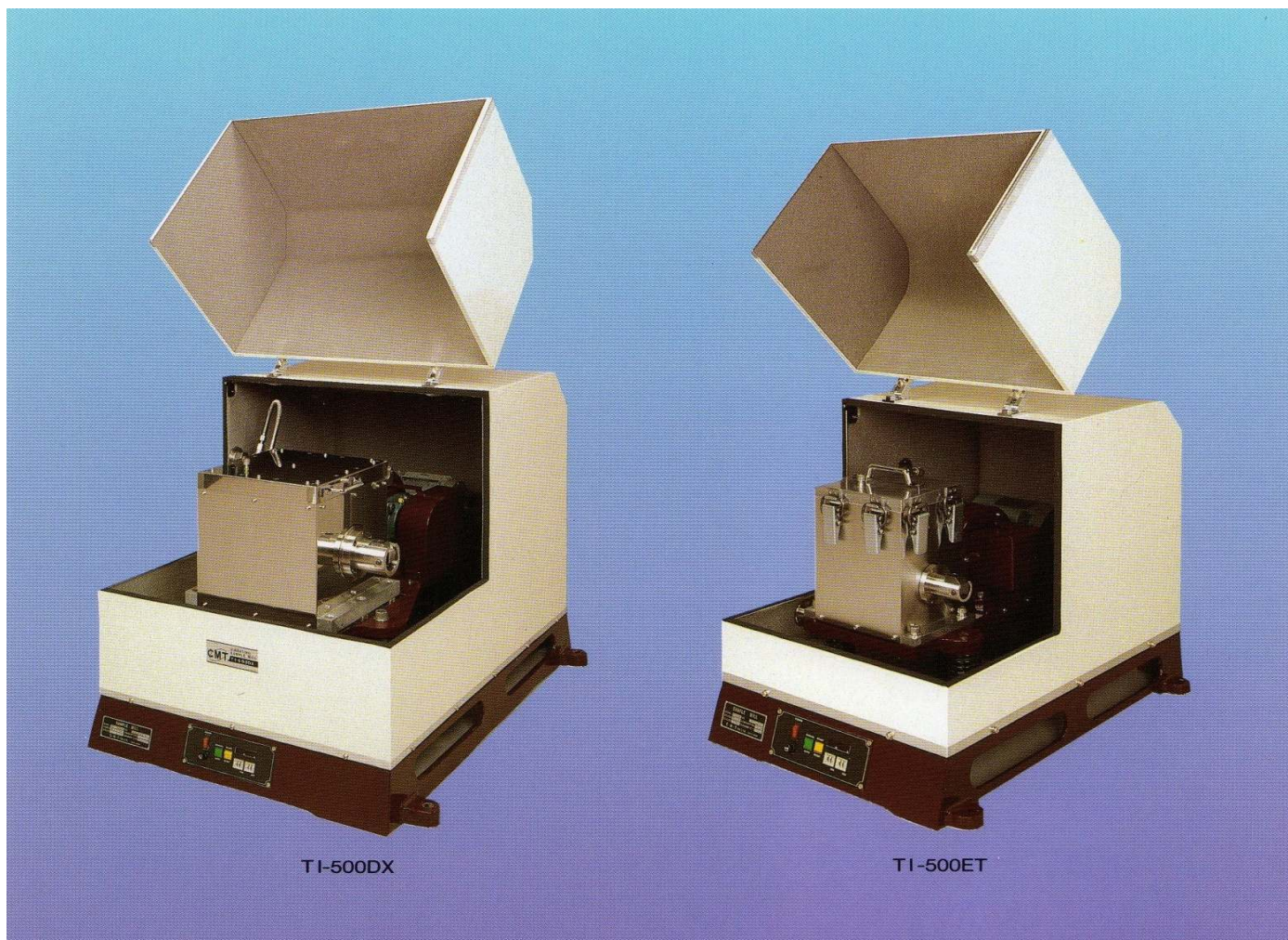


# Freezing Mill



TI-500DX

TI-500ET

## ◇FREEZING MILL◇

Designed to enable materials such as rubbers and polymers, which cannot be ground at normal temperatures to be ground at low temperatures, using liquid nitrogen or solid carbon dioxide.

The sample is held in a thermally insulated cold box which can be continuously fed with coolant, both during precooling stage and during operation. The sample temperature can be reduced to  $-180^{\circ}\text{C}$  in approximately 100 minutes using a continuous supply of liquid nitrogen, or reduced to  $-50^{\circ}\text{C}$  in approximately 100 minutes using two times filling of solid carbon dioxide.

## ■ Grinding Test

Material	Sample Size	Model	Sample Container Rod shape	Grinding		
				Coolant	Time	Ground Size
Polyethylene	2.3 ~2.5mm	TI-500	SUS 10ml	liquid nitrogen	10min	-60Mesh
			B			100%
Vinyl chloride		TI-500	SUS 10ml		15min	-80Mesh
			B			100%
Acrylic fiber	3.0 ~3.5mm	TI-500ET	SUS 10ml		7min	-80Mesh
			B			100%
Rubber		TI-500ET	SUS 10ml		8min	-80Mesh
			B			100%
Nylon		TI-500DX	SUS250ml		8min	-80Mesh
			B			100%
Animal bone particle	3.2 ~8.3mm	TI-500DX	SUS 250ml		2min	-40~
			A			-200Mesh
				82%		
Polyethylene		TI-500DX	SUS 250ml	12min	-80Mesh	
			B		100%	
Tablet		TI-500DX	WC 50ml	15min	-200Mesh	
			A		100%	

※all the contents of this catalog are subject to change without notice



■ Specification

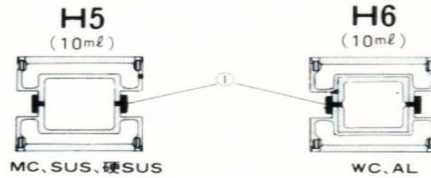
Model	TI-500DX for use with 1 containers of working capacity 50, 100, 150, 200 or 250ml				TI-500ET for use with 1 containers of working capacity 10ml				TI-500 for use with 1 containers of working capacity 10ml				
Vibration rotation	1,700r.p.m/50Hz, 60Hz				1,440r.p.m/50Hz, 60Hz				1,440r.p.m/50Hz, 60Hz				
Amplitude	8mm				7mm				7mm				
Timer	0-60min(digital type)				0-60min(digital type)				0-60min(digital type)				
Motor	750W 3phase				300W 1phase				200W 1phase				
Dimensions	820(Wide)×1,010(Deep)×690(High) mm				560(Wide)×710(Deep)×630(High) mm				500(Wide)×650(Deep)×470(High) mm				
Weight	300kg				100kg				75kg				
Sample Containers Material	Working Capacity	Coolant	Type of Container	Rod Shape A B C Balls	Working Capacity	Coolant	Type of Container	Rod Shape A B C Balls	Working Capacity	Coolant	Type of Container	Rod Shape A B C Balls	
Hardened Steel SUSJ (MC)	50ml×1 100ml×1 150ml×1 200ml×1 250ml×1	liquid nitrogen	F 5	○ ○ ○ ○	10ml×1	liquid nitrogen	F 5	○ ○ ○ ○	10ml×1	solid carbon dioxide or liquid nitrogen	H 5	○ ○ ○ ○	
Stainless steel SUS304 (SUS)				○ ○ ○ ○				○ ○ ○ ○				F 7	○ ○ ○ ○
Hardened stainless steel SUS440C				○ ○ ○ ○				○ ○ ○ ○				H 5	○ ○ ○ ○
Tungsten carbide WC(WC)				○				○ ○ ○ ○				F 7	○ ○ ○ ○
Alumina ceramics Al2O3(AL)		solid carbon dioxide	F 6	○		solid carbon dioxide	F 6	H 5			○ ○ ○ ○		
Zirconia ZrO2(ZO)				○							○ ○ ○ ○	H 6	○ ○ ○ ○
Silicon carbide SiC(SC)				○							○ ○ ○ ○	○ ○ ○ ○	
Silicon nitride Si3N4(SN)		○	○ ○ ○ ○	○ ○ ○ ○									
Polyamide resin PL(PL)		○	○ ○ ○ ○	○ ○ ○ ○									

※Please select sample containers with rod (A, B, or C) or balls for each model  
 ※When ordering please specify mains voltage and frequency

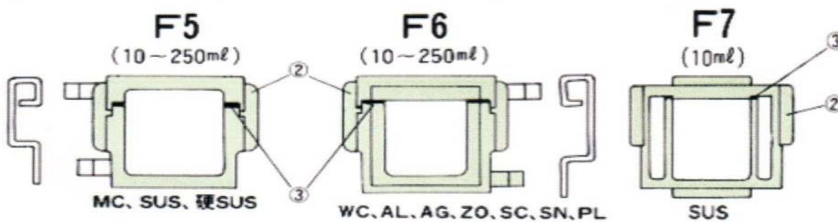
■ Type of Container

(①Rubber ring ②Lock ③Packing)

H type:



F type:



※all the contents of this catalog are subject to change without notice