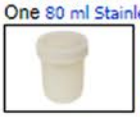
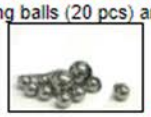
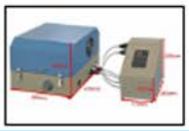
SPECIFICATIONS:

Features	• 1200 max. RPM allows efficient pulverization and homogenization • The range of jar materials (Nylon, Alumina, SS, and Agate) offered for various applications • Easy jar installation • Optional for variable speed and forced chilling air cooler
Standard Milling Jars & Media *(Two Milling Jars are included)*	• One 80 ml Nylon Jar with a set of Zirconia milling balls (4 pcs of 11.5 mm, 10 pcs of 10 mm and 10 pcs of 8mm) are included. It is suitable for grinding / milling the materials with minimized contamination. • One 80 ml Stainless Steel Jar with a set of SS milling balls (20 pcs) are included for achieving a finer particle size.   Attention: Don't use SS jar with ceramic balls.
Power Input 	• Single phase 208- 240VAC 50/60Hz • For 110V, please order a 750W transformer • The power plug is not included for the 220 VAC version. Please click here to order the plug)
Motor Power Consumption	300W
Oscillation Frequency	1,200 rounds/min (Please see the video below for performance of the jar rotation)
Timing Range	• 0 to 30 minutes for built-in mechanical timer • Warning: Running time for the mill should be less than 30 minutes, otherwise the mill may overheat.
Maximum Feeding Capacity	1/3 of the capacity of the ball milling tank
Feeding Granularity	<1mm
Discharging Granularity	0.1 micron minimum for certain material (Mainly ceramic material) *Note: To achieve finer or desired particles via ball mill is a research project, which is depended on the material to be milled, grinding time and speed, combination of grinding jar and milling ball etc. It is the user's responsibility to find the best milling procedure based on the material. Buyers are welcomed to MTI laboratory at California test before purchase.*
Noise Level	87dBA (standing at 1ft with the machine lid open and SS milling balls in the jar)
Compliance	CE Certified **NRTI certification is available upon request at extra cost**
Warranty	• **Two years** limited warranty for parts with lifetime technical support (after June1 , 2017) • *Alumina jars are not covered by the warranty.*
Operation Manual & Video	Request More Info
Speed Controller	• **Variable speed version** (0 - 1200 RPM) by 3 phase motor and speed controller is available at **$800 extra**. Click pictures below for details and please select "with speed controller" from the options bar when purchasing. 
Optional Air Cooling 	• If the user needs to force conditional **air cooling** for some ductile materials, please click to order a Portable Spot Air Cooling Conditioner, which will keep milling jar temperature low.(click picture below). It is a cost-effective way to achieve required particle sizes and production rates for heat sensitive or tough-to-mill materials. Air Cooling Conditioner Test with Nylon Jar Zirconia Balls: Milling 30 mins / Milling 60mins The temperature of jar without Air Cooling: 45°C / 65°C The temperature of jar with Air Cooling: 35°C / 45°C • Optional jar and grinding balls are available in product options bar (click Pic below to see specs or order spares) Forced cold air SS vacuum jar 50ml alumina jar Alumina balls

Application Notes	• Attention: In order to achieve the best grinding effects, it is suggested to use milling balls with diameter less than 10mm for 50ml alumina jar
	• Tips for choosing proper jars and milling media for milling and grinding application:
	  ∘ SS mixing jar is suitable for grinding various metal materials
	  ∘ For milling the oxide material, please choose Nylon or alumina/zirconia jar and media
	• Please consider our SYU-3 Ultrasonic Filtration System for filtering the product.
	• *DO NOT USE stainless steel balls in Alumina jars or vice versa to avoid contamination.*
	• *Please use N2 gas if operates inside of glove-box, do not use Ar gas because Ar may cause motor short circuit.*
	• *Bulk samples must be crushed before grinding. Please consider MTI Jaw crusher (click pic below right)*

Overall Dimensions	Mill: 415mm(L) x 365mm(W) x 285mm(H) Speed Controller: 260mm(L) x 170mm(W) x 240mm(H)
Net Weight	40 kg (88 lbs)
Shipping Dimensions	27"(L) x 23"(W) x 24"(H)
Shipping Weight	135 lbs