

KINTEK SOLUTION

# Milling Equipment Catalog

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# KINTEK SOLUTION

### **COMPANY PROFILE**

### >>> About Us

Kintek Solution Ltd is one technology orientated organization, team members are devoted to probing the most efficicent and reliable technology and innovations in the scienticfic researching equipment, fields like biochemical reacting, new materials researching, heat treatment, vaccum creating, refrigerating, as while as pharmaceutical and petroleum extracting equipment.

In the past 20 years, we earned rich experiences in this researing equipment field, we are capable to supply both the equipment and solution according to customer's needs and realities, we have also developed lots of customer tailer equipment accoding to a specific working purpose, and we have lots of successful projects in many universities and institutes from different countries, like Asia, Europe, North and south America, Australia and New Zealand, middle east, and Africa.

Profession, quick response, hard working, and sincerity is a remarkable label of our team meambers working attitude, which earn us a sound reputation among our clients.

We are here and ready to service our clients from different countries and regions, and share the most efficent and reliable technology together!





# **Mini Planetary Ball Mill**

**Item Number: KT-P400** 



### Introduction

Discover the KT-P400 desktop planetary ball mill, ideal for grinding and mixing small samples in the lab. Enjoy stable performance, long service life, and practicality. Functions include timing and overload protection.

Grinding principle	Impact & friction force
Suitable materials	Small and medium-low hardness; Brittle; Dry or wet
Materials input size	< 2 mm
Materials output size	0.1-20 um
Processing volume	< 400 ml
Grinding jar speed	0-900 r/min
Grinding jar material	Tungsten carbide; Ceramic; Agate; Stainless steel; Harden steel; Nylon, etc.
Number of grinding jar	4 pcs
Grinding jar volume	< 100 ml
Grinding ball material	Tungsten carbide; Zirconia; Alumina; Agate; Stainless steel, etc.
Motor power	250W
Net weight	35 kg
Dimensions	L500 * W300 * H350 mm
Protection level	IP65



# **Rotating Planetary Ball Mill**

**Item Number: KT-P400E** 



### Introduction

KT-P400E is a desktop multi-directional planetary ball mill with unique grinding and mixing capabilities. It offers continuous and intermittent operation, timing, and overload protection, making it ideal for various applications.

Grinding principle	Impact & friction force
Suitable materials	Small and medium-low hardness; brittle; dry or wet
Materials input size	< 2 mm
Materials output size	0.1-20 um
Processing volume	< 400 ml
Grinding jar speed	0-900 r/min
Planetary disc speed	10 r/min
Grinding jar material	Tungsten carbide; Ceramic; Agate; Stainless steel; Harden steel; Nylon, etc.
Number of grinding jar	4 pcs
Grinding jar volume	100 ml
Grinding ball material	Tungsten carbide; Zirconia; Alumina; Agate; Stainless steel, etc.
Motor power	370W
Net weight	66 kg
Dimensions	L720 * W500 * H500 mm
Protection level	IP65
Quality standards	CE



# **Horizontal Planetary Ball Mill**

Item Number: KT-P400H



### Introduction

Improve sample uniformity with our Horizontal Planetary Ball Mills. KT-P400H reduces sample deposition and KT-P400E has multi-directional capabilities. Safe, convenient and efficient with overload protection.

Grinding principle	Impact & friction force
Suitable materials	Small and medium-low hardness; brittle; dry or wet
Materials input size	
Materials output size	0.1-20 um
Processing volume	
Grinding jar speed	0-900 r/min
Grinding jar material	Tungsten carbide; Ceramic; Agate; Stainless steel; Harden steel; Nylon, etc.
Number of grinding jar	4 pcs
Grinding jar volume	100 ml
Grinding ball material	Tungsten carbide; Zirconia; Alumina; Agate; Stainless steel, etc.
Motor power	250W
Net weight	35 kg
Dimensions	L320 * W410 * H510 mm
Protection level	IP65
Quality standards	CE



### **Vibration Mill**

**Item Number: KT-VMS** 



### Introduction

Vibration Mill for Efficient Sample Preparation, Suitable for Crushing and Grinding a Variety of Materials with Analytical Precision. Supports Dry / Wet / Cryogenic Grinding and Vacuum/Inert Gas Protection.

Grinding principle	Impact & friction force
Suitable materials	Small and medium-low hardness; brittle; dry or wet
Materials input size	< 15 mm
Materials output size	0.1-20 um
Processing volume	250 / 500ml
Disc panspeed	1500 r/min
Grinding panmaterial	Tungsten carbide;Ceramic; Agate; Stainless steel; Harden steel; Nylon, etc.
Motor power	550/750W
Net weight	218/228kg
Dimensions	L780*W700*H1220 mm
Protection level	IP65
Quality standards	CE



# **Metal Alloy Grinding Jar With Balls**

Item Number: GJ-1



### Introduction

Grind and mill with ease using metal alloy grinding jars with balls. Choose from 304/316L stainless steel or tungsten carbide and optional liner materials. Compatible with various mills and features optional functions.



# Alumina/Zirconia Grinding Jar With Balls

**Item Number: AG-2** 



### Introduction

Grind to perfection with alumina/zirconia grinding jars and balls. Available in volume sizes from 50ml to 2500ml, compatible with various mills.



# **Nature Agate Mortar With Pestle**

**Item Number: AM-1** 



### Introduction

Get high-quality grinding results with Nature Agate Mortar and Pestle. Available in various sizes with shining polished grinding surfaces.



# **Agate Grinding Jar With Balls**

Item Number: AG-1



### Introduction

Grind your materials with ease using Agate Grinding Jars with Balls. Sizes from 50ml to 3000ml, perfect for planetary and vibration mills.



# **Xrd X-Ray Diffraction Grinder**

**Item Number: KT-XRD180** 



### Introduction

KT-XRD180 is a miniature desktop multifunctional horizontal grinder specially developed for sample preparation of X-ray diffraction (XRD) analysis.

Application samples	fine   low to medium hardness   brittle   dry or low viscosity
Processing Type	Grinding   Blending
Maximum injection size	
Sample particle size range	
Number of ball mill jars	1
Grinding jar volume	180ml   100ml   50ml
Number of grinding columns	42
Grinding Media Type	Cylindrical   Spherical
Grinding jar material	Zirconia   Tungsten carbide
Grinding method	dry grinding   wet grinding
Number of rubber rollers	2 pieces
Maximum speed	1800 r/min
Net weight	28kg
Dimensions	260*250*140 mm
Protection class	IP65
Standard	CE



# **Single Horizontal Jar Mill**

Item Number: KT-JM3000



#### Introduction

KT-JM3000 is a mixing and grinding instrument for placing a ball milling tank with a volume of 3000ml or less. It adopts frequency conversion control to realize timing, constant speed, direction change, overload protection and other functions.

Processing principle	Friction
Application sample features	Fine   Medium to low hardness   Brittle   Dry or low viscous
Processing type	grinding   mixing
Maximum injection size	< 5 mm
Sample particle size range	1-20um
Number of ball mill jars	1
The largest ball milling tank volume available	3000ml
Available minimum milling jar volume	250ml
Ball mill tank optional material	Zirconia   Tungsten Carbide   Agate   Nylon Stainless Steel   Polyurethane etc
Grinding media optional type	Spherical   Cylindrical
Grinding ball optional material	Zirconia   Tungsten Carbide   Agate   Stainless Steel   Corundum
Grinding method	Dry grinding   wet grinding
Number of rubber rollers:	2 sticks
Rubber roller speed	900 r/min
Rubber roller cover material	Polyurethane
Rubber roller movement method	electric control
net weight	48kg
Dimensions	680*430*430mm
Protection class:	IP65
standard	CE



# **Four-Body Horizontal Jar Mill**

**Item Number: KT-HJM** 



### Introduction

The four-body horizontal tank mill ball mill can be used with four horizontal ball mill tanks with a volume of 3000ml. It is mostly used for mixing and grinding laboratory samples.

Processing principle	Friction
Application sample features	Fine   Medium to low hardness   Brittle   Dry or low viscous
Processing type	grinding   mixing
Maximum injection size	< 5 mm
Sample particle size range	1-20um
Number of ball mill jars	4
The largest ball milling tank volume available	3000ml
Available minimum milling jar volume	250ml
Ball mill tank optional material	Zirconia   Tungsten Carbide Agate   Nylon Stainless Steel   Polyurethane etc
Grinding media optional type	Spherical   Cylindrical
Grinding ball optional material	Zirconia   Tungsten Carbide Agate   Stainless Steel   Corundum
Grinding method	Dry grinding   wet grinding
Number of rubber rollers:	3 sticks
Rubber roller speed	900 r/min
Rubber roller cover material	Polyurethane
Rubber roller movement method	electric control
net weight	88kg
Dimensions	670*660*310mm
Protection class	IP65
standard	CE



# **Ten-Body Horizontal Jar Mill**

Item Number: KT-HJM10



### Introduction

The Ten-body horizontal jar mill is for 10 ball mill pots (3000ml or less). It has frequency conversion control, rubber roller movement, and PE protective cover.

Processing principle	Friction
Application sample features	Fine   Medium to low hardness   Brittle   Dry or low viscous
Processing type	Grinding   mixing
Maximum injection size	< 5 mm
Sample particle size range	1-20um
Number of ball mill jars	10
The largest ball milling tank volume available	3000ml
Available minimum milling jar volume	250ml
Ball mill tank optional material	Zirconia   Tungsten Carbide   Agate   Nylon Stainless Steel   Polyurethane etc
Grinding media optional type	Spherical   Cylindrical
Grinding ball optional material	Zirconia   Tungsten Carbide Agate   Stainless Steel   Corundum
Grinding method	dry grinding   wet grinding
Number of rubber rollers:	6 sticks
Rubber roller speed	900 r/min
Rubber roller cover material	Polyurethane
Rubber roller movement method	electric control
net weight	165kg
Dimensions	1330*670*740mm
Protection class:	IP65
standard	CE



### **Lab Roller Mill**

**Item Number: KT-RM40** 



### Introduction

The roller mill is a horizontal grinder with 1-20L batch grinding capacity. It uses different tanks, rotating to grind samples below 20um. Features include stainless steel construction, soundproof cover, LED lighting, and PC window.

Processing principle	Friction
Application sample features	Fine   Medium to low hardness   Brittle   Dry or low viscous
Processing type	Grinding   mixing
Maximum injection size	< 20 mm
Sample particle size range	< 20 mm
Number of ball mill jars	1
Grinding jar volume	5L   10L   20L   40L
Batch feeding amount	1-20L
Grinding jar material	Stainless steel   nylon
Grinding media type	Grinding Balls   Grinding Rods
Grinding ball optional material	Stainless Steel   Zirconia
Grinding method	Dry grinding   wet grinding
Number of rubber rollers	6 sticks
Rubber roller speed	100 r/min
Rubber roller movement method	Frequency Control
net weight	110kg
Dimensions	660*1010*740 (open cover height 1480) mm
Protection class:	IP65
standard	CE



# **High Energy Planetary Ball Mill**

**Item Number: KT-BMP2000** 



### Introduction

The high-energy planetary ball mill KT-BMP2000 can not only perform fast and effective grinding, but also has good crushing ability. It can crush and grind hard samples with large particle size, which can meet more processing needs of users.

Grinding principle	Impact & friction force
Suitable materials	Small and medium-low hardness; brittle; dry or wet
Materials input size	< 10 mm
Materials output size	0.1-20 um
Processing volume	2000ml
Disc panspeed	800 r/min
Grinding panmaterial	Tungsten carbide;Ceramic; Agate; Stainless steel; Harden steel; Nylon, etc.
Planetary disk space movement mode	X axis planetary movement
Motor power	100-120V/200-240V AC ,50-60Hz,750W
Net weight	92kg
Dimensions	L570*W570*H420 mm
Protection level	IP65
Quality standards	CE



# **High-Energy Omnidirectional Planetary Ball Mill**

Item Number: KT-P2000E



### Introduction

The KT-P2000E is a new product derived from the vertical high-energy planetary ball mill with a 360° rotation function. The product not only has the characteristics of the vertical highenergy ball mill, but also has a unique 360° rotation function for the planetary body.

Grinding principle	Impact & friction force
Suitable materials	Small and medium-low hardness; brittle; dry or wet
Materials input size	< 10 mm
Materials output size	0.1-20 um
Processing volume	2000ml
Disc panspeed	800 r/min
Grinding panmaterial	Tungsten carbide;Ceramic; Agate; Stainless steel; Harden steel; Nylon, etc.
Planetary disk space movement mode	X   Y axis 360° change planetary motion
Motor power	100-120V/200-240V AC ,50-60Hz,870W
Net weight	233kg
Dimensions	L1120*W685*H780 mm
Protection level	IP65
Quality standards	CE



# **High Energy Planetary Ball Mill (Horizontal Tank Type)**

Item Number: KT-P2000H



### Introduction

The KT-P2000H uses a unique Y-axis planetary trajectory, and utilizes the collision, friction and gravity between the sample and the grinding ball.

Grinding principle	Impact   Friction   Gravity
Suitable materials	Small and medium-low hardness; brittle; dry or wet
Materials input size	< 10 mm
Materials output size	0.1-20 um
Processing volume	2000ml
Disc panspeed	800 r/min
Grinding panmaterial	Tungsten carbide;Ceramic; Agate; Stainless steel; Harden steel; Nylon, etc.
Planetary disk space movement mode	Y-axis planetary movement
Motor power	100-120V/200-240V AC ,50-60Hz,750W
Net weight	106kg
Dimensions	L720*W560*H510 mm
Protection level	IP65
Quality standards	CE



# **Cabinet Planetary Ball Mill**

**Item Number: KT-CPBM** 



### Introduction

The vertical cabinet structure combined with ergonomic design enables users to obtain the best comfortable experience in standing operation. The maximum processing capacity is 2000ml, and the speed is 1200 revolutions per minute.

Grinding principle	Impact & friction force
Suitable materials	Small and medium-low hardness; brittle; dry or wet
Materials input size	< 20 mm
Materials output size	0.1-20 um
Processing volume	2000ml
Disc panspeed	1`200 r/min
Grinding panmaterial	Tungsten carbide;Ceramic; Agate; Stainless steel; Harden steel; Nylon, etc.
Planetary disk space movement mode	X axis planetary movement
Motor power	220V/380V AC ,50-60Hz,1500W
Net weight	326kg
Dimensions	L780*W700*H1220 mm
Protection level	IP65
Quality standards	CE



# **High Energy Planetary Ball Mill**

**Item Number: KT-P4000** 



### Introduction

The biggest feature is that the high energy planetary ball mill can not only perform fast and effective grinding, but also has good crushing ability

Grinding principle	Impact & friction force
Suitable materials	Small and medium-low hardness; brittle; dry or wet
Materials input size	< 10 mm
Materials output size	0.1-20 um
Processing volume	4000ml
Disc panspeed	800 r/min
Grinding panmaterial	Tungsten carbide;Ceramic; Agate; Stainless steel; Harden steel; Nylon, etc.
Planetary disk space movement mode	X axis planetary movement
Motor power	100-120V/200-240V AC ,50-60Hz,750W
Net weight	106kg
Dimensions	L720*W500*H500 mm
Protection level	IP65
Quality standards	CE



# **High-Energy Omnidirectional Planetary Ball Mill**

**Item Number: KT-P4000E** 



### Introduction

The KT-P4000E is a new product derived from the vertical high-energy planetary ball mill with a 360° swivel function. Experience faster, uniform, and smaller sample output results with 4 ≤1000ml ball mill jars.

Grinding principle	Impact   Friction   Gravity
Suitable materials	Small and medium-low hardness; brittle; dry or wet
Materials input size	< 10 mm
Materials output size	0.1-20 um
Processing volume	4000ml
Disc panspeed	800 r/min
Grinding panmaterial	Tungsten carbide;Ceramic; Agate; Stainless steel; Harden steel; Nylon, etc.
Planetary disk space movement mode	X   Y axis 360° change planetary motion
Motor power	100-120V/200-240V AC ,50-60Hz,870W
Net weight	242kg
Dimensions	L1120*W685*H780 mm
Protection level	IP65
Quality standards	CE



# **High Energy Planetary Ball Mill (Horizontal Tank Type)**

Item Number: KT-P4000H



### Introduction

KT-P4000H uses the unique Y-axis planetary motion trajectory, and utilizes the collision, friction and gravity between the sample and the grinding ball to have a certain anti-sinking ability, which can obtain better grinding or mixing effects and further improve the sample output.

Grinding principle	Impact   Friction   Gravity
Suitable materials	Small and medium-low hardness; brittle; dry or wet
Materials input size	< 10 mm
Materials output size	0.1-20 um
Processing volume	4000ml
Disc panspeed	800 r/min
Grinding panmaterial	Tungsten carbide;Ceramic; Agate; Stainless steel; Harden steel; Nylon, etc.
Planetary disk space movement mode	Y-axis planetary movement
Motor power	100-120V/200-240V AC ,50-60Hz,750W
Net weight	115kg
Dimensions	L720*W560*H510 mm
Protection level	IP65
Quality standards	CE



# **Disc / Cup Vibratory Mill**

**Item Number: KT-DVM** 



### Introduction

The vibrating disc mill is suitable for nondestructive crushing and fine grinding of samples with large particle sizes, and can quickly prepare samples with analytical fineness and purity.

Model	KT-DVM300	KT-DVM600
Maximum injection size		
Sample particle size range		
Batch effective processing volume	15-250 ml	15-500 ml
Grinding disc speed	1500 r/min	1500 r/min
Vacuum/inert protection grinding	support	support
Movement mode	circular movement	circular movement
Time setting	9999min	9999min
Number of grinding discs	1	1
Grinding disc volume	50ml   100ml   250ml	100ml   250ml   500ml
Grinding disc material	tungsten carbide   zirconia   agate   stainless steel, etc.	tungsten carbide   zirconia   agate   stainless steel, etc.
Grinding method	dry grinding   wet grinding	dry grinding   wet grinding
Electrical description	380V, 50-60Hz, 1.5KW	380V, 50-60Hz, 1.5KW
Power port	European standard   American standard   British standard   Australian standard, etc.	European standard   American standard   British standard   Australian standard, etc.
Net weight	218kg	228kg
Dimensions (W*D*H)	780*650*1080mm	780*650*1080mm
Protection class	IP65	IP65
Standard	CE	CE
Additional configurations can be added	cryogenic liquid nitrogen cooling   touch operating system   grinding disc temperature and pressure monitoring	cryogenic liquid nitrogen cooling   touch operating system   grinding disc temperature and pressure monitoring



# **Disc Cup Vibrating Mill Multi-Platform**

**Item Number: KT-DVMP** 



### Introduction

The multi-platform vibrating disc mill is suitable for non-destructive crushing and fine grinding of samples with large particle sizes. It is suitable for crushing and grinding applications of medium-hard, high-hard, brittle, fibrous, and elastic materials.

Model	KT-DVMP2000	KT-DVMP2000-P
Maximum injection size		
Sample particle size range		
Batch effective processing volume	35-3000 ml	35-3000 ml
Grinding disc speed	1500 r/min	1500 r/min
Vacuum/inert protection grinding	support	support
Movement mode	circular movement	circular movement
Time setting	9999min	9999min
Number of grinding discs	1	4
Grinding disc volume	100ml   250ml   500ml   2000ml optional	100ml   250ml   500ml optional
Grinding disc material	Stainless Steel   Tungsten Carbide   Zirconia Optional	Stainless Steel   Tungsten Carbide   Zirconia Optional
Grinding method	dry grinding   wet grinding	dry grinding   wet grinding
Electrical description	380V,50-60Hz,2.2KW	380V, 50-60Hz, 2.2KW
Power port	three phase	three phase
Net weight	320kg	320kg
Dimensions (W*D*H)	740*640*1110mm	740*640*1110mm
Protection class	IP65	IP65
Standard	CE	CE



### **Micro Tissue Grinder**

**Item Number: KT-MT10** 



### Introduction

KT-MT10 is a miniature ball mill with a compact structure design. The width and depth are only 15X21 cm, and the total weight is only 8 kg. It can be used with a minimum 0.2ml centrifuge tube or a maximum 15ml ball mill jar.

Maximum injection size	< 6 mm
Sample particle size range	0.1-20 um
Grinding method	Dry grinding   wet grinding   low temperature grinding
Operating principle	8-track high-frequency three-dimensional movement
Range of motion	12mm
Movement frequency	3000 times/min
Grinding carrier type	Ball mill jar   cell disruption adapter
Ball mill material	Tungsten carbide   zirconia   stainless steel   polytetrafluoroethylene, etc. optional
Number of ball mill jars	1
Ball mill jar volume	15 ml
Grinding Ball Material	Zirconia   Stainless Steel   Tungsten Carbide Optional
Grinding ball size	0.1-15mm
Configurable centrifuge tube volume	0.2ml   0.5ml   2ml   5ml
Cell breaking adapter	0.2mlX25   0.5mlX12   2mlX5   5mlX4
Electrical description	200-240V AC, 50-60Hz, 30W
Power port	National Standard   European Standard   American Standard   British Standard, etc.
Net weight	8kg
Dimensions (width, depth and height)	50*210*220 mm
Protection class	IP65
Standard	CE
Additional items	Transparent PC protective cover, liquid nitrogen dry ice cooling



# **Hybrid Tissue Grinder**

**Item Number: KT-MT20** 



### Introduction

KT-MT20 is a versatile laboratory device used for rapid grinding or mixing of small samples, whether dry, wet, or frozen. It comes with two 50ml ball mill jars and various cell wall breaking adapters for biological applications such as DNA/RNA and protein extraction.

Recommended maximum injection size	< 8 mm
Sample particle size range	~5 um
Grinding method	dry grinding   wet grinding   low temperature grinding
Grinding platform (number of tanks)	2
Movement mode	Y plane arc reciprocating movement
Vibration frequency	180-1800 r/min
Control mode	LCD screen frequency conversion control
Time setting	59:59:59 (h/m/s)
Ball mill material	tungsten carbide   zirconia   stainless steel   MC nylon   PTFE, etc.
Ball mill jar volume	50ml   30ml
Ball mill tank sealing method	sealing ring + thread fastening
Grinding ball size	1-25m optional
Grinding ball material	tungsten carbide   zirconia   agate   stainless steel
Cell breaking adapter volume	10X0.2ml   5X2ml   5X5ml
Electrical description	100-110V/200-240V AC, 50-60Hz, 150W
Power port	National Standard   European Standard   American Standard   British Standard, etc.
Net weight	48kg
Dimensions (length, width and height)	470*360*250
Protection class	IP63
Standard	CE



# **High Throughput Tissue Grinder**

**Item Number: KT-MT** 



#### Introduction

KT-MT is a high-quality, small, and versatile tissue grinder used for crushing, grinding, mixing, and cell wall breaking in various fields, including food, medical, and environmental protection. It is equipped with 24 or 48 2ml adapters and ball grinding tanks and is widely employed for DNA, RNA, and protein extraction.

Model	K-MT24	K-MT48
Recommended maximum injection size	< 10mm	< 10mm
Sample particle size range	0.1-20um	0.1-20um
Grinding method	dry grinding   wet grinding   low temperature grinding	dry grinding   wet grinding   low temperature grinding
Number of ball mill jars	2	2
Range of motion	35mm	55mm
Movement mode	8-track high-frequency three-dimensional movement	8-track high-frequency three-dimensional movement
Vibration frequency	3000 times/min	3000 times/min
Control mode	LCD screen frequency conversion control	LCD screen frequency conversion control
Time setting	99:99:99[h:m:s[	99:99:99[h:m:s[
Ball mill material	Zirconia   Tungsten Carbide   Stainless Steel   PTFE Optional	Zirconia   Tungsten Carbide   Stainless Steel   PTFE Optional
Ball mill jar volume	15mlX2   25mlX2   50mlX2	15mlX2   25mlX2   50mlX2
Grinding carrier type	ball mill jar   cell disruption adapter	ball mill jar   cell disruption adapter
Grinding ball size	0.1-25m optional	0.1-25m optional
Configurable centrifuge tube volume	0.2ml   0.5ml   2ml   5ml etc.	0.2ml   0.5ml   2ml   5ml etc.
Cell breaking adapter	0.2-2ml X 24   5-15ml X 8	0.2-2ml X 48   5-15ml X 8
Adapter material	PC   MC	PC   MC
Centrifuge tube material	EP	EP
Electrical description	200-240V AC,50-60Hz,150W	200-240V AC,50-60Hz,200W
Power port	National Standard   European Standard   American Standard   British Standard, etc.	National Standard   European Standard   American Standard   British Standard, etc.
Net weight	28kg	32kg
Dimensions (length, width and height)	380*480*350mm	380*480*350mm
Protection class	IP65	IP65
Standard	CE	CE



Noise description <60dB <60dB



# **High Energy Vibratory Ball Mill (Single Tank Type)**

Item Number: KT-VB100



### Introduction

High-energy vibration ball mill is a small desktop laboratory grinding instrument.It can be ball-milled or mixed with different particle sizes and materials by dry and wet methods.

Maximum injection size	< 1 mm
Sample particle size range	0.1-20um
Maximum processing volume	80ml
Sample minimum throughput	lg
Ball milling tank speed	1700r/min
Movement mode of ball mill jar	High-frequency three-dimensional motion
Ball mill material	Tungsten carbide   Zirconia   Stainless steel optional
Number of ball mill jars	1
Ball mill tank volume	25ml / 50ml / 80ml optional
Grinding ball material	Tungsten carbide   Zirconia   Stainless steel optional
Grinding method	Dry Grinding   Wet Grinding   Vacuum Grinding
Electrical description	220V AC, 50-60Hz, 250W
Power port	National Standard   European Standard   American Standard   British Standard, etc.
Net weight	35kg
Dimensions (L*W*H)	430*318*268mm
Protection class	IP65
Standard:	CE



# **High Energy Vibratory Ball Mill (Double Tank Type)**

**Item Number: KT-VB200** 



### Introduction

High-energy vibration ball mill is a small desktop laboratory grinding instrument. It uses 1700r/min high-frequency three-dimensional vibration to make the sample achieve the result of grinding or mixing.

Maximum injection size	< 1 mm
Sample particle size range	0.1-20um
Maximum processing volume	160ml
Sample minimum throughput	lg
Ball milling tank speed	1700r/min
Movement mode of ball mill jar	High-frequency three-dimensional motion
Ball mill material	Tungsten carbide   Zirconia   Stainless steel optional
Number of ball mill jars	2
Ball mill tank volume	25ml / 50ml / 80ml optional
Grinding ball material	Tungsten carbide   Zirconia   Stainless steel optional
Grinding method	Dry Grinding   Wet Grinding   Vacuum Grinding
Electrical description	220V AC, 50-60Hz, 500W
Power port	National Standard   European Standard   American Standard   British Standard, etc.
Net weight	68kg
Dimensions (L*W*H)	620*320*268mm
Protection class	IP65
Standard:	CE



### **Mortar Grinder**

**Item Number: KT-MG200** 



### Introduction

KT-MG200 mortar grinder can be used for mixing and homogenizing powder, suspension, paste and even viscous samples. It can help users realize the ideal operation of sample preparation with more regularization and higher repeatability.

Suitable materials	soft   hard   brittle   pulpy
Treatment type	grinding
Maximum injection size	< 8 mm
Sample particle size range	< 10-20um
Batch effective processing capacity	10-190ml
Maximum speed	100 rpm
Mortar volume	700ml
Mortar material	Zirconia   Tungsten Carbide   Onyx   Stainless Steel Available
Pestle material	Zirconia   Tungsten Carbide   Onyx   Stainless Steel Available
Material of pestle	Type 304 stainless steel
Usher and pestle pressure adjustment	Adjust the handle vertically
Usher and pestle position adjustment	Knob for lateral adjustment
Scraper material	PTFE   Nylon Optional
Scraper adjustment	Adjustable pressure   Adjustable lateral position
Grinding time setting	9999 h   min   s
Stop time setting	9999 h   min   s
Grinding method	Dry Grinding   Wet Grinding   Cryogenic Grinding
Net weight	38 kg
Overall dimension	310*330*430 mm
Electrical description	110-220V, 50-60Hz, 150W
Protection level	IP65
Quality standard	CE



### **Nano Sand Mill For Laboratory**

**Item Number: KT-NM2000** 



### Introduction

KT-NM2000 is a nano-scale sample grinder for laboratory desktop use. It uses 0.1-1mm diameter zirconia sand grinding media, zirconia grinding rods and grinding chambers to achieve friction and shear forces during high-speed rotation.

Grinding chamber volume	1000ml
Processing method	batch or loop
Grinding chamber material	
Grinding rod material	Zirconia
Chamber cover material	
Cooling tube material	304 stainless steel
Grinding media material	Zirconia
Grinding media diameter	0.1-1mm
Grinding method	wet grinding
Screening particle size range	1-50nm
Rotating speed	2000 rpm
control method	Frequency Control
Circulating cooling system	yes
Cooling medium	Coolant
Sample circulation system	yes
Circulation flow rate	8L/min
Micro Sample Disperser	yes
Diffuser speed	1800r/min
High borosilicate sampling cup	yes
Sampling cup volume	2500ml
Diffuser bracket material	304 stainless steel
Quick-Removable Coolant Bottle	yes
Electrical description	100-120V/200-240V AC ,50-60Hz, 1100W
Power port	National standard / European standard / American standard / British standard, etc.
Net weight	85kg
Dimensions (width, depth and height)	470*470*290mm
Protection class	IP65



Standard CE



### **Cross Percussion Mill**

**Item Number: KT-CPM500** 



### Introduction

Suitable for a variety of soft, tough, fibrous and hard dry samples. It can be used for batch processing and continuous coarse crushing and fine crushing. (animal feed, bones, cables, cardboard, electronic components, feed pellets, foils, food[etc.

Maximum injection size	< 25 mm		
Sample particle size range	< 200um		
Grinding method	dry grinding		
Operating principle	high speed rotation		
Rotation diameter	128mm		
Rotating speed	2000-4000r/min		
Rotation line speed	14-28m/s		
Speed can be set	yes		
control method	Frequency Control		
Rotary knife material			
Grinding cavity material	Stainless Steel   Tempered Steel		
Chamber cover material	Stainless steel		
Chamber cover fixing method	Locating pin + hand wheel		
Screen material	Stainless steel		
Mesh specifications	0.2-10mm		
Sample collection bucket material	Stainless steel		
Collection bucket volume	5L-30L		
Inlet and outlet sample funnel material	Stainless steel		
In and out sample method	Top in, bottom out		
Bracket	50*50mm detachable and lifting aluminum alloy stand with universal wheels		
Electrical description	200-240V AC, 50-60Hz, 1100W		
Power port	National Standard   European Standard   American Standard   British Standard etc.		
Net weight	28kg		
Instrument size (width*depth*height)	390*435*248 (including funnel height 430)		
Stand size (width*depth*height)	550*560*720mm		
Protection class	IP65		
Standard	CE		



Additional items Sampler



# **Liquid Nitrogen Cryogenic Vibration Ball Mill**

Item Number: Kt-VBM100



### Introduction

Kt-VBM100 is a laboratory desktop highperformance vibrating ball mill and sieving dualpurpose small and lightweight instrument. The vibrating platform with a vibration frequency of 36,000 times/min provides energy.

Maximum injection size	< 5 mm
Sample particle size range	20um
Grinding amount	1g-20g
Vibration frequency	3000-3600r/min
Vibration amplitude	3mm
Vibration mode	two dimensional
Liquid nitrogen freezing method	Immersion
Grinding temperature	-196°C — 40°C
Ball mill material	Stainless Steel   Tungsten Carbide   Zirconia
Number of ball mill jars	1
Ball mill tank volume	150ml
Grinding ball material	Stainless Steel   Tungsten Carbide   Zirconia
Grinding Ball Diameter	40-60mm
Grinding method	Dry Grinding   Wet Grinding   Cryogenic Grinding
Screening method	dry sieving   wet sieving
Mesh Diameter	100mm   150mm
Dry screening range	20um - 63mm
Wet screening range	20um - 10mm
Maximum sieving weight	3kg
Screen layers	2-5 floors
Drive mod	mechanical drive
Electrical description	100-120V/200-240V AC, 50-60Hz, 150W
Power port	National Standard   European Standard   American Standard   British Standard, etc.
Net weight	35kg
Dimensions (width, depth and height)	400*300*200mm
Protection class	IP65
Standard	CE





# **Nano High Energy Ball Mill**

**Item Number: KT-MAX2000** 



### Introduction

KT-MAX2000 is a laboratory desktop nano-scale grinding equipment. It is used by placing two ball mill jars with a volume of 125ml or less.

Recommended maximum injection size	< 5 mm	
Sample particle size range	< 80nm	
Grinding method	Dry Grinding   Wet Grinding   Vacuum Grinding	
Grinding platform (number of cans)	2	
Movement method	Horizontal high-frequency circular motion	
Rotating speed	300-2000 r/min	
Crushing time setting	99h: 99m: 99s	
Ball mill material	Stainless Steel   Hard Steel  Tungsten Carbide   Zirconium Oxide   PTFE	
Ball mill tank volume	80ml   125ml	
Grinding ball material	Tungsten carbide   Zirconium oxide   Agate   Stainless steel	
Grinding ball size	1-30m optional	
Ball mill tank seat material	aluminum alloy	
Working platform material	aluminum alloy	
Electrical description	100-120V   200-240V AC, 50-60Hz, 1500W	
Power port	National Standard   European Standard   American Standard   British Standard etc.	
Net weight	128kg	
Dimensions (width, depth and height)	520*520*380	
Protection class	IP30	
Standard	CE	



# **Hybrid High Energy Vibratory Ball Mill**

**Item Number: KT-BM400** 



### Introduction

KT-BM400 is used for rapid grinding or mixing of dry, wet and frozen small amount of samples in the laboratory. It can be configured with two 50ml ball mill jars

Recommended maximum injection size	< 8 mm
Sample particle size range	~ 5um
Grinding method	Dry Grinding   Wet Grinding   Cryogenic Grinding
Grinding platform (number of cans)	2
Movement method	plane arc reciprocating motion
Vibration frequency	180-1800 r/min
Control method	LCD display
Time setting	59:59:59 (h/m/s)
Ball mill material	Tungsten carbide   zirconia   stainless steel   MC nylon PTFE, etc.
Ball mill tank volume	50ml   30ml
The sealing method of the ball mill jar	Sealing ring + screw fastening
Grinding ball size	1-25m optional
Grinding ball material	Tungsten carbide   Zirconium oxide   Agate   Stainless steel
Cell breaking adapter volume	10x0.2ml   5x2ml   5x5ml
Electrical description	100-120V/200-240V AC, 50-60Hz, 150W
Power port	National Standard   European Standard   American Standard   British Standard etc.
Net weight	48kg
Dimensions (LWH)	470*360*250
Protection class	IP63
Standard	CE



# **High Energy Vibratory Ball Mill**

**Item Number: KT-BM500** 



### Introduction

The high-energy vibrating ball mill is a highenergy oscillating and impacting multifunctional laboratory ball mill. The table-top type is easy to operate, small in size, comfortable and safe.

product name	Hybrid High Energy Vibratory Ball Mill	Hybrid High Energy Vibratory Ball Mill Low Temperature Type	High energy vibratory ball mill multi-platform	
Model	KT-BM500	KT-BM500-L	KT-BM500-P	
Recommended maximum injection size				
Sample particle size range	~0.1um			
Grinding method	Dry grinding   Wet grinding   Vacuum grinding	Dry grinding   Wet grinding   Vacuum grinding   Cryogenic grinding	Dry grinding   Wet grinding   Vacuum grinding	
Grinding platform (number of cans)	2		6	
Movement method	Y-plane arc-shaped high-frequency reciprocating motion			
Vibration frequency	180-1800 r/min			
Classic Smash Time	10-60s			
Ball mill material	Tungsten carbide   Zirconium oxide   PTFE   Nylon   Hard steel   Stainless steel	Stainless Steel   Tungsten Carbide   Zirconia		
The maximum volume of the ball mill tank	2X125ml		6X125ml	
Fixing method of ball mill jar	screw fastening			
Grinding ball size	1-30mm optional			
Grinding ball material	Tungsten carbide   Zirconium oxide   Agate   Stainless steel			
Control method	Frequency Control			
Electrical description	100-120V   200-240V AC, 50-60Hz, 750W			
Power port	National Standard   European Standard   American Standard   British Standard etc.			
Net weight	126kg			
Dimensions (width, depth and height)	680*540*320			
Protection class	IP30			
Standard	CE			



### **High Energy Planetary Ball Mill F-P2000**

Item Number: KT-P2000



#### Introduction

Experience fast and effective sample processing with the F-P2000 high-energy planetary ball mill. This versatile equipment offers precise control and excellent grinding capabilities. Perfect for laboratories, it features multiple grinding bowls for simultaneous testing and high output. Achieve optimal results with its ergonomic design, compact structure, and advanced features. Ideal for a wide range of materials, it ensures consistent particle size reduction and low maintenance.

Product name	High energy planetary ball mill
Model	F-P2000
Processing principle	impact force friction
Application sample characteristics	fine   medium to low hardness   brittle   dry or low viscosity
Processing type	crush grind mix
Maximum injection size	10mm
Sample particle size range	0.1-20um
Maximum processing volume	2000ml
Maximum speed of ball mill tank	800r/min
Transmission mode	European standard
Space movement mode	X-axis planetary motion
Function	Continuous and intermittent operation   Emergency stop   Timing   Power outage memory   Overload and hazardous operation protection
Additional features	LED Lighting Heat Dissipation
Ball mill tank material	Tungsten carbide zirconia   agate   stainless steel   MC nylon and other optional
Number of ball mill tanks	40
Ball mill tank volume	500ml
Grinding ball material	Tungsten carbide   zirconia   agate   stainless steel, etc. optional
Grinding method	Dry grinding Wet grinding
Electrical Description	100-120V/200-240VAC,50-60Hz,750W
Power port	National Standard   European Standard   American Standard   British Standard, etc.



Net weight	92kg
Dimensions (length, width and height)	570*570*420mm
Protection level	IP650
Standard	CE
Additional configurations available	Ultra-low temperature liquid nitrogen cooling touch operating system

Main accessories	Recommended standard configuration volume: 500ml	√: means it can be configured		x: indicates that it cannot be matched	
	Material:	Туре	100ml	250ml	500ml
	Tungsten carbide	Classic	√	✓	√
		Vacuum type	√	$\checkmark$	×
	Zirconia	Classic	<b>√</b>	✓	√
		Vacuum type	√	V	×
	Agate	Classic	√	✓	√
		Vacuum type	√	V	×
	MC nylon	Classic	<b>√</b>	√	√
Ball mill tank		Vacuum type	√	V	
	Stainless steel	Classic	<b>√</b>	✓	√
		Vacuum type	√	V	√
	Polyurethane	Classic	<b>√</b>	√	√
		Vacuum type	√	V	×
	PTFE	Classic	√	√	√
		Vacuum type	√	V	×
	Corundum	Classic	√	✓	√
		Vacuum type	V	√	×
Grinding ball	Diameter(mm)	Material			
	3/5/10/15/20	Tungsten carbide   Zirconia   Agate   Stainless steel   Corundum			





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