

Grinder & Mill



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About us

Innova Bio-Meditech is one of the professional solution provider of laboratory and medical devices. Firmly committed to our mission of “sharing innovative bio-meditech solutions with the world”, we are dedicated to innovation in the fields of Biology Project, Life Science, Pharmacy Industry and Medical Treatment.

Innova Bio-Meditech possesses a sound distribution and service network with business partners in North and Latin America, Europe, Africa and Asia-Pacific etc. We have built up a well established R&D, manufacture network with 3 centers in Qingdao, Shanghai and Suzhou. Inspired by the needs of our customers, we adopt advanced technologies and transform them into accessible innovation. This means constant effort and research, in order to more fully understand the developments of the market, INNOVA produce constantly upgraded product ranges by adding new products year after year.

The passion for science

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IM100S Vibratory Ball Mill

IM100S can be rapidly and efficiently grinded and homogeneous in a very short time and at frequencies up to 35Hz. Under certain grinding conditions, some samples can reach sub micron level. It can grind for dry,wet and freeze. Moreover,it can pulverize two samples from 0.2 to 45ml at the same time. IM100S is also perfectly suitable for the disruption of biological cells as well as for DNA/RNA recovery.

A variety of materials for grinding jars are suitable for multi-industry applications. Agate, zirconia, and tungsten carbide are the best choices for samples such as soil that require anti-heavy metal pollution. Tungsten carbide and stainless steel can also participate in the preparation of hard samples.



Application



Features

- Compact and light, and can be brought to the scene as portable equipment.
- Dry, wet and low temperature in liquid nitrogen for grinding.
- A variety of materials grinding jar and multi aperture adapters are optional.
- Large range of grinding jars and maximum sample quantity 2x45ml, multi aperture adapter sample quantity 6x100ml.
- High sample throughput due to short grinding times and two grinding stations, especially suitable for the disruption of biological cells as well as for DNA/RNA recovery.
- Good sealing, eliminate cross contamination between samples.
- Reproducible results by digital preselection of grinding time and vibrational frequency.
- Memory keys for three parameter combinations, The grinding process is more standardized and efficient.
- The automatic center location and safety locking device can ensure the quick location of the grinding kit, high efficiency and safety.
- The instrument is equipped with an electromagnetic safety system to ensure the safety of the operator.

Technical Parameter

Model	IM100S
Feed size	≤15mm
Final fineness	About 5 μm (Depending on the nature of the sample and grinding environment)
Feeding quantity	6×100mL
Display	LCD touch
Setting grinding time	1s-99h59min59s Continuously adjustable
Intermittent time setting	1s-99min59s
Stop time setting	1s-99min59s
Setting vibrational frequency	1Hz-35Hz (60rpm-2100rpm)
Grinding environment range	Dry, Wet, Low temperature grinding in Liquid nitrogen
Grinding jar volume	80ml, 50ml, 35ml, 25ml,10ml, 5ml
Grinding jar material	Chrome steel, Stainless steel, Zirconia, Tungsten carbide, PTFE, Agate
Adapter	5ml×4 holes (Stainless steel), 5ml×6 holes, 5ml×12 holes, 2ml×10 holes, 2ml×24 holes, 2ml×48 holes, 1.2ml×96holes,
Adapter material	PTFE, Stainless steel, Aluminum
Grinding ball diameter	0.1-1.5mm, 2mm, 3mm, 5mm, 7mm,10mm,15mm, 20mm, 25mm, 30mm
Tool for opening	Suitable for 5ml-80ml grinding jar
Grinding platform	2
Load display	Yes
Automatic center positioning device	Yes
Automatic storage parameter combination	10 groups
Cycles	1-20 times
Dimension (mm)	384 × 267 × 461
Net weight	Approx. 30kg
Electrical parameters	220V/240W

Multifunctional accessories



The type of grinding jar and adapter determines the diversity of product application and the customer's attention. The type of grinding sets is very complete, in addition, it can be customized.

Adapter holes

- The multi-hole adaptor can meet the needs of customers more, from fewer samples to more samples, from fewer samples to more samples, more convenient for customers to choose.
- Stainless steel adapter : 100ml×3 holes, 50ml×4 holes, 15ml×2 holes, 5ml×4 holes
- Aluminum adapter : 100ml×3 holes, 30ml×4 holes, 10ml×4 holes, 5ml×6 holes
- PTFE adapter : 5ml×6 holes, 5ml×8 holes, 5ml×12 holes, 2ml×10 holes, 2ml×24 holes, 2ml×48 holes
- PP adapter : 1.2ml×96 holes



Grinding jars

- Grinding jar volume : 5ml, 10ml, 25ml, 35ml, 50ml, 80ml
- Grinding jar material:
 - Stainless steel: General sample
 - Zirconium oxide, Agate: Heavy-metal-free processing
 - Tungsten carbide: Hard sample grinding, such as mineral
 - PTFE: Low temperature grinding in liquid nitrogen
- Note: all above are general recommendations



1. Exceptionally simple and safe handling, screw-top, good sealing.
2. Dust-proof and air-tight (no loss of material, no escape of e.g. inert atmosphere).
3. Suitable for wet and cryogenic grinding.
4. Stainless steel protective jacket (for Agate, - Zirconium oxide and Tungsten carbide jars).

Grinding Jar Volume (ml)	Sample Amount(ml)	Max. Feed size (ml)	Ø5mm	Ø7mm	Ø10mm	Ø12mm	Ø15mm	Ø20mm	Ø25mm
1.5/2.0	0.2-0.5	1	1-2	-	-	-	-	-	-
5	0.5-2.0	2	-	1-2	-	-	-	-	-
10	2.0-4.0	4	-	-	1-2	1-2	-	-	-
25	4.0-10.0	6	-	-	5-6	2-4	1-2	-	-
35	6.0-15.0	6	-	-	6-9	4-6	2-3	1	-
50	8.0-20.0	10	-	-	12-14	6-8	3-4	1	1
80	15.0-45.0	15	-	-	15-18	8-10	4-5	1	1

IPB420 Planetary ball mill

IPB420 is suitable for soft, medium-hard, hard, brittle and toughness, dry and wet for grinding, wet is suitable for high fineness, even meet the requirements of preparing alloy by mechanical method.

The internal design of the planetary ball mill can meet long time running, apply on Preparation of nanomaterials. The instrument can set the function of forward and backward, intermittent and so on. It can set two grinding periods. Each period of grinding time can set different rotational speed, and the grinding effect of the product can be optimized.



Application



Features

- It can be run continuously for a long time.
- Extremely high speed can grind the sample to sub micron or even nanometer fineness.
- Both forward and backward can run, can set interval time and pause time, prevent sample aggregation and better heat dissipation.
- It can set two different speed of grinding time, aiming at the special requirements of different samples.
- Grinding jars volume 50-500ml, 6 different materials, broaden application range of products.
- Automatic ventilation in grinding chamber.
- 10 sets of grinding parameters can be stored.
- LCD touch screen, no need to press button.
- The instrument is convenient to operate, accords with the principle of artificial science, with casters, and convenient to move.
- The instrument is equipped with a safety lock device to ensure the experimental safety of the operator.

Technical Parameter

Model	IPB420
Feed size	< 15mm
Final fineness	About 0.1 μm(Colloidal) / About 1 μm (General grinding)
Feeding quantity	≤2×220ml
Setting grinding time	1s-99h59min59s
Direction setting	Direction reversa, Interval, Pause, Two stage grinding
Sun wheel speed	100rpm-650rpm
Sun wheel diameter	305mm
Speed ratio	1: -2
Grinding environment range	Dry,Wet
Grinding platform	2
Grinding jar volume	50ml, 80ml, 125ml, 250ml, 500ml
Grinding jar material	Chrome Steel, Stainless steel, Tungsten carbide, Agate, Corundum, Zirconia
Number of grinding jars placed	2/4
Stacking jars volume	50ml/80ml, placed 4
Grinding ball diameter	0.1mm-1mm, 2mm, 3mm, 5mm, 7mm,10mm,15mm, 20mm, 25mm, 30mm
Parameter storage	10 groups
Combined cycle number	1-20 times
Dimension (mm)	656mm × 517mm × 396mm
Net weight	Approx. 100Kg
Electrical parameters	220V/750W

Multifunctional accessories

The sample preparation effect of planetary ball mill mainly depends on the selection of grinding jars and ball. According to the sample quantity and final fineness, the volume, material of the grinding jars and number of grinding balls are selected. IPB420 is equipped with adapters, stacking 8 piece of 50ml and 80ml grinding jars, increasing the diversity of samples.

Special application grinding kit

- Grinding jar for special applications are equipped with safety sealing devices, which have excellent air tightness and dust resistance, so that excessive pressure generated during and after grinding will not be easily removed. In addition, the grinding tank is equipped with temperature and pressure monitoring device, which can monitor the process and reaction in the grinding tank. This device is mainly used in the preparation of alloy materials.



Gas-filled jar

Grinding jars

- Grinding jar volume: 50ml, 80ml, 125ml, 250ml, 500ml
- Grinding jar material: Stainless steel/Chrome: General sample
Zirconia, agate, corundum: heavy-metal-free processing
Tungsten carbide: hard sample grinding, such as mineral
Notes: all above are general recommendations



- The bottom of the grinding jars has a central location to ensure that the grinding jar is not sliding.
- O sealing ring, dust-free design.
- The grinding jar and lid are designed with grasping edges to facilitate operation.
- Jar and lid have opening gap.
- Stainless steel protective jacket (for agate, sintered aluminum oxide, zirconium oxide and tungsten carbide grinding jars).
- Grinding jar identification (material and volume).

Grinding Jar Volume (ml)	Sample amount(ml)	Feed size (ml)	Ø5mm	Ø10mm	Ø15mm	Ø20mm	Ø30mm	Ø40mm
50	5-20	4	200	10	7	3	-	-
80	10-35	6	250	25	10	5	-	-
125	15-50	8	500	30	18	7	-	-
250	25-120	10	1200	50	45	15	6	-
500	75-220	15	2000	100	70	25	8	4

IM200S Mortar Grinder

IM200S is a classic mill. It roots in traditional manual grinding. Simple and convenient operation. Soft, hard, brittle and pasty samples can be ground. The digital display speed can make the grinding result repeatable. Samples that are difficult to grind by heating, freezing or adding grinding aids.



Application



Features

- The samples were homogenized by the classic mild grinding method.
- Digital time display ensures repeatability of results.
- The adjustment of the pressure and position of the pestle and the adjustment of the scraper board ensure the optimal grinding state.
- The instrument has an observation window, and the LED lamp in the grinding chamber can clearly understand the grinding state at any time.
- Dry, wet, freezing.
- The control panel has a load display function.
- 7 different grinding set materials.
- Closed, dust-tight grinding chamber.
- The instrument has a sensing device, operation safety.



1. Pestle pressure adjust, the greater pressure when clockwise rotation, otherwise smaller
2. Scraper adjust, the best position to contact the mortar wall
3. Position adjustment of the pestle, The factory has been set up
4. Observation window, The grinding process can be observed through the large windows
5. Feed window, The sample enters from here and can place a funnel
6. The LED lamp is designed in the grinding cavity, and the grinding process can be clearly observed
7. The load displays the current state of the load and adjusts the pressure of the mortar and pestle accordingly

Technical Parameter

Model	IM200S
Sample type	Soft, Hard, Brittle and Pasty
Feed size	<15 mm
Final fineness	<0.2-5µm (Depending on the nature of the sample and grinding environment)
Feeding quantity	10-200mL
Setting grinding time	1s-99h59min59s continuous
Intermittent time	1s-99h59min59s continuous
Stop time	1s-99h59min59s continuous
Setting speed	50rpm-150rpm, Section speed can be set
Cycles	1-20 times
Parameter storage	10 groups
Load display	Yes, Displayed on the LCD
Sample temperature display	Yes, Displayed on the LCD
Grinding environment range	Dry, Wet, Low temperature grinding in liquid nitrogen
Mortar and pestle material	Chrome steel, Stainless steel, Tungsten carbide, Agate, Sintered aluminum oxide, Zirconia, Hard porcelain
Setting pestle pressure	Pass the scale and display the pressure in the display
Setting scraper pressure	Via knob
Dimension (W×H×D) (mm)	390×455×285
Net weight	40kg
Electrical parameters	220V/250W

Multifunctional accessories

A variety of materials mortar and pestle and scraper



Grinding set

The choice of the suitable grinding set material depends primarily on the hardness of the sample and the possible effects of any abrasion on the subsequent analysis or further processing.

- Hard porcelain or sintered aluminum oxide (Al₂O₃): For soft to medium-hard or pasty substances.
- Agate, zirconium oxide or tungsten carbide: For processing hard, abrasive substances, for long-term and for heavy-metal-free processing.
- Chrome steel or stainless steel: For less demanding applications, also under rough conditions and cryogenic grinding of yeast cells.
- Scraper: Polyurethane (corrosion resistant), Beech wood (pharmaceutical sector), PTFE (cryogenic grinding)

Note: the above is a general suggestion

IM300S Cutting Mill

IM300S adopts a three-phase motor with strong output, and high torque cutting makes it more excellent in the face of extremely complex samples (such as solid waste). Stepless speed regulation can be adapted to various samples. The motor brake is stopped quickly. When the grinding cavity is opened, the instrument can not operate and the safety is ensured. In addition, IM300S can be equipped with cyclone separator, suitable for fibrous or light weight samples, improve grinding efficiency.



Application



Features

- 3KW motor drives efficiently to ensure effective grinding of samples.
- 100-3000rpm is adjustable to suit different samples.
- Multiple continuous cutting edges in the grinding chamber are short the grinding time of the sample.
- Plug-in Type rotor and bottom sieve, easy to clean.
- Low heat build-up, suitable for heat-sensitive sample.
- Large feeding quantity, up to 80L/h, final fineness 100µm-20mm, suitable for different requirement.
- Different material rotors and ring sieves.
- Digital display ensures repeatability of sample result.
- The control panel reads the load directly in class, which makes it easy to adjust the feed Speed and feed rate.
- The sample booster can make the sample easier to enter the grinding cavity for grinding.
- Escape-free hopper, dust-free design, easy to clean.
- The instrument has a sensing device, operation safety.
- The motor has a brake system, stop quickly.
- Designed with aerated grille to facilitate sample collection.
- Bracket is aluminum, separable from the host, easy to transport.



- 1 Cut between the cutting edge and the rotary knife
- 2 Feed funnel
- 3 Bottom sieve
- 4 Collecting trough

Technical Parameter

Model	IM300S
Sample type	Soft, Medium-hard, Toughness, Elastic, Fibrous
Feed size	70 × 90 mm
Final fineness	About 100µm-250µm (Depending on the nature of the sample and grinding environment)
Feeding quantity	80L/h
Setting speed	100rpm-3000rpm
Grinding environment range	Dry
Collection device	0.5L, 3L, 5L, 30L
Rotor material	Stainless steel, Tungsten carbide, Heavy-metal-free
Rotor teeth	3 teeth parallel section rotor/24 teeth Continuous rotor
Sieve holes(stainless)	Trapezoidal holes 0.2mm, 0.25mm, 0.5mm, 1.0mm, 1.5mm / Round or Square holes 2.0mm, 4.0mm, 6.0mm, 8.0mm, 10.0mm, 20.0mm
Hopper	Dust-free hopper, Screw feeder
Cyclone separator	Optional 0.5L, 1L, 3L, 5L, 30L
Dimension (W×H×D) (mm)	455 × 1450 × 715
Net weight	Approx. 150Kg
Electrical parameters	380V/3000W

Multifunctional accessories

Cutting grinder is best to carry out two-stage grinding, first pre-grinding, and then fine grinding. All of the above should be based on a wealth of accessories.

Rotary knife

Rotary knife type:

- 3-tooth parallel rotary knife, suitable for routine crushing of large, thick ordinary samples
- 24-tooth continuous rotary knife, suitable for crushing complex samples and medium-hard and brittle samples

Rotary knife material:

- Stainless steel : General grinding
- Tungsten carbide : Hard grinding , Hheavy-metal-free
- Heavy-metal-free steel : Heavy-metal-free

Notes : The above is a general suggestion

Bottom sieve

- Bottom sieve type : Trapezoidal, round and square holes
- Bottom sieve material: Stainless steel

Cyclone separator kit



1. During the grinding process, the strong absorption of the vacuum cleaner forms a negative pressure, so that the sample can be quickly discharged from the grinding chamber
2. Suitable for a small amount or low density samples
3. Efficient cooling of samples and cutting tools

Jaw Crusher

INNOVA jaw crusher is a kind of professional instrument used in the lab to make solid sample, which has a good performance in rigidity, noise-making and crushing speed. It can quickly do the coarse crushing and pre-crushing for fragile materials, hard materials, mid-hard materials and tough materials, etc. Zero correction can be done to the jaw crusher, the gap between jaw plates can be adjusted if a better crushing effect is required.

Application



Geology



Building materials



Ceramics



Coal



Cement



Glass



IMJ100 Jaw Crusher

- High efficient in crushing, large capacity and low noise.
- The motion of the jaw support is in the form of an advanced link operation, which takes the place of support by spring and bracket. So phenomena like the spring loosens, the spring extends and the bracket falls off can be avoided.
- Mechanical lock and electronic lock are available, when the feeding hopper is open, the jaw crusher will not run. So the personal safety of experiment people can be highly ensured.
- The feeding hopper uses an one-way anti-splash device, which is able to be turned over. So the samples will not splash and the cleaning of grinding chamber can be faster and more complete.
- The gap between jaw plates are able to be adjusted continuously, zero correction is available, which can ensure the correctness of the output particle size.
- Muted motor is used and overload protection is available, the rotation speed is 800rpm, which helps increase the crushing efficiency by 30%.
- The leakproofness is quite good and there is a dust-drain interface, which can well protect the environment in the lab.
- Intelligent controller is available, so it is quite safe; there is also an overload protection.

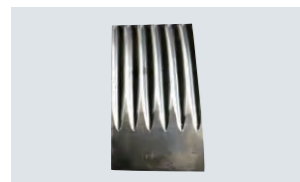


IMJ200S Bench Jaw Crusher

- Compact, space-saving benchtop instrument
- Final fineness can reach D90<250µm
- The hopper can be turned over for cleaning easily, escape-free hopper
- Gap width and speed digital display and adjustable
- Different materials jaws can be used for different applications
- The jaw can be easily dismantled without tools and easily for cleaning
- The movement direction of the jaw can be turned over
- Zero-point adjustment for wear compensation
- Large LCD touch screen

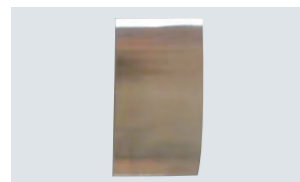
Multifunctional accessories

Jaw



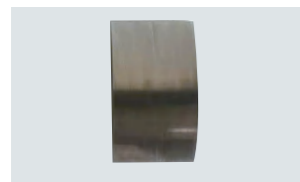
Manganese steel

- A material whose structure becomes compressed under pressure and hardens with time (cold hardening).



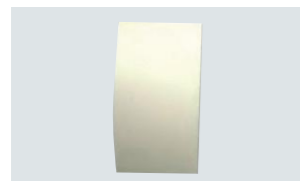
Stainless steel

- Recommended if the expected feed material is not too hard and could cause corrosion.



Tungsten carbide

- The most abrasion-resistant and pure material. It ensures a longer working life of the jaws even if materials with a hardness of up to 7 on Mohs'scale are regularly processed.



Zirconia

- Prevention of heavy metal pollution. Another advantage is that no color changes as a result of abrasion are observed. (Applicable to the sample hardness is not high samples)

Technical Parameter

Model	IMJ100
Feed size	≤95mm
Final fineness	<2mm(D90)
Adjustment range of output size	0-35mm (adjust continuously)
Gap width	Read the scale
Zero correction	Yes
Hopper	Able to be turned over
Grinding set material	Hadfield steel, stainless steel, tungsten carbide, zirconia, MnSi, heavy metal-proof steel, industrial plastics
Power supply	380V 50Hz
Motor power	2.2KW

Technical Parameter

Model	IMJ200S
Sample Type	Medium-hard, hard, brittle
Feed Size	≤40mm
Final Fineness	D90 < 250µm (Depending on the nature of the sample and the milling environment)
Collector Capacity	3L
Throughput	3L/batch Customizable continuous feed
Setting Time	2 mode optional, 1s-7h59min59s, continuous
Setting Gap width	0-12mm
Parameter Storage	10 groups
Gap width Display	Digital
Load Display	Digital graphic display
Zero Point adjustment	Yes
Dust Extraction unit	Dust-proof case
Jaw Material	Manganese steel, Stainless steel, Tungsten carbide, Anti-heavy metal steel, Zirconia
Jaw Width	60mm
Speed	500-1000rpm Customized
Dimension (W×H×D)	420mm×490mm×595mm
Net weight	Approx. 80Kg
Electrical Parameters	220V/1100W

IM900 Vibratory Disc Mill

IM900 is particularly suitable for rapid, loss-free grinding of hard, brittle and fibrous materials to analytical fineness. The IM900 is primarily used for sample preparation for spectral analysis. IM900 Even in large volume grinding jars and high speed, it can maintain a smooth and low tempered run. It can achieve 20-100 micron grinding fineness within a few seconds and has good reproducibility.



Application



Building materials



Ore



Coal



Soil



Glass

Features

- Extremely short grinding time, XRF or other spectral analysis of fineness requirements. (about 100µm).
- Reproducible results.
- Handle ergonomics design, grinding sets is easy to install.
- Quick-action grinding set clamping device, stable planar drive.
- Setting speed range 700-1500rpm.
- Grinding sets in different sizes and materials.
- Agate and tungsten carbide recognition for automatic speed reduction (Speed limit 1200rpm and 700rpm).
- The grinding jars can be slid from the track to the exact position.
- LCD touch screen display.
- 10 parameter combinations can be stored.
- Sealed, noise-insulated grinding chamber.
- Maintenance-free.

Technical Parameter

Model	IM900
Sample type	Medium-hard, hard, brittle, fibrous
Feed size	≤15mm
Final fineness	D90≤20um (Depending on the nature of the sample and grinding environment)
Feeding quantity batch	15-250ml
Grinding volume	50ml/100ml/250ml
Setting speed	700-1500rpm, continuous
Setting grinding time	1s-99h59min59s
Grinding sets material	Chrome steel, stainless steel, tungsten carbide, agate, zirconium oxide, anti-heavy metal steel
Program storage	10 groups
Grinding environment range	Dry and wet
Dimension (W×H×D)	810×1220×815mm
Net Weight	Approx. 300Kg
Electrical Parameters	220V/50HZ/1500W

Multifunctional accessories



Grinding sets

6 materials and 3 specifications are available :

- Chrome steel : 50ml-100ml-250ml
- Stainless steel : 50ml-100ml-250ml
- Heavy-metal-free : 50ml-100ml-250ml
- Tungsten carbide : 50ml-100ml-250ml (Max 1200rpm)
- Agate : 50ml-100ml (Speed limit 700rpm)
- Zirconia : 50ml-100ml

Ultra Centrifugal Mill

INNOVA Ultra Centrifugal Mill applies to a wide range of samples. Based on its high efficiency grinding technology and rich accessories, with two-steps grinding of rotating knife-ring screen system, it can process dry and wet grinding in a very short time for the soft, hard, brittle, fibrous samples.

Application



Soil



Collagen



Circuit board



Coal



Polymer



Glass



Nut



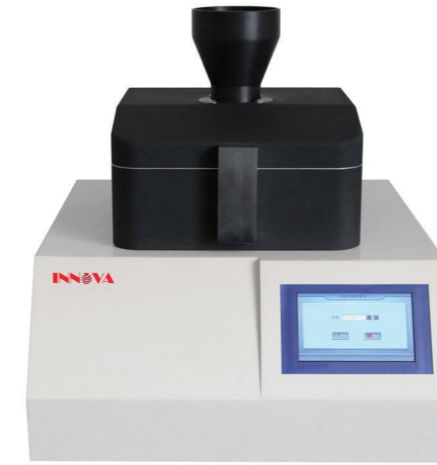
Pill



IMU500S Ultra Centrifugal Mill

- Wide speed range.
- All kinds of rotors and ring sieves , wide range of application
- High final fineness
- The grinding sets can be taken out when collecting samples , easy to collect , no loss.
- Escape-free hopper, dust-free design for Grinding cavity.
- Automatic lock design can guarantee dust free spillover.
- Parameter setting is simple and convenient, digital display.
- The control panel has an overload bar indication, which helps to control feed volume and feed rate.
- The instrument has a sensing device, operation safety.
- The instrument is equipped with automatic sampler and cyclone separator, which can be used for large of sample preparation.

IMU500E Ultra Centrifugal Mill



- Touch screen operation, simple and convenient operation.
- Fast and efficient two-stage grinding, one step to complete coarse grinding and fine grinding.
- Dry grinding and freezing grinding are available.
- Equipped with strong magnetic anti-interference system, the instrument runs more stably.
- Anti-splash feed inlet, safety switch and mechanical lock, double guarantee the safety of experimenters.
- A variety of materials and specifications of accessories can be selected, a variety of applications.
- The rotating speed is adjustable to meet different experimental requirements.
- With anti-overload function, prolong the service life of the instrument.
- Can be equipped with automatic sampler and cyclone separator, which can prepare a large number of samples.

Multifunctional accessories

Rotary knife



- Rotary knife type:
 - 6-tooth rotor: coarse, bulky, fibrous goods such as feed pellets, hay and straw
 - 12-tooth rotor: medium-coarse goods such as wheat, oats, plastics
 - 24-tooth rotor: fine goods such as chemicals, coal and sugar
- Rotary knife material:
 - Stainless steel, titanium

Ring sieve



- Ring sieve type:
 - Standard ring sieve: General sample , such as grain
 - Ring sieve with reinforced rim: medium hard , such as circuit boards, coal
 - Distance sieve: temperature-sensitive , brittle materials such as resins and Leatherwear
- Ring sieve material:
 - Stainless steel, titanium

Collecting plate



Stainless steel



Nylon



Titanium plating



Collection plate with outlet

Technical Parameter

Model	IMU500E
Feed size	≤10mm
Final fineness	≤100μm
Motor speed	5000-20000rpm
Ring sieve	0.20 / 0.50 / 0.80 / 1.00/ 1.50/ 2.00mm
Grinding sets material	Stainless steel, titanium
Collecting pan volume	900mL
Rated power	800W
Power supply	220V 50HZ

Technical Parameter

Model	IMU500S
Sample type	Soft, Medium-hard, Brittle, Elastic, Fibrous
Feed size	<10mm
Final fineness	About 40μm
Grinding time	Two modes are optional: Continuous mode Time-limited mode (time setting 1s-9min59s)
Feeding quantity	With standard cassette up to 300ml (cassette volume 900ml)/with cyclone up to 4500ml
Setting Speed	6000rpm-18000rpm
Storage parameters	10 groups
Load display	Digital graphic display
Grinding environment range	Dry, Low temperature grinding in liquid nitrogen
Cassette material and volume	Stainless steel 900ml, nylon 900ml
Rotor teeth	6-tooth, 12-tooth, 24-tooth
Rotor material	Stainless steel, Titanium
Ring sieve holes	Trapezoidal holes 0.08mm, 0.12mm, 0.2mm, 0.25mm, 0.5mm, 1.0mm, 1.5mm, Round holes 2.0mm, 3.0mm, 4.0mm, 5.0mm, 6.0mm
Ring sieve material	Stainless steel, Titanium
Dimension (W×H×D)	405×450×400mm
Net Weight	Approx. 42kg
Electrical parameters	220V/1100W

IMK600S Knife Mill

IMK600S is the most widely used in the food field. Not only dry, elastic, tough, brittle, fibrous, soft, and medium hard samples are effectively ground, but also the "three high" samples with high moisture, high oil and high fat content are quickly and effectively homogenized to meet customer needs.



Application



Plant seed



Frozen food



Dried fruit



Feed



Meat



Vegetables



Fish

Features

- High speed and more efficient grinding.
- Wide range of accessories and wide range of applications.
- Sample vessel easy to clean and exchange.
- The plugged structure rotor and containers, all grinding sets can be sterilized at high temperature and high pressure.
- One button operation, more easily.
- Data digital display , memory 4 groups.
- Run mode , interval\ forward\ backward, quick.
- The instrument is equipped with safety lock device, the machine cover can not be opened during grinding, and the instrument can not start when the machine cover is opened. Ensure the safety of operators and meet CE certification.
- Knife serrated blades make hard samples, fat samples better homogenized.
- The cover can be automatically switched.

Technical Parameter

Model	IMK600S
Sample type	Dry, elastic, hard, brittle, fibrous, soft, medium-hard, moisture, oil, fat
Feed size	10-50mm
Final fineness	Approx. 300µm
Feeding quantity	Max. 700ml
Setting Speed	1000-15000rpm
Knife diameter and line speed	118mm/about 12.4-62m/s
Grinding environment range	Dry, Wet, Low temperature grinding
Grinding containers and material	1L, stainless, PC
Setting time	1s-5min, digital display
Run mode	Interval, forward, backward, quick
Knife material	Stainless steel, titanium
Parameter storage	4 groups or 9 groups (optional)
Dimension (W×H×D)	300×370×260mm
Net weight	Approx. 19kg
Electrical parameters	220V/1100W

Multifunctional accessories

Container



- Stainless steel container:
Suitable for soft, medium hardness, toughness, water, oil and lipid samples, especially for medium hardness samples, such as grains, nuts, etc., can withstand greater impact. Stainless steel can be sterilized under high temperature and high pressure



- PC container:
Transparent anti-scratch, suitable for smashing of soft, tough, elastic, fibrous and water-containing oily fat samples, high temperature and high pressure sterilization below 120 C

Serrated rotary knife



- Suitable for samples with high fat content, such as meat.
Stainless steel or titanium knife: two blades are misaligned up and down, increase the grinding range and improve the efficiency; four blades with all stainless steel, can be ground at low temperature and can further improve the crushing efficiency.

Gravity cover



- Overflow canal gravity cover:
Ensure that the size of the grinding space always matches the sample size and move up and down during the grinding process.



- Ordinary gravity cover:
Ensure that the size of the grinding space always matches the sample size and move up and down during the grinding process.

Scraper



- For sticky sample

IF100S Vibratory Sieve Shaker

IF100S mainly sieves powder, loose materials, suspended solids. It is a three-dimensional vibratory screening instrument, that is, horizontal vibration and up and down vibration, different from other domestic screening of a single vibration mode. The instrument can dry sieve and wet sieve, and increase the diversity of sample sieving. Convenient screen cover fast fastening device, greatly improves the sieving efficiency.



Application



Mineral
Powde



Soil



Chemicals



Plastic



Seed and
Cereals



Building
materials



Fertilizer



Washing
powder

Features

- Three dimensional throwing vibration effect
- 100mm, 150mm, 200mm and 300mm diameter analysis sieve can be placed.
- Measuring range: 20 μ m-40mm.
- Maximum sievable 6kg sample.
- Dry and wet, suitable for different samples.
- It can store 9 sets of parameters, set up intermittent mode, and improve the efficiency and standardization of the instrument.
- The comfortable fastening device can quickly lock and loosen the analysis sieve.
- Large size LCD touch screen, easy to operate.
- Multi-functional operation panel, easy to operate, different amplitudes, intermittent time adjustment, suitable for different samples sieving.

Technical Parameter

Model	IF100S
Sample Type	Powder, loose materials, suspended solids
Measuring Range	20 μ m-40mm
Feeding Quantity	6kg
Maximum Series	9 series
Max. Mass of sieve stack	10kg
Amplitude adjustment range	0.2-3mm
Time display	Digital 1-99min
Interval Time	5s-99s
Storage parameters	9 groups
Sieving method	Dry, wet
Sieve tray diameter	100mm, 150mm, 200mm, 300mm
Analysis sieve material	Stainless steel, nylon
Dimension(W×H×D)	565 × 865 × 405mm
Net Weight	Approx. 50kg
Electrical Parameters	220V 50Hz / 200W

IF200S Rotary Sample Divider

IF200S sample dividers are rotating dividers. Both small and rough materials can ensure a high standard of accuracy. The material feed and dividing processes take place automatically, without interruption and without loss of material. The feed amount can range from a few grams up to 5L depending on the sample vessels used. It is possible to produce an individual number of identical fractions for various applications by the repeated division or combination of fractions.



Application



Food, Cereals



Soil, Ore

Features

- Extremely high division accuracy, Representative and reproducible division for accurate analysis results.
- The injection system and the sample separation system are integrated and easy to operate.
- Fully automatic design, preset time, speed and injection speed.
- The sampling chamber is optional, which is suitable for different sample.
- The split crown is made of aluminum material with abrasion resistance and difficult to adsorb samples.
- For samples with finer particle size, the cap is protected by dust cap.
- Split crown fastener structure design, easy disassembly.
- The overall design of the instrument is compact, convenient to clean.
- Low-noise drive.

Technical Parameter

Model	IF200S
Sample type	Bulk materials
Feed size	<12mm
Sample divider batch	5L
Setting time	1-99min
Setting speed	70-120rpm
Flow rate	Max 5L/min
Sample copies	6/8/10
Bottle volume	30ml, 100ml, 250ml, 500ml
Dimension(W×H×D)	600mm × 920mm × 450mm
Electrical parameters	220V/150W

Accessories

Composed of automatic sample injection system and dispensing system, and different injection slot widths are available. A variety of different number of sample head interfaces and bottles to meet different application requirements.



Sampling head for bags, directly dispensing



The angle of the injection slot is adjustable, and the feeding is more complete for special samples.

- Selection of dispensing head: 6, 8 or 10 dispensing ports, users can choose according to their needs and applications. The dispensing head is made of special aluminum, which is wear-resistant. The interface of the dispensing head and the dispensing bottle can be quickly fastened, and the operation is convenient.
- Selection of sample bottles: 30ml, 100ml, 250ml, 500ml.