



Sample Pretreatment *Homogenizer & Stirrer & Mixer & Shaker & Dry Bath & Centrifuge*

Lab ultrasonic homogenizer

- Single chip microcomputer technology + 4.3-inch TFT capacitive touch screen control (optional choice- 7 inches), other optional functions such as computer communication or data printing;
- High degree of intelligence, centralized control of the central computer, ultrasonic time, power can be set from 1%-100%;
- Sample temperature detection display, frequency microcomputer automatic tracking, fault automatic alarm;
- With overload protection function and if the horn not immersed in the liquid will automatically protect the luffing rod from damage;
- Can realize fault, over temperature or operation error caused by voice alarm function, more humanized.



Suitable for small volume sample ultrasonic cell crushing apparatus (this quotation includes sound insulation)

Model	JY96-IIN	JY88-IIN	JY92-IIN	JY92-IIDN
Power (w)	1.5-150 Continuous	2.5-250 Continuous	10-650 Continuous	10-900 Continuous
Crushing capacity (ml)	0.1-150	0.1-300	0.1-500	0.1-600
	With optional horns			
Optional horns (mm)	Φ2、3、6、8、10	Φ2、3、6、8、10	Φ2、3、6、8、10、12	Φ2、3、6、8、10、12、15
Ultrasonic setting time (s)	0.1-99.9			
Single stop time (s)	0.1-99.9			
Total time (ultrasound + gap)	1-99H59M59S			
Frequency range (kHz)	20-25			
Temperature control range (℃)	0-100			
Alarm function	Time, overload, no load, over temperature			Temp, time, overload, no load, over temperature
Standard horns (mm)	Φ6			
Display mode	Touch screen display			
Data storage	20 sets			
Power supply	220V/110V/ 50Hz/60Hz			
Net size (mm)	410*225*290			
Optional features	Computer communication + data printing + sound proof +sterilization			
Control mode	Single chip +TFT touch control			
Other functions	Voice alarm and prompt function			

Suitable for big volume sample ultrasonic cell crushing apparatus (this quotation includes sound insulation)

Model	HX-IID	JY98-IIIDN	JY99-IIIDN
Power (w)	10-1000 Continuous adjustable	20-1200 Continuous adjustable	50-1800 Continuous adjustable
Crushing capacity (ml)	0.1-750	1-1000	1-1200
	Need to match the corresponding horn		
Optional horns (mm)	Φ2、3、6、8、10、12、15、22	Φ3、6、8、10、15、20、22、25	Φ6、8、10、15、20、22、25
Standard horns (mm)	Φ6	Φ20	Φ22
Single ultrasound time (s)	0.1-99.9		
Single ultrasound time (s)	0.1-99.9		
Total time (ultrasound + gap)	1-99H59M59S		
Frequency range (kHz)	19.5-20.5		
Temperature control range(℃)	0-100		
Alarm function	Temperature, time, overload, no load, over temperature		
Display mode	True color touch screen display		
Data storage	20 group		
Power supply	220V/110V/ 50Hz/60Hz		
Net size (mm)	410*225*290		
Optional features	Computer communication + data printing + sound insulation lighting or sterilization		
Control mode	Single chip +TFT touch control		
Other functions	Voice alarm and prompt function		

Hand-held ultrasonic homogenizer

Hand-held Ultrasonic Homogenizer is a multifunctional device that uses ultrasonic wave to produce cavitation effect in liquid.Used for crushing, emulsifying, dispersing, homogenizing, extracting, defoaming, cleaning and nano materials, preparation and acceleration of chemical reactions.

The instrument with led screen display, automatic and manual two working modes, ultrasonic time, power stable, sample temperature detection display, automatic frequency tracking and other functions.It is good ultrasound treatment for small volume samples.

Product features

It can be used to control ultrasonic inching with hand-held ultrasonic energy device after 96-well enzyme labeling and countless small test tubes are arranged.So that countless samples can complete the ultrasonic processing in a short time.



Technical parameters

Model	UP-250		UP-400
Power(w)	2.5-250 Continuous		4-400 Continuous
Crushing capacity (ml)	0.1-150 (With optional horns)		0.1-300 (With optional horns)
Optional horns (mm)	Φ2、3、5、6		Φ2、3、5、6
Standard horn (mm)	Φ5		
Single ultrasound time (s)	0.1-99.9		
Single stop time(s)	0.1-99.9		
Total time (ultrasound + gap)	1-99H59M59S		
Frequency range (kHz)	20-30		
Temperature control range(°C)	0-100		
Alarm function	Time, overload, no load, over temperature		
Display mode	Temp, time, overload, no load, over temperature		
Data storage	20 sets		
Power supply (Optional 110 v)	220V/110V/ 50Hz/60Hz		
Net size of instrument (mm)	410*225*290		
Optional features	Computer communication + data printing + sound proof +sterilization		
Control mode	Single chip +TFT touch control		
Other functions	Voice alarm and prompt		

Soundproof box

- Reduce the noise level, the incision in the back can connect the gas or perform an inflow reaction;
- Acrylic door for process control, stainless steel box, attenuation of 20 dB;
- Soundproof material waterproof, easy to clean, with rod, swivel clamp and clip to adjust the height of sample container;
- Entrainment is used for the safe fixation of sample containers of different specifications, as well as for ultrasonic treatment of glass containers samples with round bottom or inlet on the bottom .



Soundproof box



Soundproof box chamber with lifting platform

Hand-held homogenizer

HR-6 HR-6B is a handheld/stent-supported small, fast tissue homogenizer, dispersion and emulsifier, suitable for 0.2-50mL,1-150ml liquid/liquid, liquid/solid samples with different dispersion heads, up to 35000rpm.Applied in biopharmaceutical, gene research, tissue fragmentation, cytoplasmosis, pathological analysis, oil-water emulsification, nanomaterial dispersion, dairy homogenization, polymerization reaction, daily cosmetics,lnk coating, fine chemicals, pesticides, mineral exploration, environmental protection, energy and other fields.

Product features

- The design is light and portable, which can be operated with one hand;
- Reusable, easy to remove, easy to clean;
- High quality 316L stainless steel dispersion head, corrosion resistance, high temperature disinfection;
- Dispersion head easy to disassemble, easy to clean;
- High speed and high efficiency motor, double insulation protection, ensure safety;
- Can be mixed, dispersed, emulsified, homogenized and other operations;
- Suitable for batch processing of fluid materials in small container, such as muscle, viscera, fiber, etc.



Technical parameters

Model	HR-6（Domestic motor）	HR-6B（Imported motor）
Speed range (r /min)	5000-35000	1000-35000
Deal with viscosity (mPa·s)	4000	5000
External dimension (mm)	280mm*55mm(Length*D)	185*55 (Length * diameter)
Weight (kg)	0.6	0.6
Power (w)	180	120
Processing (ml)	0.2-150（Water ）	
Standard working head	10G	
Speed control	Adjustable 6 gears speed	
Rotational speed	Calibration	
Contact material	316LStainless steel	
Enter the material part of the shaft sleeve material	PTEE	
Allowable relative humidity(%)	80	
Process types	Micro batch processing	
Power supply	220V 50Hz	
Stand	Options	

Product packaging



Portable homogenizer

HR-10B is an portable device with imported motor , with optional dispensering head can deal with 0.2 -150ml capacity sample.Stand is optional accessories ,not selling in a set.It is apply for outdoor or laboratory ,with rechargeable lithium battery,very convenient to work.

Product features

- One-hand control, humanized operation, exquisite motor contains super power, the experimental effect is more ideal;
- Double insulation protection, give you safety protection;
- All parts of working head contacting materials are made of high quality stainless steel with good corrosion resistance;
- Portable operation, light and convenient, large capacity battery, suitable for outdoor or laboratory mobile operation;
- Suitable for animal and plant tissue breakage, homogenization, medical diagnosis, microdispersive emulsification and homogenization.



Technical parameters

Model		HR-10B	
Processing (ml)	0.2-80	Dimensions (mm)	240×60
Treated viscosity (cp)	100	Weight (kg)	0.9
Speed range(rpm)	5000-30000	Packaging	Aluminium alloy suitcase
Speed control	Adjustable 6 positions	Contact material	SS316L
Speed display	Calibration	Shaft sleeve material	PTFE
Power	12V DC rechargeable lithium battery	Standard working head configuration	HR-10G
Power supply	Charger input voltage 220-240V	Optional working head configuration	HR-6G HR-8G
Allowable ambient temperature	5-40℃	Process types	Microbatch treatment
Allowable relative humidity	80%	Equipped with stand	One - bar universal bracket optional

Optional tool head (applicable to HR-6, HR-6B, HR-10B)

Working head	Item No	Specifications	Capacity (ml)	Maximum linear Speed (m/sec)	Length of working head(mm)	Working head material (mm)	Viscosity (cp)	working head material
	20040016	6G	0.2-50	5	125	6	100	316
	20040018	8G	10-60	8	150	8	500	316
	20040020	10G	30-150	10	185	10	2000	316
	20040017	6G-ST	0.2-50	5	125	6	100	316
	20040021	8G-ST	10-60	8	150	8	500	316
	20040019	10G-ST	30-150	10	185	10	2000	316

High shear homogenizing emulsifier

High-shear homogeneous emulsifier is flexible and convenient. It can be operated by hand. More than 20 kinds of working heads are available for selection, with optional vacuum working head, which can realize vacuum operation and easily meet various high requirements of dispersing, emulsifying and homogenizing experiments. It can be used in the fields of biomedicine, gene research, tissue breakage, cytoplasm, pathological analysis, oil-water emulsification, nanomaterial dispersion, dairy homogenization, polymerization reaction, daily cosmetics, ink coating, fine chemical industry, pesticide, mineral exploration, environmental protection, energy and so on.

Product features

- Imported original motor, stable operation, less noise, long time operation, safe and reliable design;
- All parts of working head contacting materials are made of high quality stainless steel with good corrosion resistance;
- The working head is connected with the driving motor by a coupling, which is easy to disassemble and assemble;
- The stepless governor uses the speed regulating frame, which is convenient for speed regulation and stable operation;
- The speed is adjustable in 6 gears continuously to ensure good dispersion effect.

Technical parameters

ModelHR-500/HR-500D(Digital display)			
Power supply	AC220V 50Hz/60Hz	Contact material	SS316L
Power (w)	500/320	Shaft sleeve material	PTFE
Speed (rpm)	8000-28000	Applicable temperature (°C)	≤120
Speed display	Calibration	Allowable ambient temperature (°C)	5-40
Speed mode	Stepless speed regulation	Allowable relative humidity(%)	80
Capacity (ml)	0. 2ml-7000 (water)	Weight (kg)	9
Standard working head	HR500-25G	Work Head	Optional

Selection of the cutting tools

It is suitable for solid-liquid mixing, oil-water emulsification, cream preparation, emulsification polymerization, silicone-oil emulsification, homogenization and other SS316L, graphite, ceramics, FKM materials under vacuum and pressure environment, with the temperature up to 180°C.

Specifications	Capacity (ml)	Viscosity (cp)	Linear Speed (m/s)	Stator diameter (mm)
HR500-25DG	100-5000	5000	27	25
HR500-25DF	100-5000	5000	27	25



HR500-25DF



HR500-25DG



Use in vacuum pressure environment



HR500-6G



HR500-8G



HR500-10G



HR500-18G



HR500-20G



HR500-25G



HR500-18F



HR500-20F



HR500-25F

Specifications	Capacity (ml)	Viscosity (cp)	Linear Speed (m/s)	Diameter of the stator(mm)	Material	Temperature (°C)	Functional description
HR500-6G	0.2-10	100	6	6	SS316L	120	It is suitable for dispersing, breaking and homogenizing animal and plant tissues
HR500-8G	1-60	100	8	8	SS316L	120	
HR500-10G	10-150	200	10	10	SS316L	120	
HR500-18G	50-1500	3000	19	18	SS316L、PTFE	120	Suitable for medium and above viscosity of solid-liquid mixing, oil-water emulsification, cream preparation, emulsification polymerization, silicone oil emulsification, homogenization, etc
HR500-20G	50-1500	3000	19	18	SS316L	120	
HR500-25G	100-5000	5000	27	25	SS316L、PTFE	120	
HR500-18F	50-1500	2000	19	18	SS316L	120	Suitable for solid-liquid mixing, oil-water emulsification, cream preparation, emulsification polymerization, silicone oil emulsification, homogenization, etc
HR500-20F	50-1500	3000	19	20	SS316L、PTFE	120	Suitable for medium and above viscosity of the solid-liquid mixing, oil suitable for medium and above viscosity of the solid-liquid mixing, oil homogenate, etc
HR500-25F	100-5000	3500	27	25	SS316L、PTFE	120	Suitable for solid-liquid mixing, oil-water emulsification, cream preparation, emulsification polymerization, silicone oil emulsification, homogenization, etc



HR500-25JX



HR500-25JQ



HR500-25G-ST



HR500-25T4



HR500-25T5



HR500-25T3



HR500-25T6



HR500-25T1

Specifications	Capacity (ml)	Viscosity (cp)	Linear Speed (m/s)	Diameter of the stator(mm)	Material	Temperature (°C)	Functional description
HR500-25JX	100-6000	8000	35	25	SS316L、PTFE	120	Vertical convection shear mixing, suitable for medium shear dispersion and solid/liquid mixing
HR500-25JQ	100-6000	8000	35	25		120	
HR500-25GST	100-5000	5000	27	25	SS316L、PTFE	120	Suitable for medium and above viscosity of solid-liquid mixing, oil-water emulsification, cream preparation, emulsification polymerization, silicone oil emulsification, homogenization, etc
HR500-25T4	100-5000	5000	27	25	SS316L、PTFE	120	Super dispersing, tissue crushing, suitable for crushing, homogenizing, dispersing and shearing of animal and plant tissues
HR500-25T5	50-5000	5000	27	25	SS316L、PTFE	120	Suitable for dispersion and homogenization of medium and high viscosity system
HR500-25T3	100-3000	5000	27	25	SS316L、PTFE	120	Solid/liquid dispersion mixed, suitable for wet Mo, effectively reduce the size of materials, increase uniformity
HR500-25T6	50-5000	5000	35	25	SS316L、PTFE	120	Super high speed mixing, suitable for the dissolution and dispersion of medium and high viscosity system
HR500-25T1	100-7000	8000	27	25	SS316L、PTFE	120	In the medium viscosity system, liquid-liquid mixing and dissolution of suspended powder are quickly completed

FJ high speed dispersing homogenizer

FJ high speed dispersing homogenizer is driven by compact series excited micro high speed motor, which is suitable for crushing experimental materials in liquid in laboratory further dispersion and homogeneity in the medium. It is composed of high density die-casting aluminum alloy as the driving machine, high quality stainless steel refined dispersive homogeneous working head and speed regulating machine stand. It has the characteristics of high driving speed, high output power, convenient loading and unloading of working head and easy operation of experiment.

Product features

- The driving motor adopts series micro-motor with large output power and compact structure, which is safe and reliable in design;
- All parts of working head contacting materials are made of high quality stainless steel with good corrosion resistance;
- The working head is connected with the driving motor by a coupling, which is easy to disassemble and assemble;
- The stepless governor was used with the speed regulating frame, which is convenient for speed regulation and stable operation.

Working head parameter

Work head				
Item No	20040005	20040006	20040007	20040008
Working head specification	12G	18G	28G	36G
Capacity (ml) (H2O)	30-800	50-1500	100-8000	150-13000
Suitable for viscosity (mPa·s)	1000	2000	6000	7000
Rotor linear velocity (s/m)	11	15	19	27
Invasion liquid height (mm)	25/85	30/120	60/155	60/160
Stator diameter (mm)	Φ 12	Φ 18	Φ 28	Φ 36
Working head length (mm)	150	190	235	240
Ambient temperature (°C)	120	120	120	120
Working head material	SS304	SS304	SS304	SS304
Working head bearing material	PTEE	PTEE	PTEE	PTEE

Technical parameters

Name	FJ200 (High speed dispersing homogenizer)	FJ200-SH (Digital display)	FJ300-SH (Digital display)
Speed range (r /min)	300-23000	300-23000	300-18000
Capacity (ml)	30-1500	30-1500	100-13000
Input power (w)	280	280	510
Output power (w)	200	200	300
External dimension (mm)	250x350x600	250x350x600	250x350x600
Working head configuration (mm)	Φ12 , Φ18	Φ12 , Φ18	Φ28 , Φ36
Working methods	Intermittent	Intermittent	Intermittent
Power supply	AC 220 V 50 Hz	AC 220 V 50 Hz	AC 220 V 50 Hz
Rated torque (N. cm)	83	68	68



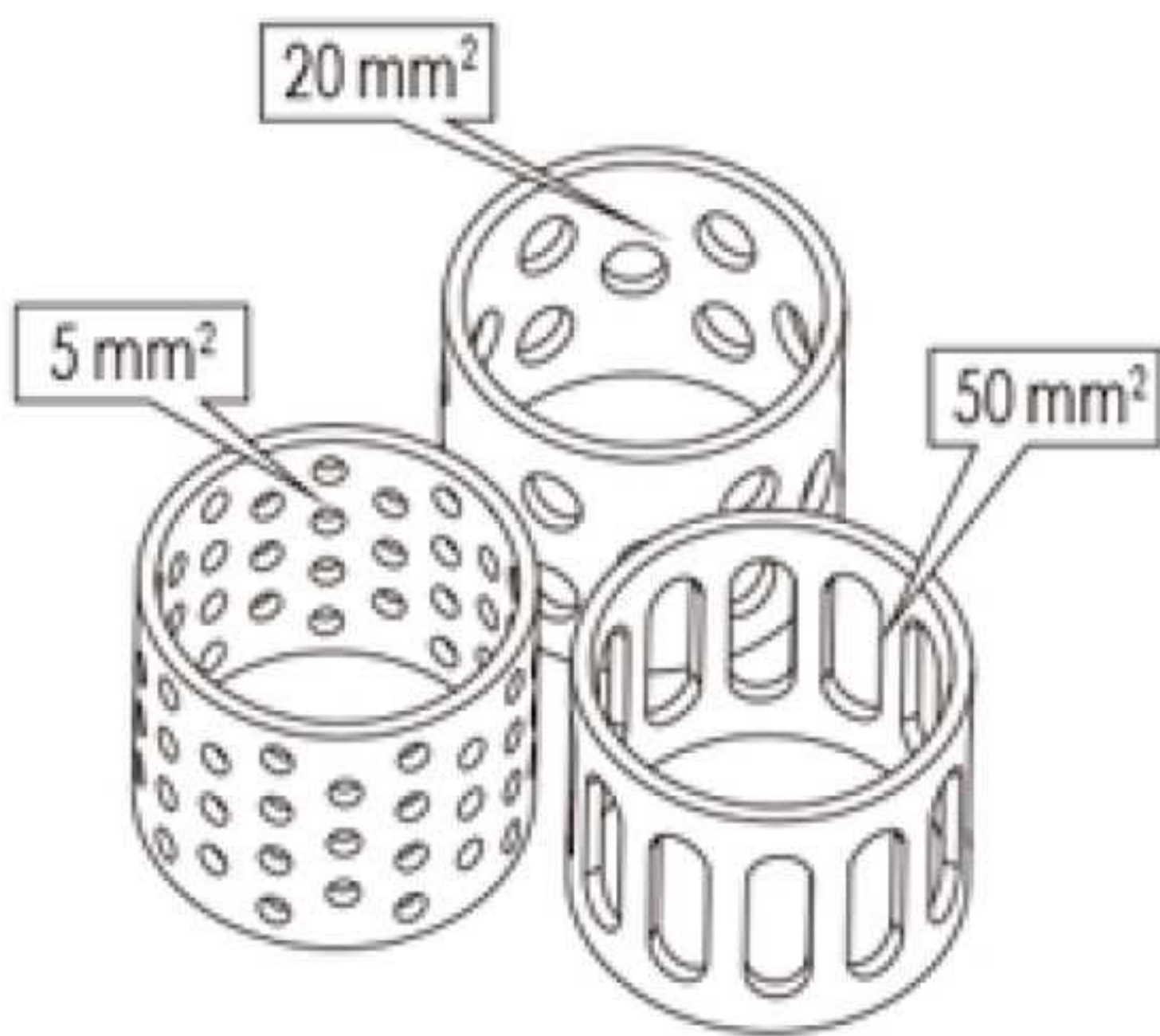
FJ200-SH/FJ300-SH



FJ200

JRJ shear dispersing homogenizer

JRJ high speed shear dispersing emulsifier is driven by series excited micro high speed motor with compact structure. It is suitable for mixing low to medium and high viscosity liquid and pulverizing granular materials in liquid medium for shear emulsification. The machine is composed of high density die-casting aluminum alloy as the driving motor, high quality stainless steel refined shear emulsification working head and speed regulating controller, etc.



Product features

- Stepless governor is adopted in the operation state controller, and touch structure is adopted in the digital display type, which makes the speed regulation convenient and the data correct;
- The driving motor with ality large output power and compact structure, which is safe and reliable in design;
- Shear emulsification mixing head is made of high quality stainless steel with good corrosion resistance and easy dismantling of interchangeable stator;
- The working head is connected with the driving motor with shaft joint, running stably at high speed.

Technical parameters

Name	JRJ300-D-1	JRJ300-SH (Digital display)
Speed range (r /min)	200-11000	200-11000
Maximum stirring capacity (L)	40	40
Input power (w)	510	510
Output power (w)	300	300
External dimension (mm)	250x650x720	250x650x720
Rated torque(N. cm)	34.1	34.1
Working head diameter (mm)	Φ70	Φ70
Stator configuration (mm²)	5 , 20 , 50	5, 20, 50
Use Power supply	AC 220 V 50 Hz	AC 220 V 50 Hz



JRJ300-D-1



JRJ300-SH

Stomacher blender /Paddle blender/Flap blender

Paddle Blender, also known as sterile homogenizer, can be used to directly extract bacteria from solid samples. Just put the original sample (large need to cut into 10 x 10 mm block) and diluent into the sterile sample bag, then put the sample bag into slapping type homogenizer, passes through the blade flapping hammer pressure, causing oscillation, accelerate mix, so as to achieve microbial composition is in a state of uniform distribution in the solution, can complete the processing of the sample. Effectively separate homogeneous samples of microorganisms contained within and on the surface of solid samples, ensuring that all samples are mixed in sterile bags. Application: food microbiology, analysis of animal tissues, biological samples, homogenization treatment of cosmetics, meat, fish, vegetables, fruits Processing; Drug, clinical, molecular, toxin and bacteria detection and other fields.

Product features

- Large LCD, Easy operation and can store multiple working programs;
- Intelligent control, uniform speed and time can be controlled;
- Transparent glass window ,easy to observe, full open door, easy to clean;
- There is no contact between the sample and the homogenizer. If there is no sample leakage, no need cleaning;
- Soft homogeneity, no pollution, no damage, no heating, no need to sterilize, no need to wash utensils;
- With strong sound insulation function.



meat



fish



vegetables



fruit

Technical parameters

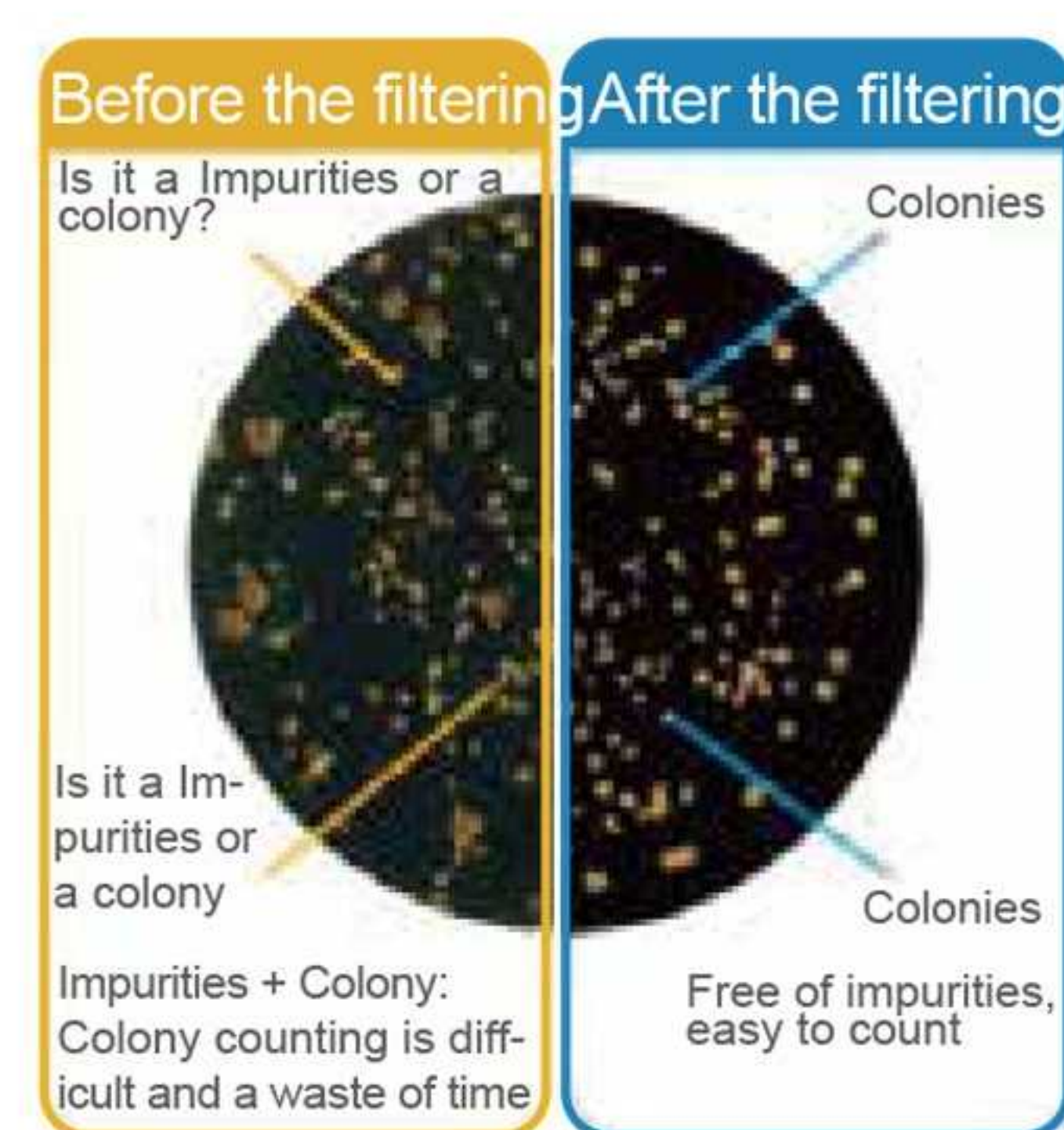
Model	HX-4		HX-4M	HX-4GM
Control mode + parameter storage	Microcomputer control +8 section combination programming			
Temperature control range (°C)	No	No		At room temperature to 60
Disinfection function	No	Disinfection wavelength of 253.7(nm)		Disinfection wavelength of 253.7(nm)
Weight (kg)	22	22		22
Display mode	Large LCD display			
Padding time	0.1 to 99 minutes and 59 seconds or continuous operation			
Flap speed (times/second)	3-12			
Heating function	No			
Effective volume (ml)	3-400			
Sterile bag size (cm)	17x30			
Paddle Material	Stainless steel + anticorrosive spray			
Panting distance	0 to 50 mm adjustable			
Start mode	Soft start			
Pause function	Yes			
Power supply/power (v/w)	220/200	220/250		220/500
Anti-pinch function	With automatic stop anti-pinch function			
Other	Removable window + toughened glass safety door			
External dimension (mm)	420x230x330			

Sterilization bag

Why use sterilization bags?



Sample homogenization and filtration at the same time, rapid filtrate absorption, no particles, no waiting for precipitation, no clogging pipette.



During the homogenization process, the filter blocked the Impurities, and the concentration of bacteria on both sides of the filter remained consistent, which not only increased the accuracy, but also accelerated the counting speed.

Proper use of sterile homogenizer is as follows:

1. Put the samples to a sterilization bag;
2. Open the homogenizer door and clamp the sterile bag opening before closing the homogenizer door;
3. Set the usage program (such as tapping speed, tapping time, etc.) to execute the work of tapping homogenization;
4. After the experiment, open the homogenizer door and take samples.



Storage operations can be easily performed in a stand:

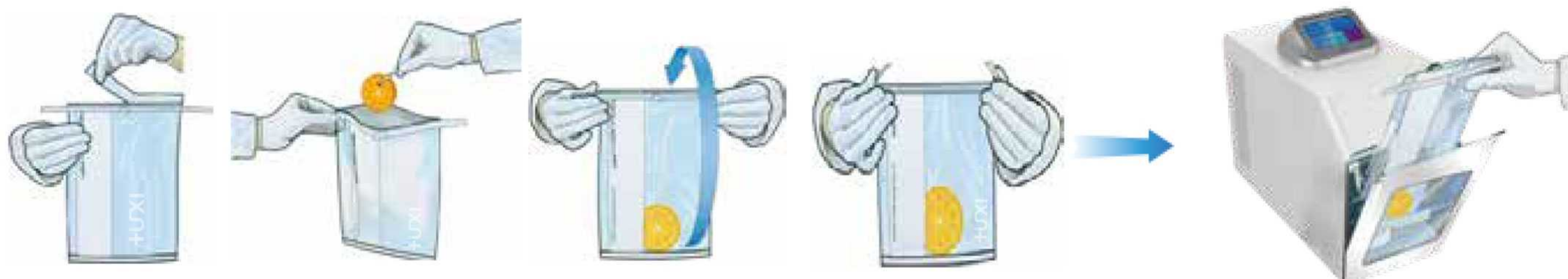


Polyolefin and adult samples for homogenizer



Only for vertical operation

Sampling and homogenization are performed in the same bag:



Name: Water tray

Item No: 20050003
Material: Stainless steel



Name: 304 stainless steel bracket

Item No: 20050002
Usage: Can put 10 samples
Size: 33 * 21.5 * 17 cm



Name: Metal spraying bracket

Item No: 20050001
Usage: Can put 5 samples



Name: Sterilization bag

Item No: 20050004
Specification: unsealed 17*30cm,
100pcs/packet



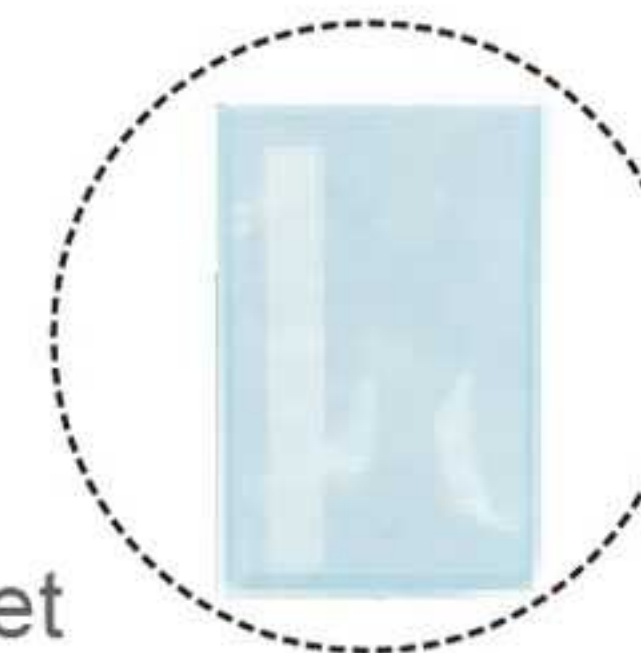
Name: Sterilization bag

Item No: 20050005
Specification: Sealing 17*30cm,
100pcs/packet



Name: Sterilization bag

Item No: 20050006
Specification: 19*30cm with
strainer
Capacity 400mL 25 PCS/packet

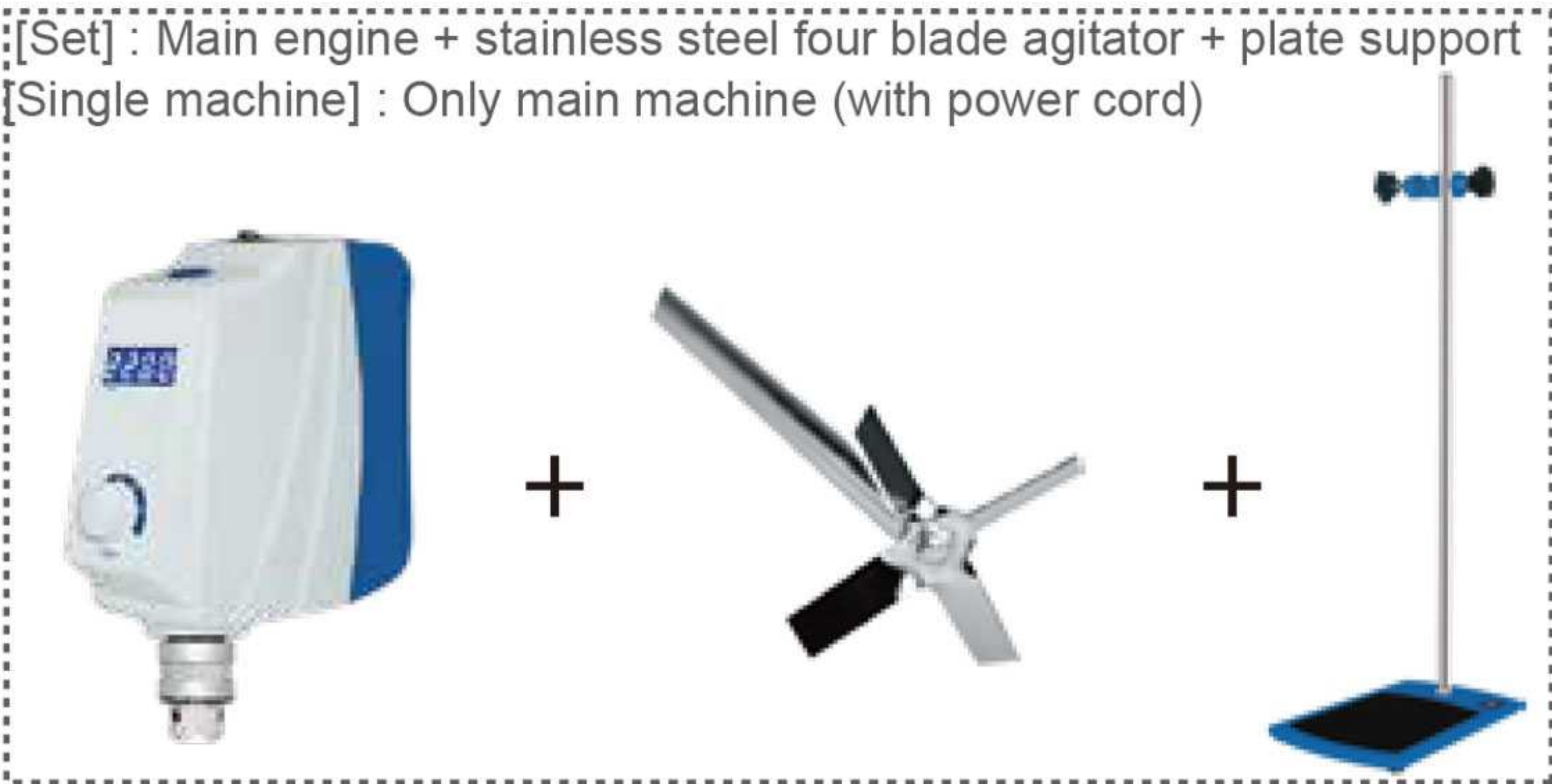


LED overhead stirrer series

High performance and high requirements, safe and reliable operation, suitable for all kinds of laboratory samples stirring, simple operation; Adopting Brushless DC motor, it can run for a long time and greatly improve the working efficiency of the laboratory.

Product features

- LED screen display, speed can be coarse and fine adjustment, while the instrument is running, the speed can also be adjusted;
- Motor soft start, smooth operation, effectively prevent sample overflow;
- The enclosed enclosure can effectively prevent the liquid from splashing into the instrument and ensure the safe operation of the experiment;
- Equipped with the agitator hole, the user does not need to adjust the installation height of the instrument, just adjust the installation position of the stirring rod;
- All kinds of stirring paddle, bracket optional.



Product model	RWD50E	RWD100E	RWD150E
Mixing amount (L)	20	40	60
Speed range (rpm)	30-2200	30-2200	30-2200
Rotational speed	LED	LED	LED
Timing function (min)	NO	NO	NO
Maximum torque (N.cm)	40	60	80
Maximum viscosity (mPa·s)	10000	50000	80000
Drill chuck clamping diameter range (mm)	0.5-10	0.5-10	0.5-10
Weight (kg)	2.6	2.8	3.0
Motor input power (w)	60	120	160
Motor output power (w)	50	100	150
Speed display resolution (rpm)	±1	±1	±1
External dimension (D*W*H) (mm)	160*80*180	160*80*180	160*80*180
Protect method	IP42	IP42	IP42
Allowable ambient temperature(°C)	5-40	5-40	5-40
Allowed ambient humidity (%)	80	80	80
Voltage (VAC)	100-240	100-240	100-240
Frequency(Hz)	50/60	50/60	50/60
Power (w)	70	130	160
Motor protection	Voice prompt, automatic stop	Voice prompt, automatic stop	Voice prompt, automatic stop
Overload protection	Voice prompt, automatic stop	Voice prompt, automatic stop	Voice prompt, automatic stop
Safety protection	Mat	Mat	Mat
Adjust speed method	Coarse adjustment fine adjustment	Coarse adjustment fine adjustment	Coarse adjustment fine adjustment
Fixed method of paddle	Wrench chuck	Wrench chuck	Wrench chuck

LCD overhead stirrer series

For solid-liquid, liquid-liquid or medium high viscosity sample mixing; Mainly used in scientific research, medicine, chemical, petrochemical, cosmetics, food, biological and other fields.

Product features

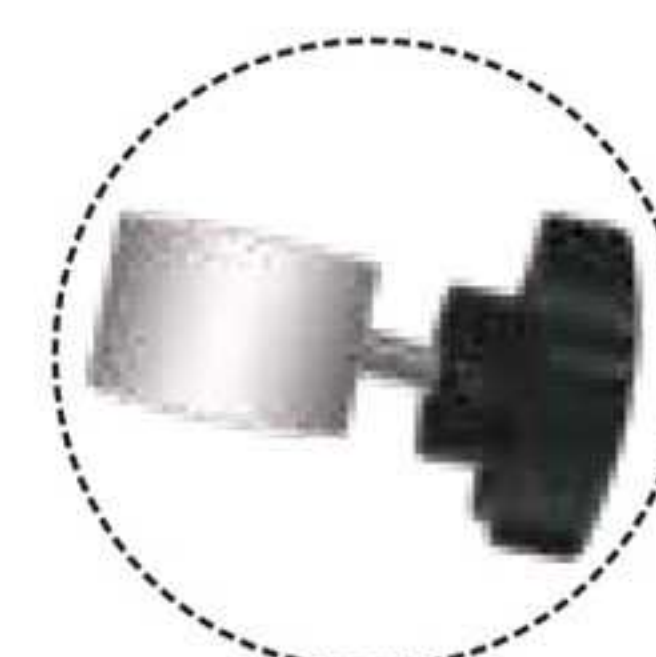
- LCD display, speed and time can be coarsely adjusted, in the working state can also be fine tuning the working time;
- The rotating speed is 30-2200rpm, can fixer or controlled for high and low speed;
- Using DC brushless motor, can run safely for a long time with excellent performance;
- Overload and motor protection. In case of overload, short circuit or abnormal condition, the circuit will be automatically cut off and alarm will be given to ensure the safety of the experiment;
- Equipped with the agitator hole, no need to adjust the installation height of the instrument, just adjust the installation position of the stirring rod;
- The torque can be adjusted automatically according to the viscosity change of the sample, which is convenient for experimental operation;
- A variety of stirring paddle, bracket optional.

[Set] : Main engine + stainless steel four blade agitator + plate support

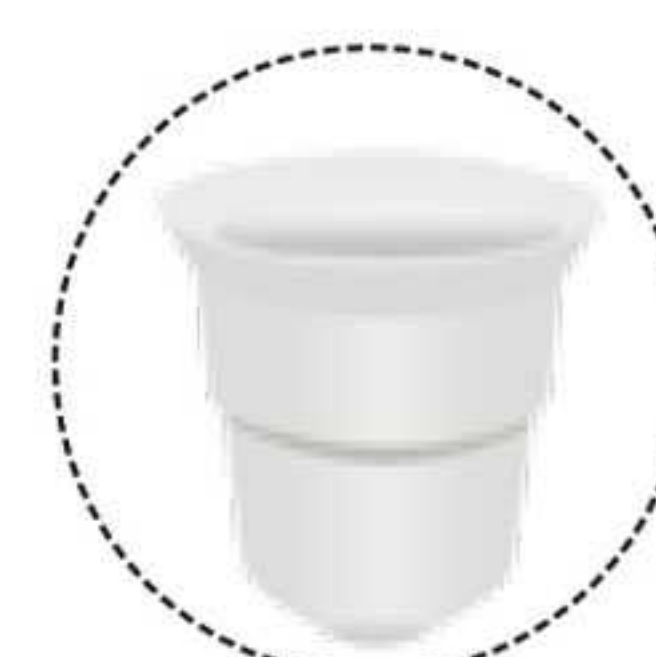
[Host] : Separate host (with power cord)



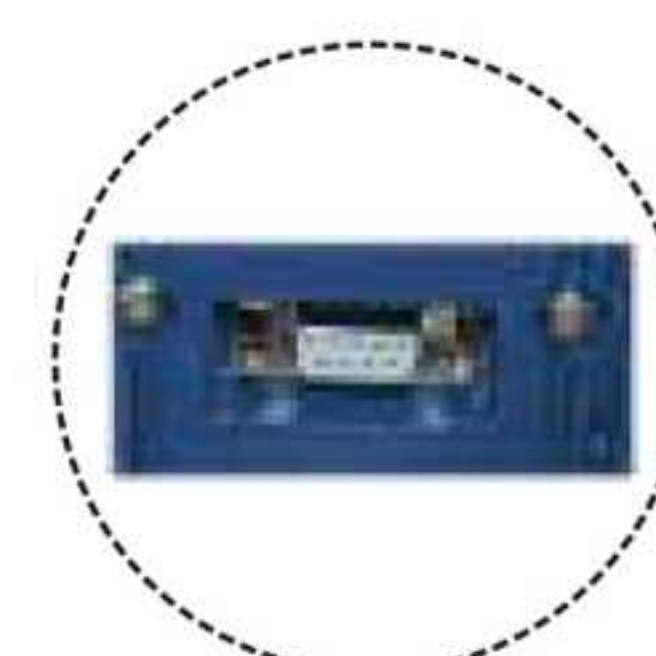
Easy to operate, automatic lock Fixed function, high axis degree.



[Safety buckle]
For fixing the lower part of the clamp, ensure that the instrument is more stable and safe during work.



[Chuck protector]
Prevent sample splashing and corrosion the chuck, protect the chuck from damage and prolong its service life.



[RS232 data Interface]
Data transmission port external PC, control the instrument and record the speed, torque etc.

Technical parameters

Product model	RWD50	RWD100	RWD150
Stirring amount (L)	20	40	60
Speed range (rpm)	30-2200	30-2200	30-2200
Rotational speed	LCD	LCD	LCD
Timing function (min)	1~9999	1~9999	1~9999
Maximum torque (N.cm)	40	60	80
Maximum viscosity (mPa·s)	10000	50000	80000
Drill chuck clamping diameter range (mm)	0.5-10	0.5-10	0.5-10
Weight (kg)	2.6	2.8	3.0
Motor input power (w)	60	120	160
Motor output power (w)	50	100	150
Speed display resolution (rpm)	±1	±1	±1
External dimension (D*W*H) (mm)	186*83*220	186*83*220	186*83*220
Protect method	IP42	IP42	IP42
Allowable ambient temperature (°C)	5-40	5-40	5-40
Allowed ambient humidity (%)	80	80	80
Voltage (VAC)	100-240	100-240	100-240
Frequency (Hz)	50/60	50/60	50/60
Power (w)	70	130	160
Motor protection	Display failure and stop automatically		
Overload protection	Display failure and stop automatically		
Safety protection	Chuck protector safety buckle non-slip pad		
Adjust speed method	coarse and fine adjustment		
Fixed method of paddle	Self-locking chuck	Self-locking chuck	Self-locking chuck

550°C series magnetic stirrer is developed for demanding applications. It is widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals etc. Combining with glass ceramic work plate, brushless DC motor and external temperature sensor, the work plate temperature is optimized up to 550°C.



MS7-H550-Pro

LCD Digital Magnetic Hotplate Stirrer

Features

- LCD display for precise monitoring of speed and temperature
- Built-in PID controller ensures safe heating of the medium with overheating protection
- Max. heating plate temperature 550°C
- Glass ceramic work plate provides excellent chemical resistant performance and most efficient heat transfer
- External temperature control is possible by connecting the temperature sensor(PT1000) with an accuracy at $\pm 0.2^{\circ}\text{C}$
- Digital speed controlling, max. speed at 1500rpm
- Outstanding brushless DC motor enables more stirring power
- Two rotating knobs enable easy adjustment of speed and temperature
- The "HOT" warning will flash when the work plate temperature is above 50°C even when the hotplate is turned off
- Remote function provides PC control and data transmission

MS7-H550-S

LED Magnetic Hotplate Stirrer

Features

- LED display for precise monitoring of temperature
- A wide speed range of 0 to 1500rpm
- Max. Heating plate temperature 550°C
- External temperature control is possible by connecting the temperature sensor(PT1000) with accuracy at $\pm 0.2^{\circ}\text{C}$
- The "HOT" warning will flash if the work plate temperature is above 50°C





Overheating protection



External sensor



Wide range of accessories



Chemical resistance



Specifications

Work plate Dimension [W x D]
Work plate material
Motor type
Motor rating input
Motor rating output
Power
Heating output
Voltage
Stirring positions
Max. stirring quantity, [H ₂ O]
Max. magnetic bar[length]
Speed range
Speed display
Temperature display
Heating temperature range
Temperature control accuracy
Overheating protection
Temperature display accuracy
External temperature sensor
"Hot" warning
Data connector
Protection class
Dimension [WxDxH]
Weight
Permissible ambient temperature and humidity

MS7-H550-Pro	MS7-H550-S
184x184mm (7 inch)	184x184mm (7 inch)
Glass ceramic	Glass ceramic
Brushless DC motor	Shaded pole motor
18W	15W
10W	1.5W
1050W	1030W
1000W	1000W
100-120/200-240V 50/60Hz	100-120/200-240V 50/60Hz
1	1
20L	10L
80mm	80mm
100-1500rpm resolution ±1rpm	0-1500rpm
LCD	Scale
LCD	LED
Room Temp.-550°C, increment 1°C	Room temp.-550°C, increment 5°C
±1°C(<100°C) ±1%(>100°C)	±10°C
580°C	580°C
±0.1°C	±1°C
PT1000 (accuracy ±0.2)	PT1000 (accuracy ±0.2)
50°C	50°C
RS232	-
IP21	IP21
215x360x112mm	215x360x112mm
5.3kg	4.5kg
5-40°C, 80%RH	5-40°C, 80%RH

340°C magnetic hotplate stirrers include all leading safety standards and features for superior ease of use and are cost-effective. They are widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals, etc.

MS-H-Pro^T

LCD Digital Magnetic Hotplate Stirrer with Timer

MS-H-Pro⁺

LCD Digital Magnetic Hotplate Stirrer

Features

- Brushless DC motor is maintenance free and explosion-proof
- Digital temperature control with max. temperature at 340°C
- Digital speed control with max. speed up to 1500rpm
- Max. stirring quantity of H₂O at 20L
- Safety circuits provide overheating protection
- The "HOT" warning will flash if the plate temperature is above 50°C even when the hotplate is turned off
- Wide range timer function from 1min to 99h59min(MS-H-ProT only)
- High-resolution LCD display shows actual temperatures and speed (MS-H-ProT displays the time also)
- External temperature control is possible by connecting the temperature sensor(PT 1000) with accuracy at $\pm 0.2^{\circ}\text{C}$
- Stainless steel work plate with ceramic coating provides good chemical-resistant performance
- Remote function provides PC control and data transmission
- A wide variety of accessories are available



External sensor



Brushless DC motor



Wide range of accessories



RS232 connector



Chemical resistance

MS-H-S

Magnetic Hotplate Stirrer

Features

- Maintenance free brushless DC motor
- Max. temperature to 340°C
- Stirring speed up to 1500 rpm
- Stainless steel work plate with ceramic coating provides good chemical-resistant performance
- Safety circuits provide overheating protection
- A wide variety of accessories are available





Specifications

Work plate dimension
Work plate material
Motor type
Motor rating input
Motor rating output
Power
Heating output
Voltage
Stirring positions
Max. stirring quantity[H ₂ O]
Max. magnetic bar[length]
Speed range
Speed display
Temperature display
Heating temperature range
Temperature control accuracy
Over temperature protection
Temperature display accuracy
External temperature sensor
"Hot" warning
Timer function
Data connector
Protection class
Dimension[WxDxH]
Weight
Permissible ambient temperature and humidity

MS-H-PRO ⁺	MS-H-PRO ^T	MS-H-S
φ135mm(5 inch)	φ135mm(5 inch)	φ135mm(5 inch)
stainless steel cover with ceramic	stainless steel cover with ceramic	stainless steel cover with ceramic
Brushless DC motor	Brushless DC motor	Brushless DC motor
18W	18W	18W
10W	10W	10W
550W	550W	530W
500W	500W	500W
100-120/200-240V 50/60Hz	100-120/200-240V 50/60Hz	100-120/200-240V 50/60Hz
1	1	1
20L	20L	20L
80mm	80mm	80mm
100-1500rpm resolution±1rpm	100-1500rpm resolution±1rpm	0-1500rpm resolution±1rpm
LCD	LCD	Scale
LCD	LCD	Scale
Room temp.-340°C, increment 1°C ±1°C(<100°C) ±1%(>100°C)	Room temp.-340°C, increment 1°C ±1°C(<100°C) ±1%(>100°C)	Room temp.-340°C
420°C	420°C	-
±0.1°C	±0.1°C	420°C
PT1000 (accuracy ±0.2)	PT1000 (accuracy ±0.2)	±0.5°C
50°C	50°C	-
-	1min to 99h 59min	-
RS232	RS232	-
IP42	IP42	IP42
160×280×85mm	160×280×85mm	160×280×85mm
2.8kg	2.8kg	2.8kg
5-40°C, 80%RH	5-40°C, 80%RH	5-40°C, 80%RH

**HP380-Pro**

LCD Digital Hotplate

MS6-Pro

LCD Digital Magnetic Stirrer

MS-H380-Pro

LCD Digital Magnetic Hotplate Stirrer

380°C magnetic hotplate stirrers include all leading safety standards and is chemically-resistant with white ceramic work plate. They can be used in physical, chemical, analytical and biological laboratories.

Features

- Max. heating temperature is 380°C
- High resolution LCD displays actual temperature and speed.
- Brushless DC motor is maintenance free
- Aluminum cover with ceramic work plate, allows for immediate heat transfer
- External temperature control is possible with temperature sensor PT1000
- Digital temperature control with max. temperature at 380°C
- Digital speed control with max. speed up to 1500rpm
- Max. stirring quantity of H₂O at 5L

Specifications

	MS-H380 Pro	MS6-Pro	HP380-Pro
Work plate Dimension	140x140mm	140x140mm	140x140mm
Work plate material	Aluminum cover with ceramic coating	Aluminum cover with ceramic coating	Aluminum cover with ceramic coating
Motor type	Brushless DC motor	Brushless DC motor	-
Motor rating input	2.4W	2.4W	-
Motor rating output	1.8W	1.8W	-
Power	510W	10W	510W
Heating output	500W	-	500W
Voltage	100-120/200-240V, 50/60Hz	100-240V, 50-60Hz	100-120/200-240V, 50/60Hz
Stirring positions	1	1	-
Max. stirring quantity[H ₂ O]	5L	5L	-
Max. magnetic bar[length]	50mm	40mm	-
Speed range	200-1500rpm	200-1500rpm	-
Speed display	LCD	LCD	-
Temperature display	LCD	-	LCD
Heating temperature range	Room temp.+5°C - 380°C	-	Room temp.+5°C - 380°C
Over heat Protection	420°C	-	420°C
Temperature display accuracy	±0.1°C	-	±0.1°C
External temperature sensor	PT1000 (accuracy ±0.5°C)	-	PT1000 (accuracy ±0.5°C)
Control accuracy of sensor	±20rpm	±20rpm	-
Protection class	IP21	IP21	IP21
Dimension [W x D x H]	320x180x108mm	320x180x108mm	320x180x108mm
Weight	2.2kg	2.2kg	2.2kg
Permissible ambient temperature and humidity	5-40°C 80%RH	5-40°C 80%RH	5-40°C 80%RH

MS-H340-S4**LCD 4-Channel Digital Magnetic Hotplate Stirrer**

It is widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals etc.

Features

- Independent heating and stirring control
- LCD display shows actual temperatures and speed
- PID controller ensures a precise and steady heating process, Max. temperature up to 340°C
- Brushless DC motor enables more powerful speed control
- External temperature sensor(PT1000) with accuracy at 0.2°C
- Overheating protection temperature at 420°C
- Stainless steel work plate with ceramic coating provides good chemical-resistant performance
- A wide variety of accessories are available

Specifications

	MS-H340-S4
Work plate dimension	Φ135mm (5inch)
Plate material	Stainless steel with ceramic coating
Motor type	Brushless DC motor
Motor rating input	1.8W×4
Power	515W×4
Heating Power	500W×4
Voltage	100-120V,60Hz; 200-240V,50 Hz
Stirring positions	4
Max. stirring quantity of single position (H ₂ O)	10L
Max. magnetic bar	40mm
Speed range	200-1500rpm
Speed display	LCD
Temperature display	LCD
Control accuracy of sensor	±20rpm
Temperature range	25-340°C
Over temperature protection	420°C
Temperature display accuracy	±0.1°C
External temp. sensor	PT1000 (Accuracy±0.2°C)
IP Protection class	IP21
Dimensions[WxDxH]	698×270×128mm
Weight	9.5kg
Permissible ambient temperature	5~40°C
Permissible relative humidity	80%RH

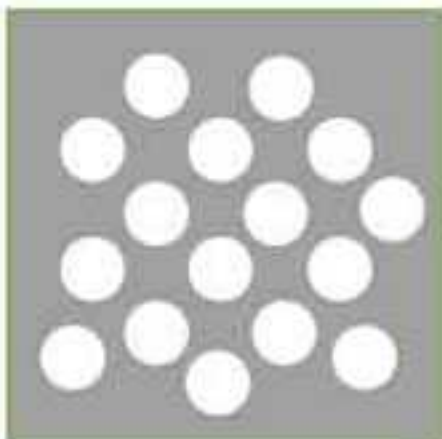
MS-H-S10
10-Position Magnetic Hotplate Stirrer

Features

- Maintenance-free brushless DC motor
- Max speed 1100rpm
- Max.temperature 120°C
- Stainless steel work plate, covered with silicone cushion, provides the excellent performance of heating uniformity and skid resistance



Skid resistance



Multiple position



Brushless DC motor

Specifications

MS-H-S10	
Work plate dimension[W x D]	180x450mm
Work plate material	Stainless steel with silicone
Motor type	Brushless DC motor
Motor rating input	12W
Motor rating output	4W
Power	490W
Heating output	470W
Voltage	100-120/200-240V 50/60Hz
Stirring positions	10
Max. stirring quantity	0.4Lx10
Max. magnetic bar[length]	40mm
Speed range	0-1100rpm
Speed display	scale
Temperature display	scale
Heating temperature range	Room temp.-120°C
Overheating protection	140°C
Protection class	IP42
Dimension[WxDxH]	182x622x65mm
Weight	3.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH

HP550-S**LED Hotplate****Features**

- LED screen shows temperature
- Max. temperature up to 550°C
- Separate safety circuits with fixed safety temperature of 580°C
- External temperature control is possible by connecting the temperature sensor(PT 1000) with an accuracy at $\pm 0.5^\circ\text{C}$
- Glass ceramic work plate provides excellent chemical-resistant performance and most efficient heat transfer
- The "HOT" warning will flash if the work plate temperature is above 50°C even when the hotplate is turned off



Wide range of accessories



Chemical resistance



Overheating protection



"HOT" warning prevents burning

**Specifications**

	HP550-S
Work plate dimension[WxD]	184x184mm(7 inch)
Work plate material	Glass ceramic
Power	1010W
Voltage Frequency	100-120/200-240V,50/60Hz
Heating Power	1000W
Heating position	1
Heating temperature range	Room temp.-550°C,increment 5°C
Control accuracy of work plate	$\pm 10^\circ\text{C}$
Safety temperature	580°C
Temperature display	LED
Temperature display accuracy	$\pm 1^\circ\text{C}$
External temperature sensor	PT1000($\pm 0.5^\circ\text{C}$)
Heating warning	50°C
Protection class	IP21
Dimension[WxDxH]	215x360x112mm
Weight	4.5kg
Permissible ambient temperature and humidity	5-40°C, 80%RH

Vortex Mixers are ideal instruments for mixing liquid components in tubes, resuspension of cells, using an eccentric mechanism. They are widely used in biological and chemical analysis applications.

MX-S
Vortex Mixer

MX-F
Vortex Mixer

Features

- Touch operation or continuous mode
- Variable speed control from 0 to 2500rpm (MX-S)
- Fixed Speed 2500rpm (MX-F)
- Used for various mixing applications with optional adapters (MX-S)
- Specially designed vacuum suction feet for body stability
- Robust aluminum-cast construction



Wide range of accessories



Specifications	MX-S (Adjustable speed)	MX-F (Fixed speed)
Voltage	100-120V/200-240V,50/60Hz	100-120V/200-240V,50/60Hz
Power	60W	60W
Mixing motion	Orbital	Orbital
Orbital diameter	4mm	4mm
Motor type	Shaded pole motor	Shaded pole motor
Motor rating input	58W	58W
Motor rating output	10W	10W
Speed range	0-2500rpm	2500rpm
Speed display	Scale	-
Run type	Touch operation/ Continuous	Touch operation/ Continuous
Dimension[W×H×D]	127×130×160mm	127×130×160mm
Weight	3.5kg	3.5kg
Permissible ambient temperature	5-40°C	5-40°C
Permissible relative humidity	80%RH	80%RH
Protection class	IP21	IP21

**VT1.1 Standard top
(Default)**

for <Ø30mm tubes and small vessels

Cat. No.18900034





MX-E
Economic Vortex Mixer

Features

- For small amount of sample mix
- Touch operation
- Fixed speed: 3000rpm
- Small and beautiful
- DC brushless motor, stable performance



Specifications

	MX-E
Power supply [VAC]	100-240
Frequency [Hz]	50/60
Power [W]	12
Mixing motion	Orbital
Revolving diameter [mm]	4.8
Motor rating output[W]	10
Rotational speed [rpm]	3000
Operating mode	Inching
External dimension [mm]	133×133×80
Dimension of packing box [mm]	250×185×130
Weight [kg]	0.6
Allowable environment temperature [°C]	5-40
Permissible Ambient Temperature	≤80%RH
Protection class	IP21



VT1.2 Tube holding rod
used with tube adapters
Cat. No. 18900044

VT1.3 Universal top plate
Ø 100mm
Cat. No.18900035



VT1.3.1 tube adapter
for 48 holes test tubes, Ø6mm
Cat. No.18900020



VT1.3.2 tube adapter
for 15 holes test tubes, Ø10mm
Cat. No.18900021



VT1.3.3 tube adapter
for 16 holes test tubes, Ø12mm
Cat. No.18900022



VT1.3.4 tube adapter
for 8 holes test tubes, Ø16mm
Cat. No.18900023



VT1.3.5 tube adapter
for 8 holes test tubes, Ø20mm
Cat. No.18900024



VT1.3.6 Platform pad
for <Ø99mm tubes and small vessels
Cat. No.18900043



Application of accessories

Accessories	Adjustable speed model (0-2500rpm)	
	Touch mode (High speed area)	Continuous mode (Low speed area)
VTI.1	Y	Y
VTI.2 + VT1.3.1	Y	
VTI.2 + VT1.3.2	Y	
VTI.2 + VT1.3.3	Y	
VTI.2 + VT1.3.4	Y	
VTI.2 + VT1.3.5	Y	
VTI.3 + VT1.3.6	Y	
VTI.3 + VT1.3.1		Y
VTI.3 + VT1.3.2		Y
VTI.3 + VT1.3.3		Y
VTI.3 + VT1.3.4		Y
VTI.3 + VT1.3.5		Y



VT1.3.7 vacuum chuck
made of rubber
Cat. No.18900158



Microplate Mixer is used for holding single or double microplates. The compact shape of MX-M Microplate Mixer occupies less bench space and makes the storage easier. It is widely used in life sciences including microbiology, cell and molecular biology, immunology and biotechnology.

MX-M
Microplate Mixers

Features

- A wide range of speed from 0 to 1500rpm
- Used for various mixing applications with optional adapters
- Maintenance-free brushless DC motor



Brushless DC motor



Wide range of accessories



PS1.2 Microplate clamp
Cat. No.18900042



PS1.1 Universal top plate
Used with tube adapters
Cat. No.18900067



VT1.3.1 tube adapter
for 48 holes test tubes, Ø6mm
Cat. No.18900020



VT1.3.2 tube adapter
for 15 holes test tubes, Ø10mm
Cat. No.18900021



VT1.3.3 tube adapter
for 12 holes test tubes, Ø12mm
Cat. No.18900022



VT1.3.4 tube adapter
for 8 holes test tubes, Ø16mm
Cat. No.18900023



VT1.3.5 tube adapter
for 8 holes test tubes, Ø20mm
Cat. No.18900024



MXM-116
Double microplate clamps
Cat. No.18900079

Specifications	
Shaking movement	Orbital
Orbital diameter	4.5mm
Max. shaking weight (with accessory)	0.5kg
Motor type	Brushless DC motor
Motor rating input	18W
Motor rating output	10W
Speed range	Single microplate: 0-1500rpm Double microplate: 0-1000rpm
Speed display	Scale
Voltage	100-240V,50/60Hz
Power	20W
Dimension	260×150×80mm
Weight	3kg
Permissible ambient temperature and humidity	5-40°C,80%RH
Protection class	IP21

orbital and linear shakers are ideal for almost any vessel from microcentrifuge tubes through petri dishes and microtitre plates to conical flasks.

SK-O330-Pro

SK-O180-Pro

LCD Digital Orbital Shaker

Features

- Max. load capacity is 7.5kg(O330) and 2.5kg(O180) with platform
- Double LCDs for independent display of time and speed
- Used with a wide variety of accessories
- Maintenance- free brushless DC motor
- Over speed detection and protection
- Remote function provides PC control and data transmission



SK-O180-S

LED Digital Orbital Shaker

Features

- Max.load capacity is 3kg with platform
- Double LEDs for independent display of time and speed
- Speed range of 40-200rpm
- Wide range of platforms for use with a variety of vessels



SK-O180-E

Economical Digital Orbital Shaker

Features

- Max. load capacity is 3kg with platform
- Speed range of 0-200rpm
- Wide range of platforms for use with a variety of vessels





Timer



Wide range of accessories



Specifications

	SK-O330-Pro	SK-O180-Pro	SK-O180-S	SK-O180-E
Orbital diameter	10mm	4mm	20mm	20mm
Max. load capacity (with platform)	7.5kg	2.5kg	3kg	3kg
Motor type	Brushless DC motor	Brushless DC motor	DC motor	DC motor
Motor input power	28W	28W	16W	16W
Motor output power	15W	15W	10W	10W
Speed range	100-500rpm	100-800rpm	40-200rpm	0-200rpm
Speed display	LCD	LCD	LED	scale
Timer display	LCD	LCD	LED	-
Time settings range	1min-19h59min	1min-19h59min	1min-19h59min	-
Voltage	100-240V,50/60Hz	100-240V,50/60Hz	100-240V,50/60Hz	100-240V,50/60Hz
Power	30W	30W	20W	20W
Weight	13.5kg	8.1kg	3.1kg	3.1kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH	5-40°C,80%RH	5-40°C, 80%RH
Dimension[WxDxH]	370x420x100mm	300x340x100mm	270x330x110mm	270x330x110mm
Protection class	IP21	IP21	IP21	IP21
Data connector	RS232	RS232	-	-



SK-L330-Pro

SK-L180-Pro

LCD Digital Linear Shaker

Features

- Max. load capacity is 7.5kg(L330) and 2.5kg(L180) with platform
- Double LCDs for independent display of time and speed
- Wide range of platforms for use with a variety of vessels
- Maintenance- free brushless DC motor
- Over speed detection and protection



SK-L180-S

LED Digital Linear Shaker

Features

- Max. load capacity is 3kg with platform
- Double LEDs for independent display of time and speed
- Speed range of 40-200 rpm
- Wide range of platforms for use with a variety of vessels

SK-L180-E

Economical digital Linear Shaker

Features

- Max. load capacity is 3kg with platform
- Speed range of 0-200 rpm
- Wide range of platforms for use with a variety of vessels





Timer



Wide range of accessories



Specifications

	SK-L330-Pro	SK-L180-Pro	SK-L180-S	SK-L180-E
Amplitude	10mm	4mm	20mm	20mm
Max. load capacity (with platform)	7.5kg	2.5kg	3kg	3kg
Motor type	Brushless DC motor	Brushless DC motor	DC motor	DC motor
Motor input power	28W	28W	16W	16W
Motor output power	15W	15W	10W	10W
Speed range	100-350rpm	100-350rpm	40-200rpm	0-200rpm
Speed display	LCD	LCD	LED	scale
Timer display	LCD	LCD	LED	-
Time settings range	1min-19h59min	1min-19h59min	1min-19h59min	-
Voltage	100-240V, 50/60Hz	100-240V, 50/60Hz	100-240V, 50/60Hz	100-240V, 50/60Hz
Power	30W	30W	20W	20W
Weight	13.5kg	8.1kg	3.1kg	3.1kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH	5-40°C, 80%RH	5-40°C, 80%RH
Dimension[W×D×H]	370×420×100mm	300×340×100mm	270×330×110mm	270×330×110mm
Protection class	IP21	IP21	IP21	IP21
Data connector	RS232	RS232	-	-

rocking and 3D shakers provide perfect solution in electrophoresis gel dyeing/discoloration, sample washing, molecular hybridization, immunoprecipitation, Western blot and cell culture.

SK-R330-Pro LCD Digital Rocking Shaker

Features

- Rocking motion angle 9°
- Max. load capacity is 10kg with platform
- Speed range of 10-70rpm
- Double LCDs for independent display of time and speed
- Wide range of platforms for use with a variety of vessels



SK-R1807-S LED Digital Rocking shaker

Features

- Rocking motion angle 7°
- Max. load capacity is 3kg with platform
- Speed range of 10-80rpm
- Double LEDs for independent display of time and speed
- Wide range of platforms for use with a variety of vessels



SK-R1807-E Economical Rocking Shaker

Features

- Rocking motion angle 7°
- Max. load capacity is 3kg with platform
- Speed range of 0-80rpm
- Wide range of platforms for use with a variety of vessels





Timer



Wide range of accessories



Specifications

	SK-R330-Pro	SK-R1807-S	SK-R1807-E
Tilt angle	9°	7°	7°
Max. load capacity (with platform)	10kg	3kg	3kg
Motor type	DC motor	DC motor	DC motor
Motor input power	40W	16W	16W
Motor output power	24W	10W	10W
Speed range	10-70rpm	10-80rpm	0-80rpm
Speed display	LCD	LED	-
Timer display	LCD	LED	-
Time settings range	1 min-19h59min	1 min-19h59min	-
Voltage	100-240V, 50/60Hz	100-240V, 50/60Hz	100-240V, 50/60Hz
Power	50W	20W	20W
Weight	9kg	3.2kg	3.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH	5-40°C, 80%RH
Dimension[WxDxH]	360x410x200mm	270x330x130mm	270x330x130mm
Protection class	IP21	IP21	IP21



SK-D3309-Pro

LCD Digital 3D Shaker

Features

- Three-dimensional rocking motion with an angle of 9°
- Max. load capacity is 5kg with platform
- Speed range of 10-70rpm
- Double LCDs for independent display of time and speed
- Various of platform accessories



SK-D1807-S

LED Digital 3D Shaker

Features

- Three-dimensional rocking motion with the angle of 7°
- Max. load capacity is 3kg with platform
- Speed range of 10-80rpm
- Double LEDs for independent display of time and speed
- Various of platform accessories

SK-D1807-E

Economical 3D Shaker

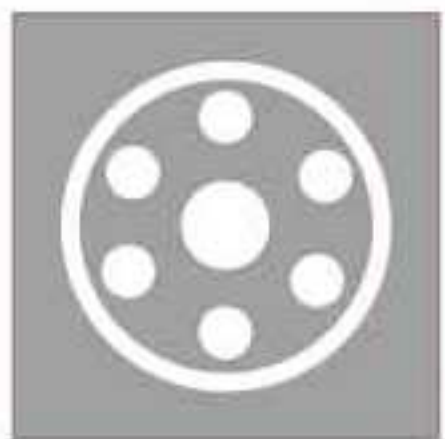
Features

- Three-dimensional rocking motion with the angle of 7°
- Max. load capacity is 3kg with platform
- Speed range of 0-80rpm
- Wide range of platforms for use with a variety of vessels





Timer



Wide range of accessories



Specifications

	SK-D3309-Pro	SK-D1807-S	SK-D1807-E
Tilt angle	9°	7°	7°
Max. load capacity (with platform)	5kg	3kg	3kg
Motor type	DC motor	DC motor	DC motor
Motor input power	40W	16W	16W
Motor output power	24W	10W	10W
Speed range	10-70rpm	10-80rpm	0-80rpm
Speed display	LCD	LED	scale
Timer display	LCD	LED	-
Time settings range	1min-19h59min	1min-19h59min	-
Voltage	100-240V, 50/60Hz	100-240V, 50/60Hz	100-240V, 50/60Hz
Power	50W	20W	20W
Weight	9kg	2.7kg	2.7kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH	5-40°C, 80%RH
Dimension[WxDxH]	360×430×106mm	270×330×130mm	270×330×130mm
Protection class	IP21	IP21	IP21
Data connector	-	-	-



SK330.5



SK180.4



SK180.5



SK180.6



SK330.1



SK330.3



SK180.1



SK180.3



Cat. No.	Description	SK-O330-Pro SK-L330-Pro SK-R330-Pro SK-D3309-Pro	SK-O180-Pro/S/E SK-L180-Pro/S/E SK-R1807-S/E SK-D1807-S/E
18900155	Dish platform with non-slip mat and fixed string (8pcs) Dimension[WxD]: 30x28.5cm	■	
18900185	Dish attachment with non-slip mat Dimension[WxD]: 24x21.5cm		■
18900200	Large size dish attachment with non-slip mat Dimension[WxD]: 30x23cm		■
18900326	Dish attachment with non-slip mat Dimension[WxD]: 28x28cm		■
18900027	Universal attachment with 4 bars Size: 32x32cm Capacity for flask: 25mlx21pcs, 50mlx15pcs, 100mlx12pcs, 250mlx6pcs, 500x4pcs	■	
18900040	Lengthways roller attachment Size: 32x32cm Capacity for flask: 25mlx21pcs, 50mlx15pcs, 100mlx12pcs, 250mlx6pcs, 500x4pcs	■	
18900025	Universal attachment with 3 bars Size: 25x24.5cm Capacity for flask: 25mlx10pcs, 50mlx8pcs, 100mlx6pcs, 250mlx4pcs, 500x2pcs		■
18900038	Lengthways roller attachment Size: 25x24.5cm Capacity for flask: 25mlx10pcs, 50mlx8pcs, 100mlx6pcs, 250mlx4pcs, 500x2pcs		■
18900036	Bar for SK330.1 universal attachment	■	
18900037	Bar for SK180.1 universal attachment		■
18900280	Connect sticks for double dishes shaker	■	■



SK330.2



SK180.2



Cat. No.	Description	SK-O330-Pro SK-L330-Pro SK-R330-Pro SK-D3309-Pro	SK-O180-Pro/S/E SK-L180-Pro/S/E SK-R1807-S/E SK-D1807-S/E
18900028	Fixing clip attachment Size: 32 x 32cm	■	
18900026	Fixing clip attachment Size: 25 x 24cm		■
18900029	Fixing clip for flask volume 25mL, used with SK330.2[56pcs] SK180.2[36pcs]	■	■
18900030	Fixing clip for flask volume 50mL, used with SK330.2[28pcs] SK180.2[18pcs]	■	■
18900031	Fixing clip for flask volume 100mL, used with SK330.2[28pcs] SK180.2 [18pcs]	■	■
18900032	Fixing clip for flask volume 200/250 mL, used with SK330.2[13pcs] SK180.2[8pcs]	■	■
18900033	Fixing clip for flask volume 500mL, used with SK330.2[9pcs] SK180.2[8pcs]	■	■

Selection guide

Mini dry bath
Temperature control
accuracy: $\pm 0.3^{\circ}\text{C}$

HX-10/
HX-10F



Constant temperature
dry bath
Temperature control
accuracy : $\pm 0.5^{\circ}\text{C}$

HX-20/
HX-20L



High Temperature
dry bath
Temperature control
accuracy : $\pm 0.5^{\circ}\text{C}$

HX-20G/
HX-20G2



Constant
temperature mixer
Temperature control
accuracy : $\pm 0.5^{\circ}\text{C}$

HX-20T/
HX-20TL



Mini dry bath

HX-10, HX-10F (air-cooled) ,mini dry bath (heating) adopt microcomputer control technology .Palm-sized thermostatic metal bath suitable for vehicle power supply. Small in size, light in weight and easy to move, it is especially suitable for outdoor, market or crowded experimental environment.

Product features

- Instant temperature display, time decrease display;
- 12V DC power input, built-in overtemperature protection device, suitable for car power; Super automatic fault detection and buzzer alarm function;
- It has the function of temperature deviation calibration;
- Convenient module replacement, easy to clean and disinfect;
- Unique temperature control technology, 5 program design, each program can be opened and closed independently, It can also be combined flexibly according to requirements;
- With the function of setting data display and current data display of each parameter, customers can see at a glance;
- The F air-cooled type is equipped with a high-speed DC fan, which can quickly cool the module or sample.

Technical parameters

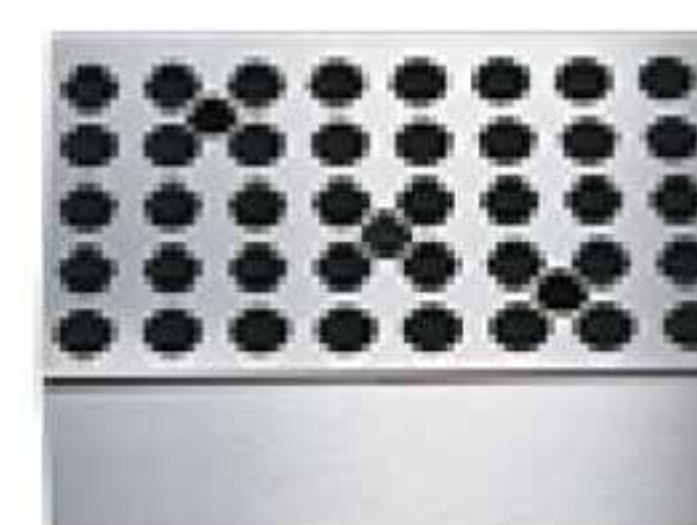
Model	HX-10	HX-10F
Cooling Mode	Natural cooling	Rapid cooling
Standard module	2 ml * 15 holes	
Temperature control range	Room temperature + 5 $^{\circ}\text{C}$ to 100 $^{\circ}\text{C}$	
Heating time (from 20 $^{\circ}\text{C}$ to 100 $^{\circ}\text{C}$) (min)	≤ 15	
Temperature control precision ($^{\circ}\text{C}$)	± 0.3	
Temperature stability@40 $^{\circ}\text{C}$ ($^{\circ}\text{C}$)	± 0.3	
Temperature stability@100 $^{\circ}\text{C}$ ($^{\circ}\text{C}$)	± 0.3	
Temperature display accuracy ($^{\circ}\text{C}$)	0.1	
Timing setting	0-100H or continuous (set time to 0 means continuous work)	
Temperature range ($^{\circ}\text{C}$)	0~100	
Power (w)	50	
Size (LxWxH) (mm)	150x100x135	
Programming function	5 groups	
Input power	IAC: 100-240V switching power supply converts 12V DC, supports DC-12V car power	
Optional module	M1, M2, M3, M4, M5	



► Replaceable module

M1

Item No: 20060001
Specification: 40x0.2mL
centrifuge tube(Applica-
ble to 8x0.2ml continuo-
us test tube)



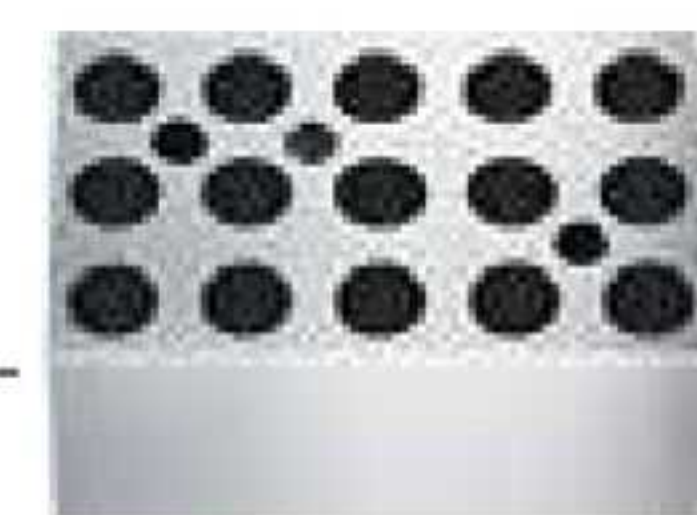
M2

Item No: 20060002
Specification: 24x0.5mL
centrifuge tube



M3

Item No: 20060003
Specification: 15X2.0mL
centrifuge tube



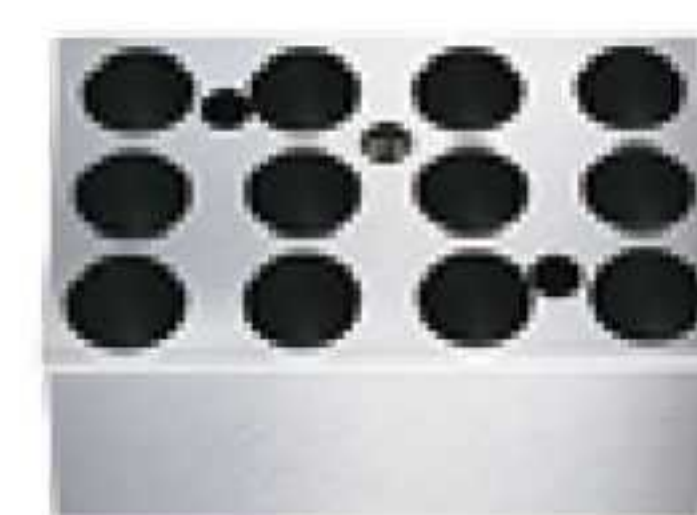
M4

Item No: 20060004
Specification: 6x15ml
centrifuge tube (The
insulation cover cann-
ot be closed)



M5

Item No: 20060005
Specification: 12x5.0mL
centrifuge tube



Constant temperature dry bath

Constant temperature Dry Bath, a constant temperature Dry Bath product manufactured by microcomputer control technology and semiconductor refrigeration technology can be equipped with a variety of modules, which can be widely used in sample preservation, preservation and reaction of various enzymes, denaturation treatment of nucleic acids and proteins, PCR reaction, electrophoresis pre-denaturation and serum coagulation, etc.



HX-20L

Product features

- LCD display, man-machine friendly touch operation interface;
- Microcomputer temperature controller, accurate temperature control, while displaying real-time temperature and constant temperature countdown time;
- Powerful programmable function implements multi-point temperature control, up to 5 temperature points and constant temperature time setting and continuous operation;
- Metal modules to prevent samples from contamination;
- Metal modules can be easily replaced, easy to clean and disinfect;
- Temperature deviation calibration function; built-in over-temperature protection device;
- Automatic fault detection and buzzer alarm function;
- Beautiful appearance, blue LIQUID crystal display instant parameter information, touch operation interface.



HX-20G

Technical parameters (Remarks: For details of optional modules, please refer to *page module options)

Model	HX-20	HX-20L	HX-20G	HX-20G2
	Heating type	Heating and cooling type	Single module high temperature	Dual module high temperature
Temperature range (°C)	RT+5°C~100	-10°C~100	RT+5~150	RT+5~150
Size (mm)	270×190×190	270×190×190	255×200×120	285×190×190
Net weight (kg)	2	3.5	3.8	5.1
Voltage	AC220V,50/60Hz	AC220V/120V,50/60Hz	AC220V,50Hz	AC220V,50Hz
Power (w)	150	250	200	400
Standard module	Hole 35 * 2.0 (ml)		24holes*2 (ml)	24holes*2 (ml)
Optional module	HX-A,B,C,D,E,F,G,H,J,K,L,M,N		HX01-HX20	HX01-HX20 (All high temperature modules can be matched with *2 pieces)
Time setting	1min-100h			
Module temperature uniformity (°C)	≤±0.3			
Display accuracy (°C)	0.1			
Temperature control precision (°C)	±0.5			
Heating time (min)	≤15(20°C to 100°C)			
Multiple points running	Support (up to 5 points)			
Heating mode	Heating film			
Fuse	250 V 3A Φ 5× 20			

Thermostatic dry bath shaker

The constant temperature integrates three functions of mixing, shaking, incubation heating and the concept of intelligent operation. Not only can it mix all kinds of microtubes, PCR plates, deep well plates and microwell plates and other common laboratory consumables, but also have the function of heating and incubating various modules.

Product features

- LCD liquid crystal display, man-machine friendly touch operation interface;
- Power off recovery function, power off recovery can be automatically resumed according to the original program;
- Microprocessor control temperature, speed and time, temperature control linear, accurate oscillation speed, small fluctuation;
- Brushless DC motor drive, long life, maintenance free;
- Metal module can protect the sample from contamination;
- Metal modules can be easily replaced, easy to clean and disinfect;
- With timing function, 0~100 hours to set incubation time;
- Temperature deviation calibration function; Built-in overtemperature protection device;
- Automatic fault detection and buzzer alarm function;
- Beautiful appearance, blue LIQUID crystal display instant parameter information, touch operation interface.

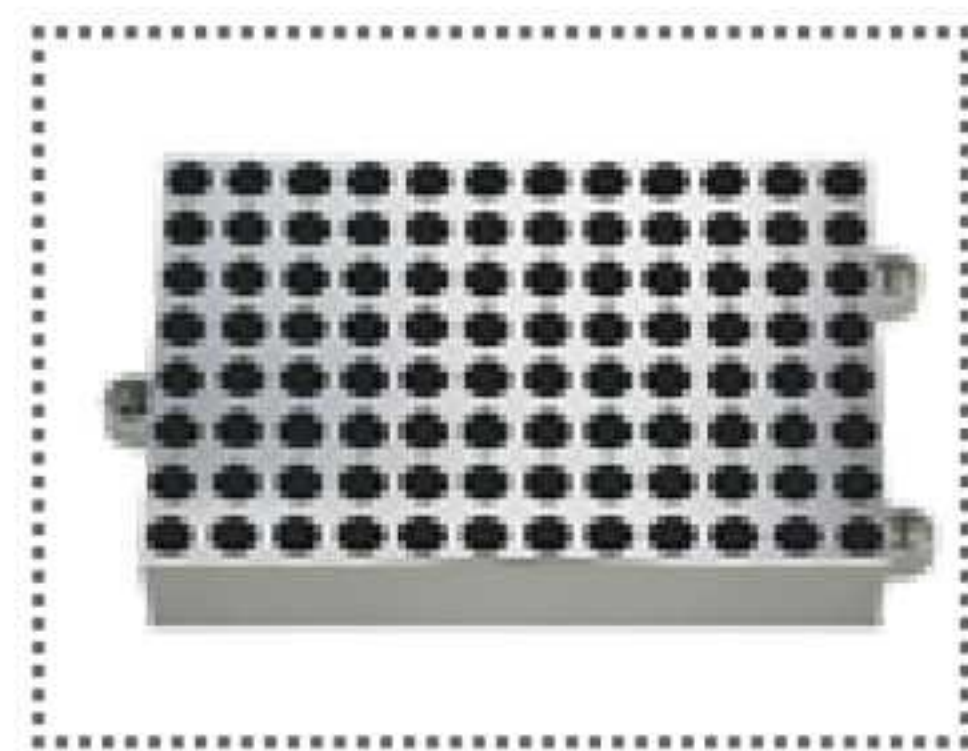


Technical parameters (Note: For details of optional modules, please see the optional module on page *)

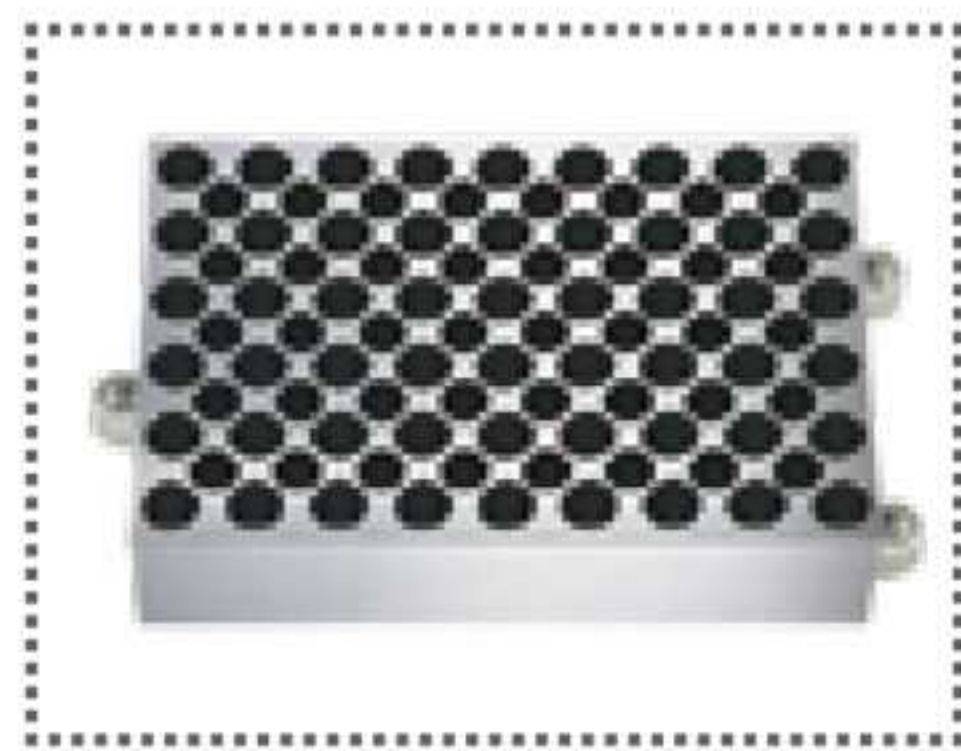
Model	HX-20T	HX-20TL
Temperature range (°C)	RT+5~100	0~100 (test at ambient temperature ≤20°C)
Time setting	1min-100h	1min-100h
Module temperature uniformity (°C)	≤±0.3	≤±0.3
Temperature control precision (°C)	±0.5	±0.5
Display accuracy (°C)	0.1	0.1
Oscillation speed (rpm)	200~1800	200~1800
Amplitude of oscillation (mm)	2-3 (horizontal rotation)	2-3 (horizontal rotation)
Heating time (min)	≤15 (25 up to 100°C)	≤15 (25 up to 100°C)
Multiple points running	Support (up to 5 points)	Support (up to 5 points)
Heating mode	Heating film	Heating film
Fuse	250 V 3A Φ 5× 20	250 V 3A Φ 5× 20
Size (mm)	270×190×190	270×190×190
Net weight (kg)	8	9.5
Power supply	AC220V,50Hz	AC220V/120V,50/60Hz
Power (w)	200	250
Standard module (ml)	35*2.0	35*2.0
Optional module	HX-A,B,C,D,E,F,G,H,J,K,L,M,N	HX-A,B,C,D,E,F,G,H,J,K,L,M,N
Cooling time	-	≤25 minutes (20°C cooling to 0°C) (The ambient temperature is 20°C for testing)

Module selection

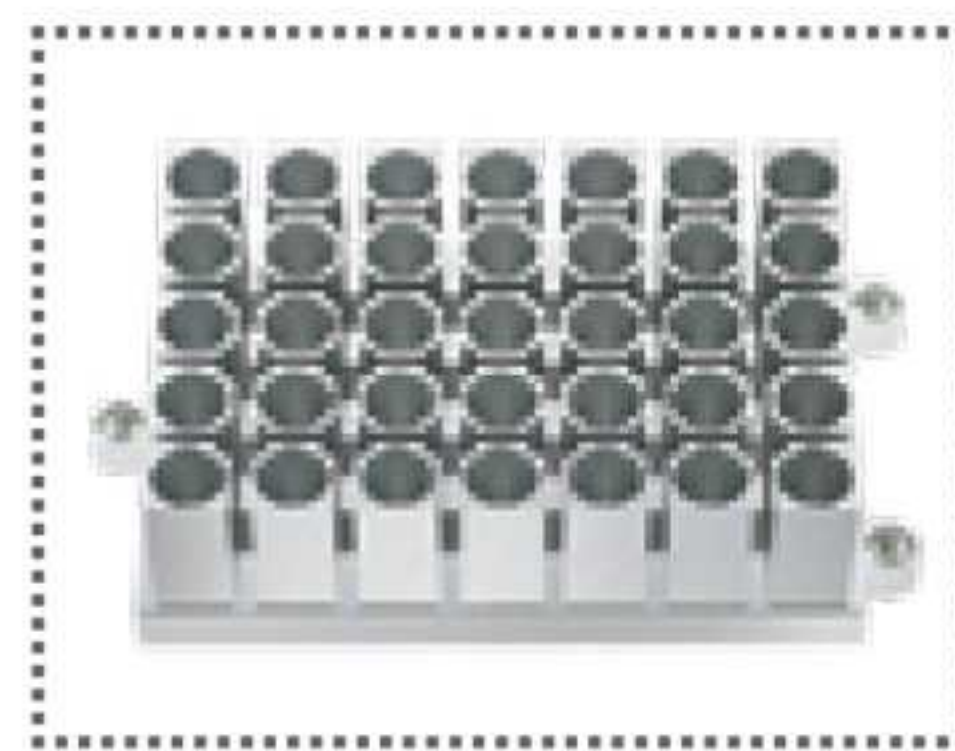
Instrument within 100 degrees can replace module



HX-A



HX-B



HX-C



HX-D



HX-E



HX-F



HX-G



HX-H



HX-J



HX-K



HX-L



HX-M



HX-N

Model	Hole diameter/hole depth (mm)	Module specification	Module size (L*W*H) (mm)	Applicable models
HX-A	6.3/17	96 Holes*0.2ml centrifuge tube	107*71*27(20 holes)	HX-20 HX-20L HX20T HX-20TL
HX-B	8.1/24	54 Holes*0.5ml centrifuge tube	107*71*25	
HX-C	10.5/31	35 Holes*1.5ml centrifuge tube	107*71*32	
HX-D	10.7/31	35 Holes*2.0 mL centrifuge tube	107*71*32	
HX-E	8.1/26 10.5/31	20 Holes*0.5ml+15 Holes*1.5ml centrifuge tube	107*71*27(20holes) 107*71*32 (15holes)	
HX-F	12/31	24 holes *2ml injection bottle	107*71*32	
HX-G	6.3/15 10.5/31	32 Holes*0.2ml+25 Holes*1.5ml centrifuge tube	107*71*19 (32holes) 107*71*32 (25holes)	
HX-H	6.3/17 8.1/20.5 10.5/31	32 Holes*0.2ml+10 Holes*0.5ml+ 15 Holes*1.5ml centrifuge tube	107*71*19(32holes) 107*71*27 (10holes) 107*71*3215holes)	
HX-J	Tablet	96-Holes*0.2ml (microplate)	107*71*19	
HX-K	13.5/40	24 Holes* 5mL centrifuge tube	107*71*42	
HX-L	16.9/99	12 Holes* 15mL centrifuge tube	107*71*100	
HX-M	29.5/90	6 Holes*50ml centrifuge tube	107*71*100	
HX-N	16/55	15 Holes*10ml centrifuge tube	107*71*58	

Module selection

Instrument within 150 degrees can replace module



HX01



HX02



HX03



HX04



HX05



HX06



HX07



HX08



HX09



HX10



HX11



HX12



HX13



HX14



HX15



HX16



HX17



HX18



HX19



HX20

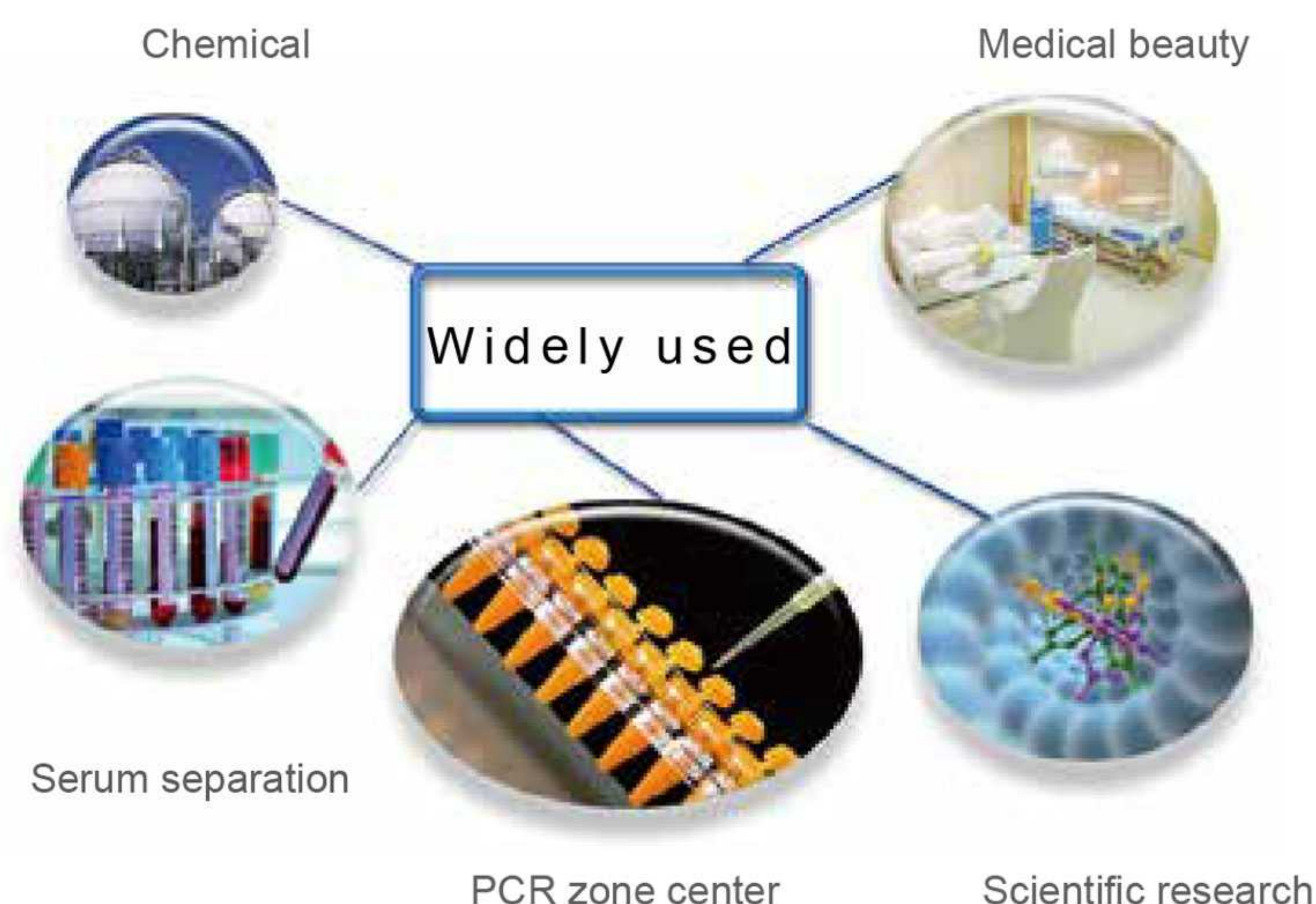
Model	Hole diameter/hole depth (mm)	Module specification	Module size (L*W*H) (mm)	Applicable models
HX01	6.1/17	48 holes*0.2ml centrifuge tube	79.5*49.5.5*35	HX-20G HX-20G2 MD200-1 MD200-2
HX02	8.1/24	48 holes*0.5ml centrifuge tube	79.5*49.5.5*35	
HX03	10.5/31	24 holes*1.5ml centrifuge tube	79.5*49.5.5*35	
HX04	10.5/31	24 holes * 2ml centrifuge tube	79.5*49.5.5*35	
HX05	13.5/33	24hole*5ml centrifuge tube	79.5*49.5.5*35	
HX06	15.5/46	12 holes*7ml centrifuge tube	95.5*76.5*50	
HX07	16.5/46	12 holes*10ml	95.5*76.5*50	
HX08	19.5/46	12 holes*19.5mm aperture	95.5*76.5*50	
HX09	17.5/46	12 holes*17.5mm aperture	95.5*76.5*50	
HX10	26.5/46	8 holes * 26.5mm aperture	95.5*76.5*50	
HX11	28.5/46	4 holes*50ml	95.5*76.5*50	
HX12	40.5/47	3 holes*100ml	95.5*76.5*50	
HX13	8.1/24	48holes*0.5ml centrifuge tube	95.5*76.5*50	
HX14	10.5/31	24 holes*1.5ml centrifuge tube	95.5*76.5*50	
HX15	10.5/31	24 holes*2ml centrifuge tube	95.5*76.5*50	
HX16	6.1/14	48holes*0.2ml centrifuge tube	95.5*76.5*50	
HX17	6.1/14	96-well*0.2ml centrifuge tube	107 * 71 * 15 (up) 153 * 95.5 * 18.5 (below)	
HX18	10.5/37	12 holes*1.5ml	95.5*76.5*50	
HX19	18.5/46	12 holes*15ml	95.5*76.5*50	
HX20	20.5/40	12 holes*20ml	95.5*76.5*50	

Mini hand held centrifuge

The mini palm centrifuge has a novel and unique appearance, smart and versatile, equipped with a variety of centrifugal rotors and a variety of test tube sets, suitable for 2.0ml, 1.5ml, 0.5ml, 0.2ml centrifuge tubes and 8x4x0.2ml PCR tubes, widely used in chemical and pharmaceutical industries, Food and other industries.

Product features

- Convenient and efficient variety of rotor, compatible with 2.0 mL, 0.4, 1.5ml, 0.5ml, 0.2ml centrifuge tube;
- Using high-frequency wide-voltage power supply technology, the input voltage range is 100~240V, ensuring operation;
- Unique rotor buckle design, easy to replace the rotor;
- Low noise, stable operation, durable dc motor, safe and reliable;
- Humanized design, semi-automatic cover opening function, cover opening time automatic stop time within 3 seconds;
- The fully transparent spherical upper cover and multi-rotor equipment achieve the best results in the pursuit of creativity and simplicity, and inject humanity into scientific research and rational laboratory products.



Product model	HL-4K	HL-4KS	HL-6KS	HL-8KS	HL-11KS
Rotating speed (rpm)	4000	4000	6000	8000	11000
Relative centrifugal force (xg)	940	940	2100	3700	7100
Weight (kg)	1.4	1.5	1.5	1.6	1.6
Reduce the time	Open the lid within 15 seconds	Open the lid within 3 seconds			
Operation hours	Continuous	Continuous or timing 1~99min			
Open	Semi-automatic				
Open cover system protection	Double brake insurance				
Acceleration time	Reach 90% of rated speed in 5 seconds				
Rotor	8x 1.5/2.0 mL angle rotor 8x4 x 0.2mL PCR tube				
Motor	DC motor				
Input power	AC100-240V/50Hz/60Hz				
Noise (dB)	≤45				
External dimension (mm)	175*135*120				

Centrifugal Separation



1 With brake function, it is safer and saves time.

2 Semi-automatic lid opening is more convenient and comfortable.

3 Zinc alloy base is stable, not easy to deformation, durable, stable, hardness and strength than plastic base. More safety!

4 Double limit control and double insurance. With timing, ensure full sample.

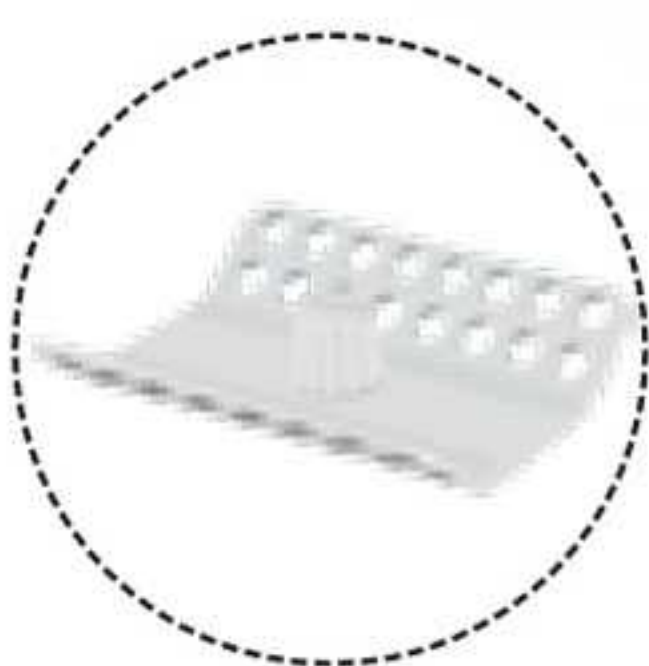
5 Unique lock design makes it safer to be away from the center and prevent flying accidents.

6 The rotor and centrifugal cover are made of high strength plastic with good quality, long life long and good rotor balance.

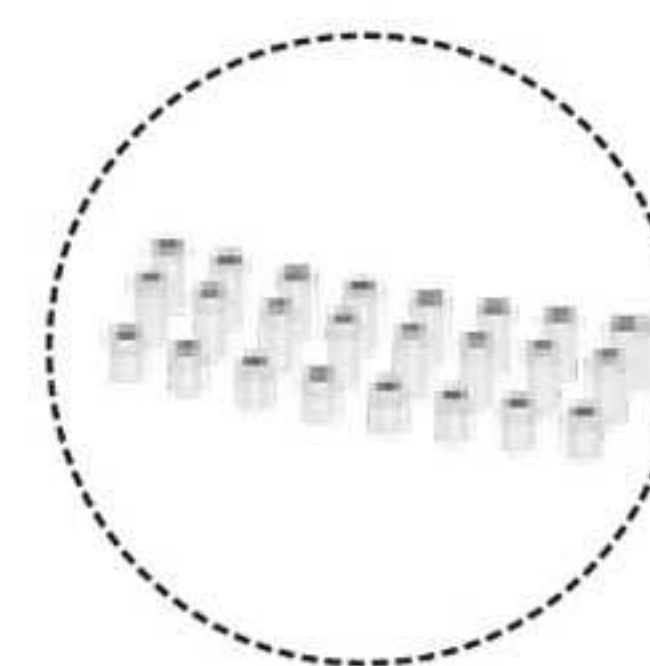
The attachments as below



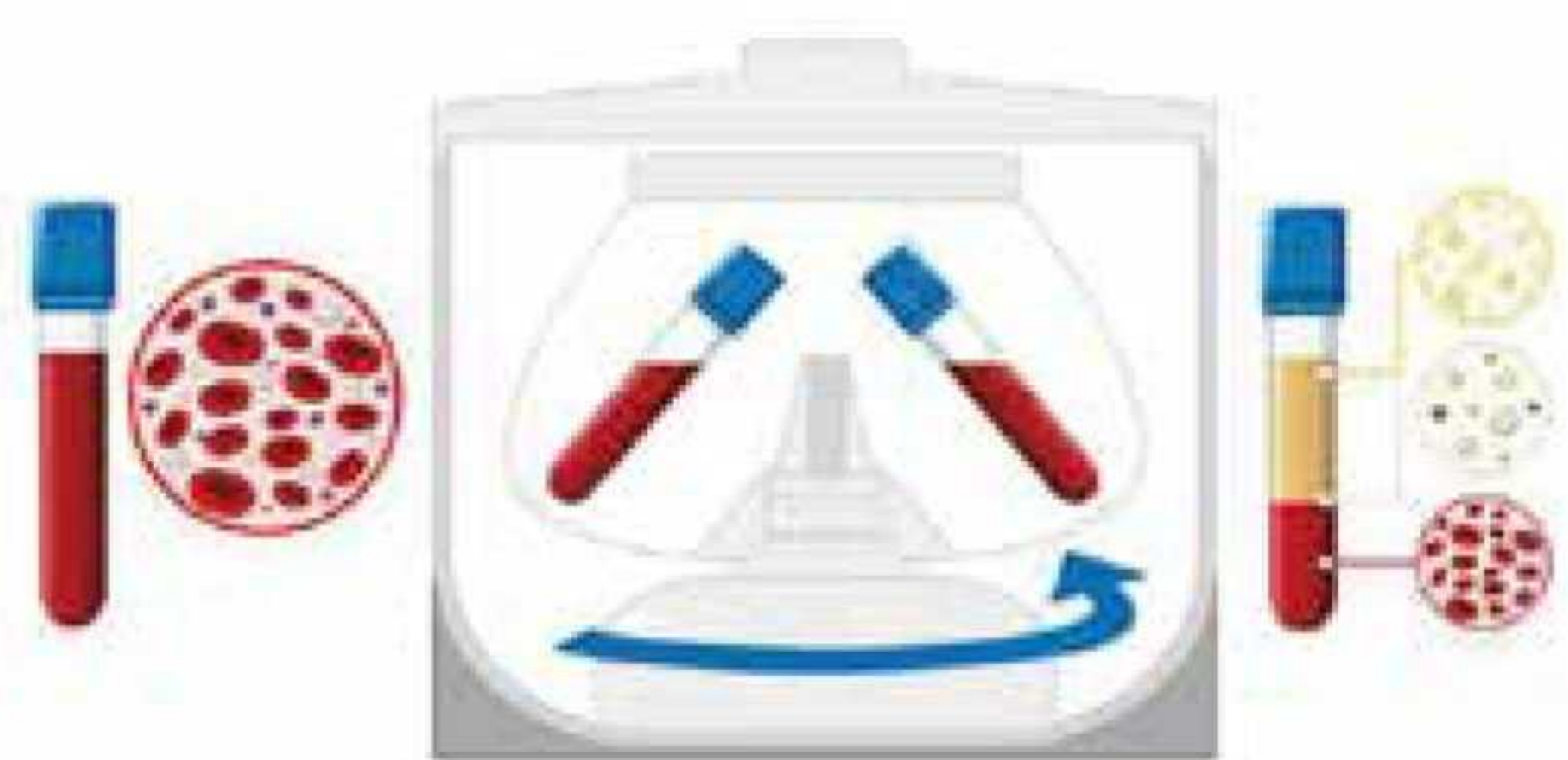
【Angle rotor】
Centrifugal tubes of 0.2ml, 0.4ml, and 0.5mL



【PCR rotor】
8*4* 0.2mL centrifuge tube or 4*0.2ml Eight horizontal tubes



【Angle rotor adapter】
Can place 8*0.2ml, 0.4ml, 0.5ml, 1.5ml, 2.0ml centrifuge tubes:



Centrifugation of blood

plasma (55%)

white blood cells & ets (4%)

red blood cells (41%)

Centrifugal effect



Sampling with Pipettes (serum)



Sample before centrifugation



Sample after centrifugation

Tabletop Low-speed Centrifuge



Features

- Microprocessor control and DC brushless motor.
- Touch panel and LCD display.
- Automatic calculation of RCF value.
- Unique shock absorber and automatic balance.
- Electronic door lock system to ensure safe operation, e.g. prevent door from opening during rotor running, reluctant to start if the door is not properly closed and the automatic stop if abnormal phenomenon occurs.
- Diversified stainless steel racks available for free choice.
- Up to 20 programs can be saved.
- Instantaneous function available for quick centrifugation.
- User friendly design with soft-touch door-closure.

Technical Parameters

Model	L420	L500	L600
Max. Speed	4200rpm	5000rpm	6000rpm
Max. RCF	2760xg	4030xg	5120xg
Max. Capacity	12x20ml	16x15ml	16x15ml
Speed accuracy	±30rpm	±30rpm	±30rpm
Time rang	1min~99min	1min~99min	1min~99min
Noise	≤65dB(A)	≤65dB(A)	≤65dB(A)
Power supply	AC220±22V 50/60Hz 5A	AC220±22V 50/60Hz 5A	AC220±22V 50/60Hz 5A
Power consumption	250W	250W	250W
Dimensions (WxDxH)	370x432x250(mm)	370x432x250(mm)	370x432x250(mm)
Packing Size (WxDxH)	435x580x312(mm)	435x580x312(mm)	435x580x312(mm)
Net weight	14kg	15kg	15kg

Tabletop Low-speed Centrifuge



Features

- ◆ Multiple rotors, buckets and adapters are available for wide applications.
- ◆ Microprocessor control, AC inverter motor with high torque without carbon powder emission.
- ◆ Offers 9 Acc profiles and 10 Dec profiles preventing the sample from emulsion or turbid.
- ◆ Accommodates the protection measures against over-speed or improper operation, including the function of fault automatic diagnosis, door lid self locking and stainless steel centrifuge chamber with double protection jackets etc. greatly improve the safety of centrifuge.
- ◆ Programmable operation and the routine programs can be saved.
- ◆ Speed ,time and RCF can be freely set.

Technical Parameters

Model	TD5A-WS
Max. Speed	5000rpm
Max. RCF	4390xg
Max. capacity	4x500ml
Speed accuracy	±10rpm
Time rang	1min to 99min
Noise	<65dB(A)
Power supply	AC220V±22V 50/60Hz 10A
Power consumption	750W
Dimensions (WxDxH)	450x545x380mm
Packing size (WxDxH)	547x427x432mm
Net weight	45kg

Tabletop Low-speed Refrigerated Centrifuge

Features:

- Environment-friendly compressor offers ideal cooling effect without pollution.
- Microprocessor control, DC brushless motor with high torque, and maintenance free.
- RCF value can be calculated and set automatically.
- Available with various racks, buckets and adapters for multiple purpose applications.
- Under programmable operation and multiple routine programs can be saved.
- Offering 9 acceleration profiles and 10 deceleration profiles to prevent the sample from secondary emulsion or turbid.
- Accommodating several safety protection against over-speed or overheat operation, including electronic door interlock for safe operation.



Technical Parameters

Model	L530R
Max. speed	5300rpm
Max. RCF	5010xg
Max. capacity	4x250ml
Speed accuracy	±30rpm
Time Range	1min to 99min
Temp Range	-20℃~40℃
Temp accuracy	±1℃
Compressor set	Environment-friendly with (R134a)refrigerant
Noise	<65dB(A)
Power supply	AC220V±22V 50/60Hz 10A
Power consumption	1200W
Dimensions (W x D x H)	470x730x380mm
Package size (W x D x H)	547x960x422mm
Net weight	70kg

Table-top High Speed Centrifuge

Technical Parameters



Model	H1650
Max. Speed	16500rpm
Max. RCF	26054xg
Max. Capacity	6x50ml
Speed accuracy	±30rpm
Time range	1min to 99min
Noise	≦65dB (A)
Power supply	AC220V 50/60Hz 5A
Wattage	400w
Dimensions (WxDxH)	325x420x325mm
Package Size (WxDxH)	385x640x330mm
Net weight	20kg

Technical Parameters:



Model	H1850
Max. speed	18500rpm
Max. RCF	23797xg
Max. capacity	4x100ml
Speed accuracy	±10rpm
Time range	1min to 99min59s
Noise	≦60dB (A)
Power Supply	AC220V 50/60Hz 10A
Power consumption	750w
Dimensions (WxDxH)	420x530x370mm
Package size (WxDxH)	487x762x422mm
Net Weight	48kg

Tabletop High Speed Refrigerated Centrifuge



Features

- 8 types of rotors are available for free choice. It can spin with 0.2ml/1.5ml/5ml test tubes and PCR strip tubes.
- Microcomputer control, direct drive by AC inverter motor with high starting torque.
- Large LCD, speed, time, RCF, Acc and Dec profiles can be set freely. Multiple regular programs can be saved for programmable operation.
- 9 Acc profiles and 10 Dec profiles (0 is free stop), 3-stage vibration damping, achieving ideal centrifugal result.
- The protective functions of electronic door interlock, stainless steel chamber, imbalance, over-temperature and over-speed for safe operation.
- The operation temperature can be kept at -4°C even when the rotors running at the max. speed, achieving ideal cooling performance.

Control Panel

- ◆ Clear and intuitive, easy data readout from the panel.
- ◆ PULSE key is provided for instantaneous centrifugation.
- ◆ Set-speed, set-time, set-temperature and running speed, time, temperature can be displayed at the same time.
- ◆ Automatic calculation of speed and RCF which can be displayed simultaneously.
- ◆ Program numbers can be set and called for the next time operation.

Technical Parameters

Model	H1650R	Temperature Control	±1°C
Max.speed	16500RPM	Compressor Set	Advanced and environment-friendly compressor set with R134a
Max.RCF	21532xg	Noise	≤65dB(A)
Max.capacity	8x10ml	Power supply	AC220V +/-22V,50Hz 10A
Speed accuracy	±10rpm	Power Consumption	1000W
Time range	30s~99min59s	Dimensions (WxDxH)	350x600x340(mm)
Temperature range	-20°C~40°C	Packing Size (WxDxH)	460x810x510(mm)
Temperature Control	±1°C	Net weight	70Kg