

STOCK CODE
430685

PRODUCT OVERVIEW

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Above insignificance is
the beginning of greatness

SCIENTZ



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NINGBO SCIENTZ BIOTECHNOLOGY CO., LTD.

A National High-Tech Enterprise

Top Ten Well-Known Brands of Life Science Instrument

COMPANY PROFILE



COMPANY INTRODUCTION

Ningbo SCIENTZ Biotechnology Co., Ltd (Stock code:430685) was established in 2001. It's a National Hi-Tech Enterprise specializing in producing ultrasonic apparatuses and instruments that serve the needs of scientific research, education, hospital, pharmaceutical industry and environmental protection. SCIENTZ has been chosen many times as the Top Ten Well-Known Brands of Life Science. It had undertaken an Important National Science & Technology Specific project of MOHC and The National Development and Reform Commission, approved by ISO9001:2008 international quality management system furthermore obtained CE.

SCIENTZ is the largest manufacturer of ultrasonic homogenizers in China. As a leader worldwide, SCIENTZ holds multiple patents for the high-pressure gene gun, which ranks first in Asia in quality and features SCIENTZ series ultrasonic cleaner, tissue grinder, paddle blender, freeze dryer, water bath, gene transduction device, cell fusion apparatus and so on all received positive feedback.

SCIENTZ is the project of scientific instrument industrialization base of the National Development and Reform Commission. The products are exported to 36 countries including France, UK, Russia, etc. SCIENTZ had set up offices and service centers in many cities in China and received a good reputation from the users.

CONTENT

1 Sample Treatment -crushing /Homogenization/Dispersion

- 1 Ultrasonic homogenizer
- 09 High-speed disperser
- 11 Tissue grinder
- 16 High-pressure homogenizer

17 Molecular Biology Instruments

- 17 Gene transduction (Gene gun)
- 20 Syncretize electric (Cell fusion instrument&Gene transduction)
- 21 Hybridization oven& UV fixer
- 25 Automatic growth curve analyzer
- 28 Parallel biological reactor

29 Regular Instrument

- 29 Ultrasonic cleaner
- 33 Glassware washer
- 34 Thermostate bath
- 43 Mixer
- 43 Freeze dryer
- 52 Flake ice maker

53 Drug Tester

- 53 Dissolution tester
- 57 Disintegration tester
- 57 Hardness tester
- 58 Friability tester
- 59 Clarity detector
- 59 Real time degassing instrument

SCIENTZ-IID Ultrasonic Homogenizer

CE Patent number: ZL200920122245.6(8362\8364)

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INNOVATION



Application area

Life sciences: Lysis, fragmentation, leaching of bacteria, viruses, spores and other cellular structures, extraction of DNA and protein in plants and animals, pruning of DNA/RNA, chromatin immunoprecipitation technique.

Materials chemistry: the dispersion and cracking of nanomaterials, such as carbon nanotubes, graphene and other materials. cracking, emulsification, homogenization and crushing of homogeneous soil, rock samples, non-ferrous metals, rare earth particles.

In addition, it can be used for the dispersion and extraction of Chinese herbal medicines. It can be used for the dispersion, homogenization and acceleration reaction of other samples, and also for sample pretreatment in chemical, medical, archaeological, geological and Marine Fields.

Integrated Ultrasonic Homogenizer



Features

- It adopts a PWM control switch power supply and the power is continuously adjustable
- It adopts 7 inches TFT touch screen display and high resolution
- Central microcomputer centralized control
- Ultrasonic time, power arbitrary setting
- Sample temperature detection display, power display, microcomputer tracking, automatic fault alarm
- Sound Abating trap adopts sheet metal, spray plastic, ABS material, die design, with lock function

Main Technical Parameters

Model	SCIENTZ-IID	Optional Tip	Φ2、3、10、15mm
Frequency	20-25KHZ automatic tracking	Storage data	20 groups
Power	20-1000W adjustable	Temperature alarm	0-99.9℃
Display	7 inches TFT touch screen	Duty cycle	0.1-99.9%
Display content	Time、Power、Temperature	Alarm	Over-temperature、Overload, and overtime
Processing volume	0.1-600ml	Timing	1-999min
Duty Ratio	0.1-99.9%	Working mode	Gap/Continuity
Accompany	Φ6mm	Standard configuration	Generator host 1pc、Sealed transducer 1pc
			Φ6mm Tip 1pc、Sound Abating trap 1pc

Main Technical Parameters

Model	SCIENTZ-1000J	Accompany	Φ6mm
Frequency	20-25KHZ	Optional Tip	Φ2、3、8、10mm
Power	1000W (1%-100%)	Temperature alarm	0-99.9℃
Display	7 inches touch screen	Duty cycle	0.1-99.9%
Display content	Time、Power、Temperature	Dimensions	320*355*633mm
Processing volume	10-200ml	Lifting method of transducer	Electric
Duty Ratio	0.1-99.9%	Light	Yes

JY-N Ultrasonic Homogenizer

CE Patent number:ZL200920122245(8362\8364)

FOR SCIENTZ
INNOVATION



Features

- With new software and central microcomputer centralized control
- It adopts 7 inches TFT touch screen display
- Ultrasonic power step with 1% continuous adjustable
- With pulse and continuous operation and with test function
- Ultrasonic time, gap time, and total time can be accurate to 0.1 seconds
- JY96-IIN、JY88-IIN、JY92-IIN、JY92-IIDN Ultrasonic Homogenizer

Main Technical Parameters

Model	JY96-IIN	JY88-IIN	JY92-IIN	JY92-IIDN
Frequency	20-25 KHz	20-25 KHz	20-25 KHz	20-25 KHz
Display	7 inches touch screen	7 inches touch screen	7 inches touch screen	7 inches touch screen
Adjustable Power range	150 W (1%-100%)	250 W (1%-100%)	650 W (1%-100%)	900 W (1%-100%)
Accompany Tip (Φ)	6 mm	6 mm	6 mm	6 mm
Optional Tip (Φ)	3 mm	3 mm	2、3、10mm	2、3、10、12、15 mm
Processing Volume	10-100 ml	10-200 ml	0.1-500 ml	0.1-600 ml
Duty Ratio	0.1-99.9 %	0.1-99.9 %	0.1-99.9 %	0.1-99.9 %
Temperature Alarm	0-99.9℃ (Prevent sample overheating)	0-99.9℃ (Prevent sample overheating)	0-99.9℃ (Prevent sample overheating)	0-99.9℃ (Prevent sample overheating)
Alarm	time, temp. overload	time, temp. overload	time, temp. overload	time, temp. overload
Power Supply	220/110V 50Hz/60Hz	220/110V 50Hz/60Hz	220/110V 50Hz/60Hz	220/110V 50Hz/60Hz
The size of Power Supply Chassis	430*245*300 (mm)	430*245*300 (mm)	430*245*300 (mm)	430*245*300 (mm)
Weight(The host and transducer)	8.4 Kg	8.5 Kg	9.5 Kg	9.6 Kg
The size of Sound Abating trap	345*345*535mm	345*345*535mm	345*345*535mm	345*345*535mm

Model	JY98-IIDN	JY99-IIDN
Frequency	19.5-20.5 KHz	19.5-20.5KHz
Display	7 inches TFT touch screen	7 inches TFT touch screen
Adjustable Power range	1200 W (1%-100%)	1800 W (1%-100%)
Accompany Tip	20mm	25mm
Optional Tip	15、25 mm	20、28 mm
Processing volume	50-1000 ml	50-1200 ml
Duty Ratio	0.1-99.9%	0.1-99.9%
Temperature alarm	0-99.9℃ (Prevent sample overheating)	0-99.9℃ (Prevent sample overheating)
Alarm	Over temperature、overtime、overload	Over temperature、overtime、overload
Size of Power Supply Chassis	430*245*300mm	430*245*300mm
Weight (the host and transducer)	11.6 Kg	11.8Kg
The size of Sound Abating trap	345*345*535mm	345*345*535mm

Tip optional reference

Tip model (Dia)		Frequency	Amplitude	Power Range	Processing volume
Φ2	1/12"	20-25KHz	300um	20-250W	0.5-5ml
Φ3	1/8"	20-25KHz	250um	30-400W	3-10ml
Φ6	1/4"	20-25KHz	220um	60-650W	10-100ml
Φ10	5/12"	20-25KHz/19.5-20.5KHz	150um	100-950W	100-200ml
Φ12	1/2"	20-25KHz	150um	100-950W	100-200ml
Φ15	5/8"	20-25KHz/19.5-20.5KHz	145um	200-950W	200-500ml
Φ18	3/4"	20-25KHz	100um	200-950W	200-500ml
Φ20	3/4"	19.5-20.5KHz	60um	400-1200W	500-1000ml
Φ25	1"	19.5-20.5KHz	40um	800-1800W	500-1200ml

Various models ultrasonic homogenizer optional parts



Titanium Alloy tip



Specialized Broken bottle

UP-250, UP-250S Handheld Ultrasonic Homogenizer



The hand-held ultrasonic homogenizer is a multi-functional and multi-purpose instrument that uses ultrasonic waves to generate cavitation effects in liquids. Used for emulsification, dispersion, homogenization, extraction, defoaming, cleaning, preparation of nanomaterials and acceleration of chemical reactions, etc. The instrument adopts an LED display and has two working modes: automatic and manual (pedal). Ultrasonic time and power can be set arbitrarily. With sample temperature detection display, frequency automatic tracking, sample temperature detection display, frequency automatic tracking and other functions. For small-volume sample processing.

Main Technical Parameters

Model	UP-250	UP-250S
Power	250W	250W
Host size	270*245*116mm	122*252*200mm
Control mode	Automatic and manual switchable (optional foot switch)	Automatic and manual switchable (optional foot switch)
Pulser	0.1-99s adjustable (gap/work)	0.1-99s adjustable (gap/work)
Frequency	19-25KHz	19-25KHz
Timer	0.1-99min can be set	0.1-99min can be set
Accessories (Φ)	Φ3mm	Φ3mm
Crushing Capacity	100μl-10ml	100μl-10ml
Power supply	220V/110V, 50HZ/60HZ	2A/12V charger (built-in 12V/10000mAH lithium battery)
Display mode	4.3 inches touch screen	4.3 inches touch screen

Ultrasonic Extractor

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INNOVATION

Ultrasonic extractor uses strong ultrasound to generate cavitation, crushing and emulsification in solid and liquid. It extracts substances by adding various reactants according to reaction conditions under temperature control and stirring state of substance cells. Ultrasonic extractors are widely used in teaching, scientific research and production in the fields of biochemistry, microbiology, medicinal chemistry, surface chemistry, physics, zoology, agronomy, medicine and pharmacy.



Main Technical Parameters

Model	SCIENTZ-5T	SCIENTZ-10T	SCIENTZ-15T	SCIENTZ-30T	SCIENTZ-50T
Frequency	20-25 KHz	20-25 KHz	20-25 KHz	20-25 KHz	20-25 KHz
Ultrasonic Power	20-1000W	20-1200W	200-1500W	200-1800W	250-2400W
Double-layer reactor capacity	5L	10L	15L	30L	50L
Tip (Φ)	Φ30mm	Φ30mm	Φ30mm	Φ50mm	Φ50mm
Ultrasonic time	0.1-99.9S	0.1-99.9S	0.1-99.9S	/	/
Gap time	0.1-99.9S	0.1-99.9S	0.1-99.9S	/	/
Full time	1-999min	1-999min	1-999min	1-99min	1-99min
Power setting	1-99 %	1-99 %	1-99 %	1-99 %	1-99 %
Duty cycle	0.1-99.9%	0.1-99.9%	0.1-99.9%	/	/
Actual temperature measurement	Yes	Yes	Yes	Yes	Yes
Stirring power	60W	60W	90W	120W	120W
Stirring speed	10-600r/min	10-600r/min	10-600r/min	10-600r/min	10-600r/min
Support	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Additive Volumetric Flask	Yes	Yes	Yes	Yes	Yes
Liquid filling/discharge port	Yes/ Yes	Yes/ Yes	Yes/ Yes	Yes/ Yes	Yes/ Yes
Chiller	DLK-5003	DLK-5007	DLK-5010	DLK-5010	DLK-5010

Non Touch Ultrasonic Homogenizer (ultrasonic DNA interrupter)

Non-touch ultrasonic homogenizer can be used for asepsis operation and ultra-micro crushing. It is able to break the chromosomes and broken cells through the centrifuge tube. Tailored for second-generation sequencing DNA samples and chromatin immunoprecipitation assay samples.

Compared with the traditional one, the non-contact ultrasonic homogenizer’s probe is not contacted with the sample so causes no infection flying fog and the cross-contamination is avoided. A plurality of samples can be detected at once so the experiment efficiency is higher. All kinds of products are in separate sealed tubes, so as to avoid cross contamination.

If you want the sample to have uniform energy distribution in the ultrasonic bath at 4°C and complete ultrasonic effect, you can choose the cooling water circulation system. The experimental process is standardized, reproducible, and the results are highly reliable with flexible parameter settings. It is gradually becoming an indispensable standardized tool for ChIP (chromatin immunoprecipitation) and DNA shearing research platforms. It can handle 5ul samples at least, and it is suitable for precious samples.



Features

- No aerosol generation -enhance biological safety (such as Mycobacterium, virus, etc.)
- Eliminates the risk of cross contamination of samples
- Eliminates dregs phenomenon of traditional probe
- A variety of samples can be processed , with a wide range of sample handling
- It is suitable for all kinds of standard containers
- It can process microscale samples, the minimum to 5μL
- The automatic continuous rotation of the centrifuge tube makes the ultrasonic energy distribution more uniform
- It is optional to buy low temperature water bath according to customer’s demand for a variety of diameter Eppendorf tube rotating base.

Application Area

- DNA Fragmentation
- RNA Fragmentation
- Bacteria and cell breakdown
- ChIP assay (Chromatin immunoprecipitation)
- High throughput sequencer sample pretreatment
- Take membrane proteins
- Homogeneous emulsification reaction
- Ultrasonic treatment of precious reagents

Model	SCIENTZ08-III	SCIENTZ08-IIIC
Frequency	40 KHz	20KHz (±0.5KHz)
Power	2200W adjustable	1800W adjustable
Adjustable power	1-99%	1-100%
Time	1-999min	1-999min
Duty Ratio	0.1 -99.9%	0.1 -99.9%
Processing Volume	3L	900ml
Temperature display	Yes	Yes
Crushing support	1-2ml*32hole、5ml*20hole、10-15ml*17hole	0.5ml*12hole、2ml*12hole、0.2ml*12hole、5-50ml customizable
Power Supply	220/110V±0.5 50Hz/60Hz	220/110V±0.5 50Hz/60Hz
Chiller	/	Yes

XHF-DY High-speed Disperser

The instrument is operated by an electronic speed control and operated micro-high speed motor to drive the 316 stainless steel inner and outer plum-type crushing knives to work. The fixed rotor configuration is subjected to high-speed rotation of the in-cutting tool to homogenize, emulsify and crush various substances.

It is used for sample treatment such as sewage sample treatment, laboratory rapid homogenization and preparation of samples.

The machine is compact in design, equipped with high-speed AC motor, noise is less than 60 decibels, and the cutting tool is removable and easy to sterilize.



Main Technical Parameters

Model	XHF—DY	The size of blade	Φ10mm processing volume:3-200ml;
Power Supply	220V/110V,50Hz/60Hz		Φ14mm processing volume:50-500ml;
Power	360W		Φ18mm processing; volume:50-1000ml;
Adjustable range	2800-28000rpm		Φ25mm processing volume:100-2000ml
Capacity	3ml-2000ml	Display	LCD
Timing Range	1-9.9min	Net weight	8.0Kg
Ambient Temperature	-10°C-40°C	Dimensions	330×235×522mm

S10 High-speed Homogenizer

S10 High-speed homogenizer (alias: tissue-pounding machine, powder-dispersive machine), is suited to liquid mixing, emulsion, homogenization dispersion of solid powder in a liquid, animal tissue crushing and homogenization. The machine is designed to bring about a strong hydrodynamic shear effect by means of high-speed shear force and speedy dispersion so that the material inhaled from the rotor bottom can spray through the stator. The extruded shapes suit ergonomics. It is easy to move and operate. As the minimum processing capacity can be 1ml, it is solely used for mashing organization, medical diagnostics, quality supervision, micro-dispersion, emulsification and homogenization. The device is ideal for micro-sample pre-treatment.



Main Technical Parameters

Power	160W	Processing Volume	1ml-120ml
Power Supply	220/110V 50/60Hz	Accessories	10mm
Speed	8000-35000rpm	Net weight	1Kg
Display	OLED	Cutter reference processing capacity	Φ6mm, 1-10ml; Φ8mm, 2-50ml; Φ10mm, 30-120ml;
Speed mode	28 levels adjustment	Optional accessories	working platform, container clamp, replaceable cutter (6mm, 8mm)

Ultrasonic Microwave Extractor

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INNOVATION

Application area

- **Biological / Biotech:**Sonication is an ideal tool for lysing bacteria, yeast and tissue cells for the extraction of protein,DNA, RNA, and cellular components.
- **Pharmaceutical:**Cell disruption is common in analytical, quality control, and R & D labs to perform numerous functions from mixing and degassing of analytical samples, to cracking open tablets for dissolution tests. Liposomes and emulsions are easily formed by Sonication for microencapsulation purposes in the production of creams and lotions.
- **Chemical:**Sonication accelerates both physical and chemical reactions. Major advances in sonochemistry include chemical synthesis of catalysts and new alloys, catalyzing organo-metallic reactions, micro-encapsulation of protein and hydrolyzing esters. The use of sonication provides greater yields, increases overall efficiency, and saves energy.
- **Industrial:**Industrial uses include forming emulsions, catalyzing reactions, extracting compounds, and reducing particle size.
- **Environmental:**Sonication is used by environmental testing labs to process soil and sediment samples.Sonication takes just 8-10 minutes per sample versus 4-18 hours by soxhlet extraction, it uses half the solvent and improves contaminant yields.

Main Technical Parameters

Model	SCIENTZ-IIDM
Microwave power	1000W (1%-100%)
Microwave frequency	2450MHz
Microwave working time	0-999S
Microwave action mode	pulse continuous heating
Light wave power/wavelength	0-800W/infrared segment
Light wave working time	0-999S
UV light power/wavelength	50W/365nm
Ultrasonic horn diameter	Φ8mm
Ultrasonic power/frequency	10-1000W/20-25 KHz
Ultrasonic action mode	the immersion ultrasonic transducer is in direct contact with the material in the container, and the acoustic vibration (energy) efficiency is close to 100%
Magnetic stirring	50-300 rpm
Program control	200 groups of programs can be preset, each program can preset time (0-999S), microwave, light wave, ultrasonic power, ultraviolet (on/off), stirring and other control working parameters, computer storage, can be set directly , modify and call;
Temperature control	non-contact infrared temperature measurement. Temperature and temperature control range, room temperature ~ 300°C (± 1°C)
Machine control	Full Chinese true color touch screen man-machine interface, industrial-grade microcomputer PLC programmable controller
Password	user, administrator secondary password
Reflection monitor	integrated screen with real-time video window to monitor sample reaction status
LED lighting power/color temperature	24W/6200K
Network interface	RJ45
Sample volume	standard 500, 1000mL (special specifications can be customized according to user requirements)
Protection	It has multiple safety interlock protection devices such as magnetron temperature protection and door switch protection, with high reliability and safety
Material	stainless steel inner shell, durable
Furnace chamber volume	25L
Power supply	220V±10%AC, 50Hz; Power: 3000W



SCIENTZ-Series High-Throughput Tissue Grinder

FOR SCIENTZ INNOVATION



Main Technical Parameters

Model	SCIENTZ-12	SCIENTZ-24	SCIENTZ-48	Model	SCIENTZ-48L	SCIENTZ-192
Rated power	100W	80W	80W	Rated power	375W	375W
Time setting	1-9999S	1-9999S	1-9999S	Time setting	1-9999S	1-35999S
Speed/Frequency setting	300-2100r/min (10-70Hz)	300-2100r/min (10-70Hz)	300-2100r/min (10-70Hz)	Speed/Frequency setting	300-2100r/min (10-70Hz)	270-2000r/min (5-35Hz)
Clamp stroke	40mm(vertical)	34mm(vertical)	34mm(vertical)	Clamp stroke	34mm(vertical)	30mm(vertical)
Sample capacity	Standard: 2ml adapter 12 holes, Optional: 5ml adapter 6 holes; 10/15/25ml grinding tank; freezing adapter	Standard: 2ml adapter 24 holes, 5ml adapter 12 holes Optional:10/15/25/50ml grinding tank; freezing adapter	Standard: 2ml adapter 48 holes, 5ml adapter 12 holes Optional: 5ml adapter 24 holes, 2ml adapter 24 holes, 10/15/25/50ml grinding tank; freezing adapter	Sample capacity	Standard configuration: 2ml adapter with 48 holes; 5ml adapter with 12 holes; Optional: 2ml adapter 24 holes Optional: 10/15/25/50/100ml grinding tank Optional: freezing adapter	Standard: 1-2ml 2*48 holes Optional:0.2-0.5ml 2*96 holes; 5ml 2*24 holes; Optional: 10/15/25/50/100ml grinding tank Optional: freezing adapter
Grinding method	Wet grinding, dry grinding, pre-frozen grinding	Wet grinding, dry grinding, pre-frozen grinding	Wet grinding, dry grinding, pre-frozen grinding	Grinding method	Wet grinding, dry grinding, pre-frozen grinding	Wet grinding, dry grinding, pre-frozen grinding
Grinding ball	φ3mm and φ6mm steel balls (1000 pieces each), Optional zirconia ball	φ3mm and φ6mm steel balls (1000 pieces each), Optional zirconia ball	φ3mm and φ6mm steel balls (1000 pieces each), Optional zirconia ball	Display mode	5.7 inches TFT touch screen	Button digital display
Protection	Open cover protection, emergency breaking function	Open cover protection, emergency breaking function	Open cover protection, emergency breaking function	Grinding ball	φ3mm and φ6mm steel balls (1000 pieces each), Optional zirconia ball	φ3mm and φ6mm steel balls (1000 pieces each), Optional zirconia ball
Dimensions	225*275*390mm	360*320*500mm	360*320*500mm	Protection	Open cover protection, emergency breaking function	With safety door and safety lock; with self-check function
Weight	≤12kg	≤29KG	≤29KG	Dimensions	450*460*795mm	514*380*520mm
				Cooling function	Yes	/
				Temperature	-50~0℃	/

Laboratory Paddle Blenders

CE Patent number:ZL200420019738.4

Germ-free Homogenizer, also known as flap homogenizer, is widely used in the homogenization treatment of animal tissue and biological samples. Also used for the following testing areas: food, pharmaceutical, cosmetics, clinics molecule, toxin and bacteria, particularly suitable for preparation of micro-organism testing samples.

The device is made of stainless steel and can effectively separate the surface of solid sample from a sample with germs inside. The samples are packed in germ-free disposable homogenization bags and thus are in no contact with any parts of the instrument. It features soft homogenization, no contamination, no damage, no warming, no sterilization treatment, and no need to clean utensils to meet the requirements of rapid, accurate and reproducible.

This product is also suitable for homogenizing tumor tissues (such as liver, intestines cancer, stomach cancer and breast cancer). Not only can obtain large numbers of single cells (2×105 within 2 minutes) but also crush tissues cells (such as liver cells) more gently.

Optional accessories of Lab blenders

- Filter homogeneous bag
- Disposable sterile tube
- Drip tray



Main Technical Parameters

Model	SCIENTZ-04	SCIENTZ-09	SCIENTZ-11
Timing	30s, 180s, 600s or ∞	0-8 hours	0-8 hours
Rap Speed	6-9times/Sec	3~12times/Sec (to 0.1minutes step)	3~12times/Sec (to 0.1minutes step)
Capacity	3-400ml	3-400ml	3-400ml
Ratting Box	Stainless Steel	Stainless Steel	Stainless Steel
Parameter storage	No	10 groups	10 groups
Power	150W	150W	300W
Display	5 inches touch screen	5 inches touch screen	5 inches touch screen
Temperature control	No	No	Room temperature--50℃ to set
UV Disinfection	No	No	Yes
External stroke adjustment	0-20mm	0-20mm	0-20mm
Leak protection	Yes	Yes	Yes
Quick Release Slap Board	Yes	Yes	Yes
Dimensions	430 *245*280mm	430 *245*280mm	430 *245*280mm

High Pressure Homogenizer

CE Patent number:ZL200910099490.4

The high-pressure homogenizer uses the special action of the material in the plunger to enter the valve with adjustable pressure and pass through the limiting groove (working area) of a certain width so that the material is lost at high speed under instantaneous voltage (1000-1500M/sec).

Working environment

- Ambient temperature: -10 ℃ to 40 ℃
- Relative humidity: 70% or less
- Power supply: 3 phase 4 lines 380 v / 50 Hz



Characteristics

3.0KW great-power motor is equipped with a specially designed feed valve to ensure stable operation under high pressure with no exhaust. The feed is directly supplied to the built-in cooling circulatory system so that the homogeneous points can be cooled immediately. All pipes are made of 316 L stainless steel.

The high-pressure homogenizer is a simplified tabletop type installment, designed especially used in the small scale product testing in the bio-engineering laboratory.

Main Technical Parameters

Model	SCIENTZ – 150 (150PS)	SCIENTZ – 150A (150APS)
Power supply	220V/50HZ	3 phase 4 lines 380V/50HZ
Motor power	1.5KW 8 class	3.0 KW 8 class
Maximum flow	6-12L/hour	12-25L /hour
Maximum working pressure	1500 bar	1500 bar
Maximum viscosity of products	2000 cp	2000 cp
Material largest feed particle size	smaller than 500 um	smaller than 500 um
Maximum product temperature	90 ℃	90 ℃
Maximum steam temperature	121 ℃	121 ℃
Overall size	800mm*460mm*450mm	840mm*620mm*540mm
Flow adjustable	Frequency conversion flow control system, the flow can be adjusted according to demand	
Spare and tools	One set of special tools One standard spares package Operation manual and service book	

NOTE: For emulsification a ball valve is suggested, while for crushing, an impingement valve is desirable. The low-temperature cooling circulation system is suggested for choice.

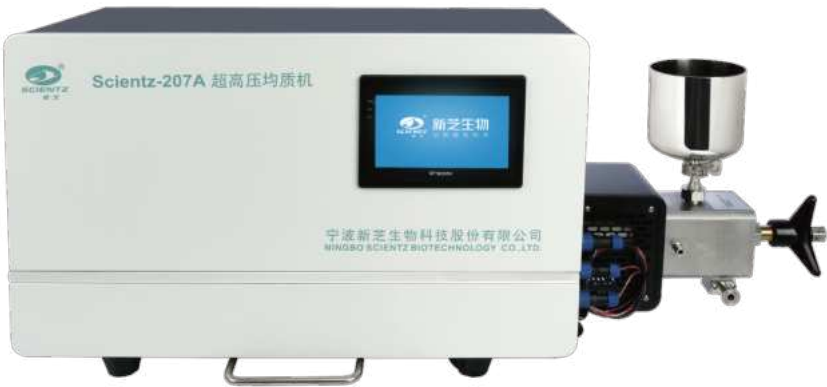
SCIENTZ-207A High Pressure Homogenizer

Product description

SCIENTZ-207A ultra-high pressure homogenizer uses the ultra-high pressure energy generated by the servo motor power to make the material instantly released through the slit, and make the material achieve the effect of crushing, homogenization, emulsification and dispersion under the action of high shear effect, cavity effect and collision effect, and keep the constant pressure working condition. The particle size of the material can be uniformly refined to less than 100nm, and the crushing rate is more than 95%. It can be used for fatty milk, liposome, cosmetics, lipid nanoparticles, nanosuspension, fermentation tank sample processing and bioengineering laboratories, pharmaceutical plants and other large-scale processing of E. coli, yeast and other samples of crushing. It is the standard equipment for R&D and production of bioengineering and biopharmaceutical industries. It can also be used in dairy, food and beverage, juice, pharmaceutical, biological and other industries for emulsification, homogenization and homogenization processing. This machine has a built-in cooling circulation system to directly cool the homogenizing head. All material contact pipelines are made of 316L stainless steel, and homogenizing valves for different applications are available. The product has the advantages of high pressure, small volume, lightweight, easy operation, intuitive display, high processing efficiency, large sample volume, etc. It has applied for an invention patent and a utility model patent.

Features

- Design homogenization pressure 0-207Mpa arbitrarily adjustable to meet the needs of nano-pharmaceutical customers;
- Minimum sample processing volume of 15ml;
- The key components are imported from Germany, with long service life;
- The power of the main machine adopts the original imported servo motor from Japan to provide power, with stable working performance.
- The metal in contact with the material is all made of 316L stainless steel, and the pipeline is polished with mirror Effect, prevent sample residue and meet the requirements of food and drug.
- Automatic sample feeding, continuous work, no exhaust;
- Using physical homogenization method, no material residue;
- With special tools for seal removal, easy to replace;
- Simple operation, more convenient and cost-effective maintenance service.



Main Technical Parameters

The maximum working pressure	1800bar / 180Mpa / 26100psi pressure adjustable
The maximum design pressure	2070bar / 207Mpa / 30015psi
Maximum processing capacity	15 L / H (250ml / min)
The minimum volume processing capacity	15ml
Material residue	0ml (no residue)
Motor power	3.0Kw / 220V / 50Hz
Overall dimensions	L1100mm * W310 mm* H460mm
Weight	95KG
Maximum feed particles & lt	500 microns
Flow control	Freely adjust the flow
Sensor	Imported high precision sensor
Cooler configuration	do not consume materials, control homogeneous temperature
Exhaust method	Online exhaust
Electrical control	Industrial grade PLC controller
Screen and display	7 inches industrial-grade touch screen + integrated digital display of pressure and temperature + real-time display of pressure

GJ-1000 High-Pressure Gas Gene Gun

CE Patent Number :ZL011 05512.X 200630105830.7

Gene gun technology (particle bombardment) is a new gene introduction technique that accelerates micron-sized gold or tungsten particles encapsulated with nucleic acids to the desired speed into cells, tissues or organs. It can be used to obtain instantaneous, stable and efficient expression and transformation. It is fast, easy, safe and efficient.

Features

- Simple, fast, flexible and suitable for a wide range of cell types
- Facilitates transient and stable expression
- Requires only a small amount of DNA and cells, no vector DNA
- Can be commonly introduced without restrictions for large fragments of DNA plasmids
- In vivo and in vitro transformation and high specificity
- Unique circular transformation of the bombardment chamber, which is removable for easy cleaning and sterilization
- Low cost of material use, costing \$18 per gun in addition to high-pressure gas
- High reproducibility
- Uniform particle distribution
- Maximum control of the experimental process

System Standard Configuration

Host , vacuum pump, 1000 gun dissipation (3.5/4.5/7Mpa ruptured membrane, carrier film, stainless steel mat, 2 bottles of gold powder , 1 bottle of tungsten powder)

Application Areas

- Animals: tissues (skin, organs), cells, organs, etc.
- Plants: living plants, leaves, or other plant tissues
- Yeast, bacteria, and other microorganisms
- Gene expression research
- Agricultural biotechnology and crop improvement
- Plants vaccines



Gold Power



Tungsten Power



Consumables

Main Technical Parameters

Target region	(big) 40cm2
Pressure range	3-12MPa
Target Type	Animals: cell and organ culture Plants: The smaller of the whole plants, cell culture, explant, yeast, bacteria and other micro-organelles, chloroplast, mitochondria
Voltage	220V/110V
Gas	Helium or nitrogen (Helium is better)
Metal Particle	Φ0.8-1.5μm; Φ1.5-3.0μm

SJ-500 Portable Gene Gun

CE Patent Number :ZL01 105513.8 200630105826.0

The Handheld Gene Gun is a convenient handheld device. It allows for rapid and direct in situ gene transfer to cells. The system uses adjustable helium or nitrogen pressure to drive gold particles, pre-packaged with DNA, RNA or other biological material, located on the inside of a small plastic tube, directly into the cell, making transgenic work more flexible to perform.



Gold Power



Tungsten Power



Cutting Machine



Nylon Tube



Magazine



Sample Devices

SCIENTZ-2C Perforator Electric

CE Patent number:200630105829.4



SCIENTZ-2C gene introducer consists of the main unit, gene introduction cup and special connection cable. It is mainly used for transferring DNA into receptor cells, plant and animal cells, and yeast cells by electrical transformation. Compared with other methods, the gene introducer method has the advantages of high reproducibility, high efficiency, easy operation, and quantitative control. Meanwhile, electrotransfer has no genotoxicity. It has become an indispensable basic technique of molecular biology.

Features

- Integrated design of the whole machine, intuitive display and simple operation
- Microprocessor-controlled pulse discharge
- Short conversion time, high conversion rate and excellent reproducibility
- Experimental parameters can be stored for easy retrieval by users

Application Areas

- Electricity conversion of bacteria, yeast and other microorganisms
- Mammalian cell transfection
- Plant tissue and the protoplast of transfection
- Cell hybridization, fusion, gene delivery
- Import the marker gene, tags, instructions
- Import the function of the specific gene were studied
- Import drugs and other molecules such as protein

Main Technical Parameters

Model	SCIENTZ-2C
Pulse form	Exponential decay
High Output voltage	401-2500 VAC
Low output voltage	50-400 VAC
High voltage capacitor	1、5、6、25、26、30、31UF
Low voltage capacity	50UF, 100UF, 125UF, 150UF...1575UF, one grades of 25UF
Resistance	50、100、150、1600Ω;-∞total 32 grades
Operating system	Microcomputer control
Output waveform	With RC time constant of the exponential decay of wave
Dimension	46×30×19(cm)
Weight	10.5Kg

Features

- Highly targeted: no extraneous genes or proteins are introduced into the sample
- Convenient and fast: portable design allows transformation to be performed in the field
- Highly functional: enables transformation of cells with specific growth needs compared to other methods
- Low sample requirements: only small amounts of DNA and cells are required, no vector DNA required, and no restrictions on large fragments of DNA
- High transformation rate: small shooting area and uniform particle distribution allow transformation of different sizes of receptors, ensuring transformation efficiency
- Facilitates transient and stable expression

Application Areas

- Animals: any exposure to gene gun outside the tissue (skin and organs), cell, organ, etc
- Plants: the field and greenhouse plants explant
- Yeast, bacteria and other microorganisms
- Gene expression studies
- Agricultural biotechnology and crop improvement
- Plant vaccine
- Organelles, chloroplasts and mitochondria

Main Technical Parameters

Experimental conditions	In situ, in vitro, in vivo, from the body
Target region	(small) 2cm2
Pressure range	0.5-5MPa (12 times per magazine magazine rotation)
Target type	Animals: any organization (skin,organs) exposure to gene gun; cells, explant and organ culture Plants: Field and greenhouse use, plant cell culture and explant, yeast, bacteria, other microbes
Voltage	9V (capable of firing 1000 times)
Gas	Helium or nitrogen
Metal partikel	Φ0.8-1.5μm/Φ1.5-3.0μm
Bombardment way	Magazine sample points directly or nylon

Hybridization Oven

The hybridization oven is ideal for modern laboratories using mixing technology. It can replace plastic bags and water bath shakers to avoid the risk of contamination from broken cross bags. This machine adopts microchip control and hot air convection technology to provide precise temperature control and a constant temperature environment. The unique design of the air circulation device inside the oven provides fast heating speed. This makes it an ideal mixing system for hybridization experiments in the north and south. It has a shaking base at the bottom of it, placed while it can also be applied to hybridization bags and other rigorous incubation experiments.

Features

- Microcomputer controller provides precise temperature control
- Rapid temperature increase
- Tube rotation
- Mixing tubes are easy to load and unload
- Corrosion-proof, mirror stainless steel material inside
- Double glass door design to effectively prevent radiation
- Can be shaken at the bottom of the base, multi-purpose machine
- Less chance of contamination than shaking water
- High sealing



Main Technical Parameters

Model	LF-IA	LF-IIIA
Temperature range	Ambient+8°C—100°C	Ambient+8°C—100°C
Temperature Accuracy	±0.5°C	±0.5°C
Display resolution	0.1°C	0.1°C
Temperature equilibrium time	<20min	<20min
Rotation speed	0-30rpm adjustable	0-30rpm adjustable
Vibration intensity	/	1-10 adjustable gears
Continuous working time	1-1440min (24 hour)	1-1440min (24 hour)
Continuous work function	Yes (set 0 as long open)	Yes (set 0 as long open)
Hybrid tube	Standard configuration: φ35×240mm 2pcs Optional: Domestic φ35×150mm and φ35×300mm	Standard configuration: φ35×240mm 2pcs Optional: Domestic φ35×150mm and φ35×300mm
Shake function	Yes	Yes
Data storage	50 groups	50 groups
Display	4.3 inches true color touch screen	4.3 inches true color touch screen
Power	<800W	<800W

SCIENTZ03-II UV Fixer

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INNOVATION

SCIENTZ03 - II UV Fixer is a kind of multi-purpose 254 nm UV radiation system. It is mainly used for cross-linking nucleic acid on the membrane.Can also be used for the DNA agarose gel cutting, RecA mutation screening, pyrimidine dimer of some restriction enzyme digestion, UV sterilization eliminate PCR pollution and so on.In UV sterilization, polymer processing, etc, also has application value.



Features

- High efficiency: nucleic acids can be immobilized on hybridization membranes within 30-60 seconds
- High sensitivity: 5-10 times higher hybridization signal than traditional baking method
- Precise dose: microprocessor-controlled precise UV dose, LED display
- Easy to operate: drawer design, automatic storage of information
- Large irradiation area: maximum irradiation area 880cm²
- Selectable modes: UV energy mode, time mode
- High safety: UV safety window and safety door lock design, can protect the use of safety
- Blue light cutting glue: 470nm wireless power supply stable blue light source, the use of high hardness tempered glass plate scratch-resistant cutting glue platform

Main Technical Parameters

UV wavelength	254 nm (optional 365nm、312nm provided)
Exposure time and measuring range	0-999.9 minutes
UV radiation energy can reach max	Maximum 5mW/cm ²
UV source	8W light tube×6pcs
	50 exposure energies and 50 exposure times can be set and saved
	UV exposure energy manual setting, UV exposure time manual setting
Exposure energy measurement range	0-99.99 J/cm ²
Exposure time measurement range	0-999.9min
Display mode	4.3 inches true color touch screenn
External dimension	560 mm×385 mm×260 mm
Exposure room dimension	350 mm×290 mm×150 mm

CRY-3B Syncretize Electric

FOR SCIENTZ
INNOVATION

CRY—3B Syncretize Electric is suitable for cell hybridization, cell fusion and direct observations can be made under inverted microscopes. It has a widespread application in the research on microorganism, animal medicine and bio-engineering. It provides safety, ease of use, and efficiency as compared with the conventional method. All types of even electrodes and needle electrodes are available.

Features

- Versatility: both cellular electrofusion and electroporation
- Flexibility: wide voltage and pulse time range
- Clear operation: new LCD touch control operation, simple and convenient parameter setting
- Fast and efficient: simple and fast cell arrangement, fusion and post-fusion processing

Applications

- Plant Protoplast Fusion
- Embryo manipulation
- Nuclear transfer
- Hybridoma Generation
- In Vivo Gene / Drug Introduction



Main Technical Parameters

Bunchy pulse voltage	Peak-peak value 1-58V, adjustable continuously
Bunchy pulse frequency	30KHz-3000KHz adjustable continuously
Gate time	10-1000 us, 1 us increasing decline, adjustable continuously
DC Field Parameters	DC Field Parameters
Square wave fusion pulse voltage	5-600V adjustable (electrode distance) 1.0mm electric voltage field reach 6000V/cm.
Square wave fusion pulse range	5-5000 - us, 1 us increasing decline, adjustable continuously
Fusion (square wave) pulse number	1-9 pcs
With fusion flat electrode	Polar distance 1mm, 2mm
Display mode	7inches TFT touch screen

Model	1—0.5	1—1.0	1—2.0	1—3.2
Electrode distance	0.5mm	1.0mm	2mm	3.2mm
Volume	20μL	40μL	80μL	700μL
Voltage range	0-600V DC			
Maintenance	Gentle cleanser, ethanol or ethylene oxide sterilization			

MGC-200 Microbial Growth Curve Analyser



The Microbial Growth Curve Analyzer is a fully automated instrument that can understand the growth of microorganisms by measuring the turbidity of the sample. This product can be used in the research of microbial strains, optimization of culture conditions, high-throughput screening and evaluation of drugs and other fields. All microorganisms (bacteria, fungi, yeasts, cells, and algae) that reproduce in culture produce turbidity. Any turbidity and color changes in the traditional test tube test can be done with the "micro test tube" in the honey-comb panel. The automatic growth curve analyzer can make the work more efficient, and can save a lot of culture medium and consumables (petri dishes and test tubes, etc.). The long-term culture of microorganisms is realized through high-precision control and high-speed shaking of the microwell plate. The integrated pulse xenon lamp and spectrometer realize full-band detection and analysis. The advanced denoising algorithm can provide more accurate microbial growth curves.

Working modes

Two working modes are available: culture mode and absorbance test mode:

1. Cultivation mode: Provide the environment required for microbial growth, and at the same time detect and record the absorbance of the sample at a specified wavelength.
2. Absorbance test mode: Full-spectrum absorbance test can be performed on the specified sample, and absorbance values at different wavelengths are given.

Features

- Using advanced full-spectrum detection technology, no need to replace the filter, it can detect 300~850 range at the same time.
- Absorbance at any wavelength within the range, providing a solution for a variety of biomass quantitative detection.
- The highest shaking speed can reach 1250rpm, so that the liquid in a small volume can be fully mixed.
- It can realize shaking culture of microorganisms in 96-well plate.
- With two culture plate positions, a variety of adapters are compatible with culture plates of different specifications, and the maximum 192 samples are processed at a time.
- As a light source, xenon lamp has the advantages of high energy and no need for preheating.
- Rapid detection lays the foundation, and the light source has good stability and long life, and does not need to be replaced frequently.
- The optimized algorithm removes background noise and obtains a more accurate growth curve.
- With RGBW four-color light setting function, it can be used to study the influence of light factors such as light cycle, light wavelength and light intensity on the growth of algae.
- It has a hot cover anti-condensation design, with cooling and heating modules, and the temperature control range is 15-60°C at room temperature (25°C). The temperature can be changed in the middle of microbial culture to facilitate the accumulation of specific metabolites.
- With standard preset program, simple operation and convenient data processing. At the same time, it supports customer-defined templates for personalized operation settings and data analysis.

Main Technical Parameters

Model	MGC-200	Absorbance range	Highest value 8.0 OD
Dimensions	510*655*350mm	Detection interval	5-360 minutes can be set
Detection wavelength	300-850nm	Longest incubation time	1600 hours
Microbial culture container	Cell culture plate/ELISA plate	Authority management	Separate user and administrator privileges
Number of channels	2 board positions, up to 192 channels	Operation failure alarm	Yes
Medium volume limit	2.5ml	Sterilization module	UV sterilization
Light source	Xenon lamp	Full spectrum scan	Yes
Temperature range	15-60°C (at room temperature 25°C)	Thermal Lid Anti-Condensation	Yes
Shaking speed	200-1250 rpm	Humidity monitoring	Yes
Detection method	Single hole multi-point detection	Mid-way temperature change function	Yes

MPB4-1000 Parallel Bioreactor

Product description

Parallel bioreactors can help experimenters efficiently evaluate the influence of different culture strains and process parameters, quickly determine the optimal process parameters, and guide the subsequent industrial scale-up process. It can be applied to fermentation process optimization, high-throughput strain screening, medium screening and evaluation etc.

The original AFDP chip module of the product can realize the high-speed parallel transmission and control of data, and ensure the high consistency of the internal parameters of each reactor. At the same time, the system is scalable and can be expanded from a single bioreactor system to multiple bioreactor systems. The system also includes a series of well-designed benchtop modules and intuitive software control modules for ultimate convenience.

Features

- The whole machine is small and compact, with an integrated design, which saves laboratory space; it is consistent with the production tank in terms of structure, flow field characteristics and control methods, which is convenient for later enlargement.
- Integrated design, plug and play; easy to learn, easy to use, easy to operate, clear logo, fool-proof design.
- Independent control, 41 hardware measurement and control parameters and 192 software parameters for each tank. The structure is consistent with the production tank, and it is easy to enlarge.
- Arbitrary expansion of multiple devices to form a high-throughput fermentation platform; cross-device fermentation tank grouping; cross-device parallelism.
- PH, DO, temperature, feed pump flow rate can be quickly calibrated with one key, and the data is displayed intuitively.
- Programs can be preset to automatically adjust parameters at regular intervals.
- The hardware guarantees the synchronization of signal collection and instruction sending, the size is reduced more than 50 times, plug and play, and the expansion of third-party equipment is convenient.
- It can realize convenient control among multiple parallel bioreactors, select the tank number with one key, and set the parameters with one key.
- pH and DO have automatic compensation adjustment.
- The acid and alkali pumps can be used as feeding pumps. The pH not only has two-way automatic control mode, but also one-way alkali and one-way acid addition modes.



Main Technical Parameters

Model	MPB4-1000
Dimensions	800*730*780mm
Net weight	60kg
Number of fermenters	4 units
Tank size	Total volume 500ml/1000mL, specifications: Φ85*133mm/Φ100*157mm, working volume 70%
Can lid interface	With pH, DO, temperature, stirring, ventilation, sampling, exhaust gas cooling device, defoaming, four-channel feeding port, puncture and Luer inoculation ports, etc.; the tank is made of high borosilicate glass
Stirring control	High-precision DC motor, 100-1200 rpm, accuracy: ±1rpm
Stirring paddle structure	2 layers of 6 blades with straight blades, adjustable in position
Shaft seal	Shaft seal seal, tank pressure test 0.05Mpa
Ventilation control	Rotameter detection, ventilation range 0.1-1.5 L/min, 0.5-4L/min, ventilation control accuracy ±5%
Tank pressure control range	0-0.05 MPa
Peristaltic pump system	A single fermenter corresponds to 4 ways of feeding, the speed can be set independently, and can be continuously adjusted from 0-290rpm; the function of each pump can be set independently: it can be used as an acid pump, alkali pump, feeding pump, defoaming pump; flow rate Range: 0-30ml/min; minimum precision: 0.0025ml
Temperature control	Semiconductor heating and cooling; temperature control range: 20~50°C, temperature accuracy display: ±0.2°C
PH control	One-key calibration, one-way or two-way control can be selected; display range: 0-14; control range: 2-12; control accuracy: ±0.02
DO control	One-key calibration, control range: 0-150%, can be associated with stirring speed and feeding
Defoaming control	With defoaming peristaltic pump automatic control
Software system	Process control, parameter analysis
Process time-sharing control	Changeable and traceable during the execution of the time-sharing scheme
Hardware control system	Signal acquisition, core control logic, peripheral drive, protocol conversion and other functions

Ultrasonic Cleaner

Ultrasonic cleaning machine is to use the cavitation effect of ultrasonic waves in the cleaning liquid to accelerate the dissolution and stripping of dirt, grease and other dirt in the inner hole and blind hole of the vessel being cleaned. SCIENTZ biological ultrasonic cleaning machine adopts imported key equipment to ensure that the instrument has the advantages of fast cleaning speed, good effect, no damage to the surface and reduced labor intensity, etc. Users can purchase products with heating, power adjustment, dual frequency, high frequency (59K, low noise, suitable for fine washing), sweeping frequency and other different functions of the product.

Among them, SBL constant temperature series ultrasonic cleaner is specially developed for chemical reactions, chemical synthesis, biological drug synthesis, biological material degradation, recombination, Chinese medicine extraction, precision instrument parts temperature control cleaning and special instruments that need to do constant temperature and ultrasound.

DTD Series Ultrasonic Cleaning Machine

Features

- Large color LED display with large viewing angle
- Working time countdown display
- The instrument's inner and outer shell and sound reduction cover are made of high-quality stainless steel
- Adopt phase-shifting power mode, power 40%-100% adjustable
- Room temperature -80 °C temperature setting range
- Real-time display of the actual temperature in the cleaning tank
- With degassing function 1-999min total working time setting
- Working parameters power-off memory function
- Digital display to set the ultrasonic cleaning time
- Equipped with special stainless steel mesh basket and lowering cover
- Ultrasonic output adopts self-excitation mode, with low noise and stable frequency
- The operating procedure of the instrument adopts the software of single-chip computer



Model	Inner tank (mm)L/W/H	Volume (L)	Frequency (KHz)	Power (W)	Heating power (W)	Power adjust	Time	Drainage
SB-3200DTD	300*155*150	6	40	180	300	40-100%	1-999	/
SB-5200DTD	300*240*150	10	40	240	500	40-100%	1-999	√
SB-5200DTD	300*240*150	10	40	360	500	40-100%	1-999	√
SB-4200DTD	300*240*200	14.4	40	480	500	40-100%	1-999	√
SB25-12DTD	500*300*150	22.5	40	600	800	40-100%	1-999	√
SB25-12DTD	500*300*150	22.5	40	720	800	40-100%	1-999	√
SB-800DTD	500*300*200	30	40	840	800	40-100%	1-999	√

Notice: For ultrasonic cleaning machines with heating function, the temperature after heating is 2-8°C higher than the actual displayed temperature. If constant temperature ultrasound is required, SBL ultrasonic constant temperature cleaning machine can be purchased.

DT Series Ultrasonic Cleaner



Model	Inner tank (mm)L/W/H	Volume (L)	Frequency (KHz)	Ultrasonic power (W)	Heating power (W)	Temperature adjustable (°C)	Time adjustable (min)	Drainage	Rack
SB-100DT	300*150*100	4.5	40	100	200	RT-80	1-99	/	√
SB-120DT	240*140*100	3	40	120	200	RT-80	1-99	/	√
SB-120DT	240*140*150	5	40	120	200	RT-80	1-99	/	√
SB-3200DT	300*155*150	6	40	180	400	RT-80	1-99	/	√
SB-5200DT	300*240*150	10	40	240	800	RT-80	1-99	√	√
SB-5200DT	300*240*150	10	40	360	800	RT-80	1-99	√	√
SB-4200DT	300*240*200	14.4	40	480	800	RT-80	1-99	√	√
SB25-12DT	500*300*150	22.5	40	600	1000	RT-80	1-99	√	√
SB25-12DT	500*300*150	22.5	40	720	1000	RT-80	1-99	√	√
SB-800DT	500*300*200	30	40	840	1000	RT-80	1-99	√	√
SB-1000DT	600*300*300	54	28	1000	3000	RT-80	1-99	√	√
SB-1200DT	600*400*300	72	28	1200	4000	RT-80	1-99	√	√
SB-1500DT	600*500*300	90	28	1500	4000	RT-80	1-99	√	/
SB-1800DT	600*600*300	108	28	1800	4000	RT-80	1-99	√	/
SB-2000DT	650*600*300	117	28	2000	6000	RT-80	1-99	√	/
SB-3600DT	750*600*300	135	28	3600	8000	RT-80	1-99	√	/
SB-6000DT	1200*650*350	273	28	6000	10000	RT-80	1-99	√	/

Notice: For ultrasonic cleaning machines with heating function, the temperature after heating is 2-8°C higher than the actual displayed temperature. If constant temperature ultrasound is required, SBL ultrasonic constant temperature cleaning machine can be purchased.

Thermostatic Ultrasonic Cleaner

SBL ultrasonic thermostatic cleaner is specially designed for the need to do thermostatic, ultrasonic chemical reactions, chemical synthesis, biological drug synthesis, biological material degradation, recombination, Chinese medicine extraction, precision instrument parts control temperature cleaning and the development of special instruments. The instrument has an imported closed type fluorine free compressor, 304 stainless steel heater, 304 stainless steel tank, microcomputer control, large screen LCD display, drain valve, net basket, stainless steel cover and other components. The instrument is easy to use, ultrasonic power, ultrasonic time, and reaction temperature can be set at will. Working parameters, power failure memory, temperature accuracy $\pm 2^{\circ}\text{C}$. It is unreachable by ordinary ultrasonic waves and can meet the different experimental requirements of experimenters.



- Temperature setting range: Ambient Temperature-80°C
- Timing range: 0-999 minutes adjustable
- Equipped with a special stainless steel basket, reduction sound cover
- The shell and cover are made of stainless steel
- The equipment controlled by single-chip controller
- With Drainage function

Main Technical Parameters

Model	Inner tank (mm)L/W/H	Volume (L)	Frequency (KHZ)	Ultrasonic power (W)	Heating power (W)	Rack	Drainage
SB-300DTY	300*240*150	10		300	800	√	√
SB-400DTY	300*240*200	14.4	33	400	800	√	√
SB-500DTY	500*300*150	22.5	40	500	1000	√	√
SB-600DTY	500*300*200	30	59	720	1000	√	√
SB-1000DTY	600*300*300	54	80	1000	4000	√	√
SB-1200DTY	600*400*300	72		1200	5000	√	√

Notice: For ultrasonic cleaning machines with heating function, the temperature after heating is 2-8°C higher than the actual displayed temperature. If constant temperature ultrasound is required, SBL ultrasonic constant temperature cleaning machine can be purchased.

Main Technical Parameters

Model	Inner bath (L.W.H (mm) L/W/H)	Freq. (KHz)	Volume (L)	Set Temp. (°C)	Ultra power (W)	Heating power (W)	Cooling capacity(W)	Timer min	Drainage	Cover /basket
SBL-10DT	300*240*150	40	10	5-90	360	1200	650	1-999	Manual	Y
SBL-15DT	300*240*200	40	14	5-90	480	1200	750	1-999	Manual	Y
SBL-22DT	500*300*150	40	22	5-90	720	1200	1500	1-999	Manual	Y
SBL-30DT	500*300*200	40	30	5-90	840	1200	1800	1-999	Manual/Auto	Y
SBL-54DT	600*300*300	40	54	5-90	1000	3600	2100	1-999	Manual/Auto	Y
SBL-72DT	600*400*300	40	72	5-90	1200	3600	2100	1-999	Manual/Auto	Y
SBL-90DT	600*500*300	40	90	5-90	1500	6000	4000	1-999	Manual/Auto	Y
SBL-108DT	600*600*300	40	108	5-90	1800	7200	4000	1-999	Manual/Auto	Y

DTY Multi-frequency Ultrasonic Cleaning Machine

CE Patent Number :ZL200920114749.3

Features

- Background light LCD screen
- Microcomputer memory setting parameters
- The ultrasonic working time set up independently
- 0-99minutes adjustable
- Multi-frequency conversion: 33KHz, 40KHz, 59KHz, 80KHz
- Display working countdown time
- Display actual temperature of the cleaning tank



DTS Series of Dual-Frequency Ultrasonic Cleaning Machine

CE Patent Number :ZL200630105831.1

- Interchangeable use of two kinds of frequencies: 37KHz, 57KHz
- Digital display and setting ultrasonic cleaning time
- Display working countdown time
- Display actual temperature of the cleaning tank
- Temperature setting range: Room temperature--80°C
- Timing range: 1-999 minutes adjustable
- Equipped with a special stainless steel basket, reduce sound cover
- The shell and cover are made by stainless steel
- The equipment controlled by Single-chip controller
- The latest working parameters can be stored in memory after power-off



Main Technical Parameters

Model	Inner tank (mm)L/W/H	Volume (L)	Frequency (KHZ)	Ultrasonic power (W)	Heating power (W)	Drainage
SB-5200DTS	300*240*150	10	37/57	360	800	√
SB-4200DTS	300*240*200	14.4	37/57	480	800	√
SB25-12DTS	500*300*150	22.5	37/57	720	1000	√
SB-800DTS	500*300*200	30	37/57	840	1000	√
SB-1000DTS	600*300*300	54	37/57	1000	3000	√
SB-1200DTS	600*400*300	72	37/57	1200	4000	√

Fully Automatic Laboratory Glassware Washer Disinfecter



The laboratory glassware washer is a high-tech product that combines automatic cleaning, disinfection and drying functions in one. It can perfectly replace the manual deep cleaning and disinfection of various laboratory glassware, and a variety of programs can be programmed. The one-touch cleaning method greatly reduces the ineffective workload of researchers. It also increases the stability and consistency of batch-to-batch cleaning. It is especially popular in industries such as environmental testing, biopharmaceuticals, and food and drug testing.

Features

- The body is made of 304 stainless steel + anti-corrosion and anti-fingerprint sandblasting process.
- The inner cabin is made of 316L mirror stainless steel (icon - 316 stainless steel), and the mold is integrally formed with no gaps and rounded corners. Effectively avoid secondary pollution caused by water leakage, impurity precipitation and bacterial growth.
- The cleaning inner cabin is a self-cleaning cabin, which is automatically cleaned when the equipment is working, and it is easy to do cleaning verification.
- The screen adopts a 7.1-inch LCD liquid crystal capacitive touch display, which can display various cleaning procedures, operation stages, temperature and instrument failure prompts.
- Drawer-type cleaning agent dosing box design, safe and convenient, easy to replace.

Main Technical Parameters

Model	LGW-100	LGW-200	LGW-300	Power of drying fan (W)	850	850	850
Dimensions(mm)	907*785*740	907*756*1062	701*845*1655	Drying heating power (W)	2200	2200	3300
Working size (mm)	530*560*633	540*560*800	630*640*930	Cleaning temperature (°C)	RT~93	RT~93	RT~93
Capacity (L)	126	206	308	Cleaning layers	1	2	2
Washing capacity (L)	100±5	200±5	300±5	Rated total power (W)	4000	5000	7500
Circulation pump power(W)	500	750	1500	Peristaltic pump dosage (ml/min)	360	360	360
Circulating pump flow (L/min)	295	430	1000	Maximum noise (dB)	45	45	45
Water heating power(W)	2000	4000	6000	Operating temperature (°C)	5~40	5~40	5~40

SC Series Constant Temperature Water (oil) Bath with Digital Control

FOR SCIENTZ
INNOVATION

The SC series constant temperature water (oil) bath adopts a microcomputer intelligent control system. Equipped with a circulation pump, the constant temperature liquid in the tank can be led to the outside to establish the second constant-temperature field. Widely used in petroleum, chemical, electronic instrumentation, physics, chemistry, biological engineering, medicine and health, life science, light industry and food, physical performance testing and chemical analysis. It provides a liquid environment with controlled hot and cold, uniform and constant temperatures for users to work.



Main Technical Parameters

Model	Temperature range(°C)	Display Resolution(mm3)	Inner Tank size (mm3)	Capacity (L)	Top Opening Dimen(mm)	Drain	Pump pressure bar	Pump flow (L/Min)	Heating power(W)	Power (W)
SC-5A	RT+8~95	0.1	260×140×140	5	130×130	√	0.45	0-15	600	750
SC-15	RT+8~100	0.1	300×240×200	15	235×160	√	0.45	0-15	1550	1800
SC-15A	RT+8~200	0.1	300×240×200	15	235×160	/	/	cycle	1550	1800
SC-15B	RT+8~200	0.1	300×240×200	15	235×160	/	0.45	0-15	1550	1800
SC-20	RT+8~100	0.1	500×300×150	20	310×280	√	0.45	0-15	1950	2200
SC-20A	RT+8~200	0.1	500×300×150	20	310×280	/	/	cycle	1950	2200
SC-20B	RT+8~200	0.1	500×300×150	20	310×280	/	0.45	0-15	1950	2200
SC-25	RT+8~100	0.1	280×250×300	25	235×160	√	0.45	0-15	2100	2200
SC-25A	RT+8~200	0.1	280×250×300	25	235×160	/	/	cycle	2500	2800
SC-25B	RT+8~200	0.1	280×250×300	25	235×160	/	0.45	0-15	2500	2800
SC-30	RT+8~100	0.1	400×330×230	30	310×280	√	0.45	0-15	2500	2800
SC-30A	RT+8~200	0.1	400×330×230	30	310×280	/	/	cycle	2500	2800
SC-30B	RT+8~90	0.1	Φ300×300	30	Φ150	√	0.15	6	2500	2800
SC-30C	RT+8~200	0.1	400×330×230	30	310×280	/	0.45	0-15	2500	2800

DC and DCW Series of Refrigerated Throstatic Bath and Heating Circulators

CE Patent number:ZL200930143093.3

This series of frozen thermostatic water bath adopts the international advanced CFC-free refrigeration system. The main components used are imported, with stable and reliable performance. It is widely used in petroleum, chemical, electronic instruments, physics, chemistry, biological engineering, medicine and health, life science, light industry, food, material testing, chemical analysis and other scientific research institutes, universities, enterprise quality management departments and industrial departments. It is used to put specimens or newly manufactured products into constant temperature tests. It can also be used as a heat or cold source for direct heating or cooling as well as auxiliary heating or cooling.



Features

- Using environmentally friendly CFC-free refrigeration technology to meet the requirements of environmental protection
- Using high-quality full-enclosed air-cooled compressor cooling system, low noise
- Full-enclosed air-cooled compressor cooling system with thermal overload protection automatically
- With a power-off protection function, automatically delayed for three minutes
- Using a large-screen LCD display, easy to understand working condition
- Easy to operate, can set the temperature quickly with soft button
- Intelligent PID automatically adjust control function
- Upper and lower temperature alarm can be set
- With over heat alarm system to ensure the safety apparatus
- Inner high-quality stainless steel material
- With external circulating pump, can be established the second constant temperature field outside the bath
- Cold liquid can be cited outside the tank, cooling the experimental container outside the bath
- Using analogue theory, automatic identify the difference between set temperature and the ambient temperature, to confirm whether a single heating or cooling heating work simultaneously to achieve the energy saving

Main Technical Parameters

Model	Temp Range (°C)	Temp Stability (°C)	Display Resolution (mm3)	TankSize (mm3)	Capacity (L)	Top Opening Dimen (mm2)	Drainage	Pump pressure bar	Pump flow (L/Min)	Cooling capacity (25°C/w)	Heating Power (W)	Dimensions (mm)
SDC-6	-5~100	±0.1	0.1	260×200×140	6	180×140	√	0.45	0-15	420	1000	390×340×652
DC-1006	-10~100	±0.1	0.1	260×200×140	6	180×140	√	0.45	0-15	320	1000	390×340×652
DC-2006	-20~100	±0.1	0.1	260×200×140	6	180×140	√	0.45	0-15	420	1000	390×340×652
DC-3006	-30~100	±0.1	0.1	260×200×140	6	180×140	√	0.45	0-15	420	1000	455×388×845
DC-4006	-40~100	±0.1	0.1	260×200×140	6	180×140	√	0.45	0-15	480	1000	455×388×845
DC-0510	-5~100	±0.1	0.1	260×200×200	10	180×140	√	0.45	0-15	520	1000	395×336×715
DC-1010	-10~100	±0.1	0.1	260×200×200	10	180×140	√	0.45	0-15	420	1000	395×336×715
DC-2010	-20~100	±0.1	0.1	260×200×200	10	180×140	√	0.45	0-15	620	1000	395×336×715
DC-3010	-30~100	±0.1	0.1	260×200×200	10	180×140	√	0.45	0-15	540	1000	455×388×845
DC - 4010	-40~100	±0.1	0.1	260×200×200	10	180×140	√	0.45	0-15	460	1000	455×430×865
DC - 0515	-5~100	±0.1	0.1	300×250×200	15	235×160	√	0.45	0-15	760	1550	455×388×845
DC-1015	-10~100	±0.1	0.1	300×250×200	15	235×160	√	0.45	0-15	760	1550	455×388×845
DC-2015	-20~100	±0.1	0.1	300×250×200	15	235×160	√	0.45	0-15	760	1550	455×388×845
DC-3015	-30~100	±0.1	0.1	300×250×200	15	235×160	√	0.45	0-15	730	1550	455×430×865
DC-4015	-40~100	±0.1	0.1	300×250×200	15	235×160	√	0.45	0-15	1240	1550	455×430×865
DC-2020	-20~100	±0.1	0.1	300×250×260	20	235×160	√	0.45	0-15	1550	2500	455×430×935
DC-0530	-5~100	±0.1	0.1	440×325×200	30	310×280	√	0.45	0-15	1800	2500	625×500×990
DC-1030	-10~100	±0.1	0.1	440×325×200	30	310×280	√	0.45	0-15	2000	2500	625×500×990
DC-2030	-20~100	±0.1	0.1	440×325×200	30	310×280	√	0.45	0-15	2400	2500	625×500×990
DC-3030	-30~100	±0.1	0.1	440×325×200	30	310×280	√	0.45	0-15	2500	2500	625×500×990
DCW-1015	-10~100	±0.1	0.1	280×250×220	15	235×160	√	0.45	0-15	760	1000	725×440×555
DCW-2008	-20~100	±0.1	0.1	280×250×140	10	235×160	√	0.45	0-15	620	1000	725×440×555
DCW-3506	-35~100	±0.1	0.1	260×200×140	7	180×140	√	0.45	0-15	750	1000	725×440×555
DCW-3510	-35~100	±0.1	0.1	250×200×200	10	180×140	√	0.45	0-15	750	1000	725×440×555
DCW-0506	-5~100	±0.1	0.1	260×200×140	7	180×140	√	0.45	0-15	520	1000	725×440×555
DCW-4006	-40~100	±0.1	0.1	260×200×140	7	180×140	√	0.45	0-15	750	1000	725×440×555

GDH High-Precision Refrigerated Thermostat Bath

CE



Main Technical Parameters

Model	Temp range (°C)	Temperature Stability (°C)	Display Resolution (°C)	Volume (mm)	Capacity (L)	Pump Flow (L/min)	Top Opening Dimen (mm)	Drain	Heating power (W)	Dimensions (mm)
GDH-2006	-20~100	±0.01	0.001	260×200×140	6	0-15	180×140	√	1000	455×388×845
GDH-4006	-40~100	±0.01	0.001	260×200×140	6	0-15	180×140	√	1000	455×388×845
GDH-2010	-20~100	±0.01	0.001	260×200×200	10	0-15	180×140	√	1000	455×388×845
GDH-2015	-20~100	±0.01	0.001	300×250×200	15	0-15	235×160	√	1500	455×388×845
GDH-0530	-5~100	±0.01	0.001	440×325×200	30	0-15	310×280	√	2500	625×500×900
GDH-2030	-20~100	±0.01	0.001	440×325×200	30	0-15	310×280	√	2500	625×500×900
GDH-2008W	-20~100	±0.01	0.001	280×250×140	8	0-15	235×160	√	1000	725×440×555

GH High-Precision Thermostat Bath



Main Technical Parameters

Model	Temperature range (°C)	Temperature Stability (°C)	Display Resolution (°C)	Volume (mm)	Capacity (L)	Pump Flow (L/min)	Top Opening Dimen (mm)	Drain	Heating power (W)	Dimensions (mm)
GH-15	Ambient+8~100	±0.01	0.001	300×240×200	15	0-15	235×160	√	1550	482×375×490
GH-15A	Ambient+8~200	±0.01	0.001	300×240×200	15	cycle	235×160	/	1550	482×375×490
GH-30	Ambient+8~100	±0.01	0.001	400×330×230	30	0-15	310×280	√	2500	605×425×490
GH-30A	Ambient+8~200	±0.01	0.001	400×330×230	30	cycle	310×280	/	2500	605×425×490

DLK Series Low Temperature Cooling Machine

Features

- DLK series fast cryogenic circulation pump is a low-temperature liquid circulation equipment that takes no fluorine environmental protection compressor refrigeration.
- With the role of providing low-temperature liquid, low-temperature water bath. Combined with 2 liters-50 liters of rotary evaporator, can replace the tap water condensation, vacuum freeze drying oven, circulating water vacuum pump, ultraviolet spectrophotometer, ultra-high vacuum sputtering instrument, X-ray machine, laser, electron gas pedal, and other instruments of constant temperature, for multi-functional low-temperature chemical reaction operations and drug storage.
- There is a large flow, high-pressure circulation pump, high pressure, high temperature and other characteristics. Humanized operation panel, small size, large refrigeration capacity, can be easily placed under the laboratory table work, does not occupy space. The equipment is especially suitable for chemical and biological reaction experiments that need to maintain low temperatures and work under normal temperature conditions. It is the laboratory of medicine and health, chemical industry, biological medicine, food industry, metallurgical industry, universities and colleges, scientific research, genetic engineering, macro-molecular engineering and other necessary equipment for the laboratory.
- The main parts of the instrument are original from international famous manufacturers. Totally enclosed fluorine-free compressor set, advanced performance, reliable quality.
- Refrigeration unit using special relays, protectors, capacitors, imported original high-quality devices.
- Adopt microcomputer temperature control, large screen LCD display temperature, timing, simple and eye-catching operation.
- Circulation system using anti-corrosion material circulation pump, with anti-rust, anti-corrosion, anti-pollution, high flow, pump body temperature rise low function.
- Can be used to directly convey the coolant to the place used for internal circulation.



Main Technical Parameters

Model	Volume (L)	Temp. Range	Temp. Accuracy (°C)	Drainage	Pump flow (L/min)	Pump pressure (bar)	Cooling capacity (20°C/W)	Dimensions (mm)
DLK-5003	3	-5°C-45°C	±2	YES	20	1.2	430	390×435×430
DLK-2003	3	-20°C-45°C	±2	YES	20	1.2	430	390×435×430
DLK-5007	7	-5°C-45°C	±2	YES	20	1.2	1150	390×410×630
DLK-2007	7	-20°C-45°C	±2	YES	20	1.2	1150	390×410×630
DLK-5010	10	-5°C-45°C	±2	YES	20	1.2	2000	430×470×820
DLK-2010	10	-20°C-45°C	±2	YES	20	1.2	2000	430×470×820
DLK-2020	20	-20°C-45°C	±2	YES	20	1.2	1900	570×575×912
DLK-4020	20	-40°C-45°C	±2	YES	20	1.2	2500	810×675×1200
DLK-4030	30	-40°C-45°C	±2	YES	20	1.2	3700	810×675×1200

CK Series Circulation Bath

This product is an automatic setting of the PID algorithm without overshooting. Analog temperature control is a commonly used temperature control equipment and is indispensable for medical apparatus and laboratory instruments. Extensively used in the Petrochemical industry, National Defense, Metallurgy, Chemical Industry, Physics, Biology Engineering, Chemistry, Pharmaceutical, life science, electronic instrument, quality inspection and measurement, plant laboratories, colleges, Research and Development Institutes and so on.



Features

- Microcomputer intelligent program control. Editable time / temperature curve.
- Intelligent multi-segment editable temperature and time program to control the process of heating up, constant temperature and cooling down. And the heating speed and cooling speed can be set according to user requirements after automatic control.
- Up to 32 temperature/time segments can be programmed and stored. Each program segment can set 0~9999min running time.
- High-definition large liquid crystal touch display window. Display the current temperature measurement value and temperature setting value at any time.
- Multiple parameter settings. Convenient and quick function keys, shift keys, digital increase and decrease keys to set the temperature/time period and other advanced control parameters.
- Adopt fully enclosed high-efficiency compressor for cooling. With overload automatic protection function;
- Autonomous identification to judge the working temperature and mode. High temperature can be directly opened compressor cooling, lifting temperature rate is efficient.

Main Technical Parameters

Model	CK-2003GD	CK-4005GD	CK-4007GD	CK-4010GD
Temperature Range	-20--200℃	-40--200℃	-40--200℃	-40--200℃
Tank Volume	3L	5L	7L	10L
Temperature fluctuation	±0.1℃	±0.1℃	±0.1℃	±0.1℃
Pump Flow	15L/min	15L/min	15L/min	15L/min
Control temperature section	32 section	32 section	32 section	32 section
Pump pressure	0.45bar	0.45bar	0.45bar	0.45bar
Heating power	600W	1500W	2100W	2500W
Cooling power(20℃/W)	350W	750W	1240W	1650W
Drainage	Yes	Yes	Yes	Yes
Dimensions (mm)	535*395*750	590*435*770	615*505*845	615*505*895

SLC Series Low Temperature Cooling Machine

Main Technical Parameters



Model	Temperature range(℃)	Temperature Stability(℃)	Max. Flow(L/min)	Max. Pump Pressure(bar)	Cooling capacity(W)	Volume(L)	Dimensions (mm)
SLC-2003	-25~40	±0.1	20	1.2	300	1.2~3	230×480×500
SLC-2006	-25~40	±0.1	20	1.2	600	1.2~3	230×480×500
SLC-2012	-25~40	±0.1	30	0.1~4	1200	8~15	500×550×750
SLC-2018	-25~40	±0.1	30	0.1~4	1800	8~15	500×550×750
SLC-2025	-25~40	±0.1	30	0.1~4	2500	8~15	500×550×750
SLC-2030	-25~40	±0.1	30	0.1~4	3000	8~15	500×550×750
SLC-2040	-25~40	±0.1	60	0.1~6	4000	39~47	750×750×1700
SLC-2060	-25~40	±0.1	60	0.1~6	6000	39~47	750×750×1700
SLC-2080	-25~40	±0.1	60	0.1~6	8000	39~47	750×750×1700
SLC-2100	-25~40	±0.1	60	0.1~6	10000	39~47	750×750×1700

DLBC Series Low Temperature Cooling Machine

Main Technical Parameters



Model	Temperature range(℃)	Top Opening Dimen(mm)	Display Resolution(℃)	Capacity (L)	Temperature Accuracy(℃)	Pump Flow(L/min)	Cooling Capacity(KW)	Magnetic stirring(W)	Dimensions (mm)
DLBC-0540	-40~98	Φ230×150	0.1	5	±0.1	20	2.8~0.6	10	520×350×720
DLBC-0580	-80~98	Φ230×150	0.1	5	±0.1	20	2.8~0.3	10	430×350×960
DLBC-1040	-40~98	Φ290×200	0.1	10	±0.1	20	2.9~0.6	10	580×450×720
DLBC-1080	-80~98	Φ290×200	0.1	10	±0.1	20	3.1~0.4	10	720×650×900

Dry Bath Incubator--DH100-1,DH100-2,DH100-4

DH100 series high-temperature dry bath incubator controlled by a microcomputer, uses high-purity aluminum material as a heat conduction medium instead of the conditional water bath device which is easy to use, wide temperature range, high precision, etc. It can be widely used in sample preservation, the reaction of DNA amplification, electrophoresis, degeneration, solidification, and other kinds of serum biochemical sample thermostatic incubation processes.

Features

- Real-time temperature display with countdown timer
- Convenient block replacement, easy to clean and disinfect
- Automatic fault detection and alarm function
- Built-in over-temperature protection device
- Temperature deviation calibration function



Main Technical Parameters

Model	DH100-1	DH100-2	DH100-4
Temperature range	RT.+5°C 160°C	RT.+5°C 160°C	RT.+5C -130C
Temp accuracy	±0.5°C(@40°C)	±0.5°C(@40°C)	±0.5°C(@40°C)
Temp accuracy	±1°C(@120°C)	±1°C(@120°C)	±1°C(@120°C)
Temp uniformity	±0.5°C	±0.5°C	±0.5°C
Display accuracy	0.1°C	0.1°C	0.1°C
Time range	1min-99h59min/∞	1min-99h59min/∞	1min-99h59min/∞
Heating time	≤15min(from 25°C to 160°C)	≤15min(from 25°C to 160°C)	≤20min(from 25°C to 130°C)
Block quantity	1	2	4
Max power	300W	500W	600W
Voltage	AC220V or AC110, 50/60Hz	AC220V or AC110, 50/60Hz	AC220V or AC110, 50/60Hz
Dimension(mm)	260X220X100	260X220X100	360x220x100
Weight	5.0kg	5.5kg	8kg

Optional Blocks

Model	Tube Diameter	Capacity	Model	Tube Diameter	Capacity
MD01	6mm	48	MD10	26mm	8
MD02	7mm	48	MD11	28mm	4
MD03	10mm	24	MD12	40mm	3
MD04	12mm	24	MD13	0.2ml centrifuge tube	48
MD05	13mm	24	MD14	0.5ml centrifuge tube	48
MD06	15mm	16	MD15	1.5ml centrifuge tube	24
MD07	16mm	16	MD16	2.0ml centrifuge tube	24
MD08	19mm	12	MD17*	0.2ml microplate	96
MD09	20mm	12	---	---	---

*MD17 is special for DH100-2

Dry Bath Incubator--DH300,DC10

DH300/DC10 is a microprocessor controlled Dry Bath Incubator. Instead of traditional water bath device, the heat-conducting medium is high purity aluminum. The exact desired temperature is easily set using the arrow keys on the sloped control panel while values are shown on the large digital display. No checking of a thermometer and readjusting temperature is necessary. The user calibration feature allows for easy calibration to in house standards when required.

This product can be widely used in preservation and reaction of samples, DNA amplification, electrophoresis denaturation and serum solidification, etc.

Features

- LCD display
- Automatic fault detection and buzzer alarm function
- Temperature calibration function
- Easy replacement and cleaning of block
- Built-in over temperature protection
- Multiple safety protection. Safe and reliable with CE standard
- Customized blocks are accepted
- 12-month warranty



Main Technical Parameters

Model	DH300	DC10
Temp setting range	0°C~100°C	-10°C~100°C
Temp range	RT+5°C~100°C	RT.-30°C~100°C
Time range	1min ~ 99h59min/∞	1min ~ 99h59min/∞
Temp accuracy	≤±0.3°C*	≤±0.3°C*
Display accuracy	0.1°C	0.1°C
Temp uniformity	≤±0.3°C*	≤±0.3°C*
Heating time	≤12min(from 25°C to 100°C)	≤10 min(from 25°C to 100°C)*
Cooling time	/	≤10min(from 100°C to 25°C)*
Cooling time	/	≤25min(from RT. to RT.-30°C)*
AUTO-4°C	/	Yes*
Multi points running	Yes(Max 5points)	Yes(Max 5points)
Multi points running circularly	Yes(Max 99times)	Yes(Max 99times)
Auto heating	Yes	Yes
Auto running	Yes	Yes
Auto resume to run	Yes	Yes
Power	150W	150W
Voltage	AC220V or AC110V / 50-60HZ	AC100~240V/50-60Hz
Fuse	250V 3A Φ5×20	250V 3A Φ5×20
Dimension(mm)	260x195x150	260x195x150
Weight	2.5kg	4.5kg

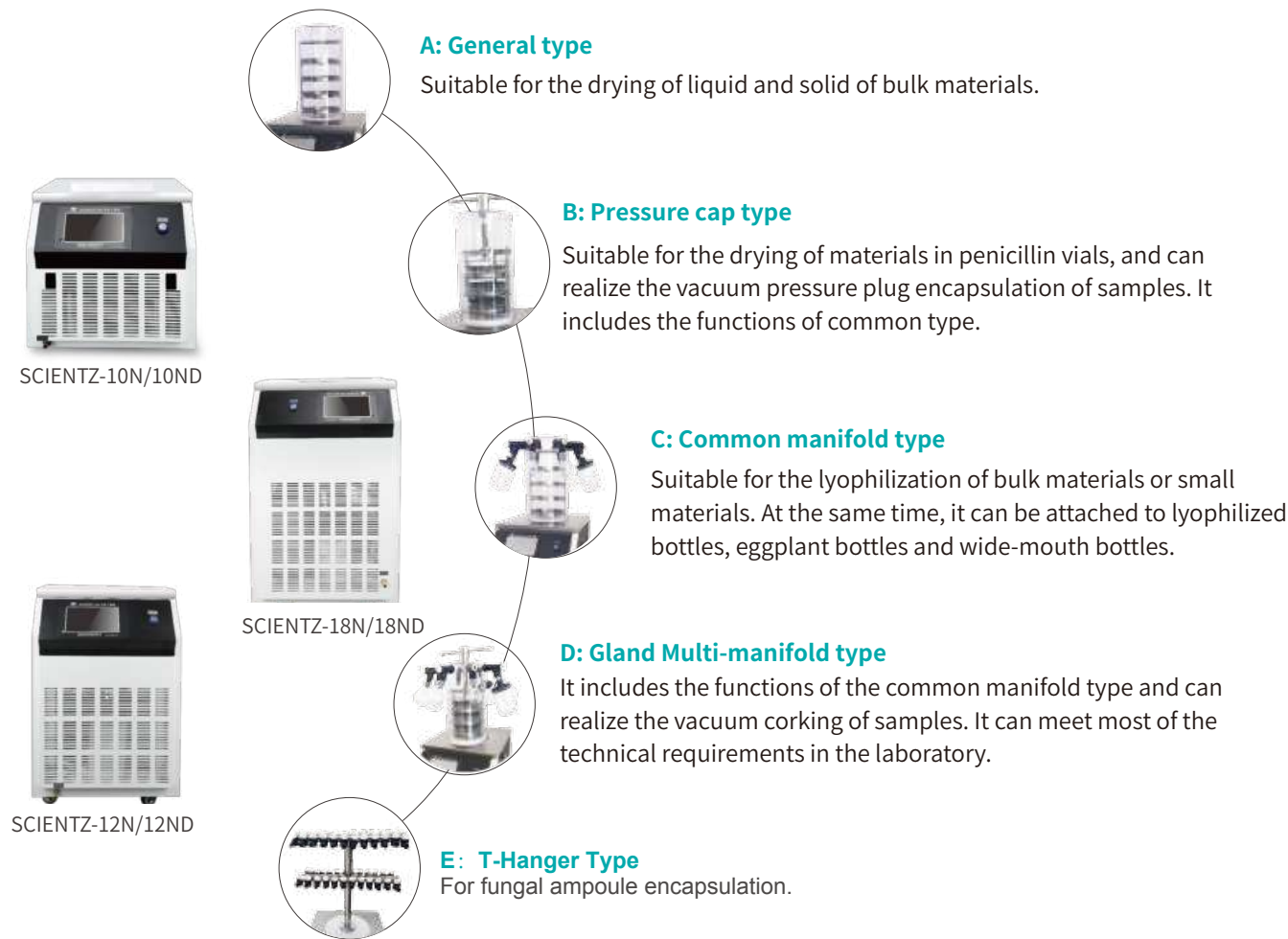
Optional Blocks:

Type	MD30	MD31	MD32	MD33	MD34	MD35	MD36	MD37	MD38	MD39
Description	96×0.2ml	54×0.5ml	35×1.5ml	35×2.0ml	15×0.5ml+20×1.5ml	96×0.2ml (elisa plate)	24×5ml	15×10ml	12×15ml	6×50ml

N Series Freeze Dryer

FREEZE-DRYING SYSTEM

FOR SCIENTZ
INNOVATION



Features

- Adopt imported brand compressor for refrigeration. Rapid cooling, low cold trap temperature
- 7-inches true color touch LCD screen control system, easy to operate and powerful
- Industrial grade embedded operating system, ARM9 core control circuit design, 32M memory, 128M FLASH, fast operation response, large storage data
- Supports storage of multiple lyophilization curves, U-disk copy, computer browsing. Support printing. Optional UPS power supply to ensure consistent operation
- Automatic storage of lyophilization data, real-time view, historical reproduction. Clear and controllable freeze-drying process
- Colorless and transparent injection-molded polycarbonate drying chamber. Corrosion-resistant, unbreakable, non-adhesive, highly transparent, airtight, clear and intuitive samples
- The whole process of freeze-drying can be observed with a gas-filling valve. Can be filled with dry inert gas
- The vacuum pump is connected to the main unit by international standard KF quick coupling. Simple and reliable, to protect the life of the vacuum pump

Main Technical Parameters

Model	SCIENTZ-10N				SCIENTZ-12N				SCIENTZ-18N				
Type	Ordinary	Top press	Ordinary multi-pipline	Top-press multi-pipeline	Ordinary	Top press	Ordinary multi-pipline	Top-press multi-pipeline	Ordinary	Top press	Ordinary multi-pipline	Top-press multi-pipeline	
Dryer area(m²)	0.12	0.08	0.12	0.08	0.12	0.08	0.12	0.08	0.18	0.09	0.18	0.09	
Ability to capture water(Kg/batch)	3	3	3	3	4	4	4	4	6	6	6	6	
Schering bottle quantity	Φ12mm	920	560	920	560	920	560	920	560	1320	990	1320	990
	Φ16mm	480	285	480	285	480	285	480	285	698	349	698	349
	Φ22mm	260	165	260	165	260	165	260	165	360	184	360	184
Eggplant shape bottle	0	0	8	8	0	0	8	8	0	0	8	8	
Plate load capacity (L)	1.5	1	1.5	1	1.5	1	1.5	1	2	1	2	1	
Plate size(mm)	Φ200	Φ180	Φ200	Φ180	Φ200	Φ180	Φ200	Φ180	Φ240	Φ200	Φ240	Φ200	
Plate distance (mm)	70												
Tray quantity (pc)	4	3	4	3	4	3	4	3	4	3	4	3	
Cold chamber size(mm)	Φ250×150				Φ250×250				Φ300×405				
Cold trap the lowest temperature(°C)	≤-56 (No load)												
Ultimate vacuum(Pa)	≤5 (No load)												
Power Kw(220V50Hz)	0.95				1				1.3				
Amibient temperature(°C)	≤25												
Overall dimension (mm)	590(L)×460(W)×450(H)+440				600(L)×450(W)×720(H)+440				670(L)×525(W)×910(H)+480				
Special note	The device size and weight not included in the external vacuum pump Top press model height not included in manual gland handle (The handle height 701mm)												

Optional Function

- Imported vacuum pump
- Automatic nitrogen filling interface
- Eggplant bottle T-frame
- Eutectic point test

ND Series Freeze Dryer (electric heating type)

The ND-type freeze dryer adds heating to the functions of the N series. It is able to accelerate the drying process, save energy, and provide the setting of heating curve with a variety of drying programs stored. It is suitable for laboratory and provides a lot of data support for the development of thesis.



SCIENTZ-10ND



SCIENTZ-12ND



SCIENTZ-18ND



A: General type

Suitable for the drying of liquid and solid of bulk materials.



B: Pressure cap type

Suitable for the drying of materials in penicillin vials, and can realize the vacuum pressure plug encapsulation of samples. It includes the functions of common type.



C: Common manifold type

Suitable for the lyophilization of bulk materials or small materials. At the same time, it can be attached to lyophilized bottles, eggplant bottles and wide-mouth bottles.



D: Gland Multi-manifold type

It includes the functions of the common manifold type and can realize the vacuum corking of samples. It can meet most of the technical requirements in the laboratory.

Features

- Adopt imported brand compressor for refrigeration. Rapid cooling, low cold trap temperature
- 7-inches true color touch LCD screen control system, easy to operate and powerful.
- Industrial grade embedded operating system, ARM9 core control circuit design, 32M memory, 128M FLASH, fast operation response, large storage data
- Supports storage of multiple lyophilization curves, U-disk copy, computer browsing. Support printing. Optional UPS power supply to ensure consistent operation.
- Automatic storage of lyophilization data, real-time view, historical reproduction. Clear and controllable freeze-drying process
- The whole process of freeze-drying can be observed with a gas-filling valve. Can be filled with dry inert gas
- The company's unique point heating curve calculation method, heating more stable, no overshoot, more accurate temperature control.
- Adopt 36V safety voltage silicon rubber electric heating plate as heating element.

Main Technical Parameters

Model		SCIENTZ-10ND				SCIENTZ-12ND				SCIENTZ-18ND			
Type		Ordinary	Top press	Ordinary multi-pipline	Top press multi-pipline	Ordinary	Top press	Ordinary multi-pipline	Top press multi-pipline	Ordinary	Top press	Ordinary multi-pipline	Top press multi-pipline
Dryer area(m²)		0.12	0.08	0.12	0.08	0.12	0.08	0.12	0.08	0.18	0.09	0.18	0.09
Ability to capture water(Kg/batch)		3	3	3	3	4	4	4	4	6	6	6	6
Vials quantity	Φ12mm	920	560	920	560	920	560	920	560	1320	990	1320	990
	Φ16mm	480	285	480	285	480	285	480	285	698	349	698	349
	Φ22mm	260	165	260	165	260	165	260	165	360	184	360	184
Eggplant shape bottle		0	0	8	8	0	0	8	8	0	0	8	8
Plate load capacity (L)		1.5	1	1.5	1	1.5	1	1.5	1	2	1	2	1
Plate size(mm)		Φ200	Φ180	Φ200	Φ180	Φ200	Φ180	Φ200	Φ180	Φ240	Φ200	Φ240	Φ200
Plate distance (mm)		70											
Tray quantity(pc)		4	3	4	3	4	3	4	3	4	3	4	3
Cold chamber size(mm)		Φ250×150				Φ250×250				Φ300×405			
Cold trap the lowest temperature(°C)		≤-56 (No load)											
Ultimate vacuum(Pa)		≤5 (No load)											
Heating temperature (°C)		≤-60											
Power Kw(220V50Hz)		1.11	1.07	1.11	1.07	1.16	1.12	1.16	1.12	1.46	1.42	1.46	1.42
Amibient temperature(°C)						≤25							
Temperature range		-55°C~+60°C											
Overall dimension (mm)		590(L)×460(W)×400(H)+440				600(L)×450(W)×720(H)+440				670(L)×525(W)×910(H)+480			
Host weight(kg)		59	65	61	67	67	74	69	76	83	89	86	91
Special note		The device size and weight not included in the external vacuum pump Top press model height not included in manual gland handle (The handle height 70mm)											

Optional Function

- Imported vacuum pump
- Automatic nitrogen filling interface
- Eggplant bottle T-frame
- Eutectic point test
- T-shaped bottle hanging rack
- APP remote control function

YG Series Freeze Dryer

YG freeze dryer is made of SUS304 square tube splicing, which is the upgraded model of electric heating type.

It adopts silicone oil circulation heating to ensure the uniformity of the cooling and heating of the compartment to the material. The temperature difference after the temperature balance of the partition is only 1°C. The integrated design of cold trap and lyophilization chamber reduces the volume of the equipment, which is suitable for lyophilization of small amounts of samples and exploration of process conditions (food processing, dehydration of antique books, pre-treatment of soil samples, etc.).



Features

- Safe and efficient, environmentally friendly and clean. Support the lyophilization of penicillin vials, glass flasks, plasma bottles or trays
- Adopt silicone oil circulation heating, the temperature control is more even and stable
- Plate layer temperature uniformity < ±1° C (after equilibration)
- PID heating algorithm, more accurate temperature control
- Automatic storage of lyophilization data, real-time view, historical reproduction. Clear and controllable freeze-drying process
- Compartment temperature adjustable and controllable, can be used for figuring out pilot and production process
- Can be set to turn on the vacuum pump when the temperature of the cold trap is lower than the temperature setting value to protect the service life of the vacuum pump
- Total running time of the vacuum pump is recorded to enhance the maintenance of the vacuum pump
- Optional vacuum pump oil mist filtration

Main Technical Parameters

Model		SCIENTZ-10YG		SCIENTZ-30YG		SCIENTZ-50YG		SCIENTZ-100YG		SCIENTZ-200YG	
Type		Ordinary	Top press	Ordinary	Top press	Ordinary	Top press	Ordinary	Top press	Ordinary	Top press
Dryer area (m²)		0.2	0.1	0.3		0.5		1.02		2.35	
Ability to capture water (Kg/ batch)		3	1.5	6		10		15		30	
Vials quantity	Φ12mm	1300	650	1950		3690		7020		14040	
	Φ16mm	814	388	1160		1940		4190		8380	
	Φ22mm	643	205	615		1020		2210		4420	
Plate load capacity (L)		2	1	3		6		15		40	
Plate size	L/mm	430				430		400		500	
	W/mm	240				320		505		900	
Plate distance (mm)		70									
Plate quantity(pc)		2	1	3		4		5+1		5+1	
Plate temperature range (°C)		-40~+70(no load)									
Cold trap the Lowest temperature(°C)		≤-56 (no load)									
Ultimate vacuum(Pa)		≤5(no load)									
Power KW		2.3(220V)		2.8(220V)		3.5(380V)		5.4(380V)		15(380V)	
Amibient temperature(°C)		≤25									
Overall dimension (mm)		750(L)*640(W)*1200(H)		1100(L)* 760(W)*1460(H)		1000(L)*760(W)* 1460(H)		1300(L)*1100(W)*1480(H)		2630(L)*1100(W)*1770(H)	
Weight(Kg)		164		224 240		256 270		570		1800	
Note		The size and weight of the whole machine do not include the external vacuum pump, and the height of the gland type freeze dryer does not include the manual gland handle (increase the height by about 90mm)									

SCIENTZ-F Series Freeze Dryer

Features

- Safe and efficient, environmentally friendly and clean. Support the lyophilization of penicillin vials, glass flasks, plasma bottles or trays
- Adopt silicone oil circulation heating, the temperature control is more even and stable.
- Plate layer temperature uniformity < ±1° C (after equilibration)
- PID heating algorithm, more accurate temperature control
- Adopt external coil cold trap, the cold trap wall is easy to clean.
- Maximum ice trap capacity 15kg/batch, larger ice trap surface area.
- Quick defrost function with electric heating.
- Supports temperature measurement of plate, cold trap and sample.
- Optional oil mist filter for vacuum pump. Optional automatic vacuum differential pressure valve to prevent oil back-absorption.
- Imported technology to customize "SCIENTZ pump" to meet freeze-drying working conditions. Anti-corrosion, silent, no leakage.
- Imported compressor, rapid cooling. The temperature of cold trap can be as low as -80°C, with higher refrigeration efficiency and reliability.



Main Technical Parameters

Model		SCIENTZ-20F		SCIENTZ-30F		SCIENTZ-50F		SCIENTZ-100F		SCIENTZ-200F		
Type		Ordinary	Top press	Ordinary	Top press	Ordinary	Top press	Ordinary	Top press	Ordinary	Top press	
Dryer area (m²)		0.21		0.32		0.54		1.08		2.16		
Ability to capture water(Kg/ batch)		4		6		10		15		>35		
Schering bottle quantity	Φ12mm	1300		1950		3690		7020		14040		
	Φ16mm	814		1160		1940		4190		7800		
	Φ22mm	430		615		1020		2210		4100		
Plate load capacity (L)		3	1.5	4.5		6		15		30		
Plate size	L/mm	400				450		600		600		
	W/mm	270				300		450		900		
Plate distance (mm)		70									90	
Plate quantity(pc)		2+1		3+1		4+1				4+1		
Plate temperature range (°C)		-50~+70(no load)										
Cold trap the Lowest temperature(°C)		≤-80 (no load)									≤-70 (no load)	
Ultimate vacuum(Pa)		≤5(no load)										
Power KW (220V50Hz)		3.0		3.8 4.0		5.0 5.6		6.8 7.4		15 (380V)		
Amibient temperature(°C)		≤25										
Overall dimension (mm)		750(L)* 640(W)* 1200(H)		1100(L)* 680(W)* 1240(H)		1100(L)* 760(W)* 1300(H)		1150(L)* 850(W)* 1480(H)		1320(L)* 850(W)* 1550(H)		
Weight(Kg)		236 286		335 360		424 480		610 780		1380 1500		
Special note		The device size and weight not included in the external vacuum pump Top press model height not included in manual gland handle (The handle height 200-350mm) top press model have defrost function										

SCIENTZ-S Series (Production) Freeze Dryer



SCIENTZ-S production-type freeze dryer adopts a true color touch screen + PLC + PID as the control core. The instrument has the advantages of stable, reliable and convenient control system.

In addition, dozens of freeze-drying curve options are built-in, each of which includes 40 levels of temperature control and settings for refrigeration compressor, vacuum pump start-up protection and other measures to extend the service life of the equipment. Ideal for large-scale freeze-drying of bulk (liquid, paste, solid) substances.

Features

- **Automatic Operation:** Pre-freeze drying is performed in situ, reducing the tedious operation of the drying process and achieving automation
- **Accurate Temperature Control:** Silicone oil is a circulating medium, the temperature error of the separator is $\leq \pm 1^{\circ}\text{C}$, and the drying effect is uniform
- **Smart Storage:** Transfer data from U disk, compensate the host computer software, print and view the freeze-dried curve
- **Fast And Efficient:** Drying chamber and cold trap are separated, with strong water catching ability and short drying time
- **Intelligent Control:** Touch screen operation, PLC control, PID adjustment
- **Mode Selectable:** Manual lyophilization mode, manual CIP mode, automatic lyophilization mode, automatic CIP mode
- The square tray is not easy to deform, easy to operate and easy to clean
- The drying room adopts a highly transparent colorless transparent plexiglass door, which can clearly observe the change of materials during operation
- **Multifunctional option:**
 1. Optional real-time monitoring of equipment operation, fault alarm
 2. APP remote control function is optional
 3. Gas filling valve can be filled with dry inert gas. Eutectic point test is optional
 4. Point measurement device

Main Technical Parameters

Model	SCIENTZ-S Silicone oil in-situ batch freeze-drying machine											
Dryer area (m²)	1	2	3	5	8	10	15	20	25	30	40	50
Effective slab area	1.08	2.16	3.24	5.4	7.56	9.72	14.4	19.8	25.2	31.5	40.5	51.3
Ability to capture water (kg/batch)	20	40	60	90	130	180	300	400	500	600	800	1000
Bottling volumeΦ16mm (branch)	4100	8200	12300	20000	30700	38900	55800	76800	97700	122000	157000	199000
Bottling volume Φ22mm (branch)	2100	4200	6300	11000	15700	19900	29500	40590	51600	64500	83000	105000
Volume of liquid (L)	20	40	60	90	130	180	300	400	500	600	800	1000
Layer size Width (mm)	450	600	600	900	900	900	1200	1200	1200	1500	1500	1500
Layer size Length (mm)	600	900	900	1200	1200	1200	1500	1500	1500	1500	1800	1800
Layer spacing (mm)	90	90	90	90	90	90	90	90	90	90	90	90
Plate number (block)	4+1	4+1	6+1	5+1	7+1	9+1	8+1	11+1	14+1	14+1	15+1	19+1
Plate temperature range (°C)	-50 ~ +80 (NO Load)											
Layer temperature difference (°C)	± 1.0 (After Balancing)											
Cold trap minimum temperature (°C)	≤ -70 (NO Load)											
Ultimate vacuum degree (pa)	≤ 5 (NO Load)											
Length (mm)	2100	2800	3000	3800	5000	5800	6500	7400	8200	8500	9000	9400
Width (mm)	900	1200	1200	1500	1500	2000	2300	2300	2300	2600	2600	2600
Height (mm)	2000	2000	2300	2900	3000	3200	3400	3800	4000	4000	4100	4500

SCIENTZ-1LS Vacuum Centrifugal Concentrator



SCIENTZ-1LS is an all-in-one vacuum centrifuge concentrator with a water trap for convenience. It can be adapted to N and ND series freeze dryers or equipped with a low-temperature cold trap to realize concentration and lyophilization. The centrifugal force, vacuum and acceleration can make the solvent in the sample evaporate quickly, so as to achieve the effect of concentrating the sample. A variety of rotor options are available to provide concentration of small volumes in large batches depending on the rotor, individual sample volumes can range from a few ml to 50 ml. The enzyme rotor can also be used to concentrate the samples loaded in the enzyme plate. They are used in a wide range of applications in biology, microbiology, biochemistry, pharmaceutical research and analytical chemistry.

Main Technical Parameters

Model	SCIENTZ-1LS	SCIENTZ-10LS
The highest speed	2000 r/min	2000 r/min
Temperature range	RT~70℃	RT~70℃
Cold chamber temperature	<-45 ℃	/
Dimensions	520*400*900	500*390*460
Weight	50kg	30kg
Input power	2KW	1KW
Standard rotor	15ml (φ18*20) ;15ml (φ16*20);2ml (φ11*46)	15ml (φ18*20) ;15ml (φ16*20);2ml (φ11*46)
Optional rotor type	2ml (φ 11 * 80); 15ml (φ 16 * 46) 15ml (φ 19.5 * 36); 50ml (φ 33 * 10) Pore enzyme labeling 2 * 96; Pore enzyme label 2 * 48	2ml (φ 11 * 80); 15ml (φ 16 * 46) 15ml (φ 19.5 * 36); 50ml (φ 33 * 10) Pore enzyme labeling 2 * 96; Pore enzyme label 2 * 48

XB-II Automatic Snowflake Ice Maker

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INNOVATION



Features

- Using high-quality stainless steel shell, anti-corrosion and durable
- Using imports of CFC-free compressor, freon-free foam insulation box, good thermal insulation effect, energy-saving environmental protection
- Imported motor, computer chip, all process controlled by computer, with full of ice, water shortages, cold protection, reliable control, low noise, smooth operation, large quantities of ice, small and practical ice-shape, automatic ice-water separation
- Fast ice production: 5 minutes to produce ice quickly, with small crushed ice particles and low water content
- Environmental protection and energy saving: Imported compressors are used, which are environmentally friendly, fast in cooling and long in life
- Fault self-diagnosis: one-button start, fault self-diagnosis
- Humanized design: original water purifier, pure ice making and anti-dirt
- Automatic drainage: bid farewell to the trouble of no floor drain and realize high-level drainage
- Capacity upgrade: truly large-capacity ice storage to meet various needs

Main Technical Parameters

Model	Ice volume (Kg/24h)	Storage capacity(Kg)	Material	Ice shape	Dimension (cm)	Rated power(W)	Refrigerant
XB-20II	20	15	Stainless steel	Small particles of irregular snow ice	420×580×735	240	R134a/80g
XB-30II	30	15			420×580×735	240	R134a/80g
XB-40II	40	15			420×580×735	240	R134a/80g
XB-50II	50	15			420×580×735	240	R134a/80g
XB-70II	70	25			600×600×830	420	R404a/120g
XB-85II	85	25			600×600×830	420	R404a/120g
XB- 100II	100	25			630×790×820	600	R404a/300g
XB- 130II	130	32			600×700×830	600	R404a/160g
XB- 150II	150	32			600×700×830	600	R404a/160g

Dissolution MDS-2008DS

Features

- It can realize the test of basket method, paddle method, small cup method, dish method (large and small dish), and drum method (long and short tube) to meet the requirements of blank and control
- The machine head is electrically lifted
- The sampling frame is electrically lifted
- Automatically set the clutch
- Automatic, independent drug administration
- Two-color lighting system
- Multi-user management
- WiFi, Bluetooth, RS232, RS485 expansion interface
- Built-in printer
- Solvent monitoring
- Stirring speed monitoring
- Multi-user management
- Connect to the sampler
- High sensitivity capacitive touch screen
- Rights management
- Audit trail



Main Technical Parameters

Model	MDS-2008DS
Cup	8
Bath Temperature	RT-45°C
Solvent temperature detection	8 channels
Temperature resolution	0.1°C
Stirring speed	10RPM—300RPM
Stirring speed resolution	0.1RPM
Dosing channel	8
Head lift method	Electrical method
Dimensions	670x565x640mm
Lighting system	Red ligh/White light
Number of user	39 users
User lever	3 class
Programme	Can store more than 100 experimental methods, and can import and export via USB
Weight	65kg

Sampling Model QY8

FOR SCIENTZ
INNOVATION

Features

- Use a precision glass syringe as the sampling power
- Adopt high precision, high pressure and high chemical stability valve body
- Built-in micro printer
- Multi-user management
- WiFi, Bluetooth, RS232, RS485 expansion interface
- The internal use of high chemical stability of the Teflon pipeline
- Has the same amount of rehydration function
- With independent pipeline system, it can meet the control requirements of blank and standard for dissolution test
- A cylindrical filter head with a pore size of 10 μm was sampled at the initial filtration, and a φ25 mm syringe filter having a pore size of 0.8 μm/0.45 μm/0.22 μm was selected as needed for the secondary filtration. A 11.16-bit test tube rack can hold up to 192 tubes
- The sampling tube is equipped with a silicone cap to prevent evaporation and contamination of the sample
- Can be operated online with the dissolution apparatus
- Ampoule collection device
- High sensitivity capacitive touch screen
- Rights management
- Audit tracking



Main Technical Parameters

Model	QY8
Sampling channel	8
Sample times	16
Longest sampling interval	99 hours 59 minutes
Minimum sampling interval	1 minute for the first time,2-10 minutes for the rest
Continuous working hours	99 hours 59 minutes × 16
Sampling filter period	<30 Second
Sample volume (or fluid volume)	1ml—100ml
Single tube distribution amount	0ml—15ml
Sampling accuracy	RSD1% (10ml)
User program	99
Number of users	7 users
User level	3 class
Record keeping	128 items *366 days

MDS-2014 Dissolution Sampling System



Dissolution Apparatus

Features

- Fully complies with the requirements of the Chinese Pharmacopoeia and the United States Pharmacopoeia.
- Swing amplitude of stirring paddle: ≤ 0.5 mm.
- Dissolution rotation speed: 10~300RPM, rotation speed accuracy: ± 0.5 RPM, rotation speed resolution 0.1 rpm.
- The dissolution apparatus is equipped with 14 cups and 14 paddles, two of which are independent isothermal rehydration cups. The large cup method and the small cup method compatible design can be quickly switched, and the operator can operate easily.
- Vessel is designed with an embedded retaining collar for better centering and vessel verticality. Indicator strips and diagonal fixtures are designed on the cup rim to achieve higher reproducibility. Available in 1000mL and 250mL specifications, and the dissolution vessel can be either transparent or low actinic brown for light-sensitive substances.
- There is no seam inside the water tank, rounded corner design, bottom slope drainage, and a standard quick adapter, which is convenient for quick emptying and cleaning.
- Through the segmented paddle shaft design, 316L medical grade stainless steel material, paddle method, basket method can be quickly switched, and no need to re-set height, small cup method, paddle-dish method, rotary drum method can be quickly switched by a simple height setting tool.
- Equipped with two sets of independent rotating shafts, the speed of the two sets of experiments can be independently controlled, and parallel comparison experiments of double 4 cups, double 5 cups, double 6 cups and double 7 cups can be performed and single 4, 5, 6, 7, 8, 10, 12, 14 cups experiment, increase experiment flexibility.
- Dissolution vessel, paddle, basket and other accessories are laser marked to avoid mechanical errors caused by accessories of different cup sizes.
- The nose runs stably and is always level. The height difference between the left and right is ≤ 1 mm. The left and right symmetrical mute and high-torque double lifting columns are used to ensure the center of gravity of the nose is centered and stable, and it has the function of electronic levelness monitoring, which can be displayed on the running interface in real time and has stalled rotors. Detection function, alarm prompt when the lifting state is abnormal.

Main Technical Parameters

Project	Index
Instrument performance index	Number of Dissolution Vessels: 1 4
	Water bath heating range: room temperature -45. 0 °C
	Temperature Resolution: 0.1 °C
	Temperature control accuracy: ± 0.2 °C
	Stirring speed range: 10.0-300 rpm
	Speed Resolution: 0.1 RPM
	Speed Accuracy: ± 0.5 RPM
	Compatible with basket method, paddle method, small cup method, paddle butterfly method, rotary drum method
	Segmented shaft design, no need to manually readjust the height of the positioning basket (paddle) when switching the dissolution method
	Automatic synchronous dosing/sequential dosing
	Can store more than 100 experimental methods, and can import and export via USB
	With operation record printing and log recording function, and can audit trail
	Permission settings: Level 4
	Swing range of propeller shaft: ≤ 0.5 mm
	Basket swing range: ≤ 1.0 mm
	The coaxially between the basket (paddle) shaft and the dissolution vessel: $\leq \pm 1.5$ mm.
Operating temperature	(5~40) °C
	(-20~60) °C
Storage temperature	(-20~60) °C
Working humidity	(20 ~ 80) % RH
Storage humidity	(5~95) % RH

Sampler

Project	Index
Performance parameters	Number of sampling channels: 14
	Single sampling volume: 0.1 - 10 mL (single); 0.2 - 20 mL (double)
	Sampling times: 1-16 times (single); 1-8 times (double)
	Network interface: 100M RJ45
	Control interface: RS 485
	Automatic dilution accuracy: $\pm 1\%$
	Temperature control accuracy of fluid replacement: $\leq \pm 0.5^{\circ}\text{C}$
	Maximum working hours: unlimited
	Minimum sampling interval: 1 minute 20 seconds (initial sampling), minimum sampling interval 2 minutes (subsequent sampling) Sampling accuracy: $\leq 0.8\%$ (10mL sampling)
	Fully automatic rinsing, filling, dripping, sampling, replenishment, dilution, emptying, cleaning
Instrument function	Precise sampling by syringe pump, suction and stop time can be set
Operating temperature	(5~40) °C
Storage temperature	(-20~60) °C
Working humidity	(2 0 ~ 80) % RH
Storage humidity	(5~95) % RH

ZBJ01 Intelligent Disintegration

ZBJ01 intelligent disintegration instrument is a new type of instrument designed in accordance with the requirements of the Chinese Pharmacopoeia. The detection of the disintegration time limit of 3 cups and 18 samples can be achieved.

Features

- 3 Basket disintegration time detection system
- Adopt high precision PT1000 temperature sensor, temperature resolution up to 0.01°C
- Temperature correction function in the cup
- Test time can be set according to actual needs, time, temperature real-time display
- Independent lighting system
- One-piece, quick-disassembly basket card (patented product)
- Permission management using 3 levels of authority 7 user accounts management
- Audit trail



Main Technical Parameters

Model	ZBJ01	Cup to Bottom distance	25mm±2mm
Temp. Range	RT-45°C	Screen Wet hole dia	2mm Optional 1mm、0.71mm、0.42mm
Temp. Resolution	0.01°C	Block density	1.18—1.20g/cm³
Basket no	3 cups	No of user	7 users
Lifting Frequency	30—32 Times/Min	Class of user	Class 3
Lifting distance	55mm±1mm	Record keeping	96pcs*366day

Tablet Hardness Tester



Tablet hardness testers are instruments for detecting breaking hardness of tablets.
Applicable standards: Corporate standard (Tablet hardness tester)Q/12XQ0186-2010

Features

- High definition touch screen control, easy and fast to use
- Adopt high precision pressure sensor to ensure high output measurement accuracy
- Chinese or English interface is optional
- Automatic statistics, analysis, printing and display of measurement data
- With a real-time calendar clock function, the test and calibration date and time can be printed in the test report
- With self-diagnostic function, automatic prompting for certain abnormalities in the test
- Parameter settings are automatically saved until reset
- With calibration function, display and print calibration results

Main Technical Parameters

Hardness range	(0~350) N, resolution 0.1N
Measuring diameter range	2.0~25.0mm, resolution 0.01mm
Unit of measure	hardness N/Kg/Kap (optional)/diameter mm/inch (optional)
Measuring method	manual single piece/automatic continuous (the maximum number of measured pieces is 100 pieces) / optional
Display	5 inches capacitive touch screen
Interface	Centronic standard serial printing interface, can be connected to microprinting (Chinese or English output)

Fragility Tester

It is used for detecting friability/abrasion of tablet.

Features

- Automation: auto-test, auto-diagnose, auto-alarm.
- Intelligently control the rotating speed of cylinder and revolutions.
- One drum runs synchronously. Auto stop at timing point. (only for TFT-4)
- Single path and double cylinder, synchronous operation and automatic stop.
- The revolution of the drum can be preset at any time, either preset or real data is displayed on the LCD.
- Microprocessor unit is used to control all operations, high accuracy is achieved in testing rotary speed and circle number.



Main Technical Parameters

Model	CSD01
Speed	25±1 rpm
Timing range	0-9 hours 59 minutes 59 seconds, optional countdown
Counting range	0-99999 times, optional countdown
Power	20W

SC-CMII Clarity Detector

Main Technical Parameters



Model	SC-CMII	Timing	1-99S
Power	50W	Dimensions	703mm×300mm×513mm
Lamp	20W	Weight	about 14.5kg
Illumination range	1000 ~ 7000lx		

Features

- Comply with the Chinese Pharmacopoeia standard for the preparation of dissolution media
- Record function: Logging, with audit trail function
- Human-machine interaction: color page touch screen, clear parameters at a glance, fast and convenient operation
- Hydraulic detection: Equipped with hydraulic detection, self-priming and external pressure can be automatically switched
- High efficiency: Heating, vacuum and circulation are combined to make degassing more thorough and rapid
- High precision: Automatic completion of quantitative liquid feeding, preheating, degassing and quantitative liquid discharge, single discharge accuracy up to ±1%
- Wide range of applications: It can directly handle dissolution experiments of solvent, pure water, distilled water, etc., with higher efficiency than traditional methods

Real-Time Constant Temperature Degasser

Main Technical Parameters

Item	Index
Technical data	Heating range:RT-45.0°C (The maximum heating temperature difference is 15°C)
	Temp. resolution:0.1°C
	Temp. control accuracy: ±2°C
	Flow resolution :0.1mL
	Flow control accuracy: ±1%
	Removal effect:effectively reduce the oxygen content of the solvent to meet the dissolution requirements
	Degassing rate :1000mL/Min
	vacuum resolution :0.1KPa
	Vacuum degree : ≤-90KPa
	Target oxygen content : ≤2.8mh/L
	Logging function with audit trail
Input power	AC220V±10% 1700W
Overall size	260x530x560mm
Weight	23Kg
EMC	IEC6100-4-2, IEC6100-4-4, IEC6100-4-5, IEC6100-4-11
Working Temp.	(5~40) °C
Storage Temp.	(-20~60) °C
Working humidity	(20~80)% RH
Storage humidity	(5~95)% RH

