



Small Laboratory Equipments

Quality, Innovation, Competitive Price

Welch Materials, Inc.

Introduction

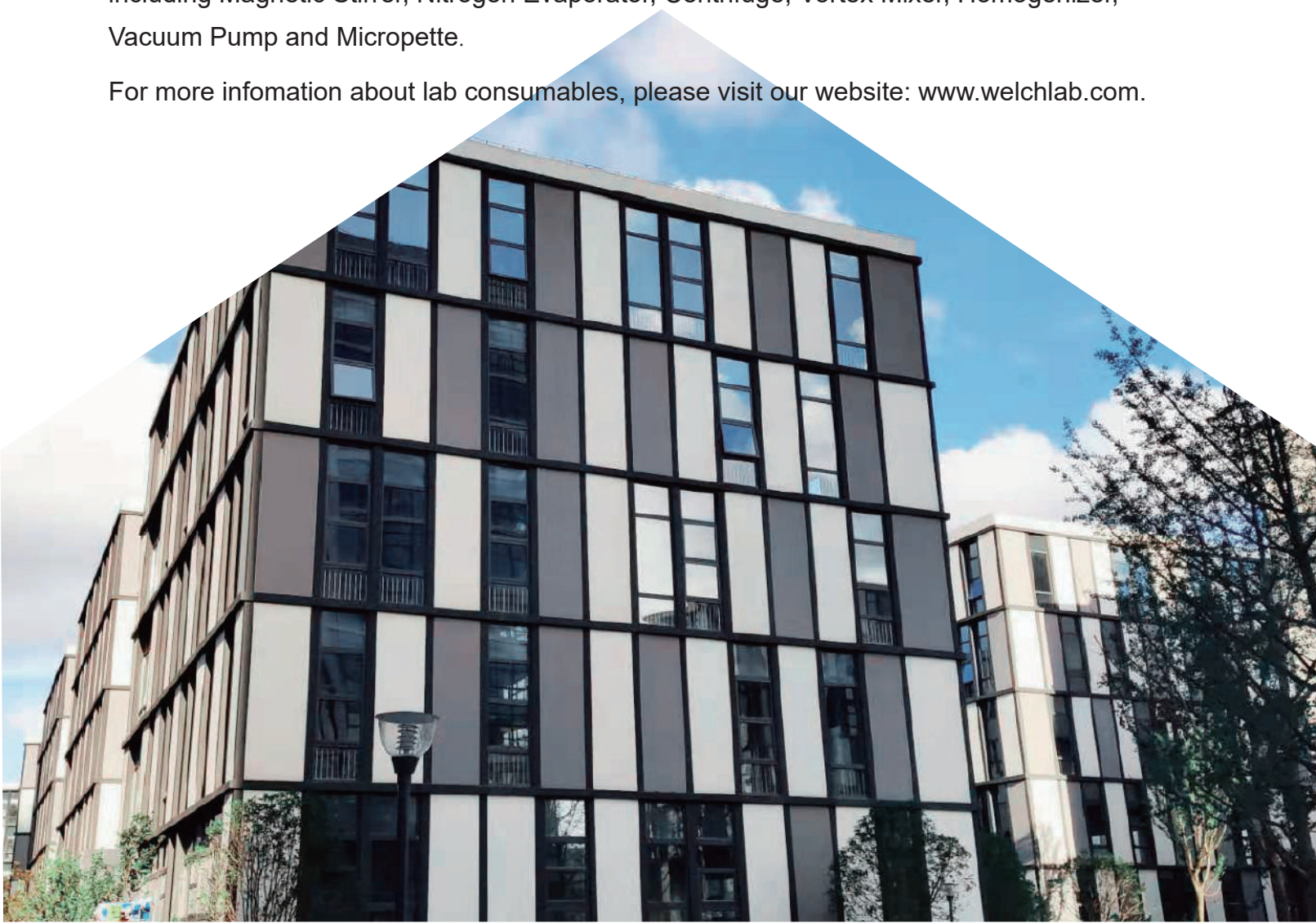
Welch Materials is a multinational company that develops and manufactures laboratory consumables including analytical and preparative HPLC columns, Solid Phase Extraction (SPE) columns, GC columns, bulk packing materials, protein purification products and other consumables.

Welch Materials was established in 2003 at Shanghai, China and Welch Materials(Zhejiang), Inc. was opened in 2011 at Jinhua, Zhejiang, China. Welch has established Welch Materials, Inc., at West Haven, CT, USA and Welch Materials, India Pvt. Ltd., at Gurgaon, India.

Welch strength lies in our deep experience in particle surface modification science. We are experts in bonding chemistry and innovative packing materials for chromatography applications. Utilizing and optimizing our resources, we have developed many innovative products including five series of HPLC columns: Ultisil®, Welchrom®, Xtimate®, Topsil®, and Boltimate®.

To meet customer's requirements, Welch introduces the lab small instrument product lines including Magnetic Stirrer, Nitrogen Evaporator, Centrifuge, Vortex Mixer, Homogenizer, Vacuum Pump and Micropette.

For more information about lab consumables, please visit our website: www.welchlab.com.



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Ultra-thin Magnetic Stirrer B201500

Product Introduction

The ultra-thin magnetic stirrer is especially suitable for small-volume samples and is easy to carry. It is a practical tool for petroleum, chemical, environmental protection, education and scientific research, etc.



Product Features

- Ultra-thin and lightweight, easy to carry, saving laboratory desktop space
- It can be powered by a mobile power supply, so that it can be used when going out
- Using advanced grindingless magnetic coil technology, quiet operation, long life
- Touch screen key design and sliding touch adjustment speed design, convenient and durable
- Switchable clockwise and counterclockwise operation mode, up to 1500 rpm
- Waterproof design (IP63)

Product Specifications

P/N	B201500
Maximum stirring volume (H ₂ O)	1L
Power	3W
Range of rotation	20~1500rpm (stepper 10rpm)
Clockwise/Counter clockwise stir/Intermittent time (except counterclockwise)	45s/5s
Timing range	0~9h (stepper 5min)
Standard stirring bar size	Φ8×20mm
Worktable Material	PVC
Working plate size	Φ110mm
Dimensions	W.110×D.180×H.14.5mm
Power supply	DC 5V 2A
Waterproof class	Ip63

Magnetic Hotplate Stirrer B201200

Product Introduction

The magnetic hotplate stirrer adopts ceramic plate heating technology, and the maximum surface temperature can reach 340 ° C. Humanized operation design and precise temperature control system can meet various experimental needs.

Product Features

- PID algorithm temperature control, high precision, digital display, knob adjustment.
- Semiconductor control technology, with disconnection protection function.
- High quality metal shell, high strength, good temperature resistance, anti-corrosion.
- DC brushless motor, stable performance, low noise, long life.
- Ceramic heating plate, high temperature resistance, easy to clean.



Product Specifications

P/N	B201200
Working plate size	Φ137mm
Working plate material	Ceramic
Range of rotation	200~1200rpm
Temperature control range	Room temperature +5~340 °C
Timing range	0~99h59min
Maximum stirring volume(H ₂ O)	20L
Standard stirrer size	8×46mm
Power supply	AC220V, 50/60Hz
Power	600w
Fuse	250V, 4A/8A
Size	W.160×D.270×H.90mm

Dry Bath Nitrogen Evaporator(visible) A502200

Product Introduction

A502200 Sample Concentrator is mainly used for sample concentration or preparation (such as drug screening, hormone analysis and sample preparation in LC and MS analysis).

Working Principle

By blowing nitrogen gas into the surface of the heated sample, the solvent in the sample is quickly evaporated, so as to achieve the purpose of oxygen-free concentration of the sample. Using a nitrogen sample concentrator instead of a common rotary evaporator for concentration can concentrate dozens of samples at the same time, saving time and efficiency.

This product has a unique feature: the liquid level position of the concentrated sample can be observed at any time when the sample is concentrated.



Product Features

- The heater causes the sample to be quickly heated to the evaporation temperature, while the gas is blown to the surface of the solution through the gas needle, which promotes the rapid evaporation of the solution and the concentration of the sample.
- The position of the gas needle in the gas chamber can be changed to make it suitable for different test tubes. Standard air needle length is 150mm.
- The height of the air chamber is adjustable. This model has a unique feature: the liquid level of the concentrated sample can be observed at any time when the sample is concentrated.
- Each purging needle can be independently controlled, can be purged separately, and the flow can be adjusted independently without wasting gas.
- When concentrating toxic solvents, the entire system can be placed in a fume hood.
- Built-in over-temperature protection device, automatic fault detection and alarm function.
- LED display, temperature synchronous display, time decrement display, simple and convenient operation.
- Equipped with air chamber and special adjustable stand.

Product Specifications

P/N	A502200
Temperature control range	Room temperature +5 ℃ -150 ℃
Temperature setting range	5 ℃ -150 ℃
Temperature stability (40~100℃)	±0.5 ℃
Temperature stability (100~150℃)	±1 ℃
Module temperature uniformity (100℃)	±0.5 ℃
Module temperature uniformity (150℃)	±1 ℃
Temperature display accuracy	0.1 ℃
Heating rate	≤ 30min(40 ℃ - 150 ℃)
Timing range	1min-99h59min
Max. lift range of air needle plate	285mm
Outer diameter of air joint	7mm
Nitrogen pressure	≤ 0.1MPa
Nitrogen flow	0-10L/min
Air needle length	150mm
Sample throughput	A standard block
Input power	AC 22V/AC 110V, 50/60Hz
Power	400W
Fuse	250V, 3A/6A, φ 5×20
Dimensions	W.220×D.260×H.525mm
Net weight	5.8kgs

Instrument General Configuration

The user can choose a block from A053010~A053070, the blocks can be interchanged. Generally A053040 or A053050 blocks is selected

Replaceable Blocks

P/NI	Tube diameter	Number of tubes	Block size mm
A053010	10 mm	12	153.5×96×49
A053020	12 mm	12	153.5×96×49
A053030	13 mm	12	153.5×96×49
A053040	15 mm	12	153.5×96×49
A053050	16 mm	12	153.5×96×49
A053060	19 mm	12	153.5×96×49
A053070	20 mm	12	153.5×96×49

Water Bath Nitrogen Evaporator B100012

Product Introduction

The water bath nitrogen evaporator is mainly used for the concentration or preparation of the sample. Blowing nitrogen into the surface of the heated sample makes the solvent evaporate quickly, so as to achieve the purpose of anaerobic concentration and ensure the purity of the sample.

Product Features

- Real-time temperature and time display panel
- Adjustable design, compatible with various sizes of tubing
- Free lifting needle valve tube, independent adjustable needle valve to control the flow of each gas needle separately
- Circular turntable structure, 360° free rotation, easy to take
- The sample position is marked with a numerical number to facilitate the recording of the sample
- Stainless steel parts are adopted to resistant to corrosion
- Built-in liquid level sensor, anti-dry protection



Technical Parameters

P/N	B100012
Temperature control range	Room temperature +5~100 °C
Number of samples	12
Timing range	1min-99h59min
Temperature display accuracy	0.1 °C
Max. lift range of air needle plate	200mm
Max. gas flow	15L/min
Air needle length	100mm
Liner size	260×150mm
Power supply	AC220V, 50/60Hz
Power	1000w
Fuse	250V, 8A
Dimensions	W.390×D.300×H.850mm
Tube Compatibility Range	φ 10 - 29mm Centrifuge tube(≤ 50ml)

Mini Centrifuge

- Doprah mini centrifuge adopts snap type bearing rotor, which has the characteristics of safe use and long service life
- The rotor can be embedded with a mini centrifugal tube sleeve or replaced with other rotor modules. It is suitable for multi-size centrifugal tubes or PCR tubes
- It can adapt to a wide range of power supply and can be applied to different standard voltages



P/N	D105000	D107000
Speed	5000rpm	7000rpm
Power range	AC100~240V/50Hz/60Hz	
Bearing capacity	8 × 0.2/0.5/1.5/2.0ml centrifuge tube Or 32 × 0.2 ml pcr tube /4 × 0.2ml 8-strip pcr tube	
Operation mode	Continuous operation after closing cover	

Mini Vortex Mixer D103000

- Doprah mini mixer adopts a replaceable vibrating base design, which is easy to assemble and disassemble, and can meet a variety of mixing needs
- The bottom is designed with replaceable suction cup feet to avoid sliding when the instrument works
- Two operation modes of touch/continuous vibration can be selected to meet different usage habits
- Maximum speed 3000rpm, adjustable design



P/N	D103000
Speed	0-3000rpm
Power range	100~120V/200~240V50
Vibration mode	Circumference
Amplitude	4mm
Operation mode	Touch/continuous operation mode

Multi-tube Vortex Mixer B100250

Product Introduction

B100250 multi-tube vortex mixer is compact and simple in appearance. It adopts DC brushless motor technology and microcomputer control technology. It has various functions and is suitable for biotechnology, microbiology and medical analysis.



Product Features

- A maximum of 50 samples can be mixed at one time
- Human machine friendly touch operation interface, LED timing time and speed display
- With timing function, the mixing time can be set arbitrarily within the range of 1 second to 9999 minutes, and the display screen displays the remaining time
- DC brushless motor drive, accurate speed, long life, maintenance free

Product Specifications

P/N	B100250
Speed	500~2500rpm
Turning diameter	4mm Horizontal rotation
Time setting	1s~9999min
Maximum payload	4.5kg
Input power	60W
Overall dimension (mm)	426×250×480
Weight	21.5kg

Handheld Homogenizer A900300

Product Introduction

The A90300 hand-held homogenizer is a small hand-held rapid tissue homogenizer, dispersing and emulsifying device. It is applicable to 0.5-250ml liquid samples with different dispersing heads, and the maximum rotation speed can reach 35000rpm.

Working Principle

The working principle of the instrument is that the sample is introduced into the narrow space between the high-speed relative moving stator and rotor, and is quickly sheared and broken.

Tissues such as muscle, liver and breast can be completely homogenized in 10-30 seconds.

It can be applied to biopharmaceutical, gene research, tissue fragmentation, cell plasmization, pathological analysis, oil-water emulsification, nano material dispersion, dairy homogenization, polymerization, daily cosmetics, ink and coating, fine chemicals, pesticides, mineral exploration, environmental protection, energy and other fields.

Product Features

- Lightweight design, hand-held and single handed operation
- Adjustable speed, digital display speed, precise control, prevent splashing
- It is suitable for homogeneous dispersion of a small amount of samples in a small container
- High quality stainless steel dispersion head, corrosion resistance and high temperature disinfection resistance
- The dispersing head is easy to disassemble and clean
- High speed and high efficiency motor, long service life
- Standard H-shaped bracket, adjustable height and angle, which is more convenient for access and storage

Product Technical Parameters

Power / frequency	230V/50/60Hz
Power (input / output)	160/110w
Rotor linear speed	6.3-14m/sec
Weight	0.8kg
Noise	72dB(A)
Speed setting	8000-35000rpm Digital display
Size	46mm×55mm×230mm

Product Technical Parameters

P/N	A091110-1	A091120-1	A091130-1	H-Type Bracket
Processing capacity	0.5-50ml	1-100ml	1-250ml	H-type bracket is used to fix the homogenizer, with adjustable height and angle
Stator diameter	6mm	8mm	10mm	
Rotor diameter	3.9mm	6.1mm	7.9mm	
Stator rotor clearance	0.1mm	0.3mm	0.3mm	
Min / max immersion depth	20/90mm	20/107mm	20/120mm	
Tool bar length	150mm	167mm	180mm	
Material	316L			



Oil-free Vacuum Pump

Product Introduction

Rex series oil-free vacuum pumps are mainly used in pharmaceutical analysis, fine chemicals, biopharmaceutical, health inspection, food and environmental testing, scientific research in universities and other fields. It is an ideal product for supporting chromatographic instruments and rotary evaporators at home and abroad. It can work continuously without oil, with small volume, low noise, high work efficiency, long service life, safety, reliability, economy and practicality.



Product Features

- The product does not require any working medium ((no oil) to produce a clean vacuum without pollution.
- Easy to carry, easy to move, and smooth to work.
- Oil-free lubrication, piston structure, longer service life than ordinary diaphragm pumps.
- The pump body motor adopts an all-copper motor with better tolerance, which can ensure long-term continuous work and operation.
- The unique pressure-adjustable design can meet the vacuum degree and gas flow rate within a certain range.
- Imported bearings are used, with smooth operation, no noise, long service life and high work efficiency.
- The fuselage shell is made of one-piece die-casting alloy material to ensure clean appearance and heat dissipation performance.
- An optional anti-corrosion air filter can be used to avoid damage to the pump body parts caused by

Product Specifications

Extraction flow	25L/min(25A*) 40L/min(40B*)	Pump head	1(25A) 2(40B)
Ultimate pressure (vacuum)	≥0.08Mpa	Precision regulator	1
Pressure range	Adjustable	Voltage	220V,50Hz
Motor power	160W(25A) 250W(40B)	Pump body temperature	<55 C
Speed	1450-1700r.p.m(25A) 1850-2100r.p.m(40B)	Overall weight	3.5kg(25A) 5.5kg(40B)
Size (L×W×H)	255×135×170mm(25A) 320×135×170mm(40B)	Noise	<50dB
Standard air inlet	φ 8mm	Working temperature	7-40 C
Pump type	Negative pressure		

*25A: WEL-REX-25A | 40B: WEL-REX-40B

Micropipette

Features

- Fully autoclavable
- Ergonomic design provides excellent operating experience
- Easy-to-read volume display
- Easy calibration and maintenance
- Manufactured from innovative materials



P/N	Capacity	Channel	Packing
WELP-1	0.5ul	Single	Individual
WELP-2	5ul	Single	Individual
WELP-3	10ul	Single	Individual
WELP-4	20ul	Single	Individual
WELP-5	50ul	Single	Individual
WELP-6	100ul	Single	Individual
WELP-7	200ul	Single	Individual
WELP-8	500ul	Single	Individual
WELP-9	1000ul	Single	Individual
WELP-10	5000ul	Single	Individual

P/N	Capacity	Channel	Packing
WELP-11	0.1-2.5ul	Single	Individual
WELP-12	0.5-10ul	Single	Individual
WELP-13	2-20ul	Single	Individual
WELP-14	5-50ul	Single	Individual
WELP-15	10-100ul	Single	Individual
WELP-16	20-200ul	Single	Individual
WELP-17	50-200ul	Single	Individual
WELP-18	100-1000ul	Single	Individual
WELP-19	200-1000ul	Single	Individual
WELP-20	1000-5000ul	Single	Individual

Micropipette Multi-channel

Features

- 8 and 12 channel pipettes are appropriate for 96 well plates
- Dispensing head rotates for effortless pipetting convenience
- Individual piston and tip cone assemblies allowing easy repair and maintenance
- Compound material-made tip cone secures high sealing performance
- Compatible with most universal tip brands



P/N	Capacity	Channel	Packing
WELP-21	0.5ul	8	Individual
WELP-22	5ul	8	Individual
WELP-23	10ul	8	Individual
WELP-24	20ul	8	Individual
WELP-25	50ul	8	Individual
WELP-26	100ul	8	Individual
WELP-27	200ul	8	Individual
WELP-28	250ul	8	Individual
WELP-29	300ul	8	Individual
WELP-30	0.5-10ul	8	Individual
WELP-31	5-50ul	8	Individual
WELP-32	50-300	8	Individual

P/N	Capacity	Channel	Packing
WELP-33	0.5ul	12	Individual
WELP-34	5ul	12	Individual
WELP-35	10ul	12	Individual
WELP-36	20ul	12	Individual
WELP-37	50ul	12	Individual
WELP-38	100ul	12	Individual
WELP-39	200ul	12	Individual
WELP-40	250ul	12	Individual
WELP-41	300ul	12	Individual
WELP-42	0.5-10ul	12	Individual
WELP-43	5-50ul	12	Individual
WELP-44	50-300	12	Individual

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Bridging Separation Techniques

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