Hangzhou Altrasonic Technology Co.,Ltd.

Hangzhou Altrasonic Technology Co.,Ltd. Founded in Hangzhou.

Altrasonic has been actively involved in the market for industrial ultrasonic applications since 1990s. Since then, the company has built up a wealth of expertise internationally, which is put to good use by customers in a wide range of different industries. Today, Altrasonic is one of the leading companies worldwide in this specialist field. The ability of the company and its employees to deliver innovative solutions is underlined by numerous patents.

Altrasonic equipment cooperated with the key graphene manufacturers, applied the ultrasound equipment in graphene preparation process of industrialization firstly, and make the ultrasonic be a good supporting to the large–scale preparation of the high quality and low cost graphene materials.

WHY CHOOSE ALTRASONIC

Overseas service team. We now have agents in India, Austrilia, UAE, Singapore, Taiwan, Malaysia,Germany, and other country still being discussing.

Innovation. Altrasonic R&D and marketing staffs to constantly explore new applications in the field of ultrasound,and the importance of team spirit of cooperation.

Half the price, double the value. Every product reach you have been test in our company three times, and with72 hours continous working, to confirm it is well before you get it. Also we always learn from foreign company, to upgrade our products.

Good components. Ceramic mainly imported from German, and using the superior quality aluminum, titanium raw materials.

Individual Customize. We can customize products according to your requirements, and also supply OEM service. Customize ultrasonic solution for different applications.

QC PROFILE

3 times old test to confirm the products is well quality.

20 technician work together , and learn together , to improve our products.

48 hours working time to test the stability of our product before sending out.

Altrasonic

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Ultrasonic Cutting and Sealing Machine

Brief Introduction

The applicable materials of ultrasonic wave sealing and cutting include: 100% of synthetic fiber, such as nylon, polyester, polypropylene, some polyethylene, modified acrylic resin, vinyl compounds, carbamate compounds, thin films, coated paper, etc. It also includes synthetic fibre mixing 35 to 50% of synthetic fiber composition.Ultrasonic can cut and sew at the same time, preventing the knitted or textile materials to be off-line. It has slot edge taper avoiding pilling. The application includes cutting, carpet ornaments, clothing labels, curtains, cable materials and industrial woven belt etc..

FREQUENCY	20khz / 30khz / 40khz
POWER	500w / 800w / 1000w
INPUT	AC110–240V, 50/60Hz
POWER CONTROLLER	stepping or continuous
MATERIAL OF CUTTING HEAD	aluminum alloy, stainless steel, titanium alloy, alloy steel.
MACHINE WIGHT	4 kg–16KG
ACCESSORIES	foot switch, additional blade
COOLING DEVICE	compressed air mouth can be installed.
CABLE LENGTH	2M or customized
FOOT SWITCH	available

Advantages

1. It can replace the traditional way of needlework, without the traditional line suture of bolt joint, but also on textiles orderly local shear and seal. The cementation strength is strong, achieving the waterproof effect and clear embossing.
2. With special steel tool head, sealing the edges of the cracks, it does not hurt the cloth edge, and no burrs, edge phenomenon.
3. Can be continuous operation without preheating.
4. Simple operation, normal sewing worker can operate
5. Lower cost, the efficiency is higher nearly 5 to 6 times than traditional machine.

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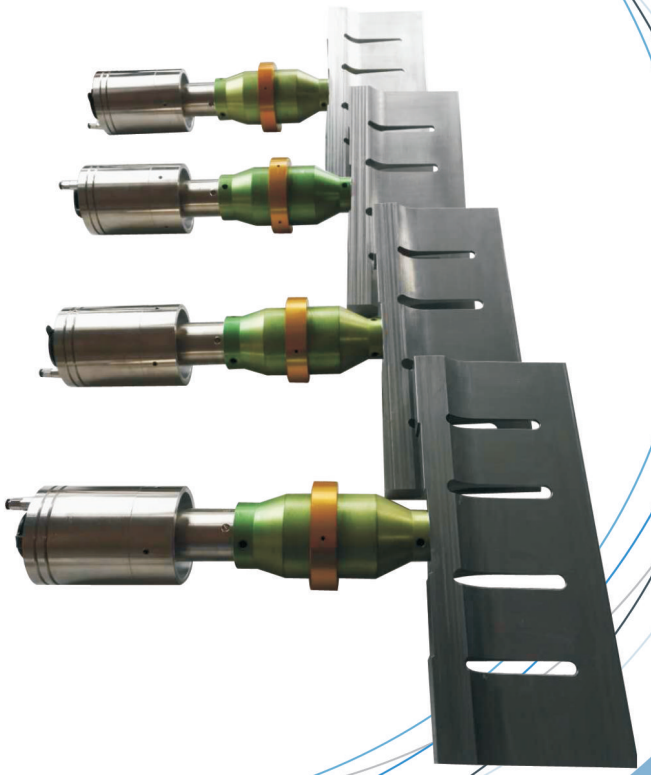

ULTRASONIC CUTTER

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Ultrasonic Cutter

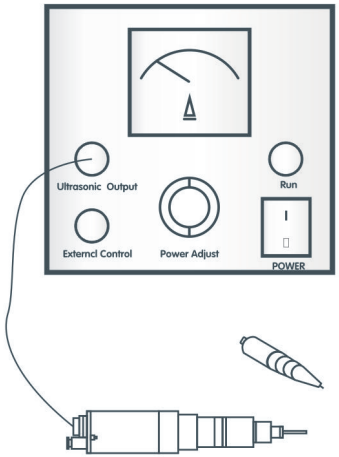
Ultrasonic Cutting is a class of device using ultrasonic energy for cutting. Instead of using traditional blade cutting, ultrasonic cutting has its advantages of smooth, reliable cutting, accurate trimming, no deformation, no raising, fuzzing, spinning, wrinkling etc. It can avoid the rough cutting–edge,coked edge, fuzzballs and other shortcomings of laser cutting machine.
Ultrasonic cutting machine is used for cutting rubber, synthetic fabric, cloth, plastic, sheet metal, food etc.

The following is some hot sale ultrasonic cutter

- 1.Name: 40K ultrasonic multi–function handheld cutter
- 2.Item No.: HSC–40
- 3.Frequency: 40KHz
- 4.Generator: ZJS–100L
- 5.Maximum output power 40W
- 6.Weight approx. 2.5Kg
- 7.Dimensions
- Generator:155W × 265L × 170H
- Handle：Φ32 × 170

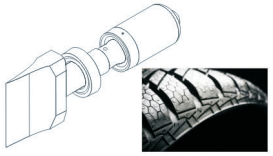
Easy to take! Easy to operate! Easy to install !

Cutting materials	Thickness	Cutting speed
ABS、PE	2mm	4mm/s
	3mm	2mm/s
	4mm	1mm/s
PVC	2mm	15mm/s
Asian gram force	2mm	3mm/s
Non–woven fabric	3mm	2mm/s
Chloroprene rubber	5mm	Easy to cut
Corrugated paper	8mm	Easy to cut
Plywood	2.5mm	Easy to cut
Glass fiber resin	1.5mm	Easy to cut
Thick cardboard	1.5mm	Easy to cut
Linen	2mm	Easy to cut
Urethane	3mm	Easy to cut
Nylon、PP	2mm	Easy to cut
	3mm	Easy to cut



Altrasonic

Rubber Cutter



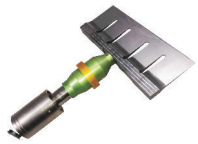
- 1. Name: 40K ultrasonic rubber cutter
- 2. Item No.: HSC–40R
- 3. Frequency: 40KHz
- 4. Generator: ZJS–500
- 5. Maximum output power 800W
- 6. Weight approx. 5.5Kg
- 7. Titanium cutting blade
- 8. Handing or mounting operation mode

Easy to take! Easy to operate! Easy to install !

Comparison	Common cutter	Ultrasonic cutter
Speed(fabric)	1m/s in max	10m/s in max
Cutting result	√	√
Thickness	1mm in max	20mm in max
Edge banding	×	√
Pressure	Big	common
Rubber	×	√
Plastic sheet	×	√
Plastic mold	×	√
Plastic film	√	√
Synthetic fabrics	×	√
Metal foil	√	√
Food	√	Non–stick

Ultrasonic food cutting machine



The vibration of the ultrasonic food processing system using high frequency wave to quickly handle food, eliminates the traditional cutting piece of downtime caused by continuous washing.Ultrasound equipment provides a new way to cut piece, cutting, steering, and transfer alignment or different kinds of food, makes the production flow and cost minimization of waste minimization and maintenance.Ultrasonic knife up and down 20000 vibrations per second, the slice from the oven or conveyor belt products, or cut the product into a bar.

Item	Detail
Frequency	20Khz
Power	800W
Input	AC110–240V, 50/60Hz
material	Stainless or titanium
Cooling way	Air
Weight	15~18Kg
Accessory	Food switch,3m line

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ULTRASONIC GENERATOR
ULTRASONIC POWER SUPPLY

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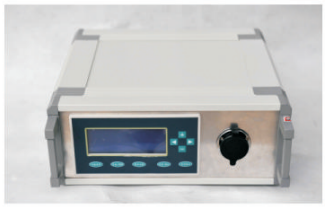
Description

The principle of ultrasonic welding by the ultrasonic digital generator 50/60 Hz current is converted into 15,20,30 or 40 kHz energy, even reach 70khz. The high frequency electrical energy is converted by the transducer is again converted into a mechanical movement of the same frequency, followed by the mechanical motion transmitted to the weld head through a set can change the amplitude modulator means. The welding head will be received by the vibration energy transmitted to the engaging portion of the workpiece to be welded, in the region, the vibration energy is by friction by conversion into heat, the plastic melts. Ultrasonic can not only be used to weld the hard thermoplastic fabrics and films can also be processed.

Applications

Ultrasonic generator is applied to all kinds of ultrasonic equipment, mainly with ultrasonic welding, ultrasonic cutting, ultrasonic chemical equipment and ultrasonic welding equipment such as non–woven fabric.

Item No.	Frequency	Power
HS–G–D15	15KHZ	1500W
		1800W
		2000W
		2600W
		3200W
		4200W
		5000W
HS–G–D20	20KHZ	1500W
		1800W
		2600W
		3000W
HS–G–D28	28KHZ	500W
		800W
		1000W
HS–G–D30	30KHZ	600W
HS–G–D35	35KHZ	500W
HS–G–D40	40KHZ	500W
HS–G–D60	60KHZ	200W
HS–G–D70	70KHZ	100W



	Analog generator	Digital generator
Circuit	Analog circuit, discrete components	Digital circuit, the chip control
Automatic search	×	√
Automatic frequency tracking	×	√
Frequency adjustment range	± 0.15 KHz	± 0.5 Khz
Power regulation	×	√
24 hours of continuous work	×	√
Non resonant condition	×	√
LCD	×	√
Add the PLC protocol	×	√
Automatic circuit protection	Bad, easy to cause the damage of components	Good
Repair method	Professional repair	Module replacement

Recommendation of ultrasonic machine

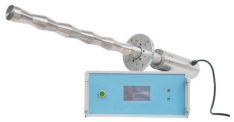
Industrial level

Ultrasonic Probe / Ultrasonic digital generator / Control system assembly / Reactor assembly / Rack and pipe fittings

Item No.	GS10	GS25	GS50	GS100	GS200	GS300
Annual output	10tons	25tons	30tons	100tons	200tons	300tons
Output Power	2000w	2000w	2000w	2000w	2000w	2000w
Total power	6000w (2000w*3)	12000w (2000w*6)	24000w (2000w*12)	48000w (2000w*24)	72000w (2000w*36)	96000w (2000w*48)
Frequency	20kHz ± 1kHz	20kHz ± 1kHz	20kHz ± 1kHz	20kHz ± 1kHz	20kHz ± 1kHz	20kHz ± 1kHz
Input voltage	220v or 380v, 50Hz	220v or 380v, 50Hz	220v or 380v, 50Hz	220v or 380v, 50Hz	220v or 380v, 50Hz	220v or 380v, 50Hz
Total volume	5m³	10m³	20m³	40m³	60m³	80m³

Recommendation of ultrasonic system (Dispersing type)

Item No.	S55B	S57B	S31B	S35B	S33B
Capacity	20L	30L	10L	30L	20L
Output power	1000W	1500W	500W	2000W	1000W
Main advantages	Uniformly dispersed, high Sonicating area				
Frequency	20kHz ± 1kHz				
Working type	Reactor / container		Recycling pipeline type		



Lab level

Recommendation of ultrasonic system (exfoliated type)

Item No.	S07B	S17B
Capacity	5L	20L
Output power	500W	2000W
Main advantages	High output intensity, high cavitation effect	
Frequency	20kHz ± 1kHz	

High-power ultrasonic metal melt treatment system

High-power ultrasonic metal melt processing system plays a important role in ultrasonic metal processing, ultrasonic grain refinement, ultrasonic metal solidification, ultrasonic exhaust bubbles, ultrasonic crystal, ultrasonic cavitation, ultrasonic casting, ultrasonic coagulating tissue, ultrasonic metal casting, etc.

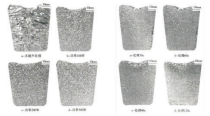
Features

* Intellectual property rights, domestic initiative;
* Temperature: maximum temperature of 800 ℃;
* Corrosion resistance: the use of high strength titanium alloy tool head;
* Power: The maximum radiated power single head up to 2500W;
* The effect is significant: between micro-molecular, direct effect, obviously;
* Easy to install: install via a standard butt flange, without changing customers' existing production equipment and processes;

Main applications

1, high-strength aluminum alloy, magnesium alloy casting;
2, aluminum, magnesium alloy bar, sheet metal production;
3, various alloy materials, and other crystalline rotor degassing;
4, metal matrix composites, high-strength aluminum piston casting;

Type	20K lab level		20K Industrial level		
Item No.	HSA-500	HSA-1000	HSA-1500	HSA-2000	HSA-2500
Power	500W	1000W	1500W	2000W	2500W
Dia. of probe	30mm	30mm	50mm	50mm	50mm
Input power	220V / 110V				



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ULTRASONIC SONOCHEMISTRY

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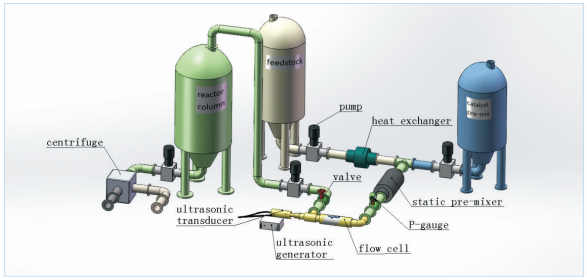
Ultrasonic Sonochemistry

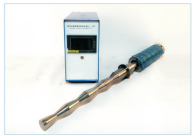
Sonochemistry is the application of ultrasonic to chemical reactions and processes. The mechanism causing sonochemistry effects in liquids is the phenomenon of acoustic cavitation.

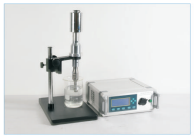
Cavitation, that is "the formation, growth and implosive collapse of bubbles in the liquid. Cavitational collapse produces intense local heating (5000K), high pressures (1000atm), and enormous heating and cooling rates(>109k/sec)" and liquid jet streams(400km/h).

Altrasonic ultrasonic laboratory and industrial devices are used in different application areas.

- Ultrasonic Mixing
- Ultrasonic Homogenizing
- Ultrasonic Extraction
- Ultrasonic Dispersion
- Ultrasonic Nano Size Encapsulation
- Ultrasonic Emulsification
- Ultrasonic Biodiesel Processor
- Ultrasonic cell crusher
- Ultrasonic Graphene production
- Ultrasonic degassing







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Ultrasonic perfect the graphene

The development of graphene industry demand high quality graphene urgently; (The traditional way of producing need to add more oxidant and reducing agent, while the ultrasonic exfoliation of graphite can greatly reduce the additive, greatly improve the purity and reduce the size of graphene.)

The large scale production of graphene;

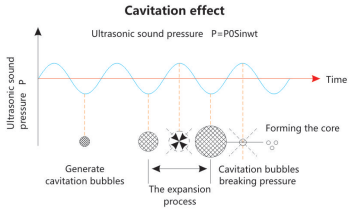
Before using Graphene. It is better to disperse by ultrasonic;

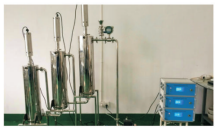
Ultrasonic dispersion for more stable graphene dispersion fluid.

In recently years, with its excellent performance and a variety of potential applications, graphene been developed fast. At the same time, people need a lot of high quality and complete structure graphene.This requires to improve the existing preparation method, explore new preparation path.And the development of preparation method require better ultrasonic equipment too.

Ultrasonic

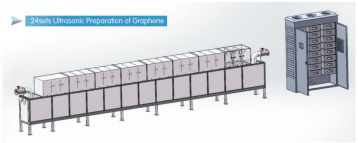
The principle of ultrasonic dispersion is make the ultrasound radiate in graphite oxide suspension, the liquid promptly flow produce a large number of tiny air bubbles, these tiny bubbles formed in the negative pressure zone along the longitudinal ultrasonic radiation and grow continuously, and quickly closed in the positive pressure area, this effect is known as "cavitation" phenomenon, in this process, closed bubbles can form thousands of instantaneous high pressure. And the instantaneous high pressure will constantly and continuously shock the graphene oxide, make graphene oxide peeling off quickly.





Theoretical basis

Some authorities and universities from home and abroad have published many references mentioned advantages of ultrasonic dispersion of graphene suspensions



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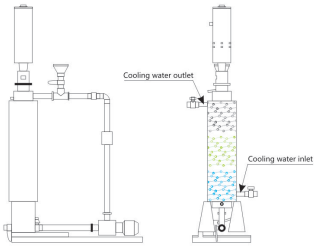
Graphene With Ultrasonic

Currently we use two step exfoliation can obtain high concentration graphene dispersion, second ultrasound in 30 hours reached the max concentration ---- 20 mg/ml, the instantaneous concentration as high as 63 mg/ml.

After using various methods, the graphite expansion and the space between graphene sheets increases, the Vader waals forces between inter-layers reduce, at the same time use the liquid phase exfoliation can make graphene production rate greatly increased, and also can use water as solvent to obtain graphene, has a broad industrial prospect.Up to now, several companies use this way to achieve large production of graphene.

Through ultrasonic equipment, the surface of graphene reach 500 ~ 1000 m2 / g, thickness in 0.55 ~ 3.74 nm, the purity is more than 95 wt %, straight in: 0.5 3 microns, layer number less than 10.



Reactor of ultrasonic system

Innovation

T caps use replaceable, solve the problem of the tool head cavitation, T caps normal working hours more than 800 hours.

Using the high-power ultrasonic transducer (1500w - 3000w), More stable performance, normal service life more than 10000 hours.

Use of the digitally controlled power, to ensure that all the time in the best condition.

Dumbbell-type tool head design, greatly improving the ultrasonic radiation power per unit area.

The integrated piping made of stainless steel #316.

Overall liquid flow-controllable

Use network-Based on CAN-bus technology, all working parameters can have room remote control.

Applications

300 Tons Ultrasonic Graphene processing system

Altrasonic

MEASURING INSTRUMENTS

Horn Analyzer

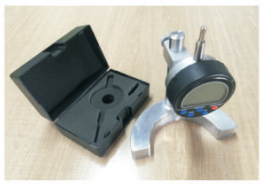
Impedance analyzer is the instrument applicable for measuring impedance–vs.–frequency and phase–vs.–frequency characteristics of complex impedance electrical components, as for instance: ultrasonic devices, piezoelectric ceramics and piezoelectric transducers for ultrasonic cleaners and ultrasonic plastic welders, underwater acoustic transducers, sensors, magnetostrictive transducers, and for many other industrial and medical applications.

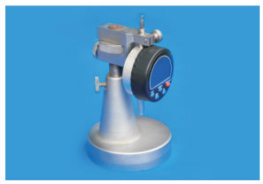
The instrument which can easily replace much more complex and more complicated, also many times more expensive instruments from Agilent/HP, as for instance: HP Impedance Gain–Phase Analyzer 4294A, Agilent E5100A, Network Analyzer, HP 3563A,Control System Analyzer etc. It is also very easy to use HS70A–80A (by engineers or ordinary production workers).

Item No	HS520A
Product feature	Portable, 8inch screen, Full touch screen
Dimension	L24cm，W19cm，H10cm
Frequency range	1KHz~500KHz
Measurement Index	All the parameters, the graph
Measurement Accuracy	< 0.5%
Measurement Speed	5s/one pass （600scan point）
Frequency Accuracy	± 10ppm
Phase Resolution	0.15 degree
Environment Temperature	10 ~ 40degree centigrade
Impedance Range	1Ω ~ 1MΩ
Frequency Step	0.1Hz ~ any
Power Supply	AC100V ~ AC250V，50 ~ 60Hz, 30W
Application	Ultrasonic device

Ultrasonic amplitude measuring instrument

Delicate design
Reasonable structure
Simple operation
Accurate measurement
Can replace the laser measuring device





Consistent and correct amplitude is one of the most important factors in achieving a high–quality ultrasonic weld. The Amplitude Gauge makes measuring and setting that amplitude easy.

Applications

Ultrasonic Amplitude Measuring Instrument is used to measure the amplitude of ultrasonic equipment.

Competitive Advantage

The measuring instrument of ingenious design, reasonable structure, simple operation, accurate measurement
Easy operation, wide applicability, no plug
Compact design, reliable work, can directly replace the laser measuring instrument
Quality assurance, sufficient stock, fast delivery

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Ultrasonic sound intensity measuring instrument

Description

This equipment is used for ultrasonic measurement of energy distribution and frequency in ultrasonic cleaning baths and ultrasonic sonochemistry process.
Our instruments provide an accurate and repeatable measure that incorporates such as energy intensity, ultrasonic waveform, frequency, max, min, time, etc.

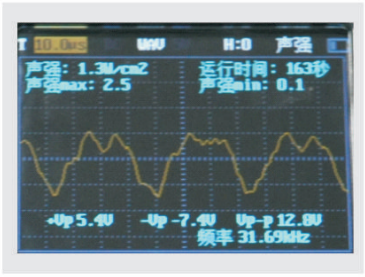
Advantages

Accurately measuring energy and frequency in ultrasonic cleaning baths, emulsification, extraction, dispersion effect.

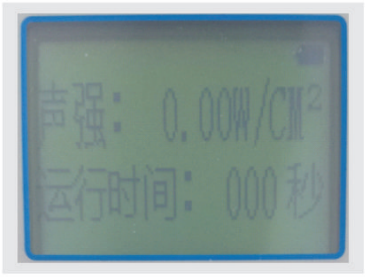
Reasonable structure, simple operation.

Accurate measurement.

Rechargeable design, pckaging is simple and easy to carry.



Precision data display



Standard data display

1 Automatic reset function, to ensure the sound intensity in a reasonable set of measurements.
2 digital / analog clock and calendar display.
3 storage / read up to 160 groups of sound intensity measurement parameters.
4 Achieve one click automatic measurement,automatic display of the sound value and waveform.
5 digital readout sound intensity, running time, Vp–p, +Vp, –Vp, F, T, WAV and setting parameters.
6 USB data transmission interface, easy to achieve with the computer data according to the format.Txt.
7 320 x 240 LED backlight with 3.5 inch color LCD display
8 built–in 2300mAh lithium battery pack, outside with AC power adapter.

1 LCD screen,can show the data immediately,easy to read
2 2Rechargeable Battery

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ULTRASONIC NEBULIZER

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Description

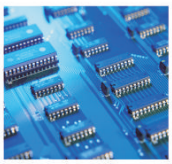
Ultrasonic spray (FOG) is to use the energy of ultrasonic water or liquid scattered, forming several microns to 100 microns in size of particles, used for air humidifying, granulating, mixing liquid, promote chemical reactions, spraying, molten metal powder etc. By breaking apart agglomerated particles as they travel down the nozzle body due to continuous ultrasonic vibrations along the length of nozzle, resulting in the most effective use of functional particles.

Applications

1, for accurate spray application, very easy to control the shape of the injection molding.
2, reduce waste and air pollution caused by the spray, energy saving and environmental protection.
3, high–performance titanium and stainless steel.
4, no pressure, no noise, no wear and nozzle blockage problems.
5, low energy consumption, high atomization efficiency.
6, unrestricted media, and even sewage, chemical liquid, oil can spray mucus.
7, spray volume size can be adjusted.
8, can work under high temperature of hundreds of degrees, the maximum temperature exceed 500 ℃.

Applications

- Semiconductor / Electronics
- It is displayed in the semiconductor wafer and flat panel spraying photographic developer
- Circuit board precision spray fluxing
- Lubricating computer hard drive
- Pharmaceutical / Biomedical
- Spraying blood collection tubes
- Drug spray drying
- Diagnostic test device spraying
- Drug micro–encapsulation
- General / Industrial
- Atomization humidification
- Chemical mixing, production
- Spray drying granulation
- Spray paint
- Metal milling
- Spray chemical reaction vessel






Technique Parameters

Frequency	Power	Atomizing volume	Dia. Average Particle	Weight	Type	Replacement
15khz	500	150	62	12		
30khz	100	50	39	2.5		Lechler US50
50khz	30	2	28	0.5	Mushroom Type	Sono–Tek 8700–48
50khz	30	0.5	28	0.5	Cone Type	
50khz	30	0.5	28	0.5	Long Nozzle	Sono–Tek 8700–48H

Altrasonic

Ultrasonic Embedding Unit

Ultrasonic smart card welder, Which is also known as smart card antenna welding machine, smart card spot welding machine, smart card implantable antenna machine, is a professional device for the production of smart cards/ID cards, widely used in welding sheet positioning, antenna implanted. In recent years, it is an important application of ultrasonic welding.

Our digital ultrasonic smart card welder has been upgraded in the matching, even if implanting head appeared certain wear, driving power generator to quickly search and find the frequency of implanting head accurately, so as to ensure the stability of the whole ultrasonic system. Prolong the service life of the welding head, saves the loss for the majority of users.

The properties

Super quality and stable performance.
Automatically adapt to frequency adjustment.
Reasonable structure and compact design.
Can be used in combination with 8 or more sets welding horn.
Multi-point power control and minor energy adjustments, and convenient operation.
Extend the product working hours compared with traditional products.
Evenly energy output without welding jumper or false welding.

INTRODUCTIONS OF 60KHZ & 70KHZ

Frequency(KHz)	60	70
Power(W)	100	100
Generator	Digital generator V6.6 or analog generator ZJS-100	Digital generator V6.6
Size	25X100mm	25X105mm
Trigger	External control or manual control	
Threading hole	0.3mm or 0.5mm	
Power form	Single use or eight sets combination	
Weight	0.2kg/set	

Altrasonic

Recommendation Of The Popular Item

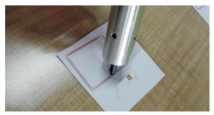
Type	YPD77
Frequency (Khz)	60KHz
Trigger	External control or manual control
Welder head	wear-resisting alloy steel above HRC55°
Threading hole	Φ0.3mm or Φ0.5mm or no hole
Power code	2M or 5M
Generator	Digital generator V6.6 or analog generator ZJS-100
Generator Size	280*320*140mm(V6.6) 280*320*150mm ZJS-100
Cover dimension	Φ25X100mm
Cover material	Nylon or aluminum
Cooling way	compressed air cooling (Φ4mm conduit)
Speed	0.1-0.3m/s
Thread fixed cycle	length 60000 m/s

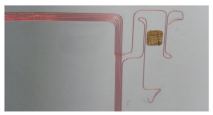
INTRODUCTIONS OF THE POWER SUPPLY UNITS

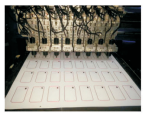
Analog generator

Digital generator

	Analog generator ZJS-100	Digital generator v6.6
Matching requirements	same generator with correspondent welding horn	Can match any welding horn of same type
External generator	—	●
Frequency search	—	●
Frequency tracking	●	●
LCD display	—	●
Digital control	—	●
Power range	80%-100%	20%-100%
Power accuracy	10%	1%







Altrasonic

ULTRASONIC SPOT WELDING

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Altrasonic

Ultrasonic Spot Welder

Ultrasonic spot welding is an assembly technique for joining two thermoplastic components at localised points without the necessity for preformed holes or an energy director. Spot welding produces a strong structural weld and is particularly suitable for large parts, sheets of extruded or cast thermoplastic, and parts with complicated geometry and hard-to-reach joining surfaces.

Metal shell series
Unique metal shell, greater strength.
High quality assurance, more powerful than similar products on the market doubled.
NC power supply, automatic search frequency,power adjustable from 50-100%
Isolation technology, make the product design more human.

Nylon shell series
Nylon shell, portable, easy to operate.
High quality, price reasonable

Main characteristics

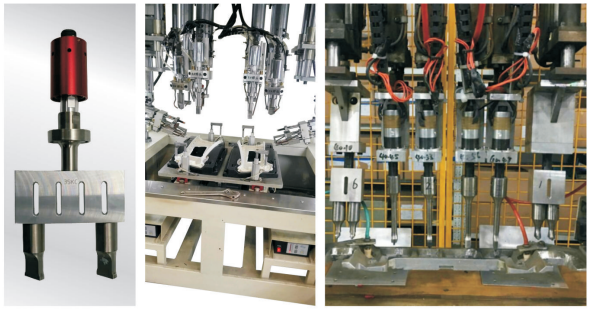
1. The product design is exquisite, reasonable structure, convenient hand-held operation.
2. The digital power supply and installation of professional cooling system, enhance the stability of equipment.
3. Can be used for thermoplastic plastic welding, riveting and metal parts and plastic parts of the mosaic and pressing process. It can completely replace the process of organic melting agent paste. Has the advantages of low energy consumption, high efficiency, no deformation, no pollution, welding firm, convenient operation etc..
4. Not only can be used to weld metal, hard plastic, can also be processed fabrics and films. According to the welding machine product riveting point size and welding requirements of portable ultrasonic welding, ultrasonic welding head replacement of different, is quick and convenient, and the cost is relatively special automobile door ultrasonic welding machine is much lower, easy to meet the needs of customers.

Altrasonic

Advantages

Fast welding speed, usually can be completed within 1 seconds.
High welding strength, good sealing performance, can maintain and material strength.
Effective energy saving, healthy environmental protection.

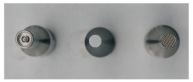
Series	Pistol type					Pen type		
Item No.	HS61B-HB	HS45B-CB	HS42B-HB	HS43B-HB	HS41B-HB	HS47B-CB	HS51B-CB	HS59B -CB
Frequency	35k	28k	28k	28k	20k	28k	28k	28k
Power	500	300	700	800	1000	300	700	800
Welding head	≤10mm	≤10mm	≤12mm	≤12mm	≤15mm	≤10mm	≤12mm	≤12mm
Dia. Of shell	51mm			64mm		40mm	45mm	60mm
The handle size	100mm×45mm×32mm					——	——	——
Net Weight	0.5kg	0.5kg	0.5kg	1.2kg	1.2kg	0.4kg	0.5kg	1.0kg
Digital generator	●	—	●	●	●	—	●	●
Analog generator	●	●	●	●	●	●	●	●



Altrasonic

Applications

Plastic hardware riveting, welding, embossing, folder location technology, decorative ribbons, spot welding, rivet welding etc.
Electronic and electrical appliances, auto parts, clothing, packaging, textile industry, environmental protection industry, medical equipment, toy industry, communications equipment and other industries.



Item No.

Part Name	ITEM NO.	Suitable materials	Welding type
28K spot welder-300W	HS45B-CB	PVC、PP、PE …	Riveting, welding, embossing
35K spot welder-500W	HS61B-HB	ABS、HIPS、PMMA、MPPO…	Riveting, welding, embossing
28K spot welder-700W	HS42B-HB	Polyacetal、PC…	Riveting, welding, embossing
28K spot welder-800W	HS43B-HB	PC、PSU、PA…	Riveting, welding, embossing
20K spot welder-1000W	HS41B-HB	NYLON、PE、PBT…	Riveting, welding, embossing
28K spot welder-300W(pen type)	HS47B-CB	PVC、PP、PE …	Riveting, welding, embossing
28K spot welder-700W(pen type)	HS51B-CB	Polyaceta、PC…	Riveting, welding, embossing
28K spot welder-800W(pen type)	HS59B-CB	PC、PSU、PA …	Riveting, welding, embossing

Replacement Item

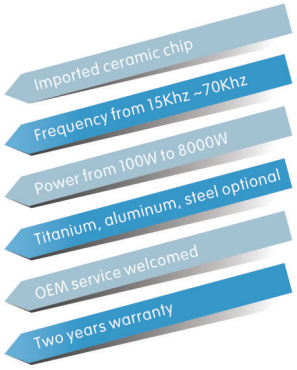
Item No.	Connect screw(Size)	Ceramic diameter (mm)	Qtyof ceramic (PC)	frequency (khz)	Resistance (Ω)	Color of the ceramic	Capacitance	Input power (W)
Branson CJ20	1/2–20UNF	50	6	19.90	10	Yellow	20000	3300
Branson 502	1/2–20UNF	50	6	19.90	10	Yellow	20000	3300
Branson402	M8*1.25	25	4	39.60	10	Yellow	4200	800
Branson 4TH	M8*1.25	25	4	39.90	10	Yellow	4200	800
Branson 902	1/2–20UNF	40	4	19.85	10	Yellow	8000	1100
Branson 922J	1/2–20UNF	50	6	19.90	10	Yellow	20000	2200
Dukane 40k	M8*1.25	35	2	39.80	5	Grey	3000	800
Dukane 20k	1/2–20UNF	50	2	19.50	10	Yellow	11000	2000
Dukane 110–3122	1/2–20UNF	50	4	19.50	10	Yellow	11000	2000
Dukane 110–3168	1/2–20UNF	45	2	19.50	10	Yellow	4000	800
Rinco 35K	M8*1.25	25	2	34.80	50	Yellow	2000	900
Rinco 20K	M16*2	50	2	19.90	50	Yellow	5000	3000
Telsonic 35K	M8*1.25	25	4	35.00	5	Yellow	4000	1200
Telsonic 20K	1/2–20UNF	50	4	20.00	3	Yellow	10000	2500

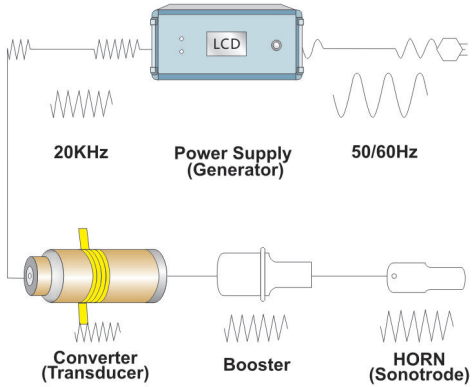
Special items can customized for you...

ULTRASONIC TRANSDUCER / CONVERTER

Piezoelectric transducer is the electric charge that accumulates in certain solid materials in response to applied mechanical stress. It is key point of the ultrasonic welding /cutting /sealing /jointing /bonding equipment.
The transducer decide the property of the machine. We can supply transducer, also transducer with house and booster.

We can supply Ultrasonic welding transducer /converter to replace some famous brand , such as Branson / Telsonic / Rinco / Dukane and obtained well reputation.
Now we are developing customize transducer for whole machine company, welcome to inquire OEM transducers.





Transducer is the core part of the ultrasonic whole machine. Ceramic chip is the key part for transducer , so we insist on using the best ceramic chip.

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The columnar type
(stabilized power and widely application)

Technical parameters

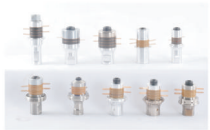
Item No.	Connect screw	Ceramic diameter (mm)	Qty of ceramic	frequency (khz)	Capacitance(nF)			Input power (W)	Max. Amplitude (um)
					Yellow	Grey	Black		
7015-4Z	M20 X 1.5	70	4	15	12.5-14	/	17-19	2600	16
6015-4Z	M20 X 1.5 or M16 X 1	60	4	15	8-10	10-12	12.5-13.5	2200	16
6015-6Z	M20 X 1.5	60	6	15	14-16	/	19.5-21	2600	16
5015-4Z	M18 X 1.5	50	4	15	12-13	13-14.3	15-17	1500	12
4015-4Z	M16 X 1	40	4	15	10-11	10.5-11.5	/	700	12
5520-4Z	M18 X 1	55	4	20	10-11	10.5-11.5	14.3-20	2000	10
5020-6Z	M18 X 1.5	50	6	20	18.5-20	/	22.5-25	2000	10
5020-4Z	M18 X 1.5	50	4	20	11-13	13-15	15-17	1500	10
5020-2Z	M18 X 1.5	50	2	20	6-6.5	6.5-7	8-9	800	10
4020-4Z	1/2-20UNF	40	4	20	9-10	9.5-11	/	900	8
4020-2Z	1/2-20UNF	40	2	20	/	4.8-5.5	/	500	8
5025-2Z	M12 X 1	50	2	25	5-5.6	/	7-8	500	6
3828-2Z	1/2-20UNF	38	2	28	3.8-4.3	/	/	500	6
3828-4Z	1/2-20UNF	38	4	28	7.6-8.5	/	10.5-12	800	6
3028-2Z	3/8-24UNF	30	2	28	2.7-3.1	3.4-3.8	/	400	10
2528-4Z	M8 X 1	25	4	28	3.9-4.3	/	/	400	10
2528-2Z	M8 X 1 or 3/8-24UNF	25	2	28	1.95-2.2	2.2-2.5	/	300	10
3030-4Z	M10	30	4	30	/	6.2-6.9	/	700	6
3035-2Z	3/8-24UNF	30	2	35	2.7-3.1	/	/	500	6
3035-4Z	M10 X 1	30	4	35	5-6.2	/	/	800	4
2535-2Z	M8 X 1	25	2	35	1.9-2.2	/	/	400	4
2540-2Z	3/8-24UNF	25	2	40	/	2-2.3	/	500	4
3040-4Z	M10	30	4	40	5.5-6.2	/	/	1000	4
3050-4Z	M8	30	4	50	5.5-6.2	/	/	600	4
1560-2Z	M6 X 0.75	15	2	60	/	/	0.7-0.8	100	4
1070-2Z	M4	10	2	70	/	/	0.35-0.4	100	2




The upside-down trumpet type
(Larger amplitude and bigger output power, high-sound intensity and high-power density application)

Technical parameters

Item No.	Connect screw	Ceramic diameter (mm)	Qty of ceramic	frequency (khz)	Capacitance(nF)			Input power (W)	Max. Amplitude (um)
					Yellow	Grey	Black		
7015-4D	M20 X 1.5	70	4	15	12.5-14	/	17-19	2600	18
6015-4D	M18 X 1.5	60	4	15	9-10	10-11	/	2200	18
6015-6D	1/2-20UNF	60	6	15	19-20.5	/	23-25	2600	18
5015-6D	1/2-20UNF	50	6	15	17-19	/	23-25	2000	16
5020-4DS	1/2-20UNF	50	4	20	11-12	12-13.5	/	1300	12
5020-4D	1/2-20UNF	50	4	20	11-12	12-13.5	14.5-16	1500	12
5020-6D	1/2-20UNF	50	6	20	19-21	/	22.5-25	2000	12
4020-6D	1/2-20UNF	40	6	20	13.5-15	/	/	1500	10
4020-4D	1/2-20UNF	40	4	20	8.5-9.3/ 9.5-10.5	10-11	10.5-11.5	900	10
3020-6D	3/8-24UNF	30	6	20	8-9	/	/	600	9
3030-4D	M8 or M8 X 1	30	4	30	/	6.2-6.9	/	800	8
3535-2D	M8 X 1	35	2	35	/	/	4.5-5	600	6
3535-4D	M8 X 1	35	4	35	6.6-7.4	/	9-10	1000	6
3035-4D	1/2-20UNF	30	4	35	5.5-6.2	/	9.2-10.2	800	6
2535-4D	M8	25	4	35	3.9-4.3	/	/	500	6
3040-2D	M8	30	2	40	/	3.4-3.8	/	500	6
2540-4D	M8	25	4	40	4.5-5.3	/	/	500	5
2040-2D	M8	20	2	40	1.1-1.3	1.15-1.35	/	300	4
replacement 402	1/2-20UNF	40	4	20	7.8-8.5	/	/	900	20
replacement 502	1/2-20UNF	50	4	20	11.5-12.5	/	/	2000	20
replacement CJ20	1/2-20UNF	50	6	20	19-21	/	/	4000	20
5020-8Z	1/2-20UNF	50	8	20	28-30	/	/	6000	20
replacement CV231	M8	25	4	38.3-39.0	3.5-4.5	/	/	500	/
replacement CV3510	M8	32	2	36.2-37.0	3.2-4	/	/	400	/
replacement CB35A15A	M8	32	2	36.5-37.5	3.3-4	/	/	400	/

Altrasonic

Ultrasonic Sewing Machine

35Khz Automatic Ultrasonic Sealing Machine , Heat Sealing Equipment CE

Description

The work method of Seamless sewing part is completely imitating traditional sewing machine. The biggest characteristic is the ultrasonic transmit horn work direction is same with the sewed cloth. Which will make the sewed point of the cloth are even, flat and fastness. Through suitable design, it can reach perfect sewing effectiveness.

Applications

Apply to lace clothing, ribbon,trim,Filter, Lacing and quilting,decoration products, handkerchief, tablecloth, curtain, bedspread, pillowcase, quilt cover, tent, raincoat, disposable operating coat and hat, disposable mask, non–woven fabric bags and so on.

Model	W–35R
Frequency	35KHz
Power	800W
Rotary Welding Horns Width	12mm
The horn’ s surface hardness	More than HRC60
Real–time Display	Working frequency and working current
Synchronizing wheel specifications	46XL Trapezoidal Tooth, Width 16mm
Synchronizing Belt Matched	Length 730mm / Width 12mm
Allowable Rotation Speed	100r/min
Power Supply	Analog and Digital Generator for selection
Rotary Wheel	Titanium material and Ceramic finish, more wear–resisting

Ultrasonic Metal Welding Machine

Description

ultrasonic metal welding machine is the high frequency vibration between the work piece surface, until the contact surface heating and welding together.

Principle

By using the ultrasonic high frequeccy vibration principle, the ultrasonic metal welder converts the ultrasonic vibration energy into friction energy to transfer the metal’ s surface. Under condition of producing the heat by the friction and putting a pressure to the metal, The metal pieces will be fused.

Applications

Welding solar plate, welding thin metal materials, and other rotary welding application.

Frequency	20Khz
Output Power	2000W
Voltage	220V
Switch	Handle or foot switch
Power Adjusting	Step or continuous
Working Time Control	24 Hours
Weight	20–30KG (determined by the size of the horn)
Generator	Digital Generator

Altrasonic

ULTRASONIC WELDING APPLICATION

Description

Ultrasonic welding equipment can be easily customized to fit the exact specifications of the parts being welded. The parts are sandwiched between a fixed shaped nest (anvil) and a sonotrode (horn) connected to a transducer, and a ~20 kHz low–amplitude acoustic vibration is emitted. (Note: Common frequencies used in ultrasonic welding of thermoplastics are 15 kHz, 20 kHz, 30 kHz, 35 kHz, 40 kHz and 70 kHz). When welding plastics, the interface of the two parts is specially designed to concentrate the melting process. One of the materials usually has a spiked energy director which contacts the second plastic part. The ultrasonic energy melts the point contact between the parts, creating a joint. This process is a good automated alternative to glue, screws or snap–fit designs. It is typically used with small parts (e.g. cell phones, consumer electronics, disposable medical tools, toys, etc.) but it can be used on parts as large as a small automotive instrument cluster.

Applications

Toy industry: such as toy gun, water gun, telephone and rag baby etc.
Electronic industry: The gum case of watch, nylon watch band, calculator, sound box wraps hull, cell phone battery etc.
Auto industry.
Packing industry: Disguise box, PVC packing box, toothpaste tube etc.
General business: The typewriter color take, video cassette rack, tape box, computer disk etc.

Item No	HS–X20P	HS–X15P
Frequency	20Khz	15Khz
Power	1500W	3300W
Voltage	200–240V, Alternating current	200–240V,Alternating current
	50–60hz, Single phase	50–60hz, Single phase
Electric current	10A	20A
Range of welding time	0.05–10/sec	0.05–10/sec
Environment Temperature	5–50℃	5–50℃
Air supply requirements	Clean dry compressed air	Clean dry compressed air
	maximum pressure 7kg	maximum pressure 7kg
Maximum pressure	1.96KN	2.89KN
Maximum stroke	100MM	100MM
Beats	80/Min	50/Min
Triggered Dynamic range	67–890N	135–990N
Weight	66Kgs	68Kgs
Dimension	476mm(L)*736mm(W)*1524mm(H)	476mm(L)*736mm(W)*1524mm(H)

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Thermoplastic Material Amplitude Reference Guide (microns)

Resin	Frequency			
Amorphous Type	15KHz	20KHz	30KHz	40KHz
ABS	36–84	30–70	24–56	18–42
ASA	36–85	30–71	24–57	18–43
Polycarbonate（PC）	48–96	40–80	32–64	24–48
PC/ABS Alloy	72–120	60–100	48–80	36–60
Polycarbonate/Polyester alloy	60–120	50–100	40–80	30–60
Polyetherimide（PEI）	84–120	70–100	56–80	42–60
Polyether Sulfone（PES）	84–120	70–100	56–80	42–60
PMMA	48–84	40–70	32–56	24–42
Polyphenylene Oxide (PPO)	60–108	50–90	40–72	30–54
polystyrene (PS)	36–84	30–70	24–56	18–42
Polysulfone (PSU)	84–120	70–100	56–80	42–60
Polyvinyl Chloride（PVC）	48–96	40–80	32–64	24–48
Acrylonitrile–styrene Copolymer（SAN）	36–84	30–70	24–56	18–42
Semi–crystalline	15KHz	20KHz	30KHz	40KHz
Cellulose(CA,CAB,CAP)	72–120	60–100	48–80	36–60
Liquid Crystal Polymer(LCP)	84–144	70–120	56–96	42–72
Copolyester	84–144	70–120	56–96	42–72
Polyformaldehyde (POM)	84–144	70–120	56–96	42–72
Polyamides (PA)	84–144	70–120	56–96	42–72
Thermoplastic Polyester (PBT)	84–144	70–120	56–96	42–72
Polythylene Terephthalate(PET)	96–144	80–120	64–96	48–72
Polyether–ether–ketone(PEEK)	84–144	70–120	56–96	42–72
Polyethylene (PE)	108–144	90–120	72–96	54–72
Polyphenylene Sulfide (PPS)	96–144	80–120	64–96	48–72
Polypropylene (PP)	108–144	90–120	72–96	54–72

Altrasonic

Thermoplastic Intermiscibility of Ultrasonic

	ABS	ABS /PC Alloy	Polyform-aldehyde (POM)	Acrylo-nitrile (PMMA)	Acrylic Copoly-mer	Butadiene -styrene (BS)	Fluoropo-lymers	Nylon	The Phenyl, Oxide based Resin	Polyamide Imide (Torlon)	Polycar-bonate (PC)	Thermoplastic Polyester PBT/PET	Polyeth-ylene PE	Polymeth-ylpentene (TPX)	Polyphen-ylene Sulfide PPS	Polypr-opylene (PP)	Polyst-yrene (PS)	Poly-sulfone (PSU)	Polyvinyl Chloride (PVC)	SAN-NAS-ASA
ABS	■	■		■	○						■								○	○
ABS/PC Alloy	■	■		○							■									
Polyformaldehyde(POM)			■																	○
Acrylonitrile(PMMA)	■	○		■	○				○		○						○			○
Acrylic Copolymer	○			○	■												○			
Butadiene-styrene(BS)						■														
Fluoropolymers							■													
Nylon								■												
The Phenyl, Oxide based Resin				○					■		○						■			○
Polyamide Imide(Torlon)										■										
Polycarbonate(PC)		■		○					○		■							○		
Thermoplastic Polyester (PBT/PET)												■								
Polyethylene(PE)													■							
Polymethylpentene(TPX)														■						
Polyphenylene Sulfide(PPS)															■					
Polypropylene(PP)																■				
Polystyrene(PS)																	■			
Polysulfone(PSU)					○	○			■									■		○
Polyvinyl Chloride(PVC)	○										○			○					■	
SAN-NAS-ASA	○			○	○				○								○			■

■–Miscibility ○–Miscibility in some cases