

ULTRASONIC[™] SERIES

超声整机系列

35

超声整机系列 / ULTRASONIC SERIES



我公司拥有强大的技术研发团队，新的研制产品和定制产品未编入在本样册中，敬请见谅！

Ultrasonic Spot Welder

超声波手焊枪

产品介绍

手持式超声波焊接枪（简称超声波手焊枪），也称超声波点焊机，可用于热塑性材料的焊接，根据不同的焊接工艺可更换焊头，用于铆焊、点焊、嵌入、切割等，超声波焊接是一种先进的生产加工技术，用来加工处理热塑性塑料配件，及一些合成构件。

Product introduction

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, which is particularly suitable for large parts, sheets of extruded or cast thermoplastic, and parts with complicated geometry and hard-to-reach joining surfaces.

主要特性

- 产品设计结构紧凑、外形美观、工作稳定、安装方便。
- 可用于热塑性塑料制品的焊接、铆接以及金属件与塑料件间的镶嵌和压边工艺。已经完全替代了有机熔点剂粘贴的工艺。具有能耗低、效率高、不变形、无污染、焊接牢固、操作方便等特点。
- 不仅可以被用来焊接金属、硬热塑性塑料，还可以加工织物和薄膜等。手持式超声波焊接枪可根据待焊接产品的铆点尺寸大小及焊接要求，更换不同的超声波焊头，既快捷又方便，而且成本相对专用汽车门板超声波焊接机要低得多，方便满足不同客户的需求。

The properties

- Compact design, reasonable structure, work stable, safe and convenient operation.
- Low energy consumption, high efficiency, no deformation, no pollution.
- Widely application to meet customer needs.

应用领域

- 塑料五金的铆接，点焊，压花，文件夹定位等工艺，装饰、缎带花点焊熔接等
- 电子电器、汽车配件、服装包装、纺织行业、环保行业、医疗器械、玩具行业、通信器材等。

Application

- 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 etc.

金属外壳系列

- 铝合金精铸外壳，强度高，散热性能好，极大的延长产品使用寿命。
- 高科技表面技术处理，耐腐蚀、抗冲击，不生锈。
- 采用成功高品质换能器，功率比市场上同类产品提升近一倍。
- 加装专业冷却系统，大大提升了产品稳定性，
- 数控电源驱动，自动搜频，功率100%可调。
- 专业的隔震技术处理后设备更加轻巧，焊接更加精确。

Metal shell series

- Unique aluminum alloy shell, excellent heat dissipation performance, greatly improving product life.
- High-tech surface treatment, corrosion resistance, impact resistance, no rust.
- High quality transducer, powerful than similar products.
- Professional cooling system, improve the stability of equipment.
- NC power supply, automatic search frequency, power adjustable from 50-100%
- Isolation technology, make the product design more accurate.



尼龙外壳系列

- 尼龙材质外壳，轻便小巧，便于操作。
- 品质高端，价格经济。
- 工作稳定，使用安全。
- 整体携带便捷，适用范围更广。

Nylon shell series

- Nylon shell, portable, easy to operate.
- High quality, price reasonable.
- Work stable, safe to use.
- Convenient to carry, widely used.



35k 手枪式500W
35K pistol 500W



28K 手枪式700W
28K pistol 700W



28k 手枪式800W
28K pistol 800W



20K 手枪式900W
20K pistol 900W



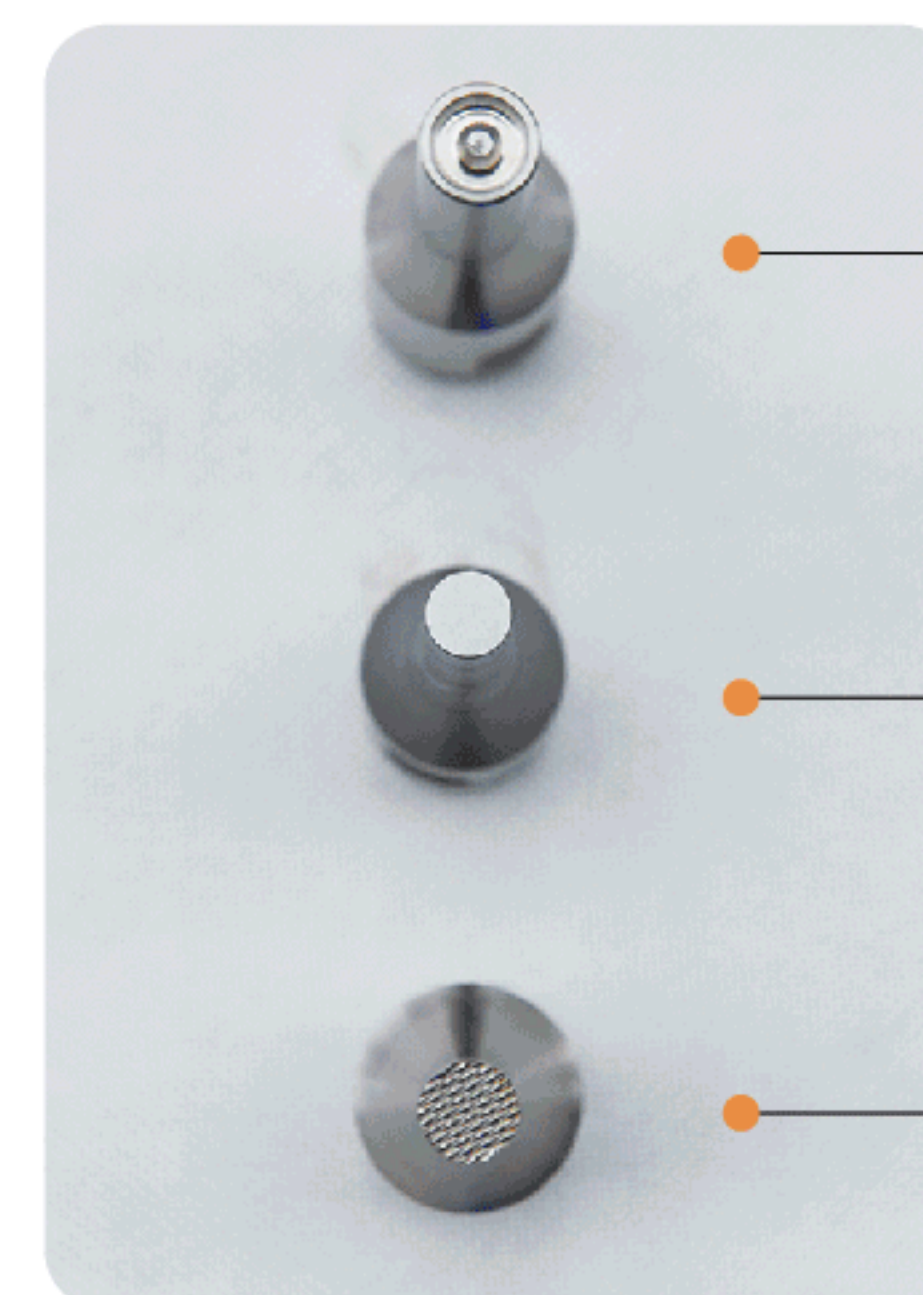
28K 直握式300W
28K pen type 300w



28K 直握式800W
28K pen type 800W

规格参数 Specification parameter

分类 Classification	手枪式 pistol type					直握式 pen type		
	频率 Frequency(KHz)	35	28	28	28	20	28	28
功率 Power(W)	500	300	700	800	900	300	700	800
适配焊头直径 Welding Head	<10mm	<10mm	<10mm	<12mm	<12mm	<10mm	<12mm	<12mm
外罩直径 Dia.Of Shell	51mm	51mm	51mm	64mm	64mm	40mm	45mm	60mm
枪柄尺寸 The handle Size	100mmx45mmx32mm					—	—	—
重量 Weight	0.5kg	0.5kg	0.5kg	1.2kg	1.2kg	0.4kg	0.5kg	1.0kg
数控驱动电源 Digital generator	●	—	●	●	●	—	●	●
模拟驱动电源 Analog generator	●	●	●	●	●	●	●	●
适用材料 Application	ABS,HIPS, PMMA,MPPO	PVC,PP,PE	Aldehyde-resin,pc	PC,PSU,PA	Nylon,PE, PBT	PVC,PP,PE	Aldehyde-resin,pc	PC,PSU,PA
焊接类型 welding type	铆焊, 点焊, 压纹 rivetweld,spot welding,embossed welding							



铆焊工具头
Rivet welding

点焊工具头
Spot welding

压模工具头
Embossing welding

Power equipment

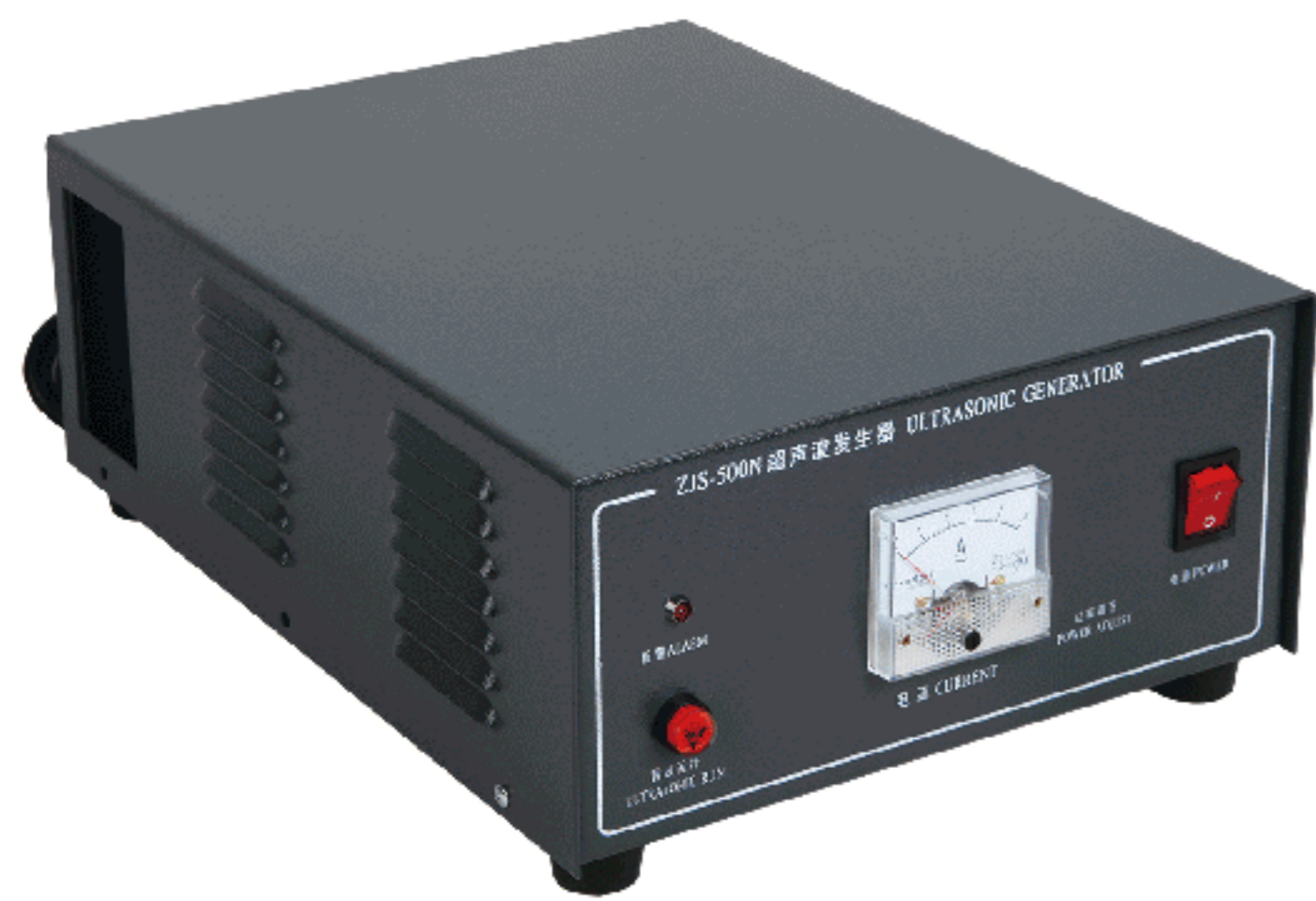
电源设备



ZJS-100

型号 Type	适用频率 Applicable frequency	晶功率调节 Power regulation		最大功率 max power
	(kHz)	分档 in steps	连续 continuous	(W)
ZJS-100	40-60	✓	—	500

适用范围：多功能切割刀、喷雾器、埋线器。
Application: ultrasonic cutter, Atomizer, welding smart cards.



ZJS-500N

型号 Type	适用频率 Applicable frequency	晶功率调节 Power regulation		最大功率 max power
	(kHz)	分档 in steps	连续 continuous	(W)
ZJS-500N	28-40	✓	—	1000

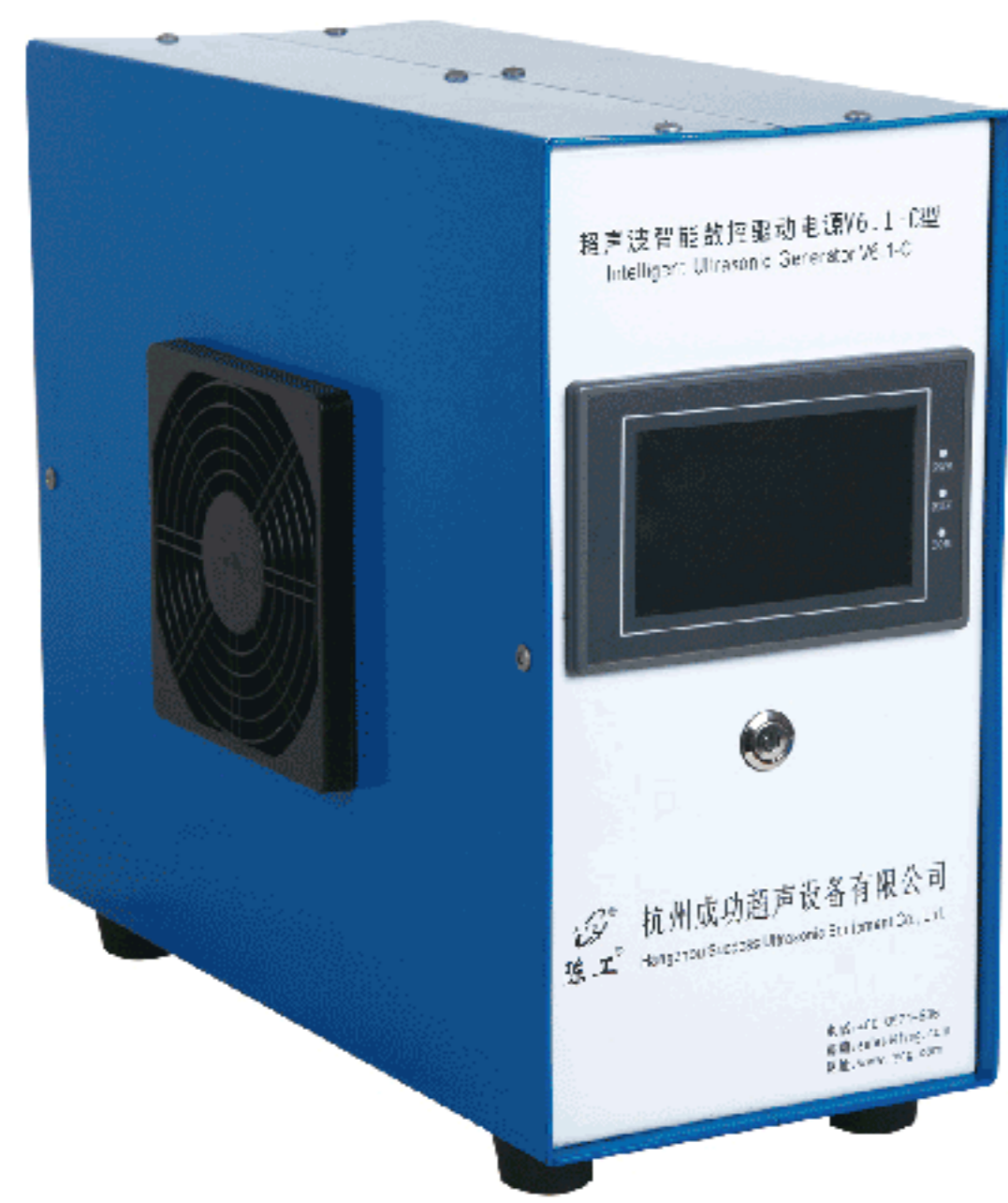
适用范围：手焊枪、缝纫机芯、28-40k焊接、切割设备。
Application: hand-held welder, sewing device, 28-40K welding machine, cutter.



ZJS-2000

型号 Type	适用频率 Applicable frequency	晶功率调节 Power regulation		最大功率 max power
	(kHz)	分档 in steps	连续 continuous	(W)
ZJS-2000	15-20	✓	—	3000

适用范围：15-20k焊接、切割设备。
Application: 15-20Khz welding machine, cutter.



V6.1

型号 Type	适用频率 Applicable frequency	晶功率调节 Power regulation		最大功率 max power
	(kHz)	分档 in steps	连续 continuous	(W)
V6.1	15-70	—	✓	5000

适用范围：15-40k焊接、切割设备,声化学系统, 70K智能卡埋线器。
Application: 15-40K welding machine, cuttiner machine, sonochemistry system, 70K smart card welder.



V6.3

型号 Type	适用频率 Applicable frequency	晶功率调节 Power regulation		最大功率 max power
	(kHz)	分档 in steps	连续 continuous	(W)
V6.3	15-40	—	✓	2600

适用范围：15-40k焊接、切割设备, 声化学系统。
Application: 15-40K welding machine, cuttiner machine, sonochemistry system.

Ultrasonic Sewing machine

超声波缝纫机芯

产品介绍

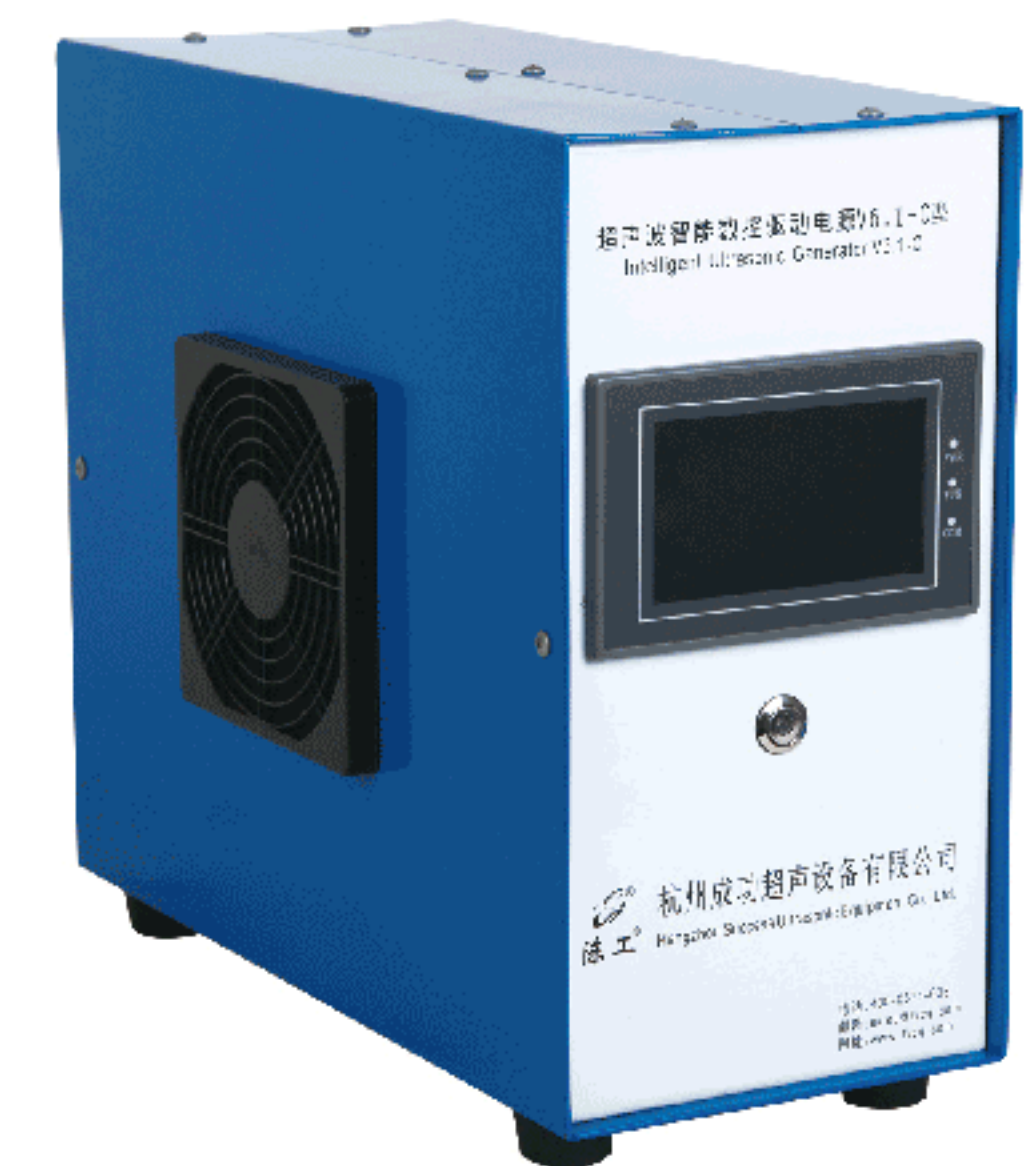
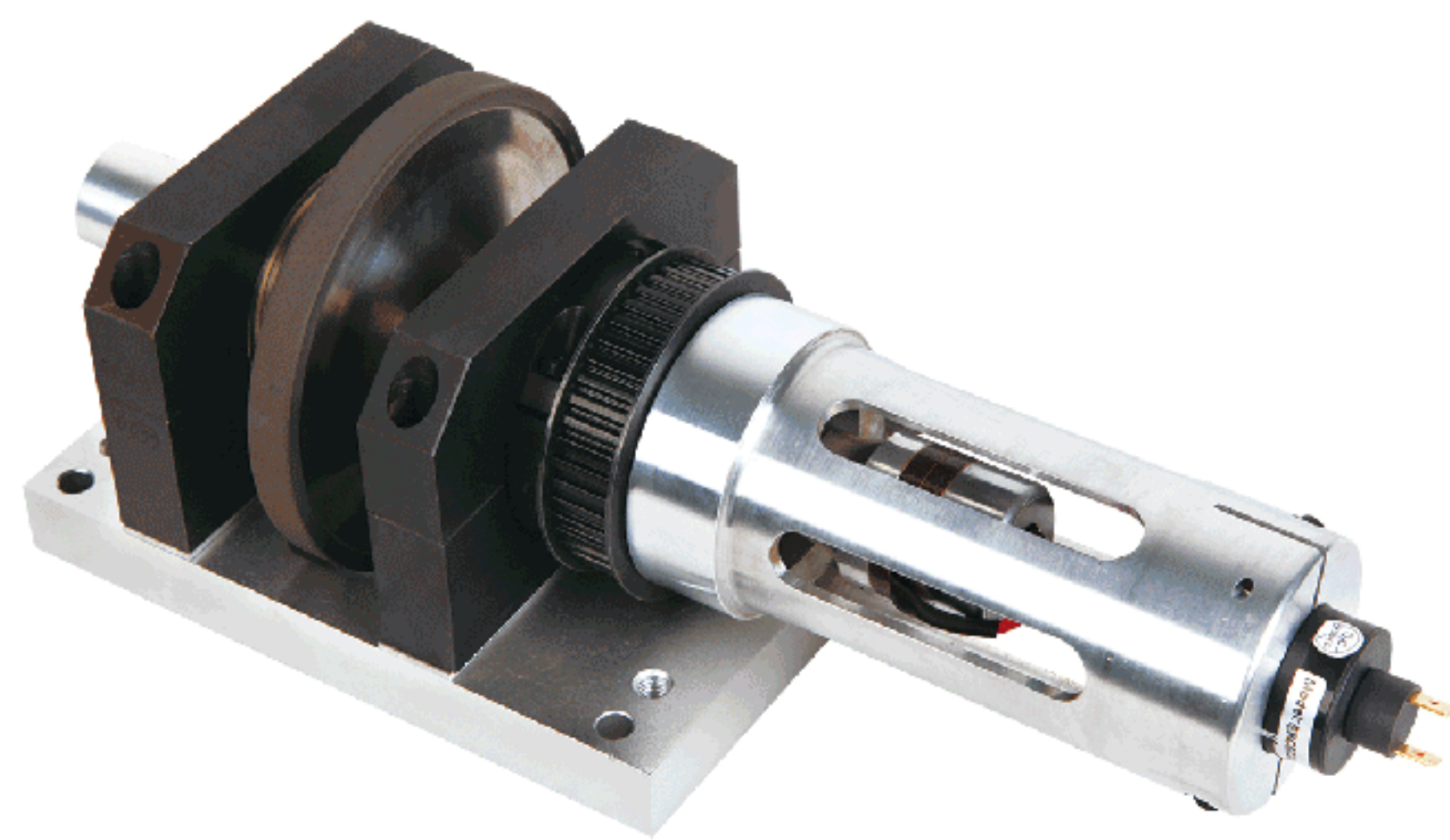
超声波缝纫机芯由35K超声波纵向振动换能器，第一节变幅杆，圆盘形发射头，第二节变幅杆，配套专用驱动电源构成。它的工作原理是超声波驱动电源将市电转换成高频高电压交流电流，输给超声波换能器，带动圆盘周表面频率振动。

换能器在纵向作来回伸缩运动，频率等同于驱动电源供出的交流电频率，即35K，伸缩的位移量在几微米左右。变幅杆的作用一是固定整个超声波系统，二是将换能器的输出振幅放大，传递给圆盘型发射头。发射头进一步放大振幅，另一方便将纵向伸缩振动转换成径向伸缩振动，圆盘转动对物料进行加工，该设备具有不影响原有设备工作，安装使用方便，体积小，能耗低等特点。

Product introduction

The Ultrasonic sewing machine is composed of 35K ultrasonic longitudinal vibration transducer, the first section of the horn, the disc type emitter, the second horn and the ultrasonic generator. Its working principle is that electric supply converted into high frequency and high AC current by ultrasonic generator, then transport to the transducer.

The transducer is vibrating in longitudinal direction, its frequency is equal to the frequency of the AC current from the generator, 35K, the displacement is about a few microns, one of the functions of the booster is to fix the whole ultrasonic vibration system, and the second is to enlarge the output amplitude of the transducer. The emitter not only enlarges the amplitude, also converts the transverse stretching vibration into the radial stretching vibration. At the same time, it has the advantages of convenient operation and installation, small size, low energy consumption and etc



技术参数

- 发射头是一个铁饼状的圆盘型，直径在118mm。
- 发射头的超声波振动频率在35kHz；振动幅度最大28 μm。
- 发射头表面硬度HRC56以上。
- 驱动电源型号：ZJS-500N型
- 供电电源：220V，50HZ，10A
- 最大功率：800W
- 匹配换能器：YP-3535-2D 黑片
- 频率跟踪范围：设计谐振频率35±0.5KHz
- 最高工作速度：10米/分
- 机箱尺寸：250x200x430（包括机箱外零件）

Technical parameter

- The emitter is a disc type, its diameter is 118 mm.
- The frequency of the transducer is 35Khz,max amplitude is 28μm.
- The surface hardness of the emitter is HRC 56.
- Analog power: Type ZJS-500N
- Power supply: 220V, 50HZ, 10A
- Max Power: 800W
- Transducer: YP-3535-2D black film.
- Frequency range: Design resonant frequency 35±0.5 KHz.
- Working Speed: 10m/min
- Overall dimension: 250x200x430 (including chassis parts)

工作环境 Working environment

- 室内使用，湿度：≤85%RH；环境温度：0℃-40℃。
- 机器四周要有充分的空间，不小于150mm左右，以便散热和插拔航空插头。
- Indoor use, humidity: ≤85%RH; ambient temperature: 0℃-40℃.
- There should be sufficient space around the machine, not less than 150mm

Ultrasonic cutting edge sealing machine

超声波切割封边机

产品介绍

- 超声波切割封边机的整体由超声波发生器（驱动电源）和超声波主机（切割部）两部分组成。
- 通过超声高频振动，先对所需加工的面料进行密实粘合，后部刀刃再随密实的纹路，对面料进行同步分切或裁边。
- 该超声波主机简单加装在编织设备上，可实现编织面料的切割，并确保织物不散边、不硬化、平整美观；设备操作安全可靠。
- 主要应用于化纤纺织物、土工织物、编织布、塑料薄膜和无纺织物的加工制造行业；编织物含聚丙烯、聚乙烯类的热塑性材料成分。

Product introduction

- Ultrasonic cutting edge sealing machine consists of the ultrasonic generator (drive power) and ultrasonic host (cutting) two parts
- Through the ultrasonic high-frequency vibration, first adhesive fabric, and then cut the fabric or cut edge
- To be installed on machines or lines, cutting the fabric with no scattered side, no hardening, smooth and beautiful, operation safe and reliable.
- Mainly used in chemical fiber textile, geotextile, woven cloth, plastic film and non-woven processing and weaving industry, Woven fabric containing polypropylene, polyethylene thermoplastic material composition.

技术优势

- 超声波切割具有切边准确、切口光滑牢靠、不会变形、抽丝、皱折等优点。这种封边技术是目前无纺布类织物切割方式中最完美的一种，封边效果好且边不会硬。
- 可手持或装夹客户系统两种方式，方便客户操作安装
- 功率大小可调节，可外接客户控制系统
- 在工作过程中安全分离并密封被加工物
- 美观且密闭的切割边缘
- 专用布料切割刀片，切割质量高，方便替换
- 彻底取代电阻热刀切割工艺，节能环保

Advantage

- Cutting the fabric with no scattered side, no hardening, smooth and beautiful
- Can be hand-held or installed on machines and line, easy operation.
- Power adjustable, can connect with the client's control system
- Safe separation and sealing of the workpiece during operation
- Beautiful and closed cutting edge
- Special fabric cutting blade, cutting high quality, easy to replace
- Completely replace the resistance heat knife cutting process, energy saving and environmental protection

产品参数

- 手持式或机架固定式，可按织机构造和裁切工艺情况另予设计
- 规格型号：40KHz
- 封边宽度：10/20mm
- 运行速度：5m/min 可按材料厚度、成分、经纬密度等因素与织机运作速度作同步调整
- 装夹方式：主机后部有Φ30mm穿孔，用于固定在织机的光杆上（按照编织物门幅宽度要求，可平行移动）
- 切割刀片：常规配置：合金滚轮刀，也可定制陶瓷刀片
- 电源：长320mm 宽320mm 高120mm 重量6.3kg
- 振动部件 长210mm 宽70mm 高260mm 重量4kg

Product parameters

- Hand-held or rack-mounted, according to loom construction and cutting process to the other design
- Type: 40KHz
- Edge width: 10/20mm
- Cutting speed: According to the material thickness, composition, latitude and longitude density and loom operating speed for synchronous adjustment
- Installation method: The rear of the host has Φ30mm perforation for fixing to the poles of the loom (parallel to the width of the width of the fabric)
- Cutting blade: Alloy roller knife, can also be customized ceramic blade
- Generator: 320 x 320 x 120 mm(L*W*H) weight: 6.3kg
- vibration parts: 210 x 70 x 260 mm(L*W*H), weight 4kg



Ultrasonic cutter

超声波切割刀

产品介绍

超声波切割刀，也称为超声波切割机，是一种专门用于切割的超声波设备，是超声波应用的重要门类之一。超声波切割的原理与传统意义上的切割完全不同。超声波切割是利用超声波换能器的能量，将被切割材料的局部加热熔化，从而达到切割材料的目的。所以超声波切割不需要锋利的刃口，也不需要很大的压力，不会造成被切割材料的崩边、破损。同时由于切割刀在做超声波振动，摩擦阻力特别小，被切割材料不易粘在刀片上。这对粘性和弹性材料、冰冻材料，如食品，橡胶等，或不便加压力的物体切割，特别有效。

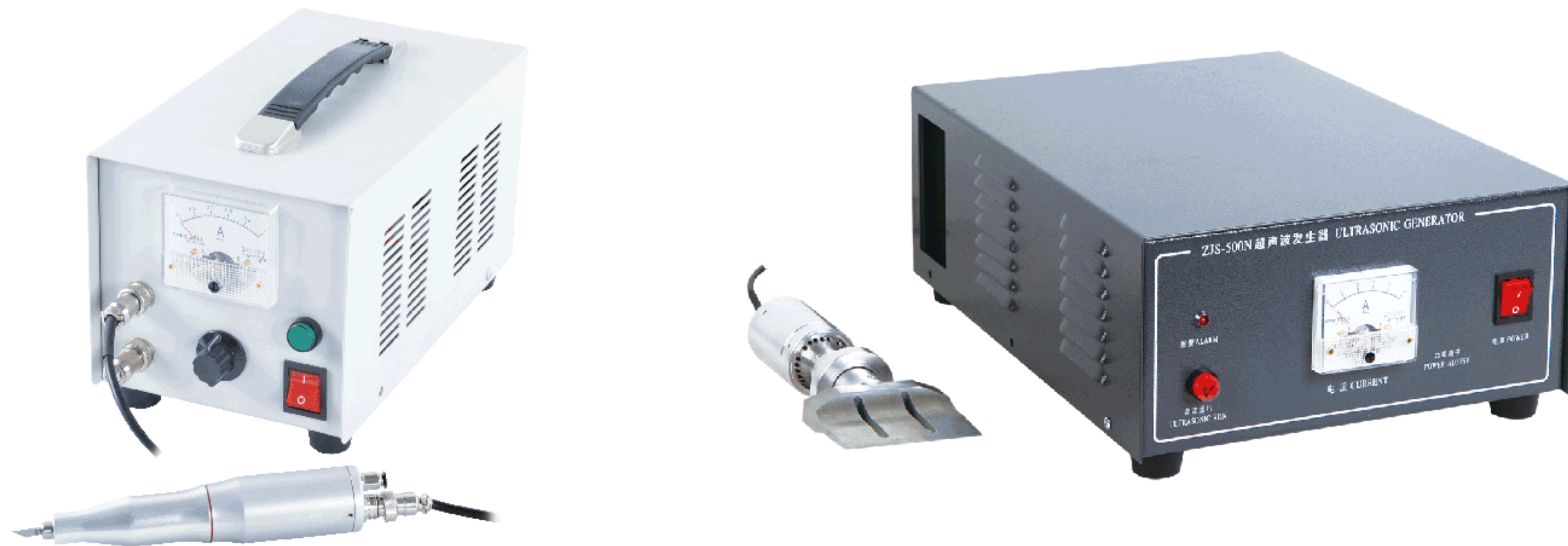
超声波切割还有一个很大的优点，就是它在切割的同时在切割部位有熔合作用，切割部位被完美地封边了，不会造成纺织材料飞边。超声波切割刀的用途还可以扩展，如挖孔，铲挖，刮漆，雕刻等。

Product introduction

Ultrasonic cutter is one of the specialized ultrasonic equipment for cutting, which makes the material to be cutting heating and melting by ultrasonic energy, so as to achieve the purpose of cutting the material. Instead of using traditional blade cutting, ultrasonic cutting has its advantages of smooth, reliable cutting, accurate trimming, no deformation, no wrinkling etc. It can avoid rough cutting-edge, coked edge, fuzz balls and other shortcomings of laser cutting machine.

The ultrasonic cutting machine(cutter) is composed of ultrasonic transducer(converter),booster, titanium blade and digital generator. And our ultrasonic cutter will be able to install easily in your current production system.

As the high-grade ultrasonic equipment manufacturers, our company can provide you with the best ultrasonic core parts(transducers, booster and generator) and ultrasonic application solution based on our strong technical strength and strict quality management system.



规格参数 Specification parameter

型号 Type		多功能手持式切割刀 Multifunctional hand-held cutter	橡胶切割刀 Rubber cutter
频率 Frequency (KHz)		40	40
外形尺寸 overall dimension	驱动电源 generator	265*165*170 (L*W*H)	380*250*150mm(L*W*H)
	刀体 cutter	Φ32*170mm	72*82.5*25.5mm(L*W*H)
重量 weight	驱动电源 generator	3.6kg	11.7kg
	刀体 cutter	0.2kg	0.6kg

多功能手持式切割刀

适用范围

- 天然纤维，合成纤维，各类化纤布料等
- 薄的塑料制品，如塑料膜，手机外壳
- 纸张，底胶片
- 橡胶，矽胶
- ABS,PP,PE等2mm以下薄板

Application

- Natural fiber, synthetic fiber, all kinds of chemical fiber cloth
- Thin plastic products, such as plastic film, mobile phone shell
- Paper, base film
- Rubber, Silica gel
- ABS, PP, PE (thickness less than 2mm)

设备特点

- 可替换刀刃，提升生产力，节约成本
- 气冷装置，确保连续开机手柄不发烫
- 重量轻，减少加工疲劳
- 只需轻轻接触，就可完成复杂，精确切割
- 输出振幅大，切割更轻易

Advantages

- Blade can be replaced, improve productivity, save cost
- Air cooling device
- Light weight
- Just touch and cut accurately
- Large amplitude, easy for cutting

橡胶切割刀

适用范围

- 橡胶
- 尼龙
- 胎侧
- 合成面料，布料
- 塑料，金属板材等

Application

- Rubber
- nylon
- The side of the tire
- Synthetic fabrics
- Plastic, sheet metal

设备特点

- 切口光滑，牢靠，切边准确、不变形等
- 切割精度高，胶料不变
- 切割面光洁度好，粘结性能好
- 速度快，效率高，无污染
- 低成本，操作简单，切割无振荡感

Advantages

- cut incision smooth, No deformation
- High cutting accuracy
- Good surface finish, good adhesion
- High speed, high efficiency, no pollution
- low cost, easy operation

Ultrasonic and Megasonic Energy Meter

精密型超声波频率（能量）分析仪

产品介绍

超声波频率（能量）分析仪是一款用于测量液体中超声波声场强度的设备，主要适用于测量超声波清洗槽，超声波声化学等工业应用场合，测量参数为超声波声强、超声波波形、工作频率、最大声强、最小声强、测量时间等。

Product introduction

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 as energy intensity. Ultrasonic waveform, frequency, Intensity of Sound (Max/min), time, etc



产品特点

- 设计精巧，结构合理，操作简单，测量准确
- 可测量各种超声波参数，并实时显示
- 可在现成的清洗生产线或实验室使用
- 可方便检测清洗环境中的超声强度
- 产品采用充电设计，包装简洁，携带方便

Advantage

- Accurately measuring energy and frequency in ultrasonic cleaning baths, emulsification, extraction, dispersion effect.
- Reasonable structure, simple operation.
- Accurate measurement
- Rechargeable design, packaging is simple and easy to carry.

规格参数 Specification parameter

探棒类型 probe type	高灵敏度水声探棒 high sensitivity acoustic probe	数据存储 Memory	160组(sets)
测量精度 measuring accuracy	0.01W/cm ²	探棒长度 probe length	40cm
声强测量范围 measurement range	0.1-150w/cm ²	声强测量 Intensity Measurement	✓
适用频率范围 frequency range	10KHz-1MHz	测量时间显示 Time Display	✓
适用液体温度 Temperature	0-135°C	波形显示 waveform display	✓
适用介质 Medium	PH4-PH10	波形调节 waveform adjustment	✓
响应时间 Response Time	0.1秒 (second)	最大(小)值显示 Max(min) Data Display	✓
供电类型 Power Supply	内置电池模块，专用接口充电 Rechargeable Battery	频率显示 Frequency Data	✓
显示仪表大小 Dimensions	5cmx15cmx20cm	时间日历显示 Calendar	✓
适用范围 Appliction	对清洗质量要求高，工艺过程控制严格的环境，可存储，处理，分析测量数据 High quality and strict process control requirements, store, process and analyze the measurement data		

Impedance Analyzer

换能器特性分析仪

产品介绍

换能器特性分析仪可以测量和评定压电陶瓷片、压电换能器、超声波清洗机、超声波焊接机、超声波粉碎机、超声波加工设备等各种器件、设备的参数和性能优劣。换能器阻抗测试仪的特点是：易用、指标和图形相结合、参数准确、价格低廉、对生产的可指导性非常强等。

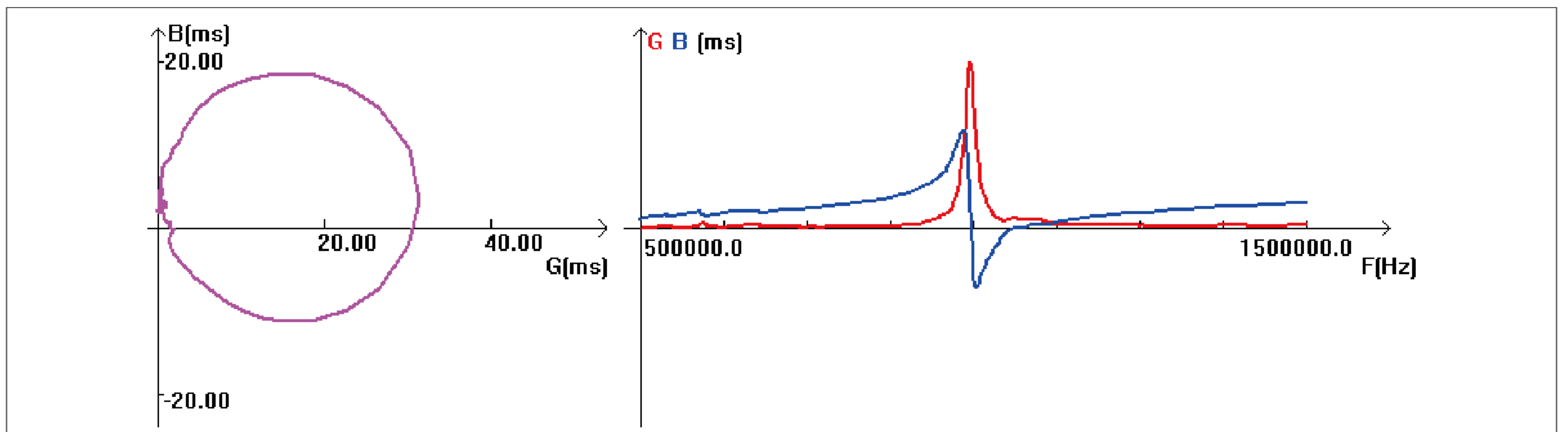


Product introduction

It is characteristic of analyzer measurement and evaluation of piezoelectric ceramics, piezoelectric transducer, ultrasonic cleaning machine, ultrasonic welding machine, ultrasonic grinder, ultrasonic machining equipment and other devices, the device parameters and performance.

Transducer impedance tester is characterized by easy to use, the combination of indicators and graphics, accurate parameters, low prices, strong guidance for production, etc.

导纳图 Admittance chart



规格参数 Specification parameter

	C260A	C360A
频率范围 Frequency range	1KHz-500KHz	1KHz-1MHz
测量速度 Measuring speed	10秒/件, 等效600点扫描 10 seconds / piece, equivalent to 600 point scanning	4秒/件, 等效600点扫描 4 seconds / piece, equivalent to 600 point scanning
测量指标 Measurement index	Fs、Fp、F2、F1、R1、Qm、Gmax、CT、L1、C1、C0、Keff、Kp	
测量精度 Measurement accuracy	< 1%	
频率精度 Frequency accuracy	±10ppm	
换能器特性范围 Range	0.1Ω-1MΩ	
频率步进 Stepped-frequency	0.1Hz-任意	
适用场合 Application	功率超声换能器, 振动子等设备的检测 Power ultrasonic transducers and vibrations testing	压电陶瓷的生产检测 Piezoelectric ceramic production testing

Amplitude measuring

振幅测量仪

产品介绍

超声波振幅测量仪是一种专门用于超声波振幅测量的设备。用于超声波塑料焊接、点焊、切割、声化学、细胞破碎等设备的输出振幅测量，也可单独测量超声波换能器、超声波变幅杆、工具头的输出振幅。

超声波振动部分接触到超声波振幅测量仪的测试杆时测试杆会进行伸缩运动，通过高精密传感器的测量把振幅显示在显示器上。超声波振幅指超声波焊接设备的振幅，通常频率在10kHz~60kHz之间，振幅在1 μm~200 μm之间，由于频率高、振幅小测量难度也较大，对测量精度提出了很高的要求。常用的测试手段对它无能为力，故很难测量。一般只能用激光测振仪进行测量，能得到较好的结果。但激光测振设备价格昂贵，操作复杂。生产单位和专业的研究设计单位都很少使用。

Product introduction

Ultrasonic Amplitude measuring is a special equipment for ultrasonic amplitude measurement, for ultrasonic plastic welding, spot welding, cutting, sonochemistry, cell disruption and other equipment, can also be individually measured ultrasonic transducer, booster, horn.

When the ultrasonic vibration part comes into contact with the measuring rod of the ultrasonic amplitude measuring instrument, the measuring rod is telescoped and the amplitude is displayed on the screen.

特点

- 设计精巧：设备体积小，仅有表头和支架组成，无需 外接电源
- 结构合理：适合测量各种超声波焊接设备的输出振幅
- 操作简单：使用步骤简单，即开即用
- 测量准确：测量精度达到1微米

Characteristic

- Small size, consists of gauge and frame, no external power supply
- Measuring the output amplitude of various ultrasonic welding equipment
- Easy to use, opening while using
- The measurement accuracy is up to 1 microns

型号:YP0901B

- 精度 Accuracy: 2.5%
- 灵敏度 Sensitivity: 1um
- 量程范围 Range: 3-1000μm
- 可测频率范围 Measurable frequency range: 10KHz~100kHz
- Test direction: up and down
- Power supply: built-in power supply, 3V DC
- Display: digital display

