



Stainless Steel Automatic Ultrasonic Cleaning Machine With PLC Control

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Sky men
- Certification: CE/PSE/FCC/ROHS/ISO9001
- Model Number: JP series
- Minimum Order Quantity: 1
- Price: 99-3500
- Packaging Details: Wooden Box
- Delivery Time: 7-15 days
- Payment Terms: T/T LC
- Supply Ability: IN STOCK



Product Specification

- Control Method: PLC Control
- Frequency: 25/28/40/68/80/120KHz
- Product Name: Automatic Ultrasonic Cleaner
- Power: 220/380V
- Material: Stainless Steel
- Capacity: 540L
- Ultrasonic Power: 0-5400W/Support Customized
- Temperature Range: 20-80°C
- Highlight: **PLC Control Automatic Ultrasonic Cleaning Machine**
, 540L Automatic Ultrasonic Cleaning Machine,
PLC Control Stainless Steel Ultrasonic Cleaner



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Product Description

Stainless Steel Automatic Ultrasonic Cleaning Machine With PLC Control

Automatic Stainless Steel Ultrasonic Washing Machine With Siemens PLC Control & 220/380V Power Supply

Automatic Ultrasonic Cleaning Line Machine's Principle

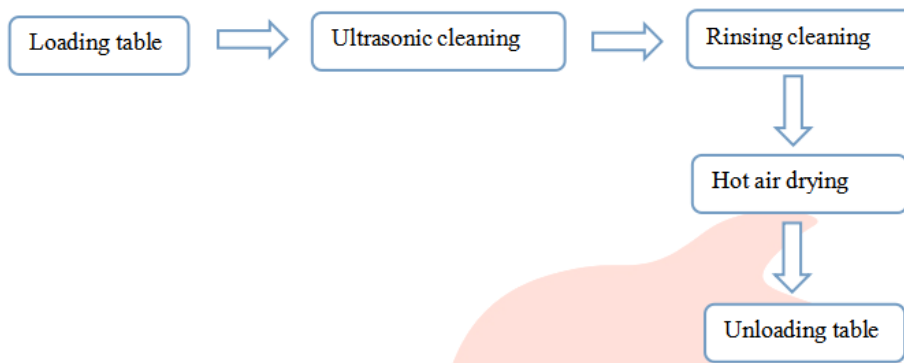
The principle of fully automatic ultrasonic cleaning machine is mainly to transform the power of the power, the sound of the power ultrasonic frequency source, and convert it into a mechanical vibration, and radiate the cleaning liquid in the groove to the ultrasonic by cleaning the groove wall. Due to the radiated ultrasound, the micro -bubbles in the liquid in the groove can keep vibration under the action of sound waves. When the sound pressure or the sound strength reaches a certain degree, the bubbles will swell rapidly, and then they suddenly close. In this process, the instantaneous shock waves of the bubbles were closed, which caused the pressure of 1012-1013Pa around the bubbles and the temperature adjustment. Steam -type emptiness has a direct impact on dirt. On the one hand, the adsorption of the surface of the dirt and the surface of the cleaning part, on the other hand, can cause the fatigue destruction of the dirt layer and be separated. Drilling the "vibration vibration and falling off the dirt layer. Due to the vacuum effect, the two liquids quickly dispersed and emulsified in the interface. When the solid particles were wrapped in oil and attached to the surface of the cleaning piece, the oil was emulsified and the solid particles fell off by themselves. When spreading in the cleaning solution, the acoustic pressure of positive and negative transformations will be generated to form a shooting flow and impact cleaning parts. At the same time, because the non -linear effect will generate sound and micro sound flow, ultrasonic vacuum will produce high - speed on the solid and liquid interface. Microcarflow, all these functions can destroy dirt, remove or weaken the boundary dirt, increase stirring and diffusion, accelerate the dissolution of soluble dirt, and strengthen the cleaning effect of chemical cleaning agents. It can be seen that any of the places where the liquid can be immersed and the sound field exists has a cleaning effect, and its characteristics are suitable for cleaning of parts with very complicated surface shapes. Especially after using this technology, the amount of chemical solvents can be reduced, thereby greatly reducing environmental pollution.

Automatic Ultrasonic Cleaning Line Machine's Specification:

Automatic Ultrasonic Cleaning Line Machine's Specification:			
1	Model	JTM-4096AD	
2	1st Chamber	Function	Ultrasonic cleaning + Filter+ Hot water cleaning
		Ultrasonic Frequency	28/40kHz (other frequency can be customized)
		Tank Material	SUS 304 (SUS 316 can be customized)
		Thickness of tank	2mm
		Inner tank dimension	700*500*500mm
		Tank Capacity	175L
		Transducer	48pcs
		Ultrasonic Power	2400W
		Heating Power	6000W
		Time setting of Ultrasonic	0~99 hours
		Temperature setting	Room temperature ~ 95°C adjustable
		Drain value	Yes
		Water inlet/outlet	Yes
		Filter	1 set, connect with 1st tank
		Size of filter tank	500*300*300mm
		Filtet element precision	5/10μ
		Generator	1pcs
		Generator power control	2400W
Basket	Yes		
Basket load	150KG		
3	2nd Chamber	Function	Ultrasonic cleaning + Bubbling + Hot water cleaning
		Ultrasonic Frequency	28/40kHz (other frequency can be customized)
		Tank Material	SUS 304 (SUS 316 can be customized)
		Thickness of tank	2mm
		Inner tank dimension	700*500*500mm
		Tank Capacity	175L
		Transducer	48pcs
		Ultrasonic Power	2400W
		Heating Power	6000W
		Time setting of Ultrasonic	0~99 hours
		Temperature setting	Room temperature ~ 95°C adjustable
		Drain value	Yes
		Water inlet/outlet	Yes
		Bubbling system	Yes, air compressor is provided by user
		Generator	1pcs
		Generator power control	2400W
		Basket	Yes
		Basket load	150KG
3	3rd Chamber	Function	Hot air drying tank
		Inner tank dimension	600*500*450mm
		Turbines power	750W
		Dryer power	3000W
4	Working way of machine	Working way	Full automatic
		Loading and unloding platform	Yes
		Moving way of basket	By mechanical arm
		Control way	PLC touch screen
5	Warranty	1 year warranty for spare parts, all life technical support	

6	Certificate	CE, RoHS; FCC, REACH
7	Production time	35 working days after deposit

Automatic Ultrasonic Cleaning Line Machine's Cleaning process: (cleaning direction: from left to right)



Automatic Ultrasonic Cleaning Line Machine's Working Way

The entire process of putting the basket into the cleaning tank, removing the basket and moving the basket between the tanks is automatically completed by a single-arm manipulator. This ultrasonic cleaning machine has a total of 3 working tanks, plus 1 loading and unloading station, a total of 4 stations.

Automatic Ultrasonic Cleaning Line Machine's Same series with different size for your choice:

Model	Size of every tank L*W*H (mm)	Tank Volume (L)	Ultrasonic Power (W)	Heating Power of Ultrasonic tank (W)	Heating Power of drying tank (W)	Transducer (pcs)
JTM-3024AD	500X300X250	38L*3	600W	1500W*2	750W	24pcs
JTM-3036AD	500X350X300	53L*3	900W	1500W*2	750W	36pcs
JTM-3048AD	550X400X350	77L*3	1200W	3000W*2	750W	48pcs
JTM-3060AD	550X450X400	99L*3	1500W	3000W*2	750W	60pcs
JTM-3072AD	600X500X450	135L*3	1800W	4500W*2	750W	72pcs
JTM-3096AD	700X500X500	175L*3	2400W	6000W*2	750W	96pcs
JTM-3120AD	800X600X550	264L*3	3000W	6000W*2	750W	120pcs
JTM-3144AD	1000X600X600	360L*3	3600W	9000W*2	750W	144pcs
JTM-3216AD	1000X900X600	540L*3	5400W	18000W*2	1100W	216pcs
JTM-3288AD	12000*1000*800	960L*3	7200W	24000W*2	1500W	288pcs

Automatic Ultrasonic Cleaning Line Machine's Images:



THREE BASE 三大基地



深圳福永·运营总部 Shenchen Exporting Marketing Center

在华南区设立营销中心,成立运营总部,品牌、人力、研发于一体的运营中心,办公面积约10000㎡,拥有非常完善的线下线上推广团队,一直致力为品牌提供全方位、多渠道、多平台的推广服务,为品牌提供一站式、全方位、多平台的推广服务。

Business office of Exhibition Site (Shenzhen) Phase and set up an operation center integrating sales, brand, human resources, and finance, with an office area of about 10000 m². It has a complete office and online promotion team. It has been committed to using the platform of the brand to enhance the competitiveness of the brand products in the market, in order to make the brand's products becoming a recognized international and domestic brand.



深圳沙井·研发中心 Shenchen R&D Center

研发中心位于宝安区沙井镇,占地面积30000㎡,引进欧美日韩超声清洗技术和设计理念,以国内专业研究机构为依托,自主研发,注重研发中心的建设和管理,核心团队人员均为十年以上的行业经验,有着丰富的研发实践经验。

The R & D center is located in Shajing Industrial Zone, Xixiang Road Branch District, with an area of 30000 m². It has introduced ultrasonic cleaning technology and design concepts from Europe, America, Japan and other countries, relying on domestic professional research institutions and independently innovated. The core members of the technical and management team of Shaoquan Medical Device Engineering Research Center have more than 10 years of rich experience in the field of ultrasonic product innovation and manufacturing internally. So far, it has more than 100 patents, many of which are from the United States, Europe, Japan and other foreign countries, patent certificates.



韶关曲江·生产基地 Shaoquan Production Base

该基地位于韶关市曲江新区,占地面积30000㎡,生产超声清洗及超声设备,是集研发、生产、销售于一体的生产基地。

Shaoquan Industrial Park is located in Xixiang Road Branch District, Shaoquan City. It is a modernized industrial park. The total planned construction area exceeds 30,000 m², and the current output value of ultrasonic cleaning machines can reach more than 1 million yuan. The base is mainly responsible for the production and R&D of the group. It will be set up in the Shaoquan Medical Device Engineering Research Center of Shaoquan Medical Device Group, and all ultrasonic ultrasonic production equipment and intelligent storage facilities. It is committed to building Shaoquan Industrial Park into an ecological, green, and intelligent industrial park, providing a good environment for environmental protection and technological innovation.

High pressure spray cleaning machine

高压喷淋清洗机

高压喷淋清洗机主要是由电机、高压水泵、喷枪组成。工作原理是运用增压高压喷淋清洗表面深入、沉孔上的颗粒、油污、金属屑等。整个设备操作起来非常简单的，使用过程中故障率也非常低，清洗效果均匀，可以大批量连续作业。适用于不同形状工件的清洗，根据企业产品不同，可为量身定制非标喷淋清洗机。隧道式喷淋清洗机、履带式清洗机。

The high-pressure spray cleaning machine is mainly composed of a motor, a high-pressure water pump, and a liquid storage tank. The working principle is to use ultrahigh pressure spraying nozzles to peel off particles, dirt, and stains on the surface, deep holes and one holes. The whole equipment is very simple in operation, the failure rate is very low during use, the cleaning effect is uniform, and it can work continuously in large quantities. It is suitable for the cleaning of different types of the castings. According to the different shapes of the products of the enterprises, nonstandard spray cleaning machines, tunnel spray cleaning machines, and crawler cleaning machines can be customized for them.



25

Hydrogen energy industry

氢能行业



氢能作为二次能源，来源非常广泛，不仅可以由煤炭、石油、天然气等化石能源重整、生物质热解或微生物发酵等途径制取，也可以来自氨、甲醇、氢能等化工生产。但是在制取加工氢能过程中，所用到的配件或多或少都会有油污，超声波清洗机可以辅助所用配件表面油污上清洗，无死角等，广泛适用于氢能行业中间板、单极板等零件清洗。

As a secondary energy source, hydrogen energy has a wide range of sources. It can not only be produced by cleaning coal energy with oil, coal oil, and natural gas, biomass particles, or microbial fermentation, but also from cleaning ammonia, alcohol, methanol, and other chemical products. Hydrogen is produced, but in the process of producing and processing hydrogen energy equipment, the required accessories will be more or less dirty. The ultrasonic cleaning machine can clean the oil dirt and other dirt on the surface of the required accessories, and is widely used in the cleaning of bipolar plates, unipolar plates and other parts in the hydrogen energy industry.

清洗对象 Cleaning objects

单极板、双极板、电芯壳、轴承、螺母、发动机、齿轮、制氢设备等。

Bipolar plate, unipolar plate, battery case, bearing, nut, engine, gear, hydrogen production accessories, etc.



合作伙伴 Partner



21

Tunnel cleaning line and drying line ultrasonic cleaner

通过式超声波清洗机

通过式超声波清洗机是采用特殊的传送带来输送工件，具有多工位，功能全，结构合理，操作方便，清洗效果好等优点，能很大程度上提高工件清洗质量及效率。

作为一款连续输送式清洗设备，通过式清洗机由人工将工件放在输送带上，工件自动通过各清洗室进行清洗，直至结束。清洗液能自动流入回收箱，经过净化处理可循环使用，设备设有废气回收装置，可以不外排废气。

The through-type ultrasonic cleaning machine uses a special chain and conveyor belt to transport workpieces. It has the advantages of multi-position, full-function, reasonable structure, convenient operation, and good cleaning effect, which can greatly improve the quality and efficiency of workpiece cleaning.

As a continuous conveying cleaning equipment, the pass-through cleaning machine puts the workpieces on the conveyor belt manually, and the workpieces are automatically cleaned through each cleaning room until the end. The cleaning liquid can automatically flow into the liquid return tank, and can be recycled after purification.



工艺流程 Process flow

进料→超声波清洗（市水）→喷淋清洗（市水）→喷淋清洗（市水）→压缩空气吹干→热风烘干→出料
Feeding → ultrasonic cleaning (city water) → ultrasonic rinsing (city water) → spray cleaning (city water) → Compressed air wind cutting → hot air drying → output

27

设备特点 Features

- 清洗腔内部喷淋嘴需求可以上下、左右、侧边、定点布置，保证清洗全面无死角。
- 配有过滤循环系统，做到清洗剂的循环使用，极大降低清洗成本。
- PLC工业触摸屏控制，只需一人即可操作清洗，简单方便。
- 清洗速度快，清洗效果好，可大批量连续作业。

- The nozzles inside the cleaning chamber can be arranged up and down, left and right, side and fixed points according to the needs, ensuring comprehensive cleaning without dead ends.
- Equipped with a filtration circulation system to maximize the use of cleaning agents and greatly reduce cleaning costs.
- The PLC industrial touch screen terminal control system only needs one person to operate and clean, which is simple and convenient.
- The cleaning speed is fast, the cleaning effect is perfect, and it can be operated continuously in large quantities.

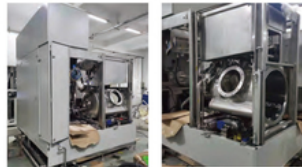
清洗对象 Cleaning objects

复杂五金件、压铸铝件、铝铸件、汽车配件、铸件制品、轴承等

Complex hardware, die-cast aluminum parts, milled parts, auto parts, pipe fittings, bearings, etc.

工艺流程 Process flow

原料→喷淋清洗（市水）→喷淋清洗（市水）→压缩空气吹干→热风烘干→出料
Loading → spray cleaning (city water) → spray rinsing (city water) → compressed air cutting water → hot air circulation drying → unloading



26

案例展示 Case presentation

JM-5156SD

五槽式全自动超声波清洗机

Five-tank automatic ultrasonic cleaning machine

清洗对象：除灰盆、磨粒及油污

Clean dirt remove dust, particles and oil



设备特点 Features

1. 连续槽内配置加热管及恒温控制器。
2. 每个槽排出口设有可拆卸式防堵网，以防止小零件堵塞进入管道中堵塞管道。
3. 超声波槽采用嵌入式盖板，盖板形式为前置+后前置。
4. 高纯水经脱水工艺，迅速散发表面水份，实现表面高清洁度。



1. The liquid storage tank is equipped with a steam heating coil and a constant temperature controller.
2. Each tank drain is equipped with a detachable anti-blocking net to prevent small parts from falling into the pipeline and blocking the pipeline.
3. The ultrasonic vibration plate adopts the input type vibration plate, and the vibration form is bottom vibration + front and rear side vibration.
4. The high-purity water dehydration process can quickly lose surface moisture and achieve high surface cleanliness.

工艺流程 Process flow



22

设备特点 Features

- 零件直接摆放，前后工序自动连接，传送速度可调，自动化程度高。
- 清洗产量大，品种多，设备投入成本低。
- 操作简便，能够降低企业人工清洗成本。
- 可针对不同清洗需求，配置相应工艺进行高效清洗。
- 设备可配置循环过滤系统，大大提高了液体利用效率。

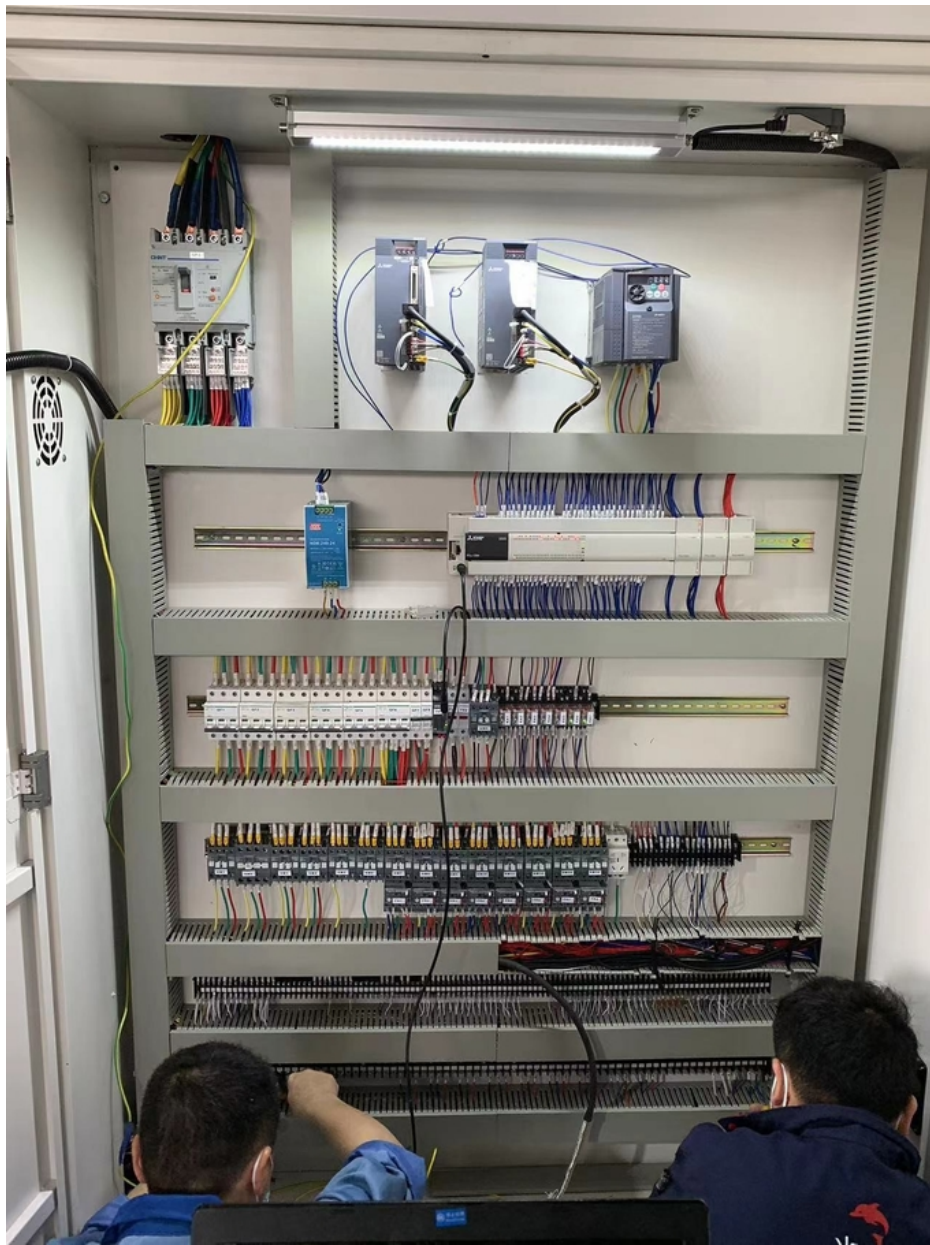
- The parts are placed directly, the front and rear processes are automatically connected, the transmission speed is adjustable by frequency conversion, and the degree of automation is high.
- Large cleaning output, many varieties, low equipment investment cost.
- Easy to operate, can reduce the cost of manual cleaning for enterprises.
- According to different decontamination requirements, corresponding processes can be configured for efficient cleaning.
- The equipment can be configured with a circulating filtration system, which greatly improves the efficiency of liquid utilization.

清洗对象 Cleaning objects

五金零件、压铸件、液压件、齿轮、轴承、汽车零部件等

Suitable for all kinds of hardware parts, die-casting parts, hydraulic parts, gears, bearings, auto parts, etc.

28

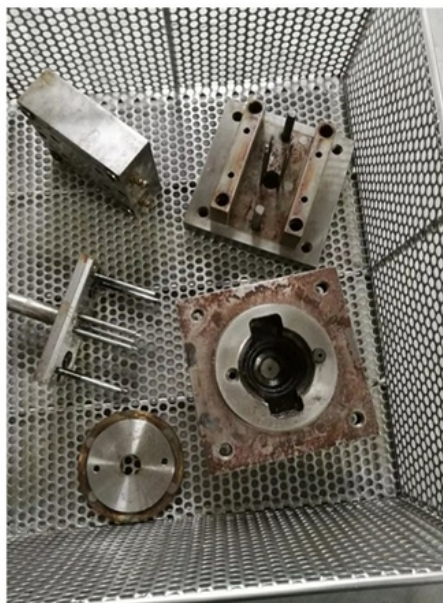








Automatic Ultrasonic Cleaning Line Machine's Clean effect:



Automatic Ultrasonic Cleaning Line Machine's Application

In all cleaning methods, fully automatic ultrasonic cleaning is the most efficient and best effect. The reason why ultrasonic cleaning can achieve

this effect is closely related to its unique working principle and cleaning method. We know that in production and life, there are many things that need to be cleaned, and there are many types and links that need to be cleaned. When the requirements are met, even the steam cleaning and high -pressure water shooting can not meet the demand for higher cleanliness. Ultrasonic cleaning can achieve fungal bacteria, dissolved organic pollutants, and prevent over corrosion.

Therefore Widely used in various industries:

- (1) The mechanical industry: removal of rust -proof oil; cleaning of quantity; oil and rust removal of mechanical parts; cleaning of engines, carburetor and automotive parts; Cleaning and so on.
- (2) Surface treatment industry: oil removal and rust removal before electroplating; cleaning before plating; phosphorus treatment; clearing carbon accumulation; removing oxide skin; removing polishing paste; metal workpiece surface activation treatment, etc.
- (3) The instrumental industry: cleaning before the high cleanliness of precision parts, etc.
- (4) Electronic industry: printing line boards removing rosin, welded spots; cleaning of mechanical electronic parts such as high -voltage contacts.
- (5) Medical industry: cleaning, disinfection, sterilization, and cleaning of experimental utensils.
- (6) Semiconductor industry: High cleanliness cleaning of semiconductor chips.
- (7) The head of the watch and the decoration industry: remove the mud, dust, oxidation layer, polishing cream, etc.
- (8) Chemistry, biological industry: cleaning and dirt of experimental utensils.
- (9) Optical industry: oil removal, sweat removal, and gray of optical devices.

Automatic Ultrasonic Cleaning Line Machine's History:

Skymen was founded in 2007, Skyman Group is an ultrasonic cleaning equipment manufacturer integrating R &D, production, sales and service .It

specializes in providing ultrasonic cleaning technology solutions for global customers , and is committed to becoming a world-leading "ultrasonic cleaning equlpment Comprehensive service provider of the whole value chain".

Rooted in the ultrasonic cleaning industry for more than ten years, Skyman Group has been focusing on the research and development of comprehensive services for ultrasonic cleaning technology-related products . It is a national high-tech enterprise and a *specialized and special new enterprise* in Shenzhen. It has several subsidiaries such as Shenzhen Skyman, Guangdong Skyman, Guangzhou Kemeng. Shaoguan Skyman, Skyman Acoustics Group (Hong Kong). etc., which are distributed in various parts of South China. It has passed ISO9001, ISO 1400 1. etc., and has various There are highly educated and high-tech personnel, there are many well-known brands, and more than 100 patents have been successfully applied .The products mainly include industrial equipment, commercial equipment, and household health ultrasonic cleaning machines, which are widely used in factory manufacturing. medical treatment, plastic products, transportation, electronic products, new energy and other major fields. Customers are located in more than 100 countries and regions around the world.

More than ten years of rapid development has enabled the company to gradually establish a complete sales system, forming the corporate characteristics of rich products, convenient supply, reasonable prices, and global services . In the future, Skyman people will be more forging ahead, pioneering and innovating , in order to implement the company's vision of "gradually becoming a respected international and diversied century-old enterprise" and "making the world cleaner and human beings healthier; creating beauty and serving The mission of "society" is unremitting efforts, and it is also making unremitting efforts to build the world's leading "integrated service provider of the whole value chain of ultrasonic cleaning equipment"



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