

KEERTEK KER Series Intelligent Integrated Ultrasonic Cleaning System

KER series ultrasonic cleaner is intelligent integrated type ultrasonic cleaning system to wash different components quickly with all-in-one and advanced design. It is realized the optimal human-computer interaction, integrated the most effective cleaning technology. Its one-touch operation minimized manual operation works during the cleaning process.



**KER Series
with Standard Configuration**



**KER Series
with Lifting & Agitation Function**

STANDARD :

- The ultrasonic generator, cleaning tank and control system are all integrated in one unit, easy to operate;
- Ultrasonic transducers are placed in transducer packs, which are easily replaced after end of life;
- Transducers packs are uniformly arranged in multi directions of cleaning tank for more homogenous, thoroughly and better cleaning efficiency;
- KEER new generation circuit board has stronger power and more stable;
- Fast degassing function at the start of the ultrasonic cycle to remove gases from the solution for maximum ultrasonic cleaning performance;
- Auto-tune technology with Sweep and power adjustment for more stable and better effect;
- Full-bridge IGBT module, high pressure resistant & high temperature resistance.
- Siemens PLC control with 7" HMI interface. Flexibility in setting different parameters;
- Networking function allows remote debugging and program update;
- Fault & maintaining reminding function;
- Emergency stop button is installed;
- Ultrasonic power adjustable linearly;
- SUS304 thickening stainless steel, acid-proof and alkali-resisting with long work life;
- Double-layer & heat-retaining lid to prevent heat loss and save energy;
- Tank body is equipped with thermal & sound insulation, which can avoid heat loss;
- Equipped with circulation and filtration system;
- Equipped with Oil skimmer;
- Fixed foot and casters with brake, easy to fixation and move;
- Equipped with dregs groove to drain dregs easily;
- Overflow function;
- Electronic components and parts come from world-famous brands.

OPTIONAL EXTRAS :

- Lifting Platform with up-down-shaking movement function;
- Air blow-gun for drying parts;
- Steam extraction fan & steam condenser units;

- Auto fresh water refill;
- Auto detergent dosing unit;
- Auto drain valve;
- Ph value monitor;
- Special fixture according to washing parts.
- Special material or size requirements can be customized.

DETAILS



PARAMETERS

- Ultrasonic Wave Direction: All the transducers are regularly fixed in three sides of cleaning tank.
- Ultrasonic Frequency: 20 / 28 / 40 KHZ, Single
- Ultrasonic Power Adjustable Range: 0% ~ 100%
- Supply Voltage: 380V, 50Hz, 3Ph+N+PE

Model	Tank Inner Size	Overall Dimensions	Effective Liquid Level	Effective Tank Capacity	Ultrasonic Power	Transducer	Heating Power
KER-2400	600x480x390mm	1260x980x940mm	390mm	112L	2.4 KW	100W, 24pcs	6 KW
KER-3000	750x550x390mm	1410x1050x980mm	390mm	160 L	3.0 KW	100W, 30pcs	9 KW
KER-4000	1000x550x420mm	1660x1050x1100mm	420mm	231 L	4.0 KW	100W, 40pcs	12 KW
KER-6000	1200x650x490mm	1860x1150x1180mm	490mm	382 L	6.0 KW	100W, 60pcs	18 KW
KER-8000	1450x720x570mm	2010x1220x1260mm	570mm	595 L	8.0 KW	100W, 80pcs	24 KW
KER-10800	1500x800x640mm	2060x1300x1330mm	640mm	768 L	10.8 KW	100W, 108pcs	30 KW
KER-12000	1700x900x640mm	2260x1400x1330mm	640mm	979 L	12.0 KW	100W, 120pcs	45 KW
KER-24000	2500x1200x840mm	3060x1700x1530mm	840mm	2520 L	24.0 KW	100W, 240pcs	90 KW

PACKAGE & WARRANTY

- Package: International Standard Veneer Case
- Warranty: One year

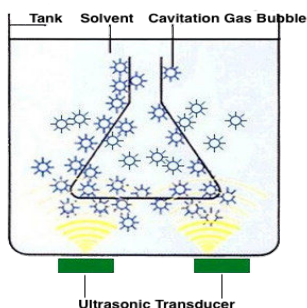
APPLICATIONS

It can be used for different sized metal, plastics, ceramics parts for prewashing, inter-operational washing, or final washing, with the possibility of anti-corrosive protection to removes oil, grease, chips, mud, production slag of the surface of parts.

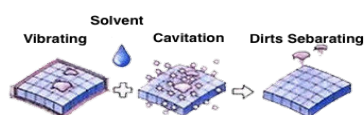
TYPICAL APPLICATIONS:

- Machinery Industry
- Repair and maintenance
- Automotive, Railway, Ship, Aerospace
- General Engineering
- Surface treatment & Processing Industry
- Electronic & Semiconductor Industry
- Precision Metal Industry
- Glass & Optical Industry
- Photovoltaic Solar Industry
- Laboratory, Medical Industry
- Printing Industry
- Food Industry

ULTRASONIC CLEANING THEORY



Ultrasonic cleaners generate ultrasonic waves that create millions of tiny bubbles through the process of cavitation. The bubbles gently clean and polish any surface they come in contact with, even inaccessible areas, penetrating every nook and cranny to dislodge trapped dirt and debris. The cleaning objects will be quickly restored to their original luster without expending any effort. The gentle cleaning action ideal for delicate items, too.



Therefore, ultrasonic cleaning method is the best cleaning method than others, because its cleaning efficiency is highest, cleaning result is the best without any trace of physical cleaning and scratches.

ULTRASONIC FREQUENCY

Frequency is suggested based on cleaning objects' material and pollutants in the objects.

Simply to say, higher precision cleaning objects, higher frequency is better.

We can provide three ultrasonic frequency options:

- 20Khz: This frequency is strongest, better for hard and strong metals with heavy oil and dirty.
- 28Khz: This frequency is stronger, widely used for different metal with heavy oil and dirty, such as car/motor/truck/vessel/metal parts, to remove oil, grease, dirt, pastes, etc.
- 40Khz: This frequency is gentle, better for high precision goods and fragile goods, such as PCB boards, electronic parts, optical elements, glasses and jewelry, etc.

HOW TO CHOOSE A GOOD ULTRASONIC CLEANER

- Frequency: Choose the suitable ultrasonic frequency according to the above suggestions.
- Inner size of cleaning tank: It should be bigger than cleaning objects' size.
- Core element: The core element of an ultrasonic cleaner is ultrasonic transducer. The quality of ultrasonic transducer influences the service life of an ultrasonic cleaner greatly.
- Ultrasonic power: For the same inner size of cleaning tank, the ultrasonic power is bigger, the cleaning effect will be better. For the same ultrasonic power, the inner size of cleaning tank is smaller, the cleaning effect will be better.