



## ***KCQ Vertical Ultrasonic Washing Machine***



KCQ series vertical ultrasonic washing machine is the key machine type which our company is generalizing in recent years. The washing method is confirmed by our partners and users. It is widely used for washing of vials, ampoules, oral liquid bottles. Change part is easy to change.

### **Working Principle**

This machine consists of bottle feeding net conveyor, ultrasonic power tank, bottle feeding pliers, water and air filter, washing needles, star wheel and electric control system. Coarsely washing is conducted by the power of ultrasonic wave to wash the inner and outer wall of the bottles. Finely washing uses purified water, WFI and compressed air to wash the inner and outer wall of the bottles alternately.

Washing process: bottles will be washed coarsely in the ultrasonic wave tank through the bottle feeding net conveyor. With the help of screw conveyor and lifting block, the bottles will be rotated by the manipulators by 180 degrees, and then rinsed by the washing needle using water and air alternately. Finally, the manipulators will rotate the bottle by 180 degrees again and then push them to the bottle reclaiming tray. The washing effect is guaranteed.

### **Characteristic**

- Ultrasonic wave power can wash the wall of the vials thoroughly, cleaning effect is good and the speed can be adjustable by inverter.
- Water and air come through separate 0.2M and 0.45M filter, clean degree is high.
- “3 Water, 3 air” alternated rinser.
- The washing WFI water can be used as recirculation water, energy-saving and environment-friendly.
- Water and air pipe separate, avoid cross contamination.
- Water and air low pressure alarm, auto counting function.

- The big turntable for washing is finely fabricated, the running is stable and bottle breakage ratio is low.
- Suits bottles of different spec, easy to change the change part.
- Can be used as single machine or part of the production line.
- Can choose touch panel.
- Fully comply with GMP requirements.

## Technical Parameters

Type	KCQ30	KCQ40
Capacity	150~160 (2~100mL)	200~220 (2~100mL)
Pure water pressure(Mpa)	0.15-0.35	0.15-0.35
Pure water consumption(m <sup>3</sup> /h)	0.3	0.4
Compressed air pressure (Mpa)	0.25-0.35	0.25-0.35
Compressed air consumption (m <sup>3</sup> /h)	20	30
Single machine noise(dB)	≤70	≤70
Power(Kw)	17.05	17.05
Power supply	380V/50Hz	380V/50Hz
Net weight(kg)	1500	1900
Overall dimensions(mm)	1800× 1800× 1300	2100× 1900× 1300

Type	KCQ60	KCQ80
Capacity	300~320 (2~20mL)	400~450 (2~20ml)
Pure water pressure(Mpa)	0.15-0.35	0.15-0.35
Pure water consumption(m <sup>3</sup> /h)	0.6	0.8
Compressed air pressure (Mpa)	0.25-0.35	0.25-0.35
Compressed air consumption (m <sup>3</sup> /h)	45	60
Single machine noise(dB)	≤70	≤70
Power(Kw)	17.05	17.05
Power supply	380V/50Hz	380V/50Hz
Net weight(kg)	2200	2500
Overall dimensions(mm)	2100× 1900× 1300	2500× 2250× 1300