

## **TUHP Series High pressure ultrasonic reactor system**

## **Function:**

This type ultrasonic reactor is often used in laboratory extraction and chemistry reaction research, which has solve amplitude transformer and reactor sealing problems, could equip various types chemical reactors' accessories under high temperature, achieve reaction system gas separation and vapour phase condensation & reflux. So could use ultrasonic disperse, crush, and excitation etc multiple effect to break the solvent structure of chemical reaction material in reactor, improve reaction activity, disperse and crush particles, reduce its radius.

According to actual research operation, this type ultrasonic reactor could accelerate reaction effect when powder substance participate the reaction, emulsion reaction and homogeneous reaction, etc. So this advanced practical type ultrasonic reactor could accelerate chemical reaction.

Ultrasonic reactor is consist of ultrasonic signal generator, stirring, constant temperature device, stainless steel pressure resistance reactor body, energy-gathered ultrasonic transducer and titanium alloy amplitude transformer. Ultrasonic transducer is fastened on reactor body through professional flange, ensure air pressure no leakage, reactor could customize double layer or three layers to heating or cooling, at the top of reactor could install dedicated magnetism-stress coupling adjustable-speed motor so as to guarantee there's no dead angle in reactor. Could customize material charging, discharging, reflux device, etc. Reactor lid could choose mechanical lifting device.



TUHP-500ml laboratory type



TUHP-10L industrial type



## technical parameter:

Model	Pressure (Mpa)	Temperature℃	Capacity	Ultrasonic power (w)
			ml	
TUHP-150ml	-0.1-12.5	RT-300	150ml	10-500w continuously adjustable
TUHP-250ml	-0.1-12.5	RT-300	250ml	20-1000w continuously adjustable
TUHP-500ml	-0.1-12.5	RT-300	500ml	100-1200w continuously adjustable
TUHP-750ml	-0.1-12.5	RT-300	750ml	200-1500w continuously adjustable
TUHP-1L	-0.1-12.5	RT-300	1000ml	300-1800w continuously adjustable
TUHP-2L	-0.1-12.5	RT-300	2000ml	400-3000w continuously adjustable
TUHP-5L	-0.1-12.5	RT-300	5000ml	500-3500w continuously adjustable
TUHP-10L	-0.1-12.5	RT-300	10000ml	800-5000w continuously adjustable







**Note:** Mechanical stirring reactor lid is available, could achieve the exchange of mechanical stirring and energy-gathered ultrasonic, or you also could install mechanical stirring at the top of reactor, install energy-gathered ultrasonic at the bottom. Special capacity, special material, special pressure and special temperature could customize, max pressure could reach 40Mpa. Max temperature could reach 400°C, low temperature could reach -50°C, max ultrasonic power could customize 100KW, max capacity could customize 1000L.