

## Reaction kettle(Single layer & Double layer & Ox-horn cup)

1. Double layer reaction cup is used for ultrasonic instruments, connect with high and low temperature / constant temperature bath could achieve system inner cooling, avoid sample changing caused by sample heating during ultrasonic process. This is more convenient than traditional ice-bath, the effect also is more ideal. General use high borosilicate glass GG17 material ( stainless steel material could be customized), high temperature or low temperature resistance, there's two circulating joint / connector on the reaction cup, adopt double layer jacketed design, charging cool water or hot water to achieve system inner constant temperature. Common size: 30ml, 50ml, 100ml, 300ml, 500ml, 1000ml, 2000ml ( could customize based on your demand).

2. Ultrasonic dedicated crush cup is customized for the samples which is difficult to crush, for its structure the upper part is big and the under part is small, so the energy could be more concentrate during ultrasonic process, there's multi reflux inlet to guarantee no dead angle of sample, this is good for sample homogeneity, cup mouth has stream guidance which is convenient for sample discharging.



30ml-2000ml double layer constant temperature cup



30-500ml Ox-horn cup

## Ultrasonic horn



**Ultrasonic horn selection guide parameters:**

Model Chinese standard	English system	Frequency (KHz)	Suggest power range reference value	Crush capacity reference value
Φ2	1/12"	20-25KHz	min-150W	0.2-5ml
Φ3	1/8"	20-25KHz	min-250W	3-10ml
Φ6	1/4"	20-25KHz	20-400W	10-100ml
Φ10	5/12"	20-25KHz	100-600W	30-300ml
Φ12	1/2"	20-25KHz	200-900W	50-500ml
Φ15	5/8"	20-25KHz 19.5-20.5KHz	300-1000W	100-600ml
Φ20	4/5"	19.5-20.5KHz	400-1100W	100-1000ml
Φ22	5/6"	19.5-20.5KHz	400-1100W	200-1000ml
Φ25	1"	19.5-20.5KHz	800-1500W	500-1200ml

Ultrasonic cell crusher

Ultrasonic material dispenser

Ultrasonic Cleaner