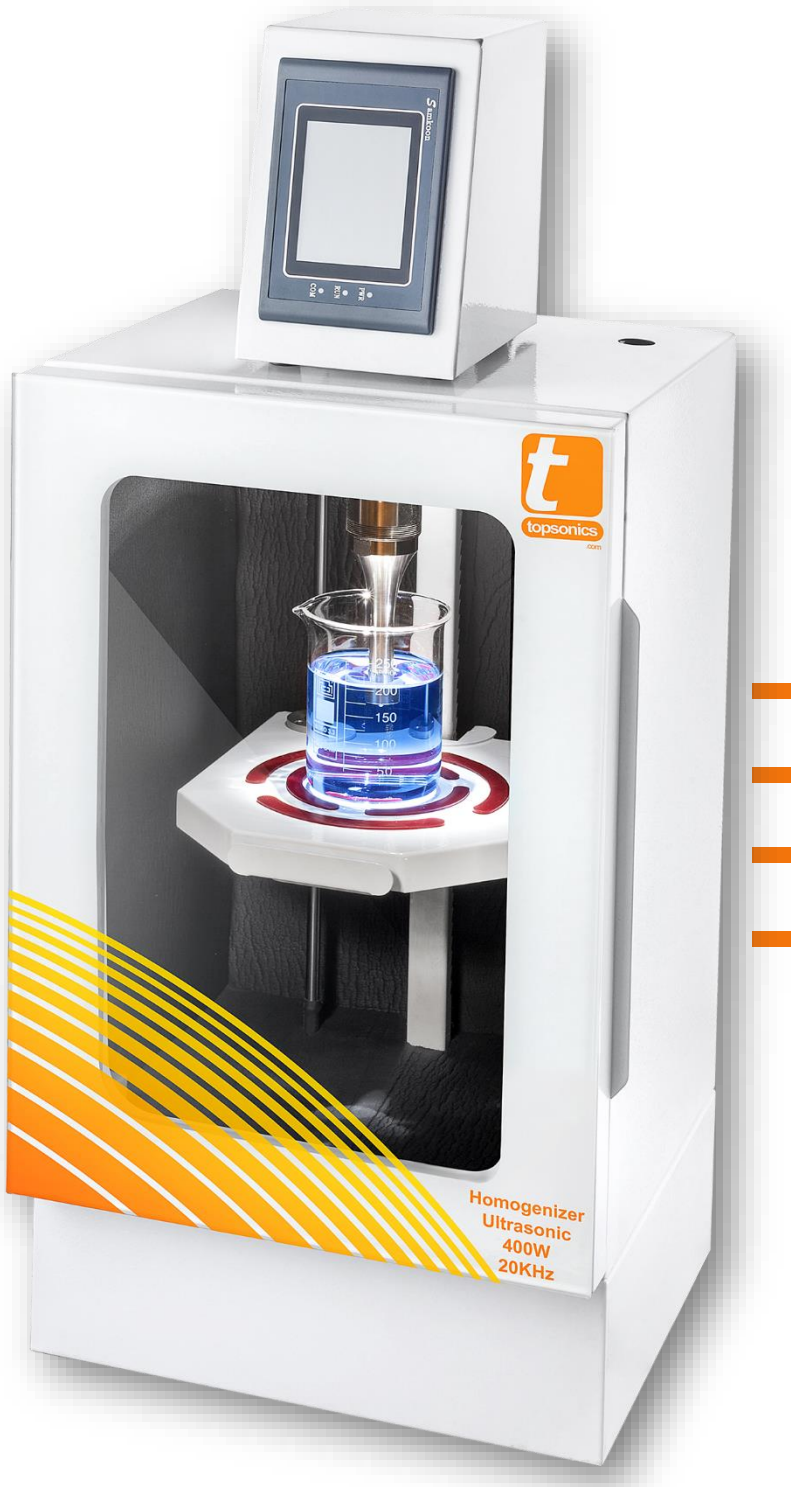
Ultrasonic Homogenizer

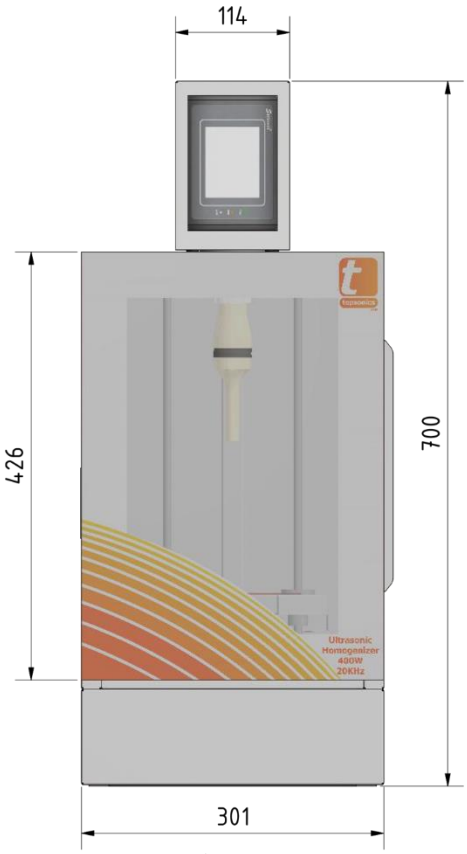
20 KHz, 400W

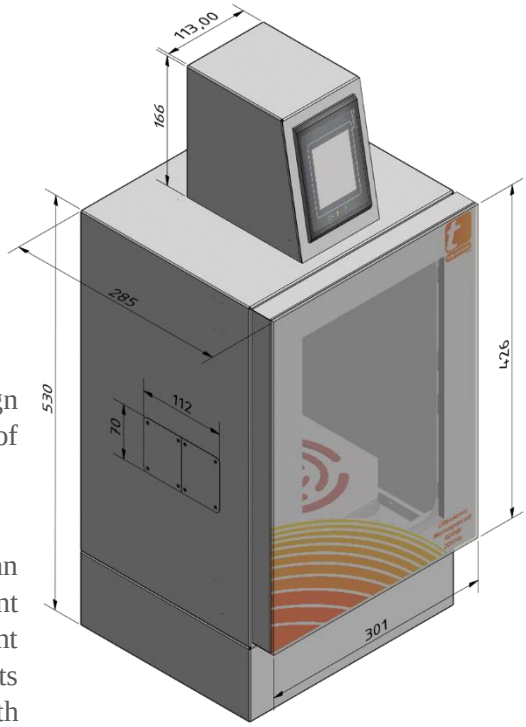


topsonics

www.topsonics.com

Property	***UP400***
Input Voltage (V)	220
Input Current (A)	2
Input Frequency (Hz)	50-60
Output power (W)	0-400
Output Frequency (KHz)	20±1
Power Adjustable	Yes
Frequency Adjustable	No
Interface	TFT LCD (touch)
Working Mode	Pulse
Pulse ON (s)	1-20
Pulse OFF (s)	1-10
Total duration for a cycle (min)	30
Sound enclosure box	Yes
Thermometer	Yes (PT-100)
Temperature range (˚C)	0-100
Horn Material	Ti-6Al-4V
Horn final diameter (mm)	13
Working volume (CC)	100-1500





The scientific background of TOPSONICS dates back to 2003 with the design and manufacturing of ultrasonic surgical knife. Today, this company is one of the leading and fast growing in the field of power ultrasonic technology.

Ultrasonic waves are mechanical waves whose frequency exceeds human hearing range (20 Hz- 20 kHz.). Due to their property, these waves have different and somewhat interesting applications. Using a simple calculation, if a point with a frequency of 25 KHz. and a domain of 10 micrometer oscillates, its acceleration reaches a magnitude which is 25000 times greater than that of earth gravity (g=9.8 m/s^2). Due to this acceleration and high speed, cavitation in liquids occur and during the phenomena of explosion of bubbles, an approximate pressure of 200 psi along with a temperature of 5000˚K are observed.

On the other hand, if a relative movement with the above mentioned condition is occurred between two layers of thermoplastic, the high temperature leads to bonding of the two layers which is called ultrasonic welding one of the industrial application of ultrasonic technology.
Ultrasonic homogenizers are widely used in Nanotechnology to disperse nano material in to the oil and water. Besides that, phytochemistry, medicine, oil and gas are some other filed which ultrasonic homogenizer are useful.

topsonics Co.
info@topsonics.com

No. 2, 4th floor,
Science and technology
park of institute of Physics
Savanori ave. 235, LT-02300
Vilnius,
Lithuania
Phone: +370 628 10566