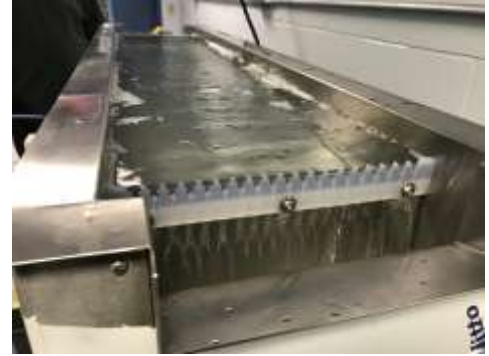




# ULTRASONIC POWER CORPORATION

Spec 17-835  
2/14/2017

## Custom BT 6012 Industrial Ultrasonic Continuous Wire Cleaning Bench Top



### DESCRIPTION:

Ultrasonic Power Corporation, heavy duty **Model BT 6012** industrial (bench top) ultrasonic continuous wire cleaning system. Built for long term, continuous, reliable, precision cleaning with the following features:

- Internal dimensions 12"W x 60"L x 8"D with a capacity of approximately 16 gallons
- Overall dimensions 15"W x 63"L x 12"H
- Heavy duty, 14 gauge, 316L stainless steel construction, double TIG welded
- **1500 Watts of "Simultaneous Multi-Frequency®" ultrasonic cleaning power (3000W peak)**
- 18 "Vibra-bar®" transducers, 36 piezoelectric (PZT) stacks mounted to tank bottom
- Two high temperature coaxial cables 6' long (for connection to ultrasonic generators)
- 1500 Watts of heat controlled by a thermostat, 120 VAC, 50/60Hz, 12.5A
- Tank has two weir systems (one on each end) to catch overflow from center tank
- Each weir will support an adjustable "saw tooth" polypropylene fixture to guide each wire strand. Height adjustment and flow rate will help determine wire depth under the liquid surface
- Three, 3/4" drains with heavy duty ball valves
- Center drain is for input of filtered cleaning detergent
- The outer drains will carry overflow to storage vessel/ filtration system
- Tank bottom is sloped for easy draining
- Based on drawing 12A321 (Wire Cleaning System with Reservoir and Pump Stand)

*One (1) 40 kHz, 1000 Watt, **Model 5300** ultrasonic generator, includes the following features:*

239 E. Stephenson St. Freeport, IL 61032 USA  
Phone: 815-235-6020 Toll Free: 800-575-0168 Fax: 815-232-2150  
Email: [sonic@upcorp.com](mailto:sonic@upcorp.com)  
**WWW.UPCORP.COM**



# ULTRASONIC POWER CORPORATION

- Modulation Sweep Control - 38-42 kHz (300-1000 Hz sweep rate) - provides the ability to perform in a variety of aqueous and semi-aqueous cleaning chemistries.
- **Patented constant power circuit design monitors power output continuously adjusting input power for controlled consistency - US patent 5,895,997**
- **Power Intensity Control** - combined with “**Simultaneous Multi-Frequency®**”, extends the equipment cleaning ability to very fragile items such as semiconductor devices, wafers and delicate glass parts
- **Automatic short / open protection** – generator is protected if the output is either "short circuited" or "open circuited"
- **Automatic frequency / load control-** provides uniform and reliable operations under all conditions of loading
- **2000 watts peak power, 1000 watts average output power**
- Includes RFI (radio frequency interference) filter - assures RFI suppression and protection against electrical shock
- High efficiency generator circuitry
- Meets FCC requirements
- On/off switch & red indicator light
- Six (6) foot power cord
- Constant output power <5% variation with input voltage
- Power requirements **120V**, 50/60Hz, 10.6A
- Includes manual

*One (1) 40 kHz, 500 Watt, **Model 5300** ultrasonic generator, includes the following features:*

- Modulation Sweep Control - 38-42 kHz (300-1000 Hz sweep rate) - provides the ability to perform in a variety of aqueous and semi-aqueous cleaning chemistries.
- **Patented constant power circuit design monitors power output continuously adjusting input power for controlled consistency - US patent 5,895,997**
- **Power Intensity Control** - combined with “**Simultaneous Multi-Frequency®**”, extends the equipment cleaning ability to very fragile items such as semiconductor devices, wafers and delicate glass parts
- **Automatic short / open protection** – generator is protected if the output is either "short circuited" or "open circuited"
- **Automatic frequency / load control-** provides uniform and reliable operations under all conditions of loading
- **500 watts peak power, 1000 watts average output power**

239 E. Stephenson St. Freeport, IL 61032 USA  
Phone: 815-235-6020 Toll Free: 800-575-0168 Fax: 815-232-2150  
Email: [sonic@upcorp.com](mailto:sonic@upcorp.com)  
**WWW.UPCORP.COM**



# ULTRASONIC POWER CORPORATION

- Includes RFI (radio frequency interference) filter - assures RFI suppression and protection against electrical shock
- High efficiency generator circuitry
- Meets FCC requirements
- On/off switch & red indicator light
- Six (6) foot power cord
- Constant output power <5% variation with input voltage
- Power requirements **120V**, 50/60Hz, 5.3A

**Options available for the system include:**

Stainless Steel Lid

**Ultrasonic Transducers:**

All ULTRASONIC POWER CORPORATION systems feature our unique “Simultaneous Multi-Frequency®” utilizing “Vibra-Bar®” transducers. We permanently attach our “Vibra-Bar” transducers to the underside of the radiating surface using a proprietary process that insures long term reliability. This bond is guaranteed for ten (10) years. The unique construction of the Vibra-Bar provides complex resonance of 40-90 kHz, which produces ULTRASONIC POWER CORPORATION’S patented “Simultaneous Multi-Frequency®”, thus virtually eliminating undesirable standing waves.

**Ultrasonic Generators:**

Each of ULTRASONIC POWER CORPORATION’S generator features our patented modulation sweep and power intensity control technology. The power intensity control maximizes the cleaning unit’s flexibility to clean small delicate items or large bulk items. Our generators use solid state circuitry backed by 20 years of field proven reliability. ULTRASONIC POWER CORPORATION’S generators provide consistent, predictable ultrasonic cleaning power throughout the cleaning bath. This proven design provides a constant output power even as the solution temperature or load volume increases.

***The Ultrasonic Power Corp. industry-leading warranty is attached. The warranty is your guarantee of the best quality, the very best. And we stand behind it!***

239 E. Stephenson St. Freeport, IL 61032 USA  
Phone: 815-235-6020 Toll Free: 800-575-0168 Fax: 815-232-2150  
Email: [sonic@upcorp.com](mailto:sonic@upcorp.com)  
**WWW.UPCORP.COM**