

BRANSON



Ultrasonic Precision Cleaning Technology

Advanced Solutions Offering Choice,
Quality and Service



BRANSON: the Worldwide Standard for Quality, Innovation, and Service



For more than 60 years, Branson has been a leader in ultrasonic precision cleaning systems. Starting with our benchtop baths that clean small, delicate components and instruments, to large industrial and automated systems, our range of precision cleaning equipment is second to none.

With the demands and expectations that the medical, aerospace, automotive, electronics, optics and semiconductor markets require, and where extreme accuracy and cleanliness is a must, Branson leads the way in providing “no-compromise” precision cleaning technologies.

Branson is recognized around the world for our unsurpassed expertise in the use of ultrasonics for precision cleaning, for innovative problem solving, leading-edge product development, and our ability to find unique, custom solutions to virtually any customer challenge.

With more 70 offices and facilities on 3 continents, including state-of-the-art capabilities serving Asian markets, our global capabilities ensure that you can count on Branson not only for the latest-technology cleaning equipment, but also for expert, local consultation, customer service, and technical support – wherever you are.

Precision Cleaning at Its World-Class Best

Branson's experience and knowledge of ultrasonic precision cleaning exceeds all others. We provide not only precision cleaning equipment, but also invaluable resources to ensure that our products deliver the intended results.

Branson's Precision Cleaning laboratory is well-equipped to provide you with precise and accurate cleanliness measurement, utilizing methods such as gas chromatography to characterize organic residues and gravimetric analysis to help you determine if your parts are clean. Applying our technology and experience, we can recommend the proper combination of equipment and process to implement in your mission to meet your cleaning objective.

We can provide precision cleaning capabilities that serve four important areas:

- Aqueous Systems
- Solvent Systems
- Automated Processes
- Support Equipment

Each area offers a unique set of capabilities and benefits, and together they cover a virtually limitless range of applications.



The Industry's Most Complete Line of Precision Cleaning Equipment

Our commitment to precision cleaning means providing not only world-class quality and reliability, but also a range of products capable of meeting the widest possible variety of needs.

Aqueous Cleaning Systems

From our sophisticated Benchmark Series to the compact Omni Series, Branson aqueous cleaning systems are designed to meet the most demanding production requirements. Pre-configured or modular, Branson aqueous cleaning systems are typically used for particulate removal, oil removal, defluxing, and many other precision cleaning applications.

Our Aqueous Systems include the **Benchmark**, **FlexLine**, and **Omni Series** cleaning systems, offering the following benefits:

- Environmentally friendly
- Effective cleaning of a wide variety of soils
- Zero or low Volatile Organic Compound
- Can be used with a wide range of chemistry options
- Compatible with many materials



Automation

For production applications that require continuous cleaning of manufactured parts or devices, Branson cleaning systems can be engineered for fully automated operation. From simple stand-alone units to fully integrated production lines, Branson can help you incorporate one of these automated systems into your production processes.



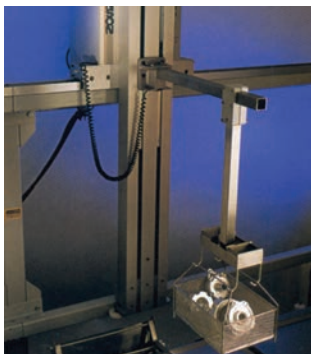
Solvent Cleaning Systems

These exceptionally cost-effective systems incorporate cleaning, rinsing, drying, and solvent reclamation in a single compact unit. Branson vapor degreasing equipment is designed to operate with a wide variety of commercially available solvents. Our product line consists of the **B-Series Ultrasonic Vapor Degreasers and Solvent Recovery Stills**. Solvent cleaning offers the following benefits:

- No process chemistry to mix
- Automatic solvent reclamation – minimized waste stream
- Fewer process variables to manage
- Easy and cost-effective to automate
- Consistent, repeatable results
- Compact footprint



Model B950R shown with optional rotating basket



Two-Dimensional Robots

Microprocessor or PLC-controlled hoists can increase throughput, as well as improve cleaning consistency and assist in regulatory compliance.



Upper Enclosure

Designed to isolate the cleaning area from the outside environment, this feature helps maintain part cleanliness and provides increased operator safety.



Product and Process Verification

Equipment and process parameters can be monitored, managed, and recorded. Barcode scanning eliminates the need for manual data input.

Complete Line of Precision Cleaning Equipment (cont'd)

Ultrasonic Components

Ultrasonic Tanks

The cornerstone of any ultrasonic system, Branson makes standard stainless steel ultrasonic tanks ranging from 5 to 100 gallons, and custom tanks in nearly any size. A number of options are available, including filter/recirculation packages and parts baskets.



Generators

Available in 3 model types and 5 frequencies (25, 40, 80, 120 and 170 kHz) offering a variety of features to match your cleaning needs.

Immersible Transducers

Branson 316L stainless steel immersible transducers provide versatile ways to add ultrasonics to new or existing tanks. They are available in standard and custom sizes. Also available in Hastelloy†.

Support Components

Hot Air Dryers

Temperature-controlled heaters and recirculating hot air provide up to 250°F drying. Options include high-performance blowers, power operated cover, air-blow-off nozzles and HEPA filtration.

Coalescer

Designed to separate oily soils from aqueous cleaning solutions, extending the solution's useful life.

Aquafier

This closed-loop industrial water purification system produces high-quality deionized (DI) rinse water at a rate of up to 5 gpm.



Markets and Applications

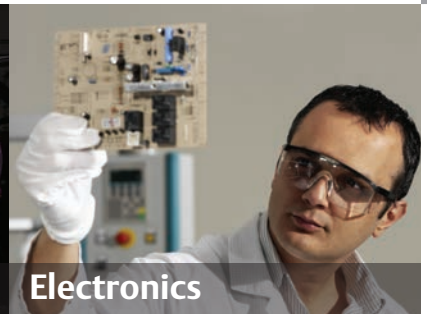
Branson ultrasonic cleaning equipment has proven to be reliable and effective in dozens of applications in a variety of markets. From industrial parts to precision medical devices to laboratory processes, the variety of models available, standard or custom, offers the reliable quality and optional features to suit virtually any precision-cleaning need.



Automotive



Aerospace



Electronics



Optics



Medical



Semiconductor

Customer Support As Advanced As Our Technologies

Branson understands the importance of supporting you after your precision cleaning systems are in place. Our global network of offices and facilities will provide your company with the following support services:

- Complete training for your employees in the operation and maintenance of your equipment
- Engineering and design assistance to determine the right system for you
- Prompt supply of replacement and repair parts from international distribution centers

Global Technologies. Local Solutions.

Branson's unmatched global resources ensure optimal solutions for the most challenging ultrasonic precision cleaning and materials joining applications. With 1600+ employees in over 70 sites worldwide, we can rapidly respond to our customers' needs, wherever they are located.

Branson understands local markets and regulations, and the open collaboration among our global offices and extensive staff of application specialists quickly produces solutions for customers. We partner with companies of every size and scope to help resolve critical issues ranging from market

changes, product quality/life cycles and production costs, to employee safety and environmental compliance. And, Branson's commitment to the publicly funded industrial collective research initiative and cooperation with various research centers have produced widespread innovations in ultrasonic cleaning and plastics joining technology that are benefiting companies everywhere.

Branson is a leading innovator in the Industrial Automation division of Emerson, a diversified global manufacturing and technology company. Emerson is a progressive company working to develop products and processes to resolve global issues, including energy

supply and distribution, information and networking, climate and environment, manufacturing efficiency, and product performance. Emerson is dedicated to the pursuit of breakthrough technology developments never before envisioned.

Branson brings exceptional quality, fast delivery and competitive prices. Contact your nearest regional center today.

Americas

Branson Ultrasonics Corp.
41 Eagle Road
Danbury, CT 06810, USA
T: 203-796-0400
F: 203-796-0450
www.bransonultrasonics.com

Europe

Branson Ultraschall
Niederlassung der Emerson
Technologies GmbH & Co. OHG
Waldstrasse 53-55
63128 Dietzenbach, Germany
T: +49-6074-497-0
F: +49-6074-497-199
www.branson.eu

Asia

Branson Ultrasonics (Shanghai) Co., Ltd.
758 Rong Le Dong Road
Song Jiang, Shanghai, PRC, 201613
T: 86-21-3781-0588
F: 86-21-5774-5100
www.branson.com.cn