



BRANSON

Superior Joining and Cleaning Solutions for the Medical Industry

Ensuring the quality products
and consistent performance required
by medical manufacturers



EMERSON
Industrial Automation

Branson's Medical Industry Expertise Provides a Competitive Edge.

With our long history of working with medical device manufacturers and biotech firms, Branson has been an active participant in the ongoing evolution of the medical industry. We fully understand the need for developing products with uncompromising quality, as well as the importance of getting new products to market quickly and cost-effectively.

We offer an extensive portfolio of joining technologies and precision cleaning equipment. Our in-depth medical industry experience provides a competitive advantage to our customers in all aspects of product development and regulatory compliance by delivering the most robust manufacturing solutions. Our global presence allows us to support the entire product life cycle, from initial R&D and pilot programs through high-volume manufacturing in multiple countries.

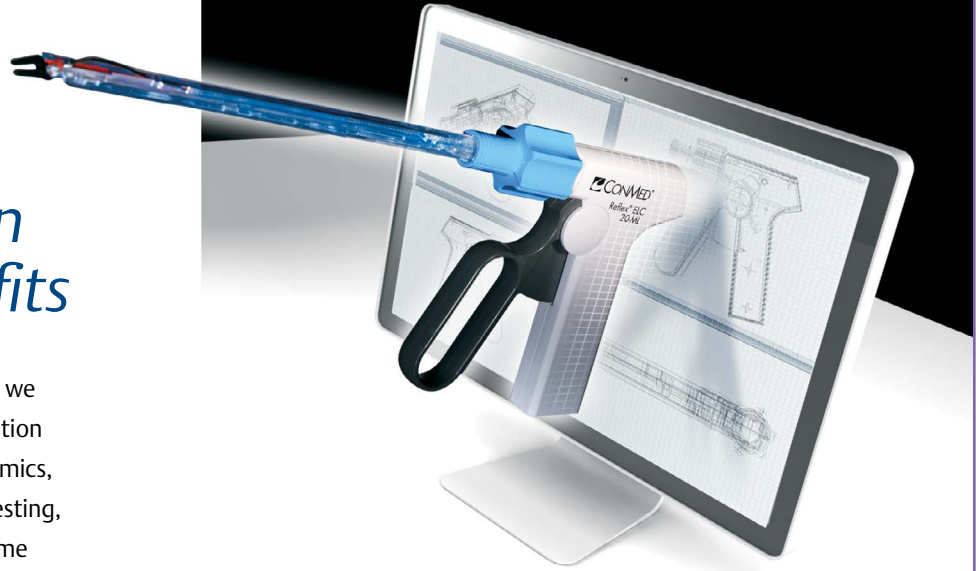
Regardless of the application challenge, you can count on Branson's technical expertise and responsive hands-on support to quickly provide solutions that enhance your ability to stay ahead of the latest industry trends.

Global Technologies. Local Solutions.



Early Collaboration Yields Major Benefits

Working closely with medical manufacturers, we apply our expertise to every aspect of application development. Included are design and ergonomics, material choices and functionality, product testing, and processing, ensuring that the final outcome meets or exceeds all performance requirements. Collaborating in the early stages of development results in quicker product and processing approvals, substantial time and cost savings, and greater speed to market.



Application Development

Responsive Service Around the World

Wherever you are located, you'll find a Branson facility nearby, ready to provide the assistance you need. We have over 70 technical centers, manufacturing facilities and sales and support offices strategically positioned throughout the Americas, Europe and Asia. With our knowledge of local cultures, markets, and regulations, we can help your projects develop quickly and efficiently. And, if you have multicontinent facilities, we can work with you by providing a global perspective with a local presence to coordinate your international design and production schedules.

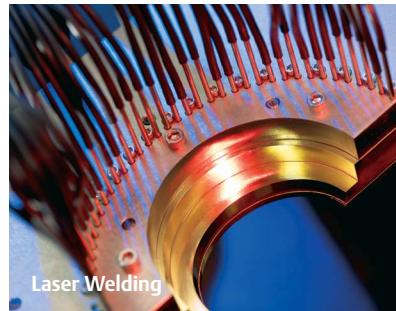
A Wide Array of Joining Technologies for Multiple Applications

From stand-alone clean room stations to fully automated systems, Branson joining technologies cover the full range of medical product applications. Branson employs a “**process neutral**” approach to application development to deliver the most robust joining solutions for your application needs.

Our plastics joining technologies include Ultrasonic, Hot Plate, Vibration, Spin, and Thermal. In response to new requirements

We also offer a range of Ultrasonic metal welding techniques that include spot welding and wire termination systems, continuous seam welding systems, wire splicing systems and tube sealers.

Driven to find innovative solutions, we continue to expand our joining capabilities and develop new applications. Successfully combining plastic joining with metal welding is one example. Plus, our joining processes support ecological standards and requirements for recyclability, eliminate the need for chemical solvents and adhesives, and are highly energy-efficient.



Laser Welding

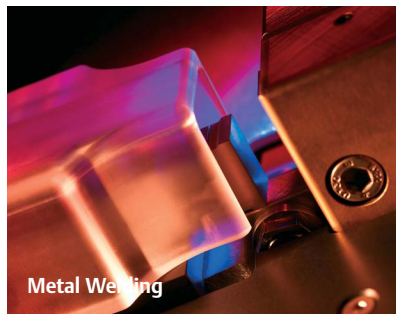
within the medical industry, Branson has developed our Clean Joining Technologies family, which includes Laser Welding, Infrared Welding, and Clean Vibration Welding. These joining technologies are specially designed to minimize or eliminate flash and particulates.



Ultrasonic Welding



Clean Vibration Welding



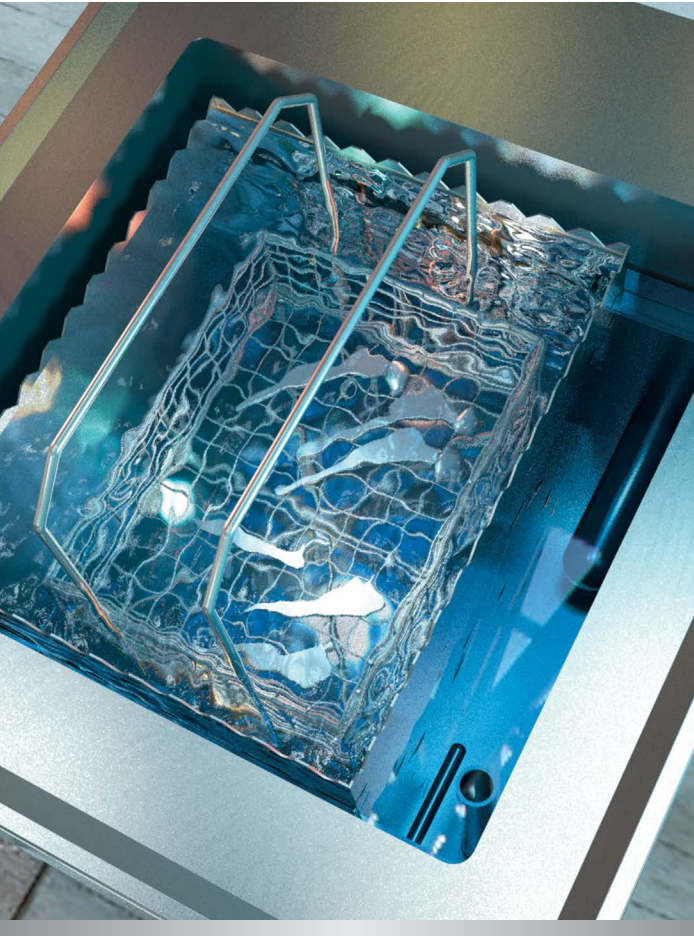
Metal Welding



Spin Welding

Leading-Edge Precision Cleaning and Passivation Systems

More than fifty years ago, Branson pioneered ultrasonic cleaning – a faster, more consistent, and efficient cleaning technique. Today,



Benchmark Cleaning System

Branson's cleaning systems set the standards by which all others are measured. Incorporating the latest in cleaning technology, a modular approach, and an uncommon level of service, these ultrasonic cleaning systems have a set of attributes that differentiate them from many of the other cleaning approaches. We offer medical manufacturers the broadest range of aqueous- and solvent-cleaning equipment specially designed to meet medical and laboratory standards for safety and performance.

Our product offering starts with our table-top units and expands to full production, modular-configured systems with HEPA-filtered dryers. Our customized models are state-of-the-art design and can meet cGMP (current Good Manufacturing Practice) sanitary system requirements. This wide range of choices allows you to match system features to your application requirements. You can also draw on Branson's expertise to engineer and implement a custom-built system that meets your specific cleaning process parameters.

All units are built with quality materials and workmanship, ensuring long-term, reliable performance. When your process needs to follow and comply with FDA guidelines, Branson can provide complete cleaning systems with excellent **process and product data collection** to meet that request.

Our notable brands include the *Benchmark Series* fully configurable cleaning and passivation systems, designed to meet exacting standards such as ASTM A380 and A967; the *Omni BioTek* preconfigured cleaning system; and the *B-Series Ultrasonic Degreasers*, for applications requiring a solvent-based process.

Branson offers complete flexibility – from simple stand-alone systems to fully-integrated systems with TDR (two-dimensional robots) and conveyors for all sizes of production systems. When applications require data collection capabilities, our systems are designed to store, access and retrieve information for your validated process.

A Partnership You Can Rely On

Branson has developed strong ties to medical companies of every size, in every corner of the globe. We work together with a common goal of providing products that offer excellent quality, consistent performance and cost-efficiency.

With our 100% commitment to customer satisfaction, we are ready to provide our application expertise whenever and wherever it's needed. Customers value our wide array of support services that range from pre-production consultation, engineering assistance and



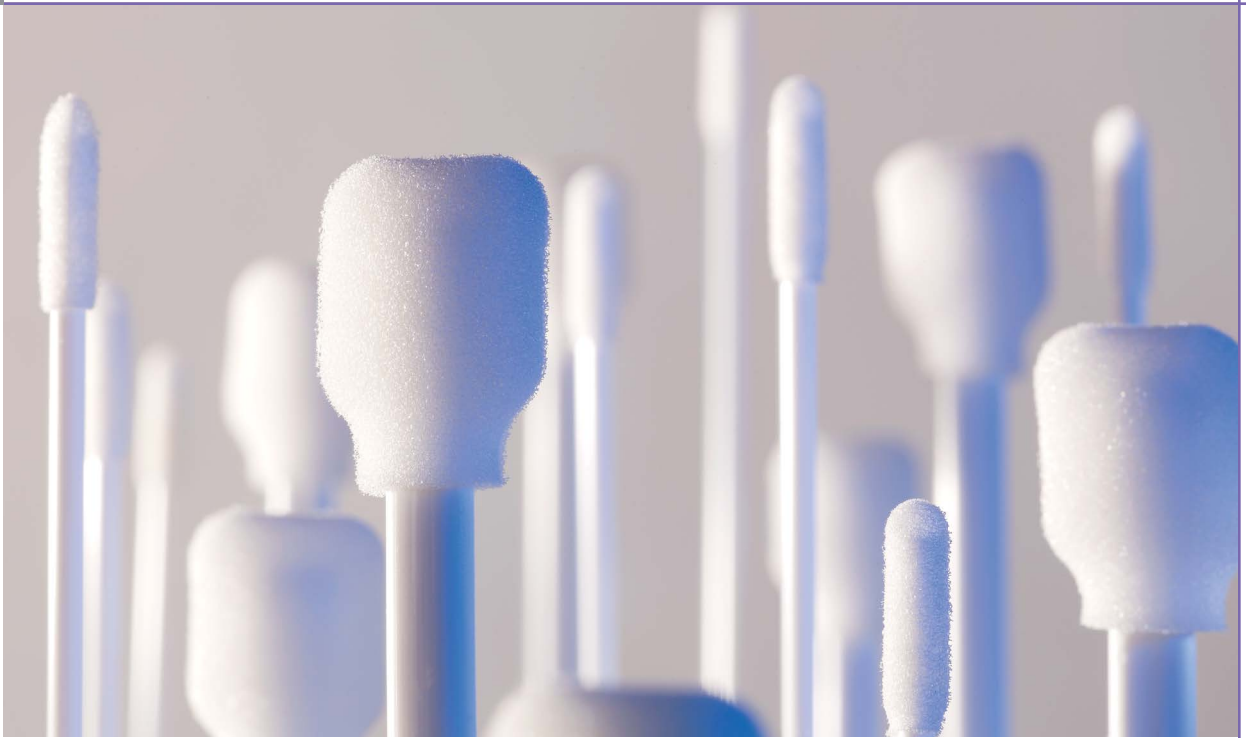
Cannula, Luers & Fittings

staff training to post-production troubleshooting, parts replacement, and preventative maintenance.

Testing Meters



Surgical Mask



Branson is part of the Industrial Automation division of Emerson, a diversified international manufacturing and technology company committed to developing technological breakthroughs that advance the performance of a wide range of

products and processes. Emerson takes pride in developing forward-thinking technologies that help customers stay ahead of the curve.

Inspired by Emerson's proactive corporate philosophy, we utilize

our exceptional capabilities and global reach to develop and implement custom solutions that help companies deal with marketplace changes and shorter product development cycles.

Medical Market Applications

- Disposable Garments
- Filters
- Tubes, Needles & Catheters
- Cleaning of Artificial Joints
- Analytical Devices
- Surgical Instruments
- Fluid Collection
- Incontinence Products
- Glucose Monitors
- Transversal Patches
- Implants



Maintaining a Focus on the Future

At Branson, we are continually expanding and refining our capabilities to help medical manufacturers deal with the inevitable changes now on the horizon. These changes can affect the design and performance of a diverse range of medical products, as well as the cost and method of their production.

Among the factors driving industry changes are the development of high performance resins, advanced metal

alloys and new combinations of materials; the growth of precision electronic medical equipment; and increased regulatory oversight and environmental compliance. Advances in medical and laboratory procedures and new patient treatments will also play a part.

Whatever lies ahead, Branson will continue to offer the technologies, products and services the medical industry requires. As a global solutions provider, Branson will remain at the

forefront of new material and process developments through our culture of innovation and ongoing cooperation with material suppliers and research institutes around the world.

To learn how Branson's expertise can help you adapt to industry changes, contact the regional center nearest you.

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