LEADING WITH INNOVATIVE TECHNOLOGY

Sonobond Ultrasonics® (formerly Aeroprojects) pioneered ultrasonic welding and received the very first patent for ultrasonic metal welding in 1960. We have over 150 U.S. patents and are known worldwide as a leader in ultrasonic technology.

Ultrasonic metal welding is fast and cost-effective. It creates solid-state, highly conductive, metallurgical bonds of non-ferrous similar or dissimilar metals and wires without the use of heat, current, fluxes, or fillers, and without melting the metals.

Our metal welders utilize our patented Wedge-Reed System, which was developed specifically for ultrasonic metal welding. It achieves the shear motion required for effective, reliable metal welding and it is the ONLY system that can weld lightly tinned or oxidized wires and terminals.

Sonobond metal welders—made in the U.S.A.—are used by leading firms in the automotive, aerospace, appliance, battery, electrical, electronic, HVAC, solar, and telecommunication industries. Our microprocessor-controlled models include:

SonoWeld® / Dual Head Spot Welders - These multi-functional welders accommodate both spot and wire-to-terminal welding, including multi-layers of foils for batteries and capacitors. The Dual Head model can weld up to 100 layers of foil as thin as seven microns without tearing, as well as aluminum sheet metal up to 3mm thick.

SpliceRite™ / Dual Head SpliceRite™ Wire Splicers - Choose SpliceRite for stranded wire bundles up to 60mm² and tinned bundles up to 35mm²; choose the Dual Head version to splice wire bundles from 48 to 100 sq. mm. cross sectional area and tinned wires to 60mm².

SPG/Single Point Ground Welder - The SPG produces single point ground terminals used for complex automotive electronic circuitry. It welds up to 18 wires to one terminal and automatically folds the terminal arms to provide stress relief on the joint.

WeldMaster™ C-Frame Welders - Effectively accommodate large metal parts, such as those used in the automotive industry, virtually eliminating tips sticking to aluminum. Models include 14-inch and 18-inch...
throat depths which can be operated as stand-alone units or incorporated into robotic production lines.

**Unique technology provides high performance**

Sonobond's patented **Wedge-Reed System** is essential for optimum ultrasonic metal welding. It was designed to provide ultrasonic vibration in the required shear mode direction parallel to the interface of the materials to be welded. In addition, its low amplitude sonics and high vibratory force provides the high impedance required for ultrasonic welding of metals, and its high static clamping force directly above the parts to be welded extends its range of applications beyond those of lateral drive systems.

For example, only Sonobond’s ultrasonic metal welders can...

- Join lightly tinned and oxidized wires up to 60mm².
- Deliver repeatably accurate welds without bending stress or stalling.
- Cut operating costs by replacing just the tips...not the entire horn.
- Dramatically reduce downtime with quick tooling changes completed without recalibration.
- Weld up to 100 layers of foil as thin as seven microns without tearing.

**Expertly engineered for maximum flexibility & durability**

Sonobond’s superior engineering has earned the company an exceptional reputation for performance and versatility, and provides a number of outstanding benefits:

- Storage and recall of over 250 weld protocols using microprocessor controller.
- Welding modes by time, energy or height.
- Digital displays, automatic frequency control, and overload protection.
- Up to 100,000 welds with high-strength, tool steel Taper Lock tips.
- Custom tooling to meet your specific requirements.
What our customers say

Manufacturers prefer the reliability and precision performance of Sonobond’s ultrasonic metal welders.

“We knew there were other assembly methods, but, unlike ultrasonics, they were less efficient and used consumables. We’ve gotten outstanding results from our customized SonoWeld® 1600. We were also very pleased with Sonobond’s personalized service, fast turnaround and excellent training. It just doesn’t get much better than that.”

Chris McLaughlin, Maintenance Manager, Lake Cable, LLC

“I’m always looking out for the most advanced, innovative processes in the market. So I have no problems giving references on your machines and your work.”

Rui Pedro Coelho, GE Energy Management

“We reduced splicing time by 60%. There is simply no comparison between Sonobond’s machines and the technology we used before. We are very pleased with all three units.

Curt Reynolds, Director of Manufacturing, J&M Products

“Sonobond technology is quick and dependable. It delivers repeatably excellent welds. In addition, Sonobond provides fast, reliable technical support. I’d rate their performance as practically a ‘10.’ You can’t do better than that!”

Tom Crumpton, Production Superintendent, Cornell Dubilier

FREE sample welds with your specific materials

Take advantage of our Free Ultrasonic Metal Welding Viability Test. Using your own materials, we will produce sample welds so you can see the results before you buy!

Sonobond offers the most dependable welders for the widest spectrum of welds. And, every unit is backed by exceptional customer service and outstanding technical support. To learn more or to request a quote, contact us today!