

# Dual Head SpliceRite™ Ultrasonic Wire Splicer

*Ultrasonically splices wire bundles with cross-sectional areas up to 100 square millimeters. No other ultrasonic welder can match this capacity with just one hit.*

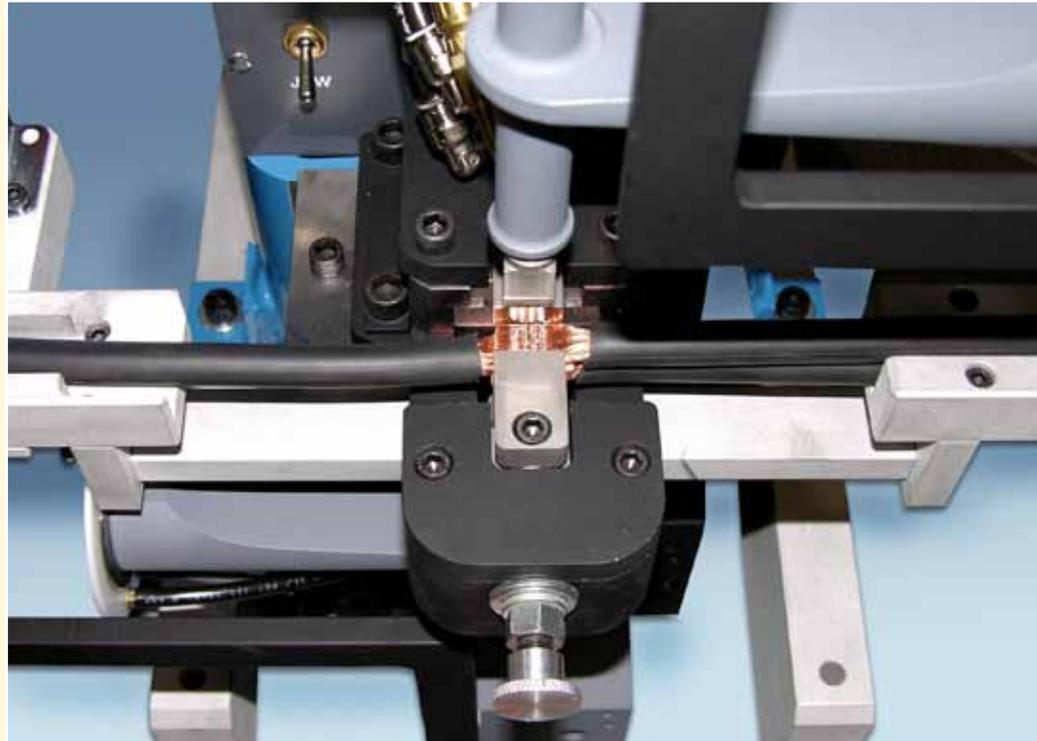
## General Description

The Dual Head SpliceRite™ Ultrasonic Wire Splicer (WS2036) is the latest addition to Sonobond's SpliceRite™ series. It features two welding heads, one on each side of the welding area. This enables it to splice large wire bundles in one quick step, even those with cross-sectional areas up to 100 square millimeters. No other ultrasonic welder equals this capability. The system produces a true solid-state metallurgical weld under controlled pressure without melting the wires or producing arcs, sparks, or fumes. High-quality, high-strength wire connections are created while eliminating any need to clip, solder, crimp, or dip.

The Dual Head SpliceRite uses Sonobond's patented "Wedge-Reed" system of high vibratory force and low amplitude coupling and is able to splice wires that are lightly tinned or oxidized. The system is fast, economical, and environmentally friendly.

## Features and Benefits

- A welding head on each side of the weld area for added welding capability.
- Accommodates large wire bundles, including those with cross-sectional areas up to 100 square millimeters. No other ultrasonic welder equals this capability with just one hit.
- Produces solid-state metallurgical welds that have low voltage drop.
- Confidently processes lightly tinned or oxidized wires.
- Microprocessor controller stores and recalls up to 250 jobs.
- Welds can be controlled by height, energy or by time.
- Stored jobs in microprocessor are locked out from operator adjustment.



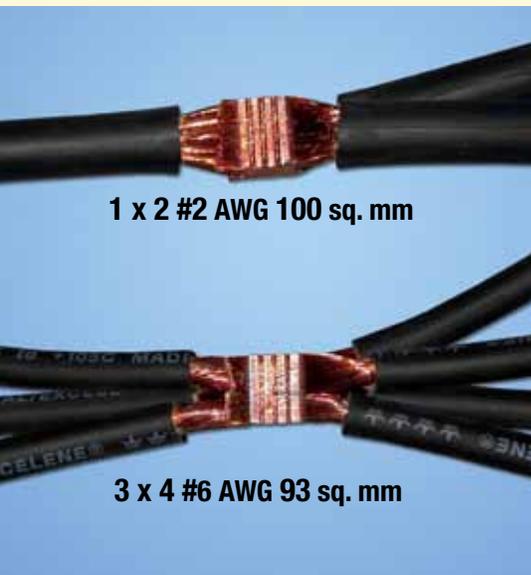
*The Dual Head SpliceRite™ accommodates cross-sectional areas up to 100 sq. mm with just a single pulse*



### Features and Benefits

(continued from other side)

- Heat-treated, tool steel taper lock tips can last for as many as 100,000 welds, while permitting quick tooling changes and fail-safe placement.
- Comes with 3,500-watt power supply.
- System is easy to set up and can be operated easily with only minimal training.
- Backed by superior customer service and exceptional technical support.



Welds even lightly tinned or oxidized wires

### Applications

The Sonobond Dual Head SpliceRite™ Ultrasonic Wire Splicer is especially suited for applications involving heavy-duty cables, such as those used for cars, trucks, and industrial machinery. No other ultrasonic welder can equal

this unit's capacity to splice large wire bundles with cross-sectional areas up to 100 square millimeters in a single pulse.

### Theory of Operation

Ultrasonic splicing with the Dual Head SpliceRite (WS2036) uses pressure to clamp the wires together. The power supply converts input line power into high frequency electrical power and transmits the energy to the transducers in the two splicing heads. The transducers convert the electrical energy into vibratory energy. This energy is delivered to the wire bundle in the form of sound waves above the audio frequency range. The applied vibratory energy disperses the oxides and surface films on the bundle. This creates a strong metallurgical bond without melting the material.

### Wire Splicer Operating Sequence

The Dual Head SpliceRite can weld in one of three modes: weld to a set height; to a fixed weld time; or to a selected energy level. The pre-selected energy level must be achieved within a time window or a fault is indicated. In this way, if the machine malfunctions, the operator can be alerted by the controller screen, by a light, or by an audible alarm.

The wires are loaded and held between the jaws and welder tips. The welder tips compress the wires and the ultrasonic energy splices them. The spliced bundle can then be removed and the tooling is ready for the next wire bundle.

### Specifications

Power Requirements	3 phase, 208 volts, 20 amps
Operating Frequency	20 kHz
Output Power	3,500 watts
Air Requirements	80-100 psi 4 CFM
Dimensions:	
• Welding Head	29" h x 19" w x 18" d
• Power Supply	8" h x 20" w x 22" d
Weight:	
• Welding Head	220 lbs
• Power Supply	75 lbs
Max. Force on Wire	880 Lbf
Weld Timer Range	0.10 to 4.00 secs
Welding Tips	Interchangeable taper lock type, heat-treated tool steel

### Ordering Information

3500 watts	
Welding Head	WS2036
Power Supply	FC2036

*Specifications are provided for information only and are believed to be accurate. However, no responsibility is assumed by Sonobond Ultrasonics for their use. Ongoing product development and improvement may cause changes without notice.*