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Tooling Gets Flexible

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Welder Produces Fast, Effective Bonds

Lake Cable LLC (Bensenville, IL) manufactures wire and cable assemblies for the power generation, energy distribution, building automation and fire systems industries. Its low-voltage products are used in a variety of audio, video and automation assemblies.

Recently, the company updated the spot welding capabilities at its

unlike ultrasonics, these other methods were less efficient and used consumables. We didn't want that. When we contacted Sonobond to replace a manual we'd lost, they recognized that a newer, customized unit could help us improve our existing processes."

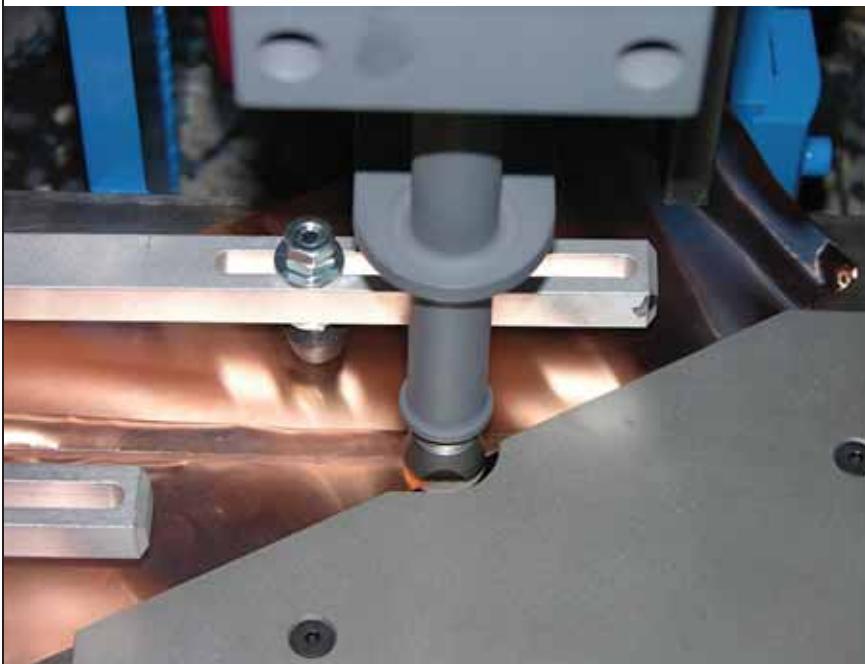
The new 2500-watt welder features a custom anvil slide assembly, as well as a modified frame, which accommodates materials up to 4.5 inches wide. The system also makes it possible to weld

The system also makes it possible to weld on an angle, so that welding stress will be spread out over a wider area.

on an angle, so that welding stresses are spread out over a wider area, making for a stronger joint. Testing has shown that weld strengths are approximately 90 percent as strong as the base material in which they were made. Cycles times for a 3/4-inch weld are about half a second.



The system's supply unit includes a microprocessor that can store some 250 different weld protocols.



Lake Cable LLC's new ultrasonic welding machine creates bonds that are nearly as strong as the base materials in which they are made.

100,000-square-foot Prairie Cable facility in Valparaiso, IN, by implementing a SonoWeld 1600 digital metal spot welder from Sonobond Ultrasonics (West Chester, PA). Among other tasks, the system is used to encapsulate cables in metal sheathing.

"We had been using a 20-year-old Sonobond machine and were very pleased," says Lake Cable maintenance manager Chris McLaughlin. "We knew there were other assembly methods. But,

In addition to providing quality bonds, the SonoWeld 1600 is also highly flexible, due to the fact that its power supply has a built-in microprocessor that can store and recall approximately 250 different weld protocols. The unit also provides automatic frequency control, overload protection and automatic quality monitoring. The welder's Taper Lock steel tooling can perform up to 300,000 welds before it needs to be replaced. A digital display allows operators to choose from a number of different welding modes, including time, energy and final weld thickness.

"We've gotten outstanding results," McLaughlin says. "We were also very pleased with Sonobond's personalized service and fast turnaround. All of our questions were answered, the training was excellent, and the requested spare-parts quote was sent out immediately. It just doesn't get much better than that."

In ultrasonic welding, high frequency ultrasonic energy is directed via a welding tip to the surfaces of the metals being welded. The energy disperses the oxides and surface films between the workpieces to create a true metallurgical bond without melting the materials. The process is environmentally friendly and produces no waste.

For more on ultrasonic welding, visit www.sonobondultrasonics.com or call 800-323-1269.

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