



Sonosystems®

ultra fast. ultra strong.
ultrasonic.

FX20-L



FX20-L

Ultrasonic Welding Machine for Power Electronics

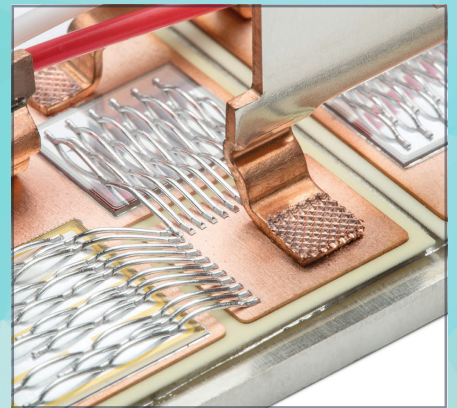
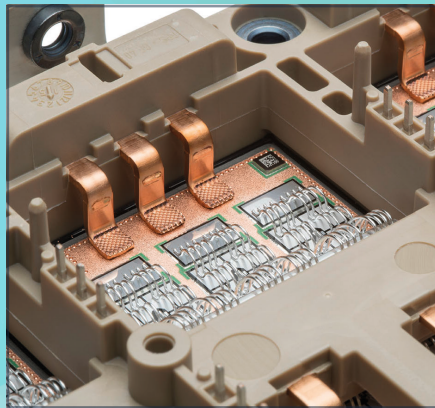
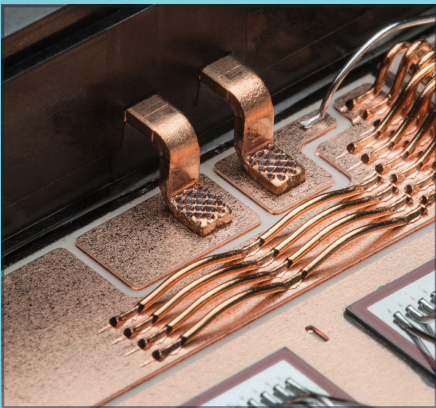
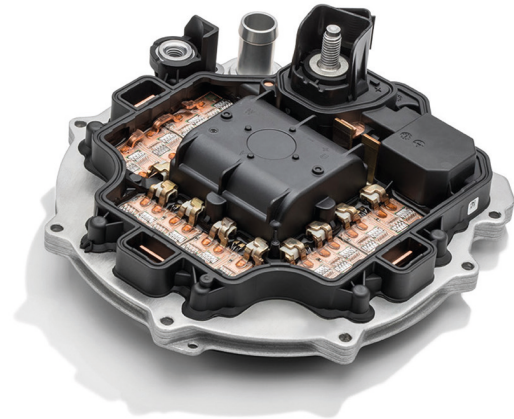
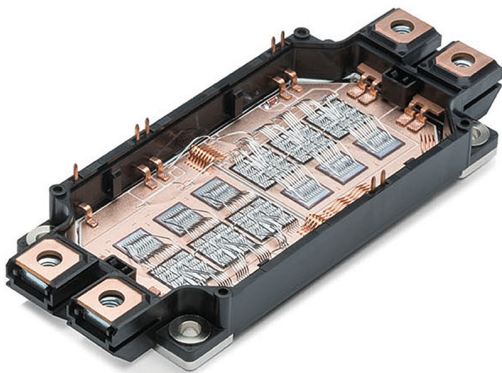
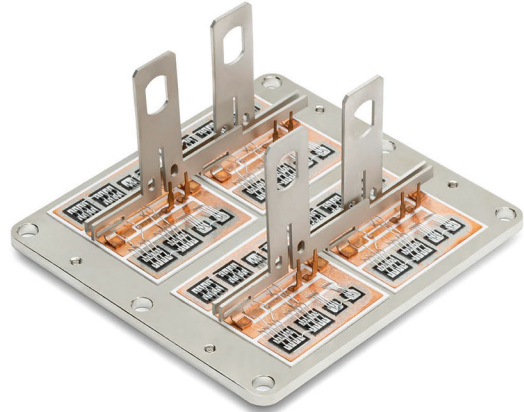
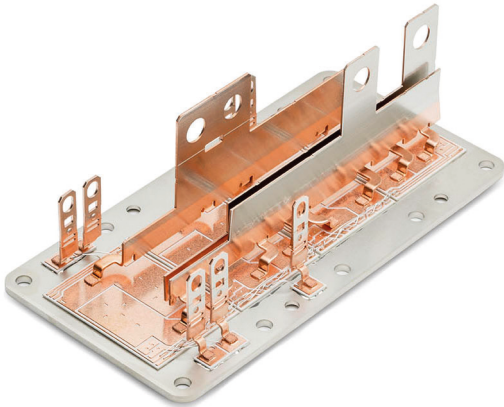
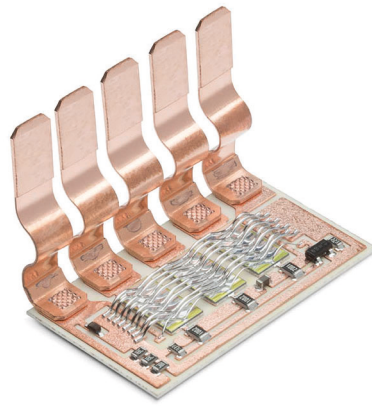
Semi-Automated machine for production



Ultrasonic welding head	20kHz (35kHz available on demand) embedded adjustment and quick change solution for welding tools
Weight, basic machine	approx. 1.200 kg (excluding external electrical cabinet)
Outer dimensions, basic machine	L x W x H: approx. 1200 mm x 980 mm x 2600 mm (excluding external electrical cabinet)
Accessibility in z-direction	max. 62 mm (special long welding tool available)
Working area (x-y-table and rotation axis)	x-axis: 250 mm / y-axis: 400 mm / rotation 360° special designed stiff axis systems, resistant to ultrasonic vibrations, axis equipped with brake systems for maximum stiffness while welding process
Welding stroke (z-movement)	30 mm, adjustable (higher stroke on demand)
Digital Ultrasonic generator system	3.000 W (4.000 W available)
Special customized clamping systems	clamping force up to 12.000 N including vacuum system for reliable welding results
Welding force	50 N - 900 N (1400 N on demand), soft touch down available
Major welding parameters	adjustable for each welding point: force (pressure), amplitude, energy, heights, deformation
Patented dynamic process control	monitoring of power and height curve, adjustable tolerances for welding time, heights and deformation for each welding point
Optional features:	
Pattern recognition system	to check and correct the welding positions
DMC (Data Matrix Code) reader	Traceability for e.g. product serial number
Measurement and calibration station	Semi-automatic machine self check possible Embedded tool adjustment and quick change solutions
Particle cleaning (external system)	useful process after welding
Integration in line automation	Improved concepts for linking of welding systems with customer-specific MES systems application-specific system adaptation up to integration into complex assembly lines

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Applications (examples)



Customized tooling available.
Let's talk about your application!

Schunk Sonosystems GmbH

Ultrasonic Metal Welding

- More than 10 years competence in Ultrasonic Metal Welding for power module industry
- More than 35 years experiences in Ultrasonic Metal Welding
- Customer related welding tests and support in special applications by our own laboratory
- Worldwide recognized as specialist in the field of Ultrasonic Metal Welding
- Optimal customer care thanks to our worldwide network of local subsidiaries and local sales/service partner for on-site support
- **ONE face to the customer -
Ultrasonic Metal Welding AND Automation Solutions**

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