

FX20-2L-R

Ultrasonic Welding Machine for Power Electronics

Automated machine for production



Ultrasonic welding head

Weight, basic machine

Outer dimensions, basic machine

Accessibility in z-direction

Working area (TWO x-y-tables)

Welding stroke (z-movement)

Digital Ultrasonic generator system

Special customized clamping systems

Welding force

Major welding parameters

Patented dynamic process control

Optional features:

Pattern recognition system

DMC (Data Matrix Code) reader

Measurement and calibration station

Particle cleaning (integrated system)

Loading system

Integration in line automation

TWO welding heads - 20kHz (35kHz available on demand) embedded adjustment and quick change solution for welding tools

approx. 2.000 kg

L x W x H: approx. 1800 mm x 2300 mm x 2300 mm

max. 62 mm (special long welding tool available)

x-axis: 200 mm / y-axis: 600 mm, axis equipped with brake systems for maximum stiffness while welding process special designed stiff axis systems, resistant to ultrasonic vibrations

max. 30 mm, adjustable (higher stroke on demand)

3.000 W (4.000 W available)

clamping force up to 12.000 N including vacuum system for reliable welding results

50 N - 900 N (1400 N on demand) soft touch down available

adjustable for each welding point: force (pressure), amplitude, energy, heights, deformation

monitoring of power and height curve, adjustable tolerances for welding time, heights and deformation for each welding point

to check and correct the welding positions

Traceability for e.g. product serial number

Semi-automatic machine self check possible Embedded tool adjustment and quick change solutions

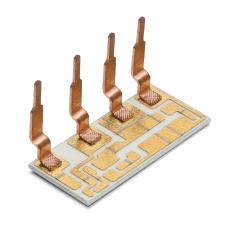
useful process after welding

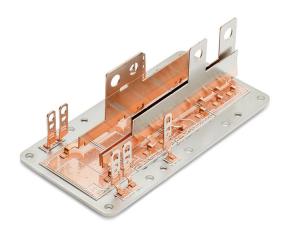
customizing possible (e. g. robot, conveyor)

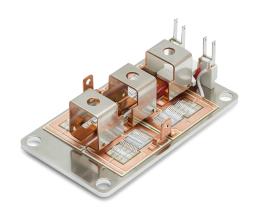
Improved concepts for linking of welding systems with customer-specific MES systems application-specific system adaptation up to integration into complex assembly lines

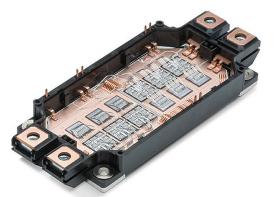
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Applications (examples)





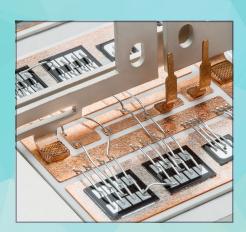












Customized tooling available. Let's talk about your application!

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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