



Ultrasonic wire welding system

iSONIC ECO CUBE MWL

Ultrasonic wire welding. Reliable electrical connections.

The iSONIC ECO CUBE MWL is a compact ultrasonic wire splicing system for joining stranded wires and cable conductors made of electrically conductive metals. High-frequency ultrasonic vibrations weld the conductors together under defined pressure, creating a stable metallic connection without the use of solder or flux.

The iSONIC ECO CUBE MWL is suitable for ultrasonic welding of copper and aluminium strands with cross-sections from 0.5 to 18 mm². Monitoring welding energy, welding time and weld width ensures repeatable welding results and consistent connection quality.

The sonotrode and anvil are designed for different conductor cross-sections and applications, allowing flexible adaptation to each welding task. The service-friendly tool design enables quick and straightforward replacement when required, reducing maintenance effort and costs.

Benefits

Repeatable weld quality: Controlled process parameters ensure consistent connections.

Service-friendly tool design: Quick tool changes with minimal maintenance effort.

Easy operation: Set the conductor cross-section using a rotary dial and monitor process parameters.

Compact design: Space-saving and flexible for use in a wide range of production environments.

No additional joining materials: Ultrasonic welding without solder or flux

CONDUCTOR CROSS-SECTION
0,5 - 18 mm²

iSONIC ECO CUBE:
Mobile ultrasonic generator
Generator output:
3 kW
Operating frequency:
20 kHz

Easy adjustment of
operating parameters
via the touchscreen



Compact design

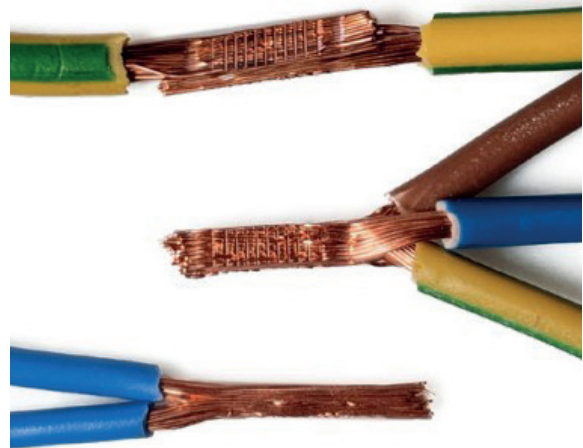
Tools enable flexible processing of different
conductor cross-sections and welding applications

Ultrasonic technology for reliable cable connections

iSONIC ECO CUBE MWL

Applications

- **Cable assembly**
Ultrasonic welding of stranded wires and cable conductors for stable electrical connections
- **Automotive industry**
Manufacturing reliable cable connections and wiring harnesses
- **Electrical and electronics manufacturing**
Repeatable metallic connections for electrical applications
- **E-mobility and battery technology**
Joining electrically conductive cables and conductors
- **Energy and connection technology**
Manufacturing stable electrical connections
- **Series and small-batch production**
A compact system for cost-effective production processes involving small to medium batch sizes



Technical data iSONIC ECO CUBE MWL	
Process	Ultrasonic wire splicing
Welding head	20 kHz wire splicing
Operating frequency	20 kHz
Generator output	up to 3 kW / 3.200 W
Max. weldable conductor cross-section	18 mm ²
iSONIC ECO CUBE MWL dimensions (W × H × L)	125 mm x 160 mm x 395 mm
iSONIC ECO CUBE dimensions (W × H × L)	222 mm x 400 mm x 340 mm
Conductor cross-section range	0.5 – 18 mm ² *
iSONIC ECO CUBE MWL weight	9,5 kg
iSONIC ECO CUBE weight:	approx. 10 kg, depending on configuration
Electrical connection:	230 V AC
Mains frequency	50 Hz

* Booster upgrade available to extend the cross-section range to 24 mm² using special tooling.

