



Ultrasonic wire end compaction

iSONIC ECO CUBE MEC

Compact, round wire ends. Fewer process steps.

The iSONIC ECO CUBE MEC is a compact ultrasonic wire end compaction system designed for fast and precise compaction of flexible stranded wires and multi-core cables. High-frequency ultrasonic vibrations join the individual strands to create a compact, homogeneous and stable wire end. The strands are compacted evenly around the circumference, resulting in a defined, round geometry. This makes the compacted wire ends easy to insert into safety terminals and control cabinet terminals. Depending on the application, additional termination components such as wire-end ferrules may not be required. This reduces process steps and simplifies subsequent electrical processing.

Advantages

Compact, round wire ends achieved through ultrasonic compaction

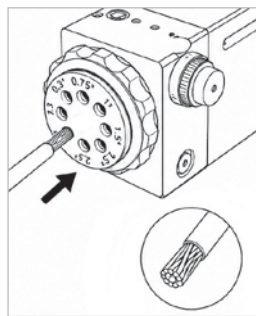
Easy insertion into safety terminals and control cabinet terminals

Repeatable results through defined process parameters

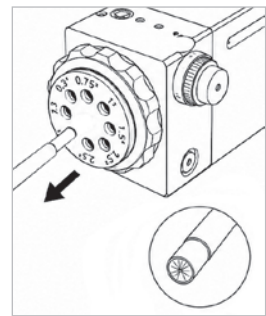
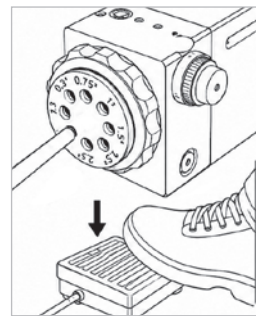
No wire-end ferrules required for suitable applications

Space-saving design with a minimal footprint

The stranded wire is ultrasonically compacted between the sonotrode and the anvil. High-frequency vibrations create a compact, homogeneous and round wire end. The 3 kW, 20 kHz generator is optimally matched to the process. Eight insertion sleeves accommodate different wire cross-sections from 0.3 to 4 mm². Foot-switch operation ensures an ergonomic and efficient workflow.



Soft wire end

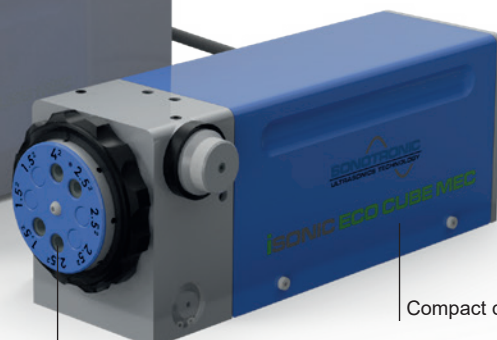


Compact, round, ultrasonically compacted wire end

iSONIC ECO CUBE:
Mobile ultrasonic generator
3 kW output power
20 kHz operating frequency

Easy adjustment of
operating parameters
via the touchscreen

CONDUCTOR CROSS-SECTION
0.3 TO 4 mm²



Compact design

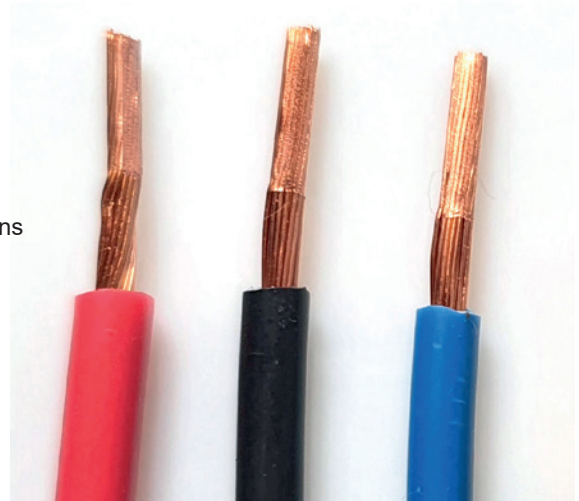
Ultrasonic compaction head with
eight insertion sleeves

Ultrasonic technology for compact wire ends

iSONIC ECO CUBE MEC

Applications

- **Cable assembly**
Repeatable, compact wire ends for high-volume and small-batch production
- **Control cabinet manufacturing**
Compact wire ends ready for direct further processing
- **Automotive industry**
Compacted wire ends for wiring harnesses and electrical connections
- **Connector technology**
Compact wire ends for reliable, easy electrical contact
- **Electrical and electronics manufacturing**
Reliable processes and repeatable electrical connections
- **Battery and energy technology**
Ultrasonic strand compaction for reliable electrical contacts



Technical data iSONIC ECO CUBE MEC

Process	Ultrasonic wire end compaction
Compaction head	20 kHz wire-end compactor
Operating frequency	20 kHz
Generator output	Up to 3 kW / 3,200 W
Dimensions iSONIC ECO CUBE MEC [WxHxL]	125 mm x 160 mm x 395 mm
Dimensions iSONIC ECO CUBE [WxHxL]	222 mm x 400 mm x 340 mm
Conductor cross-section	0.3 - 4 mm ²
Weight iSONIC ECO CUBE MEC	9,5 kg
Weight iSONIC ECO CUBE	Approx. 10 kg, depending on configuration
Electrical connection	230 V AC
Mains frequency	50 Hz

