





IWSL FMRW[™] welded Aluminium cable peel test shows good melting and welding of all wires.



Copper wire FMRW[™] welded to silver plated copper sheet.



Very low impedance FMRW[™] weld of 250 ampere fuse with connector.

REWRITING THE WELDING HANDBOOK

Our new Focused-Melt[™] Resistance Welding technology pushes the state-of-the-art. <u>You can:</u>

- Gain unprecedented welding capabilities for aluminum and copper alloy stranded wire cables with common and difficult-to-weld connector shapes and sizes.
- Manufacture welded aluminum alloy cable-connector joints with corrosion-free cleanliness and no soldering flux residues.
- Realize unprecedented low impedance and improved durability through melted and solidified weld joints.
- Weld brass, copper or aluminum connectors to stranded wire aluminum cables

With our process, you'll attain extraordinary welding capabilities with significant savings vs. current practices. <u>You can:</u>

- Eliminate entire manufacturing processes. Stop cleaning and tin-plating of stranded aluminum wire prior to welding with connectors.
- Reduce destructive testing and process-set up testing through enhanced process capability.
- Produce weld joints that do not heat-up any more than the cable materials during service.
- Produce welds far less sensitive to temperature fluctuations and "cold-flow" of aluminum.

Contact us about partnering to save money, make leaps in quality and produce ground-breaking design options!

We are collaborating with Comau Inc., and WTC Corporation in manufacturing their next generation products for current and new markets.

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PROCESS SPECIFICATIONS

UNLIMITED APPLICATION



Stranded-wire aluminum cable welded to a copper terminal through an interlayer

- Welding of aluminum alloy stranded wire cables of areas up to 120 mm² with quality, consistency, and reliability now possible using common aluminum alloy resistance weld machines.
- High quality replacement of heavy and expensive copper wire cables with stranded-wire aluminum cables with the same connectors. Dissimilar material cable welds are now possible.
- Copper (70 mm² area)and aluminum (up to 120 mm² area) stranded wire cables can now be Focused-Melt[™] resistance welded to connector with open, closed and flexible shapes.
- Significant improvements in joint strength, impedance and durabilty with both copper and aluminum stranded wire cables.
- Single cable to multiple cable joints now readily possible.

WELD SUPERIORITY

- High quality and low impedance melted-and-solidified weld is durable due to lack of cold-flow tendencies of aluminum.
- Melted weld joints that are solidified under pressure ensure high quality and low impedance joints.

PREVIOUSLY UNREALIZED SAVINGS IN MANUFACTURING



Aluminium cable weld peel tested

- The resistance weld process used is the least expensive joining method available to industry.
- Design and manufacture copper and aluminum stranded wire cables to connectors to significantly exceed the cost/quality of soldered joints.
- Weld time of a fraction of a second improves productivity and weld costs.

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