

Manual Joining Applications



Bench work Resistance Welding Power Supplies

The m1 series is designed specifically for manual bench top joining operations; reducing or eliminating weld splash, maximising electrode life and ensuring high process quality and repeatability, through precise output control.

These units are single phase, compact and lightweight, blending leading edge closed loop power technology with affordable pricing.

Common applications include battery tab assemblies and sensor manufacture.



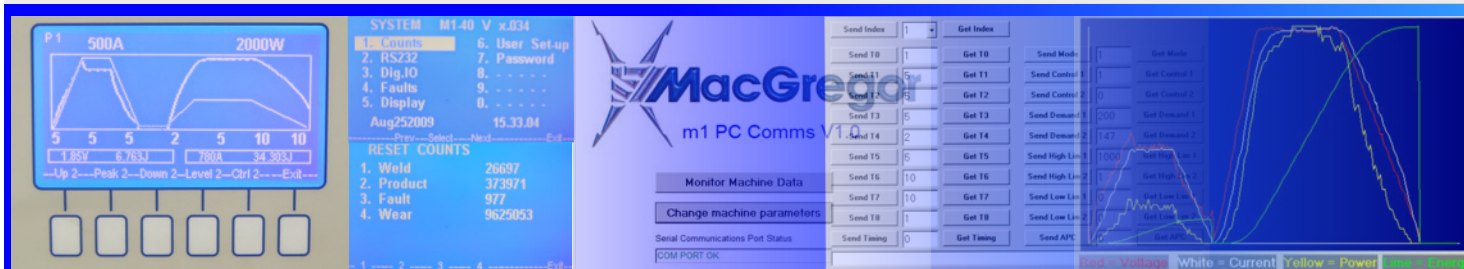
Key advantages of m1 "closed loop" supplies

All m1 power supplies offer 3 modes of operation (constant current, voltage or power) allowing them to be optimally set up for individual applications and materials to provide repeatable, accurate joining with the benefit of real time process limit controls.

Historically, low cost manual joining applications were fulfilled by capacitor discharge (CD) based machines. The nature of such machines means that the output is relatively uncontrolled and therefore quite process intolerant. Small changes in manufacturing processes such as material oxides, electrode wear and temperature can lead to significant quality issues like weld splash, weak joints and electrode wear/sticking.

Closed loop supplies deliver output as programmed and hence can compensate for process variables. In addition, built in real time process monitoring allows the possibility to detect and warn of a poor/out of tolerance part or damaged electrode.

All m1 units offer single or double pulse operation in all control modes, Advanced Part Conditioning, data capturing computer interface. A host of built in control and quality check features are available via the intuitive graphical menu system.



m1-10 product features

- Precision control, ultra fast response for low current applications
- Ideal replacement for MCW-550 & Unibond™ systems

Typical Applications

- Ribbon welding
- Micro circuit welding
- Solar cell assembly
- Sensor and component welding
- Detonator and bridge wire welding

m1-40 product features

- Short high current pulse capability for conductive material joining.
- Ideal replacement for capacitor discharge equipment.

Typical Applications

- Battery and battery pack assembly
- Miniature contact welding
- Wire and lead termination
- Lamp manufacture
- Conductive material welding

