

## MM01 MI Thermocouple Welding Machine



- Welds all Mineral Insulated thermocouples from 1.0mm to 6.0mm.
- Fully automatic weld cycle under microprocessor control.
- Both conductors and sheath closure weld carried out on one machine.
- Removable Microscope included with optical light guide for maximum visibility.
- Separate weld actions for conductors and sheath closure (CD & TIG).
- Automatic recharge on CD ready for next weld.
- TIG weld has slope-up and slope-down functions for accurate weld control envelope.
- Bench mounted.
- Single phase supply.

A comprehensive tool kit and extended manual is provided with all Welders.

The MI Thermocouple welding machine incorporates a new weld torch assembly and a new vice jaw arrangement for easier changing of thermocouple sizes. This machine is specifically designed for welding the hot junctions of mineral insulated thermocouples. Either Earthed (Bonded) Junction or Insulated Junction welds can be accommodated. The machine will weld thermocouples from 1.0mm to 6.0 mm outside diameter. The welder is divided into two sections to accommodate the two different welding processes associated with the junction of an MI thermocouple.

Part No	Description	Price Sterling	Price Euros
MM01	MI thermocouple welding machine	£15,500.00	€20,150.00

### Electrical power.

The machine operates from a single-phase 220-250V-ac-50Hz supply and is rated at 2000VA. For countries using 110V 60Hz please specify at time of order.

### Gas.

The machine requires a supply of High purity Argon Gas. Use of any other gases e.g. Argon/Nitrogen, Helium etc will alter the characteristics of the weld arc. Advice should be sought before using special gas mixes.

### Dimensions.

The maximum outside dimensions of the machine, including the microscope and weld table are:  
**500mm Wide, 450mm High, 775mm Deep**

The bench footprint:  
**500mm Wide, 480mm Deep**



## MFW Micro Flame Welder



The Micro-flame Waterwelder is a high performance gas-generating soldering unit, producing a high temperature flame - in the range of 1200 to 3300°C - with a reliable, low-cost and safe operation.

Using a standard electrical supply, hydrogen and oxygen are produced by the electrolysis of distilled water. The mixed gases are passed through a gas atomiser and delivered to single or multiple torches via an output lead. Acknowledged as an industry standard, the Micro-flame Waterwelder has been in production for over 15 years.

Three different models of welder are available, allowing gas production to be matched to operating requirements. Easily adjustable flame size, through a range of simply-fitted torch tips, makes the Micro-flame Waterwelder one of the most flexible machines of its kind on the market. Operation calls for no gas bottles or gas storage - from the moment the machine is switched on gas

Part No	Description	Price Sterling	Price Euros
MF-1	Capacity for single operator	£1,250.00	€1,625.00
	Optional 2 operator kit	£100.00	€130.00
	Optional 4 operator kit	£350.00	€457.60
MF-2	Capacity for 2 operators	£1,500.00	€1,950.00
MF-4	Capacity for up to 4 operators	£2,500.00	€3,250.00

### Accessories:

MF-ASA	Spare atomiser	£300.00	€390.00
MF-AST	Spare torch	£60.00	€78.00
MF-ATT	Set of 12 assorted torch tips	£30.00	€39.00
MF-ATH	Torch holder bracket	£20.00	€28.60
MF-ACH	Black connecting hose (per mtr)	£4.00	€5.20
MF-AP	Potassium hydroxide for MF-1	£12.00	€15.60
MF-API	Potassium hydroxide for MF-2, MF-4	£20.00	€26.00
MF-SK1	Service kit for MF-1	£35.00	€45.50
MF-SK2	Service kit for MF-2	£50.00	€65.00
MF-SK3	Service kit for MF-4	£70.00	€91.00

is only produced as it is required. During use the system is 'recharged' by just topping-up with distilled water and replenishing the atomiser with fluid, normally MEK (methyl-ethyl-ketone). MEK gives the best all-round flame - very clean and high temperature with characteristics similar to those of butane.