



## Pulsed TIG Welder MAWA series

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### MAWA-300A

Best suited for jointing copper, copper alloy, high-melting metal, and different metallic materials.

#### What is MAWA-050A PULSETIG® Welding Power Supply?

This DC type TIG welder generates arcs between an object to be welded and the tungsten electrode and carries out welding using the generated heat.

Effective for welding of precision devices and minute parts.

Individual lineup of high voltage start special purpose machines and touch start special purpose machines.

Selecting the start method appropriate for the workpiece improves the welding reliability.

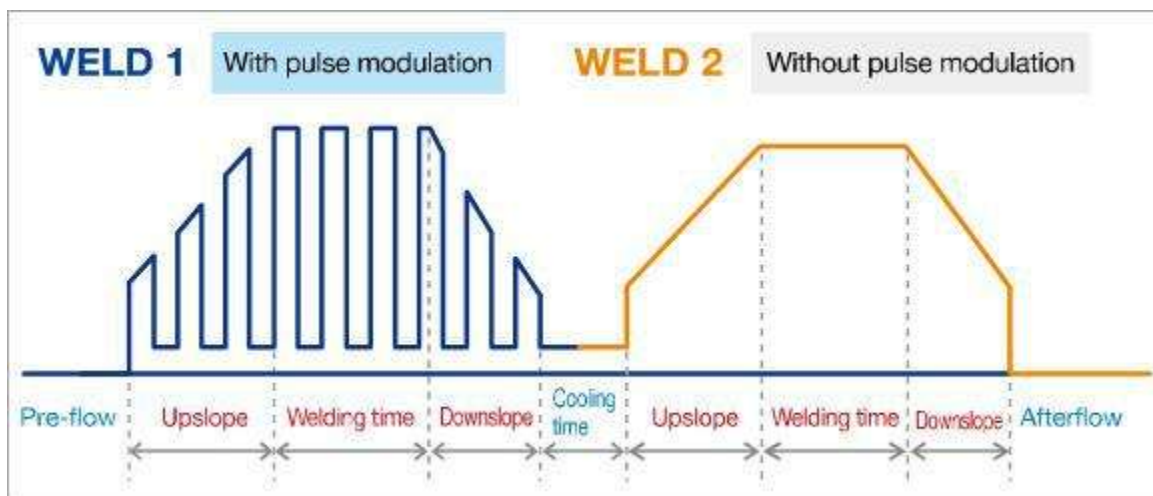
#### Arc welding image

Precision control by constant current and short time welding

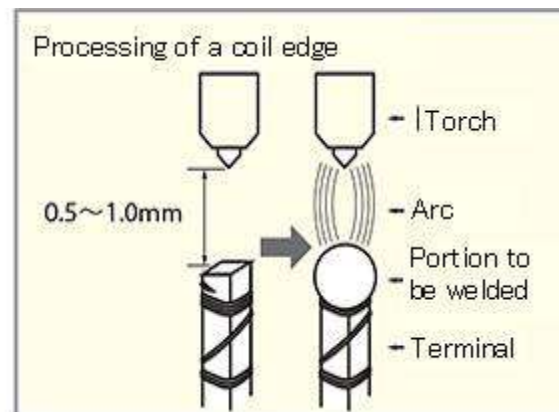
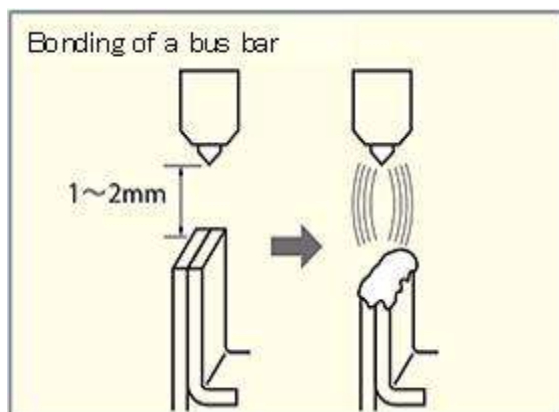


- Two step welding (WELD1 and WELD2)  
Various weld schedules can be set using with the pulse modulation feature.
- Pulse modulation feature  
Inner blow halls generated at welding are reduced due to this feature which inputs heat intermittently.  
Size and shape of arc ball is controllable.
- Envelope feature  
The upper and lower limit of criterial current waveform are set to judge welding quality.
- Touch start feature  
Touch start function prevents electronic devices in workpieces from damage and reduces a malfunction of peripherals caused by noise.
- Contactless welding  
As there is no need to contact workpieces for welding, no deformation due to applying weld force is produced and it enables welding of very narrow area.  
Best suited for projection welding.

### Example of control waveform



### Welding image



# Applications

## Resistance welding



[ Optic sensor parts ]



[ Projection welding of electronic parts ]



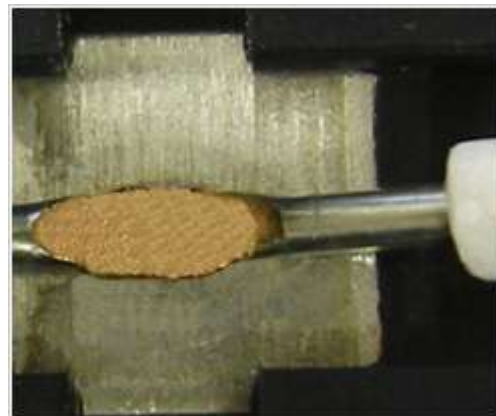
[ Can sealing ]



[ Crystal oscillator ]

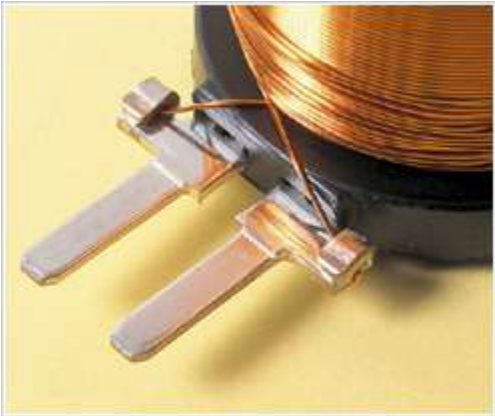


[ Terminal and lead wire ]

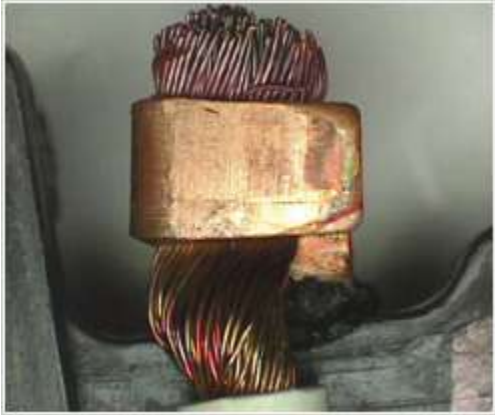


[ Terminal and copper wire ]

# Fusing

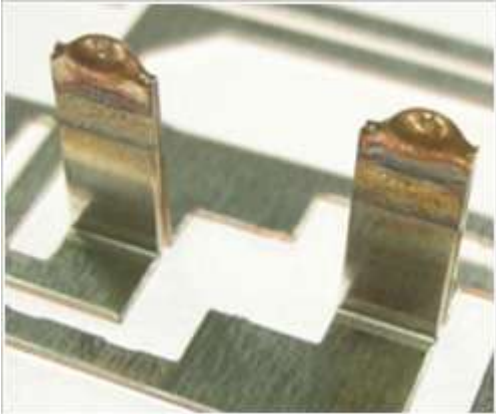


[ Motor fusing ]



[ Insulation of multiple wires ]

### Pulse TIG welding



[ Copper bus bars ]

### Pulse heat welding



[ FPC and substrate ]

## Specifications

Model	MAWA-300A-00-01	MAWA-300A-00-02
Power requirements	Three-phase, 400 VAC ±10% (50/60Hz)	Three-phase, 200 VAC ±10% (50/60Hz)
Rated input	14.0kVA	13.2kVA
Max. output current	300A	
Number of schedules	127	
Control method	Secondary constant-current control	
Control current setting range	30~300A	
	1A increments	
Welding time setting range	0~4000ms	
	1ms increments	
Frequency setting	0~5000Hz *	
Gas purge time	0~9990ms: 10ms increments (Pre-flow / After-flow)	
Display	Setting, display: 5.7 inch color LCD State indicator: LED	
Current monitoring setting range	0~999A	
	1A increments	
Time monitoring setting range	0~9999ms	
	1ms increments	
Duty cycle	5% (300A), 20% (150A), 50% (80A or below)	

- \* The waveform (current value) exactly as set may not be obtained with the setting more than 1000 Hz.



# External view

- MAWA-300A

