

# ALUMIG-250P/300P



## Quick Specs



**Processes:**  
MIG,  
Flux-Cored,  
Pulse MIG,  
Double Pulse MIG,  
MMA(Stick)

**Applications:**  
Metal Fabrication  
Maintenance and Repair  
Auto Body  
Light Industrial

**Input Power:**  
250P: 230V,1-Phase  
300P: 400V,3-Phase  
**Amperage Range:**  
250P: 10-250A/300P: 10-300A  
**Rated Output at 40°C (104°F):**  
250P: 250A at 26.5V @60% Duty Cycle  
300P: 300A at 29V @60% Duty Cycle  
**Weight:** 32KG

## For MIG and Stick Welding

### Strong power, Multi-functions, Superb performance and Economical choice

ALUMIG-250P/300P is a synergic, pulsed and double-pulsed MIG /MAG welding machine, suitable for a variety of materials including Fe, FeMc, FeFc, St/St, Al, CuSi3, CuAl8 fillers wires.

ALUMIG-250P/300P is specially designed for aluminum welding jobs with thickness from 1.5mm to 5mm.

Simply select the filler wire type and size, then go welding. For those regular welding jobs there's even a 10-channel memory function.

## Specialist Features

### Precision Arc Performance:

- **Multi-Process capable** - Welds MIG, flux-cored, stick, pulsed MIG, and advanced process of Pulse-On-Pulse.
- **Synergic control** – Set weld procedures with one control, simple and easy to operate.
- **Synergic MIG** provides communication between power source, feeder and gun. As wire speed increases or decreases, the arc voltage also increases or decreases to maintain a constant welding arc.
- **Special Trigger Hold (S4T)** allows to hold the pre-set Initial Current by user until get a successful Arc Start on Aluminum plate.
- **Aluminum Pulse Process** – Welds 4XXX (AlSi wires) and 5XXX (AlMg wires) series aluminum for superior quality welding.
- **Pulse-on-Pulse** - Delivers a stacked dime appearance when welding aluminum.
- **Featured Wave-form control system:** Maintains a stable, smooth arc for short arc welding on steel. Improved penetration on thicker aluminum sections.
- **Fast, precise, clean arc ignition and arc ending.**
- **10 channels memory capacity.**



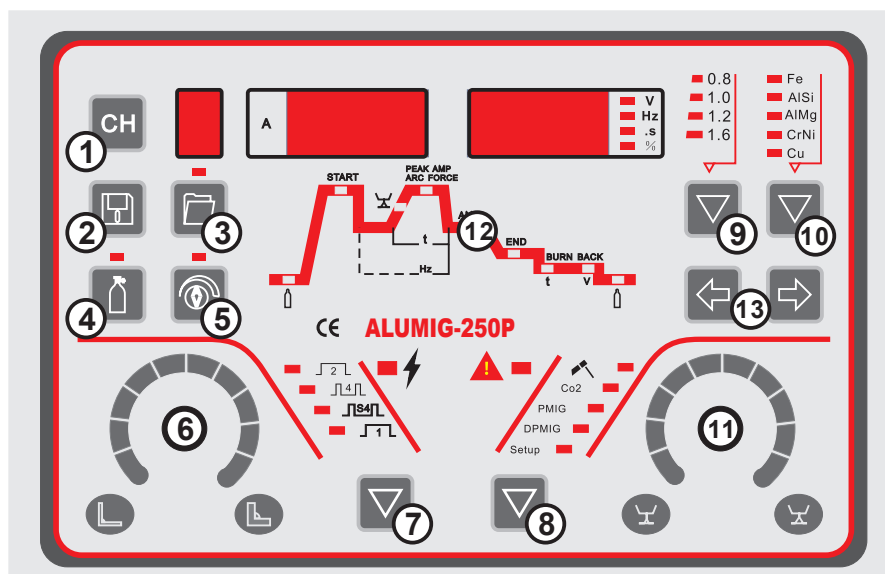
### Outstanding Quality:

- Newly designed using the latest power electronic technology for improved reliability.
- CE Certified.
- One-Year Warranty on parts.

## Technical specifications

Item No	ALUMIG-250P	ALUMIG-300P
Rated Input Voltage	1PH ~ 230V ±15%	3PH ~ 400V ±15%
Max. Load Power Capacity	10.35KVA	12.04KVA
Rated Duty Cycle(40°C) 60%	MIG: 250A/26.5V	MIG: Separated Wire-feeder: 300A/29V Internal Wire-feeder: 250A/26.5V
	MMA: 250A/28V	MMA: 250A/28V
100%	MIG: 200A/24V	MIG: 200A/24V
	MMA: 200A/28V	MMA: 200A/28V
Welding Current/Voltage Range	MIG: 10A/14.5V~250A/26.5V	MIG: 10A/14.5V~300A/29V
	MMA:10A/20.4V~250A/28V	MMA:10A/20.4V~250A/28V
Open Circuit Voltage	55V	55V
Power Factor	0.8	0.85
Efficiency	80%	85%
Pre-Gas Time	0.1-15S	0.1-15S
Flow-Gas Time	0.1-15S	0.1-15S
Wire-feed Mechanism	4 Rollers	4 Rollers
Wire-feed Speed Range	0~25m/ min	0~25m/ min
Wire Spool Capacity	300mm (15kg)	300mm (15kg)
Filler Wires Ø (mm) Fe, Ss:	0.6-1.2 mm	0.6-1.2mm
FLUX CORED:	0.9-1.2 mm	0.9-1.2 mm
Al:	0.8-1.2 mm	1.0-1.2 mm
Dimension	770X250X650mm	770X250X650mm
Weight	32KG	32KG

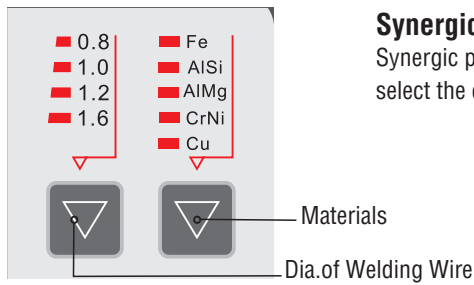
## General View of Control Panel



### Control Panel Parameter Values

- |   |  |  |
|---|--|--|
| <p><b>1. SELECT</b> the Memory channel</p> <p><b>2. OPEN</b> the parameter of selected memory channel</p> <p><b>3. STORE</b> the setting to Memory channel</p> <p><b>4. Push to Check Gas</b></p> <p><b>5. Push to use Synergic Setting</b></p> <p><b>6. Welding parameter setting, rotary dial</b><br/>Adjustment of the welding current or feeding speed.</p> | <p><b>7. Torch Holding Mode</b><br/>Push to select the torch handing type:<br/>1)2T<br/>2)4T<br/>3)S4:for aluminium welding form cold to hot situation.</p> <p><b>8. Welding Process</b><br/>Push to select:<br/>Welding process: MMA,MIG/MAG/CO2,Pulse MIG,<br/>Double Pulse MIG.</p> | <p><b>9. Dia. of Welding Wire</b></p> <p><b>10. Wire Type</b></p> <p><b>11. button, throttling effect(arc dynamics)</b></p> <p><b>12. Function Sequence</b></p> <p><b>13. Welding Settings</b></p> |
|---|--|--|

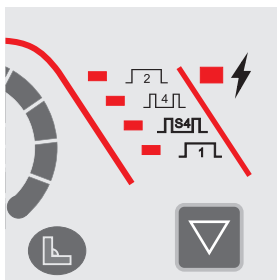
## Synergic control



### Synergic MIG

Synergic pulsed welding mode offers the simplicity of single-knob control. The machine will select the correct pulse power based on the wire feed speed (WFS) set by the operator.

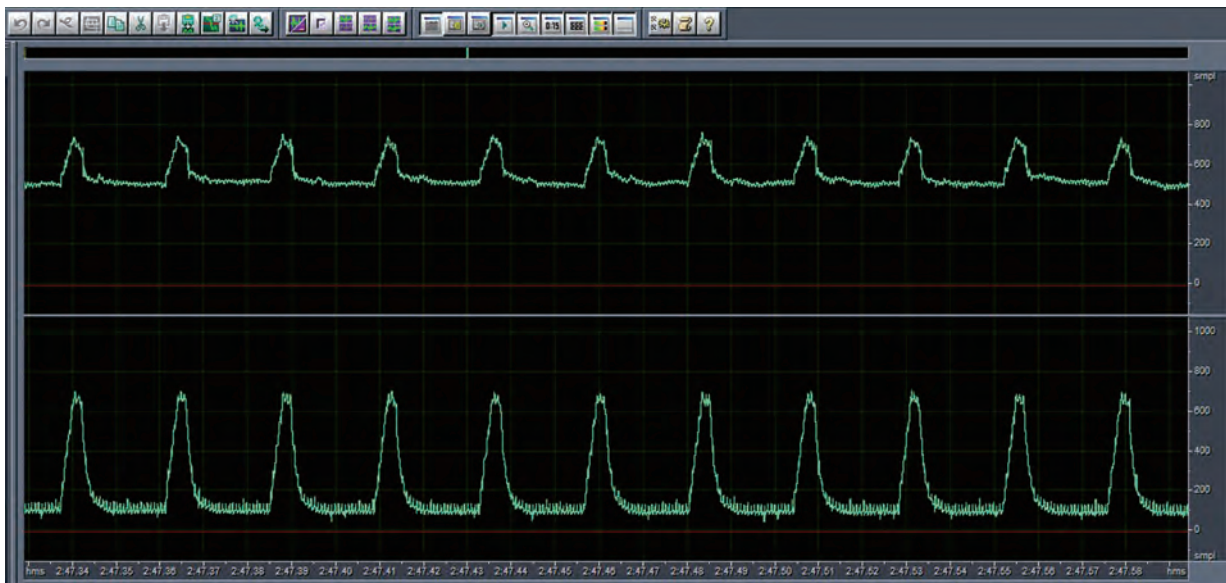
## S4T Mode



### S4T Mode.

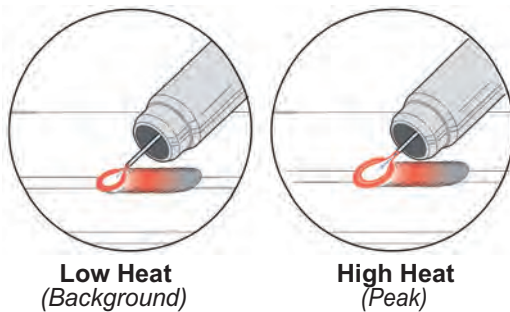
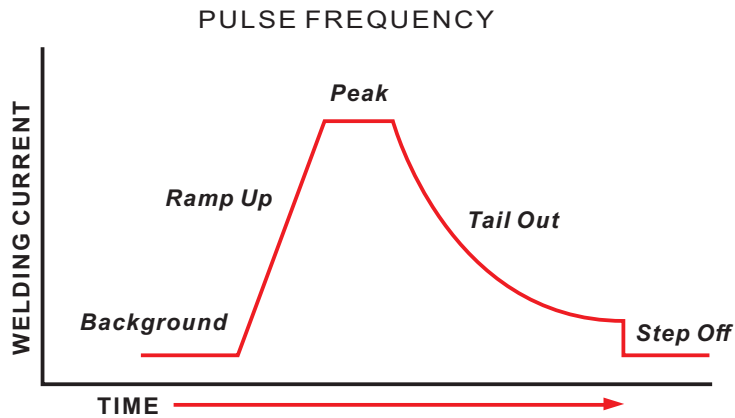
Begin and end welds with ease and confidence. Hot start eliminates incomplete fusion at the beginning of a weld, a common issue with aluminum welding. Crater gradually decreases weld current at the end of a weld to eliminate crater defects. Adjustable pre- and post-flow rates ensure that the puddle always has adequate gas coverage.

## The advantage of Wave-form Control System



The latest technology of Waveform Control System with pulsed MIG control mode, can perfectly control the output of welding power and get the precision Arc performance. The wire melting droplet transfer cycle is very clear, the welding beam is very clean and very few spatters during welding.

## Pulse MIG



**Pulsed MIG** varies weld current between peak (high heat) and background (low heat) current to provide better control of heat input, which minimizes warping and burnthrough on thin materials. Pulsed MIG also enables flat, horizontal, vertical up, or overhead welding without a slag system. Optimized GMAW-P waveforms are readily available to use on aluminum, carbon steel, high strength low alloy steel, stainless steel, and nickel alloys. See NX-2.70

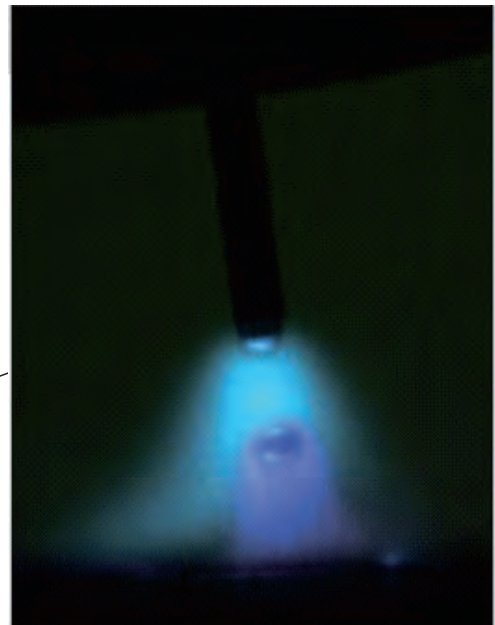
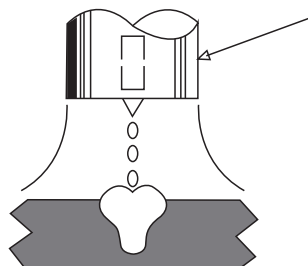
## PULSED MIG

Pulse MIG precisely controls heat input through the 1-drop-per-pulse-transfer and offers a stable arc in the wide transfer area between short and spray arc.

Spray arc transfer “sprays” a stream of tiny molten droplets across the arc, from the electrode wire to the base metal. It produces a characteristic humming or buzzing sound.

Advantages of pulse mig:

- High deposition
- Good fusion and penetration
- Good bead appearance
- Capability of using larger diameter wires
- Presence of very little spatter





## Accessories

### For Standard accessories



**MIG torch: MIG 24KD**  
Euro Connector  
Cable length 3M



**Electrode holder with cable 2M**  
**Earth clamp with cable 2M**

### For Optional accessories



**Co<sub>2</sub> gas regular with heater**



**Push-pull Troch:**  
QTLB-24KD/36KD



**Argon gas regular**

## Consumables

### For MIG torch: MIG 24KD



#### Nozzles

- ICS0800 Gas nozzle  $\Phi$  17mm
- ICS0806 Gas nozzle  $\Phi$  12.5mm
- ICS0807 Gas nozzle  $\Phi$  10mm
- ICS0808 Spot welding gas nozzle



#### Contact Tips

- ICU0003-06 Contact tip  $\Phi$  0.6mm M6x25 Ecu
- ICU0003-08 Contact tip  $\Phi$  0.8mm M6x25 Ecu
- ICU0003-09 Contact tip  $\Phi$  0.9mm M6x25 Ecu
- ICU0003-10 Contact tip  $\Phi$  1.0mm M6x25 Ecu

- ICU0003-58 Contact tip  $\Phi$  0.8mm M6x25 CuAl
- ICU0003-59 Contact tip  $\Phi$  0.9mm M6x25 CuAl
- ICU0003-60 Contact tip  $\Phi$  1.0mm M6x25 CuAl
- ICU0003-62 Contact tip  $\Phi$  1.2mm M6x25 CuAl
- ICU0003-76 Contact tip  $\Phi$  0.6mm M6x25 CuCrZr
- ICU0003-78 Contact tip  $\Phi$  0.8mm M6x25 CuCrZr
- ICU0003-80 Contact tip  $\Phi$  1.0mm M6x25 CuCrZr
- ICU0003-82 Contact tip  $\Phi$  1.2mm M6x25 CuCrZr

#### Replacement Lines

- IIC0220 Brass terminal  $\Phi$  2.0X4.0mm 0.35m
- IIC0160 Teflon liner  $\Phi$  2.0X3.0mm 3m Red
- IIC0560 Red liner  $\Phi$  1.0-1.2mm 3m

### Others



**5-pin connector**



#### Drive Roll

- Fe 0.8/0.9 mm
- Fe 0.8/1.0 mm
- Fe 1.0/1.2 mm
- Al 0.8/0.9 mm
- Al 0.8/1.0 mm
- Al 1.0/1.2 mm