

NEW!

ALUTIG-200HD/250HD



Quick Specs



Light industrial Application:
Metal fabrication workshops
Shipyards and offshore industry
Chemical and process industry
Mechanized welding

PROCESS:
DC TIG (GTAW)
AC TIG (GTAW)
MIX TIG (GTAW)
Stick (SMAW)

Input Power: 230V, 1-Phase
Amperage Range:
200HD: 5-200A/250HD: 5-250A
Rated Out put at 40°C (104°F):
200HD: 200A at 18V @60% Duty Cycle
250HD: 250A at 20V @60% Duty Cycle
Weight : 23 KG

For TIG and Stick Welding

Aluminum welding expert, precise and efficient

ALUTIG-200P AC/DC offers to the TIG welding professionals the necessary control to meet their exacting needs. Whatever the application, enjoy the performance.

ALUTIG-200P AC/DC is a precise aluminum welding specialist that suits all welded materials. Modular design allows you to build the package that best suits your needs.

Easy operation and full functions: from the control panel allowing fast adjustment of all necessary controls for DC, AC and MIX TIG welding with either HF or contact ignition. It's also very convenient to store or call out the welding parameters from the memory channels.

Specialist Features

Precision Arc Performance:

- **DC+/DC-:** Improved TIG starting. Now starts DC(-) to maintain a sharp tungsten.
- **Lift-Arc start** provides AC or DC arc starting without the use of high frequency.
- **Adjustable AC output frequency** allows the operator to focus the arc minimizing the heat affected zone.
- **Extended AC Balance Control** helps maintain a pointed tungsten to direct the arc in the weld joint.
- **Independent amplitude/amperage control** allows EP and EN amperages to be set independently to precisely control heat input to the work and electrode.
- **Multiple Waveshapes:**
Standard Squarewave for fast travel speeds and excellent puddle control,
Soft squarewave for a soft buttery arc with maximum puddle control and good wetting action,
Sine wave for a traditional softer sounding arc,
Triangular wave to reduce the heat input into the weld at low amperage.
- **MIX TIG:** we can get an excellent Arc Concentration, can be carried out the excellent welding performance from thin to thick plate.

Professional Features:

- Program memory features 10 independent program memories that maintain/save your parameters.
- Voltage Reduction Device (VRD). When enabled from the set up menu reduces the open circuit voltage in STICK mode for use in electrically hazardous conditions or when the use of a VRD is required.
- Auto-reconnects for single phase 115/230V 50/60 Hz input allows the flexibility to weld in the shop or take in the field where 230V may not be available.
- Weighs in at a mere 16 kg making it easy to carry around the shop or job site.

Outstanding Quality:

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



Technical specifications

Item No	ALUTIG-200HD	ALUTIG-250HD
Rated Input Voltage	1PH ~ 230V ±15%	1PH ~ 230V ±15%
Max. Load Power Capacity	TIG: 5.63KVA MMA: 6.60KVA	TIG: 7.81KVA MMA: 8.75KVA
Rated Duty Cycle(40°C)	60%	TIG: 200A/18V MMA: 160A/26.4V
	100%	TIG: 250A/20V MMA: 200A/28V
Welding Current/Voltage Range	TIG: 160A/16.4V MMA: 130A/25.2V	TIG: 200A/18V MMA: 160A/26.4V
	TIG: 5A/10.2V~200A/18V MMA: 20A/20.8V~160A/26.4V	TIG: 5A/10.2V~250A/20V MMA: 20A/20.8V~200A/28V
Open Circuit Voltage	70V~80V	70V~80V
Power Factor	0.8	0.8
Efficiency	80%	80%
TIG Pulse	Peak Current	5A~200A
	Pulse Frequency	0.2Hz~200Hz
AC TIG	Pulse Width (Ratio)	1~100%
	AC Frequency Range	1~100%
MIX TIG	AC Clean Width (AC Balance)	20Hz~250Hz
	AC Clean Ratio (AC Bias) %	+40~-40
MIX TIG	MIX Frequency:	+30~-50
	DC Balance: (%)	0.1Hz~5Hz
Arc-starting Current	20-80	20-80
Crater-filling Current	5A~200A	5A~250A
Current Up-slope Time	5A~200A	5A~250A
Current Down-slop Time	0.1S~15S	0.1S~15S
Pre-Gas Time	0.1S~15S	0.1S~15S
Flow-Gas Time	0.1S~15S	0.1S~15S
Spot Arc Time	0.1S~10S	0.1S~10S
MMA Arc Force	10A~160A	10A~200A
Hot Start Time	0.1-3S	0.1-S
Hot Start Current	10A-160A	10A-200A
Dimension (LxWxH)	490X230X385mm	490X230X385mm
Weight (KG)	23KG	23KG

Water-cooling Unit: WC-100 (optional)

Operating Voltage	230V 50/60Hz
Rated Power	260W
Cooling Power	1.5KW(1L/MIN)
Maximum Pressure	0.3MPA/60HZ
Recommended Cooling Liquid	20%~40% ethanol/water
Tank Volume	6.5L

4 kinds of wave shapes



Soft
Square wave



Standard
Square wave

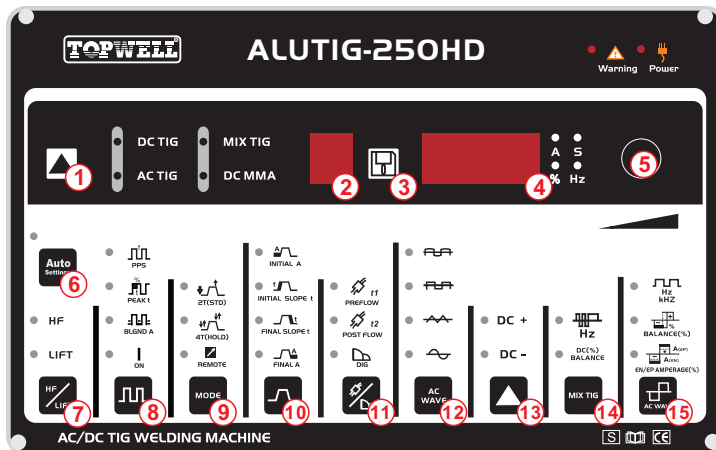


Triangular
wave



Soft wave

General View of Control Panel



10. Sequencer Control

Arc-starting Current: 10A~160A
 Crater-filling Current: 5A~200A
 Current Up-slope Time: 0.1S~10S
 Current Down-slop Time: 0.1S~15S

11. Pre-Gas Time: 0.1S~10S

Flow-Gas Time: 0.1S~15S

12. AC Waveshape types

Advanced Squarewave
 Soft Squarewave
 Triangular Wave
 Sine Wave

13. Arc Ignition Polarity DC+/DC-

14. MIX TIG MIX Frequency: 0.1Hz~5Hz
 DC Balance: (%) 10~90

15. AC Waveshape

AC Frequency Range 20Hz~200Hz
 AC Clean Width (AC Balance) +40~-40
 AC Clean Ratio (AC Bias) % +30~-50

Control Panel Parameter Values

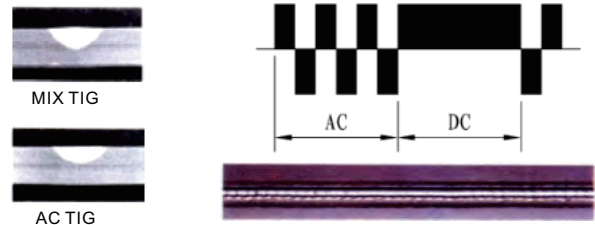
1. Welding Process	DC TIG AC TIG MIX TIG DC MMA	7. Arc Ignition type	HF Impulse LIFT Arc
2. Memory Display		8. Pulsar Control	Peak Current 5A~200A Base Current 5A~200A Pulse Frequency 0.2Hz~200Hz Pulse Width (Ratio) 1~100%
3. Memory		9. Mode	2T(STD) 4T(HOLD) REMOTE
4. Ammeter/Voltmeter Display			
5. Encoder Control			
6. Simple Setting Mode			

MIX TIG Control

Features of MIX TIG:

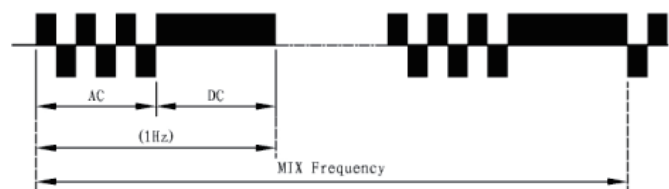
The AC current can get a very good clearance, and DC current can get a deeper penetration. Use the MIX TIG we can get an excellent Arc Concentration, can be carried out the excellent welding performance from thin to thick plate.

- 1) Nice weld appearance, deep penetration.
- 2) Excellent Arc Concentration.
- 3) Substantially reduce the electrode consumption.



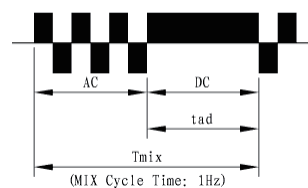
MIX TIG Frequency (Hz):

the cycle time of MIX TIG in 1 second. Adjustable range: 0.1-10Hz.



MIX TIG Balance (DC) %:

DC Balance (%) = (tad/Tmix) x 100



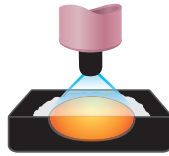
AC Waveshape Controls



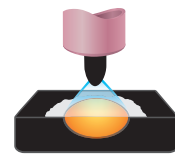
AC Frequency control

Controls the width of the arc cone. Increasing the AC Frequency provides a more focused arc with increased directional control.

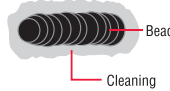
Note: Decreasing the AC Frequency softens the arc and broadens the weld puddle for a wider weld bead.



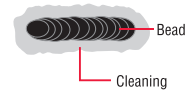
Wider bead, good penetration ideal for buildup work



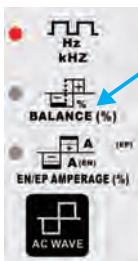
Narrower bead for fillet welds and automated applications



Wider bead and cleaning acting



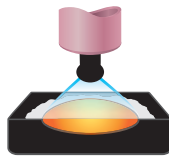
Wider bead and cleaning acting



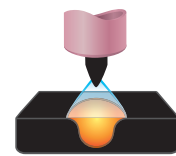
AC Balance Control

Controls arc cleaning action. Adjusting the % EN of the AC wave controls the width of the etching zone surrounding the weld.

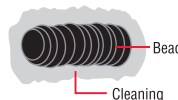
Note: Set the AC Balance control for adequate arc cleaning action at the sides and in front of the weld puddle. AC Balance should be fine tuned according to how heavy or thick the oxides are.



Wider bead, good penetration ideal for buildup work



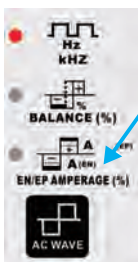
Wider bead, good penetration ideal for buildup work



Wider bead and cleaning action



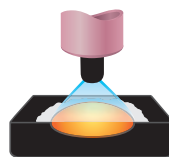
Narrow bead, with no visible cleaning



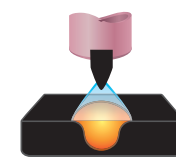
Independent AC Amperage Control

Allows the EN and EP amperage values to be set independently. Adjusts the ratio of EN to EP amperage to precisely control heat input to the work and the electrode.

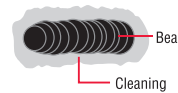
EN amperage controls the level of penetration, while EP amperage dramatically effects the arc cleaning action along with the AC Balance control.



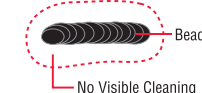
More current in EP than EN: Shallower penetration



More current in EN than EP: Deeper penetration and faster travel speeds



Wider bead and cleaning action



Narrow bead, with no visible cleaning





Accessories

For Standard accessories



TIG torch: TIG-26
 Gas connector: M16
 Cable length 4M
 5-pin control coupler



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

For Optional accessories



Argon gas regulator



Water-cooling unit: WC-100
 Operating Voltage: 230V 50/60Hz
 Rated Power: 260W
 Cooling Power: 1.5KW(1L/MIN)
 Tank Volume: 6.5L



TIG torch: TIG-25
 Cooling: Water Cooled
 Duty 100% DC: 250AMP
 Duty 100% AC: 220AMP
 Electrode Size: 0.5-3.2mm



Foot Pedal
 Model No.: FX-390B
 Serial No.: 12D36
 Input Voltage: +15V
 Output Voltage: 0-13V



Trolley: ST-7



Hand-held Remote Controller for TIG torch
 Dimensions: 110x27x30mm
 Material: ABS
 Weight: 30g
 Resistance: 10K / 0.5W