



## Quick Specs

### Personal User Applications

Bicycle, fitness equipment, stainless furniture  
Maintenance and repair  
Industry plant construction  
Containers manufacture  
Shipbuilding/Pipeline industry

### Process

Process: DC TIG /STICK /DC PULSED TIG /  
AC PULSED TIG /AC TIG

### Output



### Input



ATIG-PACIII series is fully digital models with high end DSP technology, it is suitable for both automatic application and manual welding. Compared with ATIG-PAC series, it offers advanced wave control technology which brings more flexibility for thinner /thicker material during critical aluminum welding. Smart parameters adjustment brings cleanest, deepest penetration and perfect welding result for high welding quality demanding.



## Features and benefits

- Full digital inverter power source. Current increasing speed during arc starting is greatly improved, which make beautiful aluminum welding
- Timing function which record the working time of welding machine.
- Tungsten electrode diameter select function, reduce the tungsten electrode consumption during arc ignition
- More output wave forms: standard square, Irregular square, Sine wave, Triangle wave, Mixture wave, suitable for various workpiece thickness
- Synchronous mutual arc feature
- All parameters can be precisely pre-setted
- Can store and load 30 sets of welding parameters
- Remote control function, can adjust welding current and peak current
- Can display current and voltage at the same time
- MMA: adjustable arc current, arc force current, knee point voltage, hot start current /time, easy arc starting

### Standard equipments

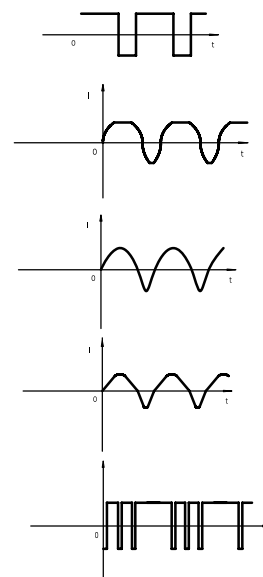
- 1 Power source
- 1 Connected primary cable L=3m
- 1 Welding cable L=3m
- 1 Ground cable L=3m
- 1 TIG torch (water cooled)

### Standard equipments

- Water cooling machine (Optional)
- Trolley (Optional)
- Remote control unit (Optional)
- Foot pedal (Optional)

## Advanced Shape Wave Control

1. Standard square wave: Responsive arc with fast zero crosses and reduced peak current. Stable arc with good puddle control and fast travel speed, minimizes tungsten overheating.
2. Irregular square wave: Stronger arc with slow zero crosses and less noise; the strongest arc and deep penetration, less noise.
3. Sine wave: Traditional smooth shaped waveform. Soft arc and less noise. Good for wide seam.
4. Triangle wave: Minimized area (heat) under the curve shape with high peaks. Lower amperages can minimize heat input to the weld high peaks more forceful for anodized applications.
5. Mixture wave: Alternate output AC current and DC current, high efficiency.



## Technical Specification

				ATIG315PAC III	ATIG500PAC III
Rated input voltage/frequency (Hz)				3 phase, 380V±10%, 50 /60Hz	
Rated input capacity (KVA)				13.6	25.4
Rated input current (A)				20.7	38.7
Duty cycle (40℃)				60%@315A	60%@500A
OCV (V)(MMA /TIG)				45/79	42/77
TIG	DC TIG	Output current range (A)		5-315	10-500
	Pulse TIG	Pulse frequency (Hz) (AC /DC)		0.2-250 /0.2-999	
		Peak current (A)		5-315	10-500
		Base current (A)		5-315	10-500
		Pulse duty cycle		15%-85%	
	AC TIG	Wave form		Square, Irregular square, Sine, Triangle, Mixture	
		AC frequency (Hz)		40-250	
		AC balance		-50%~+40%	
		Mixture	Frequency (Hz)	0.5-10	
			Duty cycle	15%-85%	
	Pre-gas /post gas (s)			OFF-10 /OFF-60	
	Initial /final current (A)			5-315 /5-315	10-500 /10-500
	Up-slope /down-slope (s)			OFF-10 /OFF-15	
	Trigger mode			2/4T, Repeat, Spot	
	Arc ignition method			HF /Contact	
MMA	Output current (A)		5-315	10-500	
	Arc force (A)		10-200		
	Knee-point voltage (V)		15-30		
	Hot start duration (s)		0.1-2		
	Hot start (A)		10-200		
Job channels				30	
Dimension (mm)				655*324*546	665*353*778
Weight (kg /lb)				53 /117	80 /176.6



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