

# Panasonic

**Bangkok Welding**  
(Thailand)

www.bangkokwelding.com

info@bangkokwelding.com

## Thyristor Controlled AC/DC Pulse TIG Arc Welder

# PANA-TIG WP

One Welder Operates  
Like Nine Welders and Applicable  
to Wide Variety of Welding.



**Model**  
YC-300WP-5

# One class high ability with Multi-Purpose welding functions.



DC Pulse TIG



AC Pulse TIG



DC TIG



AC TIG



Automatic TIG Filler



Automatic TIG w/Robot



DC Manual



AC Manual



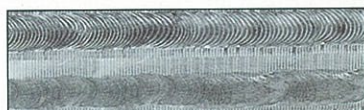
DC TIG Arc spot

## FEATURES

1. It has good output characteristics, stable arcing performance from the small current to rated current for welding of various thicknesses of plates, especially suitable for thin plates.



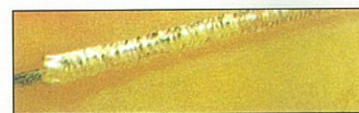
2. Very useful as power source for Butt welding of thick plate and pipe which needs high quality and penetration bead.



3. High quality welding, constant penetration and stable welding bead can be obtained by the good arc concentration.



4. Very easy to operate vertical welding, TIG filler welding operation, tack welding for thin plate and repeated short length welding, etc... by heat capacity control of pulse current. So, high efficiency welding can be done.



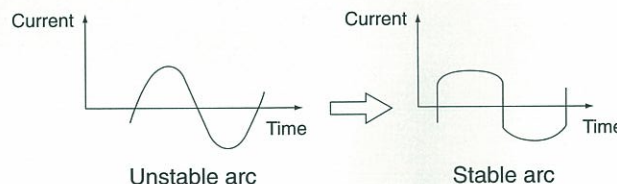
## SPECIFICATIONS

Rating		PANA-TIG	
		WP-300(with Pulse)	YC-300WP-5
Input	KVA	33.4/15.9(1φ50/60Hz)	
Duty cycle	%	35*	
DC no load voltage	V	70	
AC no load voltage	V	76	
DC output current	TIG	A	5~315
	Manual	A	5~315
DC output voltage	TIG	V	10.2~22.6
	Manual	V	20.2~32.6
AC output current	TIG	A	5~315
	Manual	A	5~315
AC output voltage	TIG	V	10.2~22.6
	Manual	V	20.2~32.6
DC initial&crater current(TIG)	A	5~315	
AC initial&crater current(TIG)	A	15~315	
Initial current control		Available when Crater control On or Repetition	
UP slope control time	sec.	0,0.1~6(Continuously)Adjustable to without control(by P.C.B)	
Down slop control time	sec.	0,0.2~10(Continuously)Adjustable to without control(by P.C.B)	
Gas pre-flow time	sec.	0.3	
Gas after-flow time	sec.	5~25(Continuously)	
Arc spot time adjustment	sec.	0.5~5(Continuously)	
Cleaning width adjustment		Adjustable with AC TIG welding	
Pulse frequency	Hz	0.5~10(Continuously)	
Dimensions(WxDxH)	mm	465 x 846 x 617	
Weight	kg	193	
Remote controller		YC-304URW(cable length 4m)	
Encloser standard		IP21S	

5. Fine treatment and increase the weld quality of welding start / finish with Up-slope control and Down-slope control.
6. Precisely controls the arc conditions for AC/DC manual welding of stainless-steel, special steel such as Cr-Mo steel by means of refined electronics techniques so that optimum dynamic characteristics can be obtained.
7. By using cleaning width adjustor, more oxide can be effectively removed at low welding current while the loss of tungsten electrode can be reduced at high welding current.



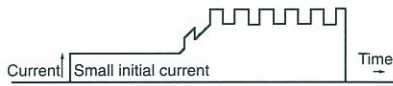
8. Equipped with advanced reactor control technology, its AC square wave output becomes very stable and stability is thus enhanced considerably, thereby high welding quality is obtainable.



The \* mark shows in case of DC manual welding, DC TIG welding and AC TIG welding which is adjusted to [WIDE] side of cleaning width control. Please inform us of primary voltage.

# High quality welding result with Pulse TIG welding for all applications.

- **Initial current control**



- To prevent burn through for thin plate welding. For confirmation of arc start point.



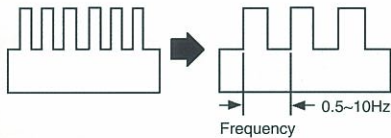
- To prevent incomplete penetration for thick plate welding.

- **Up-slope time control**

- To improve the weld quality at welding start by smooth changing from initial current to welding current with Up-slope time control.

- **Pulse frequency control**

- To change number of welding bead ripples and bead breadth.

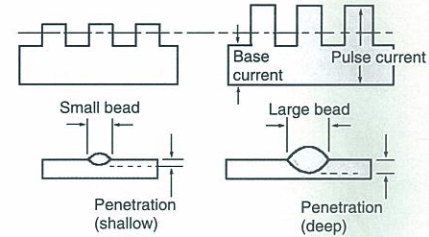


- **Three kinds of crater treatment control**

- **Gas afterflow time control**

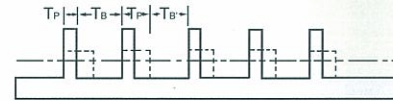
- **Pulse current control**

- Able to choose any pulse current as you like.



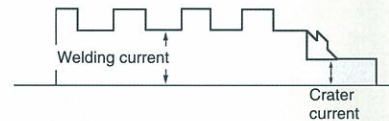
- **Pulse ratio control**

- Penetration control is easy, because it can control average current keeping strong and stable arc with pulse TIG welding.

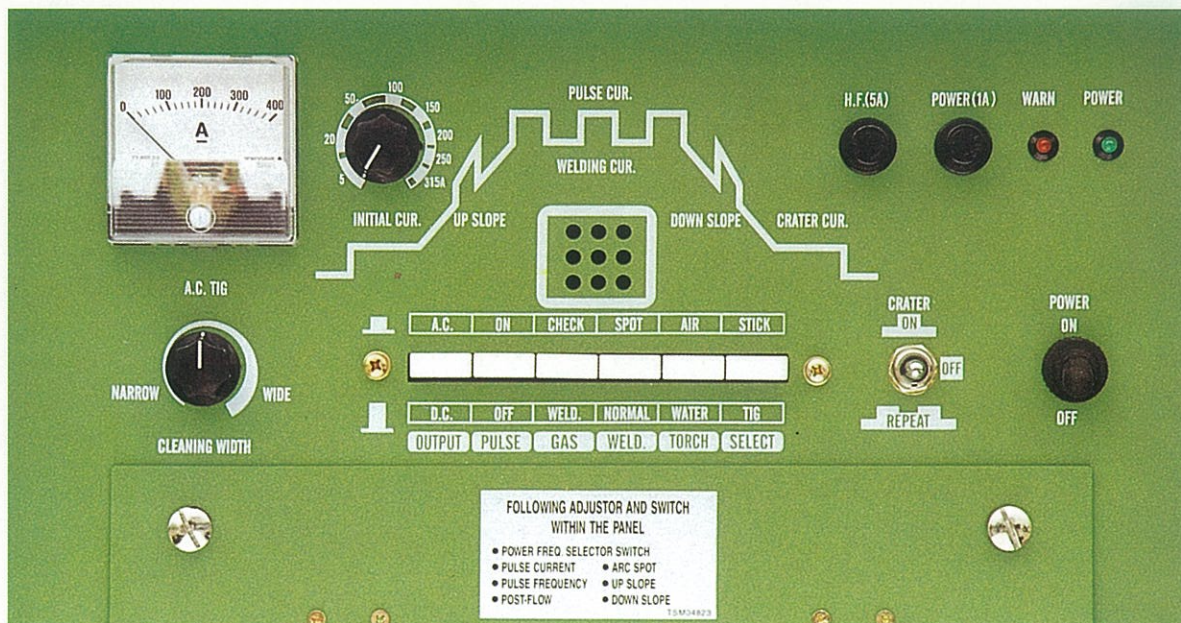


- **Down-slope time control**

- Smooth ending of welding with Down-slope time control.



- **Arc spot welding time control**



# Please Use in Combination with Following Equipment

## TIG WELDING TORCH

High durable against heat.  
Perfectly airtight and watertight.  
Small, light and easy to manipulate.



YT-208T

## ARGON GAS REGULATOR WITH FLOW METER

For reducing pressure of Argon in high pressure gas cylinder to the proper secondary pressure and for adjusting flow rate.

Max Pressure 200 kg/cm<sup>2</sup>  
Flow rate range 1~25 /min



YX-251A

## MODELS AND RATINGS

Model			YT-158THAE	YT-158THAF	YT-208THAE	YT-208THAF	YT-308TWHAJ	YT-308TWHAK
Cable length	m		4	8	4	8	4	8
Rated current	DC	A	150		200		300	
	AC	A	130		160		260	
Duty cycle (10min.)	%		50		50		100	
Usable electrode dia ( ) option	mmφ		1.0,1.6 (2.0),(2.4)		(1.0),1.6,(2.0) 2.4,(3.2)		(1.0),(1.6),(2.0) 2.4,3.2,(4.0)	
			6.5,8 (9.5),(11)		(6.5),8 9.5,(11)		(6.5),(8) 9.5,11	
Usable nozzle dia ( ) option	mmφ		-		-		0.7	
Cooling water flow rate	L/min		-		-		0.7	
Weight (approx.)	kg		1.2	2.0	2.0	3.2	1.8	3.0
Cooling Method			Air		Air		Water	



## COOLING WATER TANK

YX-09KBA1



## REMOTE CONTROLLER

YC-304URW

\* Pistol type \*\*Cooling water flow rate 0.7l/min pressure 1.0~3.0 kg/cm<sup>2</sup>

## Optional Nozzles for TIG Welding

### NOZZLE WITH GASLENS

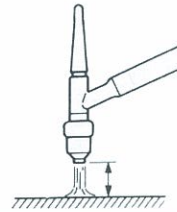


It can keep stable gas shielding

Usable Torch	Caliber	
	9.5mmφ	12.7mmφ
YT-208T	Parts NO.	Parts NO.
YT-308TW	TGN 00908	TGN 01218

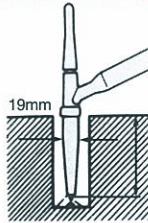
\* Use in combination with Collet body w/gas lens and adaptor

### BIG CALIBER NOZZLE



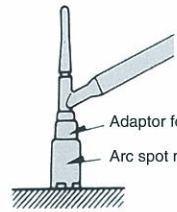
Usable Torch	Caliber		
	12.7mmφ	16mmφ	19mmφ
YT-158T	Parts NO.	Parts NO.	Parts NO.
YT-208T	TGN 01220	TGN 01674	TGN 01934
YT-308TW			

### LONG NOZZLE



Usable Torch	Caliber	
	8mmφ	11mmφ
YT-158T	Parts NO.	Parts NO.
YT-208T	TGN 00816	TGN 01106
YT-308TW		

### ARC SPOT NOZZLE

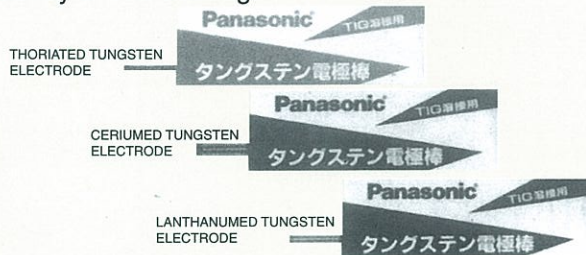


Usable Torch	Caliber		Arc Spot Nozzle
	Parts NO.		
YT-158T	Parts NO.		TGN 01809
YT-208T	TGN		
YT-308TW	TGN		

\* Use in combination with adaptor for Arc Spot.

## Electrodes for TIG Welding

A little consume of electrode, good arc startability and stability. Increase the working efficiency of TIG welding.



2% Thoriated tungsten electrode (DC TIG)	2% Ceriumed tungsten electrode (AC/DC TIG) Low consumption Nonradioactive	2% Lanthanum tungsten electrode (DC TIG) Low consumption Nonradioactive	Size(mm)	
			Dia.	Length
Manufactured by plain lath	Manufactured by plain lath	Manufactured by plain lath		
YN-05T2S	-	-	0.5	150
YN-10T2S	YN-10L2S	YN-10L2S	1.0	150
YN-16T2S	YN-16L2S	YN-16L2S	1.6	150
YN-20T2S	YN-20L2S	YN-20L2S	2.0	150
YN-24T2S	YN-24L2S	YN-24L2S	2.4	150
YN-30T2S	-	YN-30L2S	3.0	150
YN-32T2S	YN-32L2S	YN-32L2S	3.2	150
YN-40T2S	YN-40L2S	YN-40L2S	4.0	150
YN-48T2S	YN-48L2S	YN-48L2S	4.8	150

## Extension Cable

Applicable torch		Cable Length		
		5m	10m	15m
Air	YT-158T	TWU15125	TWU15126	TWU15127
	YT-208T	TWU20131	TWU20132	TWU20133
Cooling	YT-308TW	TWU30132	TWU30133	TWU30134
	YT-50TSW1	TWU50137	TWU50138	TWU50139

## Tangshan Matsushita Industrial Equipment Co., Ltd.

Tangshan New & Hi-tech development zone, 063020, Tangshan, Hebei, China

Tel: (0315)3206066 3206069

Fax: 0315-3206070 3206018

Http:// tsmi.panasonic.cn

E-mail: sales@tsmi.com.cn

www.bangkokwelding.com

info@bangkokwelding.com

**Panasonic**  
Welding Machine

TSMI 促 No.C004E