

High-end models achievable for high quality welding of a variety of materials

**WY4**

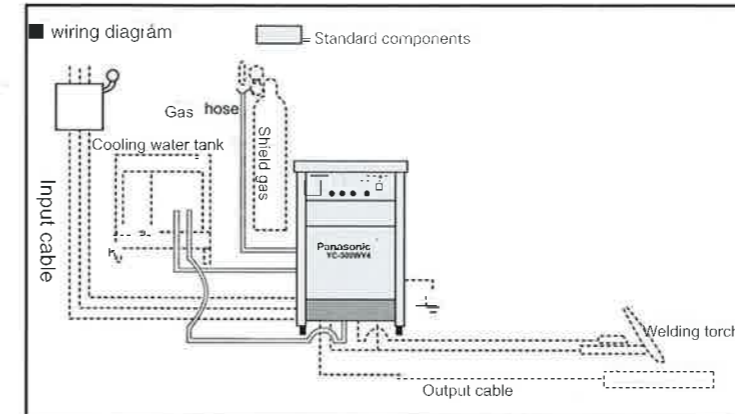


Panasonic pursues **Only one** in welding

■ Specifications

Item	Type	YC-300WY	
Rated input voltage	V	380	
Phase		Three phase	
Input voltage fluctuation tolerance		Rated input voltage ±10%	
Rated frequency	Hz	50/60 (in common)	
Rated input	kVA/kW	10.5 / 9.0	
No load voltage	DC STICK	V	Voltage reducing "ON": 14
			Voltage reducing "OFF": 63
D C -output current	TIG	A	4-300
	STICK	A	4-250
	MIX TIG	A	10-300
A C -output current	A C -STD -TIG	A	10-300
	A C -HARD TIG	A	20-300
	A C -SOFT TIG	A	10-200
Rated D C output voltage	TIG	V	10.2-22
	STICK	V	20-30
Rated A C output voltage	MIX TIG	V	10.4-21
	A C -STD -TIG	V	10.8-22
	A C -HARD TIG	V	10.8-22
	A C -SOFT TIG	V	10.4-18
A C -STD MIX -INITIAL -CRATER current	A	10-300	
D C -INITIAL -CRATER current	A	4-300	
A C -SOFT -INITIAL -CRATER current	A	10-200	
A C -HARD -INITIAL -CRATER current	A	20-300	
Rated duty cycle	%	40	
Gas preflow time	s	0.3	
Gas preflow time	s	2-20	
Upslope time	s	0 or 0.4-5 (N.B. 1)	
Downslope time	s	0 or 0.2-10 (N.B. 1)	
Pulse frequency	MIDDLE PULSE	Hz	10-500
	LOW PULSE	Hz	0.5-25
Pulse width	%	15-85	
Cleaning width		A C - STD - TIG, MIX TIG, A C SOFT TIG, A C - HARD TIG	
MIX TIG frequency	Hz	0.5-10	
Crater control process		"ON" "OFF" "REPEAT"	
Outside dimension	mm	380(W)×530(D)×730(H)	
Mass	kg	74	

N.B. 1) Where upslope and downslope time are to be 0 second, use the slope "SW1" switch mounted in PC board TSMPA013. The switch is set to "ON" position at shipment.



■ Power supply equipment and connecting cables

		YC-300WY4
Power		3-phase AC 380V±10%
	Power supply	16KVA or more
Plant capacity	Engine generator	20KVA or more
	Fuse	30A
Input protective devices	No breaker	50A
	Input power cable	6mm <sup>2</sup> or more
Section area of cables	Output power cable	35mm <sup>2</sup> or more
	Ground wire	14mm <sup>2</sup> or more

**⚠ Safety precautions**

- Please instal this product in the room with no combustibel.
- before attempting to use any welding product, always read the manual to ensure correct use.

# High quality machine for a variety of materials

# WY4



**Application can be expanded to various aluminum by changing over AC output frequency**



■ Convenient operation panel



It was preset at standard side in the factory.

**High side**  
Concentrated arc is obtained with "high" AC output frequency. Effective for welding of hard aluminum such as No.6000 and No.7000 and aluminum bronze.



Aluminium bronze



7000 series aluminium alloy

**Low side**  
Effective for wide application from thin plate to various aluminum alloys with "low" AC output frequency.

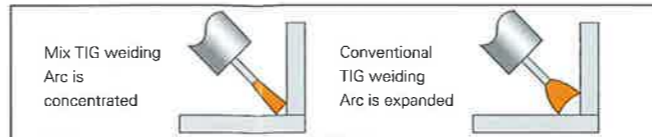
## Various work can be treated with various welding modes

### ■ Mix TIG welding (Aluminum)

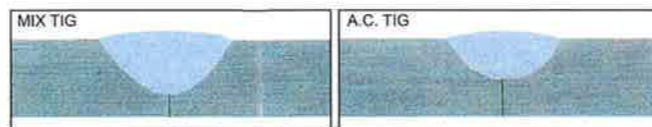
If current mixed of both direct and alternating current is used in TIG welding, the method is called MIX TIG welding.



● As concentration of arc is excellent, welding is performed effectively for fillet (overlapping) joint welding for thin aluminum plates.



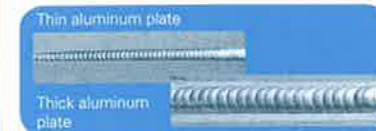
● Since DC TIG gets in AC TIG, deep penetration is achieved.



● Electrode consumption is significantly reduced.



### ■ AC standard TIG welding



● Handles various forms of works from thin plates to thick ones.

### ■ AC hard TIG welding



● Concentrated arc can be obtained  
● Effective for welding of thin plates gap joint

### ■ AC soft TIG welding



● Low arc noise with soft arc

### ■ Optimum mode of applications

Welding mode	Thin plate butt welding	Thin plate fillet welding	Thick plate butt welding	Thick plate fillet welding	Different thicknesses	Flanged plated	filler rod
MIX TIG	○	○	○	○	○	○	○
AC standard TIG	○	○	○	○	○	○	○
AC hard TIG	○	○	○	○	○	○	○
AC soft TIG	○	△	○*	○*	△	○	○

※ There is output limitation

### ■ DC TIG welding



● Choose arc starting mode based on the applications

■ Multiple spot welding  
※ EP=electrode positive

■ Continuous welding  
※ EN=electrode negative

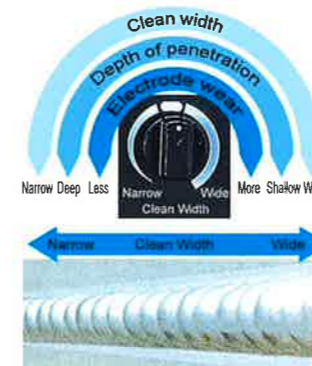
### ■ DC manual welding



● Precisely controls 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.

## Versatile function for many application

### Cleaning width is controlled



### Enhanced pulse control

● Switch between pulse "Yes" & "No"

	Pulse	Application
Yes	Low pulse	Spread arc, suitable for all position welding with different thickness plates
	Middle pulse	Concentrated arc, suitable for high-speed welding with thin plates
No	Regular welding	Soft arc, suitable for both of thin and thick plates.

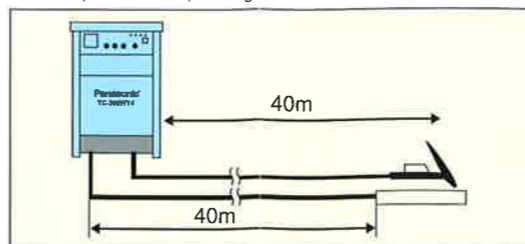
● Adjustment of pulse width and frequency.

● Mix TIG welding

## Many features for welding conditions

### ■ The cable can be extended to 40m long

※ Depending on welding current, thickness of cable, rolling way of cable, base material, arc length.



### ■ Excellent design

- Crater control
- Adjustment of slop-up/down time
- Adjustment of pre-flow & after-flow time
- Anti-shock prevention
- Measuring function for cooling water
- Terminal of output signal

- Error detection function:
  - Input voltage error
  - Cooling water shortage
  - Abnormal temperature
  - Input side over current
  - Output side over voltage