



# DC Pulsed TIG Welding Machine full of the Technologies

- Compact Size and Light Weight
- Instantaneous Arc Starts and Stable Arc
- User Friendly Operations
- Dust and Sudden rain-resistant machine





## The Latest Functions

### Welding Machine Have Wised Up! ... TIG Synergic Function

▶ What is "TIG Synergic"?

Synergic is for deciding automatically appropriate welding condition (welding current, initial current, crater current, pre flow time, post flow time, upslope time, down slope time) by selecting electrode diameter, base material, welding joint shape and base metal plate thickness.

### **Operating Procedure**



Select "WELDING METHOD" mode.

And
Select "DCTIG (synergic)" mode

Select "SYNERG. SETTING" mode and choose every parameter you want setting

Electrode diameter

(1.6mm, 2.4mm, 3.2mm)

- Base material
  (Mild steel, Stainless steel)
- Weld joint shape
  (T fillet welding, Butt welding, Lap welding, Corner welding)
- Base metal plate thickness (0.5mm~)

### **Optimum Welding Condition!**

\*Note When using synergic, pulse welding process can not be selected

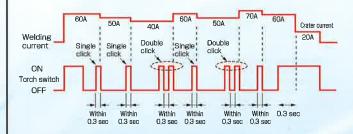


# Other Functions

### **Easy Welding**

#### Weld current regulating function via Torch Switch

When the function is "on", current adjustment with torch switch can be available in "crater on" or "crater on (repeat)" mode. The function can change welding current at the value of current set beforehand by pushing the torch switch during self-hold period.



### Job Memory Key

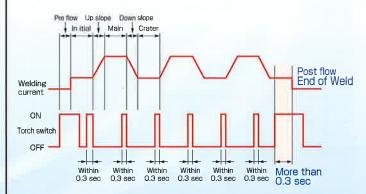
The condition which is memorized by the welding condition memory function can be read out by analog remote controller.



### High Quality Welding

#### Prevent the Oxidation

It is possible to terminate the welding by pressing torch switch. This function helps to prevent oxidation at the tip of Tungsten, which created problems in conventional methods.



#### **Pulse Function**

Easy and various pulse functions bring about high quality welding of many work pieces.

#### ▶ Low speed Pulse (~20Hz)

Uniform and beautiful bead appearance is obtained by heat input controlling. It is effective in different plate thickness or materials having gaps.

■ Stainless pipe " T " type Joint



Thickness of Plate:2mm, Welding Current:150A, Pulse Frequency:10Hz



Thickness of Plate:2mm, Welding Current:120A, Pulse Frequency:5Hz

#### ▶ High speed Pulse (20~500Hz)

Convergence of arc in low current and efficiency of corner welding and fillet welding of thin plate is substantially improved.

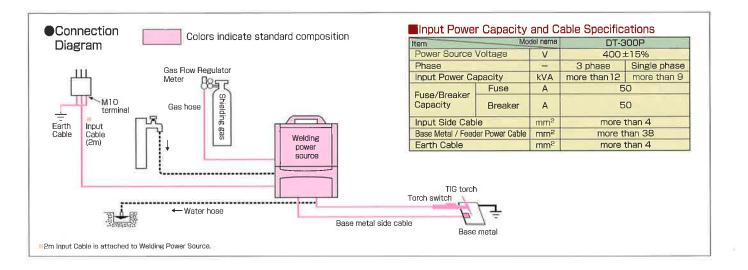


Corner Welding of Copper

Thickness of Plate:0.3mm, Welding Current:50A,

#### ▶ More efficient combination with DC sticks welding

In forming the first layer, deep penetration can be obtained by pulsed TIG welding. In forming the second layer, the efficient welding is made possible by DC stick welding.



#### Standard composition

Model		DT3	OOPI	
Welding power source		DT-300P		
Welding torch		Air-cooled	Water-cooled	
		AWD-26	AWD-18	
Base metal side power cable (3m)		BKPDT-3803		
Gas hose		BKGFF-0603		
Water hose	For tap water		BBDW-3001	
	For water tank	-	BBPU-3002	

Model		DT300PII		
· Welding power source type		DT-300P (CE-Marking)		
Rated input voltage V		400±15%		
Phase		3 phase	Single phase	
Rated input	kVA	TIG:10.1(8.1kW), Stick:11.5(9.2kW)	TIG:8.7(7.6kW), Stick:8.5(5.9kW)	
Rated duty cycle	%	40		
Range of rated output current	Α	TIG:4~300, Stick:10~250	TIG:4~250, Stick:10~180	
Rated load voltage	V	TIG:22, Stick:30	TIG:20, Stick:27,2	
Max. No-load voltage	V	58		
Initial, crater filler current	Α	TIG:4~300, Stick:10~250	TIG:4~250, Stick:10~180	
Pulsed current	Α	TIG:4~300, Stick:10~250	TIG:4~250, Stick:10~180	
Base current	Α	TIG:4~300, Stick:10~250	TIG:4~250, Stick:10~180	
Gas pre-flow	Sec.	0.1~20		
Gas post-flow	Sec.	0.1	~30	
Up-slope	Sec.	0.1	~10	
Down-slope	Sec.	0.1~10		
Pulsed frequency	Hz	0.1~500		
Pulse width	%	50 (Possible to change by FunctionKey 5~95%)		
Crater filler control		[On][Off][Repeat] change type		
Arc spot Sec		0,1~10		
The number of job memory		30		
Dimensions(W×D×H)	mm	250×640×395 (without carrying hand		
Weight	kg	30		
Start type		High frequency start/Lift start		
<ul> <li>Welding torch</li> </ul>	type	AWD-26	AWD-18	
Rated current	A	200(DC), 160(AC)	300(DC),260(AC)	
Rated duty cycle	%	50	100	
Cooling method		Air-cooled	Water-cooled	
Electrode size	mm	(0.5), (1.0), (1.6), (2	2.0)、2.4、(3.2)、(4.0) **	
Cable length	m	4 or 8		

#### \*Option is necessary to use Tungsten electrode except for 2.4.

#### Welding torch AWD-18 Water-cooled AWD-17 AWD-26 Air-cooled Air-cooled About combinations of the other torches, please inquire of the nearest our distributor.

#### Standard Accessories

Model	DTGOOPII		
Welding power source	DT-300P		
Cable plug		1	
Welding torch	AWD-26	AWD-18	
Torch switch	1 (4 or 8m)	1 (4 or 8m)	
Band	2	2	

#### Option

#### Remote Control

Convenient in the operation apart from welding power source

 Analog remote control Part number Analog remote control K5023J00

●Digital remote control (Need the following 3-piece set)

		Part number
Digital remote	control	E-2452
Control Cable	(10m)	BKCAN-0410
Control Cable	(20m)	BKCAN-0420
CAN communicatio	n module	K5422C00

#### ■ Torch adapter

Necessary to connect the conventional torch to welding power source.

	Part number
For air-cooled AW-26	BBAWD-2601
For air-cooled AW-17	BBAWD-1701
For water-cooled AW-18	BBAWD-1801

#### ■ Torch extension cable

Conventional extension cable is usable for AW type torch and AWD type torch, but above-mentioned torch adapter is needed for AW torch.

Type	For 4m	For 11m	For 16m
Air-cooled AW(D)-26	BAWE-2004	BAWE-2011	BAWE-2016
Air-cooled AW(D)-17	BAWE-1504	BAWE-1511	BAWE-1516
Water-cooled AW(D)-18	BAWE-3004	BAWE-3011	BAWE-3016

#### ■ Wheel kit Part number: K5416B00

This is convenient for the works, in which the power source is moved frequently. The rubber feet are attached originally.

In accordance with DAIHEN's policy to make continuing improvements, design and/or specifications are subject to change without notice and without any obligation on the part of manufacturer.

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