



TIG DT300P II

DC Pulsed TIG Welding Machine

D Digital Inverter
Welding Machine
SERIES

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

SYNERGIC
TRUE DIGITAL





THIS IS THE MOST INTELLIGENT TIG WELDING MACHINE WITH TIG SYNERGIC FUNCTION!

DIGITAL INVERTER
DT300P
Digital DC Pulsed TIG Welding Machine



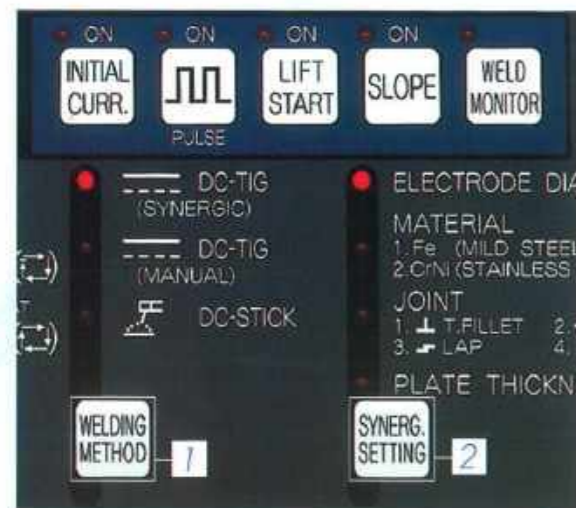
The Latest Functions

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

- | | |
|---|--|
| <ol style="list-style-type: none"> Electrode diameter
(1.6mm, 2.4mm, 3.2mm) | <ol style="list-style-type: none"> Base material
(Mild steel, Stainless steel) |
| <ol style="list-style-type: none"> Weld joint shape
(T fillet welding, Butt welding, Lap welding, Corner welding) | <ol style="list-style-type: none"> Base metal plate thickness
(0.5mm~) |

Optimum Welding Condition!

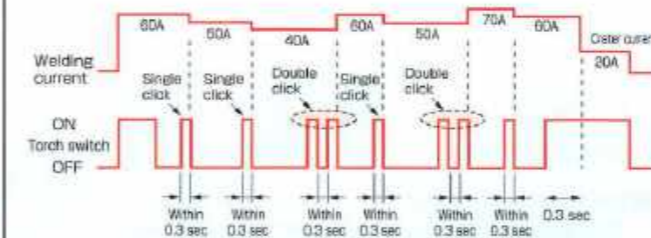
※ Note When using synergic, pulse welding process can not be selected.

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

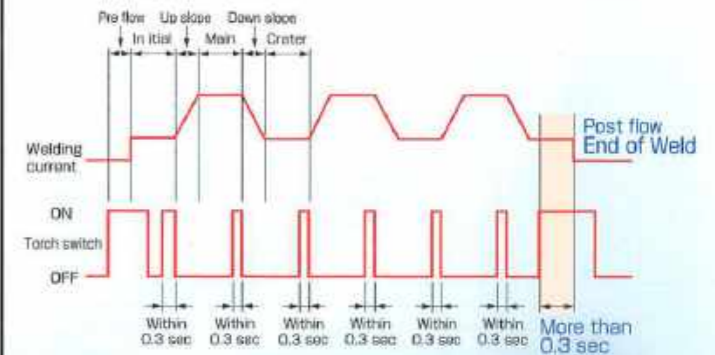
The condition which is memorized by the welding condition memory function can be read out by analog remote controller.



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.



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.



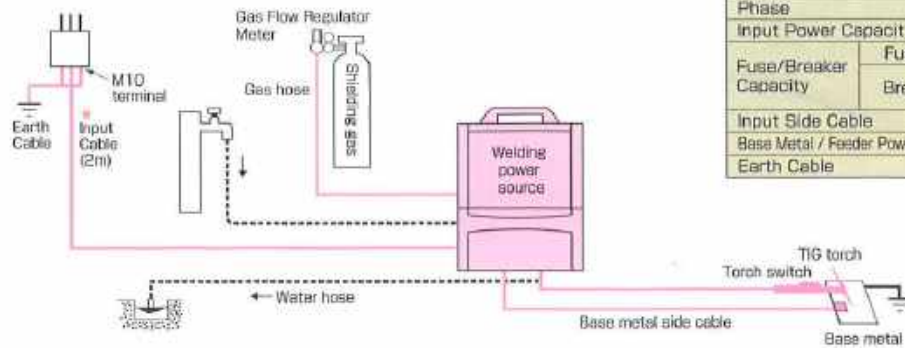
Thickness of Plate: 0.3mm, Welding Current: 50A, Pulse Frequency: 100Hz

► 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.

● Connection Diagram

Colors indicate standard composition



2m Input Cable is attached to Welding Power Source

■ Input Power Capacity and Cable Specifications

Item	Model name	DT-300P	
Power Source Voltage	V	400 ± 1.5%	
Phase		3 phase	Single phase
Input Power Capacity	kVA	more than 12	more than 9
Fuse/Breaker Capacity	Fuse	A 50	
	Breaker	A 50	
Input Side Cable	mm ²	more than 4	
Base Metal / Feeder Power Cable	mm ²	more than 38	
Earth Cable	mm ²	more than 4	

● Standard composition

Model	DT300PI	
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

● Standard Accessories

Model	DT300PI	
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

Model	DT300PI	
Welding power source type	DT-300P (CE-Marking)	
Rated input voltage	V 400 ± 1.5%	
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	%	
Rated output current	A 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	A TIG:4~300, Stick:10~250	TIG:4~250, Stick:10~180
Pulsed current	A TIG:4~300, Stick:10~250	TIG:4~250, Stick:10~180
Base current	A 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 handle)	
Weight	kg 30	
Start type	High frequency start/Lift start	
Welding torch type	AWD-26	AWD-18
Rated current	A 200(DC), 160(AC)	300(DC), 260(AC)
Rated duty cycle	%	
Rated output current	A 200(DC), 160(AC)	
Cooling method	Air-cooled	Water-cooled
Electrode size	mm (0.5), (1.0), (1.6), (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



※ About combinations of the other torches, please inquire of the nearest distributor.

Option

■ Remote Control

Convenient in the operation apart from welding power source.

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

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

● Analog remote control

Analog remote control	Part number
Analog remote control	K5023J00

■ Torch adapter

Necessary to connect the conventional torch to welding power source.

Torch adapter	Part number
For air-cooled AWD-26	BBAWD-2601
For air-cooled AWD-17	BBAWD-1701
For water-cooled AWD-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.

DAIHEN Corporation

4-1, Koyochonishi, Higashinada-ku, Kobe, Hyogo 658-0033, Japan
Phone: (Country Code 81) 78-275-2006
Fax: (Country Code 81) 78-845-8159



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