

Standard Component		WELBEE Dual-Inverter A350P			
Welding Power Source Model		WB-A350P			
Welding Torch		AWD-17 (water cool)	AWD-26 (air cool)	AWD-18 (water cool)	
Base Material Side Power Cable		BKCP1-3803			
Gas Hose		BBDW-3001			
Water Hose for tap water		-	-	-	BBDW-3001
Water Hose for PG-3H1		-	-	-	BBPU-3002
Argon gas flow rate regulator		0781-2723			

Standard Specification		WELBEE Dual-Inverter A350P			
Model	Type	WB-A350P			
Rated Output Current	A	AC TIG	DC TIG	AC STICK	DC STICK
Rated Output Voltage	V	5-350A *	2-350A *	250	250
Rated Input Voltage	V	460V±10%			
Number of Phase	-	3-phase			
Rated Frequency	Hz	50/60			
Rated Input Power	kVA	12.2(10.2kW)	12.3(10.8kW)	11.5(10.2kW)	10.5(9.1kW)
Max. No-load Voltage	V	70/77			
Rated Duty Cycle	%	24	24	40	30
Rated Load Voltage	V	5-350 (soft mode)			
Rated Output Current	A	2-350	10-350	10-350	10-350
Pre-flow Time	sec.	0-99	-	-	-
After-flow Time	sec.	0-99	-	-	-
Up Slope Time	sec.	0-10	-	-	-
Down Slope Time	sec.	0-10	-	-	-
DC Pulse Frequency	Hz	0.1-999			
Pulse Width	%	50 (changeable by function key 5-95%)			
AC Frequency	Hz	30-500	-	50 or 60	-
AC Balance	%	-20-20	-	-	-
AC/DC Change Frequency	Hz	0.1-50	-	-	-
Crater Filter Control		Off/On/Repeat	-	-	-
AC Spot Time	sec.	0.1-10	-	-	-
Number Of All Memory (Memory Control)		100			
External Dimension(Width)/mm		395x710x640 (without carrying handle)			
Mass	kg	56			
Start Method		High frequency start/ LIFT start			
Welding Torch	Type	AWD-17	AWD-26	-	AWD-18
Rated Current	A	150(DC),130(AC)	200(DC),160(AC)	350(DC),270(AC)	-
Duty Cycle	%	50	50	100	-
Cooling Method		Air Cool		Water Cool	
Electrode Dia	mm	(0.5), (1.0), (1.6), (2.0), (2.4)	(0.5), (1.0), (1.6), (2.0), 2.4, (3.2), (4.0)	(0.5), (1.0), (1.6), (2.0), 2.4, (3.2), (4.0)	(2.4), 3.2, (4.0)
Cable Length	m	4.8			
Argon Gas Flow Rate	l type				
Max. Flow	l/min	25			

Standard Component		WELBEE Dual-Inverter A350P		
Model		AWD-17	AWD-26	AWD-18
Welding Torch		1(4/8m)	1(4/8m)	1(4/8m)
Torch Switch		2	2	2
Zip Tie		2	2	2

Optional Accessories:

Remote Control		Part Number	
Description		Foot Pedal Control	KM2888
		Arising Remote Control	K5023L00

Digital Remote Control		Part Number	
Description		Digital Remote Control	E-2452
Can Communication Cable		BKCAN-D405(5m)	
		BKCAN-D410(10m)	
BKCAN Conversion Connector		K5810850	

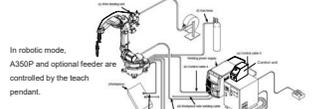
Water Cooler With Trolley		Part Number	
Description		Water cooler with trolley	WTCB-11

Extension Torch Cable		Part Number			
Description		4m	11m	16m	
AW(D)-17	BAWE-1504	BAWE-1511	BAWE-1516		
AW(D)-26	BAWE-2004	BAWE-2011	BAWE-2016		
AW(D)-18	BAWE-3004	BAWE-3011	BAWE-3016		

Extension Remote Control Cable		Part Number		
Description		4m	11m	16m
BKCP1-0404	BKCP1-0411	BKCP1-0416		

FieldBus Interface		Part Number	
Digital I/F	EtherNET/IP	IFR-800EI	
Digital I/F	PROFIBUS	IFR-800PB	
Digital I/F	PROFINET	IFR-800PN	

* Output current adjustable in 0.1A increments up to 9.9A
* Output current adjustable in 1A increments above 10A



OTC DAIHEN Website
www.DAIHEN-USA.com

DAIHEN KOBOT Website
www.DAIHEN-robot.com/en

OTC DAIHEN Inc.
NORTH AMERICA CORPORATE HEADQUARTERS
1400 Blausen Dr. Tipp City OH 45371
Phone: (937) 667-0800
Fax: (937) 667-0885

ATLANTA TECHNICAL CENTER
3135 Medlock Bridge Road
Norcross, GA 30071
Phone: 888-OTC-ROBO
Fax: (937) 667-0885

DETROIT TECHNICAL CENTER
750 Watch Road
Commerce Township, MI 48390
Phone: 888-OTC-ROBO
Fax: (937) 667-0885

DAIHEN
Member of DAIHEN Group

OTC
DAIHEN Inc.

be smart tough **Welbee**
WELBEE INVERTER

A350P

AC/DC PULSE TIG WELDING POWER SOURCE

Be smart

Optimized arc control produces the highest quality welds on the thinnest materials!

High Duty Cycle delivers efficient welding on thick plate

Welding setting guide supports automatic selection of the welding condition

Fieldbus interface makes it easy to connect to automation equipment



High output, high quality AC, DC, AC+DC HYBRID TIG welding power source.
High amperage and excellent arc control combine to produce perfect welds, from ultra-thin sheet to thick plate over a wide variety of materials.

Be tough

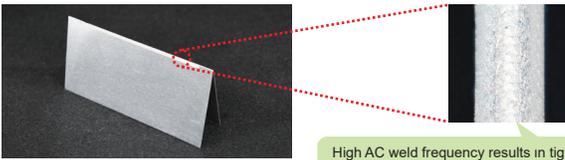
A350P

High performance TIG welding modes (AC, DC and AC+DC Hybrid), welding current to 350A, AC pulse frequency to 500Hz, supporting manual, semi-automatic, automated and robotic applications.



High AC frequency and low current result in enhanced TIG welding performance.

Combining very tight arc concentration (AC frequency up to 500Hz) and enhanced arc stability at low current settings (AC output down to 5A) for advance TIG performance.



soft aluminum, thickness: 0.2mm, gas: 100% Ar, AC, 5A, 500Hz welding speed: 7cm/min.

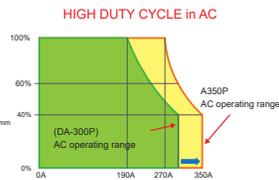
High AC weld frequency results in tighter arc focus.

Higher duty cycle for high output welding.

Higher supported duty cycle enhances welding performance on thick materials, capable of continuous AC Welding at 270A. AC Duty Cycles: 350A @ 40%, 300A @ 60% / 270A @ 100%



Hard Aluminum, t=10mm, gas: 100% Ar
 - first pass: AC, 240A, 500Hz, filler: 2.7m/min., weld: 30cm/min.
 - 2nd pass: weaving AC, 220A, 150Hz, f: 3m/min., w: 12cm/min.
 - 3rd pass: weaving AC, 200A, 70Hz, f: 3.5m/min., w: 10cm/min.



Finer control of low-end current.

Fine adjustment via the current setting increment of 0.1A for setting between 1.0A and 9.9A. Increment increases to 1A for adjustments for setting between 10A and 350A.

Advantage of fine current adjustment SS 304, thickness 0.012" Butt joint, DC mode

8A → 8.4A fine adjustment by 0.1A increments

Stable weld bead realized with fine current adjustment!

Insufficient heat input causes bead wandering

Excessive heat input cause burn through

8A → 9A 1.0A adjustment

Automatic selection of manual welding conditions via welding setting guide.*

Welding condition automatically set using material and joint related parameters.

Setting of the preferred welding condition (ex. weld current, initial current, crater current) is done by entering the 4 material and joint related parameters (electrode diameter, base material type, weld joint shape and base metal thickness).

* Note: This function cannot be used with Analog or Foot pedal Remote.

1 electrode diameter (1.6mm to 6.4mm)	3 welded joint shape (fillet, butt, lap, corner)
2 base material type (hard al, soft al, steel, stainless)	4 base material thickness (dimension in mm)

Setting these 4 parameters via the front panel, automatically selects the preferred welding conditions.

Operation flow of welding setting guide

- Press [Welding method] button to select welding method.
 - A select AC or DC TIG
- Press [welding setting guide] button to select material and joint related parameters (electrode diameter, base material type, weld joint shape and base metal thickness).

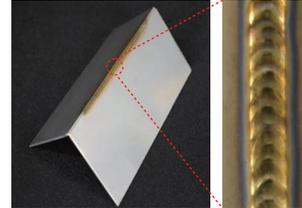
Recommended welding condition is set!



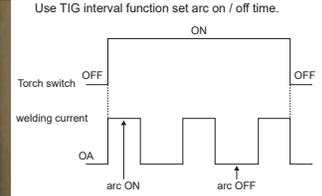
TIG interval function controls heat input, preventing burn-through & distortion

Control of Arc ON / Arc OFF time allowing finer control for establishing stable welding.

* When this function is enabled, high frequency is generated at the timing of arc ON. Touch start can not be used.



A5052, 6mm(t), 200A, 40cm/min



Supports optional FieldBus interfaces for auto and semi-auto applications.

EtherNet/IP, PROFIBUS and PROFINET network I/O interfaces for your automation and/or robot controller. Alternative to the standard OTC DAIHEN CAN bus machine network communication.

AC+DC HYBRID Mode to extend the life of your tungsten electrode.

Combines the deep penetration of DC Mode with the electrode-cleaning action of AC Mode from 0.1 to 50 Hz.

