



Welbee
Welbee Inverter

P400L

Pulsed MAG/MIG and CO₂/MAG/MIG Welder

NEW

*Expert Model meets
all your needs.*

Low-spatter

DC Pulse

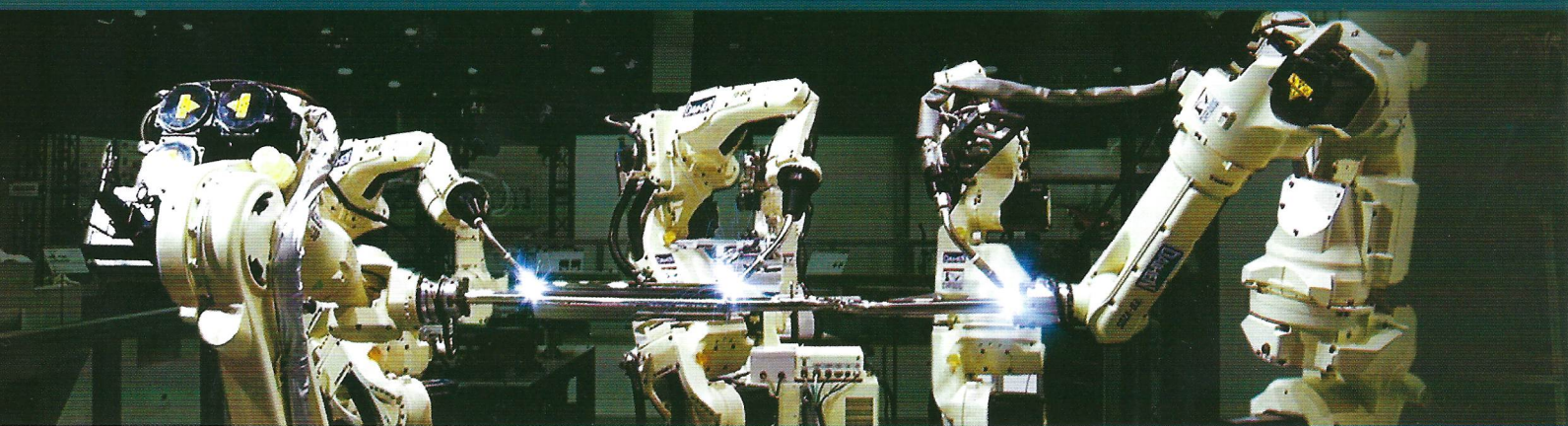
DC

TIG

STICK



Provides excellent performance on a large variety of base metals from thin,



Achieves low spatter (welding) in a large variety of applications

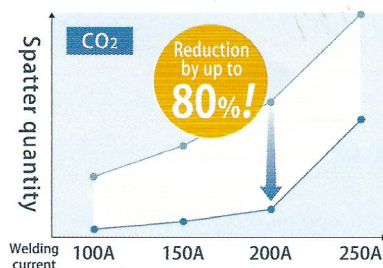
WB-P400L has a variety of welding modes built in, allowing welders to achieve stable welding with less spatter by using the appropriate mode. For example, the CBT-EX mode is best for when heat input must be suppressed. The DC pulse mode is best-suited to applications where penetration is required.

CBT-EX mode (Controlled Bridge Transfer - Expanded)

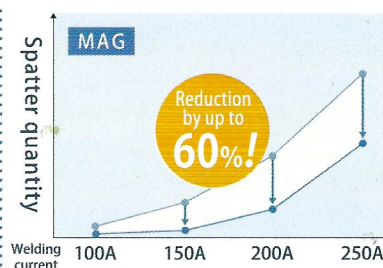


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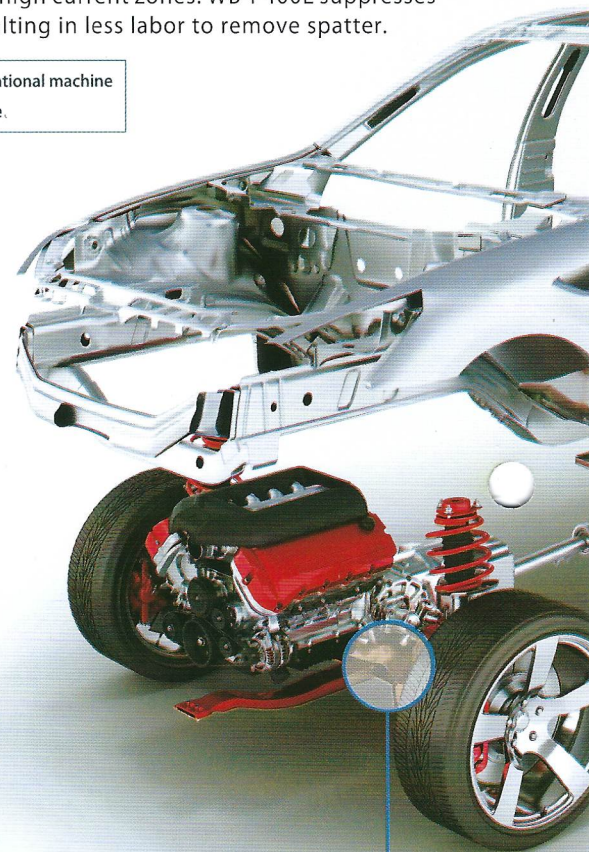
WB-P400L drastically reduces spatter not only in low current zones, but also medium to high current zones. WB-P400L suppresses the occurrence of large spatter balls, reducing spatter adhering to base metal and resulting in less labor to remove spatter.



Achieves low spatter on CO₂ welding to the same level as MAG welding.



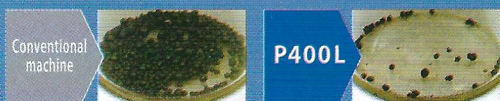
Reduces spatter to the utmost limit on MAG welding mode.



Conventional machine	Less than 0.2mm	0.2mm~0.5mm	0.5mm or more
P400L	Less than 0.2mm	0.2mm~0.5mm	0.5mm or more

Large spatter balls are drastically decreased.

[Spatter balls with a diameter of 0.5mm or more: Need to be removed if attached to base metal.]



- Welding current: 200A
- Welding speed: 50cm/min
- Wire diameter: 1.2mm
- Shielding gas: CO₂
- Welding time: 2.5min

DC pulse mode



Please scan here
for more information.

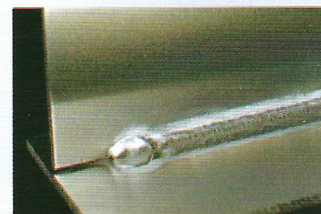
Mild steel

DC pulse mode is not only perfect for mild steel, but also for galvanized steel and other materials that cause external interference easily.



Aluminum

Wave pulse welding prevents weld burn-through when welding with different thickness base materials and really shows its power with (or during) automatic welding.



medium to thick plates, made of steel, stainless steel, and aluminum.

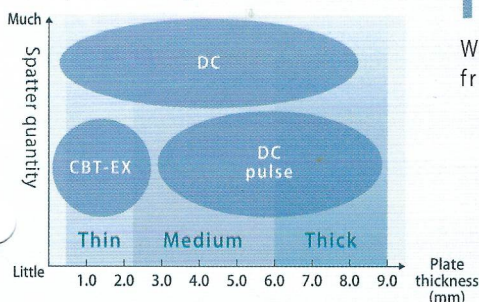


Multi Purpose Welding Machine

A large variety of welding modes

WB-P400L is able to work on a large variety of materials, responds to requirements from workplaces where multiple materials are welded.

● Scope of welding modes



● List of standard modes

Welding mode	Gas	Wire material	Wire diameter				
CBT-EX	CO ₂	Mild steel	0.8	0.9	1.0	1.2	—
	MAG	Mild steel	0.8	0.9	1.0	1.2	—
	MIG	Stainless steel	0.8	0.9	1.0	1.2	—
DC	CO ₂	Stainless ferrite	0.8	0.9	1.0	1.2	—
		Mild steel cored	—	—	1.0	1.2	1.4
	MAG	Stainless steel cored	—	0.9	—	1.2	—
		Mild steel	0.8	0.9	1.0	1.2	—
	MIG	Stainless ferrite	0.8	0.9	1.0	1.2	—
		Hard aluminum	—	—	1.0	1.2	1.6
DC pulse / Wave pulse	Ar	Soft aluminum	—	—	—	1.2	1.6
		Mild steel	0.8	0.9	1.0	1.2	—
	MIG	Stainless steel	0.8	0.9	1.0	1.2	—
		Stainless ferrite	0.8	0.9	1.0	1.2	—
	Ar	Hard aluminum	—	—	1.0	1.2	1.6
DC TIG *			(For touch start only)				
DC STICK			—				

*: When this mode is used, a TIG valve kit (part number: K8142A00) is separately required. For TIG welding torch, use AWD-17 or AWD-26.

External connection

Interfaces for the Almega Friendly series welding robots are provided as standard features, making it possible to connect them easily. A rich array of interface units is available for other manufacturers' robots, allowing customers to choose the appropriate interface unit for the connections used in their operating environment.



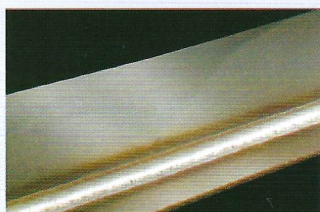
● List of interfaces

Model	Connection method
IFR-101WB	Analog network
IFR-800EI	EtherNet/IP
IFR-800PB	PROFIBUS
IFR-800DN	DeviceNet
IFR-800PN	PROFINET

Side flow structure

Stainless steel

A ferritic stainless steel mode is provided as a standard feature, making it possible to achieve stable welding with less spatter even when welding on thin plates such as mufflers.



High reliability

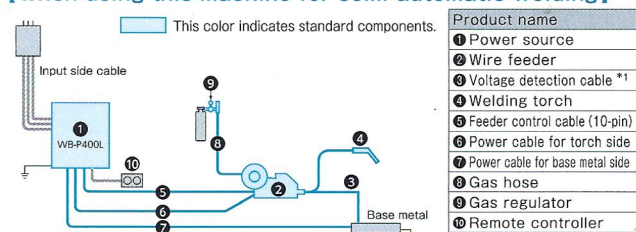
The precision electronic component area employs an isolated structure to prevent dust from getting into the area, achieving high dust resistance.

High maintainability

Air blowing can be performed without having to

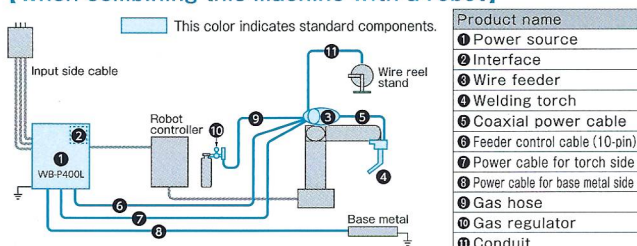
■ Connection diagram

[When using this machine for semi-automatic welding]



*1: When using the low spatter function, use the K5791G00 voltage detection cable provided with the welding machine.

[When combining this machine with a robot]



Note: If this machine is connected to another manufacturer's robot or automatic machine, specifications must be checked separately in detail.

● Standard specifications

Product name	Model	Welbee Inverter P400L
● Power source	Model	WB-P400L
Rated input voltage	V	400 (50/60Hz)
Number of phases		3
Rated input	kVA	20.1 (18.1kW)
Rated duty cycle	%	DC : 60 PULSE : 50
Rated output current	A	400
Rated load voltage	V	34
Output current range	A	30 to 400
Output voltage range	V	12 to 34
Maximum no-load voltage	V	70
External dimensions (WxDxH)	mm	395×710×640 (w/o eyebolts)
Mass	kg	62
● Power cable for torch side	Model	BKPD-6002
Cable size	mm ²	60
● Power cable for base metal side	Model	BKPD-6002
Cable size	mm ²	60

● Wire feeder	Model	CM-7403	CMV-7403 *1	CMA-7403
Wire diameter *2	mm	(0.8), 0.9, 1.0, 1.2, (1.4), (1.6)	(0.8), 0.9, 1.0, 1.2, (1.4), (1.6)	1.0, 1.2, (1.6)
Wire type		Solid wire	Solid wire	Hard aluminum
Feeding rate	m/分	22 (maximum)	22 (maximum)	22 (maximum)
External dimensions (WxDxH)	mm	254×611×393	254×611×393	285×723×393
Mass	kg	14	14	15

● Welding torch	Model	BT3510-30	BT3510V-30 *1	BTA300-30
Rated current	A	350	350	300
Wire diameter *2	mm	(0.9), (1.0), 1.2, (1.4)	(0.9), (1.0), 1.2, (1.4)	(1.0), 1.2, (1.6)
Duty cycle	%	60	60	50
Cooling system		Air cooling	Air cooling	Air cooling
Cable length	m	3, (4.5), (6)	3, (4.5), (6)	3

*1: When using the low spatter function, select a product model containing "V".

*2: If any of the wire diameters enclosed in parentheses is used, options will be required.

● Standard accessories

● Power source	WB-P400L		
Voltage detection cable(5m)	1 (K5791G00)		
● Wire feeder	CMV-7403	CM-7403	CMA-7403
Gas hose (3m)	1	1	1
Hose cover	1	1	1
Outlet guide (0.8/1.0)	—	—	1
● Welding torch	BT3500V-30/BT3510V-30	BT3510-30	BTA300-30
Allen wrench	1	1	1

■ Input power capacity and cables specifications

Items	Model	WB-P400L
Supply voltage	V	400 ± 15%
Number of phases	—	3
Installed capacity	kVA	21 or more
Protective device	Type B fuse	A
	No-fuse breaker (or leakage breaker) *1	A
		40
Input side power cable	mm ²	10 to 38
Base metal side cable	mm ²	60 or more
Grounding cable	mm ²	10 or more

*1: When using a no-fuse breaker, use one for motors.

● Options

■ Extension cables

	5m	10m	15m	20m
Power cable * (60mm ²)	BKPD-6007	BKPD-6012	—	—
(Common to base metal and feeder sides) (80mm ²)	—	—	BKPD-8017	BKPD-8022
Gas hose	BKGG-0605	BKGG-0610	BKGG-0615	BKGG-0620
Feeder control cable (10-pin)	BKCPJ-1005	BKCPJ-1010	BKCPJ-1015	BKCPJ-1020
Analog remote control cable	BKCPJ-0605	BKCPJ-0610	BKCPJ-0615	BKCPJ-0620
Water hose	BKWR-0605	BKWR-0610	BKWR-0615	BKWR-0620

* When an extension cable is used, the standard power cable (2m) is not required.

* If the cable length exceeds 20m, please specify a required length.

* If this machine is used in the vicinity of the rated current, a water cooling system is used, or the cable length is 15m or more, we recommend that 80-mm² power cables be used.

■ Voltage detection cable

	5m	10m	15m	20m
Voltage detection cable	K5791G00	K5416N00	—	K5791E00

■ Wire feeder for other manufacturers' robots

● Wire feeder	Model	CMRE-742
Wire diameter *	mm	(0.8), 0.9, 1.0, 1.2, (1.4), (1.6)
Wire type		Solid wire, flux-cored wire
Feeding rate	m/min	22
External dimensions (WxDxH)	mm	195×275×235 (excluding cables)
Mass	kg	7

* If any of the wire diameters enclosed in parentheses is used, options will be required.

■ Remote controller

● Mobile remote controller (wireless)

Product name	Model
MOBILE Remocon	E-2642



● Analog remote controller (wired)

Product name	Part No.
Analog remote controller (3m)	K5416Z00



In accordance with DAIHEN's policy of 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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