



## SINGLE SOURCE ADVANTAGE

Our single source approach is simple: we provide all the equipment needed for robotic or manual arc welding. One call solves it all!

- Seamless digital integration for maximum control
- Reduced maintenance time for greater uptime and productivity
- Expert service from experienced support staff

ROBOT, WELDING POWER SOURCE, WIRE FEEDER, TORCH—WE PROVIDE IT ALL.

## SEAMLESS SOLUTIONS

Our cells can provide arc welding solutions for a range of parts from small to large size, with minimal operator movement required and little to no part positioning. The compact designs reduce required manufacturing floor space. All cells include robot manipulator & controller, teach pendant, and complete welding package. Multiple positioning devices and software available as standard features or options.



# Weibee

NANOTECHNOLOGY

GMAW & PULSE GMAW  
MACHINES FOR MANUAL  
AND AUTOMATED  
WELDING APPLICATIONS

888-OTC-ROBO

[www.daihen-usa.com](http://www.daihen-usa.com)

WB-P500L

WB-P400

WB-M350L

WB-M500

WB-M350

### North American Corporation Headquarters

1400 Blausler Dr, Tipp City, Ohio 45371 / Phone: (937) 667-0800

### Demonstration Centers

Novi, MI  
Davenport, IA  
Atlanta, GA

Charlotte, NC  
Monterrey, Mexico  
Leon, Mexico

**DAIHEN**

Member of DAIHEN Group

DAIHEN Inc.

[www.daihen-usa.com](http://www.daihen-usa.com)

**OTC**  
CREATING METAL ARTISTS

# SIGNIFICANTLY REDUCES WELDING COSTS, VERSATILE AND EXPANDABLE

## WB-P500L **WAVE PULSE**

Achieve optimum welding performance on steel, stainless steel, and aluminum. The P500L significantly reduces spatter generation across the entire range of low to high welding currents, delivering high-quality pulse welding by performing optimized waveform control according to materials.

### WB-P500L KEY FEATURES & BENEFITS

- CBT-EX extra low spatter mode for carbon and stainless steels.
- Reduced undercut during high speed welding.
- High duty cycle for high output and automated applications.

### NANOTECHNOLOGY

Welbee power sources offer nanotechnology with OTC DAIHEN's proprietary LSI chip, which delivers precise, ultra high-speed waveform control. The result is precise, high quality welding of virtually any metal.



## WB-P400 **WAVE PULSE**

The P400 is an all-around model for welding steel, stainless, and aluminum with a single unit. This model achieves high-quality pulse welding by performing optimized waveform control according to type of metal being welded. Arc stability is perfect, even during high-speed welding.



## WB-M350L

A low-spatter model that increases your productivity by reducing spatter generation, the M350L provides significant reduction of spatter across the entire range of low to high welding currents to deliver high-quality, high-speed welding. CBT-EX extra low spatter mode for carbon and stainless steels.



## WB-M500

This 500-amp standard welding supply is for high quality welding in any situation at 100% duty cycle. The M500 provides significant improvement in arc stability in the range of low to high electric currents, and delivers a beautiful weld bead with a uniform bead end and less voltage fluctuation, even during high-speed welding.



## WB-M350

The Welbee M350 is the standard welding supply for high quality welding in any situation. It provides significant improvement in arc stability in the range of low to high electric currents, and delivers a beautiful weld bead with a uniform bead end and less voltage fluctuation, even during high-speed welding.

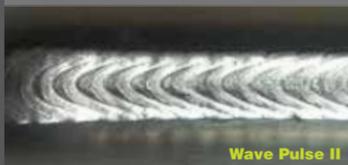
## ELIMINATES THE NEED FOR EXPENSIVE HELIUM GAS MIXTURES!

### AUSTENITIC STAINLESS MODES

Cr-Ni-Fe solid wire

- Applications include:
- Chemical plants
  - Power plants
  - Food processing
  - Dairy equipment

98% Argon + 2% CO<sub>2</sub>



Wave Pulse II

### FERRITIC STAINLESS MODES

Cr-Fe solid wire

- Applications include:
- Mufflers
  - Exhaust systems
  - Kitchen counters
  - Kitchen sinks

90% Argon + 10% CO<sub>2</sub>



2 mm sheet

### ALUMINUM

Precision pulse waveform control virtually eliminates even the fine spatter from aluminum MIG welding.

In addition, you can easily achieve a TIG-like bead appearance with OTC's enhanced and patented Wave Pulse process. This low frequency pulse GMAW process modulates both wire feeding and pulse current, achieving beautiful high speed welds with improved metallurgical benefits.

100% Argon



100% Argon



## SAVE TIME AND MONEY! UTILIZE STANDARD SHIELDING GASES ALREADY IN YOUR PLANT!

### CARBON STEELS

- Excellent results with a wider variety of shielding gases
- Compensates for inconsistent gas mixtures

80% Argon + 20% CO<sub>2</sub>



75% Argon + 25% CO<sub>2</sub>



Conventional Pulse GMAW

### ZINC COATED STEELS

- Applications include:
- Transportation
  - Bridge & highway
  - Agriculture
  - Water & marine

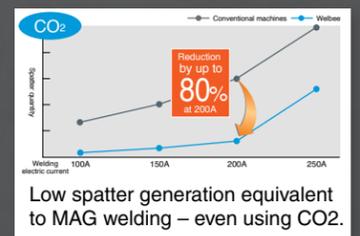
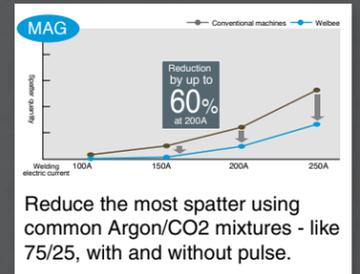
75% Argon + 25% CO<sub>2</sub>



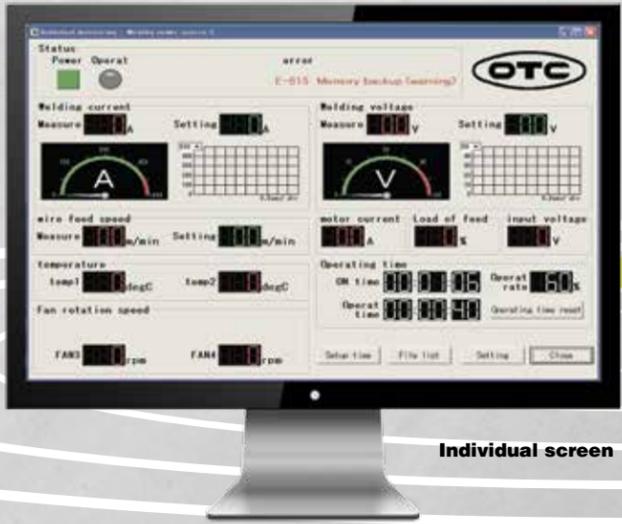
75% Argon + 25% CO<sub>2</sub>



Conventional Pulse GMAW produces an erratic arc with excessive spatter and porosity.



# A MULTITUDE OF NETWORKING, MONITORING AND DATA COLLECTION CAPABILITIES



Individual screen



**STANDARD USB PORT**  
Collect and easily transfer data from one machine to others.

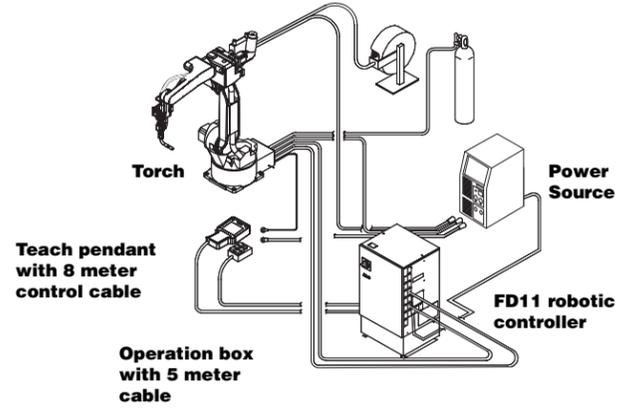


- OPTIONAL ANDROID™ TABLET APP**
- Remote control of front panel operations
  - Graphical monitoring of current and voltage
  - Upper/Lower limit alarm functions
  - Welding result monitor
  - Welding condition database
  - Maintenance (troubleshoot & backup)

**HIGH DURABILITY AND LOW MAINTENANCE**  
**Welbee side air flow structure**

- High dust resistance – Reliability is dramatically improved by adopting a separation structure that prevents dust from entering electronic components.
- Easy maintenance – The cooling fan speed is precisely controlled according to the machine duty cycle or ambient air temperature to further minimize dust entry and reduce electrical cost. Additionally, you can easily clean out with shop air without opening the case.

**FD Friendly series**



**Dust penetration into the precision part is reduced by about 98%**

# We!bee SPECIFICATIONS INVERTER SERIES

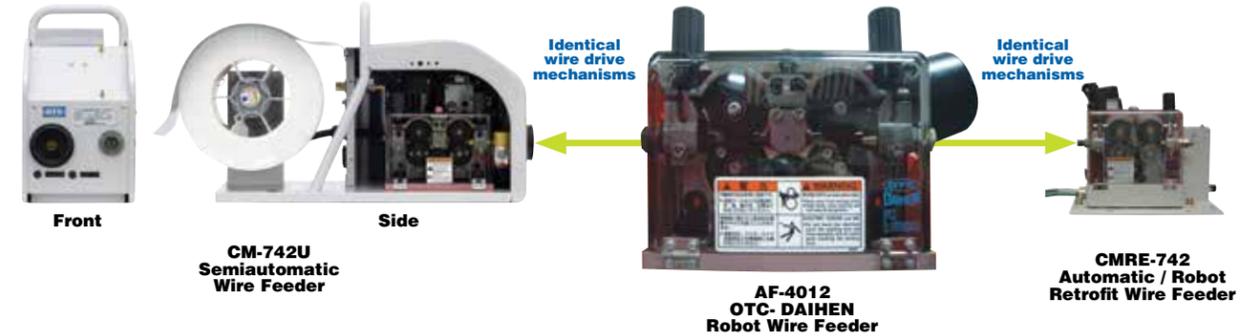
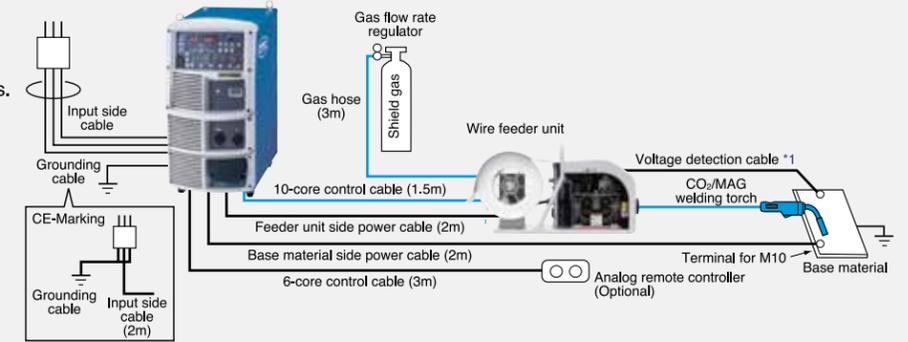
Model	WB-M350				WB-M350L				WB-M500	WB-P400		WB-P500L		
	3		1		3		1		3	3		3		
Number of phases	3		1		3		1		3	3		3		
Rated frequency	50/60Hz													
Rated input voltage	208/230V	460V	208/230V	460V	208/230V	460V	208/230V	460V	460V	208/230V	460V	460V		
Input voltage range	208/230V ±10%	460V ±10%	208/230V ±10%	460V ±10%	208/230V ±10%	460V ±10%	208/230V ±10%	460V ±10%	460V ±10%	208/230V ±10%	460V ±10%	460V ±10%		
Rated input power	15.3kVA	15.0kVA	11.3kVA	10.9kVA	15.6kVA	15.6kVA	12.1kVA	11.5kVA	25.2kVA	DC 18.2/18.0kVA	DC 19.0kVA	25.2kVA, 24.1kW		
	13.1kW/14.9kVA/13.0kW	13.3kW	8.4kW/11.2kVA/8.3kW	8.1kW	13.4kW/15.3kVA/13.3kW	13.8kW	8.9kW/11.8kVA/8.8kW	8.6kW	22.6kW	16.3/16.8kW Pulse 19.6/19.7kVA/18.1/18.1kW	17.9kW Pulse 20.7kVA/18.5kW			
Rated input current	42.5/37.4A	18.8A	54.2/48.8A	23.7A	43.3A/38.5A	19.6A	58.0/51.3A	25.0A	31.7A	DC:50.5/45.0A Pulse:54.3/49.5A	DC:23.8A Pulse:25.9A	31.6A		
Rated output current	350A		250A		350A		250A		500A	400A		500A(DC), 400A(Pulse)		
Rated load voltage	31.5V		26.5V		31.5V		26.5V		39.0V	34.0V		39.0V(DC), 34.0V(Pulse)		
Rated output current range	30 - 350A		30 - 250A		30 - 350A		30 - 250A		30 - 500A	30 - 400A		30 - 500A		
Rated output voltage range	12.0 - 31.5V		12.0 - 26.5V		12.0 - 31.5V		12.0 - 26.5V		12.0 - 45.0V	12.0 - 36.0V		12.0 - 39.0V		
Maximum no-load voltage	71/78V	70V	71/78V	70V	70/79V	70V	71/78V	70V	81V	83/92V	80V	92V		
Rated duty cycle	60%	60%	60%	60%	60%	60%	60%	60%	100%	50%	50%	60%(DC), 80%(Pulse)		
Number of welding conditions	100													
Operating temperature range	14° F to 104° F (-10 to +40° C)													
Operating humidity range	less than 50% at 104° F (40° C), less than 90% at 68° F (20° C)													
Storage Temperature Range	-13° F to +131° F (-25 to +55° C)													
Storage humidity range	less than 50% at 104° F (40° C), less than 90% at 68° F (20° C)													
Dimensions (W x D x H)	15.6 x 28.0 x 31.9 in. (395 x 710 x 810mm)													
Mass	183 lbs (83kg)				185.2 lbs (84kg)				170 lbs (77kg)	185.2 lbs (84kg)		178.6 lbs (81kg)		
For DC TIG scratch start	Rated input power	12.5kVA 10.0kW 11.9kVA 10.0kW	12.3kVA 10.5kW	8.6kVA 6.4kW 8.6kVA 6.3kW	8.9kVA 6.4kW	12.8kVA 10.5kW 12.5kVA 10.5kW	12.5kVA 10.9kW	9.1kVA 6.7kW 9.0kVA 6.6kW	2kVA 6.8kW	13.7kVA 12.2kW	14.8kVA 14.5kVA	12.6kW 12.6kW	14.5kVA 13.0kW	14.1kVA 12.6kW
	Rated output current	350A		250A		350A		250A		400A	400A		400A	
	Rated load voltage	26.0V		26.0V		26.0V		26.0V		26.0V	26.0V		26.0V	
	Rated output current range	10 - 400A		10 - 250A		10 - 400A		10 - 250A		10 - 400A	10 - 400A		10 - 400A	
Rated duty cycle	60%		60%		60%		60%		100%	50%		93%		
For DC STICK scratch start	Rated input power	13.6kVA 11.2kW 13.1kVA 11.1kW	13.3kVA 11.6kW	12.2kVA 9.2kW 12.1kVA 9.1kW	12.2kVA 9.1kW	13.3kVA 11.4kW 13.2kVA 11.5kW	13.2kVA 11.7kW	12.6kVA 9.5kW 12.4kVA 9.4kW	12.5kVA 11.1kW	12.5kVA 12.2kW	13.3kVA 12.9kVA	11.2kW 11.2kW	12.8kVA 11.5kW	12.8kVA 11.4kW
	Rated output current	300A		250A		300A		250A		300A	300A		300A	
	Rated load voltage	32.0V		30.0V		32.0V		30.0V		32.0V	32.0V		32.0V	
	Rated output current range	20 - 350A		20 - 250A		20 - 300A		20 - 250A		20 - 300A	20 - 300A		20 - 300A	
	Rated duty cycle	60%		60%		60%		60%		100%	50%		100%	

## CONNECTIONS: MANUAL WELDING

The parts in this color are standard components. (CO<sub>2</sub>/MAG air cooling specification)

\*1 Use the K5791G00 voltage detection cable (5m) attached to the welding power supply unit. (Only for Low spatter model)

The voltage detection cable is not necessary when you do not use the low-spatter-generation type.



**OTC-DAIHEN wire feeders come set up for hard wires and air cooled torches as standard features. The following items are available as options...**

- K5870E00 Aluminum Wire Kit
- K5870D00 Water Cooled Hardware Kit
- K5870C00 Tweco #5 connection kit
- K5870V00 Voltage Detection Adapter Kit
- Fully Enclosed Wire Reel Cover (Please call for details)

- All wire feeders feature 4-feed rolls for increased drive force for any wire alloy including soft aluminum.
- All control circuits are built in the power source, offering incredible durability.
- Fully enclosed wire drive mechanism keeps out dirt and grime.
- Standard wire cover flap keeps dirt and grime away from the welding wire.
- Fully enclosed wire reel cover available.
- Suitable for OTC DAIHEN MIG guns or any other major brand.

### WIRE FEEDER SPECIFICATIONS

ITEM	CM-742U	CMRE-742	AF-4012
Style	Semiautomatic	Auto & Robot Retrofit	OTC DAIHEN Robots
Wire Feed Speed	866 in. / min. (22 m/min.)		
Usable Wire Diameters	Mild Steel	inch (.030), .035, .040, .045, (.052), (1/16); mm (0.8), .09, 1.0, 1.2, (1.4), (1.6)	
	Stainless Steel	inch (.030), .035, .040, .045, (.052), (1/16); mm (0.8), .09, 1.0, 1.2, (1.4), (1.6)	
	Hard Alum (AL/MG)	.040, 3/64, 1/16 in. (1.0, 1.2, 1.6 mm)	
	Soft Aluminum	3/64, 1/16 in. (1.2, 1.6 mm)	
Weight	28.6 lb (13 kg)	15.4 lb (7 kg)	9.3 lb (4.2 kg)
External Dimensions (W x D x H)	"8.11 x 23.2 x 14.6 inches (206 x 589 x 372 mm)"	"7.68 x 10.83 x 9.25 inches (195 x 275 x 235 mm)"	"5.24 x 7.87 x 5.71 inches (133 x 200 x 145 mm)"