



Otto Arc Systems, Inc.
Add:10757 Cutten Road Building 1 Houston,
Texas 77066 USA
Phone: 832-680-5050
Website: www.ottoarc.com



Arcent (Singapore) Pte Ltd
2, Yishun Industrial Street 1
Northpoint Bizhub #07-11
Singapore 768159
Tel: +65 6356 6997
Fax: +65 6356 4854
sales@arcentwelding.com
www.arcentwelding.com



**NEW
PRODUCTS
CATALOGUE**
WELDING CUTTING

Technical Highlight

- Power devices are from well-known brands;
- Reliable and accurate digital control system, which can fully adjust parameters;
- With functions of spot welding, DC TIG welding, pulse TIG welding and manual welding;
- High-speed DC pulse waveform output, the highest frequency can reach 200Hz,
- the heat affected zone is smaller, and it is more suitable for thin plate welding.

Application

Auto Manufacturing, Pipeline Industry, Pressure Vessel, Shipbuilding, Nuclear Industry, and etc.

Standard

Earth Cable
Gas Hose
Hose Clamp

Option

TIG Torch (5 meter)



	Supply Voltage	Pulse Frequency	Rated Input Capacity	Rated Input Current	No-load Voltage	Welding Current Range	Upslope and Downslope time	pre/post Gas time	Rated Duty Cycle	Pulse Width Range	Efficiency	Power Factor	Protect Grade	Insulation Class	Weight	Frequency	Cooling Mode	Size
Technical Characteristics	V V	Hz Hz	KW KW	A A	V _o V	A _{MIN} A	S _{MAX} S	S S	%USE % % _{40℃}	% %	η %	Φ Cosφ	IP IP	H H	kg kg	Hz Hz	风冷 风冷	mm mm
TIG-200	1~230 ±10%	0.5~200	TIG 7.3 MMA 10.6	TIG 32 MMA 47	69	10~200	0~10	0~2/ 0~10	TIG 60%200A 100%155A MMA 40%200A 60%160A 100%125A	5~95	85	0.65	IP21S	H	7.8	50/60	风冷	443x156x322



Technical Highlight

- The whole machine and its components are designed to be dust-proof, moisture-proof and corrosion-resistant, with high reliability;
- Power devices are from well-known brands, and IGBT is from ST (STMicroelectronics);
- Reliable and accurate digital control system, gas flow, starting current, upslope time, peak current, base current, pulse frequency, duty ratio, downslope time, arc-break current, gas post-flow time all adjustable.
- High-speed DC pulse waveform output, the highest frequency can reach 200Hz, the arc is stronger, the heat affected zone is smaller, and it is more suitable for thin plate welding;
- With over-voltage, under-voltage and phase-loss protection, effectively protect the welding machine from the influence of harsh power supply environment;
- Can be applied to generators and any three-phase 320V to 520V power supply.

Application

Auto Manufacturing, Pipeline Industry, Pressure Vessel, Shipbuilding, Nuclear Industry, and etc.

Standard

Earth Cable
Gas Hose
Hose Clamp

Option

TIG Torch (5 meter)



Technical Highlight

- The whole machine and its components are designed to be dust-proof, moisture-proof and corrosion-resistant, with high reliability;
- Power devices are from well-known brands, and IGBT is from German Infineon;
- Can be used for TIG welding, manual welding, 5mm gouging;
- Reliable and accurate digital control system, gas flow, starting current, upslope time, peak current, base current, pulse frequency, duty ratio, downslope time, arc-break current, gas post-flow time all adjustable.
- High-speed DC pulse waveform output, the highest frequency can reach 200Hz, the arc is stronger, the heat affected zone is smaller, and it is more suitable for thin plate welding;
- With over-voltage, under-voltage and phase-loss protection, effectively protect the welding machine from the influence of harsh power supply environment;
- Can be applied to generators and any three-phase 320V to 520V power supply.
- Water cooling interface, optional water cooling components.

Application

Nuclear Power Industry, Pressure Vessel, Pipeline Industry, Auto Manufacturing, Shipbuilding, Aerospace Industry, and etc.

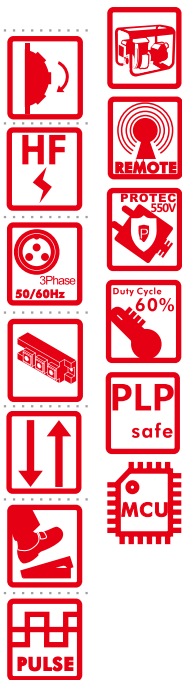
Suitable for Stainless Steel, Carbon Steel, Alloy Steel, Copper, Copper Alloy, Titanium, Titanium Alloy, and etc.

Standard

Earth Cable
Gas Hose
Hose Clamp

Option

Water Cooler
Connection Cable
TIG Torch (5 meter)



	Supply Voltage	Pulse Frequency	Rated Input Capacity	Rated Input Current	No-load Voltage	Welding Current Range	Upslope and Downslope Time	pro/post Gas time	Rated Duty Cycle	Pulse Width Range	Efficiency	Power Factor	Protect Grade	Insulation Class	Weight	Frequency	Cooling Mode	Size		Supply Voltage	Pulse Frequency	Rated Input Capacity	Rated Input Current	No-load Voltage	Welding Current Range	Upslope and Downslope Time	pro/post Gas time	Rated Duty Cycle	Pulse Width Range	Efficiency	Power Factor	Protect Grade	Insulation Class	Weight	Frequency	Cooling Mode	Size
Technical Characteristics	V	Hz	KW	A	V	A ^{MIN} A ^{MAX}	S	S	% ^{USE} % ^{40℃}	%	η	Φ	IP	H	kg	Hz	风冷	mm	Technical Characteristics	V	Hz	KW	A	V	A ^{MIN} A ^{MAX}	S	S	% ^{USE} % ^{40℃}	%	η	Φ	IP	H	kg	Hz	水冷	mm
TIG-250	3x400 ±15%	0.5~200	TIG 6.0 MMA 8.6	TIG 14 MMA 18	TIG 73 MMA 73	5~250	0~10	0~2/ 0~10	60%250A 100%195A	5~95	85	0.75	IP21S	H	18.6	50/60	Air cool	560x320x540	TIG-400	3x400 ±15%	0.5~200	TIG 12 MMA 16	TIG 25 MMA 32	TIG 66 MMA 66	5~400	0~10	0~2/ 0~10	60%400A 100%310A	5~95	85	0.75	IP21S	H	38.8	50/60	Water cooling	700x365x750

Technical Highlight

- The whole machine and its components are designed to be dust-proof, moisture-proof and corrosion-resistant, with high reliability;
 - 2. Power devices are from well-known brands, and IGBT is from German Infineon;
 - 32-bit ARM processor digital control system, reliable and accurate digital control system, gas flow, starting current, upslope time, peak current, base current, pulse frequency, duty ratio, downslope time, arc-break current, gas post-flow time all adjustable.
 - In AC mode, rectangular wave, triangle wave and sine wave can be selected for different welding requirements;
 - Special arc starting design to ensure 100% cold gun arc starting in AC state;
 - The cleaning effect is flexible and adjustable to ensure that the welding seam is bright and beautiful;
 - High-speed DC pulse waveform output, the highest frequency can reach 200Hz, the arc is stronger, the heat affected zone is smaller, and it is more suitable for thin plate welding;
 - With over-voltage, under-voltage and phase-loss protection, effectively protect the welding machine from the influence of harsh power supply environment;
- Can be applied to generators and any three-phase 320V to 520V power supply.
- Water cooling interface, optional water cooling components.

Application

Nuclear Power Industry, Pressure Vessel, Pipeline Industry, Auto Manufacturing, Shipbuilding, Aerospace Industry, and etc.

Suitable for Aluminum, Aluminum Alloy, Stainless Steel, Carbon Steel, Alloy Steel, Copper, Copper Alloy, Titanium, Titanium Alloy, and etc.

Standard

Earth Cable
Gas Hose
Hose Clamp

Option

Water Cooler
Connection Cable
TIG torch (5 meter)

Technical Highlight

- The whole machine and its components are designed to be dust-proof, moisture-proof and corrosion-resistant, with high reliability;
- Inverter full-bridge topology, with digital control system, the whole machine has fast response speed and stable arc;
- Special heat-dissipation design, guarantee the load continuous rate can reach 60% at 40 °C, improve the reliability and working efficiency of the whole machine;
- The original flexible arc control method can improve the arc shape and weld formation, reduce spatter and increase the deposition rate;
- With over-voltage, under-voltage and phase-loss protection, effectively protect the welding machine from the influence of harsh power supply environment;
- Can be applied to generators and any three-phase 320V to 520V power supply.
- Water cooling interface, optional water cooling components.

Application

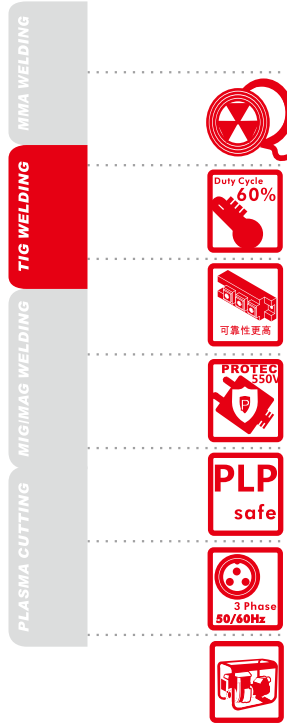
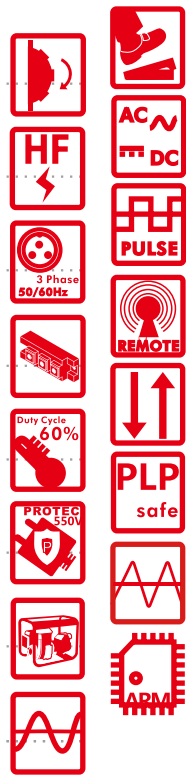
Auto Manufacturing, Shipbuilding, Railway Transit, Chemical Engineering Industry, and etc. Suitable for Carbon Steel, Low-Alloy Steel, High Strength Steel, and etc.

Standard

Framed Wire Feeder
Earth Cable
Allen Wrench
Co2 Regulator
Connection Cable (5 meter)
MIG torch (3meter)

Option

Water Cooler
Connection Cable



Technical Characteristics	Supply Voltage	Pulse Frequency	Rated Input Capacity	Rated Input Current	No-load Voltage	Welding Current Range	Upslope and Downslope time	pro/post Gas time	Rated Duty Cycle	Pulse Width Range	Efficiency	Power Factor	Protect Grade	Insulation Class	Weight	Frequency	Cooling Mode	Size	Technical Characteristics	Supply Voltage	Wire Dia	Rated Input Capacity	Rated Input Current	No-load Voltage	Welding Current Range	Rated Duty Cycle	Welding Voltage	Efficiency	Power Factor	Protect Grade	Insulation Class	Weight	Frequency	Cooling Mode	Size
	V	Hz	KW	A	V	A _{MIN} A _{MAX}	S	S	%USE %40℃	%	η	φ	IP	H	kg	Hz	冷却方式	W _h →L mm		V	mm	KW	A	V	A _{MIN} A _{MAX}	%USE %40℃	V	η	φ	IP	H	kg	Hz	冷却方式	W _h →L mm
TIG-400E	3x400 ±15%	0.5~200	AC/DC 12/13 TIG 16/17	AC/DC 25/26 TIG 34/36	TIG 76 MMA 67	10~400	0~10	0~2/ 0~10	60%400A 100%310A	5~95	85	0.75	IP21S	H	37.6	50/60	Air/water cooling	700x365x750	MIG-350	3x400 ±15%	0.6/0.8 0.9/1.0 /1.2	MMA 14 MIG 13	MMA 33 MIG 30	MMA 14 MIG 35	MMA 10~350 MIG 50~350	60%350A 100%275A	MMA 20.4~34 MIG 16.5~31.5	≥85	0.7	IP21S	H	43.4	50/60	Air/water cooling	700x365x750



MIG-500

Inverter MIG/MAG Welding Machines



MIG-500DP

Inverter Double Pulse MIG/MAG Welding Machine



Technical Highlight

- The whole machine and its components are designed to be dust-proof,moisture-proof and corrosion-resistant, with high reliability;
 - Inverter full-bridge topology, with digital control system, the whole machine has fast response speed and stable arc;
 - Special heat-dissipation design, guarantee the load continuous rate can reach 60% at 40 °C, improve the reliability and working efficiency of the whole machine;
 - The original flexible arc control method can improve the arc shape and weld formation, reduce spatter and increase the deposition rate;
 - With over-voltage, under-voltage and phase-loss protection, effectively protect the welding machine from the influence of harsh power supply environment;
 - Can be applied to generators and any three-phase 320V to 520V power supply.
- Water cooling interface, optional water cooling components.

Application

Auto Manufacturing , Shipbuilding, Rail Transit, Chemical Engineering Industry, and etc. Suitable for Carbon Steel, Low-alloy Steel, high Strength Steel, and etc.

Standard

Framed Wire Feeder
Earth Cable
Allen Wrench
Co2 Regulator
Connection Cable (5 meter)
MIG Torch (3 meter)

Option

Water Cooler
Connection Cable

Technical Highlight

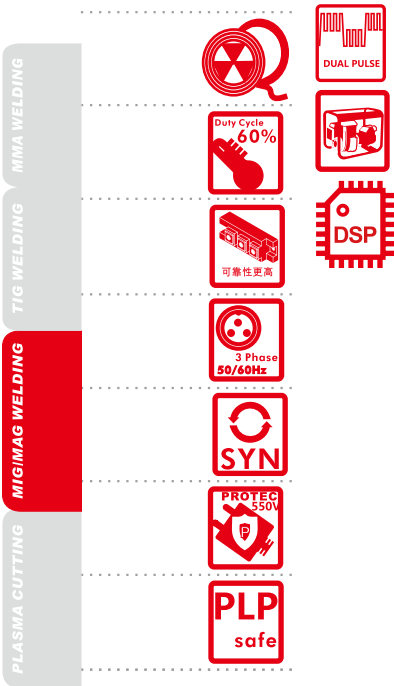
- The whole machine and its components are designed to be dust-proof, moisture-proof and corrosion-resistant, with high reliability;
- Inverter full-bridge topology, with digital control system, the whole machine has fast response speed and stable arc;
- The well-designed pulse welding control strategy greatly improves the success rate of one pulse and one drop, accurately controls the shape of the droplet, and the arc energy, improves the formation of the weld and increases the deposition rate;
- The well-designed double-pulse coordinated energy control strategy, which adjusts the heat input through periodic coordinated wire feed speed, pulse current, and arc length adjustment to improve weld formation and quality;
- Special anti-interference design, which is conducive to long-line welding, and can be extended to 50 meters under non-welded aluminum alloy conditions;
- Welding programs are easy to store and recall, total 100 of programs ;
- Built-in welding parameter library can be applied to a variety of materials and a variety of welding wires.




























Application

Auto Industry, Devices and Instrument Manufacturing, Rail Transit, Shipbuilding, Offshore Engineering Industry, and etc.

Standard

Water Cooled Wire Feeder
Water Cooler
Connection Cable for Cooler
MIG Torch (3 Meter)
Earth Cable
Co2 Regulator
Connection Cable 5 Meter (Water Cooling)



	Supply Voltage	Wire Dia	Rated Input Capacity	Rated Input Current	No-load Voltage	Welding Current Range	Rated Duty Cycle	Welding Voltage	Efficiency	Power Factor	Protect Grade	Insulation Class	Weight	Frequency	Cooling Mode	Size		Supply Voltage	Wire Dia	Rated Input Capacity	Rated Input Current	No-load Voltage	Welding Current Range	Rated Duty Cycle	Welding Voltage	Efficiency	Power Factor	Protect Grade	Insulation Class	Weight	Frequency	Cooling Mode	Size
Technical Characteristics	 V	 mm	 KW	 A	 V	 A	 %	 V	 %		 IP	 H	 kg	 Hz		 mm	parameters	 V	 mm	 KVA	 A	 V	 A	 %	 V	 %		 IP	H	kg	Hz		mm
MIG-500	3x400 ±15%	0.6/0.8 0.9/1.0 /1.2/1.6	MMA 225 MIG 22	MMA 47 MIG 45	MMA 14 MIG 68	MMA 10~500 MIG 50~500	60%500A 100%400A	MMA 20.4~40 MIG 16.5~39	≥85	0.7	IP21S	H	49.5	50/60	Air/water cooling	700x366x750	MIG-500DP	3x400 ±15%	0.6/0.8 0.9/1.0 /1.2/1.6	MMA 22.5 MIG 22	MMA 47 MIG 45	MMA 14 MIG 68	MIG 15~500	60%500A 100%400A	MIG 14~35	≥85	0.75	IP21S	H	82.6	50/60	Water cooling	750x555x805



MMA-400 Inverter Stick Welding Power Source



MMA

CUT



CUT-100 Inverter Cutting Machines



Technical Highlight

- Imported dual IGBT from Infineon (Germany), high liability
- Welding performance for industrial applications
- The parameters can be adjustable on arc force and hot arc igniting. With anti-stick function resulting in excellent welding formation and quality.
- Specially designed for cellulose electrode welding, special igniting circuit ensures easy ignition, achieving excellent welding quality even doing vertical welding, with visible melting pool, suitable for welding big pipe joints.
- Unique design for heat radiation, updated IGBT technology, user friendly
- High no-load voltage, 100-meter-long earth cable
- Adaptable to site power generators, suitable for site applications
- VRD anti-shock protection, applicable to welding applications in shipyards and large vessel manufacturing plants
- Patented over/under voltage protection and lack-phase protection ensures durable and reliable performances

Application

Pipe Industry, Petroleum, Chemical, Mechanical Engineering and Nuclear Power Industries
































Technical Highlight

- Imported IGBT from Infineon (Germany), high liability
- Max. cutting thickness: 50mm, with reliable cutting quality
- Suitable for voltage range of 330-500 V and applicable for all plate cutting
- Patented over/under voltage protection and lack-phase protection prevent damage & loss from extreme voltage fluctuations
- Cut up to 40mm thickness plates, with high cutting quality
- Work for long time with 100% duty cycle condition
- Material: mild steel, stainless steel, aluminum, copper and etc.

Application

Mechanical Engineering, Auto Manufacturing , Shipbuilding, Chemical Industry, and etc.



	Supply Voltage	Electrode Dia	Rated Input Capacity	Rated Input Current	No-load Voltage	Welding Current Range	Rated Duty Cycle	Electrode Model	Efficiency	Power Factor	Protect Grade	Insulation Class	Weight	Frequency	Cooling Mode	Size		Supply Voltage	MS Cutting Range	Rated Input Capacity	Rated Input Current	No-load Voltage	Cutting Current	Rated Duty Cycle	Quality Cutting Thickness	Power Factor	Protect Grade	Insulation Class	Weight	Frequency	Cooling Mode	Size
parameters	 V	 mm	 KW	 A	 V	 A	 %	 V	 %	 Cosφ	 IP	 H	 kg	 Hz		 mm	parameters	 V	 mm	 KW	 A	 V	 A	 %	 mm	 Cosφ	 IP	 H	 kg	 Hz		 mm
MMA-400	3x400 ±15%	1.6~6.0	氩弧焊 12 手工焊 27 手工焊 33 手工焊	氩弧焊 27 手工焊 33 手工焊	氩弧焊 14 手工焊 94	20~400	60%400A 100%325A	6010,6011 6013,7018etc.	≥80	0.7	IP21S	H	20.7	50/60	Air cool	560x320x540	CUT-100	3x400 ±15%	≤50	15	30	400	20~100	100%100A	MS ≤40 SS ≤40 AL ≤30 CU ≤18	0.76	IP21S	H	30.5	50/60	Air cool	660x240x445