2019/2020



Public Company in SZSE Stock No.: 002851



Our Mission

Be dedicated to supply high-performance arc welding equipment, high-quality welding application and solutions, and professional service to customers.

Our Vision

To be a preferred partner for arc welding equipment for robotics, automation and heavy-duty applications in the global market.

Corporate Concept Higher efficiency in electric power, cleaner in living environment.



CATALOG



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About MEGMEET

Founded in 2003, Shenzhen Megmeet Electrical Co., Ltd is a National High-Tech Enterprise with core technology in power conversion, digital power supply control, and software development in system control and communication. Our main business scope is the development, manufacturing, sales and service of hardware, software and system solution on electric automation. With a registered capital of RMB 313 million, Megmeet was listed as a public company on the Shenzhen Stock Exchange Main Board under the code of 002851 in 2017. Being headquartered in the city of Shenzhen, Megmeet employs over 3600 people globally and has business in more than 40 countries and regions. We are dedicated to higher efficiency in electrical energy use, to obtaining a cleaner living environment, to the continuous upgrading of productivity and the improvement of human lives.

Our business spans from industrial automation, rail transit, new energy vehicles, clean energy to smart home appliance, telecommunication and smart manufacturing, etc. Our products are widely used in industries including medical device, telecommunication, IT, power, transportation, photovoltaic inverter, oil production, police equipment, industrial welding, industrial microwave, inverter aircondition, inverter microwave, house-hold panel display, outdoor color screen and smart sanitary ware. They were shipped to over 800 customers globally in over 40 countries and regions, including but not limited to Europe, U.S., India, Brasil, South Korea and Japan.

Megmeet have been focusing in technology innovation and gained rapid growth. The investment budget into product R&D has been maintained as high as 10% of the sales revenue in the previous year. We have over 650 professional R&D engineers, and have established a comprehensive platform to develop, test and manufacture both hardware and software products. As until the end of 2018, Megmeet has obtained more than 400 patents. We have stablished our R&D centers in the Silicon Valley in the U.S., Sweden, Germany and in the Chinese cities of Shenzhen, Xi' an, Wuhan, Nanjing, Hangzhou, Changsha, Zhuzhou and Taizhou. The production bases are located in the cities of Zhuzhou, Taizhou and Zibo of Shandong province.

In the beginning of 2018, Megmeet transformed the business unit of welding equipment into a new subsidiary for the purpose of providing better product and service. It was named as Shenzhen Megmeet Welding Technology Co., Ltd.

The new company focuses on upgrading of welding quality, to improvement of welding efficiency for the customers. We have developed independently and produced a series of intelligent and digital-control CO₂/MIG/MAG welding equipment based on high frequency control of power source. Through the high welding performance and the superb reliability, we have gained trust from customers both in the domestic and overseas markets, and has become a leading and preferred brand of the China-made welding equipment. The majority of our products are now being used to take the places of high-end equipment under imported brands. The robotic welding series has gained affirmation and recognition of the market shortly after being launched, and have occupied the 1st place of market share in the Chinese market.

Megmeet Welding Technology will continue to supply welding equipment better in efficiency, reliability, energy-saving and more intelligent, and we will thrive to provide better services to our customers and end-users.











Milestones

2012

Launching Ehave series

2011

2003 MEGMEET Electrical established

MEGMEET acquiring "Welding System" business from Emerson

2013

Launching the robotic edition of Ehave

2014

Becoming the market leader of power source for robotic welding for consecutive years.

2018

Certified by AWS as the CRAW Center

2017

Launching Artsen Plus & Dex series

2017 **IPO of MEGMEET** 2016

MEL MEET

MEGMEET

Export started

Electrical in SZSE

2015

Launching Artsen CM500C and Artsen CM/PM series

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Global Footprint



Shenzhen (Headquarter)	
Shenzhen Megmeet Elecrtical Co., Ltd	

Shenzhen Megmeet Welding Technology Co., Ltd

Domestic R&D Centers	Domestic Subsidiaries	Overseas Subsidiaries
Shenzhen	Zhuzhou	Sweden
Zhuzhou	Beijing	Germany
Xi'an	Zibo	USA
Wuhan	Shanghai	India
Changsha	Nanjing	
Taizhou	Hangzhou	
	Taizhou	



Hong Kong

Continuous growth at high speed

With the powerful technology platform of various fields, science is closely integrated with engineering technology to develop optimal products and solution for customers in the world wide.



Arc Welding



Industrial Automation



Construction Machinery







Telecommunication



I/T



Clean Energy



Energy-saving Lingting



Flat Screen Display



Smart Home Appliance



Medical Devices



Electric Vehicles



Timely and Professional Service

■ Full Technical Support: On-site trouble-shooting service or remote instruction (7/24 by professional service team).

On-site Training: Training upon request for welding application fundamentals and machine operation.

■ User Manual: Detailed & comprehensive guidance for both manual and robotic welding applications.

■ Training: Periodical training & certification for welding application and electronics for both domestic and international customers.



Customer's needs are always our **TOP** priority!



Extensive Industrial Application

MEGMEET gained acceptance and won projects in the leading companies in various industries, many of them are the TOP-500.

The Outstanding Brand of Welding Power Source for the 2014 China Industrial Robot Industry by China Association for Mechatronics Technology and Application.

2015: Shenzhen Engineering Lab of Narrow-gap Welding Technology was established in MEGMEET.

- Official partner of welding equipment for the 2017、2018、2019 IIW AWS Arc Cup.
- 2018: MEGMEET was certified by AWS as the first CRAW Center in Asia.



WELDING TECHNOLOGY

Applications in Robotic Arc Welding































Applications in Manual Arc Welding









High-end Digital-control Welding System of Outstanding Performance



Full digital technology, bringing excellent arc physics and welding process control.



Enjoyable welding for users to experience.





Why do we attach so much importance to reliability?

- Breakdown of welding equipment frequently happens as a result of severe working conditions.
- Minimum 24H downtime for endusers once breakdown happens.
- Average lose of US\$320 or higher for each welding position when work stops.

■ The increasing competition in manufacturing industry lowers the affordability of loses from breakdowns.



Reliability: designed for tough working conditions

- Designed against lightning and power surge. Class-D (6000V/3000A) Lightning Protection. Power source is ensured to work properly even in extreme weather, high voltage fluctuation and with power generators. When the input power is within +/-25% of 3PH 380V (280V~475V) and 30~80HZ, the power sources will work normally.
- 2. 72 hours' temperature change test from -39℃ to +50℃ at 95% humidity and on-load condition.
- **3.** Passing water spray test and reaching IP23S. Working reliably under raining situations.
- 4. Constant monitoring on the output connector's temperature. Alarming through digital meter to prevent damages caused by connector overheat.
- 5. Passing salt spray test, metal dust test and suspended conductive dust test.
- 6. Passing EMC test to ensure welding power source not to interfere with other equipment nearby, or to be interfered.
- 7. HALT, Highly Accelerated Life Test. Overlay test of various extreme conditions.















Consistency: same performance by any machine



Test machines by 5V as the standards								
Machine No.	1	2	3	4	5	6	7	8
load (current : A)	173.28	172.08	169.84	172.16	173.92	173.12	172.88	171.04
Output voltage(V)	5	4.97	4.91	4.97	5.01	5	5	4.94
Output voltage deviation	0	-0.03	-0.09	-0.03	0.01	0	0	-0.06
Display voltage deviation	0	0.070586	0.010586	0.070586	0.110586	0.100586	0.100586	0.040586
	Test mach	ines by 20V	as the stand	ards				
Machine No.	1	2	3	4	5	6	7	8
load (current : A)	197.2	196.96	198	196.72	196.96	196.64	197.12	196.88
Output voltage(V)	20.06	20.03	20.15	20.01	20.02	19.97	20.04	20.02
Output voltage deviation	0.06	0.03	0.15	0.01	0.02	-0.03	0.04	0.02
Display voltage deviation	0.06	0.03	0.15	0.01	0.02	-0.03	0.04	0.02
	Test mach	ines by 30V	as the stand	ards				
Machine No.	1	2	3	4	5	6	7	8
load (current : A)	295.44	295.12	295.28	294.88	295.44	295.2	295.28	295.12
Output voltage(V)	30.09	30.06	30.07	30.02	30.08	30.03	30.06	30.05
Output voltage deviation	0.09	0.06	0.07	0.02	0.08	0.03	0.06	0.05
Display voltage deviation	0.09	0.06	0.07	0.02	0.08	0.03	0.06	0.05
	Test mach	ines by 45V	as the stand	ards				
Machine No.	1	2	3	4	5	6	7	8
load (current : A)	545.36	544.8	541.28	544.24	545.6	544.8	544.88	546.24
Output voltage(V)	45.08	45.06	44.77	44.98	45.09	45.02	45.05	45.12
Output voltage deviation	0.08	0.06	-0.23	-0.02	0.09	0.02	0.05	0.12
Display voltage deviation	0.08	0.06	-0.23	0.080586	0.09	0.120586	0.05	0.12

- Thanks to the design of high-frequency inverter and the excellent full digital-control, the depencency on the accuracy of hardware parameters are largely lowered. Consistent performance of each welding power source is therefore ensured even under input power network with large fluctuation.
- By using components of low temperature drift and high accuracy, the output performance are kept consistent from turning-on to long-time operation, and from -39°C to +50°C working temperature.
- Multiple compensation and automatic adjustment are designed for components in the sampling and control section.

Stability: smooth performance under changable conditions





- The digital-control system enables the power sources to correct the transfer status of each metal droplet. Welding arc can be maintained stable while spatter is well controlled.
- The stick-out length is changeable when the welding arc reaches a different position. By adopting the unique technology of compensation on microcosmic welding voltage and of constant arc-length control, MEGMEET power source can ensure the stability of molten pool and welding arc, and to reach a constent depth of penetration.
- By adopting the technology of compensation on macroscopic welding voltage, MEGMEET power source is able to prevent arc voltage from decreasing when working with long connection cable.



Intelligence: to connect with Industry 4.0



- Deeply open for configuration to meet the professional challenges. For special welding applications in special situations, welding process can be tailor-made.
- With the CAN BUS connector as a standard, and more communication connectors as optional, MEGMEET welding systems are well prepared for seamless and digital connection with robot controller, automatic fixtures and group control systems.
- Synergic control and welding arc characristics of wide adaptation are built on the basis of MEGMEET's welding data base of experts. Together, they have largely upgraded the feasibility and tolerance for automatic welding systems.
- The full digital-control system comes with one of the industry's best designs of anti-inteference. The output specifications are able to be maitained stabilized, even under conditions of extreme temperature, moisture, grid fluctuation, power surge, conduction and radiation of high frequency.
- Sampling and control at high accuracy, supporting high-quality and stabilized welding at different output current from 30A to 500A.
- Analog and digital connectors of different types are equipped for robotic welding. Welding specifications are able to be transmitted at real time to the robot controller. By working with its algorithm, seam tracking can be operated thru welding arc.
- The digital communication system works as fast as 500KHZ. Distortion and delay with intermediate equipment are prevented. Reaction of the whole system is largely increased.
- With the highly flexible configuration of communication, and the deeply open welding specification, the performance limit is extended to reach weling result of higher stability, higher speed and lower heat-input.











Cost-effectiveness: lower in total cost of ownership





Lower Cost Means Hi Profit

- Saving with lower downtime. With the self-protecting design, power sources will display an error code on the meter. Once the errors are removed, the system will return to work as normal. Breakdowns and downtimes will be prevented.
- Saving with lower power consumption. Power consumption of 7 KWH is saved after welding every spoll of MIG wire, compared with the thyristor (SCR) welding machines.
- Saving with ability to meet various thickness. For different output current, welding performance is maintained at a satisfactory level.
- Saving with software updating of welding procedure specification. Once a new welding process is requested, end-users may upgrade the welding application software instead of investing into a totally new welding system.
- Saving thru welding quality control. With the locking-up function, on-site QC managers are able to prevent any unnecessary change of welding specification by welders. Inspection cost will be largely saved.
- Saving thru group control system. SMARC, the group control system, is able to link welding power sources of a large number to MES. Management cost will be largely saved thru monitoring the welding specification, thru data collecting and analysising.





User-friendly Design: convenient to use



Easy-to-Use Design for Unskilled Welders

- Built-in Function of Anti-shake
- On/Off Option of Synergi Control
- On/Off Option of Constant Penetration

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Locking-up Function

Without any external device, a locking-up password is able to be set up on the front panel. The requested welding specifications will be strictly prevented from unnecessary change. Management and inspection cost will be lowered, while welding quality will be ensured.



Quick Recovery of Production

- The embedded structure and the modular design increase the reliability. Dismantling and re-assembly will be short in time consumption.
- The power source is designed to detect abnormality in the whole system. An error code will be displayed, but the power source won't be damaged.

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	Model	Ehave CM 500H / 400 / 350 / 25	Artsen CM 5000	Artsen II CM 50 / 400 / 350	Artsen II PM 50 / 400 / 350 F	Artsen II PM 50 / 400 / 350 N	Artsen II PM 50 / 400 / 350 AS	Artsen II PM 50 / 400 / 350 AD	Artsen Plus 500 / 400 D	Artsen Plus 500 / 400 P	Artsen Plus 500 / 400 Q	Dex DM 3000	Dex DM 3000 S	Dex PM 3000	Dex PM 3000 S	

IEGMEET

Ehave CM 500H / 500 / 400 / 350 / 250

Heavy-duty CO₂/MAG/MMA Intelligent Welding Machine



- ■First-choice for harsh and heavy-duty working environment
- Extensively used in various industries with carbon steel welding: railway, automotive parts, shipbuilding, steel construction, shipping container manufacturing, furniture production, metal fabrication, etc.

Features:

- Stabilized welding arc and low spatter at all output range. It is suitable for both root welding at low current and filling welding of high deposition efficiency at high current.
- Strong penetration with concentrated welding arc. Heat input is lowered by 20% with smaller heat deformation for the same depth of penetration.
- Outstanding performance in gap-filling welding with low sensitivity to wire stick-out; suitable for various welding positions and unskilled welders.
- Dynamic droplet inspection and micro-control technology, which cuts output power immediately after the last metal transfer. The wire tip will be cleared to reduce time for ball-cleaning at situations of high quality welding. Better production efficiency can be ensured thanks to the higher success ratio of one-time ignition.
- Direct achievement of locking-up with a password, multiple welding parameters, even extended functions thru the hot keys on the front panel, without any necessity and extra cost of additional equipment.
- Default set of 10 welding parameters for both saving and activating. 99 sets are allowed at maximum for tailored design.
- Analog communication with robot as optional.





Specification

Manual	Ehave CM 500 H	Ehave CM 500	Ehave CM 400 Ehave CM 350 Ehave CM 250						
Robotics	Ehave CM 500 H AR	Ehave CM 500 AR	Ehave CM 400 AR	Ehave CM 350 AR	Ehave CM 250 AR				
Control Mode			Full Digital-Control						
Rated Input Voltage	AC 3PH 380V +/-25% (3PH 285V ~ 3PH 475V)								
Input Frequency			30 ~80 HZ						
Rated Input Power	24 KVA	24 KVA 22.3 KVA 16.8 KVA 13.5 KVA 8 KVA							
Power Factor	0.93	0.93	0.94	0.94	0.94				
Efficiency			86%						
Rated OCV	75 V	73.3 V	63.7 V	63.7 V	63.7 V				
Rated Output Current	30 ~ 500 A	30 ~ 500 A	30 ~ 400 A	30 ~ 400 A	30 ~ 400 A				
Rated Output Voltage	12 ~ 45 V	12 ~ 45 V	12 ~ 38 V	12 ~ 38 V	12 ~ 38 V				
Duty Cycle	500A 100% @ 40°C	500A 60% @ 40°C 390A 100% @ 40°C	400A 60% @ 40°C 310A 100% @ 40°C	350A 60% @ 40°C 271A 100% @ 40°C	250A 100% @ 40℃ 190A 100% @ 40℃				
Applicable Material			Carbon Steel						
Welding Process		CO	2 / MAG / FCAW / MN	ΛA					
Wire Diameter	φ 1.0 / 1.2	/ 1.6 mm		φ 0.8 / 1.0 / 1.2 mm					
Welding Operation Mode		2T / 4T / Repeated 4T / Spot Welding							
Parameter Channel		10 (Standard)							
Inductance Scope (Soft / Strong Arc)		-9 ~ +9							
Communication with Robot Controller	Analog								
Reserved Communication Interface	CAN								
Cooling Mode			Intelligent Air Cool						
Wire-feeding Speed			1.4 ~ 24 m/min						
Electromagnetic Compatibility	IEC60974:10 EMS								
Insulation Grade	Н								
Ingress Protection	IP 23S								
Protection Against Lightening	Class D (6000V/3000A)								
Working Temperature & Humidity		-39°C	~ +50°C ; Humidity ≤	95%;					
Dimension (L / W / H)			620 x 300 × 480 mm						
Gross Weight	52 KG	52 KG	48 KG	48 KG	48 KG				



Artsen CM 500C

Intelligent Welding Machine with Carrier-wave Communication for Industrial and Heavy-duty Conditions



- Professionally designed for shipbuilding, marine and offshore industry, and largesize steel construction.
- Born for long-distance Welding.
- Pioneer in carrier-wave technology for two-way communication.

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Features:

- Statistics shows that 70% welding machines become defective on site because of the damaged control cable or its connectors. Thanks to the carrier-wave technology, cables are integrated. Reliability was greatly upgraded for higher production efficiency.
- Duty cycle of 100% for 500A output at 40°C.

- High wire-feeding speed of 24m/min to achieve high deposition efficiency.
- Outstanding protection design for the wife-feeder and PCBA to achieve stable performance in tough conditions like vibration, collision, moisture and salt damage.
- Long-distant welding up to 100 meters becomes practical and stable. Pioneer in the industry to apply carrier-wave technology for two-way communication between wire-feeder and power source.
- Allowing low amperage of 150A for upward vertical position of welding with flux-cored wire and with 50m connection cable.
- Allowing upward vertical position of welding in straight line for special-purposed flux-cored wire (E71T-1C). Comparing with weaving welding, heat input is largely reduced.
- Protecting the power source against short circuit from any of the peripheral cable sets. An error code will display in both the power source and the wire-feeder, and will disappear after short circuit is removed.
- Over-current protection for the wire-feeder against motor short circuit, stuck wire. Protection and recovery are both automatic.
- Automatic over-current / short circuit and open circuit protection for the electromagnetic valve.
- High-frequency inspection and control with full digital technology. Enabling a much more stabilized low current.
- Weight and dimension of external cables are greatly reduced, and brings convenience for mobility.

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- Clear display of welding current and voltage in the wire-feeder. Various welding parameters can be adjusted in the wire-feeder, saving extra adjustment equipment and time to operate on the power source.
 - Easier control of welding specification by the operators, who can check the welding parameters clearly as the distance is shortened by the wire-feeder. The complicated setup before welding will also not be necessary.
 - Allowing inspectors to check the real-time parameters for long-distance operation, bringing less concern to management and supervision.
 - Display of error code in the wire-feeder enabling a faster identification and feedback of the defects.
- The uniquely designed two-way high-speed carrier-wave communication. Wire-feeder and power source synchronizes at high speed, preventing the interface signal from interference.
 - Smoother arc ignition. Through synchronization, problems like inconsistent burn-back, wire exploration, damage to electrode can be avoided.
 - Improved crater performance. Through synchronization, risks like over-sized wire tips and sticking would be avoided.
 - The two-way digital communication enables the signals with higher ability against interference and ensures effective connection cable up to 100m. The same performance can be maintained with rolled-up cable set.

Comparison of Artsen CM500C and Carrier Machine

	Communication	Anti- interference	A/V display on wire feeder	Welding Result	PCB reliability
Artsen CM 500C	Two-way High-speed Carrier-way Communication	Excellent	Yes	Excellent	High
Conventional Carrier-wave Technology	One-way Analog Carrier-way Communication	Normal	No	Qualified	Normal



Artsen CM 500C

Specification

	Artsen CM 500C
Control Mode	Full Digital-Control
Carrier-Wave Communication	High-speed Two-way Digital Carrier-wave Communication
Rated Input Voltage	AC 3PH 380V +/-25% (3PH 285V ~ 3PH 475V)
Input Frequency	30 ~80 HZ
Rated Input Power	24 KVA
Power Factor	0.93
Efficiency	86%
Rated OCV	75V
Rated Output Current	50 ~ 500 A
Rated Output Voltage	12 ~ 50 V (Precision at 0.1V)
Duty Cycle	500A / 39V 100% @ 40°C
Applicable Material	Carbon Steel
Welding Process	CO ₂ / MAG / FCAW / MMA
Wire Diameter	φ1.0 / 1.2 / 1.4 / 1.6 mm
Welding Operation Mode	2T / 4T / Special 4T
Parameter Channel	10 (Standard)
Inductance Scope (Soft / Strong Arc)	-9 ~ +9
Reserved Communication Interface	CAN
Cooling Mode	Air Cool
Digital Meter on Wire-feeder	YES
Wire-feeding Speed	1.4 ~ 24 m/min
Electromagnetic Compatibility	IEC60974:10 EMS
Ingress Protection	IP 23S
Insulation Grade	Н
Protection Against Lightening	Class D (6000V/3000A)
Working Temperature	-39℃ ~ +50℃
Dimension (L / W / H)	620 x 300 × 480 mm
Gross Weight	52 KG



Artsen CM / PM II Series

Artsen CM 500 / 400 II (R) Artsen PM 500 / 400 F / N / AS / AD II (R) Full Digital-control Heavy-duty Pulse MIG/MAG/CO₂ Intelligent Welding Equipment



Product Features

- Independent operation panel and display in the wire-feeder, allowing convenient check and adjustment of welding parameters.
- Synchronous driving with 2 motors, flexible torch configuration, expansion capability with mid-way wire-feeder and push-pull torch. Practical for welding operation of long distance and in narrow space.
- Professional performance for materials, including carbon steel, stainless steel, aluminum alloy with DC, Pulsed DC and Double Pulsed DC process.
- Up to 50 channels with non-delay switch; up to 200 defect records bringing higher convenience to identify the on-site troubles.
- Abundant internal menu and specification opened to adjustment, meeting extreme welding demands.
- Diversified expert system and specialized program for aluminum welding ensuring the optimum welding result for different types of aluminum alloy.
- Full digital control at high speed, monitoring each phase of the metal transfer, achieving "One Pulse, One Droplet" precisely for a satisfactory welding result of extremely controlled spatter.
- Rich welding expert database; synergic adjustment allows automatic matching of key parameters and satisfactory welding result.
- Parameters of each welding steps open to adjustment, ensuring precise adjustment for different working conditions and achieve better welding quality.
- Upgradable process program to realize high efficiency welding of various special metal materials, such as high strength steel Q690, silicon bronze and aluminum bronze.

Artsen CM / PM II Series

Specification

Manual	Artsen PM 500 F / N / AS / AD II	Artsen CM 500 II	Artsen PM 400 F / N / AS / AD II Artsen CM 400 II				
Robotics	Artsen PM 500 F / N / AS / AD R II	Artsen CM 400 R II					
Control Mode	Full Digital-Control						
Rated Input Voltage	AC 3PH 380V +/-25% (3PH 285V ~ 3PH 475V)						
Input Frequency	30 ~80 HZ						
Rated Input Power	24 KVA	19.7 KVA/18KW	15 KVA/12.7KW				
Power Factor		0	.93				
Efficiency		8	7%				
Rated OCV		73.3 V		63.7 V			
Rated Output Current	30 ~ 500 A	30 ~ 500 A	30 ~ 400 A	30 ~ 400 A			
Rated Output Voltage		12 ~ 45 V (Pr	recision at 0.1V)				
Duty Cycle	500A 60% @ 40℃ 390A 100% @ 40℃	500A 60% @ 40°C 390A 100% @ 40°C	400A 100% @ 40℃	400A 100% @ 40°C			
Applicable Material	F: Carbon Steel N: Carbon Steel / Stainless Steel AS/AD: Carbon Steel / Stainless Steel / Aluminum Alloy	Carbon Steel	F: Carbon Steel N: Carbon Steel / Stainless Steel AS/AD: Carbon Steel / Stainless Steel / Aluminum Alloy	Carbon Steel			
Welding Process	VMIG / MAG / CO ₂ Pulse MIG / MAG Double Pulse MIG / MAG	MIG / MAG / CO ₂	MIG / MAG / CO ₂ Pulse MIG / MAG Double Pulse MIG / MAG	MIG / MAG / CO ₂			
Wire Diameter	φ 0.8 / 1.0 / 1.2 /	1.6 mm	φ 0.8 / 1.0 / 1.2	2 mm			
Welding Operation Mode	2T / 4T / Special 4T / Spot Welding						
Parameter Channel	50 (Standard)						
Inductance Scope (Soft / Strong Arc)	-9 ~ +9						
Push-pull Torch Function (1)	Yes						
Communication with Robot Controller	Analog; DeviceNet; CAN Open; MEGMEET CAN; EtherNet/IP (2)						
Digital Meter on Wire- feeder	Yes						
Cooling Mode	Air Cool; Water Cool (Optional)						
Electromagnetic Compatibility	IEC60974:10 EMS						
Insulation Grade	Н						
Ingress Protection	IP 23S						
Protection Against Lightening	Class D (6000V/3000A)						
Working Temperature & Humidity	-39°C ~ +50°C ; Humidity ≤ 95%;						
Dimension (L / W / H)		620 x 300 × 480 mm					
Gross Weight	52 KG						

Water Cooler (Optional)					
Rated Power	260W				
Rated Voltage	AC 400V				
Volume of Cooling Water	10L				
Flow of Cooling Water	3.5L / min				
Max Pump Head	30 m				
Flow Alarm	Yes				

Please contact with MEGMEET to specify the model of the push-pull torch.
 EtherNet/IP is optional.

Artsen CM / PM II Series

One Equipment for Aluminum Alloy, Stainless Steel and Carbon Steel





Optional Functions in Artsen CM / PM II Series



Push-pull Welding Torch Outstanding Stability with Push-pull Wire Feeding

- Integration with the motor specifications of push-pull welding torch by the mainstream brands with convenience of fast selection and matching.
- The motor parameters of push-pull welding torch are open to configuration for different torches. Push-pull torch of different designs and brands can be matched.
- Potentiometer in torches are integrated for convenient adjustment of voltage / current (wire-feeding speed / arc-length correction).
- Reaching up to 40m in working scope, including 30m by wire-feeder and 10m by the push-pull torch.
- Wire-feeding at the torch head with stability and reliability.
- Widely applicable in various applications with soft wire.

Intermediate Wire-feeder Mid-way Reinforcement for Ultra-Long

- Light and small, weighing only 4.3kg; robust and durable with metal structure; streamline design for frequent mobility.
- Digital display for convenient checking and configuration of welding parameters.
- Reaching up to 53 m working scope, including 30m by wire-feeder, 20 m by the Intermediate wire-feeder and 3 m by the torch.
- Low cost in welding consumables by allowing working with ordinary weldig torch.
- Widely applicable for conditions of long distance and narrow space, such as large tank shipbuilding and large steel construction.

Specification

мах. 53мт

eding

Package List	Power cable set; Control cable set (10 pin); Gas hose, water hose, liner.			
Size of Power Cable	Standard: 50mm; Customized: 70mm;			
Welding Current (50mm Cable)	60%@380A, 100%@300A			
Motor Voltage	DC 24V			
Wire-Feeding Speed	1.5 ~ 24 m/min			
Intermediate-Drive Wire Feeder Weight	4.3 Kg			
A/V Display	Yes			
Configuration Function	Yes			
Locking-up Function	Yes			



Artsen Plus 500 / 400 / 350 D / P / Q Series

Intelligent Platform of MIG/MAG Welding Process Continuous Realization of Expectation for Welding Process

Intelligent Welding Platform with continuously updating of welding process.

Feature:

- Full digital and intelligent control; superbly high frequency of 100KHz; zero delay in sampling circuit to gain precise reaction to the status of the metal droplet.
- Unique design of power releasing allowing welding current to be lowered as fast as 10,000A / millisecond. The current force has the lowest impact on the melt at the moment of metal transfer.
- Applying worm gear motor of high torque and low inertia, and the highly precise code wheel of 120 lines and the HF motor control system. Start-up, braking and withdrawal at millisecond level are reached. Withdrawal at both the arc ignition and ending stage are controlled precisely. Together with the welding parameter control, optimum arc ignition and crater performance are gained.
- Far-end sampling and compensation of both the positive and negative output. A clear and precise judgement of the transfer status, and an accurate control as a result, can be made even when output cable reaches 30m.
- A stable and comprehensive hardware platform of high speed. The open software system makes it possible to expand process control program for different welding conditions and collect expert database, meeting continuously updating process demands from customers.



The Brand-new Job Mode for Flexible Collocation of Welding Process

Double Pulse? Dual DC? Pulse DC? All up to you!

- Independent configuration of duration time, control mode, control parameters, collocation parameters, descending characteristics.
- Two processes to be collocated under the same JOB. Complicated job switch commands is no longer needed. Switching between processes can be completed thru just one press on the torch.
- Smooth transition between different jobs. Distortion of welding arc and spatter during transition can be largely reduced. Characteristics of transition can be configured in each job.

[3]: The Tranquil Fusion function for carbon steel is standard. Other processes are optional for different welding conditions.[4]: Optional.

^{[1]:} Sampling speed is increased by 13 times comparing with Artsen series.

^{[2]:} The power source will proactively release the arc energy at the moment of metal transfer. Welding arc will be maintained with an extremely low current. The output current has no impact on the melt.

Brand-new Welding Process

Tranquil Fusion - Smooth Short-circuit Transfer^[3]

- The welding energy is subject to adjustment. Heat input can be effectively reduced.
- Soft welding arc with tranquil welding pool and superbly low spatter.
- The welding arc is so stabilized that the speed is significantly increased.
- Remarkable welding junction with lowered defects of blowhole and undercut.

Applications:

Widely applied in sheet metal of carbon steel, stainless steel, galvanized sheet and dissimilar metals. It is specially suitable for backing and all position welding.

Clean Fusion-HF Dynamic Wave Energy Control^[5]

- High in welding beat, clear in the switch of welding energy achieving well recognizable fish scale pattern.
- Low in heat input; high in welding penetration; highly tolerant in variation of welding gap; superbly low in spatter.

Applications:

Widely applied in sheet metal of carbon steel, stainless steel, galvanized sheet and dissimilar metal, especially suitable for upward vertical position of welding.

Consistant Fusion - Welding with Unchanging Penetration ^[3]

The welding penetration will remain the same and not be influenced by the stick-out length of wire.

Applications:

Robotic and automatic welding.

Thunder Fusion - Short-arc Pulse Transfer ^[4]

Short in welding arc; high in arc stiffness; sharp in arc direction. Welding speed is significantly increased.

- Low in welding heat input and welding spatter.
- Remarkable welding junction with lowered defects of blowhole and undercut. Less accessories and labor protection products are needed.

Applications:

■ Widely used in the pulse welding of carbon steel, stainless steel, galvanized welding and high strength steel.

Leaping Fusion - High Speed Stitching Welding ^[6]

- Short in arc ignition time and arc ending time. Welding spool can be formed swiftly. Heat input and deformation will be furtherly lowered.
- High in welding beat and clear fish scale pattern to achieve.
- High in welding penetration; highly tolerant in variation of welding gap.

Applications:

Widely applied in the sheet metal welding of carbon steel, stainless steel, galvanized sheet, aluminum and aluminum alloy.



[5]: Optional

[6]: The Leap Fusion process for carbon steel is a standard function. Other processes are optional.

^{[7]:} The welding beat is lowered than Clean Fusion.

Artsen Plus 500 / 400 / 350 D / P / Q Series

Specification

Manual	Artsen Plus 500 D / P / Q	Artsen Plus 400 D / P / Q	Artsen Plus 350 D / P / Q				
Robotics	Artsen Plus 500 D / P / Q R	Artsen Plus 400 D / P / Q R	Artsen Plus 350 D / P / Q R				
Control Mode	Full Digital-Control						
Rated Input Voltage	AC 3PH 380V +/-25% (3PH 285V ~ 3PH 475V)	AC 3PH 380V +/-25% (3PH 285V ~ 3PH 475V) AC 3PH 220V +/-15% (3PH 187V ~ 3PH 254V)				
Input Frequency	45 ~65 HZ						
Rated Input Power	24 KVA	22.3 KVA	16.8 KVA				
Power Factor		0.93					
Efficiency		87%					
Rated OCV		85 V					
Rated Output Current	30 ~ 500 A	30 ~ 400 A	30 ~ 350 A				
Rated Output Voltage	1	2 ~ 45 V (Precision at 0.1)	/)				
Duty Cycle	500A / 39V 60% @ 40°C 387A / 33.5V 100% @ 40°C	400A / 34V 100% @ 40°C	350A / 33.5V 60% @ 40°C 270A / 27.5V 100% @ 40°C				
Applicable Material	D: P: Q: Carbon S	D: Carbon Steel / Stainless Steel P: Carbon Steel / Stainless Steel O: Carbon Steel / Stainless Steel / Aluminum Allov					
Welding Process	D: MIG / MAG / CO2; Low-spatter; P: MIG / MAG / CO2; Low-spatter; Short-arc Pulse Q: MIG / MAG / CO2; Low-spatter; Short-arc Pulse						
Wire Diameter	φ 0.8 / 0.9 / 1.0 / 1.2 / 1.6 mm						
Welding Operation Mode	2T / 4T / Special 4T / Spot Welding / Leaping Welding						
Inductance Scope (Soft / Strong Arc)	-7 ~ +7						
Push-pull Torch Function (1)	Yes						
Communication with Robot Controller	Analog; DeviceNet; CAN Open; MEGMEET CAN; EtherNet/IP (2)						
Digital Meter on Wire-feeder		Yes					
Cooling Mode	Air Cool; Water Cool (Optional)						
Electromagnetic Compatibility	IEC60974:10 EMS						
Insulation Grade	Н						
Ingress Protection	IP 23S						
Protection Against Lightening	Class D (6000V/3000A)						
Working Temperature & Humidity	-39	9° C ~ +50°C ; Humidity \leq 9	5%;				
Dimension (L / W / H)		620 x 300 × 480 mm					
Gross Weight	52 KG						
Water Cooler (Optional)							
Rated Power		260W					
Rated Voltage		AC 400V					

Rated Voltage	
Volume of Cooling Water	10L
Flow of Cooling Water	3.5L / min
Max Pump Head	30 m
Flow Alarm	Yes

(1) Please contact with MEGMEET to specify the model of the push-pull torch.(2) EtherNet/IP is optional.

Intelligent Welding Platform with continuously updating of welding process.



Dex DM / PM 3000 (S)^[1] Series

All new welding experience with a brand-new pulse process. The pulse welding is much simplified.

A Completely New Hardware Platform

- Adopting a leading three-level topology for the main power. Output frequency is as high as 180 KHz; soft switch is used for all power switch tubes. The power density is highly upgraded with a full digital control program. Heat radiation is generally lowered. A smaller radiator is used and the weight of power source is lowered as a result.
- Efficiency as high as 90% is reached thanks to the leading power conversion design. It is 20% higher than traditional MIG/MAG welding machines, and 8% higher than inverter welding machines of previous designs.
- A unique twin-cycle motor drive and control system. The inner cycle is controlled by current to gain power wire-feeding; the exterior cycle is controlled by the speed to achieve stabilized wire-feeding.
- Code wheel is used for the sampling of speed. Precise wire-feeding speed control is achieved.
- More than one enclosed cabinet is designed. Strong and weak current are completely separated. Pollution to PCB is largely blocked. The effective design against water and dust helps to extend the duration and increased the stability. IP23S is reached as a leading achievement of the whole industry.
- Applying a integrated cooling tunnel of compact and enclosed design. The rotating speed of AC cooling fan can be variated infinitely. Cooling efficiency is largely improved while the loss of cooling effect is decreased. The duration of the fan is extended as well.





The All New Control Program

- Power source with 2 control cycle. Super high in control frequency. Through the complete software adjustment, the transfer status of each droplet can be precisely controlled and helps welders to face each welding process with confidence.
- The welding current change can reach as fast as 1500A/millisecond. The melting of welding wire happens in the high current scope of XXX. Stabilized in welding arc and highly tolerant against external interference. The stability of welding arc can recover soon after abnormality.
- Highly tolerant in variation of welding voltage. Changes in stick-out length can be well managed, despite the cause. The requirement and dependence on welding torch, wire-feeder, the precise and constant skills of the welders.
- Allowing switching between Standard and High-Speed mode. Two different welding process with distinguished features are available in one system.

^{[1]:} Dex DM / PM 3000 is a compact MIG/MAG equipment. Dex DM / PM 3000S comes with a external wire-feeder.

Dex DM3000(S)

Complete out-performance over conventional welding machines^[2].



- Higher in duty cycle. Higher in deposition efficiency. Higher in wire feeding speed. 28m/min at maximum. Welding speed can exceed 2m/min, with no sacrifices of welding result.
- Smooth and highly successful in arc ignition. Welding pool can be immediately created after ignition. Full-sized weld can take shape in 0.3 second.
- Soft in welding arc; strong in gap-filling welding and allowing confident handling of seam variations resulted from un-precise cutting.
- Sharp in welding arc; clear in arc direction; strong in arc penetration, reaching higher depth of penetration.
- Intelligent in welding energy control, concentrating energy on the wire melting section. High in deposition efficiency. Reaching higher wire-feeding speed at the same welding wire.
- Lower in reduced current. With a welding current control of more improved design, spatter is much limited.

Dex PM3000(S) All new process brings a new and comfortable welding experience of pulse MIG/MAG.

- Multifunctional. All welding processes of DM3000 are available in PM3000. It can handle carbon steel, stainless steel, aluminum alloy with MIG/MAG, Pulse MIG/MAG and Double Pulse MIG/MAG processes.
- The optional QPT process supports high welding speed up to 2.0 m/min for butt welding at flat position.
- Abundant in expert welding database. Synergic control The all new control system of pulse welding brings smoother arc ignition, more stabilized welding and lower welding spatter.
- Strict in energy distribution under the welding system, making better weld formation of double pulse process. Clear fish scale pattern can be achieved even for stainless steel.
- Expert database and special process for various aluminum welding to guarantee premium performance of different types of aluminum.
- Individual parameters of pulse welding process open to personalized adjustment for even higher welding quality.



[2]: Conventional welding machines refer to welders based on tapper, thyristor and analogy inverter welders.



Dex DM / PM 3000 (S) Series

Specification

Manual	Dex DM 3000	Dex DM 3000 S	Dex PM 3000	Dex PM 3000 S			
Robotics	-	Dex DM 3000 R	-	Dex PM 3000 R			
Control Mode	Full Digital-Control						
Rated Input Voltage	AC 3PH 380V -15% ~ +21% (3PH 323V ~ 3PH 460V)						
Input Frequency	45 ~65 HZ						
Rated Input Power		9.2	KVA / 8.7 KW				
Power Factor			0.94				
Efficiency		81%	(210A / 24.5V)				
Rated OCV			54.2 V				
Rated Output Current			280 A				
Output Current Range			30A~300A				
Rated Output Voltage		12 ~ 30 \	V (Precision at 0.	1V)			
Duty Cycle		/ 280A 217A / 2	28V 60% @ 40% 4.9V 100% @ 40	C)°C			
Applicable Material	Carbon Ste	el / Stainless Steel	Carbon Steel /	Stainless Steel / Aluminum Alloy			
Welding Process	MIG / M		MIG	i / MAG / CO ₂ / MMA Pulse MIG/MAG			
Welding Process			Double Pulse MIG/MAG				
Wire Diameter		φ 0.8 /	0.9 / 1.0 / 1.2 mi	m			
Welding Operation							
Mode		21 21 / 41 / Special 41					
Parameter Channel	50 (Standard)						
Inductance Scope (Soft / Strong Arc)			-9 ~ +9				
Communication with Robot Controller	-	Analog; DeviceNet; - CAN Open; MEGMEET CAN; EtherNet/IP		Analog; DeviceNet; CAN Open; MEGMEET CAN; EtherNet/IP			
External Wire-feeder	-	- Yes -		Yes Enclosed type with digital meters (A / V)			
Cooling Mode		Air Cool; V	Vater Cool (Option	onal)			
Wire-feeding Speed	1.4 ~ 28 m/min						
Electromagnetic Compatibility	IEC60974:10 EMS						
Insulation Grade	Н						
Ingress Protection	IP 23S						
Protection Against	Class D (6000V/3000A)						
Working Temperature & Humidity	-40°C ~ +70°C ; Humidity ≤ 95%;						
Dimension (L / W / H)	610 × 260 × 398 mm						
Gross Weight	25.4 KG	23.7 KG	25.4 KG 23.7 KG				
				· · · · · · · · · · · · · · · · · · ·			
Water Cooler Anycool-	68 (Optional)						
Rated Power			260W				

Rated Power	260W
Rated Voltage	AC 380V
Volume of Cooling Water	6.8L
Flow of Cooling Water	3.5L / min
Max Pump Head	20 m

All new welding experience with a brand-new pulse process.



Superior adaptability for Robotic and Automatic Welding





Superior Adaptability

Abundant Communication & Connection; Software and Hardware Module for Robotic Welding.

- The large-quantity duplication and long-time stability in performance of robotic welding specification are effectively ensured through the high stability of welding arc, the high consistence of parameters and the high reliability of power source' s design.
- Applicable for robotic wire-feeders with torch connectors of both European and Japanese types.
- Analog communication cables with the standard FANUC and YASKAWA connectors are also optionally available.
- Highly flexible in connection connectors, supporting up to 6 types: analog, DeviceNet, CAN Open, MEGMEET CAN, RS-485, EtherNet/IP.
- Robot brands can be selected directly through the internal menu. Complicated configuration and time are saved.
- Compatible to major robotic welding modes. The unique MEGMEET modes of normal, monitoring, JOB and free are also able to be selected.
- Sensing power supply of both high and low voltage.^[1] The default is high voltage. It can be switched to low voltage or be closed through internal menu. No extra sensing power supply would be necessary for the robot to locate the work piece.
- The high-voltage sensing power supply of DC 45V supports successful penetration through surfaces of oil stains and antirust paint. The cost of robotic integration is much lowered.
- The real-time and accurate feedback of welding current and voltage supports the robot for seam tracking through welding arc.
- Applicable with the push-pull torch for robotic welding^[2], whose motor is directly driven by the welding machine. Both torque and speed can be synchronized with the wire-feeder.

Welder		Communication & Connection				Seam Positioning		Seam-
	Analog	DeviceNet	CAN Open	MEGMEET CAN	EtherNet/ IP	High- Voltage	Low-Voltage	Traching Thru-Arc
Ehave	٠						•	٠
Artsen	0	0	0	0	0	٠	•	٠
Artsen Plus	•	0	0	0	0	٠	0	٠
Dex S	0	0	0	0	0	0	0	٠

Communications between power source and robot controller and automatcion system

• Standard • Optional

[1]: The Ehave series only support low voltage for seam positioning. The Artsen Plus only support high voltage for seam positioning.

[2]: Artsen II and Artsen Plus supports push-pull torch for robotic welding.



SMARCTM

The Digitalized Information Management System



Functions:

- Remote management and sending welding parameters to the power sources. Locking-up adjustment scope of welding parameters to ensure the precise execution of WPS.
- Monitoring and recording the real-time welding specification of each welder. Checking and downloading historic welding data of each welder.
- Generating automatically and analyzing welding data by equipment, welder and project, including total volume and efficiency. Creating statistics chart automatically.
- Automatically generating statistics of gas consumption^[1], wire quantity and power consumption.
- Monitoring the working status of equipment. Automatic alarming for periodic maintenances. Real-time alarming when defective occurs.
- Supporting both distributed and centralized swiping-in solution^[2], ensuring one-by-one matching of welder personnel, qualification and equipment.
- Connecting to and displaying dashboard on terminal devices PC, TV, PDA and mobile phones.
- On-line storage and one-click export of welding project data.
- Reminding by email for system notices.



- B/S system structure. No application is needed to install in PC, phone, PDA and TV, making cross-platform operation convenient.
- Thru B/S system structure, the data base can be stored in a local server or in a server on the cloud.
- Networking flexibily through 4G, WiFi or Ethernet for the best solution for various indoors or outdoors conditions.
- Adapting industrial router and switch. Easy to purchase and maintain.
- The large storage space built-in the power sources enables storage under network breakup and automatic transmission after network resuming.^[3]
- Open to be connected with third-party systems like MES, ERP and OA.
- Open design of authority management, allowing the administer to define authority of different personals.

[1]: Electronic gas flowmeter will be needed to record gas consumption.[2]: Optional function. Please contact with MEGMEET for detailed information.[3]:Size of data to save under network breakup differs as per the models and the communication box.









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