MEGMEET
WELDING TECHNOLOGY

☑ Fully Digital-control Industrial & Heavy-duty Welding Equipment

MEGMEET Welding Technology

Powering the Future

www.megmeet-welding.com

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Company Profile

Pioneering
Collaboration
Openness
Innovation

Established in 2003, MEGMEET Electrical Co. Ltd. (Stock Code: 002851.sz) is a China National High-tech Enterprise focusing on power electronics and industrial control technology and engaging in the R&D, manufacturing, sales and services of hardware, software and system solutions in the field of electrical and industrial automation. Headquartered in Shenzhen, China, the company has operations in over 40 countries and employs 5,200+ employees. We are committed to improving energy efficiency with the purpose of empowering the world to increase productivity while reducing environmental impact, and thus changing the life of human beings and the environment for the better.

$70.8 Million
Paid-in Capital

5200+
Employees

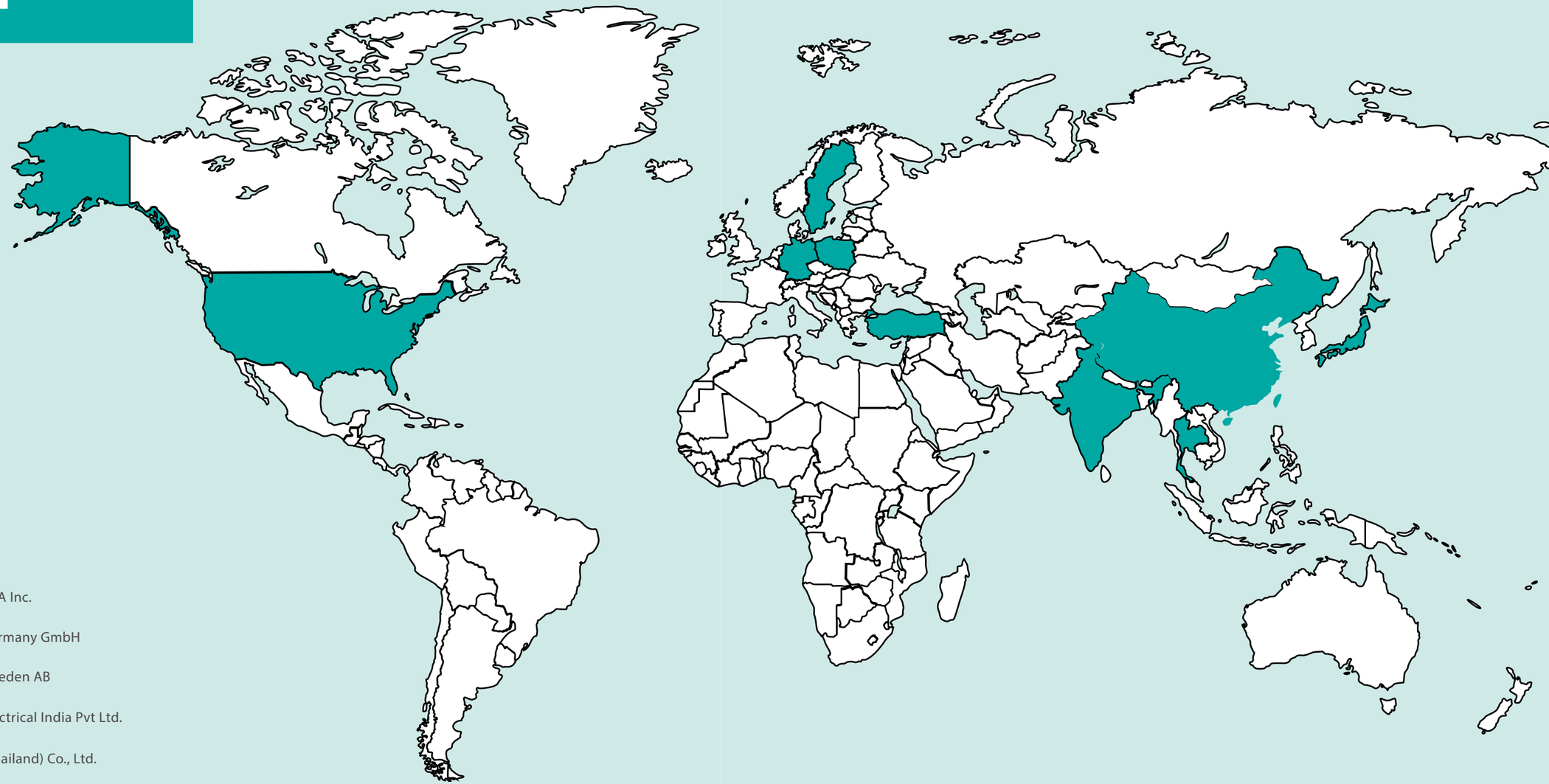
1000+
R&D Engineers

MEGMEET operates in the business segments of industrial automation, electrical vehicles & rail transit, smart home appliances and high-end intelligent manufacturing. We serve various industries, including but not limited to healthcare, telecommunication, IT, electricity, transportation, photovoltaics, oil exploration, police equipment, industrial welding, industrial microwave, inverter air-conditioning, inverter microwave, commercial display screens and smart sanitary ware etc. Our products are sold in over 40 countries around the globe, including countries of high technology criteria like the U.S.A., Germany, Japan, Sweden, South Korea, etc.

Technological innovation has been at the core of MEGMEET since its inception and has fueled the growth of the company. MEGMEET has been investing heavily in R&D with yearly spending equivalent to over 10% of its annual sales revenue. The company employs 1000+ R&D engineers, creates comprehensive and well-equipped software and hardware platforms to develop, test and manufacture products. By the end of 2020, MEGMEET has 597 patent grants. The company has established a global R&D network with locations in Sweden, Germany, and in the Chinese cities of Shenzhen, Xi' an, Wuhan, Changsha, Zhuzhou and Taizhou. Manufacturing facilities are located domestically in the cities of Zhuzhou, Taizhou, Zibo, Heyuan and abroad in India and Thailand.

In an effort to provide better products and services to our customers, MEGMEET has restructured its welding division and transformed it into a subsidiary named MEGMEET Welding Technology Co. Ltd., With integrated multidisciplinary knowledge and technologies, MEGMEET redefines the standards for reliability and stability of inverter welding equipment to provide our customers with more efficient, more reliable, more energy-saving and smarter welding machines. MEGMEET has built a reputation as a trustworthy supplier with its quality products and services and has become one of the preferred brands of industrial welding equipment in the market.

Global Footprints



- MEGMEET USA Inc.
- MEGMEET Germany GmbH
- MEGMEET Sweden AB
- MEGMEET Electrical India Pvt Ltd.
- MEGMEET (Thailand) Co., Ltd.
- MEGMEET Turkey
- MEGMEET Poland
- MEGMEET Japan

Core Business

MEGMEET

"MEGMEET's powerful multidisciplinary platform integrated with technology and engineering enables us to serve our global customers with industry expertise, quality products and optimal solutions."

Innovation for the Future

Smart Manufacturing

- **Industrial & Digital-control Welding Equipment**
- Industrial Microwave System
- Electric Submersible Oil Pumping System
- Optical Fiber Flexible Bend Sensor

Industrial Power Supply

- Power Supply for ICT
- Electric Power Supply
- Power Supply for Medical Devices
- Power Supply for Industrial Microwave
- Customized Power Supply for Industries

Industrial Automation

- Inverter
- Servo
- PLC
- Controller for Injection Molding Machine & CNC
- Frame Power Supply
- Integrated Driver for Elevator

Power Supply for Smart Home Appliances

- Visual Display
- HVAC
- Kitchen Appliances
- Smart Sanitary Ware

EV & Railway

- Drive and Control Modules for EV
- Charging Station Modules
- Drive, Control & AC Modules for Railway

Research and Development

MEGMEET'S relentless pursuit of innovation is best reflected in our R&D efforts. The company invests more than 10% of its sales revenue in R&D each year and has developed innovative cutting-edge technologies, leading laboratories and a team of industry experts around the world. Equipped with unique insights into industry outlook and a deep understanding of customers' needs, MEGMEET is in a position to address customers' needs with competitive products in a fast and accurate way.

Efficient & Stable R&D Team

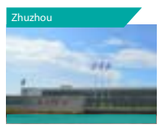
1000+
R&D Engineers

300+
Technological Innovations led by staff holding Master and PhD Degrees

9
R&D Centers

R&D Centers & Institutes

◎ Shenzhen R&D Center ◎ Zhuzhou R&D Center ◎ Changsha Institute ◎ Wuhan Institute
◎ Xi'an Institute ◎ Hangzhou R&D Center ◎ Taizhou R&D Center ◎ Germany Institute
◎ Sweden Institute



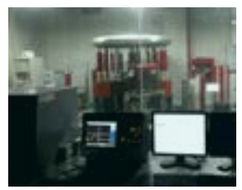
R&D investment equivalent to 10% of our sales revenue

Leading Technological Platform

- Power Electronic Technology
- ICT Technology
- Motor Control Algorithm
- Arc Welding Technology
- Industrial Automation

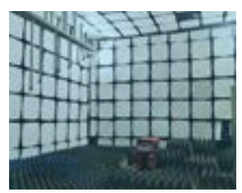
Professional Testing Laboratories

◎ Environmental Testing Laboratory
◎ IPX1-9K Laboratory
◎ 15P Enthalpy Difference Laboratory



◎ Design Verification Laboratory
◎ Power Test Laboratory for EV
◎ Lightening & Surge Testing Laboratory

◎ Electromagnetic Interference Laboratory
◎ Aging Chamber
◎ Salt Spray Testing Laboratory



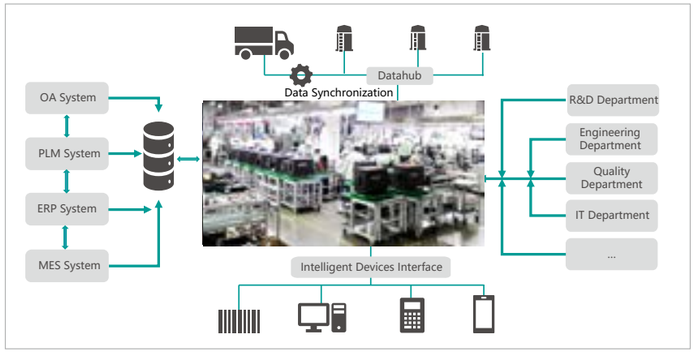
◎ Power Grid Simulation Laboratory
◎ Temperature & Humidity Laboratory
◎ Vibration Test Laboratory .....

Production Capacity

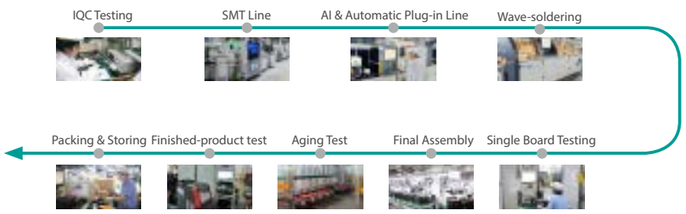
Production capacity up to USD 1.5 Billion

Factory Digitalization

MEGMEET owns several production facilities around the world, among which the Zhuzhou Industrial Park is the global manufacturing center for the company's electronic products. Manufacturing digitalization has been implemented in Zhuzhou Industrial Park to provide life cycle management for all products.



Manufacturing Process



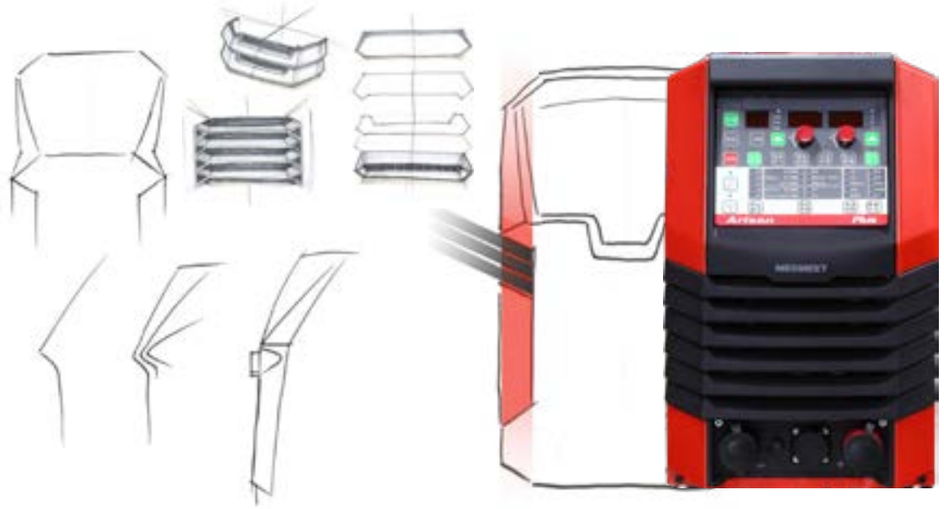
Manufacturing Facilities

Manufacturing facilities have been established in different countries to improve customer responsiveness.

Business Philosophy

"We strive to become a trusted and preferred partner to our customers by delivering highly reliable welding products and solutions."

High-performance Digital-control Welding Equipment



Industry-tailored applications

Welding expert database

Welding process modeling

Power Electronic Technology

Computer Software Technology

Welding Process

Arc Physics

Material Science

Motor Drive and Motion Control

MEGMEET's cross-border integration of multidisciplinary and engineering technologies

Application in Professional Welding & Key Industries

Automotive & Railway

- CRRC
- BYD Auto
- Wuling Faurecia
- Yutong
- CIMC
- Fuwa
- SAIC
- JBM (India)
- DIT Holding
- NANFU Aluminum
- Q J MOTOR
- Loncin
- Sheng Run Automobile
- Sunhunk
- Hong Tai
- Yate Auto

Construction & Mining Machinery

- SANY
- XCMG
- ZOOMLION
- Sunward
- LIUGONG
- ZMJ
- CRCHI (CRRC)
- NFLG
- Schwing Stetter
- SD-Gold
- MESDA

Ship-building & Marine Engineering

- CSSC
- CNOOC
- CIMC Raffles
- DAMEN
- ZPMC
- COSCO
- Yangzijiang
- New Times Shipbuilding
- New Dayang Shipbuilding (SUMEC)
- Xiang Yu
- CSE (Chiwan Sembaowang Engineering)

Heavy Steel Construction

- CSCEC
- Hong Lu Steel Structure
- BSB (Broad Sustainable Building)
- Bo Rui Heavy Traffic Equipment
- Fu Huang
- Jing Gong
- Hang Xiao Steel Structure
- Dong Fang Steel Structure

Shipping Container & others

- CIMC
- FUWA
- OCCL
- Midea
- TBEA
- State Grid Corporation of China
- CXIC
- Hangyang
- JZNEE
- Zhongwang
- CHINALCO (CSCEC)
- China Southern Power Grid
- BTW Electric

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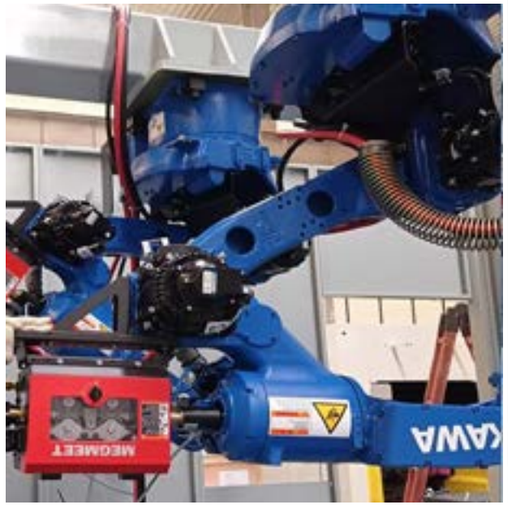
Product market performance



Leading in MIG / MAG equipment for robotic welding for 6 consecutive years in China with

market share of

30%.

MEGMEET

Selection List for MIG/MAG Machines

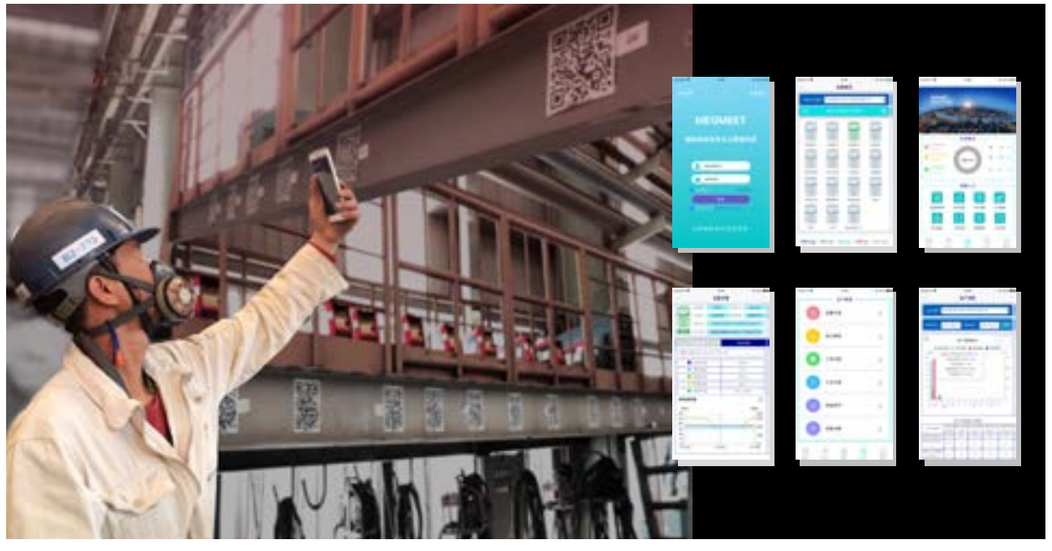
Product Series	Page No.	Applicable Metal / Consumables					Welding Process					Featured Welding Process						
		Steel / Solid Wire	SUS	Alum-inum Alloy	AlSi CuSi	Metal-cored	MAG / CO_2	FCAW	Pulse	MMA	AC-MIG	Tranquil Fusion (Low spatter)	Thunder Fusion (short arc pulse)	Leaping Fusion	DP Fusion (Vertical up welding)	LSA (Low Spatter Arc)	QPT (Quick Pulse) [2]	Super-Low Spatter
Artsen II CM 500 / 400 / 350	23	●					●	●		●								
Artsen II PM 500 / 400 F	23	●			○		●	●	●	●								
Artsen II PM 500 / 400 N	23	●	●		○		●	●	●	●								
Artsen II PM 500 / 400 AS	23	●	●	●	○		●	●	● [1]	●								
Artsen II PM 500 / 400 AD	23	●	●	●	○		●	●	●	●								
Artsen Plus 500 / 400 / 350 D	31	●	●				●	●				●		○	○			
Artsen Plus 500 / 400 / 350 P	31	●	●				●	●	●			●	●	○	○			
Artsen Plus 500 / 400 / 350 Q	31	●	●	●			●	●	●			●	●	○	○			
Artsen Pro 500 / 400 / 350 D	41	●	●				●	●								●		
Artsen Pro 500 / 400 / 350 P	41	●	●				●	●	●				●			●		
Artsen Pro 500 / 400 / 350 Q	41	●	●	●			●	●	●				●			●		
Dex DM 3000 / DM3000 S	47	●	●		○		●			●						●		
Dex PM3000 / PM3000 S	47	●	●	●	○		●		●	●						●		
Dex PM3000 Q / PM3000 QS	47	●	●	●	○		●		●	●						●	●	
Dex2 500/350MD	53	●	●		○		●	●		●						●		
Dex2 500/350MP	53	●	●		○		●	●	●	●						●	●	
Dex2 500/350MQ	53	●	●	●	○		●	●	●	●						●	●	
Dex2 500/350LD	61	●	●		○		●	●		●								●
Dex2 500/350LP	61	●	●		○		●	●	●	●							●	●
Dex2 500/350LQ	61	●	●	●	○		●	●	●	●							●	●
Dex2 Ultra	61	●	●	●	○		●	●	●	●	●					●	●	
Ehave2 CM630/500/350B	78	●					●	●		●								
Ehave2 CM630/500/350M	78	●	●				●	●		●								
Artsen CM500 C	88	●					●	●		●								

Communication with Robot & Automation						Featured Functions			
EtherNetIP	EtherCAT	ProfiNet	Analog & Automation	DeviceNet	CANOpen	Constant Penetration	Arc Gouging	SMARC IoT	Generator Inferface
○	○	○	○	○	○			○	
○	○	○	○	○	○	●		○	
○	○	○	○	○	○	●		○	
○	○	○	○	○	○	●		○	
○	○	○	○	○	○	●		○	
○	○	○	○	○	○			○	○
○	○	○	○	○	○	●		○	○
○	○	○	○	○	○	●		○	○
○	○	○	○	○	○			○	
○	○	○	○	○	○	●		○	
○	○	○	○	○	○	●		○	
○	○	○	○	○	○	●		○	
○	○	○	○	○	○	○		○	
○	○	○	○	○	○			○	
○	○	○	○	○	○	●		○	
○	○	○	○	○	○	●		○	
○	○	○	○	○	○	●		○	
○	○	○	○	○	○		●	○	○
○	○	○	○	○	○		●	○	○
								○	

[1] : Double pulse MIG/MAG for aluminum alloy is not available with Artsen II PM500/400 AS;

[2] : QPT: Quick Pulse Technology. Welding speed of pulse MIG/MAG reaches 2 times of the standard pulse MIG/MAG. It lowers the sensitivity to shield gas for stainless steel welding.

SMARC ™
Informatization and IoT Solution for Smart Welding Manufacturing



MEGMEET

SMARC
Informatization and IoT Solution for Smart Welding Manufacturing

Supporting Smart Manufacturing for the Industries.

1

Equipment Management
- Status Monitoring
- Parameter Monitoring
- Location Monitoring
- Welder Status Monitoring
- Workshop Dashboard
- Data Cockpit

2

Warning Management:
- Warning Info
- Defect Info
- Warning Record
- Warning Classification
- Statistics & Analysis
- Solution & Supports

3

Personnel Management:
- Team Management
- Registration
- Qualification
- Record by Personnel
- Statistics by Personnel
- Check-in

4

Production Management:
- Organization
- Utilization report
- Personnel efficiency report
- Wire consumption report
- Gas consumption report
- Production trend report

5

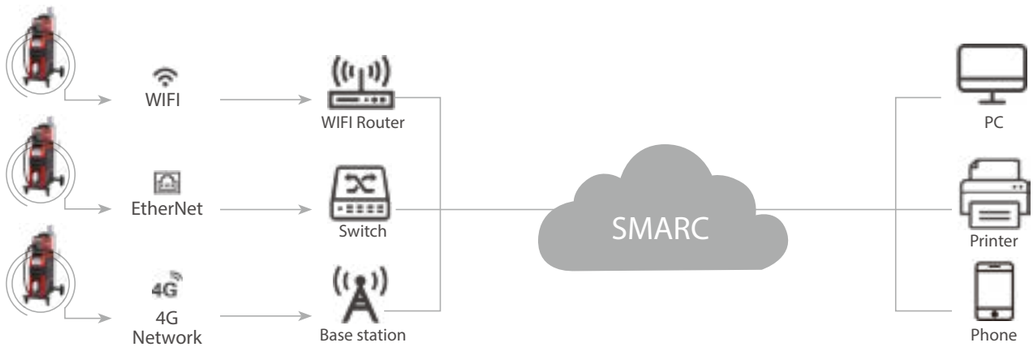
WPS Management:
- Welding Resources
- Workpieces
- WPS
- WPS Activating
- Production Regulation Activating
- Amperage Limits

6

Consumable Management:
- Incoming
- Outcoming

SMARC
Informationization Cloud Platform for Intelligent Welding

Basic Framework

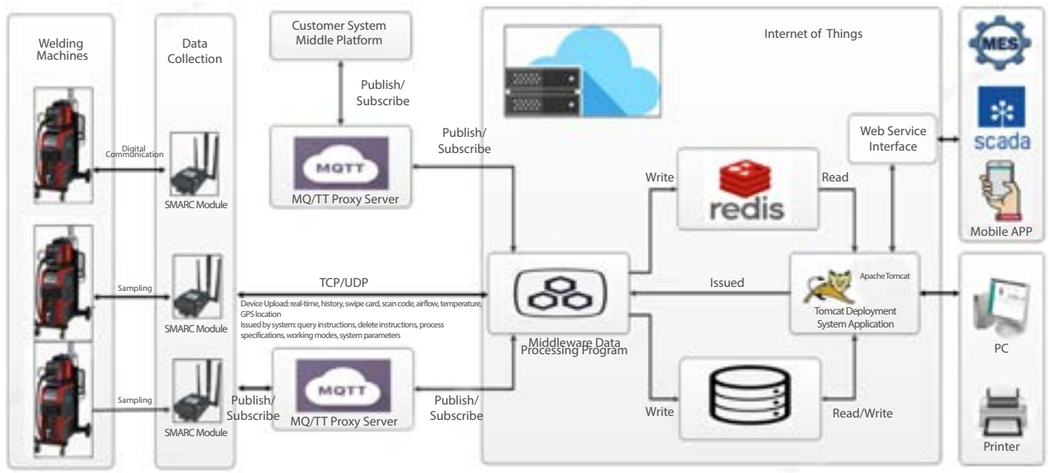


Smart Welding Manufacturing and Solutions

Informatization and IoT Solution for Smart Welding Manufacturing

Friendly Openness

MEGMEET SMARC System has an open data interface, which can be interconnected with MES, ERP and other systems, and supports welding machines of different brands to connect to the system to realize interconnection of all-thing.



Data Security

In the information age, security of customer data has become more and more important. MEGMEET adopts a comprehensive encryption technology on the system side to ensure the security of customer information and MEGMEET can sign confidentiality agreements with customers.

Artsen II CM / PM Series

Artsen II CM/PM Series

Product Features

- Digital Microprocessor Controlled Inverter Technology.
- Synergic control of MIG/MAG/C02 process, Pulse / Double Pulse MIG/MAG.
- Stable welding with stick-out length up to 30mm.
- Standard locking function for both front panel locking & parameters range locking.
- Standard Job saving features (up to 50 Job).
- Supporting SMARC for networking.
- Supporting Up/Down torch.
- Supporting Push-pull torch.
- MIG Brazing function as optional.
- Convenient for building multi-operator system.
- Proven record in heavy industries since 2014.
- High tolerance against input voltage fluctuation (25%+/-).
- Superior reliability with self-protecting design and error code display for easy maintenance.

Excellent Welding Performance

This series of products are equipped with a control process of "special energy controlled short-circuit transition", a droplet transfer control process of "pulse energy adjustment", and a synergic pulse energy control process based on varying wire feeding speeds, being suitable for carbon steel, stainless steel, and aluminum alloys and other high-quality welding, etc.

☑ Standard
⁕ Optional with extra costs
☐ Not Applicable

Artsen II PM500 / 400 AS

- Synergic / Pulse / Double Pulse MAG for Carbon Steel and Stainless Steel
- Single Pulse MIG for Aluminum and alloy

☑ DC CO_2/MAG | ☑ Standard Pulse
☑ Steel | ☑ Stainless Steel
☑ Aluminum / Aluminum Alloy
⁕ Aluminum Bronze | ⁕ Silicon Bronze

☑ Push-pull Welding Torch Interface
☑ Mid-drive Wire Feeding Interface
☑ Constant Penetration

Artsen II PM500 / 400 AD

- Synergic / Pulse / Double Pulse MAG for Carbon Steel and Stainless Steel
- Pulse & Double Pulse MIG for Aluminum and alloy

☑ DC CO_2/MAG | ☑ Standard Pulse
☑ Steel | ☑ Stainless Steel
☑ Aluminum / Aluminum Alloy
⁕ Aluminum Bronze | ⁕ Silicon Bronze

☑ Push-pull Welding Torch Interface
☑ Constant Penetration
☑ Mid-drive Wire Feeding Interface

Artsen II PM500 / 400 F

- Synergic & Pulse MAG for Carbon Steel

☑ DC CO_2/MAG | ☑ Standard Pulse
☑ Steel | ☐ Stainless Steel
⁕ Aluminum Bronze | ⁕ Silicon Bronze
☐ Aluminum / Aluminum Alloy

☑ Push-pull Welding Torch Interface
☑ Mid-drive Wire Feeding Interface
☑ Constant Penetration

Artsen II PM500 / 400 N

- Synergic / Pulse / Double Pulse MAG for Carbon Steel and Stainless Steel

☑ DC CO_2/MAG | ☑ Standard Pulse
☑ Steel | ☑ Stainless Steel
⁕ Aluminum Bronze | ⁕ Silicon Bronze
☐ Aluminum / Aluminum Alloy

☑ Push-pull Welding Torch Interface
☑ Mid-drive Wire Feeding Interface
☑ Constant Penetration

Artsen II CM500 / 400 / 350

- Synergic MAG for Carbon Steel

☑ DC CO_2/MAG | ☐ Standard Pulse
☑ Steel | ☐ Stainless Steel
☐ Aluminum Bronze | ☐ Silicon Bronze
☐ Aluminum / Aluminum Alloy

☑ Push-pull Welding Torch Interface
☑ Mid-drive Wire Feeding Interface
☐ Constant Penetration

Specification for Artsen II Series

● Standard ○ Optional

Manual	Artsen II PM500 / 400 AD	Artsen II PM500 / 400 AS	Artsen II PM 500 / 400 N	Artsen II PM 500 / 400 F	Artsen II CM500 / 400 / 350
Robotic *	Artsen II PM500 / 400 AD R	Artsen II PM500 / 400 AS R	Artsen II PM 500 / 400 N R	Artsen II PM 500 / 400 F R	Artsen II CM 500 / 400 / 350 R
Process					
Synergic MAG / CO_2	●	●	●	●	●
Single & Double Pulse MAG for Steel	●	●	●	●	-
Single & Double Pulse MAG for SUS	●	●	●	-	-
Single Pulse MIG for Aluminum	●	●	-	-	-
Double Pulse MIG for Aluminum	●	-	-	-	-
Silicon bronze	○	○	○	○	-
Aluminum bronze	○	○	○	○	-
Constant Penetration	●	●	●	●	-
Functions					
Push-pull Torch	○	○	○	○	○
Middle-drive wire feeding	○	○	○	○	○
Up/Down Torch	○	○	○	○	○
SMARC / IoT	○	○	○	○	○

Manual	Artsen II PM500 AD / AS / N / F	Artsen II CM500	Artsen II PM400 AD / AS / N / F	Artsen II CM400	Artsen II CM350
Robotic	Artsen II PM500 AD / AS / N / F R	Artsen II CM500 R	Artsen II PM400 AD / AS / N / F R	Artsen II CM400 R	Artsen II CM350 R
Control Mode	Fully Digital-control		Fully Digital-control		
Rated Input Voltage	AC 3PH 380V -25% ~ 400V +20% (3PH 285V ~ 3PH 475V)		AC 3PH 380V -25% ~ 400V +20% (3PH 285V ~ 3PH 475V)		
Input Frequency	30 ～ 80 Hz		30 ～ 80 Hz		
Rated Input Power	24KVA / 22.3KW	24KVA / 22.3KW	19.7KVA / 18KW	15 KVA / 12.7KW	15 KVA / 12.7KW
Power Factor	0.93		0.94	0.93	0.93
Efficiency	87%		87%	87%	87%
Rated OCV	73.3V		73.3V	73.3V	73.3V
Max Output Current	500A		400A	400A	400A
Rated Output Current	39V		34V	31.5v	31.5v
Rated Output Voltage	12 ～ 45V		12 ～ 45V	12 ～ 45V	12 ～ 45V
Duty Cycle (40˚C / 10 min)	500A / 39V 60% @ 40˚C 387A / 33.5V 100% @ 40˚C		400A 100% @ 40°C	350A 100% @ 40°C	350A 100% @ 40°C
Wire Diameter	ϕ 0.8 / 0.9 / 1.0 / 1.2 / 1.6 mm		ϕ 0.8 / 0.9 / 1.0 / 1.2 / 1.6 mm		
Welding Operation Mode	2T / 4T / Special 4T / Spot Welding / Intermittent Welding		2T / 4T / Special 4T / Spot Welding / Intermittent Welding		
Electromagnetic Compatibility	EN 60974-10: 2014.		EN 60974-10: 2014.		
Protection Against Lightening	Class D (6000V/3000A)		Class D (6000V/3000A)		
Insulation Grade	H		H		
Ingress Protection	IP23 S		IP23 S		
Working Temperature / Humidity	-39˚C～ +40˚C		-39˚C～ +40˚C		
Dimension (L / W / H)	620*300*480 mm		620*300*480 mm		
Gross Weight	52KG		52KG		

* : Please refer to P56-P64 for Robotic and Automatic Welding.

Push-pull Welding Torch

Outstanding Stability with Push-pull Wire-feeding

Product Features:

- Capability to work with push-pull torches by major torch manufacturers withe easy connection and one-button selection in internal menu.
- Welding current (wire-feeding speed) and voltage (arc-length correction) adjustable from push-pull torch body.
- Widely used in welding aluminum for large work pieces.

Up/Down Torch Control

- Up/Down Control of Current
- Up/Down Control of Voltage

Intermediate Wire-feeder

Mid-way Reinforcement for Ultra-Long Wire-feeding

Product Features

- 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 58 m working scope for solid wires of steel, including 30m by wire-feeder, 25 m by the Intermediate wire-feeder and 3 m by the torch.
- Low cost in welding consumables by allowing working with ordinary welding torch.
- Widely applicable for conditions of long distance and narrow space, such as large tanks, shipbuilding and large steel construction.

Specification

Specification		
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	
Max Cable Length of Intemediate Wire-feeder	Solid wire of Carbon Steel	25m
	Solid wire of Stainless Steel	25m
	Flux-cored wire of Carbon Steel	15m
	Alluminum and Alloy	10m
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 Series

Intelligent Platform of MIG/MAG Welding Process

Artsen Plus Series

Intelligent Platform of MIG/MAG Welding Process

Features

- Based on the robust Artsen series, Artsen Plus is elevated with inverter frequency of 100K HZ, super high-speed samplying and highly precise control.
- 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.
- 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.
- Capable of multiple welding processes, as well of combination and switch between different process in order to face the changing welding challenges.
- Equipped with USB port for upgrading, ensuring access to the most advanced welding process developed by MEGMEET and the most suitable welding software to face different welding conditions.
- Capable to work with multiple industrial robots thru multiple robotic protocol.

Advanced Welding Process of Artsn Plus Series

Artsen Plus is capable of multiple welding modes, and provides more suitable welding solution for welding of higher efficiency, thinner sheets, thicker plates or more various metal materials.

Tranquil Fusion (Spatter-Free MAG) → Thunder Fusion (Short-arc Pulse MIG/MAG) → DP Fusion → Root Fusion → Leaping Fusion (High-speed Intermittent MAG)

Artsen Plus Series

Artsen Plus 500Q / 400Q / 350Q

- Tranquil Fusion for Carbon Steel and Stainless Steel.
- Thunder Fusion for Aluminum, Carbon Steel and Stainless Steel

☑ Tranquil Fusion ☑ Synergic CO_2/MAG
☑ Thunder Fusion ☑ Leaping Fusion
☑ DP Fusion

☑ Steel ☑ Stainless Steel ☑ Aluminum

☑ Constant Penetration ☑ USB Port
☑ Push-pull Torch Connector

Artsen Plus 500P / 400P / 350P

- Tranquil Fusion for Carbon Steel and Stainless Steel
- Thunder Fusion for Carbon Steel and Stainless Steel

☑ Tranquil Fusion ☑ Synergic CO_2/MAG
☑ Thunder Fusion ✳ Leaping Fusion
✳ DP Fusion

☑ Steel ☑ Stainless Steel ☐ Aluminum

☑ Constant Penetration ☑ USB Port
☑ Push-pull Torch Connector

Artsen Plus 500D / 400D / 350D

- Tranquil Fusion for Carbon Steel and Stainless Steel

☑ Tranquil Fusion ☑ Synergic CO_2/MAG
☐ Thunder Fusion ✳ Leaping Fusion
☐ DP Fusion

☑ Steel ☑ Stainless Steel ☐ Aluminum

☑ Constant Penetration ☑ USB Port
☑ Push-pull Torch Connector

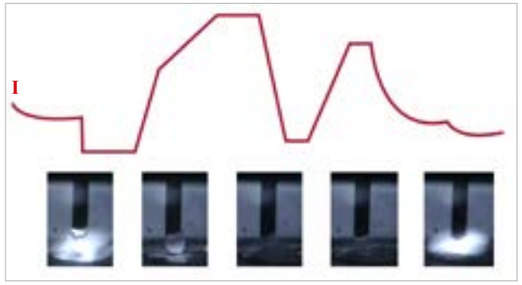
☑ Standard
✳ Optional with extra costs
☐ Not Applicable

Tranquil Fusion (Low Spatter Welding)

Using the patented monitoring and control technology in droplet formation, with the highly sensitive Tranquil Fusion module and the energy-releasing technology in the power source, MEGMEET achieved precise control of the droplet formation and transfer. At the transfer moment of each droplet, welding current is controlled to be a extremely low level. As a result, the droplet moves into the melton pool peacefully without spatter from explosion. The waveform also lowered the heat-input substantially.

Features in Welding Process:

- Soft welding arc with tranquil welding pool and superbly low spatter.
- The welding energy is subject to adjustment. Heat input can be effectively reduced
- Remarkable welding junction with lowered defects of blowhole and undercut. Suitable for high quality root welding at all wedling positions.
- The welding speed is significantly increased



Automotive parts
Spatter-free and low heat-input

Automotive parts
Stainless steel

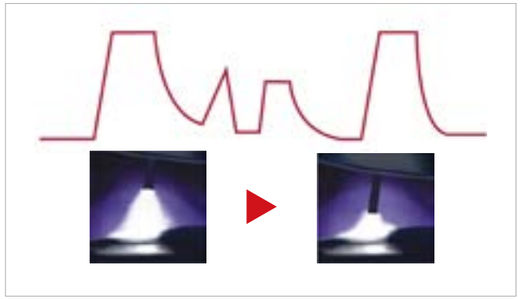
Two-wheeler parts
Low heat-input
and strong in gap-filling

Thunder Fusion (Short Arc Pulse Welding)

Shot-circuit transfer was added into waveform of the standard pulse process. It is a superb combination of synergic and pulse welding process together with their advantages, and achieving better results with short welding arc.

Features in Welding Process:

- Welding with lowered voltage to achieve spatter-free and beautiful results with pulse process
- Short in transfer arc, higher in transfer frequency, stronger in anti-interference capability
- More friendly to robotic welding with high arc stiffness and sharp arc direction
- Heat-input lowered to avoid defects like under-cut
- Deposition rate increased
- Welding spatter is eliminated. Welding process becomes well controlled



Standard Pulse Thunder Fusion

Heavy construction equipment

Spatter-free with Thunder Fusion

Energy

High-speed welding with anti-interference capability

Welding aluminum and alloys

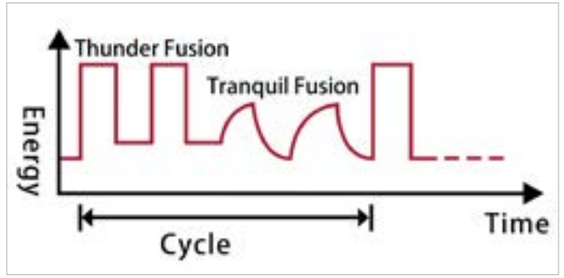
Higher quality in aluminum welding

DP Fusion (Vertical Up Welding)

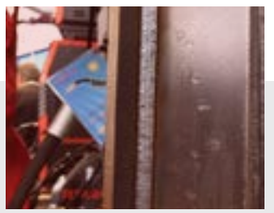
Using short-circuit and pulse welding waveform together but at high-frequency and stable alternate switching. Welding arc periodically heats and cools the base material, and effectively reduces heat-input. It is a welding method that combines short-circuit and pulse transfer, which requires precise control of welding power source and waveform

Features in Welding Process:

- Highly applicable for vertical-up welding without weaving
- Highly suitable for full-position welding of plates over 2.5 mm, especially with robotics and welding automation
- More precise control of heat-input and welding formation. The internal expert menu is highly open for configuration, and enables precisely control of the parameters such as the alternating frequency, duty cycle, peak value and base value
- Obvious changes in energy. Fast in welding cycle. Achieving clear fish-scale results even in carbon steel and stainless steel



All-position welding



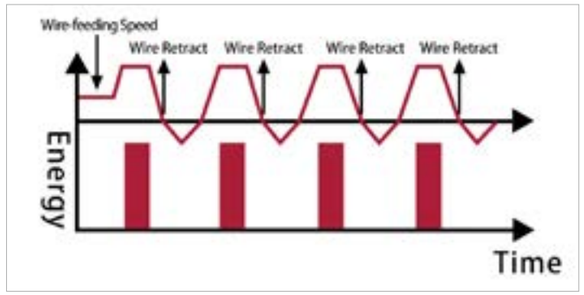
Vertical-up welding without weaving

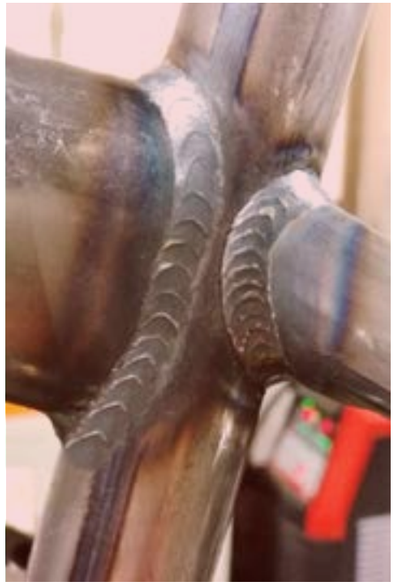
Leaping Fusion (High-speed Intermittent Welding)

Perfectly integrating the welding process, arc physics, power source technology of high dynamic response and motor control technology. Each time a macroscopic molten pool is formed during the welding process, the welding wire is drawn back at high frequency while the current is sharply reduced to quickly complete a spot welding. The cycle repeats itself, which is more efficient than the traditional spot-welding

Process characteristics:

- The welding arc starts quickly, and ends sharply. The molten-pool can be formed fast, with extremely low heat input and deformation
- 2-3 times faster than traditional spot welding, while achieving clear fish-scale welding appearance
- High tolerance over in-consistent cutting results. Very suitable for welding of gaps and at all-position
- Suitable for the bicycle industry where fish-scale results are requested for carbon steel





USB Port

It benefits welders by ensuing fast access to the latest or any tailor-made welding process by MEGMEET. Welding process could be shared and down-loaded from online into a USB, and used thru the port for upgrading

Consistant Fusion

When the base material is uneven and the stick-out length changes, the power-source automatically adjust instantly the wire-feeding speed, and prevent the melting depth from being affected by the changing stick-out length. Welding quality is therefore improved

Process characteristics:

- The welding arc has high dynamic characteristics and stability, stable penetration, and high quality
- Suitable for automated welding by robots and special machines

Artsen Plus Wire-feeders

	Enclosed-type	Light-weight type
		
Drive control mode	Photoelectric encoder feedback / Counter electromotive force	Counter electromotive force
Rated current	4.5A	4.5A
Rated voltage	24V	24V
Wire-feeding speed	0.8 ～ 24 m / min	0.8 ～ 24 m / min
Wire diameter	0.8 ～ 1.6	0.8 ～ 1.6
Wire-spool	All standard wire reel	All standard wire reel
Drive and roller	4-rollers	4-rollers
Torch connectors	Euro (standard) / Japanese (optional)	Japanese (optional) / Euro
Dimension (L / W / H)	630*250*400	519*200*370
Gross weight	14.5	9.6

Specification

Manual	Artsen Plus 500 / 400 / 350 Q	Artsen Plus 500 / 400 / 350 P	Artsen Plus 500 / 400 / 350 D
Robotics	Artsen Plus 500 / 400 / 350 Q R	Artsen Plus 500 / 400 / 350 P R	Artsen Plus 500 / 400 / 350 D R
Welding Process			
Synergic	●	●	●
Tranquil Fusion	●	●	●
Thunder Fusion	●	●	-
Leaping Fusion	●	○	○
DP Fusion	●	○	-
Material			
Steel	●	●	●
Stainless Steel	●	●	●
Aluminum	●	-	-
Featured Function			
USB for Upgrading	●	●	●
Consistent Fusion	●	●	-
Push-pull torch connection	●	●	●
Relay wire-feeder for barrel	○	○	○
SMARC / IoT	○	○	○
A / V display in manual wire-feeder	●	●	●

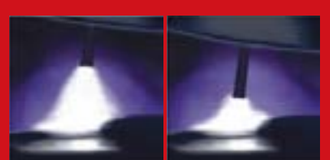
Manual	Artsen Plus 500 D / P / Q	Artsen Plus 400 D / P / Q	Artsen Plus 350 D / P / Q
Robotics	Artsen Plus 500 D / P / Q R	Artsen Plus 400 D / P / Q R	Artsen Plus 350 D / P / Q R
Control Mode	Fully Digital-Control		
Rated Input Voltage 1	AC 3PH 380V -25% ~ 400V +20% (3PH 285V ~ 3PH 475V)		
Rated Input Voltage 2	-	-	AC 3PH 220V +/-15% (3PH 187V ~ 3PH 254V)
Input Frequency	45 ~ 65Hz		
Rated Input Power	24 KVA	22.3 KVA	16.8 KVA
Power Factor	0.93	0.94	0.94
Efficiency	87%		
Rated OCV	85V		
Max Output Current	500A	400A	350A
Rated Output Current	30 ~ 500 A	30 ~ 400 A	30 ~ 350 A
Rated Output Voltage	12 ~ 45 V (Precision at 0.1V)		
Duty Cycle (40℃ / 10 min)	500A / 39V 60% @ 40℃ 387A / 33.5V 100% @ 40℃	400A / 34V 100% @ 40℃	350A / 33.5V 60% @ 40℃ 270A / 27.5V 100% @ 40℃
Wire Diameter	ϕ 0.8 / 0.9 / 1.0 / 1.2 / 1.6 mm		
Welding Operation Mode	2T / 4T / Special 4T / Spot Welding / Intermittent Welding		
Electromagnetic Compatibility	EN 60974-10 EMC		
Protection Against Lightening	Class D (6000V/3000A)		
Insulation Grade	H		
Ingress Protection	IP23 S		
Working Temperature / Humidity	-39℃ ~ +50℃ ; Humidity ≤ 95%;		
Dimension (L / W / H)	620*300*480		
Gross Weight	57.5Kg	57.5Kg	53Kg

* : Please refer to P56-P64 for Robotic and Automatic Welding.

● Standard ○ Optional

Artsen Pro Series

Intelligent Platform of MIG/MAG Welding Process



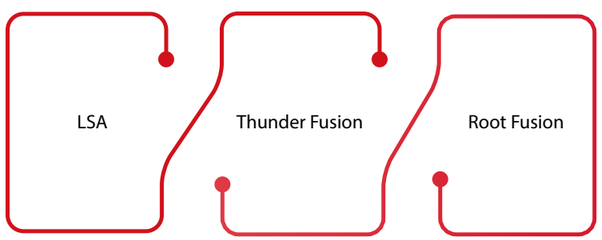
Artsen Pro Series

Intelligent Platform of MIG/MAG Welding Process

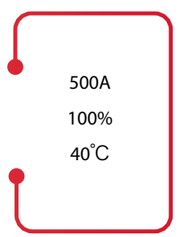
Features

- Artsen Pro series was developed on the basis of the Artsen Plus series. It has meet the demand of high efficiency welding, especially for thick plates.
- Power source of 500A 100% is available for Artsen Pro series.
- With inverter technology of frequency as high as 100K HZ and high-speed sampling, Artsen Pro achieves precise control, and is flexible with various welding characteristics.
- Artsen Pro series brings LSA, a featured low-spatter welding process, as standard. Thunder Fusion is also available with Artsen Pro for the advanced short-arc pulse and double pulse MIG/MAG.
- Artsen Pro series meets high quality welding of carbon steel, stainless steel and aluminum alloys.
- Equipped with Constant Fusion, which allows wire-feeding speed at pulse mode to change automatically according to the stick-out length, and keeps the penetration stabilized.
- Capable to work with multiple industrial robots thru multiple robotic protocols.
- Anti-interference capability, especially convenient for welding automation of multiple torches.
- Equipped with USB port for upgrading, ensuring access to the most advanced welding process developed by MEGMEET and the most suitable welding software to face different welding conditions.
- Artsen Pro brings various wire-feeders to meet different welding applications at different markets of different budget levels.

Advanced Welding Process of Artsen Pro Series



Heavy-duty Power Source



Artsen Pro Series

Artsen Pro
500H Q / 500Q / 400Q /350Q

- LSA for Carbon Steel and Stainless Steel.
- Thunder Fusion for Aluminum, Carbon Steel and Stainless Steel

☑ LSA ☑ Synergic CO_2/MAG
☑ Thunder Fusion

☑ Steel ☑ Stainless Steel ☑ Aluminum

☑ Constant Penetration ☑ USB Port
☑ Push-pull Torch Connector

Artsen Pro
500H P / 500P / 400P / 350P

- LSA for Carbon Steel and Stainless Steel
- Thunder Fusion for Carbon Steel and Stainless Steel

☑ LSA ☑ Synergic CO_2/MAG
☑ Thunder Fusion

☑ Steel ☑ Stainless Steel ☐ Aluminum

☑ Constant Penetration ☑ USB Port
☑ Push-pull Torch Connector

Artsen Pro
500H D / 500D / 400D / 350D

- LSA for Carbon Steel and Stainless Steel

☑ LSA ☑ Synergic CO_2/MAG
☐ Thunder Fusion

☑ Steel ☑ Stainless Steel ☐ Aluminum

☑ Constant Penetration ☑ USB Port
☑ Push-pull Torch Connector

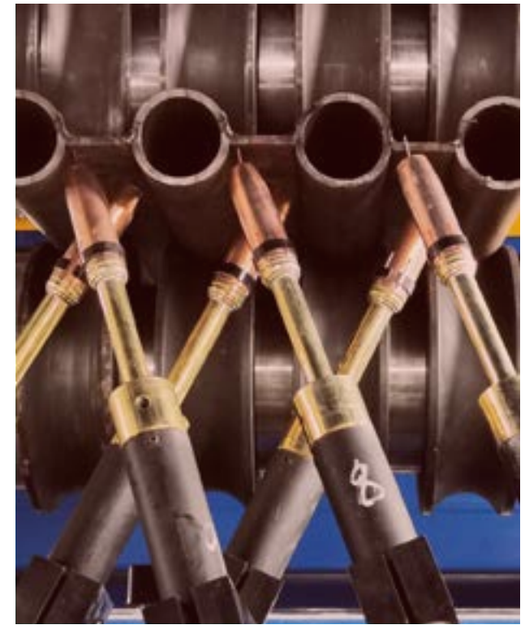
☑ Standard
✱ Optional with extra costs
☐ Not Applicable

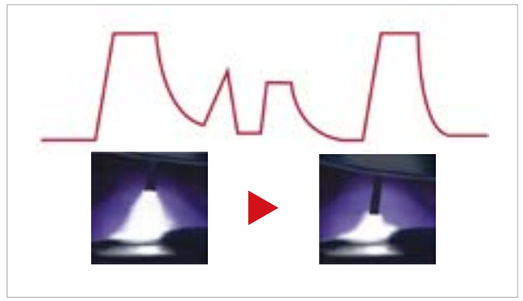
Thunder Fusion (Short Arc Pulse Welding)

Shot-circuit transfer was added into waveform of the standard pulse process. It is a superb combination of synergic and pulse welding process together with their advantages, and achieving better results with short welding arc.

Features in Welding Process:

- Welding with lowered voltage to achieve spatter-free and beautiful results with pulse process
- Short in transfer arc, higher in transfer frequency, stronger in anti-interference capability
- More friendly to robotic welding with high arc stiffness and sharp arc direction
- Heat-input lowered to avoid defects like under-cut
- Deposition rate increased
- Welding spatter is eliminated. Welding process becomes well controlled





Standard Pulse Thunder Fusion

Heavy construction equipment

Spatter-free with Thunder Fusion

Energy

High-speed welding with anti-interference capability

Welding aluminum and alloys

Higher quality in aluminum welding

LSA (Low-spatter Arc for MAG / CO_2)

Optimized and upgraded on the basis of standard synergic MIG/MAG, through software-based precise control, the molten droplet of short-circuit transfer is softly disconnected, so that the spatter caused by the traditional liquid bridge explosion and electromagnetic repulsion is reduced. The molten pool is calmer, and the weld formation is more beautiful.

Process Characteristics:

- Accurate in software control for high-frequency short-circuit transfer. Lower in spatter. Lower in heat input. Highly suitable for sheet metal welding
- Soft in welding arc and fine with spatter particles. Less spatter to remain on the workpiece. Lower with rework like grinding after welding. Higher in total working efficiency
- Higher in welding speed. Better in deformation control. More helpful in welding quality

USB Port

It benefits welders by ensuing fast access to the latest or any tailor-made welding process by MEGMEET. Welding process could be shared and down-loaded from online into a USB, and used thru the port for upgrading

Consistant Fusion

When the base material is uneven and the stick-out length changes, the power-source automatically adjust instantly the wire-feeding speed, and prevent the melting depth from being affected by the changing stick-out length. Welding quality is therefore improved

Process characteristics:

- The welding arc has high dynamic characteristics and stability, stable penetration, and high quality
- Suitable for automated welding by robots and special machines

Specification

Manual	Artsen Pro 500 H / 500 / 400 / 350 Q	Artsen Pro 500 H / 500 / 400 / 350 P	Artsen Pro 500 H / 500 / 400 / 350 D
Robotics	Artsen Pro 500 H / 500 / 400 / 350 Q R	Artsen Pro 500 H / 500 / 400 / 350 P R	Artsen Pro 500 H / 500 / 400 / 350 D R
Welding Process			
Synergic	●	●	●
LSA	●	●	●
Thunder Fusion	●	●	-
Leaping Fusion	-	-	-
DP Fusion	-	-	-
Material			
Steel	●	●	●
Stainless Steel	●	●	●
Aluminum	●	-	-
Featured Function			
USB for Upgrading	●	●	●
Consistent Fusion	●	●	-
Push-pull torch connection	●	●	●
Relay wire-feeder for barrel	○	○	○
SMARC / IoT	○	○	○
A / V display in manual wire-feeder	●	●	●

Manual	Artsen Pro 500 H D / P / Q	Artsen Pro 500 D / P / Q	Artsen Pro 400 D / P / Q	Artsen Pro 350 D / P / Q
Robotics	Artsen Pro 500 H D / P / Q R	Artsen Pro 500 D / P / Q R	Artsen Pro 400 D / P / Q R	Artsen Pro 350 D / P / Q R
Control Mode	Fully Digital-Control			
Rated Input Voltage1	AC 3PH 380V -25% ~ 400V +10% (3PH 285V ~ 3PH 440V)			
Rated Input Voltage2				AC 3PH 220V +/-15% (3PH 187V ~ 3PH 254V)
Input Frequency	45 ~ 65Hz			
Rated Input Power	24KVA / 22.3KW	24KVA / 22.3KW	16KW / 14KW	15KVA / 12.7KW
Power Factor	0.93	0.94	0.94	0.93
Efficiency	87%			
Rated OCV	85V			
Max Output Current	500A	500A	400A	350A
Rated Output Current	30 ~ 500 A	30 ~ 500 A	30 ~ 400 A	30 ~ 350 A
Rated Output Voltage	12 ~ 45 V (Precision at 0.1V)			
Duty Cycle (40°C / 10 min)	500A / 39V 100% @ 40°C	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
Wire Diameter	ϕ 0.8 / 1.0 / 1.2 / 1.6 mm			
Welding Operation Mode	2T / 4T / Special 4T / Spot Welding / Intermittent Welding			
Electromagnetic Compatibility	EN 60974-10 EMC			
Protection Against Lightening	Class D (6000V/3000A)			
Insulation Grade	H			
Ingress Protection	IP23 S			
Working Temperature / Humidity	-39°C ~ +50°C ; Humidity ≤ 95%;			
Dimension (L / W / H)	620mm*300mm*480mm			
Gross Weight	57.5Kg			

● Standard ○ Optional

* : Please refer to P56-P64 for Robotic and Automatic Welding.

Dex Series
(Compact)

Dex Series
(Decompact)

Compact but
Powerful and
Professional.

Dex Series

Born for sheet metal

Features

- Low spatter arc for carbon steel at synergic MAG mode
- Better performance for SUS at synergic mode
- Short-arc pulse MIG/MAG (QPT) with superb performance for SUS
- Highly easy to use with wide expert database and synergic control
- Power-saving with up to 90% efficiency
- Waveform control at a new level with 180K HZ output frequency
- Better tolerance for minor changes of welding voltage
- Standard Job saving features (up to 50 Job)
- Up to 15m inter-connection cable for more flexibility
- Highly adaptive for automation with precise control of wire-feeding
- Longer service life and lower defective rate thanks to better mechanical design

∗: CE and RCM only applicable to Dex DM3000 and Dex PM3000 and Dex PM3000 Q.

Dex Series

☑ Standard
⁕ Optional with extra costs
☐ Not Applicable

Dex PM3000 (Compact)
Dex PM3000S (Separate)

- Spatter-Free Synergic, Pulse and Double Pulse MAG for Carbon Steel and Stainless Steel
- Pulse & Double Pulse MIG for Aluminum and alloy

☑ LSA(Low.spatter Arc for MAG / CO_2)
☑ Pulse MIG / MAG ☑ MMA
⁕ QPT (Short-arc pulse MIG / MAG)
☐ Synergic MAG for Metal-cored wire
☐ Pulse MAG for Metal-cored wire
☑ Steel ☑ Stainless Steel ☑ Aluminum

Dex DM3000 (Compact)
Dex DM3000S (Separate)

- Spatter-Free Synergic MAG for Carbon Steel and Stainless Steel

☑ LSA(Low.spatter Arc for MAG / CO_2)
☐ Pulse MIG / MAG ☑ MMA
⁕ QPT (Short-arc pulse MIG / MAG)
☐ Synergic MAG for Metal-cored wire
☐ Pulse MAG for Metal-cored wire
☑ Steel ☑ Stainless Steel ☐ Aluminum

Decompact

Compact

Dex PM3000Q (Compact)
Dex PM3000QS (Separate)

- Spatter-Free Synergic, Pulse and Double Short-arc Pulse MAG for Carbon Steel and Stainless Steel
- Short-arc Pulse & Double Pulse MIG for Aluminum and alloy

☑ LSA(Low.spatter Arc for MAG / CO_2)
☑ Pulse MIG / MAG ☑ MMA
☑ *QPT (Short-arc pulse MIG / MAG)
☑ Synergic MAG for Metal-cored wire
☑ Pulse MAG for Metal-cored wire
☑ Steel ☑ Stainless Steel ☑ Aluminum

LSA (Low-spatter Arc for MAG / CO_2)

Optimized and upgraded on the basis of standard synergic MIG/MAG, through software-based precise control, the molten droplet of short-circuit transfer is softly disconnected, so that the spatter caused by the traditional liquid bridge explosion and electromagnetic repulsion is reduced. The molten pool is calmer, and the weld formation is more beautiful.

Process Characteristics:

- Accurate in software control for high-frequency short-circuit transfer. Lower in spatter. Lower in heat input. Highly suitable for sheet metal welding
- Soft in welding arc and fine with spatter particles. Less spatter to remain on the workpiece. Lower with rework like grinding after welding. Higher in total working efficiency
- Higher in welding speed. Better in deformation control. More helpful in welding quality

QPT (Short-arc pulse)

The industry-leading 180 K HZ inverter frequency brings advantages of high-speed sampling and control. Dex can find critical control and balance between short-circuit and spray transfer, and achieve higher transfer speed.

Process Characteristics:

- Low spatter, low heat-input, suitable for high speed sheet metal welding
- 50%~100% faster than standard pulse MIG/MAG process
- Less sensitive to shield gas composition. Capable of welding SUS solid wire with mixed gas of 80% argon / 20% CO_2

Stainless steel

Aluminum alloy

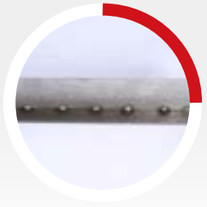
Specification

● Standard ○ Optional

Manual - Compact	Dex DM3000	Dex PM3000	Dex PM3000Q	-	-	-
Manual - Decompact	-	-	-	Dex DM3000S	Dex PM3000S	Dex PM3000QS
Robotic	-	-	-	Dex DM3000R	Dex PM3000R	Dex PM3000QR
Process						
Synergic MAG / CO_2	●	●	●	●	●	●
LSA	●	●	●	●	●	●
Pulse MIG / MAG	-	●	●	-	●	●
QPT	-	○	●	-	○	●
MMA	●	●	●	●	●	●
Material						
Steel	●	●	●	●	●	●
Stainless Steel	●	●	●	●	●	●
Aluminum & Alloy	-	●	●	-	●	●
Metal-cored Wire	-	-	●	-	-	●

Specification			
Control mode	Fully Digital-control		
Rated Input Voltage	AC 3PH 380V -15% ~ 400 V +15% (3PH 323V ~ 3PH 460V)		
Input Frequency	45 ～ 65Hz		
Rated Input Power	9.2KVA / 8.7KW		
Power Factor	0.94		
Efficiency	91%		
Rated OCV	54.2V		
Rated Output Current	30A~300A		
Rated Output Voltage	12V~30V		
Parameter channel	50		
Duty Cycle (40˚C / 10 min)	100%@207A / 24.9V 60%@250A / 28V		100%@217A / 24.9V 60%280A / 28V
Wire feeding speed	1.4 ～ 28m/min		
Insulation Grade	H		
Ingress Protection	IP23 S		
Protection Against Lightening	Class D (6000V/3000A)		
Certification	EN60974-10:2014 EN60974-1:2012 GB/T15579.1-2013		GB/T15579.1-2013
Working Temperature	-10˚C～ +40˚C		
Dimension (L / W / H)	610mm×260mm×398mm		
Gross Weight	25.4kg		23.7kg
Manual wire-feeder	Built-in wire-feeder	Light-weight wire-feeder 	Enclosed-type wire-feeder 

Multiple welding processes

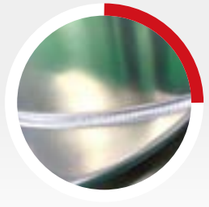


High-speed spot welding

Higher arc-striking success rate. Easier to control. Completing a round and full-sized welding spot in 0.3 seconds.

Stainless steel

Special control program for stainless steel welding. Reduce the sensitivity to pulses welding arc. No complicated parameter matching is required. Applicable with multiple types of shield gas to weld SUS only by adjusting the welding voltage.



Aluminum alloy

Various expert and special programs for aluminum welding. Brand new pulse welding control scheme. The contrast of peak and base current can reach 90%, and therefore enables welders to achieve clear fish-scale welding of aluminum.

Dex2 M Series

Full Digital IGBT Inverter
Multi-functional MIG Welding Machine

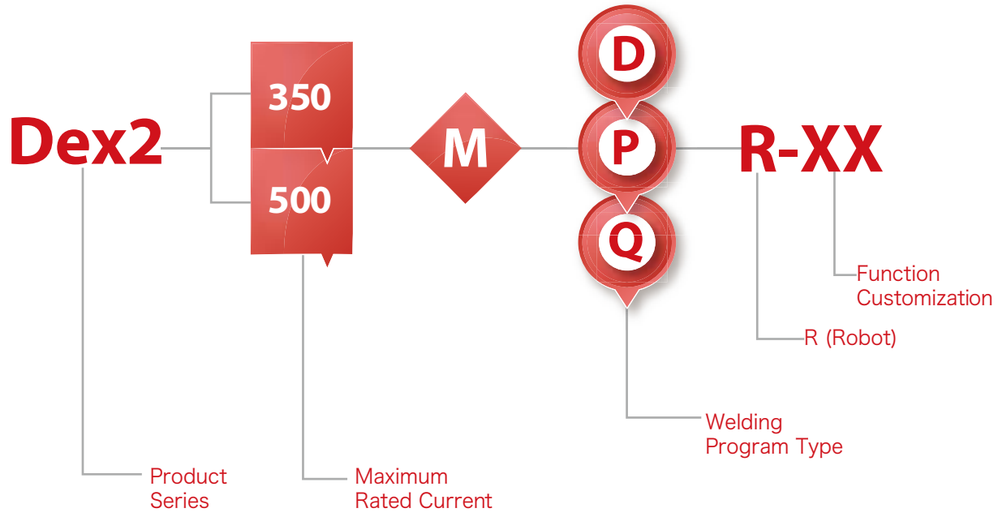
Dex2 M Series

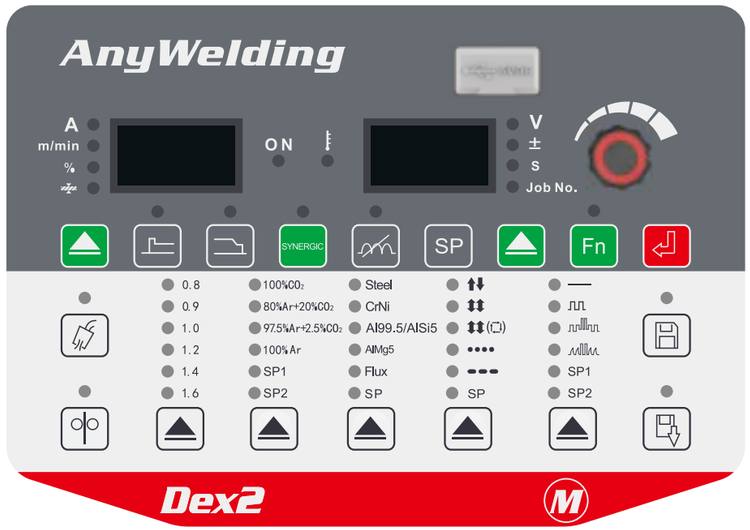
Full Digital IGBT Inverter Multi-functional
MIG Welding Machine

DC | 380 3PH | 40~70 Hz | CV | 110 kHz

Features

- Optimal welding programs in LSA (low-spatter-arc welding realized by software algorithm), quick pulse, high-speed weld and others. Be weldable in multiple materials: carbon steel, stainless steel, aluminum alloy and others;
- "Chopper" control technology is applied in software to precisely control droplet, and reduce spatter by more than 50%;
- Unique quick pulse process integrates advantages of pulse and DC short circuit, and welding speed is increased by more than 20% compared with conventional pulse welding;
- Wider voltage range, high current and low voltage, lower heat input, higher fusion efficiency, thin plate welding is comparable to TAP-TYPE machine;
- Adaptive arc-start retraction technology increases arc start success rate to almost 100%;
- Inverter frequency up to 110KHz enables higher control precision and more stable arc;
- Comprehensive communication interfaces are able to communicate with different brands of robots;
- Built-in touch sensing function with 80-400 voltage is easier to break down the rust on the surface of workpiece;
- Acting national standard of first-level energy efficiency;
- IOT interface is reserved to connect with Megmeet SMARC cloud system;
- U-disk upgrade function ensures customers to easily obtain Megmeet's most cutting-edge welding technology;
- Application industries: engineering machinery, steel structures, special vehicles, auto parts, two/tricycles, containers, petroleum and petrochemical industries, etc.





Dex2 500MD/350MD

- ☑ LSA(Low Spatter Arc) CO_2/MAG
- ☐ Pulse MAG/MIG
- ☐ Quick Pulse MAG/MIG
- ☑ Flux Core Carbon Steel/DC
- ☑ Stainless Steel
- ☑ Aluminum Alloy
- ☑ U-disk Interface
- ▣ IOT Interface
- ▣ Other Customization

Dex2 500MP/350MP

- ☑ LSA(Low Spatter Arc) CO_2/MAG
- ☑ Pulse MAG/MIG
- ☑ Quick Pulse MAG/MIG
- ☑ Flux Core Carbon Steel/DC
- ☑ Stainless Steel
- ☐ Aluminum Alloy
- ☑ U-disk Interface
- ▣ IOT Interface
- ▣ Other Customization

Dex2 500MQ/350MQ

- ☑ LSA(Low Spatter Arc) CO_2/MAG
- ☑ Pulse MAG/MIG
- ☑ Quick Pulse MAG/MIG
- ☑ Flux Core Carbon Steel/DC
- ☑ Stainless Steel
- ☑ Aluminum Alloy
- ☑ U-disk Interface
- ▣ IOT Interface
- ▣ Other Customization

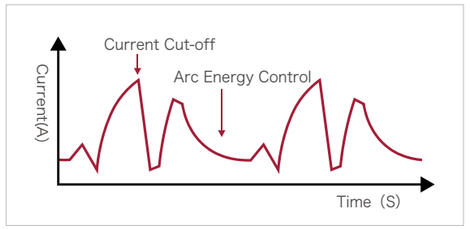
☑ Standard ☐ N/A ▣ Customization

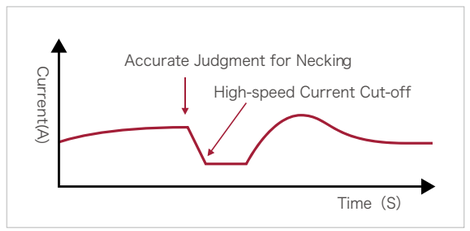
LSA (Low Spatter Arc by Software Algorithm)

Fine management in droplet transfer through software algorithm so that short-circuit transfer of droplet is softly cut off, which greatly reduces spatter caused by liquid-bridge bursting and electromagnetic repulsion, and helps fusion pool more stable and weld shape more beautiful.

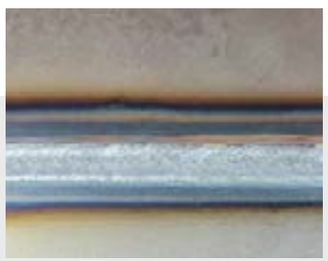
Welding Features:

- Compared with conventional DC welding, spatter quantity is cut down by 50%, which reduces cleaning and grinding time and improves production efficiency;
- Fluctuation of fusion pool is small, weld surface is more delicate, and weld shape is more beautiful;
- Lower heat input and less deformation;
- Stronger gap adaptability.





Normal DC (many spatters)



LSA (low spatter and low heat input)

Quick Pulse Technology(QPT)

Unique quick pulse welding technology adopts three-level main power topology. High-speed sampling and control advantages, brought by the inverter frequency up to 110kHz, can reach critical state between short circuit and pulse spray transition.

With shorter droplet transition distance, lower arc and faster welding speed, pulse speed is increased by more than 20%. Service life of wearing parts is lengthened and weld shape is better, meeting actual needs of manual welding.

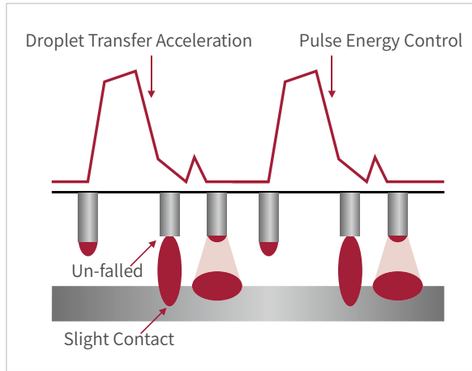
Pain Points in Conventional Pulse Welding

- Speed is slow: 30% slower than DC welding
- Weld formation is difficult to control: high heat input, long arc and many undercuts
- High Requirements in Mixed Gas: high requirement in the 80/20 gas ratio and resulted higher cost
- Accessories Loss: high voltage and high pulse peak value bring serious heating to torch, and high cost of accessories and shorter service life.

VS

Megmeet Quick Pulse Technology(QPT)

- Welding speed is faster and welding speed is increased by 20%, compared with conventional pulse;
- Short arc length, good stiffness, strong anti-interference ability, more suitable for high-speed welding of medium and thick plates, supporting concentrated arc energy and better penetration;
- Low arc heat input increases service life of accessories;
- Wide voltage range, strong welding adaptability, simpler operation, more popular by welders.



Construction Machinery

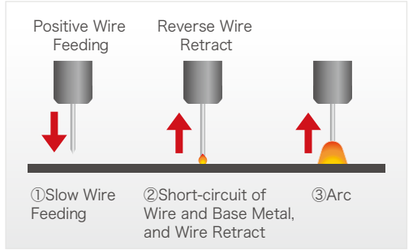
Boiler Membrane Wall

High Speed DC Welding

- With wider adaptive range of voltage, the same current is able to match lower voltage (10% lower than other welding machines);
- Lower heat input, higher deposition efficiency, thin-plate welding performance be comparable with tap-type machine.

Wire Retraction Function in Arc Starting

- When welding machine detects arc starting signal, wire will retract in high speed, which greatly improves the quality and success rate of arc starting, and greatly reduces various arc staring issues.



Up-down Torch (optional)

- Up-down torch is optional to conveniently adjust welding parameters on the torch(current, voltage, etc).

High Reliability

Strong environmental adaptability, suitable for working under tough environment;

Stable and reliable: stability is the base of intelligent welding machines!

Consistency: consistent performance by any machine, anytime and anywhere!

Product Specification

● Standard ○ Optional

Manual type	Dex2 500MD	Dex2 350MD	Dex2 500MP	Dex2 350MP	Dex2 500MQ	Dex2 350MQ
Robotic type*	Dex2 500MDR	Dex2 350MDR	Dex2 500MPR	Dex2 350MPR	Dex2 500MQR	Dex2 350MQR
Welding Programs						
LSA (Low Spatter Arc by Software)	●	●	●	●	●	●
DC	●	●	●	●	●	●
Standard pulse	-	-	●	●	●	●
Quick pulse	-	-	●	●	●	●
Flux Core Carbon Steel/DC	●	●	●	●	●	●
Carbon steel	●	●	●	●	●	●
Stainless steel	●	●	●	●	●	●
Aluminum alloy	-	-	-	-	●	●
Function						
U-disk interface	●	●	●	●	●	●
SMARC interface	○	○	○	○	○	○
Push-pull welding torch interface	○	○	○	○	○	○
Wire feeder AV LED display (manual type)	○	○	○	○	○	○
Technical Parameters						
Control Method	Digital IGBT Control		Digital IGBT Control		Digital IGBT Control	
Input voltage	3-phase AC 380 V (±25%)		3-phase AC 380 V (±25%)		3-phase AC 380 V (±25%)	
Input frequency	40~70Hz	40~70Hz	40~70Hz	40~70Hz	0~70Hz	40~70Hz
Inverter switching frequency	110kHz	110kHz	110kHz	110kHz	110kHz	110kHz
Rated input capacity	23.3KVA/21.4KW	13.4KVA/12.3KW	23.3KVA/21.4KW	13.4KVA/12.3KW	23.3KVA/21.4KW	13.4KVA/12.3KW
No-load voltage	77V	77V	77V	77V	77V	77V
Rated output current	500A	350A	500A	350A	500A	350A
Rated output voltage	39V	31.5V	39V	31.5V	39V	31.5V
Duty cycle	100%@500A	100%@350A	100%@500A	100%@350A	100%@500A	100%@350A
Power factor	0.92	0.92	0.92	0.92	0.92	0.92
Efficiency	91%@500A	89%@350A	91%@500A	89%@350A	91%@500A	89%@350A
Output characteristics	CV	CV	CV	CV	CV	CV
Wire feeding speed	0.5~28m/min	0.5~28m/min	0.5~28m/min	0.5~28m/min	0.5~28m/min	0.5~28m/min
Parameter JOB	50	50	50	50	50	50
Operating temperature	-10°C~40°C (welding power source can be started at -39°C)					
Dimension	L*W*H (mm) 647*291*572					
Weight	37KG	37KG	37KG	37KG	37KG	37KG
Enclosure rating	IP23 S	IP23 S	IP23 S	IP23 S	IP23 S	IP23 S
Insulation class	H	H	H	H	H	H
Cooling method	Forced air	Forced air	Forced air	Forced air	Forced air	Forced air

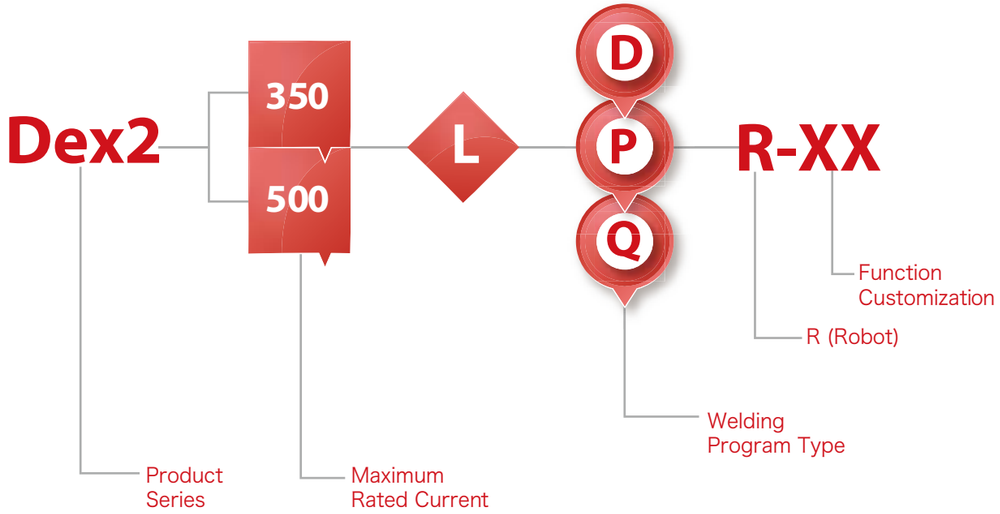
Dex2 L Series

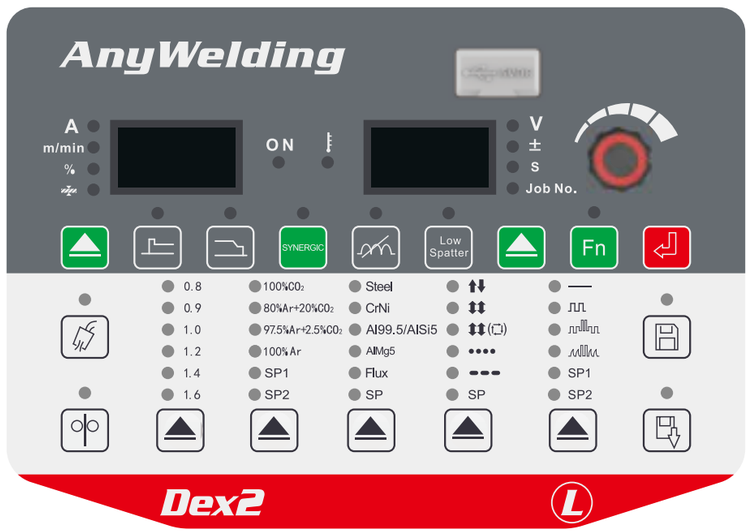
Full Digital IGBT Inverter Multi-functional
Super-low Spatter MIG Welding Machine

DC | 380 3PH | 40~70 Hz | CV | 110 kHz

Features

- Optimal welding programs in super-low spatter DC, quick pulse, high-speed weld and others. Be weldable in multiple materials: carbon steel, stainless steel, aluminum alloy and others;
- "Chopper" control technology in the combination of hardware & software to precisely control droplet, realize DC super-low spatter performance, and reduce spatter by more than 90%;
- Unique quick pulse process integrates advantages of pulse and DC short circuit, and welding speed is increased by more than 20% compared with conventional pulse welding;
- Wider voltage range, high current and low voltage, lower heat input, higher fusion efficiency, thin plate welding is comparable to TAP-TYPE machine;
- Adaptive arc-start retraction technology increases arc start success rate to almost 100%;
- Three-level main power topology structure and inverter frequency up to 110kHz enable higher control precision and more stable arc;
- Comprehensive communication interfaces are able to communicate with different brands of robots;
- Touch sensing function with 80-400 voltage is easier to break down the rust on the surface of workpiece;
- IOT interface is reserved to connect with Megmeet SMARC cloud system;
- U-disk upgrade function ensures customers to easily obtain Megmeet's most cutting-edge welding technology;
- Application industries: engineering machinery, steel structures, special vehicles, auto parts, two/tricycles, containers, petroleum and petrochemical industries, etc.





Dex2 500LD/350LD

- ☑ Super-low Spatter CO_2/MAG
- ☐ Pulse MIG/MAG
- ☑ Quick Pulse MIG/MAG
- ☑ Carbon Steel
- ☑ Stainless Steel
- ☐ Aluminum Alloy
- ☑ U-disk Interface
- ▣ IOT Interface
- ▣ Other Customization

Dex2 500LP/350LP

- ☑ Super-low Spatter CO_2/MAG
- ☑ Pulse MIG/MAG
- ☑ Quick Pulse MIG/MAG
- ☑ Carbon Steel
- ☑ Stainless Steel
- ☐ Aluminum Alloy
- ☑ U-disk Interface
- ▣ IOT Interface
- ▣ Other Customization

Dex2 500LQ/350LQ

- ☑ Super-low Spatter CO_2/MAG
- ☑ Pulse MIG/MAG
- ☑ Quick Pulse MIG/MAG
- ☑ Carbon Steel
- ☑ Stainless Steel
- ☑ Aluminum Alloy
- ☑ U-disk Interface
- ▣ IOT Interface
- ▣ Other Customization

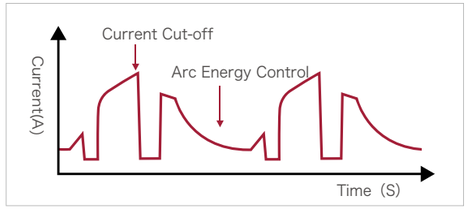
☑ Standard ☐ N/A ▣ Customization

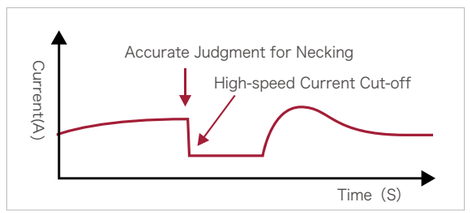
Super-low Spatter Technology

110kHz high-frequency hardware system combined with patented algorithm can realize precise "chopper" control, which greatly reduces spatter caused by liquid-bridge bursting and electromagnetic repulsion, and helps fusion pool more stable and weld shape more beautiful.

Welding Features:

- Soft arc, low and small spatter, 90% less spatter than conventional DC welding machine. Grinding work is reduced to improve production efficiency;
- Lower heat input, suitable for thin plate welding;
- Smooth droplet transfer, calm fusion pool, low heat input, strong ability in bridge-welding, be adaptive in large-gap welding;
- Wider range in low spatter welding: thin-plate carbon steel, $1.2mm wire. Low spatter current range can reach 210A, 20% higher than other similar welding machines.





Automotive Parts (low spatter and low heat-input)

Quick Pulse Technology(QPT)

Unique quick pulse welding technology adopts three-level main power topology. High-speed sampling and control advantages, brought by the inverter frequency up to 110kHz, can reach critical state between short circuit and pulse spray transition.

With shorter droplet transition distance, lower arc and faster welding speed, pulse speed is increased by more than 20%. Service life of wearing parts is lengthened and weld shape is better, meeting actual needs of manual welding.

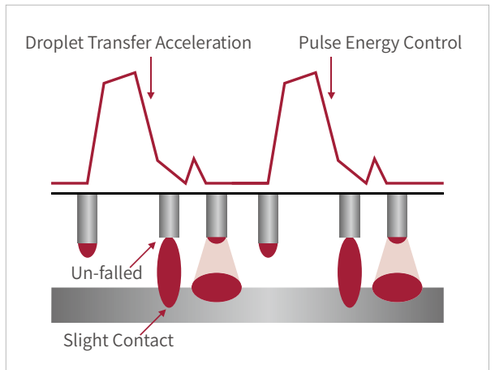
Pain Points in Conventional Pulse Welding

- Speed is slow: 30% slower than DC welding
- Weld formation is difficult to control: high heat input, long arc and many undercuts
- High Requirements in Mixed Gas: high requirement in the 80/20 gas ratio and resulted higher cost
- Accessories Loss: high voltage and high pulse peak value bring serious heating to torch, and high cost of accessories and shorter service life.

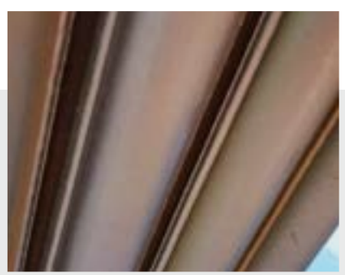
VS

Megmeet Quick Pulse Technology(QPT)

- Welding speed is faster and welding speed is increased by 20%, compared with conventional pulse;
- Short arc length, good stiffness, strong anti-interference ability, more suitable for high-speed welding of medium and thick plates, supporting concentrated arc energy and better penetration;
- Low arc heat input increases service life of accessories;
- Wide voltage range, strong welding adaptability, simpler operation, more popular by welders.



Construction Machinery



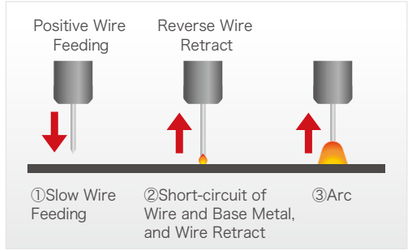
Boiler Membrane Wall

High Speed DC Welding

- With wider adaptive range of voltage, the same current is able to match lower voltage (10% lower than other welding machines);
- Lower heat input, higher deposition efficiency, thin-plate welding performance be comparable with tap-type machine.

Wire Retraction Function in Arc Starting

- When welding machine detects arc starting signal, wire will retract in high speed, which greatly improves the quality and success rate of arc starting, and greatly reduces various arc staring issues.



Up-down Torch (optional)

- Up-down torch is optional to conveniently adjust welding parameters on the torch(current, voltage, etc).

High Reliability

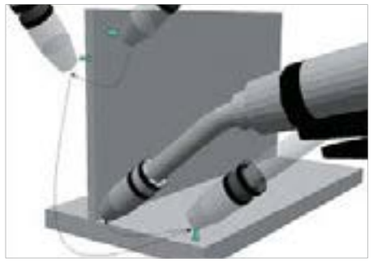
Strong environmental adaptability, suitable for working under tough environment;

Stable and reliable: stability is the base of intelligent welding machines!

Consistency: consistent performance by any machine, anytime and anywhere!

400V High-voltage Touch Sensing Function

- Built-in high-voltage touch sensing function with adjustable range 80~400V, no need to separately buy high-voltage touch sense device;
- High reliability and effective penetration of oil stains, rust, water stains, etc., fast touch-sense with high precision, and strong adaptability to robots;
- Current-limiting design ensures welding within safe current range, effectively protecting the safety of welders and welding machines;



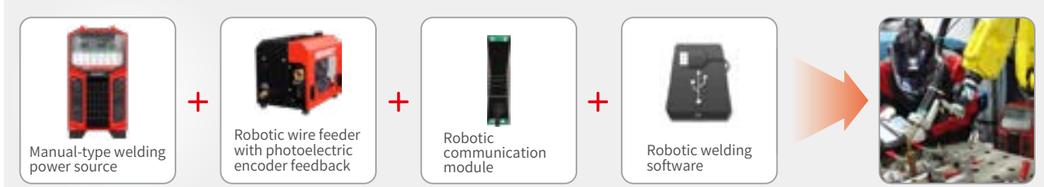
U-disk Interface

- To ensure customers conveniently obtaining Megmeet's foremost welding programs and function customization;

  New software can be programmed into welding machines through U disk.

Intelligent Upgrade

- With additional robotic accessories package, manual-type welding power source can be expanded to robotic welding power source to help users save money.



Water Cooler (Optional)

Circulating Water Cooler AnyCool-66	
Water cooler power supply	Powered by welding machine
Rated power	370W
Rated voltage	380V AC
Cooling water capacity	6.8L
Cooling water flow	3.5L/min
Cooling water maximum lift	20m
Flow alarm	√

Product Specification

● Standard ○ Optional

Manual type	Dex2 500LD	Dex2 350LD	Dex2 500LP	Dex2 350LP	Dex2 500LQ	Dex2 350LQ
Robotic type*	Dex2 500LDR	Dex2 350LDR	Dex2 500LPR	Dex2 350LPR	Dex2 500LQR	Dex2 350LQR
Welding Programs						
Super-low Spatter by Hardware	●	●	●	●	●	●
Low Spatter Arc (LSA by software)	●	●	●	●	●	●
Standard pulse	-	-	●	●	●	●
Quick pulse	-	-	●	●	●	●
Flux Core Carbon Steel/DC	●	●	●	●	●	●
Carbon steel	●	●	●	●	●	●
Stainless steel	●	●	●	●	●	●
Aluminum alloy	-	-	-	-	●	●
Function						
U-disk interface	●	●	●	●	●	●
SMARC interface	○	○	○	○	○	○
Push-pull welding torch interface	○	○	○	○	○	○
Wire feeder AV LED display (manual type)	○	○	○	○	○	○
Technical Parameters						
Control Method	Digital IGBT Control		Digital IGBT Control		Digital IGBT Control	
Input voltage	3-phase AC 380 V (±25%)		3-phase AC 380 V (±25%)		3-phase AC 380 V (±25%)	
Input frequency	40~70Hz	40~70Hz	40~70Hz	40~70Hz	0~70Hz	40~70Hz
Inverter switching frequency	110kHz	110kHz	110kHz	110kHz	110kHz	110kHz
Rated input capacity	24.1KVA/22.1KW	13.7KVA/12.6KW	24.1KVA/22.1KW	13.7KVA/12.6KW	24.1KVA/22.1KW	13.7KVA/12.6KW
No-load voltage	77V	77V	77V	77V	77V	77V
Rated output current	500A	350A	500A	350A	500A	350A
Rated output voltage	39V	31.5V	39V	31.5V	39V	31.5V
Duty cycle	60%@500A（@25℃） 100%@350A	100%@350A	60%@500A（@25℃） 100%@350A	100%@350A	60%@500A（@25℃） 100%@350A	100%@350A
Power factor	0.92	0.92	0.92	0.92	0.92	0.92
Efficiency	88%@500A	87%@350A	88%@500A	87%@350A	88%@500A	87%@350A
Output characteristics	CV	CV	CV	CV	CV	CV
Wire feeding speed	0.5~28m/min	0.5~28m/min	0.5~28m/min	0.5~28m/min	0.5~28m/min	0.5~28m/min
Parameter JOB	50	50	50	50	50	50
Operating temperature	-10℃~40℃ (welding power source can be started at -39℃)					
Dimension	L*W*H（mm）647*291*572					
Weight	40KG	40KG	40KG	40KG	40KG	40KG
Enclosure rating	IP23 S	IP23 S	IP23 S	IP23 S	IP23 S	IP23 S
Insulation class	H	H	H	H	H	H
Cooling method	Forced air	Forced air	Forced air	Forced air	Forced air	Forced air

Dex2 Communication Protocols with Robots

Function	TAST(Thru-arc Seam Tracking)	Touch Sensing	Communication Protocols with Robots						
		80-400V	Analog	DeviceNet	CANopen	MEGMEET CAN	EtherNet/IP	EtherCAT	Profinet
	●	●	○	○	○	○	⊛	⊛	⊛

● Standard ○ Optional ⊛ Customized

Robotic Wire Feeder Selection

Series	Model Name	Dimensions (L*W*H) mm	Welding Torch Interface	Weight (kg)	
Dex 2	WF1-50ZE	230x170x170	European type	6kg	
	WF1-50ZER	230x170x170	Asian type	6kg	
	WF1-50PW-7	223x152x221	European type	7kg	
	WF1-50PWR-7	223x152x221	Asian type	7kg	

Manual Wire Feeder Selection

	Enclosed wire feeder (optional)	Open wire feeder
		
Model Name	WF2-50P	WF2-50ZP
Wire feeding drive control mode	Photoelectric encoder feedback /Back electromotive force	Back electromotive force
Wire feeder rated current	4.5A	4.5A
Wire feeder rated voltage	24V	24V
Wire feeding speed	0.5~28m/min	0.5~28m/min
Wire feeding roller diameter	ϕ0.8~1.6 mm	ϕ0.8~1.6 mm
Wire spool type	Standard wire spool	Standard wire spool
Drive unit	Double drive four rollers	Double drive four rollers
Wire feeder torch interface	European interface	Asian interface
Dimension	630*250*400	519*200*370
Weight	14.5	9.6

Dex2 Ultra 400AC

Variable Polarity Full Digital IGBT
Inverter AC-MIG Welding Machine

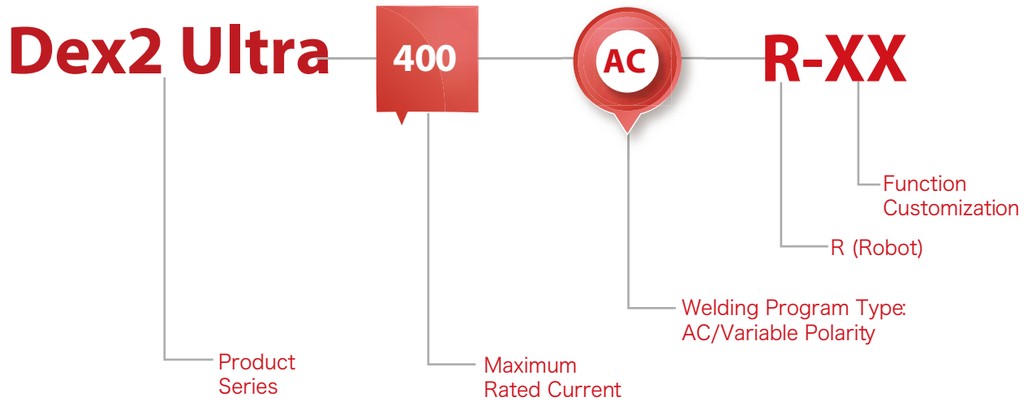
Dex2 Ultra 400AC

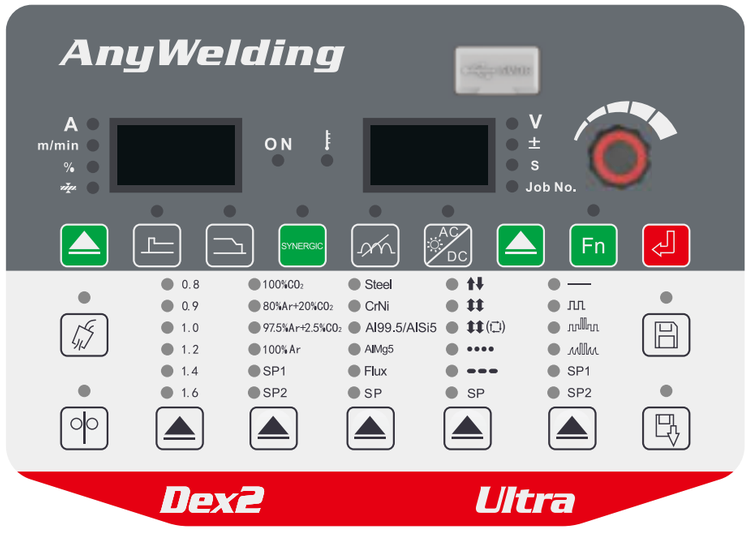
Variable Polarity Full Digital IGBT
Inverter AC-MIG Welding Machine

AC/DC | 380 3PH | 40~70 Hz | CV | 110 kHz

Features

- Superior welding programs in AC-Pulse MIG, AC short-circuit transition, quick pulse and others, to easily realize high-performance welding of carbon steel, stainless steel, aluminum alloy and other materials;
- Wire feeding speed is faster and deposition rate is increased by more than 20%, under the same current;
- Patented software algorithm enables high-frequency switching of polarity, low heat input, less spatter, and 0.5mm aluminum alloy welding;
- By adjusting positive and negative polarity ratio of EN/EP, heat input is optimized, and optimal welding of large-gap bridge can be easily achieved;
- Arc energy is controllable and effectively suppresses the generation of welding fumes. Glossiness of Al-Mg welding is as good as Al-Si welding with more beautiful weld shape;
- Inverter frequency up to 110KHz enables higher control precision and more stable arc;
- Comprehensive communication interfaces are able to communicate with different brands of robots and automation devices;
- Touch sensing function with 80-400 voltage is easier to break down the rust on the surface of workpiece;
- IOT interface is reserved to connect with Megmeet SMARC cloud system;
- U-disk upgrade function ensures customers to easily obtain Megmeet's most cutting-edge welding technology;
- Application industries: precision welding in automobiles and parts, two/tricycles, aerospace, military industry, rail vehicles, new energy, etc.





- ☑ Low spatter arc (LSA) CO_2 /MAG
- ☑ Pulse MAG/MIG
- ☑ Quick Pulse MAG/MIG
- ☑ Flux Core Carbon Steel/DC
- ☑ AC short circuit transition CO_2 /MAG/MIG
- ☑ AC Pulse MAG/MIG
- ☑ AC double pulse MAG/MIG
- ☑ Carbon steel
- ☑ Stainless steel
- ☑ Aluminum alloy
- ☑ U-disk interface
- ▣ SMARC IOT
- ▣ Other customization

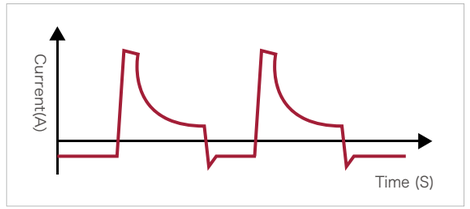
☑ Standard ☐ Customized

AC Pulse

Accurate and fast switching of pulse polarity is achieved by Megmeet patented algorithm, which integrates high speed&high efficiency of MIG welding with high quality of TIG welding, greatly optimizes welding production efficiency and welding quality.

Welding Features:

- High inverter frequency, more stable arc, higher precision;
- With unique negative stability algorithm, AC MIG is as stable as DC welding;
- Full-process heat input management, precise control of penetration depth, to be easily competent in high-quality welding of 0.5mm ultra-thin plates;
- By adjusting EN/EP ratio, wire melting speed can be dynamically regulated to realize higher deposition rate and higher welding efficiency;
- Gap tolerance is high and bridging ability is good, suitable for welding of large-gap lap joints and uneven gaps;
- Welding fume is greatly reduced without black smoke deposition on welding seam, and welding surface is more beautiful.

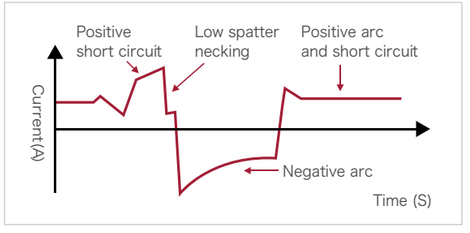


AC Short Circuit Transition

High-frequency hardware system working with Megmeet patented algorithm could accurately pre-judge droplet necking. Droplet transition instant polarity is switched to negative arc, and droplet flows freely into fusion pool, which fundamentally eliminates the generation of large-particle spatter and smoke, and ensures high-speed and high-quality welding.

Welding Features:

- High-speed and stable alternation of polarity, softer arc, 90% less spatter than traditional DC welding;
- Smooth droplet transition, small fluctuation in fusion pool, and weld shape is more delicate and beautiful;
- Gap tolerance is high and bridging ability is good, suitable for welding of large gaps and uneven gaps;
- Ultra-low heat input, to be easily competent in high-quality welding of 0.5mm ultra-thin plates
- Higher deposition efficiency and faster welding speed, and wire feeding speed is increased by 20% under the same current;
- Arc energy is low and dust amount during welding is small.



Product Specification

● Standard ○ Optional

Manual type	Dex2 Ultra 400AC	
Robotic type*	Dex2 Ultra 400ACR	
Welding Programs	DC	AC
LSA (Low Spatter Arc by Software)	●	-
Pulse	●	-
Quick pulse	●	-
Flux core carbon steel/DC	●	●
AC short circuit transition	-	●
AC pulse	-	●
AC double pulse	-	●
Carbon steel	●	●
Stainless steel	●	●
Aluminum alloy	●	●
Function		
U-disk interface	●	●
SMARC IOT	○	○
Technical Parameters		
Control Method	Digital IGBT Control	
Input voltage	3-phase AC 380 V (±25%)	
Input frequency	40~70Hz	
Inverter switching frequency	110kHz	
Rated input capacity	16.8KVA/15.5KW	
No-load voltage	77V	
Rated output current	DC 380A/350A	AC 350A/315A
Rated output voltage	DC 33V/31.5V	AC 31.5V/29.7V
Duty cycle	60%@380A 100%@350A	60%@350A 100%@315A
Power factor	0.92	
Efficiency	88%@400A	
Output characteristics	CV	
Wire feeding speed	0.5~28m/min	
Parameter JOB	50	
Operating temperature	-10℃~40℃ (welding power source can be started at -39℃)	
Dimension	L*W*H (mm) 647*291*572	
Weight	40KG	
Enclosure rating	IP23 S	
Insulation class	H	
Cooling method	Forced air	

Multiple Welding Programs

AC Pulse

It is mainly used for welding thin plates of aluminum alloy with lower heat input. It can easily realize superior welding of 0.5mm ultra-thin plates and higher deposition efficiency. Welding speed is increased by 20% compared with DC pulse, less dust without black oxides around welding seam.

AC Short Circuit Transition

It is mainly used to weld thin plates of carbon steel and alloy steel with lower heat input, be competent in welding of 0.5mm ultra-thin plates. Higher deposition efficiency and stronger gap tolerance is ensured.

QPT(Quick Pulse Technology)

It is mainly suitable for welding of medium&thick plates of carbon steel and stainless steel. It combines advantages of DC and pulse to achieve faster welding speed and less spatter.

Dex2 Communication Protocols with Robots

Function	TAST(Thru-arc Seam Tracking)	Touch Sensing	Communication Protocols with Robots						
		80-400V	Analog	DeviceNet	CANopen	MEGMEET CAN	EtherNet/IP	EtherCAT	Profinet
	●	●	○	○	○	○	⊛	⊛	⊛

● Standard ○ Optional ⊛ Customized

Robotic Wire Feeder Selection

Series	Model Name	Dimensions (L*W*H) mm	Welding Torch Interface	Weight (kg)	
Dex 2	WF1-50ZE	230x170x170	European type	6kg	
	WF1-50ZER	230x170x170	Asian type	6kg	
	WF1-50PW-7	223x152x221	European type	7kg	
	WF1-50PWR-7	223x152x221	Asian type	7kg	

Manual Wire Feeder Selection

	Enclosed wire feeder
	
Model Name	WF2-50P
Wire feeding drive control mode	Photoelectric encoder feedback /Back electromotive force
Wire feeder rated current	4.5A
Wire feeder rated voltage	24V
Wire feeding speed	0.5～28m/min
Wire feeding roller diameter	ϕ0.8～1.6 mm
Wire spool type	Standard wire spool
Drive unit	Double drive four rollers
Wire feeder torch interface	European interface
Dimension	630*250*400
Weight	14.5

Ehave2 CM Series

CO_2/MIG/MAG/DC TIG/MMA/Arc Gouging
All-in-one Machine

Ehave2 CM Series

CO_2/MIG/MAG/DC TIG/MMA/Arc Gouging
All-in-one Machine

DC | 380 3PH | 30-80 Hz | CV CC | Class D

Product Features

- A variety of programs combined into one machine, supporting CO2/MAG/MIG/TIG/MMA/ Arc Gouging/Fast Weld and others, could be expanded to robotic welding power source, rich in functions to meet various application conditions;
- Equipped with more than 20 items of independent patented technologies including arc starting soft-transition control, TIG arc ignition energy control, higher reliability and better performance;
- Droplet cleaning detection and control technology is adopted to automatically remove the end of wire to improve arc start success rate and quality;
- Extensive expert welding database, up to 99 groups of welding parameters storage/calling channels with one-key calling and easy operability;
- RFID card-linking function, more convenient management of welding machine usage authority, seamless connection with Megmeet SMARC System(welding management system);
- Software up-gradable to ensure customers obtaining Megmeet foremost welding process conveniently;
- With welding current and voltage limiting function, upper/lower limits of welding current and voltage can be set to prevent operating outside WPS parameters;
- Welding voltage and welding current compensation function to guarantee the stability of long-cable welding and the consistency of actual values and preset values;
- Heat conduction efficiency of IGBT is increased by 50%, and whole series of Ehave-2 products meet the national standard of first-class energy efficiency, more energy-saving and environment-friendly, and carbon emissions is reduced.
- Lightning protection level reaches Class D, wide-range input voltage is more suitable for severe power grids, and can expand to work with generator;
- All models of Ehave-2 series are 100% rated duty cycle, supporting to weld stably at a distance up to 50 meters and suitable for industrial heavy-duty harsh environments.

Ehave2 CM630M/500M/350M

- ☑ Carbon Steel
- ☑ Stainless Steel
- ☑ DC CO_2 /MAG
- ☑ DC MIG
- ☑ MMA
- ☑ Arc Gouging
- ☑ Simple TIG
- ☑ Fast Weld
- ☑ USB Upgrade Interface
- ☑ RFID
- ☐ SMARC IOT

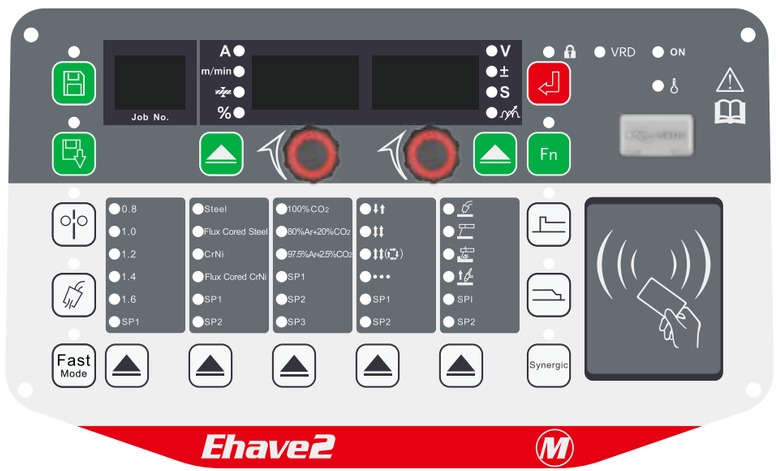
Ehave2 CM630B/500B/350B

- ☑ Carbon Steel
- ☐ Stainless Steel
- ☑ DC CO_2 /MAG
- ☐ DC MIG
- ☑ MMA
- ☑ Arc Gouging
- ☐ Simple TIG
- ☐ Fast Weld
- ☑ USB Upgrade Interface
- ☑ RFID
- ☐ SMARC IOT

☑ Standard ☐ Not Applicable

Front Display Panel

Ehave2(Basic Version) CM630B/500B/350B



Ehave2(Multi-function Version) CM630M/500M/350M

Multiple Function Options

CO_2/MIG/MAG

- Support Synergic/Separate adjustment, automatic matching of key parameters to meet high-quality welding requirements;
- 0.8, 1.0, 1.2, 1.4, 1.6mm welding wire, and customized 2.0 and 2.4mm welding process(SP);
- MAG flux-cored carbon steel and MIG DC stainless steel is also weldable.

Fast Mode Weld Function

- Mainly suited to spot welding and short-seam welding, and welding speed is able to increase with this function.

Simple DC TIG Function

- Scratch start/lift-start function is available for multi-purpose usages;
- Extensive parameter settings are friendly for various welding operations from thin to medium plates;
- Through overlapping control of arc, loss of tungsten electrode can be reduced and success rate of arc starting can reach 100%.

MMA Function

- Switch to "MMA function" through internal menu, and supports welding electrodes with a diameter of up to 6.0mm and suitable for various acid-type and alkaline welding electrodes;
- Applicable for long cable with adjustable arc starting current and arc force.

Arc Gouging Function

- With the function of "arc gouging", carbon rods with maximum diameter of 12mm can be gouged (by 630A model) for all positions;
- Quick cleaning of welding roots and gouging of reworked welding seams.

Application in Outdoor Power Generation Occasions (optional)

- A voltage stabilization module is designed for outdoor power generation.

RFID Card Linking

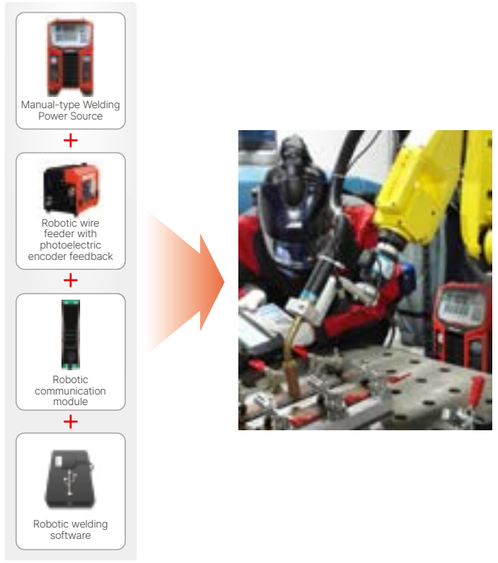
- RFID card swiping function enables quick linking between welding personnel and welding machines;
- Coordinated with SMARC welding information cloud-platform to realize more intelligent functions as: parameter issue, welding hours statistics, welding parameter traceability, etc.

U-Disk Interface

- To ensure customers conveniently obtaining Megmeet's foremost welding programs and function customization;
- Welding machine can be upgraded through U disk.

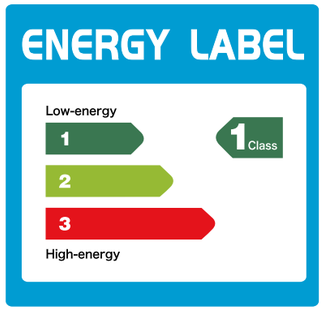
Intelligent Upgrade

With additional robotic accessories package, manual-type welding power source is able to be expanded to robotic welding power source.



First-Class Energy Efficiency

With the inverter technology of first-class energy efficiency, 3 kWh/day of electricity can be saved (only based on 300A welding with 4 working hours a day), compared with other inverter welding machines.



Specification

Manual Models	Ehave2 CM630B	Ehave2 CM500B	Ehave2 CM350B	Ehave2 CM630M	Ehave2 CM500M	Ehave2 CM350M
Robotic Models	-	-	-	Ehave2 CM630R	Ehave2 CM500R	Ehave2 CM350R
Process						
DC	●	●	●	●	●	●
Carbon steel	●	●	●	●	●	●
Stainless Steel	-	-	-	●	●	●
Simple TIG	-	-	-	●	●	●
MMA	●	●	●	●	●	●
Carbon arc gouging	●	●	●	●	●	●
Fast-weld Mode	-	-	-	●	●	●
Technical Specification						
Control Mode	Full Digital	Full Digital	Full Digital	Full Digital	Full Digital	Full Digital
Wire feeding drive control mode	HF opposing electromotive force					
Rated Input Voltage	AC 3PH 380V ±25%					
Input Frequency	50~60Hz	50~60Hz	50~60Hz	50~60Hz	50~60Hz	50~60Hz
Rated Input Power	32.4/30.4	23.1/21.7	13.1/12.4	32.4/30.4	23.1/21.7	13.1/12.4
Power Factor	0.94	0.94	0.95	0.94	0.94	0.95
Efficiency	0.91	0.9	0.89	0.91	0.9	0.89
Energy Efficiency	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1
Rated OCV	78V	73V	60V	78V	73V	60V
Rated Output Current	630A	500A	350A	630A	500A	350A
Rated Output Voltage	44V	39V	31.5V	44V	39V	31.5V
Rated Current Range	30~630A	30~500A	30~400A	30~630A	30~500A	30~400A
Rated Voltage Range	12~50V	12~45V	12~38V	12~50V	12~45V	12~38V
Duty Cycle	630A@100%	500A@100%	350A@100%	630A@100%	500A@100%	350A@100%
EMC	Class A	Class A	Class A	Class A	Class A	Class A
Protection Against Lightening	Class D	Class D	Class D	Class D	Class D	Class D
Welding Parameter Storage JOB	-	-	-	99	99	99
Insulation Grade	F (reactor H)	F (reactor H)	F (reactor H)	F (reactor H)	F (reactor H)	F (reactor H)
Ingress Protection	IP23	IP23	IP23	IP23	IP23	IP23
Working Temperature	−10℃~+40℃					
Dimension (L / W / H)	684X320X580mm					
Gross Weight	38KG	37KG	34KG	38KG	37KG	34KG
Extended function						
SMARC (Optional)	Support	Support	Support	Support	Support	Support
USB upgrade	Support	Support	Support	Support	Support	Support

Ehave-2 Communication Protocols with Robots

Function	TAST(Thru-arc Seam Tracking)	Touch Sensing	Communication Protocols with Robots						
		54V	Analog	DeviceNet	CANopen	MEGMEET CAN	EtherNet/IP	EtherCAT	Profinet
	●	●	○	○	○	○	⊛	⊛	⊛

● Standard ○ Optional ⊛ Customized

Robotic Wire Feeder Specification

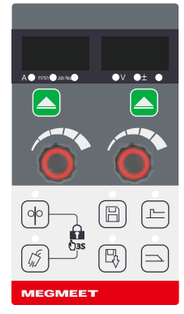
Machine Model	Model	Dimensions(L*W*H) mm	Welding Torch Connector	Weight
Ehave-2 Wire Feeder	WF1-50ZE	247.6x161.2x220.6	Euro Type (Default)	7.4kg
	WF1-50ZER	222.6x151.5x220.6	Japanese Type	7.15kg

Ehave-2 Robotic Wire Feeder Selection

Welding Power Source	Model	Product Diagram
(500A as example)	Ehave2 CM630R Ehave2 CM500R Ehave2 CM350R	
	WF1-50ZE Euro Connector(Default)	
	WF1-50ZER Japanese Connector(Optional)	

Manual-type Wire Feeder Specification

Wire Feeder	LED Display (Multifunction Version)		LED Display (Basic Version)		Knob-Type Display	
Motor Type	Printed Motor	Worm Gear[1]	Printed Motor	Worm Gear[1]	Printed Motor	Worm Gear[1]
Bracket Type	Single Drive/Double Drive*		Single Drive/Double Drive*		Single Drive/Double Drive*	
Adaptive Machine Model	Ehave2 CM630M/ CM500M/CM350M		Ehave2 CM630B/ CM500B/CM350B		Ehave2 CM630B/ CM500B/CM350B	
Communication with Welding Machine	HP CAN	HP CAN	HP CAN	HP CAN	Analog	Analog
Wire Feeding Drive Control Way	HF BEMF Control	HF BEMF Control	HF BEMF Control	HF BEMF Control	HF BEMF Control	HF BEMF Control
Rated Current	5.5A	3.5A	5.5A	3.5A	5.5A	3.5A
Rated Voltage	24V	24V	24V	24V	24V	24V
Wire Feeding Speed	1.2～28m/min	1.2～28m/min	1.2～28m/min	1.2～28m/min	1.2～28m/min	1.2～28m/min
Wire Dimension	0.8～1.6	0.8～1.6	0.8～1.6	0.8～1.6	0.8～1.6	0.8～1.6
Welding Torch Default Connector[2]	Japanese Type	Japanese Type	Japanese Type	Japanese Type	Japanese Type	Japanese Type
Dimension	519mm×200mm×370mm					
Weight	9.6kg/10.5kg	8.7kg/9.6kg	9.6kg/10.5kg	8.7kg/9.6kg	9.6kg/10.5kg	8.7kg/9.6kg



LED Display
(Multi-function Version)

LED Display
(Basic Version)

Knob-Type Display

*: Non-standard configuration, optional upgrade according to demand (wire spool cover could be added if required).

[1]: Worm Gear Motor: suitable for fast start/fast stop, high-rhythm welding operations

[2]: Japanese connector is defaulted and Euro connector is optional (should be noted in PO).

Manual-type Ehave-2 Recommended Selection

(500A As Example)

Manual-type Configuration	Model	Type	Product Diagram
Ehave2-B Series Default Configuration	Ehave2 CM500B	Basic Version	
	WF2-50ZPR	Single Drive/Printed Motor/ Knob-type Display	
Ehave2-M Series Default Configuration	Ehave2 CM500M	Multifunction Version	
	WF2-50ZPR-DM7	Single Drive/Printed Motor/LED Display(Multifunction Version)	

Optional Selections for Wire Feeder:

[1]: Wire spool cover;

[2]: Printed motor with double drive;

[3]: Worm gear motor with single/double drive;

[4]: Knob-type upgraded to LED display

Artsen CM500 C

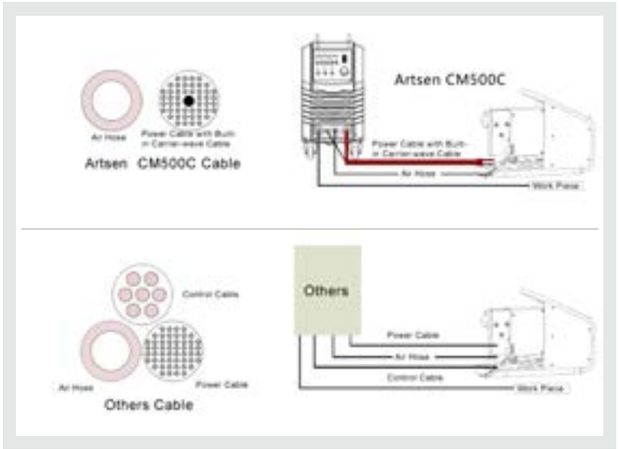
Born for Long-reach Welding.

100MTR

Artsen CM500C

Specially designed for sites and application with super long-reach welding such as shipbuilding, marine engineering and steel construction

Pioneer in adapting the Two-way Digital High-speed Carrier-wave Communication Technology

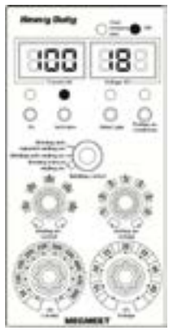


Product Features:

- Digital Microprocessor Controlled Inverter Technology
- Longer and 30% lighter interconnection cable set up to 100 m
- Stronger inter-connection cable set, better protection, less cable damages, much less down-time
- MAG / CO2 process with synergic control and MMA as standard
- Lighter but more functional wire-feeder for better mobility and easier operation
- Stable welding with stick-out length up to 30mm
- Achieving stabilized vertical-up welding at 150A with flux-cored wire and 50 m inter-connection cable set
- Protection of PCB and wire-feeder from vibration, collision, moisture and salty air
- Superior reliability with self-protecting design and error code display for easy trouble-shooting

Advantages of the Two-way Digital High-speed Carrier-wave Communication Technology

	Communication	Anti-interference Capability	A / V display on the wire-feeder	Reliability in wire-feeder PCBs
Artsen CM500C	the Two-way Digital High-speed Carrier-wave Communication Technology	Excellent	Yes	High
Traditional Carrier-wave Technology	One-way analog carrier-wave technology	Normal	No	Normal



The light-weighted wire-feeder supports A / V display. It also allows setting up of A / V, as well as parameters for starting and crater arc. It brings huge convenience to long-reach welding, and saves welders' time.

Industries and Application

Marine engineering

Technical Specification

Parameters	Artsen CM500C
Control Mode	Fully Digital-control
Carrier-wave Communication Method	Two-way Digital High-speed Carrier-wave Communication Technology
Rated Input Voltage	AC 3PH 380V -15% ~ 400 V +15% (3PH 323V ~ 3PH 460V)
Input Frequency	30 ～ 80 Hz
Rated Input Power	24KVA(22.3KW)
Power Factor	0.93
Efficiency	86%
Rated OCV	75V
Rated Output Current	50 ～ 500A
Rated Output Voltage	12 ～ 50V
Duty Cycle (40℃ / 10 min)	500A / 39V 100% @40℃
Certification	EN 60974-1
Protection Against Lightening	Class D (6000V/3000A)
Welding Operation Mode	2T / 4T / Special 4T
Inductance Scope (Soft / Strong Arc)	-9 ～ +9
Parameter Channel	10 (standard)
Reserved Communication Interface	CAN
Cooling Mode	Intelligent air cooling
Wire-feeder Digital Display	Included, welding parameter can be adjusted remotely
Wire-feeding Speed	1.4 ～ 24m/min
Insulation Grade	H
Ingress Protection	IP23 S
Working Temperature	Industrial heavy duty, -39℃～ +50℃
Dimension (L / W / H)	300×480×620mm
Gross Weight	52kg

Welding Process	Welding Material	Welding Wire Diameter (mm)	Shield-gas
Synergic CO_2 & MAG	Solid wire / Carbon steel	1.0/1.2/1.6	100% CO_2
	Solid wire / Carbon steel	1.0/1.2/1.6	80% Ar + 20% CO_2
	Flux-cored / Carbon steel	1.2/1.4/1.6	100% CO_2
DC MMA	Electrode	2.0 / 2.5 / 3.2 / 4.0 / 5.0 / 6.0 mm	

Wire-feeder	Standard	Euro	Lite
Connector	Japanese-type	Euro	Japanese-type
Roller	4-roller	4-roller	2-roller
			

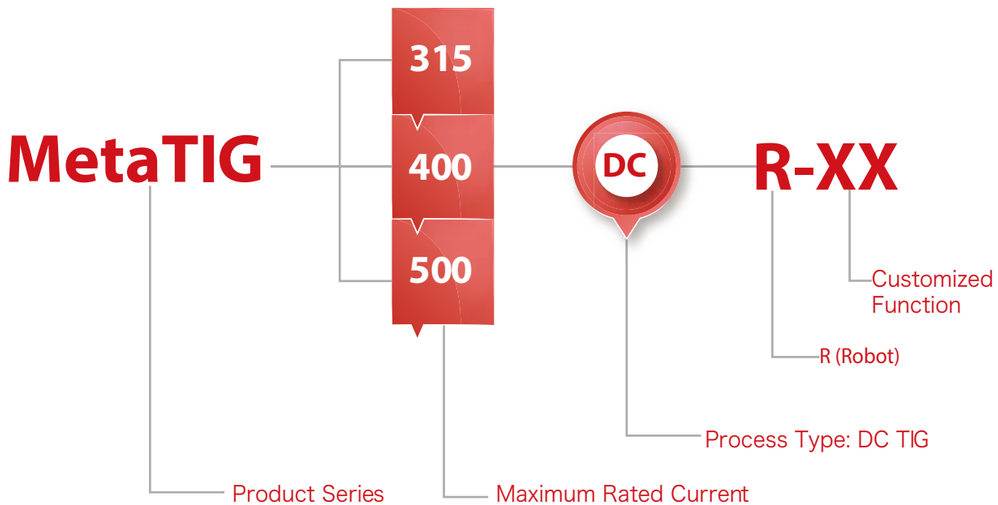
MetaTIG 315/400/500 DC

Full-digital IGBT Inverter
Multifunctional DC TIG

MetaTIG 315/400/500 DC

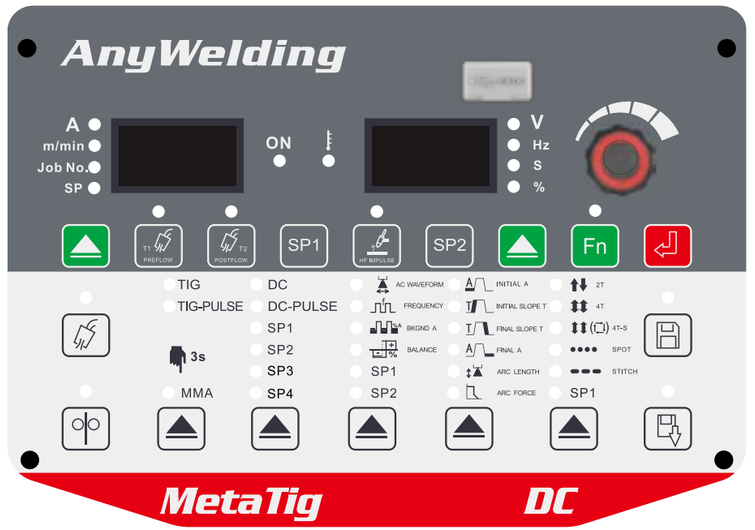
Full-digital IGBT Inverter Multifunctional DC TIG

DC | 380 3PH | 40~70 Hz | CC | Class D



Product Features

- Wide applications: supporting carbon steel, stainless steel, alloy steel and other metal materials;
- Comprehensive functions with pulse DC TIG, high-speed TIG spot welding, MMA and others;
- Full digital intelligent control is adopted. Internal background menu is open and adjustable to better satisfy more technological requirements of various working conditions;
- VRD anti-shock function with adjustable arc force and better arc stiffness in MMA mode;
- IOT interface is reserved to quickly access to Megmeet SMARC management platform or the third-party welding data system to realize efficient welding interconnection;
- Communication interface is reserved to support multiple types of communication protocols to connect with different brands of robots and automation devices;
- Software is upgradable through U-disk interface to help customers easily obtain Megmeet foremost welding process or customized functions;
- Optional foot switch, water-cooler, water-cooled torch, trolley, etc.



☑ Carbon Steel ☑ DC ☑ Spot Welding ☑ U-disk
☑ Stainless Steel ☑ Pulse ☑ MMA ☐ SMARC IOT

Extensive Welding Process

Diversified welding applications from ultra-thin to medium-thick plates with high-performance welding quality.

Welding Process Type	Welding Process Name	Advantage	Material	Industry
DC TIG	DC TIG	Stable arc, high adaptability for gap, easier for one-sided welding and double-sided forming	Carbon steel, stainless steel, titanium alloy, etc	Petrochemical, pressure pipeline&vessel backing weld, etc.
DC PULSE TIG	DC-Pulse TIG	Low heat input, beautiful fish-scale shape is available, pulse frequency up to 3000Hz	Carbon steel, stainless steel, titanium alloy, etc	Sheet metal and welding occasions with requirements for heat input and weld form, etc.
MMA	MMA	Easy arc start, non-stick with rod, softer arc&less spatter, and beautiful weld shape	Carbon steel, alloy steel, stainless steel, etc.	Boiler, pressure vessel, petrochemical industry, pressure pipeline, outdoor construction, etc.

Multiple waveform controls provide optimal combination according to welding needs

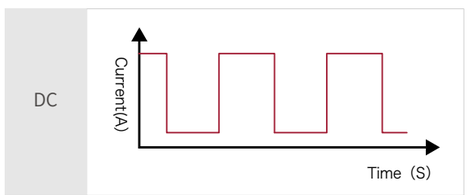
- With triangle wave, square wave, sine wave, trapezoidal wave and others;
- Optimal setting for waveform in different welding phases.

Conventional TIG Welding

Triangular-wave TIG Welding

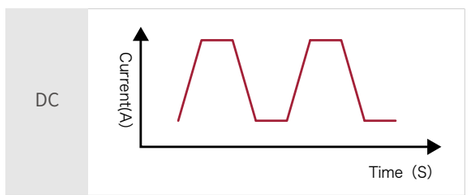
Square Wave

Precise control in current waveform and accurate adjustment in parameters of peak current, base current, frequency and others, with high arc stability and good dynamic characteristics, applicable for various stainless steel welding.



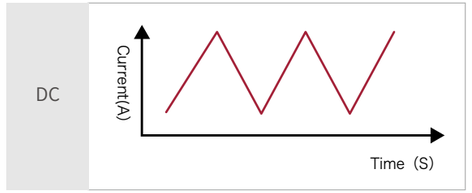
Trapezoidal Wave

Soft arc brings good wetting effect to fusion pool, suited to groove welding and overhead welding.



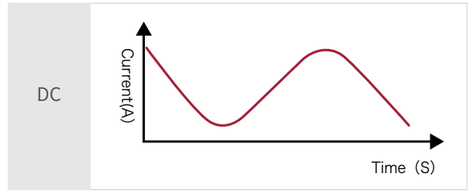
Triangle Wave

Short peak-time and low heat-input, suitable for thin sheet welding.



Sine Wave

Arc noise is smaller and softer.



Arc is able to start and stabilize at 3A in DC welding

- Unique circuit design supports arc to start at 3A and stabilize at 3A in DC welding, ensuring continuous arc in very small current.

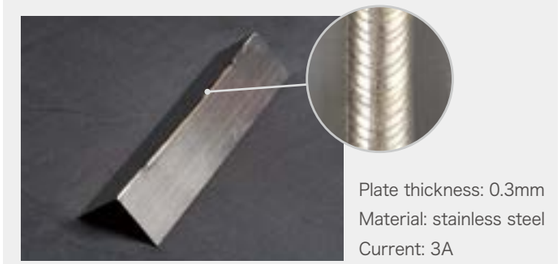
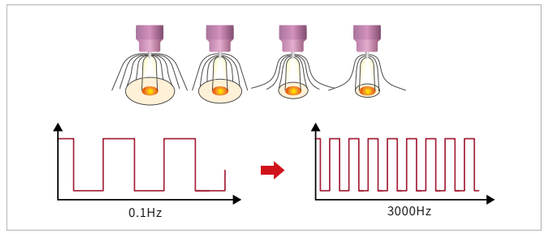


Plate thickness: 0.3mm
Material: stainless steel
Current: 3A

0.1Hz-3000Hz High Frequency Output

Suited to high-quality welding from extreme thin to medium-thick plates

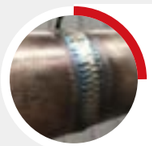
- In low-frequency pulse (0.1-10Hz), arc column is wide, adaptive for all-position welding;
- In medium-high frequency pulse (10-3000Hz), arc directivity is strong and heat input is low, supporting high-speed welding and fillet welding in thin plates.



Regular 1.5Hz

3000Hz high-frequency enables more concentrated arc

Be capable to weld diverse metal materials



Carbon Steel

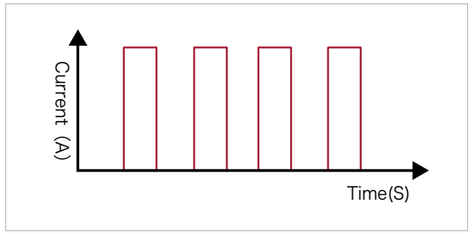
Output current ripple is small and arc is stable. Fusion pool is well controllable.

Stainless Steel

High-frequency pulse effectively compresses welding arc and reduce heat-input, bringing easier weldability and better welding shape to stainless steel thin plate.

High-stability TIG Spot Welding Function

- Fine regulation is suitable for high-quality welding of ultra-thin plates;
- Setting range of spot welding time is 0.1-30 seconds (tuning unit is 0.1 seconds). Arc is stable and welding spot is consistent.



Spot welding function is not used

Spot welding function is used

U-Disk Interface

- To ensure customers quickly obtaining Megmeet foremost welding software and customized functions;
- Welding process and software could be sent to user by email and upgraded into machines through U-disk interface.

Circulating Water Cooler (Optional)

Circulating Water Cooler AnyCool-66	
Water cooler power supply	Powered by welding machine
Rated power	370W
Rated voltage	380V AC
Cooling water capacity	6.8L
Cooling water flow	3.5L/min
Cooling water maximum lift	20m
Flow alarm	√

Foot Switch

- Easy operation in current adjustment;
- Current is able to be set with the maximum range: 5~500A;
- 5-pin control cable and 2 meters of length (can be extended as demand) to meet long-distance welding;
- Control modes are optional. Current can be adjusted by foot switch or by welding machine as needed.

Technical Specification

Model	MetaTIG 500 DC	MetaTIG 400 DC	MetaTIG 315 DC
Control method	Full-digital IGBT Control	Full-digital IGBT Control	Full-digital IGBT Control
Input voltage	3 Phase AC 380 V(±25%)	3 Phase AC 380 V(±25%)	3 Phase AC 380 V(±25%)
Input frequency	40~70Hz	40~70Hz	40~70Hz
Inverter switching frequency	110KHz	110KHz	110KHz
Rated input capacity	24.4KVA/22KW	17.5KVA/16KW	12.5KVA/11.4KW
Rated output no-load voltage	68V	68V	68V
Rated output current	500A	400A	315A
Rated output voltage	30V	26V	22.6V
Duty cycle	40%@500A	100%@400A	100%@315A
Set current range	DC TIG 3-500A	DC TIG 3-400A	DC TIG 3-315A
	MMA 30-500A	MMA 30-400A	MMA 30-315A
Power Factor	0.94	0.94	0.94
Efficiency	90%@500A	91%@400A	91%@315A
DC pulse frequency	0.1-3000Hz	0.1-3000Hz	0.1-3000Hz
Pulse Width	1-99%	1-99%	1-99%
Arc striking method	High-frequency arc/Lifting arc		
Parameter JOB	50 Groups	50 Groups	50 Groups
Rise Time	0-20s Continuous regulation (0.1s increments)		
Fall time	0-20s Continuous regulation (0.1s increments)		
Pre-gas time	0-25s Continuous regulation (0.1s increments)		
Post-gas time	0-25s Continuous regulation (0.1s increments)		
Output terminal	Quick plug	Quick plug	Quick plug
Foot Switch (optional)	√	√	√
Protection rating	IP23	IP23	IP23
Insulation class	H	H	H
Cooling method	Forced-air	Forced-air	Forced-air
Dimensions (length x width x height)	647x291x572mm	647x291x572mm	647x291x572mm
Weight	37kg	37kg	37kg
Extension function			
IOT SMARC System (optional)	√	√	√
USB Upgrade	√	√	√
Robot (optional)	√	√	√
LCD front panel (optional)	√	√	√

MetaTIG
315/400/500 ACDC

Full-digital IGBT Inverter
Multifunctional ACDC TIG

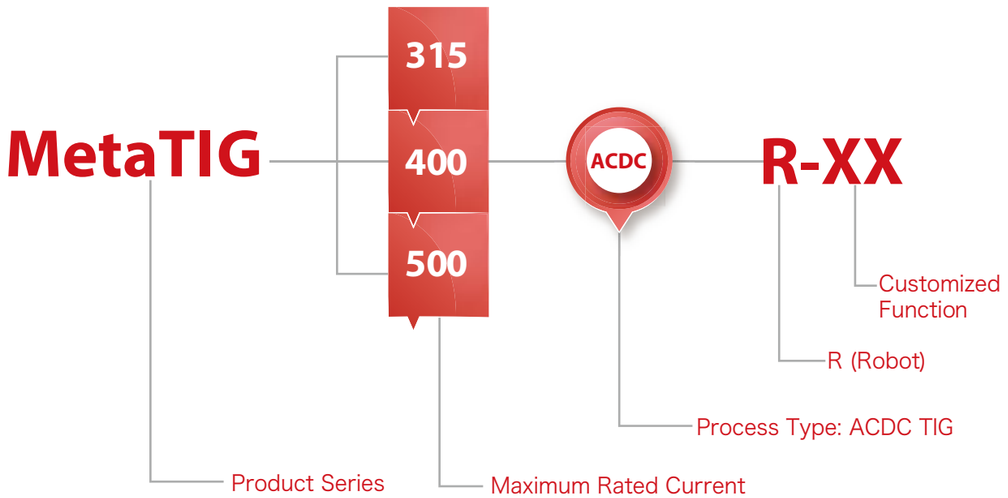
MetaTIG 315/400/500 ACDC

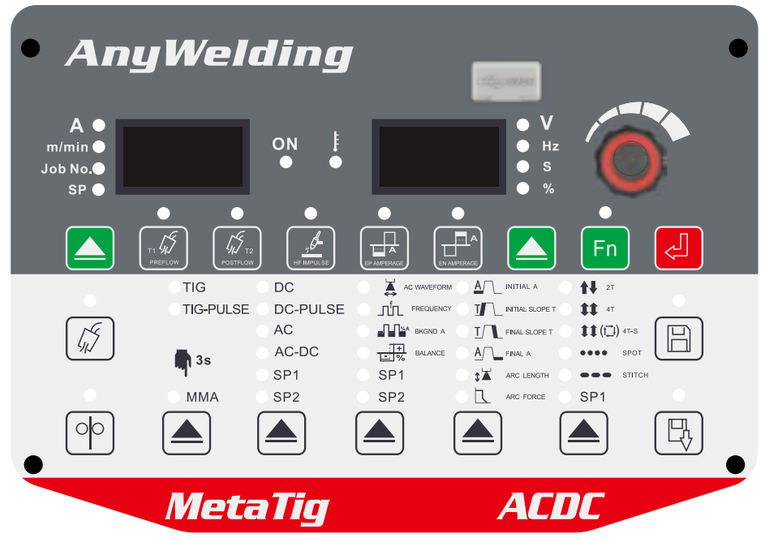
Full-digital IGBT Inverter Multifunctional ACDC TIG

AC/DC | 380 3PH | 40~70 Hz | CC | Class ① | | |

Product Features

- Comprehensive applications: carbon steel, 9Ni, stainless steel, alloy steel, copper, magnesium alloy, aluminum, AL alloy and others, adaptive for dissimilar-metal welding;
- Extensive functions with AC-DC TIG, AC-DC Pulse TIG, high-speed TIG spot welding and MMA;
- Full digital intelligent control is adopted. Internal background menu is open and adjustable to better satisfy more technological requirements of various working conditions;
- VRD anti-shock function with adjustable arc force in MMA mode and better arc stiffness;
- IOT interface is reserved to quickly access to Megmeet SMARC management platform or the third-party welding data management system to realize efficient welding interconnection;
- Communication interface is reserved to support multiple types of communication protocols to connect with various brands of robots and automation devices;
- Software is up-gradable through U-disk interface to help customers easily obtain Megmeet foremost welding process or customized functions;
- Optional foot switch, water-cooler, water-cooled torch, trolley, etc.





☑ Carbon Steel ☑ Pulse ☑ Al Alloy ☑ DC ☑ Spot Welding ☑ AC-DC
☑ Stainless Steel ☑ TIG-Pulse ☑ MMA ☑ AC ☑ U-disk ☐ SMARC IOT

Extensive Welding Process

Welding Process Type	Welding Process Name	Advantage	Material	Industry
DC TIG	DC TIG	Stable arc, high adaptability for gap, easier for one-sided welding and double-sided forming	Carbon steel, stainless steel, titanium alloy, etc	Petrochemical, pressure pipeline&vessel backing weld, etc.
DC PULSE TIG	DC-Pulse TIG	Low heat input, beautiful fish-scale shape is available, pulse frequency up to 3000Hz	Carbon steel, stainless steel, titanium alloy, etc	Sheet metal and welding occasions with requirements for heat input and weld form, etc.
AC TIG	AC TIG	Stable arc, AC frequency up to 300Hz	Aluminum, aluminum alloy, magnesium, etc.	Aluminum alloy pipelines, bicycle frame welding with high appearance requirements, etc.
AC TIG Pulse	Double Pulse AC TIG	Low heat input, clear fish-scale welding shape	Aluminum, aluminum alloy, magnesium, etc.	Aluminum alloy thin-plate and welding occasion requiring heat input and weld forming , etc.
AC-DC TIG Pulse	Double-pulse AC-DC TIG	Deeper penetration and less tungsten loss	Aluminum alloy, aluminum, magnesium etc.	Aluminum alloy medium&thick plates, and welding occasions requiring depth of penetration, etc.
MMA	MMA	Easy arc start, non-stick with rod, softer arc&less spatter, and beautiful weld shape	Carbon steel, alloy steel, stainless steel, etc.	Boiler, pressure vessel, petrochemical industry, pressure pipeline, outdoor construction, etc.

Multiple waveform controls provide optimal combination according to welding needs

- Multiple selections with triangle wave, square wave, sine wave, trapezoidal wave and others;
- Optimal setting for waveform in different welding phases;
- EN/EP range ratio is able to be adjusted to efficiently clean oxide film on surface while ensuring the depth of penetration.

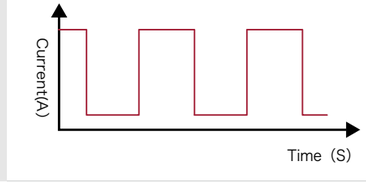
Conventional TIG Welding

Triangular-wave TIG Welding

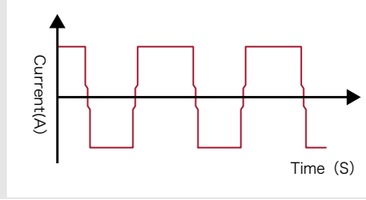
Square Wave

DC/AC square wave, polarity fast-switching, high-stability of arc, good dynamic characteristics, strong-ability to clean aluminum oxide film, suitable for a wide range of aluminum and aluminum alloy welding.

DC



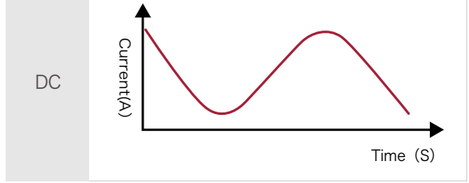
AC



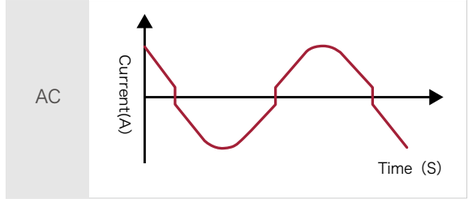
Sine Wave

DC/AC sine wave, rectangular transition at zero-crossing point, less and softer arc noise.

DC



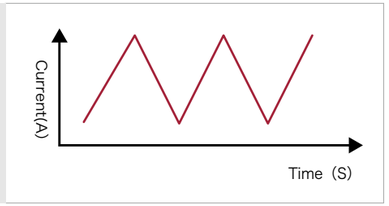
AC



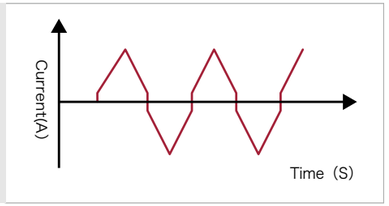
Triangle Wave

Short peak-time and low heat input, suited to welding of thermo-sensitive metals as thin plates.

DC



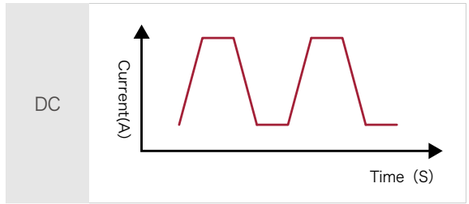
AC



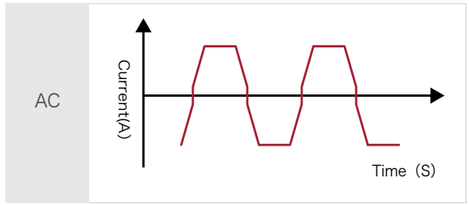
Trapezoidal Wave

DC/AC trapezoidal wave, polarity stable-switching, soft arc brings good wetting effect to fusion pool, applicable for groove welding and overhead welding.

DC



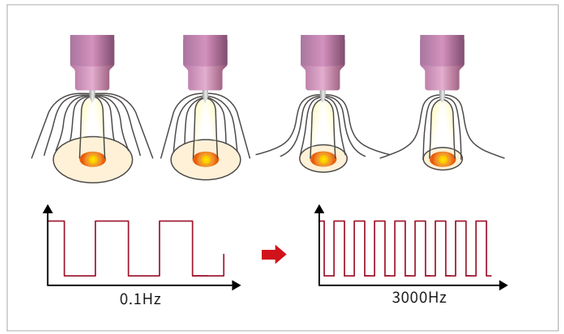
AC

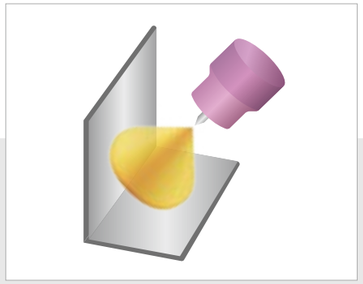


0.1Hz-3000Hz High Frequency Output

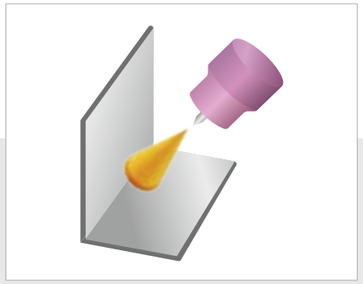
Enables high-quality welding from extreme-thin to medium-thick plates

- In low-frequency pulse (0.1-10Hz), arc column is wide, adaptive for all-position welding;
- In medium-high frequency pulse (10-3000Hz), arc directivity is strong and heat input is low, supporting thin plate high-speed welding and fillet welding.





Regular 1.5Hz



3000Hz high-frequency brings more concentrated arc

Arc is able to start and stabilize at 3A in DC welding

- Unique circuit design supports arc to start at 3A and stabilize at 3A in DC welding, ensuring continuous arc in very small current.

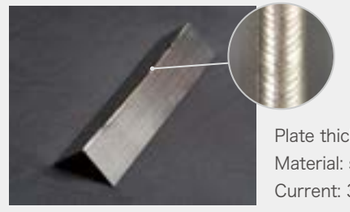
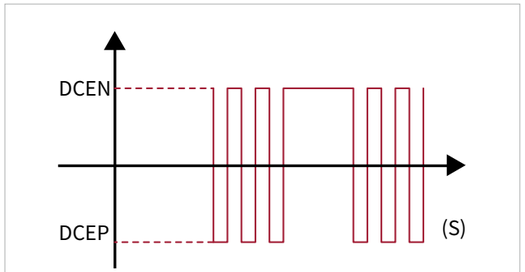
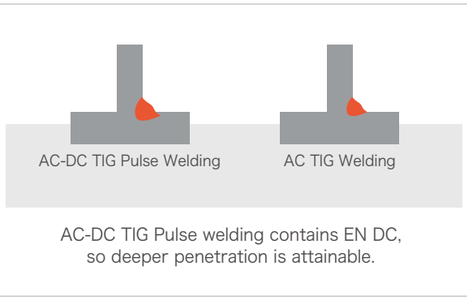


Plate thickness: 0.3mm
Material: stainless steel
Current: 3A

AC-DC Pulse

- DC is blended into AC-wave to further raise the heat input of base metal and increase the depth of penetration;
- In AC-DC Pulse, tungsten rod loss could be reduced in DCEN;
- In AC-DC Pulse, EP ratio is adjustable in AC section to improve cleaning effect;
- Arc stiffness and concentration is good and heat input is high to further improve welding efficiency.



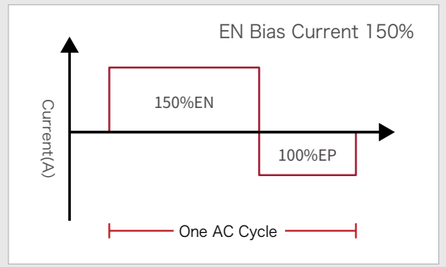


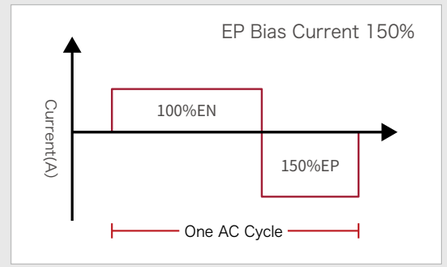
AC-DC TIG Pulse welding contains EN DC, so deeper penetration is attainable.

EN and EP range ratio is separately adjustable.

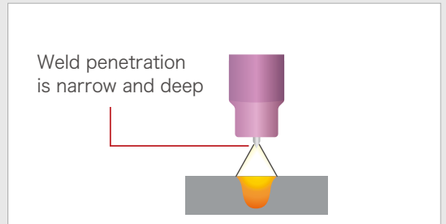
Range ratio of EN and EP is able to be independently adjusted to further change the cleaning strength of oxide film, as well as welding penetration depth and width, to realize easier welding operation.

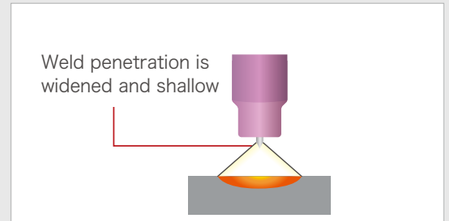
Waveform



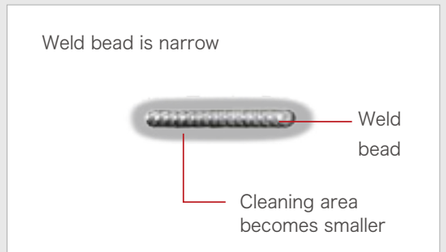


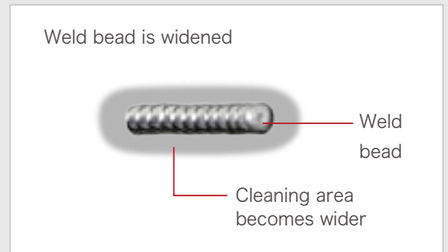
Penetration Varies





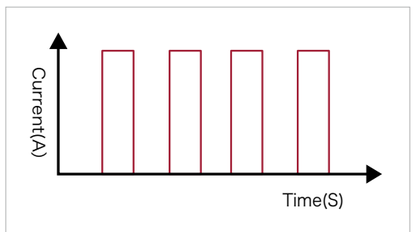
Weld Forming

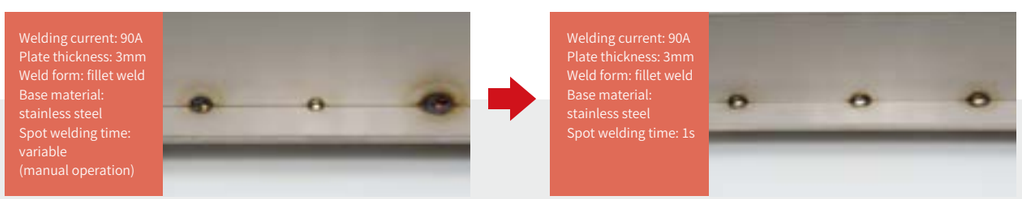




High-stability TIG Spot Welding Function

- Fine regulation is suitable for high-quality welding of ultra-thin plates;
- Setting range of spot welding time is 0.1-30 seconds (adjustment unit is 0.1 seconds) with stable arc and consistent solder joints

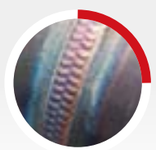




Spot welding function is not used

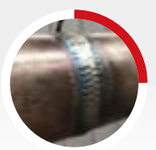
Spot welding function is used

MetaTIG ACDC Series is capable to weld diversified metals.



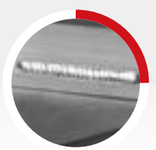
Carbon Steel

Output current ripple is small and arc is stable. Fusion pool is well controllable.



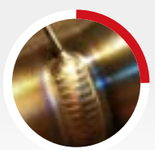
Stainless Steel

High-frequency pulse effectively compresses arc and reduces heat-input, easier welding for thin-plate stainless steel and welding shape is more beautiful.



Aluminum Alloy

Variable polarity to adjust the range ratio of EN and EP, combined with the cleaning width, brings high-quality welding for aluminum alloy welding.



Copper

With unique triangular wave, sine wave, square wave, trapezoidal wave, complex wave and other waveforms, welding for copper, titanium, magnesium and other troublesome metals is easier.

U-Disk Interface

- To ensure customers quickly obtaining Megmeet foremost welding software and customized functions;
- Welding process and software could be sent to user by email and upgraded into machines through U-disk interface.

Aluminum Alloy Welding

- Machine Name: MetaTig 500 ACDC
- Product Name: Aluminum alloy oil-tank truck
- Welding position: Jointed welding of tank body plate
- Automation: Automation Device for Plate-Jointing
- Base material: Al-Mg/5182/65.7
- Welding consumables: Er5183/Medium 1.6
- Joint type: butt joint/no groove/no gap

Welding parameters:

- Peak current 280A
- Base current 140A
- Pulse frequency 2.2Hz
- AC frequency 60Hz
- Duty cycle 50%
- Wire feeding speed 1.8m/min
- Welding speed 170mm/min

Foot Switch

- Easy operation in current adjustment;
- Current is able to be set with the maximum range: 5~500A;
- 5-pin control cable and 2 meters of length (can be extended as demand) to meet long-distance welding;
- Control modes are optional. Current can be adjusted by foot switch or by welding machine as needed.

Circulating Water Cooler (Optional)

Circulating Water Cooler AnyCool-66	
Water cooler power supply	Powered by welding machine
Rated power	370W
Rated voltage	380V AC
Cooling water capacity	6.8L
Cooling water flow	3.5L/min
Cooling water maximum lift	20m
Flow alarm	√

Technical Specification

Model	MetaTIG 500 ACDC	MetaTIG 400 ACDC	MetaTIG 315 ACDC
Control method	Full-digital IGBT Control	Full-digital IGBT Control	Full-digital IGBT Control
Input voltage	3 Phase AC 380 V(±25%)	3 Phase AC 380 V(±25%)	3 Phase AC 380 V(±25%)
Input frequency	40-70Hz	40-70Hz	40～70Hz
Inverter switching frequency	110KHz	110KHz	110KHz
Rated input capacity	25.2KVA/21.9KW	15KVA/13.5KW	12.9KVA/11.4KW
Rated output no-load voltage	68V	68V	68V
Rated output current	500A	400A	315A
Rated output voltage	30V	26V	22.6V
Duty cycle	20%@500A 100%@315A	60%@350A 100%@315A	100%@315A
Set current range	DC TIG 3-500A	DC TIG 3-400A	DC TIG 3-315A
	AC TIG 4-500A	AC TIG 4-400A	AC TIG 4~315A
	MMA 30-500A	MMA 30-400A	MMA 30-315A
Power Factor	0.94	0.94	0.94
Efficiency	87%@500A	88%@400A	88%@315A
DC pulse frequency	0.1-3000Hz	0.1-3000Hz	0.1-3000Hz
AC pulse frequency	20-300Hz	20-300Hz	20-300Hz
Pulse Width	1-99%	1-99%	1-99%
Arc striking method	High-frequency arc/Lifting arc		
Parameter JOB	50 Groups	50 Groups	50 Groups
Rise Time	0-20s Continuous regulation（0.1s increments）		
Fall time	0-20s Continuous regulation（0.1s increments）		
Pre-gas time	0-25s Continuous regulation（0.1s increments）		
Post-gas time	0-25s Continuous regulation（0.1s increments）		
Output terminal	Quick plug	Quick plug	Quick plug
Foot Switch(optional)	√	√	√
Protection rating	IP23 S	IP23 S	IP23 S
Insulation class	H	H	H
Cooling method	Forced-air	Forced-air	Forced-air
Dimensions (length x width x height)	647x291x572mm	647x291x572mm	647x291x572mm
Weight	40kg	40kg	40kg
Extension function			
IOT SMARC System (optional)	√	√	√
USB Upgrade	√	√	√
Robot (optional)	√	√	√
LCD front panel (optional)	√	√	√

Robotic and Automatic Welding

Communications Protocols with Industrial Robots

Model	Communications Protocols with Industrial Robots							Touch-sensing			TAST
	Analog	DeviceNet	EtherNet/IP	EtherCAT	ProfiNet	CANOpen	MEGMEET CAN	80-400V	54V	5V	
Ehave2	○	○	⊛	⊛	⊛	○	○		●		●
Artsen II CM / PM	○	○	○	○	○	○	○		●	●	●
Artsen Plus /Pro	○	○	○	○	○	○	○		●	●	●
Dex DM /PM	○	○	○	○	○	○	○				●
Dex2 Series	○	○	⊛	⊛	⊛	○	○	●			●

● Standard ○ Optional ⊛ Customized

- For 7 consecutive years since 2014, MEGMEET have been the market leader with the highest share of GMAW (MIG/MAG/CO_2) equipment for robotic arc welding in China, the biggest single-country market in the world.
- Capable to communicate with industrial robot and cobot by almost all international or regional manufacturers. Convenient to select robot type thru one click in the internal menu.
- Multiple baud rate built-in, capable of communicating with multiple third-party devices simultaneously.
- 54V for touch sensing, allowing better performance with workpieces with rust, dirt and oily surface.
- Perfectly support TAST (Thru-arc Seam Tracking) function by robots by different manufacturers. Especially suitable for robotic welding of thick plates.
- High speed inter-communication of welding parameters with robot controller. Highly open with parameter adjustments.
- Supporting push-pull torch for robotic welding. Capable of synchronizing motor torque and speed between the push-pull torch and wire-feeder without extra devices. Capable of driving push-pull torch directly. [1]
- Relay wire-feeder of synchronization optionally available for wire barrels, especially suitable for welding conditions with long wire conduits. [2]

[1] : Artsen series and Artsen Plus series supports robotic push-pull torch.
[2] : The relay wire-feeder is only optional for Artsen Plus / Pro series.

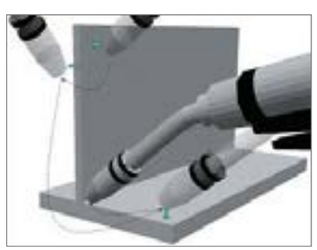
Smart Design and Rich Experience in Robotic Arc Welding

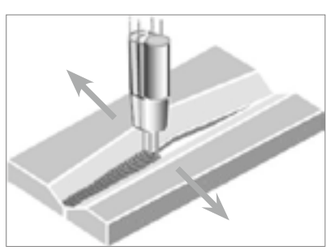
- ABB
- Cobot
- FANUC
- KUKA
- YASKAWA
- KAWASAKI
- COMAU

EtherNet/IP
PROFINET
EtherCAT
DeviceNet
CANopen
MEGMEET CAN
Analog

Functions of Robot Arc Welding

- Touch sensing with high voltage (54V)
- Thru-Arc Seam Tracking (TAST)
- Multi-layer and multi-pass welding



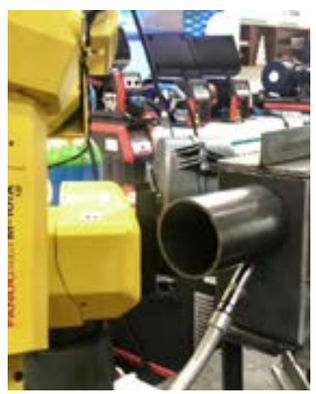


Smart Compensation for Extra Long Cables

- Correction of welding parameters P23 (on)
- Compensation for resistance
- Compensation for inductance
- Smart compensation ensures more stabilized welding
- Particularly suitable for welding large-sized workpiece

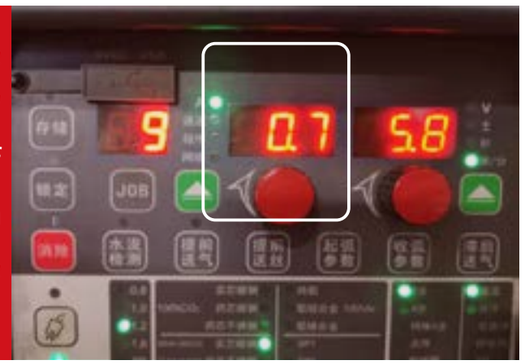
Instant Switch between Welding Jobs

Only one arc ignition is needed to achieve rapid switch between different welding jobs. All happens within 0.08 seconds. Welding spatter and possible defects caused by new ignition are avoided. It is particularly suitable for robotic welding under complex conditions



Display of Wire-feeding Resistance

The machine panel can display the "wire feeding resistance coefficient" to remind customers to check if the wire-feeding system is smooth enough so as not to affect the welding quality



Robotic Wire-feeders

Euro-connector
(standard)

Features:

- Buttons available for fast operation of wire-feeding, wire withdrawing, and gas check for Artsen Plus / Pro
- Switching between mechanisms of encoder feedback and "Opposing electromotance feedback"
- Supporting push-pull torch

Japanese-connector
(Optional)

Specification of Robotic Wire-feeders

Model	Euro Connector	Japanese-type Connector	Weight (kg)	Water-cool	Dimension (L / W / H) mm
Artsen II CM/PM Series	Standard	Optional	6.8	Standard	303*170*205
Artsen Plus / Pro Series	Standard	Optional	6	Standard	230*170*170
Ehave2 Series	Standard	Optional	7.4	Optional	248*161*221
Dex DM/PMSeries	Standard	Optional	6	Optional	230*170*170
Dex2 Series	Standard	Optional	7	Optional	230*152*221

Remote Controller

Features:

- Supporting welding automation, convenient adjustment of welding parameters at real-time Synergic control
- Control cable length up to 25m

* Only optional for Artsen Plus / Pro series

Cooling-unit

Specification

AnyCool-100

For Artsen II CM/PM series, and Artsen Plus / Pro series

Water cooler AnyCool-100	
Power Supply	By welding power source
Rated Power	260W
Rated Voltage	380V-400V AC
Volume of Cooling Water	10L
Flow Speed	3.5L/min
Max Pump Head	26m
Flow Alarm	Yes

AnyCool-68

For Dex PM3000 / PM3000 Q / PM3000 S / PM3000 QS / PM3000 R

Water cooler AnyCool-68	
Power Supply	By welding power source
Rated Power	260W
Rated Voltage	380V-400V AC
Volume of Cooling Water	6.8L
Flow Speed	3.5L/min
Max Pump Head	20m
Flow Alarm	Yes

AnyCool-66

For Dex2 series, Meta TIG series, Ehave2 series

Water cooler AnyCool-66	
Power Supply	By welding power source
Rated Power	370W
Rated Voltage	380V AC
Volume of Cooling Water	6.8L
Flow Speed	3.5L/min
Max Pump Head	20m
Flow Alarm	Yes

Powering the Future

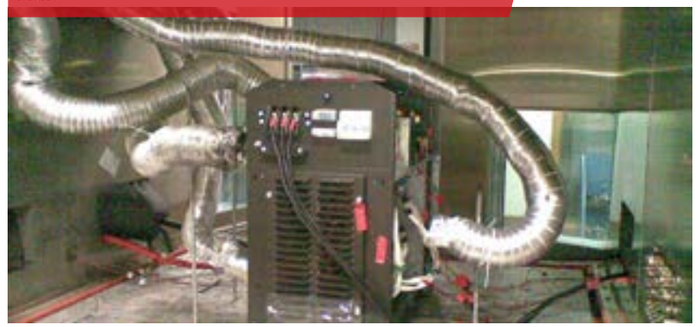
Reliability

Re-defining reliability and stability of inverter welding machines.

Firm and strong like a rock, even being used at outdoors or under tough conditions

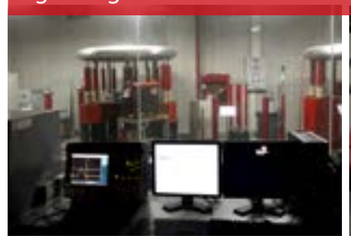
Quality

Halt



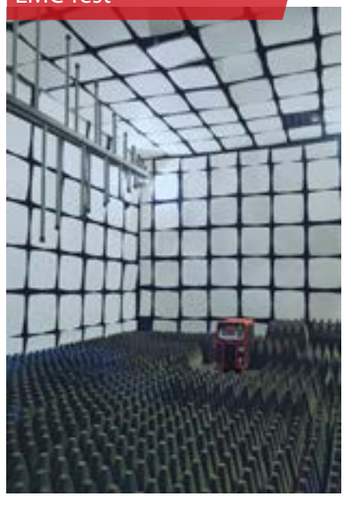
All the imaginable harsh conditions are added on testing the welding machine at the same time. The severity levels are gradually increased, until the welding machine break down. After that, the short-board analysis is performed, and the design is continuously optimized. The process was performed again and again. Test conditions include, but not limited to, full load operation, vibration, high temperature, high humidity, ultra-low temperature, salt spray, conductive dust, power surge, voltage drop, ESD, EFT, etc. The designed product lifetime of the welding power source reaches 10 years after HALT test. It is the highest for arc welding equipment of inverter technologies.

Lightning Protection Test



The industry's unique Class D (6000V/3000A) surge lightning device is used to conduct extreme tests on the welding machine. To ensure stable and reliable work under the conditions of thunder and lightning and large fluctuations in the network voltage of the customer's factory. It avoids "soft damage" to the welder, and greatly extend the life of the welding machines

EMC Test



Passing EMC Test ensures welding power source not to interfere with other equipment nearby, or to be interfered. It is especially suitable for complex robot welding production line and other intelligent factories.

Conductive Dust Test

Iron powder and graphite powder floating in the air are used as test conditions to ensure that the welding machines are highly reliable under similar harsh working conditions.

High and Low Temperature Impact Test

For the purpose of ensuring MEGMEET products'performance at indoor and outdoor in different countries, this test verifies the stability and reliability of the welding machines' output parameters under high and low working temperatures.

Salt Spray Test

The Salt Spray Test can test the corrosion resistance of the welding machine. Passing this test, the welding machine can be more suitable for the high salinity and high humidity environment such as in the ship-building and marine engineering industries

Water Spray Test

Make sure that the welding machine can work reliably under the raining situation

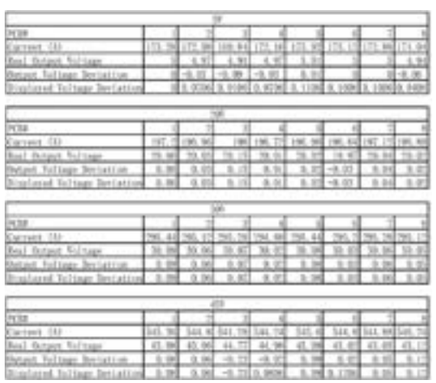
Mechanical Vibration

Multi-angle Free-fall Test

These tests examinates the robustness of the whole structure, packaging its components, as well as the workmanship of final assembly. It ensures quality and performance after transportations and falls

Consistency

Consistent performance by any machine, anytime, anywhere



- Thanks to the design of high-frequency inverter and excellent full digital control, the dependency on the accuracy of hardware parameters are largely lowered. Consistent performance of each welding power source is therefore ensured even under large fluctuation of input power network
- By using components of low temperature drift and high accuracy, the output performance are kept consistently from turning-on to long-time operation, and from -10℃ to +50℃ working temperature
- Multiple compensations and automatic adjustments are designed for components in the sampling and control section, which ensures the consistency of each machine performance.

Stability and Reliability

Stability is the cornerstone of intelligent welding machine

Stable as Always

Through leading power electronics and software technology, high-frequency digital sampling, and circuit correction, it's as stable as a new welding machine, whether it's a year, five years, or ten years

Intelligent Adjustment

The stick-out length is changeable when the welding arc reaches a different position. By using 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.

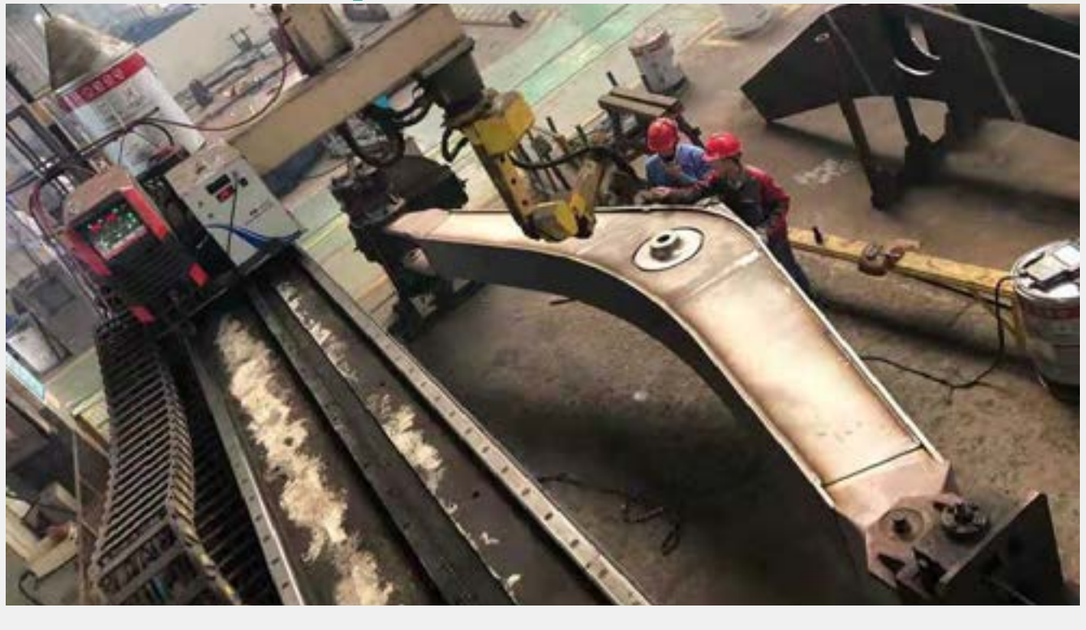
Smart Compensation

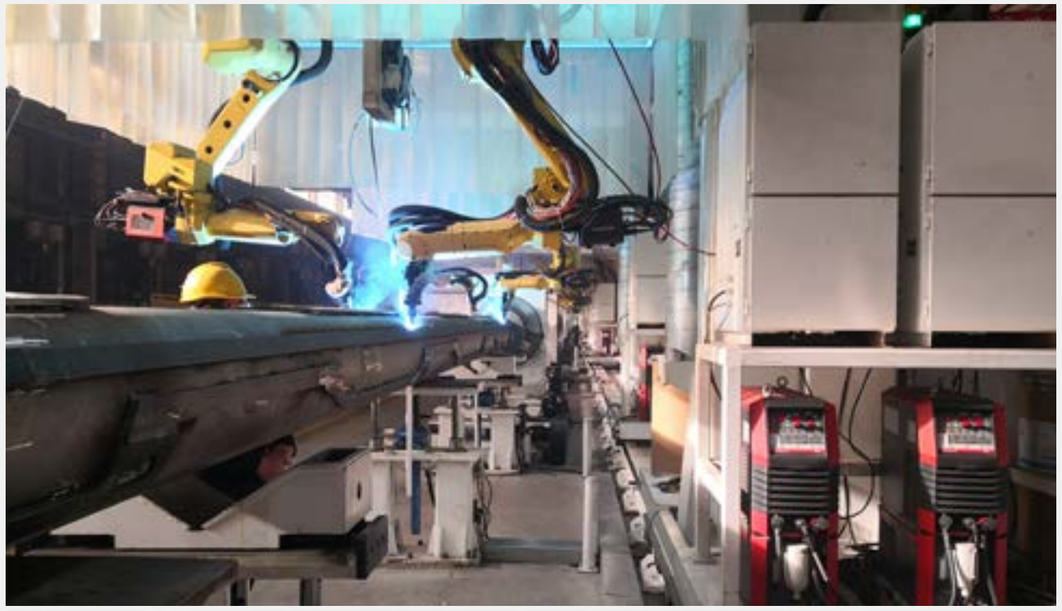
By adopting the technology of compensation on macroscopic welding voltage, MEGMEET power source is able to prevent arc voltage from decreasing when working with connection cable of 5m or 50m

Applications and Cases

“For over 10 years, we have been devoted to researching the basic disciplines of arc welding and welding engineering application technology. Today, we are highly recognized by the industry. This is due to MEGMEET's strong multidisciplinary technical team, corporate R&D platform and the spirit of innovation. We firmly believe that we can help our customers overcome their challenges in the welding production process, and ensure that customers can focus on their core business other than welding, so that they will stand out.”

Construction Machinery



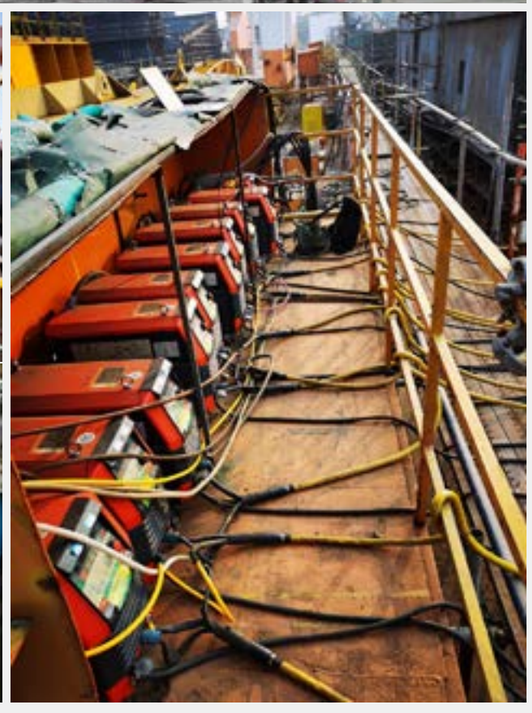


MEGMEET
WELDING TECHNOLOGY

Mining Machinery

MEGMEET
WELDING TECHNOLOGY

Ship-building & Marine Engineering



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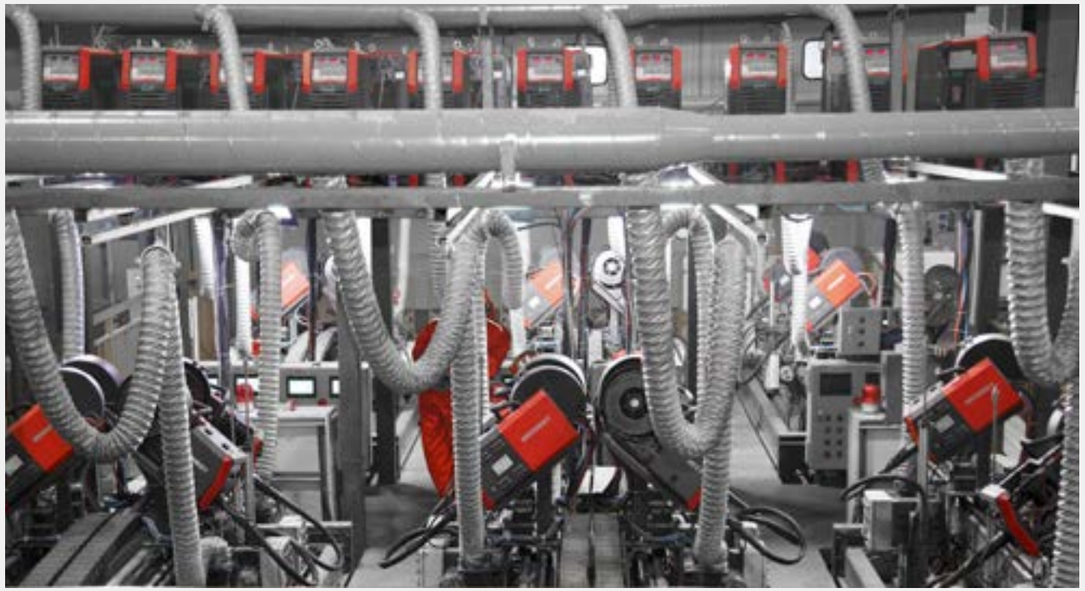
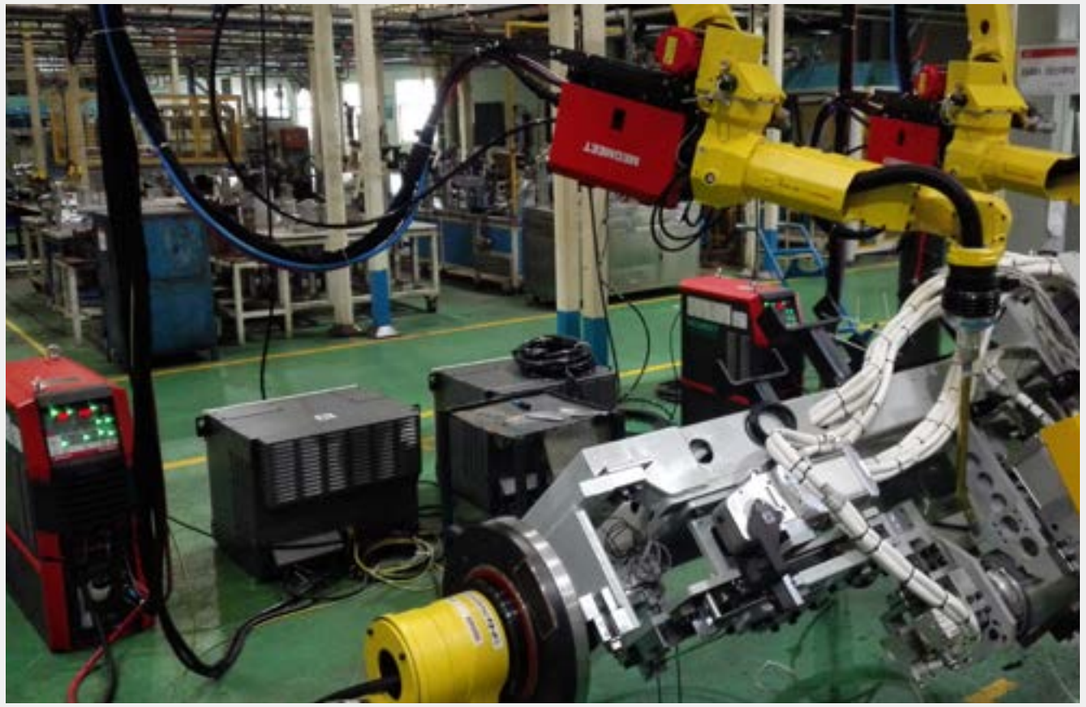
Shipping Container

CIMC Fuwa COSCO SHIPPING



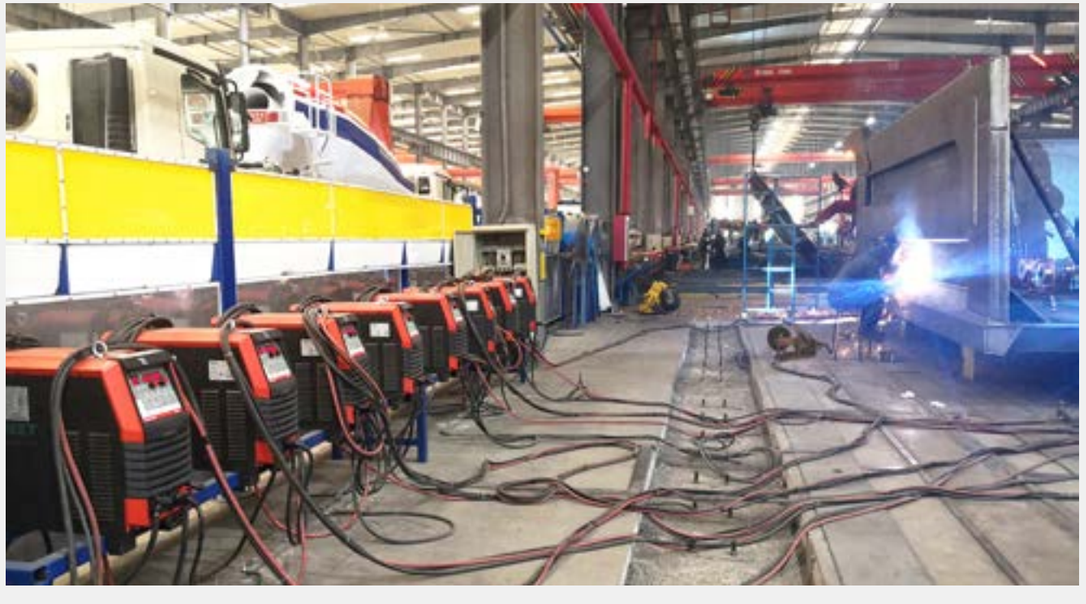
Automotive



Construction

MEGMEET WELDING TECHNOLOGY

Commercial Vehicles



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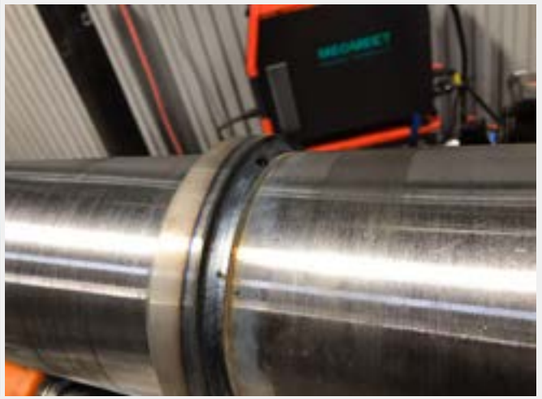
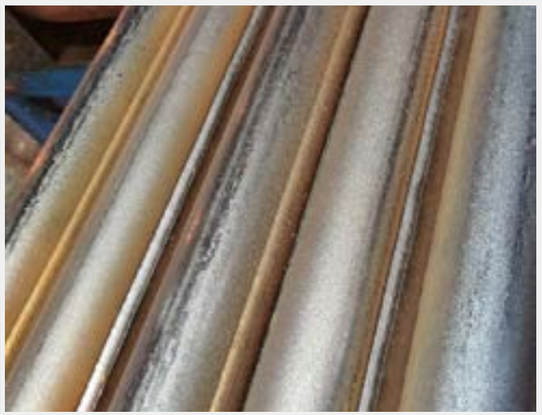
Vessels and Tanks





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Railway

CRRC

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MEGMEET Electrical Co., Ltd
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Add: 3rd Floor, Block C Unisplendour Information Harbor, Langshan Road, Shenzhen, Guangdong, 518057, China

www.megmeet.com (MEGMEET Electrical)

www.megmeet-welding.com (MEGMEET Welding Technology)

E-mail: welding@megmeet.com

Tel: +86-755-8660 0555

MEGMEET Germany GmbH

Add: Stadtheider Str. 26-28, 33609 Bielefeld, Germany

Tel: +49 521 588 131 40

Email: welding@megmeet.com

MEGMEET Türkiye rtibat Bürosu

Add: Merkez Mah. Hasat Sok. No:52/1 Şişli - İstanbul

Tel: +90 538 334 94 88

Email: welding@megmeet.com

MEGMEET Electrical India Pvt Ltd

Add: Plot No. 140, Sector 7, IMT Manesar, Gurugram – 122052, Haryana

Tel: +91 12442 14460

Email: welding@megmeet.com

MEGMEET (Thailand) Co., Ltd

Add: 7/375 Moo 6, Tambon M abyangporn, Pluak Daeng, Rayong 21140

Tel: +66 (0) 33 012 666

Email: welding@megmeet.com

MEGMEET's strong technical strength, extensive industry application experience, relentless attention to customer needs, and the spirit of continuous innovation enable us to bring tailor-made products and solutions to help customers achieve greater success.

2023-08