SHENZHEN MEGMEET®

Focus on Heavy-duty Intelligent Welding Technology and Application

Public Listed on SZSE
Stock No.: 002851

MEGMEET
WELDING TECHNOLOGY

Our Mission :

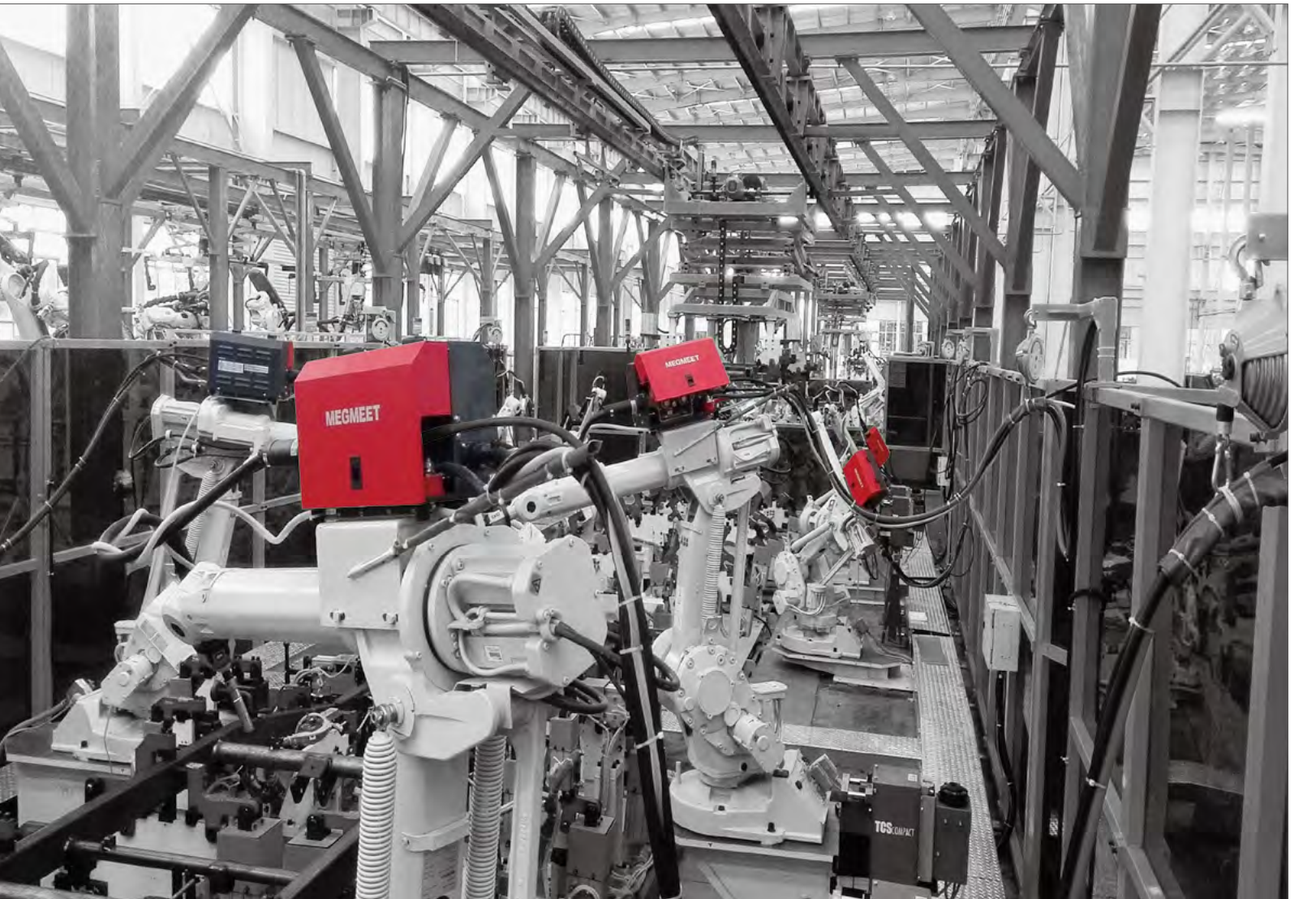
Be dedicated to provide high-performance welding machines, customer-focused solutions and professional services for users to achieve the best welding result in production .

Our Vision :

To be a global pioneer in energy-efficient and electrical control.

Corporate Concept :

More efficient electric power, Much cleaner living environment.



CATALOG

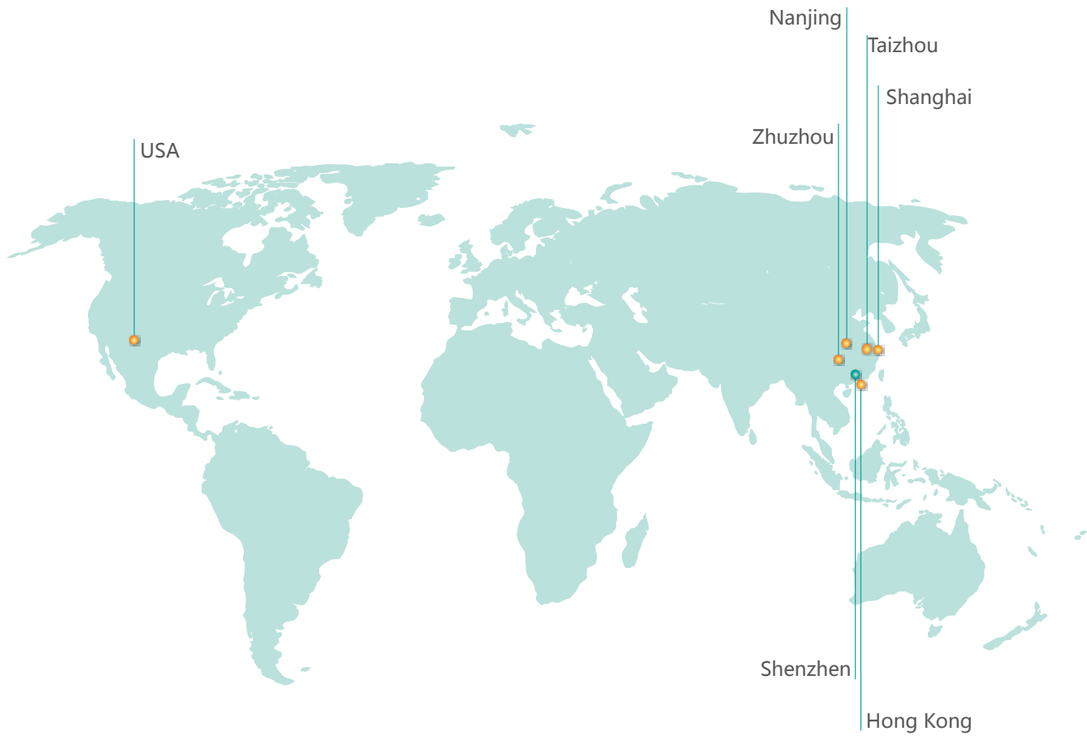
MEGMEET
WELDING TECHNOLOGY

SHENZHEN MEGMEET ELECTRICAL CO.,LTD (Stock No.: 002851) is a leading solution provider in electrical control and energy saving power conversion. Core business of Megmeet includes industrial automation, smart home appliances, control devices, and customized power products. Since its founding in 2003, Megmeet have firmly positioned as a technology-orientation company focused on R&D and have experienced rapid growth in diversified industrial applications.

Digital heavy-duty intelligent welding machine is a strategic business acquired from Emerson (a global leader in industrial automation) in 2011. While inheriting the original advanced technology of Emerson, Megmeet is continuously making unremitting efforts to development and application of IGBT welding solution and provide industrial welding machines with reliable performance, high precision, energy efficient and easy operation.

Depending on solid comprehensive foundation of power source,motor drive,computer software and arc physics, Megmeet have wholeheartedly stood on optimum application of welding technology especially for extremely heavy & harsh manufacturing environment. With high-reputation for its superior quality, Megmeet welding machines have commonly served in multiple fields as shipbuilding, military, automobile, rail transit, metal processing, construction machinery, energy industry, pipeline, etc.

Location & Branches



Shenzhen (Headquarter)
Shenzhen Megmeet Elecrtical Co., Ltd

Taizhou
Zhejiang Bathroom R&D Center

Hong Kong
Megmeet Hong Kong Limited

Zhuzhou
Zhuzhou Global Manufacture Center

USA
MEGMEET USA, INC.

Shanghai
Megmeet Shanghai R&D Center

Nanjing
Megmeet Nanjing R&D Center

MEGMEET
WELDING TECHNOLOGY

OUR STEPS

Year 2003
MEGMEET
Established

Year 2005
MEGMEET
Hongkong Found

Year 2006
Customized Power
for Industrial Products

Year 2008
MEGMEET
USA Found

Year 2010
Electricity Power
launching

Year 2011
Welding Technology
Acquired from Emerson

Year 2012
Industrial Microwave

Year 2014
Core Electricity Solution

Year 2015
Solar Inverter

Year 2017
MEGMEET Successful
Public Listing

Boundless Journey To

Surmount Technology Boundary…

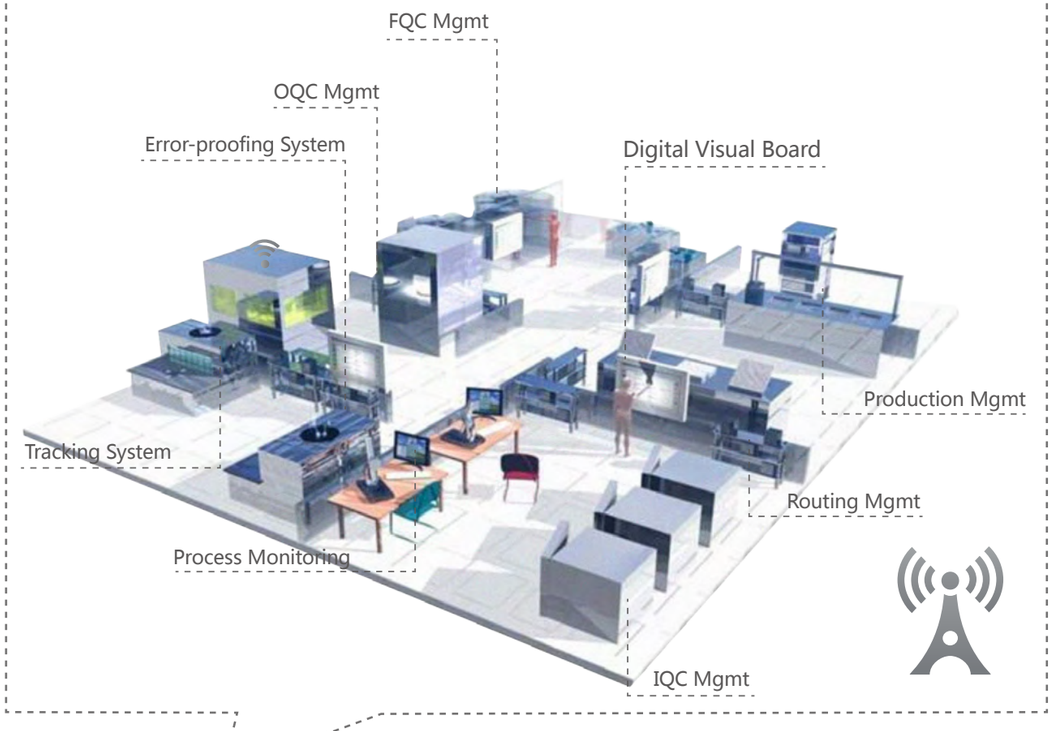
MEGMEET
WELDING TECHNOLOGY

R&D(Technology Patents)

- More than **450 R&D** engineers with rich experiences in top technology-based companies as Emerson, Huawei etc
- Effective and professional **"Pipelined R&D Management"** mode
- 8~10% of turnover invested in R&D(up to **16 million USD** per year)
- **326** technology patents(including **72** invention patents)
- **70%** of annual turnover comes from new products for recent 5 years

Perfection Derives From Onward Technology

MES Smart Production



Industrie4.0

Smart Production For Future

MEGMEET
WELDING TECHNOLOGY

Service Timely and Professional

- **One-on-one full technical supports:** jobsite trouble-shooting service or remote instructions(24 hours/Professional Service Team)
- **Trained engineers**, if requested, will gladly provide extensive instructions during commissioning status to help you familiar with our system
- **Detailed and comprehensive operation manual** for each model machine in multi-language
- **Periodical training classes and examination** on new-launching machines for both domestic and international customers

Customer’s needs are always our TOP priority ！

Extensive Industrial Application

- Honor of “2014 Outstanding Welding Power for China Industrial Robot”
- “2017 IIW.CWS.Arc Cup International Welding Competition” : Megmeet to be one of the designated brands
- Serve for leading enterprises in various fields: shipbuilding, military, automobile, rail transit, metal processing, construction machinery, energy industry, pipeline, etc.

中国中车 CRRC · 中国兵器装备集团 · 中国铁建 · 中国建筑 · 中建钢构 · 中国船舶工业集团公司 CHINA STATE SHIPBUILDING CORPORATION

武船重工 · 招商局 工业集团有限公司 China Merchants Industry Holdings co.,Ltd · CHIWAN · DAMEN · CIMC 中集 · Fuwa

中航工业 · 中国忠旺 China Zhongwang · CHALCO · NANSHAN 南山集团 · HUAYANG · 永强汽车 YQ VEHICLES · 长安工业 CHANGAN INDUSTRY

万向集团 WANXIANG GROUP · OTIS 奥的斯电梯 · SANYO · XCMG 徐工集团 · ZPMC · LONKING 龙工

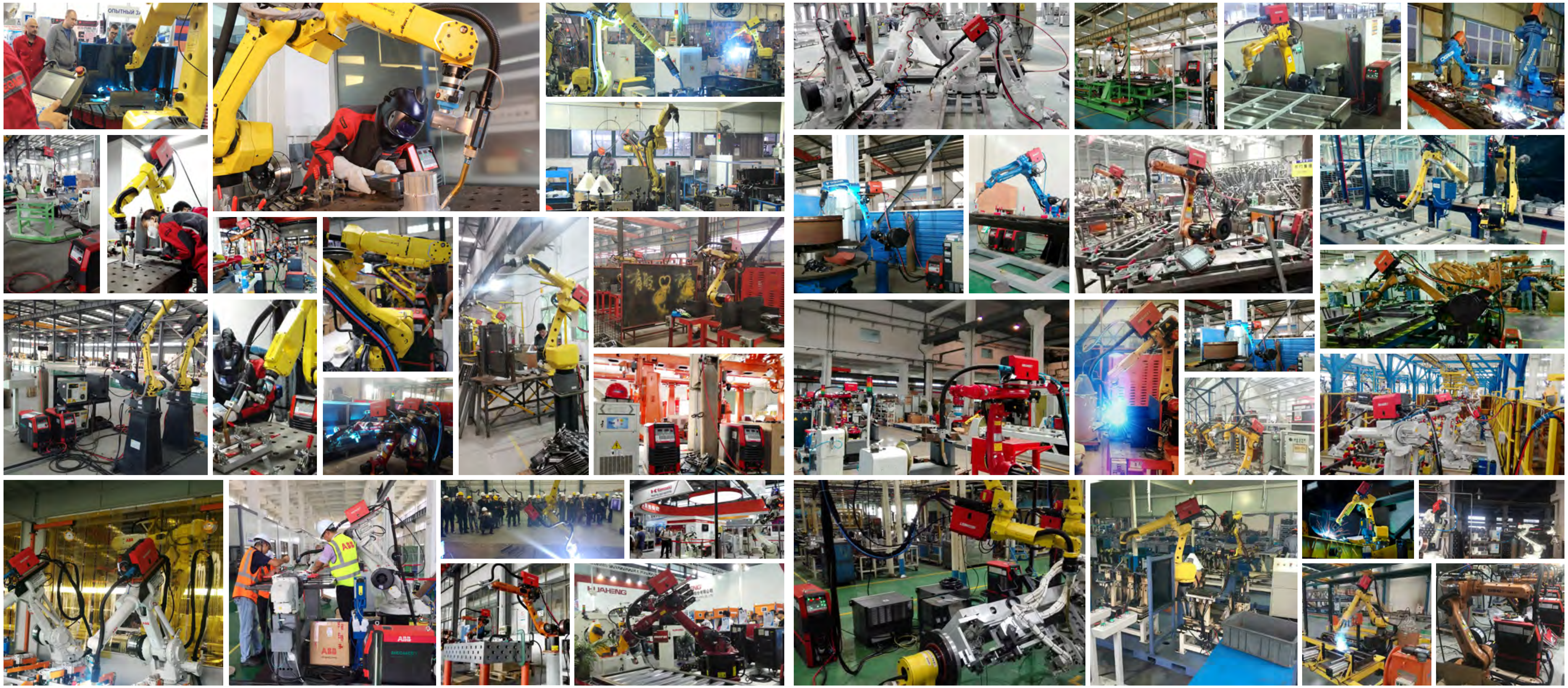
宇通客车 · BYD · FOTON 福田汽车 · 五菱汽车 · LIFAN · JAC 江淮汽车 · 东风汽车

美的 Midea · Vanward 万和 燃气具专家 · 钱江摩托 QJIANG · LONCIN 隆鑫摩托

中国南方电网 CHINA SOUTHERN POWER GRID · TBEA 特变电工 · 天威集团 · TTK · METTLER TOLEDO · FOXCONN 富士康科技集团

MEGMEET
WELDING TECHNOLOGY

Robot-Type Welding Machine Application



MEGMEET
WELDING TECHNOLOGY

Manual-Type Welding Machine Application

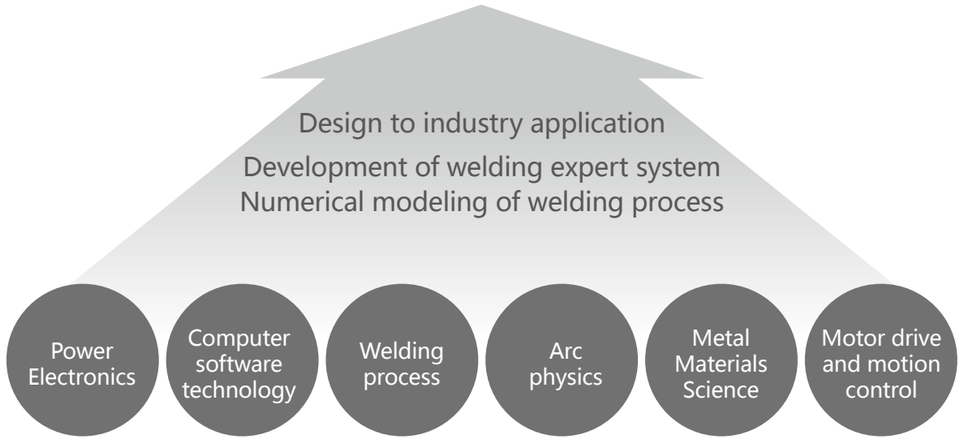
MEGMEET
WELDING TECHNOLOGY

Full Digital Heavy-duty Intelligent Welding Machine

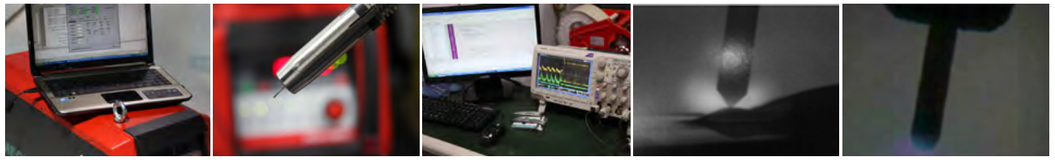
Megmeet full digital IGBT **180KHz** heavy-duty welding machines are launched for international manufacturing market.
Enhanced welding effect, reliable electrical performance and high welding efficiency will bring better welding experience for customers.

Professional Multi-Disciplinary Technology Team+Strong R&D Platform

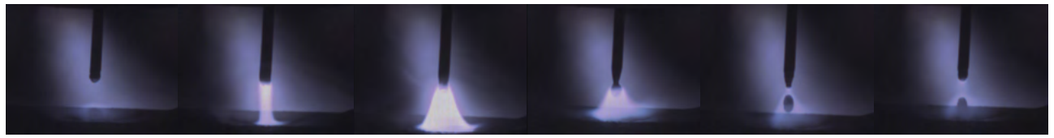
Optimal-Performance Digital Welding Machine



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



Amazing Funs of Welding.



MEGMEET
WELDING TECHNOLOGY

Why shall we always highlight **RELIABILITY** ?

- Frequent welding machine failures in severe environment
- 24 hours or even longer downtime due to welding machine failures
- Average shutdown cost of each welding position is 360USD or higher
- Affordable downtime becomes shorter since of increasing competition in global manufacturing industry

Reliability: designing for severe environment

1. Lightning and class D surge protection(withstand 6000V/3000A) design to ensure high reliability and long lifetime in extreme harsh environment.
2. 72 hours on-load temperature & thermal shock test from -39℃ to +50℃ @ 95% humidity.
3. Working reliably under high humid and rain condition.
4. Overheat monitoring and warning of output terminals, prompting users to tighten screws to avoid damage of output terminals in abnormal condition.
5. Optimized EMC&EMI design enables welding machine to work with other electrical equipment without any disturbance.
6. Rigorous salt spray test, metal dust test and conductivity test.
7. HALT (Highly Accelerated Life Test): all extreme conditions simultaneously superimposed for critical testing.

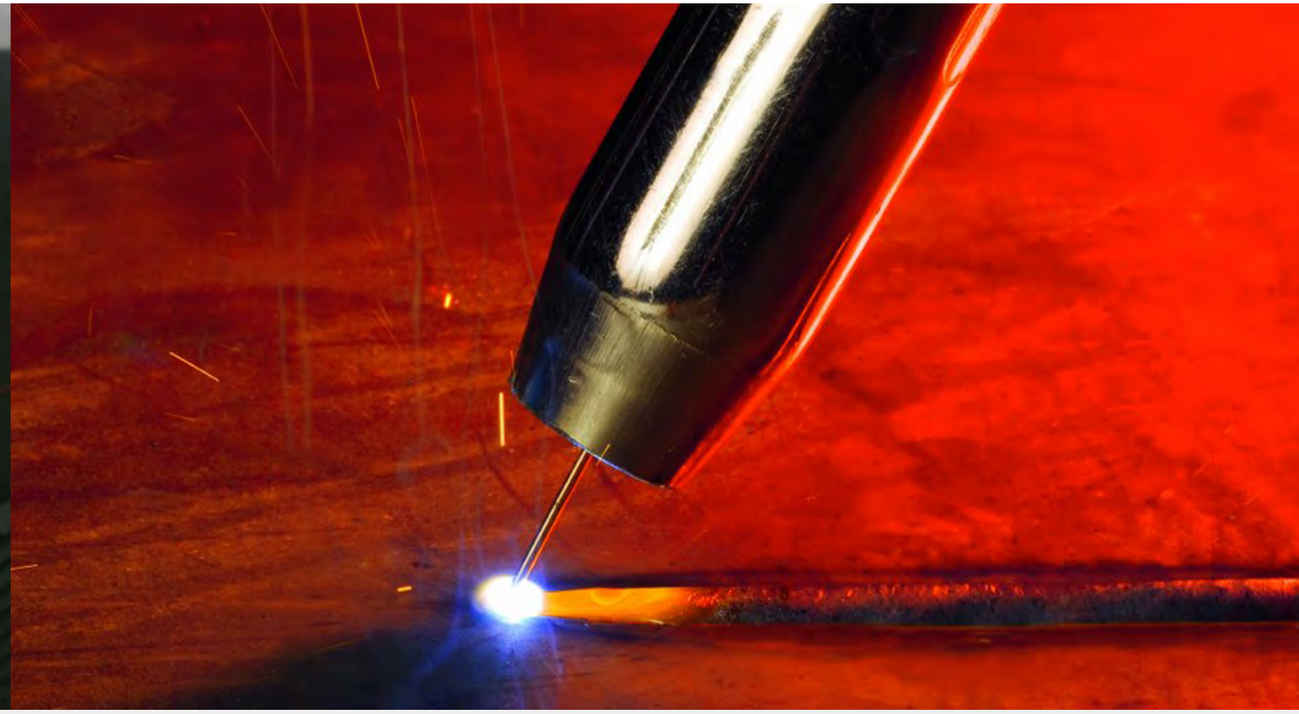
MEGMEET
WELDING TECHNOLOGY

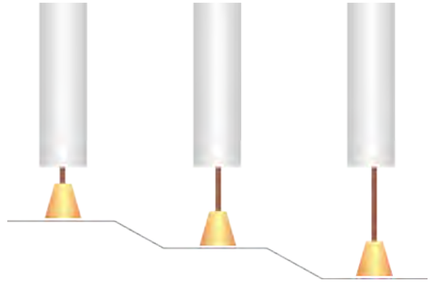
Consistency : keeping constant anytime & anywhere

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

- **High-frequency inverter design and superb full-digital control** can considerably reduce dependence on hardware parameter accuracy, and performance consistency of each welding machine is available in the case of voltage sharp fluctuations
- **Low-temperature drift and high-precision components** brings consistent output waveform of welding machine in different ambient condition
- **Hardware & software multiple compensation and multi-dimensional self-regulation** for sampling and control loop components is able to ensure consistency of welding performance

Stability : good performance with dependable quality

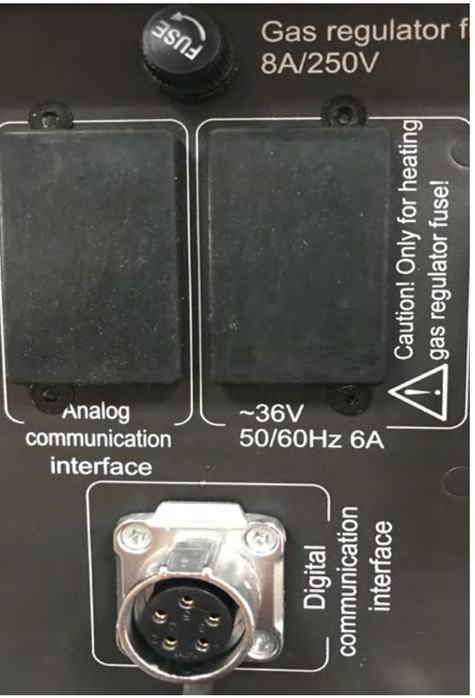




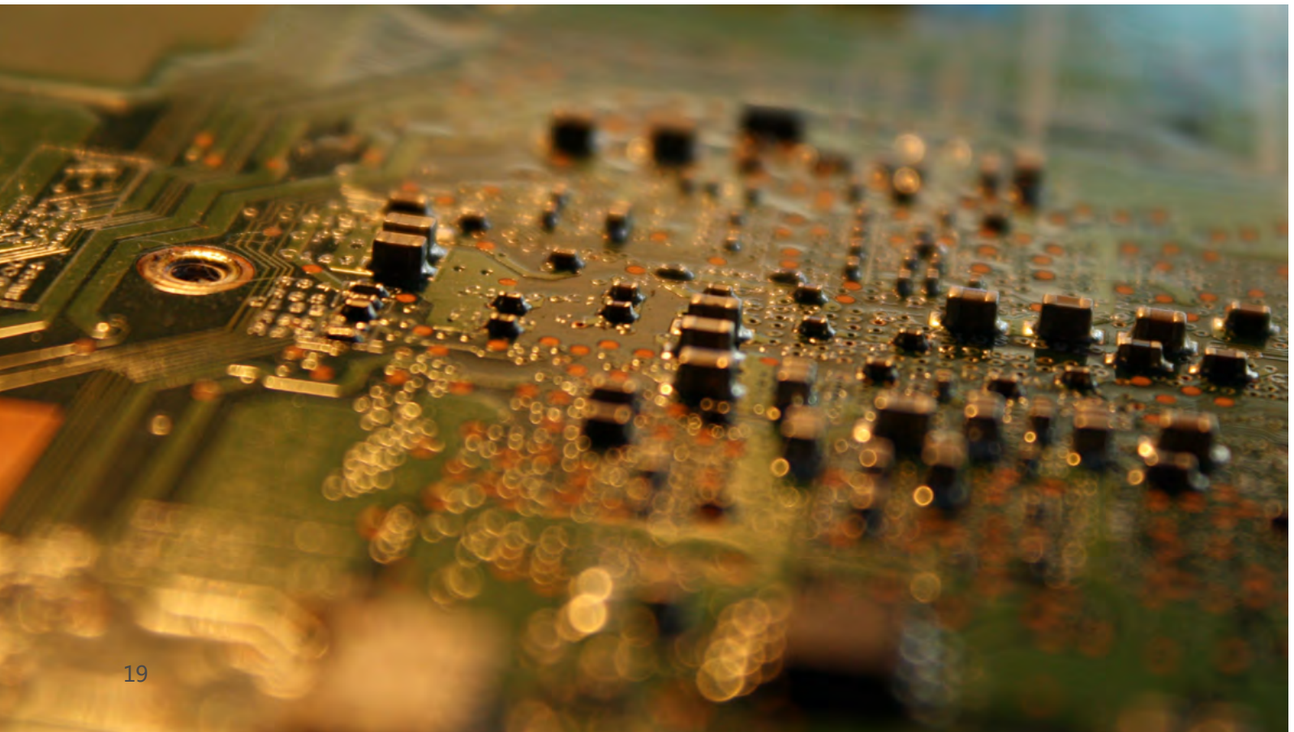
- **Intelligent self-correction of all droplet transition state** brings continuous stability and less spatter in welding performance
- **Megmeet micro arc voltage compensation and arc length constant control technology** can maintain effective stability of arc and fusion depth when wire extensions have variations
- **Megmeet macro arc voltage compensation technology** can keep arc voltage unaffected by long-term voltage drop whatever intermediate-drive cable is 5 M or 50M

MEGMEET
WELDING TECHNOLOGY

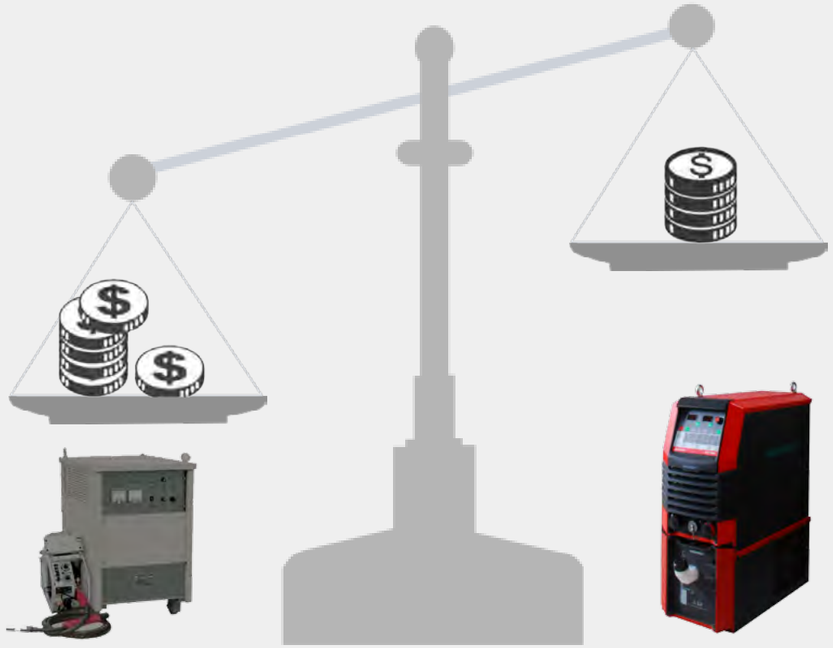
Intelligence: more possibility & extensibility



- **Opened expert operation mode** well satisfy with special welding requirements including specific customization
- **Enhanced CAN-BUS interface and various communication protocols** enables seamless digital connections between welding machine and robot, automatic tooling and management system
- **Combination of synergic operation and wide-range arc dynamics** can vastly strengthen operability and tolerance of automatic welding system
- **Full-digital control with leading power supply anti-jamming designs** ensures welding parameters output always consistent and stable even in extreme condition
- **High-precision sampling and control is** to realize high-quality full current range(30~500A)
- **Defaulted standard analog interface and various digital interfaces** are simultaneously available for robot model
- **High-speed digital communication system (up to 500KHz),** effectively avoid any distortion and delay caused from intermediate-drive
- **Flexible communication protocol and deep-opened welding parameters** can remarkably extend welding limit and seek for more stability, more speed, and less thermal deformation, etc



Cost Effective: reducing production investment for users



Less Cost Means More Profit

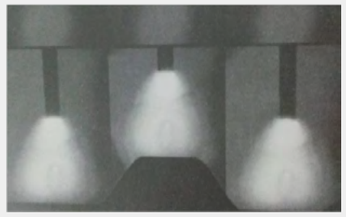
- One roll of wire consumption for Megmeet machine can save 6~10 Kwh of electricity compared with traditional (SCR) welding machine. **Almost 1000 USD of electricity cost could be reduced annually** for one set of machine in case of 2 rolls of wire consumption daily.
- Usually 200/350A welding machine is used in thin metal and 500A for medium metal. But the truth is that power consumption of Megmeet 500A machine is still **more economical** than traditional 200A. No more repeated investment are necessary in subsequent medium plate welding.
- **Upgradeable welding software :** forefront welding process is available for our customers in first time and no need to purchase new machine for special welding.

MEGMEET
WELDING TECHNOLOGY

High Reliability
+
Fault Auto-diagnosis
+
Simple Dismounting

➡ **HIGH Productivity**

Humanization: easy and quick operation

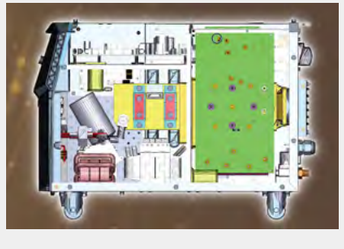


Easy-operation Design Specially for New Hand

- **Anti-shake function:** Megmeet arc voltage compensation and arc length constant control technology
- **Synergic mode:** Parameter can be perfectly and automatically matched and welder only need to input current

Welding Parameter Locking

Welding parameter can be directly locked on control panel to ensure correct welding process and avoid any random changes during production.



Quick Recovery

- Embedded structure and isolation-protection design not only brings more reliability but also simply dismounting and rapid recovery
- Self-recognition and intelligent alarming through error codes

Welding Machine Model List

MIG/MAG Welding Machine	MMA	Carbon Steel	Stainless Steel	Aluminum Alloy	Silicon Bronze	Aluminum Bronze	Pulse	Intermediate-drive	Push Pull Torch	Standard Welding Torch Type	Trolley	Integrated Water Tank	Communication of Robot & Special Machine: Analog	DeviceNet	CAN Open	Customized CAN	RS-485	Ether Net/IP	Welding Information Management System
Ehave CM500H/500/350/250	●	●								Panasonic	○		○						○
Artsen CM500C	●	●								Eur./Panasonic	○	○	○						○
Artsen CM500/400/350	○	●			○	○				Eur./Panasonic	○	○	○		○	○			
Artsen PM500/400F	○	●			○	○	●			Eur./Panasonic	○	○	○		○	○			
Artsen PM500/400N	○	●	●		○	○	●			Eur./Panasonic	○	○	○		○	○			
Artsen PM500/400A	○	●	●	●	○	○	●			Eur./Panasonic	○	○	○		○	○			
Artsen CM500/400/350 Ⅱ	○	●			○	○		○	○	Eur./Panasonic *	○	○	○		○	○	○	○	○
Artsen PM500/400F Ⅱ	○	●			○	○	●	○	○	Eur./Panasonic *	○	○	○		○	○	○	○	○
Artsen PM500/400N Ⅱ	○	●	●		○	○	●	○	○	Eur./Panasonic *	○	○	○		○	○	○	○	○
Artsen PM500/400A Ⅱ	○	●	●	●	○	○	●	○	○	Eur./Panasonic *	○	○	○		○	○	○	○	○
Artsen Plus500/400		●	○	○			○			Eur./Panasonic	○	○	○		○	○	○	○	○
Dex CM3000	●	●	●							Eur.									
Dex PM3000	●	●	●	●			●			Eur.									

● Standard
○ Optional

* Intermediate-drive wire feeder and push pull torch is not available for Panasonic-type welding torch

MEGMEET
WELDING TECHNOLOGY

Ehave CM500H/500/350/250

Heavy-duty CO_2/MAG/MMA Intelligent Welding Machine

Classical Model

- First-choice for harsh heavy-duty working environment
- Extensively applied in various carbon steel welding industries: rail transit, automobile, shipbuilding, steel structure, container, machining, metal hardware, etc

Product Feature:

- **Stable arc in full current and low spatter**, be suitable for different welding processes ;
- **Highly concentrated arc and strong penetration**, 20% less than other machines in heat input;
- **Excellent gap-bridging capability** and less sensibility in wire extension;
- **Droplet necking testing and micro-control technology** can improve success rate of arc starting;
- **Welding parameter locking and function expansion** can be quickly set up on control panel without more configuration outsourcing;
- 10 groups of default parameters and up to 99 groups of customization;
- **Communication with robot** is available(for option)

Technical Data Sheet

ITEM-MODEL	Ehave CM500H	Ehave CM500	Ehave CM350	Ehave CM250
Control mode	Full Digital			
Input voltage	3 phase 380Vac±25%(285 ~ 475V)			
Input frequency	30 ~ 80 Hz			
Input capacity	24KVA	22.3KVA	13.5KVA	8kVA
Rated open-circuit voltage	75V	73.3V	63.7V	63.7V
Rated output current	30 ~ 500A	30 ~ 500A	30 ~ 400A	30 ~ 300A
Rated output voltage	12 ~ 45V	12 ~ 45V	12 ~ 38V	12 ~ 30V
Rated duty cycle	500A@100% @40℃	500A@100% @25℃	350A@100% @40℃	250A@100% @40℃
Welding method	CO_2/MAG/MMA, solid wire, flux-cored wire,electrode			
Wire diameter	1.0/1.2/1.6mm		0.8/1.0/1.2mm	
Welding sequence	2T, 4T, special 4T, spot welding			
Welding parameter channel	10 sets (default)			
Arc dynamic	-9 ~ +9			
Reserved communication interface	CAN			
Cooling mode	Intelligent Gas Cooling			
wire feed speed	1.4~24m/min			
Protection class	IP23S			
Machine environment	Heavy-duty Industry -39℃~ +50℃			
Dimensions	300×480×620mm			
Weight	55kg	52kg	48kg	48kg

MEGMEET
WELDING TECHNOLOGY

Artsen CM500C

Heavy-duty CO_2/MAG/MMA **Carrier** Intelligent Welding Machine

- Designed for ultra-long distance(**up to 100 meters**) welding in large structure industries as shipbuilding, offshore, steel structure, etc
- Industry-leading digital bi-directional high-speed carrier communication

Product Feature:

- **Carrier technology application** effectively replace conventional control cable and overall welding efficiency in jobsite is thereby improved
- **100% @ 500A duty cycle** , high deposition rate and high-speed wire feeding (24 m / min)
- **Outstanding protective design in wire feeder and PCBA**, better suited to the harsh environments with vibration, collision, humidity, salt spray, etc
- **Stable vertical-up flux cored welding** including 150A small current welding is available even if power cable is more than 50 meters
- **Vertical-up pulling welding function for special flux cored wire(E71T-1C)** is available, significantly reducing heat input compared with swing welding

- **Any peripheral cable short-circuit will not cause damage to main machine** and fault codes could be simultaneously indicated on both main machine and wire feeder;
- **Over-current protection in wire feeder** can enable automatic recovery when motor rotation or wire blockages happen;
- **Short circuit over-current and open circuit protection** for magnetic valve;
- **Visual display of welding parameter on wire feeder**. Parameter setting function is available on wire feeder, no need of external debugger and adjustment on main machine display panel ;
- **High-speed synchronization of wire feeder and main machine**, and perfect anti-interference communication;
- **Full digital high-frequency test and control** can provide more stability in small current welding;
- **Lightweight and portable design** with less peripheral cables

Comparison of Artsen CM500C and Carrier Machine

	Communication mode	Anti-interference	A/V display on wire feeder	Welding performance	PCB reliability
Artsen CM 500C	Digital bi-directional high-speed carrier	Excellent	Yes	Excellent	Excellent
Conventional Model	One-Way Analog	Pass	No	Pass	Pass

100MTR

Artsen P(C)M500/400F/N/A(R) Ⅱ

Technical Data Sheet for Artsen CM500C

ITEM-MODEL	Artsen CM500C
Control mode	Full Digital
Carrier communication mode	High Speed Bi-directional Carrier Communication
Input voltage	3 phase 380Vac±25%(285 ~ 475V)
Input frequency	30 ~ 80 Hz
Input capacity	24KVA(22.3KW)
Rated open-circuit voltage	75V
Rated output current	50 ~ 500A
Rated output voltage	12 ~ 50V
Rated duty cycle	500A@ 100%
Welding method	CO_2/MAG/MMA, solid wire, flux-cored wire, electrode
Wire diameter	φ1.0/1.2/1.4/1.6mm
Welding sequence	2T, 4T, special 4T
Arc dynamic	-9 ~ +9
Reserved communication interface	Yes
Cooling mode	Intelligent Gas Cooling
Wire feeder digital display	Yes, long-distance reading and setting
wire feed speed	1.4 ~ 24m/min
Protection class	IP23S
Machine environment	Heavy-duty Industry -39℃~ +50℃
Dimensions	300×480×620mm
Weight	52KG

Full Digital Heavy-duty **DC/Pulse** MIG/MAG/CO_2 Welding Machine

Product Features

- **Independent operation display panel on wire feeder**, be more convenient to read and regulate welding parameter
- **Dual-motor synchronous driving and flexible torch configuration**, achieving expansions for middle driving and push-pull torch functions for ultra-long distance and narrow space welding
- **Multi-process model** be proficient in CS, SS, Al, DC, pulse and dual pulse
- **50 pieces of storage channels and quick switching** between multiple parameters; 200 items of fault records for better traceability
- **Abundant internal menu and massive parameters** (fully-open and adjustable)
- **Diversified welding expert systems and special programs** for aluminum (alloy) welding
- **High-speed and all-digital control** to realize "one pulse one drop" and stable welding with minimal spatter
- **Huge expert welding database:** synergic regulation and parameter auto-correlation
- **Program software upgrade** is available to obtain more welding processes for various special metals(such as high-strength steel Q690, silicon bronze, aluminum bronze, etc.)

Artsen P(C)M500/400F/N/A(R) Ⅱ

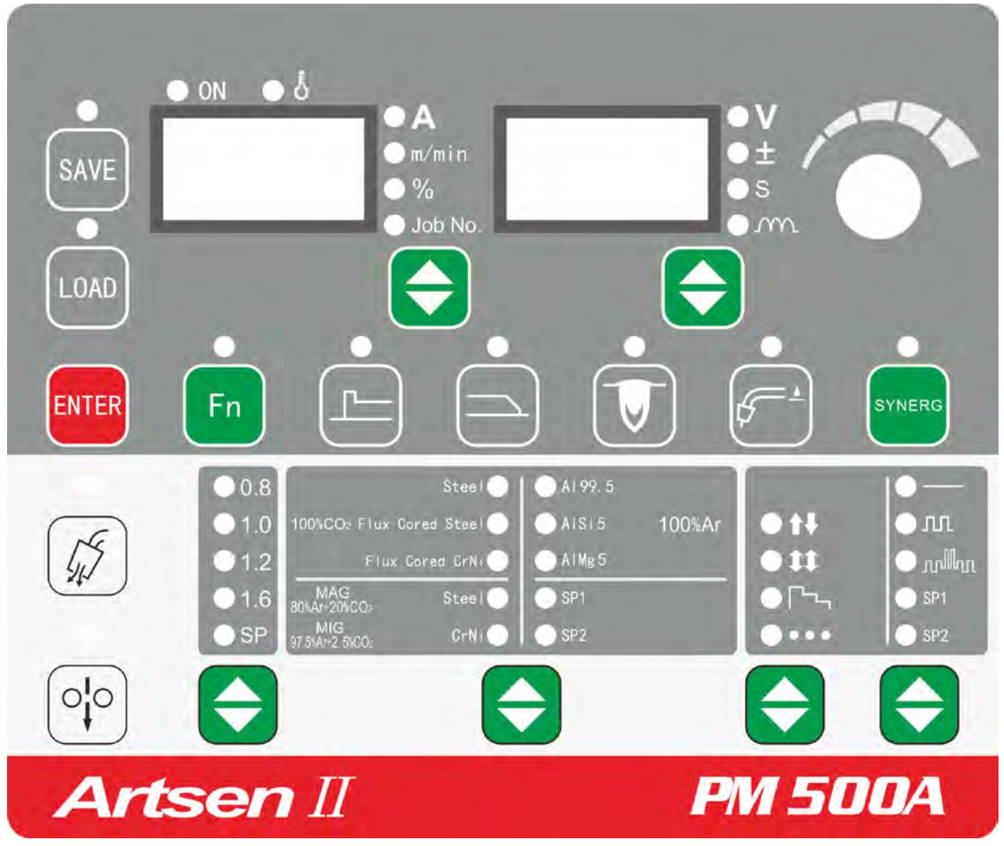
Technical Data Sheet

Machine Model	Artsen PM500F/N/A Ⅱ Artsen PM500F/N/A R Ⅱ	Artsen CM500 Ⅱ Artsen CM500 R Ⅱ	Artsen PM400F/N/A Ⅱ Artsen PM400F/N/A R Ⅱ	Artsen CM400/350 Ⅱ Artsen CM400/350 R Ⅱ
Control Mode	Full Digital			
Wire Feeding Drive Control Mode	Photoelectric coder feedback+ Separate Chip high-speed loop control. Remote motor synchronous control is for option			
Input Voltage	3 phases 380Vac±(285~475V)			
Input Efficiency	30 ~ 80 Hz			
Input Capacity	24KVA(22.3KW)			
Power Factor Meter	0.93			
Efficiency	87%			
Rated Output Voltage	73.3V			
Rated Output Current	500A	500A	400A	400A/350A
Given Current and Voltage Range	12~45V(Accuracy is 0.1V)			
	30 ~ 500A	30 ~ 500A	30 ~ 400A	30 ~ 400A
Rated Duty Cycle	60%@500A@40℃		100%@400A@40℃	
Wire Diameter	φ0.8/1.0/1.2/1.6/SP mm		φ0.8/1.0/1.2/SP mm	
Welding Material Type	F :CS N: CS/SS S: CS/SS/Al	CS	F :CS N: CS/SS S: CS/SS/Al	CS
Welding Process	MIG/MAG/CO_2 Dual-pulse/Pulse/DC	MAG/CO_2 DC	MIG/MAG/CO_2 Dual-pulse/Pulse/DC	MAG/CO_2 DC
Welding sequence	2 steps, 4 steps, special 4 steps and dot welding			
Arc characteristic	-9 ~ +9			
Parameter Display of Wire Feeder	Available			
Robot Communication	Analog/Device Net/CAN Open/Megmeet CAN/RS-485/Ethernet/IP*			
Insulation Class	H			
Protection Class	IP23S			
Main Machine Environment	heavy-duty, -39℃ ~+50℃ , humidity ≤ 95%			
Dimension	300×480×620mm			
Weight	52KG			

Circulating Cooling System (Option Configuration)	
Rated Power	260W
Rated Voltage	400Vac
Cooling Water Volume	6.5L
Cooling Water Flow	3.5L/min
Cooling Water Max. Pump Head	30m
Flow Alarm	Available
Water Temperature Alarm	Available

* ：Ethernet/IP is for Optional.

One-Model, But Multi-Use



MEGMEET
WELDING TECHNOLOGY

Optional Functions in Artsen P(C)M500/400F/N/A Ⅱ

Push Pull Welding Torch

Excellent Stability and Desirable Operation

- **Integration with motor parameters of mainstream push-pull welding torches,** quick selection and matching with welding torch brand;
- **Motor parameters in push-pull welding torch are opened for regulation**, to match with all types of push-pull torches;
- **Welding torch parameter regulating knob** is convenient to regulate current/voltage;
- **Max working radius can reach 40 meters:** 30 meters for wire feeder distance and 10 meters for push-pull torch;
- **Wire feeding through welding torch tip** brings more stability;
- **Wide applications** in various soft-wire welding conditions.

Intermediate-Drive Wire Feeder

Steady Control in Ultra-length Wire Feeding

- **Optimal Structure:** portable weight, metal enclosure, durable material, streamlined shape and draggable designing;
- **Operation display panel** on Intermediate-Drive wire feeder is convenient to read and regulate welding parameters;
- **Max working radius up to 58 meters:** 30meters for wire feeder distance, 25 meters for Intermediate-Drive wire feeder and 3 meters for welding torch;
- **Economical consumable cost** by using normal welding torch;
- **Extensive applications** in long-distance and narrow-space welding jobsites as large tank, shipyard, large steel structure, etc.

Intermediate-Drive Wire Feeder Parameter List	
Component	Power cable+ 10 cores control cable+ gas tube+ water tube+ wire-guide pipe
Power Cable Specification	$50mm^2$(Standard) \ $70mm^2$(Customized) \ $95mm^2$(Customized)
$50mm^2$ Cable Welding Current	60%@380A, 100%@300A
Motor Voltage	DC24V
Wire Feeding Speed	1.5 ~ 24M/min
Intermediate-Drive Wire Feeder Weight	4.3 Kg
Parameter Display	Available
Parameter Regulation	Available
Parameter Locking	Available

MEGMEET
WELDING TECHNOLOGY

Artsen Plus500/400

Intelligent Welding Machine With **Extendable Process Platform**

Continuous Realization Your Process Imagination

Intelligent Platform for Unceasing Renewed Process Mode

Product Feature:

- **Full digital intelligent control and 100KHz ultra-high inverting frequency,** "zero delay" [1] sampling circuit, accurate power response for each phase of droplet transition;
- **Unique power supply energy releasing design**, up to 10,000 amps / ms of current descending slope, realizing "zero impact" [2] on fusion pool;
- **High-torque and low-inertia worm gear motor**, supplemented by 120 lines of high-precision encoder and high-frequency motor control system, brings accurate control of arc start withdrawal and arc end withdrawal;
- **Dual-remote sampling compensation of output positive and negative terminals**, be able to correctly determine process status of droplet transition and obtain precise control of droplet transition;
- **Stable and comprehensive high-speed hardware platform, and opened software system**, enables constant expansions of process control procedure and accumulation of welding expert database based on different welding conditions.

New JOB Mode Brings Free Collocation of Welding Process

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

- Each JOB can individually set up characteristic quantity as duration, control mode, control parameter, collaboration parameter, gradient slope, etc;
- Single JOB can achieve double-process collaboration and no need of complex external JOB switching command;
- Tranquil transition between different characteristics of JOB, greatly reducing arc distortion and welding spatter. Transition characteristics can be freely set in all JOB.

Innovative Process Mode

Tranquil Fusion [3]

- Adjustable arc energy effectively reduce welding heat input
- Soft arc, tranquil fusion pool, minimal spatter
- Stable arc and substantial increase in welding speed
- Better welding fusion and less welding defects

Applications:

- Thin plate and ultra-thin plate welding of CS, SS, galvanized sheet, dissimilar metals, especially for backing welding and all-position welding

Clean Fusion [5]

- Faster welding rhythm, obvious energy intensity and clear "Stacked Dimes" welding appearance
- Low heat input, deeper fusion depth, minimal spatter and higher tolerance for welding gap

Applications:

- Thin plate and ultra-thin plate welding of CS, SS, galvanized sheet, Al & Al alloy, especially for vertical-up welding

Thunder Fusion [4]

- Short arc length, high stiffness, strong directivity, substantial increase in welding speed;
- Low heat input and minimal spatter;
- Better welding fusion and less welding defects.

Applications:

- Pulse welding of CS, SS, galvanized sheet and high-strength steel, etc.

Leaping Fusion [6]

- Shorter arc starting time and quick arc ending, be able to further reduce welding heat input and thermal deformation
- Clear "Stacked Dimes" welding appearance and faster welding rhythm [7]
- Deeper fusion depth, higher tolerance for welding gap

Applications:

- Thin plate and ultra-thin plate welding of CS, SS, galvanized sheet, Al & Al alloy, etc

Consistant Fusion [3]

- Welding fusion depth keep consistent and will not be affected by wire extension change

Applications:

- Automatic welding of robot, special machine, etc

[1]: Compared with Artsen series, sampling speed of Artsen Plus is increased by about 13 times.
[2]: Power supply release arc energy in droplet transition moment to avoid impulsive oscillation of current force on fusion pool.
[3]: Standard configuration is Tranquil Fusion carbon steel, and other processes are for optional selection according to specific working conditions.
[4]: Optional
[5]: Optional
[6]: Standard configuration is Leaping Fusion carbon steel, and other processes are for optional selection according to specific working conditions.
[7]: Welding rhythm is lower than Clean Fusion Process.
[8]: Optional

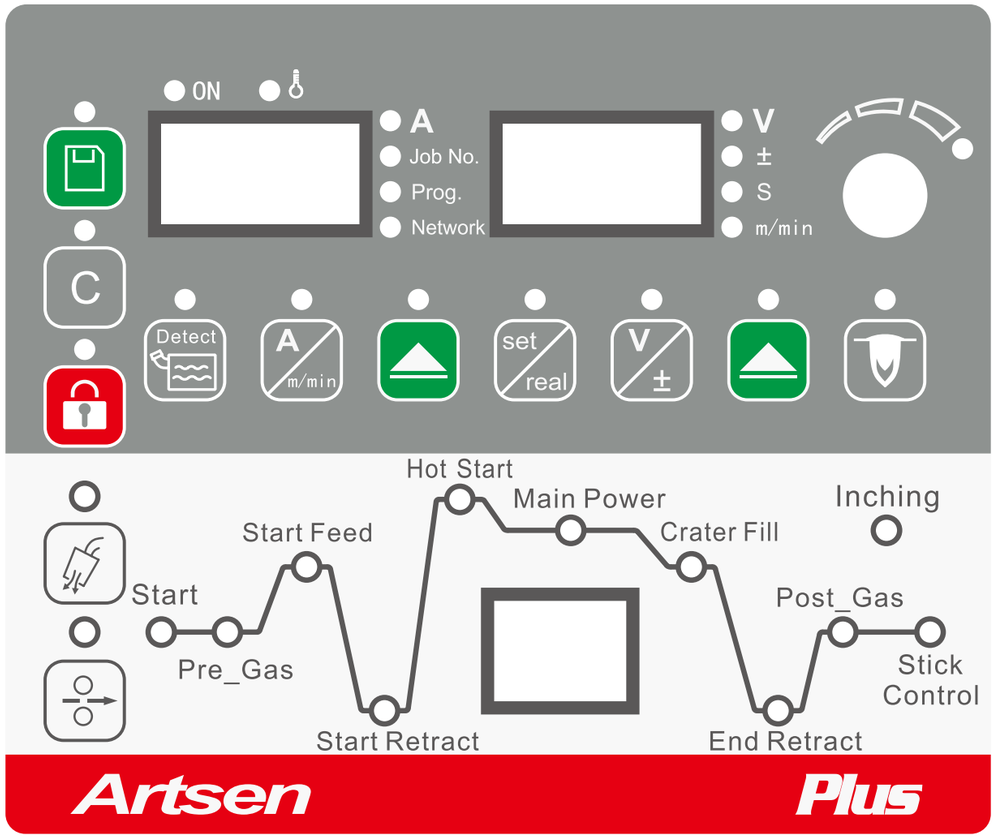
Artsen Plus500/400

Technical Data Sheet

Machine Model	Artsen Plus500 Artsen Plus500R	Artsen Plus400 Artsen Plus400R
Control Mode	Full Digital	
Wire Feeding Drive Control Mode	Photoelectric coder feedback+ Independent Chip high-speed loop control	
Input Voltage	3 Phases 380Vac(-25%,+15%) , (285 ~ 437V)	
Input Efficiency	45 ~ 65 Hz	
Input Capacity	24KVA(22.3KW)	
Power Factor Meter	0.93	
Efficiency	85%	
Rated Output Voltage	85V	
Rated Output Current	500A	400A
Given Current and Voltage Range	12 ~ 45V (Accuracy 0.1V)	
	30 ~ 500A	30 ~ 400A
Rated Duty Cycle	60%@500A@40℃	100%@400A@40℃
Wire Diameter	φ0.8/1.0/1.2/1.6/SP mm	
Welding Process*	Tranquil Fusion Thunder Fusion Clean Fusion Leaping Fusion Consistant Fusion	
Welding sequence	2 steps, 4 steps, special 4 steps , spot welding and intermittent welding	
Arc characteristic	-7 ~ +7	
Robot Communication	Analog \ DeviceNet \ CAN Open \ MEGMEET CAN \ RS-485 \ EtherNet/IP**	
Insulation Class	H	
Protection Class	IP23S	
Main Machine Environment	Industrial Heavy Duty, -39℃~ +50℃ , Humidity ≤ 95%	
Dimension	300×480×620mm	
Weight	52KG	
Circulating Cooling System (Option Configuration)		
Rated Power	260W	
Rated Voltage	400Vac	
Cooling Water Volume	6.5L	
Cooling Water Flow	3.5L/min	
Cooling Water Max. Pump Head	30m	
Flow Alarm	Available	
Water Temperature Alarm	Available	

* : Some Process is for Optional.
** : Ethernet/IP is for Optional.

Megmeet Platform-Type Machine Specially For Continuous Mode Extension & Process Interaction



MEGMEET
WELDING TECHNOLOGY

Dex P(C)M 3000

Intelligent **Compact & Lightweight** Welding Machine

Innovative Hardware Platform

- **Industry-leading three-level main power topology, up to 180KHz of output frequency and full soft-switching power switch.** Machine power density is raised, while overall heat value ,radiating component volume and total weight is reduced
- **Leading power conversion solution provides up to 90% of power conversion efficiency.** Power efficiency is 20% higher than traditional taped machine and about 8% higher than conventional inverter welding machine
- **Unique dual-loop motor-drive control program:** inner-loop current control for more powerful wire feeding and outer-loop speed control for more stable wire feeding
- **Encoder sampling for speed** provides higher accuracy of wire feeding speed
- **Multi-clean cabin design** ensures complete isolation of strong and weak electricity. Protection level reaches IP23S(industry-leading)
- **Full-enclosure intensive integrated air duct** with DC fan of stepless speed, greatly improving cooling efficiency and fan life

Overall New Control Solution

- **Dual-control loop power, ultra-high control frequency and full software adjustment,** be able to accurately control transition state of each droplet and easily response to each welding process
- **Up to 1500 amps / millisecond of current gradient** and wire fusion concentrated in high-current zone, effectively ensures stable arc, strong anti-interference and quick-recovery arc in abnormal conditions
- **Wide-range matching of voltage** can ideally adapt to various changes of wire extensions
- **Both** "**standard mode**" **(default) and** "**fast mode**" **are available**. Two completely different welding processes can be used in a model

Dex CM3000

More Functions and Better Performances Than Traditional Welding Machines*

- **High duty-cycle, high deposition rate and high wire feeding rate (max. 28 m / min)**. Maximum welding speed can be more than 2 m / min
- **Soft art start and high success rate** enables rapid formation of fusion pool and perfect welding spot in 0.3 second
- **Soft welding arc and strong gap-bridging**, effectively solves the rough welding gaps due to cutting
- **Concentrated arc, clear directivity and strong penetration**
- **Intelligent control of welding energy** ensures energy to be concentrated in the wire fusion zone with high deposition rate. Better wire feeding rate is realized in the same welding current
- **Lower pilot arc current** and more reasonable current waveform control can reduce spatter.

Dex PM3000

New Pulse Process Brings Superior Welding Experience and Easier Pulse Welding

- **Multi-process model and excellent compatible** with Dex CM3000 welding process. All proficient in CS, SS, Al alloy, DC, Pulse, dual-pulse
- **Huge expert welding database:** synergic regulation and parameter auto-correlation
- **New pulse welding control solution** brings softer arc starting and less spatter
- **Strict energy allocation** in welding solution enables clearer dual-pulse forming
- **Diversified welding expert systems and special programs** for Al welding to obtain optimal Al (alloy) welding quality;
- **Pulse welding parameter in each phase is opened** for fine tuning and better welding quality is achieved

*: Traditional welding machine refers specifically to the wide-use tapped welding machines, thyristor machines, analog inverter machines in thin-plate industry.

MEGMEET
WELDING TECHNOLOGY

Dex P(C)M 3000

Technical Data Sheet

Machine Model	Dex CM3000	Dex PM3000
Control Modede	Full digital	
Input Voltage	3P 380V(-15%~+21%) , 323Vac ~ 460Vac	
Input Power Frequency	45 ~ 65Hz	
Input Volume	9.2KVA/8.7KW	
Power Factor	0.94	
Efficiency	90%	
Open Circuit Voltage	54.2V	
Output Current Range	30A~300A	
Output Voltage Range	12V~30V	
Rated Duty Cycle	60%@280A@40°C	
Welding Modes	CO_2/MAG/MMA , DC	CO_2/MAG/MIG , DC /Pulse/Dual pulse
Welding Steps	2T	2T \4T \ SP4T
Filler Wire Diameter	φ0.8/1.0/SPmm	φ0.8/1.0/1.2/SPmm
Welding Materials	Carbon Steel/Electrode	Carbon Steel/Stainless Steel/ Alloy Aluminum /Electrode
Wire feeding Speed Adjustment range	1.4~28m/m	
Arc Characteristic	-9 ~ +9	
Degree Protection	IP23S	
Dimension	610mm×260mm×398mm	
Weight	25.4Kg	

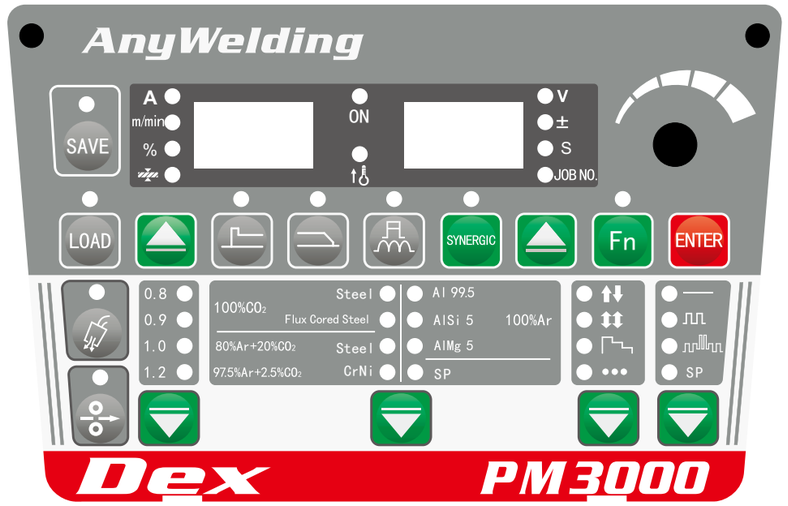
Dex CM3000 Order information

Accessories details	Remarks
Welding power source	Dex CM3000 Power source
Group cable	25mm², 1.8m, fast coupling, earth clamp
Torch A	150A Torch (Panasonic type neck, euro connectors)
Torch B (Optional)	200A Torch (Panasonic type neck, euro connectors)
Trundle	4pcs In a set
CO_2 Heating Relief Valve	AC36V, 25L/min
Wire Feeder	0.8/1.0
Wire Feeder Driving Kits	Motor, Driving Units, Fast Coupling, Feeding Rollers

Dex PM3000 Order information

Accessories details	Remarks
Welding Power Source	Dex PM3000Power source
Group Cable	35mm², 1.8m, fast coupling, earth clamp
Torch	300A Euro Type Torch
Trundle	4pcs In a set
CO_2 Heating Relief Valve	AC36V, 25L/min
Wire Feeder Driving Kits	Motor, Driving Units, FastCoupling, Feeding Rollers

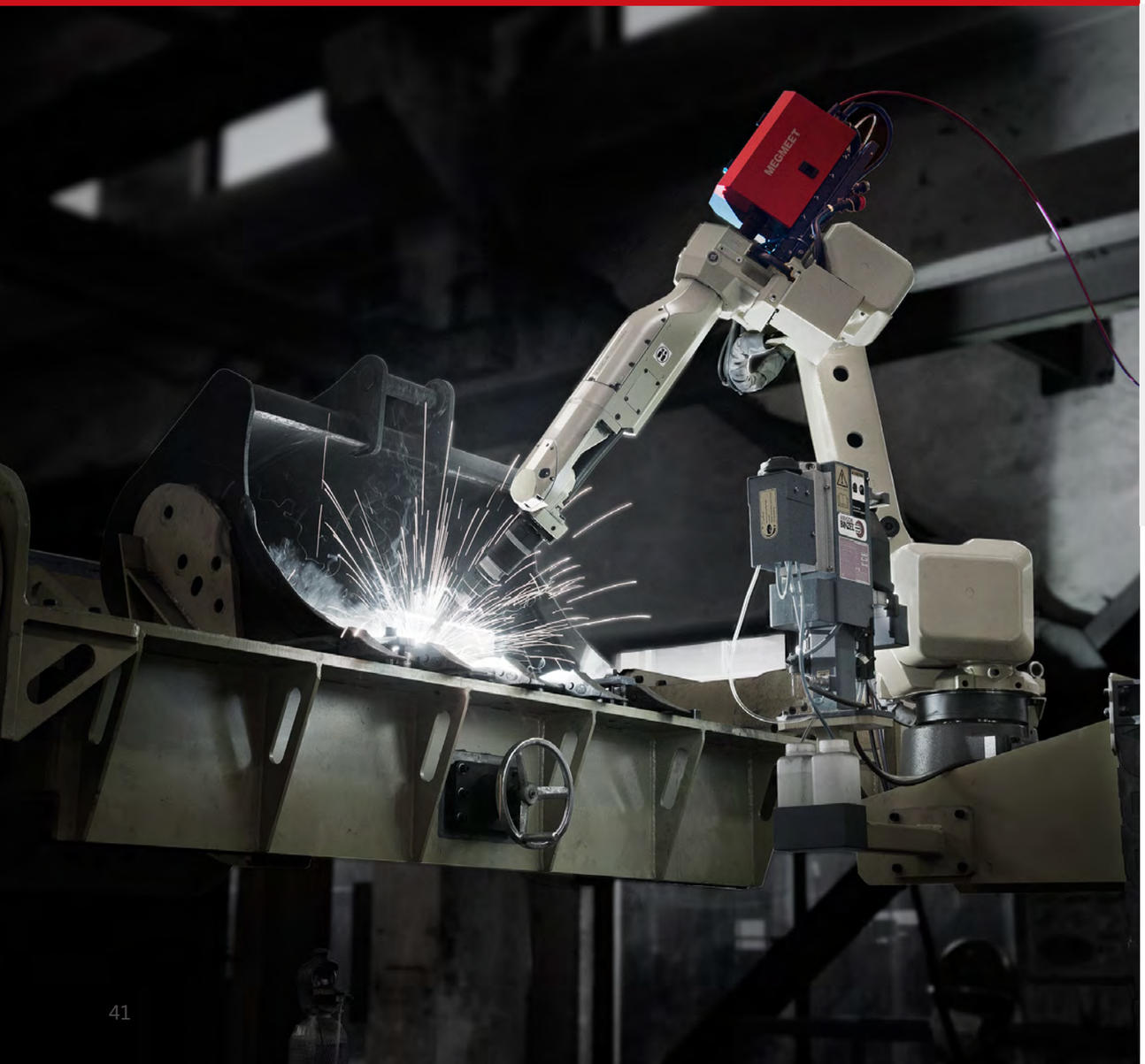
Compact Model For High-Efficiency Welding



MEGMEET
WELDING TECHNOLOGY

SUPERIOR ADAPTABILITY

With Robot and Special Device



Superior Adaptability

Abundant Communication Interface, Specialized Robot Software & Hardware Module

- **Stable arc, high consistency in parameter and high reliability in power source**, to be effective supporting in bulk copy operation and long stable welding of robot;
- **Both Euro-type(defaulted) and Panasonic-type(optional) welding torch** for robot-model wire feeder are available;
- **Flexible communication interface:** Analog\Devicenet\CAN Open\MEGMEET CAN\RS-485 \EtherNet/IP (6 selections);
- **"One Key" selection** of robot brand in internal menu can simplify complicated parameter configuration;
- **Be Compatible with welding mode classification of mainstream robot brands**, and optional Megmeet unique 4 modes are available: Normal/Monitoring/JOB/Free;
- **Double touch sensor power supply*:** defaulted high-pressure touch sensor power supply and optional low-pressure touch sensor. No additional touch sensor power source is needed for robot;
- **DC54V high-pressure touch sensor power supply** brings stronger penetration through oil stain and painting of plates and less cost for working station integration of robot;
- **Accurate real-time feedback** of welding current and voltage to support effective robot arc tracking;
- **Push-pull welding torch for robot is available:** welding power source directly drive push-pull welding torch motor and maintain synchronization with wire feeder torque and speed.

Communication Mode List

Machine Model	Communication Mode						Touch Sensor		Arc Track Support
	Analog	DeviceNet	CAN Open	MEGMEET CAN	RS-485	EtherNet/ IP	High Pressure	Low Pressure	
Ehave	●							●	●
Artsen	●	●	●	●			●	●	●
Artsen Ⅱ	●	●	●	●	●	○	●	●	●
Artsen Plus	●	●	●	●	●	○	●	●	●

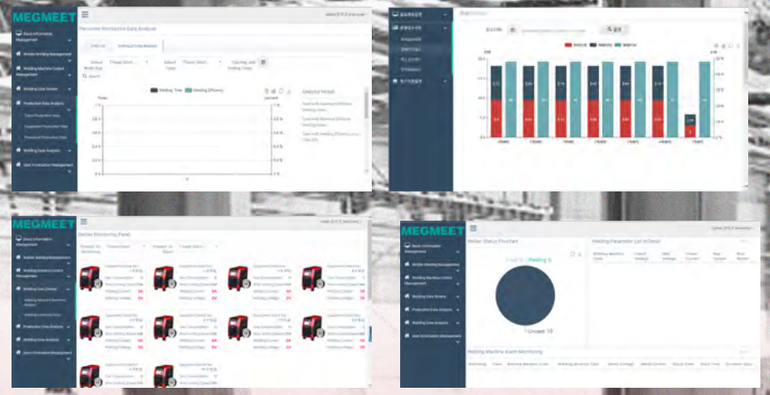
*: Ehave series only have low-pressure touch sensor power source
**: Push-pull function is available in Artsen Ⅱ series

● Standard ○ Optional

MEGMEET
WELDING TECHNOLOGY

SMARC

Megmeet Welding Information Management System

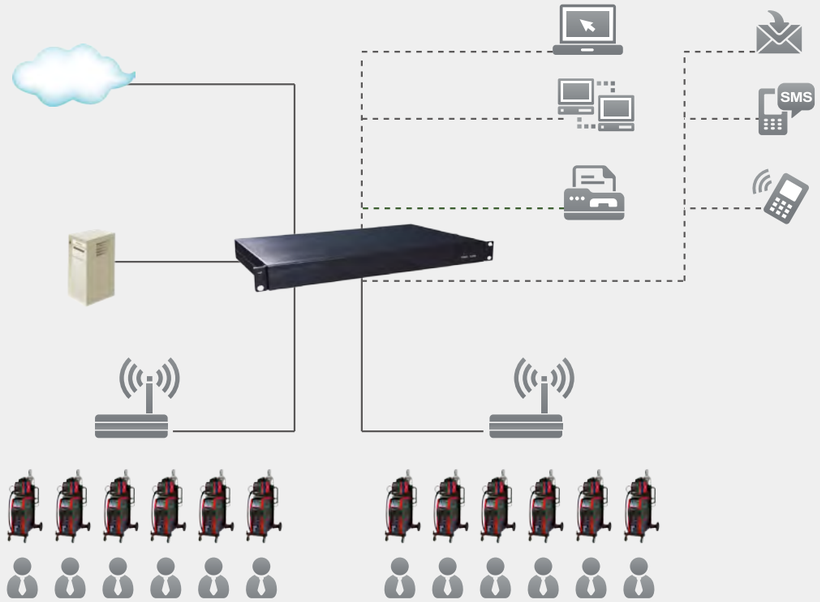


Integration and Interaction of Industry & Internet

What SMARC Can Do?

- ■Overall real-time monitoring and fault alarming
- ■Accurate data acquisition and management
- ■Effective networking of machine, welder and document
- ■Easier process traceability and massive cloud storage
- ■Flexible Interaction with other software and digital facility

SMARC System Architecture



- ■ Each Megmeet welding machine has access to Smarc system
- ■ Welding machine is able to connect with Smarc through both wired network(Ethernet) and wireless network(Wi-Fi)
- ■ Unique “Tri-Mode System” function design can be extensively adaptive to various welding jobsites
- ■ Superb “Four Principles of Control” designing effectively enables minimal interference to operation habit of welder while welding quality is well guaranteed
- ■ All welding parameters can be opened to Smarc system and more transparency for welding process is available

MEGMEET
WELDING TECHNOLOGY

MEGMEET

Shenzhen Megmeet Electrical Co.,Ltd
5F, Ziguang information Harbor, Langshan Road, Nanshan district, Shenzhen.
www.megmeet.com
weld4s@megmeet.com
Tel: +86-755-86600500
Fax: +86-755-86600840
Postcode: 518057

Hot line:
400-666-2163