

MEGMEET Electrical Co., Ltd MEGMEET Welding Technology Co., Ltd

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

MEGMEET Türkiye rtibat Bürosu Add: Merkez Mah. Hasat Sok. No:52/1 Şişli - İstanbul Tel: +90 538 334 94 88

Email: welding@megmeet.com

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

Follow us:











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.

*MEGMEET Welding Technology Co., Ltd is continuously striving to develop and innovate for new product. We reserves the right of changing the technical specifications and Copyright 2023 © MEGMEET Welding Technology Co., Ltd



Dex2 M Series

Full Digital IGBT Inverter Multi-functional MIG Welding Machine

www.megmeet-welding.com



Dex2 M Series

Full Digital IGBT Inverter Multi-functional MIG Welding Machine











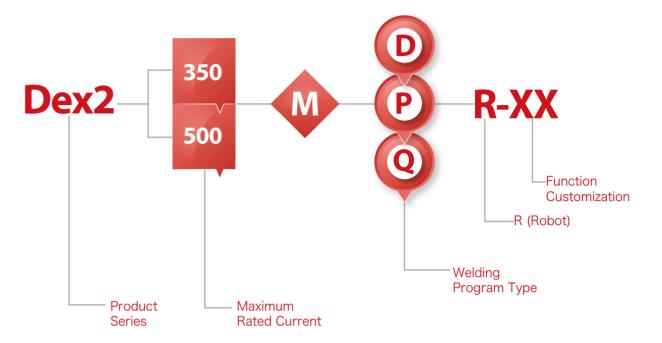




Features

- 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
- 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) CO₂/MAG

☐ Pulse MAG/MIG ☐ Quick Pulse MAG/MIG

sk Interface 🔳 IOT Interface

Dex2 500MP/350MP



Dex2 500MQ/350MQ

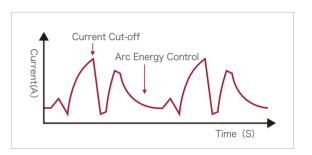
LSA (Low Spatter Arc by Software Algorithm)

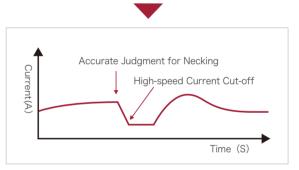
Fine management in droplet transfer through software algorithm so that short-circuit transfer of droplet is softly cut off, which greatly reduces spatter caused by liquid-bridge bursting and electromagnetic repulsion, and helps fusion pool more stable and weld shape more beautiful.

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.

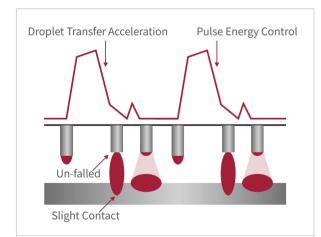
With shorter droplet transition distance, lower arc and faster welding speed, pulse speed is increased by more than 20%. Service life of wearing parts is lengthened and weld shape is better, meeting actual needs of manual welding.

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.



- · 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

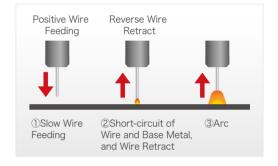
- · With wider adaptive range of voltage, the same current is able to match lower voltage (10% lower than other welding machines);
- · Lower heat input, higher deposition efficiency, thin-plate welding performance be comparable with tap-type machine.





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

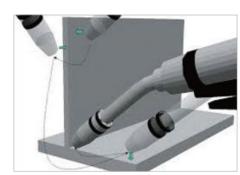
- · Built-in high-voltage touch sensing function with adjustable range 80~400V, no need to separately buy high-voltage touch sense device;
- · High reliability and effective penetration of oil stains, rust, water stains, etc., fast touch-sense with high precision, and strong adaptability to robots;
- · 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)

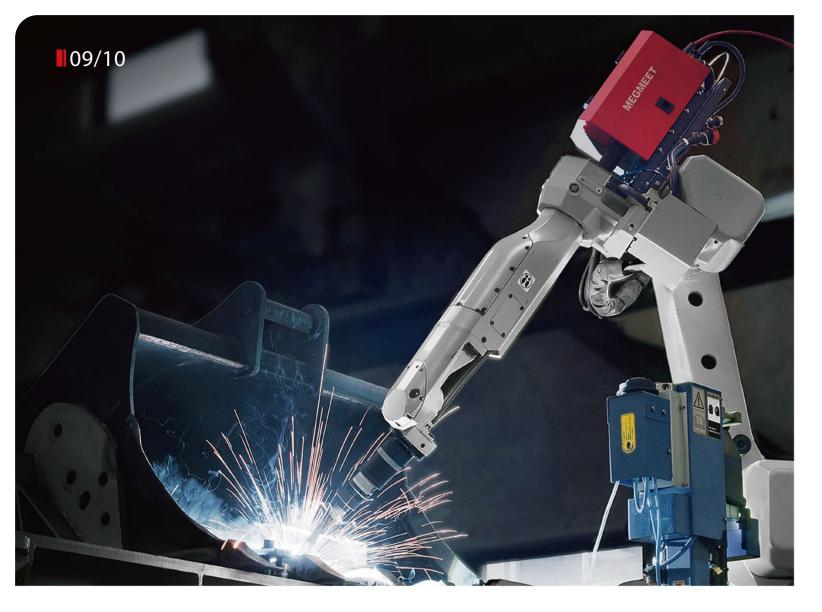
Circulating Water Cooler AnyCool-66				
Water cooler power supply Powered by welding machine				
Rated power	370W			
Rated voltage	380V AC			
Cooling water capacity	6.8L			
Cooling water flow	3.5L/min			
Cooling water maximum lift	20m			
Flow alarm	√			



Product Specification

Troductop	Comica	CIOII			Standar	d 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	0	0	0	0	0	0
Push-pull welding torch interface	0	0	0	0	0	0
Wire feeder AV LED display (manual type	e) O	0	0	0	0	0
Technical Parameters						
Control Method	Digital IGBT Control		Digital IGBT Control		Digital IGBT Control	
Input voltage	3-phase AC 3	380 V (土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	rating 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	Н	Н	Н	Н	Н	Н
Cooling method	Forced air	Forced air	Forced air	Forced air	Forced air	Forced air









Embedded-Type communication module supports multiple types of communication protocols















Dex2 Communication Protocols with Robots

	TAST(Thru- arc Seam	Touch Sensing				Communication P	on Protocols with Robots		
Function	Tracking)	80-400V	Analog	DeviceNet	CANopen	MEGMEET CAN	EtherNet/IP	EtherCAT	Profinet
	•	•	0	0	0	0	*	*	*

● Standard ○ Optional ◆ Customized

Robotic Wire Feeder Selection

Series	Model Name	Dimensions (L*W*H) mm	Welding Torch Interface	Weight (kg)	
	WF1-50ZE	230x170x170	European type	6kg	and the same of th
Dex 2 -	WF1-50ZER	230x170x170	Asian type	6kg	3
	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	ф0.8~1.6 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	