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

Intelligent Platform of MIG/MAG Welding Process

Continuous Realization of Expectation for Welding Process

Intelligent Welding Platform with continuously updating of welding process.

Feature:

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

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

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

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

[1]: Sampling speed is increased by 13 times comparing with Artsen series.
[2]: The power source will proactively release the arc energy at the moment of metal transfer. Welding arc will be maintained with an extremely low current. The output current has no impact on the melt.
[3]: The Tranquil Fusion function for carbon steel is standard. Other processes are optional for different welding conditions.
[4]: Optional.

Brand-new Welding Process

Tranquil Fusion - Smooth Short-circuit Transfer [3]

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

Applications:

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

Thunder Fusion - Short-arc Pulse Transfer [4]

- Short in welding arc; high in arc stiffness; sharp in arc direction. Welding speed is significantly increased.
- Low in welding heat input and welding spatter.
- Remarkable welding junction with lowered defects of blowhole and undercut. Less accessories and labor protection products are needed.

Applications:

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

Clean Fusion-HF Dynamic Wave Energy Control [5]

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

Applications:

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

Leaping Fusion - High Speed Stitching Welding [6]

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

Applications:

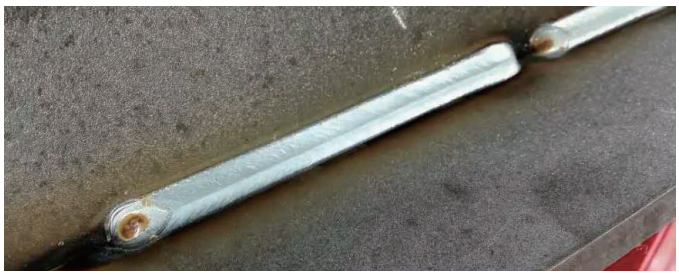
- Widely applied in the sheet metal welding of carbon steel, stainless steel, galvanized sheet, aluminum and aluminum alloy.

Consistant Fusion - Welding with Unchanging Penetration [3]

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

Applications:

- Robotic and automatic welding.



[5]: Optional
[6]: The Leap Fusion process for carbon steel is a standard function. Other processes are optional.
[7]: The welding beat is lowered than Clean Fusion.
[8]: Optional

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

Specification

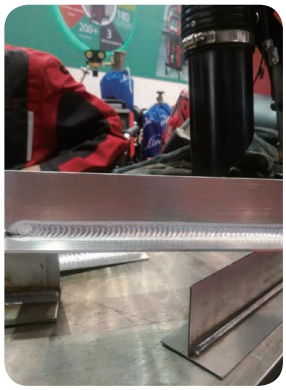
Manual Robotics	Artsen Plus 500 D / P / Q Artsen Plus 500 D / P / Q R	Artsen Plus 400 D / P / Q Artsen Plus 400 D / P / Q R	Artsen Plus 350 D / P / Q Artsen Plus 350 D / P / Q R
Control Mode	Full Digital-Control		
Rated Input Voltage	AC 3PH 380V +/-25% (3PH 285V ~ 3PH 475V)		AC 3PH 380V +/-25% (3PH 285V ~ 3PH 475V) AC 3PH 220V +/-15% (3PH 187V ~ 3PH 254V)
Input Frequency	45 ~65 HZ		
Rated Input Power	24 KVA	22.3 KVA	16.8 KVA
Power Factor	0.93		
Efficiency	87%		
Rated OCV	85 V		
Rated Output Current	30 ~ 500 A	30 ~ 400 A	30 ~ 350 A
Rated Output Voltage	12 ~ 45 V (Precision at 0.1V)		
Duty Cycle	500A / 39V 60% @ 40℃ 387A / 33.5V 100% @ 40℃	400A / 34V 100% @ 40℃	350A / 33.5V 60% @ 40℃ 270A / 27.5V 100% @ 40℃
Applicable Material	D: Carbon Steel / Stainless Steel P: Carbon Steel / Stainless Steel Q: Carbon Steel / Stainless Steel / Aluminum Alloy		
Welding Process	D: MIG / MAG / CO_2; Low-spatter; P: MIG / MAG / CO_2; Low-spatter; Short-arc Pulse Q: MIG / MAG / CO_2; Low-spatter; Short-arc Pulse		
Wire Diameter	φ 0.8 / 0.9 / 1.0 / 1.2 / 1.6 mm		
Welding Operation Mode	2T / 4T / Special 4T / Spot Welding / Leaping Welding		
Inductance Scope (Soft / Strong Arc)	-7 ~ +7		
Push-pull Torch Function (1)	Yes		
Communication with Robot Controller	Analog; DeviceNet; CAN Open; MEGMEET CAN; EtherNet/IP (2)		
Digital Meter on Wire-feeder	Yes		
Cooling Mode	Air Cool; Water Cool (Optional)		
Electromagnetic Compatibility	IEC60974:10 EMS		
Insulation Grade	H		
Ingress Protection	IP 23S		
Protection Against Lightening	Class D (6000V/3000A)		
Working Temperature & Humidity	-39℃ ~ +50℃ ; Humidity ≤ 95%;		
Dimension (L / W / H)	620 x 300 × 480 mm		
Gross Weight	52 KG		

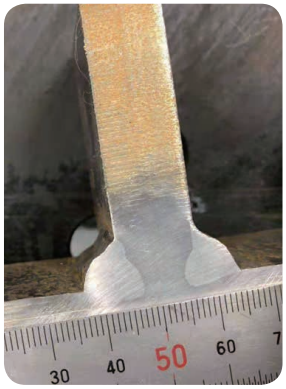
Water Cooler (Optional)	
Rated Power	260W
Rated Voltage	AC 400V
Volume of Cooling Water	10L
Flow of Cooling Water	3.5L / min
Max Pump Head	30 m
Flow Alarm	Yes

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

SYTECH

Intelligent Welding Platform with continuously updating of welding process.





MEGMEET
WELDING TECHNOLOGY