Product Specification

● Standard ○ Optional

Manual model	Artsen3 500D	Artsen3 400D	Artsen3 500P	Artsen3 400P	Artsen3 500Q	Artsen3 400Q
Robotic model*	Artsen3 500DR	Artsen3 400DR	Artsen3 500PR	Artsen3 400PR	Artsen3 500QR	Artsen3 400QR
Welding process						
DC	●	●	●	●	●	●
Carbon steel (single and double pulse, DP synergic)	-	-	●	●	●	●
Stainless steel (single and double pulse, DP synergic)	-	-	●	●	●	●
Al, Al-Mg, Al-Si (single and double pulse)	-	-	-	-	●	●
DC TIG	●	●	●	●	●	●
MMA	●	●	●	●	●	●
Extended function						
Smarc IoT	○	○	○	○	○	○
U-disk upgrade	●	●	●	●	●	●
Technical parameters						
Control mode	Digital IGBT					
Wire feeding drive control mode	Encoder feedback/High-frequency back-EMF control					
Input voltage	3-phase AC 380V (±25%)					
Input frequency	50~60Hz	50~60Hz	50~60Hz	50~60Hz	50~60Hz	50~60Hz
Input capacity	23.1KVA/21.7KW	16.2KVA/15.2KW	23.1KVA/21.7KW	16.2KVA/15.2KW	23.1KVA/21.7KW	16.2KVA/15.2KW
Power factor	0.94	0.94	0.94	0.94	0.94	0.94
Efficiency	0.89	0.89	0.89	0.89	0.89	0.89
Rated no-load voltage	76V	76V	76V	76V	76V	76V
Rated output current	500A	400A	500A	400A	500A	400A
Rated output voltage	39V	34V	39V	34V	39V	34V
Given current range	30～500A	30～400A	30～500A	30～400A	30～500A	30～400A
Given voltage range	12～45V	12～38V	12～45V	12～38V	12～45V	12～38V
Rated duty cycle	500A@100%	400A@100%	500A@100%	400A@100%	500A@100%	400A@100%
Lightning protection degree	D	D	D	D	D	D
Welding machine JOB storage	99	99	99	99	99	99
Insulation degree	F (reactor H)	F (reactor H)	F (reactor H)	F (reactor H)	F (reactor H)	F (reactor H)
Protection degree	IP23	IP23	IP23	IP23	IP23	IP23
Main machine environment	−10°C～+40°C					
Volume (L×W×H)	684×320×580mm					
Total weight	44kg	44kg	44kg	44kg	44kg	44kg

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Artsen3 Series

Fully Digital IGBT Inverter
Multifunctional MIG machine

www.megmeet-welding.com

MEGMEET
WELDING TECHNOLOGY

Artsen3 Series

CO_2/MAG/MIG/TIG/MMA
All-in-one Machine

DC | 380 3PH | 50~60 Hz | CV CC | Class D

Product Feature

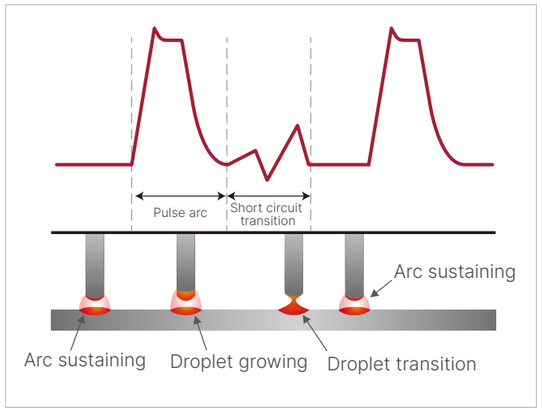
- Available with many welding processes including DC flexible transition, pulse mixed transition, TIG, MMA, etc., and be able to weld various materials such as carbon steel, stainless steel and aluminum alloy;
- Unique mixed-pulse process perfectly integrates both advantages of pulse and DC short circuit, and welding speed is increased by more than 20% compared with standard pulse welding;
- Huge expert welding database, up to 99 groups of welding parameter JOB, one-click call, and convenient operation;
- Multiple protection functions such as input over/under voltage protection, phase loss protection, overheat protection, short circuit protection, etc;
- Welding voltage and welding current compensation functions can realize stability of long-cable welding and consistency of actual parameters with pre-set values;
- Intelligent fan control to ensure excellent heat dissipation effect, reduce noise and overall power consumption;
- Full series of machines are 100% duty cycle, be suitable for use in harsh hearty-duty environments;
- Main machine and wire feeder adapt high-voltage CAN communication and high-voltage code disk sampling. Signal transmission is strong anti-interference, be applicable in long-cable and large electromagnetic interference occasions;
- RFID card binding function can support welding machine to use authority management and can be quickly connected with SMARC IoT system;
- U-disk Interface helps customers easily obtain Megmeet's most cutting-edge welding technology.

Mixed Pulse

Megmeet unique mixed pulse welding process is to add short-circuit transition algorithm based on pulse arc. Through the combination of software and hardware, welding arc becomes lower, more concentrated, and more anti-interference. So, welding speed is faster than traditional pulse, weld formation is better, which more caters to robotic automation welding.

Advantages

- Arc is lower and fusion cladding efficiency is high, and welding speed is 20% higher than standard pulse;
- More concentrated arc, stronger penetration, deeper fusion depth, and better fusion at the groove root;
- Spatter is less, not easy to produce defects such as undercut and pores;
- Droplet transition distance is short and anti-interference ability is extremely strong;
- Wearing parts are less heated, so service life is longer and use cost is low;
- Heat-affected zone is small, and mechanical properties of welding joint are better.



Flexible Short-circuit Transition

By droplet necking detection and chopping control technology, short-circuit droplet transition is precisely controlled, so that the current of each droplet drops sharply to the arc-sustaining state at the moment of transition, and the droplet enters fusion pool calmly, reducing main spatter caused by wave bridge explosion. The entire waveform control can greatly reduces heat input simultaneously.

Advantages

- Softer arc, calm fusion pool, and beautiful weld appearance;
- Spatter can be reduced by more than 70% compared with ordinary DC welding, and spatters do not stick to work-piece and almost do not need to be cleaned;
- Low heat input and small deformation to work-piece ;
- Strong bridging ability is especially suitable for the occasions with gaps or base welding.