

# Artsen 3 Series

Fully Digital IGBT Inverter  
Multifunctional MIG Welding Machine

**MEGMEET** | Stock Code  
WELDING TECHNOLOGY | 002851

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MEGMEET  
Welding Technology

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 designs without notices in advance.





## Artsen3 Series

CO<sub>2</sub>/MAG/MIG/TIG/MMA

All-in-one Machine

DC

380  
3PH

50 ~ 60  
Hz

CV  
CC

Class D  
6000V / 300A



### Product Features

- 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.

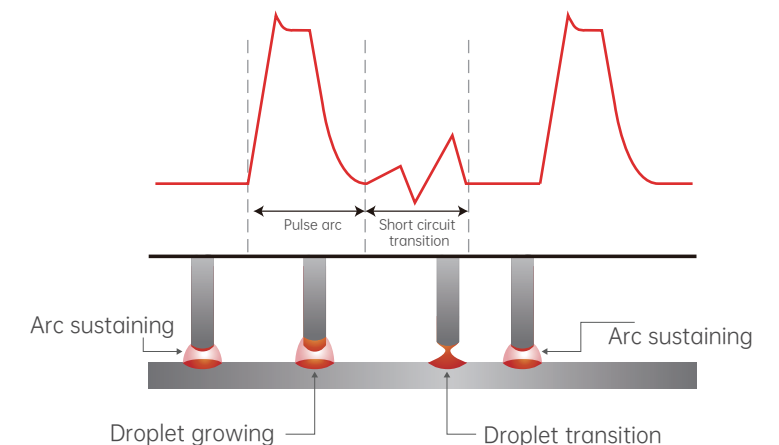


### Mixed Pulse

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.

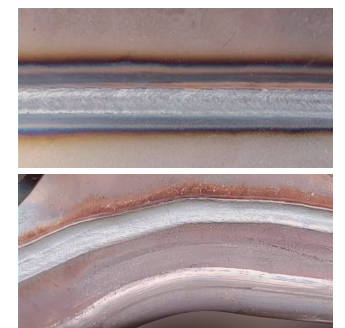


### Flexible Short-circuit Transition

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 reduce heat input simultaneously.

#### Advantages

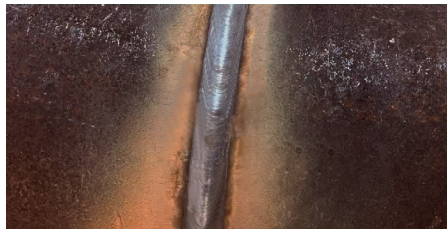
- Softer arc, calm fusion pool, and beautiful weld appearance;
- Spatter can be reduced by more than 70% compared with ordinary DC welding, and spatters do not stick to work-piece and almost do not need to be cleaned;
- Low heat input and small deformation to work-piece ;
- Strong bridging ability is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





## Multi-process·MMA Function

- Featuring professional MMA welding technology, the arc starting current and thrust current are adjustable.
- Compatible with a variety of electrode types, including carbon steel, stainless steel, and various acid, alkaline, electrodes.
- A single machine achieves the composite process of 'TIG root pass + MMA filling and cap pass', significantly enhancing production efficiency.



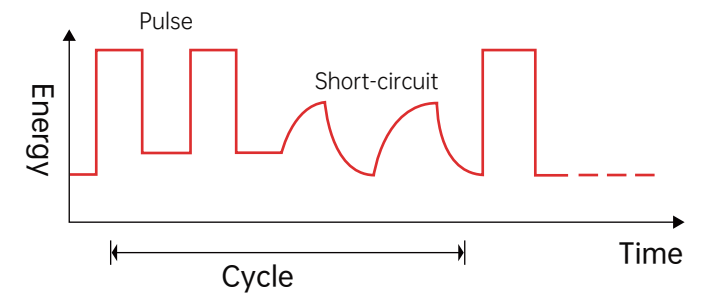
## TIG/Pulse TIG Function

- Unique arc-starting design minimizes tungsten electrode loss and increases arc-start success rate.
- Compared to other competitors' simple TIG welding machines, it offers a wider range of adjustable parameters, including arc start and end, rise and fall times, and pulse frequency.
- A single machine achieves the composite process of 'TIG root pass + MAG filling and cap pass', convenient and fast.



## DP Fusion (Vertical Up Welding)

- 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.
- Highly suitable for full-position welding of plates over 2.5 mm, especially with robotics and welding automation.
- Highly applicable for vertical-up welding without weaving commonly known as "SPEED UP". Compared with the traditional vertical welding method with low current swinging, it has deeper penetration and the efficiency is increased by 2-3 times.





# Artsen

## Push-pull Welding Torch

Outstanding Stability with Push-pull Wire-feeding

### Product Features:

- Capability to work with push-pull torches by major torch manufacturers with the 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.



## Artsen Series Exclusive options

### Intermediate Wire-feeder

Mid-way Reinforcement for Ultra-Long Wire-feeding

### Product Features:

- When welding over long distances, there's no need to carry heavy wire and a wire feeder. The intermediate wire feeder weighs only 4.3kg, making it lightweight and compact, significantly reducing welder workload. The metal housing is durable.
- The relay wire feeder's built-in motor synchronises with the wire feeder motor for wire feeding. Simply plug in a standard welding torch for immediate use, offering an economical solution.
- The intermediate wire feeder features an integrated operation and display panel, enabling convenient on-site parameter viewing and adjustment.
- Widely applicable for conditions of long distance and narrow space, such as large tanks, shipbuilding and large steel construction.



Up/Down torch  
Welding current, voltage, etc. can be adjusted on the welding torch, making operation more convenient

### Specification

|                        |                                                                  |
|------------------------|------------------------------------------------------------------|
| Cable assembly         | Power cable+Control cable+Gas hose+liner+water hose              |
| Wire-Feeding Speed     | 1.5 ~ 24 m/min                                                   |
| A/V Display            | Yes                                                              |
| Configuration Function | Yes                                                              |
| Locking-up Function    | Yes                                                              |
| Weight                 | 4.3kg                                                            |
| Length                 | The default length is 10 meters, other lengths can be customized |

For Artsen series.



|                                 |                                                 |
|---------------------------------|-------------------------------------------------|
| Model Name                      | WF1-50MZP-16E                                   |
| Wire Feeding Drive Control Mode | High frequency back electromotive force control |
| Wire Feeder Rated Current       | 4.2A                                            |
| Wire Feeder Rated Voltage       | 24V                                             |
| Push-Pull                       | Optional                                        |
| Wire Feeder Speed               | 1.1~28m/min                                     |
| Wire Feeding Roller Diameter    | 0.8~1.6mm                                       |
| Drive Unit                      | Double drive four rollers                       |
| Wire Feeder Torch Interface     | European interface                              |
| Dimension                       | 250*200*200mm                                   |
| Weight                          | 6.5kg                                           |

Robot Wire Feeder



|                                 |                                                         |
|---------------------------------|---------------------------------------------------------|
| Model Name                      | WF22-50MZP-16E                                          |
| Wire Feeding Drive Control Mode | Photoelectric encoder feedback/Back electromotive force |
| Wire Feeder Rated Current       | 4.2A                                                    |
| Wire Feeder Rated Voltage       | 24V                                                     |
| Push-Pull                       | Optional                                                |
| A/V Display                     | Yes                                                     |
| Wire Feeding Speed              | 1.1~28m/min                                             |
| Wire Feeding Roller Diameter    | 0.8~1.6mm                                               |
| Drive Unit                      | Double drive four rollers                               |
| Wire Feeder Torch Interface     | European interface                                      |
| Dimension                       | 640*230*390mm                                           |
| Weight                          | 14.5kg                                                  |

Manual Wire Feeder



|                            |                  |
|----------------------------|------------------|
| Model Name                 | AnyCool-101      |
| Water Cooler Power Supply  | 400VAC 1~50/60Hz |
| Rated Power                | 260w             |
| Rated Voltage              | 400VAC           |
| Cooling Water Capacity     | 10L              |
| Cooling Water Flow         | MAX 8L/min       |
| Cooling Water Maximum Lift | 35m              |
| Flow Alarm                 | Yes              |
| Dimension                  | 711*323*327mm    |
| Weight                     | 15kg             |

Water Cooler





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)             | -                                                | -              |                |                | ●              | ●              |
| Silicon bronze/Aluminum Bronze(Customized)             |                                                  |                | custom-made    | custom-made    | custom-made    | custom-made    |
| DC TIG                                                 | ●                                                | ●              | ●              | ●              | ●              | ●              |
| MMA                                                    | ●                                                | ●              | ●              | ●              | ●              | ●              |
| Extended function                                      |                                                  |                |                |                |                |                |
| Smarc IoT                                              | ○                                                | ○              | ○              | ○              | ○              | ○              |
| USB Upgrade                                            | ●                                                | ●              | ●              | ●              | ●              | ●              |
| Technical parameters                                   |                                                  |                |                |                |                |                |
| Control mode                                           | Digital IGBT                                     |                |                |                |                |                |
| Wire feeding drive control mode                        | Encoder feedback/High-frequency back-EMF control |                |                |                |                |                |
| Input voltage                                          | 3-phase AC 400V (±15%)                           |                |                |                |                |                |
| 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           |
| Effciency                                              | 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@60%                                         | 400A@100%      | 500A@60%       | 400A@100%      | 500A@60%       | 400A@100%      |
| 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℃～+40℃                                        | －10℃～+40℃      | －10℃～+40℃      | －10℃～+40℃      | －10℃～+40℃      | －10℃～+40℃      |
| Volume (L×W×H)                                         | 684X320X580mm                                    | 684X320X580mm  | 684X320X580mm  | 684X320X580mm  | 684X320X580mm  | 684X320X580mm  |
| Total weight                                           | 44kg                                             | 44kg           | 44kg           | 44kg           | 44kg           | 44kg           |