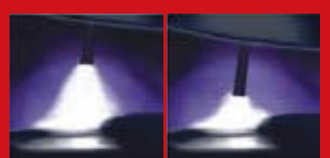
Artsen Pro Series

Intelligent Platform of MIG/MAG Welding Process



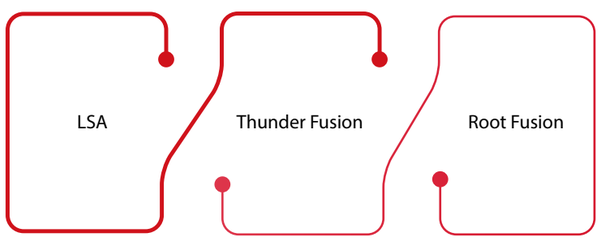
Artsen Pro Series

Intelligent Platform of MIG/MAG Welding Process

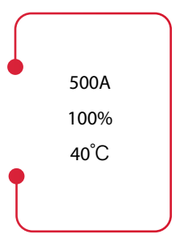
Features

- Artsen Pro series was developed on the basis of the Artsen Plus series. It has meet the demand of high efficiency welding, especially for thick plates.
- Power source of 500A 100% is available for Artsen Pro series.
- With inverter technology of frequency as high as 100K HZ and high-speed sampling, Artsen Pro achieves precise control, and is flexible with various welding characteristics.
- Artsen Pro series brings LSA, a featured low-spatter welding process, as standard. Thunder Fusion is also available with Artsen Pro for the advanced short-arc pulse and double pulse MIG/MAG.
- Artsen Pro series meets high quality welding of carbon steel, stainless steel and aluminum alloys.
- Equipped with Constant Fusion, which allows wire-feeding speed at pulse mode to change automatically according to the stick-out length, and keeps the penetration stabilized.
- Capable to work with multiple industrial robots thru multiple robotic protocols.
- Anti-interference capability, especially convenient for welding automation of multiple torches.
- Equipped with USB port for upgrading, ensuring access to the most advanced welding process developed by MEGMEET and the most suitable welding software to face different welding conditions.
- Artsen Pro brings various wire-feeders to meet different welding applications at different markets of different budget levels.

Advanced Welding Process of Artsen Pro Series



Heavy-duty Power Source



Artsen Pro Series

Artsen Pro
500H Q / 500Q / 400Q /350Q

- LSA for Carbon Steel and Stainless Steel.
- Thunder Fusion for Aluminum, Carbon Steel and Stainless Steel

☑ LSA ☑ Synergic CO_2/MAG
☑ Thunder Fusion

☑ Steel ☑ Stainless Steel ☑ Aluminum

☑ Constant Penetration ☑ USB Port
☑ Push-pull Torch Connector

Artsen Pro
500H P / 500P / 400P / 350P

- LSA for Carbon Steel and Stainless Steel
- Thunder Fusion for Carbon Steel and Stainless Steel

☑ LSA ☑ Synergic CO_2/MAG
☑ Thunder Fusion

☑ Steel ☑ Stainless Steel ☐ Aluminum

☑ Constant Penetration ☑ USB Port
☑ Push-pull Torch Connector

Artsen Pro
500H D / 500D / 400D / 350D

- LSA for Carbon Steel and Stainless Steel

☑ LSA ☑ Synergic CO_2/MAG
☐ Thunder Fusion

☑ Steel ☑ Stainless Steel ☐ Aluminum

☑ Constant Penetration ☑ USB Port
☑ Push-pull Torch Connector

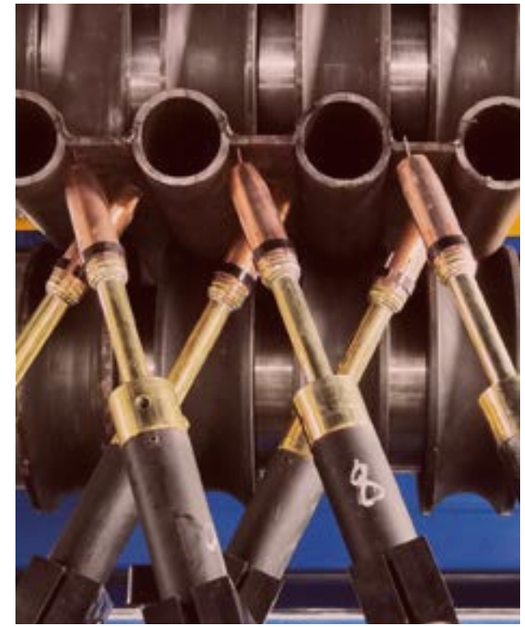
☑ Standard
✱ Optional with extra costs
☐ Not Applicable

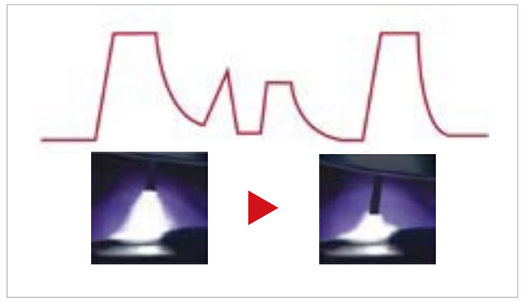
Thunder Fusion (Short Arc Pulse Welding)

Shot-circuit transfer was added into waveform of the standard pulse process. It is a superb combination of synergic and pulse welding process together with their advantages, and achieving better results with short welding arc.

Features in Welding Process:

- Welding with lowered voltage to achieve spatter-free and beautiful results with pulse process
- Short in transfer arc, higher in transfer frequency, stronger in anti-interference capability
- More friendly to robotic welding with high arc stiffness and sharp arc direction
- Heat-input lowered to avoid defects like under-cut
- Deposition rate increased
- Welding spatter is eliminated. Welding process becomes well controlled





Standard Pulse Thunder Fusion

Heavy construction equipment

Spatter-free with Thunder Fusion

Energy

High-speed welding with anti-interference capability

Welding aluminum and alloys

Higher quality in aluminum welding

LSA (Low-spatter Arc for MAG / CO_2)

Optimized and upgraded on the basis of standard synergic MIG/MAG, through software-based precise control, the molten droplet of short-circuit transfer is softly disconnected, so that the spatter caused by the traditional liquid bridge explosion and electromagnetic repulsion is reduced. The molten pool is calmer, and the weld formation is more beautiful.

Process Characteristics:

- Accurate in software control for high-frequency short-circuit transfer. Lower in spatter. Lower in heat input. Highly suitable for sheet metal welding
- Soft in welding arc and fine with spatter particles. Less spatter to remain on the workpiece. Lower with rework like grinding after welding. Higher in total working efficiency
- Higher in welding speed. Better in deformation control. More helpful in welding quality

USB Port

It benefits welders by ensuing fast access to the latest or any tailor-made welding process by MEGMEET. Welding process could be shared and down-loaded from online into a USB, and used thru the port for upgrading

Consistant Fusion

When the base material is uneven and the stick-out length changes, the power-source automatically adjust instantly the wire-feeding speed, and prevent the melting depth from being affected by the changing stick-out length. Welding quality is therefore improved

Process characteristics:

- The welding arc has high dynamic characteristics and stability, stable penetration, and high quality
- Suitable for automated welding by robots and special machines

Specification

Manual	Artsen Pro 500 H / 500 / 400 / 350 Q	Artsen Pro 500 H / 500 / 400 / 350 P	Artsen Pro 500 H / 500 / 400 / 350 D
Robotics	Artsen Pro 500 H / 500 / 400 / 350 Q R	Artsen Pro 500 H / 500 / 400 / 350 P R	Artsen Pro 500 H / 500 / 400 / 350 D R
Welding Process			
Synergic	●	●	●
LSA	●	●	●
Thunder Fusion	●	●	-
Leaping Fusion	-	-	-
DP Fusion	-	-	-
Material			
Steel	●	●	●
Stainless Steel	●	●	●
Aluminum	●	-	-
Featured Function			
USB for Upgrading	●	●	●
Consistent Fusion	●	●	-
Push-pull torch connection	●	●	●
Relay wire-feeder for barrel	○	○	○
SMARC / IoT	○	○	○
A / V display in manual wire-feeder	●	●	●

Manual	Artsen Pro 500 H D / P / Q	Artsen Pro 500 D / P / Q	Artsen Pro 400 D / P / Q	Artsen Pro 350 D / P / Q
Robotics	Artsen Pro 500 H D / P / Q R	Artsen Pro 500 D / P / Q R	Artsen Pro 400 D / P / Q R	Artsen Pro 350 D / P / Q R
Control Mode	Fully Digital-Control			
Rated Input Voltage1	AC 3PH 380V -25% ~ 400V +10% (3PH 285V ~ 3PH 440V)			
Rated Input Voltage2				AC 3PH 220V +/-15% (3PH 187V ~ 3PH 254V)
Input Frequency	45 ~ 65Hz			
Rated Input Power	24KVA / 22.3KW	24KVA / 22.3KW	16KW / 14KW	15KVA / 12.7KW
Power Factor	0.93	0.94	0.94	0.93
Efficiency	87%			
Rated OCV	85V			
Max Output Current	500A	500A	400A	350A
Rated Output Current	30 ~ 500 A	30 ~ 500 A	30 ~ 400 A	30 ~ 350 A
Rated Output Voltage	12 ~ 45 V (Precision at 0.1V)			
Duty Cycle (40°C / 10 min)	500A / 39V 100% @ 40°C	500A / 39V 60% @ 40°C 387A / 33.5V 100% @ 40°C	400A / 34V 100% @ 40°C	350A / 33.5V 60% @ 40°C 270A / 27.5V 100% @ 40°C
Wire Diameter	ϕ 0.8 / 1.0 / 1.2 / 1.6 mm			
Welding Operation Mode	2T / 4T / Special 4T / Spot Welding / Intermittent Welding			
Electromagnetic Compatibility	EN 60974-10 EMC			
Protection Against Lightening	Class D (6000V/3000A)			
Insulation Grade	H			
Ingress Protection	IP23 S			
Working Temperature / Humidity	-39°C ~ +50°C ; Humidity ≤ 95%;			
Dimension (L / W / H)	620mm*300mm*480mm			
Gross Weight	57.5Kg			

● Standard ○ Optional

* : Please refer to P56-P64 for Robotic and Automatic Welding.