# **ProMIG-360SYN DPulse**

Compact, Synergy, High Speed Pulse MIG welding



#### **Advanced Features**

**High Speed Pulse MIG** - Improve the Welding Efficiency Up-to 30%.

**Pulse MIG Process** - Welds Mild steel, Stainless Steel, 4XXX and 5XXX series aluminum for superior quality welding.

**Double Pulse MIG Process** - Delivers a staked dime appearance when welding mild steel and aluminum.

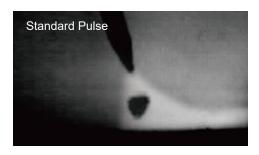
**Powerful output** - Maintains a stable, smooth arc for spay arc welding, especially for <u>1.2mm M.S.</u> in Pulse and Double Pulse process.

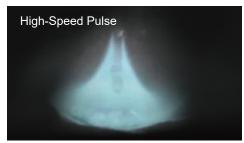
**Synergic Control** - Set weld procedures with one control. **Professional 4-Rollers Drive System** - Allows for constant wire feed speed and consistent welds.

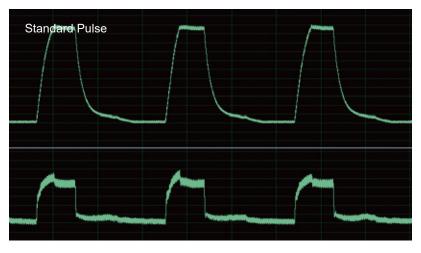
# **High Speed Pulse MAG/MIG process**

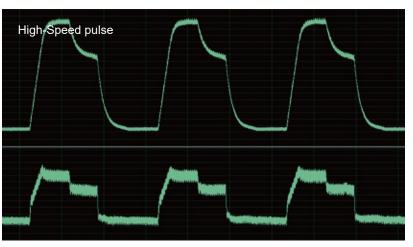
Specifically designed for demanding workshop use, the deposition rate can increase 25~30% for various materials, whether used in manufacturing thick materials or sheet metal.

The High-Speed Pulse(HSP) process enables you to save time, money, and energy compared to traditional pulse welding. This process is ready to raise pulse welding to a whole new level!





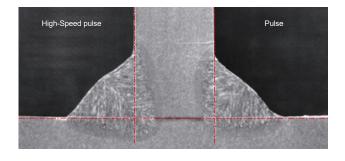




In general, One pulse melt one droplet, but we increase the submission of these droplets by TOPWELL's New High-Speed pulse process. The transition will be faster, narrower HAZ zone and deeper penetration!

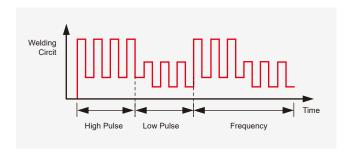
# Improve the Welding Efficiency Up-to 30%

Compared with the conventional MAG/MIG, The HSP MAG/MIG has a higher arc energy density, thus the welding speed increases up to 30%.



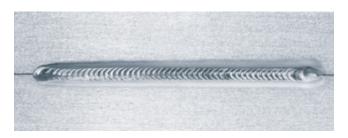
# **High Speed Double Pulse MIG process**

Compared with the traditional DoublePulse, High Speed Double Pulse process can increase the welding speed by about 25%. Welding quality is comparable to TIG process.



No need to swing, You can easily get a cosmetically pleasing weld seam, with significantly lower and more controller heat input into the workpiece. It results in much lower distortion and less rework, very suitable for welding the thin Aluminum or S.S sheets.

By High-Speed Double Pulse process, the heat input of arc is alternating, effectively reducing the heat input of base metal. It reduces the occurrence of welding defects such as crack.



# **HSP Vertical-up Welding Process**

The HSP optimised for fillet welds (FW) completed using PF welding (in vertical up position); can also be used to great benefit in other weld positions. For Topwell ProMIG Series, HSP is approx 70 % faster, an enormous progress for everyone welding a vertical seam. A whole new level!

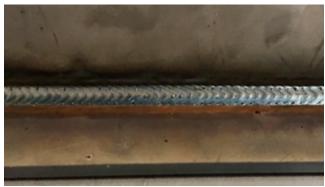
No need to swing! No undercuts or other defects!
The speed of PF welding by HSP is twice that of the traditional pulse welding.



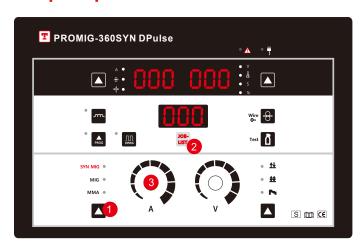
# Advanced Spray-arc for M.S.

Thanks to its powerful output, PROMIG-360SYN DPulse not only uses Pulse and Double Pulse for aluminum, but also for mild steel(up to 1.2mm wire). It allows M.S. wire transfer to welding puddle by spray-arc, which provides better control of the arc and significantly reduce spatters.





# **Simple Operation**



#### 3 Steps to achieve weld perfection

- 1. Select operation mode
- 2. Select Job-list No.
- 3. Adjust welding current

(always the perfect setting by the synergic function using the material thickness)

JOBs-list							
	<del>8</del> Material		B≺ Gas	Ø Wire			
				0.8	1.0	1.2	
				JOBs No.			
No Pulse	M.S.		100%CO2	101	102	103	
			82%Ar 18%CO2	201	202	203	
	Flux Cored		100%CO2	1	1	303	
	M.S.		82%Ar 18%CO2	1	402	403	
Pulse	s.s.	308	98%Ar 2%CO2	1	502	503	
		316		1	1	1	
		4043	100%Ar	1	702	703	
	AL	5356		1	802	803	

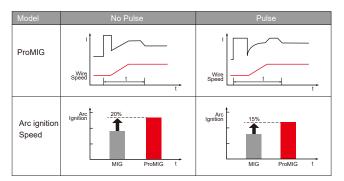
#### Synergy control with job-list

The Job-lists display is easily and intuitively controlled through its graphical user interface. We assembled the perfect welding curve in every Job-No. for highly efficient multi-process welding of carbon steels and aluminum alloys. Operation is easier than ever before.

# **Improved Operation Process & Controls**

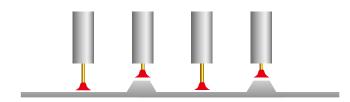
#### **Initial Arc control**

We control the arc energy by welding waveform, so the success rate of arc ignition can be improved and quickly establish a molten pool.



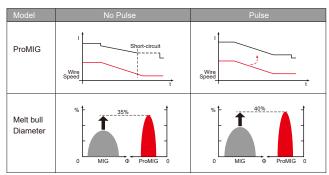
#### **Arc Length control**

By changing the distance between torch and workpiece. You can now react much more easily to control the arc, such as changing gap dimensions or arc blow, more intuitively and with greater efficiency!



#### **Burn Back control**

Adjustable time delay between turning off the arc and the wire feed to prevent wire sticking to the puddle.



#### **Dynamic control**

Dynamic control allows the welder, for the first time, to variably adjust a pulse welding machine to a wide range of jobs and welding positions as well as to his personal preferences. The welder can use a controller to directly access the arc characteristic and change it from soft to hard.







Arc setting: medium

Arc setting: hard

# **High Speed Spot <HSS> Technology**

Comparing with the standard spot welding, High Speed Spot is an great improvement. It offers a faster travel speed and better welding performance, especially for thin (less than 2mm) pipes or frame/structure welding jobs, like the furnitures etc.







# **Specifications**

Item No	PROMIG-360SYN DPulse
Rated Input Voltage	3PH ~ 400V ±15%
Max. Load Power Capacity	19.35KVA
Rated Duty Cycle(40°C) 60%	MIG: 320A/30V
	MMA: 320A/32.8V
100%	MIG: 250A/26.5V
	MMA: 250A/30V
Welding Current/Voltage Range	MIG: 10A/14.5V ~360A/32V
	MMA: 20A/20.8V~360A/34.4V
Open Circuit Voltage	70V~80V
Power Factor	0.8
Efficiency	80%
Pre-Gas Time	0.1-10s
Flow-Gas Time	0.1-10s
Wire-feed Mechanism	4 Rollers
Wire-feed Speed Range	0-25m/min
Wire Spool Capacity	300mm (15kg)
Filler Wires (mm) for Fe	0.8~1.2mm
For Stainless steel	0.8~1.2mm
For Aluminum	0.8~1.2mm
Dimension	790x250x650mm
Weight	32KG