TOPWELL®

PROFESSIONAL IN WELDING

PROMIG-250SYN DPulse

Synergy, Pulse and Double Pulse MIG

Pulse Process For M.S/AL | Double Pulse Process For M.S/AL | Full IGBT Modules | Synergy With JOBS-LIST

Quick Specs

Input Voltage	1PH ~ 230V ±15% 3PH ~ 400V ±15%
Output Range	10A ~ 250A
Rated Output(40℃) 60%	250A / 26.5V
Net Weight	32kg
Wire Feeder	4-Rollers

Machines Processes

Stick (SMAW)
Flux-Cored (FCAW)
MIG (GMAW)
Pulsed MIG (GMAW-P)
Double Pulsed MIG (GMAW-DP)

Industrial Applications

General fabricators
Contract welding services
Plant maintenance shops

Advanced Features

- **Compact & Heavy Duty**

  250A @ 60% Duty cycle, suitable for workshop or light industrial applications.

- **Synergic Control**

  Set weld procedures with one control. Just easily takes 3 Steps to achieve weld perfection.

- **Pulse MIG Process**

  Welds 4XXX and 5XXX series Aluminum and Mild Steel for superior quality welding.

- **Double Pulse MIG Process**

  Delivers a staked dime appearance when welding mild steel and aluminum without swinging.

- **Advanced Performance For Mild Steel**

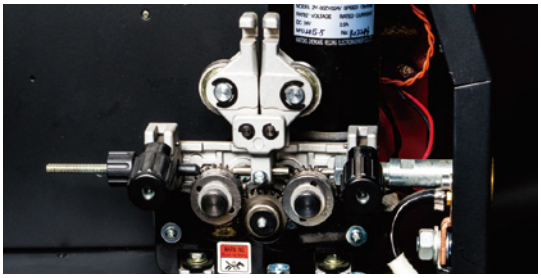
  Delivers less spatters, less rework than before.

- **Improved Operation Process & Controls**

  Initial Arc control, Burn Back control, Arc Length control, Dynamic control, these make an easier operation and handling for welding.

- **Professional 4-Rollers Wire Feeder**

  Four-rollers drive systems deliver the electrode to the welding torch. It provides a stable wire speed and is popular for industrial applications.



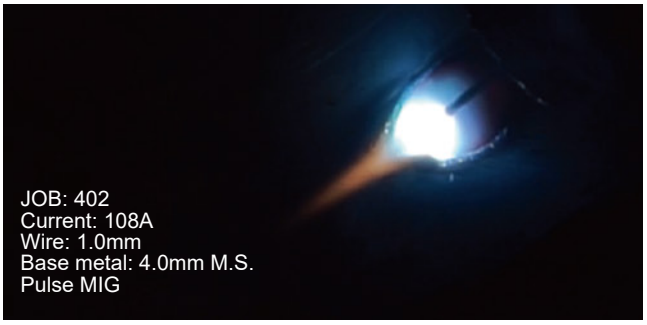
Pulse MIG

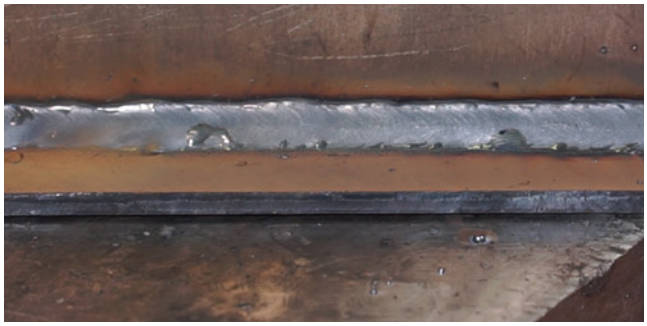
The Pulse MIG process works by forming one droplet of molten metal at the end of the electrode per pulse. Then, just the right amount of current is added to push that one droplet across the arc and into the puddle. The transfer of these droplets occurs through the arc, one droplet per pulse.

It minimizes warping and burnthrough on thin materials, not only for Aluminum, but also for Mild Steel. Moreover, it delivers ultra low spatters which is outstanding for Mild Steel welding.

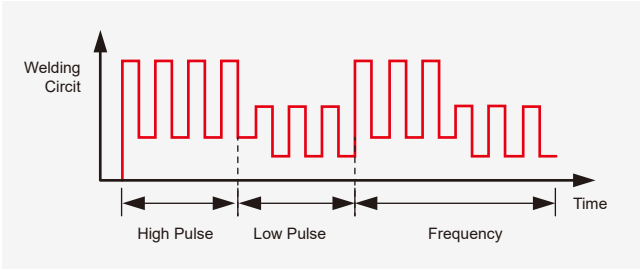
Less Spatters For Mild Steel

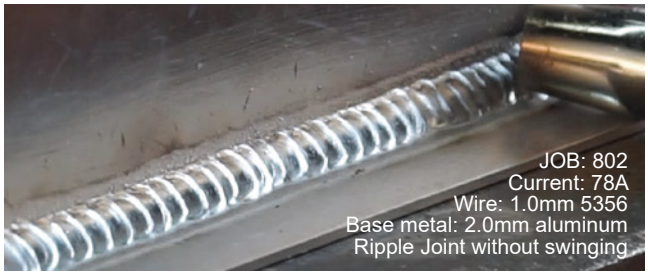
ProMIG-250SYN DPulse is not just an aluminum welding expert, it also has nice results on M.S welding. With the advanced welding curves from Master's JOBS-LIST(short-circuit transfer), there is ultra-low spatters while welding M.S and save your time for secondary work.





Double Pulse MIG

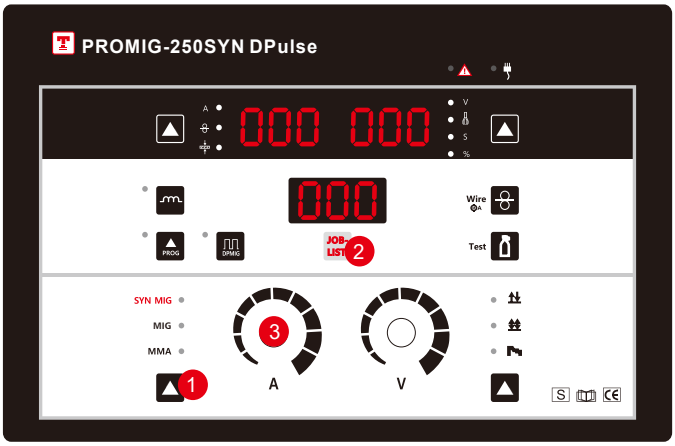




No need to swing, You can easily get a cosmetically pleasing weld seam, with significantly lower and more controller heat input into the workpiece. It results in much lower distortion and less rework for Mild steel and Aluminum sheets.

By 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. Welding quality is comparable to TIG process.

Simple Operation



JOBs-list					
	Material	Gas	Wire		
			0.8	1.0	1.2
			JOBs No.		
No Pulse	M.S.	100%CO_2	101	102	/
		82%Ar 18%CO_2	201	202	/
	Flux Cored	Self-shiled	101	102	/
Pulse	M.S.	82%Ar 18%CO_2	/	402	/
	S.S. 308	98%Ar 2%CO_2	/	/	/
	S.S. 316		/	/	/
	AL 4043	100%Ar	/	702	703
	AL 5356		/	802	803

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)

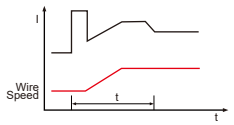
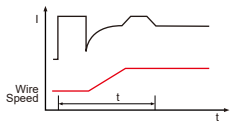
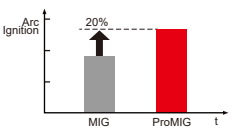
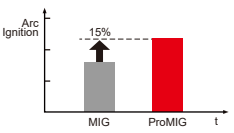
Synergy control with job-list

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

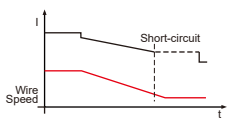
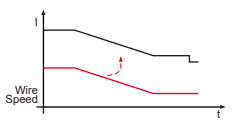
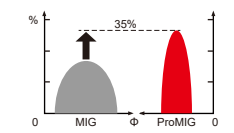
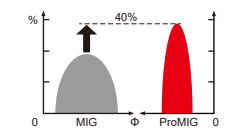
Initial Arc control

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

Model	No Pulse	Pulse
ProMIG		
Arc ignition Speed		

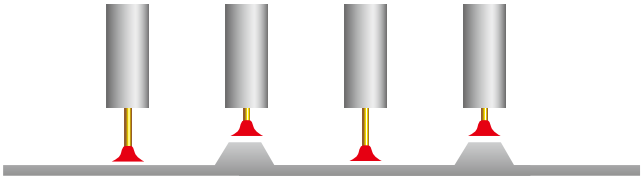
Burn Back control

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

Model	No Pulse	Pulse
ProMIG		
Melt bull Diameter		

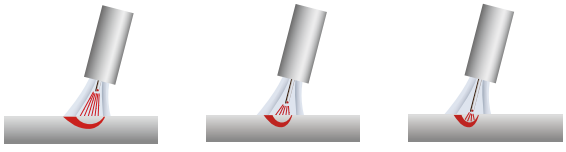
Arc Length control

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 !



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: soft　Arc setting: medium　Arc setting: hard

Specifications

Item No	PROMIG-250SYN DPulse
Rated Input Voltage	1PH ~ 230V / 3PH ~ 400V ±15%
Max. Load Power Capacity	11.72KVA
Rated Duty Cycle(40℃) 60%	MIG: 250A/26.5V
	MMA: 250A/30V
100%	MIG: 200A/24V
	MMA: 200A/28V
Welding Current/Voltage Range	MIG: 10A/14.5V ~250A/26.5V
	MMA: 20A/20.8V~250A/30V
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