

# ProMIG-250SYN DPulse

Synergy, Pulse and Double Pulse MIG



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

## Advanced Features

**Multi-Process Capable** - Welds flux-cored, stick, TIG, pulsed MIG, and advanced processes like Double Pulse MIG\*.

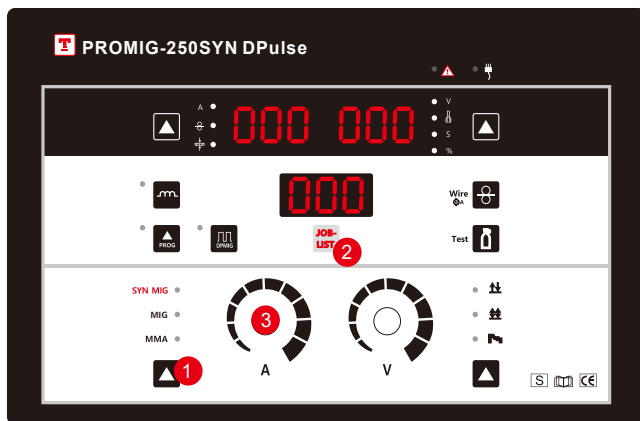
**Pulse MIG Process** - Welds *Mild steel*, 4XXX and 5XXX series aluminum for superior quality welding.

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

**Synergic Control** - Set weld procedures with one control.

**Professional 4-Rollers Drive System** - Allows for constant wire feed speed and consistent welds.

## 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 |            |                          |      |     |     |     |
|-----------|------------|--------------------------|------|-----|-----|-----|
|           | Material   | Gas                      | Wire |     |     |     |
|           |            |                          | 0.8  | 1.0 | 1.2 |     |
| JOBs No.  |            |                          |      |     |     |     |
| No Pulse  | M.S.       | 100%CO <sub>2</sub>      | 101  | 102 | /   |     |
|           |            | 82%Ar 18%CO <sub>2</sub> | 201  | 202 | /   |     |
|           | Flux Cored | Self-shielded            | 101  | 102 | /   |     |
| Pulse     | M.S.       | 82%Ar 18%CO <sub>2</sub> | /    | 402 | /   |     |
|           | S.S.       | 98%Ar 2%CO <sub>2</sub>  | 308  | /   | /   |     |
|           |            |                          | 316  | /   | /   |     |
|           | AL         | 100%Ar                   | 4043 | /   | 702 | 703 |
|           |            |                          | 5356 | /   | 802 | 803 |

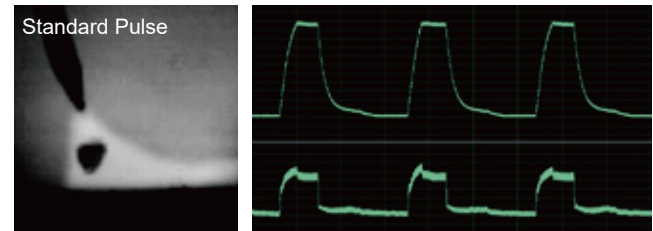
### Synergy control with job-list

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.

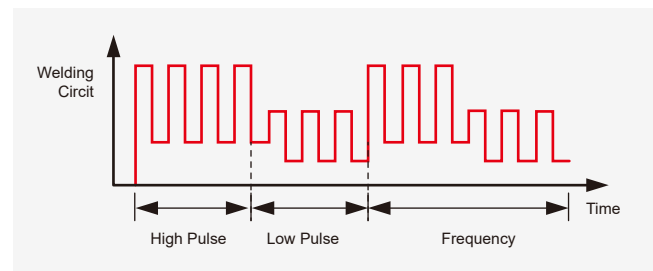
## Pulse MIG

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.

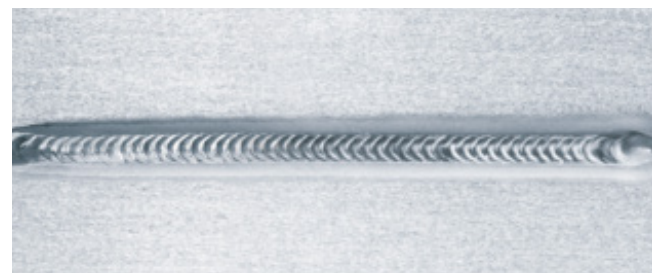
It minimizes warping and burnthrough on thin materials, not only for Aluminum, but also for Mild Steel. Moreover, it delivers ultra low spatters which is outstanding for Mild Steel welding.



## Double Pulse



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.

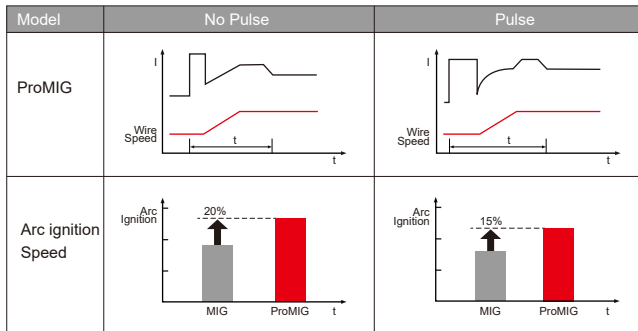


By Double Pulse process, the heat input of arc is alternating, effectively reducing the heat input of base metal. It reduces the occurrence of welding defects such as crack. Welding quality is comparable to TIG process.

# Improved Operation Process & Controls

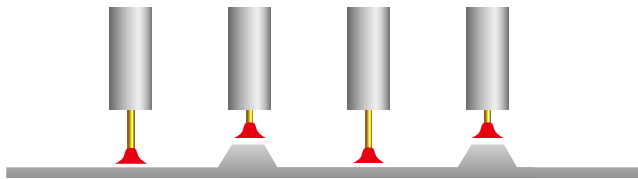
## Initial Arc control

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



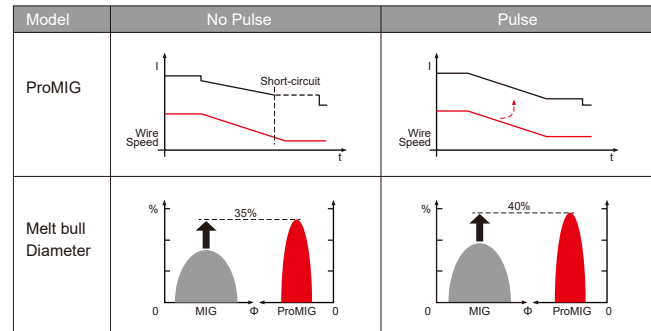
## Arc Length control

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 !



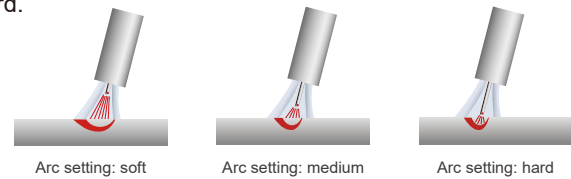
## Burn Back control

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.



## Specifications

| Item No                       | PROMIG-250SYN DPulse                                                            |
|-------------------------------|---------------------------------------------------------------------------------|
| Rated Input Voltage           | 1PH ~ 230V ±15%/3PH ~ 400V ±15%                                                 |
| Max. Load Power Capacity      | 11.72KVA                                                                        |
| Rated Duty Cycle(40 °C) 60%   | MIG: 250A/26.5V<br>MMA: 250A/30V<br>TIG: 250A/20V                               |
| 100%                          | MIG: 200A/24V<br>MMA: 200A/28V<br>TIG: 200A/18V                                 |
| Welding Current/Voltage Range | MIG: 10A/14.5V ~250A/26.5V<br>MMA: 20A/20.8V~250A/30V<br>TIG: 5A/10.2V~250A/20V |
| 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                                                                            |