AC Aluminum Pulse (GMAW) brings features that cannot be realized with standard DC pulse MIG welding. The AC pulse process reduces the heat input by focusing the energy away from the base plate and switching the polarity of the arc.

Productivity increases with improved deposition rates using AC Aluminum Pulse (GMAW) waveform technology are available exclusively on the Power Wave® Advanced Module. This is possible because the negative polarity arc redirects the heat away from the workpiece, reducing the chance of burnthrough. The UltimArc™ and synergic precision controls give the user full control over heat input, penetration while improving cleaning action, and allowing for faster travel speeds on thin material.

With this technology, it is now easier to weld thin aluminum and bridge gaps. Precise control of the heat input is achieved with the UltimArc™ control using AC Aluminum Pulse (GMAW). UltimArc™ adjusts the amount of DC negative time during the background to allow less heat to be transferred to the workpiece.

**FEATURES**

- Increases travel speed up to 40%
- Increases deposition up to 75%
- Decreases burnthrough
- Improves gap bridging

*Based on a side by side comparison of AC Aluminum Pulse and Pulse using a Power Wave® S350 with SuperGlaze® 4043 3/64” wire on a 1.5mm lap. AC Aluminum Pulse parameters: Mode 393, WFS 215 in/min, Travel Speed 40 in/min, 0.75 Trim and -5 WC. Pulse parameters: Mode72, WFS 130 in/min, Travel Speed 30 in/min, 0.8 Trim and 0 WC.
**Applications**

See the AC Aluminum Pulse weld process guide for: technical data, proper set-up, application settings and troubleshooting.

**Gap Bridging**

See the AC Aluminum Pulse weld process guide for: technical data, proper set-up, application settings and troubleshooting.

**Recommended Equipment**

<table>
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<tr>
<th>Power Source</th>
<th>Wire Feeder</th>
<th>Accessories</th>
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<tr>
<td>Power Wave® S350, S500 w/ Advanced Module</td>
<td>Power Feed® Wire Feeders</td>
<td>SuperGlaze® Wire Magnum® Pro Push Pull Gun</td>
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