Superior quality using stainless and carbon steel flux cored wires. Significantly reduced post-weld cleanup on galvanized material.

MATHESON Select® HC-1018 is a preferred alternative to 25% CO₂ in Argon because of its versatility, stronger and wider arc, faster travel speeds, and reduced fume emission.

Typical challenges when welding on steels
• With stainless steel, 25% CO₂ can produce high amounts of fume and hexavalent chromium emission
• On carbon steel, 25% CO₂ will be slower and will have a larger heat affected zone
• With galvanized steel, 25% CO₂ produces large droplets of spatter, which can lead to significant cleanup issues

Key Benefits of HC-1018
• Ideal for spray application over a wide range of voltages
• Wider, increased arc energy

Stainless and Carbon Steel:
• Lower fumes and hexavalent chromium emissions
• Smooth and stable arc
• Low oxidation potential
• Improved wettablity and bead profile
• Increased travel speeds

Galvanized Steel:
• Reduced porosity
• Decreased surface tension improves droplet transfer
• Reduced overall spatter and fumes are particularly apparent with galvanized material
• Spatter globules are smaller and cool before contact, which simplifies cleanup
• Reduced cleanup leads to reduced cost and improved operator appeal

Other Benefits
• Excellent mechanical properties with all materials
• Minimized vaporization of zinc oxides on galvanized materials
• Longer cylinder fill life - blended and homogenously mixed to enable more complete usage of cylinder contents

All MATHESON Select® Shielding Gas Mixtures are certified to AWS A5.32 and ISO 14.175 Standards - the best choice for mixture quality, welding efficiency, and to ensure compliance in certified welding operations.