

# MATHESON *Select*® Shielding Gas H-3 for GTAW on Stainless Steel

## Faster processing; minimization of heat-related problems; and a more controllable arc

Faster travel speeds, enabled by the addition of a small concentration of Hydrogen\* in MATHESON *Select*® H-3 Shielding Gas, reduce heat-related problems - such as warpage, distortion and poor color match; while also delivering a more highly focused, more controllable arc.

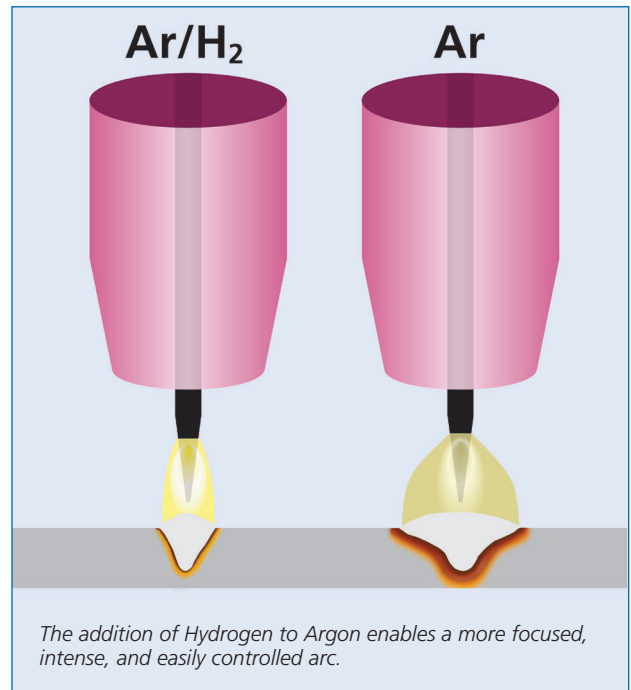
## Typical challenges when welding on stainless steel

- Hexavalent chromium emission can be problematic with any nickel-containing alloy
- Stainless steel is susceptible to heat absorption and oxidation

## Key Benefits of H-3

- Considerably faster travel speeds
- Reduced fume and hexavalent chromium emission
- Better color match
- Increased impact properties
- Smaller heat affected zone and lower surface oxidation
- Very high, narrowly focused heat transfer - for improved arc control
- Excellent wetting action
- Faster travel speed reduces negative impact on mechanical properties
- Ideal for narrow welds as small as 1/16 inch
- Ideal for use as a backing gas to produce smooth, oxidation-free penetration welds on tubes, pipe, and tanks

*\*H-3 MATHESON *Select*® Shielding Gas uses a CGA 350 cylinder valve outlet connection*



**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.**

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