Inomaxx® TIG
Maximum performance for welding stainless steel

The Inomaxx gases have been developed to give optimum weld quality and ease of use without compromise on material performance. Inomaxx gases also provide a high-grade surface finish with low reject rates and superb environmental performance.

Features/benefits
Inomaxx TIG is a mixture of argon and hydrogen which is used to TIG weld stainless steel of all thicknesses.

• Improves weld quality and reduces oxides; Its excellent characteristics produce brilliant, smooth, flat weld finish
• Higher productivity (up to 30% increase in manual weld speeds when compared with argon)
• Protects the work environment; minimal ozone generation.
Approved Welding Procedure Inomaxx TIG

Manufacturer: Air Products
Welding Process: GTAW (TIG 141)
Joint Type: Fillet

Welded Joint Design
Preparation of Parts: Sandblasting and Solvent Cleaning
Parent Material and Specifications: Stainless Steel EN 10088-2 X2CrNi 19-11
Composition:
- C – 0.030% max.
- Si – 1.0% max.
- Mn – 2.0% max.
- P – 0.049% max.
- S – 0.030% max.
- Cr – 17.0% / 19.0%
- Ni – 9.0% / 12.5%
Material Thickness: 1/8"
Outside Diameter: n/a
Welding Position: Flat 1F

Welding Details
<table>
<thead>
<tr>
<th>Run</th>
<th>Process</th>
<th>Diameter of Filler Metal (mm)</th>
<th>Current (A)</th>
<th>Voltage (V)</th>
<th>Type of Current &amp; Polarity</th>
<th>Wire Feed Speed (in/min)</th>
<th>Travel Speed (in/min)</th>
<th>Heat Input (KJ/Inch)</th>
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<tbody>
<tr>
<td>1</td>
<td>GTAW</td>
<td>1/16</td>
<td>155</td>
<td>15</td>
<td>DC-</td>
<td>n/a</td>
<td>400</td>
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Filler Metal and Specification: AWS A 5.9 ER 308 L
Filler Metal Composition:
- C – 0.03% max. – Si 0.65%/1.00%
- Mn – 1.50%/2.50% – P – 0.030% max.
- S – 0.030% max – Cr – 19.5%/21.0%
- Mo – 0.50% max. – Ni – 9.50%-11.0%
- Cu – 0.50% max.

Shielding Gas: Inomaxx TIG
Classification of Shielding Gas: EN 439-R1
Gas Flow Rate – Shield Gas: 20-25 CFH
Purge: n/a
TIG Electrode Type: Thoriated 3/32"
Underside Protection: n/a
Preheat Temperature: Ambient
Interpass Temperature: n/a
Heat Treatment: n/a
Torch Angle: 15° in the Direction of Welding
Nozzle Bore Diameter: 5/8-3/4"

* n/a: not applicable