

# 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

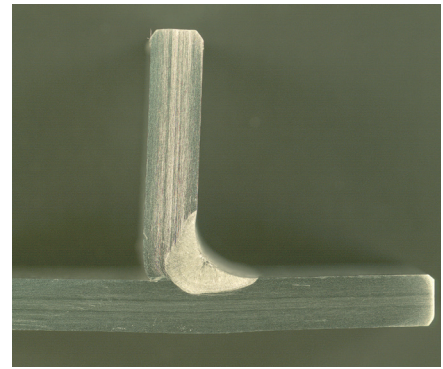
Preparation of Parts	Sandblasting and Solvent Cleaning
Parent Material and Specifications	Stainless Steel EN 10088-2 X2CrNi 19-11
Composition	C – 0.030% max. Si – 1.0% max. Mn – 2.0% max. P – 0.049% max. S – 0.030% max. Cr – 17.0%/19.0% Ni – 9.0%/12.5%
Material Thickness	1/8"
Outside Diameter	n/a
Welding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

### Welding Details

Run	Process	Diameter of Filler Metal (mm)	Current (A)	Voltage (V)	Type of Current & Polarity	Wire Feed Speed (in/min)	Travel Speed (in/min)	Heat Input (KJ/Inch)
1	GTAW	1/16	155	15	DC-	n/a	400	1.39
2								
3								
4								
5								
6								

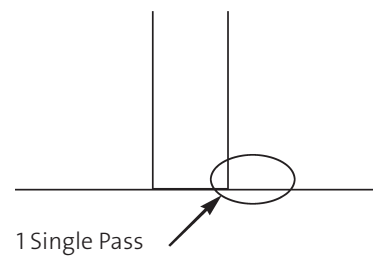
Filler Metal and Specification	AWS A 5.9 ER 308 L
Filler Metal Composition	C – 0.03% max. – Si 0.65%/1.00% Mn – 1.50%/2.50% – P – 0.030% max. S – 0.030% max – Cr – 19.5%/21.0% Mo – 0.50% max. – Ni – 9.50%-11.0% Cu – 0.50% max.
Shielding Gas	Inomaxx TIG
Classification of Shielding Gas	EN 439-R1
Gas Flow 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



Macrography

### Welding Sequence



For more information,  
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