



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.

The best gas for TIG welding stainless steel

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 PLC Air Products Ireland Ltd
Welding process:	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	3 mm
Outside diameter	n/a
Welding position	Flat (PB)

Welding details

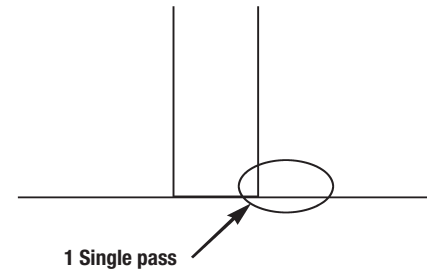
Run	Process	Diameter of filler metal (mm)	Current (A)	Voltage (V)	Type of Current & Polarity	Wire feed Speed (m/min)	Travel Speed (mm/min)	Heat Input (KJ)
1	TIG	1.6	155	15	DC-	n/a	100	1.39
2								
3								
4								
5								
6								

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	10 l/min
Purge	n/a
TIG electrode type	Thoriated 2.4 mm diameter
Underside protection	n/a
Preheat temperature	Ambient
Interpass temperature	n/a

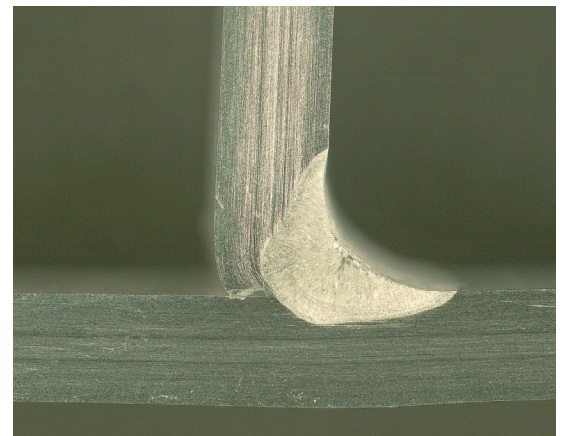
Heat treatment	n/a
Torch angle	15° in the direction of welding
Nozzle bore diameter	20 mm

*n/a: not applicable

Welding sequence



Macrography



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