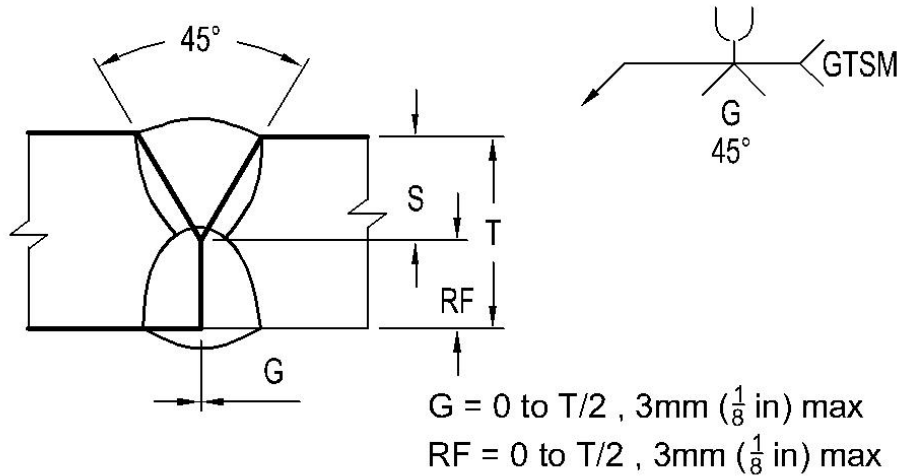


Prepared by: WPSAmerica.com		<b>WELDING PROCEDURE SPECIFICATION (WPS)</b>		Identification #	DEMO-GMAW
Company Name: <i>www.WPSAmerica.com</i>				Ref. Code	AWS D1.6
Address: <i>info@WPSAmerica.com, Toll Free: 1 (877) WPS-WELD</i>		PQR No.		PREQUALIFIED	
Process	GMAW	Process Type	Semi-Automatic	Position	Flat
Base Metals		Austenitic Stainless Steel Alloy Grades 304, 304L, 316 or 316L of Group A or B of Table 3.2-AWS D1.6			
Filler Metals		AWS A5.9: ER308L; ER308LSi; ER308; ER308Si; ER316L; ER316LSi; ER316; ER316Si			
Shielding Gas Flux (SAW)		Ar+ 2% CO2 (Or) Ar+ 2% O2	Flow Rate	30-45 CFH	
			Nozzle Dia.	5/8 in	
Weld Type		Complete Joint Penetration Groove Weld		Current/ Polarity	DCEP
Electrical Stick Out ESO (in)		5/8 to 3/4	Preheat / Interpass Temp., Min		To free surfaces from moisture, Max Interpass 175 °C (350 °F)

Joint Details/ Joint Design Used/ Sketch:



**B-U2-GF**

GTSM : Gouging To Sound Metal before welding from the other side

Welding Procedure:

Thickness (T) mm (in)	Weld Size ETT (E)	Side	Weld Layers	Pass No.	Filler Metal Diameter mm (in)	Current Amps	Volts	Wire Feed Speed (IPM)	Travel Speed (IPM)
T ≤ 6 mm (1/4) T ≥ 6 mm (1/4) T ≥ 6 mm (1/4) T ≥ 10 mm (3/8)	T	1 and 2	Root, Fill, Cap	As Required, see notes	1.6 mm (0.062, 1/16)	260-310 310-330 330-360 360-390	25-28 26-29 27-31 28-32	175-200 200-250 250-275 275-300	10 to 20

Notes, Technique or Code's rules:

- Transfer Mode: Spray
- For low or high temp., corrosive or any critical applications always confirm wire choice with manufacturer.
- Shielding gases shall conform to AWS A5.32/A5.32M
- For similar metal joints, use filler metal of matching composition, (e.g.: weld 304L with 308L wire), (316 with 316, and 316L with 316L wire).
- Dissimilar joining, use the lower alloyed of the two base metals, (e.g. use 308 to join 304 to 316).
- If both metals are low carbon (3XXL), then use 3XXL filler metal as well.
- Maximum thickness of layer is 5 mm (3/16) for root pass and 6 mm (1/4) for subsequent layers.
- The minimum size of a root pass shall be sufficient to prevent cracking.

**Originated by:**

**John Smith, Welding Engineer**

**Date: 04, 29, 2005 Revision (1)**

**Authorized by:**

**Jim Clark, Quality Manager**

**Date: 04, 29, 2005**

**Caution Note: Use of prequalified joint is not intended as a substitute for engineering judgment in the suitability of application to a welded assembly or connection.**