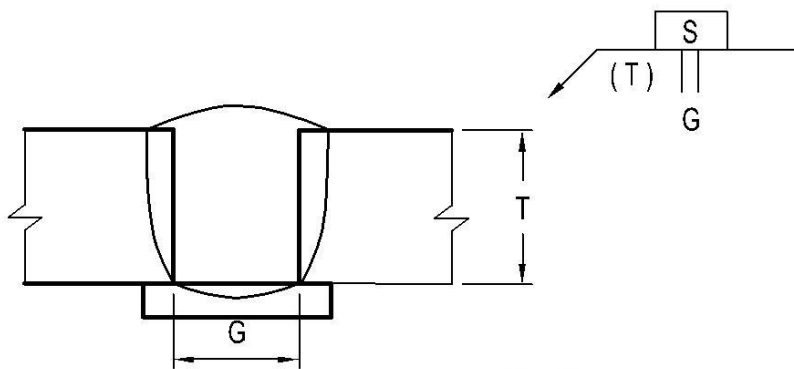


Prepared By: WeldCanada.com, Inc.		PREQUALIFIED WELDING PROCEDURE DATA SHEET		WPDS No.	DEMO-GMAW
				Ref. WPS	GMAW-SS
Company Name: <i>www.WeldCanada.com</i> Address: <i>info@WeldCanada.com, Toll Free: 1 (877) WPS-WELD</i>				Ref. Standards	AWS D1.6/ CSA W47.1
Process	GMAW	Process Mode	Semi-Automatic	Position	Flat
Base Materials	Austenitic Stainless Steel Alloy Grades 304, 304L, 316 or 316L of Group A or B of Table 3.2-AWS D1.6				
Wire Class. (CSA W48)	Not in CSA W48				
AWS Classification	A5.9, ER308L, ER308LSi, ER308Si, ER308 (Or) ER316L, ER316LSi, ER316Si, ER316				
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 Temperature, Min	To free surfaces from moisture, Max Interpass 175 °C (350 °F)	

Joint Configuration/ Joint Details:



$$G = T$$

$$T \leq 6 \text{ mm } \left(\frac{1}{4} \text{ in}\right)$$

B-L1a

Welding Parameters:

Thickness (T) mm (in)	Weld Size ETT (E)	Side	Weld Layers	Pass Numbers	Filler Dia. mm (in)	Current Amps	Volts V	Wire Feed Speed (IPM)	Travel Speed (IPM)
T ≤ 6 mm (1/4)	T	1	Root, Fill, Cap	As Required, see notes	1.1/ 1.2 mm (0.045)	195-230	23-25	220-260	10 to 20
						230-240	24-25	260-300	

Notes or Code's rules:

- Transfer Mode: Spray
- For low or high temp., corrosive or any critical applications always confirm wire choice with manufacturer.
- 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.

John Smith, Welding Engineer

CWB Acceptance



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.