

WELDING PROCEDURE SPECIFICATION

Material specification ASTM Gr 50 + 50W
 Welding process Submerged ARC welding
 Manual or machine Machine
 Position of welding Flat + Horizontal
 Filler metal specification AWS A5-23
 Flux Lincoln 960-Elec LA-75
 Shielding gas NA Flow rate NA
 Single or multiple pass Single + Multiple
 Single or multiple arc Single
 Welding current DC
 Polarity DC EP
 Welding progression See Detail
 Root treatment Grind - wire brush - Area Free of slag - RUST & Moisture
 Preheat and interpass temperature See Table
 Postheat temperature NA
 Heat Input Min 5.3 kJ/in Max 73.4 kJ/in PCR-1 = 64.1 kJ/in

Vtrans Received JW
 CKD
 DEC 12 2013
 Resubmit BY
 APPROVED DATE 12/17/13

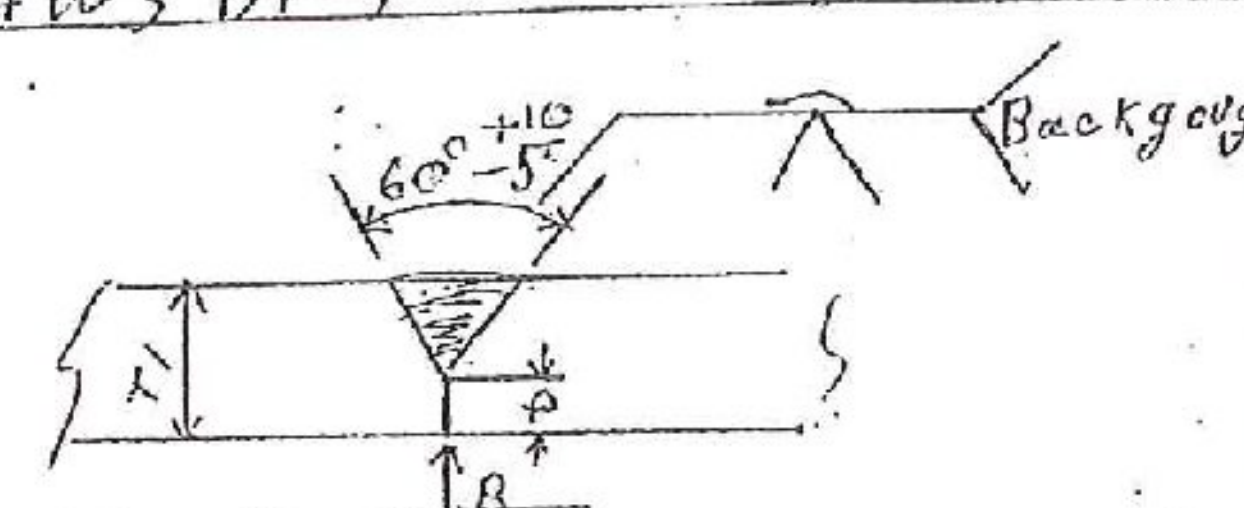
Minimum Preheat and Interpass Temperature, °C [°F]

Thickness of Thickest Part at Point of Welding, mm [in]

Welding Process (Base Metal)	VERMONT AOT			
	To 20 mm [3/4 in] Incl.	Over 20 mm to 40 mm [3/4 in] to 1-1/2 in Incl.	Over 40 mm to 65 mm [1-1/2 in] to 2-1/2 in Incl.	Over 65 mm [2-1/2 in]
SAW; OMAW; FCAW; SMAW (M270M [M270] [A 709M [A 709]] Or. 250 [36], 345 [50], 345W [50W], HPS 345W [HPS 50W])	10 [50]	20 [70]	65 [150]	110 [225]
SAW; OMAW; FCAW; SMAW (M270M [M270] [A 709M [A 709]] Or. HPS 485W [HPS 70W], 690 [100], 690W [100W])	10 [50]	50 [125]	80 [175]	110 [225]

WELDING PROCEDURE

Max InterPass - 430°F

Pass no.	Electrode size	Welding current		Travel speed	Sec 5.13 AWS D1-5 Joint detail RL 2c-s 												
		Amperes	Volts														
5 32	5	620	31	18 IPM	<table border="1"> <tr><th>T1</th><th>P</th><th>R</th></tr> <tr><td>1/2 to 1"</td><td>1/8 min</td><td>0</td></tr> <tr><td>1 1/2 to 2"</td><td>3/16 min</td><td>0</td></tr> <tr><td>2 1/2 to 4"</td><td>1/2 min</td><td>0</td></tr> </table>	T1	P	R	1/2 to 1"	1/8 min	0	1 1/2 to 2"	3/16 min	0	2 1/2 to 4"	1/2 min	0
		T1	P	R													
		1/2 to 1"	1/8 min	0													
1 1/2 to 2"	3/16 min	0															
2 1/2 to 4"	1/2 min	0															
570	29	15															
To	To	To															
650	33	20															

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in applicable A.W.S. codes or contract specifications

Procedure no. 202^B ST OF VT Contractor Casco Bay Steel
 Revision no. _____ Authorized By Paul E. [Signature]
 Date April-13-2012