

Casco Bay Steel Structures, Inc.

WELDING PROCEDURE SPECIFICATION

Material specification ASTM A709 - Gr 36-50-50W
 Welding process Submerged Arc welding
 Manual or machine Machine
 Position of welding Flat + Horizontal
 Filler metal specification A5-23
 Filler metal classification E8A2-ENIK-Ni1-H8
 Flux Lincoln 960 - Electrode LA-75
 Shielding gas NA Flow rate NA
 Single or multiple pass Both
 Single or multiple arc Single
 Welding current DC
 Polarity DCEP
 Welding progression See Detail
 Root treatment grind-wirebrush-free of Mill scale, slag-RUST & Moisture
 Preheat and interpass temperature See Table
 Postheat temperature As Req
 Heat Input Min 39.8 Max 62.5 FCM 14-56.8 kJ/in

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

Welding Process (Base Metal)	Thickness of Thickest Part at Point of Welding, mm [in]			
	To 20 mm [3/4 in] Incl.	Over 20 mm [3/4 in] to 40 mm [1-1/2 in] Incl.	Over 40 mm [1-1/2 in] to 65 mm [2-1/2 in] Incl.	Over 65 mm [2-1/2 in]
SAW; GMAW; FCAW; SMAW (M270M [M270] A 709M [A 709] Gr. 250 [36], 345 [50], 345W [50W], HPS 345W [HPS 50W])	10 [50]	20 [70]	65 [150]	110 [225]

VT-AOT Chester
 BRNO, 9 - Proj No. BRF0251-37
 CBSS NO 476

Pass no.	Electrode size	Welding current		Travel speed	Joint detail
		Amperes	Volts		
AS REQ	5/32	600	30	19	
		640 TO	32 TO	21 TO	
		560	28	17	

sec. 5-13
 AWS D1-5
 Joint detail B-U3c-S

BACKGOUGE

T ₁		S ₁
Over	to	
2	2-1/2	1-3/8
2-1/2	3	1-3/4
3	3-5/8	2-1/8
3-5/8	4	2-1/2
4	4-3/4	2-3/4
4-3/4	5-1/2	3
5-1/2	6-1/4	3-3/4

For T₁ > 6-1/4 or T₁ ≤ 2
 S₁ = 2/3 (T₁ - 1/4)

VT TRANS
 CR 12/15/2010
 SUBMIT APPROVED
 BY DATE 12/16/10

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
 Revision no. _____

Contractor Casco Bay Steel
 Authorized By Paul E. Hoodal
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