

Casco Bay Steel Structures, Inc.

WELDING PROCEDURE SPECIFICATION


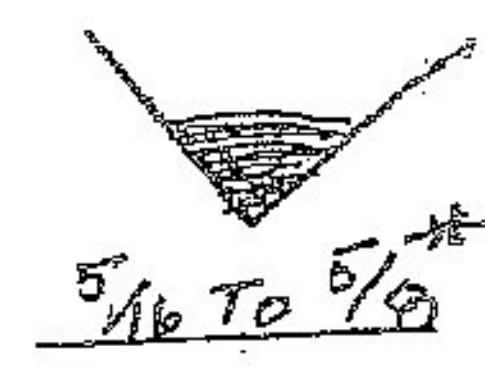
Material specification ASTM Gr 50 (345)
 Welding process Flux Core Arc Welding (FCAW)
 Manual or machine Semi Auto
 Position of welding Flat & Horizontal
 Filler metal specification AWS 5-21
 Filler metal classification E 71T-1 - Lincoln Ultracore 71A95 D1E
 Flux NA
 Shielding gas 75% AR / 25% CO₂ Flow rate 35 CFH + 8/-4, Elec. 5/16" ^{5/16" out}
 Single or multiple pass Single & Multiple
 Single or multiple arc Single
 Welding current DC
 Polarity DC EP
 Welding progression See Details
 Root treatment blast clean - wire brush - area free of slag, rust & moisture
 Preheat and interpass temperature See Table
 Postheat temperature AS Req.
 Heat Input Min 22.4 kJ/in Max 35.2 kJ/in PQR # FCM-SP2, 32 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)
AWS: SMAW, FCAW, SMAW (M270M [M270]) A 709M (A 709) Cl. 250 [36], 345 [50], 345W (0W) 10-3 1-45W (0W) 30W	10 [50]	20 [70]	63 [150]	110 [225]
<u>FCM-Gr50</u>	<u>150^{OF}</u>	<u>200^{OF}</u>	<u>225^{OF}</u>	<u>325^{OF} - H8</u>

VT - DOT, HYDE PARK
 Br. NO. 42
 PROJ. NO. STP-CUW 226
 CLASS NO. 565

WELDING PROCEDURE

Pass no.	Electrode size	Welding current		Travel speed	Sec. 5.12.4.2 AWS D1.5	Joint detail Fillet
		Amperes	Volts			
1 TO 4	1/16	297	29	16.4	 5/16 To 5/8*	 5/16 To 5/8*
		326	31	18.9		
		To	To	To		
		267.3	27	13.9		

RECEIVED
 CK'D BY JWC OK'D BY JWC
 March 17, 2014
 Approved
 RESUBMIT BY DATE 03/24/2014

* Weld size may use multiple Pass

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.

10100 ST. OF VT. DOT
 REV 1

Casco Bay Steel
 Paul E. Stoddole
 1-11-2013