

Casco Bay Steel Structures, Inc.

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
 Filler metal classification E8A2-ENiK-Ni1-H8
 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 51.3 kJ/in Max 79.4 kJ/in PGR-1 = 64.1 kJ/in

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

Welding Process (Base Metal)	To 20 mm [3/4 in] Incl.	Thickness of Thickest Part Point of Welding, mm [in]		Over 65 mm [2-1/2 in]
		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.	
SAW; GMAW; 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; GMAW; 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]

VT - AOT, HYDE PAR
 BR NO. 42
 PROJ NO. STP-CUW 6
 CBSS NO 565

WELDING PROCEDURE

Pass no.	Electrode size	Welding current		Travel speed	Joint detail
		Amperes	Volts		
5 32		620	31	18 IPM	2F To 5/16 1F To 1/2
		570	29	15	
		TO	TO	TO	
		650	33	20	

See 5.13
 AWS D1-5
 Joint detail Fillet

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

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. 201 - ST OF VT Contractor Casco Bay Steel
Paul E. Goodale
April 13, 2012