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 A-5-23
Filler metal classification F8A2-EN1K-N1-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 DCEP
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 73.4 KJ/in PGR-1 = 64.1 KJ/in

Vermont Agency of Transportation
RECEIVED
CK'D BY JWC OK'D BY
November 4, 2013
RESUBMIT No **Approved**
BY James Lacroix DATE 11/08/13

VT-AOT; Bristol
Bridge No. 31
Proj No. BRO 1445(31)
CBSS No. 534

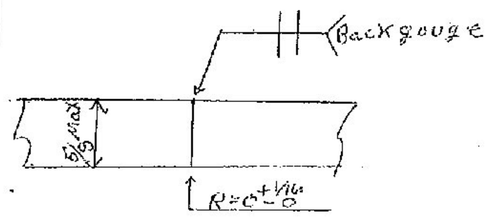
Minimum Preheat and Interpass Temperature, °C [°F]

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]
SAW; GMAW; FCAW; SMAW (M270M [M270] [A 709M (A 709)] Gr. HPS 485W [HPS 70W], 690 [100], 690W [100W])[a]	10 [50]	50 [125]	80 [175]	110 [225]

WELDING PROCEDURE Max InTerpass - 430°F

Pass no.	Electrode size	Welding current Amperes	Welding current Volts	Travel speed
5/32		620	31	18 IPM
		570 To 650	29 To 33	15 To 20

See 5.13
AWS D1-5 Joint detail BL1a-S



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. 202A ST of VT
Revision no

Contractor Casco Bay Steel
Authorized By Paul E. Gerald
Date April-13-2012