



Casco Bay Steel Structures
 One Wallace Avenue, South Portland ME 04106
AWS - Welding Procedure Specification (WPS)
 WeldOffice WPS

WPS record number	250	Revision	1	Qualified to	AWS D1.5
Date	6/10/2014	Company name	Casco Bay Steel Structures		
Supporting PQR(s) Reference docs.	SAW FCM 3/32 DC- 5/7/14				

Scope	Fillet, no PWHT (As-welded), Impact testing
Joint	Joint details for this welding procedure specification in: JOINTS section of this WPS

BASE METALS				THICKNESS RANGE QUALIFIED (in.)			
Type	Gr50/Gr50W	P-no.	Grp-no.	As-welded		With PWHT	
Welded to	Gr50/Gr50W	P-no.	Grp-no.	Min.	Max.	Min.	Max.
Backing:	none	P-no.	Grp-no.	-	-	-	-
Retainers	All A709 with 50 ksi or less are also qualified						
Notes							

Complete pen.	-	-	-	-
Impact tested	-	-	-	-
Partial pen.	-	-	-	-
Fillet welds	1/8	no max.	-	-

DIAMETER RANGE QUALIFIED (in.)			
As-welded		With PWHT	
Min.	Max.	Min.	Max.
N/A	N/A	-	-

FILLER METALS						THICKNESS RANGE QUALIFIED (in.)			
SFA	Classification	F-no.	A-no.	Chemical analysis or Trade name	As-welded		With PWHT		
					Min.	Max.	Min.	Max.	
SAW	5.23	ENi1K	6	LincolnElectric LA-75	1/8	no max.	-	-	
Flux	5.23	F8A2		LincolnElectric Lincolnweld960			- Required -	- Required -	
Sup. filler									
Flux type	No								
Flux from recrush. slag	No								
Suppl. filler metal vol. (ft ³)	N/A								

WELDING PROCEDURE		SAW	
Type		Machine	
Minimum preheat/interpass temperature (°F)		See Back Page	
Maximum interpass temperature (°F)		400	
Filler metal size (in.)		3/32	
Layer number			
Position		H	
Current/polarity		DCEN (straight polarity)	
Amperes		363.3	
Volts		31.6	
Travel speed (in./min)		12.8	
Maximum heat input (kJ/in.)		53.8138	
Wire feed type		Cold wire	
Wire feed speed (in./min)		N/A	
String or weave		Stringer	
C.T.W.D (in.)			
Multi/Single pass per side		Single or Multiple passes	
Multiple or single layer		Single or Multiple layer	
Oscillation		None	
Multi/single electrode		Single electrode	
Electrode angle (deg.)		Varies	
Maximum pass thickness (in.)		See Back Page	
Weld deposit chemistry		F8A2-ENi1K-Ni1-H8	
Notes			

CK'D BY R. Foster OK'D BY R. Foster
 March 8, 2017
 RESUBMIT No Approved
 BY Kristin Higgins DATE 3/10/2017

CBSS 696 RT 110 over 1st Branch White River
 Br #9 Proj BHF 0169(9)
 CBSS 697 RT 110 over South Washington Brook
 Br #11 Proj BHF 169(10)
 Chelsea, VT