



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

Company name: Casco Bay Steel Structures
 Welding process: SMAW
 Process type: Manual

Identification #: 469 Rev.
 Originated by: Matthew Cote
 Date: 11/28/2016
 Authorized by: Matthew J Cote
 Date: 11/28/2016

Joint design used
 Joint type: BTC - Butt, T or corner joint
 Joint design: Single bevel groove (4)
 Backing: No
 Backing material: n/a
 Root opening (R)* (in.): 0, +1/16, -0 (+1/8, -1/16)
 Root face (f)* (in.): 1/8 min, +U, -0 (+1/16)
 Groove angle (a)* (deg.): 45, +10, -0 (+10, -5)
 Radius (J - U)* (deg.): n/a
 Back gouging: No
 Back gouging method: n/a

Position
 Welding position: Groove Flat/Horizontal
 Fillet n/a
 Vertical progression: Up

Base metals * Datum, As Detailed (As Fit-Up)
 Spec., type or grade: Gr 50
 Thickness: Groove (in.): T1:unlimited T2:unlimited
 Fillet (in.): n/a
 Diameter (Pipe) (in.): Unlimited

Electrical characteristics
 Transfer mode (GMAW): N/A
 Current type: Other
 Other: DC+ and AC

Filler metals
 AWS Specification: A5.1
 AWS Classification: E-7018 H4R

Technique
 Stringer or weave bead: Stringer or Weave
 Multi/single pass (per side): Single or Multiple
 Number of electrodes: Varies
 Spacing: Longitudinal (in.): -
 Lateral (in.): -
 Angle (deg.): -
 Contact tube to work (in.): -
 Peening: Not permitted
 Interpass cleaning: Brushing or grinding

Shielding
 Flux: -
 Electrode-flux (class): -
 Gas composition: -
 Gas flow rate (cfh): -
 Gas cup size (in.): -

Preheat
 Preheat temp.: Min. (°F): See notes
 Interpass temp.: Min. (°F): See notes
 Max. (°F): 450

Post weld heat treatment
 Temperature (°F): None
 Time (hrs): -

Welding procedure

Layer	Pass	Process	Filler metal class	Filler metal diameter (in.)	Current type / polarity	Amps	Wire feed speed (in./min)	Volts	Travel speed (in./min)	Joint details
1	All	SMAW	E-7018 H4R	1/8	DCEP	90-160	-	n/a	varies	
1	All	SMAW	E-7018 H4R	1/8	AC	100-160	-	n/a	varies	
1	All	SMAW	E-7018 H4R	5/32	DCEP	130-210	-	n/a	varies	
1	All	SMAW	E-7018 H4R	5/32	AC	140-210	-	n/a	varies	
1	All	SMAW	E-7018 H4R	3/16	DCEP	180-300	-	n/a	varies	
1	All	SMAW	E-7018 H4R	3/16	AC	200-300	-	n/a	varies	

Designation: BTC-P4

Notes
 LINCOLN ELECTRIC EXCALIBUR 7018 MR
~~ATTACKING ONLY ON GR50W MATERIAL~~
 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

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

Signature 1 Name: Matthew Cote Date: 11/28/16	Signature 2 Name: Matthew J Cote Date:
Signature 3 Name: Date:	Signature 4 Name: Date: