

**WELDING PROCEDURE SPECIFICATION**

Material specification ASTM A 572 Gr 50 - 345-45W  
 Welding process Submerged Arc Welding (SAW)  
 Manual or machine Machine  
 Position of welding Flat 1F - Horizontal 2F  
 Filler metal specification AWS A5-23 E60-E70-E80  
 Filler metal classification Lincoln E60 ELEC EX 1/8" 3/4"  
 Flux Lincoln 960  
 Shielding gas Ar Flow rate Ar  
 Single or multiple pass Single and Multiple Pass  
 Single or multiple arc Single  
 Welding current DC  
 Polarity DCEN  
 Welding progression See Joint Detail  
 Root treatment As per AWS specification  
 Preheat and interpass temperature 34-50, 34 to 120, 1/4 to 260 over 225  
 Postheat temperature Ar  
 Heat input Min 30 KJ/in Max 40 KJ/in PQR-FCM #9 42.8 KJ/in

WELDING PROCEDURE

Pass no.	Electrode size	Welding current		Travel speed
		Amperes	Volts	
1	3/32	293	32	13 IPM
		264	30	11
		70	70	15
	822	34		

AWS D1-5  
 1/4 TO 5/16  
 AWS C1  
 FULL C QUALITY  
 11-1-06

This procedure may vary due to fabrication sequence, flou pass size, etc., within the limitation of applicable A.W.S. codes or contract specifications

Procedure no. 250 Contractor Casco Bay Steel  
 Revision no. 1 new PQR Authorized By Paul C. Goodale  
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