

Highway Safety Corporation

Glastonbury, CT

Welding Procedure Specification

Material specification	<u>A572 gr 50, A709 Gr 50</u>		Vermont Agency of Transportation RECEIVED CK'D BY _____ OK'D BY <u>R. FOSTER</u> February 17, 2017 RESUBMIT NO <u>Approved</u> BY <u>C. CARLSON</u> DATE <u>02/24/2017</u>
Welding process	<u>Gas Metal Arc Welding (GMAW) Spray Transfer</u>		
Manual, semi-automatic, or automatic	<u>Semi-Automatic</u>		
Position of welding	<u>Flat (1F) or Horizontal (2F)</u>		
Filler metal specification	<u>AWS A5.18</u>		
Filler metal classification	<u>ER70S-6</u>		
Electrode and manufacturer	<u>Lincoln Electric Lincoln Weld L-56</u>		
Flux and manufacturer	<u>N/A</u>		
Shielding gas	<u>86% Argon / 14% CO2</u>	Flow rate <u>38 - 46 CFH</u>	
Single or multiple pass	<u>Single or Multiple</u>		
Single or multiple arc	<u>Single</u>		
Welding current	<u>DCEP</u>		
Polarity	<u>Reverse - electrode positive</u>		
Welding progression	<u>Stringers</u>		
Root treatment	<u>clean base metal</u>		
Preheat and interpass temperature	<u>base metal up to 3/4" (50°F) ; over 3/4 thru 1-1/2" (150°F) : over 1-1/2" thru 2-1/2" (225°F)</u>		
Postweld heat treatment	<u>None</u>		
Electrode extension	<u>3/4" ± 1/4"</u>		

WELDING PROCEDURE

Weld size	Pass no.	Electrode size	Welding parameters		Travel speed	Joint detail
			Amperes	Volts		
5/16"	1	1/16"	290 A to 330 A	29 V	16 - 18 ipm	
1/2"	1 & 2	1/16"	↓	29 V	17 - 18 ipm	

This procedure may vary due to fabrication sequence, fit-up, pass size, etc. within the limitation of variables given in section 5 of latest edition AWS D1.5

WPS no. <u>W-VTPEDPOST2</u>	Fabricator <u>Highway Safety Corp</u>
Revision no. <u>2</u>	Prepared By: <u>Paul A Radice</u>
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