

WELDING PROCEDURE SPECIFICATION (WPS) YES (X)
 PREQUALIFIED QUALIFIED BY TESTING X
 or PROCEDURE QUALIFICATION RECORD (PQR) YES ()

Company Name ARC Ent. Inc. Identification # ARC WPS 45a
 Welding Process(es) SAW Revision 3 Date 9/12/2014 By SVH
 Supporting PQR No.(s) ARC PQR # 45 Authorized by STEVE HOWARD Date 6/8/2012
 Type - Manual () Semi - Automatic ()
 Machine () Automatic (X)

DART Welder

JOINT DESIGN USED Type <u>FILLET</u> Single (X) Double Veld () Backing <u>NO</u> Backing Material _____ Root Opening <u>0</u> Root Face Dimension _____ Groove Angle <u>NA</u> Radius (R) _____ Back Gouging Method _____		POSITION Position of Groove <u>Fillet</u> <u>1F_2F</u> Vertical Progression ()	
BASE METALS Material Spec <u>A709</u> Type or Grade <u>50 50W HPS50W</u> Thickness _____ Groove _____ Fillet <u>U</u> Diameter (Pipe) _____		ELECTRICAL CHARACTERISTICS Transfer Mode (FCAW) _____ Short Circuiting () Globular () Spray (X) Current : AC () DCEP _____ DCEN (X) Pulsed () OTHER : _____	
FILLER METALS AWS Specification <u>AS 23 Lincoln LA75</u> AWS Classification <u>ENiK-Ni-H8</u>		TECHNIQUE Stringer or Weave Bead <u>STRINGER</u> Multi-pass or Single Pass (per side) _____ Number of Electrodes _____ Electrode Spacing _____ Longitudinal _____ _____ Lateral _____ Angle _____	
SHIELDING Flux <u>960</u> Gas _____ Electrode Flux (Gross) _____ Composition _____ Flow Rate _____ FB42-ENiK-Ni1 _____ Gas Cup Size _____		Contact Tube to Work Distance <u>1.14" Stickout +/- .14"</u> Peening _____ Interpass Cleaning : _____	
Preheat up to 3/4" = 50 degrees 3/4" - 1 1/2" = 70 degrees 1 1/2" - 2 1/2" = 150 degrees Over 2 1/2" = 225 degrees F		POSTWELD HEAT TREATMENT Temp _____ Time _____	

Pass or Weld Layers	S	Filler Metals				Current		Volts	Travel Speed	Joint Details
		Class	Diameter	Type & Polarity	Amps or Wire Feed Speed					
1	SAW	ENiK	3/32"	DCEN	350-440	26-32	12-16.2 ipm			
1	1/4"									
1	5/16"									
1	3/8"									

VTrans Received OK'd by JWC

JAN 21 2015

Resubmit APPROVED BY DATE 1/30/15