

JONES IRON & METAL

Page 1 of 1

Welder Qualification Test Record

JIM-SMAW-V-miller21

WQTR No. JIM-SMAW-V-miller21 Welder Name Gabriel Miller Welder Id _____
WPS No. JIM-SMAW(Cady) Revision 0 Date 9/28/2021

Variables Record Actual Values Used In Qualification

Process (Table 4.10, Item (1)) SMAW
Transfer Mode (GMAW): Short-Cir. ☐ Globular ☐ Spray ☐
Type Manual ☒ Machine ☐ Semi-Auto ☐ Auto ☐
Number of Electrodes Single ☒ Multiple ☐
Current/Polarity AC ☐ DCEP ☒ DCEN ☐ Pulsed ☐
Position (Table 4.10, Item (4)) Vertical
Weld Progression: (Table 4.10, Item (6)) Up ☒ Down ☐
Backing [Table 4.10, Item (7)] Use Backing ☐
Consumable Insert (GTAW) Use Insert ☐
Material/Spec. ASTM A36 to ASTM A36
Thickness (Plate): Groove (in) .375
Fillet (in) _____
Thickness (Pipe/tube): Groove (in) _____
Fillet (in) _____
Diameter(Pipe): Groove () _____
Fillet () _____
Notes _____
Filler Metal (Table 10, Item (2))
Spec. SFA 5.1
Class. E-7018
F-No. 4
Gas/Flux Type (Table 4.10, Item (3)) _____
Other _____

Qualification Range

SMAW
Short-Circuiting ☐ Globular ☐ Spray ☐
Manual ☒ Machine ☐ Semi-Auto ☐ Auto ☐
Single ☒ Multiple ☐
AC ☐ DCEP ☒ DCEN ☐ Pulsed ☐
Flat, Vertical, Horizontal, 3G
Up ☒ Down ☐
With Backing ☒ Without Backing ☐
With Insert ☐ Without Insert ☐
MILD STEEL GROUPS
.125 - .750 in
Any - Any in
.125 - .75 in
Any - Any in
24" - greater in
Any - Any
PIPE QUAL.FOR >24INCHES IN DIAMETER.ALL
EXX15,EXX16,EXX18,EXX15-X,EXX16-X,EXX18-X
EXX20,EXX27,EXX28,EXX20-X,EXX27-X
EXX12,EXX13,EXX14,EXX13-X
EXX10,EXX11,EXX10-X,EXX11-X
With backing or back gouge

VISUAL INSPECTION (4.8.1) Acceptable Yes

GUIDED BEND TEST RESULTS (4.30.5)

Type	Result	Type	Result
ROOT BEND	ACCEPTABLE		
FACE BEND	ACCEPTABLE		

Fillet Test Results (4.30.2.3 and 4.30.4.1)

Appearance na Fillet Size na Macroetch na

Fracture Test Root Penetration na Description na

Inspected By M.D. SCHNEIDER Test No. JIM21vmiller Organization PRAXAIR DIST. INC. Date 9/28/2021

RADIOGRAPHIC TEST RESULTS (4.30.3.1)

Film Identification No.	Result	Remark	Interpreted By <u>na</u>
<u>na</u>	 <u>Michael D Schneider</u> <u>CWI 97080931</u> <u>QC1 EXP. 8/1/2024</u>		Organization _____ Test No. _____ Date _____

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of section 4 of ANSI/AWS D1.1, (2020) Structural Welding Code-Steel.

Manufacturer JONES IRON & METAL Authorized By [Signature] Date 9/28/2021

JONES IRON METAL

Welding Procedure Specification

Page 1 of 2

JIM-SMAW

WPS No. **JIM-SMAW** Revision _____ Date _____ By _____
 Authorized By _____ Date **3/2/2013** Prequalified ☒
 Welding Process(es) **SMAW** Type: Manual ☒ Machine ☐ Semi-Auto ☐ Auto ☐
 Supporting PQR(s) _____

JOINT

Type **Butt**

Backing Yes ☒ No ☐ Single Weld ☐ Double Weld ☒

Backing Material **BACK WELD**

Root Opening **0-1/8"** Root Face Dimension **0-1/8"**

Groove Angle **60** Radius (J-U) _____

Back Gouge Yes ☒ No ☐

Method **GRIND-BRUSH**

Single-V groove weld (2)
Butt joint (B)



Welding Process - Designation	Joint	Base Metal Thickness (Unlimited)	Groove Preparation				Permitted Welding Positions	Notes
			Root Opening	Root Face	As Detailed (see 3.13.1)	As Detailed (see 3.13.1)		
			Groove Angle					
			R = 0.125		+1/16, -0	+1/16, -1/32		
			α = 60°		+10°, -0	+10°, -5°		

BASE METALS

Material Spec. **A-36** to **A-36**

Type or Grade _____ to _____

Thickness: Groove (in) **.125** - **.750**

Fillet (in) **Any** - **Any**

Diameter (Pipe,) _____ - _____

POSITION

Position of Groove **ANY** Fillet **ANY**

Vertical Progression: ☐ Up ☐ Down

ELECTRICAL CHARACTERISTICS

Transfer Mode (GMAW):

Short-Circuiting ☐ Globular ☐ Spray ☐

Current: AC ☐ DCEP ☒ DCEN ☐ Pulsed ☐

Other _____

Tungsten Electrode (GTAW):

Size _____ Type _____

FILLER METALS

AWS Specification **5.1**

AWS Classification **E-6010/E-7018**

SHIELDING

Flux _____ Gas _____

Composition _____

Electrode-Flux (Class) _____ Flow Rate _____

Gas Cup Size _____

PREHEAT

Preheat Temp., Min. **50 F**

Thickness Up to 3/4" Temperature **50 F**

Over 3/4" to 1-1/2" **150 F**

Over 1-1/2" to 2-1/2" **225 F**

Over 2-1/2" **300 F**

Interpass Temp., Min. **50 F** Max. **450 F**

TECHNIQUE

Stringer or Weave Bead **Both**

Multi-pass or Single Pass (per side) **Both**

Number of Electrodes **1**

Electrode Spacing: Longitudinal _____

Lateral _____

Angle _____

Contact Tube to Work Distance _____

Peening **N/A**

Interpass Cleaning **GRIND-BRUSH**

POSTWELD HEAT TREATMENT PWHT Required ☐

Temp. _____ Time _____

WELDING PROCEDURE

Layer/Pass	Process	Filler Metal Class	Diameter	Cur. Type	Amps or WFS	Volts	Travel Speed	Other Notes
1-n	SMAW	E-7018LH	1/8"	DCEP	100-125 A	19-22 V	3-5 IPM	BACK GOUGE BACK WELD

RICHARD P. CADY
S1010241

CW1

JONES IRON METAL

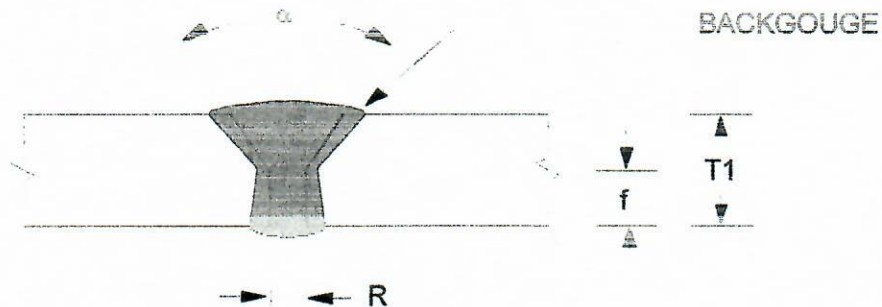
Welding Procedure Specification

Page 2 of 2

JIM-SMAW

Single-V-groove weld (2)

Butt joint (B)



Welding Process	Joint Designation	Base Metal		Groove Preparation			Permitted Welding Positions	Notes
		Thickness (U=unlimited)		Root Opening Root Face Groove Angle	Tolerances			
		T1	T 2		As Detailed (see 3.13.1)	As Fit Up (see 3.13.1)		
SMAW	B-U2	U	-	R = 0 to 1/8	+1/16, -0	+1/16, -1/8	All	C, D, N
				f = 0 to 1/8	+1/16, -0	Not limited		
				$\alpha = 60^\circ$	+10°, -0°	+10°, -5°		

MEMO

AWS D1.1 STRUCTURAL CODE-GROOVES AND FILLETS

