

WELDING OPERATOR QUALIFICATION (WPQ)

Welding Specification ASME IX & AWS D1.1

Welder's Name Ken Ballard Employee No. 334 WPQ No. 146
 Welding Process(es) used FCAW Type Semi-Automatic
 Identification of WPS followed by welder during welding of test coupon WPS 146
 Base Material(s) welded ASME IX: P1 to P1 (A36) Thickness .375"
AWS D1.1: Group 1 to Group 1 (A36)

Manual or Semi-Automatic Variables for Each Process

<u>Manual or Semi-Automatic Variables for Each Process</u>	<u>Actual Values</u>	<u>Range Qualified</u>
Penetration – Complete or Partial	Complete	Complete
Single or Double Weld	Single	Single
Backing (metal, weld metal, welded from both sides, flux, etc)	Yes	Yes
ASME IX P-No. to ASME IX P-No.	1	1
AWS D 17.1. Group No. to Group No.	N/A	N/A
AWS D 1.1. Group-No. to Group-No.	1	1
Plate <input checked="" type="checkbox"/> Pipe (enter diameter, if pipe)	.375"	ASME IX: .0625" - .75" AWS D1.1: .125" - .75"
Filler Metal Specification (SFA): <u>5.20</u> Classification	E71T-1	-
Filler Metal F-No.	6	6
Consumable Insert for GTAW or PAW	N/A	N/A
Weld deposit thickness for each welding process (ASME IX)	.375"	.750" max
Weld deposit thickness for each welding process (AWS D 17.1)	N/A	N/A
Weld deposit thickness for each welding process (AWS D 1.1)	.375"	.750" max
Welding Position (1G, 5G, etc)	1G	1G
Progression (uphill/downhill)	N/A	N/A
Backing Gas	N/A	N/A
GMAW Transfer Mode	N/A	N/A
Welding current type / polarity	DC REverse	DC Reverse

GUIDED BEND TEST RESULTS

Guided Bend Tests Type: (Side) Results (Trans. R&F) Type (Long.R&F) Results

1 - Acceptable	4 - Acceptable		
2 - Acceptable			
3 - Acceptable			

Visual test results Pass Radiographic test results N/A
 Fillet Weld – Fracture Test N/A Length and percent of defects N/A in.
 Macro test fusion N/A Fillet leg size N/A in. X N/A in Concavity/convexity N/A in.
 Welding test conducted by Metalex Manufacturing
 Mechanical tests conducted by MQS Inspection Lab test no. 0594-5586

We certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of the above referenced welding specification. The above named individual is qualified in accordance with the above referenced welding specification within the above limits for the welding process used for this test.

Date: 5/19/94 By: Katrina Black / 7/31/00
 Metalex Manufacturing, Inc.

** Revised By/Date: 7/26/01 [Signature]
 Revised to transfer info to updated Form to include AWS D1.1 info.*

WELDING OPERATOR QUALIFICATION (WPQ)

Welding Specification AWS D1.1

Welder's Name Greg Black Employee No. 132 WPQ No. 194-1
 Welding Process(es) used FCAW Type Semi-Automatic
 Identification of WPS followed by welder during welding of test coupon 194-1
 Base Material(s) welded Group II to Group II (A572 to A572) Thickness .500"

<u>Manual or Semi-Automatic Variables for Each Process</u>	<u>Actual Values</u>	<u>Range Qualified</u>
Penetration – Complete or Partial	<u>Complete</u>	<u>Complete</u>
Single or Double Weld	<u>Single</u>	<u>Single</u>
Backing (metal, weld metal, welded from both sides, flux, etc)	<u>N/A</u>	<u>N/A</u>
ASME IX P-No. to ASME IX P-No.	<u>N/A</u>	<u>N/A</u>
AWS D 17.1. Group No. to Group No.	<u>N/A</u>	<u>N/A</u>
AWS D 1.1. Group-No. to Group-No.	<u>.500"</u>	<u>.125" - 1.00"</u>
Plate <u>X</u> Pipe (enter diameter, if pipe) _____	<u>.500"</u>	<u>.125" - 1.00"</u>
Filler Metal Specification (SFA): <u>5.20</u> Classification _____	<u>E71T-1</u>	<u>E71T-1</u>
Filler Metal F-No.	<u>6</u>	<u>6</u>
Consumable Insert for GTAW or PAW	<u>N/A</u>	<u>N/A</u>
Weld deposit thickness for each welding process (ASME IX)	<u>N/A</u>	<u>N/A</u>
Weld deposit thickness for each welding process (AWS D 17.1)	<u>N/A</u>	<u>N/A</u>
Weld deposit thickness for each welding process (AWS D 1.1)	<u>1.00" max</u>	<u>1.00" max</u>
Welding Position (1G, 5G, etc)	<u>1G</u>	<u>1G</u>
Progression (uphill/downhill)	<u>N/A</u>	<u>N/A</u>
Backing Gas	<u>Argon</u>	<u>Argon</u>
3MAW Transfer Mode	<u>N/A</u>	<u>N/A</u>
Welding current type / polarity	<u>DC Reverse</u>	<u>DC Reverse</u>

GUIDED BEND TEST RESULTS

Guided Bend Tests Type: (Side) Results (Trans. R&F) Type (Long.R&F) Results

Side - Acceptable	Side - Acceptable		
Side - Acceptable			
Side - Acceptable			

Visual test results Pass Radiographic test results Pass
 Fillet Weld – Fracture Test N/A Length and percent of defects N/A in.
 Macro test fusion N/A Fillet leg size N/A in. X _____ in. Concavity/convexity _____ in.
 Welding test conducted by Metalex Manufacturing
 Mechanical tests conducted by Cooperheat MQS Lab test no. 303-04557-1

We certify that the statements in this record are correct and that the test welds were prepared and tested in accordance with the requirements of the above referenced welding specification. The above named individual is qualified in accordance with the above referenced welding specification within the above limits for the welding process used for this test.

Date: 2/26/04 By: Tom Jolly / KKB
 Metalex Manufacturing, Inc.
 * Revised by: Tom Jolly 7/27/07 7/26/07 TJB
 to transfer to revised form to
 add AWS D1.1. info.