

Prepared for: Stephen Hillier Branch: Mount Pearl, NF

Sample Description: Weld Coupons - 6061 Welder ID Number: E2955

Standard/Specification: ASME IX: QW-160 Guided Bend Test

Test Results

Sample ID	Visual Examination of Weld	Location	Bend Test	Comments
1G	Pass	Face	Pass	
2G	Pass		Pass	
3G	Pass		Pass	
4G	Pass		Pass	
1G	Pass	Root	Pass	
2G	Pass		Pass	
3G	Pass		Pass	
4G	Pass		Pass	

Test Findings

All positions passed bend test.

Recommendations

No Recommendations needed.

Test Performed By: 
 Scott Gira

Test Date: Aug/20/2018



Welders Name	<u>Stephen Hillier</u>	Identification number	<u>E2955</u>
WPS used	<u>A-MBF-2</u>	Test Coupon	<u>1G</u>
Base Metal	<u>6061 T6</u>	Thickness	<u>1/4"</u>

	Actual Values	Range Values
Welding process	<u>GMAW</u>	<u>GMAW</u>
Type of Welder	<u>SEMI AUTO</u>	<u>SEMI AUTO</u>
Plate or Pipe	<u>PLATE</u>	<u>PLATE</u>
Base metal	<u>6061 T6</u>	<u>6005/6061/6063/6111/6351</u>
Filler Metal specs	<u>AWS 5.10</u>	<u>AWS 5.10</u>
Filler Metal class	<u>ER5356</u>	<u>ER5356</u>
Filler Metal	<u>ALUMINUM</u>	<u>ALUMINUM</u>
Consumable Insert	<u></u>	<u></u>
Filler Type	<u>WIRE</u>	<u>WIRE</u>
Weld position/ progression	<u>1G FLAT/Uphill</u>	<u>1G FLAT/Uphill</u>
Inert gas Used	<u>99.99% ARGON</u>	<u>99.99% ARGON</u>
Voltage	<u>22 Volts</u>	<u>22 – 25 Volts</u>
Amp	<u>Auto Amps.</u>	<u>230 – 260 Amps.</u>
Transfer mode	<u>SPRAY ARC</u>	<u>SPRAY ARC</u>
Welder polarity	<u>DCRP</u>	<u>DCRP</u>
Cleaning type	<u>STEEL WIRE BRUSH</u>	<u>STEEL WIRE BRUSH</u>

Welder and Welding Supervisor are responsible for the test coupons being prepared and welded in accordance with requirements of Section IX of the ASME Code.

Welding Supervisor: Jeremy Newhook
 Location: Mount Pearl Shop

Signature: Jeremy Newhook

Results of Bend Test

Visual Examination of Complete Weld:	<u>Pass</u>
Type of Test: <u>Bend</u>	Face
Code: <u>ASME IX</u>	Result: <u>Pass</u>
Visual Examination of Complete Weld:	<u>Pass</u>
Type of Test: <u>Bend</u>	Root
Code: <u>ASME IX</u>	Result: <u>Pass</u>

Mechanical Test Performed by: Scott Gira
 Location: NEEI Winnipeg

Signature: [Signature]

We certify that the statement in the record is correct and that the test coupons were tested in accordance with the requirements of Section IX of ASME Code.

Date: August 20, 2018
 Name: Zanyar Farhadi

Organization: National Energy Equipment Inc.
 Signature: [Signature]

Form Number: NEE-FRM-019

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Welders Name Stephen Hillier **Identification number** E2955
WPS used A-MBH-2 **Test Coupon** 2G
Base Metal 6061 T6 **Thickness** 1/4"

	Actual Values	Range Values
Welding process	<u>GMAW</u>	<u>GMAW</u>
Type of Welder	<u>SEMI AUTO</u>	<u>SEMI AUTO</u>
Plate or Pipe	<u>PLATE</u>	<u>PLATE</u>
Base metal	<u>6061 T6</u>	<u>6005/6061/6063/6111/6351</u>
Filler Metal specs	<u>AWS 5.10</u>	<u>AWS 5.10</u>
Filler Metal class	<u>ER5356</u>	<u>ER5356</u>
Filler Metal	<u>ALUMINUM</u>	<u>ALUMINUM</u>
Consumable Insert	<u> </u>	<u> </u>
Filler Type	<u>WIRE</u>	<u>WIRE</u>
Weld position/ progression	<u>2G Horizontal/Uphill</u>	<u>2G Horizontal/Uphill</u>
Inert gas Used	<u>99.99% ARGON</u>	<u>99.99% ARGON</u>
Voltage	<u>22 Volts</u>	<u>22 – 25 Volts</u>
Amp	<u>Auto Amps.</u>	<u>215 – 230 Amps.</u>
Transfer mode	<u>SPRAY ARC</u>	<u>SPRAY ARC</u>
Welder polarity	<u>DCRP</u>	<u>DCRP</u>
Cleaning type	<u>STEEL WIRE BRUSH</u>	<u>STEEL WIRE BRUSH</u>

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Welding Supervisor: Jeremy Newhook

Signature: *Jeremy Newhook*

Location: Mount Pearl Shop

Results of Bend Test

Visual Examination of Complete Weld:
Type of Test: Bend
Code: ASME IX

Pass
Face
Result: Pass

Visual Examination of Complete Weld:
Type of Test: Bend
Code: Asme IX

Pass
Root
Result: Pass

Mechanical Test Preformed by: Scott Gira

Signature: 

Location: NEEI Winnipeg

We certify that the statement in the record is correct and that the test coupons were tested in accordance with the requirements of Section IX of ASME Code.

Date: August 20, 2018

Organization: National Energy Equipment Inc.

Name: Zanyar Farhadi

Signature: 

Welders Name	<u>Stephen Hillier</u>	Identification number	<u>E2955</u>
WPS used	<u>A-MBV-2</u>	Test Coupon	<u>3G</u>
Base Metal	<u>6061 T6</u>	Thickness	<u>1/4"</u>

	Actual Values	Range Values
Welding process	<u>GMAW</u>	<u>GMAW</u>
Type of Welder	<u>SEMI AUTO</u>	<u>SEMI AUTO</u>
Plate or Pipe	<u>PLATE</u>	<u>PLATE</u>
Base metal	<u>6061 T6</u>	<u>6005/6061/6063/6111/6351</u>
Filler Metal specs	<u>AWS 5.10</u>	<u>AWS 5.10</u>
Filler Metal class	<u>ER5356</u>	<u>ER5356</u>
Filler Metal	<u>ALUMINUM</u>	<u>ALUMINUM</u>
Consumable Insert	<u></u>	<u></u>
Filler Type	<u>WIRE</u>	<u>WIRE</u>
Weld position/ progression	<u>3G Vertical/Uphill</u>	<u>3G Vertical/Uphill</u>
Inert gas Used	<u>99.99% ARGON</u>	<u>99.99% ARGON</u>
Voltage	<u>22 Volts</u>	<u>22 – 25 Volts</u>
Amp	<u>Auto Amps.</u>	<u>190 – 210 Amps.</u>
Transfer mode	<u>SPRAY ARC</u>	<u>SPRAY ARC</u>
Welder polarity	<u>DCRP</u>	<u>DCRP</u>
Cleaning type	<u>STEEL WIRE BRUSH</u>	<u>STEEL WIRE BRUSH</u>

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Welding Supervisor: Jeremy Newhook
Location: Mount Pearl Shop

Signature: *Jeremy Newhook*

Results of Bend Test

Visual Examination of Complete Weld: Pass
Type of Test: Bend
Code: ASME IX
Face Result: Pass

Visual Examination of Complete Weld: Pass
Type of Test: Bend
Code: Asme IX
Root Result: Pass

Mechanical Test Performed by: Scott Gira
Location: NEEI Winnipeg

Signature: *[Signature]*

We certify that the statement in the record is correct and that the test coupons were tested in accordance with the requirements of Section IX of ASME Code.

Date: August 20, 2018
Name: Zanyar Farhadi

Organization: National Energy Equipment Inc.
Signature: *[Signature]*

Welders Name	<u>Stephen Hillier</u>	Identification number	<u>E2955</u>
WPS used	<u>A-MBO-2</u>	Test Coupon	<u>4G</u>
Base Metal	<u>6061 T6</u>	Thickness	<u>1/4"</u>

	Actual Values	Range Values
Welding process	<u>GMAW</u>	<u>GMAW</u>
Type of Welder	<u>SEMI AUTO</u>	<u>SEMI AUTO</u>
Plate or Pipe	<u>PLATE</u>	<u>PLATE</u>
Base metal	<u>6061 T6</u>	<u>6005/6061/6063/6111/6351</u>
Filler Metal specs	<u>AWS 5.10</u>	<u>AWS 5.10</u>
Filler Metal class	<u>ER5356</u>	<u>ER5356</u>
Filler Metal	<u>ALUMINUM</u>	<u>ALUMINUM</u>
Consumable Insert	<u></u>	<u></u>
Filler Type	<u>WIRE</u>	<u>WIRE</u>
Weld position/ progression	<u>4G Overhead/Uphill</u>	<u>4G Overhead/Uphill</u>
Inert gas Used	<u>99.99% ARGON</u>	<u>99.99% ARGON</u>
Voltage	<u>22 Volts</u>	<u>22 – 25 Volts</u>
Amp	<u>Auto Amps.</u>	<u>215 – 225 Amps.</u>
Transfer mode	<u>SPRAY ARC</u>	<u>SPRAY ARC</u>
Welder polarity	<u>DCRP</u>	<u>DCRP</u>
Cleaning type	<u>STEEL WIRE BRUSH</u>	<u>STEEL WIRE BRUSH</u>

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Location: Mount Pearl Shop

Signature: *Jeremy Newhook*

Results of Bend Test

Visual Examination of Complete Weld: Pass
Type of Test: Bend
Code: ASME IX
Face Result: Pass

Visual Examination of Complete Weld: Pass
Type of Test: Bend
Code: Asme IX
Root Result: Pass

Mechanical Test Performed by: Scott Gira
Location: NEEI Winnipeg

Signature: *[Signature]*

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Date: August 20, 2018
Name: Zanyar Farhadi

Organization: National Energy Equipment Inc.
Signature: *[Signature]*