

Prepared for: Stephen Hillier Branch: Mount Pearl, NF

Sample Description: Weld Test Coupons - 5052 Welder ID Number: E2955

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

**Test Results**

Sample ID	Visual Examination of Welds	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

Coupons passed all positions.

Recommendations

No recommendations needed.

Test Performed By:   
 Scott Gira

Test Date: Aug/20/2018



<b>Welders Name</b>	<u>Stephen Hillier</u>	<b>Identification number</b>	<u>E2955</u>
<b>WPS used</b>	<u>A-MBF-1</u>	<b>Test Coupon</b>	<u>1G</u>
<b>Base Metal</b>	<u>5052</u>	<b>Thickness</b>	<u>1/4"</u>

	<b>Actual Values</b>	<b>Range Values</b>
<b>Welding process</b>	<u>GMAW</u>	<u>GMAW</u>
<b>Type of Welder</b>	<u>SEMI AUTO</u>	<u>SEMI AUTO</u>
<b>Plate or Pipe</b>	<u>PLATE</u>	<u>PLATE</u>
<b>Base metal</b>	<u>5052</u>	<u>5052/5154/5454/5754</u>
<b>Filler Metal specs</b>	<u>AWS 5.10</u>	<u>AWS 5.10</u>
<b>Filler Metal class</b>	<u>ER5356</u>	<u>ER5356</u>
<b>Filler Metal</b>	<u>ALUMINUM</u>	<u>ALUMINUM</u>
<b>Consumable Insert</b>	<u></u>	<u></u>
<b>Filler Type</b>	<u>WIRE</u>	<u>WIRE</u>
<b>Weld position/ progression</b>	<u>1G FLAT/Uphill</u>	<u>1G FLAT/Uphill</u>
<b>Inert gas Used</b>	<u>99.99% ARGON</u>	<u>99.99% ARGON</u>
<b>Voltage</b>	<u>22 Volts</u>	<u>22 – 25 Volts</u>
<b>Amp</b>	<u>Auto Amps.</u>	<u>230 – 260 Amps.</u>
<b>Transfer mode</b>	<u>SPRAY ARC</u>	<u>SPRAY ARC</u>
<b>Welder polarity</b>	<u>DCRP</u>	<u>DCRP</u>
<b>Cleaning type</b>	<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

Signature: *Jeremy Newhook*

Location: Mount Pearl Shop

**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

Signature: *Scott Gira*

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: *Zanyar Farhadi*

<b>Welders Name</b>	<u>Stephen Hillier</u>	<b>Identification number</b>	<u>E2955</u>
<b>WPS used</b>	<u>A-MBH-1</u>	<b>Test Coupon</b>	<u>2G</u>
<b>Base Metal</b>	<u>5052</u>	<b>Thickness</b>	<u>1/4"</u>

	<b>Actual Values</b>	<b>Range Values</b>
<b>Welding process</b>	<u>GMAW</u>	<u>GMAW</u>
<b>Type of Welder</b>	<u>SEMI AUTO</u>	<u>SEMI AUTO</u>
<b>Plate or Pipe</b>	<u>PLATE</u>	<u>PLATE</u>
<b>Base metal</b>	<u>5052</u>	<u>5052/5154/5454/5754</u>
<b>Filler Metal specs</b>	<u>AWS 5.10</u>	<u>AWS 5.10</u>
<b>Filler Metal class</b>	<u>ER5356</u>	<u>ER5356</u>
<b>Filler Metal</b>	<u>ALUMINUM</u>	<u>ALUMINUM</u>
<b>Consumable Insert</b>	<u></u>	<u></u>
<b>Filler Type</b>	<u>WIRE</u>	<u>WIRE</u>
<b>Weld position/ progression</b>	<u>2G Horizontal/Uphill</u>	<u>2G Horizontal/Uphill</u>
<b>Inert gas Used</b>	<u>99.99% ARGON</u>	<u>99.99% ARGON</u>
<b>Voltage</b>	<u>22</u> Volts	<u>21 – 24</u> Volts
<b>Amp</b>	<u>Auto</u> Amps.	<u>205 – 220</u> Amps.
<b>Transfer mode</b>	<u>SPRAY ARC</u>	<u>SPRAY ARC</u>
<b>Welder polarity</b>	<u>DCRP</u>	<u>DCRP</u>
<b>Cleaning type</b>	<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**

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

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

**Mechanical Test Performed by:** Scott Gira

**Location:** NEEI Winnipeg


**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:** 

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Welders Name Stephen Hillier Identification number E2955  
 WPS used A-MBV-1 Test Coupon 3G  
 Base Metal 5052 Thickness 1/4"

	<u>Actual Values</u>	<u>Range Values</u>
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>5052</u>	<u>5052/5154/5454/5754</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</u> Volts	<u>21 – 24</u> Volts
Amp	<u>Auto</u> Amps.	<u>185 – 205</u> Amps.
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: 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

Signature: *Scott Gira*

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: *Zanyar Farhadi*

<b>Welders Name</b>	<u>Stephen Hillier</u>	<b>Identification number</b>	<u>E2955</u>
<b>WPS used</b>	<u>A-MBO-1</u>	<b>Test Coupon</b>	<u>4G</u>
<b>Base Metal</b>	<u>5052</u>	<b>Thickness</b>	<u>1/4"</u>

	<b>Actual Values</b>	<b>Range Values</b>
<b>Welding process</b>	<u>GMAW</u>	<u>GMAW</u>
<b>Type of Welder</b>	<u>SEMI AUTO</u>	<u>SEMI AUTO</u>
<b>Plate or Pipe</b>	<u>PLATE</u>	<u>PLATE</u>
<b>Base metal</b>	<u>5052</u>	<u>5052/5154/5454/5754</u>
<b>Filler Metal specs</b>	<u>AWS 5.10</u>	<u>AWS 5.10</u>
<b>Filler Metal class</b>	<u>ER5356</u>	<u>ER5356</u>
<b>Filler Metal</b>	<u>ALUMINUM</u>	<u>ALUMINUM</u>
<b>Consumable Insert</b>	<u></u>	<u></u>
<b>Filler Type</b>	<u>WIRE</u>	<u>WIRE</u>
<b>Weld position/ progression</b>	<u>4G Overhead/Uphill</u>	<u>4G Overhead/Uphill</u>
<b>Inert gas Used</b>	<u>99.99% ARGON</u>	<u>99.99% ARGON</u>
<b>Voltage</b>	<u>22 Volts</u>	<u>21 – 24 Volts</u>
<b>Amp</b>	<u>Auto Amps.</u>	<u>200 – 220 Amps.</u>
<b>Transfer mode</b>	<u>SPRAY ARC</u>	<u>SPRAY ARC</u>
<b>Welder polarity</b>	<u>DCRP</u>	<u>DCRP</u>
<b>Cleaning type</b>	<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**

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

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

**Mechanical Test Performed by:** Scott Gira  
**Location:** NEEI Winnipeg

**Signature:** *Scott Gira*

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  
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**Organization:** National Energy Equipment Inc.  
**Signature:** *Zanyar Farhadi*