

**AD Cryogenics Department
In-Process Weld Inspection Form**

(as per In-Process Weld Inspection Guidelines, AD-Cryogenics, Nov 3, 2006)

Date 4/18/15 Project: G-2
Pipe Section: _____ Weld Number: 3
Weld location: LHP PIPE
Welder: MIKE JEFMUNDA Inspector: KELLY HARDIN

Before Welding:

Type of weld: (butt) (other) _____
(1) Pipe #1 Size, Schedule and material: 3/4" SCH 10
(2) Pipe #2 Size, Schedule and material: 3/4" SCH 10

(1) Joint Preparation and Cleanliness

Joint Preparation and Cleanliness acceptable?

(2) Welding Machine

(a) Remote foot pedal?
(b) DC straight machine?

(3) Joint Fit-up, and Internal Alignment

(a) Internal alignment acceptable?
(b) Joint Clearance acceptable?
(c) End Preparation acceptable?

(4) Filler Rod

(a) AWS A5.9 stainless steel filler rod?
(b) Filler rod: Class 308L Diameter .045"

(5) Purge Gas

(a) type of purge gas : ARGON
(b) time length of purge: 20 MIN purge flow rate: 20 CFH
(b) (if done) O2 reading: NA O2 Monitor manf/model : _____

(6) Inspection After Root Pass

(a) No visible cracks.
(b) No suck holes, which are small holes in middle of weld.
(c) No porosity or obvious imperfections.
(d) Filler material fused along edges of weld.

(8) Repeat inspection after every pass:

(9) Final Inspection: Kelly Hardin

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(as per In-Process Weld Inspection Guidelines, AD Cryogenics, Nov 3, 2006)

Date 5/4/15 Project: G-2
Pipe Section: _____ Weld Number: 3
Weld location: LHE PIPE
Welder: MIKE JEFMUNA Inspector: KELLY HARDIN

Before Welding:

Type of weld: (butt) (other) _____
(1) Pipe #1 Size, Schedule and material: 3/4" SCH 10
(2) Pipe #2 Size, Schedule and material: 3/4" SCH 10

(1) Joint Preparation and Cleanliness

Joint Preparation and Cleanliness acceptable?

(2) Welding Machine

(a) Remote foot pedal?
(b) DC straight machine?

(3) Joint Fit-up, and Internal Alignment

(a) Internal alignment acceptable?
(b) Joint Clearance acceptable?
(c) End Preparation acceptable?

(4) Filler Rod

(a) AWS A5.9 stainless steel filler rod?
(b) Filler rod: Class 308L Diameter .045"

(5) Purge Gas

(a) type of purge gas : ARGON
(b) time length of purge: 20 MIN purge flow rate: 20 CFH
(b) (if done) O2 reading: NA O2 Monitor manf/model : _____

(6) Inspection After Root Pass

(a) No visible cracks.
(b) No suck holes, which are small holes in middle of weld.
(c) No porosity or obvious imperfections.
(d) Filler material fused along edges of weld.

(8) Repeat inspection after every pass:

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Date 5/4/15 Project: G-2
Pipe Section: _____ Weld Number: 3
Weld location: LHE PIPE
Welder: MIKE JEFMUNA Inspector: KELLY HARDIN

Before Welding:

Type of weld: (butt) (other) _____
(1) Pipe #1 Size, Schedule and material: 3/4" SCH 10
(2) Pipe #2 Size, Schedule and material: 3/4" SCH 10

(1) Joint Preparation and Cleanliness

Joint Preparation and Cleanliness acceptable?

(2) Welding Machine

(a) Remote foot pedal?
(b) DC straight machine?

(3) Joint Fit-up, and Internal Alignment

(a) Internal alignment acceptable?
(b) Joint Clearance acceptable?
(c) End Preparation acceptable?

(4) Filler Rod

(a) AWS A5.9 stainless steel filler rod?
(b) Filler rod: Class 308L Diameter .045"

(5) Purge Gas

(a) type of purge gas: ARGON
(b) time length of purge: 20 MIN purge flow rate: 20 CFH
(b) (if done) O2 reading: NA O2 Monitor manf/model: _____

(6) Inspection After Root Pass

(a) No visible cracks.
(b) No suck holes, which are small holes in middle of weld.
(c) No porosity or obvious imperfections.
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(as per In-Process Weld Inspection Guidelines, AD Cryogenics, Nov 3, 2006)

Date 4/18/15 Project: G-2
Pipe Section: _____ Weld Number: 3
Weld location: LHC PIPE
Welder: MIKE JEFMUNA Inspector: KELLY HARDIN

Before Welding:

Type of weld: (butt) (other) _____
(1) Pipe #1 Size, Schedule and material: 3/4" SCH 10
(2) Pipe #2 Size, Schedule and material: 3/4" SCH 10

(1) Joint Preparation and Cleanliness

Joint Preparation and Cleanliness acceptable?

(2) Welding Machine

(a) Remote foot pedal?
(b) DC straight machine?

(3) Joint Fit-up, and Internal Alignment

(a) Internal alignment acceptable?
(b) Joint Clearance acceptable?
(c) End Preparation acceptable?

(4) Filler Rod

(a) AWS A5.9 stainless steel filler rod?
(b) Filler rod: Class 308L Diameter .045"

(5) Purge Gas

(a) type of purge gas : ARGON
(b) time length of purge: 20 MIN purge flow rate: 20 CFH
(b) (if done) O2 reading: NA O2 Monitor manf/model : _____

(6) Inspection After Root Pass

(a) No visible cracks.
(b) No suck holes, which are small holes in middle of weld.
(c) No porosity or obvious imperfections.
(d) Filler material fused along edges of weld.

(8) Repeat inspection after every pass:

(9) Final Inspection: Kelly Hardin

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In-Process Weld Inspection Form**

(as per In-Process Weld Inspection Guidelines, AD Cryogenics, Nov 3, 2006)

Date 5/13/15 Project: G-2
Pipe Section: _____ Weld Number: 3
Weld location: LHP JACKET
Welder: MIKE JEFMULA Inspector: KELLY HARDIN

Before Welding:

Type of weld: (butt) (other) _____
(1) Pipe #1 Size, Schedule and material: 6" TUBE, 109 W
(2) Pipe #2 Size, Schedule and material: 6" TUBE, 109 W

(1) Joint Preparation and Cleanliness

Joint Preparation and Cleanliness acceptable?

(2) Welding Machine

(a) Remote foot pedal?
(b) DC straight machine?

(3) Joint Fit-up, and Internal Alignment

(a) Internal alignment acceptable?
(b) Joint Clearance acceptable?
(c) End Preparation acceptable?

(4) Filler Rod:

(a) AWS A5.9 stainless steel filler rod?
(b) Filler rod: Class 308L Diameter .045"

(5) Purge Gas:

(a) type of purge gas: ARGON
(b) time length of purge: 20 MIN purge flow rate: 20 CFH
(b) (if done) O2 reading: NA O2 Monitor manf/model: _____

(6) Inspection After Root Pass

(a) No visible cracks.
(b) No suck holes, which are small holes in middle of weld.
(c) No porosity or obvious imperfections.
(d) Filler material fused along edges of weld.

(8) Repeat inspection after every pass:

(9) Final Inspection: Kelly Hardin

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(as per In-Process Weld Inspection Guidelines, AD Cryogenics, Nov 3, 2006)

Date 5/13/15 Project: G-2
Pipe Section: _____ Weld Number: 3
Weld location: LHE SACKET
Welder: MIKE JEFMUNA Inspector: KELLY HARDIN

Before Welding:

Type of weld: (butt) (other) _____
(1) Pipe #1 Size, Schedule and material: 6" TUBE, 109W
(2) Pipe #2 Size, Schedule and material: 8" TUBE, 109W

(1) Joint Preparation and Cleanliness

Joint Preparation and Cleanliness acceptable?

(2) Welding Machine

(a) Remote foot pedal?
(b) DC straight machine?

(3) Joint Fit-up and Internal Alignment

(a) Internal alignment acceptable?
(b) Joint Clearance acceptable?
(c) End Preparation acceptable?

(4) Filler Rod

(a) AWS A5.9 stainless steel filler rod?
(b) Filler rod: Class 308L Diameter .045"

(5) Purge Gas

(a) type of purge gas: ARGON
(b) time length of purge: 20 MIN purge flow rate: 20 CFH
(b) (if done) O2 reading: NA O2 Monitor manf/model: _____

(6) Inspection After Root Pass

(a) No visible cracks.
(b) No suck holes, which are small holes in middle of weld.
(c) No porosity or obvious imperfections.
(d) Filler material fused along edges of weld.

(8) Repeat inspection after every pass:

(9) Final Inspection: Kelly Hardin

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(as per In-Process Weld Inspection Guidelines, AD Cryogenics, Nov 3, 2006)

Date 5/15/15 Project: G-2

Pipe Section: _____ Weld Number: 3

Weld location: LHC PIPE

Welder: MIKE JEFMOLA Inspector: KELLY HARDIN

Before Welding:

Type of weld: (butt) (other) _____

(1) Pipe #1 Size, Schedule and material: 3/4" SCH 10

(2) Pipe #2 Size, Schedule and material: 3/4" CERAMIC

(1) Joint Preparation and Cleanliness

Joint Preparation and Cleanliness acceptable?

(2) Welding Machine

(a) Remote foot pedal?

(b) DC straight machine?

(3) Joint Fit-up, and Internal Alignment

(a) Internal alignment acceptable?

(b) Joint Clearance acceptable?

(c) End Preparation acceptable?

(4) Filler Rod

(a) AWS A5.9 stainless steel filler rod?

(b) Filler rod: Class 308L Diameter .045"

(5) Purge Gas

(a) type of purge gas : ARGON

(b) time length of purge: 20 MIN purge flow rate: 20 CFH

(b) (if done) O2 reading: NA O2 Monitor manf/model : _____

(6) Inspection After Root Pass

(a) No visible cracks.

(b) No suck holes, which are small holes in middle of weld.

(c) No porosity or obvious imperfections.

(d) Filler material fused along edges of weld.

(8) Repeat inspection after every pass:

(9) Final Inspection: Kelly Hardin

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In-Process Weld Inspection Form**

(as per In-Process Weld Inspection Guidelines, AD Cryogenics, Nov 3, 2006)

Date 5/15/15 Project: G-2
Pipe Section: _____ Weld Number: 3
Weld location: LHR PIPE
Welder: MIKE JEFMUNA Inspector: KELLY HARDIN

Before Welding:

Type of weld: (butt) (other) _____
(1) Pipe #1 Size, Schedule and material: 3/4" SCH 10
(2) Pipe #2 Size, Schedule and material: 3/4" CERAMIC

(1) Joint Preparation and Cleanliness

Joint Preparation and Cleanliness acceptable?

(2) Welding Machine

(a) Remote foot pedal?
(b) DC straight machine?

(3) Joint Fit-up and Internal Alignment

(a) Internal alignment acceptable?
(b) Joint Clearance acceptable?
(c) End Preparation acceptable?

(4) Filler Rod

(a) AWS A5.9 stainless steel filler rod?
(b) Filler rod: Class 308L Diameter .045"

(5) Purge Gas

(a) type of purge gas: ARGON
(b) time length of purge: 20 MIN purge flow rate: 20 CFH
(b) (if done) O2 reading: NA O2 Monitor manf/model: _____

(6) Inspection After Root Pass

(a) No visible cracks.
(b) No suck holes, which are small holes in middle of weld.
(c) No porosity or obvious imperfections.
(d) Filler material fused along edges of weld.

(8) Repeat inspection after every pass:

(9) Final Inspection: Kelly Hardin

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(as per In-Process Weld Inspection Guidelines, AD Cryogenics, Nov 3, 2006)

Date 5/18/15 Project: G-2
Pipe Section: _____ Weld Number: 3
Weld location: LN2 VENT
Welder: MIKE JEEUNGA Inspector: KELLY HARDIN

Before Welding:

Type of weld: (butt) _____ (other)
(1) Pipe #1 Size, Schedule and material: 1 1/2" COPPER
(2) Pipe #2 Size, Schedule and material: 1 1/2" COPPER

(1) Joint Preparation and Cleanliness

Joint Preparation and Cleanliness acceptable?

(2) Welding Machine

(a) Remote foot pedal? _____
(b) DC straight machine? _____ TORCH BRAZE

(3) Joint Fit-up and Internal Alignment

(a) Internal alignment acceptable?
(b) Joint Clearance acceptable?
(c) End Preparation acceptable?

(4) Filler Rod

(a) AWS A5.9 stainless steel filler rod? NA
(b) Filler rod: Class 5 SILPHOS Diameter 1/8 FLAT

(5) Purge Gas

(a) type of purge gas : NA
(b) time length of purge: _____ purge flow rate: _____
(b) (if done) O2 reading: _____ O2 Monitor manf/model : _____

(6) Inspection After Root Pass

(a) No visible cracks.
(b) No suck holes, which are small holes in middle of weld.
(c) No porosity or obvious imperfections.
(d) Filler material fused along edges of weld.

(8) Repeat inspection after every pass: NA

(9) Final Inspection: Kelly Hardin

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Date 5/13/15 Project: G-2
Pipe Section: _____ Weld Number: 3
Weld location: LN2 VENT
Welder: MIKE JEEVIA Inspector: KELLY HARRIS

Before Welding:

Type of weld: (butt) _____ (other) _____
(1) Pipe #1 Size, Schedule and material: 1/2" COPPER
(2) Pipe #2 Size, Schedule and material: 1/2" COPPER

(1) Joint Preparation and Cleanliness

Joint Preparation and Cleanliness acceptable?

(2) Welding Machine

(a) Remote foot pedal? _____
(b) DC straight machine? _____ TORCH BRAZE

(3) Joint Fit-up, and Internal Alignment

(a) Internal alignment acceptable?
(b) Joint Clearance acceptable?
(c) End Preparation acceptable?

(4) Filler Rod

(a) AWS A5.9 stainless steel filler rod? N/A
(b) Filler rod: Class 5 SiCr103 Diameter 1/8" FLAT

(5) Purge Gas

(a) type of purge gas : N/A
(b) time length of purge: _____ purge flow rate: _____
(b) (if done) O2 reading: _____ O2 Monitor manf/model : _____

(6) Inspection After Root Pass

(a) No visible cracks.
(b) No suck holes, which are small holes in middle of weld.
(c) No porosity or obvious imperfections.
(d) Filler material fused along edges of weld.

(8) Repeat inspection after every pass:

(9) Final Inspection: Kelly Harris