RESUME



RAJU CHOUDHARY
Mobile: 050 7524229 (UAE)
00919934419303 (India)

APPLICATION FOR THE POST OF 6G, GTAW+SAMW, 6GR WELDER

Professional Summary

To work in a challenging position wherein my abilities and experiences can be utilized for the benefit of the company with a scope to upgrade my skills for future personal and effective contribution of the Organization.

Educational Qualification

- Middle Class Passed

Professional Experience

1) **Work Experience in India 2 Years**
2) **Work Experience in Gulf 10 Years**

Company Name	Position	Duration
Bridge & Roof C.India. LTD.I.P.C.L,DAHEJ	GTAW & SMAW	12.01.2004 To 04.06.2005
P.A PROJECT (P)LTD	GTAW &SMAW	26.04.2006 TO 23.10.2012
ADYARD ABU DHABI LLC	GTAW &SMAW	26/04/2006 TO 23/10/2012
PT.LINDE INDONESIA	GTAW & SMAW	10.04.2013 TO 30.07.2013
ADYARD ABU DHABI LLC ADYARD ABUDHABILLC	GTAW &SMAW GTAW&SMAW	15/01/2014 TO17/04/2017 15/10/2017TO9/11/202

Passport Detail

Passport No	:	v4960940
Date of Issue	:	01/11/2022
Place of Issue	:	Abu Dhabi
Date of Expiry	:	31/10/2032

वीज़ा / VISA

EXIT
22 FEB 2023
DXB AGN 5.0
UAE

भारत गणराज्य / REPUBLIC OF INDIA



टाईप / Type
P

कोड / Code
IND

राष्ट्रीयता / Nationality
भारतीय / INDIAN

पासपोर्ट नं. / Passport No.
V4960940

CHOUDHARY

दिया गया नाम/ Given Name(s)
RAJU

जन्मतिथि / Date of Birth
10/03/1979

लिंग / Sex
M

जन्म स्थान/ Place of Birth
GOPALGANJ, BIHAR

जारी करने का स्थान/ Place of Issue
ABU DHABI

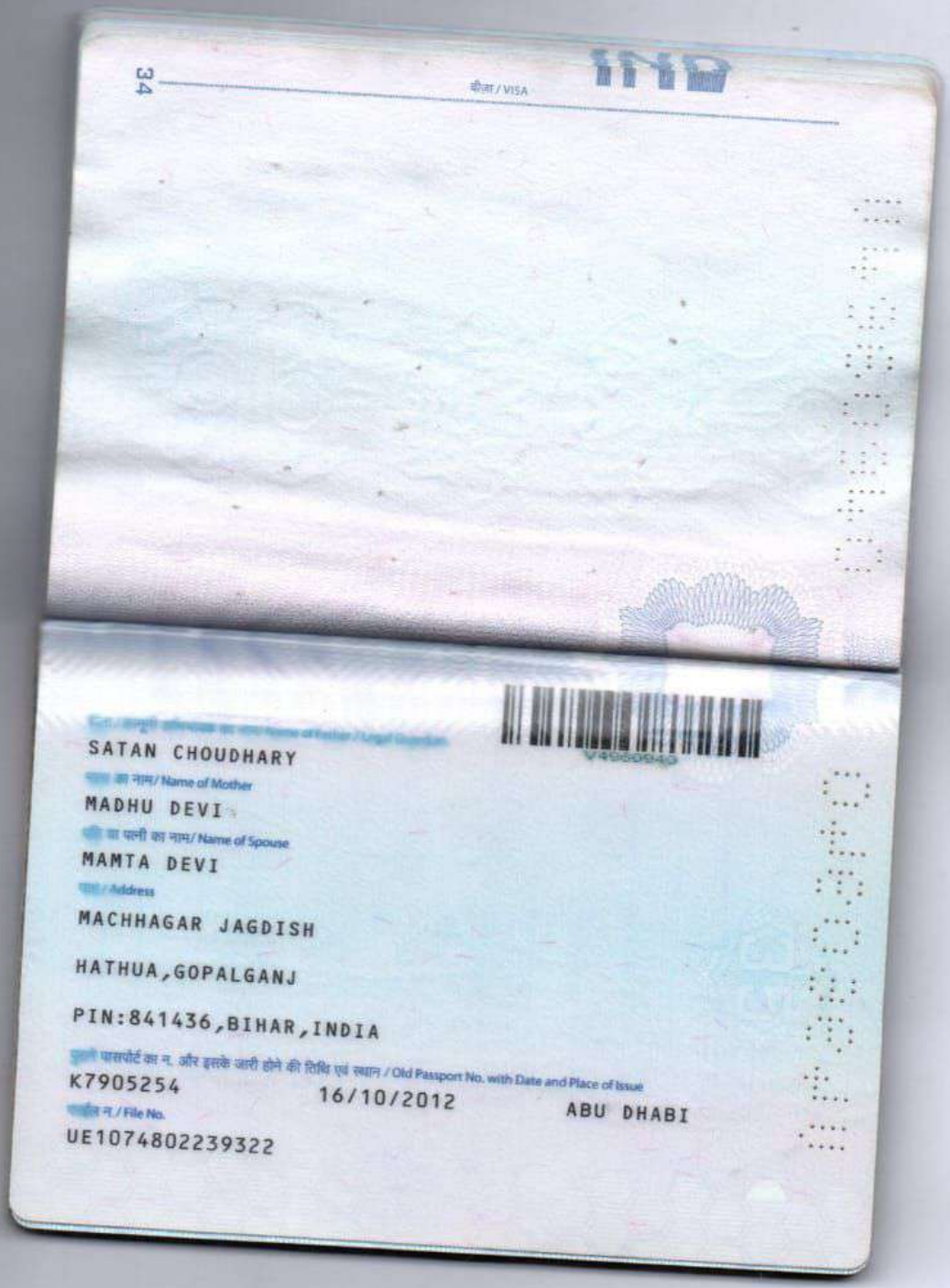
RAJU

जारी करने की तिथि/ Date of Issue
01/11/2022



समाप्ति की तिथि/ Date of Expiry
31/10/2032

P<INDCHOUDHARY<<RAJU<<<<<<<<<<<<<<<<<<<<<<<<
V4960940<7IND7903100M3210318107480223932 2<72


34
वीजा / VISA
IND
SATAN CHOUDHARY
MADHU DEVI
MAMTA DEVI
MACHHAGAR JAGDISH
HATHUA,GOPALGANJ
PIN:841436,BIHAR,INDIA
K7905254
16/10/2012
ABU DHABI
UE1074802239322

July 10, 2008

TO WHOM IT MAY CONCERN

This is to certify that Mr. RAJU CHOWDHURY has been worked as a Welder with ADMA-OPCO onboard barge Al-Ghweifat during Zakum West Super Complex; Module 2 Shutdown and SBIM Package

During his working period we found him sincere, hardworking and efficient in performing the duties entrusted to him in a professional manner.

He understood his daily work related duties and has been very motivated and committed to his work

We wish him all success in his future assignment

ADMA-OPCO
BARGE REP
YOUSRY SALEM

Sincerely Yours,
Yousri Salem
Adma Rep. (Barge Al-Ghweifat)

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أدنوك للغاز الحامض
ADNOC Sour Gas

أدنـوك
ADNOC

APPRECIATION CERTIFICATE

PRESENTED TO

RAJU CHOUDHARI

In recognition of

HIS SIGNIFICANT CONTRIBUTION TO ACHIEVE
SAFE COMPLETION OF THE PROJECT

"LP STEAM AND DRY RISER INSTALLATION"

MOHSEN ALMOUSAWI
OPERATIONS HSE MANAGER

JAYESH CHAVAN
SR. PROJECT ENGINEER

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أدنـوك
ADNOC

Certificate of Recognition

Awarded to

Mr. Raju choudary

(Welder)

From Adyard Abudhabi LLC

For his hard work, commitment and valuable efforts that contributed to the **ADNOC Sour Gas Maximum Production Project**.

He has fulfilled an outstanding performance during the related Project Works and Shutdown from November 2017 to April 2018

Sameh Naim AbdelKhalil
Senior Project Manager

أدنوك للغاز الحامض
ADNOC Sour Gas

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أدنوك للغاز الحامض
ADNOC Sour Gas

أدنـوك
ADNOC

HSE AWARD CERTIFICATE

PRESENTED TO

Raju Chaudhary

In recognition of

SAFE WORK ACTIVITIES DURING 2018 SHUTDOWN

MOHSEN ALMOUSAWI
OPERATIONS HSE MANAGER

GORDON MCGROTTY
SHUTDOWN MANAGER

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We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : **RAJU CHAUDHARI** **Stamp No.** **W# 9001980**

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
31.10.2015	ADYARD ادیارد QC/Welding Engineer		
30.04.2016	ادیارد QC/Welding Engineer	Lloyd's Register EMEA	
29.10.2016	ADYARD ادیارد Welding Engineer	Lloyd's Register EMEA Abu Dhabi Office 12/10/16	
28.04.2017	ADYARD ادیارد Welding Engineer		
27.10.2017	ADYARD ادیارد QC/Welding Engineer	Lloyd's Register Middle East LLC PS Abu Dhabi Office 27/10/17 Lloyd's Register	

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WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per QW-484A, QW-301 of ASME Section IX,)

Welder's name RAJU CHAUDHARI Temp. ID No. -- Permanent ID No. 9001980 Date of test 21.07.2015

Test Description

Identification of WPS followed AY-WPS-SS-001 ☑ Test Coupon ☐ Production weld
Specification of base metal(s) SA 106 GR. B Thickness 8.74 mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW	GTAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	Without	With/Without
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 60.3mm	Plate & Pipe OD 25 mm to Unlimited
Base metal P-Number to P-Number	P-No.1 To P-No.1	P-No.1 through P-No. 15F, P-No.34 & P-No.41 through P-No.49
Filler metal(GTAW)	With	With
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.9	
Filler metal or electrode classification(s) (for info. only)	ER 316L	
Filler metal F-Number(s)	F-No.6	F-No.6
Consumable insert (GTAW or PAW)	Without	Without
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	Solid	Solid or Metal Cored
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☑ Yes ☐ No	8.74 mm	17.48 mm Max.
Process 2: ____ 3 layers minimum ☐ Yes ☐ No	NA	NA
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm — All; 25mm ≤ Pipe OD ≤ 610mm — All; Fillet: Plate & Pipe — All
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	With	With
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN
Others (for info. only)	NIL	NA

RESULTS

Visual Examination of Completed Weld (QW-302.4) Satisfactory
☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)
☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];
☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];
☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (Rep. No.AD/326030, Dtd.21.07.2015)
Fillet-weld - fracture test (QW-181.2) NA Length and percent of defects NA
☐ Fillet Welds in plate [QW-462.4(b)] ☐ Fillet Welds in pipe [QW-462.4(c)]
Macro examination (QW-184) NA Fillet size (in.) ____ x ___ Concavity/convexity (in.) NA
Other tests NIL
Film or specimens evaluated by ANEESH/ GANESAN Company INSPEC / ADYARD
Mechanical tests conducted by NA Laboratory test no. NA
Welding supervised by ASHWANI BHATIA, ADYARD ABU DHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2013.

Witnessed by: HDEC ADMA-TPA(DNV-GL)

Organization ADYARD ABU DHABI LLC
(Incorporating ADYARD ABUDHABI LLC, NICO International Hydrospace)
Certified by: ASHWANI BHATIA
Date 29.07.2015

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : **RAJU CHAUDHARI** **Stamp No.** **W# 9001980**

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
14.09.2016	ADYARD Welding Engineer		
13.03.2017	ADYARD Welding Engineer	Lloyd's Register EMEA Lloyd's Register Abu Dhabi Office	
12.09.2017	ADYARD QC/Welding Engineer	Lloyd's Register Middle East LLC PS 17/4/17 Lloyd's Register Abu Dhabi Office	

WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per QW-484A, QW-301 of ASME Section IX)

Welder's name: RAJU CHAUDHARI | Temp. ID No.: -- | Permanent ID No.: 9001980 | Date of test: 15.03.2016

Test Description

Identification of WPS followed: SS-WQT-002, Rev.0 ☑ Test Coupon ☐ Production weld
Specification of base metal(s): SA 106 GR. B | Thickness: 11.07 mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW+SMAW	GTAW+SMAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	GTAW - Without, SMAW-With	GTAW-With/Without, SMAW-With
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 60.3 mm	Plate & Pipe OD 25 mm to Unlimited
Base metal P-Number to P-Number	P-No.1 To P-No.1	P-No.1 through P-No.15F, P-No.34 & P-No.41 through P-No.46
Filler metal(GTAW)	With	With
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.9 + SFA 5.4	
Filler metal or electrode classification(s) (for info. only)	ER316L + E316L-16	
Filler metal F-Number(s)	F-No.6 + F-No.5	F-No.6, F-No.1 and F-No.5 (With backing)
Consumable insert (GTAW or PAW)	Without	Without
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	Solid	Solid or Metal Cored
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☐ Yes ☑ No	4 mm	8 mm Max
Process 2: SMAW 3 layers minimum ☑ Yes ☐ No	7.07 mm	14.14 mm
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm — All; 25mm ≤ Pipe OD ≤ 610mm — All; Fillet: Plate & Pipe — All
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	With	With
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN
Others (for info. only)	NIL	NA

RESULTS

Visual Examination of Completed Weld (QW-302.4): Satisfactory
☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)
☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];
☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];
☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (Rep. No.AD/350770 Dated 16/03/2016)
Fillet-weld - fracture test (QW-181.2): NA | Length and percent of defects: NA

Fillet Welds in plate [QW-462.4(b)] | Fillet Welds in pipe [QW-462.4(c)]
Macro examination (QW-184): NA | Fillet size (in.): ___ x ___ | Concavity/convexity (in.): NA
Other tests: NIL
Film or specimens evaluated by: JACOB/ GANESAN | Company: INSPEC / ADYARD
Mechanical tests conducted by: NA | Laboratory test no.: NA
Welding supervised by: ASHWANI BHATIA, ADYARD ABU DHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2015.

Witnessed by:
HDEC | ADMA TPA (DNV-GL)

Organization: ADYARD ABU DHABI LLC
(Incorporating ADYARD ABUDHABI LLC, NICO International Hydrospace/ (FUJAIRAH)
Certified by: Ashwani Bhatia
Date: 30.03.2016

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead

WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per QW-484A, QW-301 of ASME Section IX,)

Welder's name RAJU CHAUDHARI Temp. ID No. -- Permanent ID No. 9001980 Date of test 21.07.2015

Test Description

Identification of WPS followed AY-WPS-P43-002 ☑ Test Coupon ☐ Production weld
Specification of base metal(s) SA 106 GR. B Thickness 8.74 mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW	GTAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	Without	With/Without
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 60.3mm	Plate & Pipe OD 25 mm to Unlimited
Base metal P-Number to P-Number	P-No.1 To P-No.1	P-No.1 through P-No. 15F, P-No.34 & P-No.41 through P-No.49
Filler metal(GTAW)	With	With
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.14	
Filler metal or electrode classification(s) (for info. only)	ER NiCrMo-3	
Filler metal F-Number(s)	F-No.43	F-No.34 and all F-No.41 through F-No.49
Consumable insert (GTAW or PAW)	Without	Without
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	Solid	Solid or Metal Cored
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☑ Yes ☐ No	8.74 mm	17.48 mm Max.
Process 2: ____ 3 layers minimum ☐ Yes ☐ No	NA	NA
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm — All; 25mm ≤ Pipe OD ≤ 610mm — All; Fillet: Plate & Pipe — All
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	With	With
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN
Others (for info. only)	NIL	NA

RESULTS

Visual Examination of Completed Weld (QW-302.4) Satisfactory
☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)
☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];
☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];
☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (Rep. No.AD/326030, Dtd.21.07.2015)
Fillet-weld - fracture test (QW-181.2) NA Length and percent of defects NA
☐ Fillet Welds in plate [QW-462.4(b)] ☐ Fillet Welds in pipe [QW-462.4(c)]
Macro examination (QW-184) NA Fillet size (in.) ____ x ____ Concavity/convexity (in.) NA
Other tests NIL
Film or specimens evaluated by ANEESH/ GANESAN Company INSPEC / ADYARD
Mechanical tests conducted by NA Laboratory test no. NA
Welding supervised by ASHWANI BHATIA, ADYARD ABU DHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2013.

Witnessed by: HDEC — ADMA-TPA(DNV-GL)

Organization ADYARD ABU DHABI LLC
(Incorporating ADYARD ABUDHABI LLC, NICO International Hydrospace)
Certified by: ASHWANI BHATIA
Date 29.07.2015

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : **RAJU CHAUDHARI** **Stamp No.** **W# 9001980**

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
31.10.2015	ADYARD QC/Welding Engineer		
30.04.2016	ADYARD	Lloyd's Register EMEA PS 27/10/15	
29.10.2016	ADYARD	Lloyd's Register EMEA PS 6/4/16	
28.04.2017	ADYARD Welding Engineer	Lloyd's Register EMEA SM Abu Dhabi Office 12/10/16	
27.10.2017	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. PS 17/4/17 Lloyd's Register Abu Dhabi Office	

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ADYARD ادیـــارد



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during six (6) months preceding the date of our signature.

Welder's Name : RAJU CHAUDHARY **Stamp No. W# 9001980**

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
30.04.2016	ADYARD ادیـــارد Welding Engineer		
29.10.2016	ADYARD ادیـــارد Welding Engineer	Lloyd's Register EMEA PS 3/4/16 Lloyd's Register	
28.04.2017	ADYARD ادیـــارد Welding Engineer	Lloyd's Register EMEA SM Abu Dhabi Office Lloyd's Register	
27.10.2017	ADYARD ادیـــارد QC/Welding Engineer	Lloyd's Register Middle East LLC PS 17/4/17 Abu Dhabi Office Lloyd's Register	

WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per QW-484A, QW-301 of ASME Section IX)

Welder's name **RAJU CHAUDHARY** Temp. ID No. **--** Permanent ID No. **9001980** Date of test **8-Feb-16**

Test Description

Identification of WPS followed **AY-WPS-LTCS-003** ☑ Test Coupon ☐ Production weld

Specification of base metal(s) **SA 106 GR. B** Thickness **8.74 mm**

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW	GTAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	Without	With/Without
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 60.3mm	Plate & Pipe OD 25 mm to Unlimited
Base metal P-Number to P-Number	P-No.1 To P-No.1	P-No.1 through P-No. 15F, P-No.34 & P-No.41 through P-No.49
Filler metal(GTAW)	With	With
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.28	
Filler metal or electrode classification(s) (for info. only)	ER80SNi-1	
Filler metal F-Number(s)	F-No.6	F-No.6
Consumable insert (GTAW or PAW)	Without	Without
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	Solid	Solid or Metal Cored
Deposit thickness for each process		
Process 1: **GTAW** 3 layers minimum ☑ Yes ☐ No	8.74 mm	17.48 mm Max.
Process 2: _____ 3 layers minimum ☐ Yes ☐ No	NA	NA
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm — All; 25mm ≤ Pipe OD ≤ 610mm — All; Fillet: Plate & Pipe — All
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	Without	With/Without
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN
Others (for info. only)	NIL	NA

RESULTS

Visual Examination of Completed Weld (QW-302.4) **Satisfactory**

☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)

☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];

☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];

☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: **Satisfactory (Rep. No.AD/346353,Dated 09/02/2016)**

Fillet-weld - fracture test (QW-181.2) **NA** Length and percent of defects **NA**

Fillet Welds in plate [QW-462.4(b)] Fillet Welds in pipe [QW-462.4(c)]

Macro examination (QW-184) **NA** Fillet size (in.) ____ x ____ Concavity/convexity (in.) **NA**

Other tests **NIL**

Film or specimens evaluated by **ANEESH/ GANESAN** Company **INSPEC / ADYARD**

Mechanical tests conducted by **NA** Laboratory test no. **NA**

Welding supervised by **ASHWANI BHATIA, ADYARD ABU DHABI LLC**

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2013.

Witnessed by:

HDEC

ADMA TPA (DNV-GL)

Organization **ADYARD ABU DHABI LLC**
(Incorporating ADYARD ABUDHABI LLC, NICO International Hydrospace (FUJAIRAH)

Certified by: **Ashwani Bhatia**

Date **15.02.2016**

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead

51-073

P.O. Box: 7604, Musaffah, Abu Dhabi, U.A.E.
Tel: +9712 5547722, Fax: +9712 5546767
E-mail: adyard.abudhabi@interserve.com
www.interserve.com
PAID UP SHARE CAPITAL AED 25 MILLION

ص.ب : 7604، المصفح -- ابوظبي ، أ.ع.م.
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البريد الالكتروني : adyard.abudhabi@interserve.com
www.interserve.com
راس المال المدفوع : 25 مليون درهم

CERT No
642C

WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per ASME Section IX)

Welder's name: RAJU CHAUDARY | Welder's ID No.: 9001980 | Date of test: 02-Feb-15

Test Description

Identification of WPS followed: PP-214 Rev.01 | Test Coupon ☑ | Production weld ☐

Specification of base metal(s): SA 106 GR.B | Thickness: 8.74mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW+SMAW	GTAW+SMAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	GTAW-Without: SMAW-With	GTAW-With/Without, SMAW-With
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 60.30mm	Plate & Pipe OD 25 mm to Unlimited
Base metal P-Number to P-Number	P-No.1 To P-No.1	P-No.1 to 15F, P-No.34, P-No.41 to 49
Filler metal (GTAW)	With	With
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.14+SFA 5.11	
Filler metal or electrode classification(s) (for info. only)	ERNiCrMo3 + ENiCrMo3	
Filler metal F-Number(s)	F-No.43	F-NO.34 and all F.No.41 through F.No.46
Consumable insert (GTAW or PAW)	NA	NA
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	Solid	Solid or Metal Cored
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☐ yes ☑ No	4mm	8mm Max.
Process 2: SMAW 3 layers minimum ☐ yes ☑ No	4.74mm	9.48mm Max.
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm — All; 25 mm ≤ Pipe OD < 610mm — All; Fillet: Plate & Pipe all Dia — All
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	With	With
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN
Others (for info. only)	NIL	NA

RESULTS

Visual Examination of Completed Weld (QW-302.4): Satisfactory

☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)
☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];
☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];
☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (INSPEC RT Report No: AD/ 316483, Dt:02.02.2015)

Fillet-weld - fracture test (QW-181.2): NA | Length and percent of defects: NA

☐ Fillet Welds in plate [QW-462.4(b)] ☐ Fillet Welds in pipe [QW-462.4(c)]

Macro examination (QW-184): NA | Fillet size (in.): NA | Concavity/convexity (in.): NA

Other tests: NIL

Film or specimens evaluated by: ANEESH RAJ / GANESAN | Company: INSPEC / ADYARD

Mechanical tests conducted by: NA | Laboratory test no.: NA

Welding supervised by: ANGA KRISHNA, ADYARD ABUDHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2013.

Witnessed by:

Third Party Inspection Agency: BUREAU VERITAS

BUREAU VERITAS S.A. Reviewed INP-LO Witnessed 32 ABU DHABI BRANCH

Organization : ADYARD ABUDHABI LLC

(Incorporating Adyard Abu Dhabi LLC,Nico International-Hydrospace/Fujairah)

Certified by: Anga Krishna

Date: 14-Feb-15

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead

P.O. Box 7604, Mussafah, Abu Dhabi, U.A.E.
Tel. +971 2 5547722, Fax +971 2 5546767
Email: adyard@adyarduae.com, www.topazworld.com
PAID UP SHARE CAPITAL AED 25 MILLION

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We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : **RAJU CHAUDARY** **Stamp No.** **9001980**

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
23.04.2015			
22.10.2015	ADYARD Welding Engineer	PS 23/4/15 Abu Dhabi Office	
21.04.2016	ADYARD Welding Engineer	PS 20/10/15	
20.10.2016	ADYARD	Lloyd's Register EMEA PS 6/4/16 Abu Dhabi Office	
19.04.2017	ADYARD Welding Engineer	SM Abu Dhabi Office	
18.10.2017	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. PS Abu Dhabi Office 17/4/17 Lloyd's Register	

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CERT No 642A

WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per QW-484A, QW-301 of ASME Section IX,)

Welder's name RAJU CHAUDARY Temp. ID No. – Permanent ID No. 9001980 Date of test 26-Oct-14

Test Description

Identification of WPS followed PP-98, Rev.0 ☑ ☐ Production weld
Specification of base metal(s) SA 106 GR.B Thickness 11.07mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW	GTAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	Without	With/Without
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 60.30mm	Plate & Pipe OD 25 mm to Unlimited
Base metal P-Number to P-Number	P-No.1 To P-No.1	P-No.1 to 15F, P-No.34, P-No.41 to 49
Filler metal	With	With
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.18	NA
Filler metal or electrode classification(s) (for info. only)	ER70S-3	NA
Filler metal F-Number(s)	F-No.6	ALL F-No.6
Consumable insert (GTAW or PAW)	NA	NA
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	Solid	Solid or Metal Cored
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☑ Yes ☐ No	11.07 mm	22.14 mm Max.
Process 2: ____ 3 layers minimum ☐ Yes ☐ No	NA	NA
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm All; 25mm ≤ Pipe OD ≤ 610mm All; Fillet: Plate & Pipe All
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	Without	With & Without
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN
Others (for info. only)	NIL	NA

RESULTS

Visual Examination of Completed Weld (QW-302.4) Satisfactory

☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)
☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];
☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];
☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (Rep. No.AD/308098, Dtd.26.10.2014)
Fillet-weld - fracture test (QW-181.2) NA Length and percent of defects NA

☐ Fillet Welds in plate [QW-462.4(b)] ☐ Fillet Welds in pipe [QW-462.4(c)]
Macro examination (QW-184) NA Fillet size (in.) ____ x ____ Concavity/convexity (in.) NA
Other tests NIL
Film or specimens evaluated by SOJI / GANESAN Company INSPEC / ADYARD
Mechanical tests conducted by NA Laboratory test no. NA
Welding supervised by ANGA KRISHNA, ADYARD ABU DHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2013.

Witnessed by:
Third Party Inspection Agency

Lloyd's Register 4/12 for SA

Manufacturer or Contractor ADYARD ABU DHABI LLC
(Incorporating ADYARD ABUDHABI LLC, NICO International Hydrospace/ (FUJAIRAH)

Certified by: Anga Krishna
Date 27-Nov-14

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : **RAJU CHAUDARY** **Stamp No.** **9001980**

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
25.04.2015			
24.10.2015	Welding Engineer	Lloyd's Register EMEA PS 22/4/15 Abu Dhabi Office	
23.04.2016	ADYARD Welding Engineer	PS 20/10/15 Abu Dhabi Office	
22.10.2016	ADYARD Welding Engineer	Lloyd's Register EMEA PS 6/4/16 Abu Dhabi Office	
21.04.2017	ADYARD Welding Engineer	Lloyd's Register EMEA SM 12/10/16 Abu Dhabi Office	
20.10.2017	ADYARD QC/Welding Engineer	Lloyd's Register Middle East LLC PS 17/4/17 Abu Dhabi Office Lloyd's Register	

CERT No
642B

WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per ASME Section IX)

Welder's name RAJU CHAUDARY Welder's ID No. 9001980 Date of test 26-Oct-14

Test Description

Identification of WPS followed PP-126 Rev.0 Test Coupon ☑ Production weld ☐
Specification of base metal(s) SA 106 GR.B Thickness 21.95mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW+SMAW	GTAW+SMAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	GTAW-Without: SMAW-With	GTAW-With/Without, SMAW-With
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 168.30mm	Plate & Pipe OD 73 mm to Unlimited
Base metal P-Number to P-Number	P-No.1 To P-No.1	P-No.1 to 15F, P-No.34, P-No.41 to 49
Filler metal (GTAW)	With	With
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.14+SFA 5.11	
Filler metal or electrode classification(s) (for info. only)	ERNiCrMo3 + ENiCrMo3	
Filler metal F-Number(s)	F-No.43	F-NO.34 and all F.No.41 through F.No.46
Consumable insert (GTAW or PAW)	NA	NA
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	Solid	Solid or Metal Cored
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☑ yes ☐ No	6mm	12mm Max.
Process 2: SMAW 3 layers minimum ☑ yes ☐ No	15.9mm	MAX TO BE WELDED
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm — All; 73 mm ≤ Pipe OD < 610mm — All; Fillet: Plate & Pipe all Dia — All
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	With	With
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN
Others (for info. only)	NIL	NA

RESULTS

Visual Examination of Completed Weld (QW-302.4) Satisfactory

☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)
☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];
☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];
☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (INSPEC RT Report No: AD/ 308097, Dt:26.10.2014)

Fillet-weld - fracture test (QW-181.2) NA Length and percent of defects NA

☐ Fillet Welds in plate [QW-462.4(b)] ☐ Fillet Welds in pipe [QW-462.4(c)]

Macro examination (QW-184) NA Fillet size (in.) NA Concavity/convexity (in.) NA

Other tests NIL

Film or specimens evaluated by SOJI/GANESAN Company INSPEC / ADYARD

Mechanical tests conducted by NA Laboratory test no. NA

Welding supervised by ANGA KRISHNA, ADYARD ABUDHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2013.

Witnessed by:
Third Party Inspection Agency
Lloyd's Register EMEA

Lloyd's Register EMEA SD 4/12 Abu Dhabi Office — Lloyd's Register

Organization : ADYARD ABUDHABI LLC
(Incorporating Adyard Abu Dhabi LLC,Nico International-Hydrospace/Fujairah)

Certified by: Anga krishna
Date: 27-Nov-14

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead

Adyard Abu Dhabi L.L.C



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : **RAJU CHAUDARY** **Stamp No.** **W# 9001980**

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
25.07.2015			
24.10.2015	ADYARD Welding Engineer	Lloyd's Register EMEA PS 23/4/15 Abu Dhabi Office	
23.04.2016	ADYARD Welding Engineer	Lloyd's Register EMEA PS 20/10/15	
22.10.2016	ADYARD	Lloyd's Register EMEA PS 6/4/16	
21.04.2017	ADYARD Welding Engineer	Lloyd's Register EMEA SM 12/10/16 Abu Dhabi Office	
20.10.2017	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. PS 17/4/17 Abu Dhabi Office	

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WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Type of Welder **MANUAL**

Name: **RAJU CHAUDHARY** Identification No. **9001980**

Welding Procedure Specification No: SP-97 Rev. 00 Date 06.02.2014

Variables	Qualification	Qualification Range
Process/ Type [Table 4.11, Item (1)]	SMAW	SMAW
Electrode (single or multiple) [Table 4.11, Item (7)]	SINGLE	SINGLE
Current/ Polarity	DCEN (ROOT) + DCEP (FILL & CAP)	DCEN & DCEP
Position [Table 4.11 Item (3)]	6GR	ALL T,K,Y-GROOVE JOINTS (REFER: NOTE 1 & 2)
Weld Progression [Table 4.11 Item (5)]	UPHILL	UPHILL
Backing (YES or NO) [Table 4.11 Item (6)]	WITHOUT	WITH / WITHOUT BACKING
Material/ Spec	GROUP II	ALL GROUP I , II , III & IV
Base Metal		
Thickness: (Plate)		
Groove	NA	5 mm to Unlimited
Fillet	NA	ANY SIZES
Thickness: (Pipe/ Tube)		
Groove	14.27 # 21.95 mm	5 mm to Unlimited
Fillet	NA	ANY SIZES
Diameter: (Pipe)		
Groove	6" (150 mm) NPS	OVER 4 " (100 mm) NPS
Fillet	NA	ANY SIZES
Filler Metal		
Spec No.	A 5.1	
Class	E 7016-1 & E 7018-1	F4 WITH / WITHOUT BACKING & F3, F2 & F1 WITH BACKING
F-No. [Table 4.11 Item (2)]	F4	
Gas/ Flux Type	NA	
Other	NONE	

NOTE: 1) ALL POSITIONS FOR PLATE; PIPE JOINTS, NOT QUALIFIED FOR JOINTS WELDED FROM ONE SIDE WITHOUT BACKING OR WELDED FROM 2 SIDES WITHOUT BACKGOUGING.

2) NOT QUALIFIED FOR WELDS HAVING GROOVE ANGLE LESS THAN 30°.

VISUAL INSPECTION (4.8.1)

Acceptable YES or NO: YES

Guided Bend Test Result (4.30.5) NONE

Type	Result	Type	Result
--	--	--	--
--	--	--	--

FILLET TEST RESULTS – (4.30.2.3 & 4.30.4.1)

Appearance NA Fillet Size NA

Fracture Test Root Penetration NA Macroetch NA

(Describe the location, nature, and size of any crack or tearing of the specimen)

Inspected by NA Test Number NA

Organization NA Date NA

RADIOGRAPHIC TEST RESULTS (4.30.3.1)

Film Identification No.	Results	Remarks	Film Identification No.	Results	Remarks
WQT 9001980	ACCEPTABLE				

Interpreted By MR ANEESH / MR GANESAN Test Number AD/ 286033

Organization INSPEC / ADYARD Date 06.02.2014

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 AWS D1.1 2010 Structural welding code- Steel.

Witnessed By For ONGC Project Manufacturer or Contractor ADYARD ABU DHABI LLC

BY: BALU SREENIVAS Welding Engineer



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : **RAJU CHAUDHARY** **Welder's ID No. 9001980**

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
03.04.2014	ADYARD Welding Engineer		
02.10.2014	ADYARD Welding Engineer	Lloyd's Register EMEA SD Abu Dhabi Office Lloyd's Register	
01.01.2015	ADYARD QC/Welding Engineer	Lloyd's Register EMEA SD Abu Dhabi Office Lloyd's Register	
30.09.2015	ADYARD QC/Welding Engineer	Abu Dhabi Office Lloyd's Register EMEA PS 21/11/15	
29.03.2016	ADYARD Welding Engineer	PS 20/10/15	
28.09.2016	ADYARD Welding Engineer	Lloyd's Register EMEA PS 17/3/16 Abu Dhabi Office Lloyd's Register	
27.03.2017	ADYARD Welding Engineer	Lloyd's Register EMEA SM 12/10/16 Abu Dhabi Office	
26.09.2017	ADYARD QC/Welding Engineer	Lloyd's Register Middle East LLC. PS 11/4/17 Abu Dhabi Office Lloyd's Register	

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WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Type of Welder **WELDER**

Name: **RAJU CHAUDHARY** PERMANENT ID No. **9001980**

Welding Procedure Specification No: AY-WPS-LTCS-001 Rev. 01 Date 08.02.2016

Variables	Qualification	Qualification Range
Process/ Type [Table 4.12, Item (1)]	GTAW	GTAW
Electrode (single or multiple) [Table 4.12, Item (7)]	SINGLE	SINGLE
Current/ Polarity	DCEN	DCEN
Position [Table 4.12 Item (3)]	6G	ALL(EXCEPT CJP JOINTS OF T-Y-K)
Weld Progression [Table 4.12 Item (5)]	UPHILL	UPHILL
Backing (YES or NO) [Table 4.12 Item (6)]	WITHOUT	WITH & WITHOUT
Material/ Spec	GROUP I	ALL GROUP I , II , III & IV
Base Metal		
Thickness: (Plate)		
Groove	NA	3 mm to 20 mm
Fillet	NA	ALL
Thickness: (Pipe/ Tube)		
Groove	8.74 mm	3 mm to 20 mm
Fillet	NA	ALL
Diameter: (Pipe)		3/4" NPS (20 mm) TO
Groove	2"NPS (O.D 60.30 mm)	4"NPS (100 mm)
Fillet	NA	ANY DIA
Filler Metal [Table 4.12]		
Spec No.	5.28	—
Class	ER 80S Ni-1	—
F-No. [Table 4.12 Item (2)]	F6	ALL F6 WITH/WITHOUT BACKING
Gas/ Flux Type [Table 4.12]	ARGON	—
Other	NONE	—

VISUAL INSPECTION (4.9.1)

Acceptable YES or NO: YES

Guided Bend Test Result (4.31.5) NONE

Type	Result	Type	Result

FILLET TEST RESULTS – (4.31.2.3 & 4.31.4.1)

Appearance NA Fillet Size NA

Fracture Test Root Penetration NA Macroetch NA

(Describe the location, nature, and size of any crack or tearing of the specimen)

Inspected by NA Test Number NA

Organization NA Date NA

RADIOGRAPHIC TEST RESULTS (4.31.3.2)

Film Identification No.	Results	Remarks	Film Identification No.	Results	Remarks
WQT 9001980	ACCEPTABLE				
RADIOGRAPHIC TEST					

Interpreted By MR ANEESH / MR GANESAN Test Number AD/346353

Organization INSPEC / ADYARD Date 09.02.2016

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 Clause 4 of AWS D1.1/D1.1M 2010 Structural welding code- Steel.

Witnessed By

HDEC ADMATRA (DNV-GL)

Manufacturer or Contractor: **ADYARD ABU DHABI LLC**

ADYARD Welding Engineer

BY: ASHWANI BHATIA

Date: 15.02.2016

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead

51.073



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : **RAJU CHAUDHARI** **Stamp No.** **W# 9001980**

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
30.04.2016	ADYARD Welding Engineer		
29.10.2016	ADYARD	Lloyd's Register EMEA PS 31/4/16 Abu Dhabi Office	
28.04.2017	ADYARD Welding Engineer	Lloyd's Register EMEA SM Abu Dhabi Office 12/10/16	
27.10.2017	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. PS Abu Dhabi Office	

WELDER PERFORMANCE QUALIFICATIONS (WPQ) TEST RECORD
(See QW - 301 Section IX, ASME Boiler & Pressure Vessel Code)

Welder's name RAJU CHAWDARY TEMP. ID. NO. 9691 PERMANENT ID. NO. ____ Date of test 06.04.2011

Test Description

Identification of WPS followed PP-127 ☑ Test coupon ☐ Production weld

Specification of base metal(s) SA106 Gr.B Thickness 11.07

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW+SMAW	GTAW+SMAW
Type (ie: manual, semi-auto) used	MANUAL	MANUAL
Backing (with / without)	GTAW- WITHOUT ; SMAW-WITH	GTAW -WITH / WITHOUT & SMAW -WITH BACKING
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	273.1 mm OD (10" NPS)	73 mm OD (2 1/2 " NPS) TO UNLIMITED
Base metal P-Number to P-Number	P1 to P1	P1 TO P15F, P34 , P41 TO P 49
Filler metal or electrode specification(s) (SFA) (info. only)	5.14 + 5.11	—
Filler metal or electrode classification(s) (info. only)	ER NiCrMo-3 + E NiCrMo-3	—
Filler metal F-Number(s)	F43	F34 and all F41 through F 46
Consumable insert (GTAW or PAW)	NONE	NONE
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	SOLID	SOLID
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☐ Yes ☑ No	3.07 mm	UP TO 6 mm Maximum
Process 2: SMAW 3 layers minimum ☑ Yes ☐ No	8 mm	UP TO 16.0mm Maximum
Position qualified (2G, 6G, 3F, etc.)	.6G	ALL
Vertical progression (uphill or downhill)	UP HILL	UP HILL
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	NA	NA
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN

RESULTS

Visual Examination of Completed Weld (QW-302.4) SATISFACTORY

☐ Bend test; ☐ Transverse root and face [QW-462.3 (a☐ Longitudinal root and face [QW-462.3 (b) ; ☐ Side (QW-462.2) ;

☐ Pipe bend specimen, corrosion-resistant overlay [QW-462.5 (c)]:☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5(d)];

☐ Macro test for fusion [QW-462.5 (b)☐ Macro test for fusion [QW-462.5 (e)];

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191 SATISFACTORY ☑ RT (or)☐ UT

Fillet-weld - fracture test (QW-180) NA Length and percent of defects NA

Macro examination (QW-184) NA Fillet size (in.) NA X NA Concavity/convexity (in.) NA

Other tests NA

Film or specimens evaluated by GYAN BAHADUR THAPA / MUTHURAMAN (REPORT NO:AD/147921) Company INSPEC / ADYARD

Mechanical tests conducted by NA Laboratory test no. NA

Welding supervised by ADYARD

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2010.

WITNESSED BY THIRD PARTY INSPECTION AGENCY:

LR- EMEA

Lloyd's Register EMEA 14/4 Lloyd's Register

Manufacturer or Contractor ADYARD ABU DHABI LLC

Certified By BALU SREENIVAS

Date 12.04.2011

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We, the undersigned declare and confirmed that the welder whose name as Stated below has been regularly employed on work covered by this certificate During the six (6) months preceding the date of our signature.

Welder's Name RAJU CHAUDARY **Stamp No.** W # 9691

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
05-10-2011	TOPAZ ENGINEERING QA/QC - 8	Lloyd's Register EMEA SD Abu Dhabi Office Lloyd's Register	
01-01-2012	TOPAZ ENGINEERING QA/QC - 8	Lloyd's Register EMEA SD Abu Dhabi Office Lloyd's Register	

ADYARD ABU DHABI LLC أديبارد أبوظبي ذ.م.م.

ADYARD أديبارد

WELDER PERFORMANCE QUALIFICATIONS (WPQ) TEST RECORD
(Section IX, ASME Boiler & Pressure Vessel Code) NEW BADGE # 9691

Welder's name RAJU CHOWDHARI Identification no. ~~V-152~~ Date of test 26.04.06

Test Description

Identification of WPS followed PP-97 ☑ Test coupon ☐ Production weld

Specification of base metal(s) SA 106 GR.B Thickness 11.5

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW + SMAW	GTAW+SMAW
Type (ie; manual, semi-auto) used	MANUAL	MANUAL
Backing (metal, weld metal, double-welded, etc.)	GTAW- WITHOUT : SMAW-WITH	GTAW -WITH / WITHOUT & SMAW -WITH BACKING
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	2" (60.30 mm OD)	3/4" NPS (25mm OD) TO UNLIMITED
Base metal P- or S- Number to P- or S- Number	P1	P1 /S1 TO P11 /S11 , P/S 34 , P/S 41 TO 49
Filler metal or electrode specification(s) (SFA) (info. only)	5.18 +5.1	—
Filler metal or electrode classification(s) (info. only)	ER 70 S3 + E 7018-1	—
Filler metal F-Number(s)	F6 +F4	F6 WITH /WITHOUT & F4 ,F3 , F2 & F1 WITH BACKING
Consumable insert (GTAW or PAW)	NONE	NONE
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	SOLID	SOLID
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☐ Yes ☑ No	5.5	UP TO 11 mm
Process 2: SMAW 3 layers minimum ☑ Yes ☐ No	6	UP TO 12 mm
Position qualified (2G, 6G, 3F, etc.)	6G	ALL
Vertical progression (uphill or downhill)	UP HILL	UP HILL
Type of fuel gas (OFW)	NA	NA
Insert gas backing (GTAW, PAW, GMAW)	WITHOUT	WITH / WITHOUT
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN

RESULTS

Visual Examination of Completed Weld (QW-302.4) SATISFACTORY

☐ Bend test; ☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ; ☐ Side (QW-462.2) ;
☐ Pipe bend specimen, corrosion-resistant overlay [QW-462.5 (c)]; ☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5(d)];
☐ Macro test for fusion [QW-462.5 (b)]; ☐ Macro test for fusion [QW-462.5 (e)];

Type	Result	Type	Result	Type	Result

Alternative radiographic examination results (QW-191) SATISFACTORY (REPORT NO: AD /44744)

Fillet-weld - fracture test (QW-180) NA Length and percent of defects NA

Macro examination (QW-184) NA Fillet size (in.) NA X NA Concavity/convexity (in.) NA

Other tests NA

Film or specimens evaluated by RABBANI / MARUTHI Company INSPEC / ADYARD

Mechanical tests conducted by NA Laboratory test no. NA

Welding supervised by ADYARD

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code.

WITNESSED BY THIRD PARTY INSPECTION AGENCY:

LR- EMEA MR.ADEL M. SHAFSHAK

Lloyd's Register EMEA Abu Dhabi

FLOWSERVE ALMANSOORI 21 JAN 2010 RECEIVED

Organization ADYARD ABU DHABI LLC

By V. MARUTHI

Date Welding Engineer 20/01/06

P.O. Box : 7604, Mussafah, Abu Dhabi, U.A.E.
Tel. : 5547722, Fax : 5546767
E-mail : adyard@adyarduae.com

PAID UP SHARE CAPITAL AED 25 MILLION

ص.ب : ٧٦٠٤ ، المصفح ، أبوظبي - ا.ع.م.
هاتف : ٥٥٤٧٧٢٢ - فاكس : ٥٥٤٦٧٦٧
البريد الالكتروني : adyard@adyarduae.com

رأس المال المدفوع ٢٥ مليون درهم

24



We, the undersigned declare and confirmed that the welder whose name as Stated below has been regularly employed on work covered by this certificate During the six (6) months preceding the date of our signature.

Welder's Name RAJU CHOWDARI **Stamp No.** ~~V-152~~ 9691

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
25.10.06		Lloyd's Register EMEA RJF Abu Dhabi Office Lloyd's Register	
24.04.07	Welding Engineer	Lloyd's Register EMEA RJF Abu Dhabi Office Lloyd's Register	
23.10.2007	Welding Engineer	Lloyd's Register EMEA RJF Abu Dhabi Office Lloyd's Register	
22.04.2008	Welding Engineer	Lloyd's Register EMEA RJF Abu Dhabi Office Lloyd's Register	
21.10.2008	QA/QC	Lloyd's Register EMEA 15.04.2008 Lloyd's Register Abu Dhabi Office	
20.04.2009	Welding Engineer	Lloyd's Register EMEA Abu Dhabi Office Lloyd's Register	

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We, the undersigned declare and confirmed that the welder whose name as Stated below has been regularly employed on work covered by this certificate During the six (6) months preceding the date of our signature.

Welder's Name RAJU CHOWDARI **Stamp No.** ~~V-152~~ 9691

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
25. 10. 06		Lloyd's Register EMEA RJF Abu Dhabi Office Lloyd's Register	
24. 04. 07	ADYARD Sr. Welding Engineer		
23. 10. 2007	ADYARD Welding Engineer	Lloyd's Register EMEA RJF Abu Dhabi Office	Lloyd's Register
22. 04. 2008	ADYARD Welding Engineer	Lloyd's Register EMEA RJF Lloyd's Register	
21. 10. 2008	ADYARD QA/QC	Lloyd's Register EMEA AR 15. 04. 2008 Abu Dhabi Office Lloyd's Register	
20. 04. 2009	WELDING ADYARD Welding Engineer	Lloyd's Register EMEA Lloyds Register	
19. 10. 2009	ADYARD Welding Engineer	Abu Dhabi Office Lloyd's Register EMEA SD Abu Dhabi Office	
18. 04. 2010	ADYARD Welding Engineer	Lloyd's Register EMEA SD Abu Dhabi Office Lloyd's Register	
17. 10. 2010	ADYARD Welding Engineer	Lloyd's Register EMEA SD Abu Dhabi Office	Lloyd's Register
16. 04. 2011	ADYARD Welding Engineer	Lloyd's Register EMEA SD Abu Dhabi Office Lloyd's Register	
15-10-2011		Lloyd's Register EMEA SD Abu Dhabi Office Lloyd's Register	
14-04-2012	OPAZ ENGINEERING	Lloyd's Register EMEA SD Abu Dhabi Office Lloyd's Register	

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ADYARD ABU DHABI LLC أديـارد أبـوظبـي ذ.م.م.

WELDER, WELDING OPERATOR OR TACK WELDER QUALIFICATION TEST RECORD

Type of Welder **MANUAL** NEW BADGE # 9691

Name: **RAJU CHOWDARI** Identification No. ~~V-152~~

Welding Procedure Specification No: SP-03 Rev. 00 Date 26.04.06

Variables	Record Actual Values Used in Qualification	Qualification Range
Process/ Type [Table 4.11, Item (1)]	SMAW #	SMAW
Electrode (single or multiple) [Table 4.11, Item (8)]	SINGLE	SINGLE
Current/ Polarity	DCEP	ANY
Position [Table 4.11 Item (4)]	6G	ALL (EXCEPT CJP JOINTS OF T-Y-K)
Weld Progression [Table 4.11 Item (6)]	UPHILL	UPHILL
Backing (YES or NO) [Table 4.11 Item (7)]	YES- WITH #	WITH BAKING
Material/ Spec	GROUP I	ALL GROUP I, II & III
Base Metal		
Thickness: (Plate)		
Groove	NA	3 mm to 20mm
Fillet	NA	ALL SIZE
Thickness: (Pipe/ Tube)		
Groove	11.5 mm	3 mm to 20mm
Fillet	NA	ALL SIZES
Diameter: (Pipe)		
Groove	2" NPS	¾" NPS (20mm OD) TO 4" NPS (100 mm OD)
Fillet	NA	ALL SIZES
Filler Metal [Table 4.11 Item (3)]		
Spec No.	A 5.1	
Class	E 7018-1	
F-No. [Table 4.11 Item (2)]	F4	F1 TO F4
Gas/ Flux Type [Table 4.11 Item (3)]	NA	
Other	# WITH GTAW WELD METAL BACKING	

VISUAL INSPECTION (4.8.1)
Acceptable YES or NO: YES

Guided Bend Test Result (4.30.5) NA

Type	Result	Type	Result
--	--	--	--
--	--	--	--

FILLET TEST RESULTS – (4.30.2.3 & 4.30.4.1)

Appearance NA Fillet Size NA

Fracture Test Root Penetration NA Macroetch NA

(Describe the location, nature, and size of any crack or tearing of the specimen)

Inspected by NA Test Number NA

Organization NA Date NA

RADIOGRAPHIC TEST RESULTS (4.30.3.1)

Film Identification No.	Results	Remarks	Film Identification No.	Results	Remarks
WPQ/V-152	ACCEPTABLE				

Interpreted By RABBANI / MARUTHI.V Test Number INSPEC : AD / 44744

Organization INSPEC / ADYARD Date 26.04.06

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 AWS D1.1 2004 Structural welding code- Steel.

Manufacturer or Contractor ADYARD ABU DHABI LLC LLC Reviewed /Authorized By LLOYD'S REGISTER EMEA

BY MARUTHI.V DT 27.04.06 Date

Welding Engineer

Lloyd's Register EMEA Abu Dhabi

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Tel. : 5547722, Fax : 5546767
E-mail : adyard@adyarduae.com
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ISO 9001 REGISTERED
MGMT.SYS. RvA C 024
DNV Certification B.V., The Netherlands
Certi. No. 2001-DUB-AD-RvA-013001

ص.ب : ٧٦٠٤ ، المصفح ، أبوظبي – أ.ع.م.
هاتف : ٥٥٤٧٧٢٢ – فاكس : ٥٥٤٦٧٦٧
البريد الالكتروني : adyard@adyarduae.com
رأس المال المدفوع : ٢٥ مليون درهم



We, the undersigned declare and confirmed that the welder whose name as Stated below has been regularly employed on work covered by this certificate During the six (6) months preceding the date of our signature.

Welder's Name RAJU CHOWDARI **Stamp No.** 9691 ~~V-152~~

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
25.10.06		Lloyd's Register EMEA RJF Abu Dhabi Office	
24.04.07	ADYARD Sr. Welding Engineer	Lloyd's Register EMEA RJF Abu Dhabi Office	
23.10.2007	ADYARD Welding Engineer	Lloyd's Register EMEA RJF Abu Dhabi Office	
22.04.2008	ADYARD Welding Engineer	Lloyd's Register EMEA RJF Abu Dhabi Office	
21.10.2008	ADYARD QA/QC	Lloyd's Register EMEA AR 15.04.2008 Abu Dhabi Office	
20.04.2009	ADYARD Welding Engineer	Lloyd's Register EMEA Abu Dhabi Office	
19.10.2009	ADYARD Welding Engineer	Lloyd's Register EMEA SD Abu Dhabi Office	
18.04.2010	ADYARD Welding Engineer	Lloyd's Register EMEA SD Abu Dhabi Office	
17.10.2010	ADYARD Welding Engineer	Lloyd's Register EMEA SD Abu Dhabi Office	
16.04.2011	ADYARD Welding Engineer	Lloyd's Register EMEA SD Abu Dhabi Office	
15-10-2011		Lloyd's Register EMEA SD Abu Dhabi Office	
14-04-2012	TOPAZ ENGINEERING QA/QC - 8	Lloyd's Register EMEA SD Abu Dhabi Office	

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ADYARD ABU DHABI LLC أديـارد أبـوظبـي ذ.م.م.

WELDER PERFORMANCE QUALIFICATIONS (WPQ) TEST RECORD

(Section IX, ASME Boiler & Pressure Vessel Code) NEW BADGE # 9691

Welder's name RAJU CHOWDARI Identification no. ~~V-152~~ Date of test 07.05.06

Test Description

Identification of WPS followed PP-136 ☑ Test coupon ☐ Production weld

Specification of base metal(s) SA 790 UNS 32760 (SUPER DUPLEX SS) Thickness 5.7 mm

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW	GTAW
Type (ie; manual, semi-auto) used	MANUAL	MANUAL
Backing (metal, weld metal, double-welded, etc.)	WITHOUT	GTAW -WITH / WITHOUT WITH BACKING
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	2" (60.3 mm OD)	3/4" NPS (25 mm OD) TO UNLIMITED
Base metal P- or S- Number to P- or S- Number	S 10 H	P1 /S1 TO P11 /S11 , P/S 34 , P/S 41 TO 49
Filler metal or electrode specification(s) (SFA) (info. only)	NA	----
Filler metal or electrode classification(s) (info. only)	ZERON 100 X (#)	----
Filler metal F-Number(s)	F6	F6 WITH /WITHOUT BACKING
Consumable insert (GTAW or PAW)	NONE	NONE
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	SOLID	SOLID
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☑ Yes ☐ No	5.7 mm	UP TO 11.4 mm
Process 2: ____ 3 layers minimum ☐ Yes ☐ No		
Position qualified (2G, 6G, 3F, etc.)	6G	ALL
Vertical progression (uphill or downhill)	UP HILL	UP HILL
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	WITH (98% Ar+2% N2)	WITH INERT GAS BACKING
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN

(#) BRAND : METRODE - ZERON 100X ; BS EN 12072 W 25 9 4 NL

RESULTS

Visual Examination of Completed Weld (QW-302.4) SATISFACTORY

☐ Bend test; ☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b) ; ☐ Side (QW-462.2) ;
☐ Pipe bend specimen, corrosion-resistant overlay [QW-462.5 (c)]; ☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5(d)];
☐ Macro test for fusion [QW-462.5 (b)]; ☐ Macro test for fusion [QW-462.5 (e)];

Type	Result	Type	Result	Type	Result

Alternative radiographic examination results (QW-191) SATISFACTORY

Fillet-weld - fracture test (QW-180) NA Length and percent of defects NA

Macro examination (QW-184) NA Fillet size (in.) NA X NA Concavity/convexity (in.) NA

Other tests NA

Film or specimens evaluated by RABBANI / MARUTHI (REPORT NO: AD / 44965) Company INSPEC / ADYARD

Mechanical tests conducted by NA Laboratory test no. NA

Welding supervised by ADYARD

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code.

WITNESSED BY THIRD PARTY INSPECTION AGENCY: Organization ADYARD ABU DHABI LLC

LR- EMEA MR.ADEL M. SHAFSHAK By MARUTHI V.

Abu Dhabi Date 07.05.06

Lloyd's Register EMEA — ADYARD ABU DHABI — Welding Engineer

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ص.ب : ٧٦٠٤ ، المصفح ، أبوظبي – ا.ع.م.
هاتف : ٥٥٤٧٧٢٢ – فاكس : ٥٥٤٦٧٦٧
البريد الالكتروني : adyard@adyarduae.com
رأس المال المدفوع : ٢٥ مليون درهم

WELDER PERFORMANCE QUALIFICATIONS (WPQ) TEST RECORD
(See QW - 301 Section IX, ASME Boiler & Pressure Vessel Code)

Welder's name **RAJU CHOWDHAIRI** TEMP. ID. NO. _____ PERMANENT ID. NO. **9691** Date of test 12.01.2010

Test Description

Identification of WPS followed PP-66 ☑ Test coupon ☐ Production weld

Specification of base metal(s) SA335 Gr. P9 Thickness 5.49 mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW	GTAW
Type (ie; manual, semi-auto) used	MANUAL	MANUAL
Backing (metal, weld metal, double-welded, etc.)	WITHOUT	WITH / WITHOUT
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	88.90 mm OD (3" NPS)	73 mm OD (2 1/2 " NPS) TO UNLIMITED
Base metal P-Number to P-Number	P5B	P1 TO P15E, P34 , P41 TO P 49
Filler metal or electrode specification(s) (SFA) (info. only)	5.28	—
Filler metal or electrode classification(s) (info. only)	ER 80S-B8	—
Filler metal F-Number(s)	F6	ALL F6 WITH / WITHOUT
Consumable insert (GTAW or PAW)	NONE	NONE
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	SOLID	SOLID
Deposit thickness for each process	5.49 mm	UP TO 10.98 mm Maximum
Process 1: GTAW 3 layers minimum ☑ Yes ☐ No	NA	NA
Process 2: _____ 3 layers minimum ☐ Yes ☐ No	6G	ALL
Position qualified (2G, 6G, 3F, etc.)	UP HILL	UP HILL
Vertical progression (uphill or downhill)	NA	NA
Type of fuel gas (OFW)	WITH ARGON	WITH BACKING
Insert gas backing (GTAW, PAW, GMAW)	NA	NA
Transfer mode (spray/globular or pulse to short circuit-GMAW)	DCEN	DCEN
GTAW current type/polarity (AC, DCEP, DCEN)		

RESULTS

Visual Examination of Completed Weld (QW-302.4) SATISFACTORY

☐ Bend test; ☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ; ☐ Side (QW-462.2) ;

☐ Pipe bend specimen, corrosion-resistant overlay [QW-462.5 (c)]; ☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5(d)];

☐ Macro test for fusion [QW-462.5 (b)]; ☐ Macro test for fusion [QW-462.5 (e)];

Type	Result	Type	Result	Type	Result

Alternative radiographic examination results (QW-19 SATISFACTORY

Fillet-weld - fracture test (QW-180) NA Length and percent of defects NA

Macro examination (QW-184) NA Fillet size (in.) NA X NA Concavity/convexity (in.) NA

Other tests NA

Film or specimens evaluated by SANIL KUMAR / MUTHURAMAN (REPORT NO:AD/111539) Company INSPEC / ADYARD

Mechanical tests conducted by NA Laboratory test no. NA

Welding supervised by ADYARD

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code.

Organization ADYARD ABU DHABI LLC

Certified By LALIT D PATIDAR

Date 13.01.2010

WITNESSED BY THIRD-PARTY INSPECTION AGENCY:

LR- EMEA | Lloyd's Register EMEA | 14.01.10 | RJF | Abu Dhabi Office | Lloyd's Register



We, the undersigned declare and confirmed that the welder whose name as Stated below has been regularly employed on work covered by this certificate During the six (6) months preceding the date of our signature.

Welder's Name RAJU CHOWDHAIRI **Stamp No.** W # 9691

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
30.04.2010	ADYARD Welding Engineer		
29.10.2010	ADYARD Welding Engineer	Lloyd's Register EMEA SD Abu Dhabi Office	Lloyd's Register
28.04.2011	ADYARD Welding Engineer	Lloyd's Register EMEA Abu Dhabi Office	Lloyd's Register
27-10-2011		Lloyd's Register EMEA SD Abu Dhabi Office	Lloyd's Register
26-04-2012	TOPAZ ENGINEERING QA/QC - 8	Lloyd's Register EMEA SD Abu Dhabi Office	Lloyd's Register

PT. Onshore

PT. ONSHORE CONSTRUCTION INDONESIA.

PROJECT:- 2000 TPD SCALE ASU Plant, CILEGON- INDONESIA.

Linde

WELDER PERFORMANCE QUALIFICATION (WPQ)

(Refer QW - 301, ASME Section IX)



Welder Name	RAJU CHAUDHRI	Welder No.	PLS-59
WPS Number	BOC/QC-27	Test	Test Coupon
Date of Qualified	10.04.2013	Type	Manual
Base Material(s)m welded	ASTM A 240 TYPE 304	Thickness	5 MM

The above welder is qualified for the following ranges:

Welding Variables (QW 350)	Actual Values used in Qualification	Range Values
Welding Process(cs) used	GTAW	GTAW
Type	Manual	Manual
Backing	With backing	With or Without backing
Base Metal "P" Number _____ to "P" Number _____	P No. 8 to P No. 8	P No 1 through P No 15F,P No 34 and P No.41 through P No 49
Pipe Diameter	N/A	N/A
Filler Metal Specification (SFA)	SFA 5.9	SFA 5.9
AWS Classifiaction	ER 308L	ER 308L
Filler Metal "F" Number	F No: 6	All F No. 6 (see QW-433 ASME Sec-IX)
Pipe Thickness	5 mm	1.5 mm to 10 mm
Weld Deposit Thickness for GTAW Process	5 mm	1.5 mm to 10 mm
Weld Deposit Thickness for SMAW Process	N/A	N/A
Weld Deposit Thickness for GMAW Process	N/A	N/A
Weld Deposit Thickness for FCAW Process	N/A	N/A
Weld Deposit Thickness for SAW Process	N/A	N/A
Welding Position	2G	Groove Plate(F,H), Pipe over 24" OD (F,H), Fillet (F,H) - (see QW-461.9 ASME Sec-IX)
Progression	Uphill	Uphill
Backing Gas for GTAW, PAW or GMAW (QW-408)	N/A	N/A
GMAW Transfer Mode (QW-409)	N/A	N/A
GTAW/SMAW Welding Current Type / Polarity	DCEN	DCEN

RESULTS

Visual Examination Results (QW 302.4)	Satisfactory	Test Date	08.04.2013		
Radiography Test Result(QW-191)	Accepted	RT Report no.	/RT/ONS/LE	RT Report dt.	10.04.2013
Fillet Weld-Fracture Test(QW-180)	N/A				
Macro Examination (QW-184)	N/A	Fillet Leg Size	N/A	Concavity / Convexity	N/A
Mechanical Test Conducted by	N/A	Laboratory Test Number		N/A	
Welding Test Conducted by	PED/LE	Film Evaluated by		PED/LE	
Welder's Qualification Test Witnessed by :	A.C. BISWAS				

We certify that the statements in this record are correct and that the test coupons were prepared, welded and tested in accordance with the requirements of Section IX of ASME code.

Signature		
Name	SD IN 12.8	
Date	10/04/2013	10/04/13
	PT.ONSHORE (QA/QC)	PED/LE (QA/QC)

PT. ONSHORE CONSTRUCTION INDONESIA QA/QC

PED/LE INDONESIA MKR

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WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per QW-484A, QW-301 of ASME Section IX)

Welder's name: RAJU CHOUDHARY | Temp. ID No.: -- | Permanent ID No.: 9003238 | Date of test: 02.10.2017

Test Description

Identification of WPS followed: PV-190 ☑ Test Coupon ☐ Production weld
Specification of base metal(s): A790 UNS S31803 Thickness: 18.26mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW + SMAW	GTAW + SMAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	GTAW-Without, SMAW-With	GTAW-With & Without, SMAW-With
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 168.3 mm	Plate & Pipe OD 73 mm to Unlimited
Base metal P-Number to P-Number	P-No.10H To P-No.10H	P-No.1 through P-No. 15F, P-No.34 & P-No.41 through P-No.49
Filler metal(GTAW)	With	With
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.9 + SFA 5.4	
Filler metal or electrode classification(s) (for info. only)	ER2209 + ~~ER2209-15~~ E2209-15	
Filler metal F-Number(s)	F-No.6 + F-No.5	F-No.6 + F-No.5 (With Backing)
Consumable insert (GTAW or PAW)	Without	Without
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	Solid	Soid or Metal Cored
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☐ Yes ☑ No	4 mm	8 mm Max.
Process 2: SMAW 3 layers minimum ☑ Yes ☐ No	14.26 mm	Unlimited
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm ALL; 73mm ≤ Pipe OD ≤ 610mm ALL; Fillet: Plate & Pipe ALL
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	With	With
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN
Others (for info. only)	NIL	NA

RESULTS

Visual Examination of Completed Weld (QW-302.4): Satisfactory
☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)
☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];
☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];
☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (Rep. No AD/398268, Dtd.03.10.2017)
Fillet-weld - fracture test (QW-181.2): NA Length and percent of defects: NA
☐ Fillet Welds in plate [QW-462.4(b)] ☐ Fillet Welds in pipe [QW-462.4(c)]
Macro examination (QW-184): NA Fillet size (in.): ___ x ___ Concavity/convexity (in.): NA
Other tests: WELD METAL FERRITE- 31.7% (REFER REPORT NO: AD/FER-057)
Film or specimens evaluated by: SIVAPERUMAL / MATHEW Company: INSPEC / ADYARD
Mechanical tests conducted by: NA Laboratory test no.: NA
Welding supervised by: ASHWANI BHATIA, ADYARD ABU DHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2015.

Witnessed by:

Lloyd's Register Middle East LLC. PS Abu Dhabi Office 16/10/17 Lloyd's Register

Organization: ADYARD ABU DHABI LLC
(Incorporating ADYARD ABUDHABI LLC, NICO International Hydrospace/ (FUJAIRAH)

ADYARD اديارد QC/Welding Engineer

Certified by: Ashwani Bhatia
Date: 07.10.2017

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead

WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per QW-484A, QW-301 of ASME Section IX)

Welder's name: RAJU CHOUDHARY | Temp. ID No.: -- | Permanent ID No.: 9003238 | Date of test: 03.12.2017

Test Description

Identification of WPS followed: PP-295 & PP-98 ☑ Test Coupon ☐ Production weld
Specification of base metal(s): A106 GR.B | Thickness: 8.74 mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW	GTAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	Without	With/Without
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 60.3mm	Plate & Pipe OD 25 mm to Unlimited
Base metal P-Number to P-Number	P-No.1 To P-No.1	P-No.1 through P-No. 15F, P-No.34 & P-No.41 through P-No.49
Filler metal(GTAW)	With	With
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.28	
Filler metal or electrode classification(s) (for info. only)	ER80S Ni-1	
Filler metal F-Number(s)	F-No.6	F-No.6
Consumable insert (GTAW or PAW)	Without	Without
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	Solid	Solid or Metal Cored
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☑ Yes ☐ No	8.74 mm	17.48 mm Max.
Process 2: ____ 3 layers minimum ☐ Yes ☐ No	NA	NA
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm — All; 25mm ≤ Pipe OD ≤ 610mm — All; Fillet: Plate & Pipe — All
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	Without	With/Without
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN
Others (for info. only)	NIL	NA

RESULTS

Visual Examination of Completed Weld (QW-302.4): Satisfactory
☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)
☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];
☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];
☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (Rep. No AD/403173, Dtd.04.12.2017)
Fillet-weld - fracture test (QW-181.2): NA | Length and percent of defects: NA
☐ Fillet Welds in plate [QW-462.4(b)] ☐ Fillet Welds in pipe [QW-462.4(c)]
Macro examination (QW-184): NA | Fillet size (in.) ____ x ____ | Concavity/convexity (in.): NA
Other tests: NA
Film or specimens evaluated by: SIVA KUMAR/ASHWANI | Company: INSPEC / ADYARD
Mechanical tests conducted by: NA | Laboratory test no.: NA
Welding supervised by: ASHWANI BHATIA, ADYARD ABU DHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2015.

Witnessed by: intertek ☐ Reviewed ☑ Witnessed Initial: Date: 05 DEC 17 AE - 233

Organization: ADYARD ABU DHABI LLC
(Incorporating ADYARD ABUDHABI LLC, FUJAIRAH)

Certified by: Ashwani Bhatia
Date: 05.12.2017

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : RAJU CHOUDHARY **Stamp No.** W# 9003238

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
30.04.2018	ADYARD QC/Welding Engineer		
29.10.2018	ADYARD QC Engineer	Lloyd's Register Middle East L.L.C. PS 01/05 Abu Dhabi Office	
28.04.2019	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. PS Abu Dhabi Office	
27.10.2019	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. SM 28/4/19 Abu Dhabi Office	
26.04.2020	ADYARD QC/Welding Engineer	SM 28/10/19 Abu Dhabi Office	
30.09.2020	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. SM 09/4/2020 Abu Dhabi Office	
27.03.21	ADYARD ALTRAD Welding Engineer	RJ 11/10/20 Abu Dhabi Office	
26.09.21	ALTRAD Welding Engineer	Lloyd's Register Middle East L.L.C. PS 29/3/21 Abu Dhabi Office	
19-03-22	ADYARD ALTRAD Welding Engineer	Harford Steam Boiler 29/9/21	
15-09-22	ADYARD ALTRAD Welding Engineer	Name: Pradeep Subhedar Review ☐ Signature: Accept ☐ Date: Harford Steam Boiler 15/9/22 Witness ☐	
07-03-23	ADYARD ALTRAD Welding Engineer	Name: Pradeep Subhedar (13935) Review ☑ Signature: Accept ☐ Date: 7/3/23 Witness ☐	

11653

WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per QW-484A, QW-301 of ASME Section IX)

Welder's name: RAJU CHOUDHARY | Temp. ID No.: -- | Permanent ID No.: 9003238 | Date of test: 28.11.2017

Test Description

Identification of WPS followed: PP-298 ☑ Test Coupon ☐ Production weld
Specification of base metal(s): A312 TP 316L | Thickness: 8.74 mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW	GTAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	Without	With/Without
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 60.3mm	Plate & Pipe OD 25 mm to Unlimited
Base metal P-Number to P-Number	P-No.8 To P-No.8	P-No.1 through P-No. 15F, P-No.34 & P-No.41 through P-No.49
Filler metal(GTAW)	With	With
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.9	
Filler metal or electrode classification(s) (for info. only)	ER316L	
Filler metal F-Number(s)	F-No.6	F-No.6
Consumable insert (GTAW or PAW)	Without	Without
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	Solid	Solid or Metal Cored
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☑ Yes ☐ No	8.74 mm	17.48 mm Max.
Process 2: ____ 3 layers minimum ☐ Yes ☐ No	NA	NA
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm — All; 25mm ≤ Pipe OD ≤ 610mm — All; Fillet: Plate & Pipe — All
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	With	With
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN
Others (for info. only)	NIL	NA

RESULTS

Visual Examination of Completed Weld (QW-302.4): Satisfactory
☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)
☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];
☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];
☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (Rep. No AD/403054, Dtd.29.11.2017)
Fillet-weld - fracture test (QW-181.2): NA | Length and percent of defects: NA
☐ Fillet Welds in plate [QW-462.4(b)] ☐ Fillet Welds in pipe [QW-462.4(c)]
Macro examination (QW-184): NA | Fillet size (in.): ___ x ___ | Concavity/convexity (in.): NA
Other tests: NA
Film or specimens evaluated by: SIVA KUMAR/ASHWANI | Company: INSPEC / ADYARD
Mechanical tests conducted by: NA | Laboratory test no.: NA
Welding supervised by: ASHWANI BHATIA, ADYARD ABU DHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2015.

Witnessed by: ____

intertek ☐ Reviewed ☑ Witnessed Initial: Date: 05 DEC 2017 AE - 233

Organization: ADYARD ABU DHABI LLC
(Incorporating ADYARD ABUDHABI LLC, FUJAIRAH)

Certified by: for Ashwani Bhatia QC Inspector (08)
Date: 03.12.2017

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead

WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per QW-484A, QW-301 of ASME Section IX)

Welder's name: RAJU CHOUDHARY | Temp. ID No.: – | Permanent ID No.: 9003238 | Date of test: 11.12.2017

Test Description

Identification of WPS followed: PP-299 ☑ Test Coupon ☐ Production weld
Specification of base metal(s): A312 TP316L | Thickness: 18.26mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	SMAW	SMAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	With	With
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 168.3 mm	Plate & Pipe OD 73 mm to Unlimited
Base metal P-Number to P-Number	P-No.8 To P-No.8	P-No.1 through P-No. 15F, P-No.34 & P-No.41 through P-No.49
Filler metal(GTAW)	NA	NA
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.4	
Filler metal or electrode classification(s) (for info. only)	E316L-15	
Filler metal F-Number(s)	F-No.5	F-No.5 (With Backing)
Consumable insert (GTAW or PAW)	NA	NA
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	NA	NA
Deposit thickness for each process		
Process 1: SMAW 3 layers minimum ☑ Yes ☐ No	*14 mm	Unlimited
Process 2: ____ 3 layers minimum ☐ Yes ☐ No	-	-
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm ALL; 73mm ≤ Pipe OD ≤ 610mm ALL; Fillet: Plate & Pipe ALL
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	NA	NA
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	NA	NA
Others (for info. only)	*ROOT BY OTHER WELDER	

RESULTS

Visual Examination of Completed Weld (QW-302.4): Satisfactory

☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)
☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];
☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];
☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (Rep. No AD/404164, Dtd.11.12.2017)
Fillet-weld - fracture test (QW-181.2): NA | Length and percent of defects: NA
☐ Fillet Welds in plate [QW-462.4(b)] ☐ Fillet Welds in pipe [QW-462.4(c)]
Macro examination (QW-184): NA | Fillet size (in.): ___ x ___ | Concavity/convexity (in.): NA
Other tests: NA
Film or specimens evaluated by: SIVA KUMAR/ASHWANI | Company: INSPEC / ADYARD
Mechanical tests conducted by: NA | Laboratory test no.: NA
Welding supervised by: ASHWANI BHATIA, ADYARD ABU DHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2015.

Witnessed by: intertek ☐ Reviewed ☑ Witnessed Initial: Date: 12 DEC 2017 AE - 233

Organization: ADYARD ABU DHABI LLC
(Incorporating ADYARD ABUDHABI LLC, FUJAIRAH)

Certified by: Ashwani Bhatia
Date: 12.12.2017

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead

ADYARD ادیـــارد

Interserve Engineering & Construction Ltd

Interserve



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : **RAJU CHOUDHARY** **Stamp No.** **W# 9003238**

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
01-MAY-18	QC Inspector (08)		
30.10.2018	QC Engineer	Lloyd's Register Middle East LLC PS 31/05 Abu Dhabi Office	
29.04.2019	QC/W... Engineer	Lloyd's Register Middle East LLC Abu Dhabi Office	
28.10.2019	QC/W... Engineer	Lloyd's Register Middle East LLC SM 28/4/19 Abu Dhabi Office	
27.04.2020	QC/Welding Engineer	Lloyd's Register Middle East LLC SM 27/10/19 Abu Dhabi Office	
30.09.2020	QC/Welding Engineer	Lloyd's Register Middle East LLC SM 30/9/2020 Abu Dhabi Office	
27.03.2021	ADYARD ALTRAD Welding Engineer	Lloyd's Register Middle East LLC RJ 11/10/20 Abu Dhabi Office	
26.09.21	ADYARD ALTRAD Welding Engineer	Lloyd's Register Middle East LLC PS 29/3/21 Abu Dhabi Office	
19-03-22	ADYARD ALTRAD Welding Engineer	PS 21/9/21 Hartford Steam Boiler	
15-09-22	ADYARD ALTRAD Welding Engineer	Name: Pradeep Subhedar Review ☐ Signature: Accept ☐ Date: Hartford Steam Boiler (13935)	
07-03-23	ADYARD ALTRAD Welding Engineer	Name: Pradeep Subhedar Review ☑ Signature: Accept ☐ Date: Witness ☐ (13935)	

1165A



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : RAJU CHOUDHARY **Stamp No.** W# 9003238

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
30.04.2018	ADYARD QC/Welding Engineer		
29.10.2018	ADYARD QC Engineer	Lloyd's Register Middle East L.L.C. PS 01/05 Abu Dhabi Office	
28.04.2019	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. PS Abu Dhabi Office	
27.10.2019	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. SM Abu Dhabi Office 28/4/19	
26.04.2020	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. SM 27/10/19	
30.09.2020	ADYARD QC/Welding Engineer	SM Abu Dhabi Office 09/4/2020	
27.03.2021	ADYARD ALTRAD Welding Engineer	Lloyd's Register Middle East L.L.C. RJ 11/10/20	
26.09.21	ADYARD ALTRAD Welding Engineer	Lloyd's Register Middle East L.L.C. PS 29/3/21 Abu Dhabi Office	
19-03-22	ADYARD ALTRAD Welding Engineer	Hartford Steam Boiler	
15-09-22	ADYARD ALTRAD Welding Engineer	Name: Pradeep Subhedar Review ☐ Hartford Steam Boiler ☐ Signature: Witness ☐ Date: 16/3/22 Pradeep Subhedar Review ☐ (13935) Accept ☐	
07-03-23	ADYARD ALTRAD Welding Engineer	Signature: 19/9/22 Witness ☐ Date: (13935)	

1165C

WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per QW-484A, QW-301 of ASME Section IX)

Welder's name: RAJU CHOUDHARY | Temp. ID No.: -- | Permanent ID No.: 9003238 | Date of test: 31.12.2017

Test Description

Identification of WPS followed: PV-41 ☑ Test Coupon ☐ Production weld
Specification of base metal(s): A106 GR.B Thickness: 18.26mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	SMAW	SMAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	With	With
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 168.3 mm	Plate & Pipe OD 73 mm to Unlimi
Base metal P-Number to P-Number	P-No.1 To P-No.1	P-No.1 through P-No. 15F, P-No.3 P-No.41 through P-No.49
Filler metal(GTAW)	NA	NA
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.1	
Filler metal or electrode classification(s) (for info. only)	E7018-1	
Filler metal F-Number(s)	F-No.4	F-No.1 TO F-No.4 (With Backing
Consumable insert (GTAW or PAW)	NA	NA
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	NA	NA
Deposit thickness for each process		
Process 1: SMAW 3 layers minimum ☑ Yes ☐ No	*14 mm	Unlimited
Process 2: ____ 3 layers minimum ☐ Yes ☐ No	-	-
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm; 73mm ≤ Pipe OD ≤ 610mm / Fillet: Plate & Pipe
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	NA	NA
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	NA	NA
Others (for info. only)	*ROOT BY OTHER WELDER	

RESULTS

Visual Examination of Completed Weld (QW-302.4): Satisfactory
☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)
☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];
☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];
☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (Rep. No AD/405740, Dtd.31.12.20
Fillet-weld - fracture test (QW-181.2): NA Length and percent of defects: NA
☐ Fillet Welds in plate [QW-462.4(b)] ☐ Fillet Welds in pipe [QW-462.4(c)]
Macro examination (QW-184): NA Fillet size (in.): ___ x ___ Concavity/convexity (in.): NA
Other tests: NA
Film or specimens evaluated by: PULAKESH/ASHWANI Company: INSPEC / ADYARD
Mechanical tests conducted by: NA Laboratory test no.: NA
Welding supervised by: ASHWANI BHATIA, ADYARD ABU DHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2017.

Witnessed by: intertek ☑ Reviewed ☐ Witnessed Initial: Date: 13 Jan 18 AE - 233

Organization: ADYARD ABU DHABI LLC
(Incorporating ADYARD ABUDHABI LLC, FUJAIRAH)

Certified by: Ashwani Bhatia
Date: 02.01.2018

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-Ove



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : RAJU CHOUDHARY **Stamp No.** W# 9003238

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
30.04.2018	ADYARD QC/Welding Engineer		
29.10.2018	ADYARD QC Engineer	Lloyd's Register Middle East L.L.C. PS 01/05 Abu Dhabi Office	
28.04.2019	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. PS Abu Dhabi Office	
27.10.2019	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. SM 28/4/19 Abu Dhabi Office	
26.04.2020	ADYARD QC/Welding Engineer	SM 29/10/19 Abu Dhabi Office	
30.09.2020	ADYARD QC/Welding Engineer	SM Abu Dhabi Office 27/4/2020	
07.03.2021	ADYARD ALTRAD Welding Engineer	Lloyd's Register Middle East L.L.C. RJ Abu Dhabi Office 11/10/20	
26.09.21	ADYARD ALTRAD Welding Engineer	Lloyd's Register Middle East L.L.C. PS 27/10/21 Abu Dhabi Office	
19-03-22	ADYARD ALTRAD Welding Engineer	PS Hartford Steam Boiler	
15-09-22	ADYARD ALTRAD Welding Engineer	Hartford Steam Boiler Name: Pradeep Subhedar Review ☑ Signature: Accept ☐ Date: 15/9/22 Witness ☐ (13935)	
07-03-23	ADYARD ALTRAD Welding Engineer	Hartford Steam Boiler (13935) Name: Pradeep Subhedar Review ☑ Signature: Accept ☐ Date: 7/3/23 Witness ☐ (13935)	



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : RAJU CHOUDHARY **Stamp No.** W# 9003238

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
30.10.2018	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. PS Abu Dhabi Office	
29.04.2019	ADYARD QC/W	Lloyd's Register Middle East L.L.C. PS	
28.10.2019	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. SM Abu Dhabi Office 28/4/19	
27.04.2020	ADYARD QC/W Engineer	Lloyd's Register Middle East L.L.C. SM Abu Dhabi Office 29/10/19	
30.09.2020	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. SM Abu Dhabi Office 9/4/2020	
07.03.2021	ADYARD ALTRAD Welding Engineer	RJ 11/10/20	
26.09.21	ALTRAD Welding Engineer	Lloyd's Register Middle East L.L.C. PS Abu Dhabi Office 29/3/21	
19-03-22	ADYARD ALTRAD Welding Engineer	Hartford Steam Boiler Name: Pradeep Subhedar Review ☑ Signature: Accept ☐ Witness ☐	
15-09-22	ALTRAD Welding Engineer ADYARD	Hartford Steam Boiler (13935) Name: Pradeep Subhedar Review ☑ Signature: Accept ☐ Witness ☐ Date: 14/9/22	
07-03-23	ALTRAD Welding Engineer	(13935)	

WELDER, WELDING OPERATOR QUALIFICATION TEST RECORD

Type of Welder: MANUAL

Name: RAJU CHOUDHARY — Identification N°: 9003338

Welding Procedure Specification No: PL-11 — Revision: 0 — Date: 01.05.2018

PIPE LINE WELDERS QUALIFICATION TEST RECORD

Variables	Record Actual Values Used in Qualification	Qualification Range
Process / Type	SMAW -MANUAL	SMAW - MANUAL
Electrode (Single or Multiple)	SINGLE	SINGLE
Current / Polarity	DCEP	DCEP
Position	FIXED POSITION: HORIZONTAL	HORIZONTAL POSITIONS -FIXED
Weld Progression	UPHILL	UPHILL
Backing (Yes or No)	WITH BACKING	WITH BACKING ONLY
Material/Specs.	ASTM A36 # ASTM A36	ALL GROUPS OF API1104
Joint Design	SINGLE-V	SINGLE-V
Thickness: (Pipe/Tube)		
Groove	SLEEVE: 9 MM	4.8 TO 19.1 mm
Fillet	NA	ANY
Diameter (Pipe)		
Groove	NA	NA
Fillet	NA	ALL DIA.
Filler Metal		
Specs. No	A 5.1	--
AWS class	E 7018-1	--
Group no(Ref Table 1of API 1104):	GR.3	ALL FILLER METALS IN GR.3
Gas / Flux Type	NA	--
Others		
Wind Break Used	YES- TEMPORARY	
Weather Condition	GOOD- SLIGHTLY WINDY	

Visual Inspection
Acceptable

X-RAY / Radio Graphic Examination			
X-Ray/ RT Report No:	NIL	UT Report No:	42750

BEND TEST RESULT		NICK BREAK TEST RESULT	
Type	Result	Type	Result
TENSILE TEST-1	Acceptable	WELD SECTION NB-1	Acceptable
-	-	-	-

MACROEXAMINATION RESULT			TENSILE TEST RESULT		
Identification #	Results	Remarks	Identification #	Results	Remarks
ROOT BEND -1	Satisfactory	-			
FACE BEND -1	Satisfactory	-			

Tested By: AJITH PETER — Test Number: PR97717-0

Organization: LONESTAR LAB — Date: 08.05.2018

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 **API 1104, Ed.2013**

Witnessed By: LR — Manufacturer or Contractor: ADYARD ABU DHABI LLC

Lloyd's Register Middle East L.L.C. SM Abu Dhabi Office — Lloyd's Register

09/5/18.

By: ADYARD QC/Welding Engineer Ashwani Bhatia

Date: 08.05.2018

WELDER, WELDING OPERATOR QUALIFICATION TEST RECORD

Type of Welder	MANUAL				
Name	RAJU CHOUDHARY	Identification N°		9003238	
Welding Procedure Specification No	PL12 & PL-13	Revision	0	Date	04.08.2018

PIPE LINE WELDERS QUALIFICATION TEST RECORD

Variables	Record Actual Values Used in Qualification	Qualification Range
Process / Type	SMAW -MANUAL	SMAW - MANUAL
Electrode (Single or Multiple)	SINGLE	SINGLE
Current / Polarity	DCEP	DCEP
Position	5F- FIXED HORIZONTAL 2G-FIXED HORIZONTAL	5F -FIXED HORIZONTAL POSITIONS 2G -FIXED HORIZONTAL POSITIONS
Weld Progression	DOWNHILL	DOWNHILL
Backing (Yes or No)	WITH BACKING	WITH BACKING ONLY
Material/Specs.	ASTM A516 GR 65 & API 5L X65	ALL GROUPS OF API1104
Joint Design	FILLET & SINGLE-V	FILLET & SINGLE-V
Thickness: (Pipe/Tube)		
Groove	SLEEVE FITTING : 27 mm	> 19.1 mm
Fillet	SIZE: 30 mm	ANY
Diameter (Pipe)		
Groove	NA	NA
Fillet	30" NPS	ALL DIA.
Filler Metal		
Specs. No	A 5.5 & 5.1	--
AWS class	E8045-P2 & E 7018-1	--
Group no(Ref Table 1of API 1104):	NIL & GR.3	E8045-P2 & ALL FILLER METALS IN GR.3
Gas / Flux Type	NA	--
Others		
Wind Break Used	YES- TEMPORARY	
Weather Condition	GOOD- SLIGHTLY WINDY	

Visual Inspection
Acceptable

X-RAY / Radio Graphic Examination			
X-Ray/ RT Report No:	NIL	**UT Report No:**	NIL

TENSILE TEST		NICK BREAK TEST RESULT	
Type	**Result**	**Type**	**Result**
TENSILE TEST-TT-2	Acceptable	WELD SECTION NB-2	Acceptable
-	-	-	-

BEND TEST RESULT			MACRO EXAMINATION		
Identification #	Results	Remarks	Identification #	Results	Remarks
SIDE BEND -3	Satisfactory	-	M2	ACC.	NIL
SIDE BEND -4	Satisfactory	-	-	-	-

Tested By: AJITH PETER
Organization: LONESTAR LAB
Test Number: PR100205-0
Date: 29.08.2018

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 **API 1104, Ed.2013**

Witnessed By: VELOSI

Manufacturer or Contractor: ADYARD ABU DHABI LLC.

By: Ashwani Bhatia
QC Welding Engineer
Date: 10.09.2018

WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per QW-484A, QW-301 of ASME Section IX)

Welder's name: RAJU CHAUDHARI | Temp. ID No.: -- | Permanent ID No.: 9003238 | Date of test: 23.06.2019

Test Description

Identification of WPS followed: PP-249 ☑ Test Coupon ☐ Production weld

Specification of base metal(s): A106 GR.B | Thickness: 8.74 mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW	GTAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	Without	With/Without
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 60.3 mm	Plate & Pipe OD 25 mm to Unlimited
Base metal P-Number to P-Number	P-No.1 To P-No.1	P-No.1 through P-No. 15F, P-No.34 & P-No.41 through P-No.49
Filler metal(GTAW)	With	With
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.14	
Filler metal or electrode classification(s) (for info. only)	ER NiCrMo-3	
Filler metal F-Number(s)	F-No.43	F-No.34 and all F-No.41 through F-No.46
Consumable insert (GTAW or PAW)	Without	Without
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	Solid	Solid or Metal Cored
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☑ Yes ☐ No	8.74 mm	17.48 mm Max.
Process 2: ___ 3 layers minimum ☐ Yes ☐ No	NA	NA
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm — All; 25mm ≤ Pipe OD ≤ 610mm — All; Fillet: Plate & Pipe — All
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	With	With
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN
Others (for info. only)	NIL	NA

RESULTS

Visual Examination of Completed Weld (QW-302.4): Satisfactory

☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)

☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];

☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];

☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (Rep. No AD/442760, Dtd.24.06.2019)

Fillet-weld - fracture test (QW-181.2): NA | Length and percent of defects: NA

☐ Fillet Welds in plate [QW-462.4(b)] ☐ Fillet Welds in pipe [QW-462.4(c)]

Macro examination (QW-184): NA | Fillet size (in.) ___ x ___ | Concavity/convexity (in.): NA

Other tests: NA

Film or specimens evaluated by: MATHEW/ASHWANI | Company: INSPEC / ADYARD

Mechanical tests conducted by: NA | Laboratory test no.: NA

Welding supervised by: ASHWANI BHATIA, ADYARD ABU DHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2017.

Witnessed by:

Lloyd's Register Middle East LLC
RJ
Abu Dhabi Office
Lloyd's Register
9/7/19

Organization: ADYARD ABU DHABI LLC
(Incorporating ADYARD ABUDHABI LLC, FUJAIRAH)

ADYARD QC/Engineer

Certified by: Ashwani Bhatia
Date: 30.06.2019

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead

11656

WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per QW-484A, QW-301 of ASME Section IX)

Welder's name: RAJU CHOUDHARY | Temp. ID No.: -- | Permanent ID No.: 9003238 | Date of test: 02.06.2020

Test Description

Identification of WPS followed: PP-98 ☑ Test Coupon ☐ Production weld

Specification of base metal(s): A106 GR.B | Thickness: 4.78mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW	GTAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	Without	With/Without
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 21.3mm	Plate & Pipe OD 21.3 mm to Unlimited
Base metal P-Number to P-Number	P-No.1 To P-No.1	P-No.1 through P-No. 15F, P-No.34 & P-No.41 through P-No.49
Filler metal(GTAW)	With	With
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.18	
Filler metal or electrode classification(s) (for info. only)	ER70S-3	
Filler metal F-Number(s)	F-No.6	F-No.6
Consumable insert (GTAW or PAW)	Without	Without
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	Solid	Solid or Metal Cored
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☑ Yes ☐ No	4.78 mm	9.56 mm Max.
Process 2: ____ 3 layers minimum ☐ Yes ☐ No	NA	NA
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm — All; OD 21.3 mm to Unlimited — All; Fillet: Plate & Pipe — All
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	Without	With/ Without
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN
Others (for info. only)	NIL	NA

RESULTS

Visual Examination of Completed Weld (QW-302.4): Satisfactory

☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)

☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];

☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];

☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (Rep. No 459165, Dtd.02.06.2020)

Fillet-weld - fracture test (QW-181.2): NA | Length and percent of defects: NA

☐ Fillet Welds in plate [QW-462.4(b)] ☐ Fillet Welds in pipe [QW-462.4(c)]

Macro examination (QW-184): NA | Fillet size (in.): ___ x ___ | Concavity/convexity (in.): NA

Other tests: NA

Film or specimens evaluated by: PULAKESH JANA /AMANDEEP SINGH | Company: INSPEC / ADYARD

Mechanical tests conducted by: NA | Laboratory test no.: NA

Welding supervised by: AMANDEEP SINGH, ADYARD ABU DHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2019.

Witnessed by: Lloyd's Register Middle East L.L.C. RJ Abu Dhabi Office 8/6/20

Organization: ADYARD ABU DHABI LLC
(Incorporating ADYARD ABUDHABI LLC, FUJAIRAH)

Certified by: AMANDEEP SINGH
Date: 04.06.2020

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead

P.O. Box: 7604, Musaffah, Abu Dhabi, U.A.E.
Tel: +9712 5547722, Fax: +9712 5546767

ص.ب : 7604، المصفح – ابوظبي ، أ.ع.م.
تلفون : 5547722 9712+ ، فاكس : 5546767 9712+

11 85 H

ADYARD ادیـــارد

Interserve Engineering & Construction Ltd — Interserve



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : **RAJU CHOUDHARY** **Stamp No.** **W# 9003238**

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
01-11-2019	ADYARD QCN... Engineer		
30-04-2020	ADYARD QCN... Engineer	Lloyd's Register Middle East L.L.C. S.M. Abu Dhabi Office 29/4/20	
30.09.2020	ADYARD QC Welding Engineer	Lloyd's Register Middle East L.L.C. S.M. Abu Dhabi Office 09/4/2020	
27.03.2021	ADYARD ALTRAD Welding Engineer	Lloyd's Register Middle East L.L.C. RJ Abu Dhabi Office 11/10/20	
26.09.21	ADYARD ALTRAD Welding Engineer	Lloyd's Register Middle East L.L.C. PS 29/3/21 Abu Dhabi Office	
19-03-22	ADYARD ALTRAD Welding Engineer	Hartford Steam Boiler Name: Pradeep Subhedar Review ☐ Signature: Accept ☐ Date: 18/3/22 Witness ☐	
15-09-22	ADYARD ALTRAD Welding Engineer	Hartford Steam Boiler (13935) Name: Pradeep Subhedar Review ☐ Signature: Accept ☐ Date: 15/9/22 Witness ☐ (13935)	
07-03-23	ADYARD ALTRAD Welding Engineer		



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : RAJU CHOUDHARY **Stamp No.** W# 9003238

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
03.02.2019	ADYARD QC/Welding Engineer		
02.08.2019	ADYARD QC/Welding Engineer	Lloyd's Register Middle East LLC PS Abu Dhabi Office	
01.02.2020	ADYARD QC/Welding Engineer	Lloyd's Register Middle East LLC SM Abu Dhabi Office 27/10/19	
30.09.2020	ADYARD QC/Welding Engineer	Lloyd's Register Middle East LLC SM Abu Dhabi Office 09/4/2020	
27.03.2021	ADYARD ALTRAD Welding Engineer	Lloyd's Register RJ Abu Dhabi Office 11/10/20	
26.09.21	ADYARD ALTRAD Welding Engineer	Lloyd's Register Middle East LLC PS Abu Dhabi Office 29/3/21	
19-03-22	ADYARD ALTRAD Welding Engineer	Lloyd's Register PS Abu Dhabi Office 21/9/21 Hartford Steam Boiler	
15-09-22	ADYARD ALTRAD Welding Engineer	Name: Pradeep Subhedar Review ☑ Signature: Hartford Steam Boiler Accept ☐ Witness ☐ Date: 15/9/22	
07-03-23	ADYARD ALTRAD Welding Engineer	Name: Pradeep Subhedar (13935) Review ☑ Accept ☐ Signature: Witness ☐ Date: (13935)	



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : **RAJU CHOUDHARY** **Stamp No.** **W# 9003238**

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
01-11-2019	ADYARD QC/Welding Engineer		
30-04-2020	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. SM Abu Dhabi Office 24/10/19	
30.09.2020	ADYARD QC/Welding Engineer	Lloyd's Register Middle East L.L.C. SM Abu Dhabi Office 09/4/2020	
27.03.2021	ADYARD ALTRAD Welding Engineer	Lloyd's Register Middle East L.L.C. RJ 11/10/20	
26.09.21	ADYARD ALTRAD Welding Engineer	Lloyd's Register Middle East L.L.C. PS 29/3/24	
19-03-22	ADYARD ALTRAD Welding Engineer	Hartford Steam Boiler 21/9/24	
15-09-22	ADYARD ALTRAD Welding Engineer	Name: Pradeep Subhedar Review ☑ Signature: Hartford Steam Boiler Accept ☐ Date: 19/3/24 Witness ☐	
07-03-23	ADYARD ALTRAD Welding Engineer	Name: Pradeep Subhedar (13935) Review ☑ Signature: Accept ☐ Date: 19/3/24 Witness ☐ (13935)	

Emirates Technical & Safety Development Centre

مركـــز الإمـــارات للتطـــويـــر الفنـــي و الســـلامـــة

This is to certify that

Raju Choudhari

Successfully achieved the necessary competence having been assessed against learning outcomes for

Tropical Basic Offshore Safety Induction Emergency Training

OPITO APPROVED Course Code - 5501

Modules covered in this course:

Safety Induction
Sea Survival & First Aid
Helicopter Safety & Escape
Fire Fighting & Self Rescue

Training Date: 26-28th May, 2019

Valid until: 27th May, 2023

Certificate No. : **00585501280519172758**

Training & Admin Manager

ACTVET License No. 0529/2013

ETSDC, Musaffah Industrial Area, Corniche Road, P.O.Box 35450, Abu Dhabi - U.A.E.
Tel.: +971 2 5552034 - Fax: +971 2 5547717 - GPS Coordinates: 24.382588 54.513945

www.etsdc.com

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ALTRAD ADYARD

CERTIFICATE OF APPRECIATION

This certificate is awarded to

RAJU CHOUDARY (3100999)

WELDER

For Best HSE performance towards improving Health & Safety during BuHasa Turnaround Shutdown - November 2021.

Irfan Mohammed
Project Manager

Steven Platts
HSE Manager

ADYARD ادیـــارد

Interserve Engineering & Construction Ltd



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : **RAJU CHOUDHARY** **Stamp No.** **W# 9003238**

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
01-12-20			
27-03-2021	ADYARD ALTRAD Welding Engineer	Lloyd's Register Middle East L.L.C 11/6/20	
26-09-21	ADYARD ALTRAD Welding Engineer	Lloyd's Register Middle East L.L.C PS 29/3/22	
19-03-22	ADYARD ALTRAD Welding Engineer	PS 21/9/22	
15-09-22	ADYARD ALTRAD Welding Engineer	Hartford Steam Boiler Name: Pradeep Subhedar Review ☑ Signature Accept ☐ Date: 28/3/22 Witness ☐	
07-03-23	ADYARD ALTRAD Welding Engineer	Name: Pradeep Subhedar (13935) Review ☑ Signature Accept ☐ Date: 12/9/22 Witness ☐ (13935)	

WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per QW-484A, QW-301 of ASME Section IX)

Welder's name: RAJU CHOUDHARY Temp. ID No.: -- Permanent ID No.: 9003238 Date of test: 02.10.2017

Test Description

Identification of WPS followed: PV-190 ☑ Test Coupon ☐ Production weld

Specification of base metal(s): A790 UNS S31803 Thickness: 18.26mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW + SMAW	GTAW + SMAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	GTAW-Without, SMAW-With	GTAW-With & Without, SMAW-With
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 168.3 mm	Plate & Pipe OD 73 mm to Unlimited
Base metal P-Number to P-Number	P-No.10H To P-No.10H	P-No.1 through P-No. 15F, P-No.34 & P-No.41 through P-No.49
Filler metal(GTAW)	With	With
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.9 + SFA 5.4	
Filler metal or electrode classification(s) (for info. only)	ER2209 + ~~ER2209-15~~ E2209-15	
Filler metal F-Number(s)	F-No.6 + F-No.5	F-No.6 + F-No.5 (With Backing)
Consumable insert (GTAW or PAW)	Without	Without
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	Solid	Sold or Metal Cored
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☐ Yes ☑ No	4 mm	8 mm Max.
Process 2: SMAW 3 layers minimum ☑ Yes ☐ No	14.26 mm	Unlimited
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm ALL; 73mm ≤ Pipe OD ≤ 610mm ALL; Fillet: Plate & Pipe ALL
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	With	With
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN
Others (for info. only)	NIL	NA

RESULTS

Visual Examination of Completed Weld (QW-302.4): Satisfactory

☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)

☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];

☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];

☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (Rep. No AD/398268, Dtd.03.10.2017)

Fillet-weld - fracture test (QW-181.2): NA Length and percent of defects: NA

☐ Fillet Welds in plate [QW-462.4(b)] ☐ Fillet Welds in pipe [QW-462.4(c)]

Macro examination (QW-184): NA Fillet size (in.) ___ x ___ Concavity/convexity (in.): NA

Other tests: WELD METAL FERRITE- 31.7% (REFER REPORT NO: AD/FER-057)

Film or specimens evaluated by: SIVAPERUMAL / MATHEW Company: INSPEC / ADYARD

Mechanical tests conducted by: NA Laboratory test no.: NA

Welding supervised by: ASHWANI BHATIA, ADYARD ABU DHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2015.

Witnessed by:

Lloyd's Register Middle East L.L.C. Lloyd's Register
PS 06/10/17
Abu Dhabi Office

Organization: ADYARD ABU DHABI LLC
(Incorporating ADYARD ABUDHABI LLC, NICO International Hydrospace/ (FUJAIRAH)

ADYARD اديارد QC/Welding Engineer

Certified by: Ashwani Bhatia
Date: 07.10.2017

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead

ADYARD ادیـــارد

Interserve Engineering & Construction Ltd Interserve



We, the undersigned declare and confirmed that the welder whose name as stated below has been regularly employed on work covered by this certificate during the six (6) months preceding the date of our signature.

Welder's Name : RAJU CHOUDHARY **Stamp No.** W# 9003238

VALIDITY EXTENDED TO	SIGNATURE & POSITION OF EMPLOYERS REPRESENTATIVE VERIFYING EMPLOYMENT AND WELDING PERFORMANCE	SIGNATURE OF SURVEYOR VERIFYING ACCEPTABLE WELDING PERFORMANCE	OFFICE STAMP AND DATE
01-12-20	ADYARD QC/Welding Engineer ADYARD		
27-03-2021	ADYARD ALTRAD Welding Engineer	RJ 11/10/21	
26-09-21	ADYARD ALTRAD Welding Engineer	PS 29/3/22	
19-03-22	ADYARD ALTRAD Welding Engineer	PS 21/9/21	
15-09-22	ADYARD ALTRAD Welding Engineer	Name: Pradeep Subhedar Review ☑ Hartford Steam Boiler Signature: Accept ☐ Date: 18/3/22 Witness ☐	
07-03-23	ADYARD ALTRAD Welding Engineer	Name: Pradeep Subhedar Review ☐ (13935) Signature: Accept ☐ Date: 18/3/22 (13935) Witness ☐	

WELDER PERFORMANCE QUALIFICATION (WPQ) TEST RECORD
(As per QW-484A, QW-301 of ASME Section IX)

Welder's name: RAJU CHOUDHARY | Temp. ID No.: – | Permanent ID No.: 9003238 | Date of test: 02.06.2020

Test Description

Identification of WPS followed: PP-152 ☑ Test Coupon ☐ Production weld

Specification of base metal(s): A106 GR B Thickness: 4.78mm

Testing Variables and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding Process(es)	GTAW	GTAW
Type (ie; manual, semi-auto) used	Manual	Manual
Backing (with / without)	Without	With/Without
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD 21.3mm	Plate & Pipe OD 21.3 mm to Unlimited
Base metal P-Number to P-Number	P-No.1 To P-No.1	P-No.1 through P-No. 15F, P-No.34 & P-No.41 through P-No.49
Filler metal(GTAW)	With	With
Filler metal or electrode specification(s) (SFA) (for info. only)	SFA 5.9	
Filler metal or electrode classification(s) (for info. only)	ERNiCrMo-3	
Filler metal F-Number(s)	F-No.43	F-No.34, F-No.41 through F-No.46
Consumable insert (GTAW or PAW)	Without	Without
Filler type (solid /metal or flux cored/powder) (GTAW or PAW)	Solid	Solid or Metal Cored
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☑ Yes ☐ No	4.78 mm	9.56 mm Max.
Process 2: ____ 3 layers minimum ☐ Yes ☐ No	NA	NA
Position qualified (2G, 6G, 3F, etc.)	6G	Groove: Plate & Pipe OD > 610mm All; OD 21.3 mm to Unlimited All; Fillet: Plate & Pipe All
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	With	With/ Without
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA	NA
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN
Others (for info. only)	NIL	NA

RESULTS

Visual Examination of Completed Weld (QW-302.4): Satisfactory

☐ Transverse root and face [QW-462.3 (a)] ☐ Longitudinal root and face [QW-462.3 (b)] ☐ Side (QW-462.2)

☐ Pipe bend specimen, Corrosion-resistant overlay [QW-462.5 (c)];

☐ Plate bend specimen, corrosion-resistant overlay [QW-462.5 (d)];

☐ Pipe Specimen, Macro test for fusion [QW-462.5 (b)] ☐ Plate specimen, Macro test for fusion [QW-462.5 (e)]

Type	Result	Type	Result	Type	Result

Alternative Volumetric examination results (QW-191): ☑ RT or ☐ UT: Satisfactory (Rep. No 459166, Dtd.02.06.2020)

Fillet-weld - fracture test (QW-181.2): NA Length and percent of defects: NA

☐ Fillet Welds in plate [QW-462.4(b)] ☐ Fillet Welds in pipe [QW-462.4(c)]

Macro examination (QW-184): NA Fillet size (in.): ___ x ___ Concavity/convexity (in.): NA

Other tests: NA

Film or specimens evaluated by: PULAKESH JANA /AMANDEEP SINGH Company: INSPEC / ADYARD

Mechanical tests conducted by: NA Laboratory test no.: NA

Welding supervised by: AMANDEEP SINGH, ADYARD ABU DHABI LLC

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code, Edition 2019.

Witnessed by: Lloyd's Register Middle East L.L.C. RJ Abu Dhabi Office 9/6/20

Organization: ADYARD ABU DHABI LLC (Incorporating ADYARD ABUDHABI LLC, FUJAIRAH)

Certified by: AMANDEEP SINGH

Date: 04.06.2020

NA-Not Applicable, F-Flat, H-Horizontal, V-Vertical, OH-OverHead