



UTKAL GALVANIZERS LIMITED

AN ISO 9001 : 2015 Certified Company

Plot No 43 (P), Saheed Nagar, Bhubaneswar-751 007, Odisha (India)

Phone 0091-674-2547849

Factory : AT-KAPURSINGH, P.O. : ORANDA, CUTTACK, ODISHA-754029, PH. : 0091-8249608042

E-mail : ho@utkaltd.in / utkalho@gmail.com, Website : www.utkalgalvanizers.com



ISO 9001:2015 Certificate No. 34270-A01

Date: 06/06/2026

To,
The Executive Director/ Director
Research Design & Standard Organization (RDSO)
B& S, Engineering
Lucknow.

Subject: Welder Qualification and Training Certificate

Dear Sir,

In the reference to the above noted work, we have offered for following welders for doing the welding. All Welders are as under provision of **IS: 817** (Code of practice for training and testing of metal arc welders and **IS: 7310 (Pt-1)** approval tests for welders working to approved welding procedures- fusion welding of steel).

Sr. No.	Name of Welders	Process	Fillet Size (mm)	WPSS No. and WPQR NO.
1	Bishnu Charan Swain	SAW	12mm	WPS/UGL/SAW/001/PQR/UGL/SAW/001
2	Biranjana Bihari	SAW	10MM	WPS/UGL/SAW/002/PQR/UGL/SAW/002
3	Bhismaya Parida	SAW	16MM	WPS/UGL/SAW/003/PQR/UGL/SAW/003
4	Raj Kishore Behera	SAW	18mm	WPS/UGL/SAW/004/PQR/UGL/SAW/004
5	Sd. Enam Ali	SAW	14mm	WPS/UGL/SAW/005/PQR/UGL/SAW/005

Thanking You

Authorized Signatory
For Utkal Galvanizers Ltd



Nandan Mohanty

Plot No : 43 (P), Saheed Nagar, Bhubaneswar-751 007, Odisha (India) AWS D1.10D:6M:2017
 Phone : 0091-674-2547849
 Factory : AT-KAPURSINGH, P.O. : ORANDA, CUTTACK, ODISHA-754029, PH. : 0091-8249608042
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PROCEDURE QUALIFICATION RECORDS (PQR)

PQR No. PQR/UGL/SAW/001

Revision: Ro

Date: 08.02.2026

Company Name: UTKAL GALVANIZERS LTD.

Authorized by: TUVIPL

Welding Process(es) S A W

Type—Manual ☐
 Machine ☐

Semi-Automatic ☒
 Automatic ☐

Reference WPS NO.:
WPS/UGL/SAW/001

JOINT DESIGN USED

Type: Fillet

Single Double Weld ☐

Backing: Yes ☐ No ☒

Backing Material:

Root Opening: N/A Root Face Dimension: N/A

Groove Angle: N/A Radius (J—U) : N/A

Back Gouging: Yes ☐ No ☒ Method: N/A

POSITION

Position of Groove: N/A Fillet: 1F

Vertical Progression: Up ☐ Down ☐

ELECTRICAL CHARACTERISTICS

Transfer Mode (SAW) Short-Circuiting

Globular ☒ Spray ☐ Current: AC ☐ DCEP ☒

DCEN ☐ Pulsed ☐

Other

Tungsten Electrode (GTAW)

Size: N/A

Type: N/A

BASE METALS

Material Spec. IRS 350 CR to IRS 350 CR

Type or Grade: E350

Thickness: Groove: N/A Fillet: 20MM

Diameter (Pipe) : N/A

FILLER METALS

AWS Specification AWS A5.9

AWS Classification ER 309L

TECHNIQUE

Stringer or Weave Bead: Stringer

Multi-pass or Single Pass (per side) : Multipass

Number of Electrodes 1 Electrode

Longitudinal Yes

Lateral: N/A

Angle : N/A

SHIELDING

Flux: ☒ Gas: N/A

Composition: N/A

Electrode-Flux (Class) Flow Rate: N/A

SFA 5.9 Gas Cup Size: N/A

Contact Tube to Work Distance : 1-1/4"

Peening : NA

Interpass Cleaning: Slag Removed

PREHEAT

Preheat Temp., Min. N/A

Interpass Temp., Min. N/A Max. N / A

POSTWELD HEAT TREATMENT - N A

Temp. : N/A

Time : N/A



Nandan Mohanty

WELDING PROCEDURE

Pass or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed (mm/min)	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed			
1 st	SAW				450-475	29.1-29.5	410	
2 nd	SAW	SF A A S.9 ER 309L	Ø 3.15	DCEP	476-507	29.2-29.5	450	
3 rd	SAW				471-491	29.4-29.6	500	



Nandan Mohanty

WELDER OR WELDING OPERATOR QUALIFICATION TEST RECORD

Type of Welder: SAW Operator (Welding)

Identification No: W-05Name: Bishnu Charan SwainDate: 08.02.2026Welding Procedure Specification No: WPS/UGL/SAW/001

Rev Ro

Variables	Record Actual Values Used in Qualification SAW/Semi Auto	Qualification Range
Process/Type	Single	EP
Electrode (single or multiple)	DCEP	
Current/Polarity		
Position		
Weld Progression	IF	IF
Backing (YES or NO)	NO	Without Backing
Material/Spec.	IRS 350 CR TO IRS 350 CR	IRS 350 CR To IRS 350 CR
Base Metal		
Thickness (Plate)	20	N/A
Groove	12 mm Fillet only	Fillet (Unlimited)
Fillet	N/A	N/A
Thickness: (Pipe/tube)	N/A	N/A
Groove	N/A	N/A
Fillet	N/A	N/A
Diameter: (Pipe)	N/A	N/A
Groove		
Filler		
Metal	AWS A 5.9 ER 309 L	AWS A 5.9 ER 309 L
Spec. No.	6	6
Class		
F-No.	AWS A 5.9	AWS A 5.9
Flux Type	SFA 5.9	SFA 5.9
Other		

VISUAL INSPECTION			
Acceptable YES or NO – Satisfactory			
Guided Bend Test Results N/A			
Type	Result	Type	Result

Fillet Test Results	
Appearance : <u>Satisfactory</u>	Fillet Size: <u>12 mm</u>
Fracture Test Root Penetration: <u>NA</u>	Macroetch : <u>Satisfactory</u>

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

Inspected by _____ Test Number _____

Organization _____ Date _____

RADIOGRAPHIC TEST RESULTS					
Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks

Inspected by Kaladip Kumar Test Number UGL-701988624 00000 34765
 Organization ISE, Noida Date 10.02.2024

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 6 of AWS D1.6, (2017) Structural Welding Code Stainless Steel.

Manufacturer or Contractor: Utkal Galvanizers Ltd

Authorized By _____

Date: 10.02.2026

Nandan Mohanty

Procedure qualification Record (PQR) Test Results

TENSILE TEST

Specimen No.	Width	Thickness	Area	Ultimate tensile load, lbs [N]	Ultimate unit stress, psi [MPa]	Character of failure and location
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A

GUIDED BEND TEST

Specimen No.	Type of bend	Result	Remarks
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

VISUAL INSPECTION

Appearance: SatisfactoryUndercut: SatisfactoryPiping porosity: SatisfactoryConvexity: SatisfactoryTest date: 08.02.2026Witnessed by: Mr. Satyam Mahapatra TUVIPL

Radiographic-ultrasonic examination

RT report no.: N/A Result: N/AUT report no.: N/A Result: N/A

FILLET WELD TEST RESULTS

Minimum size multiple pass Macroetch

1. Satisfactory 3. Satisfactory2. Satisfactory

All-weld-metal tension test

Tensile strength, psi [MPa]: N/AYield point/strength, psi [MPa]: N/AElongation in 2 in [50 mm], %: N/A

Laboratory test no. _____

Other Tests: Inspection of weld – Visual, DP Test & Weld Size

Welder's name: Bishnu Charan SwainClock no. _____ Stamp no- W-5Welder's qualification as per IS 7310 Pt 1 and IS 817.Tests conducted by: ICR Industrial research & consultancy pvt ltd.

Laboratory

Test number: IRC/M/3127/2025-2026

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 6 of AWS D1.6, (2017) *Structural Welding Code Stainless Steel*.

Sign: Manas Ranjan Pradhan
UGLBy: Manas Ranjan PradhanTitle: Q/C ManagerDate: 10.02.2026

Nandan Mohanty



UTKAL GALVANIZERS LIMITED

AN ISO 9001 : 2015 Certified Company

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PROCEDURE QUALIFICATION RECORDS (PQR)

PQR No. PQR/UGL/SAW/002

Revision: Ro

Date: 08.02.2026

Company Name: UTKAL GALVANIZERS LTD.

Authorized by: TUVIPL

Welding Process(es) SAW

Type—Manual ☐

Semi-Automatic ☒

Machine ☐

Automatic ☐

Reference WPS NO.:

WPS/UGL/SAW/002

JOINT DESIGN USED

Type: Fillet

Single

Double Weld ☐

Backing: Yes ☐ No ☒

Backing Material:

Root Opening: N/A Root Face Dimension: N/A

Groove Angle: N/A Radius (J-U) : N/A

Back Gouging: Yes ☐ No ☒ Method: N/A

POSITION

Position of Groove: N/A Fillet: 1F

Vertical Progression: Up ☐ Down ☐

ELECTRICAL CHARACTERISTICS

Transfer Mode (SAW) Short-Circuiting

Globular ☒ Spray ☐ Current: AC ☐ DCEP ☒

DCEN ☐ Pulsed ☐

Other:

Tungsten Electrode (GTAW)

Size: N/A Type:

N/A

BASE METALS

Material Spec. IRS 350 CR to IRS 350 CR

Type or Grade: E350

Thickness: Groove: N/A Fillet: 20MM

Diameter (Pipe) : N/A

TECHNIQUE

Stringer or Weave Bead: Stringer

Multi-pass or Single Pass (per side) : Multipass

Number of Electrodes 1 Electrode

Longitudinal Yes

Lateral: N/A

Angle : N/A

SHIELDING

Flux: ☒ Gas: N/A

Composition: N/A

Electrode-Flux (Class) Flow Rate : N/A

SFA 5.9 Gas Cup Size : N/A

Contact Tube to Work Distance : 1-1/4"

Peening : NA

Interpass Cleaning: Slag Removed

PREHEAT

Preheat Temp., Min. N/A

Interpass Temp., Min. N/A Max. N / A

POSTWELD HEAT TREATMENT - N A

Temp. : N/A

Time : N/A



Nandan Mohanty

WELDING PROCEDURE

P. ss or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed (mm/min)	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed			
1 st	SAW				450-475	29.1-29.5	410	
2 nd	SAW	SF A A S.9 ER 309L	Ø 3.15	DCEP	476-507	29.2-29.5	450	
3 rd	SAW				471-491	29.4-29.6	500	



Nandan Mohanty

Procedure qualification Record (PQR) Test Results

TENSILE TEST

Specimen No.	Width	Thickness	Area	Ultimate tensile load, lbs [N]	Ultimate unit stress, psi [MPa]	Character of failure and location
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A

GUIDED BEND TEST

Specimen No.	Type of bend	Result	Remarks
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

VISUAL INSPECTION

Appearance: Satisfactory
 Undercut: Satisfactory
 Piping porosity: Satisfactory
 Convexity: Satisfactory
 Test date: 08.02.2026
 Witnessed by: Mr. Satyam Mahapatra TUVIPL

Radiographic-ultrasonic examination

RT report no.: N/A Result: N/AUT report no.: N/A Result: N/A

FILLET WELD TEST RESULTS

Minimum size multiple pass Macroetch

1. Satisfactory 3. Satisfactory2. Satisfactory

All-weld-metal tension test

Tensile strength, psi [MPa]: N/AYield point/strength, psi [MPa]: N/AElongation in 2 in [50 mm], %: N/A

Laboratory test no. _____

Other Tests: Inspection of weld – Visual, DP Test & Weld Size

Welder's name: Biranjana BihariClock no. _____ Stamp no- W-5Welder's qualification as per IS 7310 Pt 1 and IS 817.Tests conducted by: ICR Industrial research & consultancy pvt ltd.

Laboratory

Test number: IRC/M/3127/2025-2026

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 6 of AWS D1.6, (2017) Structural Welding Code Stainless Steel.

Sign Manas Ranjan Pradhan
UGLBy: Manas Ranjan PradhanTitle: Q/C ManagerDate: 10.02.2026

Manas Ranjan Pradhan

WELDER OR WELDING OPERATOR QUALIFICATION TEST RECORD

Type of Welder: SAW Operator (Welding)

Name: Biranjana BihariIdentification No.: W-05Date: 08.02.2026Welding Procedure Specification No: WPS/UGL/SAW/002Rev Ro

Variables	Record Actual Values Used in Qualification SAW/Semi Auto	Qualification Range
Process/Type	Single	EP
Electrode (single or multiple)	DCEP	
Current/Polarity		
Position		
Weld Progression	IF	IF
Backing (YES or NO)	NO	Without Backing
Material/Spec.		
Base Metal		
Thickness (Plate)	IRS 350 CR TO IRS 350 CR	IRS 350 CR To IRS 350 CR
Groove	20	N/A
Fillet	10 mm Fillet only	Fillet (Unlimited)
Thickness: (Pipe/tube)	N/A	N/A
Groove	N/A	N/A
Fillet	N/A	N/A
Diameter: (Pipe)	N/A	N/A
Groove		
Filler		
Metal	AWS A 5.9 ER 309 L	AWS A 5.9 ER 309 L
Spec. No.	6	6
Class		
F-No.		
Flux Type	AWS A 5.9	AWS A 5.9
Other	SFA 5.9	SFA 5.9

VISUAL INSPECTION			
Acceptable YES or NO – Satisfactory			
Guided Bend Test Results N/A			
Type	Result	Type	Result

Fillet Test Results	
Appearance : <u>Satisfactory</u>	Fillet Size: <u>10 mm</u>
Fracture Test Root Penetration: <u>NA</u>	Macroetch : <u>Satisfactory</u>

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

Inspected by: _____ Test Number: _____
Organization: _____ Date: _____

RADIOGRAPHIC TEST RESULTS					
Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks

Inspected by: Kuldeep Kumar Test Number: U4L 1713886240000034250
Organization: ITE, Noida Date: 10-02-2026

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 6 of AWS D1.6, (2017) Structural Welding Code Stainless Steel.

Manufacturer or Contractor: Utkal Galvanizers Ltd

Authorized By: _____

Date: 10.02.2026Nandan Mohanty

Plot No 43 (P) Saheed Nagar, Bhubaneswar-751 007 Odisha (India)
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PROCEDURE QUALIFICATION RECORDS (PQR)

PQR No. PQR/UGL/SAW/003

Revision: Ro

Date 31.10.2025

Company Name: UTKAL GALVANIZERS LTD.

Authorized by: TUVIPL

Welding Process(es) S A W

Type—Manual ☐
Machine ☐

Semi-Automatic ☒
Automatic ☐

Reference WPS NO.:
WPS/UGL/SAW/003

JOINT DESIGN USED

Type: Fillet

Single

Double Weld ☐

Backing: Yes ☐ No ☒

Backing Material:

Root Opening: N/A Root Face Dimension: N/A

Groove Angle: N/A Radius (J—U) : N/A

Back Gouging: Yes ☐ No ☒ Method: N/A

POSITION

Position of Groove: N/A Fillet: 1F

Vertical Progression: Up ☐ Down ☐

ELECTRICAL CHARACTERISTICS

Transfer Mode (SAW) Short-Circuiting

Globular ☒ Spray ☐ Current: AC ☐ DCEP ☒

DCEN ☐ Pulsed ☐

Other

Tungsten Electrode (GTAW)

Size: N/A

Type: N/A

BASE METALS

Material Spec. IRS 350 CR to IRS 350 CR

Type or Grade: E350

Thickness: Groove: N/A Fillet: 20MM

Diameter (Pipe) : N/A

FILLER METALS

AWS Specification AWS A5.9

AWS Classification ER 309L

TECHNIQUE

Stringer or Weave Bead Stringer

Multi-pass or Single Pass (per side) Multipass

Number of Electrodes 1 Electrode

Longitudinal Yes

Lateral: N/A

Angle: N/A

SHIELDING

Flux: ☒ Gas: N/A

Composition: N/A

Electrode-Flux (Class) SFA 5.9 Flow Rate: N/A

Gas Cup Size: N/A

Contact Tube to Work Distance 1-1/4"

Peening NA

Interpass Cleaning: Slag Removed

PREHEAT

Preheat Temp. Min. N/A

Interpass Temp., Min. N/A Max. N / A

POSTWELD HEAT TREATMENT - N A

Temp. N/A

Time N/A



Nandan Mohanty

WELDING PROCEDURE

P.s.s or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed (mm/min)	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed			
1 st	SAW				450-475	29.1-29.5	410	
2 nd	SAW	SF A A S.9 ER 309L	Ø 3.15	DCEP	476-507	29.2-29.5	450	
3 rd	SAW				471-491	29.4-29.6	500	



Nandan Mohanty

Procedure qualification Record (PQR) Test Results

TENSILE TEST

Specimen No.	Width	Thickness	Area	Ultimate tensile load, lbs [N]	Ultimate unit stress, psi [MPa]	Character of failure and location
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A

GUIDED BEND TEST

Specimen No.	Type of bend	Result	Remarks
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

VISUAL INSPECTION

Appearance: SatisfactoryUndercut: SatisfactoryPiping porosity: SatisfactoryConvexity: SatisfactoryTest date: 08.02.2026Witnessed by: Mr. Satyam Mahapatra TUVIPL

Radiographic-ultrasonic examination

RT report no.: N/A Result: N/AUT report no.: N/A Result: N/A

FILLET WELD TEST RESULTS

Minimum size multiple pass Macroetch

1. Satisfactory 3. Satisfactory

2. Satisfactory

All-weld-metal tension test

Tensile strength, psi [MPa]: N/AYield point/strength, psi [MPa]: N/AElongation in 2 in [50 mm], %: N/A

Laboratory test no. _____

Other Tests: Inspection of weld – Visual, DP Test & Weld Size

Welder's name: Bhismaya ParidaClock no. _____ Stamp no- W-5Welder's qualification as per IS 7310 Pt 1 and IS 817.Tests conducted by: ICR Industrial research & consultancy pvt ltd.

Laboratory

Test number: IRC/M/3127/2025-2026

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 6 of AWS D1.6, (2017) Structural Welding Code Stainless Steel.

Nandan Bhattacharya



Sign Manas Ranjan Pradhan
(year)
UGL

By: Manas Ranjan PradhanTitle: Q/C ManagerDate: 10.02.2026

WELDER OR WELDING OPERATOR QUALIFICATION TEST RECORD

Type of Welder: SAW Operator (Welding)

Name: Bhismaya ParidaIdentification No.: W-05Date: 31.10.25Welding Procedure Specification No: WPS/UGL/SAW/003Rev Ro

Variables	Record Actual Values Used in Qualification SAW/Semi Auto	Qualification Range
Process/Type	Single	EP
Electrode (single or multiple)	DCEP	
Current/Polarity		
Position	IF	IF
Weld Progression	NO	Without Backing
Backing (YES or NO)		
Material/Spec.	IRS 350 CR TO IRS 350 CR	IRS 350 CR To IRS 350 CR
Base Metal		
Thickness (Plate)	20	N/A
Groove	16 mm Fillet only	Fillet (Unlimited)
Fillet	N/A	N/A
Thickness: (Pipe/tube)	N/A	N/A
Groove	N/A	N/A
Fillet	N/A	N/A
Diameter: (Pipe)		
Groove		
Filler	AWS A 5.9 ER 309 L	AWS A 5.9 ER 309 L
Metal	6	6
Spec. No.		
Class		
F-No.	AWS A 5.9	AWS A 5.9
Flux Type	SFA 5.9	SFA 5.9
Other		

VISUAL INSPECTION			
Acceptable YES or NO – Satisfactory			
Guided Bend Test Results N/A			
Type	Result	Type	Result

Fillet Test Results

Appearance : Satisfactory Fillet Size: 16 mm

Fracture Test Root Penetration: NA Macroetch : Satisfactory

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

Inspected by _____ Test Number _____

Organization _____ Date _____

RADIOGRAPHIC TEST RESULTS					
Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks

Inspected by Kuldeep Kumar Test Number UGL-13886240000034745

Organization _____ Date 31-10-2025

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 6 of AWS D1.6, (2017) Structural Welding Code Stainless Steel.

Manufacturer or Contractor: Utkal Galvanizers Ltd

Authorized By _____

Date: 31.10.2025

Nandan Mohanty



UTKAL GALVANIZERS LIMITED

AN ISO 9001 : 2015 Certified Company

Plot No : 43 (P), Saheed Nagar, Bhubaneswar-751 007, Odisha (India)

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Factory : AT-KAPURSINGH, P.O. : ORANDA, CUTTACK, ODISHA-754029, PH. : 0091-8249608042

E-mail : ho@utkaltd.in / utkalho@gmail.com, Website : www.utkalgalvaniz



PROCEDURE QUALIFICATION RECORDS (PQR)

PQR No. PQR/UGL/SAW/004

Revision: Ro

Date: 08.02.2026

Company Name: UTKAL GALVANIZERS LTD.

Authorized by: TUOPL

Welding Process(es) SAW

Type—Manual ☐

Semi-Automatic ☒

Machine ☐

Automatic ☐

Reference WPS NO.: WPS/UGL/SAW/004

JOINT DESIGN USED

Type: Fillet

Single

Double Weld ☐

Backing: Yes ☐ No ☒

Backing Material:

Root Opening: N/A Root Face Dimension: N/A

Groove Angle: N/A Radius (J-U) : N/A

Back Gouging: Yes ☐ No ☒ Method: N/A

POSITION

Position of Groove: N/A Fillet: 1F

Vertical Progression: Up ☐ Down ☐

ELECTRICAL CHARACTERISTICS

Transfer Mode (SAW) Short-Circuiting

Globular ☒ Spray ☐ Current: AC ☐ DCEP ☒

DCEN ☐ Pulsed ☐

Other

Tungsten Electrode (GTAW)

Size: N/A

Type: N/A

BASE METALS

Material Spec. IRS 350 CR to IRS 350 CR

Type or Grade: E350

Thickness: Groove: N/A Fillet: 20MM

Diameter (Pipe) : N/A

FILLER METALS

AWS Specification AWS A5.9

AWS Classification ER 309L

TECHNIQUE

Stringer or Weave Bead: Stringer

Multi-pass or Single Pass (per side) : Multipass

Number of Electrodes 1 Electrode

Longitudinal Yes

Lateral: N/A

Angle : N/A

SHIELDING

Flux: ☒

Gas: N/A

Composition: N/A

Electrode-Flux (Class) SFA 5.9 Flow Rate : N/A

Gas Cup Size : N/A

Contact Tube to Work Distance : 1-1/4"

Peening : NA

Interpass Cleaning: Slag Removed

PREHEAT

Preheat Temp., Min. N/A

Interpass Temp., Min. N/A Max. N / A

POSTWELD HEAT TREATMENT - N A

Temp. : N/A

Time : N/A



Nandan Mohanty

WELDING PROCEDURE

P. ss or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed (mm/min)	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed			
1 st	SAW				450-475	29.1-29.5	410	
2 nd	SAW	SF A A S.9 ER 309L	Ø 3.15	DCEP	476-507	29.2-29.5	450	
3 rd	SAW				471-491	29.4-29.6	500	



Nandan Mohanty

Procedure qualification Record (PQR) Test Results

TENSILE TEST

Specimen No.	Width	Thickness	Area	Ultimate tensile load, lbs [N]	Ultimate unit stress, psi [MPa]	Character of failure and location
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A

GUIDED BEND TEST

Specimen No.	Type of bend	Result	Remarks
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

VISUAL INSPECTION

Appearance: SatisfactoryUndercut: SatisfactoryPiping porosity: SatisfactoryConvexity: SatisfactoryTest date: 08.02.2026Witnessed by: Mr. Satyam Mahapatra TUVIPL

Radiographic-ultrasonic examination

RT report no.: N/A Result: N/AUT report no.: N/A Result: N/A

FILLET WELD TEST RESULTS

Minimum size multiple pass Macroetch

1. Satisfactory 3. Satisfactory2. Satisfactory

All-weld-metal tension test

Tensile strength, psi [MPa]: N/AYield point/strength, psi [MPa]: N/AElongation in 2 in [50 mm], %: N/A

Laboratory test no. _____

Other Tests: Inspection of weld – Visual, DP Test & Weld Size

Welder's name: Raj Kishore BeheraClock no. _____ Stamp no- W-5Welder's qualification as per IS 7310 Pt 1 and IS 817.Tests conducted by: ICR Industrial research & consultancy pvt ltd.

Laboratory

Test number: IRC/M/3127/2025-2026

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 6 of AWS D1.6, (2017) *Structural Welding Code Stainless Steel*.

Nandan Mohanty

Sign: Manas Ranjan Pradhan
UGLBy: Manas Ranjan PradhanTitle: Q/C ManagerDate: 10.02.2026

WELDER OR WELDING OPERATOR QUALIFICATION TEST RECORD

Type of Welder: SAW Operator (Welding)

Identification No.: W-05

Date: 08.02.2026

Name: Raj Kishore Behera

Welding Procedure Specification No: WPS/UGL/SAW/004

Rev. Ro

Variables	Record Actual Values Used in Qualification SAW/Semi Auto	Qualification Range
Process/Type	Single	EP
Electrode (single or multiple)	DCEP	
Current/Polarity		IF
Position	IF	Without Backing
Weld Progression	NO	
Backing (YES or NO)	IRS 350 CR TO IRS 350 CR	IRS 350 CR To IRS 350 CR
Material/Spec.		
Base Metal		N/A
Thickness (Plate)	20	Fillet (Unlimited)
Groove	18 mm Fillet only	
Fillet	N/A	N/A
Thickness: (Pipe/tube)		
Groove	N/A	N/A
Fillet	N/A	N/A
Diameter: (Pipe)		
Groove		
Filler	AWS A 5.9 ER 309 L	AWS A 5.9 ER 309 L
Metal		
Spec. No.	6	6
Class		
F-No.	AWS A 5.9	AWS A 5.9
Flux Type	SFA 5.9	SFA 5.9
Other		

VISUAL INSPECTIONAcceptable YES or NO – Satisfactory
Guided Bend Test Results N/A

Type	Result	Type	Result

Fillet Test Results

Appearance : Satisfactory

Fillet Size: 18 mm

Fracture Test Root Penetration: NA

Macroetch : Satisfactory

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

Inspected by _____ Test Number _____

Organization _____ Date _____

RADIOGRAPHIC TEST RESULTS

Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks

Inspected by Kuldeep Kumar Test Number UGL-TC1 388624000003473
 Organization ITE, Noida Date 10.02.2026

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 6 of AWS D1.6, (2017) Structural Welding Code Stainless Steel.

Manufacturer or Contractor: Utkal Galvanizers Ltd

Authorized By _____

Date: 10.02.2026



Nandan Mohanty



UTKAL GALVANIZERS LIMITED

AN ISO 9001 : 2015 Certified Company

Plot No 43 (P), Saheed Nagar, Bhubaneswar-751 007, Odisha (India)

Phone 0091-674-2547849

Factory : AT-KAPURSINGH, P.O. : ORANDA, CUTTACK, ODISHA-754029, PH. : 0091-8249608042

E-mail : ho@utkaltd.in / utkalho@gmail.com, Website : www.utkalgalvanizers.com



PROCEDURE QUALIFICATION RECORDS (PQR)

PQR No. PQR/UGL/SAW/005

Revision: Ro

Date: 31.10.2025

Company Name: UTKAL GALVANIZERS LTD.

Authorized by: TUVIPL

Welding Process(es) S A W

Type—Manual ☐

Semi-Automatic ☒

Machine ☐

Automatic ☐

Reference WPS NO.:

WPS/UGL/SAW/005

JOINT DESIGN USED

Type: Fillet

Single

Double Weld ☐

Backing: Yes ☐ No ☒

Backing Material:

Root Opening: N/A Root Face Dimension: N/A

Groove Angle: N/A Radius (J-U) : N/A

Back Gouging: Yes ☐ No ☒ Method: N/A

POSITION

Position of Groove: N/A Fillet: 1F

Vertical Progression: Up ☐ Down ☐

ELECTRICAL CHARACTERISTICS

Transfer Mode (SAW) Short-Circuiting

Globular ☒ Spray ☐ Current: AC ☐ DCEP ☒

DCEN ☐ Pulsed ☐

Other

Tungsten Electrode (GTAW)

Size: N/A

Type: N/A

BASE METALS

Material Spec. IRS 350 CR to IRS 350 CR

Type or Grade: E350

Thickness: Groove: N/A Fillet: 20MM

Diameter (Pipe) : N/A

TECHNIQUE

Stringer or Weave Bead: Stringer

Multi-pass or Single Pass (per side) : Multipass

Number of Electrodes 1 Electrode

Longitudinal Yes ☐

Lateral: N/A

Angle : N/A

SHIELDING

Flux: ☒

Gas: N/A

Composition : N/A

Electrode-Flux (Class) SFA 5.9 Flow Rate : N/A

Gas Cup Size : N/A

Contact Tube to Work Distance : 1-1/4"

Peening : NA

Interpass Cleaning: Slag Removed

PREHEAT

Preheat Temp., Min. N/A

Interpass Temp., Min. N/A Max. N / A

POSTWELD HEAT TREATMENT - N A

Temp. : N/A

Time : N/A

Nandan Mohanty



WELDING PROCEDURE

P. ss or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed (mm/min)	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed			
1 st	SAW				450-475	29.1-29.5	410	
2 nd	SAW	SF A A S.9 ER 309L	Ø 3.15	DCEP	476-507	29.2-29.5	450	
3 rd	SAW				471-491	29.4-29.6	500	



Nandan Mohanty

Procedure qualification Record (PQR) Test Results

TENSILE TEST

Specimen No.	Width	Thickness	Area	Ultimate tensile load, lbs [N]	Ultimate unit stress, psi [MPa]	Character of failure and location
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A

GUIDED BEND TEST

Specimen No.	Type of bend	Result	Remarks
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

VISUAL INSPECTION

Appearance: SatisfactoryUndercut: SatisfactoryPiping porosity: SatisfactoryConvexity: SatisfactoryTest date: 08.02.2026Witnessed by: Mr. Satyam Mahapatra TUVIPL

Radiographic-ultrasonic examination

RT report no.: N/A Result: N/AUT report no.: N/A Result: N/A

FILLET WELD TEST RESULTS

Minimum size multiple pass Macroetch

1. Satisfactory 3. Satisfactory

2. Satisfactory

All-weld-metal tension test

Tensile strength, psi [MPa]: N/AYield point/strength, psi [MPa]: N/AElongation in 2 in [50 mm], %: N/A

Laboratory test no. _____

Other Tests: Inspection of weld – Visual, DP Test & Weld Size

Welder's name: Sd. Enam AliClock no. _____ Stamp no- W-5Welder's qualification as per IS 7310 Pt 1 and IS 817.Tests conducted by: ICR Industrial research & consultancy pvt ltd.

Laboratory

Test number: IRC/M/3127/2025-2026

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 6 of AWS D1.6, (2017) Structural Welding Code Stainless Steel.

Sign _____

UGL

By: Manas Ranjan PradhanTitle: Q/C ManagerDate: 31.10.2025Nandan Mohanty

WELDER OR WELDING OPERATOR QUALIFICATION TEST RECORD

Type of Welder: SAW Operator (Welding)

Identification No: W-05
Date: 31.10.25Name: Sd. Enam AliWelding Procedure Specification No: WPS/UGL/SAW/005

Rev Ro

Variables	Record Actual Values Used in Qualification SAW/Semi Auto	Qualification Range
Process/Type	Single	
Electrode (single or multiple)	DCEP	
Current/Polarity		EP
Position		IF
Weld Progression	IF	Without Backing
Backing (YES or NO)	NO	
Material/Spec.	IRS 350 CR TO IRS 350 CR	IRS 350 CR To IRS 350 CR
Base Metal		
Thickness (Plate)	20	N/A
Groove	14 mm Fillet only	Fillet (Unlimited)
Fillet	N/A	N/A
Thickness: (Pipe/tube)		
Groove	N/A	N/A
Fillet	N/A	N/A
Diameter: (Pipe)		
Groove		
Filler		
Metal	AWS A 5.9 ER 309 L	AWS A 5.9 ER 309 L
Spec. No.	6	6
Class		
F-No.	AWS A 5.9	AWS A 5.9
Flux Type	SFA 5.9	SFA 5.9
Other		

VISUAL INSPECTION			
Acceptable YES or NO – Satisfactory			
Guided Bend Test Results N/A			
Type	Result	Type	Result
Fillet Test Results			
Appearance : <u>Satisfactory</u>		Fillet Size: <u>14 mm</u>	
Fracture Test Root Penetration: <u>NA</u>		Macroetch : <u>Satisfactory</u>	

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

Inspected by _____ Test Number _____

Organization _____ Date _____

RADIOGRAPHIC TEST RESULTS					
Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks

Inspected by Kuldeep Kauran Test Number UGL-7C/3886240000034225
Organization ITE, Noida Date 31-10-2025

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 6 of AWS D1.6, (2017) Structural Welding Code Stainless Steel.

Manufacturer or Contractor: Utkal Galvanizers Ltd

Authorized By _____

Date: 31.10.2025Nandan Mohanty