

<b>TECNIMONT</b> Tecnimont S.p.A.	 <b>REPSOL</b> REPSOL POLIMEROS SA	4274_CONST ALBA PROJECT-PP AND PEL PLANTS	
MOD-ITP-XL_220 RELEASE OF SPOOLS FROM WORKSHOP Rev.1		Report n° <b>IP-WSR-P-310-000467_RFI6615_MOD-ITP-XL_220</b>	
		RFI Nr.: _____	Date : _____
Unit - Plant Area - Isometric Number -			
Inspection Package Number <b>IP-WSR-P-310-000467_RFI6615 - IP Spool Release From Workshop</b>			

Sheet 01/01

The Present Inspection Package contains the following Elements:

2121-VG40E02-1-SP01-01098;4221-COM10C01-6-SP05-00725;4221-HXE10C32-1-SP02-00754;1211-PP81006-1-SP02-00313;2121-VG40E02-2-SP02-01099;1211-PP81008-2-SP02-00316;1211-PP81006-1-SP03-01142;4221-COM10C01-6-SP04-00724;1121-HCM24064-2-SP01-00131;4221-HXE10C32-1-SP01-00753;1211-PP81006-1-SP01-00312;2121-VG40E01-2-SP02-01097;1211-PP81008-2-SP03-00317;4221-COM10C01-6-SP06-00726

Spool No.	Ready for destination to: P: Painting (1) W: Wrapping F: Field	NDE Class	Check List					
			Visual Inspect	Traceability OK (2)	Pending NDE / PMI (Yes/No/NA)	PWHT / HARDNESS (Yes/No/NA)	Inside Cleaning (3) (Yes/No/NA)	Spool Identified (Yes/No/NA)

LEGEND OF CHECK RESULT	<input checked="" type="checkbox"/> Checked & NOT Accepted	<input checked="" type="checkbox"/> Checked & Accepted	N.A. Not Applicable	Y / N	Punch List Produced
SUBCONTRACTOR	18-12-2024	[DD-MMM-YYYY]	Name	Signature	
CONTRACTOR			Sergio Marcelo Colletta		
COMPANY					
(Free)	18-12-24		MANCINO RICCARDO		

<b>TECNIMONT</b> Tecnimont S.p.A.	 <b>REPSOL</b> REPSOL POLIMEROS SA	4274_CONST ALBA PROJECT-PP AND PEL PLANTS	
MOD-ITP-XL_220 Rev.1		RELEASE OF SPOOLS FROM WORKSHOP	Report n° <b>IP-WSR-P-310-000467_RFI6615_MOD-ITP-XL_220</b>
		RFI Nr.:	Date :
Unit -			
Plant Area -			
Isometric Number			
Inspection Package Number <b>IP-WSR-P-310-000467_RFI6615 - IP Spool Release From Workshop</b>			

Sheet 01/01

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NOTES (\*): 4274-XH-PQ-00000001

- 1) Painting cycle to be indicated.
- 2) Refer to: 4274-LZ-PC-00000214 (COMPANY 4001008GEN-PC-214) "Management of Site Metallic Welding Activities" and 4274-LZ-PC-00000215 (COMPANY 4001008GEN-PC-215) "Procedure for Traceability of Piping Material"
- 3) Refer to: 4274-XH-SG-00000003 (COMPANY 45-L-45-000-2-00-80005) "Specification for Piping Fabrication & Erection Amendment 1" and 4274-XH-SG-00000002 (COMPANY 45-L-45-000-2-00-80081) "Inspection and Test Plan for Steel Piping Works"

**GABRIEL BOTEZATU**  
IWT&IWI-s RO/00011

ISO EN 9712 certification Level 2  
VT/PT/MT/RT/UT- TOFD - PA

LEGEND OF CHECK RESULT	<input checked="" type="checkbox"/> Checked & NOT Accepted	<input checked="" type="checkbox"/> Checked & Accepted	N.A. Not Applicable	Y / N Punch List Produced
SUBCONTRACTOR			Date [DD-MMM-YYYY]	Name Signature
CONTRACTOR				
COMPANY				
(Free)				
	18-12-2024	Sergio Morelos Gallegos		
	18-12-24	Riccardo Mancino		

 <b>Tecnimont</b>	<p style="text-align: center;"><b>Punch List</b></p> <p style="text-align: center;"><b>PUNCH LIST</b></p>	<p style="text-align: center;"><b>IDENTIFICATION CODE</b></p>			
		<table border="1" style="width: 100%; text-align: center;"> <tr> <td>SHEET 1 / 1</td> <td>DOC.CLASS 1</td> <td>ISSUE 01</td> </tr> </table>	SHEET 1 / 1	DOC.CLASS 1	ISSUE 01
SHEET 1 / 1	DOC.CLASS 1	ISSUE 01			
 <b>MECWIDE</b> <small>Engineering Consultancy</small>	<p><b>ISO ID:</b> 2121-VG40E01-2</p>				

	DATE (dd-Mmm-YYYY)	NAME	SIGNATURE
SUBCONTRACTOR			
CONTRACTOR			
COMPANY			
(Free)			

										LINE DATA						Tecnímont			IDENTIFICATION CODE						
										FLUID CODE: VG			LINE NO. 2"-VG-40E01-2E63			PLANT: SINES INDUSTRIAL COMPLEX		CLIENT REF: REPSOL POLYMEROS		Job	EICL T	Area	N		
00A	16-05-2024	ISSUED FOR CONSTRUCTION-SITE REVISION			MW	MW	TM	PIPING MATERIAL CLASS			HEAT TREATMENT	PAINTING CODE	P&ID No.	REFERENCES			4274 XHDL 2121 VG40E01			4274	XHDL	2121	VG40E01		
00	23-12-2022	ISSUED FOR CONSTRUCTION															UNIT	19	SHEET	2	REV	00A			
REV	DATE	REVISION DESCRIPTION			DRAWN UP	CHKD UP	APP'D	2E63	N / O	M	N	NR	19-A-19-000-1-01-00001 sheet 34	PIPE ASSEMBLY DRAWING E C T N 19-L-19-000-2-00-86197 sheet 6			PIPE SUPPORT SPECIFICATION E C T N	PIPE STANDARD SUPPORT SUMMARY E C T N			PIPE ISOMETRIC LIST E C T N	PIPE TYPICAL INSTALLATIONS E C T N	WELDING SPECIFICATION E C T N		

LINES 1 1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED  
FOR THE COMPONENT MARKED AS FIELD WELDED ONE WELDED FOR ADJUSTMENT OF IN-LINE COMPONENT WHERE MARKED  
FIELD WELD SYMBOL FOR ADJUSTMENT OF IN-LINE COMPONENT WHERE MARKED

THIS DOCUMENT BELONGS TO REPSOL, IT CAN NOT BE COPIED, REPRODUCED AND/OR USED WITHOUT PREVIOUS AUTHORIZATION OF REPSOL. COMPUTERIZED DRAWING (HANDWRITING STRICTLY FORBIDDEN).

NOTES: EXTR. DATE: 22-12-2022 11:15:17 STREAM NO:4554 STREAM REV. NO.: 7 REV. CAUSE ID:

ISSUED FOR CONSTRUCTION - SITE REVISION 16-05-2024 F.CARRA' M.PECILE M.PECILE

ISSUED FOR CONSTRUCTION 23-DEC-22 U.CHAVAN P.VAZE G.PAGANONI

REV. DESCRIPTION DATE DRW. BY CHECK BY APPR. BY APPR. CLIENT

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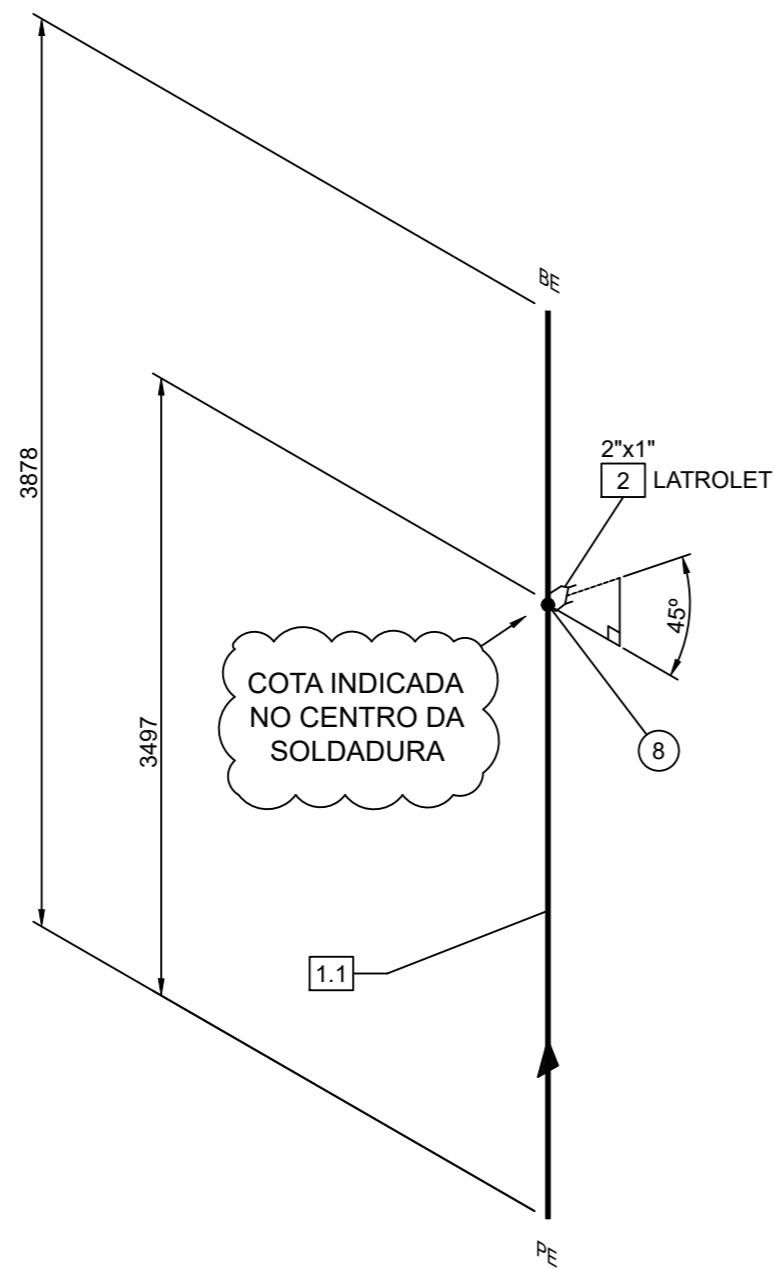
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ISSUED FOR CONSTRUCTION 23-DEC-22 U.CHAVAN P.VAZE G.PAGANONI

REV. DESCRIPTION DATE DRW. BY



M



On behalf of Tecnimont/R

Piping Supervisor

R. Mancini

16.Dec.2

10.01.31

Rev.	Date	DRW	Check 1	Check 2	
					<b>Marking Color:</b> GREEN
					<b>Weld Class:</b> 2E63-M
00A	10/09/2024	RHA	AZA		<b>Paint System:</b> NR

Sergio Morales

Date: 11-12-24

The logo consists of a stylized blue 'A' shape containing the word 'anticorrosion' in a lowercase, sans-serif font. Below it, the words 'INDUSTRIAL' and 'S.A.' are stacked vertically.

BILL OF MATERIAL

PIPE

ITEM	LONGUEUR	DIAMÈTRE	SCH/mm	DESCRIPTION / MATERIEL	ITEM CODE
1.1	3,876	2"	S-40S	PIPE - A312-TP304/304L DUAL GR BUTTWELDED SMLS INTERNAL SURFACE ROUGHNESS <OR= 125 RMS RExPE	I3364292

PIÈCES FORGÉES

ITEM	QT	DIAMÉTRE	SCH/PRESS.	DESCRIPTION / MATÉRIEL	WGT_ID
2	1	2"x1"	S-40S	RED 45 LATROLET MSS SP-97/AA 3000# A182-F304/304L DUAL GR BE SWE	I2495931

P2308S 01097



2121-VG40E01-2-SP02-01097

Weld Map Sticker



# Spool Material List

Contract : P2308

Client NERVION

Job : P2308S

Project ALBA

Job	Spool	Piece Mark	Drawing	Rev			
Item No Tag No ID No	Qty	Size1 Sch1	Size2 Sch2	Description	Heat No MTR No Folder No	Unit Weight Kgs	Weight Kgs
<b>P2308S 01097 2121-VG40E01-2-SP02-01097</b>		<b>2121-VG40E01-2</b>		<b>00A</b>			
1.1	3,876	2.0000 S40S	0.0000 NA	PIPE, SEAMLESS, A312-TP304L	J3120640 0392	5,44	21,09
40393							
2	1	2.0000 NA	1.0000 NA	LATROLET, SW, 3000#, A182-F304L	N220606AV04 0296	0,52	0,52
37422							

On behalf of Tecnimont/R

Piping Supervisor

R. Mancino

16.Dec.24



Number of Items : 2

Total Weight : 21,61

Signature	QA	Client
		Sergio Morales Date: 11-12-24
Date	2024-12-10 14:40:33	

**INSPECTION CERTIFICATE ACC. TO EN 10204/3.1**

**Arvind Pipes & Fittings Industries Pvt.Ltd.**

Plot No: 657, G.I.D.C. Waghadia - 391 760, Dist: Baroda, India  
Soluzioni Piping Srl

Certified manufacturer to PED 14/68, AD WD, Certificate No.01 202 INDIC-19 0019

Certificate No.: API/F/2022-2023/QC/ 780

Client	SOLUZIONI PIPING SRL			Purchase Order No.	354/355		
Product	COLD FINISHED SEAMLESS STAINLESS STEEL PIPE WITH PLAIN ENDS IN RANDOM LENGTHS 5'-7' M			Purchase Order Date	16/07/2021		
Specification	DIN EN 10216-5 TC1, ANSI B 36.19, ASME/A/SA 312, W2, W10, ASME CODE SEC II PART A 2019 ed , NACE MR-0175 / ISO 15156-3, NACE MR-0103, Tel. DIN EN ISO 1127 D3TS, ASTM A 998, BV 07-NR-2030			Purchase Order Article Number	TU4LE0_33 X 3.91 MM THK		
Quality Assurance Plan Number	.....			Size	60.33 MM OD X 3.91 MM ID		
Supply Condition	Heat No.			Grade	1.4301/1.4307-304 / 304L		
Solution Annealed CFD, Pickled, Passivated	J3120640			Ordered quantity (m)	Total Quantity	Total Length m	Total Weight kg
Heat Treatment <sup>a</sup>	Satisfactory			1000	1000	945.95	4774.00
Annealed and quenched in water 1040°C - 1120°C	Element EN 110216-5 ASTM - A -312	C ≤ 0.03 ≤ 0.035	Mn ≤ 2.0 ≤ 2.0	P 0.040 Max 0.045 Max	S 0.015 Max 0.030 Max	Cr ≤ 17.50-19.50 ≤ 18.00-20.00	N ≤ 0.11 ≤ 0.00-1.00 ≤ 0.00-1.30 ≤ 0.03 ≤ 0.16 mm ≤ 0.047
Ladle Analysis	0.021			0.031	0.002	0.37	.....
Product Analysis	0.019			0.029	0.002	0.39	0.04
Mechanical Properties							
Testing Item	Tensile Strength	Rm Mpa	Rp0.2 Mpa	Elongation A50(%)	Flattening Test:	Drift Expanding Test	
Requirements	EN 10216-5 ASTM - A -312	500-700 515 Min.	195 Min 205 Min	230 Min 35 Min.	EN ISO 8492 ASTM A370	EN ISO 8493	
Testing Results	EN 10216-5 ASTM - A -312	576.63 573.41	227.16 245.67	248.07 56.08 54.10	Satisfactory	Satisfactory	
Grain Size	Intergranular Corrosion Test			Hardness	Eddy-current Testing 100%	Ultrasonic Test 100%	Hydrostatic Test
ASTM E112 ≤ 7	EN ISO 3651-2 A ASTM A262 Practice E	NACE MR-0175 / ISO 15156-3,NACE MR-0103, 52/52HRC (90 HRC Max.) (Avg. of 3 reading)	EN ISO 10983-1 ASTM E426	EN 10246-6 U2 EN 10246-7 U2	Charpy V ISO-EN-10065-1 ≥ 100 Joule 20°C	Positive Material Identification EN 10216-5 100%	Positive Material Identification EN 10216-5 100%
5 TO 7	Satisfactory	73-76 HRC (10 HRC)	Satisfactory	—	—	13 / 1900	10 Sec (Min) Satisfactory
Remarks :							
1. Mercury free 2. No weld repair performed for base material and tube - 3. 100% hydro test carried out by APIFPL : found satisfactory. 4. 100% visual & dimensional inspection carried out by APIFPL found satisfactory. 5. 100% PML carried out by APIFPL : found satisfactory. 6. Chemical Test carried out by APIFPL : found satisfactory. 7. Mechanical Test (Tensile, Flattening, Drift expansion, Hardness) carried out by APIFPL : found satisfactory. 8. Corrosion Test - (G.C. Pr. "E" carried out by APIFPL : found satisfactory) 9. Metallurgical Test - Grain Size - carried out by APIFPL found satisfactory. 10. Pickling & Passivation carried out by APIFPL & found satisfactory. 11. Eddy-current Testing carried out by APIFPL & found satisfactory. 12. Marking : / 304L- HEAT NO: J3120640 -TC1-CFD- D3 / T3 Sec II Part A 2019 ed NACE-MR-0175 / ISO 15156-3, NACE MR-0103 - MERKBLATT HTTP 1900 PSI - PMI TESTED - INDIA							



Date:26/11/2022

ARWIND PIPES & FITTINGS INDUSTRIES PVT. LTD.  
(QA/QC HEAD)





Contract : P2300

Drawing : 2121-VG40E01-2

## Welding and QC Report Per Spool

Job : P2300S

Material : Stainless Steel 304, 316, 317

Client : NERVION

Revision : 00A

Spool : 01097

Spec : 2E63-M

Project : ALBA

Piece Mark : 2121-VG40E01-2-SP02-01097

Weld data				Welding												Control												
Weld No.	Type	Dia /Thk	Sch Proc.	1st Pass	1st MTR	Final Pass	Final MTR	Dim	Date DIM	Visual	Date Visual	PT	Date PT	MT	Date MT	PMI	Date PMI	Ferite	Date Ferrite	PWHT	Date PWHT	BHN	Date BHN	Ultra	Date UT	Xray	Date Xray	
0008	OL	1	S40S	MW.26_SBR	AH	29-11-2024	4712055	AH	29-11-2024	4712055					001231	04-12-2024	000255	04-12-2024			001292	06-12-2024						

On behalf of Tecnimont  
QC Welding Inspector

GABRIEL BOFFATO  
16/12/2024 (R)

Notes:

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Boccard Portugal QC	Client
	Sergio Morales Date: 11-12-24
Date	10-12-2024 14:40:33



Contract : P2300

## Welding and QC Report Per Spool

Drawing : 2121-VG40E01-2

Job : P2300S

Material : Stainless Steel 304, 316, 317

Client : NERVION

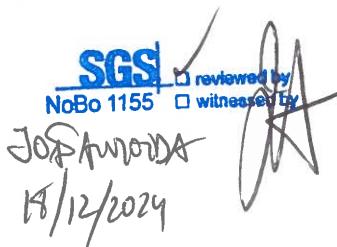
Revision : 00A

Project : ALBA

Piece Mark : 2121-VG40E01-2-SP02-01097

Spec : 2E63-M

Weld data				Welding												Control													
Weld No.	Type	Dia /Thk	Sch Proc.	1st Pass	1st MTR	Final Pass	Final Pass	Final MTR	Dim	Date DIM	Visual	Date Visual	PT	Date PT	MT	Date MT	PMI	Date PMI	Ferite	Date Ferrite	PWHT	Date PWHT	BHN	Date BHN	Ultra	Date UT	Xray	Date Xray	
0008	COL	1	S40S	MW.26_SBR	AH	29-11-2024	4712055	AH	29-11-2024	4712055			001231	04-12-2024	000255	04-12-2024		001292	06-12-2024										

  
 reviewed by  
 NoBo 1155  witnessed by  
  
 Jose Andrade  
 14/12/2024

Notes:

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Boccard Portugal QC	Client
 <input checked="" type="checkbox"/> QA / QC	Sergio Morales  Date: 11-12-24

Signature

Date

10-12-2024 14:40:33



## Shop QC Inspection Report

P2308-001278

Client : NERVION  
 Contract : P2308 / Project : ALBA  
 Material: Stainless Steel 304, 316, 317

Job number: P2308S  
 Spool N°: 01097  
 Piece Mark: 2121-VG40E01-2-SP02-01097

Procedure / Instruction reference: 20.2 IT 011 MF 324 - Rev: A

Control Date: 04-12-2024

Remarks: The results refer to the controlled items

### Actions / Tasks List

	Required	Done/ Identified
	Yes	No

Welder / weld list labels printed and pasted on the spool sheet

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Spool Barcode label printed

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	--------------------------	-------------------------------------

Spool is identified with the metal tag

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	--------------------------	-------------------------------------

Spool stencil required (hard stamp low stress)

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Joint preparation &amp; cleanliness / spool dimensions checked

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	--------------------------	-------------------------------------

Level, plumb, Two holes, flanges and internal alignment, Squareness

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	--------------------------	-------------------------------------

Material checked (type of material, rate, heat numbers, filler material, etc.)

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	--------------------------	-------------------------------------

Welders list match with actual welder stencil / Id. on pipe

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	--------------------------	-------------------------------------

PWHT- Spool identified as per Procedure / Instruction for PWHT

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

HT ( Hardness Test)- Welds identified as per Procedure / Instruction

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

MT - Welds identified as per Procedure / Instruction

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

PT - Welds identified as per Procedure / Instruction

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	--------------------------	-------------------------------------

PMI - Welds identified as per Procedure / Instruction

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	--------------------------	-------------------------------------

FE ( Ferrite test) - Welds identified as per Procedure / Instruction

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

RT - Welds identified as per Procedure / Instruction

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

UT - Welds identified as per Procedure / Instruction

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------

Spool identified (by marker) as per Procedure / Instruction (Job number, sheet number and Paint type if required)

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Hydro - Spool identified as per Procedure / Instruction

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Cleanliness - Cleaned inside free of slag, scale, sand, weld spatter, cutting chips, etc. and blow out by compressed air

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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### Comments:

Performed by: MATOS, MARCO (N2 VT/PT)

QA/QC Inspection: RAIMUNDO, MARIANA

Customer Inspection:

Date: 04-12-2024

Date: 10-12-2024 14:40:33

Sergio Morales

Signature



Signature



Date: 11-12-24



SGS  
 NoBo 1155  
 18/12/2024



# Shop QC Inspection Report

P2308-001278

Client : NERVION  
 Contract : P2308 / Project : ALBA  
 Material: Stainless Steel 304, 316, 317

Job number: P2308S  
 Spool N°: 01097  
 Piece Mark: 2121-VG40E01-2-SP02-01097

Procedure / Instruction reference: 20.2 IT 011 MF 324 - Rev: A

Control Date: 04-12-2024

Remarks: The results refer to the controlled items

Actions / Tasks List	Required		Done/ Identified
	Yes	No	
Welder / weld list labels printed and pasted on the spool sheet	X	<input type="checkbox"/>	X
Spool Barcode label printed	X	<input type="checkbox"/>	X
Spool is identified with the metal tag	X	<input type="checkbox"/>	X
Spool stencil required (hard stamp low stress)	<input type="checkbox"/>	X	<input type="checkbox"/>
Joint preparation & cleanliness / spool dimensions checked	X	<input type="checkbox"/>	X
Level, plumb, Two holes, flanges and internal alignment, Squareness	X	<input type="checkbox"/>	X
Material checked (type of material, rate, heat numbers, filler material, etc.)	X	<input type="checkbox"/>	X
Welders list match with actual welder stencil / Id. on pipe	X	<input type="checkbox"/>	X
PWHT- Spool identified as per Procedure / Instruction for PWHT	<input type="checkbox"/>	X	<input type="checkbox"/>
HT ( Hardness Test)- Welds identified as per Procedure / Instruction	<input type="checkbox"/>	X	<input type="checkbox"/>
MT - Welds identified as per Procedure / Instruction	<input type="checkbox"/>	X	<input type="checkbox"/>
PT - Welds identified as per Procedure / Instruction	X	<input type="checkbox"/>	X
PMI - Welds identified as per Procedure / Instruction	X	<input type="checkbox"/>	X
FE (Ferrite test) - Welds identified as per Procedure / Instruction	<input type="checkbox"/>	X	<input type="checkbox"/>
RT - Welds identified as per Procedure / Instruction	<input type="checkbox"/>	X	<input type="checkbox"/>
UT - Welds identified as per Procedure / Instruction	<input type="checkbox"/>	X	<input type="checkbox"/>
Spool identified (by marker) as per Procedure / Instruction (Job number, sheet number and Paint type if required)	X	<input type="checkbox"/>	X
Hydro - Spool identified as per Procedure / Instruction	<input type="checkbox"/>	X	<input type="checkbox"/>
Cleanliness - Cleaned inside free of slag, scale, sand, weld spatter, cutting chips, etc. and blow out by compressed air	X	<input type="checkbox"/>	X

Comments:

Performed by: MATOS, MARCO (N2 VT/PT)  Date: 04-12-2024  Signature 	QA/QC Inspection: RAIMUNDO, MARIANA  Date: 10-12-2024 14:40:33  Signature 	Customer Inspection: <b>Sergio Morales</b>  Date: 11-12-24  
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16/12/2024

On behalf of Tecnimont  
 QC Welding Inspector

*GABRIEL BOTELHO*  
 GABRIEL BOTELHO  
 ISO EN 9712 certified Welder  
 VTP/TMTR/ID-TODA PA  
 (R)

# Visual Examination Report (Welds)

P2308-001231

Contract : P2308

Job number: P2308S

Material: Stainless Steel 304, 316, 317

Client : NERVION

Spool Nº: 01097

Procedure &amp; Instructions: 4274-LZ-VF31010370QAC04 - Rev: 1

Project : ALBA

Piece Mark: 2121-VG40E01-2-SP02-01097

Testing Date: 04-12-2024

Remarks: The results refer to the controlled items

Unacceptable indications for welding

ACCEPTANCE CRITERIA : ASME B31.3

Weld reinforcement greater than specified in project procedure

The illumination of the surface must be at least 500 lux. However, a value of 1000lux is recommended

Any linear indications greater than specified in project procedure, surface porosity with rounded indications having a dimension greater than specified project procedure

Indications of lack of fusion open to the surface / Cracks located on external surfaces

Surface finish that could interfere with other testing required

Incomplete penetration of welds / Indications of undercut on surfaces which are greater than specified in project procedure

Misalignment greater than specified in applicable code or poor fit up of weld joints

## Identification

Temp.  
(°F/°C)

Accepted

Rejected

Defect

Technique  
Used

Comments

Weld No.

Weld Desc.

Welder

0008 1.0000 S40S LOL-Latrolet to Header Weld (MW.26\_SBR)

AH

13

X

Sketch / Photo:

## Defects

Clustered Porosity CP

Porosity P

Cap C

Lack of Cleanup LC

Hollow in Cap W

Unibmly Porosity UP

Slag

S

Undercut UC

Crack

CR

Surface

SU

Test Performed by: MATOS, MARCO (N2 VT/PT)

QA/QC Inspection: RAIMUNDO, MARIANA

Customer Inspection:

Date: 04-12-2024

Date: 10-12-2024 14:40:33

Sergio Morales

Signature



Signature



Date: 11-12-24



16/12/2024

On behalf of Tecnimont  
QC Welding Inspector

GABRIEL BONET LAFERRA  
WT&WWS R. 2  
ISO EN 9712 CERTIFICATION LEVEL 2  
VT/PT/MT/RT/HUT-T/OFD - PA  
(R)



# Liquid Penetrant Examination Report

P2308-000255

Client : NERVION  
 Contract : P2308 / Project : ALBA  
 Remarks: The results refer to the controlled items

Job number: P2308S

Material: Stainless Steel 304, 316, 317

Spool Nº: 01097

Procedure / Instruction reference: 4274-LZ-VD-FW31010370QAC03

Piece Mark: 2121-VG40E01-2-SP02-01097

Testing Date: 04-12-2024

Steps	Penetrant	Cleaner	Developer	Lighting Equipment
Brand	Mr Chemie (MR68-NF)	Mr Chemie (MR85)	Mr Chemie (MR70)	Artificial > 500 lux
Type	II	C	e	-
Batch/Serial Number	*080323 (03/2026)	*150124 (01/2027)	*300124 (01/2027)	-

Weld / Item No.	Identification Description	Welder	Tem (°F/C)	Dwell Time (min)				Examin Time	Accepted yes	No Indication	Remarks
				Penetrant	Cleaner	Developer	Lighting				
0008	1.0000 S40S LOL-Latrolet to Header Weld (MW.26_SBR)	AH	11	20 m	-	10 m	-	-	X	<input type="checkbox"/>	

Sketch / Photo:



## Defects

Clustered Porosity	CP	Cap	C	Undercut	UC	Surface	SU	Crack	CR
Porosity	P	Slag	S	Lack of Cleanup	LC	Crater Crack	CC		

Test Performed by: MARCO (N2 VT/PT), MATOS

QA/QC Inspection: RAIMUNDO, MARIANA

Customer Inspection:

Date: 04-12-2024

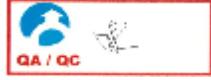
Date: 04-12-2024

Sergio Morales

Signature



Signature



Date: 11-12-24



16/12/2024  
 On behalf of Tecnimont  
 QC Welding Inspector

GABRIEL BOFFELLI (R)  
 INTS/INTS-POL/2024-12-16  
 ISO EN 9712 certified by GABRIEL BOFFELLI  
 VTP/TM/TATUT/2024-12-16



# Positive Material Identification Report (PMI)

P2308-001292

Client : NERVION

Contract : P2308 / Project : ALBA

Remarks: The results refer to the controlled items

Job number: P2308S

Spool N°: 01097

Piece Mark: 2121-VG40E01-2-SP02-01097

Material: Stainless Steel 304, 316, 317

Procedure / Instruction reference: 4274-LZ-VF-FW31010370QAC11 - Rev: 1

PMI Equipment : Niton XL3t800 Serial N° 32735 (FP01)

Equipment Deviation : + - 5%

Testing Date: 06-12-2024

Weld / Item No	Description	Reading Number	Chemical Elements										Accepted	Rejected	Comments
			%Ti	%Mo	%Cu	%Ni	%Fe	%Mn	%Cr	%Nb	%Al	%V			
0008	1.0000 S40S LOL-Latrolet to Header Weld (MW.26_SBR)	203	0	0	0	8	70	1	18	0	0	0	X		
1.1	2.0000 S40S PIPE, SEAMLESS, A312-TP304L (J3120640)	201	0	0	0	8	71	1	17	0	0	0	X		
2	2.0000 NA 1.0000 NA LATROLET, SW, 3000#, A182-F304L (N220606AV04)	202	0	0	0	7	72	1	17	0	0	0	X		

On behalf of Tecnimont  
QC Welding Inspector

GABRIEL HOFELICH (R)  
16/12/2024  
ISO EN 9712 certified Level 2  
Welding Inspector  
VIA MMTR/UT-TODF-PA

Test Performed by: GONCALVES(QA), J. (N2 PT/RT) QA/QC Inspection: RAIMUNDO, MARIANA

Date: 06-12-2024

Signature



Date: 10-12-2024 14:40:33

Signature



Customer Inspection:

Sergio Morales

Date:

Signature

Date: 11-12-24



Boccard Portugal, Lda  
Zona Industrial de Montalvo, Lote 3  
Constância, Portugal 2250-999

## Certificate of PMI Reading

XL3t-32735

Reading No	203
Mode	ALLOY
Time	2024-12-06 13:27
Duration	13.98
Sequence	Final
Alloy1	304SS : 0.00
Alloy2	No Match : *2.10
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.035
Sn	< LOD	:	0.046
Pd	< LOD	:	0.032
Ag	< LOD	:	0.162
Al	< LOD	:	80.000
Mo	0.028	±	0.006
Nb	0.008	±	0.004
Zr	< LOD	:	0.003
Bi	< LOD	:	0.004
Pb	< LOD	:	0.012
Se	< LOD	:	0.007
W	< LOD	:	0.089
Zn	< LOD	:	0.033
Cu	< LOD	:	0.132
Ni	8.741	±	0.263
Co	< LOD	:	0.430
Fe	70.405	±	0.397
Mn	1.646	±	0.179
Cr	18.662	±	0.230
V	< LOD	:	0.109
Ti	< LOD	:	0.133

On behalf of Tecnimont  
QC Welding Inspector

GABRIEL HORNIGAU (R)  
16/12/2024

buen lavoro  
INT'L WI's Reference Lab  
ISO EN 9712 Certified  
VTP/TMTR/TUT-TOD-P-A  
Level 2

Sergio Morales

Date: 11-12-24



Boccard Portugal, Lda  
Zona Industrial de Montalvo, Lote 3  
Constância, Portugal 2250-999

## Certificate of PMI Reading

XL3t-32735

Reading No	201
Mode	ALLOY
Time	2024-12-06 13:27
Duration	12.93
Sequence	Final
Alloy1	304SS : 1.67
Alloy2	No Match : *1.97
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.037
Sn	< LOD	:	0.043
Pd	< LOD	:	0.034
Ag	< LOD	:	0.158
Al	< LOD	:	80.000
Mo	< LOD	:	0.007
Nb	< LOD	:	0.007
Zr	< LOD	:	0.003
Bi	< LOD	:	0.008
Pb	< LOD	:	0.024
Se	< LOD	:	0.006
W	< LOD	:	0.079
Zn	< LOD	:	0.032
Cu	< LOD	:	0.127
Ni	8.163	±	0.263
Co	< LOD	:	0.442
Fe	71.878	±	0.403
Mn	1.450	±	0.178
Cr	17.866	±	0.230
V	< LOD	:	0.107
Ti	< LOD	:	0.134

16/12/2024  
On behalf of Tecnimont  
QC Welding Inspector (R)

Sergio Morales

Date: 11-12-24



GABRIEL BONFILIO  
INTERNS  
ISO EN 9001:2015 Certified  
VTP/PT/MT/RT/UT/TOFD - PA  
Level 2

Boccard Portugal, Lda  
Zona Industrial de Montalvo, Lote 3  
Constância, Portugal 2250-999

## Certificate of PMI Reading

XL3t-32735

Reading No	202
Mode	ALLOY
Time	2024-12-06 13:27
Duration	11.33
Sequence	Final
Alloy1	301SS : 1.72
Alloy2	No Match : *2.55
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.042
Sn	< LOD	:	0.056
Pd	< LOD	:	0.043
Ag	< LOD	:	0.138
Al	< LOD	:	80.000
Mo	< LOD	:	0.011
Nb	< LOD	:	0.008
Zr	< LOD	:	0.004
Bi	< LOD	:	0.009
Pb	< LOD	:	0.018
Se	< LOD	:	0.008
W	< LOD	:	0.092
Zn	< LOD	:	0.035
Cu	< LOD	:	0.145
Ni	7.881	±	0.298
Co	0.539	±	0.255
Fe	72.021	±	0.464
Mn	1.481	±	0.205
Cr	17.721	±	0.264
V	< LOD	:	0.135
Ti	< LOD	:	0.165

16/12/2024 (R)

On behalf of Tecnimont  
QC Welding Inspector

GABRIEL BOFF MAMU  
ISO EN 9613-1 certified by Level 2  
VTIP/IMRT/TOT-TOFD-PA

Sergio Morales

Date: 11-12-24



**Client :** NERVION  
**Contract :** P2308 / Project : ALBA  
**Material:** Stainless Steel 304, 316, 317  
**Procedure/Instruction:** 23A008/010 Rev.2

**Job number:** P2308S  
**Spool N°:** 01097  
**Piece Mark:** 2121-VG40E01-2-SP02-01097

<b>Pickling Paste</b>		<b>Neutralizer Paste</b>			
Brand:	Antox® 71 E Plus	Brand:	Antox® NP	Brand:	
Batch:	N/A	Batch:	N/A	Batch:	
Opening Date:	10/08/2024	Opening Date:	10/08/2024	Opening Date:	
Expiration Date:	NA	Expiration Date:	NA	Expiration Date:	

Weld No.	Operations				Accepted	Rejected
	Pickling	Pickling duration (min.)	Neutralization	Rinsing		
0008	OK	15 min	OK	OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<b>Performed by:</b> DIEGUES, DIOGO <b>Date:</b> 09/12/2024 <b>Signature</b> 	<b>QA/QC Inspection:</b> RAIMUNDO, MARIANA <b>Date:</b> 10/12/2024 15:46:35 <b>Signature</b> 	<b>Customer Inspection:</b> Sergio Morales <b>Date:</b> 11-12-24 
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16/12/2024  
On behalf of Tecnimont (R)  
QC Welding Inspector

GABRIEL BONFILATU  
WT&WW's Responsible  
ISO EN 9712 certification Level 2  
VTIPTMVR/TUT-OFD-PA