



Tecnimont S.p.A.

REPSOL POLIMEROS
SA

4274_CONST

ALBA PROJECT-PP AND PEL PLANTS



MOD-ITP-XL_220		RELEASE OF SPOOLS FROM WORKSHOP	Report n° IP-WSR-P-310-000425_RFI5581_MOD-ITP-XL_220
Rev.1			RFI Nr.: Date :
Unit	-		
Plant Area	-		
Isometric Number			
Inspection Package Number	IP-WSR-P-310-000425_RFI5581 - IP Spool Release From Workshop		

Sheet 01/01

The Present Inspection Package contains the following Elements:

7111-IA91F42-1-SP02-00048;7111-IA91F42-1-SP01-00047;2211-PEP71A02-1-SP03-01133;2211-PEP71A02-1-SP02-00429;2211-PEP71A02-1-SP01-00428;2211-LO70B01-1-SP03-00384;2211-LO70B01-1-SP02-00383;2211-LO70B01-1-SP01-00382;2211-DMW91Q01-2-SP01-03070;2211-DMW91Q01-5-SP11-03073;2211-DMW91Q01-5-SP10-03072;2211-DMW91Q01-2-SP07-03065;2211-DMW91Q01-2-SP06-03064;2211-DMW91Q01-2-SP05-03063;2121-LO40B03-5-SP10-01005;2121-LO40B03-4-SP11-01004;2121-LO40B03-4-SP09-01003;2121-LO40B03-4-SP08-01154;2121-LO40B03-3-SP07-01002;2121-LO40B03-3-SP06-01001;2121-LO40B02-4-SP14-01152;2121-LO40B02-4-SP13-01151;2121-LO40B02-4-SP12-00507;1211-PCW89010-1-SP03-00287;1211-PCV89010-1-SP02-00286;1211-PCW89010-1-SP01-00285;1211-N81030-2-SP07-01061;1211-N81030-2-SP04-00956;1211-N81030-2-SP03-00955;1211-N81030-2-SP02-00954;1211-N81030-2-SP01-00953;1211-LS89046-2-SP03-00298;1211-LS89046-1-SP02-00297;1211-LS89046-1-SP01-00296;1211-LO89003-1-SP02-00947;1211-LO89003-1-SP01-00946;1211-DMW64001-4-SP10-03059;1211-DMW64001-4-SP09-03058;1211-DMW64001-4-SP08-03057;1127-PN52030-1-SP01-00833;1126-LO32010-1-SP04-00847;1126-LO32010-1-SP03-00846;1126-LO32010-1-SP02-00845;1126-LO32010-1-SP01-00844;1126-LO32009-1-SP02-00843;1126-LO32009-1-SP01-00842;1115-DMW63001-2-SP02-03077

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)

On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu

LEGEND OF CHECK RESULT	<input checked="" type="checkbox"/> Checked & NOT Accepted	<input type="checkbox"/> Checked & Accepted	N.A.	Not Applicable	Y / N	Punch List Produced
			Date [DD-MMM-YYYY]	Name	Signature	
SUBCONTRACTOR	29-10-2024	Sergio Morales Collantes			 Sergio Morales Collantes Tecnicmont Industrial B-43977950	
CONTRACTOR						
COMPANY						
(Free)						



Tecnimont S.p.A.

4274_CONST

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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 to EC-L-51.01 and EC-L-51.02" and **4274-XH-PQ-00000001** (COMPANY 45-L-45-000-2-00-80081) "Inspection and Test Plan for Steel Piping Works"

On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu

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
			Date [DD-MMM-YYYY]	Name	Signature	
SUBCONTRACTOR	29-10-2024			Sergio Morales Collantes		
CONTRACTOR						
COMPANY						
(Free)						

 Tecnimont	<p style="text-align: center;">Punch List</p> <p style="text-align: center;">PUNCH LIST</p>	<p style="text-align: center;">IDENTIFICATION CODE</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			
 MECWIDE <small>Engineering Solutions</small>	<p>ISO ID: 2121-LO40B02-4</p>				

NOTES AND REMARKS

On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 *C. Sandu*

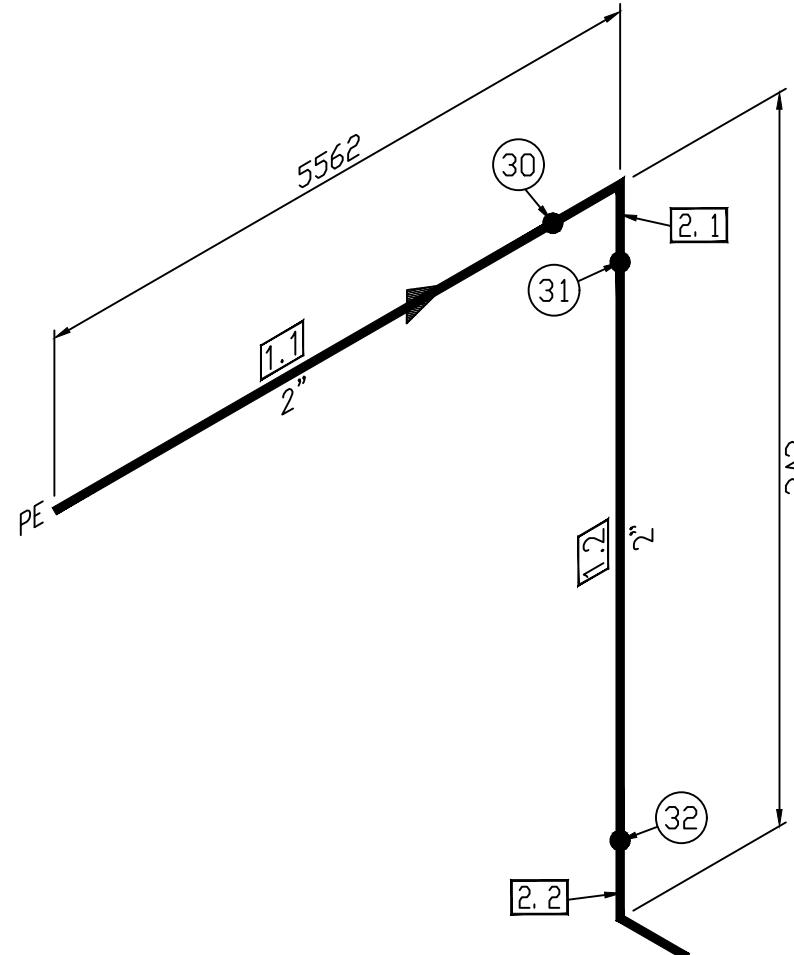
	DATE (dd-Mmm-YYYY)	NAME	SIGNATURE
SUBCONTRACTOR			
CONTRACTOR			
COMPANY			
(Free)			

This document is Technimon's property, and cannot be used by others for any purpose without prior written consent.

ALL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1-1/2" AND SMALLER SHALL BE CHECKED IN FIELD BEFORE CONSTRUCTION
FOR THE COMPONENT MARKED AS FIELD WELDED, ONE WELDED, ONE FOR ADJUSTMENT OF IN-LINE COMPONENT MUST BE LEFT
GUSSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER SPECIFICATION 4048-XH-SG-0000000000000001



100

<div style="text-align: center; padding: 10px;">   </div>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="6" style="text-align: center;">BILL OF MATERIAL</th> </tr> <tr> <th colspan="6" style="text-align: center;">PIPE</th> </tr> <tr> <th>ITEM</th> <th>LONGUEUR</th> <th>DIAMÉTRE</th> <th>SCH/mm</th> <th>DESCRIPTION / MATERIEL</th> <th>ITEM CODE</th> </tr> </thead> <tbody> <tr> <td>1.1</td> <td>5,484</td> <td>2"</td> <td>S-10s</td> <td>PIPE - A312-TP304/304L DUAL GR SMLS, PExBE</td> <td>I3364302</td> </tr> <tr> <td>1.2</td> <td>0,186</td> <td>2"</td> <td>S-10s</td> <td>PIPE - A312-TP304/304L DUAL GR SMLS, BExBE</td> <td>I3364302</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="6" style="text-align: center;">WELD FITTINGS</th> </tr> <tr> <th>ITEM</th> <th>QT</th> <th>DIAMÉTRE</th> <th>SCH/PRESS.</th> <th>DESCRIPTION / MATERIEL</th> <th>ITEM CODE</th> </tr> </thead> <tbody> <tr> <td>2.1</td> <td>1</td> <td>2"</td> <td>S-10s</td> <td>90 LR ELBOW ASME B16.9 A403-WP304/304L DG BE SMLS</td> <td>I2259133</td> </tr> <tr> <td>2.2</td> <td>1</td> <td>2"</td> <td>S-10s</td> <td>90 LR ELBOW ASME B16.9 A403-WP304/304L DG BE SMLS</td> <td>I2259133</td> </tr> </tbody> </table> <div style="text-align: right; margin-right: 10px;"> P2308S 00507  2121-LO40B02-4-SP12-00507 </div> <div style="text-align: right; margin-right: 10px;">  </div> <div style="text-align: right; margin-right: 10px;"> Weld Map Sticker </div>	BILL OF MATERIAL						PIPE						ITEM	LONGUEUR	DIAMÉTRE	SCH/mm	DESCRIPTION / MATERIEL	ITEM CODE	1.1	5,484	2"	S-10s	PIPE - A312-TP304/304L DUAL GR SMLS, PExBE	I3364302	1.2	0,186	2"	S-10s	PIPE - A312-TP304/304L DUAL GR SMLS, BExBE	I3364302	WELD FITTINGS						ITEM	QT	DIAMÉTRE	SCH/PRESS.	DESCRIPTION / MATERIEL	ITEM CODE	2.1	1	2"	S-10s	90 LR ELBOW ASME B16.9 A403-WP304/304L DG BE SMLS	I2259133	2.2	1	2"	S-10s	90 LR ELBOW ASME B16.9 A403-WP304/304L DG BE SMLS	I2259133
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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
P2308S 00507 2121-LO40B02-4-SP12-00507		2121-LO40B02-4		00			
1.2	,186	2.0000 S10S	0.0000 NA	PIPE, SEAMLESS, A312-TP304L	S-23594 0357	3,93	0,73
40391							
1.1	5,484	2.0000 S10S	0.0000 NA	PIPE, SEAMLESS, A312-TP304L	S-23594 0357	3,93	21,55
40391							
2.1	1	2.0000 S10S	0.0000 NA	90 LR ELL, SEAMLESS, A403-WP304L	M220696 0410	0,49	0,49
42965							
2.2	1	2.0000 S10S	0.0000 NA	90 LR ELL, SEAMLESS, A403-WP304L	M220696 0410	0,49	0,49
42965							

On behalf of Tecnimont / R
 Piping Supervisor
 Cristi Sandu
 29.10.2024 *C. Sandu*

Number of Items : 4 Total Weight : 23,26

Signature	QA	Client
	Date	Date
	 QA / QC	Sergio Morales Date: 21-10-24 

CTA Group	Kg 1138	Mt 305,57	Pz No.: 49
This document is reproduced by a computerized system and is conform to the original	Heat No.: S-23594	Cta's job: OC0000319	Date: 29/02/2024
Customer : TECNIMONT SPA AFC	P.O. No.: PO:		Item: I3364302

12

7500118753 N.PRO: 4274 - PP+PE SINES (PORTUGAL) EPC



F / QA / 24

REV. NO. 10

WORKS :
 Survey No. 779/A, Thol, Kadi - Sanand Highway,
 Tal.-Kadi, Dist. Mehsana, Gujarat (India)
 Tel. : (02764) 274216 / 27417 Fax : (02764) 274419
 Email : quality@surajgroup.com
 Visit us at www.surajgroup.com

INSPECTION CERTIFICATE

In Accordance with EN 10204/3.1

Customer: Commerciale Tubi Acciaio S.P.A.	T.C No : 680	Date: 26.03.2022
Product : Austenitic S.S Seamless Cold Finish,Solution Annealed,Pickled & Passivated Pipes.	P.O.No : OS-0000175	Date: 14.10.2021
	W.O.No : 2122/OEP400035	Date: 16.10.2021

Sr. No	Specification	Grade	Heat No.	Dimensions		Quantity			Hydro Test Pressure (Psi)
				NPS	SCH	Length Mtr	Pcs	Total Meter	
27	ASTM A-312 Ed.2019 SA-312 of ASME Sec.II Part "A" Ed.2019 ASME B36.19, EN 10216-5 TC1 NACE MR 0175/ISO 15156, NACE MR 0103	TP 304/304L 1.4301/ 1.4307	S-23594	2	10S	RL	171	1075.220	1400

Chemical Analysis %

Heat No.	Required	C	Mn	P	S	Si	Cr	Ni	Mo	N	Ti
	Min	--	--	--	--	--	18.00	8.00	--	--	--
	Max	0.030	2.00	0.040	0.015	1.00	19.50	10.00	--	0.100	--
S-23594	Heat Analysis	0.025	1.72	0.038	0.008	0.41	18.20	8.08	--	0.079	--

Mechanical Test

Heat No.	Required			Gauge Width	Flattening Test	Hardness Test	Impact Test		IGC Test					
	Tensile strength Mpa	Yield strength					Max-90 HRB	100 Joule Min.(AVG)	ASTM A-262 Practice"E" & ISO 3651-2 Method "A"					
		Rp0.2% Mpa	Rp1 % Mpa						N/A					
MAX	690	--	--	--										
MIN	515	205	230	40										
S-23594	624.31	316.22	322.57	55.21	25.40	Satisfactory	76-78							
	623.05	315.91	320.42	54.89			73-75							

Heat Treatment : Solution annealing conducted at 1045-1060°C temperature and rapid water quenching after final cold process.

Marking on pipes: SURAJ LTD SPECIFICATION GRADE SIZE

CFD EN 10216-5 TC1 EN GRADE SL NO. _____ HEAT NO. _____ P O NO. _____

Remarks:

- * 100% Hydro test done at required pressure for 10 second holding time found satisfactory without any leakage.
- * 100% Visual, Dimensions(OD/THK/LENGTH) & Product Marking checked-satisfy the requirement of specification.
- * 100% Positive Material Identification (PMI) done by SL & conforming to grade as per specification.
- * Intergranular Corrosion Test (IGC) Conducted as per ASTM A262 Pr"E" & ISO 3651-2 method-A-No crack observed on bend portion at 20X.
- * Pickling and Passivation Conducted as per ASTM A-380.
- * "Approved acc.to AD 2000-MERKBLATT W0 and certified acc.to PED (2014/68/EU) by certification body for pressure equipment of TUV NORD SYSTEMS (NOTIFIED BODY,REG NO.;0045)"
- * Tensile test piece taken from the same lot as certified and tested in longitudinal direction.
- * Melting process:EIF+AOD & Material is free of mercury & radioactive contamination.

Prepared by

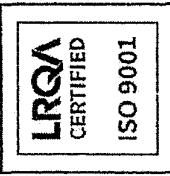
COMMERCIALE TUBI ACCIAIO S.P.A.
QUALITY CONTROL DEPARTMENT

SURAJ LTD
THOL
For, Suraj Limited.
C.I.Nayak
Dept,Head Quality

Page no. 01 of 12

We hereby certify that the material described herein are in accordance with the specification and results comply with the requirements of the purchase order.

APPLUS OBO TCM
28 03 24



Approved No:1509001-00400
RCO Cert No:0343/P/2014/UW/101007/3

INSPECTION CERTIFICATE



RACCORDI TUBI S.P.A.

Order No.: 22TEC003
(注文番号)

P.O. No. : 000000150 S

Chemical Composition of Pipe (Raw Material) %

MARCH 2015 VOL 42 / NO 3

/EN 10204-3.1 PED 2014/68/EU ANNEX I SECTION 4.3

HEAT TREATMENT 1050 DEGREE CELCIUS QUENCHED IN WATER WITHIN 1 MINUTES TO

MATERIAL WAS MANUFACTURED, SAMPLED, TESTED AND INSPECTED IN ACCORDANCE WITH INDICATED SPECIFICATIONS AND WAS FOUND TO MEET THE REQUIREMENTS. NO WELD REPAIR WAS PERFORMED AND ALL ITEMS SUPPLIED ARE FREE OF WELD REPAIR.
MATERIAL IS FREE OF MERCURY CONTAMINATION AND RADIOACTIVITY.

We herewith certify that the above products meet the requirements of the relevant standard and of the customer order.

(この製品は、当社規格及び、注文の要件に適合するところを確認する。)

We herewith certify that the above products meet the requirements of the relevant standard and of the customer order.

Head of QA/QC Dept.
QA/QC 部門經理

Customer:

TECNIMONT S.p.A.

Order: 7500118979 - 26.01.24 - Item n.: 61 - Project: 4274 - PP+PE Sines (Portugal) EPC - Our ref.: OCVEIT202400000474

Description:

CURVE 90° LR 2" SCH.10/S SEAMLESS
I2259133

raccortubi

Heat num. or Pcs. marking: M220696 - Qty:71,000

Protocol: CTCERC202400003104 * CERTIFIED TRUE COPY
* Issued 03-04-2024



Contract : P2300

Drawing : 2121-LO40B02-4

Welding and QC Report Per Spool

Job : P2300S

Material : Stainless Steel 304, 316, 317

Client : NERVION

Revision : 00

Spool : 00507

Spec : QXB-55-M

Project : ALBA

Piece Mark : 2121-LO40B02-4-SP12-00507

Weld data

Welding

Control

Weld No.	Type	Dia	Sch	Weld /Thk	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
0030	BW	2	S10S	MW.26_BW	AE	04-07-2024	4712055	AE	04-07-2024	4712055		000791	12-08-2024					000877	07-09-2024										
0031	BW	2	S10S	MW.26_BW	AE	04-07-2024	4712055	AE	04-07-2024	4712055		000791	12-08-2024					000877	07-09-2024										
0032	BW	2	S10S	MW.26_BW	AE	04-07-2024	4712055	AE	04-07-2024	4712055		000791	12-08-2024					000877	07-09-2024										

On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu

Notes:

Boccard Portugal QC	Client
 Sergio Morales	Date: 21-10-24
11-09-2024 16:19:46	



Shop QC Inspection Report

P2308-000815

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

Job number: P2308S
 Spool N°: 00507
 Piece Mark: 2121-LO40B02-4-SP12-00507

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

Control Date: 12-08-2024

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	<input type="checkbox"/>	X	<input type="checkbox"/>
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: 12-08-2024 Signature 	QA/QC Inspection: RAIMUNDO, MARIANA Date: 11-09-2024 16:19:46 Signature 	Customer Inspection: Sergio Morales Date: 21-10-24 
--	---	--

On behalf of Tecnimont / R
 Piping Supervisor
 Cristi Sandu
 29.10.2024 

Visual Examination Report (Welds)

P2308-000791

Contract : P2308

Job number: P2308S

Material: Stainless Steel 304, 316, 317

Client : NERVION

Spool Nº: 00507

Procedure & Instructions: 4274-LZ-VF-W31010370QAC04 - Rev: 1

Project : ALBA

Piece Mark: 2121-LO40B02-4-SP12-00507

Testing Date: 12-08-2024

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

Weld No.	Weld Desc.	Welder	Temp. (°F/°C)	Technique Used			Comments
				Accepted	Rejected	Defect	
0030	2.0000 S10S BW-Buttweld Straight (MW.26_BW)	AE	26	X			Direct
0031	2.0000 S10S BW-Buttweld Straight (MW.26_BW)	AE	26	X			Direct
0032	2.0000 S10S BW-Buttweld Straight (MW.26_BW)	AE	26	X			Direct

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: 12-08-2024

Date: 11-09-2024 16:19:46

Sergio Morales

Signature



Signature



Date: 21-10-24


On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu



Positive Material Identification Report (PMI)

P2308-000877

Client : NERVION

Contract : P2308 / Project : ALBA

Remarks: The results refer to the controlled items

Job number: P2308S

Spool N°: 00507

Piece Mark: 2121-LO40B02-4-SP12-00507

Material: Stainless Steel 304, 316, 317

Procedure / Instruction reference: 4274-LZ-VF-W31010370QAC11 - Rev: 1

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

Equipment Deviation : + - 5%

Testing Date: 07-09-2024

Weld / Item No	Description	Reading Number	Chemical Elements										Accepted	Rejected	Comments
			%Ti	%Mo	%Cu	%Ni	%Fe	%Mn	%Cr	%Nb	%Al	%V			
0030	2.0000 S10S BW-Buttweld Straight (MW.26_BW)	533	0	0	0	8	69	1	19	0	0	0	X		
0031	2.0000 S10S BW-Buttweld Straight (MW.26_BW)	531	0	0	0	8	69	1	19	0	0	0	X		
0032	2.0000 S10S BW-Buttweld Straight (MW.26_BW)	529	0	0	0	8	69	1	19	0	0	0	X		
1.1	2.0000 S10S PIPE, SEAMLESS, A312-TP304L (S-23594)	534	0	0	0	8	71	1	17	0	0	0	X		
1.2	2.0000 S10S PIPE, SEAMLESS, A312-TP304L (S-23594)	530	0	0	0	7	71	1	18	0	0	0	X		
2.1	2.0000 S10S 90 LR ELL, SEAMLESS, A403-WP304L (M220696)	532	0	0	0	8	70	1	18	0	0	0	X		
2.2	2.0000 S10S 90 LR ELL, SEAMLESS, A403-WP304L (M220696)	528	0	0	0	7	71	1	18	0	0	0	X		

On behalf of Tecnimont / R
 Piping Supervisor
 Cristi Sandu
 29.10.2024 

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

Customer Inspection:

Date: 07-09-2024

Date: 11-09-2024 16:19:46

Date:

Sergio Morales

Signature



Signature



Signature

Date: 21-10-24



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

Certificate of PMI Reading

XL3t-32735

Reading No	533
Mode	ALLOY
Time	2024-09-07 10:51
Duration	7.12
Sequence	Final
Alloy1	304SS : 0.64
Alloy2	No Match : 1.76
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.059
Sn	< LOD	:	0.069
Pd	< LOD	:	0.054
Ag	< LOD	:	0.176
Al	< LOD	:	80.000
Mo	0.037	±	0.010
Nb	< LOD	:	0.011
Zr	< LOD	:	0.006
Bi	< LOD	:	0.002
Pb	< LOD	:	0.013
Se	< LOD	:	0.012
W	< LOD	:	0.156
Zn	< LOD	:	0.042
Cu	< LOD	:	0.203
Ni	8.512	±	0.398
Co	< LOD	:	0.664
Fe	69.730	±	0.612
Mn	1.525	±	0.273
Cr	19.324	±	0.359
V	< LOD	:	0.185
Ti	< LOD	:	0.218

Sergio Morales

Date: 21-10-24



On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu

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

Certificate of PMI Reading

XL3t-32735

Reading No	531
Mode	ALLOY
Time	2024-09-07 10:51
Duration	9.90
Sequence	Final
Alloy1	304SS : 0.64
Alloy2	No Match : 1.69
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.041
Sn	< LOD	:	0.056
Pd	< LOD	:	0.043
Ag	< LOD	:	0.148
Al	< LOD	:	80.000
Mo	0.042	±	0.009
Nb	< LOD	:	0.008
Zr	< LOD	:	0.005
Bi	< LOD	:	0.005
Pb	< LOD	:	0.023
Se	< LOD	:	0.010
W	< LOD	:	0.103
Zn	< LOD	:	0.030
Cu	< LOD	:	0.165
Ni	8.683	±	0.329
Co	< LOD	:	0.541
Fe	69.888	±	0.500
Mn	1.678	±	0.226
Cr	19.049	±	0.292
V	< LOD	:	0.149
Ti	< LOD	:	0.182

Sergio Morales

Date: 21-10-24



On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu

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

Certificate of PMI Reading

XL3t-32735

Reading No	529
Mode	ALLOY
Time	2024-09-07 10:50
Duration	18.68
Sequence	Final
Alloy1	304SS : 1.02
Alloy2	No Match : 1.68
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.033
Sn	< LOD	:	0.038
Pd	< LOD	:	0.030
Ag	< LOD	:	0.164
Al	< LOD	:	80.000
Mo	0.037	±	0.006
Nb	< LOD	:	0.006
Zr	< LOD	:	0.003
Bi	< LOD	:	0.006
Pb	< LOD	:	0.011
Se	< LOD	:	0.004
W	< LOD	:	0.074
Zn	< LOD	:	0.024
Cu	< LOD	:	0.117
Ni	8.749	±	0.231
Co	< LOD	:	0.379
Fe	69.527	±	0.350
Mn	1.885	±	0.161
Cr	19.142	±	0.205
V	< LOD	:	0.102
Ti	< LOD	:	0.130

Sergio Morales



Date: 21-10-24

On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu

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

Certificate of PMI Reading

XL3t-32735

Reading No	534
Mode	ALLOY
Time	2024-09-07 10:51
Duration	9.21
Sequence	Final
Alloy1	304SS : 1.35
Alloy2	No Match : *2.00
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.046
Sn	< LOD	:	0.059
Pd	< LOD	:	0.043
Ag	< LOD	:	0.196
Al	< LOD	:	80.000
Mo	< LOD	:	0.009
Nb	< LOD	:	0.006
Zr	< LOD	:	0.005
Bi	< LOD	:	0.015
Pb	< LOD	:	0.009
Se	< LOD	:	0.009
W	< LOD	:	0.112
Zn	< LOD	:	0.035
Cu	< LOD	:	0.162
Ni	8.233	±	0.332
Co	< LOD	:	0.557
Fe	71.709	±	0.511
Mn	1.428	±	0.225
Cr	17.935	±	0.291
V	< LOD	:	0.147
Ti	< LOD	:	0.171

Sergio Morales

Date: 21-10-24



On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu

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

Certificate of PMI Reading

XL3t-32735

Reading No	530
Mode	ALLOY
Time	2024-09-07 10:50
Duration	15.75
Sequence	Final
Alloy1	304SS : 0.94
Alloy2	No Match : 1.99
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.036
Sn	< LOD	:	0.045
Pd	< LOD	:	0.033
Ag	< LOD	:	0.195
Al	< LOD	:	80.000
Mo	0.043	±	0.007
Nb	< LOD	:	0.006
Zr	< LOD	:	0.003
Bi	< LOD	:	0.007
Pb	< LOD	:	0.015
Se	< LOD	:	0.009
W	< LOD	:	0.089
Zn	< LOD	:	0.028
Cu	0.173	±	0.067
Ni	7.994	±	0.244
Co	< LOD	:	0.414
Fe	71.611	±	0.378
Mn	1.384	±	0.167
Cr	18.010	±	0.217
V	0.161	±	0.059
Ti	< LOD	:	0.122

Sergio Morales

Date: 21-10-24



On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu

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

Certificate of PMI Reading

XL3t-32735

Reading No	532
Mode	ALLOY
Time	2024-09-07 10:51
Duration	8.10
Sequence	Final
Alloy1	304SS : 0.90
Alloy2	No Match : 1.64
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.048
Sn	< LOD	:	0.067
Pd	< LOD	:	0.050
Ag	< LOD	:	0.172
Al	< LOD	:	80.000
Mo	0.046	±	0.011
Nb	< LOD	:	0.010
Zr	< LOD	:	0.008
Bi	< LOD	:	0.005
Pb	< LOD	:	0.003
Se	< LOD	:	0.009
W	< LOD	:	0.147
Zn	< LOD	:	0.046
Cu	0.298	±	0.113
Ni	8.099	±	0.376
Co	< LOD	:	0.635
Fe	70.861	±	0.581
Mn	1.674	±	0.262
Cr	18.194	±	0.334
V	< LOD	:	0.181
Ti	< LOD	:	0.213

Sergio Morales

Date: 21-10-24



On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu

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

Certificate of PMI Reading

XL3t-32735

Reading No	528
Mode	ALLOY
Time	2024-09-07 10:50
Duration	5.49
Sequence	Final
Alloy1	301SS : 2.06
Alloy2	No Match : *2.28
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.071
Sn	< LOD	:	0.081
Pd	< LOD	:	0.061
Ag	< LOD	:	0.210
Al	< LOD	:	80.000
Mo	< LOD	:	0.012
Nb	< LOD	:	0.007
Zr	< LOD	:	0.007
Bi	< LOD	:	0.026
Pb	< LOD	:	0.037
Se	< LOD	:	0.011
W	< LOD	:	0.155
Zn	< LOD	:	0.031
Cu	< LOD	:	0.198
Ni	7.459	±	0.437
Co	< LOD	:	0.774
Fe	71.244	±	0.697
Mn	1.834	±	0.320
Cr	18.363	±	0.403
V	< LOD	:	0.229
Ti	< LOD	:	0.196

Sergio Morales

Date: 21-10-24



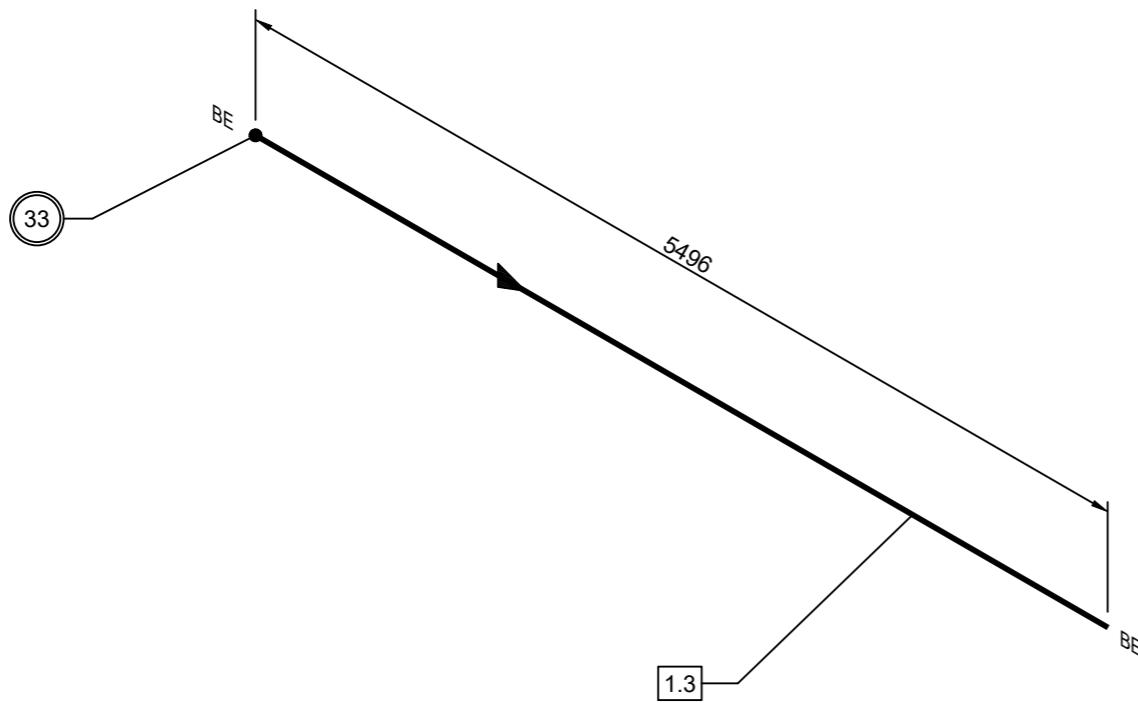
On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu



BILL OF MATERIAL

PIPE

ITEM	LONGUEUR	DIAMÈTRE	SCH/mm	DESCRIPTION / MATÉRIEL	ITEM CODE
1.3	5,496	2"	S-10S	PIPE - A312-TP304/304L DUAL GR SMLS, BExBE	I3364302



On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C Sandu

Rev.	Date	DRW	Check 1	Check 2	
					Marking Color: GREEN
					Weld Class: QXB-55-M
00	01/10/2024	RHA	AZA		Paint System: NR

Sergio Morales

Date: 21-10-24

Weld Map Sticke

P2308S 01151



2121-LO40B02-4-SP13-01151



Spool Material List

Contract : P2308

Client NERVION

Job : P2308S

Project ALBA

Job	Spool	Piece Mark	Drawing	Rev				
Item No	Qty	Size1	Sch1	Size2	Description	Heat No	Unit	Weight
Tag No						MTR No	Weight	Kgs
ID No						Folder No		
P2308S	01151	2121-LO40B02-4-SP13-01151	2121-LO40B02-4	00				
1.3	5,496	2.0000	S10S	0.0000	NA PIPE, SEAMLESS, A312-TP304L	NY231216AS15 0391	3,93	21,60
40391								

On behalf of Tecnimont / R
 Piping Supervisor
 Cristi Sandu
 29.10.2024 *C. Sandu*

Number of Items : 1 Total Weight : 21,60

Signature	QA	Client
		Sergio Morales Date: 21-10-24
Date	2024-10-15 14:53:24	



Contract : P2300

Drawing : 2121-LO40B02-4

Welding and QC Report Per Spool

Job : P2300S

Material : Stainless Steel 304, 316, 317

Client : NERVION

Revision : 00

Project : ALBA

Piece Mark : 2121-LO40B02-4-SP13-01151

Spec : QXB-55-M

Weld data				Welding												Control															
Weld No.	Type	Dia	Sch	Weld /Thk	1st Proc.	Pass	1st Pass	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
0033	SP	2	S10S										001105	09-10-2024																	

On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu

Notes:

Boccard Portugal QC	Client
	Sergio Morales Date: 21-10-24
15-10-2024 14:53:24	



Shop QC Inspection Report

P2308-001141

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

Job number: P2308S
 Spool N°: 01151
 Piece Mark: 2121-LO40B02-4-SP13-01151

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

Control Date: 09-10-2024

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	<input type="checkbox"/>	X	<input type="checkbox"/>
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: 09-10-2024 Signature 	QA/QC Inspection: RAIMUNDO, MARIANA Date: 15-10-2024 14:53:24 Signature 	Customer Inspection: Sergio Morales Date: 21-10-24 
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On behalf of Tecnímont / R
 Piping Supervisor
 Cristi Sandu
 29.10.2024 

Visual Examination Report (Welds)

P2308-001105

Contract : P2308

Job number: P2308S

Material: Stainless Steel 304, 316, 317

Client : NERVION

Spool Nº: 01151

Procedure & Instructions: 4274-LZ-VF-W31010370QAC04 - Rev: 1

Project : ALBA

Piece Mark: 2121-LO40B02-4-SP13-01151

Testing Date: 09-10-2024

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

Weld No.	Weld Desc.	Welder	Temp. (°F/°C)	Accepted	Rejected	Defect	Technique Used	Comments
0033	2.0000 S10S SP-Pipe/Fitting Without Weld ()		20	X			Direct	

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: 09-10-2024

Date: 15-10-2024 14:53:24

Sergio Morales

Signature



Signature



Date: 21-10-24


On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu



Positive Material Identification Report (PMI)

P2308-001175

Client : NERVION
 Contract : P2308 / Project : ALBA

Remarks: The results refer to the controlled items

Job number: P2308S

Spool N°: 01151

Piece Mark: 2121-LO40B02-4-SP13-01151

Material:

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

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

Equipment Deviation : + - 5%

Testing Date: 14-10-2024

Weld / Item No	Description	Reading Number	Chemical Elements										Accepted	Rejected	Comments
			%Ti	%Mo	%Cu	%Ni	%Fe	%Mn	%Cr	%Nb	%Al	%V			
1.3	2.0000 S10S PIPE, SEAMLESS, A312-TP304L (NY231216AS15)	21	0	0	0	7	71	1	17	0	0	0	<input checked="" type="checkbox"/> X	<input type="checkbox"/>	

On behalf of Tecnimont / R
 Piping Supervisor
 Cristi Sandu
 29.10.2024 C. Sandu

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

Date: 14-10-2024

Signature



Date: 15-10-2024 14:53:24

Signature



Customer Inspection:

Sergio Morales

Date:



Signature

Date: 21-10-24

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

Certificate of PMI Reading

XL3t-32735

Reading No	21
Mode	ALLOY
Time	2024-10-14 09:13
Duration	12.83
Sequence	Final
Alloy1	301SS : 1.75
Alloy2	No Match : *2.27
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.036
Sn	< LOD	:	0.044
Pd	< LOD	:	0.033
Ag	< LOD	:	0.165
Al	< LOD	:	80.000
Mo	0.015	±	0.005
Nb	< LOD	:	0.004
Zr	< LOD	:	0.005
Bi	< LOD	:	0.007
Pb	< LOD	:	0.012
Se	< LOD	:	0.007
W	< LOD	:	0.075
Zn	< LOD	:	0.029
Cu	< LOD	:	0.128
Ni	7.988	±	0.254
Co	< LOD	:	0.431
Fe	71.803	±	0.391
Mn	1.641	±	0.176
Cr	17.759	±	0.223
V	0.122	±	0.058
Ti	< LOD	:	0.123

Sergio Morales

Date: 21-10-24



On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu

Spool Material List

Contract : P2308

Client NERVION

Job : P2308S

Project ALBA

Job	Spool	Piece Mark	Drawing	Rev				
Item No	Qty	Size1	Sch1	Size2	Description	Heat No	Unit	Weight
Tag No						MTR No	Weight	Kgs
ID No						Folder No		
P2308S	01152	2121-LO40B02-4-SP14-01152	2121-LO40B02-4	00				
1.4	5,17	2.0000	S10S	0.0000	NA PIPE, SEAMLESS, A312-TP304L	NY231216AS15	3,93	20,32
						0391		
40391								

On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu

Number of Items : 1 Total Weight : 20,32

Signature	QA	Client
	 QC	Sergio Morales  Date: 21-10-24
Date		



Contract : P2300

Drawing : 2121-LO40B02-4

Welding and QC Report Per Spool

Job : P2300S

Material : Stainless Steel 304, 316, 317

Client : NERVION

Revision : 00

Project : ALBA

Piece Mark : 2121-LO40B02-4-SP14-01152

Spec : QXB-55-M

Weld data

Welding

Control

Weld No.	Type	Dia	Sch	Weld /Thk	1st Proc.	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
0034	SP	2	S10S									001100	09-10-2024																

On behalf of Tecnimont / R
 Piping Supervisor
 Cristi Sandu
 29.10.2024 C. Sandu

Notes:

Boccard Portugal QC	Client
GIL, Boccard Portugal AO/QC	Sergio Morales Date: 21-10-24



Shop QC Inspection Report

P2308-001146

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

Job number: P2308S
 Spool N°: 01152
 Piece Mark: 2121-LO40B02-4-SP14-01152

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

Control Date: 09-10-2024

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

Comments:

Performed by: MATOS, MARCO (N2 VT/PT) Date: 09-10-2024 Signature 	QA/QC Inspection: Date: Gil, Michael Signature 	Customer Inspection: Sergio Morales Date: 21-10-24 
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On behalf of Tecnimon / R
 Piping Supervisor
 Cristi Sandu
 29.10.2024 C. Sandu

Visual Examination Report (Welds)

P2308-001100

Contract : P2308

Job number: P2308S

Material: Stainless Steel 304, 316, 317

Client : NERVION

Spool Nº: 01152

Procedure & Instructions: 4274-LZ-VF-W31010370QAC04 - Rev: 1

Project : ALBA

Piece Mark: 2121-LO40B02-4-SP14-01152

Testing Date: 09-10-2024

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

Weld No.	Weld Desc.	Welder	Temp. (°F/°C)	Accepted	Rejected	Defect	Technique Used	Comments
0034	2.0000 S10S SP-Pipe/Fitting Without Weld ()		20	X			Direct	

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)

Date: 09-10-2024

Signature



QA/QC Inspection:

Date:

Signature



Customer Inspection:

Sergio Morales

Date: 21-10-24


On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu



Positive Material Identification Report (PMI)

P2308-001176

Client : NERVION
 Contract : P2308 / Project : ALBA

Remarks: The results refer to the controlled items

Job number: P2308S

Spool N°: 01152

Piece Mark: 2121-LO40B02-4-SP14-01152

Material:

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

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

Equipment Deviation : + - 5%

Testing Date: 14-10-2024

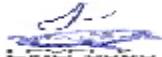
Weld / Item No	Description	Reading Number	Chemical Elements										Accepted	Rejected	Comments
			%Ti	%Mo	%Cu	%Ni	%Fe	%Mn	%Cr	%Nb	%Al	%V			
1.4	2.0000 S10S PIPE, SEAMLESS, A312-TP304L (NY231216AS15)	22	0	0	0	8	71	1	18	0	0	0	<input checked="" type="checkbox"/> X	<input type="checkbox"/>	

On behalf of Tecnimont / R
 Piping Supervisor
 Cristi Sandu
 29.10.2024 C. Sandu

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

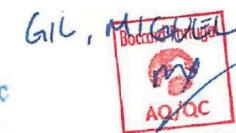
Date: 14-10-2024

Signature



Date:

Signature



Customer Inspection:

Sergio Morales

Date:

Signature

Date: 21-10-24



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

Certificate of PMI Reading

XL3t-32735

Reading No	22
Mode	ALLOY
Time	2024-10-14 09:13
Duration	15.59
Sequence	Final
Alloy1	304SS : 0.22
Alloy2	No Match : *2.11
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.028
Sn	< LOD	:	0.038
Pd	< LOD	:	0.027
Ag	< LOD	:	0.185
Al	< LOD	:	80.000
Mo	< LOD	:	0.008
Nb	< LOD	:	0.003
Zr	< LOD	:	0.004
Bi	< LOD	:	0.004
Pb	< LOD	:	0.021
Se	< LOD	:	0.006
W	< LOD	:	0.064
Zn	< LOD	:	0.021
Cu	< LOD	:	0.108
Ni	8.064	±	0.227
Co	< LOD	:	0.381
Fe	71.733	±	0.350
Mn	1.521	±	0.156
Cr	18.099	±	0.201
V	0.152	±	0.055
Ti	< LOD	:	0.120

Sergio Morales

Date: 21-10-24



On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
29.10.2024 C. Sandu