

<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

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

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		<input checked="" type="checkbox"/> Date [DD-MMM-YYYY]	Name	Signature
CONTRACTOR		<input checked="" type="checkbox"/> 18-12-2024	Sergio Morelos Gallegos	
COMPANY				
(Free)		<input checked="" type="checkbox"/> 18-12-24	Riccardo Mancino	

 <b>Tecnimont</b> <small>Engineering Construction</small>	<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 Construction</small> 	<p><b>ISO ID:</b> <span style="color: blue;">2121-VG40E02-2</span></p>				

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

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

LINE DATA										Tecnimon		PIPING ISOMETRIC		IDENTIFICATION CODE								
FLUID CODE: VG LINE NO. 2"-VG-40E02-2E63										Tecnimon		PIPING ISOMETRIC		Job	EIC	Area	N					
00A	16-05-2023	ISSUED FOR CONSTRUCTION			MW	MW	TM	PIPING MATERIAL CLASS	INSULATION	WELD CLASS	HEAT TREATMENT	PAINTING CODE	P&ID No.	PLANT: SINES INDUSTRIAL COMPLEX		CLIENT REF: REPSOL POLYMEROS		4274	XHDL	2121	VG40E02	
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 35	REFERENCES	P&ID No.	PIPE ASSEMBLY DRAWING	E C T N	19-L-19-000-2-00-86197 sheet 6	PIPING SUPPORT SPECIFICATION	E C T N	PIPING STANDARD SUPPORT SUMMARY	E C T N
		REVISION DESCRIPTION												REFERENCES	PIPE ISOMETRIC LIST	E C T N	PIPING TYPICAL INSTALLATIONS	E C T N	WELDING SPECIFICATION	E C T N		

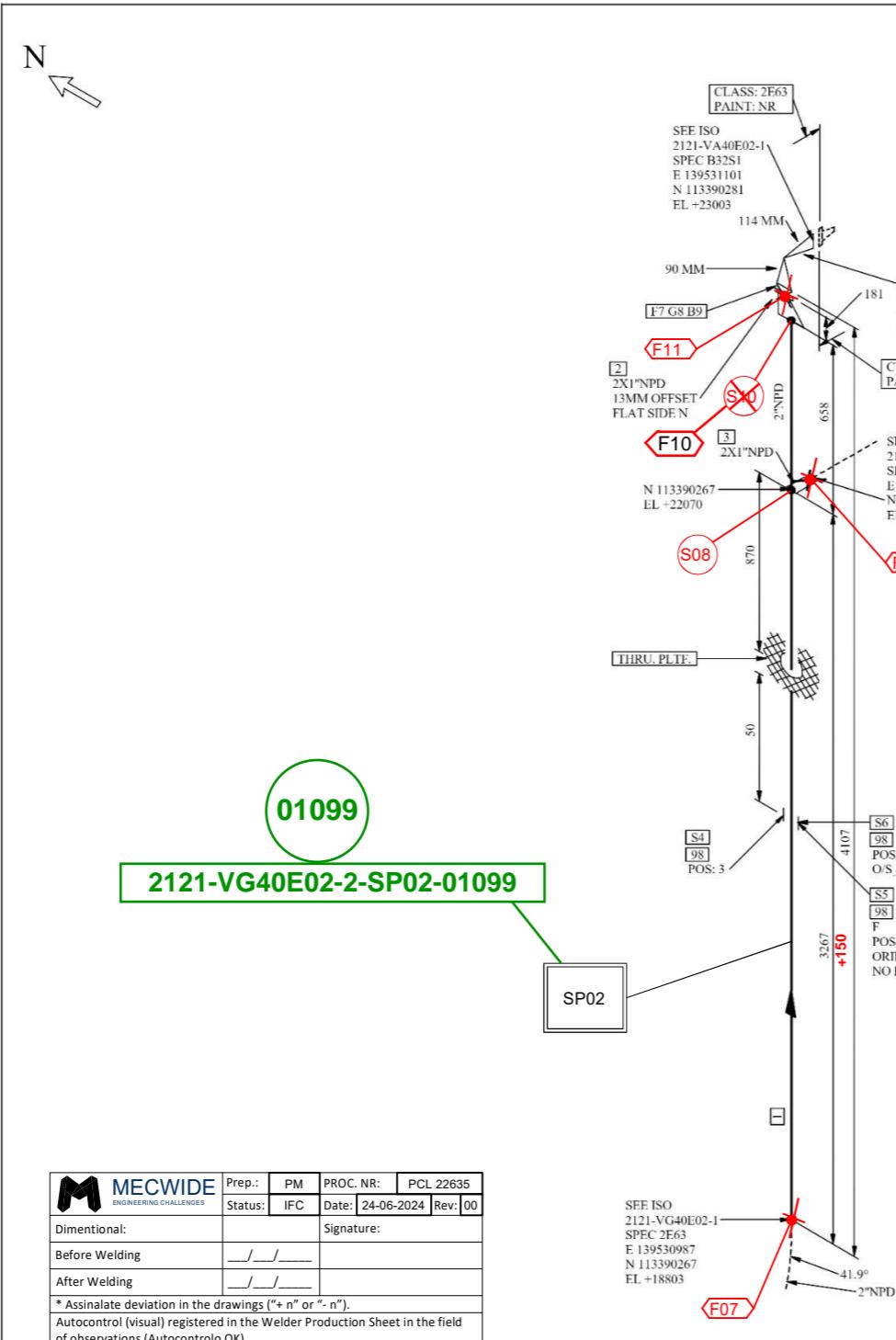
LINES 1 1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED  
FOR THE COMPONENT MARKED AS FIELD WELDED ONE WELDED FOR ADJUSTMENT OF IN-LINE COMPONENT WHERE MARKED  
FIELD WELD SYMBOL FOR ADJUSTMENT OF IN-LINE COMPONENT WHERE MARKED

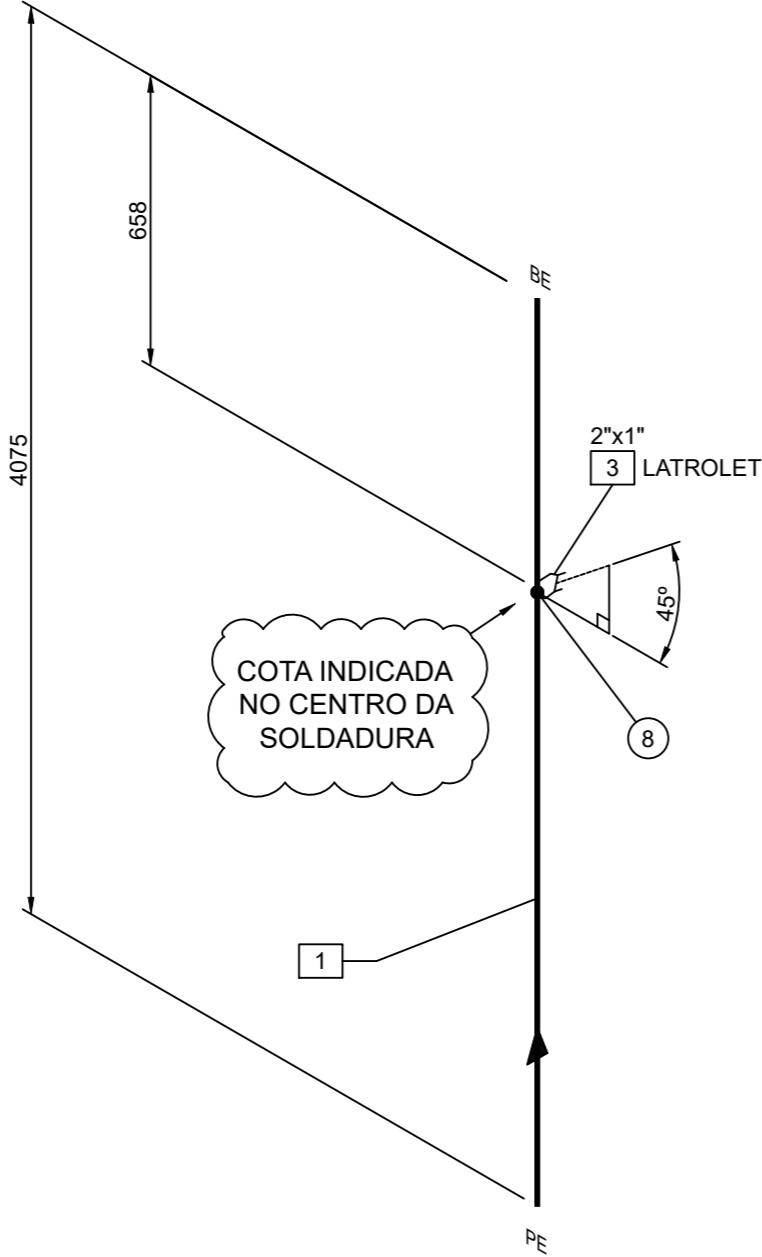
THIS DOCUMENT BELONGS TO REPSOL, IT CAN NOT BE COPIED, REPRODUCED AND/OR USED WITHOUT PREVIOUS AUTHORIZATION OF REPSOL, COMPUTERIZED DRAWING (HANDWRITING STRICTLY FORBIDDEN).

NOTES:  
1) LINES 1 1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED.  
2) ALL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1 1/2" AND SMALLER SHALL BE CHECKED IN FIELD BEFORE CONSTRUCTION.  
3) FOR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL ONE WELD FOR ADJUSTMENT OF IN-LINE COMPONENT MUST BE LEFT.  
4) FOR EXTR PIPE LENGTH REFER TO 4274-LZ-PC-00000603.  
5) GUSSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-XH-SG-00000002.  
6) CROSSING BETWEEN WELDS ON PIPELINE SHALL NOT BE ADMITTED.  
7) IN CASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS APPLICABLE, DATA SHOWN IN LINE LIST GOVERN.  
8) ACTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (REF TO 4274-LZ-PC-00000603).  
9) WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-00902 4274-NN-DW-00000002 AND ASSEMBLY NO FEA005 AND FE019.

SUPPORTS LEGEND: DENOTES PARTS LIST NO PIP SUPPORT A=RESTING SUPPORT G=GUIDE F=AXIAL STOP B=ANCHOR M=SPRING S=TEFLON PAD  
 WITHOUT NUMBERING IS INDICATED, THIS MEANS THAT THERE IS A REST DIRECTLY ON STEEL STRUCTURE.

EXTR. DATE: 22-12-2022 11:15:58 STREAM NO.:4554 STREAM REV. NO. : 7 REV. CAUSE ID:



<div style="text-align: center; padding: 10px;">    <p><b>COTA INDICADA NO CENTRO DA SOLDADURA</b></p> <p>On behalf of Tecnimont/R Piping Supervisor R. Mancino 16.Dec.24</p> <p>Sergio Morales Date: 11-12-24</p> <p>Construction Code: ASME B31.3 % RT - YES % UT - NO Hydro: NO ID Cleaning: YES Piece Mark Ref. Drawing Job # Spool # Project</p> <p>Acc Criteria: ASME B31.3 % PT - YES % FE - NO PWHT: NO OD Cleaning: YES 2121-VG40E02-1-SP01-01099 2121-VG40E02-1 P2308S 01099 REPSOL PROJETO ALBA NERVION</p> <p>Metal Tag: YES % MT - NO % PMI - YES BHN% - NO Tolerances: ASME B31.3</p> </div>																																	
<b>BILL OF MATERIAL</b> <b>PIPE</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>ITEM</th> <th>LONGUEUR</th> <th>DIAMÉTRE</th> <th>SCH/mm</th> <th>DESCRIPTION / MATÉRIEL</th> <th>ITEM CODE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4,073</td> <td>2"</td> <td>S-40S</td> <td>PIPE - A312-TP304/304L DUAL GR BUTTWELDED SMLS INTERNAL SURFACE ROUGHNESS &lt;OR= 125 RMS BExPE</td> <td>I3364292</td> </tr> </tbody> </table> <b>PIÈCES FORGÉES</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>ITEM</th> <th>QT</th> <th>DIAMÉTRE</th> <th>SCH/PRESS.</th> <th>DESCRIPTION / MATÉRIEL</th> <th>WGT_ID</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>1</td> <td>2"x1"</td> <td>S-40S</td> <td>RED 45 LATROLET MSS SP-97/AA 3000# A182-F304/304L DUAL GR BE SWE</td> <td>I2495931</td> </tr> </tbody> </table>										ITEM	LONGUEUR	DIAMÉTRE	SCH/mm	DESCRIPTION / MATÉRIEL	ITEM CODE	1	4,073	2"	S-40S	PIPE - A312-TP304/304L DUAL GR BUTTWELDED SMLS INTERNAL SURFACE ROUGHNESS <OR= 125 RMS BExPE	I3364292	ITEM	QT	DIAMÉTRE	SCH/PRESS.	DESCRIPTION / MATÉRIEL	WGT_ID	3	1	2"x1"	S-40S	RED 45 LATROLET MSS SP-97/AA 3000# A182-F304/304L DUAL GR BE SWE	I2495931
ITEM	LONGUEUR	DIAMÉTRE	SCH/mm	DESCRIPTION / MATÉRIEL	ITEM CODE																												
1	4,073	2"	S-40S	PIPE - A312-TP304/304L DUAL GR BUTTWELDED SMLS INTERNAL SURFACE ROUGHNESS <OR= 125 RMS BExPE	I3364292																												
ITEM	QT	DIAMÉTRE	SCH/PRESS.	DESCRIPTION / MATÉRIEL	WGT_ID																												
3	1	2"x1"	S-40S	RED 45 LATROLET MSS SP-97/AA 3000# A182-F304/304L DUAL GR BE SWE	I2495931																												
<span style="font-size: small;">Weld Map Sticker</span>																																	
<span style="font-size: small;">P2308S 01099</span>																																	
 <span style="font-size: small;">2121-VG40E02-2-SP02-01099</span>																																	
 <span style="font-size: small;">Alliance for success Boccard Portugal, Lda.</span>																																	

# 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 01099 2121-VG40E02-2-SP02-01099</b>		<b>2121-VG40E02-2</b>		<b>00A</b>			
1	4,073	2.0000 S40S	0.0000 NA	PIPE, SEAMLESS, A312-TP304L	A-6500 0001	5,44	22,16
40393							
3	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 :

22,68

Signature	QA	Client
	Date	Date
	 <b>QA / QC</b>	 Sergio Morales Date: 11-12-24

**TP****TUBACEX**  
GROUP
**INSPECTION CERTIFICATE  
EN 10204:2004 / 3.1**

Number: TTP/MTC-2023/0924

Rev: 00

Page: 1 of 6

Created on:  
Date: 22.06.2023Modified on:  
---**TUBACEX TUBES AND PIPES PVT LTD.**

Plot No. 131/1, Umbergaon – Sanjan Road, Umbergaon – 396171

Dist. Valsad, Gujarat, INDIA

TL: +91 260 6616200, +91 260 6616240

E-MAIL: [quality@tubacexindia.com](mailto:quality@tubacexindia.com)**CUSTOMER DESCRIPTION****CLIENT SOLD TO**

M/S. TUBACEX SERVICE SOLUTIONS, S.A.U.

**CLIENT SHIP TO****CLIENT ORDER:** 508342 DTD: 17.11.2022**TECHNIMONT PO NO.:** 7500107816**SALES ORDER:** 1202171**PROJECT:** ALBA PROJECT**END USER:** REPSOL

MATERIAL: SEAML. STAINL. STEEL PIPES.

COLD FINISHED &amp; HEAT-TREATED. PICKLED &amp; PASSIVATED ACC. TO ASTM A380.

GRADE: TP 304/304L

STANDARD:

ASTM A 312/A 312M-21 (ED.2022) PED 2014/68/EU

ASME B16.25 FIG.4

CUSTOMER SPECIFICATION:

4274-XH-SS-00000001, REV.01

COLOR CODE: 4274-XZ-SG-00000006

PMA:4274-XH-SS-0000100

ITP: TTP/QAP/2171/0329, REV.05, DT.05.06.2023

PROCEDURE NO:

TSS SAU-ALBA PROJECT/PSP/01 REV.00 PROCEDURE FOR PACKING/STORAGE AND PRESERVATION OF PRODUCT

TSS SAU-ALBA PROJECT/LSH/01 REV.00 PROCEDURE FOR LOADING/SHIPPING &amp; HANDLING

CHECK ANALYSIS

HYDROTEST: ASTM A999/A999M ASTM A312

TOLERANCE: A312: A999

RANDOM LENGTHS: 9-11.8 M / 5-9 M / 5-7 M / BEVELLED ENDS B16.25 FIG.4

DIMENSIONS: SR NO.1 - 60.33 MM OD X 3.91 MM THK - 2" X SCH 40S

DIMENSIONS: SR NO.2 - 88.90 MM OD X 3.05 MM THK - 3" X SCH 10S



Deepti Patel  
22.06.2023 \*  
Dinesh Patel.  
Dinesh Patel.

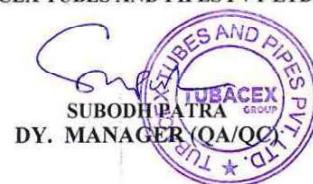


52-028

Certified Management System acc. to ISO 9001, ISO 14001 &amp; ISO 45001 by TUV-NORD

We hereby certify that the material herein described has been manufactured, sampled, tested and inspected in accordance with above standards and specifications and satisfies orders requirements. In case the owner of the certificate would release as a copy of it, he must attest its conformity to the issued, assuming the responsibility for any unlawful or TUBACEX, not allowed use. Any forgery or falsification of this certificate shall be legally prosecuted.

TUBACEX TUBES AND PIPES PVT LTD.



TTP

TUBACEX  
GROUPINSPECTION CERTIFICATE  
EN 10204:2004 / 3.1

Number: TTP/MTC-2023/0924

Rev: 00

Page: 2 of 6

Created on:  
Date: 22.06.2023Modified on:  
---

DIMENSIONS: SR NO.3 - 114.30 MM OD X 6.02 MM THK - 4" X SCH 40S  
 DIMENSIONS: SR NO.4 - 168.28 MM OD X 3.40 MM THK - 6" X SCH 10S  
 DIMENSIONS: SR NO.5 - 21.34 MM OD X 2.77 MM THK - 1/2" X SCH 40S  
 DIMENSIONS: SR NO.6 - 21.34 MM OD X 3.73 MM THK - 1/2" X SCH 80S  
 DIMENSIONS: SR NO.7 - 26.67 MM OD X 5.56 MM THK - 3/4" X SCH 160S  
 DIMENSIONS: SR NO.8 - 48.26 MM OD X 3.68 MM THK - 1.1/2" X SCH 40S  
 DIMENSIONS: SR NO.9 - 48.26 MM OD X 5.08 MM THK - 1.1/2" X SCH 80S

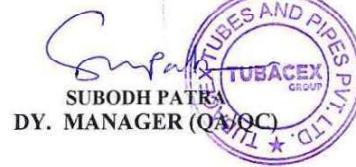
Sr. No.	Sales Item	Tr item no	Ident no	Heat No	Pieces	Weight	Total Lgth	Un Lgth
1	70	7	I3364292	A-6500	32	-	314.015	9000-11800 MM
2	90	9	I3364303	A-6630	2	-	23.300	9000-11800 MM
3	120	12	I3364294	23L0389	16	-	84.890	5000-7000 MM
3	120	12	I3364294	MT100077	4	-	24.730	5000-7000 MM
4	130	13	I3364305	MT100081	5	-	32.060	5000-7000 MM
5	180	18	I2257937	A-6500	50	-	568.800	9000-11800 MM
5	180	18	I2257937	235073	7	-	74.560	9000-11800 MM
6	190	19	I2257955	A-6500	95	-	1065.305	9000-11800 MM
7	200	20	I2514552	A-6500	9	-	96.500	9000-11800 MM
8	260	26	I2257941	A-6500	6	-	66.540	9000-11800 MM
9	270	27	I2257959	A-6500	55	-	96.500	9000-11800 MM

## RAW MATERIAL

Sr. No.	Heat No:	Method
1,5,6,7,8, 9	A-6500	EF-AOD-CCM
2	A-6630	EF-AOD-CCM
3	23L0389	EIF-AOD-CCM
3	MT100077	Electric furnace + AOD
4	MT100081	Electric furnace + AOD
5	235073	IF/AOD/CCP(EMS)/HR



TUBACEX TUBES AND PIPES PVT LTD.



Certified Management System acc. to ISO 9001, ISO 14001 &amp; ISO 45001 by TUV-NORD

We hereby certify that the material herein described has been manufactured, sampled, tested and inspected in accordance with above standards and specifications and satisfies orders requirements. In case the owner of the certificate would release as a copy of it, he must attest its conformity to the issued, assuming the responsibility for any unlawful or TUBACEX, not allowed use. Any forgery or falsification of this certificate shall be legally prosecuted.

TTP

TUBACEX  
GROUPINSPECTION CERTIFICATE  
EN 10204:2004 / 3.1

Number: TTP/MTC-2023/0924

Rev: 00

Page: 3 of 6

Created on:  
Date: 22.06.2023Modified on:  
---

## CHEMICAL COMPOSITION (%)

\*L: Ladle C: Products

Sr. No.	*	Heat	C	Mn	Si	P	S	Ni	Cr
Req. Max.			0.035	2.00	1.00	0.045	0.030	11.00	20.00
Req. Min.				-	-	-	-	8.00	18.00
1	L	A-6500	0.027	1.84	0.40	0.038	0.011	8.05	18.15
1	C	A-6500	0.028	1.85	0.43	0.036	0.013	8.08	18.22
2	L	A-6630	0.021	1.84	0.37	0.039	0.011	8.06	18.12
2	C	A-6630	0.023	1.86	0.38	0.038	0.012	8.09	18.21
3	L	23L0389	0.026	1.86	0.41	0.038	0.009	8.15	18.20
3	C	23L0389	0.028	1.87	0.42	0.039	0.011	8.17	18.28
3	L	MT100077	0.029	1.85	0.43	0.038	0.005	8.05	18.20
3	C	MT100077	0.028	1.87	0.45	0.036	0.007	8.06	18.26
4	L	MT100081	0.026	1.87	0.26	0.038	0.010	8.10	18.14
4	C	MT100081	0.028	1.26	0.25	0.038	0.014	8.09	18.18
5	L	A-6500	0.027	1.84	0.40	0.038	0.011	8.05	18.15
5	C	A-6500	0.029	1.82	0.39	0.037	0.012	8.06	18.23
5	L	235073	0.021	1.80	0.27	0.038	0.005	8.08	18.13
5	C	235073	0.023	1.82	0.28	0.037	0.006	8.09	18.20
6	L	A-6500	0.027	1.84	0.40	0.038	0.011	8.05	18.15
6	C	A-6500	0.028	1.86	0.43	0.035	0.013	8.07	18.24
7	L	A-6500	0.027	1.84	0.40	0.038	0.011	8.05	18.15
7	C	A-6500	0.028	1.86	0.43	0.039	0.013	8.07	18.23
8	L	A-6500	0.027	1.84	0.40	0.038	0.011	8.05	18.15
8	C	A-6500	0.026	1.86	0.43	0.036	0.014	8.06	18.20
9	L	A-6500	0.027	1.84	0.40	0.038	0.011	8.05	18.15
9	C	A-6500	0.029	1.83	0.42	0.037	0.010	8.06	18.21

## HEAT TREATMENT

SOLUTION ANNEALED AT MINIMUM 1040°C, FOLLOWED BY WATER QUENCHED.



Bhavesh Patel  
22.06.2023



TUBACEX TUBES AND PIPES PVT LTD.



Certified Management System acc. to ISO 9001, ISO 14001 &amp; ISO 45001 by TUV-NORD

We hereby certify that the material herein described has been manufactured, sampled, tested and inspected in accordance with above standards and specifications and satisfies orders requirements. In case the owner of the certificate would release as a copy of it, he must attest its conformity to the issued, assuming the responsibility for any unlawful or TUBACEX, not allowed use. Any forgery or falsification of this certificate shall be legally prosecuted.

**TTP****TUBACEX**  
GROUP
**INSPECTION CERTIFICATE**  
**EN 10204:2004 / 3.1**

Number: TTP/MTC-2023/0924

Rev: 00

Page: 4 of 6

Created on:  
Date: 22.06.2023Modified on:  
---**TENSILE TEST: ACCORDING TO ASTM A 370**

Sr. No.	Heat No:	Sample	Temp	YS °C	UTS MPa	A2" %	Type	Spc. Type	Spc. Dim Mm	Mm
Req. max.				---	---	---	---	---	WIDTH	THK
Req. Min.				---	205	515	35	---		
1	A-6500	1	RT	320.57	615.10	56.20	L	R	25.40	3.93 ✓
2	A-6630	1	RT	299.78	630.78	57.60	L	R	25.39	3.04 ✓
3	23L0389	1	RT	315.23	610.26	61.20	L	R	38.13	6.05 ✓
3	MT100077	1	RT	320.24	615.23	62.00	L	R	38.10	6.06 ✓
4	MT100081	1	RT	325.33	622.46	62.10	L	R	38.15	3.43 ✓
5	A-6500	1	RT	295.90	601.00	56.80	L	F	21.33 •	2.80 ✓
5	235073	1	RT	311.84	617.60	56.00	L	F	21.28 •	2.77 ✓
6	A-6500	1	RT	296.69	599.17	64.00	L	F	21.31 •	3.75 ✓
7	A-6500	1	RT	295.02	570.49	60.00	L	F	26.71	5.53 ✓
8	A-6500	1	RT	316.83	588.68	60.00	L	R	25.38	3.67 ✓
9	A-6500	1	RT	286.09	610.48	57.20	L	R	25.43	5.05 ✓

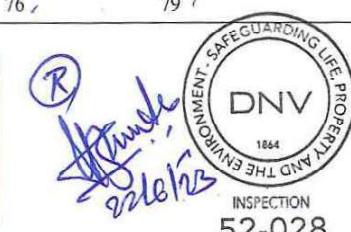
**HARDNESS TEST: ACCORDING TO ASTM A 370**

Sr. No.	Heat No:	Sample	HRB1	HRB2
Req. Max			---	---
Req. Min			---	---
1	A-6500	1	77 ✓	79 ✓
2	A-6630	1	74 ✓	76 ✓
3	23L0389	1	76 ✓	79 ✓



Certified Management System acc. to ISO 9001, ISO 14001 &amp; ISO 45001 by TUV-NORD

We hereby certify that the material herein described has been manufactured, sampled, tested and inspected in accordance with above standards and specifications and satisfies orders requirements. In case the owner of the certificate would release as a copy of it, he must attest its conformity to the issued, assuming the responsibility for any unlawful or TUBACEX, not allowed use. Any forgery or falsification of this certificate shall be legally prosecuted.



TUBACEX TUBES AND PIPES PVT LTD.



TTP

TUBACEX  
GROUPINSPECTION CERTIFICATE  
EN 10204:2004 / 3.1

Number: TTP/MTC-2023/0924

Rev: 00

Page: 5 of 6

Created on:  
Date: 22.06.2023Modified on:  
---

3	MT100077	1	77	80
4	MT100081	1	76	78
5	A-6500	1	76	79
5	235073	1	76	80
6	A-6500	1	77	80
7	A-6500	1	76	81
8	A-6500	1	79	80
9	A-6500	1	77	80

## METALLURGICAL TESTS

INTERGRANULAR CORROSION TEST CARRIED OUT PER EACH HEAT ACC. ASTM A 262 PRACTICE "E". NO CRACKS OR IGC FISSURES OBSERVED ON BENT SPECIMEN AT 20X AND MICROSTRUCTURE FOUND NO GARIN DROPPING AT 250X MAGNIFICATION OBSERVED: FOUND SATISFACTORY.

## NON-DESTRUCTIVE TESTS

POSITIVE MATERIAL IDENTIFICATION TEST CARRIED OUT BY "X-RAY-FLUORESCENCE-ANALYZER" (TARGET ELEMENTS Cr & Ni) BY M/s TTP & 'SW' WITNESSED BY M/s ITI, M/s DNV, M/s BV: SATISFACTORY.

HYDROSTATIC PRESSURE TEST CARRIED OUT ON EACH PIPE FOR DURATION OF 5 SEC AND NO LEAKAGE OR PRESSURE DROP OBSERVED: SATISFACTORY

Sr. No.	Sales Item	Hydro Pressure (Psig)	Remarks
1	70	2000	SATISFACTORY
2	90	1100	SATISFACTORY
3	120	1600	SATISFACTORY
4	130	650	SATISFACTORY
5	180	2500	SATISFACTORY
6	190	2500	SATISFACTORY
7	200	2500	SATISFACTORY
8	260	2300	SATISFACTORY
9	270	2500	SATISFACTORY

DIMENSIONAL AND VISUAL CHECKING ON EACH PIPE FOR ALL SIZES BY M/s TTP & 'SW' WITNESSED BY M/s ITI, M/s DNV, M/s BV: SATISFACTORY.

## TECHNOLOGICAL TESTS

FLATTENING TEST: SATISFACTORY

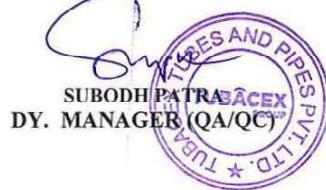


TUBACEX TUBES AND PIPES PVT LTD.



Certified Management System acc. to ISO 9001, ISO 14001 &amp; ISO 45001 by TUV-NORD

We hereby certify that the material herein described has been manufactured, sampled, tested and inspected in accordance with above standards and specifications and satisfies orders requirements. In case the owner of the certificate would release as a copy of it, he must attest its conformity to the issued, assuming the responsibility for any unlawful or TUBACEX, not allowed use. Any forgery or falsification of this certificate shall be legally prosecuted.



**INSPECTION CERTIFICATE**  
**EN 10204:2004 / 3.1**

Number: TTP/MTC-2023/0924

Rev: 00

Page: 6 of 6

Created on:  
Date: 22.06.2023

Modified on:  
---

**MARKING**

TTP.TUBACEX GROUP/COLD FINISHED SEAMLESS PIPE /---" (---MM OD) x SCH--- (---MM THK) x --- MTR LONG /  
ASTM A 312 / GRADE--- / HEAT NO.--- / IDENT CODE..... / ITEM NO.---/B.NO. --- / PMIV / TTP-2

**COLOR CODE:**

2 BLACK (RAL 9017) LONGITUDINAL COLOR BAND WITH 15-20MM WIDTH GAP BETWEEN BOTH BAND 10MM.

**REMARKS**

NO MERCURY, MERCURY COMPOUNDS OR MERCURY BEARING INSTRUMENTS AND/OR EQUIPMENT HAVE BEEN USED ALONG MANUFACTURING AND INSPECTION PROCESS.

NO WELDING OR WELD REPAIRS WERE MADE.

WE HEREBY CONFORM THAT WE ARE CERTIFIED BY TUV RHEINLAND INDUSTRIE SERVICE GmbH AS NOTIFIED BODY (0035) TO ISSUE CERTIFICATES OF SPECIFIC PRODUCT CONTROL IN ACCORDANCE TO PRESSURE EQUIPMENT DIRECTIVE 2014/68/EU ANNEX 1 POINT 4.3 & AD 2000-WO.PED 2014/68/EU CERTIFICATE NO.: 01 202 IND/Q-15-0036 VALID UNTILL DECEMBER 31, 2024.

MATERIAL CHARACTERISTIC COMPLY WITH POINT 7.5 OF ANNEX 1 TO PED BY HAVING AN ELONGATION AFTER MATERIAL IS FREE OF RADIATION CONTAMINATION.

10% WITNESSED PIPES SINGLE ELECTRO ETCHED NEAR MILL MARKING "  " FOR IDENTIFICATION BY M/s DNV & "  " FOR IDENTIFICATION M/s BV.

**ABBREVIATIONS**

YS-YIELD STRESS, UTS-ULTIMATE TENSILE STRESS, A2"-GAUGE LENGTH (2 INCH), A5-GAUGE LENGTH 5.65VS°, RT-ROOM TEMPERATURE, T-TRANSVERSE, L-LONGITUDINAL, R-REDUCED SECTION (STRIP), F-FULL SECTION, R/L-RANDOM LENGTH, SPC-SPECIMEN, M-METER, TTP - TUBACEX TUBES AND PIPES PVT LTD. H-HARDNESS



TUBACEX TUBES AND PIPES PVT LTD.



Certified Management System acc. to ISO 9001, ISO 14001 & ISO 45001 by TUV-NORD

We hereby certify that the material herein described has been manufactured, sampled, tested and inspected in accordance with above standards and specifications and satisfies orders requirements. In case the owner of the certificate would release as a copy of it, he must attest its conformity to the issued, assuming the responsibility for any unlawful or TUBACEX, not allowed use. Any forgery or falsification of this certificate shall be legally prosecuted.





Contract : P2300

Drawing : 2121-VG40E02-2

## Welding and QC Report Per Spool

Job : P2300S

Material : Stainless Steel 304, 316, 317

Client : NERVION

Revision : 00A

Spool : 01099

Spec : 2E63-M

Project : ALBA

Piece Mark : 2121-VG40E02-2-SP02-01099

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	OL	1	S40S	MW.26_SBR	AH	29-11-2024	4712055	AH	29-11-2024	4712055			001232	04-12-2024	000256	04-12-2024		001293	06-12-2024										

On behalf of Tecnicont  
QC Welding Inspector

GABRIEL BOAVENTURA  
ISO EN 1090-2 Certified Welder  
WFT/T/MT/UT/TOFD Level 2  
(R)

16/12/2024

Notes:

---



---



---



---

Boccard Portugal QC	Client
	Sergio Morales Date: 11-12-24
Date	10-12-2024 14:47:29



Contract : P2300

## Welding and QC Report Per Spool

Drawing : 2121-VG40E02-2

Job : P23005

Material : Stainless Steel 304, 316, 317

Client : NERVION

Revision : 00A

Spool : 01099

Spec : 2E63-M

Project : ALBA

Piece Mark : 2121-VG40E02-2-SP02-01099

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	JOL	1	S40S	MW.26_SBR	AH	29-11-2024	4712055	AH	29-11-2024	4712055			001232	04-12-2024	000256	04-12-2024		001293	06-12-2024								

  
 reviewed by  
 witnessed by  
 NoBo 1155  
 JOP Aunisia  
 18/12/2024

Notes:

---



---



---

Signature

Boccard Portugal QC	Client
	Sergio Morales Date: 11-12-24

Date

10-12-2024 14:47:29



## Shop QC Inspection Report

P2308-001277

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

Job number: P2308S  
 Spool N°: 01099  
 Piece Mark: 2121-VG40E02-2-SP02-01099

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"/>
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 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"/>
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: 04-12-2024

Signature



QA/QC Inspection: RAIMUNDO, MARIANA

Date: 10-12-2024 14:47:29

Signature



Customer Inspection:

Sergio Morales

Date: 11-12-24



**SGS**  
 NoBo 1155  
 ✓ reviewed by  
 ✓ witnessed by  
 2024/12/11  
 13/12/2024



# Shop QC Inspection Report

P2308-001277

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

Job number: P2308S  
 Spool N°: 01099  
 Piece Mark: 2121-VG40E02-2-SP02-01099

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 14:47:29  Signature 	Customer Inspection: <b>Sergio Morales</b>  Date: 11-12-24  
--	--	--

On behalf of Technimont  
 QC Welding Inspector

16/12/2024 (R)



GABRIEL BOCCARD  
ISO EN 9712 Certified Welder  
VTP/TM/TUTTOFOGLIO  
Level 2

# Visual Examination Report (Welds)

P2308-001232

Contract : P2308

Job number: P2308S

Material: Stainless Steel 304, 316, 317

Client : NERVION

Spool Nº: 01099

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

Project : ALBA

Piece Mark: 2121-VG40E02-2-SP02-01099

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

Weld No.	Weld Desc.	Welder	Temp. (°F/°C)	Accepted	Rejected	Defect	Technique Used	Comments
0008	1.0000 S40S LOL-Latrolet to Header Weld (MW.26_SBR)	AH	13	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: 04-12-2024

Date: 10-12-2024 14:47:29

Sergio Morales

Signature



Signature



Date: 11-12-24



16/12/2024

On behalf of Tecnimont  
QC Welding Inspector

(R)



# Liquid Penetrant Examination Report

P2308-000256

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: 01099

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

Piece Mark: 2121-VG40E02-2-SP02-01099

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	13	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

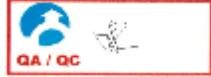
Date: 04-12-2024

Sergio Morales

Signature



Signature



Date: 11-12-24



16/12/2024 (R)

On behalf of Tecnimont  
QC Welding InspectorGABRIEL BOZZETTO  
INTERNAIS CONSULTORES LEVANTE  
SOEN 973 - CERTIFICADO DE CALIDAD



# Positive Material Identification Report (PMI)

P2308-001293

Client : NERVION

Contract : P2308 / Project : ALBA

Remarks: The results refer to the controlled items

Job number: P2308S

Spool N°: 01099

Piece Mark: 2121-VG40E02-2-SP02-01099

Material: Stainless Steel 304, 316, 317

Procedure / Instruction reference: 4274-LZ-VD-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)	206	0	0	0	9	69	1	18	0	0	0	X		
1	2.0000 S40S PIPE, SEAMLESS, A312-TP304L (A-6500)	204	0	0	0	7	71	1	17	0	0	0	X		
3	2.0000 NA 1.0000 NA LATROLET, SW, 3000#, A182-F304L (N220606AV04)	205	0	0	0	7	72	1	17	0	0	0	X		

On behalf of Tecnimont  
QC Welding Inspector

GABRIEL BONFIM  
ISO EN 9712 Certified Inspector Level 2  
VIP-PT/RT/TOT-TOD-Pa

16/12/2024 (R)

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

Date: 06-12-2024

Signature



Date: 10-12-2024 14:47:29

Signature



Customer Inspection:

Sergio Morales

Date:

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	206
Mode	ALLOY
Time	2024-12-06 13:28
Duration	11.62
Sequence	Final
Alloy1	304SS : 1.36
Alloy2	321SS : 1.74
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.045
Sn	< LOD	:	0.051
Pd	< LOD	:	0.040
Ag	< LOD	:	0.150
Al	< LOD	:	80.000
Mo	0.066	±	0.009
Nb	< LOD	:	0.009
Zr	< LOD	:	0.004
Bi	< LOD	:	0.002
Pb	< LOD	:	0.003
Se	< LOD	:	0.006
W	< LOD	:	0.099
Zn	< LOD	:	0.039
Cu	< LOD	:	0.156
Ni	9.152	±	0.306
Co	< LOD	:	0.497
Fe	69.040	±	0.456
Mn	1.917	±	0.209
Cr	18.916	±	0.265
V	< LOD	:	0.129
Ti	< LOD	:	0.171

16/12/2024

On behalf of Tecnimont  
QC Welding Inspector

GABRIEL BOEUF (R)  
ISO EN 9613-2 Certified Welder Level  
VTP-HMTR/TOT-TOTD PA

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	204
Mode	ALLOY
Time	2024-12-06 13:28
Duration	11.60
Sequence	Final
Alloy1	301SS : 0.74
Alloy2	No Match : 2.42
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.036
Sn	< LOD	:	0.047
Pd	< LOD	:	0.034
Ag	< LOD	:	0.139
Al	< LOD	:	80.000
Mo	0.225	±	0.015
Nb	< LOD	:	0.008
Zr	< LOD	:	0.003
Bi	< LOD	:	0.008
Pb	< LOD	:	0.010
Se	< LOD	:	0.010
W	< LOD	:	0.082
Zn	< LOD	:	0.036
Cu	0.518	±	0.090
Ni	7.776	±	0.267
Co	< LOD	:	0.454
Fe	71.231	±	0.417
Mn	1.876	±	0.192
Cr	17.839	±	0.239
V	< LOD	:	0.123
Ti	< LOD	:	0.156

On behalf of Tecnimont  
QC Welding Inspector

GABRIEL BOFF JAU  
ISO EN 9712 Certified Inspector Level 2  
VIP/T-UT-TDFD-PA  
16/12/2024 (R)

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	205
Mode	ALLOY
Time	2024-12-06 13:28
Duration	11.82
Sequence	Final
Alloy1	301SS : 1.57
Alloy2	No Match : *2.45
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.038
Sn	< LOD	:	0.048
Pd	< LOD	:	0.038
Ag	< LOD	:	0.163
Al	< LOD	:	80.000
Mo	< LOD	:	0.010
Nb	< LOD	:	0.004
Zr	< LOD	:	0.004
Bi	< LOD	:	0.014
Pb	< LOD	:	0.008
Se	< LOD	:	0.008
W	< LOD	:	0.097
Zn	< LOD	:	0.034
Cu	< LOD	:	0.141
Ni	7.928	±	0.278
Co	< LOD	:	0.473
Fe	72.167	±	0.431
Mn	1.520	±	0.191
Cr	17.540	±	0.244
V	< LOD	:	0.128
Ti	< LOD	:	0.152

16/12/2024

On behalf of Tecnimont  
QC Welding Inspector

GABRIEL BONETTO  
ISO 9609-1  
VTP/TMTRY/D-TODD-PA  
(R)

Sergio Morales

Date: 11-12-24





## Pickling & Passivation Report

P2308 – 001179

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

**Job number:** P2308S  
**Spool N°:** 01099  
**Piece Mark:** 2121-VG40E02-2-SP02-01099

**Procedure/Instruction:** 23A008/010 Rev.2

Pickling Paste		Neutralizer Paste		
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	X	

Performed by: DIEGUES, DIOGO Date: 09/12/2024 Signature 	QA/QC Inspection: RAIMUNDO, MARIANA Date: 10/12/2024 15:47:46 Signature 	Customer Inspection: Sergio Morales Date: 11-12-24 
---	--	--

16/12/2024

On behalf of Technimont  
QC Welding Inspector

*GABRIEL BOSELAER* (R)  
ISO EN 9712 certified technician Level 2  
VI-PT/MT/RT/UT-TOFD - PA