



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-310-000420_RFI5573_MOD-ITP-XL_220
Rev.1			RFI Nr.: Date :
Unit	-		
Plant Area	-		
Isometric Number			
Inspection Package Number	IP-WSR-P-310-000420_RFI5573 - IP Spool Release From Workshop		

Sheet 01/01

The Present Inspection Package contains the following Elements:

2211-PCW71A01-1-SP12-01162;2121-LO40B03-1-SP01-00997;2121-LO40B02-2-SP05-01147;2121-IA91F62-7-SP16-00477;1122-O15011-1-SP01-00546;1121-LS50001-4-SP07-01094;2211-PCW70B04-3-SP06-00407;2121-LO40B03-1-SP03-00998;2121-LO40B02-3-SP09-01150;1121-LS50001-4-SP08-01132;1113-PN52018-1-SP02-00862;2211-PCW70B04-3-SP05-01158;2211-VA71A01-1-SP01-00442;2211-PCW71A01-2-SP04-01104;2121-LO40B02-3-SP10-00505;2121-LO40B02-2-SP07-01149;1121-LS50006-2-SP02-01129;1121-LS50002-2-SP08-01126;2211-VA71A01-1-SP02-00443;2211-PCW71A01-2-SP05-01105;2121-LO40B02-3-SP11-00506;2121-LO40B02-3-SP08-00503;1121-PR34029-3-SP03-01131;1121-LS50005-3-SP05-00192;2121-LO40B02-2-SP06-01148;2121-LO40B02-2-SP04-01146;1211-VA81004-1-SP01-01095;1127-LS50009-2-SP01-01130;2211-PCW70B04-3-SP04-00406;2121-LO40B04-1-SP02-01069;2121-LO40B04-1-SP01-01068;2121-LO40B01-1-SP01-00498;2121-IA91F63-4-SP05-00488;2211-PCW70B04-3-SP07-00409;2121-LO40B03-1-SP02-01153;2121-LO40B01-1-SP02-00499;1211-PX86033-2-SP04-01145;1121-LS50002-2-SP05-01125;2211-LS50A05-1-SP02-00385;2121-LO40B04-1-SP03-01155;2121-IA91F63-4-SP04-00487;2121-IA91F62-8-SP17-00478;1113-PN52018-1-SP01-00861

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 Tecnímont / R
Piping Supervisor
Cristi Sandu
29.10.2024

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



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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 C. Sandu
29.10.2024

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 style="width: 33%;">SHEET 1 / 1</td><td style="width: 33%;">DOC.CLASS 1</td><td style="width: 33%;">ISSUE 01</td></tr> </table>	SHEET 1 / 1	DOC.CLASS 1	ISSUE 01
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 MECWIDE <small>Engineering Consultancy</small>	<p>ISO ID: 2121-IA91F62-8</p>				

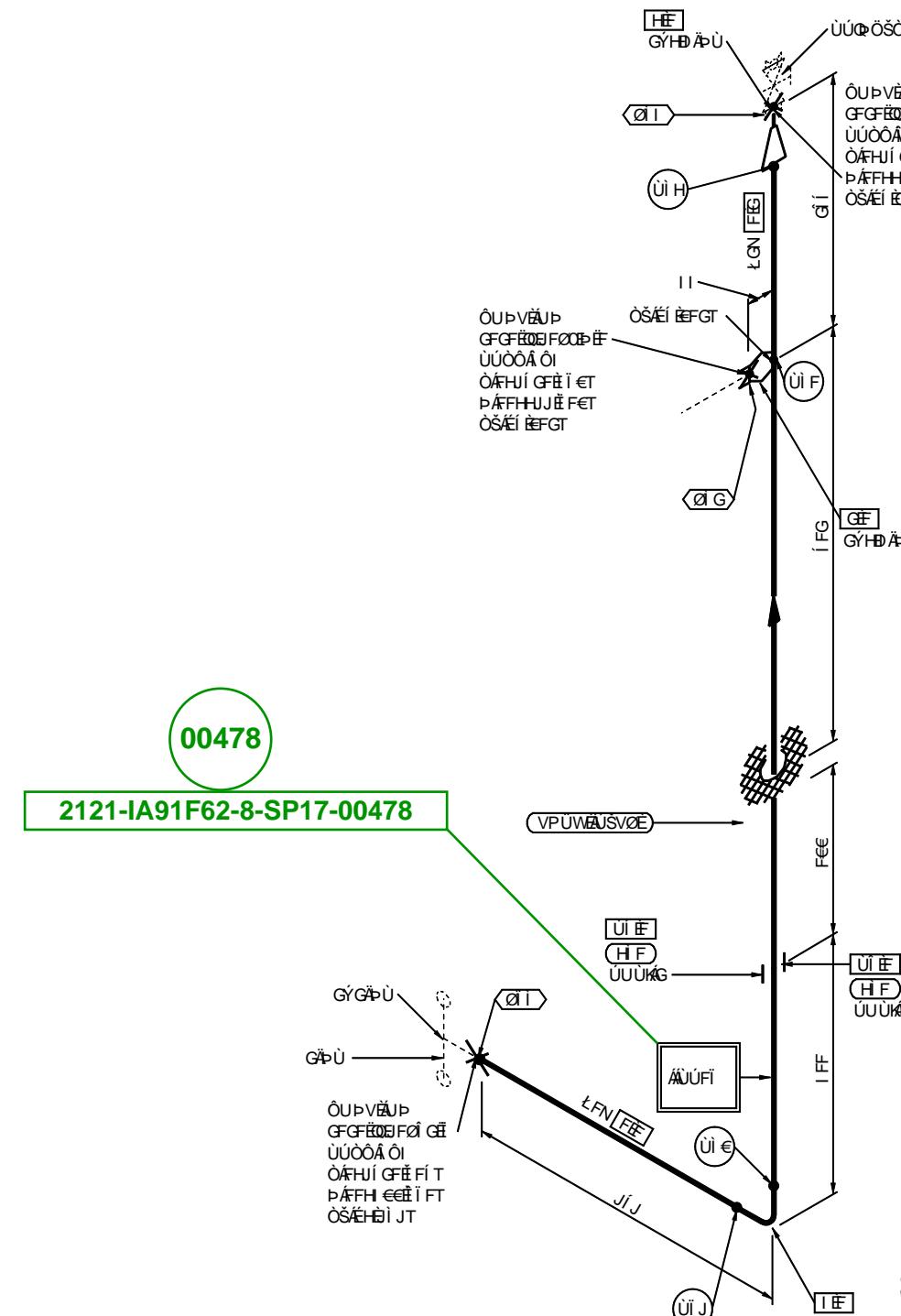
NOTES AND REMARKS

On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
25.10.2024 *C. Sandu*

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



REPSO



Sergio Morales
Date: 22-10-24

RECEIVED
14 / 12 / 2023

On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
25.10.2024 C. Sandu

	<p>BILL OF MATERIAL</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="6">PIPE</th> </tr> <tr> <th>ITEM</th> <th>LENGTH</th> <th>DIAMETER</th> <th>SCH/mm</th> <th>DESCRIPTION / MATERIAL</th> <th>ITEM CODE</th> </tr> </thead> <tbody> <tr> <td>1.1</td> <td>0,881</td> <td>2"</td> <td>S-10S</td> <td>PIPE - A312-TP304/304L DUAL GR SMLS, BExBE</td> <td>I3364302</td> </tr> <tr> <td>1.2</td> <td>1,043</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">WELD FITTINGS</th> </tr> <tr> <th>ITEM</th> <th>QT</th> <th>DIAMETER</th> <th>SCH/mm</th> <th>DESCRIPTION / MATERIAL</th> <th>ITEM CODE</th> </tr> </thead> <tbody> <tr> <td>3.1</td> <td>1</td> <td>2" x 3/4"</td> <td>S-10S x S-40S</td> <td>CONCENTRIC SWAGE MSS SP-95 - A403-WP304/304L DG BE PE SMLS</td> <td>I2495660</td> </tr> <tr> <td>4.1</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> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="6">FORGINGS</th> </tr> <tr> <th>ITEM</th> <th>QT</th> <th>DIAMETER</th> <th>SCH/PRESS.</th> <th>DESCRIPTION / MATERIAL</th> <th>ITEM CODE</th> </tr> </thead> <tbody> <tr> <td>2.1</td> <td>1</td> <td>2" x 3/4"</td> <td>3000#</td> <td>REDUCING SOCKOLET MSS-SP-97 3000# A182-F304/304L DUAL GR BE SWE</td> <td>I2258338</td> </tr> </tbody> </table> <div style="text-align: center; margin-top: 10px;"> P2308S 00478  2121-IA91F62-8-SP17-00478 </div> <div style="text-align: center; margin-top: 10px;"> Weld Map Sticker </div> <div style="text-align: right; margin-top: 10px;">  boccard Alliance for success Boccard Portugal, Lda. </div>	PIPE						ITEM	LENGTH	DIAMETER	SCH/mm	DESCRIPTION / MATERIAL	ITEM CODE	1.1	0,881	2"	S-10S	PIPE - A312-TP304/304L DUAL GR SMLS, BExBE	I3364302	1.2	1,043	2"	S-10S	PIPE - A312-TP304/304L DUAL GR SMLS, BExBE	I3364302	WELD FITTINGS						ITEM	QT	DIAMETER	SCH/mm	DESCRIPTION / MATERIAL	ITEM CODE	3.1	1	2" x 3/4"	S-10S x S-40S	CONCENTRIC SWAGE MSS SP-95 - A403-WP304/304L DG BE PE SMLS	I2495660	4.1	1	2"	S-10S	90 LR ELBOW ASME B16.9 A403-WP304/304L DG BE SMLS	I2259133	FORGINGS						ITEM	QT	DIAMETER	SCH/PRESS.	DESCRIPTION / MATERIAL	ITEM CODE	2.1	1	2" x 3/4"	3000#	REDUCING SOCKOLET MSS-SP-97 3000# A182-F304/304L DUAL GR BE SWE	I2258338
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F324-302-0																																																																			

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	00478	2121-IA91F62-8-SP17-00478		2121-IA91F62-8		00	
1.2	1,043	2.0000 S10S	0.0000 NA	PIPE, SEAMLESS, A312-TP304L	NY231216AS15 0391	3,93	4,10
40391							
1.1	,881	2.0000 S10S	0.0000 NA	PIPE, SEAMLESS, A312-TP304L	NY231216AS15 0391	3,93	3,46
40391							
4.1	1	2.0000 S10S	0.0000 NA	90 LR ELL, SEAMLESS, A403-WP304L	NY230506AT08 0462	0,49	0,49
42965							
2.1	1	2.0000 NA	0.7500 NA	SOCKOLET, 3000#, A182-F304L	N220606AV04 0297	0,15	0,15
88696							
3.1	1	2.0000 S10S	0.7500 S40S	CONC SWAGE NIPPLE, LEB-SEP, A403-WP304L	N220606AV04 0510	1,02	1,02
135932							

On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
25.10.2024 *C. Sandu*

Number of Items : **5** Total Weight : **9,23**

Signature	QA	Client
	Date	Date
	 QA / QC	Sergio Morales Date: 22-10-24 

 Stainless Steel Experience				 DNV GL GROUP				CERTIFICATO DI COLLAUDO WORK TEST CERTIFICATE EN 10204/3.1 DIN 50049/3.1 NR. BD24016251 DEL 11/06/24												Delivery Note NR. BD24016251 DEL 11/06/24				CLIENTE: PANTALONE S.R.L. CUSTOMER VIA DON PRIMO MAZZOLARI, 21 - Z.I. SELVAIEZZI 66100 CHIETI (CHIETI SCALO) CH							
RIF. DDT BD24016251																															

ANALISI CHIMICA - CHEMICAL COMPOSITION

COLATA	QTA'	CODICE	DESCRIZIONE	MATERIALE	C%	Si%	Mn%	S%	P%	Ni%	Cr%	Mo%	Al%	Cu%	Ti%	N%
HEAT NO.	Q.TY	CODE	DESCRIPTION	MATERIAL	C%	Si%	Mn%	S%	P%	Ni%	Cr%	Mo%	Al%	Cu%	Ti%	N%
			Ns. Ordine Cliente Nr. OC24017381 del 11/06/24													
			Vs. Ordine Cliente Nr. 2024-BOF-0001035 del 11/06/24													
NY231216AS1 5	134,40	946#200010304	TUBO SMLS ASTM/ASME A/SA312/A999 2" (60.3) SCH10S (2.77) AISI 304/304L	TP304/304L-1.4301/1.4307	0,022	0,4	1,37	0,001	0,035	8,03	18,34					0,076
NY231216AS1 5	106,40	946#200010304	TUBO SMLS ASTM/ASME A/SA312/A999 2" (60.3) SCH10S (2.77) AISI 304/304L	TP304/304L-1.4301/1.4307	0,022	0,4	1,37	0,001	0,035	8,03	18,34					0,076

Note - Notes

Firma
Signature

I dati dell'analisi chimica e delle prove meccaniche corrispondono fedelmente al certificato inviato dal fabbricante del materiale base e/o dal laboratorio che ha effettuato le prove. I certificati sono conservati nel nostro archivio.
 The chemical analysis and mechanical properties fully comply with the certificate issued by the manufacturer of the basic material and/or by the laboratory carrying out test. The certificates are kept in our archives.

 TECNICATRE Stainless Steel Experience TECNICA TRE s.r.l. 36061 BASSANO DEL GR. -VI- Via delle Viole, 16 - Tel. +39 0424 Fax Sede legale: Via delle Viole, 16 36061 BASSANO DEL GR. -VI- Partita Iva 02523320246 - R.I. VI-1996-149	CERTIFICATO DI COLLAUDO WORK TEST CERTIFICATE EN 10204/3.1 DIN 50049/3.1 NR. BD24016251 DEL 11/06/24	Delivery Note NR. BD24016251 DEL 11/06/24	CLIENTE: PANTALONE S.R.L. CUSTOMER VIA DON PRIMO MAZZOLARI, 21 - Z.I. SELVAIEZZI 66100 CHIETI (CHIETI SCALO) CH
			RIF. DDT BD24016251

CARATTERISTICHE MECCANICHE - MECHANICAL TEST

COLATA Heat no.	SNERVAMENTO yield point - N/mm ²	ROTTURA tensile - N/mm ²	ALLUNGAMENTO elongation - %	CONTRAZIONE red of area - %	DUREZZA hardness - %
NY231216AS15	320,0	545,0	44,5	0,0	0,0
NY231216AS15	320,0	545,0	44,5	0,0	0,0

Note - Notes

Firma
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I dati dell'analisi chimica e delle prove meccaniche corrispondono fedelmente al certificato inviato dal fabbricante del materiale base e/o dal laboratorio che ha effettuato le prove. I certificati sono conservati nel nostro archivio.
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MATERIAL TEST CERTIFICATE

EN10204 3.1

MANUFACTURER: Yingkou Guangming Pipeline Industry Co.,Ltd

MATERIAL: ASTM A403 WP304/304L

DIMENSION: ASME B16.9

WORK NO: GMPPFCP2312363

DATE: April.10th,2024

PAGE NO: 20/29

CUSTOMER: Chero Piping S.p.A.

NO.	POS .No.	CHERO CODE	COMMESA COMMESA	PRODUCT & SIZE	QUANTITY	MFG NO. (HEAT NO.)	CHEMICAL COMPOSITION%					
							MIN	C	Si	Mn	P	S
				PCS		MAX	0.030	1.00	2.00	0.045	0.030	8.00
74	310	C90LRB1XB 0001.ZZW	OC/2023/90 3/1040	SIZE: 2 - SCHED.S-10S 90 LR ELBOW A403- WP304/304L DG BE SMLS ASME B16.9	58	NY230506AT08	0.015	0.39	1.34	0.036	0.009	8.02
75	320	C90LRB1XB 000N.ZZW	OC/2023/90 3/1060	SIZE: 3 - SCHED.S-10S 90 LR ELBOW A403- WP304/304L DG BE SMLS ASME B16.9	16	JSG2310019	0.027	0.54	1.22	0.026	0.015	8.11
76	330	C90LRB1XB 000P.ZZW	OC/2023/90 3/1080	SIZE: 4 - SCHED.S-10S 90 LR ELBOW A403- WP304/304L DG BE SMLS ASME B16.9	4	JSG2312020	0.028	0.44	1.23	0.027	0.010	8.28
77	340	C90LRB1XB 000R.ZZW	OC/2023/90 3/1090	SIZE: 6 - SCHED.S-10S 90 LR ELBOW A403- WP304/304L DG BE SMLS ASME B16.9	2	JSG2312024	0.027	0.47	1.24	0.028	0.013	8.26
PHYSICAL TEST												
NO.	POS .No.	CHERO CODE	COMMESA COMMESA	CHARGE NO	STANDARD	YIELD STRENGTH MPA(N/mm ²)	TENSILE STRENGTH MPA(N/mm ²)	ELONGATION %	HARDNESS HB	VISUAL INSPECTION	DIMENSION INSPECTION	PMI TESTING
					MIN	170	485	28	-			
					MAX				-			
74	310	C90LRB1XB 0001.ZZW	OC/2023/90 3/1040	NY230506AT08	299	611	51	-	GOOD	GOOD	GOOD	OK
75	320	C90LRB1XB 000N.ZZW	OC/2023/90 3/1060	JSG2310019	256	665	54	-	GOOD	GOOD	GOOD	OK
76	330	C90LRB1XB 000P.ZZW	OC/2023/90 3/1080	JSG2312020	279	680	66	-	GOOD	GOOD	GOOD	OK
77	340	C90LRB1XB 000R.ZZW	OC/2023/90 3/1090	JSG2312024	273	674	62	Yuan Yuan	GOOD	GOOD	GOOD	OK

NOTE:

1. HEAT TREATMENT: SOLUTION ANNEALED TEMPERATURE 1050°C X 0.5HR, COOLING IN WATER.

WE HEREBY CERTIFY THAT THE PRODUCT DESCRIBED HEREIN HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE SPECIFICATIONS CONCERNED AND ALSO WITH THE PURCHASER'S REQUIREMENTS AND THAT THE TEST RESULTS SHOWN HEREIN ARE CORRECT AND WE CONFIRM THAT P.M.I HAS BEEN DONE.

CHIEF OF INSPECTION DEPARTMENT

Prime 4 030 TCN

2024.4.7





Zongnan Heavy Industries

江阴中南重工有限公司

Jiangyin Zhongnan Heavy Industries Co.,Ltd.

产品品质证明书 Quality Certificate EN10204-3.1

用户(Purchaser): (印度)TECNIMONT S.P.A

订单号:PO 7500110919

质量证明书编号 (Certificate No.): 2023-03-225-71

表号: ZNHI/W400-34-1
修订号: 0

材质(Material): ASTM A182-2021 F304/304L DUL GR											化学成分 Chemical Composition (%)											机械性能 Mechanical Properties							
生产批号 Batch No.	品名 Designation	规格型号 Dimension	单位 Unit	数量 Qty	炉号 Heat No.	C	Si	Mn	P	Cr	Ni	T	Mo	V	Cu	Nb	Al	N	CE	屈服强度 R _{0.2} R _u (Mpa)	抗拉强度 R _u (Mpa)	断面收缩率 A%	延伸率 Z%	冲击试验(J) Impact Test Report 0°C (10*10*55mm)	硬度 HBW	PO item No.	备注 Remark		
2023-03-225-306	SOCKOLET SWE	SIZE:1.2 SIZE:2.0:0.5 2"0.5"**3000LB	件	5	N220606AV04	0.023	0.35	1.30	0.002	0.029	18.19	8.08							0.047	61.5	309	54.5	77	-	-	172/165/174	306	Ident Code: 2258337	
2023-03-225-307	SOCKOLET SWE	SIZE:1.2 SIZE:2.0:0.75 2"0.75"**3000LB	件	5	N220606AV04	0.023	0.35	1.30	0.002	0.029	18.19	8.08							0.047	61.5	309	54.5	77	-	-	172/165/174	307	Ident Code: 2258338	
2023-03-225-308	SOCKOLET SWE	SIZE:1.3 SIZE:2.0:0.75 3"0.75"**3000LB	件	10	N220606AV04	0.023	0.35	1.30	0.002	0.029	18.19	8.08							0.047	61.5	309	54.5	77	-	-	172/165/174	308	Ident Code: 2258415	
2023-03-225-309	SOCKOLET SWE	SIZE:1.3 SIZE:2.1 3"1"**3000LB	件	5	N220606AV04	0.023	0.35	1.30	0.002	0.029	18.19	8.08							0.047	61.5	309	54.5	77	-	-	172/165/174	309	Ident Code: 2258416	
2023-03-225-310	SOCKOLET SWE	SIZE:1.4 SIZE:2.0:0.75 4"0.75"**3000LB	件	5	N220606AV04	0.023	0.35	1.30	0.002	0.029	18.19	8.08							0.047	61.5	309	54.5	77	-	-	172/165/174	310	Ident Code: 2258477	
2023-03-225-311	SOCKOLET SWE	SIZE:1.6 SIZE:2.0:0.75 6"0.75"**3000LB	件	5	N220606AV04	0.023	0.35	1.30	0.002	0.029	18.19	8.08							0.047	61.5	309	54.5	77	-	-	172/165/174	311	Ident Code: 2258518	
其他检测结果(Other examination and test)																												其他(others):	
尺寸检查 Dimension Inspection	外观检查 Visual Inspection	硬度 Hardness (H13W≤201)	无损检测(NDT) MT	磁粉 MT	着色 PT	超声波 UT	X射线 RT	晶间腐蚀 Intergranular Corrosion Test																				交货状态 Delivery condition	
合格 OK	合格 OK	合格 OK	-	合格 OK	-	-	-	合格 OK	-	PMI OK	-	PMI OK	-	固溶 Solution Annealing															

兹证明上述产品制造、检验和试验，符合上述标准规定及合同要求。
We hereby certify that the products described above have manufactured, inspected and tested in accordance with the specified standards and the contract requirements.

特种设备制造许可证号(Manufacture License of Special Equipment): TS2732E11-2024

地址:江阴市高新技术产业开发区山阳西路8号
Add: 788 Jinshan Rd,High and New Technology Industrial Development,JiangYin City, JiangSu P.R.China电话(Tel): 0510-8696009
传真(Fax): 0510-8696035



表号: ZNNH/QM400-34-1
修订号: 0

江阴中南重工有限公司
Jiangyin Zhongnan Heavy Industries Co.,Ltd.
产品质量证明书 Quality Certificate EN10204-3.1

用户(Purchaser): 意大利Techinmont

材质(Material): ASTM A403-2022 WP304/304L

质量证明书编号(Certificate No.): 2024-01-43-56

产品执行标准(Product standards): MSS SP-95-2018

化学成分 Chemical Composition (%)

机械性能 Mechanical Properties

其他检测结果(Other examination and test)

尺寸检查 Dimension Inspection

外观检查 Visual Inspection

厚度 Hardness (HBW≤201)

磁粉 MT

着色 PT

超声波 UT

X射线 RT

晶间腐蚀 Intergranular Corrosion Test

备注 Remark

PMI OK

固溶 Solution Annealing

交货状态 Delivery condition

其他(others):

无损检测(NDT)

兹证明上述产品的制造、检验和试验，符合上述标准规定及合同要求。

We hereby certify that the products described above have manufactured, inspected and tested in accordance with the specified standards and the contract requirements.

特许设备制造许可证编号(Manufacture License of Special Equipment): TS2732E11-2024

检验员(Inspector):

印张

质保工程师(QA Engineer):

印凯

签发日期(Date of issue):

2024.04.22

电话(Tel): 0510-86996009

传真(Fax): 0510-86996035

Add: 788 Jinshan Rd, High and New Technology Industrial Development, JiangYin City, JiangSu P.R. China

检验员(Inspector):

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Add: 788 Jinshan Rd, High and New Technology Industrial Development, JiangYin City, JiangSu P.R. China



Contract : P2300

Drawing : 2121-IA91F62-8

Welding and QC Report Per Spool

Job : P2300S

Material : Stainless Steel 304, 316, 317

Client : NERVION

Revision : 00

Spool : 00478

Spec : 6C4-M

Project : ALBA

Piece Mark : 2121-IA91F62-8-SP17-00478

Weld data

Welding

Control

Weld No.	Type	Dia	Sch	Weld 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
0079	BW	2	S10S	MW.26_BW	CA	12-09-2024	4712055	CA	12-09-2024	4712055						001129	11-10-2024					001141	14-10-2024					
0080	BW	2	S10S	MW.26_BW	CA	13-09-2024	4712055	CA	13-09-2024	4712055						001129	11-10-2024					001141	14-10-2024					
0081	SOL	0,75	S10S	MW.26_SBR	BC	16-09-2024	4712055	BC	16-09-2024	4712055						001129	11-10-2024	000219	11-10-2024			001141	14-10-2024					
0083	BW	2	S10S	MW.26_BW	CA	13-09-2024	4712055	CA	13-09-2024	4712055						001129	11-10-2024					001141	14-10-2024					

On behalf of Tecnimont / R
 Piping Supervisor
 Cristi Sandu 
 25.10.2024

Notes:

Boccard Portugal QC	Client
	Sergio Morales Date: 22-10-24 
15-10-2024 15:28:28	

Signature

Date



Shop QC Inspection Report

P2308-001171

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

Job number: P2308S
 Spool N°: 00478
 Piece Mark: 2121-IA91F62-8-SP17-00478

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

Control Date: 11-10-2024

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 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: RODRIGUES(ST), VITOR (N2 VT/PT) Date: 11-10-2024 Signature 	QA/QC Inspection: RAIMUNDO, MARIANA Date: 15-10-2024 15:28:28 Signature 	Customer Inspection: Sergio Morales Date: 22-10-24 
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On behalf of Tecnimont / R
 Piping Supervisor
 Cristi Sandu 
 25.10.2024

Visual Examination Report (Welds)

P2308-001129

Contract : P2308

Job number: P2308S

Material: Stainless Steel 304, 316, 317

Client : NERVION

Spool Nº: 00478

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

Project : ALBA

Piece Mark: 2121-IA91F62-8-SP17-00478

Testing Date: 11-10-2024

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
0079	2.0000 S10S BW-Buttweld Straight (MW.26_BW)	CA	21	X			Direct	
0080	2.0000 S10S BW-Buttweld Straight (MW.26_BW)	CA	21	X			Direct	
0081	0.7500 S10S SOL-Sockolet to Header Weld (MW.26_SBR)	BC	21	X			Direct	
0083	2.0000 S10S BW-Buttweld Straight (MW.26_BW)	CA	21	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: RODRIGUES(ST), VITOR (N2 VT/PT)

Date: 11-10-2024

Signature



QA/QC Inspection: RAIMUNDO, MARIANA

Date: 15-10-2024 15:28:28

Signature



Customer Inspection:

Sergio Morales

Date: 22-10-24


On behalf of Tecnimon / R
Piping Supervisor
Cristi Sandu
25.10.2024 C. Sandu



Liquid Penetrant Examination Report

P2308-000219

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

Job number: P2308S

Material: Stainless Steel 304, 316, 317

Spool N°: 00478

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

Piece Mark: 2121-IA91F62-8-SP17-00478

Testing Date: 11-10-2024

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				
0081	0.7500 S10S SOL-Socket to Header Weld (MW.26_SBR)	BC	21	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: VITOR (N2 VT/PT), RODRIGUES(ST)

QA/QC Inspection: RAIMUNDO, MARIANA

Customer Inspection:

Date: 11-10-2024

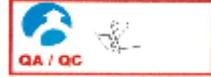
Date: 11-10-2024

Sergio Morales

Signature



Signature



Date: 22-10-24



On behalf of Tecnicmont / R
 Piping Supervisor
 Cristi Sandu
 25.10.2024



Positive Material Identification Report (PMI)

P2308-001141

Client : NERVION

Contract : P2308 / Project : ALBA

Remarks: The results refer to the controlled items

Job number: P2308S

Spool N°: 00478

Piece Mark: 2121-IA91F62-8-SP17-00478

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: 14-10-2024

Weld / Item No	Description	Reading Number	Chemical Elements										Accepted	Rejected	Comments
			%Ti	%Mo	%Cu	%Ni	%Fe	%Mn	%Cr	%Nb	%Al	%V			
0079	2.0000 S10S BW-Buttweld Straight (MW.26_BW)	176	0	0	0	8	70	1	19	0	0	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
0080	2.0000 S10S BW-Buttweld Straight (MW.26_BW)	177	0	0	0	8	70	1	18	0	0	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
0081	0.7500 S10S SOL-Sockolet to Header Weld (MW.26_SBR)	178	0	0	0	9	68	2	19	0	0	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
0083	2.0000 S10S BW-Buttweld Straight (MW.26_BW)	179	0	0	0	9	69	1	19	0	0	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
1.1	2.0000 S10S PIPE, SEAMLESS, A312-TP304L (NY231216AS15)	175	0	0	0	7	72	1	17	0	0	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
1.2	2.0000 S10S PIPE, SEAMLESS, A312-TP304L (NY231216AS15)	172	0	0	0	8	71	1	17	0	0	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2.1	2.0000 NA 0.7500 NA SOCKOLET, 3000#, A182-F304L (N220606AV04)	173	0	0	0	9	69	1	18	0	0	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3.1	2.0000 S10S 0.7500 S40S CONC SWAGE NIPPLE, LEB-SEP, A403-WP304L (N220606AV04)	171	0	0	0	7	71	1	17	0	0	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4.1	2.0000 S10S 90 LR ELL, SEAMLESS, A403-WP304L (NY230506AT08)	174	0	0	0	7	72	1	17	0	0	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
25.10.2024 *C. Sandu*

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

Customer Inspection:

Sergio Morales

Date: 14-10-2024

Date: 15-10-2024 15:28:28

Date:



Signature



Signature



Signature

Date: 22-10-24

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

Certificate of PMI Reading

XL3t-32735

Reading No	176
Mode	ALLOY
Time	2024-10-14 10:40
Duration	9.97
Sequence	Final
Alloy1	304SS : 0.09
Alloy2	No Match : *2.09
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.042
Sn	< LOD	:	0.048
Pd	< LOD	:	0.034
Ag	< LOD	:	0.176
Al	< LOD	:	80.000
Mo	0.024	±	0.006
Nb	< LOD	:	0.008
Zr	< LOD	:	0.005
Bi	< LOD	:	0.016
Pb	< LOD	:	0.028
Se	< LOD	:	0.007
W	< LOD	:	0.090
Zn	< LOD	:	0.027
Cu	< LOD	:	0.141
Ni	8.430	±	0.291
Co	< LOD	:	0.483
Fe	70.174	±	0.446
Mn	1.721	±	0.203
Cr	19.064	±	0.262
V	< LOD	:	0.137
Ti	< LOD	:	0.155

Sergio Morales



Date: 22-10-24

On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
25.10.2024 

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

Certificate of PMI Reading

XL3t-32735

Reading No	177
Mode	ALLOY
Time	2024-10-14 10:40
Duration	11.05
Sequence	Final
Alloy1	304SS : 0.00
Alloy2	No Match : *2.09
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.040
Sn	< LOD	:	0.054
Pd	< LOD	:	0.041
Ag	< LOD	:	0.162
Al	< LOD	:	80.000
Mo	0.027	±	0.007
Nb	< LOD	:	0.008
Zr	< LOD	:	0.004
Bi	< LOD	:	0.002
Pb	< LOD	:	0.019
Se	< LOD	:	0.008
W	< LOD	:	0.096
Zn	< LOD	:	0.034
Cu	< LOD	:	0.149
Ni	8.557	±	0.300
Co	< LOD	:	0.493
Fe	70.721	±	0.455
Mn	1.642	±	0.205
Cr	18.531	±	0.263
V	< LOD	:	0.134
Ti	< LOD	:	0.154

Sergio Morales



Date: 22-10-24

On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
25.10.2024 *C. Sandu*

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

Certificate of PMI Reading

XL3t-32735

Reading No	178
Mode	ALLOY
Time	2024-10-14 10:40
Duration	8.69
Sequence	Final
Alloy1	304SS : 1.55
Alloy2	No Match : 2.10
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.049
Sn	< LOD	:	0.057
Pd	< LOD	:	0.046
Ag	< LOD	:	0.167
Al	< LOD	:	80.000
Mo	0.050	±	0.010
Nb	< LOD	:	0.010
Zr	< LOD	:	0.003
Bi	< LOD	:	0.011
Pb	< LOD	:	0.008
Se	< LOD	:	0.009
W	< LOD	:	0.100
Zn	< LOD	:	0.040
Cu	< LOD	:	0.180
Ni	9.627	±	0.353
Co	< LOD	:	0.562
Fe	68.187	±	0.518
Mn	2.073	±	0.242
Cr	19.364	±	0.304
V	< LOD	:	0.140
Ti	< LOD	:	0.191

Sergio Morales

Date: 22-10-24



On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
25.10.2024 

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

Certificate of PMI Reading

XL3t-32735

Reading No	179
Mode	ALLOY
Time	2024-10-14 10:41
Duration	9.65
Sequence	Final
Alloy1	304SS : 0.36
Alloy2	No Match : *2.14
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.040
Sn	< LOD	:	0.051
Pd	< LOD	:	0.037
Ag	< LOD	:	0.194
Al	< LOD	:	80.000
Mo	0.046	±	0.008
Nb	< LOD	:	0.008
Zr	< LOD	:	0.003
Bi	< LOD	:	0.007
Pb	< LOD	:	0.019
Se	< LOD	:	0.009
W	< LOD	:	0.078
Zn	< LOD	:	0.028
Cu	< LOD	:	0.153
Ni	9.171	±	0.315
Co	< LOD	:	0.512
Fe	69.353	±	0.467
Mn	1.669	±	0.212
Cr	19.033	±	0.273
V	< LOD	:	0.140
Ti	< LOD	:	0.128

Sergio Morales

Date: 22-10-24



On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
25.10.2024 

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

Certificate of PMI Reading

XL3t-32735

Reading No	175
Mode	ALLOY
Time	2024-10-14 10:40
Duration	9.24
Sequence	Final
Alloy1	301SS : 0.60
Alloy2	No Match : 2.44
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.045
Sn	< LOD	:	0.056
Pd	< LOD	:	0.042
Ag	< LOD	:	0.190
Al	< LOD	:	80.000
Mo	0.024	±	0.007
Nb	< LOD	:	0.006
Zr	< LOD	:	0.004
Bi	< LOD	:	0.013
Pb	< LOD	:	0.014
Se	< LOD	:	0.010
W	< LOD	:	0.117
Zn	< LOD	:	0.037
Cu	< LOD	:	0.162
Ni	7.734	±	0.315
Co	< LOD	:	0.541
Fe	72.035	±	0.493
Mn	1.585	±	0.221
Cr	17.802	±	0.282
V	< LOD	:	0.145
Ti	< LOD	:	0.171

Sergio Morales

Date: 22-10-24



On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
25.10.2024 C. Sandu

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Constância, Portugal 2250-999

Certificate of PMI Reading

XL3t-32735

Reading No	172
Mode	ALLOY
Time	2024-10-14 10:39
Duration	9.23
Sequence	Final
Alloy1	321SS : 1.72
Alloy2	304SS : 2.00
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.044
Sn	< LOD	:	0.061
Pd	< LOD	:	0.044
Ag	< LOD	:	0.189
Al	< LOD	:	80.000
Mo	0.016	±	0.007
Nb	< LOD	:	0.006
Zr	< LOD	:	0.005
Bi	< LOD	:	0.010
Pb	< LOD	:	0.008
Se	< LOD	:	0.008
W	< LOD	:	0.101
Zn	< LOD	:	0.045
Cu	< LOD	:	0.150
Ni	8.261	±	0.331
Co	< LOD	:	0.551
Fe	71.724	±	0.506
Mn	1.644	±	0.227
Cr	17.740	±	0.288
V	< LOD	:	0.145
Ti	< LOD	:	0.186

Sergio Morales

Date: 22-10-24



On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
25.10.2024 C. Sandu

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Certificate of PMI Reading

XL3t-32735

Reading No	173
Mode	ALLOY
Time	2024-10-14 10:39
Duration	8.68
Sequence	Final
Alloy1	321SS : 1.66
Alloy2	No Match : *3.06
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.091
Sn	< LOD	:	0.088
Pd	< LOD	:	0.087
Ag	< LOD	:	0.152
Al	< LOD	:	80.000
Mo	0.068	±	0.015
Nb	< LOD	:	0.017
Zr	< LOD	:	0.014
Bi	< LOD	:	0.018
Pb	< LOD	:	0.042
Se	< LOD	:	0.018
W	< LOD	:	0.185
Zn	< LOD	:	0.088
Cu	0.306	±	0.123
Ni	9.052	±	0.415
Co	0.713	±	0.334
Fe	69.122	±	0.629
Mn	1.735	±	0.275
Cr	18.154	±	0.356
V	< LOD	:	0.191
Ti	0.608	±	0.166

Sergio Morales



Date: 22-10-24

On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
25.10.2024 *C. Sandu*

Boccard Portugal, Lda
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Constância, Portugal 2250-999

Certificate of PMI Reading

XL3t-32735

Reading No	171
Mode	ALLOY
Time	2024-10-14 10:39
Duration	9.98
Sequence	Final
Alloy1	301SS : 1.67
Alloy2	304SS : 2.00
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.041
Sn	< LOD	:	0.053
Pd	< LOD	:	0.038
Ag	< LOD	:	0.194
Al	< LOD	:	80.000
Mo	0.079	±	0.010
Nb	0.013	±	0.005
Zr	< LOD	:	0.004
Bi	< LOD	:	0.002
Pb	< LOD	:	0.002
Se	< LOD	:	0.007
W	< LOD	:	0.067
Zn	< LOD	:	0.027
Cu	0.172	±	0.080
Ni	7.993	±	0.292
Co	< LOD	:	0.495
Fe	71.900	±	0.449
Mn	1.493	±	0.201
Cr	17.749	±	0.257
V	< LOD	:	0.121
Ti	< LOD	:	0.143

Sergio Morales

Date: 22-10-24



On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
25.10.2024 *C. Sandu*

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Certificate of PMI Reading

XL3t-32735

Reading No	174
Mode	ALLOY
Time	2024-10-14 10:39
Duration	9.45
Sequence	Final
Alloy1	301SS : 0.70
Alloy2	No Match : *2.90
Flags	
SAMPLE	
HEAT	
LOT	
BATCH	
MISC	
NOTE	

	%	±	Error
Sb	< LOD	:	0.059
Sn	< LOD	:	0.067
Pd	< LOD	:	0.053
Ag	< LOD	:	0.175
Al	< LOD	:	80.000
Mo	< LOD	:	0.014
Nb	< LOD	:	0.010
Zr	< LOD	:	0.005
Bi	< LOD	:	0.017
Pb	< LOD	:	0.011
Se	< LOD	:	0.012
W	< LOD	:	0.135
Zn	< LOD	:	0.039
Cu	< LOD	:	0.178
Ni	7.600	±	0.356
Co	< LOD	:	0.616
Fe	72.258	±	0.561
Mn	1.659	±	0.251
Cr	17.588	±	0.318
V	0.205	±	0.092
Ti	< LOD	:	0.187

Sergio Morales

Date: 22-10-24



On behalf of Tecnimont / R
Piping Supervisor
Cristi Sandu
25.10.2024 C. Sandu