

INSPECTION REPORT Nr GPSS-18368-20210911

J-PECO Job nr: GPSS-18368-20210911

PROJECT: N/A	Ref: JP-GPSS-442
J-PECO Client: GPSS	P/o nr: GPSS-18368 (client to J-PECO)
Manufacturer: Zhejiang XXX Stainless Steel Co.,Limited	P/o nr: N/A (J-PECO to Manufacturer)
Inspection requested by: GPSS	

No.	SUPPLY / SUBJECT OF INSPECTION	Heat Nr	Manufacturer name	Qty
1	14" Std 321/H SA/A 312 SA/A 376 (GPS)	ZY2105AA14	Zhejiang XXX Stainless Steel Co.,Limited	60'0"
2	4" S/40 321/321H SA/A 312 SA/A 376 (GPS)	ZY2105AA12	Zhejiang XXX Stainless Steel Co.,Limited	200'0"
3	1.5" S/80 321/321H SA/A 312 SA/A 376(GPS)	ZY2105AA12	Zhejiang XXX Stainless Steel Co.,Limited	200'0"
4	3.5" S/80 310S SA/A 312 (GPS)		Zhejiang XXX Stainless Steel Co.,Limited	100'0"
5	8" S/10 310S/H SA/A 312 (GPS)		Zhejiang XXX Stainless Steel Co.,Limited	140'0"
6	10" S/xh 310S/H SA/A 312 (GPS)	FK2107-169	Zhejiang XXX Stainless Steel Co.,Limited	100'0"
7	0.75" S/160 310S/H SA/A312 (GPS)	FK2107-169	Zhejiang XXX Stainless Steel Co.,Limited	300'0"
8	0.25" S/80 310S/H SA/A 312 (GPS)	FK2107-169	Zhejiang XXX Stainless Steel Co.,Limited	500'0"
9	4" S/40 310S/H SA/A 312 (GPS)	FK2107-169	Zhejiang XXX Stainless Steel Co.,Limited	200'0"
10	12" Std 310S/H SA/A 312 (GPS)	FK2107-169	Zhejiang XXX Stainless Steel Co.,Limited	80'0"
11	10" s/40 310S/H SA/A 312 (GPS)	FK2107-169	Zhejiang XXX Stainless Steel Co.,Limited	100'0"
12	12" S/xh 310S/H SA/A 312 (GPS)	FK2107-169	Zhejiang XXX Stainless Steel Co.,Limited	60'0"
13	3.5" S/40 310S/H SA/A 312(GPS)		Zhejiang XXX Stainless Steel Co.,Limited	140'0"
14	2.5" S/40 317/317L SA/A 312(GPS)	OMAL210418	Zhejiang XXX Stainless Steel Co.,Limited	200'0"
15	6" S/80 317/317L SA/A 312 (GPS)	OMAL210418	Zhejiang XXX Stainless Steel Co.,Limited	80'0"
16	3" S/40 S31803/S32205 SA/A 790 (GPS)	21071405E	Zhejiang XXX Stainless Steel Co.,Limited	300'0"
17	2" S/40 S31803/S32205 SA/A 790 (GPS)	21071405E	Zhejiang XXX Stainless Steel Co.,Limited	500'0"
18	4" S/40 S31803/S32205 SA/A 790(GPS)	21071405E	Zhejiang XXX Stainless Steel Co.,Limited	100'0"
19	4" S/10 S31803/S32205 SA/A 790(GPS)	21071405E	Zhejiang XXX Stainless Steel Co.,Limited	140'0"
20	3" S/10 S31803/S32205 SA/A 790(GPS)	21071405E	Zhejiang XXX Stainless Steel Co.,Limited	200'0"

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21	1.5" S/80 S31803/S32205 SA/A 790 (GPS)		Zhejiang XXX Stainless Steel Co., Limited	200'0"
22	6" S/40 N08904 SA/A 312 (GPS)	FK2107-159	Zhejiang XXX Stainless Steel Co., Limited	100'0"
23	8" S/80 304/304H SA/A 312 (GPS)	2107AS17	Zhejiang XXX Stainless Steel Co., Limited	100'0"
24	3" S/40 304/304H SA/A 312 (GPS)	2106AS11	Zhejiang XXX Stainless Steel Co., Limited	400'0"
25	6" S/40 304/304H SA/A 312 (GPS)	Pipe has been shipped and did not been inspected.		

DOCUMENTS OF REFERENCE : See continuation sheet for additional documents: ☒ Yes ☐ No

Title	Reference n°	Rev.	Approved by	Date
Purchase Order-18368	N/A	N/A	GPSS	May 10, 2021

INSPECTIONS :

Results of inspection : ☐ Satisfactory ☒ Unsatisfactory**Inspection place & Date or Period:**

Place: NO.3 1555 Tianzhong Road,
Longwan District, Wenzhou City,
Zhejiang Province. China
Date: 11th, Sep, 2021

Stage of inspection :

- ☐ Before manufacturing
☐ During manufacturing
☒ Final
☐ Packing

Kind of inspection:

- ☐ Pre-inspection meeting
☒ Witnessing tests
☒ Final inspection
☒ Document review
☐ Expediting & vendor assessment
☐ Packing
 (for details see continuation sheet)

Stamping :

- ☒ No

Non Conformities Reports (NCR):

☐ NCR's issued during reported period :
None

☐ List of outstanding NCR's :
None

Main Conclusions & Remarks: (for details see continuation sheet)

As per request of GPSS, J-PECO inspector Jiang JianKui performed visit inspection at Zhejiang XXX Stainless Steel Co., Limited. Inspection items including document review and final inspection.

The result was unacceptable.

The inspection details refer to the following report content.

Next visit scheduled:

N/A

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Description of the inspections carried out:

➤ Introduction

As per request of CLIENT, the undersigned inspector Jiang JianKui from **Anhui Jipeng Project Supervision and Consulting Co., Ltd.** China performed final inspection for the pipes at **Zhejiang XXX Stainless Steel Co., Limited.** (hereinafter referred to as *Supplier*) on 11th, Sep, 2021.

The inspection result was unacceptable.

J-PECO Scope of work

1. Document review
2. Final inspection

Attendees

Name	Company	Title
Jiang Jiankui	J-PECO	Inspector
Manager Wang	Supplier	Quality Manager
Iron Huang	Supplier	Sales

➤ Manufacturing Progress Status and Sampling Ratio

All the pipes have been completed when J-PECO inspector arrived. J-PECO inspector performed the inspection activities according to following sampling ratio:

Document review	Visual inspection	Dimension check	NDT check	PMI check
100%	30%	30%	/	30%

➤ Details of inspection activities carried out with respect to scope of work

1. Document review.

J-PECO inspector arrived at Zhejiang XXX Stainless Steel Co., Limited and reviewed the documents provided by the factory which were included as following:

1.1 The material code, heat number, size, quantity and condition met the requirement of the order.

1.2 The PO number, heat number, grade, quantity, size, chemical composition, tensile test result, flattening test, corrosion test, hardness test, grain size, heat treatment and visual inspection result met the requirement of ASTM A312 & ASTM A790 and the order.

1.3 The manufacturing condition, heat treatment time and temperature met ASTM A312 & ASTM A790 in the MTC.

1.4 The calibrations of tape measure 10m, angle gauge, calipers 0-150mm, calipers 0-500mm, wall thickness micrometre 0-25mm were all in validity.

2. Final inspection.

2.1 J-PECO inspector checked the pipes markings according to order requirement, the result was acceptable. The sample was as follows:

Item 1: XXX 14" STD A/SA312 A/SA376 TP321/H HEAT NO ZY2105AA14 UT SMLS

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MADE IN CHINA GPSS PO18368

Item 2: XXX 4" 40S A/SA312 A/SA376 TP321/H HEAT NO ZY2105AA12 HT SMLS MADE IN CHINA GPSS PO18368

Item 3: XXX 1.5" 80S A/SA312 A/SA376 TP321/H HEAT NO ZY2105AA12 HT SMLS MADE IN CHINA GPSS PO18368

Item 6: XXX 10" XH A/SA312 TP310S/H HEAT NO FK2107-169 UT SMLS MADE IN CHINA GPSS PO18368

Item 7: XXX 0.75" SCH160 A/SA312 TP310S/H HEAT NO FK2106-167 HT SMLS MADE IN CHINA GPSS PO18368

2.2 J-PECO inspector witnessed 30% visual inspection on the pipes. No stains or scuff marks were found. The result was acceptable.

2.3 J-PECO inspector witnessed dimension check of the pipes by sampling of 30%. The outer diameter, wall thickness and length met the requirements of standards and regulations. Details inspection data see the following annex-1.

Note: the thickness of item 3 should be 4.45~6.1, but the actual value was 6.0~6.3 which was out of tolerance, so the result was unacceptable. Some lengths of items exceed the required value which needs the confirmation by the client. Detailed data please see the following annex-1.

2.4 J-PECO inspector witnessed PMI of the pipes by sampling of 30%. Test result only showed composition of metallic elements, inspection result met the requirement of the standard and the order. Details inspection data see the following annex-2.

➤ Problems pending / Areas of Concern

Details see the above in red.

➤ Results of Inspection

The inspection result was unacceptable.

➤ Photos on Site



Marking check



Marking check

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Marking check



Marking check



Marking check



Marking check



Pipes OD check



Pipes OD check

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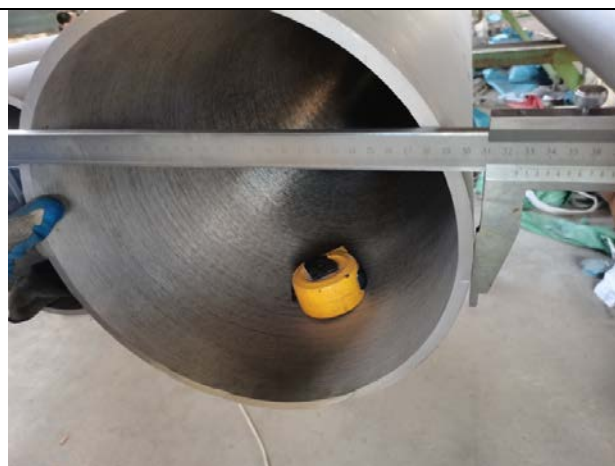
Pipes OD check



Pipes OD check



Pipes OD check



Pipes OD check



Pipes OD check



Pipes OD check

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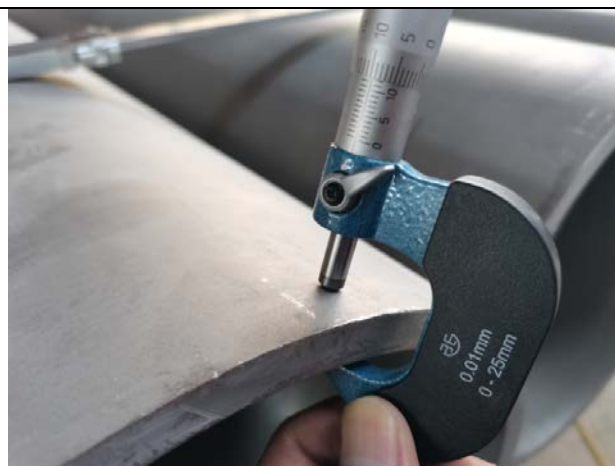
Pipes thickness check



Pipes thickness check



Pipes thickness check



Pipes thickness check



Pipes thickness check



Pipes thickness check

INSPECTION REPORT Nr GPSS-18368-20210911*J-PECO Job nr: GPSS-18368-20210911***Pipes thickness check****Pipes thickness check****Length measurement****Length measurement****Length measurement****Length measurement**

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Length measurement



Length measurement



Visual inspection



Visual inspection



Visual inspection



Visual inspection

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Visual inspection

Visual inspection



Visual inspection

Visual inspection

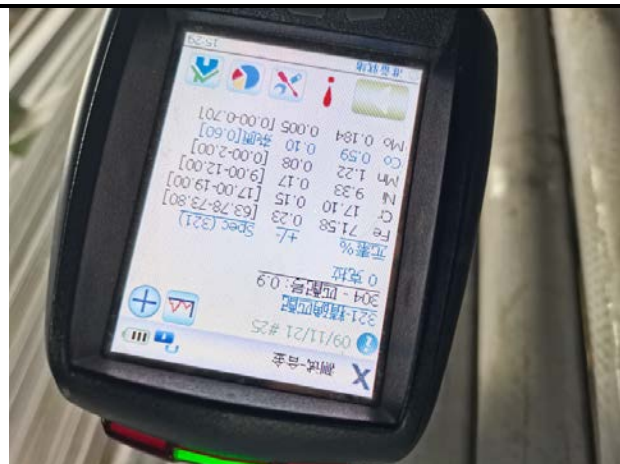


PMI test

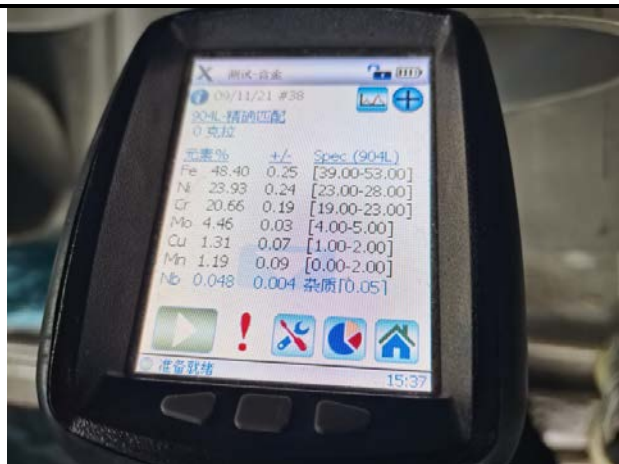
PMI test result

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PMI test



PMI test result



PMI test



PMI test result

Annex1: Dimension Check Records

Item	OD (mm)	Wall Thickness (mm)	Length (mm)	Result
Item 1: 14" Std 321/H SA/A 312 SA/A 376 UT, SMLS (Length:60'0") Qty:1pcs				
Standard Value	354.8~358	8.34~10.7	6502(+10,-0)	-
Actual Value	357.3	9.32	6523	ACC
Item 2: 4" S/40 321/321H SA/A 312 SA/A 376 HT, SMLS (Length:200'0") Qty: 3pcs				
Standard Value	113.5~115.9	5.27~6.77	6502(+10,-0)	-
Actual Value	113.8~114.2	6.1~6.4	6521~6528	ACC
Item 3: 1.5" S/80 321/321H SA/A 312 SA/A 376 HT, SMLS (Length:200'0") Qty: 3pcs				
Standard Value	47.5~4.91	4.45~6.1	6502(+10,-0)	-
Actual Value	48.8~48.9	6.0~6.3	6517~6520	ACC
Item 6: 10" S/xh 310S/H SA/A 312 HT, SMLS (Length:100'0") Qty: 2pcs				

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Standard Value	272.2~274.6	11.12~14.28	6502(+10,-0)	-
Actual Value	272.9~273	12.11~12.16	6521~6523	ACC
Item 7: 0.75" S/160 310S/H SA/A312 HT, SMLS (Length:300'0") Qty: 5pcs				
Standard Value	25.9~27.1	4.87~6.25	6502(+10,-0)	-
Actual Value	26.8~27	5.5~5.8	6508~6510	ACC
Item 8: 0.25" S/80 310S/H SA/A 312 HT, SMLS (Length:500'0") Qty: 8pcs				
Standard Value	12.9~14.1	2.65~3.39	6502(+10,-0)	-
Actual Value	13.6~13.8	2.9~3.1	6510~6512	ACC
Item 9: 4" S/40 310S/H SA/A 312 HT, SMLS (Length:200'0") Qty: 3pcs				
Standard Value	113.5~115.9	5.27~6.77	6502(+10,-0)	-
Actual Value	113.8~114.1	6.1~6.2	6510~6512	ACC
Item 10: 12" Std 310S/H SA/A 312 HT, SMLS (Length:80'0") Qty: 2pcs				
Standard Value	323.1~326.3	8.34~10.7	6502(+10,-0)	-
Actual Value	323.5~235	8.95~9.35	6522~6524	ACC
Item 11: 10" S/40 310S/H SA/A 312 HT, SMLS (Length:100'0") Qty: 2pcs				
Standard Value	272.2~274.	8.12~10.42	6502(+10,-0)	-
Actual Value	272.1~274	8.85~9.3	6520~6522	ACC
Item 12: 12" S/xh 310S/H SA/A 312 HT, SMLS (Length:60'0") Qty: 1pcs				
Standard Value	323.1~326.3	11.12~14.28	6502(+10,-0)	-
Actual Value	324.6	12.15	6517	ACC
Item 14: 2.5" S/40 317/317L SA/A312 HT, SMLS (Length:200'0") Qty: 3pcs				
Standard Value	72.2~73.8	4.52~5.8	6502(+10,-0)	-
Actual Value	72.8~73	4.97~5.07	6509~6510	ACC
Item 15: 6" S/80 317/317L SA/A312 HT, SMLS (Length:80'0") Qty: 2pcs				
Standard Value	167.5~169.9	9.6~12.34	6502(+10,-0)	-
Actual Value	167.6~167.8	10.73~11.16	6517~6519	ACC
Item 16: 3" S/40 S31803/S32205 SA/A790 HT, SMLS (Length:300'0") Qty: 5pcs				
Standard Value	88.1~89.7	4.81~6.17	6502(+10,-0)	-
Actual Value	88.9~89.1	5.17~5.5	6507~6512	ACC
Item 17: 2" S/40 S31803/S32205 SA/A790 HT, SMLS (Length:500'0") Qty: 8pcs				
Standard Value	59.5~61.9	3.43~4.39	6502(+10,-0)	-
Actual Value	59.8~60.0	3.56~3.9	6509~6511	ACC
Item 18: 4" S/40 S31803/S32205 SA/A790 HT, SMLS (Length:100'0") Qty: 2pcs				
Standard Value	113.5~115.9	5.27~6.77	6502(+10,-0)	-
Actual Value	113.7~113.8	5.97~6.0	6507~6510	ACC

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Item 19: 4" S/10 S31803/S32205 SA/A790 HT, SMLS (Length:140'0") Qty: 3pcs				
Standard Value	113.5~115.9	2.67~3.43	6502(+10,-0)	-
Actual Value	113.8~114.2	2.95~3.05	6515~6517	ACC
Item 20: 3" S/10 S31803/S32205 SA/A790 HT, SMLS (Length:200'0") Qty: 3pcs				
Standard Value	88.1~89.7	2.67~3.43	6502(+10,-0)	-
Actual Value	88.5~89.1	3.04~3.15	6511	ACC
Item 22: 6" S/40 N08904 SA/A312 HT, SMLS (Length:100'0") Qty: 2pcs				
Standard Value	167.5~169.9	6.23~7.99	6502(+10,-0)	-
Actual Value	168.1~168.3	7.01~7.02	6518~6520	ACC
Item 23: 8" S/80 304/304H SA/A312 HT, SMLS (Length:100'0") Qty: 2pcs				
Standard Value	218.2~220.6	11.12~14.28	6502(+10,-0)	-
Actual Value	218.4~219	12.75~14.24	6525~6526	ACC
Item 24: 3" S/40 304/304H SA/A312 HT, SMLS (Length:400'0") Qty: 6pcs				
Standard Value	88.1~89.7	4.81~6.17	6502(+10,-0)	-
Actual Value	88.8~89.1	5.03~5.33	6505~6512	ACC

Annex 2: PMI Test result records

ASTM A312 A376 TP321/321H					
Item	Cr	Ni	Mn	Ti 5(C+N)	Result
Standard Value	17.0~19.0	9.0~12.0	≤2.0	≤0.7	
Item 1: 14" Std 321/H SA/A312 A376 HEAT NO.ZY2105AA14 SMLS (Length:60'0") Qty:1pcs					
Actual Value	17.3	9.05	1.10	0.172	Acceptable
Item 2: 4" S/40 321/H SA/A312 A376 HEAT NO.ZY2105AA12 SMLS (Length:200'0") Qty: 1pcs					
Actual Value	17.39	9.10	1.21	0.169	Acceptable
Item 3: 1.5" S/80 321/H SA/A312 A376 HEAT NO.ZY2105AA12 SMLS (Length:200'0") Qty: 1pcs					
Actual Value	17.10	9.33	1.22	0.184	Acceptable
ASTM A312 TP310S/H					
Item	Cr	Ni	Mn	MO	Result
Standard Value	24.0~26.0	19.0~22.0	≤2.0	≤0.75	
Item 6: 10" S/xh 310S/H SA/A312 HEAT NO.FK2107-169 SMLS (Length:100'0") Qty:1pcs					
Actual Value	24.26	19.67	1.38	0.139	Acceptable
Item 7: 0.75" S/160 310S/H SA/A312 HEAT NO.FK2106-167 SMLS (Length:300'0") Qty: 2pcs					
Actual Value	24.16~24.81	19.17~19.89	0.72~1.22	0.119~0.137	Acceptable
Item 8: 0.25" S/80 310S/H SA/A312 HEAT NO.FK2106-167 SMLS (Length:500'0") Qty: 3pcs					

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Actual Value	24.42~24.73	19.43~20.04	0.80~1.24	0.115~0.144	Acceptable
Item 9: 4" S/40 310S/H SA/A312 HEAT NO.FK2106-210 SMLS (Length:200'0") Qty: 1pcs					
Actual Value	24.81	19.17	1.22	0.137	Acceptable
Item 10:12" Std 310S/H SA/A312 HEAT NO.FK2107-169 SMLS (Length:80'0") Qty: 1pcs					
Actual Value	24.67	19.61	0.64	0.126	Acceptable
Item 11: 10" S/40 310S/H SA/A312 HEAT NO.FK2107-169 SMLS (Length:100'0") Qty: 1pcs					
Actual Value	24.47	19.62	0.73	0.073	Acceptable
Item 12: 12" S/xh 310S/H SA/A312 HEAT NO.FK2107-169 SMLS (Length:60'0") Qty: 1pcs					
Actual Value	24.38	19.43	0.76	0.075	Acceptable
ASTM A312 TP317/317L					
Item	Cr	Ni	Mn	MO	Result
Standard Value	18.0~20.0	11.0~15.0	≤2.0	3.0~4.0	
Item 14: 2.5" S/40 317/317L SA/A312 HEAT NO.OMAL210718 SMLS (Length:200'0") Qty: 1pcs					
Actual Value	18.43	11.30	1.54	3.16	Acceptable
Item 15: 6" S/80 317/317L SA/A312 HEAT NO.OMAL210718 SMLS (Length:80'0") Qty: 1pcs					
Actual Value	18.45	11.39	1.23	3.21	Acceptable
ASTM A790 S31803/S32205					
Item	Cr	Ni	Mn	MO	Result
Standard Value	22.0~23.0	4.5~6.5	≤2.0	3.0~3.5	
Item 16: 3" S/40 S31803/S32205 SA/A790 HEAT NO.21071405E SMLS (Length:300'0") Qty:2pcs					
Actual Value	22.06~22.63	4.64~4.97	0.89~1.27	3.02~3.25	Acceptable
Item 17: 2" S/40 S31803/S32205 SA/A790 HEAT NO.21071405E SMLS (Length:500'0") Qty: 3pcs					
Actual Value	22.17~22.46	4.61~4.70	0.92~1.45	3.07~3.19	Acceptable
Item 18: 4" S/40 S31803/S32205 SA/A790 HEAT NO.21071405E SMLS (Length:100'0") Qty: 1pcs					
Actual Value	22.05	4.87	1.54	3.17	Acceptable
Item 19: 4" S/10 S31803/S32205 SA/A790 HEAT NO.21071405E SMLS (Length:140'0") Qty: 1pcs					
Actual Value	22.08	4.60	1.43	3.08	Acceptable
Item 20: 3" S/10 S31803/S32205 SA/A790 HEAT NO.21071405E SMLS (Length:200'0") Qty: 1pcs					
Actual Value	22.08	4.97	1.05	3.25	Acceptable
ASTM A312 N08904					
Item	Cr	Ni	Mn	MO	Result
Standard Value	19.0~23.0	23.0~28.0	≤2.0	4.0~5.0	
Item 22: 6" S/40 N08904 SA/A312 HEAT NO.FK2107-159 SMLS (Length:100'0") Qty: 1pcs					

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Actual Value	20.66	23.93	1.19	4.46	Acceptable
ASTM A312 TP304/304H					
Item	Cr	Ni	Mn	MO	Result
Standard Value	18.0-20.0	8.0-11.0	≤2.0	/	
Item 23: 8" S/80 304/304H SA/A312 HEAT NO.2107AS17 SMLS (Length:100'0") Qty: 1pcs					
Actual Value	18.11	8.44	1.10	/	Acceptable
Item 24: 3" S/40 304/304H SA/A312 HEAT NO.2106AS11 SMLS (Length:400'0") Qty: 2pcs					
Actual Value	18.08~18.26	8.09~8.66	0.83~1.02	/	Acceptable

ANNEXES ☒ Yes ☐ No MTC of GPSS-18368**Inspected by:**

Name: Jiang JianKui

Signature: Date of issue: 11th, Sep, 2021**Inspection centre:** J-PECO Project supervision**Checked by:**

Name: Liu Xiaonan

Signature: Distribution: ☒ CLIENT ☐ MANUFACTURER ☒ J-PECO CHINA