

Industry & Facilities Division  INSPECTION REPORT Nr CLIENT-15210-170510	Page 1/28
	☐ Interim ☒ Final
J-PECO Job nr: CLIENT-15210-170510	

PROJECT: N/A	Ref: JP-CLIENT-133-15210
J-PECO Client: CLIENT XX	P/o nr: CLIENT-15210 (client to J-PECO)
Manufacturer: Zhejiang XXX Pipeline Industry Co., Ltd.	P/o nr: N/A (J-PECO to Manufacturer)
Inspection requested by: CLIENT	

No.	SUPPLY / SUBJECT OF INSPECTION	Heat Nr	Manufacturer name	Qty(ea)
1	Fittings, for details please see annex 1	/	XXX Pipeline	/

DOCUMENTS OF REFERENCE : See continuation sheet for additional documents: ☒ Yes ☐ No				
Title	Reference n°	Rev.	Approved by	Date
Purchase Order-15210	N/A	N/A	CLIENT	31.Mar.17

INSPECTIONS :	Results of inspection : ☐ Satisfactory ☒ Unsatisfactory
<u>Inspection place & Date or Period:</u> Place: Binhai district, Wenzhou, Zhejiang Date: 7 th ~10 th , May, 2017 <u>Stage of inspection :</u> ☐ Before manufacturing ☐ During manufacturing ☒ Final ☐ Packing <u>Kind of inspection:</u> ☐ Pre-inspection meeting ☐ Witnessing tests ☒ Final inspection ☒ Document review ☐ Expediting & vendor assessment ☐ Packing (for details see continuation sheet) <u>Stamping :</u> ☒ No	<u>Non Conformities Reports (NCR):</u> ◦ NCR's issued during reported period : None ◦ List of outstanding NCR's : None <u>Main Conclusions & Remarks:</u> (for details see continuation sheet) As per request of CLIENT, J-PECO inspector Jian Zhang and Dong Huang performed visit inspection at Zhejiang XXX Pipeline Industry Co., Ltd. Inspection items including document review and final inspection. The inspection result was Unacceptable. The inspection details refer to the following report content. <u>Next visit scheduled:</u> N/A

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Description of the inspections carried out:

➤ Introduction

As per request of CLIENT, the undersigned inspector Jian Zhang from Anhui Jipeng Project Supervision and Consulting Co., Ltd. China performed final inspection for the fittings and pipes at **Zhejiang XXX Pipeline Industry Co., Ltd.** (hereinafter referred to as Supplier) during 7th ~10th, May, 2017. The inspection result was unacceptable.

J-PECO Scope of work

1. Document review.
2. Final inspection.

Attendees

Name	Company	Title
Jian Zhang	J-PECO	Inspector
Wujun Yang	Supplier	Tech. Dept. Manager
Ella	Supplier	International Trade Manager

➤ Manufacturing Progress Status and Sampling Ratio

All the pipes and fittings were completed when arrived, J-PECO inspector performed the inspection activities according to following sampling ratio:

Document review	Dimension check	PMI	Visual inspection
100%	30%	10%	100%

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

1. Document review.

J-PECO inspector arrived at XXX Pipeline and reviewed the process documents provided by the factory, which were including product quality certificate. All the above documents were within expire date and acceptable.

2. Final inspection.

2.1 J-PECO inspector checked the fitting and pipe markings according to order requirement, details as following:

All weld fittings to be marked with: Size Schedule Type of fittings Specification Grade CLIENT Heat No. ZJ WP-S

All Forged fittings to be marked with: Size Class Type of fittings Specification Grade CLIENT Heat No. ZJ

All pipes to be marked with: Size Schedule Specification Grade CLIENT Heat No. ZJ HT SMLS

All Flanges to be marked with: Size Class Type Specification Schedule CLIENT NAME Heat No. ZJ

2.2 J-PECO inspector performed dimension check of the fittings and pipes by random sampling of 30% of each item. The inspection result met the requirement of The relevant

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standard, Details inspection data see the following annex 1.

2.3 J-PECO inspector witnessed PMI of the pipes by random sampling of 10%. PMI only showed the metallic element and the inspection result met the requirement of the relevant standard. Details inspection data see the following annex 2.

Note: 1. Portable PMI test was not suitable for material A105 and A106.

2. PMI test failed of Item 31 and 34, now in re-manufacturing.

2.4 J-PECO inspector performed 100% visual inspection of the fittings and pipes. The appearance of the most fittings and pipes were smooth and without unacceptable defects. The inspection result was in accordance with CLIENT requirement except for **there were some grinding markings on stencil areas of item 16, 17,18,29,30,31,32,33 and 35, cracks in interior surface of item 59 then rejected. Item 74, actual products were not conformed to PO requires, mill replies they were confirming with GPS now.**

2.5 J-PECO inspector did not witness the NDT for the pipes.

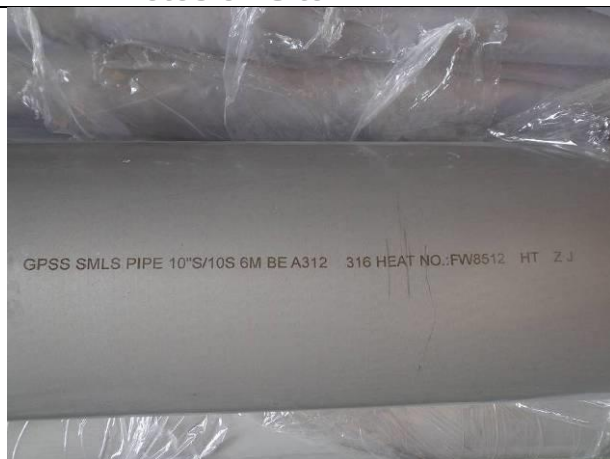
➤ Problems pending / Areas of Concern

Please see above details in red.

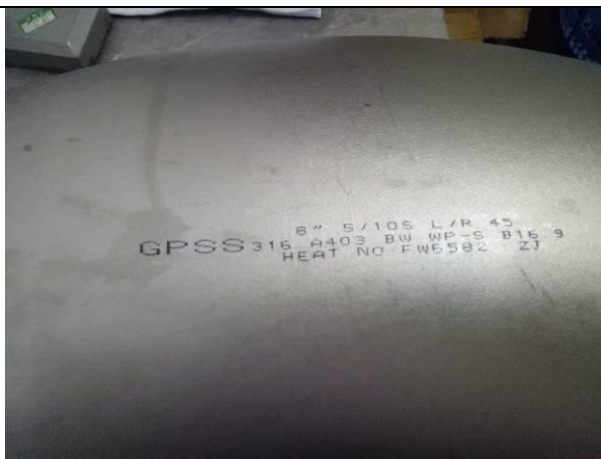
➤ Results of Inspection

The inspection result was Unacceptable.

➤ Photos on Site



Marking check



Marking check

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Marking check



Marking check



Marking check



Marking check



Dimension check



Dimension check

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Dimension check



Dimension check



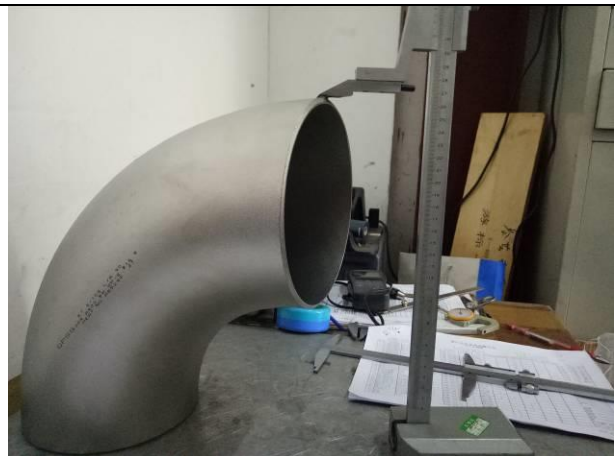
Dimension check



Dimension check



Dimension check



Dimension check

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Dimension check



Dimension check



Thickness check



Thickness check



Thickness check



Thickness check

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Thickness check



Thickness check



NPT Check



NPT Check



PMI process



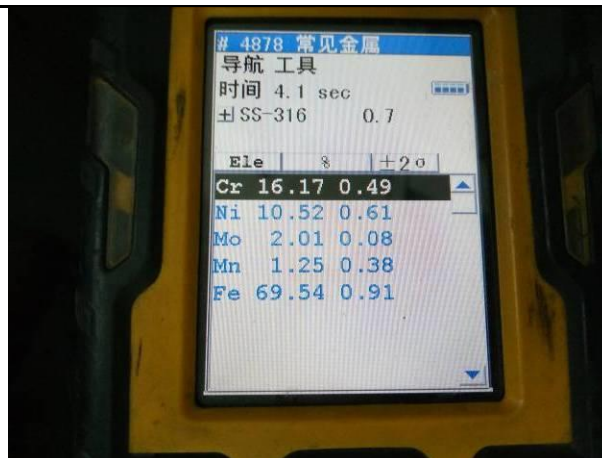
PMI test result

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PMI process



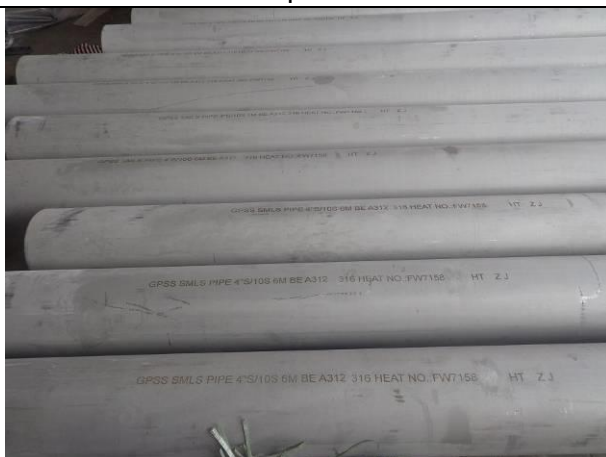
PMI test result



PMI process



PMI test result



Visual inspection



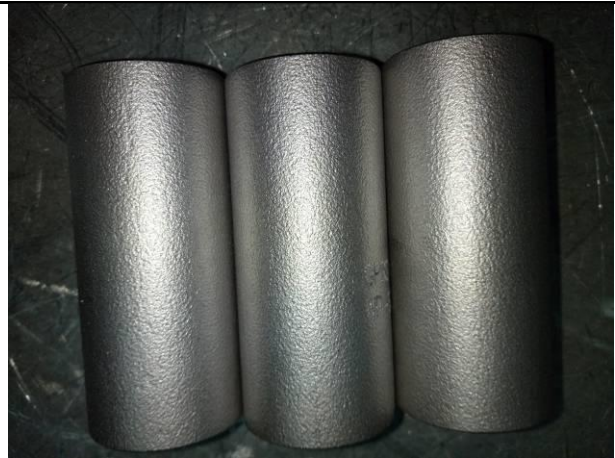
Visual inspection

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Visual inspection



Visual inspection



Visual inspection



Visual inspection



Visual inspection



Visual inspection

Annex1:

Dimension Check Record



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1" S/40S 316 A312 SMLS pipe PEx6m(L), Qty.: 14, Heat No: FW5451

Item	Inspection item	OD	Thickness	Length	Straightness	Appearance	PMI	Sampling Qty.
1	Measured value	33.8-34.0	3.40-3.60	6004-6005	Acc.	Acc.	Acc.	5

2" S/40S 316 A312 SMLS pipe PEx6m(L), Qty.: 2, Heat No: FW8565

Item	Inspection item	OD	Thickness	Length	Straightness	Appearance	PMI	Sampling Qty.
2	Measured value	60.3-60.5	3.70-3.80	6006	Acc.	Acc.	Acc.	1

3" S/10S 316 A312 SMLS pipe BEx6m(L), Qty.: 10, Heat No: FW7158

Item	Inspection item	OD	Thickness	Length	Bevel angle	Straightness	Appearance	PMI	Sampling Qty.
3	Measured value	89.0-89.3	3.0-3.2	6000-6004	38.0-38.5	Acc.	Acc.	Acc.	3

4" S/10S 316 A312 SMLS pipe BEx6m(L), Qty.: 13, Heat No: FW7158

Item	Inspection item	OD	Thickness	Length	Bevel angle	Straightness	Appearance	PMI	Sampling Qty.
4	Measured value	114.5-114.6	3.2-3.3	6006-6005	38.0-38.5	Acc.	Acc.	Acc.	5

6" S/10S 316 A312 SMLS pipe BEx6m(L), Qty.: 7, Heat No: FW6582

Item	Inspection item	OD	Thickness	Length	Bevel angle	Straightness	Appearance	PMI	Sampling Qty.
5	Measured value	168.4-168.8	3.3-3.5	6006-6005	38.0-38.5	Acc.	Acc.	Acc.	3

8" S/10S 316 A312 SMLS pipe PEx6m(L), Qty.: 3, Heat No: FW6582

Item	Inspection item	OD	Thickness	Length	Bevel angle	Straightness	Appearance	PMI	Sampling Qty.
6	Measured value	219.1-219.3	3.5-4.0	6006	37.0	Acc.	Acc.	Acc.	1

10" S/10S 316 A312 SMLS pipe PEx6m(L), Qty.: 1, Heat No: FW8512

Item	Inspection item	OD	Thickness	Length	Bevel angle	Straightness	Appearance	PMI	Sampling Qty.
7	Measured value	273.5-273.0	4.2-5.0	6006	36.0	Acc.	Acc.	Acc.	1

1/2" 3000# L/R 90 A105 SW B16.11 Heat No: A250T3 Qty.: 1pcs

Item	Inspection item	B	D	C	G	J	A	PMI	Sampling Qty.
12	Measured value	22.0	16.5	5.0	6.5-6.6	10.0	16.0	Acc.	1

1" 3000# Half Coupling A105 SW WP-S B16.11 Heat No: A250T3 Qty.: 2pcs



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Item	Inspection item	B	D	C	J	F	PMI	Sampling Qty.
13	Measured value	34.0	27.0	5.8	13.0	27.5	Acc.	1

3/4" 3000# Half Coupling A105 SW WP-S B16.11 Heat No: A250T3 Qty.: 1pcs

Item	Inspection item	B	D	C	J	F	PMI	Sampling Qty.
14	Measured value	27.5	20.5	5.2	13.0	24.0	Acc.	1

1" S/80 Nipple A106 Gr.B WP-S PE x Male NPT Threaded B36.10 x 75mm(L),

Heat No: BA224 Qty.: 3pcs

Item	Inspection item	D	T	L	NPT	PMI	Sampling Qty.
16	Measured value	33.8	4.5-4.6	76.0	OK	Acc.	1

1/2" S/80 Nipple A106 Gr.B WP-S PE x Male NPT Threaded B36.10 x 75mm(L),

Heat No: BA224 Qty.: 1pcs

Item	Inspection item	D	T	L	NPT	PMI	Sampling Qty.
17	Measured value	22.0	4.0	75.0	OK	Acc.	1

3/4" S/80 Nipple A106 Gr.B WP-S PE x Male NPT Threaded B36.10, Heat No: BA224 Qty.: 1pcs

Item	Inspection item	D	T	L	NPT	PMI	Sampling Qty.
18	Measured value	26.9-27.0	4.0	75.0	OK	Acc.	1

3/4" Hexagon Plug Male NPT THRD A105 Round Head, Heat No: A250T3 Qty.: 1pcs

Item	Inspection item	F	H	A	NPT	PMI	Sampling Qty.
19	Measured value	27.0	10.5	16.0	OK	Acc.	1

1" Hexagon Plug Male NPT THRD A105 RD HD, Heat No: A250T3 Qty.: 3pcs

Item	Inspection item	F	H	A	NPT	PMI	Sampling Qty.
20	Measured value	36.0	10.0	19.0	OK	Acc.	1

2" 3000# L/R 45 304 A182 SW B16.11 Heat No: F0602 Qty.: 1pcs



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Item	Inspection item	B	D	C	G	J	A	PMI	Sampling Qty.
21	Measured value	61.4	51.8	7.2	7.3-7.5	16.2	38.3	Acc.	1

14" S/10S L/R 45 304 A403 BW WP-S B16.9 Heat No: A871Q2 Qty.: 3pcs

Item	Inspection item	T1	T2	OD1	B value	Bevel angle	Q/P value	PMI	Sampling Qty.
22	Measured value	4.7-5.0	5.9-6.1	354.8-356.0	223.0-222.2	36.0-37.5	Acc.	Acc.	1

1" 3000# L/R 90 304 SW B16.11 Heat No: F0602 Qty.: 2pcs

Item	Inspection item	B	D	C	G	J	A	PMI	Sampling Qty.
23	Measured value	34.2	27.1	5.5	6.2-6.1	13.0	22.5	Acc.	1

6" S/10S L/R 90 304 A403 BW WP-S B16.9 Heat No: A852Q2 Qty.: 2pcs

Item	Inspection item	T1	T2	OD1	A value	Bevel angle	Q/P value	PMI	Sampling Qty.
24	Measured value	3.4-3.8	3.4-3.7	168.8-169.7	229.0-229.6	36.0-37.0	Acc.	Acc.	1

14" S/10S L/R 90 304 A403 BW WP-S B16.9 Heat No: A871Q2 Qty.: 2pcs

Item	Inspection item	T1	T2	OD1	A value	Bevel angle	Q/P value	PMI	Sampling Qty.
25	Measured value	357.1-355.5	4.8-5.0	5.5-5.7	533.8-534.6	36.5-37.0	Acc.	Acc.	1

14" x8" S/10S Ecc Red 304 A403 BW WP-S B16.9 Heat No: A871Q2 Qty.: 1pcs

Item	Inspection item	T1	T2	OD1	OD2	H value	Bevel angle	Q/P value	PMI	Sampling Qty.
26	Measured value	5.0-5.1	4.0-4.2	355.7-355.5	219.1-219.3	330.5	37.0-37.5	Acc.	Acc.	1

8" x6" S/10S Ecc Red 304 A403 BW WP-S B16.9 Heat No: A852Q2 Qty.: 1pcs

Item	Inspection item	T1	T2	OD1	OD2	H value	Bevel angle	Q/P value	PMI	Sampling Qty.
27	Measured value	4.1-4.0	4.0-3.8	219.5-219.0	168.2-169.0	152.5	37.0-37.5	Acc.	Acc.	1



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2" 150# RF/SW 304 A182 S/40S B16.5 Heat No: F0602 Qty.: 5pcs

Item	Inspection item	O	W	RF OD	RF H	D	Number of bolts	Diameter of bolt holes
28	Measured value	150.0-150.1	120.5-120.3	91.8-91.5	2.0-1.9	18.0	4	19.0-19.1
Item	Inspection item	Y	Thickness of Flange	B1	B2	PMI	Sampling Qty.	/
28	Measured value	26.8-27.0	18.3-18.4	62.4-62.2	52.5-52.6	Acc.	2	/

1" S/40S Nipple 304 A312 WP-S PE x 75mm(L), Heat No: AQ2017 Qty.: 4pcs

Item	Inspection item	D	T	L	PMI	Sampling Qty.
29	Measured value	34.0-34.1	3.6-3.7	75.2-75.0	Acc.	1

1/2" S/40S Nipple 304 A312 WP-S PE x Male NPT THRD x 75mm(L), Heat No: AQ2017 Qty.: 6pcs

Item	Inspection item	D	T	L	NPT	PMI	Sampling Qty.
30	Measured value	21.0-21.2	2.70-2.80	75.0-75.3	OK	Acc.	2

3/4" S/40S Nipple 304 A312 WP-S PE x Male NPT THRD x 75mm(L), Heat No: AQ2017 Qty.: 9pcs

Item	Inspection item	D	T	L	NPT	PMI	Sampling Qty.
31	Measured value	26.8-26.9	2.8-2.9	75.0-75.1	OK	UNACC.	3

1" S/40S Nipple 304 A312 WP-S PE x Male NPT THRD x 75mm(L), Heat No: AQ2017 Qty.: 11pcs

Item	Inspection item	D	T	L	NPT	PMI	Sampling Qty.
32	Measured value	34.0-34.1	75.1-75.2	3.8-3.9	OK	Acc.	4

1/2" S/40S Nipple 304 A312 WP-S Male NPT THRD x Male NPT THRD x 75mm(L),

Heat No: AQ2017 Qty.: 14pcs

Item	Inspection item	D	T	L	NPT	PMI	Sampling Qty.
33	Measured value	21.3-21.2	2.8-2.7	75.2-76.0	OK	Acc.	5



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1" 3000# Hexagon Plug 304 A182 NPT THRD Both Ends, Heat No: F0602 Qty.: 2pcs

Item	Inspection item	F	H	A	NPT	PMI	Sampling Qty.
34	Measured value	36.0-35.9	10.5	19.2	OK	UNACC	1

1" 3000# Half Coupling 304 A182 SW B16.11 Heat No: F0602 Qty.: 4pcs

Item	Inspection item	B	D	C	J	F	PMI	Sampling Qty.
35	Measured value	34.1-34.0	26.2-26.3	5.2-5.5	13.0-13.1	28.0-28.2	Acc.	2

1" 3000# L/R 45 elbow 316 A182 B16.11 Female NPT THRD Heat No: FL662 Qty.: 4pcs

Item	Inspection item	H	L2	B	G	C	NPT	PMI	Sampling Qty.
36	Measured value	56.2-56.3	18.0-18.3	15.5-15.8	7.5-7.8	33.5-34.0	Acc.	Acc.	2

2" 3000# L/R 45 elbow 316 A182 B16.11 Female NPT THRD Heat No: FL662 Qty.: 1pcs

Item	Inspection item	H	L2	B	G	C	NPT	PMI	Sampling Qty.
37	Measured value	84.5	25.0	20.5	7.5-7.8	44.1	Acc.	Acc.	1

3" S/10S L/R 45 elbow 316 A403 B16.9 BW WP-S Heat No: FW7158 Qty.: 4pcs

Item	Inspection item	T1	T2	OD1	B value	Bevel angle	Q/P value	PMI	Sampling Qty.
38	Measured value	3.0-3.3	3.1-3.2	88.8-89.3	51.2-52.0	36.0-37.0	Acc.	Acc.	2

4" S/10S L/R 45 elbow 316 A403 B16.9 BW WP-S Heat No: FW7158 Qty.: 2pcs

Item	Inspection item	T1	T2	OD1	B value	Bevel angle	Q/P value	PMI	Sampling Qty.
39	Measured value	3.2-3.4	3.4-3.5	114.0-114.5	64.1-64.6	36.5-37.0	Acc.	Acc.	1



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8" S/10S L/R 45 elbow 316 A403 B16.9 BW WP-S Heat No: FW6582 Qty.: 3pcs

Item	Inspection item	T1	T2	OD1	B value	Bevel angle	Q/P value	PMI	Sampling Qty.
40	Measured value	3.9-3.5	3.7-3.9	219.0-218.5	126.7-127.2	36.0-37.0	Acc.	Acc.	1

1.5" 3000# L/R 90 elbow 316 A182 B16.11 SW Heat No: FL662 Qty.: 1pcs

Item	Inspection item	B	D	C	G	J	A	PMI	Sampling Qty.
41	Measured value	49.0	41.0	6.7	6.3-6.5	13.0	31.5	Acc.	1

2" 3000# L/R 90 elbow 316 A182 B16.11 SW Heat No: FL662 Qty.: 9pcs

Item	Inspection item	B	D	C	G	J	A	PMI	Sampling Qty.
42	Measured value	61.4-61.5	52.4-52.5	7.0-7.1	7.3-7.4	16.0-16.1	38.0-38.1	Acc.	3

6" S/10S L/R 90 elbow 316 A403 B16.9 BW WP-S Heat No: FW6582 Qty.: 5pcs

Item	Inspection item	T1	T2	OD1	A value	Bevel angle	Q/P value	PMI	Sampling Qty.
43	Measured value	3.3-3.6	3.1-3.3	168.5-169.0	228.8-229.5	38.0-37.0	Acc.	Acc.	2

8" S/10S S/R 90 elbow 316 A403 B16.9 BW WP-S Heat No: FW6582 Qty.: 1pcs

Item	Inspection item	T1	T2	OD1	A value	B1 level angle	Q/P value	PMI	Sampling Qty.
44	Measured value	4.1-3.8	4.4-4.8	218.3-220.0	202.6-203.7	36.5-37.0	Acc.	Acc.	1

4" x3" S/10 Con Red 316 A403 BW WP-S B16.9 Heat No: FW7158 Qty.: 1pcs

Item	Inspection item	T1	T2	OD1	OD2	H value	Bevel angle	Q/P value	PMI	Sampling Qty.
45	Measured value	4.3-3.8	3.8-3.6	114.1-114.5	89.0-89.1	102.5	37.5-38.0	Acc.	Acc.	1

1/2" 3000# Tee 316 A182 B16.11 SW, Heat No: FL662 Qty.: 10pcs

Item	Inspection item	B	D	C	G	J	A	PMI	Sampling Qty.
46	Measured value	22.0-22.1	16.0-16.2	5.0-5.1	5.9-6.2	10.0-10.5	16.0-16.2	Acc.	3



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1.5" 3000# Tee 316 A182 B16.11 SW, Heat No: FL662 Qty.: 1pcs

Item	Inspection item	B	D	C	G	J	A	PMI	Sampling Qty.
47	Measured value	49.0	40.8	7.3	6.9-7.0	13.0	31.5	Acc.	1

2" 3000# Tee 316 A182 B16.11 SW, Heat No: FL662 Qty.: 5pcs

Item	Inspection item	B	D	C	G	J	A	PMI	Sampling Qty.
48	Measured value	61.3-61.4	52.0-52.3	7.0-7.1	7.5-7.7	16.0-16.3	77.0-77.3	Acc.	2

4" S/10S Tee 316 A403 BW WP-S B16.9 Heat No: FW7158 Qty.: 1pcs

Item	Inspection item	T1	T2	OD1	OD2	M value	C value	Bevel angle	Q/P value	PMI	Sampling Qty.
49	Measured value	3.7-3.5	3.3-3.2	114.2-144.4	114.1-114.2	105.1-105.9	105.3-106.0	36.5-37.5	Acc.	Acc.	1

6" S/10S Tee 316 A403 BW WP-S B16.9 Heat No: FW6582 Qty.: 1pcs

Item	Inspection item	T1	T2	OD1	OD2	M value	C value	Bevel angle	Q/P value	PMI	Sampling Qty.
50	Measured value	3.5-3.7	3.3-3.1	168.0-169.5	168.0-169.0	143.0-143.9	144.0-144.7	36.0-37.5	Acc.	Acc.	1

3/4" 150# RF/SW 316 A182 B16.5 S/40S Heat No: 213T2 Qty.: 1pcs

Item	Inspection item	O	W	RF OD	RF H	D	Number of bolts	Diameter of bolt holes
51	Measured value	100.0	69.5	43.0	2.0	11.0	4	16.0
Item	Inspection item	Y	Thickness of Flange	B1	B2	PMI	Sampling Qty.	/
51	Measured value	16.3	12.0	27.6	21.0	Acc.	1	/



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1.5" 150# RF/SW 316 A182 B16.5 S/40S Heat No: 213T2 Qty.: 8pcs

Item	Inspection item	O	W	RF OD	RF H	D	Number of bolts	Diameter of bolt holes
52	Measured value	125.0-125.2	99.0-98.5	72.7-72.5	1.9-2.0	15.0-14.8	4	16.0-16.1
Item	Inspection item	Y	Thickness of Flange	B1	B2	PMI	Sampling Qty.	/
52	Measured value	24.0-24.2	16.8-17.0	49.2-49.3	40.8-39.5	Acc.	3	/

2" 150# RF/SW 316 A182 B16.5 S/40S Heat No: 213T2 Qty.: 20pcs

Item	Inspection item	O	W	RF OD	RF H	D	Number of bolts	Diameter of bolt holes
53	Measured value	150.0-150.3	120.5-120.8	91.8-91.7	1.9-2.0	17.0-17.2	4	19.0-19.1
Item	Inspection item	Y	Thickness of Flange	B1	B2	PMI	Sampling Qty.	/
53	Measured value	26.2-26.5	18.0-18.1	62.0-62.1	52.5-52.6	Acc.	7	/

3" 150# RF/WN 316 A182 B16.5 S/10S Heat No: 213T2 Qty.: 17pcs

Item	Inspection item	O	W	RF OD	RF H	Aft	Number of bolts	Diameter of bolt holes
54	Measured value	190.0-190.2	153.2-153.0	126.8-127.0	2.0-1.9	89.0-88.9	4	19.0-19.1
Item	Inspection item	Y	Thickness of Flange	B	T	PMI	Sampling Qty.	/
54	Measured value	68.0-68.1	22.5-22.3	82.0-82.1	3.2-3.3	Acc.	6	/

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J-PECO Job nr: CLIENT-15210-170510

10" 150# RF/WN 316 A182 B16.5 S/10S Heat No: 213T2 Qty.: 3pcs

Item	Inspection item	O	W	RF OD	RF H	Aft	Number of bolts	Diameter of bolt holes
55	Measured value	405.0	363.0	326.5	2.0	273.0	12	26.0-26.1
Item	Inspection item	Y	Thickness of Flange	B	T	PMI	Sampling Qty.	/
55	Measured value	98.0	30.2	263.0	5.0	Acc.	1	/

1/2" S/40S Nipple 316 A312 WP-S PE x PE x 75mm(L), Heat No: FW5451 Qty.: 14pcs

Item	Inspection item	D	T	L	PMI	Sampling Qty.
56	Measured value	34.021.4-21.3	2.8-2.7	75.2-75.0	Acc.	5

1" S/40S Nipple 316 A312 WP-S PE x PE x 75mm(L), Heat No: FW5451 Qty.: 4pcs

Item	Inspection item	D	T	L	PMI	Sampling Qty.
57	Measured value	34.0-33.9	3.6-3.7	75.5-75.3	Acc.	2

1" S/40S Nipple 316 A312 WP-S PE x Male NPT THRD x 75mm(L), Heat No: FW5451 Qty.: 12pcs

Item	Inspection item	D	T	L	NPT	PMI	Sampling Qty.
58	Measured value	34.0-34.1	3.8-4.1	74.5-75.0	OK	Acc.	4

1/2" S/40S Nipple 316 A312 WP-S PE x Male NPT THRD x 75mm(L), Heat No: FW5451 Qty.: 43pcs

Rejected due to inner surface cracks

Item	Inspection item	D	T	L	NPT	PMI	Sampling Qty.
59	Measured value	34.0	26.5	5.2	13.0	Acc.	1

3/4" S/40S Nipple 316 A312 WP-S PE x Male NPT THRD x 75mm(L), Heat No: FW5451 Qty.: 14pcs

Item	Inspection item	D	T	L	NPT	PMI	Sampling Qty.
60	Measured value	27.0-27.1	2.8-2.7	75.5-75.0	OK	Acc.	5

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J-PECO Job nr: CLIENT-15210-170510

1.5" S/40S Nipple 316 A312 WP-S PE x Male NPT THRD x 75mm(L), Heat No: FW5451 Qty.: 2pcs

Item	Inspection item	D	T	L	NPT	PMI	Sampling Qty.
61	Measured value	48.0-48.1	3.5-3.7	75.5-75.3	OK	Acc.	1

1/2" S/40S Nipple 316 A312 WP-S Male NPT THRD x Male NPT THRD x 75mm(L),

Heat No: FW5451 Qty.: 29pcs

Item	Inspection item	D	T	L	NPT	PMI	Sampling Qty.
62	Measured value	21.2-21.3	3.0-3.1	75.0-75.2	OK	Acc.	10

3/4" S/40S Nipple 316 A312 WP-S Male NPT THRD x Male NPT THRD x 75mm(L),

Heat No: FW5451 Qty.: 2pcs

Item	Inspection item	D	T	L	NPT	PMI	Sampling Qty.
63	Measured value	26.9-27.0	2.7-2.8	75.0-75.2	OK	Acc.	1

1" S/40S Nipple 316 A312 WP-S Male NPT THRD x Male NPT THRD x 75mm(L),

Heat No: FW5451 Qty.: 5pcs

Item	Inspection item	D	T	L	NPT	PMI	Sampling Qty.
64	Measured value	34.0-34.1	3.8-3.6	75.0-75.5	OK	Acc.	2

1" x0.5" 3000# Red Coupling 316 A182 B16.11 SW Heat No: FL662 Qty.: 3pcs

Item	Inspection item	B1	D1	C	J1	E	B2	D2	J2	PMI	Sampling Qty.
65	Measured value	34.0	16.0	5.2	13.5	13.8	22.0	17.0	10.5	Acc.	1

2" x1.5" 3000# Red Coupling 316 A182 B16.11 SW Heat No: FL662 Qty.: 2pcs

Item	Inspection item	B1	D1	C	J1	E	B2	D2	J2	PMI	Sampling Qty.
66	Measured value	61.6	52.2	6.3	16.5	18	49.1	41.6	13.5	Acc.	1



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J-PECO Job nr: CLIENT-15210-170510

2" x3/4" 3000# Red Coupling 316 A182 B16.11 SW Heat No: FL662 Qty.: 1pcs

Item	Inspection item	B1	D1	C	J1	E	B2	D2	J2	PMI	Sampling Qty.
67	Measured value	61.5	53.2	6.3	16.2	19.3	27.3	21.0	13.0	Acc.	1

1.25" x1" 3000# Red Bush Male NPT x Female NPT 316 A182 , Heat No: FL662 Qty.: 3pcs

Item	Inspection item	F	G	A	NPT	PMI	Sampling Qty.
68	Measured value	45.8	7.0	21.0	OK	Acc.	1

1" x3/4" 3000# Red Tee 316 A182 B16.11 SW, Heat No: FL662 Qty.: 2pcs

Item	Inspection item	B1	D1	C	G	J1	A	B2	D2	J2	PMI	Sampling Qty.
69	Measured value	34.0	27.0	6.5	6.1-6.5	13.0	22.5	27.3	21.5	13.4	Acc.	1

1.5" x0.5" 3000# Red Tee 316 A182 B16.11 SW, Heat No: FL662 Qty.: 2pcs

Item	Inspection item	B1	D1	C	G	J1	A	B2	D2	J2	PMI	Sampling Qty.
70	Measured value	49.0	41.3	6.3	6.7-7.3	13.0	31.0	22.0	15.8	10.5	Acc.	1

1.5" x3/4" 3000# Red Tee 316 A182 B16.11 SW, Heat No: FL662 Qty.: 1pcs

Item	Inspection item	B1	D1	C	G	J1	A	B2	D2	J2	PMI	Sampling Qty.
71	Measured value	49.3	41.0	6.8	6.9-7.0	13.0	32.2	27.4	21.3	13.0	Acc.	1

1" x0.5" 3000# Red Tee 316 A182 B16.11 Female NPT THRD, Heat No: FL662 Qty.: 3pcs

Item	Inspection item	H	L2(1)	B1	G	A	L2(2)	B2	NPT	PMI	Sampling Qty.
72	Measured value	57.6	20.0	16.0	7.0-6.8	44.4	17.0	12.5	OK	Acc.	1



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J-PECO Job nr: CLIENT-15210-170510

10" x6" S/10S Red Tee 316 A403 BW WP-S ANSI B16.9 Heat No: FW8512 Qty.: 4pcs

ITEM	Inspection item	T1	T2	OD1	OD2	M value	C value	Bevel angle	Q/P value	PMI	Sampling Qty.
73	Measured value	4.7-4.6	4.0-4.1	273.2-273.5	169.5-168.5	216.8-217.0	194.9-195.3	36.0-37.0	Acc.	Acc.	2

1" x0.5" 3000# Swage Con Red 316 A182 B16.11 SW, Heat No: FL662 Qty.: 3pcs

Rejected due to product not conformed to PO requires.

Item	Inspection item	D	L2	B	W	L2	B	NPT	PMI	Sampling Qty.
74	Measured value	44.7	21.0	17.0	53.9	17.5	13.0	OK	Acc.	1

0.5" 150# RF/BL 316 A182 B16.5, Heat No: 213T2 Qty.: 2pcs

Item	Inspection item	OD	K	RF OD	RF H	Diameter of bolt holes
75	Measured value	90.2	61.5	35.0	2.0	16.0
Item	Inspection item	Number of bolts	Thickness of Flange	PMI	Sampling Qty.	/
75	Measured value	4	10.0	Acc.	1	/

1" 150# RF/BL 316 A182 B16.5, Heat No: 213T2 Qty.: 49pcs

Item	Inspection item	OD	K	RF OD	RF H	Diameter of bolt holes
76	Measured value	110.0-110.1	79.8-80.0	51.0-50.8	1.9-2.0	16.0
Item	Inspection item	Number of bolts	Thickness of Flange	PMI	Sampling Qty.	/
76	Measured value	4	13.0-13.3	Acc.	17	/



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J-PECO Job nr: CLIENT-15210-170510

8" 150# RF/BL 316 A182 B16.5, Heat No: 213T2 Qty.: 1pcs

Item	Inspection item	OD	K	RF OD	RF H	Diameter of bolt holes
77	Measured value	345.0	299.0	269.0	1.9	22.0
Item	Inspection item	Number of bolts	Thickness of Flange	PMI	Sampling Qty.	/
77	Measured value	8	27.2	Acc.	1	/

1" 3000# Hexagon Plug 316 A182 Male NPT THRD, Heat No: FL662 Qty.: 24pcs

Item	Inspection item	F	H	A	NPT	PMI	Sampling Qty.
78	Measured value	36.0-36.1	10.0-10.1	19.0-19.2	OK	Acc.	8

1/2" 3000# Hexagon Plug 316 A182 Male NPT THRD, Heat No: FL662 Qty.: 6pcs

Item	Inspection item	F	H	A	NPT	PMI	Sampling Qty.
79	Measured value	22.0-22.1	8.5-8.0	14.0-14.1	OK	Acc.	2

3/4" 3000# Hexagon Plug 316 A182 Male NPT THRD, Heat No: FL662 Qty.: 13pcs

Item	Inspection item	F	H	A	NPT	PMI	Sampling Qty.
80	Measured value	27.0-27.1	10.0-10.2	16.5-16.6	OK	Acc.	5

1" 3000# Full Coupling 316 A182 B16.11 SW, Heat No: FL662 Qty.: 17pcs

Item	B	D	C	J	E	Appearance	PMI	Sampling Qty.
81	34.2-34.1	26.5-26.4	5.5-5.4	13.0-13.1	12.0-12.2	Acc.	Acc.	6

1" 3000# Full Coupling 316 A182 B16.11 Female NPT THRD, Heat No: FL662 Qty.: 1pcs

Item	OD	B	L2	W	NPT	Appearance	PMI	Sampling Qty.
82	43.5	16.0	20.5	60.0	Acc.	Acc.	Acc.	1

1" 3000# Half Coupling 316 A182 B16.11 SW Heat No: FL662 Qty.: 6pcs

Item	Inspection item	B	D	C	J	F	PMI	Sampling Qty.
83	Measured value	34.1-34.0	26.4-26.6	5.3-5.5	13.0-13.2	28-28.3	Acc.	2



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J-PECO Job nr: CLIENT-15210-170510

2" 3000# Half Coupling 316 A182 B16.11 SW Heat No: FL662 Qty.: 3pcs

Item	Inspection item	B	D	C	J	F	PMI	Sampling Qty.
84	Measured value	61.4	53.0	7.2	16.0	41.5	Acc.	1

0.5" 3000# Half Coupling 316 A182 B16.11 Female NPT THRD Heat No: FL662 Qty.: 1pcs

Item	Inspection item	D	L2	W/2	B	PMI	Sampling Qty.
85	Measured value	28.0	17.5	24.0	12.0	Acc.	1

3/4" 3000# Cap 316 A182 B16.11 SW Heat No: FL662 Qty.: 1pcs

Item	Inspection item	B	C	J	K	PMI	Sampling Qty.
86	Measured value	27.6	5.2	13.0	8	Acc.	1

Annex 2:

PMI test record

Item	Description	Qty Ordered	Mn	Cr	Ni	Mo	Sampling Qty.
1	1" S/40S 316 A312 SMLS pipe PEx6m(L)	14	0.99-1.07	16.04-16.26	10.27-10.28	2.09-2.21	2
2	2" S/40S 316 A312 SMLS pipe PEx6m(L)	2	0.864	16.07	10.20	2.06	1
3	3" S/10S 316 A312 SMLS pipe BEx6m(L)	10	0.936	16.75	10.14	2.03	1
4	4" S/10S 316 A312 SMLS pipe BEx6m(L)	13	1.07-0.812	17.11-16.81	10.09-10.94	2.01-2.01	2
5	6" S/10S 316 A312 SMLS pipe BEx6m(L)	7	0.877	16.45	10.04	2.04	1
6	8" S/10S 316 A312 SMLS pipe BEx6m(L)	3	0.869	16.49	10.45	2.10	1
7	10" S/10S 316 A312 SMLS pipe BEx6m(L)	1	1.16	16.57	10.12	2.09	1
12	1/2" 3000# L/R 90 A105 SW B16.11	1	-	-	-	-	-
13	1" 3000# Half Coupling A105 SW WP-S B16.11	2	-	-	-	-	-



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J-PECO Job nr: CLIENT-15210-170510

14	3/4" 3000# Half Coupling A105 SW WP-S B16.11	1	-	-	-	-	-
16	1" S/80 Nipple A106 Gr.B WP-S PE x Male NPT Threaded B36.10 x 75mm(L)	3	-	-	-	-	-
17	1/2" S/80 Nipple A106 Gr.B WP-S PE x Male NPT Threaded B36.10 x 75mm(L)	1	-	-	-	-	-
18	3/4" S/80 Nipple A106 Gr.B WP-S PE x Male NPT Threaded B36.10	1	-	-	-	-	-
19	3/4" Hexagon Plug Male NPT THRD A105 Round Head	1	-	-	-	-	-
20	1" Hexagon Plug Male NPT THRD A105 RD HD	3	-	-	-	-	-
21	2" 3000# L/R 45 304 A182 SW B16.11	1	1.01	18.30	8.11	/	1
22	14" S/10S L/R 45 304 A403 BW WP-S B16.9	3	1.29	18.07	8.15	/	1
23	1" 3000# L/R 90 304 SW B16.11	2	0.977	18.02	8.27	/	1
24	6" S/10S L/R 90 304 A403 BW WP-S B16.9	2	0.503	18.14	9.02	/	1
25	14" S/10S L/R 90 304 A403 BW WP-S B16.9	2	1.27	18.05	8.19	/	1
26	14" x8" S/10S Ecc Red 304 A403 BW WP-S B16.9	1	1.36	18.18	8.20	/	1
27	8" x6" S/10S Ecc Red 304 A403 BW WP-S B16.9	1	0.948	18.03	8.43	/	1
28	2" 150# RF/SW 304 A182 S/40S B16.5	5	1.09	18.04	8.21	/	1
29	1" S/40S Nipple 304 A312 WP-S PE x 75mm(L)	4	0.918	18.05	8.32	/	1
30	1/2" S/40S Nipple 304 A312 WP-S PE x Male NPT THRD x 75mm(L)	6	0.933	18.44	8.14	/	1
31	3/4" S/40S Nipple 304 A312 WP-S PE x Male NPT THRD x 75mm(L)	9	-	-	-	-	-
32	1" S/40S Nipple 304 A312 WP-S PE x Male NPT THRD x 75mm(L)	11	1.07- 1.19	18.02- 18.00	8.14- 8.41	/	2



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J-PECO Job nr: CLIENT-15210-170510

33	1/2" S/40S Nipple 304 A312 WP-S Male NPT THRD x Male NPT THRD x 75mm(L)	14	1.05- 1.04	18.16- 18.27	8.02- 8.01	/	2
34	1" 3000# Hexagon Plug 304 A182 NPT THRD Both Ends	2	-	-	-	-	-
35	1" 3000# Half Coupling 304 A182 SW B16.11	4	1.09	18.04	8.21	/	1
36	1" 3000# L/R 45 elbow 316 A182 B16.11 Female NPT THRD	4	0.949	16.32	10.29	2.04	1
37	2" 3000# L/R 45 elbow 316 A182 B16.11 Female NPT THRD	1	0.966	16.30	10.33	2.19	1
38	3" S/10S L/R 45 elbow 316 A403 B16.9 BW WP-S	4	1.08	16.10	10.03	2.20	1
39	4" S/10S L/R 45 elbow 316 A403 B16.9 BW WP-S	2	1.00	16.62	10.04	2.20	1
40	8" S/10S L/R 45 elbow 316 A403 B16.9 BW WP-S	3	1.04	16.42	10.10	2.30	1
41	1.5" 3000# L/R 90 elbow 316 A182 B16.11 SW	1	0.999	16.06	10.04	2.14	1
42	2" 3000# L/R 90 elbow 316 A182 B16.11 SW	9	1.87	16.01	10.72	2.15	1
43	6" S/10S L/R 90 elbow 316 A403 B16.9 BW WP-S	5	0.854	16.17	10.05	2.26	1
44	8" S/10S S/R 90 elbow 316 A403 B16.9 BW WP-S	1	0.821	16.72	10.34	2.07	1
45	4" x3" S/10 Con Red 316 A403 BW WP-S B16.9	1	0.791	16.12	10.23	2.10	1
46	1/2" 3000# TEE 316 A182 B16.11 SW	10	1.01	16.31	10.34	2.10	1
47	1.5" 3000# TEE 316 A182 B16.11 SW	1	1.11	16.27	10.32	2.15	1
48	2" 3000# TEE 316 A182 B16.11 SW	5	0.974	16.77	10.08	2.07	1
49	4" S/10S Tee 316 A403 BW WP-S B16.9	1	0.64	16.42	10.33	2.10	1
50	6" S/10S Tee 316 A403 BW WP-S B16.9	1	0.841	16.63	10.09	2.09	1
51	3/4" 150# RF/SW 316 A182 B16.5 S/40S	1	0.833	16.23	10.25	2.05	1
52	1.5" 150# RF/SW 316 A182 B16.5 S/40S	8	0.858	16.20	10.03	2.11	1
53	2" 150# RF/SW 316 A182 B16.5 S/40S	20	0.963- 0.778	16.06- 16.46	10.06- 10.01	2.18- 2.06	2



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54	3" 150# RF/WN 316 A182 B16.5 S/10S	17	0.745- 0.711	17.13- 17.15	10.17- 10.11	2.14- 2.11	2
55	10" 150# RF/WN 316 A182 B16.5 S/10S	3	0.98	16.03	10.10	2.23	1
56	1/2" S/40S Nipple 316 A312 WP-S PE x PE x 75mm(L)	14	1.40- 0.669	16.33- 16.23	10.31- 10.48	2.07- 2.15	2
57	1" S/40S Nipple 316 A312 WP-S PE x PE x 75mm(L)	4	0.922	16.45	10.00	2.11	1
58	1" S/40S Nipple 316 A312 WP-S PE x Male NPT THRD x 75mm(L)	12	0.986- 0.997	16.03- 16.56	10.03- 10.05	2.22- 2.08	2
59	1/2" S/40S Nipple 316 A312 WP-S PE x Male NPT THRD x 75mm(L)	43	-	-	-	-	-
60	3/4" S/40S Nipple 316 A312 WP-S PE x Male NPT THRD x 75mm(L)	14	0.909- 1.10	16.03- 16.32	10.01- 10.25	2.06- 2.01	2
61	1.5" S/40S Nipple 316 A312 WP-S PE x Male NPT THRD x 75mm(L)	2	1.14	16.20	10.07	2.01	1
62	1/2" S/40S Nipple 316 A312 WP-S Male NPT THRD x Male NPT THRD x 75mm(L)	29	0.803- 1.17	16.06- 16.25	10.42- 10.54	2.10- 2.06	3
63	3/4" S/40S Nipple 316 A312 WP-S Male NPT THRD x Male NPT THRD x 75mm(L)	2	0.959	16.54	10.05	2.15	1
64	1" S/40S Nipple 316 A312 WP-S Male NPT THRD x Male NPT THRD x 75mm(L)	5	0.595	16.35	10.42	2.09	1
65	1" x0.5" 3000# Red Coupling 316 A182 B16.11 SW	3	0.994	16.22	10.00	2.20	1
66	2" x1.5" 3000# Red Coupling 316 A182 B16.11 SW	2	0.741	16.45	10.03	2.10	1
67	2" x3/4" 3000# Red Coupling 316 A182 B16.11 SW	1	1.11	16.05	10.03	2.12	1
68	1.25" x1" 3000# Red Bush Male NPT x Female NPT 316 A182	3	1.25	16.17	10.52	2.01	1
69	1" x3/4" 3000# Red Tee 316 A182 B16.11 SW	2	0.688	16.28	10.06	2.06	1
70	1.5" x0.5" 3000# Red Tee 316 A182 B16.11 SW	2	0.699	16.57	11.44	2.11	1
71	1.5" x3/4" 3000# Red Tee 316 A182 B16.11 SW	1	0.69	16.20	10.38	2.07	1



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J-PECO Job nr: CLIENT-15210-170510

72	1" x0.5" 3000# Red Tee 316 A182 B16.11 Female NPT THRD	3	0.805	16.58	10.58	2.06	1
73	10" x6" S/10S Red Tee 316 A403 BW WP-S ANSI B16.9	4	0.955	16.52	10.04	2.06	1
74	1" x0.5" 3000# Swage Con Red 316 A182 B16.11 SW	3	0.46	16.75	10.57	2.11	1
75	0.5" 150# RF/BL 316 A182 B16.5	2	0.904	16.43	10.63	2.12	1
76	1" 150# RF/BL 316 A182 B16.5	49	0.691-0.748	16.13-16.29	10.34-11.20	2.04-2.26	5
77	8" 150# RF/BL 316 A182 B16.5	1	0.974	16.09	10.11	2.07	1
78	1" 3000# Hexagon Plug 316 A182 Male NPT THRD	24	0.865-0.957	16.10-16.05	10.04-10.12	2.02-2.04	3
79	1/2" 3000# Hexagon Plug 316 A182 Male NPT THRD	6	0.848	16.64	10.06	2.03	1
80	3/4" 3000# Hexagon Plug 316 A182 Male NPT THRD	13	0.962-1.14	16.45-16.39	10.08-10.02	2.06-2.06	2
81	3/4" 3000# Full Coupling 316 A182 B16.11 SW	17	0.576-0.999	16.05-16.05	12.22-10.16	2.12-2.05	2
82	1" 3000# Full Coupling 316 A182 B16.11 Female NPT THRD	1	1.06	16.07	10.02	2.12	1
83	1" 3000# Half Coupling 316 A182 B16.11 SW	6	1.04	16.18	10.04	2.03	1
84	2" 3000# Half Coupling 316 A182 B16.11 SW	3	0.527	16.34	12.17	2.06	1
85	0.5" 3000# Half Coupling 316 A182 B16.11 Female NPT THRD	1	0.67	16.32	11.84	2.10	1
86	3/4" 3000# Cap 316 A182 B16.11 SW	1	0.975	16.45	10.15	2.11	1

ANNEXES ☒ Yes ☐ No MTC of CLIENT15210

**INSPECTION REPORT Nr CLIENT-15210-170510****J-PECO Job nr: CLIENT-15210-170510****Inspected by:**

Name: Jian Zhang

Signature:

Date of issue: May. 10th, 2016**Inspection centre:** J-PECO Project supervision**Checked by:**

Name: Xiaonan Liu

Signature:

Distribution: ☒ CLIENT☐ MANUFACTURER☒ J-PECO CHINA