



INSPECTION REPORT

Client: *****

Client order No: 1111716B

Factory: *****

Inspector: Jack Lau

Report date: Dec-2th~4th 2016



Fair Valve Inspection

Report No.:F-201612005

1、 Product Description and amount of inspection

Item	Product Description	Quantity (SETS)		
		Order	Series no.	Inspected
1	Duo-plate check valve 2"150lb	4	VC16061-001~004	4
2	Duo-plate check valve 3"150lb	3	VC16061-005~007	3
3	Ball valve 2"150lb	4	VC16059-002~003	4
4	Three ways ball valve 2"150lb	2	VC16059-005~006	2
5	Three ways ball valve 3"150lb	2	VC16059-007~008	2
6	Three ways ball valve 8"150lb	1	VC16059-009	1
Total		16		16

2、 Inspection activities

Inspection place & Date or Period:

Wuxing Industrial Area Oubei Town, Wenzhou City, Zhejiang Province,China.
Dec-2th~4th 2016

Stage of inspection :

- Before manufacturing
- During manufacturing
- Final
- Packing

Kind of inspection:

- Pre-inspection meeting
- Witnessing tests
- Material inspection
- Document review
- Packing

Results of inspection :

- Satisfactory
- Unsatisfactory

Main Conclusions & Remarks:

1,The torque was out of control at first time, then the supplier dis-assemble unit and assemble again, We witness again and the torque was acceptable.

Product basic information on products is conducted by inspectors examine test and performance test, structure test, size, details are as follows:

- 1) visual inspection to check the basic information of the products, to record the scene visual information;
- 2) Inspection on the appearance of the product structure.
- 3) According to the requirements of the guests for the product structure length and flange size measurement, Record the measured data;



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4) PMI TEST

5) According to the requirements of the guests on the performance of the product testing, testing standards, in accordance with API 598.

6) Packing inspection.

In size and performance test before, Inspector has carried on the inspection to measure caliper and pressure gauge, Confirm that they are qualified and effective.



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PMI INSPECTION

Data of Spectrum Analysis													
Material: CF8		C%	Si%	Mn%	P%	S%	Cr%	Mo%	Ni%	Co%	Cu%	Fe%	Remark
ITEM	Heat No.	≤0.08	≤2	≤1.5	≤0.04	≤0.04	18~21	≤0.5	8~12	/	/	/	ASTM A351
Three ways ball valve 8"150lb-body	9965	/	/	0.97/0.80	/	/	18.47/18.38	0.19/0.16	8.31/8.29	0.27/0.17	0.17/ 0.16	71.64/71.91	PASS
Three ways ball valve 3"150lb-body	8809	/	/	1.26/1.46	/	/	18.62/18.46	0.07/0.07	8.51/8.15	/	0.06	71.38/71.87	PASS
Duo-plate check valve 3"150lb-disc	2198	/	/	1.04	/	/	18.25	0.09	8.18	0.39	0.10	71.95	PASS
Duo-plate check valve 2"150lb-disc	0822	/	/	1.11	/	/	18.13	0.09	8.49	0.24	0.27	72.08	PASS
Note:	NIL												
Comment:	NIL.												



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Data of Spectrum Analysis													
Material: SS304		C%	Si%	Mn%	P%	S%	Cr%	Mo%	Ni%	Co%	Cu%	Fe%	Remark
ITEM	Heat No.	≤0.08	≤1	≤2	≤0.045	≤0.03	18~20	≤0.5	8~11	/	/	/	ASTM A182
Three ways ball valve 2"150lb-body	DG1612	/	/	0.99/1.06	/	/	18.23/18.45	0.09/0.08	8.11/8.09	0.17/	/	72.41/72.70	PASS
Three ways ball valve 2"150lb-bonnet	DG1612	/	/	1.09/0.78	/	/	18.34/19.19	0.19/0.23	8.22/8.15	/	0.23	71.94/72.08	PASS
Three ways ball valve 2"150lb-ball	S6625	/	/	0.82/	/	/	18.43/	0.36/	8.19/	/	/	72.58/	PASS
Ball valve 2"150lb-body	Q163	/	/	1.21/1.20	/	/	18.36/18.18	0.21/0.20	8.27/8.33	0.18	/	72.34/72.30	PASS
Ball valve 2"150lb-bonnet	Q163	/	/	1.14/	/	/	18.70/	0.22/	8.32/	/	0.18/	71.84/	PASS
Ball valve 2"150lb-ball	K235	/	/	1.05/	/	/	18.64/	0.09/	8.48/	/	0.22/	71.93/	PASS
Duo-plate check valve 2"150lb-body	1609	/	/	1.37/1.16	/	/	18.10/18.32	0.12/0.13	8.32/8.46	0.16/0.19	0.07	72.14/72.14	PASS
Note:	NIL												
Comment:	NIL.												

PHOTO ATTACHMENT



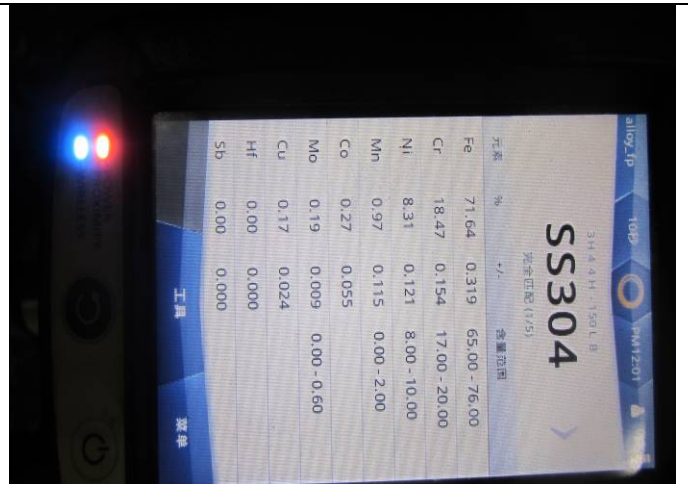
1 PMI on body



2 marking



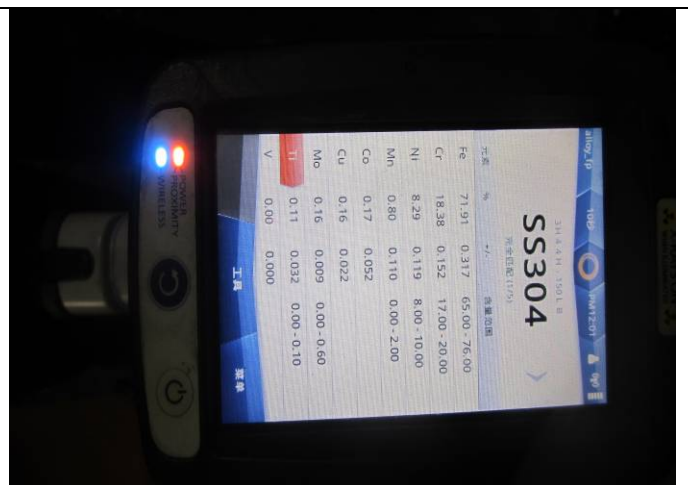
3 details



4 details



5 details



6 details



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7 PMI on body



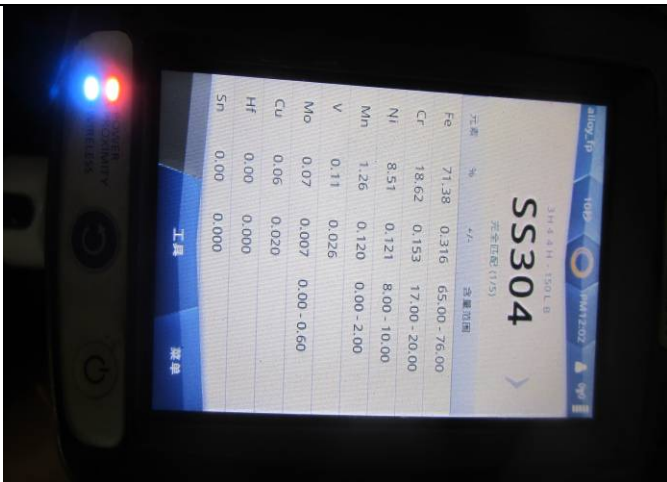
8 marking



9 heat no.



10 details



11 details



12 details



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元素	%	+/-	数量范围
Fe	71.87	0.318	65.00 - 76.00
Cr	18.46	0.153	17.00 - 20.00
Ni	8.15	0.119	8.00 - 10.00
Mn	1.46	0.124	0.00 - 2.00
Mo	0.07	0.007	0.00 - 0.60
Sb	0.00	0.000	
Hf	0.00	0.000	
Sn	0.00	0.000	
In	0.00	0.000	

316L 4H - 1504LB
SS304
完全匹配 (1/5)

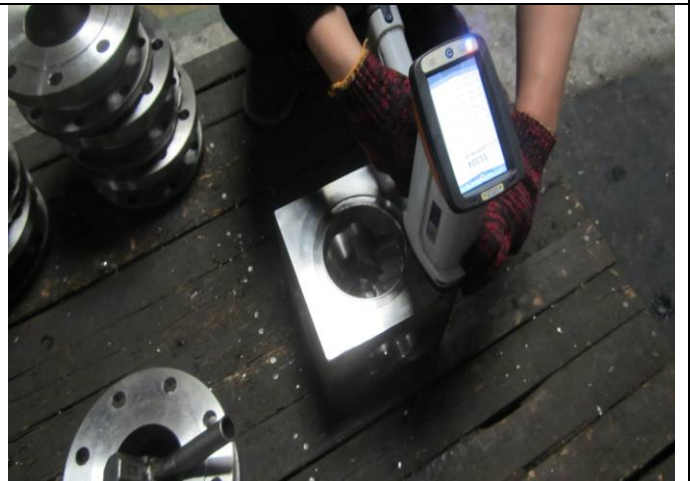
13 details



14 heat no.



15 PMI on forge



16 details

元素	%	+/-	数量范围
Fe	72.41	0.319	65.00 - 76.00
Cr	18.23	0.152	17.00 - 20.00
Ni	8.11	0.121	8.00 - 10.00
Mn	0.99	0.115	0.00 - 2.00
Co	0.17	0.054	
Mo	0.09	0.007	0.00 - 0.60
Hf	0.00	0.000	
Ta	0.00	0.000	
Sb	0.00	0.000	

316L 4H - 1504LB
SS304
完全匹配 (1/5)

17 details

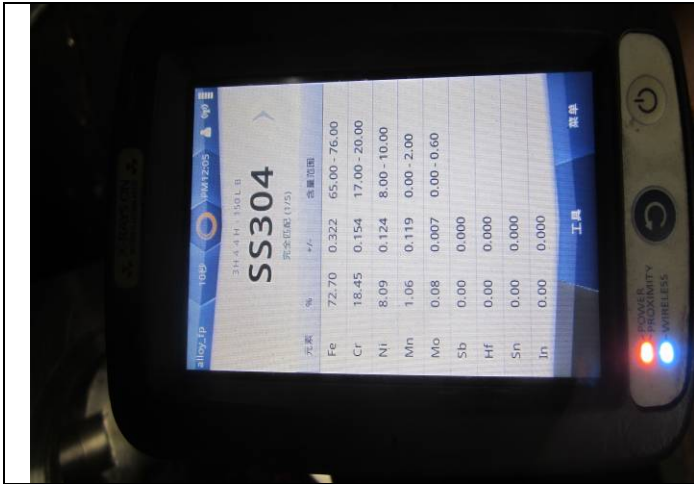


18 PMI on forge

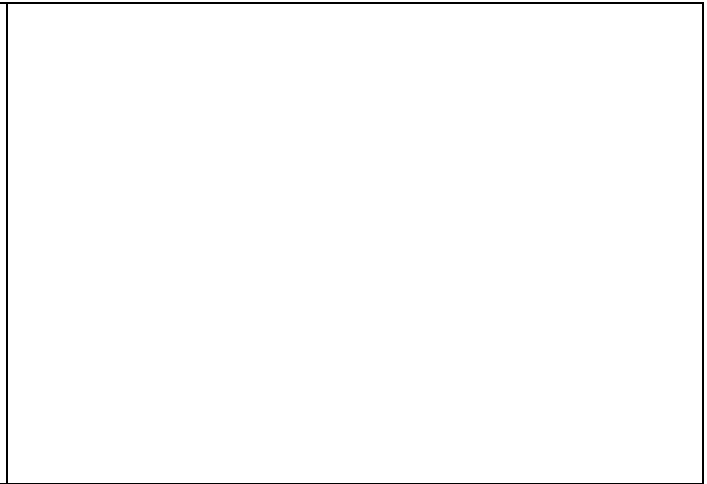


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19 details

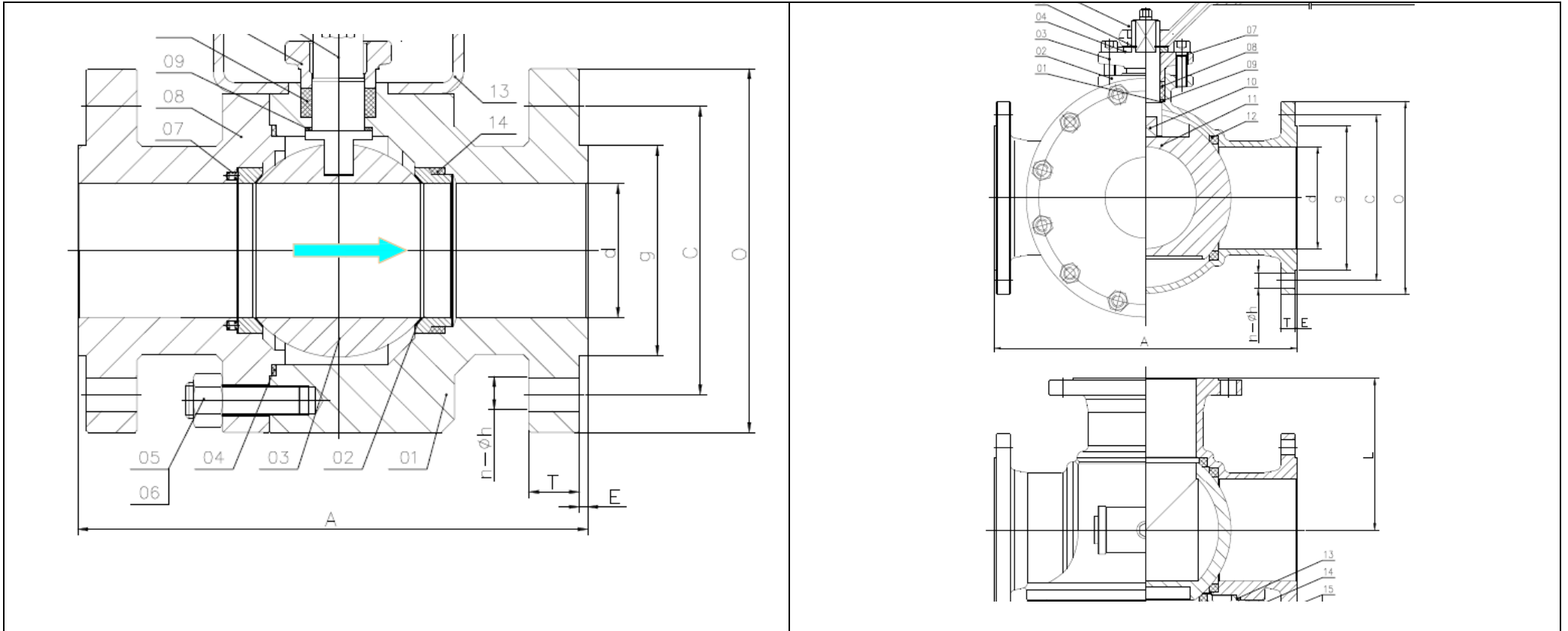


20 forge

FR Fair Valve Inspection

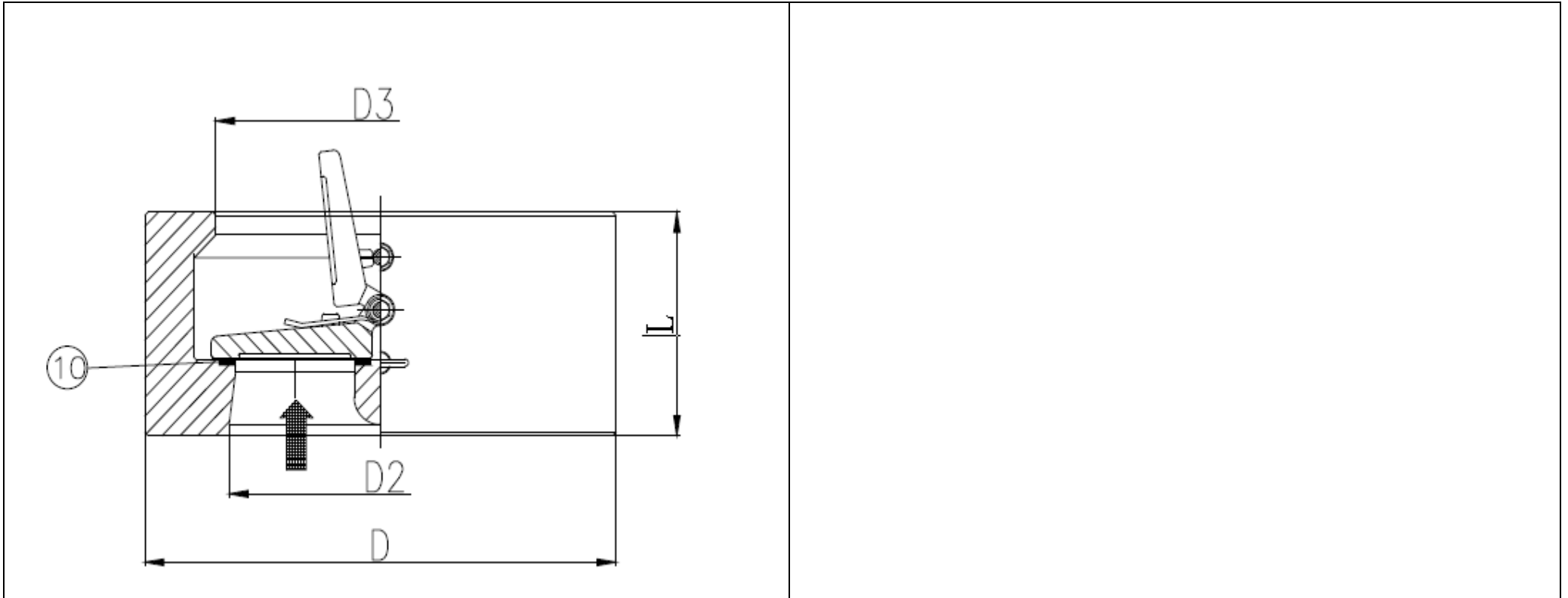
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CONNECTION DIMENSION INSPECTION



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Fair Valve Inspection

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Part 1																						
Item No: Duo-plate check valve 2"150lb																						
Series No.	Detailed measurement of body																	result:				
	L		D		D2		D3															
	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS														
VC2016061-001	60	60.0	103	102.4	51	46.5	56	56.0										PASS				
VC2016061-002		60.8		102.4		46.5		55.8													PASS	
VC2016061-003		60.3		102.5		46.5		55.8														PASS
VC2016061-004		60.7		102.4		46.5		55.6														PASS
Part 2																						
Item No: Duo-plate check valve 3"150lb																						
Series No.	Detailed measurement of body																	result:				
	L		D		D2		D3															
	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS														
VC2016061-005	73	73.6	135	134.5	80	77.0	88	87.8										PASS				
VC2016061-006		73.8		134.7		77.0		88.0													PASS	
VC2016061-007		74.0		134.6		77.0		87.5														PASS
Part 3																						
Item No: Ball valve 2"150lb																						
Series No.	Detailed measurement of body																	result:				
	A		O		C		g		T		E		n-∅ h		d							
	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS						
VC2016059-002	178	179.5	150	152.0	120.5	120.6	92	92.0	14.3	16.3	2	2.0	4-19	4-19.0	49	49.9			PASS			
VC2016059-003		179.6		152.0		120.4		91.8		16.3		2.4		4-19.0		50.0			PASS			

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Part 4																			
Item No: Three ways ball valve 2"150lb																			
Series No.	Detailed measurement of body																		result:
	A		L		O		C		g		T		E		n-Ø h		d		
	Spe c.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	
VC2016059-005	350	350.0	175	175.3	150	150.4	120.5	120.5	92	92.0	14.3	14.8	2	2.0	4-19	4-19.0	49	50.2	PASS
VC2016059-006		350.0		175.2		150.5		120.6		92.0		15.3		2.0		4-19.0		50.1	PASS
Part 5																			
Item No: Three ways ball valve 3"150lb																			
Series No.	Detailed measurement of body																		result:
	A		L		O		C		g		T		E		n-Ø h		d		
	Spe c.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	
VC2016059-007	280	281.2	140	139.5	190	190.0	152.4	152.0	127	127.0	17.5	19.5	2	2.0	4-19	4-19.0	76	78.0	PASS
VC2016059-008		281.4		140.5		190.0		152.5		127.0		19.3		2.1		4-19.0		79.0	PASS
Part 6																			
Item No: Three ways ball valve 8"150lb																			
Series No.	Detailed measurement of body																		result:
	A		L		O		C		g		T		E		n-Ø h		d		
	Spe c.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	Spec.	AS	
VC16059-009	550	551.8	275	274.5	343	343.0	298.5	298.3	269.9	268.0	27.0	29.0	2	2.1	8-22	8-22.0	201	201.0	PASS

YOU EYES ON YOUR SUPPLY CHAIN



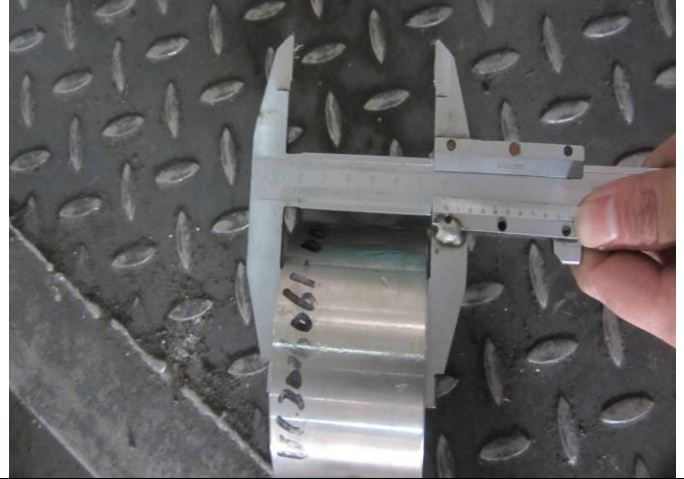
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PHOTO ATTACHMENT



101 size measurement



102 size measurement



103 size measurement



104 size measurement

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STRENGTH AND SEAL INSPECTION REPORT

Details of Shell Strength/Seat Seal/ Pneumatic Pressure Inspection as below:

Part A:		PO#:1111716B							
No.	Series No.	Item No.	Shell Strength		High pressure Seat Seal		Pneumatic Pressure seat seal		Overall Result
			Spec.(Mpa)	Result	Spec.(Mpa)	Result	Spec.(Mpa)	Result	
1	VC2016061-001	Duo-plate check valve 2"150lb	3.0	√	2.2	√	/	/	PASS
2	VC2016061-002	Duo-plate check valve 2"150lb	3.0	√	2.2	√	/	/	PASS
3	VC2016061-003	Duo-plate check valve 2"150lb	3.0	√	2.2	√	/	/	PASS
4	VC2016061-004	Duo-plate check valve 2"150lb	3.0	√	2.2	√	/	/	PASS
5	VC2016061-005	Duo-plate check valve 3"150lb	3.0	√	2.2	√	/	/	PASS
6	VC2016061-006	Duo-plate check valve 3"150lb	3.0	√	2.2	√	/	/	PASS
7	VC2016061-007	Duo-plate check valve 3"150lb	3.0	√	2.2	√	/	/	PASS
8	VC2016059-002	Ball valve 2"150lb	3.0	√	2.2	√	0.6	√	PASS
9	VC2016059-003	Ball valve 2"150lb	3.0	√	2.2	√	0.6	√	PASS
10	VC2016059-005	Three ways ball valve 2"150lb	3.0	√	2.2	√	0.6	√	PASS
11	VC2016059-006	Three ways ball valve 2"150lb	3.0	√	2.2	√	0.6	√	PASS
12	VC2016059-007	Three ways ball valve 3"150lb	3.0	√	2.2	√	0.6	√	PASS
13	VC2016059-008	Three ways ball valve 3"150lb	3.0	√	2.2	√	0.6	√	PASS
14	VC2016059-009	Three ways ball valve 8"150lb	3.0	√	2.2	√	0.6	√	PASS
Remark:	NIL								
Note:	1, The expiry date of all pressure gauges was acceptable. 2, The leakage of series No. VC2016061-001 is 0.2ml/min, series No. VC2016061-002 is 0.2ml/min, series No. VC2016061-003 is 1ml/min, series No. VC2016061-004 is 0.8ml/min, series No. VC2016061-005 is 0.2ml/min, series No. VC2016061-006 is 0.4ml/min, series No. VC2016061-007 is 0.2ml/min(Max allowed leakage 3ml/in/min).								

YOU EYES ON YOUR SUPPLY CHAIN

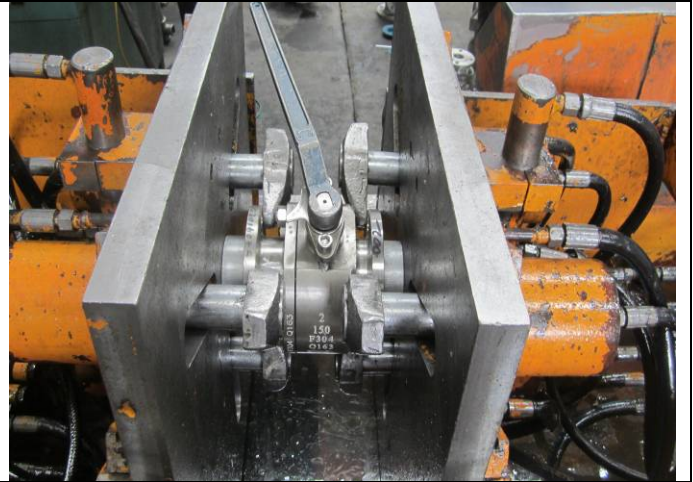
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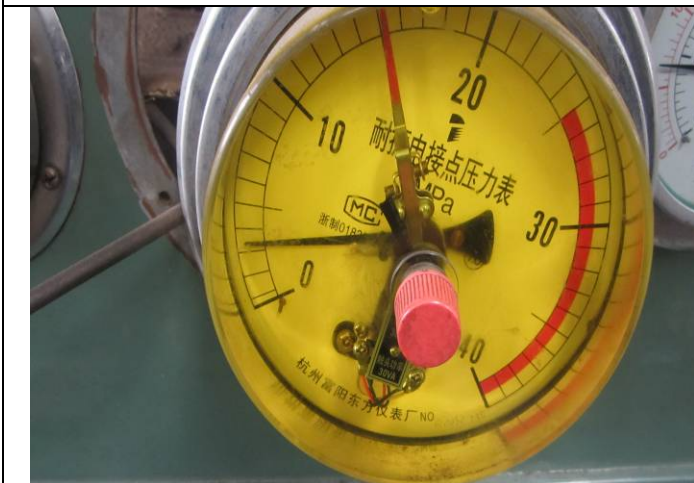
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1 mark



2 shell test



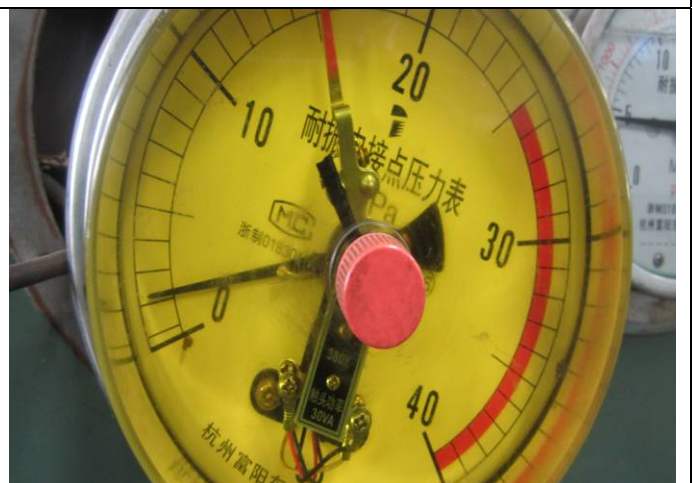
3 test at 3.0Mpa



4 seal test



5 details



5 test at 2.2Mpa

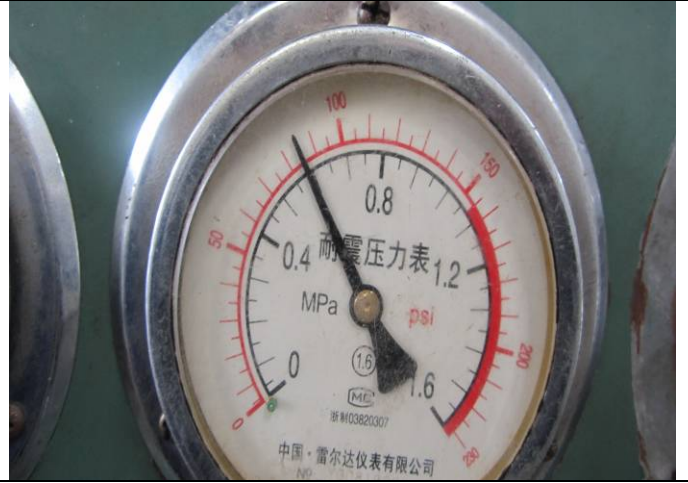


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12 details



13 test at 0.6Mpa



60 shell test



61 test at 3.0mpa



63 seal test



64 test at 2.2Mpa

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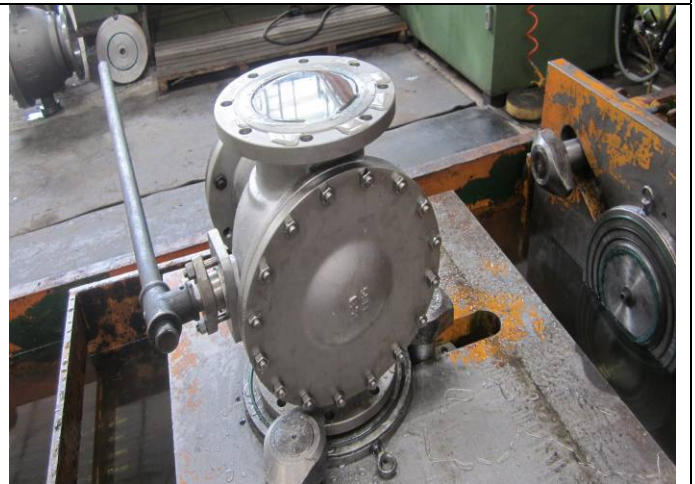
65 details



66 torque test



67 details



68 pneumatic test



69 test at 0.6MPa



70 details

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101 shell test



102 test at 3.0Mpa



103 seal test



104 test at 2.2Mpa



105 leakage of seal test



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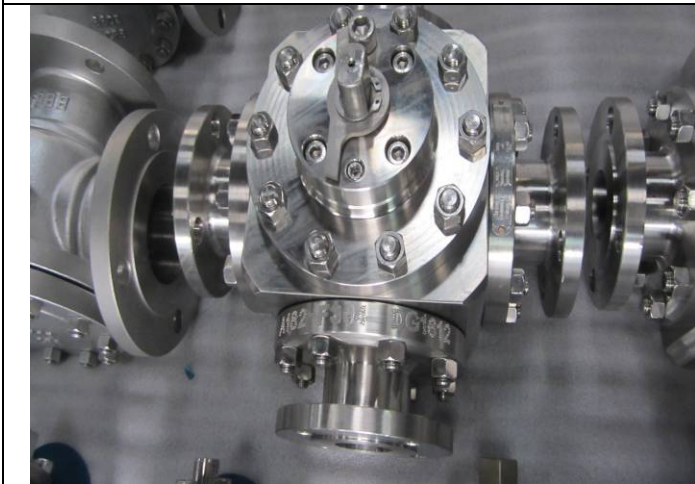
PACKING INSPECTION



1 units



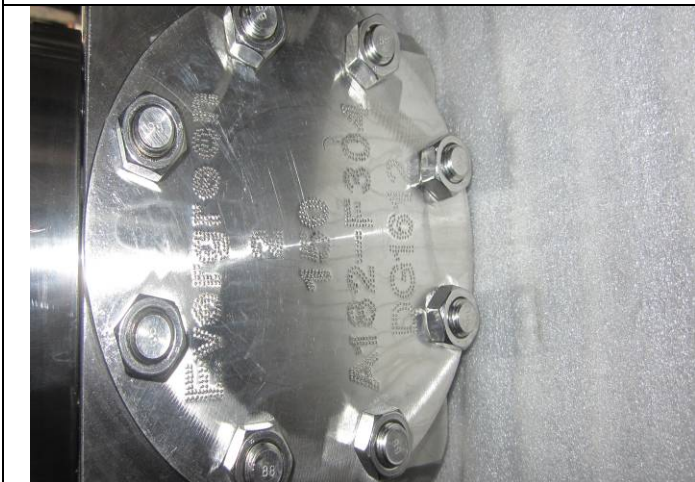
2 units



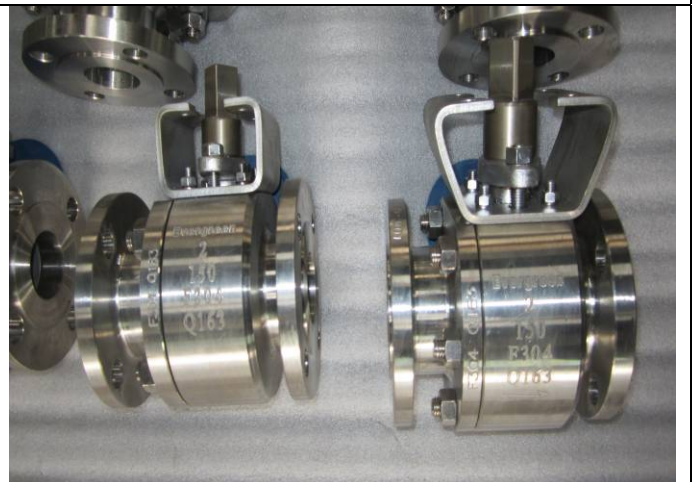
5 units



6 nameplate



7 marking



9 two ways ball valve

FR Fair Valve Inspection

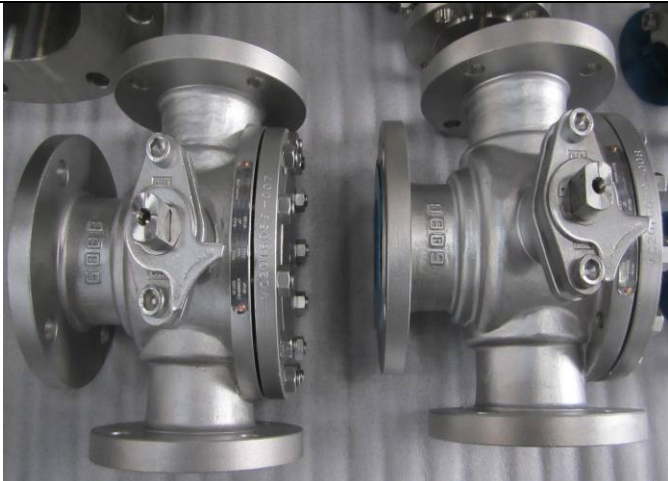
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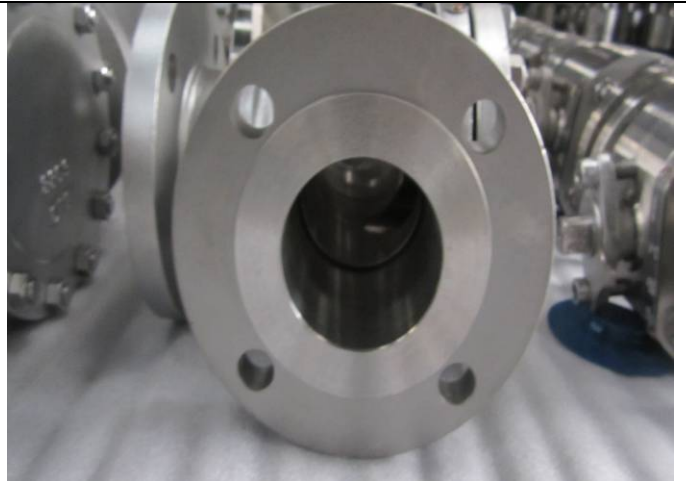
10 marking



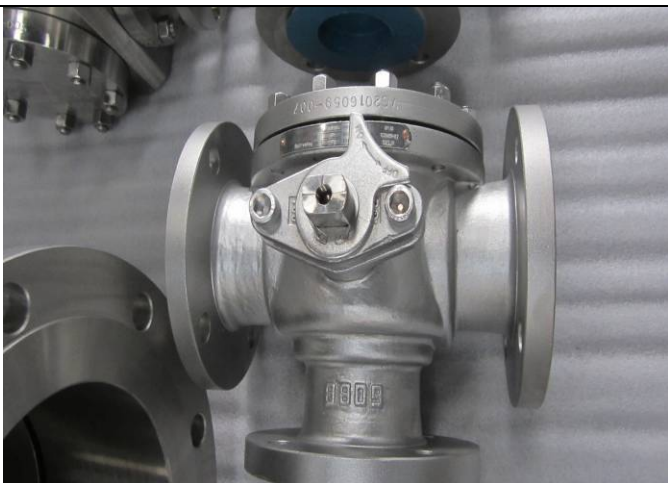
11 unit view



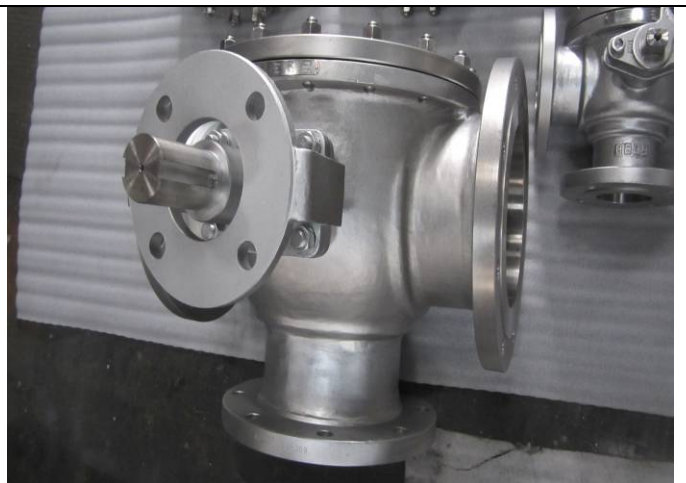
15 unit view



16 unit view



17 unit view



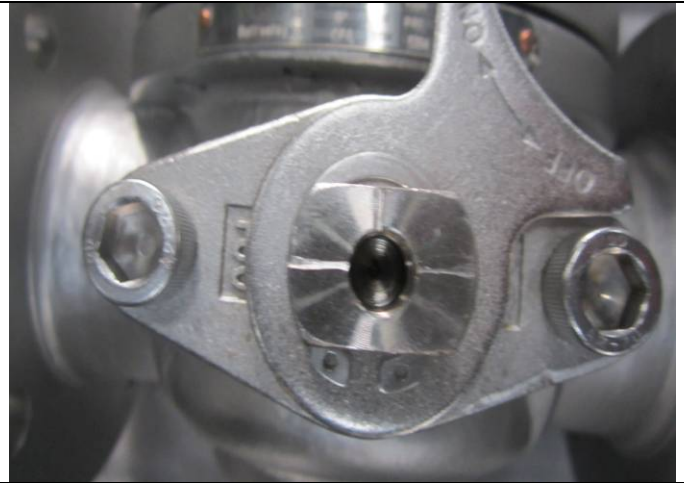
18 unit view

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19 unit view



20 unit view



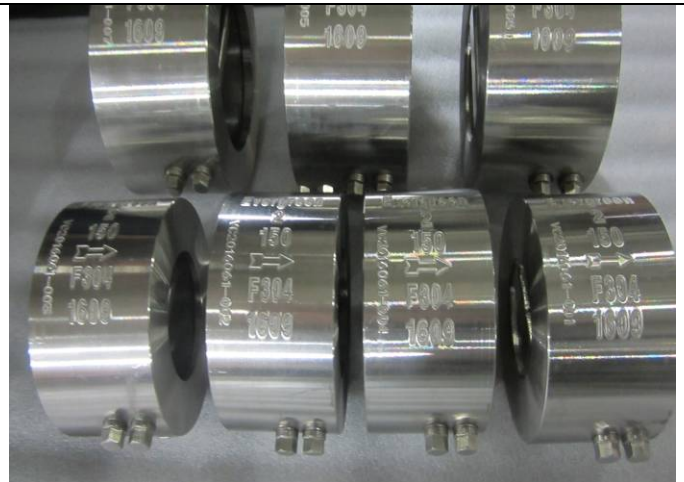
27 position indicate(T type)



28 position indicate(L type)



102 unit view



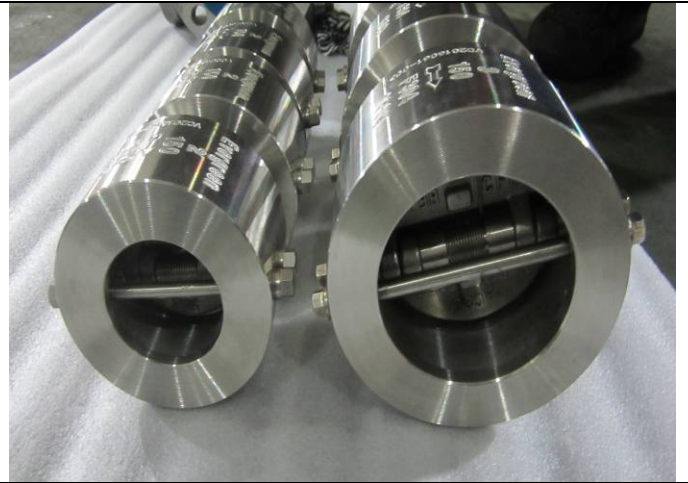
103 unit view

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104 unit view



105 unit view



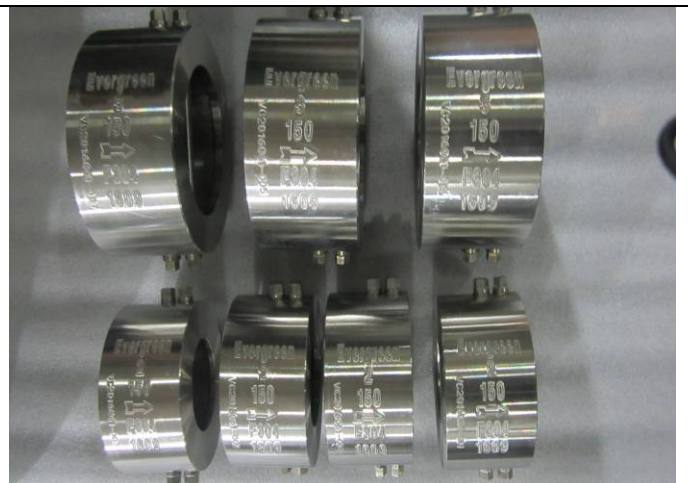
106 unit view



107 unit view



108 marking



109 unit view

