

Witness test

Report No.: XXXX

## **INSPECTION REPORT**

To:	XXXXXXXXXXX	Attn:	XXXXXX		
From:	Troika Inspection Service Co., Ltd	Report Date:	XXXXXXX		
Project No.:	: XXXXXXXXX				
Vendor Name	: xxxxxxxx				
Factory Name	: xxxxxxxx				
Factory Address	: xxxxxxxx				
Order No. / PO No.	: xxxxxxxx				
Product description:	: valve				
Inspection Date:	: XXXXXXX				
· ·	ils of inspections, tests etc. carried out/witness	ied)	<b>\$</b>		
Equipment description:	Valve				
I.T.P. line number	Inspection Activity		Results		
XXXXXX	Marking check		<ul> <li>Accepted without deviation</li> <li>Accepted with deviation</li> <li>Reject</li> </ul>		
XXXXXX	Visual quality check		<ul> <li>Accepted without deviation</li> <li>Accepted with deviation</li> <li>Reject</li> </ul>		
			Accepted without deviation		

## 2.0 Reason for visit

The purpose of this visit is to carry out the visual, dimension inspection and hydro test for valve listed in PO XXXX according to purchaser order and specification.

#### 3.0 Documentation used

XXXXXX

DOCUMENT NUMBER	REV. No.	TITLE	Approval Status
XXXXXXXX	X	ITP	By purchaser
XXXXXXXXX 🔨 🔪	Х	Drawings	By purchaser
MSS SP-55	×	Quality Standard for Steel Casting for Valve, Flanges and Fittings and Other Piping Components- visual Method for Evaluation of Surface Irregularities;	
API 598	Х	Valve Inspection and Testing	By purchaser

#### 4.0 Details of inspection performed

#### 4.1 Quantity check

#### 4.1.1 Reference documents:

#### $\rightarrow$ [PO XXXX]

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Accepted with deviation

Reject

## 4.1.2 Method of quantity check

## → [check the items one by one ]

No.	Description	REQ. Q'ty	ACT. Q'ty	Valve No.	
1	Gate Valve, WCB, 2", 150LB, RF, Trim No.13, Stem A182 F6	5	5	No serial No.	
2	Gate Valve, WCB, 3", 150LB, RF, Trim No.13, Stem A182 F6	15	15	No serial No.	
3	Gate Valve, WCB, 4", 150LB, RF, Trim No.13, Stem A182 F6	15	15	No serial No.	
4	Gate Valve, WCB, 6", 150LB, RF, Trim No.13, Stem A182 F6	12	12	No serial No.	
5	Gate Valve, WCB, 8", 150LB, RF, Trim No.13, Stem A182 F6	8	8	No serial No.	
6	Gate Valve, WCB, 10", 150LB, RF, Trim No.13, Stem A182 F6	8	8	No serial No.	
7	Gate Valve, WCB, 12", 150LB, RF, Trim No.13, Stem A182 F6	2	2	No serial No.	

## 4.2 Marking check

## 4.2.1 Sample size: [1 valve per size, total 7pc]

4.2.2 Typical marking the valve body, bonnet, wedge and hand wheel is as follows:

Marking on body	Marking on bonnet	Marking on wedge	Marking on hand wheel
KCM	6	6	OPEN-SHUT
6	150	150	
150	WCB	WCB	
WCB	808808	XXXXX (illegible)	
808808			

- 4.2.3 Above sample contents might be various in size and heat No. to different valves
- 4.2.4 Traceability for valve bodies and bonnets is checked satisfactory, heat No. is clearly indicated; However:
  - For 2" and 3" valves, no material & heat No. is available on the wedge;
    - For sampled 6" valve, heat No. on the wedge is illegible.
- 4.2.5 Typical marking on the nameplate: refers to the attached picture below;
- 4.3 Visual quality check

## 4.3.1 Sample size: [1 valve per size, total 7pcs]

During the inspection, visual quality inspection for 7 sampled valves was conducted, details as follows:

- Valves are newly fabricated;
- > Main parts of gate valves are made of castings;
- Used bolt/nut is randomly verified B7/2H;
- Stem thread is well greased;
- > There is no damage on the raised face of end flange;
- No obvious casting defects such as porosity, crack, shrinkage, sand inclusion and slag inclusion, etc.;
- > All valves are top coated during inspection, colored in bright aluminium grey;
- > There is no serial No. available on the valves;
- Dirt, oil stain and local paint damage caused of pressure test to be repaired by the manufacturer prior to the shipment

Remark: above traceability issue to be evaluated by the buyer.

4.4 Witness testing

## [pressure test]

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- 4.4.1. Sample size: [1 valve per size, total 7pcs]
- 4.4.2. Reference document: [API 598-2009]
- Pressure test for below sampled valves was conducted under inspector's witness, including shell test, backseat test, high pressure closure test and low pressure closure test;
- > Due to painting has been completed on all valves, the pressure test is conducted after painting;
- Water is used for shell test, backseat test and high pressure closure test, air is used for low pressure closure test;
- Test temperature is ambient;
- All used pressure gauges for test were verified calibration valid;
- Details are as follows:

Det	etalis are as follows:											
	Shell Test (MPa)		Backseat Test (MPa)		High Pressure Seat Test (MPa)		Low Pressure Seat Test (MPa)					
	Р	Time	Result	Р	Time	Result	Р	Time	Result	Р	Time	Result
1	3.0	15 S	ОК	2.2	15 S	ОК	2.2	15 S	ОК	0.6	15 S	ОК
2	3.0	60 S	ОК	2.2	60 S	ОК	2.2	60 S	ОК	0.6	60 S	ОК
3	3.0	60 S	ОК	2.2	60 S	ОК	2.2	60 S	OK	0.6	60 S	ОК
4	3.0	60 S	ОК	2.2	60 S	ОК	2.2	60 S	ОК	0.6	60 S	ОК
5	3.0	120 S	ОК	2.2	60 S	ОК	2.2	120 S	ОК	0.6	120 S	ОК
6	3.0	120 S	ОК	2.2	60 S	ОК	2.2	120 S	ОК	0.6	120 S	ОК
7*	3.0	120 S	ОК	2.2	60 S	ок 📐	2.2	120 S	ОК	0.6	120 S	ОК

\*Note: For the sample 12" valve, after internal adjustment, it has been conducted double high pressure closure test. And it passed the second time high pressure closure test.

## 5.0. Result of Inspection

Accepted without deviation

Accepted with deviation (See Punch list)

Reject (See the deviation for Rejection)

## 6.0. Quality Records reviewed and attached:

- 1. MTC for the valves
- 2. Heat treatment report and record;
- 3. PWHT
- 4. The mill hydrostatic test records
- 5. Calibration Certificates

## 7.0 Progress Status

After the inspection the valves were held and waiting for client's instruction before to next step;

## 8.0 Next Forecasted Inspection Date:

TBA

#### 9.0 Attendees

- Mr. XXX supplier inspector
- Mr. XXX Vendor Inspector
- Mr. XXX TIS inspector on behalf of XXX

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Any deviation & PUNCH attached : Yes 🛛 No, 🗌	Punch No.: XXXX
IRN attached : Yes D No ,	IRN No.:

## 10. Photo Report



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