

Report no. 11-7974-SQ-01	Project no. 2611329	Report date: 20-March-2012	Office: China
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REPORT OF ACTIVITY

General scope of activity: Third Party Inspection of Fire Test for Valve	Dates of all related activity: 19 March 2012 and subsequent dates
Client: Company name: PT KOROSI SPECINDO. Address: JL. PANGERAN JAYAKARTA NO 76, JAKARTA 10730 Contact(s): Mr. Yohan Sutandar Tel/Fax: +86-21-6267576 / 6289919 PO/shop/contract or job no:	Supplier: Company name: PT KOROSI SPECINDO. Address: JL. PANGERAN JAYAKARTA NO 76, JAKARTA 10730 Contact(s): Mr. Yohan Sutandar Tel/Fax: +86-21-6267576 / 6289919 PO/shop/contract or job no:
Subvendor - 1: NA Company name: Address: Contact(s): PO/shop/contract or job no:	Subvendor - 2: NA Company name: Address: Contact(s): PO/shop/contract or job no:
Component description(s): API 607 sixth Edition, September 2010	Results: Meets requirements <input checked="" type="checkbox"/> Subject to condition(s) noted <input type="checkbox"/> Does not meet requirements <input type="checkbox"/>

This is to certify that the undersigned representative of **ABSG Consulting Inc.** did at the request of **Messrs. PT KOROSI SPECINDO** attended **Hefei General Machinery & Electrical Products Inspection Institute** plant located at **NO.888 Changjiang Road (w) Hefei City Anhui Province P.R. of China** on the 19th Day of March 2012, and subsequent dates in order to carryout the scope of services described below.:

1.0 Description of Valves:

Drawing No.: 240961-10

Type : Service Valve ASSY

Pressure Rating: 3600PSI

Norm. Size: Inlet 3-1/2"-5-ACME-2G

Outlet 3"-5-ACME-2G

■ Symmetric Construction

■ Full Opening

F-F or E-E dimension: 334.63mm

Part Number: TKS - K - 36 - FS

Test record No. 2012FM341

Materials

Body/ Bonnet: AISI 1020 CS / AISI 1020 CS

Stem/Ball: AISI 316L SS / AISI 316L SS

Back Up Ring Stem : Carbon Graphite

Stud: ASTM 193 GrB7

Nut: ASTM 194 Gr2H

Non-metallic materials

Seat Seal : Polyamide (PA)

O- Ring: Viton

2.0 Conformity of Equipment

The test equipment was verified ABSG Consulting Inc inspector according to requirements of API SPEC 607 Section 4 and 5 and found satisfactory. The details arrangement of the fire-test equipment is shown below.

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Form IS-2

Reporting, SIZ-102-99-P02

Attachment B – Rev. 1



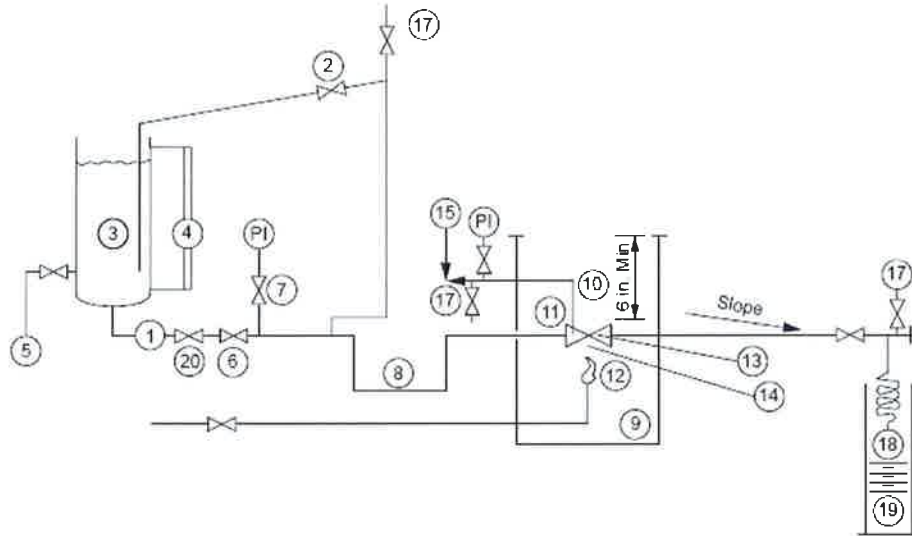
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Office:
China

Figure 1, Typical Fire-test System Using a Pump as the Pressure source.



Legend

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Pressure source. 2. Pressure regulator and relief. 3. Vessel for water. 4. Calibrated sight gauge. 5. Water supply. 6. Shutoff valve. 7. Pressure gauge. 8. Piping arranged to provide vapor trap. 9. Enclosure for test—horizontal clearance between any part of the valve and the closure shall be a minimum of 6 in. (152 mm). 10. Minimum height of enclosure shall be 6 in. (152 mm) above the top of the valve. | <ol style="list-style-type: none"> 11. Test valve mounted horizontally with stem in horizontal position. 12. Fuel gas supply to burners 13. Calorimeter—1 1/2 in. cubes 14. Flame temperature thermocouple 15. Pressure gauge and relief valve connected to center cavity of valve. 16. Shutoff valve. 17. Vent valve. 18. Condenser. 19. Calibrated container. 20. Check valve. |
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3.0 Fire Test

3.1 Fire test

The fire test was conducted according to API 607 Section 5. The flame temperature reached 750°C within 2 minutes after ignition. The test pressure and temperature were maintained during the test. The temperature and pressure were recorded continuously by the operators. The system and test valve was cooled down at 40°C within 5 minutes by natural after 30 minutes fire test. The loss of water weight in vessel was measured by weighing scale and water in calibrated container were read and recorded.

The test result is shown as below.



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Test result of fire test		
Item	API 607 required Value	Actual Value
Test pressure (MPa)	18.6	18.6
Test Temperature (°C)	750~1000	776~895
Through valve leakage according to API 607 Table 1	≤1280ml / min	15 ml / min
Total weight of water through valve seat during cooling down period	0	
Total time form fire test to cooling down	35 Minutes	
External leakage according to API 607 Table 1	≤320 ml / min	2.0 ml / min
Conclusion: the test result is satisfactory according to API 607		

3.2 Operational Test

The test valve cooled at 40°C within 5 minutes after complete the fire test .The operational test was conducted according to API 607 Para 6.5. Open the test valve against the high test pressure differential. The test valve was be moved to a open position close to the shutoff valve. Vent the piping and test valve body cavity to remove air of steam.

Then measured and recorded external leakage for a period of five minutes after valve was in the open position at high test pressure. The test result was recorded on below.

Test result of operational test		
Item	API 607 required Value	Actual Value
Test Pressure (MPa)	18.6	18.6
Test Time	5 Minutes	
External Leakage according to API 607 Table 1	≤80 ml / min	65 ml / min
Conclusion: the test result is satisfactory according to API 607		

4.0 Conclusion:

Based on the results of the above inspection, the Fire Test for Valve described herein was found to be satisfactory and in accordance with the applicable specification and requirements.

5.0 Attachments:

Report prepared and submitted without prejudice.




 Zhang Peng
 Technical Representative
 ABSG Consulting Inc

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ABS Consulting

Certificate No. 11-7974-SQ-01-A

Date March.20, 2012

PID No. 2611329

Office China.

CERTIFICATE OF COMPLIANCE

Client: PT KOROSI SPECINDO.

Items: *Fire Test For Valve*

Design Drawing No.:240961-10

Inspection Date: *March .19, 2012*

This is to certify that the undersigned Surveyor of ABSG Consulting Inc. at request of PT KOROSI SPECINDO witnessed the capability of the under-noted Items, to withstand to a certain level of fire without rupturing or relevant failure in operating in accordance with API Std 607 Sixth Edition, September 2010.

Description	Valve tested	Valves Qualified
<i>Ball Valve</i>	<i>Class 1500 NPS 3</i>	<i>Class 1500; & Class 2500 (Size: NPS 3; 4; 5; 6)</i>

The above valves were subjected to the fire test in accordance with the above-mentioned Standards in the presence of ABSG Consulting Inc. surveyor.

Details refer to in Technical Report No.11-7974-SQ-01.

Zhang Peng

Zhang Peng



Surveyor of ABSG Consulting Inc.

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