



®  
**American  
Petroleum  
Institute**



2015-313

# Certificate of Authority to use the Official API Monogram

**License Number: 6D-1337**

**ORIGINAL**

The American Petroleum Institute hereby grants to

**VALVE-TECH INDUSTRIES**  
**Plot No. L-44**  
**M.I.D.C, Talaja, Raigad District**  
**Navi Mumbai, Maharashtra**  
**India**

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and **API-6D** and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: **6D-1337**

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Check Valves, Ball Valves and Gate Valves

QMS Exclusions: Servicing

**Effective Date: JULY 6, 2017**

**Expiration Date: JULY 6, 2018**

To verify the authenticity of this license, go to [www.api.org/compositelist](http://www.api.org/compositelist).

Vice President, API Global Industry Services

# Certificate

## Quality-Assurance System

acc. to Directive 97/23/EC

Certificate no.: **01 202 IND/Q-15 0018**

Name and address of the manufacturer:

**Valve Tech Industries  
L 44, MIDC, Taloja, Dist. Raigad  
Maharashtra 410206  
INDIA**

We hereby certify, that the manufacturer has introduced and implemented a **Quality-Assurance-System** according to the European Directive 97/23/EC. The manufacturer has the permission to affix the following CE marking to pressure equipment described and manufactured in accordance to the scope covered by this Quality-Assurance System:

**CE 0035**

Tested acc. to Directive 97/23/EC:

**QS-System (Modul H)**  
(the QS-Moduls E1, E, D1 and D are covered by module H)

Audit report no.:

01 202 IND/Q-15 0018

Scope:

**Design & Manufacture of Industrial valves like Gate Valve, Globe Valve, Check Valve, Butterfly Valves & Ball Valves, see annex to the certificate**

Manufacturing plant/supplier:

**Valve Tech Industries  
L 44, MIDC, Taloja, Dist. Raigad  
Maharashtra 410206  
INDIA**

Valid until:

**June 30, 2018**

Berlin, 23.02.2016

*i. A. Z. Vö.*  
Dipl. Ing. Ines Krüger-Führ



Certification Body for Pressure Equipment  
TUV Rheinland Industrie Service GmbH  
Am Grauen Stein  
D-51105 Cologne, Germany

TUV Rheinland Industrie Service GmbH  
Branch office Berlin  
Albinstr. 58  
D-12103 Berlin  
Tel. (+49 30) 76 62-17 07; Fax: (+49 30) 76 62-16 73  
e-mail: ineskrueger@de.tuv.com

E-014-E-Rev7

**Scope of the Approval as Manufacturer of Pressure Equipment  
according to PED 97/23/EC QA-System**

**Annex to Certificate No.: 01 202 IND/Q-15-0018**

Manufacturer			Production Plant			Nationality	Date	Page No..	TÜV Rheinland Industrie Service GmbH
Name: Valve Tech Industries Adress: L-44, MIDC, Taloja 410206, District Raigad, Maharashtra, India			L-44, MIDC, Taloja 410206, District Raigad, Maharashtra, India			Indian	29-06-2015	1	
							Rev.: 00	of: 1	
Current No.	Product description	Series Number	Size	Until now applied Codes	Materials	Limitations / Restrictions	Listing of Module B/B1 certificates (for QS-module D/E)	Remarks	
01	Ball Valve		½" to 18" upto #1500	API 6D	Carbon Steel Stainless Steel Alloy Steel	n.a		A PMA by pressure equipment manufacturer (category I/II) respectively the Notified Body (III/IV) is requested.	
02	Check Valve		½" to 18" upto #600	API 6D, BS1868					
03	Plug Valve		1" to 12" upto #300	API 6D					
04	Gate Valve		½" to 36" upto #600	API 600					
05	Butterfly Valve		1½" to 72" PN6 to PN40	API 609					
06	Globe Valve		½" to 18" upto #300	BS 1873					



# FIRE SAFE TESTING REPORT

Certificate of conformity with technical requirements in:  
API Specification 607 7<sup>th</sup> EDITION, June 2016

Certificate No :- GLIS/VALVETECH/2017-001

**Name of Manufacturer** : M/s VALVE TECH INDUSTRIES.  
**Address of Manufacturer** : Plot No L-44, M.I.D.C. Taloja,  
Dist -Raigad 410 206, India.

### VALVE SPECIFICATEIONS

Nominal Size – Pressure Class :	2"NB 150 # Reduce Bore, 2PC
Type of Valve	UNI Directional
Valve Sr No	17-18358
Model No of the Ball Valve (Series)	--
Operation	Lever Operated
Drawing No	VTI/281SD22FE-02 REV 00

### STANDARD SPECIFICATION

Design Standard	API 6D - 2014
Testing Standard:	API 6D -2014
Fire Safe Testing Standard	API Specification 607 7 <sup>TH</sup> EDITION, June 2016

### MATERIAL OF CONSTRUCTION

Body / Bonnet	ASTM A 216 Gr WCB
"O" Ball / Stem	ASTM A 351 Gr CF8 / ASTM A 479 Gr 304
Seat Ring	PTFE

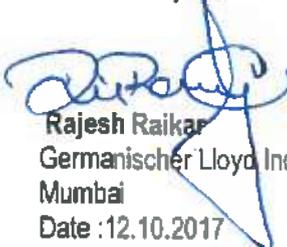
### SIZE & RATING QUALIFIED AS PER STANDARD :

Qualified Size :	DN 50 and below and DN65, DN 80 and DN100
Qualified Rating	150 # & 300 #

<b>Inspection Report / Manufacture Test report of Valves :</b>	<b>DNVGL/MUM/VALVE-TECH/VPS/2017/IR-01</b> <b>Rev.00 Dated 05.10.2017</b>
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Herewith is stated that a conformity test according to the above mentioned standard has been conducted. The specimen tested did not exceed the maximum allowed leakage rates according to the above mentioned standards.

Witnessed by Mr. Victor Paul

  
**Rajesh Raikar**  
Germanischer Lloyd Industrial Services GmbH.  
Mumbai  
Date :12.10.2017



Equinox Business Park, 6<sup>th</sup> Floor, Tower 3, L.B.S Marg, Off. Bandra Kurla Complex, Kurla ( W) Mumbai – 4000 070

DNV GL Headquarters, Veritasveien 1, P.O.Box 300, 1322 Høvik, Norway. Tel: +47 67 57 99 00. [www.dnvgl.com](http://www.dnvgl.com)

**FIRE SAFE TESTING REPORT**

Certificate of conformity with technical requirements in:  
 API Specification 607 7<sup>th</sup> EDITION, June 2016

**Certificate No :- GLIS/VALVETECH/2017-002**

**Name of Manufacturer** : M/s VALVE TECH INDUSTRIES.  
**Address of Manufacturer** : Plot No L-44, M.I.D.C. Taloja,  
 Dist -Raigad 410 206, India.

**VALVE SPECIFICATEIONS**

Nominal Size – Pressure Class :	2" NB 600 # Reduce Bore, 3 PC
Type of Valve	UNI Directional
Valve Sr No	17-18359
Model No of the Ball Valve (Series)	--
Operation	Lever Operated
Drawing No	VTI/281SD22FE-01 REV 00

**STANDARD SPECIFICATION**

Design Standard	API 6D – 2014
Testing Standard:	API 6D -2014
Fire Safe Testing Standard	API Specification 607 7 <sup>th</sup> EDITION, June 2016

**MATERIAL OF CONSTRUCTION**

Body / Bonnet	ASTM A 216 Gr WCB
"O" Ball / Stem	ASTM A 182 Gr F304 / ASTM A 479 Gr 304
Seat Ring	PTFE

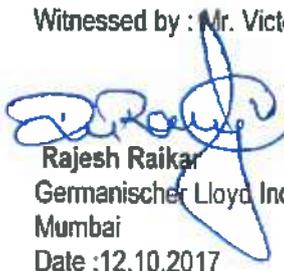
**SIZE & RATING QUALIFIED AS PER STANDARD :**

Qualified Size :	DN 50 and below and DN65, DN 80 and DN100
Qualified Rating	600 # , 800# & 900 #

<b>Inspection Report / Manufacture Test report of Valves :</b>	<b>DNVGL/MUM/VALVE-TECH/VPS/2017/IR-01</b>
	<b>Rev.00 Dated 05.10.2017</b>

Herewith is stated that a conformity test according to the above mentioned standard has been conducted. The specimen tested did not exceed the maximum allowed leakage rates according to the above mentioned standards.

Witnessed by : Mr. Victor Paul

  
**Rajesh Raikar**  
 Germanischer Lloyd Industrial Services GmbH  
 Mumbai  
 Date :12.10.2017



# FIRE SAFE TESTING REPORT

Certificate of conformity with technical requirements in:  
API Specification 607 7<sup>th</sup> EDITION, June 2016

Certificate No :- GLIS/VALVETECH/2017-003

Name of Manufacturer : M/s VALVE TECH INDUSTRIES.  
Address of Manufacturer : Plot No L-44, M.I.D.C. Taloja,  
Dist -Raigad 410 206, India.

### VALVE SPECIFICATEIONS

Nominal Size – Pressure Class :	6" NB 150 # Reduce Bore, 2 PC
Type of Valve	UNI Directional
Valve Sr No	17-18360
Model No of the Ball Valve (Series)	--
Operation	Lever Operated
Drawing No	VTI/281SD22FE-03 REV 00

### STANDARD SPECIFICATION

Design Standard	API 6D – 2014
Testing Standard:	API 6D -2014
Fire Safe Testing Standard	API Specification 607 7 <sup>th</sup> EDITION, June 2016

### MATERIAL OF CONSTRUCTION

Body / Bonnet	ASTM A 216 Gr WCB
"O" Ball / Stem	ASTM A 351 Gr CF8 / ASTM A 276 Gr 304
Seat Ring	PTFE

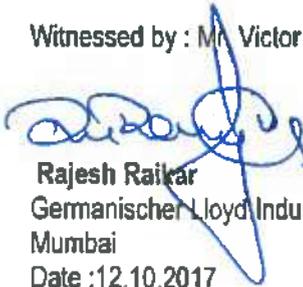
### SIZE & RATING QUALIFIED AS PER STANDARD :

Qualified Size :	DN 150, DN200, DN 250 and DN300
Qualified Rating	150 # & 300#

Inspection Report / Manufacture Test report of Valves :	DNVGL/MUM/VALVE-TECH/VPS/2017/IR-01 Rev.00 Dated 05.10.2017
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Herewith is stated that a conformity test according to the above mentioned standard has been conducted. The specimen tested did not exceed the maximum allowed leakage rates according to the above mentioned standards.

Witnessed by : Mr. Victor Paul

  
Rajesh Raikar  
Germanischer Lloyd Industrial Services GmbH  
Mumbai  
Date :12.10.2017



महाराष्ट्र शासन  
बाष्पके संचालनालय



ई-मेल :- [dirsb.mumbai@maharashtra.gov.in](mailto:dirsb.mumbai@maharashtra.gov.in)  
दूरध्वनी क्रमांक :- ०२२-२६५७१२०१/१३०४/१३५२.  
फॅक्स क्रमांक :- ०२२-२६५७१२८३.

कामगार भवन, ७ वा मजला,  
प्लॉट क्र. सी २०, ब्लॉक - ई,  
वांद्रे कुर्ला संकुल, वांद्रे (पूर्व), मुंबई-४०००५१

[www.mahakamgar.gov.in](http://www.mahakamgar.gov.in)

No. SB-5/PMK/2018/ 1602  
Dated-

24-JAN 2018

To,

✓ M/s. Valve-Tech Industries,  
Plot No. L-44, MIDC Taloja,  
Dist.: Raigad 410 206.

Sub :- Renewal of approval as “ Valves ” (Size upto 24”dia) Manufacturing,  
under Indian Boiler Regulations,1950 & its latest amendments.

**Ref :- This office letter No. SB-5/SBC/2013/6479 dt. 01-03-2013**

Gentleman,

With reference to your letter No. NIL, dt. 02-01-2018, I have to inform you that you had been permitted to undertake manufacturing of “ Valves ” (Size upto 24”dia) as per Indian Boiler Regulations,1950 and its latest amendments, in the prescribed manner, under supervision of this Directorate & as per conditions laid down, in this office above referred letter. Same is hereby renewed, subject to all conditions stipulated in above referred letter for a period **upto 31<sup>st</sup> December, 2018.**

However, you are advised to submit the next renewal application **one month** before the expiry date.

Yours faithfully

I/C. Director of Steam Boilers,  
Maharashtra State, Mumbai.

Copy to Jt. Director of Steam Boilers, Maharashtra State, Pune/Nagpur/Nashik /Ahmednagar/  
Kolhapur/Solapur for information.



# MATERIAL OF CONSTRUCTION (TECHNICAL DATASHEET)



VALVE Enquiry Sr. Nos :	1
VALVE MAKE :	VTI (Valve - Tech)
VALVE	NON RETURN VALVE
TYPE:	DUAL PLATE CHECK VALVES
SIZE (MM)	250 MM
PRESSURE RATING :	PN 10
QUANTITY :	04 Nos.
ENDS:	WAFER To Suit Between ANSI B16.5, 150#
BODY :	ASTM A 216 GR.WCB
DISC :	ASTM A 351 Gr. CF8 (AISI SS 304)
SEAT :	NITRILE RUBBER
STOP / HINGE PIN :	AISI SS 410
SPRING :	AISI SS 304
OPERATION :	SELF OPERATED
DESING STD. :	API 594
TESTING STD. :	API 598

VALVE Enquiry Sr. Nos :	2
VALVE MAKE :	VTI (Valve - Tech)
VALVE	NON RETURN VALVE
TYPE:	SWING CHECK
SIZE (MM) :	250 MM
PRESSURE RATING :	150#
QUANTITY :	10 Nos
ENDS:	FLANGED As Per ANSI B16.5 RF, 150#
BODY :	ASTM A 216 Gr. WCB
COVER :	ASTM A 216 Gr. WCB
DISC :	ASTM A 216 Gr. WCB + 13% Cr.
SEAT :	CS + 13% Cr.
GASKET :	Spiral Wound SS304 with GRAPHITE
HINGE / HINGE PIN :	AISI SS 410
STUD & NUTS :	ASTM A 193 Gr. B7/A 194 Gr. 2H
OPERATION :	SELF OPERATED
DESING STD. :	BS 1868
TESTING STD. :	BS EN 12266-1

VALVE Enquiry Sr. NOS. :	1
Material No. :	300061349
VALVE MAKE :	VTI (Valve - Tech)
VALVE :	BUTTERFLY VALVE :-
TYPE :	DOUBLE OFFSET
SIZE (MM)	250 MM
PRESSURE RATING :	150#
QUANTITY :	12 NOS.
ENDS:	Wafer to Suit Between ANSI B16.5, 150#
BODY :	ASTM A 216 Gr. WCB
DISC :	ASTM A 351 Gr. CF8 (AISI SS 304)
RETAINER RING :	AISI SS 304
DISC SEAL :	EPDM
STEM :	AISI SS 304
O' Ring :	EPDM
STUD & NUTS	ASTM A 193 GR.B7/A 194 GR.2H
OPERATION :	GEAR OPERATED
DESING STD. :	BS EN 593
TESTING STD. :	BS EN 12266-1



**PROOF OF DESIGN TEST REPORT: NPS 6", CLASS 150 WAFER TYPE BUTTERFLY VALVE**

**Inspection Report**

VTI/MUMBAI/SPB/2017/IR-01

Rev-00

*This is to certify that the components as described hereunder have been inspected.*

**Client:** : INTERNAL REFERENCE

**Project** : POD TEST FOR NPS 6 INCH X CLASS 150 WAFER TYPE BUTTERFLY VALVE

**Client's P.O./LOI No** : EMAIL REFERENCE

**Items** : NPS 6 INCH X CLASS 150 WAFER TYPE BUTTERFLY VALVE

**Supplier:** : M/s VALVE-TECH INDUSTRIES

**Manufacturer:** : M/s VALVE-TECH INDUSTRIES

**Place of Inspection:** : VTI, L36 & L44, TALOJA MIDC, RAIGAD, MAHARASHTRA.

**Date/Period of Inspection:** : 17.07.2017+05.10.2017+06.10.2017+07.10.2017+09.10.2017+12.10.2017+  
13.10.2017+14.10.2017+15.10.2017+16.10.2017+17.10.2017

**The following material was inspected:**

Item No: acc. to PO	Quantity				Description
	Ordered	Previously Inspected	Offered	Inspected	
01	01	00	01	01	POD TEST FOR NPS 6 INCH X CLASS 150 WAFER TYPE BUTTERFLY VALVE

**Applicable POD Documents:**

Document Name	Document Number	Rev.	Dated
Notification No:	01	00	14.07.2017
Spec. No:	ANSI/AWWA C504-10	--	20.06.2010
Datasheet	NA	--	--
Inspection & Test Plan	VTI/QAP/BFV-CYCLE TEST/01	00	01.07.2017
GA Drawing	VTI-211SD21FE-01	00	--
Casting Drawing(Body)	VTI-416CD21WF-01	00	11.03.2015
Casting Drawing-IC (Disc)	VTI-116CD21F-02	02	16.07.2014
Machining Drawing 6" Spindle #150	VTI-118MD21F-3	00	10.08.2017
Machining Drawing 6" Bottom Spindle #150	VTI-118MD21F-3-01	00	10.08.2017



**PROOF OF DESIGN TEST REPORT: NPS 6", CLASS 150 WAFER TYPE BUTTERFLY VALVE**

**Scope of inspection:**

**Witnessed Activities -**

1. Component inspection for Body & Disc for Visual, Marking & Dimension Check.
2. Hydrostatic shell test before Cycle Test.
3. Hydrostatic Seat test (Both Side) before Cycle Test.
4. Cycle test (10,000 cycles).
5. Hydrostatic Seat test (Both Side) after completion of each 1,000 Cycle.
6. Hydrostatic shell test after completion of Cycle Test.
7. Hydrostatic Seat test (Both Side) after completion of Cycle Test.
8. Strip Test after completion of Cycle Test.

**Reviewed Activities -**

9. MTC review.
10. In-Process Inspection report review.
11. Compliance certificate review.

**Inspection Details:**

**STAGE -1 - Component inspection for Body & Disc for Visual, Marking & Dimension Check**

- Component inspection witnessed for the Body (ASTM A216 Gr. WCB, Heat No - J295) & Disc (ASTM A351 Gr. CF8, Heat No - K978) for Visual check and found free from the surface defects like crack, Inclusion, Pores, Dents, Shrinkage, Mechanical damage and any other injurious defects that harms the product quality and result found acceptable. Valve marking checked for the Heat No, size, class, type, MOC, Foundry, VTI Logo as per MSS SP-25, correlated with the MTC and result found in order. The dimension checked for the face to face distance, Body OD, Body ID, Top Flange OD, Top Flange thk, Neck thk, Disc OD etc and result found as per the approved drawing hence acceptable.

**STAGE -2 - Hydrostatic shell test before Cycle Test.**

- Hydrostatic shell test before Cycle Test witnessed at the pressure 30kg/cm<sup>2</sup> and duration 02 minutes and found neither leakage nor pressure drop during the pressure test duration. Hence Hydrostatic shell test before Cycle Test was found acceptable.

**STAGE -3 - Hydrostatic Seat test (Both Side) before Cycle Test.**

- Hydrostatic Seat test (Both Side) before Cycle Test witnessed at the pressure 22kg/cm<sup>2</sup> and duration 02 minutes and found neither leakage nor pressure drop during the pressure test duration. Hence Hydrostatic seat test before Cycle Test was found acceptable.

**STAGE -4 - Cycle test (10,000 cycles)**

- Cycle test (10,000 cycles) completed as per the ANSI/AWWA C504-10 and found acceptable.

**Purpose:-**

The purpose of this test is to provide the minimum requirement for rubber- seated butterfly valves Suitable for fresh water service.



**PROOF OF DESIGN TEST REPORT: NPS 6", CLASS 150 WAFER TYPE BUTTERFLY VALVE**

**TEST DETAILS:-**

<i>Valve Manufacturer</i>	Valve Tech Industries.
<i>Location of Test</i>	Plot no-L36&L44 /M.I.D.C Taloja, Dist - Raigad-410206
<i>Test dates</i>	05.10.2017+06.10.2017+07.10.2017+09.10.2017+12.10.2017+13.10.2017+14.10.2017+15.10.2017+16.10.2017+17.10.2017
<i>Customer</i>	POD TESTING ARRANGEMENT
<i>Size/ Pressure Class/ Type</i>	NPS 6 INCH / #150/ WAFER TYPE BUTTERFLY VALVE
<i>Valve body Heat No</i>	J295
<i>Valve Material</i>	ASTM A216 GR WCB
<i>Body lining</i>	EPDM
<i>Disc</i>	ASTM A351Gr.CF8
<i>Actuator model</i>	ECF125
<i>Method of sample selection</i>	RANDOM
<i>Test Fluid</i>	WATER
<i>General assembly drawing</i>	VTI-211SD21FE-01 REV.00

**TEST PROCEDURE:-**

<i>Procedure reference</i>	VTI/QC/COMP/17-18/POD/01
<i>Reference Standard</i>	ANSI/AWWAC504-10
<i>Shaft Orientation</i>	Horizontal
<i>Differential pressure for cycling</i>	22 kg/cm <sup>2</sup>
<i>Seat test pressure- Hydrostatic</i>	22 kg/cm <sup>2</sup>
<i>Dwell time under pressure</i>	15 seconds
<i>Number of mechanical cycles</i>	10000 cycles
<i>Measurement of leakage</i>	Every 1000 cycles
<i>Acceptance criteria for seat leakage- Hydrostatic</i>	No visible leakage

**TEST RESULTS:-**

<b>PROOF OF DESIGN TEST: NPS 6", CLASS 150 WAFER TYPE BUTTERFLY VALVE</b>								
S.N.	DATE	OFFERED CYCLE	CUMULATIVE CYCLE COMPLETED	TEST PRESSURE	TEST DURATION	LEAKAGE ML/MIN	REMARK	
01	17.07.2017	COMPONENT VISUAL, MARKING AND DIMENSION CHECK						RESULT - ACCEPTABLE
02	05.10.2017	HYDROSTATIC SHELL TEST		30 KG/CM <sup>2</sup>	120 SECONDS	NIL	RESULT - ACCEPTABLE	



**PROOF OF DESIGN TEST REPORT: NPS 6", CLASS 150 WAFER TYPE BUTTERFLY VALVE**

		HYDROSTATIC SEAT TEST (BOTH SIDE)		22 KG/CM2	120 SECONDS	NIL	RESULT - ACCEPTABLE
		1000	1000	22 KG/CM2	15 SECONDS	NIL	CYCLE TEST RESULT - ACCEPTABLE
		HYDROSTATIC SEAT TEST (BOTH SIDE)		22 KG/CM2	120 SECONDS	NIL	RESULT - ACCEPTABLE
03	06.10.2017	1000	2000	22 KG/CM2	15 SECONDS	NIL	CYCLE TEST RESULT - ACCEPTABLE
		HYDROSTATIC SEAT TEST (BOTH SIDE)		22 KG/CM2	120 SECONDS	NIL	RESULT - ACCEPTABLE
04	07.10.2017	1000	3000	22 KG/CM2	15 SECONDS	NIL	CYCLE TEST RESULT - ACCEPTABLE
		HYDROSTATIC SEAT TEST (BOTH SIDE)		22 KG/CM2	120 SECONDS	NIL	RESULT - ACCEPTABLE
05	09.10.2017	1000	4000	22 KG/CM2	15 SECONDS	NIL	CYCLE TEST RESULT - ACCEPTABLE
		HYDROSTATIC SEAT TEST (BOTH SIDE)		22 KG/CM2	120 SECONDS	NIL	RESULT - ACCEPTABLE
06	12.10.2017	1000	5000	22 KG/CM2	15 SECONDS	NIL	CYCLE TEST RESULT - ACCEPTABLE
		HYDROSTATIC SEAT TEST (BOTH SIDE)		22 KG/CM2	120 SECONDS	NIL	RESULT - ACCEPTABLE
07	13.10.2017	1000	6000	22 KG/CM2	15 SECONDS	NIL	CYCLE TEST RESULT - ACCEPTABLE
		HYDROSTATIC SEAT TEST (BOTH SIDE)		22 KG/CM2	120 SECONDS	NIL	RESULT - ACCEPTABLE
08	14.10.2017	1000	7000	22 KG/CM2	15 SECONDS	NIL	CYCLE TEST RESULT - ACCEPTABLE
		HYDROSTATIC SEAT TEST (BOTH SIDE)		22 KG/CM2	120 SECONDS	NIL	RESULT - ACCEPTABLE
09	15.10.2017	1000	8000	22 KG/CM2	15 SECONDS	NIL	CYCLE TEST RESULT - ACCEPTABLE
		HYDROSTATIC SEAT TEST (BOTH SIDE)		22 KG/CM2	120 SECONDS	NIL	RESULT - ACCEPTABLE
10	16.10.2017	1000	9000	22 KG/CM2	15 SECONDS	NIL	CYCLE TEST RESULT - ACCEPTABLE
		HYDROSTATIC SEAT TEST (BOTH SIDE)		22 KG/CM2	120 SECONDS	NIL	RESULT - ACCEPTABLE
11	17.10.2017	1000	10,000	22 KG/CM2	15 SECONDS	NIL	CYCLE TEST RESULT - ACCEPTABLE
		HYDROSTATIC SHELL TEST		30 KG/CM2	120 SECONDS	NIL	RESULT - ACCEPTABLE



**PROOF OF DESIGN TEST REPORT: NPS 6", CLASS 150 WAFER TYPE BUTTERFLY VALVE**

	HYDROSTATIC SEAT TEST (BOTH SIDE)	22 KG/CM2	120 SECONDS	NIL	RESULT - ACCEPTABLE
	STRIP TEST WITNESSED WITH DISMANTLING THE VALVE AND FOUND NO WEAR & TEAR OF INTERNAL SURFACE.				RESULT - ACCEPTABLE

**STAGE -5 - Hydrostatic Seat test (Both Side) after completion of each 1,000 Cycle.**

- Hydrostatic Seat test (Both Side) after completion of each 1,000 Cycle witnessed at the pressure 22kg/cm<sup>2</sup> and duration 02 minutes and found neither leakage nor pressure drop during the pressure test duration. Hence Hydrostatic seat test before Cycle Test was found acceptable.

**STAGE -6 - Hydrostatic shell test after completion of Cycle Test.**

- Hydrostatic shell test after completion of Cycle Test witnessed at the pressure 30kg/cm<sup>2</sup> and duration 02 minutes and found neither leakage nor pressure drop during the pressure test duration. Hence Hydrostatic shell test after Cycle Test was found acceptable.

**STAGE -7 - Hydrostatic Seat test (Both Side) after completion of Cycle Test.**

- Hydrostatic Seat test (Both Side) after completion of 10,000 Cycle witnessed with the pressure twice the rated pressure of the valve class and duration 02 minutes and found neither leakage nor pressure drop during the pressure test duration. As well as the parts of the valve or disc did not exhibit permanent visible deformation resulting from the application of the test pressure. Hence Hydrostatic seat test after completion of Cycle Test found acceptable.

**STAGE -8 - Strip Test after completion of Cycle Test.**

- After the test, the valve was dismantled and the sealing surfaces and shaft were observed for any wear & tear. There was no undue deformation, wear & tear observed on the internal surface, disc etc. Hence the stripping test result found acceptable.

**STAGE -9 - MTC review.**

- The MTC reviewed for the Body, Disc, Spindle, Seat, Actuator and result found meeting to the relevant standard requirement. Hence acceptable.

**STAGE -10 - In-Process Inspection report review.**

- The In-process inspection reports reviewed for Dimension, Material, Heat No and the same are found in line with the requirement. Hence acceptable.

**STAGE -11 - Compliance certificate review.**

- The compliance certificate reviewed for the cycle test, visual check, dimension check, pressure test, functional test, material, size, applicable standard and Serial No and result found acceptable.

**Conclusion:-**

The results obtained during the POD test were found to be in compliance with the requirements of the procedure VTI/QC/COMP/17-18/POD/01 and ANSI/AWWA C504-10.

The POD Test qualifies the valve size group from NPS 75 to NPS 500 (03 inch to 20 inch).



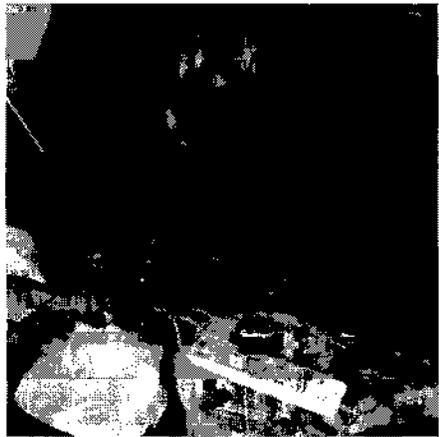
**PROOF OF DESIGN TEST REPORT: NPS 6", CLASS 150 WAFER TYPE BUTTERFLY VALVE**



**CYCLE TEST WITNESS**



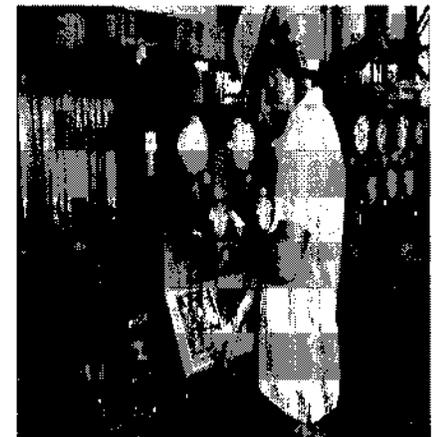
**CYCLE TEST WITNESS**



**CYCLE TEST WITNESS**



**CYCLE TEST WITNESS**



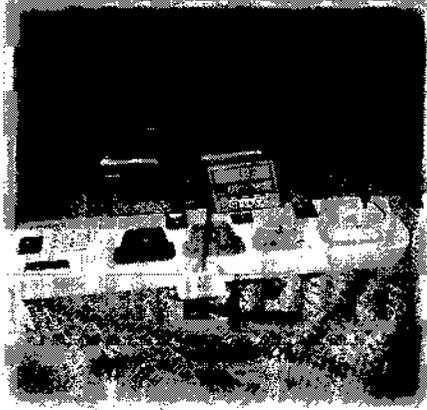
**CYCLE TEST WITNESS**



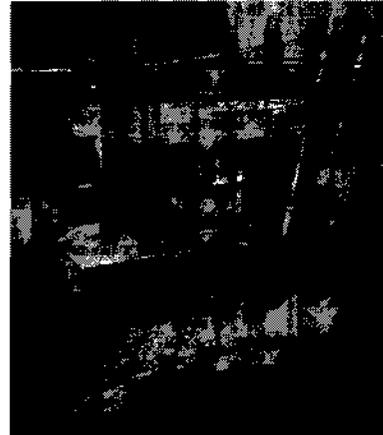
**CYCLE TEST WITNESS**



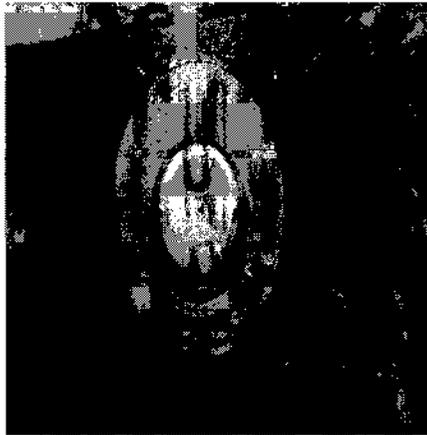
**PROOF OF DESIGN TEST REPORT: NPS 6", CLASS 150 WAFER TYPE BUTTERFLY VALVE**



**10,000 CYCLES COMPLETED**



**HYDROSTATIC SHELL TEST**



**HYDROSTATIC SEAT TEST**



**HYDROSTATIC SEAT TEST**

**Result of Inspection:**

- There were no reasons for objection,
- With objection, see Remarks.

**Status of items.**

complete

not complete

**(Acc to PO.):-**

Released for export packing

ready for shipment

**Purchase Order Status:**

complete

not complete

**Further Inspections:**

yes

no

**Associated Documents:**

- MTC
- In-Process Inspection Report.
- Compliance Certificate.



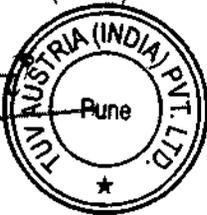
**PROOF OF DESIGN TEST REPORT: NPS 6", CLASS 150 WAFER TYPE BUTTERFLY VALVE**

Attended inspector: Mr. Shakti Prakash Biswal and Mr. Binayak S. Sahoo

Place: Talaja MIDC, Mumbai

Date: 17.10.2017

Inspector to TUV-Austria (India)

*Shakti*  


(Printed/signature/stamp)

**Note:** This Inspection Report is not an authorization to dispatch the item(s). The item(s) can be dispatched only after the issue of a valid release note duly authorized by us. We are not responsible for any damages of the item(s) subsequent to the inspection due to handling during packing, loading/unloading, transit etc