

Cat.no.:E-PS



Cat.no.:E-GGC



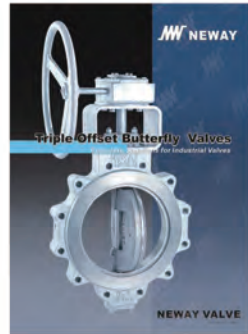
Cat.no.:E-TMBV



Cat.no.:E-FBV



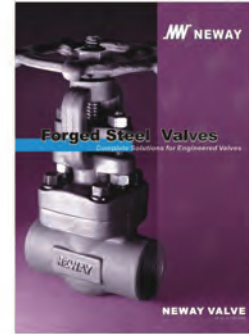
Cat.no.:E-DOV



Cat.no.:E-TOV



Cat.no.:E-PLV



Cat.no.:E-FSV



Cat.no.:E-DAV



Cat.no.:E-CPS



Cat.no.:E-AV



Cat.no.:E-PV

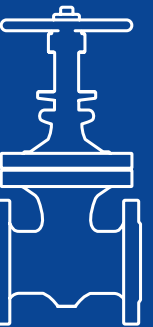


Low-E Valve Solutions for EPA Compliance



Think Global, Act local

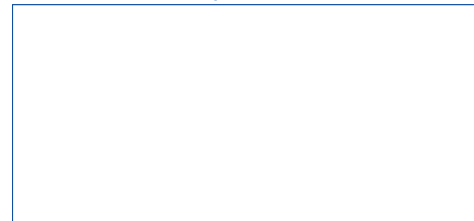
Cat.no.: E-FE-2018



MW NEWAY
NEWAY VALVE (SUZHOU) CO., LTD.

No.666 Taishan Road, Suzhou New District, P.R. China
Post Code:215129
Tel: 86-512-666-51365
Fax: 86-512-666-18930-2102
E-mail: overseas.sales@neway.com.cn
<http://www.newayvalve.com>

Distributed by:



Cat.no.: E-FE-2018



Contents

Foreword 3

Low Emission Guarantee 4~5

Packing Selection 6~7

Nameplate & Tags 8

Testing Certificates 9~11

Certificates Interpretation 12

Certificates from Third Party 13

Testing Summary 14~17

Neway Factory 18

Product Warranty 19



Foreword: Neway Low Emission Valves

As the oil & gas industry moves forward with low emission initiatives to meet current EPA standards, many owners and end uses have requirements in place to source low-emission products from their suppliers. To enable our clients to meet their low emission needs, Neway Valve has proactively designed and certified multiple lines of our product to meet current industry standards.

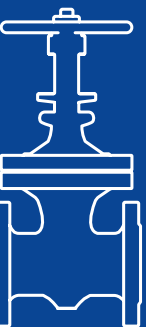
Neway offers fully compliant API 600 valves (13th edition, 2015) with certified reports from United Valve demonstrating sub 10 ppm emission performance, tested to API 624 (1st edition, 2014). Certified witness testing has also been completed for the full recommended range of API 623 globe valves, API 603 gate valves, and API 602 forged gate and globe valves. Neway also passed the API 641 testing witnessed by TUV and Lloyd's Register and got the certified reports since the API 641 standard was published in 2016. Test summaries are published on pages 14 & 17 of this document, with full reports available upon request.

For valves outside the scope of API 624 and API 641, Neway has the ability to provide various special stem sealing arrangements that have been tested to ISO15848-1, TA-LUFT, and other custom testing standards. For additional information, please contact Neway's Engineering Department.

To ensure compliance to current and future policy changes, Neway is providing our certified low emission valves with a five year limited guarantee on emission performance.

Sincerely,

Luke Chou
 Technical Team Lead
 Neway Valve International, Inc.





Neway guarantees that “Neway Low Emission Certified Valves” installed and maintained in accordance to the “Conditions of Guarantee” will not have fugitive emission leakage greater than 100ppm, as detected pursuant to EPA Method 21, for a period of five (5) years from the date of installation.

Neway Low Emission Certified Valves

Low Emission Certified Valves are valves designed and manufactured by Neway, installed with Certified Low-Leaking Valve Packing, that have been qualified through industry standardized valve emission testing standards Such as API 624, API 641. Valves qualified through API 624 and API 641, will have API 624 and API 641 tagged clearly on the valve.

Conditions of Guarantee:

1. Valve shall only be used in static application (e.g. on-off application, blocking application).
2. Valve shall be installed with stuffing box oriented at least 45 degrees above horizontal.
3. Valve stem, stuffing box, gland, packing, gland follower, eyebolt, and/or eyebolt nut shall not be damaged (e.g. bent stem, galling, bent gland follower).
4. If a bent stem is suspected, stem run out must be evaluated and not exceed ± 0.010 TIR/ft.
5. Guarantee only applies if leakage is detected greater than 100ppm above background and after the first attempt of repair has been done in accordance with TB-140529. Necessary adjustments up to an increase of 20% in torque values, in 5% increments, is allowed to bring leakage below 100ppm.
6. Packing shall be installed by Neway or a Neway authorized installer in accordance to both Neway and the packing manufacture's published installation instructions.
7. Low leaking guarantee will not be upheld if service conditions exceed 1500 psig, and/or 750°F (400°C), and/or -50°F (-45°C), unless prior written approval was given by Neway Engineering.
8. Valve must be installed, maintained, stored, and transported in accordance to applicable Neway installation, operation, and maintenance manual.
9. Neway must be given a reasonable opportunity to inspect the valve and packing material prior to repair or replacement.
10. Neway shall be granted permission to conduct a site visit for inspection of our product and to verify correct maintenance and storage procedures are being followed. 2 weeks advanced notice will be given before Neway conducts a site visit. Denial of inspection may be grounds for voiding of this guarantee.

Neway Low-Emission Valve Guarantee

NOTE: For valves subjected to temperature variations greater than 150°, it is critical to verify and tighten gland bolting after the first temperature cycle.

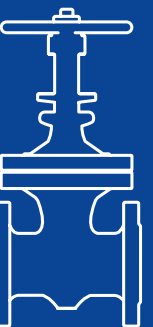
Additional Conditions for Modified Valves:

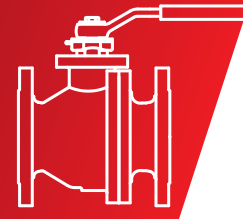
1. Valve modification by an unauthorized modification shop or actuation house are grounds for voiding this guarantee unless prior approval is given by Neway Engineering.
2. Unauthorized modification, disassembly or replacement of any parts such as stem bushing, stem, eyebolt, or packing, are grounds for voiding this guarantee.
3. If the stem is replaced, finish should be 16 to 32 RMS (0.4 to 0.8 Ra).
4. Only authorized packing shall be used for packing replacement.
5. API RP621 latest edition should be followed for repair and reconditioning of valves.

LIMITATIONS OF LIABILITY

Neway's obligation under this guarantee is expressly limited to replacing of defective material. In no event will Neway be liable for damage, loss to persons or property, cost of repair operation, imposed fines, or consequential damages and downtime which follows a failure. Each valve that is covered can only receive one replacement valve. Guarantee is limited to normal use and service and does not cover fugitive emission leakage due to improper valve application, usage, installation, modification, or alteration.

Neway Valve (Suzhou) Co.,Ltd.
Technical Center





Neway API 624 & 641 Packing Selection

API 600 & API 623 Valves

Chesterton 1622 OEMDF

- Die-formed braided graphitic rings
- Packing max temp (low emission): 400°C
- Packing max temp (steam service/non oxidizing) : 650°C
- Packing min temp: -240°C

API 602 & API 603 Valves

Pillar EDP17 Stack (#6710 Wiper + #6617 Mid)

- Die-formed flexible graphite with braided graphitic end ring
- Packing max temp (low emission): 450°C
- Packing max temp (steam service/non oxidizing) : 600°C
- Packing min temp: -240°C

API 608 & API 609 Valves

Pillar EDP15

- Die-formed braided graphitic rings
- Packing max temp (low emission): 350°C
- Packing max temp (stem service/non oxidizing): 400°C
- Packing min temp: -200°C

Chesterton 1622



Pillar EDP 17



Neway ISO 15848 Packing Selection

Gate & Globe Valves

Chesterton 1622

- Die-formed braided graphitic rings
- Packing max temp (low emission): 400°C
- Packing min temp: -240°C

James Walker Supagraf Premier

- Die-formed braided graphitic rings
- Packing max temp (low emission): 450°C
- Packing min temp: -200°C

Ball & Butterfly Valves

Pillar EDP15

- Die-formed braided graphitic rings
- Packing max temp (low emission): 350°C
- Packing min temp: -200°C

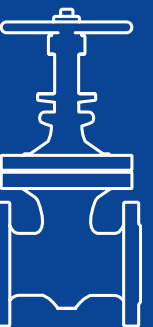
Cathay CPS 9904

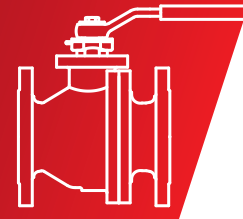
- Die-formed flexible graphite with braided graphitic end ring
- Packing max temp (low emission): 400°C
- Packing min temp: -120°C

Pillar EDP 15



Cathay CPS 9904





Neway API FE & ISO 15848 Nameplates and Tags

Nameplates

NEWAY <small>API 600 / ASME B16.34</small>	BODY		STEM		MADE IN CHINA
	SEAT		DISC		
	MOP				
	FIG.NO.		S.N.		

NEWAY <small>API 608 / ASME B16.34</small>	BODY		STEM		MADE IN CHINA
	SEAT		BALL		
	MOP				
	S.N.				

In addition to the standard nameplate above, an API FE and ISO 15848 nameplate will be affixed to the valve.

ISO 15848-1 AH-CO2 (-46°C to 400°C)

API 624

ISO 15848-1 BH-CO1 (-196°C to RT)

API 641

Packing Information Tags

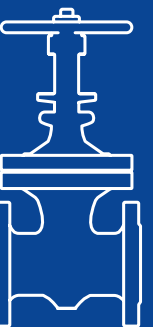
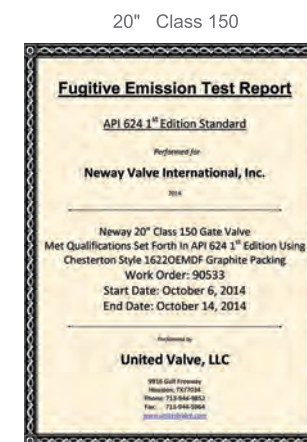
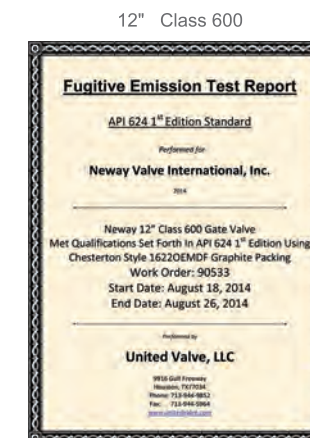
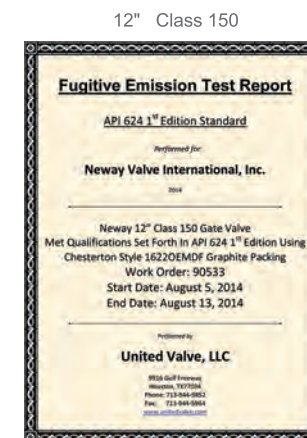
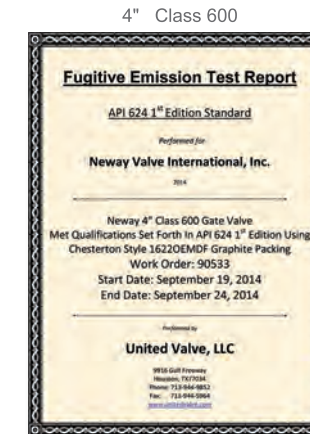
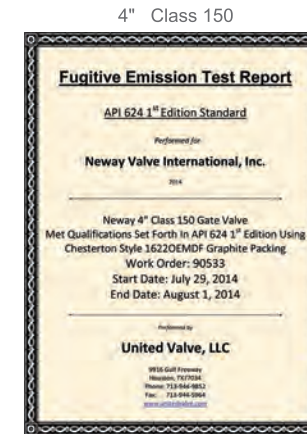
The tags below will be wired to the packing gland bolts.

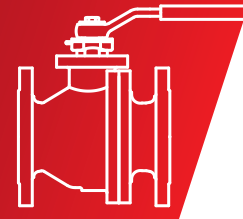
NEWAY
API 624 Low Emission Certified

NEWAY
API 641 Low Emission Certified

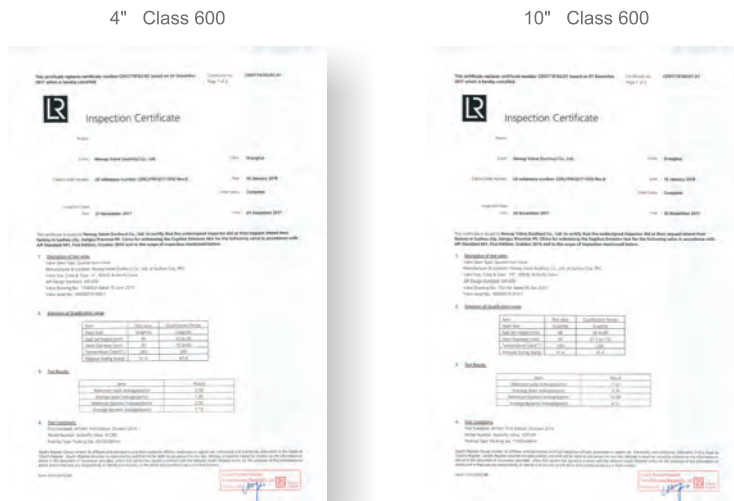
NEWAY
ISO 15848 Low Emission Certified

Neway API 624 (Gate Valve) Testing Certificates

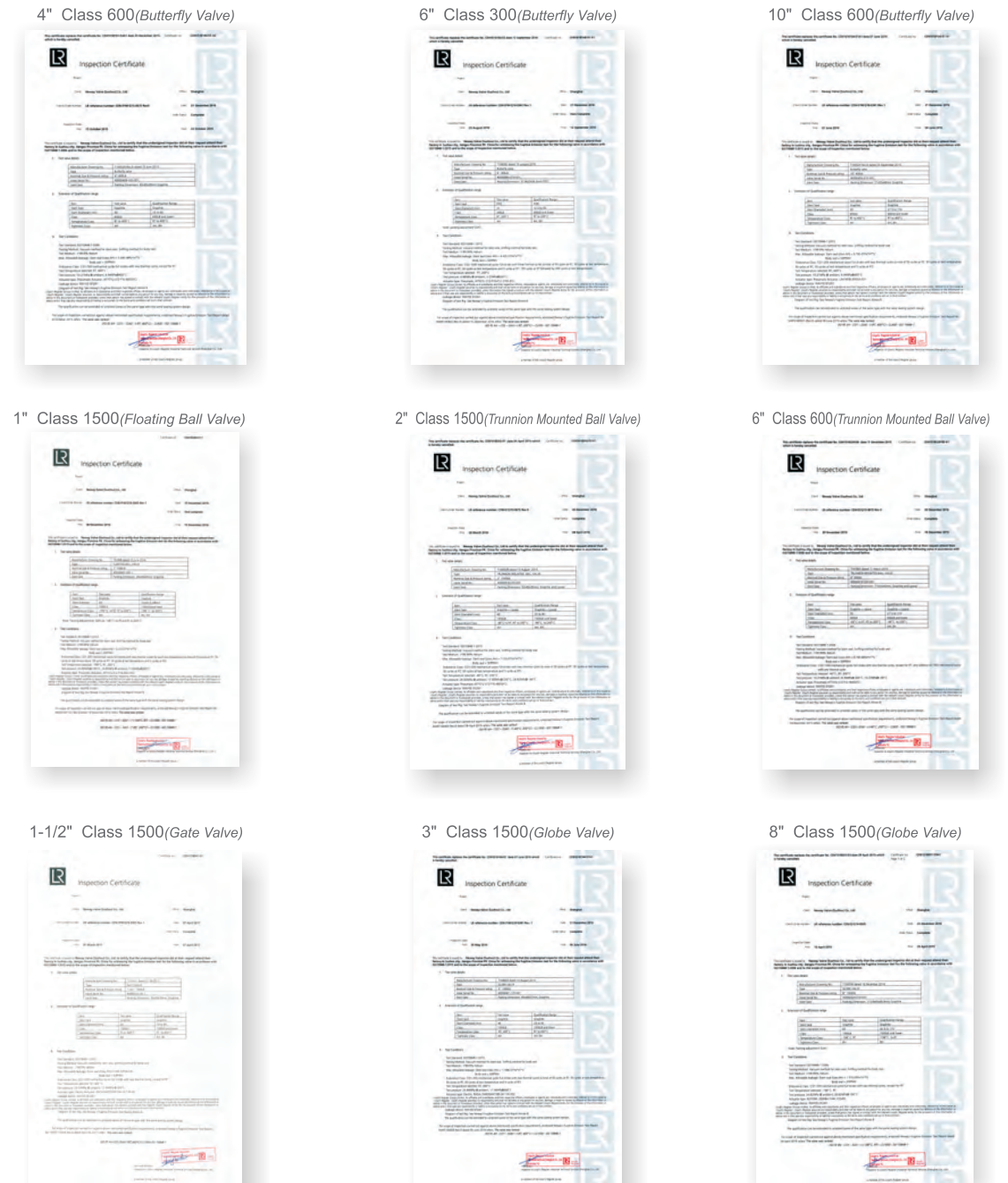




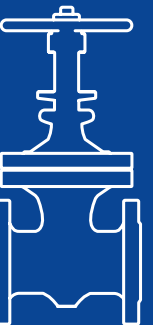
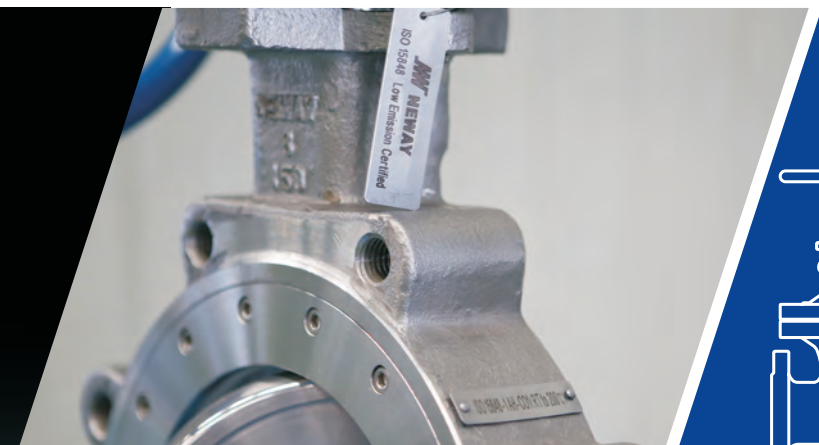
Neway API 641 (Ball & Butterfly Valve) Testing Certificates

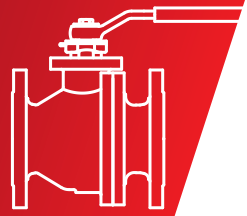


Neway ISO 15848 Valve Testing Certificates(Portion)



Up till 30th, Jun, 2018, Neway has obtained a total of 73 ISO15848 fugitive emission certificates, including 21 gate valve certificates, 47 ball valve certificates and 5 butterfly certificates.





ISO FE **AH**-CO2-SSA0-t(-46°C,200°C)-CL1500-ISO15848-1

Test pressure
According to PN or ASME rating

Temperature
Qualified temperature range

Number of stem seal adjustments(Packing)
SSA 0=None, SSA 1=One adjustment, SSA 2=Two adjustments
A maximum of one adjustment is accepted for CO1,
Two for CO2 and three for CO3

Endurance es (mechanical and thermal cycles)

- Isolation valves
- CO1= 205 mechanical / 2 thermal cycles
- CO2= 1,500 mechanical / 3 thermal cycles
- CO3= 2,500 mechanical / 4 thermal cycles
- Control valves
- CC1= 20,000 mechanical / 2 thermal cycles
- CC2= 60,000 mechanical / 3 thermal cycles
- CC3= 100,000 mechanical / 4 thermal cycles

Test fluid

- H Helium gas—Tightness AH, BH, CH
- M Methane gas—Tightness AM, BM, CM

Tightness

- A $\leq 10^{-6} \text{ mg} \cdot \text{s}^{-1} \cdot \text{m}^{-1} = 1.78 \times 10^{-7} \text{ mbar} \cdot \text{l} \cdot \text{s}^{-1} \cdot \text{mm}^{-1}$
- B $\leq 10^{-4} \text{ mg} \cdot \text{s}^{-1} \cdot \text{m}^{-1} = 1.78 \times 10^{-6} \text{ mbar} \cdot \text{l} \cdot \text{s}^{-1} \cdot \text{mm}^{-1}$
- C $\leq 10^{-2} \text{ mg} \cdot \text{s}^{-1} \cdot \text{m}^{-1} = 1.78 \times 10^{-4} \text{ mbar} \cdot \text{l} \cdot \text{s}^{-1} \cdot \text{mm}^{-1}$

United Valve
The Valve Service Specialists

Customer: Newway
Date: 1/21/2015
United Valve Work Order: 90533

United Valve confirms that all Newway API 600/ASME 816.34 gate valves in Table 1 successfully completed testing according to API 624, 1st Edition using Chesterton 1622OEMDF Graphite Packing.

With the stem in a vertical orientation, in accordance with API 624, all valves were pressurized with 99% pure methane and completed 310 mechanical cycles and 3 thermal cycles at 500°F ± 5%.

NPS	Class (Test Pressure (psig))	Material	Serial Number	Fig. Number	Recommended Packing Torque Value (ft.-lbs.)	Maximum Leakage (ppmv)	
						Static	Dynamic
4 in.	150 (170)	WCB	30000977-010-2	4G1RA8-ULE1	35	7	6
4 in.	600 (600)	WCB	30000977-020-9	4G6RA8-ULE1	67	10	3
4 in.	1500 (600)	WCB	53993-060-2	4G15RA8-ULE1	71	0	1
12 in.	150 (170)	WCB	30000977-040-1	12G1RA8-ULE1	132	4	4
12 in.	600 (600)	WCB	53993-030-4	12G6RA8-ULE1-G	170	3	3
12 in.	1500 (600)	WCB	30000977-060-5	12G15RA8-ULE1-G	347	2	1
20 in.	150 (170)	WCB	53993-070-1	20G1RA8-ULE1-G	174	2	1
20 in.	600 (600)	WCB	53993-090-3	20G6RA8-ULE1-G	347	1	1

Drury Davis, Staff Engineer

Lloyd's Register

Client: NEWWAY VALVE (SUZHOU) CO., LTD.
Date: July 20, 2018
LR Certificate Number: CEN1718182/01A1, CEN1718182/01A1

Lloyd's Register Industrial Technical Services (Shanghai) Co., Limited (hereafter denoted as LR) confirms that Newway's API 609 butterfly valves in below Table successfully completed testing according to API641 First Edition, October 2016 by using type Pillar EDP15 graphite packing.

With the stem in vertical position, in accordance with API 641, the valves were pressurized with >97% methane and complete 610 Mechanical cycles & 3 Thermal cycles at ambient temperature and 260°C respectively. Details refer to LR certificates and the Newway's test reports.

NPS	Class/Test Pressure (MPa)	Material (body)	Serial No.	Figure No.	Packing Nut Torque Value (N.m)		Maximum Leakage (ppmv)	
					Initial	Final	Static	Dynamic
10	600 (4.2)	WCB	40000574-410-1	T52142	75	35	11.21	12.06
4	600 (4.2)	WCB	40000574-400-1	T106524	25	10	2.93	2.52

TUV SUD
Industrie Service

Client: NEWWAY VALVE (SUZHOU) CO., LTD.
Date: April 23, 2018
TUV SUD Certificate Number: 251008/251070/151071

TUV SUD Certificate and Testing (Shanghai) Co., Ltd. Shanghai branch confirms that Newway's API 609 butterfly valves in below Table successfully completed testing according to API 641, 1st Edition, October 2016 by using type Pillar EDP15 graphite packing.

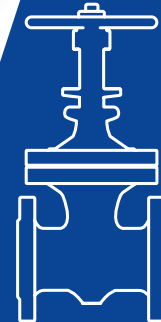
With the stem in vertical position, in accordance with API 641, the valves were pressurized with >97% methane and completed 610 mechanical cycles & 3 thermal cycles at ambient temperature and 260°C respectively. Details refer to TUV SUD certificates and the Newway's test reports.

NPS	Class (Test Pressure in MPa)	Material (body)	Serial No.	Figure No.	Packing Nut Torque Value (N.m)		Maximum Leakage (ppmv)	
					Initial	Final	Static	Dynamic
6	3000 (4.1)	CF8M	40000512-10-1	T20160	84.84	63.80	9.10	10.07
1	3000 (4.1)	CF8M	40000512-20-1	T204400	142.04	122.12	6.90	7.23
1	6000 (4.1)	F304	40000522-30-1	T56084	272.17	210	4.55	4.78

Yao Shuang, Project engineer
Industry services

TUV SUD Industry Services GmbH
3-13, No. 151, Hong Kong Road
Shanghai 200170 P.R. China

Tel: +86 21 6241-0123
Fax: +86 21 6140-8805

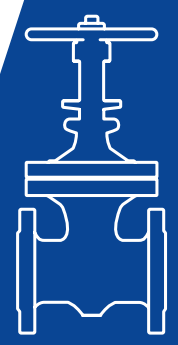




Neway API 624 & 641 Testing Summary

Valve Information					
Design	Type	Size	Class	Stem Movement	Packing
API 600	Gate	4	150	Rising Non-Rotating	Chesterton 1622 OEMDF
API 600	Gate	4	600	Rising Non-Rotating	Chesterton 1622 OEMDF
API 600	Gate	4	1500	Rising Non-Rotating	Chesterton 1622 OEMDF
API 600	Gate	12	150	Rising Non-Rotating	Chesterton 1622 OEMDF
API 600	Gate	12	600	Rising Non-Rotating	Chesterton 1622 OEMDF
API 600	Gate	12	1500	Rising Non-Rotating	Chesterton 1622 OEMDF
API 600	Gate	20	150	Rising Non-Rotating	Chesterton 1622 OEMDF
API 600	Gate	20	600	Rising Non-Rotating	Chesterton 1622 OEMDF
API 602	Gate	3/4	800	Rising Non-Rotating	Pillar EDP 17
API 602	Gate	1 1/2	800	Rising Non-Rotating	Pillar EDP 17
API 602	Gate	3/4	1500	Rising Non-Rotating	Pillar EDP 17
API 602	Gate	1 1/2	1500	Rising Non-Rotating	Pillar EDP 17
API 602	Globe	3/4	800	Rising Rotating	Pillar EDP 17
API 602	Globe	1 1/2	800	Rising Rotating	Pillar EDP 17
API 602	Globe	3/4	1500	Rising Rotating	Pillar EDP 17
API 602	Globe	1 1/2	1500	Rising Rotating	Pillar EDP 17
API 603	Gate	4	300	Rising Non-Rotating	Pillar EDP 17
API 603	Gate	12	300	Rising Non-Rotating	Pillar EDP 17
API 603	Gate	20	300	Rising Non-Rotating	Pillar EDP 17
API 623	Globe	4	150	Rising Non-Rotating	Chesterton 1622 OEMDF
API 623	Globe	4	150	Rising Rotating	Chesterton 1622 OEMDF
API 623	Globe	4	600	Rising Non-Rotating	Chesterton 1622 OEMDF
API 623	Globe	4	600	Rising Rotating	Chesterton 1622 OEMDF
API 623	Globe	4	1500	Rising Non-Rotating	Chesterton 1622 OEMDF
API 623	Globe	12	150	Rising Non-Rotating	Chesterton 1622 OEMDF
API 623	Globe	12	600	Rising Non-Rotating	Chesterton 1622 OEMDF
API 623	Globe	12	1500	Rising Non-Rotating	Chesterton 1622 OEMDF
API 608	Ball	1	300	Quarter-turn	Pillar EDP 15
API 608	Ball	1	600	Quarter-turn	Pillar EDP 15
API 608	Ball	6	300	Quarter-turn	Pillar EDP 15
API 609	Butterfly	10	600	Quarter-turn	Pillar EDP 15
API 609	Butterfly	4	600	Quarter-turn	Pillar EDP 15

Test Results (ppmv)			
Avg. Static	Max Static	Avg. Dynamic	Max Dynamic
1	7	2	6
1	10	1	3
0	0	0	1
1	4	1	4
1	3	1	3
0	2	0	1
0	2	0	1
0	1	0	1
6	16	10	40
12	39	13	32
6	22	7	17
4	13	4	15
6	19	8	22
8	19	10	21
7	24	9	26
11	43	14	47
6	17	6	19
4	11	5	11
11	21	24	44
7	31	6	27
2	5	3	6
7	15	9	17
4	14	6	19
3	7	4	9
5	10	6	16
9	31	11	39
5	21	5	21
3	7	2	3
2	5	3	5
3	5	3	10
3	11	5	12
1	3	2	3

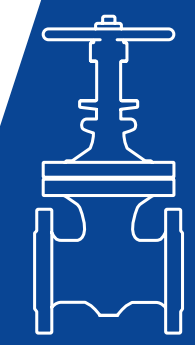


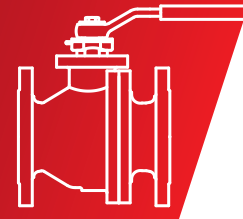


Neway ISO 15848 Testing Summary(Portion)

Type	Size	Class	Qualified Class
Gate Valve	1"	1500	150~1500
Gate Valve	1-1/2"	1500	150~1500
Gate Valve	6"	600	150
			300
			600
Gate Valve	8"	600	150
			300
			600
Globe Valve	1"	1500	150~800
			900~1500
Globe Valve	1-1/2"	1500	150~800
			900~1500
Globe Valve	3"	1500	150
			300
			600
			900
			1500
Globe Valve	8"	1500	150
			300
			600
			900
Floating Ball Valve	1"	1500	150~600
			900~1500
			150
			300
Floating Ball Valve	3/4"	2500	600~900
			1500~2500
			1500~2500
Floating Ball Valve	2"	600	150~300
			600
Floating Ball Valve	4"	300	150
			300
Trunnion Mounted Ball Valve	2"	600	150~300
			600
Trunnion Mounted Ball Valve	2"	1500	150
			300
			600
			900
			1500
Trunnion Mounted Ball Valve	6"	600	150~300
			600
Trunnion Mounted Ball Valve	10"	900	150
			300~600
			900
Triple Offset Butterfly Valve	4"	600	150~600
Triple Offset Butterfly Valve	4"	600	150~600
Triple Offset Butterfly Valve	6"	300	150~300
Triple Offset Butterfly Valve	10"	600	150~600

Qualified Size	Qualified Temp Range	Endurance Class	Tightness Class
1/2"~2"	-196°C~RT	CO1	AH
1/2"~2"	RT~400°C	CO1	AH
2"~36"	-196°C~RT	CO1	BH
2"~30"			
2"~24"			
3"~36"	RT~400°C	CO1	BH
3"~30"			
3"~24"			
1/2"~2"	-196°C~RT	CO1	AH
1/2"~2"			
3/4"~2"	RT~400°C	CO1	BH
1/2"~2"			
2"~24"	RT~400°C	CO1	AH
2"~20"			
2"~14"			
2"~10"			
2"~8"			
10"~24"	-196°C~RT	CO1	BH
6"~20"			
5"~18"			
4"~12"			
3"~12"	-196°C~200°C	CO1	AH
1/2"~4"			
1/2"~2"			
1-1/2"~5"			
1-1/2"~4"			
1/2"~5"	-46°C~200°C	CO2	BH
1/2"~2-1/2"			
1-1/2"~8"	-196°C~200°C	CO1	AH
1"~6"			
1-1/2"~10"	-46°C~200°C	CO1	AH
1-1/2"~8"			
1-1/2"~4"	-46°C~400°C	CO1	AH
1"~4"			
1-1/2"~20"	-46°C~200°C	CO1	AH
1-1/2"~16"			
1-1/2"~14"			
1-1/2"~10"			
1-1/2"~8"			
2-1/2"~26"	-46°C~200°C	CO2	AH
2"~16"			
3"~24"	-196°C~RT	CO1	AH
3"~16"			
3"~14"			
16"~64"	RT~400°C	CO1	AH
16"~64"	-196°C~RT	CO2	AH
13"~50"	RT~200°C	CO1	AH
28"~110"	RT~400°C	CO1	AH





NEWAY Head Office

Total area: 2,295sqm
Office area: 6,885sqm

Founded in 2014



Neway Manufacturing Base

Main products: Ball Valve, Gate Valve,
Globe Valve, Check Valve,
Forged Steel Valve, Butterfly Valve

Building area: 230,000 sqm
Work shop: 140,061 sqm

Established in 2006 and expanded in 2013



NEWAY Foundry (Suzhou)

Main products: Sand Casting
Building area: 112,500 sqm
Work shop: 98000 sqm

Founded in 2008 and expanded in 2015



NEWAY Foundry (Dafeng)

Main products: Lost wax investment casting
Building area: 46,000 sqm
Work shop: 12,000 sqm

Founded in 2004



NEWAY Foundry (Dafeng)

Main products: Lost wax investment casting
Building area: 40,000 sqm
Work shop: 20,000 sqm

Founded in 2008



Seller will replace without charge or refund the purchase price of products provided by Seller which prove to be defective in material or workmanship, provided in each case that the product is properly installed and is used in the service for which Seller recommends it and that written claim, specifying the alleged defect, is presented to the Seller within 18 months from the date of shipment or 12 months after installation, whichever occurs first. Seller shall in no event bear any laborequipment, engineering or other costs incurred in connection with repair of replacementThe warranty stated in this paragraph is in lieu of all other warranties, either expressed or implied. With respect to warranties, this paragraph states Buyer's exclusive remedy and seller's exclusive liability.

