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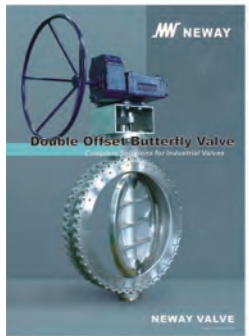
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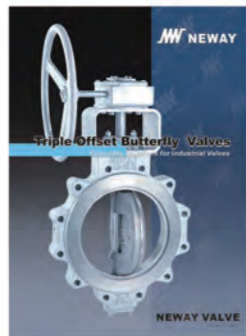
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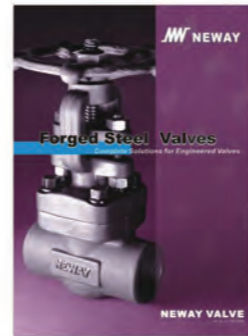
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Cat.no.:E-AV



Cat.no.:E-PV

**MW NEWAY 纽威**

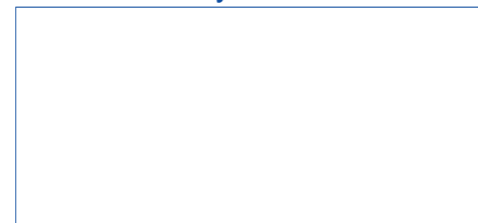
# Product Summary

Complete Solutions for Industrial Valves

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Distributed by:



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**NEWAY VALVE**

Cat.no.:E-PS-2017

# Table of Contents

- 1 Quality Commitment
- 2~3 Product Range
- 4 Introduction of Foundries
- 5 Technical Innovation
- 6 Quality Control   Advanced Manufacturing
- Gate, Globe, Check Valve**
- 7 Conventional Gate, Globe and Check Valve
- 8 Pressure Seal Valve   Full-bore Pipeline Valve
- 9 Knife Gate Valve
- 10 Full Opening Check Valve   Axial Flow Check Valve
- 11 Dual-plate Check Valve   Tilting Disc Check Valve
- 12 API 603 Stainless Steel Gate Valve  
Bi-directional Three-way Globe Valve
- Forged Steel Gate, Globe and Check Valve**
- 13 API 602 Forged Steel Valve  
Forged Steel Pressure-seal Valve
- 14 Forged Steel Bellows Seal Valve  
Forged Steel Valve for Cryogenic Applications
- 15 Forged Steel Valve for High-temperature Service  
Forged Steel Valve for Thermal Power use
- Ball Valve**
- 16 Floating Ball Valve
- 17 Trunnion Mounted Ball Valve
- 18~19 Ball Valves for H<sub>2</sub>s Service
- Butterfly Valve**
- 20 Resilient Seated Concentric Butterfly Valve  
Double Offset Butterfly Valve
- 21 Metal-seated Triple Offset Butterfly Valve
- Valves for Cryogenic Service**
- 22 Valves for Cryogenic Service
- 23 Cryogenic Gate Valve  
Cryogenic Globe Valve
- 24 Cryogenic Check Valve (Swing Check Valve)  
Cryogenic Check Valve (Axial Flow Check Valve)
- 25 Lift Check Valve for Cryogenic Applications  
Cryogenic Check Valve (Butterfly Check Valve)
- 26 Cryogenic Floating Ball Valve  
Cryogenic Triple Offset Butterfly Valve
- 27 Cryogenic Trunnion Mounted Ball Valve
- Subsea Valve**
- 28 Subsea Ball Valve   Subsea Gate Valve
- Nuclear Power Valve**
- 29 Nuclear Globe Valve   Nuclear Gate Valve
- 30 Nuclear Check Valve   Nuclear Ball Valve  
Nuclear Butterfly Valve
- Control Valve**
- 31 CSS Series Single-seated Control Valve  
CSC Series Cage-guided Control Valve  
CBE Series Eccentric Rotating Control Valve
- 32 CAB Series Resistance To Erosion  
Angle-type Control Valve  
CTD(M) Series Three Way  
Diverting(Mixing) Control Valve
- Special Valve**
- 33 Jacketed Valve   Bellows Seal Valve
- 34 Ball Valves for Pig Launching and Receiving  
Strainer
- 35 Valve for Marine Service  
Forged Bonnetless Globe Valve
- 36 Neway Factory



## Complete Solutions for Industrial Valves

As a global leader of valve manufacturing, Neway (SSE:603699) is dedicated to the production, research, and development of industrial valves. Neway is committed to providing complete valve solutions to all industries through advanced engineering and innovation.

Neway's product line includes Ball, Gate, Globe, Check, Butterfly, Nuclear, Control, Subsea, Safety valves. Our high quality standards and innovative ability are recognized by many global end users and EPCs. Neway valves are utilized in a wide variety of industries and working conditions such as Gas, Oil, Refining, Chemical, Coal Chemical, Offshore, FPSO, Air Separation, LNG, Nuclear Power, Power Generation, and Pipeline Transmission applications.

## Facilities & Service

Neway has developed a sophisticated multi-plant management system operating one valve assembly plant, one API6A valve plant, three foundries, and one R&D center. Our newest assembly plant was expanded in 2013, and it now covers 35,000 square meters.

Advanced software (ANSYS, FE-Safe, CF-Design, Siemens PLM and NX) is applied here at Neway for the Research & Development of products. We use SAP to control the traceability and status of all products during the manufacturing process. In order to ensure the safety, eco-friendliness, and reliability of our products, we use the most advanced fire-safe, cryogenic, high pressure, and fugitive emission test equipment.

As part of Neway's global strategy, to provide better service to our customers, we have established our overseas subsidiaries in North America, Brazil, Netherlands, Italy, Singapore, and Dubai along with over 80 agents and distributors worldwide.

## High Quality, High Value

Neway is dedicated to the pursuit of "Zero Defect". We maintain a quality management system that encompasses our entire operation from order entry, to final inspection. Through Neway's continuous efforts, our products have achieved industrial certificates including ISO 9001, API 6A, API 6D, CE/PED, ASME N & NPT, TA-Luft, ABS, CU-TR, and Fire-Safe approvals.



NORSOK



ISO 9001



API 6D



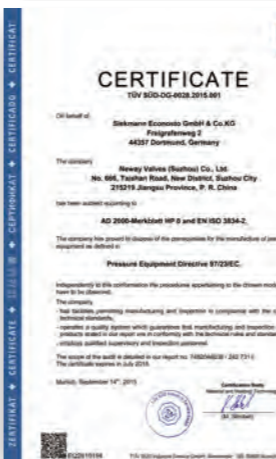
CE/PED



TA Luft



ABS



AD2000



Fire Safe Test

Neway recognizes the importance of valve quality for the safety and protection of personnel health and property. It is our quality commitment to focus our resources to provide our customers with first class products at a competitive price, that are designed, manufactured, inspected and tested in accordance with our customer's specifications and that comply with all international standards. With respect to the facts that the current industrial standards do not always take into consideration the likelihood and consequences of possible deterioration in service, related to specific service fluids or the external environment in which they operate. Our customers are requested to keep an open line of communication with our engineering department to identify and implement standards, that will provide valves with the possibility of deterioration in service, so as to ensure safety over the valves expected lifetime.

Valve Type	Design Standard	Size							ASME Rating Class						
		1/2-2"	2-4"	6-12"	12-24"	≥ 26"	150PSI	150	300	600	800	900	1500	2500	4500
Gate Valve	Conventional Gate Valve	API 600	♦	♦	♦	♦		♦	♦	♦	♦	♦	♦	♦	
	Stainless Steel Gate Valve	API 603	♦	♦	♦	♦		♦	♦	♦	♦	♦	♦	♦	
	Forged Steel Gate Valve	API 602	♦	♦	♦			♦	♦	♦	♦	♦	♦	♦	
	NRS Gate Valve	ASME B16.34	♦	♦	♦			♦	♦	♦	♦	♦	♦	♦	
	Pressure Seal Gate Valve	ASME B16.34			♦	♦			♦	♦	♦	♦	♦	♦	
	Through Conduit Gate Valve	API 6D	♦	♦	♦	♦			♦	♦	♦	♦	♦	♦	
	Knife Gate Valve	MSS SP-81		♦	♦	♦		♦							
Globe Valve	Conventional Globe Valve	BS 1873		♦	♦	♦		♦	♦	♦		♦	♦	♦	
	Globe valve	API 623		♦	♦	♦		♦	♦	♦		♦	♦	♦	
	Stainless Steel Globe Valve	ASME B16.34	♦	♦	♦	♦		♦	♦	♦		♦	♦	♦	
	Forged Steel Globe Valve	API 602	♦	♦	♦			♦	♦	♦	♦	♦	♦	♦	
	Pressure Seal Globe Valve	ASME B16.34		♦	♦	♦			♦	♦	♦	♦	♦	♦	
	3 Way Double Direction Globe Valve	ASME B16.34		♦	♦			♦	♦	♦		♦	♦	♦	
	Y Type Globe Valve	BS 1873	♦	♦	♦			♦	♦	♦		♦	♦	♦	
Check Valve	Quickly Close Globe Valve	ASME B16.34	♦	♦	♦			♦							
	Angle Globe Valve	BS 1873	♦	♦	♦			♦	♦	♦		♦	♦	♦	
	Conventional Check Valve	BS 1868		♦	♦	♦	♦					♦	♦	♦	
	Stainless Steel Check Valve	ASME B16.34	♦	♦	♦	♦						♦	♦	♦	
	Forged Steel Piston Check Valve	API 602	♦	♦	♦			♦	♦	♦	♦	♦	♦	♦	
	Forged Steel Swing Check Valve	API 602	♦					♦	♦	♦	♦	♦	♦	♦	
	Pressure Seal Check Valve	ASME B16.34		♦	♦	♦						♦	♦	♦	
	Full Opening Check Valve	API 6D		♦	♦	♦	♦					♦	♦	♦	
Ball Valve	Axial Flow Check Valve	API 6D	♦	♦	♦	♦						♦	♦	♦	
	Swing / Lift Check Valve	API 594	♦	♦	♦	♦						♦	♦	♦	
	Globe Check Valve	BS 1873	♦	♦	♦			♦	♦	♦		♦	♦	♦	
	Tilting Disc Check Valve	ASME B16.34		♦	♦	♦	♦					♦	♦	♦	
	1 PC Floating Ball Valve	ISO 17292API 608/API 6D	♦	♦	♦			♦	♦	♦		♦	♦	♦	
	2 PC Floating Ball Valve	ISO 17292API 608/API 6D	♦	♦	♦			♦	♦	♦	♦	♦	♦	♦	
	3 PC Floating Ball Valve	ISO 17292API 608/API 6D	♦					♦	♦	♦	♦	♦	♦	♦	
	Top Entry Floating Ball Valve	ISO 17292API 608/API 6D	♦	♦				♦	♦	♦	♦	♦	♦	♦	
Butterfly Valve	Metal Seated Floating Ball Valve	ISO 17292API 608/API 6D	♦	♦	♦			♦	♦	♦	♦	♦	♦	♦	
	2 PC Trunnion Mounted Ball Valve	API 6D		♦	♦	♦						♦	♦	♦	
	3 PC Trunnion Mounted Ball Valve	API 6D		♦	♦	♦	♦					♦	♦	♦	
	Top Entry Trunnion Mounted Ball Valve	API 6D		♦	♦	♦	♦					♦	♦	♦	
	Metal Seated Trunnion Mounted Ball Valve	API 6D		♦	♦	♦	♦					♦	♦	♦	
	Full Welded Ball Valve	API 6D		♦	♦	♦	♦					♦	♦	♦	
	DBB Ball Valve	API 6D	♦	♦	♦	♦						♦	♦	♦	
	Concentric Butterfly Valve	API 609		♦	♦	♦	♦					♦	♦	♦	
Nuclear Valve	Double Off-Set Butterfly Valve	API 609		♦	♦	♦	♦					♦	♦	♦	
	Triple Off-Set Butterfly Valve	API 609		♦	♦	♦	♦					♦	♦	♦	
	Nuclear-grade I / Gate / Globe / Check / Ball / Butterfly Valve	RCC-M B/ASME BPVC-III NB	♦	♦	♦	♦						♦	♦	♦	
Control Valve	Nuclear-grade II / Gate / Globe / Check / Ball / Butterfly Valve	RCC-M C/ASME BPVC-III NC	♦	♦	♦	♦						♦	♦	♦	
	Nuclear-grade III / Gate / Globe / Check / Ball / Butterfly Valve	RCC-M D/ASME BPVC-III ND	♦	♦	♦	♦						♦	♦	♦	
	Non-nuclear Gate / Globe / Check / Ball / Butterfly Valve	ASME B16.34	♦	♦	♦	♦						♦	♦	♦	
Special Valves	Single-seated Control Valve	IEC 60534	♦	♦	♦			♦	♦	♦		♦	♦	♦	
	Cage-guided Control Valve	IEC 60534	♦	♦	♦	♦						♦	♦	♦	
	Eccentric Rotating Control Valve	IEC 60534	♦	♦	♦	♦						♦	♦	♦	
	V-pattern Control Ball Valve	IEC 60534	♦	♦	♦			♦	♦	♦		♦	♦	♦	
	Plastic-lined Control Valve	IEC 60534	♦	♦	♦			♦	♦	♦		♦	♦	♦	
	Bellows Seal Control Valve	IEC 60534	♦	♦	♦			♦	♦	♦		♦	♦	♦	
	Multistage Pressure Reducing Control Valve	IEC 60534	♦	♦	♦	♦						♦	♦	♦	
	Angle Control Valve Resistance to Erosion	IEC 60534	♦	♦	♦			♦	♦	♦		♦	♦	♦	
Three Way Diverting (Mixing) Control Valve	IEC 60534	♦	♦	♦	♦						♦	♦	♦		
Special Valves	Ball Valves for Pig Launching and Receiving	JB/T 3595		♦	♦			♦	♦	♦		♦	♦	♦	
	Jacketed Valves	ASME B16.34	♦	♦	♦	♦						♦	♦	♦	
	Forged Steel Valve for Power Station	JB/T 3595	♦	♦								♦	♦	♦	
	Strainer	ASME B16.34	♦	♦	♦	♦						♦	♦	♦	
	Bellows Sealed Valve	ASME B16.34	♦	♦	♦	♦						♦	♦	♦	
	FGD Butterfly Valve														
	Three-way Ball Valve		♦	♦	♦			♦	♦			♦	♦	♦	
	Pneu / elec-hydraulic Ball Valve		♦					♦	♦			♦	♦	♦	
	Non-heat-treated Y-type Globe Valve	ASME B16.34	♦									♦	♦	♦	
Titanium Valve	ASME B16.34	♦	♦	♦			♦	♦							

Temperature				Material				End Connection					Special Feature				Application													
-196 ~ -50 °C	-50 ~ -29 °C	-29 ~ 200 °C	200 ~ 425 °C	> 425 °C	Carbon Steel & Low Alloy Steel	Stainless Steel	Nickel Alloy Steel	Titanium (alloy)	Socket Weld End	Screw End	Flange End	Butt-Welding End	Welder Type	Lug Type	High Temperature	Cryogenic	Bellow Seal	Anti-Fire Design	Anti-Static Design	Aseismic Design Irradiation-resistant	Oil and Gas	Refinery and Petrochemical	Chemical	Power	Marine	Coal chemical	LNG	Air separation		
♦	♦	♦	♦	♦	♦	♦	♦					♦			♦	♦	♦	♦	♦	♦										
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### Introduction of Foundries



Valve casting quality is of prime importance for product life, personnel and environmental safety, particularly in high temperature and high pressure service as valve serves as one of pressure-containing equipment in process-controlled pipeline. Thus, castings are always certified firstly by the customers requiring strictly before a valve manufacturer is pre-qualified and approved as a qualified supplier.



Compared with most of other competitors, we own three foundries: two of them work on produce large-sized sand castings by organic ester water glass, and two of them are for production of small-sized investment castings by lost-wax casting. Besides, each is equipped with all kinds of quality inspection facilities, such as spectrum instrument, non-destructive test machinery, and mechanical property test device. Against such backdrop, Neway can monitor the whole process of manufacture to ensure product quality, delivery and competitive price and enable Neway to remain a creditable supplier for every customer.



Imported Sand Mixing Machine



Automatic Line Form IMF, Italy



Forklift Type Heat Treatment Equipment

### Technical Innovation

With cutting-edge computer technology utilized, NEWAY Technical Center focuses on providing outstanding quality products and developing new lines. There is a highly educated and well-trained engineering team, supported by a comprehensive internal computer network which links the entire operations of design, manufacturing and administration.

NEWAY design philosophy is to develop a safe and cost-efficient valve. We introduced the latest Ansys, Fe-safe, CF-design and NX software for all our new product design research which include the advanced finite element analysis, fluid and fatigue analysis to virtually verify the new design prior to production, which has resulted in dramatically shortening development duration and assure a safe and cost-efficient final product.

NEWAY technical personnel are always ready to offer on line or on site technical training and support for all of its distributors, agents and end users.



High Temperature Test



Low Temperature Test



Low Fugitive Emission Test



Cv Value on-line Test



Fire Test



Quality Control

NEWAY developed comprehensive and advanced inspection and test facilities to control the quality from rough castings or forgings to final products, which enable us to perform radiographic test, liquid penetrant test, magnetic-particle test, spectrum analysis, Material Positive Identification (MPI), impact test, tensile test, hardness test, fire safe test, cryogenic test, vacuum test, low fugitive emission test, high pressure gas test, ultrasonic testing and hydrostatic test.



Impact Test



3D Coordinate Instrument



Tensile Test



Scanning Electron Microscope

Advanced Manufacturing

The latest computer technology has been extensively applied in NEWAY manufacturing, which includes a large number of numeric control machines (machining center, CNC horizontal and vertical lathe and CNC drilling machine) and ERP management system. Additionally, the data through all factories have been connected and shared. These facilitate resource integration, boost productivity, evidently enhancing machining quality and tightening process control.



5M Vertical Lathe



Neway Brand CNC Lathe



3D Automatic Shelf



Clean Room for Special Valve



Hot-wire Tig Automatic Cladding System

Conventional Gate, Globe and Check Valve

The series is one of Neway key products. We are able to provide complete set of size, pressure, material and inventory of parts for customers. The gate valve from 2 to 4 inch, Class 150 to 300, the wedge can be changed with each other, so it is convenient for on-site maintenance. They are all certified by API 591, with authorized certification of low emission from European TA Luft in 2"-24"(CLASS 150-900) GGC products with bolted bonnets.

Design Features:

- API 591 TAT certification
- TA-Luft certified for low emissions 2"-24"(CLASS150-900) GGC valves with bolted bonnets
- Flexible wedge (Gate valve)
- Welding seat ring
- Conical disc (Globe valve)
- Swing or plunger disc (Check)
- Optional full jacketed or half jacketed design
- Alternative external hammer damping disc (Check)
- Stem extension (Gate and Globe valve) available



14" Gate Valve (Class 150)

Products Range:

Type:	Gate, Globe, Check
Size:	2"-64" (DN50~DN1600)
Pressure Rating:	CLASS 150-2500 (PN16~PN420)
Body Materials:	Carbon Steel, Stainless Steel, Alloy Steel, Duplex Steel
Trim Material:	Per API 600
Operation:	Hand Wheel, Gear Box, Electric and Pneumatic Actuator
End Connection:	Flange, BW, RTJ

For more technical details, please refer to Neway catalogue: E-CSV and C-CSV



Gate Valve (64" and Class150)



Globe Valve (16" and Class 600)



### Pressure Seal Valve

Neway pressure-seal valve is designed based on API 600, working in high temperature and high pressure conditions. It serves a wide range of demanding applications, such as nuclear power plant. Characterized by simple structure and better rigidity, it is competitive in maintenance costs, providing reliable body-bonnet seal.



### Knife Gate Valve

Succeeding gate/globe/check valve, butterfly valve and ball valve, knife gate valve (GK in short) is a ultra-thin valve broadly used, especially in modern industry, such as tailings, papermaking, oil, food, shipbuilding and sewage treatment etc. The product has the advantages of compact structure, flexible operation, smooth wedge working, no vibration, no noise, easy maintenance, safety and reliability. The valve can be driven by pneumatic- electric and hydraulic device at discretion of customers for remote control.

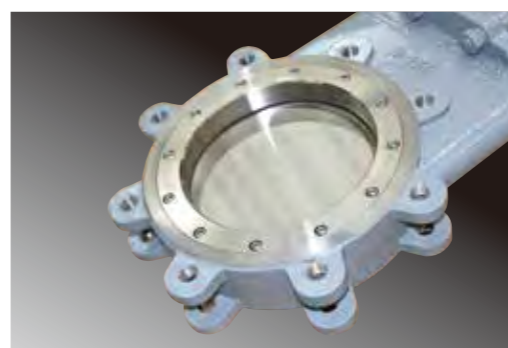
#### Product Range:

Type:	Gate, Globe, Check
Size:	2"-40" (DN50-1000)
Pressure Rating:	Class 600-2500 (PN100-PN420)
Body Material:	Carbon Steel, Chromium-molybdenum Alloy Steel
Trim Material:	Based on API 600
Operation:	Hand Wheel, Gear Box, Electric and Pneumatic Actuator
End Connection:	Butted-welding

For more technical details, please refer to Neway catalogue: E-CSV and C-CSV

#### Design Features:

- Hard alloy for seating surface
- Flexible wedge
- Guide design for full stroke
- Leakage prevention at the valve body in contact with bonnet
- Optional by-pass valve design



#### Design Features:

- Metal-seated GK valve is of integral seat or weld-overlay stainless steel/hard alloy, not only keeping sealing, but also extending service life
- High performance soft seat is constructed of RTFE sealing ring to ensure bi-directional seal and zero leakage
- Stop nut is designed to prevent the valve from excessive closing and damaging the wedge
- The wedge is engineered with great arc for packing protection and longer service life

### Full-bore Pipeline Valve

Neway full-bore pipeline valve is designed to serve long transportation of crude oil and natural gas. Satisfying API 6D requirements, it functions as double-block-and-bleed (DBB) valves, used for bi-directional shut-off. We deliver two series: single slab gate and expanding through conduit slab gate valve.



#### Design Features:

- Fire-safe design
- Optional single or double slab wedge
- DBB
- Cavity pressure self-relief
- Emergency sealant injection for leakage avoiding

#### Product Range:

Size:	2-48 inch (DN50-1200)
Pressure Rating:	Class 150-2500 (PN16-PN420)
Body Material:	Carbon Steel, Stainless Steel
Trim Material:	Soft Seat, Metal Seat
Operation:	Hand Wheel, Gear Box, Electric and Pneumatic Actuator
End Connection:	Flange, BW, RTJ

For more technical details, please refer to Neway catalogue: E-CSV and C-CSV

#### Product Range:

Size:	2"-24" (DN50-DN600)
Pressure Grade:	100PSI-150PSI (PN6-PN10)
Body Material:	Stainless Steel, Carbon Steel
Sealing Surface Material:	PTFE, Elastomeric, RTFE, Stainless Steel, Hard Alloy
Operation:	Hand Wheel, Gear Box, Electric and Pneumatic Actuator
End Connection:	Wafer, Lug





### Full Opening Check Valve

Neway full opening check valve is designed according to API 6D, applied in crude oil and natural gas pipeline to prevent service medium backflow. Full opening allows pigging ball to flow through, convenient to maintain the pipeline. For large-sized valve, buffer damper can be accessible to delay disc closing time for seating surface protection. Neway provides soft-seat and metal-seat types.

#### Design Features:

- Swing disc design
- Applicable for pigging ball
- Optional soft-seat and metal-seat structure
- Welded or threaded seat
- Alternative hammer damping device

#### Product Range:

Size:	2"~50" (DN50~DN1250)
Pressure Rating:	Class 150~2500 (PN16~PN420)
Body Material:	Carbon Steel, Stainless Steel
End Connection:	Flange, BW, RTJ

For more technical details, please refer to Neway catalogue: E-CSV and C-CSV

### Axial Flow Check Valve

Axial flow check valve is a high-performance check valve, which is designed per API 6D and ASME B16.34. It is widely utilized in piping system to prevent the medium backflow and protect the mechanical device. It not only features properties of general check valves, but also reduction of water hammer, noise and pressure drop, and rapid response. Depending on different working temperature and pressure difference, associated solution and professional technical services are available from us.



#### Product Range:

Size:	2"~60" (DN50~DN1500)
Pressure Rating:	Class 150~2500 (PN16~PN420)
Body Material:	Cast Carbon Steel, Stainless Steel, Alloy Steel
End Connection:	Flange, BW, RTJ

#### Design Features:

- Venturi bore, reducing pressure drop
- Spring protection for collision prevention
- Low noise and rather limited water hammer damage
- Soft-seat and secondary sealing
- Metal-seat and fire-safe design
- Lug and support leg available in all series
- No fugitive emission probability



### Dual-plate Check Valve

In modern fluid control industry, dual-plate check valve is increasingly popular. Compared with those of traditional flange-connection, it is simple in configuration, shorter in face-to-face dimension and convenient in installation and maintenance. The valve in butterfly pattern is designed in accordance with API 594, with single and dual slab available and various materials selectable.

#### Design Features:

- Dual-slab
- Compact and low-weight design
- Disc with dynamically loaded spring
- Optional soft-seat or metal-seat structure

#### Product Range:

Size:	2"~64" (DN50~DN1600)
Pressure Rating:	Class 150~2500 (PN16~PN420)
Body Material:	Carbon Steel, Stainless Steel, Alloy Steel
End Connection:	Flange, Wafer, Lug, BW

### Tilting Disc Check Valve

Tilting disc check valve features quick-closing, low opening pressure, no water hammer and can be installed in vertical pipe. A wide spectrum of application covers pipelines containing high temperature steam, oil refining, petrochemical, oil field production, hydrogenation, etc.



#### Design Features:

- Dual-disk structure serves as balance weight to achieve fast closing
- Torsional spring mounted on hinge pin for assisting closing
- Low opening pressure with no water hammer
- Acceptable to be installed in vertical pipe

#### Product Range:

Size:	2"~36" (DN50~DN900)
Pressure Rating:	Class 150~2500 (PN16~PN420)
Body Material:	Carbon Steel, Stainless Steel
End Connection:	Flange, Wafer, Lug, BW

## API 603 Stainless Steel Gate Valve

The thickness of the series is designed according to ASME B16.34. In comparison with general API 600 valve, it is light-weighted and price-competitive, widely applied in fine chemicals and food factories, in particular, the extended-bonnet construction can fulfill requirements of cryogenic service.



### Design Features:

- Precision casting of silica solution
- PTFE gasket and packing
- Integral seat
- Light weight design
- Flexible wedge

### Product Range:

Type:	Gate, Globe, Check
Size:	1/2"~24" (DN15~DN600)
Pressure Rating:	Class 150~300 (PN16~PN40)
Body Material:	Stainless Steel, Alloy Steel and Duplex Steel
End Connection:	Flange, SW

For more technical details, please refer to Neway catalogue: E-CSV and C-CSV



### Product Range:

Type:	Gate, Globe and Check Valves
Size:	1/2"~3" (DN15~DN80)
Pressure Rating:	Class 150~2500
Body Material:	Carbon Steel, Stainless Steel, Duplex Steel and Alloy Steel
End Connection:	Flanged, SW, Threaded, BW

For more technical details, please refer to Neway catalogue: E-FSV or C-CSV

## API 602 Forged Steel Valve

Neway forged valves, including gate, globe and check valves, comply with API 602. Neway provides forged gate and globe valves, such as those with standard bolted bonnet, special welded bonnet valves or bellows seal. Besides, weld-overlay hard alloy on the seating surface is the standard design.

### Design Features:

- Solid wedge design
- Bolted or welded bonnet
- Full bore and reduced bore
- Optional bellows sealed gate and globe valves
- Cone or needle disc globe valves
- Lifting or swing check valves



## Bi-directional Three-way Globe Valve

It is designed and manufactured based on BS 1873 and ASME B16.34, extensively employed in petroleum, chemical industry, etc., working to block and distribute the flow.

### Product Range:

Size:	2"~10" (DN50~DN250)
Pressure Rating:	Class 150~600 (PN16~PN100)
Body Material:	Carbon Steel, Stainless Steel, Alloy Steel
Operation:	Hand Wheel
End Connection:	Flange

For more technical details, please refer to Neway catalogue: E-CSV

### Design Features:

- API 591 TAT certification
- TA-Luft low emission certification
- Cone disc
- With long service life, stellite hard alloy used in sealing face is resistant to wear, abrasion, high temperature and corrosion
- Full opening and low fluid resistance
- Block flow, achieving zero leakage, and regulate fluids for distribution

## Forged Steel Pressure-seal Valve

Neway forged steel pressure-seal valves, broadly used in nuclear and petrochemical power plants, can serve harsh conditions such as high pressure and high temperature, designed according to ASTM B16.34. Compared with bolted-bonnet valves, it features succinct appearance, superior rigidity and low cost of maintenance, more reliable in body-bonnet sealing.

### Design Features:

- Hard alloy overlaid on seating surface
- Solid wedge
- Full-stroke guide
- No leakage for body-bonnet connection
- Optional bypass valves: Y-type globe and check valves



### Product Range:

Type:	Gate, Globe and Check Valves
Size:	1/2"~2" (DN15~DN50)
Pressure Rating:	CLASS 900~2500 (PN150~PN420)
Body Material:	Carbon Steel, Cr-Mo Alloy Steel and Austenitic Steel
Trim Material:	According to API 600
Operation:	Hand Wheel, Electric Actuator, Gearbox
End Connection:	Flanged End, BW, RTJ





### Forged Steel Bellows Seal Valve

Leakage around stuffing box of valve bonnet remains a long-standing trouble for environmental protection. It is also rather dangerous in case of highly hazardous service fluids leakage. Our bellows seal valve is of the construction that bellows is welded onto bonnet and stem. The up-and-down movement of stem drives expansion and contraction of the bellows, eliminating the leaking possibilities during sliding and rotation.

**Design Features:**

- Formed bellows
- Two secondary stem seals: bellows + packing
- Zero leakage at stem

**Product Range:**

Type:	Gate, Globe
Size:	1/2"~2" (DN15~DN50)
Pressure Rating:	CLASS 150~1500 (PN16~PN260)
Body Material:	Carbon Steel, Stainless Steel, Alloy Steel, Duplex Steel
Bellows Material:	Stainless Steel, Inconel Steel, Hastelloy Steel
End Connection:	Flange, SW, BW, RTJ

### Forged Steel Valve for Cryogenic Applications

The valves working below -110°C are normally defined as cryogenic valves, which are extensively found in LNG, LPG and other low-temperature industries. Neway can manufacture gate, globe and check valves serving the temperature up to -196°C.



**Product Range:**

Type:	Gate, Globe And Check Valves
Size:	1/2"~2" (DN15~DN50)
Pressure Rating:	CLASS 150~1500 (PN16~PN260)
Body Material:	Austenitic Steel
End Connection:	Flanged, SW, BW and RTJ

**Design Features:**

- Extended bonnet and stem for safety
- Relief hole to the upstream side for avoiding cavity pressure rise
- Keep sealing performance at low temperature by using low-leakage packing

### Forged Steel Valve for High-temperature Service

For the valves serving high temperature application, material mechanical properties are substantially weakened, thus serious safety challenge ensues. Meanwhile, it is inconvenient to operate valves in high temperature. By far, the troubles are settled by Neway through finite element analysis and validation of actual use.

**Design Features:**

- Finite element analysis for ensuring safety
- Heat dissipation and handwheel heightening to make sure temperature at handwheel is suitable for manual operation
- With long service life, Satellite hard alloy used in sealing face is resistant to wear, abrasion, high temperature and corrosion



**Product Range:**

Type:	Gate and Globe Valves
Size:	1/2"~2" (DN15~50)
Pressure Rating:	CLASS 150~1500 (PN16~PN260)
Body Material:	High Temperature Alloy F11/F22, Austenitic Dteel F304H/F316H, etc.
End Connection:	Flanged, SW, BW and RTJ

### Forged Steel Valve for Thermal Power use

Neway forged steel thermal power valve is designed and manufactured in conformity with JB/3595, DL/T531, E101 (Chugoku Electric Power) and ASME B16.34 (American standard), which is applicable for high temperature and high pressure conditions, with extensive application in pipes for petroleum, chemical, thermal power plants to isolate and connect the medium.



**Design Features:**

- Forged steel shell with high strength
- Simple and reliable pressure seal structure with few leaking points
- With long service life, stellite hard alloy used in sealing face is resistant to wear, abrasion, high temperature and corrosion
- Compact structure with low height and maintenance convenience
- Stem retention, safe and reliable

**Product Range:**

Size:	DN10~DN32
Pressure Rating:	PN100, PN200, PN250, PN320, P54-100V, P54-140V, P54-170V, P54-100V, P54-140V, P54-170V
Body Material:	Carbon Steel and Cr-mo Alloy Steel
Operation:	Hand Wheel and Electric Actuator
End Connection:	BW

## Floating Ball Valve



Neway floating ball valve is designed according to ISO 17292, API 608 and API 6D, which serves at working temperature: -196~425 °C. API 607 or API 6FA fire-safe certificates have been acquired for all the valves subject to fire safe test witnessed by LR.

### Design Feature:

- Full bore or reduced bore
- Fire safe certification
- Anti-blowout stem
- Anti-static device
- Bi-directional soft seal
- Bi-directional seal is alternative for meta-seated valves
- Cavity pressure self-relief
- ISO 5211 Top flange
- On-off position indicator
- Locking device
- Optional fugitive emission design

### Product Range:

Body Material:	Carbon Steel, Stainless Steel, Nickel-based Alloy
Trim Material:	Carbon Steel, Stainless Steel, Nickel-based Alloy
Operation:	Handle, Gearbox, Pneumatic / Electric Actuator.
End Connection:	Flange, Thread, Socket or Butt-welded.

For detailed technical information, see Neway floating ball valve catalog: E-FBV

Valve Type	Code	Body Material	Size	Pressure Rating	Advantage
One piece	BA	Cast Steel	1/2"~10" (DN15~DN250)	Class 150~300 (PN16~PN40)	Reduced bore as standard design of compact dimension and low cost
Two-piece	B	Cast Steel	1/2"~10" (DN15~DN250)	Class 150~300 (PN16~PN40)	Standard design is full bore which is economical
	BB	Forged Steel	1/2"~6" (DN15~DN150)	Class 150~2500 (PN16~PN420)	Available for ≥Class 600 valves Optional for high-pressure service Design for cryogenic applications
Three-piece	BC	Forged Steel	1/2"~2" (DN15~DN50)	Class 150~2500 (PN16~PN420)	Socket welded or threaded
Top entry	BEC	Cast Steel	1/2"~4" (DN15~DN100)	Class 150~1500 (PN16~PN250)	On-line service available
Metal-seated	BM	Cast Steel	1/2"~4" (DN15~DN100)	Class 150~300 (PN16~PN40)	Excellent resistance against abrasion and high temperature & low cost
	BBM	Forged Steel	1/2"~8" (DN15~DN200)	Class 150~2500 (PN16~PN420)	available for ≥Class 600 valves and higher pressure service
DBB Ball Valve	BBJ	Forged Steel	1/2"~10" (DN15~DN250)	Class 150~2500 (PN16~PN420)	Compact dimension and DBB functionality

## Trunnion Mounted Ball Valve



Neway trunnion mounted ball valve is designed in conformity with ISO 17292, API 608 and API 6D, which serves at working temperature: -196~425 °C. It is applicable for large-sized and high-pressure piping and fluid flow control. API 607 or API 6FA fire-safe certificates have been obtained for all the valves subject to fire safe test witnessed by LR.

### Design Feature:

- Full bore or reduced bore
- Fire safe certification
- Anti-blowout stem
- Anti-static device
- DPE and cavity relief
- Optional injection system for stem and seat
- Cavity pressure self-relief
- Standard ISO 5211 top flange design
- Valve on-off position indicator
- Lock device
- Optional fugitive emission design
- Optional double piston seat
- Optional stem extension design for underground application

### Product Range:

Body Material:	Carbon Steel, Stainless Steel, Nickel-based Alloy
Trim Material:	Carbon Steel, Stainless Steel, Nickel-based Alloy
Operation:	Handle, Gearbox, Pneumatic, Electric, Pneumatic-hydraulic Actuator, Electric-hydraulic Actuator.
End Connection:	Flange, Butt-welded, HUB

See detailed technical information for Neway Trunnion mounted ball valve catalog: E-TMBV

Valve Type	Code	Body Material	Size	Pressure Rating	Advantage
Side Entry	BT	Cast steel	2"~24"(DN50~DN600)	Class 150~1500 (PN16~PN250)	Economic
Side Entry	BS	Forged steel	2"~60"(DN50~DN1500)	Class 150~2500 (PN16~PN420)	Wide application range and fast delivery
Top Entry	BE	Cast steel	2"~36"(DN50~DN900)	Class 150~1500 (PN16~PN250)	On-line maintenance available
	BSK	Forged steel	2"~36"(DN50~DN900)	Class 150~2500 (PN16~PN420)	Suit for ambient temperature and abrasion service
Metal-seated	BSM	Forged steel	2"~30"(DN50~DN750)	Class 150~1500 (PN16~PN250)	Impervious to abrasion and high temperature
	BW	Forged steel	2"~60"(DN50~DN1500)	Class 150~1500 (PN16~PN250)	No fugitive emission and freedom from maintenance
Fully Welded	BW	Forged steel	2"~60"(DN50~DN1500)	Class 150~1500 (PN16~PN250)	No fugitive emission and freedom from maintenance
DBB Ball Valve	BSJ	Forged steel	2"~24"(DN50~DN600)	Class 150~2500 (PN16~PN420)	Compact dimension and DBB functionality



Ball valve for H<sub>2</sub>S service

## Ball Valves for H<sub>2</sub>S Service

Neway's ball valves for H<sub>2</sub>S application are specially directed in design, anti-corrosion material selection and quality control given high-level toxicity and corrosion inherent in hydrogen sulfide.

### Main applicable design standards:

- API 6D
- ISO17292
- NACE MR0175/ISO15156

## Valve Seat Design Selection

The seat design selection varies with service conditions. Soft seated by thermoplastic insert or metal seated with hard faced ball and seat sealing surfaces (tungsten or chrome carbides up to 400 microns thickness) are available depending upon operating conditions: abrasive service or high temperature.



Top Entry Trunnion Mounted Ball Valve



Side Entry Forged Steel Trunnion Mounted Ball Valve

## Valve Fugitive Emission Control

Taking into account H<sub>2</sub>S high toxicity, due care is taken to valve fugitive emission control. Neway Valve R&D and Engineering depts have finalized and successfully prototype tested with reliable sealing designs for each external leaking path. The remarkable sealing performance requires fugitive emission test per rate B or even A (i.e. Lethal / Hazardous Service) to ISO 15848.

## Quality Control

Given H<sub>2</sub>S service criticality, the valves are specially controlled by a rather demanding quality program and customer requirements, including content control over chemical elements, e.g. carbon, sulfur and phosphorus, heat treatment, welding procedure and HIC/SSC test, etc.



Low Fugitive Emission Test

## Ball Valves for H<sub>2</sub>S Service



Puguang project in Sichuan, China

## Working Condition:

Typically applied in high-concentration H<sub>2</sub>S gas field and few particles left in it, e.g. sand, before cleaning process. Such natural gas is found in China's Sichuan basin and Xinjiang, Russia, Canada and Mideast etc.

## Valve Seal Material and Design

In sour service, a range of seal materials and design configuration are available to meet project and service requirements:

- Various anti-explosive decompression types of fluoro-elastomeric (FKM) O-ring seal
- Multiple anti-explosive decompression types of hydrogenated nitrile butadiene rubber (HNBR) suitable in low temperature conditions
- Chemical resistant perfluoroelastomer (FFKM) O-ring seal
- Low emission graphite packing
- PTFE Jacketed Spring Energized Lip Seals

## Anti-corrosion Material Selection

Based on NACE MR0175 / ISO 15156 standard, carbon steel can be used in high-concentration H<sub>2</sub>S leading to electrochemical corrosion, which is utterly susceptible to rust and loss of material in sealing areas and grooves and, in the worst case to sulfide stress cracking. Thus, in order to protect the sealing surface from corrosion, it must be treated with anti-corrosive treatment to avert the risk of corrosion by using nickel-based alloy solid material parts or welding overlay on critical areas.

## Product Range

Size	1/2"~60"
Pressure Rating	CLASS 150~1500
Material	Carbon Steel, Stainless Steel, Nickel-based Alloy
Type	Floating / Trunnion Mounted, Soft / Metal Seat, Side / Top Entry.



Two-piece Casting Steel Floating Ball Valve.



Two-piece Forged Steel Floating Ball Valve.



Hot-wire TIG Automatic cladding system



## Resilient Seated Concentric Butterfly Valve

Resilient seated concentric butterfly valve is a device that allows, obstructs and regulates a fluid to flow through, widely applied to various industrial fluid controls. Compared to conventional globe and ball valve, the butterfly valve has advantages of light weight and low cost. With the rapid development of artificial rubber, the valve serves not only traditional sector of water treatment, but also ship-building, marine, food and modern chemical industry, etc. Neway resilient seated concentric butterfly valve is designed with the concentricity in conformity with API609.

### Design Features:

- Concentric design for the disc, shaft and body
- Low torque
- Optional bi-directional installation
- Self-cleaning seat
- Blow-out proof shaft
- ISO 5211 top flange
- Two-piece shaft
- Optional extended shaft

### Product Range:

Size:	2"~72" (DN50~DN1800)
Pressure Rating:	232 PSI (PN6~PN16)
Body Material:	Gray Cast Iron, Ductile Cast Iron, Cast Steel, Stainless Steel
Sealing Material:	EPDM, NBR, PTFE, VITON
End Connection:	Wafer, Lug, Double Flange
Operation:	Lever, Gear, Electric, Pneumatic

For more technical details, please refer to Neway catalogue E-BFV or C-BFV

## Double Offset Butterfly Valve

To satisfy the continuous development of modern industry, a variety of butterfly valves with high performances are rolled out in succession in order to adapt increasingly variable temperature and pressure. Neway double offset butterfly valve is of double offset construction which minimizes the contact between seat and disc in opening-closing stroke, accordingly considerably decreases the process torque and prolongs the service life. Applications: petrochemical, LNG, air separation, steel plant, ship-building and marine.



### Product Range:

Size:	2"~120" (DN50~DN3000)
Pressure Rating:	Class150~600 (PN16~PN100)
Body Material:	Carbon Steel, Stainless Steel, Nickel-based Alloy, Duplex Steel
Trim Material:	Stainless Steel, Nickel-based Alloy, Albronze, Duplex Steel
Soft-seat Material:	PTFE, RPTFE, EPDM, NBR, VITON
End Connection:	Wafer, Lug, Double Flange

For more technical details, please refer to Neway catalogue E-MV or C-CSV

### Design Features:

- Offset design for disc and shaft
- Bi-directional seal
- Blow-out proof shaft
- Optimized seat ring to realize bi-directional end service (only limited in lug and double flange connections)
- Optional fire safe design proved by API607 fire safe certification

## Metal-seated Triple Offset Butterfly Valve

Metal-seated butterfly valve breaks through the limitation on temperature and pressure of traditional resilient seated ones. Neway valve is supplied with triple offset design per API609 and features optional bi-directional installation, light weight and low cost and torque. The working temperature ranges from -196 C to 816 C, with different body materials available. In multiple service conditions, the valve applies not only for flow interruption but also fluid control, taking place of conventional gate, globe and ball valve.



### Design Features:

- Triple offset and bi-directional seal design
- Zero leakage
- Frictionless close
- Blow-out proof shaft
- ISO 5211 top flange
- Optional extended stem
- Optional hard-alloy seat

### Product Range:

Size:	2"~120" (DN50~DN3000)
Pressure Rating:	Class150~2500 (PN16~PN420)
Body Material:	Carbon Steel, Stainless Steel, Alloy Steel, Duplex Steel
Disc Sealing Material:	Multilayer Metal + Graphite, Metal + PTFE, Metal Seal Ring
End Connection:	Wafer, Lug, Double Flange, Butt-welding
Operation:	Gear, Electric, Pneumatic

For more technical details, please refer to Neway catalogue E-BFV or C-BFV



## Valves for Cryogenic Service



Valves for cryogenic service generally refer to those at working temperature below -101°C, broadly used in LNG, LPG and other low-temperature applications. With novel design philosophy, NEWAY strictly controls production process to supply the cryogenic valves having superior sealing capability, low operating torque, consistent endurance in low-temperature condition and prolonged service life. TS, fire safe and fugitive emission certificates have been acquired. At present, NEWAY is capable of providing Gate, Globe, Check, Ball and Butterfly valves for cryogenic service up to -196°C. Our in-house computer-controlled test facility can verify the valves of max. 56". NEWAY valves have been functioning in cryogenic projects at home and abroad, e.g. LNG receiving terminals and liquefaction stations.

### Design Features:

- Extension of stuffing box
- Reliable sealing structure
- Fire safe, anti-static design
- Material selection for cryogenic service
- Structural design applicable for different services



### Product Range:

Type:	Gate, Globe, Check, Ball, Butterfly Valves
Size:	1/2"~42" (DN15~DN1050)
Pressure Rating:	ASME CLASS 150~2500 (PN16~PN420)
Body Material:	CF3M / CF3 / CF8M / CF8 / Dual Certified (F316L / F304L / F316 / F304)
End Connection:	BW. RF. SW. NPT.
Temperature Range:	-196°C~400°C
Operation:	Manual / Pneumatic / Hydraulic
Application:	Cryogenic Industry, e.g. LNG / LPG / LEG / Air Separation.



## Cryogenic Gate Valve

### Design Features:

- Flexible wedge
- Round flange in cavity is designed to improve the body stress
- PCTFE shaft sleeve at the middle of stem to keep stem stable
- Extend backseat to secure cavity
- Drill a hole in upstream end of wedge to avoid cavity pressure rise
- Extend stuffing box to protect packing effectively
- Drip plate prevents condensate from flowing into insulation

### Product Range:

Size:	1/2"~42" (DN15~DN1050)
Pressure Rating:	ASME CLASS 150~2500 (PN20~PN420)
Body Material:	CF3M / CF3 / CF8M / CF8 / Dual Certified (F316L / F304L / F316 / F304)
End Connection:	BW. RF. SW.
Temperature Range:	-196°C~400°C
Operation:	Manual / Pneumatic / Hydraulic
Structure:	Flexible Wedge

## Cryogenic Globe Valve

### Design Features:

- PCTFE shaft sleeve at the middle of stem to keep stem stable
- Extend backseat to secure cavity
- To improve the service life, the seal surface is made of hard alloy by weld overlay
- Extend stuffing box to protect packing effectively
- Drip plate prevents condensate from flowing into insulation

### Product Range:

Size:	1/2"~24" (DN15~DN600)
Pressure Rating:	ASME CLASS 150~2500 (PN20~PN420)
Body Material:	CF3M / CF3 / CF8M / CF8 / Dual Certified (F316L / F304L / F316 / F304)
End Connection:	BW. RF. SW.
Temperature Range:	-196°C~400°C
Operation:	Manual / Pneumatic / Hydraulic
Structure:	Rising Stem



## Cryogenic Check Valve (Swing Check Valve)



### Design Features:

- Ball-like pin could achieve self-alignment, which makes it easier to seal at low temperature
- Ensure the optimal flow design & the maximum flow capacity by fluid analysis software calculation
- Metal-seat structure, with sealing surface subject to hard-alloy weld overlay, which performs well in scouring & particle resistance and improves service life
- Dedicated accurate and match grinding to guarantee the sealing performance in low temperature

### Product Range:

Size:	1/2"~42" (DN15~DN1050)
Pressure Rating:	ASME CLASS 150~2500 (PN20~PN420)
Body Material:	CF3M / CF3 / CF8M / CF8 / Dual Certified (F316L / F304L / F316 / F304)
End Connection:	BW. RF. SW.
Temperature Range:	-196°C~400°C
Structure:	Swing

## Cryogenic Check Valve (Axial Flow Check Valve)

### Design Features:

- Venturi streamline design, low flow resistance with no impact
- Lipseal + Graphite between body and seat
- One-piece body, without external leaking points
- By way of fluid analysis software calculation, ensure minimum flow resistance and best dynamic characteristics
- Exclusive machining & grinding process for keeping the sealing performance



### Product Range:

Size:	2"~42" (DN50~DN1050)
Pressure Rating:	ASME CLASS 150~1500 (PN20~PN260)
Body Material:	CF3M / CF3 / CF8M / CF8 / Dual Certified (F316L / F304L / F316 / F304)
End Connection:	BW. RF.
Temperature Range:	-196°C~150°C
Structure:	Axial Flow Check Valve

## Lift Check Valve for Cryogenic Applications



### Design Features:

- Integral closed die forging is used in body, without welding flange
- Disc guided & spring return structure. The valve is closed with no jamming and can be installed vertically or horizontally
- To prolong the service life, the seal surface is made of cobalt-based alloy by weld overlay

### Product Range:

Size:	1/2"~2" (DN15~DN50)
Pressure Rating:	ASME CLASS 150~1500 (PN20~PN260)
Body Material:	F316L / F304L / F316 / F304 / Dual Certified
End Connection:	BW. RF. SW.
Temperature Range:	-196°C~400°C
Structure:	Lift Check Valve

## Cryogenic Check Valve (Butterfly Check Valve)

### Design Features:

- Short length, light weight and small installation space
- Low flow resistance with desirable flow capacity, with no water hammer
- One-piece body, without external leaking points
- Ensure superior sealing capability via special process



### Product Range:

Size:	2"~24" (DN50~DN600)
Pressure Rating:	ASME CLASS 150~900 (PN20~PN150)
Body Material:	CF3M / CF3 / CF8M / CF8 / Dual Certified
End Connection:	Wafer. Lug. Double Flange.
Temperature Range:	-196°C~400°C
Structure:	Butterfly (Dual Plate Wafer Check Valve)

### Cryogenic Floating Ball Valve



**Design Features:**

- Spring-preloaded seat structure is designed to effectively avoid conflict between sealing and torque
- To avoid risks, drill a hole on yoke or stem to keep connection between stem extension and cavity
- To make sure cavity pressure relief, a hole is drilled on the ball's upstream side
- Fire-safe & anti-static design
- Imported PCTFE, which has excellent stability in low temperature, or other high-strength seat, are chosen as seat material
- High-strength grade 2 stud is applied as cavity pressure-bearing bolting, which could control gasket preload
- To fulfill low leaking requirements, the special packing is used in stem sealing
- On-line maintenance could be achieved in top-entry series

**Product Range:**

Size:	3/8"~8" (DN10~DN200)
Pressure Rating:	ASME CLASS 150~1500 (PN20~PN260)
Body Material:	CF3M / CF3 / CF8M / CF8 / Dual Certified (F316L / F304L / F316 / F304)
End Connection:	BW. RF. SW. NPT.
Temperature Range:	-196°C~150°C
Operation:	Manual / Pneumatic / Hydraulic
Structure:	Top Entry or Side Entry

### Cryogenic Trunnion Mounted Ball Valve

**Design Features:**

- Fire safe & anti-static device
- To ensure the sealing performance ,the Imported lipseal is used for primary sealing
- To ensure the seal capability, the design of unique patent was adopted
- To fulfill low leakage requirements, double-sealing configuration is applied for high-pressure-class products
- Multiple seat structures are available to satisfy different service conditions
- A plenty of pressure relief structures are available for service conditions to ensure cavity relief
- On-line maintenance could be achieved for top-entry construction

**Product Range:**

Size:	2"~24" (DN50~DN600)
Pressure Rating:	ASME CLASS 150~900 (PN20~PN150)
Body Material:	CF3M / CF3 / CF8M / CF8 / Dual Certified
End Connection:	BW. RF.
Temperature Range:	-196°C~150°C
Operation:	Manual / Pneumatic / Hydraulic
Structure:	Top Entry



top entry

**Product Range:**

Size:	2"~40" (DN50~DN1000)
Pressure Rating:	ASME CLASS 150~900 (PN20~PN150)
Body Material:	F316L / F304L / F316 / F304 / Dual Certified
End Connection:	BW. RF.
Temperature Range:	-196°C~150°C
Operation:	Manual / Pneumatic / Hydraulic
Structure:	Side Entry



side entry

### Cryogenic Triple Offset Butterfly Valve

**Design Features:**

- Triple offset structure design, low torque, and long service life
- Stuffing box extension adequately protects packing
- Drip plate prevents condensate from flowing into insulation
- To develop abrasive resistance, weld-overlay hard alloy is used in body seal surface
- Multi-layer metal sealing ring or metal seal ring is accessible for disc selection
- Blow-out proof stem to secure proper use
- The specific grinding machine was used to grind sealing surface, which could improve product sealing performance at low temperature
- Special design could be achieved upon customer requests, such as top entry structure, lateral holes used for maintenance

**Product Range:**

Size:	3"~56" (DN80~DN1400)
Pressure Rating:	ASME CLASS 150~600 (PN20~PN100)
Body Material:	CF3M / CF3 / CF8M / CF8 / Dual Certified
End Connection:	Lug. Wafer. BW. RF.
Temperature Range:	-196°C~400°C
Operation:	Manual / Manual Device / Pneumatic Device / Hydraulic Device
Structure:	Triple Offset , Side Entry, Top Entry



## Subsea Valve

Subsea valves are applied in subsea manifolds and pipelines of oil and gas engineering, serving in deep and ultra-deep water. The advanced design methods and manufacturing procedure enable Neway to provide the valve featuring high reliability, superior sealing performance and prolonged lifespan.



### Products Range: Subsea Ball Valve

Design Standard:	API 6DSS, API 6A, API 17D, or upon request
Size:	2"~48" (DN50~DN1200)
Class Rating:	Class 150~Class 2500
Design Depth:	Up to 3000m
Valve Type:	Side Entry, Top Entry
Actuator:	Gearbox, Hydraulic, etc. (ROV interface are all available).
Application:	Subsea Manifold (PLEM) Subsea Pipeline End Termination (PLET) Subsea Transport Pipeline Other Subsea Produce System

### Products Range: Subsea Gate Valve

Design Standard:	API 17D, API 6A, Upon Request
Size:	2"~9" (DN50~DN225)
Class Rating:	Up to 15000 psi
Design Depth:	up to 3000m
Valve Type:	Slab gate
Actuator:	Linear Driving Device, Hydraulic, etc. (ROV Interface Are all Available)
Application:	Subsea Manifold (PLEM) Subsea Pipeline End Termination (PLET) Subsea Transport Pipeline Other Subsea Produce System



## Nuclear Power Valve

Nuclear Power as one of the cleanest energy has been the focus of the development worldwide.

Neway acquired the Civil Nuclear Safety Equipment Design/Manufacturing Licenses from NNSA and "N" & "NPT" certificate from ASME. We established a complete nuclear quality assurance system per Nuclear Power Plant Quality Assurance and Safety Regulations. By far, we have supplied nuclear valves to many nuclear projects and experimental reactors. With an excellent R&D team and advanced experimental production facilities, Neway will complete the localization of nuclear equipment step by step.



### Products Range: Nuclear Globe Valve

Safety Class:	Class 2, 3 and Non-classified
Seismic Category:	I
Normal Diameter:	DN≤100mm
Service Temperature:	T≤350°C
Design Pressure:	≤17.5MPa
End Connection:	Butt-welded, Flanged
Operation:	Hand Wheel, Pneumatic & Electrical Operator
Body Material:	Stainless Steel, Carbon Steel, Alloy Steel
Structure:	Bellows, Packing

※ ASME "N" Construction of Class 1,2 & 3 valves  
 ※ ASME "NPT" Class 1,2 & 3 fabrication

### Products Range: Nuclear Gate Valve

Safety Class:	Class 2, 3 and Non-classified
Seismic Category:	I
Normal Diameter:	DN≤400mm
Service Temperature:	T≤350°C
Design Pressure:	≤17.5MPa
End Connection:	Butt-welded, Flanged
Operation:	Hand Wheel, Pneumatic & Electrical Operator
Body Material:	Stainless Steel, Carbon Steel, Alloy Steel
Structure:	Wedge, Parallel Slide (V type & W type)

※ ASME "N" Construction of Class 1,2 & 3 valves  
 ※ ASME "NPT" Class 1,2 & 3 fabrication





## Products Range:

Nuclear Check Valve

Safety Class:	Class 2, 3 and Non-classified
Seismic Category:	I
Normal Diameter:	DN≤400mm
Service Temperature:	T≤350°C
Design Pressure:	≤17.5MPa
End Connection:	Butt-welded, Flanged
Operation:	Hand Wheel, Pneumatic & Electrical Operator
Body Material:	Stainless Steel, Carbon Steel, Alloy Steel
Structure:	Swing, Lift, Axial Flow, Dual-plate wafer, Tilting



※ ASME "N" Construction of Class 1,2 & 3 valves  
 ※ ASME "NPT" Class 1,2 & 3 fabrication

## Products Range:

Nuclear Ball Valve

Safety Class:	Class 2, 3 and Non-classified
Seismic Category:	I
Normal Diameter:	DN≤150mm
Service Temperature:	T≤200°C
Design Pressure:	≤6.4MPa
Seal:	Soft, Metal-to-metal
End Connection:	Butt-welded, Flanged
Operation:	Hand Wheel, Pneumatic & Electrical Operator
Body Material:	Stainless Steel, Carbon Steel, Alloy Steel
Structure:	Top-entry, Two-piece, Three-piece, Wedge



※ ASME "N" Construction of Class 1,2 & 3 valves  
 ※ ASME "NPT" Class 1,2 & 3 fabrication

## Products Range:

Nuclear Butterfly Valve

Safety Class:	Class 3 and Non-classified
Seismic Category:	I
Normal Diameter:	DN≤400mm
Service Temperature:	T≤200°C
Design Pressure:	≤6.4MPa
Operation:	Hand Wheel, Pneumatic & Electrical Operator
End Connection:	Wafer, Lug, Flange
Body Material:	Stainless Steel, Carbon Steel, Alloy Steel
Structure:	Concentric, Triple Offset, Double Offset



※ ASME "N" Construction of Class 1,2 & 3 valves  
 ※ ASME "NPT" Class 1,2 & 3 fabrication

## CSS Series Single-seated Control Valve

CSS series single-seated control valve is used to exactly control medium pressure, temperature, liquid level, etc. The product adopts fast disassembly modular design, simple construction, convenient for assembly and maintenance.



## CSC Series Cage-guided Control Valve

CSC series cage-guided control valve adopt balanced plug structure, frequently used in high differential pressure and high flow capacity condition. The specifically designed balanced sealing ring could serve high-temperature and cryogenic condition. The product is used to exactly control medium pressure, temperature, level. etc. The fast disassembly modular design provides simple construction, convenient for assembly and servicing.



## CBE Series Eccentric Rotating Control Valve

CBE series eccentric rotating control valve (camflex control valve), adopts eccentric disk for angular travel control. The product structure is of novelty, sealing reliably and quick movement. The product is frequently used in high differential pressure and high flow capacity. The product through the specific structure design and hardening treatment could exactly control the solid particle, crystalline and scour, cavitation and flashing condition.





### CAB Series Resistance To Erosion Angle-type Control Valve

Angle-type control valve of CAB series resistant to erosion is angle linear-stroke control valve with the entrance and exit forming 90°. The product through hardening treatment could be used in the condition containing impurity, strong scour, cavitation, flashing etc, especially black and grey water in coal chemical industry.

### CTD (M) Series Three Way Diverting (Mixing) Control Valve

CTD (M) series Three Way Diverting (Mixing) Control Valve could replace two control valves, applied for diverting or mixing. The product is equipped with thin-wall cylinder windows type plug, featuring a simple structure, light weight, control stability and compact space, with extensive applications In heat exchanger temperature control, automatic process control regarding oil, chemical, power station, metallurgy, etc.



Type of Valves	Size	Class Rating
CSS Series single-seated control valve	3/4" ~ 12"	Class 150 ~ 2500
CSC Series cage-guided control valve	1-1/2" ~ 20"	Class 150 ~ 2500
CBS(C) Series bellows seal control valve	3/4" ~ 12"	Class 150 ~ 1500
CTD Series Three way diverting(mixing) control valve	1-1/2" ~ 12"	Class 150 ~ 600
CAB Series angle control valve resistance to erosion	2" ~ 12"	Class 150 ~ 1500
CBE Series eccentric rotating control valve	1" ~ 16"	Class 150 ~ 600
CBV Series V-pattern control ball valve	1" ~ 20"	Class 150 ~ 600
CFS Series plastic-lined control valve	3/4" ~ 8"	Class 150
CMM(N) Series multistage pressure reducing control valve	1/2" ~ 16"	Class 150 ~ 2500

### Jacketed Valve

The jacketed valve, as one of Neway special products, serves a wide breath of conditions where holding temperature is needed for fluids through the valves. We can deliver tailor-made design and supportive service. At present, we are highly experienced in design and manufacture for jackets of gate, globe, check and ball valves.

#### Design Features:

- Welded jacket
- Circular head fitted to reduce possible risks of damages
- Customer-defined fittings
- Expanded flanged end
- Applicable for multiple valve types
- Full or partial jacket available



#### Product Range:

Type:	Gate, Globe
Size:	1/2"~2" (DN15~50) 2"~24" (DN50~DN600)
Pressure Rating:	CLASS 150~300 (PN16~PN40) CLASS 150~2500 (PN16~PN420)
Body Material:	Cast Carbon Steel, Carbon Steel, Stainless Steel, Alloy Steel
Jacket Material:	Carbon Steel, Stainless Steel
End Connection:	Flange, BW, RTJ

### Bellows Seal Valve

Leakage around stuffing box of valve bonnet remain a long-standing trouble for environmental protection. It is also rather dangerous in case of highly hazardous service fluids leakage. Our bellows seal valve is of the construction that bellows is welded onto bonnet and stem. The up-and-down movement of stem drives expansion and contraction of the bellows, eliminating the leaking possibilities during sliding and rotation.

#### Design Features:

- Formed bellows
- Two secondary stem seals: bellows + packing
- Zero leakage at stem



#### Product Range:

Type:	Gate, Globe
Size:	1/2"~30" (DN15~DN750)
Pressure Rating:	CLASS 150~1500 (PN16~PN260)
Body Material:	Carbon Steel, Stainless Steel, Alloy Steel, Duplex Steel
Bellows Material:	Stainless Steel, Inconel Steel, Hastelloy Steel

## Ball Valves for Pig Launching and Receiving

The Neway ball valve for pig launching and receiving is a novel modification with functions added based on T-type three-way trunnion mounted ball valves which are fully-developed. It is compact in dimension and small in size, mounted with fire safe and anti-static devices found in general ball valves. With application covering oil and natural gas pipelines in North America, it is used to block or connect service fluids and clean the pipeline, enhancing transport efficiency.



### Design Features:

- Stem seals configuration with two O-rings
- Double-assurance soft-seat and one metal-seat design between quick-opening gland and body
- Fixed ball design
- Fire-safe structure
- Emergency sealant injection
- Double-block-and-bleed (DBB)
- Anti-static design

### Product Range:

Size:	2"~8"
Body Material:	Carbon Steel, Stainless Steel, Nickel-based Alloy
Trim Material:	Carbon Steel, Stainless Steel, Nickel-based Alloy
Operation:	Lever, Gearbox, Pneumatic, Electric, Pneumatic-hydraulic Device, Electric-hydraulic Device

## Strainer

The strainer is a device using a perforated or wire metal mesh to remove solid from liquid. It is a cost-effective solution for protecting such downstream equipment as condenser, heat exchanger, pump, compressor, instrumentation, sprayer, turbine and steam trap from damage of rust, dirt and sediment or other solid debris.



Y-strainer

### Design Features:

- Y or T shape
- Bolted end cover
- Relief plug
- Stainless steel mesh
- Flange, BW, threaded SW

### Product Range:

Size:	1/2"~20" (DN15~DN500)
Pressure Rating:	CLASS 150~600 (PN16~PN100)
Body Material:	Carbon Steel and Stainless Steel
Mesh Material:	304, 316



T-strainer

## Valve for Marine Service

Light weight and compact dimension is the basic principal Neway marine valve design follows, which is intended to cut installation cost and save space. All the series produced by Neway have been subject to certification of American Bureau of Shipping (ABS).



### Product Range:

Type:	Non-rising Gate Valve, Angle Globe Valve, Quick-opening Globe Valve
Size:	1/2"~12" (DN15~DN300)
Pressure Rating:	CLASS 150, 300 (PN16~PN40)
Body Material:	Carbon Steel, Bronze, Stainless Steel
Trim Material:	13Cr, Bronze, Stainless Steel

For more technical details, please refer to Neway catalogue: E-MV

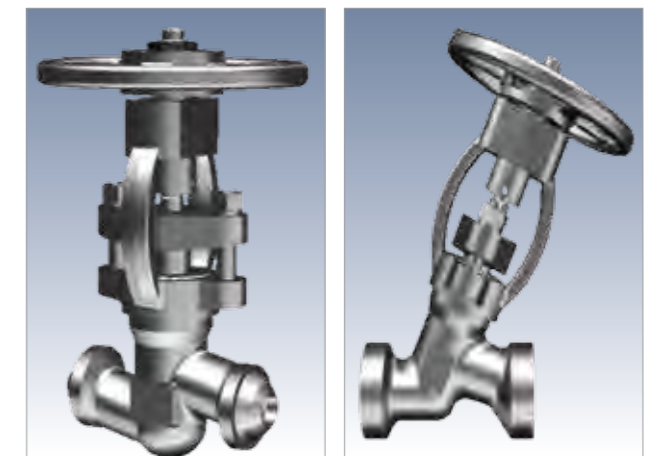
### Design Features:

- Non-rising stem
- Bronze trims
- Angle globe valve
- Disc of globe check valve
- Manually or pneumatically operated & quick opening
- ABS certification

## Forged Bonnetless Globe Valve

### Design Features:

- Forged bonnetless globe valve, including T and Y pattern, is a two-piece configuration without bonnet, diminishing cavity leaking points. Weld is not needed for assembly, settling the trouble of high-temperature welding difficulty and post-welding heat treatment
- It is acceptable to replace stop nut with disc spring nut assembly to secure packing sealing in the case of considerable variation and high frequency concerning service temperature.
- For pressure class exceeding 1700lb, the valve is equipped with rising stem, fitted with quill roller (ball) bearing to lower operating torque. Injection of grease (oil) into grease fitting extends bearing life and decrease friction factor, making the entire driving system a totally enclosed one
- Lifting stem, mounted with position indicator which is convenient for valve on-off observation
- Anti-rotation: anti-rotation assembly is designed between stem and yoke, preventing stem turning during valve opening and closing via dedicated shaft, keeping packing from the damage as a result of stem rotation and prolonging service life of the valve
- Special construction design could assist in taking packing away with stop nut below, making in-line maintenance available and repair cost-competitive



### Product Range:

Size:	1/2"~2.5" (DN15~DN65)
Pressure Rating:	CLASS 1500~4500 (PN250~PN760)
Body Material:	A105 / F11 / F22 / F36 / F91 / F92 / F304 / F304L / F304H / F316 / F316L / F316H / F321 / F347
End Connection:	BW, SW, Thread
Operation:	Manual, Gearbox, Pneumatic, Hydraulic and Electric Actuator.
Structure:	Bonnetless & Precision Forging

**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 labor, equipment, engineering or other costs incurred in connection with repair or replacement. The 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.